

30-015-45550

Schlumberger

Cimarex Parkway 15-14 North State Com 1H Rev0 RM 05Dec18 Proposal

Geodetic Report

(Non-Def Plan)



Report Date: December 05, 2018 - 11:47 AM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Parkway 15-14 North State Com 1H / New Slot
Well: Parkway 15-14 North State Com 1H
Borehole: Parkway 15-14 North State Com 1H
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Parkway 15-14 North State Com 1H Rev0 RM 05Dec18
Survey Date: December 05, 2018
Tort / AHD / DDI / ERD Ratio: 104.557 ° / 10632.947 ft / 6.372 / 1.203
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 39' 53.01145", W 104° 4' 11.79505"
Location Grid N/E Y/X: N 605658.690 rUS, E 622390.920 rUS
CRS Grid Convergence Angle: 0.1422 °
Grid Scale Factor: 0.99991661
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 90.285 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3371.000 ft above MSL
Seabed / Ground Elevation: 3345.000 ft above MSL
Magnetic Declination: 7.351 °
Total Gravity Field Strength: 998.5139mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48041.471 nT
Magnetic Dip Angle: 60.452 °
Declination Date: December 05, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.1422 °
Total Corr Mag North->Grid North: 7.2091 °
Local Coord Referenced To: Well Head

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 13 2018

RECEIVED

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (rUS)	Easting (rUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL [1210' FNL, 390' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
Rustler	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
Top Salt	340.00	0.00	0.00	340.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
Yates	1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
Base Salt	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
Nudge 2"/100'	1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	605658.69	622390.92	N 32 39 53.01 W 104	4 11.80
DLS	1600.00	2.00	0.00	1599.98	-0.01	1.75	0.00	2.00	605660.44	622390.92	N 32 39 53.03 W 104	4 11.80
	1700.00	4.00	0.00	1699.84	-0.03	6.98	0.00	2.00	605665.67	622390.92	N 32 39 53.08 W 104	4 11.79
	1800.00	6.00	0.00	1799.45	-0.08	15.69	0.00	2.00	605674.38	622390.92	N 32 39 53.17 W 104	4 11.79
Hold Nudge	1863.92	7.28	0.00	1862.94	-0.11	23.08	0.00	2.00	605681.77	622390.92	N 32 39 53.24 W 104	4 11.79
	1900.00	7.28	0.00	1898.73	-0.14	27.65	0.00	0.00	605686.34	622390.92	N 32 39 53.29 W 104	4 11.79
	2000.00	7.28	0.00	1997.93	-0.20	40.32	0.00	0.00	605699.01	622390.92	N 32 39 53.41 W 104	4 11.79
	2100.00	7.28	0.00	2097.12	-0.26	52.99	0.00	0.00	605711.68	622390.92	N 32 39 53.54 W 104	4 11.79
Queen	2143.23	7.28	0.00	2140.00	-0.29	58.47	0.00	0.00	605717.15	622390.92	N 32 39 53.59 W 104	4 11.79
	2200.00	7.28	0.00	2196.31	-0.33	65.66	0.00	0.00	605724.35	622390.92	N 32 39 53.66 W 104	4 11.79

