Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT NMNM134867 APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: NMNM 138437 1b. Type of Well: Oil Well ✓ Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone HOSS 2/11 W1AP FED COM 2H 9. API Well No. 30 015 48285 2. Name of Operator MEWBOURNE OIL COMPANY 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PURPLE SAGE WOLFCAMP GAS/ WOLF 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 2/T25S/R28E/NMP At surface NENE / 300 FNL / 1180 FEL / LAT 32.1656765 / LONG -104.0531852 At proposed prod. zone SESE / 330 FSL / 990 FEL / LAT 32.1383681 / LONG -104.0526211 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **EDDY** NM 7 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 330 feet location to nearest 480.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 60 feet 9831 feet / 19848 feet FED: NM1693 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 2953 feet 02/03/2020 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date BRADLEY BISHOP / Ph: (575) 393-5905 (Electronic Submission) 12/06/2019 Title Regulatory Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 05/03/2021 Cody Layton / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. 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



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

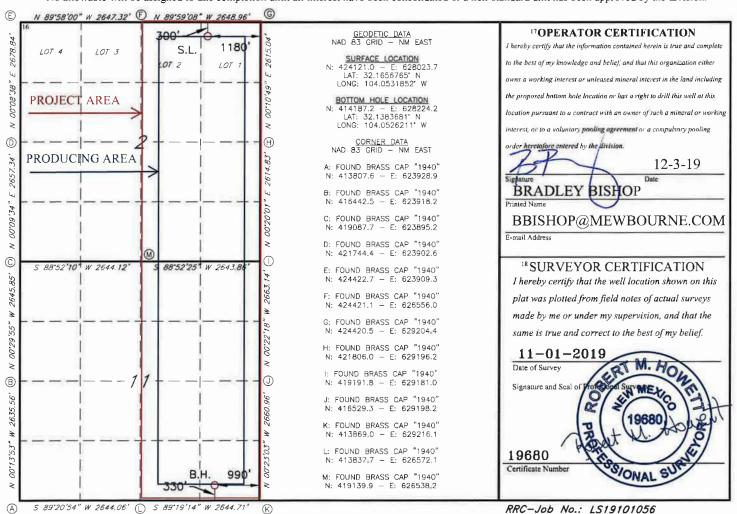
■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	² Pool Code	³ Pool Name				
30 015 48285	98220	PURPLE SAGE; WOLFCAMP GAS POOL				
⁴ Property Code 330792		perty Name W1AP FED COM	6 Weil Number 2H			
70GRID NO. 14744		erator Name OIL COMPANY	⁹ Elevation 2953'			

					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
_11	2	25S	28E		300	NORTH	1180	EAST	EDDY
			11]	Bottom H	Tole Location	If Different Fro	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	25S	28E		330	SOUTH	990	EAST	EDDY
² Dedicated Acres	13 Joint	or Infill 14	Consolidation	Code 15 (Order No.				
640									

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.



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State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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

Date	e: <u>12-3-19</u>		GAS CA	APTURE PL	AN		
	Original Amended - Reason for	Amendmen	•	· & OGRID ì	No.: <u>Mewbo</u>	urne Oil Con	npany - 14744
	Gas Capture Plan ou completion (new drill		•		o reduce we	ll/production	n facility flaring/venting for
	: Form C-129 must be su l(s)/Production Facil	-		eding 60 days a	llowed by Rul	e (Subsection 2	A of 19.15.18.12 NMAC).
The	well(s) that will be lo	antad at the	anduation facility o	na charre in	tha tabla bal	OW	
	Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
	HOSS 2/11 W1AP Fed Com #2H		1 2-25S -28E	300' FNL & 1180' FEI	0	NA	ONLINE AFTER FRAC
			a				
	hering System and P			ovviko ole omon	nations one o	ammlata if a	gas transporter system is in
place	e. The gas produced	l from produ nigh pressur	action facility is de re gathering system	edicated to _ n located in	Western (County, New	
be d	odically) to Western rilled in the foreseeab	ole future.	a drilling, completion In addition, <u>Mewbo</u>	on and estimate ourne Oil Co	ted first prod mpany and	uction date fo	or wells that are scheduled to have periodic
	erence calls to discus						wells will be processed at ounty, Texas. The actual flow
	e gas will be based on o						unty, Texas. The actual now
	8	1	1 81	8	8 7 1		
	vback Strategy	1	117	\:11 1	1		
							uction tanks and gas will be duced fluids contain minimal

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.

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

Alternatives to Reduce Flaring

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

is Operator's belief the system can take this gas upon completion of the well(s).

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



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

Drilling Plan Data Report

05/04/2021

APD ID: 10400051835

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 W1AP FED COM

Well Type: CONVENTIONAL GAS WELL

Submission Date: 12/06/2019

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Well Number: 2H

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
600684	UNKNOWN	2953	28	28	OTHER : Top Soil	NONE	N
600696	TOP SALT	1773	1180	1180	SALT	NONE	N
600688	BOTTOM SALT	538	2415	2415	SALT	NONE	N
600689	LAMAR	328	2625	2625	LIMESTONE	NATURAL GAS, OIL	N
600690	BELL CANYON	303	2650	2650	SANDSTONE	NATURAL GAS, OIL	N
600691	CHERRY CANYON	-592	3545	3545	SANDSTONE	NATURAL GAS, OIL	N
600692	MANZANITA	-717	3670	3670	LIMESTONE	NATURAL GAS, OIL	N
600693	BRUSHY CANYON	-1899	4852	4852	SANDSTONE	NATURAL GAS, OIL	N
600683	BONE SPRING	-3432	6385	6385	LIMESTONE, SHALE	NATURAL GAS, OIL	N
600686	BONE SPRING 1ST	-4382	7335	7335	SANDSTONE	NATURAL GAS, OIL	N
600687	BONE SPRING 2ND	-5172	8125	8125	SANDSTONE	NATURAL GAS, OIL	N
600694	BONE SPRING 3RD	-6222	9175	9175	SANDSTONE	NATURAL GAS, OIL	N
600695	WOLFCAMP	-6602	9555	9555	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Pressure Rating (PSI): 5M Rating Depth: 19848

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. 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:

Hoss_2_11_W1AP_Fed_Com_2H_5M_BOPE_Choke_Diagram_20191204092917.pdf

Hoss_2_11_W1AP_Fed_Com_2H_Flex_Line_Specs_20191204092917.pdf

Hoss_2_11_W1AP_Fed_Com_2H_Flex_Line_Specs_API_16C_20201110090251.pdf

BOP Diagram Attachment:

Hoss_2_11_W1AP_Fed_Com_2H_Multi_Bowl_WH_20191204092933.pdf

Hoss_2_11_W1AP_Fed_Com_2H_5M_BOPE_Schematic_20191204092933.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	450	0	450	2953	2503	450	H-40	48	ST&C	3.74	8.4	DRY	14.9 1	DRY	25.0 5
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2550	0	2550	2996	403	2550	J-55	36	LT&C	1.52	2.65	DRY	4.93	DRY	6.14
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10000	0	9827	2996	-6874	10000	HCP -110	26	LT&C	1.28	2.05	DRY	2.39	DRY	2.86
4	LINER	6.12 5	4.5	NEW	API	N	9297	19848	9288	9861	-6335	-6908	10551	P- 110	13.5	LT&C	1.74	2.02	DRY	2.37	DRY	2.96

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Hoss_2_11_W1AP_Fed_Com_2H_Csg_assumptions_20191204093046.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Hoss_2_11_W1AP_Fed_Com_2H_Csg_assumptions_20191204093112.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:**

Casing Design Assumptions and Worksheet(s):

Hoss_2_11_W1AP_Fed_Com_2H_Csg_assumptions_20191204093210.pdf

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Casing Attachments

Casing ID: 4 String Type:LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Hoss_2_11_W1AP_Fed_Com_2H_Csg_assumptions_20191204093322.pdf$

Section 4 - Cement

Occion											
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	258	170	2.12	12.5	360	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail	· '	258	450	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1859	340	2.12	12.5	721	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1859	2550	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	3670	2350	2993	60	2.12	12.5	127	25	Class C	Gel, Extender, Salt, LCM
PRODUCTION	Tail		2993	3670	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	3670	3670	7495	340	2.12	12.5	721	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		7495	1000 0	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9297	1984 8	420	2.97	11.2	1247	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

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: Pason/PVT/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	450	SPUD MUD	8.6	8.8		"					
450	2550	SALT SATURATED	10	10	-						
2550	9827	WATER-BASED MUD	8.6	9.5							
9827	9861	OIL-BASED MUD	10	12							MW up to 13.0 ppg may be required for shale control. The highest MW needed to balance formation pressure is expected to be 12.0 ppg.

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (9297') to surface

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

COMPENSATED NEUTRON LOG, DIRECTIONAL SURVEY, GAMMA RAY LOG, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGIC LITHOLOGY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6153 Anticipated Surface Pressure: 3985

Anticipated Bottom Hole Temperature(F): 165

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:

Hoss_2_11_W1AP_Fed_Com_2H_H2S_Plan_20191204100302.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Hoss_2_11_W1AP_Fed_Com_2H_Dir_plot_20191204100325.pdf Hoss_2_11_W1AP_Fed_Com_2H_Dir_plan_20191204102655.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Hoss_2_11_W1AP_Fed_Com_2H_Add_Info_20191204100339.pdf Hoss_2_11_W1AP_Fed_Com_2H_Drlg_Program_20191204100355.docx

Other Variance attachment:

SL: 300' FNL & 1180' FEL BHL: 330' FSL & 990' FEL

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	450'	13.375"	48	H40	STC	3.74	8.40	14.91	25.05
12.25"	0'	2550'	9.625"	36	J55	LTC	1.52	2.65	4.93	6.14
8.75"	0'	10000'	7"	26	P110	LTC	1.28	2.05	2.39	2.86
6.125"	9297'	19848'	4.5"	13.5	P110	LTC	1.74	2.02	2.37	2.96
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	IN
Is well within the designated 4 string boundary.	
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?	

SL: 300' FNL & 1180' FEL BHL: 330' FSL & 990' FEL

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8.75"	0'	10000'	7"	26	26 P110		1.28	2.05	2.39	2.86
6.125"	9297'	19848'	4.5"	13.5	13.5 P110		1.74	2.02	2.37	2.96
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
				Factor					1.8 Wet	1.8 Wet

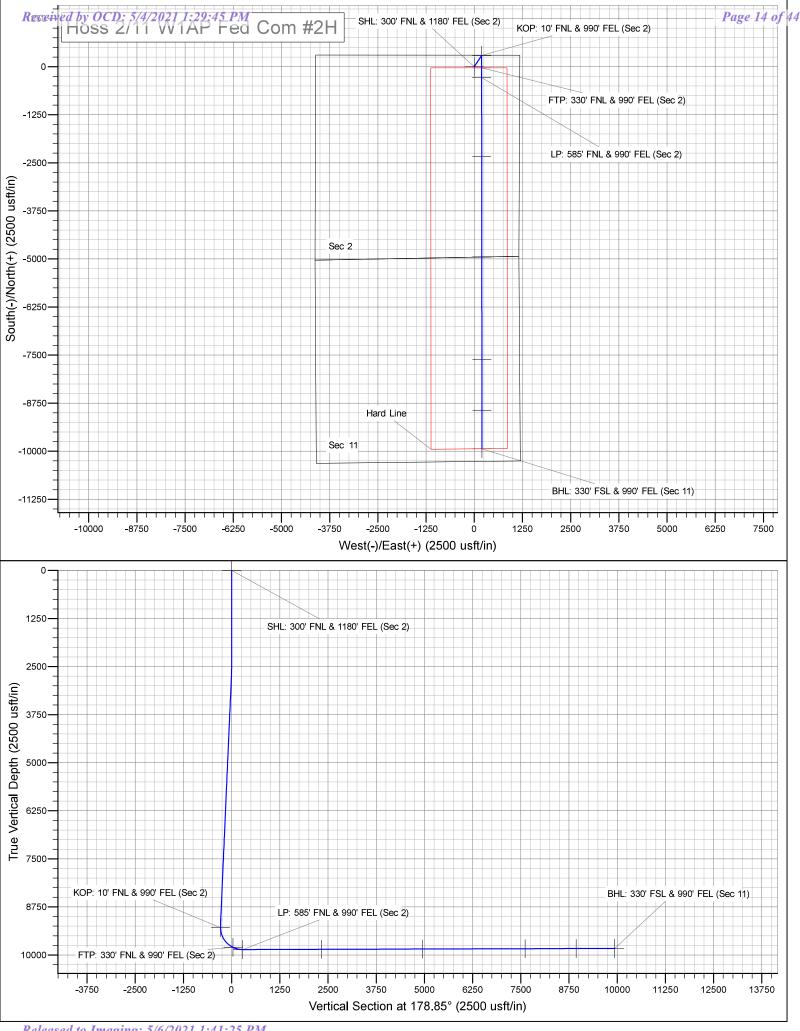
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Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	



Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Hoss 2/11 W1AP Fed Com #2H Sec 2, T25S, R28E

SHL: 300' FNL & 1180' FEL, Sec 2 BHL: 330' FSL & 990' FEL, Sec 11

Plan: Design #1

Standard Planning Report

04 December, 2019

Database: Hobbs

Company: Mewbourne Oil Company Project: Eddy County, New Mexico NAD 83

Hoss 2/11 W1AP Fed Com #2H Site:

Well: Sec 2, T25S, R28E

Wellbore: BHL: 330' FSL & 990' FEL, Sec 11

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 W1AP Fed Com #2H

WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

Minimum Curvature

59.84

47,670

Project Eddy County, New Mexico NAD 83

Map System: US State Plane 1983 North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum:

