

Noble Energy

CO, Weld County (NAD 83 NZ)
Sec 10 Twn 2 N Rng 64 W
Oscar Y10-72-1HN Original Hole
05-123-37940
H&P 277



A Schlumberger Company

Final Survey Report

15-Dec-2014

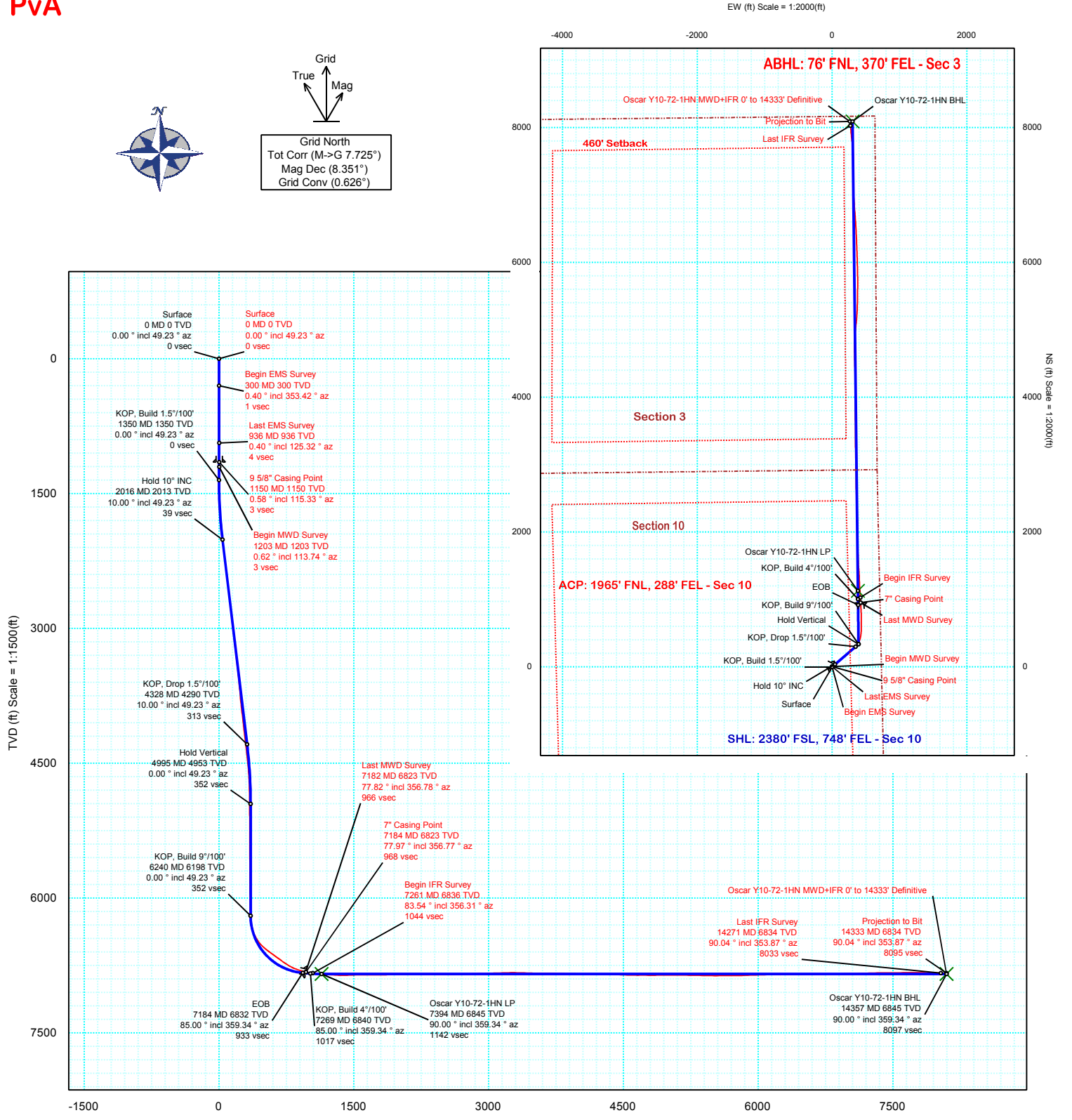
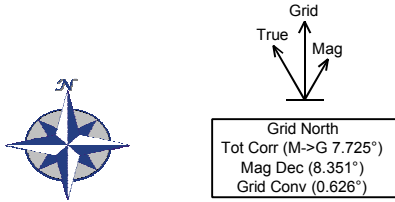
Well Coordinates:	NAD83 CO State Plane, N Zone, US Ft	
	N 40° 9' 7.99200"	W 104° 31' 51.27600"
	1299777.27 usFt	3270882.66 usFt
Ground Level:	4929.00 ft MSL	
TVD Reference:	KB 24ft @ 4953.00 ft MSL	
Local Coordinate Origin:	Oscar Y10-72-1HN well head	
Vertical Section Azimuth:	2.143 ° (Grid North)	
North Reference:	Grid North	

