



Job Number: Maddie Mae 4H Svy
Company: Jay Bee Oil & Gas
Lease/Well: Maddie Mae 4H
Location: Northern
Rig Name:
State/County: West Virginia/ Tyler
Country: USA
API Number:



Elevation (To MSL): 1042.00 ft
RKB: 16.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: West Virginia North 4701
Projection Datum: CLARKE 1866
Magnetic Declination: -8.50
Grid Convergence: -0.83303 W
Date: Thursday, February 05, 2015



Vertical Section (1000 Ft/Div) VSP: 315.95°



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Elev. GL: 1042.00 ft **RKB:** 16.00 ft
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Mag. Decl.: -8.50° (C:\HawkEye\IGRF2010.MIF)
Grid Conv.: -0.83303 W
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Calculated by HawkEye Software
 Minimum Curvature Method
 Vertical Section Plane 315.95°
 Northing (US ft): 344204.60 Easting (US ft): 1631075.20
 Latitude: 39°26'15.6505" N Longitude: -80°48'22.5131" W
 Direction Reference: Grid North



#	Measured Depth (Ft)	INC Deg	AZM Deg	CL (Ft)	TVD (Ft)	VS (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	DLS *100 Ft	LR/EW From-Plan (Ft)	UD/NS From-Plan (Ft)
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	344204.60	1631075.20	0.00	-	-
2	100.00	1.03	142.43	100.00	99.99	-0.89	-0.71	0.55	344203.89	1631075.75	1.03	-	-
3	200.00	1.29	170.01	100.00	199.97	-2.72	-2.53	1.29	344202.07	1631076.49	0.61	-	-
4	300.00	1.66	212.79	100.00	299.94	-3.98	-4.86	0.70	344199.74	1631075.90	1.13	-	-
5	400.00	0.57	332.63	100.00	399.93	-3.83	-5.64	-0.31	344198.96	1631074.89	2.01	-	-
6	500.00	1.75	356.70	100.00	499.91	-2.20	-3.67	-0.63	344200.93	1631074.57	1.25	-	-
7	600.00	2.50	352.99	100.00	599.84	0.70	0.02	-0.98	344204.62	1631074.22	0.76	-	-
8	700.00	2.65	354.69	100.00	699.74	4.24	4.49	-1.46	344209.09	1631073.74	0.17	-	-
9	800.00	2.85	350.81	100.00	799.62	8.08	9.24	-2.07	344213.84	1631073.13	0.27	-	-
10	900.00	3.23	352.85	100.00	899.48	12.38	14.49	-2.82	344219.09	1631072.38	0.40	-	-
11	1000.00	3.70	352.00	100.00	999.30	17.24	20.48	-3.62	344225.08	1631071.58	0.47	-	-
12	1100.00	4.07	353.62	100.00	1099.07	22.66	27.20	-4.46	344231.80	1631070.74	0.39	-	-
13	1200.00	4.12	353.10	100.00	1198.81	28.33	34.30	-5.29	344238.90	1631069.91	0.06	-	-
14	1300.00	4.45	353.75	100.00	1298.53	34.26	41.72	-6.14	344246.32	1631069.06	0.33	-	-
15	1400.00	4.59	353.07	100.00	1398.22	40.51	49.55	-7.05	344254.15	1631068.15	0.15	-	-
16	1500.00	4.80	349.26	100.00	1497.89	47.20	57.63	-8.31	344262.23	1631066.89	0.38	-	-
17	1600.00	4.80	349.36	100.00	1597.54	54.19	65.85	-9.86	344270.45	1631065.34	0.01	-	-
18	1700.00	4.70	348.25	100.00	1697.19	61.14	73.98	-11.47	344278.58	1631063.73	0.14	-	-
19	1800.00	4.70	351.15	100.00	1796.86	67.96	82.04	-12.93	344286.64	1631062.27	0.24	-	-
20	1900.00	4.86	342.60	100.00	1896.51	75.09	90.13	-14.83	344294.73	1631060.37	0.73	-	-
21	2000.00	5.02	354.16	100.00	1996.14	82.31	98.52	-16.54	344303.12	1631058.66	1.01	-	-
22	2100.00	5.06	353.92	100.00	2095.76	89.23	107.26	-17.46	344311.86	1631057.74	0.05	-	-
23	2200.00	5.17	356.57	100.00	2195.36	96.12	116.14	-18.19	344320.74	1631057.01	0.26	-	-
24	2300.00	4.65	354.80	100.00	2294.99	102.70	124.68	-18.83	344329.28	1631056.37	0.54	-	-
25	2400.00	3.37	347.22	100.00	2394.74	108.37	131.58	-19.85	344336.18	1631055.35	1.38	-	-
26	2500.00	2.18	342.80	100.00	2494.63	112.58	136.26	-21.06	344340.86	1631054.14	1.21	-	-
27	2600.00	1.27	323.09	100.00	2594.58	115.38	138.97	-22.29	344343.57	1631052.91	1.07	-	-
28	2700.00	0.68	316.58	100.00	2694.57	117.07	140.28	-23.36	344344.88	1631051.84	0.60	-	-
29	2800.00	0.28	306.37	100.00	2794.56	117.90	140.86	-23.97	344345.46	1631051.23	0.41	-	-
30	2900.00	0.51	290.53	100.00	2894.56	118.55	141.16	-24.58	344345.76	1631050.62	0.25	-	-

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31	3000.00	0.79	291.00	100.00	2994.55	119.57	141.56	-25.64	344346.16	1631049.56	0.28	-	-
