Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM045273

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
8910086550

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
BOGLE FLATS UNIT 4 3H 7H

2. Name of Operator
MEWBOURNE OIL COMPANY
Contact: JACKIE LATHAN
E-Mail: jlathan@mewbourne.com

Carlsbad Field Office
OCD Artesia

9. API Well No.
30-015-10576-00-S1

3a. Address
P O BOX 5270
HOBBS, NM 88241

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

10. Field and Pool or Exploratory Area
INDIAN BASIN-~~STRAWN~~ -Yeso 33690

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T22S R23E SENW 2100FNL 1650FWL

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☒ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Mewbourne Oil Company requests approval to make the following changes:

1) ~~Change name to Bogle Flats Federal Unit 10/9 Y1FE #1H~~ — 322235
2) Plug back well to 1565'
3) Mill window in casing @ 1565' and drill lateral in Yeso formation w/BHL @ 1980' FNL & 100' FWL Sec. 9, T22S, R23E.
4) Set & cmt tapered 5 1/2" & 4 1/2" production csg string from surface to TD.
5) Change pool to: Indian Basin Yeso (33690).

Please see attachments containing C-102, plug-back procedure, proposed wellbore diagram, new drilling plan, and casing and cement information.

RECEIVED
AUG 07 2018
DISTRICT II-ARTESIA O.C.D.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #427574 verified by the BLM Well Information System
For MEWBOURNE OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by ZOTA STEVENS on 07/18/2018 (18ZS0132SE)

Name *(Printed/Typed)* KLAY H KIRKES — Title ENGINEER

Signature (Electronic Submission) — Date 07/17/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS — Title PETROLEUM ENGINEER — Date 07/18/2018

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

8-16-18 RWP

Additional data for EC transaction #427574 that would not fit on the form

32. Additional remarks, continued

Please contact Klay Kirkes with any questions.

Mewbourne Oil Company, Bogle Flats Fed Unit 10/9 Y1FE #1H
Sec 10, T22S, R23E
SL: 2100' FNL & 1650' FWL, Sec 10
BHL: 1980' FNL & 100' FWL, Sec 9

TVD of target	1972'	Pilot hole depth	NA
MD at TD:	8737'	Deepest expected fresh water:	225'

Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
7.875"	0'	1615'	5.5"	17	L80	LTC	8.92	10.97	3.07	3.61
7.875"	1615'	8737'	4.5"	11.6	L80	LTC	6.94	8.50	2.57	3.23
BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet	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 3rd 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 2nd 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?	

Mewbourne Oil Company, Bogle Flats Fed Unit 10/9 Y1FE #1H
Sec 10, T22S, R23E
SL: 2100' FNL & 1650' FWL, Sec 10
BHL: 1980' FNL & 100' FWL, Sec 9

Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Prod.	970	11.9	2.47	10	10	50/50/10 Poz Class C

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

Casing String	TOC	% Excess
Production	0'	25%

Pressure Control Equipment

	Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
7 7/8"	13-5/8"	3M	Annular	X	1500#
			Blind Ram	X	3000#
			Pipe Ram	X	
			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.

Y	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.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N — Are anchors required by manufacturer?
N	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.

Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
1565	8737	FW Gel	8.4	28-34	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

Logging and Testing Procedures

Logging, Coring and Testing.	
	Will run GR/CNL from KOP (') 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	1565' to TD
	Density	
	CBL	
	Mud log	
	PEX	

Drilling Conditions

Mewbourne Oil Company, Bogle Flats Fed Unit 10/9 Y1FE #1H
Sec 10, T22S, R23E
SL: 2100' FNL & 1650' FWL, Sec 10
BHL: 1980' FNL & 100' FWL, Sec 9

Condition	Specify what type and where?
BH Pressure at deepest TVD	915 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe.

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.	
	H2S is present
X	H2S Plan attached

Other facets of operation

Is this a walking operation? If yes, describe.
Will be pre-setting casing? If yes, describe.

