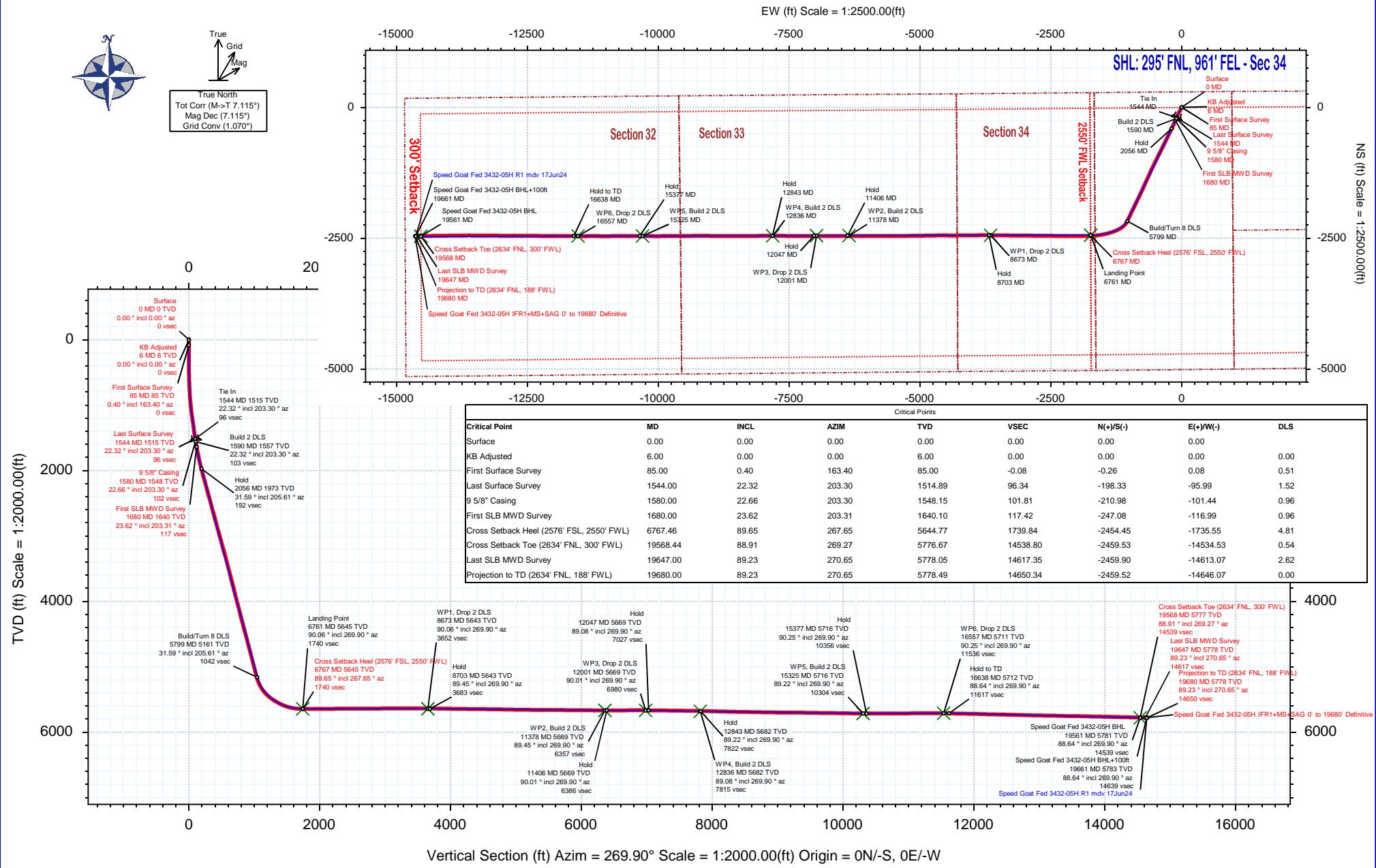


Borehole: Speed Goat Fed 3432-05H	Well: Speed Goat Fed 3432-05H	Field: CO, Weld County (NAD 83 NZ) - 2019	Structure: Verdad Resources 34-09N-58W (Speed Goat 3432-3435 Pad)
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Gravity & Magnetic Parameters				Surface Location NAD83 Colorado State Plane, Northern Zone, US Feet				Miscellaneous			
Model: HDGM 2024	Dip: 66.848°	Date: 17-Jun-2024	Lat: N 40 42 51.01	Northing: 1507303.62ftUS	Grid Conv: 1.0701°	Slot: Speed Goat Fed 3432-05H	TVD Ref: RKB = 21ft(4743ft above Mean Sea Level)	Plan: Speed Goat Fed 3432-05H IFR1+MS+SAG 0' to 19680' Definitive			
MagDec: 7.115°	FS: 51813.79mT	Gravity FS: 999.096mg (9.80665 Based)	Lon: W 103 50 37.65	Easting: 3459106.94ftUS	Scale Fact: 0.99998951						





Speed Goat Fed 3432-05H IFR1+MS+SAG 0' to 19680' Definitive Survey

Geodetic Report

(Def Survey)



Report Date: July 23, 2024 - 10:13 AM
Client: Verdad Resources
Field: CO, Weld County (NAD 83 NZ) - 2019
Structure / Slot: Verdad Resources 34-09N-58W (Speed Goat 3432-3435 Pad) / Speed Goat Fed 3432-05H
Well: Speed Goat Fed 3432-05H
Borehole: Speed Goat Fed 3432-05H
UWI / API#: Unknown / 05-123-52499
Survey Name: Speed Goat Fed 3432-05H IFR1+MS+SAG 0' to 19680' Definitive
Survey Date: May 08, 2024
Tort / AHD / DDI / ERD Ratio: 217.965 ° / 16106.984 ft / 7.078 / 2.787
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 42' 51.01197", W 103° 50' 37.64758"
Location Grid N/E Y/X: N 1507303.620 ftUS, E 3459106.940 ftUS
CRS Grid Convergence Angle: 1.0701 °
Grid Scale Factor: 0.99998951
Version / Patch: 2.10.836.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 269.900 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB = 21ft
TVD Reference Elevation: 4743.000 ft above Mean Sea Level
Seabed / Ground Elevation: 4722.000 ft above Mean Sea Level
Magnetic Declination: 7.115 °
Total Gravity Field Strength: 999.0960mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 51813.790 nT
Magnetic Dip Angle: 66.848 °
Declination Date: June 17, 2024
Magnetic Declination Model: HDGM 2024
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True North: 7.1146 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1507303.62	3459106.94	40.714170	-103.843791
KB Adjusted	6.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	1507303.62	3459106.94	40.714170	-103.843791
First Surface Survey	85.00	0.40	163.40	85.00	-0.08	-0.26	0.08	0.51	1507303.36	3459107.02	40.714169	-103.843791
	176.00	0.40	330.39	176.00	-0.01	-0.29	0.01	0.87	1507303.33	3459106.96	40.714169	-103.843791
	267.00	0.31	34.99	267.00	0.00	0.19	0.00	0.43	1507303.81	3459106.93	40.714171	-103.843791
	358.00	0.31	39.12	358.00	-0.29	0.58	0.29	0.02	1507304.20	3459107.22	40.714172	-103.843790
	448.00	1.27	200.93	447.99	-0.09	-0.16	0.09	1.74	1507303.46	3459107.03	40.714170	-103.843791