DOX Version: 2.8

Borehole: Original Hole	Well: Oscar Y10-72-1HN	Field: CO, Weld County (NAD 83 NZ)	Structure: 10-02N-64W (Oscar Y10-73HN Pad) - H&P 277
-----------------------------------	----------------------------------	--	---

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: BGGM 2014 Dip: 66.761° Date: 03-Dec-2014	NAD83 Colorado State Plane, Northern Zone, US Feet	Slot: Oscar Y10-72-1HN TVD Ref: KB 24ft(4953ft above MSL)
MagDec: 8.351° FS: 52546.169nT Gravity FS: 999.008mgm (9.80665 Based)	Lat: N 40 9 7.99 Northing: 1299777.67ftU S Grid Conv: 0.6262° Lon: W 104 31 50.81 Easting: 3270919ftUS Scale Fact: 0.99995832	Plan: Oscar Y10-72-1HN MWD+IFR 0' to 14333' Definitive

PvA





Oscar Y10-72-1HN MWD+IFR 0' to 14333' Definitive Survey Geodetic Report (Def Survey)



Report Date: December 15, 2014 - 10:35 AM
Client: Noble Energy
Field: CO, Weld County (NAD 83 NZ)
Structure / Slot: Noble 10-02N-64W (Oscar Y10-73HN Pad) - H&P 277 / Oscar Y10-72-1HN
Well: Oscar Y10-72-1HN
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Oscar Y10-72-1HN MWD+IFR 0' to 14333' Definitive
Survey Date: December 03, 2014
Tort / AHD / DDI / ERD Ratio: 256.455 ° / 8302.255 ft / 6.648 / 1.210
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 9' 7.99200", W 104° 31' 50.80800"
Location Grid N/E Y/X: N 1299777.667 ftUS, E 3270918.995 ftUS
CRS Grid Convergence Angle: 0.6262 °
Grid Scale Factor: 0.99995832
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 2.143 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 24ft
TVD Reference Elevation: 4953.000 ft above MSL
Seabed / Ground Elevation: 4929.000 ft above MSL
Magnetic Declination: 8.351 °
Total Gravity Field Strength: 999.0079mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 52546.169 nT
Magnetic Dip Angle: 66.761 °
Declination Date: December 03, 2014
Magnetic Declination Model: BGGM 2014
North Reference: Grid North
Grid Convergence Used: 0.6262 °
Total Corr Mag North->Grid North: 7.7244 °
Local Coord Referenced To: Well Head

