

30-015-38482

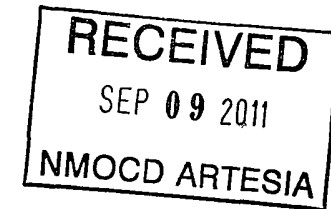


Job Number: 11-187
 Company: Devon Energy
 Lease/Well: Helios 6 Fed Com # 1H
 Location: Eddy County
 Rig Name: McVay # 10
 RKB:
 G.L. or M.S.L.:

State/Country: New Mexico
 Declination: 7.78
 Grid: -0.22
 File name: P:\SURVEYS\DEVON\11187R3.SVY
 Date/Time: 24-Jun-11 / 07:39
 Curve Name: as drilled

Inwell Inc

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .63
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead



Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00
100.00	.24	14.72	100.00	.20	.05	.20	.24
200.00	.38	8.80	200.00	.73	.16	.73	.14
300.00	.42	349.08	300.00	1.42	.14	1.42	.14
400.00	.11	25.30	399.99	1.87	.11	1.87	.34
500.00	.17	8.97	499.99	2.10	.17	2.10	.07
600.00	.19	5.97	599.99	2.41	.21	2.41	.02
700.00	.20	5.27	699.99	2.75	.25	2.75	.01
800.00	.31	341.97	799.99	3.18	.18	3.18	.15
900.00	.20	355.83	899.99	3.61	.08	3.61	.13

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
1000.00	.28	23.92	999.99	4.01	.17	4.01	.14
1100.00	.25	16.51	1099.99	4.44	.33	4.45	.05
1200.00	.38	51.39	1199.99	4.86	.65	4.87	.23
1300.00	.44	35.96	1299.99	5.38	1.14	5.39	.13
8715' MD/8678' TVD Begin Hold @ 44.99°, 332.00° Azm							
1400.00	.45	38.88	1399.98	5.99	1.61	6.01	.02
1500.00	.62	53.16	1499.98	6.62	2.29	6.65	.21
8745' MD/8699' TVD Begin Build and Turn @ 12.00°/ 100'							
1600.00	.75	60.56	1599.97	7.27	3.29	7.31	.16
1700.00	1.13	24.62	1699.96	8.49	4.27	8.53	.68
1800.00	1.08	46.56	1799.94	10.03	5.37	10.09	.42
1900.00	1.36	52.65	1899.92	11.40	6.99	11.48	.31
2000.00	1.77	58.27	1999.88	12.93	9.25	13.03	.44
2100.00	1.82	64.94	2099.83	14.42	12.00	14.55	.21
2200.00	1.91	61.01	2199.78	15.90	14.90	16.06	.16
2300.00	1.55	54.15	2299.73	17.50	17.45	17.69	.41
2400.00	1.40	47.03	2399.70	19.12	19.44	19.33	.24
2500.00	1.20	49.64	2499.67	20.63	21.14	20.86	.21
2600.00	1.20	46.35	2599.65	22.03	22.69	22.28	.07
2700.00	.99	48.41	2699.63	23.33	24.10	23.59	.21
2800.00	.91	50.21	2799.62	24.41	25.35	24.69	.09
2900.00	.71	54.47	2899.61	25.28	26.47	25.57	.21
3000.00	.67	64.05	2999.60	25.90	27.50	26.20	.12
9178' MD/8860' TVD Begin Hold @ 90.71°, 0.01° Azm							
3100.00	.66	60.21	3099.60	26.44	28.52	26.75	.05
3200.00	.58	53.73	3199.59	27.02	29.43	27.34	.11
3300.00	.37	62.35	3299.59	27.47	30.12	27.80	.22
3400.00	.21	64.48	3399.58	27.70	30.57	28.04	.16
3500.00	.25	70.67	3499.58	27.85	30.95	28.19	.05

