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. NMNM103877 BUREAU OF LAND MANAGEMENT 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: ✓ Oil Well 1b. Type of Well: Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone EASY COMPANY 36/35 B3IJ FED COM 9. API Well No 015 48480 2. Name of Operator MEWBOURNE OIL COMPANY 10. Field and Pool, or Exploratory 3a. Address 3b. Phone No. (include area code) Grama Ridge/BONE SPRING 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 36/T20S/R28E/NMP At surface NESE / 1330 FSL / 205 FEL / LAT 32.5263348 / LONG -104.1235203 At proposed prod. zone NWSE / 1330 FSL / 2546 FEL / LAT 32.5263366 / LONG -104.1482899 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **EDDY** NM 20 miles 17. Spacing Unit dedicated to this well 15. Distance from proposed* 16. No of acres in lease 185 feet location to nearest 320.0 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, 1012 feet 8880 feet / 16704 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 3229 feet 11/16/2019 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) 09/25/2019 Title Regulatory Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) Cody Layton / Ph: (575) 234-5959 05/10/2021 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

*(Instructions on page 2)

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

12 Dedicated Acres

240

13 Joint or Infill

14 Consolidation Code

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

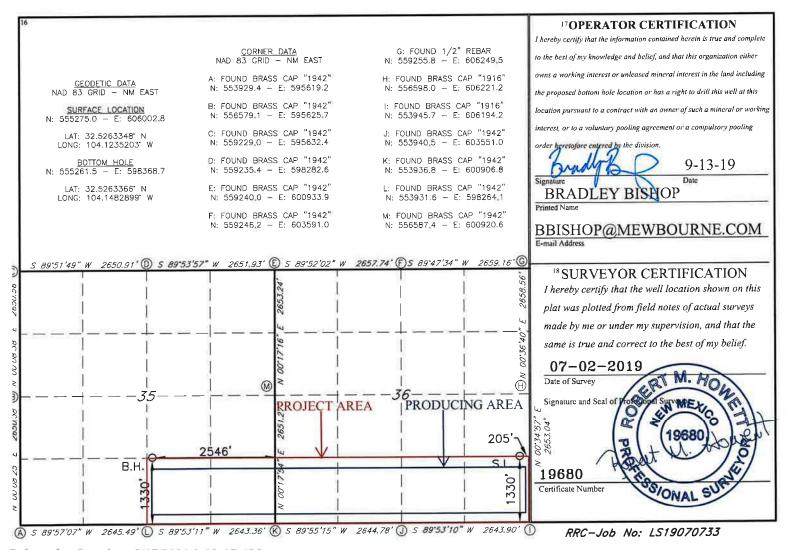
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Number			² Pool Code 3713		AVALON; BONE SPRING, EAST							
⁴ Property Co	de		EAS	SY COM		6 Well Number 1 H							
	7 OGRID NO. 14744 MEWBOURNE OIL COMPANY												
	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				
I	36	20S	28E		1330	SOUTH	205	EAST	EDDY				
			11	Bottom H	lole Location	If Different Fr	om Surface						
UL or lot no.	lot no. Section Township Range Lot Idn Feet fr					North/South line	Feet from the	East/West line	County				
i	35	20S	28E		2546	EAST	EDDY						

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.

15 Order No.



District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV

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

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: 9-13-19	GAS CAPTURE PLAN
☑ Original☐ Amended - Reason for Amendment:	Operator & OGRID No.: Mewbourne Oil Company - 14744
This Gas Capture Plan outlines actions to be new completion (new drill, recomplete to new	e taken by the Operator to reduce well/production facility flaring/venting for v 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
Easy Company 36/35 B3IJ Fed Com #1H		I 36- 20S - 28E	1330 FSL & 205 FEL	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
low/high pressure gathering system located inEDDY County, New Mexico. It will require
' 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
 - 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

05/12/2021

APD ID: 10400047478

Operator Name: MEWBOURNE OIL COMPANY

Well Name: EASY COMPANY 36/35 B3IJ FED COM

Well Type: OIL WELL

Submission Date: 09/25/2019

Well Number: 1H

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
538554	UNKNOWN	3229	27	27	OTHER : Topsoil	NONE	N
538558	TOP SALT	2674	555	555	SALT	NONE	N
538555	BOTTOM SALT	2294	935	935	SALT	NONE	N
538562	YATES	2054	1175	1175	SANDSTONE	NATURAL GAS, OIL	N
538563	CAPITAN REEF	1774	1455	1455	DOLOMITE, LIMESTONE	USEABLE WATER	N
538560	DELAWARE	144	3085	3085	LIMESTONE	NATURAL GAS, OIL	N
538553	BONE SPRINGS	-2441	5670	5670	LIMESTONE, SHALE	NATURAL GAS, OIL	N
538556	BONE SPRING 1ST	-3576	6805	6805	SANDSTONE	NATURAL GAS, OIL	N
538557	BONE SPRING 2ND	-4281	7510	7510	SANDSTONE	NATURAL GAS, OIL	N
541039	BONE SPRING 3RD	-5516	8745	8745	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Rating Depth: 16704 Pressure Rating (PSI): 3M

Equipment: Annular, Pipe Rams, 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. 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:

Page 1 of 7

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

Easy_Company_36_35_B3IJ_Fed_Com_1H_3M_BOPE_Choke_Diagram_20190918142847.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_Flex_Line_Specs_20190918142847.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_Flex_Line_Specs_API_16C_20190918142848.pdf

BOP Diagram Attachment:

Easy_Company_36_35_B3IJ_Fed_Com_1H_H2S_Plan_20190918142858.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_3M_BOPE_Schematic_20190918142859.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	26	20.0	NEW	API	N	0	330	0	330	3229	2899	330	J-55	94	BUTT	3.61	14.6 4	DRY	45.2	DRY	47.7 1
	INTERMED IATE	17.5	13.375	NEW	API	N	0	1350	0	1350	3229	1879	1350	H-40	48	ST&C	1.22	2.74	DRY	4.97	DRY	8.35
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3010	0	3010	3624	219	3010	J-55	36	LT&C	1.27	2.2	DRY	4.1	DRY	5.1
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	9360	0	9074	3635	-5845	9360	P- 110	26	LT&C	1.88	2.49	DRY	2.91	DRY	3.79
5	LINER	6.12 5	4.5	NEW	API	N	8600	16705	8597	9074	-5368	-5845	8105	P- 110	13.5	LT&C	2.52	2.93	DRY	2.33	DRY	2.91

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Easy_Company_36_35_B3IJ_Fed_Com_1H_Csg_Assumptions_20190918143158.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Easy_Company_36_35_B3IJ_Fed_Com_1H_Csg_Assumptions_20190918143304.pdf Casing ID: 3 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s):

Easy_Company_36_35_B3IJ_Fed_Com_1H_Csg_Assumptions_20190918143344.pdf

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

Casing Attachments

Casing ID: 4 String Type:PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Easy_Company_36_35_B3IJ_Fed_Com_1H_Csg_Assumptions_20190918143444.pdf

Casing ID: 5 String Type:LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 ${\sf Easy_Company_36_35_B3IJ_Fed_Com_1H_Csg_Assumptions_20190918143543.pdf}$

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	ı Ft	Excess%	Cement type	Additives
St	Le	ty Q	_ ∟	Bc	<u> </u>	ĭ₹	ے	Cu	மி	Ŭ	Ă
SURFACE	Lead		0	242	345	2.12	12.5	731	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		242	330	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1075	495	2.12	12.5	1049	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1075	1350	200	1.34	14.8	268	25	Class C	Retarder
INTERMEDIATE	Lead	1400	0	1117	250	2.12	12.5	530	25	Class C	Salt, Gel, Extender, LCM

Page 4 of 7

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		1117	1400	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	1400	1400	2335	175	2.12	12.5	371	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2335	3010	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		1400	6890	495	2.12	12.5	1049	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		6890	9360	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		8600	1670 5	330	2.97	11.2	980	25	Class C	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

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	330	SPUD MUD	8.6	8.8							

Page 5 of 7

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
330	1350	SALT SATURATED	10	10							
1350	8880	WATER-BASED MUD	8.6	9.7						1	
8880	9074	OIL-BASED MUD	8.6	10					. ^		

Section 6 - Test, Logging, Coring

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

Will run GR/CNL in deeper offset Easy Company 36/35 W0IJ Fed Com #1H

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,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4719 Anticipated Surface Pressure: 2750

Anticipated Bottom Hole Temperature(F): 140

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:

Easy Company 36 35 B3IJ Fed Com 1H H2S Plan 20190918144851.pdf

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Other proposed operations facets description:

Other proposed operations facets attachment:

Easy_Company_36_35_B3IJ_Fed_Com_1H_Drlg_Program_20190918144943.doc Easy_Company_36_35_B3IJ_Fed_Com_1H_Add_Info_20190918145236.pdf

Other Variance attachment:

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Casing Program

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
26"	0'	330'	20"	94	J55	BTC	3.61	14.64	45.20	47.71
17.5"	0'	1350'	13.375"	48	H40	STC	1.22	2.74	4.97	8.35
12.25"	0'	3010'	9.625"	36	J55	LTC	1.27	2.20	4.10	5.10
8.75"	0'	9360'	7"	26	HCP110	LTC	1.88	2.49	2.91	3.79
6.125"	8600'	16,705'	4.5"	13.5	P110	LTC	2.52	2.93	2.33	2.91
-		•		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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
is well within the designated 4 string boundary.	1
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?	

