HOBBS OCD

SECRETARY'S POTASH

17-121

Form 3160-3
(March 2012)

JUN 16 2017

RECEIVED

OCD Hobbs

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
NMNM 85933

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. (318085)
BILBREY 34 27 B2MD FED COM 1H

2. Name of Operator MEWBOURNE OIL COMPANY (14744)

9. API Well No.
30-025-43872

3a. Address
PO Box 5270 Hobbs NM 88240

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

10. Field and Pool, or Exploratory (53580)
SALT LAKE; BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWSW / 270 FSL / 405 FWL / LAT 32.4287121 / LONG -103.6698685
At proposed prod. zone NWNW / 330 FNL / 330 FWL / LAT 32.4561199 / LONG -103.6698604

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 34 / T21S / R32E / NMP

14. Distance in miles and direction from nearest town or post office*
20 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
185 feet

16. No. of acres in lease
160

17. Spacing Unit dedicated to this well
152.8

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
330 feet

19. Proposed Depth
10702 feet / 20543 feet

20. BLM/BIA Bond No. on file
FED: NM1693

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3780 feet

22. Approximate date work will start*
08/16/2016

23. Estimated duration
60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Bradley Bishop / Ph: (575)393-5905	10/19/2016

Title
Regulatory

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	06/07/2017

Title	Office
Supervisor Multiple Resources	HOBBS

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

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

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

KZ
06/06/17

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
CARLSBAD, NEW MEXICO 88220

In Reply
Refer To:
3160 (NMP0201)
NMNM-86710
NMNM-85933
NMNM-86710
NMNM-114819

Memorandum

To: Manager, Carlsbad Field Office (NMP0201)

From: Division of Land and Minerals (NMP0220)

Subject: Application for Permit to Drill

Applicant:	**Mewbourne Oil Company**
Lease:	NMNM – 86710 NMNM – 85933 NMNM – 63019 NMNM – 114819
Well Name:	**Bilbrey 34 B2MD Federal Com 1H**
Surface Location:	185' FSL & 405' FWL T21S, R32E: Sec. 34 NMNM-86710 (Fee Surface)
Bottom Hole Location:	330' FNL & 330' FWL T21S, R32E: Sec. 27 NMNM-114819
Well Type:	Oil and Gas Well; TVD: 10,702'; MD: 20,543'
Producing Formation:	2nd Bone Spring

Approval Recommendation

Objective

The APD was evaluated with respect to the following lease stipulations as stated in the Secretary's 2012 Potash Order.

1. Drilling for oil and gas shall be permitted only in the event that the lessee establishes to the satisfaction of the authorized officer, Bureau of Land Management, that such will not interfere with the mining and recovery of potash deposits (Section III A 1).
2. No Wells shall be drilled for oil or gas at a location which, in the opinion of the authorized officer, would result in undue waste of potash deposits or constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits. (Section III A 2)
3. When the authorized officer, determines that unitization is necessary for orderly oil and gas development and proper protection of potash deposits, no well shall be drilled for oil or gas

except pursuant to a unit plan approved by the authorized officer. (Section III A 3)

4. The drilling or the abandonment of any well on said lease shall be in accordance with applicable oil and gas operating regulations, including such requirements as the authorized officer may prescribe as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits. (Section III A 4)
5. In taking any action under Part A, Items 1, 2, 3, and 4 of this Order, the authorized officer shall take into consideration the applicable rules and regulations of the Oil Conservation Division of the State of New Mexico.

New Objectives

1. It is the intent of the Department of the Interior to administer oil and gas operations through the Designated Potash Area in a manner which promotes safe, orderly co-development of oil, gas, and potash resources. It is the policy of the Department of the Interior to deny approval of most applications for permits to drill oil and gas wells from surface locations within the Designated Potash Area. Three exceptions to this policy will be permitted if the drilling will occur under the following conditions from:

    a. A Drilling Island associated with a Development Area established under this Order or a Drilling Island established under a prior Order;
    b. A Barren Area and the Authorized Officer determines that such operations will not adversely affect active or planned potash mining operations in the immediate vicinity of the proposed drill-site; or
    c. A Drilling Island, not covered by (a) above, or single well site established under this Order by the approval and in the sole discretion of the Authorized Officer, provided that such site was jointly recommended to the Authorized Officer by the oil and gas lessee(s) and the nearest potash lessee(s).