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
3600.00	.27	61.60	3599.58	28.04	31.36	28.38	.05
3700.00	.27	72.16	3699.58	28.22	31.79	28.57	.05
3800.00	.23	92.97	3799.58	28.28	32.22	28.63	.10
3900.00	.26	84.93	3899.58	28.29	32.64	28.65	.05
4000.00	.29	91.18	3999.58	28.31	33.12	28.67	.04
4100.00	.21	87.26	4099.58	28.31	33.56	28.68	.08
4200.00	.29	22.92	4199.58	28.55	33.84	28.92	.27
4300.00	.36	31.13	4299.58	29.05	34.10	29.43	.08
4400.00	.31	43.68	4399.57	29.52	34.45	29.90	.09
4500.00	.35	68.46	4499.57	29.83	34.92	30.21	.15
4600.00	.32	86.50	4599.57	29.96	35.48	30.34	.11
4700.00	.37	97.91	4699.57	29.93	36.08	30.32	.08
4800.00	.41	90.62	4799.57	29.88	36.76	30.28	.06
4900.00	.44	90.45	4899.56	29.87	37.50	30.28	.03
5000.00	.76	88.56	4999.56	29.89	38.55	30.31	.32
5100.00	1.17	82.94	5099.54	30.03	40.22	30.47	.42
5200.00	1.43	73.93	5199.52	30.50	42.44	30.96	.33
5300.00	1.51	76.42	5299.48	31.15	44.92	31.65	.10
5400.00	1.43	76.35	5399.45	31.76	47.41	32.28	.08
5500.00	1.53	80.21	5499.42	32.28	49.94	32.83	.14
5600.00	1.55	72.54	5599.38	32.91	52.54	33.49	.21
5700.00	1.48	77.98	5699.35	33.59	55.10	34.19	.16
5800.00	1.74	69.99	5799.31	34.38	57.79	35.01	.34
5900.00	1.79	71.01	5899.26	35.40	60.69	36.07	.06
6000.00	1.77	70.27	5999.21	36.43	63.62	37.13	.03
6100.00	1.49	60.84	6099.17	37.59	66.21	38.31	.39
6200.00	1.13	50.12	6199.15	38.85	68.10	39.60	.43
6300.00	.84	53.00	6299.13	39.93	69.44	40.69	.29
6400.00	.84	26.91	6399.12	41.02	70.36	41.79	.38
6500.00	.82	355.14	6499.11	42.39	70.63	43.16	.45

