Magnetic Declination: ..1 DEG

Tie In Point (TIP):

Measured Depth	11750	FT.
True Vertical Depth	11746.85	FT.
Inclination	1.8	DEG
Azimuth	214.1	DEG
N/S Displacement(-ve for S)	-144.51	FT.
E/W Displacement(-ve for W)	57.44	FT.
Azim. From Rotary Table To Target	120.7	DEG

Accepted Survey Listing:

M.Dpth (ft)	Int. (ft)	V.Dpth (ft)	Target (ft)	Incl. (deg)	Azim (deg)	N.Disp (ft)	E.Disp (ft)	T.Disp (ft)	Clr.A. (deg)	DLS (D/HF
11837	87	11833.7	125.14	3.49	159.91	-148.13	57.58	158.93	158.76	3.26
11861	24	11857.7	126.16	3.07	165.93	-149.44	57.99	160.3	158.79	2.26
11894	33	11890.5	128.81	8.08	149.77	-152.3	59.37	163.47	158.7	15.76
11925	31	11920.9	134.43	15.29	145.44	-157.56	62.79	169.61	158.27	23.41
11957	32	11951.3	143.62	20.52	138.31	-165.23	68.92	179.03	157.36	17.69
11988	31	11979.9	155	24.53	136.33	-173.95	76.98	190.22	156.13	13.16
12019	31	12007.6	168.45	28.74	134.11	-183.8	86.78	203.25	154.73	13.95
12051	32	12035.2	184.34	32.52	133.31	-195.06	98.57	218.55	153.19	11.88
12082	31	12060.6	201.7	37.42	132.52	-207.15	111.58	235.29	151.69	15.87
12114	32	12085.5	221.46	40.38	129.62	-220.34	126.74	254.18	150.09	10.86
12145	31	12108.7	241.81	42.35	125.28	-232.78	143	273.2	148.44	11.22
12177	32	12131.9	263.88	45.15	123.77	-245.31	161.23	293.56	146.69	9.34
12208	31	12153.0	286.47	48.67	124.51	-258.02	179.96	314.58	145.1	11.49
12240	32	12173.0	311.42	54.17	124.49	-272.18	200.57	338.1	143.61	17.19
12271	31	12189.8	337.38	60.2	125.82	-287.18	221.85	362.9	142.31	19.78
12297	26	12201.9	360.17	64.11	130.02	-301.31	239.97	385.19	141.47	20.74
12327	30	12213.9	387.25	68.99	131.69	-319.31	260.77	412.27	140.76	17.05
12359	32	12223.8	417.12	74.72	130.93	-339.37	283.6	442.27	140.12	18.05
12390	31	12230.5	446.88	80.27	131.13	-359.23	306.42	472.17	139.54	17.91
12426	36	12235.0	482.05	85.36	130.12	-382.48	333.52	507.47	138.91	14.41
12460	34	12237.3	515.58	87.08	128.75	-404.03	359.72	540.96	138.32	6.46
12491	31	12238.2	546.31	89.34	127.42	-423.14	384.11	571.48	137.77	8.46
12523	32	12238.6	578.11	89.43	126.57	-442.39	409.67	602.94	137.2	2.67
12554	31	12239.0	608.95	89	126.53	-460.85	434.57	633.43	136.68	1.39
12586	32	12239.6	640.79	88.82	126.23	-479.83	460.33	664.93	136.19	1.09
12617	31	12240.3	671.64	88.6	126.01	-498.1	485.36	695.47	135.74	1
12648	31	12241.0	702.5	88.82	125.82	-516.28	510.46	726.03	135.32	0.94
12680	32	12241.7	734.38	88.65	125.25	-534.87	536.49	757.57	134.91	1.86
12711	31	12242.6	765.26	88.25	125.37	-552.78	561.78	788.14	134.54	1.35
12742	31	12243.5	796.15	88.11	125.46	-570.74	587.03	818.75	134.19	0.54
12772	30	12244.4	826.05	88.54	124.67	-587.97	611.57	848.37	133.87	3
