

HOBBS OCD

DEC 31 2012

RECEIVED

OCD-HOBBS

Form 3160-3
(April 2004)FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other☒ Single Zone ☐ Multiple Zone

Split Estate

2. Name of Operator

Cimarex Energy Co. of Colorado

3a. Address

600 N. Marienfeld St., Ste. 600; Midland, TX 79701

3b. Phone No. (include area code)

432-571-7800

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

At Surface

26-23S-33E 330 FSL & 510 FWL

At proposed prod. Zone

26-23S-33E 330 FNL & 660 FWL

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

5. Lease Serial No.

NM-126495

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

W. Bell Lake "26" Federal #1H

9. API Well No.

30-025-

40905

10. Field and Pool, or Exploratory

Bell Lake; Bone Spring Wildcat

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

26, 23S-33E

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

320

17. Spacing Unit dedicated to this well

W2W2

160

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

NA

19. Proposed Depth

MD 15840

TVD 11330

20. BLM/BIA Bond No. on File

NM-2575

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

3653' GR

22. Approximate date work will start*

9.1.12

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
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

Zeno Farris

Name (Printed/Typed)

Zeno Farris

Date

5.31.12

Title

Manager Operations Administration

Approved By (Signature)

/s/ James A. Amos

Name (Printed/Typed)

Date

DEC 27, 2012

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

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

JAN 08 2013

Operator - Landowner Agreement

Company: Cimarex Energy Co. of Colorado
Proposed Well: W. Bell Lake "26" Federal #1H
Federal Lease Number: NM-126495

This is to advise that Cimarex Energy Co. of Colorado has an agreement with: Brininstool XL Ranch LLC (424 XL Road, Jal NM 88252, (575) 390-1881), the surface owner, concerning entry and surface restoration after completion of drilling operations at the above described well.

After abandonment of the well, all pits will be filled and levelled and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

5.31.12
Date

Zeno Farris
Signature Zeno Farris
Manager, Operations Administration

Drilling Plan
W. Bell Lake "26" Federal #1H
Cimarex Energy Co. of Colorado
Unit M, Section 26
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 26-23S-33E 330 FSL & 510 FWL
BHL 26-23S-33E 330 FNL & 660 FWL
- 2 **Elevation above sea level:** 3653 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 15840 TVD 11330
- 6 **Estimated tops of geological markers:**

Rustler	1350
T. Salt	1700
Castille	3800
B. Salt	4800
Lamar	5275
Delaware Sands	5300
Bone Spring	9160
Avalon Shale	9500
1st Bone Spring	10280
2nd Bone Spring	10910
3rd Bone Spring	11500
- 7 **Possible mineral bearing formations:**

Bone Spring	Oil
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8 **Proposed Mud Circulating System:**

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 1375' 1440'	8.4 - 8.6	28	NC	FW
1375' to 5200'	10.0	30-32	NC	Brine water
5200' to 15840'	8.6-8.8	28-32	NC	FW/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

After setting surface & intermediate csg, drill 8 3/4" hole to KOP @ 11044' and log kick off and drill through the curve to lateral TD @ 15840' MD, 11330' TVD. Run 5-1/2" csg to TD.

Drilling Plan
W. Bell Lake "26" Federal #1H
 Cimarex Energy Co. of Colorado
 Unit M, Section 26
 T23S-R33E; Lea County, NM

9 Casing & Cementing Program:

See COA

String	Hole Size	Depth	Casing OD	Weight	Collar	Grade
Surface	17 1/2"	0' to 1375'	New 13 3/8"	48#	STC	H-40
Intermediate	12 1/4"	0' to 5200'	New 9 5/8"	40#	LTC	N-80
Production	8 3/4"	0' to 15840'	New 5 1/2"	17#	LTC	P-110

10 Cementing:

Surface

Lead: 700SKS Premium Plus + 2% CaCl + 4% Gel. 13.5ppg 1.75 yield 100% Excess

Tail: 240SKS Premium Plus + 2% CaCl. 14.8ppg 1.34 yield 50% Excess

TOC Surface Centralizers per Onshore order 2.III.B.1.f

Intermediate

Lead: 1100SKS HLPP + 5% salt + 5 lbm gilsonite 12.9ppg 1.92 yield 75% Excess

Tail: 350SKS Premium Plus + 1% CaCl 14.8ppg 1.34 yield 50% Excess

TOC Surface

Production

Lead: 850SKS EconoCem - H + 0.5/10 % HR-601 .5/10% Halad 322. 11.9ppg 2.48 yield 50% Excess

Tail: 1460SKS Versacem - H + 0.5% Halad(R)-344 + 0.4% CFR-3 + 1 lbm/sk salt + 0.2% HR-601 14.5ppg 1.22 yield 25% Excess

TOC 4700' 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 142' according to the State Engineer. Fresh water zones will be protected by setting 13 3/8" casing at 1375' and cementing to surface and 9 5/8" casing at 5200' and cementing to surface. Hydrocarbon zones will be protected by setting 5 1/2" casing at 15840' and cementing to 4700'.

<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 3/8" 5000 psi working pressure BOP system 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. Mud gas separator will be installed 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 13 3/8" casing through the running of production casing, the well will be equipped with a 5000 psi BOP system.

