MANZANO, LLC SURFACE USE AND PLAN

Little Valley Federal #1 SHL: 660' FSL & 1050' FWL - Section 17 -T21S-R32E BHL: 2310' FSL &330' FWL - Section 18 - T21S-R32E Lea County, New Mexico

This Surface Use Plan is submitted with Form 3160-3, Application for Permit to Drill, in accordance with BLM Onshore Oil and Gas Order Number 1 Section III.D.4., 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 rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

a. EXISTING ROADS:

- 1. The well site and elevation plat for the proposed well are attached to Form 3160-3 and reflect the proposed well site layout (NMOCD Form C-102). The well was staked by Basin Surveys, Inc.
- 2. Surface Use Plan-Exhibit 1 is a Vicinity map showing the well and roads in the vicinity of the proposed location. There are existing roads that provide access to other wells in the area that will be utilized for access to this new location. These roads are in good condition and will not require any improvements for this well.

DIRECTIONS:

From Hobbs, Go east on US 62-180 for ~38 miles to the junction of US 62-180 and Campbell Road (C29), Turn left (south) onto Campbell (C29) and go 5.6 miles, Turn left (east) onto existing lease road & go 1.0 miles, Turn right (south) & go 0.25 miles, Turn left (north) to location.

- 3. Right of Way using the proposed route is hereby being requested if necessary.
- 4. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition in the same or better condition than before operations began for as long as any operations continue on this lease.

b. NEW ACCESS ROAD AND DRILL PAD:

- 1. As the proposed drill pad is adjacent to the existing drill pad for the Yates Petroleum Corp Caper #16H well, no new road construction will be required for this well. Access will be on existing lease roads and will enter into the southeast corner of the proposed drill pad. The proposed well site and the proposed access route to the well site are shown on Surface Use Plan-Exhibit 2.
- 2. Surface Use Plan-Exhibit 2 also is a plat showing the well site layout and drill pad dimensions for a rig utilizing a closed loop system. This well will be drilled with a closed loop system so no reserve pits will be constructed.

The drill pad will be 330' x 310' (see Surface Use Plan-Exhibit 2) and will require less than 5' of "cut and fill" from the south side of the pad to the northwest side of the pad. The drill pad will be surfaced with 4-6 inches of compacted caliche. The average grade will be approximately 1%. Topsoil will be stockpiled on the east side of the location.

c. LOCATION OF EXISTING WELLS: Surface Use Plan-Exhibit 3 shows all wells within a one mile radius of the proposed well.

d. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

- 1. In the event the well is found productive, a tank battery will be constructed with three 500 bbl oil storage tanks, one 500 bbl fiberglass water tank, a separator, a heater treater and a gas sales meter (see Surface Use Plan-Exhibit 4).
- 2. The well should be a producing oil well and will be produced with a submersible pump or a conventional pumping unit.
- 3. All flowlines will adhere to API standards.
- 4. Electricity is located on the east side of the Yates Caper #16H location.

e. LOCATION AND TYPES OF WATER SUPPLY:

- 1. This location will be drilled using a combination of water mud systems. The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown.
- f. CONSTRUCTION MATERIALS; Surface material will be native caliche. Construction materials will be obtained from the nearest approved BLM, Fee or State pit or from existing deposits found under the location.

g. METHODS OF HANDLING WASTE:

- 1. All trash, junk and other waste material, including broken sacks and/or pallets, will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
- 2. All drilling fluids and cuttings will be trucked to an approved disposal facility.
- 3. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete. Any trailer houses on the well site will be plumbed into a sanitary septic system.
- 4. Disposal of fluids to be transported by an approved disposal company.

h. ANCILLARY FACILITIES:

1. No campsite or other facilities will be constructed as a result of this well.

i. WELLSITE LAYOUT:

- 1. Surface Use Plan-Exhibit 2 shows the proposed well site layout with dimensions of the pad layout.
- 2. Surface Use Plan-Exhibit 5 is a schematic showing the rig equipment on the well pad.
- 3. Surface Use Plan-Exhibit 4 shows the proposed location of the topsoil stockpile.
- 4. Mud pits in the active circulating system will be steel pits and a closed loop system will be utilized.

j. PLANS FOR SURFACE RECLAMATION:

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- 1. If the well is productive, Interim Reclamation plans will be to reduce the pad size to 265' x 250' by removing the caliche on the east side and north side of location. A strip of caliche 65 feet wide on the east side and 50 feet wide on the north side will be removed. The original top soil will be returned to the reclaimed portions of the location. Then this area will be ripped and seeded.

- 2. Top soil will be stock piled on the east side of the location, and 100% of this material will be used for the reclamation after the well is completed and production facilities are installed.
- 3. Surface Use Plan-Exhibit 4 illustrates the proposed Interim Reclamation Plan.
- 4. If the well is not productive, a dry hole marker will be installed, all caliche will be removed from the location, the top soil returned to the location and be re-contoured as close as is practical to the original contour. The location will then be ripped and seeded. The new access road will be reclaimed as directed by the BLM.

k. SURFACE OWNERSHIP:

1. The surface is owned by the BLM and administered by the BLM. The surface is multiple use with the primary uses being the grazing of livestock and the production of oil and gas.

I. OTHER INFORMATION:

- 1. The area surrounding the well site is grassland. The topsoil is packed red soils. The vegetation is moderately sparse with native prairie grass, some mesquite bushes and some shinnery oak located to the northwest of the proposed drill pad. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- 2. There is no permanent or live water in the general proximity of the location.
- 3. There are no dwellings within 2 miles of location.

12. OPERATOR'S REPRESENTATIVE:

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.

Executed this 19th day of March, 2013.

Mike Hanagan

Name: Mike Hanagan Position Title: Managing Member, Manzano, LLC Address: PO Box 2107 - Roswell, New Mexico 88202-2107 Telephone: 575-623-1996





LITTLE VALLEY FEDERAL #1 Located 660' FSL and 1050' FWL Section 17, Township 21 South, Range 32 East, N.M.P.M., Lea County, New Mexico.

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	P.O. Box 1786	W.O. Number: KAN 29260	
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SUITVEWS	(575) 393-7316 - Office	Scale: $1' = 2000'$	
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