

30-015-38993



Job Number: 11-204
 Company: Unit Petroleum
 Lease/Well: HB 3 FED #4H
 Location: Eddy County
 Rig Name: JW Drilling # 2
 RKB:
 G.L. or M.S.L.:

State/Country: New Mexico
 Declination:
 Grid:
 File name: P:\SURVEYS\UNIT11204.SVY
 Date/Time: 01-Nov-11 / 11:17
 Curve Name: as drilled

Inwell Inc

WINSERVE SURVEY CALCULATIONS Minimum Curvature Method Vertical Section Plane 270.00 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
.00	.00	.00	.00	.00	.00	.00	.00
256.00	.20	288.00	256.00	.14	-.42	.42	.08
576.00	.80	2.00	575.99	2.54	-.88	.88	.24
755.00	.80	144.50	754.98	2.77	-.11	.11	.85
945.00	1.40	86.20	944.95	1.85	2.98	-2.98	.63
1169.00	1.10	89.20	1168.90	2.06	7.86	-7.86	.14
1357.00	1.00	82.20	1356.86	2.31	11.29	-11.29	.09
1582.00	.40	131.20	1581.85	2.06	13.82	-13.82	.35
1772.00	1.20	176.10	1771.83	-.36	14.46	-14.46	.50
1995.00	1.40	173.60	1994.77	-5.40	14.92	-14.92	.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
2183.00	.80	235.80	2182.74	-8.42	14.09	-14.09	.66
3093.00	2.80	154.20	3092.34	-32.01	18.51	-18.51	.31
3157.00	2.40	139.80	3156.27	-34.44	20.06	-20.06	1.19
3220.00	2.20	117.50	3219.22	-36.01	21.98	-21.98	1.45
3284.00	2.80	93.70	3283.16	-36.67	24.63	-24.63	1.85
3347.00	3.50	84.60	3346.07	-36.59	28.08	-28.08	1.36
3411.00	3.60	79.80	3409.94	-36.05	32.00	-32.00	.49
3474.00	3.80	74.40	3472.81	-35.14	35.96	-35.96	.64
3537.00	4.70	66.80	3535.64	-33.56	40.34	-40.34	1.68
3601.00	5.20	62.00	3599.40	-31.17	45.31	-45.31	1.01
3664.00	6.20	51.90	3662.09	-27.73	50.51	-50.51	2.24
3728.00	6.70	44.30	3725.69	-22.92	55.84	-55.84	1.54
3792.00	6.80	39.50	3789.24	-17.33	60.86	-60.86	.89
3855.00	6.80	34.20	3851.80	-11.36	65.33	-65.33	1.00
3919.00	6.40	25.70	3915.38	-5.02	69.00	-69.00	1.65
4015.00	5.80	23.40	4010.83	4.26	73.25	-73.25	.67
4110.00	6.10	24.00	4105.32	13.27	77.21	-77.21	.32
4205.00	5.90	24.40	4199.80	22.33	81.28	-81.28	.22
4301.00	6.10	23.40	4295.28	31.51	85.34	-85.34	.24
4396.00	6.20	22.50	4389.73	40.88	89.31	-89.31	.15
4491.00	6.00	23.70	4484.19	50.16	93.27	-93.27	.25
4586.00	5.80	23.00	4578.69	59.13	97.14	-97.14	.22
4681.00	5.50	23.20	4673.23	67.73	100.81	-100.81	.32
4776.00	6.50	20.30	4767.70	76.96	104.47	-104.47	1.10
4872.00	6.40	20.40	4863.10	87.07	108.22	-108.22	.10
4967.00	6.40	20.70	4957.50	96.99	111.94	-111.94	.04
5062.00	6.10	20.40	5051.94	106.67	115.57	-115.57	.32
5157.00	5.90	22.30	5146.42	115.92	119.18	-119.18	.30
5252.00	5.40	21.80	5240.96	124.59	122.69	-122.69	.53
5348.00	5.80	22.80	5336.50	133.25	126.25	-126.25	.43