Before drilling out of surface casing BOPS will be tested by an independent service company to 250 psi low and 3000 psi high. Hydril will be tested to 250 psi low and 1500 psi high. Before drilling out of intermediate casing BOPS 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 115 (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: 63270

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

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

Drilling Plan
W. Bell Lake "26" Federal #1H
Cimarex Energy Co. of Colorado
Unit M, Section 26
T23S-R33E; Lea County, NM

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

- A. Mud logging program: 2 man unit from 5200' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR 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 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 **5099** Estimated BHT **130°**

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 potential as **an oil well.**



Cimarex Energy Co. of Colorado

Location: Lea County, NM
Field: (W. Bell) Sec 26, T23S, R33E
Facility: W. Bell Lake 26 Fed No.1H

Slot: No.1H SHL
Well: No.1H
Wellbore: No.1H 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	1.393	0.00	0.00	0.00	0.00	0.00
Est KOP	11044.00	0.000	1.393	11044.00	0.00	0.00	0.00	0.00
End of Build	11493.25	90.000	1.393	11330.00	285.92	6.95	20.03	286.00
No.1H PBHL	15840.34	90.000	1.393	11330.00	4631.72	112.63	0.00	4633.09

Plot reference wellpath is Prelm_1

True vertical depths are referenced to Rig on No.1H SHL (RT)

Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet

Measured depths are referenced to Rig on No.1H SHL (RT)

North Reference: Grid north

Rig on No.1H SHL (RT) to Mean Sea Level: 3653 feet

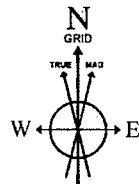
Scale: True distance

Mean Sea Level to Mud line (At Slot: No.1H SHL): -3653 feet

Depths are in feet

Coordinates are in feet referenced to Slot

Created by: gentbry on 2/17/2012



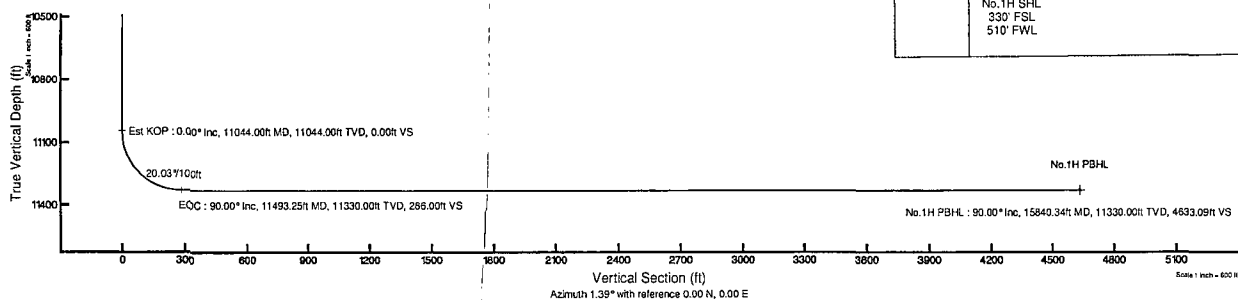
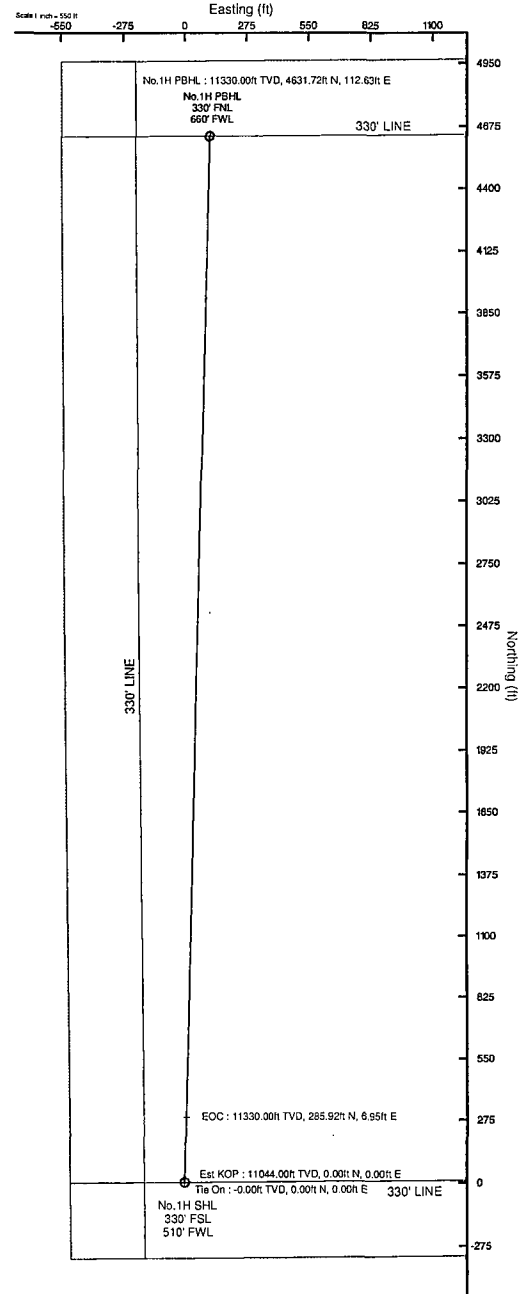
BGGM (1945.0 to 2013.0) Dip: 60.18° Field: 48585.7 nT
Magnetic North is 7.57 degrees East of True North (at 2/17/2012)

