



# Verdad Resources LLC

Schlumberger

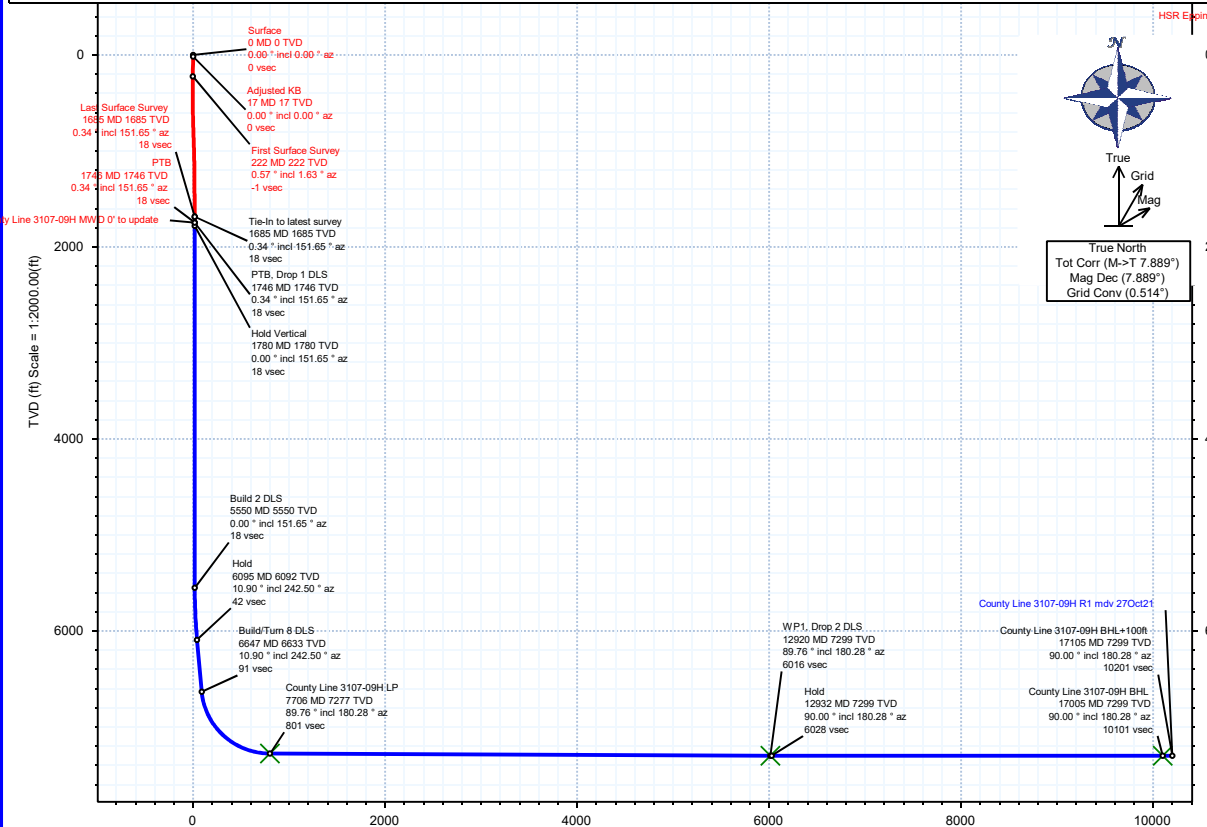
Rev 1

Borehole:	Well:	Field:	Structure:
Original Hole	County Line 3107-09H	CO, Weld County (NAD 83 NZ) - 2019	Verdad Resources 31-01N-65W (County Line Pad)

