

OCD Hobbs

HOBBS OCD

NOV 06 2015

RECEIVED

AT5-15-355

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

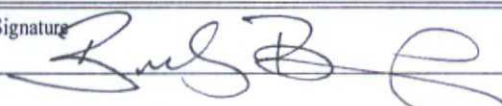
1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM02965A
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company (14744)		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 5270 Hobbs, NM 88241		8. Lease Name and Well No. <315646> El Mar 21 B2DM Fed Com #2H
3b. Phone No. (include area code) 575-393-5905		9. API Well No. 30-024-42935
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 200' FNL & 720' FWL, Sec 21 T26S R33E (D) At proposed prod. zone 300 FSL & 660 FWL, Sec 21 T26S R33E (M)		10. Field and Pool, or Exploratory (97900) Red Hills Upper Bone Spring Shale
14. Distance in miles and direction from nearest town or post office* 28 miles northeast of Orla, TX.		11. Sec., T. R. M. or Blk. and Survey or Area Sec 21 T26S R33E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200'	16. No. of acres in lease 2,174.12	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 60' - El Mar 21 W1DM Fed Com #1H	19. Proposed Depth 15196' - MD 10726' - TVD	20. BLM/BIA Bond No. on file NM-1693 Nationwide, NMB-000919
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3276'-GL	22. Approximate date work will start* 03/20/2015	23. Estimated duration 60 Days

UNORTHODOX
LOCATION

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 	Name (Printed/Typed) Bradley Bishop	Date 01/20/2015
Approved by (Signature) Steve Caffey		Name (Printed/Typed) NOV 2 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

Ka
11/06/15

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NOV 09 2015

Mewbourne Oil Company, El Mar 21 B2DM Fed Com 2H
 Sec 21, T26S, R33E
 SL: 200' FNL & 720' FWL
 BHL: 330' FSL & 660' FWL

HOBBS OGD

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1. Geologic Formations

TVD of target	10726'	Pilot hole depth	NA
MD at TD:	15196'	Deepest expected fresh water:	125'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	800	Water	
Top of Salt	1170		
Castill	4650		
Yates			
Seven Rivers			
Queen			
Capitan	NP		
Grayburg			
San Andres			
Delaware	4890	Oil/Gas	
Bone Springs	9050	Oil/Gas	
1 st Bone Springs		Oil/Gas	
2 nd Bone Springs	10600	Target Zone	
3 rd Bone Springs			
Wolfcamp		Will Not Penetrate	
Fusselman			
Ellenburger			
Granite Wash			

*H2S, water flows, loss of circulation, abnormal pressures, etc.

Mewbourne Oil Company, El Mar 21 B2DM Fed Com 2H
 Sec 21, T26S, R33E
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2. Casing Program

See COA

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0'	825' 920	13.375"	48	H40	STC	1.72	4.03	8.13
12.25"	0'	3400'	9.625"	36	J55	LTC	1.14	1.99	3.7
12.25"	3400'	4350'	9.625"	40	J55	LTC	1.14	1.75	13.68
12.25"	4350'	4800'	9.625"	40	N80	LTC	1.24	2.30	40.39
8.75"	0'	2200'	5.5"	17	P110	BTC	6.54	9.30	2.11
8.75"	2200'	10174'	5.5"	17	P110	LTC	1.41	2.01	2.01
8.75"	10174'	10915'	5.5"	17	P110	BTC	1.35	1.92	6.40
8.75"	10915'	15196'	5.5"	17	P110	LTC	1.34	1.91	6.10
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft ³ / sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	410	12.5	2.12	11	10	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 5% Sodium Chloride + 0.25lb/sk Cello-Flake
	200	14.8	1.34	6.3	5	Tail: Class C + 0.005pps Static Free + 1% CaCl ₂ + 0.25 pps CelloFlake + 0.005 gps FP-6L
Inter. <i>See COA</i>	760	12.5	2.12	11	10	Lead: Class C + 4.0% Bentonite + 0.6% CD-32 + 5% Sodium Chloride + 0.25lb/sk Cello-Flake
	200	14.8	1.34	6.3	5	Tail: Class C + 0.005pps Static Free + 1% CaCl ₂ + 0.25 pps CelloFlake + 0.005 gps FP-6L
Prod.	1120	11.2	2.99	17	74	(15:61:11) Class C+5#/sk LCM+0.6% FL-52+9.2#/sk CSE-2+3% Sodium Metasilicate

