Form 3160-3 (June 2015) MAY 2 2 2019

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

# UNITED STATES DEPARTMENT OF THE INTERIOBISTRICT II-ARTESIA O.C.

BUREAU OF LAND MANAGEMENT

5. Lease Serial No. NMNM0001159

APPLICATION FOR PERMIT TO DR	ILL OR REENTER	6. If Indian, Allotee or Tribe Name
	984 · · · · · · ·	
la. Type of work: PRILL REE	NTER	7. If Unit or CA Agreement, Name and No.
ib. Type of Well: Oil Well Gas Well Othe	er :	
	le Zone Multiple Zone	8. Lease Name and Well No.
		LOCO HILLS 2/3.B2FE FED COM
		1H 3256/2
2. Name of Operator MEWBOURNE OIL COMPANY	14744	9/API-Well No. 30-0/5-46020
	p. Phone No. (include area code) 575)393-5905	10 Fich and Book of Tapparative 62, SHUGAR (NORTH BONE SPRING / BON
4. Location of Well (Report location clearly and in accordance with	h any State requirements.*)	11. Sec., T. R. M. or Blk. and Survey or Area
At surface SWNE / 2340 FNL / 2475 FEL / LAT 32.77727	'92 / LONG -103.9420822	SEC 2/1185 / R30E / NMP
At proposed prod. zone SWNW / 2085 FNL / 100 FWL / LA	T 32.7780083 / LONG -103.9680476 🗋	
<ol> <li>Distance in miles and direction from nearest town or post office</li> <li>miles</li> </ol>	*	12. County or Parish 13. State NM
location to nearest 185 feet	6. No of acres in lease 17. Spacii 083.04 320	g,Unit dedicated to this well
18. Distance from proposed location*	9. Proposed Depth 20/BLM/	BIA Bond No. in file
to nearest well, drilling, completed, applied for, on this lease, ft.	808 feet./_15544 feet FED: NM	1693
	2. Approximate date work will start*	23. Estimated duration
	1/14/2018	60 days
	24. Attachments	
The following, completed in accordance with the requirements of O (as applicable)	nshore Oil and Gas Order No. 1, and the H	ydraulic Fracturing rule per 43 CFR 3162.3-3
Well plat certified by a registered surveyor.     A Drilling Plan.	4. Bond to cover the operation Item 20 above).	s unless covered by an existing bond on file (see
B. A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).		mation and/or plans as may be requested by the
25. Signature	Name (Printed/Typed)	Date
(Electronic Submission)	Bradley Bishop / Ph: (575)393-590	5 08/15/2018
Title Regulatory		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Christopher Walls / Ph: (575)234-2	Date 04/30/2019
Fitle ( ) Petroleum Engineer	Office CARLSBAD	
Application approval does not warrant or certify that the applicant happlicant to conduct operations thereon.  Conditions of approval, if any, are attached.	olds legal or equitable title to those rights	n the subject lease which would entitle the
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make of the United States any false, fictitious or fraudulent statements or r		

or traudulent statements or representations as to any matter within its jurisdiction.



(Continued on page 2)

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances-for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

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

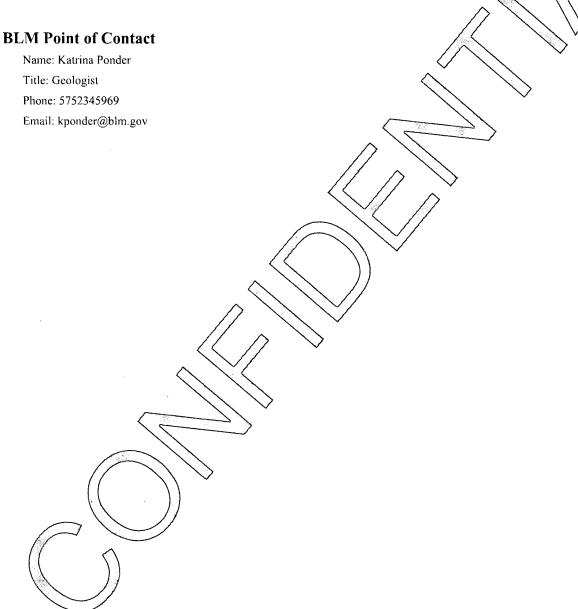
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

#### **Additional Operator Remarks**

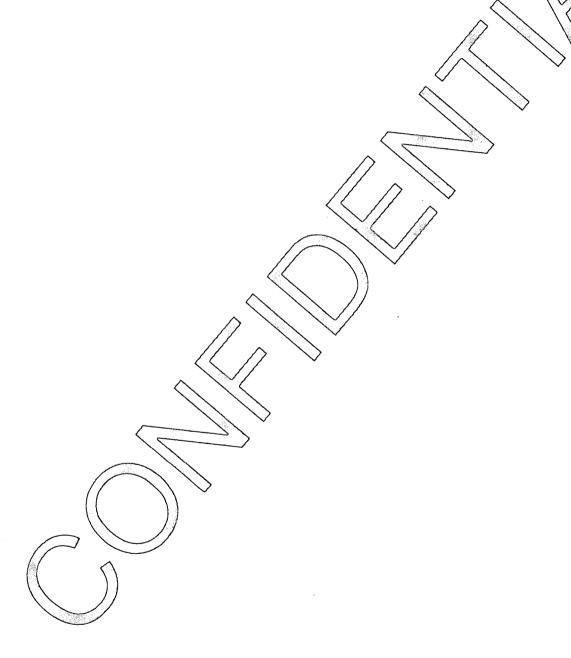
#### Location of Well

1. SHL: SWNE / 2340 FNL / 2475 FEL / TWSP: 18S / RANGE: 30E / SECTION: 2 / LAT: 32.7772792 / LONG: -103.9420822 ( TVD: 27 feet, MD: 27 feet )
PPP: SENW / 2085 FSL / 2538 FWL / TWSP: 18S / RANGE: 30E / SECTION: 2 / LAT: 32.7778906 / LONG: -103.942934 [ ("TVD: 7730 feet, MD: 7766 feet )
PPP: SENE / 2085 FNL / 0 FEL / TWSP: 18S / RANGE: 30E / SECTION: 3 / LAT: 32.77799 / LONG: -103.9511984 ( TVD: 7886 feet, MD: 10365 feet )
BHL: SWNW / 2085 FNL / 100 FWL / TWSP: 18S / RANGE: 30E / SECTION: 3 / LAT: 32.7780083 / LONG: 103.9680476 ( TVD: 7808 feet, MD: 15544 feet )



#### **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



(Form 3160-3, page 4)

#### PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | Mewbourne Oil Company

**LEASE NO.: NMNM-0001159** 

WELL NAME & NO.: Loco Hills 2 3 B2FE Fed Com 1H

SURFACE HOLE FOOTAGE: | 2340' FNL & 2475' FEL

BOTTOM HOLE FOOTAGE | 2085' FNL & 0100' FWL Sec. 03, T. 18 S., R 30 E.

LOCATION: Section 02, T. 18 S., R 30 E., NMPM

**COUNTY:** | County, New Mexico

#### **Communitization Agreement**

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

#### A. DRILLING OPERATIONS 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

- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Grayburg formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. 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 is located, this does not include the dog house or stairway area.
- 4. 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.

#### B. CASING

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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

#### 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)

Page 2 of 6

cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

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.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water flows in the Artesia Group and Salado. Possibility of lost circulation in the Rustler, Red Beds, Artesia Group, and Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 500 feet (a minimum of 25 feet 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 is to include the lead cement slurry.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Cement to surface.	If cement does not circulate see B.1.a, c-d above.	Excess
calculates to 24%	- Additional cement may be required.	

#### Centralizers required through the curve and a minimum of one every other joint.

3. The minimum required fill of cement behind the 7 inch production easing is:

	☐ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.
4.	The minimum required fill of cement behind the 4-1/2 inch production Liner is:
	☐ Cement as proposed. Operator shall provide method of verification.
5.	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

#### C. PRESSURE CONTROL

continuing drilling operations.

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.

larger diameter than the tool joints of the drill pipe will be installed prior to

- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Operator shall perform the 9-5/8" and 7" casing integrity tests to 70% of the casing burst. This will test the multi-bowl seals.
- 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.
- 4. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - a. The tests shall be done by an independent service company utilizing a test plug **not** a **cup or J-packer**.
  - b. 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.
  - c. The results of the test shall be reported to the appropriate BLM office.
  - d. 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.
  - e. 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.

#### D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

#### E. 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.

**JAM 121318** 

Page 6 of 6



**Email address:** 

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

# ©perator Certification Data Report 05/20/2019

#### **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

	<b>Signed on:</b> 08/15/2018
State: NM	<b>Zip:</b> 88240
rne.com	
State:	Zip:
	rne.com



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

### **Application Data Report**

APD ID: 10400030420

Submission Date: 08/15/2018

Highlighted data reflects the most

Well Number: 1H

recent changes

Well Type: OIL WELL

Well Work Type: Drill

**Show Final Text** 

#### Section 1 - General

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: LOCO HILLS 2/3 B2FE FED COM

APD ID:

10400030420

Tie to previous NOS?

Submission Date: 08/15/2018

**BLM Office: CARLSBAD** 

**User:** Bradley Bishop

Title: Regulatory

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM0001159

Lease Acres: 2083.04

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

**Permitting Agent? NO** 

**APD Operator: MEWBOURNE OIL COMPANY** 

Operator letter of designation:

LocoHills2\_3B2FEFedCom1H\_operatorletterordesignation\_20180521140437.pdf

#### **Operator Info**

**Operator Organization Name: MEWBOURNE OIL COMPANY** 

Operator Address: PO Box 5270

**Operator PO Box:** 

Zip: 88240

**Operator City: Hobbs** 

State: NM

**Operator Phone:** (575)393-5905

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: SHUGART NORTH Pool Name: BONE SPRING

**BONE SPRING** 

mineral resources? MATHRAL GAS OIL

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO New surface disturbance?

Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: LOCO Number: 2

HILLS 2 FED COM

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL
Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 20 Miles Distance to nearest well: 330 FT Distance to lease line: 185 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: LocoHills2\_3B2FEFedCom1H\_wellplat\_20180814141153.pdf

Well work start Date: 11/14/2018 Duration: 60 DAYS

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 1

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	234 0	FNL	247 5	FEL	18S	30E	2	Aliquot SWNE	32.77727 92	- 103.9420 822	EDD Y	NEW MEXI CO	1 —	s	STATE	362 3	27	27
KOP Leg #1	208 5	FSL	263 8	FWL	18S	30E	2	Aliquot SENW	32.77798 02	- 103.9426 152	EDD Y		NEW MEXI CO	S	STATE	- 381 8	745 4	744 1
PPP Leg #1	208 5	FSL	253 8	FWL	18S	30E	2		32.77789 06	- 103.9429 341	EDD Y	NEW MEXI CO		S	STATE	- 410 7		773 0

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	208 5	FNL	0	FEL	18S	30E	3	Aliquot SENE	32.77799	- 103.9511 984	EDD Y		NEW MEXI CO		NMNM 000115 9	- 426 3	103 65	788 6
EXIT Leg #1	208 5	FNL	100	FWL	18S	30E	3	Aliquot SWN W	32.77800 83	- 103.9680 476	EDD Y	i .	NEW MEXI CO		NMNM 000115 9	- 418 5	155 44	780 8
BHL Leg #1	208 5	FNL	100	FWL	18S	30E	3	Aliquot SWN W	32.77800 83	- 103.9680 476	EDD Y	l .	NEW MEXI CO		NMNM 000115 9	- 418 5	155 44	780 8

# United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 E Greene Street Carlsbad, New Mexico 88201-1287

#### Statement Accepting Responsibility for Operations

Operator Name:

Mewbourne Oil Company

Street or Box:

P.O. Box 5270

City, State:

Hobbs, New Mexico

Zip Code:

88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number:

NMNM 0001159

Legal Description of Land:

Section 2, T18S, R30E, Eddy County, New Mexico.

Location @ 2340 FNL & 2475 FEL

Formation (if applicable):

**Bone Spring** 

Bond Coverage:

\$150,000

BLM Bond File:

NM1693 nationwide, NMB000919

Authorized Signature:

Name: Bradley Bishop

Title: Regulatory Manager

Date: 5-21-18



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

## Drilling Plan Data Report

05/20/2019

APD ID: 10400030420

Submission Date: 08/15/2018

Highlighted data reflects the most

Operator Name: MEWBOURNE OIL COMPANY
Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

recent changes

Well Type: OIL WELL

Well Mullipel.

**Show Final Text** 

Well Work Type: Drill

#### **Section 1 - Geologic Formations**

ormation ID	Farmation Name	Florinting	True Vertical	i .		Minaral Dagarina	Producing
1	Formation Name UNKNOWN	Elevation 3623	Depth 27	Depth 27	Lithologies	Mineral Resources NONE	No
	<b></b>	3323					
2	RUSTLER	3203	420	420	DOLOMITE,ANHYDRIT E	USEABLE WATER	No
3	TOP SALT	3008	615	615	SALT	NONE	No
4	BASE OF SALT	2118	1505	1505	SALT	NONE	No
5	YATES	1938	1685	1685	SANDSTONE	NATURAL GAS,OIL	No
6	SEVEN RIVERS	1578	2045	2045	DOLOMITE	NATURAL GAS,OIL	No
7	QUEEN	983	2640	2640	SANDSTONE,DOLOMIT E	NATURAL GAS,OIL	No
8	GRAYBURG	793	2830	2830		NATURAL GAS,OIL	No
9	SAN ANDRES	118	3505	3505	DOLOMITE	NATURAL GAS,OIL	No
10	BONE SPRING	-1252	4875	4875	LIMESTONE,SHALE	NATURAL GAS,OIL	No
11	BONE SPRING 1ST	-3282	6905	6905	SANDSTONE	NATURAL GAS,OIL	No
12	BONE SPRING 2ND	-3827	7450	7450	SANDSTONE	NATURAL GAS,OIL	Yes

#### Section 2 - Blowout Prevention

ressure Rating (PSI): 3M

Rating Depth: 15544

quipment: Annular, Pipe Ram, Blind Ram

**!equesting Variance?** YES

'ariance request: A variance is requested for the use of a flexible choke line from the BOP to choke manifold. Anchors are ot required by the manufacturer. A multibowl wellhead is being used. See attached schematic.

esting Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure idicated above per Onshore Order 2 requirements. The system may be upgraded to a higher pressure but still tested to the

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

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

#### **Choke Diagram Attachment:**

Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_3M\_BOPE\_Choke\_Diagram\_20180814160811.pdf
Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Flex\_Line\_Specs\_20180814160813.pdf

#### **BOP Diagram Attachment:**

Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_3M\_BOPE\_Schematic\_20180814160829.pdf
Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Multi\_Bowl\_WH\_20180814160831.pdf

#### **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	Z	0	500	0	500	3650		500	H-40	48	STC	3.37	7.56	DRY	13.4 2	DRY	22.ŧ 4
	INTERMED IATE	12.2 5	9.625	NEW	API	Y	0 .	3775	0	3775	3650		3775	J-55	36	LTC	1.13	1.96	DRY	3.3	DRY	4.11
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8211	0	7918	3650		8211	P- 110	26	LTC	1.89	2.57	DRY	2.97	DRY	3.89
4	LINER	6.12 5	4.5	NEW	API	N	7454	15544	7441	7808			8090	P- 110	13.5	LTC	2.59	3.01	DRY	3.09	DRY	3.8€

#### **Casing Attachments**

**Operator Name: MEWBOURNE OIL COMPANY** Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Csg\_Assumptions\_20180814161219.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Loco Hills 2 3 B2FE Fed Com 1H TaperedCsg 20180814162140.pdf Casing Design Assumptions and Worksheet(s): Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Csg\_Assumptions\_20180814162204.pdf Casing ID: 3 String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Csg\_Assumptions\_20180814162316.pdf

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

#### **Casing Attachments**

Casing ID: 4

String Type:LINER

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Csg\_Assumptions\_20180814162425.pdf

#### **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	.Ft	Excess%	Cement type	Additives
<del>5</del> 5		20 00	မ	B	ŏ	ÿ	ے	ರ	ŭ	, č	A
SURFACE	Lead		0	309	205	2.12	12.5	435	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		309	500	200	1.34	14.8	268	100	Class C	Retarder
NTERMEDIATE	Lead		0	3113	595	2.12	12.5	1261	25	Class C	Salt, Gel, Extender, LCM
NTERMEDIATE	Tail		3113	3775	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		3575	5740	195	2.12	12.5	413	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		5740	8211	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
INER	Lead		7454	1554 4	330	2.97	11.2	980	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

#### **Section 5 - Circulating Medium**

lud System Type: Closed

Vill an air or gas system be Used? NO

escription of the equipment for the circulating system in accordance with Onshore Order #2:

lagram of the equipment for the circulating system in accordance with Onshore Order #2:

escribe what will be on location to control well or mitigate other conditions: Lost circulation material Sweeps Mud cavengers in surface hole

rescribe the mud monitoring system utilized: Visual monitoring

#### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	500	SPUD MUD	8.6	8.8							
500	3775	SALT SATURATED	10	10							
3775	7441	WATER-BASED MUD	8.6	9.5							
7441	7918	OIL-BASED MUD	8.6	10						-	

#### Section 6 - Test, Logging, Coring

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

Vill run GR/CNL from KOP (7454') to surface

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

:NL,DS,GR,MWD,MUDLOG

oring operation description for the well:

lone

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

#### **Section 7 - Pressure**

inticipated Bottom Hole Pressure: 4118

**Anticipated Surface Pressure: 2199.6** 

Inticipated Bottom Hole Temperature(F): 140

inticipated abnormal pressures, temperatures, or potential geologic hazards? NO

escribe:

ontingency Plans geoharzards description:

ontingency Plans geohazards attachment:

lydrogen Sulfide drilling operations plan required? YES

lydrogen sulfide drilling operations plan:

Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_H2S\_Plan\_20180814163347.pdf

#### Section 8 - Other Information

roposed horizontal/directional/multi-lateral plan submission:

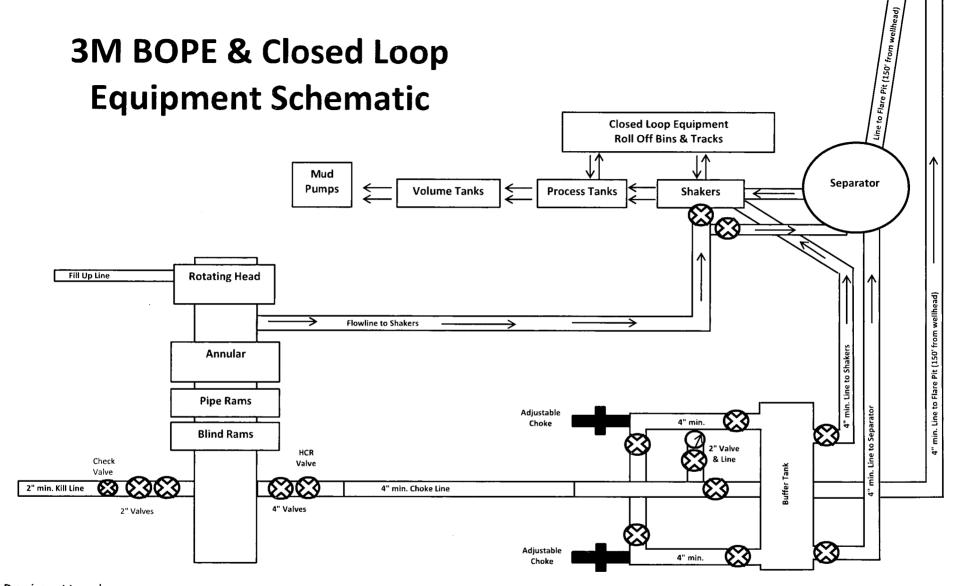
Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Dir\_Plot\_20180814163407.pdf Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_Dir\_Plan\_20180814163408.pdf

Ither proposed operations facets description:

ther proposed operations facets attachment:

Loco\_Hills\_2\_3 B2FE Fed Com\_1H\_Drilling\_Program\_20180814163422.doc Loco\_Hills\_2\_3\_B2FE\_Fed\_Com\_1H\_C\_101\_20180814163933.pdf

Ither Variance attachment:



Drawing not to scale



GATES E & S NORTH AMERICA, INC. 134 44TH STREET CORPUS CHRISTI, TEXAS 78405 PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

#### 10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER
Product Description:		10K3.548.0CK4.1/1610KFLGE/E	LE
·	4 1/16 10K FLG		
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
·	4 1/16 10K FLG 4773-6290 10,000 PSI		

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager:

Date:

Signature :

QUALITY

4/30/2015

Produciton:

Date:

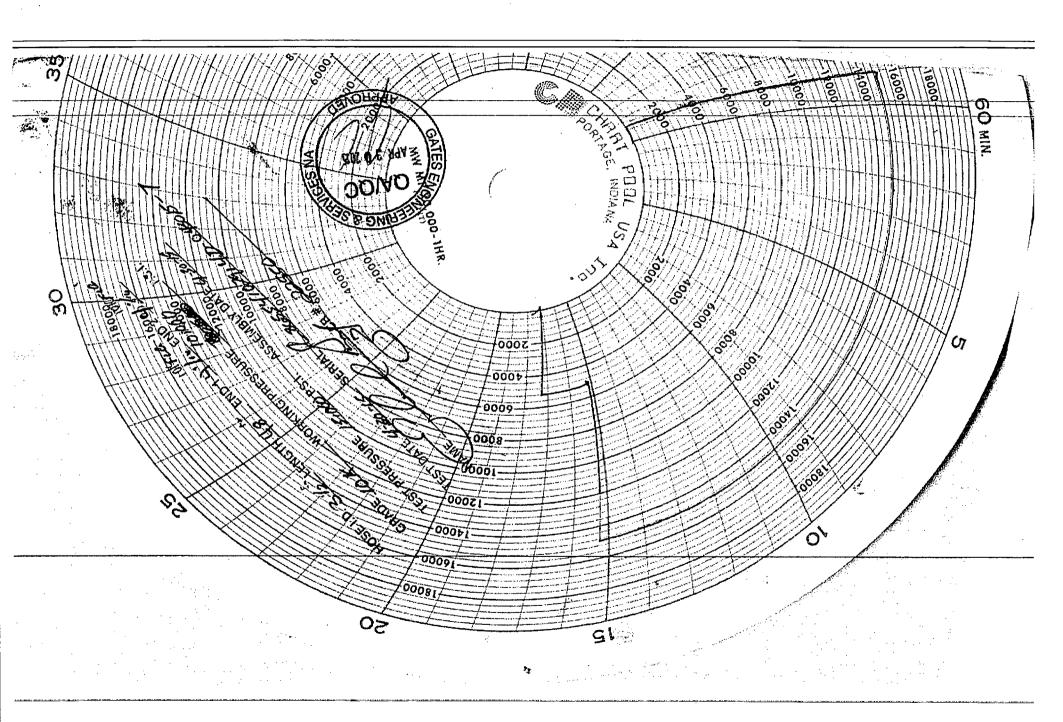
Signature :

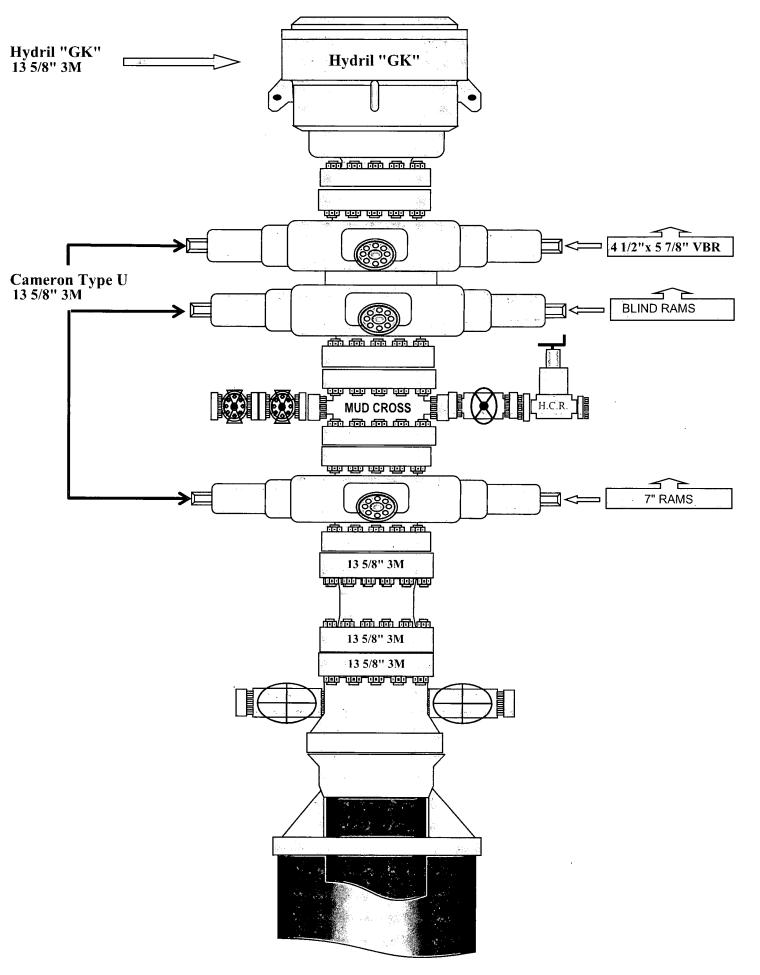
**PRODUCTION** 

4/30/2015

Form PTC - 01 Rev.0 2

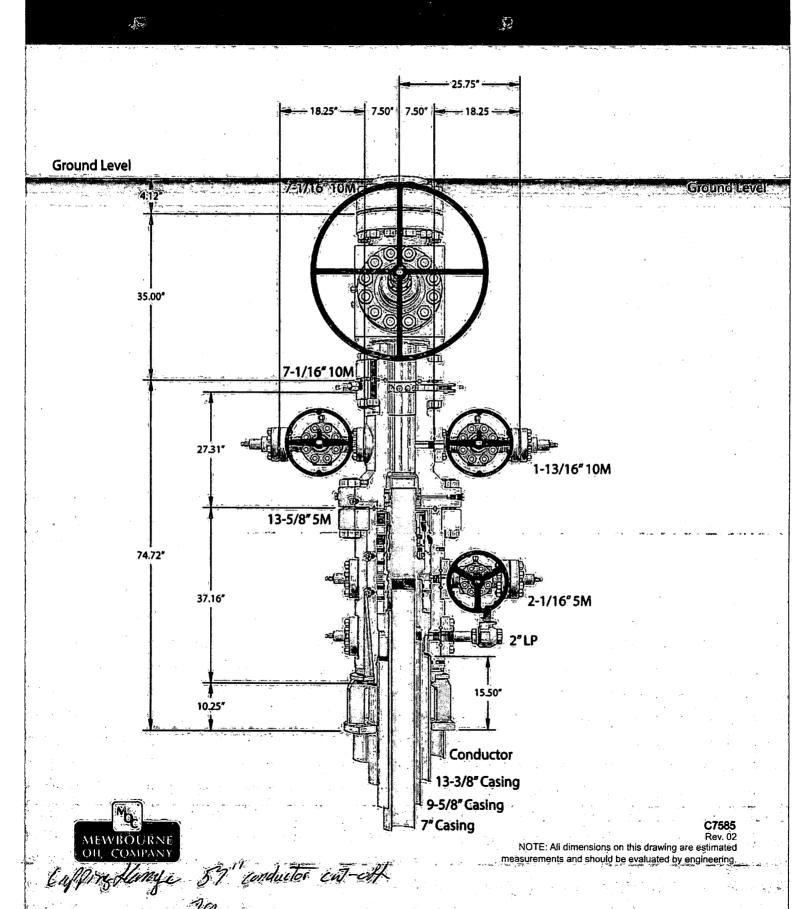




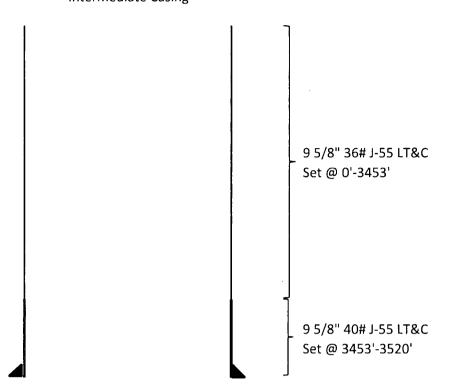




# 13-5/8" MN-DS Wellhead System



Loco Hills 2-3 B2FE Fed Com 1H Intermediate Casing



	SF	SF	SF Jt	SF Body
Casing	Collapse	Burst	Tension	Tension
36# J-55	1.13	1.96	3.3	4.11
40# J-55	1.31	2.01	40.37	48.91

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### **Casing Program**

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF -	SF Jt	SF Body
Size	From	To	Size	(lbs)	E TOTAL TOTAL		Collapse	Burst	Tension	Tension
17.5"	0'	500'	13.375"	48	H40	STC	3.37	7.56	13.42	22.54
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.30	4.11
12.25"	3453'	3775'	9.625"	40	J55	LTC	1.31	2.01	40.37	48.91
8.75"	0'	8211'	7"	26	HCP110	LTC	1.89	2.57	2.97	3.89
6.125"	7454'	15,544'	4.5"	13.5	P110	LTC	2.59	3.01	3.09	3.86
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
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 <sup>rd</sup> 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?	11
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
is 2 string set 100 to 000 below the base of satt?	Tarada a sa
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?	
的位置。	T
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### **Casing Program**

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	500'	13.375"	48	H40	STC	3.37	7.56	13.42	22.54
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.30	4.11
12.25"	3453'	3775'	9.625"	40	J55	LTC	1.31	2.01	40.37	48.91
8.75"	0'	8211'	7"	26	HCP110	LTC	1.89	2.57	2.97	3.89
6.125"	7454'	15,544'	4.5"	13.5	P110	LTC	2.59	3.01	3.09	3.86
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	Y or N				
Is casing new? If used, attach certification as required in Onshore Order #1	Y				
Is casing API approved? If no, attach casing specification sheet.					
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N				
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y				
justification (loading assumptions, casing design criteria).					
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y				
collapse pressure rating of the casing?					
Is well located within Capitan Reef?	N				
*	1N				
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Is well located in SOPA but not in R-111-P?	N				
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> 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 <sup>nd</sup> 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?					

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### **Casing Program**

Hole	Casing Interval		Casing Interval Cs		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)	A 100	growth of the	Collapse	Burst	Tension	Tension		
17.5"	0'	500'	13.375"	48	H40	STC	3.37	7.56	13.42	22.54		
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.30	4.11		
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8.75"	0'	8211'	7"	26	HCP110	LTC	1.89	2.57	2.97	3.89		
6.125"	7454'	15,544'	4.5"	13.5	P110	LTC	2.59	3.01	3.09	3.86		
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry		
						Factor			1.8 Wet	1.8 Wet		

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide 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 <sup>rd</sup> 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 <sup>nd</sup> 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?	

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### **Casing Program**

Hole	Casing	Interval	Csg.	Weight.	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
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8.75"	0'	8211'	7"	26	HCP110	LTC	1.89	2.57	2.97	3.89
6.125"	7454'	15,544'	4.5"	13.5	P110	LTC	2.59	3.01	3.09	3.86
				BLM Minimum Safety			1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

the property of the second	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
	481 HR44
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 <sup>rd</sup> 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 <sup>nd</sup> 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?	

#### Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

#### 1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H2S were found. MOC will have on location and working all H2S safety equipment before the Delaware formation for purposes of safety and insurance requirements.

#### 2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

- 1. The hazards and characteristics of hydrogen sulfide gas.
- 2. The proper use of personal protective equipment and life support systems.
- 3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- 4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

#### 3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 9 5/8" intermediate casing.

#### 1. Well Control Equipment

- A. Choke manifold with minimum of one adjustable choke/remote choke.
- B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- C. Auxiliary equipment including annular type blowout preventer.
- 2. <u>Protective Equipment for Essential Personnel</u>

Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H2S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H2S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

#### 3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

#### 4. Visual Warning Systems

- A. Wind direction indicators as indicated on the wellsite diagram.
- B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

#### 4. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

#### 5. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

#### 6. Communications

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

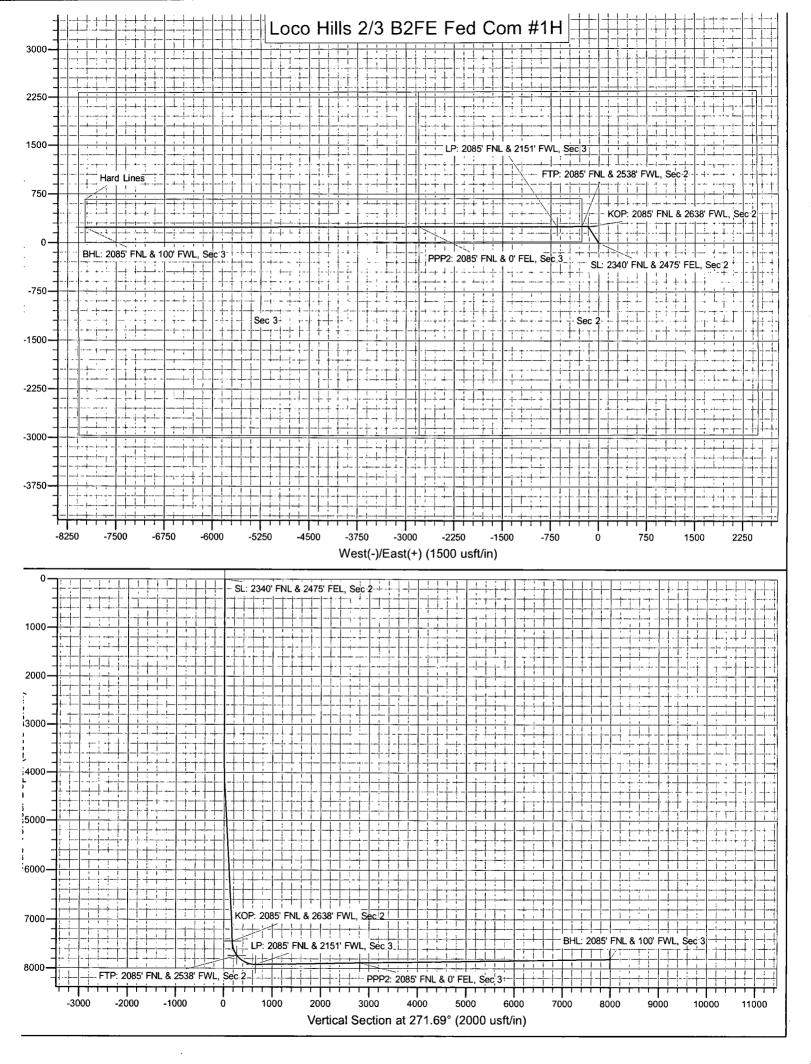
#### 7. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

#### 8. Emergency Phone Numbers

Eddy County Sheriff's Office	911 or 575-887-7551
Ambulance Service	911 or 575-885-2111
Carlsbad Fire Dept	911 or 575-885-2111
Loco Hills Volunteer Fire Dept.	911 or 575-677-3266
Closest Medical Facility - Columbia Medical Cent	ter of Carlsbad 575-492-5000

Mewbourne Oil Company	Hobbs District Office Fax 2 <sup>nd</sup> Fax	575-393-5905 575-397-6252 575-393-7259
District Manager	Robin Terrell	575-390-4816
<b>Drilling Superintendent</b>	Frosty Lathan	575-390-4103
-	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729



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MAY 2 2 2019

DISTRICT II-ARTESIA O.C.D

# **Mewbourne Oil Company**

Eddy County, New Mexico NAD 83 Loco Hills 2/3 B2FE Fed Com #1H

Sec 2, T18S, R30E

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

Plan: Design #1

# **Standard Planning Report**

10 August, 2018

#### Planning Report

Database: Company:

Hobbs

Project: Site:

Well:

Wellbore:

Design:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Loco Hills 2/3 B2FE Fed Com #1H. Sec 2, T18S, R30E

BHL: 2085' FNL & 100' FWL, Sec 3

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

**Survey Calculation Method:** 

Site Loco Hills 2/3 B2FE Fed Com #1H WELL @ 3650.0usft (Original Well Elev)

WELL @ 3650.0usft (Original Well Elev)

Grid

Minimum Curvature

**Project** 

Site

Well

Eddy County, New Mexico NAD 83

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983

Map Zone: New Mexico Eastern Zone System Datum:

Mean Sea Level

Site Position:

Loco Hills 2/3 B2FE Fed Com #1H

Мар

Easting:

Northing:

646,729.00 usft 661,587.00 usft

Latitude:

32.7772804 -103.9420814 Longitude:

**Position Uncertainty:** 

Sec 2, T18S, R30E

0.0 usft Slot Radius: 13-3/16 "

**Grid Convergence:** 

0.21 °

Well Position

+N/-S

0.0 usft 0.0 usft Northing: Easting:

646,729.00 usft 661,587.00 usft

6.91

Latitude:

32.7772804 -103.9420814

**Position Uncertainty** 

+E/-W 0.0 usft

IGRF2010

Wellhead Elevation:

8/10/2018

3,650.0 usft

Longitude: **Ground Level:** 

3,623.0 usft

BHL: 2085' FNL & 100' FWL, Sec 3 Wellbore

Design #1

Magnetics Model Name

Sample Date

(usft)

0.0

Declination ° (°)

Dip Angle (°)

Field Strength

(nT) 48,191

Design

**Audit Notes:** 

Version: Phase: Depth From (TVD) **Vertical Section:** 

**PROTOTYPE** 

+N/-S

(usft)

0.0

Tie On Depth: +E/-W

(usft)

0.0

0.0

60.45

Direction

(°) 271.69

Plan Sections										
Measured		Barrier a	Vertical			Dogleg	Build	Turn	1. J. 3.	Para Araba
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,850.0	0.00	0.00	3,850.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,206.8	5.35	326.99	4,206.2	14.0	-9.1	1.50	1.50	0.00	326.99	
7,097.4	5.35	326.99	7,084.3	240.0	-155.9	0.00	0.00	0.00	0.00	
7,454.2	0.00	0.00	7,440.5	254.0	-165.0	1.50	-1.50	0.00	180.00	KOP: 2085' FNL & 26
8,211.4	90.86	269.87	7,918.0	252.9	-649.7	12.00	12.00	0.00	-90.13	
15,543.6	90.86	269.87	7,808.0	236.0	-7,981.0	0.00	0.00	0.00	0.00	BHL: 2085' FNL & 100

Database: Company: Project:

Site:

Well:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Sec 2, T18S, R30E

Wellbore: Design:

Loco Hills 2/3 B2FE Fed Com #1H

BHL: 2085' FNL & 100' FWL, Sec 3

North Reference: **Survey Calculation Method:** 

TVD Reference:

MD Reference:

Local Co-ordinate Reference:

Site Loco Hills 2/3 B2FE Fed Com #1H WELL @ 3650.0usft (Original Well Elev) WELL @ 3650.0usft (Original Well Elev)

Grid

Minimum Curvature

Design:	Design #1								
Planned Survey	1		77	**************************************					
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	IL & 2475' FEL, S								
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0						
1,700.0	0.00			0.0	0.0	0.0	0.00	0.00	0.00
		0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2 000 0	0.00	0.00	2 000 0		0.0	0.0	0.00	0.00	2.22
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00 0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0 3,300.0		0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,850.0	0.00	0.00	3,850.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.75	326.99	3,900.0	0.3	-0.2	0.2	1.50	1.50	0.00
4,000.0	2.25	326.99	4,000.0	2.5	-1.6	1.7	1.50	1.50	0.00
4,100.0	3.75	326.99	4,099.8	6.9	<b>-4</b> .5	4.7	1.50	1.50	0.00
4,200.0	5.25	326.99	4,199.5	13.4	-8.7	9.1	1.50	1.50	0.00
4,206.8	5.35	326.99	4,206.2	14.0	<b>-</b> 9. <b>1</b>	9.5	1.50	1.50	0.00
4,300.0	5.35	326.99	4,299.1	21.3	-13.8	14.4	0.00	0.00	0.00
4,400.0	5.35	326.99	4,299.1	29.1	-13.6	19.7	0.00	0.00	0.00
4,500.0	5.35	326.99							
			4,498.2	36.9	-24.0	25.0	0.00	0.00	0.00
4,600.0	5.35	326.99	4,597.8	44.7	-29.0	30.4	0.00	0.00	0.00
4,700.0	5.35	326.99	4,697.3	52.5	-34.1	35.7	0.00	0.00	0.00
4,800.0	5.35	326.99	4,796.9	60.4	-39.2	41.0	0.00	0.00	0.00
4.900.0	5.35	326.99	4.896.5	68.2	-44.3	46.3	0.00	0.00	0.00

4,900.0

5,000.0

5.35

5.35

326.99

326.99

4,896.5

4,996.0

68.2

76.0

-44.3

-49.4

46.3

51.6

0.00

0.00

0.00

0.00

0.00

0.00

Database: Company: Project:

Site:

Well:

Hobbs

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Sec 2, T18S, R30E

Wellbore: Design:

Loco Hills 2/3 B2FE Fed Com #1H

BHL: 2085' FNL & 100' FWL, Sec 3

Design #1

Local Co-ordinate Reference:

**TVD Reference:** MD Reference:

North Reference: Survey Calculation Method: Site Loco Hills 2/3 B2FE Fed Com #1H WELL @ 3650.0usft (Original Well Elev) WELL @ 3650.0usft (Original Well Elev) Grid