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
5443.00	4.90	23.70	5431.08	141.39	129.74	-129.74	.95
5538.00	5.50	15.50	5525.69	149.49	132.59	-132.59	1.00
5634.00	6.40	16.00	5621.18	159.07	135.29	-135.29	.94
5729.00	5.80	19.20	5715.64	168.69	138.33	-138.33	.73
5825.00	5.70	21.60	5811.16	177.71	141.68	-141.68	.27
5920.00	6.10	17.90	5905.65	186.90	144.97	-144.97	.58
6015.00	5.70	19.20	6000.15	196.16	148.07	-148.07	.44
6109.00	5.80	20.20	6093.68	205.02	151.25	-151.25	.15
6201.00	5.50	21.50	6185.23	213.49	154.47	-154.47	.35
6293.00	6.40	19.80	6276.73	222.41	157.82	-157.82	1.00
6385.00	6.00	20.70	6368.19	231.74	161.26	-161.26	.45
6476.00	5.90	23.20	6458.70	240.48	164.78	-164.78	.31
6567.00	5.70	25.00	6549.24	248.88	168.53	-168.53	.30
6657.00	5.60	26.00	6638.80	256.88	172.35	-172.35	.16
6749.00	5.20	13.50	6730.40	264.96	175.29	-175.29	1.35
6840.00	4.60	31.30	6821.07	272.09	178.15	-178.15	1.79
6931.00	4.20	27.60	6911.80	278.16	181.59	-181.59	.54
7023.00	3.40	24.60	7003.60	283.63	184.28	-184.28	.90
7115.00	2.70	19.00	7095.47	288.16	186.12	-186.12	.83
7206.00	2.10	357.90	7186.39	291.85	186.76	-186.76	1.16
7298.00	2.40	337.80	7278.32	295.32	185.97	-185.97	.91
7359.00	2.00	327.30	7339.27	297.40	184.91	-184.91	.93
7421.00	1.90	321.20	7401.24	299.11	183.69	-183.69	.37
7450.00	1.70	322.40	7430.22	299.83	183.12	-183.12	.70
7480.00	3.10	284.50	7460.20	300.38	182.06	-182.06	6.82
7513.00	6.80	267.00	7493.07	300.50	179.25	-179.25	11.98
7544.00	10.80	261.10	7523.70	299.96	174.54	-174.54	13.21
7576.00	14.50	260.10	7554.92	298.80	167.63	-167.63	11.58
7607.00	18.50	260.00	7584.63	297.28	158.96	-158.96	12.90
7639.00	22.30	260.60	7614.62	295.41	147.97	-147.97	11.89

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
7670.00	26.10	262.40	7642.89	293.55	135.40	-135.40	12.49
7701.00	29.30	265.20	7670.34	292.01	121.08	-121.08	11.14
7733.00	32.60	266.20	7697.78	290.78	104.67	-104.67	10.44
7764.00	35.90	266.50	7723.40	289.67	87.26	-87.26	10.66
7796.00	39.40	265.60	7748.73	288.32	67.77	-67.77	11.07
7827.00	42.80	264.60	7772.09	286.57	47.47	-47.47	11.17
7859.00	46.20	264.60	7794.91	284.46	25.14	-25.14	10.62
7891.00	50.10	264.80	7816.26	282.26	1.41	-1.41	12.20
7922.00	54.20	265.40	7835.27	280.18	-22.97	22.97	13.31
7954.00	57.70	266.10	7853.19	278.22	-49.41	49.41	11.09
7986.00	61.80	266.80	7869.31	276.51	-76.99	76.99	12.95
8017.00	65.50	266.60	7883.06	274.91	-104.72	104.72	11.95
8049.00	69.40	266.80	7895.33	273.21	-134.22	134.22	12.20
8080.00	72.80	266.20	7905.37	271.42	-163.49	163.49	11.12
8111.00	74.70	267.30	7914.05	269.73	-193.20	193.20	7.01
8143.00	75.90	267.10	7922.17	268.22	-224.12	224.12	3.80
8175.00	77.60	268.10	7929.50	266.91	-255.24	255.24	6.12
8206.00	80.60	269.20	7935.36	266.20	-285.66	285.66	10.29
8237.00	83.90	270.30	7939.54	266.07	-316.38	316.38	11.21
8269.00	87.10	270.50	7942.05	266.29	-348.27	348.27	10.02
8300.00	89.00	270.40	7943.11	266.53	-379.25	379.25	6.14
8332.00	89.60	271.00	7943.50	266.92	-411.25	411.25	2.65
8363.00	90.40	271.80	7943.50	267.68	-442.24	442.24	3.65
8395.00	90.70	271.90	7943.19	268.71	-474.22	474.22	.99
8426.00	91.10	271.90	7942.70	269.74	-505.20	505.20	1.29
8458.00	91.40	271.80	7942.01	270.77	-537.17	537.17	.99
8490.00	91.60	271.60	7941.17	271.72	-569.15	569.15	.88
8520.00	91.70	272.40	7940.30	272.77	-599.12	599.12	2.69
8552.00	92.00	271.90	7939.27	273.97	-631.08	631.08	1.82
8583.00	91.90	272.50	7938.22	275.16	-662.04	662.04	1.96

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
8615.00	92.10	272.80	7937.10	276.64	-693.98	693.98	1.13
8647.00	91.30	271.80	7936.15	277.92	-725.94	725.94	4.00
8678.00	91.20	271.50	7935.47	278.81	-756.92	756.92	1.02
8710.00	91.10	271.50	7934.83	279.65	-788.91	788.91	.31
8741.00	90.10	271.60	7934.51	280.49	-819.89	819.89	3.24
8772.00	89.90	271.10	7934.51	281.22	-850.88	850.88	1.74
8804.00	89.80	271.00	7934.59	281.81	-882.88	882.88	.44
8835.00	89.80	270.80	7934.70	282.29	-913.87	913.87	.65
8867.00	89.70	270.70	7934.84	282.71	-945.87	945.87	.44
8930.00	90.10	270.50	7934.95	283.37	-1008.87	1008.87	.71
8961.00	90.30	269.90	7934.84	283.48	-1039.87	1039.87	2.04
8993.00	90.50	270.00	7934.62	283.45	-1071.87	1071.87	.70
9025.00	90.60	269.90	7934.31	283.42	-1103.86	1103.86	.44
9056.00	90.60	270.00	7933.99	283.40	-1134.86	1134.86	.32
9088.00	90.80	269.90	7933.59	283.37	-1166.86	1166.86	.70
9120.00	90.90	270.60	7933.12	283.51	-1198.86	1198.86	2.21
9151.00	91.20	270.70	7932.55	283.86	-1229.85	1229.85	1.02
9182.00	91.70	271.00	7931.77	284.32	-1260.84	1260.84	1.88
9214.00	91.80	270.90	7930.79	284.85	-1292.82	1292.82	.44
9245.00	91.00	270.60	7930.03	285.26	-1323.80	1323.80	2.76
9277.00	91.10	271.40	7929.45	285.81	-1355.79	1355.79	2.52
9307.00	91.20	272.10	7928.84	286.73	-1385.77	1385.77	2.36
9339.00	91.40	272.20	7928.12	287.93	-1417.74	1417.74	.70
9371.00	91.30	271.90	7927.36	289.07	-1449.71	1449.71	.99
9402.00	91.40	271.80	7926.63	290.08	-1480.69	1480.69	.46
9433.00	90.40	270.20	7926.15	290.62	-1511.68	1511.68	6.09
9465.00	90.30	270.70	7925.95	290.87	-1543.68	1543.68	1.59
9496.00	90.20	270.30	7925.82	291.14	-1574.68	1574.68	1.33
9527.00	89.90	269.20	7925.79	291.00	-1605.67	1605.67	3.68
9559.00	89.30	269.20	7926.01	290.56	-1637.67	1637.67	1.87

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
9591.00	89.50	268.80	7926.35	290.00	-1669.66	1669.66	1.40
9622.00	90.20	269.40	7926.43	289.51	-1700.66	1700.66	2.97
9653.00	90.40	268.70	7926.27	289.00	-1731.65	1731.65	2.35
9684.00	90.60	269.20	7926.00	288.43	-1762.65	1762.65	1.74
9716.00	90.50	268.50	7925.69	287.79	-1794.64	1794.64	2.21
9747.00	90.70	268.30	7925.36	286.92	-1825.63	1825.63	.91
9778.00	90.50	268.50	7925.04	286.06	-1856.61	1856.61	.91
9809.00	90.60	268.40	7924.74	285.22	-1887.60	1887.60	.46
9841.00	90.90	268.00	7924.32	284.21	-1919.58	1919.58	1.56
9872.00	90.90	268.00	7923.84	283.13	-1950.56	1950.56	.00
9903.00	91.00	268.10	7923.32	282.08	-1981.54	1981.54	.46
9935.00	91.10	268.70	7922.74	281.18	-2013.52	2013.52	1.90
9966.00	91.10	268.70	7922.14	280.48	-2044.50	2044.50	.00
9997.00	90.80	268.30	7921.63	279.67	-2075.49	2075.49	1.61
10029.00	90.80	267.70	7921.18	278.55	-2107.47	2107.47	1.87
10060.00	90.90	267.80	7920.72	277.33	-2138.44	2138.44	.46
10091.00	91.00	268.40	7920.21	276.31	-2169.42	2169.42	1.96
10123.00	91.00	268.40	7919.65	275.41	-2201.40	2201.40	.00
10154.00	91.10	268.00	7919.08	274.44	-2232.38	2232.38	1.33
10185.00	91.10	268.10	7918.48	273.38	-2263.36	2263.36	.32
10216.00	91.10	268.00	7917.89	272.33	-2294.33	2294.33	.32
10248.00	91.20	267.70	7917.25	271.13	-2326.30	2326.30	.99
10279.00	91.00	267.30	7916.65	269.78	-2357.27	2357.27	1.44
10311.00	90.80	267.50	7916.15	268.33	-2389.23	2389.23	.88
10342.00	91.00	267.30	7915.66	266.92	-2420.20	2420.20	.91
10374.00	91.10	267.10	7915.08	265.36	-2452.15	2452.15	.70
10405.00	91.20	266.70	7914.45	263.68	-2483.10	2483.10	1.33
10436.00	91.40	266.60	7913.75	261.87	-2514.04	2514.04	.72
10468.00	91.40	266.00	7912.97	259.81	-2545.96	2545.96	1.87
10500.00	91.10	265.60	7912.27	257.46	-2577.87	2577.87	1.56

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
10532.00	91.20	265.50	7911.63	254.98	-2609.77	2609.77	.44
10563.00	91.40	265.50	7910.92	252.55	-2640.66	2640.66	.65
10595.00	91.40	265.50	7910.14	250.04	-2672.55	2672.55	.00
10626.00	91.80	265.80	7909.28	247.69	-2703.45	2703.45	1.61
10657.00	92.00	266.00	7908.25	245.47	-2734.36	2734.36	.91
10688.00	91.80	265.90	7907.22	243.29	-2765.26	2765.26	.72
10719.00	91.80	265.80	7906.25	241.04	-2796.17	2796.17	.32
10751.00	91.80	265.70	7905.24	238.67	-2828.06	2828.06	.31
10782.00	91.60	267.30	7904.32	236.78	-2858.99	2858.99	5.20
10814.00	92.00	267.50	7903.32	235.33	-2890.94	2890.94	1.40
10840.00	91.70	267.70	7902.48	234.24	-2916.90	2916.90	1.39
10871.00	90.90	267.00	7901.78	232.81	-2947.86	2947.86	3.43
10903.00	91.20	267.10	7901.19	231.16	-2979.82	2979.82	.99
10934.00	91.30	267.40	7900.51	229.68	-3010.77	3010.77	1.02
10966.00	91.30	267.10	7899.79	228.14	-3042.73	3042.73	.94
10998.00	90.20	267.50	7899.37	226.63	-3074.69	3074.69	3.66
11028.00	90.30	267.40	7899.24	225.30	-3104.66	3104.66	.47
11060.00	90.20	267.20	7899.10	223.79	-3136.62	3136.62	.70
11090.00	90.50	267.80	7898.91	222.48	-3166.59	3166.59	2.24
11122.00	90.60	267.80	7898.61	221.25	-3198.57	3198.57	.31
11154.00	90.80	267.20	7898.22	219.86	-3230.53	3230.53	1.98
11185.00	90.60	267.10	7897.84	218.32	-3261.49	3261.49	.72
11216.00	90.40	266.60	7897.57	216.61	-3292.45	3292.45	1.74
11247.00	90.30	266.30	7897.38	214.69	-3323.39	3323.39	1.02
11279.00	90.40	266.10	7897.18	212.57	-3355.31	3355.31	.70
11310.00	90.50	266.00	7896.94	210.44	-3386.24	3386.24	.46
11342.00	90.60	266.00	7896.63	208.21	-3418.16	3418.16	.31
11373.00	90.60	265.70	7896.31	205.96	-3449.08	3449.08	.97
11404.00	90.90	265.20	7895.90	203.50	-3479.98	3479.98	1.88
11436.00	91.10	265.30	7895.34	200.85	-3511.86	3511.86	.70

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
11467.00	91.30	265.40	7894.69	198.34	-3542.75	3542.75	.72
Projected to TD							
11520.00	91.30	265.40	7893.49	194.09	-3595.57	3595.57	.00