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 ° ' ")
	2300.00	7.28	0.00	2295.51	-0.39	78.33	0.00	0.00	605737.01	622390.92	N 32 39 53.79 W 104	4 11.79
	2400.00	7.28	0.00	2394.70	-0.45	91.00	0.00	0.00	605749.68	622390.92	N 32 39 53.91 W 104	4 11.79
	2500.00	7.28	0.00	2493.90	-0.52	103.67	0.00	0.00	605762.35	622390.92	N 32 39 54.04 W 104	4 11.79
	2600.00	7.28	0.00	2593.09	-0.58	116.34	0.00	0.00	605775.02	622390.92	N 32 39 54.16 W 104	4 11.79
	2700.00	7.28	0.00	2692.29	-0.64	129.01	0.00	0.00	605787.68	622390.92	N 32 39 54.29 W 104	4 11.79
	2800.00	7.28	0.00	2791.48	-0.70	141.67	0.00	0.00	605800.35	622390.92	N 32 39 54.41 W 104	4 11.79
	2900.00	7.28	0.00	2890.67	-0.77	154.34	0.00	0.00	605813.02	622390.92	N 32 39 54.54 W 104	4 11.79
	3000.00	7.28	0.00	2989.87	-0.83	167.01	0.00	0.00	605825.69	622390.92	N 32 39 54.66 W 104	4 11.79
	3100.00	7.28	0.00	3089.06	-0.89	179.68	0.00	0.00	605838.36	622390.92	N 32 39 54.79 W 104	4 11.79
Capitan	3105.99	7.28	0.00	3095.00	-0.90	180.44	0.00	0.00	605839.11	622390.92	N 32 39 54.80 W 104	4 11.79
	3200.00	7.28	0.00	3188.26	-0.96	192.35	0.00	0.00	605851.02	622390.92	N 32 39 54.91 W 104	4 11.79
	3300.00	7.28	0.00	3287.45	-1.02	205.02	0.00	0.00	605863.69	622390.92	N 32 39 55.04 W 104	4 11.79
Delaware	3312.65	7.28	0.00	3300.00	-1.03	206.62	0.00	0.00	605865.29	622390.92	N 32 39 55.06 W 104	4 11.79
	3400.00	7.28	0.00	3386.65	-1.08	217.69	0.00	0.00	605878.36	622390.92	N 32 39 55.17 W 104	4 11.79
	3500.00	7.28	0.00	3485.84	-1.15	230.36	0.00	0.00	605889.03	622390.92	N 32 39 55.29 W 104	4 11.79
	3600.00	7.28	0.00	3585.03	-1.21	243.03	0.00	0.00	605901.70	622390.92	N 32 39 55.42 W 104	4 11.79
	3700.00	7.28	0.00	3684.23	-1.27	255.69	0.00	0.00	605914.36	622390.92	N 32 39 55.54 W 104	4 11.79
	3800.00	7.28	0.00	3783.42	-1.33	268.36	0.00	0.00	605927.03	622390.92	N 32 39 55.67 W 104	4 11.79
	3900.00	7.28	0.00	3882.62	-1.40	281.03	0.00	0.00	605939.70	622390.92	N 32 39 55.79 W 104	4 11.79
	4000.00	7.28	0.00	3981.81	-1.46	293.70	0.00	0.00	605952.37	622390.92	N 32 39 55.92 W 104	4 11.79
	4100.00	7.28	0.00	4081.00	-1.52	306.37	0.00	0.00	605965.03	622390.92	N 32 39 56.04 W 104	4 11.79
	4200.00	7.28	0.00	4180.20	-1.59	319.04	0.00	0.00	605977.70	622390.92	N 32 39 56.17 W 104	4 11.79
	4300.00	7.28	0.00	4279.39	-1.65	331.71	0.00	0.00	605990.37	622390.92	N 32 39 56.29 W 104	4 11.79
	4400.00	7.28	0.00	4378.59	-1.71	344.38	0.00	0.00	606003.04	622390.92	N 32 39 56.42 W 104	4 11.79
	4500.00	7.28	0.00	4477.78	-1.78	357.05	0.00	0.00	606015.71	622390.92	N 32 39 56.54 W 104	4 11.78
	4600.00	7.28	0.00	4576.98	-1.84	369.71	0.00	0.00	606028.37	622390.92	N 32 39 56.67 W 104	4 11.78
	4700.00	7.28	0.00	4676.17	-1.90	382.38	0.00	0.00	606041.04	622390.92	N 32 39 56.79 W 104	4 11.78
	4800.00	7.28	0.00	4775.36	-1.97	395.05	0.00	0.00	606053.71	622390.92	N 32 39 56.92 W 104	4 11.78
	4900.00	7.28	0.00	4874.56	-2.03	407.72	0.00	0.00	606066.38	622390.92	N 32 39 57.05 W 104	4 11.78
	5000.00	7.28	0.00	4973.75	-2.09	420.39	0.00	0.00	606079.04	622390.92	N 32 39 57.17 W 104	4 11.78
	5100.00	7.28	0.00	5072.95	-2.15	433.06	0.00	0.00	606091.71	622390.92	N 32 39 57.30 W 104	4 11.78
	5200.00	7.28	0.00	5172.14	-2.22	445.73	0.00	0.00	606104.38	622390.92	N 32 39 57.42 W 104	4 11.78
	5300.00	7.28	0.00	5271.34	-2.28	458.40	0.00	0.00	606117.05	622390.92	N 32 39 57.55 W 104	4 11.78
	5400.00	7.28	0.00	5370.53	-2.34	471.07	0.00	0.00	606129.72	622390.92	N 32 39 57.67 W 104	4 11.78
	5500.00	7.28	0.00	5469.72	-2.41	483.73	0.00	0.00	606142.38	622390.92	N 32 39 57.80 W 104	4 11.78
	5600.00	7.28	0.00	5568.92	-2.47	496.40	0.00	0.00	606155.05	622390.92	N 32 39 57.92 W 104	4 11.78
	5700.00	7.28	0.00	5668.11	-2.53	509.07	0.00	0.00	606167.72	622390.92	N 32 39 58.05 W 104	4 11.78
	5800.00	7.28	0.00	5767.31	-2.60	521.74	0.00	0.00	606180.39	622390.92	N 32 39 58.17 W 104	4 11.78
	5900.00	7.28	0.00	5866.50	-2.66	534.41	0.00	0.00	606193.05	622390.92	N 32 39 58.30 W 104	4 11.78
	6000.00	7.28	0.00	5965.70	-2.72	547.08	0.00	0.00	606205.72	622390.92	N 32 39 58.42 W 104	4 11.78
Drop to Vertical 2°/100' DLS	6034.58	7.28	0.00	6000.00	-2.74	551.46	0.00	0.00	606210.10	622390.92	N 32 39 58.47 W 104	4 11.78
	6100.00	5.97	0.00	6084.98	-2.78	559.01	0.00	2.00	606217.65	622390.92	N 32 39 58.54 W 104	4 11.78
	6200.00	3.97	0.00	6164.60	-2.82	567.67	0.00	2.00	606226.31	622390.92	N 32 39 58.63 W 104	4 11.78
	6300.00	1.97	0.00	6264.46	-2.85	572.85	0.00	2.00	606231.49	622390.92	N 32 39 58.68 W 104	4 11.78
Hold Vertical	6398.50	0.00	0.00	6362.94	-2.86	574.54	0.00	2.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6400.00	0.00	0.00	6364.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6500.00	0.00	0.00	6464.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6600.00	0.00	0.00	6564.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6700.00	0.00	0.00	6664.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6800.00	0.00	0.00	6764.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	6900.00	0.00	0.00	6864.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
1st Bone Spring Sand	6985.56	0.00	0.00	6950.00	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7000.00	0.00	0.00	6964.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7100.00	0.00	0.00	7064.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7200.00	0.00	0.00	7164.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7300.00	0.00	0.00	7264.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7400.00	0.00	0.00	7364.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78

