



FOUNDATION ENERGY MANAGEMENT, LLC

DIRECTIONAL SURVEYING WORKSHEET

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Sectional Interpretation (Circular Arc)

Company: FOUNDATION ENERGY MANAGEMENT, LLC
 Field: LAY CREEK
 Borehole: GAMMA STATE 21-22
 Date: N/A
 Note:

Engineer: RLP
 Survey: PLAN

Survey Number	Measured Depth	INC	AZM	True Vertical Depth	Relative Coordinates		Relative Closure	Closure Azimuth	Dogleg Severity Deg/100Ft
					North= + South= -	East= + West= -			
0	0	0.00	131.75	0.00	0.00	0.00	0.00	131.75	-
1	500	0.00	131.75	500.00	0.00	0.00	0.00	131.75	0.00
2	1000	0.00	131.75	1000.00	0.00	0.00	0.00	131.75	0.00
3	1000	0.00	131.75	1000.00	0.00	0.00	0.00	131.75	0.00
4	1100	2.20	131.75	1099.98	-1.28	1.43	1.92	131.75	2.20
5	1200	4.39	131.75	1199.80	-5.11	5.72	7.67	131.75	2.20
6	1300	6.59	131.75	1299.34	-11.48	12.86	17.24	131.75	2.20
7	1400	8.79	131.75	1398.43	-20.39	22.84	30.62	131.75	2.20
8	1500	10.99	131.75	1496.94	-31.83	35.65	47.79	131.75	2.20
9	1600	13.18	131.75	1594.72	-45.77	51.27	68.73	131.75	2.20
10	1700	15.38	131.75	1691.62	-62.20	69.68	93.40	131.75	2.20
11	1800	17.58	131.75	1787.51	-81.09	90.84	121.77	131.75	2.20
12	1900	19.78	131.75	1882.24	-102.41	114.73	153.79	131.75	2.20
13	2000	21.97	131.75	1975.67	-126.14	141.31	189.42	131.75	2.20
14	3000	21.97	131.75	2903.02	-375.32	420.45	563.60	131.75	0.00
15	4000	21.97	131.75	3830.38	-624.50	699.60	937.78	131.75	0.00
16	5000	21.97	131.75	4757.73	-873.68	978.74	1311.97	131.75	0.00
17	6000	21.97	131.75	5685.09	-1122.86	1257.89	1686.15	131.75	0.00
18	6100	19.78	131.75	5778.52	-1146.59	1284.47	1721.78	131.75	2.20
19	6200	17.58	131.75	5873.24	-1167.91	1308.36	1753.80	131.75	2.20
20	6300	15.38	131.75	5969.13	-1186.80	1329.52	1782.17	131.75	2.20
21	6400	13.18	131.75	6066.03	-1203.23	1347.93	1806.84	131.75	2.20
22	6500	10.99	131.75	6163.81	-1217.17	1363.54	1827.78	131.75	2.20
23	6600	8.79	131.75	6262.32	-1228.61	1376.35	1844.95	131.75	2.20
24	6700	6.59	131.75	6361.41	-1237.52	1386.34	1858.33	131.75	2.20
25	6800	4.39	131.75	6460.95	-1243.89	1393.48	1867.90	131.75	2.20
26	6900	2.20	131.75	6560.78	-1247.72	1397.77	1873.65	131.75	2.20
27	7000	0.00	131.75	6660.75	-1249.00	1399.20	1875.57	131.75	2.20
28	7314	0.00	131.75	6975.00	-1249.00	1399.20	1875.57	131.75	0.00
29	7500	0.00	131.75	7160.75	-1249.00	1399.20	1875.57	131.75	0.00
30	8000	0.00	131.75	7660.75	-1249.00	1399.20	1875.57	131.75	0.00
31	8500	0.00	131.75	8160.75	-1249.00	1399.20	1875.57	131.75	0.00
32	9000	0.00	131.75	8660.75	-1249.00	1399.20	1875.57	131.75	0.00
33	9005	0.00	131.75	8666.00	-1249.00	1399.20	1875.57	131.75	0.00
34	9159	0.00	131.75	8820.00	-1249.00	1399.20	1875.57	131.75	0.00
35				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
36				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
37				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
38				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
39				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
40				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
41				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
42				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
43				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
44				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
45				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
46				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
47				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
48				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
49				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
50				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
51				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
52				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
53				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
54				-339.25	-1249.00	1399.20	1875.57	131.75	0.00
55				-339.25	-1249.00	1399.20	1875.57	131.75	0.00