Attachments
___ Directional Plan
___ Other, describe

Newbourne Oil Company

RE-ENTRY PROCEDURE

Submitted By: K. Kirkes

Well Name: **Bogle Flats Fed Unit 10/9 Y1FE #1H**

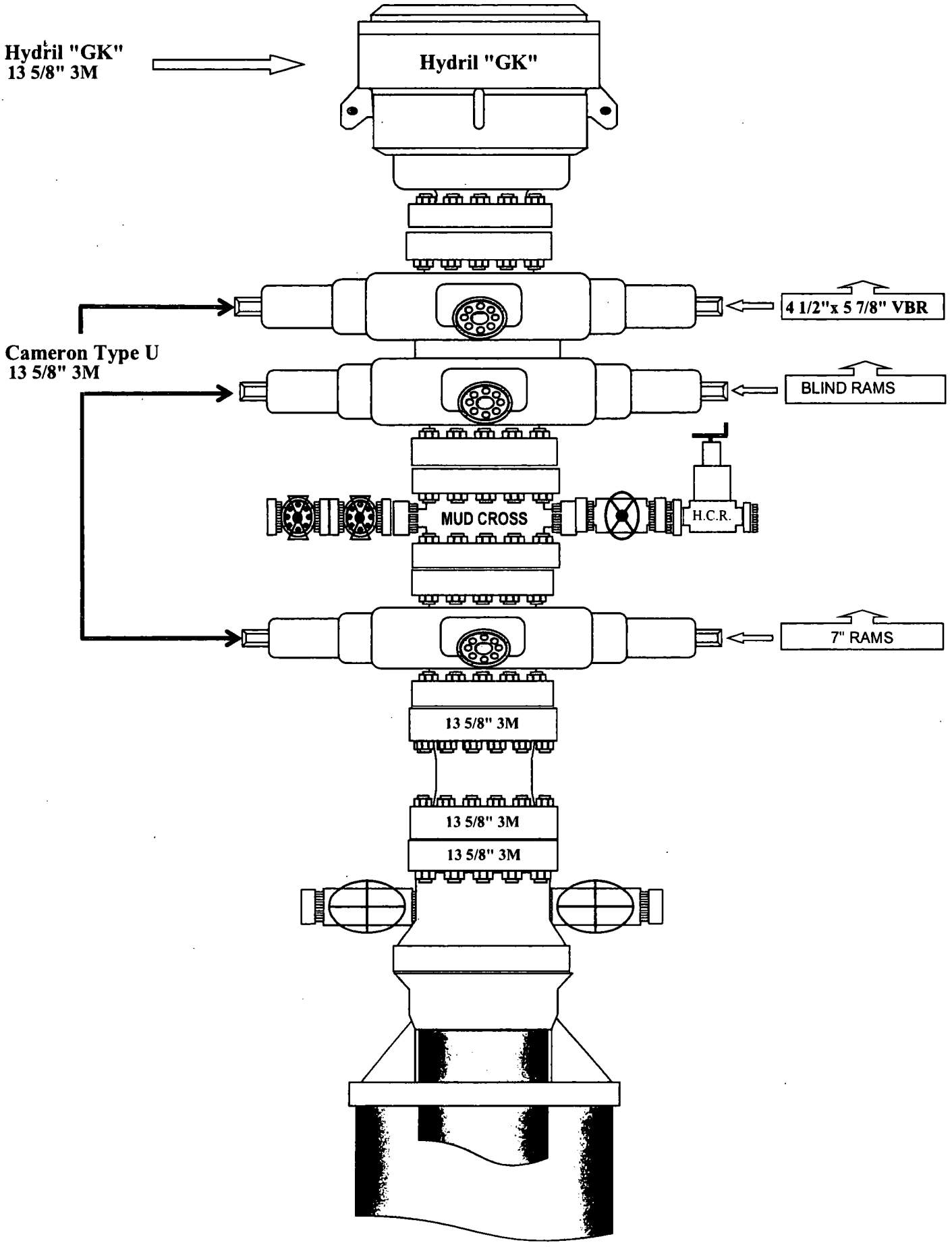
Location: 2100' FNL & 1650' FWL
Sec 10, T22S, R23E
Eddy Co, NM

Date: 7/13/18

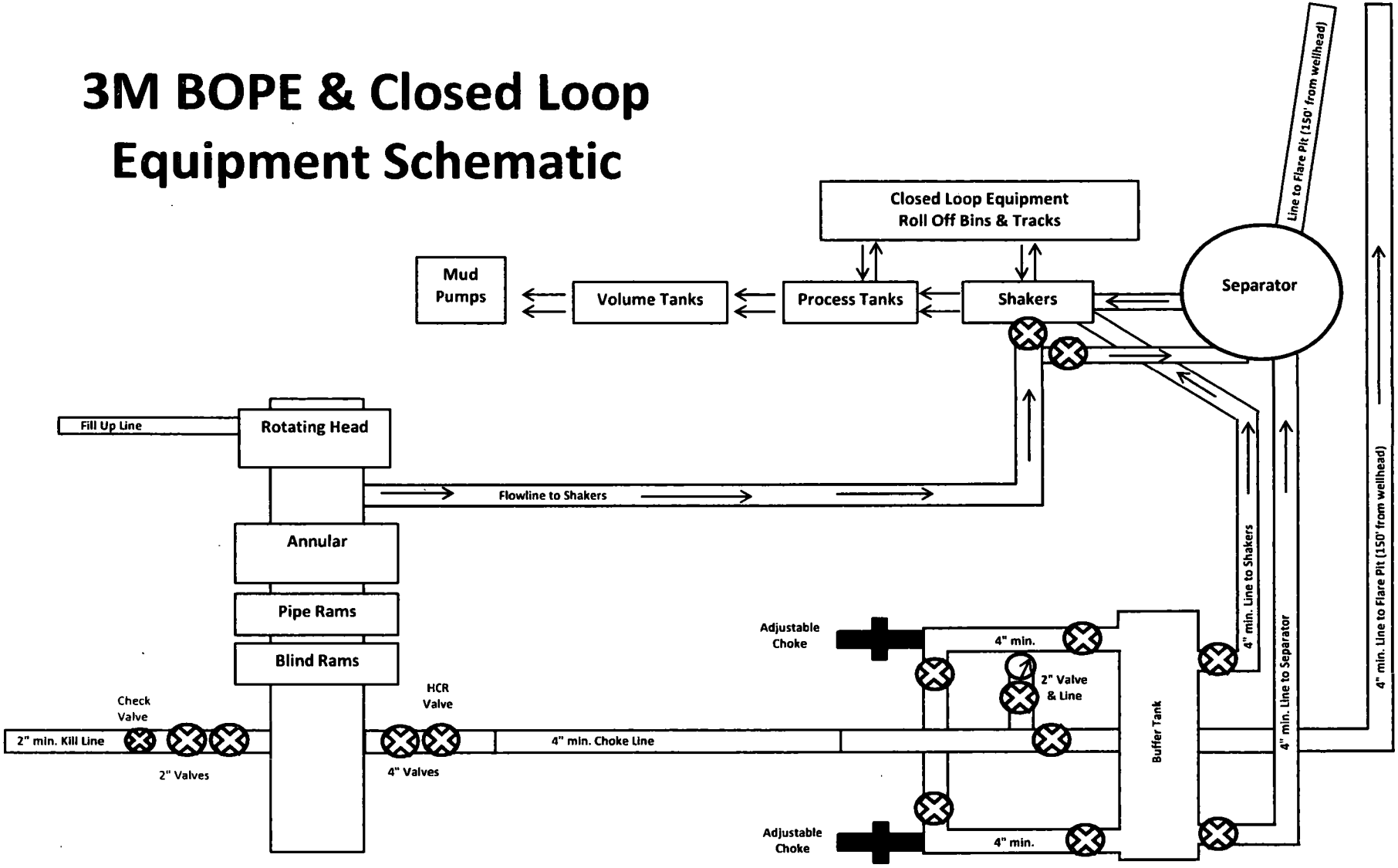
Csg Set:	7630'	**Packer Type:**	Baker Model 'D'
PBTD:	7562'	**Packer Depth:**	7044'
Csg Size:	5 ½" 14# & 15.5# J55	**Min ID:**	4.825"
Tbg Size:	3 ½" 9.3# L80 EUE	**Perforations:**	7143' - 7306'
DV Tool:	N/A	**New Perfs:**	None

