

30-045-33795



Job Number: 06242
Company: Williams Production
Lease/Well: Rosa Unit 35-C
Location: San Juan County
Rig Name: ☐
RKB: ☐
G.L. or M.S.L.: 6337

State/Country: NM
Declination: ☐
Grid: ☐
File name: C:\DATA\CUST06\SURVEYS\WILLIAMS\06242.SVY
Date/Time: 05-Oct-06 / 12:54
Curve Name: As Drilled

DIST. 3

2-6-07

Inwell Inc.

Surface 2100/S 1925/W
BHL 2116/S 2253/E
Md 6202
Td 5981

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 89.58
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	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
300.00	.00	.00	300.00	.00	.00	.00	.00	.00	.00
359.00	1.50	80.50	358.99	.13	.76	.76	.77	80.50	2.54
390.00	1.50	71.20	389.98	.33	1.55	1.55	1.58	78.12	.78
421.00	2.40	75.00	420.96	.62	2.56	2.56	2.63	76.29	2.93
451.00	2.90	78.40	450.93	.94	3.91	3.91	4.02	76.48	1.75
482.00	3.10	76.80	481.89	1.29	5.49	5.50	5.64	76.80	.70
512.00	3.10	81.00	511.85	1.60	7.08	7.09	7.26	77.27	.76
542.00	3.60	94.70	541.80	1.65	8.82	8.83	8.98	79.41	3.13
573.00	3.70	95.50	572.73	1.47	10.79	10.80	10.89	82.22	.36
604.00	3.90	98.20	603.66	1.23	12.83	12.84	12.89	84.53	.87
634.00	4.90	97.40	633.58	.92	15.11	15.11	15.14	86.52	3.34
664.00	6.10	94.70	663.44	.62	17.97	17.97	17.98	88.02	4.09
695.00	7.00	91.50	694.23	.44	21.50	21.50	21.50	88.83	3.13
725.00	7.70	89.00	723.99	.42	25.33	25.34	25.34	89.04	2.56
755.00	8.40	89.90	753.69	.46	29.53	29.54	29.54	89.10	2.37
786.00	9.10	90.80	784.33	.43	34.25	34.25	34.25	89.27	2.30
817.00	9.70	90.70	814.91	.37	39.31	39.31	39.31	89.46	1.94
847.00	10.40	88.90	844.45	.39	44.55	44.55	44.55	89.50	2.56
877.00	11.30	89.80	873.92	.45	50.19	50.20	50.20	89.49	3.05
908.00	12.20	88.90	904.27	.52	56.51	56.51	56.51	89.47	2.96
938.00	13.30	89.70	933.53	.60	63.13	63.13	63.13	89.45	3.71
969.00	14.00	90.80	963.65	.57	70.44	70.44	70.44	89.54	2.41
999.00	15.20	89.90	992.68	.53	78.00	78.00	78.00	89.61	4.07
1030.00	16.20	89.50	1022.53	.57	86.39	86.39	86.39	89.62	3.24

