

ATS-09-62

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OCD Hobbs

Form 3160-3
(April 2004)

MAR 14 2011
HOBBSDUCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-052
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	3b. Phone No. (include area code) 432-571-7800	8. Lease Name and Well No. Mallon 35 Federal No. 6 H <29024>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface Unit E 2310 FNL & 330 FWL At Bottom Hole Unit H 1980 FNL & 510 FEL At proposed prod. Zone Unit F 2310 FNL & 330 FWL Horizontal Bone Spring test		9. API Well No. 30-025- 40085
14. Distance in miles and direction from nearest town or post office*		10. Field and Pool, or Exploratory Quail Ridge; Bone Spring, South <32570>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 330		11. Sec., T. R. M. or Blk. and Survey or Area 35-19S-34E
16. No of acres in lease NM-052 - 1240 acres		12. County or Parish Lea
17. Spacing Unit dedicated to this well S2N2 160		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A		20. BLM/BIA Bond No. on File NM-2575
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3705' GR	22. Approximate date work will start* 01.15.11	23. Estimated duration 25-30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor | 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 Zeno Farris	Name (Printed/Typed) Zeno Farris	Date 12.01.10
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Title

Manager Operations Administration

Approved By (Signature) /S/ JEANETTE MARTINEZ	Name (Printed/Typed)	Date MAR 10 2011
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Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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

States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

CATTAN CONTROLLED WATER BASIN

K203/12/11

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED
AND SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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OIL CONSERVATION DIVISION
HOBBSUCD

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-40085	Pool Code 3757D	Pool Name Lea; Bone Spring
Property Code 29029	Property Name MALLON "35" FEDERAL	Well Number 6 H
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3705'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	35	19 S	34 E		2310	NORTH	330	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	35	19 S	34 E		1980	NORTH	510	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION Lat - N 32°37'03.62" Long - W 103°32'18.23" NMSPCE- N 589354.9 E 786095.7 (NAD-83) BOTTOM HOLE LOCATION Lat - N 32°37'06.96" Long - W 103°31'26.31" NMSPCE- N 589726.671 E 790533.506 (NAD-83)	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Natalie Krueger</i> 11/30/2010 Signature Date Natalie Krueger Printed Name SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 2009 Date Surveyed Signature of Professional Surveyor 7977 Certificate No. Gary L. Jones 7977 BASIN SURVEYS
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Application to Drill
Mallon 35 Federal No. 6
 Cimarex Energy Co. of Colorado
 Unit E, Section 35
 T19S-R34E, 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 2310 FNL & 330 FWL
 BHL 1980 FNL & 510 FEL

2 Elevation above sea level: 3705' 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 15362' TVD 10990' Pilot Hole TVD 11200'

6 Estimated tops of geological markers:

Rustler	1200'	Bone Spring	7850'
Yates	3020'	Wolfcamp	11100'
Capitan	3650'	Strawn	12110'
Delaware	5180'	Morrow	12820'

7 Possible mineral bearing formation:

Bone Spring	Oil
Delaware	Oil
Yates/7 Rivers	Oil

8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 1775' ¹⁷⁷⁵ 1750'	8.4 - 8.6	28	NC	FW
1750' to 5500'	10.0	30-32	NC	Brine water
5500' to 15362'	8.4 - 9.5	30-32	NC	FW, brine

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Proposed drilling Plan

Drill 8 3/4" pilot hole to 11200' and log. Set 250 sx Class H cmt plug from 10700'-11200.' Kick off 8 3/4" lateral @ 10799' and drill to TD @ 15362.' Run 5 1/2" 17# P-110 LTC from 0-15362.'

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Application to Drill
Mallon 35 Federal No. 6
 Cimarex Energy Co. of Colorado
 Unit E, Section 35
 T19S-R34E, Lea County, NM

9 Casing & Cementing Program:

String	Hole Size	Depth	Casing OD	Weight	Collar	Grade
<i>See CoA</i> Surface	17½"	0' to 1750' 1750'	New 13¾"	54.5#	STC	J-55
Intermediate	12¾"	0' to 5500'	New 9¾"	40#	LTC	N-80
Production	8¾"	0' to 15362'	New 5½"	17#	LTC	P-110

10 Cementing:

Surface 650 sx Premium Plus + 2% CaCl₂ (wt 14.8, yld 1.35)

