

HOBBS OCD

DEC 12 2011

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
Phone (505) 323-8181 Fax: (505) 323-0720

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
Phone (505) 743-1583 Fax: (505) 743-0720

DISTRICT III
1000 Ido Brarog Rd., Aztec, NM 87410
Phone (505) 331-8178 Fax: (505) 331-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87503
Phone (505) 478-3102 Fax: (505) 478-3102

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

RECEIVED

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-40366	Pool Code 51683	Pool Name Red Tank; Bone Spring
Property Code 309502	Property Name CORIANDER "AOC" STATE	Well Number 5
OGRIID No. 215099	Operator Name CIMAREX ENERGY CO.	Elevation 3755'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 1	1	23 S	32 E		330	NORTH	660	EAST	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
P	1	23 S	32 E		330	SOUTH	375	EAST	LEA

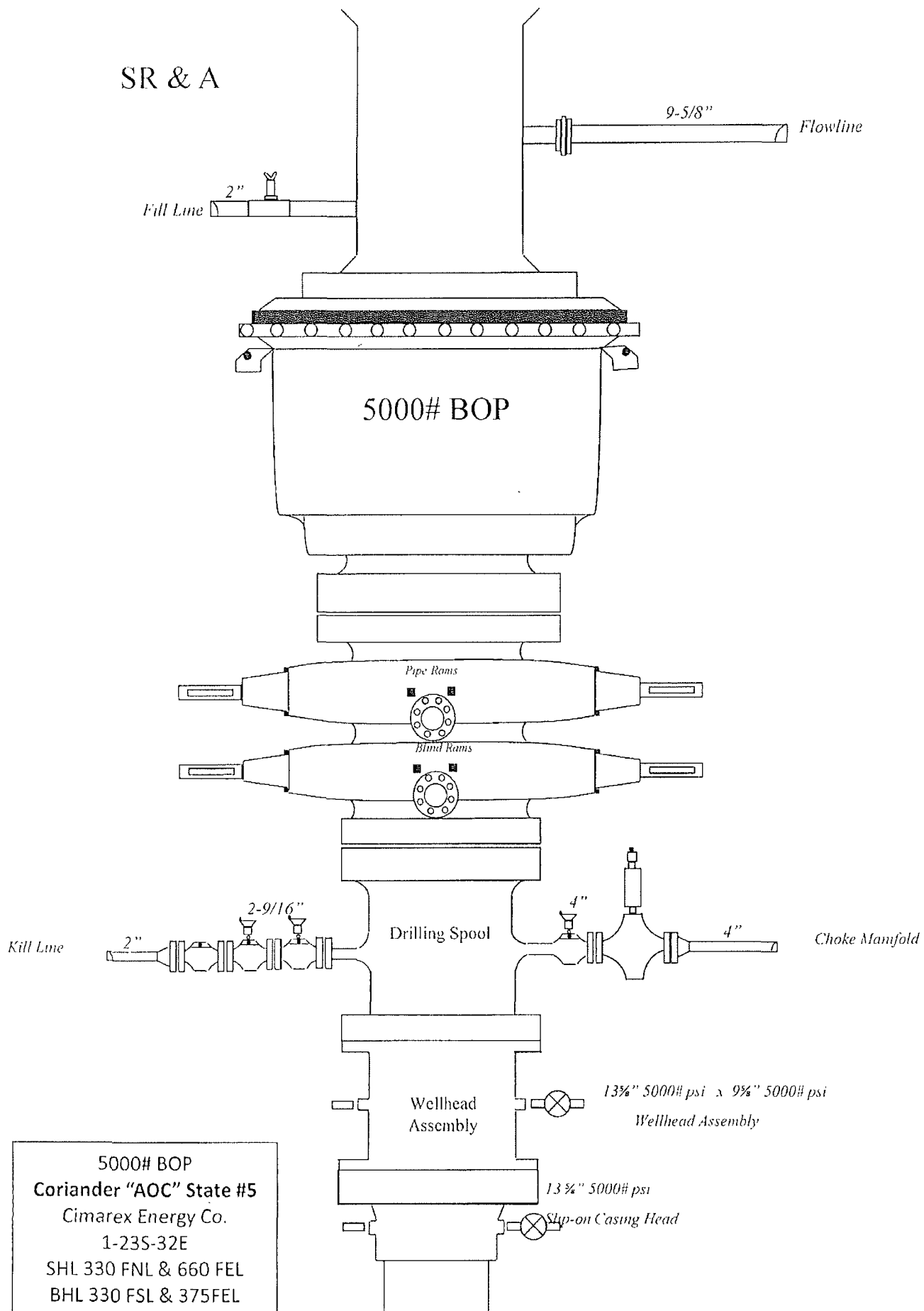
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
159.95			

