

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
NMNM4609, NMNM94970 SHL
6. If Indian, Allottee or Tribe Name

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 (14744)

3a. Address PO BOX 5270
HOBBS, NM 88241

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

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No. (315643)
QUEREOCHO 28 B2PA FEDERAL #1H

9. API Well No.
30-025-42930

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface 170' FSL & 1300' FEL, SEC. 28 T18S R32E

At proposed prod. zone 330' FNL & 330' FEL, SEC. 28 T18S R32E

10. Field and Pool, or Exploratory (50510)
QUEREOCHO PLAINS BONE SPRING LWR BS

11. Sec., T. R. M. or Blk. and Survey or Area
SEC. 28 T18S R32E

14. Distance in miles and direction from nearest town or post office*
37 MILES WEST OF HOBBS, 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)
170'

16. No. of acres in lease
NMNM4609 - 480 ACRES
NMNM94970 - 160 ACRES

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
130' - MOC'S
QUEREOCHO 28 #2H

19. Proposed Depth
14,126' - MD
9,381' - TVD

20. BLM/BIA Bond No. on file
NM1693 NATIONWIDE, NMB-000919

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3711' - GL

22. Approximate date work will start*
08/17/2014

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
06/17/2014

Title

Approved by (Signature)

Steve Caffey

Name (Printed/Typed)

NOV 4 2015

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

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NOV 09 2015

NOV 05 2015

RECEIVED

Drilling Program
Mewbourne Oil Company
 Querecho 28 B2PA Federal #1H
 170' FSL & 1300' FEL (SHL)
 Sec 28-T18S-R32E
 Lea County, New Mexico

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

Rustler	1175'
Top Salt	1325'
Base Salt/Tansill	2545'
*Yates	2770'
Seven Rivers	3175'
*Queen	3900'
Capitan	NP
Grayburg	4425'
San Andres	4600
*Lamar/Delaware	5275'
*Bone Springs	7050'
*1 st Bone Spring Sand	8450'
*2 nd Bone Spring Sand	9100'
3 rd Bone Spring Sand	Will Not Penetrate
Wolfcamp	Will Not Penetrate

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

Water	Fresh water is anticipated @ 350' and will be protected by setting surface casing at 1200' and cementing to surface. 1225'
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 13 3/8" annular BOPE to 1250#. Will test 9 5/8" & 7" BOPE to 3000# and the Annular to 1500#. All BOPE tests will be done with 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. MOC proposes to drill a vertical wellbore to 8983' & kick off to horizontal @ 9461' TVD. The well will be drilled to 14126' MD (9381' 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' - 1200' 1225'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0' - 2820' MD 2650'	LT&C
8 3/4"	7" (new)	26#	P110	0' - 8983' MD	LT&C
8 3/4"	7" (new)	26#	P110	8983' - 9742' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	9542' - TD	LT&C

See
COA

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: 660 sks Class C light cement with salt & LCM. Yield at 2.13 cuft/sk. Mix water @ 11.17 gal/sk. 200 sks Class C cement containing 1% CaCl₂. Yield at 1.33 cuft/sk. Mix water @ 6.34 gal/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 400 sacks Class C light cement with salt & LCM. Yield at 2.13 cuft/sk. Mix water @ 11.17 gal/sk. 200 sacks Class C cement. Yield at 1.33 cuft/sk. Mix water @ 6.34 gal/sk. Cmt circulated to surface w/25% excess.
- iii. Production Casing: 420 sks Class "H" light cement w/salt, FL & LCM additives. Yield @ 2.12 cuft/sk. Mix water @ 11.31 gal/sk. 400 sks Class "H" cement w/salt & FL additives. Yield @ 1.18 cuft/sk. Mix water @ 5.25 gal/sk. Cmt calculated to tie back 200' into 9 5/8" casing @ 2620' 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:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 1200'	FW spud mud	8.6-9.0	32-34	NA
1200' - 2820'	Brine water	10.0-10.2	28-30	NA
2820' - 8983' (KOP)	FW	8.5-8.7	28-30	NA
8983' - 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 KOP to TD
Logging: GR, CN & Gyro 100' above KOP (8883') to surface. GR from 8887' 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 (9461' x .43668 = 4131.4 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, New Mexico

Querecho 28 PA Fed 1H

Sec 28, 18S, 32E

SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL

Plan: Design #2

Standard Planning Report

18 June, 2014

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Querecho 28 PA Fed 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3731.0usft (Original Well Elev)
Project:	Lea County, New Mexico	MD Reference:	WELL @ 3731.0usft (Original Well Elev)
Site:	Querecho 28 PA Fed 1H	North Reference:	Grid
Well:	Sec 28, 18S, 32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL		
Design:	Design #2		

Project	Lea 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	Querecho 28 PA Fed 1H		
Site Position:		Northing:	623,049.60 usft
From:	Map	Easting:	674,356.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 41.685 N
		Longitude:	103° 45' 59.282 W
		Grid Convergence:	0.31 °

