

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
SUNDRY NOTICES AND REPORTS ON WELLS <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No. NMLC58698B
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. NIGHT WATCH 2/1 B2DA FED COM
2. Name of Operator MEWBOURNE OIL COMPANY		9. API Well No. 3002551643
3a. Address P O BOX 5270, HOBBS, NM 88241	3b. Phone No. (include area code) (575) 393-5905	10. Field and Pool or Exploratory Area YOUNG/BONE SPRING NORTH
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 35/T17S/R32E/NMP		11. Country or Parish, State LEA/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 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 recompleate 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 perfonned 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 recompleation 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 detennined that the site is ready for final inspection.)

Mewbourne Oil Company requests approval to make the following changes to the approved APD:

- 1) Change well name from Night Watch 2/1 B2DA Fed Com #1H to Night Watch 1/2 Fed Com #511H
- 2) Change BHL from 660' FNL & 1420' FEL, Sec 1, T18S, R32E to 660' FNL & 100' FEL, Sec 1, T18S, R32E

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) ANDY TAYLOR / Ph: (575) 393-5905	Title Engineer
Signature	Date 08/18/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 09/06/2023
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 CARLSBAD	

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)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SWSW / 230 FSL / 205 FWL / TWSP: 17S / RANGE: 32E / SECTION: 35 / LAT: 32.7844388 / LONG: -103.7449695 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 660 FNL / 100 FWL / TWSP: 18S / RANGE: 32E / SECTION: 2 / LAT: 32.7819929 / LONG: -103.7453124 (TVD: 8133 feet, MD: 8216 feet)

PPP: NWNW / 660 FNL / 0 FWL / TWSP: 18S / RANGE: 32E / SECTION: 1 / LAT: 32.7819641 / LONG: -103.7284525 (TVD: 8428 feet, MD: 13489 feet)

PPP: NENW / 660 FNL / 1320 FWL / TWSP: 18S / RANGE: 32E / SECTION: 1 / LAT: 32.7819564 / LONG: -103.7241575 (TVD: 8437 feet, MD: 14809 feet)

BHL: NWNE / 660 FNL / 1420 FEL / TWSP: 18S / RANGE: 32E / SECTION: 1 / LAT: 32.781941 / LONG: -103.7158967 (TVD: 8454 feet, MD: 17348 feet)

CONFIDENTIAL

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	Night Watch 2/1 Fed Com 511H
SURFACE HOLE FOOTAGE:	230'/S & 205'/W
BOTTOM HOLE FOOTAGE	660'/N & 100'/E
SURFACE LOCATION:	M, Section 35, T.17 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	☒ Yes	☐ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☒ Low	☐ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Other	☐ 4 String	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

SEE THE ORIGINAL COAs FOR ALL OTHER REQUIREMENTS.

The previous name of this well was **NIGHT WATCH 2/1 B2DA FED COM 1H.**

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed at SPUD. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet title 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

Primary Casing Design:

1. The 13-3/8 inch surface casing shall be set at approximately **1,300 ft.** (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing **at least 25 feet above the salt.**
 - 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 psi 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 psi compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 in.** intermediate casing shall be set at approximately **2,600 ft.** The minimum required fill of cement behind the **9-5/8 in.** intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above.
 3. Operator has proposed to set production casing at approximately **7,890 ft.** The minimum required fill of cement behind the **7 in.** production casing is:
 - Cement should tie-back **at least 200 feet** into previous casing string. **Operator shall provide method of verification.**
Note: Excess cement is below CFO's recommendation of %25. More cement might be needed.
 4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
 - Cement should tie-back **at least 100 feet** into previous casing string. 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**. Before drilling out surface casing shoe, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with 43 CFR 3172.
 - 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 43 CFR 3172 must be followed.

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) 689-5981

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 43 CFR part 3170 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 doghouse 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 integrity 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 integrity 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 43 CFR part 3170 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3170 subpart 3172 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 43 CFR 3170 subpart 3172.

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.

SA 09/01/2023

Mewbourne Oil Company, Night Watch 1/2 Fed Com #511H**Sec 35, T17S, R32E****SHL: 205' FSL & 230' FWL, Sec 35****BHL: 660' FNL & 100' FEL, Sec 1****Casing Program**

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
	From	To								
6.125"	7690'	18,668'	4.5"	13.5	P110	LTC	2.43	2.83	2.28	2.85
				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 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?	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?	

Mewbourne Oil Company, Night Watch 1/2 Fed Com #511H**Sec 35, T17S, R32E****SHL: 205' FSL & 230' FWL, Sec 35****BHL: 660' FNL & 100' FEL, Sec 1****Cementing Program**

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Liner	440	11.2	2.97	18	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.

Casing String	TOC	% Excess
Liner	7690'	25%



Mewbourne Oil Company

Lea Co., NM (NAD 83)

Haunted Forest - Night Watch Pad

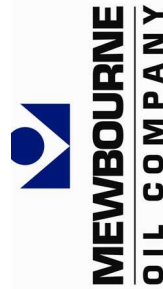
Night Watch 2-1 Fed Com #511H

OH

Plan: Plan #1

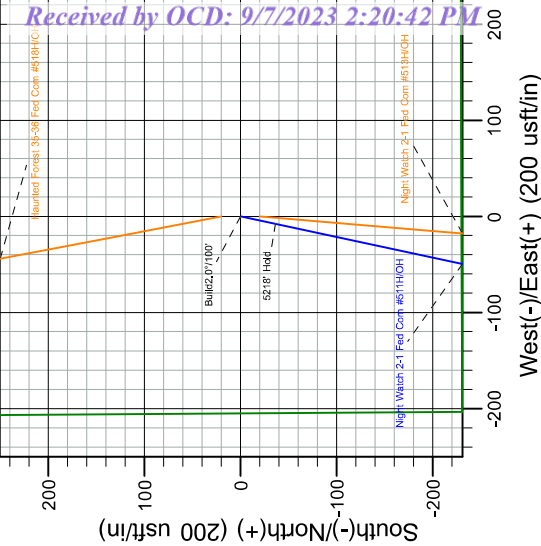
Standard Planning Report

16 August, 2023



Project: Lea Co. NM (NAD 83)
Site: Haunted Forest - Night Watch Pad
Well: Night Watch 2-1 Fed Com #511H
Wellbore: OH
Design: Plan #1
Lat: 32.764439
Long: -103.744970
GL: 3913.00
KB: KB=28 @ 3941.00ust (Patterson 597)

Received by OCD: 9/7/2023 2:20:42 PM





VBOURNE

COMPANY

Project: Lea Co., NM (NAD 83)

Site: Haunted Forest - Night Watch Pad

Well: Night Watch 2-1 Fed Com #511H

Wellbore: OH

Design: Plan #1

Lat: 32.784439

Long: -103.744970

GL: 3913.00

KB: KB=28 @ 39411.00usft (Patterson 597)

WELL DETAILS: Night Watch 2-1 Fed Com #511H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	649613.80	722154.70	32.784439	-103.744970

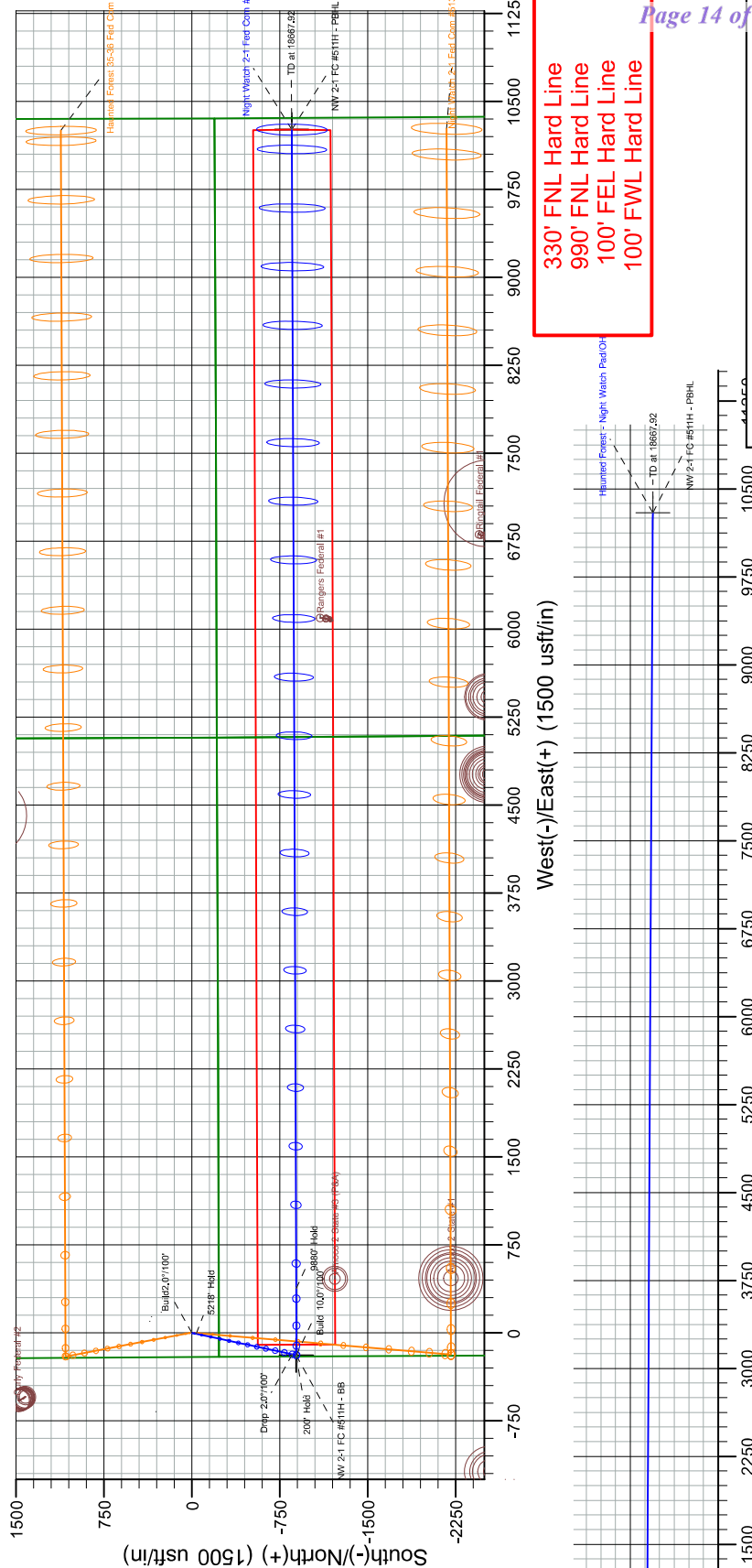
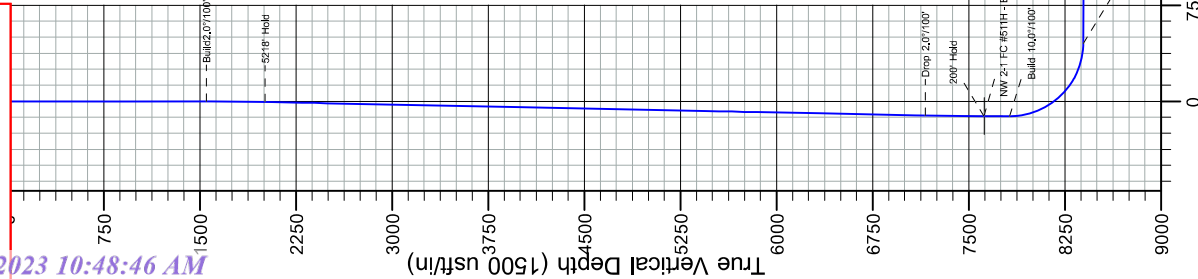
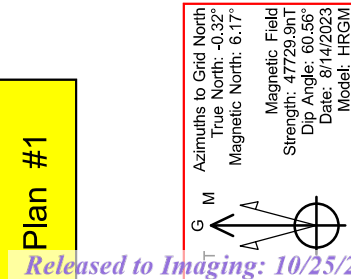
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
NW 2-1 FC #511H - BB	7619.05	-890.56	-190.35	648723.24	721964.35	Point
NW 2-1 FC #511H - PBHL	8442.00	-851.60	10259.80	648762.20	732414.50	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1550.00	0.00	0.00	1550.00	0.00	0.00	0.00	0.00	0.00	Build 2.0°/100'
2011.28	9.23	192.06	2009.29	-36.24	-7.75	2.00	192.06	-4.72	5218' Hold
7229.24	9.23	192.06	7159.76	-854.32	-182.60	0.00	0.00	-111.31	Drop 2.0°/100'
7690.53	0.00	0.00	7619.05	-890.56	-190.35	2.00	180.00	-116.04	200' Hold
7890.53	0.00	0.00	7819.05	-890.56	-190.35	0.00	0.00	-116.04	Build 10.0°/100'
8787.63	89.71	89.79	8392.00	-888.43	379.70	10.00	89.79	451.89	9880' Hold
18667.92	89.71	89.79	8442.00	-851.60	10259.80	0.00	0.00	10295.08	TD at 18667.92