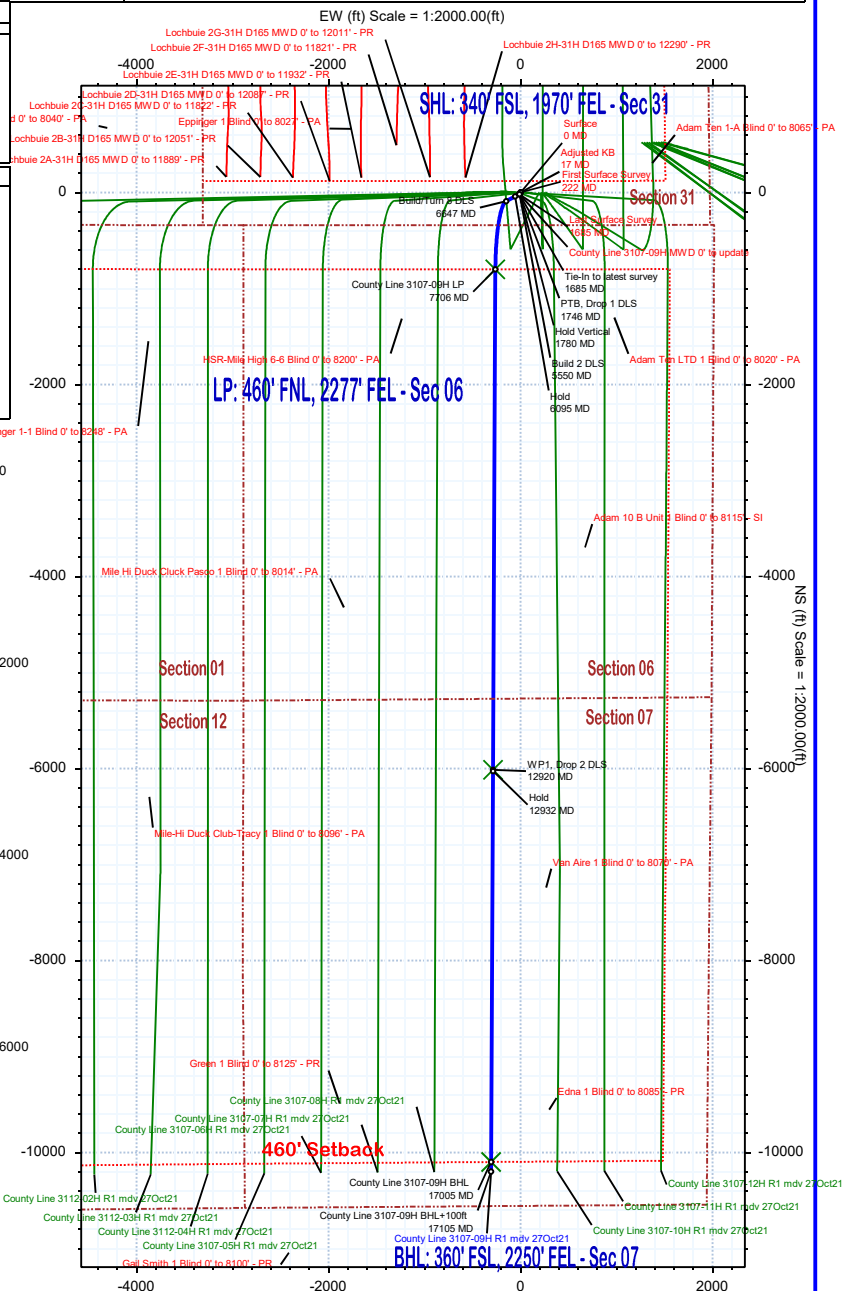
Gravity & Magnetic Parameters	Surface Location	NAD83 Colorado State Plane, Northern Zone, US Feet	Miscellaneous
Model: HDGM 2021 Dip: 66.238° Date: 27-Oct-2021	Lat: N 40 0 5.24 Northing: 1244377.46ftUS Grid Conv: 0.5141°		Slot: County Line 3107-09H TVD Ref: KB 21ft(5058ft above MSL)
MagDec: 7.889° FS: 51647.313mT Gravity FS: 998.982mgm (9.80665 Based)	Lon: W 104 42 15.51 Easting: 3222908.36ftUS Scale Fact: 0.99996626		Plan: County Line 3107-09H R1 mdv 27Oct21

Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)
County Line Pad - Sec 31-30 - CL	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	0.33	-0.04	-59.98
County Line Pad - Sec 01-12 - SB	N 40 0 5.24	W 104 42 17.05	1244376.31	3222788.38	5058.00	0.66	-0.07	-119.99
County Line Pad - Sec 06-07 - SB	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	0.33	-0.04	-59.98
County Line Pad - Sec 01-12	N 40 0 5.24	W 104 42 17.05	1244376.31	3222788.38	5058.00	0.66	-0.07	-119.99
County Line Pad - Sec 31-30 - SB	N 40 0 5.24	W 104 42 13.00	1244379.40	3223103.61	5058.00	-1.14	0.18	195.27
County Line Pad - Sec 01-12 - 460' SB	N 40 0 5.24	W 104 42 17.05	1244376.31	3222788.38	5058.00	0.66	-0.07	-119.99
County Line Pad - Sec 06-07 - CL	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	0.33	-0.04	-59.98
County Line Pad - Sec 31-30-06-07	N 40 0 5.24	W 104 42 16.28	1244376.89	3222848.38	5058.00	0.33	-0.04	-59.98
County Line 3107-09H LP	N 39 59 57.34	W 104 42 18.99	1243574.97	3222852.76	7277.00	801.47	-800.19	-262.80
County Line 3107-09H BHL	N 39 58 25.44	W 104 42 19.47	124376.24	3222890.70	7289.00	10100.61	-10099.22	-308.30
County Line 3107-09H WP1	N 39 59 5.81	W 104 42 19.21	1238361.14	3222674.03	7299.00	6015.53	-6014.19	-288.31

