Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM018626

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.: LINDALE 24/25 H3DE FED 2H

2. Name of Operator: MEWBOURNE OIL COMPANY

9. API Well No.: 30 015 48091

3a. Address: PO Box 5270 Hobbs NM 88240

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

10. Field and Pool, or Exploratory: ~~JENNINGS / PURPLE SAGE; WOLFCAM~~ WC 015 G 06 S242630;Bone Spring

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

At surface: NWNW / 405 FNL / 595 FWL / LAT 32.0342405 / LONG -103.8413973

At proposed prod. zone: SWNW / 2566 FNL / 330 FWL / LAT 32.0137396 / LONG -103.8422637

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 24 / T26S / R30E / NMP

14. Distance in miles and direction from nearest town or post office*: 25 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 185 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 480

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 200 feet

19. Proposed Depth: 10239 feet / 17901 feet

20. BLM/BIA Bond No. in file: FED: NM1693

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3139 feet

22. Approximate date work will start*: 12/14/2017

23. Estimated duration: 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

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 requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)		09/25/2018

Title:

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	08/05/2019
Title: Assistant Field Manager Lands & Minerals	Office: CARLSBAD	

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.

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 08/05/2019

Entered - KMS NMOCD

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30 015 48091	98319	WC 015 G 06 S242630A WILDCAT BONE SPRING

4 Property Code	5 Property Name	6 Well Number
326036	LINDALE 24/25 H3DE FED	2H

7 OGRID NO.	8 Operator Name	9 Elevation
14744	MEWBOURNE OIL COMPANY	3139'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
D	24	26S	30E		405	NORTH	595	WEST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	25	26S	30E		2540	NORTH	330	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
480			

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.

16

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1940"
N: 366293.1 – E: 693228.1

B: FOUND BRASS CAP "1940"
N: 368956.8 – E: 693212.2

C: FOUND BRASS CAP "1940"
N: 371622.3 – E: 693195.5

D: FOUND BRASS CAP "1940"
N: 374284.4 – E: 693187.5

E: FOUND BRASS CAP "1940"
N: 376945.7 – E: 693179.8

F: FOUND BRASS CAP "1940"
N: 376952.9 – E: 695842.7

G: FOUND BRASS CAP "1940"
N: 376961.6 – E: 698498.3

H: FOUND BRASS CAP "1940"
N: 374295.4 – E: 698512.3

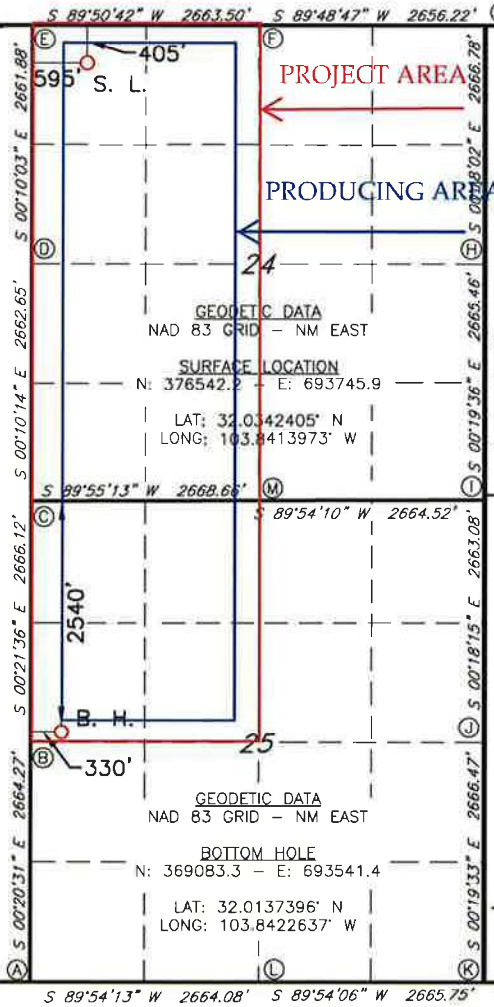
I: FOUND BRASS CAP "1940"
N: 371630.5 – E: 698527.5

J: FOUND BRASS CAP "1940"
N: 368968.0 – E: 698541.7

K: FOUND BRASS CAP "1940"
N: 366302.2 – E: 698556.8

L: FOUND BRASS CAP "1940"
N: 366297.6 – E: 695891.6

M: FOUND BRASS CAP "1940"
N: 371626.0 – E: 695863.6



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.

Signature 9-14-18 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.

8-27-18
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No.: LS18081028

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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

Date: 9-12-18

☒ Original Operator & OGRID No.: Mewbourne Oil Company - 14744
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Lindale 24/25 H3DE Fed #2H		D- 24-T26S-R30E	405' FNL & 595 FWL	0	NA	ONLINE AFTER FRAC

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Western and will be connected to Western low/high pressure gathering system located in EDDY County, New Mexico. It will require 3,400 ' of pipeline to connect the facility to low/high pressure gathering system. Mewbourne Oil Company provides (periodically) to Western a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Mewbourne Oil Company and Western have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Western Processing Plant located in Sec. 36, Blk. 58 T1S, Culberson County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Western system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
02/26/2021

APD ID: 10400034114
Submission Date: 09/25/2018

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED
Well Number: 2H

Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
303286	UNKNOWN	3140	27	27		NONE	N
303287	RUSTLER	2221	919	919	ANHYDRITE, DOLOMITE	USEABLE WATER	N
303288	CASTILE	839	2301	2301	SALT	NONE	N
303289	BASE OF SALT	-499	3639	3639	SALT	NONE	N
303290	LAMAR	-614	3754	3754	LIMESTONE	NATURAL GAS, OIL	N
303291	BELL CANYON	-649	3789	3789	SANDSTONE	NATURAL GAS, OIL	N
303292	CHERRY CANYON	-1542	4682	4682	SANDSTONE	NATURAL GAS, OIL	N
303293	MANZANITA	-1718	4858	4858	SANDSTONE	NATURAL GAS, OIL	N
303294	BRUSHY CANYON	-2736	5876	5876	SANDSTONE	NATURAL GAS, OIL	N
303295	BONE SPRING	-4547	7687	7687	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M
Rating Depth: 17901

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer A multi-bowl wellhead is being used. See attached schematic
Testing Procedure: 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.
Choke Diagram Attachment:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Lindale_24_25_H3DE_Fed_2H_5M_BOPE_Choke_Diagram_20180924145902.pdf

Lindale_24_25_H3DE_Fed_2H_Flex_Line_Specs_20180924145910.pdf

BOP Diagram Attachment:

Lindale_24_25_H3DE_Fed_2H_5M_BOPE_Schematic_20180924145930.pdf

Lindale_24_25_H3DE_Fed_2H_Multi_Bowl_Wellhead_20180924145934.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1000	0	1000			1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.27
2	INTERMEDIATE	12.25	9.625	NEW	API	Y	0	3675	0	3675			3675	J-55	36	LT&C	1.125	1.96	DRY	3.3	DRY	4.11
3	PRODUCTION	8.75	7.0	NEW	API	N	0	10593	0	10246			10593	P-110	26	LT&C	1.23	1.97	DRY	2.32	DRY	3.01
4	LINER	6.125	4.5	NEW	API	N	9693	17901	9673	10239			8208	P-110	13.5	LT&C	1.67	1.94	DRY	3.05	DRY	3.81

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_H3DE_Fed_2H_Csg_Assumptions_20180924150729.doc

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Lindale_24_25_H3DE_Fed_2H_Tapered_String_20180924150644.pdf

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_H3DE_Fed_2H_Csg_Assumptions_20180924150751.doc

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_H3DE_Fed_2H_Csg_Assumptions_20180924151202.doc

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_H3DE_Fed_2H_Csg_Assumptions_20180924151332.doc

