

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

RECEIVED

DEC 10 2010  
HOBBSOCD

## SUNDRY NOTICES AND REPORTS ON WELLS

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/>		5. Lease Serial No. NM-052
2. Name of Operator Cimarex Energy Co. of Colorado <input checked="" type="checkbox"/>		6. If Indian, Allottee or Tribe Name
3a. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701	3b. Phone No. (include area code) 432-571-7800	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 2055 FNL & 790 FEL 34-19S-34E BHL 1980 FNL & 330 FWL		8. Well Name and No. Mallon 34 Federal No. 19 <input checked="" type="checkbox"/>
		9. API Well No. 30-025-39894 <input checked="" type="checkbox"/>
		10. Field and Pool, or Exploratory Area Quail Ridge; Bone Spring, S <input checked="" type="checkbox"/>
		11. County or Parish, State Lea County, NM <input checked="" type="checkbox"/>

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change SHL</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)
- Cimarex has changed the SHL of the Mallon 34 Federal No. 19 because the original location at 2055 FNL & 790 FEL was staked over an old pit area. Please see new location and drilling plan below, as well as attached revised plats and preliminary directional survey.

Permitted Location  
SHL 2055 FNL & 790 FEL  
BHL 1980 FNL & 330 FWL

Engineering review is OK.  
RGH 12/7/2010

Proposed Location  
SHL 1650 FNL & 700 FEL  
BHL 1980 FNL & 330 FWL

Instead of drilling a pilot hole and setting 7" casing and fiberglass tubing for kick-off as permitted, Cimarex plans to drill the 8¾" production hole to KOP @ 10749' and through the curve of the lateral to TD @ 15123' MD, 10940' TVD. Run 5½" 17# P-110 LTC casing from 0-TD and cement with Lead 700 sx Econocem + 5# Gilsonite (wt 11.9, yld 2.48) and Tail 1930 sx Halcem (wt 15.6, yld 1.19), TOC 5300.'

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Natalie Krueger

Signature



Title

Regulatory

Date

November 8, 2010

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Approved by

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

PETROLEUM ENGINEER

Office

APPROVED

DEC 7 2010

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

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

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

(Instructions on reverse)

DISTRICT I  
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised July 16, 2010

Submit one copy to appropriate  
District Office

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

☐ AMENDED REPORT

API Number 30-025-39894	Pool Code 50461	Pool Name Quail Ridge; Bone Spring, S
Property Code 29028	Property Name MALLON "34" FEDERAL	Well Number 19
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3709'

**Surface Location**

UL or lot No. H	Section 34	Township 19 S	Range 34 E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 700	East/West line EAST	County LEA
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**Bottom Hole Location If Different From Surface**