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In to latest survey	1685.00	0.34	151.65	1684.63	17.93	-17.87	-11.95	
PTB, Drop 1 DLS	1746.00	0.34	151.65	1745.63	18.24	-18.19	-11.78	0.00
Hold Vertical	1780.00	0.00	151.65	1779.63	18.33	-18.28	-11.73	1.00
Build 2 DLS	5550.37	0.00	151.65	5550.00	18.33	-18.28	-11.73	0.00
Hold	6095.49	10.90	242.50	6091.83	42.43	-42.15	-57.60	2.00
Build/Turn 8 DLS	6646.76	10.90	242.50	6633.15	91.04	-90.31	-150.08	0.00
County Line 3107-09H LP	7705.56	89.76	180.28	7277.00	801.47	-800.19	-262.80	8.00
WP1, Drop 2 DLS	12919.66	89.76	180.28	7299.00	6015.53	-6014.19	-288.31	0.00
Hold	12931.77	90.00	180.28	7299.03	6027.63	-6026.30	-288.37	2.00
County Line 3107-09H BHL	17004.74	90.00	180.28	7299.00	10100.61	-10099.22	-308.30	0.00
County Line 3107-09H BHL+100ft	17104.74	90.00	180.28	7299.00	10200.61	-10199.22	-308.79	0.00



Vertical Section (ft) Azim = 180.28° Scale = 1:2000.00(ft) Origin = 0N/-S, 0E/-W



## County Line 3107-09H R1 mdv 27Oct21 Proposal Geodetic Report



(Def Plan)

**Report Date:** November 01, 2021 - 01:23 PM  
**Client:** Verdad Resources LLC  
**Field:** CO, Weld County (NAD 83 NZ) - 2019  
**Structure / Slot:** Verdad Resources 31-01N-65W (County Line Pad) / County Line 3107-09H  
**Well:** County Line 3107-09H  
**Borehole:** Original Hole  
**UWI / API#:** Unknown / 05-123-51167  
**Survey Name:** County Line 3107-09H R1 mdv 27Oct21  
**Survey Date:** October 27, 2021  
**Tort / AHD / DDI / ERD Ratio:** 107.501 ° / 10313.346 ft / 6.415 / 1.413  
**Coordinate Reference System:** NAD83 Colorado State Plane, Northern Zone, US Feet  
**Location Lat / Long:** N 40° 0' 5.24304", W 104° 42' 15.50700"  
**Location Grid N/E/Y/X:** N 1244377.460 ftUS, E 3222908.359 ftUS  
**CRS Grid Convergence Angle:** 0.5141 °  
**Grid Scale Factor:** 0.99996626  
**Version / Patch:** 2.10.824.0

