

OCD Hobbs

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DEC 03 2014

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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 & 550 FWL

At proposed prod. Zone 330 FNL & 370 FWL

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

Jal NM is 23 miles to the west of location.

5. Lease Serial No.

SHL: NMLC0071986; BHL: NMNM110835

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

Fuggles 11 Federal Com 1H

9. API Well No.

30025 - 42300

10. Field and Pool, or Exploratory

Wildcat Bone Spring

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

11, 25S, 32E

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

NMLC0071986=440.00 acres
NMNM110835=1600.00 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.

1630' to #2H

19. Proposed Depth

Pilot Hole TD: N/A

13,897 MD 9,484 TVD

20. BLM/BIA Bond No. on File

NM2575; NMB000835

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

3461 GR

22. Approximate date work will start*

3/13/14

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

Gloria Garza

Name (Printed/Typed)

Gloria Garza

Date

12/13/13

Title

Regulatory Compliance

Approved By (Signature)

Steve Caffey

Name (Printed/Typed)

Office CARLSBAD FIELD OFFICE

Date

NOV 21 2014

Title

FIELD MANAGER

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.

APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

DEC 04 2014

Operator Certification Statement

Fuggles 11 Federal Com 1H

Cimarex Energy Co.

UL: M, Sec. 11, 25S, 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 13 day of December, 2013

NAME:

Gloria Garza
Gloria Garza

TITLE: Regulatory Compliance

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

TELEPHONE: 432-571-7800

EMAIL: ggarza@cimarex.com

Field Representative: Same as above

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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 FSL & 550 FWL
 BHL 330 FNL & 370 FWL
2. **Elevation Above Sea Level:** 3,461' 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:** 13,897 MD 9,484 TVD Pilot Hole TD: N/A
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler		769 N/A
Top Salt		3164 N/A
Base Salt		4554 N/A
Delaware		4704 N/A
Cherry Canyon		5849 N/A
Brushy Canyon Lower		8496 N/A
Bone Spring		8729 Hydrocarbons
Bone Spring "A" Shale		8849 Hydrocarbons
Bone Spring "B" Carb		9165 Hydrocarbons
Bone Spring "C" Shale		9304 Hydrocarbons
HZ Target		9484 N/A
1st Bone Spring Ss		9759 Hydrocarbons

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

7A. **OSE Ground Water Estimated Depth:** 250'

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 Bouyed Weight (lbs)	Bouyant Tension (SF (1.8)
Surface	0	820	820	17 1/2	13-3/8"	48.00	H-40	ST&C	New	353	8.3	2.09		4.89	39,360	34,372	9.37
Intermediate	0	4680	4750	12 1/4	9-5/8"	36.00	J-55	LT&C	New	2433	10.0		1.23	1.45	168,480	142,758	3.17
Production	0	9007	9007	8 3/4	5-1/2"	17.00	L-80	LT&C	New	4215	9.0	1.49		1.84	161,228	139,074	2.43
Production	9007	13897	9484	8 3/4	5-1/2"	17.00	L-80	BT&C	New	4438	9.0	1.42		1.74	8,109	6,995	56.76

See COA

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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	413	1.75	13.50		722 Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	195	1.34	14.80		260 Class C + LCM, 6.32 gps water
	TOC: 0		73% Excess			Centralizers per Onshore Order 2.III.B.1f
Intermediate	Lead	1112	1.88	12.90		2089 35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	274	1.34	14.80		366 Class C + retarder + LCM, 6.32 gps water
	TOC: 0		82% Excess			
Production	Lead	525	2.40	11.90		1259 35:65 (poz/H) + salt + Sodium Metasilicate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1373	1.24	14.50		1702 50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
	TOC: 4480		25% 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: 9,007' EOC: 9,757'

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.

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11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 820'	8.30	28	NC	FW Spud Mud
820' to 4680'	10.00	30-32	NC	Brine Water
4680' to 13897'	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 4680 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: 4268 psi

Estimated BHT: 156°

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 "C" Shale pay will be perforated and stimulated.