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 ° ' ")
Surface	0.00	0.00	49.23	0.00	0.00	0.00	0.00	N/A	1299777.67	3270918.99	N 40 9 7.99	W 104 31 50.81
Begin EMS Survey	300.00	0.40	353.42	300.00	1.04	1.04	-0.12	0.13	1299778.71	3270918.87	N 40 9 8.00	W 104 31 50.81
	565.00	0.80	315.72	564.98	3.22	3.28	-1.52	0.20	1299780.95	3270917.48	N 40 9 8.02	W 104 31 50.83
Last EMS Survey	936.00	0.40	125.32	935.97	4.30	4.39	-2.27	0.32	1299782.06	3270916.73	N 40 9 8.04	W 104 31 50.84
9 5/8" Casing Point	1150.00	0.57	115.33	1149.97	3.47	3.50	-0.69	0.09	1299781.16	3270918.31	N 40 9 8.03	W 104 31 50.82
Begin MWD Survey	1203.00	0.62	113.74	1202.96	3.26	3.27	-0.19	0.09	1299780.94	3270918.81	N 40 9 8.02	W 104 31 50.81
	1297.00	0.79	117.37	1296.96	2.80	2.77	0.85	0.19	1299780.43	3270919.85	N 40 9 8.02	W 104 31 50.80
	1390.00	0.70	113.34	1389.95	2.32	2.25	1.95	0.11	1299779.91	3270920.94	N 40 9 8.01	W 104 31 50.78
	1484.00	2.29	85.85	1483.91	2.32	2.15	4.35	1.81	1299779.82	3270923.34	N 40 9 8.01	W 104 31 50.75
	1578.00	3.17	60.89	1577.81	3.87	3.56	8.49	1.55	1299781.22	3270927.48	N 40 9 8.03	W 104 31 50.70
	1671.00	3.25	56.59	1670.66	6.74	6.26	12.94	0.27	1299783.92	3270931.93	N 40 9 8.05	W 104 31 50.64
	1765.00	5.45	52.39	1764.39	11.14	10.45	18.70	2.36	1299788.12	3270937.69	N 40 9 8.09	W 104 31 50.57
	1859.00	8.79	51.68	1857.65	18.66	17.63	27.87	3.55	1299795.30	3270946.87	N 40 9 8.16	W 104 31 50.45
	1954.00	10.55	49.04	1951.30	29.31	27.83	40.14	1.91	1299805.50	3270959.13	N 40 9 8.26	W 104 31 50.29
	2049.00	10.90	47.91	2044.64	41.52	39.55	53.37	0.43	1299817.22	3270972.36	N 40 9 8.38	W 104 31 50.12
	2143.00	10.64	48.58	2136.98	53.70	51.25	66.47	0.31	1299828.92	3270985.46	N 40 9 8.49	W 104 31 49.94
	2238.00	10.20	48.79	2230.41	65.52	62.60	79.38	0.46	1299840.26	3270998.37	N 40 9 8.60	W 104 31 49.78
	2428.00	9.58	45.00	2417.59	88.66	84.86	103.21	0.47	1299862.52	3271022.20	N 40 9 8.82	W 104 31 49.47
	2523.00	9.50	44.28	2511.28	100.27	96.06	114.28	0.15	1299873.72	3271033.27	N 40 9 8.93	W 104 31 49.32
	2617.00	9.41	45.46	2604.00	111.61	107.01	125.17	0.23	1299884.67	3271044.16	N 40 9 9.04	W 104 31 49.18
	2712.00	9.41	53.06	2697.73	122.16	117.12	136.91	1.31	1299894.78	3271055.90	N 40 9 9.13	W 104 31 49.03
