

Cimarex Triste Draw 25 Federal #11H Rev0 RM 22Mar17 Proposal

Geodetic Report

(Non-Def Plan)



Report Date: March 22, 2017 - 04:43 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Triste Draw 25 Federal #11H / Cimarex Triste Draw 25 Federal #11H
Well: Cimarex Triste Draw 25 Federal #11H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Triste Draw 25 Federal #11H Rev0 RM 22Mar17
Survey Date: March 22, 2017
Tort / AHD / DDI / ERD Ratio: 90.322 ° / 4446.945 ft / 5.760 / 0.452
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 11.44636", W 103° 37' 59.47735"
Location Grid N/E Y/X: N 462609.010 ftUS, E 757738.430 ftUS
CRS Grid Convergence Angle: 0.3738 °
Grid Scale Factor: 0.99996272
Version / Patch: 2.10.254.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.205 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3699.800 ft above MSL
Seabed / Ground Elevation: 3679.800 ft above MSL
Magnetic Declination: 6.916 °
Total Gravity Field Strength: 998.4378mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48196.475 nT
Magnetic Dip Angle: 60.075 °
Declination Date: March 22, 2017
Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.3738 °
Total Corr Mag North->Grid North: 6.5417 °
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 [510' FSL, 1140' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	100.00	0.00	353.50	100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	200.00	0.00	353.50	200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	300.00	0.00	353.50	300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	400.00	0.00	353.50	400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	500.00	0.00	353.50	500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	600.00	0.00	353.50	600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	700.00	0.00	353.50	700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	800.00	0.00	353.50	800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	900.00	0.00	353.50	900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1000.00	0.00	353.50	1000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1100.00	0.00	353.50	1100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1200.00	0.00	353.50	1200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1300.00	0.00	353.50	1300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1400.00	0.00	353.50	1400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1500.00	0.00	353.50	1500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1600.00	0.00	353.50	1600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1700.00	0.00	353.50	1700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1800.00	0.00	353.50	1800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	1900.00	0.00	353.50	1900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2000.00	0.00	353.50	2000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2100.00	0.00	353.50	2100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2200.00	0.00	353.50	2200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2300.00	0.00	353.50	2300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2400.00	0.00	353.50	2400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2500.00	0.00	353.50	2500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	

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 ° ' ")
	2600.00	0.00	353.50	2600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2700.00	0.00	353.50	2700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2800.00	0.00	353.50	2800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	2900.00	0.00	353.50	2900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3000.00	0.00	353.50	3000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3100.00	0.00	353.50	3100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3200.00	0.00	353.50	3200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3300.00	0.00	353.50	3300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3400.00	0.00	353.50	3400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3500.00	0.00	353.50	3500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3600.00	0.00	353.50	3600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3700.00	0.00	353.50	3700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3800.00	0.00	353.50	3800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	3900.00	0.00	353.50	3900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4000.00	0.00	353.50	4000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4100.00	0.00	353.50	4100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4200.00	0.00	353.50	4200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4300.00	0.00	353.50	4300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4400.00	0.00	353.50	4400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4500.00	0.00	353.50	4500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4600.00	0.00	353.50	4600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4700.00	0.00	353.50	4700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4800.00	0.00	353.50	4800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	4900.00	0.00	353.50	4900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5000.00	0.00	353.50	5000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5100.00	0.00	353.50	5100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5200.00	0.00	353.50	5200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5300.00	0.00	353.50	5300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5400.00	0.00	353.50	5400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5500.00	0.00	353.50	5500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5600.00	0.00	353.50	5600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5700.00	0.00	353.50	5700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5800.00	0.00	353.50	5800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	5900.00	0.00	353.50	5900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6000.00	0.00	353.50	6000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6100.00	0.00	353.50	6100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6200.00	0.00	353.50	6200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6300.00	0.00	353.50	6300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6400.00	0.00	353.50	6400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6500.00	0.00	353.50	6500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6600.00	0.00	353.50	6600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6700.00	0.00	353.50	6700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6800.00	0.00	353.50	6800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	6900.00	0.00	353.50	6900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7000.00	0.00	353.50	7000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7100.00	0.00	353.50	7100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7200.00	0.00	353.50	7200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7300.00	0.00	353.50	7300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7400.00	0.00	353.50	7400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7500.00	0.00	353.50	7500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7600.00	0.00	353.50	7600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7700.00	0.00	353.50	7700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7800.00	0.00	353.50	7800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	7900.00	0.00	353.50	7900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	8000.00	0.00	353.50	8000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	8100.00	0.00	353.50	8100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	8200.00	0.00	353.50	8200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	8300.00	0.00	353.50	8300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	
	8400.00	0.00	353.50	8400.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W 103 37 59.48	