Procedure:

1) MIRU well-service rig & rental equipment.
2) Kill well w/ 2% KCL water. NU 5M hydraulic BOP.
3) Release packer & POOH w/3 ½" tbg.
4) RIH & set 5 ½" CIBP @ 7130'
5) Spot 25 sk Class C cmt plug @ 7130'. WOC & tag plug
6) Test csg to 500#.
7) Spot 25 sk Class C cmt plug @ 6500'. WOC & tag plug.
8) POOH w/tbg.
9) ND BOP & ND B-section.
10) Weld on 5 ½" lift sub & pull slips.
11) RU WL & chemical cut 5 ½" csg @ 6160'
12) POOH w/cut off 5 ½" csg.
13) NU BOP & RIH w/3 ½" open-ended.
14) Spot 75 sk Class C cmt plug @ 3600'. WOC & tag plug.
15) Spot 90 sk Class C cmt plug @ 2200'. WOC & tag plug. POOH.
16) PU 8 ⅝" 10K# CIBP. TIH & set @ 1580'. Circ hole clean w/FW.
17) LD 3 ½" tbg. ND BOP & install capping flange.
18) RDMO well-service rig.
19) MIRU drilling rig.
20) TIH w/ whipstock. Orient & set whipstock on CIBP @ 1565'.
21) Mill window in 8 ⅝" csg. TOOH.
22) PU directional tools. Drill curve & lateral according to dir plan.
23) Run 5 ½" x 4 ½" tapered csg string & cmt in place. (See attachment for details)
24) RDMO drilling rig.


Hydril "GK"
13 5/8" 3M
Hydril "GK"
4 1/2"x 5 7/8" VBR
Cameron Type U
13 5/8" 3M
BLIND RAMS
MUD CROSS
H.C.R.
7" RAMS
13 5/8" 3M
13 5/8" 3M
13 5/8" 3M

3M BOPE & Closed Loop Equipment Schematic



Drawing not to scale

GATES E & S NORTH AMERICA, INC.
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: *Tim.Cantu@gates.com*
WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER

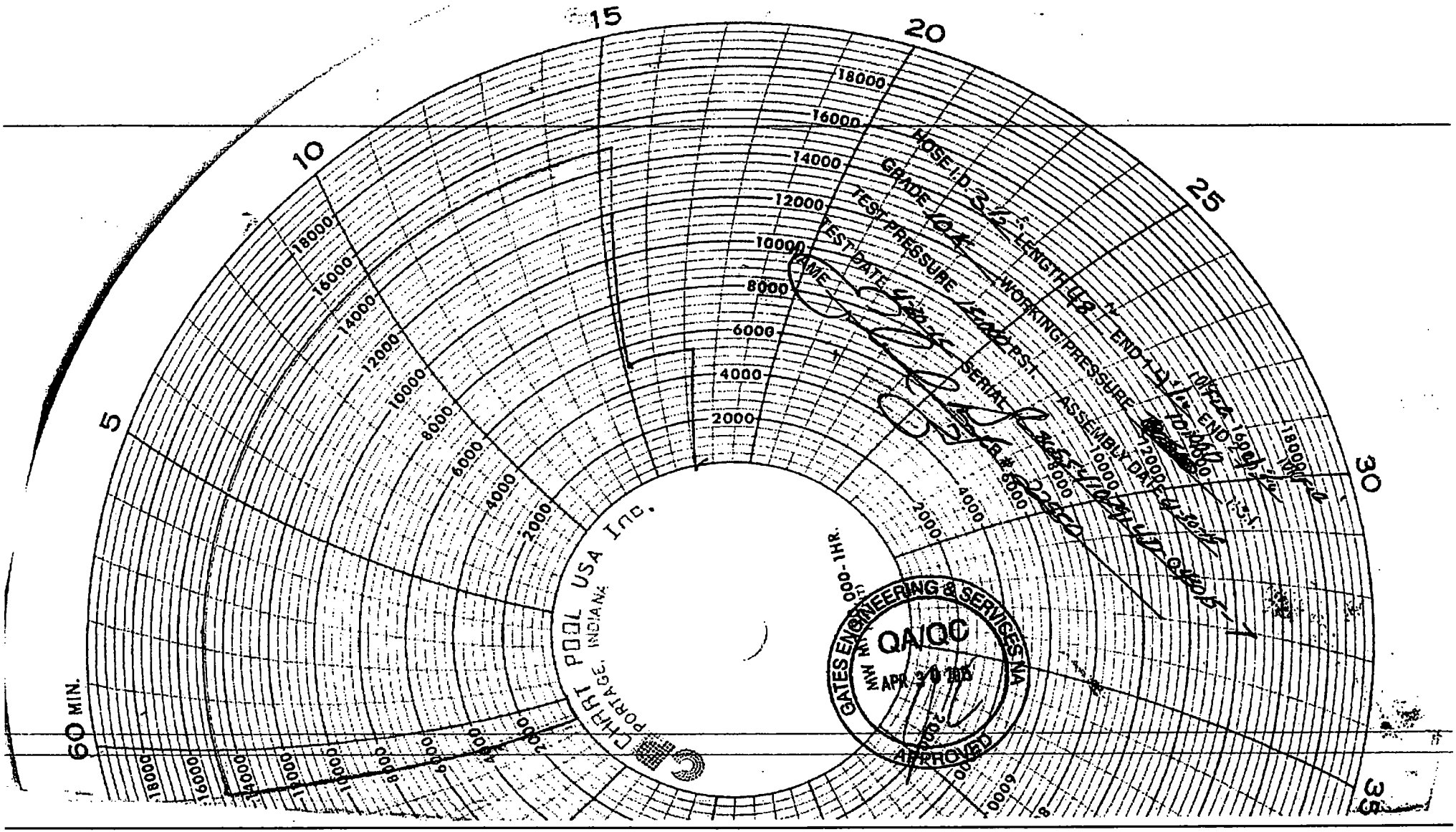
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE

End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager :	QUALITY	Produciton:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :		Signature :	

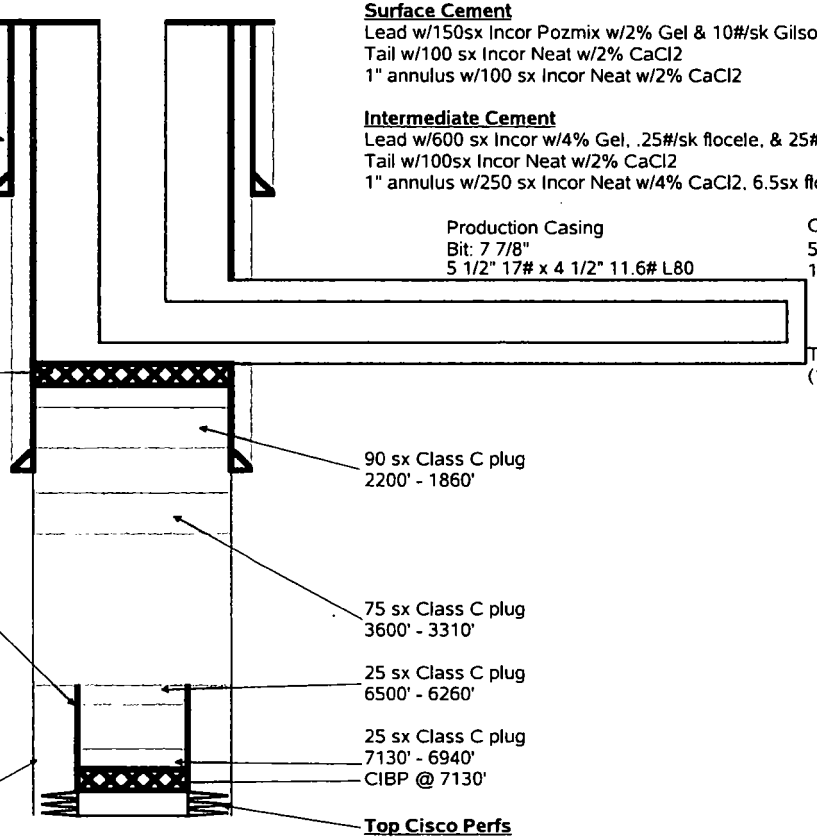
Form PTC - 01 Rev.0 2


15
20
10
25
5
30
60 MIN.
35
18000
16000
14000
12000
10000
8000
6000
4000
2000
HOSE I.D. 3 1/2"
GRADE 104
TEST PRESSURE 15000 PSI
TEST DATE 4-30-10
NAME
SERIAL
WORKING PRESSURE 10000
ASSEMBLY DATE 4-30-10
END 1
END 2
PORTAGE, INDIANA
CHART POOL USA Inc.
GATES ENGINEERING & SERVICES NA
QA/QC
APPROVED

By: K.Kirkes
Date: 7/13/2018

Mewbourne Oil Co.
Proposed Wellbore Schematic
Bogle Flats Fed Unit 10/9 Y1FE #1H
Eddy County, NM

SL: 2100' FNL & 1650' FWL - Sec. 10-T22S-R23E



Surface Casing:
Bit: 17 1/2"
13 3/8" H40 48# ST&C
Set @ 255'

Intermediate Casing
Bit: 11"
8 5/8" 32# J55 LT&C
Set @ 2253'

CIBP & whipstock @ 1565'

Production Casing:
Bit: 7 7/8"
5 1/2" 14# & 15.5# J55 Csg
Set @7630'
Proposed cut off @ 6160'

Production Cement:
Lead w/ 175sx incor poz mix W/2% GEL - 5#/sk Gilsonite - 0.6% CFR-2
Tail w/ 75sx Incor Neat 5#/sk Gilsonite & 1 gal/sk latex
TOC @ 6210'

Surface Cement
Lead w/150sx Incor Pozmix w/2% Gel & 10#/sk Gilsonite
Tail w/100 sx Incor Neat w/2% CaCl2
1" annulus w/100 sx Incor Neat w/2% CaCl2

Intermediate Cement
Lead w/600 sx Incor w/4% Gel, .25#/sk flocele, & 25#/sk Gilsonite
Tail w/100sx Incor Neat w/2% CaCl2
1" annulus w/250 sx Incor Neat w/4% CaCl2, 6.5sx flocele, & 8sx fiber + 100sx Incor Neat

Production Casing
Bit: 7 7/8"
5 1/2" 17# x 4 1/2" 11.6# L80

Cmt:
50/50/10 Poz C
11.9 PPG @ 2.47 cuft/sk

TD @ 8737' MD
(1972' TVD)

90 sx Class C plug
2200' - 1860'