A copy of cement test will be available on location at time of cement job providing pump times, compressive strengths, etc.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	4600'	25%

Mewbourne Oil Company, El Mar 21 B2DM Fed Com 2H
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4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
See COA 12-1/4"	13-5/8"	2M 3M	Annular	X	1250#
			Blind Ram		Must test to 2000 psi
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	11"	3M	Annular	X	1500#
			Blind Ram	X	3000#
			Pipe Ram	X	
			Double Ram		
			Other*		
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
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Mewbourne Oil Company, El Mar 21 B2DM Fed Com 2H
Sec 21, T26S, R33E
SL: 200' FNL & 720' FWL
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N	Variance: None	
	Y /N	Are anchors required by manufacturer?
	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. • Provide description here See attached schematic.	

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	825 920	FW Gel	8.6-8.8	28-34	N/C
825	4800	Saturated Brine	10.0	28-34	N/C
4800	10174	Cut Brine	8.5-9.3	28-34	N/C
10174	15196	FW w/Polymer	8.5-9.5	30-40	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Visual Monitoring
---	-------------------

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
X	Gamma Ray	10174' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

Mewbourne Oil Company, El Mar 21 B2DM Fed Com 2H
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7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4612 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole.

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H ₂ S is present
X	H ₂ S Plan attached

8. Other facets of operation

Is this a walking operation? If yes, describe. **NO**

Will be pre-setting casing? If yes, describe. **NO**

Attachments

☒ Directional Plan

☐ Other, describe

Mewbourne Oil Company

Lea County, New Mexico

El Mar 21 B2DM Fed Com 1H

Sec 21, T26S, R33E

SL: 200' FNL & 720' FWL

BHL: 330' FSL & 660' FWL

Plan: Design #1

Standard Planning Report

24 November, 2014

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site El Mar 21 B2DM Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3296.0usft (Original Well Elev)
Project:	Lea County, New Mexico	MD Reference:	WELL @ 3296.0usft (Original Well Elev)
Site:	El Mar 21 B2DM Fed Com 1H	North Reference:	Grid
Well:	Sec 21, T26S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 660' FWL		
Design:	Design #1		

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	El Mar 21 B2DM Fed Com 1H		
Site Position:	Northing:	377,481.30 usft	Latitude: 32° 2' 8.125 N
From: Map	Easting:	732,523.50 usft	Longitude: 103° 34' 58.671 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16"	Grid Convergence: 0.40 °

Well	Sec 21, T26S, R33E		
Well Position	+N/-S	0.0 usft	Northing: 377,481.30 usft
	+E/-W	0.0 usft	Easting: 732,523.50 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	3,296.0 usft
		Ground Level:	3,276.0 usft

Wellbore	BHL: 330' FSL & 660' FWL		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	11/24/2014	7.15
			Dip Angle
			59.92
			Field Strength
			48,158

Design	Design #1		
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
			180.29

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,173.5	0.00	0.00	10,173.5	0.0	0.0	0.00	0.00	0.00	0.00	
10,915.3	89.00	180.29	10,651.0	-469.2	-2.4	12.00	12.00	0.00	-179.71	
15,196.3	89.00	180.29	10,726.0	-4,749.5	-24.3	0.00	0.00	0.00	0.00	BHL: 330 FSL & 660 I

Planning Report

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Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3296.0usft (Original Well Elev)
Project:	Lea County, New Mexico	MD Reference:	WELL @ 3296.0usft (Original Well Elev)
Site:	El Mar 21 B2DM Fed Com 1H	North Reference:	Grid
Well:	Sec 21, T26S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 660' FWL		
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 200 FNL & 720 FWL									
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