Well	Sec 28, 18S, 32E		
Well Position	+N/-S	0.0 usft	Northing: 623,049.60 usft
	+E/-W	0.0 usft	Easting: 674,356.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,731.0 usft
		Latitude:	32° 42' 41.685 N
		Longitude:	103° 45' 59.282 W
		Ground Level:	3,712.0 usft

Wellbore	SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	6/17/2014	7.34
			Dip Angle (°)
			60.53
			Field Strength (nT)
			48,585

Design	Design #2		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			11.11

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,983.5	0.00	0.00	8,983.5	0.0	0.0	0.00	0.00	0.00	0.00	
9,740.5	90.82	45.42	9,461.0	340.0	345.0	12.00	12.00	0.00	45.42	LP @ 9741 MD (510 I
10,316.0	90.82	5.13	9,452.4	849.7	585.6	7.00	0.00	-7.00	-89.70	PBHL (330 FNL & 330
14,260.8	91.25	5.13	9,381.0	4,778.1	938.2	0.01	0.01	0.00	0.00	PBHL (330 FNL & 330

Planning Report

Database: Hobbs
 Company: Mewbourne Oil Company
 Project: Lea County, New Mexico
 Site: Querecho 28 PA Fed 1H
 Well: Sec 28, 18S, 32E
 Wellbore: SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL
 Design: Design #2

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Site Querecho 28 PA Fed 1H
 WELL @ 3731.0usft (Original Well Elev)
 WELL @ 3731.0usft (Original Well Elev)
 Grid
 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

Planning Report

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 North Reference: Grid
 Survey Calculation Method: 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)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,983.5	0.00	0.00	8,983.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 8984									
9,000.0	1.98	45.42	9,000.0	0.2	0.2	0.2	12.00	12.00	0.00
9,100.0	13.98	45.42	9,098.8	9.9	10.1	11.7	12.00	12.00	0.00
9,200.0	25.98	45.42	9,192.7	33.9	34.4	39.8	12.00	12.00	0.00
9,300.0	37.97	45.42	9,277.3	71.0	72.0	83.5	12.00	12.00	0.00
9,400.0	49.97	45.42	9,349.2	119.6	121.4	140.8	12.00	12.00	0.00
9,500.0	61.97	45.42	9,405.0	177.7	180.3	209.1	12.00	12.00	0.00
9,600.0	73.97	45.42	9,442.5	242.6	246.2	285.5	12.00	12.00	0.00
9,700.0	85.96	45.42	9,459.9	311.6	316.2	366.7	12.00	12.00	0.00
9,740.5	90.82	45.42	9,461.0	340.0	345.0	400.1	12.00	12.00	0.00
LP @ 9741 MD (510 FSL & 955 FEL)									
9,800.0	90.84	41.25	9,460.1	383.3	385.8	450.5	7.00	0.03	-7.00
9,900.0	90.86	34.25	9,458.7	462.3	447.0	539.8	7.00	0.02	-7.00
10,000.0	90.87	27.25	9,457.1	548.2	498.1	633.9	7.00	0.01	-7.00
10,100.0	90.87	20.25	9,455.6	639.6	538.4	731.4	7.00	0.00	-7.00

Planning Report

Database: Hobbs
 Company: Mewbourne Oil Company
 Project: Lea County, New Mexico
 Site: Querecho 28 PA Fed 1H
 Well: Sec 28, 18S, 32E
 Wellbore: SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL
 Design: Design #2