**Survey / DLS Computation:** Minimum Curvature / Lubinski  
**Vertical Section Azimuth:** 180.280 ° (True North)  
**Vertical Section Origin:** 0.000 ft, 0.000 ft  
**TVD Reference Datum:** KB 21ft  
**TVD Reference Elevation:** 5058.000 ft above MSL  
**Seabed / Ground Elevation:** 5037.000 ft above MSL  
**Magnetic Declination:** 7.889 °  
**Total Gravity Field Strength:** 998.9824mgn (9.80665 Based)  
**Gravity Model:** GARM  
**Total Magnetic Field Strength:** 51647.313 nT  
**Magnetic Dip Angle:** 66.238 °  
**Declination Date:** October 27, 2021  
**Magnetic Declination Model:** HDGM 2021  
**North Reference:** True North  
**Grid Convergence Used:** 0.0000 °  
**Total Corr Mag North->True North:** 7.8886 °  
**Local Coord Referenced To:** Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	-5058.00	0.00	0.00	0.00	N/A	1244377.46	3222908.36	40.001456	-104.704308
Adjusted KB	17.00	0.00	0.00	17.00	-5041.00	0.00	0.00	0.00	0.00	1244377.46	3222908.36	40.001456	-104.704308
First Surface Survey	222.00	0.57	1.63	222.00	-4836.00	-1.02	1.02	0.03	0.28	1244378.48	3222908.38	40.001459	-104.704307
	252.00	0.54	17.58	252.00	-4806.00	-1.30	1.30	0.08	0.52	1244378.76	3222908.42	40.001460	-104.704307
	283.00	0.62	1.33	282.99	-4775.01	-1.61	1.61	0.12	0.59	1244379.07	3222908.47	40.001461	-104.704307
	311.00	0.54	359.22	310.99	-4747.01	-1.89	1.89	0.13	0.30	1244379.35	3222908.47	40.001462	-104.704307
	343.00	0.39	24.39	342.99	-4715.01	-2.14	2.14	0.17	0.78	1244379.60	3222908.51	40.001462	-104.704307
	373.00	0.32	22.30	372.99	-4685.01	-2.32	2.31	0.24	0.24	1244379.78	3222908.58	40.001463	-104.704307
	403.00	0.46	11.59	402.99	-4655.01	-2.51	2.51	0.30	0.52	1244379.97	3222908.63	40.001463	-104.704306
	433.00	0.33	339.21	432.99	-4625.01	-2.71	2.71	0.29	0.84	1244380.17	3222908.63	40.001464	-104.704306
	463.00	0.31	250.70	462.99	-4595.01	-2.76	2.76	0.18	1.49	1244380.22	3222908.52	40.001464	-104.704307
	493.00	0.59	233.53	492.99	-4565.01	-2.64	2.64	-0.02	1.03	1244380.10	3222908.32	40.001464	-104.704308
	523.00	0.80	237.53	522.99	-4535.01	-2.44	2.44	-0.32	0.72	1244379.90	3222908.02	40.001463	-104.704309
	553.00	1.02	220.43	552.98	-4505.02	-2.12	2.12	-0.67	1.16	1244379.58	3222907.67	40.001462	-104.704310
	583.00	1.58	215.51	582.97	-4475.03	-1.58	1.58	-1.08	1.90	1244379.03	3222907.26	40.001461	-104.704311
	613.00	1.97	218.02	612.96	-4445.04	-0.83	0.84	-1.64	1.33	1244378.29	3222906.71	40.001459	-104.704313
	643.00	1.98	225.68	642.94	-4415.06	-0.06	0.07	-2.33	0.88	1244377.51	3222906.03	40.001457	-104.704316
	673.00	2.03	224.17	672.92	-4385.08	0.69	-0.67	-3.07	0.24	1244376.76	3222905.30	40.001455	-104.704318
	703.00	1.84	221.92	702.91	-4355.09	1.43	-1.41	-3.76	0.68	1244376.02	3222904.61	40.001453	-104.704321
	733.00	1.96	211.10	732.89	-4325.11	2.23	-2.21	-4.35	1.26	1244375.21	3222904.03	40.001450	-104.704323
	763.00	1.97	204.70	762.87	-4295.13	3.14	-3.12	-4.83	0.73	1244374.30	3222903.56	40.001448	-104.704325
	793.00	2.21	207.95	792.85	-4265.15	4.12	-4.10	-5.31	0.89	1244373.32	3222903.08	40.001445	-104.704326
	823.00	2.27	208.92	822.83	-4235.17	5.15	-5.13	-5.87	0.24	1244372.28	3222902.53	40.001442	-104.704328
	853.00	2.07	204.06	852.81	-4205.19	6.17	-6.14	-6.38	0.91	1244371.26	3222902.03	40.001440	-104.704330
	883.00	2.00	208.92	882.79	-4175.21	7.13	-7.09	-6.85	0.62	1244370.30	3222901.57	40.001437	-104.704332
	913.00	1.98	212.23	912.77	-4145.23	8.03	-7.99	-7.38	0.39	1244369.40	3222901.05	40.001434	-104.704334
	943.00	1.99	217.81	942.75	-4115.25	8.88	-8.84	-7.98	0.64	1244368.55	3222900.46	40.001432	-104.704336
	973.00	1.86	218.00	972.74	-4085.26	9.68	-9.64	-8.60	0.43	1244367.75	3222899.85	40.001430	-104.704338
	1003.00	2.02	221.94	1002.72	-4055.28	10.46	-10.41	-9.25	0.69	1244366.97	3222899.20	40.001428	-104.704341
	1033.00	1.96	215.50	1032.70	-4025.30	11.27	-11.22	-9.90	0.77	1244366.15	3222898.56	40.001426	-104.704343
	1063.00	1.86	223.17	1062.68	-3995.32	12.05	-12.00	-10.53	0.91	1244365.37	3222897.93	40.001423	-104.704345