	2806.00	9.41	53.12	2790.46	131.84	126.35	149.20	0.01	1299904.01	3271068.19	N 40 9 9.22	W 104 31 48.87
	2901.00	10.29	53.37	2884.06	142.05	136.07	162.22	0.93	1299913.73	3271081.21	N 40 9 9.32	W 104 31 48.70
	2996.00	10.73	53.06	2977.47	152.93	146.45	176.10	0.47	1299924.11	3271095.09	N 40 9 9.42	W 104 31 48.52
	3091.00	10.20	54.16	3070.89	163.69	156.69	189.99	0.60	1299934.35	3271108.97	N 40 9 9.52	W 104 31 48.34
	3186.00	10.11	52.14	3164.40	174.22	166.73	203.39	0.39	1299944.39	3271122.37	N 40 9 9.62	W 104 31 48.17
	3280.00	9.85	46.57	3256.98	185.27	177.33	215.74	1.06	1299954.98	3271134.73	N 40 9 9.72	W 104 31 48.00
	3375.00	9.67	47.55	3350.60	196.67	188.30	227.53	0.26	1299965.96	3271146.52	N 40 9 9.83	W 104 31 47.85
	3470.00	8.62	47.11	3444.39	207.31	198.53	238.63	1.11	1299976.19	3271157.62	N 40 9 9.93	W 104 31 47.71
	3565.00	8.09	46.05	3538.39	217.17	208.01	248.66	0.58	1299985.67	3271167.65	N 40 9 10.02	W 104 31 47.58
	3659.00	7.47	45.27	3631.52	226.39	216.90	257.77	0.67	1299994.56	3271176.75	N 40 9 10.11	W 104 31 47.46
	3754.00	7.91	53.05	3725.67	235.02	225.18	267.38	1.19	1300002.84	3271186.36	N 40 9 10.19	W 104 31 47.33
	3849.00	9.32	51.84	3819.59	244.12	233.86	278.65	1.50	1300011.52	3271197.63	N 40 9 10.27	W 104 31 47.19
	3943.00	9.23	48.29	3912.37	254.27	243.58	290.26	0.62	1300021.24	3271209.25	N 40 9 10.37	W 104 31 47.04
	4038.00	10.82	54.43	4005.91	265.00	253.84	303.20	2.01	1300031.49	3271222.19	N 40 9 10.47	W 104 31 46.87
	4132.00	10.38	53.60	4098.31	275.67	264.00	317.20	0.50	1300041.65	3271236.18	N 40 9 10.57	W 104 31 46.69
	4227.00	9.67	51.56	4191.86	286.20	274.03	330.34	0.84	1300051.69	3271249.32	N 40 9 10.66	W 104 31 46.52
	4322.00	9.94	49.79	4285.47	296.91	284.29	342.85	0.43	1300061.94	3271261.83	N 40 9 10.76	W 104 31 46.35
	4416.00	9.85	49.70	4378.07	307.80	294.73	355.17	0.10	1300072.38	3271274.15	N 40 9 10.87	W 104 31 46.19
	4511.00	8.35	45.40	4471.88	318.31	304.83	366.28	1.73	1300082.48	3271285.26	N 40 9 10.96	W 104 31 46.05
	4606.00	6.51	43.31	4566.08	327.39	313.59	374.89	1.96	1300091.24	3271293.87	N 40 9 11.05	W 104 31 45.94
	4701.00	5.01	50.87	4660.59	334.18	320.13	381.80	1.77	1300097.78	3271300.78	N 40 9 11.11	W 104 31 45.85
	4795.00	3.17	59.62	4754.35	338.29	324.03	389.23	2.06	1300101.68	3271306.21	N 40 9 11.15	W 104 31 45.78