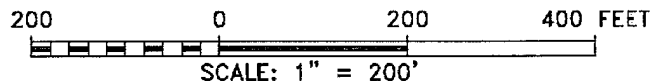
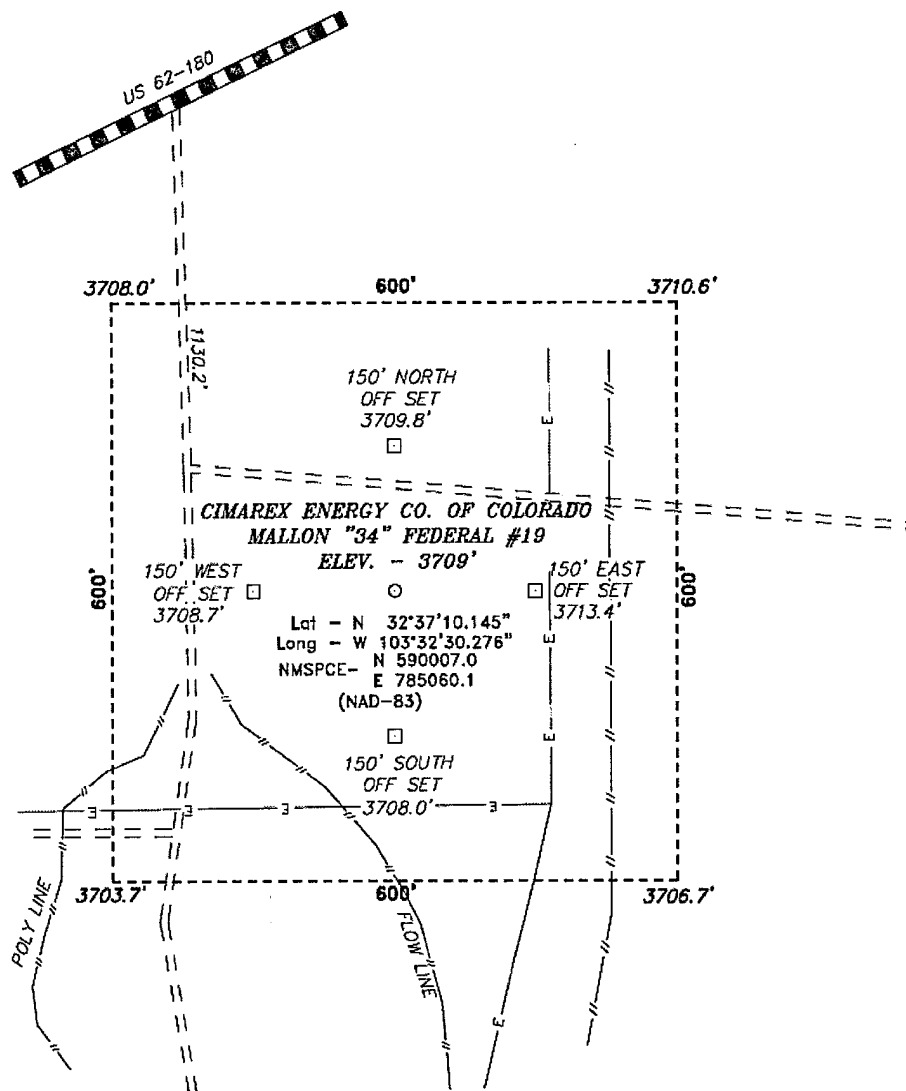
UL or lot No. E	Section 34	Township 19 S	Range 34 E	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 330	East/West line WEST	County LEA
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Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p><b>SURFACE LOCATION</b> Lat - N 32°37'10.145" Long - W 103°32'30.276" NMSPC- N 590007.0 E 785060.1 (NAD-83)</p> <p><b>PROPOSED BOTTOM HOLE LOCATION</b> Lat - N 32°37'06.900" Long - W 103°33'19.987" NMSPC- N 589647.61 E 780810.84 (NAD-83)</p> <p><b>EOC</b> 1666 FNL &amp; 890 FEL</p> <p><b>NM-052</b></p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Natalie Krueger</i> 11/8/2010 Signature Date Natalie Krueger Printed Name nkrueger@cimarex.com Email Address</p> <p><b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>OCTOBER 28 2010 Date Surveyed Signature &amp; Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23654</p>
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SECTION 34, TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



Directions to Location:

AT MILE MARKER 79.7 ON US 62-180 TURN SOUTH  
ON EXISTING ACCESS ROAD FOR 0.2 MILES TO  
PROPOSED LOCATION.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 23654 Drawn By: B. NIXON

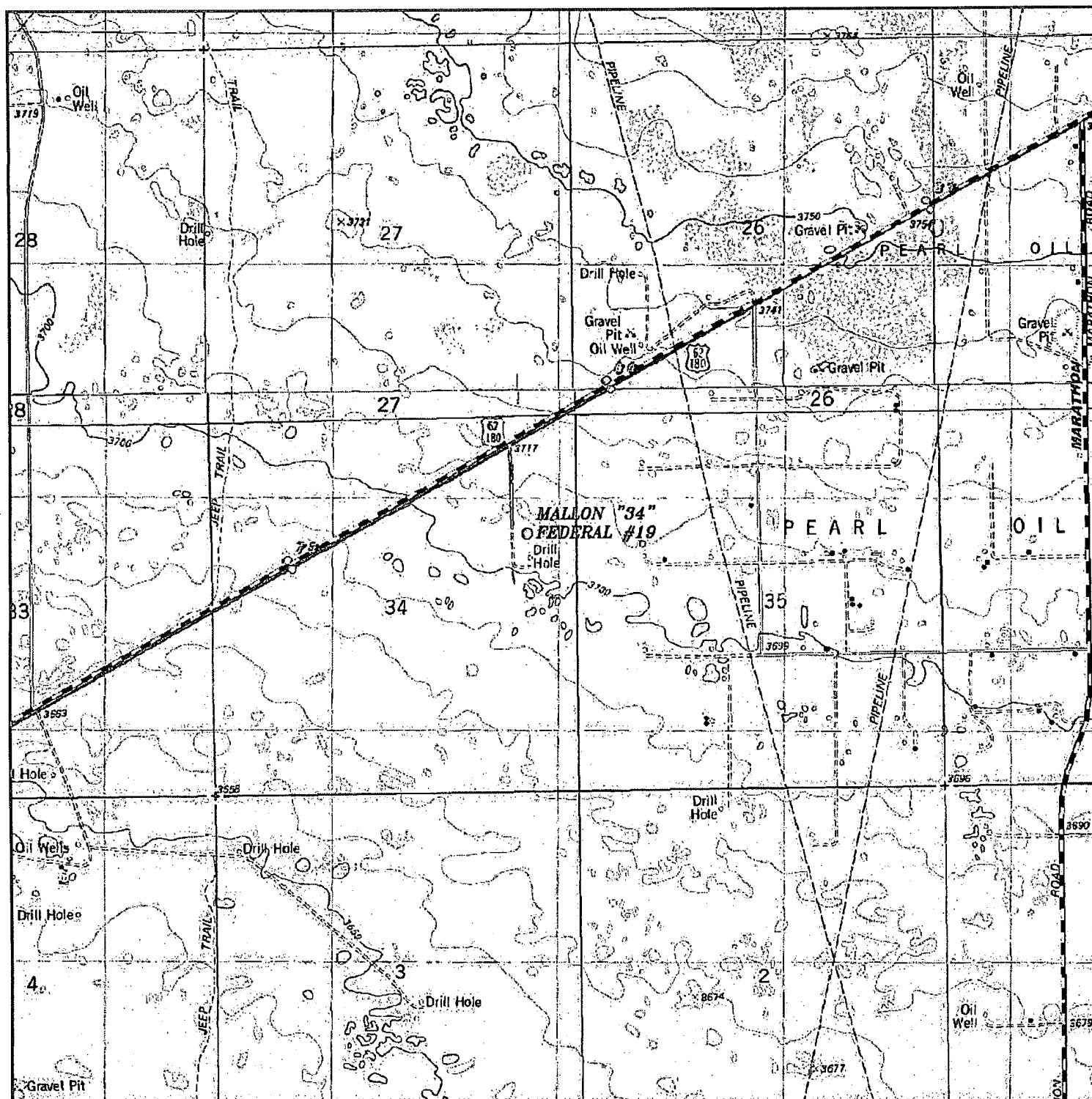
Date: 10-27-2010 Disk: BJN 23654

**CIMAREX ENERGY CO. OF COLORADO**

REF: MALLON "34" FEDERAL #19 / WELL PAD TOPO

THE MALLON "34" FEDERAL #19 LOCATED 1650'  
FROM THE NORTH LINE AND 700' FROM THE EAST LINE OF  
SECTION 34, TOWNSHIP 19 SOUTH, RANGE 34 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 10-26-2010 Sheet 1 of 1 Sheets



**MALLON "34" FEDERAL #19**  
 Located 1650' FNL and 700' FEL  
 Section 34, Township 19 South, Range 34 East,  
 N.M.P.M., Lea County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basin-surveys.com