Minimum Curvature

Planned Survey									
			: 300	a da	3 × 5 ×			je i i i	A Marian
Measure	d , , , , , , ,	2	Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)		(°/100usft)
5,100		326.99	5,095.6	83.8	-54.5	56.9	0.00	0.00	0.00
5,200	0.0 5.35	326.99	5,195.2	91.6	<b>-</b> 59.5	62.2	0.00	0.00	0.00
5,300	0.0 5.35	326.99	5,294.7	99.5	-64.6	67.5	0.00	0.00	0.00
5,400	0.0 5.35	326.99	5,394.3	107.3	-69.7	72.8	0.00	0.00	0.00
5,500	0.0 5.35	326.99	5,493.8	115.1	-74.8	78.1	0.00	0.00	0.00
5,600	0.0 5.35	326.99	5,593.4	122.9	-79.9	83.5	0.00	0.00	0.00
5,700	0.0 5.35	326.99	5,693.0	130.7	-84.9	88.8	0.00	0.00	0.00
5,800	0.0 5.35	326.99	5,792.5	138.6	-90.0	94.1	0.00	0.00	0.00
5,900		326.99	5,892.1	146.4	-95.1	99.4	0.00	0.00	0.00
6,000		326.99	5,991.7	154.2	-100.2	104.7	0.00	0.00	0.00
6,100		326.99	6,091.2	162.0	-105.3	110.0	0.00	0.00	0.00
6,200		326.99	6,190.8	169.9	-110.3	115.3	0.00	0.00	0.00
6,300		326.99	6,290.4	177.7	-115.4	120.6	0.00	0.00	0.00
6,400		326.99	6,389.9	185.5	-120.5	125.9	0.00	0.00	0.00
6,500		326.99	6,489.5	193.3	-125.6	131.2	0.00	0.00	0.00
6,600		326.99	6,589.1	201.1	-130.7	136.5	0.00	0.00	0.00
6,700	0.0 5.35	326.99	6,688.6	209.0	-135.7	141.9	0.00	0.00	0.00
6,800	0.0 5.35	326.99	6,788.2	216.8	-140.8	147.2	0.00	0.00	0.00
6,900		326.99	6,887.7	224.6	-145.9	152.5	0.00	0.00	0.00
7,000		326.99	6,987.3	232.4	-151.0	157.8	0.00	0.00	0.00
7,097		326.99	7,084.3	240.0	-155.9	163.0	0.00	0.00	0.00
7,100		326.99	7,086.9	240.2	-156.1	163.1	1.50	-1.50	0.00
7,200		326.99	7,186.6	246.9	-160.4	167.6	1.50	-1.50	0.00
7,300		326.99	7,286.4	251.4	-163.3	170.7	1.50	-1.50	0.00
7,400		326.99	7,386.4	253.7	-164.8	172.2	1.50	-1.50	0.00
7,454		0.00	7,440.5	254.0	-165.0	172.4	1.50	-1.50	0.00
	85' FNL & 2638' FW								
7,500	0.0 5.50	269.87	7,486.3	254.0	-167.2	174.6	12.00	12.00	0.00
7,600	0.0 17.50	269.87	7,584.1	253.9	-187.1	194.5	12.00	12.00	0.00
7,700		269.87	7,675.6	253.9	-226.9	234.3	12.00	12.00	0.00
7,765		269.87	7,730.4	253.8	-263.0	270.4	12.00	12.00	0.00
FTP: 208	15' FNL & 2538' FWL								,
7,800		269.87	7,756.9	253.7	-284.8	292.2	12.00	12.00	0.00
7,900		269.87	7,824.4	253.6	-358.4	365.8	12.00	12.00	0.00
8,000		269.87	7,875.0	253.4	-444.4	451.7	12.00	12.00	0.00
8,100 8,200		269.87	7,906.7	253.1	-539.1	546.3	12.00	12.00	0.00
8,200 8,211		269.87 269.87	7,918.0	252.9	-638.3	645.5	12.00	12.00	0.00
		269.87	7,918.0	252.9	-649.7	656.9	11.97	11.97	0.00
	FNL & 2151' FWL,	a company of	70407	050.7	700 0	745 4	2.25	2.22	
8,300	0.0 90.86	269.87	7,916.7	252.7	-738.2	745.4	0.00	0.00	0.00
8,400		269.87	7,915.2	252.4	-838.2	845.3	0.00	0.00	0.00
8,500	0.0 90.86	269.87	7,913.7	252.2	-938.2	945.3	0.00	0.00	0.00
8,600	90.86	269.87	7,912.2	252.0	-1,038.2	1,045.2	0.00	0.00	0.00
8,700	.0 90.86	269.87	7,910.7	251.8	-1,138.2	1,145.1	0.00	0.00	0.00
8,800	.0 90.86	269.87	7,909.2	251.5	-1,238.2	1,245.1	0.00	0.00	0.00
8,900	.0 90.86	269.87	7,907.7	251.3	-1,338.2	1,345.0	0.00	0.00	0.00
9,000		269.87	7,907.7 7,906.2	251.3 251.1	-1,438.2	1,345.0	0.00	0.00	0.00
9,000		269.87 269.87	7,906.2 7,904.7						
9,100		269.87 269.87	7,904.7 7,903.2	250.8 250.6	-1,538.2 1,638.1	1,544.9	0.00	0.00	0.00
9,200					-1,638.1 1,739.1	1,644.8	0.00	0.00	0.00
9,300	.0 90.86	269.87	7,901.7	250.4	-1,738.1	1,744.8	0.00	0.00	0.00
9,400	.0 90.86	269.87	7,900.2	250.1	-1,838.1	1,844.7	0.00	0.00	0.00
9,500	.0 90.86	269.87	7,898.7	249.9	-1,938.1	1,944.7	0.00	0.00	0.00
9.600	0 90.86	269.87	7 897 2	249 7	-2 038 1	2 044 6	0.00	0.00	0.00

9,600.0

90.86

269.87

7,897.2

249.7

-2,038.1

2,044.6

0.00

0.00

0.00

Database: Company: Hobbs

Project: Site:

Eddy County, New Mexico NAD 83 Loco Hills 2/3 B2FE Fed Com #1H

BHL: 2085' FNL & 100' FWL, Sec 3

Well: Sec 2, T18S, R30E

Wellbore:

Planned Survey

Mewbourne Oil Company

TVD Reference: MD Reference: North Reference: **Survey Calculation Method:** 

Local Co-ordinate Reference:

Site Loco Hills 2/3 B2FE Fed Com #1H WELL @ 3650.0usft (Original Well Elev) WELL @ 3650.0usft (Original Well Elev)

Minimum Curvature

Jesign	 	Design #

Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
9,700.0	90.86	269.87	7,895.7	249.5	-2,138.1	2,144.5	0.00	0.00	0.00
9,800.0	90.86	269.87	7,894.2	249.2	-2,238.1	2,244.5	0.00	0.00	0.00
9,900.0	90.86	269.87	7,892.7	249.0	-2,338.1	2,344.4	0.00	0.00	0.00
10,000.0	90.86	269.87	7,891.2	248.8	-2,438.1	2,444.3	0.00	0.00	0.00
10,100.0	90.86	269.87	7,889.7	248.5	-2,538.0	2,544.3	0.00	0.00	0.00
10,200.0	90.86	269.87	7,888.2	248.3	-2,638.0	2,644.2	0.00	0.00	0.00
10,300.0	90.86	269.87	7,886.7	248.1	-2,738.0	2,744.2	0.00	0.00	0.00
10,365.0	90.86	269.87	7,885.7	247.9	-2,803.0	2,809.1	0.00	0.00	0.00
PPP2: 2085	5' FNL & 0' FEL, S	ec 3							
10,400.0	90.86	269.87	7,885.2	247.8	-2,838.0	2,844.1	0.00	0.00	0.00
10,500.0	90.86	269.87	7,883.7	247.6	-2,938.0	2,944.0	0.00	0.00	0.00
10,600.0	90.86	269.87	7,882.2	247.4	-3,038.0	3,044.0	0.00	0.00	0.00
10,700.0	90.86	269.87	7,880.7	247.2	-3,138.0	3,143.9	0.00	0.00	0.00
10,800.0	90.86	269.87	7,879.2	246.9	-3,238.0	3,243.8	0.00	0.00	0.00
10,900.0	90.86	269.87	7,877.7	246.7	-3,337.9	3,343.8	0.00	0.00	0.00
11,000.0	90.86	269.87	7,876.2	246.5	-3,437.9	3,443.7	0.00	0.00	0.00
11,100.0	90.86	269.87	7,876.2	246.2	-3,537.9	3,543.7	0.00	0.00	0.00
11,100.0	90.86	269.87	7,874.7	246.2	-3,637.9	3,643.6	0.00	0.00	0.00
11,300.0	90.86	269.87	7,871.7	245.8	-3,737.9	3,743.5	0.00	0.00	0.00
11,400.0	90.86	269.87	7,870.2	245.5	-3,837.9	3,843.5	0.00	0.00	0.00
11,500.0									
	90.86	269.87	7,868.7	245.3	-3,937.9	3,943.4	0.00	0.00	0.00
11,600.0 11,700.0	90.86 90.86	269.87 269.87	7,867.2 7,865.7	245.1 244.9	-4,037.9 -4,137.9	4,043.3 4,143.3	0.00 0.00	0.00 0.00	0.00 0.00
11,800.0	90.86	269.87	7,864.2	244.6	-4,237.8	4,243.2	0.00	0.00	0.00
11,900.0	90.86	269.87	7,862.7	244.4	-4,337.8	4,343.2	0.00	0.00	0.00
12,000.0	90.86	269.87	7,861.2	244.2	-4,437.8	4,443.1	0.00	0.00	0.00
12,100.0	90.86	269.87	7,859.7	243.9	-4,537.8	4,543.0	0.00	0.00	0.00
12,200.0	90.86	269.87	7,858.2	243.7	-4,637.8	4,643.0	0.00	0.00	0.00
12,300.0	90.86	269.87	7,856.7	243.5	-4,737.8 4,937.8	4,742.9	0.00	0.00	0.00
12,400.0	90.86	269.87	7,855.2	243.2	-4,837.8	4,842.9	0.00	0.00	0.00
12,500.0	90.86	269.87	7,853.7	243.0	-4,937.8	4,942.8	0.00	0.00	0.00
12,600.0	90.86	269.87	7,852.2	242.8	-5,037.8	5,042.7	0.00	0.00	0.00
12,700.0	90.86	269.87	7,850.7	242.5	-5,137.7	5,142.7	0.00	0.00	0.00
12,800.0	90.86	269.87	7,849.2	242.3	-5,237.7	5,242.6	0.00	0.00	0.00
12,900.0	90.86	269.87	7,847.7	242.1	-5,337.7	5,342.5	0.00	0.00	0.00
13,000.0	90.86	269.87	7,846.2	241.9	-5,437.7	5,442.5	0.00	0.00	0.00
13,100.0 13,200.0	90.86 90.86	269.87 269.87	7,844.7 7,843.2	241.6 241.4	-5,537.7 -5,637.7	5,542.4 5,642.4	0.00 0.00	0.00 0.00	0.00 0.00
13,300.0 13,400.0	90.86 90.86	269,87 269,87	7,841.7 7,840.2	241.2 240.9	-5,737.7 -5,837.7	5,742.3 5,842.2	0.00 0.00	0.00 0.00	0.00 0.00
13,500.0	90.86	269.87	7,838.7	240.7	-5,937.7 -5,937.7	5,942.2	0.00	0.00	0.00
13,600.0 13,700.0	90.86 90.86	269.87 269.87	7,837.2 7,835.7	240.5 240.2	-6,037.6 -6,137.6	6,042.1 6,142.0	0.00 0.00	0.00 0.00	0.00 0.00
,			•		•				
13,800.0 13,900.0	90.86 90.86	269.87 269.87	7,834.2 7,832.7	240.0 239.8	-6,237.6 -6,337.6	6,242.0 6,341.9	0.00 0.00	0.00 0.00	0.00 0.00
•									
14,000.0	90.86	269.87	7,831.2	239.6	-6,437.6	6,441.9	0.00	0.00	0.00
14,100.0 14,200.0	90.86	269.87	7,829.7	239.3	-6,537.6 -6.637.6	6,541.8 6,641.7	0.00	0.00 0.00	0.00
•	90.86	269.87	7,828.2	239.1	-6,637.6	6,641.7	0.00		0.00
14,300.0	90.86	269.87	7,826.7	238.9	-6,737.6	6,741.7	0.00	0.00	0.00
14,400.0	90.86	269.87	7,825.2	238.6	-6,837.5	6,841.6	0.00	0.00	0.00
14,500.0	90.86	269.87	7,823.7	238.4	-6,937.5	6,941.6	0.00	0.00	0.00
14,600.0	90.86	269.87	7,822.2	238.2	-7,037.5	7,041.5	0.00	0.00	0.00