32	3100.00	0.60	277.07	100.00	3094.55	120.61	141.87	-26.80	344346.47	1631048.40	0.25	-	-
33	3200.00	0.43	257.03	100.00	3194.54	121.21	141.85	-27.69	344346.45	1631047.51	0.25	-	-
34	3300.00	0.21	299.98	100.00	3294.54	121.58	141.86	-28.21	344346.46	1631046.99	0.31	-	-
35	3400.00	0.23	327.66	100.00	3394.54	121.95	142.12	-28.48	344346.72	1631046.72	0.11	-	-
36	3500.00	0.61	316.04	100.00	3494.54	122.68	142.68	-28.96	344347.28	1631046.24	0.39	-	-
37	3600.00	0.62	275.90	100.00	3594.53	123.62	143.11	-29.86	344347.71	1631045.34	0.42	-	-
38	3700.00	0.42	268.46	100.00	3694.53	124.29	143.16	-30.77	344347.76	1631044.43	0.21	-	-
39	3800.00	0.05	336.47	100.00	3794.53	124.58	143.19	-31.15	344347.79	1631044.05	0.40	-	-
40	3900.00	0.68	33.94	100.00	3894.52	124.74	143.72	-30.84	344348.32	1631044.36	0.65	-	-
41	4000.00	0.47	10.75	100.00	3994.52	125.10	144.62	-30.43	344349.22	1631044.77	0.31	-	-
42	4100.00	1.11	9.10	100.00	4094.51	125.92	145.98	-30.20	344350.58	1631045.00	0.64	-	-
43	4200.00	0.91	17.30	100.00	4194.49	126.88	147.69	-29.81	344352.29	1631045.39	0.25	-	-
44	4300.00	0.80	26.09	100.00	4294.48	127.50	149.08	-29.27	344353.68	1631045.93	0.17	-	-
45	4400.00	0.68	37.51	100.00	4394.47	127.82	150.17	-28.60	344354.77	1631046.60	0.19	-	-
46	4500.00	0.49	35.05	100.00	4494.47	127.99	151.00	-27.99	344355.60	1631047.21	0.19	-	-
47	4600.00	0.38	37.94	100.00	4594.47	128.12	151.61	-27.54	344356.21	1631047.66	0.11	-	-
48	4700.00	0.58	33.85	100.00	4694.46	128.27	152.29	-27.06	344356.89	1631048.14	0.20	-	-
49	4800.00	0.91	39.36	100.00	4794.45	128.46	153.32	-26.27	344357.92	1631048.93	0.34	-	-
50	4900.00	0.70	18.74	100.00	4894.44	128.84	154.52	-25.57	344359.12	1631049.63	0.35	-	-
51	5000.00	0.41	13.96	100.00	4994.44	129.30	155.44	-25.29	344360.04	1631049.91	0.29	-	-
52	5100.00	0.33	15.88	100.00	5094.44	129.64	156.07	-25.12	344360.67	1631050.08	0.08	-	-
53	5200.00	0.78	16.05	100.00	5194.43	130.12	157.00	-24.86	344361.60	1631050.34	0.45	-	-
54	5300.00	1.05	39.93	100.00	5294.42	130.56	158.35	-24.08	344362.95	1631051.12	0.46	-	-
55	5400.00	1.13	34.43	100.00	5394.40	130.85	159.87	-22.94	344364.47	1631052.26	0.13	-	-
56	5500.00	0.83	341.05	100.00	5494.39	131.70	161.37	-22.61	344365.97	1631052.59	0.92	-	-
57	5600.00	0.79	349.26	100.00	5594.38	132.93	162.73	-22.98	344367.33	1631052.22	0.12	-	-
58	5700.00	0.47	333.38	100.00	5694.37	133.90	163.77	-23.29	344368.37	1631051.91	0.36	0.00 (E)	0.00 (N)
59	5814.00	0.40	0.00	114.00	5808.37	134.63	164.59	-23.50	344369.19	1631051.70	0.19	0.21 (E)	-0.02 (S)
60	5858.00	0.40	324.60	44.00	5852.37	134.90	164.87	-23.59	344369.47	1631051.61	0.55	0.28 (E)	-0.06 (S)
61	5902.00	0.30	331.00	44.00	5896.37	135.16	165.09	-23.73	344369.69	1631051.47	0.24	0.30 (E)	-0.16 (S)
62	5947.00	3.00	282.70	45.00	5941.34	136.26	165.46	-24.94	344370.06	1631050.26	6.24	-0.28 (W)	0.70 (N)
63	5992.00	7.60	282.90	45.00	5986.14	139.74	166.38	-28.99	344370.98	1631046.21	10.22	-0.58 (L)	4.65 (U)
64	6034.00	12.10	290.80	42.00	6027.51	146.06	168.57	-35.82	344373.17	1631039.38	11.16	-1.83 (L)	10.57 (U)
65	6079.00	15.00	291.20	45.00	6071.26	155.62	172.35	-45.66	344376.95	1631029.54	6.45	-2.16 (L)	17.32 (U)
66	6123.00	15.30	290.60	44.00	6113.73	166.03	176.45	-56.40	344381.05	1631018.80	0.77	-2.21 (L)	22.28 (U)
67	6167.00	16.50	288.50	44.00	6156.04	176.82	180.47	-67.76	344385.07	1631007.44	3.02	-1.84 (L)	25.14 (U)
68	6212.00	18.20	290.50	45.00	6198.99	188.84	184.96	-80.40	344389.56	1630994.80	4.00	-3.23 (L)	26.20 (U)
69	6256.00	20.10	291.20	44.00	6240.56	201.91	190.10	-93.89	344394.70	1630981.31	4.35	-3.76 (L)	25.84 (U)
70	6300.00	24.40	290.70	44.00	6281.27	217.01	196.05	-109.45	344400.65	1630965.75	9.78	-3.77 (L)	25.11 (U)
71	6345.00	28.40	290.30	45.00	6321.57	235.07	203.05	-128.19	344407.65	1630947.01	8.90	-3.99 (L)	24.77 (U)