Section 4 - Cement

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	809	535	2.12	12.5	1134	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		809	1000	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	2976	545	2.12	12.5	1155	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2976	3675	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	4858	3475	4128	60	2.12	12.5	127	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		4128	4858	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	4858	4858	8081	295	2.12	12.5	625	25	Class H	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		8081	10593	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9693	17901	325	2.97	11.2	965	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Lost circulation material Sweeps Mud scavengers in surface hole

Describe the mud monitoring system utilized: Visual Monitoring

Circulating Medium Table

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1000	SPUD MUD	8.6	8.8							
1000	3675	SALT SATURATED	10	10							
3675	10246	WATER-BASED MUD	8.6	9.5							
10246	10246	OIL-BASED MUD	9.5	12							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Will run GR/CNL from KOP (9693') to surface

List of open and cased hole logs run in the well:

CNL,DS,GR,MWD,MUDLOG

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6393 **Anticipated Surface Pressure:** 3877.52

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Lindale_24_25_H3DE_Fed_2H_H2S_Plan_20180924152906.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Lindale_24_25_H3DE_Fed_2H_Dir_Plan_20180924152924.pdf
Lindale_24_25_H3DE_Fed_2H_Dir_Plot_20180924152928.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Lindale_24_25_H3DE_Fed_2H_Drlg_Program_20180924152953.doc
Lindale_24_25_H3DE_Fed_2H_C101_20180924153302.pdf

Other Variance attachment:

Mewbourne Oil Company
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

2. 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
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	LTC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10593'	7"	26	P110	LTC	1.23	1.97	2.32	3.01
6.125"	9693'	17901'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
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?	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
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

Mewbourne Oil Company
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

2. Casing Program

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17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	LTC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10593'	7"	26	P110	LTC	1.23	1.97	2.32	3.01
6.125"	9693'	17901'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
BLM Minimum Safety Factor		1.125		1		1.6 Dry 1.8 Wet		1.6 Dry 1.8 Wet		

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Must have table for contingency casing

	Y or N
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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?	
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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
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

Drilling Plan

Mewbourne Oil Company
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

2. 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
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12.25"	0'	3452'	9.625"	36	J55	LTC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10593'	7"	26	P110	LTC	1.23	1.97	2.32	3.01
6.125"	9693'	17901'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
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?	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
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

Mewbourne Oil Company
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

2. 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
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	LTC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10593'	7"	26	P110	LTC	1.23	1.97	2.32	3.01
6.125"	9693'	17901'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
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?	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
Lindale 24/25 H3DE Fed #2H
Sec 24 & 25, T26S, R30E
SL: 405' FNL & 595' FWL, Sec. 24
BHL: 2566' FNL & 330' FWL, Sec. 25

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Lindale 24/25 H3DE Fed #2H
SL: 405' FNL & 595' FWL (24)
Secs. 24 & 25, T26S, R30E
BHL: 2566' FNL & 330' FWL (25)

Plan: Design #1

Standard Planning Report

21 September, 2018

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lindale 24/25 H3DE Fed #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 H3DE Fed #2H	**North Reference:**	Grid
Well:	SL: 405' FNL & 595' FWL (24)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 2566' FNL & 330' FWL (25)		
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 Lindale 24/25 H3DE Fed #2H

Site Position:		**Northing:**	376,542.00 usft	**Latitude:**	32.0342397
From:	Map	**Easting:**	693,776.00 usft	**Longitude:**	-103.8413971
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.26 °

Well SL: 405' FNL & 595' FWL (24)

Well Position	**+N/-S**	0.0 usft	**Northing:**	376,542.00 usft	**Latitude:**	32.0342397
	+E/-W	0.0 usft	**Easting:**	693,776.00 usft	**Longitude:**	-103.8413971
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,167.0 usft	**Ground Level:**	3,140.0 usft

Wellbore BHL: 2566' FNL & 330' FWL (25)

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/21/2018	6.80	59.78	47,751

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	181.80

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	
3,750.0	0.00	0.00	3,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,074.1	4.86	326.04	4,073.7	11.4	-7.7	1.50	1.50	0.00	326.04	
9,368.7	4.86	326.04	9,349.3	383.6	-258.3	0.00	0.00	0.00	0.00	
9,692.8	0.00	0.00	9,673.0	395.0	-266.0	1.50	-1.50	0.00	180.00	KOP: 10' FNL & 330' I
10,593.4	90.05	179.77	10,246.0	-178.5	-263.7	10.00	10.00	0.00	179.77	
17,901.0	90.05	179.77	10,239.0	-7,486.0	-235.0	0.00	0.00	0.00	0.00	BHL: 2566' FNL & 33(