	537.00	2.55	207.70	536.94	1.19	-2.84	-1.18	1.46	1507300.76	3459105.81	40.714162	-103.843795
	627.00	3.96	210.16	626.79	3.69	-7.30	-3.67	1.57	1507296.25	3459103.40	40.714150	-103.843804
	716.00	5.54	202.34	715.48	6.88	-13.93	-6.85	1.91	1507289.56	3459100.35	40.714132	-103.843816
	806.00	7.47	204.71	804.90	10.99	-23.26	-10.95	2.16	1507280.16	3459096.43	40.714106	-103.843830
	895.00	10.02	208.49	892.86	17.12	-35.33	-17.06	2.94	1507267.98	3459090.54	40.714073	-103.843853
	984.00	11.82	205.15	980.24	24.72	-50.38	-24.63	2.14	1507252.79	3459083.26	40.714032	-103.843880
	1074.00	13.23	208.40	1068.10	33.56	-67.79	-33.45	1.75	1507235.22	3459074.77	40.713984	-103.843912
	1163.00	16.70	207.87	1154.07	44.42	-88.06	-44.27	3.90	1507214.75	3459064.32	40.713928	-103.843951
	1253.00	17.31	207.78	1240.13	56.75	-111.34	-56.56	0.68	1507191.25	3459052.47	40.713864	-103.843995
	1342.00	17.89	204.62	1324.97	68.66	-135.48	-68.42	1.26	1507166.89	3459041.06	40.713798	-103.844038
	1431.00	19.16	203.13	1409.36	80.14	-161.34	-79.86	1.52	1507140.82	3459030.11	40.713727	-103.844079
	1521.00	22.06	203.92	1493.59	92.84	-190.38	-92.51	3.24	1507111.55	3459018.00	40.713647	-103.844125
Last Surface Survey	1544.00	22.32	203.30	1514.89	96.34	-198.33	-95.99	1.52	1507103.53	3459014.67	40.713626	-103.844137
9 5/8" Casing	1580.00	22.66	203.30	1548.15	101.81	-210.98	-101.44	0.96	1507090.78	3459009.46	40.713591	-103.844157
First SLB MWD Survey	1680.00	23.62	203.31	1640.10	117.42	-247.08	-116.99	0.96	1507054.40	3458994.59	40.713492	-103.844213
	1770.00	24.22	204.48	1722.37	132.26	-280.44	-131.77	0.85	1507020.77	3458980.43	40.713400	-103.844266
	1859.00	27.50	204.36	1802.45	148.37	-315.78	-147.82	3.69	1506985.14	3458965.05	40.713303	-103.844324
	1949.00	28.97	204.80	1881.74	166.15	-354.50	-165.53	1.65	1506946.10	3458948.06	40.713197	-103.844388
	2039.00	31.66	204.92	1959.42	185.32	-395.71	-184.63	2.99	1506904.54	3458929.74	40.713084	-103.844457
	2128.00	31.85	206.24	2035.10	205.62	-437.96	-204.85	0.81	1506861.92	3458910.30	40.712968	-103.844530
	2218.00	31.67	206.12	2111.62	226.59	-480.47	-225.75	0.21	1506819.02	3458890.20	40.712851	-103.844605
	2307.00	31.77	206.64	2187.33	247.46	-522.39	-246.55	0.33	1506776.72	3458870.20	40.712736	-103.844680
	2397.00	31.61	205.97	2263.91	268.48	-564.77	-267.50	0.43	1506733.96	3458850.04	40.712620	-103.844756
	2487.00	31.38	206.40	2340.65	289.30	-606.96	-288.24	0.36	1506691.39	3458830.09	40.712504	-103.844831
	2576.00	31.69	206.42	2416.51	310.08	-648.66	-308.95	0.35	1506649.32	3458810.16	40.712390	-103.844905
	2665.00	31.72	206.13	2492.23	330.86	-690.60	-329.65	0.17	1506607.00	3458790.24	40.712274	-103.844980
	2755.00	31.69	205.50	2568.80	351.53	-733.17	-350.25	0.37	1506564.04	3458770.45	40.712158	-103.845054
	2845.00	31.77	205.73	2645.34	372.07	-775.85	-370.71	0.16	1506520.99	3458750.78	40.712040	-103.845128