	1093.00	1.59	222.39	1092.67	-3965.33	12.71	-12.66	-11.15	0.90	1244364.70	3222897.33	40.001422	-104.704347
	1123.00	1.42	221.06	1122.66	-3935.34	13.30	-13.25	-11.67	0.58	1244364.11	3222896.81	40.001420	-104.704349
	1153.00	1.06	225.91	1152.65	-3905.35	13.78	-13.72	-12.12	1.25	1244363.63	3222896.37	40.001419	-104.704351
	1183.00	0.88	219.79	1182.65	-3875.35	14.15	-14.09	-12.46	0.69	1244363.26	3222896.02	40.001418	-104.704352
	1213.00	0.74	215.44	1212.65	-3845.35	14.49	-14.42	-12.72	0.51	1244362.92	3222895.77	40.001417	-104.704353
	1243.00	0.67	207.00	1242.64	-3815.36	14.80	-14.74	-12.91	0.42	1244362.61	3222895.58	40.001416	-104.704354
	1273.00	0.68	201.06	1272.64	-3785.36	15.12	-15.06	-13.06	0.24	1244362.28	3222895.44	40.001415	-104.704354
	1303.00	0.59	155.84	1302.64	-3755.36	15.43	-15.37	-13.06	1.65	1244361.98	3222895.44	40.001414	-104.704354
	1333.00	0.54	131.50	1332.64	-3725.36	15.67	-15.60	-12.89	0.81	1244361.74	3222895.61	40.001414	-104.704354
	1363.00	0.47	148.17	1362.64	-3695.36	15.86	-15.80	-12.72	0.54	1244361.55	3222895.78	40.001413	-104.704353
	1393.00	0.45	120.06	1392.64	-3665.36	16.03	-15.96	-12.55	0.75	1244361.38	3222895.95	40.001413	-104.704352
	1423.00	0.22	144.96	1422.64	-3635.36	16.13	-16.07	-12.42	0.89	1244361.28	3222896.09	40.001412	-104.704352
	1453.00	0.53	153.88	1452.64	-3605.36	16.30	-16.24	-12.32	1.05	1244361.11	3222896.18	40.001412	-104.704351
	1483.00	0.49	155.71	1482.63	-3575.37	16.54	-16.48	-12.21	0.14	1244360.87	3222896.30	40.001411	-104.704351
	1513.00	0.31	153.86	1512.63	-3545.37	16.73	-16.67	-12.12	0.60	1244360.68	3222896.39	40.001411	-104.704351
	1543.00	0.33	155.33	1542.63	-3515.37	16.88	-16.83	-12.05	0.07	1244360.53	3222896.46	40.001410	-104.704351
	1573.00	0.43	158.76	1572.63	-3485.37	17.07	-17.01	-11.97	0.34	1244360.35	3222896.54	40.001410	-104.704350
	1603.00	0.40	188.64	1602.63	-3455.37	17.28	-17.22	-11.95	0.72	1244360.14	3222896.57	40.001409	-104.704350
	1633.00	0.56	193.06	1632.63	-3425.37	17.52	-17.46	-12.00	0.55	1244359.89	3222896.52	40.001408	-104.704350
	1663.00	0.46	167.87	1662.63	-3395.37	17.78	-17.72	-12.00	0.81	1244359.63	3222896.52	40.001408	-104.704350
Tie-In to latest survey	1685.00	0.34	151.65	1684.63	-3373.37	17.93	-17.87	-11.95	0.74	1244359.49	3222896.57	40.001407	-104.704350
	1700.00	0.34	151.65	1699.63	-3358.37	18.00	-17.95	-11.91	0.00	1244359.41	3222896.61	40.001407	-104.704350
PTB, Drop 1 DLS	1746.00	0.34	151.65	1745.63	-3312.37	18.24	-18.19	-11.78	0.00	1244359.17	3222896.74	40.001406	-104.704350
Hold Vertical	1780.00	0.00	151.65	1779.63	-3278.37	18.33	-18.28	-11.73	1.00	1244359.08	3222896.79	40.001406	-104.704349
	1800.00	0.00	151.65	1799.63	-3258.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	1900.00	0.00	151.65	1899.63	-3158.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2000.00	0.00	151.65	1999.63	-3058.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2100.00	0.00	151.65	2099.63	-2958.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2200.00	0.00	151.65	2199.63	-2858.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2300.00	0.00	151.65	2299.63	-2758.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2400.00	0.00	151.65	2399.63	-2658.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2500.00	0.00	151.65	2499.63	-2558.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2600.00	0.00	151.65	2599.63	-2458.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2700.00	0.00	151.65	2699.63	-2358.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2800.00	0.00	151.65	2799.63	-2258.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	2900.00	0.00	151.65	2899.63	-2158.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	3000.00	0.00	151.65	2999.63	-2058.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	3100.00	0.00	151.65	3099.63	-1958.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	3200.00	0.00	151.65	3199.63	-1858.37	18.33	-18.28						

