

DISTRICT I1625 N. French Dr., Hobbs, NM 88240
Phone (505) 833-0161 Fax: (505) 833-0720**DISTRICT II**811 S. First St., Artesia, NM 88210
Phone (505) 740-1253 Fax: (505) 740-0780**DISTRICT III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 834-8170 Fax: (505) 834-8170**DISTRICT IV**1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-2460 Fax: (505) 476-2462**State of New Mexico**
Energy, Minerals and Natural Resources DepartmentForm C-102
Revised August 1, 2011Submit one copy to appropriate
District Office**OIL CONSERVATION DIVISION**1220 South St. Francis Dr.
Santa Fe, New Mexico 87505**WELL LOCATION AND ACREAGE DEDICATION PLAT**☐ AMENDED REPORT

API Number 30-025-40906	Pool Code 28432	Pool Name Gamma Ridge; Bone Springs, West
Property Code 39674	Property Name WEST GRAMA RIDGE 8 STATE COM	Well Number 2
OGRID No. 215099	Operator Name CIMAREX ENERGY CO.	Elevation 3529'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	8	22 S	34 E		330	SOUTH	1980	WEST	LEA

Bottom Hole Location If Different From Surface

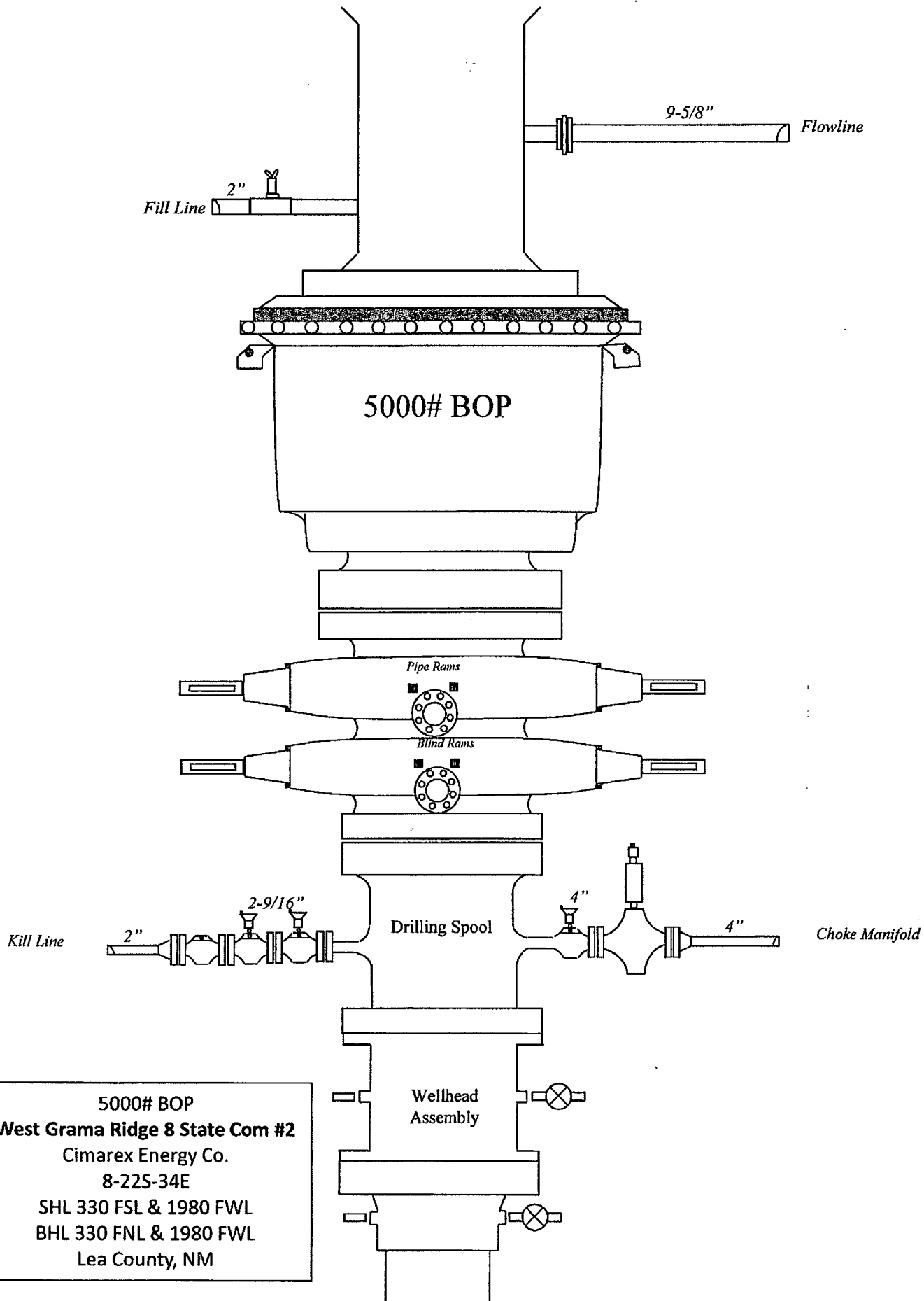
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	8	22 S	34 E		330	NORTH	1980	WEST	LEA