See CoA

TOC Surface

Intermediate Lead: 415 sx Econocem + 3% Salt + 2% CaCl₂ + 3 lbm/sk Gilsonite (wt 11.7, yld 2.06)

See CoA

Tail: 650 sks Premium Plus + 1% CaCl₂ (wt 14.8, yld 1.34)

TOC Surface

Production Lead: 500 sx EconoCem + 5# Gilsonite (wt 11.9, yld 2.48)

Tail: 1730 sx Halcem (wt 15.6, yld 1.19)

TOC 5300'

Depth to groundwater is approximately 135' according to the State Engineer. Fresh water zones will be protected by setting 13¾" casing at ~~1750'~~ and cementing to surface. Hydrocarbon zones will be protected by setting 9¾" casing at 5500' and cementing to surface, and by setting 5½" casing at 15362' and cementing to 5300'.

Collapse Factor Burst Factor Tension Factor

1.125

1.125

1.6

11 Pressure control Equipment:

See CoA

Exhibit "E". A 13¾" 5000 PSI working pressure BOP tested to ~~3000~~ psi 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 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 13¾" casing through the running of production casing, the well will be equipped with a 5000 psi BOP system tested to ~~3000~~ psi.

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.

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 (No)

Application to Drill
Mallon 35 Federal No. 6
Cimarex Energy Co. of Colorado
Unit E, Section 35
T19S-R34E, Lea County, NM

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

- A. Mud logging program: 2 man unit from 3100' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- 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 3000 psi 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 potentialized as an oil well.

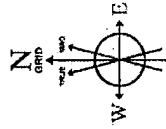
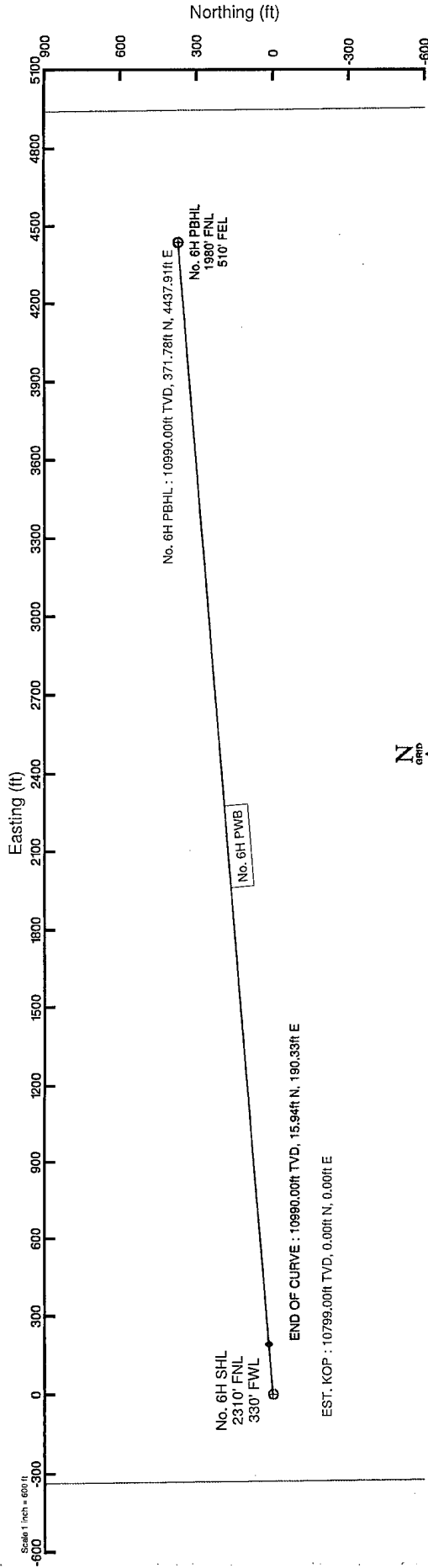
Cimarex Energy Co.