#	Measured Depth (Ft)	INC Deg	AZM Deg	CL (Ft)	TVD (Ft)	VS (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	DLS */100 Ft	LR/EW From-Plan (Ft)	UD/NS From-Plan (Ft)
72	6389.00	33.50	292.10	44.00	6359.29	255.62	211.26	-149.26	344415.86	1630925.94	11.78	-4.72 (L)	24.86 (U)
73	6434.00	37.20	292.20	45.00	6395.99	279.44	221.07	-173.37	344425.67	1630901.83	8.22	-4.38 (L)	25.80 (U)
74	6478.00	41.60	291.90	44.00	6429.98	304.96	231.55	-199.25	344436.15	1630875.95	10.01	-3.90 (L)	26.80 (U)
75	6522.00	46.80	291.60	44.00	6461.52	332.93	242.91	-227.74	344447.51	1630847.46	11.83	-3.52 (L)	28.96 (U)
76	6567.00	49.50	291.70	45.00	6491.54	363.48	255.28	-258.89	344459.88	1630816.31	6.00	-3.28 (L)	31.00 (U)
77	6611.00	50.80	291.00	44.00	6519.73	394.19	267.57	-290.35	344472.17	1630784.85	3.20	-2.92 (L)	31.95 (U)
78	6656.00	53.50	290.40	45.00	6547.34	426.33	280.13	-323.59	344484.73	1630751.61	6.09	-2.98 (L)	31.36 (U)
79	6700.00	56.40	289.80	44.00	6572.61	458.74	292.50	-357.41	344497.10	1630717.79	6.68	-3.45 (L)	30.27 (U)
80	6743.00	59.60	289.30	43.00	6595.39	491.39	304.70	-391.77	344509.30	1630683.43	7.51	-4.34 (L)	28.61 (U)
81	6785.00	62.10	288.80	42.00	6615.85	524.10	316.67	-426.44	344521.27	1630648.76	6.04	-5.56 (L)	26.68 (U)
82	6829.00	65.30	290.20	44.00	6635.34	559.42	329.84	-463.62	344534.44	1630611.58	7.81	-6.93 (L)	23.79 (U)
83	6874.00	67.10	290.50	45.00	6653.50	596.55	344.16	-502.22	344548.76	1630572.98	4.05	-7.45 (L)	20.22 (U)
84	6918.00	71.00	291.50	44.00	6669.23	633.80	358.89	-540.57	344563.49	1630534.63	9.11	-7.53 (L)	15.84 (U)
85	6963.00	76.30	291.90	45.00	6681.89	673.15	374.85	-580.68	344579.45	1630494.52	11.81	-6.96 (L)	12.29 (U)
86	7007.00	81.80	291.50	44.00	6690.25	712.52	390.82	-620.80	344595.42	1630454.40	12.53	-6.33 (L)	10.12 (U)
87	7049.00	87.20	292.00	42.00	6694.27	750.64	406.30	-659.61	344610.90	1630415.59	12.91	-5.71 (L)	9.61 (U)
88	7094.00	90.10	292.40	45.00	6695.33	791.82	423.30	-701.26	344627.90	1630373.94	6.51	-4.66 (L)	9.54 (U)
89	7138.00	90.00	292.70	44.00	6695.29	832.20	440.17	-741.90	344644.77	1630333.30	0.72	-3.37 (L)	9.20 (U)
90	7183.00	89.60	291.60	45.00	6695.45	873.37	457.14	-783.58	344661.74	1630291.62	2.60	-2.36 (L)	8.65 (U)
91	7227.00	89.10	291.30	44.00	6695.95	913.41	473.23	-824.53	344677.83	1630250.67	1.33	-1.92 (L)	7.77 (U)
92	7271.00	90.50	292.70	44.00	6696.10	953.61	489.71	-865.32	344694.31	1630209.88	4.50	-1.05 (L)	7.23 (U)
93	7316.00	90.50	293.80	45.00	6695.71	995.13	507.47	-906.66	344712.07	1630168.54	2.44	0.82 (R)	7.23 (U)
94	7360.00	90.30	294.00	44.00	6695.40	1035.91	525.30	-946.89	344729.90	1630128.31	0.64	3.15 (R)	7.16 (U)
95	7405.00	90.10	293.10	45.00	6695.24	1077.51	543.28	-988.14	344747.88	1630087.06	2.05	5.25 (R)	6.92 (U)
96	7449.00	89.60	293.20	44.00	6695.36	1118.07	560.57	-1028.60	344765.17	1630046.60	1.16	6.79 (R)	6.42 (U)
97	7494.00	89.00	294.40	45.00	6695.91	1159.75	578.73	-1069.77	344783.33	1630005.43	2.98	7.81 (R)	5.48 (U)
98	7538.00	89.10	295.90	44.00	6696.64	1200.87	597.43	-1109.59	344802.03	1629965.61	3.42	8.70 (R)	4.36 (U)
99	7582.00	89.80	299.80	44.00	6697.06	1242.69	617.98	-1148.48	344822.58	1629926.72	9.00	10.48 (R)	3.54 (U)
100	7626.00	90.60	303.30	44.00	6696.91	1285.30	641.00	-1185.97	344845.60	1629889.23	8.16	13.98 (R)	3.29 (U)
101	7671.00	91.00	305.70	45.00	6696.28	1329.39	666.48	-1223.05	344871.08	1629852.15	5.41	18.64 (R)	3.50 (U)
102	7715.00	91.30	308.10	44.00	6695.40	1372.83	692.89	-1258.23	344897.49	1629816.97	5.50	23.91 (R)	3.98 (U)
103	7759.00	91.60	307.70	44.00	6694.28	1416.39	719.91	-1292.94	344924.51	1629782.26	1.14	28.59 (R)	4.70 (U)
104	7804.00	91.60	307.00	45.00	6693.03	1460.86	747.20	-1328.69	344951.80	1629746.51	1.55	31.75 (R)	5.55 (U)
105	7848.00	91.00	307.80	44.00	6692.03	1504.36	773.92	-1363.64	344978.52	1629711.56	2.27	33.73 (R)	6.15 (U)
106	7892.00	90.90	307.80	44.00	6691.30	1547.91	800.88	-1398.40	345005.48	1629676.80	0.23	34.81 (R)	6.48 (U)