Night Watch 2-1 Fed Com #511H
SHL: 230' FSL & 205' FWL
BHL: 660' FNL & 100' FEL



330' FNL Hard Line
990' FNL Hard Line
100' FEL Hard Line
100' FWL Hard Line



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea Co., NM (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		Haunted Forest - Night Watch Pad			
Site Position:		Northing:	649,633.80 usft	Latitude:	32.784494
From:	Map	Easting:	722,154.60 usft	Longitude:	-103.744970
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	

Well		Night Watch 2-1 Fed Com #511H				
Well Position	+N/-S	0.00 usft	Northing:	649,613.80 usft	Latitude:	32.784439
	+E/-W	0.00 usft	Easting:	722,154.70 usft	Longitude:	-103.744970
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,913.00 usft
Grid Convergence:		0.32 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	8/14/2023	6.49	60.56	47,729.92983739

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	94.74	

Plan Survey Tool Program	Date	8/16/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,667.92 Plan #1 (OH)	MWD + HDGM		
			MWD + HDGM - Standard		

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,550.00	0.00	0.00	1,550.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,011.28	9.23	192.06	2,009.29	-36.24	-7.75	2.00	2.00	0.00	192.06	
7,229.24	9.23	192.06	7,159.76	-854.32	-182.60	0.00	0.00	0.00	0.00	
7,690.53	0.00	0.00	7,619.05	-890.56	-190.35	2.00	-2.00	0.00	180.00	NW 2-1 FC #511H -
7,890.53	0.00	0.00	7,819.05	-890.56	-190.35	0.00	0.00	0.00	0.00	
8,787.63	89.71	89.79	8,392.00	-888.43	379.70	10.00	10.00	10.01	89.79	
18,667.92	89.71	89.79	8,442.00	-851.60	10,259.80	0.00	0.00	0.00	0.00	NW 2-1 FC #511H -



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,229.00	0.00	0.00	1,229.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,550.00	0.00	0.00	1,550.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2.0°/100'									
1,570.00	0.40	192.06	1,570.00	-0.07	-0.01	-0.01	2.00	2.00	0.00
Salt Top									
1,600.00	1.00	192.06	1,600.00	-0.43	-0.09	-0.06	2.00	2.00	0.00
1,700.00	3.00	192.06	1,699.93	-3.84	-0.82	-0.50	2.00	2.00	0.00
1,800.00	5.00	192.06	1,799.68	-10.66	-2.28	-1.39	2.00	2.00	0.00
1,900.00	7.00	192.06	1,899.13	-20.88	-4.46	-2.72	2.00	2.00	0.00
2,000.00	9.00	192.06	1,998.15	-34.49	-7.37	-4.49	2.00	2.00	0.00
2,011.28	9.23	192.06	2,009.29	-36.24	-7.75	-4.72	2.00	2.00	0.00
5218' Hold									
2,100.00	9.23	192.06	2,096.86	-50.15	-10.72	-6.53	0.00	0.00	0.00
2,200.00	9.23	192.06	2,195.57	-65.83	-14.07	-8.58	0.00	0.00	0.00
2,300.00	9.23	192.06	2,294.27	-81.50	-17.42	-10.62	0.00	0.00	0.00
2,400.00	9.23	192.06	2,392.98	-97.18	-20.77	-12.66	0.00	0.00	0.00
2,500.00	9.23	192.06	2,491.69	-112.86	-24.12	-14.71	0.00	0.00	0.00
2,513.49	9.23	192.06	2,505.00	-114.98	-24.58	-14.98	0.00	0.00	0.00
Salt Base									
2,600.00	9.23	192.06	2,590.39	-128.54	-27.47	-16.75	0.00	0.00	0.00
2,700.00	9.23	192.06	2,689.10	-144.22	-30.83	-18.79	0.00	0.00	0.00
2,720.16	9.23	192.06	2,709.00	-147.38	-31.50	-19.20	0.00	0.00	0.00
Yates									
2,800.00	9.23	192.06	2,787.81	-159.90	-34.18	-20.83	0.00	0.00	0.00
2,900.00	9.23	192.06	2,886.51	-175.57	-37.53	-22.88	0.00	0.00	0.00
3,000.00	9.23	192.06	2,985.22	-191.25	-40.88	-24.92	0.00	0.00	0.00
3,100.00	9.23	192.06	3,083.93	-206.93	-44.23	-26.96	0.00	0.00	0.00
3,156.81	9.23	192.06	3,140.00	-215.84	-46.13	-28.12	0.00	0.00	0.00
Seven Rivers									
3,200.00	9.23	192.06	3,182.63	-222.61	-47.58	-29.00	0.00	0.00	0.00
3,300.00	9.23	192.06	3,281.34	-238.29	-50.93	-31.05	0.00	0.00	0.00
3,400.00	9.23	192.06	3,380.05	-253.96	-54.28	-33.09	0.00	0.00	0.00
3,500.00	9.23	192.06	3,478.75	-269.64	-57.63	-35.13	0.00	0.00	0.00
3,600.00	9.23	192.06	3,577.46	-285.32	-60.99	-37.18	0.00	0.00	0.00
3,700.00	9.23	192.06	3,676.17	-301.00	-64.34	-39.22	0.00	0.00	0.00
3,800.00	9.23	192.06	3,774.87	-316.68	-67.69	-41.26	0.00	0.00	0.00



