

Cimarex Azul State 13 Fed Com 1H Rev0 OPB 9-Sep-16 Proposal Report

(Non-Def Plan)

Report Date: September 09, 2016 - 05:44 AM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Azul State 13 Fed Com 1H / Cimarex Azul State 13 Fed Com 1H
Well: Azul State 13 Fed Com 1H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Azul State 13 Fed Com 1H
Survey Date: September 09, 2016
Tort / AHD / DDI / ERD Ratio: 90.062 ° / 4617.719 ft / 5.782 / 0.477
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 18' 39.57900", W 103° 32' 0.43283"
Location Grid N/E Y/X: N 477794.100 RUS, E 788453.570 RUS
CRS Grid Convergence Angle: 0.4276 °
Grid Scale Factor: 0.99997903
Version / Patch: 2.9.370.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.302 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Unknown
TVD Reference Elevation: 3573.900 ft above MSL
Seabed / Ground Elevation: 3573.900 ft above MSL
Magnetic Declination: 6.929 °
Total Gravity Field Strength: 998.4563mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48290.851 nT
Magnetic Dip Angle: 60.160 °
Declination Date: September 09, 2016
Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.4276 °
Total Corr Mag North->Grid North: 6.5018 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL [360° FWL, 335° FNL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	100.00	0.00	176.00	100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	200.00	0.00	176.00	200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	300.00	0.00	176.00	300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	400.00	0.00	176.00	400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	500.00	0.00	176.00	500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	600.00	0.00	176.00	600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	700.00	0.00	176.00	700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	800.00	0.00	176.00	800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	900.00	0.00	176.00	900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1000.00	0.00	176.00	1000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1100.00	0.00	176.00	1100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1200.00	0.00	176.00	1200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1300.00	0.00	176.00	1300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1400.00	0.00	176.00	1400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1500.00	0.00	176.00	1500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1600.00	0.00	176.00	1600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1700.00	0.00	176.00	1700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1800.00	0.00	176.00	1800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	1900.00	0.00	176.00	1900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2000.00	0.00	176.00	2000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2100.00	0.00	176.00	2100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2200.00	0.00	176.00	2200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2300.00	0.00	176.00	2300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2400.00	0.00	176.00	2400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2500.00	0.00	176.00	2500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2600.00	0.00	176.00	2600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2700.00	0.00	176.00	2700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2800.00	0.00	176.00	2800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	2900.00	0.00	176.00	