

301025-40622

HOBBS OGD

JUN 13 2012

SR & A

RECEIVED
Flowline

9-5/8"

Fill Line
2"

5000# BOP

Pipe Rams

Blind Rams

Drilling Spool

Kill Line

2"

2-9/16"

4"

Choke Manifold

4"

Wellhead
Assembly

13 5/8" 5000# psi x 9 5/8" 5000# psi
Wellhead Assembly

13 5/8" 5000# psi

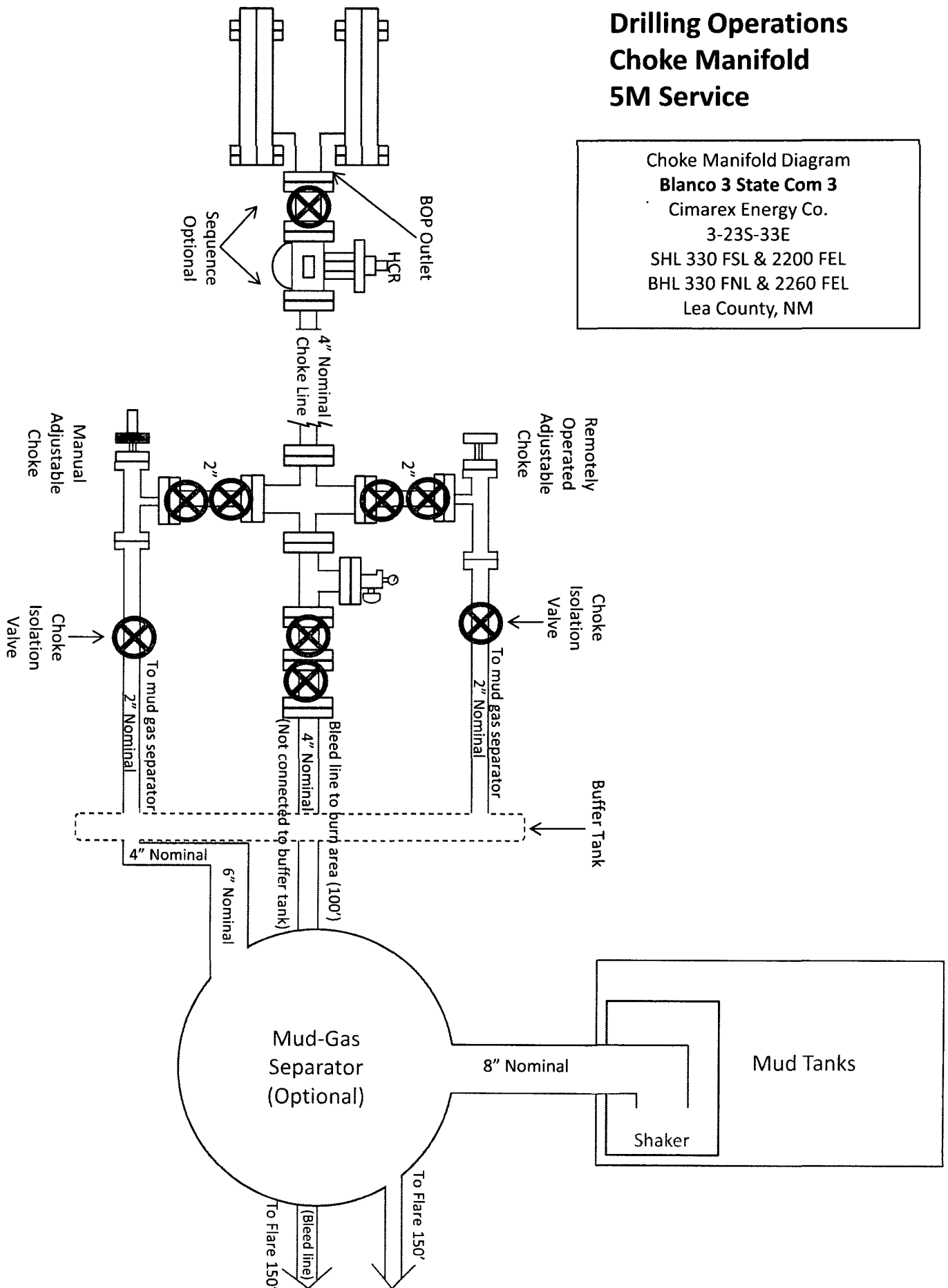
Slip-on Casing Head

5000# BOP
Blanco 3 State Com 3
Cimarex Energy Co.
3-23S-33E
SHL 330 FSL & 2200 FEL
BHL 330 FNL & 2260 FEL
Lea County, NM

JUN 18 2012

Drilling Operations Choke Manifold 5M Service

Choke Manifold Diagram
Blanco 3 State Com 3
 Cimarex Energy Co.
 3-23S-33E
 SHL 330 FSL & 2200 FEL
 BHL 330 FNL & 2260 FEL
 Lea County, NM





Cimarex Energy Co.