Planning Report

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Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
3,871.05	9.23	192.06	3,845.00	-327.82	-70.07	-42.71	0.00	0.00	0.00
Grayburg									
3,900.00	9.23	192.06	3,873.58	-332.36	-71.04	-43.30	0.00	0.00	0.00
4,000.00	9.23	192.06	3,972.28	-348.03	-74.39	-45.35	0.00	0.00	0.00
4,100.00	9.23	192.06	4,070.99	-363.71	-77.74	-47.39	0.00	0.00	0.00
4,130.40	9.23	192.06	4,101.00	-368.48	-78.76	-48.01	0.00	0.00	0.00
San Andres									
4,200.00	9.23	192.06	4,169.70	-379.39	-81.09	-49.43	0.00	0.00	0.00
4,300.00	9.23	192.06	4,268.40	-395.07	-84.44	-51.48	0.00	0.00	0.00
4,400.00	9.23	192.06	4,367.11	-410.75	-87.79	-53.52	0.00	0.00	0.00
4,500.00	9.23	192.06	4,465.82	-426.42	-91.14	-55.56	0.00	0.00	0.00
4,600.00	9.23	192.06	4,564.52	-442.10	-94.50	-57.60	0.00	0.00	0.00
4,603.52	9.23	192.06	4,568.00	-442.66	-94.61	-57.68	0.00	0.00	0.00
Delaware (Lamar)									
4,700.00	9.23	192.06	4,663.23	-457.78	-97.85	-59.65	0.00	0.00	0.00
4,800.00	9.23	192.06	4,761.94	-473.46	-101.20	-61.69	0.00	0.00	0.00
4,830.46	9.23	192.06	4,792.00	-478.23	-102.22	-62.31	0.00	0.00	0.00
Bone Spring									
4,900.00	9.23	192.06	4,860.64	-489.14	-104.55	-63.73	0.00	0.00	0.00
5,000.00	9.23	192.06	4,959.35	-504.82	-107.90	-65.78	0.00	0.00	0.00
5,100.00	9.23	192.06	5,058.06	-520.49	-111.25	-67.82	0.00	0.00	0.00
5,200.00	9.23	192.06	5,156.76	-536.17	-114.60	-69.86	0.00	0.00	0.00
5,300.00	9.23	192.06	5,255.47	-551.85	-117.95	-71.90	0.00	0.00	0.00
5,400.00	9.23	192.06	5,354.17	-567.53	-121.30	-73.95	0.00	0.00	0.00
5,500.00	9.23	192.06	5,452.88	-583.21	-124.66	-75.99	0.00	0.00	0.00
5,600.00	9.23	192.06	5,551.59	-598.88	-128.01	-78.03	0.00	0.00	0.00
5,700.00	9.23	192.06	5,650.29	-614.56	-131.36	-80.08	0.00	0.00	0.00
5,800.00	9.23	192.06	5,749.00	-630.24	-134.71	-82.12	0.00	0.00	0.00
5,900.00	9.23	192.06	5,847.71	-645.92	-138.06	-84.16	0.00	0.00	0.00
6,000.00	9.23	192.06	5,946.41	-661.60	-141.41	-86.20	0.00	0.00	0.00
6,060.37	9.23	192.06	6,006.00	-671.06	-143.43	-87.44	0.00	0.00	0.00
1st Bone Spring Sand									
6,100.00	9.23	192.06	6,045.12	-677.28	-144.76	-88.25	0.00	0.00	0.00
6,200.00	9.23	192.06	6,143.83	-692.95	-148.11	-90.29	0.00	0.00	0.00
6,300.00	9.23	192.06	6,242.53	-708.63	-151.46	-92.33	0.00	0.00	0.00
6,400.00	9.23	192.06	6,341.24	-724.31	-154.82	-94.37	0.00	0.00	0.00
6,500.00	9.23	192.06	6,439.95	-739.99	-158.17	-96.42	0.00	0.00	0.00
6,600.00	9.23	192.06	6,538.65	-755.67	-161.52	-98.46	0.00	0.00	0.00
6,700.00	9.23	192.06	6,637.36	-771.35	-164.87	-100.50	0.00	0.00	0.00
6,800.00	9.23	192.06	6,736.07	-787.02	-168.22	-102.55	0.00	0.00	0.00
6,900.00	9.23	192.06	6,834.77	-802.70	-171.57	-104.59	0.00	0.00	0.00
7,000.00	9.23	192.06	6,933.48	-818.38	-174.92	-106.63	0.00	0.00	0.00
7,100.00	9.23	192.06	7,032.18	-834.06	-178.27	-108.67	0.00	0.00	0.00
7,200.00	9.23	192.06	7,130.89	-849.74	-181.62	-110.72	0.00	0.00	0.00
7,229.25	9.23	192.06	7,159.76	-854.32	-182.60	-111.31	0.00	0.00	0.00
Drop 2.0°/100'									
7,300.00	7.81	192.06	7,229.73	-864.57	-184.79	-112.65	2.00	-2.00	0.00
7,400.00	5.81	192.06	7,329.02	-876.17	-187.27	-114.16	2.00	-2.00	0.00
7,500.00	3.81	192.06	7,428.66	-884.37	-189.03	-115.23	2.00	-2.00	0.00
7,600.00	1.81	192.06	7,528.54	-889.16	-190.05	-115.85	2.00	-2.00	0.00
7,690.53	0.00	0.00	7,619.05	-890.56	-190.35	-116.04	2.00	-2.00	185.51
200' Hold									
7,700.00	0.00	0.00	7,628.52	-890.56	-190.35	-116.04	0.00	0.00	0.00



Planning Report

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Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
7,800.00	0.00	0.00	7,728.52	-890.56	-190.35	-116.04	0.00	0.00	0.00
7,811.48	0.00	0.00	7,740.00	-890.56	-190.35	-116.04	0.00	0.00	0.00
2nd Bone Spring Sand									
7,890.53	0.00	0.00	7,819.05	-890.56	-190.35	-116.04	0.00	0.00	0.00
Build 10.0°/100'									
7,900.00	0.95	89.79	7,828.52	-890.56	-190.27	-115.96	10.00	10.00	0.00
7,950.00	5.95	89.79	7,878.42	-890.55	-187.27	-112.96	10.00	10.00	0.00
8,000.00	10.95	89.79	7,927.86	-890.52	-179.92	-105.65	10.00	10.00	0.00
8,050.00	15.95	89.79	7,976.47	-890.48	-168.30	-94.07	10.00	10.00	0.00
8,100.00	20.95	89.79	8,023.89	-890.42	-152.48	-78.31	10.00	10.00	0.00
8,138.11	24.76	89.79	8,059.00	-890.36	-137.69	-63.57	10.00	10.00	0.00
Formation 12									
8,150.00	25.95	89.79	8,069.74	-890.34	-132.59	-58.50	10.00	10.00	0.00
8,200.00	30.95	89.79	8,113.69	-890.26	-108.79	-34.78	10.00	10.00	0.00
8,250.00	35.95	89.79	8,155.40	-890.15	-81.24	-7.33	10.00	10.00	0.00
8,300.00	40.95	89.79	8,194.55	-890.04	-50.16	23.63	10.00	10.00	0.00
8,350.00	45.95	89.79	8,230.83	-889.91	-15.78	57.88	10.00	10.00	0.00
8,400.00	50.95	89.79	8,263.99	-889.77	21.62	95.14	10.00	10.00	0.00
8,450.00	55.95	89.79	8,293.76	-889.62	61.77	135.15	10.00	10.00	0.00
8,500.00	60.95	89.79	8,319.91	-889.46	104.37	177.58	10.00	10.00	0.00
8,550.00	65.95	89.79	8,342.26	-889.29	149.08	222.13	10.00	10.00	0.00
8,600.00	70.95	89.79	8,360.62	-889.12	195.57	268.44	10.00	10.00	0.00
8,650.00	75.95	89.79	8,374.86	-888.94	243.48	316.17	10.00	10.00	0.00
8,700.00	80.95	89.79	8,384.87	-888.76	292.45	364.96	10.00	10.00	0.00
8,750.00	85.95	89.79	8,390.58	-888.57	342.11	414.43	10.00	10.00	0.00
8,787.63	89.71	89.79	8,392.00	-888.43	379.70	451.89	10.00	10.00	0.00
9880' Hold									
8,800.00	89.71	89.79	8,392.06	-888.39	392.08	464.21	0.00	0.00	0.00
8,900.00	89.71	89.79	8,392.57	-888.02	492.07	563.84	0.00	0.00	0.00
9,000.00	89.71	89.79	8,393.08	-887.64	592.07	663.46	0.00	0.00	0.00
9,100.00	89.71	89.79	8,393.58	-887.27	692.07	763.09	0.00	0.00	0.00
9,200.00	89.71	89.79	8,394.09	-886.90	792.07	862.71	0.00	0.00	0.00
9,300.00	89.71	89.79	8,394.59	-886.52	892.07	962.34	0.00	0.00	0.00
9,400.00	89.71	89.79	8,395.10	-886.15	992.06	1,061.96	0.00	0.00	0.00
9,500.00	89.71	89.79	8,395.61	-885.78	1,092.06	1,161.59	0.00	0.00	0.00
9,600.00	89.71	89.79	8,396.11	-885.41	1,192.06	1,261.21	0.00	0.00	0.00
9,700.00	89.71	89.79	8,396.62	-885.03	1,292.06	1,360.83	0.00	0.00	0.00
9,800.00	89.71	89.79	8,397.12	-884.66	1,392.06	1,460.46	0.00	0.00	0.00
9,900.00	89.71	89.79	8,397.63	-884.29	1,492.05	1,560.08	0.00	0.00	0.00
10,000.00	89.71	89.79	8,398.14	-883.91	1,592.05	1,659.71	0.00	0.00	0.00
10,100.00	89.71	89.79	8,398.64	-883.54	1,692.05	1,759.33	0.00	0.00	0.00
10,200.00	89.71	89.79	8,399.15	-883.17	1,792.05	1,858.96	0.00	0.00	0.00
10,300.00	89.71	89.79	8,399.65	-882.80	1,892.05	1,958.58	0.00	0.00	0.00
10,400.00	89.71	89.79	8,400.16	-882.42	1,992.04	2,058.21	0.00	0.00	0.00
10,500.00	89.71	89.79	8,400.67	-882.05	2,092.04	2,157.83	0.00	0.00	0.00
10,600.00	89.71	89.79	8,401.17	-881.68	2,192.04	2,257.46	0.00	0.00	0.00
10,700.00	89.71	89.79	8,401.68	-881.31	2,292.04	2,357.08	0.00	0.00	0.00
10,800.00	89.71	89.79	8,402.18	-880.93	2,392.04	2,456.70	0.00	0.00	0.00
10,900.00	89.71	89.79	8,402.69	-880.56	2,492.03	2,556.33	0.00	0.00	0.00
11,000.00	89.71	89.79	8,403.20	-880.19	2,592.03	2,655.95	0.00	0.00	0.00
11,100.00	89.71	89.79	8,403.70	-879.81	2,692.03	2,755.58	0.00	0.00	0.00
11,200.00	89.71	89.79	8,404.21	-879.44	2,792.03	2,855.20	0.00	0.00	0.00
11,300.00	89.71	89.79	8,404.71	-879.07	2,892.03	2,954.83	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
11,400.00	89.71	89.79	8,405.22	-878.70	2,992.02	3,054.45	0.00	0.00	0.00
11,500.00	89.71	89.79	8,405.73	-878.32	3,092.02	3,154.08	0.00	0.00	0.00
11,600.00	89.71	89.79	8,406.23	-877.95	3,192.02	3,253.70	0.00	0.00	0.00
11,700.00	89.71	89.79	8,406.74	-877.58	3,292.02	3,353.33	0.00	0.00	0.00
11,800.00	89.71	89.79	8,407.24	-877.20	3,392.02	3,452.95	0.00	0.00	0.00
11,900.00	89.71	89.79	8,407.75	-876.83	3,492.01	3,552.57	0.00	0.00	0.00
12,000.00	89.71	89.79	8,408.26	-876.46	3,592.01	3,652.20	0.00	0.00	0.00
12,100.00	89.71	89.79	8,408.76	-876.09	3,692.01	3,751.82	0.00	0.00	0.00
12,200.00	89.71	89.79	8,409.27	-875.71	3,792.01	3,851.45	0.00	0.00	0.00
12,300.00	89.71	89.79	8,409.78	-875.34	3,892.01	3,951.07	0.00	0.00	0.00
12,400.00	89.71	89.79	8,410.28	-874.97	3,992.00	4,050.70	0.00	0.00	0.00
12,500.00	89.71	89.79	8,410.79	-874.59	4,092.00	4,150.32	0.00	0.00	0.00
12,600.00	89.71	89.79	8,411.29	-874.22	4,192.00	4,249.95	0.00	0.00	0.00
12,700.00	89.71	89.79	8,411.80	-873.85	4,292.00	4,349.57	0.00	0.00	0.00
12,800.00	89.71	89.79	8,412.31	-873.48	4,392.00	4,449.20	0.00	0.00	0.00
12,900.00	89.71	89.79	8,412.81	-873.10	4,491.99	4,548.82	0.00	0.00	0.00
13,000.00	89.71	89.79	8,413.32	-872.73	4,591.99	4,648.44	0.00	0.00	0.00
13,100.00	89.71	89.79	8,413.82	-872.36	4,691.99	4,748.07	0.00	0.00	0.00
13,200.00	89.71	89.79	8,414.33	-871.98	4,791.99	4,847.69	0.00	0.00	0.00
13,300.00	89.71	89.79	8,414.84	-871.61	4,891.99	4,947.32	0.00	0.00	0.00
13,400.00	89.71	89.79	8,415.34	-871.24	4,991.98	5,046.94	0.00	0.00	0.00
13,500.00	89.71	89.79	8,415.85	-870.87	5,091.98	5,146.57	0.00	0.00	0.00
13,600.00	89.71	89.79	8,416.35	-870.49	5,191.98	5,246.19	0.00	0.00	0.00
13,700.00	89.71	89.79	8,416.86	-870.12	5,291.98	5,345.82	0.00	0.00	0.00
13,800.00	89.71	89.79	8,417.37	-869.75	5,391.98	5,445.44	0.00	0.00	0.00
13,900.00	89.71	89.79	8,417.87	-869.38	5,491.97	5,545.06	0.00	0.00	0.00
14,000.00	89.71	89.79	8,418.38	-869.00	5,591.97	5,644.69	0.00	0.00	0.00
14,100.00	89.71	89.79	8,418.88	-868.63	5,691.97	5,744.31	0.00	0.00	0.00
14,200.00	89.71	89.79	8,419.39	-868.26	5,791.97	5,843.94	0.00	0.00	0.00
14,300.00	89.71	89.79	8,419.90	-867.88	5,891.97	5,943.56	0.00	0.00	0.00
14,400.00	89.71	89.79	8,420.40	-867.51	5,991.97	6,043.19	0.00	0.00	0.00
14,500.00	89.71	89.79	8,420.91	-867.14	6,091.96	6,142.81	0.00	0.00	0.00
14,600.00	89.71	89.79	8,421.41	-866.77	6,191.96	6,242.44	0.00	0.00	0.00
14,700.00	89.71	89.79	8,421.92	-866.39	6,291.96	6,342.06	0.00	0.00	0.00
14,800.00	89.71	89.79	8,422.43	-866.02	6,391.96	6,441.69	0.00	0.00	0.00
14,900.00	89.71	89.79	8,422.93	-865.65	6,491.96	6,541.31	0.00	0.00	0.00
15,000.00	89.71	89.79	8,423.44	-865.27	6,591.95	6,640.93	0.00	0.00	0.00
15,100.00	89.71	89.79	8,423.94	-864.90	6,691.95	6,740.56	0.00	0.00	0.00
15,200.00	89.71	89.79	8,424.45	-864.53	6,791.95	6,840.18	0.00	0.00	0.00
15,300.00	89.71	89.79	8,424.96	-864.16	6,891.95	6,939.81	0.00	0.00	0.00
15,400.00	89.71	89.79	8,425.46	-863.78	6,991.95	7,039.43	0.00	0.00	0.00
15,500.00	89.71	89.79	8,425.97	-863.41	7,091.94	7,139.06	0.00	0.00	0.00
15,600.00	89.71	89.79	8,426.47	-863.04	7,191.94	7,238.68	0.00	0.00	0.00
15,700.00	89.71	89.79	8,426.98	-862.66	7,291.94	7,338.31	0.00	0.00	0.00
15,800.00	89.71	89.79	8,427.49	-862.29	7,391.94	7,437.93	0.00	0.00	0.00
15,900.00	89.71	89.79	8,427.99	-861.92	7,491.94	7,537.56	0.00	0.00	0.00
16,000.00	89.71	89.79	8,428.50	-861.55	7,591.93	7,637.18	0.00	0.00	0.00
16,100.00	89.71	89.79	8,429.01	-861.17	7,691.93	7,736.80	0.00	0.00	0.00
16,200.00	89.71	89.79	8,429.51	-860.80	7,791.93	7,836.43	0.00	0.00	0.00
16,300.00	89.71	89.79	8,430.02	-860.43	7,891.93	7,936.05	0.00	0.00	0.00
16,400.00	89.71	89.79	8,430.52	-860.06	7,991.93	8,035.68	0.00	0.00	0.00
16,500.00	89.71	89.79	8,431.03	-859.68	8,091.92	8,135.30	0.00	0.00	0.00
16,600.00	89.71	89.79	8,431.54	-859.31	8,191.92	8,234.93	0.00	0.00	0.00
16,700.00	89.71	89.79	8,432.04	-858.94	8,291.92	8,334.55	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
16,800.00	89.71	89.79	8,432.55	-858.56	8,391.92	8,434.18	0.00	0.00	0.00
16,900.00	89.71	89.79	8,433.05	-858.19	8,491.92	8,533.80	0.00	0.00	0.00
17,000.00	89.71	89.79	8,433.56	-857.82	8,591.91	8,633.43	0.00	0.00	0.00
17,100.00	89.71	89.79	8,434.07	-857.45	8,691.91	8,733.05	0.00	0.00	0.00
17,200.00	89.71	89.79	8,434.57	-857.07	8,791.91	8,832.67	0.00	0.00	0.00
17,300.00	89.71	89.79	8,435.08	-856.70	8,891.91	8,932.30	0.00	0.00	0.00
17,400.00	89.71	89.79	8,435.58	-856.33	8,991.91	9,031.92	0.00	0.00	0.00
17,500.00	89.71	89.79	8,436.09	-855.95	9,091.90	9,131.55	0.00	0.00	0.00
17,600.00	89.71	89.79	8,436.60	-855.58	9,191.90	9,231.17	0.00	0.00	0.00
17,700.00	89.71	89.79	8,437.10	-855.21	9,291.90	9,330.80	0.00	0.00	0.00
17,800.00	89.71	89.79	8,437.61	-854.84	9,391.90	9,430.42	0.00	0.00	0.00
17,900.00	89.71	89.79	8,438.11	-854.46	9,491.90	9,530.05	0.00	0.00	0.00
18,000.00	89.71	89.79	8,438.62	-854.09	9,591.89	9,629.67	0.00	0.00	0.00
18,100.00	89.71	89.79	8,439.13	-853.72	9,691.89	9,729.30	0.00	0.00	0.00
18,200.00	89.71	89.79	8,439.63	-853.34	9,791.89	9,828.92	0.00	0.00	0.00
18,300.00	89.71	89.79	8,440.14	-852.97	9,891.89	9,928.54	0.00	0.00	0.00
18,400.00	89.71	89.79	8,440.64	-852.60	9,991.89	10,028.17	0.00	0.00	0.00
18,500.00	89.71	89.79	8,441.15	-852.23	10,091.88	10,127.79	0.00	0.00	0.00
18,600.00	89.71	89.79	8,441.66	-851.85	10,191.88	10,227.42	0.00	0.00	0.00
18,667.92	89.71	89.79	8,442.00	-851.60	10,259.80	10,295.08	0.00	0.00	0.00
TD at 18667.92									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
NW 2-1 FC #511H - B	0.00	0.00	7,619.05	-890.56	-190.35	648,723.24	721,964.35	32.781994	-103.745605
- plan hits target center									
- Point									
NW 2-1 FC #511H - P	0.00	0.00	8,442.00	-851.60	10,259.80	648,762.20	732,414.50	32.781937	-103.711603
- plan hits target center									
- Point									



