Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

HOBBS OCD

SEP 18 2017

RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM81599

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
CRAZY WOLF 1 B2MD FED 1H

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

9. API Well No.
30-025-43135-00-X1

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

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

10. Field and Pool or Exploratory Area
TONTO

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 1 T19S R32E SWSW 185FSL 660FWL

11. County or Parish, State
LEA COUNTY, NM

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

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

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

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

NEW PROP ID 319587

1) Change well name to Crazy Wolf 1/2 B2MM Fed Com #1H.
2) Change SL to 330' FSL & 1290' FWL, Sec 1, T19S, R32E.
3) Change BHL to 330' FSL & 330' FWL, Sec 2, T19S, R32E.
4) Change csg and cement to suit new plan.
5) Change wellhead to multi-bowl type wellhead.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Eng Okay 9/11/17 CWells

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

Electronic Submission #384311 verified by the BLM Well Information System
For MEWBOURNE OIL COMPANY, sent to the Hobbs
Committed to AFMSS for processing by CHRISTOPHER WALLS on 08/18/2017 (17CRW0030SE)

Name *(Printed/Typed)* ANDREW TAYLOR — Title ENGINEER

Signature (Electronic Submission) — Date 08/10/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Kurt Vasenden — Title Assoc Field Mgr — Date 9/11/2017

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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

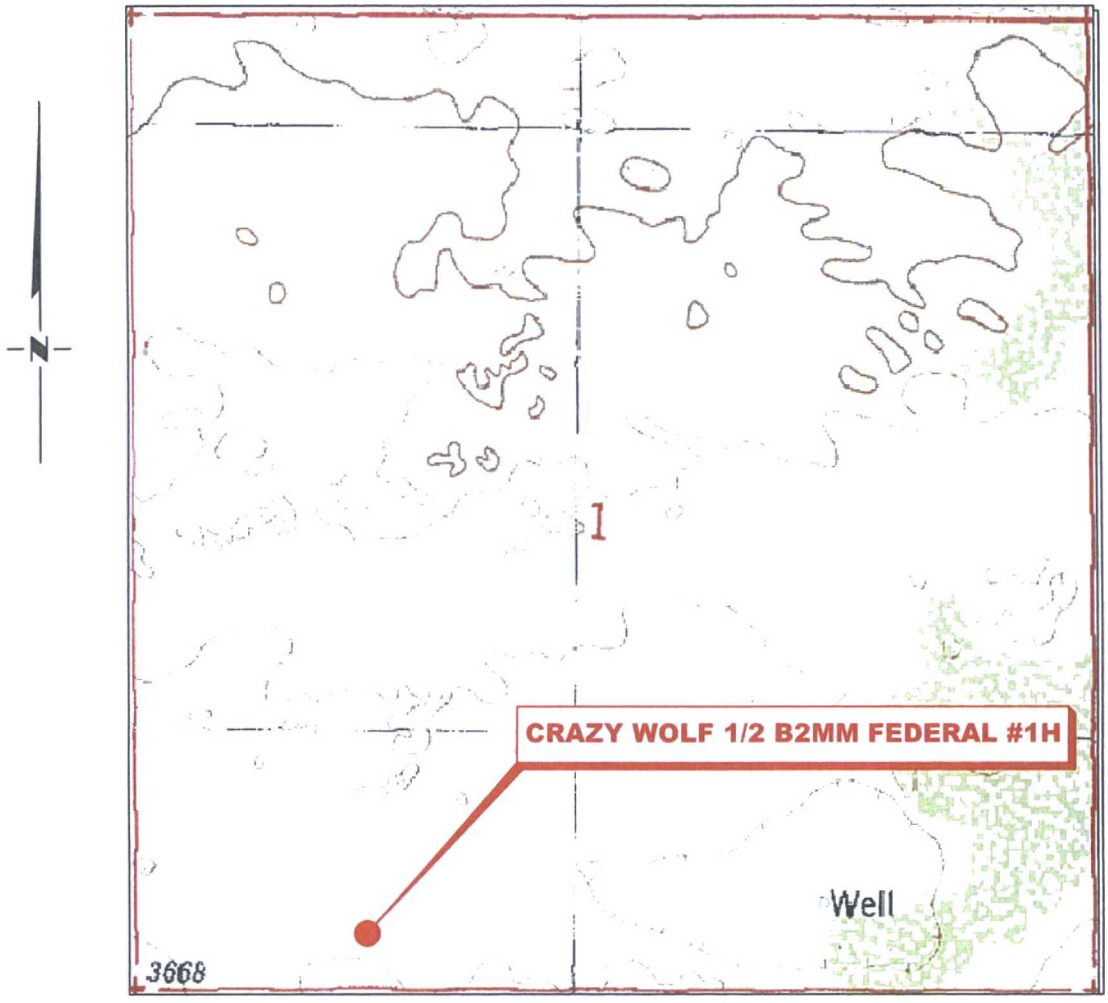
KZ

Additional data for EC transaction #384311 that would not fit on the form

32. Additional remarks, continued

Please contact Andy Taylor with any questions.