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**

	PROPOSED BOTTOM HOLE LOCATION Lat - N 32°24'45.30" Long - W 103°28'39.01" NMSPC - N 514845.9 E 800300.6 (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: <u>Michelle Chappell</u> Date: <u>01/30/13</u> Printed Name: <u>Michelle Chappell</u> Email Address: <u>mchappell@cimarex.com</u>
	SURFACE LOCATION Lat - N 32°23'59.60" Long - W 103°29'39.12" NMSPC - N 510227.2 E 800327.9 (NAD-83)	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: <u>February 2012</u> Signature: <u>[Signature]</u> Professional Surveyor: <u>7977</u> Certificate No.: <u>Gary L. Jones 7977</u> BASIN SURVEYS 26188

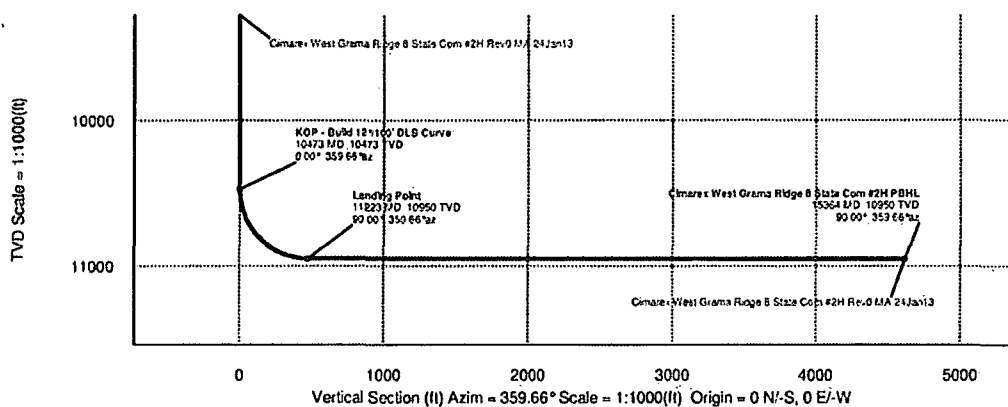
FEB 04 2013



5000# BOP
West Grama Ridge 8 State Com #2
Cimarex Energy Co.
8-22S-34E
SHL 330 FSL & 1980 FWL
BHL 330 FNL & 1980 FWL
Lea County, NM



West Grama Ridge 8 State #2H		West Grama Ridge 8 State #2H		West Grama Ridge 8 State #2H	
Map: 85571 P12 Box: 22-215 Date: January 24, 2013		Location: Box: West Grama Ridge 8 State #2H Date: 8/20/09		Map: 85571 P12 Box: 22-215 Date: January 24, 2013	



Critical Point	MP	INCL	AZIM	Critical Points				
				TVD	YSEC	N(+)/S(-)	E(+)/W(-)	DLS
Cimarex West Grama Ridge 8 State Com #2H SHL	0.00	0.00	359.66	0.00	0.00	0.00	0.00	
KOP - Build 12"/100' DLS Curve	10472.50	0.00	359.66	10472.50	0.00	0.00	0.00	0.00
Landing Point	11222.56	90.00	359.66	10950.00	477.50	477.49	-2.83	12.00
Cimarex West Grama Ridge 8 State Com #2H PBHL	15363.91	90.00	359.66	10950.00	4618.85	4618.77	-27.30	0.00



Cimarex West Grama Ridge 8 State Com #2H Rev0 MA 24Jan13 Proposal Report (Non-Def Plan)



Report Date: January 24, 2013 - 11:17 AM
 Client: Cimarex
 Field: NM Lea County (NAD 83)
 Structure / Slot: Cimarex West Grama Ridge 8 State Com #2H / Cimarex West Grama Ridge 8 State Com #2H
 Well: Cimarex West Grama Ridge 8 State Com #2H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cimarex West Grama Ridge 8 State Com #2H Rev0 MA 24Jan13
 Survey Date: January 24, 2013
 Tort / AHD / DDI / ERD Ratio: 90.003 * / 4618.855 ft / 5.766 / 0.422
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 23' 59.59999", W 103° 29' 39.11525"
 Location Grid N/E Y/X: N 510227.200 RUS, E 800327.900 RUS
 CRS Grid Convergence Angle: 0.4497 *
 Grid Scale Factor: 0.99998591

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 359.661 * (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: Ground Level
 TVD Reference Elevation: 3529.000 ft above MSL
 Seabed / Ground Elevation: 3529.000 ft above MSL
 Magnetic Declination: 7.468 *
 Total Gravity Field Strength: 998.4899mgn (9.80665 Based)
 Total Magnetic Field Strength: 48552.748 nT
 Magnetic Dip Angle: 60.285 *
 Declination Date: January 24, 2013
 Magnetic Declination Model: BGGM 2012
 North Reference: Grid North
 Grid Convergence Used: 0.4497 *
 Total Corr Mag North->Grid North: 7.0185 *
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)
Cimarex West Grama Ridge 8 State Com #2H SHL	0.00	0.00	359.66	0.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	N/A
	100.00	0.00	359.66	100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	200.00	0.00	359.66	200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	300.00	0.00	359.66	300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	400.00	0.00	359.66	400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	500.00	0.00	359.66	500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	600.00	0.00	359.66	600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	700.00	0.00	359.66	700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	800.00	0.00	359.66	800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	900.00	0.00	359.66	900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1000.00	0.00	359.66	1000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1100.00	0.00	359.66	1100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1200.00	0.00	359.66	1200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1300.00	0.00	359.66	1300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1400.00	0.00	359.66	1400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1500.00	0.00	359.66	1500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1600.00	0.00	359.66	1600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1700.00	0.00	359.66	1700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1800.00	0.00	359.66	1800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	1900.00	0.00	359.66	1900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2000.00	0.00	359.66	2000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2100.00	0.00	359.66	2100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2200.00	0.00	359.66	2200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2300.00	0.00	359.66	2300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2400.00	0.00	359.66	2400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2500.00	0.00	359.66	2500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2600.00	0.00	359.66	2600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (ft/100ft)