2900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3000.00	0.00	176.00	3000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3100.00	0.00	176.00	3100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3200.00	0.00	176.00	3200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3300.00	0.00	176.00	3300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3400.00	0.00	176.00	3400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3500.00	0.00	176.00	3500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3600.00	0.00	176.00	3600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3700.00	0.00	176.00	3700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3800.00	0.00	176.00	3800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	3900.00	0.00	176.00	3900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4000.00	0.00	176.00	4000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4100.00	0.00	176.00	4100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4200.00	0.00	176.00	4200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4300.00	0.00	176.00	4300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4400.00	0.00	176.00	4400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4500.00	0.00	176.00	4500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4600.00	0.00	176.00	4600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4700.00	0.00	176.00	4700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4800.00	0.00	176.00	4800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	4900.00	0.00	176.00	4900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5000.00	0.00	176.00	5000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5100.00	0.00	176.00	5100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5200.00	0.00	176.00	5200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5300.00	0.00	176.00	5300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5400.00	0.00	176.00	5400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5500.00	0.00	176.00	5500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5600.00	0.00	176.00	5600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5700.00	0.00	176.00	5700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5800.00	0.00	176.00	5800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	5900.00	0.00	176.00	5900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6000.00	0.00	176.00	6000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6100.00	0.00	176.00	6100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6200.00	0.00	176.00	6200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6300.00	0.00	176.00	6300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6400.00	0.00	176.00	6400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6500.00	0.00	176.00	6500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6600.00	0.00	176.00	6600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6700.00	0.00	176.00	6700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6800.00	0.00	176.00	6800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	6900.00	0.00	176.00	6900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7000.00	0.00	176.00	7000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7100.00	0.00	176.00	7100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7200.00	0.00	176.00	7200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7300.00	0.00	176.00	7300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7600.00	0.00	176.00	7600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7700.00	0.00	176.00	7700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7800.00	0.00	176.00	7800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	7900.00	0.00	176.00	7900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8000.00	0.00	176.00	8000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8100.00	0.00	176.00	8100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8200.00	0.00	176.00	8200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8300.00	0.00	176.00	8300.