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Site Querecho 28 PA Fed 1H
 WELL @ 3731.0usft (Original Well Elev)
 WELL @ 3731.0usft (Original Well Elev)
 Grid
 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)
10,200.0	90.85	13.25	9,454.1	735.3	567.1	830.8	7.00	-0.02	-7.00
10,300.0	90.83	6.25	9,452.6	833.8	584.1	930.7	7.00	-0.03	-7.00
10,316.0	90.82	5.13	9,452.4	849.7	585.6	946.6	7.00	-0.04	-7.00
10,400.0	90.83	5.13	9,451.2	933.4	593.2	1,030.2	0.01	0.01	0.00
10,500.0	90.84	5.13	9,449.7	1,033.0	602.1	1,129.6	0.01	0.01	0.00
10,600.0	90.85	5.13	9,448.3	1,132.6	611.0	1,229.1	0.01	0.01	0.00
10,700.0	90.86	5.13	9,446.8	1,232.2	620.0	1,328.5	0.01	0.01	0.00
10,800.0	90.87	5.13	9,445.3	1,331.7	628.9	1,428.0	0.01	0.01	0.00
10,900.0	90.88	5.13	9,443.7	1,431.3	637.8	1,527.4	0.01	0.01	0.00
11,000.0	90.90	5.13	9,442.2	1,530.9	646.8	1,626.9	0.01	0.01	0.00
11,100.0	90.91	5.13	9,440.6	1,630.5	655.7	1,726.3	0.01	0.01	0.00
11,200.0	90.92	5.13	9,439.0	1,730.1	664.7	1,825.7	0.01	0.01	0.00
11,300.0	90.93	5.13	9,437.4	1,829.7	673.6	1,925.2	0.01	0.01	0.00
11,400.0	90.94	5.13	9,435.8	1,929.3	682.5	2,024.6	0.01	0.01	0.00
11,500.0	90.95	5.13	9,434.1	2,028.9	691.5	2,124.1	0.01	0.01	0.00
11,600.0	90.96	5.13	9,432.4	2,128.4	700.4	2,223.5	0.01	0.01	0.00
11,700.0	90.97	5.13	9,430.8	2,228.0	709.3	2,323.0	0.01	0.01	0.00
11,800.0	90.98	5.13	9,429.1	2,327.6	718.3	2,422.4	0.01	0.01	0.00
11,900.0	90.99	5.13	9,427.3	2,427.2	727.2	2,521.8	0.01	0.01	0.00
12,000.0	91.01	5.13	9,425.6	2,526.8	736.2	2,621.3	0.01	0.01	0.00
12,100.0	91.02	5.13	9,423.8	2,626.4	745.1	2,720.7	0.01	0.01	0.00
12,200.0	91.03	5.13	9,422.0	2,725.9	754.0	2,820.2	0.01	0.01	0.00
12,300.0	91.04	5.13	9,420.2	2,825.5	763.0	2,919.6	0.01	0.01	0.00
12,400.0	91.05	5.13	9,418.4	2,925.1	771.9	3,019.0	0.01	0.01	0.00
12,500.0	91.06	5.13	9,416.6	3,024.7	780.8	3,118.5	0.01	0.01	0.00
12,600.0	91.07	5.13	9,414.7	3,124.3	789.8	3,217.9	0.01	0.01	0.00
12,700.0	91.08	5.13	9,412.8	3,223.9	798.7	3,317.3	0.01	0.01	0.00
12,800.0	91.09	5.13	9,410.9	3,323.4	807.7	3,416.8	0.01	0.01	0.00
12,900.0	91.10	5.13	9,409.0	3,423.0	816.6	3,516.2	0.01	0.01	0.00
13,000.0	91.12	5.13	9,407.1	3,522.6	825.5	3,615.7	0.01	0.01	0.00
13,100.0	91.13	5.13	9,405.1	3,622.2	834.5	3,715.1	0.01	0.01	0.00
13,200.0	91.14	5.13	9,403.1	3,721.8	843.4	3,814.5	0.01	0.01	0.00
13,300.0	91.15	5.13	9,401.1	3,821.3	852.3	3,914.0	0.01	0.01	0.00
13,400.0	91.16	5.13	9,399.1	3,920.9	861.3	4,013.4	0.01	0.01	0.00
13,500.0	91.17	5.13	9,397.1	4,020.5	870.2	4,112.8	0.01	0.01	0.00
13,600.0	91.18	5.13	9,395.0	4,120.1	879.1	4,212.3	0.01	0.01	0.00
13,700.0	91.19	5.13	9,393.0	4,219.7	888.1	4,311.7	0.01	0.01	0.00
13,800.0	91.20	5.13	9,390.9	4,319.2	897.0	4,411.1	0.01	0.01	0.00
13,900.0	91.21	5.13	9,388.8	4,418.8	906.0	4,510.6	0.01	0.01	0.00
14,000.0	91.23	5.13	9,386.6	4,518.4	914.9	4,610.0	0.01	0.01	0.00
14,100.0	91.24	5.13	9,384.5	4,618.0	923.8	4,709.4	0.01	0.01	0.00
14,200.0	91.25	5.13	9,382.3	4,717.5	932.8	4,808.9	0.01	0.01	0.00
14,260.8	91.25	5.13	9,381.0	4,778.1	938.2	4,869.3	0.01	0.01	0.00

PBHL (330 FNL & 330 FEL)

