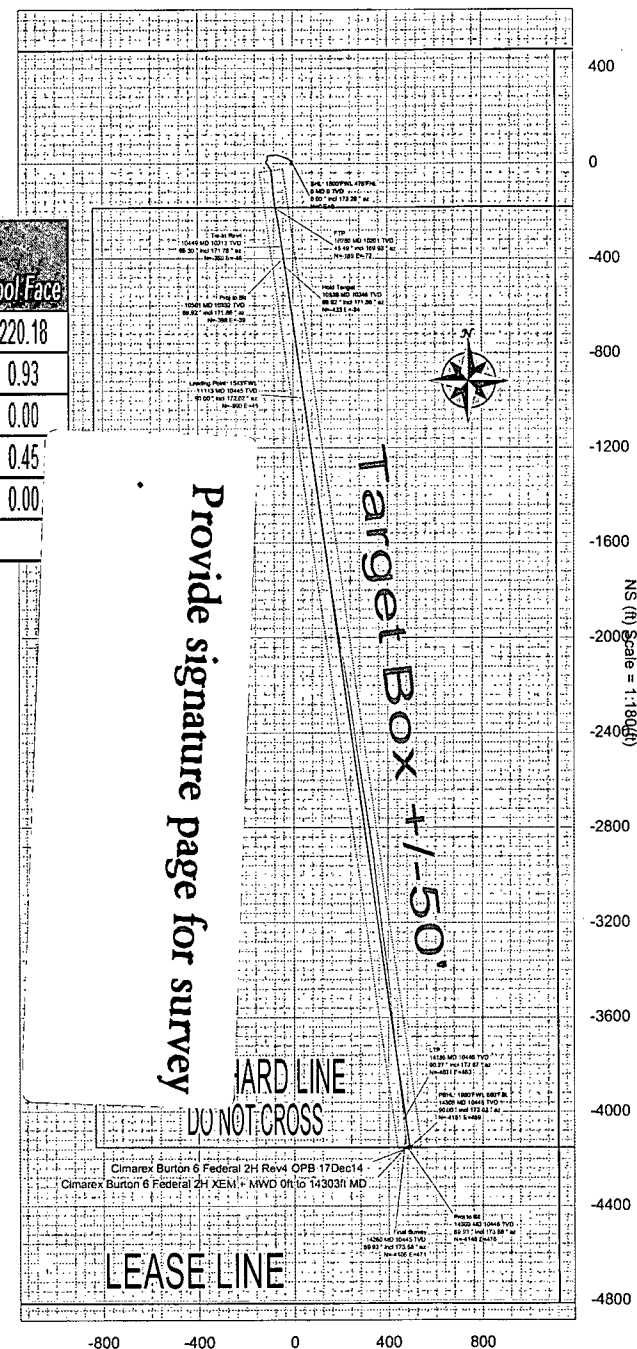
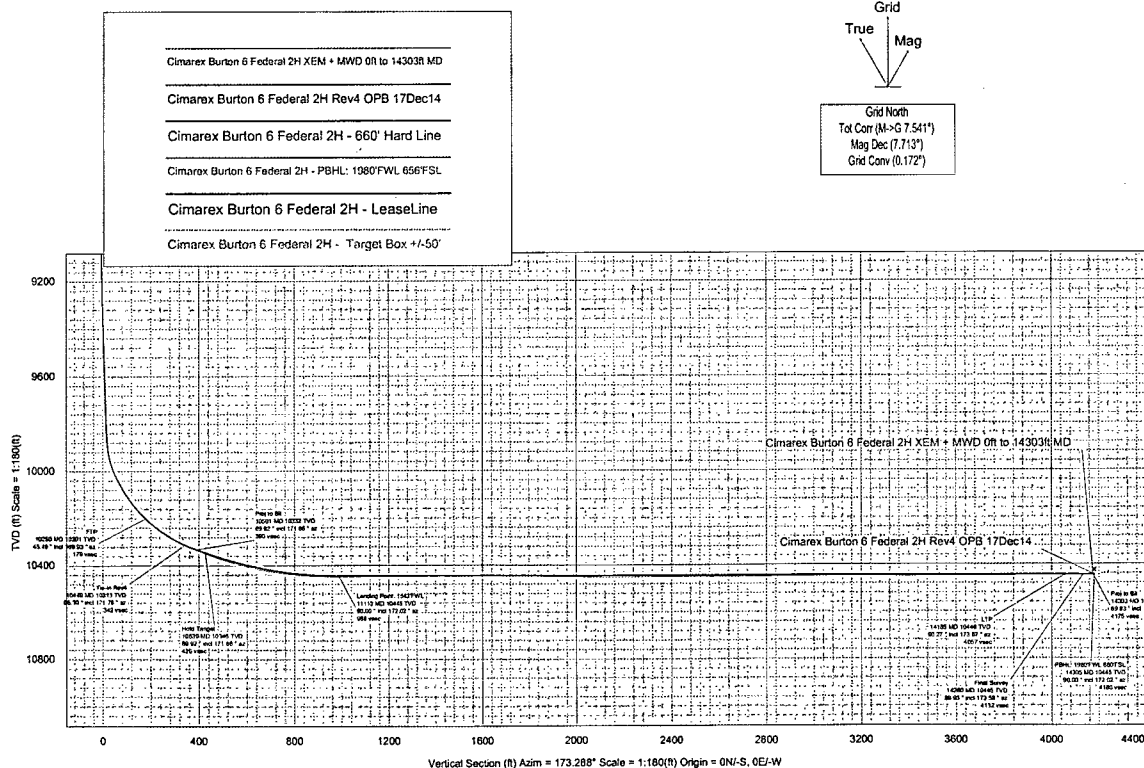


Borehole:	Well:	Field:	Structure:
Original Borehole	Burton 6 Federal 2H	NM Eddy County (NAD 83)	ScanDrill Eagle

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: HDGM 2014 Dip: 60.52° Date: 26-Nov-2014	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Slot: Burton 6
MagDec: 7.713° FB: 48488.497m Gravity FB: 988.506mgm (9.80665 Based)	Lat: N 32 36 30.18 Northing: 585205.10RUS Grid Conv: 0.1710°	Federal 2H TVD Ref: RKB(3317ft above MSL)
	Lon: W 104 0 53.88 Easting: 639370.01US Scale Fact: 0.9999281	Plan: Cimarex Burton 6 Federal 2H XEM + MWD 0ft to 14303ft MD

Critical Points													
Comments	Survey MD	Inc	Azim	TVD	SSTVD	VS	NS	EW	Longitude	Latitude	Easting	Northing	DLS Tool Face
SHL: 1500'FWL 475'FNL	0.00	0.00	173.28	0.00	-3317.00	0.00	0.00	0.00	N 32 36 30.158	W 104 0 53.884	639370.01	585205.16	220.18
Tie-In Rev4	10449.00	65.30	171.78	10312.54	6995.54	342.42	-350.15	-45.62	N 32 36 26.695	W 104 0 54.430	639324.39	584855.04	10.06 0.93
Proj to Bit	10501.00	69.92	171.86	10332.35	7015.35	390.47	-397.73	-38.78	N 32 36 26.224	W 104 0 54.352	639331.23	584807.47	8.89 0.00
Hold Target	10539.29	69.92	171.86	10345.49	7028.49	426.42	-433.33	-33.69	N 32 36 25.871	W 104 0 54.293	639336.32	584771.87	0.00 0.45
Landing Point: 1543'FWL	11113.02	90.00	172.02	10445.00	7128.00	988.33	-989.84	45.11	N 32 36 20.363	W 104 0 53.392	639415.11	584215.41	3.50 0.00
PBHL: 1980'FWL 660'FSL	14305.42	90.00	172.02	10445.00	7128.00	4179.94	-4151.29	488.52	N 32 35 49.068	W 104 0 48.320	639858.49	581054.21	0.00



30015 42.352



Cimarex Burton 6 Federal 2H XEM + MWD 0ft to 14303ft MD Survey Report



(Def Survey)

Report Date: May 19, 2015 - 10:42 AM
 Client: Cimarex
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Cimarex Burton 6 Federal 2H / Burton 6 Federal 2H
 Well: Burton 6 Federal 2H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cimarex Burton 6 Federal 2H XEM + MWD 0ft to 14303ft MD
 Survey Date: November 26, 2014
 Tort / AHD / DDI / ERD Ratio: 151.711 ° / 4367.512 ft / 5.957 / 0.418
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 36' 30.15791", W 104° 0' 53.88436"
 Location Grid N/E Y/X: N 585205.164 RUS, E 639370.005 RUS
 CRS Grid Convergence Angle: 0.1716 °
 Grid Scale Factor: 0.9999201
 Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 173.288 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3317.000 ft above MSL
 Seabed / Ground Elevation: 3292.000 ft above MSL
 Magnetic Declination: 7.713 °
 Total Gravity Field Strength: 998.5057mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48488.497 nT
 Magnetic Dip Angle: 60.520 °
 Declination Date: November 26, 2014
 Magnetic Declination Model: HDGM 2014
 North Reference: Grid North
 Grid Convergence Used: 0.1716 °
 Total Corr Mag North->Grid North: 7.5413 °
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')	TF (°)
SHL: 1500'FWL 475'FNL	0.00	0.00	173.28	0.00	-3317.00	0.00	0.00	0.00	N/A	0.00	0.00	585205.16	639370.01	N 32 36 30.16	W 104 0 53.88	220.18M
	50.00	0.60	220.18	50.00	-3267.00	0.18	-0.20	-0.17	1.20	220.18	0.26	585204.96	639369.84	N 32 36 30.16	W 104 0 53.89	222.56M
	100.00	0.76	222.56	100.00	-3217.00	0.57	-0.64	-0.56	0.32	221.10	0.86	585204.52	639369.44	N 32 36 30.15	W 104 0 53.89	219.91M
	150.00	0.73	219.91	149.99	-3167.01	1.01	-1.13	-0.99	0.09	221.17	1.50	585204.03	639369.01	N 32 36 30.15	W 104 0 53.90	220.03M