Grid North is 0.42 degrees East of True North

To correct azimuth from True to Grid subtract 0.42 degrees

To correct azimuth from Magnetic to Grid add 7.15 degrees

For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.15 = 97.15





Planned Wellpath Report

Prelm_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

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	Gentbry
Scale	0.999976	Report Generated	2/17/2012 at 2:21:01 PM
Convergence at slot	0.42° East	Database/Source file	WA Midland/No.1H_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	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W
Facility Reference Pt			783450.90	462583.60	32°16'09.436"N	103°33'00.017"W
Field Reference Pt			783450.90	462583.60	32°16'09.436"N	103°33'00.017"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.1H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (RT) to Mean Sea Level	3653.00ft
Vertical Reference Pt	Rig on No.1H SHL (RT)	Rig on No.1H SHL (RT) to Mud Line at Slot (No.1H SHL)	0.00ft
MD Reference Pt	Rig on No.1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	1.39°



Planned Wellpath Report

Prelm_1
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REFERENCE WELLPATH IDENTIFICATION

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Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

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	1.393	0.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	Tie On
100.00†	0.000	1.393	100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
200.00†	0.000	1.393	200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
300.00†	0.000	1.393	300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
400.00†	0.000	1.393	400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
500.00†	0.000	1.393	500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
600.00†	0.000	1.393	600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
700.00†	0.000	1.393	700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
800.00†	0.000	1.393	800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
900.00†	0.000	1.393	900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1000.00†	0.000	1.393	1000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1100.00†	0.000	1.393	1100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1200.00†	0.000	1.393	1200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1300.00†	0.000	1.393	1300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1400.00†	0.000	1.393	1400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1500.00†	0.000	1.393	1500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1600.00†	0.000	1.393	1600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1700.00†	0.000	1.393	1700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1800.00†	0.000	1.393	1800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
1900.00†	0.000	1.393	1900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2000.00†	0.000	1.393	2000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2100.00†	0.000	1.393	2100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2200.00†	0.000	1.393	2200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2300.00†	0.000	1.393	2300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2400.00†	0.000	1.393	2400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2500.00†	0.000	1.393	2500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2600.00†	0.000	1.393	2600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2700.00†	0.000	1.393	2700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2800.00†	0.000	1.393	2800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
2900.00†	0.000	1.393	2900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3000.00†	0.000	1.393	3000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3100.00†	0.000	1.393	3100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3200.00†	0.000	1.393	3200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3300.00†	0.000	1.393	3300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3400.00†	0.000	1.393	3400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3500.00†	0.000	1.393	3500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3600.00†	0.000	1.393	3600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3700.00†	0.000	1.393	3700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3800.00†	0.000	1.393	3800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
3900.00†	0.000	1.393	3900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4000.00†	0.000	1.393	4000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4100.00†	0.000	1.393	4100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4200.00†	0.000	1.393	4200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4300.00†	0.000	1.393	4300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4400.00†	0.000	1.393	4400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	



Planned Wellpath Report

Prelm_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

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	1.393	4500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4600.00†	0.000	1.393	4600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4700.00†	0.000	1.393	4700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4800.00†	0.000	1.393	4800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
4900.00†	0.000	1.393	4900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5000.00†	0.000	1.393	5000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5100.00†	0.000	1.393	5100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5200.00†	0.000	1.393	5200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5300.00†	0.000	1.393	5300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	Delaware Sands
5400.00†	0.000	1.393	5400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5500.00†	0.000	1.393	5500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5600.00†	0.000	1.393	5600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5700.00†	0.000	1.393	5700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5800.00†	0.000	1.393	5800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
5900.00†	0.000	1.393	5900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6000.00†	0.000	1.393	6000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6100.00†	0.000	1.393	6100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6200.00†	0.000	1.393	6200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6300.00†	0.000	1.393	6300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6400.00†	0.000	1.393	6400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6500.00†	0.000	1.393	6500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6600.00†	0.000	1.393	6600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6700.00†	0.000	1.393	6700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6800.00†	0.000	1.393	6800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
6900.00†	0.000	1.393	6900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7000.00†	0.000	1.393	7000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7100.00†	0.000	1.393	7100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7200.00†	0.000	1.393	7200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7300.00†	0.000	1.393	7300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7400.00†	0.000	1.393	7400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7500.00†	0.000	1.393	7500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7600.00†	0.000	1.393	7600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7700.00†	0.000	1.393	7700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7800.00†	0.000	1.393	7800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
7900.00†	0.000	1.393	7900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8000.00†	0.000	1.393	8000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8100.00†	0.000	1.393	8100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8200.00†	0.000	1.393	8200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8300.00†	0.000	1.393	8300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8400.00†	0.000	1.393	8400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8500.00†	0.000	1.393	8500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8600.00†	0.000	1.393	8600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8700.00†	0.000	1.393	8700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8800.00†	0.000	1.393	8800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
8900.00†	0.000	1.393	8900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	