2. In taking any action under Section 6.e. of this Order, the Authorized Officer will take into consideration the applicable rules and regulations of the NMOCD.
3. The Authorized Officer will make full use of his/her authorities wherever necessary or advisable to require unitization and/or communitization pursuant to the regulations in 43CFR Subparts 3105 and 3180.
4. In implementing this Order, the BLM is authorized to exercise its discretion through any and all appropriate means, including rulemaking, notices to lessees, and orders of the Authorized Officer.

Chronology and Data

The APD was evaluated using all the pertinent information and data available at the date of the application. The information and data pertinent to this decision are:

1. The area was included within the Secretary's Potash Area on May 11, 1965.
2. Oil and gas lease NMNM-86710, NMNM-85933, NMNM-86710 and NMNM-114819 were issued respectively on September 1, 1971, December 1, 1990, September 1, 1985 and July 1, 1973.
3. The Application for Permit to Drill (APD) was received on October 19, 2016.
4. The proposed well will be horizontally drilled with a total vertical depth of 10,702 feet.
5. The proposed well is not within the potash enclave.
6. The proposed well is not leased for potassium.
7. The proposed well is not within one mile of a Three Year Mine Plan.
8. The proposed well is not within one mile of open mine workings.
9. The proposed well does not interfere with access to potash ore deposits.
10. The proposed well is not in a known barren area.

11. The proposed well casing requirements will have two casing strings cemented to surface.
12. The proposed location is a Drilling Island associated with a Development Area established under this Order.

Rationale:

Buffer Zones Established by the BLM - Buffer zones of ¼ mile for oil wells and ½ mile for gas wells have been established in the Secretary's Potash Order of 2012. These Buffer Zones will stay in effect until such time as revised distances are adopted by the BLM Director or other BLM official, as delegated. The Director will base revised Buffer Zones on science, engineering, and new technology and will consider comments and reports from the Joint Industry Technical Committee and other interested parties in adopting any revisions.

The proposed well is within established oil and gas well buffer zone.

Base of Second Bone Spring Sandstone General – The BLM differentiates between shallow and deep wells with respect to the base of the Second Bone Spring Sandstone of the Leonardian Group, correlated from existing wells, for the respective area within the Secretary's Potash Area. The BLM generally defines shallow and deep zones for oil and gas as:

> **Shallow Zone** - all formations above the base of the Second Bone Spring Sandstone as defined by the BLM geological report for the respective area within the Secretary's Potash Area.
>
> **Deep Zone** - all formations below the base of the Second Bone Spring Sandstone as defined by the BLM geological report for the respective area within the Secretary's Potash Area.

The BLM, at its discretion, uses the base of the Second Bone Spring Sandstone of the Leonardian Group as a liberally defined demarcation between shallow oil wells and deep gas wells. The Second Bone Spring Sandstone is often produced for oil at or very near the bottom of the formation. The BLM allows wells to be drilled 50 feet below the base of the Second Bone Spring Sandstone to accommodate logging the zones at the base of the formation, and still be classified as shallow oil wells.

The proposed location is to be horizontally drilled to a total vertical depth of 10,702 feet. The base of the Second Bone Spring Sandstone is given in the BLM's geological report as 10,935 feet. The proposed well is 233 feet deeper than the base of the Second Bone Spring Sandstone and is therefore classified as "shallow" by BLM definitions.

Development Areas, Drill Islands & Three Year Mine Plans: - The Secretary's 2012 Order allows for the establishment of Development Areas and Drilling Islands within Development Areas. A Development Area established by the BLM within the Designated Potash Area in consideration of appropriate oil and gas technology such that wells can be drilled from a Drilling Island capable of effectively extracting oil and gas resources while managing the impact on potash resources. Each Development Area will typically have only one Drilling Island, subject to narrow exceptions based on specific facts and circumstances. All new oil and gas wells that penetrate the potash formations within a Development Area will be drilled from the Drilling Island (s) associated with that Development Area. The boundaries of each Development Area will be determined in conformity with Section 6.e. (2).