	200.00	0.77	220.03	199.99	-3117.01	1.46	-1.63	-1.41	0.08	220.81	2.16	585203.53	639368.59	N 32 36 30.14	W 104 0 53.90	231.01M
	250.00	0.96	231.01	249.98	-3067.02	1.91	-2.16	-1.95	0.50	222.18	2.91	585203.01	639368.05	N 32 36 30.14	W 104 0 53.91	237.27M
	300.00	0.96	237.27	299.97	-3017.03	2.32	-2.65	-2.63	0.21	224.84	3.73	585202.52	639367.37	N 32 36 30.13	W 104 0 53.92	236.64M
	350.00	1.01	236.64	349.97	-2967.03	2.70	-3.11	-3.35	0.10	227.10	4.57	585202.05	639366.65	N 32 36 30.13	W 104 0 53.92	243.31M
	400.00	0.96	243.31	399.96	-2917.04	3.04	-3.54	-4.09	0.25	229.11	5.41	585201.62	639365.91	N 32 36 30.12	W 104 0 53.93	255.1M
	450.00	0.94	255.10	449.95	-2867.05	3.24	-3.84	-4.86	0.39	231.72	6.20	585201.33	639365.14	N 32 36 30.12	W 104 0 53.94	261.41M
	500.00	0.95	261.41	499.95	-2817.05	3.32	-4.01	-5.67	0.21	234.76	6.94	585201.16	639364.34	N 32 36 30.12	W 104 0 53.95	263.93M
	550.00	0.94	263.93	549.94	-2767.06	3.32	-4.11	-6.49	0.09	237.64	7.68	585201.05	639363.52	N 32 36 30.12	W 104 0 53.96	268.11M
	600.00	1.01	268.11	599.93	-2717.07	3.28	-4.17	-7.34	0.20	240.39	8.44	585201.00	639362.67	N 32 36 30.12	W 104 0 53.97	280.02M
	650.00	0.87	280.02	649.93	-2667.07	3.14	-4.12	-8.15	0.48	243.20	9.13	585201.05	639361.86	N 32 36 30.12	W 104 0 53.98	281.12M
	700.00	0.84	281.12	699.92	-2617.08	2.91	-3.98	-8.88	0.07	245.87	9.73	585201.18	639361.12	N 32 36 30.12	W 104 0 53.99	294.44M
	750.00	0.76	294.44	749.91	-2567.09	2.63	-3.77	-9.55	0.40	248.44	10.26	585201.39	639360.46	N 32 36 30.12	W 104 0 54.00	322.14M
	800.00	0.62	322.14	799.91	-2517.09	2.23	-3.42	-10.01	0.71	251.13	10.58	585201.74	639359.99	N 32 36 30.12	W 104 0 54.00	348.37M
	850.00	0.74	348.37	849.91	-2467.09	1.67	-2.89	-10.24	0.66	254.24	10.64	585202.27	639359.76	N 32 36 30.13	W 104 0 54.00	10.13M
	900.00	0.87	10.13	899.90	-2417.10	0.99	-2.20	-10.24	0.66	257.87	10.48	585202.96	639359.76	N 32 36 30.14	W 104 0 54.00	18.04M
	950.00	1.04	18.04	949.90	-2367.10	0.21	-1.40	-10.04	0.43	262.08	10.13	585203.77	639359.76	N 32 36 30.14	W 104 0 54.00	29.56M
	1000.00	1.29	29.56	999.89	-2317.11	-0.65	-0.48	-9.82	0.68	267.17	9.63	585204.69	639360.39	N 32 36 30.15	W 104 0 54.00	33.39M
	1050.00	1.48	33.39	1049.87	-2267.13	-1.60	0.55	-8.98	0.42	273.52	9.00	585205.72	639361.02	N 32 36 30.16	W 104 0 53.99	39.04M
	1100.00	1.50	39.04	1099.85	-2217.15	-2.55	1.60	-8.22	0.30	281.02	8.37	585206.78	639361.79	N 32 36 30.17	W 104 0 53.98	48.07M
	1150.00	1.82	48.07	1149.83	-2167.17	-3.46	2.64	-7.21	0.82	290.10	7.68	585207.80	639362.79	N 32 36 30.18	W 104 0 53.97	56.41M
	1200.00	1.82	56.41	1199.81	-2117.19	-4.28	3.61	-5.96	0.53	301.19	6.97	585208.77	639364.04	N 32 36 30.19	W 104 0 53.95	55.62M
	1250.00	1.78	55.62	1249.78	-2067.22	-5.00	4.49	-4.66	0.09	313.92	6.47	585209.65	639365.35	N 32 36 30.20	W 104 0 53.94	55.96M
	1300.00	1.68	55.96	1299.76	-2017.24	-5.70	5.34	-3.41	0.20	327.41	6.33	585210.50	639366.59	N 32 36 30.21	W 104 0 53.92	57.22M
	1350.00	1.28	57.22	1349.74	-1967.26	-6.28	6.05	-2.33	0.80	338.90	6.48	585211.21	639367.67	N 32 36 30.22	W 104 0 53.91	57.09M
	1400.00	0.87	57.09	1399.74	-1917.26	-6.69	6.56	-1.55	0.82	346.73	6.74	585211.72	639368.46	N 32 36 30.22	W 104 0 53.90	38.71M
	1450.00	0.54	38.71	1449.73	-1867.27	-7.03	6.95	-1.08	0.79	351.16	7.03	585212.11	639368.93	N 32 36 30.23	W 104 0 53.90	31.28M
	1500.00	0.30	31.28	1499.73	-1817.27	-7.29	7.24	-0.86	0.49	353.19	7.29	585212.41	639369.14	N 32 36 30.23	W 104 0 53.89	351.74M