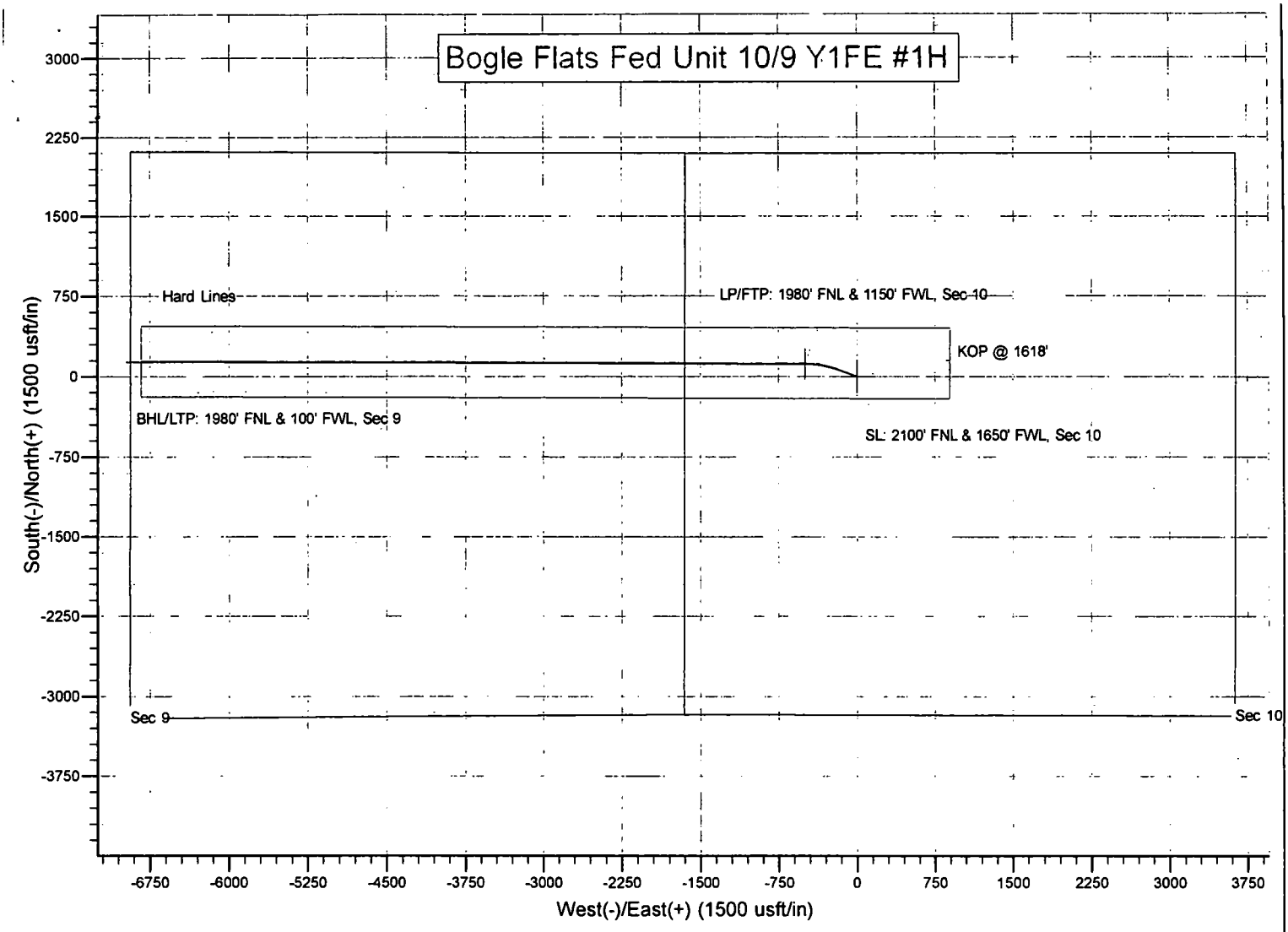
75 sx Class C plug
3600' - 3310'

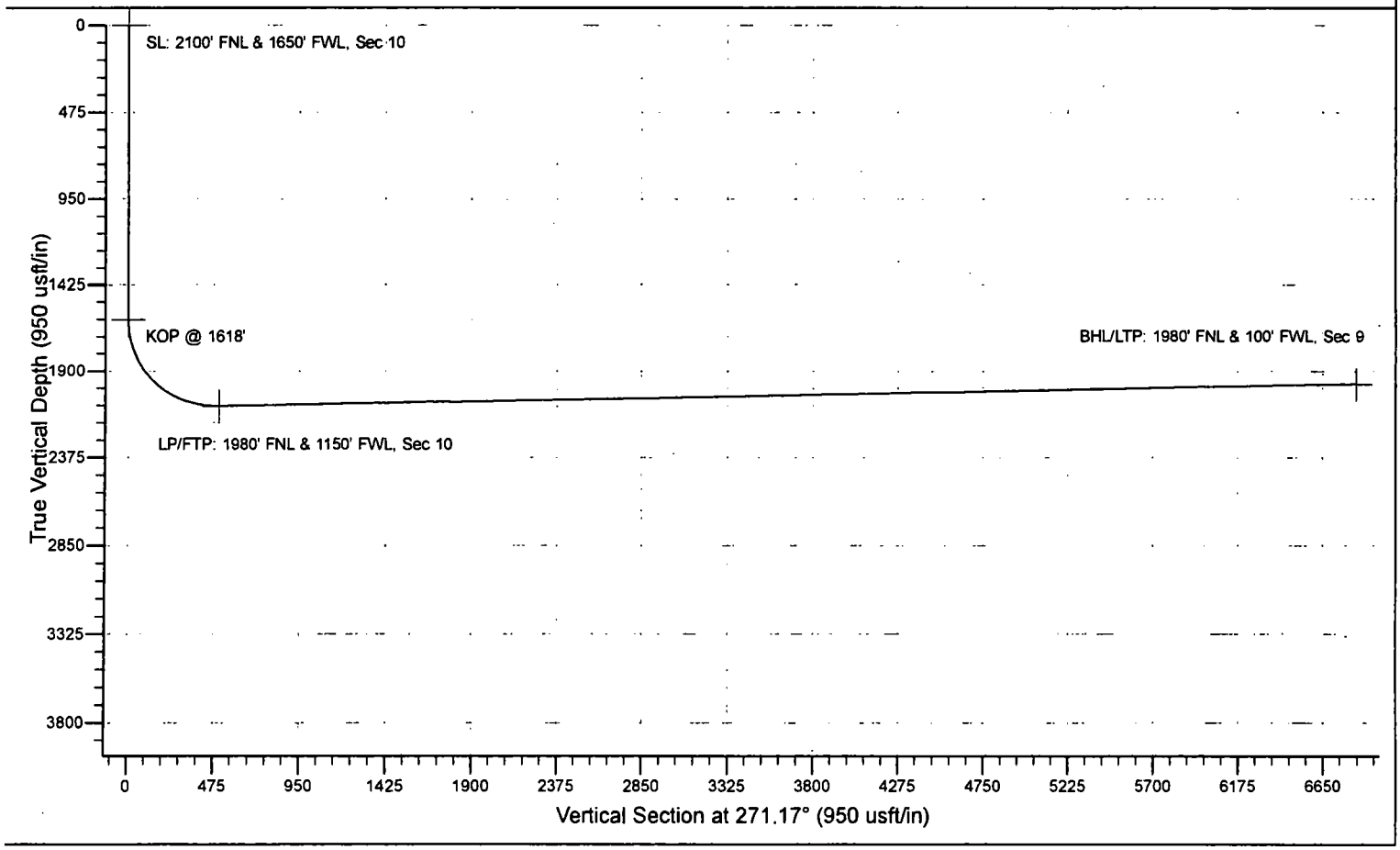
25 sx Class C plug
6500' - 6260'