The Bilbrey 34 B2MD Federal Com 1H will be drilled in the Bilbrey 34/27 Development Area (DA) (See Attached – Location Map). The Bilbrey 34/27 DA encompasses all of Sections 27 and 34 in T21S R32E.

Drilling Islands usually associated with and within a Development Area, from which all new drilling of vertical, directional, or horizontal wells that newly penetrate the potash formations can be performed in order to support the development of oil and gas resources. The size and shape of a Drilling Island defines the area where wellbore penetrations of the potash formations will be allowed; this area is to be small as practical to allow effective oil and gas development while managing impacts on potash.

No islands shall be established within one mile of any area where approved mining operations will be conducted within three years. Three-year mine plans are filed to make this determination.

A three-year mine plan has been filed by Intrepid for CY 2017. Intrepid's Three Year Mine Plan is approximately 5.7 miles northwest of proposed location.

The Bilbrey 34 B2MD Federal Com 1H will be drilled from the Bilbrey 34/27 Drill Island. The Bilbrey 34/27 Drill Island extends one mile across the southern section line and 600 feet from the southern section line in Section 34 in T21S 32E (See Attached Map).

Open Mine Workings - The proposed location is not within one mile of open mine workings. Intrepid's mine workings are located approximately 4.2 miles northwest of the proposed location.

In areas where there are no mineable ore reserves, or the reserves have been completely mined and no mining is being conducted in that mine, drilling is allowed no closer to open mine workings than ½ mile for deep wells and ¼ mile for shallow wells.

Access to Measured Potash Ore Reserves - The proposed location is not in an area which if drilled will limit access to currently defined Measured Ore reserves.

Measured Potash Ore Reserves - The proposed location is not within currently defined Measured Ore reserves.

In the area of the proposed location the Tenth Ore Zone is defined by the core holes listed below.

Core-Hole	10^{th} Ore Zone Thickness(ft)	$\%K_20$ as Sylvite
P-135	4.0	11.2
P-157	2.5	17.63
IP-034	5.9	Barren

The above information is considered confidential and shall not be disclosed

Protests or Objections – The proposed location has not been protested by an affected party.

Casing Requirements- The Authorized Officer shall take into consideration the applicable rules and regulations of the Oil Conservation Division of the State of New Mexico as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits.

The Casing and Cementing requirements in the Secretary's Potash Area are delineated by whether the proposed well is inside or outside of the R-111-P boundary.

Secretary's Potash—Casing design is for three strings of casing. The first two strings, which protect the fresh water and the salt formation, are cemented to surface. The intermediate casing may be set deeper than the base of the salt. The requirement for the third casing string is varying tie-back a minimum of 500 feet into the next larger casing string.

R-111-P—Casing design is for three or four strings of casing. With three casing strings, all will be cemented to surface. With four casing strings, the fourth casing string will have varying tie-back of at least 500 feet into the next larger casing. The first casing protects surface water; the second casing is a salt string and is set within 100 to 600 feet of the salt base. The third and possibly fourth casings are production casings.

The proposed well is not within the R-111-P and will not require R-111-P casing design. The surface

casing will be set into the first competent formation and above the salt and cemented circulated to surface. The intermediate casing will be set to protect the salt formation with cement circulated to surface.

Determination

Considering the above analysis, it has been determined that the drilling of this well satisfies all conditions of the Secretary's 2012 Potash Order because it is a Drilling Island associated with a Development Area established under this Order. The drilling of the proposed well is in accordance with applicable oil and gas operating regulations, including such requirements as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits. Drilling at this location will not result in undue waste of potash deposits, nor will it constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits. Unitization is not applicable because the adjacent lease is open to drilling.

Recommendation of Bilbrey 34 B2MD Federal Com 1H

The APD was evaluated with consideration of the 2012 Potash Order and is recommended for **approval** at the requested location. A well drilled for oil and gas at the proposed location will not result in the undue waste of potash deposits, and will not constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits.