Database:	Hobbs	Local Co-ordinate Reference:	Site El Mar 21 B2DM Fed Com 1H
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Well:	Sec 21, T26S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL 330' FSL & 660' FWL		
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)
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
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,173.5	0.00	0.00	10,173.5	0.0	0.0	0.0	0.00	0.00	0.00
KCP @ 10174									
10,200.0	3.18	180.29	10,200.0	-0.7	0.0	0.7	12.00	12.00	0.00
10,300.0	15.18	180.29	10,298.5	-16.7	-0.1	16.7	12.00	12.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site EI Mar 21 B2DM Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3296.0usft (Original Well Elev)
Project:	Lea County, New Mexico	MD Reference:	WELL @ 3296.0usft (Original Well Elev)
Site:	EI Mar 21 B2DM Fed Com 1H	North Reference:	Grid
Well:	Sec 21, T26S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 660' FWL		
Design:	Design #1		

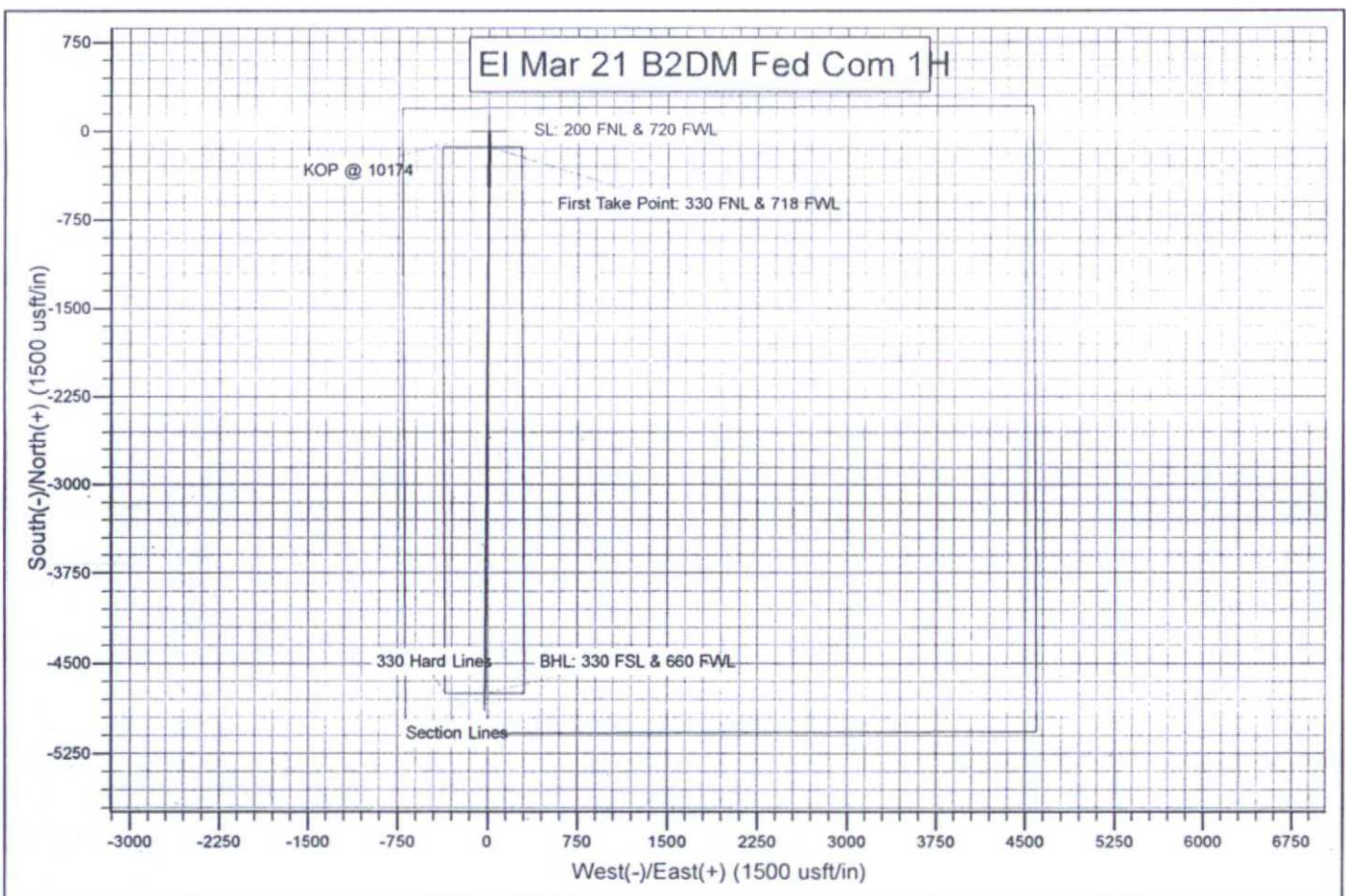
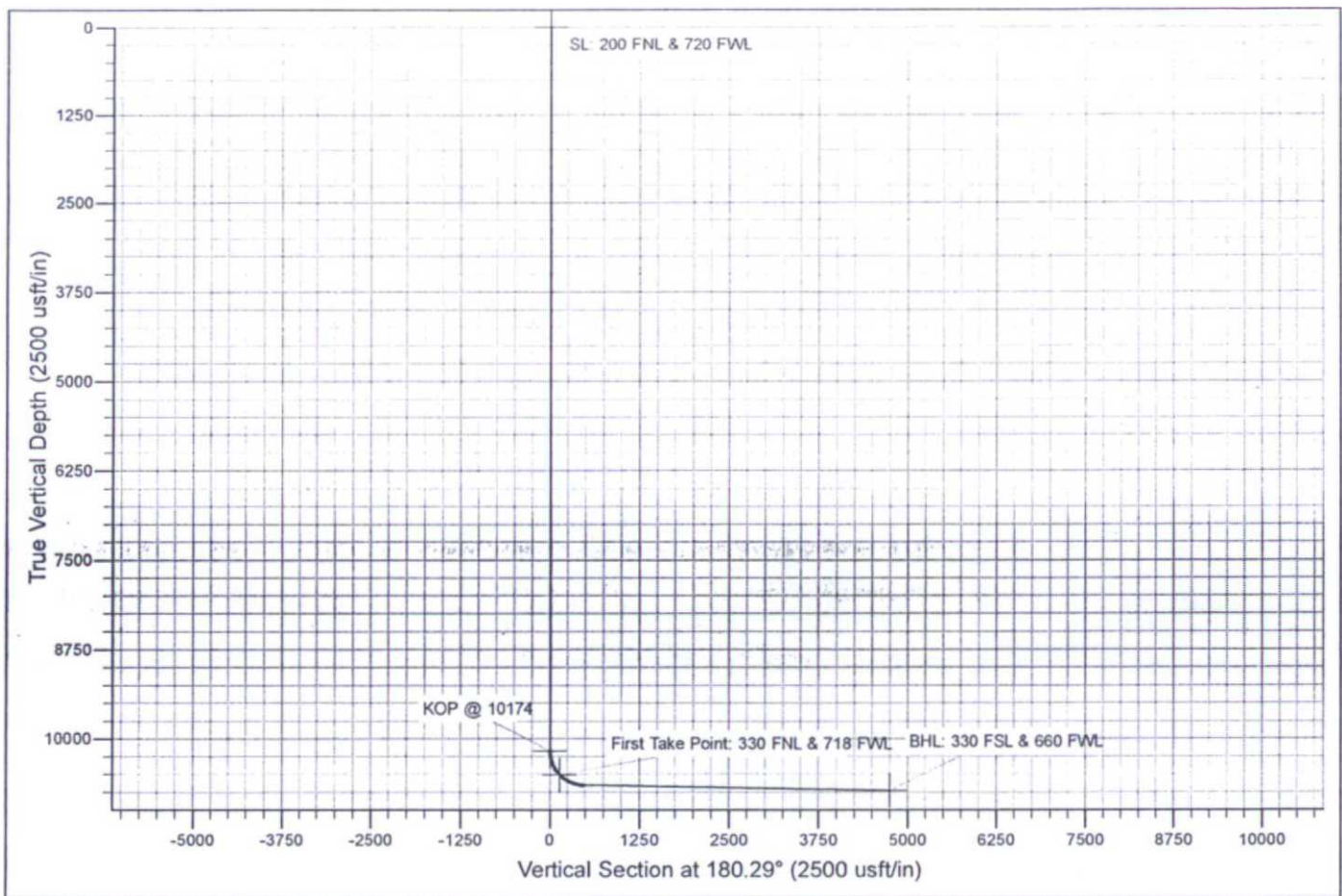
Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400.0	27.17	180.29	10,391.6	-52.7	-0.3	52.7	12.00	12.00	0.00
10,500.0	39.17	180.29	10,475.2	-107.3	-0.5	107.3	12.00	12.00	0.00
10,541.2	44.12	180.29	10,506.0	-134.7	-0.7	134.7	12.00	12.00	0.00
First Take Point: 330 FNL & 718 FWL									
10,600.0	51.17	180.29	10,545.5	-178.1	-0.9	178.1	12.00	12.00	0.00
10,700.0	63.17	180.29	10,599.6	-262.0	-1.3	262.0	12.00	12.00	0.00
10,800.0	75.16	180.29	10,635.1	-355.3	-1.8	355.3	12.00	12.00	0.00
