

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**OCD-ARTESIA**

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

**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 type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM-26105
2. Name of Operator Cimarex Energy Co. of Colorado		6. If Indian, Allottee or Tribe Name NMCD ARTESIA
3a. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701	3b. Phone No. (include area code) 432-571-7800	7. If Unit of Management, Name and/or No. NM-112716
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1650 FNL & 1200 FWL 24-25S-26E		8. Well Name and No. Liberty 24 Federal Com No. 1
		9. API Well No. 30-015-33094
		10. Field and Pool, or Exploratory Area Cottonwood Draw; Upper Penn & Morrow
		11. County or Parish, State Eddy County, NM

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 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 Deepen to Devonian (prep for SWD conversion)
	<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.)

Well is currently TA with plugs in place. Uppermost plug @ 5810-5902. Cimarex plans to deepen to the Devonian in preparation for SWD conversion as shown below:

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

- Use kickoff plug at 5810' to exit wellbore.
  - Drill 8 3/4" hole to 13000.' Set 7" 35# L-80 BTC casing from 13000 to 12400 and 7" 32# L-80 BTC from 12400-0.
  - Cement in 3 stages with 2 DV tools to ensure proper circulation to surface: *DV Tools at 5,700' + 11,000'*
- Stage 1** 640 sx PVL + 1.3% D-44 BWOW + 0.2% D-167 + 0.2% D-65 + 0.2% D-46 + 0.2% D-800 + 0.06 gps D-177 (wt 13, yld 1.41)
- Stage 2** Lead: 150 sx 35/65 POZ H + 5% D-44 BWOW + 10% D-20 + 1.5% D-112 + 0.125# D-130 + 3# D-42 + 0.2% D-46 + 0.1% D-800 (wt 12.4, yld 2.28) and Tail: 300 sx PVL + 1% D-44 bwow + 0.1% D-65 + 0.3% D-167 + 0.2% D-46 + 0.3% D-800 + 0.03 gps D-177 (wt 13, yld 1.4)
- Stage 3** 300 sx 35/65 POZ C + 5% D-44 bwow + 6% D-20 + 0.2% D-46 + 0.2% D-800 + 3# D-42 + 0.125# D-130 (wt 12.4, yld 2.19)
- Drill through cement to 13900. A plug/packer will be set in the 7" and the rig will be rigged down. Upon approval of poly line ROW and construction of SWD line completion will consist of pulling the plug/packer, acidizing, and running tbg/pkr.

Please see attached plat, rig diagram, WBD, and BOP schematic and testing information.

14. I hereby certify that the foregoing is true and correct		Title Regulatory	Date 07.02.10	APPROVED JUL 9 2010 /s/ Chris Walls BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE
Name (Printed/Typed) Natalie Krueger	Signature <i>Natalie Krueger</i>			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE				
Approved by		Title	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 and Title 43 U.S.C. 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.				

BOP Testing Info - Liberty 24 Federal Com No. 1 SWD Conversion  
Cimarex Energy Co. of Colorado  
24-25S-26E  
1650 FNL & 1200 FWL  
Eddy County, NM

*See CoH*

A 11" 10000 PSI working pressure BOP consisting of one set of blind rams and two sets of pipe rams and a <sup>10</sup>3000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head as needed. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the existing 9 5/8" intermediate pipe through the running of production casing, the well will be equipped with a 10000 psi BOP system.

BOPS will be tested by an independent service company to 250 psi low and 10000 psi high. Hydril will be tested to 250 psi low and ~~3500~~ <sup>5000</sup> psi high.

## DISTRICT I

P.O. Box 1888, Hobbs, NM 88241-1888

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1984

Submit to Appropriate District Office

State Lease - 4 Copies

Free Lease - 3 Copies

## DISTRICT II

P.O. Drawer 10, Artesia, NM 88211-0710

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT III

1000 Rio Grande Rd., Artec, NM 87410

## DISTRICT IV

P.O. Box 2088, Santa Fe, N.M. 87504-2088

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-33094	Pool Code	Pool Name Devonian Wildcat
Property Code	Property Name LIBERTY 24 FEDERAL COM	Well Number 1
OGRIID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3272'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	25-S	26-E		1650'	NORTH	1200'	WEST	EDDY

## Bottom Hole Location If Different From Surface

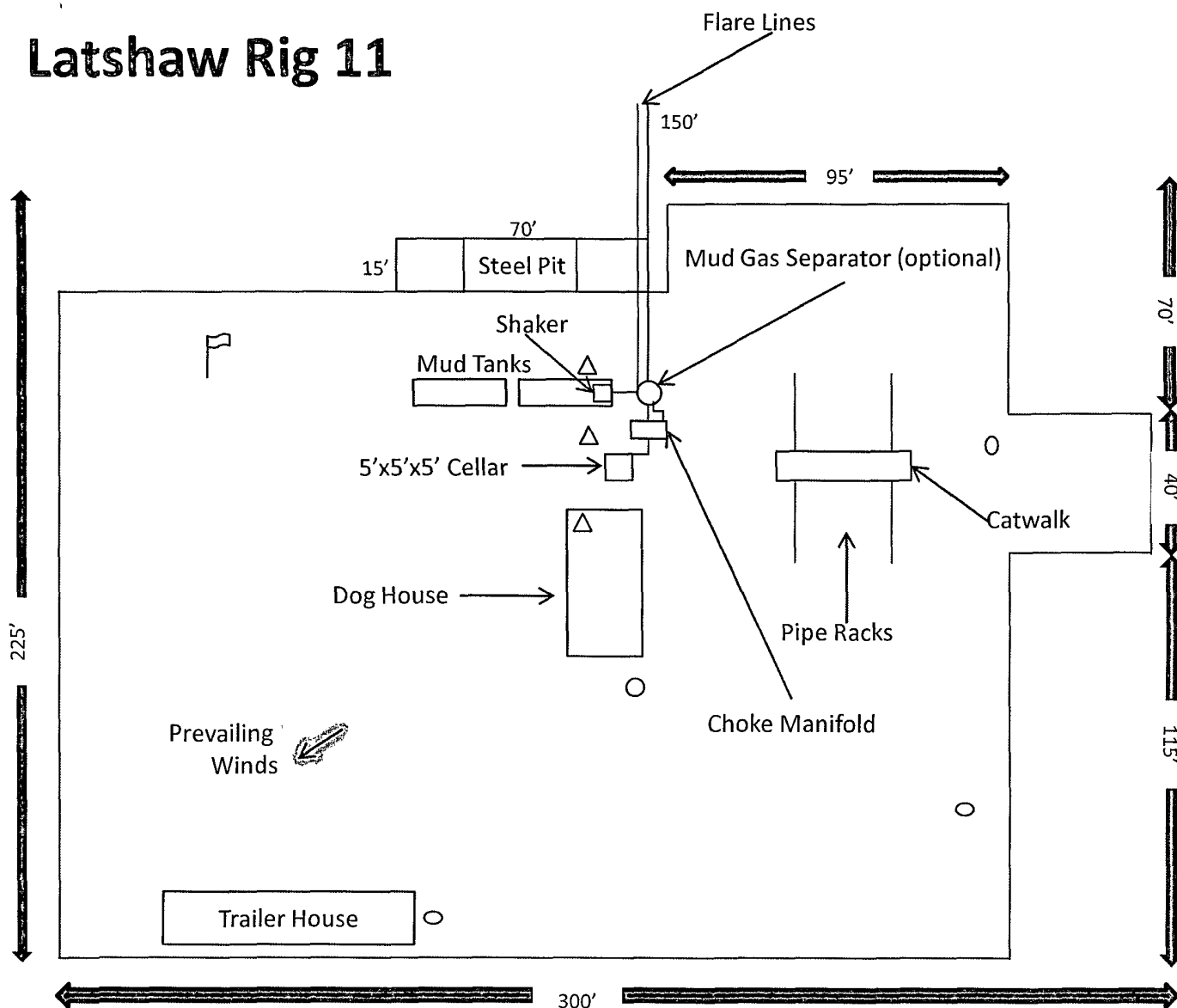
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No. SWD-1216
-----------------	-----------------	--------------------	-----------------------

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

	<b>GEODETIC COORDINATES</b> NAD 27 NME Y=406672.2 N X=525639.3 E LAT.= 32°07'04.91"N LONG.= 104°15'01.86"W	<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Zeno Farris Printed Name Manager Operations, Admin Title Date
	<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. August 07, 2003 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. RONALD J. HUDSON 3236 GARY HUDSON 12641	

# Latshaw Rig 11



- Wind Direction Indicators  
(wind sock or streamers)
- △ H2S Monitors  
(alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit

Exhibit D – Rig Diagram  
**Crescent Hale 11 Federal No. 1**  
 Cimarex Energy Co. of Colorado  
 SHL 345 FNL & 375 FEL  
 BHL 330 FSL & 660 FEL  
 11-19S-30E  
 Eddy County, NM

**Current Condition (Post Plugback)**

**Cimarex Energy Co. of Colorado**

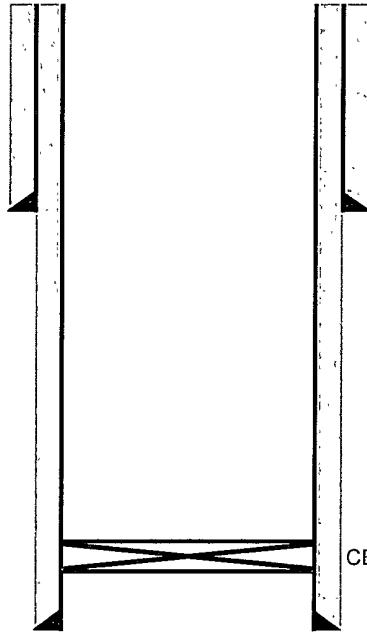
Liberty 24 Federal Com #1

1650' FSL & 1200' FWL

Sec. 24, T-25-S, R-26-E, Eddy Co., NM

S. Gengler

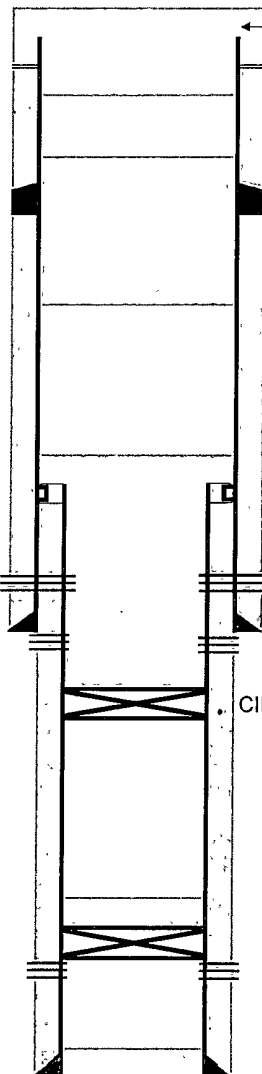
07/07/2009



13-3/8", 54.5# J-55 csg @ 440'  
cmtd w/ 490 sx, cmt circ

CBP @ 5750'

9-5/8", 40# NS-110 csg @ 5808'  
cmtd w/ 1700 sx, cmt circ



Cut casing @ 5902' & set 80 sx CI H stub plug, min 50' above top of stub, tagged @ 5810'

TOC @ 6950' by CBL

DV Tool @ 8318'

Tool would not open & was not cemented

115 sx CI H plug from 8670-8258'

TOL @ 10059'

Cisco Canyon perfs (10236' - 10409')  
7", 26# P-110 csg @ 10369'  
cmtd w/ 350 sx

CIBP @ 10450' w/ 100 sx CI H, tagged @ 9933'

CIBP @ 11450' w/ 25 sx Class H cmt 50' above Morrow perfs, calcd at above 11270' (no tag)  
Morrow perfs (11487' - 11956')

PBTD @ 12215'

4-1/2" 11.6# P-110 @ 12303' cmtd w/ 235 sx  
TD @ 12300'

Wolfcamp 8620'

Cisco 10230'

Strawn 10430'

Atoka 10663'

Morrow 11320'



DISTRICT I  
P.O. Box 1888, Hobbs, NM 88241-1888

DISTRICT II  
P.O. Drawer 22, Artesia, NM 88211-0718

DISTRICT III  
1000 Rio Grande Ed., Artesia, NM 87410

DISTRICT IV  
P.O. Box 2888, Santa Fe, N.M. 87504-2888

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1984  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 2 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-33094	Pool Code	Pool Name Devonian Wildcat
Property Code	Property Name LIBERTY 24 FEDERAL COM	Well Number 1
OGRIID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3272'

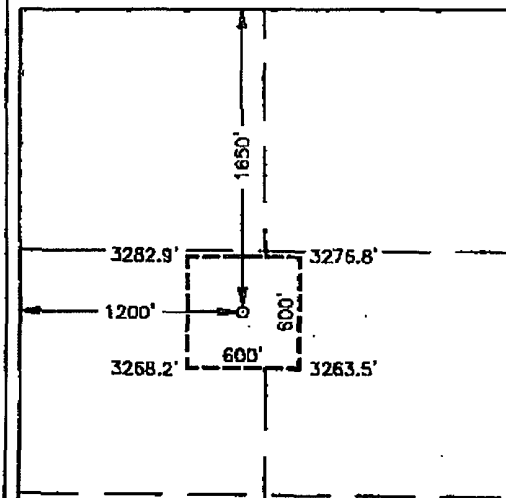
Surface Location

UL or lot No. E	Section 24	Township 25-S	Range 26-E	Lot Idn	Feet from the 1650'	North/South line NORTH	Feet from the 1200'	East/West line WEST	County EDDY
--------------------	---------------	------------------	---------------	---------	------------------------	---------------------------	------------------------	------------------------	----------------

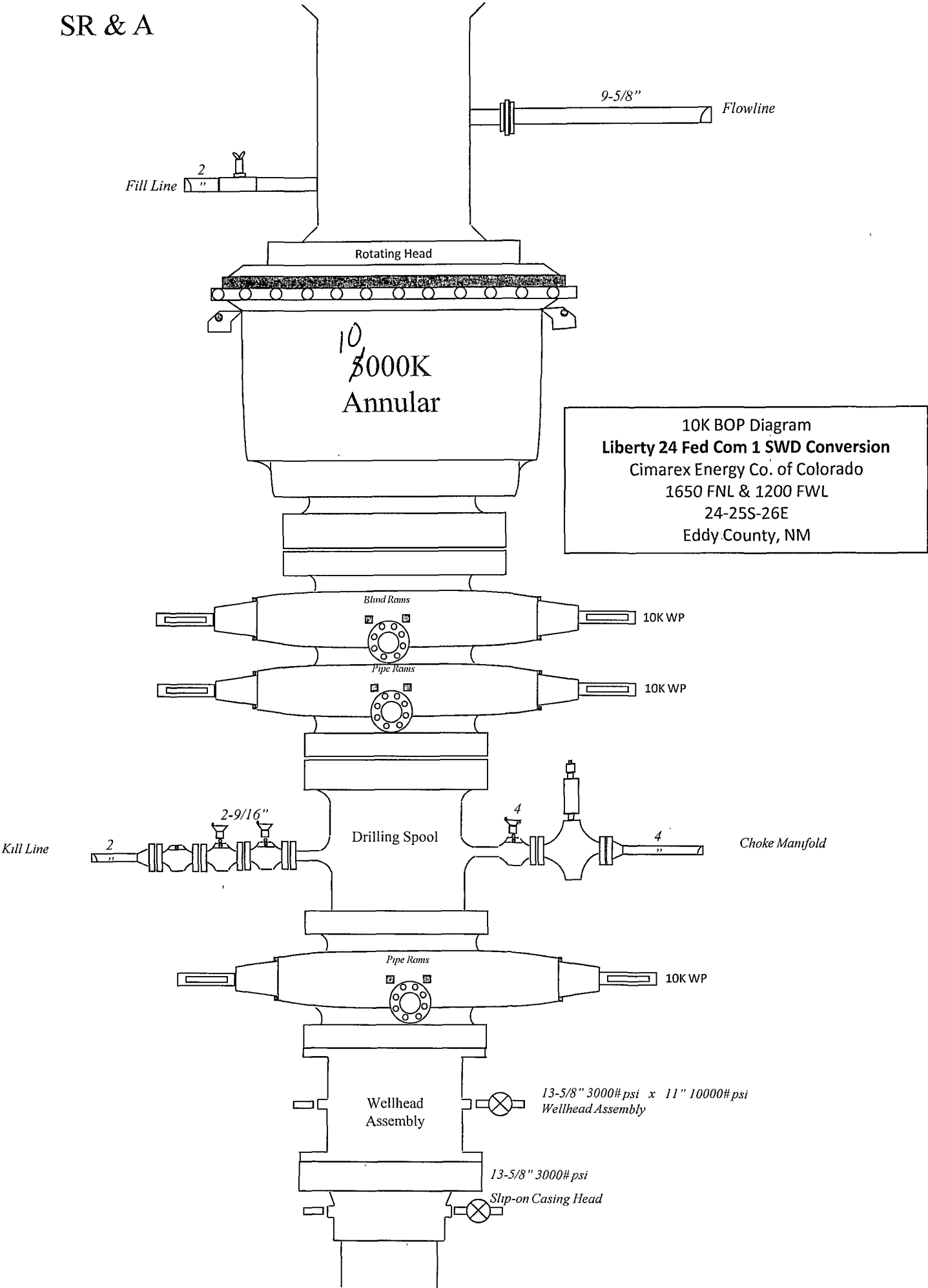
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code	Order No. SWD-1216					

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

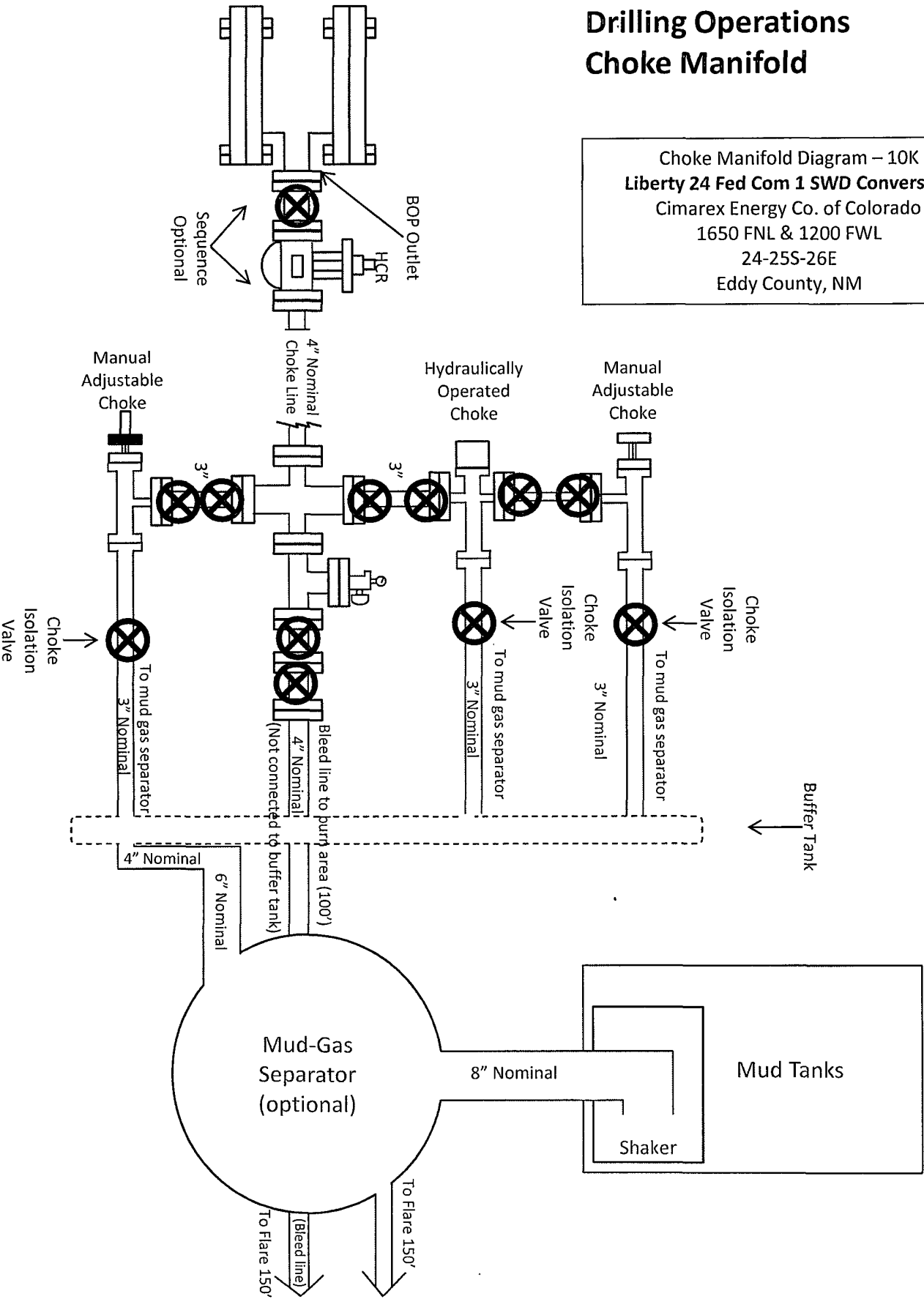
	<p>GEODETIC COORDINATES NAD 27 NME Y=406672.2 N X=525639.3 E LAT.= 32°07'04.91"N LONG.= 104°15'01.86"W</p>
<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature Zeno Farris</p> <p>Printed Name Manager Operations, Admin</p> <p>Title</p> <p>Date</p>	
<p>SURVEYOR CERTIFICATION</p> <p>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>August 07, 2003</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor Professional Surveyor RONALD J. EDISON 003.11.0837</p> <p>Certificate No. RONALD J. EDISON 3238 GARY EDISON 12841</p>	

SR & A



# Drilling Operations Choke Manifold

Choke Manifold Diagram – 10K  
**Liberty 24 Fed Com 1 SWD Conversion**  
Cimarex Energy Co. of Colorado  
1650 FNL & 1200 FWL  
24-25S-26E  
Eddy County, NM



## CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Cimarex Energy Co. of Colorado</b>
<b>LEASE NO.:</b>	<b>NMNM-26105</b>
<b>WELL NAME &amp; NO.:</b>	<b>Liberty 24 Federal Com 1</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>1650' FNL &amp; 1200' FWL</b>
<b>LOCATION:</b>	<b>Section 24, T. 25 S., R 26 E., NMPM</b>
<b>COUNTY:</b>	<b>Eddy 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

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

1. **Hydrogen Sulfide has been reported as a hazard but the formation is unknown. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, please report measurements 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 are located, this does not include the dog house or stairway area.

## B. CASING

1. The minimum required fill of cement behind the 7 inch production casing is:
  - a. First stage to DV tool, cement shall:
    - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
  - b. Second stage above DV tool, cement shall:
    - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.  
**Additional cement may be required as the excess cement calculates to be negative 4%**
  - c. Third stage above DV tool, cement shall:
    - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required as the excess cement calculates to be negative 27%**
2. 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 **10000 (10M) psi. 10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- a. The tests shall be done by an independent service company utilizing a test plug.
- b. The results of the test shall be reported to the appropriate BLM office.
- c. 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.**
- d. 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.
- e. 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. DRILL STEM TEST**

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

**CRW 070810**

**Operator is to submit subsequent report of operations and a completion report. Also when well begins injection a subsequent sundry with the date injection began.**