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8400.00	0.00	176.00	8400.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8500.00	0.00	176.00	8500.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8600.00	0.00	176.00	8600.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8700.00	0.00	176.00	8700.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8800.00	0.00	176.00	8800.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	8900.00	0.00	176.00	8900.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	9000.00	0.00	176.00	9000.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	9100.00	0.00	176.00	9100.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
	9200.00	0.00	176.00	9200.00	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
Build 12/100'	9212.19	0.00	176.00	9212.19	0.00	0.00	0.00	0.00	477794.10	788453.57	N 32 18 39.58	W 103 32 0.43
DLS	9300.00	10.54	176.00	9299.51	8.04	-8.03	0.56	12.00	477786.07	788454.13	N 32 18 39.50	W 103 32 0.43
	9400.00	22.54	176.00	9395.19	36.40	-36.37	2.54	12.00	477757.73	788456.11	N 32 18 39.22	W 103 32 0.41
Build & Turn	9462.19	30.00	176.00	9450.92	63.86	-63.81	4.46	12.00	477730.29	788458.03	N 32 18 38.95	W 103 32 0.39
12/100' DLS	9500.00	34.53	176.58	9482.89	84.01	-83.95	5.77	12.00	477710.15	788459.34	N 32 18 38.75	W 103 32 0.37
	9600.00	46.51	177.56	9558.77	148.81	-148.72	9.02	12.00	477645.39	788462.59	N 32 18 38.11	W 103 32 0.34
	9700.00	58.50	178.23	9619.53	227.96	-227.86	11.89	12.00	477566.25	788465.46	N 32 18 37.32	W 103 32 0.31
	9800.00	70.49	178.75	9662.51	318.07	-317.92	14.25	12.00	477476.19	788467.82	N 32 18 36.43	W 103 32 0.29
	9900.00	82.48	179.19	9685.84	415.12	-414.95	15.98	12.00	477379.15	788469.55	N 32 18 35.47	W 103 32 0.28
Landing Point	9962.69	90.00	179.45	9689.94	477.63	-477.46	16.72	12.00	477316.85	788470.29	N 32 18 34.85	W 103 32 0.28
	10000.00	90.00	179.45	9689.94	514.94	-514.77	17.08	0.00	477279.34	788470.65	N 32 18 34.48	W 103 32 0.28
	10100.00	90.00	179.45	9689.94	614.94	-614.76	18.03	0.00	477179.35	788471.60	N 32 18 33.49	W 103 32 0.28
	10200.00	90.00	179.45	9689.94	714.94	-714.76	18.99	0.00	477079.36	788472.56	N 32 18 32.51	W 103 32 0.27
	10300.00	90.00	179.45	9689.94	814.94	-814.76	19.94	0.00	476979.36	788473.51	N 32 18 31.52	W 103 32 0.27
	10400.00	90.00	179.45	9689.94	914.94	-914.75	20.89	0.00	476879.37	788474.46	N 32 18 30.53	W 103 32 0.27
	10500.00	90.00	179.45	9689.94	1014.94	-1014.75	21.85	0.00	476779.38	788475.42	N 32 18 29.54	W 103 32 0.27
	10600.00	90.00	179.45	9689.95	1114.94	-1114.74	22.80	0.00	476679.38	788476.37	N 32 18 28.55	W 103 32 0.26
	10700.00	90.00	179.45	9689.95	1214.94	-1214.74	23.76	0.00	476579.39	788477.33	N 32 18 27.56	W 103 32 0.26
	10800.00	90.00	179.45	9689.95	1314.94	-1314.73	24.71	0.00	476479.40	788478.28	N 32 18 26.57	W 103 32 0.26
	10900.00	90.00	179.45	9689.95	1414.94	-1414.73	25.66	0.00	476379.40	788479.23	N 32 18 25.58	W 103 32 0.26
	11000.00	90.00	179.45	9689.95	1514.94	-1514.72	26.62	0.00	476279.41	788480.19	N 32 18 24.59	W 103 32 0.25
	11100.00	90.00	179.45	9689.95	1614.93	-1614.72	27.57	0.00	476179.42	788481.14	N 32 18 23.60	W 103 32 0.25
	11200.00	90.00	179.45	9689.95	1714.93	-1714.71	28.53	0.00	476079.43	788482.10	N 32 18 22.61	W 103 32 0.25
	11300.00	90.00	179.45	9689.95	1814.93	-1814.71	29.48	0.00	475979.43	788483.05	N 32 18 21.62	W 103 32 0.25
	11400.00	90.00	179.45	9689.95	1914.93	-1914.71	30.43	0.00	475879.44	788484.00	N 32 18 20.63	W 103 32 0.24
	11500.00	90.00	179.45	9689.95	2014.93	-2014.70	31.39	0.00	475779.45	788484.96	N 32 18 19.64	W 103 32 0.24
	11600.00	90.00	179.45	9689.95	2114.93	-2114.70	32.34	0.00	475679.45	788485.91	N 32 18 18.65	W 103 32 0.24
	11700.00	90.00	179.45	9689.95	2214.93	-2214.69	33.30	0.00	475579.46	788486.86	N 32 18 17.66	W 103 32 0.24
	11800.00	90.00	179.45	9689.95	2314.93	-2314.69	34.25	0.00	475479.47	788487.82	N 32 18 16.67	W 103 32 0.24
	11900.00	90.00	179.45	9689.96	2414.93	-2414.68	35.20	0.00	475379.47	788488.77	N 32 18 15.68	W 103 32 0.23
	12000.00	90.00	179.45	9689.96	2514.93	-2514.68	36.16	0.00	475279.48	788489.73	N 32 18 14.69	W 103 32 0.23
	12100.00	90.00	179.45	9689.96	2614.93	-2614.67	37.11	0.00	475179.49	788490.68	N 32 18 13.70	W 103 32 0.23
	12200.00	90.00	179.45	9689.96	2714.93	-2714.67	38.07	0.00	475079.49	788491.63	N 32 18 12.72	W 103 32 0.23
	12300.00	90.00	179.45	9689.96	2814.93	-2814.66	39.02	0.00	474979.50	788492.59	N 32 18 11.73	W 103 32 0.22
	12400.00	90.00	179.45	9689.96	2914.93	-2914.66	39.97	0.00	474879.51	788493.54	N 32 18 10.74	W 103 32 0.22
	12500.00	90.00	179.45	9689.96	3014.93	-3014.65	40.93	0.00	474779.51	788494.50	N 32 18 9.75	W 103 32 0.22
	12600.00	90.00	179.45	9689.97	3114.93	-3114.65	41.88	0.00	474679.52	788495.45	N 32 18 8.76	W 103 32 0.22
	12700.00	90.00	179.45	9689.97	3214.93	-3214.65	42.83	0.00	474579.53	788496.40	N 32 18 7.77	W 103 32 0.21
	12800.00	90.00	179.45	9689.97	3314.93	-3314.64	43.79	0.00	474479.53	788497.36	N 32 18 6.78	W 103 32 0.21
	12900.00	90.00	179.45	9689.97	3414.93	-3414.64	44.74	0.00	474379.54	788498.31	N 32 18 5.79	W 103 32 0.21
	13000.00	90.00	179.45	9689.97	3514.93	-3514.63	45.70	0.00	474279.55	788499.26	N 32 18 4.80	W 103 32 0.21
	13100.00	90.00	179.45	9689.98	3614.93	-3614.63	46.65	0.00	474179.56	788500.22	N 32 18 3.81	W 103 32 0.20
	13200.00	90.00	179.45	9689.98	3714.93	-3714.62	47.60	0.00	474079.57	788501.17	N 32 18 2.82	W 103 32 0.20
	13300.00	90.00	179.45	9689.98	3814.93	-3814.62	48.56	0.00	473979.57	788502.13	N 32 18 1.83	W 103 32 0.20
	13400.00	90.00	179.45	9689.98	3914.93	-3914.61	49.51	0.00	473879.58	788503.08	N 32 18 0.84	W 103 32 0.20
	13500.00	90.00	179.45	9689.98	4014.93	-4014.61	50.46	0.00	473779.58	788504.03	N 32 17 59.85	W 103 32 0.19
	13600.00	90.00	179.45	9689.99	4114.93	-4114.60	51.42	0.00	473679.59	788504.99	N 32 17 58.86	W 103 32 0.19
	13700.00	90.00	179.45	9689.99	4214.93	-4214.60	52.37	0.00	473579.60	788505.94	N 32 17 57.87	W 103 32 0.19
	13800.00	90.00	179.45	9689.99	4314.93	-4314.60	53.33	0.00	473479.60	788506.89	N 32 17 56.88	W 103 32 0.19
	13900.00	90.00	179.45	9689.99	4414.92	-4414.59	54.28	0.00	473379.61	788507.85	N 32 17 55.89	W 103 32 0.18
	14000.00	90.00	179.45	9690.00	4514.92	-4514.59	55.23	0.00	473279.62	788508.80	N 32 17 54.90	W 103 32 0.18
	14100.00	90.00	179.45	9690.00	4614.92	-4614.58	56.19	0.00	473179.62	788509.76	N 32 17 53.91	W 103 32 0.18
Cimarex Azul												
State 13 Fed	14102.56	90.00	179.45	9690.00	4617.49	-4617.15	56.21	0.00	473177.06	788509.78	N 32 17 53.89	W 103 32 0.18
Com 1H - PBHL												

Survey Type: Non-Def Plan

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

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	14102.564	1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG	Original Borehole / Cimarex Azul State 13 Fed Com 1H

Schlumberger

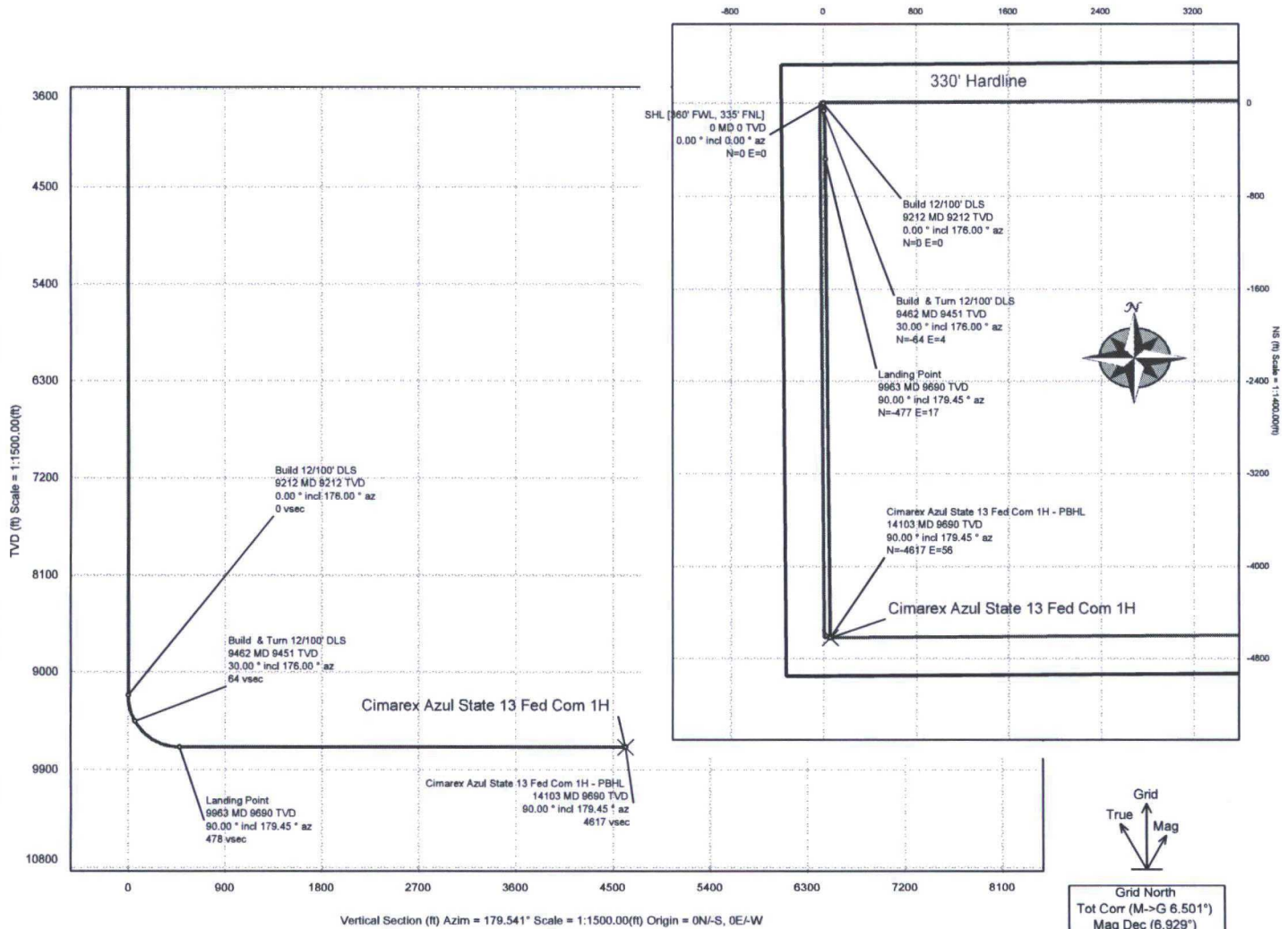
Cimarex

CIMAREX

Borehole:	Well:	Field:	Structure:
Original Borehole	Azul State 13 Fed Com 1H	NM Lea County (NAD 83)	TBD

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	HDGM	Dip:	60.16°	Date:	09-Sep-2016	Lat:	N 32 18 39.58	Northing:	477794.1ftUS	Grid Conv:	0.4278°
MagDec:	6.929°	FS:	48290.851n	Gravity FS:	998.456mgn (9.80665 Based)	Lon:	W 103 32 0.43	Easting:	788463.57ftUS	Scale Fact:	0.99997903
								Slot: 13 Fed Com			
								TVD Ref: Unknown(3573.9ft above MSL)			
								Plan: Cimarex Azul State 13 Fed Com 1H			

EW (ft) Scale = 1:1400.00(ft)



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [360' FWL, 335' FNL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Build 12/100' DLS	9212.19	0.00	176.00	9212.19	0.00	0.00	0.00	0.00
Build & Turn 12/100' DLS	9462.19	30.00	176.00	9450.92	63.86	-63.81	4.46	12.00
Landing Point	9962.69	90.00	179.45	9689.94	477.63	-477.46	16.72	12.00
Cimarex Azul State 13 Fed Com 1H - PBHL	14102.56	90.00	179.45	9690.00	4617.49	-4617.15	56.21	0.00