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Company:	Mewbourne Oil Company	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Project:	Lea Co., NM (NAD 83)	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site:	Haunted Forest - Night Watch Pad	North Reference:	Grid
Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,229.00	1,229.00	Rustler			
1,570.00	1,570.00	Salt Top			
2,513.49	2,505.00	Salt Base			
2,720.16	2,709.00	Yates			
3,156.81	3,140.00	Seven Rivers			
3,871.05	3,845.00	Grayburg			
4,130.40	4,101.00	San Andres			
4,603.52	4,568.00	Delaware (Lamar)			
4,830.46	4,792.00	Bone Spring			
6,060.37	6,006.00	1st Bone Spring Sand			
7,811.48	7,740.00	2nd Bone Spring Sand			
8,138.11	8,059.00	Formation 12			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,550.00	1,550.00	0.00	0.00	Build 2.0°/100'
2,011.28	2,009.29	-36.24	-7.75	5218' Hold
7,229.25	7,159.76	-854.32	-182.60	Drop 2.0°/100'
7,690.53	7,619.05	-890.56	-190.35	200' Hold
7,890.53	7,819.05	-890.56	-190.35	Build 10.0°/100'
8,787.63	8,392.00	-888.43	379.70	9880' Hold
18,667.92	8,442.00	-851.60	10,259.80	TD at 18667.92



MEWBOURNE
OIL COMPANY

Mewbourne Oil Company

Lea Co., NM (NAD 83)