LOCATION VERIFICATION MAP



SECTION 1, TWP. 19 SOUTH, RGE. 32 EAST,
N. M. P. M., LEA CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company
LEASE: Crazy Wolf 1/2 B2MM Federal
WELL NO.: 1H
ELEVATION: 3669'

LOCATION: 330' FSL & 1290' FWL
CONTOUR INTERVAL: 10'
USGS TOPO. SOURCE MAP:
Laguna Gatuna NW, N.M. (1984)

NO.	REVISION	DATE

JOB NO.: LS140374R
DWG. NO.: 140374VM

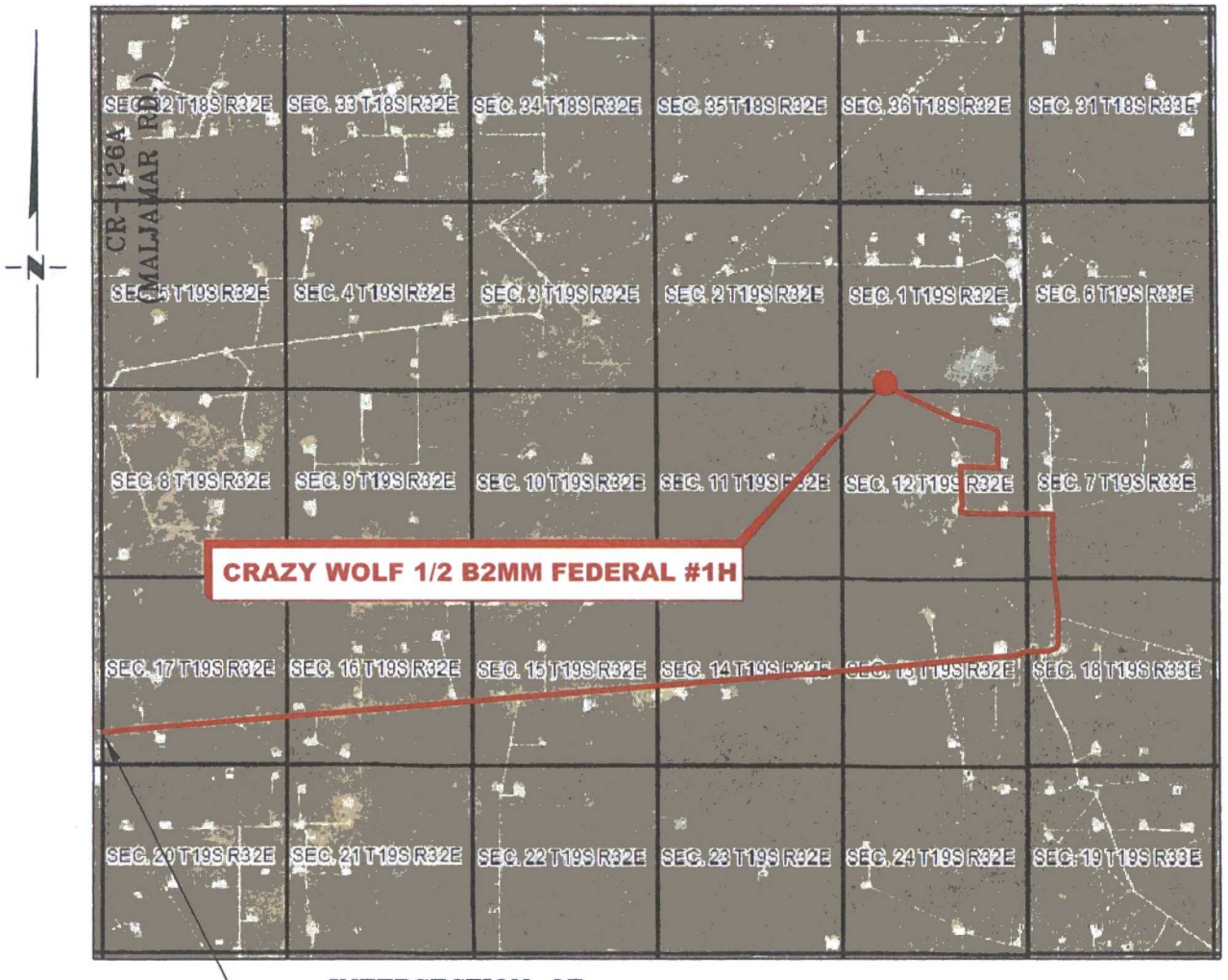
RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 8-8-2017
SURVEYED BY: ML/JL
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1

VICINITY MAP

NOT TO SCALE



INTERSECTION OF
CR-126A (MALJAMAR) &
CR-126 (DRY LAKE)

SECTION 1, TWP. 19 SOUTH, RGE. 32 EAST,
N. M. P. M., LEA COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company
LEASE: Crazy Wolf 1/2 B2MM Federal
WELL NO.: 1H

LOCATION: 330' FSL & 1290' FWL
ELEVATION: 3669'

NO.	REVISION	DATE

JOB NO.: LS140374R
DWG. NO.: 170374VM

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 8-8-2017
SURVEYED BY: ML/JL
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1