Location: Lea County, NM
Field: (Mallon) Sec 35, T19S, R34E
Facility: Mallon 35 Fed No. 6H

**BAKER
HUGHES**
INTEQ

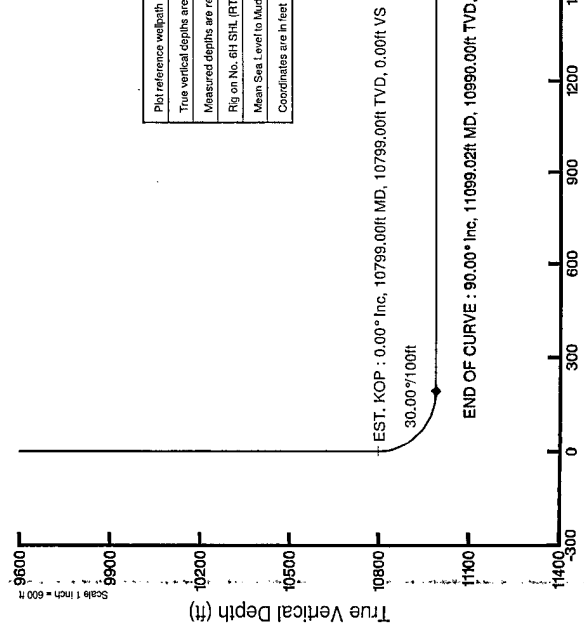
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	85.211	0.00	0.00	0.00	0.00	0.00
EST. KOP	10799.00	0.000	85.211	10799.00	0.00	0.00	0.00	0.00
END OF CURVE	11099.02	90.000	85.211	10990.00	15.94	190.33	30.00	191.00
No. 6H PBHL	15361.48	90.000	85.211	10990.00	371.78	4437.91	0.00	4453.46



BGGM (1945.0 to 2011.0) Dip: 80.62° Field: 49086.7 mT
Magnetic North is 7.85 degrees East of True North (at 10/7/2009)
Grid North is 0.43 degrees East of True North
To correct azimuth from true to grid add 7.42 degrees
To correct azimuth from magnetic to grid add 7.42 degrees
For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.42 = 97.42

Plot reference wellpath is Prelim_1	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (2001), US feet
True vertical depths are referenced to Rig on No. 6H SHL (RT)	North Reference: Grid north
Measured depths are referenced to Rig on No. 6H SHL (RT)	Scale: True distance
Rig on No. 6H SHL (RT) to Mean Sea Level: 3705 feet	Depths are in feet
Mean Sea Level to Mud Line (Facility: Mallon 35 Fed No. 6H): -3705 feet	
Coordinates are in feet referenced to Facility Center	Created by: Victor Hernandez on 10/7/2009



Vertical Section (ft)
Azimuth 85.21° with reference 0.00 N, 0.00 E

Scale 1 inch = 600 ft



Planned Wellpath Report

Prelim_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Lea County, NM	Well	No. 6H
Field	(Mallon) Sec 35, T19S, R34E	Wellbore	No. 6H PWB
Facility	Mallon 35 Fed No. 6H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999978	Report Generated	10/7/2009 at 3:27:58 PM
Convergence at slot	0.43° East	Database/Source file	WA_Midland/No._6H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	786095.70	589354.90	32°37'03.617"N	103°32'18.225"W
Facility Reference Pt			786095.70	589354.90	32°37'03.617"N	103°32'18.225"W
Field Reference Pt			786447.20	587045.00	32°36'40.736"N	103°32'14.318"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 6H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 6H SHL (RT) to Mean Sea Level	3705.00ft
Vertical Reference Pt	Rig on No. 6H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 6H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	85.21°



Planned Wellpath Report

Prelim_1
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Field	(Mallon) Sec 35, T19S, R34E	Wellbore	No. 6H PWB
Facility	Mallon 35 Fed No. 6H		