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
26"	0'	330'	20"	94	J55	BTC	3.61	14.64	45.20	47.71
17.5"	0'	1350'	13.375"	48	H40	STC	1.22	2.74	4.97	8.35
12.25"	0'	3010'	9.625"	36	J55	LTC	1.27	2.20	4.10	5.10
8.75"	0'	9360'	7"	26	HCP110	LTC	1.88	2.49	2.91	3.79
6.125"	8600'	16,705'	4.5"	13.5	P110	LTC	2.52	2.93	2.33	2.91
				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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
	_
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?	

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
26"	0'	330'	20"	94	J55	BTC	3.61	14.64	45.20	47.71
17.5"	0'	1350'	13.375"	48	H40	STC	1.22	2.74	4.97	8.35
12.25"	0'	3010'	9.625"	36	J55	LTC	1.27	2.20	4.10	5.10
8.75"	0'	9360'	7"	26	HCP110	LTC	1.88	2.49	2.91	3.79
6.125"	8600'	16,705'	4.5"	13.5	P110	LTC	2.52	2.93	2.33	2.91
				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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
	_
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?	

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
26"	0'	330'	20"	94	J55	BTC	3.61	14.64	45.20	47.71
17.5"	0'	1350'	13.375"	48	H40	STC	1.22	2.74	4.97	8.35
12.25"	0'	3010'	9.625"	36	J55	LTC	1.27	2.20	4.10	5.10
8.75"	0'	9360'	7"	26	HCP110	LTC	1.88	2.49	2.91	3.79
6.125"	8600'	16,705'	4.5"	13.5	P110	LTC	2.52	2.93	2.33	2.91
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

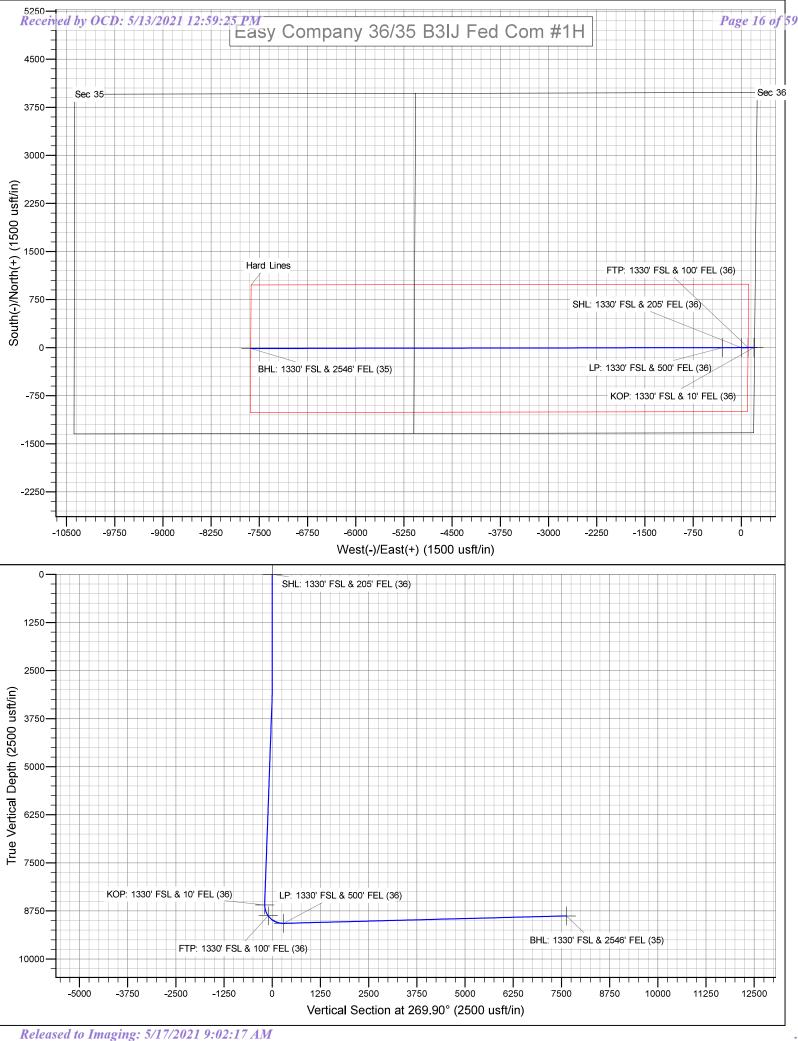
	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? 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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
is well within the designated 4 string boundary.	1
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?	

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
26"	0'	330'	20"	94	J55	BTC	3.61	14.64	45.20	47.71
17.5"	0'	1350'	13.375"	48	H40	STC	1.22	2.74	4.97	8.35
12.25"	0'	3010'	9.625"	36	J55	LTC	1.27	2.20	4.10	5.10
8.75"	0'	9360'	7"	26	HCP110	LTC	1.88	2.49	2.91	3.79
6.125"	8600'	16,705'	4.5"	13.5	P110	LTC	2.52	2.93	2.33	2.91
				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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	Y
	_
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	
500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	



Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Easy Company 36/35 B3IJ Fed Com #1H

Sec 36, T20S, R28E

SHL: 1330' FSL & 205' FEL, Sec 36 BHL: 1330' FSL & 2546' FEL, Sec 35

Plan: Design #1

Standard Planning Report

26 July, 2019

Database: Hobbs

Project:

Company: Mewbe

Mewbourne Oil Company
Eddy County, New Mexico NAD 83

Site: Easy Company 36/35 B3IJ Fed Com #1H

Well: Sec 36, T20S, R28E

Wellbore: BHL: 1330' FSL & 2546' FEL, Sec 35

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Easy Company 36/35 B3IJ Fed Com #1H

WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

Grid

Minimum Curvature

Project Eddy County, New Mexico NAD 83

Map System: US State Plane 1983
Geo Datum: North American Datum 1983

Map Zone: North American Datum 198

New Mexico Eastern Zone

System Datum: Me

Mean Sea Level

Site Easy Company 36/35 B3IJ Fed Com #1H

Northing: 555,275.00 usft Site Position: Latitude: 32.5263349 From: Мар Easting: 606,003.00 usft Longitude: -104.1235197 **Position Uncertainty:** Slot Radius: 13-3/16 " **Grid Convergence:** 0.11 0.0 usft

Ostituli dicertainty.

Well Sec 36, T20S, R28E

 Well Position
 +N/-S
 0.0 usft
 Northing:
 555,275.00 usft
 Latitude:
 32.5263349

 +E/-W
 0.0 usft
 Easting:
 606,003.00 usft
 Longitude:
 -104.1235197

Position Uncertainty 0.0 usft Wellhead Elevation: 3,256.0 usft Ground Level: 3,229.0 usft

BHL: 1330' FSL & 2546' FEL, Sec 35 Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) 7/24/2019 IGRF2010 6.86 60.17 47,932

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 0.0 269.90

lan 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	
3,085.0	0.00	0.00	3,085.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,223.6	2.08	89.71	3,223.5	0.0	2.5	1.50	1.50	0.00	89.71	
8,461.5	2.08	89.71	8,458.0	1.0	192.5	0.00	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,596.5	1.0	195.0	1.50	-1.50	0.00	180.00	KOP: 1330' FSL & 10'
9,362.9	91.51	269.90	9,074.0	0.1	-295.2	12.00	12.00	0.00	-90.10	
16,704.3	91.51	269.90	8,880.0	-13.0	-7,634.0	0.00	0.00	0.00	0.00	BHL: 1330' FSL & 254

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Easy Company 36/35 B3IJ Fed Com #1H

Well: Sec 36, T20S, R28E

Wellbore: BHL: 1330' FSL & 2546' FEL, Sec 35

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Easy Company 36/35 B3IJ Fed Com #1H

WELL @ 3256.0usft (Original Well Elev)
WELL @ 3256.0usft (Original Well Elev)