Database: Company:

Hobbs

Mewbourne Oil Company

90.86

90.86

90.86

BHL: 2085' FNL & 100' FWL, Sec 3

269.87

269.87

269.87

7,810.2

7,808.7

7,808.0

Project: Site: Eddy County, New Mexico NAD 83

Loco Hills 2/3 B2FE Fed Com #1H

Well: Sec 2, T18S, R30E

 Wellbore:
 BHL: 2085' FNL & 100' FWL, Sec 3

 Design:
 Design #1

15,400.0

15,500.0

15,543.6

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

-7,837.4

-7,937.4

-7,981.0

7,841.0

7,940.9

7,984.5

Site Loco Hills 2/3 B2FE Fed Com #1H WELL @ 3650.0usft (Original Well Elev)

WELL @ 3650.0usft (Original Well Elev)
Grid

Minimum Curvature

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

Planne	d Survey			*					i e e	
e i di Giri	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	14,800.0	90.86	269.87	7,819.2	237.7	-7,237.5	7,241.4	0.00	0.00	0.00
	14,900.0	90.86	269.87	7,817.7	237.5	-7,337.5	7,341.3	0.00	0.00	0.00
	15,000.0	90.86	269.87	7,816.2	237.3	-7,437.5	7,441.2	0.00	0.00	0.00
	15,100.0	90.86	269.87	7,814.7	237.0	-7,537.5	7,541.2	0.00	0.00	0.00
	15,200.0	90.86	269.87	7,813.2	236.8	-7,637.5	7,641.1	0.00	0.00	0.00
	15,300.0	90.86	269.87	7,811.7	236.6	-7,737.4	7,741.1	0.00	0.00	0.00

236.3

236.1

236.0

Design Targets		-1/							
Target Name - hit/miss target Di - Shape	p Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 2340' FNL & 2475' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	646,729.00	661,587.00	32.7772804	-103.9420814
KOP: 2085' FNL & 2638' - plan hits target center - Point	0.00	0.00	7,440.5	254.0	-165.0	646,983.00	661,422.00	32.7779802	-103.9426152
FTP: 2085' FNL & 2538' - plan hits target center - Point	0.00	0.00	7,730.3	253.8	-263.0	646,982.78	661,324.00	32.7779806	-103.9429341
BHL: 2085' FNL & 100' F - plan hits target center - Point	0.00	0.00	7,808.0	236.0	-7,981.0	646,965.00	653,606.00	32.7780075	-103.9680458
PPP2: 2085' FNL & 0' Ft - plan hits target center - Point	0.00	0.00	7,885.7	247.9	-2,803.0	646,976.93	658,784.00	32.7779900	-103.9511984
LP: 2085' FNL & 2151' F - plan hits target center - Point	0.00	0.01	7,918.0	252.9	-649.7	646,981.90	660,937.30	32.7779821	-103.9441923

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### 1. Geologic Formations

TVD of target	7918'	Pilot hole depth	NA
MD at TD:	15,544'	Deepest expected fresh water:	300'

#### Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		· · · · · · · · · · · · · · · · · · ·
Rustler	420	Water	
Top of Salt	615		
Castile			
Base Salt	1505		
Yates	1685	Oil/Gas	
Seven Rivers	2045	Oil/Gas	
Queen	2640	Oil/Gas	
Grayburg	2830		
San Andres	3505	Oil/Gas	
Bone Spring	4875	Oil/Gas	
1 <sup>st</sup> Bone Spring Sand	6905		
2 <sup>nd</sup> Bone Spring Sand	7450	Target Zone	
3 <sup>rd</sup> Bone Spring Sand			
Abo			
Wolfcamp		Will Not Penetrate	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From ,	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	500'	13.375"	48	H40	STC	3.37	7.56	13.42	22.54
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.30	4.11
12.25"	3453'	3775'	9.625"	40	J55	LTC	1.31	2.01	40.37	48.91
8.75"	0'	8211'	7"	26	HCP110	LTC	1.89	2.57	2.97	3.89
6.125"	7454'	15,544'	4.5"	13.5	P110	LTC	2.59	3.01	3.09	3.86
В	LM Minii	mum Safet	y 1.125	1	1.6 Dr	y 1.6 D	ry			
		Facto	or	.	1.8 We	et   1.8 V	Vet			

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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
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 <sup>rd</sup> string cement tied back	
500' into previous casing?	
	45 52 54 54 E
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
AND THE RESERVE OF THE PROPERTY OF THE PROPERT	
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?	

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

€ 2 Jan - 1 1 2 Jan - 1 2				- Table 1	1,	19	14.7	**
Is well located in crit	ical Cave/Kars	st?						N
If yes, are there th	ree strings cen	nented to surfac	e?					

#### 3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H <sub>2</sub> 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	205	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	595	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	195	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	330	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

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

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	3575'	25%
Liner	7454'	25%

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

#### 4. Pressure Control Equipment

_		 		
	Variance: None			

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type		Tested to:
			Annular	X	1500#
			Blind Ram	X	
12-1/4"	13-5/8"	3M	Pipe Ram	X	2000#
			Double Ram		3000#
			Other*		

<sup>\*</sup>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

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

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.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

N Are anchors required by manufacturer?

Y A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

• Provide description here

See attached schematic.

#### 5. Mud Program

T	ΫD	Туре	Weight (ppg)	Viscosity	Water Loss
From					
0'	500'	FW Gel	8.6-8.8	28-34	N/C
500'	3775'	Saturated Brine	10.0	28-34	N/C
3775'	7441'	Cut Brine	8.6-9.7	28-34	N/C
7441'	7918'	FW w/ Polymer	8.6-10	30-40	<20cc

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	Visual Monitoring
of fluid?	

#### 6. Logging and Testing Procedures

Logg	ing, Coring and Testing.
X	Will run GR/CNL from KOP (7454') 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

Addi	tional logs planned	Interval
X	Gamma Ray	7454' (KOP) to TD

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

Density	
CBL	
Mud log	
PEX	

#### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4118 psi
Abnormal Temperature	No

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

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

	H2S is present	
X	H2S Plan attached	

#### 8. Other facets of operation

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

Attacl	hments	
D	Directional	Plan

SL: 2340' FNL & 2475' FEL, Sec 2 BHL: 2085' FNL & 100' FWL, Sec 3

\_\_\_ Other, describe



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

SUPO Data Report

05/20/2019

APD ID: 10400030420

Submission Date: 08/15/2018

Highlighted data reflects the most

recent changes

Well Name: LOCO HILLS 2/3 B2FE FED COM

Operator Name: MEWBOURNE OIL COMPANY

Well Number: 1H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

#### **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

LocoHills2\_3B2FEFedCom1H\_existingroadmap\_20180521141347.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

#### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

#### **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

Attach Well map:

LocoHills2 3B2FEFedCom1H existingwellmap 20180521141433.pdf

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

**Existing Wells description:** 

#### Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

**Production Facilities description:** a. All permanent, lasting more than 6 months, above ground structures including but not limited to pumpjacks, storage tanks, pipeline risers, meter housing, etc. that are not subject to safety requirements will be painted a non-reflective paint color that blends in with the surrounding landscape. The paint color will be one of the colors from the BLM Standard Environmental Colors chart selected by the BLM authorized officer. b. All proposed production facilities that are located on the well pad will be strategically placed to allow for maximum interim reclamation, recontouring, and revegetation of the well location. c. Production from the proposed well will be located on the East edge of location. d. If any plans change regarding the production facility or other infrastructure (pipeline, electric line, etc.), we will submit a sundry notice or right of way (if applicable) prior to installation of construction. e. An electric line will be applied for through a sundry notice or BLM right of way at a later date.