Planned Wellpath Report

Prelm_1

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

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
9000.00†	0.000	1.393	9000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9100.00†	0.000	1.393	9100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9160.00†	0.000	1.393	9160.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	Bone Spring
9200.00†	0.000	1.393	9200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9300.00†	0.000	1.393	9300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9400.00†	0.000	1.393	9400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9500.00†	0.000	1.393	9500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	Avalon Shale
9600.00†	0.000	1.393	9600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9700.00†	0.000	1.393	9700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9800.00†	0.000	1.393	9800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
9900.00†	0.000	1.393	9900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10000.00†	0.000	1.393	10000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10100.00†	0.000	1.393	10100.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10200.00†	0.000	1.393	10200.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10280.00†	0.000	1.393	10280.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	1st BSS
10300.00†	0.000	1.393	10300.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10400.00†	0.000	1.393	10400.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10500.00†	0.000	1.393	10500.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10600.00†	0.000	1.393	10600.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10700.00†	0.000	1.393	10700.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10800.00†	0.000	1.393	10800.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10900.00†	0.000	1.393	10900.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
10910.00†	0.000	1.393	10910.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	2nd BSS
11000.00†	0.000	1.393	11000.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	
11044.00†	0.000	1.393	11044.00	0.00	0.00	0.00	783450.90	462583.60	32°16'09.436"N	103°33'00.017"W	0.00	Est KOP
11100.00†	11.219	1.393	11099.64	5.47	5.46	0.13	783451.03	462589.06	32°16'09.490"N	103°33'00.015"W	20.03	
11200.00†	31.252	1.393	11192.38	41.50	41.49	1.01	783451.91	462625.09	32°16'09.847"N	103°33'00.002"W	20.03	
11300.00†	51.286	1.393	11267.16	107.13	107.09	2.60	783453.50	462690.69	32°16'10.496"N	103°32'59.978"W	20.03	
11400.00†	71.319	1.393	11314.93	194.40	194.34	4.73	783455.63	462777.93	32°16'11.359"N	103°32'59.946"W	20.03	
11493.25	90.000	1.393	11330.00	286.00	285.92	6.95	783457.85	462869.51	32°16'12.265"N	103°32'59.912"W	20.03	End of Build
11500.00†	90.000	1.393	11330.00	292.75	292.67	7.12	783458.02	462876.26	32°16'12.332"N	103°32'59.909"W	0.00	
11600.00†	90.000	1.393	11330.00	392.75	392.64	9.55	783460.45	462976.23	32°16'13.321"N	103°32'59.873"W	0.00	
11700.00†	90.000	1.393	11330.00	492.75	492.61	11.98	783462.88	463076.19	32°16'14.310"N	103°32'59.836"W	0.00	
11800.00†	90.000	1.393	11330.00	592.75	592.58	14.41	783465.31	463176.16	32°16'15.299"N	103°32'59.799"W	0.00	
11900.00†	90.000	1.393	11330.00	692.75	692.55	16.84	783467.74	463276.13	32°16'16.288"N	103°32'59.762"W	0.00	
12000.00†	90.000	1.393	11330.00	792.75	792.52	19.27	783470.17	463376.10	32°16'17.277"N	103°32'59.725"W	0.00	
12100.00†	90.000	1.393	11330.00	892.75	892.49	21.70	783472.60	463476.07	32°16'18.266"N	103°32'59.689"W	0.00	
12200.00†	90.000	1.393	11330.00	992.75	992.46	24.13	783475.03	463576.03	32°16'19.255"N	103°32'59.652"W	0.00	
12300.00†	90.000	1.393	11330.00	1092.75	1092.43	26.56	783477.46	463676.00	32°16'20.244"N	103°32'59.615"W	0.00	
12400.00†	90.000	1.393	11330.00	1192.75	1192.40	29.00	783479.90	463775.97	32°16'21.233"N	103°32'59.578"W	0.00	
12500.00†	90.000	1.393	11330.00	1292.75	1292.37	31.43	783482.33	463875.94	32°16'22.222"N	103°32'59.541"W	0.00	
12600.00†	90.000	1.393	11330.00	1392.75	1392.34	33.86	783484.76	463975.90	32°16'23.211"N	103°32'59.504"W	0.00	
12700.00†	90.000	1.393	11330.00	1492.75	1492.31	36.29	783487.19	464075.87	32°16'24.200"N	103°32'59.468"W	0.00	
12800.00†	90.000	1.393	11330.00	1592.75	1592.28	38.72	783489.62	464175.84	32°16'25.189"N	103°32'59.431"W	0.00	
12900.00†	90.000	1.393	11330.00	1692.75	1692.25	41.15	783492.05	464275.81	32°16'26.178"N	103°32'59.394"W	0.00	