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

LOT 4	LOT 3	LOT 2	LOT 1
SURFACE LOCATION Lot - N 32°20'24.67" Long - W 103°37'18.80" NNSPCE - E 761061.3 (NAD-83)			
PROPOSED BOTTOM HOLE LOCATION Lot - N 32°19'38.96" Long - W 103°37'15.45" NNSPCE - E 761379.5 (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 or has a right to drill this well at this 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. Signature: <i>Terri Stathem</i> Date: 12/13/11 Printed Name: Terri Stathem Email Address: tsthathem@cimarex.com			
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. Date Surveyed: OCTOBER 21, 2011 Signature & Seal of Professional Surveyor: <i>Gary L. Jones</i> Certificate No. Gary L. Jones 7977 BASIN SURVEYS 25262			

DEC 13 2011

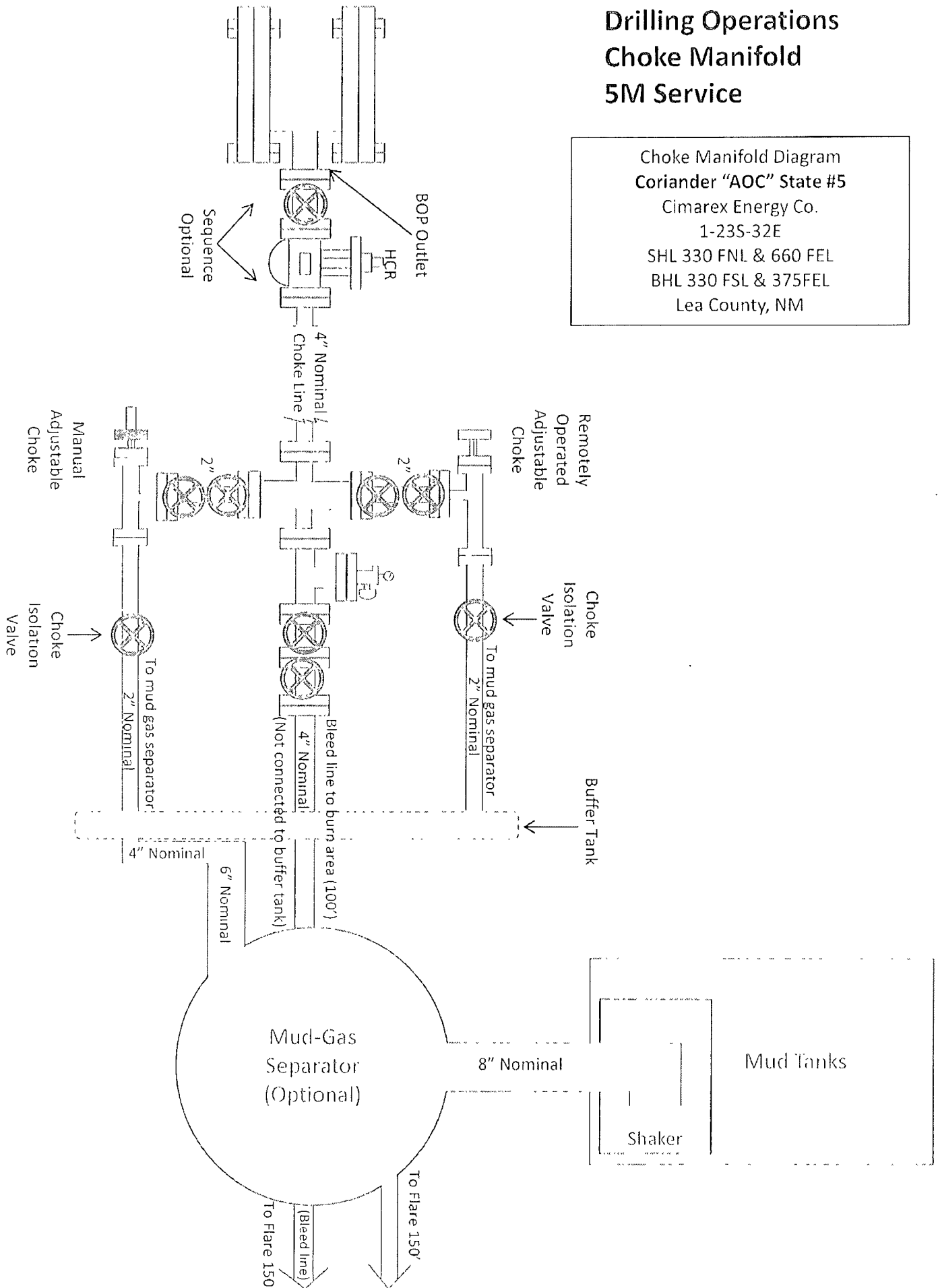
SR & A



5000# BOP
Coriander "AOC" State #5
Cimarex Energy Co.
1-23S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 375 FEL
Lea County, NM

Drilling Operations Choke Manifold 5M Service

Choke Manifold Diagram
Coriander "AOC" State #5
Cimarex Energy Co.
1-23S-32E
SHL 330 FNL & 660 FEL
BHL 330 FSL & 375FEL
Lea County, NM





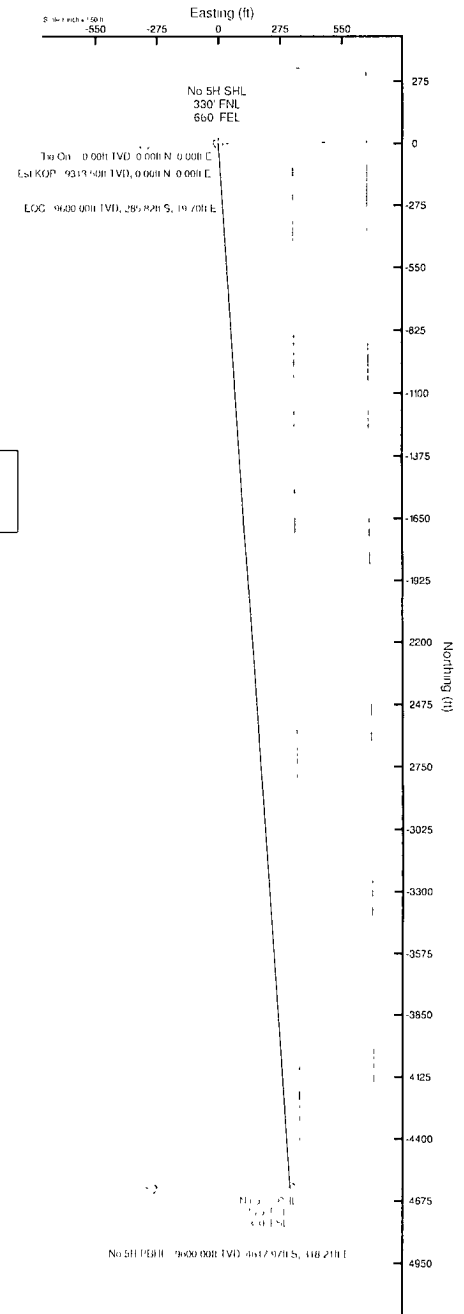
Cimarex Energy Co.

Location: Lea County, NM
Field: (Corral) Sec. 1, T23S, R32E
Facility: Corral AOC, State No 5H

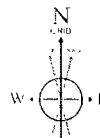
Site: No 5H SHL
Well: No 5H
Wellbore: No 5H PWB