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

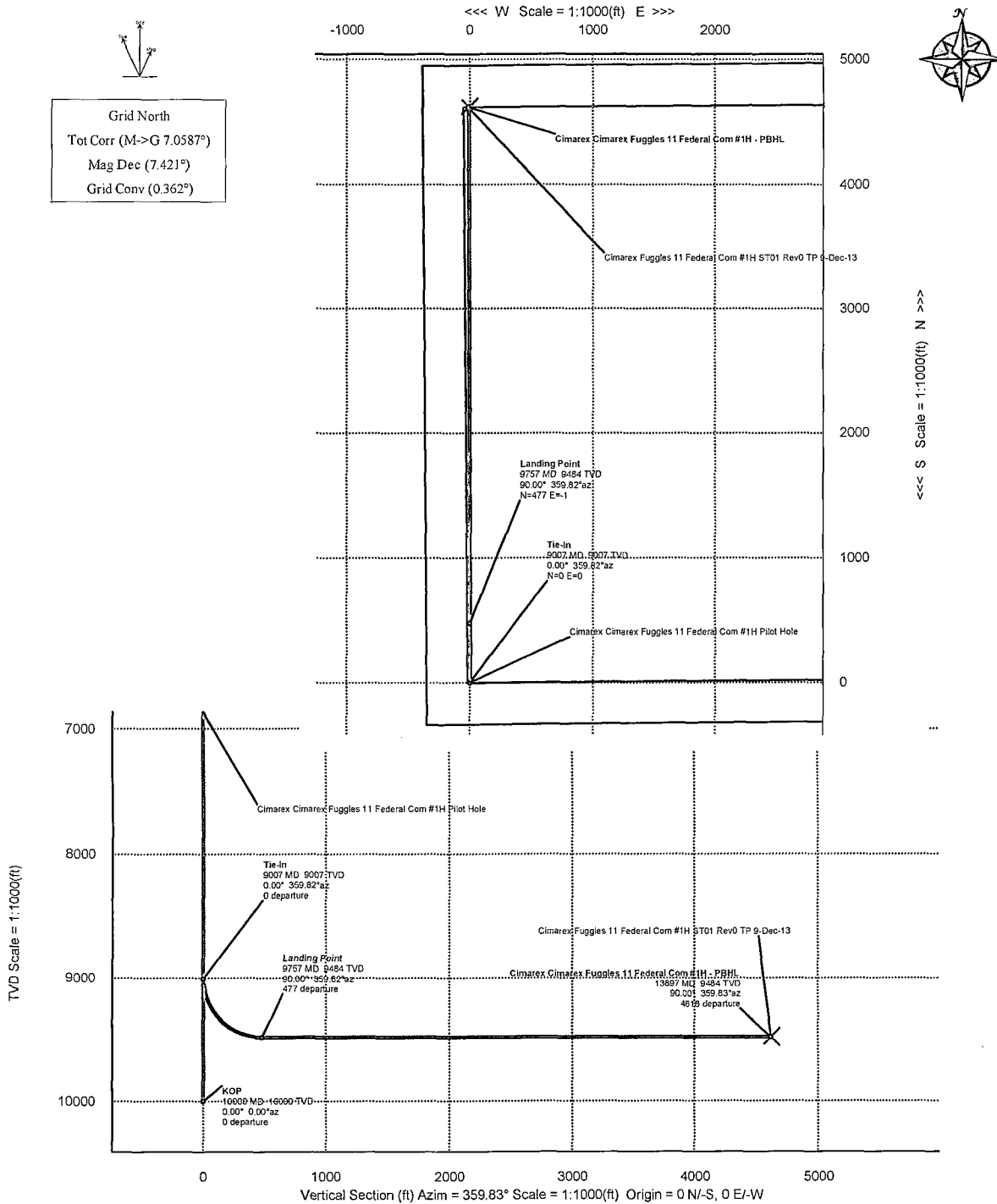


Cimarex

PATHFINDER
A Schlumberger Company

WELL	FIELD	STRUCTURE
Fuggles 11 Federal Com #1H	NM Lea County (NAD 83)	Cimarex Fuggles 11 Federal C

Magnetic Parameters	Surface Location	MAGNETIC	Miscellaneous
Model: 850M/2012	Lat: N 32 8 19.258	NAD83 New Mexico State Plane, Exclusion Zone, US Feet	Fuggles 11 Federal Com #1H TVD Ref: Ground Level (34618 show MSL)
Dip: 59.582°	Long: W 103 39 11.122	Northing: 414833.46 NUS	Site Plan: Cimarex Fuggles 11 Federal Com #1H TVD Rev0 9-Dec-13
Mag Dec: 7.421°		Eastng: 751859.10 EUS	
Date: December 09, 2013		Grid Conv: 0.362°	
FS: 43263 7m		Scale Fact: 0.00000007	



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Marker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MudLine								
Tie-In	9006.50	0.00	359.83	9006.50	0.00	0.00	0.00	
Landing Point	9756.56	90.00	359.83	9484.00	477.50	477.50	-1.46	12.00
Cimarex Fuggles 11 Federal Com #1H - PBHL	13897.17	90.00	359.83	9484.00	4618.12	4618.09	-13.90	0.00



Cimarex Fuggles 11 Federal Com #1H ST01 Rev0 TP 9-Dec-13 Proposal Report (Non-Def Plan)