107	7937.00	90.60	309.60	45.00	6690.71	1592.55	829.02	-1433.52	345033.62	1629641.68	4.05	35.44 (R)	6.65 (U)
108	7981.00	90.70	311.90	44.00	6690.21	1636.36	857.73	-1466.84	345062.33	1629608.36	5.23	36.43 (R)	6.74 (U)
109	8025.00	89.60	312.30	44.00	6690.10	1680.26	887.23	-1499.49	345091.83	1629575.71	2.66	37.23 (R)	6.46 (U)
110	8070.00	89.60	311.70	45.00	6690.41	1725.15	917.34	-1532.93	345121.94	1629542.27	1.33	36.77 (R)	5.74 (U)
111	8112.00	90.90	316.30	42.00	6690.23	1767.11	946.51	-1563.13	345151.11	1629512.07	11.38	36.67 (R)	5.52 (U)
112	8158.00	91.10	318.60	46.00	6689.42	1813.09	980.39	-1594.23	345184.99	1629480.97	5.02	38.11 (R)	5.90 (U)

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113	8203.00	91.10	317.50	45.00	6688.56	1858.05	1013.85	-1624.31	345218.45	1629450.89	2.44	38.66 (R)	6.37 (U)
114	8247.00	90.90	317.00	44.00	6687.79	1902.03	1046.16	-1654.17	345250.76	1629421.03	1.22	37.46 (R)	6.76 (U)
115	8291.00	90.70	315.90	44.00	6687.18	1946.02	1078.04	-1684.48	345282.64	1629390.72	2.54	34.57 (R)	6.99 (U)
116	8336.00	90.50	315.20	45.00	6686.71	1991.02	1110.16	-1716.00	345314.76	1629359.20	1.62	30.37 (R)	7.07 (U)
117	8378.00	90.40	314.40	42.00	6686.38	2033.01	1139.76	-1745.80	345344.36	1629329.40	1.92	25.90 (R)	7.03 (U)
118	8423.00	91.20	315.90	45.00	6685.75	2078.00	1171.66	-1777.53	345376.26	1629297.67	3.78	21.27 (R)	7.26 (U)
119	8467.00	90.80	315.10	44.00	6684.98	2121.99	1203.03	-1808.36	345407.63	1629266.84	2.03	17.12 (R)	7.65 (U)
120	8511.00	90.80	314.40	44.00	6684.37	2165.98	1234.01	-1839.61	345438.61	1629235.59	1.59	12.37 (R)	7.88 (U)
121	8556.00	90.70	316.60	45.00	6683.78	2210.97	1266.10	-1871.14	345470.70	1629204.06	4.89	8.06 (R)	8.07 (U)
122	8601.00	90.50	319.60	45.00	6683.30	2255.93	1299.59	-1901.19	345504.19	1629174.01	6.68	5.82 (R)	8.14 (U)
123	8645.00	90.20	319.40	44.00	6683.04	2299.84	1333.04	-1929.77	345537.64	1629145.43	0.82	4.72 (R)	8.03 (U)
124	8689.00	89.90	318.60	44.00	6683.00	2343.78	1366.25	-1958.63	345570.85	1629116.57	1.94	3.24 (R)	7.68 (U)
125	8734.00	89.90	317.30	45.00	6683.08	2388.75	1399.67	-1988.77	345604.27	1629086.43	2.89	0.89 (R)	7.21 (U)
126	8778.00	89.80	318.80	44.00	6683.19	2432.72	1432.39	-2018.19	345636.99	1629057.01	3.42	-1.32 (L)	6.71 (U)
127	8822.00	90.30	320.30	44.00	6683.15	2476.63	1465.87	-2046.73	345670.47	1629028.47	3.59	-2.38 (L)	6.36 (U)
128	8867.00	91.50	322.90	45.00	6682.45	2521.40	1501.13	-2074.68	345705.73	1629000.52	6.36	-1.86 (L)	6.68 (U)
129	8909.00	92.10	323.90	42.00	6681.13	2563.03	1534.83	-2099.71	345739.43	1628975.49	2.78	-0.04 (L)	7.63 (U)
130	8953.00	92.70	322.70	44.00	6679.28	2606.63	1570.08	-2125.98	345774.68	1628949.22	3.05	1.78 (R)	9.09 (U)
131	8998.00	90.60	320.80	45.00	6677.99	2651.37	1605.40	-2153.82	345810.00	1628921.38	6.29	2.40 (R)	9.99 (U)
132	9042.00	90.50	320.60	44.00	6677.57	2695.22	1639.44	-2181.69	345844.04	1628893.51	0.51	2.22 (R)	10.03 (U)
133	9087.00	90.20	319.60	45.00	6677.29	2740.10	1673.97	-2210.55	345878.57	1628864.65	2.32	1.57 (R)	9.91 (U)
134	9131.00	89.80	318.80	44.00	6677.29	2784.03	1707.27	-2239.30	345911.87	1628835.90	2.03	0.24 (R)	9.53 (U)
135	9174.00	91.00	320.00	43.00	6676.99	2826.95	1739.92	-2267.29	345944.52	1628807.91	3.95	-0.92 (L)	9.45 (U)
136	9218.00	90.80	319.50	44.00	6676.30	2870.85	1773.50	-2295.71	345978.10	1628779.49	1.22	-1.82 (L)	9.76 (U)
137	9263.00	90.30	319.20	45.00	6675.87	2915.77	1807.64	-2325.02	346012.24	1628750.18	1.30	-3.07 (L)	9.80 (U)
138	9308.00	90.10	319.50	45.00	6675.71	2960.69	1841.78	-2354.34	346046.38	1628720.86	0.80	-4.31 (L)	9.56 (U)
139	9352.00	90.90	321.00	44.00	6674.94	3004.55	1875.60	-2382.47	346080.20	1628692.73	5.32	-4.83 (L)	9.95 (U)
140	9396.00	91.70	320.20	44.00	6673.56	3048.39	1909.58	-2410.38	346114.18	1628664.82	1.87	-5.09 (L)	10.94 (U)