25 sx Class C plug
7130' - 6940'

CIBP @ 7130'

Top Cisco Perfs
7143'-7306' - producing interval
2000 gals 15% HCl


Bogle Flats Fed Unit 10/9 Y1FE #1H
Hard Lines
LP/FTP: 1980' FNL & 1150' FWL, Sec 10
KOP @ 1618'
BHL/LTP: 1980' FNL & 100' FWL, Sec 9
SL: 2100' FNL & 1650' FWL, Sec 10
Sec 9
Sec 10
South(-)/North(+) (1500 usft/in)
West(-)/East(+) (1500 usft/in)
3000
2250
1500
750
0
-750
-1500
-2250
-3000
-3750
-6750
-6000
-5250
-4500
-3750
-3000
-2250
-1500
-750
0
750
1500
2250
3000
3750


SL: 2100' FNL & 1650' FWL, Sec 10
KOP @ 1618'
BHL/LTP: 1980' FNL & 100' FWL, Sec 9
LP/FTP: 1980' FNL & 1150' FWL, Sec 10
True Vertical Depth (950 usft/in)
Vertical Section at 271.17° (950 usft/in)
0
475
950
1425
1900
2375
2850
3325
3800
4275
4750
5225
5700
6175
6650

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Bogle Flats Fed Unit 10/9 Y1FE #1H
Sec 10, T22S, R23E
SL: 2100' FNL & 1650' FWL, Sec 10
BHL: 1980' FNL & 100' FWL, Sec 9

Plan: Design #1

Standard Planning Report

17 July, 2018

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Bogle Flats Fed Unit 10/9 Y1FE #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Site:	Bogle Flats Fed Unit 10/9 Y1FE #1H	**North Reference:**	Grid
Well:	Sec 10, T22S, R23E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980' FNL & 100' FWL, Sec 9		
Design:	Design #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Bogle Flats Fed Unit 10/9 Y1FE #1H				
Site Position:		**Northing:**	511,832.00 usft	**Latitude:**	32.4068295
From:	Map	**Easting:**	461,688.00 usft	**Longitude:**	-104.5914228
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.14 °

Well	Sec 10, T22S, R23E					
Well Position	**+N/-S**	0.0 usft	**Northing:**	511,832.00 usft	**Latitude:**	32.4068295
	+E/-W	0.0 usft	**Easting:**	461,688.00 usft	**Longitude:**	-104.5914228
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	4,048.0 usft	**Ground Level:**	4,021.0 usft

Wellbore	BHL: 1980' FNL & 100' FWL, Sec 9				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	7/11/2018	7.20	60.01	47,908

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	271.17	

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	
1,617.5	0.00	0.00	1,617.5	0.0	0.0	0.00	0.00	0.00	0.00	
2,075.4	56.51	289.63	2,004.7	69.9	-196.0	12.34	12.34	0.00	289.63	
2,401.5	91.11	270.19	2,095.0	118.0	-499.0	12.00	10.61	-5.96	-31.81	LP/FTP: 1980' FNL &
8,736.7	91.11	270.19	1,972.0	139.0	-6,833.0	0.00	0.00	0.00	0.00	BHL/LTP: 1980' FNL &