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	4700.00	0.00	151.65	4699.63	-358.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	4800.00	0.00	151.65	4799.63	-258.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	4900.00	0.00	151.65	4899.63	-158.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5000.00	0.00	151.65	4999.63	-58.37	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5100.00	0.00	151.65	5099.63	41.63	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5200.00	0.00	151.65	5199.63	141.63	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5300.00	0.00	151.65	5299.63	241.63	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5400.00	0.00	151.65	5399.63	341.63	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5500.00	0.00	151.65	5499.63	441.63	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
Build 2 DLS	5550.37	0.00	151.65	5550.00	492.00	18.33	-18.28	-11.73	0.00	1244359.08	3222896.79	40.001406	-104.704349
	5600.00	0.99	242.50	5599.62	541.62	18.53	-18.47	-12.12	2.00	1244358.88	3222896.41	40.001406	-104.704351
	5700.00	2.99	242.50	5699.56	641.56	20.15	-20.08	-15.20	2.00	1244357.25	3222893.34	40.001401	-104.704362
	5800.00	4.99	242.50	5799.31	741.31	23.40	-23.29	-21.37	2.00	1244353.98	3222887.20	40.001392	-104.704384
	5900.00	6.99	242.50	5898.76	840.76	28.26	-28.12	-30.63	2.00	1244349.07	3222877.98	40.001379	-104.704417
	6000.00	8.99	242.50	5997.78	939.78	34.75	-34.54	-42.97	2.00	1244342.54	3222865.71	40.001362	-104.704461
Hold	6095.49	10.90	242.50	6091.83	1033.83	42.43	-42.15	-57.60	2.00	1244334.79	3222851.15	40.001341	-104.704513
	6100.00	10.90	242.50	6096.26	1038.26	42.83	-42.55	-58.35	0.00	1244334.39	3222850.39	40.001340	-104.704516
	6200.00	10.90	242.50	6194.46	1136.46	51.65	-51.28	-75.13	0.00	1244325.51	3222833.70	40.001316	-104.704576
	6300.00	10.90	242.50	6292.65	1234.65	60.47	-60.02	-91.90	0.00	1244316.62	3222817.00	40.001292	-104.704636
	6400.00	10.90	242.50	6390.85	1332.85	69.28	-68.75	-108.68	0.00	1244307.74	3222800.30	40.001268	-104.704695
	6500.00	10.90	242.50	6489.04	1431.04	78.10	-77.49	-125.46	0.00	1244298.85	3222783.61	40.001244	-104.704755
	6600.00	10.90	242.50	6587.24	1529.24	86.91	-86.22	-142.23	0.00	1244289.97	3222766.91	40.001220	-104.704815
Build/Turn 8 DLS	6646.76	10.90	242.50	6633.15	1575.15	91.04	-90.31	-150.08	0.00	1244285.81	3222759.10	40.001209	-104.704843
	6700.00	13.40	225.95	6685.21	1627.21	97.70	-96.92	-158.98	8.00	1244279.12	3222750.26	40.001190	-104.704875
	6800.00	19.76	208.57	6781.07	1723.07	120.71	-119.86	-175.41	8.00	1244256.04	3222734.03	40.001127	-104.704934
	6900.00	26.98	198.80	6872.83	1814.83	157.04	-156.10	-191.21	8.00	1244219.65	3222718.57	40.001028	-104.704990
	7000.00	34.53	194.58	6958.72	1900.72	205.96	-204.96	-206.05	8.00	1244170.67	3222704.16	40.000894	-104.705043
	7100.00	42.23	191.06	7037.06	1979.06	266.53	-265.46	-219.66	8.00	1244110.05	3222691.10	40.000728	-104.705092
	7200.00	50.01	188.46	7106.33	2048.33	337.58	-336.45	-231.77	8.00	1244038.96	3222679.63	40.000533	-104.705135
	7300.00	57.83	186.39	7165.18	2107.18	417.71	-416.53	-242.13	8.00	1243958.79	3222669.98	40.000313	-104.705172
	7400.00	65.68	184.66	7212.47	2154.47	505.37	-504.15	-250.56	8.00	1243871.10	3222662.34	40.000072	-104.705202
	7500.00	73.55	183.12	7247.26	2189.26	598.84	-597.60	-256.88	8.00	1243777.60	3222656.86	39.999816	-104.705224
	7600.00	81.43	181.71	7268.90	2210.90	696.32	-695.06	-260.98	8.00	1243680.11	3222653.64	39.999548	-104.705239
	7700.00	89.32	180.36	7276.96	2218.96	795.91	-794.64	-262.77	8.00	1243580.53	3222652.74	39.999275	-104.705245
County Line 3107-09H LP	7705.56	89.76	180.28	7277.00	2219.00	801.47	-800.19	-262.80	8.00	1243574.97	3222652.76	39.999260	-104.705246
	7800.00	89.76	180.28	7277.40	2219.40	895.91	-894.63	-263.26	0.00	1243480.53	3222653.15	39.999001	-104.705247
	7900.00	89.76	180.28	7277.82	2219.82	995.91	-994.63	-263.75	0.00	1243380.54	3222653.56	39.998726	-104.705249
	8000.00	89.76	180.28	7278.24	2220.24	1095.91	-1094.63	-264.24	0.00	1243280.54	3222653.96	39.998452	-104.705251
