HOBBS OCD

APR 2 6 2013

12-1184

Form 3160-3 (April 2004) RECEIVED

OCD Hobbs

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. Lease Serial No.
NMNM031224

6. If Indian, Allotee or Tribe Name

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.
Triste Draw 30 Federal 3H <398967

2. Name of Operator
Cimarex Energy Co. ~~of Colorado~~ <215099>

9. API Well No.
30-025- 41176

3a. Address
600 N. Marienfeld St., Ste. 600; Midland, TX 79701

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

10. Field and Pool, or Exploratory
TRIPLE X; BONE SPRING, WEST <96674>

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

At Surface 330 FSL & ~~660~~ 1980 FEL

At proposed prod. Zone 330 FNL & 1980 FEL *Horizontal Bone Spring test*

11. Sec., T. R. M. or Blk. and Survey or Area
30-23S-33E

14. Distance in miles and direction from nearest town or post office*
27 miles NE 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)	16. No of acres in lease	17. Spacing Unit dedicated to this well
330'	591.68	160 acres
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**
1320' from #2	MD 15516 TVD 11150	NM2575; NMB000835
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3694' GR	01.01.13	30-35 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	Name *(Printed/Typed)*	Date
Tracie J Cherry	Tracie J Cherry	08.24.12
Title: Sr. Regulatory Analyst		
Approved By *(Signature)*: /s/George MacDonell	Name (Printed/Typed)	Date: APR 2 4 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.

* *(Instructions on page 2)*

Carlsbad Controlled Water Basin

KZ 05/15/13

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

MAY 2 0 2013

Application to Drill
Triste Draw 30 Federal 3
Cimarex Energy Co. of Colorado
Unit O, Section 30
T23S-R33E; Lea County, NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1 Location: SHL 330 FSL & ~~660~~ 1980 - per plat FEL
BHL 330 FNL & 1980 FEL

2 Elevation above sea level: 3694 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: MD 15516 TVD 11150

6 Estimated tops of geological markers:

Groundwater per OSE	475	
Rustler	1220	
T. Salt	1440	
Castille	3450	
B. Salt	4780	
Lamar	5050	
Bell Canyon	5150	Hydrocarbons
Cherry Canyon	6000	Hydrocarbons
Brushy Canyon	7400	Hydrocarbons
Basal Brushy Canyon	8625	Hydrocarbons
Bone Spring	8850	Hydrocarbons
Avalon Shale	9300	Hydrocarbons
1st Bone Spring	10050	Hydrocarbons
2nd Bone Spring	10675	Hydrocarbons
3rd Bone Spring	11250	Hydrocarbons

7 Possible mineral bearing formation:
Shown above

8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to ~~1245'~~ 1360'	8.4 - 8.6	28	NC	FW
~~1245'~~ to ~~4900'~~ 5500'	10.0	30-32	NC	Brine water
~~4900'~~ to 15516'	8.4	30-32	NC	2% KCL

See COA

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.

Proposed Drilling Plan
After setting surface and intermediate casing, drill 7-7/8 or 8-3/4" hole to 10623'. Kick off curve at 10623' and drill 7-7/8 or 8-3/4" lateral to TD @ 15517' MD, 11150 TVD. Run 5½" 17# P-110 BTC from 10800'-15517' and 5-1/2" 17# P-110 LTC from 0'-10800' and cement.

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T23S-R33E; Lea County, NM

9 Casing & Cementing Program:

String	Hole Size	Depth			Casing OD		Weight	Collar	Grade
Surface	17 1/2"	0'	to	~~1245~~ 1360'	New	13 3/8"	48#	STC	H-40
Intermediate	12 1/4"	0'	to	3400'	New	9 5/8"	36#	LTC	J-55
Intermediate	12 1/4"	3400'	to	~~4500~~ 5500'	New	9 5/8"	40#	LTC	N-80
Production	7 7/8" or 8 3/4"	0'	to	10800'	New	5 1/2"	17#	LTC	P-110
Production	7 7/8"or 8 3/4"	10800'	to	15516'	New	5 1/2"	17#	BTC	P-110

See COA

10 Cementing:

Surface Lead: 750 sks Premium Plus + 2% CaCl 4% gel 13.5ppg 1.75yield
Tail: 200 sks Premium Plus + 2% CaCl 14.8ppg 1.34 yield
85% Excess **TOC Surface** **Centralizers per Onshore Order 2.III.B.1.f**

Intermediate Lead: 1555 sks HLPP + 5% Salt + 5# Gilsonite 12.9 ppg 1.92 yield
Tail: 235 sks Premium Plus + 1% CaCl 14.8 ppg 1.34 yield
60% Excess **TOC Surface**

Production Lead: 835 sks Econocem H + 0.5/10% HR-601 0.5/10% Halad-322 (fluid loss/friction contol) 11.9 ppg 2.48 yield
Tail: 1385 sks Versacem H + 0.5% Halad(R)-344 (fluid loss) + 0.4% CFR-3 + 1# Salt + 0.2% HR-601 (retarder) 14.5 ppg 1.22 yield
Cement volumes will be adjusted depending on hole size.

See COA 25% Excess **TOC 3600'** **Centralizers every 3rd joint through the curve or legal location hardline to provide adequate cement coverage every 100' unless hole conditions require greater spacing between centralizers.**

Collapse Factor	*Burst Factor*	*Tension Factor*
1.125	1.125	1.6

11 Pressure control Equipment:
Exhibit "E". A 13⅝" 5000 PSI working pressure BOP, tested to 3000 psi on the surface casing and 5000 psi on the intermediate consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head 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 unit will be hydraulically operated. BOP will be nippled up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company to 250 psi low and 3000 psi high on the surface casing and 250 psi low and 5000 psi high on the intermediate. Hydril will be tested to 250 psi low and 2500 psi high on the surface and intermediate casings.

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. 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.

Application to Drill
Triste Draw 30 Federal 3
Cimarex Energy Co. of Colorado
Unit O, Section 30
T23S-R33E; Lea County, NM

12 Testing, Logging and Coring Program:

A. Mud logging program: 2 man unit from 4900 to TD
B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR Inter. Csg from surface to TD
C. No DSTs or cores are planned at this time.

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.

See COA

Estimated BHP **4995 psi** Estimated BHT **138°**

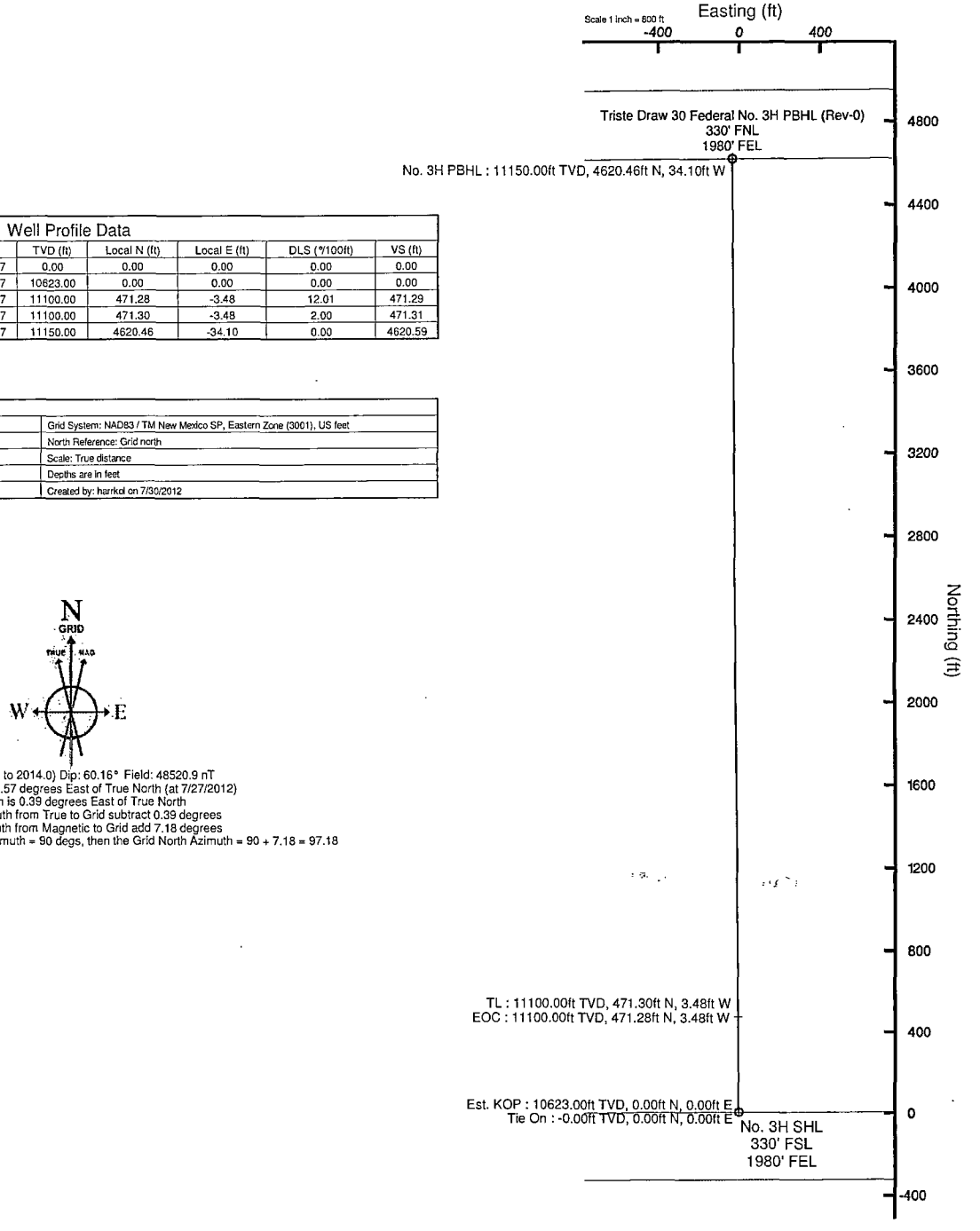
14 Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.
Drilling expected to take 30-35 days
If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals.
Bone Spring pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **an oil well.**

Cimarex Energy Co. of Colorado

Location:	Lea County, New Mexico	Slot:	No. 3H SHL
Field:	(Triste Draw) Sec 30, T23S, R33E	Well:	No. 3H
Facility:	Triste Draw 30 Federal No. 3H	Wellbore:	No. 3H PWB

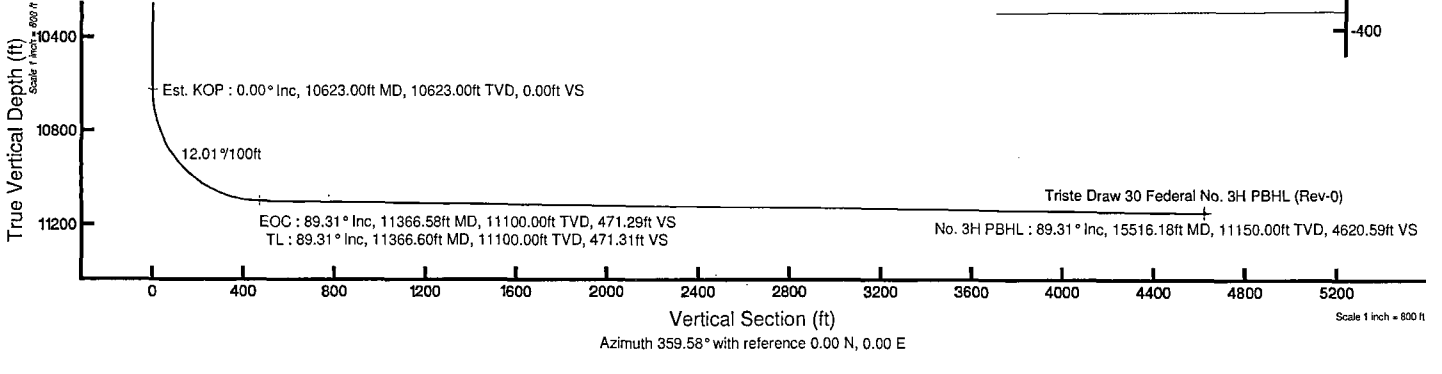


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	359.577	0.00	0.00	0.00	0.00	0.00
Est. KOP	10623.00	0.000	359.577	10623.00	0.00	0.00	0.00	0.00
EOC	11366.58	89.310	359.577	11100.00	471.28	-3.48	12.01	471.29
TL	11366.60	89.310	359.577	11100.00	471.30	-3.48	2.00	471.31
No. 3H PBHL	15516.18	89.310	359.577	11150.00	4620.46	-34.10	0.00	4620.59

Plot reference wellpath is Rev-A.0	
True vertical depths are referenced to Rig on No. 3H SHL (RT)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 3H SHL (RT)	North Reference: Grid north
Rig on No. 3H SHL (RT) to Mean Sea Level: 3694 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No. 3H SHL): -3694 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: harrkol on 7/30/2012

BGGM (1945.0 to 2014.0) Dip: 60.16° Field: 48520.9 nT
Magnetic North is 7.57 degrees East of True North (at 7/27/2012)
Grid North is 0.39 degrees East of True North
To correct azimuth from True to Grid subtract 0.39 degrees
To correct azimuth from Magnetic to Grid add 7.18 degrees
For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.18 = 97.18



Azimuth 359.58° with reference 0.00 N, 0.00 E

Rev-A.0

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co. of Colorado**	Slot	**No. 3H SHL**
Area	**Lea County, New Mexico**	Well	**No. 3H**
Field	**(Triste Draw) Sec 30, T23S, R33E**	Wellbore	**No. 3H PWB**
Facility	**Triste Draw 30 Federal No. 3H**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 3.0.0**
North Reference	**Grid**	User	**Harrkol**
Scale	**0.999966**	Report Generated	**7/30/2012** at **9:07:30 AM**
Convergence at slot	**0.39° East**	Database/Source file	**WA Midland/No._3H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W
Facility Reference Pt			**765133.50**	**462502.70**	32°16'09.909"N	103°36'33.358"W
Field Reference Pt			**0.00**	**0.00**	30°59'18.404"N	106°03'38.987"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 3H SHL (RT) to Facility Vertical Datum	**0.00ft**
Horizontal Reference Pt	**Slot**	Rig on No. 3H SHL (RT) to Mean Sea Level	**3694.00ft**
Vertical Reference Pt	**Rig on No. 3H SHL (RT)**	Rig on No. 3H SHL (RT) to Mud Line at Slot (No. 3H SHL)	**0.00ft**
MD Reference Pt	**Rig on No. 3H SHL (RT)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**359.58°**

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co. of Colorado**	Slot	**No. 3H SHL**
Area	**Lea County, New Mexico**	Well	**No. 3H**
Field	**(Triste Draw) Sec 30, T23S, R33E**	Wellbore	**No. 3H PWB**
Facility	**Triste Draw 30 Federal No. 3H**		

WELLPATH DATA (165 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	359.577	0.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Tie On
100.00†	0.000	359.577	100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
200.00†	0.000	359.577	200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
300.00†	0.000	359.577	300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
400.00†	0.000	359.577	400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
500.00†	0.000	359.577	500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
600.00†	0.000	359.577	600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
700.00†	0.000	359.577	700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
800.00†	0.000	359.577	800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
900.00†	0.000	359.577	900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1000.00†	0.000	359.577	1000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1100.00†	0.000	359.577	1100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1200.00†	0.000	359.577	1200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1300.00†	0.000	359.577	1300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1400.00†	0.000	359.577	1400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1500.00†	0.000	359.577	1500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1600.00†	0.000	359.577	1600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1700.00†	0.000	359.577	1700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1800.00†	0.000	359.577	1800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
1900.00†	0.000	359.577	1900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2000.00†	0.000	359.577	2000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2100.00†	0.000	359.577	2100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2200.00†	0.000	359.577	2200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2300.00†	0.000	359.577	2300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2400.00†	0.000	359.577	2400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2500.00†	0.000	359.577	2500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2600.00†	0.000	359.577	2600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2700.00†	0.000	359.577	2700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2800.00†	0.000	359.577	2800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
2900.00†	0.000	359.577	2900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3000.00†	0.000	359.577	3000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3100.00†	0.000	359.577	3100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3200.00†	0.000	359.577	3200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3300.00†	0.000	359.577	3300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3400.00†	0.000	359.577	3400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3500.00†	0.000	359.577	3500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3600.00†	0.000	359.577	3600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3700.00†	0.000	359.577	3700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3800.00†	0.000	359.577	3800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
3900.00†	0.000	359.577	3900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4000.00†	0.000	359.577	4000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4100.00†	0.000	359.577	4100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4200.00†	0.000	359.577	4200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4300.00†	0.000	359.577	4300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4400.00†	0.000	359.577	4400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 3H SHL
Area	Lea County, New Mexico	Well	No. 3H
Field	(Triste Draw) Sec 30, T23S, R33E	Wellbore	No. 3H PWB
Facility	Triste Draw 30 Federal No. 3H		

WELLPATH DATA (165 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4500.00†	0.000	359.577	4500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4600.00†	0.000	359.577	4600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4700.00†	0.000	359.577	4700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4800.00†	0.000	359.577	4800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
4900.00†	0.000	359.577	4900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5000.00†	0.000	359.577	5000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5020.00†	0.000	359.577	5020.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Delaware Sands
5100.00†	0.000	359.577	5100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5200.00†	0.000	359.577	5200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5300.00†	0.000	359.577	5300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5400.00†	0.000	359.577	5400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5500.00†	0.000	359.577	5500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5600.00†	0.000	359.577	5600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5700.00†	0.000	359.577	5700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5800.00†	0.000	359.577	5800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
5900.00†	0.000	359.577	5900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6000.00†	0.000	359.577	6000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6100.00†	0.000	359.577	6100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6200.00†	0.000	359.577	6200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6300.00†	0.000	359.577	6300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6400.00†	0.000	359.577	6400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6500.00†	0.000	359.577	6500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6600.00†	0.000	359.577	6600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6700.00†	0.000	359.577	6700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6800.00†	0.000	359.577	6800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
6900.00†	0.000	359.577	6900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7000.00†	0.000	359.577	7000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7100.00†	0.000	359.577	7100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7200.00†	0.000	359.577	7200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7300.00†	0.000	359.577	7300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7400.00†	0.000	359.577	7400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7500.00†	0.000	359.577	7500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7600.00†	0.000	359.577	7600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7700.00†	0.000	359.577	7700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7800.00†	0.000	359.577	7800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
7900.00†	0.000	359.577	7900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8000.00†	0.000	359.577	8000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8100.00†	0.000	359.577	8100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8200.00†	0.000	359.577	8200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8300.00†	0.000	359.577	8300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8400.00†	0.000	359.577	8400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8500.00†	0.000	359.577	8500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8600.00†	0.000	359.577	8600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8625.00†	0.000	359.577	8625.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Basal Brushy Canyon
8700.00†	0.000	359.577	8700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 3H SHL
Area	Lea County, New Mexico	Well	No. 3H
Field	(Triste Draw) Sec 30, T23S, R33E	Wellbore	No. 3H PWB
Facility	Triste Draw 30 Federal No. 3H		

WELLPATH DATA (165 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8800.00†	0.000	359.577	8800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
8850.00†	0.000	359.577	8850.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Bone Spring
8900.00†	0.000	359.577	8900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9000.00†	0.000	359.577	9000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9100.00†	0.000	359.577	9100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9200.00†	0.000	359.577	9200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9300.00†	0.000	359.577	9300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Avalon Shale
9400.00†	0.000	359.577	9400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9500.00†	0.000	359.577	9500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9600.00†	0.000	359.577	9600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9700.00†	0.000	359.577	9700.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9800.00†	0.000	359.577	9800.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
9900.00†	0.000	359.577	9900.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10000.00†	0.000	359.577	10000.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10050.00†	0.000	359.577	10050.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	1st BSS
10100.00†	0.000	359.577	10100.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10200.00†	0.000	359.577	10200.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10300.00†	0.000	359.577	10300.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10400.00†	0.000	359.577	10400.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10500.00†	0.000	359.577	10500.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10600.00†	0.000	359.577	10600.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	
10623.00	0.000	359.577	10623.00	0.00	0.00	0.00	765133.50	462502.70	32°16'09.909"N	103°36'33.358"W	0.00	Est. KOP
10675.10†	6.258	359.577	10675.00	2.84	2.84	-0.02	765133.48	462505.54	32°16'09.937"N	103°36'33.358"W	12.01	2nd BSS
10700.00†	9.248	359.577	10699.67	6.20	6.20	-0.05	765133.45	462508.90	32°16'09.970"N	103°36'33.358"W	12.01	
10800.00†	21.259	359.577	10795.97	32.46	32.46	-0.24	765133.26	462535.16	32°16'10.230"N	103°36'33.358"W	12.01	
10900.00†	33.270	359.577	10884.69	78.19	78.19	-0.58	765132.92	462580.88	32°16'10.682"N	103°36'33.358"W	12.01	
11000.00†	45.281	359.577	10961.96	141.38	141.37	-1.04	765132.46	462644.07	32°16'11.308"N	103°36'33.359"W	12.01	
11100.00†	57.292	359.577	11024.39	219.26	219.26	-1.62	765131.88	462721.95	32°16'12.078"N	103°36'33.359"W	12.01	
11200.00†	69.302	359.577	11069.25	308.43	308.43	-2.28	765131.22	462811.11	32°16'12.961"N	103°36'33.360"W	12.01	
11300.00†	81.313	359.577	11094.56	404.99	404.98	-2.99	765130.51	462907.66	32°16'13.916"N	103°36'33.361"W	12.01	
11366.58	89.310	359.577	11100.00	471.29	471.28	-3.48	765130.02	462973.96	32°16'14.572"N	103°36'33.361"W	12.01	EOC
11366.60	89.310	359.577	11100.00	471.31	471.30	-3.48	765130.02	462973.98	32°16'14.572"N	103°36'33.361"W	2.00	TL
11400.00†	89.310	359.577	11100.40	504.71	504.69	-3.73	765129.77	463007.38	32°16'14.903"N	103°36'33.361"W	0.00	
11500.00†	89.310	359.577	11101.61	604.70	604.68	-4.46	765129.04	463107.36	32°16'15.892"N	103°36'33.362"W	0.00	
11600.00†	89.310	359.577	11102.81	704.69	704.67	-5.20	765128.30	463207.35	32°16'16.882"N	103°36'33.363"W	0.00	
11700.00†	89.310	359.577	11104.02	804.69	804.66	-5.94	765127.56	463307.34	32°16'17.871"N	103°36'33.364"W	0.00	
11800.00†	89.310	359.577	11105.22	904.68	904.65	-6.68	765126.82	463407.32	32°16'18.861"N	103°36'33.364"W	0.00	
11900.00†	89.310	359.577	11106.43	1004.67	1004.64	-7.42	765126.08	463507.31	32°16'19.850"N	103°36'33.365"W	0.00	
12000.00†	89.310	359.577	11107.63	1104.66	1104.63	-8.15	765125.35	463607.30	32°16'20.840"N	103°36'33.366"W	0.00	
12100.00†	89.310	359.577	11108.84	1204.66	1204.62	-8.89	765124.61	463707.28	32°16'21.829"N	103°36'33.367"W	0.00	
12200.00†	89.310	359.577	11110.04	1304.65	1304.61	-9.63	765123.87	463807.27	32°16'22.818"N	103°36'33.367"W	0.00	
12300.00†	89.310	359.577	11111.25	1404.64	1404.60	-10.37	765123.13	463907.25	32°16'23.808"N	103°36'33.368"W	0.00	
12400.00†	89.310	359.577	11112.45	1504.64	1504.59	-11.11	765122.39	464007.24	32°16'24.797"N	103°36'33.369"W	0.00	
12500.00†	89.310	359.577	11113.66	1604.63	1604.58	-11.84	765121.66	464107.23	32°16'25.787"N	103°36'33.370"W	0.00	
12600.00†	89.310	359.577	11114.86	1704.62	1704.57	-12.58	765120.92	464207.21	32°16'26.776"N	103°36'33.370"W	0.00	

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 3H SHL
Area	Lea County, New Mexico	Well	No. 3H
Field	(Triste Draw) Sec 30, T23S, R33E	Wellbore	No. 3H PWB
Facility	Triste Draw 30 Federal No. 3H		

WELLPATH DATA (165 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12700.00†	89.310	359.577	11116.07	1804.61	1804.56	-13.32	765120.18	464307.20	32°16'27.766"N	103°36'33.371"W	0.00	
12800.00†	89.310	359.577	11117.27	1904.61	1904.55	-14.06	765119.44	464407.19	32°16'28.755"N	103°36'33.372"W	0.00	
12900.00†	89.310	359.577	11118.48	2004.60	2004.54	-14.80	765118.71	464507.17	32°16'29.744"N	103°36'33.372"W	0.00	
13000.00†	89.310	359.577	11119.68	2104.59	2104.53	-15.53	765117.97	464607.16	32°16'30.734"N	103°36'33.373"W	0.00	
13100.00†	89.310	359.577	11120.89	2204.58	2204.52	-16.27	765117.23	464707.15	32°16'31.723"N	103°36'33.374"W	0.00	
13200.00†	89.310	359.577	11122.09	2304.58	2304.51	-17.01	765116.49	464807.13	32°16'32.713"N	103°36'33.375"W	0.00	
13300.00†	89.310	359.577	11123.30	2404.57	2404.50	-17.75	765115.75	464907.12	32°16'33.702"N	103°36'33.375"W	0.00	
13400.00†	89.310	359.577	11124.50	2504.56	2504.49	-18.48	765115.02	465007.11	32°16'34.692"N	103°36'33.376"W	0.00	
13500.00†	89.310	359.577	11125.71	2604.56	2604.48	-19.22	765114.28	465107.09	32°16'35.681"N	103°36'33.377"W	0.00	
13600.00†	89.310	359.577	11126.91	2704.55	2704.47	-19.96	765113.54	465207.08	32°16'36.670"N	103°36'33.378"W	0.00	
13700.00†	89.310	359.577	11128.12	2804.54	2804.46	-20.70	765112.80	465307.07	32°16'37.660"N	103°36'33.378"W	0.00	
13800.00†	89.310	359.577	11129.32	2904.53	2904.45	-21.44	765112.06	465407.05	32°16'38.649"N	103°36'33.379"W	0.00	
13900.00†	89.310	359.577	11130.53	3004.53	3004.44	-22.17	765111.33	465507.04	32°16'39.639"N	103°36'33.380"W	0.00	
14000.00†	89.310	359.577	11131.73	3104.52	3104.43	-22.91	765110.59	465607.02	32°16'40.628"N	103°36'33.381"W	0.00	
14100.00†	89.310	359.577	11132.94	3204.51	3204.42	-23.65	765109.85	465707.01	32°16'41.618"N	103°36'33.381"W	0.00	
14200.00†	89.310	359.577	11134.14	3304.50	3304.41	-24.39	765109.11	465807.00	32°16'42.607"N	103°36'33.382"W	0.00	
14300.00†	89.310	359.577	11135.35	3404.50	3404.40	-25.13	765108.37	465906.98	32°16'43.597"N	103°36'33.383"W	0.00	
14400.00†	89.310	359.577	11136.55	3504.49	3504.39	-25.86	765107.64	466006.97	32°16'44.586"N	103°36'33.383"W	0.00	
14500.00†	89.310	359.577	11137.76	3604.48	3604.38	-26.60	765106.90	466106.96	32°16'45.575"N	103°36'33.384"W	0.00	
14600.00†	89.310	359.577	11138.96	3704.48	3704.37	-27.34	765106.16	466206.94	32°16'46.565"N	103°36'33.385"W	0.00	
14700.00†	89.310	359.577	11140.17	3804.47	3804.36	-28.08	765105.42	466306.93	32°16'47.554"N	103°36'33.386"W	0.00	
14800.00†	89.310	359.577	11141.37	3904.46	3904.35	-28.82	765104.68	466406.92	32°16'48.544"N	103°36'33.386"W	0.00	
14900.00†	89.310	359.577	11142.58	4004.45	4004.34	-29.55	765103.95	466506.90	32°16'49.533"N	103°36'33.387"W	0.00	
15000.00†	89.310	359.577	11143.78	4104.45	4104.33	-30.29	765103.21	466606.89	32°16'50.523"N	103°36'33.388"W	0.00	
15100.00†	89.310	359.577	11144.99	4204.44	4204.33	-31.03	765102.47	466706.88	32°16'51.512"N	103°36'33.389"W	0.00	
15200.00†	89.310	359.577	11146.19	4304.43	4304.32	-31.77	765101.73	466806.86	32°16'52.501"N	103°36'33.389"W	0.00	
15300.00†	89.310	359.577	11147.40	4404.42	4404.31	-32.51	765101.00	466906.85	32°16'53.491"N	103°36'33.390"W	0.00	
15400.00†	89.310	359.577	11148.60	4504.42	4504.30	-33.24	765100.26	467006.83	32°16'54.480"N	103°36'33.391"W	0.00	
15500.00†	89.310	359.577	11149.81	4604.41	4604.29	-33.98	765099.52	467106.82	32°16'55.470"N	103°36'33.392"W	0.00	
15516.18	89.310	359.577	11150.00†	4620.59	4620.46	-34.10	765099.40	467123.00	32°16'55.630"N	103°36'33.392"W	0.00	No. 3H PBHL

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co. of Colorado**	Slot	**No. 3H SHL**
Area	**Lea County, New Mexico**	Well	**No. 3H**
Field	**(Triste Draw) Sec 30, T23S, R33E**	Wellbore	**No. 3H PWB**
Facility	**Triste Draw 30 Federal No. 3H**		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Triste Draw 30 Federal No. 3H PBHL (Rev-0)	15516.18	11150.00	4620.46	-34.10	**765099.40**	**467123.00**	32°16'55.630"N	103°36'33.392"W	point

SURVEY PROGRAM - Ref Wellbore: No. 3H PWB Ref Wellpath: Rev-A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15516.18	NaviTrak (Standard)		No. 3H PWB

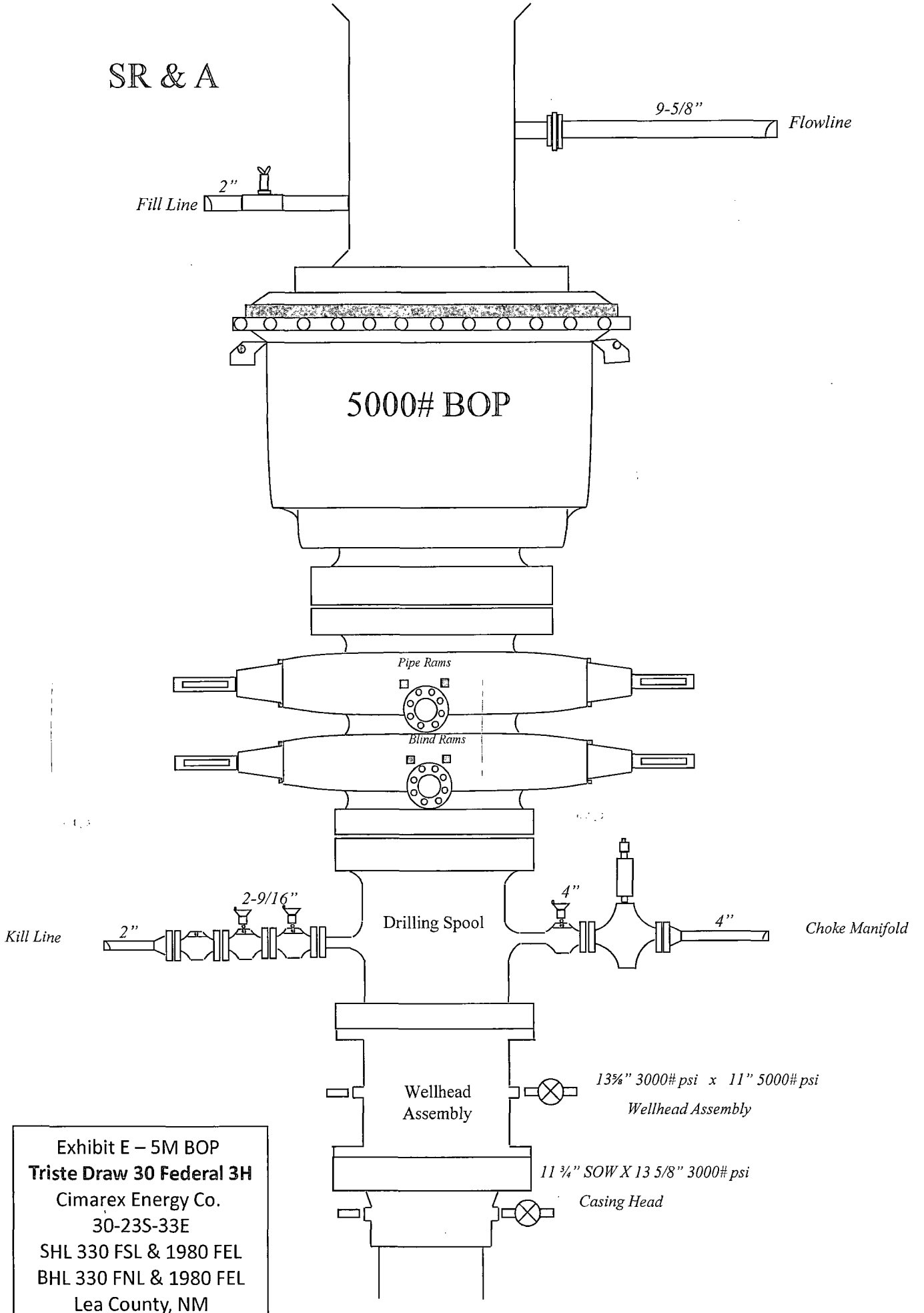
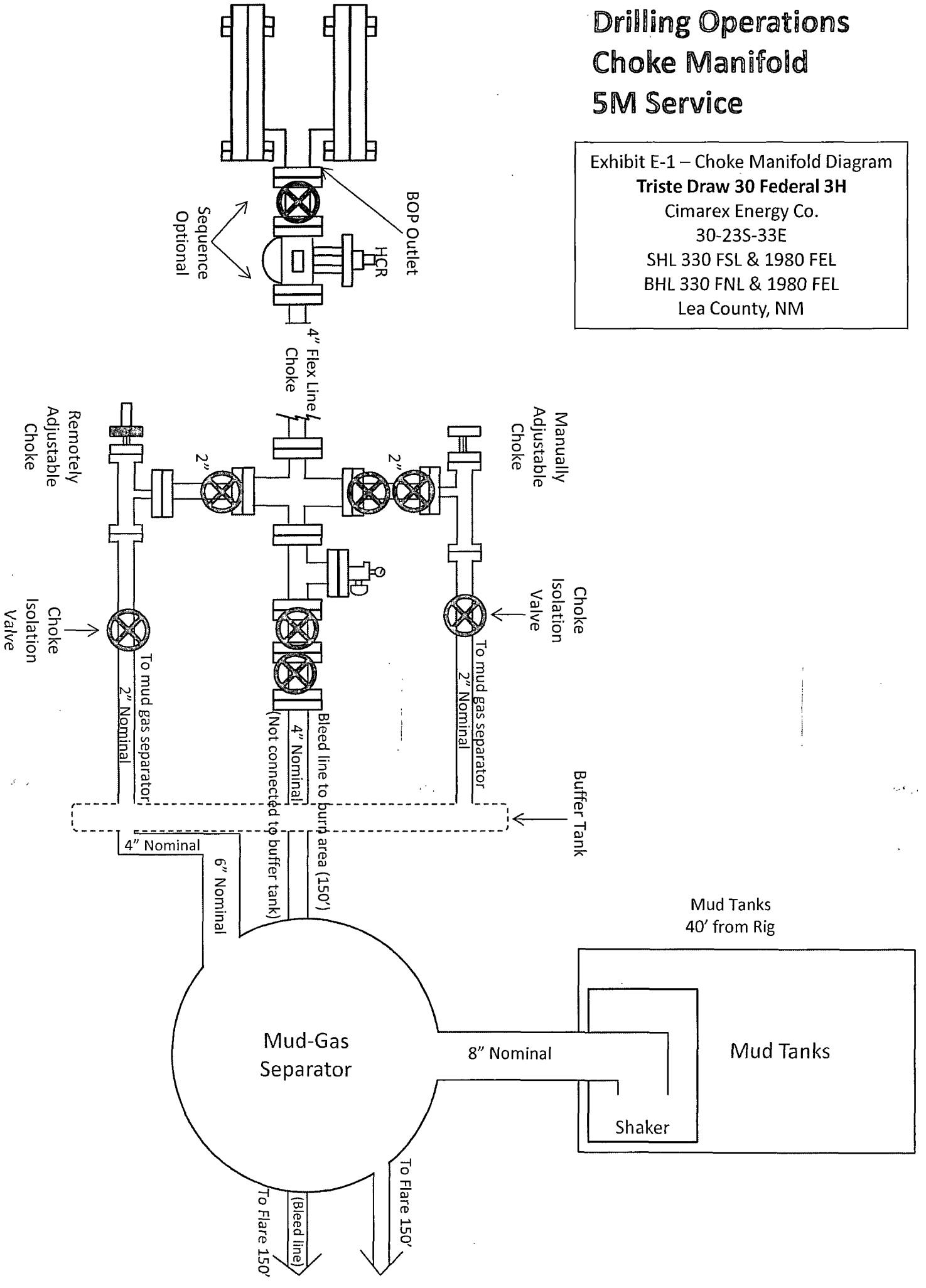
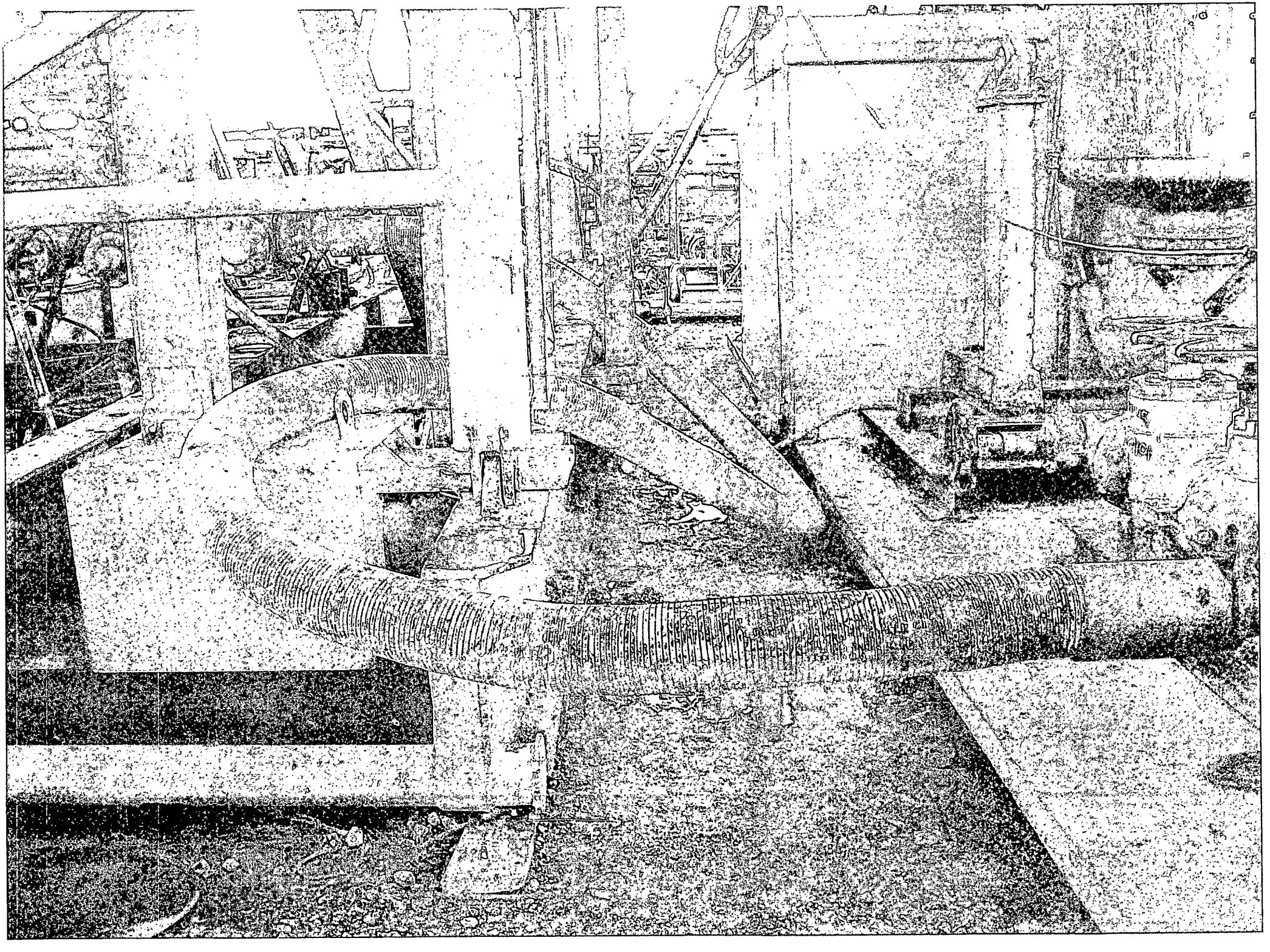


Exhibit E – 5M BOP
Triste Draw 30 Federal 3H
Cimarex Energy Co.
30-23S-33E
SHL 330 FSL & 1980 FEL
BHL 330 FNL & 1980 FEL
Lea County, NM

Drilling Operations
Choke Manifold
5M Service

Exhibit E-1 – Choke Manifold Diagram
Triste Draw 30 Federal 3H
Cimarex Energy Co.
30-23S-33E
SHL 330 FSL & 1980 FEL
BHL 330 FNL & 1980 FEL
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 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:	Date:
[signature]	3/8/2011

Midwest Hose
& Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
Oderco Inc	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.	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		

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

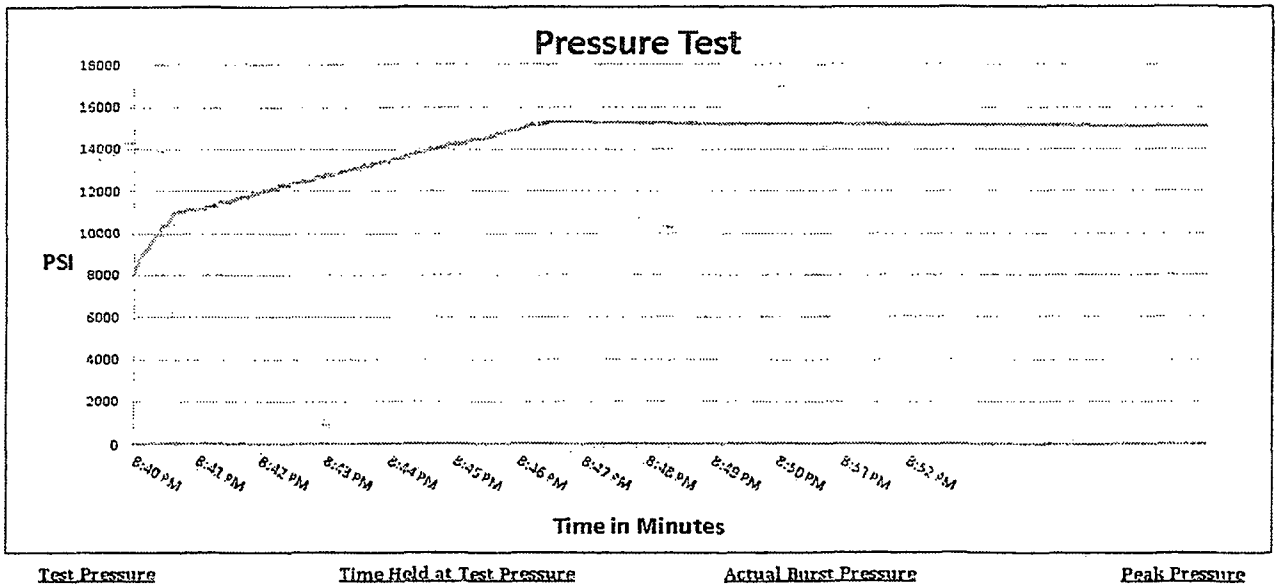
Pick Ticket #: 94260

Hose Specifications

Hose Type	Length
C & K	45'
I.D.	**O.D.**
4"	6.09"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

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



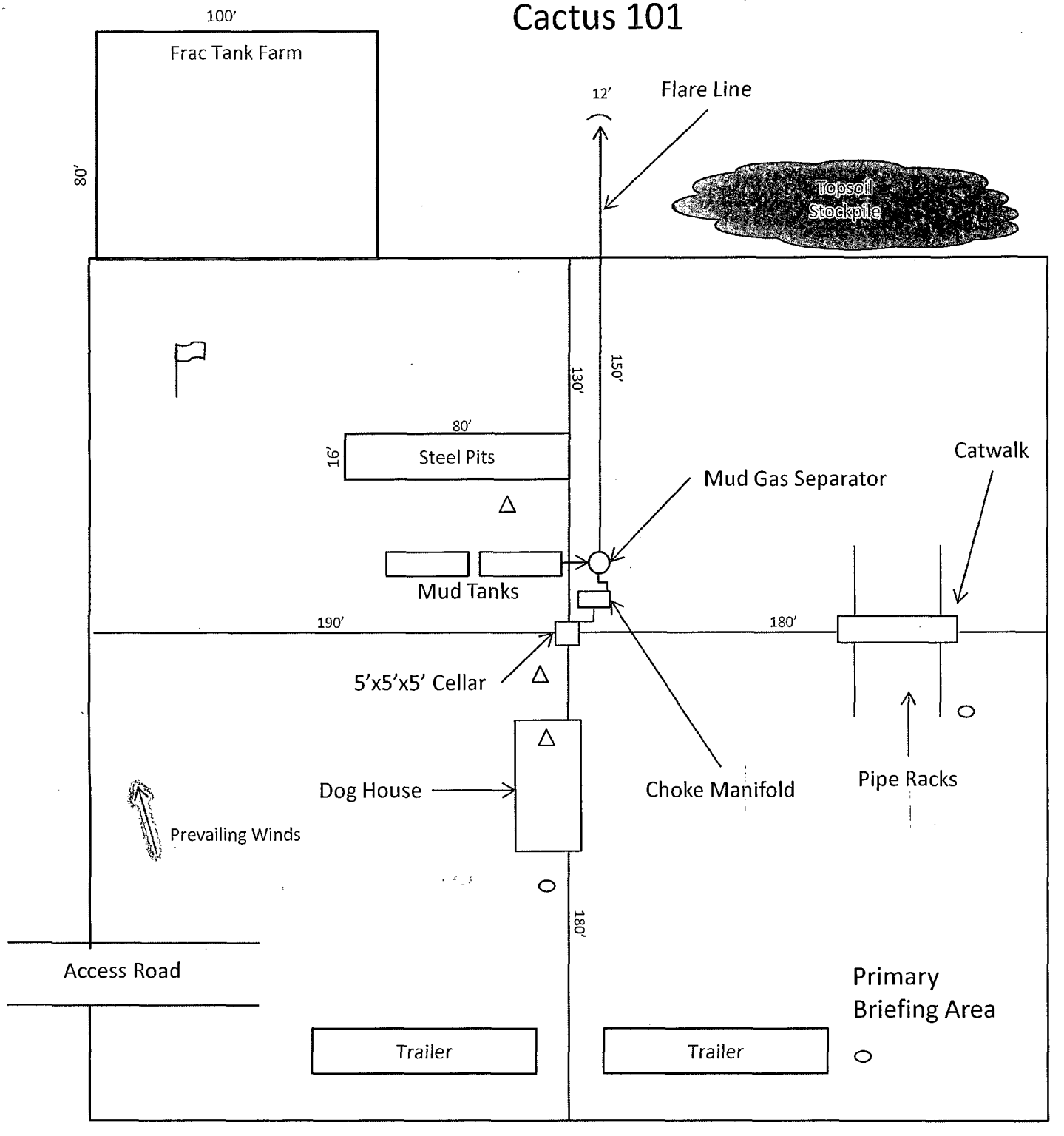
Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 Minutes		15483 PSI

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

Tested By: *Zac Mcconnell*

Approved By: *Kim Thomas*

Cactus 101



Wind Direction Indicators (wind sock or streamers)

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

○ Briefing Areas

N

Exhibit D – Rig Diagram
Triste Draw 30 Federal 3H
Cimarex Energy Co.
30-23S-33E
SHL 330 FSL & 1980 FEL
BHL 330 FNL & 1980 FEL
Lea County, NM