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Bogle Flats Fed Unit 10/9 Y1FE #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Site:	Bogle Flats Fed Unit 10/9 Y1FE #1H	**North Reference:**	Grid
Well:	Sec 10, T22S, R23E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980' FNL & 100' FWL, Sec 9		
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: 2100' FNL & 1650' FWL, Sec 10									
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
1,617.5	0.00	0.00	1,617.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 1618'									
1,700.0	10.18	289.63	1,699.6	2.5	-6.9	6.9	12.34	12.34	0.00
1,800.0	22.52	289.63	1,795.3	11.9	-33.3	33.6	12.34	12.34	0.00
1,900.0	34.87	289.63	1,882.9	28.0	-78.5	79.0	12.34	12.34	0.00
2,000.0	47.21	289.63	1,958.2	50.0	-140.2	141.2	12.34	12.34	0.00
2,075.4	56.51	289.63	2,004.7	69.9	-196.0	197.4	12.34	12.34	0.00
2,100.0	59.04	287.81	2,017.8	76.6	-215.7	217.2	12.00	10.25	-7.37
2,200.0	69.51	281.28	2,061.2	98.9	-302.8	304.7	12.00	10.47	-6.53
2,300.0	80.18	275.59	2,087.3	112.9	-398.1	400.3	12.00	10.68	-5.68
2,400.0	90.95	270.27	2,095.0	118.0	-497.5	499.8	12.00	10.77	-5.32
2,401.5	91.11	270.19	2,095.0	118.0	-499.0	501.3	12.00	10.78	-5.28
LP/FTP: 1980' FNL & 1150' FWL, Sec 10									
2,500.0	91.11	270.19	2,093.1	118.3	-597.5	599.8	0.00	0.00	0.00
2,600.0	91.11	270.19	2,091.1	118.7	-697.5	699.7	0.00	0.00	0.00
2,700.0	91.11	270.19	2,089.2	119.0	-797.4	799.7	0.00	0.00	0.00
2,800.0	91.11	270.19	2,087.3	119.3	-897.4	899.7	0.00	0.00	0.00
2,900.0	91.11	270.19	2,085.3	119.7	-997.4	999.6	0.00	0.00	0.00
3,000.0	91.11	270.19	2,083.4	120.0	-1,097.4	1,099.6	0.00	0.00	0.00
3,100.0	91.11	270.19	2,081.4	120.3	-1,197.4	1,199.6	0.00	0.00	0.00
3,200.0	91.11	270.19	2,079.5	120.6	-1,297.3	1,299.5	0.00	0.00	0.00
3,300.0	91.11	270.19	2,077.6	121.0	-1,397.3	1,399.5	0.00	0.00	0.00
3,400.0	91.11	270.19	2,075.6	121.3	-1,497.3	1,499.5	0.00	0.00	0.00
3,500.0	91.11	270.19	2,073.7	121.6	-1,597.3	1,599.4	0.00	0.00	0.00
3,600.0	91.11	270.19	2,071.7	122.0	-1,697.3	1,699.4	0.00	0.00	0.00
3,700.0	91.11	270.19	2,069.8	122.3	-1,797.2	1,799.4	0.00	0.00	0.00
3,800.0	91.11	270.19	2,067.8	122.6	-1,897.2	1,899.3	0.00	0.00	0.00
3,900.0	91.11	270.19	2,065.9	123.0	-1,997.2	1,999.3	0.00	0.00	0.00
4,000.0	91.11	270.19	2,064.0	123.3	-2,097.2	2,099.3	0.00	0.00	0.00
4,100.0	91.11	270.19	2,062.0	123.6	-2,197.2	2,199.2	0.00	0.00	0.00
4,200.0	91.11	270.19	2,060.1	124.0	-2,297.1	2,299.2	0.00	0.00	0.00
4,300.0	91.11	270.19	2,058.1	124.3	-2,397.1	2,399.2	0.00	0.00	0.00
4,400.0	91.11	270.19	2,056.2	124.6	-2,497.1	2,499.1	0.00	0.00	0.00
4,500.0	91.11	270.19	2,054.3	125.0	-2,597.1	2,599.1	0.00	0.00	0.00
4,600.0	91.11	270.19	2,052.3	125.3	-2,697.1	2,699.1	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Bogle Flats Fed Unit 10/9 Y1FE #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Site:	Bogle Flats Fed Unit 10/9 Y1FE #1H	**North Reference:**	Grid
Well:	Sec 10, T22S, R23E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980' FNL & 100' FWL, Sec 9		
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)
4,700.0	91.11	270.19	2,050.4	125.6	-2,797.0	2,799.0	0.00	0.00	0.00
4,800.0	91.11	270.19	2,048.4	126.0	-2,897.0	2,899.0	0.00	0.00	0.00
4,900.0	91.11	270.19	2,046.5	126.3	-2,997.0	2,999.0	0.00	0.00	0.00
5,000.0	91.11	270.19	2,044.5	126.6	-3,097.0	3,098.9	0.00	0.00	0.00
5,100.0	91.11	270.19	2,042.6	126.9	-3,197.0	3,198.9	0.00	0.00	0.00
5,200.0	91.11	270.19	2,040.7	127.3	-3,296.9	3,298.9	0.00	0.00	0.00
5,300.0	91.11	270.19	2,038.7	127.6	-3,396.9	3,398.8	0.00	0.00	0.00
5,400.0	91.11	270.19	2,036.8	127.9	-3,496.9	3,498.8	0.00	0.00	0.00
5,500.0	91.11	270.19	2,034.8	128.3	-3,596.9	3,598.8	0.00	0.00	0.00
5,600.0	91.11	270.19	2,032.9	128.6	-3,696.9	3,698.7	0.00	0.00	0.00
5,700.0	91.11	270.19	2,031.0	128.9	-3,796.9	3,798.7	0.00	0.00	0.00
5,800.0	91.11	270.19	2,029.0	129.3	-3,896.8	3,898.7	0.00	0.00	0.00
5,900.0	91.11	270.19	2,027.1	129.6	-3,996.8	3,998.6	0.00	0.00	0.00
6,000.0	91.11	270.19	2,025.1	129.9	-4,096.8	4,098.6	0.00	0.00	0.00
6,100.0	91.11	270.19	2,023.2	130.3	-4,196.8	4,198.6	0.00	0.00	0.00
6,200.0	91.11	270.19	2,021.3	130.6	-4,296.8	4,298.5	0.00	0.00	0.00
6,300.0	91.11	270.19	2,019.3	130.9	-4,396.7	4,398.5	0.00	0.00	0.00
6,400.0	91.11	270.19	2,017.4	131.3	-4,496.7	4,498.5	0.00	0.00	0.00
6,500.0	91.11	270.19	2,015.4	131.6	-4,596.7	4,598.4	0.00	0.00	0.00
6,600.0	91.11	270.19	2,013.5	131.9	-4,696.7	4,698.4	0.00	0.00	0.00
6,700.0	91.11	270.19	2,011.5	132.2	-4,796.7	4,798.4	0.00	0.00	0.00
6,800.0	91.11	270.19	2,009.6	132.6	-4,896.6	4,898.3	0.00	0.00	0.00
6,900.0	91.11	270.19	2,007.7	132.9	-4,996.6	4,998.3	0.00	0.00	0.00
7,000.0	91.11	270.19	2,005.7	133.2	-5,096.6	5,098.3	0.00	0.00	0.00
7,100.0	91.11	270.19	2,003.8	133.6	-5,196.6	5,198.2	0.00	0.00	0.00
7,200.0	91.11	270.19	2,001.8	133.9	-5,296.6	5,298.2	0.00	0.00	0.00
7,300.0	91.11	270.19	1,999.9	134.2	-5,396.5	5,398.2	0.00	0.00	0.00
7,400.0	91.11	270.19	1,998.0	134.6	-5,496.5	5,498.1	0.00	0.00	0.00
7,500.0	91.11	270.19	1,996.0	134.9	-5,596.5	5,598.1	0.00	0.00	0.00
7,600.0	91.11	270.19	1,994.1	135.2	-5,696.5	5,698.1	0.00	0.00	0.00
7,700.0	91.11	270.19	1,992.1	135.6	-5,796.5	5,798.0	0.00	0.00	0.00
7,800.0	91.11	270.19	1,990.2	135.9	-5,896.4	5,898.0	0.00	0.00	0.00
7,900.0	91.11	270.19	1,988.2	136.2	-5,996.4	5,998.0	0.00	0.00	0.00
8,000.0	91.11	270.19	1,986.3	136.6	-6,096.4	6,097.9	0.00	0.00	0.00
8,100.0	91.11	270.19	1,984.4	136.9	-6,196.4	6,197.9	0.00	0.00	0.00
8,200.0	91.11	270.19	1,982.4	137.2	-6,296.4	6,297.9	0.00	0.00	0.00
8,300.0	91.11	270.19	1,980.5	137.6	-6,396.3	6,397.8	0.00	0.00	0.00
8,400.0	91.11	270.19	1,978.5	137.9	-6,496.3	6,497.8	0.00	0.00	0.00
8,500.0	91.11	270.19	1,976.6	138.2	-6,596.3	6,597.8	0.00	0.00	0.00
8,600.0	91.11	270.19	1,974.7	138.5	-6,696.3	6,697.7	0.00	0.00	0.00
8,700.0	91.11	270.19	1,972.7	138.9	-6,796.3	6,797.7	0.00	0.00	0.00
8,736.7	91.11	270.19	1,972.0	139.0	-6,833.0	6,834.4	0.00	0.00	0.00
BHL/LTP: 1980' FNL & 100' FWL, Sec 9									