See Attachments:

Date: March 13, 2017

James S. Rutley
Geologist,
Carlsbad Field Office

Concurrence of Recommendation of Bilbrey 34 B2MD Federal Com 1H

Date: 06/07/17

Acting Field Manager
Carlsbad Field Office

APD ID: 10400002814
Operator Name: MEWBOURNE OIL COMPANY
Well Name: BILBREY 34/27 B2MD FED COM
Well Type: OIL WELL

Submission Date: 10/19/2016
Federal/Indian APD: FED
Well Number: 1H
Well Work Type: Drill

Highlight All Changes

Application

Section 1 - General

APD ID: 10400002814
Tie to previous NOS?
Submission Date: 10/19/2016
BLM Office: HOBBS
User: Bradley Bishop
Title: Regulatory
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM 85933
Lease Acres: 160
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:
Keep application confidential? YES

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY
Operator Address: PO Box 5270
Zip: 88240
Operator PO Box:
Operator City: Hobbs
State: NM
Operator Phone: (575)393-5905
Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO
Mater Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** PALMILLO EAST BONE SPRING OIL **Pool Name:**

Is the proposed well in an area containing other mineral resources? POTASH

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: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: HORIZONTAL **Number of Legs:**

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: 152.8 Acres

Well plat: Bilbrey 34 27 B2MD Federal Com 1H_Well Plat_10-19-2016.pdf

Well work start Date: 08/16/2016 **Duration:** 60 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 1

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4287121	**Longitude:** -103.6698685	
SHL	**Elevation:** 3780	**MD:** 0	**TVD:** 0
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM86710	
	NS-Foot: 270	**NS Indicator:** FSL	
	EW-Foot: 405	**EW Indicator:** FWL	
	Twsp: 21S	**Range:** 32E	**Section:** 34
	Aliquot: SWSW	**Lot:**	**Tract:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4287121	**Longitude:** -103.6698685	
KOP	**Elevation:** -6520	**MD:** 10300	**TVD:** 10300
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM86710	
	NS-Foot: 270	**NS Indicator:** FSL	
	EW-Foot: 405	**EW Indicator:** FWL	
	Twsp: 21S	**Range:** 32E	**Section:** 34
	Aliquot: SWSW	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4287533	**Longitude:** -103.6693772	
PPP	**Elevation:** -6751	**MD:** 10541	**TVD:** 10531
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM86710	
	NS-Foot: 330	**NS Indicator:** FSL	
	EW-Foot: 405	**EW Indicator:** FWL	
	Twsp: 18S	**Range:** 29E	**Section:** 34
	Aliquot: SWSW	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4561199	**Longitude:** -103.6698604	
EXIT	**Elevation:** -6922	**MD:** 20543	**TVD:** 10702
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM114819	
	NS-Foot: 330	**NS Indicator:** FNL	
	EW-Foot: 330	**EW Indicator:** FWL	
	Twsp: 21S	**Range:** 32E	**Section:** 27
	Aliquot: NWNW	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4561199	**Longitude:** -103.6698604	
BHL	**Elevation:** -6922	**MD:** 20543	**TVD:** 10702
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM114819	
	NS-Foot: 330	**NS Indicator:** FNL	
	EW-Foot: 330	**EW Indicator:** FWL	

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Twsp: 21S **Range:** 32E **Section:** 27

Aliquot: NWNW **Lot:** **Tract:**

Drilling Plan

Section 1 - Geologic Formations

ID: Surface formation **Name:** UNKNOWN

Lithology(ies):

Elevation: 3780 **True Vertical Depth:** 27 **Measured Depth:** 27

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1 **Name:** RUSTLER

Lithology(ies):

DOLOMITE

ANHYDRITE

Elevation: 2587 **True Vertical Depth:** 810 **Measured Depth:** 810

Mineral Resource(s):

USEABLE WATER

Is this a producing formation? N

ID: Formation 2 **Name:** TOP SALT

Lithology(ies):

SALT

Elevation: 2630 **True Vertical Depth:** 1150 **Measured Depth:** 1150

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 3 **Name:** BOTTOM SALT

Lithology(ies):

SALT

Elevation: 1040 **True Vertical Depth:** 2740 **Measured Depth:** 2740

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 4 **Name:** DELAWARE

Lithology(ies):

LIMESTONE

Elevation: -1070 **True Vertical Depth:** 4850 **Measured Depth:** 4850

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 5 **Name:** BELL CANYON

Lithology(ies):

SANDSTONE

Elevation: -1180 **True Vertical Depth:** 4960 **Measured Depth:** 4960

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 6 **Name:** CHERRY CANYON

Lithology(ies):