WELLPATH DATA (49 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	85.211	0.00	0.00	0.00	0.00	786095.70	589354.90	32°37'03.617"N	103°32'18.225"W	0.00	Tie On
10799.00†	0.000	85.211	10799.00	0.00	0.00	0.00	786095.70	589354.90	32°37'03.617"N	103°32'18.225"W	0.00	EST. KOP
10899.00†	29.998	85.211	10894.49	25.59	2.14	25.50	786121.20	589357.04	32°37'03.636"N	103°32'17.927"W	30.00	
10999.00†	59.996	85.211	10964.40	95.49	7.97	95.15	786190.85	589362.87	32°37'03.689"N	103°32'17.112"W	30.00	
11099.00†	89.993	85.211	10990.00	190.98	15.94	190.31	786286.01	589370.84	32°37'03.760"N	103°32'15.998"W	30.00	
11199.02	90.000	85.211	10990.00	191.00	15.94	190.33	786286.03	589370.84	32°37'03.761"N	103°32'15.998"W	30.00	END OF CURVE
11199.00†	90.000	85.211	10990.00	290.98	24.29	289.96	786385.66	589379.19	32°37'03.836"N	103°32'14.833"W	0.00	
11299.00†	90.000	85.211	10990.00	390.98	32.64	389.61	786485.30	589387.54	32°37'03.911"N	103°32'13.667"W	0.00	
11399.00†	90.000	85.211	10990.00	490.98	40.99	489.26	786584.95	589395.89	32°37'03.986"N	103°32'12.501"W	0.00	
11499.00†	90.000	85.211	10990.00	590.98	49.34	588.92	786684.60	589404.23	32°37'04.061"N	103°32'11.335"W	0.00	
11599.00†	90.000	85.211	10990.00	690.98	57.68	688.57	786784.25	589412.58	32°37'04.137"N	103°32'10.170"W	0.00	
11699.00†	90.000	85.211	10990.00	790.98	66.03	788.22	786883.90	589420.93	32°37'04.212"N	103°32'09.004"W	0.00	
11799.00†	90.000	85.211	10990.00	890.98	74.38	887.87	786983.55	589429.28	32°37'04.287"N	103°32'07.838"W	0.00	
11899.00†	90.000	85.211	10990.00	990.98	82.73	987.52	787083.19	589437.63	32°37'04.362"N	103°32'06.672"W	0.00	
11999.00†	90.000	85.211	10990.00	1090.98	91.08	1087.17	787182.84	589445.97	32°37'04.437"N	103°32'05.507"W	0.00	
12099.00†	90.000	85.211	10990.00	1190.98	99.42	1186.82	787282.49	589454.32	32°37'04.513"N	103°32'04.341"W	0.00	
12199.00†	90.000	85.211	10990.00	1290.98	107.77	1286.47	787382.14	589462.67	32°37'04.588"N	103°32'03.175"W	0.00	
12299.00†	90.000	85.211	10990.00	1390.98	116.12	1386.12	787481.79	589471.02	32°37'04.663"N	103°32'02.009"W	0.00	
12399.00†	90.000	85.211	10990.00	1490.98	124.47	1485.77	787581.44	589479.37	32°37'04.738"N	103°32'00.844"W	0.00	
12499.00†	90.000	85.211	10990.00	1590.98	132.82	1585.42	787681.09	589487.71	32°37'04.813"N	103°31'59.678"W	0.00	
12599.00†	90.000	85.211	10990.00	1690.98	141.16	1685.08	787780.73	589496.06	32°37'04.888"N	103°31'58.512"W	0.00	
12699.00†	90.000	85.211	10990.00	1790.98	149.51	1784.73	787880.38	589504.41	32°37'04.964"N	103°31'57.346"W	0.00	
12799.00†	90.000	85.211	10990.00	1890.98	157.86	1884.38	787980.03	589512.76	32°37'05.039"N	103°31'56.181"W	0.00	
12899.00†	90.000	85.211	10990.00	1990.98	166.21	1984.03	788079.68	589521.11	32°37'05.114"N	103°31'55.015"W	0.00	
12999.00†	90.000	85.211	10990.00	2090.98	174.56	2083.68	788179.33	589529.45	32°37'05.189"N	103°31'53.849"W	0.00	
13099.00†	90.000	85.211	10990.00	2190.98	182.91	2183.33	788278.98	589537.80	32°37'05.264"N	103°31'52.683"W	0.00	
13199.00†	90.000	85.211	10990.00	2290.98	191.25	2282.98	788378.63	589546.15	32°37'05.339"N	103°31'51.518"W	0.00	
13299.00†	90.000	85.211	10990.00	2390.98	199.60	2382.63	788478.27	589554.50	32°37'05.415"N	103°31'50.352"W	0.00	
13399.00†	90.000	85.211	10990.00	2490.98	207.95	2482.28	788577.92	589562.84	32°37'05.490"N	103°31'49.186"W	0.00	
13499.00†	90.000	85.211	10990.00	2590.98	216.30	2581.93	788677.57	589571.19	32°37'05.565"N	103°31'48.020"W	0.00	



