

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL CONSERVATION
ARTESIA DISTRICT
APR 18 2018
RECEIVEDFORM 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.
NMNM117115
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No. **316525**
ICEMAN 26 W2AP FED COM 1H
9. API Well No.
30-015-43862-00-X1
10. Field and Pool or Exploratory Area
FOREHAND RANCH
11. County or Parish, State
EDDY COUNTY, NM

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

2. Name of Operator
MEWBOURNE OIL COMPANY

Carlsbad Field Office
Contact: JACKIE LATHAN
E-Mail: jlathan@meowbournelco.com
OCB Artesia

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 26 T23S R27E NENE 205FNL 330FEL

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	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 recompleat 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 recompleat 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 has an approved APD for the above well. Mewbourne requests approval to make the following changes:

- 1) Change well name to **Iceman 26 W0AP Fed Com #1H.** - **321208** - **effective 7-1-2017**
- 2) Change TVD to 9297'.
- 3) Change csg depth and cement to suit new plan and add DV tool/ECP @3150'.
- 4) Change wellhead to multi-bowl type wellhead.
- 5) Request variance for the use of a flexible choke line from the BOP to choke manifold. Anchors are not required by manufacturer.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Please see attachments for C-102, wellhead schematic, new drilling plan, casing & cement information.

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

Electronic Submission #381521 verified by the BLM Well Information System
For MEWBOURNE OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by TEUNGKU KRUENG on 07/18/2017 (17TMK0023SE)

Name (Printed/Typed) ROBERT TALLEY

Title ENGINEER

Signature (Electronic Submission)

Date 07/17/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS

Title PETROLEUM ENGINEER

Date 04/11/2018

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 ****

RWP 4-18-18

Additional data for EC transaction #381521 that would not fit on the form

32. Additional remarks, continued

Please contact Robert Talley with any questions.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

APR 27 2018

☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-43862		² Pool Code 98220		³ Pool Name PURPLE SAGE WOLFCAMP					
⁴ Property Code 31625		⁵ Property Name ICEMAN 26 WOAP FED COM						⁶ Well Number 1H	
⁷ OGRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY						⁹ Elevation 3137'	
¹⁰ Surface Location									
UL or lot no. A	Section 26	Township 23S	Range 27E	Lot Idn	Feet from the 205	North/South line NORTH	Feet from the 415	East/West line EAST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. P	Section 26	Township 23S	Range 27E	Lot Idn	Feet from the 330	North/South line SOUTH	Feet from the 330	East/West line EAST	County EDDY
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

GEODETIC DATA NAD 27 GRID - NM EAST SURFACE LOCATION N: 466619.4 - E: 555649.4 LAT: 32.28272503° N LONG: 104.15326162° W BOTTOM HOLE N: 461807.5 - E: 555901.1 LAT: 32.26949609° N LONG: 104.15247334° W GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION N: 466678.2 - E: 596831.9 LAT: 32.28284483° N LONG: 104.15375899° W BOTTOM HOLE N: 461866.2 - E: 597083.7 LAT: 32.26961606° N LONG: 104.15297018° W CORNER DATA NAD 27 GRID - NM EAST A: FOUND 100D NAIL N 461359.3 - E 550940.4 B: FOUND 1" IRON ROD N 466813.9 - E 550780.2 C: FOUND BRASS CAP "1969" N 466825.3 - E 556057.5 D: CALCULATED CORNER N 461485.6 - E 556242.3		DETAIL "A" 3135.6' 600' 3134.5' 3138.7' 600' 3137.9' S. L.		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Bradley Bishop</i> 7-17-17 Signature Date BRADLEY BISHOP Printed Name BBISHOP@MEWBOURNE.COM E-mail Address	
18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 10-6-2016 Date of Survey Signature and Seal of Professional Surveyor		19680 Certificate Number			

RRC - Firm No.: TX 10193838 NM 4655451 - Job No.: LS140455R

Mewbourne Oil Company, Iceman 26 W0AP Fed Com #1H
Sec 26, T23S, R27E
SL: 205' FNL & 415' FEL
BHL: 330' FSL & 330' FEL