SANDSTONE

Elevation: -2080 **True Vertical Depth:** 5860 **Measured Depth:** 5860

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 7 **Name:** MANZANITA

Lithology(ies):

LIMESTONE

Elevation: -2240 **True Vertical Depth:** 6020 **Measured Depth:** 6020

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 8 **Name:** BRUSHY CANYON

Lithology(ies):

SANDSTONE

Elevation: -3430 **True Vertical Depth:** 7210 **Measured Depth:** 7210

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 9 **Name:** BONE SPRING LIME

Lithology(ies):

LIMESTONE

SHALE

Elevation: -5020 **True Vertical Depth:** 8800 **Measured Depth:** 8800

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 10 **Name:** BONE SPRING 1ST

Lithology(ies):

SANDSTONE

Elevation: -6080 **True Vertical Depth:** 9860 **Measured Depth:** 9860

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 11 **Name:** BONE SPRING 2ND

Lithology(ies):

SANDSTONE

Elevation: -6720 **True Vertical Depth:** 10500 **Measured Depth:** 10500

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M **Rating Depth:** 4775

Equipment: Annular

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: Test Annular to 1500#.

Choke Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_3M Surface BOPE Choke Diagram_10-18-2016.pdf

BOP Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_13.625 Inch 3M Surface BOPE Schematic_10-18-2016.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Pressure Rating (PSI): 5M **Rating Depth:** 11053

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: Test Annular to 2500# Test Rams to 5000#

Choke Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_5M BOPE Choke Diagram_10-18-2016.pdf

BOP Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_5M BOPE Schematic_10-18-2016.pdf

---

Pressure Rating (PSI): 5M **Rating Depth:** 20550

Equipment: Annular, Pipe Rams, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold

Testing Procedure: Test annular to 2500#. Test rams to 5000#.

Choke Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_5M BOPE Choke Diagram_10-18-2016.pdf

BOP Diagram Attachment:

Bilbrey 34-27 B2MD Fed Com 1H_5M BOPE Schematic_10-18-2016.pdf

---

Section 3 - Casing

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

String Type: SURFACE **Other String Type:**

Hole Size: 17.5

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6922

Bottom setting depth MD: 835 **Bottom setting depth TVD:** 835

Bottom setting depth MSL: -7757

Calculated casing length MD: 835

Casing Size: 13.375 **Other Size**

Grade: H-40 **Other Grade:**

Weight: 48

Joint Type: STC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.77 **Burst Design Safety Factor:** 3.98

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 8.03

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 13.5

Casing Design Assumptions and Worksheet(s):

Bilbrey 34-27 B2MD Fed Com 1H_Casing Assumptions_10-19-2016.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

String Type: INTERMEDIATE **Other String Type:**

Hole Size: 12.25

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6922

Bottom setting depth MD: 4775 **Bottom setting depth TVD:** 4775

Bottom setting depth MSL: -11697

Calculated casing length MD: 4775

Casing Size: 9.625 **Other Size**

Grade: J-55 **Other Grade:**

Weight: 36

Joint Type: LTC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: Y

Tapered String Spec: Bilbrey 34-27 B2MD Fed Com 1H_TaperedCsg_10-19-2016.pdf

Safety Factors

Collapse Design Safety Factor: 1.13 **Burst Design Safety Factor:** 1.96

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 2.56

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 4.54

Casing Design Assumptions and Worksheet(s):

Bilbrey 34-27 B2MD Fed Com 1H_Casing Assumptions_10-19-2016.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

String Type: PRODUCTION **Other String Type:**

Hole Size: 8.75

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6922

Bottom setting depth MD: 11053 **Bottom setting depth TVD:** 10777

Bottom setting depth MSL: -17699

Calculated casing length MD: 11053

Casing Size: 7.0 **Other Size**

Grade: P-110 **Other Grade:**

Weight: 26

Joint Type: LTC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.46 **Burst Design Safety Factor:** 1.86

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 2.41

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 2.89

Casing Design Assumptions and Worksheet(s):

Bilbrey 34-27 B2MD Fed Com 1H_Casing Assumptions_10-19-2016.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