	2934.00	31.76	206.24	2721.01	392.67	-817.97	-391.24	0.30	1506478.50	3458731.05	40.711925	-103.845202
	3024.00	31.42	206.59	2797.68	413.72	-860.19	-412.21	0.43	1506435.89	3458710.87	40.711809	-103.845278
	3113.00	31.55	206.67	2873.57	434.62	-901.75	-433.05	0.15	1506393.96	3458690.81	40.711695	-103.845353
	3203.00	31.30	206.47	2950.37	455.68	-943.71	-454.04	0.30	1506351.60	3458670.61	40.711580	-103.845429
	3292.00	31.89	206.48	3026.18	476.54	-985.45	-474.83	0.66	1506309.48	3458650.61	40.711465	-103.845504
	3382.00	31.94	206.67	3102.58	497.90	-1028.00	-496.11	0.12	1506266.54	3458630.12	40.711348	-103.845580
	3472.00	32.16	205.82	3178.86	519.10	-1070.84	-517.23	0.56	1506223.32	3458609.81	40.711231	-103.845657
	3561.00	31.94	206.09	3254.29	539.84	-1113.31	-537.90	0.29	1506180.48	3458589.93	40.711114	-103.845731
	3651.00	31.69	206.00	3330.77	560.75	-1155.93	-558.73	0.28	1506137.47	3458569.90	40.710997	-103.845806
	3740.00	31.72	204.86	3406.49	580.91	-1198.17	-578.82	0.67	1506094.86	3458550.61	40.710881	-103.845879
	3830.00	31.98	204.69	3482.94	600.88	-1241.29	-598.72	0.31	1506051.38	3458531.52	40.710763	-103.845951
	3920.00	31.51	204.44	3559.48	620.64	-1284.36	-618.40	0.54	1506007.95	3458512.64	40.710645	-103.846022
	4009.00	31.52	204.46	3635.35	639.97	-1326.71	-637.66	0.02	1505965.25	3458494.18	40.710528	-103.846091
	4099.00	31.32	204.47	3712.15	659.48	-1369.42	-657.09	0.22	1505922.19	3458475.55	40.710411	-103.846161
	4188.00	31.61	204.62	3788.06	678.85	-1411.67	-676.39	0.34	1505879.58	3458457.04	40.710295	-103.846231
	4278.00	31.73	204.19	3864.66	698.45	-1454.70	-695.91	0.28	1505836.19	3458438.33	40.710177	-103.846301
	4367.00	31.17	205.16	3940.59	717.91	-1496.90	-715.29	0.85	1505793.64	3458419.14	40.710061	-103.846371
	4457.00	32.00	203.28	4017.26	737.31	-1539.89	-734.62	1.43	1505750.30	3458401.21	40.709943	-103.846441
	4546.00	31.59	205.77	4092.90	756.84	-1582.54	-754.08	1.54	1505707.29	3458382.56	40.709826	-103.846511
	4636.00	31.21	204.68	4169.72	776.90	-1624.96	-774.06	0.76	1505664.51	3458363.37	40.709710	-103.846583
	4724.00	31.36	205.46	4244.93	796.33	-1666.35	-793.43	0.49	1505622.76	3458344.74	40.709596	-103.846653
	4814.00	31.03	206.06	4321.92	816.66	-1708.34	-813.68	0.50	1505580.41	3458325.31	40.709481	-103.846726
	4903.00	31.51	204.93	4397.99	836.62	-1750.03	-833.56	0.85	1505538.35	3458306.21	40.709367	-103.846798
	4993.00	31.35	205.86	4474.78	856.82	-1792.43	-853.69	0.57	1505495.58	3458286.88	40.709250	-103.846870
	5082.00	31.04	205.64	4550.91	876.92	-1833.95	-873.72	0.37	1505453.70	3458267.64	40.709136	-103.846942
	5172.00	31.29	205.95	4627.93	897.26	-1875.88	-893.99	0.33	1505411.39	3458248.16	40.709021	-103.847016
	5261.00	31.17	206.52	4704.03	917.73	-1917.27	-914.38	0.36	1505369.63	3458228.53	40.708908	-103.847089
	5350.00	31.43	205.54	4780.08	938.09	-1958.82	-934.67	0.64	1505327.71	3458209.03	40.708793	-103.847162