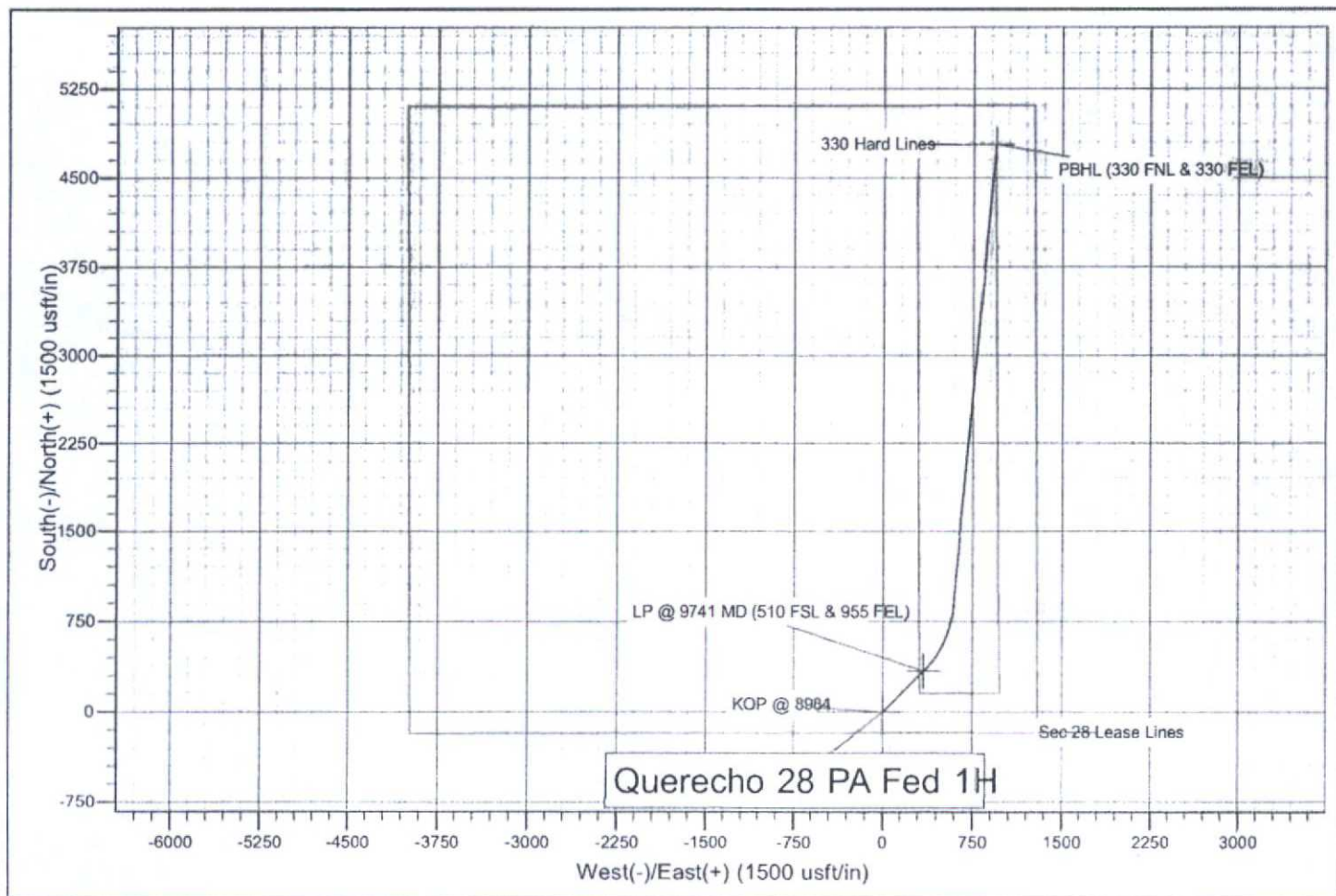
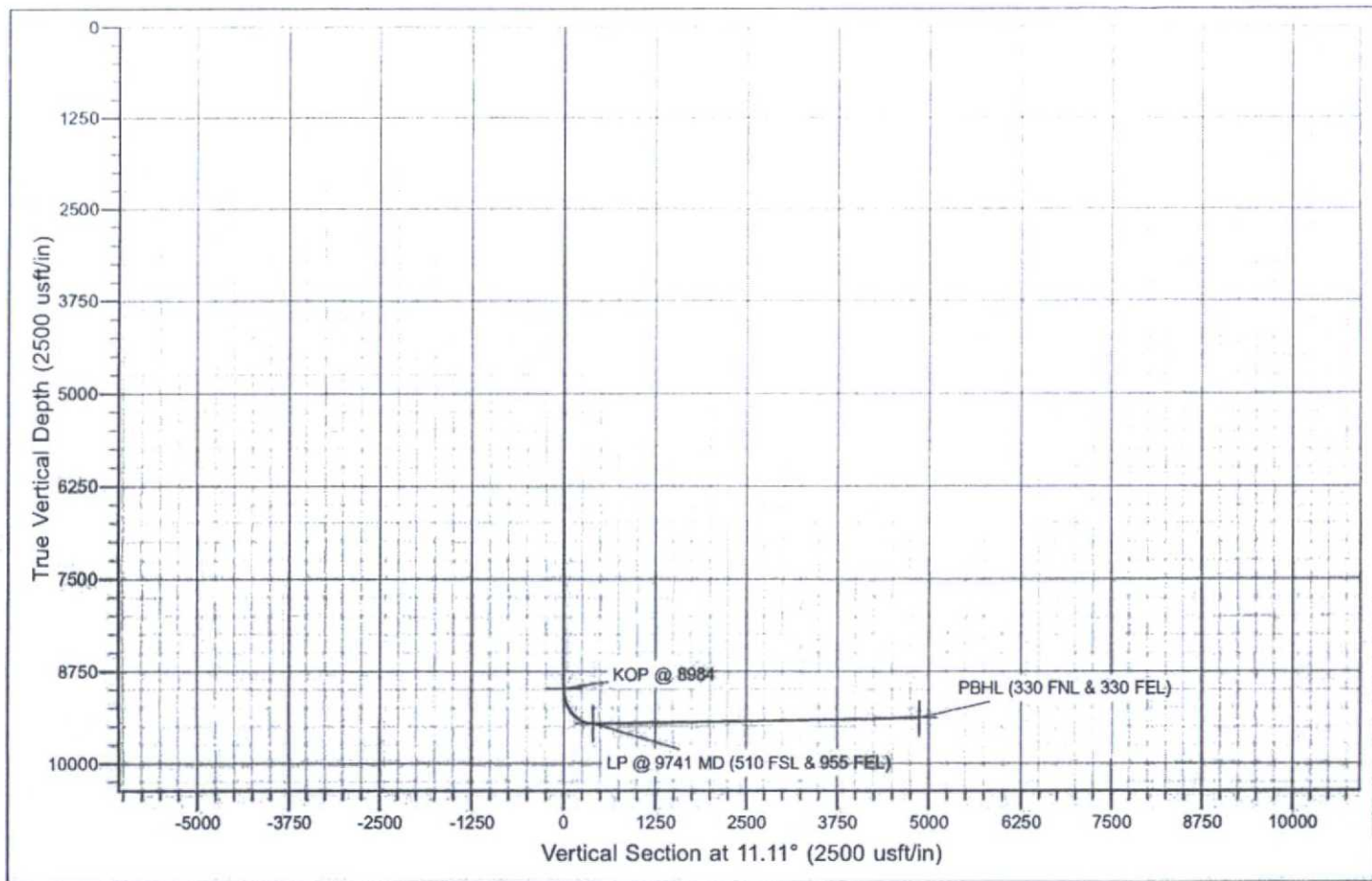
Planning Report

Database: Hobbs
Company: Mewbourne Oil Company
Project: Lea County, New Mexico
Site: Querecho 28 PA Fed 1H
Well: Sec 28, 18S, 32E
Wellbore: SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL
Design: Design #2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Site Querecho 28 PA Fed 1H
 WELL @ 3731.0usft (Original Well Elev)
 WELL @ 3731.0usft (Original Well Elev)
 Grid
 Minimum Curvature

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
KOP @ 8984	0.00	0.00	8,983.5	0.0	0.0	623,049.60	674,356.10	32° 42' 41.685 N	103° 45' 59.282 W
- plan hits target center									
- Point									
PBHL (330 FNL & 330 F	0.00	0.00	9,381.0	4,778.1	938.2	627,827.70	675,294.30	32° 43' 28.915 N	103° 45' 48.000 W
- plan hits target center									
- Point									
LP @ 9741 MD (510 FSI	0.00	0.01	9,461.0	340.0	345.0	623,389.60	674,701.10	32° 42' 45.031 N	103° 45' 55.223 W
- plan hits target center									
- Point									



Mewbourne Oil Company

Lea County, New Mexico

Querecho 28 PA Fed 1H

Sec 28, 18S, 32E

SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL
Design #2

Anticollision Summary Report

16 June, 2015

Anticollision Summary Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Site Querecho 28 PA Fed 1H
Project:	Lea County, New Mexico	TVD Reference:	WELL @ 3731.0usft (Original Well Elev)
Reference Site:	Querecho 28 PA Fed 1H	MD Reference:	WELL @ 3731.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Sec 28, 18S, 32E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL	Database:	Hobbs
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference	Design #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria	WARNING:	There is hidden tight data in this project
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	6/18/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,260.8	Design #2 (SL: 170 FSL & 1300 FEL, BHL)		

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Querecho 28 PA Fed 1H						
Querecho 28 Federal #1 - Wellbore #1 - Design #1	0.0	0.0	2,161.2			
Querecho 28 Federal #1 - Wellbore #1 - Design #1	11,576.1	9,432.8	403.7			

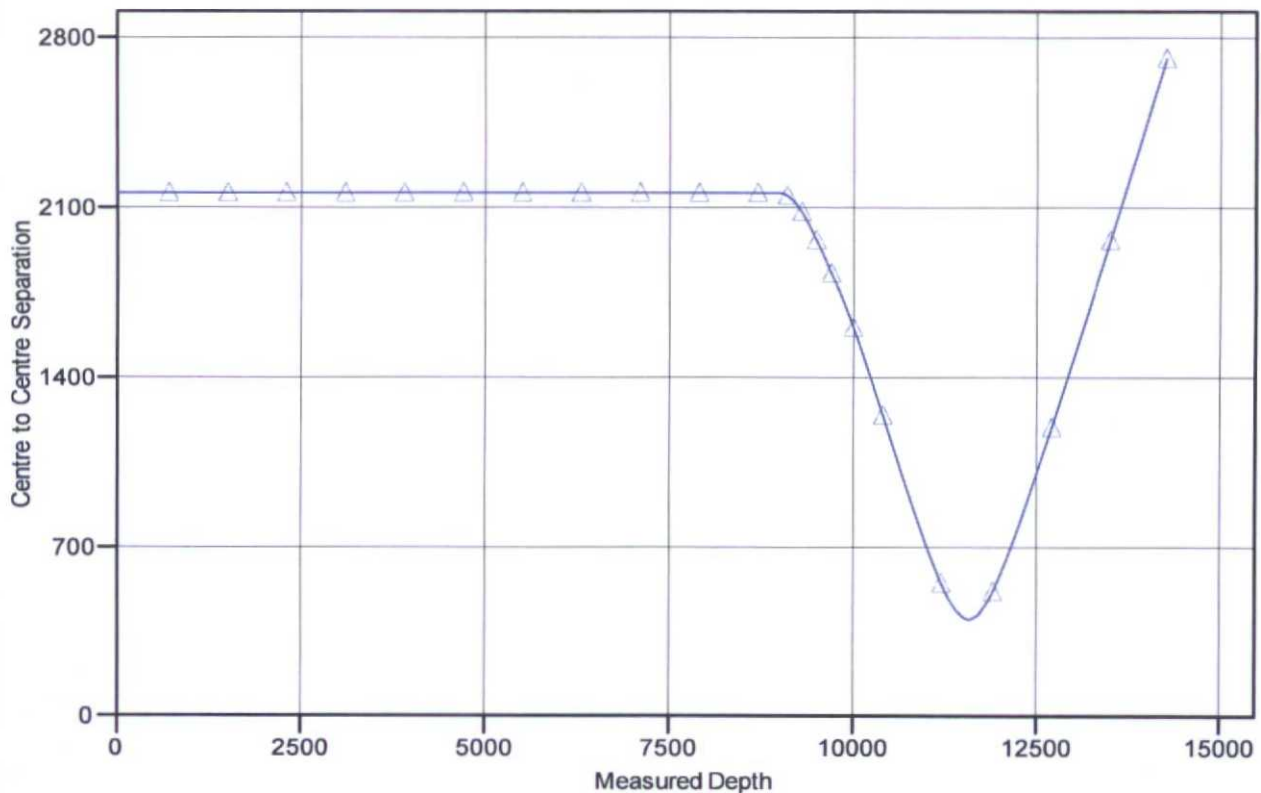
Anticollision Summary Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Site Querecho 28 PA Fed 1H
Project:	Lea County, New Mexico	TVD Reference:	WELL @ 3731.0usft (Original Well Elev)
Reference Site:	Querecho 28 PA Fed 1H	MD Reference:	WELL @ 3731.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Sec 28, 18S, 32E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL	Database:	Hobbs
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3731.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Querecho 28 PA Fed 1H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

Querecho 28 Federal #1, Wellbore #1, Design #1 V0

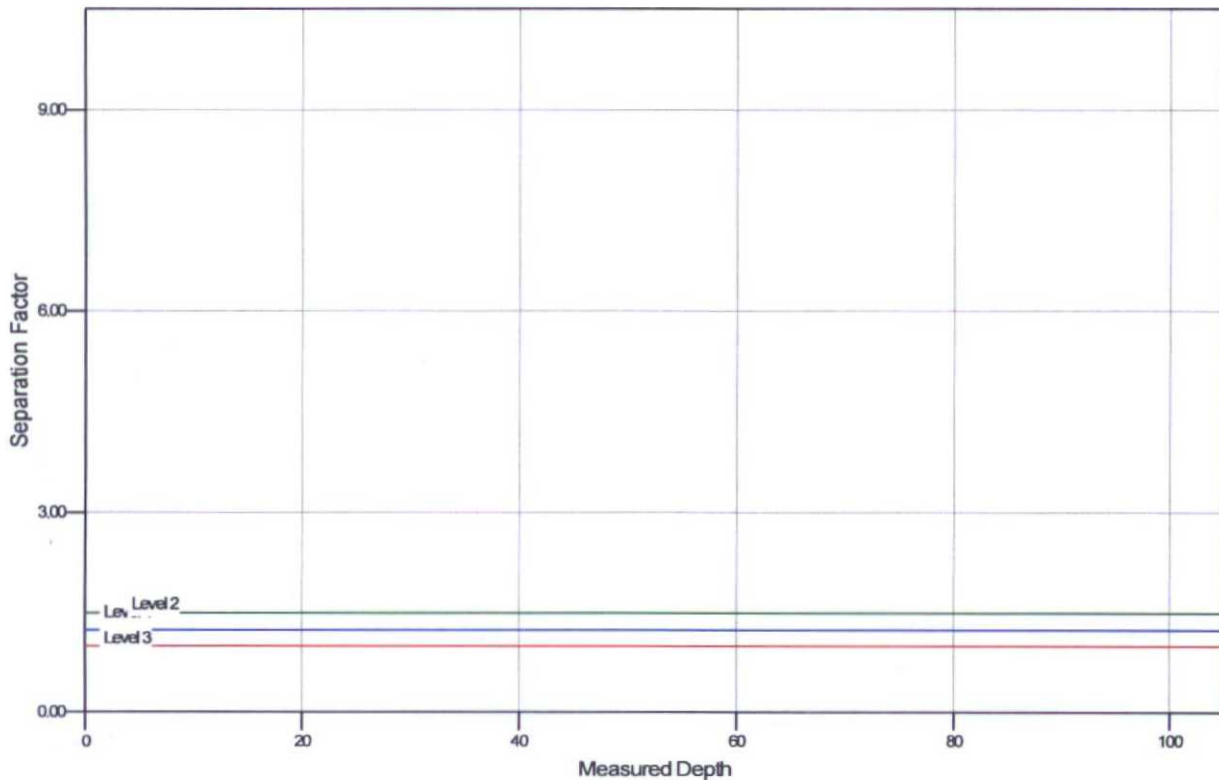
Anticollision Summary Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Site Querecho 28 PA Fed 1H
Project:	Lea County, New Mexico	TVD Reference:	WELL @ 3731.0usft (Original Well Elev)
Reference Site:	Querecho 28 PA Fed 1H	MD Reference:	WELL @ 3731.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Sec 28, 18S, 32E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	SL: 170 FSL & 1300 FEL, BHL: 330 FNL & 330 FEL	Database:	Hobbs
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3731.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Querecho 28 PA Fed 1H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.31"