1. Geologic Formations

TVD of target	9297'	Pilot hole depth	NA
MD at TD:	13900'	Deepest expected fresh water:	100'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	300	Water	
Top of Salt	460		
Castile			
Base Salt			
Lamar	2300	Oil/Gas	
Bell Canyon		Oil/Gas	
Cherry Canyon		Oil/Gas	
Manzanita Marker			
Brushy Canyon		Oil/Gas	
Bone Spring	5700	Oil/Gas	
1 st Bone Spring Sand			
2 nd Bone Spring Sand			
3 rd Bone Spring Sand			
Abo			
Wolfcamp	9200	Target Zone	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

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

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2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
	From	To								
17.5"	0'	350'	13.375"	48	H40	STC	4.70	10.56	19.17	32.20
12.25"	0'	2200'	9.625"	36	J55	LTC	1.77	3.08	5.72	7.12
8.75"	0'	9415'	7"	26	HCP110	LTC	1.71	2.19	2.64	3.39
6.125"	8750'	13900'	4.5"	13.5	P110	LTC	1.70	1.97	4.86	6.07
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 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?	Y
If yes, are there two strings cemented to surface?	Y
(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, Iceman 26 W0AP Fed Com #1H
Sec 26, T23S, R27E
SL: 205' FNL & 415' FEL
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3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	110	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	300	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod. Stg 1	340	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
ECP/DV Tool @ 3150'						
Prod. Stg 2	50	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	100	14.8	1.34	6.3	8	Tail: Class C + Retarder
Liner	215	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

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	2000'	25%
Liner	8750'	25%

Mewbourne Oil Company, Iceman 26 W0AP Fed Com #1H
Sec 26, T23S, R27E
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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:
12-1/4"	13-5/8"	5M	Annular	X	2500#
			Blind Ram	X	5000#
			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.

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.
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?
Y	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.

Mewbourne Oil Company, Iceman 26 W0AP Fed Com #1H
Sec 26, T23S, R27E
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5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0'	350'	Spud Mud	8.6-8.8	28-34	N/C
350'	2200'	Brine	10.0	28-34	N/C
2200'	8750'	Cut Brine	8.6-9.7	28-34	N/C
8750'	13900'	OBM	10.0-13.0	30-40	<10cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. MW up to 13.0 ppg may be required for shale control. The highest mud weight needed to balance formation pressure is expected to be 12.0 ppg.

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

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from KOP (8750') 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	8750' (KOP) to TD
Density	
CBL	
Mud log	
PEX	

Mewbourne Oil Company, Iceman 26 W0AP Fed Com #1H
Sec 26, T23S, R27E
SL: 205' FNL & 415' FEL
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7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5801 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. **Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.**

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.