	5440.00	31.00	205.58	4857.05	958.29	-2000.90	-954.80	0.48	1505285.26	3458189.69	40.708678	-103.847235
	5530.00	31.23	205.32	4934.10	978.35	-2042.89	-974.78	0.30	1505242.90	3458170.49	40.708563	-103.847307
	5619.00	30.66	204.91	5010.43	997.84	-2084.33	-994.21	0.68	1505201.11	3458151.85	40.708449	-103.847377
	5709.00	31.08	205.69	5087.68	1017.65	-2126.08	-1013.94	0.64	1505159.00	3458132.89	40.708334	-103.847448
	5798.00	32.23	205.17	5163.44	1037.78	-2168.26	-1034.00	1.33	1505116.45	3458113.63	40.708219	-103.847520
	5888.00	35.45	213.71	5238.22	1062.57	-2211.73	-1058.71	6.37	1505072.53	3458098.74	40.708109	-103.847610
	5978.00	39.71	223.68	5309.60	1097.03	-2254.29	-1093.10	8.24	1505029.33	3458086.15	40.707992	-103.847734
	6067.00	44.08	234.07	5375.91	1141.88	-2293.09	-1137.88	9.20	1504989.71	3458072.10	40.707876	-103.847895
	6157.00	50.63	241.81	5436.90	1188.05	-2327.96	-1193.99	9.63	1504953.80	3457956.65	40.707780	-103.848098
</												

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	6515.00	72.18	258.48	5609.01	1492.79	-2427.08	-1488.55	8.34	1504849.19	3457663.99	40.707508	-103.849160
	6604.00	79.32	261.87	5630.91	1577.75	-2441.75	-1573.49	8.83	1504832.94	3457579.35	40.707468	-103.849466
	6694.00	86.30	266.54	5642.17	1666.52	-2450.73	-1662.25	9.31	1504822.31	3457490.77	40.707443	-103.849786
Cross Setback Heel (2576' FSL, 2550' FWL)	6767.46	89.65	267.65	5644.77	1739.84	-2454.45	-1735.55	4.81	1504817.22	3457417.55	40.707433	-103.850051
	6784.00	90.41	267.90	5644.76	1756.36	-2455.09	-1752.08	4.81	1504816.27	3457401.04	40.707431	-103.850110
	6873.00	89.98	268.86	5644.45	1845.33	-2457.61	-1841.04	1.18	1504812.09	3457312.14	40.707424	-103.850431
	6963.00	90.24	269.37	5644.28	1935.32	-2459.00	-1931.03	0.64	1504809.02	3457222.19	40.707420	-103.850756
	7052.00	90.15	270.26	5643.98	2024.32	-2459.28	-2020.03	1.01	1504807.07	3457133.22	40.707420	-103.851077
	7142.00	90.26	270.06	5643.66	2114.32	-2459.03	-2110.03	0.25	1504805.64	3457043.23	40.707420	-103.851402
	7232.00	90.27	270.19	5643.24	2204.32	-2458.84	-2200.03	0.14	1504804.16	3456953.24	40.707421	-103.851726
	7321.00	90.04	270.39	5643.00	2293.31	-2458.39	-2289.03	0.34	1504802.94	3456864.25	40.707422	-103.852047
	7411.00	90.04	270.75	5642.94	2383.31	-2457.49	-2379.02	0.40	1504802.16	3456774.26	40.707424	-103.852372
	7500.00	90.32	270.73	5642.66	2472.30	-2456.34	-2468.01	0.32	1504801.65	3456685.26	40.707428	-103.852693
	7590.00	90.08	270.58	5642.34	2562.29	-2455.31	-2558.01	0.31	1504800.99	3456595.27	40.707430	-103.853017
	7679.00	90.66	270.28	5641.77	2651.28	-2454.64	-2647.00	0.73	1504800.00	3456506.27	40.707432	-103.853338
	7769.00	90.22	270.64	5641.08	2741.28	-2453.92	-2737.00	0.63	1504799.04	3456416.28	40.707434	-103.853663
	7859.00	90.43	270.71	5640.57	2831.27	-2452.86	-2826.99	0.25	1504798.42	3456326.29	40.707437	-103.853988
