



Job Number: 12211
 Company: Unit Petroleum
 Lease/Well: Happy Hollow 18 #1H
 Location: Reno County
 Rig Name: Unit # 331
 RKB:
 G.L. or M.S.L.:

State/Country: Kansas
 Declination: 4.74
 Grid: -0.08
 File name: P:\SURVEYS\UNIT12211R5.SVY
 Date/Time: 26-Oct-12 / 12:10
 Curve Name: as drilled

Inwell Inc

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 180.00
 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
3000.00	.29	196.18	2999.84	-14.08	17.36	14.08	.00
3008.00	.50	182.60	3007.84	-14.13	17.35	14.13	2.86
3040.00	1.40	182.30	3039.84	-14.66	17.33	14.66	2.81
3071.00	3.40	180.60	3070.81	-15.96	17.31	15.96	6.45
3103.00	5.90	180.10	3102.70	-18.56	17.29	18.56	7.81
3135.00	8.90	181.20	3134.43	-22.68	17.24	22.68	9.39
3166.00	11.60	183.30	3164.93	-28.19	17.01	28.19	8.79
3198.00	14.10	183.50	3196.13	-35.29	16.59	35.29	7.81
3229.00	16.50	183.30	3226.03	-43.46	16.10	43.46	7.74
3261.00	18.80	183.80	3256.52	-53.14	15.50	53.14	7.20
3293.00	21.20	183.70	3286.59	-64.06	14.78	64.06	7.50
3324.00	24.30	183.30	3315.17	-76.02	14.05	76.02	10.01
3356.00	28.10	182.50	3343.88	-90.13	13.35	90.13	11.93

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
3388.00	31.40	182.30	3371.66	-105.99	12.68	105.99	10.32
3419.00	34.10	181.90	3397.73	-122.75	12.07	122.75	8.74
3451.00	36.70	181.90	3423.81	-141.28	11.46	141.28	8.12
3515.00	41.40	181.80	3473.50	-181.56	10.16	181.56	7.34
3547.00	44.00	181.90	3497.01	-203.25	9.46	203.25	8.13
3578.00	46.20	182.20	3518.89	-225.19	8.67	225.19	7.13
3610.00	48.60	181.80	3540.55	-248.73	7.85	248.73	7.56
3642.00	51.50	181.30	3561.10	-273.25	7.19	273.25	9.14
3705.00	55.60	181.00	3598.52	-323.91	6.17	323.91	6.52
3737.00	56.50	180.90	3616.39	-350.45	5.73	350.45	2.82
3767.00	56.90	180.50	3632.86	-375.52	5.43	375.52	1.74
3862.00	57.70	180.40	3684.18	-455.46	4.80	455.46	.85
3895.00	58.10	179.70	3701.72	-483.42	4.78	483.42	2.17
3925.00	60.00	180.10	3717.15	-509.14	4.82	509.14	6.44
3988.00	66.70	181.40	3745.39	-565.41	4.06	565.41	10.79
4019.00	70.00	180.40	3756.82	-594.22	3.61	594.22	11.06
4051.00	72.50	180.40	3767.11	-624.52	3.40	624.52	7.81
4082.00	74.90	180.40	3775.81	-654.27	3.20	654.27	7.74
4115.00	77.70	180.20	3783.62	-686.32	3.03	686.32	8.51
4208.00	88.00	180.30	3795.18	-778.48	2.63	778.48	11.08
4334.00	91.10	179.80	3796.17	-904.46	2.52	904.46	2.49
4396.00	91.70	179.80	3794.66	-966.44	2.73	966.44	.97
4520.00	90.30	179.60	3792.50	-1090.41	3.38	1090.41	1.14
4582.00	89.80	178.60	3792.44	-1152.40	4.35	1152.40	1.80
4645.00	89.90	179.50	3792.61	-1215.39	5.40	1215.39	1.44
4705.00	90.60	179.30	3792.34	-1275.39	6.03	1275.39	1.21
4830.00	90.80	180.30	3790.82	-1400.38	6.46	1400.38	.82
4892.00	89.70	179.80	3790.55	-1462.38	6.41	1462.38	1.95
4954.00	89.80	179.70	3790.82	-1524.38	6.68	1524.38	.23
5016.00	89.70	179.50	3791.09	-1586.37	7.11	1586.37	.36
5078.00	89.40	179.50	3791.57	-1648.37	7.65	1648.37	.48
5201.00	89.70	179.50	3792.54	-1771.36	8.73	1771.36	.24
5264.00	89.50	179.50	3792.98	-1834.36	9.28	1834.36	.32
5326.00	89.60	179.40	3793.47	-1896.35	9.87	1896.35	.23

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
5390.00	89.50	179.50	3793.97	-1960.35	10.49	1960.35	.22
5516.00	88.10	178.90	3796.61	-2086.30	12.25	2086.30	1.21
5578.00	87.20	180.20	3799.15	-2148.25	12.73	2148.25	2.55
5641.00	89.80	179.50	3800.80	-2211.22	12.90	2211.22	4.27
5703.00	89.10	179.30	3801.40	-2273.21	13.55	2273.21	1.17
5763.00	89.50	180.60	3802.13	-2333.21	13.60	2333.21	2.27
5953.00	89.30	181.80	3804.12	-2523.15	9.62	2523.15	.64
6015.00	89.80	181.70	3804.60	-2585.12	7.73	2585.12	.82
6078.00	89.50	181.20	3804.99	-2648.10	6.13	2648.10	.93
6141.00	88.90	180.60	3805.87	-2711.08	5.14	2711.08	1.35
6204.00	88.50	180.80	3807.30	-2774.06	4.37	2774.06	.71
6268.00	89.70	180.40	3808.30	-2838.05	3.70	2838.05	1.98
6393.00	90.30	180.10	3808.30	-2963.05	3.16	2963.05	.54
6456.00	91.00	179.80	3807.59	-3026.04	3.21	3026.04	1.21
6582.00	90.20	180.30	3806.27	-3152.04	3.10	3152.04	.75
6645.00	90.90	179.70	3805.67	-3215.03	3.10	3215.03	1.46
6708.00	89.90	179.80	3805.23	-3278.03	3.38	3278.03	1.60
6771.00	90.40	179.80	3805.06	-3341.03	3.60	3341.03	.79
6897.00	90.90	179.60	3803.63	-3467.02	4.26	3467.02	.43
7009.00	90.40	179.00	3802.36	-3579.00	5.63	3579.00	.70
7072.00	90.10	179.50	3802.09	-3642.00	6.45	3642.00	.93
7135.00	90.60	179.40	3801.70	-3704.99	7.06	3704.99	.81
7198.00	90.00	179.40	3801.37	-3767.99	7.71	3767.99	.95
7261.00	90.50	179.80	3801.10	-3830.98	8.15	3830.98	1.02
7324.00	90.60	180.50	3800.49	-3893.98	7.99	3893.98	1.12
7388.00	89.60	180.20	3800.38	-3957.98	7.60	3957.98	1.63
7577.00	89.60	180.50	3801.70	-4146.97	6.44	4146.97	.16
7640.00	90.10	180.40	3801.86	-4209.97	5.95	4209.97	.81
7703.00	88.70	180.60	3802.52	-4272.96	5.40	4272.96	2.24
7766.00	89.50	180.50	3803.51	-4335.95	4.80	4335.95	1.28
7829.00	90.40	180.40	3803.57	-4398.95	4.30	4398.95	1.44
7891.00	89.40	180.40	3803.68	-4460.94	3.87	4460.94	1.61
7954.00	89.20	180.90	3804.45	-4523.94	3.15	4523.94	.85
8017.00	89.60	180.60	3805.11	-4586.93	2.33	4586.93	.79

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
8080.00	90.30	180.00	3805.16	-4649.92	2.00	4649.92	1.46
Projected to TD @ 8130' MD							
8130.00	90.30	180.00	3804.90	-4699.92	2.00	4699.92	.00