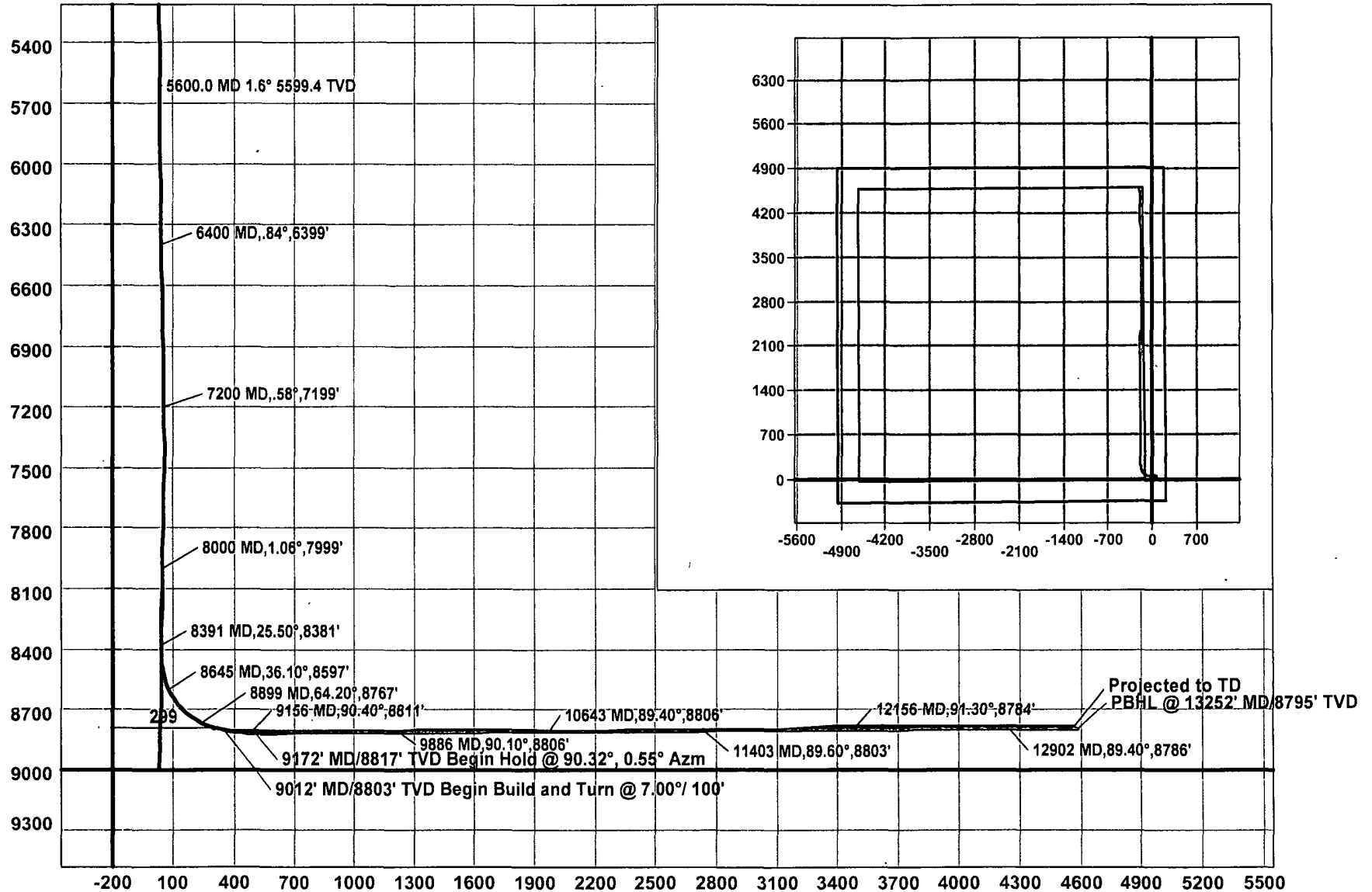
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
6600.00	.99	332.42	6599.10	43.87	70.17	44.64	.39
6700.00	1.15	321.96	6699.08	45.42	69.15	46.18	.25
6800.00	1.11	323.38	6799.06	46.99	67.96	47.74	.05
6900.00	.98	330.53	6899.05	48.51	66.96	49.25	.18
7000.00	.71	342.36	6999.03	49.85	66.35	50.57	.32
7100.00	.90	8.66	7099.02	51.22	66.28	51.94	.41
7200.00	.58	21.91	7199.02	52.46	66.59	53.19	.36
7300.00	.65	26.25	7299.01	53.44	67.03	54.17	.08
7400.00	.33	342.15	7399.01	54.22	67.19	54.96	.47
7500.00	.11	275.61	7499.01	54.51	67.01	55.24	.30
7600.00	.88	180.42	7599.00	53.75	66.90	54.48	.90
7700.00	1.18	171.03	7698.99	51.96	67.06	52.70	.34
7800.00	1.22	175.24	7798.96	49.88	67.31	50.62	.10
7900.00	1.20	174.78	7898.94	47.78	67.49	48.52	.02
8000.00	1.06	173.82	7998.92	45.82	67.69	46.56	.14
8100.00	1.02	166.42	8098.91	44.03	67.99	44.78	.14
8200.00	7.20	263.50	8198.64	42.46	61.97	43.14	7.39
8232.00	9.90	263.10	8230.28	41.90	57.24	42.53	8.44
8264.00	13.00	273.50	8261.65	41.79	50.92	42.35	11.60
8296.00	15.80	267.50	8292.64	41.82	42.97	42.29	9.90
8327.00	19.00	271.80	8322.22	41.79	33.71	42.16	11.12
8359.00	22.20	270.20	8352.17	41.98	22.45	42.22	10.15
8391.00	25.50	268.20	8381.43	41.78	9.52	41.88	10.62
8422.00	28.70	267.70	8409.03	41.27	-4.59	41.22	10.35
8454.00	30.30	271.80	8436.88	41.22	-20.34	40.99	8.05
8486.00	31.50	277.90	8464.34	42.62	-36.69	42.22	10.48
8518.00	32.20	283.40	8491.53	45.75	-53.27	45.16	9.33
8547.00	32.60	288.10	8516.02	49.97	-68.22	49.21	8.79
8581.00	33.30	294.40	8544.56	56.67	-85.43	55.73	10.28
8613.00	34.30	302.90	8571.17	65.20	-101.01	64.09	15.09