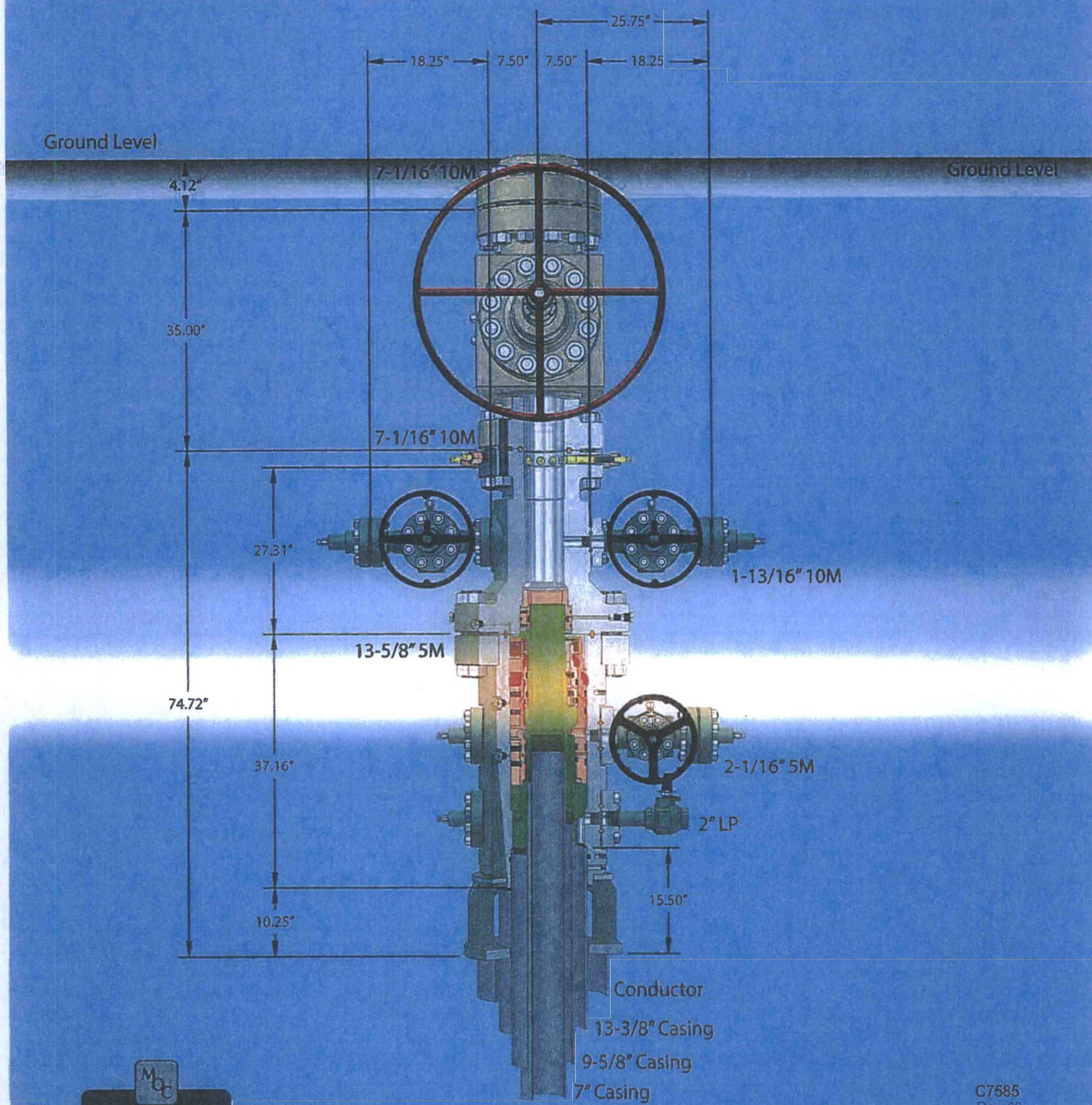
☐	H2S is present
X	H2S Plan attached

8. 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



Capping Range 57" conductor cut-off
79

Mewbourne Oil Company

Eddy County, New Mexico

Iceman 26 W0AP Fed Com 1H

Sec 26, T23S, R27E

SL: 205' FNL & 415' FEL

BHL: 330' FSL & 330' FEL

Plan: Design #1

Standard Planning Report

20 June, 2017

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Iceman 26 W0AP Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3164.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3164.0usft (Original Well Elev)
Site:	Iceman 26 W0AP Fed Com 1H	North Reference:	Grid
Well:	Sec 26, T23S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FEL		
Design:	Design #1		

Project	Eddy 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	Iceman 26 W0AP Fed Com 1H				
Site Position:		Northing:	466,619.00 usft	Latitude:	32° 16' 57.806 N
From:	Map	Easting:	555,649.00 usft	Longitude:	104° 9' 11.746 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.10 °

Well	Sec 26, T23S, R27E					
Well Position	+N/-S	0.0 usft	Northing:	466,619.00 usft	Latitude:	32° 16' 57.806 N
	+E/-W	0.0 usft	Easting:	555,649.00 usft	Longitude:	104° 9' 11.746 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,164.0 usft	Ground Level:	3,137.0 usft