141	9441.00	91.40	319.50	45.00	6672.34	3093.26	1943.97	-2439.39	346148.57	1628635.81	1.69	-5.95 (L)	11.77 (U)
142	9483.00	91.50	319.50	42.00	6671.28	3135.17	1975.89	-2466.66	346180.49	1628608.54	0.24	-7.00 (L)	12.46 (U)
143	9528.00	91.50	319.80	45.00	6670.10	3180.06	2010.18	-2495.78	346214.78	1628579.42	0.67	-8.00 (L)	13.25 (U)
144	9572.00	91.50	320.40	44.00	6668.95	3223.93	2043.92	-2523.99	346248.52	1628551.21	1.36	-8.64 (L)	14.02 (U)
145	9617.00	91.50	319.80	45.00	6667.77	3268.80	2078.43	-2552.85	346283.03	1628522.35	1.33	-9.30 (L)	14.80 (U)
146	9661.00	90.70	320.70	44.00	6666.93	3312.66	2112.25	-2580.98	346316.85	1628494.22	2.74	-9.81 (L)	15.26 (U)
147	9705.00	90.60	319.60	44.00	6666.43	3356.54	2146.03	-2609.17	346350.63	1628466.03	2.51	-10.42 (L)	15.37 (U)
148	9750.00	90.30	318.80	45.00	6666.08	3401.47	2180.09	-2638.57	346384.69	1628436.63	1.90	-11.79 (L)	15.33 (U)
149	9794.00	89.50	318.10	44.00	6666.15	3445.43	2213.02	-2667.76	346417.62	1628407.44	2.42	-13.69 (L)	14.87 (U)
150	9838.00	89.10	318.50	44.00	6666.69	3489.39	2245.87	-2697.03	346450.47	1628378.17	1.29	-15.71 (L)	13.95 (U)
151	9883.00	90.40	319.90	45.00	6666.89	3534.31	2279.93	-2726.43	346484.53	1628348.77	4.25	-17.07 (L)	13.36 (U)
152	9927.00	90.20	319.50	44.00	6666.66	3578.22	2313.49	-2754.89	346518.09	1628320.31	1.02	-18.02 (L)	13.21 (U)
153	9971.00	90.40	320.80	44.00	6666.43	3622.10	2347.27	-2783.08	346551.87	1628292.12	2.99	-18.61 (L)	13.06 (U)

#	Measured Depth (Ft)	INC Deg	AZM Deg	CL (Ft)	TVD (Ft)	VS (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	DLS ² /100 Ft	LR/EW From-Plan (Ft)	UD/NS From-Plan (Ft)
154	10016.00	90.50	320.00	45.00	6666.07	3666.96	2381.94	-2811.76	346586.54	1628263.44	1.79	-19.04 (L)	13.02 (U)
155	10061.00	91.50	321.70	45.00	6665.29	3711.79	2416.83	-2840.17	346621.43	1628235.03	4.38	-19.09 (L)	13.41 (U)
156	10105.00	91.90	322.30	44.00	6663.98	3755.52	2451.49	-2867.24	346656.09	1628207.96	1.64	-18.27 (L)	14.34 (U)
157	10150.00	91.50	322.00	45.00	6662.65	3800.24	2487.01	-2894.84	346691.61	1628180.36	1.11	-17.32 (L)	15.28 (U)
158	10194.00	89.70	321.90	44.00	6662.19	3843.99	2521.65	-2921.96	346726.25	1628153.24	4.10	-16.55 (L)	15.35 (U)
159	10239.00	89.50	321.70	45.00	6662.50	3888.76	2557.01	-2949.79	346761.61	1628125.41	0.63	-15.86 (L)	14.65 (U)
160	10283.00	89.30	322.20	44.00	6662.96	3932.51	2591.66	-2976.91	346796.26	1628098.29	1.22	-15.09 (L)	13.80 (U)
161	10327.00	89.60	322.70	44.00	6663.38	3976.23	2626.54	-3003.72	346831.14	1628071.48	1.33	-13.93 (L)	13.00 (U)
162	10372.00	90.60	321.70	45.00	6663.30	4020.96	2662.10	-3031.30	346866.70	1628043.90	3.14	-12.92 (L)	12.68 (U)
163	10416.00	90.30	321.90	44.00	6662.96	4064.73	2696.68	-3058.51	346901.28	1628016.69	0.82	-12.26 (L)	12.64 (U)
164	10461.00	89.80	321.00	45.00	6662.92	4109.52	2731.87	-3086.55	346936.47	1627988.65	2.29	-11.85 (L)	12.28 (U)
165	10505.00	89.40	319.60	44.00	6663.23	4153.39	2765.72	-3114.66	346970.32	1627960.54	3.31	-12.34 (L)	11.59 (U)
166	10548.00	89.90	321.00	43.00	6663.49	4196.27	2798.80	-3142.12	347003.40	1627933.08	3.46	-12.81 (L)	10.95 (U)
167	10592.00	89.80	320.70	44.00	6663.60	4240.11	2832.92	-3169.90	347037.52	1627905.30	0.72	-12.87 (L)	10.45 (U)
168	10636.00	91.20	320.20	44.00	6663.22	4283.97	2866.85	-3197.92	347071.45	1627877.28	3.38	-13.25 (L)	10.45 (U)
169	10681.00	91.20	319.70	45.00	6662.28	4328.85	2901.29	-3226.87	347105.89	1627848.33	1.11	-14.03 (L)	11.00 (U)
170	10725.00	91.10	319.10	44.00	6661.40	4372.76	2934.69	-3255.50	347139.29	1627819.70	1.38	-15.21 (L)	11.50 (U)
171	10770.00	91.00	320.30	45.00	6660.57	4417.65	2969.00	-3284.60	347173.60	1627790.60	2.68	-16.17 (L)	11.93 (U)
172	10812.00	90.90	320.90	42.00	6659.87	4459.51	3001.45	-3311.25	347206.05	1627763.95	1.45	-16.41 (L)	12.26 (U)
173	10856.00	90.60	321.70	44.00	6659.30	4503.31	3035.79	-3338.76	347240.39	1627736.44	1.94	-16.13 (L)	12.46 (U)