	7948.00	90.44	270.85	5639.89	2920.25	-2451.65	-2915.98	0.16	1504797.87	3456237.29	40.707440	-103.854308
	8038.00	90.13	270.15	5639.44	3010.25	-2450.86	-3005.97	0.85	1504797.07	3456147.30	40.707442	-103.854633
	8127.00	90.03	270.12	5639.32	3099.25	-2450.65	-3094.97	0.12	1504795.62	3456058.31	40.707443	-103.854954
	8217.00	90.14	270.72	5639.19	3189.24	-2449.99	-3184.97	0.68	1504794.60	3455968.32	40.707445	-103.855279
	8306.00	90.31	270.90	5638.84	3278.23	-2448.74	-3273.96	0.28	1504794.20	3455879.32	40.707448	-103.855600
	8396.00	90.54	271.09	5638.17	3368.21	-2447.17	-3363.94	0.33	1504794.08	3455789.33	40.707452	-103.855924
	8486.00	89.98	270.86	5637.76	3458.19	-2445.84	-3453.93	0.67	1504793.33	3455699.33	40.707457	-103.856249
	8575.00	90.28	270.57	5637.56	3547.18	-2444.53	-3542.92	0.47	1504793.38	3455610.33	40.707460	-103.856570
	8665.00	89.48	270.53	5637.75	3637.18	-2443.67	-3632.92	0.89	1504792.56	3455520.34	40.707462	-103.856894
	8754.00	89.11	269.72	5638.84	3726.17	-2443.47	-3721.91	1.00	1504791.09	3455431.36	40.707462	-103.857215
	8843.00	89.31	269.82	5640.07	3815.16	-2443.83	-3810.90	0.25	1504789.07	3455342.39	40.707461	-103.857536
	8933.00	89.09	269.56	5641.33	3905.15	-2444.32	-3900.89	0.38	1504786.91	3455252.43	40.707460	-103.857861
	9022.00	88.98	269.10	5642.82	3994.13	-2445.36	-3989.87	0.53	1504784.20	3455163.48	40.707457	-103.858182
	9112.00	89.28	269.70	5644.19	4084.12	-2446.30	-4079.86	0.75	1504781.58	3455073.53	40.707455	-103.858506
	9201.00	89.21	269.72	5645.36	4173.11	-2446.75	-4168.85	0.08	1504779.47	3454984.57	40.707453	-103.858827
	9291.00	88.87	268.80	5646.87	4263.09	-2447.91	-4258.83	1.09	1504776.63	3454894.63	40.707450	-103.859152
	9380.00	89.37	269.80	5648.24	4352.07	-2449.00	-4347.81	1.26	1504773.88	3454805.68	40.707447	-103.859473
	9470.00	89.52	270.57	5649.11	4442.07	-2448.71	-4437.80	0.87	1504772.49	3454715.70	40.707448	-103.859797
	9559.00	89.71	270.55	5649.71	4531.06	-2447.84	-4526.80	0.21	1504771.70	3454626.71	40.707450	-103.860118
	9649.00	89.33	269.60	5650.46	4621.06	-2447.72	-4616.79	1.14	1504770.13	3454536.73	40.707450	-103.860443
	9738.00	88.81	269.32	5651.91	4710.04	-2448.56	-4705.77	0.66	1504767.63	3454447.77	40.707448	-103.860764
	9827.00	89.11	268.99	5653.52	4799.02	-2448.87	-4794.75	0.50	1504764.66	3454358.84	40.707444	-103.861085
	9917.00	88.84	268.64	5655.13	4888.99	-2451.73	-4884.72	0.49	1504761.12	3454268.93	40.707439	-103.861409
	10007.00	89.09	269.44	5656.76	4978.96	-2453.24	-4974.69	0.93	1504757.93	3454179.00	40.707435	-103.861734
	10096.00	89.21	268.51	5658.08	5067.94	-2454.83	-5063.66	1.05	1504754.68	3454090.07	40.707431	-103.862055
	10186.00	89.50	269.79	5659.09	5157.92	-2456.17	-5153.65	1.46	1504751.66	3454000.13	40.707427	-103.862379
	10275.00	89.47	269.57	5659.89	5246.92	-2456.67	-5242.64	0.25	1504749.50	3453911.16	40.707426	-103.862700