	4890.00	0.79	11.94	4849.29	340.34	326.00	389.63	2.84	1300103.65	3271308.61	N 40 9 11.17	W 104 31 45.74
	4985.00	0.26	336.49	4944.29	341.18	326.84	389.68	0.63	1300104.49	3271308.66	N 40 9 11.18	W 104 31 45.74
	5079.00	0.70	317.56	5038.28	341.78	327.46	389.21	0.49	1300105.11	3271308.19	N 40 9 11.19	W 104 31 45.75
	5174.00	0.97	300.84	5133.27	342.58	328.30	388.13	0.38	1300105.95	3271307.10	N 40 9 11.19	W 104 31 45.76
	5269.00	0.70	291.90	5228.26	343.17	328.93	386.90	0.31	1300106.58	3271305.88	N 40 9 11.20	W 104 31 45.78
	5363.00	0.79	289.69	5322.26	343.56	329.36	385.75	0.10	1300107.01	3271304.73	N 40 9 11.20	W 104 31 45.79
	5458.00	0.44	310.23	5417.25	343.98	329.82	384.86	0.43	1300107.47	3271303.84	N 40 9 11.21	W 104 31 45.81
	5553.00	0.62	293.28	5512.25	344.39	330.25	384.11	0.25	1300107.91	3271303.09	N 40 9 11.21	W 104 31 45.82
	5648.00	0.44	302.28	5607.24	344.76	330.68	383.33	0.21	1300108.31	3271302.31	N 40 9 11.22	W 104 31 45.83
	5742.00	0.53	337.46	5701.24	345.33	331.25	382.86	0.32	1300108.90	3271301.83	N 40 9 11.22	W 104 31 45.83
	5837.00	0.44	356.22	5796.24	346.10	332.02	382.66	0.19	1300109.67	3271301.64	N 40 9 11.23	W 104 31 45.83
	5932.00	0.26	12.59	5891.23	346.67	332.59	382.69	0.21	1300110.24	3271301.67	N 40 9 11.24	W 104 31 45.83
	6026.00	0.35	324.50	5985.23	347.11	333.03	382.57	0.28	1300110.69	3271301.55	N 40 9 11.24	W 104 31 45.83
	6121.00	0.26	17.89	6080.23	347.54	333.47	382.46	0.30	1300111.13	3271301.44	N 40 9 11.25	W 104 31 45.84
	6216.00	0.79	346.26	6175.23	348.38	334.32	382.38	0.62	1300111.97	3271301.35	N 40 9 11.25	W 104 31 45.84
	6310.00	9.41	18.36	6268.77	356.40	342.25	384.65	9.31	1300119.91	3271303.62	N 40 9 11.33	W 104 31 45.81
	6405.00	18.82	23.82	6360.80	378.15	363.69	393.30	9.99	1300141.34	3271312.28	N 40 9 11.54	W 104 31 45.69
	6500.00	30.78	22.17	6446.89	415.36	400.35	408.72	12.61	1300178.00	3271327.70	N 40 9 11.90	W 104 31 45.49
	6595.00	43.70	9.84	6522.46	471.03	455.51	423.58	15.65	1300233.16	3271342.56	N 40 9 12.45	W 104 31 45.29
	6689.00	53.82	3.22	6584.39	541.37	525.61	431.29	11.99	1300303.25	3271350.26	N 40 9 13.14	W 104 31 45.18
	6784.00	53.90	359.88	6640.42	618.06	602.28	433.36	2.84	1300379.92	3271352.34	N 40 9 13.90	W 104 31 45.14
	6879.00	54.08	0.09	6696.28	694.86	679.13	433.34	0.26				

