Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

Carlsbad Field Office
OCD Artesia

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.

5. Lease Serial No.
NMNM0540701A

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other: UNKNOWN OTH

8. Well Name and No.
TOP GUN FEDERAL SWD 1

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

9. API Well No.
30-015-31075-00-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
SALT WATER DISPOSAL (SWD)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 18 T23S R27E NENE 660FNL 660FEL

11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK 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	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

MOC is currently drilling the above well. MOC would like to make changes to 7" casing and cement program. Please see attached pages for details. Call Levi Jackson with any questions.

Bond on file: NM1693 nationwide & NMB000919

Bond on file: 22015694 nationwide & 022041703 Statewide

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 04 2016
RECEIVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #334799 verified by the BLM Well Information System
For MEWBOURNE OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by TEUNGKU KRUENG on 03/28/2016 (16TMK0009SE)

Name *(Printed/Typed)* JACKIE LATHAN — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 03/28/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By **Teungku Muchlis Krueng** — Title PETROLEUM ENGINEER — Date MAR 30 2016

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

APPROVED
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

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

Mewbourne Oil Company, Top Gun Federal SWD #1
Sec 18, T23S, R27E
SL: 660' FNL & 660' FEL

1. Geologic Formations

TVD of target	14000'	Pilot hole depth	NA
MD at TD:	14000'	Deepest expected fresh water:	125'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler			
Top of Salt			
Castile	600	Barren	
Lamar	2100	Oil	
Bell Canyon			
Cherry Canyon			
Manzanita Marker			
Brushy Canyon			
Bone Spring	5332	Oil/Gas	
Wolfcamp	8950	Oil/Gas	
Canyon	10214		
Strawn	10543		
Atoka	10918		
Morrow	11482	Gas	
Devonian	12900	Target Zone	

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

Mewbourne Oil Company, Top Gun Federal SWD #1
Sec 18, T23S, R27E
SL: 660' FNL & 660' FEL

2. Existing Casing & Open Hole

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17.5"	0'	508'	13.375"	48	H40	STC			
12.25"	0'	2683'	9.625"	36	J55	STC			
8.75"	2683'	12150'	OPEN						
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

3. Existing Cement Plugs

Plug #	Casing Interval From	Casing Interval To	Interval (ft)						
1	0'	50'	50						
2	458'	558'	100						
3	2633'	2733'	100						
4	5600'	5700'	100						
5	8875'	9025'	200						
6	10443'	10643'	200						
7	11382'	11582'	200						

4. Proposed Drilling Program

-Deepen 8.75" hole from 12150' to 14000'.
-Set 7" casing @ 12900'.
-Open Hole completion from 12900' to 14000'.

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
8.75"	0'	12900'	7"	26#	HCL80	LTC	1.16	1.48	2.07
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y

Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_2O gal/ sk	500# Comp. Strength (hours)	Slurry Description
7" csg	1st Stage					
	50	15.6	1.18	5.2	10	1st Stage: Class H + 0.65% FL-52 + 0.10% R-3 + 0.005 lb/sk Static Free
	2nd Stage DV Tool & ECP Set @ 12875'					
	625	15.6	1.18	5.2	10	2nd Stage: Class H + 0.65% FL-52 + 0.10% R-3 + 0.005 lb/sk Static Free
	3rd Stage DV Tool Set @ 8900'					
	760	12.5	2.12	11	9	3rd Stage Lead: 60:40:0 Class C + 15.00 lb/sk BA-90 + 4.00% MPS-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free
	100	15.6	1.18	5.2	10	3rd Stage Tail: Class H + 0.65% FL-52 + 0.10% R-3 + 0.005 lb/sk Static Free

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

Casing String	TOC	% Excess
Production (7" csg)	0'	25%

4. Pressure Control Equipment

	Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	11"	5M	Annular	X	2500#
			Blind Ram	X	5000#
			Pipe Ram	X	
			Double Ram		
			Other*		
			Annular		
			Blind Ram		
			Pipe Ram		
			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	Variance: 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?
N	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'	14000'	Cut Brine	8.6-9.5	28-40	<10

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, PVT, Pason

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL fromTD 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
	Gamma Ray	
	Density	
	CBL	
	Mud log	
	PEX	

7. *Drilling Conditions*

Condition	Specify what type and where?
BH Pressure at deepest TVD	6115 psi
Abnormal Temperature	No