Comments	MD (ft)	Incl (°)	Azim Grd (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7500.00	0.00	0.00	7464.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7600.00	0.00	0.00	7564.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7700.00	0.00	0.00	7664.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
2nd Bone Spring Sand	7745.56	0.00	0.00	7710.00	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7800.00	0.00	0.00	7764.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	7900.00	0.00	0.00	7864.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8000.00	0.00	0.00	7964.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8100.00	0.00	0.00	8064.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8200.00	0.00	0.00	8164.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8300.00	0.00	0.00	8264.44	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
KOP - Build 12°/100' DLS	8398.10	0.00	0.00	8362.54	-2.86	574.54	0.00	0.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8400.00	0.23	90.29	8364.44	-2.85	574.54	0.00	12.00	606233.18	622390.92	N 32 39 58.70 W 104	4 11.78
	8500.00	12.23	90.29	8463.67	7.98	574.49	10.83	12.00	606233.13	622401.75	N 32 39 58.70 W 104	4 11.65
	8600.00	24.23	90.29	8558.48	39.20	574.33	42.06	12.00	606232.98	622432.97	N 32 39 58.69 W 104	4 11.29
	8700.00	36.23	90.29	8644.72	89.45	574.08	92.31	12.00	606232.73	622483.22	N 32 39 58.69 W 104	4 10.70
3rd Bone Spring Sand	8772.88	44.97	90.29	8700.00	136.83	573.85	139.69	12.00	606232.49	622530.60	N 32 39 58.69 W 104	4 10.14
	8800.00	48.23	90.29	8718.63	156.54	573.75	159.39	12.00	606232.39	622550.30	N 32 39 58.68 W 104	4 9.91
	8900.00	60.23	90.29	8776.98	237.53	573.35	240.38	12.00	606231.99	622631.28	N 32 39 58.68 W 104	4 8.97
	9000.00	72.23	90.29	8817.22	328.87	572.89	331.73	12.00	606231.53	622722.62	N 32 39 58.67 W 104	4 7.90
	9100.00	84.23	90.29	8837.58	426.59	572.41	429.44	12.00	606231.05	622820.33	N 32 39 58.66 W 104	4 6.75
Landing Point	9148.10	90.00	90.29	8840.00	474.61	572.17	477.46	12.00	606230.81	622868.34	N 32 39 58.66 W 104	4 6.19
	9200.00	90.00	90.29	8840.00	526.51	571.91	529.36	0.00	606230.55	622920.24	N 32 39 58.66 W 104	4 5.59
	9300.00	90.00	90.29	8840.00	626.51	571.41	629.36	0.00	606230.05	623020.23	N 32 39 58.65 W 104	4 4.42
	9400.00	90.00	90.29	8840.00	726.51	570.92	729.36	0.00	606229.56	623120.22	N 32 39 58.64 W 104	4 3.25
	9500.00	90.00	90.29	8840.00	826.51	570.42	829.36	0.00	606229.06	623220.21	N 32 39 58.63 W 104	4 2.08
	9600.00	90.00	90.29	8840.00	926.51	569.92	929.36	0.00	606228.56	623320.20	N 32 39 58.63 W 104	4 0.91
	9700.00	90.00	90.29	8840.00	1026.51	569.42	1029.36	0.00	606228.06	623420.19	N 32 39 58.62 W 104	3 59.74
	9800.00	90.00	90.29	8840.00	1126.51	568.93	1129.35	0.00	606227.57	623520.18	N 32 39 58.61 W 104	3 58.57
	9900.00	90.00	90.29	8840.00	1226.51	568.43	1229.35	0.00	606227.07	623620.17	N 32 39 58.61 W 104	3 57.40