Location: Lea County, NM
Field: (Blanco) Sec 3, T23S, R33E
Facility: Blanco 3 State Com No. 3

Slot: Slot #1
Well: No. 3
Wellbore: No. 3 (PWB)

RECEIVED

JUN 13 2012

HOBBS OGD



Well Profile Data

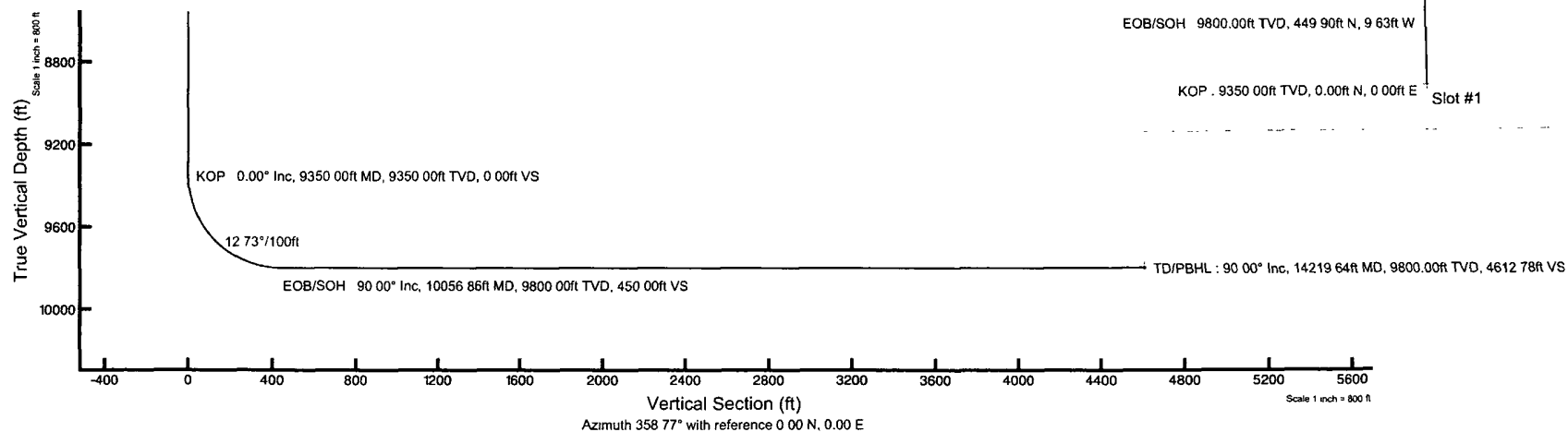
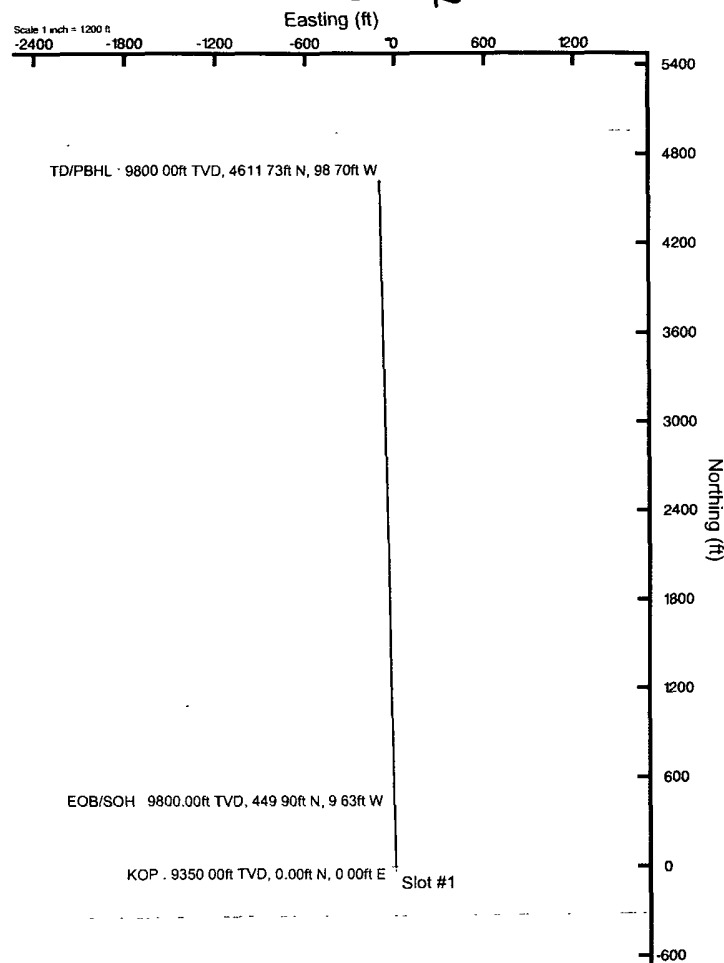
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	358.774	0.00	0.00	0.00	0.00	0.00
KOP	9350.00	0.000	358.774	9350.00	0.00	0.00	0.00	0.00
EOB/SOH	10056.86	90.000	358.774	9800.00	449.90	-9.63	12.73	450.00
TD/PBHL	14219.64	90.000	358.774	9800.00	4611.73	-98.70	0.00	4612.78