Planned Wellpath Report

Prelm 1

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

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
13000.00†	90.000	1.393	11330.00	1792.75	1792.22	43.58	783494.48	464375.78	32°16'27.167"N	103°32'59.357"W	0.00	
13100.00†	90.000	1.393	11330.00	1892.75	1892.19	46.01	783496.91	464475.74	32°16'28.156"N	103°32'59.320"W	0.00	
13200.00†	90.000	1.393	11330.00	1992.75	1992.16	48.44	783499.34	464575.71	32°16'29.145"N	103°32'59.284"W	0.00	
13300.00†	90.000	1.393	11330.00	2092.75	2092.13	50.87	783501.77	464675.68	32°16'30.134"N	103°32'59.247"W	0.00	
13400.00†	90.000	1.393	11330.00	2192.75	2192.10	53.31	783504.20	464775.65	32°16'31.123"N	103°32'59.210"W	0.00	
13500.00†	90.000	1.393	11330.00	2292.75	2292.07	55.74	783506.64	464875.62	32°16'32.112"N	103°32'59.173"W	0.00	
13600.00†	90.000	1.393	11330.00	2392.75	2392.05	58.17	783509.07	464975.58	32°16'33.101"N	103°32'59.136"W	0.00	
13700.00†	90.000	1.393	11330.00	2492.75	2492.02	60.60	783511.50	465075.55	32°16'34.090"N	103°32'59.099"W	0.00	
13800.00†	90.000	1.393	11330.00	2592.75	2591.99	63.03	783513.93	465175.52	32°16'35.079"N	103°32'59.063"W	0.00	
13900.00†	90.000	1.393	11330.00	2692.75	2691.96	65.46	783516.36	465275.49	32°16'36.068"N	103°32'59.026"W	0.00	
14000.00†	90.000	1.393	11330.00	2792.75	2791.93	67.89	783518.79	465375.45	32°16'37.057"N	103°32'58.989"W	0.00	
14100.00†	90.000	1.393	11330.00	2892.75	2891.90	70.32	783521.22	465475.42	32°16'38.046"N	103°32'58.952"W	0.00	
14200.00†	90.000	1.393	11330.00	2992.75	2991.87	72.75	783523.65	465575.39	32°16'39.035"N	103°32'58.915"W	0.00	
14300.00†	90.000	1.393	11330.00	3092.75	3091.84	75.18	783526.08	465675.36	32°16'40.024"N	103°32'58.879"W	0.00	
14400.00†	90.000	1.393	11330.00	3192.75	3191.81	77.62	783528.51	465775.33	32°16'41.013"N	103°32'58.842"W	0.00	
14500.00†	90.000	1.393	11330.00	3292.75	3291.78	80.05	783530.94	465875.29	32°16'42.002"N	103°32'58.805"W	0.00	
14600.00†	90.000	1.393	11330.00	3392.75	3391.75	82.48	783533.38	465975.26	32°16'42.991"N	103°32'58.768"W	0.00	
14700.00†	90.000	1.393	11330.00	3492.75	3491.72	84.91	783535.81	466075.23	32°16'43.980"N	103°32'58.731"W	0.00	
14800.00†	90.000	1.393	11330.00	3592.75	3591.69	87.34	783538.24	466175.20	32°16'44.969"N	103°32'58.694"W	0.00	
14900.00†	90.000	1.393	11330.00	3692.75	3691.66	89.77	783540.67	466275.17	32°16'45.958"N	103°32'58.658"W	0.00	
15000.00†	90.000	1.393	11330.00	3792.75	3791.63	92.20	783543.10	466375.13	32°16'46.947"N	103°32'58.621"W	0.00	
15100.00†	90.000	1.393	11330.00	3892.75	3891.60	94.63	783545.53	466475.10	32°16'47.936"N	103°32'58.584"W	0.00	
15200.00†	90.000	1.393	11330.00	3992.75	3991.57	97.06	783547.96	466575.07	32°16'48.925"N	103°32'58.547"W	0.00	
15300.00†	90.000	1.393	11330.00	4092.75	4091.54	99.49	783550.39	466675.04	32°16'49.914"N	103°32'58.510"W	0.00	
15400.00†	90.000	1.393	11330.00	4192.75	4191.51	101.93	783552.82	466775.01	32°16'50.903"N	103°32'58.474"W	0.00	
15500.00†	90.000	1.393	11330.00	4292.75	4291.48	104.36	783555.25	466874.97	32°16'51.892"N	103°32'58.437"W	0.00	
15600.00†	90.000	1.393	11330.00	4392.75	4391.45	106.79	783557.69	466974.94	32°16'52.881"N	103°32'58.400"W	0.00	
15700.00†	90.000	1.393	11330.00	4492.75	4491.42	109.22	783560.12	467074.91	32°16'53.870"N	103°32'58.363"W	0.00	
15800.00†	90.000	1.393	11330.00	4592.75	4591.39	111.65	783562.55	467174.88	32°16'54.859"N	103°32'58.326"W	0.00	
15840.34	90.000	1.393	11330.00	4633.09	4631.72	112.63	783563.53	467215.20	32°16'55.258"N	103°32'58.311"W	0.00	No.1H PBHL



Planned Wellpath Report

Prelm_1

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(W. Bell) Sec 26, T23S, R33E	Wellbore	No.1H PWB
Facility	W. Bell Lake 26 Fed No.1H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.1H PBHL		11330.00	4631.72	112.63	783563.53	467215.20	32°16'55.258"N	103°32'58.311"W	point

SURVEY PROGRAM - Ref Wellbore: No.1H PWB Ref Wellpath: Prelm_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15840.34	NaviTrak (Standard)		No.1H PWB