	10000.00	90.00	90.29	8840.00	1326.51	567.93	1329.35	0.00	606226.57	623720.16	N 32 39 58.60 W 104	3 56.23
	10100.00	90.00	90.29	8840.00	1426.51	567.43	1429.35	0.00	606226.07	623820.15	N 32 39 58.59 W 104	3 55.06
	10200.00	90.00	90.29	8840.00	1526.51	566.94	1529.35	0.00	606225.58	623920.14	N 32 39 58.58 W 104	3 53.89
	10300.00	90.00	90.29	8840.00	1626.51	566.44	1629.35	0.00	606225.08	624020.13	N 32 39 58.57 W 104	3 52.72
	10400.00	90.00	90.29	8840.00	1726.51	565.94	1729.35	0.00	606224.58	624120.12	N 32 39 58.57 W 104	3 51.55
	10500.00	90.00	90.29	8840.00	1826.51	565.44	1829.35	0.00	606224.08	624220.11	N 32 39 58.56 W 104	3 50.38
	10600.00	90.00	90.29	8840.00	1926.51	564.95	1929.34	0.00	606223.59	624320.10	N 32 39 58.55 W 104	3 49.21
	10700.00	90.00	90.29	8840.00	2026.51	564.45	2029.34	0.00	606223.09	624420.09	N 32 39 58.55 W 104	3 48.04
	10800.00	90.00	90.29	8840.00	2126.51	563.95	2129.34	0.00	606222.59	624520.08	N 32 39 58.54 W 104	3 46.87
	10900.00	90.00	90.29	8840.00	2226.51	563.45	2229.34	0.00	606222.09	624620.07	N 32 39 58.53 W 104	3 45.70
	11000.00	90.00	90.29	8840.00	2326.51	562.96	2329.34	0.00	606221.60	624720.06	N 32 39 58.52 W 104	3 44.53
	11100.00	90.00	90.29	8840.00	2426.51	562.46	2429.34	0.00	606221.10	624820.05	N 32 39 58.52 W 104	3 43.36
	11200.00	90.00	90.29	8840.00	2526.51	561.96	2529.34	0.00	606220.60	624920.04	N 32 39 58.51 W 104	3 42.19
	11300.00	90.00	90.29	8840.00	2626.51	561.46	2629.34	0.00	606220.11	625020.03	N 32 39 58.50 W 104	3 41.02
	11400.00	90.00	90.29	8840.00	2726.51	560.97	2729.33	0.00	606219.61	625120.02	N 32 39 58.49 W 104	3 39.85
	11500.00	90.00	90.29	8840.00	2826.51	560.47	2829.33	0.00	606219.11	625220.01	N 32 39 58.49 W 104	3 38.68
	11600.00	90.00	90.29	8840.00	2926.51	559.97	2929.33	0.00	606218.61	625320.00	N 32 39 58.48 W 104	3 37.51
	11700.00	90.00	90.29	8840.00	3026.51	559.47	3029.33	0.00	606218.12	625419.99	N 32 39 58.47 W 104	3 36.34
	11800.00	90.00	90.29	8840.00	3126.51	558.98	3129.33	0.00	606217.62	625519.98	N 32 39 58.46 W 104	3 35.17
	11900.00	90.00	90.29	8840.00	3226.51	558.48	3229.33	0.00	606217.12	625619.97	N 32 39 58.46 W 104	3 34.00
	12000.00	90.00	90.29	8840.00	3326.51	557.98	3329.33	0.00	606216.62	625719.96	N 32 39 58.45 W 104	3 32.83
	12100.00	90.00	90.29	8840.00	3426.51	557.48	3429.33	0.00	606216.13	625819.95	N 32 39 58.44 W 104	3 31.66
	12200.00	90.00	90.29	8840.00	3526.51	556.99	3529.32	0.00	606215.63	625919.94	N 32 39 58.43 W 104	3 30.49
	12300.00	90.00	90.29	8840.00	3626.51	556.49	3629.32	0.00	606215.13	626019.93	N 32 39 58.43 W 104	3 29.32
	12400.00	90.00	90.29	8840.00	3726.51	555.99	3729.32	0.00	606214.63	626119.92	N 32 39 58.42 W 104	3 28.15
	12500.00	90.00	90.29	8840.00	3826.51	555.49	3829.32	0.00	606214.14	626219.91	N 32 39 58.41 W 104	3 26.99
	12600.00	90.00	90.29	8840.00	3926.51	555.00	3929.32	0.00	606213.64	626319.90	N 32 39 58.40 W 104	3 25.82