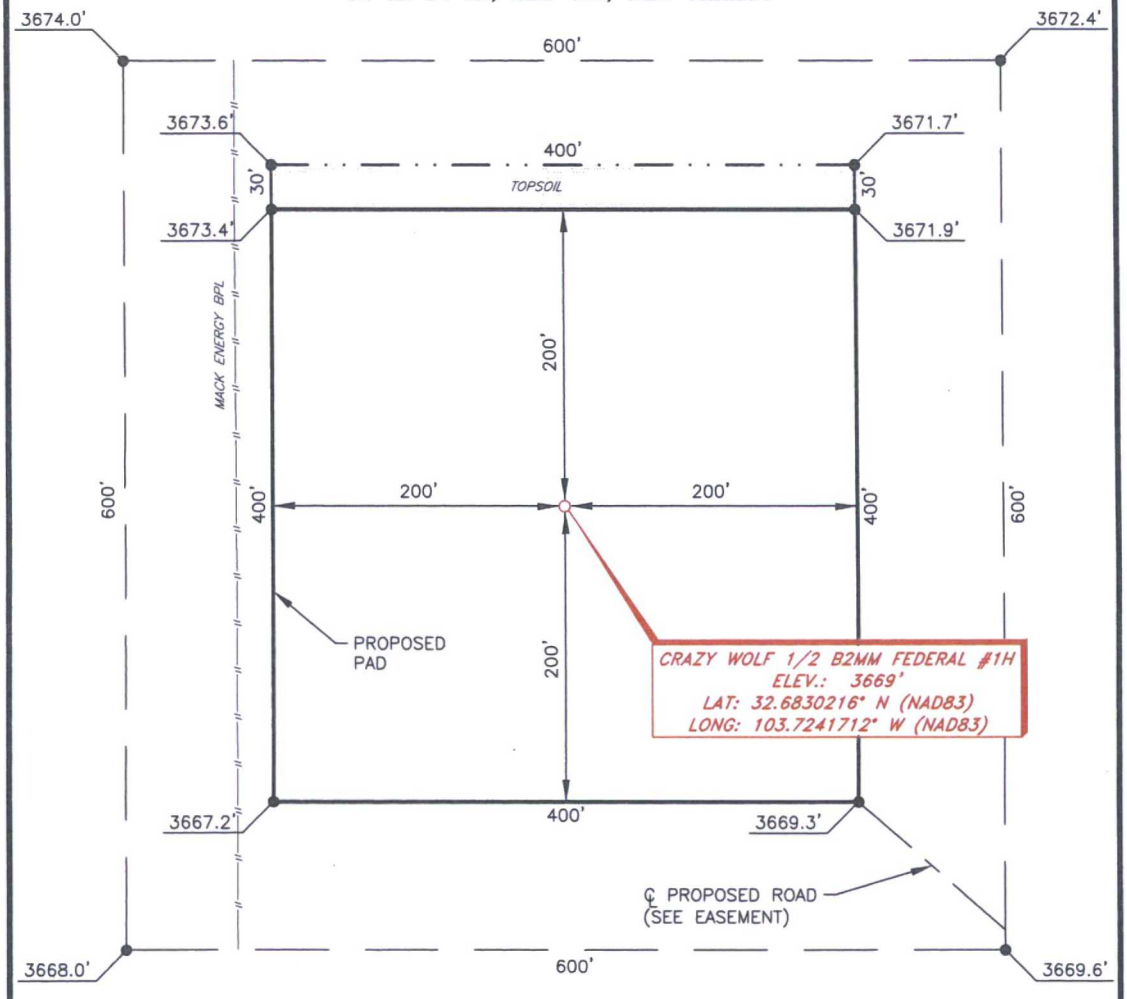
MEWBOURNE OIL COMPANY

CRAZY WOLF 1/2 B2MM FEDERAL #1H

(330' FSL & 1290' FWL)

SECTION 1, T19S, R32E

N. M. P. M., LEA CO., NEW MEXICO



From the intersection of CR-126A (Maljamar Road), and CR-126 (Dry Lake Road), go East on lease road approx. 5.1 miles to a "Y";
Keep left and go North approx. 0.8 miles to a lease road on the left;
Turn left on lease road and go West 0.5 miles to a "T";
Turn right and go North approx. 0.2 miles to a "T";
Turn right and go East 0.2 miles;
Turn left and go North turning Northwest approx. 0.3 miles to the Southwest corner of the existing Endurance Resources Fed 12 #4 pad and beginning of proposed road;
Follow proposed road Northwest approx. 0.4 miles to this location.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID - NM EAST
DISTANCES ARE GROUND.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 8/8/17 PROFESSIONAL SURVEYOR

Firm No.: TX 10193838 NM 4655451

NO.	REVISION	DATE

JOB NO.: LS140374R
DWG. NO.: 140374PAD

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 8-8-2017
SURVEYED BY: ML/JL
DRAWN BY: RMH
APPROVED BY: RMH
SHEET: 1 OF 1

Mewbourne Oil Company, Crazy Wolf 1/2 B2MM Fed Com #1H
Sec 1, T19S, R32E
SL: 330' FSL & 1290' FWL, Sec 1
BHL: 330' FSL & 330' FWL, Sec 2

1. Geologic Formations

TVD of target	9600'	Pilot hole depth	NA
MD at TD:	15650'	Deepest expected fresh water:	325'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	1450	Water	
Top of Salt	1565		
Base Salt			
Yates	3240	Oil/Gas	
Seven Rivers	3620	Oil/Gas	
Queen	4080	Oil/Gas	
Grayburg	4870		
San Andres	5510	Oil/Gas	
Lamar	5760	Oil/Gas	
Bell Canyon		Oil/Gas	
Cherry Canyon		Oil/Gas	
Manzanita Marker			
Brushy Canyon		Oil/Gas	
Bone Spring	7455	Oil/Gas	
1st Bone Spring Sand	8675	Oil/Gas	
2nd Bone Spring Sand	9305	Target Zone	
3rd Bone Spring Sand			
Abo			
Wolfcamp		Will Not Penetrate	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