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lindale 24/25 H3DE Fed #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 H3DE Fed #2H	**North Reference:**	Grid
Well:	SL: 405' FNL & 595' FWL (24)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 2566' FNL & 330' FWL (25)		
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: 405' FNL & 595' FWL (24)									
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
3,750.0	0.00	0.00	3,750.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.75	326.04	3,800.0	0.3	-0.2	-0.3	1.50	1.50	0.00
3,900.0	2.25	326.04	3,900.0	2.4	-1.6	-2.4	1.50	1.50	0.00
4,000.0	3.75	326.04	3,999.8	6.8	-4.6	-6.6	1.50	1.50	0.00
4,074.1	4.86	326.04	4,073.7	11.4	-7.7	-11.2	1.50	1.50	0.00
4,100.0	4.86	326.04	4,099.5	13.2	-8.9	-12.9	0.00	0.00	0.00
4,200.0	4.86	326.04	4,199.2	20.2	-13.6	-19.8	0.00	0.00	0.00
4,300.0	4.86	326.04	4,298.8	27.3	-18.4	-26.7	0.00	0.00	0.00
4,400.0	4.86	326.04	4,398.4	34.3	-23.1	-33.6	0.00	0.00	0.00
4,500.0	4.86	326.04	4,498.1	41.3	-27.8	-40.4	0.00	0.00	0.00
4,600.0	4.86	326.04	4,597.7	48.4	-32.6	-47.3	0.00	0.00	0.00
4,700.0	4.86	326.04	4,697.4	55.4	-37.3	-54.2	0.00	0.00	0.00
4,800.0	4.86	326.04	4,797.0	62.4	-42.0	-61.1	0.00	0.00	0.00
4,900.0	4.86	326.04	4,896.6	69.5	-46.8	-68.0	0.00	0.00	0.00
5,000.0	4.86	326.04	4,996.3	76.5	-51.5	-74.8	0.00	0.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lindale 24/25 H3DE Fed #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 H3DE Fed #2H	**North Reference:**	Grid
Well:	SL: 405' FNL & 595' FWL (24)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 2566' FNL & 330' FWL (25)		
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)
5,100.0	4.86	326.04	5,095.9	83.5	-56.2	-81.7	0.00	0.00	0.00
5,200.0	4.86	326.04	5,195.6	90.5	-61.0	-88.6	0.00	0.00	0.00
5,300.0	4.86	326.04	5,295.2	97.6	-65.7	-95.5	0.00	0.00	0.00
5,400.0	4.86	326.04	5,394.8	104.6	-70.4	-102.3	0.00	0.00	0.00
5,500.0	4.86	326.04	5,494.5	111.6	-75.2	-109.2	0.00	0.00	0.00
5,600.0	4.86	326.04	5,594.1	118.7	-79.9	-116.1	0.00	0.00	0.00
5,700.0	4.86	326.04	5,693.8	125.7	-84.6	-123.0	0.00	0.00	0.00
5,800.0	4.86	326.04	5,793.4	132.7	-89.4	-129.9	0.00	0.00	0.00
5,900.0	4.86	326.04	5,893.0	139.8	-94.1	-136.7	0.00	0.00	0.00
6,000.0	4.86	326.04	5,992.7	146.8	-98.8	-143.6	0.00	0.00	0.00
6,100.0	4.86	326.04	6,092.3	153.8	-103.6	-150.5	0.00	0.00	0.00
6,200.0	4.86	326.04	6,192.0	160.8	-108.3	-157.4	0.00	0.00	0.00
6,300.0	4.86	326.04	6,291.6	167.9	-113.1	-164.2	0.00	0.00	0.00
6,400.0	4.86	326.04	6,391.2	174.9	-117.8	-171.1	0.00	0.00	0.00
6,500.0	4.86	326.04	6,490.9	181.9	-122.5	-178.0	0.00	0.00	0.00
6,600.0	4.86	326.04	6,590.5	189.0	-127.3	-184.9	0.00	0.00	0.00
6,700.0	4.86	326.04	6,690.2	196.0	-132.0	-191.8	0.00	0.00	0.00
6,800.0	4.86	326.04	6,789.8	203.0	-136.7	-198.6	0.00	0.00	0.00
6,900.0	4.86	326.04	6,889.4	210.1	-141.5	-205.5	0.00	0.00	0.00
7,000.0	4.86	326.04	6,989.1	217.1	-146.2	-212.4	0.00	0.00	0.00
7,100.0	4.86	326.04	7,088.7	224.1	-150.9	-219.3	0.00	0.00	0.00
7,200.0	4.86	326.04	7,188.4	231.1	-155.7	-226.1	0.00	0.00	0.00
7,300.0	4.86	326.04	7,288.0	238.2	-160.4	-233.0	0.00	0.00	0.00
7,400.0	4.86	326.04	7,387.6	245.2	-165.1	-239.9	0.00	0.00	0.00
7,500.0	4.86	326.04	7,487.3	252.2	-169.9	-246.8	0.00	0.00	0.00
7,600.0	4.86	326.04	7,586.9	259.3	-174.6	-253.7	0.00	0.00	0.00
7,700.0	4.86	326.04	7,686.6	266.3	-179.3	-260.5	0.00	0.00	0.00
7,800.0	4.86	326.04	7,786.2	273.3	-184.1	-267.4	0.00	0.00	0.00
7,900.0	4.86	326.04	7,885.8	280.4	-188.8	-274.3	0.00	0.00	0.00
8,000.0	4.86	326.04	7,985.5	287.4	-193.5	-281.2	0.00	0.00	0.00
8,100.0	4.86	326.04	8,085.1	294.4	-198.3	-288.0	0.00	0.00	0.00
8,200.0	4.86	326.04	8,184.8	301.4	-203.0	-294.9	0.00	0.00	0.00
8,300.0	4.86	326.04	8,284.4	308.5	-207.7	-301.8	0.00	0.00	0.00
8,400.0	4.86	326.04	8,384.0	315.5	-212.5	-308.7	0.00	0.00	0.00
8,500.0	4.86	326.04	8,483.7	322.5	-217.2	-315.6	0.00	0.00	0.00
8,600.0	4.86	326.04	8,583.3	329.6	-221.9	-322.4	0.00	0.00	0.00
8,700.0	4.86	326.04	8,683.0	336.6	-226.7	-329.3	0.00	0.00	0.00
8,800.0	4.86	326.04	8,782.6	343.6	-231.4	-336.2	0.00	0.00	0.00
8,900.0	4.86	326.04	8,882.2	350.7	-236.1	-343.1	0.00	0.00	0.00
9,000.0	4.86	326.04	8,981.9	357.7	-240.9	-349.9	0.00	0.00	0.00
9,100.0	4.86	326.04	9,081.5	364.7	-245.6	-356.8	0.00	0.00	0.00
9,200.0	4.86	326.04	9,181.2	371.7	-250.3	-363.7	0.00	0.00	0.00
9,300.0	4.86	326.04	9,280.8	378.8	-255.1	-370.6	0.00	0.00	0.00
9,368.7	4.86	326.04	9,349.3	383.6	-258.3	-375.3	0.00	0.00	0.00
9,400.0	4.39	326.04	9,380.5	385.7	-259.7	-377.4	1.50	-1.50	0.00
9,500.0	2.89	326.04	9,480.3	391.0	-263.3	-382.5	1.50	-1.50	0.00
9,600.0	1.39	326.04	9,580.2	394.1	-265.4	-385.5	1.50	-1.50	0.00
9,692.8	0.00	0.00	9,673.0	395.0	-266.0	-386.5	1.50	-1.50	0.00
KOP: 10' FNL & 330' FWL (24)									
9,700.0	0.72	179.77	9,680.2	395.0	-266.0	-386.4	10.00	10.00	0.00
9,800.0	10.72	179.77	9,779.5	385.0	-266.0	-376.5	10.00	10.00	0.00
9,900.0	20.72	179.77	9,875.7	358.0	-265.9	-349.4	10.00	10.00	0.00
10,000.0	30.71	179.77	9,965.7	314.6	-265.7	-306.1	10.00	10.00	0.00