Separation Factor Plot



LEGEND

Querecho 28 Federal #1, Wellbore #1, Design #1 V0

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Querecho 28 B2PA Federal #1H

170' FSL & 1300' FEL (SHL)

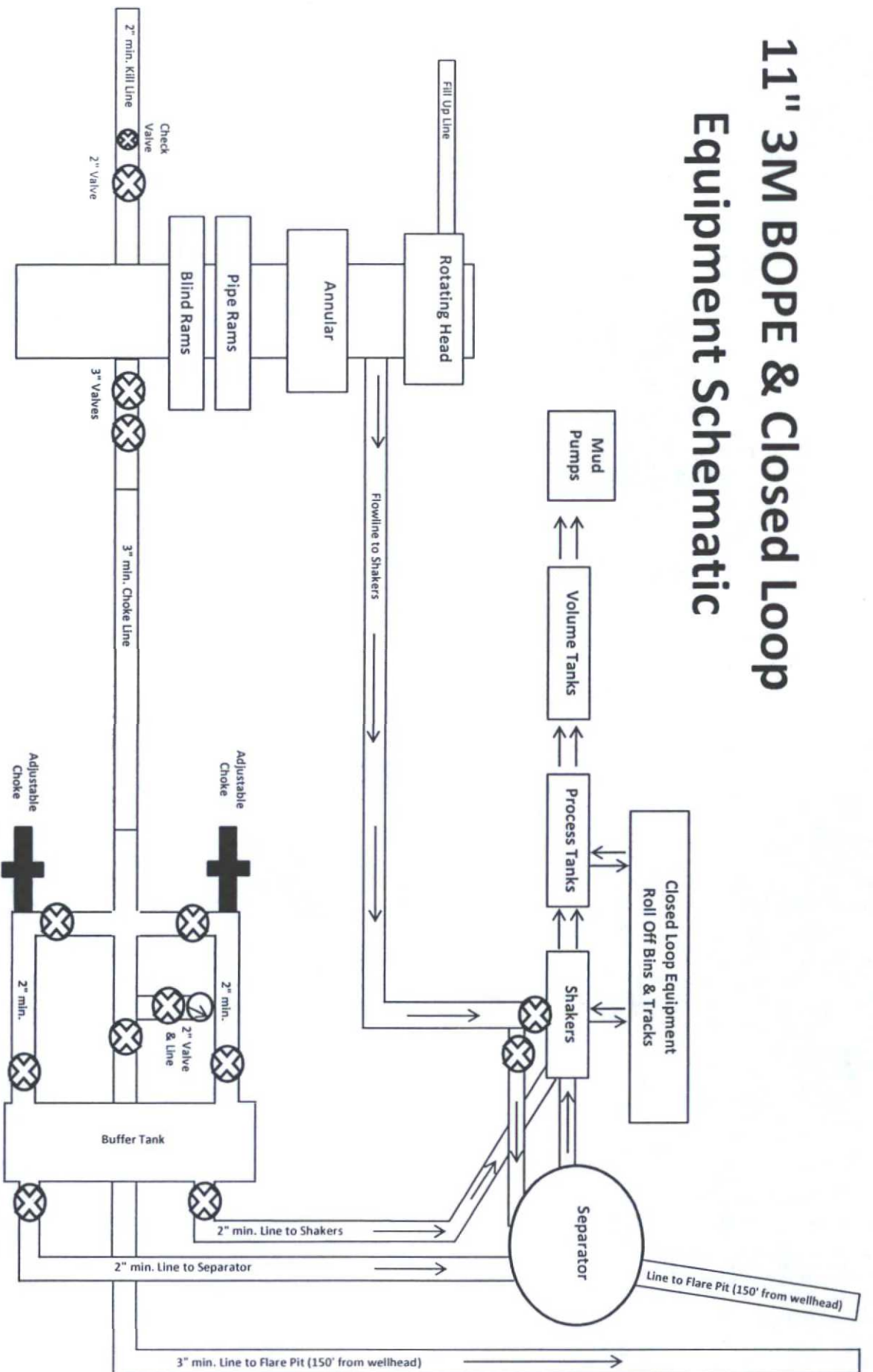
Sec 28-T18S-R32E