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

Mewbourne Oil Company, Crazy Wolf 1/2 B2MM Fed Com #1H
Sec 1, T19S, R32E
SL: 330' FSL & 1290' FWL, Sec 1
BHL: 330' FSL & 330' FWL, Sec 2

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	1475'	13.375"	54.5	J55	STC	1.64	3.95	6.39	10.61
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.59	4.54
12.25"	3453'	3500'	9.625"	40	J55	LTC	1.41	2.17	276.55	335.05
8.75"	0'	9875'	7"	26	HCP110	LTC	1.64	2.10	2.51	3.23
6.125"	9122'	15650'	4.5"	13.5	P110	LTC	2.14	2.49	3.84	4.79
BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet		1.6 Dry 1.8 Wet			

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h
Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	835	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	600	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	365	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	270	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

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

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	3420'	25%
Liner	9122'	25%

4. Pressure Control Equipment

	Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12 1/4"	13 5/8"	3M	Annular	X	1500#
			Blind Ram	X	3000#
			Pipe Ram	X	
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. • Provide description here: See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0'	1460'	FW Gel	8.6-8.8	28-34	N/C
1460'	3620'	Saturated Brine	10.0	28-34	N/C
3620'	9212'	Cut Brine	8.6-9.5	28-34	N/C
9212'	15750'	OBM	8.6-9.7	30-40	<10cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from KOP (9122') to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
X	Gamma Ray	9122' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4992 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
	H2S is present
X	H2S Plan attached