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
8645.00	36.10	311.10	8597.33	76.30	-115.69	75.03	15.79
8677.00	37.80	319.20	8622.92	89.93	-129.21	88.51	16.11
8709.00	38.40	326.60	8648.11	105.66	-141.10	104.10	14.39
8741.00	41.30	332.80	8672.69	123.36	-151.40	121.69	15.36
8772.00	45.90	337.10	8695.13	142.73	-160.41	140.96	17.65
8804.00	50.50	340.80	8716.46	164.99	-168.95	163.12	16.76
8836.00	55.20	343.70	8735.78	189.27	-176.70	187.32	16.37
8868.00	60.40	346.50	8752.83	215.43	-183.65	213.40	17.85
8899.00	64.20	350.90	8767.25	242.34	-189.00	240.25	17.55
8931.00	67.70	355.30	8780.29	271.34	-192.50	269.20	16.65
8963.00	72.30	357.90	8791.23	301.34	-194.27	299.19	16.28
8995.00	77.60	359.60	8799.54	332.23	-194.94	330.06	17.34
9027.00	81.60	.20	8805.32	363.69	-194.99	361.53	12.64
9060.00	85.50	.90	8809.02	396.48	-194.68	394.31	12.00
9092.00	89.00	1.20	8810.56	428.43	-194.09	426.27	10.98
9124.00	90.40	1.10	8810.72	460.42	-193.45	458.27	4.39
9156.00	90.40	1.10	8810.50	492.42	-192.83	490.27	.00
9219.00	90.80	.90	8809.84	555.40	-191.73	553.26	.71
9315.00	91.10	.40	8808.25	651.38	-190.65	649.25	.61
9410.00	89.60	.70	8807.67	746.37	-189.73	744.24	1.61
9505.00	89.70	.00	8808.25	841.37	-189.15	839.24	.74
9600.00	90.30	359.60	8808.25	936.37	-189.48	934.23	.76
9696.00	90.80	359.10	8807.33	1032.36	-190.57	1030.20	.74
9791.00	90.10	359.30	8806.58	1127.34	-191.90	1125.17	.77
9886.00	90.10	359.30	8806.42	1222.34	-193.06	1220.14	.00
9982.00	91.30	359.60	8805.24	1318.32	-193.98	1316.11	1.29
10077.00	89.70	.40	8804.41	1413.32	-193.98	1411.10	1.88
10172.00	90.40	.20	8804.33	1508.31	-193.48	1506.10	.77
10267.00	88.90	1.20	8804.91	1603.30	-192.32	1601.09	1.90
10363.00	90.40	1.80	8805.50	1699.26	-189.81	1697.07	1.68

