

OCD Hobbs

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AUG 18 2014

Form 3160-3
(March 2012)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. SHL: NMNM077062; BHL: NMNM084728	
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Cimarex Energy Co.		7. If Unit or CA Agreement, Name and No.	
3a. Address 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103		8. Lease Name and Well No. <313460> Urraca Federal Com 25H	
3b. Phone No. (include area code) 918-585-1100		9. API Well No. 30-025-42048	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 330' FNL 440' FEL At proposed prod. Zone 330' FSL 440' FEL Bone Spring		10. Field and Pool, or Exploratory Bone Spring <17644>	
14. Distance in miles and direction from nearest town or post office* Malaga, NM is +/- 26.3 miles Southwesterly		11. Sec., T. R. M. or Blk. and Survey and Area 11, 23S, 32E	
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 NMNM077062=280.00 acres NMNM084728=800.00 acres	
17. Spacing Unit dedicated to this well 160.00		18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 1310' to the #24H	
19. Proposed Depth Pilot Hole TD: 10,200 14,118 MD 9,700 TVD		20. BLM/BIA Bond No. on File NM2575; NMB000835	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3726 GR		22. Approximate date work will start* 5/14/14	
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:

- 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 Aricka Easterling	Name (Printed/Typed) Aricka Easterling	Date 2/26/14
Title Regulatory Compliance		
Approved By (Signature) FIELD MANAGER	Name (Printed/Typed) IS/ STEPHEN J. CAFFEY	Date 8-13-14
Title Office		Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or mineral rights to the land on which the 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. States any false, fictitious, or fraudulent statement

(Continued on page 2)

Carlsbad Controlled Water

E-PERMITTING -- New Well P.M.
Comp _____ P&A _____ TA _____
CSNG _____ Loc CHG _____
ReComp _____ Add New Pool _____
Cancel Well _____ Create Pool _____
& Special Stipulations Attached

subject lease which would entitle the applicant to

APPROVAL FOR TWO YEARS

ly to make to any department or agency of the United

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
(Instructions on page 2)

AUG 18 2014

Operator Certification Statement

Urraca Federal Com 25H

Cimarex Energy Co.

UL: A, Sec. 11, 23S, 32E

Lea Co., NM

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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 26 day of February, 2014

NAME:

Aricka Easterling
Aricka Easterling

TITLE: Regulatory Compliance

ADDRESS: 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103

TELEPHONE: 918-585-1100

EMAIL: AEasterling@cimarex.com

Field Representative: Same as above

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 Cimarex Energy Co.
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 Lea Co., NM

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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' FNL 440' FEL
 BHL 330' FSL 440' FEL
2. **Elevation Above Sea Level:** 3,726' 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:** 14,118 MD 9,700 TVD Pilot Hole TD: 10,200
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler		1180: N/A
Salt		1410: N/A
Castille		3550: N/A
Base Salt		4635: N/A
Cherry Canyon		4835: N/A
Lamar		4900: N/A
Bell Canyon		4900: N/A
Brushy Canyon		7180: Hydrocarbons
Basal Brushy Canyon		8500: Hydrocarbons
Bone Spring		8790: Hydrocarbons
Avalon Shale		9300: Hydrocarbons
1st BSS		9975: Hydrocarbons

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

7A. **OSE Ground Water Estimated Depth:** 550'

8. **Casing Program:**

See COA

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 Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface	0	1230	1230	17 1/2	13-3/8"	48.00	H-40	ST&C	New	530	8.3	1.39		3.26	59,040	51,559	6.25
Intermediate	0	4920	4920	12 1/4	9-5/8"	40.00	J-55	LT&C	New	2558	10.0		1.45	1.54	196,800	166,754	3.12
Production	0	9223	9223	8 3/4	5-1/2"	17.00	L-80	LT&C	New	4316	9.0	1.46		1.79	164,900	142,242	2.38
Production	9223	14118	9700	8 3/4	5-1/2"	17.00	L-80	BT&C	New	4539	9.0	1.39		1.71	8,109	6,995	56.76

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.

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 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 Production 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	586	1.75	13.50	1025	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	159	1.34	14.80	213	Class C + LCM, 6.32 gps water
	TOC: 0		45% Excess		Centralizers per Onshore Order 2.III.B.1f	
Intermediate <i>See COA</i>	Lead	882	1.88	12.90	1657	35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	288	1.34	14.80	385	Class C + retarder + LCM, 6.32 gps water
	TOC: 0		44% Excess			
Production <i>See COA</i>	Lead	522	2.40	11.90	1252	35:65 (poz/H) + salt + Sodium Metasilicate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1210	1.24	14.50	1500	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
	TOC: 4720		16% 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: 10,200' KOP: 9,223' EOC: 9,973'

Set OH mechanical whipstock w/ 927 ft of 2.875 tubing and pump 30 bbls of Mudpush @ 12 ppg, followed by 433 sks Type H cement, dispersant 0.080 gals/sk, retarder 0.045 gals/sk @ 17.50 ppg, 0.94 cuft/sk, & 0% excess from pilot hole TD to KOP. KO lateral and drill through the curve to TD. Run production csg to TD and cement.

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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.

See COA
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.

See COA
11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 1230'	7.80 - 8.30	28	NC	FW Spud Mud
1230' to 4920'	9.50 - 10.00	30-32	NC	Brine Water
4920' to 14118'	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 4920 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:

See COA
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: 4590 psi

Estimated BHT: 158°

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.

Bone Spring pay will be perforated and stimulated.