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

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

8. Other facets of operation

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

Attachments
___ Directional Plan
___ Other, describe

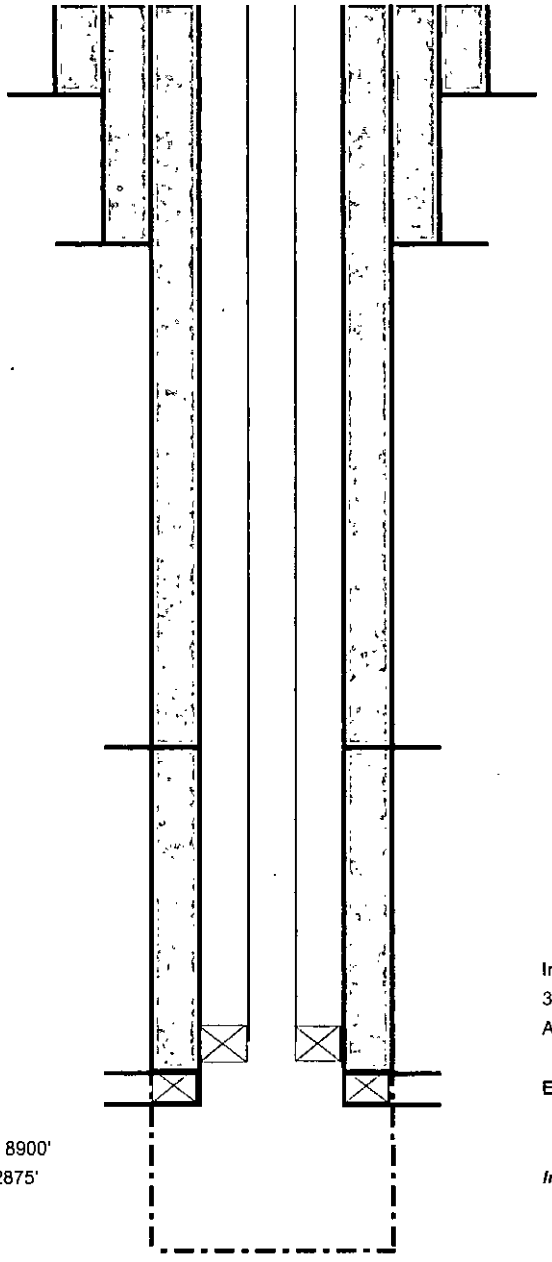
Mewbourne Oil Company

Well Name: Top Gun Federal SWD #1

Last Updated by: L. Jackson on 03/28/2016

17 1/2" x 13 3/8" 48# H-40 ST&C csg
Set @ 508'
Cmt w/ 450 sx, circ to surface

12 1/4" x 9 5/8" 40# J55 csg
Set @ 2683'
Cmt w/ 910 sx, circ to surface



DVT @ 8900'
Cmt 3rd Stage w/ 1500 Sx, circ to surface

DVT @ 12875'
8 3/4" x 7" 26# HCL80 LTC
Set @ 12900'
Cmt 2nd Stage w/ 625 Sx, circ off upper tool @ 8900'
Cmt 1st Stage w/ 50 sx, circ off lower tool @ 12875'

8 3/4" Open Hole
TD @ 14000'

Injection String
3 1/2" 9.3# L80 tbg IPC w/TK99
Arrowset 1X Nickel Pltd Pkr set @ 12850'

External Csg Pkr Set @ 12900'

Injection Invterval 12900'-14000'

Note: The ECP set @ 12900' will have 1 jt of casing above it. Then the DV tool will be set above that jt of.casing.
1st stage cmt will be placed prior to setting ECP @ 12900'. Then DV tool @ 12875' will be opened and 2nd stage cmt will begin.

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Co
LEASE NO.:	NM054071A
WELL NAME & NO.:	1-Top Gun Federal SWD
SURFACE HOLE FOOTAGE:	660'/N & 660'/E
BOTTOM HOLE FOOTAGE	'/ & '/
LOCATION:	Section 18, T. 23 S., R. 27 E., NMPM
COUNTY:	Eddy County, New Mexico

All previous COA still applies except for the following:

Proposed drilling program;

- Operator to drill an 8.75 hole from below the 9-5/8" to TD of 14000'
- Set 7" csg @ 12,900'
- Open hole completion from 12,900' to 14,000'

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

Operator to set stage tool/ECP at 12,875'
Operator to set a stage tool only at 8,900'

Stage 1 of operators cement program approved as stated.

Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

1. First Stage or Second Stage DV tool as proposed on operator cement program.

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation or approved top of cement on the next stage.

2. Second Stage or Third Stage DV tool as proposed on operator cement program.

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

WELL COMPLETION

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. **Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.**
2. **Restrict the injection fluid to the approved formation.**