	8100.00	89.76	180.28	7278.66	2220.66	1195.91	-1194.63	-264.73	0.00	1243180.54	3222654.37	39.998177	-104.705252
	8200.00	89.76	180.28	7279.09	2221.09	1295.91	-1294.62	-265.22	0.00	1243080.55	3222654.78	39.997903	-104.705254
	8300.00	89.76	180.28	7279.51	2221.51	1395.90	-1394.62	-265.71	0.00	1242980.56	3222655.19	39.997628	-104.705256
	8400.00	89.76	180.28	7279.93	2221.93	1495.90	-1494.62	-266.19	0.00	1242880.56	3222655.60	39.997354	-104.705258
	8500.00	89.76	180.28	7280.35	2222.35	1595.90	-1594.62	-266.68	0.00	1242780.57	3222656.00	39.997079	-104.705259
	8600.00	89.76	180.28	7280.77	2222.77	1695.90	-1694.62	-267.17	0.00	1242680.57	3222656.41	39.996805	-104.705261
	8700.00	89.76	180.28	7281.20	2223.20	1795.90	-1794.61	-267.66	0.00	1242580.58	3222656.82	39.996530	-104.705263
	8800.00	89.76	180.28	7281.62	2223.62	1895.90	-1894.61	-268.15	0.00	1242480.59	3222657.23	39.996256	-104.705265
	8900.00	89.76	180.28	7282.04	2224.04	1995.90	-1994.61	-268.64	0.00	1242380.59	3222657.64	39.995981	-104.705266
	9000.00	89.76	180.28	7282.46	2224.46	2095.90	-2094.61	-269.13	0.00	1242280.60	3222658.04	39.995707	-104.705268
	9100.00	89.76	180.28	7282.88	2224.88	2195.90	-2194.61	-269.62	0.00	1242180.60	3222658.45	39.995432	-104.705270
	9200.00	89.76	180.28	7283.31	2225.31	2295.90	-2294.60	-270.11	0.00	1242080.61	3222658.86	39.995158	-104.705272
	9300.00	89.76	180.28	7283.73	2225.73	2395.90	-2394.60	-270.60	0.00	1241980.61	3222659.27	39.994883	-104.705273
	9400.00	89.76	180.28	7284.15	2226.15	2495.89	-2494.60	-271.09	0.00	1241880.62	3222659.68	39.994608	-104.705275
	9500.00	89.76	180.28	7284.57	2226.57	2595.89	-2594.60	-271.58	0.00	1241780.62	3222660.08	39.994334	-104.705277
	9600.00	89.76	180.28	7284.99	2226.99	2695.89	-2694.60	-272.07	0.00	1241680.63	3222660.49	39.994059	-104.705279
	9700.00	89.76	180.28	7285.42	2227.42	2795.89	-2794.59	-272.56	0.00	1241580.63	3222660.90	39.993785	-104.705280
	9800.00	89.76	180.28	7285.84	2227.84	2895.89	-2894.59	-273.04	0.00	1241480.64	3222661.31	39.993510	-104.705282
	9900.00	89.76	180.28	7286.26	2228.26	2995.89	-2994.59	-273.53	0.00	1241380.64	3222661.72	39.993236	-104.705284
	10000.00	89.76	180.28	7286.68	2228.68	3095.89	-3094.59	-274.02	0.00	1241280.65	3222662.12	39.992961	-104.705285
	10100.00	89.76	180.28	7287.10	2229.10	3195.89	-3194.59	-274.51	0.00	1241180.65	3222662.53	39.992687	-104.705287
	10200.00	89.76	180.28	7287.52	2229.52	3295.89	-3294.58	-275.00	0.00	1241080.66	3222662.94	39.992412	-104.705289
	10300.00	89.76	180.28	7287.95	2229.95	3395.89	-3394.58	-275.49	0.00	1240980.66	3222663.35	39.992138	-104.705291
	10400.00	89.76	180.28	7288.37	2230.37	3495.89	-3494.58	-275.98	0.00	1240880.67	3222663.76	39.991863	-104.705292
	10500.00	89.76	180.28	7288.79	2230.79	3595.88	-3594.58	-276.47	0.00	1240780.68	3222664.16	39.991589	-104.705294
	10600.00	89.76	180.28	7289.21	2231.21	3695.88	-3694.57	-276.96	0.00	1240680.68	3222664.57	39.991314	-104.705296
	10700.00	89.76	180.28	7289.63	2231.63	3795.88	-3794.57	-277.45	0.00	1240580.69	3222664.98	39.991040	-104.705298
	10800.00	89.76	180.28	7290.06	2232.06	3895.88	-3894.57	-277.94	0.00	1240480.69	3222665.39	39.990765	-104.705299
	10900.00	89.76	180.28	7290.48	2232.48	3995.88	-3994.57	-278.43	0.00	1240380.70	3222665.79	39.990491	-104.705301
	11000.00	89.76	180.28	7290.90	2232.90	4095.88	-4094.57	-278.92	0.00	1240280.70	3222666.20	39.990216	-104.705303
	11100.00	89.76	180.28	7291.32	2233.32	4195.88	-4194.56	-279.41	0.00	1240180.71	3222666.61	39.989942	-104.705305
	11200.00	89.76	180.28	7291.74	2233.74	4295.88	-4294.56	-279.90	0.00	1240080.71	3222667.02	39.989667	-104.705306
	11300.00	89.76	180.28	7292.17	2234.17	4395.88	-4394.56	-280.38	0.00	1239980.72	3222667.43	39.989393	-104.705308
	11400.00	89.76	180.28	7292.59	2234.59	4495.88	-4494.56	-280.87	0.00	1239880.72	3222667.84	39.989118	-104.705310
	11500.00	89.76	180.28	7293.01	2235.01	4595.88	-4594.56	-281.36	0.00	1239780.73	3222668.24	39.988844	-104.705312