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 ° ' ")
	8500.00	0.00	353.50	8500.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	8600.00	0.00	353.50	8600.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	8700.00	0.00	353.50	8700.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	8800.00	0.00	353.50	8800.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
Bone Spring	8830.00	0.00	353.50	8830.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	8900.00	0.00	353.50	8900.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	9000.00	0.00	353.50	9000.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	9100.00	0.00	353.50	9100.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	9200.00	0.00	353.50	9200.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	9300.00	0.00	353.50	9300.00	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
KOP - Build 12"/100' DLS	9351.42	0.00	353.50	9351.42	0.00	0.00	0.00	0.00	462609.01	757738.43	N 32 16 11.45 W	103 37 59.48
	9400.00	5.83	353.50	9399.92	2.46	2.45	-0.28	12.00	462611.46	757738.15	N 32 16 11.47 W	103 37 59.48
	9500.00	17.83	353.50	9497.61	22.82	22.78	-2.60	12.00	462631.79	757735.83	N 32 16 11.67 W	103 37 59.51
	9600.00	29.83	353.50	9588.92	62.95	62.85	-7.16	12.00	462671.86	757731.27	N 32 16 12.07 W	103 37 59.56
	9700.00	41.83	353.50	9669.85	121.09	120.91	-13.78	12.00	462729.91	757724.65	N 32 16 12.64 W	103 37 59.63
Build & Turn 12"/100' DLS	9726.42	45.00	353.50	9689.04	139.15	138.95	-15.83	12.00	462747.95	757722.60	N 32 16 12.82 W	103 37 59.65
	9800.00	53.74	355.13	9736.91	194.74	194.46	-21.31	12.00	462803.47	757717.12	N 32 16 13.37 W	103 37 59.71
	9900.00	65.65	356.84	9787.27	280.79	280.44	-27.27	12.00	462889.43	757711.16	N 32 16 14.22 W	103 37 59.77
	10000.00	77.58	358.25	9818.76	375.47	375.07	-31.29	12.00	462984.07	757707.15	N 32 16 15.16 W	103 37 59.81
	10100.00	89.51	359.54	9829.98	474.65	474.24	-33.19	12.00	463083.23	757705.24	N 32 16 16.14 W	103 37 59.83
Landing Point	10104.11	90.00	359.59	9830.00	478.76	478.34	-33.22	12.00	463087.33	757705.21	N 32 16 16.18 W	103 37 59.83
	10200.00	90.00	359.59	9830.00	574.65	574.24	-33.91	0.00	463183.22	757704.52	N 32 16 17.13 W	103 37 59.83
	10300.00	90.00	359.59	9830.00	674.65	674.23	-34.63	0.00	463283.22	757703.80	N 32 16 18.12 W	103 37 59.83
	10400.00	90.00	359.59	9830.00	774.65	774.23	-35.35	0.00	463383.21	757703.09	N 32 16 19.11 W	103 37 59.83
	10500.00	90.00	359.59	9830.00	874.64	874.23	-36.06	0.00	463483.20	757702.37	N 32 16 20.10 W	103 37 59.83
	10600.00	90.00	359.59	9830.00	974.64	974.22	-36.78	0.00	463583.20	757701.65	N 32 16 21.09 W	103 37 59.83
	10700.00	90.00	359.59	9830.00	1074.64	1074.22	-37.50	0.00	463683.19	757700.93	N 32 16 22.08 W	103 37 59.83
	10800.00	90.00	359.59	9830.00	1174.64	1174.22	-38.22	0.00	463783.18	757700.21	N 32 16 23.07 W	103 37 59.83
	10900.00	90.00	359.59	9830.00	1274.63	1274.22	-38.94	0.00	463883.18	757699.50	N 32 16 24.06 W	103 37 59.83
