

HOBBS OCD

14-584

OCD Hobbs

SEP 10 2014

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 28 2014

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014Form 3160-3
(March 2012)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		8. Lease Name and Well No. (39851) Triste Draw 25 Fed Com #8H
2. Name of Operator Cimarex Energy Co.		9. API Well No. 30-025-42102
3a. Address 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103	3b. Phone No. (include area code) 918-585-1100	10. Field and Pool, or Exploratory Bone Spring/ Triste Draw (96603)
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 330 FSL & 1310 FWL At proposed prod. Zone 330 FNL & 2200 FWL Bone Spring		11. Sec., T. R. M. or Blk. and Survey and Area 25, 23S, 32E
14. Distance in miles and direction from nearest town or post office* 28 miles NW of Jal, NM		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 NMLC0063228=1600.00 acres NMNM086154=280.00 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. 20' from the #9H	19. Proposed Depth Pilot Hole TD: N/A 14,411 MD 9,800 TVD	20. BLM/BIA Bond No. on File NM2575; NMB000835
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3680 GR	22. Approximate date work will start* 5/26/14	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 | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator Certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Terri Stathem	Date 2/28/14
Title Regulatory Compliance		
Approved By (Signature) James A. Amos	Name (Printed/Typed) Carlsbad Field Office	Date AUG 22 2014
Title Field Manager		

Application approval does not warrant or certify that the applicant will conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.S. Section 1001 and Title 43 U.S.C. Section 1212, make States any false, fictitious, or fraudulent statements or representations.

(Continued on page 2)

E-PERMITTING - - New Well dn
 Comp _____ P&A _____ TA _____
 CSNG _____ Loc Chng _____
 ReComp _____ Add New Well _____
 Cancl Well _____ Create Pool _____

would entitle the applicant to

APPROVAL FOR TWO YEARS

Department or agency of the United

*(Instructions on page 2)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL
SEP 16 2014

Operator Certification Statement

Triste Draw 25 Fed Com #8H

Cimarex Energy Co.

UL: M, Sec. 25, 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 28 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

Application to Drill
Triste Draw 25 Fed Com #8H
 Cimarex Energy Co.
 UL: M, Sec. 25, 23S, 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 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
- 2. Elevation Above Sea Level:** 3,680' 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:** 14,411 MD 9,800 TVD Pilot Hole TD: N/A
- 6. Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler	1220'	N/A
Salt	2450'	N/A
Castille	3600'	N/A
Base last Salt	4780'	N/A
Lamar	4990'	N/A
Bell Canyon	5040'	Hydrocarbons
Cherry Canyon	6150'	N/A
Brushy Canyon	7200'	Hydrocarbons
Bone Spring	8850'	Hydrocarbons
Avalon Shale	9450'	Hydrocarbons

7. Possible Mineral Bearing Formation: Shown above

7A. OSE Ground Water Estimated Depth: 475'

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	1270	1270	17 1/2	13-3/8"	48.00	H-40	ST&C	New	548	8.3	1.35		3.16	60,960	53,235	6.05
Intermediate	0	5000	5000	12 1/4	9-5/8"	40.00	J-55	LT&C	New	2600	10.0		1.51	1.52	200,000	169,466	3.07
Production	0	9323	9323	8 3/4	5-1/2"	17.00	L-80	LT&C	New	4363	9.0	1.44		1.77	166,600	143,708	2.35
Production	9323	14411	9800	8 3/4	5-1/2"	17.00	L-80	BT&C	New	4586	9.0	1.37		1.69	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.

Application to Drill
Triste Draw 25 Fed Com #8H
 Cimarex Energy Co.
 UL: M, Sec. 25, 23S, 32E
 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	605	1.75	13.50	1058	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	165	1.34	14.80	220	Class C + LCM, 6.320 gps water
	TOC: 0	45% Excess		Centralizers per Onshore Order 2.III.B.1f		
Intermediate	Lead	895	1.88	12.90	1681	35:65 (Poz:C) + Salt + Bentonite + LCM + Retarder, 9.650 gps water
	Tail	292	1.34	14.80	391	Class C + Retarder + LCM, 6.320 gps water
	TOC: 0	44% Excess				
Production	Lead	525	2.40	11.90	1258	35:65 (poz:H) + Salt + Sodium Metasilicate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.800 gps water
	Tail	1253	1.24	14.50	1553	50:50(Poz:H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.550 gps water
	TOC: 4800	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: No Pilot KOP: 9,323' EOC: 10,073'

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 1270'	7.80 - 8.30	28	NC	FW Spud Mud
1270' to 5000'	9.50 - 10.00	30-32	NC	Brine Water
5000' to 14308'	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 5000 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: 4410 psi

Estimated BHT: 159°

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.