	2700.00	0.00	359.66	2700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2800.00	0.00	359.66	2800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	2900.00	0.00	359.66	2900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3000.00	0.00	359.66	3000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3100.00	0.00	359.66	3100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3200.00	0.00	359.66	3200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3300.00	0.00	359.66	3300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3400.00	0.00	359.66	3400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3500.00	0.00	359.66	3500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3600.00	0.00	359.66	3600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3700.00	0.00	359.66	3700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3800.00	0.00	359.66	3800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	3900.00	0.00	359.66	3900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4000.00	0.00	359.66	4000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4100.00	0.00	359.66	4100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4200.00	0.00	359.66	4200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4300.00	0.00	359.66	4300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4400.00	0.00	359.66	4400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4500.00	0.00	359.66	4500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4600.00	0.00	359.66	4600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4700.00	0.00	359.66	4700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4800.00	0.00	359.66	4800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	4900.00	0.00	359.66	4900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5000.00	0.00	359.66	5000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5100.00	0.00	359.66	5100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5200.00	0.00	359.66	5200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5300.00	0.00	359.66	5300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5400.00	0.00	359.66	5400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5500.00	0.00	359.66	5500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5600.00	0.00	359.66	5600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5700.00	0.00	359.66	5700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5800.00	0.00	359.66	5800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	5900.00	0.00	359.66	5900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6000.00	0.00	359.66	6000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6100.00	0.00	359.66	6100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6200.00	0.00	359.66	6200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6300.00	0.00	359.66	6300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6400.00	0.00	359.66	6400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6500.00	0.00	359.66	6500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6600.00	0.00	359.66	6600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6700.00	0.00	359.66	6700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6800.00	0.00	359.66	6800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	6900.00	0.00	359.66	6900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7000.00	0.00	359.66	7000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7100.00	0.00	359.66	7100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7200.00	0.00	359.66	7200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7300.00	0.00	359.66	7300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7400.00	0.00	359.66	7400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7500.00	0.00	359.66	7500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7600.00	0.00	359.66	7600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7700.00	0.00	359.66	7700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7800.00	0.00	359.66	7800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	7900.00	0.00	359.66	7900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8000.00	0.00	359.66	8000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8100.00	0.00	359.66	8100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)
	8200.00	0.00	359.66	8200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8300.00	0.00	359.66	8300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8400.00	0.00	359.66	8400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8500.00	0.00	359.66	8500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8600.00	0.00	359.66	8600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8700.00	0.00	359.66	8700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8800.00	0.00	359.66	8800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	8900.00	0.00	359.66	8900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9000.00	0.00	359.66	9000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9100.00	0.00	359.66	9100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9200.00	0.00	359.66	9200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9300.00	0.00	359.66	9300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9400.00	0.00	359.66	9400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9500.00	0.00	359.66	9500.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9600.00	0.00	359.66	9600.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9700.00	0.00	359.66	9700.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9800.00	0.00	359.66	9800.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	9900.00	0.00	359.66	9900.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	10000.00	0.00	359.66	10000.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	10100.00	0.00	359.66	10100.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	10200.00	0.00	359.66	10200.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	10300.00	0.00	359.66	10300.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
	10400.00	0.00	359.66	10400.00	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
KOP - Build 12°/100'	10472.50	0.00	359.66	10472.50	0.00	0.00	0.00	510227.20	800327.90	N 32 23 59.60	W 103 29 39.12	0.00	0.00	0.00
DLS Curve	10500.00	3.30	359.66	10499.98	0.79	0.79	0.00	510227.99	800327.90	N 32 23 59.61	W 103 29 39.12	0.79	359.66	12.00
	10600.00	15.30	359.66	10598.49	16.92	16.92	-0.10	510244.12	800327.80	N 32 23 59.77	W 103 29 39.11	16.92	359.66	12.00
	10700.00	27.30	359.66	10691.49	53.18	53.18	-0.32	510280.38	800327.58	N 32 24 0.13	W 103 29 39.11	53.18	359.66	12.00
	10800.00	39.30	359.66	10774.92	107.98	107.97	-0.64	510335.17	800327.26	N 32 24 0.67	W 103 29 39.11	107.98	359.66	12.00
	10900.00	51.30	359.66	10845.14	178.92	178.92	-1.06	510406.12	800326.84	N 32 24 1.37	W 103 29 39.11	178.92	359.66	12.00
	11000.00	63.30	359.66	10899.07	262.92	262.91	-1.56	510490.11	800326.34	N 32 24 2.20	W 103 29 39.11	262.92	359.66	12.00
	11100.00	75.29	359.66	10934.36	356.29	356.28	-2.11	510583.47	800325.79	N 32 24 3.13	W 103 29 39.11	356.29	359.66	12.00
	11200.00	87.29	359.66	10949.47	454.95	454.95	-2.70	510682.14	800325.20	N 32 24 4.10	W 103 29 39.11	454.95	359.66	12.00
Landing Point	11222.56	90.00	359.66	10950.00	477.50	477.49	-2.83	510704.68	800325.07	N 32 24 4.32	W 103 29 39.10	477.50	359.66	12.00
	11300.00	90.00	359.66	10950.00	554.94	554.93	-3.29	510782.12	800324.61	N 32 24 5.09	W 103 29 39.10	554.94	359.66	0.00
	11400.00	90.00	359.66	10950.00	654.94	654.93	-3.89	510882.12	800324.01	N 32 24 6.08	W 103 29 39.10	654.94	359.66	0.00
	11500.00	90.00	359.66	10950.00	754.94	754.93	-4.48	510982.12	800323.42	N 32 24 7.07	W 103 29 39.10	754.94	359.66	0.00
	11600.00	90.00	359.66	10950.00	854.94	854.93	-5.07	511082.12	800322.83	N 32 24 8.06	W 103 29 39.10	854.94	359.66	0.00
	11700.00	90.00	359.66	10950.00	954.94	954.93	-5.67	511182.11	800322.23	N 32 24 9.05	W 103 29 39.09	954.94	359.66	0.00
	11800.00	90.00	359.66	10950.00	1054.94	1054.93	-6.26	511282.11	800321.64	N 32 24 10.04	W 103 29 39.09	1054.94	359.66	0.00
	11900.00	90.00	359.66	10950.00	1154.94	1154.92	-6.85	511382.11	800321.05	N 32 24 11.03	W 103 29 39.09	1154.94	359.66	0.00
	12000.00	90.00	359.66	10950.00	1254.94	1254.92	-7.44	511482.10	800320.46	N 32 24 12.02	W 103 29 39.09	1254.94	359.66	0.00
	12100.00	90.00	359.66	10950.00	1354.94	1354.92	-8.04	511582.10	800319.86	N 32 24 13.01	W 103 29 39.08	1354.94	359.66	0.00
	12200.00	90.00	359.66	10950.00	1454.94	1454.92	-8.63	511682.10	800319.27	N 32 24 14.00	W 103 29 39.08	1454.94	359.66	0.00
	12300.00	90.00	359.66	10950.00	1554.94	1554.92	-9.22	511782.09	800318.68	N 32 24 14.99	W 103 29 39.08	1554.94	359.66	0.00
	12400.00	90.00	359.66	10950.00	1654.94	1654.92	-9.81	511882.09	800318.09	N 32 24 15.98	W 103 29 39.08	1654.94	359.66	0.00
	12500.00	90.00	359.66	10950.00	1754.94	1754.91	-10.40	511982.09	800317.50	N 32 24 16.96	W 103 29 39.08	1754.94	359.66	0.00
	12600.00	90.00	359.66	10950.00	1854.94	1854.91	-11.00	512082.08	800316.90	N 32 24 17.95	W 103 29 39.07	1854.94	359.66	0.00
	12700.00	90.00	359.66	10950.00	1954.94	1954.91	-11.59	512182.08	800316.31	N 32 24 18.94	W 103 29 39.07	1954.94	359.66	0.00
	12800.00	90.00	359.66	10950.00	2054.94	2054.91	-12.18	512282.08	800315.72	N 32 24 19.93	W 103 29 39.07	2054.94	359.66	0.00
	12900.00	90.00	359.66	10950.00	2154.94	2154.91	-12.77	512382.07	800315.13	N 32 24 20.92	W 103 29 39.07	2154.94	359.66	0.00
	13000.00	90.00	359.66	10950.00	2254.94	2254.91	-13.36	512482.07	800314.54	N 32 24 21.91	W 103 29 39.06	2254.94	359.66	0.00
	13100.00	90.00	359.66	10950.00	2354.94	2354.90	-13.95	512582.07	800313.95	N 32 24 22.90	W 103 29 39.06	2354.94	359.66	0.00
	13200.00	90.00	359.66	10950.00	2454.94	2454.90	-14.54	512682.06	800313.36	N 32 24 23.89	W 103 29 39.06	2454.94	359.66	0.00
	13300.00	90.00	359.66	10950.00	2554.94	2554.90	-15.13	512782.06	800312.77	N 32 24 24.88	W 103 29 39.06	2554.94	359.66	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)
	13400.00	90.00	359.66	10950.00	2654.94	2654.90	-15.72	512882.06	800312.18	N 32 24 25.87	W 103 29 39.06	2654.94	359.66	0.00
	13500.00	90.00	359.66	10950.00	2754.94	2754.90	-16.32	512982.05	800311.58	N 32 24 26.86	W 103 29 39.05	2754.94	359.66	0.00
	13600.00	90.00	359.66	10950.00	2854.94	2854.89	-16.91	513082.05	800310.99	N 32 24 27.85	W 103 29 39.05	2854.94	359.66	0.00
	13700.00	90.00	359.66	10950.00	2954.94	2954.89	-17.50	513182.05	800310.40	N 32 24 28.84	W 103 29 39.05	2954.94	359.66	0.00
	13800.00	90.00	359.66	10950.00	3054.94	3054.89	-18.09	513282.04	800309.81	N 32 24 29.83	W 103 29 39.05	3054.94	359.66	0.00
	13900.00	90.00	359.66	10950.00	3154.94	3154.89	-18.68	513382.04	800309.22	N 32 24 30.82	W 103 29 39.04	3154.94	359.66	0.00
	14000.00	90.00	359.66	10950.00	3254.94	3254.89	-19.27	513482.04	800308.63	N 32 24 31.81	W 103 29 39.04	3254.94	359.66	0.00
	14100.00	90.00	359.66	10950.00	3354.94	3354.89	-19.86	513582.03	800308.04	N 32 24 32.80	W 103 29 39.04	3354.94	359.66	0.00
	14200.00	90.00	359.66	10950.00	3454.94	3454.88	-20.45	513682.03	800307.45	N 32 24 33.79	W 103 29 39.04	3454.94	359.66	0.00
	14300.00	90.00	359.66	10950.00	3554.94	3554.88	-21.04	513782.03	800306.86	N 32 24 34.78	W 103 29 39.04	3554.94	359.66	0.00
	14400.00	90.00	359.66	10950.00	3654.94	3654.88	-21.63	513882.02	800306.28	N 32 24 35.77	W 103 29 39.03	3654.94	359.66	0.00
	14500.00	90.00	359.66	10950.00	3754.94	3754.88	-22.21	513982.02	800305.69	N 32 24 36.75	W 103 29 39.03	3754.94	359.66	0.00
	14600.00	90.00	359.66	10950.00	3854.94	3854.88	-22.80	514082.02	800305.10	N 32 24 37.74	W 103 29 39.03	3854.94	359.66	0.00
	14700.00	90.00	359.66	10950.00	3954.94	3954.88	-23.39	514182.01	800304.51	N 32 24 38.73	W 103 29 39.03	3954.94	359.66	0.00
	14800.00	90.00	359.66	10950.00	4054.94	4054.87	-23.98	514282.01	800303.92	N 32 24 39.72	W 103 29 39.02	4054.94	359.66	0.00
	14900.00	90.00	359.66	10950.00	4154.94	4154.87	-24.57	514382.01	800303.33	N 32 24 40.71	W 103 29 39.02	4154.94	359.66	0.00
	15000.00	90.00	359.66	10950.00	4254.94	4254.87	-25.16	514482.00	800302.74	N 32 24 41.70	W 103 29 39.02	4254.94	359.66	0.00
	15100.00	90.00	359.66	10950.00	4354.94	4354.87	-25.75	514582.00	800302.15	N 32 24 42.69	W 103 29 39.02	4354.94	359.66	0.00
	15200.00	90.00	359.66	10950.00	4454.94	4454.87	-26.34	514682.00	800301.56	N 32 24 43.68	W 103 29 39.01	4454.94	359.66	0.00
	15300.00	90.00	359.66	10950.00	4554.94	4554.87	-26.92	514781.99	800300.98	N 32 24 44.67	W 103 29 39.01	4554.94	359.66	0.00
Cimarex West Grama Ridge 8 State Com #2H PBHL	15363.91	90.00	359.66	10950.00	4618.85	4618.77	-27.30	514845.90	800300.60	N 32 24 45.30	W 103 29 39.01	4618.85	359.66	0.00

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	15363.910	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex West Grama Ridge 8 State Com #2H