String Type: LINER **Other String Type:**

Hole Size: 6.125

Top setting depth MD: 10300 **Top setting depth TVD:** 10300

Top setting depth MSL: -17222

Bottom setting depth MD: 20550 **Bottom setting depth TVD:** 10777

Bottom setting depth MSL: -17699

Calculated casing length MD: 10250

Casing Size: 4.5 **Other Size**

Grade: P-110 **Other Grade:**

Weight: 13.5

Joint Type: LTC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.31 **Burst Design Safety Factor:** 1.52

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 2.44

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 3.05

Casing Design Assumptions and Worksheet(s):

Bilbrey 34-27 B2MD Fed Com 1H_Casing Assumptions_10-19-2016.pdf

---

Section 4 - Cement

Casing String Type: SURFACE

Stage Tool Depth:

Lead

Top MD of Segment: 0 **Bottom MD Segment:** 644 **Cement Type:** Class C

Additives: Salt, Gel, Extender, LCM **Quantity (sks):** 425 **Yield (cu.ff./sk):** 2.12

Density: 12.5 **Volume (cu.ft.):** 901 **Percent Excess:** 100

Tail

Top MD of Segment: 644 **Bottom MD Segment:** 835 **Cement Type:** Class C

Additives: Retarder **Quantity (sks):** 200 **Yield (cu.ff./sk):** 1.34

Density: 14.8 **Volume (cu.ft.):** 268 **Percent Excess:** 100

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0 **Bottom MD Segment:** 4120 **Cement Type:** Class C

Additives: Salt, Gel, Extender, LCM **Quantity (sks):** 795 **Yield (cu.ff./sk):** 2.12

Density: 12.5 **Volume (cu.ft.):** 1685 **Percent Excess:** 25

Tail

Top MD of Segment: 4120 **Bottom MD Segment:** 4775 **Cement Type:** Class C

Additives: Retarder **Quantity (sks):** 200 **Yield (cu.ff./sk):** 1.34

Density: 14.8 **Volume (cu.ft.):** 268 **Percent Excess:** 25

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 4275 **Bottom MD Segment:** 8570 **Cement Type:** Class C

Additives: Gel, Retarder, Defoamer, Extender **Quantity (sks):** 385 **Yield (cu.ff./sk):** 2.12

Density: 12.5 **Volume (cu.ft.):** 816 **Percent Excess:** 25

Tail

Top MD of Segment: 8570 **Bottom MD Segment:** 11053 **Cement Type:** Class H

Additives: Retarder, Fluid Loss, Defoamer **Quantity (sks):** 400 **Yield (cu.ff./sk):** 1.18

Density: 15.6 **Volume (cu.ft.):** 472 **Percent Excess:** 25

Casing String Type: LINER

Stage Tool Depth:

Lead

Top MD of Segment: 10300 **Bottom MD Segment:** 20550 **Cement Type:** Class C

Additives: Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent **Quantity (sks):** 415 **Yield (cu.ff./sk):** 2.97

Density: 11.2 **Volume (cu.ft.):** 1232 **Percent Excess:** 25

Tail

Bottom MD Segment: **Cement Type:**

Top MD of Segment: 925 **Quantity (sks):** **Yield (cu.ff./sk):**

Additives: **Volume (cu.ft.):** **Percent Excess:** 25

Density:

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

Describe the mud monitoring system utilized: Visual Monitoring

Circulating Medium Table

Top Depth: 0 **Bottom Depth:** 835

Mud Type: SPUD MUD

Min Weight (lbs./gal.): 8.6 **Max Weight (lbs./gal.):** 8.8

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Top Depth: 835 **Bottom Depth:** 4775

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 10 **Max Weight (lbs./gal.):** 10

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Top Depth: 4775 **Bottom Depth:** 10300

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 8.6 **Max Weight (lbs./gal.):** 9.5

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Top Depth: 10300 **Bottom Depth:** 20550

Mud Type: WATER-BASED MUD

Min Weight (lbs./gal.): 8.6 **Max Weight (lbs./gal.):** 9.5

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (10300') to surface

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

CNL,DS,GR,MWD,MUDLOG

Coring operation description for the well:

None

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5605 **Anticipated Surface Pressure:** 3965.12