Wellbore	BHL: 330' FSL & 330' FEL				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.02	60.19	48,765

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	177.00

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	
8,750.0	0.00	0.00	8,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,851.6	12.19	125.64	8,850.8	-6.3	8.8	12.00	12.00	0.00	125.64	
9,601.1	90.04	178.01	9,297.0	-519.0	103.0	11.03	10.39	6.99	52.99	LP: 725' FNL & 330' F
13,895.6	90.04	178.01	9,294.0	-4,811.0	252.0	0.00	0.00	0.00	0.00	BHL: 330' FSL & 330' FEL

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Iceman 26 W0AP Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3164.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3164.0usft (Original Well Elev)
Site:	Iceman 26 W0AP Fed Com 1H	North Reference:	Grid
Well:	Sec 26, T23S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FEL		
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: 205' FNL & 415' FEL									
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 Iceman 26 W0AP Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3164.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3164.0usft (Original Well Elev)
Site:	Iceman 26 W0AP Fed Com 1H	North Reference:	Grid
Well:	Sec 26, T23S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FEL		
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	
8,750.0	0.00	0.00	8,750.0	0.0	0.0	0.0	0.00	0.00	0.00	
KOP @ 8750'										
8,800.0	6.00	125.64	8,799.9	-1.5	2.1	1.6	12.00	12.00	0.00	
8,851.6	12.19	125.64	8,850.8	-6.3	8.8	6.7	12.00	12.00	0.00	
8,900.0	15.97	141.30	8,897.8	-14.5	17.1	15.3	11.03	7.81	32.35	
9,000.0	25.57	157.05	8,991.2	-45.2	34.1	46.9	11.03	9.60	15.76	
9,100.0	35.96	164.36	9,077.1	-93.5	50.5	96.0	11.03	10.39	7.31	
9,152.1	41.49	166.85	9,117.7	-125.0	58.6	127.9	11.03	10.62	4.77	
FTP: 330' FNL & 356' FEL										
9,200.0	46.61	168.70	9,152.1	-157.6	65.6	160.8	11.03	10.70	3.86	
9,300.0	57.38	171.72	9,213.6	-235.1	78.8	238.9	11.03	10.77	3.02	
9,400.0	68.21	174.08	9,259.3	-323.2	89.7	327.5	11.03	10.82	2.36	
9,500.0	79.06	176.11	9,287.4	-418.7	97.9	423.2	11.03	10.85	2.03	
9,600.0	89.93	177.99	9,297.0	-517.9	103.0	522.6	11.03	10.87	1.88	
9,601.1	90.04	178.01	9,297.0	-519.0	103.0	523.7	11.03	10.87	1.86	
LP: 725' FNL & 330' FEL										
9,700.0	90.04	178.01	9,296.9	-617.9	106.4	622.6	0.00	0.00	0.00	
9,800.0	90.04	178.01	9,296.9	-717.8	109.9	722.6	0.00	0.00	0.00	

