

HOBBS OCD

NOV 12 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
APPLICATION FOR PERMIT TO DRILL OR REENTER

NM OCD

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
SHL Fee; BHL: NMNM128835

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

Lea 7 Federal Com 1H

9. API Well No.

30-025-42268

10. Field and Pool, or Exploratory

WC-025 G-07 5203506D; BONE

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

7, 20s, 35e

1a. Type of Work

☒ DRILL

☐ REENTER

1b. Type of Well

☒ Oil Well

☐ Gas Well

☐ Other

☒ Single Zone

☐ Multiple Zone

2. Name of Operator

Cimarex Energy Co.

3a. Address

600 N. Marienfield St. Ste. 600 Midland Tx 79071

3b. Phone No. (include area code)

432-571-7800

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

At Surface 330 FSL & 660 FWL

At proposed prod. Zone 330 FNL & 900 FWL

Wolfcamp

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

Hobbs NM, is +/-22.6 miles northeasterly

12. County or Parish

Lea

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

NMNM128835=319.67 acres
Fee=160.00 acres

17. Spacing Unit dedicated to this well

160.00
159.40

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

2890' to the
Lea 7 Federal
Com 2H

19. Proposed Depth

Pilot Hole TD: N/A

15,472 MD

11,070 TVD

20. BLM/BIA Bond No. on File

NM2575 & NMB000835

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

3672 GR

22. Approximate date work will start*

2/25/14

23. Estimated duration

35 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

2. A Drilling Plan

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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator Certification

6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Hope Knauks

Name (Printed/Typed)

Hope Knauks

Date

2/10/14

Title

Regulatory Compliance

Approved By (Signature)

AFM

Name (Printed/Typed)

CFO

Date

11-12-14

Application approval does not warrant or certify that the applicant holds legal title to the land on which operations are to be conducted 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 to knowingly make any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

Approval Subject to General Requirements
& Special Stipulations Attached

CAPITAN CONTROLLED WATER BASIN

APPROVAL FOR TWO YEARS

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NOV 14 2014

Application to Drill
Lea 7 Federal Com 1H
 Cimarex Energy Co.
 UL: N, Sec. 7, 20s, 35e
 Lea Co., 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 330 FSL & 660 FWL
 BHL 330 FNL & 900 FWL
2. **Elevation Above Sea Level:** 3,672' 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:** 15,472 MD 11,070 TVD Pilot Hole TD: N/A
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler	1740	N/A
Top Salt	1830	N/A
Tansill	3513	N/A
Seven Rivers	4020	N/A
Queen	4700	N/A
Capitan	4900	N/A
Cherry Canyon	5820	N/A
Brushy Canyon	8030	N/A
Bone Spring	8225	N/A
1st BSS	9620	N/A
2nd BSS	10220	N/A
3rd BSS	10840	N/A
3rd BS "C" Sand	11030	Hydrocarbons
Wolfcamp	11120	N/A

7. **Possible Mineral Bearing Formation:** Shown above

7A. **OSE Ground Water Estimated Depth:** 125'

8. **Casing Program:**

Name	Casing Depth From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Open Hole Size (inches)	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	BHP (psig)	Anticipated Mud Weight (ppg)	Collapse SF at Full Evacuation(1.125)	Collapse SF at 1/3 Evacuation(1.125)	Burst SF (1.125)	Cumulative Air Weight	Cumulative Buoyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface	0	1780	1780	17 1/2	13-3/8"	54.50	J-55	ST&C	New	768	8.3	1.47		3.57	97,010	84,717	6.07
Intermediate	0	5770	5770	12 1/4	9-5/8"	40.00	J-55	LT&C	New	3000	10.0		1.34	1.32	230,800	195,563	2.66
Production	0	10573	10573	8 3/4	5-1/2"	17.00	P-110	LT&C	New	4948	9.0	1.51		2.15	188,190	162,332	2.74
Production	10573	15472	11070	8 3/4	5-1/2"	17.00	P-110	BT&C	New	5180	9.0	1.44		2.05	8,449	7,288	74.92

Note: Operator may drill a 8-1/2" OH from end of curve to TD of the well. This is to reduce the need to ream the conventionally drilled curve to run a RSS assembly into the lateral.

Application to Drill
Lea 7 Federal Com 1H
 Cimarex Energy Co.
 UL: N, Sec. 7, 20s, 35e
 Lea Co., NM

8A. Casing Design and Casing Loading Assumptions:

Surface	Tension	A 1.8 design factor with effects of buoyancy: 8.30 ppg.
	Collapse	A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.30 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Intermediate	Tension	A 1.8 design factor with effects of buoyancy: 10.00 ppg.
	Collapse	A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.00 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Production and/or Completion System	Tension	A 1.8 design factor with effects of buoyancy: 9.00 ppg.
	Collapse	A 1.125 design factor with full internal evacuation of next casing string with a collapse force equal to a 9.00 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

9. Cementing Program:

Casing Type	Type	Sacks	Yield	Weight	Cubic Feet	Cement Blend
Surface	Lead	848	1.75	13.50	1483	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	231	1.34	14.80	309	Class C + LCM, 6.32 gps water
	TOC: 0	45% Excess		Centralizers per Onshore Order 2.III.B.1f		
Intermediate	Lead	1045	1.88	12.90	1963	35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	292	1.34	14.80	391	Class C + retarder + LCM, 6.32 gps water
	TOC: 0	44% Excess				
Production	Lead	664	2.40	11.90	1592	35:65 (poz/H) + salt + Sodium Metasilcate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1211	1.24	14.50	1501	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
	TOC: 4850	17% Excess		No centralizers planned in the lateral section. 1 every jt from EOC to KOP. 1 every 4th joint from KOP to 500' inside previous casing.		

Cement volumes will be adjusted depending on hole size

9a. Proposed Drilling Plan:

Pilot Hole TD: No Pilot KOP: 10,573' EOC: 11,320'

Set Surface and Intermediate casing strings. Drill production hole to KOP. Continue drilling lateral through the curve to TD. Run prod casing & cement.

10. Pressure Control Equipment:

Exhibit "E-1". A BOP consisting of two rams with blind rams and pipe rams, and one annular preventer. Below the surface casing, a 2M system will be used. Below the intermediate casing, a 3M system will be used. See attachments for BOP and choke manifold diagrams. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A Rotating head may be installed 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 and associated equipment will be installed, used, maintained, and tested in a manner necessary to assure well control and shall be in place and operational prior to drilling the surface casing shoe. The Annular Preventer shall be functioned at least weekly. The pipe and blind rams will be operated each trip. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: On the surface casing, pressure tests will be made to 250 psi low and 2000 psi high. On the intermediate casing, pressure tests will be made to 250 psi low and 3000 psi high.

The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 low and 1500 high on the intermediate casing.

Cimarex Energy Co. of Colorado requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used.

11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 1780' 1850	7.80 - 8.30	28	NC	FW Spud Mud
1780' to 5770' 5600	9.50 - 10.00	30-32	NC	Brine Water
5770' to 15472'	8.50 - 9.00	30-32	NC	FW/Cut Brine

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.

The Mud Monitoring System is an electronic Pason System satisfying requirements of Onshore Order 1:

12. Testing, Logging and Coring Program:

- A. Mud logging program: 2 man unit from 5770 to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL /GR -- Inter. Csg to TD
CNL /GR -- Surf to Inter. Csg
- C. No DSTs or cores are planned at this time
- D. CBL w/ CCL from as far as gravity will let it fall to TOC

13. Potential Hazards:

No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H₂S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H₂S Safety package on all wells, attached is an "H₂S Drilling Operations Plan." 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: 4982 psi

Estimated BHT: 168°

14. Construction and Drilling:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.

Drilling expected to take: 35 days.

If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:

If production casing is run an additional 30 days will be required to complete and construct surface facilities.

1st BSS pay will be perforated and stimulated.

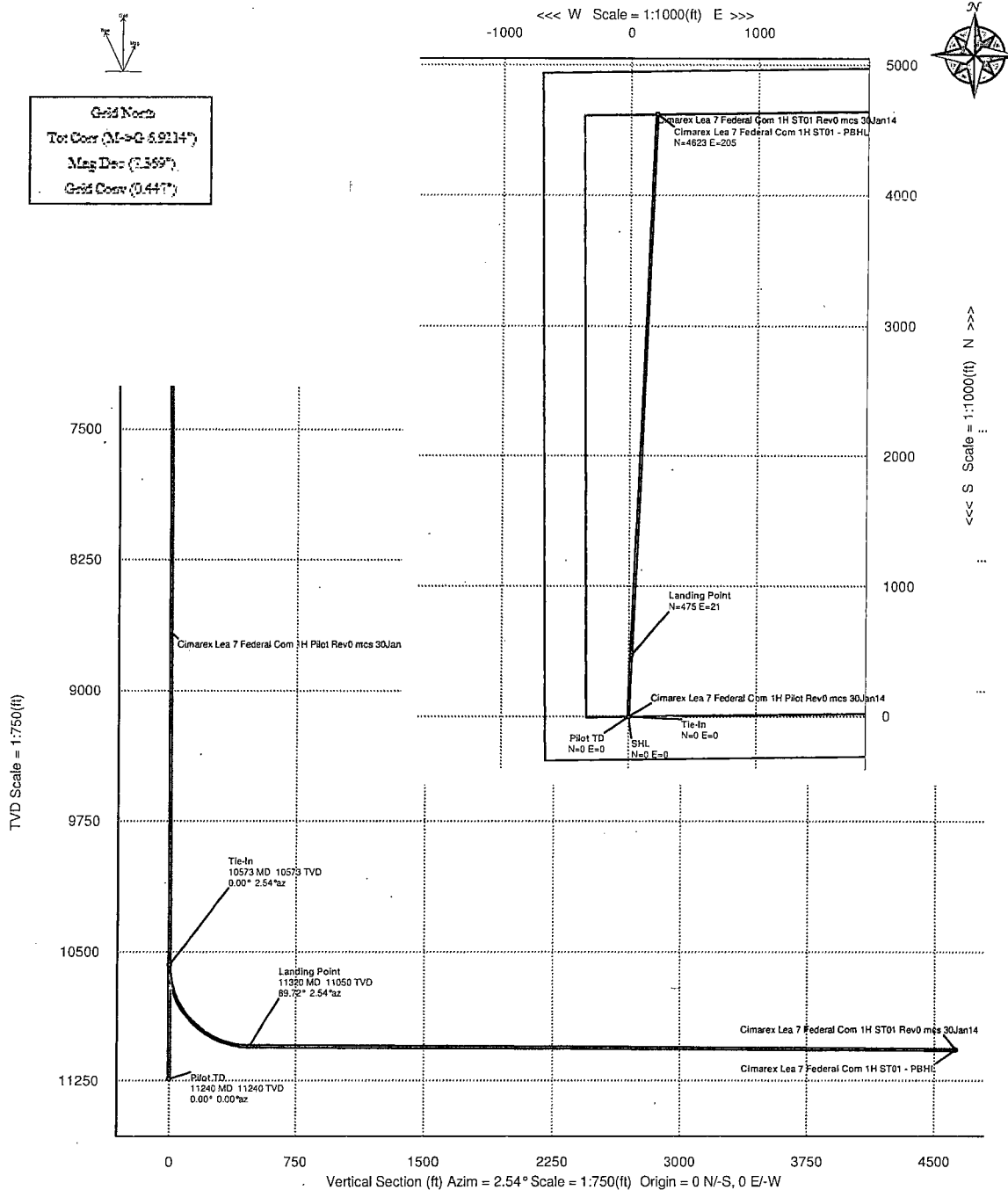
The proposed well will be tested and potentialized as **Oil**



Cimarex

PATHFINDER
A Schlumberger Company

WELL	Lea 7 Federal Com 1H	FIELD	NM Lea County (NAD 83)	STRUCTURE	TBD
Magnetic Parameters					
Model	BGM2013	Dip	50.453°	Date	January 30, 2014
		Mag Dec	7.329°	FB	48558.5m
Surface Location					
Lat	N 32 34 52.856	Long	W 103 30 10.816	Northings	57653.14 NUS
				Easting	797087.47 AUS
				Grid Cont.	0.441°
				Scale Fact.	0.99996400
Miscellaneous					
Str.	Cimarex Lea 7 Federal Com 1H	Rev	0 mcs	30 Jan 14	
Plan	Cimarex Lea 7 Federal Com 1H ST01 - PBHL				



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-In	10572.54	0.00	2.54	10572.54	0.00	0.00	0.00	
Landing Point	11320.24	89.72	2.54	11050.00	475.16	474.70	21.04	12.00
Cimarex Lea 7 Federal Com 1H ST01 - PBHL	15472.44	89.72	2.54	11070.00	4627.32	4622.78	204.88	0.00



Cimarex Lea 7 Federal Com 1H ST01 Rev0 mcs 30Jan14 Proposal Report



(Def Plan)

Report Date: February 01, 2014 - 01:29 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Lea 7 Federal Com 1H / Cimarex Lea 7 Federal Com 1H
Well: Cimarex Lea 7 Federal Com 1H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Lea 7 Federal Com 1H ST01 Rev0 mcs 30Jan14
Survey Date: January 30, 2014
Tort / AHD / DDI / ERD Ratio: 89.724 ° / 4627.321 ft / 5.764 / 0.418
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 34' 52.65597", W 103° 30' 10.91820"
Location Grid N/E Y/X: N 576203.140 ftUS, E 797087.470 ftUS
CRS Grid Convergence Angle: 0.4471 °
Grid Scale Factor: 0.999984

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 2.538 ° (Grid North)
Vertical Section Origin: 0,000 ft, 0.000 ft
TVD Reference Datum: Ground Elevation
TVD Reference Elevation: 3672.000 ft above MSL
Seabed / Ground Elevation: 3672.000 ft above MSL
Magnetic Declination: 7.369 °
Total Gravity Field Strength: 998.4913mgn (9.80665 Based)
Total Magnetic Field Strength: 48558.493 nT
Magnetic Dip Angle: 60.453 °
Declination Date: January 30, 2014
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.4471 °

Total Corr Mag North->Grid North: 6.9214 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	N/A
	100.00	0.00	2.54	100.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	200.00	0.00	2.54	200.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	300.00	0.00	2.54	300.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	400.00	0.00	2.54	400.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	500.00	0.00	2.54	500.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	600.00	0.00	2.54	600.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	700.00	0.00	2.54	700.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	800.00	0.00	2.54	800.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	900.00	0.00	2.54	900.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1000.00	0.00	2.54	1000.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1100.00	0.00	2.54	1100.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1200.00	0.00	2.54	1200.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1300.00	0.00	2.54	1300.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1400.00	0.00	2.54	1400.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1500.00	0.00	2.54	1500.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1600.00	0.00	2.54	1600.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1700.00	0.00	2.54	1700.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1800.00	0.00	2.54	1800.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	1900.00	0.00	2.54	1900.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2000.00	0.00	2.54	2000.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2100.00	0.00	2.54	2100.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2200.00	0.00	2.54	2200.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2300.00	0.00	2.54	2300.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2400.00	0.00	2.54	2400.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2500.00	0.00	2.54	2500.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2600.00	0.00	2.54	2600.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2700.00	0.00	2.54	2700.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2800.00	0.00	2.54	2800.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00
	2900.00	0.00	2.54	2900.00	0.00	0.00	0.00	576203.14	797087.47	N 32 34 52.66	W 103 30 10.92	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (%/100ft)
	13800.00	89.72	2.54	11061.94	2954.90	2952.00	130.83	579155.09	797218.30	N 32 35 21.85	W 103 30 9.12	2954.90	2.54	0.00
	13900.00	89.72	2.54	11062.43	3054.89	3051.90	135.26	579254.98	797222.73	N 32 35 22.84	W 103 30 9.06	3054.89	2.54	0.00
	14000.00	89.72	2.54	11062.91	3154.89	3151.80	139.69	579354.88	797227.16	N 32 35 23.83	W 103 30 9.00	3154.89	2.54	0.00
	14100.00	89.72	2.54	11063.39	3254.89	3251.70	144.12	579454.78	797231.58	N 32 35 24.82	W 103 30 8.94	3254.89	2.54	0.00
	14200.00	89.72	2.54	11063.87	3354.89	3351.60	148.54	579554.68	797236.01	N 32 35 25.81	W 103 30 8.88	3354.89	2.54	0.00
	14300.00	89.72	2.54	11064.35	3454.89	3451.50	152.97	579654.58	797240.44	N 32 35 26.79	W 103 30 8.82	3454.89	2.54	0.00
	14400.00	89.72	2.54	11064.83	3554.89	3551.40	157.40	579754.48	797244.87	N 32 35 27.78	W 103 30 8.75	3554.89	2.54	0.00
	14500.00	89.72	2.54	11065.32	3654.89	3651.30	161.83	579854.38	797249.29	N 32 35 28.77	W 103 30 8.69	3654.89	2.54	0.00
	14600.00	89.72	2.54	11065.80	3754.89	3751.20	166.25	579954.28	797253.72	N 32 35 29.76	W 103 30 8.63	3754.89	2.54	0.00
	14700.00	89.72	2.54	11066.28	3854.89	3851.11	170.68	580054.18	797258.15	N 32 35 30.75	W 103 30 8.57	3854.89	2.54	0.00
	14800.00	89.72	2.54	11066.76	3954.88	3951.01	175.11	580154.07	797262.58	N 32 35 31.73	W 103 30 8.51	3954.88	2.54	0.00
	14900.00	89.72	2.54	11067.24	4054.88	4050.91	179.54	580253.97	797267.00	N 32 35 32.72	W 103 30 8.45	4054.88	2.54	0.00
	15000.00	89.72	2.54	11067.72	4154.88	4150.81	183.97	580353.87	797271.43	N 32 35 33.71	W 103 30 8.39	4154.88	2.54	0.00
	15100.00	89.72	2.54	11068.21	4254.88	4250.71	188.39	580453.77	797275.86	N 32 35 34.70	W 103 30 8.33	4254.88	2.54	0.00
	15200.00	89.72	2.54	11068.69	4354.88	4350.61	192.82	580553.67	797280.29	N 32 35 35.69	W 103 30 8.27	4354.88	2.54	0.00
	15300.00	89.72	2.54	11069.17	4454.88	4450.51	197.25	580653.57	797284.71	N 32 35 36.68	W 103 30 8.21	4454.88	2.54	0.00
	15400.00	89.72	2.54	11069.65	4554.88	4550.41	201.68	580753.47	797289.14	N 32 35 37.66	W 103 30 8.15	4554.88	2.54	0.00
Cimarex Lea 7 Federal Com 1H ST01 - PBHL	15472.44	89.72	2.54	11070.00	4627.32	4622.78	204.88	580825.84	797292.35	N 32 35 38.38	W 103 30 8.10	4627.32	2.54	0.00

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	10572.540	1/100.000	30.000	30.000	SLB_MWD-STD	Pilot / Cimarex Lea 7 Federal Com 1H Pilot Rev0 mcs 30Jan14
	10572.540	15472.445	1/100.000	30.000	30.000	SLB_MWD-STD	ST01 / Cimarex Lea 7 Federal Com 1H ST01 Rev0 mcs 30Jan14

Drilling 12-1/4" hole
below 13 3/8" Casing

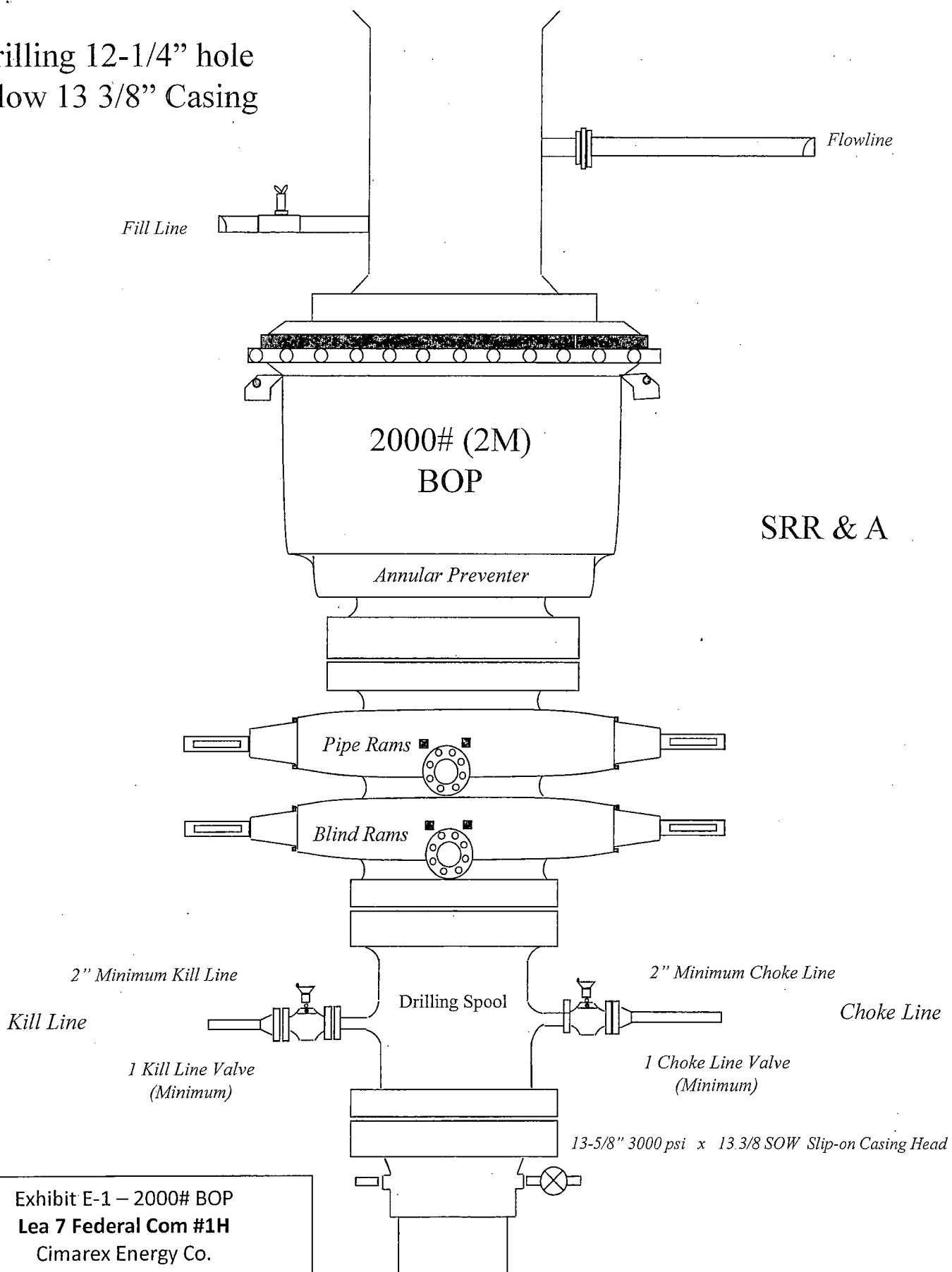


Exhibit E-1 – 2000# BOP
Lea 7 Federal Com #1H
Cimarex Energy Co.
7-20S-35E
SHL 330 FSL & 660 FWL
BHL 330 FNL & 9000 FWL
Lea County, NM

Drilling 8-3/4" hole
below 9 5/8" Casing

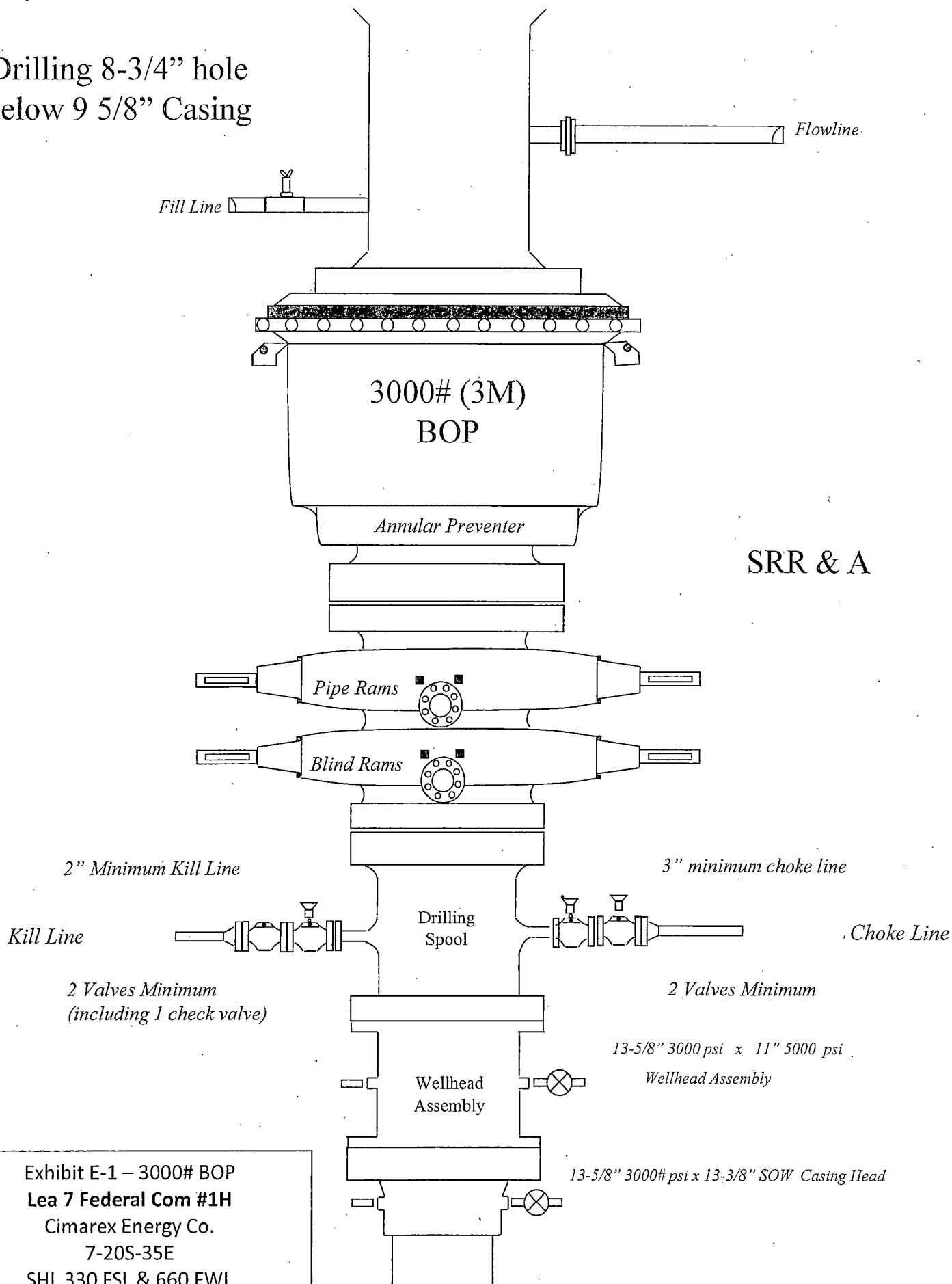
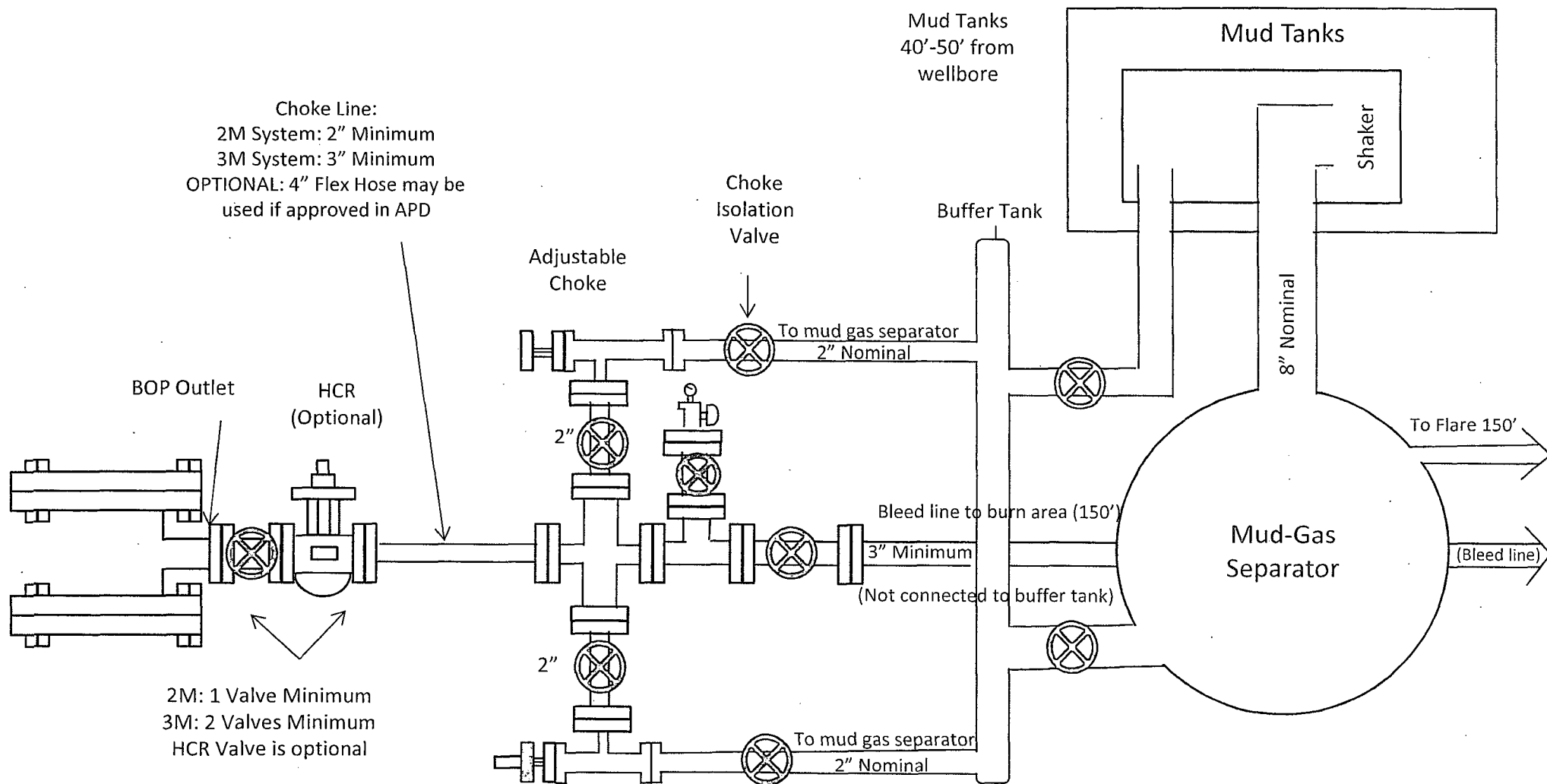


Exhibit E-1 – 3000# BOP
Lea 7 Federal Com #1H
Cimarex Energy Co.
7-20S-35E
SHL 330 FSL & 660 FWL
BHL 330 FNL & 9000 FWL
Lea County, NM



Drilling Operations Choke Manifold 2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
 Lea 7 Federal Com #1H
 Cimarex Energy Co.
 7-20S-35E
 SHL 330 FSL & 660 FWL
 BHL 330 FNL & 9000 FWL
 Lea County, NM

Exhibit F-1 — Co-Flex Hose Hydrostatic Test

Lea 7 Federal Com #1H

Cimarex Energy Co.

7-20S-35E

SHL 330 FSL & 660 FWL

BHL 330 FNL & 9000 FWL

Lea County, NM



Midwest Hose
& Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer: Oderco Inc		P.O. Number: odyd-271	
HOSE SPECIFICATIONS			
Type: Stainless Steel Armor Choke & Kill Hose		Hose Length: 45'ft.	
I.D. 4 INCHES		O.D. 9 INCHES	
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI	BURST PRESSURE 0 PSI	
COUPLINGS			
Stem Part No. OKC OKC		Ferrule No. OKC OKC	
Type of Coupling: Swage-It			
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 15 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
Hose Assembly Serial Number: 79793		Hose Serial Number: OKC	
Comments:			
Date: 3/8/2011	Tested: <i>A. Jimm Sosa</i>	Approved: <i>[Signature]</i>	



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

March 3, 2011

Hose Specifications

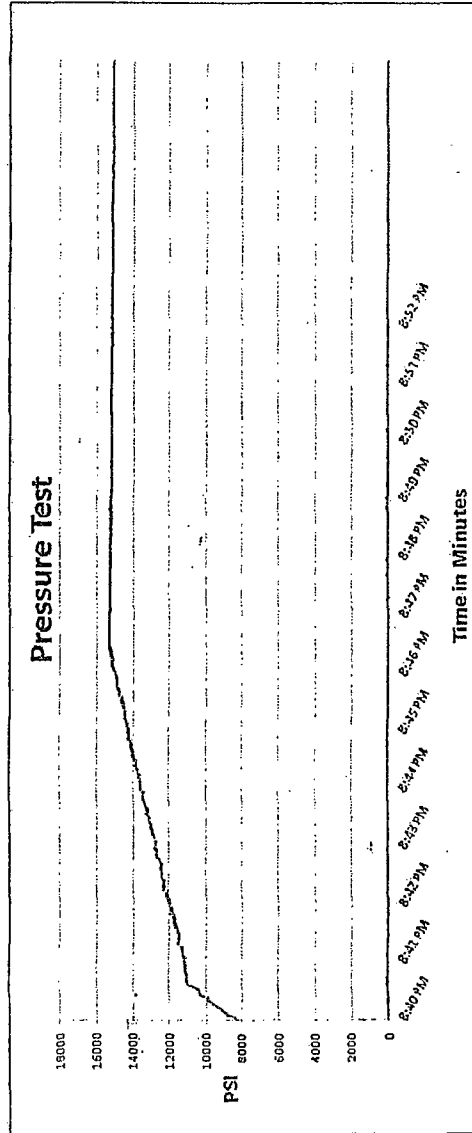
Hose Type
C.S.K.
I.D.
4"
Working Pressure
10000 PSI

Length
45'
O.D.
6.09"
Burst Pressure
Standard Safety Multiplier Applies

Verification

Type of Fittings
4.1/16 JOK
Coupling Method
Swage
Final O.D.
6.25"
Hose Serial #
5544
Hose Assembly Serial #
79793

Pressure Test



Test Pressure
15000 PSI

Time Held at Test Pressure
11 Minutes

Actual Burst Pressure

Peak Pressure
15483 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Zac McConnell

Approved By: Kim Thomas

Zac McConnell

Kim Thomas



Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
Lea 7 Federal Com #1H
Cimarex Energy Co.
7-20S-35E
SHL 330 FSL & 660 FWL
BHL 330 FNL & 9000 FWL
Lea County, NM

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium componets. 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)

Exhibit F-2 - Co-Flex Hose
Lea 7 Federal Com #1H
Cimarex Energy Co.
7-20S-35E
SHL 330 FSL & 660 FWL
BHL 330 FNL & 9000 FWL
Lea County, NM



Midwest Hose & Specialty, Inc.

Certificate of Conformity

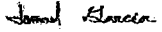
Customer:		PO
DEM		ODYD-271
SPECIFICATIONS		
Sales Order	Dated:	
79793	3/8/2011	
We hereby certify that the material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards Supplier: Midwest Hose & Specialty, Inc. 10640 Tanner Road Houston, Texas 77041		
Comments:		
Approved:		Date:
		3/8/2011

Exhibit F – Co-Flex Hose

Lea 7 Federal Com #1H

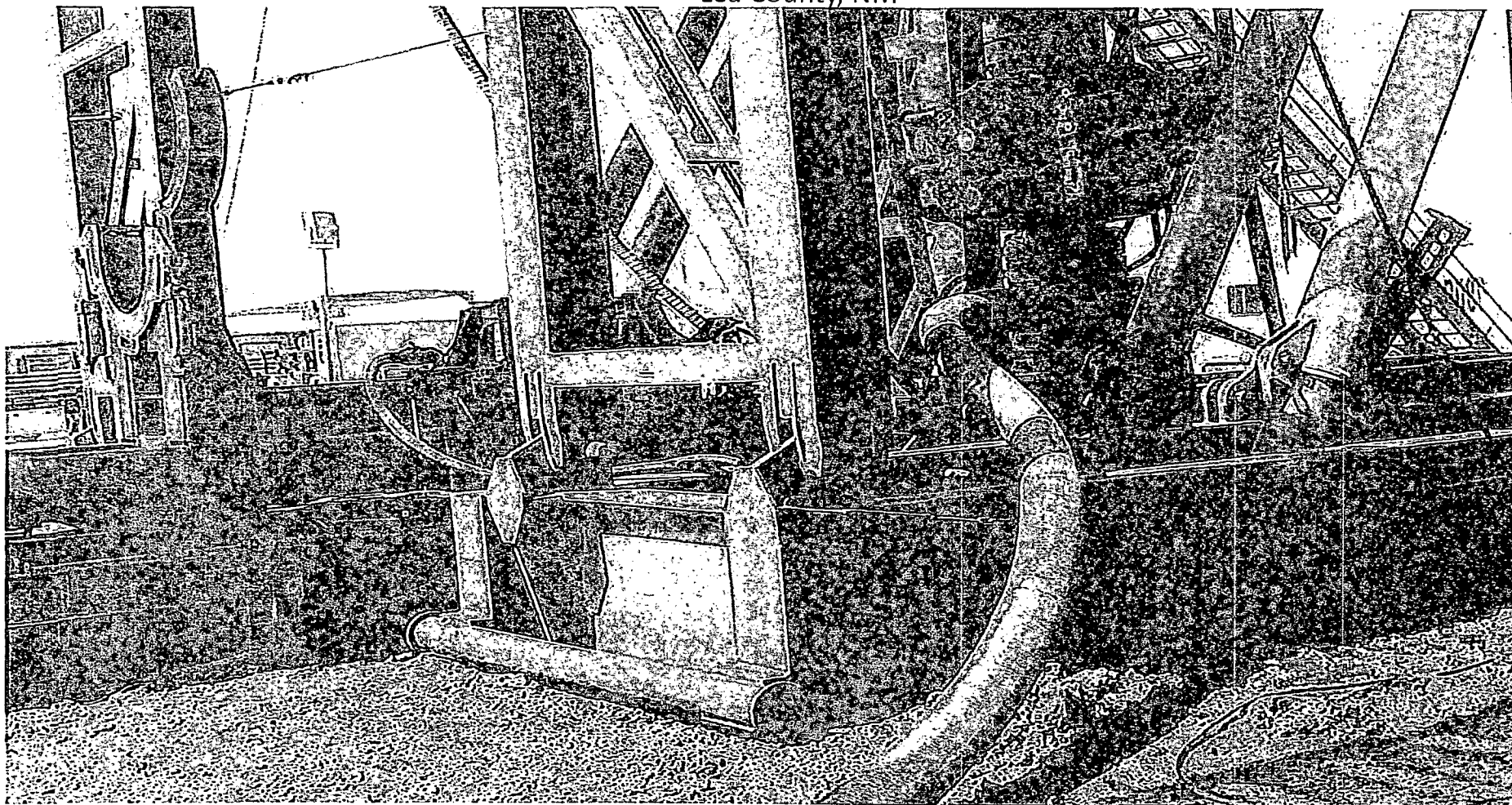
Cimarex Energy Co.

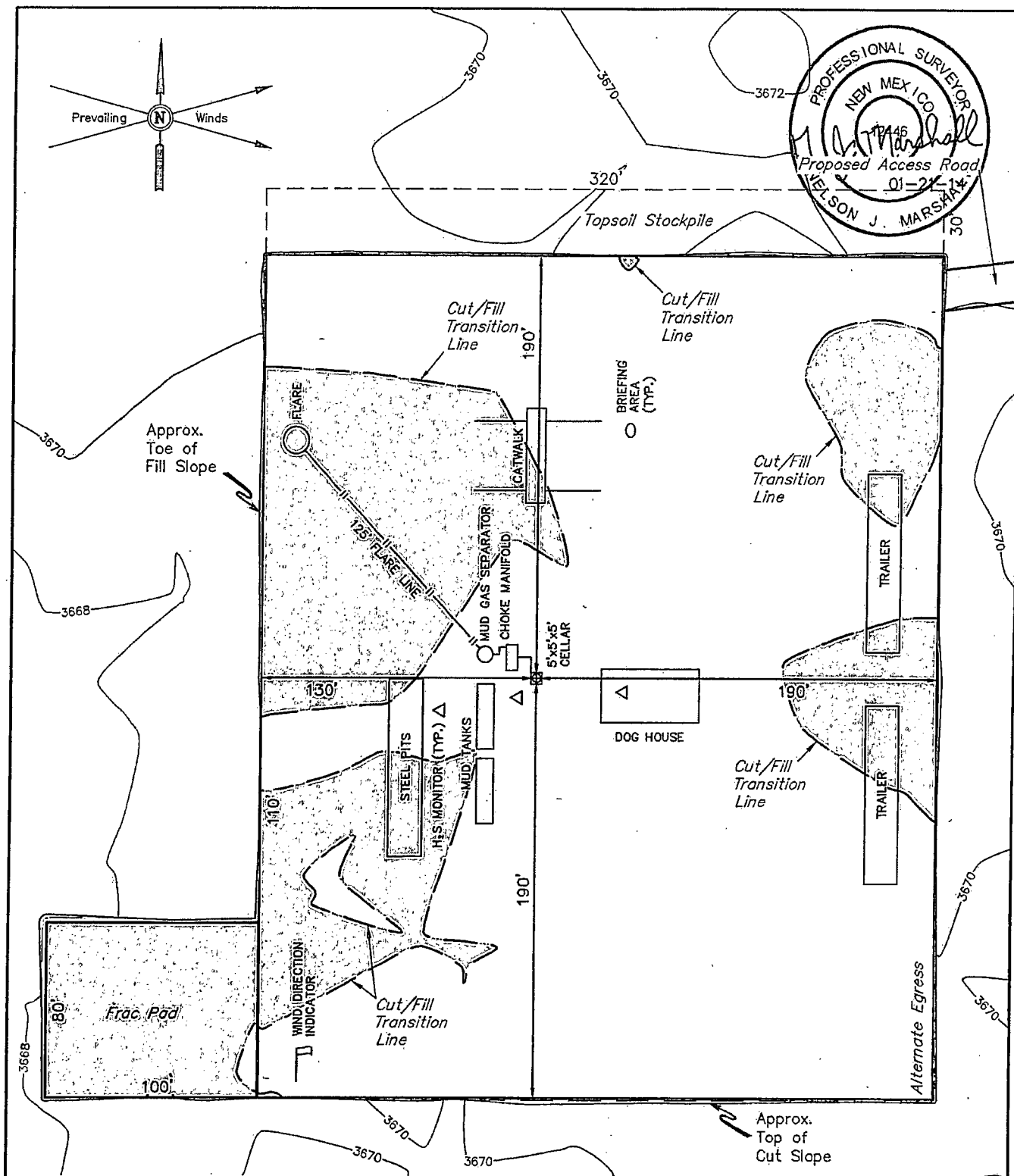
7-20S-35E

SHL 330 FSL & 660 FWL

BHL 330 FNL & 9000 FWL

Lea County, NM





NOTES:

- Flare pit is to be located a min. of 160' from the well head.



CIMAREX ENERGY CO.

LEA 7 FEDERAL COM #1H
SECTION 7, T20S, R35E, N.M.P.M.
330' FSL 660' FWL

DRAWN BY: C.A.G.

SCALE: 1" = 60'

DATE: 01-20-14

TYPICAL RIG LAYOUT

EXHIBIT D



Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

- 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. Principal and operation of H₂S detectors, warning system and briefing areas.
 - D. Evacuation procedure, routes and first aid.
 - E. Proper use of safety equipment & life support systems
 - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.
- 2 H₂S Detection and Alarm Systems:
 - A. H₂S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H₂S detectors may play placed as deemed necessary.
 - B. An audio alarm system will be installed on the derrick floor and in the top doghouse.
- 3 Windsock and/or wind streamers:
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock on the rig floor and / or top doghouse 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 H₂S trained and certified personnel admitted to location.
- 5 Well control equipment:
 - A. See exhibit "E-1"
- 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 r 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.

Operator Certification Statement

Lea 7 Federal Com 1H

Cimarex Energy Co.

UL: N, Sec. 7, 20s, 35e

Lea Co., NM

Operator's Representative

Cimarex Energy Co. of Colorado

600 N. Marienfeld St., Ste. 600

Midland, TX 79701

Office Phone: (432) 571-7800

CERTIFICATION: I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 10 day of February, 2014

NAME: Hope Knauls
Hope Knauls

TITLE: Regulatory Compliance

ADDRESS: 600 N. Marienfeld St. Ste. 600 Midland Tx 79071

TELEPHONE: 432-571-7800

EMAIL: hknauls@cimarex.com

Field Representative: Same as above