**BAKER
HUGHES**

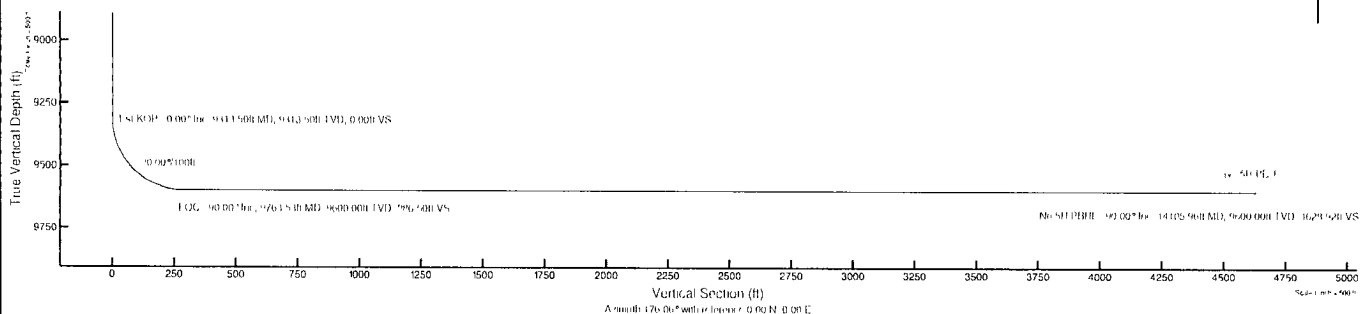
Well Profile Data							
Design Comment	MD (ft)	Inc (°)	A* (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	0.00	0.000	176.058	0.00	0.00	0.00	0.00
Est KOP	9313.50	0.000	176.058	9313.50	0.00	0.00	0.00
EOC	9763.53	90.000	176.058	9600.00	285.82	19.70	286.50
No 5H PWB	14105.95	00.000	176.058	9600.00	-4617.97	318.21	-4628.92



Plot reference wellpath is No 5H-1
True vertical depths are referenced to Tye on No 5H SHL (Tie)
Magnetic declination is referenced to Tye on No 5H SHL (Tie)
Tye on No 5H SHL (Tie) is Magnetic North - 75.5 East
Magnetic North is referenced to Tye on No 5H SHL (Tie)
Coordinates are in feet and rounded to 500



ICM (1995) to 2011 (0.000) (0.000) (0.000) (0.000) (0.000) (0.000)
Magnetic North is 7.65 degrees East of True North (12/1/11)
Grid North is 0.00 degrees East of True North
To convert Azimuth from True to Grid North (12/1/11)
To convert Azimuth from Magnetic to Grid add 7.65 degrees
For example if the Magnetic North Azimuth is 90 degrees, then the Grid North Azimuth is 90 + 7.65 = 97.65





Planned Wellpath Report

Prelim_1
Page 1 of 5



GENERAL INFORMATION			
Operator	Cimarex Energy Co.	Slot	No.5H SHL
Area	Lea County, NM	Well	No.5H
Field	(Coriander)Sec 1, T23S, R32E	Wellbore	No.5H PWB
Facility	Coriander "AOC" State No.5H		

PROJECTION 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	0.999964	Report Generated	12/1/2011 at 3:02:40 PM
Convergence at slot	0.38° East	Database/Source file	WA Midland/No.5H_PWB.xml

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W
Facility Reference Pt			761061.30	488221.80	32°20'24.673"N	103°37'18.797"W
Field Reference Pt			761061.30	488221.80	32°20'24.673"N	103°37'18.797"W

WELL PATH DATA			
Calculation method	Minimum curvature	Rig on No.5H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.5H SHL (RT) to Mean Sea Level	3755.00ft
Vertical Reference Pt	Rig on No.5H SHL (RT)	Rig on No.5H SHL (RT) to Mud Line at Slot (No.5H SHL)	0.00ft
MD Reference Pt	Rig on No.5H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	176.06°



Planned Wellpath Report

Prelim_1
Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No.5H SHL
Area	Lea County, NM	Well	No.5H
Field	(Coriander)Sec 1, T23S, R32E	Wellbore	No.5H PWB
Facility	Coriander "AOC" State No.5H		

WELLPATH DATA (147 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 [1"/100ft]	Comments
0.00	0.000	176.058	0.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Tie On
100.00	0.000	176.058	100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
200.00	0.000	176.058	200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
300.00	0.000	176.058	300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
400.00	0.000	176.058	400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
500.00	0.000	176.058	500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
600.00	0.000	176.058	600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
700.00	0.000	176.058	700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
800.00	0.000	176.058	800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
900.00	0.000	176.058	900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1000.00	0.000	176.058	1000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1100.00	0.000	176.058	1100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1200.00	0.000	176.058	1200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1220.00	0.000	176.058	1220.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Rustler
1300.00	0.000	176.058	1300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1400.00	0.000	176.058	1400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1500.00	0.000	176.058	1500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1600.00	0.000	176.058	1600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1700.00	0.000	176.058	1700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1800.00	0.000	176.058	1800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
1900.00	0.000	176.058	1900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2000.00	0.000	176.058	2000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2100.00	0.000	176.058	2100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2200.00	0.000	176.058	2200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2300.00	0.000	176.058	2300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2400.00	0.000	176.058	2400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2500.00	0.000	176.058	2500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2600.00	0.000	176.058	2600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2700.00	0.000	176.058	2700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2800.00	0.000	176.058	2800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
2900.00	0.000	176.058	2900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3000.00	0.000	176.058	3000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3100.00	0.000	176.058	3100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3200.00	0.000	176.058	3200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3300.00	0.000	176.058	3300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3400.00	0.000	176.058	3400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3500.00	0.000	176.058	3500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3600.00	0.000	176.058	3600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3700.00	0.000	176.058	3700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3800.00	0.000	176.058	3800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
3900.00	0.000	176.058	3900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4000.00	0.000	176.058	4000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4100.00	0.000	176.058	4100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4200.00	0.000	176.058	4200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4300.00	0.000	176.058	4300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	