Report Date:	December 09, 2013 - 01:06 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex	Vertical Section Azimuth:	359.828 ° (Grid North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Fuggles 11 Federal Com #1H / Fuggles 11 Federal Com #1H	TVD Reference Datum:	Ground Level
Well:	Fuggles 11 Federal Com #1H	TVD Reference Elevation:	3461.000 ft above MSL
Borehole:	ST01	Seabed / Ground Elevation:	3461.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.421 °
Survey Name:	Cimarex Fuggles 11 Federal Com #1H ST01 Rev0 TP 9-Dec-13	Total Field Strength:	48263.657 nT
Survey Date:	December 09, 2013	Magnetic Dip Angle:	59.982 °
Tort / AHD / DDI / ERD Ratio:	90.006 ° / 4518.116 ft / 6.629 / 0.487	Declination Date:	December 09, 2013
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Declination Model:	BGGM 2012
Location Lat / Long:	N 32° 8' 19.25828", W 103° 39' 11.12246"	North Reference:	Grid North
Location Grid N/E Y/X:	N 414853.400 ftUS, E 751889.100 ftUS	Grid Convergence Used:	0.3619 °
CRS Grid Convergence Angle:	0.3619 °	Total Corr Mag North->Grid North:	7.0587 °
Grid Scale Factor:	0.99995987	Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Marker MudLine	0.00	0.00	0.00	0.00	-3461.00	0.00	0.00	0.00	0.00	414853.40	751889.10	N 32 8 19.26	W 103 39 11.12
Tie-In	9006.50	0.00	359.83	9006.50	5545.50	0.00	0.00	0.00	N/A	414853.40	751889.10	N 32 8 19.26	W 103 39 11.12
	9100.00	11.22	359.83	9099.40	5638.40	9.12	9.12	-0.03	-12.00	414862.52	751889.07	N 32 8 19.35	W 103 39 11.12
	9200.00	23.22	359.83	9194.75	5733.75	38.67	38.67	-0.12	12.00	414892.07	751888.98	N 32 8 19.64	W 103 39 11.12
	9300.00	35.22	359.83	9281.85	5820.85	87.40	87.40	-0.27	12.00	414940.79	751888.83	N 32 8 20.12	W 103 39 11.12
	9400.00	47.22	359.83	9356.95	5895.95	153.17	153.17	-0.47	12.00	415006.58	751888.63	N 32 8 20.77	W 103 39 11.12
	9500.00	59.22	359.83	9416.72	5955.72	233.11	233.11	-0.71	12.00	415086.50	751888.39	N 32 8 21.56	W 103 39 11.11
	9600.00	71.21	359.83	9458.56	5997.56	323.73	323.73	-0.99	12.00	415177.12	751888.11	N 32 8 22.46	W 103 39 11.11
	9700.00	83.21	359.83	9480.65	6019.65	421.08	421.07	-1.29	12.00	415274.46	751887.81	N 32 8 23.42	W 103 39 11.11
Landing Point	9756.56	90.00	359.83	9484.00	6023.00	477.50	477.50	-1.46	12.00	415330.68	751887.64	N 32 8 23.98	W 103 39 11.10
	9800.00	90.00	359.83	9484.00	6023.00	520.94	520.94	-1.59	0.00	415374.32	751887.51	N 32 8 24.41	W 103 39 11.10
	9900.00	90.00	359.83	9484.00	6023.00	620.94	620.94	-1.90	0.00	415474.32	751887.20	N 32 8 25.40	W 103 39 11.10
	10000.00	90.00	359.83	9484.00	6023.00	720.94	720.94	-2.20	0.00	415574.31	751886.90	N 32 8 26.39	W 103 39 11.10
	10100.00	90.00	359.83	9484.00	6023.00	820.94	820.94	-2.51	0.00	415674.31	751886.59	N 32 8 27.38	W 103 39 11.09
	10200.00	90.00	359.83	9484.00	6023.00	920.94	920.94	-2.81	0.00	415774.30	751886.29	N 32 8 28.37	W 103 39 11.09
	10300.00	90.00	359.83	9484.00	6023.00	1020.94	1020.94	-3.11	0.00	415874.30	751885.99	N 32 8 29.36	W 103 39 11.08
	10400.00	90.00	359.83	9484.00	6023.00	1120.94	1120.94	-3.42	0.00	415974.29	751885.68	N 32 8 30.35	W 103 39 11.08
	10500.00	90.00	359.83	9484.00	6023.00	1220.94	1220.94	-3.72	0.00	416074.29	751885.38	N 32 8 31.34	W 103 39 11.08
	10600.00	90.00	359.83	9484.00	6023.00	1320.94	1320.94	-4.03	0.00	416174.28	751885.07	N 32 8 32.33	W 103 39 11.07
	10700.00	90.00	359.83	9484.00	6023.00	1420.94	1420.94	-4.33	0.00	416274.28	751884.77	N 32 8 33.32	W 103 39 11.07
	10800.00	90.00	359.83	9484.00	6023.00	1520.94	1520.94	-4.63	0.00	416374.27	751884.47	N 32 8 34.31	W 103 39 11.06