	1550.00	0.28	351.74	1549.73	-1767.27	-7.52	7.48	-0.81	0.39	353.78	7.52	585212.64	639369.19	N 32 36 30.23	W 104 0 53.89	299.33M
	1653.00	0.31	299.33	1652.73	-1664.27	-7.93	7.86	-1.09	0.25	352.08	7.94	585213.02	639368.91	N 32 36 30.24	W 104 0 53.90	300.96M
	1747.00	0.48	300.96	1746.73	-1570.27	-8.33	8.19	-1.65	0.18	348.59	8.35	585213.35	639368.35	N 32 36 30.24	W 104 0 53.90	289.84M
	1842.00	0.40	289.84	1841.72	-1475.28	-8.72	8.51	-2.31	0.12	344.83	8.81	585213.67	639367.70	N 32 36 30.24	W 104 0 53.91	269.14M
	1937.00	0.31	269.14	1936.72	-1380.28	-8.89	8.61	-2.87	0.16	341.54	9.08	585213.78	639367.13	N 32 36 30.24	W 104 0 53.92	304.87M
	2032.00	0.31	304.87	2031.72	-1285.28	-9.09	8.76	-3.34	0.20	339.11	9.37	585213.92	639366.66	N 32 36 30.24	W 104 0 53.92	296.35M
	2128.00	0.48	296.35	2127.72	-1189.28	-9.48	9.08	-3.92	0.19	336.68	9.89	585214.25	639366.09	N 32 36 30.25	W 104 0 53.93	295.03M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	2223.00	0.70	295.03	2222.71	-1094.29	-10.00	9.51	-4.80	0.23	333.22	10.65	585214.67	639365.21	N 32 36 30.25	W 104 0 53.94	299.07M
	2318.00	0.88	299.07	2317.70	-999.30	-10.73	10.11	-5.96	0.20	329.46	11.73	585215.27	639364.04	N 32 36 30.26	W 104 0 53.95	304.34M
	2414.00	1.01	304.34	2413.69	-903.31	-11.72	10.94	-7.30	0.16	326.27	13.16	585216.10	639362.70	N 32 36 30.27	W 104 0 53.97	317.75M
	2509.00	0.70	317.75	2508.68	-808.32	-12.74	11.84	-8.39	0.39	324.70	14.51	585217.01	639361.62	N 32 36 30.28	W 104 0 53.98	312.56M
	2604.00	0.79	312.56	2603.67	-713.33	-13.71	12.72	-9.26	0.12	323.94	15.73	585217.88	639360.75	N 32 36 30.28	W 104 0 53.99	315.86M
	2699.00	0.70	315.86	2698.66	-618.34	-14.67	13.58	-10.15	0.10	323.23	16.95	585218.74	639359.86	N 32 36 30.29	W 104 0 54.00	308.74M
	2794.00	0.70	308.74	2793.66	-523.34	-15.54	14.36	-11.00	0.09	322.53	18.09	585219.52	639359.00	N 32 36 30.30	W 104 0 54.01	316.25M
	2889.00	0.70	316.25	2888.65	-428.35	-16.42	15.14	-11.86	0.10	321.93	19.23	585220.30	639358.15	N 32 36 30.31	W 104 0 54.02	309.13M
	2990.00	0.88	309.13	2989.64	-327.36	-17.47	16.07	-12.88	0.20	321.28	20.60	585221.24	639357.12	N 32 36 30.32	W 104 0 54.03	307.16M
	3084.00	1.01	307.16	3083.63	-233.37	-18.56	17.03	-14.10	0.14	320.37	22.11	585222.19	639355.90	N 32 36 30.33	W 104 0 54.05	312.03M
	3180.00	1.01	312.03	3179.61	-137.39	-19.78	18.11	-15.41	0.09	319.60	23.77	585223.27	639354.60	N 32 36 30.34	W 104 0 54.06	299.73M
	3275.00	0.88	299.73	3274.60	-42.40	-20.85	19.03	-16.66	0.25	318.79	25.29	585224.19	639353.34	N 32 36 30.35	W 104 0 54.08	308.74M
	3311.00	1.01	308.74	3310.59	-6.41	-21.24	19.36	-17.15	0.55	318.47	25.87	585224.53	639352.86	N 32 36 30.35	W 104 0 54.08	290.94M
	3410.00	1.41	290.94	3409.57	92.57	-22.42	20.35	-18.97	0.55	317.01	27.82	585225.51	639351.04	N 32 36 30.36	W 104 0 54.11	281.67M
	3505.00	0.88	281.67	3504.55	187.55	-23.20	20.91	-20.77	0.59	315.19	29.48	585226.07	639349.23	N 32 36 30.37	W 104 0 54.13	288.13M
	3603.00	0.88	288.13	3602.54	285.54	-23.75	21.30	-22.23	0.10	313.78	30.78	585226.46	639347.78	N 32 36 30.37	W 104 0 54.14	289.36M
	3699.00	0.88	289.36	3698.53	381.53	-24.38	21.77	-23.62	0.02	312.66	32.12	585226.93	639346.38	N 32 36 30.37	W 104 0 54.16	284.57M
	3793.00	0.88	284.57	3792.52	475.52	-24.96	22.19	-25.00	0.08	311.59	33.43	585227.35	639345.00	N 32 36 30.38	W 104 0 54.18	292.17M
	3889.00	0.79	292.17	3888.51	571.51	-25.55	22.63	-26.33	0.15	310.68	34.72	585227.79	639343.68	N 32 36 30.38	W 104 0 54.19	295.34M