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
10458.00	89.60	1.40	8805.50	1794.23	-187.16	1792.06	.94
10550.00	90.40	1.40	8805.50	1886.20	-184.91	1884.05	.87
10643.00	89.40	1.10	8805.66	1979.17	-182.88	1977.04	1.12
10739.00	89.90	1.10	8806.25	2075.15	-181.04	2073.04	.52
10834.00	90.10	.70	8806.25	2170.14	-179.55	2168.04	.47
10929.00	90.60	.70	8805.67	2265.13	-178.39	2263.03	.53
11023.00	91.10	.50	8804.27	2359.12	-177.40	2357.02	.57
11118.00	89.90	.20	8803.44	2454.11	-176.82	2452.02	1.30
11212.00	91.10	.00	8802.62	2548.10	-176.66	2546.01	1.29
11308.00	89.40	.00	8802.20	2644.10	-176.66	2642.00	1.77
11403.00	89.60	.20	8803.03	2739.10	-176.49	2736.99	.30
11498.00	89.60	.20	8803.70	2834.09	-176.16	2831.98	.00
11593.00	89.70	.40	8804.28	2929.09	-175.66	2926.98	.24
11685.00	90.60	.50	8804.04	3021.09	-174.94	3018.98	.98
11779.00	91.80	.90	8802.07	3115.06	-173.79	3112.96	1.35
11874.00	92.90	.50	8798.17	3209.97	-172.63	3207.88	1.23
11968.00	93.60	.70	8792.84	3303.81	-171.65	3301.72	.77
12063.00	92.70	.40	8787.62	3398.66	-170.74	3396.58	1.00
12156.00	91.30	.00	8784.38	3491.60	-170.42	3489.52	1.57
12250.00	90.10	359.80	8783.23	3585.59	-170.58	3583.50	1.29
12343.00	90.60	359.30	8782.66	3678.59	-171.31	3676.48	.76
12435.00	89.60	358.90	8782.50	3770.57	-172.75	3768.45	1.17
12529.00	90.10	358.80	8782.75	3864.56	-174.64	3862.40	.54
12620.00	89.40	358.40	8783.14	3955.53	-176.86	3953.34	.89
12714.00	89.70	358.10	8783.88	4049.48	-179.74	4047.26	.45
12808.00	88.90	358.10	8785.03	4143.42	-182.85	4141.16	.85
12902.00	89.40	357.90	8786.42	4237.35	-186.13	4235.05	.57
12997.00	90.10	357.90	8786.84	4332.29	-189.61	4329.94	.74
13090.00	90.80	358.10	8786.11	4425.23	-192.86	4422.84	.78
13182.00	91.50	358.10	8784.26	4517.16	-195.91	4514.73	.76

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
Projected to TD							
13235.00	91.50	358.10	8782.87	4570.11	-197.66	4567.66	.00

Company: Devon Energy
Lease/Well: Helios 6 Fed Com # 1H
Location: Eddy County
State/Country: New Mexico



11187.TXT

Job Number: 11-187

State/Country: New Mexico

Company: Devon Energy
Lease/Well: Helios 6 Fed Com # 1H
Location: Eddy County
Rig Name: McVay # 10
RKB:
G.L. or M.S.L.:

Declination: 7.78
Grid: -0.22
File name: P:\SURVEYS\DEVON\11187R3.SVY
Date/Time: 24-Jun-11 / 07:39
Curve Name: as drilled

Inwell Inc

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane .63

Vertical Section Referenced to offset from wellhead: EW =.00 Ft , NS=.00 Ft

Rectangular Coordinates Referenced to wellhead

Measured Dogleg Depth Severity FT Deg/100	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
.00	.00	.00	.00	.00	.00	.00
.00	100.00	.24	14.72	100.00	.20	.05
.24	200.00	.38	8.80	200.00	.73	.16
.14	300.00	.42	349.08	300.00	1.42	.14
.14	400.00	.11	25.30	399.99	1.87	.11
.34	500.00	.17	8.97	499.99	2.10	.17
.07	600.00	.19	5.97	599.99	2.41	.21
.02	700.00	.20	5.27	699.99	2.75	.25
.01	800.00	.31	341.97	799.99	3.18	.18
.15	900.00	.20	355.83	899.99	3.61	.08
.13	1000.00	.28	23.92	999.99	4.01	.17
.14	1100.00	.25	16.51	1099.99	4.44	.33
.05	1200.00	.38	51.39	1199.99	4.86	.65
.23	1300.00	.44	35.96	1299.99	5.38	1.14
.13						

11187.TXT

8715' MD/8678' TVD Begin Hold @ 44.99°, 332.00° Azm						
1400.00	.45	38.88	1399.98	5.99	1.61	6.01
.02						
1500.00	.62	53.16	1499.98	6.62	2.29	6.65
.21						
8745' MD/8699' TVD Begin Build and Turn @ 12.00°/ 100'						
1600.00	.75	60.56	1599.97	7.27	3.29	7.31
.16						
1700.00	1.13	24.62	1699.96	8.49	4.27	8.53
.68						
1800.00	1.08	46.56	1799.94	10.03	5.37	10.09
.42						
1900.00	1.36	52.65	1899.92	11.40	6.99	11.48
.31						
2000.00	1.77	58.27	1999.88	12.93	9.25	13.03
.44						
2100.00	1.82	64.94	2099.83	14.42	12.00	14.55
.21						
2200.00	1.91	61.01	2199.78	15.90	14.90	16.06
.16						
2300.00	1.55	54.15	2299.73	17.50	17.45	17.69
.41						