Grid

ned Survey									
nou our roy									
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: 1330'	FSL & 205' FEL (36)							
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
3,085.0	0.00	0.00	3,085.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.23	89.71	3,100.0	0.0	0.0	0.0	1.50	1.50	0.00
3,200.0	1.73	89.71	3,200.0	0.0	1.7	-1.7	1.50	1.50	0.00
3,223.6	2.08	89.71	3,223.5	0.0	2.5	-2.5	1.50	1.50	0.00
3,300.0	2.08	89.71	3,299.9	0.0	5.3	-5.3	0.00	0.00	0.00
3,400.0	2.08	89.71	3,399.9	0.0	8.9	-8.9	0.00	0.00	0.00
3,500.0	2.08	89.71	3,499.8	0.1	12.5	-12.5	0.00	0.00	0.00
3,600.0	2.08	89.71	3,599.7	0.1	16.2	-16.2	0.00	0.00	0.00
3,700.0	2.08	89.71	3,699.7	0.1	19.8	-19.8	0.00	0.00	0.00
3,800.0	2.08	89.71	3,799.6	0.1	23.4	-23.4	0.00	0.00	0.00
3,900.0	2.08	89.71	3,899.5	0.1	27.0	- 27.0	0.00	0.00	0.00
4,000.0	2.08	89.71	3,999.5	0.2	30.7	-30.7	0.00	0.00	0.00
4,100.0	2.08	89.71	4,099.4	0.2	34.3	-34.3	0.00	0.00	0.00
4,200.0	2.08	89.71	4,199.3	0.2	37.9	-37.9	0.00	0.00	0.00
4,300.0	2.08	89.71	4,299.3	0.2	41.6	-41.6	0.00	0.00	0.00
4,400.0	2.08	89.71	4,399.2	0.2	45.2	-45.2	0.00	0.00	0.00
4,500.0	2.08	89.71	4,499.1	0.3	48.8	-48.8	0.00	0.00	0.00
4,600.0	2.08	89.71	4,599.1	0.3	52.4	-52.4	0.00	0.00	0.00
4,700.0	2.08	89.71	4,699.0	0.3	56.1	-56.1	0.00	0.00	0.00
4,800.0	2.08	89.71	4,798.9	0.3	59.7	-59.7	0.00	0.00	0.00
4,900.0	2.08	89.71	4,898.9	0.3	63.3	-63.3	0.00	0.00	0.00
5,000.0	2.08	89.71	4,998.8	0.3	66.9	-66.9	0.00	0.00	0.00

Hobbs Database: Company:

Project:

Site:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Easy Company 36/35 B3IJ Fed Com #1H

Well: Sec 36, T20S, R28E

BHL: 1330' FSL & 2546' FEL, Sec 35 Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Easy Company 36/35 B3IJ Fed Com #1H

WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

angii.									
lanned Survey									
Measured Depth (usft)	I 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	1.0 2.08	89.71	5,098.7	0.4	70.6	-70.6	0.00	0.00	0.00
							0.00		0.00
5,200	2.08	89.71	5,198.7	0.4	74.2	-74.2	0.00	0.00	0.00
5,300	2.08	89.71	5,298.6	0.4	77.8	-77.8	0.00	0.00	0.00
5,400		89.71	5,398.5	0.4	81.5	-81.5	0.00	0.00	0.00
5,500		89.71	5,498.5	0.4	85.1	-85.1	0.00	0.00	0.00
5,600		89.71	5,598.4	0.5	88.7	-88.7	0.00	0.00	0.00
5,700		89.71	5,698.3	0.5	92.3	-92.3	0.00	0.00	0.00
5,800	0.0 2.08	89.71	5,798.3	0.5	96.0	-96.0	0.00	0.00	0.00
5,900	2.08	89.71	5,898.2	0.5	99.6	-99.6	0.00	0.00	0.00
6,000	0.0 2.08	89.71	5,998.1	0.5	103.2	-103.2	0.00	0.00	0.00
6,100	2.08	89.71	6,098.1	0.5	106.8	-106.8	0.00	0.00	0.00
6,200	2.08	89.71	6,198.0	0.6	110.5	-110.5	0.00	0.00	0.00
6,300		89.71	6,297.9	0.6	114.1	-114.1	0.00	0.00	0.00
6,400		89.71	6,397.9	0.6	117.7	-117.7	0.00	0.00	0.00
6,500		89.71	6,497.8	0.6	121.3	-121.3	0.00	0.00	0.00
6,600	0.0 2.08	89.71	6,597.7	0.6	125.0	-125.0	0.00	0.00	0.00
6,700	0.0 2.08	89.71	6,697.7	0.7	128.6	-128.6	0.00	0.00	0.00
6,800	1.0 2.08	89.71	6,797.6	0.7	120.0	122.2	0.00	0.00	0.00
,					132.2	-132.2			
6,900		89.71	6,897.6	0.7	135.9	-135.9	0.00	0.00	0.00
7,000		89.71	6,997.5	0.7	139.5	-139.5	0.00	0.00	0.00
7,100		89.71	7,097.4	0.7	143.1	-143.1	0.00	0.00	0.00
7,200	0.0 2.08	89.71	7,197.4	8.0	146.7	-146.7	0.00	0.00	0.00
7,300	2.08	89.71	7,297.3	0.8	150.4	-150.4	0.00	0.00	0.00
7,400		89.71	7,397.2	0.8	154.0	-154.0	0.00	0.00	0.00
7,500		89.71	7,497.2	0.8	157.6	-15 7 .6	0.00	0.00	0.00
7,500 7,600			7,497.2 7,597.1	0.8	161.2	-157.6 -161.2	0.00	0.00	
		89.71							0.00
7,700	2.08	89.71	7,697.0	0.8	164.9	-164.9	0.00	0.00	0.00
7,800	2.08	89.71	7,797.0	0.9	168.5	-168.5	0.00	0.00	0.00
7,900	2.08	89.71	7,896.9	0.9	172.1	-172.1	0.00	0.00	0.00
8,000	2.08	89.71	7,996.8	0.9	175.7	-175.8	0.00	0.00	0.00
8,100		89.71	8,096.8	0.9	179.4	-179.4	0.00	0.00	0.00
8,200		89.71	8,196.7	0.9	183.0	-183.0	0.00	0.00	0.00
8,300		89.71	8,296.6	1.0	186.6	-186.6	0.00	0.00	0.00
8,400		89.71	8,396.6	1.0	190.3	-190.3	0.00	0.00	0.00
8,461		89.71	8,458.0	1.0	192.5	-192.5	0.00	0.00	0.00
8,500	1.50	89.71	8,496.5	1.0	193.7	-193.7	1.50	-1.50	0.00
8,600	0.00	0.00	8,596.5	1.0	195.0	-195.0	1.50	-1.50	0.00
KOP: 133	30' FSL & 10' FEL (3	36)							
	•	•							
8,700		269.90	8,695.8	1.0	184.6	-184.6	12.00	12.00	0.00
8,800		269.90	8,790.7	0.9	153.8	-153.8	12.00	12.00	0.00
8,898	35.75	269.90	8,875.6	8.0	105.0	-105.0	12.00	12.00	0.00
FTP: 133	0' FSL & 100' FEL (36)							
8,900	.0 35.98	269.90	8,877.2	0.8	103.9	-103.9	12.00	12.00	0.00
9,000	1.0 47.98	269.90	8,951.4	0.7	37.1	-37.1	12.00	12.00	0.00
9,100		269.90	9,010.1	0.6	-43.6	43.6	12.00	12.00	0.00
9,200		269.90	9,050.7	0.4	-134.8	134.8	12.00	12.00	0.00
9,300		269.90	9,071.5	0.2	-232.4	232.4	12.00	12.00	0.00
9,362	2.9 91.51	269.90	9,074.0	0.1	-295.2	295.2	12.00	12.00	0.00
LP: 1330	' FSL & 500' FEL (36	6)							
9,400	0.0 91.51	269.90	9,073.0	0.1	-332.3	332.3	0.02	0.02	0.00
9,500	0.0 91.51	269.90	9,070.4	-0.1	-432.3	432.3	0.00	0.00	0.00
9,600		269.90	9,067.7	-0.3	-532.2	532.2	0.00	0.00	0.00
			0,001.1	0.0	002.2	JUZ.2	0.00	0.00	0.00

Hobbs Database: Company:

Project:

Site:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Easy Company 36/35 B3IJ Fed Com #1H

Well: Sec 36, T20S, R28E

BHL: 1330' FSL & 2546' FEL, Sec 35 Wellbore:

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Easy Company 36/35 B3IJ Fed Com #1H

WELL @ 3256.0usft (Original Well Elev) WELL @ 3256.0usft (Original Well Elev)

