

SURFACE USE PLAN OF OPERATIONS
MEWBOURNE OIL COMPANY

Red Hills West Unit #010H
330' FNL & 1215' FWL (SHL)
Sec. 10 – T26S-R32E
Lea County, New Mexico

Introduction

This plan is submitted with Form 3160-3, Application for Permit to Drill, Covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

1. Existing Roads

- a. The existing access road route to the proposed project is depicted on Exhibit 3E. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of this surface use plan.
- b. The existing oil and gas roads utilized to access the proposed project will be maintained by crowning, clearing ditches, and fixing potholes. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
- c. Mewbourne Oil Co. will cooperate with other operators in the maintenance of lease roads.

2. New or Reconstructed Access Roads

- a. No new road construction will be needed since the well pad adjoins a sufficient oil and gas road.

3. Location of Existing Wells

- a. Exhibit 4, 4A of the APD depicts all known wells within a one mile radius of the proposed well.

4. Location of Existing and/or Proposed Production Facilities

- 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 on the west side of the well pad.

5. Location and Types of Water

- a. The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as identified above in this surface use plan.

6. Construction Materials

- a. Construction material that will be used to build the well pad and road will be caliche.
- b. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.
- c. Obtaining caliche: One way of obtaining caliche to build locations and roads will be by “turning over” the location. This means, caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to obtaining caliche. Amount of caliche will vary for each pad. The procedure below has been approved by BLM personnel:
 - i. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
 - ii. An approximate 160’ X 160’ area is used within the proposed well site to remove caliche.
 - iii. Subsoil is removed and stockpiled within the surveyed well pad.
 - iv. When caliche is found, material will be stock piled within the pad site to build the location and road.
 - v. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
 - vi. Once well is drilled, the stock piled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced.
 - vii. Neither caliche, nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat.

In the event that no caliche is found onsite, caliche will be hauled in from a BLM, state, or private mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or land.

7. Methods of Handling Waste

- a. The well will be drilled utilizing a closed loop system. Drill cuttings will be properly contained in steel tanks and taken to an NMOCD approved disposal facility.
- b. Drilling fluids and produced oil and water from the well during completion operations will be stored safely in closed containers and disposed of properly in an NMOCD approved disposal facility.
- c. Garbage and trash produced during drilling and completion operations will be collected in trash containers and disposed of properly at a state approved site. All trash on and around the well site will be collected for disposal.
- d. All human waste and grey water from drilling and completion operations will be properly contained and disposed of properly at a disposal facility.
- e. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at a disposal site.

8. Ancillary Facilities

- a. No ancillary facilities will be needed for this proposed project.

9. Well Site Layout

- a. The proposed drilling pad to be built was staked and surveyed by a professional surveyor. The attached survey plat of the well site depicts the drilling pad layout as staked.
- b. A title of a well site diagram is **Exhibit 5**. This diagram depicts the rig layout.
- c. 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.

10. Plans for Surface Reclamation

Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all

trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible.

a. Interim Reclamation (well pad)

- i. Interim reclamation will be performed on the well site after the well is drilled and completed. Exhibit 6 depicts the location and dimensions of the planned interim reclamation for the well site.
- ii. The well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production.
- iii. In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- iv. 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.
- v. 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. 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.
- vi. Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.
- vii. The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion and invasive/noxious weeds are controlled.

b. Final Reclamation (well pad, buried pipelines, etc.)

- i. Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.
- ii. All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- iii. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with

the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

- iv. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture, free of noxious weeds. 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.
- v. Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.
- vi. All unused equipment and structures including pipelines, electric line poles, tanks, etc. that serviced the well will be removed.
- 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.

11. Surface Ownership

- a. The surface ownership of the proposed project is federal.

12. Other Information

- a. No other information is needed at this time.

13. Operator's Representative

- a. Through APD approval, drilling, completion and production operations:

Robin Terrell, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
575-393-5905

Mewbourne Oil Company

PO Box 5270
Hobbs, NM 88241
(575) 393-5905

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.

Executed this 24 day of June, 2014.

Name: Robin Terrell

Signature: Buddy Dicks FOR Robin Terrell

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: Rterrell@mewbourne.com

Form NM 8140-9
(March 2008)
United States Department of the Interior
Bureau of Land Management
New Mexico State Office

Permian Basin Cultural Resource Mitigation Fund

The company shown below has agreed to contribute funding to the Permian Basin Cultural Resource Fund in lieu of being required to conduct a Class III survey for cultural resources associated with their project. This form verifies that the company has elected to have the Bureau of Land Management (BLM) follow the procedures specified within the Memorandum of Agreement (MOA) concerning improved strategies for managing historic properties within the Permian Basin, New Mexico, for the undertaking rather than the Protocol to meet the agency's Section 106 obligations.

Company Name: Mewbourne Oil Company

Address: PO Box 5270
Hobbs, NM 88241


Project description:
280' x 320' location for MOC's Red Hills West Unit #010H.

