HOBBS OCD

OCT 31 2013

RECEIVED

OCD Hobbs

Form 3160-3
(March 2012)

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

5. Lease Serial No.
SHL: NM0553642; BHL: NM0553548

6. If Indian, Allotee or Tribe Name

1a. Type of Work: [X] DRILL [ ] REENTER

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

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. (40201)
Dos Equis 13 Federal Com #1H

2. Name of Operator
Cimarex Energy Co. (215099)

9. API Well No.
30-025-41479

3a. Address
600 N. Marienfield St. Ste. 600 Midland Tx 79071

3b. Phone No. *(include area code)*
432-571-7800

10. Field and Pool, or Exploratory (96674)
Triple X; Bone Spring West

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At Surface: 330 FNL & 660 FEL
At proposed prod. Zone: 330 FSL & 660 FEL

11. Sec,. T. R. M. or Blk. and Survey and Area
13, 24s, 32e

14. Distance in miles and direction from nearest town or post office*
Jal NM, is 26 miles to the southeast of location

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)	16. No of acres in lease	17. Spacing Unit dedicated to this well
330	NM0553642=400 acres NM0553548=320 acres	160

18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on File
1420' to #2	Pilot Hole TD: 11,400 15,500 MD 11,085 TVD	NM2575; NMB000835

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3576 GR	9/16/13	30 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	Name *(Printed/Typed)*	Date
Title: Regulatory Compliance	Terri Stathem	8/13/13

Approved By *(Signature)* /s/ James Stovall	Name (Printed/Typed)	Date OCT 25 2013
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

11/4/13

Carlsbad Controlled Water Basin

NOV 05 2013

Application to Drill
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
UL: A, Sec. 13, 24s, 32e
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 FNL & 660 FEL
BHL 330 FSL & 660 FEL

2. Elevation Above Sea Level: 3,576' 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: 15,500 MD 11,085 TVD Pilot Hole TD: 11,400

6. Estimated Tops of Geological Markers:

Formation	Est Top	Bearing
Rustler	1185	N/A
Salt	1320	N/A
Castille	3430	N/A
Base Last Salt	4710	N/A
Lamar	4950	N/A
Bell Canyon	5000	N/A
Cherry Canyon	6120	N/A
Brushy Canyon	7340	N/A
Basal Brushy Canyon	8660	N/A
Bone Spring	8900	Hydrocarbons
Avalon Shale	9050	Hydrocarbons
1st BSS	10050	Hydrocarbons
2nd BSS	10690	Hydrocarbons
3rd BSS	11175	N/A
Pilot Hole TD - 3rd Bone Spring	11400	N/A

7. Possible Mineral Bearing Formation: Shown above

7A. OSE Ground Water Estimated Depth: 200'

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	Conditon	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	~~1235~~ 1215'	~~1235~~ 1215'	17 1/2	13-3/8"	48.00	H-40	ST&C	New	555	8.3	1.39		3.11	59,280	51,768	6.22
Intermediate	0	~~4980~~ 4920'	~~4980~~ 4920'	12 1/4	9-5/8"	40.00	N-80	BT&C	New	2241	10.0		1.56	2.57	199,200	168,788	5.43
Production	0	10608	10608	8 3/4	5-1/2"	17.00	P-110	LT&C	New	2691	9.0	1.51		3.95	188,445	162,552	2.74
Production	10608	15500	11085	8 3/4	5-1/2"	17.00	P-110	BT&C	New	5130	9.0	1.44		2.07	8,109	6,995	78.06

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	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.

Application to Drill
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
UL: A, Sec. 13, 24s, 32e
Lea Co., NM

9. Cementing Program:

Casing Type	Type	Sacks	Yield	Weight	Cubic Feet	Cement Blend
Surface	Lead	784	1.75	13.50	1372	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	160	1.34	14.80	214	Class C + LCM, 6.32 gps water
	TOC: 0		85% Excess			Centralizers per Onshore Order 2.III.B.1f
Intermediate	Lead	1122	1.88	12.90	2109	35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	291	1.34	14.80	389	Class C + retarder + LCM, 6.32 gps water
	TOC: 0		81% Excess			
Production	Lead	696	2.40	11.90	1670	35:65 (poz/H) + salt + Sodium Metasilcate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1374	1.24	14.50	1703	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
	TOC: ~~4780~~ See COA		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: 11,400' KOP: 10,608' EOC: 11,085'

Set OH mechanical whipstock w/ 742 ft of 2.875 tubing and pump 30 bbls of Mudpush @ 12 ppg, followed by 352 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.

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 ~~1235'~~ 1275'	8.30	28	NC	FW Spud Mud
~~1235'~~ 1275' to ~~4980'~~ 4950'	10.00	30-32	NC	Brine Water
~~4980'~~ 4950' to 15500'	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.

Application to Drill
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
UL: A, Sec. 13, 24s, 32e
Lea Co., NM

12. Testing, Logging and Coring Program:

A. Mud logging program: 2 man unit from 4980 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 H_2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H_2S Safety package on all wells, attached is an "H_2S 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: 4989 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: 30 days.
If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:

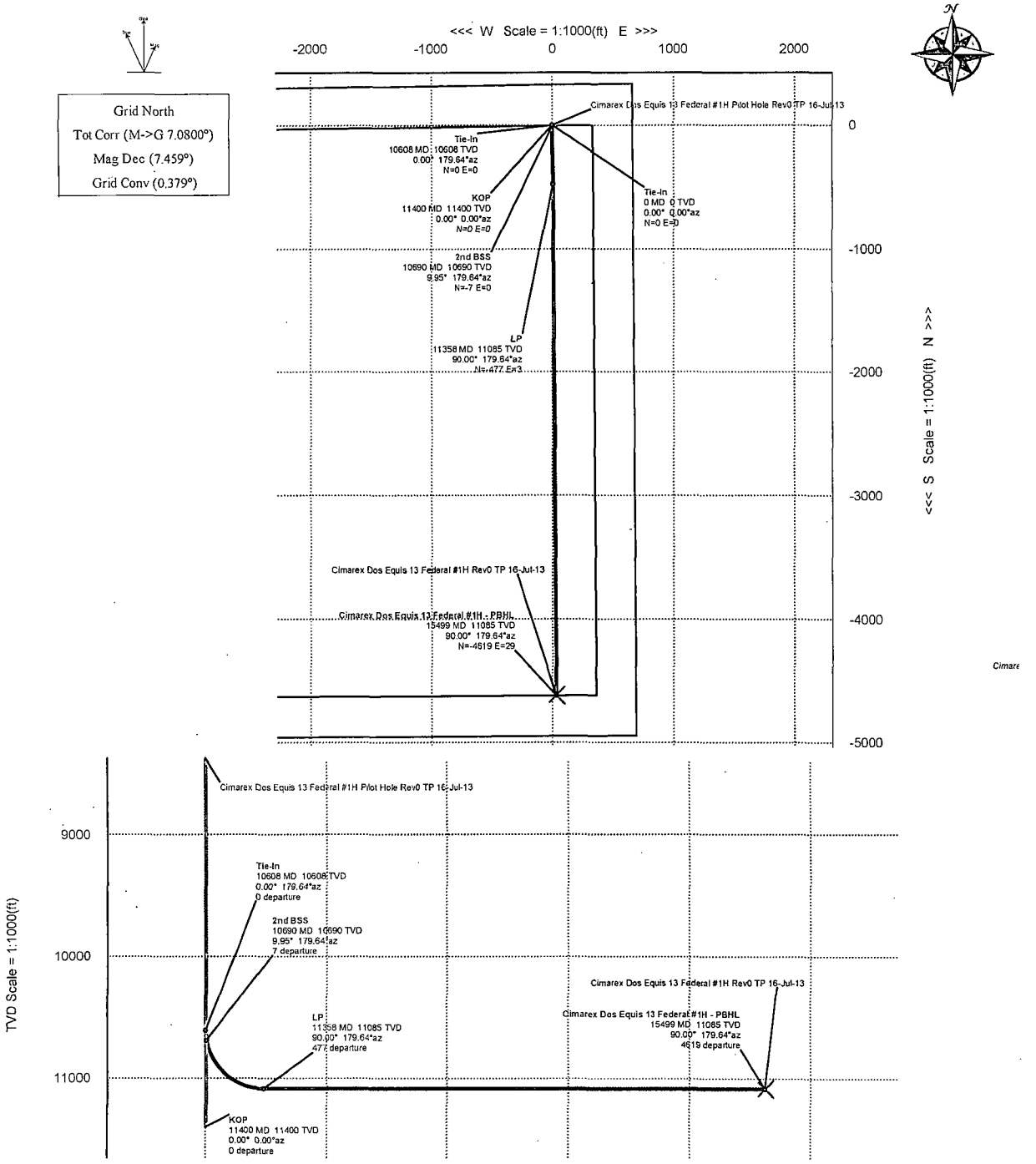
If production casing is run an additional 30 days will be required to complete and construct surface facilities.
Bone Spring pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **Oil**

Cimarex Energy

PATHFINDER
A Schlumberger Company

WELL	FIELD	STRUCTURE
Dos Equis 13 Federal #1H	NM Lea County (NAD 83)	Cimarex Dos Equis 13 Federal

Magnetic Parameters				Surface Location				Miscellaneous	
Model: BGGM 2012	Dip: 60.081°	Date: July 16, 2013	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Lat: N 32 13 26.645	Northing: 445978.10 flUS	Grid Conv: 0.379°		Slot: Dos Equis 13 Federal #1H TVD Ref: Ground Level(3576ft above MSL)	
	Mag Dec: 7.459°	FS: 48369.6nT		Lon: W 103 37 18.885	Easting: 761333.90 flUS	Scale Fact: 0.99996452		Plan: Cimarex Dos Equis 13 Federal#1H(Rev0,JDP 08.JUL.2013	



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
9 5/8 Casing Point	4900.00	0.00	179.64	4900.00	0.00	0.00	0.00	0.00
Tie-In	10607.50	0.00	179.64	10607.50	0.00	0.00	0.00	
2nd BSS	10690.42	9.95	179.64	10690.00	7.18	-7.18	0.04	12.00
LP	11357.56	90.00	179.64	11085.00	477.50	-477.49	2.97	12.00
Cimarex Dos Equis 13 Federal #1H - PBHL	15499.22	90.00	179.64	11085.00	4619.16	-4619.07	28.80	0.00

PATHFINDER
A Schlumberger Company

Cimarex Dos Equis 13 Federal #1H Rev0 TP 16-Jul-13 Proposal Report

(Def Plan)

Report Date:	July 16, 2013 - 01:25 PM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex Energy	**Vertical Section Azimuth:**	179.643 ° (Grid North)
Field:	NM Lea County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Dos Equis 13 Federal #1H / Dos Equis 13 Federal #1H	**TVD Reference Datum:**	Ground Level
Well:	Dos Equis 13 Federal #1H	**TVD Reference Elevation:**	3576.000 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3576.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.459 °
Survey Name:	Cimarex Dos Equis 13 Federal #1H Rev0 TP 16-Jul-13	**Total Field Strength:**	48369.563 nT
Survey Date:	July 16, 2013	**Magnetic Dip Angle:**	60.081 °
Tort / AHD / DDI / ERD Ratio:	90.003 ° / 4619.163 ft / 5.764 / 0.417	**Declination Date:**	July 16, 2013
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Declination Model:**	BGGM 2012
Location Lat / Long:	N 32° 13' 26.64507", W 103° 37' 18.88531"	**North Reference:**	Grid North
Location Grid N/E Y/X:	N 445978.100 ftUS, E 761333.900 ftUS	**Grid Convergence Used:**	0.3794 °
CRS Grid Convergence Angle:	0.3794 °	**Total Corr Mag North->Grid North:**	7.0800 °
Grid Scale Factor:	0.99996452	**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)
9 5/8 Casing Point	*4900.00*	*0.00*	*179.64*	*4900.00*	*0.00*	*0.00*	*0.00*	*445978.10*	*761333.90*	*N 32 13 26.65*	*W 103 37 18.89*	*0.00*	*0.00*	*0.00*
Tie-In	10607.50	0.00	179.64	10607.50	0.00	0.00	0.00	445978.10	761333.90	N 32 13 26.65	W 103 37 18.89	0.00	0.00	N/A
2nd BSS	*10690.42*	*9.95*	*179.64*	*10690.00*	*7.18*	*-7.18*	*0.04*	*445970.92*	*761333.94*	*N 32 13 26.57*	*W 103 37 18.89*	*7.18*	*179.64*	*12.00*
	10700.00	11.10	179.64	10699.42	8.93	-8.93	0.06	445969.17	761333.96	N 32 13 26.56	W 103 37 18.89	8.93	179.64	12.00
	10800.00	23.10	179.64	10794.83	38.28	-38.28	0.24	445939.82	761334.14	N 32 13 26.27	W 103 37 18.89	38.28	179.64	12.00
	10900.00	35.10	179.64	10882.05	86.82	-86.82	0.54	445891.28	761334.44	N 32 13 25.79	W 103 37 18.89	86.82	179.64	12.00
	11000.00	47.10	179.64	10957.27	152.43	-152.43	0.95	445825.67	761334.85	N 32 13 25.14	W 103 37 18.89	152.43	179.64	12.00
	11100.00	59.10	179.64	11017.21	232.25	-232.25	1.44	445745.86	761335.34	N 32 13 24.35	W 103 37 18.89	232.25	179.64	12.00
	11200.00	71.09	179.64	11059.24	322.79	-322.78	2.01	445655.33	761335.91	N 32 13 23.45	W 103 37 18.89	322.79	179.64	12.00
	11300.00	83.09	179.64	11081.54	420.08	-420.08	2.61	445558.04	761336.51	N 32 13 22.49	W 103 37 18.89	420.08	179.64	12.00
LP	11357.56	90.00	179.64	11085.00	477.50	-477.49	2.97	445500.63	761336.87	N 32 13 21.92	W 103 37 18.89	477.50	179.64	12.00
	11400.00	90.00	179.64	11085.00	519.94	-519.93	3.23	445458.18	761337.13	N 32 13 21.50	W 103 37 18.89	519.94	179.64	0.00
	11500.00	90.00	179.64	11085.00	619.94	-619.93	3.85	445358.19	761337.75	N 32 13 20.51	W 103 37 18.89	619.94	179.64	0.00
	11600.00	90.00	179.64	11085.00	719.94	-719.93	4.47	445258.20	761338.37	N 32 13 19.52	W 103 37 18.89	719.94	179.64	0.00
	11700.00	90.00	179.64	11085.00	819.94	-819.93	5.10	445158.20	761339.00	N 32 13 18.53	W 103 37 18.89	819.94	179.64	0.00
	11800.00	90.00	179.64	11085.00	919.94	-919.93	5.72	445058.21	761339.62	N 32 13 17.54	W 103 37 18.89	919.94	179.64	0.00
	11900.00	90.00	179.64	11085.00	1019.94	-1019.93	6.34	444958.21	761340.24	N 32 13 16.55	W 103 37 18.89	1019.94	179.64	0.00
	12000.00	90.00	179.64	11085.00	1119.94	-1119.92	6.96	444858.22	761340.86	N 32 13 15.56	W 103 37 18.89	1119.94	179.64	0.00
	12100.00	90.00	179.64	11085.00	1219.94	-1219.92	7.58	444758.22	761341.48	N 32 13 14.57	W 103 37 18.89	1219.94	179.64	0.00
	12200.00	90.00	179.64	11085.00	1319.94	-1319.92	8.21	444658.23	761342.11	N 32 13 13.58	W 103 37 18.89	1319.94	179.64	0.00
	12300.00	90.00	179.64	11085.00	1419.94	-1419.92	8.83	444558.24	761342.73	N 32 13 12.59	W 103 37 18.89	1419.94	179.64	0.00
	12400.00	90.00	179.64	11085.00	1519.94	-1519.92	9.45	444458.24	761343.35	N 32 13 11.60	W 103 37 18.89	1519.94	179.64	0.00
	12500.00	90.00	179.64	11085.00	1619.94	-1619.91	10.07	444358.25	761343.97	N 32 13 10.62	W 103 37 18.89	1619.94	179.64	0.00
	12600.00	90.00	179.64	11085.00	1719.94	-1719.91	10.70	444258.25	761344.60	N 32 13 9.63	W 103 37 18.89	1719.94	179.64	0.00
	12700.00	90.00	179.64	11085.00	1819.94	-1819.91	11.32	444158.26	761345.22	N 32 13 8.64	W 103 37 18.89	1819.94	179.64	0.00
	12800.00	90.00	179.64	11085.00	1919.94	-1919.91	11.94	444058.26	761345.84	N 32 13 7.65	W 103 37 18.89	1919.94	179.64	0.00
	12900.00	90.00	179.64	11085.00	2019.94	-2019.91	12.56	443958.27	761346.46	N 32 13 6.66	W 103 37 18.89	2019.94	179.64	0.00
	13000.00	90.00	179.64	11085.00	2119.94	-2119.90	13.19	443858.28	761347.09	N 32 13 5.67	W 103 37 18.90	2119.94	179.64	0.00
	13100.00	90.00	179.64	11085.00	2219.94	-2219.90	13.81	443758.28	761347.71	N 32 13 4.68	W 103 37 18.90	2219.94	179.64	0.00
	13200.00	90.00	179.64	11085.00	2319.94	-2319.90	14.43	443658.29	761348.33	N 32 13 3.69	W 103 37 18.90	2319.94	179.64	0.00
	13300.00	90.00	179.64	11085.00	2419.94	-2419.90	15.06	443558.29	761348.96	N 32 13 2.70	W 103 37 18.90	2419.94	179.64	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)
	13400.00	90.00	179.64	11085.00	2519.94	-2519.90	15.68	443458.30	761349.58	N 32 13 1.71	W 103 37 18.90	2519.94	179.64	0.00
	13500.00	90.00	179.64	11085.00	2619.94	-2619.89	16.31	443358.30	761350.20	N 32 13 0.72	W 103 37 18.90	2619.94	179.64	0.00
	13600.00	90.00	179.64	11085.00	2719.94	-2719.89	16.93	443258.31	761350.83	N 32 12 59.73	W 103 37 18.90	2719.94	179.64	0.00
	13700.00	90.00	179.64	11085.00	2819.94	-2819.89	17.55	443158.32	761351.45	N 32 12 58.74	W 103 37 18.90	2819.94	179.64	0.00
	13800.00	90.00	179.64	11085.00	2919.94	-2919.89	18.18	443058.32	761352.08	N 32 12 57.75	W 103 37 18.90	2919.94	179.64	0.00
	13900.00	90.00	179.64	11085.00	3019.94	-3019.89	18.80	442958.33	761352.70	N 32 12 56.76	W 103 37 18.90	3019.94	179.64	0.00
	14000.00	90.00	179.64	11085.00	3119.94	-3119.88	19.43	442858.33	761353.33	N 32 12 55.77	W 103 37 18.90	3119.94	179.64	0.00
	14100.00	90.00	179.64	11085.00	3219.94	-3219.88	20.05	442758.34	761353.95	N 32 12 54.78	W 103 37 18.90	3219.94	179.64	0.00
	14200.00	90.00	179.64	11085.00	3319.94	-3319.88	20.68	442658.34	761354.57	N 32 12 53.79	W 103 37 18.90	3319.94	179.64	0.00
	14300.00	90.00	179.64	11085.00	3419.94	-3419.88	21.30	442558.35	761355.20	N 32 12 52.80	W 103 37 18.90	3419.94	179.64	0.00
	14400.00	90.00	179.64	11085.00	3519.94	-3519.88	21.92	442458.36	761355.82	N 32 12 51.81	W 103 37 18.90	3519.94	179.64	0.00
	14500.00	90.00	179.64	11085.00	3619.94	-3619.87	22.55	442358.36	761356.45	N 32 12 50.83	W 103 37 18.90	3619.94	179.64	0.00
	14600.00	90.00	179.64	11085.00	3719.94	-3719.87	23.17	442258.37	761357.07	N 32 12 49.84	W 103 37 18.90	3719.94	179.64	0.00
	14700.00	90.00	179.64	11085.00	3819.94	-3819.87	23.80	442158.37	761357.70	N 32 12 48.85	W 103 37 18.90	3819.94	179.64	0.00
	14800.00	90.00	179.64	11085.00	3919.94	-3919.87	24.43	442058.38	761358.32	N 32 12 47.86	W 103 37 18.90	3919.94	179.64	0.00
	14900.00	90.00	179.64	11085.00	4019.94	-4019.87	25.05	441958.38	761358.95	N 32 12 46.87	W 103 37 18.90	4019.94	179.64	0.00
	15000.00	90.00	179.64	11085.00	4119.94	-4119.86	25.68	441858.39	761359.58	N 32 12 45.88	W 103 37 18.90	4119.94	179.64	0.00
	15100.00	90.00	179.64	11085.00	4219.94	-4219.86	26.30	441758.40	761360.20	N 32 12 44.89	W 103 37 18.90	4219.94	179.64	0.00
	15200.00	90.00	179.64	11085.00	4319.94	-4319.86	26.93	441658.40	761360.83	N 32 12 43.90	W 103 37 18.90	4319.94	179.64	0.00
	15300.00	90.00	179.64	11085.00	4419.94	-4419.86	27.55	441558.41	761361.45	N 32 12 42.91	W 103 37 18.91	4419.94	179.64	0.00
	15400.00	90.00	179.64	11085.00	4519.94	-4519.86	28.18	441458.41	761362.08	N 32 12 41.92	W 103 37 18.91	4519.94	179.64	0.00
Cimarex Dos Equis 13 Federal #1H - PBHL	15499.22	90.00	179.64	11085.00	4619.16	-4619.07	28.80	441359.20	761362.70	N 32 12 40.94	W 103 37 18.91	4619.16	179.64	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	10607.500	1/100.000	30.000	30.000	SLB_MWD-STD	Pilot Hole / Cimarex Dos Equis 13 Federal #1H Pilot Hole Rev0 TP
	10607.500	15499.218	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Dos Equis 13 Federal #1H Rev0 TP 16-

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

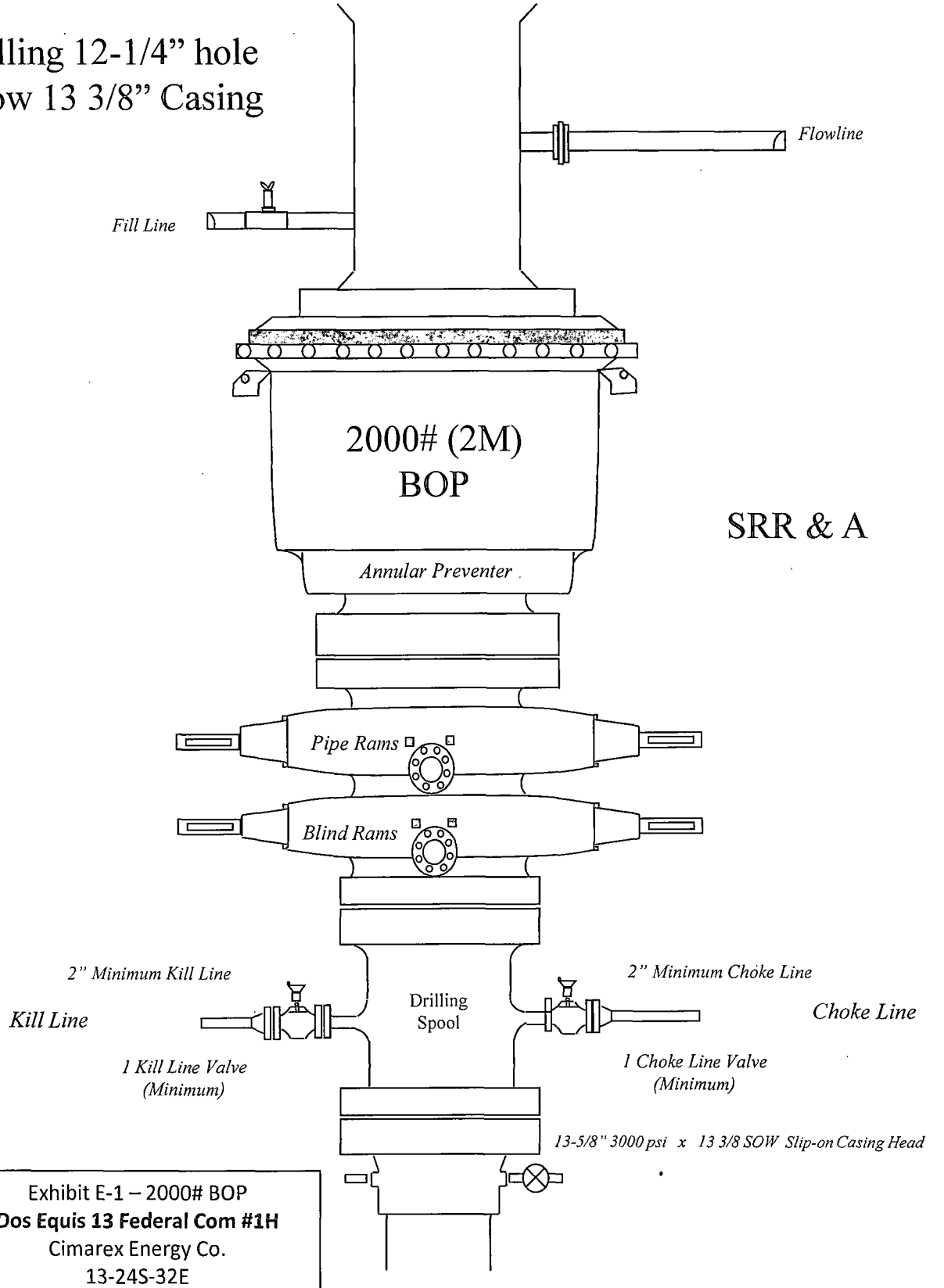


Exhibit E-1 – 2000# BOP
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
Lea County, NM

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

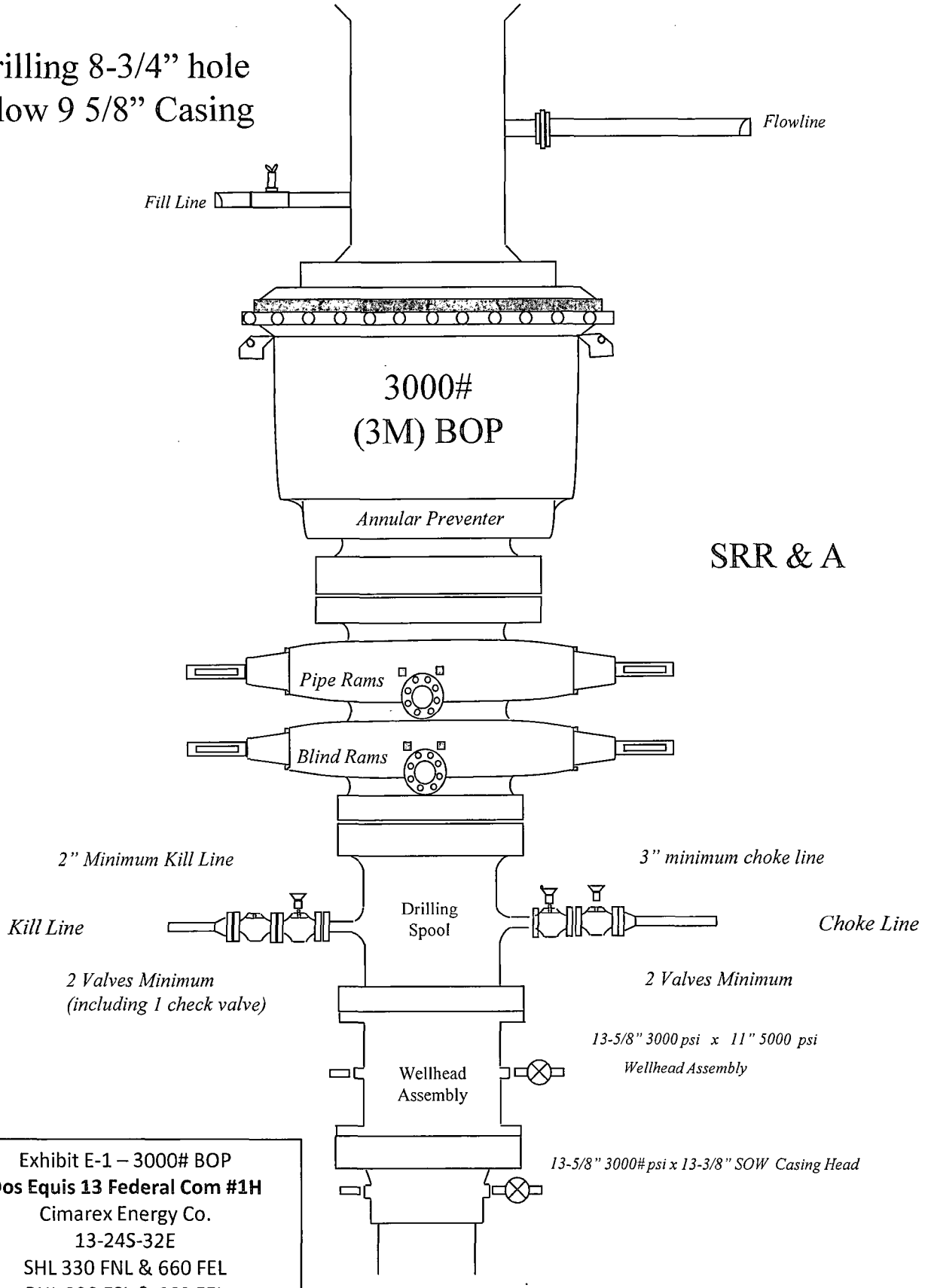
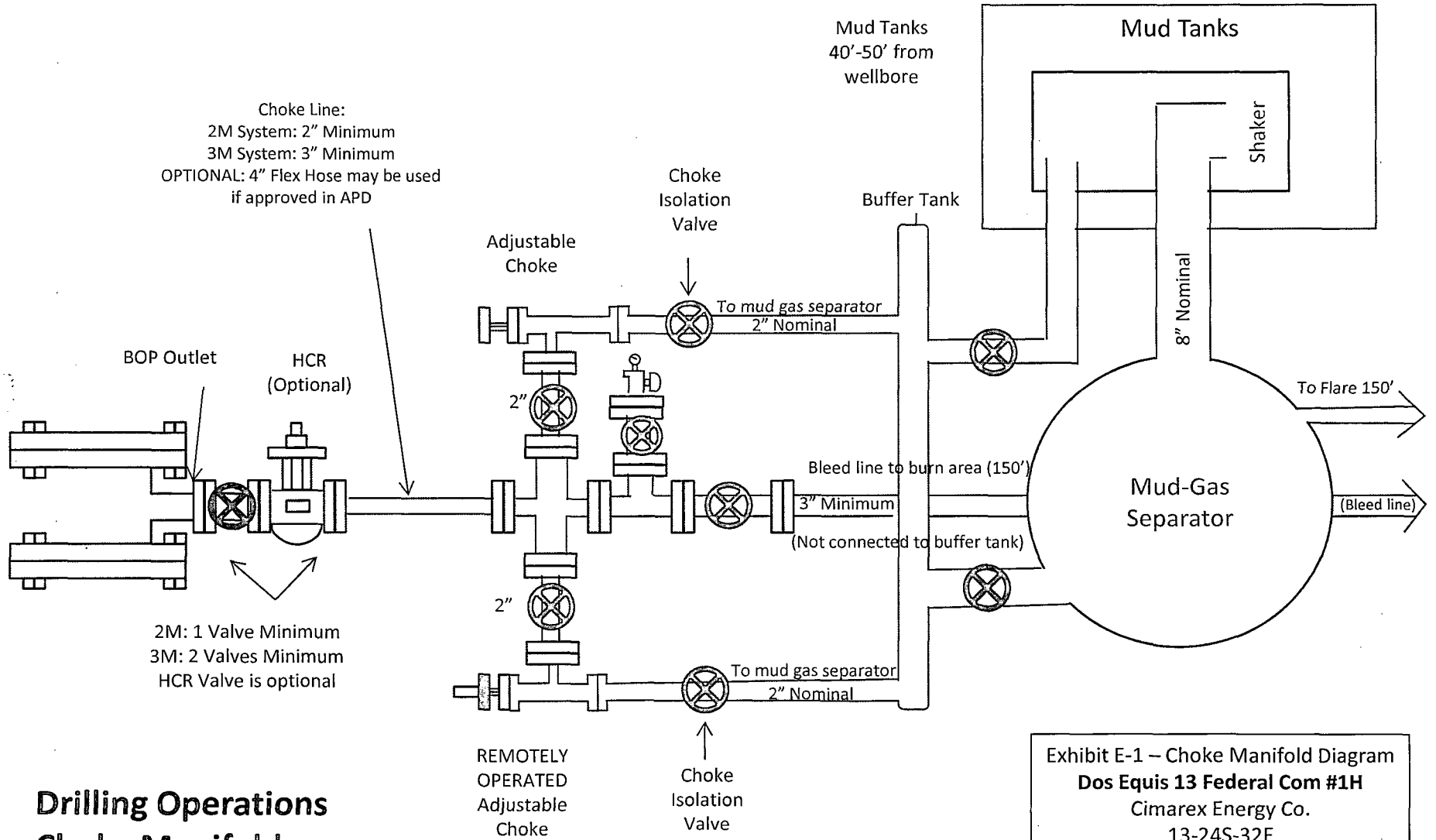


Exhibit E-1 – 3000# BOP
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
Lea County, NM



Drilling Operations
Choke Manifold
2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
Lea County, NM

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
Lea County, NM

Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
Oderco Inc	odyd-271

HOSE SPECIFICATIONS

Type:	Hose Length:
Stainless Steel Armor Choke & Kill Hose	45'ft.

I.D.	O.D.
4 INCHES	9 INCHES

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 PSI	15,000 PSI	0 PSI

COUPLINGS

Stem Part No.	Ferrule No.
OKC OKC	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:	Hose Serial Number:
79793	OKC

Comments:

Date:	Tested:	Approved:
3/8/2011	A. Jesus Sosa	

Midwest Hose & Specialty, Inc.

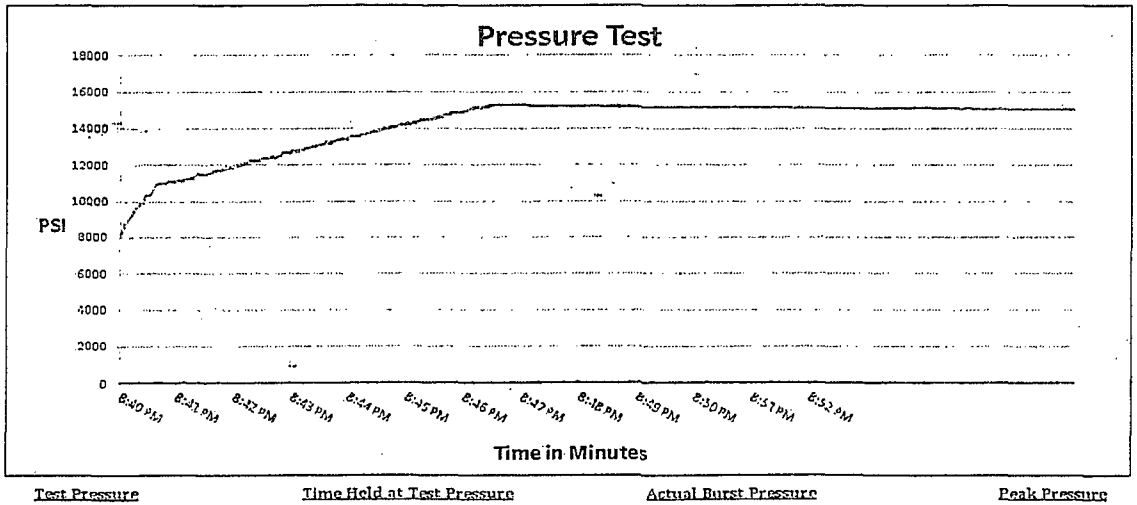
Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type	Length	Type of Fitting	Coupling Method
C & K	45'	4 1/16 10K	Swage
I.D.	O.D.	Die Size	Final O.D.
4"	6.09"	6.38"	6.25"
Working Pressure	Burst Pressure	Hose Serial #	Hose Assembly Serial #
10000 PSI	Standard Safety Multiplier Applies	5544	79793



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 Minutes		15483 PSI

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

Tested By: *Zac Mcconnell*

Approved By: *Kim Thomas*

Exhibit F-1 – Co-Flex Hose Hydrostatic Test

Dos Equis 13 Federal Com #1H

Cimarex Energy Co.

13-24S-32E

SHL 330 FNL & 660 FEL

BHL 330 FSL & 660 FEL

Lea County, NM

Midwest Hose & Specialty, Inc.

Exhibit F -3– Co-Flex Hose
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
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 vermculite 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, unibolt 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)

P.O. Box 96558 – 1421 S.E. 29th St. Oklahoma City, OK 73143 * (405) 670-6718 * Fax: (405) 670-6816

Exhibit F-2 – Co-Flex Hose
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 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 cerify 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: Israel Garcia	**Date:** 3/8/2011

Exhibit F – Co-Flex Hose

Dos Equis 13 Federal Com #1H

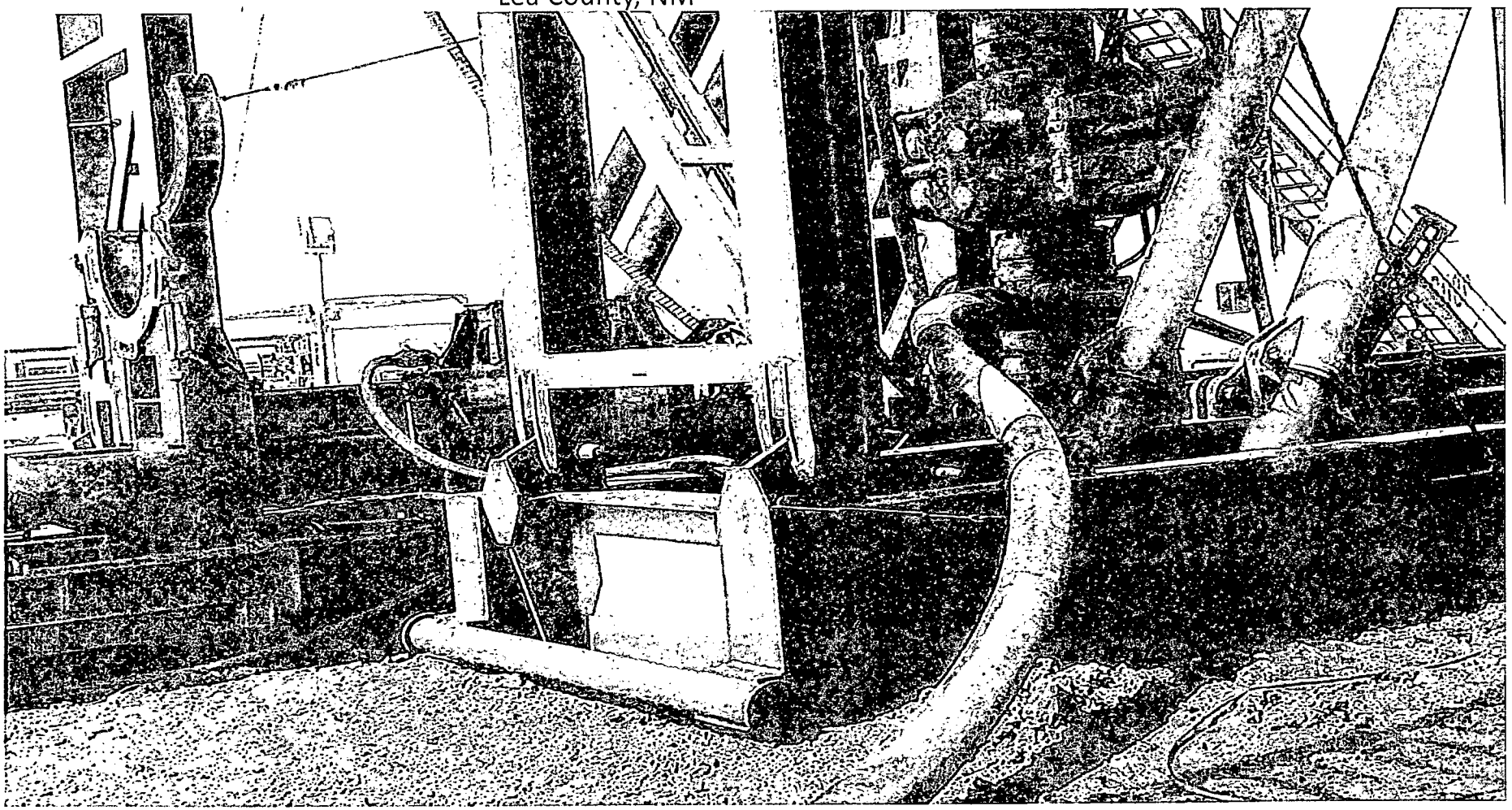
Cimarex Energy Co.

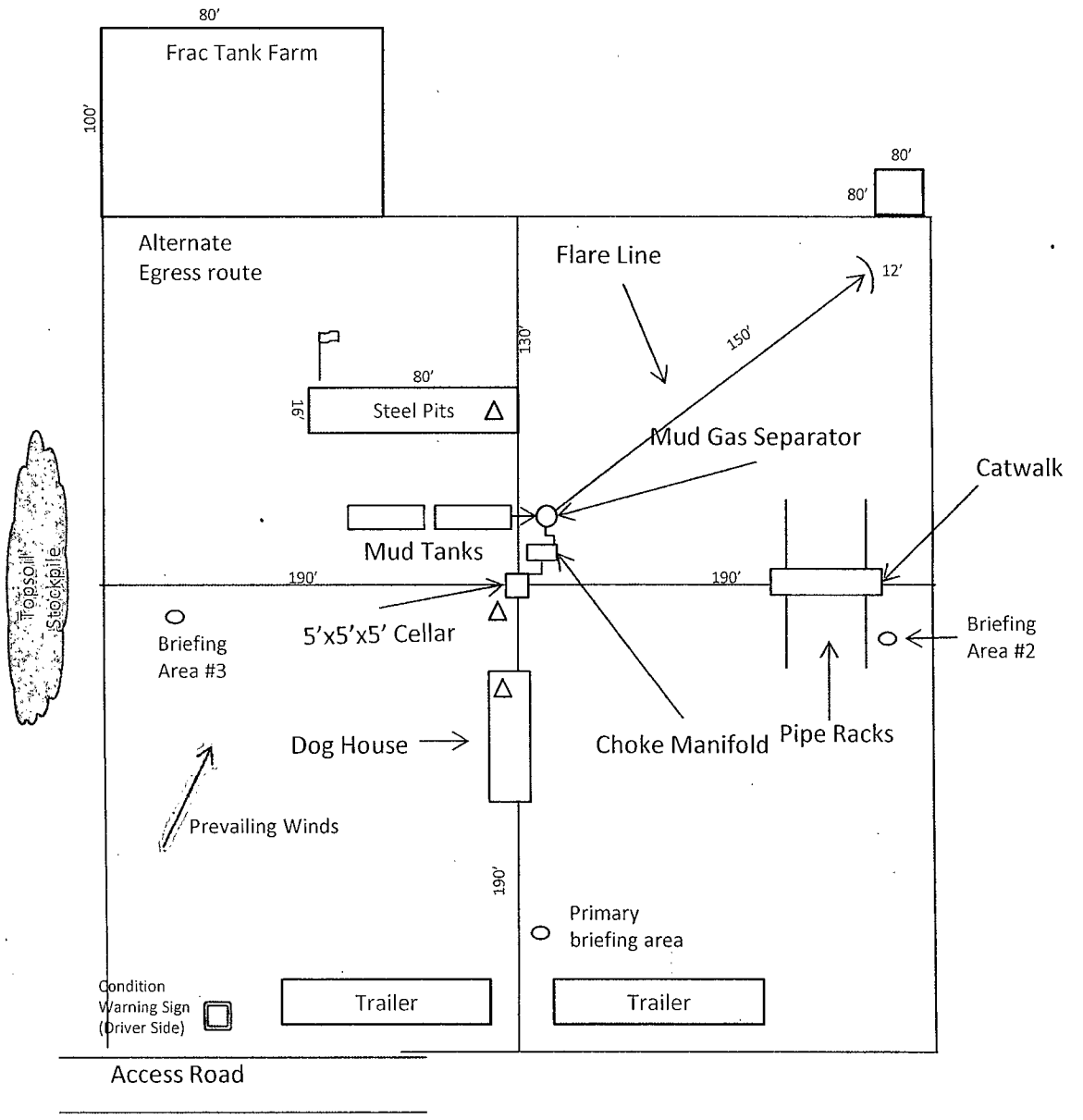
13-24S-32E

SHL 330 FNL & 660 FEL

BHL 330 FSL & 660 FEL

Lea County, NM





Wind Direction Indicators
(wind sock or streamers)

• H2S Monitors
(alarms at bell nipple and shale shaker)

Briefing Areas

N

Exhibit D – Rig Diagram
Dos Equis 13 Federal Com #1H
Cimarex Energy Co.
13-24S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 660 FEL
Lea County, NM