	11000.00	90.00	359.59	9830.00	1374.63	1374.21	-39.65	0.00	463983.17	757698.78	N 32 16 25.05 W	103 37 59.83
	11100.00	90.00	359.59	9830.00	1474.63	1474.21	-40.37	0.00	464083.16	757698.06	N 32 16 26.04 W	103 37 59.84
	11200.00	90.00	359.59	9830.00	1574.63	1574.21	-41.09	0.00	464183.16	757697.34	N 32 16 27.03 W	103 37 59.84
	11300.00	90.00	359.59	9830.00	1674.63	1674.21	-41.81	0.00	464283.15	757696.62	N 32 16 28.02 W	103 37 59.84
	11400.00	90.00	359.59	9830.00	1774.62	1774.20	-42.53	0.00	464383.14	757695.90	N 32 16 29.00 W	103 37 59.84
	11500.00	90.00	359.59	9830.00	1874.62	1874.20	-43.25	0.00	464483.14	757695.19	N 32 16 29.99 W	103 37 59.84
	11600.00	90.00	359.59	9830.00	1974.62	1974.20	-43.96	0.00	464583.13	757694.47	N 32 16 30.98 W	103 37 59.84
	11700.00	90.00	359.59	9830.00	2074.62	2074.20	-44.68	0.00	464683.13	757693.75	N 32 16 31.97 W	103 37 59.84
	11800.00	90.00	359.59	9830.00	2174.61	2174.19	-45.40	0.00	464783.12	757693.03	N 32 16 32.96 W	103 37 59.84
	11900.00	90.00	359.59	9830.00	2274.61	2274.19	-46.12	0.00	464883.11	757692.31	N 32 16 33.95 W	103 37 59.84
	12000.00	90.00	359.59	9830.00	2374.61	2374.19	-46.84	0.00	464983.11	757691.60	N 32 16 34.94 W	103 37 59.84
	12100.00	90.00	359.59	9830.00	2474.61	2474.19	-47.55	0.00	465083.10	757690.88	N 32 16 35.93 W	103 37 59.84
	12200.00	90.00	359.59	9830.00	2574.61	2574.18	-48.27	0.00	465183.09	757690.16	N 32 16 36.92 W	103 37 59.84
	12300.00	90.00	359.59	9830.00	2674.60	2674.18	-48.99	0.00	465283.09	757689.44	N 32 16 37.91 W	103 37 59.84
	12400.00	90.00	359.59	9830.00	2774.60	2774.18	-49.71	0.00	465383.08	757688.72	N 32 16 38.90 W	103 37 59.85
	12500.00	90.00	359.59	9830.00	2874.60	2874.18	-50.43	0.00	465483.07	757688.00	N 32 16 39.89 W	103 37 59.85
	12600.00	90.00	359.59	9830.00	2974.60	2974.17	-51.15	0.00	465583.07	757687.29	N 32 16 40.88 W	103 37 59.85
	12700.00	90.00	359.59	9830.00	3074.59	3074.17	-51.86	0.00	465683.06	757686.57	N 32 16 41.87 W	103 37 59.85
	12800.00	90.00	359.59	9830.00	3174.59	3174.17	-52.58	0.00	465783.05	757685.85	N 32 16 42.86 W	103 37 59.85
	12900.00	90.00	359.59	9830.00	3274.59	3274.17	-53.30	0.00	465883.05	757685.13	N 32 16 43.85 W	103 37 59.85
	13000.00	90.00	359.59	9830.00	3374.59	3374.16	-54.02	0.00	465983.04	757684.41	N 32 16 44.84 W	103 37 59.85
	13100.00	90.00	359.59	9830.00	3474.59	3474.16	-54.74	0.00	466083.03	757683.70	N 32 16 45.83 W	103 37 59.85
	13200.00	90.00	359.59	9830.00	3574.58	3574.16	-55.46	0.00	466183.03	757682.98	N 32 16 46.82 W	103 37 59.85
	13300.00	90.00	359.59	9830.00	3674.58	3674.16	-56.17	0.00	466283.02	757682.26	N 32 16 47.81 W	103 37 59.85
	13400.00	90.00	359.59	9830.00	3774.58	3774.15	-56.89	0.00	466383.01	757681.54	N 32 16 48.79 W	103 37 59.85
	13500.00	90.00	359.59	9830.00	3874.58	3874.15	-57.61	0.00	466483.01	757680.82	N 32 16 49.78 W	103 37 59.85
	13600.00	90.00	359.59	9830.00	3974.57	3974.15	-58.33	0.00	466583.00	757680.10	N 32 16 50.77 W	103 37 59.85
	13700.00	90.00	359.59	9830.00	4074.57	4074.15	-59.05	0.00	466683.00	757679.39	N 32 16 51.76 W	103 37 59.86

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 ° ' ")
	13800.00	90.00	359.59	9830.00	4174.57	4174.14	-59.76	0.00	466782.99	757678.67	N 32 16 52.75 W	103 37 59.86
	13900.00	90.00	359.59	9830.00	4274.57	4274.14	-60.48	0.00	466882.98	757677.95	N 32 16 53.74 W	103 37 59.86
	14000.00	90.00	359.59	9830.00	4374.57	4374.14	-61.20	0.00	466982.98	757677.23	N 32 16 54.73 W	103 37 59.86
Cimarex Triste Draw 25 Federal #11H - PBHL [330' FNL, 1110' FWL]	14071.22	90.00	359.59	9830.00	4445.78	4445.35	-61.71	0.00	467054.19	757676.72	N 32 16 55.44 W	103 37 59.86

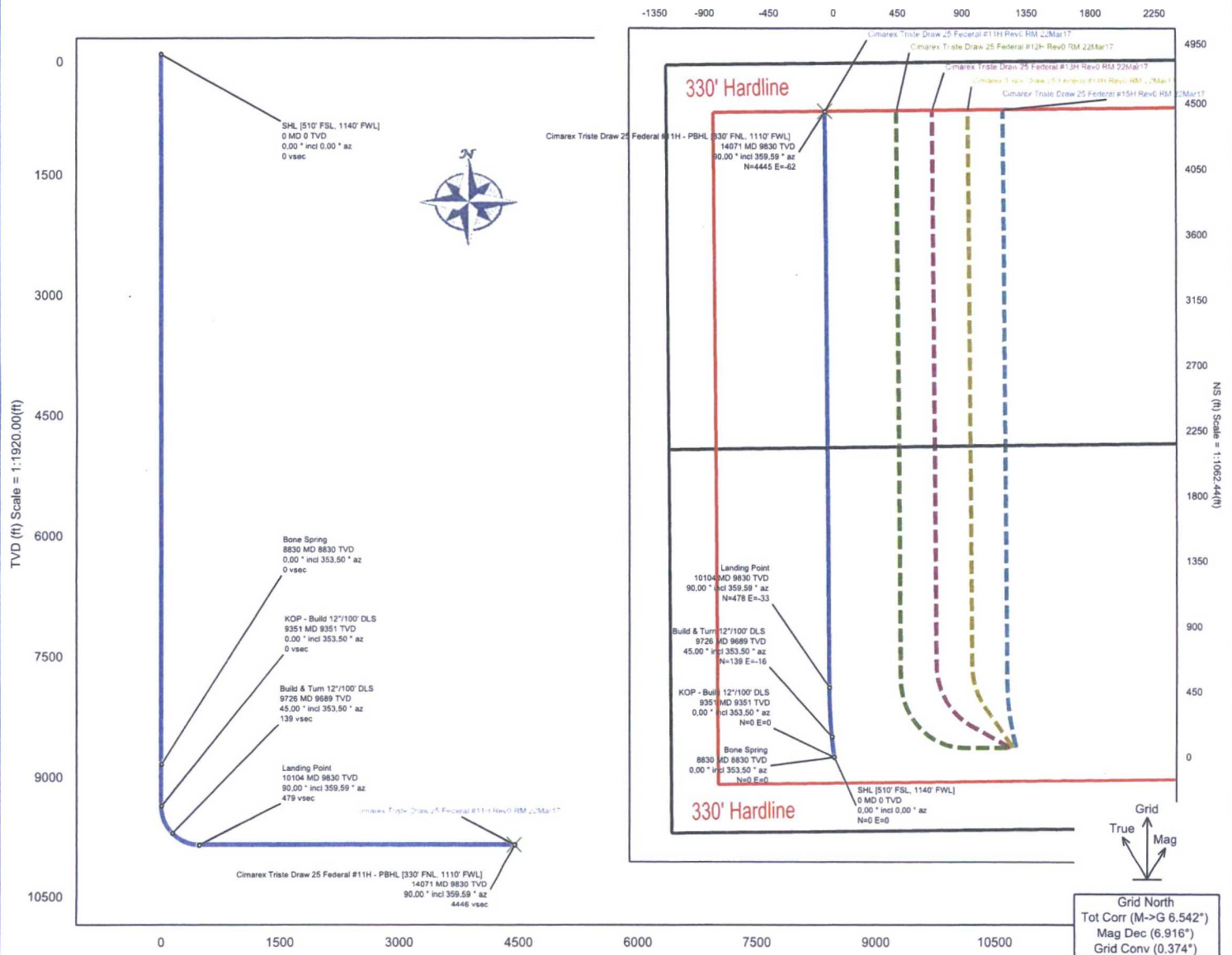
Survey Type: Non-Def Plan

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	20.000	1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Borehole / Cimarex Triste Draw 25 Federal #11H Rev0 RM 22Mar17
	1	20.000	14071.219	1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG	Original Borehole / Cimarex Triste Draw 25 Federal #11H

Borehole: Original Borehole	Well: Cimarex Triste Draw 25 Federal #11H	Field: NM Lea County (NAD 83)	Structure: Cimarex Triste Draw 25 Federal #11H
Gravity & Magnetic Parameters Model: HDGM 2016 Dip: 60.675° Date: 22-Mar-2017 MagDec: 6.916° FS: 48196.475nT Gravity FS: 996.438mgn (8.50665 Based)		Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet Lat: N 32 16 11.45 Northing: 462609.91RUS Grid Conv: 0.3738° Lon: W 103 37 59.48 Easting: 757738.43RUS Scale Fact: 0.99996272	
		Miscellaneous: Cimarex Triste Draw 25 Federal #11H Rev0 RM 22Mar17 Slot: Draw 25 Federal #11H Rev0 RM 22Mar17 Plan: Cimarex Triste Draw 25 Federal #11H Rev0 RM 22Mar17	

EW (ft) Scale = 1:1062.44(ft)



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [510' FSL, 1140' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Bone Spring	8830.00	0.00	353.50	8830.00	0.00	0.00	0.00	0.00
KOP - Build 12°/100' DLS	9351.42	0.00	353.50	9351.42	0.00	0.00	0.00	0.00
Build & Turn 12°/100' DLS	9726.42	45.00	353.50	9689.04	139.15	138.95	-15.83	12.00
Landing Point	10104.11	90.00	359.59	9830.00	478.76	478.34	-33.22	12.00
Cimarex Triste Draw 25 Federal #11H - PBHL [330' FNL, 1110' FWL]	14071.22	90.00	359.59	9830.00	4445.78	4445.35	-61.71	0.00