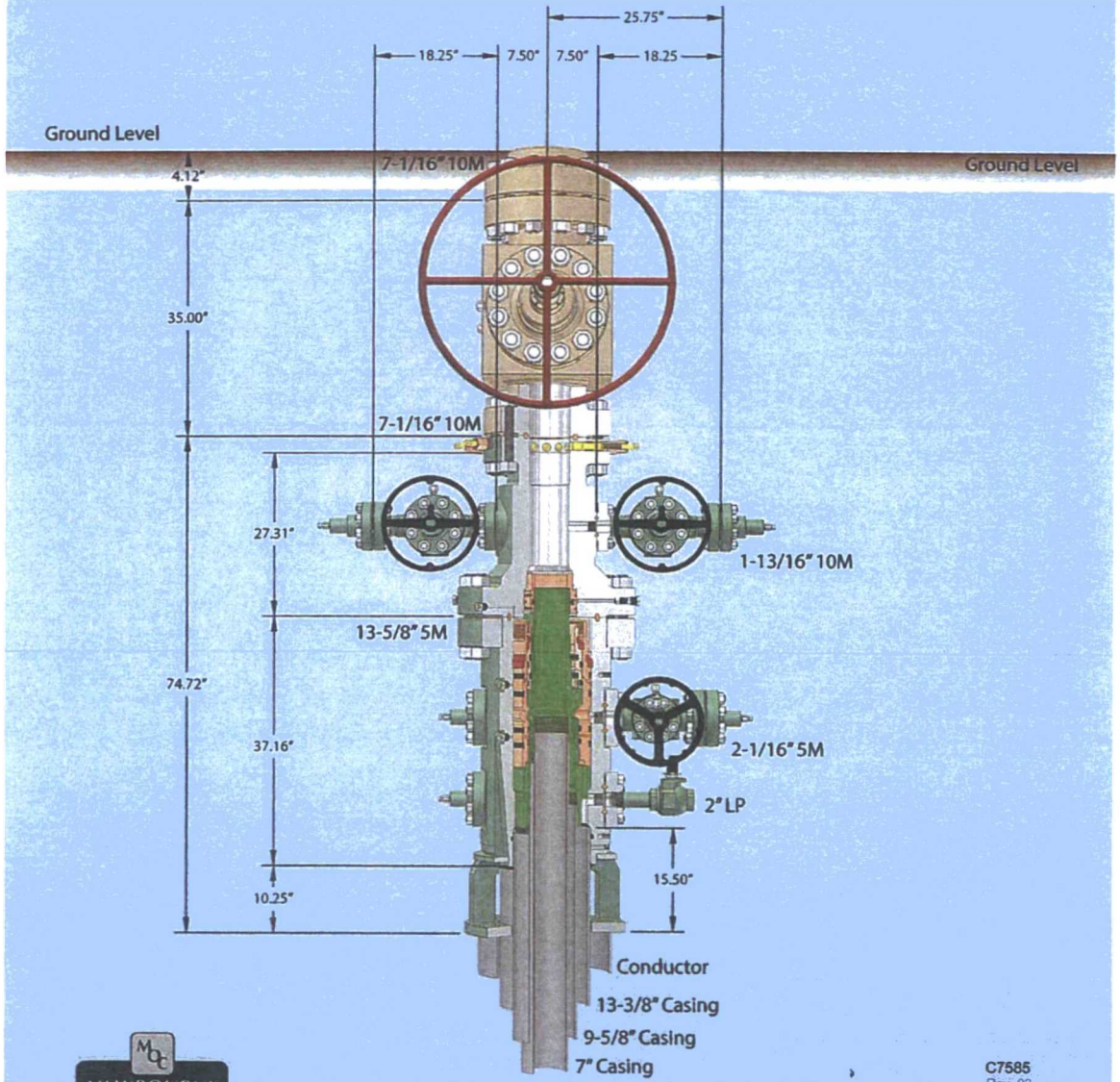
8. Other facets of operation

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

Attachments
___ Directional Plan
___ Other, describe

CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



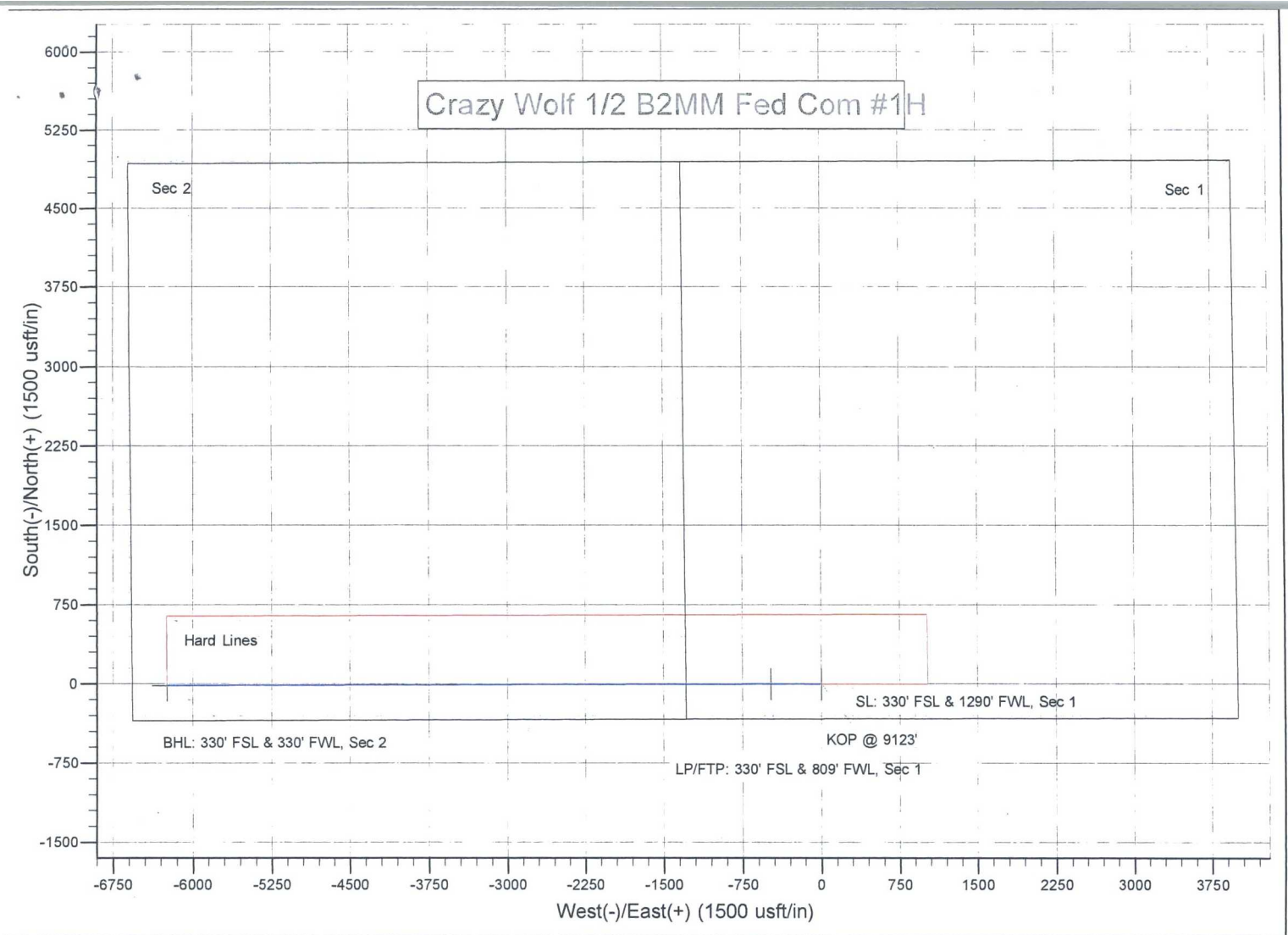
MEWBOURNE OIL COMPANY

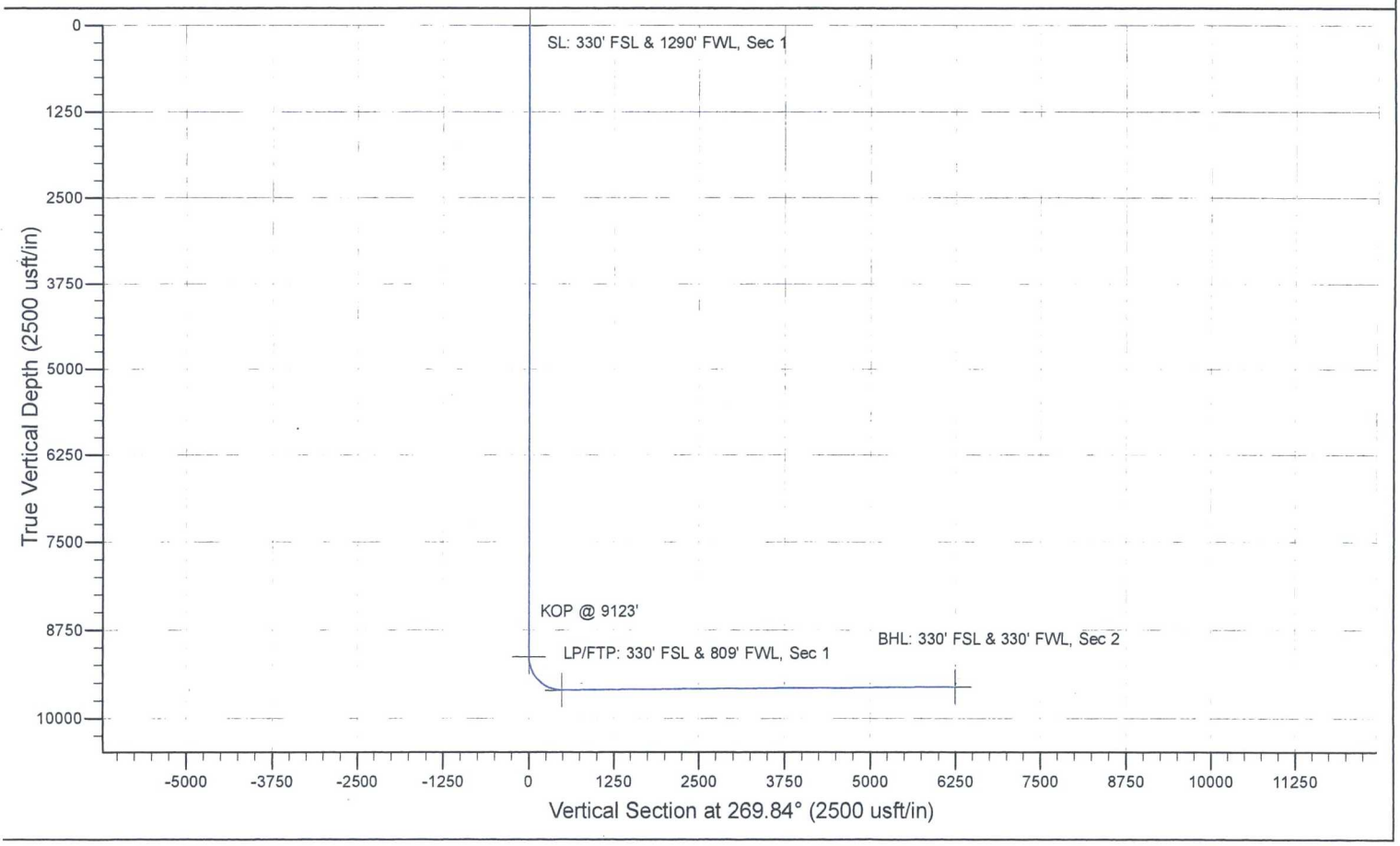
C7585
Rev. 02

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

Cupping flange 57" conductor cut-off

79


Crazy Wolf 1/2 B2MM Fed Com #1H
Sec 2
Sec 1
Hard Lines
SL: 330' FSL & 1290' FWL, Sec 1
BHL: 330' FSL & 330' FWL, Sec 2
KOP @ 9123'
LP/FTP: 330' FSL & 809' FWL, Sec 1
South(-)/North(+) (1500 usft/in)
West(-)/East(+) (1500 usft/in)
6000
5250
4500
3750
3000
2250
1500
750
0
-750
-1500
-6750
-6000
-5250
-4500
-3750
-3000
-2250
-1500
-750
0
750
1500
2250
3000
3750


SL: 330' FSL & 1290' FWL, Sec 1
KOP @ 9123'
LP/FTP: 330' FSL & 809' FWL, Sec 1
BHL: 330' FSL & 330' FWL, Sec 2
True Vertical Depth (2500 usft/in)
Vertical Section at 269.84° (2500 usft/in)
0
1250
2500
3750
5000
6250
7500
8750
10000
-5000
-3750
-2500
-1250
0
1250
2500
3750
5000
6250
7500
8750
10000
11250

Mewbourne Oil Company

Lea County, New Mexico NAD 83
Crazy Wolf 1/2 B2MM Fed Com #1H
Sec 1, T19S, R32E
SL: 330' FSL & 1290' FWL, Sec 1
BHL: 330' FSL & 330' FWL, Sec 2

Plan: Design #1

Standard Planning Report

09 August, 2017