Haunted Forest - Night Watch Pad

Night Watch 2-1 Fed Com #511H

OH

Plan #1

Anticollision Report

16 August, 2023


MEWBOURNE
OIL COMPANY

Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 1,000.00usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program	Date	8/16/2023
From (usft)	To (usft)	Survey (Wellbore)
0.00	18,667.92	Plan #1 (OH)
		Tool Name
		MWD + HDGM
		Description
		MWD + HDGM - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Haunted Forest - Night Watch Offsets						
Amoco 1 Federal #1 - OH - OH						Out of range
Amoco 2 State #1 - OH - OH						Out of range
Amoco 2 State #3 (P&A) - OH - OH	5,184.72	5,000.00	898.66	772.35	7.114	CC, ES, SF
Amoco East 2 State #2 (P&A) - OH - OH						Out of range
Aztec Dos State #1 (P&A) - OH - OH						Out of range
Beverly Federal #1 (P&A) - OH - OH						Out of range
Copper State LTD #1 (P&A) - OH - OH						Out of range
Curly Federal #2 - OH - OH						Out of range
Dragonstone 11-2 B2ML Fed Com #1H - OH - OH						Out of range
Dragonstone 11-2 B2NK FED COM #1H - OH - OH						Out of range
Dragonstone 11-2 Fed Com #526H - OH - OH						Out of range
Dragonstone 11-2 Fed Com #528H - OH - OH						Out of range
EWT 1 Federal #2 - OH - OH						Out of range
Federal Johns #1 (P&A) - OH - OH						Out of range
North Young Fed #3 (P&A) - OH - OH						Out of range
Rangers Federal #1 - OH - OH	14,504.45	8,410.50	270.65	59.99	1.285	Level 3, CC, ES, SF
Ringtail Federal #1 - OH - OH						Out of range
Sharp Shooter 2 State #1 - OH - OH						Out of range
Sharp Shooter 2 State #2 (P&A) - OH - OH						Out of range
Sharp Shooter 2 State #3 (P&A) - OH - OH						Out of range
Shinnery 1 Federal #1 (P&A) - OH - OH						Out of range
Sprinkle B Federal #1 (P&A) - OH - OH						Out of range
Sprinkle B Federal #2 - OH - OH						Out of range
Tank 1 Federal #1 (P&A) - OH - OH						Out of range
Haunted Forest - Night Watch Pad						
Haunted Forest 35-36 Fed Com #518H - OH - Plan #1	1,410.00	1,411.00	20.00	10.09	2.018	CC
Haunted Forest 35-36 Fed Com #518H - OH - Plan #1	1,500.00	1,500.65	20.44	9.89	1.937	ES, SF
Night Watch 2-1 Fed Com #513H - OH - Plan #2	1,410.00	1,410.00	20.00	10.09	2.019	CC
Night Watch 2-1 Fed Com #513H - OH - Plan #2	1,500.00	1,499.65	20.43	9.89	1.938	ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Haunted Forest - Night Watch Offsets - Amoco 2 State #3 (P&A) - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 270-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,200.00	4,169.70	4,113.97	4,113.63	15.53	88.93	-45.31	-1,217.76	461.12	998.44	894.37	104.07	9.594	
4,300.00	4,268.40	4,209.13	4,208.77	15.94	90.84	-45.93	-1,218.32	461.12	987.64	881.27	106.37	9.285	
4,400.00	4,367.11	4,314.51	4,314.11	16.35	93.04	-46.64	-1,218.44	461.12	976.56	867.59	108.97	8.962	
4,500.00	4,465.82	4,413.21	4,412.82	16.77	95.12	-47.32	-1,218.44	461.12	965.55	854.10	111.45	8.664	
4,600.00	4,564.52	4,510.45	4,510.04	17.18	97.16	-48.05	-1,217.46	461.12	953.88	839.98	113.90	8.375	
4,700.00	4,663.23	4,606.51	4,606.10	17.59	99.18	-48.74	-1,217.81	461.12	943.46	827.13	116.32	8.111	
4,800.00	4,761.94	4,709.40	4,708.94	18.01	101.36	-49.48	-1,218.44	461.12	933.38	814.48	118.90	7.850	
4,900.00	4,860.64	4,808.11	4,807.64	18.42	103.51	-50.23	-1,218.44	461.12	922.96	801.50	121.46	7.599	
5,000.00	4,959.35	4,906.82	4,906.35	18.84	105.66	-51.00	-1,218.44	461.12	912.71	788.69	124.03	7.359	
5,100.00	5,058.06	5,000.00	4,999.46	19.25	107.69	-51.74	-1,218.44	461.12	902.65	776.17	126.47	7.137	
5,184.72	5,141.68	5,000.00	4,999.46	19.60	107.69	-51.74	-1,218.44	461.12	898.66	772.35	126.32	7.114	CC, ES, SF
5,200.00	5,156.76	5,000.00	4,999.46	19.67	107.69	-51.74	-1,218.44	461.12	898.79	772.62	126.17	7.123	
5,300.00	5,255.47	5,000.00	4,999.46	20.08	107.69	-51.74	-1,218.44	461.12	906.02	781.61	124.42	7.282	
5,400.00	5,354.17	5,000.00	4,999.46	20.50	107.69	-51.74	-1,218.44	461.12	924.09	802.74	121.34	7.615	
5,500.00	5,452.88	5,000.00	4,999.46	20.92	107.69	-51.74	-1,218.44	461.12	952.36	835.15	117.21	8.125	
5,600.00	5,551.59	5,000.00	4,999.46	21.33	107.69	-51.74	-1,218.44	461.12	989.97	877.64	112.33	8.813	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Haunted Forest - Night Watch Offsets - Rangers Federal #1 - OH - OH													Offset Site Error:	0.00 usft					
Survey Program: 109-MWD				Reference		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.00 usft
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside													
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Between	Between	Minimum	Separation							
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	Separation	Factor					Warning		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)								
13,600.00	8,416.35	8,402.86	8,401.88	155.47	29.58	90.63	-1,137.86	6,096.09	942.85	861.76	81.09	11.627							
13,700.00	8,416.86	8,403.72	8,402.75	158.32	29.58	90.81	-1,137.83	6,096.10	847.55	761.79	85.76	9.883							
13,800.00	8,417.37	8,404.58	8,403.61	161.17	29.59	90.99	-1,137.80	6,096.10	753.46	661.64	91.82	8.206							
13,900.00	8,417.87	8,405.44	8,404.46	164.02	29.59	91.17	-1,137.76	6,096.10	661.12	561.31	99.80	6.624							
14,000.00	8,418.38	8,406.29	8,405.31	166.88	29.59	91.35	-1,137.73	6,096.10	571.35	460.90	110.45	5.173							
14,100.00	8,418.88	8,407.13	8,406.16	169.74	29.60	91.53	-1,137.70	6,096.11	485.60	360.79	124.81	3.891							
14,200.00	8,419.39	8,407.97	8,407.00	172.59	29.60	91.71	-1,137.66	6,096.11	406.42	262.32	144.10	2.820							
14,300.00	8,419.90	8,408.81	8,407.83	175.45	29.60	91.89	-1,137.63	6,096.11	338.43	169.68	168.75	2.006							
14,400.00	8,420.40	8,409.64	8,408.66	178.31	29.60	92.06	-1,137.60	6,096.11	289.65	94.68	194.98	1.486	Level 3						
14,500.00	8,420.91	8,410.46	8,409.48	181.18	29.61	92.24	-1,137.57	6,096.12	270.67	60.21	210.46	1.286	Level 3						
14,504.45	8,420.93	8,410.50	8,409.52	181.30	29.61	92.24	-1,137.57	6,096.12	270.65	59.99	210.67	1.285	Level 3, CC, ES, SF						
14,600.00	8,421.41	8,411.28	8,410.30	184.04	29.61	92.41	-1,137.54	6,096.12	287.44	83.08	204.36	1.407	Level 3						
14,700.00	8,421.92	8,412.10	8,411.12	186.91	29.61	92.58	-1,137.50	6,096.12	334.63	150.46	184.17	1.817							
14,800.00	8,422.43	8,412.91	8,411.93	189.77	29.62	92.75	-1,137.47	6,096.12	401.67	239.09	162.58	2.471							
14,900.00	8,422.93	8,413.71	8,412.73	192.64	29.62	92.92	-1,137.44	6,096.12	480.31	335.60	144.71	3.319							
15,000.00	8,423.44	8,414.51	8,413.53	195.51	29.62	93.09	-1,137.41	6,096.13	565.73	434.80	130.93	4.321							
15,100.00	8,423.94	8,415.31	8,414.33	198.38	29.62	93.26	-1,137.38	6,096.13	655.29	534.86	120.42	5.442							
15,200.00	8,424.45	8,416.10	8,415.12	201.25	29.63	93.43	-1,137.35	6,096.13	747.50	635.16	112.33	6.654							
15,300.00	8,424.96	8,416.89	8,415.90	204.12	29.63	93.60	-1,137.31	6,096.13	841.49	735.48	106.01	7.938							
15,400.00	8,425.46	8,417.67	8,416.68	206.99	29.63	93.76	-1,137.28	6,096.13	936.73	835.75	100.98	9.277							