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Measured Dogleg Depth Severity FT Deg/100	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
2400.00	1.40	47.03	2399.70	19.12	19.44	19.33
.24						
2500.00	1.20	49.64	2499.67	20.63	21.14	20.86
.21						
2600.00	1.20	46.35	2599.65	22.03	22.69	22.28
.07						
2700.00	.99	48.41	2699.63	23.33	24.10	23.59
.21						
2800.00	.91	50.21	2799.62	24.41	25.35	24.69
.09						
2900.00	.71	54.47	2899.61	25.28	26.47	25.57
.21						
3000.00	.67	64.05	2999.60	25.90	27.50	26.20
.12						
9178' MD/8860' TVD Begin Hold @ 90.71°, 0.01° Azm						
3100.00	.66	60.21	3099.60	26.44	28.52	26.75
.05						
3200.00	.58	53.73	3199.59	27.02	29.43	27.34

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11187.TXT

.11	3300.00	.37	62.35	3299.59	27.47	30.12	27.80
.22							
	3400.00	.21	64.48	3399.58	27.70	30.57	28.04
.16							
	3500.00	.25	70.67	3499.58	27.85	30.95	28.19
.05							
	3600.00	.27	61.60	3599.58	28.04	31.36	28.38
.05							
	3700.00	.27	72.16	3699.58	28.22	31.79	28.57
.05							
	3800.00	.23	92.97	3799.58	28.28	32.22	28.63
.10							
	3900.00	.26	84.93	3899.58	28.29	32.64	28.65
.05							
	4000.00	.29	91.18	3999.58	28.31	33.12	28.67
.04							
	4100.00	.21	87.26	4099.58	28.31	33.56	28.68
.08							
	4200.00	.29	22.92	4199.58	28.55	33.84	28.92
.27							
	4300.00	.36	31.13	4299.58	29.05	34.10	29.43
.08							
	4400.00	.31	43.68	4399.57	29.52	34.45	29.90
.09							
	4500.00	.35	68.46	4499.57	29.83	34.92	30.21
.15							
	4600.00	.32	86.50	4599.57	29.96	35.48	30.34
.11							
	4700.00	.37	97.91	4699.57	29.93	36.08	30.32
.08							
	4800.00	.41	90.62	4799.57	29.88	36.76	30.28
.06							
	4900.00	.44	90.45	4899.56	29.87	37.50	30.28
.03							
	5000.00	.76	88.56	4999.56	29.89	38.55	30.31
.32							
	5100.00	1.17	82.94	5099.54	30.03	40.22	30.47
.42							
	5200.00	1.43	73.93	5199.52	30.50	42.44	30.96
.33							
	5300.00	1.51	76.42	5299.48	31.15	44.92	31.65
.10							
	5400.00	1.43	76.35	5399.45	31.76	47.41	32.28
.08							
	5500.00	1.53	80.21	5499.42	32.28	49.94	32.83
.14							
	5600.00	1.55	72.54	5599.38	32.91	52.54	33.49
.21							
	5700.00	1.48	77.98	5699.35	33.59	55.10	34.19
.16							
	5800.00	1.74	69.99	5799.31	34.38	57.79	35.01
.34							
	5900.00	1.79	71.01	5899.26	35.40	60.69	36.07
.06							
	6000.00	1.77	70.27	5999.21	36.43	63.62	37.13
.03							

			11187.TXT			
.39	6100.00	1.49	60.84	6099.17	37.59	66.21 38.31
.43	6200.00	1.13	50.12	6199.15	38.85	68.10 39.60
.29	6300.00	.84	53.00	6299.13	39.93	69.44 40.69

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Measured Dogleg Depth Severity FT Deg/100	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
.38	6400.00	.84	26.91	6399.12	41.02	70.36 41.79
.45	6500.00	.82	355.14	6499.11	42.39	70.63 43.16
.39	6600.00	.99	332.42	6599.10	43.87	70.17 44.64
.25	6700.00	1.15	321.96	6699.08	45.42	69.15 46.18
.05	6800.00	1.11	323.38	6799.06	46.99	67.96 47.74
.18	6900.00	.98	330.53	6899.05	48.51	66.96 49.25
.32	7000.00	.71	342.36	6999.03	49.85	66.35 50.57
.41	7100.00	.90	8.66	7099.02	51.22	66.28 51.94
.36	7200.00	.58	21.91	7199.02	52.46	66.59 53.19
.08	7300.00	.65	26.25	7299.01	53.44	67.03 54.17
.47	7400.00	.33	342.15	7399.01	54.22	67.19 54.96
.30	7500.00	.11	275.61	7499.01	54.51	67.01 55.24
.90	7600.00	.88	180.42	7599.00	53.75	66.90 54.48
.34	7700.00	1.18	171.03	7698.99	51.96	67.06 52.70
.10	7800.00	1.22	175.24	7798.96	49.88	67.31 50.62
.02	7900.00	1.20	174.78	7898.94	47.78	67.49 48.52
.14	8000.00	1.06	173.82	7998.92	45.82	67.69 46.56

			11187.TXT			
8100.00	1.02	166.42	8098.91	44.03	67.99	44.78
.14						
8200.00	7.20	263.50	8198.64	42.46	61.97	43.14
7.39						
8232.00	9.90	263.10	8230.28	41.90	57.24	42.53
8.44						
8264.00	13.00	273.50	8261.65	41.79	50.92	42.35
11.60						
8296.00	15.80	267.50	8292.64	41.82	42.97	42.29
9.90						
8327.00	19.00	271.80	8322.22	41.79	33.71	42.16
11.12						
8359.00	22.20	270.20	8352.17	41.98	22.45	42.22
10.15						
8391.00	25.50	268.20	8381.43	41.78	9.52	41.88
10.62						
8422.00	28.70	267.70	8409.03	41.27	-4.59	41.22
10.35						
8454.00	30.30	271.80	8436.88	41.22	-20.34	40.99
8.05						
8486.00	31.50	277.90	8464.34	42.62	-36.69	42.22
10.48						
8518.00	32.20	283.40	8491.53	45.75	-53.27	45.16
9.33						
8547.00	32.60	288.10	8516.02	49.97	-68.22	49.21
8.79						
8581.00	33.30	294.40	8544.56	56.67	-85.43	55.73
10.28						
8613.00	34.30	302.90	8571.17	65.20	-101.01	64.09
15.09						
8645.00	36.10	311.10	8597.33	76.30	-115.69	75.03
15.79						
8677.00	37.80	319.20	8622.92	89.93	-129.21	88.51
16.11						
8709.00	38.40	326.60	8648.11	105.66	-141.10	104.10
14.39						
8741.00	41.30	332.80	8672.69	123.36	-151.40	121.69
15.36						
8772.00	45.90	337.10	8695.13	142.73	-160.41	140.96
17.65						
8804.00	50.50	340.80	8716.46	164.99	-168.95	163.12
16.76						
8836.00	55.20	343.70	8735.78	189.27	-176.70	187.32
16.37						
8868.00	60.40	346.50	8752.83	215.43	-183.65	213.40
17.85						
8899.00	64.20	350.90	8767.25	242.34	-189.00	240.25
17.55						
8931.00	67.70	355.30	8780.29	271.34	-192.50	269.20
16.65						