SR & A

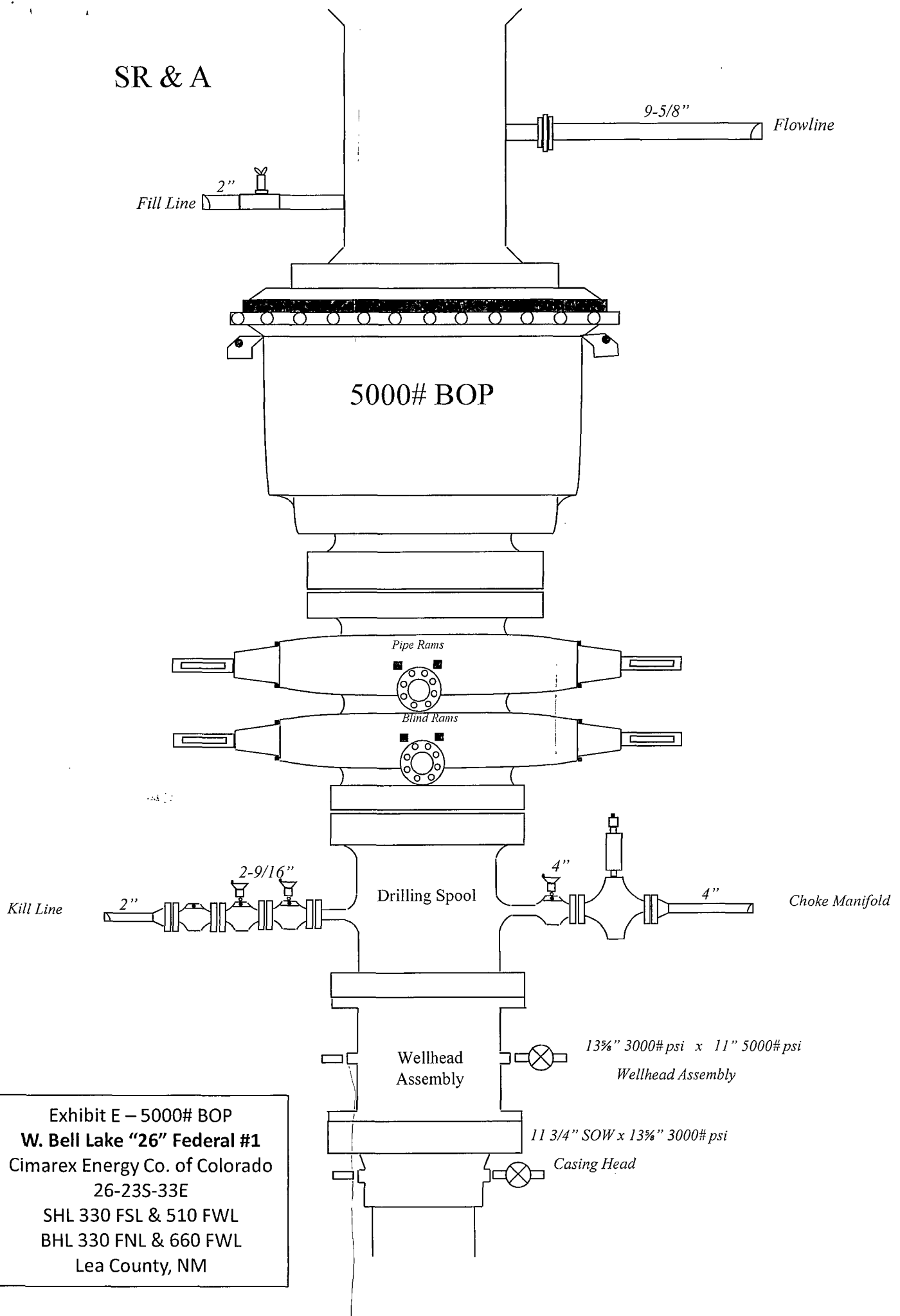


Exhibit E – 5000# BOP
W. Bell Lake "26" Federal #1
Cimarex Energy Co. of Colorado
26-23S-33E
SHL 330 FSL & 510 FWL
BHL 330 FNL & 660 FWL
Lea County, NM