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 ° ' ")
	7514.00	87.14	357.91	6857.04	1294.89	1280.68	403.91	2.45	1301058.29	3271322.89	N 40 9 20.60	W 104 31 45.43
	7609.00	90.48	358.07	6859.01	1389.60	1375.59	400.58	3.52	1301153.19	3271319.56	N 40 9 21.54	W 104 31 45.46
	7703.00	92.15	354.06	6856.86	1483.03	1469.32	394.13	4.62	1301246.92	3271313.11	N 40 9 22.47	W 104 31 45.53
	7798.00	89.69	358.44	6855.33	1577.48	1564.07	387.92	5.29	1301341.67	3271306.90	N 40 9 23.41	W 104 31 45.59
	7892.00	89.96	358.18	6855.62	1671.27	1658.03	385.15	0.40	1301435.62	3271304.13	N 40 9 24.33	W 104 31 45.61
	7987.00	90.40	358.11	6855.32	1766.04	1752.98	382.08	0.47	1301530.57	3271301.05	N 40 9 25.27	W 104 31 45.64
	8081.00	91.89	357.97	6853.44	1859.78	1846.90	378.86	1.59	1301624.49	3271297.84	N 40 9 26.20	W 104 31 45.67
	8176.00	91.01	1.00	6851.04	1954.64	1941.86	378.01	3.32	1301719.44	3271296.99	N 40 9 27.14	W 104 31 45.67
	8270.00	90.75	358.94	6849.59	2048.55	2035.84	377.96	2.21	1301813.42	3271296.94	N 40 9 28.07	W 104 31 45.65
	8364.00	90.84	359.21	6848.29	2142.41	2129.82	376.44	0.30	1301907.39	3271295.42	N 40 9 29.00	W 104 31 45.66
	8459.00	88.99	357.80	6848.43	2237.21	2224.78	373.96	2.45	1302002.35	3271292.94	N 40 9 29.94	W 104 31 45.68
	8553.00	88.99	358.02	6850.09	2330.94	2318.70	370.54	0.23	1302096.27	3271289.52	N 40 9 30.86	W 104 31 45.71
	8648.00	88.81	356.99	6851.91	2425.61	2413.59	366.40	1.10	1302191.16	3271285.38	N 40 9 31.80	W 104 31 45.75
	8742.00	90.48	358.43	6852.49	2519.32	2507.51	362.65	2.35	1302285.07	3271281.63	N 40 9 32.73	W 104 31 45.78
	8837.00	91.19	357.48	6851.11	2614.05	2602.44	359.26	1.25	1302379.99	3271278.24	N 40 9 33.67	W 104 31 45.81
	8931.00	92.07	359.39	6848.43	2707.81	2696.36	356.69	2.24	1302473.91	3271275.67	N 40 9 34.60	W 104 31 45.83
	9025.00	92.86	359.69	6844.39	2801.63	2790.27	355.94	0.90	1302567.82	3271274.92	N 40 9 35.53	W 104 31 45.83
	9120.00	91.45	358.93	6840.82	2896.44	2885.19	354.79	1.69	1302662.73	3271273.77	N 40 9 36.46	W 104 31 45.83
	9214.00	92.33	359.02	6837.72	2990.25	2979.13	353.11	0.94	1302756.66	3271272.09	N 40 9 37.39	W 104 31 45.84
	9308.00	91.01	358.97	6834.96	3084.06	3073.07	351.46	1.41	1302850.60	3271270.44	N 40 9 38.32	W 104 31 45.85
	9402.00	92.24	358.41	6832.31	3177.85	3167.01	349.32	1.44	1302944.53	3271268.30	N 40 9 39.25	W 104 31 45.86
	9495.00	89.96	359.60	6830.53	3270.69	3259.97	347.70	2.77	1303037.49	3271266.68	N 40 9 40.17	W 104 31 45.87
	9589.00	88.02	0.14	6832.19	3364.60	3353.95	347.49	2.14	1303131.47	3271266.47	N 40 9 41.10	W 104 31 45.86
	9682.00	88.37	359.12	6835.11	3457.46	3446.90	346.89	1.16	1303224.41	3271265.87	N 40 9 42.01	W 104 31 45.86
	9776.00	90.31	359.39	6836.20	3551.33	3540.88	345.67	2.08	1303318.39	3271264.65	N 40 9 42.94	W 104 31 45.86