T. 26S , R. 32E , Section 10 NMPM, Lea County, New Mexico

Amount of contribution: \$ 1507.00

Provisions of the MOA:

- A. No new Class III inventories are required of industry within the Project Area for those projects where industry elects to contribute to the mitigation fund.
- B. The amount of funds contributed was derived from the rate schedule established within Appendix B of the MOA. The amount of the funding contribution acknowledged on this form reflects those rates.
- C. The BLM will utilize the funding to carry out a program of mitigation at high-priority sites whose study is needed to answer key questions identified within the Regional Research Design.
- D. Donating to the fund is voluntary. Industry acknowledges that it is aware it has the right to pay for Class III survey rather than contributing to the mitigation fund, and that it must avoid or fund data recovery at those sites already recorded that are eligible for nomination to the National Register or whose eligibility is unknown and that any such payments are independent of the mitigation funds established by this MOA.
- E. Previously recorded archeological sites determined eligible for nomination to the National Register or whose eligibility remains undetermined must be avoided or mitigated.
- F. If any skeletal remains that might be human or funerary objects are discovered by any activities, the land-use applicant will cease activities in the area of discovery, protect the remains, and notify the BLM within 24 hours. The BLM will determine the appropriate treatment of the remains in consultation with culturally affiliated Indian Tribe(s) and lineal descendants. Applicants will be required to pay for treatment of the cultural items independent and outside of the mitigation fund.



Company-Authorized Officer

6-24-14

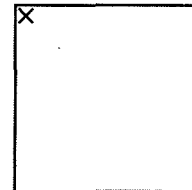
Date

BLM-Authorized Officer

Date



United States Department of the Interior
Bureau of Land Management
Carlsbad Field Office



Refer to: 3160-3

To: AFM, Lands & Minerals, CFO
From: Geologist, CFO
Subject: Geologic Review of Application for Permit to Drill

COPY

Operator: Mewbourne Oil Co
Well Name and Number: Red Hills West Unit-10H
Potash: No
Location: SHL:330'/N.& 1215'/N. SEC010 T026S, R032E.(NWNW)
County Lea Lease Number: NMNM105559 APD Received: 6-30-2014
Ground Level Elevation: 3255 Surface Geology: Qe/Qp-Eolian deposits/Piedmont alluvial deposits
TVD: 9095 MD: 14221 BH Mud Weight: 8.7
BHP: 4115 MASP: 2114

1. Geologic Marker Tops (from reports on surrounding wells):

	Hall Federal 1	Sun Federal 1	Union Federal 1	EXXON FEDERAL	Proposed Well
	3002508254	3002520417	3002523993	#001	Red Hills West
	T26E R32E Sec 10	T26E R32E Sec 4	T26E R32E Sec 3	T26E R32E Sec 9	Unit-10H
	660FNL 660FWL	1980FNL 2310FWL	660FNL 660FWL	1750FSL 400FWL	T026S,
					R032E.(NWNWSEC010
					330'/N.& 1215'/N
					Unit
	Elevation	Elevation	Elevation	Elevation	Elevation
Geologic Marker	Depth	Depth	Depth	Depth	Estimated Depth
Rustler	935	1200	1086	870	920
Top of Salt	1280	-	1570	1230	1270
Lamar	4523	4497	4572	4397	4510
Bell Canyon	4567	4540	4611	4438	4560
Bone Spring Lime	-	-	-	-	8630
1st BS Sand	-	-	-	-	9580

2. Fresh Water Information

a. Fresh Water: 1020

b. Fresh Water Remarks:

According to well data from the New Mexico Office of the State Engineer's Water Rights Reporting System, there are 7 water wells within a six-mile radius of the proposed project. Depth to water ranges from 120 to 405 feet. Usable water can also be found within the Magenta Dolomite Member of the Rustler Formation down to a depth of approximately 1020 feet.

c. Water Basin: Carlsbad Water Basin

3. Recommended Casing Setting Depth

- a. Surface Casing Depth: 1040
- b. Intermediate Casing Depth: 4450
- c. 2nd Interm. Casing Depth: _____
- d. Casing Depth Remarks:

The operator proposes to set surface casing at 960 feet, which will not adequately protect usable water zones. Instead, set casing in the anhydrite just below the base of the Magenta Dolomite at approximately 1040 feet. The location of this project is on the fringe of a large collapse feature in the Rustler, however the closest well (Hall Federal 1) is only 300 feet away, which should provide adequate data control. If salt is encountered, set casing at least 25 feet above the salt. The operator proposes to set intermediate casing at 4450 feet, which be in the basal anhydrite of the Castile Formation. This is an acceptable set point.

4. Geologic Hazards

- a. Cave/Karst Occurance: Medium
- b. Potential Cave/Karst Depth: 350
- c. Possible Water Flows: Castile, Salado,
- d. Possible Lost Circulation: Rustler, Delaware,
- e. Possible Abnormal Pressure: NO
- f. H2S within 1 mile: YES
- g. H2S Remarks:

H2S has been reported in Section 4, T26S, R32E, within the Jennings Delaware Pool with 300 ppm in the gas stream. Although this well is more than 2 miles from the proposed project.

5. Additional Remarks

Geologist: Robert Salaz

Sign Off Date: 1-26-2015