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Haunted Forest - Night Watch Pad - Haunted Forest 35-36 Fed Com #518H - OH - Plan #1													Offset Site Error:
													0.00 usft
													Offset Well Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	1.00	0.00	0.00	-0.29	20.00	-0.10	20.00				
100.00	100.00	101.00	101.00	0.26	0.26	-0.29	20.00	-0.10	20.00	19.48	0.52	38.478	
200.00	200.00	201.00	201.00	0.62	0.62	-0.29	20.00	-0.10	20.00	18.76	1.24	16.172	
300.00	300.00	301.00	301.00	0.98	0.98	-0.29	20.00	-0.10	20.00	18.05	1.95	10.237	
400.00	400.00	401.00	401.00	1.33	1.34	-0.29	20.00	-0.10	20.00	17.33	2.67	7.489	
500.00	500.00	501.00	501.00	1.69	1.70	-0.29	20.00	-0.10	20.00	16.61	3.39	5.904	
600.00	600.00	601.00	601.00	2.05	2.05	-0.29	20.00	-0.10	20.00	15.90	4.10	4.873	
700.00	700.00	701.00	701.00	2.41	2.41	-0.29	20.00	-0.10	20.00	15.18	4.82	4.148	
800.00	800.00	801.00	801.00	2.77	2.77	-0.29	20.00	-0.10	20.00	14.46	5.54	3.611	
900.00	900.00	901.00	901.00	3.13	3.13	-0.29	20.00	-0.10	20.00	13.74	6.26	3.197	
1,000.00	1,000.00	1,001.00	1,001.00	3.48	3.49	-0.29	20.00	-0.10	20.00	13.03	6.97	2.869	
1,100.00	1,100.00	1,101.00	1,101.00	3.84	3.85	-0.29	20.00	-0.10	20.00	12.31	7.69	2.601	
1,200.00	1,200.00	1,201.00	1,201.00	4.20	4.20	-0.29	20.00	-0.10	20.00	11.59	8.41	2.379	
1,300.00	1,300.00	1,301.00	1,301.00	4.56	4.56	-0.29	20.00	-0.10	20.00	10.88	9.12	2.192	
1,400.00	1,400.00	1,401.00	1,401.00	4.92	4.92	-0.29	20.00	-0.10	20.00	10.16	9.84	2.033	
1,410.00	1,410.00	1,411.00	1,411.00	4.95	4.96	-0.29	20.00	-0.10	20.00	10.09	9.91	2.018 CC	
1,500.00	1,500.00	1,500.65	1,500.64	5.28	5.28	-0.52	20.44	-0.18	20.44	9.89	10.55	1.937 ES, SF	
1,550.00	1,550.00	1,550.27	1,550.25	5.46	5.46	-1.13	21.72	-0.43	21.74	10.83	10.91	1.993	
1,600.00	1,600.00	1,600.00	1,599.93	5.63	5.64	166.17	23.86	-0.84	24.32	13.06	11.25	2.161	
1,700.00	1,699.93	1,698.29	1,697.97	5.95	5.99	165.70	30.56	-2.12	34.55	22.65	11.91	2.902	
1,800.00	1,799.68	1,795.40	1,794.56	6.28	6.34	165.81	40.43	-4.00	51.48	38.93	12.55	4.102	
1,900.00	1,899.13	1,890.53	1,888.79	6.61	6.68	166.05	53.20	-6.44	74.97	61.80	13.18	5.690	
2,000.00	1,998.15	1,983.09	1,980.02	6.95	7.02	166.26	68.58	-9.37	104.85	91.07	13.78	7.608	
2,011.28	2,009.29	1,993.35	1,990.10	6.99	7.06	166.29	70.46	-9.73	108.61	94.76	13.85	7.841	
2,100.00	2,096.86	2,075.23	2,070.35	7.30	7.36	166.47	86.38	-12.77	139.28	124.88	14.41	9.669	
2,200.00	2,195.57	2,168.97	2,162.20	7.66	7.72	166.59	104.83	-16.29	174.10	159.03	15.07	11.555	
2,300.00	2,294.27	2,262.71	2,254.04	8.02	8.09	166.67	123.28	-19.82	208.91	193.17	15.73	13.277	
2,400.00	2,392.98	2,356.46	2,345.88	8.39	8.45	166.73	141.73	-23.34	243.72	227.31	16.41	14.855	
2,500.00	2,491.69	2,450.20	2,437.73	8.76	8.83	166.77	160.18	-26.86	278.53	261.45	17.08	16.306	
2,600.00	2,590.39	2,543.95	2,529.57	9.14	9.21	166.81	178.64	-30.38	313.35	295.59	17.76	17.642	
2,700.00	2,689.10	2,637.69	2,621.41	9.52	9.59	166.83	197.09	-33.90	348.16	329.72	18.44	18.876	
2,800.00	2,787.81	2,731.44	2,713.25	9.91	9.97	166.85	215.54	-37.43	382.97	363.84	19.13	20.020	
2,900.00	2,886.51	2,825.18	2,805.10	10.30	10.36	166.87	233.99	-40.95	417.79	397.97	19.82	21.081	
3,000.00	2,985.22	2,918.92	2,896.94	10.69	10.75	166.89	252.44	-44.47	452.60	432.09	20.51	22.068	
3,100.00	3,083.93	3,012.67	2,988.78	11.09	11.14	166.90	270.89	-47.99	487.42	466.21	21.20	22.989	
3,200.00	3,182.63	3,106.41	3,080.63	11.48	11.53	166.91	289.35	-51.52	522.23	500.33	21.90	23.850	
3,300.00	3,281.34	3,200.16	3,172.47	11.88	11.93	166.92	307.80	-55.04	557.04	534.45	22.59	24.655	
3,400.00	3,380.05	3,293.90	3,264.31	12.28	12.32	166.93	326.25	-58.56	591.86	568.57	23.29	25.411	
3,500.00	3,478.75	3,387.65	3,356.16	12.68	12.72	166.94	344.70	-62.08	626.67	602.68	23.99	26.121	
3,600.00	3,577.46	3,481.39	3,448.00	13.09	13.12	166.95	363.15	-65.60	661.48	636.79	24.69	26.789	
3,700.00	3,676.17	3,575.14	3,539.84	13.49	13.52	166.95	381.61	-69.13	696.30	670.90	25.39	27.419	
3,800.00	3,774.87	3,668.88	3,631.68	13.90	13.92	166.96	400.06	-72.65	731.11	705.01	26.10	28.014	
3,900.00	3,873.58	3,762.62	3,723.53	14.30	14.32	166.96	418.51	-76.17	765.93	739.12	26.80	28.577	
4,000.00	3,972.28	3,856.37	3,815.37	14.71	14.73	166.97	436.96	-79.69	800.74	773.23	27.51	29.109	
4,100.00	4,070.99	3,950.11	3,907.21	15.12	15.13	166.97	455.41	-83.22	835.55	807.34	28.21	29.614	
4,200.00	4,169.70	4,043.86	3,999.06	15.53	15.54	166.98	473.87	-86.74	870.37	841.44	28.92	30.093	
4,300.00	4,268.40	4,137.60	4,090.90	15.94	15.94	166.98	492.32	-90.26	905.18	875.55	29.63	30.549	
4,400.00	4,367.11	4,231.35	4,182.74	16.35	16.35	166.98	510.77	-93.78	939.99	909.65	30.34	30.982	
4,500.00	4,465.82	4,325.09	4,274.58	16.77	16.75	166.99	529.22	-97.30	974.81	943.76	31.05	31.395	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Haunted Forest - Night Watch Pad - Night Watch 2-1 Fed Com #513H - OH - Plan #2													Offset Site Error: 0.00 usft
Survey Program: Reference		0-MWD + HDGM Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	179.71	-20.00	0.10	20.00				
100.00	100.00	100.00	100.00	0.26	0.26	179.71	-20.00	0.10	20.00	19.48	0.52	38.745	
200.00	200.00	200.00	200.00	0.62	0.62	179.71	-20.00	0.10	20.00	18.77	1.23	16.219	
300.00	300.00	300.00	300.00	0.98	0.98	179.71	-20.00	0.10	20.00	18.05	1.95	10.256	
400.00	400.00	400.00	400.00	1.33	1.33	179.71	-20.00	0.10	20.00	17.33	2.67	7.499	
500.00	500.00	500.00	500.00	1.69	1.69	179.71	-20.00	0.10	20.00	16.62	3.38	5.910	
600.00	600.00	600.00	600.00	2.05	2.05	179.71	-20.00	0.10	20.00	15.90	4.10	4.877	
700.00	700.00	700.00	700.00	2.41	2.41	179.71	-20.00	0.10	20.00	15.18	4.82	4.151	
800.00	800.00	800.00	800.00	2.77	2.77	179.71	-20.00	0.10	20.00	14.47	5.53	3.614	
900.00	900.00	900.00	900.00	3.13	3.13	179.71	-20.00	0.10	20.00	13.75	6.25	3.199	
1,000.00	1,000.00	1,000.00	1,000.00	3.48	3.48	179.71	-20.00	0.10	20.00	13.03	6.97	2.870	
1,100.00	1,100.00	1,100.00	1,100.00	3.84	3.84	179.71	-20.00	0.10	20.00	12.31	7.69	2.602	
1,200.00	1,200.00	1,200.00	1,200.00	4.20	4.20	179.71	-20.00	0.10	20.00	11.60	8.40	2.380	
1,300.00	1,300.00	1,300.00	1,300.00	4.56	4.56	179.71	-20.00	0.10	20.00	10.88	9.12	2.193	
1,400.00	1,400.00	1,400.00	1,400.00	4.92	4.92	179.71	-20.00	0.10	20.00	10.16	9.84	2.033	
1,410.00	1,410.00	1,410.00	1,410.00	4.95	4.95	179.71	-20.00	0.10	20.00	10.09	9.91	2.019 CC	
1,500.00	1,500.00	1,499.65	1,499.65	5.28	5.27	179.82	-20.43	0.06	20.43	9.89	10.54	1.938 ES, SF	
1,550.00	1,550.00	1,549.27	1,549.25	5.46	5.43	-179.88	-21.71	-0.04	21.73	10.85	10.88	1.997	
1,600.00	1,600.00	1,598.85	1,598.78	5.63	5.59	-11.73	-23.85	-0.22	23.46	12.25	11.20	2.094	
1,700.00	1,699.93	1,697.92	1,697.61	5.95	5.92	-12.07	-30.68	-0.80	26.94	15.11	11.83	2.278	
1,800.00	1,799.68	1,796.87	1,796.02	6.28	6.24	-13.15	-40.90	-1.66	30.47	18.02	12.45	2.447	
1,900.00	1,899.13	1,895.70	1,893.90	6.61	6.58	-14.72	-54.48	-2.80	34.04	20.98	13.07	2.605	
2,000.00	1,998.15	1,994.40	1,991.13	6.95	6.93	-16.64	-71.39	-4.23	37.69	24.02	13.67	2.756	
2,011.28	2,009.29	2,005.53	2,002.05	6.99	6.97	-16.87	-73.51	-4.41	38.11	24.37	13.74	2.773	
2,100.00	2,096.86	2,092.91	2,087.53	7.30	7.28	-18.23	-91.58	-5.93	42.74	28.47	14.28	2.994	
2,200.00	2,195.57	2,190.99	2,182.75	7.66	7.66	-18.68	-114.96	-7.90	51.15	36.28	14.87	3.439	
2,300.00	2,294.27	2,288.40	2,276.48	8.02	8.04	-18.38	-141.38	-10.13	62.89	47.43	15.46	4.067	
2,400.00	2,392.98	2,384.93	2,368.43	8.39	8.45	-17.70	-170.68	-12.59	77.92	61.88	16.03	4.860	
2,500.00	2,491.69	2,480.39	2,458.32	8.76	8.87	-16.90	-202.67	-15.29	96.21	79.62	16.59	5.798	
2,600.00	2,590.39	2,574.57	2,545.91	9.14	9.32	-16.11	-237.14	-18.19	117.72	100.58	17.14	6.869	
2,700.00	2,689.10	2,671.00	2,634.79	9.52	9.80	-15.41	-274.39	-21.33	141.36	123.55	17.82	7.935	
2,800.00	2,787.81	2,768.14	2,724.32	9.91	10.29	-14.91	-311.97	-24.50	165.08	146.54	18.54	8.906	
2,900.00	2,886.51	2,865.28	2,813.84	10.30	10.81	-14.53	-349.54	-27.66	188.80	169.54	19.26	9.801	
3,000.00	2,985.22	2,962.41	2,903.36	10.69	11.33	-14.24	-387.12	-30.83	212.53	192.53	20.00	10.628	
3,100.00	3,083.93	3,059.55	2,992.88	11.09	11.87	-14.00	-424.70	-34.00	236.26	215.52	20.74	11.394	
3,200.00	3,182.63	3,156.69	3,082.40	11.48	12.41	-13.81	-462.28	-37.16	259.99	238.51	21.48	12.103	
3,300.00	3,281.34	3,253.83	3,171.92	11.88	12.96	-13.65	-499.85	-40.33	283.73	261.50	22.23	12.763	
3,400.00	3,380.05	3,350.97	3,261.44	12.28	13.52	-13.52	-537.43	-43.49	307.47	284.48	22.99	13.377	
3,500.00	3,478.75	3,448.11	3,350.96	12.68	14.09	-13.40	-575.01	-46.66	331.21	307.47	23.74	13.949	
3,600.00	3,577.46	3,545.25	3,440.48	13.09	14.66	-13.30	-612.59	-49.82	354.95	330.45	24.51	14.485	
3,700.00	3,676.17	3,642.39	3,530.00	13.49	15.24	-13.21	-650.16	-52.99	378.69	353.42	25.27	14.986	
3,800.00	3,774.87	3,739.53	3,619.52	13.90	15.82	-13.13	-687.74	-56.16	402.44	376.40	26.04	15.456	
3,900.00	3,873.58	3,836.67	3,709.04	14.30	16.40	-13.07	-725.32	-59.32	426.18	399.37	26.81	15.897	
4,000.00	3,972.28	3,933.80	3,798.56	14.71	16.99	-13.00	-762.90	-62.49	449.93	422.35	27.58	16.313	
4,100.00	4,070.99	4,030.94	3,888.08	15.12	17.58	-12.95	-800.48	-65.65	473.67	445.32	28.36	16.705	
4,200.00	4,169.70	4,128.08	3,977.60	15.53	18.18	-12.90	-838.05	-68.82	497.42	468.28	29.13	17.074	
4,300.00	4,268.40	4,225.22	4,067.12	15.94	18.77	-12.85	-875.63	-71.99	521.16	491.25	29.91	17.424	
4,400.00	4,367.11	4,322.36	4,156.64	16.35	19.37	-12.81	-913.21	-75.15	544.91	514.22	30.69	17.754	
4,500.00	4,465.82	4,419.50	4,246.16	16.77	19.97	-12.78	-950.79	-78.32	568.65	537.18	31.47	18.068	
4,600.00	4,564.52	4,516.64	4,335.68	17.18	20.58	-12.74	-988.36	-81.48	592.40	560.14	32.26	18.365	
4,700.00	4,663.23	4,613.78	4,425.20	17.59	21.18	-12.71	-1,025.94	-84.65	616.15	583.10	33.04	18.647	
4,800.00	4,761.94	4,710.92	4,514.72	18.01	21.79	-12.68	-1,063.52	-87.81	639.89	606.07	33.83	18.916	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Haunted Forest - Night Watch Pad - Night Watch 2-1 Fed Com #513H - OH - Plan #2													Offset Site Error: 0.00 usft
Survey Program:	0-MWD + HDGM		Offset	Semi Major Axis			Offset Wellbore Centre		Rule Assigned:			Offset Well Error: 0.00 usft	
Reference	Measured Depth	Vertical Depth	Measured Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
4,900.00	4,860.64	4,808.06	4,604.24	18.42	22.40	-12.65	-1,101.10	-90.98	663.64	629.02	34.62	19.172	
5,000.00	4,959.35	4,905.20	4,693.76	18.84	23.01	-12.62	-1,138.67	-94.15	687.39	651.98	35.40	19.415	
5,100.00	5,058.06	5,002.33	4,783.28	19.25	23.62	-12.60	-1,176.25	-97.31	711.13	674.94	36.19	19.648	
5,200.00	5,156.76	5,099.47	4,872.80	19.67	24.23	-12.58	-1,213.83	-100.48	734.88	697.90	36.98	19.870	
5,300.00	5,255.47	5,196.61	4,962.32	20.08	24.84	-12.56	-1,251.41	-103.64	758.63	720.85	37.78	20.082	
5,400.00	5,354.17	5,293.75	5,051.84	20.50	25.46	-12.54	-1,288.98	-106.81	782.38	743.81	38.57	20.286	
5,500.00	5,452.88	5,390.89	5,141.36	20.92	26.07	-12.52	-1,326.56	-109.98	806.12	766.76	39.36	20.480	
5,600.00	5,551.59	5,488.03	5,230.88	21.33	26.69	-12.50	-1,364.14	-113.14	829.87	789.72	40.16	20.667	
5,700.00	5,650.29	5,585.17	5,320.41	21.75	27.30	-12.48	-1,401.72	-116.31	853.62	812.67	40.95	20.845	
5,800.00	5,749.00	5,682.31	5,409.93	22.17	27.92	-12.47	-1,439.30	-119.47	877.37	835.62	41.75	21.017	
5,900.00	5,847.71	5,779.45	5,499.45	22.59	28.54	-12.45	-1,476.87	-122.64	901.11	858.57	42.54	21.182	
6,000.00	5,946.41	5,876.59	5,588.97	23.01	29.16	-12.44	-1,514.45	-125.80	924.86	881.52	43.34	21.341	
6,100.00	6,045.12	5,973.72	5,678.49	23.42	29.78	-12.43	-1,552.03	-128.97	948.61	904.47	44.14	21.493	
6,200.00	6,143.83	6,070.86	5,768.01	23.84	30.40	-12.41	-1,589.61	-132.14	972.36	927.42	44.93	21.640	
6,300.00	6,242.53	6,168.00	5,857.53	24.26	31.02	-12.40	-1,627.18	-135.30	996.11	950.37	45.73	21.782	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=28 @ 3941.00usft (Patterson 597 Coordinates are relative to: Night Watch 2-1 Fed Com #511H