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lindale 24/25 H3DE Fed #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 H3DE Fed #2H	**North Reference:**	Grid
Well:	SL: 405' FNL & 595' FWL (24)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 2566' FNL & 330' FWL (25)		
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)
10,018.3	32.55	179.77	9,981.3	305.0	-265.6	-296.5	10.00	10.00	0.00
FTP: 100' FNL & 330' FWL (24)									
10,100.0	40.71	179.77	10,046.8	256.3	-265.5	-247.9	10.00	10.00	0.00
10,200.0	50.71	179.77	10,116.5	184.8	-265.2	-176.4	10.00	10.00	0.00
10,300.0	60.71	179.77	10,172.8	102.3	-264.8	-93.9	10.00	10.00	0.00
10,400.0	70.71	179.77	10,213.8	11.3	-264.5	-3.0	10.00	10.00	0.00
10,500.0	80.71	179.77	10,238.5	-85.5	-264.1	93.8	10.00	10.00	0.00
10,593.4	90.05	179.77	10,246.0	-178.5	-263.7	186.7	10.00	10.00	0.00
10,600.0	90.05	179.77	10,246.0	-185.1	-263.7	193.3	0.00	0.00	0.00
10,700.0	90.05	179.77	10,245.9	-285.1	-263.3	293.2	0.00	0.00	0.00
10,800.0	90.05	179.77	10,245.8	-385.1	-262.9	393.2	0.00	0.00	0.00
10,900.0	90.05	179.77	10,245.7	-485.1	-262.5	493.1	0.00	0.00	0.00
11,000.0	90.05	179.77	10,245.6	-585.1	-262.1	593.0	0.00	0.00	0.00
11,100.0	90.05	179.77	10,245.5	-685.1	-261.8	693.0	0.00	0.00	0.00
11,200.0	90.05	179.77	10,245.4	-785.1	-261.4	792.9	0.00	0.00	0.00
11,300.0	90.05	179.77	10,245.3	-885.1	-261.0	892.8	0.00	0.00	0.00
11,400.0	90.05	179.77	10,245.2	-985.1	-260.6	992.8	0.00	0.00	0.00
11,500.0	90.05	179.77	10,245.1	-1,085.1	-260.2	1,092.7	0.00	0.00	0.00
11,600.0	90.05	179.77	10,245.0	-1,185.1	-259.8	1,192.7	0.00	0.00	0.00
11,700.0	90.05	179.77	10,244.9	-1,285.1	-259.4	1,292.6	0.00	0.00	0.00
11,800.0	90.05	179.77	10,244.8	-1,385.1	-259.0	1,392.5	0.00	0.00	0.00
11,900.0	90.05	179.77	10,244.7	-1,485.1	-258.6	1,492.5	0.00	0.00	0.00
12,000.0	90.05	179.77	10,244.7	-1,585.1	-258.2	1,592.4	0.00	0.00	0.00
12,100.0	90.05	179.77	10,244.6	-1,685.1	-257.8	1,692.3	0.00	0.00	0.00
12,200.0	90.05	179.77	10,244.5	-1,785.1	-257.4	1,792.3	0.00	0.00	0.00
12,300.0	90.05	179.77	10,244.4	-1,885.1	-257.0	1,892.2	0.00	0.00	0.00
12,400.0	90.05	179.77	10,244.3	-1,985.1	-256.6	1,992.2	0.00	0.00	0.00
12,500.0	90.05	179.77	10,244.2	-2,085.1	-256.2	2,092.1	0.00	0.00	0.00
12,600.0	90.05	179.77	10,244.1	-2,185.1	-255.9	2,192.0	0.00	0.00	0.00
12,700.0	90.05	179.77	10,244.0	-2,285.1	-255.5	2,292.0	0.00	0.00	0.00
12,800.0	90.05	179.77	10,243.9	-2,385.1	-255.1	2,391.9	0.00	0.00	0.00
12,900.0	90.05	179.77	10,243.8	-2,485.1	-254.7	2,491.8	0.00	0.00	0.00
13,000.0	90.05	179.77	10,243.7	-2,585.1	-254.3	2,591.8	0.00	0.00	0.00
13,100.0	90.05	179.77	10,243.6	-2,685.1	-253.9	2,691.7	0.00	0.00	0.00
13,200.0	90.05	179.77	10,243.5	-2,785.1	-253.5	2,791.7	0.00	0.00	0.00
13,300.0	90.05	179.77	10,243.4	-2,885.1	-253.1	2,891.6	0.00	0.00	0.00
13,400.0	90.05	179.77	10,243.3	-2,985.1	-252.7	2,991.5	0.00	0.00	0.00
13,500.0	90.05	179.77	10,243.2	-3,085.1	-252.3	3,091.5	0.00	0.00	0.00
13,600.0	90.05	179.77	10,243.1	-3,185.1	-251.9	3,191.4	0.00	0.00	0.00
13,700.0	90.05	179.77	10,243.0	-3,285.1	-251.5	3,291.4	0.00	0.00	0.00
13,800.0	90.05	179.77	10,242.9	-3,385.1	-251.1	3,391.3	0.00	0.00	0.00
13,900.0	90.05	179.77	10,242.8	-3,485.1	-250.7	3,491.2	0.00	0.00	0.00
14,000.0	90.05	179.77	10,242.7	-3,585.1	-250.3	3,591.2	0.00	0.00	0.00
14,100.0	90.05	179.77	10,242.6	-3,685.1	-250.0	3,691.1	0.00	0.00	0.00
14,200.0	90.05	179.77	10,242.5	-3,785.1	-249.6	3,791.0	0.00	0.00	0.00
14,300.0	90.05	179.77	10,242.4	-3,885.1	-249.2	3,891.0	0.00	0.00	0.00
14,400.0	90.05	179.77	10,242.4	-3,985.1	-248.8	3,990.9	0.00	0.00	0.00
14,500.0	90.05	179.77	10,242.3	-4,085.1	-248.4	4,090.9	0.00	0.00	0.00
14,600.0	90.05	179.77	10,242.2	-4,185.1	-248.0	4,190.8	0.00	0.00	0.00
14,700.0	90.05	179.77	10,242.1	-4,285.1	-247.6	4,290.7	0.00	0.00	0.00
14,800.0	90.05	179.77	10,242.0	-4,385.1	-247.2	4,390.7	0.00	0.00	0.00
14,900.0	90.05	179.77	10,241.9	-4,485.1	-246.8	4,490.6	0.00	0.00	0.00
15,000.0	90.05	179.77	10,241.8	-4,585.1	-246.4	4,590.5	0.00	0.00	0.00
15,100.0	90.05	179.77	10,241.7	-4,685.1	-246.0	4,690.5	0.00	0.00	0.00

Planning Report

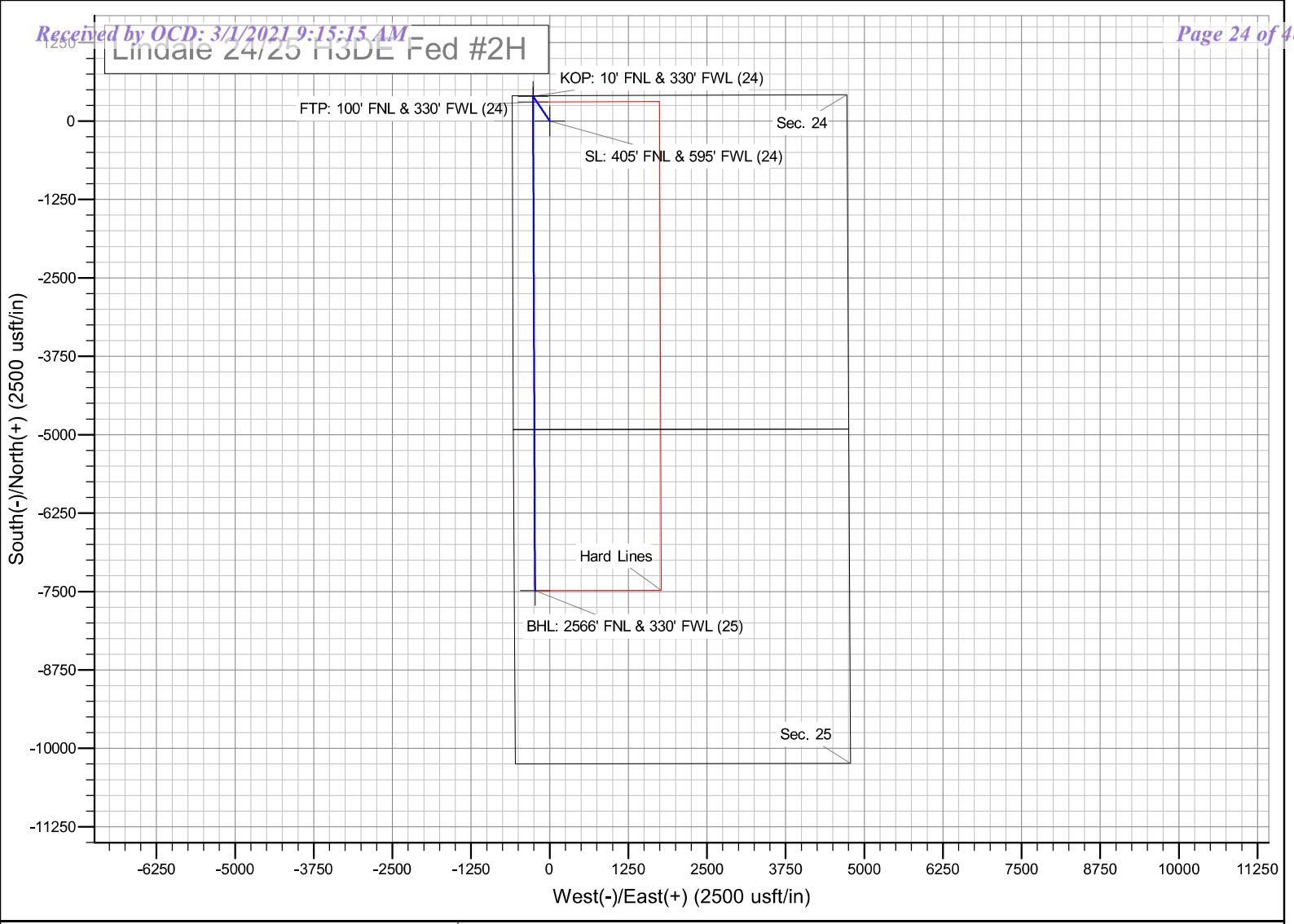
Database:	Hobbs	**Local Co-ordinate Reference:**	Site Lindale 24/25 H3DE Fed #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 H3DE Fed #2H	**North Reference:**	Grid
Well:	SL: 405' FNL & 595' FWL (24)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 2566' FNL & 330' FWL (25)		
Design:	Design #1		

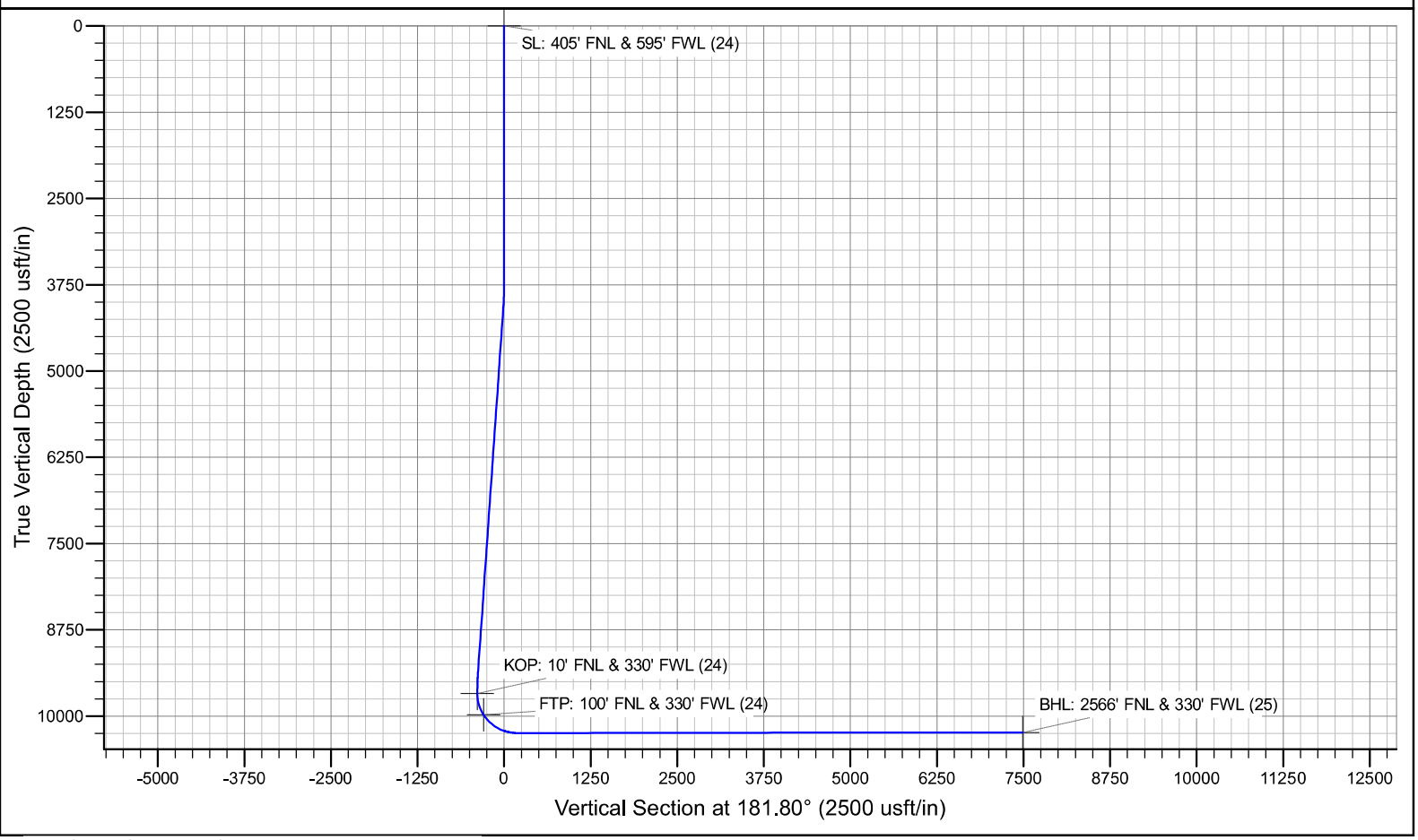
Planned Survey

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)
15,200.0	90.05	179.77	10,241.6	-4,785.1	-245.6	4,790.4	0.00	0.00	0.00
15,300.0	90.05	179.77	10,241.5	-4,885.1	-245.2	4,890.4	0.00	0.00	0.00
15,400.0	90.05	179.77	10,241.4	-4,985.1	-244.8	4,990.3	0.00	0.00	0.00
15,500.0	90.05	179.77	10,241.3	-5,085.1	-244.4	5,090.2	0.00	0.00	0.00
15,600.0	90.05	179.77	10,241.2	-5,185.1	-244.1	5,190.2	0.00	0.00	0.00
15,700.0	90.05	179.77	10,241.1	-5,285.1	-243.7	5,290.1	0.00	0.00	0.00
15,800.0	90.05	179.77	10,241.0	-5,385.1	-243.3	5,390.0	0.00	0.00	0.00
15,900.0	90.05	179.77	10,240.9	-5,485.1	-242.9	5,490.0	0.00	0.00	0.00
16,000.0	90.05	179.77	10,240.8	-5,585.1	-242.5	5,589.9	0.00	0.00	0.00
16,100.0	90.05	179.77	10,240.7	-5,685.1	-242.1	5,689.9	0.00	0.00	0.00
16,200.0	90.05	179.77	10,240.6	-5,785.1	-241.7	5,789.8	0.00	0.00	0.00
16,300.0	90.05	179.77	10,240.5	-5,885.1	-241.3	5,889.7	0.00	0.00	0.00
16,400.0	90.05	179.77	10,240.4	-5,985.1	-240.9	5,989.7	0.00	0.00	0.00
16,500.0	90.05	179.77	10,240.3	-6,085.1	-240.5	6,089.6	0.00	0.00	0.00
16,600.0	90.05	179.77	10,240.2	-6,185.1	-240.1	6,189.5	0.00	0.00	0.00
16,700.0	90.05	179.77	10,240.2	-6,285.1	-239.7	6,289.5	0.00	0.00	0.00
16,800.0	90.05	179.77	10,240.1	-6,385.1	-239.3	6,389.4	0.00	0.00	0.00
16,900.0	90.05	179.77	10,240.0	-6,485.1	-238.9	6,489.4	0.00	0.00	0.00
17,000.0	90.05	179.77	10,239.9	-6,585.0	-238.5	6,589.3	0.00	0.00	0.00
17,100.0	90.05	179.77	10,239.8	-6,685.0	-238.2	6,689.2	0.00	0.00	0.00
17,200.0	90.05	179.77	10,239.7	-6,785.0	-237.8	6,789.2	0.00	0.00	0.00
17,300.0	90.05	179.77	10,239.6	-6,885.0	-237.4	6,889.1	0.00	0.00	0.00
17,400.0	90.05	179.77	10,239.5	-6,985.0	-237.0	6,989.0	0.00	0.00	0.00
17,500.0	90.05	179.77	10,239.4	-7,085.0	-236.6	7,089.0	0.00	0.00	0.00
17,600.0	90.05	179.77	10,239.3	-7,185.0	-236.2	7,188.9	0.00	0.00	0.00
17,700.0	90.05	179.77	10,239.2	-7,285.0	-235.8	7,288.9	0.00	0.00	0.00
17,800.0	90.05	179.77	10,239.1	-7,385.0	-235.4	7,388.8	0.00	0.00	0.00
17,900.0	90.05	179.77	10,239.0	-7,485.0	-235.0	7,488.7	0.00	0.00	0.00
17,901.0	90.05	179.77	10,239.0	-7,486.0	-235.0	7,489.7	0.00	0.00	0.00
BHL: 2566' FNL & 330' FWL (25)									

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: 405' FNL & 595' FWI - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	376,542.00	693,776.00	32.0342397	-103.8413971
KOP: 10' FNL & 330' FW - plan hits target center - Point	0.00	0.00	9,673.0	395.0	-266.0	376,937.00	693,510.00	32.0353289	-103.8422496
FTP: 100' FNL & 330' FV - plan hits target center - Point	0.00	0.00	9,981.3	305.0	-265.6	376,847.00	693,510.35	32.0350815	-103.8422498
BHL: 2566' FNL & 330' F - plan hits target center - Point	0.00	0.00	10,239.0	-7,486.0	-235.0	369,056.00	693,541.00	32.0136645	-103.8422652


Lindale 24/25 H3DE Fed #2H
KOP: 10' FNL & 330' FWL (24)
FTP: 100' FNL & 330' FWL (24)
Sec. 24
SL: 405' FNL & 595' FWL (24)
Hard Lines
BHL: 2566' FNL & 330' FWL (25)
Sec. 25
South(-)/North(+) (2500 usft/in)
West(-)/East(+) (2500 usft/in)


SL: 405' FNL & 595' FWL (24)
KOP: 10' FNL & 330' FWL (24)
FTP: 100' FNL & 330' FWL (24)
BHL: 2566' FNL & 330' FWL (25)
True Vertical Depth (2500 usft/in)
Vertical Section at 181.80° (2500 usft/in)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Lindale 24/25 H3DE Fed Com	2H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	24	T26S	R30E		10	N	330	W	Eddy

Latitude	Longitude	NAD
32.0353289	-103.8422496	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	24	T26S	R30E		100	N	330	W	Eddy

Latitude	Longitude	NAD
32.0350815	-103.8422498	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
E	25	T26S	R30E		2566	N	330	W	Eddy

Latitude	Longitude	NAD
32.0136645	-103.8422652	83

Is this well the defining well for the Horizontal Spacing Unit? N

Is this well an infill well? Y

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Lindale 24/25 H3DE Fed	2H

KZ 06/27/2018

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**MEWBOURNE OIL COMPANY**
LEASE NO.:	**NMNM018626**
WELL NAME & NO.:	**LINDALE 24/25 H3DE FED 2H**
SURFACE HOLE FOOTAGE:	**405' FNL & 595' FWL**
BOTTOM HOLE FOOTAGE	**2566' FNL & 330' FWL**
LOCATION:	**Section 24, T. 26 S., R 30 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

COA

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
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1,000** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to

Approval Date: 08/05/2019

include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess cement calculates to 15%, additional cement might be required. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

❖ In High 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.

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

Operator has proposed DV tool at depth of **4,858 feet**, but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

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.

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:

- Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification. **Excess cement calculates to 23%, additional cement might be required.**

C. 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. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. 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.

    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.

JJP08052019

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: 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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
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.

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 not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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. The results of the test shall be reported to the appropriate BLM office.

f. 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.

g. 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 if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. 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.

production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 3, for Shallow Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass (*Setaria macrostachya*)	1.0
Green Sprangletop (*Leptochloa dubia*)	2.0
Sideoats Grama (*Bouteloua curtipendula)*	5.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H2S were found. MOC will have on location and working all H2S safety equipment before the Delaware formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 9 5/8" intermediate casing.

1. Well Control Equipment
   - A. Choke manifold with minimum of one adjustable choke/remote choke.
   - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
   - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H2S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H2S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

3. Hydrogen Sulfide Protection and Monitoring Equipment
Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

4. Visual Warning Systems
A. Wind direction indicators as indicated on the wellsite diagram.
B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. Communications

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. Emergency Phone Numbers

Eddy County Sheriff's Office	**911 or 575-887-7551**
Ambulance Service	**911 or 575-885-2111**
Carlsbad Fire Dept	**911 or 575-885-2111**
Loco Hills Volunteer Fire Dept.	**911 or 575-677-3266**
Closest Medical Facility - Columbia Medical Center of Carlsbad	**575-492-5000**

Mewbourne Oil Company	**Hobbs District Office**	**575-393-5905**
	Fax	**575-397-6252**
	2nd Fax	**575-393-7259**
District Manager	**Robin Terrell**	**575-390-4816**
Drilling Superintendent	**Frosty Lathan**	**575-390-4103**
	Bradley Bishop	**575-390-6838**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Lindale24_25H3DEFed2H_wellsitelayout_20180914092806.pdf

Comments:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: LINDALE 24/25 DE WELLS

Multiple Well Pad Number: 4

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Well pad proposed disturbance (acres): 4.05
Road proposed disturbance (acres): 0.133
Powerline proposed disturbance (acres): 0
Pipeline proposed disturbance (acres): 0
Other proposed disturbance (acres): 0

Total proposed disturbance: 4.183

Well pad interim reclamation (acres): 1.088
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 0
Other interim reclamation (acres): 0

Total interim reclamation: 1.088

Well pad long term disturbance (acres): 2.962
Road long term disturbance (acres): 0
Powerline long term disturbance (acres): 0
Pipeline long term disturbance (acres): 0
Other long term disturbance (acres): 0

Total long term disturbance: 2.962

Disturbance Comments: In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report
02/26/2021

APD ID: 10400034114 **Submission Date:** 09/25/2018

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
303286	UNKNOWN	3140	27	27		NONE	N
303287	RUSTLER	2221	919	919	ANHYDRITE, DOLOMITE	USEABLE WATER	N
303288	CASTILE	839	2301	2301	SALT	NONE	N
303289	BASE OF SALT	-499	3639	3639	SALT	NONE	N
303290	LAMAR	-614	3754	3754	LIMESTONE	NATURAL GAS, OIL	N
303291	BELL CANYON	-649	3789	3789	SANDSTONE	NATURAL GAS, OIL	N
303292	CHERRY CANYON	-1542	4682	4682	SANDSTONE	NATURAL GAS, OIL	N
303293	MANZANITA	-1718	4858	4858	SANDSTONE	NATURAL GAS, OIL	N
303294	BRUSHY CANYON	-2736	5876	5876	SANDSTONE	NATURAL GAS, OIL	N
303295	BONE SPRING	-4547	7687	7687	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 17901

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer A multi-bowl wellhead is being used. See attached schematic
Testing Procedure: 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.
Choke Diagram Attachment:

AFMSS
U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

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303292	CHERRY CANYON	-1542	4682	4682	SANDSTONE	NATURAL GAS, OIL	N
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303295	BONE SPRING	-4547	7687	7687	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

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Choke Diagram Attachment:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED **Well Number:** 2H

Lindale_24_25_H3DE_Fed_2H_5M_BOPE_Choke_Diagram_20180924145902.pdf

Lindale_24_25_H3DE_Fed_2H_Flex_Line_Specs_20180924145910.pdf

BOP Diagram Attachment:

Lindale_24_25_H3DE_Fed_2H_5M_BOPE_Schematic_20180924145930.pdf

Lindale_24_25_H3DE_Fed_2H_Multi_Bowl_Wellhead_20180924145934.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1000	0	1000			1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.27
2	INTERMEDIATE	12.25	9.625	NEW	API	Y	0	3675	0	3675			3675	J-55	36	LT&C	1.125	1.96	DRY	3.3	DRY	4.11
3	PRODUCTION	8.75	7.0	NEW	API	N	0	10593	0	10246			10593	P-110	26	LT&C	1.23	1.97	DRY	2.32	DRY	3.01
4	LINER	6.125	4.5	NEW	API	N	9693	17901	9673	10239			8208	P-110	13.5	LT&C	1.67	1.94	DRY	3.05	DRY	3.81

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

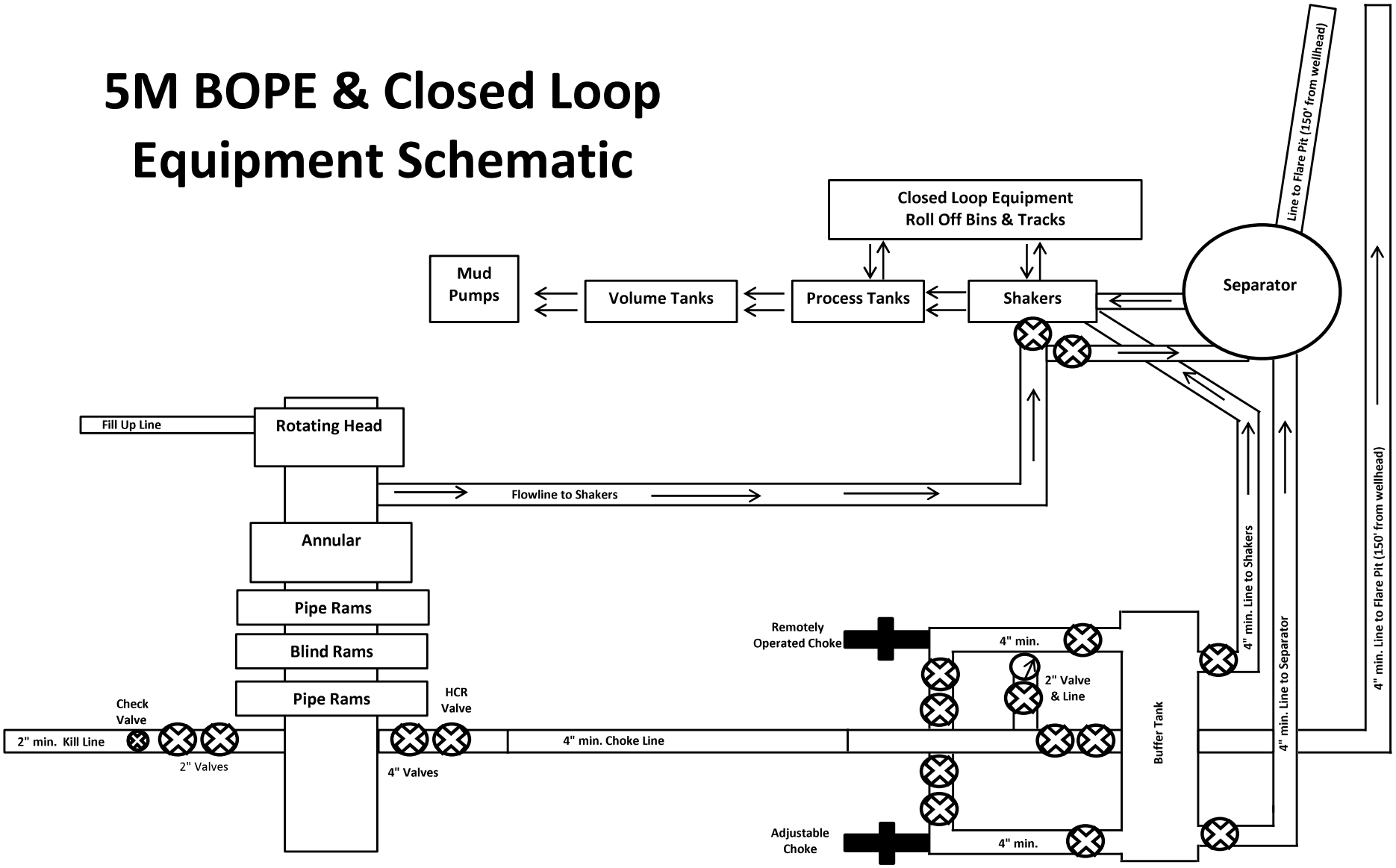
Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_H3DE_Fed_2H_Csg_Assumptions_20180924150729.doc

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale

Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.

ENGINEERING & SERVICES

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

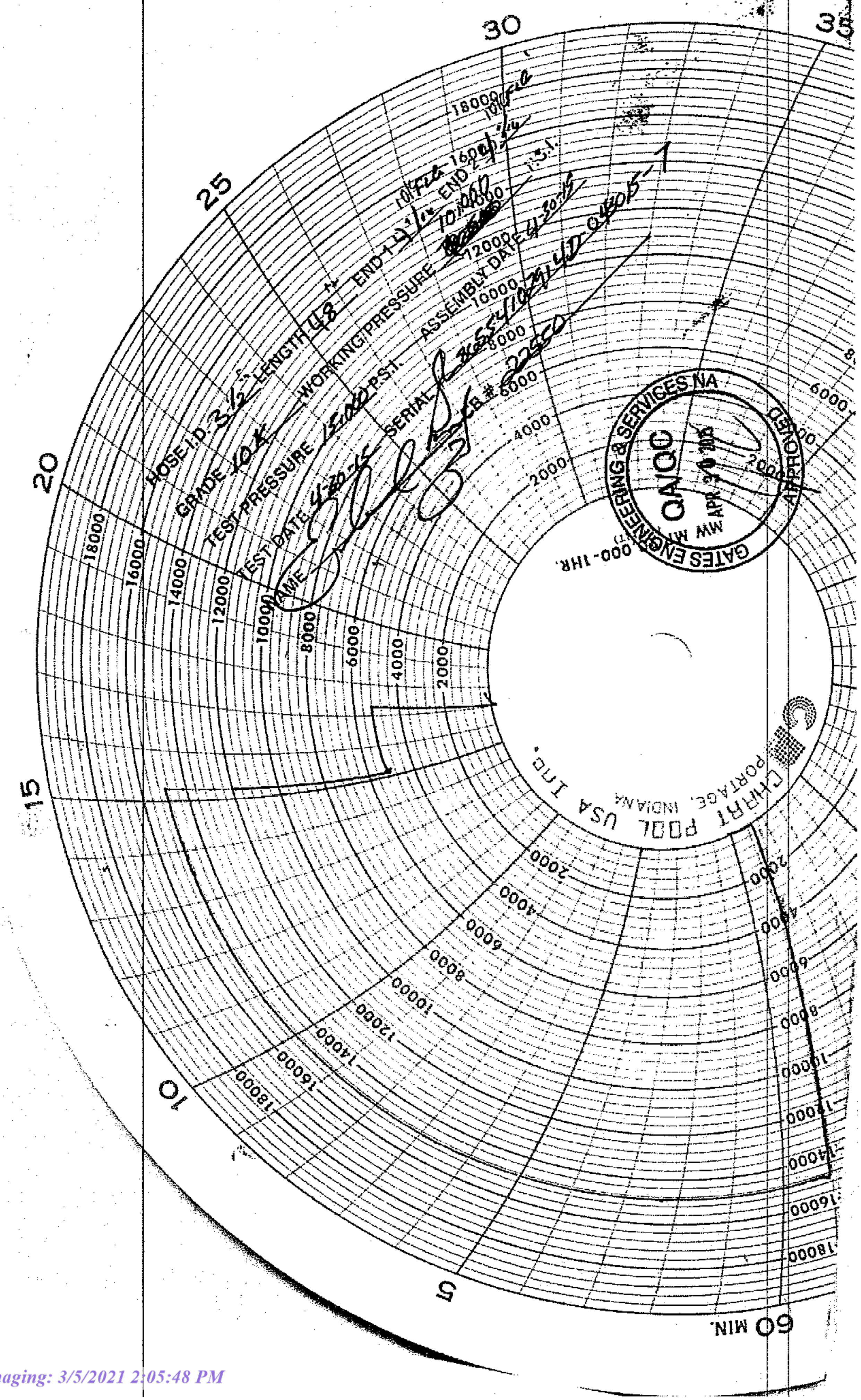
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE

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 :	Justin Cropper	Signature :	

Form-PTC - 01 Rev.0 2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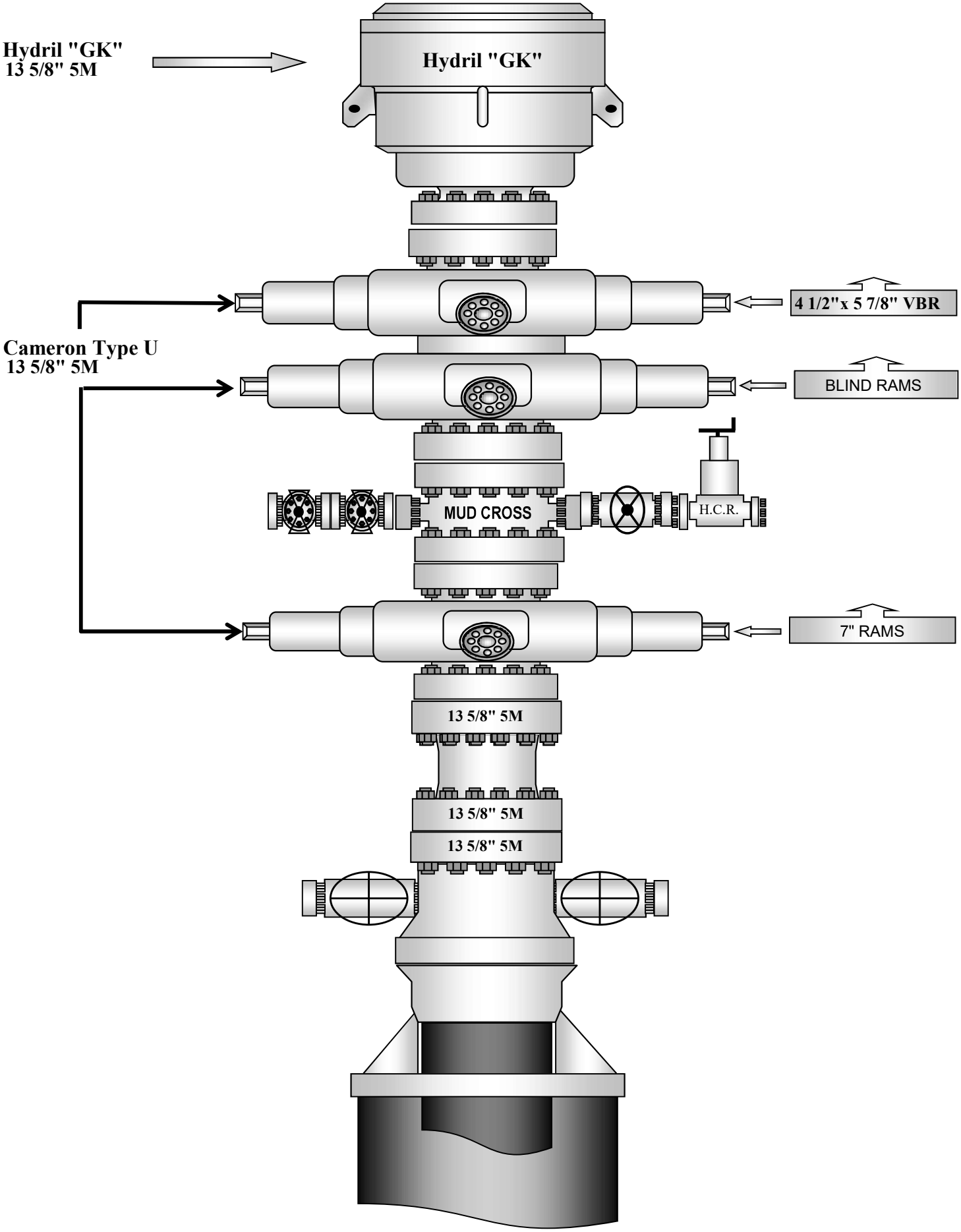
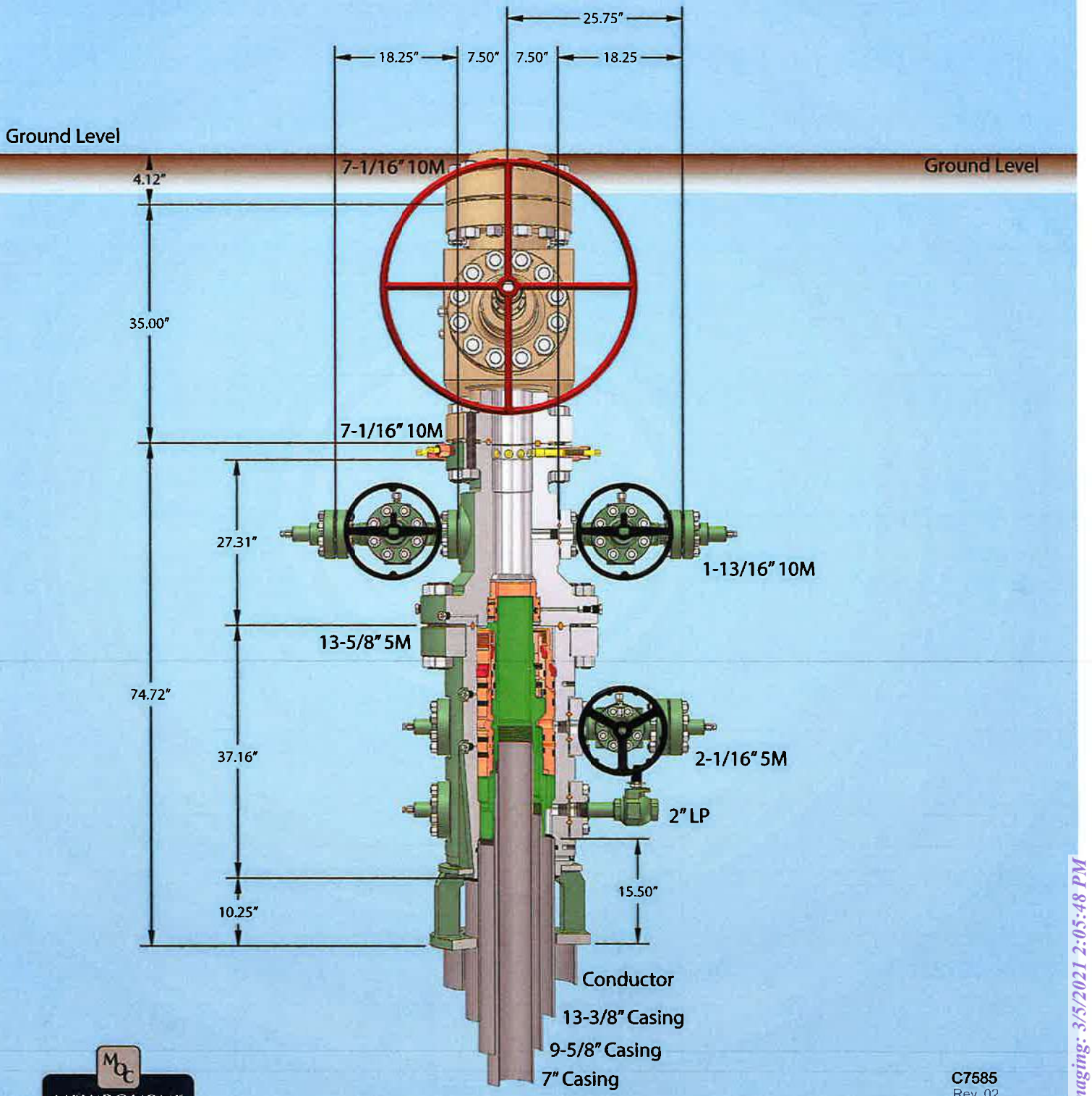
P.S.I.
ASSEMBLY DATE
TEST DATE
SERIAL
NAME
CB #
GATES ENGINEERING & SERVICES NA
QA/QC
APPROVED
CHART POOL USA INC.
PORTAGE, INDIANA
60 MIN.

5M BOPE Schematic



CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



MEWBOURNE OIL COMPANY

C7585
Rev. 02

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

Capping flange 57" conductor cut-off

79

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 19236

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM88241	14744	19236	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 3/05/2021	03/05/2021

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 Rd., Aztec, NM 87410
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CONDITIONS

Action 19236

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM88241	14744	19236	FORM 3160-3

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system