10,900.0	87.16	180.29	10,650.5	-453.9	-2.3	453.9	12.00	12.00	0.00
10,915.3	89.00	180.29	10,651.0	-469.2	-2.4	469.2	12.00	12.00	0.00
11,000.0	89.00	180.29	10,652.5	-553.9	-2.8	553.9	0.00	0.00	0.00
11,100.0	89.00	180.29	10,654.2	-653.9	-3.3	653.9	0.00	0.00	0.00
11,200.0	89.00	180.29	10,656.0	-753.8	-3.9	753.9	0.00	0.00	0.00
11,300.0	89.00	180.29	10,657.7	-853.8	-4.4	853.8	0.00	0.00	0.00
11,400.0	89.00	180.29	10,659.5	-953.8	-4.9	953.8	0.00	0.00	0.00
11,500.0	89.00	180.29	10,661.2	-1,053.8	-5.4	1,053.8	0.00	0.00	0.00
11,600.0	89.00	180.29	10,663.0	-1,153.8	-5.9	1,153.8	0.00	0.00	0.00
11,700.0	89.00	180.29	10,664.7	-1,253.8	-6.4	1,253.8	0.00	0.00	0.00
11,800.0	89.00	180.29	10,666.5	-1,353.7	-6.9	1,353.8	0.00	0.00	0.00
11,900.0	89.00	180.29	10,668.3	-1,453.7	-7.4	1,453.8	0.00	0.00	0.00
12,000.0	89.00	180.29	10,670.0	-1,553.7	-7.9	1,553.7	0.00	0.00	0.00
12,100.0	89.00	180.29	10,671.8	-1,653.7	-8.5	1,653.7	0.00	0.00	0.00
12,200.0	89.00	180.29	10,673.5	-1,753.7	-9.0	1,753.7	0.00	0.00	0.00
12,300.0	89.00	180.29	10,675.3	-1,853.7	-9.5	1,853.7	0.00	0.00	0.00
12,400.0	89.00	180.29	10,677.0	-1,953.6	-10.0	1,953.7	0.00	0.00	0.00
12,500.0	89.00	180.29	10,678.8	-2,053.6	-10.5	2,053.7	0.00	0.00	0.00
12,600.0	89.00	180.29	10,680.5	-2,153.6	-11.0	2,153.6	0.00	0.00	0.00
12,700.0	89.00	180.29	10,682.3	-2,253.6	-11.5	2,253.6	0.00	0.00	0.00
12,800.0	89.00	180.29	10,684.0	-2,353.6	-12.0	2,353.6	0.00	0.00	0.00
12,900.0	89.00	180.29	10,685.8	-2,453.6	-12.6	2,453.6	0.00	0.00	0.00
13,000.0	89.00	180.29	10,687.5	-2,553.5	-13.1	2,553.6	0.00	0.00	0.00