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.

11" 3M BOPE & Closed Loop Equipment Schematic



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

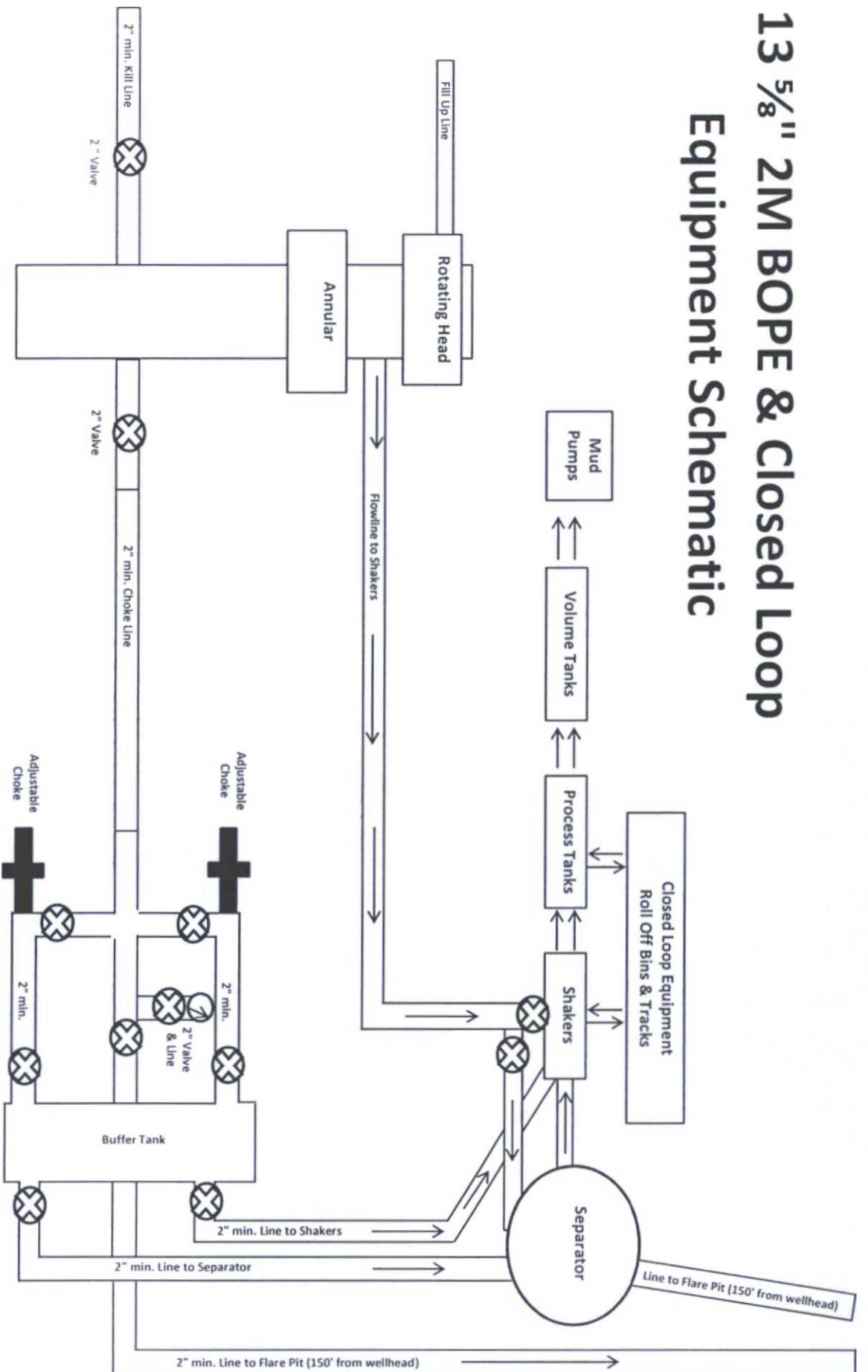


Exhibit 2A
Querecho 28 B2PA Fed. #1H