174	10899.00	90.70	321.80	43.00	6658.81	4546.09	3069.55	-3365.38	347274.15	1627709.82	0.33	-15.51 (L)	12.57 (U)
175	10943.00	90.60	321.80	44.00	6658.31	4589.86	3104.13	-3392.59	347308.73	1627682.61	0.23	-14.85 (L)	12.68 (U)
176	10987.00	90.10	322.20	44.00	6658.04	4633.61	3138.80	-3419.67	347343.40	1627655.53	1.46	-14.03 (L)	12.57 (U)
177	11031.00	89.90	322.00	44.00	6658.04	4677.36	3173.52	-3446.70	347378.12	1627628.50	0.64	-13.13 (L)	12.19 (U)
178	11076.00	89.50	321.80	45.00	6658.28	4722.12	3208.93	-3474.47	347413.53	1627600.73	0.99	-12.38 (L)	11.56 (U)
179	11118.00	91.10	322.50	42.00	6658.06	4763.87	3242.10	-3500.24	347446.70	1627574.96	4.16	-11.48 (L)	11.41 (U)
180	11163.00	91.10	322.90	45.00	6657.19	4808.55	3277.88	-3527.50	347482.48	1627547.70	0.89	-10.09 (L)	11.88 (U)
181	11207.00	90.70	322.40	44.00	6656.50	4852.24	3312.86	-3554.19	347517.46	1627521.01	1.46	-8.77 (L)	12.19 (U)
182	11250.00	90.60	321.40	43.00	6656.02	4895.01	3346.69	-3580.72	347551.29	1627494.48	2.34	-8.05 (L)	12.30 (U)
183	11293.00	90.20	320.20	43.00	6655.72	4937.85	3380.01	-3607.90	347584.61	1627467.30	2.94	-8.15 (L)	12.22 (U)
184	11339.00	89.90	320.00	46.00	6655.68	4983.73	3415.30	-3637.41	347619.90	1627437.79	0.78	-8.82 (L)	11.86 (U)
185	11383.00	89.90	318.80	44.00	6655.94	5027.65	3448.71	-3666.04	347653.31	1627409.16	2.95	-10.00 (L)	11.21 (U)
186	11427.00	89.50	318.40	44.00	6656.37	5071.60	3481.71	-3695.14	347686.31	1627380.06	0.94	-11.79 (L)	10.40 (U)
187	11472.00	91.30	319.80	45.00	6656.05	5116.53	3515.72	-3724.60	347720.32	1627350.60	5.07	-13.23 (L)	10.32 (U)
188	11516.00	91.20	319.60	44.00	6655.09	5160.42	3549.27	-3753.05	347753.87	1627322.15	0.51	-14.18 (L)	10.90 (U)
189	11560.00	90.90	318.60	44.00	6654.29	5204.35	3582.53	-3781.85	347787.13	1627293.35	2.37	-15.60 (L)	11.31 (U)
190	11605.00	90.80	318.10	45.00	6653.62	5249.30	3616.15	-3811.76	347820.75	1627263.44	1.13	-17.64 (L)	11.59 (U)
191	11649.00	91.10	320.30	44.00	6652.89	5293.22	3649.45	-3840.50	347854.05	1627234.70	5.05	-18.94 (L)	11.94 (U)
192	11694.00	91.10	320.20	45.00	6652.02	5338.09	3684.04	-3869.27	347888.64	1627205.93	0.22	-19.48 (L)	12.41 (U)
193	11738.00	90.90	319.80	44.00	6651.26	5381.97	3717.74	-3897.55	347922.34	1627177.65	1.02	-20.20 (L)	12.79 (U)
194	11782.00	90.40	318.80	44.00	6650.76	5425.89	3751.09	-3926.24	347955.69	1627148.96	2.54	-21.46 (L)	12.90 (U)

#	Measured Depth (Ft)	INC Deg	AZM Deg	CL (Ft)	TVD (Ft)	VS (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	DLS ¹ /100 Ft	LR/EW From-Plan (Ft)	UD/NS From-Plan (Ft)
195	11827.00	91.10	321.10	45.00	6650.17	5470.78	3785.54	-3955.19	347990.14	1627120.01	5.34	-22.22 (L)	13.11 (U)
196	11871.00	90.30	320.70	44.00	6649.63	5514.61	3819.68	-3982.94	348024.28	1627092.26	2.03	-22.24 (L)	13.26 (U)
197	11915.00	89.80	322.50	44.00	6649.59	5558.39	3854.16	-4010.27	348058.76	1627064.93	4.25	-21.74 (L)	12.92 (U)
198	11960.00	89.50	322.60	45.00	6649.87	5603.09	3889.88	-4037.63	348094.48	1627037.57	0.70	-20.47 (L)	12.25 (U)
199	12004.00	89.60	322.30	44.00	6650.21	5646.81	3924.77	-4064.44	348129.37	1627010.76	0.72	-19.30 (L)	11.52 (U)
200	12048.00	89.50	321.70	44.00	6650.56	5690.56	3959.44	-4091.53	348164.04	1626983.67	1.38	-18.48 (L)	10.79 (U)
201	12093.00	89.10	321.50	45.00	6651.11	5735.34	3994.70	-4119.48	348199.30	1626955.72	0.99	-17.96 (L)	9.85 (U)
202	12137.00	88.60	321.80	44.00	6651.99	5779.12	4029.20	-4146.78	348233.80	1626928.42	1.33	-17.41 (L)	8.58 (U)
203	12181.00	90.10	322.70	44.00	6652.49	5822.85	4063.99	-4173.71	348268.59	1626901.49	3.98	-16.40 (L)	7.70 (U)
204	12226.00	90.00	323.20	45.00	6652.45	5867.51	4099.90	-4200.82	348304.50	1626874.38	1.13	-14.82 (L)	7.34 (U)
205	12271.00	90.70	323.70	45.00	6652.18	5912.12	4136.05	-4227.62	348340.65	1626847.58	1.91	-12.84 (L)	7.23 (U)
206	12315.00	90.70	323.30	44.00	6651.64	5955.74	4171.42	-4253.79	348376.02	1626821.41	0.91	-10.87 (L)	7.38 (U)
