

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

ATS-07-343

Form 3160-3
(April 2004)

679

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

S

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC-028784-C	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Cimarex Energy Co. of Colorado		7. If Unit or CA Agreement, Name and No. Grayburg Deep Unit	
3a. Address PO Box 140907; Irving, TX 75014-0907		8. Lease Name and Well No. 35766 Grayburg Deep Unit No. 22	
3b. Phone No. (include area code) 972-401-3111		9. API Well No. 30-015- 35598	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 1940' 1650' FNL & 330' FWL At proposed prod. Zone 1940' 1650' FNL & 330' FWL B. Hunt E se Per SN dated 4-16-07		10. Field and Pool, or Exploratory Loco Hills; Wolfcamp, NE	
11. Sec., T. R. M. or Blk. and Survey or Area 25-17S-29E		12. County or Parish Eddy	
13. State NM		14. Distance in miles and direction from nearest town or post office* 2 miles NW of Loco Hills	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 750'		16. No of acres in lease 1440	
17. Spacing Unit dedicated to this well 40 acres		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. n/a	
19. Proposed Depth 9400'		20. BLM/BIA Bond No. on File NM-2575	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3589' GR		22. Approximate date work will start* 5/15/2007	
23. Estimated duration 35-45 days		24. Attachments	

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

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

25. Signature Zeno Farris	Name (Printed/Typed) Zeno Farris	Date 04.03.07
Title Manager Operations Administration		
Approved By (Signature)	Name (Printed/Typed) /s/ James Stovall	Date MAY 0 2007
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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.S. 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.

*(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Reswell Controlled Water Basin

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

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

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
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Cimarex Energy Co. of Colorado

3a. Address
PO Box 140907; Irving, TX 75014-0907

3b. Phone No. (include area code)
972-401-3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1940' FNL & 330' FEL
25-17S-29E

5. Lease Serial No.

LC-028784-C

6. If Indian, Allottee or Tribe Name

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

Grayburg Deep Unit

8. Well Name and No.

Grayburg Deep Unit No. 22

9. API Well No.

30-015-

10. Field and Pool, or Exploratory Area

Wolfcamp Wildcat

11. County or Parish, State

Eddy County, NM

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 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 type="checkbox"/> Other _____
	<input checked="" 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 recomplate 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 recomplate 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.)

Due to arc in the area, Cimarex is changing its proposed location for this well **FROM** 1650' FNL & 750' FWL **TO** 1940' FNL & 330' FEL. Please see attached revised plats.

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

Natalie Krueger

Signature

Natalie Krueger

Title

Reg Analyst 1

Date

April 16, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ James Stoval

FIELD MANAGER

Date

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.

Office

CARLSBAD FIELD OFFICE

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

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III

1000 Rio Braxos Rd., Aztec, NM 87410

DISTRICT IV

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

State of New Mexico
Energy, Minerals and Natural Resources DepartmentOIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97601	Pool Name Loco Hills; Wolfcamp; AE
Property Code	Property Name GRAYBURG DEEP UNIT	Well Number 22
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3584'

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	25	17 S	29 E		1940	NORTH	330	WEST	EDDY

Bottom Hole Location If Different From Surface

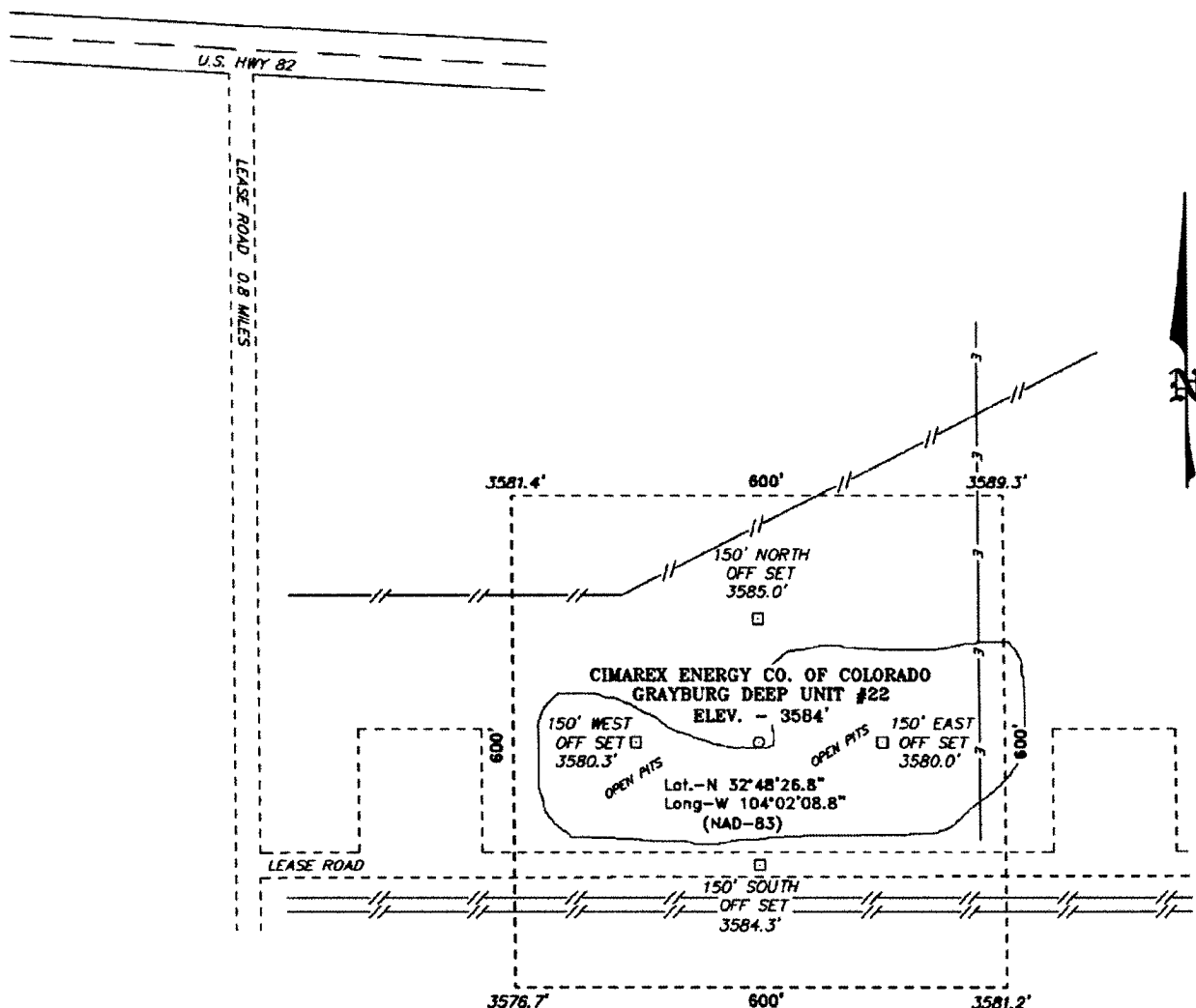
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill N	Consolidation Code U	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>Lat - N32°48'26.8"</p> <p>Long - W104°02'08.8"</p> <p>NMSPCE - N 657612.853</p> <p>E 632755.450</p> <p>(NAD-83)</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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole 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><u>Zeno Farris</u> 04-16-07</p> <p>Signature Date</p> <p><u>Zeno Farris</u></p> <p>Printed Name</p>
	<p>LC-028784-C & Grayburg Deep Unit</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>APR 12 2007</p> <p>Date Surveyed</p> <p>Signature of Professional Surveyor</p> <p><u>[Signature]</u></p> <p>Professional Surveyor</p> <p>16020</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

SECTION 25, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM MILE MARKER 129 ON U.S. HWY 82, GO WEST
0.3 MILES TO LEASE ROAD, ON LEASE ROAD GO
SOUTH 0.8 MILES TO LEASE ROAD, THENCE 0.3
MILES WEST FROM KEELY "26" FEDERAL #1 ON
LEASE ROAD TO PROPOSED LOCATION.

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

W.O. Number: 18020

Drawn By: J. M. SMALL

Date: 04-13-2007

Disk: JMS 18020W

CIMAREX ENERGY CO. OF COLORADO

REF: GRAYBURG DEEP UNIT #22 / WELL PAD TOPO

THE GRAYBURG DEEP UNIT #22 LOCATED 1940' FROM
THE NORTH LINE AND 330' FROM THE WEST LINE OF
SECTION 25, TOWNSHIP 17 SOUTH, RANGE 29 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 04-12-2007

Sheet 1 of 1 Sheets



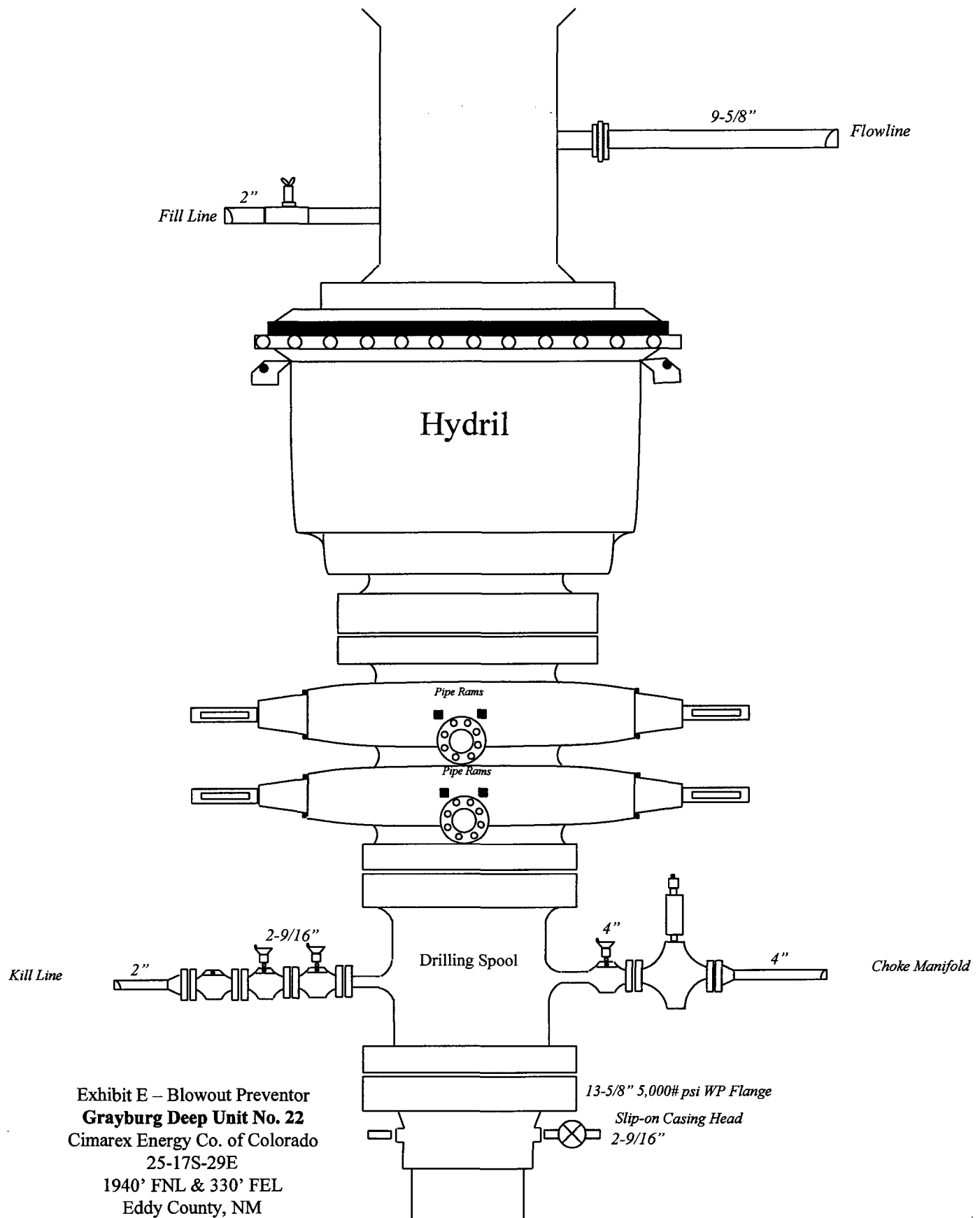
Midwest Hose
& Specialty, Inc.

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium components. The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermiculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unbolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2", 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

SR & A



**DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE**

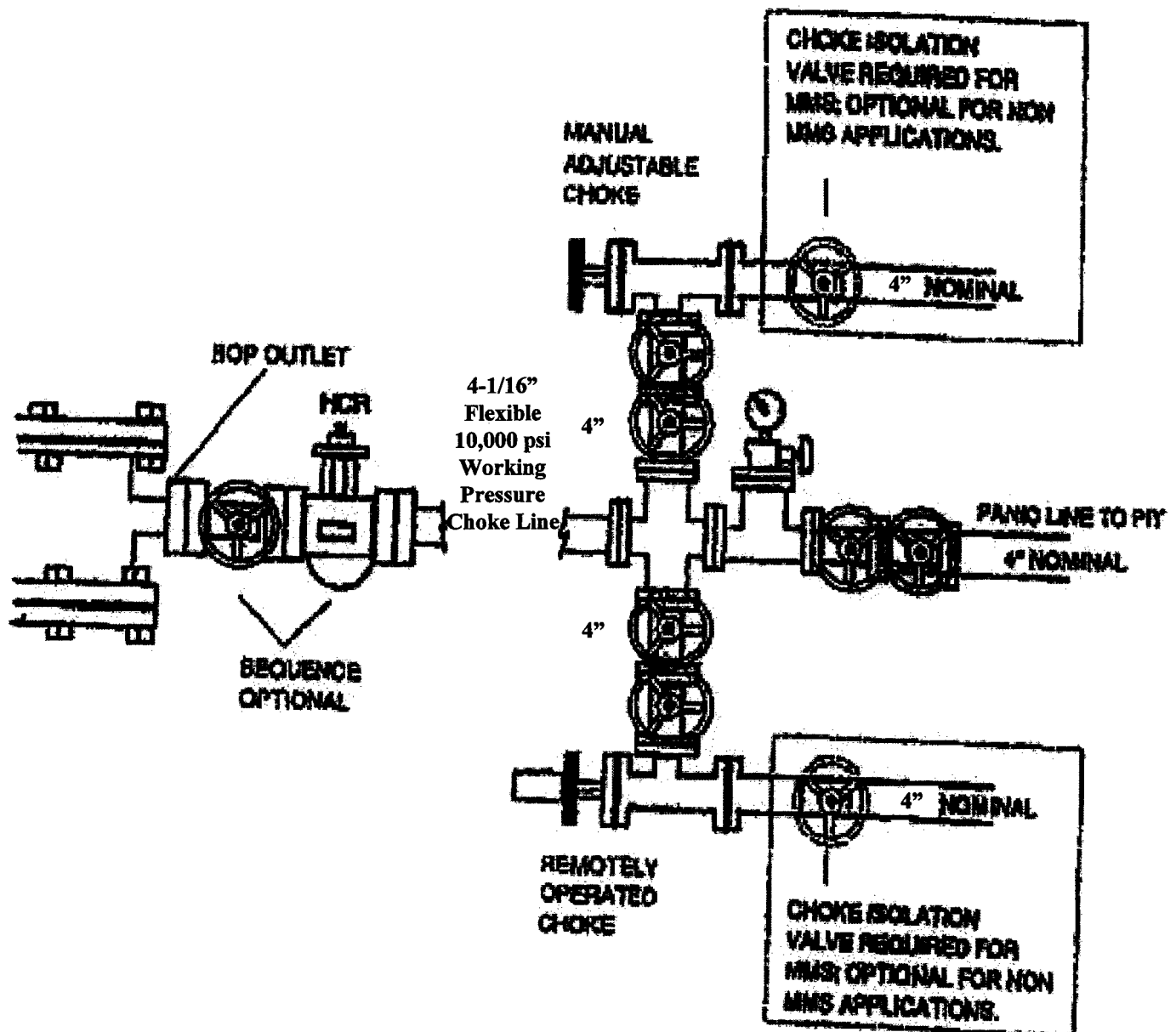


Exhibit E-1 – Choke Manifold
Grayburg Deep Unit No. 22
 Cimarex Energy Co. of Colorado
 25-17S-29E
 1940' FNL & 330' FEL
 Eddy County, NM

Application to Drill

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

- 1 Location: ~~1650' ENL & 750' EWT~~
1940' N & 330' W
- 2 Elevation above sea level: 3589' GR
- 3 Geologic name of surface formation: Quaternary Alluvium Deposits
- 4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5 Proposed drilling depth: 9400'
- 6 Estimated tops of geological markers:
San Andres 2600'
Yeso 4100'
Wolfcamp 7500'
Lower Wolfcamp 9100'
- 7 Possible mineral bearing formation:
Wolfcamp oil

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17-1/2"	0-350' to 500'	13-3/8"	48	8-R	ST&C	H-40
12-1/4"	0-4700'	9-5/8"	40	8-R	LT&C	J-55
8-3/4"	0-9400'	5-1/2"	17	8-R	LT&C	P-110

Application to Drill

9 Cementing & Setting Depth:

13-3/8"	Surface	Set 350' - 500'* of 13-3/8" H-40 48 # ST&C casing. Cement with 500 sx Class C cement + additives, circulate cement to surface.
9-5/8"	Intermediate	Set 4700' of 9-5/8" J-55 40# LT&C casing. Cement with 1700 sx POZ/C + additives, circulate cement to surface.
5-1/2"	Production	Set 9400' of 5-1/2" P-110 17# LT&C casing. Cement with 1460 sx Super H + additives. TOC 8600.'

*Set surface casing 25' into the top of the Rustler, which is estimated to be between 350' and 500'.

10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. 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 on the 9 5/8" casing and will be 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 surface pipe through the running of production casing, the well will be equipped with a 500 psi BOP system.

We are requesting a variance for the 13-3/8" surface casing and BOP testing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting a variance to test the 13-3/8" casing to 1000 psi using rig pumps. The BOP will be tested to 5000 PSI by an independent service company.

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 500'	8.4 - 8.6	30 - 32	May lose circ.	Fresh water spud mud. Add paper to control seepage and high viscosity sweeps to clean hole.
500' - 4700'	9.7 - 10.0	28 - 29	May lose circ.	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
4700' - 9400'	8.4 - 10.0	28 - 29	NC	Brine water. Paper for seepage. Lime for PH (9 - 9.5).

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Application to Drill

12 Testing, Logging and Coring Program:

- A. Mud logging program: Two-man unit from 4700' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DSTs or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a potential H2S hazard. An H2S drilling plan is attached. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, estimated BHT 175.

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35-45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Wolfcamp pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

Hydrogen Sulfide Drilling Operations Plan

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:

- A. Characteristics of H2S
- B. Physical effects and hazards
- C. Proper use of safety equipment and life support systems.
- D. Principle and operation of H2S detectors, warning system and briefing areas.
- E. Evacuation procedure, routes and first aid.
- F. Proper use of 30 minute pressure demand air pack.

- 2 H2S Detection and Alarm Systems

- A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.

- 3 Windsock and/or wind streamers

- A. Windsock at mudpit area should be high enough to be visible.
- B. Windsock at briefing area should be high enough to be visible.

- 4 Condition Flags and Signs

- A. Warning sign on access road to location.
- B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only emergency personnel admitted to location.

- 5 Well control equipment

- A. See exhibit "E"

- 6 Communication

- A. While working under masks chalkboards will be used for communication.
- B. Hand signals will be used where chalk board is inappropriate.
- C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

- 7 Drillstem Testing not anticipated.

A DST is planned for 9100' - 9250.'

Hydrogen Sulfide Drilling Operations Plan

- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

Surface Use Plan

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

A. Exhibit "A" shows the proposed well site as staked.

B. From mile marker 129 on US Hwy 82, go West 0.3 miles to lease road. On lease road, go South 0.8 miles to lease road. Thence East on lease road to proposed location.

- 2 PLANNED ACCESS ROADS: No access roads will be constructed.

- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells -	None known
B. Disposal wells -	None known
C. Drilling wells -	None known
D. Producing wells -	As shown on Exhibit "A"
E. Abandoned wells -	As shown on Exhibit "A"

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Cimarex Energy Co. of Colorado
Well Name & No. 22-Grayburg Deep Unit
Location: 1940FNL, 0330FWL, Sec. 25, T-17-S, R-29-E, Eddy County, NM
Lease: LC-028784-C

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I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. Although Hydrogen Sulfide has not been reported in this section, it has been reported numerous times in the Township to the East. The operator has attached a hydrogen sulfide drilling plan to the APD.
- C. 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.
- D. If floor controls are required, (3M or Greater) 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.

II. CASING:

- A. The 13-3/8 inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite between 350-500 feet** and cemented to the surface.
1. 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Grayburg and San Andres formations.

Possible water flows in the Salado and Artesia Groups.

Possibility of high pressure gas bursts from the Wolfcamp.

- B. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is **cement to circulate to surface**. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement is to extend a minimum of 200' inside the intermediate casing**.
- D. 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.

III. PRESSURE CONTROL:

- A. 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. **Check condition of 4 1/16" flexible line from BOP to BOPE, replace if exterior is damaged or if line fails test. Line to be as straight as possible. Sundry requesting variance for flex line attached to APD.**
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) PSI**.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing shoe shall be **3000 (3M) PSI**.
- D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - 1. The tests shall be done by an independent service company.
 - 2. The results of the test shall be reported to the appropriate BLM office.
 - 3. 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.
 - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. 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.
 - 5. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
 - 6. A variance to test the **surface casing** to the reduced pressure of 1000 psi with the rig pumps is approved.

IV. 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.

Engineer on call phone: 505-706-2779

WWI 042407