Location Information

Facility Name		Gnd East (US ft)		Gnd North (US ft)		Latitude	Longitude
Blanco 3 State Com No. 3		780579.100		483710.500		32°19'38.694"N	103°33'31.686"W
Slot	Local N (ft)	Local E (ft)	Gnd East (US ft)	Gnd North (US ft)	Latitude	Longitude	
Slot #1	0.00	0.00	780579.100	483710.500	32°19'38.694"N	103°33'31.686"W	
Rig on Slot #1 (RT) to Mud line (At Slot: Slot #1)						0ft	
Mean Sea Level to Mud line (At Slot: Slot #1)						-3567ft	
Rig on Slot #1 (RT) to Mean Sea Level						3567ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Gnd East (US ft)	Gnd North (US ft)	Latitude	Longitude
Blanco 3 State Com No. 3 (Rev-0)	14219.64	9800.00	4611.73	-98.70	780480.40	483322.10	32°20'24.333"N	103°33'32.448"W



Rev-A.0



Planned Wellpath Report

Rev-A.0

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

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	Daviarcm
Scale	0.999975	Report Generated	6/6/2012 at 8:50:48 AM
Convergence at slot	n/a	Database/Source file	WA_Midland/No. 3_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	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W
Facility Reference Pt			780579.10	483710.50	32°19'38.694"N	103°33'31.686"W
Field Reference Pt			780799.10	483712.00	32°19'38.693"N	103°33'29.122"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	3567.00ft
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	358.77°



Planned Wellpath Report

Rev-A.0

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

WELLPATH DATA (146 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	358.774	0.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
100.00†	0.000	358.774	100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
200.00†	0.000	358.774	200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
300.00†	0.000	358.774	300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
400.00†	0.000	358.774	400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
500.00†	0.000	358.774	500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
600.00†	0.000	358.774	600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
700.00†	0.000	358.774	700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
800.00†	0.000	358.774	800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
900.00†	0.000	358.774	900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1000.00†	0.000	358.774	1000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1100.00†	0.000	358.774	1100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1200.00†	0.000	358.774	1200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1300.00†	0.000	358.774	1300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1400.00†	0.000	358.774	1400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1500.00†	0.000	358.774	1500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1600.00†	0.000	358.774	1600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1700.00†	0.000	358.774	1700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1800.00†	0.000	358.774	1800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
1900.00†	0.000	358.774	1900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2000.00†	0.000	358.774	2000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2100.00†	0.000	358.774	2100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2200.00†	0.000	358.774	2200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2300.00†	0.000	358.774	2300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2400.00†	0.000	358.774	2400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2500.00†	0.000	358.774	2500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2600.00†	0.000	358.774	2600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2700.00†	0.000	358.774	2700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2800.00†	0.000	358.774	2800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
2900.00†	0.000	358.774	2900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00