Water source type: IRRIGATION

Source longitude: -103.53552

Water source type: IRRIGATION

**Production Facilities map:** 

LocoHills2\_3B2FEFedCom1H\_productionfacilitymap 20180521141449.pdf

#### Section 5 - Location and Types of Water Supply

#### **Water Source Table**

Water source use type: CAMP USE, DUST CONTROL,

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

**CASING** 

Describe type:

Source latitude: 32.464592

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 1940 Source volume (acre-feet): 0.2500526

Source volume (gal): 81480

Water source use type: DUST CONTROL,

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type: Source longitude: -103.902504

Source latitude: 32.71228

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 1940

Source volume (acre-feet): 0.2500526

Source volume (gal): 81480

Water source and transportation map:

LocoHills2\_3B2FEFedCom1H\_watersourceandtransmap\_20180521141506.pdf

Water source comments:

New water well? NO

#### **New Water Well Info**

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

**Aquifer comments:** 

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

**Drilling method:** 

**Drill material:** 

**Grout material:** 

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

**Completion Method:** 

Water well additional information:

State appropriation permit:

Additional information attachment:

#### **Section 6 - Construction Materials**

Construction Materials description: Caliche - BOTH SOURCES SHOWN ON ONE MAP

**Construction Materials source location attachment:** 

LocoHills2\_3B2FEFedCom1H\_calichesourceandtransmap 20180521141555.pdf

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

#### **Section 7 - Methods for Handling Waste**

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940

barrels

Waste disposal frequency: One Time Only

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

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

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

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

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500

gallons

Waste disposal frequency: Weekly

Safe containment description: 2,000 gallon plastic container

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500

pounds

Waste disposal frequency: One Time Only

Safe containment description: Enclosed trash trailer

Safe containmant attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

#### **Cuttings Area**

**Cuttings Area being used? NO** 

Are you storing cuttings on location? NO

**Description of cuttings location** 

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: NO

**Ancillary Facilities attachment:** 

Comments:

**Section 9 - Well Site Layout** 

Well Site Layout Diagram:

LocoHills2\_3B2FEFedCom1H\_wellsitelayout\_20180521141621.pdf

**Comments:** 

Well Name: LOCO HILLS 2/3 B2FE FED COM Well Number: 1H

#### Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: LOCO HILLS 2 FED COM

Multiple Well Pad Number: 2

Recontouring attachment:

Drainage/Erosion control construction: None **Drainage/Erosion control reclamation:** None

Well pad proposed disturbance

(acres): 4.132

Road proposed disturbance (acres):

0.53

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 0

Other proposed disturbance (acres): 0

Total proposed disturbance: 4.662

Well pad interim reclamation (acres): Well pad long term disturbance

Road interim reclamation (acres): 0

Powerline interim reclamation (acres): Powerline long term disturbance

Other interim reclamation (acres): 0

Total interim reclamation: 1,314

(acres): 2.818

Road long term disturbance (acres): 0

(acres): 0

Pipeline interim reclamation (acres): 0 Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres): 0

Total long term disturbance: 2.818

Disturbance Comments: In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging. Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

**Existing Vegetation Community at the road attachment:** 

Existing Vegetation Community at the pipeline: NA

**Existing Vegetation Community at the pipeline attachment:** 

Existing Vegetation Community at other disturbances: NA

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

#### **Seed Management**

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

**Seed Summary** 

**Seed Type** 

Pounds/Acre

Total pounds/Acre:

#### Seed reclamation attachment:

#### **Operator Contact/Responsible Official Contact Info**

First Name: Bradley

Last Name: Bishop

Phone: (575)393-5905

Email: bbishop@mewbourne.com

**Seedbed prep:** Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Seed BMP: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

**Seed method:** drilling or broadcasting seed over entire reclaimed area.

Eviation invasive anadica? NO

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

Existing invasive species treatment description:

**Existing invasive species treatment attachment:** 

Weed treatment plan description: NA

Weed treatment plan attachment:

**Monitoring plan description:** vii. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion and invasive/noxious weeds are controlled.

Monitoring plan attachment:

Success standards: regrowth within 1 full growing season of reclamation.

Pit closure description: NA

Pit closure attachment:

#### **Section 11 - Surface Ownership**

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: STATE GOVERNMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

State Local Office: ARTESIA NM

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS Ranger District:** 

Operator Name: MEWBOURNE OIL COMPANY Well Name: LOCO HILLS 2/3 B2FE FED COM	Well Number: 1H
Disturbance type: EXISTING ACCESS ROAD	
Describe:	
Surface Owner: STATE GOVERNMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
State Local Office: ARTESIA NM	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:
Disturbance type: WELL PAD	
Disturbance type: WELL PAD  Describe:	
Describe: Surface Owner: STATE GOVERNMENT	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description:	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office:	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office:	
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Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office:	
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Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: ARTESIA NM Military Local Office:	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: ARTESIA NM Military Local Office: USFWS Local Office:	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: ARTESIA NM Military Local Office:	
Describe: Surface Owner: STATE GOVERNMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: ARTESIA NM Military Local Office: USFWS Local Office:	

Well Name: LOCO HILLS 2/3 B2FE FED COM

Well Number: 1H

#### **Section 12 - Other Information**

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

#### **SUPO Additional Information:**

Use a previously conducted onsite? YES

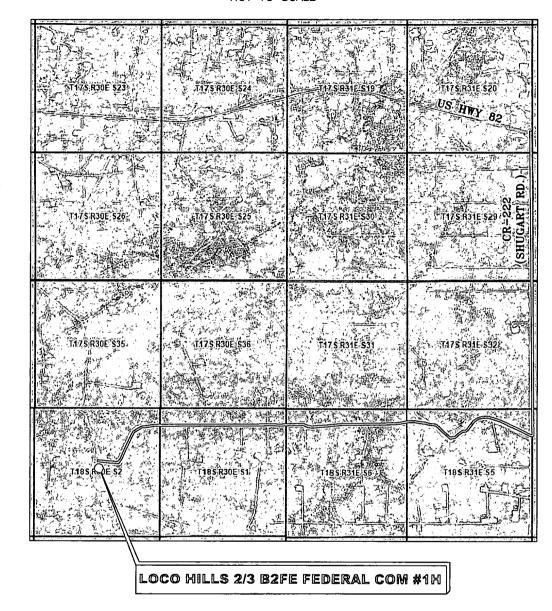
**Previous Onsite information:** APR 13 2018 Met with BLM & RRC surveying & staked location @ location 2025' FNL & 2475' FEL, Sec 2, T18S, R30E, Eddy Co., NM. This location was unacceptable due to overhead electric line. Moved location to 2340' FNL & 2475' FEL, Sec 2, T18S R30E, Eddy Co., NM. This appears to be a drillable location. (Elevation @ 3623'). Topsoil will be stockpiled on South edge of well pad. Location is 400' x 450'. Existing lease road is on NE edge of well pad. GPS coordinates: 32.7772792, -103.9420822 (NAD 83)

#### **Other SUPO Attachment**

LocoHills2\_3B2FEFedCom1H\_gascaptureplan\_20180521141907.pdf LocoHills2\_3B2FEFedCom1H\_interimreclamationdiagram\_20180521141922.pdf

## VICINITY MAP

NOT TO SCALE



SECTION 2, TWP. 18 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 2340' FNL & 2475' FEL

LEASE: Loco Hills 2/3 B2FE Federal Com ELEVATION: 3623'

WELL NO.: 1H

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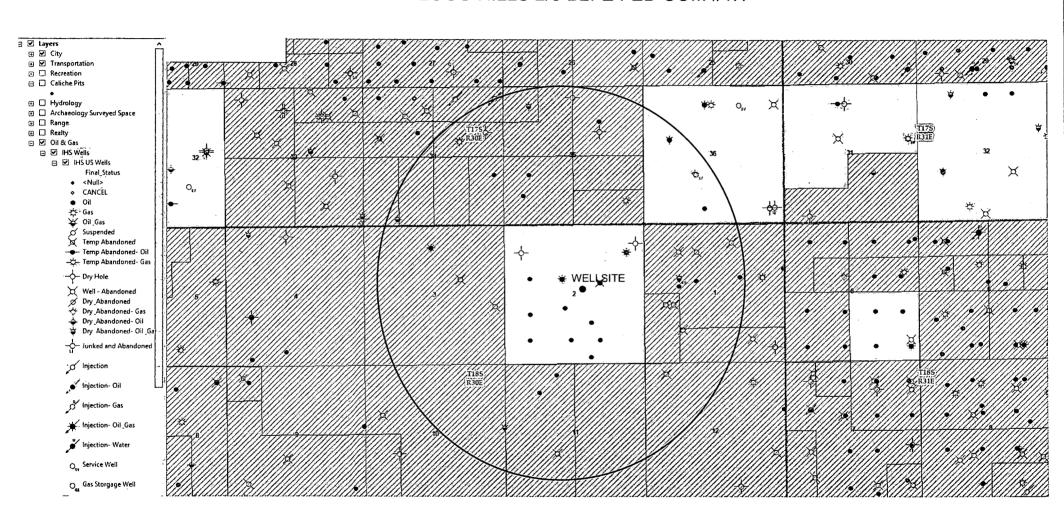
NO. REVISION DATE JOB NO.: LS1804429 DWG. NO.: 1804429VM



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

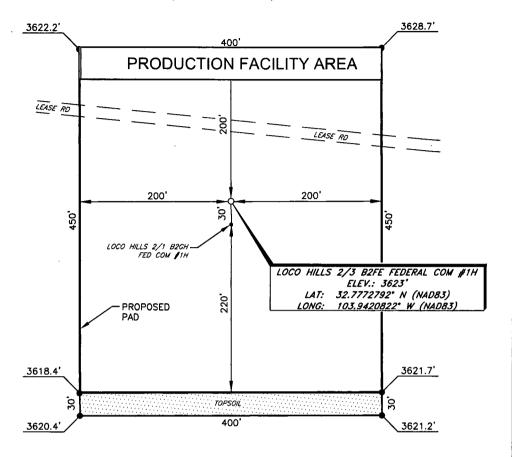
SCALE: 1" = 1000' DATE: 4-04-2018 SURVEYED BY: ML/TF DRAWN BY: LPS APPROVED BY: RMH SHEET: 1 OF 1

## EXISTING WELL MAP LOCO HILLS 2/3 B2FE FED COM #1H



#### MEWBOURNE OIL COMPANY LOCO HILLS 2/3 B2FE FEDERAL COM #1H (2340' FNL & 2475' FEL) SECTION 2, T18S, R30E

N. M. P. M., EDDY COUNTY, NEW MEXICO



#### DIRECTIONS TO LOCATION

From the intersection of US HWY 82 and CR-222 (Shugart Rd.): Go South on CR-222 approx. 2.4 miles to a lease road on the right; Turn right and go West approx. 0.9 miles to a "Y" in road; Stay left at "Y" and continue West approx. 2.3 miles to a curve to the left; Turn left and go Southwest approx. 0.3 miles to a curve to the right; Turn right and go West approx. 0.1 miles to location on the left.