	10365.00	89.57	269.61	5660.65	5336.92	-2457.31	-5332.64	0.12	1504747.18	3453821.19	40.707424	-103.863025
	10454.00	89.44	269.37	5661.41	5425.91	-2458.10	-5421.63	0.31	1504744.72	3453732.23	40.707421	-103.863346
	10544.00	89.64	270.03	5662.14	5515.91	-2458.57	-5511.62	0.77	1504742.57	3453642.26	40.707420	-103.863671
	10633.00	89.76	270.59	5662.60	5604.90	-2458.09	-5600.62	0.64	1504741.39	3453553.27	40.707421	-103.863992
	10723.00	89.74	269.67	5663.00	5694.90	-2457.89	-5690.62	1.02	1504739.91	3453463.29	40.707422	-103.864316
	10812.00	89.68	270.04	5663.45	5783.90	-2458.11	-5779.62	0.42	1504738.03	3453374.31	40.707421	-103.864637
	10902.00	89.50	269.84	5664.09	5873.90	-2458.21	-5869.61	0.30	1504736.25	3453284.33	40.707421	-103.864962
	10991.00	89.65	270.13	5664.75	5962.89	-2458.23	-5958.61	0.37	1504734.57	3453195.35	40.707421	-103.865283
	11080.00	89.47	269.93	5665.43	6051.89	-2458.18	-6047.61	0.30	1504732.95	3453106.37	40.707421	-103.865604
	11170.00	89.28	270.54	5666.42	6141.88	-2457.81	-6137.60	0.71	1504731.64	3453016.39	40.707422	-103.865928
	11259.00	89.71	269.49	5667.20	6230.88	-2457.79	-6226.60	1.27	1504730.00	3452927.41	40.707422	-103.866249
	11349.00	89.78	270.15	5667.60	6320.88	-2458.07	-6316.60	0.74	1504728.04	3452837.43	40.707421	-103.866574
	11439.00	89.96	269.47	5667.80	6410.88	-2458.37	-6406.59	0.78	1504726.06	3452747.46	40.707420	-103.866899
	11528.00	90.25	269.90	5667.64	6499.87	-2458.86	-6495.59	0.58	1504723.91	3452658.48	40.707419	-103.867220
	11617.00	90.44	270.17	5667.11	6588.87	-2458.81	-6584.59	0.37	1504722.30	3452569.50	40.707419	-103.867541
	11707.00	90.29	270.04	5666.53	6678.87	-2458.64	-6674.59	0.22	1504720.78	3452479.52	40.707419	-103.867865
	11797.00	90.74	270.21	5665.72	6768.87	-2458.45	-6764.58	0.53	1504719.30	3452389.53	40.707420	-103.868190
	11886.00	90.60	270.07	5664.68	6857.86	-2458.23	-6853.58	0.22	1504717.85	3452300.55	40.707420	-103.868511
	11975.00	89.10	269.43	5664.92	6946.85	-2458.62	-6942.57	1.83	1504715.80	3452211.58	40.707419	-103.868832
	12065.00	89.04	269.87	5666.38	7036.84	-2459.17	-7032.56	0.49	1504713.57	3452121.62	40.707417	-103.869156
	12154.00	89.10	270.44	5667.82	7125.83	-2458.93	-7121.55	0.64	1504712.15	3452032.65	40.707418	-103.869477
	12244.00	89.72	269.91	5668.75	7215.82	-2458.65	-7211.54	0.91	1504710.75	3451942.66	40.707419	-103.869800
	12333.00	89.24	270.53	5669.56	7304.82	-2458.31	-7300.54	0.88	1504709.43	3451853.68	40.707420	-103.870123
	12423.00	89.08	270.02	5670.88	7394.80	-2457.88	-7390.53	0.59	1504708.18	3451763.70	40.707421	-103.870447
	12513.00	89.17	270.03	5672.25	7484.79	-2457.84	-7480.52	0.10	1504706.54	3451673.73	40.707421	-103.870772
	12602.00	89.64	271.56	5673.17	7573.78	-2456.60	-7569.50	1.80	1504706.11	3451584.73	40.707424	-103.871093
	12692											

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	15917.00	90.52	269.68	5713.90	10888.27	-2460.65	-10883.99	0.47	1504640.16	3448270.94	40.707410	-103.883048