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Crazy Wolf 1/2 B2MM Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Site:	Crazy Wolf 1/2 B2MM Fed Com #1H	**North Reference:**	Grid
Well:	Sec 1, T19S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FWL, Sec 2		
Design:	Design #1		

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

Site	Crazy Wolf 1/2 B2MM Fed Com #1H				
Site Position:		**Northing:**	612,752.00 usft	**Latitude:**	32° 40' 58.873 N
From:	Map	**Easting:**	728,759.00 usft	**Longitude:**	103° 43' 27.013 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.33 °

Well	Sec 1, T19S, R32E					
Well Position	**+N/-S**	0.0 usft	**Northing:**	612,752.00 usft	**Latitude:**	32° 40' 58.873 N
	+E/-W	0.0 usft	**Easting:**	728,759.00 usft	**Longitude:**	103° 43' 27.013 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,694.0 usft	**Ground Level:**	3,669.0 usft

Wellbore	BHL: 330' FSL & 330' FWL, Sec 2			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	8/9/2017	6.93	60.43	48,258

Design	Design #1			
Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.0	0.0	0.0	269.84

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	
9,122.5	0.00	0.00	9,122.5	0.0	0.0	0.00	0.00	0.00	0.00	KOP @ 9123'
9,876.7	90.50	269.84	9,600.0	-1.3	-481.6	12.00	12.00	0.00	-90.16	
15,634.3	90.50	269.84	9,550.0	-17.0	-6,239.0	0.00	0.00	0.00	0.00	BHL: 330' FSL & 330'