	9871.00	88.90	359.47	6836.85	3646.22	3635.87	344.72	1.49	1303413.38	3271263.70	N 40 9 43.88	W 104 31 45.86
	9966.00	89.43	358.80	6838.24	3741.08	3730.85	343.29	0.90	1303508.35	3271262.27	N 40 9 44.82	W 104 31 45.86
	10060.00	87.93	0.70	6840.40	3834.91	3824.81	342.88	2.57	1303602.31	3271261.86	N 40 9 45.75	W 104 31 45.85
	10155.00	89.25	0.72	6842.74	3929.90	3919.78	344.05	1.39	1303697.27	3271263.03	N 40 9 46.69	W 104 31 45.82
	10249.00	88.37	0.30	6844.69	4023.84	4013.75	344.89	1.04	1303791.24	3271263.87	N 40 9 47.62	W 104 31 45.80
	10344.00	89.87	1.15	6846.15	4118.80	4108.73	346.09	1.81	1303886.22	3271265.07	N 40 9 48.55	W 104 31 45.77
	10439.00	89.96	357.60	6846.29	4213.67	4203.71	345.06	3.74	1303981.19	3271264.04	N 40 9 49.49	W 104 31 45.77
	10533.00	87.85	358.61	6848.09	4307.41	4297.63	341.95	2.49	1304075.11	3271260.93	N 40 9 50.42	W 104 31 45.80
	10628.00	88.02	358.93	6851.51	4402.19	4392.55	339.91	0.38	1304170.02	3271258.89	N 40 9 51.36	W 104 31 45.81
	10722.00	87.76	357.32	6854.97	4495.89	4486.43	336.84	1.73	1304263.90	3271255.82	N 40 9 52.29	W 104 31 45.84
	10817.00	88.99	358.03	6857.67	4590.56	4581.31	332.98	1.49	1304358.78	3271251.97	N 40 9 53.23	W 104 31 45.87
	10911.00	90.22	359.43	6858.31	4684.39	4675.28	330.90	1.98	1304452.75	3271249.88	N 40 9 54.15	W 104 31 45.89
	11006.00	89.69	359.02	6858.39	4779.26	4770.27	329.62	0.71	1304547.73	3271248.60	N 40 9 55.09	W 104 31 45.89
	11101.00	90.40	3.89	6858.31	4874.23	4865.21	332.03	5.18	1304642.67	3271251.01	N 40 9 56.03	W 104 31 45.85
	11196.00	90.66	5.99	6857.44	4969.11	4959.89	340.21	2.23	1304737.30	3271259.19	N 40 9 56.97	W 104 31 45.73
	11290.00	89.60	8.06	6857.22	5062.76	5053.14	351.70	2.47	1304830.59	3271270.68	N 40 9 57.89	W 104 31 45.57
	11384.00	89.69	4.99	6857.80	5156.47	5146.52	362.38	3.27	1304923.96	3271281.36	N 40 9 58.81	W 104 31 45.42
	11479.00	88.55	3.23	6859.26	5251.40	5241.26	369.19	2.21	1305018.69	3271288.17	N 40 9 59.74	W 104 31 45.31
	11574.00	89.60	1.58	6860.80	5346.38	5336.16	373.18	2.06	1305113.59	3271292.16	N 40 10 0.68	W 104 31 45.25
	11669.00	88.46	1.39	6862.41	5441.36	5431.11	375.64	1.22	1305208.54	3271294.62	N 40 10 1.62	W 104 31 45.21
	11764.00	90.40	0.34	6863.35	5536.32	5526.09	377.07	2.32	1305303.51	3271296.05	N 40 10 2.56	W 104 31 45.17
	11858.00	89.87	0.75	6863.13	5630.29	5620.08	377.97	0.71	1305397.50	3271296.95	N 40 10 3.49	W 104 31 45.15
	11953.00	90.13	0.14	6863.13	5725.24	5715.08	378.70	0.70	1305492.50	3271297.68	N 40 10 4.42	W 104 31 45.13
	12047.00	92.07	358.79	6861.33	5819.12	5809.05	377.83	2.51	1305586.46	3271296.81	N 40 10 5.35	W 104 31 45.12
	12142.00	91.71	358.78	6858.19	5913.90	5903.98	375.81	0.38	1305681.39	3271294.79	N 40 10 6.29	W 104 31 45.14