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11187.TXT

Measured Dogleg Depth Severity FT Deg/100	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
8963.00	72.30	357.90	8791.23	301.34	-194.27	299.19
16.28						
8995.00	77.60	359.60	8799.54	332.23	-194.94	330.06
17.34						
9027.00	81.60	.20	8805.32	363.69	-194.99	361.53
12.64						
9060.00	85.50	.90	8809.02	396.48	-194.68	394.31
12.00						
9092.00	89.00	1.20	8810.56	428.43	-194.09	426.27
10.98						
9124.00	90.40	1.10	8810.72	460.42	-193.45	458.27
4.39						
9156.00	90.40	1.10	8810.50	492.42	-192.83	490.27
.00						
9219.00	90.80	.90	8809.84	555.40	-191.73	553.26
.71						
9315.00	91.10	.40	8808.25	651.38	-190.65	649.25
.61						
9410.00	89.60	.70	8807.67	746.37	-189.73	744.24
1.61						
9505.00	89.70	.00	8808.25	841.37	-189.15	839.24
.74						
9600.00	90.30	359.60	8808.25	936.37	-189.48	934.23
.76						
9696.00	90.80	359.10	8807.33	1032.36	-190.57	1030.20
.74						
9791.00	90.10	359.30	8806.58	1127.34	-191.90	1125.17
.77						
9886.00	90.10	359.30	8806.42	1222.34	-193.06	1220.14
.00						
9982.00	91.30	359.60	8805.24	1318.32	-193.98	1316.11
1.29						
10077.00	89.70	.40	8804.41	1413.32	-193.98	1411.10
1.88						
10172.00	90.40	.20	8804.33	1508.31	-193.48	1506.10
.77						
10267.00	88.90	1.20	8804.91	1603.30	-192.32	1601.09
1.90						
10363.00	90.40	1.80	8805.50	1699.26	-189.81	1697.07
1.68						
10458.00	89.60	1.40	8805.50	1794.23	-187.16	1792.06
.94						
10550.00	90.40	1.40	8805.50	1886.20	-184.91	1884.05
.87						
10643.00	89.40	1.10	8805.66	1979.17	-182.88	1977.04
1.12						
10739.00	89.90	1.10	8806.25	2075.15	-181.04	2073.04

11187.TXT

.52	10834.00	90.10	.70	8806.25	2170.14	-179.55	2168.04
.47							
	10929.00	90.60	.70	8805.67	2265.13	-178.39	2263.03
.53	11023.00	91.10	.50	8804.27	2359.12	-177.40	2357.02
.57	11118.00	89.90	.20	8803.44	2454.11	-176.82	2452.02
1.30	11212.00	91.10	.00	8802.62	2548.10	-176.66	2546.01
1.29	11308.00	89.40	.00	8802.20	2644.10	-176.66	2642.00
1.77							
	11403.00	89.60	.20	8803.03	2739.10	-176.49	2736.99
.30	11498.00	89.60	.20	8803.70	2834.09	-176.16	2831.98
.00	11593.00	89.70	.40	8804.28	2929.09	-175.66	2926.98
.24	11685.00	90.60	.50	8804.04	3021.09	-174.94	3018.98
.98	11779.00	91.80	.90	8802.07	3115.06	-173.79	3112.96
1.35							
	11874.00	92.90	.50	8798.17	3209.97	-172.63	3207.88
1.23	11968.00	93.60	.70	8792.84	3303.81	-171.65	3301.72
.77	12063.00	92.70	.40	8787.62	3398.66	-170.74	3396.58
1.00	12156.00	91.30	.00	8784.38	3491.60	-170.42	3489.52
1.57	12250.00	90.10	359.80	8783.23	3585.59	-170.58	3583.50
1.29							
	12343.00	90.60	359.30	8782.66	3678.59	-171.31	3676.48
.76							

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Measured Dogleg Depth Severity FT Deg/100	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
12435.00	89.60	358.90	8782.50	3770.57	-172.75	3768.45
1.17						
12529.00	90.10	358.80	8782.75	3864.56	-174.64	3862.40
.54						

			11187.TXT			
.89	12620.00	89.40	358.40	8783.14	3955.53	-176.86 3953.34
.45	12714.00	89.70	358.10	8783.88	4049.48	-179.74 4047.26
.85	12808.00	88.90	358.10	8785.03	4143.42	-182.85 4141.16
.57	12902.00	89.40	357.90	8786.42	4237.35	-186.13 4235.05
.74	12997.00	90.10	357.90	8786.84	4332.29	-189.61 4329.94
.78	13090.00	90.80	358.10	8786.11	4425.23	-192.86 4422.84
.76	13182.00	91.50	358.10	8784.26	4517.16	-195.91 4514.73
.00	Projected to TD					
	13235.00	91.50	358.10	8782.87	4570.11	-197.66 4567.66