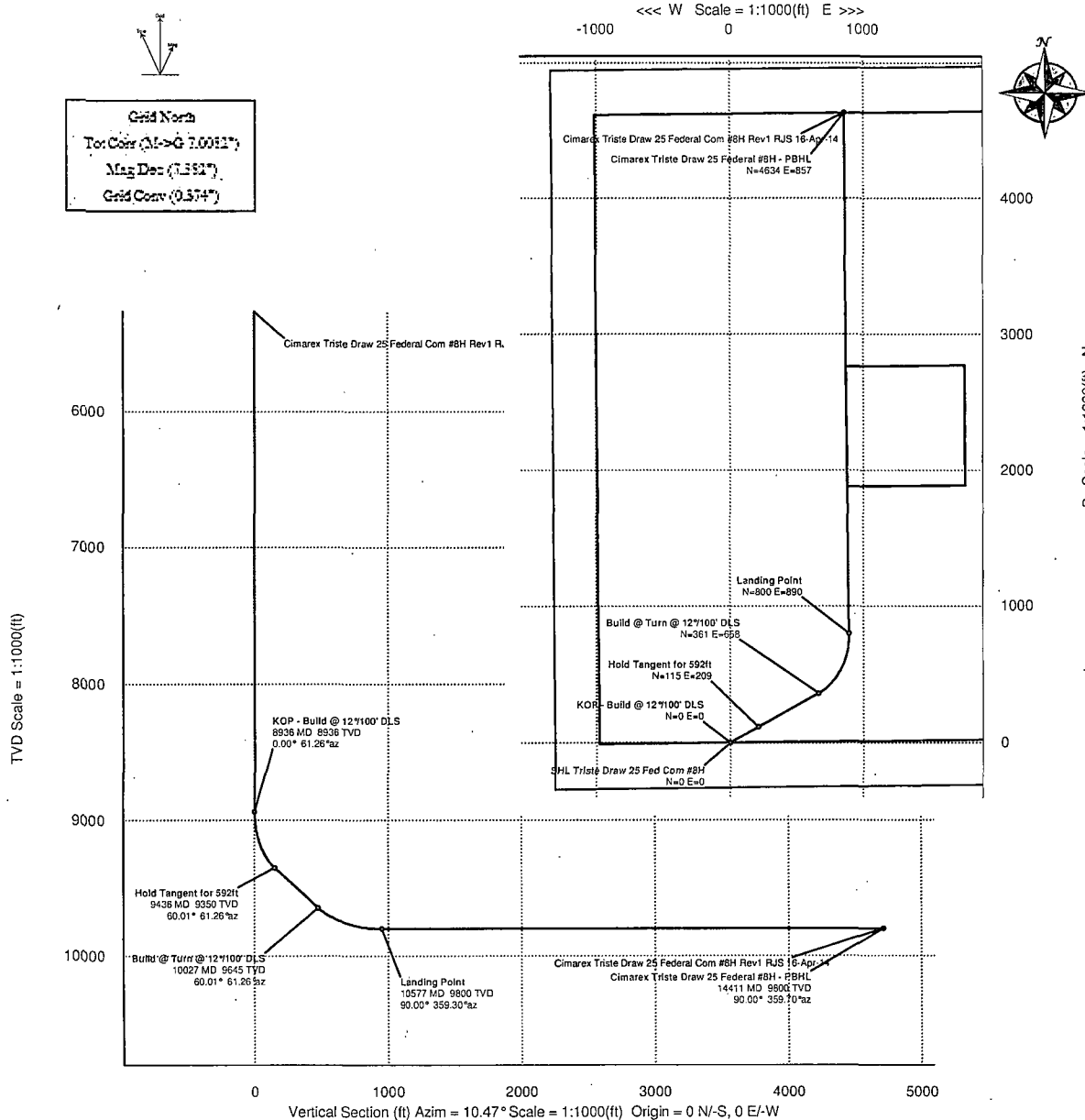
The proposed well will be tested and potentialed as **Oil**



Cimarex

PATHFINDER
A Schlumberger Company

WELL	Triste Draw 25 Federal Com #8H	FIELD	NM Lea County	STRUCTURE	TBD
Magnetic Parameters					
Model:	BOGIM 2013	Dip:	60.133°	Date:	April 15, 2014
		Mag Dec:	7.352°	FB:	48330.3NY
Surface Location		Lat:	N 32 16 9.572	Northings:	452430.80 RJLS
		Lon:	W 102 37 57.496	Eastings:	757906.70 RJLS
		Grid Zone:	18QJ	Scale Fact:	0.99996281
Miscellaneous		Site:	Triste Draw 25 Federal Com #8H	Unknown	(6600' above MSL)
		Plan:	Rev1 RJLS 16-Apr-14	Sky Date:	April 16, 2014



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL Triste Draw 25 Fed Com #8H	0.00	0.00	61.26	0.00	0.00	0.00	0.00	
KOP - Build @ 12°/100' DLS	8936.00	0.00	61.26	8936.00	0.00	0.00	0.00	0.00
Hold Tangent for 592ft	9436.03	60.01	61.26	9349.54	150.96	114.82	209.39	12.00
Avalon Shale	9637.07	60.01	61.26	9450.00	261.01	198.51	362.02	0.00
Build @ Turn @ 12°/100' DLS	10027.35	60.01	61.26	9645.08	474.70	361.03	658.42	0.00
Landing Point	10577.15	90.00	359.30	9800.00	948.45	800.00	890.00	12.00
Cimarex Triste Draw 25 Federal #8H - PBHL	14411.43	90.00	359.70	9800.00	4712.69	4634.13	856.63	0.01

1st take depending on shows. per S. Heitzman 8-19-14 CAW



Cimarex Triste Draw 25 Federal Com #8H Rev1 RJS 16-Apr-14 Proposal
Report 100' Interpolated
(Non-Def Plan)



Report Date: April 16, 2014 - 09:14 AM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: TBD / Triste Draw 25 Federal Com #8H
Well: Triste Draw 25 Federal Com #8H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Triste Draw 25 Federal Com #8H Rev1 RJS 16-Apr-14
Survey Date: April 16, 2014
Tort / AHD / DDI / ERD Ratio: 126.389 ° / 5105.894 ft / 5.977 / 0.521
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 9.67187", W 103° 37' 57.49617"
Location Grid N/E Y/X: N 462430.800 ftUS, E 757909.700 ftUS
CRS Grid Convergence Angle: 0.3741 °
Grid Scale Factor: 0.99996281