	16006.00	90.18	269.20	5713.35	10977.27	-2461.52	-10972.99	0.66	1504637.63	3448181.97	40.707407	-103.883369
	16096.00	90.24	270.96	5713.02	11067.26	-2461.39	-11062.98	1.96	1504636.07	3448091.99	40.707407	-103.883693
	16186.00	90.14	269.83	5712.73	11157.26	-2460.77	-11152.98	1.26	1504635.01	3448002.00	40.707409	-103.884018
	16275.00	90.29	270.52	5712.39	11246.26	-2460.50	-11241.98	0.79	1504633.62	3447913.02	40.707409	-103.884339
	16365.00	90.54	269.50	5711.74	11336.25	-2460.49	-11331.97	1.17	1504631.96	3447823.04	40.707409	-103.884664
	16454.00	90.46	269.73	5710.96	11425.25	-2461.08	-11420.97	0.27	1504629.70	3447734.07	40.707408	-103.884985
	16544.00	88.63	270.26	5711.68	11515.24	-2461.09	-11510.96	2.12	1504628.01	3447644.09	40.707408	-103.885309
	16633.00	88.45	270.30	5713.95	11604.21	-2460.66	-11599.93	0.21	1504626.78	3447555.13	40.707409	-103.885630
	16723.00	88.92	269.91	5716.01	11694.18	-2460.49	-11689.91	0.68	1504625.27	3447465.17	40.707409	-103.885955
	16812.00	88.77	270.59	5717.81	11783.16	-2460.10	-11778.89	0.78	1504623.99	3447376.20	40.707410	-103.886276
	16902.00	88.81	270.69	5719.71	11873.14	-2459.10	-11868.86	0.12	1504623.32	3447286.22	40.707413	-103.886600
	16991.00	89.19	271.11	5721.26	11962.11	-2457.70	-11957.84	0.64	1504623.05	3447197.24	40.707416	-103.886921
	17081.00	88.68	269.79	5722.93	12052.09	-2457.00	-12047.82	1.57	1504622.08	3447107.26	40.707418	-103.887246
	17170.00	88.48	269.93	5725.14	12141.06	-2457.21	-12136.79	0.27	1504620.20	3447018.31	40.707417	-103.887566
	17260.00	88.66	270.37	5727.38	12231.03	-2456.98	-12226.76	0.53	1504618.76	3446928.35	40.707418	-103.887891
	17350.00	88.92	270.22	5729.28	12321.01	-2456.51	-12316.74	0.33	1504617.54	3446838.38	40.707419	-103.888216
	17440.00	88.54	270.56	5731.28	12410.98	-2455.90	-12406.71	0.57	1504616.47	3446748.41	40.707421	-103.888540
	17529.00	88.65	270.97	5733.46	12499.94	-2454.71	-12495.68	0.48	1504616.00	3446658.44	40.707424	-103.888861
	17618.00	88.67	270.42	5735.54	12588.91	-2453.63	-12584.65	0.62	1504615.41	3446570.47	40.707427	-103.889182
	17708.00	88.36	270.28	5737.88	12678.88	-2453.08	-12674.62	0.38	1504614.28	3446480.51	40.707428	-103.889506
	17797.00	88.53	269.89	5740.29	12767.85	-2452.95	-12763.58	0.48	1504612.75	3446391.55	40.707428	-103.889827
	17887.00	88.56	269.78	5742.58	12857.82	-2453.21	-12853.55	0.13	1504610.81	3446301.60	40.707427	-103.890152
	17976.00	88.68	270.28	5744.72	12946.79	-2453.17	-12942.53	0.58	1504609.20	3446212.65	40.707427	-103.890473
	18066.00	89.27	270.35	5746.33	13036.77	-2452.67	-13032.51	0.66	1504608.01	3446122.67	40.707429	-103.890797
	18156.00	88.84	270.69	5747.81	13126.75	-2451.85	-13122.50	0.61	1504607.15	3446032.69	40.707431	-103.891122
	18245.00	89.34	270.41	5749.23	13215.74	-2451.00	-13211.48	0.64	1504606.34	3445943.70	40.707433	-103.891443