12803	31	12245.0	856.97	89.28	124.36	-605.53	637.11	878.96	133.54	2.59
12834	31	12244.9	887.93	91.12	122.96	-622.71	662.91	909.52	133.21	7.46
12866	32	12244.4	919.91	90.83	121.76	-639.83	689.94	940.96	132.84	3.86
12897	31	12244.0	950.9	90.66	121.27	-656.03	716.37	971.37	132.48	1.67
12929	32	12243.6	982.9	90.52	119.83	-672.29	743.93	1002.7	132.1	4.52
12960	31	12243.5	1013.9	89.89	119.62	-687.66	770.85	1033	131.74	2.14
12991	31	12243.6	1044.89	89.66	118.71	-702.77	797.92	1063.28	131.37	3.03
13023	32	12244.0	1076.85	89.05	117.55	-717.86	826.14	1094.45	130.99	4.1
13054	31	12244.5	1107.79	89.17	116.47	-731.94	853.76	1124.56	130.61	3.5
13085	31	12244.8	1138.69	89.66	115.7	-745.57	881.6	1154.6	130.22	2.94
13117	32	12244.7	1170.54	90.57	114.68	-759.19	910.56	1185.53	129.82	4.27
13148	31	12244.8	1201.33	89.28	113.35	-771.81	938.88	1215.39	129.42	5.98
13180	32	12245.5	1233.06	88	113.05	-784.41	968.28	1246.14	129.01	4.11
13211	31	12246.4	1263.75	88.94	112.55	-796.42	996.85	1275.93	128.62	3.43
13242	31	12246.8	1294.41	89.66	112	-808.17	1025.53	1305.7	128.24	2.92
13273	31	12247.1	1325.02	89	111.17	-819.57	1054.35	1335.43	127.86	3.42
13304	31	12248.0	1355.53	87.76	110.3	-830.54	1083.33	1365.06	127.48	4.89
13336	32	12249.3	1386.94	87.4	109.65	-841.46	1113.38	1395.59	127.08	2.32
13368	32	12250.7	1418.27	87.65	108.77	-851.98	1143.57	1426.05	126.69	2.86
13399	31	12252	1448.54	87.82	108	-861.75	1172.96	1455.49	126.3	2.54
13431	32	12253.2	1479.68	87.59	107.22	-871.42	1203.44	1485.81	125.91	2.54
13462	31	12254.4	1509.73	87.99	106.13	-880.31	1233.11	1515.09	125.52	3.74
13493	31	12255.5	1539.71	88.2	106.13	-888.92	1262.87	1544.35	125.14	0.68
13525	32	12256.4	1570.57	88.3	104.72	-897.43	1293.7	1574.5	124.75	4.42
13557	32	12257.4	1601.26	88.42	103.93	-905.34	1324.69	1604.51	124.35	2.5
13588	31	12258.2	1630.87	88.31	103.28	-912.63	1354.81	1633.52	123.97	2.13
13619	31	12259.0	1660.37	89	102.36	-919.51	1385.03	1662.47	123.58	3.71
13651	32	12259.2	1690.69	90.34	101.71	-926.18	1416.33	1692.27	123.18	4.65
13682	31	12258.8	1719.93	90.83	100.96	-932.27	1446.72	1721.09	122.8	2.89
13717	35	12258.1	1752.84	91.52	100.73	-938.85	1481.09	1753.59	122.37	2.08
13748	31	12257.3	1781.91	91.52	100.14	-944.46	1511.57	1782.37	122	1.9
13779	31	12256.7	1810.87	90.83	99.44	-949.73	1542.11	1811.1	121.63	3.17
13811	32	12256.4	1840.65	90.11	99.13	-954.89	1573.69	1840.74	121.25	2.45
13843	32	12256.6	1870.38	89.28	98.79	-959.87	1605.3	1870.39	120.88	2.8
13870	27	12257.1	1895.42	88.6	98.73	-963.98	1631.98	1895.42	120.57	2.53
13910	40	12258.0	1932.5	88.6	98.73	-970.05	1671.5	1932.6	120.13	0