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Iceman 26 W0AP Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3164.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3164.0usft (Original Well Elev)
Site:	Iceman 26 W0AP Fed Com 1H	North Reference:	Grid
Well:	Sec 26, T23S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FEL		
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)
9,900.0	90.04	178.01	9,296.8	-817.8	113.4	822.6	0.00	0.00	0.00
10,000.0	90.04	178.01	9,296.7	-917.7	116.8	922.6	0.00	0.00	0.00
10,100.0	90.04	178.01	9,296.7	-1,017.6	120.3	1,022.5	0.00	0.00	0.00
10,200.0	90.04	178.01	9,296.6	-1,117.6	123.8	1,122.5	0.00	0.00	0.00
10,300.0	90.04	178.01	9,296.5	-1,217.5	127.2	1,222.5	0.00	0.00	0.00
10,400.0	90.04	178.01	9,296.4	-1,317.5	130.7	1,322.5	0.00	0.00	0.00
10,500.0	90.04	178.01	9,296.4	-1,417.4	134.2	1,422.5	0.00	0.00	0.00
10,600.0	90.04	178.01	9,296.3	-1,517.3	137.7	1,522.5	0.00	0.00	0.00
10,700.0	90.04	178.01	9,296.2	-1,617.3	141.1	1,622.5	0.00	0.00	0.00
10,800.0	90.04	178.01	9,296.2	-1,717.2	144.6	1,722.4	0.00	0.00	0.00
10,900.0	90.04	178.01	9,296.1	-1,817.2	148.1	1,822.4	0.00	0.00	0.00
11,000.0	90.04	178.01	9,296.0	-1,917.1	151.5	1,922.4	0.00	0.00	0.00
11,100.0	90.04	178.01	9,296.0	-2,017.0	155.0	2,022.4	0.00	0.00	0.00
11,200.0	90.04	178.01	9,295.9	-2,117.0	158.5	2,122.4	0.00	0.00	0.00
11,300.0	90.04	178.01	9,295.8	-2,216.9	161.9	2,222.4	0.00	0.00	0.00
11,400.0	90.04	178.01	9,295.7	-2,316.9	165.4	2,322.3	0.00	0.00	0.00
11,500.0	90.04	178.01	9,295.7	-2,416.8	168.9	2,422.3	0.00	0.00	0.00
11,600.0	90.04	178.01	9,295.6	-2,516.7	172.4	2,522.3	0.00	0.00	0.00
11,700.0	90.04	178.01	9,295.5	-2,616.7	175.8	2,622.3	0.00	0.00	0.00
11,800.0	90.04	178.01	9,295.5	-2,716.6	179.3	2,722.3	0.00	0.00	0.00
11,900.0	90.04	178.01	9,295.4	-2,816.6	182.8	2,822.3	0.00	0.00	0.00
12,000.0	90.04	178.01	9,295.3	-2,916.5	186.2	2,922.2	0.00	0.00	0.00
12,100.0	90.04	178.01	9,295.3	-3,016.4	189.7	3,022.2	0.00	0.00	0.00
12,200.0	90.04	178.01	9,295.2	-3,116.4	193.2	3,122.2	0.00	0.00	0.00
12,300.0	90.04	178.01	9,295.1	-3,216.3	196.6	3,222.2	0.00	0.00	0.00
12,400.0	90.04	178.01	9,295.0	-3,316.3	200.1	3,322.2	0.00	0.00	0.00
12,500.0	90.04	178.01	9,295.0	-3,416.2	203.6	3,422.2	0.00	0.00	0.00
12,600.0	90.04	178.01	9,294.9	-3,516.1	207.0	3,522.2	0.00	0.00	0.00
12,700.0	90.04	178.01	9,294.8	-3,616.1	210.5	3,622.1	0.00	0.00	0.00
12,800.0	90.04	178.01	9,294.8	-3,716.0	214.0	3,722.1	0.00	0.00	0.00
12,900.0	90.04	178.01	9,294.7	-3,816.0	217.5	3,822.1	0.00	0.00	0.00
13,000.0	90.04	178.01	9,294.6	-3,915.9	220.9	3,922.1	0.00	0.00	0.00
13,100.0	90.04	178.01	9,294.6	-4,015.8	224.4	4,022.1	0.00	0.00	0.00
13,200.0	90.04	178.01	9,294.5	-4,115.8	227.9	4,122.1	0.00	0.00	0.00
13,300.0	90.04	178.01	9,294.4	-4,215.7	231.3	4,222.0	0.00	0.00	0.00
13,400.0	90.04	178.01	9,294.3	-4,315.7	234.8	4,322.0	0.00	0.00	0.00
13,500.0	90.04	178.01	9,294.3	-4,415.6	238.3	4,422.0	0.00	0.00	0.00
13,600.0	90.04	178.01	9,294.2	-4,515.5	241.7	4,522.0	0.00	0.00	0.00
13,700.0	90.04	178.01	9,294.1	-4,615.5	245.2	4,622.0	0.00	0.00	0.00
13,800.0	90.04	178.01	9,294.1	-4,715.4	248.7	4,722.0	0.00	0.00	0.00
13,895.6	90.04	178.01	9,294.0	-4,811.0	252.0	4,817.6	0.00	0.00	0.00