Planned Wellpath Report

Prelim_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Lea County, NM	Well	No. 6H
Field	(Mallon) Sec 35, T19S, R34E	Wellbore	No. 6H PWB
Facility	Mallon 35 Fed No. 6H		

WELLPATH DATA (49 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13599.00†	90.000	85.211	10990.00	2690.98	224.65	2681.58	788777.22	589579.54	32°37'05.640"N	103°31'46.855"W	0.00	
13699.00†	90.000	85.211	10990.00	2790.98	232.99	2781.24	788876.87	589587.89	32°37'05.715"N	103°31'45.689"W	0.00	
13799.00†	90.000	85.211	10990.00	2890.98	241.34	2880.89	788976.52	589596.24	32°37'05.790"N	103°31'44.523"W	0.00	
13899.00†	90.000	85.211	10990.00	2990.98	249.69	2980.54	789076.17	589604.58	32°37'05.865"N	103°31'43.357"W	0.00	
13999.00†	90.000	85.211	10990.00	3090.98	258.04	3080.19	789175.81	589612.93	32°37'05.941"N	103°31'42.192"W	0.00	
14099.00†	90.000	85.211	10990.00	3190.98	266.39	3179.84	789275.46	589621.28	32°37'06.016"N	103°31'41.026"W	0.00	
14199.00†	90.000	85.211	10990.00	3290.98	274.73	3279.49	789375.11	589629.63	32°37'06.091"N	103°31'39.860"W	0.00	
14299.00†	90.000	85.211	10990.00	3390.98	283.08	3379.14	789474.76	589637.98	32°37'06.166"N	103°31'38.694"W	0.00	
14399.00†	90.000	85.211	10990.00	3490.98	291.43	3478.79	789574.41	589646.32	32°37'06.241"N	103°31'37.528"W	0.00	
14499.00†	90.000	85.211	10990.00	3590.98	299.78	3578.44	789674.06	589654.67	32°37'06.316"N	103°31'36.363"W	0.00	
14599.00†	90.000	85.211	10990.00	3690.98	308.13	3678.09	789773.70	589663.02	32°37'06.391"N	103°31'35.197"W	0.00	
14699.00†	90.000	85.211	10990.00	3790.98	316.48	3777.74	789873.35	589671.37	32°37'06.466"N	103°31'34.031"W	0.00	
14799.00†	90.000	85.211	10990.00	3890.98	324.82	3877.40	789973.00	589679.72	32°37'06.542"N	103°31'32.865"W	0.00	
14899.00†	90.000	85.211	10990.00	3990.98	333.17	3977.05	790072.65	589688.06	32°37'06.617"N	103°31'31.700"W	0.00	
14999.00†	90.000	85.211	10990.00	4090.98	341.52	4076.70	790172.30	589696.41	32°37'06.692"N	103°31'30.534"W	0.00	
15099.00†	90.000	85.211	10990.00	4190.98	349.87	4176.35	790271.95	589704.76	32°37'06.767"N	103°31'29.368"W	0.00	
15199.00†	90.000	85.211	10990.00	4290.98	358.22	4276.00	790371.60	589713.11	32°37'06.842"N	103°31'28.202"W	0.00	
15299.00†	90.000	85.211	10990.00	4390.98	366.56	4375.65	790471.24	589721.46	32°37'06.917"N	103°31'27.037"W	0.00	
15361.48	90.000	85.211	10990.00	4453.46	371.78	4437.91	790533.51	589726.67	32°37'06.964"N	103°31'26.308"W	0.00	No. 6H PBL



Planned Wellpath Report

Prelim_1
Page 4 of 4



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Lea County, NM	Well	No. 6H
Field	(Mallon) Sec 35, T19S, R34E	Wellbore	No. 6H PWB
Facility	Mallon 35 Fed No. 6H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 6H PBHL	15361.48	10990.00	371.78	4437.91	790533.51	589726.67	32°37'06.964"N	103°31'26.308"W	point

SURVEY PROGRAM Ref Wellbore: No. 6H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	15361.48	NaviTrak (Standard)		No. 6H PWB

Cactus 101

Flare Line

Access Road

Catwalk

Steel Pits (80' x 16')

Mud Tanks

Mud Gas Separator

5'x5'x5' Cellar

Dog House

Choke Manifold

Pipe Racks

Pipe Lay Down Area (30' x 30')