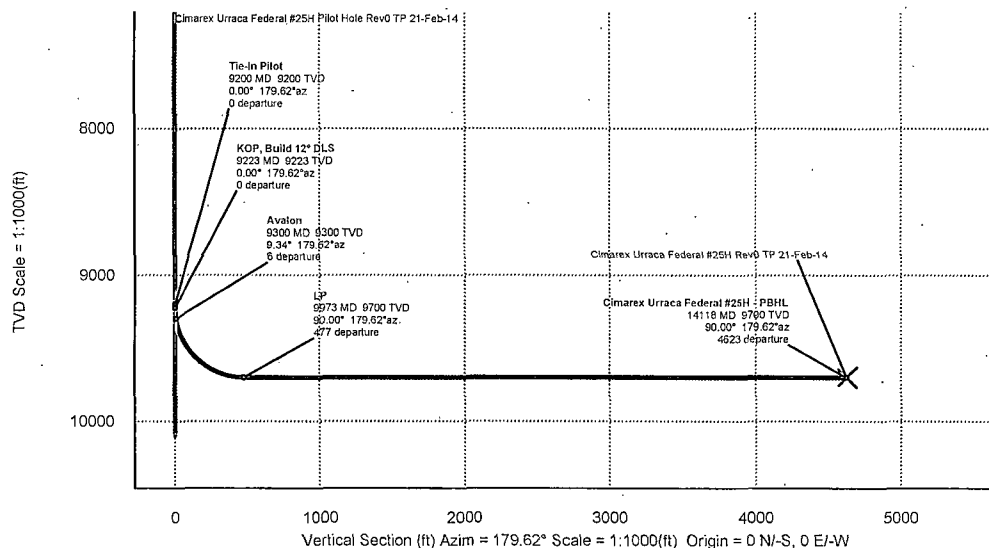
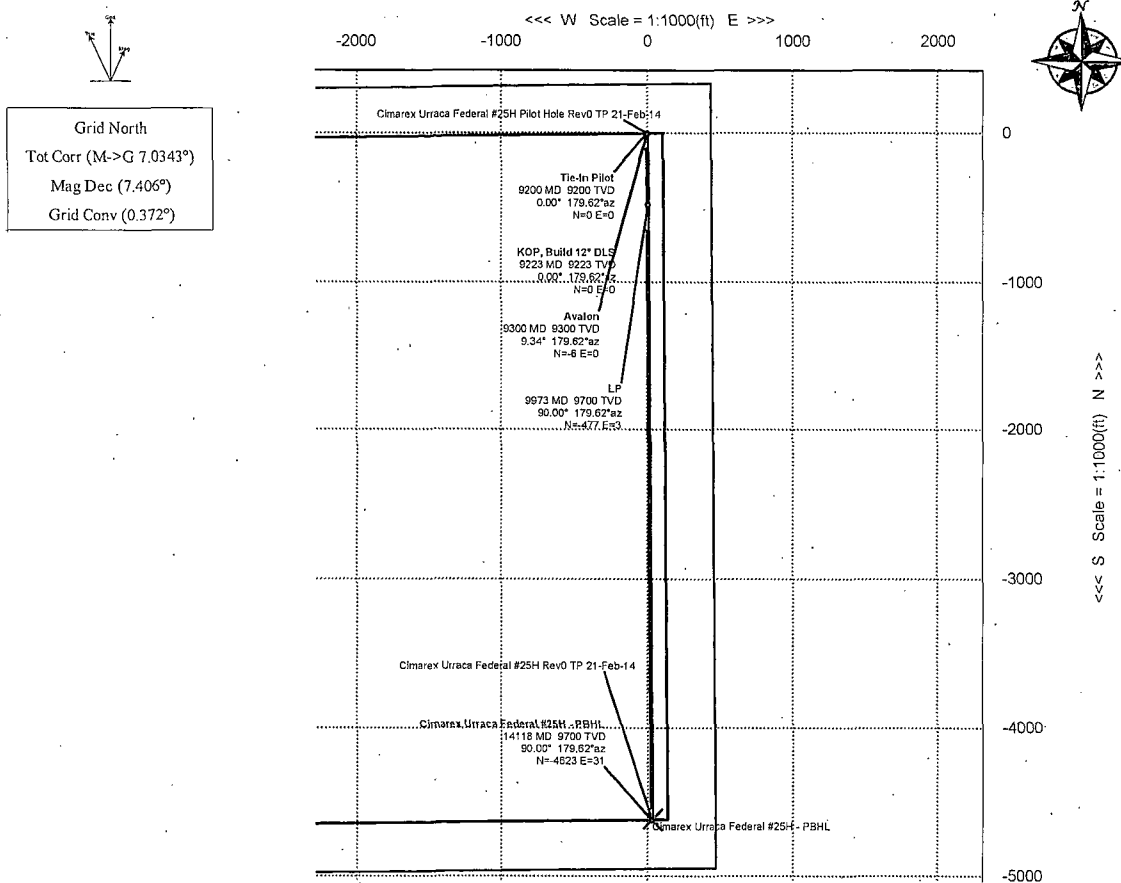
The proposed well will be tested and potential as **Oil**



Cimarex

PATHFINDER
A Schlumberger Company

WELL	Urraca Federal #25H	FIELD	NM Lea County (NAD 83)	STRUCTURE	Cimarex Urraca Federal #25H
Magnetic Parameters	Model: BOOM 2013	Dip: 60.160°	Date: February 21, 2014	Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet
		Mag Dec: 7.406°	PS	Lat: N 32 19 32.189	North: 48284.88 NUS
				Long: W 103 38 18.901	East: 7960.16 S1 NUS
					Grid Conv: 0.372°
					Scale Fact: 0.9999187
				Miscellaneous	Urraca Federal #25H
				Plan:	Cimarex Urraca Federal #25H Rev0 TP 21-Feb-14
					TVD Ref: Unknown (372 ft above MSL)
					Cimarex Urraca Federal #25H Rev0 TP 21-Feb-14



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-In Pilot	9200.00	0.00	179.62	9200.00	0.00	0.00	0.00	
KOP, Build 12° DLS	9222.54	0.00	179.62	9222.54	0.00	0.00	0.00	0.00
Avalon	9300.34	9.34	179.62	9300.00	6.33	-6.33	0.04	12.00
LP	9972.54	90.00	179.62	9700.00	477.46	-477.45	3.17	12.00
Cimarex Urraca Federal #25H - PBHL	14117.89	90.00	179.62	9700.00	4622.82	-4622.72	30.73	0.00

Cimarex Urraca Federal #25H Rev0 TP 21-Feb-14 Proposal Report

(Non-Def Plan)

Report Date: February 25, 2014 - 02:39 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Urraca Federal #25H / Urraca Federal #25H
Well: Urraca Federal #25H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Urraca Federal #25H Rev0 TP 21-Feb-14
Survey Date: February 21, 2014
Tort / AHD / DDI / ERD Ratio: 90.000 ° / 4622.818 ft / 5.782 / 0.477
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 19' 32.18929", W 103° 38' 18.00125"
Location Grid N/E Y/X: N 482884.680 ftUS, E 756016.530 ftUS
CRS Grid Convergence Angle: 0.3717 °
Grid Scale Factor: 0.99996187

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.619 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Unknown
TVD Reference Elevation: 3727.000 ft above MSL
Seabed / Ground Elevation: 3727.000 ft above MSL
Magnetic Declination: 7.406 °
Total Field Strength: 48380.195 nT
Magnetic Dip Angle: 60.189 °
Declination Date: February 21, 2014
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.3717 °
Total Corr Mag North->Grid North: 7.0343 °
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)
Tie-In Pilot	9200.00	0.00	179.62	9200.00	0.00	0.00	0.00	482884.68	756016.53	N 32 19 32.19	W 103 38 18.00	0.00	0.00	N/A
KOP, Build 12" DLS	9222.54	0.00	179.62	9222.54	0.00	0.00	0.00	482884.68	756016.53	N 32 19 32.19	W 103 38 18.00	0.00	0.00	0.00
Avalon	9300.00	9.30	179.62	9299.66	6.27	-6.27	0.04	482878.41	756016.57	N 32 19 32.13	W 103 38 18.00	6.27	179.62	12.00
	9300.34	9.34	179.62	9300.00	6.33	-6.33	0.04	482878.35	756016.57	N 32 19 32.13	W 103 38 18.00	6.33	179.62	12.00
	9400.00	21.30	179.62	9395.94	32.60	-32.60	0.22	482852.08	756016.75	N 32 19 31.87	W 103 38 18.00	32.60	179.62	12.00
	9500.00	33.30	179.62	9484.64	78.38	-78.38	0.52	482806.31	756017.05	N 32 19 31.41	W 103 38 18.00	78.38	179.62	12.00
	9600.00	45.30	179.62	9561.89	141.59	-141.59	0.94	482743.10	756017.47	N 32 19 30.79	W 103 38 18.00	141.59	179.62	12.00
	9700.00	57.30	179.62	9624.31	219.49	-219.48	1.46	482665.20	756017.99	N 32 19 30.02	W 103 38 18.00	219.49	179.62	12.00
	9800.00	69.30	179.62	9669.16	308.66	-308.65	2.05	482576.04	756018.58	N 32 19 29.14	W 103 38 18.00	308.66	179.62	12.00
	9900.00	81.30	179.62	9694.50	405.21	-405.20	2.69	482479.50	756019.22	N 32 19 28.18	W 103 38 18.00	405.21	179.62	12.00
LP	9972.54	90.00	179.62	9700.00	477.46	-477.45	3.17	482407.24	756019.70	N 32 19 27.46	W 103 38 18.00	477.46	179.62	12.00
	10000.00	90.00	179.62	9700.00	504.93	-504.92	3.36	482379.78	756019.89	N 32 19 27.19	W 103 38 18.00	504.93	179.62	0.00
	10100.00	90.00	179.62	9700.00	604.93	-604.92	4.02	482279.79	756020.55	N 32 19 26.20	W 103 38 18.00	604.93	179.62	0.00
	10200.00	90.00	179.62	9700.00	704.93	-704.91	4.69	482179.79	756021.22	N 32 19 25.21	W 103 38 18.00	704.93	179.62	0.00
	10300.00	90.00	179.62	9700.00	804.93	-804.91	5.35	482079.80	756021.88	N 32 19 24.22	W 103 38 18.00	804.93	179.62	0.00
	10400.00	90.00	179.62	9700.00	904.93	-904.91	6.02	481979.81	756022.55	N 32 19 23.24	W 103 38 18.00	904.93	179.62	0.00
	10500.00	90.00	179.62	9700.00	1004.93	-1004.91	6.68	481879.81	756023.21	N 32 19 22.25	W 103 38 18.00	1004.93	179.62	0.00
	10600.00	90.00	179.62	9700.00	1104.93	-1104.91	7.35	481779.82	756023.87	N 32 19 21.26	W 103 38 18.00	1104.93	179.62	0.00
	10700.00	90.00	179.62	9700.00	1204.93	-1204.90	8.01	481679.83	756024.54	N 32 19 20.27	W 103 38 18.00	1204.93	179.62	0.00
	10800.00	90.00	179.62	9700.00	1304.93	-1304.90	8.67	481579.83	756025.20	N 32 19 19.28	W 103 38 18.00	1304.93	179.62	0.00
	10900.00	90.00	179.62	9700.00	1404.93	-1404.90	9.34	481479.84	756025.87	N 32 19 18.29	W 103 38 18.00	1404.93	179.62	0.00
	11000.00	90.00	179.62	9700.00	1504.93	-1504.90	10.00	481379.84	756026.53	N 32 19 17.30	W 103 38 18.00	1504.93	179.62	0.00
	11100.00	90.00	179.62	9700.00	1604.93	-1604.89	10.67	481279.85	756027.20	N 32 19 16.31	W 103 38 18.00	1604.93	179.62	0.00
	11200.00	90.00	179.62	9700.00	1704.93	-1704.89	11.33	481179.86	756027.86	N 32 19 15.32	W 103 38 18.00	1704.93	179.62	0.00
	11300.00	90.00	179.62	9700.00	1804.93	-1804.89	12.00	481079.86	756028.53	N 32 19 14.33	W 103 38 18.00	1804.93	179.62	0.00
	11400.00	90.00	179.62	9700.00	1904.93	-1904.89	12.66	480979.87	756029.19	N 32 19 13.34	W 103 38 18.00	1904.93	179.62	0.00
	11500.00	90.00	179.62	9700.00	2004.93	-2004.89	13.33	480879.88	756029.86	N 32 19 12.35	W 103 38 18.00	2004.93	179.62	0.00
	11600.00	90.00	179.62	9700.00	2104.93	-2104.88	13.99	480779.88	756030.52	N 32 19 11.36	W 103 38 18.00	2104.93	179.62	0.00
	11700.00	90.00	179.62	9700.00	2204.93	-2204.88	14.66	480679.89	756031.19	N 32 19 10.37	W 103 38 18.00	2204.93	179.62	0.00
	11800.00	90.00	179.62	9700.00	2304.93	-2304.88	15.32	480579.89	756031.85	N 32 19 9.38	W 103 38 18.00	2304.93	179.62	0.00
	11900.00	90.00	179.62	9700.00	2404.93	-2404.88	15.99	480479.90	756032.52	N 32 19 8.39	W 103 38 18.00	2404.93	179.62	0.00
	12000.00	90.00	179.62	9700.00	2504.93	-2504.87	16.65	480379.91	756033.18	N 32 19 7.40	W 103 38 18.00	2504.93	179.62	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)
	12100.00	90.00	179.62	9700.00	2604.93	-2604.87	17.32	480279.91	756033.85	N 32 19 6.41	W 103 38 18.00	2604.93	179.62	0.00
	12200.00	90.00	179.62	9700.00	2704.93	-2704.87	17.98	480179.92	756034.51	N 32 19 5.42	W 103 38 18.00	2704.93	179.62	0.00
	12300.00	90.00	179.62	9700.00	2804.93	-2804.87	18.65	480079.92	756035.18	N 32 19 4.43	W 103 38 18.00	2804.93	179.62	0.00
	12400.00	90.00	179.62	9700.00	2904.93	-2904.87	19.31	479979.93	756035.84	N 32 19 3.45	W 103 38 18.00	2904.93	179.62	0.00
	12500.00	90.00	179.62	9700.00	3004.93	-3004.86	19.98	479879.94	756036.51	N 32 19 2.46	W 103 38 18.00	3004.93	179.62	0.00
	12600.00	90.00	179.62	9700.00	3104.93	-3104.86	20.64	479779.94	756037.17	N 32 19 1.47	W 103 38 18.00	3104.93	179.62	0.00
	12700.00	90.00	179.62	9700.00	3204.93	-3204.86	21.31	479679.95	756037.83	N 32 19 0.48	W 103 38 18.00	3204.93	179.62	0.00
	12800.00	90.00	179.62	9700.00	3304.93	-3304.86	21.97	479579.96	756038.50	N 32 18 59.49	W 103 38 18.00	3304.93	179.62	0.00
	12900.00	90.00	179.62	9700.00	3404.93	-3404.85	22.64	479479.96	756039.16	N 32 18 58.50	W 103 38 17.99	3404.93	179.62	0.00
	13000.00	90.00	179.62	9700.00	3504.93	-3504.85	23.30	479379.97	756039.83	N 32 18 57.51	W 103 38 17.99	3504.93	179.62	0.00
	13100.00	90.00	179.62	9700.00	3604.93	-3604.85	23.96	479279.97	756040.49	N 32 18 56.52	W 103 38 17.99	3604.93	179.62	0.00
	13200.00	90.00	179.62	9700.00	3704.93	-3704.85	24.63	479179.98	756041.16	N 32 18 55.53	W 103 38 17.99	3704.93	179.62	0.00
	13300.00	90.00	179.62	9700.00	3804.93	-3804.85	25.29	479079.99	756041.82	N 32 18 54.54	W 103 38 17.99	3804.93	179.62	0.00
	13400.00	90.00	179.62	9700.00	3904.93	-3904.84	25.96	478979.99	756042.49	N 32 18 53.55	W 103 38 17.99	3904.93	179.62	0.00
	13500.00	90.00	179.62	9700.00	4004.93	-4004.84	26.62	478880.00	756043.15	N 32 18 52.56	W 103 38 17.99	4004.93	179.62	0.00
	13600.00	90.00	179.62	9700.00	4104.93	-4104.84	27.29	478780.01	756043.82	N 32 18 51.57	W 103 38 17.99	4104.93	179.62	0.00
	13700.00	90.00	179.62	9700.00	4204.93	-4204.84	27.95	478680.01	756044.48	N 32 18 50.58	W 103 38 17.99	4204.93	179.62	0.00
	13800.00	90.00	179.62	9700.00	4304.93	-4304.83	28.62	478580.02	756045.15	N 32 18 49.59	W 103 38 17.99	4304.93	179.62	0.00
	13900.00	90.00	179.62	9700.00	4404.93	-4404.83	29.28	478480.02	756045.81	N 32 18 48.60	W 103 38 17.99	4404.93	179.62	0.00
	14000.00	90.00	179.62	9700.00	4504.93	-4504.83	29.95	478380.03	756046.48	N 32 18 47.61	W 103 38 17.99	4504.93	179.62	0.00
	14100.00	90.00	179.62	9700.00	4604.93	-4604.83	30.61	478280.04	756047.14	N 32 18 46.62	W 103 38 17.99	4604.93	179.62	0.00
Cimarex Urraca Federal #25H - PBHL	14117.89	90.00	179.62	9700.00	4622.82	-4622.72	30.73	478262.15	756047.26	N 32 18 46.45	W 103 38 17.99	4622.82	179.62	0.00

Survey Type: Non-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	9200.000	1/100.000	30.000	30.000	SLB_MWD-POOR	Pilot Hole / Cimarex Urraca Federal #25H Pilot Hole Rev0 TP
	9200.000	14117.888	1/100.000	30.000	30.000	SLB_MWD-POOR	ST01 / Cimarex Urraca Federal #25H Rev0 TP 21-Feb-14

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

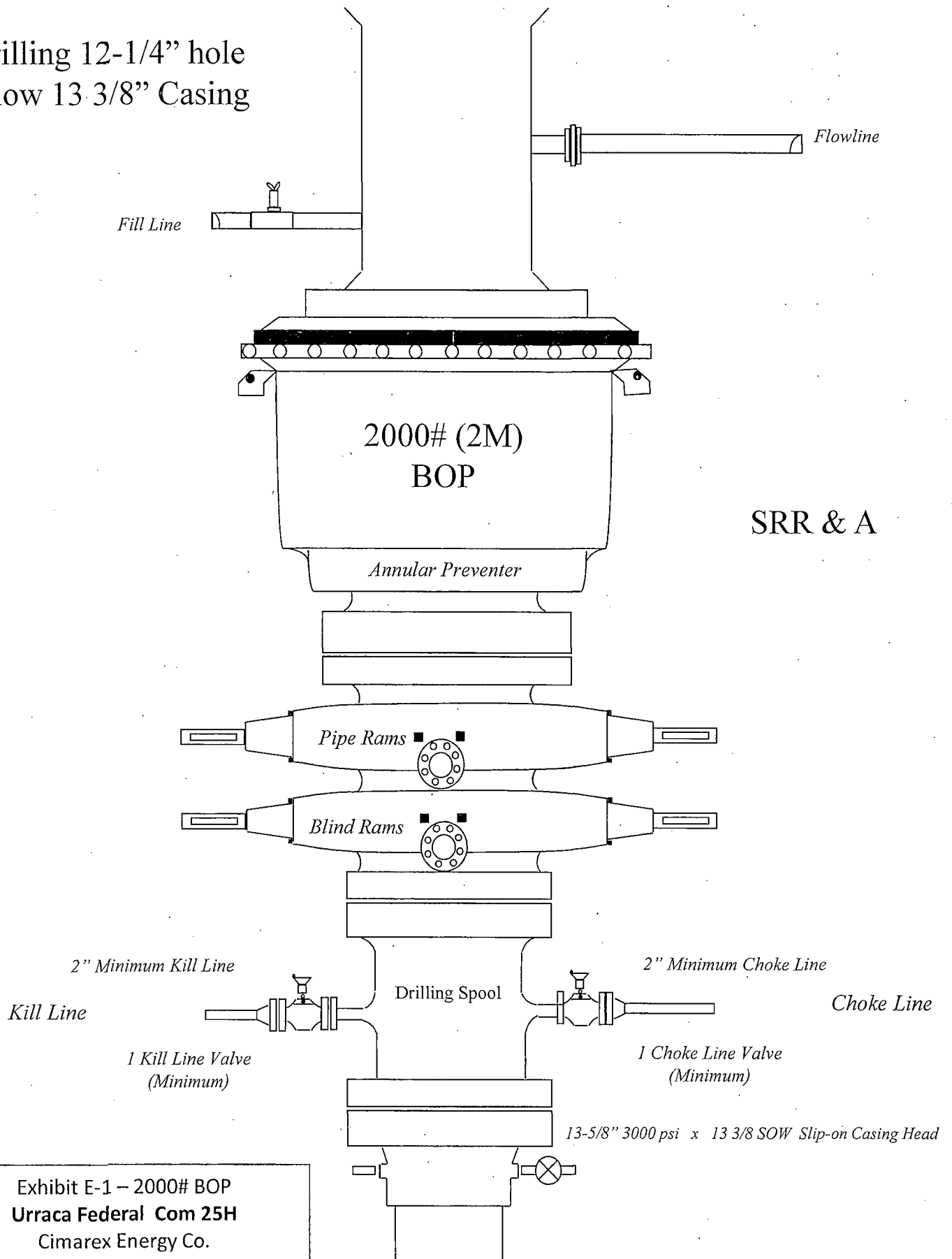


Exhibit E-1 – 2000# BOP
Urraca Federal Com 25H
Cimarex Energy Co.
11-23S-32E
SHL 330 FNL & 440 FEL
BHL 330 FSL & 440 FEL
Lea County, NM

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

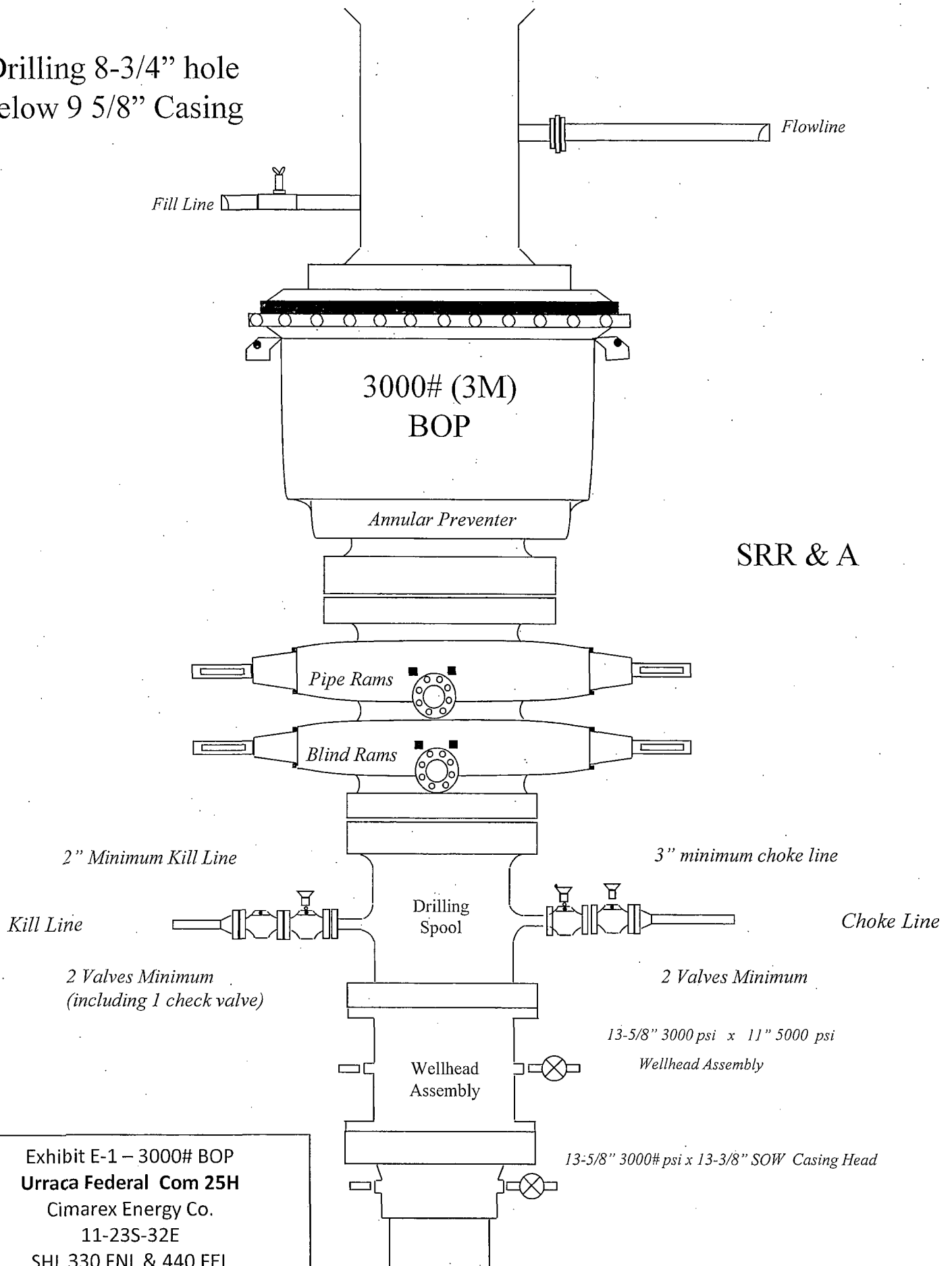
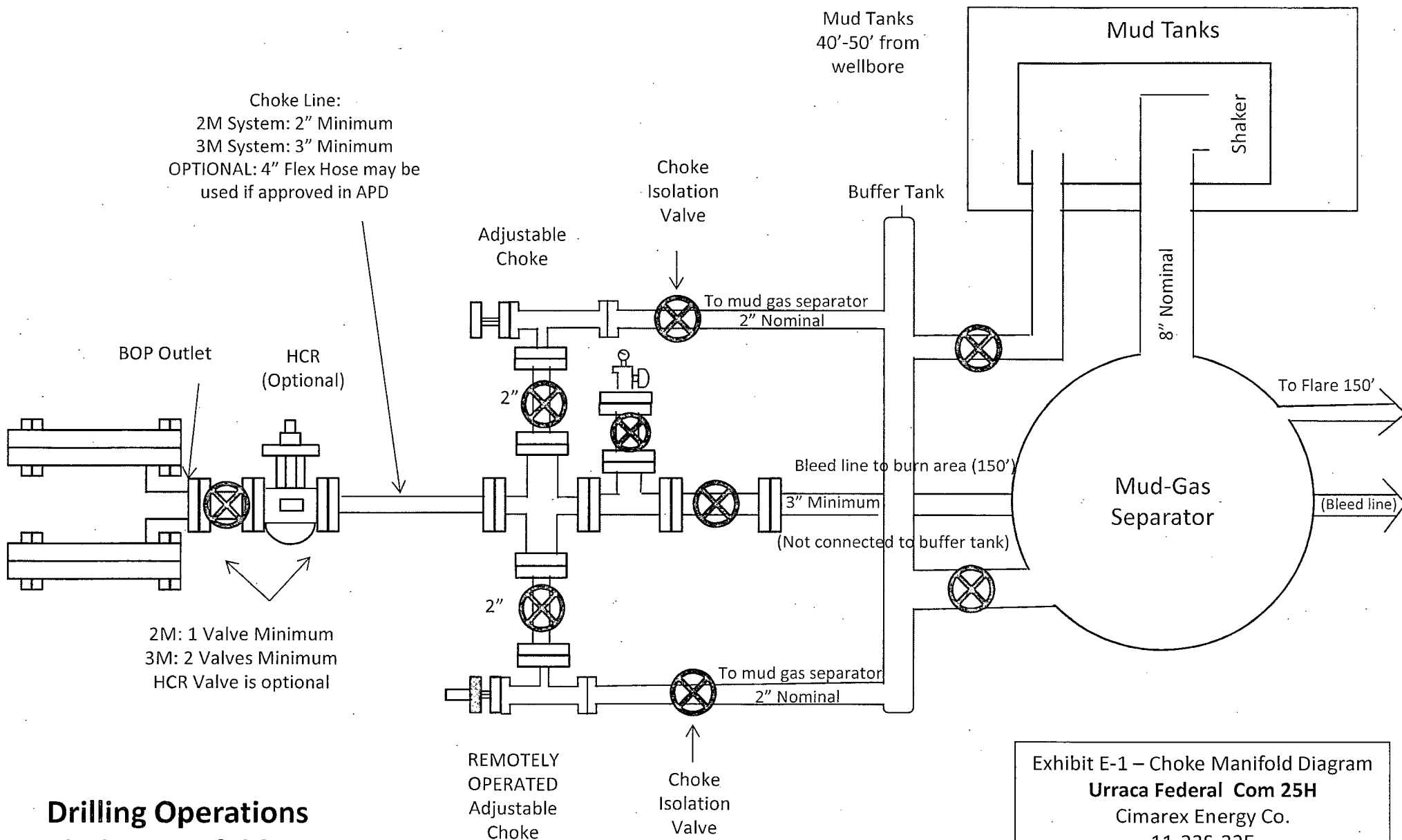


Exhibit E-1 – 3000# BOP
Urraca Federal Com 25H
Cimarex Energy Co.
11-23S-32E
SHL 330 FNL & 440 FEL
BHL 330 FSL & 440 FEL
Lea County, NM



Drilling Operations Choke Manifold 2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Urraca Federal Com 25H
 Cimarex Energy Co.
 11-23S-32E
 SHL 330 FNL & 440 FEL
 BHL 330 FSL & 440 FEL
 Lea County, NM

Exhibit F-1 – Co-Flex Hose Hydrostatic Test

Urraca Federal Com 25H

Cimarex Energy Co.

11-23S-32E

SHL 330 FNL & 440 FEL

BHL 330 FSL & 440 FEL

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

TEST PRESSURE

BURST PRESSURE

10,000 PSI

15,000 PSI

0 PSI

COUPLINGS

Stem Part No.

OKC
OKC

Ferrule No.

OKC
OKC

Type of Coupling:

Swage-It

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE

ACTUAL BURST PRESSURE:

15 MIN.

0 PSI

Hose Assembly Serial Number:

79793

Hose Serial Number:

OKC

Comments:

Date:

3/8/2011

Tested:

A. Joann Sauer

Approved:

Kevin Hef



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

Pick Ticket #: 94260

Midwest Hose
& Specialty, Inc.

Hose Specifications:

Hose Type

C.S.R.

L.D.

4"

Working Pressure

10000 PSI

Length

45'

O.D.

6.09"

Burst Pressure

Standard Safety Multiplier Applies

Verification

Type of Fittings

41/16 JOK

Die Size

6.38"

Hose Serial #

5544

Coupling Method

Swage

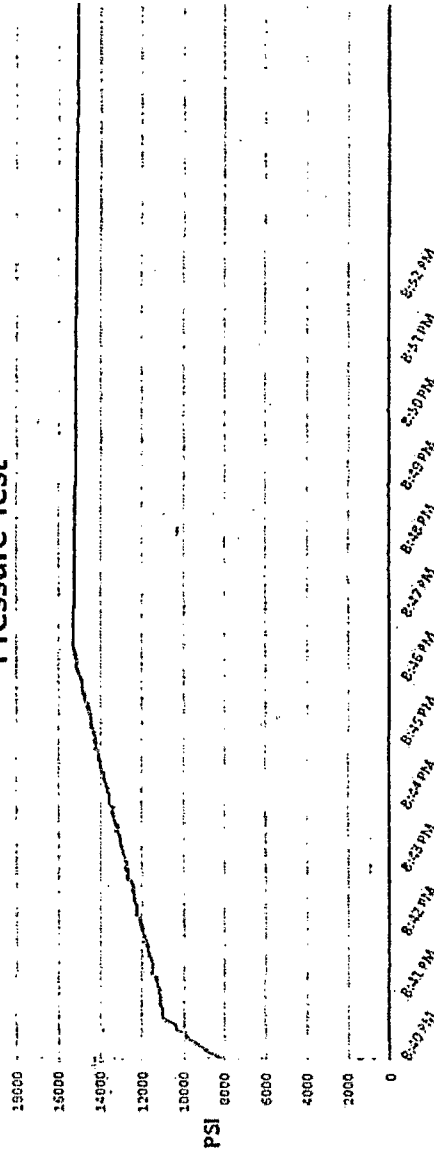
Final O.D.

6.35"

Hose Assembly Serial #

79793

Pressure Test



Test Pressure 15000 PSI Time Held at Test Pressure 11 Minutes Actual Burst Pressure Peak Pressure 15485 PSI

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

Tested By: Zec McConnell

Approved By: Kim Thomas

[Signature]

[Signature]

Exhibit F-2 - Co-Flex Hose
Urraca Federal Com 25H
Cimarex Energy Co.
11-23S-32E
SHL 330 FNL & 440 FEL
BHL 330 FSL & 440 FEL
Lea County, NM



Midwest Hose & Specialty, Inc.

Certificate of Conformity

Customer:

DEM

PO

ODYD-271

SPECIFICATIONS

Sales Order

79793

Dated:

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:

David Garcia

Date:

3/8/2011



Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
Urraca Federal Com 25H
Cimarex Energy Co.
11-23S-32E
SHL 330 FNL & 440 FEL
BHL 330 FSL & 440 FEL
Lea County, NM

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)

Exhibit F – Co-Flex Hose
Urraca Federal Com 25H

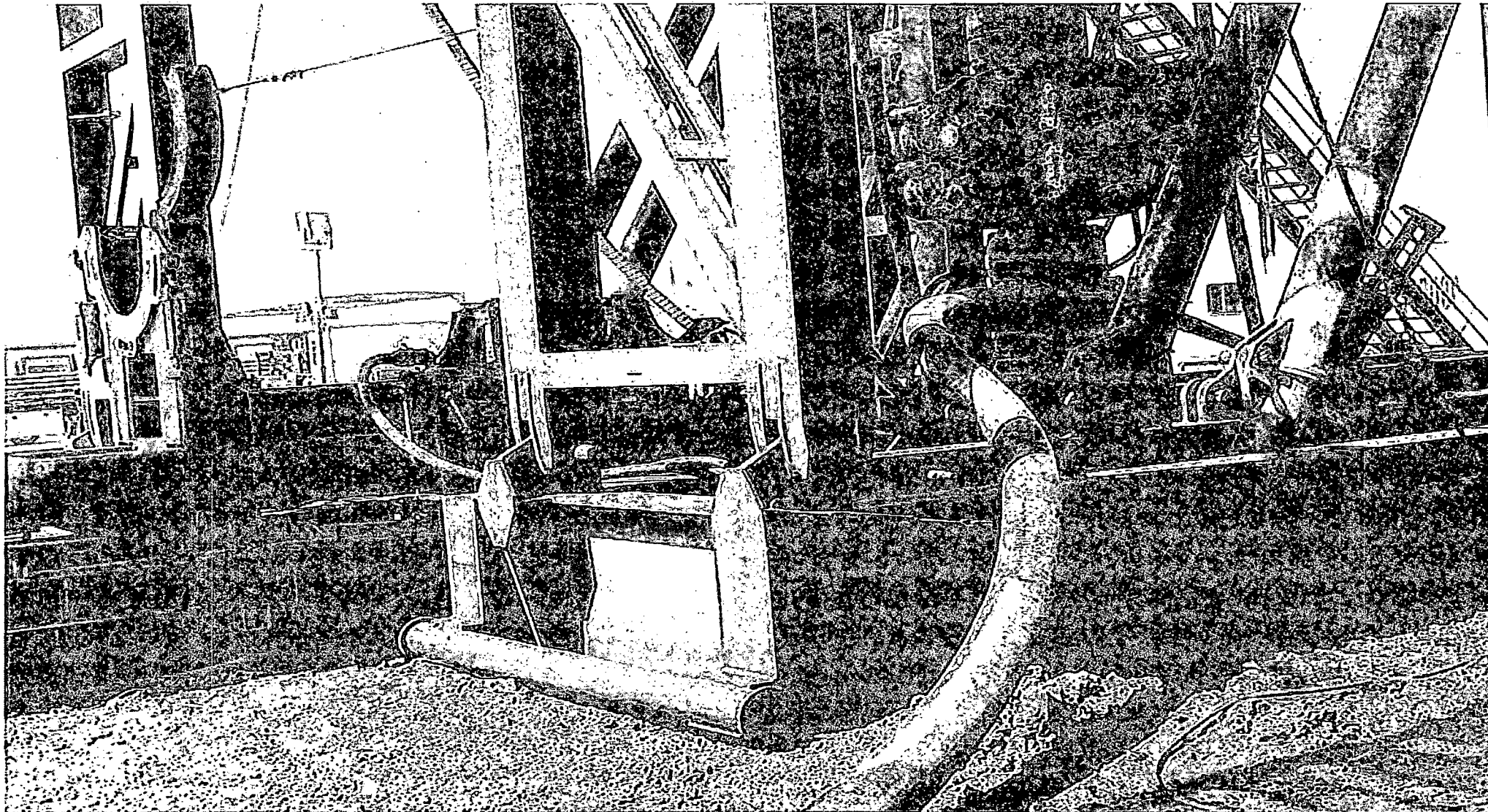
Cimarex Energy Co.

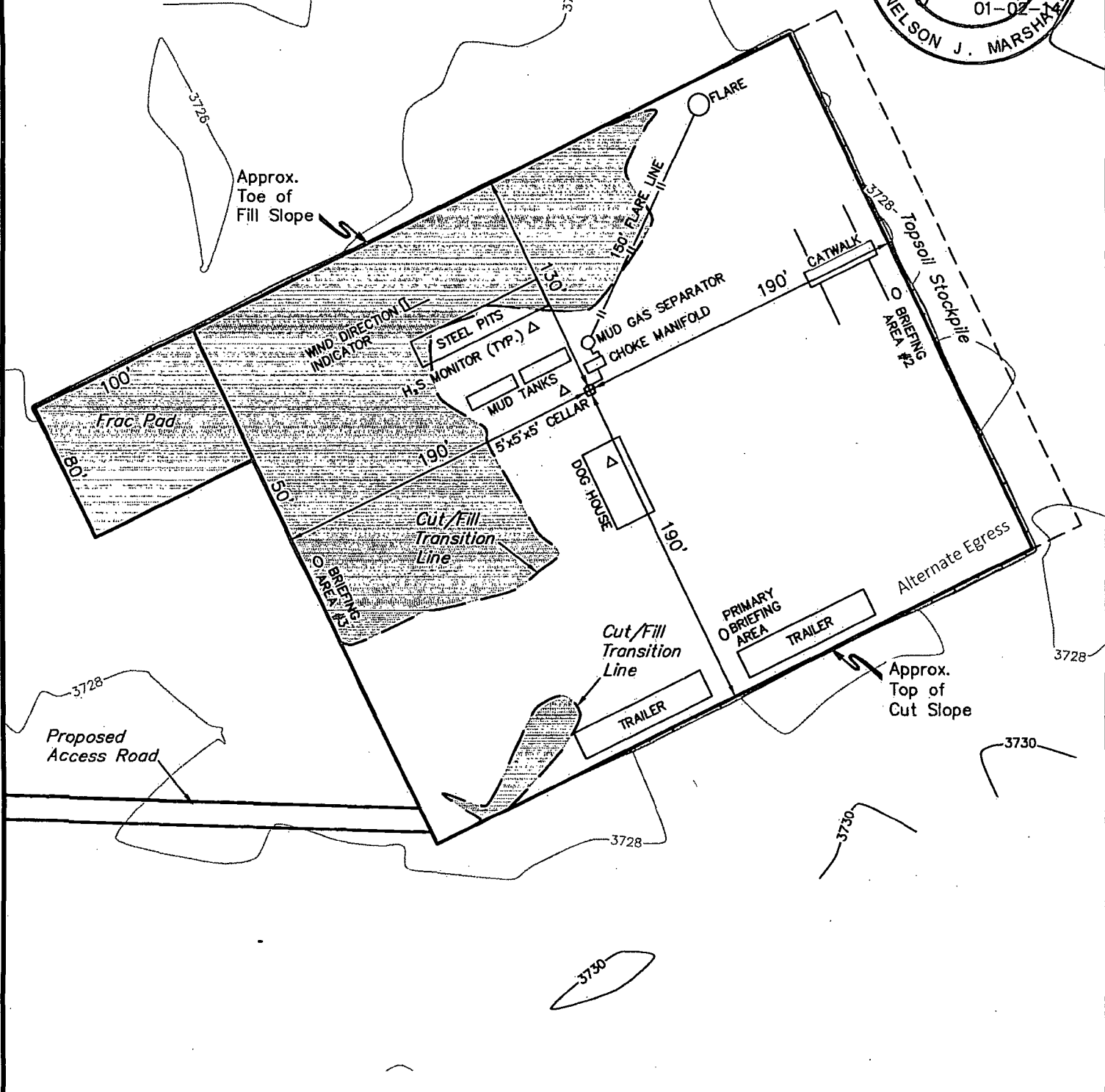
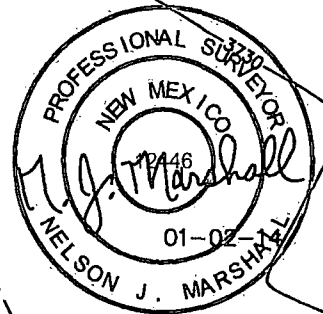
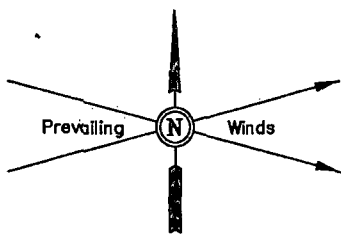
11-23S-32E

SHL 330 FNL & 440 FEL

BHL 330 FSL & 440 FEL

Lea County, NM





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

CIMAREX		CIMAREX ENERGY CO.	
URRACA FEDERAL COM #25H SECTION 11, T23S, R32E, N.M.P.M. 330' FNL 440' FEL			
DRAWN BY: B.D.H.	SCALE: 1" = 80'		
DATE: 12-19-13	REVISED:		
TYPICAL RIG LAYOUT		EXHIBIT D	



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

Urraca Federal Com 25H

Cimarex Energy Co.

UL: A, Sec. 11, 23S, 32E

Lea Co., 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. 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.