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Crazy Wolf 1/2 B2MM Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Site:	Crazy Wolf 1/2 B2MM Fed Com #1H	**North Reference:**	Grid
Well:	Sec 1, T19S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FWL, Sec 2		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 330' FSL & 1290' FWL, Sec 1									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Crazy Wolf 1/2 B2MM Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Site:	Crazy Wolf 1/2 B2MM Fed Com #1H	**North Reference:**	Grid
Well:	Sec 1, T19S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FWL, Sec 2		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,122.5	0.00	0.00	9,122.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 9123'									
9,200.0	9.29	269.84	9,199.7	0.0	-6.3	6.3	12.00	12.00	0.00
9,300.0	21.29	269.84	9,295.9	-0.1	-32.6	32.6	12.00	12.00	0.00
9,400.0	33.29	269.84	9,384.6	-0.2	-78.4	78.4	12.00	12.00	0.00
9,500.0	45.29	269.84	9,461.9	-0.4	-141.6	141.6	12.00	12.00	0.00
9,600.0	57.29	269.84	9,524.3	-0.6	-219.5	219.5	12.00	12.00	0.00
9,700.0	69.29	269.84	9,569.2	-0.8	-308.6	308.6	12.00	12.00	0.00
9,800.0	81.29	269.84	9,594.5	-1.1	-405.2	405.2	12.00	12.00	0.00
9,876.7	90.49	269.84	9,600.0	-1.3	-481.6	481.6	12.00	12.00	0.00
LP/FTP: 330' FSL & 809' FWL, Sec 1									
9,900.0	90.50	269.84	9,599.8	-1.4	-504.9	504.9	0.01	0.01	0.00
10,000.0	90.50	269.84	9,598.9	-1.6	-604.9	604.9	0.00	0.00	0.00
10,100.0	90.50	269.84	9,598.1	-1.9	-704.9	704.9	0.00	0.00	0.00
10,200.0	90.50	269.84	9,597.2	-2.2	-804.9	804.9	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Crazy Wolf 1/2 B2MM Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Site:	Crazy Wolf 1/2 B2MM Fed Com #1H	**North Reference:**	Grid
Well:	Sec 1, T19S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FWL, Sec 2		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	90.50	269.84	9,596.3	-2.5	-904.9	904.9	0.00	0.00	0.00
10,400.0	90.50	269.84	9,595.5	-2.7	-1,004.9	1,004.9	0.00	0.00	0.00
10,500.0	90.50	269.84	9,594.6	-3.0	-1,104.9	1,104.9	0.00	0.00	0.00
10,600.0	90.50	269.84	9,593.7	-3.3	-1,204.9	1,204.9	0.00	0.00	0.00
10,700.0	90.50	269.84	9,592.9	-3.6	-1,304.9	1,304.9	0.00	0.00	0.00
10,800.0	90.50	269.84	9,592.0	-3.8	-1,404.9	1,404.9	0.00	0.00	0.00
10,900.0	90.50	269.84	9,591.1	-4.1	-1,504.9	1,504.9	0.00	0.00	0.00
11,000.0	90.50	269.84	9,590.2	-4.4	-1,604.9	1,604.9	0.00	0.00	0.00
11,100.0	90.50	269.84	9,589.4	-4.6	-1,704.9	1,704.9	0.00	0.00	0.00
11,200.0	90.50	269.84	9,588.5	-4.9	-1,804.9	1,804.9	0.00	0.00	0.00
11,300.0	90.50	269.84	9,587.6	-5.2	-1,904.9	1,904.9	0.00	0.00	0.00
11,400.0	90.50	269.84	9,586.8	-5.5	-2,004.9	2,004.9	0.00	0.00	0.00
11,500.0	90.50	269.84	9,585.9	-5.7	-2,104.8	2,104.9	0.00	0.00	0.00
11,600.0	90.50	269.84	9,585.0	-6.0	-2,204.8	2,204.9	0.00	0.00	0.00
11,700.0	90.50	269.84	9,584.2	-6.3	-2,304.8	2,304.8	0.00	0.00	0.00
11,800.0	90.50	269.84	9,583.3	-6.6	-2,404.8	2,404.8	0.00	0.00	0.00
11,900.0	90.50	269.84	9,582.4	-6.8	-2,504.8	2,504.8	0.00	0.00	0.00
12,000.0	90.50	269.84	9,581.6	-7.1	-2,604.8	2,604.8	0.00	0.00	0.00
12,100.0	90.50	269.84	9,580.7	-7.4	-2,704.8	2,704.8	0.00	0.00	0.00
12,200.0	90.50	269.84	9,579.8	-7.6	-2,804.8	2,804.8	0.00	0.00	0.00
12,300.0	90.50	269.84	9,579.0	-7.9	-2,904.8	2,904.8	0.00	0.00	0.00
12,400.0	90.50	269.84	9,578.1	-8.2	-3,004.8	3,004.8	0.00	0.00	0.00
12,500.0	90.50	269.84	9,577.2	-8.5	-3,104.8	3,104.8	0.00	0.00	0.00
12,600.0	90.50	269.84	9,576.4	-8.7	-3,204.8	3,204.8	0.00	0.00	0.00
12,700.0	90.50	269.84	9,575.5	-9.0	-3,304.8	3,304.8	0.00	0.00	0.00
12,800.0	90.50	269.84	9,574.6	-9.3	-3,404.8	3,404.8	0.00	0.00	0.00
12,900.0	90.50	269.84	9,573.7	-9.5	-3,504.8	3,504.8	0.00	0.00	0.00
13,000.0	90.50	269.84	9,572.9	-9.8	-3,604.8	3,604.8	0.00	0.00	0.00