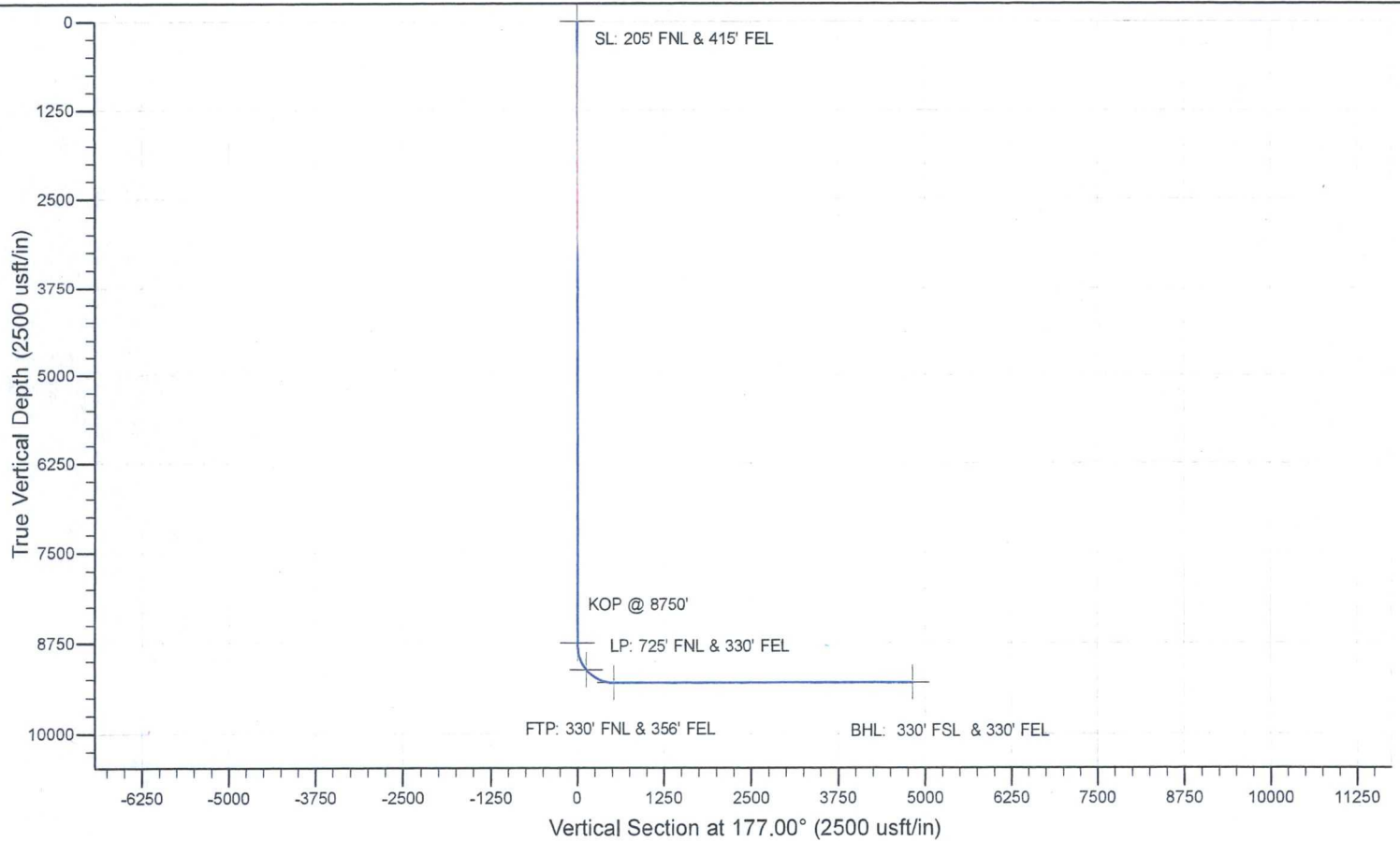