Drilling Operations Choke Manifold 5M Service

Exhibit E-1 – Choke Manifold Diagram

W. Bell Lake "26" Federal #1

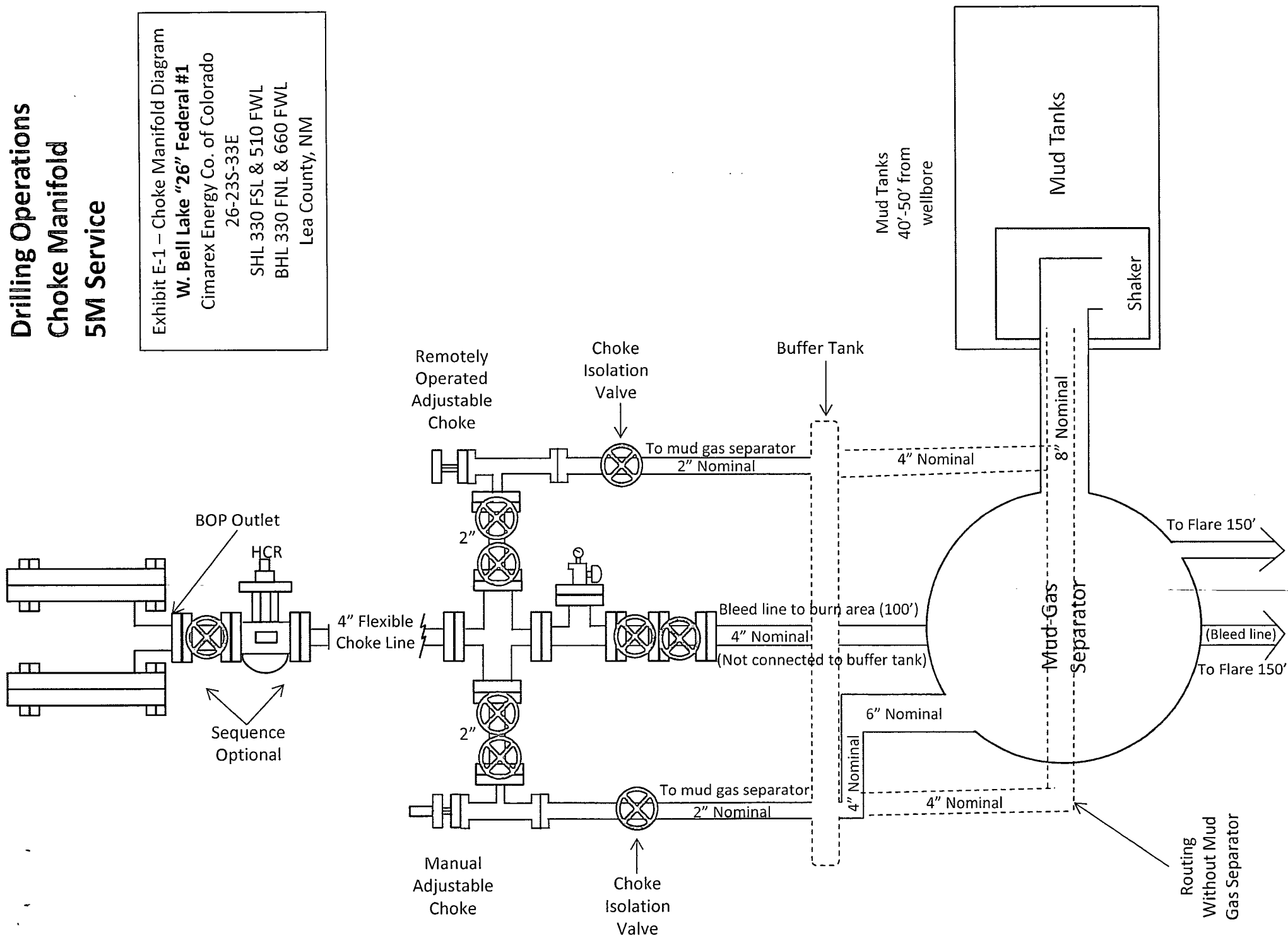
Cimarex Energy Co. of Colorado

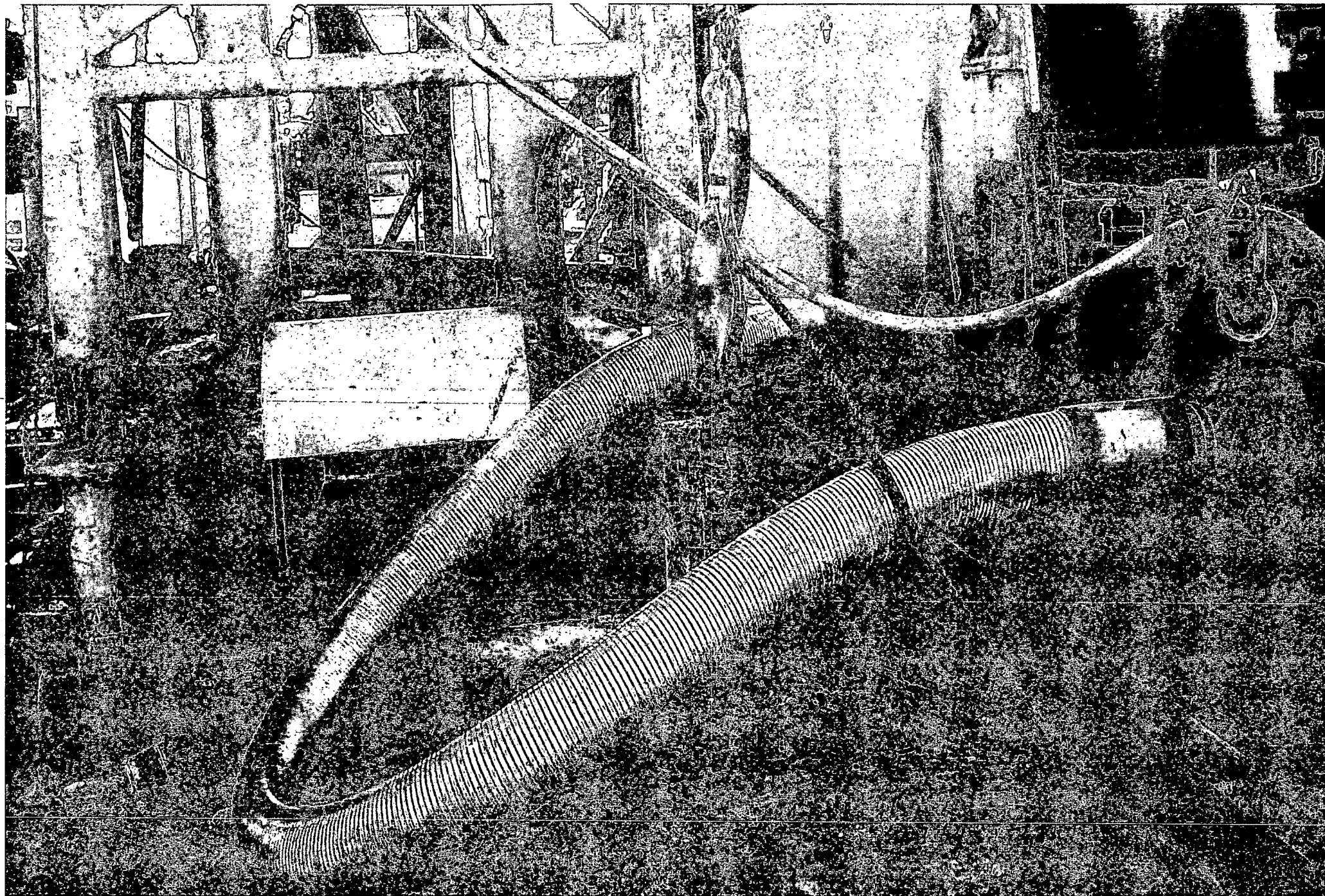
26-23S-33E

SHL 330 FSL & 510 FWL

BHL 330 FNL & 660 FWL

Lea County, NM





Cactus Rig 115
Serial # 63270

MIDWEST
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT		
Customer: CACTUS DRILLING		P.O. Number: RIG#147
HOSE SPECIFICATIONS		
Type: CHOK & KILL		Length: 35'
I.D. 4" INCHES		O.D. 8"
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000	BURST PRESSURE
COUPLINGS		
Stem Part No. E4.0X64WB		Ferrule No. FERRULE-128