Planned Wellpath Report

Prelim_1
Page 3 of 5

**BAKER
HUGHES**

REFERENCE		IDENTIFICATION	
Operator	Cimarex Energy Co.	Slot	No.5H SHL
Area	Lea County, NM	Well	No.5H
Field	(Coriander)Sec 1, T23S, R32E	Wellbore	No.5H PWB
Facility	Coriander "AOC" State No.5H		

WELLPATH DATA (147 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
4400.00	0.000	176.058	4400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4500.00	0.000	176.058	4500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4600.00	0.000	176.058	4600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4700.00	0.000	176.058	4700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4800.00	0.000	176.058	4800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
4900.00	0.000	176.058	4900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5000.00	0.000	176.058	5000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Delaware
5100.00	0.000	176.058	5100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5200.00	0.000	176.058	5200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5300.00	0.000	176.058	5300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5400.00	0.000	176.058	5400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5500.00	0.000	176.058	5500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5600.00	0.000	176.058	5600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5700.00	0.000	176.058	5700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5800.00	0.000	176.058	5800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
5900.00	0.000	176.058	5900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6000.00	0.000	176.058	6000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6100.00	0.000	176.058	6100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6200.00	0.000	176.058	6200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6300.00	0.000	176.058	6300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6400.00	0.000	176.058	6400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6500.00	0.000	176.058	6500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6600.00	0.000	176.058	6600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6700.00	0.000	176.058	6700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6800.00	0.000	176.058	6800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
6900.00	0.000	176.058	6900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7000.00	0.000	176.058	7000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7100.00	0.000	176.058	7100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7200.00	0.000	176.058	7200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7300.00	0.000	176.058	7300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7400.00	0.000	176.058	7400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7500.00	0.000	176.058	7500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7600.00	0.000	176.058	7600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7700.00	0.000	176.058	7700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7800.00	0.000	176.058	7800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
7900.00	0.000	176.058	7900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8000.00	0.000	176.058	8000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8100.00	0.000	176.058	8100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8200.00	0.000	176.058	8200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8300.00	0.000	176.058	8300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8400.00	0.000	176.058	8400.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8500.00	0.000	176.058	8500.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Basal Brushy Canyon
8600.00	0.000	176.058	8600.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Bone Sprung
8700.00	0.000	176.058	8700.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
8800.00	0.000	176.058	8800.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	



Planned Wellpath Report

Prelim_1
Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No.5H SHL
Area	Lea County, NM	Well	No.5H
Field	(Coriander)Sec 1, T23S, R32E	Wellbore	No.5H PWB
Facility	Coriander "AOC" State No.5H		