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
1060.00	16.80	88.50	1051.29	.72	94.91	94.91	94.91	89.57	2.21
1091.00	17.40	88.50	1080.92	.96	104.02	104.03	104.03	89.47	1.94
1121.00	18.40	89.50	1109.47	1.12	113.24	113.25	113.25	89.43	3.49
1152.00	19.40	89.20	1138.80	1.23	123.28	123.29	123.29	89.43	3.24
1182.00	20.00	89.90	1167.04	1.31	133.39	133.40	133.40	89.44	2.15
1215.00	20.80	89.50	1197.97	1.37	144.90	144.90	144.90	89.46	2.46
1246.00	21.70	89.50	1226.86	1.47	156.13	156.14	156.14	89.46	2.90
1278.00	22.60	88.90	1256.50	1.64	168.20	168.20	168.20	89.44	2.90
1309.00	23.50	87.90	1285.02	1.98	180.33	180.34	180.34	89.37	3.17
1340.00	24.10	88.00	1313.39	2.43	192.83	192.84	192.84	89.28	1.94
1372.00	25.00	89.20	1342.49	2.75	206.12	206.13	206.14	89.24	3.22
1403.00	25.50	90.20	1370.53	2.82	219.34	219.36	219.36	89.26	2.12
1435.00	25.80	89.50	1399.38	2.86	233.19	233.21	233.21	89.30	1.33
1466.00	26.40	89.50	1427.22	2.97	246.83	246.85	246.85	89.31	1.94
1497.00	27.30	89.70	1454.88	3.07	260.83	260.85	260.85	89.33	2.92
1529.00	27.80	88.90	1483.25	3.25	275.63	275.65	275.65	89.32	1.94
1560.00	27.80	89.50	1510.67	3.46	290.09	290.11	290.11	89.32	.90
1590.00	28.90	89.50	1537.07	3.58	304.33	304.35	304.35	89.33	3.67
1622.00	29.30	90.20	1565.03	3.62	319.90	319.91	319.92	89.35	1.64
1653.00	29.90	89.50	1591.99	3.66	335.21	335.23	335.23	89.37	2.23
1685.00	29.80	89.00	1619.74	3.87	351.13	351.15	351.16	89.37	.84
1717.00	29.70	88.50	1647.52	4.22	367.01	367.03	367.03	89.34	.84
1748.00	29.80	88.00	1674.44	4.68	382.38	382.41	382.41	89.30	.86
1780.00	29.70	89.00	1702.22	5.10	398.26	398.28	398.29	89.27	1.58
1811.00	29.50	89.20	1729.17	5.34	413.57	413.60	413.60	89.26	.72
1843.00	29.90	88.90	1756.97	5.60	429.42	429.45	429.46	89.25	1.33
1874.00	29.80	90.80	1783.86	5.65	444.85	444.88	444.88	89.27	3.07
1906.00	30.50	90.80	1811.53	5.42	460.92	460.95	460.95	89.33	2.19
1937.00	30.30	91.50	1838.27	5.11	476.60	476.63	476.63	89.39	1.31
1969.00	30.60	90.50	1865.85	4.82	492.82	492.84	492.84	89.44	1.84
2000.00	30.70	90.40	1892.52	4.70	508.62	508.64	508.64	89.47	.36
2031.00	30.40	90.80	1919.22	4.54	524.38	524.39	524.40	89.50	1.17
2062.00	31.00	90.20	1945.87	4.40	540.20	540.22	540.22	89.53	2.17
2094.00	30.70	90.80	1973.35	4.25	556.61	556.63	556.63	89.56	1.34
2126.00	31.00	88.90	2000.82	4.30	573.02	573.03	573.03	89.57	3.19
2157.00	30.20	88.20	2027.50	4.70	588.79	588.81	588.81	89.54	2.83
2189.00	30.00	88.50	2055.19	5.16	604.83	604.86	604.86	89.51	.78
2220.00	29.90	87.50	2082.05	5.70	620.30	620.33	620.33	89.47	1.64
2252.00	29.70	88.00	2109.82	6.32	636.19	636.22	636.22	89.43	1.00
2283.00	29.60	90.40	2136.76	6.54	651.52	651.55	651.56	89.43	3.84
2314.00	28.60	91.50	2163.85	6.29	666.60	666.62	666.63	89.46	3.66
2346.00	28.20	91.00	2191.99	5.96	681.81	681.84	681.84	89.50	1.45
2377.00	28.00	90.40	2219.34	5.78	696.41	696.44	696.44	89.52	1.12
2408.00	28.10	90.50	2246.70	5.67	710.99	711.01	711.01	89.54	.36
2440.00	28.60	89.20	2274.86	5.71	726.18	726.21	726.21	89.55	2.48