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 ° ' ")
	12700.00	90.00	90.29	8840.00	4026.51	554.50	4029.32	0.00	606213.14	626419.89	N 32 39 58.40 W 104	3 24.65
	12800.00	90.00	90.29	8840.00	4126.51	554.00	4129.32	0.00	606212.64	626519.88	N 32 39 58.39 W 104	3 23.48
	12900.00	90.00	90.29	8840.00	4226.51	553.50	4229.32	0.00	606212.15	626619.88	N 32 39 58.38 W 104	3 22.31
	13000.00	90.00	90.29	8840.00	4326.51	553.01	4329.32	0.00	606211.65	626719.87	N 32 39 58.37 W 104	3 21.14
	13100.00	90.00	90.29	8840.00	4426.51	552.51	4429.31	0.00	606211.15	626819.86	N 32 39 58.37 W 104	3 19.97
	13200.00	90.00	90.29	8840.00	4526.51	552.01	4529.31	0.00	606210.65	626919.85	N 32 39 58.36 W 104	3 18.80
	13300.00	90.00	90.29	8840.00	4626.51	551.51	4629.31	0.00	606210.16	627019.84	N 32 39 58.35 W 104	3 17.63
	13400.00	90.00	90.29	8840.00	4726.51	551.02	4729.31	0.00	606209.66	627119.83	N 32 39 58.34 W 104	3 16.46
	13500.00	90.00	90.29	8840.00	4826.51	550.52	4829.31	0.00	606209.16	627219.82	N 32 39 58.34 W 104	3 15.29
	13600.00	90.00	90.29	8840.00	4926.51	550.02	4929.31	0.00	606208.66	627319.81	N 32 39 58.33 W 104	3 14.12
	13700.00	90.00	90.29	8840.00	5026.51	549.52	5029.31	0.00	606208.17	627419.80	N 32 39 58.32 W 104	3 12.95
	13800.00	90.00	90.29	8840.00	5126.51	549.03	5129.31	0.00	606207.67	627519.79	N 32 39 58.31 W 104	3 11.78
	13900.00	90.00	90.29	8840.00	5226.51	548.53	5229.30	0.00	606207.17	627619.78	N 32 39 58.31 W 104	3 10.61
	14000.00	90.00	90.29	8840.00	5326.51	548.03	5329.30	0.00	606206.67	627719.77	N 32 39 58.30 W 104	3 9.44
	14100.00	90.00	90.29	8840.00	5426.51	547.53	5429.30	0.00	606206.18	627819.76	N 32 39 58.29 W 104	3 8.27
	14200.00	90.00	90.29	8840.00	5526.51	547.04	5529.30	0.00	606205.68	627919.75	N 32 39 58.28 W 104	3 7.10
	14300.00	90.00	90.29	8840.00	5626.51	546.54	5629.30	0.00	606205.18	628019.74	N 32 39 58.28 W 104	3 5.93
	14400.00	90.00	90.29	8840.00	5726.51	546.04	5729.30	0.00	606204.68	628119.73	N 32 39 58.27 W 104	3 4.76
	14500.00	90.00	90.29	8840.00	5826.51	545.54	5829.30	0.00	606204.19	628219.72	N 32 39 58.26 W 104	3 3.59
	14600.00	90.00	90.29	8840.00	5926.51	545.05	5929.30	0.00	606203.69	628319.71	N 32 39 58.25 W 104	3 2.42
	14700.00	90.00	90.29	8840.00	6026.51	544.55	6029.29	0.00	606203.19	628419.70	N 32 39 58.25 W 104	3 1.25
	14800.00	90.00	90.29	8840.00	6126.51	544.05	6129.29	0.00	606202.69	628519.69	N 32 39 58.24 W 104	3 0.08
	14900.00	90.00	90.29	8840.00	6226.51	543.55	6229.29	0.00	606202.20	628619.68	N 32 39 58.23 W 104	2 58.91
	15000.00	90.00	90.29	8840.00	6326.51	543.06	6329.29	0.00	606201.70	628719.67	N 32 39 58.22 W 104	2 57.74
	15100.00	90.00	90.29	8840.00	6426.51	542.56	6429.29	0.00	606201.20	628819.66	N 32 39 58.22 W 104	2 56.57
	15200.00	90.00	90.29	8840.00	6526.51	542.06	6529.29	0.00	606200.70	628919.65	N 32 39 58.21 W 104	2 55.40
	15300.00	90.00	90.29	8840.00	6626.51	541.56	6629.29	0.00	606200.21	629019.64	N 32 39 58.20 W 104	2 54.23
	15400.00	90.00	90.29	8840.00	6726.51	541.07	6729.29	0.00	606199.71	629119.63	N 32 39 58.19 W 104	2 53.06
	15500.00	90.00	90.29	8840.00	6826.51	540.57	6829.28	0.00	606199.21	629219.62	N 32 39 58.19 W 104	2 51.89