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)
9,800.0	91.51	269.90	9,062.4	-0.7	-732.2	732.2	0.00	0.00	0.00
9,900.0	91.51	269.90	9,059.8	-0.8	-832.1	832.1	0.00	0.00	0.00
10,000.0	91.51	269.90	9,057.2	-1.0	-932.1	932.1	0.00	0.00	0.00
10,100.0	91.51	269.90	9,054.5	-1.2	-1,032.1	1,032.1	0.00	0.00	0.00
10,200.0	91.51	269.90	9,051.9	-1.4	-1,132.0	1,132.0	0.00	0.00	0.00
10,300.0	91.51	269.90	9,049.2	-1.6	-1,232.0	1,232.0	0.00	0.00	0.00
10,400.0	91.51	269.90	9,046.6	-1.7	-1,332.0	1,332.0	0.00	0.00	0.00
10,500.0	91.51	269.90	9,044.0	-1.9	-1,431.9	1,431.9	0.00	0.00	0.00
10,600.0	91.51	269.90	9,041.3	-2.1	-1,531.9	1,531.9	0.00	0.00	0.00
10,700.0	91.51	269.90	9,038.7	-2.3	-1,631.9	1,631.9	0.00	0.00	0.00
10,800.0	91.51	269.90	9,036.0	-2.4	-1,731.8	1,731.8	0.00	0.00	0.00
10,900.0	91.51	269.90	9,033.4	-2.6	-1,831.8	1,831.8	0.00	0.00	0.00
11,000.0	91.51	269.90	9,030.7	-2.8	-1,931.7	1,931.8	0.00	0.00	0.00
11,100.0	91.51	269.90	9,028.1	-3.0	-2,031.7	2,031.7	0.00	0.00	0.00
11,200.0	91.51	269.90	9,025.5	-3.2	-2,131.7	2,131.7	0.00	0.00	0.00
11,300.0	91.51	269.90	9,022.8	-3.3	-2,231.6	2,231.6	0.00	0.00	0.00
11,400.0	91.51	269.90	9,020.2	-3.5	-2,331.6	2,331.6	0.00	0.00	0.00
11,500.0	91.51	269.90	9,017.5	-3.7	-2,431.6	2,431.6	0.00	0.00	0.00
11,600.0	91.51	269.90	9,014.9	-3.9	-2,531.5	2,531.5	0.00	0.00	0.00
11,700.0	91.51	269.90	9,012.2	-4.1	-2,631.5	2,631.5	0.00	0.00	0.00
11,800.0	91.51	269.90	9,009.6	-4.2	-2,731.5	2,731.5	0.00	0.00	0.00
11,900.0	91.51	269.90	9,007.0	-4.4	-2,831.4	2,831.4	0.00	0.00	0.00
12,000.0	91.51	269.90	9.004.3	-4.6	-2.931.4	2,931.4	0.00	0.00	0.00
12,100.0	91.51	269.90	9,001.7	-4.8	-3,031.4	3,031.4	0.00	0.00	0.00
12,200.0	91.51	269.90	8,999.0	-4.9	-3,131.3	3,131.3	0.00	0.00	0.00
12,300.0	91.51	269.90	8,996.4	-5.1	-3,231.3	3,231.3	0.00	0.00	0.00
12,400.0	91.51	269.90	8,993.7	-5.3	-3,331.3	3,331.3	0.00	0.00	0.00
12,500.0	91.51	269.90	8,991.1	-5.5	-3,431.2	3,431.2	0.00	0.00	0.00
12,600.0	91.51	269.90	8,988.5	-5.7	-3,531.2	3,531.2	0.00	0.00	0.00
12,700.0	91.51	269.90	8,985.8	-5.8	-3,631.2	3,631.2	0.00	0.00	0.00
12,800.0	91.51	269.90	8,983.2	-6.0	-3,731.1	3,731.1	0.00	0.00	0.00
12,900.0	91.51	269.90	8,980.5	-6.2	-3,831.1	3,831.1	0.00	0.00	0.00
13,000.0	91.51	269.90	8,977.9	-6.4	-3.931.0	3,931.1	0.00	0.00	0.00
13,100.0	91.51	269.90	8,975.2	-6.6	-3,931.0 -4,031.0	4.031.0	0.00	0.00	0.00
13,200.0	91.51	269.90	8,972.6	-6.7	-4,131.0	4,131.0	0.00	0.00	0.00
13,300.0	91.51	269.90	8,970.0	-6.9	-4,230.9	4,230.9	0.00	0.00	0.00
13,400.0	91.51	269.90	8,967.3	-7.1	-4,330.9	4,330.9	0.00	0.00	0.00
13,500.0		269.90	8,964.7	-7.3	-4,430.9	4,430.9	0.00	0.00	0.00
13,500.0	91.51 91.51	269.90 269.90	8,964.7 8,962.0	-7.3 -7.5	-4,430.9 -4,530.8	4,430.9 4,530.8	0.00	0.00	0.00
13,700.0	91.51	269.90	8,959.4	-7.5 -7.6	-4,530.8 -4,630.8	4,530.8	0.00	0.00	0.00
13,800.0	91.51	269.90	8,956.7	-7.8	-4,030.8 -4,730.8	4,730.8	0.00	0.00	0.00
13,900.0	91.51	269.90	8,954.1	-8.0	-4,830.7	4,830.7	0.00	0.00	0.00
14,000.0 14,100.0	91.51 91.51	269.90 269.90	8,951.5 8.948.8	-8.2 8.3	-4,930.7 5.030.7	4,930.7 5,030.7	0.00	0.00 0.00	0.00 0.00
14,100.0 14,158.4	91.51 91.51	269.90 269.90	8,948.8 8.947.3	-8.3 -8.4	-5,030.7 -5,089.0	5,030.7 5,089.0	0.00 0.00	0.00	0.00
	FSL & 0' FEL (3!		0,347.3	-0.4	-5,009.0	5,009.0	0.00	0.00	0.00
14.200.0	91.51	269.90	8,946.2	-8.5	-5,130.6	5,130.6	0.00	0.00	0.00
14,200.0	91.51	269.90	8,943.5	-6.5 -8.7	-5,130.6 -5,230.6	5,130.6	0.00	0.00	0.00
,									
14,400.0 14,500.0	91.51 91.51	269.90 269.90	8,940.9	-8.9 0.1	-5,330.6 5,430.5	5,330.6 5,430.5	0.00	0.00 0.00	0.00 0.00
14,500.0 14,600.0	91.51 91.51	269.90 269.90	8,938.2 8,935.6	-9.1 -9.2	-5,430.5 -5,530.5	5,430.5 5,530.5	0.00 0.00	0.00	0.00
14,600.0	91.51	269.90 269.90	8,933.0	-9.2 -9.4	-5,530.5 -5,630.5	5,530.5 5,630.5	0.00	0.00	0.00
17.700.0	31.31	269.90	8,930.3	-9.4 -9.6	-5,730.4	5,730.4	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Easy Company 36/35 B3IJ Fed Com #1H

Well: Sec 36, T20S, R28E

Wellbore: BHL: 1330' FSL & 2546' FEL, Sec 35

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Easy Company 36/35 B3IJ Fed Com #1H

WELL @ 3256.0usft (Original Well Elev)
WELL @ 3256.0usft (Original Well Elev)

Grid

anned 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)
14,900.0	91.51	269.90	8,927.7	-9.8	-5,830.4	5,830.4	0.00	0.00	0.00
15,000.0	91.51	269.90	8,925.0	-10.0	-5,930.3	5,930.4	0.00	0.00	0.00
15,100.0	91.51	269.90	8,922.4	-10.1	-6,030.3	6,030.3	0.00	0.00	0.00
15,200.0	91.51	269.90	8,919.8	-10.3	-6,130.3	6,130.3	0.00	0.00	0.00
15,300.0	91.51	269.90	8,917.1	-10.5	-6,230.2	6,230.2	0.00	0.00	0.00
15,400.0	91.51	269.90	8,914.5	-10.7	-6,330.2	6,330.2	0.00	0.00	0.00
15,500.0	91.51	269.90	8,911.8	-10.8	-6,430.2	6,430.2	0.00	0.00	0.00
15,600.0	91.51	269.90	8,909.2	-11.0	-6,530.1	6,530.1	0.00	0.00	0.00
15,700.0	91.51	269.90	8,906.5	-11.2	-6,630.1	6,630.1	0.00	0.00	0.00
15,800.0	91.51	269.90	8,903.9	-11.4	-6,730.1	6,730.1	0.00	0.00	0.00
15,900.0	91.51	269.90	8,901.3	-11.6	-6,830.0	6,830.0	0.00	0.00	0.00
16,000.0	91.51	269.90	8,898.6	-11.7	-6,930.0	6,930.0	0.00	0.00	0.00
16,100.0	91.51	269.90	8,896.0	-11.9	-7,030.0	7,030.0	0.00	0.00	0.00
16,200.0	91.51	269.90	8,893.3	-12.1	-7,129.9	7,129.9	0.00	0.00	0.00
16,300.0	91.51	269.90	8,890.7	-12.3	-7,229.9	7,229.9	0.00	0.00	0.00
16,400.0	91.51	269.90	8,888.0	-12.5	-7,329.9	7,329.9	0.00	0.00	0.00
16,500.0	91.51	269.90	8,885.4	-12.6	-7,429.8	7,429.8	0.00	0.00	0.00
16,600.0	91.51	269.90	8,882.8	-12.8	-7,529.8	7,529.8	0.00	0.00	0.00
16,700.0	91.51	269.90	8,880.1	-13.0	-7,629.7	7,629.8	0.00	0.00	0.00
16,704.3	91.51	269.90	8,880.0	-13.0	-7,634.0	7,634.0	0.00	0.00	0.00
BHL: 1330' F	FSL & 2546' FEL	(35)							