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 10.473 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Unknown
TVD Reference Elevation: 3680.000 ft above MSL
Seabed / Ground Elevation: 3680.000 ft above MSL
Magnetic Declination: 7.382 °
Total Gravity Field Strength: 998.4646mgn (9.80665 Based)
Total Magnetic Field Strength: 48330.258 nT
Magnetic Dip Angle: 60.133 °
Declination Date: April 15, 2014
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.3741 °
Total Corr Mag North->Grid North: 7.0082 °
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 Triste Draw 25 Fed Com #8H	0.00	0.00	61.26	0.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	N/A
	100.00	0.00	61.26	100.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	200.00	0.00	61.26	200.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	300.00	0.00	61.26	300.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	400.00	0.00	61.26	400.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	500.00	0.00	61.26	500.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	600.00	0.00	61.26	600.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	700.00	0.00	61.26	700.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	800.00	0.00	61.26	800.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	900.00	0.00	61.26	900.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1000.00	0.00	61.26	1000.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1100.00	0.00	61.26	1100.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1200.00	0.00	61.26	1200.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1300.00	0.00	61.26	1300.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1400.00	0.00	61.26	1400.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1500.00	0.00	61.26	1500.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1600.00	0.00	61.26	1600.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1700.00	0.00	61.26	1700.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1800.00	0.00	61.26	1800.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	1900.00	0.00	61.26	1900.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2000.00	0.00	61.26	2000.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2100.00	0.00	61.26	2100.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2200.00	0.00	61.26	2200.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2300.00	0.00	61.26	2300.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2400.00	0.00	61.26	2400.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2500.00	0.00	61.26	2500.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2600.00	0.00	61.26	2600.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2700.00	0.00	61.26	2700.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	2800.00	0.00	61.26	2800.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	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)
	8400.00	0.00	61.26	8400.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	8500.00	0.00	61.26	8500.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	8600.00	0.00	61.26	8600.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	8700.00	0.00	61.26	8700.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	8800.00	0.00	61.26	8800.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	8900.00	0.00	61.26	8900.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
KOP - Build @ 12°/100' DLS	8936.00	0.00	61.26	8936.00	0.00	0.00	0.00	462430.80	757909.70	N 32 16 9.67	W 103 37 57.50	0.00	0.00	0.00
	9000.00	7.68	61.26	8999.81	2.71	2.06	3.76	462432.86	757913.46	N 32 16 9.69	W 103 37 57.45	4.28	61.26	12.00
	9100.00	19.68	61.26	9096.79	17.63	13.41	24.45	462444.21	757934.15	N 32 16 9.80	W 103 37 57.21	27.89	61.26	12.00
	9200.00	31.68	61.26	9186.75	44.98	34.21	62.38	462465.00	757972.08	N 32 16 10.01	W 103 37 56.77	71.14	61.26	12.00
	9300.00	43.68	61.26	9265.75	83.55	63.54	115.88	462494.34	758025.58	N 32 16 10.29	W 103 37 56.14	132.16	61.26	12.00
Hold Tangent for 592ft	9400.00	55.68	61.26	9330.34	131.66	100.13	182.61	462530.93	758092.30	N 32 16 10.65	W 103 37 55.36	208.26	61.26	12.00
	9436.08	60.01	61.26	9349.54	150.96	114.82	209.39	462545.61	758119.08	N 32 16 10.79	W 103 37 55.05	238.80	61.26	12.00
	9500.00	60.01	61.26	9381.49	185.96	141.43	257.93	462572.23	758167.62	N 32 16 11.05	W 103 37 54.48	294.16	61.26	0.00
	9600.00	60.01	61.26	9431.47	240.71	183.08	333.88	462613.87	758243.56	N 32 16 11.46	W 103 37 53.59	380.77	61.26	0.00
	9700.00	60.01	61.26	9481.46	295.47	224.72	409.82	462655.51	758319.50	N 32 16 11.87	W 103 37 52.71	467.39	61.26	0.00
	9800.00	60.01	61.26	9531.44	350.22	266.36	485.76	462697.15	758395.44	N 32 16 12.28	W 103 37 51.82	554.00	61.26	0.00
	9900.00	60.01	61.26	9581.43	404.97	308.00	561.71	462738.79	758471.38	N 32 16 12.68	W 103 37 50.93	640.61	61.26	0.00
	10000.00	60.01	61.26	9631.41	459.73	349.65	637.65	462780.43	758547.32	N 32 16 13.09	W 103 37 50.04	727.22	61.26	0.00
Build @ Turn @ 12°/100' DLS	10027.35	60.01	61.26	9645.08	474.70	361.03	658.42	462791.82	758568.09	N 32 16 13.20	W 103 37 49.80	750.90	61.26	0.00
	10100.00	62.59	51.77	9680.03	518.91	396.19	711.44	462826.97	758621.11	N 32 16 13.55	W 103 37 49.18	814.31	60.89	12.00
	10200.00	67.13	39.48	9722.64	592.82	459.45	775.83	462890.23	758685.50	N 32 16 14.17	W 103 37 48.43	901.67	59.37	12.00
	10300.00	72.54	28.06	9757.20	678.88	537.38	827.75	462968.15	758737.42	N 32 16 14.94	W 103 37 47.82	986.89	57.01	12.00
	10400.00	78.56	17.34	9782.22	773.35	626.57	864.93	463057.34	758774.59	N 32 16 15.82	W 103 37 47.38	1068.03	54.08	12.00
	10500.00	84.95	7.07	9796.60	872.08	723.13	885.73	463153.90	758795.40	N 32 16 16.77	W 103 37 47.13	1143.43	50.77	12.00
Landing Point	10577.15	90.00	359.30	9800.00	948.45	800.00	890.00	463230.77	758799.67	N 32 16 17.53	W 103 37 47.07	1196.70	48.05	12.00
	10600.00	90.00	359.30	9800.00	970.87	822.85	889.72	463253.62	758799.39	N 32 16 17.76	W 103 37 47.07	1211.89	47.24	0.01
	10700.00	90.00	359.31	9800.00	1068.98	922.84	888.51	463353.61	758798.18	N 32 16 18.75	W 103 37 47.08	1281.05	43.91	0.01
	10800.00	90.00	359.32	9800.00	1167.09	1022.84	887.32	463453.60	758796.99	N 32 16 19.74	W 103 37 47.08	1354.08	40.94	0.01
	10900.00	90.00	359.33	9800.00	1265.20	1122.83	886.15	463553.58	758795.82	N 32 16 20.72	W 103 37 47.09	1430.39	38.28	0.01
	11000.00	90.00	359.34	9800.00	1363.32	1222.82	885.00	463653.57	758794.66	N 32 16 21.71	W 103 37 47.10	1509.48	35.89	0.01
	11100.00	90.00	359.35	9800.00	1461.44	1322.82	883.86	463753.56	758793.53	N 32 16 22.70	W 103 37 47.10	1590.93	33.75	0.01
	11200.00	90.00	359.37	9800.00	1559.56	1422.81	882.75	463853.55	758792.41	N 32 16 23.69	W 103 37 47.11	1674.40	31.82	0.01
	11300.00	90.00	359.38	9800.00	1657.69	1522.80	881.65	463953.54	758791.31	N 32 16 24.68	W 103 37 47.11	1759.61	30.07	0.01
	11400.00	90.00	359.39	9800.00	1755.83	1622.80	880.57	464053.53	758790.23	N 32 16 25.67	W 103 37 47.12	1846.31	28.49	0.01
	11500.00	90.00	359.40	9800.00	1853.96	1722.79	879.51	464153.52	758789.17	N 32 16 26.66	W 103 37 47.12	1934.31	27.04	0.01
	11600.00	90.00	359.41	9800.00	1952.10	1822.79	878.46	464253.52	758788.13	N 32 16 27.65	W 103 37 47.13	2023.42	25.73	0.01
	11700.00	90.00	359.42	9800.00	2050.24	1922.78	877.44	464353.51	758787.10	N 32 16 28.64	W 103 37 47.13	2113.52	24.53	0.01
	11800.00	90.00	359.43	9800.00	2148.39	2022.78	876.43	464453.50	758786.10	N 32 16 29.63	W 103 37 47.13	2204.49	23.43	0.01
	11900.00	90.00	359.44	9800.00	2246.54	2122.77	875.44	464553.49	758785.11	N 32 16 30.62	W 103 37 47.14	2296.21	22.41	0.01
	12000.00	90.00	359.45	9800.00	2344.69	2222.77	874.47	464653.48	758784.14	N 32 16 31.61	W 103 37 47.14	2388.60	21.48	0.01
	12100.00	90.00	359.46	9800.00	2442.85	2322.76	873.52	464753.47	758783.19	N 32 16 32.60	W 103 37 47.15	2481.58	20.61	0.01
	12200.00	90.00	359.47	9800.00	2541.01	2422.76	872.59	464853.46	758782.25	N 32 16 33.59	W 103 37 47.15	2575.10	19.81	0.01
	12300.00	90.00	359.48	9800.00	2639.17	2522.75	871.67	464953.45	758781.34	N 32 16 34.58	W 103 37 47.15	2669.10	19.06	0.01
	12400.00	90.00	359.49	9800.00	2737.34	2622.75	870.78	465053.45	758780.44	N 32 16 35.57	W 103 37 47.15	2763.52	18.37	0.01
	12500.00	90.00	359.50	9800.00	2835.51	2722.75	869.90	465153.44	758779.56	N 32 16 36.56	W 103 37 47.16	2858.33	17.72	0.01
	12600.00	90.00	359.51	9800.00	2933.68	2822.74	869.04	465253.43	758778.70	N 32 16 37.55	W 103 37 47.16	2953.49	17.11	0.01
	12700.00	90.00	359.52	9800.00	3031.86	2922.74	868.20	465353.42	758777.86	N 32 16 38.54	W 103 37 47.16	3048.96	16.54	0.01
	12800.00	90.00	359.53	9800.00	3130.04	3022.74	867.37	465453.42	758777.04	N 32 16 39.53	W 103 37 47.16	3144.72	16.01	0.01
	12900.00	90.00	359.54	9800.00	3228.23	3122.73	866.57	465553.41	758776.23	N 32 16 40.51	W 103 37 47.17	3240.74	15.51	0.01
	13000.00	90.00	359.55	9800.00	3326.42	3222.73	865.78	465653.40	758775.45	N 32 16 41.50	W 103 37 47.17	3337.00	15.04	0.01
	13100.00	90.00	359.57	9800.00	3424.61	3322.73	865.01	465753.40	758774.68	N 32 16 42.49	W 103 37 47.17	3433.48	14.59	0.01