207	12358.00	90.50	322.40	43.00	6651.19	5998.42	4205.69	-4279.76	348410.29	1626795.44	2.14	-9.43 (L)	7.45 (U)
208	12402.00	90.20	321.90	44.00	6650.92	6042.17	4240.43	-4306.75	348445.03	1626768.45	1.33	-8.49 (L)	7.33 (U)
209	12447.00	89.60	321.20	45.00	6651.00	6086.95	4275.67	-4334.74	348480.27	1626740.46	2.05	-8.01 (L)	6.86 (U)
210	12491.00	89.70	320.80	44.00	6651.27	6130.78	4309.87	-4362.43	348514.47	1626712.77	0.94	-7.95 (L)	6.21 (U)
211	12536.00	89.60	321.00	45.00	6651.54	6175.61	4344.79	-4390.81	348549.39	1626684.39	0.50	-7.98 (L)	5.54 (U)
212	12580.00	89.10	320.60	44.00	6652.04	6219.45	4378.88	-4418.61	348583.48	1626656.59	1.46	-8.08 (L)	4.66 (U)
213	12625.00	89.20	319.50	45.00	6652.71	6264.33	4413.38	-4447.51	348617.98	1626627.69	2.45	-8.78 (L)	3.60 (U)
214	12669.00	90.60	320.10	44.00	6652.79	6308.23	4446.98	-4475.90	348651.58	1626599.30	3.46	-9.65 (L)	3.13 (U)
215	12713.00	90.60	319.30	44.00	6652.32	6352.13	4480.54	-4504.36	348685.14	1626570.84	1.82	-10.60 (L)	3.21 (U)
216	12757.00	90.80	318.90	44.00	6651.79	6396.06	4513.79	-4533.17	348718.39	1626542.03	1.02	-12.01 (L)	3.36 (U)
217	12799.00	91.70	320.20	42.00	6650.87	6437.97	4545.75	-4560.41	348750.35	1626514.79	3.76	-13.02 (L)	3.91 (U)
218	12844.00	91.90	320.00	45.00	6649.46	6482.83	4580.25	-4589.26	348784.85	1626485.94	0.63	-13.67 (L)	4.94 (U)
219	12889.00	91.00	319.40	45.00	6648.32	6527.72	4614.56	-4618.36	348819.16	1626456.84	2.40	-14.64 (L)	5.68 (U)
220	12933.00	90.90	319.50	44.00	6647.59	6571.63	4647.99	-4646.96	348852.59	1626428.24	0.32	-15.78 (L)	6.02 (U)
221	12977.00	91.40	319.20	44.00	6646.71	6615.54	4681.36	-4675.61	348885.96	1626399.59	1.33	-17.00 (L)	6.52 (U)
222	13022.00	91.30	318.80	45.00	6645.65	6660.46	4715.32	-4705.13	348919.92	1626370.07	0.92	-18.53 (L)	7.19 (U)
223	13066.00	91.00	318.10	44.00	6644.76	6704.41	4748.24	-4734.31	348952.84	1626340.89	1.73	-20.45 (L)	7.68 (U)
224	13111.00	89.70	320.90	45.00	6644.49	6749.32	4782.45	-4763.53	348987.05	1626311.67	6.86	-21.54 (L)	7.57 (U)
225	13155.00	89.50	320.40	44.00	6644.80	6793.17	4816.48	-4791.43	349021.08	1626283.77	1.22	-21.76 (L)	6.88 (U)
226	13199.00	89.00	320.00	44.00	6645.37	6837.05	4850.28	-4819.59	349054.88	1626255.61	1.46	-22.32 (L)	5.92 (U)
227	13242.00	89.00	319.40	43.00	6646.12	6879.95	4883.07	-4847.40	349087.67	1626227.80	1.40	-23.25 (L)	4.79 (U)
228	13286.00	90.90	320.70	44.00	6646.16	6923.83	4916.79	-4875.65	349121.39	1626199.55	5.23	-23.92 (L)	4.37 (U)
229	13331.00	90.90	320.10	45.00	6645.45	6968.69	4951.46	-4904.33	349156.06	1626170.87	1.33	-24.35 (L)	4.68 (U)
230	13375.00	90.60	320.40	44.00	6644.88	7012.56	4985.29	-4932.46	349189.89	1626142.74	0.96	-24.87 (L)	4.88 (U)
231	13417.00	90.00	319.90	42.00	6644.66	7054.45	5017.53	-4959.37	349222.13	1626115.83	1.86	-25.44 (L)	4.73 (U)
232	13461.00	89.90	319.80	44.00	6644.70	7098.35	5051.17	-4987.74	349255.77	1626087.46	0.32	-26.28 (L)	4.30 (U)
233	13506.00	89.80	319.70	45.00	6644.81	7143.25	5085.51	-5016.82	349290.11	1626058.38	0.31	-27.21 (L)	3.79 (U)
234	13550.00	89.60	319.50	44.00	6645.04	7187.16	5119.02	-5045.34	349323.62	1626029.86	0.64	-28.23 (L)	3.18 (U)
235	13594.00	89.70	318.90	44.00	6645.31	7231.09	5152.32	-5074.09	349356.92	1626001.11	1.38	-29.57 (L)	2.52 (U)

#	Measured Depth (Ft)	INC Deg	AZM Deg	CL (Ft)	TVD (Ft)	VS (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	DLS *100 Ft	LR/EW From-Plan (Ft)	UD/NS From-Plan (Ft)
236	13638.00	89.50	318.10	44.00	6645.62	7275.04	5185.28	-5103.24	349389.88	1625971.96	1.87	-31.46 (L)	1.83 (U)
237	13683.00	90.10	321.70	45.00	6645.78	7319.93	5219.69	-5132.22	349424.29	1625942.98	8.11	-32.24 (L)	1.29 (U)
238	13725.00	89.90	321.60	42.00	6645.78	7361.72	5252.63	-5158.28	349457.23	1625916.92	0.53	-31.71 (L)	0.93 (U)
239	13769.00	90.10	321.00	44.00	6645.78	7405.53	5286.97	-5185.79	349491.57	1625889.41	1.44	-31.43 (L)	0.54 (U)