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

100 MAD BJ GRID - NM EAST HOUSET M. + DISTANCES ARE GROUND ROBERT M. HOWELL BEARINGS ARE Howell NM PS 19680

4/09/16 TUSONAL SUF

SCALE: 1" = 100' DATE: 4-04-2018 SURVEYED BY: ML/TF DRAWN BY: LPS APPROVED BY: RMH SHEET: 1 OF 1

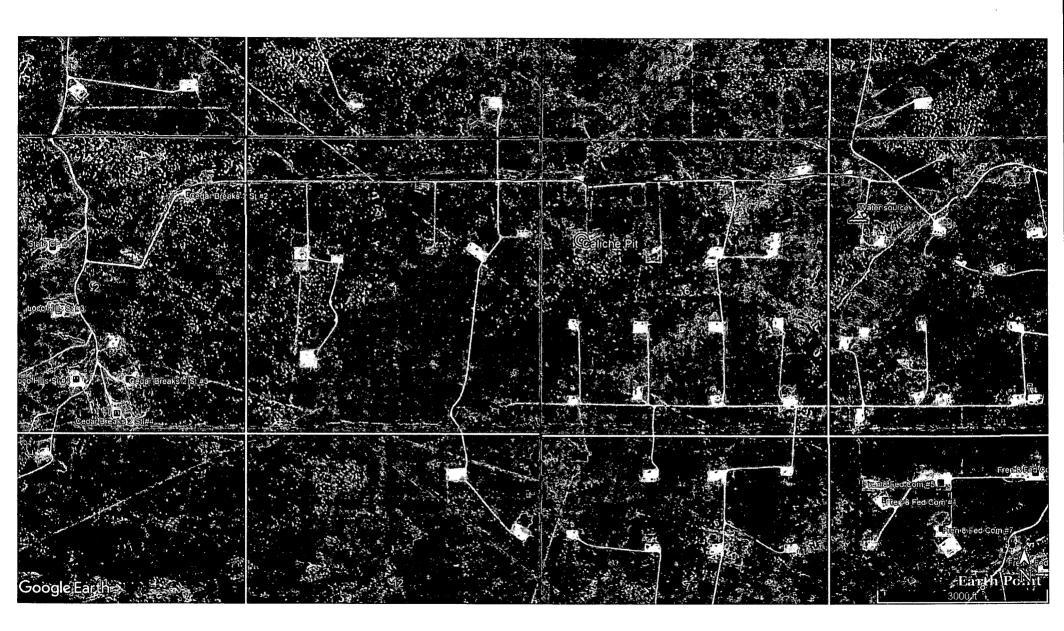
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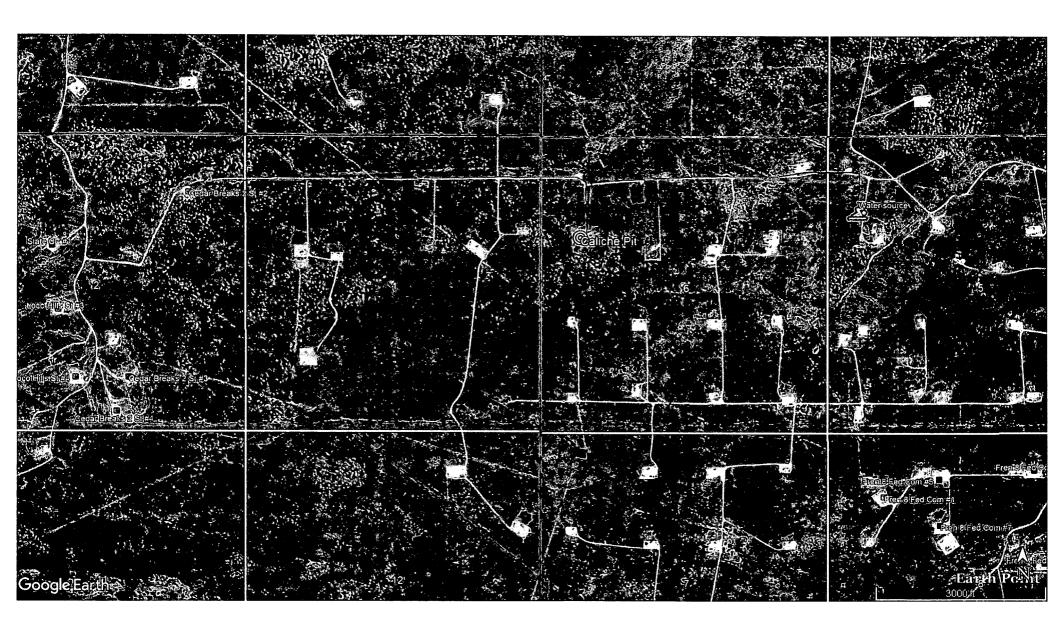
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REVISION DATE DWG. NO.: 1804429PAD

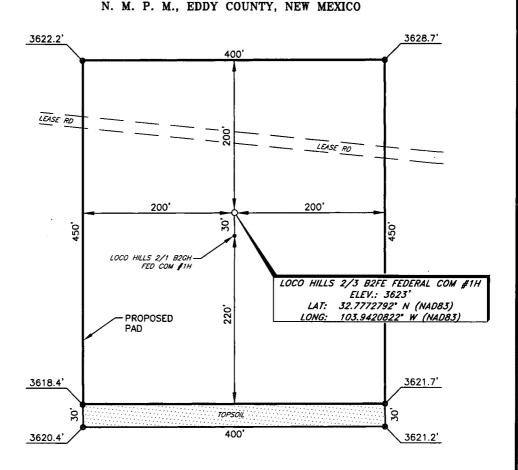
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(575) 964-8200 308 W. BROADWAY ST., HOBBS, NM 88240





# MEWBOURNE OIL COMPANY LOCO HILLS 2/3 B2FE FEDERAL COM #1H (2340' FNL & 2475' FEL) SECTION 2, T18S, R30E



#### DIRECTIONS TO LOCATION

From the intersection of US HWY 82 and CR-222 (Shugart Rd.):

Go South on CR-222 approx. 2.4 miles to a lease road on the right;

Turn right and go West approx. 0.9 miles to a "Y" in road;

Stay left at "Y" and continue West approx. 2.3 miles to a curve to the left;

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NAD BY GRID - NM EAST ROBERT M. HOWELT
DISTANCES ARE GROUND ROBERT M. HOWELT NM PS 19680

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SCALE: 1" = 100'

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NO. REVISION DATE

JOB NO.: LS1804429

DWG. NO.: 1804429PAD 308 W. BROA

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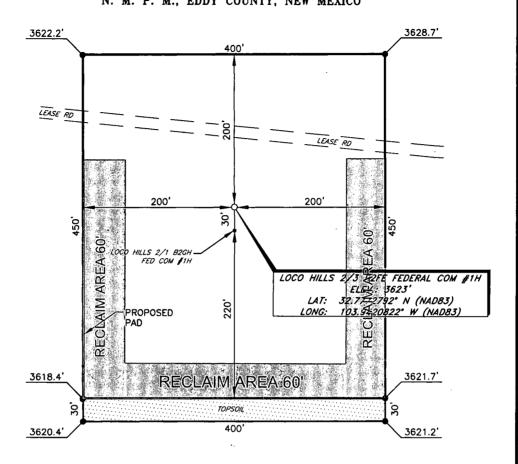
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DATE: 4-04-2018
SURVEYED BY: ML/TF
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1

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

#### MEWBOURNE OIL COMPANY LOCO HILLS 2/3 B2FE FEDERAL COM #1H (2340' FNL & 2475' FEL) SECTION 2, T18S, R30E N. M. P. M., EDDY COUNTY, NEW MEXICO



#### DIRECTIONS TO LOCATION

From the intersection of US HWY 82 and CR-222 (Shugart Rd.): Go South on CR-222 approx. 2.4 miles to a lease road on the right; Turn right and go West approx. 0.9 miles to a "Y" in road; Stay left at "Y" and continue West approx. 2.3 miles to a curve to the left; Turn left and go Southwest approx. 0.3 miles to a curve to the right; Turn right and go West approx. 0.1 miles to location on the left.

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BEARINGS ARE AND EAST KODELT M. TO DISTANCES ARE GROUND ROBERT M. HOWELL Howell NM PS 19680

4/09/18 4/09/18 7 onts Copyright 2016 - All Rights Re-

ON PART

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

REVISION DATE JOB NO.: LS1804429 DWG. NO.: 1804429PAD SCALE: 1" = 100 DATE: 4-04-2018 SURVEYED BY: ML/TF DRAWN BY: LPS APPROVED BY: RMH SHEET: 1 OF 1

M. Hon

19680



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

#### **Section 1 - General**

Would you like to address long-term produced water disposal? NO

#### **Section 2 - Lined Pits**

Would you like to utilize Lined Pit PWD options? NO

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

**Lined pit Monitor attachment:** 

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

### Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

voodid you like to utilize offililed Fit FVVD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachment:	
Unlined pit reclamation description:	
Unlined pit reclamation attachment:	
Unlined pit Monitor description:	
Unlined pit Monitor attachment:	
Do you propose to put the produced water to beneficial use?	
Beneficial use user confirmation:	
Estimated depth of the shallowest aquifer (feet):	
Does the produced water have an annual average Total Dissolve that of the existing water to be protected?	ed Solids (TDS) concentration equal to or less than
TDS lab results:	
Geologic and hydrologic evidence:	
State authorization:	
Unlined Produced Water Pit Estimated percolation:	
Jnlined pit: do you have a reclamation bond for the pit?	
s the reclamation bond a rider under the BLM bond?	
Jnlined pit bond number:	
Jnlined pit bond amount:	•
Additional bond information attachment:	
Section 4 - Injection	
Nould you like to utilize Injection PWD options? NO	

PWD disturbance (acres):

Injection PWD discharge volume (hhl/day).

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

Injection well type:	
Injection well number:	Injection well name:
Assigned injection well API number?	Injection well API number:
Injection well new surface disturbance (acres):	
Minerals protection information:	
Mineral protection attachment:	
Underground Injection Control (UIC) Permit?	
UIC Permit attachment:	
Section 5 - Surface Discharge	
Would you like to utilize Surface Discharge PWD options? NO	)
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Surface discharge PWD discharge volume (bbl/day):	
Surface Discharge NPDES Permit?	
Surface Discharge NPDES Permit attachment:	
Surface Discharge site facilities information:	
Surface discharge site facilities map:	
Section 6 - Other	
Would you like to utilize Other PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Other PWD discharge volume (bbl/day):	
Other PWD type description:	
Other PWD type attachment:	
Have other regulatory requirements been met?	
Other regulatory requirements attachment:	

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

## Bond Info Data Report

#### **Bond Information**

Federal/Indian APD: FED

**BLM Bond number: NM1693** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

**BLM** reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

**Reclamation bond rider amount:** 

Additional reclamation bond information attachment: