

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

RECEIVED

Form 3160-3
(April 2004)

DEC 10 2008

HOBBSOCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No
Private Surface
SHL LC-069832-C BHL LC-069832
6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

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

Pending

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No (37525)
Lincoln 5 Federal Com No. 1

2. Name of Operator

Cimarex Energy Co. of Colorado

9. API Well No.
30-005- 29091

3a. Address

PO Box 140907; Irving, TX 75014

3b. Phone No. (include area code)

972-443-6489

10. Field and Pool, or Exploratory

ABO; Wildcat; ABO-WOLF CANYON

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At Surface

1980 FSL & 330 FWL

At proposed prod Zone

1980 FSL & 330 FEL Unit 1 Proposed Horizontal Abo Test

11. Sec., T. R. M. or Blk and Survey or Area

5-15S-31E

14. Distance in miles and direction from nearest town or post office*

12. County or Parish
Chaves
13 State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line if
any)

330

16. No of acres in lease

LC-069832-C - 321.75 acres

LC-069832 - 320 acres

17. Spacing Unit dedicated to this well

N2S2 160

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

NA

19. Proposed Depth

Pilot Hole 9500'

MD 13295'

TVD 8750'

20. BLM/BIA Bond No. on File

NM-2575

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

4,451' GR

22. Approximate date work will start*

11/30/2008

23. Estimated duration

35-45 days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

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

- Well plat certified by a registered surveyor
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
- Operator Certification
- 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

10.16.08

Title

Manager Operations Administration

Approved By (Signature)

/s/ Jerry Dutchover

Name (Printed/Typed)

/s/ Jerry Dutchover

Date

05 DEC 2008

Title

Acting Assistant Field Manager,
Lands And Minerals

Office

ROSWELL FIELD OFFICE

APPROVED FOR 2 YEARS

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)

ROSWELL CONTROLLED WATER BASIN

RECEIVED

CEMENT BEHIND THE 133'
CASING MUST BE CIRCULATED

WITNESS

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 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 October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-005-29091	Pool Code ✓	Pool Name Abq Wildcat, ABO, WOLF CAMP
Property Code 37525	Property Name LINCOLN "5" FEDERAL COM	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 4451'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	5	15 S	31 E		1980	SOUTH	330	WEST	CHAVES

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
I	5	15 S	31 E		1980	SOUTH	330	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

SURFACE LOCATION Lat - N33°02'35.14" Long - W103°51'05.74" NMSPCE- N 743554.1 E 688956.0 (NAD-83)	BOTTOM HOLE LOCATION Lat - N33°02'35.10" Long - W103°50'11.40" NMSPCE- N 743571.421 E 693581.488 (NAD-83)	OPERATOR CERTIFICATION 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. <u>Zeno Farris</u> 10-15-08 Signature Date Zeno Farris Printed Name
Private Surface LC-069832-C SHL 1980 FSL & 330 FWL P.P. 1980 FSL & 330 FWL BHL 1980 FSL & 330 FEL		SURVEYOR CERTIFICATION 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. APR 26, 2008 Date Surveyed Signature Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS



Planned Wellpath Report

Preliminary
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Lincoln) Sec 5, T15S, R31E	Wellbore	No. 1H PWB
Facility	Lincoln 5 Fed Com No. 1H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999934	Report Generated	7/25/2008 at 2:24:29 PM
Convergence at slot	0.26° East	Database/Source file	WA_Midland/No. 1H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	688956.00	743554.10	33°02'35.143"N	103°51'05.743"W
Facility Reference Pt			688956.00	743554.10	33°02'35.143"N	103°51'05.743"W
Field Reference Pt			689008.20	741949.80	33°02'19.267"N	103°51'05.216"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	4469.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.79°



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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
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Field	(Lincoln) Sec 5, T15S, R31E	Wellbore	No. 1H PWB
Facility	Lincoln 5 Fed Com No. 1H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00	0.000	89.785	0.00	0.00	0.00	0.00	0.00	Tie On
8560.00	0.000	89.785	8560.00	0.00	0.00	0.00	0.00	KOP
8660.00†	30.000	89.785	8655.49	25.59	0.10	25.59	30.00	
8760.00†	60.000	89.785	8725.40	95.49	0.36	95.49	30.00	
8860.00†	90.000	89.785	8750.99	190.99	0.72	190.98	30.00	
8860.04	90.013	89.785	8750.99	191.03	0.72	191.03	30.00	EOC
8960.00†	90.013	89.785	8750.96	290.99	1.09	290.98	0.00	
9060.00†	90.013	89.785	8750.94	390.99	1.46	390.98	0.00	
9160.00†	90.013	89.785	8750.92	490.99	1.84	490.98	0.00	
9260.00†	90.013	89.785	8750.90	590.99	2.21	590.98	0.00	
9360.00†	90.013	89.785	8750.87	690.99	2.59	690.98	0.00	
9460.00†	90.013	89.785	8750.85	790.99	2.96	790.98	0.00	
9560.00†	90.013	89.785	8750.83	890.99	3.34	890.98	0.00	
9660.00†	90.013	89.785	8750.81	990.99	3.71	990.98	0.00	
9760.00†	90.013	89.785	8750.79	1090.99	4.09	1090.98	0.00	
9860.00†	90.013	89.785	8750.76	1190.99	4.46	1190.98	0.00	
9960.00†	90.013	89.785	8750.74	1290.99	4.83	1290.98	0.00	
10060.00†	90.013	89.785	8750.72	1390.99	5.21	1390.98	0.00	
10160.00†	90.013	89.785	8750.70	1490.99	5.58	1490.98	0.00	
10260.00†	90.013	89.785	8750.67	1590.99	5.96	1590.97	0.00	
10360.00†	90.013	89.785	8750.65	1690.99	6.33	1690.97	0.00	
10460.00†	90.013	89.785	8750.63	1790.99	6.71	1790.97	0.00	
10560.00†	90.013	89.785	8750.61	1890.99	7.08	1890.97	0.00	
10660.00†	90.013	89.785	8750.59	1990.99	7.46	1990.97	0.00	
10760.00†	90.013	89.785	8750.56	2090.99	7.83	2090.97	0.00	
10860.00†	90.013	89.785	8750.54	2190.99	8.20	2190.97	0.00	
10960.00†	90.013	89.785	8750.52	2290.99	8.58	2290.97	0.00	
11060.00†	90.013	89.785	8750.50	2390.99	8.95	2390.97	0.00	
11160.00†	90.013	89.785	8750.47	2490.99	9.33	2490.97	0.00	
11260.00†	90.013	89.785	8750.45	2590.99	9.70	2590.97	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Lincoln) Sec 5, T15S, R31E	Wellbore	No. 1H PWB
Facility	Lincoln 5 Fed Com No. 1H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11360.00†	90.013	89.785	8750.43	2690.99	10.08	2690.97	0.00	
11460.00†	90.013	89.785	8750.41	2790.99	10.45	2790.97	0.00	
11560.00†	90.013	89.785	8750.39	2890.99	10.83	2890.97	0.00	
11660.00†	90.013	89.785	8750.36	2990.99	11.20	2990.96	0.00	
11760.00†	90.013	89.785	8750.34	3090.99	11.57	3090.96	0.00	
11860.00†	90.013	89.785	8750.32	3190.99	11.95	3190.96	0.00	
11960.00†	90.013	89.785	8750.30	3290.99	12.32	3290.96	0.00	
12060.00†	90.013	89.785	8750.27	3390.99	12.70	3390.96	0.00	
12160.00†	90.013	89.785	8750.25	3490.99	13.07	3490.96	0.00	
12260.00†	90.013	89.785	8750.23	3590.99	13.45	3590.96	0.00	
12360.00†	90.013	89.785	8750.21	3690.99	13.82	3690.96	0.00	
12460.00†	90.013	89.785	8750.19	3790.99	14.20	3790.96	0.00	
12560.00†	90.013	89.785	8750.16	3890.99	14.57	3890.96	0.00	
12660.00†	90.013	89.785	8750.14	3990.99	14.94	3990.96	0.00	
12760.00†	90.013	89.785	8750.12	4090.99	15.32	4090.96	0.00	
12860.00†	90.013	89.785	8750.10	4190.99	15.69	4190.96	0.00	
12960.00†	90.013	89.785	8750.07	4290.99	16.07	4290.96	0.00	
13060.00†	90.013	89.785	8750.05	4390.99	16.44	4390.96	0.00	
13160.00†	90.013	89.785	8750.03	4490.99	16.82	4490.95	0.00	
13260.00†	90.013	89.785	8750.01	4590.99	17.19	4590.95	0.00	
13294.85	90.013	89.785	8750.00	4625.83	17.32	4625.80	0.00	No. 1H BHL



Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Lincoln) Sec 5, T15S, R31E	Wellbore	No. 1H PWB
Facility	Lincoln 5 Fed Com No. 1H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H BHL	13294.85	8750.00	17.32	4625.80	693581.49	743571.42	33°02'35.101"N	103°50'11.402"W	point

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Preliminary				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	13294.85	NaviTrak (Standard)		No. 1H PWB



Cimarex Energy Co. of Colorado

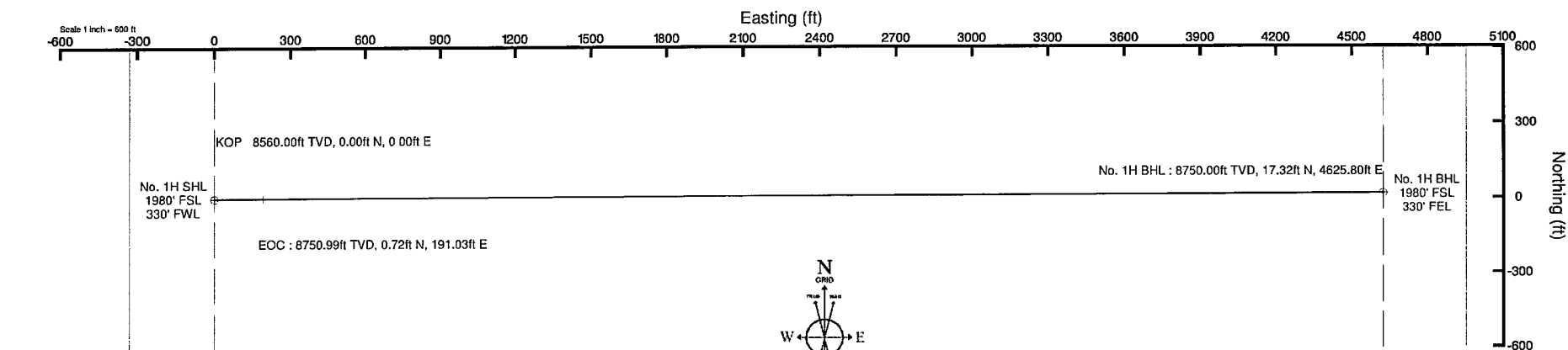
Location: Chaves County, NM
Field: (Lincoln) Sec 5, T15S, R31E
Facility: Lincoln 5 Fed Com No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H.PWB



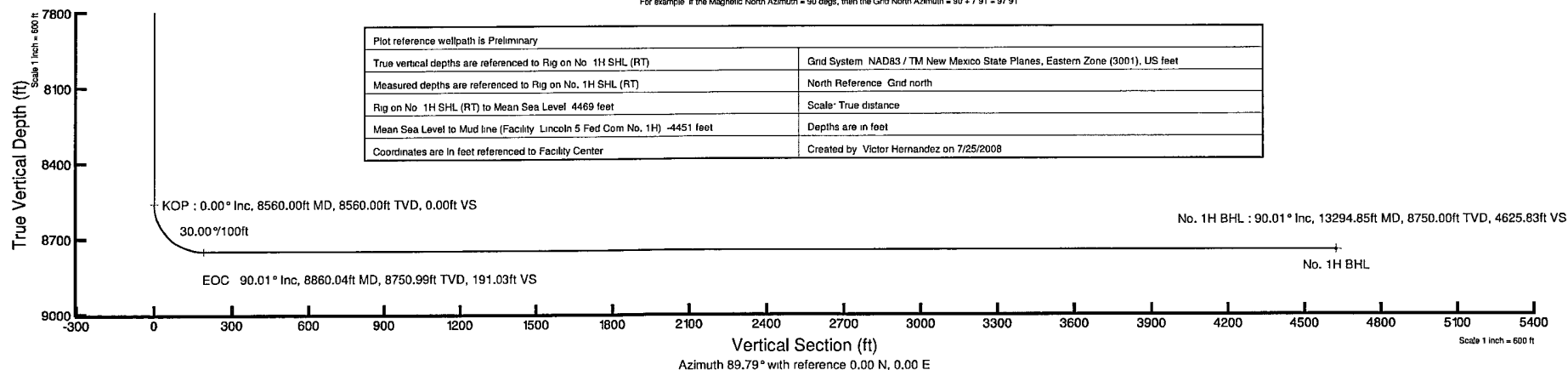
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (%100ft)	VS (ft)
Tie On	0.00	0.000	89.785	0.00	0.00	0.00	0.00	0.00
KOP	8560.00	0.000	89.785	8560.00	0.00	0.00	0.00	0.00
EOC	8860.04	90.013	89.785	8750.99	0.72	191.03	30.00	191.03
No. 1H BHL	13294.85	90.013	89.785	8750.00	17.32	4625.80	0.00	4625.83



LEASE / HARD LINES ARE ESTIMATE ONLY AND ARE SUBJECT TO CUSTOMER APPROVAL.

BGGM (1945.0 to 2009.0) Dip: 60.98° Field: 43384.4 nT
Magnetic North is 8.17 degrees East of True North (at 7/25/2008)
Grid North is 0.28 degrees East of True North
To correct azimuth from True to Grid subtract 0.28 degrees
To correct azimuth from Magnetic to Grid add 7.91 degrees
For example if the Magnetic North Azimuth = 90 degrees, then the Grid North Azimuth = 90 + 7.91 = 97.91



Operator - Landowner Agreement

Company: Cimarex Energy Co. of Colorado
Proposed Well: Lincoln 5 Federal Com No. 1
Federal Lease Number: LC-069832, LC-069832-C

This is to advise that Cimarex Energy Co. of Colorado has an agreement with: Bill Medlin;
PO Box 50; Maljamar, NM 88264 the surface owner, concerning entry and surface
restoration after completion of drilling operations at the above described well.

After abandonment of the well, all pits will be filled and levelled and all equipment and
trash will be removed from the well site. No other requirements were made concerning
restoration of the well site.

October 16, 2008
Date

Zeno Farris
Signature Zeno Farris
Manager, Operations Administration

Application to Drill
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
Unit L, Section 5
T15S R31E; Chaves County, NM

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

- 1 Location: SHL 1980 FSL & 330 FWL
BHL 1980 FSL & 330 FEL *Proposed Horizontal Abo Test*
- 2 Elevation above sea level: 4,451 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: Pilot Hole 9500' MD 13295' TVD 8750'
- 6 Estimated tops of geological markers:

Yates	2,312'
Queen	3,090'
SanAndres	3,940'
Abo Shale	7,340'
Lower Abo Dolomite	8,585'
Wolfcamp LS	8,675'
- 7 Possible mineral bearing formation:

Abo	Oil
Wolfcamp	Oil
Queen	Oil

8 Proposed Mud Circulating System:

Depth			Mud Wt	Visc	Fluid Loss	Type Mud
0	to	340	8.4 - 8.6	30-32	May lose circ	Fresh water spud mud
340	to	3,950	10.0	28-29	May lose circ	Brine Water
3,950	to	9,500	8.6 - 9.5	28-29	NC	Fresh water and brine, use hi-vis sweeps to keep hole clean
8,560	to	13,295	8.4 - 8.9	28	NC	2% KCl

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.

- 8a Drill 7½" pilot hole to 9500' and run and cement 7" casing as shown on next page. Set KO Plug @ 8570.' Mill window from 8555' to 8565' and kick off lateral leg @ 8560.' Drill lateral 6½" hole to 13295' MD & 8750' TVD. Run 4½" 11.6# P-110 **BTC** (Peak Systems Iso-Pak Liner) from RSB packer @ 8455' to 8860' (End of Curve) and **LTC** from 8860' to TD @ MD 13295' and TVD 8750.' No cement required for Peak Systems Liner.

Application to Drill
Lincoln 5 Federal Com No. 1
 Cimarex Energy Co. of Colorado
 Unit L, Section 5
 T15S R31E; Chaves County, NM

9 Casing Program:

Hole Size (inches)	Depth		Casing OD (inches)		Weight (lbs)	Thread	Collar	Grade
17½	0'	to 340'	New	13¾	48	8-R	STC	H-40
12¾	0'	to 3950'	New	9¾	40	8-R	LTC	J-55
8¾	0'	to 9500'	New	7	26	8-R	LTC	P-110
6¾	8455'	to 8860'	New	4½	12	8-R	BTC	P-110
6¾	8860'	13295'	New	4½	12	8-R	LTC	P-110

10 Cementing Program:

Surface Lead: 110 sx Light Premium Plus + 0.125 lb/sk Poly-E-Flake + 1% CaCl₂ (wt 14.2, yld 1.64)
 Tail: 220 sx Premium Plus + 2% CaCl₂ (wt 14.8, yld 1.35)
 TOC Surface

Intermediate Lead: 450 sx Interfill C + 0.125 lb/sk Poly-E-Flake (wt 11.9, yld 2.45)
 Tail: 200 sx Premium Plus + 1% CaCl₂ (wt 14.8, yld 1.33)
 TOC Surface

Production 615 sx Super H + 0.5% Halad-344 + 0.4% CFR-3 + 1lbm/sk Salt + 5 lb/sk Gilsonite + 0.125 lb/sk Poly-E-Flake + 0.35% HR-7
 (wt 13.0, yld 1.67)
 TOC 3,750'

Liner *Peak Systems Iso-Pack Liner will not require cementing.*

Fresh water will be protected by setting surface casing at **340** and cementing to **Surface**
 Hydrocarbon zones will be protected by setting intermediate casing at **3950** and cementing to **Surface**
 and by setting production casing at **9500** and cementing to **3750**

Cimarex uses the following minimum safety factors:

Burst	Collapse	Tension
1.125	1.125	1.80

Application to Drill
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
Unit L, Section 5
T15S R31E; Chaves County, NM

11 Pressure control Equipment:

Exhibit "E". A 13 $\frac{3}{8}$ " 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 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 surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

We are requesting a variance for testing the 13 $\frac{3}{8}$ " surface casing 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 to test the 13 $\frac{3}{8}$ " casing to 1000 psi using rig pumps. The BOP will be tested to 5000 PSI by an independent service company.

12 Testing, Logging and Coring Program:

- A. Mud logging program: 2 man unit from 3950' 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 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.

Abo pay will be perforated and stimulated.

The proposed well will be tested and potentialized as **an oil well.**

Hydrogen Sulfide Drilling Operations Plan
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
Unit L, Section 5
T15S R31E; Chaves County, NM

- 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:

No DSTs or cores are planned at this time.
- 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.

H₂S Contingency Plan
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
Unit L, Section 5
T15S R31E; Chaves County, NM

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must:

- ★ Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- ★ Evacuate any public places encompassed by the 100 ppm ROE.
- ★ Be equipped with H₂S monitors and air packs in order to control the release.
- ★ Use the "buddy system" to ensure no injuries occur during the response.
- ★ Take precautions to avoid personal injury during this operation.
- ★ Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- ★ Have received training in the:
 - ◆ Detection of H₂S, and
 - ◆ Measures for protection against the gas,
 - ◆ Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air=1	2 ppm	N/A	1000 ppm

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S Contingency Plan Emergency Contacts

Lincoln 5 Federal Com No. 1

Cimarex Energy Co. of Colorado

Unit L, Section 5

T15S R31E; Chaves County, NM

Company Office

Cimarex Energy Co. of Colorado
Co. Office and After-Hours Menu

800-969-4789

Key Personnel

Name	Title	Office	Mobile
Doug Park	Drilling Manager	972-443-6463	972-333-1407
Dee Smith	Drilling Super	972-443-6491	972-882-1010
Jim Evans	Drilling Super	972-443-6451	972-465-6564
Dorsey Rogers	Field Super		575-200-6105
Roy Shirley	Field Super		432-634-2136

Artesia

Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Chaves County

Ambulance	575-624-7590
State Police	575-622-7200
City Police	575-624-6770
Sheriff's Office	575-624-7590
Fire Department	575-624-7590
Chaves Co. Emergency Services Coordinator	575-624-6770 x 129 575-910-5033 (Cell)
BLM Roswell Field Office	575-627-0272

Carlsbad

Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

Santa Fe

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635

National

National Emergency Response Center (Washington, D.C.)	800-424-8802
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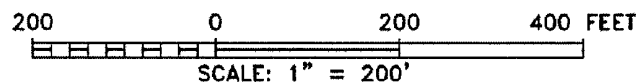
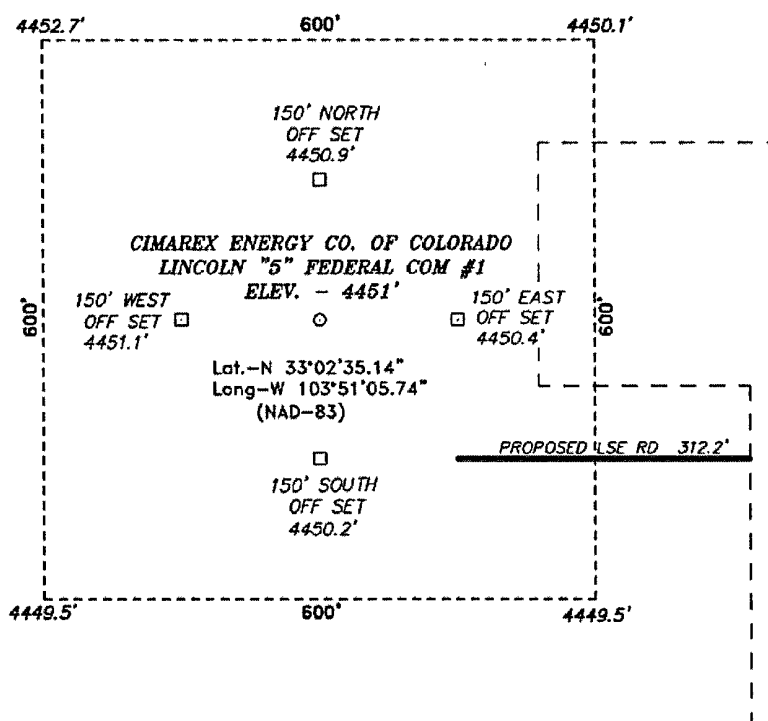
Medical

Flight for Life - 4000 24th St.; Lubbock, TX	806-743-9911
Aerocare - R3, Box 49F; Lubbock, TX	806-747-8923
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949

Other

Boots & Coots IWC	800-256-9688	or	281-931-8884
Cudd Pressure Control	432-699-0139	or	432-563-3356
Halliburton	575-746-2757		
B.J. Services	575-746-3569		

SECTION 5, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



Directions to Location:

FROM THE MILE MARKER 30 OF HWY 249; GO
NORTH ON LEASE ROAD FOR 2.1 MILES TO LEASE
ROAD, ON LEASE ROAD GO WEST TURNING NORTH
FOR 0.7 MILES TO PROPOSED LEASE ROAD.

CIMAREX ENERGY CO. OF COLORADO

REF: LINCOLN "5" FEDERAL COM #1 / WELL PAD TOPO

THE LINCOLN "5" FEDERAL COM #1 LOCATED 1980'

FROM THE SOUTH LINE AND 330' FROM THE WEST LINE OF

SECTION 5, TOWNSHIP 15 SOUTH, RANGE 31 EAST,

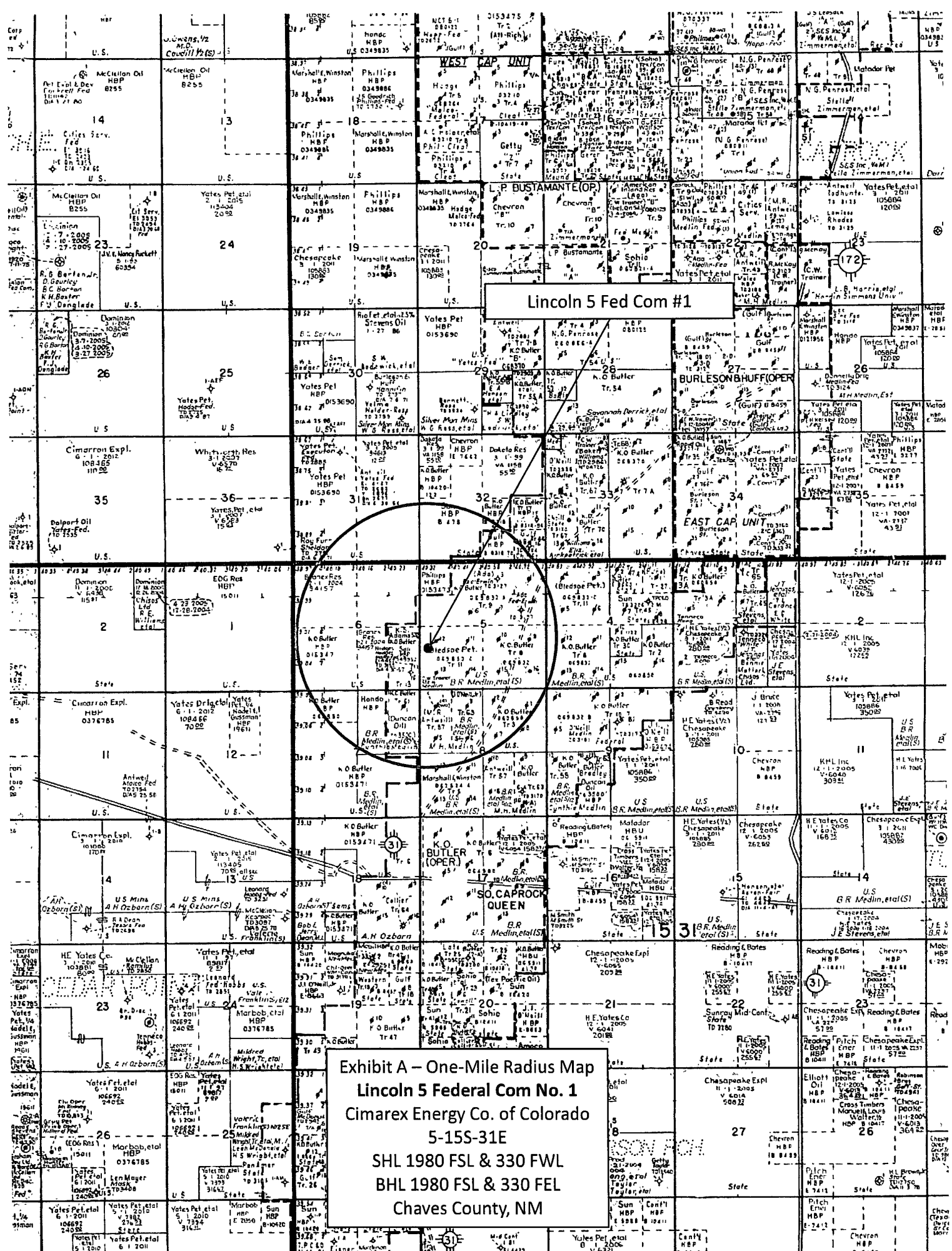
N.M.P.M., CHAVES COUNTY, NEW MEXICO.

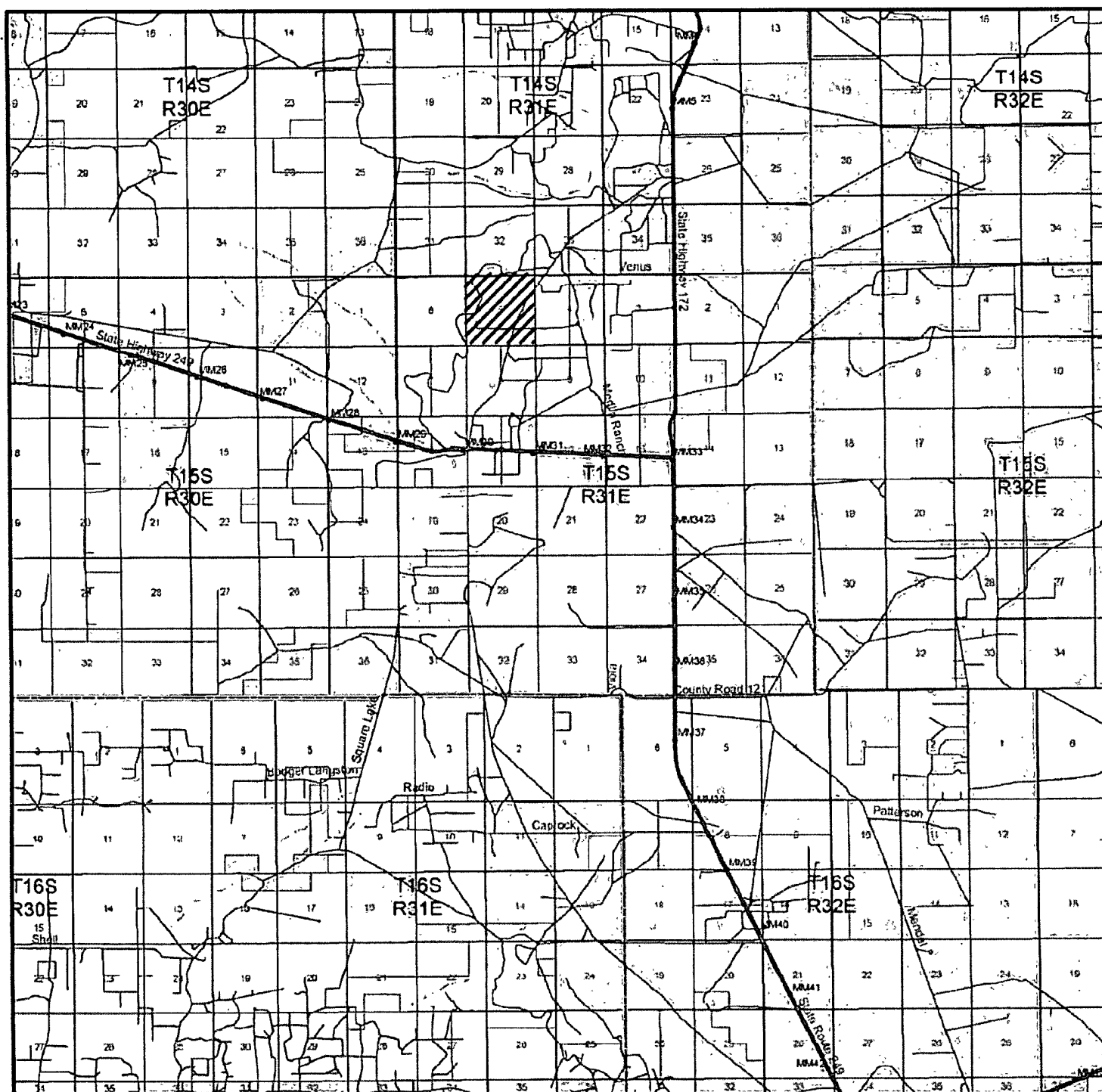
BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 19429 Drawn By: J. SMALL

Date: 05-02-2008 Disk: JMS 19429

Survey Date: 04-26-2008 Sheet 1 of 1 Sheets





LINCOLN "5" FEDERAL COM #1
 Located 1980' FSL and 330' FWL
 Section 5, Township 15 South, Range 31 East,
 N.M.P.M., Chaves County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

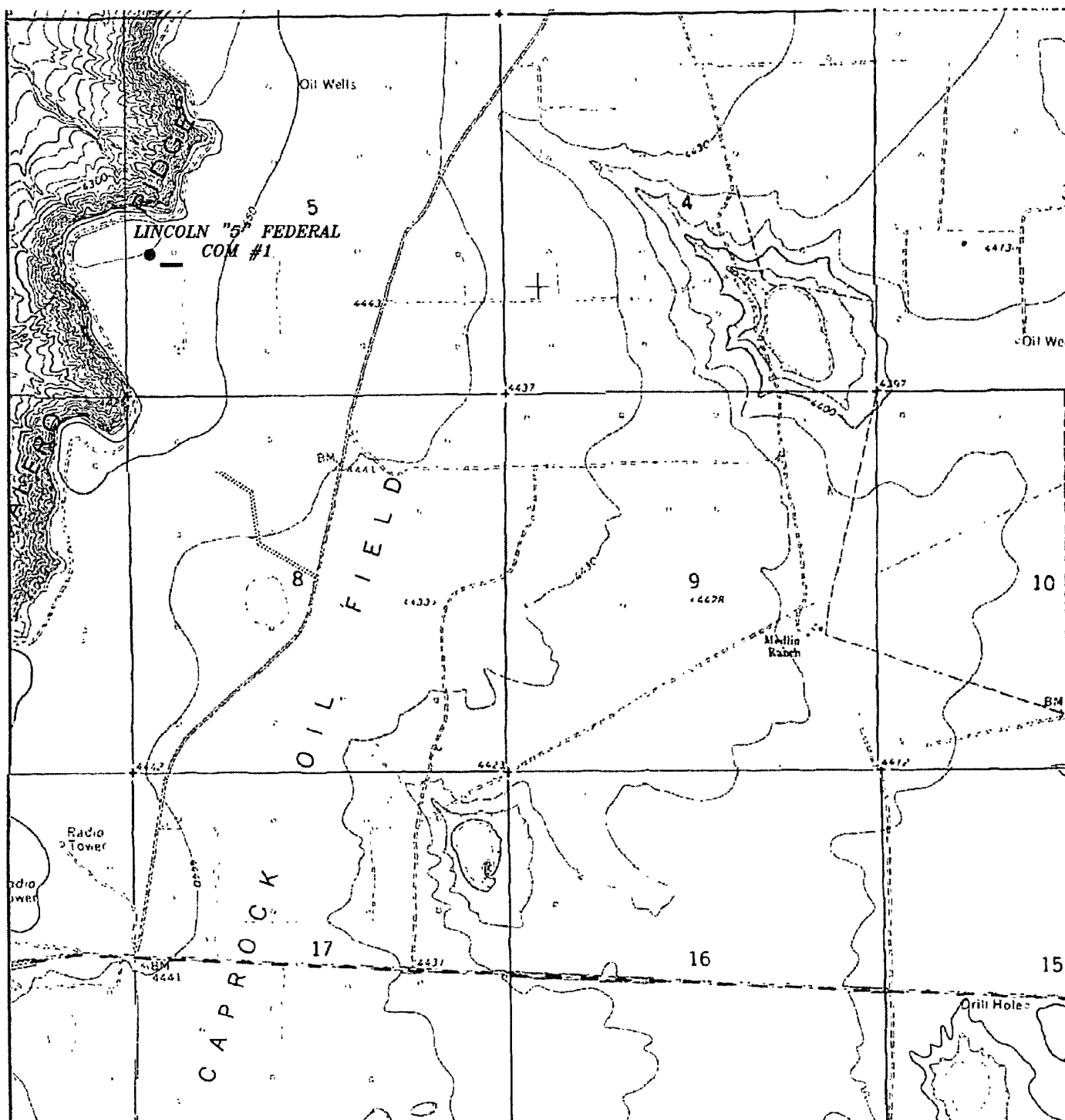
W.O. Number: JMS 19429

Survey Date: 04-26-2008

Scale: 1" = 2 MILES

Date: 05-02-2008

CIMAREX
ENERGY CO.
OF COLORADO



LINCOLN "5" FEDERAL COM #1
 Located 1980' FSL and 330' FWL
 Section 5, Township 15 South, Range 31 East,
 N.M.P.M., Chaves County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: JMS 19430T

Survey Date: 04-10-2008

Scale: 1" = 2000'

Date: 04-11-2008

CIMAREX
ENERGY CO.
OF COLORADO

Cactus Rig 107

Cimarex Energy Co.
Irving, TX

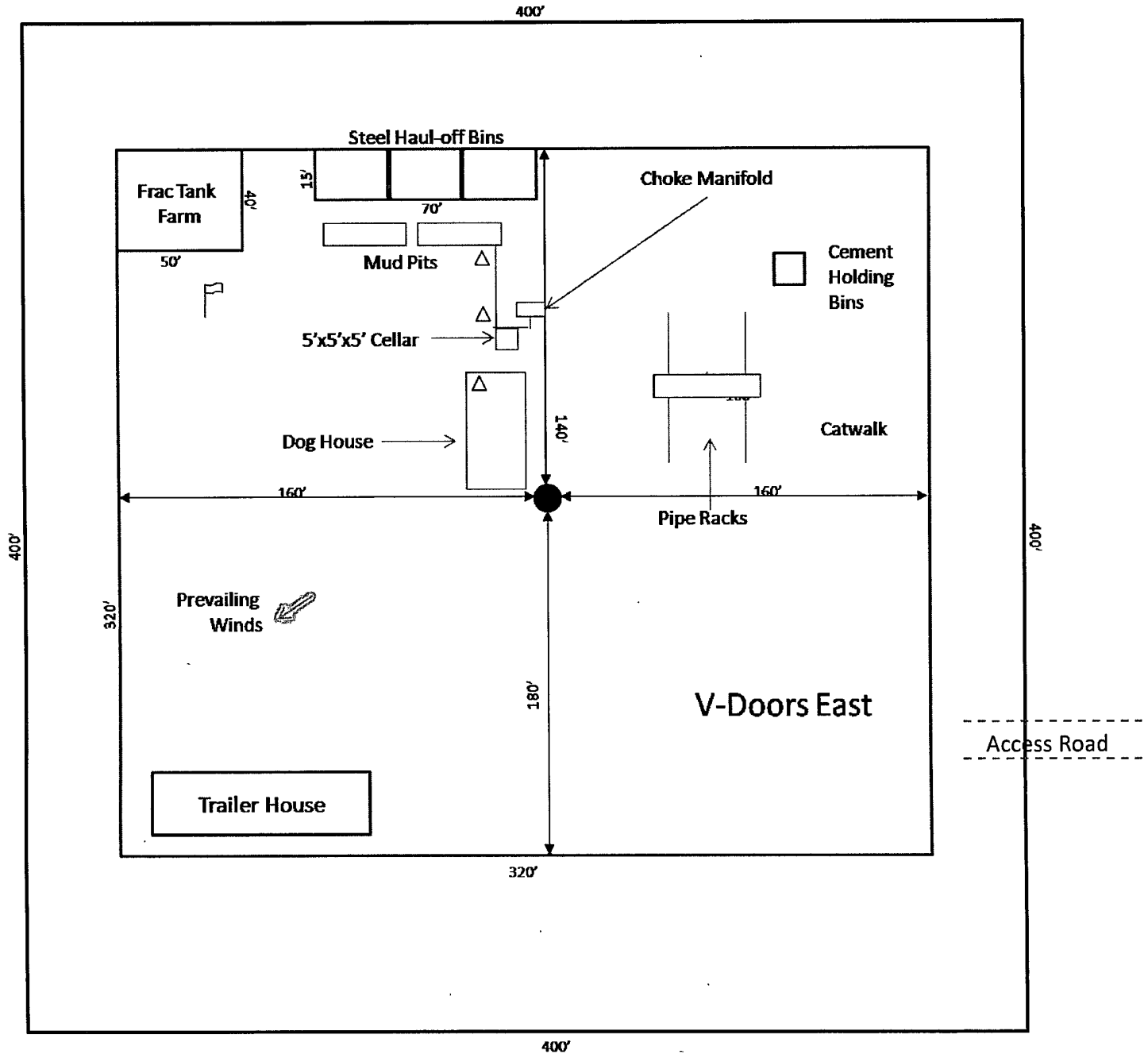
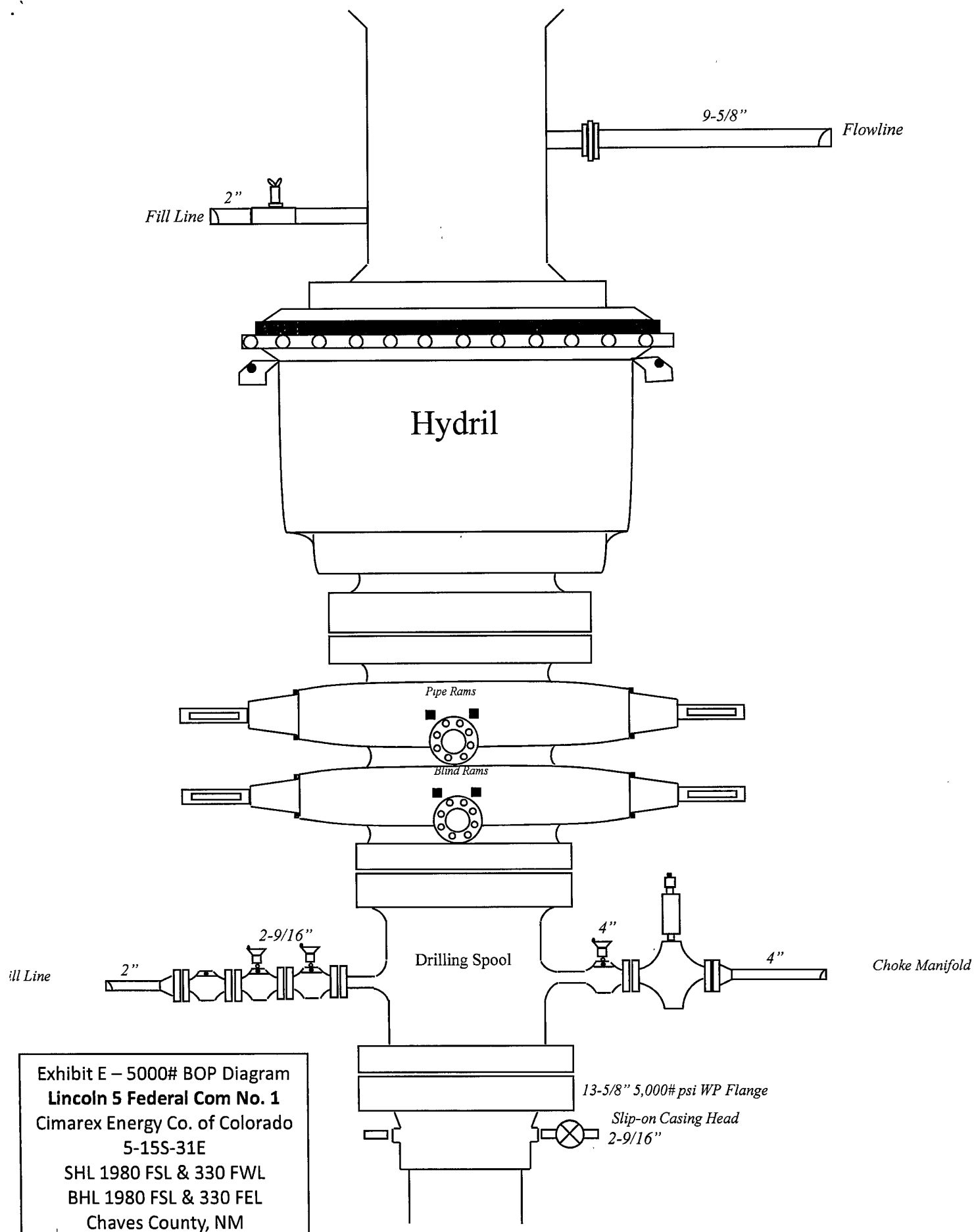


Exhibit D – Rig Layout
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
5-15S-31E
SHL 1980 FSL & 330 FWL
BHL 1980 FSL & 330 FEL
Chaves County, NM

SR & A



DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE

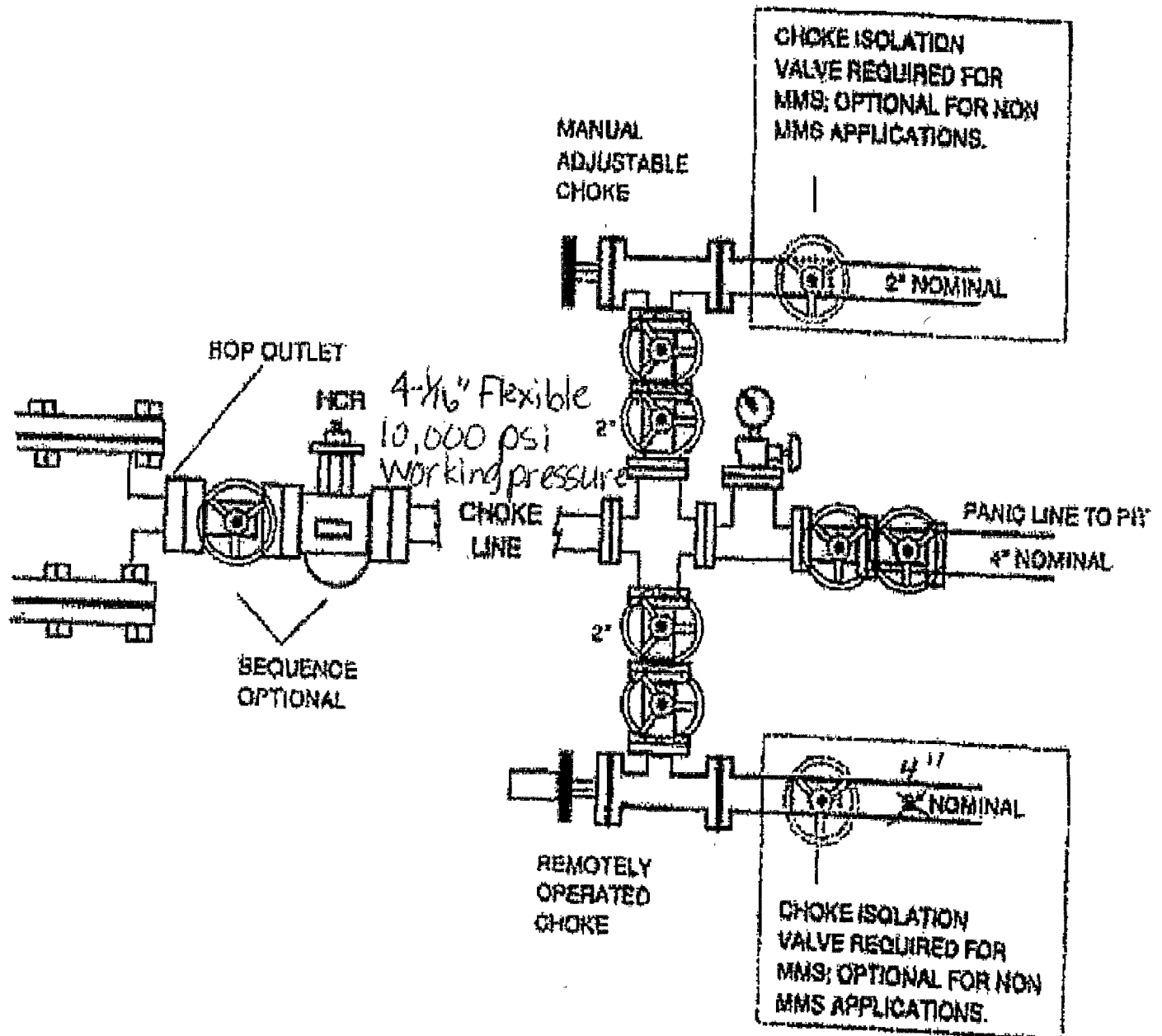


Exhibit E-2 – Choke Manifold Diagram
Lincoln 5 Federal Com No. 1
Cimarex Energy Co. of Colorado
5-155-31E
SHL 1980 FSL & 330 FWL
BHL 1980 FSL & 330 FEL
Chaves County, NM

Exhibit A -- General Location Map