	12236.00	91.71	358.22	6855.39	6007.67	5997.90	373.35	0.60	1305775.31	3271292.33	N 40 10 7.22	W 104 31 45.15
	12331.00	91.19	358.06	6852.98	6102.41	6092.82	370.27	0.57	1305870.22	3271289.25	N 40 10 8.16	W 104 31 45.18
	12426.00	90.66	358.19	6851.45	6197.16	6187.76	367.16	0.57	1305965.16	3271286.14	N 40 10 9.10	W 104 31 45.21
	12521.00	89.43	357.48	6851.30	6292.01	6282.01	365.99	0.75	1306060.01	3271283.07	N 40 10 10.04	W 104 31 45.27
	12616.00	90.84	356.51	6851.08	6386.86	6377.62	364.72	1.82	1306155.01	3271278.97	N 40 10 10.97	W 104 31 45.27
	12710.00	90.84	356.51	6851.08	6480.24	6471.49	355.06	0.77	1306248.87	3271274.04	N 40 10 11.90	W 104 31 45.32
	12805.00	90.75	356.56	6849.76	6574.77	6566.30	349.32	1.11	1306343.68	3271268.30	N 40 10 12.84	W 104 31 45.38
	12900.00	90.84	356.30	6848.44	6669.29	6661.11	343.40	0.29	1306438.48	3271262.38	N 40 10 13.78	W 104 31 45.45
	12995.00	92.42	355.08	6845.74	6763.65	6755.80	336.27	2.10	1306533.17	3271255.25	N 40 10 14.71	W 104 31 45.53
	13089.00	90.22	355.89	6843.57	6856.98	6849.47	328.87	2.49	1306626.84	3271247.85	N 40 10 15.64	W 104 31 45.61
	13184.00	90.13	356.09	6843.28	6951.43	6944.24	322.23	0.23	1306721.60	3271241.21	N 40 10 16.58	W 104 31 45.68
	13279.00	91.01	358.31	6842.34	7046.07	7039.12	317.59	2.51	1306816.46	3271236.57	N 40 10 17.51	W 104 31 45.73
	13373.00	92.68	358.74	6839.31	7139.83	7133.03	315.17	1.83	1306910.39	3271231.15	N 40 10 18.44	W 104 31 45.74
	13468.00	91.89	1.32	6835.52	7234.68	7227.95	315.22	2.84	1307005.30	3271234.20	N 40 10 19.38	W 104 31 45.73
	13563.00	91.36	0.41	6832.83	7329.62	7322.90	316.65	1.11	1307100.24	3271232.63	N 40 10 20.32	W 104 31 45.70
	13657.00	89.78	359.84	6831.90	7423.55	7416.89	316.86	1.79	1307194.23	3271235.84	N 40 10 21.25	W 104 31 45.68
	13752.00	90.48	358.11	6831.68	7518.40	7511.87	315.16	1.96	1307289.21	3271234.14	N 40 10 22.19	W 104 31 45.69
	13847.00	91.01	357.61	6830.44	7613.13	7606.80	311.61	0.77	1307384.13	3271230.59	N 40 10 23.12	W 104 31 45.72
	13941.00	89.60	354.87	6829.94	7706.62	7700.58	305.45	3.28	1307477.91	3271224.43	N 40 10 24.05	W 104 31 45.79
	14036.00	90.13	353.19	6830.17	7800.66	7795.06	295.57	1.85	1307572.39	3271214.55	N 40 10 24.99	W 104 31 45.90
	14131.00	87.93	354.62	6831.78	7894.66	7889.50	285.48	2.76	1307666.82	3271204.46	N 40 10 25.92	W 104 31 46.02
	14226.00	89.34	354.05	6834.04	7988.75	7984.01	276.11	1.60	1307761.33	3271195.09	N 40 10 26.86	W 104 31 46.13
Last IFR Survey	14271.00	90.04	353.87	6834.28	8033.29	8028.76	271.37	1.61	1307806.07	3271190.36	N 40 10 27.30	W 104 31 46.18
Projection to Bit	14333.00	90.04	353.87	6834.24	8094.65	8090.40	264.75	0.00	1307867.72	3271183.74	N 40 10 27.91	W 104 31 46.26

Survey Type: Def Survey