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)
	13200.00	90.00	359.58	9800.00	3522.80	3422.72	864.26	465853.39	758773.93	N 32 16 43.48	W 103 37 47.17	3530.15	14.17	0.01
	13300.00	90.00	359.59	9800.00	3621.00	3522.72	863.53	465953.38	758773.20	N 32 16 44.47	W 103 37 47.17	3627.02	13.77	0.01
	13400.00	90.00	359.60	9800.00	3719.20	3622.72	862.82	466053.38	758772.48	N 32 16 45.46	W 103 37 47.17	3724.05	13.40	0.01
	13500.00	90.00	359.61	9800.00	3817.41	3722.72	862.12	466153.37	758771.79	N 32 16 46.45	W 103 37 47.17	3821.24	13.04	0.01
	13600.00	90.00	359.62	9800.00	3915.62	3822.71	861.45	466253.36	758771.11	N 32 16 47.44	W 103 37 47.17	3918.57	12.70	0.01
	13700.00	90.00	359.63	9800.00	4013.83	3922.71	860.79	466353.36	758770.45	N 32 16 48.43	W 103 37 47.17	4016.05	12.38	0.01
	13800.00	90.00	359.64	9800.00	4112.04	4022.71	860.15	466453.35	758769.81	N 32 16 49.42	W 103 37 47.17	4113.64	12.07	0.01
	13900.00	90.00	359.65	9800.00	4210.26	4122.71	859.53	466553.35	758769.19	N 32 16 50.41	W 103 37 47.17	4211.35	11.78	0.01
	14000.00	90.00	359.66	9800.00	4308.49	4222.71	858.92	466653.34	758768.59	N 32 16 51.40	W 103 37 47.17	4309.17	11.50	0.01
	14100.00	90.00	359.67	9800.00	4406.71	4322.70	858.34	466753.33	758768.00	N 32 16 52.39	W 103 37 47.17	4407.10	11.23	0.01
	14200.00	90.00	359.68	9800.00	4504.94	4422.70	857.77	466853.33	758767.44	N 32 16 53.38	W 103 37 47.17	4505.12	10.98	0.01
	14300.00	90.00	359.69	9800.00	4603.17	4522.70	857.22	466953.32	758766.89	N 32 16 54.37	W 103 37 47.17	4603.22	10.73	0.01
	14400.00	90.00	359.70	9800.00	4701.41	4622.70	856.69	467053.32	758766.36	N 32 16 55.36	W 103 37 47.17	4701.41	10.50	0.01
Cimarex Triste Draw 25 Federal #8H - PBHL	14411.48	90.00	359.70	9800.00	4712.69	4634.18	856.63	467064.80	758766.30	N 32 16 55.47	W 103 37 47.17	4712.69	10.47	0.01

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	14411.483		1/100.000	30.000	30.000	SLB_MWD-STD
							Original Borehole / Cimarex Triste Draw 25 Federal Com #8H Rev1

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

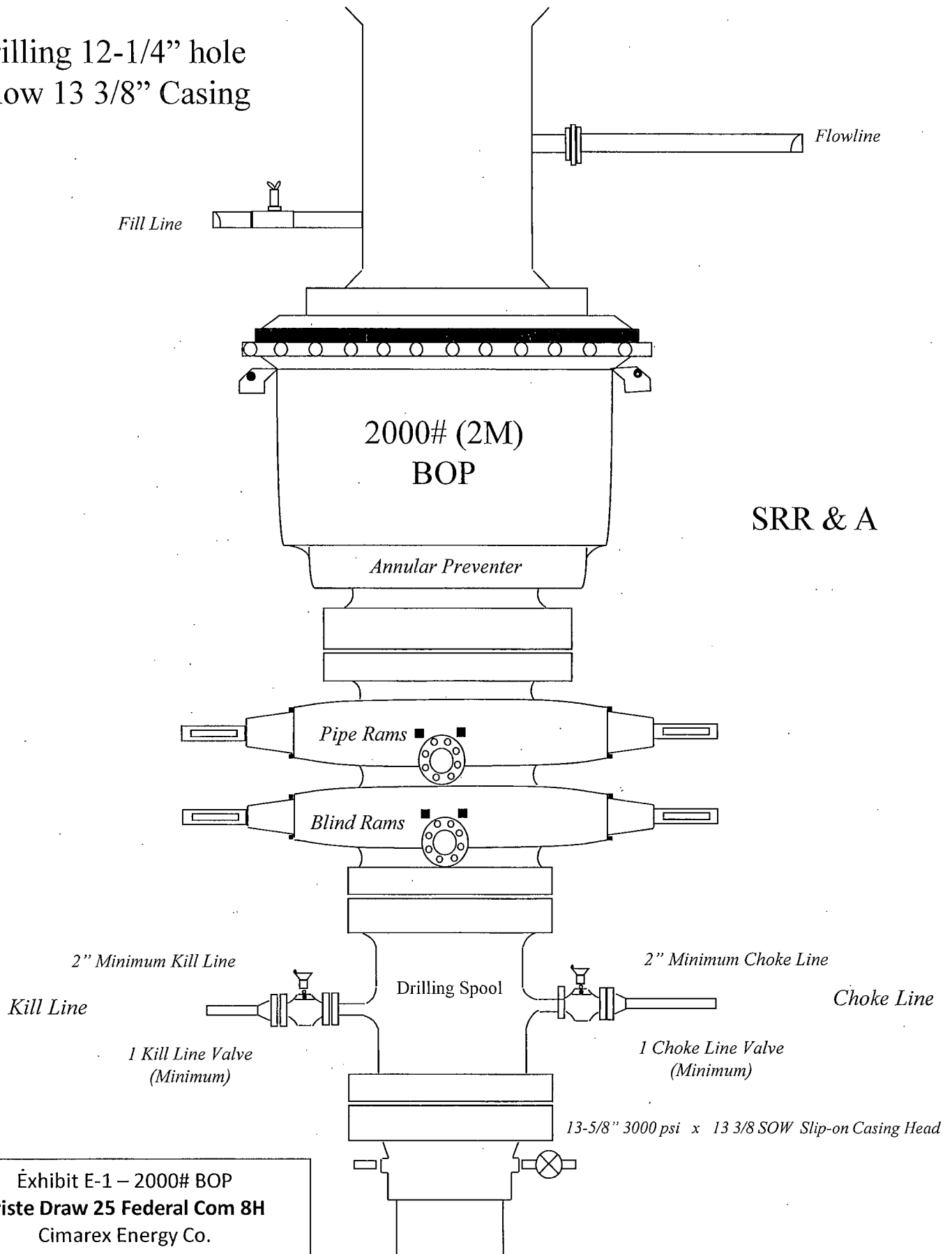


Exhibit E-1 – 2000# BOP
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
Lea County, NM

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

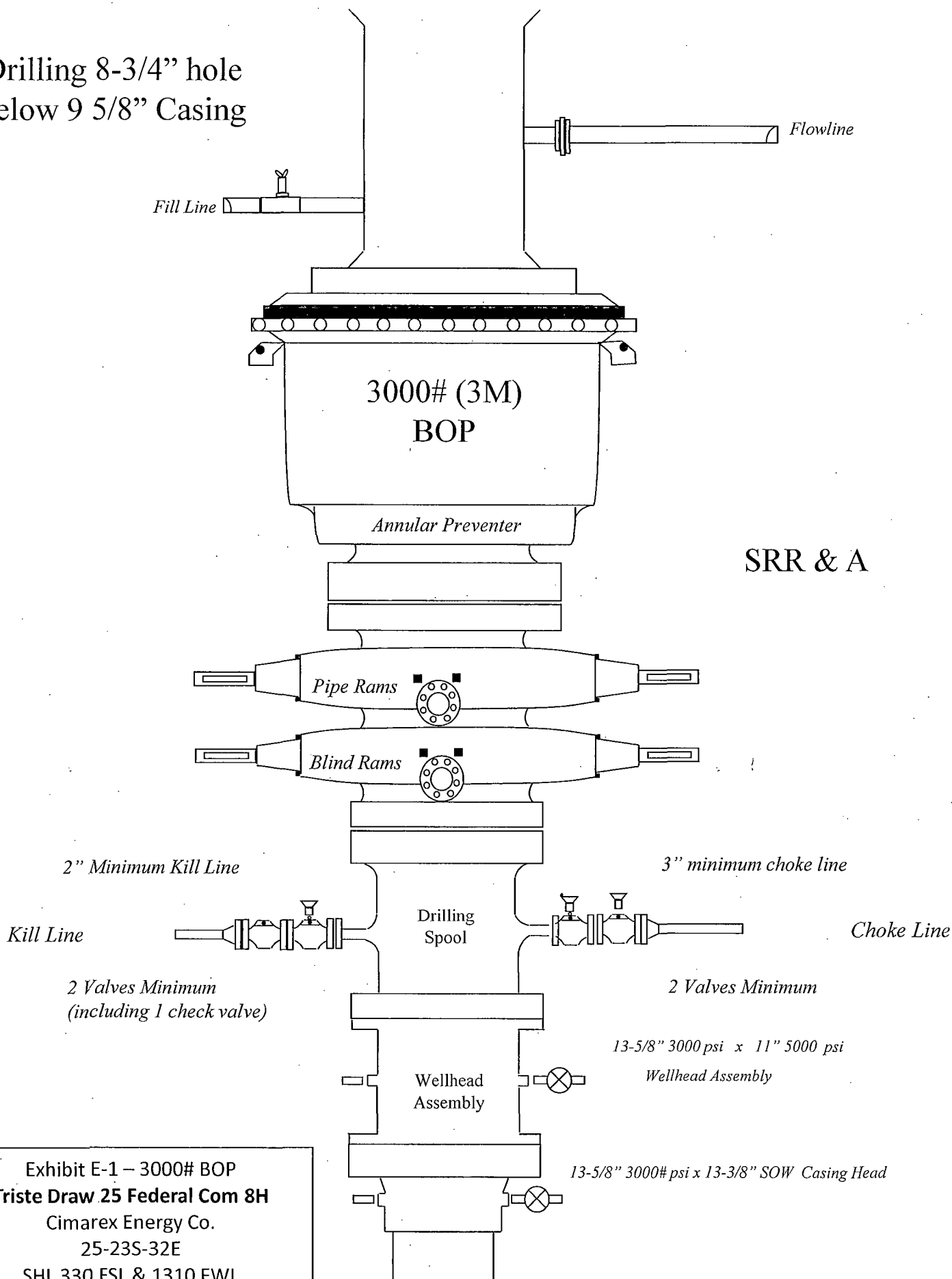
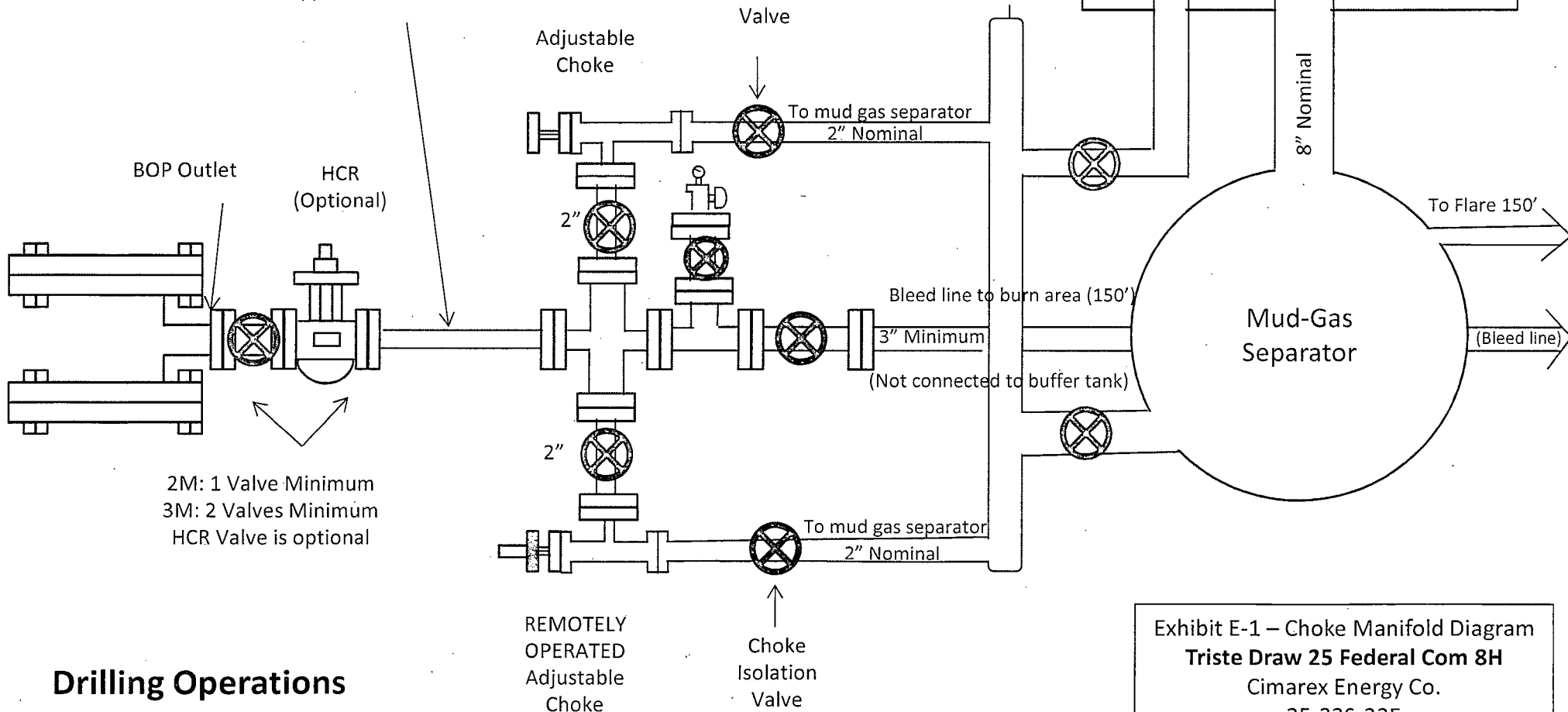


Exhibit E-1 – 3000# BOP
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
Lea County, NM

Choke Line:
 2M System: 2" Minimum
 3M System: 3" Minimum
 OPTIONAL: 4" Flex Hose may be
 used if approved in APD



Drilling Operations Choke Manifold 2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
 Triste Draw 25 Federal Com 8H
 Cimarex Energy Co.
 25-23S-32E
 SHL 330 FSL & 1310 FWL
 BHL 330 FNL & 2200 FWL
 Lea County, NM

Exhibit F-1 – Co-Flex Hose Hydrostatic Test

Triste Draw 25 Federal Com 8H

Cimarex Energy Co.

25-23S-32E

SHL 330 FSL & 1310 FWL

BHL 330 FNL & 2200 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. Jimenez</i>		Approved: <i>Kevin [Signature]</i>



Midwest Hose
& Specialty, Inc.

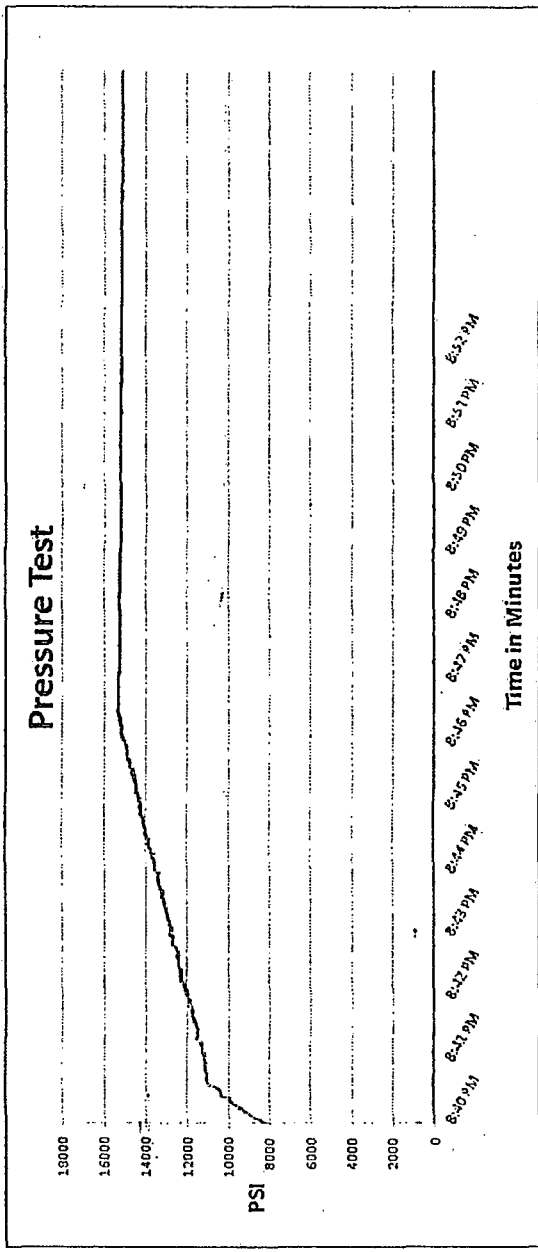
Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type C & K I.D. 4"	Length 45'	Type of Fittings 4 1/16 10K Die Size 6.38"	Coupling Method Swage Final O.D. 6.25"
Working Pressure 10000 PSI	Burst Pressure Standard Safety Multiplier Applies 609"	Hose Serial # 5544	Hose Assembly Serial # 79793

Exhibit F-1 - Co-Flex Hose Hydrostatic Test
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
Lea County, NM



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

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

Tested By: Zac McConnell

Approved By: Kim Thomas

[Signature]

[Signature]



Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 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-2 – Co-Flex Hose
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.

25-23S-32E

SHL 330 FSL & 1310 FWL

BHL 330 FNL & 2200 FWL

Lea County, NM

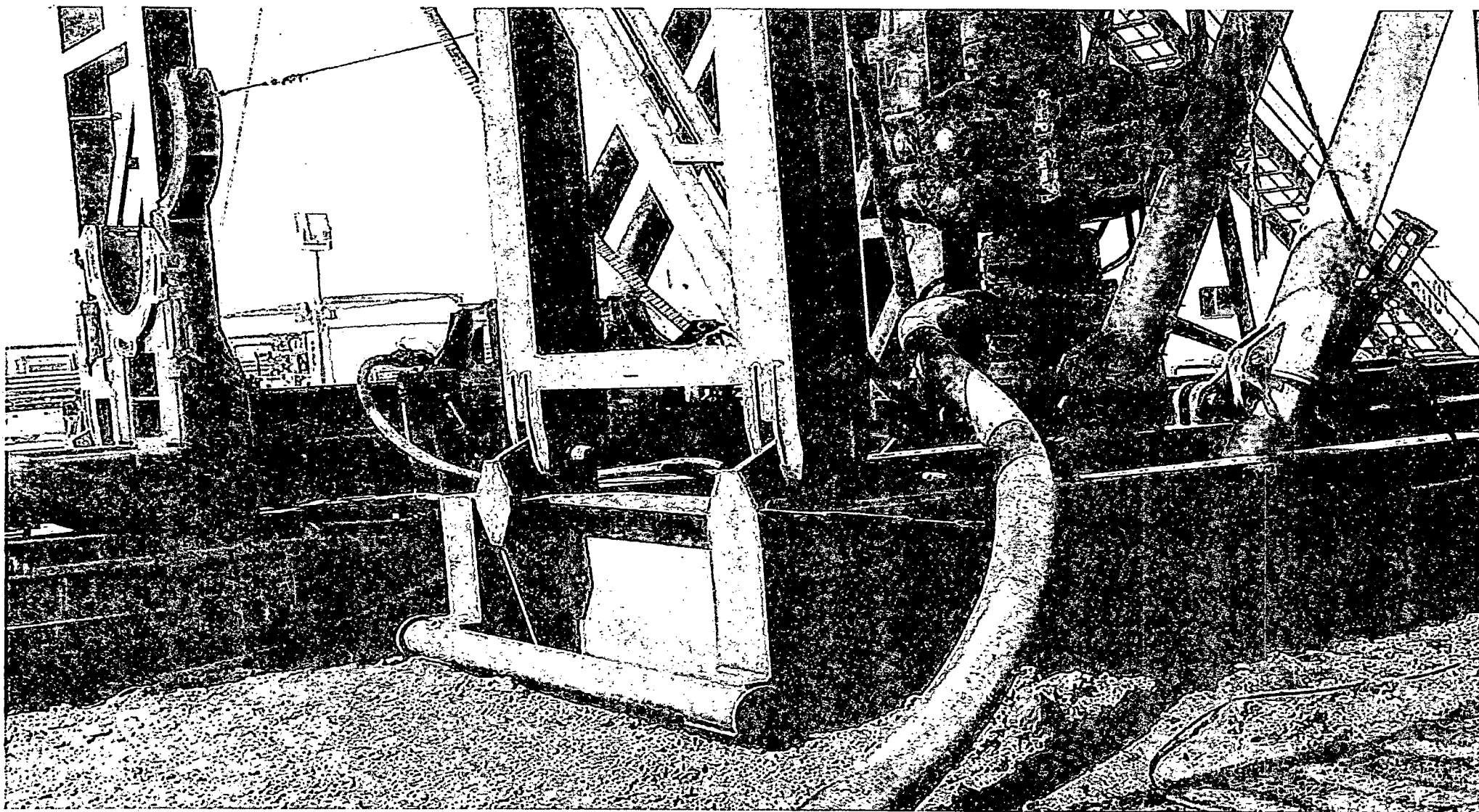


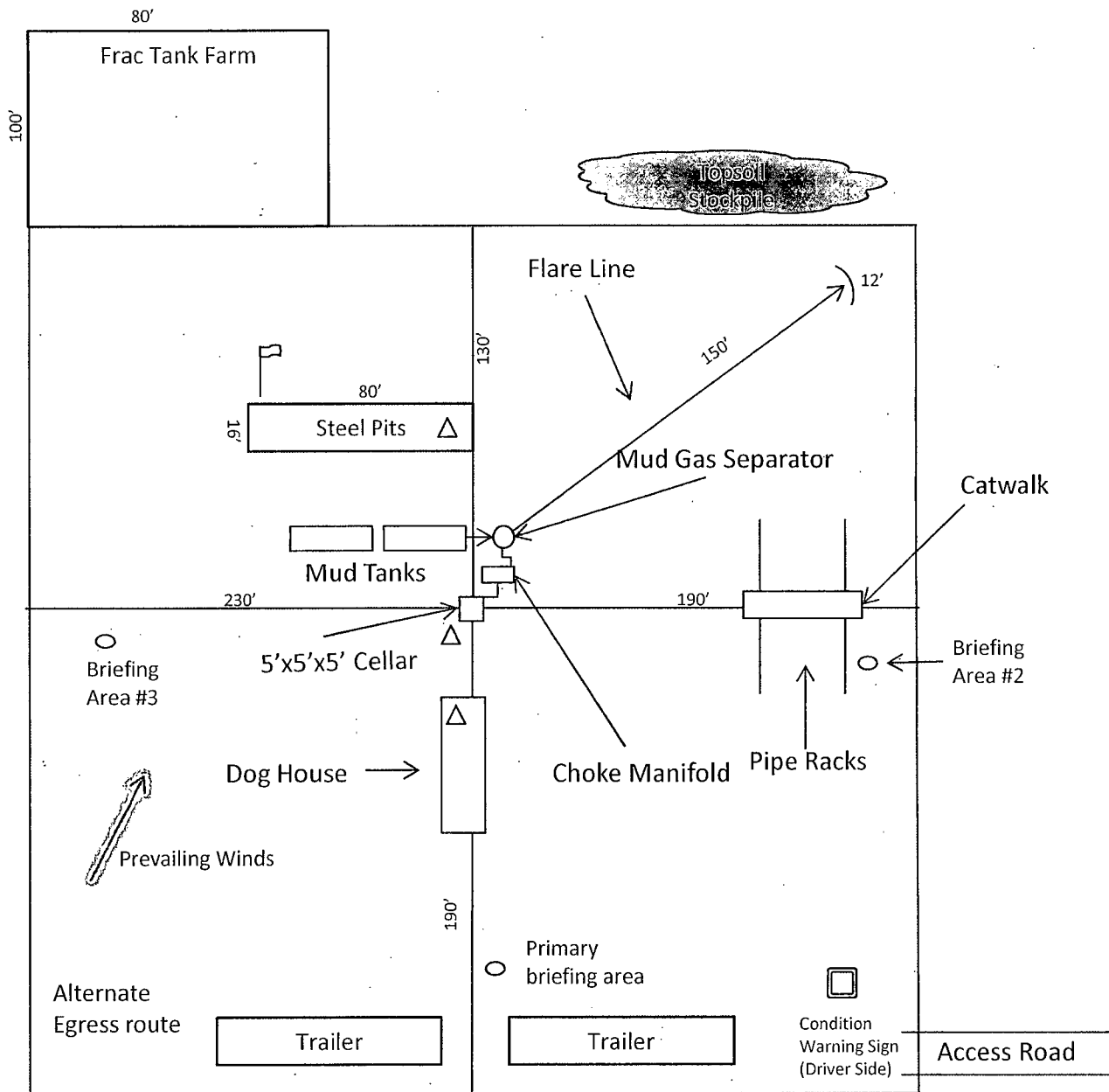
Midwest Hose & Specialty, Inc.

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:
<i>David Garcia</i>		3/8/2011

Exhibit F – Co-Flex Hose
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
Lea County, NM





Wind Direction Indicators
(wind sock or streamers)



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



Briefing Areas

N



Exhibit D-1 – Rig Diagram
Triste Draw 25 Federal Com 8H
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 1310 FWL
BHL 330 FNL & 2200 FWL
Lea County, NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. 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 be 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 or cores are planned at this time.
- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.