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2471.00	27.80	89.80	2302.18	5.84	740.83	740.86	740.86	89.55	2.74
2503.00	27.30	90.00	2330.55	5.86	755.63	755.66	755.66	89.56	1.59
2534.00	26.90	89.20	2358.15	5.96	769.75	769.78	769.78	89.56	1.75
2566.00	26.00	91.50	2386.80	5.88	784.00	784.03	784.03	89.57	4.26
2597.00	25.50	90.50	2414.72	5.64	797.47	797.49	797.49	89.59	2.14
2629.00	25.10	87.80	2443.65	5.84	811.14	811.16	811.16	89.59	3.82
2660.00	24.20	87.20	2471.83	6.40	824.06	824.08	824.08	89.55	3.01
2692.00	23.40	86.50	2501.11	7.11	836.95	836.98	836.98	89.51	2.65
2724.00	22.80	87.50	2530.54	7.77	849.49	849.52	849.52	89.48	2.24
2755.00	21.80	88.00	2559.22	8.23	861.24	861.28	861.28	89.45	3.28
2786.00	20.80	90.00	2588.10	8.43	872.50	872.54	872.54	89.45	3.99
2818.00	20.50	89.00	2618.05	8.53	883.78	883.82	883.82	89.45	1.45
2850.00	19.70	88.90	2648.10	8.73	894.78	894.82	894.82	89.44	2.50
2881.00	18.60	88.00	2677.38	9.01	904.94	904.99	904.99	89.43	3.67
2913.00	17.40	87.40	2707.82	9.40	914.82	914.87	914.87	89.41	3.79
2944.00	16.90	87.70	2737.44	9.79	923.96	924.00	924.01	89.39	1.64
2976.00	16.20	87.00	2768.11	10.21	933.06	933.11	933.12	89.37	2.27
3007.00	15.50	87.20	2797.93	10.64	941.52	941.57	941.58	89.35	2.26
3039.00	14.50	85.00	2828.84	11.20	949.78	949.84	949.85	89.32	3.60
3070.00	14.00	86.50	2858.89	11.77	957.39	957.45	957.46	89.30	2.00
3101.00	13.10	85.50	2889.03	12.27	964.63	964.70	964.71	89.27	3.00
3133.00	12.70	83.90	2920.22	12.93	971.75	971.82	971.83	89.24	1.68
3164.00	12.60	83.40	2950.47	13.68	978.49	978.57	978.59	89.20	.48
3196.00	12.20	85.00	2981.72	14.38	985.33	985.41	985.43	89.16	1.65
3227.00	11.70	86.20	3012.05	14.87	991.73	991.81	991.84	89.14	1.80
3259.00	11.50	86.50	3043.39	15.28	998.15	998.24	998.27	89.12	.65
3291.00	11.60	91.40	3074.75	15.40	1004.55	1004.64	1004.67	89.12	3.08
3322.00	11.10	92.20	3105.14	15.21	1010.65	1010.73	1010.76	89.14	1.69
3354.00	9.80	90.70	3136.61	15.05	1016.45	1016.53	1016.56	89.15	4.15
3385.00	9.00	90.20	3167.19	15.01	1021.51	1021.60	1021.62	89.16	2.59
3417.00	9.20	90.00	3198.79	15.00	1026.57	1026.66	1026.68	89.16	.63
3448.00	9.00	89.00	3229.40	15.05	1031.48	1031.56	1031.59	89.16	.82
3479.00	8.60	87.80	3260.04	15.18	1036.22	1036.30	1036.33	89.16	1.42
3511.00	8.20	87.50	3291.69	15.37	1040.89	1040.97	1041.00	89.15	1.26
3543.00	7.60	85.50	3323.39	15.63	1045.28	1045.36	1045.39	89.14	2.06
3574.00	7.00	84.00	3354.14	15.99	1049.20	1049.29	1049.32	89.13	2.03
3606.00	6.10	83.80	3385.93	16.38	1052.83	1052.92	1052.96	89.11	2.81
3637.00	4.80	87.50	3416.79	16.62	1055.76	1055.86	1055.89	89.10	4.34
3669.00	3.90	89.70	3448.69	16.68	1058.19	1058.28	1058.32	89.10	2.86
3698.00	3.30	85.50	3477.64	16.75	1060.01	1060.10	1060.14	89.09	2.26
3730.00	2.70	92.80	3509.59	16.79	1061.68	1061.77	1061.81	89.09	2.22
5286.00	1.00	86.50	5064.73	15.82	1111.84	1111.93	1111.95	89.18	.11
6162.00	.50	86.50	5940.65	16.52	1123.28	1123.38	1123.41	89.16	.06
Projected to TD									
6202.00	.50	86.50	5980.65	16.55	1123.63	1123.72	1123.75	89.16	.00

Company: Williams Production
 Lease/Well: Rosa Unit 35-C
 Location: San Juan County
 State/Country: NM