Planned Wellpath Report

Rev-A.0

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

WELLPATH DATA (146 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	358.774	3000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3100.00†	0.000	358.774	3100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3200.00†	0.000	358.774	3200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3300.00†	0.000	358.774	3300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3400.00†	0.000	358.774	3400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3500.00†	0.000	358.774	3500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3600.00†	0.000	358.774	3600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3700.00†	0.000	358.774	3700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3800.00†	0.000	358.774	3800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
3900.00†	0.000	358.774	3900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4000.00†	0.000	358.774	4000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4100.00†	0.000	358.774	4100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4200.00†	0.000	358.774	4200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4300.00†	0.000	358.774	4300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4400.00†	0.000	358.774	4400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4500.00†	0.000	358.774	4500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4600.00†	0.000	358.774	4600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4700.00†	0.000	358.774	4700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4800.00†	0.000	358.774	4800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
4900.00†	0.000	358.774	4900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5000.00†	0.000	358.774	5000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5100.00†	0.000	358.774	5100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5200.00†	0.000	358.774	5200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5300.00†	0.000	358.774	5300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5400.00†	0.000	358.774	5400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5500.00†	0.000	358.774	5500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5600.00†	0.000	358.774	5600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5700.00†	0.000	358.774	5700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5800.00†	0.000	358.774	5800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
5900.00†	0.000	358.774	5900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00



Planned Wellpath Report

Rev-A.0

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

WELLPATH DATA (146 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	358.774	6000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6100.00†	0.000	358.774	6100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6200.00†	0.000	358.774	6200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6300.00†	0.000	358.774	6300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6400.00†	0.000	358.774	6400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6500.00†	0.000	358.774	6500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6600.00†	0.000	358.774	6600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6700.00†	0.000	358.774	6700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6800.00†	0.000	358.774	6800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
6900.00†	0.000	358.774	6900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7000.00†	0.000	358.774	7000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7100.00†	0.000	358.774	7100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7200.00†	0.000	358.774	7200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7300.00†	0.000	358.774	7300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7400.00†	0.000	358.774	7400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7500.00†	0.000	358.774	7500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7600.00†	0.000	358.774	7600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7700.00†	0.000	358.774	7700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7800.00†	0.000	358.774	7800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
7900.00†	0.000	358.774	7900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8000.00†	0.000	358.774	8000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8100.00†	0.000	358.774	8100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8200.00†	0.000	358.774	8200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8300.00†	0.000	358.774	8300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8400.00†	0.000	358.774	8400.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8500.00†	0.000	358.774	8500.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8600.00†	0.000	358.774	8600.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8700.00†	0.000	358.774	8700.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8800.00†	0.000	358.774	8800.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
8900.00†	0.000	358.774	8900.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00