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: 1330' FSL & 205' F - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	555,275.00	606,003.00	32.5263349	-104.1235197
KOP: 1330' FSL & 10' FI - plan hits target cent - Point	0.00 er	0.00	8,596.5	1.0	195.0	555,276.00	606,198.00	32.5263366	-104.1228870
FTP: 1330' FSL & 100' F - plan hits target cent - Point	0.00 er	0.00	8,875.6	0.8	105.0	555,275.84	606,108.00	32.5263367	-104.1231790
BHL: 1330' FSL & 2546' - plan hits target cent - Point	0.00 er	0.00	8,880.0	-13.0	-7,634.0	555,262.00	598,369.00	32.5263381	-104.1482889
PPP2: 1330' FSL & 0' FE - plan hits target cent - Point	0.00 er	0.00	8,947.3	-8.4	-5,089.0	555,266.55	600,914.00	32.5263382	-104.1400314
LP: 1330' FSL & 500' FE - plan hits target cent - Point	0.00 er	0.00	9,074.0	0.1	-295.2	555,275.10	605,707.80	32.5263368	-104.1244775

Inten	L	As Dril	led											
API#														
Operator Name: Mewbourne Oil Co.					Property Name: Easy Company 36/35 B3IJ Fed Com						Com	Well Number 1H		
Kick C	Off Point	(KOP)												
UL I	Section 36	Township 20S	Range 28E	Lot	Feet 1330		From N/S		Feet 10		From E/W		County Eddy	
Latitu			202		Longitu		8870		10		<u> </u>		NAD 83	
02.0	J2000C	,			-104.	. 122	.0070						00	
First 7	Гake Poir	nt (FTP)												
UL I	Section 36	Township Range Lot Feet 20S 28E 1330			Feet 1330	From N/		I/S	Feet 100		From E/W		County Eddy	
Latitu 32.	ide 526336	67				Longitude						NAD 83		
	ake Poin							ı						
J J	Section 35	Township 20S	Range 28E	Lot	Feet 1330	Froi S	From N/S Feet From E/W Count Eddy							
32.	^{ide} 526336	66			_	Longitude NAD -104.1482899 83								
Is this	well the	defining v	vell for th	e Horiz	zontal Sp	oacin	g Unit?	١	1					
					٦									
Is this	well an	infill well?		N										
	ll is yes p ng Unit.	lease prov	ide API if	availab	ole, Oper	rator	Name a	and w	vell n	umbe	r for I	Definir	ng well fo	r Horizontal
API#														
Operator Name:					Property Name:					Well Number				

KZ 06/29/2018

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | MEWBOURNE OIL COMPANY

LEASE NO.: | NMNM103877

WELL NAME & NO.: | EASY COMPANY 36-35 B3IJ FED COM 1H

SURFACE HOLE FOOTAGE: 1330'/S & 205'/E **BOTTOM HOLE FOOTAGE** 1330'/S & 2546'/E

LOCATION: | SECTION 36, T20S, R28E, 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

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Delaware formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Casing Design:

- 1. The 20 inch surface casing shall be set at approximately 375 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.

First intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 2. The 13-3/8 inch first intermediate casing shall be set at approximately 1350 feet. The minimum required fill of cement behind the 13-3/8 inch first intermediate casing 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 24%, 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.
 - ❖ In <u>Capitan Reef 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.
 - ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following: (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The 9-5/8 inch second intermediate casing shall be set at approximately 3010 feet. The minimum required fill of cement behind the 9-5/8 inch second intermediate casing is:

Option 1 (Single Stage):

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 -38%, 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 to surface. If cement does not circulate, contact the appropriate BLM office.

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

- 4. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement should tie-back at least 50 feet on top of Capitan Reef top. 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 24%, additional cement might be required.
- 5. 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 **3000 (3M)** 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 County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

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

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

OTA04132021

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.
- 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 Cente	r 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: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

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.

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 containmant 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: DRILLING

Waste content description: Drill cuttings

Amount of waste: 3510 barrels

Waste disposal frequency: One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containment attachment:

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.

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: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

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:

EasyCompany36_35B3IJFedCom1H_wellsitelayout_20190916135922.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: EASY COMPANY 36/35 W0IJ/W0PO/B3IJ

Fed Com

Multiple Well Pad Number: 3

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

05/12/2021

APD ID: 10400047478

Operator Name: MEWBOURNE OIL COMPANY

Well Name: EASY COMPANY 36/35 B3IJ FED COM

Well Type: OIL WELL

Submission Date: 09/25/2019

Well Number: 1H

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
538554	UNKNOWN	3229	27	27	OTHER : Topsoil	NONE	N
538558	TOP SALT	2674	555	555	SALT	NONE	N
538555	BOTTOM SALT	2294	935	935	SALT	NONE	N
538562	YATES	2054	1175	1175	SANDSTONE	NATURAL GAS, OIL	N
538563	CAPITAN REEF	1774	1455	1455	DOLOMITE, LIMESTONE	USEABLE WATER	N
538560	DELAWARE	144	3085	3085	LIMESTONE	NATURAL GAS, OIL	N
538553	BONE SPRINGS	-2441	5670	5670	LIMESTONE, SHALE	NATURAL GAS, OIL	N
538556	BONE SPRING 1ST	-3576	6805	6805	SANDSTONE	NATURAL GAS, OIL	N
538557	BONE SPRING 2ND	-4281	7510	7510	SANDSTONE	NATURAL GAS, OIL	N
541039	BONE SPRING 3RD	-5516	8745	8745	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Rating Depth: 16704 Pressure Rating (PSI): 3M

Equipment: Annular, Pipe Rams, 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. 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:

Page 1 of 7

Operator Name: MEWBOURNE OIL COMPANY

Well Name: EASY COMPANY 36/35 B3IJ FED COM Well Number: 1H

Easy_Company_36_35_B3IJ_Fed_Com_1H_3M_BOPE_Choke_Diagram_20190918142847.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_Flex_Line_Specs_20190918142847.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_Flex_Line_Specs_API_16C_20190918142848.pdf

BOP Diagram Attachment:

Easy_Company_36_35_B3IJ_Fed_Com_1H_H2S_Plan_20190918142858.pdf
Easy_Company_36_35_B3IJ_Fed_Com_1H_3M_BOPE_Schematic_20190918142859.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	26	20.0	NEW	API	N	0	330	0	330	3229	2899	330	J-55	94	BUTT	3.61	14.6 4	DRY	45.2	DRY	47.7 1
2	INTERMED IATE	17.5	13.375	NEW	API	N	0	1350	0	1350	3229	1879	1350	H-40	48	ST&C	1.22	2.74	DRY	4.97	DRY	8.35
3	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3010	0	3010	3624	219	3010	J-55	36	LT&C	1.27	2.2	DRY	4.1	DRY	5.1
4	PRODUCTI ON	8.75	7.0	NEW	API	N	0	9360	0	9074	3635	-5845	9360	P- 110	26	LT&C	1.88	2.49	DRY	2.91	DRY	3.79
5	LINER	6.12 5	4.5	NEW	API	N	8600	16705	8597	9074	-5368	-5845	8105	P- 110	13.5	LT&C	2.52	2.93	DRY	2.33	DRY	2.91

Casing Attachments



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:

Working Pressure:

Gates Part No.:

4 1/16 10K FLG

10,000 PSI

4773-6290

End Fitting 2:

Assembly Code:

Test Pressure:

4 1/16 10K FLG

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:

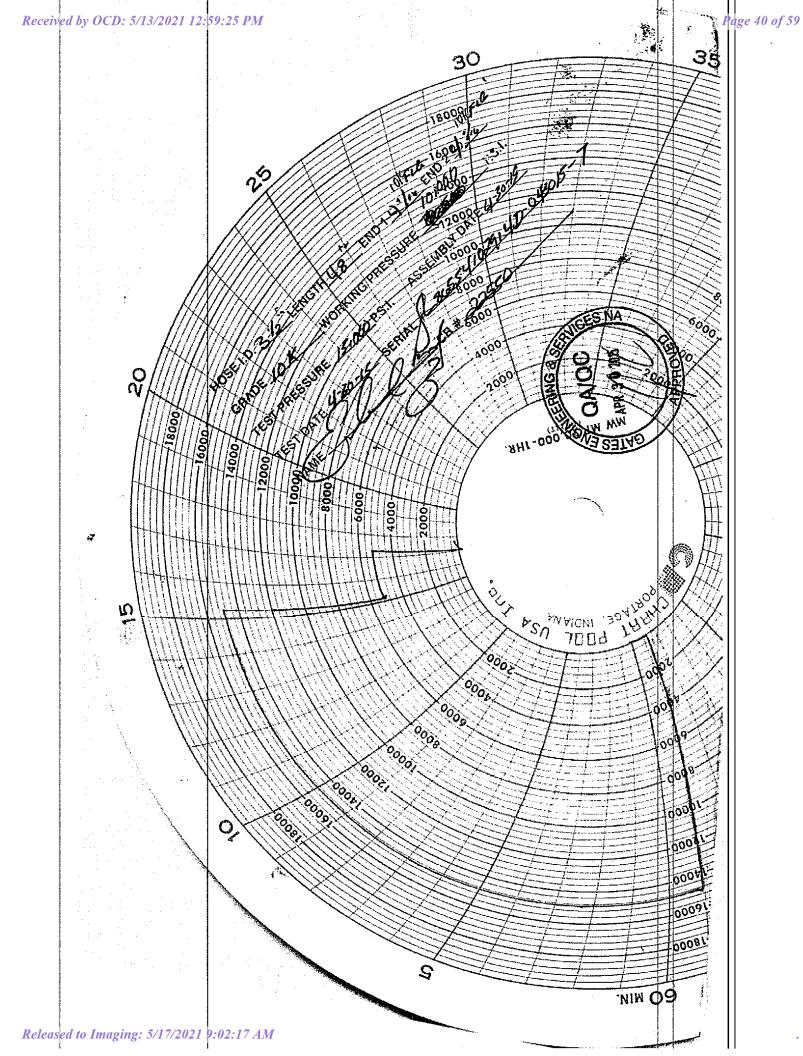
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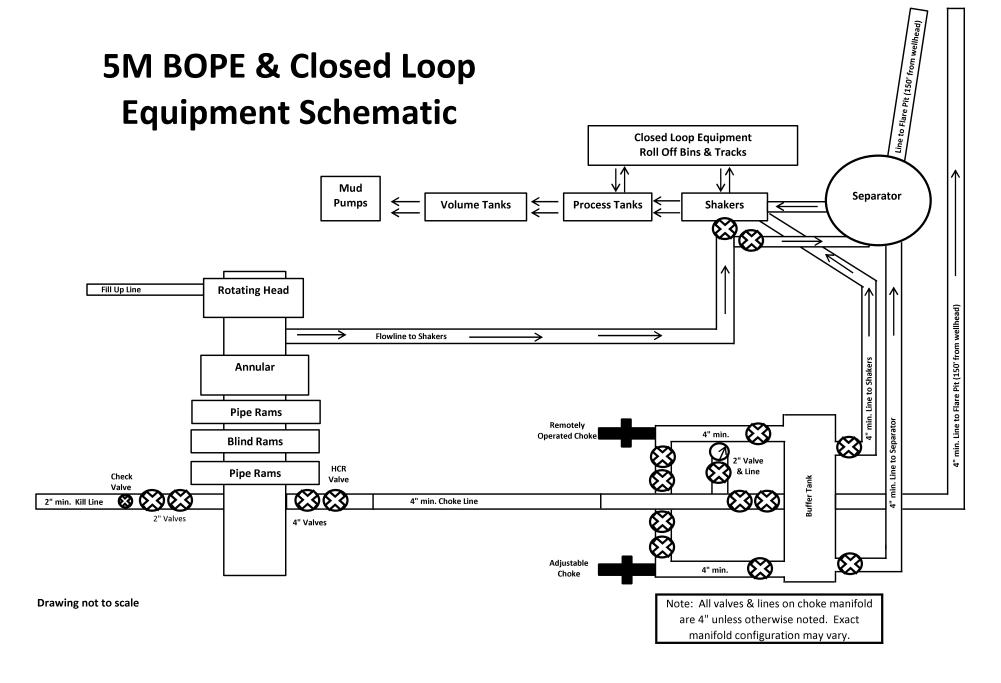
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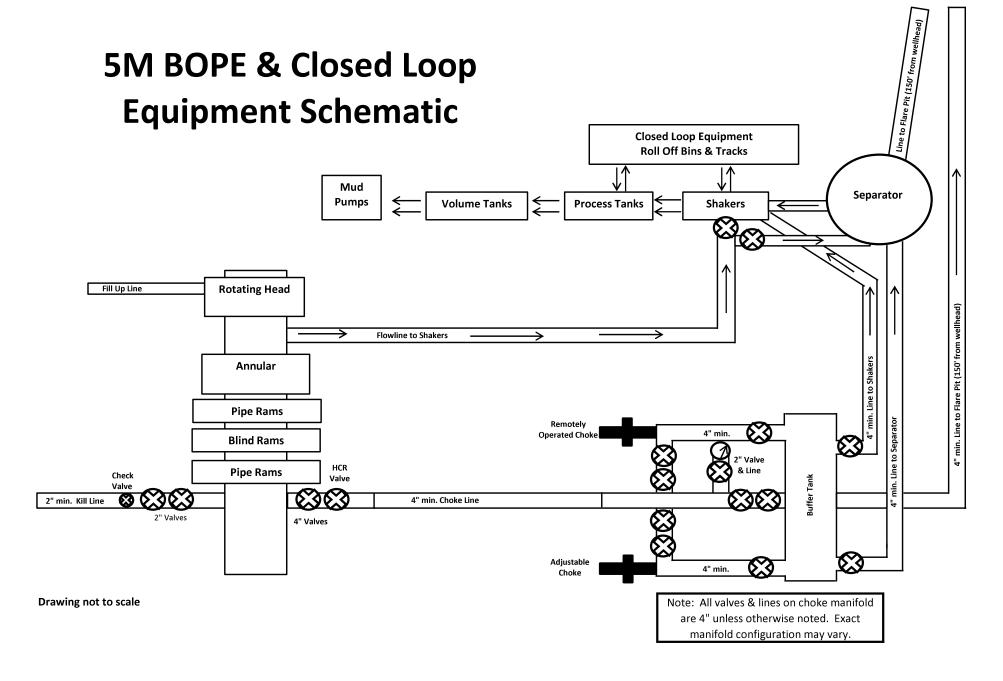
PRODUCTION

4/30/2015











PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer : Customer Ref. :

Invoice No.:

AUSTIN DISTRIBUTING

500506

4060578

Test Date: Hose Serial No.: 4/30/2015 D-043015-7

Created By:

JUSTIN CROPPER

Product Description:

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

End Fitting 1:

Gates Part No.:

Working Pressure :

4 1/16 10K FLG 4773-6290 10,000 PSI End Fitting 2:

Assembly Code:

Test Pressure:

4 1/16 10K FLG

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:

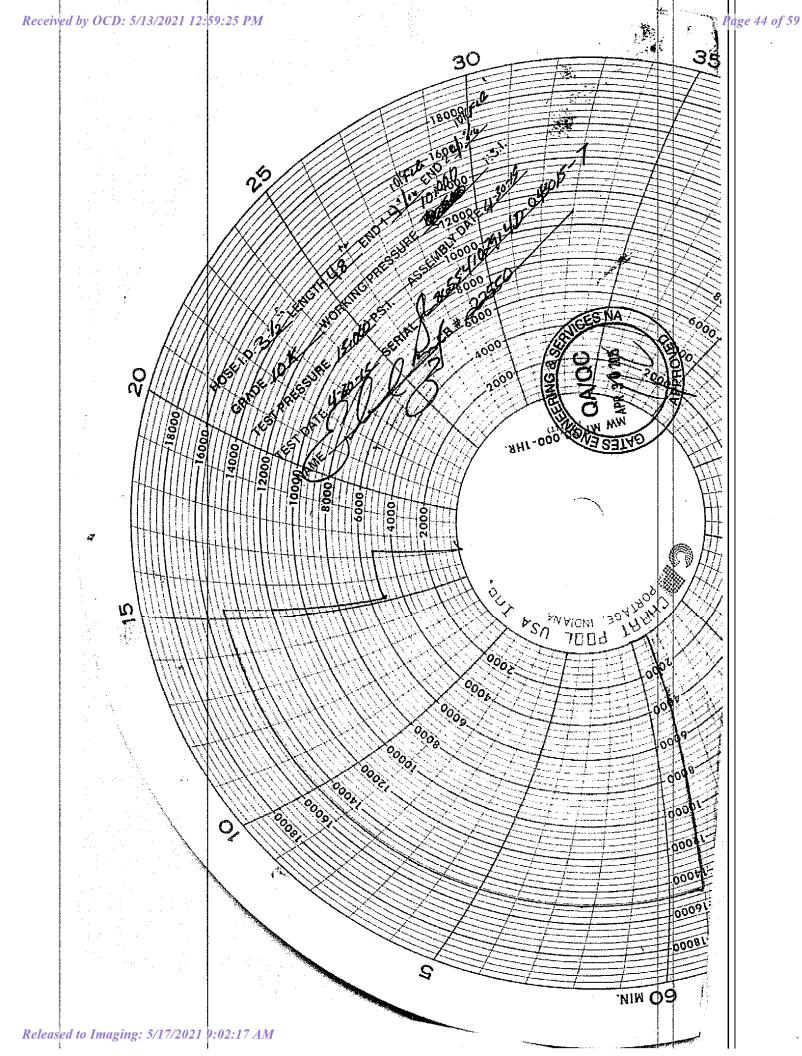
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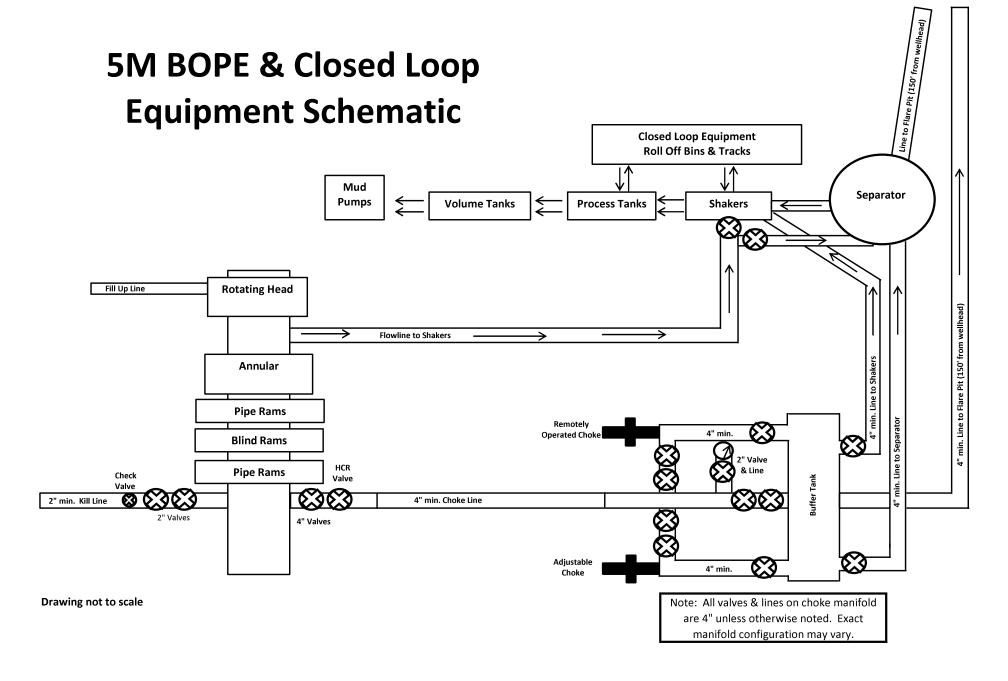
Signature :