Type of Coupling: 4-1/16 10K FLANGE(BX-155)		Die Size:
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: SERIAL#63270		
Date: 7/14/2010	Tested By: BOBBY FINK	Approved: BRENT BURNETT



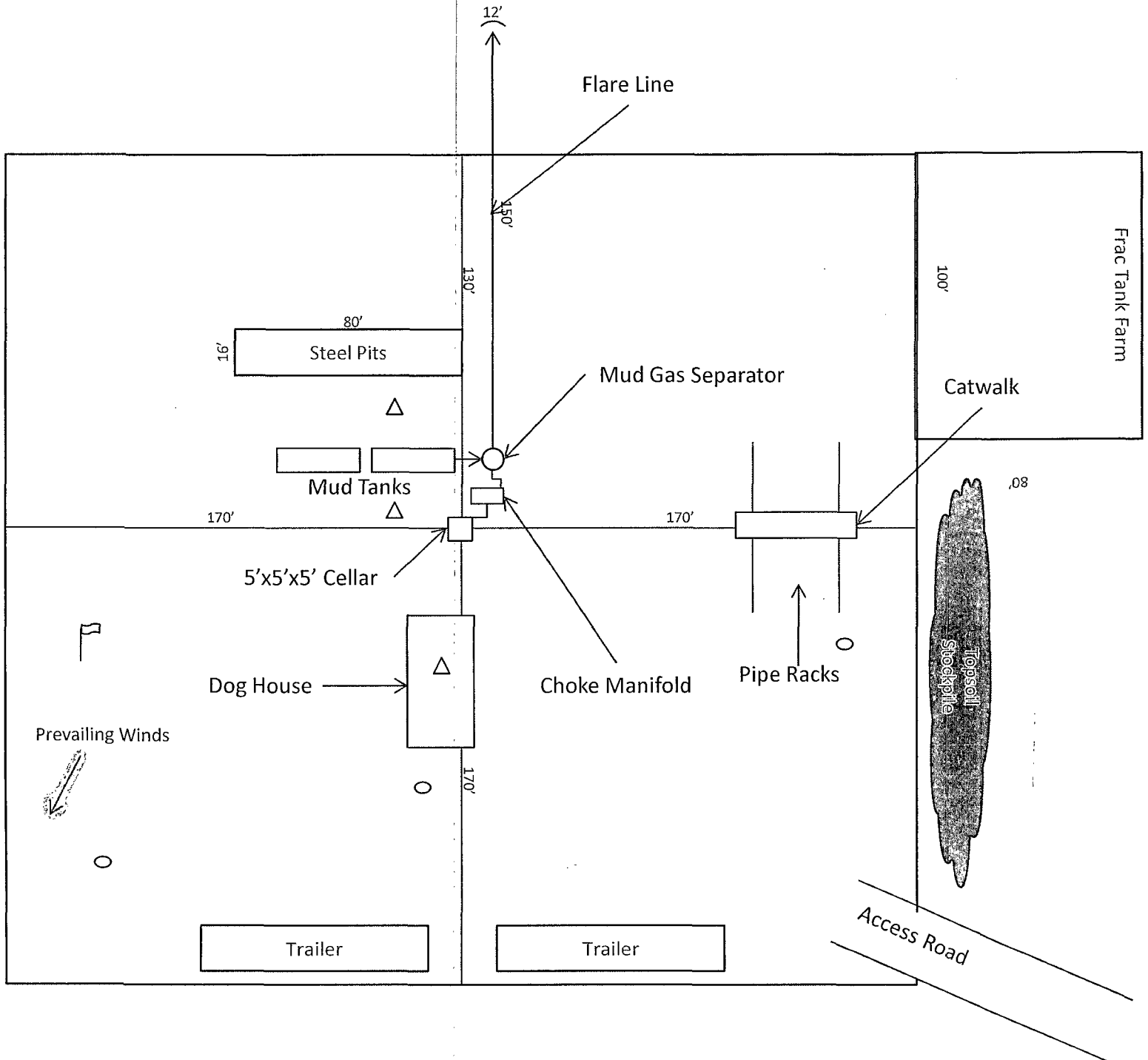
Midwest Hose
& Specialty, Inc.

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 115



1"=50'



Wind Direction Indicators
(wind sock or streamers)



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



Briefing areas

Exhibit D – Rig Diagram
W. Bell Lake "26" Federal #1
 Cimarex Energy Co. of Colorado
 26-23S-33E
 SHL 330 FSL & 510 FWL
 BHL 330 FNL & 660 FWL
 Lea County, NM