	10900.00	90.00	359.83	9484.00	6023.00	1620.94	1620.94	-4.94	0.00	416474.27	751884.16	N 32 8 35.30	W 103 39 11.06
	11000.00	90.00	359.83	9484.00	6023.00	1720.94	1720.94	-5.24	0.00	416574.26	751883.86	N 32 8 36.29	W 103 39 11.06
	11100.00	90.00	359.83	9484.00	6023.00	1820.94	1820.94	-5.54	0.00	416674.26	751883.56	N 32 8 37.28	W 103 39 11.05
	11200.00	90.00	359.83	9484.00	6023.00	1920.94	1920.94	-5.84	0.00	416774.25	751883.26	N 32 8 38.27	W 103 39 11.05
	11300.00	90.00	359.83	9484.00	6023.00	2020.94	2020.94	-6.14	0.00	416874.25	751882.96	N 32 8 39.26	W 103 39 11.05
	11400.00	90.00	359.83	9484.00	6023.00	2120.94	2120.94	-6.45	0.00	416974.25	751882.65	N 32 8 40.25	W 103 39 11.04
	11500.00	90.00	359.83	9484.00	6023.00	2220.94	2220.93	-6.75	0.00	417074.24	751882.35	N 32 8 41.24	W 103 39 11.04
	11600.00	90.00	359.83	9484.00	6023.00	2320.94	2320.93	-7.05	0.00	417174.24	751882.05	N 32 8 42.22	W 103 39 11.03
	11700.00	90.00	359.83	9484.00	6023.00	2420.94	2420.93	-7.35	0.00	417274.23	751881.75	N 32 8 43.21	W 103 39 11.03
	11800.00	90.00	359.83	9484.00	6023.00	2520.94	2520.93	-7.65	0.00	417374.23	751881.45	N 32 8 44.20	W 103 39 11.03
	11900.00	90.00	359.83	9484.00	6023.00	2620.94	2620.93	-7.95	0.00	417474.22	751881.15	N 32 8 45.19	W 103 39 11.02
	12000.00	90.00	359.83	9484.00	6023.00	2720.94	2720.93	-8.25	0.00	417574.22	751880.85	N 32 8 46.18	W 103 39 11.02
	12100.00	90.00	359.83	9484.00	6023.00	2820.94	2820.93	-8.55	0.00	417674.21	751880.55	N 32 8 47.17	W 103 39 11.01
	12200.00	90.00	359.83	9484.00	6023.00	2920.94	2920.93	-8.85	0.00	417774.21	751880.25	N 32 8 48.16	W 103 39 11.01
	12300.00	90.00	359.83	9484.00	6023.00	3020.94	3020.93	-9.15	0.00	417874.20	751879.95	N 32 8 49.15	W 103 39 11.01
	12400.00	90.00	359.83	9484.00	6023.00	3120.94	3120.93	-9.45	0.00	417974.20	751879.65	N 32 8 50.14	W 103 39 11.00
	12500.00	90.00	359.83	9484.00	6023.00	3220.94	3220.93	-9.75	0.00	418074.19	751879.35	N 32 8 51.13	W 103 39 11.00
	12600.00	90.00	359.83	9484.00	6023.00	3320.94	3320.93	-10.05	0.00	418174.19	751879.05	N 32 8 52.12	W 103 39 11.00
	12700.00	90.00	359.83	9484.00	6023.00	3420.94	3420.93	-10.35	0.00	418274.18	751878.75	N 32 8 53.11	W 103 39 10.99
	12800.00	90.00	359.83	9484.00	6023.00	3520.94	3520.93	-10.64	0.00	418374.18	751878.45	N 32 8 54.10	W 103 39 10.99
	12900.00	90.00	359.83	9484.00	6023.00	3620.94	3620.93	-10.94	0.00	418474.18	751878.16	N 32 8 55.09	W 103 39 10.98
	13000.00	90.00	359.83	9484.00	6023.00	3720.94	3720.93	-11.24	0.00	418574.17	751877.86	N 32 8 56.08	W 103 39 10.98
	13100.00	90.00	359.83	9484.00	6023.00	3820.94	3820.93	-11.54	0.00	418674.17	751877.56	N 32 8 57.07	W 103 39 10.98
	13200.00	90.00	359.83	9484.00	6023.00	3920.94	3920.93	-11.83	0.00	418774.16	751877.27	N 32 8 58.06	W 103 39 10.97
	13300.00	90.00	359.83	9484.00	6023.00	4020.94	4020.93	-12.13	0.00	418874.16	751876.97	N 32 8 59.05	W 103 39 10.97
	13400.00	90.00	359.83	9484.00	6023.00	4120.94	4120.93	-12.43	0.00	418974.15	751876.67	N 32 9 0.04	W 103 39 10.96
	13500.00	90.00	359.83	9484.00	6023.00	4220.94	4220.93	-12.72	0.00	419074.15	751876.38	N 32 9 1.03	W 103 39 10.96
	13600.00	90.00	359.83	9484.00	6023.00	4320.94	4320.93	-13.02	0.00	419174.14	751876.08	N 32 9 2.01	W 103 39 10.96
	13700.00	90.00	359.83	9484.00	6023.00	4420.94	4420.92	-13.32	0.00	419274.14	751875.78	N 32 9 3.00	W 103 39 10.95
	13800.00	90.00	359.83	9484.00	6023.00	4520.94	4520.92	-13.61	0.00	419374.13	751875.49	N 32 9 3.99	W 103 39 10.95
Cimarex Cimarex Fuggles 11 Federal Com #1H - PBHL	13897.17	90.00	359.83	9484.00	6023.00	4618.12	4618.09	-13.90	0.00	419474.13	751875.20	N 32 9 4.98	W 103 39 10.94

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	9006.500	1/100.000	30.000	30.000	SLB_MWD-STD	Pilot Hole / Cimarex Cimarex Fuggles 11 Federal Com #1H
	9006.500	13897.171	1/100.000	30.000	30.000	SLB_MWD-STD	ST01 / Cimarex Fuggles 11 Federal Com #1H ST01 Rev0 TP

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

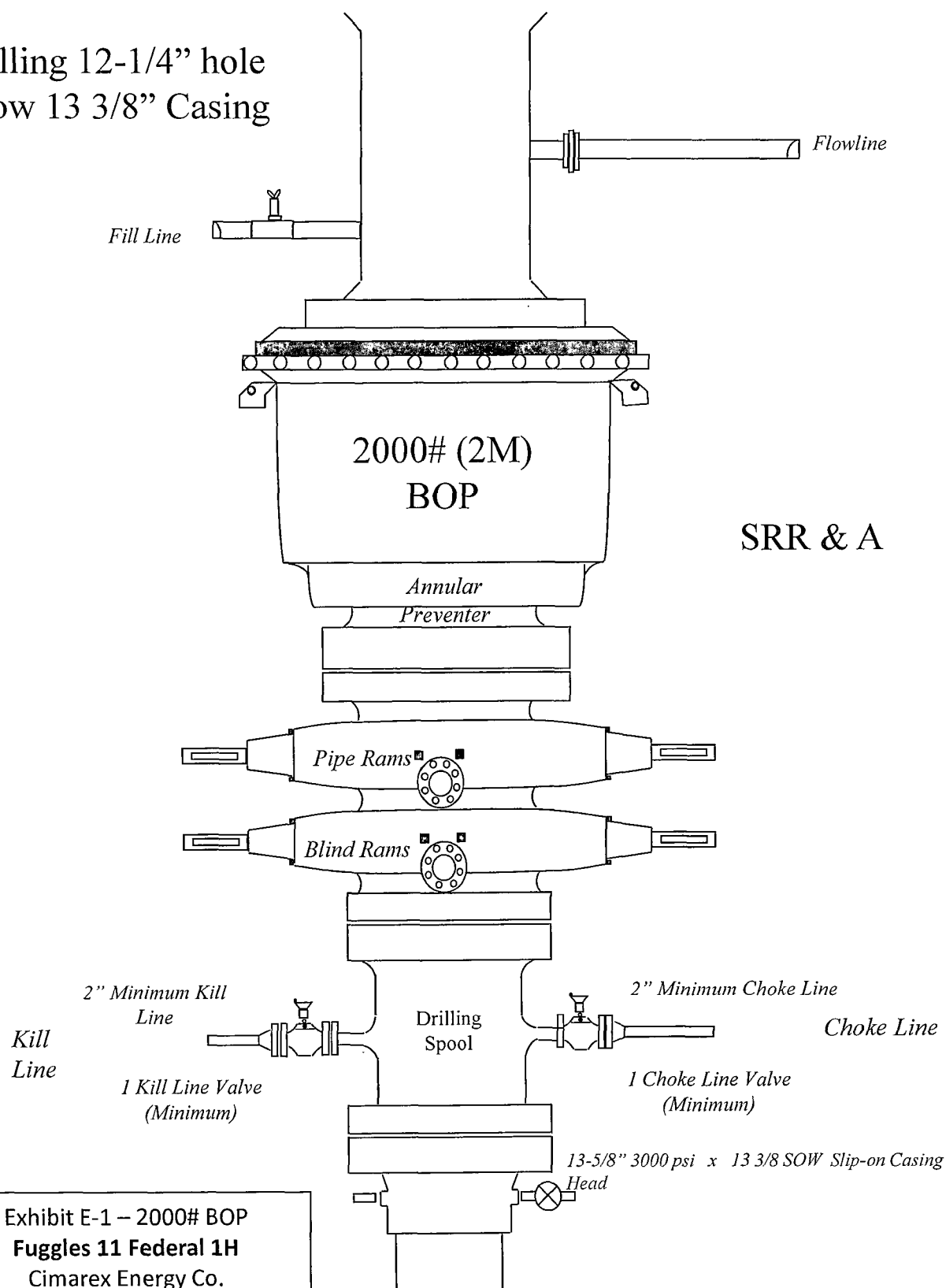


Exhibit E-1 – 2000# BOP
Fuggles 11 Federal 1H
Cimarex Energy Co.
11-25S-33E
SHL 330 FSL & 550 FWL
BHL 330 FNL & 370 FWL
Lea County, NM

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

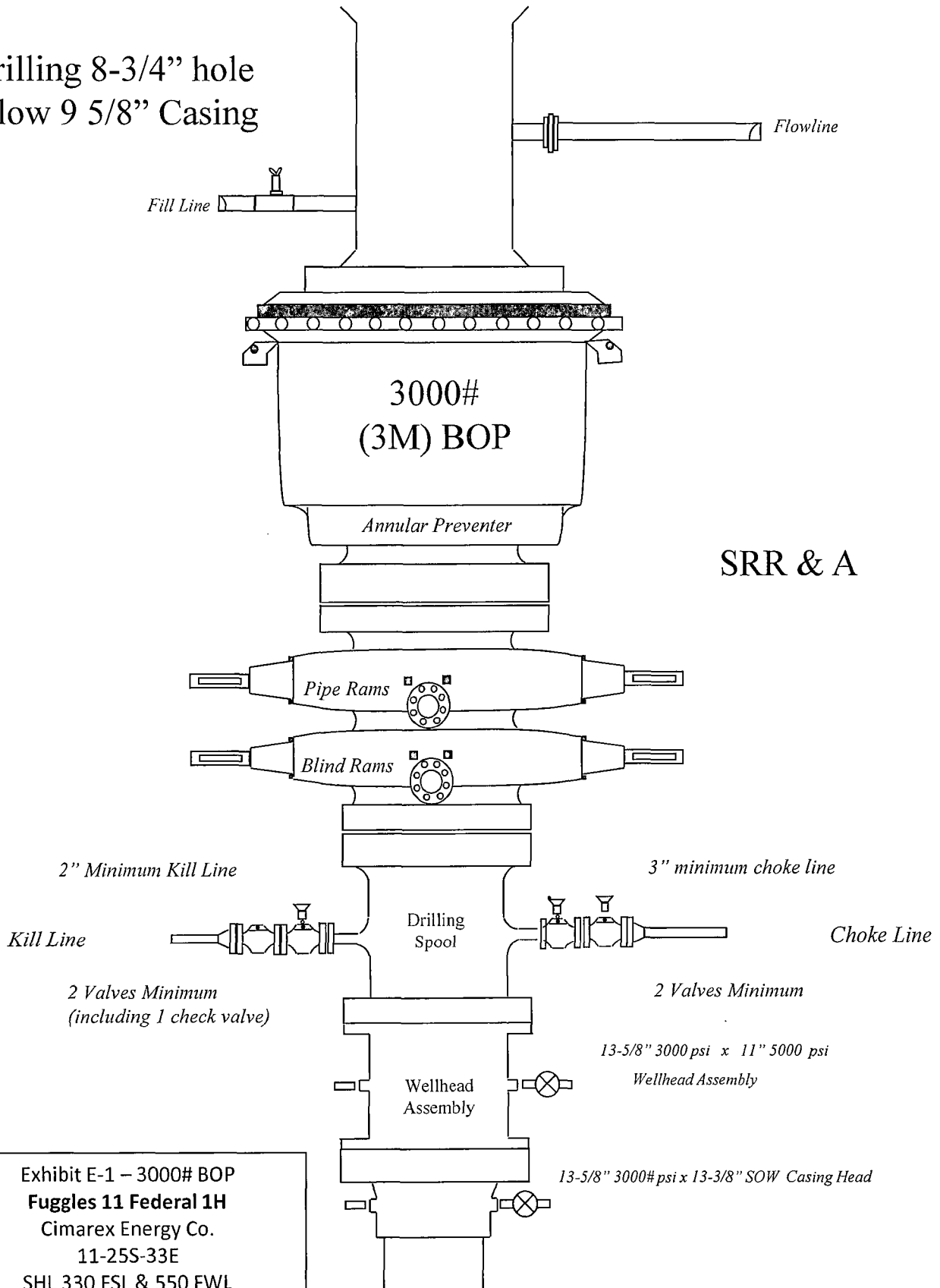
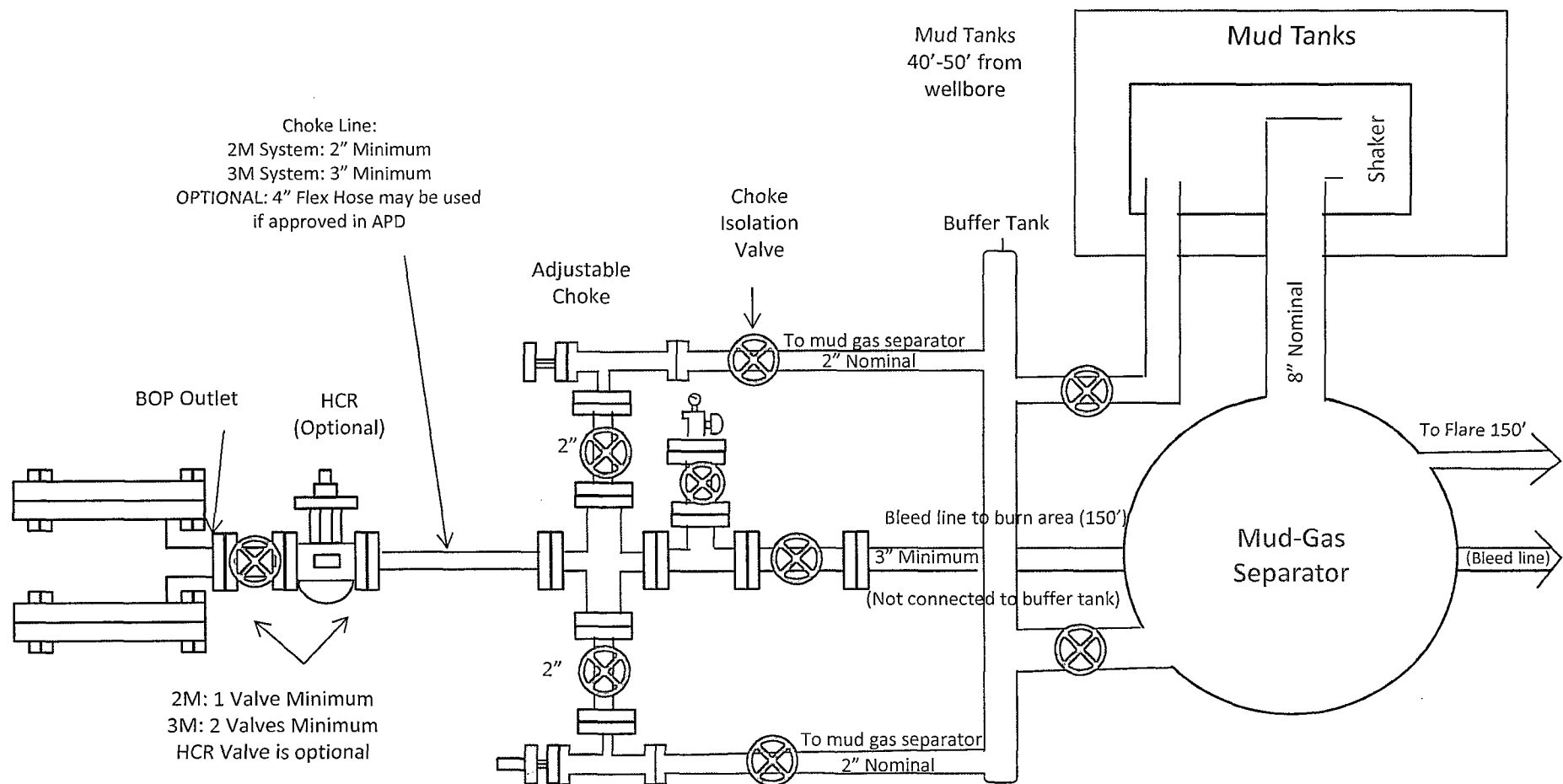


Exhibit E-1 – 3000# BOP
Fuggles 11 Federal 1H
Cimarex Energy Co.
11-25S-33E
SHL 330 FSL & 550 FWL
BHL 330 FNL & 370 FWL
Lea County, NM



Drilling Operations Choke Manifold 2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Fuggles 11 Federal 1H
 Cimarex Energy Co.
 11-25S-33E
 SHL 330 FSL & 550 FWL
 BHL 330 FNL & 370 FWL
 Lea County, NM

Exhibit F-1 – Co-Flex Hose Hydrostatic Test

Fuggles 11 Federal 1H

Cimarex Energy Co.

11-25S-33E

SHL 330 FSL & 550 FWL

BHL 330 FNL & 370 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			
<u>Hose assembly pressure tested with water at ambient temperature.</u>			
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. Joins</i>	Approved: <i>[Signature]</i>	



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

March 3, 2011

Hose Specifications

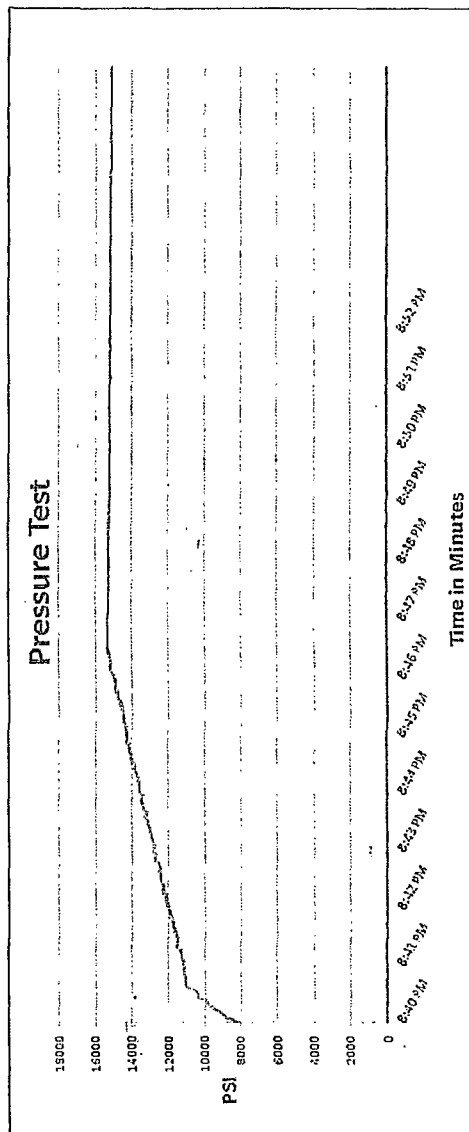
Hose Type
CSK
ID
4"
Working Pressure
10000 PSI

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

Verification

Type of Fitting
41/16 10K
Die Size
6.38"
Hose Serial #
5544
Coupling Method
Swage
End O.D.
6.25"
Hose Assembly Serial #
79793

Pressure Test



Test Pressure
15000 PSI

Actual Burst Pressure

Peak Pressure
15483 PSI

Time Held at Test Pressure
11 Minutes

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

Tested By: Zac McConnell

Approved By: Kim Thomas

[Signature]

[Signature]

Exhibit F-2 - Co-Flex Hose
Fuggles 11 Federal 1H
Cimarex Energy Co.
11-25S-33E
SHL 330 FSL & 550 FWL
BHL 330 FNL & 370 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



Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
Fuggles 11 Federal 1H
Cimarex Energy Co.
11-25S-33E
SHL 330 FSL & 550 FWL
BHL 330 FNL & 370 FWL
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

Fuggles 11 Federal 1H

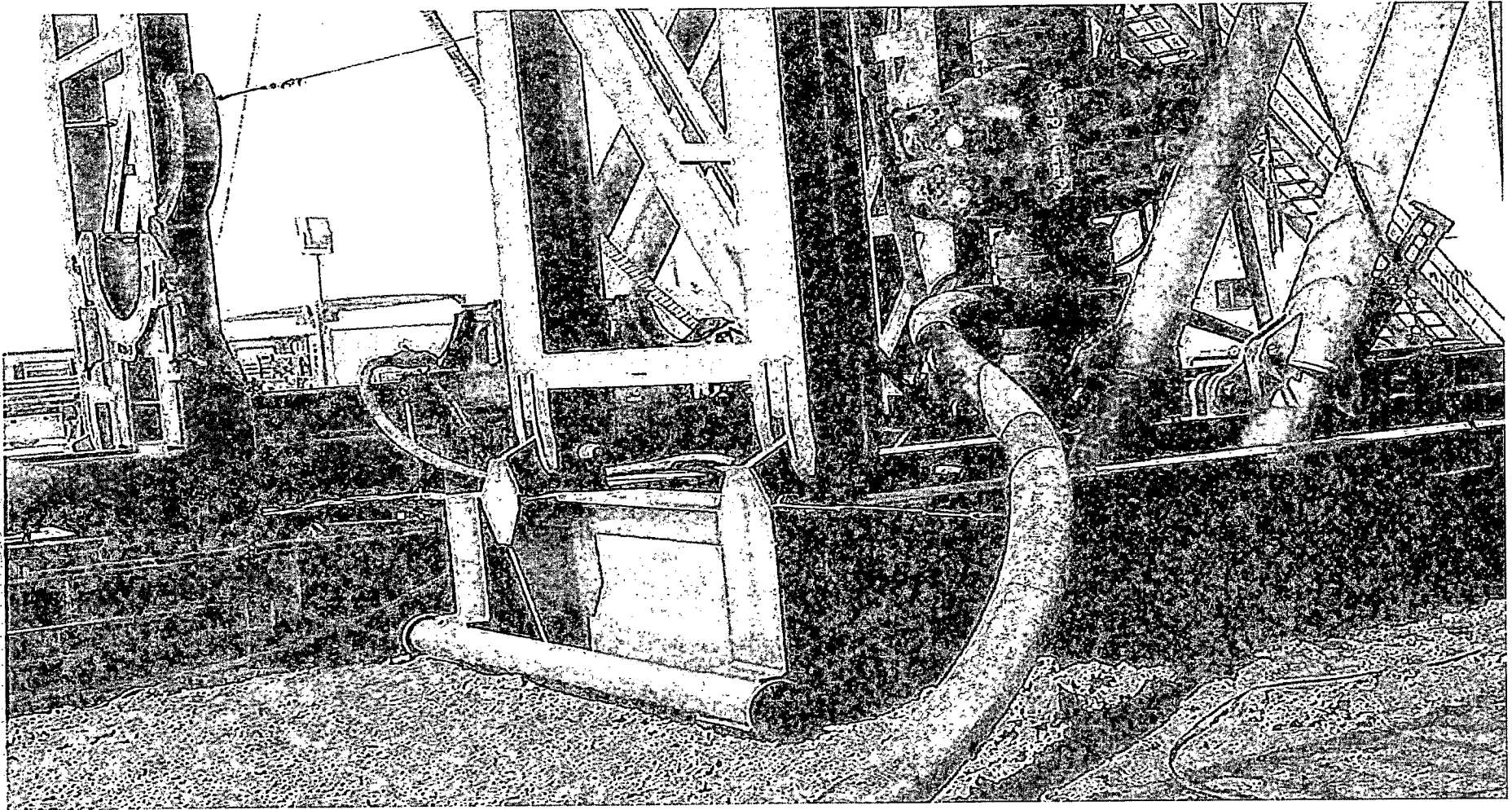
Cimarex Energy Co.

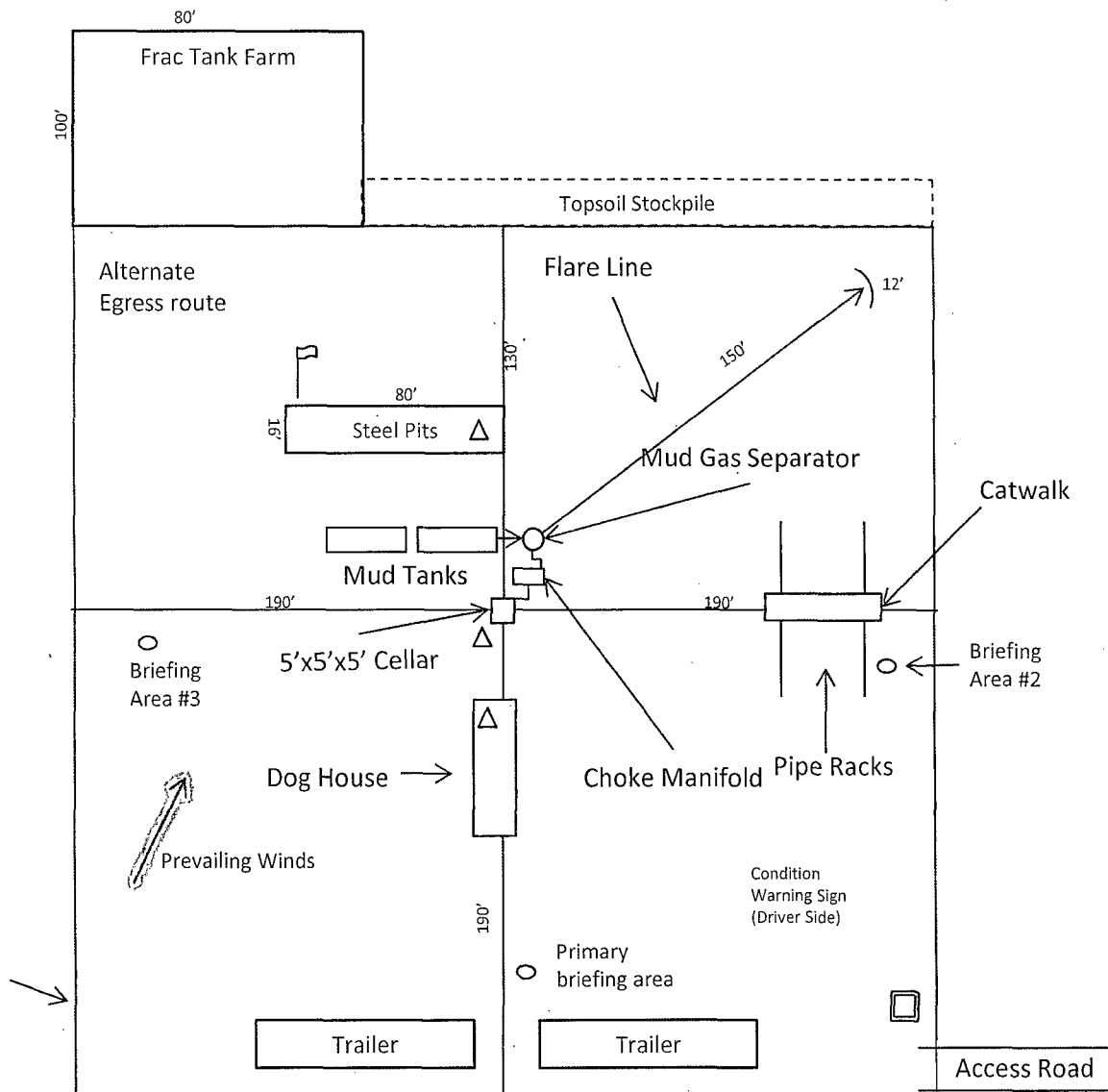
11-25S-33E

SHL 330 FSL & 550 FWL

BHL 330 FNL & 370 FWL

Lea County, NM





-  Wind Direction Indicators (wind sock or streamers)
-  • H2S Monitors (alarms at bell nipple and shale shaker)
-  Briefing Areas



Exhibit D – Rig Diagram
Fuggles 11 Federal 1H
 Cimarex Energy Co.
 11-25S-33E
 SHL 330 FSL & 550 FWL
 BHL 330 FNL & 370 FWL
 Lea County, NM