PRODUCTION

4/30/2015









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 D-043015-7

Customer Ref.: Invoice No.:

4060578 500506

Created By:

JUSTIN CROPPER

Product Description:

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

End Fitting 1:

4 1/16 10K FLG Gates Part No.:

End Fitting 2:

4 1/16 10K FLG

Working Pressure:

4773-6290 10,000 PSI Assembly Code:

L36554102914D-043015-7

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:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

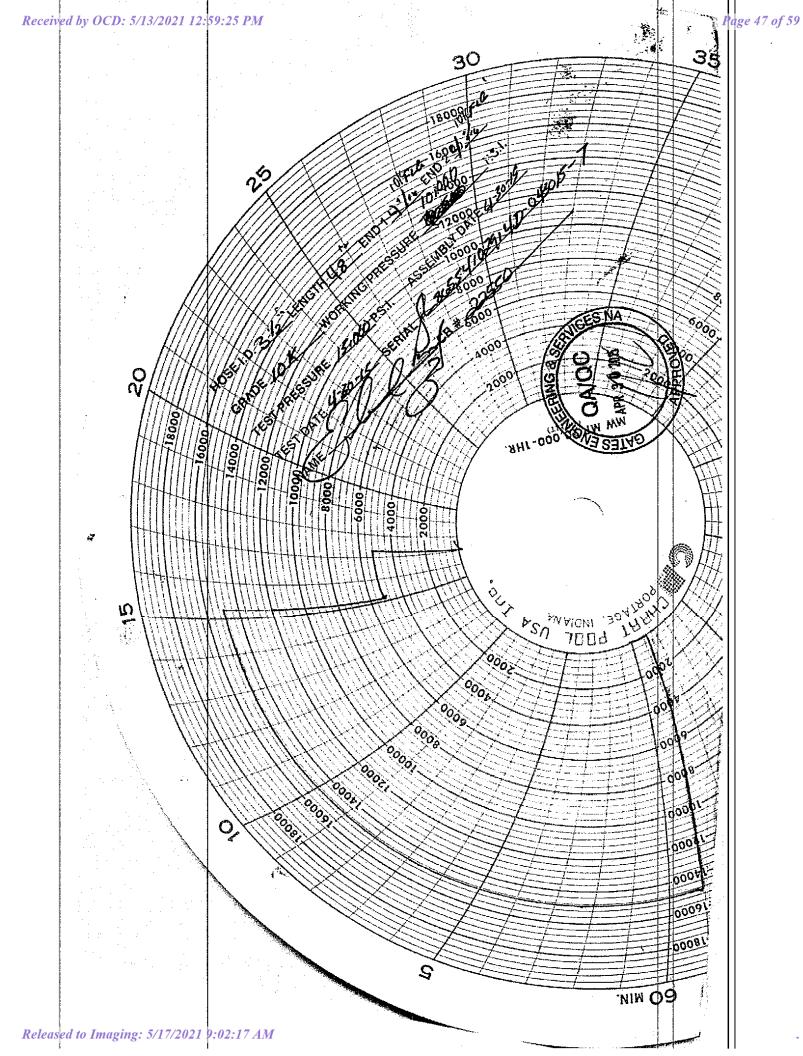
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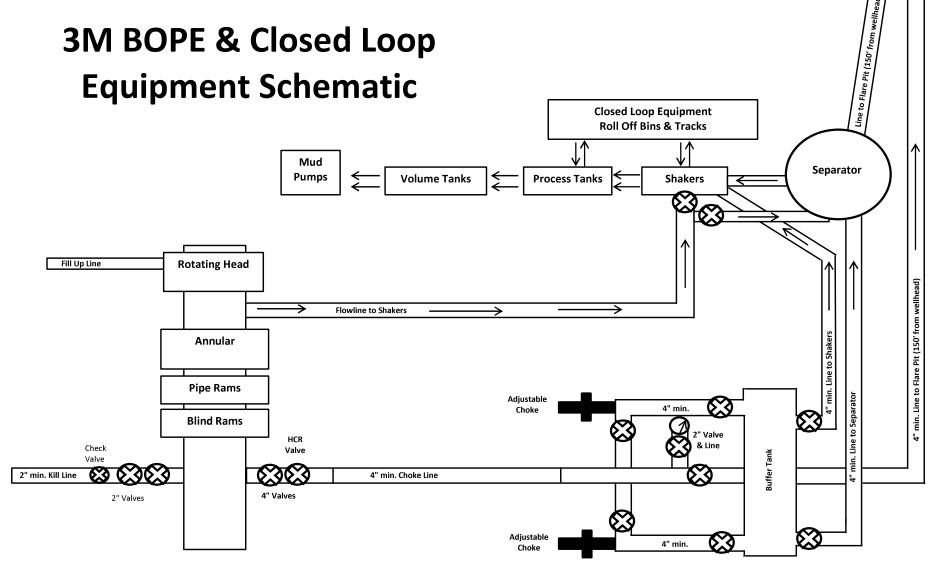
Signature :

PRODUCTION

4/30/2015







Drawing not to scale



PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

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4773-6290

10,000 PSI

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Assembly Code:

Test Pressure:

4 1/16 10K FLG

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:

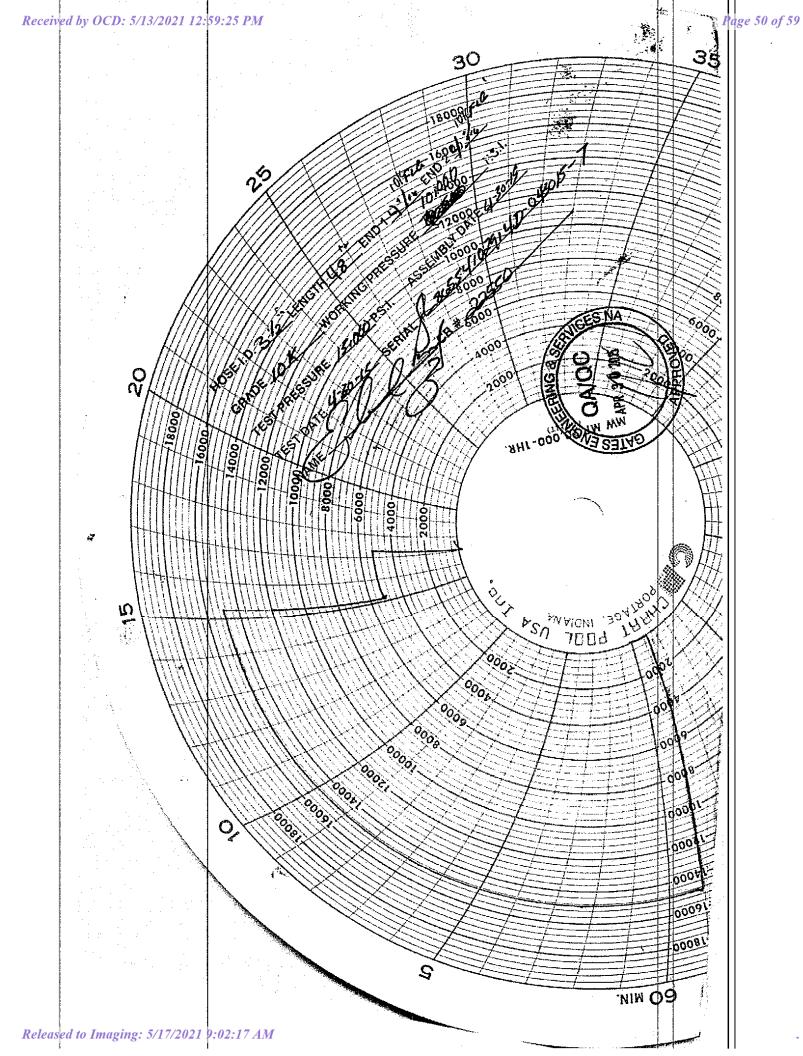
Date:

Signature :

PRODUCTION

4/30/2015







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

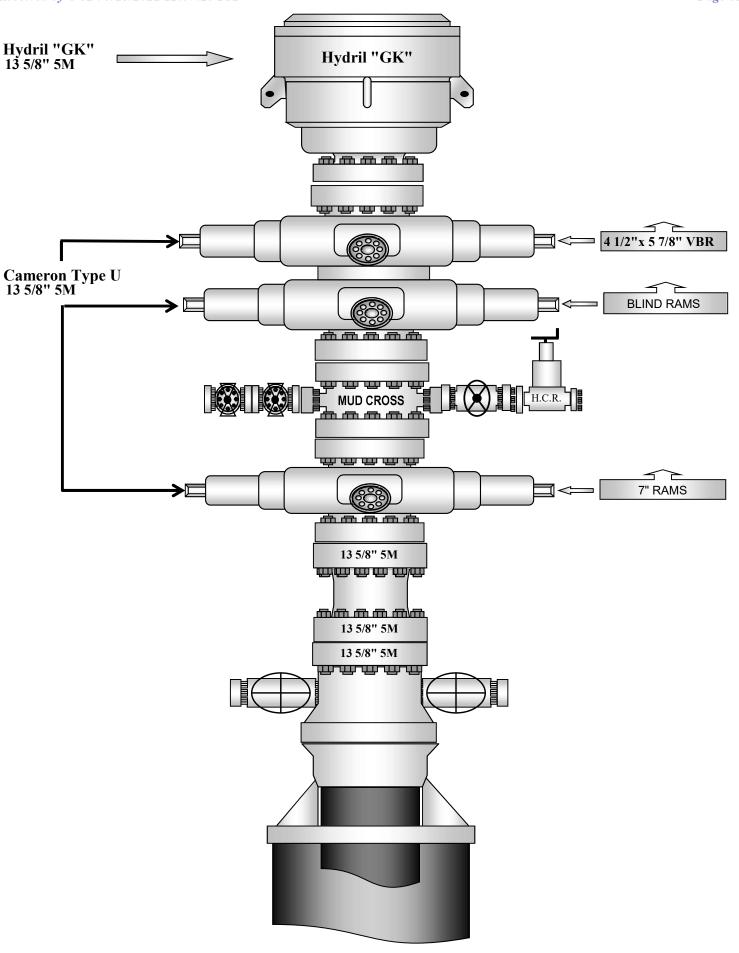
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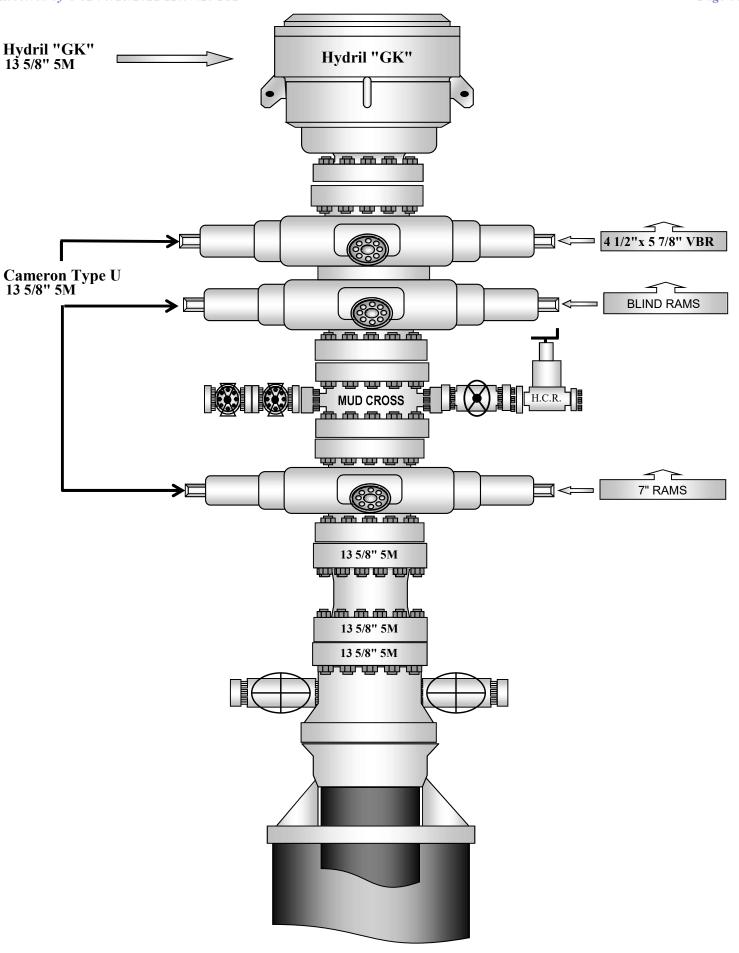
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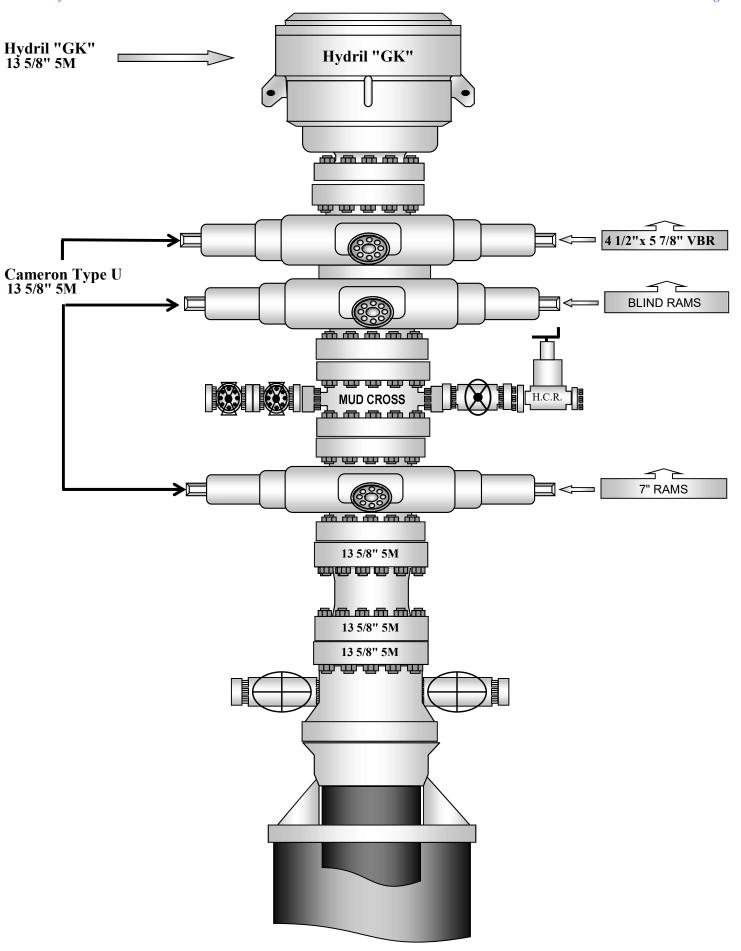
Form PTC - 01 Rev.0 2

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 28133

COMMENTS

Operator:			OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO	P.O. Box 5270	Hobbs, NM88241	14744	28133	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 5/14/2021	05/14/2021

<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 28133

CONDITIONS OF APPROVAL

0 1			CODID	A .: N	A 1: T
Operator:			OGRID:	Action Number:	Action Type:
MEWBOURNE OIL CO	P.O. Box 5270	Hobbs, NM88241	14744	28133	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	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