	15600.00	90.00	90.29	8840.00	6926.51	540.07	6929.28	0.00	606198.72	629319.61	N 32 39 58.18 W 104	2 50.72
	15700.00	90.00	90.29	8840.00	7026.51	539.57	7029.28	0.00	606198.22	629419.60	N 32 39 58.17 W 104	2 49.55
	15800.00	90.00	90.29	8840.00	7126.51	539.08	7129.28	0.00	606197.72	629519.59	N 32 39 58.16 W 104	2 48.38
	15900.00	90.00	90.29	8840.00	7226.51	538.58	7229.28	0.00	606197.22	629619.58	N 32 39 58.15 W 104	2 47.21
	16000.00	90.00	90.29	8840.00	7326.51	538.08	7329.28	0.00	606196.73	629719.57	N 32 39 58.15 W 104	2 46.04
	16100.00	90.00	90.29	8840.00	7426.51	537.58	7429.28	0.00	606196.23	629819.56	N 32 39 58.14 W 104	2 44.87
	16200.00	90.00	90.29	8840.00	7526.51	537.09	7529.28	0.00	606195.73	629919.55	N 32 39 58.13 W 104	2 43.71
	16300.00	90.00	90.29	8840.00	7626.51	536.59	7629.27	0.00	606195.23	630019.54	N 32 39 58.12 W 104	2 42.54
	16400.00	90.00	90.29	8840.00	7726.51	536.09	7729.27	0.00	606194.74	630119.53	N 32 39 58.12 W 104	2 41.37
	16500.00	90.00	90.29	8840.00	7826.51	535.59	7829.27	0.00	606194.24	630219.52	N 32 39 58.11 W 104	2 40.20
	16600.00	90.00	90.29	8840.00	7926.51	535.10	7929.27	0.00	606193.74	630319.51	N 32 39 58.10 W 104	2 39.03
	16700.00	90.00	90.29	8840.00	8026.51	534.60	8029.27	0.00	606193.24	630419.50	N 32 39 58.09 W 104	2 37.86
	16800.00	90.00	90.29	8840.00	8126.51	534.10	8129.27	0.00	606192.75	630519.49	N 32 39 58.09 W 104	2 36.69
	16900.00	90.00	90.29	8840.00	8226.51	533.60	8229.27	0.00	606192.25	630619.48	N 32 39 58.08 W 104	2 35.52
	17000.00	90.00	90.29	8840.00	8326.51	533.11	8329.27	0.00	606191.75	630719.47	N 32 39 58.07 W 104	2 34.35
	17100.00	90.00	90.29	8840.00	8426.51	532.61	8429.26	0.00	606191.25	630819.46	N 32 39 58.06 W 104	2 33.18
	17200.00	90.00	90.29	8840.00	8526.51	532.11	8529.26	0.00	606190.76	630919.45	N 32 39 58.06 W 104	2 32.01
	17300.00	90.00	90.29	8840.00	8626.51	531.61	8629.26	0.00	606190.26	631019.45	N 32 39 58.05 W 104	2 30.84
	17400.00	90.00	90.29	8840.00	8726.51	531.12	8729.26	0.00	606189.76	631119.44	N 32 39 58.04 W 104	2 29.67
	17500.00	90.00	90.29	8840.00	8826.51	530.62	8829.26	0.00	606189.26	631219.43	N 32 39 58.03 W 104	2 28.50
	17600.00	90.00	90.29	8840.00	8926.51	530.12	8929.26	0.00	606188.77	631319.42	N 32 39 58.03 W 104	2 27.33
	17700.00	90.00	90.29	8840.00	9026.51	529.62	9029.26	0.00	606188.27	631419.41	N 32 39 58.02 W 104	2 26.16
	17800.00	90.00	90.29	8840.00	9126.51	529.13	9129.26	0.00	606187.77	631519.40	N 32 39 58.01 W 104	2 24.99
	17900.00	90.00	90.29	8840.00	9226.51	528.63	9229.25	0.00	606187.27	631619.39	N 32 39 58.00 W 104	2 23.82
	18000.00	90.00	90.29	8840.00	9326.51	528.13	9329.25	0.00	606186.78	631719.38	N 32 39 57.99 W 104	2 22.65
	18100.00	90.00	90.29	8840.00	9426.51	527.63	9429.25	0.00	606186.28	631819.37	N 32 39 57.99 W 104	2 21.48
	18200.00	90.00	90.29	8840.00	9526.51	527.14	9529.25	0.00	606185.78	631919.36	N 32 39 57.98 W 104	2 20.31
	18300.00	90.00	90.29	8840.00	9626.51	526.64	9629.25	0.00	606185.28	632019.35	N 32 39 57.97 W 104	2 19.14
	18400.00	90.00	90.29	8840.00	9726.51	526.14	9729.25	0.00	606184.79	632119.34	N 32 39 57.96 W 104	2 17.97
	18500.00	90.00	90.29	8840.00	9826.51	525.64	9829.25	0.00	606184.29	632219.33	N 32 39 57.96 W 104	2 16.80