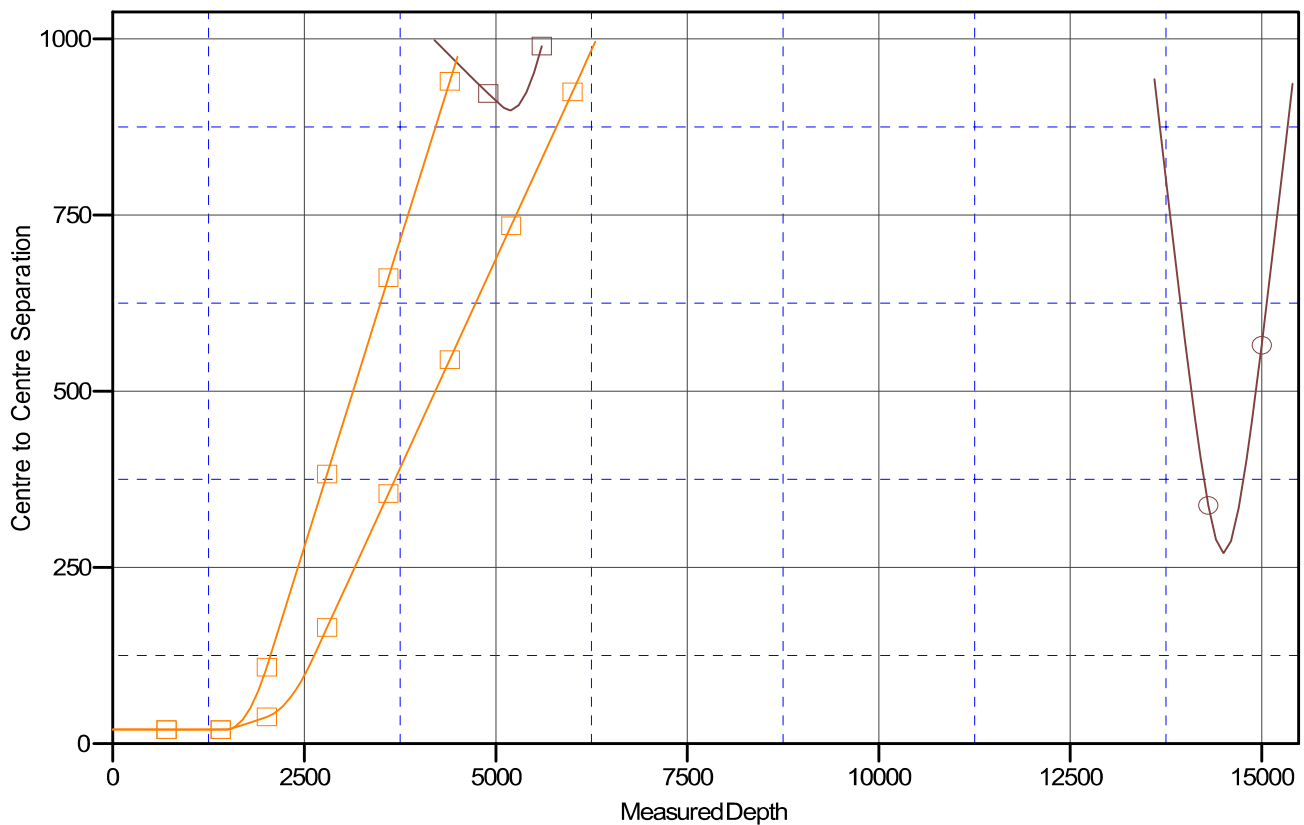
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.333334

Grid Convergence at Surface is: 0.32°

Ladder Plot



LEGEND

Amoco 25State #3 (P&A), OH, OH V0
RangersFedest #1, OH, OH V0

HauntedForest 3536 FedCom #5181, OH, Plan#1 V0
Night Watch 2-1 Fed Com #533H, OH, Plan #2 V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Night Watch 2-1 Fed Com #511H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Reference Site:	Haunted Forest - Night Watch Pad	MD Reference:	KB=28 @ 3941.00usft (Patterson 597)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Night Watch 2-1 Fed Com #511H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.16 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=28 @ 3941.00usft (Patterson 597) Coordinates are relative to: Night Watch 2-1 Fed Com #511H

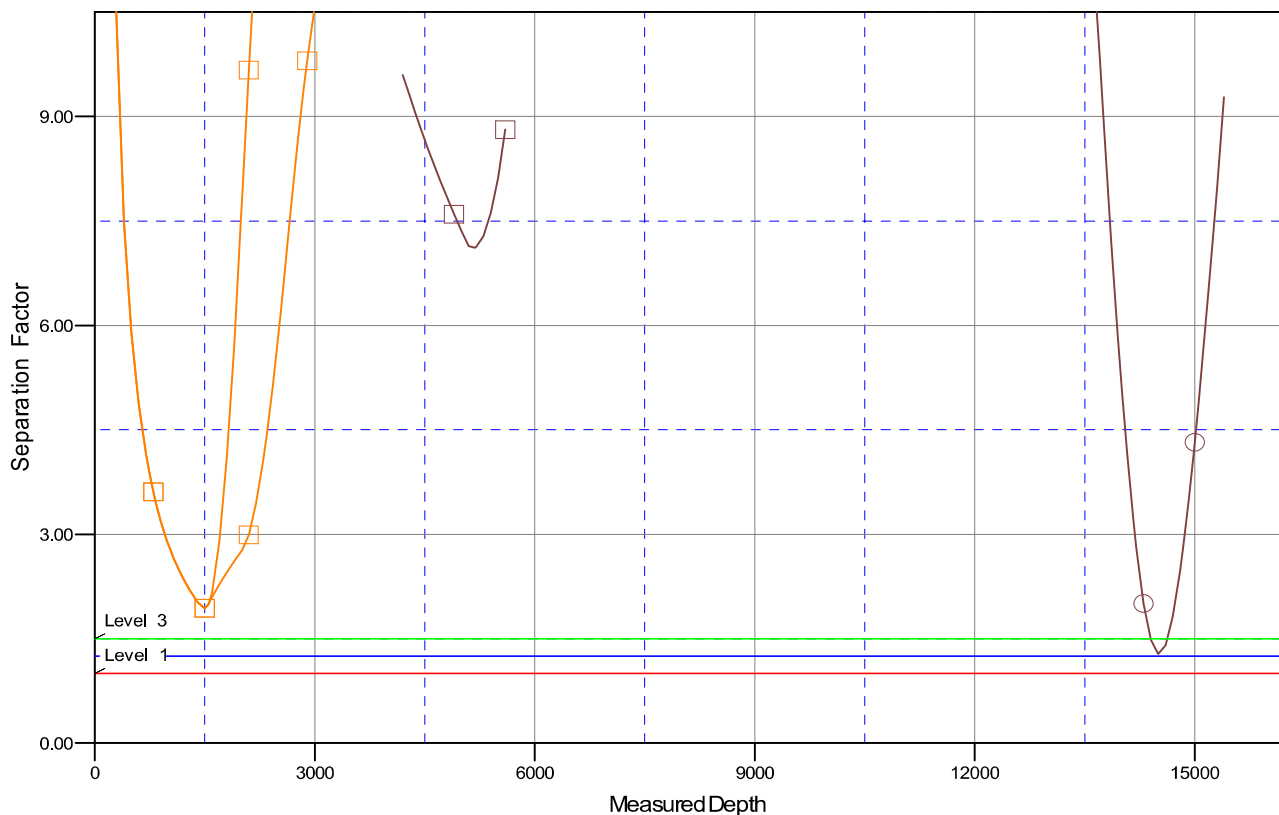
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.333334

Grid Convergence at Surface is: 0.32°

Separation Factor Plot



LEGEND

Amoco 251st #3 (P&A), OH, OH V0
Rangers Federal #1, OH, OH V0

Haunted Forest 3536 Fed Com #5181, OH, Plan #1 V0
Night Watch 2-1 Fed Com #511H, OH, Plan #2 V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

District I
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District II
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Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-51643		² Pool Code 65350		³ Pool Name YOUNG; BONE SPRING, NORTH					
⁴ Property Code 334595		⁵ Property Name NIGHT WATCH 2/1 FED COM						⁶ Well Number 511H	
⁷ OGRID NO. 14744		⁸ Operator Name MEWBOURNE OIL COMPANY						⁹ Elevation 3913'	
¹⁰ Surface Location									
UL or lot no. M	Section 35	Township 17S	Range 32E	Lot Idn	Feet from the 230	North/South line SOUTH	Feet From the 205	East/West line WEST	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. 1	Section 1	Township 18S	Range 32E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 100	East/West line EAST	County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.

						¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Andrew W Taylor</u> Date: <u>8/16/2023</u> Printed Name: <u>Andrew Taylor</u> E-mail Address: <u>ataylor@mewbourne.com</u>	
¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: <u>11/13/2021</u> Signature and Seal of Professional Surveyor: <u>Robert M. Howett</u> 19680 Certificate Number REV: BH MOVE, ADD KOP, FTP & LTP 07/13/23							
Job No: LS21111171R1							

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WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name					
4 Property Code		5 Property Name NIGHT WATCH 2/1 FED COM						6 Well Number 511H	
7 OGRID NO.		8 Operator Name MEWBOURNE OIL COMPANY						9 Elevation 3913'	
10 Surface Location									
UL or lot no. M	Section 35	Township 17S	Range 32E	Lot Idn	Feet from the 230	North/South line SOUTH	Feet From the 205	East/West line WEST	County LEA
11 Bottom Hole Location If Different From Surface									
UL or lot no. 1	Section 1	Township 18S	Range 32E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 100	East/West line EAST	County LEA
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

16	<u>GEODETIC DATA</u> NAD 83 GRID — NM EAST <u>SURFACE LOCATION</u> N: 649613.8 — E: 722154.7 LAT: 32.7844388° N LONG: 103.7449695° W <u>KICK OFF POINT (KOP)</u> 660' FNL — 10' FWL (SEC. 2) N: 648723.4 — E: 721964.3 LAT: 32.7819944° N LONG: 103.7456052° W <u>FIRST TAKE POINT (FTP)</u> 660' FNL — 100' FWL (SEC. 2) N: 648723.7 — E: 722054.3 LAT: 32.7819938° N LONG: 103.7453124° W <u>PROPOSED PENETRATION POINT 2 (PPP2)</u> 658' FNL — 0' FWL (SEC. 1) N: 648742.9 — E: 727235.7 LAT: 32.7819665° N LONG: 103.7284535° W <u>PROPOSED PENETRATION POINT 3 (PPP3)</u> 658' FNL — 1320' FWL (SEC. 1) N: 648747.8 — E: 728555.4 LAT: 32.7819592° N LONG: 103.7241596° W <u>PROPOSED PENETRATION POINT 4 (PPP4)</u> 659' FNL — 1320' FEL (SEC. 1) N: 648757.7 — E: 731194.8 LAT: 32.7819442° N LONG: 103.7155716° W <u>BOTTOM HOLE</u> N: 648762.2 — E: 732414.5 LAT: 32.7819370° N LONG: 103.7116029° W		17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> Signature _____ Date _____ Printed Name _____ E-mail Address _____	
	18 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> 11/13/2021 Date of Survey Signature and Seal of Professional Surveyor:  19680 Certificate Number REV: BH MOVE, ADD KOP, FTP & LTP 07/13/23			

Job No: LS21111171R1

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WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name					
4 Property Code		5 Property Name NIGHT WATCH 2/1 FED COM						6 Well Number 511H	
7 OGRID NO.		8 Operator Name MEWBOURNE OIL COMPANY						9 Elevation 3913'	
10 Surface Location									
UL or lot no. M	Section 35	Township 17S	Range 32E	Lot Idn	Feet from the 230	North/South line SOUTH	Feet From the 205	East/West line WEST	County LEA
11 Bottom Hole Location If Different From Surface									
UL or lot no. 1	Section 1	Township 18S	Range 32E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 100	East/West line EAST	County LEA
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

16 <u>CORNER DATA</u> NAD 83 GRID — NM EAST <table border="0"> <tr> <td>A: FOUND 1" PIPE N: 644082.8 — E: 721974.3</td> <td>K: FOUND BRASS CAP "1913" N: 646781.4 — E: 732526.9</td> </tr> <tr> <td>B: FOUND BRASS CAP "1913" N: 646722.0 — E: 721963.3</td> <td>L: FOUND BRASS CAP "1913" N: 644140.1 — E: 732543.3</td> </tr> <tr> <td>C: FOUND BRASS CAP "1913" N: 649383.2 — E: 721951.4</td> <td>M: FOUND BRASS CAP "1913" N: 644129.0 — E: 729908.3</td> </tr> <tr> <td>D: FOUND BRASS CAP "1913" N: 652022.2 — E: 721933.2</td> <td>N: FOUND BRASS CAP "1913" N: 644117.6 — E: 727273.3</td> </tr> <tr> <td>E: FOUND BRASS CAP "1913" N: 654661.5 — E: 721914.9</td> <td>O: FOUND BRASS CAP "1913" N: 644099.9 — E: 724622.7</td> </tr> <tr> <td>F: FOUND BRASS CAP "1913" N: 654671.4 — E: 724557.2</td> <td>P: FOUND BRASS CAP "1913" N: 649391.8 — E: 724589.2</td> </tr> <tr> <td>G: FOUND BRASS CAP "1913" N: 654680.9 — E: 727196.9</td> <td>Q: FOUND BRASS CAP "1913" N: 652026.7 — E: 727221.2</td> </tr> <tr> <td>H: FOUND BRASS CAP "1913" N: 654723.6 — E: 732496.7</td> <td>R: FOUND SMOOTH ROD N: 649410.0 — E: 729870.3</td> </tr> <tr> <td>I: FOUND BRASS CAP "1913" N: 652073.1 — E: 732503.5</td> <td>S: FOUND 1" IRON PIPE N: 646756.9 — E: 727250.3</td> </tr> <tr> <td>J: FOUND BRASS CAP "1913" N: 649422.5 — E: 732510.4</td> <td>T: FOUND BRASS CAP "1913" N: 649400.8 — E: 727230.8</td> </tr> </table>		A: FOUND 1" PIPE N: 644082.8 — E: 721974.3	K: FOUND BRASS CAP "1913" N: 646781.4 — E: 732526.9	B: FOUND BRASS CAP "1913" N: 646722.0 — E: 721963.3	L: FOUND BRASS CAP "1913" N: 644140.1 — E: 732543.3	C: FOUND BRASS CAP "1913" N: 649383.2 — E: 721951.4	M: FOUND BRASS CAP "1913" N: 644129.0 — E: 729908.3	D: FOUND BRASS CAP "1913" N: 652022.2 — E: 721933.2	N: FOUND BRASS CAP "1913" N: 644117.6 — E: 727273.3	E: FOUND BRASS CAP "1913" N: 654661.5 — E: 721914.9	O: FOUND BRASS CAP "1913" N: 644099.9 — E: 724622.7	F: FOUND BRASS CAP "1913" N: 654671.4 — E: 724557.2	P: FOUND BRASS CAP "1913" N: 649391.8 — E: 724589.2	G: FOUND BRASS CAP "1913" N: 654680.9 — E: 727196.9	Q: FOUND BRASS CAP "1913" N: 652026.7 — E: 727221.2	H: FOUND BRASS CAP "1913" N: 654723.6 — E: 732496.7	R: FOUND SMOOTH ROD N: 649410.0 — E: 729870.3	I: FOUND BRASS CAP "1913" N: 652073.1 — E: 732503.5	S: FOUND 1" IRON PIPE N: 646756.9 — E: 727250.3	J: FOUND BRASS CAP "1913" N: 649422.5 — E: 732510.4	T: FOUND BRASS CAP "1913" N: 649400.8 — E: 727230.8	17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> Signature _____ Date _____ Printed Name _____ E-mail Address _____ 18 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> 11/13/2021 Date of Survey Signature and Seal of Professional Surveyor:  19680 Certificate Number REV: BH MOVE, ADD KOP, FTP & LTP 07/13/23
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Job No: LS21111171R1

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 263187

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 263187
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/25/2023