	3985.00	0.88	295.34	3984.50	667.50	-26.26	23.19	-27.61	0.11	310.03	36.06	585228.35	639342.40	N 32 36 30.39	W 104 0 54.21	292.74M
	4080.00	1.19	292.74	4079.48	762.48	-27.13	23.89	-29.18	0.33	309.31	37.71	585229.05	639340.83	N 32 36 30.40	W 104 0 54.22	291.16M
	4175.00	1.32	291.16	4174.46	857.46	-28.13	24.66	-31.11	0.14	308.41	39.70	585229.82	639338.90	N 32 36 30.40	W 104 0 54.25	287.73M
	4270.00	1.49	287.73	4269.43	952.43	-29.15	25.43	-33.30	0.20	307.37	41.90	585230.60	639336.70	N 32 36 30.41	W 104 0 54.27	291.85M
	4366.00	1.49	291.95	4365.40	1048.40	-30.27	26.28	-35.65	0.11	306.40	44.29	585231.44	639334.36	N 32 36 30.42	W 104 0 54.30	287.95M
	4461.00	1.49	287.95	4460.37	1143.37	-31.37	27.12	-37.97	0.11	305.54	46.66	585232.28	639332.04	N 32 36 30.43	W 104 0 54.33	286.24M
	4565.00	1.58	286.24	4564.33	1247.33	-32.50	27.94	-40.63	0.10	304.51	49.31	585233.10	639329.37	N 32 36 30.44	W 104 0 54.36	288.83M
	4651.00	1.58	288.83	4650.30	1333.30	-33.47	28.65	-42.89	0.08	303.74	51.59	585233.82	639327.11	N 32 36 30.44	W 104 0 54.38	288.04M
	4746.00	1.58	288.04	4745.26	1428.26	-34.58	29.48	-45.38	0.02	303.01	54.12	585234.64	639324.63	N 32 36 30.45	W 104 0 54.41	288.57M
	4838.00	1.80	288.57	4837.22	1520.22	-35.73	30.34	-47.96	0.24	302.32	56.74	585235.50	639322.05	N 32 36 30.46	W 104 0 54.44	292.57M
	4933.00	1.80	292.57	4932.17	1615.17	-37.10	31.38	-50.75	0.13	301.73	59.67	585236.54	639319.26	N 32 36 30.47	W 104 0 54.48	288.55M
	5028.00	2.11	288.35	5027.12	1710.12	-38.57	32.51	-53.79	0.36	301.15	62.85	585237.67	639316.22	N 32 36 30.48	W 104 0 54.51	282.24M
	5124.00	0.88	282.24	5123.08	1806.08	-39.56	33.22	-56.18	1.29	300.59	65.27	585238.38	639313.83	N 32 36 30.49	W 104 0 54.54	285.45M
	5219.00	0.62	285.45	5218.08	1901.08	-39.99	33.51	-57.39	0.28	300.28	66.46	585238.67	639312.62	N 32 36 30.49	W 104 0 54.55	278.64M
	5314.00	0.70	278.64	5313.07	1996.07	-40.34	33.73	-58.46	0.12	299.99	67.50	585238.90	639311.55	N 32 36 30.49	W 104 0 54.57	281.84M
	5409.00	0.88	281.84	5408.06	2091.06	-40.72	33.97	-59.75	0.20	299.62	68.73	585239.13	639310.26	N 32 36 30.50	W 104 0 54.58	280.66M
	5504.00	1.10	280.66	5503.05	2186.05	-41.23	34.29	-61.36	0.23	299.20	70.29	585239.45	639308.65	N 32 36 30.50	W 104 0 54.60	281.23M
	5600.00	1.32	281.23	5599.03	2282.03	-41.84	34.68	-63.35	0.23	298.70	72.22	585239.84	639306.66	N 32 36 30.50	W 104 0 54.62	278.77M
	5696.00	1.49	278.77	5695.00	2378.00	-42.52	35.08	-65.67	0.19	298.11	74.45	585240.24	639304.34	N 32 36 30.51	W 104 0 54.65	275.96M
	5791.00	1.80	275.96	5789.96	2472.96	-43.17	35.42	-68.37	0.34	297.39	77.00	585240.59	639301.64	N 32 36 30.51	W 104 0 54.68	272.84M
	5886.00	2.02	272.84	5884.90	2567.90	-43.78	35.66	-71.53	0.26	296.50	79.92	585240.82	639298.48	N 32 36 30.51	W 104 0 54.72	257.63M
	5981.00	1.19	257.63	5979.87	2662.87	-43.96	35.53	-74.16	0.97	295.60	82.24	585240.70	639295.85	N 32 36 30.51	W 104 0 54.75	258.25M
	6079.00	1.80	258.25	6077.83	2760.83	-43.72	35.00	-76.66	0.82	294.54	84.28	585240.16	639293.35	N 32 36 30.51	W 104 0 54.78	257.06M
	6174.00	1.19	257.06	6172.80	2855.80	-43.48	34.48	-79.09	0.64	293.55	86.28	585239.64	639290.93	N 32 36 30.50	W 104 0 54.81	287.56M
	6269.00	0.31	287.56	6267.79	2950.79	-43.48	34.33	-80.29	0.99	293.15	87.33	585239.50	639289.72	N 32 36 30.50	W 104 0 54.82	272.97M
	6360.00	1.41	272.97	6358.78	3041.78	-43.77	34.47	-81.65	1.22	292.89	88.62	585239.63	639288.37	N 32 36 30.50	W 104 0 54.84	273.54M
	6455.00	1.49	273.54	6453.75	3136.75	-44.19	34.60	-84.05	0.09	292.38	90.89	585239.76	639285.97	N 32 36 30.50	W 104 0 54.87	260.84M
	6551.00	1.32	260.84	6549.72	3232.72	-44.36	34.50	-86.38	0.37	291.77	93.02	585239.67	639283.63	N 32 36 30.50	W 104 0 54.89	265.45M
	6645.00	1.71	265.45	6643.69	3326.69	-44.37	34.22	-88.85	0.43	291.06	95.21	585239.38	639281.16	N 32 36 30.50	W 104 0 54.92	263.03M
	6741.00	1.89	263.03	6739.64	3422.64	-44.42	33.92	-91.85	0.20	290.27	97.91	585239.08	639278.16	N 32 36 30.50	W 104 0 54.96	263.04M
	6836.00	1.89	263.04	6834.59	3517.59	-44.40	33.54	-94.96	0.00	289.45	100.71	585238.70	639275.05	N 32 36 30.49	W 104 0 54.99	270.33M
	6932.00	2.29	270.33	6930.52	3613.52	-44.63	33.35	-98.45	0.50	288.72	103.95	585238.52	639271.56	N 32 36 30.49	W 104 0 55.03	277.67M
	7027.00	1.41	277.67	7025.47	3708.47	-45.15	33.52	-101.51	0.96	288.28	106.90	585238.68	639268.51	N 32 36 30.49	W 104 0 55.07	277.45M
	7117.00	0.88	277.45	7115.46	3798.46	-45.60	33.76	-103.29	0.59	288.10	108.66	585238.92	639266.73	N 32 36 30.49	W 104 0 55.09	217.07M
	7212.00	0.48	217.07	7210.45	3893.45	-45.49	33.54	-104.25	0.81	287.83	109.51	585238.70	639265.76	N 32 36 30.49	W 104 0 55.10	191.23M
	7308.00	0.70	191.23	7306.45	3989.45	-44.64	32.64	-104.61	0.35	287.33	109.58	585237.80	639265.41	N 32 36 30.48	W 104 0 55.11	179.06M
	7403.00	1.01	179.06	7401.43	4084.43	-43.26	31.23	-104.71	0.38	286.61	109.27	585236.40	639265.31	N 32 36 30.47	W 104 0 55.11	182.04M
	7498.00	1.10	182.04	7496.42	4179.42	-41.52	29.49	-104.73	0.11	285.72	108.80	585234.65	639265.29	N 32 36 30.45	W 104 0 55.11	185.75M
	7593.00	1.19	185.75	7591.40	4274.40	-39.66	27.59	-104.86	0.12	284.74	108.43	585232.75	639265.16	N 32 36 30.43	W 104 0 55.11	188.33M
	7688.00	1.89	188.33	7686.36	4369.36	-37.18	25.06	-105.18	0.74	283.40	108.13	585230.22	639264.83	N 32 36 30.41	W 104 0 55.11	192.15M
	7783.00	2.50	192.15	7781.29	4464.29	-33.71	21.49	-105.85	0.66	281.47	108.00	585226.65	639264.17	N 32 36 30.37	W 104 0 55.12	141.26M
	7878.00	0.70	141.26	7876.26	4559.26	-31.26	19.01	-105.92	2.24	280.17	107.61	585224.17	639264.09	N 32 36 30.35	W 1	

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	8073.00	1.32	211.05	8071.23	4754.23	-28.14	15.85	-106.04	0.76	278.50	107.22	585221.01	639263.97	N 32 36 30.32	W 104 0 55.12	234.47M
	8168.00	1.10	234.47	8168.21	4849.21	-26.83	14.38	-107.35	0.56	277.63	108.31	585219.55	639262.67	N 32 36 30.30	W 104 0 55.14	222.17M
	8266.00	1.41	222.17	8264.18	4947.18	-25.59	12.94	-108.92	0.42	276.78	109.69	585218.11	639261.09	N 32 36 30.29	W 104 0 55.16	211.05M
	8362.00	1.41	211.05	8360.15	5043.15	-23.88	11.06	-110.32	0.28	275.72	110.88	585216.22	639259.69	N 32 36 30.27	W 104 0 55.17	199.36M
	8457.00	1.49	199.36	8455.12	5138.12	-21.84	8.89	-111.34	0.32	274.57	111.69	585214.05	639258.68	N 32 36 30.25	W 104 0 55.19	177.43M
	8552.00	1.89	177.43	8550.08	5233.08	-19.17	6.16	-111.67	0.79	273.16	111.84	585211.32	639258.34	N 32 36 30.22	W 104 0 55.19	161.65M
	8647.00	2.50	161.65	8645.01	5328.01	-15.58	2.63	-110.95	0.90	271.36	110.98	585207.79	639259.06	N 32 36 30.19	W 104 0 55.18	153.35M
	8742.00	1.80	153.35	8739.95	5422.95	-12.15	-0.67	-109.63	0.80	269.65	109.63	585204.49	639260.38	N 32 36 30.15	W 104 0 55.17	127.55M
	8837.00	1.19	127.55	8834.92	5517.92	-10.05	-2.61	-108.18	0.94	268.62	108.21	585202.56	639261.83	N 32 36 30.14	W 104 0 55.15	119.16M