13,100.0	90.50	269.84	9,572.0	-10.1	-3,704.8	3,704.8	0.00	0.00	0.00
13,200.0	90.50	269.84	9,571.1	-10.4	-3,804.8	3,804.8	0.00	0.00	0.00
13,300.0	90.50	269.84	9,570.3	-10.6	-3,904.8	3,904.8	0.00	0.00	0.00
13,400.0	90.50	269.84	9,569.4	-10.9	-4,004.8	4,004.8	0.00	0.00	0.00
13,500.0	90.50	269.84	9,568.5	-11.2	-4,104.8	4,104.8	0.00	0.00	0.00
13,600.0	90.50	269.84	9,567.7	-11.5	-4,204.8	4,204.8	0.00	0.00	0.00
13,700.0	90.50	269.84	9,566.8	-11.7	-4,304.8	4,304.8	0.00	0.00	0.00
13,800.0	90.50	269.84	9,565.9	-12.0	-4,404.8	4,404.8	0.00	0.00	0.00
13,900.0	90.50	269.84	9,565.1	-12.3	-4,504.7	4,504.8	0.00	0.00	0.00
14,000.0	90.50	269.84	9,564.2	-12.5	-4,604.7	4,604.8	0.00	0.00	0.00
14,100.0	90.50	269.84	9,563.3	-12.8	-4,704.7	4,704.8	0.00	0.00	0.00
14,200.0	90.50	269.84	9,562.5	-13.1	-4,804.7	4,804.8	0.00	0.00	0.00
14,300.0	90.50	269.84	9,561.6	-13.4	-4,904.7	4,904.8	0.00	0.00	0.00
14,400.0	90.50	269.84	9,560.7	-13.6	-5,004.7	5,004.7	0.00	0.00	0.00
14,500.0	90.50	269.84	9,559.9	-13.9	-5,104.7	5,104.7	0.00	0.00	0.00
14,600.0	90.50	269.84	9,559.0	-14.2	-5,204.7	5,204.7	0.00	0.00	0.00
14,700.0	90.50	269.84	9,558.1	-14.5	-5,304.7	5,304.7	0.00	0.00	0.00
14,800.0	90.50	269.84	9,557.2	-14.7	-5,404.7	5,404.7	0.00	0.00	0.00
14,900.0	90.50	269.84	9,556.4	-15.0	-5,504.7	5,504.7	0.00	0.00	0.00
15,000.0	90.50	269.84	9,555.5	-15.3	-5,604.7	5,604.7	0.00	0.00	0.00
15,100.0	90.50	269.84	9,554.6	-15.5	-5,704.7	5,704.7	0.00	0.00	0.00
15,200.0	90.50	269.84	9,553.8	-15.8	-5,804.7	5,804.7	0.00	0.00	0.00
15,300.0	90.50	269.84	9,552.9	-16.1	-5,904.7	5,904.7	0.00	0.00	0.00
15,400.0	90.50	269.84	9,552.0	-16.4	-6,004.7	6,004.7	0.00	0.00	0.00
15,500.0	90.50	269.84	9,551.2	-16.6	-6,104.7	6,104.7	0.00	0.00	0.00
15,600.0	90.50	269.84	9,550.3	-16.9	-6,204.7	6,204.7	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Crazy Wolf 1/2 B2MM Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	**MD Reference:**	WELL @ 3694.0usft (Original Well Elev)
Site:	Crazy Wolf 1/2 B2MM Fed Com #1H	**North Reference:**	Grid
Well:	Sec 1, T19S, R32E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 330' FSL & 330' FWL, Sec 2		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,634.3	90.50	269.84	9,550.0	-17.0	-6,239.0	6,239.0	0.00	0.00	0.00
BHL: 330' FSL & 330' FWL, Sec 2									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 330' FSL & 1290' FV - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	612,752.00	728,759.00	32° 40' 58.873 N	103° 43' 27.013 W
KOP @ 9123' - plan hits target center - Point	0.00	0.00	9,122.5	0.0	0.0	612,752.00	728,759.00	32° 40' 58.873 N	103° 43' 27.013 W
BHL: 330' FSL & 330' FV - plan hits target center - Point	0.00	0.00	9,550.0	-17.0	-6,239.0	612,735.00	722,520.00	32° 40' 59.054 N	103° 44' 40.012 W
LP/FTP: 330' FSL & 809 - plan hits target center - Point	0.00	0.01	9,600.0	-1.3	-481.6	612,750.70	728,277.40	32° 40' 58.888 N	103° 43' 32.648 W

CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Company
LEASE NO.:	NMNM81599
WELL NAME & NO.:	1H-Crazy Wolf 1/2 B2MM Fed Com
COUNTY:	Lea County, New Mexico

A. 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 53.

2. Variance approved to use flex line from BOP to choke manifold. 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.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. 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.

4. 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. The tests shall be done by an independent service company utilizing a test plug.
c. 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.
d. The results of the test shall be reported to the appropriate BLM office.
e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes 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.

CRW 091117