WELLPATH DATA (147 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
8900.00†	0.000	176.058	8900.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
9000.00†	0.000	176.058	9000.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
9100.00†	0.000	176.058	9100.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
9200.00†	0.000	176.058	9200.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
9250.00†	0.000	176.058	9250.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Upper Bone Spring Shale
9300.00†	0.000	176.058	9300.00	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	
9313.50	0.000	176.058	9313.50	0.00	0.00	0.00	761061.30	488221.80	32°20'24.673"N	103°37'18.797"W	0.00	Est KOP
9400.00†	17.299	176.058	9398.69	12.96	-12.93	0.89	761062.19	488208.87	32°20'24.545"N	103°37'18.788"W	20.00	
9500.00†	37.297	176.058	9487.10	58.59	-58.45	4.03	761065.33	488163.35	32°20'24.095"N	103°37'18.755"W	20.00	
9600.00†	57.296	176.058	9554.58	131.70	-131.39	9.05	761070.35	488090.41	32°20'23.372"N	103°37'18.702"W	20.00	
9700.00†	77.294	176.058	9592.98	223.49	-222.96	15.36	761076.66	487998.85	32°20'22.466"N	103°37'18.635"W	20.00	
9763.53	90.000	176.058	9600.00	286.50	-285.82	19.70	761080.99	487935.99	32°20'21.844"N	103°37'18.590"W	20.00	EOC
9800.00†	90.000	176.058	9600.00	322.97	-322.20	22.20	761083.50	487899.61	32°20'21.484"N	103°37'18.563"W	0.00	
9900.00†	90.000	176.058	9600.00	422.97	-421.97	29.08	761090.38	487799.85	32°20'20.496"N	103°37'18.491"W	0.00	
10000.00†	90.000	176.058	9600.00	522.97	-521.73	35.95	761097.25	487700.09	32°20'19.508"N	103°37'18.419"W	0.00	
10100.00†	90.000	176.058	9600.00	622.97	-621.49	42.83	761104.12	487600.33	32°20'18.521"N	103°37'18.346"W	0.00	
10200.00†	90.000	176.058	9600.00	722.97	-721.26	49.70	761111.00	487500.57	32°20'17.533"N	103°37'18.274"W	0.00	
10300.00†	90.000	176.058	9600.00	822.97	-821.02	56.57	761117.87	487400.81	32°20'16.546"N	103°37'18.201"W	0.00	
10400.00†	90.000	176.058	9600.00	922.97	-920.78	63.45	761124.75	487301.05	32°20'15.558"N	103°37'18.129"W	0.00	
10500.00†	90.000	176.058	9600.00	1022.97	-1020.55	70.32	761131.62	487201.29	32°20'14.571"N	103°37'18.057"W	0.00	
10600.00†	90.000	176.058	9600.00	1122.97	-1120.31	77.20	761138.49	487101.53	32°20'13.583"N	103°37'17.984"W	0.00	
10700.00†	90.000	176.058	9600.00	1222.97	-1220.07	84.07	761145.37	487001.77	32°20'12.595"N	103°37'17.912"W	0.00	
10800.00†	90.000	176.058	9600.00	1322.97	-1319.84	90.95	761152.24	486902.01	32°20'11.608"N	103°37'17.839"W	0.00	
10900.00†	90.000	176.058	9600.00	1422.97	-1419.60	97.82	761159.12	486802.25	32°20'10.620"N	103°37'17.767"W	0.00	
11000.00†	90.000	176.058	9600.00	1522.97	-1519.36	104.70	761165.99	486702.49	32°20'09.633"N	103°37'17.695"W	0.00	
11100.00†	90.000	176.058	9600.00	1622.97	-1619.13	111.57	761172.87	486602.73	32°20'08.645"N	103°37'17.622"W	0.00	
11200.00†	90.000	176.058	9600.00	1722.97	-1718.89	118.44	761179.74	486502.97	32°20'07.657"N	103°37'17.550"W	0.00	
11300.00†	90.000	176.058	9600.00	1822.97	-1818.65	125.32	761186.61	486403.21	32°20'06.670"N	103°37'17.477"W	0.00	
11400.00†	90.000	176.058	9600.00	1922.97	-1918.42	132.19	761193.49	486303.45	32°20'05.682"N	103°37'17.405"W	0.00	
11500.00†	90.000	176.058	9600.00	2022.97	-2018.18	139.07	761200.36	486203.69	32°20'04.695"N	103°37'17.333"W	0.00	
11600.00†	90.000	176.058	9600.00	2122.97	-2117.94	145.94	761207.24	486103.94	32°20'03.707"N	103°37'17.260"W	0.00	
11700.00†	90.000	176.058	9600.00	2222.97	-2217.71	152.82	761214.11	486004.18	32°20'02.719"N	103°37'17.188"W	0.00	
11800.00†	90.000	176.058	9600.00	2322.97	-2317.47	159.69	761220.98	485904.42	32°20'01.732"N	103°37'17.116"W	0.00	
11900.00†	90.000	176.058	9600.00	2422.97	-2417.23	166.57	761227.86	485804.66	32°20'00.744"N	103°37'17.043"W	0.00	
12000.00†	90.000	176.058	9600.00	2522.97	-2517.00	173.44	761234.73	485704.90	32°19'59.757"N	103°37'16.971"W	0.00	
12100.00†	90.000	176.058	9600.00	2622.97	-2616.76	180.31	761241.61	485605.14	32°19'58.769"N	103°37'16.898"W	0.00	
12200.00†	90.000	176.058	9600.00	2722.97	-2716.53	187.19	761248.48	485505.38	32°19'57.782"N	103°37'16.826"W	0.00	
12300.00†	90.000	176.058	9600.00	2822.97	-2816.29	194.06	761255.36	485405.62	32°19'56.794"N	103°37'16.754"W	0.00	
12400.00†	90.000	176.058	9600.00	2922.97	-2916.05	200.94	761262.23	485305.86	32°19'55.806"N	103°37'16.681"W	0.00	
12500.00†	90.000	176.058	9600.00	3022.97	-3015.82	207.81	761269.10	485206.10	32°19'54.819"N	103°37'16.609"W	0.00	
12600.00†	90.000	176.058	9600.00	3122.97	-3115.58	214.69	761275.98	485106.34	32°19'53.831"N	103°37'16.536"W	0.00	
12700.00†	90.000	176.058	9600.00	3222.97	-3215.34	221.56	761282.85	485006.58	32°19'52.844"N	103°37'16.464"W	0.00	
12800.00†	90.000	176.058	9600.00	3322.97	-3315.11	228.43	761289.73	484906.82	32°19'51.856"N	103°37'16.392"W	0.00	
12900.00†	90.000	176.058	9600.00	3422.97	-3414.87	235.31	761296.60	484807.06	32°19'50.868"N	103°37'16.319"W	0.00	
13000.00†	90.000	176.058	9600.00	3522.97	-3514.63	242.18	761303.47	484707.30	32°19'49.881"N	103°37'16.247"W	0.00	