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 ° ' ")
	18600.00	90.00	90.29	8840.00	9926.51	525.15	9929.25	0.00	606183.79	632319.32	N 32 39 57.95 W 104 2 15.63	
	18700.00	90.00	90.29	8840.00	10026.51	524.65	10029.24	0.00	606183.29	632419.31	N 32 39 57.94 W 104 2 14.46	
Cimarex Parkway 15-14 North State Com 1H - PBHL [635' FNL, 100' FEL	18729.03	90.00	90.29	8840.00	10055.55	524.50	10058.28	0.00	606183.15	632448.34	N 32 39 57.94 W 104 2 14.12	

Survey Type: Non-Def Plan

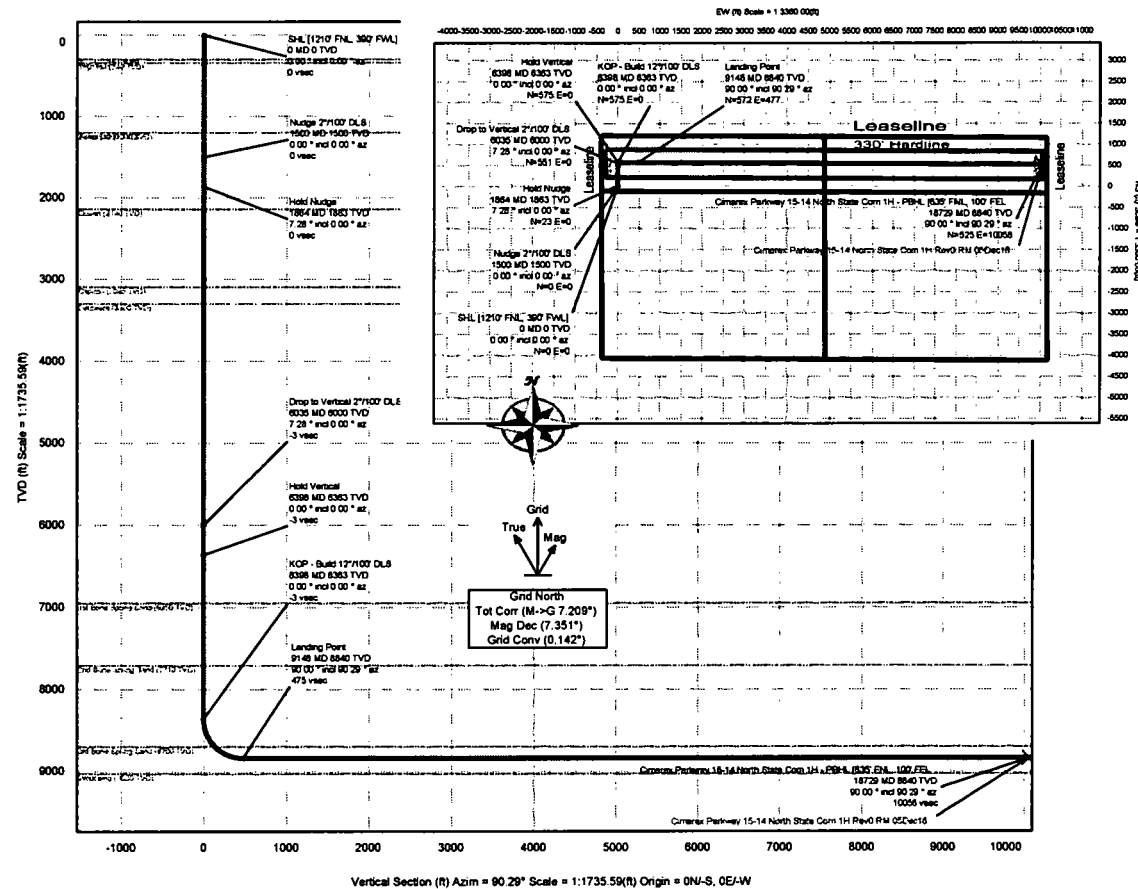
Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