Topsoil Stockpile

Trailer

Trailer

Frac Tank Farm (80' x 50')

Dimensions: 12', 150', 130', 160', 160', 160', 50', 80', 30'

Scale: 1"=50'

Exhibit D – Rig Diagram
Mallon 35 Federal No. 6
 Cimarex Energy Co. of Colorado
 35-19S-34E
 SHL 2310 FNL & 330 FWL
 BHL 1980 FNL & 510 FEL
 Lea County, NM

SR & A

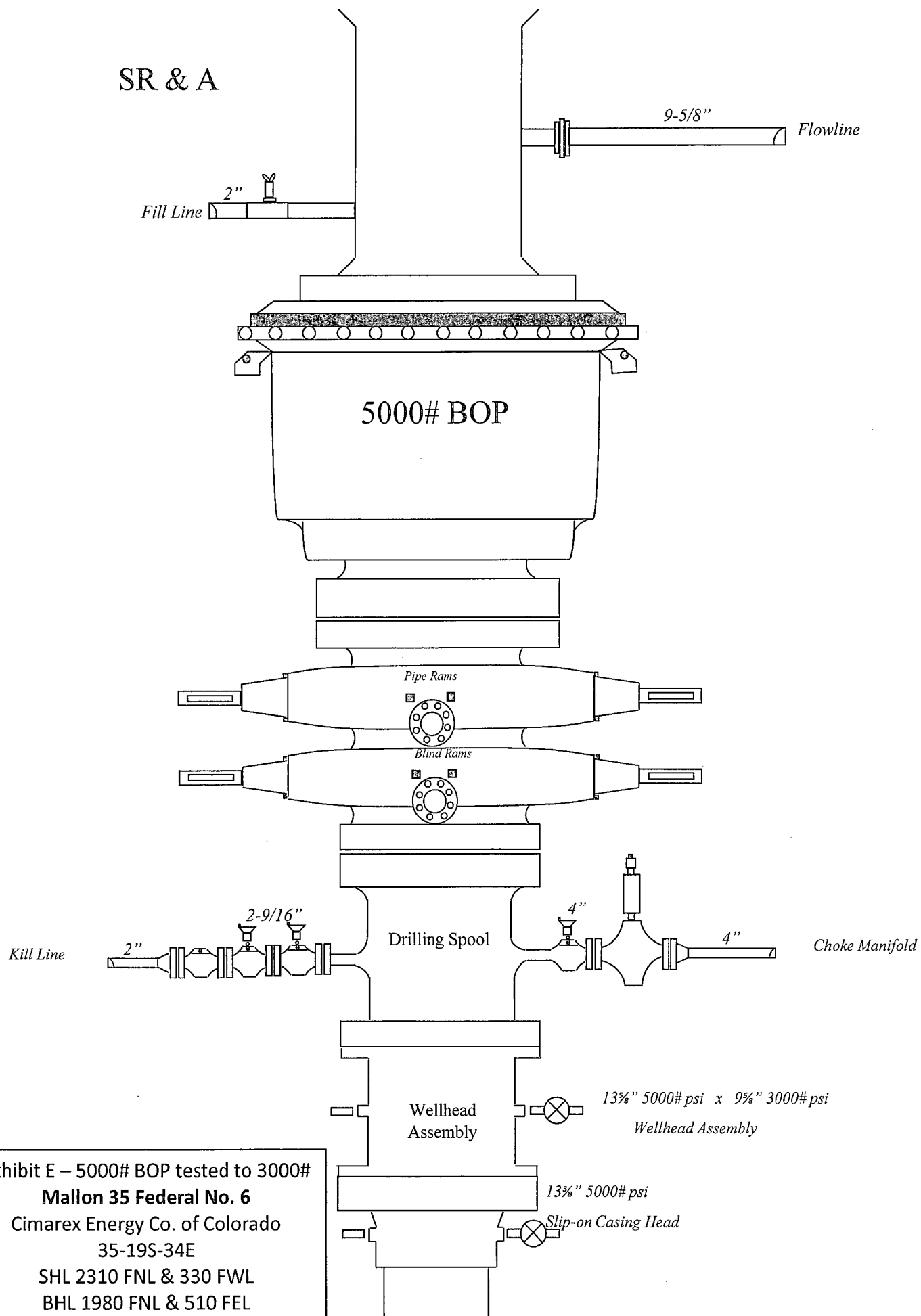


Exhibit E – 5000# BOP tested to 3000#

Mallon 35 Federal No. 6

Cimarex Energy Co. of Colorado

35-19S-34E

SHL 2310 FNL & 330 FWL

BHL 1980 FNL & 510 FEL

Lea County, NM

Drilling Operations Choke Manifold 5M Service tested to 3M