Anticipated Bottom Hole Temperature(F): 140

Anticipated abnormal proessures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Bilbrey 34-27 B2MD Fed Com 1H_H2S Plan_10-19-2016.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Bilbrey 34-27 B2MD Fed Com 1H_Dir Plot_10-19-2016.pdf
Bilbrey 34-27 B2MD Fed Com 1H_Dir Plan_10-19-2016.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Other Variance attachment:

Bilbrey 34-27 B2MD Fed Com 1H_Flex Line Specs_10-19-2016.pdf

SUPO

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Bilbrey 34 27 B2MD Federal Com 1H_existing lease road_10-19-2016.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? YES

New Road Map:

Bilbrey 34 27 B2MD Federal Com 1H_new lease road_10-19-2016.pdf

New road type: RESOURCE

Length: 1151 Feet **Width (ft.):** 20

Max slope (%): 3 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: None

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth:

Offsite topsoil source description: Stored onsite, on edge of slope.

Onsite topsoil removal process:

Access other construction information: None

Access miscellaneous information: None

Number of access turnouts: 1 **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Bilbrey 34 27 B2MD Federal Com 1H_existing well map_10-19-2016.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

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 west 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.

Production Facilities map:

Bilbrey 34 27 B2MD Federal Com 1H_productionfacmap_10-19-2016.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

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

Water source type: IRRIGATION

Describe type:

Source longitude: -103.62513

Source latitude: 32.3991

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT,WATER WELL

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3510

Source volume (acre-feet): 0.45241478

Source volume (gal): 147420

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

Water source type: IRRIGATION

Describe type:

Source longitude: -103.66579

Source latitude: 32.430565

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 3510

Source volume (acre-feet): 0.45241478

Source volume (gal): 147420

Water source and transportation map:

Bilbrey 34_27 B2MD Federal Com 1H_watersourceandtransportationmap_12-15-2016.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:

Bilbrey 34_27 B2MD Federal Com 1H_calichesourceandtransportationmap_12-15-2016.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 3510 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

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 containmant attachment:

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

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 FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Bilbrey 34 27 B2MD Federal Com 1H_well site layout_10-19-2016.pdf
Bilbrey 34 27 B2MD Federal Com 1H_well site layout2_10-19-2016.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Wellpad long term disturbance (acres): 1.239

Wellpad short term disturbance (acres): 2.65

Access road long term disturbance (acres): 0.79

Access road short term disturbance (acres): 0

Pipeline long term disturbance (acres): 0.79269975

Pipeline short term disturbance (acres): 0.79269975

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 2.8216996

Total short term disturbance: 3.4426997

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

Existing Vegetation Community at other disturbances attachment:

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

Total pounds/Acre:

Seed Type	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.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Existing invasive species? NO

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: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Fee Owner: Stacey Mills **Fee Owner Address:** PO Box 1358 Loving, NM 88256

Phone: (575)390-2779 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SUA in place.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Fee Owner: Stacey Mills **Fee Owner Address:** PO Box 1358 Loving, NM 88256

Phone: (575)390-2779 **Email:**

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SUA in place

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information: NONE

Use a previously conducted onsite? YES

Previous Onsite information: Met with Tanner Nygren (BLM), WTC Surveying, Christine with Boone Archeology, Stacey Mills & staked location @ 185' FSL & 660' FWL, Sec 34, T21S, R32E, Lea Co. NM. This location was denied due to draw on west edge. Re-staked @ 270' FSL & 405' FWL, Sec 34, T21S, R32E, Lea Co. NM (Elev. @ 3779'). This appears to be a drillable location with pits to the west. Topsoil will be stockpiled on the north 30' wide. Pad will be 340' x 340'. Road will be on the southeast corner heading east. Reclaim 70' on all sides.

Other SUPO Attachment

PWD

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:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD 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 Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral 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:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

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:

Bond Info

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:

Operator Certification

Operator Name: MEWBOURNE OIL COMPANY

Well Name: BILBREY 34/27 B2MD FED COM **Well Number:** 1H

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.

NAME: Bradley Bishop **Signed on:** 10/19/2016

Title: Regulatory

Street Address: PO Box 5270

City: Hobbs **State:** NM **Zip:** 88240

Phone: (575)393-5905

Email address: bbishop@mewbourne.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

Payment Info

Payment

APD Fee Payment Method: PAY.GOV

pay.gov Tracking ID: 25UHJLJO

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed