

HOBBS OCD

Form 3160-3
(April 2004)

DEC 04 2012

OCD Hobbs

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

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMLC0063228
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Cimarex Energy Co. of Colorado		7. If Unit or CA Agreement, Name and No.
3a. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701		8. Lease Name and Well No. Triste Draw 25 Federal 1 <39568>
3b. Phone No. (include area code) 432-571-7800		9. API Well No. 30-025- 40877
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 330 FSL & 660 FEL At proposed prod. Zone 330 FNL & 660 FEL Horizontal Bone Spring test		10. Field and Pool, or Exploratory Diamondtail; Bone Spring <17644>
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area 25-23S-32E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 330'		12. County or Parish Lea
16. No of acres in lease 1600		13. State NM
17. Spacing Unit dedicated to this well E2E2 160 acres		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 467'		20. BLM/BIA Bond No. on File NM-2575
19. Proposed Depth Pilot Hole 11300' MD 15594 TVD 11100		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3698' GR	22. Approximate date work will start* 09.05.12	23. Estimated duration 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 | 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 <i>Zeno Farris</i>	Name (Printed/Typed) Zeno Farris	Date 06.21.12
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Title

Manager Operations Administration

Approved By (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed)	Date
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Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

DEC 04 2012

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

SEE ATTACHED FOR
Approval Subject to General Requirements
& Special Stipulations Attached

CONDITIONS OF APPROVAL

DEC 05 2012

Application to Drill
Triste Draw 25 Federal 1
Cimarex Energy Co. of Colorado
Unit P, Section 25
T23S-R32E; 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 FEL
 BHL 330 FNL & 660 FEL
- 2 Elevation above sea level: 3698 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 15594 TVD 11100 Pilot Hole 11300'
- 6 Estimated tops of geological markers:
Rustler 1220
T. Salt 1440
Castille 3450
B. Salt 4780
Lamar 5050
Delaware 5100
Basal Brushy Canyon 8625
Bone Spring 8850
Avalon Shale 9300
1st Bone Spring 10050
2nd Bone Spring 10675
3rd Bone Spring 11250
- 7 Possible mineral bearing formation:
Bone Spring Oil
Avalon Shale Oil

8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 1250'	8.4 - 8.6	28	NC	FW
1250' to 4900'	10.0	30-32	NC	Brine water
4900' to 15594'	8.4	30-32	NC	2% KCL

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

Drill 8¾" pilot hole to 11300 and log. Pump 30bbls MUDPUSHII 12ppg, followed by 495 sks Type H Cement, D080 (Dispersant) 0.080 gal/sk, D177 (Retarder) 0.045gal/sk17.5 ppg yield 0.94 & 0% Excess from 11300 to 10800. Set whipstock and kick off 8¾" lateral @ 10800 and drill to TD @ 15594 MD, 11100 TVD. Run 5½" 17# P-110 LTC from 0-15594 and cement.

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9 Casing & Cementing Program:

See COA

String	Hole Size	Depth	Casing OD	Weight	Collar	Grade
Surface	17 1/2"	0' to 1250'	New 13 3/8"	48#	STC	H-40
Intermediate	12 1/4"	0' to 4900'	New 9 5/8"	40#	LTC	J-55
Production	7 7/8" or 8 3/4"	3600' to 15594'	New 5 1/2"	17#	LTC	P-110

10 Cementing:

Surface

Lead: 810SKS Premium Plus + 2% CaCl 4% gel 13.5ppg 1.75 yield 115% Excess

Tail: 200SKS Premium Plus + 2% CaCl 14.8ppg 1.34 yield 10% Excess

TOC Surface Centralizers per Onshorder 2.III.B.1.f

Intermediate

Lead: 1555SKS HLPP + 5% Salt + 5# Gilsonte 12.9ppg 1.92 yield 120% Excess

Tail: 235SKS Premium Plus + 1% CaCl 14.8ppg 1.34 yield 0% Excess

TOC Surface

Production

Lead: 835SKS Econocem H + 0.5/10% HR-601 0.5/10% Halad-322 11.9ppg 2.48 yield 53% Excess

Tail: 1385SKS Versacem H + 0.5% Halad(R)-344 + 0.4% CFR-3 + 1# Salt + 0.2% HR-601 14.5ppg 1.22 yield 25% Excess Cement volumes will be adjusted depending on hole size.

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.

Depth to ground water is 475' according to the State Engineer. Fresh water zones will be protected by setting 13 3/8" casing at 1250' and cementing to surface and 9 5/8" casing at 4900 and cementing to surface. Hydrocarbon zones will be protected by setting 5 1/2" casing at 15594' and cementing to 3600'.

<u>Collapse Factor</u>	<u>Burst Factor</u>	<u>Tension Factor</u>
1.125	1.125	1.6

11 Pressure control Equipment:

Exhibit "E". A 13 5/8" 5000 PSI working pressure B.O.P. 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 below 4900'. 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. Mud gas separator will be installed with BOP before drilling out of surface casing.

BOP unit will be hydraulically operated. BOP will be nipped 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. From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

Before drilling out of the surface pipe BOP's will be tested to 250 psi low and 3000 psi high by an independent service company. Hydril will be tested to 250 psi low and 1500 psi high. Before drilling out of the intermediate pipe BOP's will be tested by an independent service company to 250 psi low and 5000 psi high. Hydril will be tested to 250 psi low and 2500 psi high.

Cimarex Energy Co. of Colorado (operator) requests a variance if Cactus 101 (rig name) is used to drill this well to use a co-flex line between the BOP and choke manifold.

Manufacturer: Midwest Hose & Specialty

Serial Number: 59473

Length: 35' Size: 4-1/16" Ends - flanges/clamps

WP rating: 10,000 psi Anchors required by manufacturer - Yes/No

Application to Drill
Triste Draw 25 Federal 1
Cimarex Energy Co. of Colorado
Unit P, Section 25
T23S-R32E; Lea County, NM

12 Testing, Logging and Coring Program: *See COP*

- A. Mud logging program: 2 man unit from 4900 to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR Inter. Csg 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 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 **5062 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 potentialized as **an oil well.**



Cimarex Energy Co. of Colorado

Location: Lea County, New Mexico
Field: (Triste Draw) Sec 25, T23S, R32E
Facility: Triste Draw 25 Federal No. 1

Slot: Slot #1
Well: No. 1
Wellbore: No. 1 (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	359.536	0.00	0.00	0.00	0.00	0.00
KOP	10800.00	0.000	359.536	10800.00	0.00	0.00	0.00	0.00
EOB/SOH	11271.24	90.000	359.536	11100.00	299.99	-2.43	19.10	300.00
TD/PBHL	15593.96	90.000	359.536	11100.00	4622.57	-37.40	0.00	4622.72

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Triste Draw 25 Federal No. 1			761240.000	462477.300	32°16'09.915"N	103°37'18.706"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #1	0.00	0.00	761240.000	462477.300	32°16'09.915"N	103°37'18.706"W
Rig on Slot #1 (RT) to Mud line (At Slot: Slot #1)					0ft	
Mean Sea Level to Mud line (At Slot: Slot #1)					-3698ft	
Rig on Slot #1 (RT) to Mean Sea Level					3698ft	

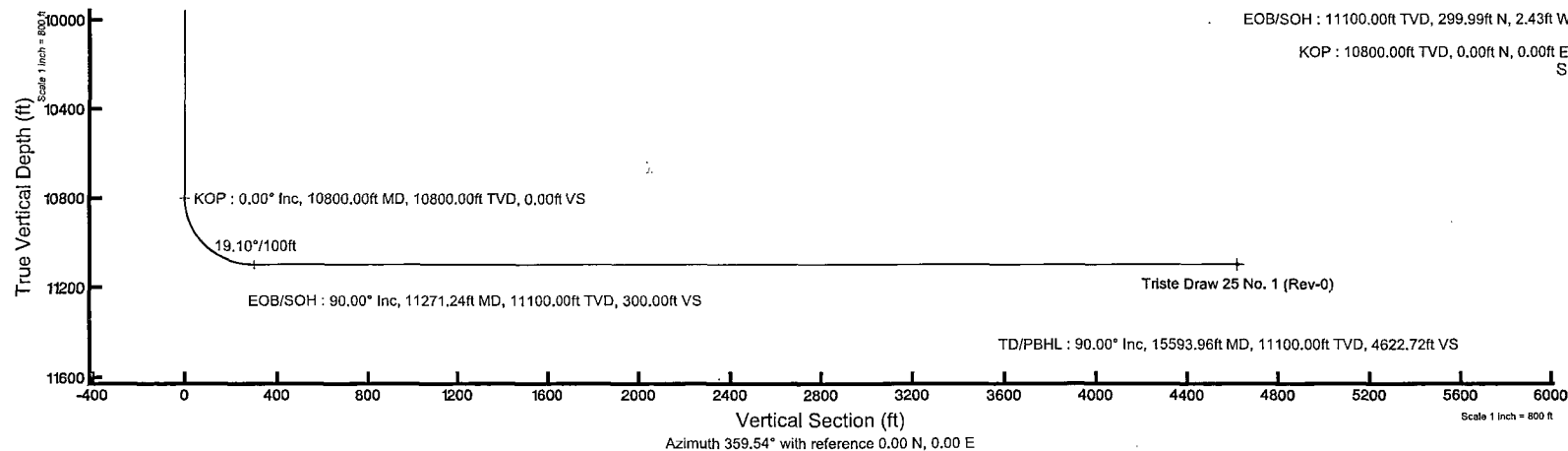
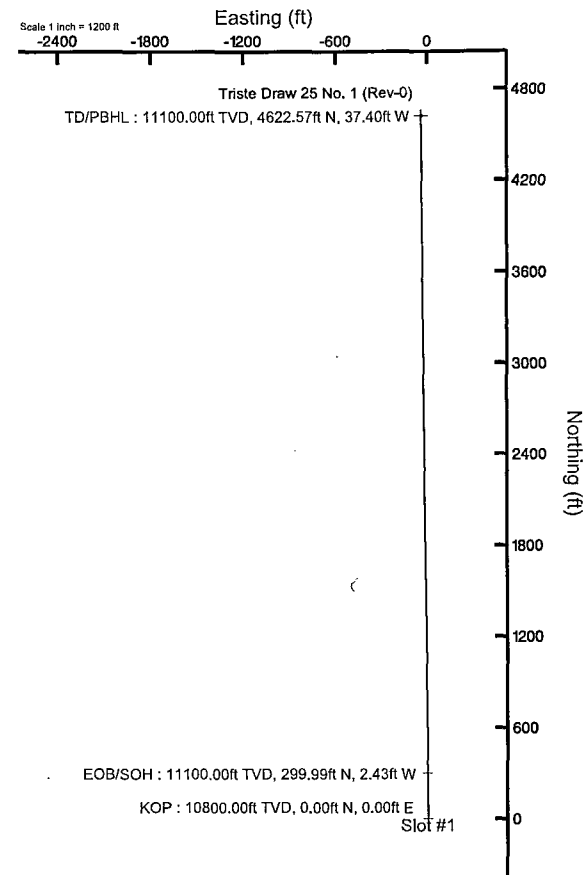
Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Triste Draw 25 No. 1 (Rev-0)	15593.96	11100.00	4622.57	-37.40	761202.60	467099.70	32°16'55.657"N	103°37'18.784"W

Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
15593.96	90.000	359.536	11100.00	4622.57	-37.40	761202.60	467099.70	32°16'55.657"N	103°37'18.784"W

Plot reference wellpath is Rev-A.0	
True vertical depths are referenced to Rig on Slot #1 (RT)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on Slot #1 (RT)	North Reference: Grid north
Rig on Slot #1 (RT) to Mean Sea Level: 3698 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot #1): -3698 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: lemarchd on 6/6/2012



Rev-A.0



Planned Wellpath Report

Rev-A.0

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

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	Lemachrl
Scale	0.999964	Report Generated	6/6/2012 at 9:27:51 AM
Convergence at slot	n/a	Database/Source file	WA_Midland/No. 1_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	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W
Facility Reference Pt			761240.00	462477.30	32°16'09.915"N	103°37'18.706"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 Slot #1 (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on Slot #1 (RT) to Mean Sea Level	3698.00ft
Vertical Reference Pt	Rig on Slot #1 (RT)	Rig on Slot #1 (RT) to Mud Line at Slot (Slot #1)	0.00ft
MD Reference Pt	Rig on Slot #1 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.54°



Planned Wellpath Report

Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION			
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Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0.00	0.000	359.536	0.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
100.00†	0.000	359.536	100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
200.00†	0.000	359.536	200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
300.00†	0.000	359.536	300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
400.00†	0.000	359.536	400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
500.00†	0.000	359.536	500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
600.00†	0.000	359.536	600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
700.00†	0.000	359.536	700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
800.00†	0.000	359.536	800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
900.00†	0.000	359.536	900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1000.00†	0.000	359.536	1000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1100.00†	0.000	359.536	1100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1200.00†	0.000	359.536	1200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1300.00†	0.000	359.536	1300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1400.00†	0.000	359.536	1400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1500.00†	0.000	359.536	1500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1600.00†	0.000	359.536	1600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1700.00†	0.000	359.536	1700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1800.00†	0.000	359.536	1800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
1900.00†	0.000	359.536	1900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2000.00†	0.000	359.536	2000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2100.00†	0.000	359.536	2100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2200.00†	0.000	359.536	2200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2300.00†	0.000	359.536	2300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2400.00†	0.000	359.536	2400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2500.00†	0.000	359.536	2500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2600.00†	0.000	359.536	2600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2700.00†	0.000	359.536	2700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2800.00†	0.000	359.536	2800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
2900.00†	0.000	359.536	2900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00



Planned Wellpath Report

Rev-A.0

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
3000.00†	0.000	359.536	3000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3100.00†	0.000	359.536	3100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3200.00†	0.000	359.536	3200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3300.00†	0.000	359.536	3300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3400.00†	0.000	359.536	3400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3500.00†	0.000	359.536	3500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3600.00†	0.000	359.536	3600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3700.00†	0.000	359.536	3700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3800.00†	0.000	359.536	3800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
3900.00†	0.000	359.536	3900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4000.00†	0.000	359.536	4000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4100.00†	0.000	359.536	4100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4200.00†	0.000	359.536	4200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4300.00†	0.000	359.536	4300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4400.00†	0.000	359.536	4400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4500.00†	0.000	359.536	4500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4600.00†	0.000	359.536	4600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4700.00†	0.000	359.536	4700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4800.00†	0.000	359.536	4800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
4900.00†	0.000	359.536	4900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5000.00†	0.000	359.536	5000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5100.00†	0.000	359.536	5100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5200.00†	0.000	359.536	5200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5300.00†	0.000	359.536	5300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5400.00†	0.000	359.536	5400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5500.00†	0.000	359.536	5500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5600.00†	0.000	359.536	5600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5700.00†	0.000	359.536	5700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5800.00†	0.000	359.536	5800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
5900.00†	0.000	359.536	5900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00



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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
6000.00†	0.000	359.536	6000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6100.00†	0.000	359.536	6100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6200.00†	0.000	359.536	6200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6300.00†	0.000	359.536	6300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6400.00†	0.000	359.536	6400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6500.00†	0.000	359.536	6500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6600.00†	0.000	359.536	6600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6700.00†	0.000	359.536	6700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6800.00†	0.000	359.536	6800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
6900.00†	0.000	359.536	6900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7000.00†	0.000	359.536	7000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7100.00†	0.000	359.536	7100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7200.00†	0.000	359.536	7200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7300.00†	0.000	359.536	7300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7400.00†	0.000	359.536	7400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7500.00†	0.000	359.536	7500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7600.00†	0.000	359.536	7600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7700.00†	0.000	359.536	7700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7800.00†	0.000	359.536	7800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
7900.00†	0.000	359.536	7900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8000.00†	0.000	359.536	8000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8100.00†	0.000	359.536	8100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8200.00†	0.000	359.536	8200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8300.00†	0.000	359.536	8300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8400.00†	0.000	359.536	8400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8500.00†	0.000	359.536	8500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8600.00†	0.000	359.536	8600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8700.00†	0.000	359.536	8700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8800.00†	0.000	359.536	8800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
8900.00†	0.000	359.536	8900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00



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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
9000.00†	0.000	359.536	9000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9100.00†	0.000	359.536	9100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9200.00†	0.000	359.536	9200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9300.00†	0.000	359.536	9300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9400.00†	0.000	359.536	9400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9500.00†	0.000	359.536	9500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9600.00†	0.000	359.536	9600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9700.00†	0.000	359.536	9700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9800.00†	0.000	359.536	9800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
9900.00†	0.000	359.536	9900.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10000.00†	0.000	359.536	10000.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10100.00†	0.000	359.536	10100.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10200.00†	0.000	359.536	10200.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10300.00†	0.000	359.536	10300.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10400.00†	0.000	359.536	10400.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10500.00†	0.000	359.536	10500.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10600.00†	0.000	359.536	10600.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10700.00†	0.000	359.536	10700.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10800.00†	0.000	359.536	10800.00	0.00	0.00	0.00	761240.00	462477.30	32°16'09.915"N	103°37'18.706"W	0.00	0.000	0.00
10900.00†	19.099	359.536	10898.16	16.51	16.51	-0.13	761239.87	462493.81	32°16'10.079"N	103°37'18.706"W	16.51	359.536	19.10
11000.00†	38.197	359.536	10985.51	64.23	64.23	-0.52	761239.48	462541.53	32°16'10.551"N	103°37'18.707"W	64.23	359.536	19.10
11100.00†	57.296	359.536	11052.44	137.91	137.90	-1.12	761238.88	462615.20	32°16'11.280"N	103°37'18.708"W	137.91	359.536	19.10
11200.00†	76.394	359.536	11091.58	229.43	229.42	-1.86	761238.14	462706.71	32°16'12.185"N	103°37'18.710"W	229.43	359.536	19.10
11271.24	90.000	359.536	11100.00	300.00	299.99	-2.43	761237.57	462777.28	32°16'12.884"N	103°37'18.711"W	300.00	359.536	19.10
11300.00†	90.000	359.536	11100.00	328.76	328.75	-2.66	761237.34	462806.04	32°16'13.168"N	103°37'18.711"W	328.76	359.536	0.00
11400.00†	90.000	359.536	11100.00	428.76	428.75	-3.47	761236.53	462906.03	32°16'14.158"N	103°37'18.713"W	428.76	359.536	0.00
11500.00†	90.000	359.536	11100.00	528.76	528.74	-4.28	761235.72	463006.02	32°16'15.147"N	103°37'18.715"W	528.76	359.536	0.00
11600.00†	90.000	359.536	11100.00	628.76	628.74	-5.09	761234.91	463106.02	32°16'16.137"N	103°37'18.716"W	628.76	359.536	0.00
11700.00†	90.000	359.536	11100.00	728.76	728.74	-5.90	761234.10	463206.01	32°16'17.126"N	103°37'18.718"W	728.76	359.536	0.00
11800.00†	90.000	359.536	11100.00	828.76	828.73	-6.71	761233.29	463306.00	32°16'18.116"N	103°37'18.720"W	828.76	359.536	0.00



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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
11900.00†	90.000	359.536	11100.00	928.76	928.73	-7.51	761232.49	463406.00	32°16'19.105"N	103°37'18.722"W	928.76	359.536	0.00
12000.00†	90.000	359.536	11100.00	1028.76	1028.73	-8.32	761231.68	463505.99	32°16'20.095"N	103°37'18.723"W	1028.76	359.536	0.00
12100.00†	90.000	359.536	11100.00	1128.76	1128.72	-9.13	761230.87	463605.98	32°16'21.084"N	103°37'18.725"W	1128.76	359.536	0.00
12200.00†	90.000	359.536	11100.00	1228.76	1228.72	-9.94	761230.06	463705.97	32°16'22.074"N	103°37'18.727"W	1228.76	359.536	0.00
12300.00†	90.000	359.536	11100.00	1328.76	1328.72	-10.75	761229.25	463805.97	32°16'23.063"N	103°37'18.728"W	1328.76	359.536	0.00
12400.00†	90.000	359.536	11100.00	1428.76	1428.71	-11.56	761228.44	463905.96	32°16'24.053"N	103°37'18.730"W	1428.76	359.536	0.00
12500.00†	90.000	359.536	11100.00	1528.76	1528.71	-12.37	761227.63	464005.95	32°16'25.042"N	103°37'18.732"W	1528.76	359.536	0.00
12600.00†	90.000	359.536	11100.00	1628.76	1628.71	-13.18	761226.82	464105.95	32°16'26.032"N	103°37'18.733"W	1628.76	359.536	0.00
12700.00†	90.000	359.536	11100.00	1728.76	1728.70	-13.99	761226.01	464205.94	32°16'27.021"N	103°37'18.735"W	1728.76	359.536	0.00
12800.00†	90.000	359.536	11100.00	1828.76	1828.70	-14.80	761225.20	464305.93	32°16'28.011"N	103°37'18.737"W	1828.76	359.536	0.00
12900.00†	90.000	359.536	11100.00	1928.76	1928.70	-15.61	761224.40	464405.93	32°16'29.000"N	103°37'18.739"W	1928.76	359.536	0.00
13000.00†	90.000	359.536	11100.00	2028.76	2028.69	-16.41	761223.59	464505.92	32°16'29.990"N	103°37'18.740"W	2028.76	359.536	0.00
13100.00†	90.000	359.536	11100.00	2128.76	2128.69	-17.22	761222.78	464605.91	32°16'30.979"N	103°37'18.742"W	2128.76	359.536	0.00
13200.00†	90.000	359.536	11100.00	2228.76	2228.69	-18.03	761221.97	464705.90	32°16'31.969"N	103°37'18.744"W	2228.76	359.536	0.00
13300.00†	90.000	359.536	11100.00	2328.76	2328.68	-18.84	761221.16	464805.90	32°16'32.958"N	103°37'18.745"W	2328.76	359.536	0.00
13400.00†	90.000	359.536	11100.00	2428.76	2428.68	-19.65	761220.35	464905.89	32°16'33.948"N	103°37'18.747"W	2428.76	359.536	0.00
13500.00†	90.000	359.536	11100.00	2528.76	2528.68	-20.46	761219.54	465005.88	32°16'34.937"N	103°37'18.749"W	2528.76	359.536	0.00
13600.00†	90.000	359.536	11100.00	2628.76	2628.68	-21.27	761218.73	465105.88	32°16'35.927"N	103°37'18.750"W	2628.76	359.536	0.00
13700.00†	90.000	359.536	11100.00	2728.76	2728.67	-22.08	761217.92	465205.87	32°16'36.916"N	103°37'18.752"W	2728.76	359.536	0.00
13800.00†	90.000	359.536	11100.00	2828.76	2828.67	-22.89	761217.11	465305.86	32°16'37.906"N	103°37'18.754"W	2828.76	359.536	0.00
13900.00†	90.000	359.536	11100.00	2928.76	2928.67	-23.70	761216.30	465405.86	32°16'38.895"N	103°37'18.756"W	2928.76	359.536	0.00
14000.00†	90.000	359.536	11100.00	3028.76	3028.66	-24.51	761215.50	465505.85	32°16'39.885"N	103°37'18.757"W	3028.76	359.536	0.00
14100.00†	90.000	359.536	11100.00	3128.76	3128.66	-25.31	761214.69	465605.84	32°16'40.874"N	103°37'18.759"W	3128.76	359.536	0.00
14200.00†	90.000	359.536	11100.00	3228.76	3228.66	-26.12	761213.88	465705.83	32°16'41.864"N	103°37'18.761"W	3228.76	359.536	0.00
14300.00†	90.000	359.536	11100.00	3328.76	3328.65	-26.93	761213.07	465805.83	32°16'42.853"N	103°37'18.762"W	3328.76	359.536	0.00
14400.00†	90.000	359.536	11100.00	3428.76	3428.65	-27.74	761212.26	465905.82	32°16'43.843"N	103°37'18.764"W	3428.76	359.536	0.00
14500.00†	90.000	359.536	11100.00	3528.76	3528.65	-28.55	761211.45	466005.81	32°16'44.832"N	103°37'18.766"W	3528.76	359.536	0.00
14600.00†	90.000	359.536	11100.00	3628.76	3628.64	-29.36	761210.64	466105.81	32°16'45.822"N	103°37'18.767"W	3628.76	359.536	0.00
14700.00†	90.000	359.536	11100.00	3728.76	3728.64	-30.17	761209.83	466205.80	32°16'46.811"N	103°37'18.769"W	3728.76	359.536	0.00
14800.00†	90.000	359.536	11100.00	3828.76	3828.64	-30.98	761209.02	466305.79	32°16'47.801"N	103°37'18.771"W	3828.76	359.536	0.00



Planned Wellpath Report

Rev-A.0

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	Slot #1
Area	Lea County, New Mexico	Well	No. 1
Field	(Triste Draw) Sec 25, T23S, R32E	Wellbore	No. 1 (PWB)
Facility	Triste Draw 25 Federal No. 1		

WELLPATH DATA (158 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	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
14900.00†	90.000	359.536	11100.00	3928.76	3928.63	-31.79	761208.21	466405.79	32°16'48.790"N	103°37'18.773"W	3928.76	359.536	0.00
15000.00†	90.000	359.536	11100.00	4028.76	4028.63	-32.60	761207.41	466505.78	32°16'49.780"N	103°37'18.774"W	4028.76	359.536	0.00
15100.00†	90.000	359.536	11100.00	4128.76	4128.63	-33.40	761206.60	466605.77	32°16'50.769"N	103°37'18.776"W	4128.76	359.536	0.00
15200.00†	90.000	359.536	11100.00	4228.76	4228.62	-34.21	761205.79	466705.76	32°16'51.759"N	103°37'18.778"W	4228.76	359.536	0.00
15300.00†	90.000	359.536	11100.00	4328.76	4328.62	-35.02	761204.98	466805.76	32°16'52.748"N	103°37'18.779"W	4328.76	359.536	0.00
15400.00†	90.000	359.536	11100.00	4428.76	4428.62	-35.83	761204.17	466905.75	32°16'53.738"N	103°37'18.781"W	4428.76	359.536	0.00
15500.00†	90.000	359.536	11100.00	4528.76	4528.61	-36.64	761203.36	467005.74	32°16'54.728"N	103°37'18.783"W	4528.76	359.536	0.00
15593.96	90.000	359.536	11100.00†	4622.72	4622.57	-37.40	761202.60	467099.70	32°16'55.657"N	103°37'18.784"W	4622.72	359.536	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Triste Draw 25 No. 1 (Rev-0)	15593.96	11100.00	4622.57	-37.40	761202.60	467099.70	32°16'55.657"N	103°37'18.784"W	point

SR & A

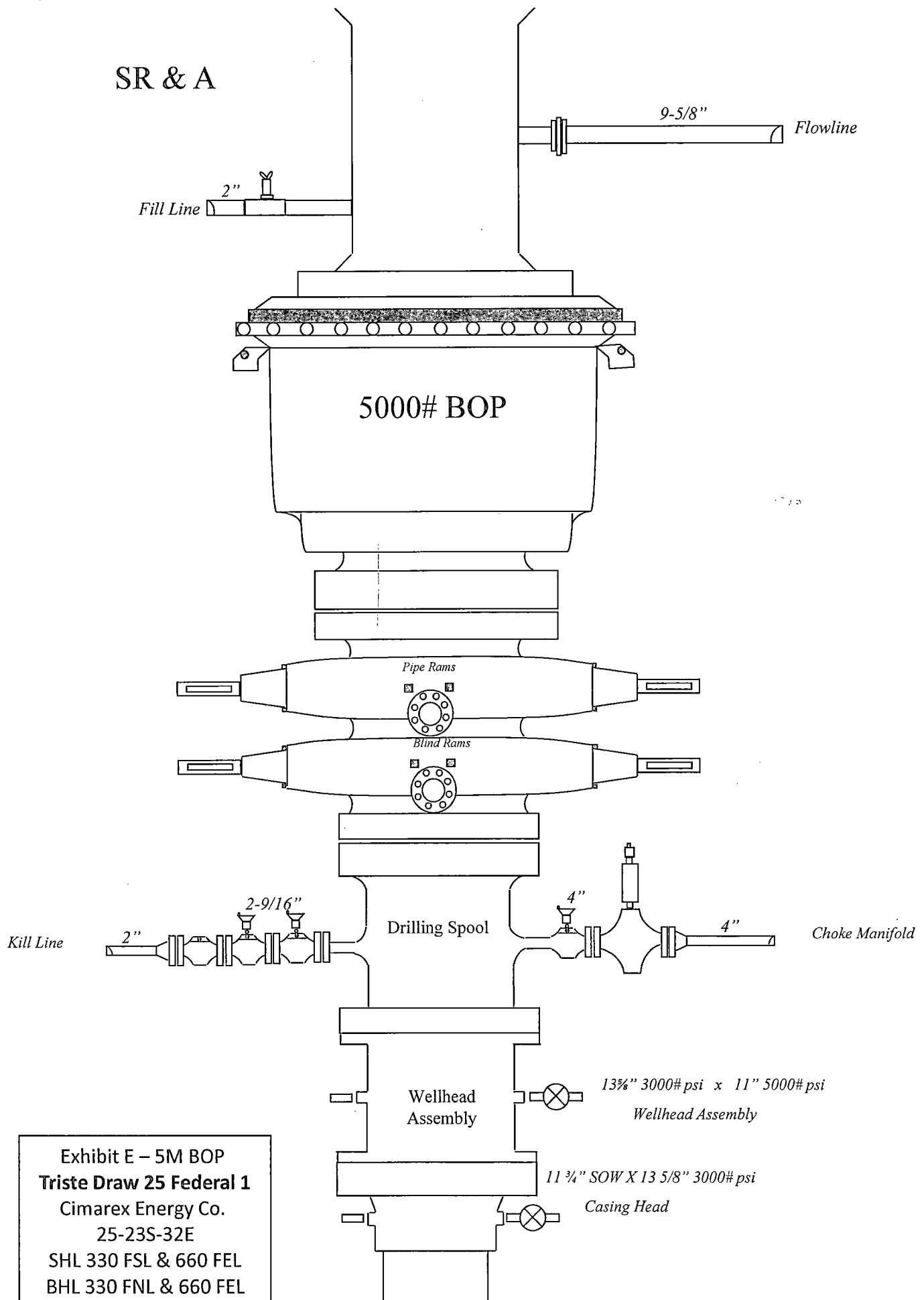


Exhibit E – 5M BOP
Triste Draw 25 Federal 1
Cimarex Energy Co.
25-23S-32E
SHL 330 FSL & 660 FEL
BHL 330 FNL & 660 FEL
Lea County, NM

Drilling Operations

Choke Manifold

5M Service

Exhibit E-1 – Choke Manifold Diagram

Triste Draw 25 Federal 1

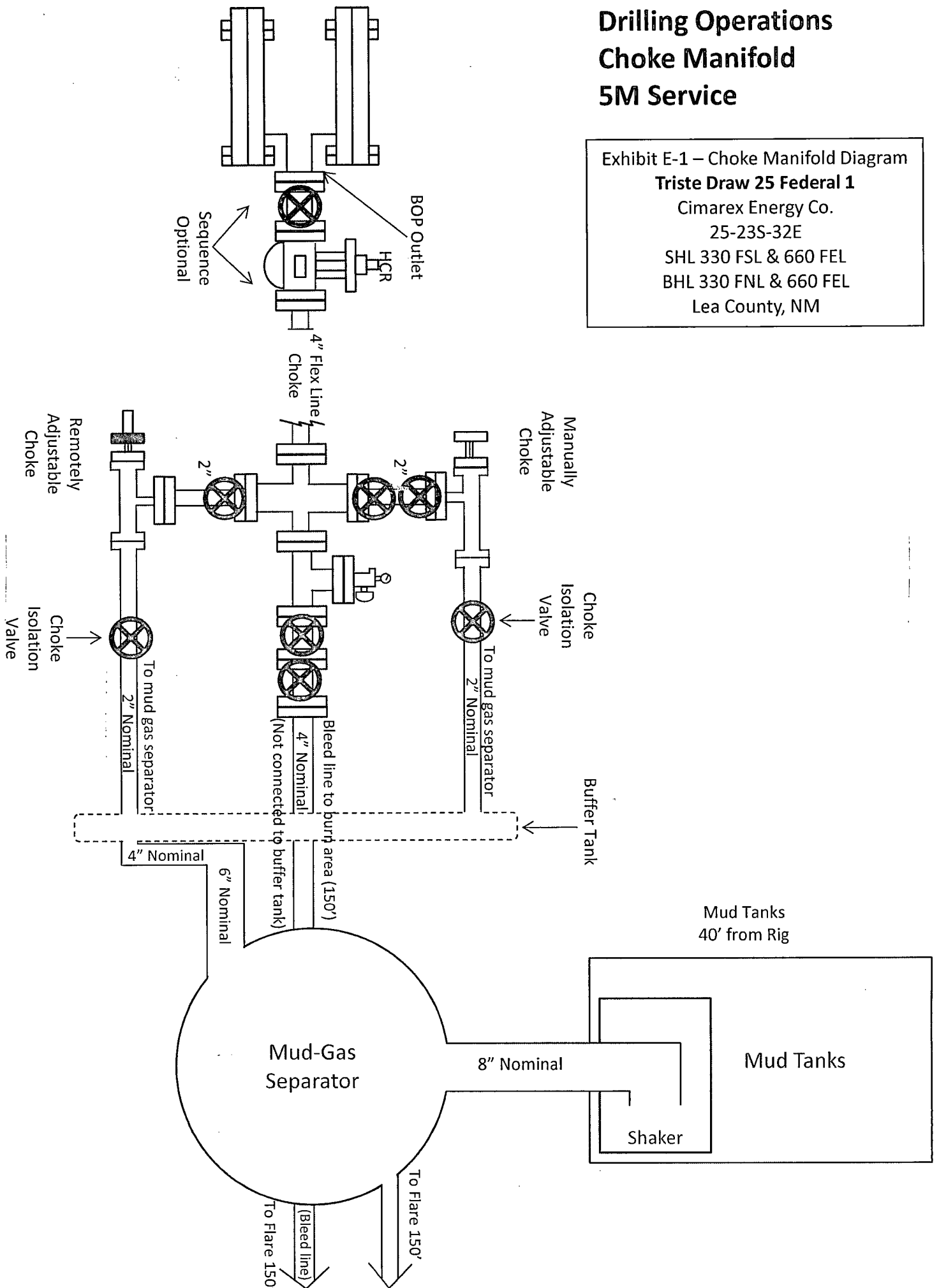
Cimarex Energy Co.

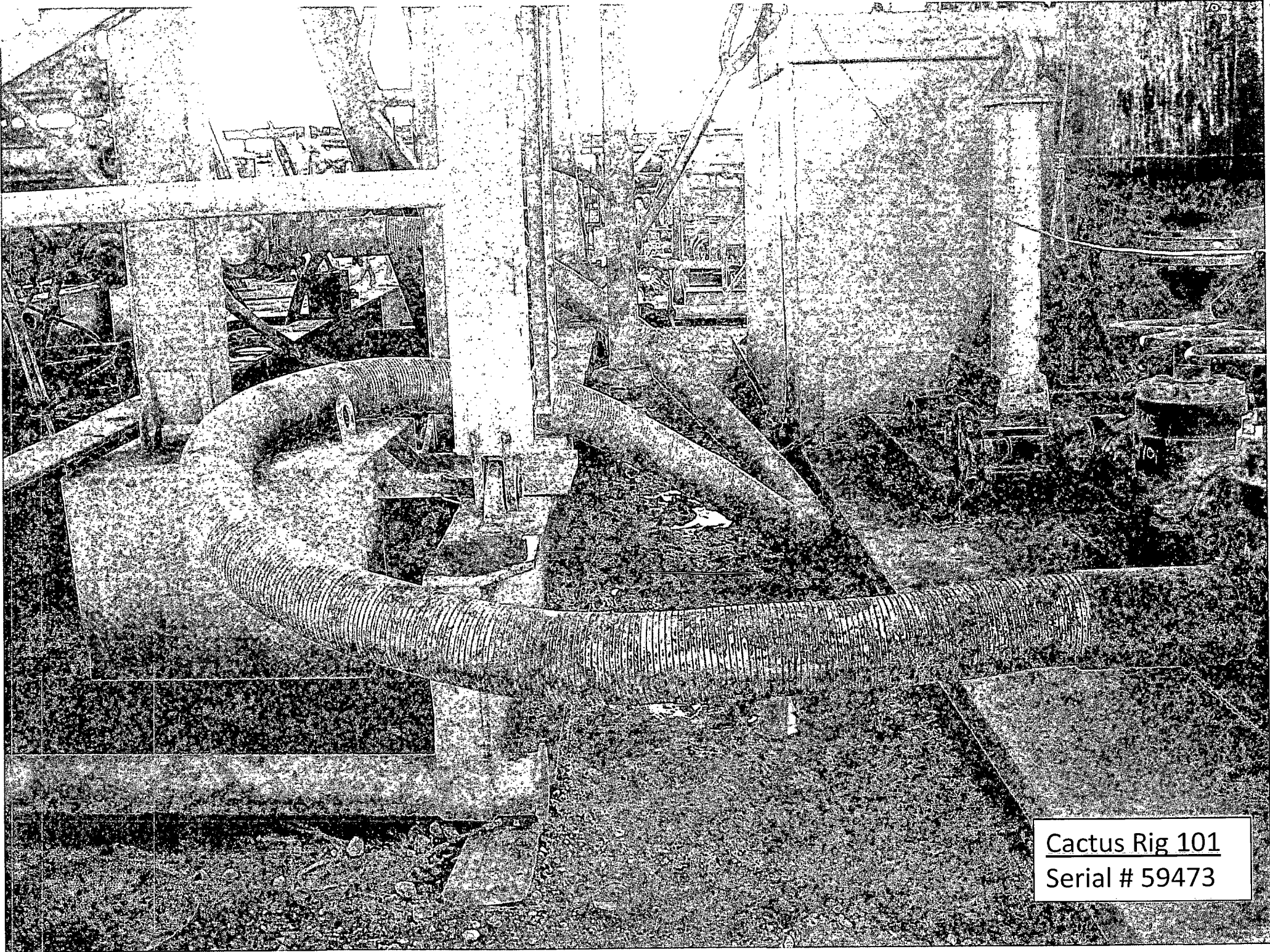
25-23S-32E

SHL 330 FSL & 660 FEL

BHL 330 FNL & 660 FEL

Lea County, NM





Cactus Rig 101
Serial # 59473

M I D W E S T
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: CACTUS		P.O. Number: Rig#101 Asset#M5358	
HOSE SPECIFICATIONS			
Type: CHOKER LINE		Length: 35'	
I.D. 4" INCHES	O.D. 8" INCHES		
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI		BURST PRESSURE PSI
COUPLINGS			
Type of End Fitting 4 1/16 10K FLANGE			
Type of Coupling: SWEDGED		MANUFACTURED BY MIDWEST HOSE & SPECIALTY	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 15 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
COMMENTS: s/n#59473 Asset#M5358 Hose is covered with stainless steel armour cover and wrapped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes			
Date: 5/19/2010	Tested By: BOBBY FINK		Approved: MENDI JACKSON



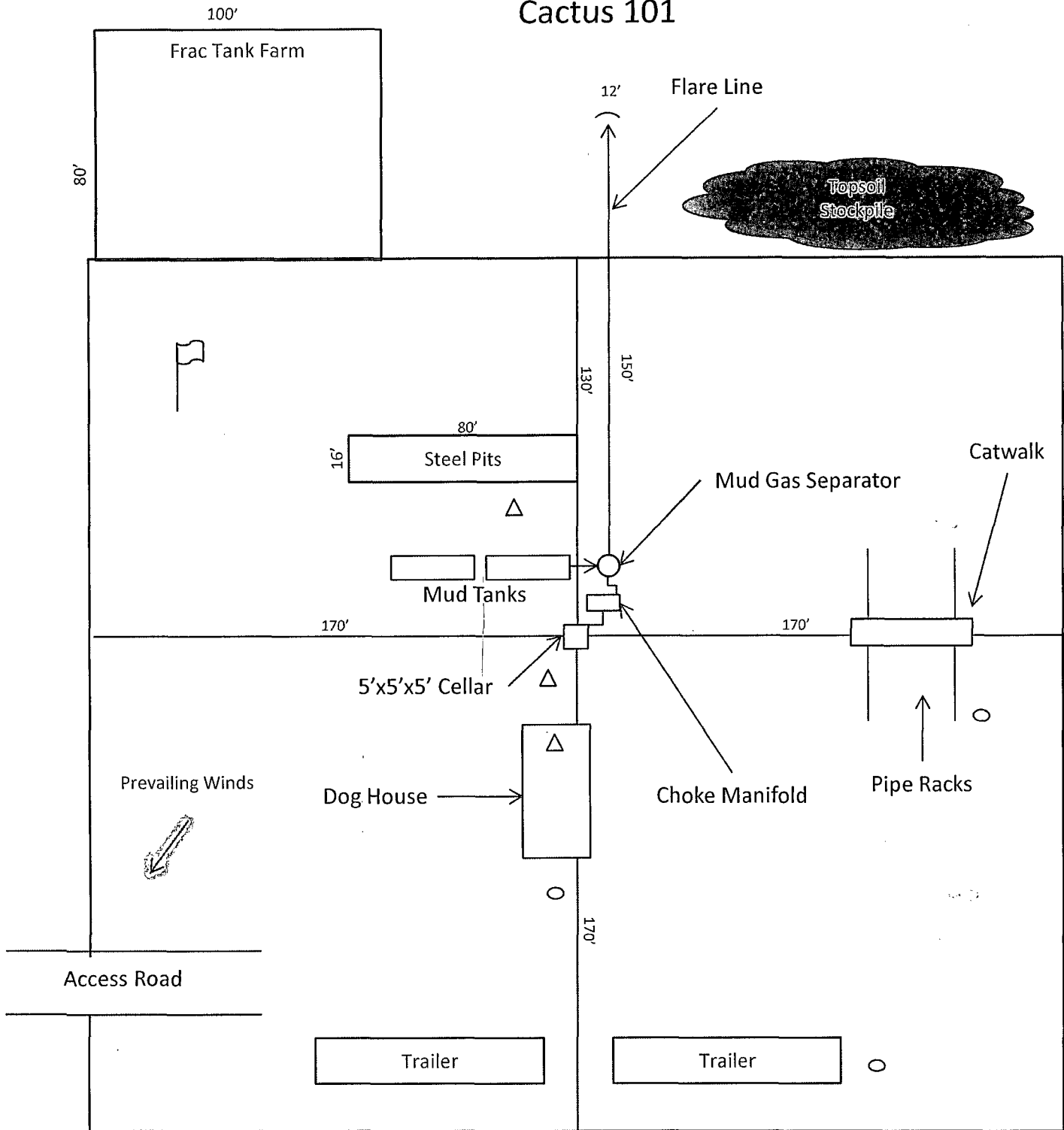
Midwest Hose
& Specialty, Inc.

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)

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 25 Federal 1
Cimarex Energy Co.
25-235-32E
SHL 330 FSL & 660 FEL
BHL 330 FNL & 660 FEL
Lea County, NM