	8932.00	1.19	119.16	8929.89	5612.89	-8.79	-3.69	-106.54	0.18	268.02	106.60	585201.48	639263.48	N 32 36 30.12	W 104 0 55.13	129.66M
	9024.00	1.10	129.66	9021.88	5704.88	-7.59	-4.72	-105.02	0.25	267.43	105.13	585200.45	639264.99	N 32 36 30.11	W 104 0 55.11	141.44M
	9120.00	1.10	141.44	9117.86	5800.86	-6.14	-6.03	-103.74	0.24	266.68	103.91	585199.14	639266.28	N 32 36 30.10	W 104 0 55.10	157.44M
	9215.00	1.32	157.44	9212.84	5895.84	-4.31	-7.75	-102.75	0.42	265.69	103.04	585197.42	639267.26	N 32 36 30.08	W 104 0 55.09	153.44M
	9309.00	1.89	153.44	9306.80	5989.80	-1.81	-10.14	-101.64	0.62	264.31	102.15	585195.03	639268.37	N 32 36 30.06	W 104 0 55.07	152.73M
	9405.00	2.02	152.73	9402.74	6085.74	1.26	-13.06	-100.16	0.14	262.57	101.01	585192.11	639269.86	N 32 36 30.03	W 104 0 55.06	153.74M
	9500.00	1.80	153.74	9497.69	6180.69	4.23	-15.88	-98.73	0.23	260.86	100.00	585189.28	639271.28	N 32 36 30.00	W 104 0 55.04	140.96M
	9599.00	1.80	140.96	9596.64	6279.64	7.01	-18.48	-97.06	0.40	259.22	98.81	585186.68	639272.95	N 32 36 29.98	W 104 0 55.02	137.97M
	9694.00	2.02	137.97	9691.59	6374.59	9.64	-20.89	-95.00	0.25	257.60	97.27	585184.28	639275.01	N 32 36 29.95	W 104 0 55.00	148.65M
	9789.00	2.20	148.65	9786.53	6469.53	12.66	-23.69	-92.93	0.45	255.70	95.90	585181.48	639277.08	N 32 36 29.93	W 104 0 54.97	151.85M
	9833.00	2.20	151.85	9830.49	6513.49	14.22	-25.15	-92.10	0.28	254.72	95.47	585180.01	639277.92	N 32 36 29.91	W 104 0 54.96	170.34M
	9909.00	5.83	170.34	9906.30	6589.30	19.43	-30.25	-90.76	5.01	251.57	95.67	585174.92	639279.25	N 32 36 29.86	W 104 0 54.95	172.63M
	9941.00	11.80	172.63	9937.91	6620.91	24.33	-35.10	-90.07	18.68	248.71	96.66	585170.07	639279.95	N 32 36 29.81	W 104 0 54.94	0.87R
	9973.00	17.86	172.93	9968.82	6651.82	32.52	-43.22	-89.04	18.94	244.11	98.98	585161.95	639280.97	N 32 36 29.73	W 104 0 54.93	5.38R
	10004.00	22.40	174.05	9997.92	6680.92	43.18	-53.82	-87.84	14.70	238.51	103.02	585151.35	639282.17	N 32 36 29.63	W 104 0 54.91	7.17R
	10036.00	25.48	174.95	10027.17	6710.17	56.16	-66.74	-86.61	9.69	232.38	109.34	585138.43	639283.41	N 32 36 29.50	W 104 0 54.90	6.8L
	10068.00	28.22	174.26	10055.71	6738.71	70.61	-81.13	-85.24	8.62	226.42	117.68	585124.04	639284.77	N 32 36 29.36	W 104 0 54.88	13.41R
	10099.00	31.23	175.64	10082.63	6765.63	85.97	-96.44	-83.90	9.96	221.02	127.83	585108.73	639285.11	N 32 36 29.21	W 104 0 54.87	8.48L
	10131.00	33.93	174.92	10109.60	6792.60	103.19	-113.61	-82.48	8.52	215.98	140.39	585091.56	639287.54	N 32 36 29.04	W 104 0 54.85	10.07L
	10163.00	37.13	173.98	10135.63	6818.63	121.78	-132.11	-80.67	10.14	211.41	154.80	585073.06	639289.34	N 32 36 28.85	W 104 0 54.83	19.56L
	10195.00	40.00	172.40	10160.65	6843.65	141.73	-151.92	-78.30	9.48	207.27	170.91	585053.26	639291.71	N 32 36 28.66	W 104 0 54.80	21.6L
	10227.00	43.16	170.58	10184.59	6867.59	162.95	-172.92	-75.15	10.57	203.49	188.54	585032.26	639294.87	N 32 36 28.45	W 104 0 54.77	11.22L
	10250.00	45.49	169.93	10201.04	6884.04	178.99	-188.75	-72.42	10.32	200.99	202.17	585016.43	639297.59	N 32 36 28.29	W 104 0 54.74	10.75L
	10258.00	46.30	169.72	10206.61	6889.61	184.73	-194.41	-71.41	10.32	200.17	207.11	585010.77	639298.60	N 32 36 28.24	W 104 0 54.73	8.96L
	10290.00	49.64	169.03	10228.03	6911.03	208.44	-217.76	-67.02	10.56	197.11	227.85	584987.42	639302.99	N 32 36 28.01	W 104 0 54.68	1.6L
	10322.00	53.38	168.90	10247.94	6930.94	233.41	-242.34	-62.23	11.69	194.40	250.21	584962.84	639307.78	N 32 36 27.76	W 104 0 54.62	22.69R