240	13812.00	90.10	321.00	43.00	6645.70	7448.36	5320.39	-5212.85	349524.99	1625862.35	0.00	-31.38 (L)	0.24 (U)
241	13855.00	90.20	320.50	43.00	6645.59	7491.21	5353.69	-5240.06	349558.29	1625835.14	1.19	-31.52 (L)	-0.03 (D)
242	13899.00	89.80	320.30	44.00	6645.59	7535.08	5387.59	-5268.10	349592.19	1625807.10	1.02	-31.93 (L)	-0.41 (D)
243	13943.00	89.30	319.60	44.00	6645.94	7578.97	5421.27	-5296.41	349625.87	1625778.79	1.96	-32.69 (L)	-1.15 (D)
244	13987.00	89.60	321.00	44.00	6646.36	7622.84	5455.12	-5324.52	349659.72	1625750.68	3.25	-33.17 (L)	-1.95 (D)
245	14032.00	89.30	321.30	45.00	6646.79	7667.65	5490.16	-5352.74	349694.76	1625722.46	0.94	-33.00 (L)	-2.77 (D)
246	14076.00	90.80	322.40	44.00	6646.75	7711.42	5524.76	-5379.92	349729.36	1625695.28	4.23	-32.30 (L)	-3.11 (D)
247	14120.00	90.50	322.60	44.00	6646.25	7755.13	5559.67	-5406.71	349764.27	1625668.49	0.82	-31.10 (L)	-2.99 (D)
248	14165.00	90.40	322.50	45.00	6645.90	7799.83	5595.39	-5434.07	349799.99	1625641.13	0.31	-29.83 (L)	-3.03 (D)
249	14209.00	91.30	322.40	44.00	6645.25	7843.54	5630.27	-5460.88	349834.87	1625614.32	2.06	-28.67 (L)	-2.77 (D)
250	14253.00	91.00	321.80	44.00	6644.36	7887.28	5664.98	-5487.90	349869.58	1625587.30	1.52	-27.76 (L)	-2.27 (D)
251	14298.00	90.80	321.40	45.00	6643.66	7932.05	5700.25	-5515.85	349904.85	1625559.35	0.99	-27.24 (L)	-1.96 (D)
252	14342.00	90.30	321.30	44.00	6643.23	7975.85	5734.61	-5543.33	349939.21	1625531.87	1.16	-26.92 (L)	-1.92 (D)
253	14386.00	89.90	320.50	44.00	6643.16	8019.69	5768.75	-5571.08	349973.35	1625504.12	2.03	-26.94 (L)	-2.23 (D)
254	14431.00	90.80	321.70	45.00	6642.88	8064.51	5803.77	-5599.34	350008.37	1625475.86	3.33	-26.81 (L)	-2.35 (D)
255	14475.00	90.90	321.70	44.00	6642.23	8108.28	5838.30	-5626.61	350042.90	1625448.59	0.23	-26.22 (L)	-2.08 (D)
256	14520.00	90.80	321.40	45.00	6641.56	8153.06	5873.54	-5654.59	350078.14	1625420.61	0.70	-25.74 (L)	-1.80 (D)
257	14564.00	90.70	321.00	44.00	6640.99	8196.87	5907.82	-5682.15	350112.42	1625393.05	0.94	-25.53 (L)	-1.61 (D)
258	14607.00	90.40	321.00	43.00	6640.57	8239.70	5941.24	-5709.21	350145.84	1625365.99	0.70	-25.48 (L)	-1.58 (D)
259	14651.00	90.80	321.00	44.00	6640.11	8283.53	5975.43	-5736.90	350180.03	1625338.30	0.91	-25.43 (L)	-1.50 (D)
260	14696.00	90.70	321.00	45.00	6639.52	8328.35	6010.40	-5765.22	350215.00	1625309.98	0.22	-25.38 (L)	-1.30 (D)
261	14740.00	90.70	321.00	44.00	6638.99	8372.18	6044.59	-5792.91	350249.19	1625282.29	0.00	-25.33 (L)	-1.15 (D)
262	14784.00	90.80	320.10	44.00	6638.41	8416.03	6078.57	-5820.86	350283.17	1625254.34	2.06	-25.62 (L)	-0.96 (D)
263	14829.00	90.50	320.50	45.00	6637.90	8460.90	6113.19	-5849.60	350317.79	1625225.60	1.11	-26.12 (L)	-0.84 (D)
264	14871.00	90.10	323.20	42.00	6637.68	8502.67	6146.21	-5875.55	350350.81	1625199.65	6.50	-25.47 (L)	-0.98 (D)
265	14916.00	89.80	322.80	45.00	6637.72	8547.33	6182.15	-5902.63	350386.75	1625172.57	1.11	-23.83 (L)	-1.41 (D)
266	14960.00	89.90	322.10	44.00	6637.83	8591.05	6217.03	-5929.44	350421.63	1625145.76	1.61	-22.66 (L)	-1.92 (D)
267	15005.00	89.80	321.30	45.00	6637.95	8635.82	6252.35	-5957.33	350456.95	1625117.87	1.79	-22.06 (L)	-2.43 (D)
268	15049.00	89.30	321.00	44.00	6638.30	8679.64	6286.61	-5984.93	350491.21	1625090.27	1.33	-21.89 (L)	-3.16 (D)
269	15093.00	89.80	321.00	44.00	6638.64	8723.47	6320.81	-6012.62	350525.41	1625062.58	1.14	-21.84 (L)	-3.89 (D)
270	15138.00	90.00	320.80	45.00	6638.72	8768.30	6355.73	-6041.00	350560.33	1625034.20	0.63	-21.86 (L)	-4.36 (D)
271	15165.00	89.80	319.20	47.00	6638.77	8795.23	6376.41	-6058.36	350581.01	1625016.84	5.97	-22.31 (L)	-4.65 (D)
Proj to Bit													
272	15222.00	89.80	319.20	57.00	6638.97	8852.14	6419.56	-6095.60	350624.16	1624979.60	0.00	-24.04 (L)	-5.35 (D)

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