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Bogle Flats Fed Unit 10/9 Y1FE #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 4048.0usft (Original Well Elev)
Site:	Bogle Flats Fed Unit 10/9 Y1FE #1H	**North Reference:**	Grid
Well:	Sec 10, T22S, R23E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980' FNL & 100' FWL, Sec 9		
Design:	Design #1		

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
SL: 2100' FNL & 1650' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	511,832.00	461,688.00	32.4068295	-104.5914228
KOP @ 1618' - plan hits target center - Point	0.00	0.00	1,617.5	0.0	0.0	511,832.00	461,688.00	32.4068295	-104.5914228
BHL/LTP: 1980' FNL & 1 - plan hits target center - Point	0.00	0.00	1,972.0	139.0	-6,833.0	511,971.00	454,855.00	32.4071643	-104.6135648
LP/FTP: 1980' FNL & 11 - plan hits target center - Point	0.00	0.00	2,095.0	118.0	-499.0	511,950.00	461,189.00	32.4071505	-104.5930406

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Co**
LEASE NO.:	**NM045273**
WELL NAME & NO.:	**1H – Bogle Flats Fed Unit 10/9 Y1FE**
SURFACE HOLE FOOTAGE:	**2100'/N & 1650'/W**
BOTTOM HOLE FOOTAGE	**1980'/N & 100'/W**
LOCATION:	**Sec. 10, T. 22 S, R. 23 E**
COUNTY:	**Eddy County, New Mexico**

COA

All previous COAs still apply expect the following:

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

A. CASING

The pilot hole plugging procedure is approved as written. Note plug tops on subsequent drilling report.

Pilot hole is required to have a plug at the bottom of the hole. If two plugs are set, the BLM is to be contacted (575-361-2822) prior to tag of bottom plug, which must be a minimum of 200' in length. Operator can set one plug from bottom of pilot hole to kick-off point and save the WOC time for tagging the first plug. Note plug tops on subsequent drilling report.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings , the cement on the 3rd casing string must come to surface.

1. The minimum required fill of cement behind the **5 ½ X 4-1/2** inch production liner is: Cement to surface. If cement does not circulate to surface contact BLM.

B. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. **If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:**
    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**

d. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**
e. **Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.**

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

   b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

   c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.

   d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

   e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

   f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.

   g. BOP/BOPE must be tested by an independent service company within 500

feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

ZS 071818

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Recompletion operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to Recomplete the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be Recompleted. Failure to do so will result in enforcement action.

The rig used for the Recomplete procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any Recomplete operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.**

3. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. Mud Requirement: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**
Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat

Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

7. Subsequent Recomplete Reporting: Within 30 days after Recomplete work is completed, file one original and three copies of the Subsequent Report of Recomplete, Form 3160-5 to BLM. The report should give in detail the manner in which the recompletion was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was recompleted.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

222310D APD18-564 BOGLE FLATS FED UNIT 10 Y1MD 1H 30025 NMNM045273
Mewbourne 12-55 03182018 ZS

High

13 3/8	surface csg in a	17 1/2	inch hole.		Design Factors		SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	48.00	H 40	ST&C	26.31	6.92	2.53	255	12,240
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,100		Tail Cmt	does not	circ to sfc.		Totals:	255	12,240

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	250	382	232	65	8.40	339	2M	1.56

8 5/8	casing inside the	13 3/8			Design Factors		INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	32.00	J 55	LT&C	8.33	3.7	4.3	1,565	50,080
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	1,565	50,080

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 255 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
11	0.2542	700	1404	469	199	8.40	453	2M	0.69

Tail cmt

5 1/2	casing inside the	8 5/8			Design Factors		PRODUCTION	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	17.00	L 80	LT&C	10.70	8.93	8.47	1,615	27,455
"B"	11.60	L 80	LT&C	4.17	4.47	8.51	7,122	82,615
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,500						Totals:	8,737	110,070
B would be:				51.19	7.38	if it were a vertical wellbore.		

00	MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
	8737	2095	1972	1618	91	12	2402

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 1565 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
7 7/8	0.1733	970	2396	1524	57	8.40			0.91

Class 'C' tail cmt yld > 1.35