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	15700.00	90.00	180.28	7299.01	2241.01	8795.86	-8794.49	-301.91	0.00	1235580.93	3222685.38	39.977315	-104.705385
	15800.00	90.00	180.28	7299.01	2241.01	8895.86	-8894.49	-302.40	0.00	1235480.93	3222685.79	39.977040	-104.705387
	15900.00	90.00	180.28	7299.01	2241.01	8995.86	-8994.49	-302.89	0.00	1235380.93	3222686.19	39.976766	-104.705388
	16000.00	90.00	180.28	7299.01	2241.01	9095.86	-9094.49	-303.38	0.00	1235280.94	3222686.60	39.976491	-104.705390
	16100.00	90.00	180.28	7299.01	2241.01	9195.86	-9194.49	-303.87	0.00	1235180.94	3222687.01	39.976217	-104.705392
	16200.00	90.00	180.28	7299.01	2241.01	9295.86	-9294.49	-304.36	0.00	1235080.95	3222687.42	39.975942	-104.705393
	16300.00	90.00	180.28	7299.00	2241.00	9395.86	-9394.49	-304.85	0.00	1234980.95	3222687.83	39.975668	-104.705395
	16400.00	90.00	180.28	7299.00	2241.00	9495.86	-9494.48	-305.34	0.00	1234880.96	3222688.23	39.975393	-104.705397
	16500.00	90.00	180.28	7299.00	2241.00	9595.86	-9594.48	-305.83	0.00	1234780.96	3222688.64	39.975119	-104.705399
	16600.00	90.00	180.28	7299.00	2241.00	9695.86	-9694.48	-306.32	0.00	1234680.97	3222689.05	39.974844	-104.705400
	16700.00	90.00	180.28	7299.00	2241.00	9795.86	-9794.48	-306.81	0.00	1234580.97	3222689.46	39.974570	-104.705402
	16800.00	90.00	180.28	7299.00	2241.00	9895.86	-9894.48	-307.30	0.00	1234480.97	3222689.87	39.974295	-104.705404
	16900.00	90.00	180.28	7299.00	2241.00	9995.86	-9994.48	-307.79	0.00	1234380.98	3222690.27	39.974021	-104.705406
	17000.00	90.00	180.28	7299.00	2241.00	10095.86	-10094.48	-308.28	0.00	1234280.98	3222690.68	39.973746	-104.705407
County Line 3107-09H BHL	17004.74	90.00	180.28	7299.00	2241.00	10100.61	-10099.22	-308.30	0.00	1234276.24	3222690.70	39.973733	-104.705408
County Line 3107-09H BHL+100ft	17100.00	90.00	180.28	7299.00	2241.00	10195.86	-10194.48	-308.76	0.00	1234180.99	3222691.09	39.973472	-104.705409
	17104.74	90.00	180.28	7299.00	2241.00	10200.61	-10199.22	-308.79	0.00	1234176.24	3222691.11	39.973459	-104.705409

Survey Type: 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	21.000	Act Stns	13.500	9.625		NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Hole / County Line 3107- 09H MWD 0' to update
	1	21.000	1685.000	Act Stns	13.500	9.625		NAL_MWD_PLUS_0.5_DEG	Original Hole / County Line 3107- 09H MWD 0' to update
	1	1685.000	2342.373	1/100.000	13.500	9.625		NAL_MWD_PLUS_0.5_DEG	Original Hole / County Line 3107- 09H R1 mdv 27Oct21
	1	2342.373	17104.744	1/100.000	8.500	5.500		NAL_MWD_PLUS_0.5_DEG	Original Hole / County Line 3107- 09H R1 mdv 27Oct21