13,100.0	89.00	180.29	10,689.3	-2,653.5	-13.6	2,653.6	0.00	0.00	0.00
13,200.0	89.00	180.29	10,691.0	-2,753.5	-14.1	2,753.6	0.00	0.00	0.00
13,300.0	89.00	180.29	10,692.8	-2,853.5	-14.6	2,853.5	0.00	0.00	0.00
13,400.0	89.00	180.29	10,694.5	-2,953.5	-15.1	2,953.5	0.00	0.00	0.00
13,500.0	89.00	180.29	10,696.3	-3,053.5	-15.6	3,053.5	0.00	0.00	0.00
13,600.0	89.00	180.29	10,698.0	-3,153.4	-16.1	3,153.5	0.00	0.00	0.00
13,700.0	89.00	180.29	10,699.8	-3,253.4	-16.6	3,253.5	0.00	0.00	0.00
13,800.0	89.00	180.29	10,701.5	-3,353.4	-17.2	3,353.5	0.00	0.00	0.00
13,900.0	89.00	180.29	10,703.3	-3,453.4	-17.7	3,453.4	0.00	0.00	0.00
14,000.0	89.00	180.29	10,705.0	-3,553.4	-18.2	3,553.4	0.00	0.00	0.00
14,100.0	89.00	180.29	10,706.8	-3,653.4	-18.7	3,653.4	0.00	0.00	0.00
14,200.0	89.00	180.29	10,708.5	-3,753.4	-19.2	3,753.4	0.00	0.00	0.00
14,300.0	89.00	180.29	10,710.3	-3,853.3	-19.7	3,853.4	0.00	0.00	0.00
14,400.0	89.00	180.29	10,712.0	-3,953.3	-20.2	3,953.4	0.00	0.00	0.00
14,500.0	89.00	180.29	10,713.8	-4,053.3	-20.7	4,053.4	0.00	0.00	0.00
14,600.0	89.00	180.29	10,715.6	-4,153.3	-21.2	4,153.3	0.00	0.00	0.00
14,700.0	89.00	180.29	10,717.3	-4,253.3	-21.8	4,253.3	0.00	0.00	0.00
14,800.0	89.00	180.29	10,719.1	-4,353.3	-22.3	4,353.3	0.00	0.00	0.00
14,900.0	89.00	180.29	10,720.8	-4,453.2	-22.8	4,453.3	0.00	0.00	0.00
15,000.0	89.00	180.29	10,722.6	-4,553.2	-23.3	4,553.3	0.00	0.00	0.00
15,100.0	89.00	180.29	10,724.3	-4,653.2	-23.8	4,653.3	0.00	0.00	0.00
15,196.3	89.00	180.29	10,726.0	-4,749.5	-24.3	4,749.6	0.00	0.00	0.00
BHL: 330 FSL & 660 FWL									