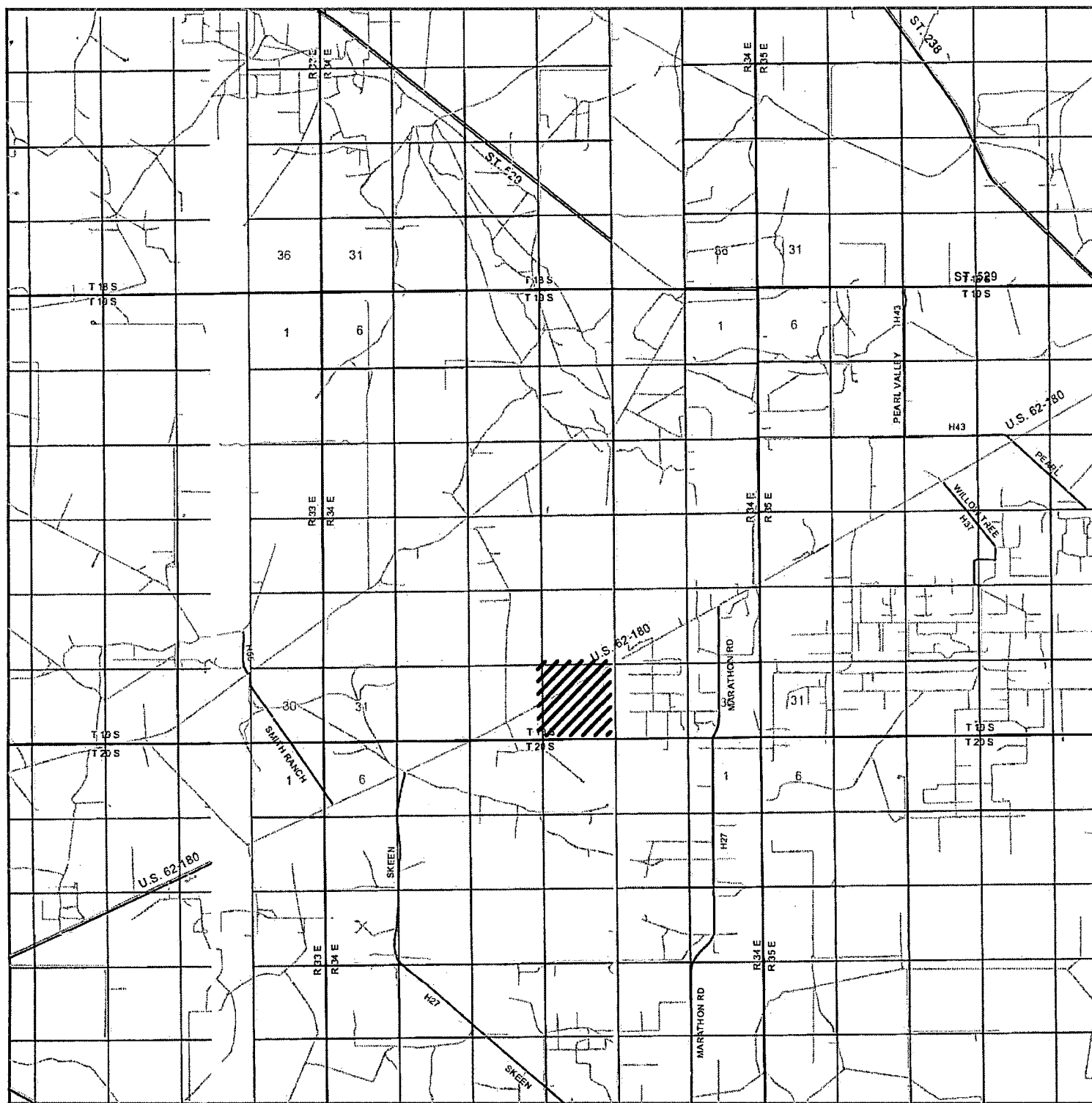
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Survey Date: 10-26-2010

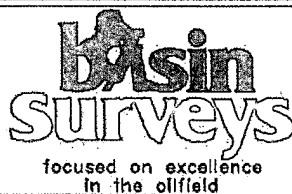
Scale: 1" = 2000'

Date: 10-27-2010

**CIMAREX**  
**ENERGY CO.**  
**OF COLORADO**



**MALLON "34" FEDERAL #19**  
 Located 1650' FNL and 700' FEL  
 Section 34, Township 19 South, Range 34 East,  
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
[basinsurveys.com](http://basinsurveys.com)

W.O. Number: BJN 23654

Survey Date: 10-26-2010

Scale: 1" = 2 Miles

Date: 10-27-2010

**CIMAREX**  
**ENERGY CO.**  
**OF COLORADO**

## PECOS DISTRICT CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Cimarex Energy Company of Colorado</b>
<b>LEASE NO.:</b>	<b>NM052</b>
<b>WELL NAME &amp; NO.:</b>	<b>Mallon 34 Federal #19</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>1650' FNL &amp; 700' FEL</b>
<b>BOTTOM HOLE FOOTAGE</b>	<b>1980' FNL &amp; 330' FWL</b>
<b>LOCATION:</b>	<b>Section 34, T. 19 S., R 34 E., NMPM</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

### I. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 393-3612

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling into the Yates 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 CAL/GR/N well log run from TD to surface (horizontal well – vertical portion of hole) will 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 and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

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

**Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

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

**Possible lost circulation or water flows in the Seven Rivers and Capitan Reef, if encountered.**

**Possible high pressures in the Wolfcamp.**

1. **The 13-3/8 inch surface casing shall be set at approximately 1750 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.**
  - 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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to the Capitan Reef.**
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- ☒ Cement should tie-back a minimum of 50 feet above the Capitan Reef. Operator shall provide method of verification.
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

### C. PRESSURE CONTROL

- 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 RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi. Operator is using a 5M and testing as a 3M.**
  - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.



3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.
  - 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.
  - f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### **D. DRILLING MUD**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

**Proposed mud weight may not be adequate for drilling through Wolfcamp.**

**E. DRILL STEM TEST**

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

**F. 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.

**RGH 120710**