Ground Level

Hoss 2/11 W1AP Fed Com #2H Site

IGRF2010

Northing: 424,121.00 usft Site Position: Latitude: 32.1656766 From: Мар Easting: 628,024.00 usft Longitude: -104.0531842 **Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 " **Grid Convergence:** 0.15

Well Sec 2, T25S, R28E

Well Position +N/-S 0.0 usft Northing: 424,121.00 usft Latitude: 32.1656766 +E/-W 0.0 usft Easting: 628,024.00 usft Longitude: -104.0531842 **Position Uncertainty** 0.0 usft Wellhead Elevation: 2,981.0 usft **Ground Level:** 2,953.0 usft

BHL: 330' FSL & 990' FEL, Sec 11 Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°)

6.76

11/18/2019

Design #1 Design Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 178.85

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	
2,550.0	0.00	0.00	2,550.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,752.4	3.04	33.23	2,752.3	4.5	2.9	1.50	1.50	0.00	33.23	
9,094.7	3.04	33.23	9,085.7	285.5	187.1	0.00	0.00	0.00	0.00	
9,297.1	0.00	0.00	9,288.0	290.0	190.0	1.50	-1.50	0.00	180.00	KOP: 10' FNL & 990' I
10,198.9	90.18	179.94	9,861.0	-284.8	190.6	10.00	10.00	0.00	179.94	
19,848.2	90.18	179.94	9,831.0	-9,934.0	200.0	0.00	0.00	0.00	0.00	BHL: 330' FSL & 990'

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83
Site: Hoss 2/11 W1AP Fed Com #2H

Well: Sec 2, T25S, R28E

Wellbore: BHL: 330' FSL & 990' FEL, Sec 11

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 W1AP Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

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
SHL: 300' FI	NL & 1180' FEL (Sec 2)							
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	0.00	1,300.0	0.0	0.0 0.0	0.0	0.00	0.00 0.00	0.00
1,400.0		0.00	1,400.0	0.0		0.0	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 1.800.0	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	0.00 0.00	1,800.0 1,900.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 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 2,300.0	0.00 0.00	0.00 0.00	2,200.0 2,300.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 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
2,550.0 2,600.0	0.00 0.75	0.00 33.23	2,550.0 2,600.0	0.0 0.3	0.0 0.2	0.0 -0.3	0.00 1.50	0.00 1.50	0.00 0.00
2,700.0	2.25	33.23	2,700.0	2.5	1.6	-0.3 -2.4	1.50	1.50	0.00
2,752.4	3.04	33.23	2,752.3	4.5	2.9	-4.4	1.50	1.50	0.00
	3.04	33.23	2,799.8	6.6	4.3	-6.5	0.00	0.00	0.00
2,800.0 2,900.0	3.04	33.23 33.23	2,799.6 2,899.7	11.0	4.3 7.2	-6.5 -10.9	0.00	0.00	0.00
3,000.0	3.04	33.23	2.999.6	15.5	10.1	-15.2	0.00	0.00	0.00
3,100.0	3.04	33.23	3,099.4	19.9	13.0	-19.6	0.00	0.00	0.00
3,200.0	3.04	33.23	3,199.3	24.3	15.9	-24.0	0.00	0.00	0.00
3,300.0	3.04	33.23	3,299.1	28.7	18.8	-28.4	0.00	0.00	0.00
3,400.0	3.04	33.23	3,399.0	33.2	21.7	-32.7	0.00	0.00	0.00
3,500.0	3.04	33.23	3,498.9	37.6	24.6	-37.1	0.00	0.00	0.00
3,600.0	3.04	33.23	3,598.7	42.0	27.5	-41.5	0.00	0.00	0.00
3,700.0	3.04	33.23	3,698.6	46.5	30.4	-45.9	0.00	0.00	0.00
3,800.0	3.04	33.23	3,798.4	50.9	33.4	-50.2	0.00	0.00	0.00
3,900.0	3.04	33.23	3,898.3	55.3	36.3	-54.6	0.00	0.00	0.00
4,000.0	3.04	33.23	3,998.2	59.8	39.2	-59.0	0.00	0.00	0.00
4,100.0	3.04	33.23	4,098.0	64.2	42.1	-63.3	0.00	0.00	0.00
4,200.0	3.04	33.23	4,197.9	68.6	45.0	-67.7	0.00	0.00	0.00
4,300.0	3.04	33.23	4,297.7	73.1	47.9	-72.1	0.00	0.00	0.00
4,400.0	3.04	33.23	4,397.6	77.5	50.8	-76.5	0.00	0.00	0.00
4,500.0	3.04	33.23	4,497.5	81.9	53.7	-80.8	0.00	0.00	0.00
4,600.0	3.04	33.23	4,597.3	86.4	56.6	-85.2	0.00	0.00	0.00
4,700.0	3.04	33.23	4,697.2	90.8	59.5	-89.6	0.00	0.00	0.00
4,800.0	3.04	33.23	4,797.0	95.2	62.4	-93.9	0.00	0.00	0.00
4,900.0	3.04	33.23	4,896.9	99.6	65.3	-98.3	0.00	0.00	0.00
5,000.0	3.04	33.23	4,996.7	104.1	68.2	-102.7	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83
Site: Hoss 2/11 W1AP Fed Com #2H

Well: Sec 2, T25S, R28E

Wellbore: BHL: 330' FSL & 990' FEL, Sec 11

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method: Minim

Site Hoss 2/11 W1AP Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

311U

1:	Design # I												
ned 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	3.04	33.23	5,096.6	108.5	71.1	-107.1	0.00	0.00	0.00				
5,200.0	3.04	33.23	5,196.5	112.9	74.0	-111.4	0.00	0.00	0.00				
5,300.0	3.04	33.23	5,296.3	117.4	76.9	-115.8	0.00	0.00	0.00				
5,400.0	3.04	33.23	5,396.2	121.8	79.8	-120.2	0.00	0.00	0.00				
5,500.0	3.04	33.23	5,496.0	126.2	82.7	-124.5	0.00	0.00	0.00				
5,600.0	3.04	33.23	5,595.9	130.7	85.6	-128.9	0.00	0.00	0.00				
5,700.0	3.04	33.23	5,695.8	135.1	88.5	-133.3	0.00	0.00	0.00				
5,800.0	3.04	33.23	5,795.6	139.5	91.4	-137.7	0.00	0.00	0.00				
5,900.0	3.04	33.23	5,895.5	144.0	94.3	-142.0	0.00	0.00	0.00				
6,000.0	3.04	33.23	5,995.3	148.4	97.2	-146.4	0.00	0.00	0.00				
6,100.0	3.04	33.23	6,095.2	152.8	100.1	-150.8	0.00	0.00	0.00				
6,200.0	3.04	33.23	6,195.1	157.2	103.0	-155.1	0.00	0.00	0.00				
6,300.0	3.04	33.23	6,294.9	161.7	105.9	-159.5	0.00	0.00	0.00				
6,400.0	3.04	33.23	6,394.8	166.1	108.8	-163.9	0.00	0.00	0.00				
6,500.0	3.04	33.23	6,494.6	170.5	111.7	-168.3	0.00	0.00	0.00				
6,600.0	3.04	33.23	6,594.5	175.0	114.6	-172.6	0.00	0.00	0.00				
6,700.0	3.04	33.23	6,694.4	179.4	117.5	-177.0	0.00	0.00	0.00				
6,800.0	3.04	33.23	6,794.2	183.8	120.4	-181.4	0.00	0.00	0.00				
6,900.0	3.04	33.23	6,894.1	188.3	123.3	-185.7	0.00	0.00	0.00				
7,000.0	3.04	33.23	6,993.9	192.7	126.3	-190.1	0.00	0.00	0.00				
7,100.0	3.04	33.23	7,093.8	197.1	129.2	-194.5	0.00	0.00	0.00				
7,200.0	3.04	33.23	7,193.7	201.6	132.1	-198.9	0.00	0.00	0.00				
7,300.0	3.04	33.23	7,293.5	206.0	135.0	-203.2	0.00	0.00	0.00				
7,400.0	3.04	33.23	7,393.4	210.4	137.9	-207.6	0.00	0.00	0.00				
7,500.0	3.04	33.23	7,493.2	214.9	140.8	-212.0	0.00	0.00	0.00				
7,600.0	3.04	33.23	7,593.1	219.3	143.7	-216.3	0.00	0.00	0.00				
7,700.0	3.04	33.23	7,693.0	223.7	146.6	-220.7	0.00	0.00	0.00				
7,800.0	3.04	33.23	7,792.8	228.1	149.5	-225.1	0.00	0.00	0.00				
7,900.0	3.04	33.23	7,892.7	232.6	152.4	-229.5	0.00	0.00	0.00				
8,000.0	3.04	33.23	7,992.5	237.0	155.3	-233.8	0.00	0.00	0.00				
8,100.0	3.04	33.23	8,092.4	241.4	158.2	-238.2	0.00	0.00	0.00				
8,200.0	3.04	33.23	8,192.3	245.9	161.1	-242.6	0.00	0.00	0.00				
8,300.0	3.04	33.23	8,292.1	250.3	164.0	-247.0	0.00	0.00	0.00				
8,400.0	3.04	33.23	8,392.0	254.7	166.9	-251.3	0.00	0.00	0.00				
8,500.0	3.04	33.23	8,491.8	259.2	169.8	-255.7	0.00	0.00	0.00				
8,600.0	3.04	33.23	8,591.7	263.6	172.7	-260.1	0.00	0.00	0.00				
8,700.0	3.04	33.23	8,691.6	268.0	175.6	-264.4	0.00	0.00	0.00				
8,800.0	3.04	33.23	8,791.4	272.5	178.5	-268.8	0.00	0.00	0.00				
8,900.0	3.04	33.23	8,891.3	276.9	181.4	-273.2	0.00	0.00	0.00				
9,000.0	3.04	33.23	8,991.1	281.3	184.3	-277.6	0.00	0.00	0.00				
9,094.7	3.04	33.23	9,085.7	285.5	187.1	-281.7	0.00	0.00	0.00				
9,100.0	2.96	33.23	9,091.0	285.7	187.2	-281.9	1.50	-1.50	0.00				
9,200.0	1.46	33.23	9,190.9	289.0	189.3	-285.1	1.50	-1.50	0.00				
9,297.1	0.00	0.00	9,288.0	290.0	190.0	-286.1	1.50	-1.50 -1.50	0.00				
	L & 990' FEL (Se		5,200.0	200.0	100.0	200.1	1.00	1.03	0.50				
9,300.0	0.29	179.94	9,290.9	290.0	190.0	-286.1	10.00	10.00	0.00				
9,400.0	10.29	179.94	9,390.4	280.8	190.0	-276.9	10.00	10.00	0.00				
9,500.0	20.29	179.94	9,486.7	254.4	190.0	-250.6	10.00	10.00	0.00				
9,600.0 9,700.0	30.29 40.29	179.94 179.94	9,577.0 9,658.5	211.8 154.1	190.1 190.1	-207.9 -150.2	10.00 10.00	10.00 10.00	0.00 0.00				
9,700.0	50.29	179.94	9,656.5 9,728.8	83.1	190.1	-150.2 -79.3	10.00	10.00	0.00				
9,900.0	60.29	179.94	9,785.7	1.0	190.2	2.8	10.00	10.00	0.00				
9,935.1	63.80	179.94	9,802.1	-30.0	190.3	33.8	10.00	10.00	0.00				
	NL & 990' FEL (Se		-,	- 0.0	. 50.0	30.0	. 5.00	. 5.55	5.50				

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83
Site: Hoss 2/11 W1AP Fed Com #2H

Well: Sec 2, T25S, R28E

Wellbore: BHL: 330' FSL & 990' FEL, Sec 11

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 W1AP Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

Grid

and Company									
inned 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)
10,000.0	70.29	179.94	9,827.4	-89.7	190.4	93.5	10.00	10.00	0.00
10,100.0	80.28	179.94	9,852.8	-186.3	190.5	190.1	10.00	10.00	0.00
10,199.0	90.18	179.94	9,861.0	-284.8	190.6	288.6	10.00	10.00	0.00
	L & 990' FEL (Se	•							
10,200.0	90.18	179.94	9,861.0	-285.8	190.6	289.6	0.00	0.00	0.00
10,300.0	90.18	179.94	9,860.7	-385.8	190.7	389.6	0.00	0.00	0.00
10,400.0	90.18	179.94	9,860.4	-485.8	190.8	489.6	0.00	0.00	0.00
10,500.0	90.18	179.94	9,860.1	-585.8	190.9	589.6	0.00	0.00	0.00
10,600.0	90.18	179.94	9,859.8	-685.8	191.0	689.5	0.00	0.00	0.00
10,700.0	90.18	179.94	9,859.4	- 785.8	191.1	789.5	0.00	0.00	0.00
10,800.0	90.18	179.94	9,859.1	-885.8	191.2	889.5	0.00	0.00	0.00
10,900.0	90.18	179.94	9,858.8	-985.8	191.2	989.5	0.00	0.00	0.00
11,000.0	90.18	179.94	9,858.5	-1,085.8	191.3	1,089.5	0.00	0.00	0.00
11,100.0	90.18	179.94	9,858.2	-1,185.8	191.4	1,189.4	0.00	0.00	0.00
11,200.0	90.18	179.94	9,857.9	-1,285.8	191.5	1,289.4	0.00	0.00	0.00
11,300.0	90.18	179.94	9,857.6	-1,385.8	191.6	1,389.4	0.00	0.00	0.00
11,400.0	90.18	179.94	9,857.3	-1,485.8	191.7	1,489.4	0.00	0.00	0.00
11,500.0	90.18	179.94	9,857.0	-1,585.8	191.8	1,589.4	0.00	0.00	0.00
11,600.0	90.18	179.94	9,856.6	-1,685.8	191.9	1,689.4	0.00	0.00	0.00
11,700.0	90.18	179.94	9,856.3	-1,785.8	192.0	1,789.3	0.00	0.00	0.00
11,800.0	90.18	179.94	9,856.0	-1,885.8	192.1	1,889.3	0.00	0.00	0.00
11,900.0	90.18	179.94	9,855.7	-1,985.8	192.2	1,989.3	0.00	0.00	0.00
12,000.0	90.18	179.94	9,855.4	-2,085.8	192.2	2,089.3	0.00	0.00	0.00
12,100.0	90.18	179.94	9,855.1	-2,185.8	192.4	2,189.3	0.00	0.00	0.00
12,200.0	90.18	179.94	9,854.8	-2,285.8	192.5	2,289.2	0.00	0.00	0.00
12,247.2	90.18	179.94	9,854.6	-2,333.0	192.6	2,336.4	0.00	0.00	0.00
PPP2: 2616	' FSL & 990' FEL	(2)							
12,300.0	90.18	179.94	9,854.5	-2,385.8	192.6	2,389.2	0.00	0.00	0.00
12,400.0	90.18	179.94	9,854.2	-2,485.8	192.7	2,489.2	0.00	0.00	0.00
12,500.0	90.18	179.94	9,853.8	-2,585.8	192.8	2,589.2	0.00	0.00	0.00
12,600.0	90.18	179.94	9,853.5	-2,685.8	192.9	2,689.2	0.00	0.00	0.00
12,700.0	90.18	179.94	9,853.2	-2,785.8	193.0	2,789.1	0.00	0.00	0.00
12,800.0	90.18	179.94	9,852.9	-2,885.8	193.1	2,889.1	0.00	0.00	0.00
12,800.0	90.18	179.94	9,852.9 9,852.6	-2,885.8 -2,985.8	193.1	2,989.1	0.00	0.00	0.00
13,000.0	90.18	179.94	9,852.3	-2,985.8 -3,085.8	193.2	3,089.1	0.00	0.00	0.00
13,100.0	90.18	179.94	9,852.0	-3,185.8	193.4	3,189.1	0.00	0.00	0.00
13,200.0	90.18	179.94	9,851.7	-3,285.8	193.5	3,289.1	0.00	0.00	0.00
									0.00
13,300.0	90.18	179.94 179.94	9,851.4 9,851.0	-3,385.8 -3,485.8	193.6 193.7	3,389.0 3,489.0	0.00	0.00	
13,400.0 13,500.0	90.18 90.18	179.94 179.94	9,851.0 9,850.7	-3,485.8 -3,585.8	193.7 193.8	3,489.0 3,589.0	0.00 0.00	0.00 0.00	0.00 0.00
13,600.0	90.18	179.94	9,850.4	-3,685.8	193.0	3,689.0	0.00	0.00	0.00
13,700.0	90.18	179.94	9,850.1	-3,785.8	194.0	3,789.0	0.00	0.00	0.00
13,800.0	90.18	179.94	9,849.8	-3,885.8	194.1	3,888.9	0.00	0.00	0.00
13,900.0 14,000.0	90.18 90.18	179.94 179.94	9,849.5 9,849.2	-3,985.8 -4,085.8	194.2 194.3	3,988.9 4,088.9	0.00 0.00	0.00 0.00	0.00 0.00
14,000.0	90.18	179.94	9,849.2 9,848.9	-4,085.8 -4,185.8	194.3	4,088.9 4,188.9	0.00	0.00	0.00
14,100.0	90.18	179.94	9,848.6	-4,185.8 -4,285.8	194.4	4,188.9	0.00	0.00	0.00
14,300.0	90.18	179.94	9,848.2 9,847.9	-4,385.8 4.485.8	194.6	4,388.8	0.00	0.00	0.00
14,400.0 14,500.0	90.18 90.18	179.94 179.94	9,847.9 9,847.6	-4,485.8 -4,585.8	194.7 194.8	4,488.8 4,588.8	0.00 0.00	0.00 0.00	0.00 0.00
14,600.0	90.18	179.94 179.94	9,847.8 9,847.3	-4,565.6 -4,685.8	194.6	4,500.0 4,688.8	0.00	0.00	0.00
14,700.0	90.18	179.94	9,847.3 9,847.0	-4,665.6 -4,785.8	194.9	4,788.8	0.00	0.00	0.00
•									
14,800.0	90.18	179.94	9,846.7	-4,885.8	195.1	4,888.7	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83

Site: Hoss 2/11 W1AP Fed Com #2H

Well: Sec 2, T25S, R28E

 Wellbore:
 BHL: 330' FSL & 990' FEL, Sec 11

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 W1AP Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

Grid .

d 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)
14,862.2	90.18	179.94	9,846.5	-4,948.0	195.1	4,950.9	0.00	0.00	0.00
	NL & 990' FEL (Se	ec 11)	,	,		,			
14,900.0	•	179.94	9,846.4	-4,985.8	195.2	4,988.7	0.00	0.00	0.00
15,000.0		179.94	9,846.1	-5,085.8	195.3	5,088.7	0.00	0.00	0.00
15,100.0		179.94	9,845.8	-5,185.8	195.4	5,188.7	0.00	0.00	0.00
15,200.0		179.94	9,845.5	-5,285.8	195.5	5,288.7	0.00	0.00	0.00
15,300.0	90.18	179.94	9,845.1	-5,385.8	195.6	5,388.7	0.00	0.00	0.00
15,400.0	90.18	179.94	9,844.8	-5,485.8	195.6	5,488.6	0.00	0.00	0.00
15,500.0	90.18	179.94	9,844.5	-5,585.8	195.7	5,588.6	0.00	0.00	0.00
15,600.0	90.18	179.94	9,844.2	-5,685.8	195.8	5,688.6	0.00	0.00	0.00
15,700.0	90.18	179.94	9,843.9	-5,785.8	195.9	5,788.6	0.00	0.00	0.00
15,700.0		179.94	9,843.6	-5,885.8	196.0	5,888.6	0.00	0.00	0.00
15,900.0		179.94	9,843.3	-5,985.8	196.1	5,988.5	0.00	0.00	0.00
16,000.0		179.94 179.94	9,843.3 9,843.0	-5,965.6 -6,085.8	196.1	6,088.5	0.00	0.00	0.00
16,100.0	90.18	179.94	9,842.7	-6,185.8	196.3	6,188.5	0.00	0.00	0.00
16,200.0		179.94	9,842.3	-6,285.8	196.4	6,288.5	0.00	0.00	0.00
16,300.0	90.18	179.94	9,842.0	-6,385.8	196.5	6,388.5	0.00	0.00	0.00
16,400.0	90.18	179.94	9,841.7	-6,485.8	196.6	6,488.4	0.00	0.00	0.00
16,500.0	90.18	179.94	9,841.4	-6,585.8	196.7	6,588.4	0.00	0.00	0.00
16,600.0	90.18	179.94	9,841.1	-6,685.8	196.8	6,688.4	0.00	0.00	0.00
16,700.0	90.18	179.94	9,840.8	-6,785.8	196.9	6,788.4	0.00	0.00	0.00
16,800.0		179.94	9,840.5	-6,885.8	197.0	6,888.4	0.00	0.00	0.00
16,900.0		179.94	9,840.2	-6,985.8	197.1	6,988.4	0.00	0.00	0.00
17,000.0		179.94	9,839.9	-7,085.8	197.1	7,088.3	0.00	0.00	0.00
		179.94	9,839.5		197.2	7,088.3 7,188.3	0.00	0.00	0.00
17,100.0	90.10	179.94	9,039.5	-7,185.8	197.3	7,100.3	0.00	0.00	0.00
17,200.0		179.94	9,839.2	-7,285.8	197.4	7,288.3	0.00	0.00	0.00
17,300.0	90.18	179.94	9,838.9	-7,385.8	197.5	7,388.3	0.00	0.00	0.00
17,400.0	90.18	179.94	9,838.6	-7,485.8	197.6	7,488.3	0.00	0.00	0.00
17,500.0	90.18	179.94	9,838.3	-7,585.8	197.7	7,588.2	0.00	0.00	0.00
17,522.2	90.18	179.94	9,838.2	-7,608.0	197.7	7,610.4	0.00	0.00	0.00
PPP4: 265	5' FSL & 990' FEL	(Sec 11)							
17,600.0	90.18	179.94	9,838.0	-7,685.8	197.8	7,688.2	0.00	0.00	0.00
17,700.0		179.94	9,837.7	-7,785.8	197.9	7,788.2	0.00	0.00	0.00
17,800.0		179.94	9.837.4	-7,885.8	198.0	7,888.2	0.00	0.00	0.00
17,900.0		179.94	9,837.1	-7,985.8	198.1	7,988.2	0.00	0.00	0.00
18,000.0		179.94	9,836.7	-7,965.6 -8,085.8	198.2	8,088.1	0.00	0.00	0.00
						•			
18,100.0		179.94	9,836.4	-8,185.8	198.3	8,188.1	0.00	0.00	0.00
18,200.0		179.94	9,836.1	-8,285.8	198.4	8,288.1	0.00	0.00	0.00
18,300.0	90.18	179.94	9,835.8	-8,385.8	198.5	8,388.1	0.00	0.00	0.00
18,400.0		179.94	9,835.5	-8,485.8	198.6	8,488.1	0.00	0.00	0.00
18,500.0	90.18	179.94	9,835.2	-8,585.8	198.7	8,588.1	0.00	0.00	0.00
18,600.0	90.18	179.94	9,834.9	-8,685.8	198.8	8,688.0	0.00	0.00	0.00
18,700.0		179.94	9,834.6	-8,785.8	198.9	8,788.0	0.00	0.00	0.00
18,800.0		179.94	9,834.3	-8,885.8	199.0	8,888.0	0.00	0.00	0.00
18,848.2		179.94	9,834.1	-8,934.0	199.0	8,936.2	0.00	0.00	0.00
	0' FSL & 990' FEL		.,	-,		-,			
18,900.0		179.94	9,833.9	-8,985.8	199.1	8,988.0	0.00	0.00	0.00
19,000.0	90.18	179.94	9,833.6	-9,085.8	199.2	9,088.0	0.00	0.00	0.00
19,100.0		179.94	9,833.3	-9,185.8	199.3	9,187.9	0.00	0.00	0.00
19,200.0		179.94	9,833.0	-9,285.8	199.4	9,287.9	0.00	0.00	0.00
19,300.0		179.94	9,832.7	-9,385.8	199.5	9,387.9	0.00	0.00	0.00
19,400.0		179.94	9,832.4	-9,485.8	199.6	9,487.9	0.00	0.00	0.00
19,500.0	90.18	179.94	9,832.1	-9,585.8	199.7	9,587.9	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83

Site: Hoss 2/11 W1AP Fed Com #2H

Well: Sec 2, T25S, R28E

Wellbore: BHL: 330' FSL & 990' FEL, Sec 11

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Hoss 2/11 W1AP Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev)

Grid

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)
19,600.0	90.18	179.94	9,831.8	-9,685.8	199.8	9,687.8	0.00	0.00	0.00
19,700.0	90.18	179.94	9,831.5	-9,785.8	199.9	9,787.8	0.00	0.00	0.00
19,800.0	90.18	179.94	9,831.1	-9,885.8	200.0	9,887.8	0.00	0.00	0.00
19.848.2	90.18	179.94	9,831.0	-9.934.0	200.0	9.936.0	0.00	0.00	0.00

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
SHL: 300' FNL & 1180' F - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	424,121.00	628,024.00	32.1656766	-104.0531842
KOP: 10' FNL & 990' FE - plan hits target cent - Point	0.00 er	0.00	9,288.0	290.0	190.0	424,411.00	628,214.00	32.1664724	-104.0525678
FTP: 330' FNL & 990' FE - plan hits target cent - Point	0.00 er	0.00	9,802.1	-30.0	190.3	424,091.00	628,214.32	32.1655928	-104.0525695
BHL: 330' FSL & 990' FE - plan hits target cent - Point	0.00 er	0.00	9,831.0	-9,934.0	200.0	414,187.00	628,224.00	32.1383676	-104.0526216
PPP5: 1330' FSL & 990' - plan hits target cent - Point	0.00 er	0.00	9,834.1	-8,934.0	199.0	415,187.00	628,223.03	32.1411165	-104.0526163
PPP4: 2655' FSL & 990' - plan hits target cent - Point	0.00 er	0.00	9,838.2	-7,608.0	197.7	416,513.00	628,221.73	32.1447615	-104.0526094
PPP3: 0' FNL & 990' FEI - plan hits target cent - Point	0.00 er	0.00	9,846.5	-4,948.0	195.1	419,173.00	628,219.13	32.1520737	-104.0525954
PPP2: 2616' FSL & 990' - plan hits target cent - Point	0.00 er	0.00	9,854.6	-2,333.0	192.6	421,788.00	628,216.57	32.1592621	-104.0525816
LP: 585' FNL & 990' FEL - plan hits target cent - Point	0.00 er	0.00	9,861.0	-284.8	190.6	423,836.20	628,214.60	32.1648924	-104.0525707

Intent		As Dril	led											
API#														
	rator Nai vbourne	ne: e Oil Co.	1			Property Name: Hoss 2/11 W1AP Fed Com								Well Number 2H
Kick C	Off Point	(KOP)												
UL A	Section 2	Township 25S	Range 28E	Lot	Feet 10		From N	/S	Feet 990'	1	Fron	n E/W	County Eddy	
Latitu		Longitu	ıde							NAD 83				
First 1	Γake Poir	nt (FTP)												
UL A	Section 2	Township 25S	Range 28E	Lot	Feet 330		From N	/S	Feet 990		From E/W		County Eddy	
Latitu 32.	ide 165592	28				ongitude NAD 104.0525695 83								
Last T	ake Poin	t (LTP)												
UL P	Section 11	Township 25S	Range 28E	Lot	Feet 330	From S	n N/S	Feet 990		From E	E/W	Count Eddy		
Latitu 32.1	ide 138367	76			Longitu -104.		6216					NAD 83		
Is this	s well the	defining v	vell for th	e Horiz	ontal Sp	pacing	g Unit?		/]				
Is this	well an	infill well?		N]									
	l is yes p ng Unit.	lease prov	ide API if	availab	le, Oper	rator I	Name a	and v	vell n	umbe	r for I	Definir	ng well fo	r Horizontal
API#														
Ope	rator Nai	ne:				Prop	erty N	ame:						Well Number

KZ 06/29/2018

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Mewbourne Oil Company

LEASE NO.: NMNM134867

WELL NAME & NO.: HOSS 2-11 W1AP FED COM 2H

SURFACE HOLE FOOTAGE: | 300'/N & 1180'/E **BOTTOM HOLE FOOTAGE** | 330'/S & 990'/E

LOCATION: Section 2, T.25 S., R.28 E., NMP **COUNTY:** Eddy County, New Mexico

COA

H2S	© Yes	© No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	C Low	© Medium	• High
Cave/Karst Potential	© Critical		
Variance	© None	Flex Hose	Other 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

Casing Design:

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 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 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 which shall be set at approximately 2550 feet is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 Excess cement calculates to 20%, additional cement might be required.
 - ❖ In <u>High Cave/Karst Areas</u> 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:

Option 1 (Single Stage):

Cement should tie-back at least 200 feet into previous casing string.
 Operator shall provide method of verification.
 Excess cement calculates to 3%, additional cement might be required.

Option 2:

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.

- 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.

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.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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)
 - ☑ Eddy CountyCall the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. 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.

OTA01282021

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:

- 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.
- 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. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

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. <u>Visual Warning Systems</u>

- 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 Fax 2 nd Fax	575-393-5905 575-397-6252 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

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located

on HWY 62/180, Sec. 27 T20S R32E.

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency: Weekly

Safe containment description: 2,000 gallon plastic container

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500 pounds

Waste disposal frequency: One Time Only

Safe containment description: Enclosed trash trailer

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? N

Temporary disposal of produced water into reserve pit? NO

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

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

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?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Hoss2 11W1APFedCom2H wellsitelayout 20191203104116.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: HOSS 2/11 AP & BO FED COM

Multiple Well Pad Number: 4

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None



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

Drilling Plan Data Report

05/04/2021

APD ID: 10400051835

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 W1AP FED COM

Well Type: CONVENTIONAL GAS WELL

Submission Date: 12/06/2019

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Well Number: 2H

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing
600684	UNKNOWN	2953	28	28	OTHER : Top Soil	NONE	N
600696	TOP SALT	1773	1180	1180	SALT	NONE	N
600688	BOTTOM SALT	538	2415	2415	SALT	NONE	N
600689	LAMAR	328	2625	2625	LIMESTONE	NATURAL GAS, OIL	N
600690	BELL CANYON	303	2650	2650	SANDSTONE	NATURAL GAS, OIL	N
600691	CHERRY CANYON	-592	3545	3545	SANDSTONE	NATURAL GAS, OIL	N
600692	MANZANITA	-717	3670	3670	LIMESTONE	NATURAL GAS, OIL	N
600693	BRUSHY CANYON	-1899	4852	4852	SANDSTONE	NATURAL GAS, OIL	N
600683	BONE SPRING	-3432	6385	6385	LIMESTONE, SHALE	NATURAL GAS, OIL	N
600686	BONE SPRING 1ST	-4382	7335	7335	SANDSTONE	NATURAL GAS, OIL	N
600687	BONE SPRING 2ND	-5172	8125	8125	SANDSTONE	NATURAL GAS, OIL	N
600694	BONE SPRING 3RD	-6222	9175	9175	SANDSTONE	NATURAL GAS, OIL	N
600695	WOLFCAMP	-6602	9555	9555	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention



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

Drilling Plan Data Report

05/04/2021

APD ID: 10400051835

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 W1AP FED COM

Well Type: CONVENTIONAL GAS WELL

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Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
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600689	LAMAR	328	2625	2625	LIMESTONE	NATURAL GAS, OIL	N
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600692	MANZANITA	-717	3670	3670	LIMESTONE	NATURAL GAS, OIL	N
600693	BRUSHY CANYON	-1899	4852	4852	SANDSTONE	NATURAL GAS, OIL	N
600683	BONE SPRING	-3432	6385	6385	LIMESTONE, SHALE	NATURAL GAS, OIL	N
600686	BONE SPRING 1ST	-4382	7335	7335	SANDSTONE	NATURAL GAS, OIL	N
600687	BONE SPRING 2ND	-5172	8125	8125	SANDSTONE	NATURAL GAS, OIL	N
600694	BONE SPRING 3RD	-6222	9175	9175	SANDSTONE	NATURAL GAS, OIL	N
600695	WOLFCAMP	-6602	9555	9555	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: HOSS 2/11 W1AP FED COM Well Number: 2H

Pressure Rating (PSI): 5M Rating Depth: 19848

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. 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:

Hoss_2_11_W1AP_Fed_Com_2H_5M_BOPE_Choke_Diagram_20191204092917.pdf

Hoss_2_11_W1AP_Fed_Com_2H_Flex_Line_Specs_20191204092917.pdf

Hoss_2_11_W1AP_Fed_Com_2H_Flex_Line_Specs_API_16C_20201110090251.pdf

BOP Diagram Attachment:

Hoss_2_11_W1AP_Fed_Com_2H_Multi_Bowl_WH_20191204092933.pdf

Hoss_2_11_W1AP_Fed_Com_2H_5M_BOPE_Schematic_20191204092933.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	450	0	450	2953	2503	450	H-40	48	ST&C	3.74	8.4	DRY	14.9 1	DRY	25.0 5
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2550	0	2550	2996	403	2550	J-55	36	LT&C	1.52	2.65	DRY	4.93	DRY	6.14
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10000	0	9827	2996	-6874	10000	HCP -110	26	LT&C	1.28	2.05	DRY	2.39	DRY	2.86
4	LINER	6.12 5	4.5	NEW	API	N	9297	19848	9288	9861	-6335	-6908	10551	P- 110	13.5	LT&C	1.74	2.02	DRY	2.37	DRY	2.96

Casing Attachments



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

www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:

AUSTIN DISTRIBUTING

Test Date: Hose Serial No.: 4/30/2015

Customer Ref.: Invoice No.:

4060578 500506

Created By:

D-043015-7 JUSTIN CROPPER

Product Description:

10K3.548.0CK4.1/1610KFLGE/E LE

End Fitting 1:

Gates Part No.:

4 1/16 10K FLG

End Fitting 2:

4 1/16 10K FLG

Working Pressure:

4773-6290 10,000 PSI Assembly Code:

Test Pressure:

L36554102914D-043015-7

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:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

Date:

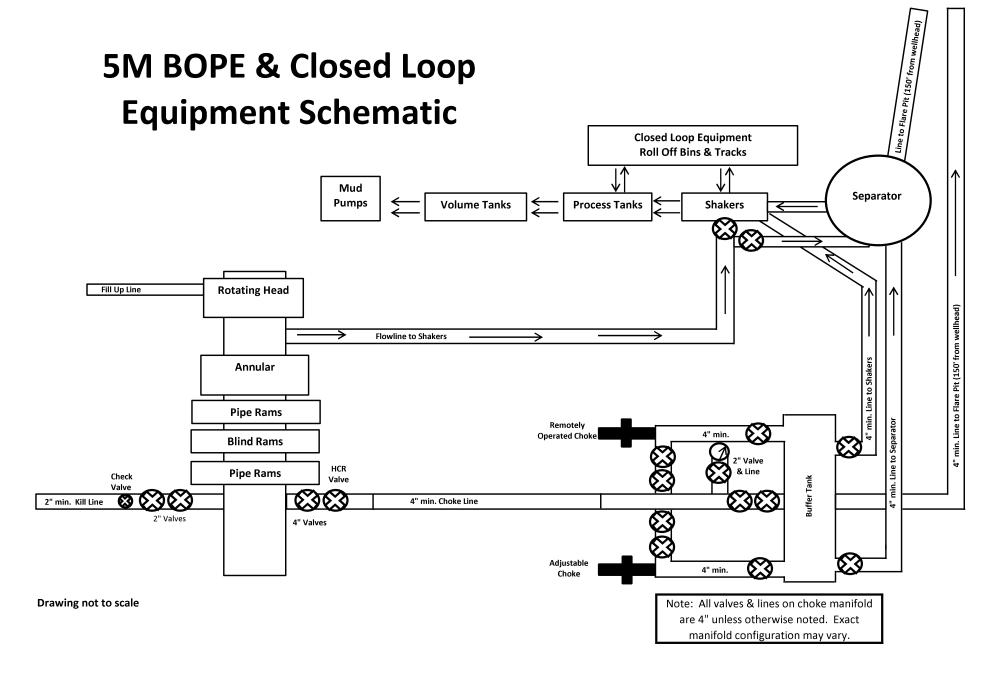
Signature :

PRODUCTION

4/30/2015

Forn PTC - 01 Rev.0 2







GATES ENGINEERING & SERVICES NORTH AMERICA 7603 Prairie Oak Dr. Houston, TX 77086

PHONE: (281) 602 - 4119

FAX:

EMAIL: Troy.Schmidt@gates.com

WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

A-7 AUSTIN INC DBA AUSTIN HOSE Test Date: 8/20/2018 Customer: Hose Serial No.: H-082018-10 Customer Ref .: 4101901 Created By: Moosa Nagvi Invoice No.: 511956 10KF3.035.0CK41/1610KFLGFXDxFLT_L/E Product Description: End Fitting 2: End Fitting 1: 4 1/16 in. Fixed Flange 4 1/16 in. Float Flange Assembly Code: L40695052218H-082018-10 Gates Part No.: 68503010-9721632 Test Pressure: 15,000 psi. 10,000 psi. Working Pressure:

Gates Engineering & Services North America certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements.

Quality:

Date:

Signature:

QUALITY

8/20/2018

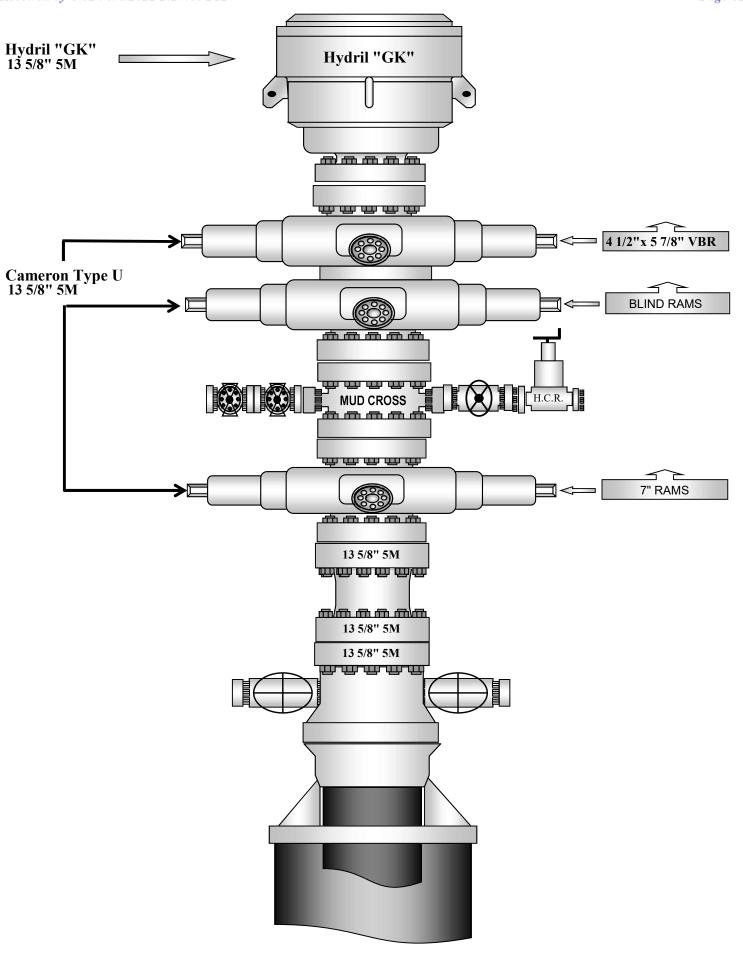
Production: Date:

Signature:

Form PTC - 01 Rev.0 2

PRODUCTION

8/20/2018



<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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

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 26860

COMMENTS

Operator:			OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO	P.O. Box 5270	Hobbs, NM88241	14744	26860	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/5/2021	05/05/2021

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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

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**

CONDITIONS

Action 26860

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO	P.O. Box 5270	Hobbs, NM88241	14744	26860	FORM 3160-3

OCD	Condition
Reviewer	
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Surface casing must be set 25' below top of Rustler Anhydrite or salt in order to seal off protectable water
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	Cement is required to circulate on both surface and intermediate1 strings of casing
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