Planned Wellpath Report

Prelim_1
Page 5 of 5



Operator: Cimarex Energy Co. Slot: No.5H SHL
Area: Lea County, NM Well: No.5H
Field: (Coriander)Sec 1, T23S, R32E Wellbore: No.5H PWB
Facility: Coriander "AOC" State No.5H

WELLPATH DATA (147 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
13100.00	90.000	176.058	9600.00	3622.97	-3614.40	249.06	761310.35	484607.54	32°19'48.893"N	103°37'16.174"W	0.00	
13200.00	90.000	176.058	9600.00	3722.97	-3714.16	255.93	761317.22	484507.78	32°19'47.906"N	103°37'16.102"W	0.00	
13300.00	90.000	176.058	9600.00	3822.97	-3813.92	262.81	761324.10	484408.02	32°19'46.918"N	103°37'16.030"W	0.00	
13400.00	90.000	176.058	9600.00	3922.97	-3913.69	269.68	761330.97	484308.26	32°19'45.930"N	103°37'15.957"W	0.00	
13500.00	90.000	176.058	9600.00	4022.97	-4013.45	276.56	761337.85	484208.50	32°19'44.943"N	103°37'15.885"W	0.00	
13600.00	90.000	176.058	9600.00	4122.97	-4113.21	283.43	761344.72	484108.74	32°19'43.955"N	103°37'15.813"W	0.00	
13700.00	90.000	176.058	9600.00	4222.97	-4212.98	290.30	761351.59	484008.98	32°19'42.968"N	103°37'15.740"W	0.00	
13800.00	90.000	176.058	9600.00	4322.97	-4312.74	297.18	761358.47	483909.22	32°19'41.980"N	103°37'15.668"W	0.00	
13900.00	90.000	176.058	9600.00	4422.97	-4412.50	304.05	761365.34	483809.46	32°19'40.993"N	103°37'15.595"W	0.00	
14000.00	90.000	176.058	9600.00	4522.97	-4512.27	310.93	761372.22	483709.70	32°19'40.005"N	103°37'15.523"W	0.00	
14100.00	90.000	176.058	9600.00	4622.97	-4612.03	317.80	761379.09	483609.94	32°19'39.017"N	103°37'15.451"W	0.00	
14105.96	90.000	176.058	9600.00	4628.92	-4617.97	318.21	761379.50	483604.00	32°19'38.959"N	103°37'15.446"W	0.00	No 5H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.5H PBHL	14105.96	9600.00	-4617.97	318.21	761379.50	483604.00	32°19'38.959"N	103°37'15.446"W	point

SURVEY PROGRAM - Ref Wellbore: No.5H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	14105.96	NaviTrak (Standard)		No 5H PWB