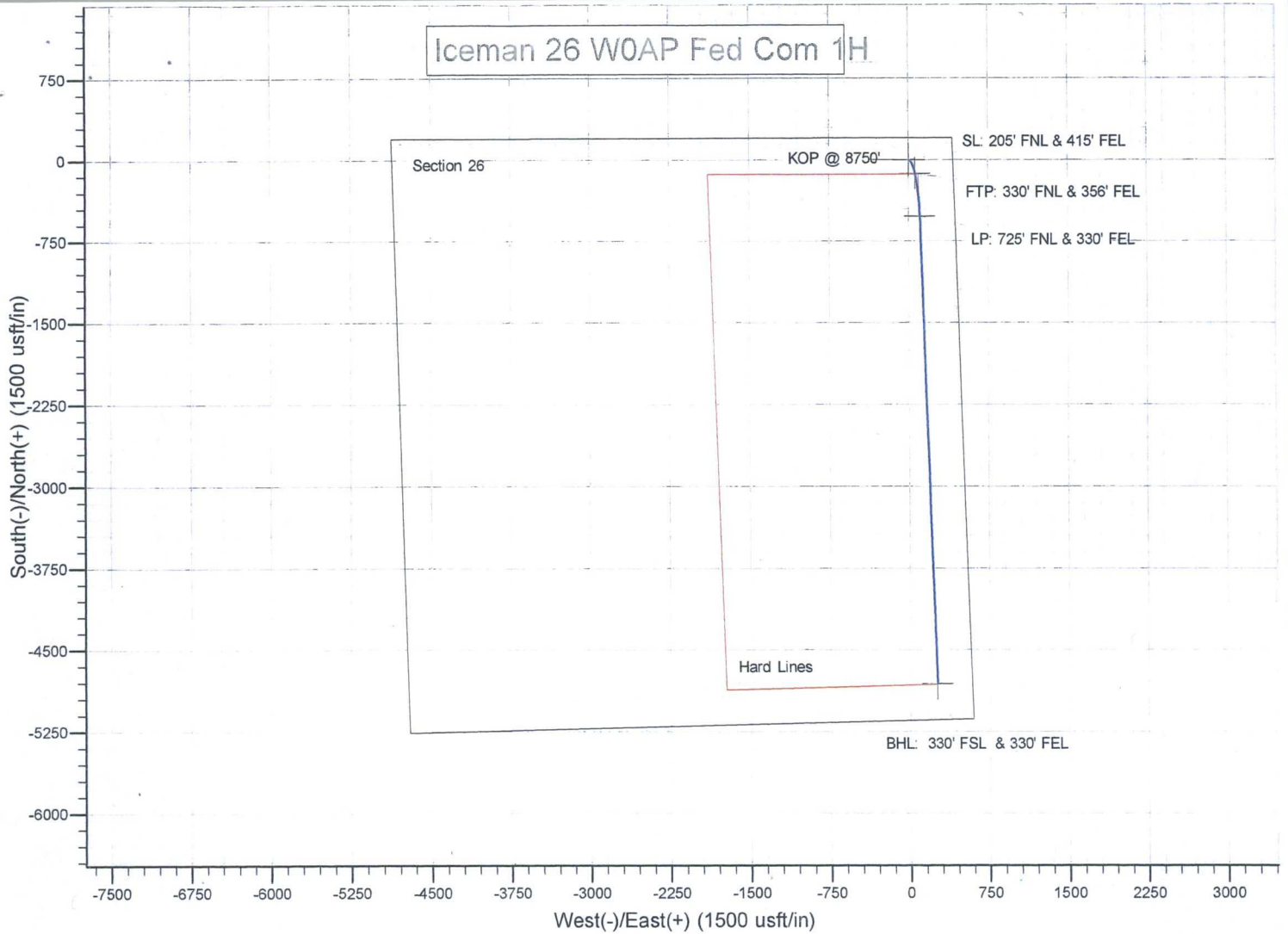
BHL: 330' FSL & 330' FEL