Exhibit E-1 – Choke Manifold Diagram

Mallon 35 Federal No. 6

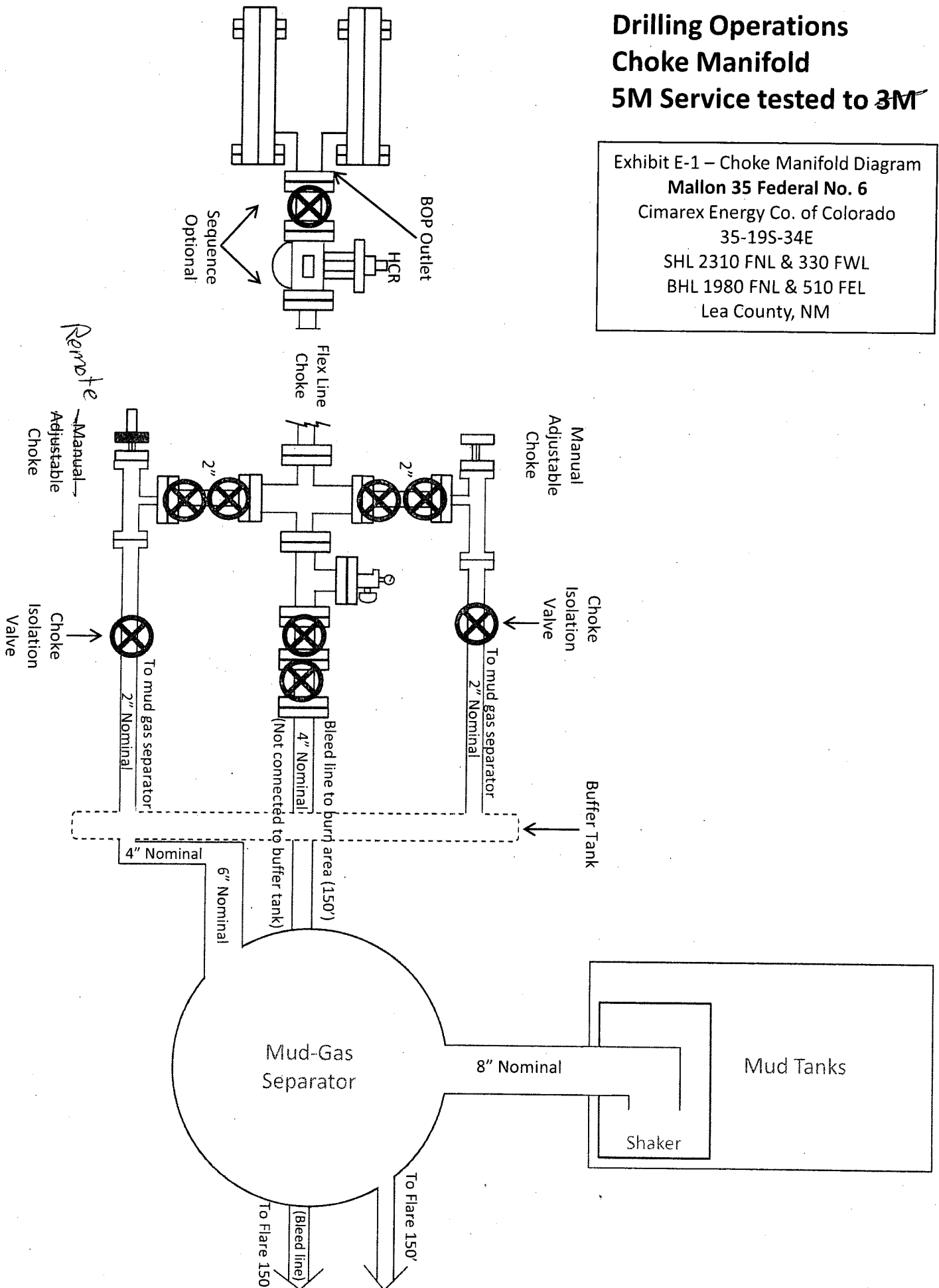
Cimarex Energy Co. of Colorado

35-19S-34E

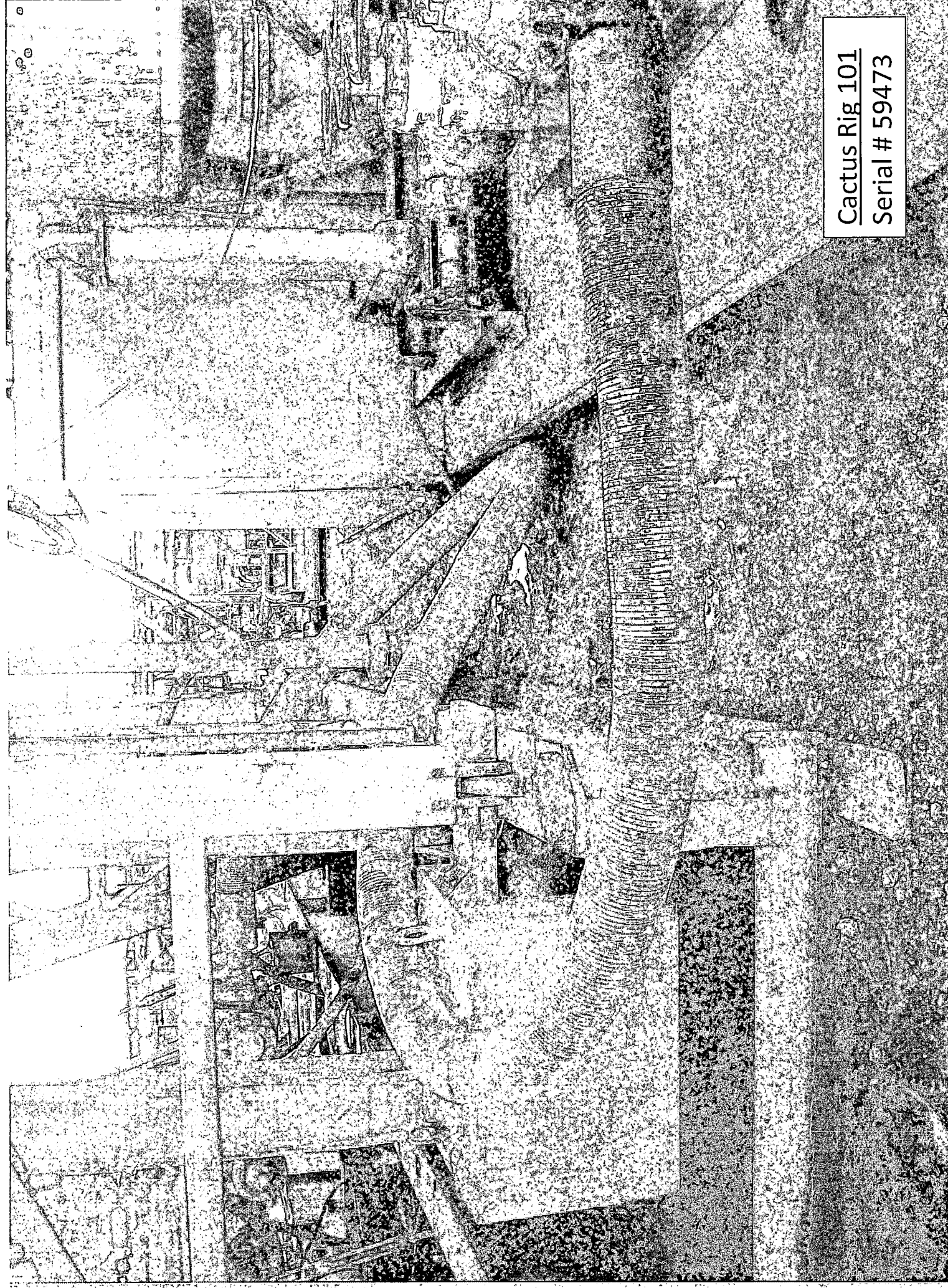
SHL 2310 FNL & 330 FWL

BHL 1980 FNL & 510 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