	10353.00	56.65	170.53	10265.72	6948.72	258.75	-267.33	-57.70	11.39	192.18	273.49	584937.86	639312.31	N 32 36 27.51	W 104 0 54.57	26.75R
	10385.00	59.27	172.06	10282.69	6965.69	285.86	-294.14	-53.60	9.14	190.33	298.99	584911.05	639316.41	N 32 36 27.25	W 104 0 54.52	3.63L
	10417.00	62.06	171.86	10298.37	6981.37	313.75	-321.76	-49.70	8.74	188.78	325.58	584883.43	639320.31	N 32 36 26.98	W 104 0 54.48	1.29L
	10449.00	65.30	171.78	10312.55	6995.55	342.42	-350.15	-45.62	10.13	187.42	353.11	584855.05	639324.39	N 32 36 26.69	W 104 0 54.43	9.97L
	10547.00	68.75	171.13	10350.80	7033.80	432.58	-439.36	-32.21	3.57	184.19	440.54	584765.84	639337.80	N 32 36 25.81	W 104 0 54.28	8.02R
	10610.00	70.83	171.44	10372.56	7055.56	491.66	-497.79	-23.25	3.33	182.67	498.34	584707.41	639346.75	N 32 36 25.23	W 104 0 54.17	10.1R
	10704.00	75.29	172.26	10399.95	7082.95	581.53	-586.78	-10.52	4.82	181.03	586.88	584618.43	639359.49	N 32 36 24.35	W 104 0 54.03	2.66R
	10798.00	79.10	172.44	10420.77	7103.77	673.17	-677.61	1.68	4.06	179.86	677.62	584527.61	639371.69	N 32 36 23.45	W 104 0 53.89	5.94L
	10892.00	83.11	172.02	10435.31	7118.31	766.00	-769.61	14.24	4.29	178.94	769.74	584435.62	639384.24	N 32 36 22.54	W 104 0 53.74	3.03L
	10986.00	85.94	171.87	10444.27	7127.27	859.54	-862.25	27.35	3.01	178.18	862.68	584342.99	639397.35	N 32 36 21.63	W 104 0 53.59	4.81L
	11081.00	90.10	171.52	10447.56	7130.56	954.42	-956.18	41.06	4.39	177.54	957.06	584249.07	639411.06	N 32 36 20.70	W 104 0 53.44	98.53R
	11175.00	90.07	171.72	10447.42	7130.42	1048.38	-1049.17	54.76	0.22	177.01	1050.60	584156.08	639424.76	N 32 36 19.78	W 104 0 53.28	156.8R
	11269.00	90.00	171.75	10447.36	7130.36	1142.35	-1142.20	68.27	0.08	176.58	1144.23	584063.06	639438.27	N 32 36 18.85	W 104 0 53.13	1.68L
	11363.00	90.34	171.74	10447.08	7130.08	1236.31	-1235.22	81.77	0.36	176.21	1237.92	583970.04	639451.77	N 32 36 17.93	W 104 0 52.97	8.13R
	11458.00	90.41	171.75	10446.46	7129.46	1331.28	-1329.24	95.41	0.07	175.89	1332.65	583876.04	639465.40	N 32 36 17.00	W 104 0 52.82	177.88L
	11552.00	90.14	171.74	10446.01	7129.01	1425.24	-1422.26	108.90	0.29	175.62	1426.42	583783.02	639478.90	N 32 36 16.08	W 104 0 52.66	64.54R
	11646.00	90.24	171.95	10445.70	7128.70	1519.21	-1515.31	122.24	0.25	175.39	1520.23	583689.98	639492.23	N 32 36 15.16	W 104 0 52.51	171.03L
	11740.00	89.86	171.89	10445.61	7128.61	1613.18	-1608.38	135.45	0.41	175.19	1614.07	583596.92	639505.44	N 32 36 14.24	W 104 0 52.36	25.46R
	11835.00	90.07	171.99	10445.67	7128.67	1708.16	-1702.44	148.77	0.24	175.01	1708.92	583502.87	639518.76	N 32 36 13.31	W 104 0 52.20	143.29L
	11929.00	89.48	171.55	10446.04	7129.04	1802.12	-1795.47	162.22	0.78	174.84	1802.78	583409.84	639532.22	N 32 36 12.39	W 104 0 52.05	153.86L
	12023.00	88.93	171.28	10447.34	7130.34	1896.06	-1888.41	176.26	0.65	174.67	1896.61	583316.91	639546.25	N 32 36 11.47	W 104 0 51.89	117.16L
	12118.00	88.73	170.89	10449.28	7132.28	1990.97	-1982.24	190.97	0.46	174.50	1991.42	583223.09	639560.96	N 32 36 10.54	W 104 0 51.72	55.66L
	12218.00	89.14	170.29	10451.14	7134.14	2090.84	-2080.87	207.32	0.73	174.31	2091.18	583124.46	639577.31	N 32 36 9.56	W 104 0 51.53	7.25R
	12312.00	90.24	170.43	10451.65	7134.65	2184.72	-2173.54	223.06	1.18	174.14	2184.96	583031.80	639593.05	N 32 36 8.65	W 104 0 51.35	96.34R
	12406.00	90.14	171.33	10451.34	7134.34	2278.63	-2266.35	237.96	0.96	174.01	2278.81	582939				