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Iceman 26 W0AP Fed Com 1H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3164.0usft (Original Well Elev)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3164.0usft (Original Well Elev)
Site:	Iceman 26 W0AP Fed Com 1H	North Reference:	Grid
Well:	Sec 26, T23S, R27E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FEL		
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: 205' FNL & 415' FEL - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	466,619.00	555,649.00	32° 16' 57.806 N	104° 9' 11.746 W
KOP @ 8750' - plan hits target center - Point	0.00	0.00	8,750.0	0.0	0.0	466,619.00	555,649.00	32° 16' 57.806 N	104° 9' 11.746 W
FTP: 330' FNL & 356' FE - plan hits target center - Point	0.00	0.00	9,117.7	-125.0	58.6	466,494.00	555,707.58	32° 16' 56.568 N	104° 9' 11.066 W
BHL: 330' FSL & 330' F - plan hits target center - Point	0.00	0.00	9,294.0	-4,811.0	252.0	461,808.00	555,901.00	32° 16' 10.191 N	104° 9' 8.905 W
LP: 725' FNL & 330' FEL - plan hits target center - Point	0.00	0.00	9,297.0	-519.0	103.0	466,100.00	555,752.00	32° 16' 52.668 N	104° 9' 10.556 W

Iceman 26 W0AP Fed Com 1H



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL CO
LEASE NO.:	NMNM117115
WELL NAME & NO.:	1H- ICEMAN 26 W0AP FED COM
SURFACE HOLE FOOTAGE:	205' FNL & 330' FEL
BOTTOM HOLE FOOTAGE	330' FSL & 330' FEL
LOCATION:	Section 26, T. 23 S., R 27 E., NMPM
COUNTY:	Eddy County, New Mexico

All pervious COA still apply expect the following:

Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

1. The minimum required fill of cement behind the 7 inch production casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool: Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

A. 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 5000 (5M) psi.

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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
- e. 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.

ZS 041118

Medium Cave Karst: two casing strings, both to circulate cement to surface.

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	19.17	4.81	1.48	350	16,800	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,058			Tail Cmt	does	circ to sfc.	Totals:	350	16,800	
Comparison of Proposed to Minimum Required Cement Volumes									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
17 1/2	0.6946	310	501	298	68	8.80	682	2M	1.56

9 5/8	casing inside the	13 3/8	Design Factors				INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	36.00	J 55	LT&C	5.72	1.73	0.75	2,200	79,200
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:						Totals:	2,200	79,200
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		350	overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE
12 1/4	0.3132	500	904	730	24	10.20	2633	3M
								0.81

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.6, b, c, d All
 > 0.70, OK.

7	casing inside the		9 5/8	Design Factors			PRODUCTION	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	26.00	HCP 110	LT&C	2.99	1.68	1.59	9,415	244,790
"B"							0	0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,040							Totals:	9,415
A	would be:			2.87	1.67	if it were a vertical wellbore.		
No Pilot Hole Planned		MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
		9415	9273	9273	8750	74	-1	0
The cement volume(s) are intended to achieve a top of				2000	ft from surface or a		200	overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE
8 3/4	0.1503	look v	0	1127		9.70	4232	5M
Setting Depths for D V Tool(s):			3150			sum of sx	Σ CuFt	Σ %excess
% excess cmt by stage:			25	36		890	1433	27

Tail cmt

4 1/2	Liner w/top @	8750	Design Factors				LINER		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	13.50	P 110	LT&C	3.19	1.55	1.98	851	11,489	
"B"	13.50	P 110	LT&C	2.97	1.70	1.98	4,299	58,037	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,045						Totals:	5,150	69,525	
A egment Design Factors would be:				4.86	1.7	if it were a vertical wellbore.			
No Pilot Hole Planned		MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC	
		13900	9294	9294	8750	90	11	9601	
The cement volume(s) are intended to achieve a top of				8750	ft from surface or a		665	overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
6 1/8	0.0942	215	639	436	46	13.00			0.56

Class 'H' tail cmt yld > 1.20