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site El Mar 21 B2DM Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3296.0usft (Original Well Elev)
Project:	Lea County, New Mexico	MD Reference:	WELL @ 3296.0usft (Original Well Elev)
Site:	El Mar 21 B2DM Fed Com 1H	North Reference:	Grid
Well:	Sec 21, T26S, R33E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 660' FWL		
Design:	Design #1		

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									
SL: 200 FNL & 720 FWL	0.00	0.00	0.0	0.0	0.0	377,481.30	732,523.50	32° 2' 8.125 N	103° 34' 58.671 W
- plan hits target center									
- Point									
KOP @ 10174	0.00	0.00	10,173.5	0.0	0.0	377,481.30	732,523.50	32° 2' 8.125 N	103° 34' 58.671 W
- plan hits target center									
- Point									
First Take Point: 330 FN	0.00	0.00	10,508.0	-132.7	-0.5	377,348.60	732,523.00	32° 2' 6.812 N	103° 34' 58.687 W
- plan misses target center by 2.9usft at 10541.2usft MD (10508.0 TVD, -134.7 N, -0.7 E)									
- Point									
BHL: 330 FSL & 660 FW	0.00	0.00	10,726.0	-4,749.5	-24.3	372,731.80	732,499.20	32° 1' 21.127 N	103° 34' 59.336 W
- plan hits target center									
- Point									



Notes Regarding Blowout Preventer

Mewbourne Oil Company

El Mar 21 B2DM Fed Com #2H

200' FNL & 720' FWL (SHL)