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	26.000	1/100.000	30.000	30.000		NAL_MWD_IFR1+MS-Depth Only	Parkway 15-14 North State Com 1H / Cimarex Parkway 15-14 North State Com 1H Rev0 RM
	1	26.000	18729.035	1/100.000	30.000	30.000		NAL_MWD_IFR1+MS	Parkway 15-14 North State Com 1H / Cimarex Parkway 15-14

Borehole:	Well:	Field:	Structure:
Parkway 15-14 North State Com 1H	Parkway 15-14 North State Com 1H	NM Eddy County (NAD 83)	Cimarex Parkway 15-14 North State Com 1H

Gravity & Magnetic Parameters	Surface Location	MADEI Near Mexico State Plane, Eastern Zone, US Feet	Intersections
Model: NDOB 2010 Dls: 60.427 Date: 05-Dec-2010	Lat: N 32 38 53.91	Northing: 60008.8943	Grid Cont: 6.1427
MagDec: 7.351° PE: 40041.671xT Gravity PE: 986.514mga (3.0000 Gauss)	Long: W 104 4 11.80	Easting: 62236.32918	Scale Fact: 0.98891881
			Plot: New Plot TVD Ref: KDC(32719 above BSL)
			Plan: Cimarex Parkway 15-14 North State Com 1H Rev0 R05 05Dec10



Critical Points							
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)
SHL (1210' FNL, 360' FNL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler	300.00	0.00	0.00	300.00	0.00	0.00	0.00
Top Set	340.00	0.00	0.00	340.00	0.00	0.00	0.00
Base Set	1200.00	0.00	0.00	1200.00	0.00	0.00	0.00
Yates	1200.00	0.00	0.00	1200.00	0.00	0.00	0.00
Nudge 2'1100' DLS	1500.00	0.00	0.00	1500.00	0.00	0.00	0.00
Hold Nudge	1863.82	7.28	0.00	1862.94	-0.11	23.08	0.00
Queen	2143.23	7.28	0.00	2140.00	-0.29	56.47	0.00
Capitan	3105.99	7.28	0.00	3086.00	-0.90	180.44	0.00
Datavara	3312.85	7.28	0.00	3300.00	-1.03	206.62	0.00
Drop to Vertical 2'1100' DLS	6034.58	7.28	0.00	6000.00	-2.74	581.46	0.00
Hold Vertical	6368.50	0.00	0.00	6362.94	-2.86	574.54	0.00
1st Bone Spring Sand	6660.56	0.00	0.00	6650.00	-2.86	574.54	0.00
2nd Bone Spring Sand	7745.56	0.00	0.00	7710.00	-2.86	574.54	0.00
KOP - Build 12'1100' DLS	8386.10	0.00	0.00	8362.54	-2.86	574.54	0.00
3rd Bone Spring Sand	8772.88	44.97	90.29	8700.00	136.63	573.85	136.69
Landing Point	9148.10	90.00	90.29	8840.00	474.61	572.17	477.48
Cimarex Parkway 15-14 North State Com 1H - PBH-L 830' FNL, 100' FEL	18729.03	90.00	90.29	8840.00	10055.55	524.50	10056.28
Wolfcamp	N/A			9030.00			