Planned Wellpath Report

Rev-A.0

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

WELLPATH DATA (146 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	358.774	9000.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
9100.00†	0.000	358.774	9100.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
9200.00†	0.000	358.774	9200.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
9300.00†	0.000	358.774	9300.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
9350.00	0.000	358.774	9350.00	0.00	0.00	0.00	780579.10	483710.50	32°19'38.694"N	103°33'31.686"W	0.00	0.000	0.00
9400.00†	6.366	358.774	9399.90	2.77	2.77	-0.06	780579.04	483713.27	32°19'38.721"N	103°33'31.686"W	2.77	358.774	12.73
9500.00†	19.099	358.774	9497.24	24.77	24.76	-0.53	780578.57	483735.26	32°19'38.939"N	103°33'31.690"W	24.77	358.774	12.73
9600.00†	31.831	358.774	9587.34	67.68	67.66	-1.45	780577.65	483778.16	32°19'39.364"N	103°33'31.697"W	67.68	358.774	12.73
9700.00†	44.563	358.774	9665.76	129.39	129.36	-2.77	780576.33	483839.85	32°19'39.974"N	103°33'31.707"W	129.39	358.774	12.73
9800.00†	57.296	358.774	9728.66	206.86	206.82	-4.43	780574.67	483917.31	32°19'40.741"N	103°33'31.720"W	206.86	358.774	12.73
9900.00†	70.028	358.774	9772.94	296.30	296.23	-6.34	780572.76	484006.72	32°19'41.626"N	103°33'31.735"W	296.30	358.774	12.73
10000.00†	82.761	358.774	9796.41	393.29	393.20	-8.42	780570.68	484103.69	32°19'42.585"N	103°33'31.751"W	393.29	358.774	12.73
10056.86	90.000	358.774	9800.00	450.00	449.90	-9.63	780569.47	484160.38	32°19'43.146"N	103°33'31.760"W	450.00	358.774	12.73
10100.00†	90.000	358.774	9800.00	493.14	493.03	-10.55	780568.55	484203.52	32°19'43.573"N	103°33'31.767"W	493.14	358.774	0.00
10200.00†	90.000	358.774	9800.00	593.14	593.01	-12.69	780566.41	484303.49	32°19'44.563"N	103°33'31.784"W	593.14	358.774	0.00
10300.00†	90.000	358.774	9800.00	693.14	692.98	-14.83	780564.27	484403.46	32°19'45.552"N	103°33'31.800"W	693.14	358.774	0.00
10400.00†	90.000	358.774	9800.00	793.14	792.96	-16.97	780562.13	484503.44	32°19'46.541"N	103°33'31.817"W	793.14	358.774	0.00
10500.00†	90.000	358.774	9800.00	893.14	892.94	-19.11	780559.99	484603.41	32°19'47.531"N	103°33'31.834"W	893.14	358.774	0.00
10600.00†	90.000	358.774	9800.00	993.14	992.91	-21.25	780557.85	484703.39	32°19'48.520"N	103°33'31.850"W	993.14	358.774	0.00
10700.00†	90.000	358.774	9800.00	1093.14	1092.89	-23.39	780555.71	484803.36	32°19'49.510"N	103°33'31.867"W	1093.14	358.774	0.00
10800.00†	90.000	358.774	9800.00	1193.14	1192.87	-25.53	780553.57	484903.34	32°19'50.499"N	103°33'31.883"W	1193.14	358.774	0.00
10900.00†	90.000	358.774	9800.00	1293.14	1292.85	-27.67	780551.43	485003.31	32°19'51.488"N	103°33'31.900"W	1293.14	358.774	0.00
11000.00†	90.000	358.774	9800.00	1393.14	1392.82	-29.81	780549.29	485103.28	32°19'52.478"N	103°33'31.916"W	1393.14	358.774	0.00
11100.00†	90.000	358.774	9800.00	1493.14	1492.80	-31.95	780547.15	485203.26	32°19'53.467"N	103°33'31.933"W	1493.14	358.774	0.00
11200.00†	90.000	358.774	9800.00	1593.14	1592.78	-34.09	780545.01	485303.23	32°19'54.457"N	103°33'31.949"W	1593.14	358.774	0.00
11300.00†	90.000	358.774	9800.00	1693.14	1692.75	-36.23	780542.87	485403.21	32°19'55.446"N	103°33'31.966"W	1693.14	358.774	0.00
11400.00†	90.000	358.774	9800.00	1793.14	1792.73	-38.37	780540.73	485503.18	32°19'56.435"N	103°33'31.982"W	1793.14	358.774	0.00
11500.00†	90.000	358.774	9800.00	1893.14	1892.71	-40.51	780538.59	485603.16	32°19'57.425"N	103°33'31.999"W	1893.14	358.774	0.00
11600.00†	90.000	358.774	9800.00	1993.14	1992.69	-42.65	780536.45	485703.13	32°19'58.414"N	103°33'32.015"W	1993.14	358.774	0.00
11700.00†	90.000	358.774	9800.00	2093.14	2092.66	-44.79	780534.31	485803.11	32°19'59.404"N	103°33'32.032"W	2093.14	358.774	0.00



Planned Wellpath Report

Rev-A.0
Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

WELLPATH DATA (146 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]
11800.00†	90.000	358.774	9800.00	2193.14	2192.64	-46.93	780532.17	485903.08	32°20'00.393"N	103°33'32.048"W	2193.14	358.774	0.00
11900.00†	90.000	358.774	9800.00	2293.14	2292.62	-49.07	780530.03	486003.05	32°20'01.382"N	103°33'32.065"W	2293.14	358.774	0.00
12000.00†	90.000	358.774	9800.00	2393.14	2392.59	-51.21	780527.89	486103.03	32°20'02.372"N	103°33'32.081"W	2393.14	358.774	0.00
12100.00†	90.000	358.774	9800.00	2493.14	2492.57	-53.35	780525.75	486203.00	32°20'03.361"N	103°33'32.098"W	2493.14	358.774	0.00
12200.00†	90.000	358.774	9800.00	2593.14	2592.55	-55.49	780523.61	486302.98	32°20'04.351"N	103°33'32.114"W	2593.14	358.774	0.00
12300.00†	90.000	358.774	9800.00	2693.14	2692.53	-57.63	780521.47	486402.95	32°20'05.340"N	103°33'32.131"W	2693.14	358.774	0.00
12400.00†	90.000	358.774	9800.00	2793.14	2792.50	-59.77	780519.33	486502.93	32°20'06.329"N	103°33'32.147"W	2793.14	358.774	0.00
12500.00†	90.000	358.774	9800.00	2893.14	2892.48	-61.91	780517.20	486602.90	32°20'07.319"N	103°33'32.164"W	2893.14	358.774	0.00
12600.00†	90.000	358.774	9800.00	2993.14	2992.46	-64.05	780515.06	486702.87	32°20'08.308"N	103°33'32.180"W	2993.14	358.774	0.00
12700.00†	90.000	358.774	9800.00	3093.14	3092.43	-66.19	780512.92	486802.85	32°20'09.298"N	103°33'32.197"W	3093.14	358.774	0.00
12800.00†	90.000	358.774	9800.00	3193.14	3192.41	-68.33	780510.78	486902.82	32°20'10.287"N	103°33'32.213"W	3193.14	358.774	0.00
12900.00†	90.000	358.774	9800.00	3293.14	3292.39	-70.47	780508.64	487002.80	32°20'11.276"N	103°33'32.230"W	3293.14	358.774	0.00
13000.00†	90.000	358.774	9800.00	3393.14	3392.36	-72.61	780506.50	487102.77	32°20'12.266"N	103°33'32.246"W	3393.14	358.774	0.00
13100.00†	90.000	358.774	9800.00	3493.14	3492.34	-74.75	780504.36	487202.75	32°20'13.255"N	103°33'32.263"W	3493.14	358.774	0.00
13200.00†	90.000	358.774	9800.00	3593.14	3592.32	-76.88	780502.22	487302.72	32°20'14.245"N	103°33'32.279"W	3593.14	358.774	0.00
13300.00†	90.000	358.774	9800.00	3693.14	3692.30	-79.02	780500.08	487402.70	32°20'15.234"N	103°33'32.296"W	3693.14	358.774	0.00
13400.00†	90.000	358.774	9800.00	3793.14	3792.27	-81.16	780497.94	487502.67	32°20'16.223"N	103°33'32.312"W	3793.14	358.774	0.00
13500.00†	90.000	358.774	9800.00	3893.14	3892.25	-83.30	780495.80	487602.64	32°20'17.213"N	103°33'32.329"W	3893.14	358.774	0.00
13600.00†	90.000	358.774	9800.00	3993.14	3992.23	-85.44	780493.66	487702.62	32°20'18.202"N	103°33'32.345"W	3993.14	358.774	0.00
13700.00†	90.000	358.774	9800.00	4093.14	4092.20	-87.58	780491.52	487802.59	32°20'19.192"N	103°33'32.362"W	4093.14	358.774	0.00
13800.00†	90.000	358.774	9800.00	4193.14	4192.18	-89.72	780489.38	487902.57	32°20'20.181"N	103°33'32.378"W	4193.14	358.774	0.00
13900.00†	90.000	358.774	9800.00	4293.14	4292.16	-91.86	780487.24	488002.54	32°20'21.170"N	103°33'32.395"W	4293.14	358.774	0.00
14000.00†	90.000	358.774	9800.00	4393.14	4392.14	-94.00	780485.10	488102.52	32°20'22.160"N	103°33'32.411"W	4393.14	358.774	0.00
14100.00†	90.000	358.774	9800.00	4493.14	4492.11	-96.14	780482.96	488202.49	32°20'23.149"N	103°33'32.428"W	4493.14	358.774	0.00
14200.00†	90.000	358.774	9800.00	4593.14	4592.09	-98.28	780480.82	488302.46	32°20'24.138"N	103°33'32.445"W	4593.14	358.774	0.00
14219.64	90.000	358.774	9800.00 ¹	4612.78	4611.73	-98.70	780480.40	488322.10	32°20'24.333"N	103°33'32.448"W	4612.78	358.774	0.00



Planned Wellpath Report

Rev-A.0
Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	Slot #1
Area	Lea County, NM	Well	No. 3
Field	(Blanco) Sec 3, T23S, R33E	Wellbore	No. 3 (PWB)
Facility	Blanco 3 State Com No. 3		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Blanco 3 State Com No. 3 (Rev-0)	14219.64	9800.00	4611.73	-98.70	780480.40	488322.10	32°20'24.333"N	103°33'32.448"W	point