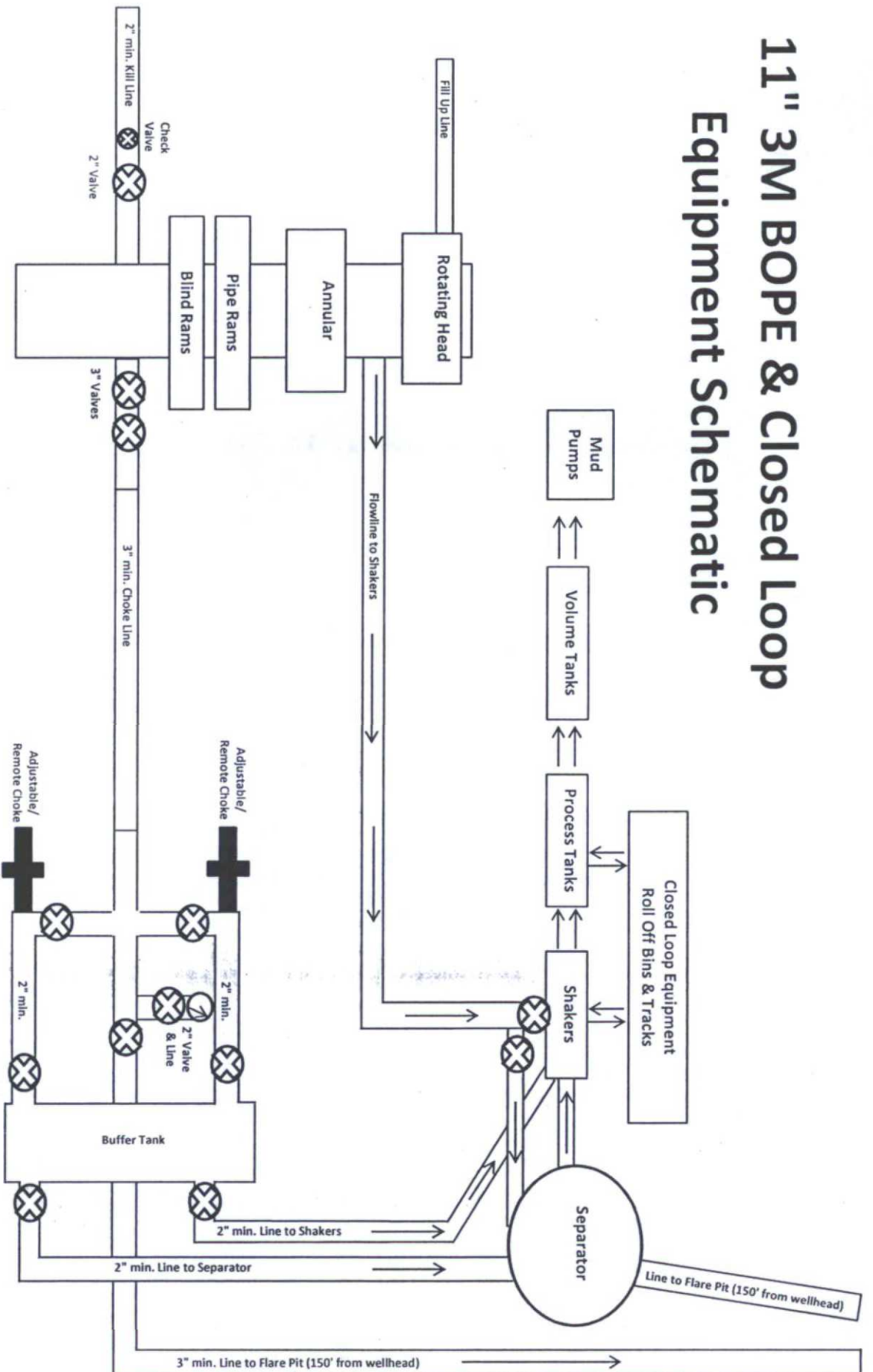
Sec 21-T26S-R33E

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.

Exhibit 2A
El Mar 21 B2DM Fed Com #2H