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
	12783.00	90.14	170.99	10450.94	7133.94	2655.44	-2639.20	293.68	1.10	173.65	2655.49	582566.18	639663.66	N 32 36 4.04	W 104 0 50.54	16.26L
	12877.00	90.38	170.92	10450.51	7133.51	2749.36	-2732.03	308.46	0.27	173.56	2749.39	582473.36	639678.44	N 32 36 3.12	W 104 0 50.37	80.05R
	12972.00	90.48	171.49	10449.80	7132.80	2844.29	-2825.91	322.98	0.61	173.48	2844.31	582379.49	639692.96	N 32 36 2.19	W 104 0 50.21	90R
	13066.00	90.48	172.10	10449.01	7132.01	2938.26	-2918.94	336.40	0.65	173.43	2938.26	582286.46	639706.37	N 32 36 1.27	W 104 0 50.05	94.37R
	13160.00	90.34	173.93	10448.34	7131.34	3032.25	-3012.24	347.83	1.95	173.41	3032.26	582193.17	639717.80	N 32 36 0.34	W 104 0 49.92	87.27L
	13254.00	90.38	173.09	10447.75	7130.75	3126.24	-3105.63	358.45	0.89	173.42	3126.25	582099.78	639728.43	N 32 35 59.42	W 104 0 49.80	173.56R
	13348.00	89.76	173.16	10447.63	7130.63	3220.24	-3198.96	369.70	0.66	173.41	3220.25	582006.47	639739.68	N 32 35 58.49	W 104 0 49.67	137.52L
	13443.00	88.45	171.96	10449.12	7132.12	3315.22	-3293.14	382.00	1.87	173.38	3315.23	581912.29	639751.98	N 32 35 57.56	W 104 0 49.53	31.55R
	13537.00	90.34	173.12	10450.11	7133.11	3409.20	-3386.34	394.20	2.36	173.36	3409.20	581819.10	639764.18	N 32 35 56.64	W 104 0 49.40	76.27R
	13631.00	90.55	173.98	10449.38	7132.38	3503.20	-3479.74	404.76	0.94	173.37	3503.20	581725.71	639774.74	N 32 35 55.72	W 104 0 49.27	120.81R
	13725.00	90.21	174.55	10448.76	7131.76	3597.18	-3573.27	414.16	0.71	173.39	3597.19	581632.19	639784.13	N 32 35 54.79	W 104 0 49.17	103.13L
	13819.00	90.14	174.25	10448.47	7131.47	3691.16	-3666.82	423.33	0.33	173.41	3691.17	581538.65	639793.30	N 32 35 53.86	W 104 0 49.06	26.56L
	13914.00	90.72	173.96	10447.76	7130.76	3786.15	-3761.31	433.09	0.68	173.43	3786.16	581444.16	639803.06	N 32 35 52.93	W 104 0 48.95	107.94L
	14008.00	90.38	172.91	10446.85	7129.85	3880.14	-3854.69	443.83	1.17	173.43	3880.16	581350.79	639813.80	N 32 35 52.00	W 104 0 48.83	85.56R
	14102.00	90.48	174.20	10446.15	7129.15	3974.14	-3948.09	454.38	1.38	173.43	3974.15	581257.40	639824.35	N 32 35 51.08	W 104 0 48.71	122.97L
LTP	14185.00	90.27	173.87	10445.61	7128.61	4057.13	-4030.64	463.01	0.47	173.45	4057.14	581174.86	639832.97	N 32 35 50.26	W 104 0 48.61	122.97L
	14196.00	90.24	173.83	10445.56	7128.56	4068.13	-4041.58	464.18	0.47	173.45	4068.14	581163.92	639834.15	N 32 35 50.15	W 104 0 48.60	141.12L
Final Survey	14260.00	89.93	173.58	10445.46	7128.46	4132.13	-4105.19	471.20	0.62	173.45	4132.14	581100.31	639841.17	N 32 35 49.53	W 104 0 48.52	HS
Proi to Bit	14303.00	89.93	173.58	10445.52	7128.52	4175.13	-4147.92	476.01	0.00	173.45	4175.14	581057.58	639845.98	N 32 35 49.10	W 104 0 48.47	

Survey Type: Def Survey

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)	Survey Tool Type	Borehole / Survey
	1	0.000	25.000	1/98.425	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD 0ft to 14303ft MD
	1	25.000	25.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD 0ft to 14303ft MD
	1	25.000	1550.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD
	1	1550.000	9833.000	Act Stns	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD
	1	9833.000	14260.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD
	1	14260.000	14303.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Borehole / Cimarex Burton 6 Federal 2H XEM + MWD