	18335.00	88.37	270.59	5751.03	13305.71	-2450.21	-13301.46	1.10	1504605.45	3445853.73	40.707435	-103.891767
	18424.00	88.71	269.98	5753.29	13394.68	-2449.77	-13390.43	0.78	1504604.23	3445764.77	40.707436	-103.892088
	18514.00	89.23	270.36	5754.91	13484.67	-2449.50	-13480.41	0.72	1504602.81	3445674.80	40.707437	-103.892413
	18603.00	89.49	270.91	5755.90	13573.65	-2448.52	-13569.40	0.68	1504602.14	3445585.80	40.707439	-103.892734
	18693.00	88.81	269.05	5757.24	13663.64	-2448.55	-13659.39	2.20	1504600.43	3445495.84	40.707439	-103.893058
	18783.00	88.51	269.86	5759.34	13753.61	-2449.41	-13749.36	0.96	1504597.89	3445405.90	40.707436	-103.893383
	18872.00	88.93	269.14	5761.33	13842.58	-2450.18	-13838.33	0.94	1504595.45	3445316.96	40.707434	-103.893704
	18962.00	88.95	269.47	5763.00	13932.56	-2451.27	-13928.31	0.37	1504592.68	3445227.02	40.707431	-103.894028
	19051.00	88.50	268.82	5764.98	14021.53	-2452.60	-14017.27	0.89	1504589.69	3445138.09	40.707427	-103.894349
	19141.00	88.70	269.26	5767.18	14111.50	-2454.11	-14107.23	0.54	1504586.50	3445048.17	40.707423	-103.894674
	19231.00	88.66	269.49	5769.25	14201.47	-2455.09	-14197.21	0.26	1504583.84	3444958.24	40.707420	-103.894998
	19320.00	88.69	269.21	5771.31	14290.44	-2456.10	-14286.18	0.32	1504581.17	3444869.30	40.707417	-103.895319
	19409.00	88.41	268.87	5773.56	14379.40	-2457.59	-14375.13	0.49	1504578.02	3444780.39	40.707413	-103.895640
	19499.00	89.14	269.56	5775.48	14469.37	-2458.82	-14465.10	1.12	1504575.11	3444690.46	40.707409	-103.895964

Cross Setback Toe (2634' FNL, 300' FWL)	19568.44	88.91	269.27	5776.67	14538.80	-2459.53	-14534.53	0.54	1504573.10	3444621.06	40.707407	-103.896215
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19589.00	88.84	269.18	5777.07	14559.36	-2459.81	-14555.08	0.54	1504572.44	3444600.51	40.707407	-103.896289
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Last SLB MWD Survey Projection to TD (2634' FNL, 188' FWL)	19647.00	89.23	270.65	5778.05	14617.35	-2459.90	-14613.07	2.62	1504571.27	3444542.54	40.707406	-103.896498
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19680.00	89.23	270.65	5778.49	14650.34	-2459.52	-14646.07	0.00	1504571.03	3444509.54	40.707407	-103.896617
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Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 *** 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	6.000	1/98.425	13.500	9.625	A001Mb_MWD-Depth Only	Speed Goat Fed 3432-05H / Speed Goat Fed 3432-05H
	1	6.000	21.000	Act Stns	13.500	9.625	A001Mb_MWD-Depth Only	Speed Goat Fed 3432-05H / Speed Goat Fed 3432-05H
	1	21.000	1544.000	Act Stns	13.500	9.625	A001Mb_MWD	Speed Goat Fed 3432-05H / Speed Goat Fed 3432-05H
	1	1544.000	19680.000	Act Stns	8.500	5.500	A010Mb_MWD+IFR1+SAG+MS	Speed Goat Fed 3432-05H / Speed Goat Fed 3432-05H IFR1+MS+SAG 0' to 19680'