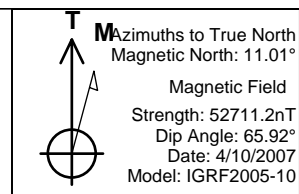
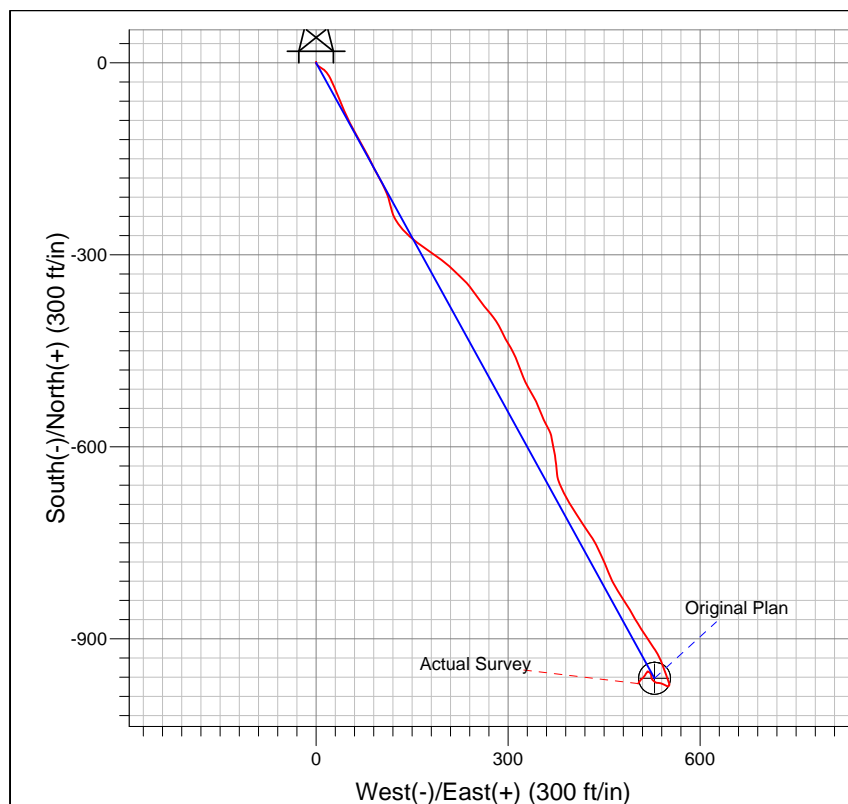
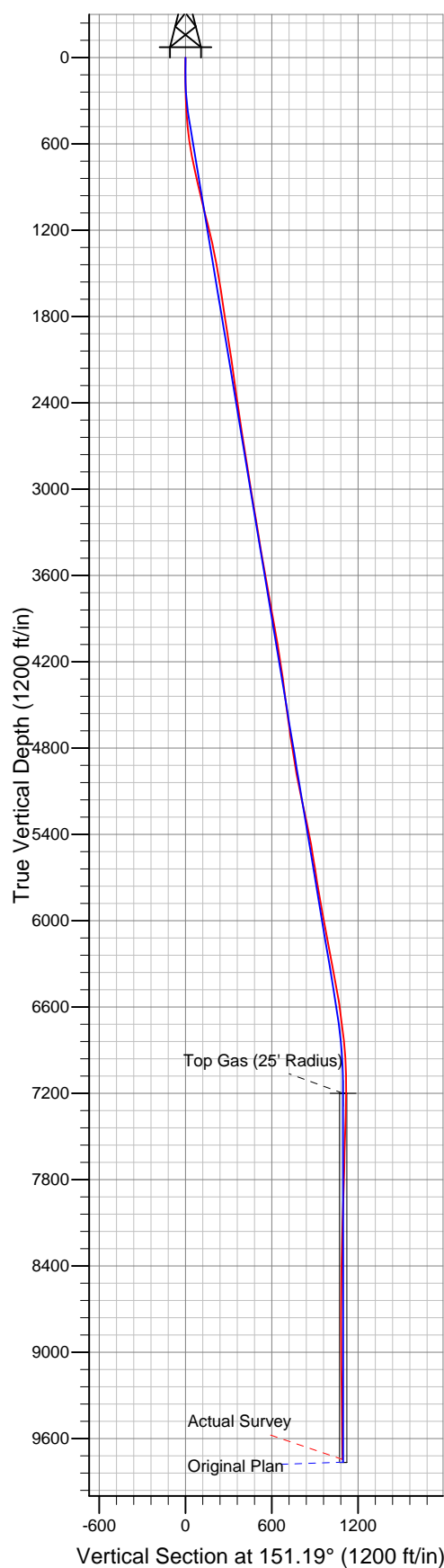




Well Name: Chevron TR 34-3-597
 Surface Location: Chevron TR 33-3-597 Pad
 NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution) Colorado Central 502
 Ground Elevation: 8562.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	669904.701221843.1	89° 38' 24.821 N	108° 15' 48.520 W		



Job Number: CO-07-DD-041-04
Company: Williams Production
Lease/Well: Chevron TR 34-3-597
Location: Sec. 3-5s-97W
Rig Name: Nabors # 614
RKB: 0
G.L. or M.S.L.: ☐

State/Country: Co/U.S.A.
Declination: 11.01
Grid: 0
File name: C:\WINSERVE\TR343597.SVY
Date/Time: 22-Apr-07 / 10:11
Curve Name: TR 34-3-597

Vaughn Guidance Systems

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 151.19
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
96.00	.91	7.40	96.00	.76	.10	-.62	.76	7.40	.95
187.00	1.73	179.42	186.99	.10	.21	.01	.23	64.26	2.89
279.00	2.20	142.45	278.93	-2.69	1.30	2.98	2.99	154.28	1.44
369.00	3.40	124.13	368.83	-5.56	4.56	7.07	7.19	140.64	1.65
462.00	5.84	123.15	461.52	-9.69	10.80	13.70	14.51	131.90	2.62
553.00	7.56	145.53	551.91	-17.16	18.07	23.74	24.92	133.52	3.40
645.00	9.65	155.96	642.87	-29.19	24.64	37.45	38.20	139.84	2.83
736.00	11.61	157.77	732.31	-44.64	31.21	54.15	54.47	145.04	2.18
796.00	12.33	157.13	791.00	-56.13	35.98	66.52	66.67	147.34	1.22
887.00	13.02	156.22	879.78	-74.46	43.89	86.40	86.44	149.48	.79
982.00	13.83	153.78	972.19	-94.44	53.22	108.40	108.41	150.60	1.04
1078.00	14.44	150.77	1065.28	-115.18	64.14	131.83	131.83	150.89	.99
1173.00	14.03	150.49	1157.37	-135.54	75.59	155.19	155.19	150.85	.44
1267.00	12.96	154.14	1248.77	-154.94	85.81	177.11	177.11	151.02	1.45
1362.00	11.44	151.38	1341.62	-172.80	94.97	197.17	197.17	151.21	1.71
1457.00	10.64	152.65	1434.86	-188.86	103.51	215.36	215.36	151.27	.88
1550.00	9.53	157.30	1526.43	-203.59	110.42	231.60	231.61	151.53	1.48
1645.00	9.04	167.42	1620.19	-218.13	115.08	246.59	246.63	152.18	1.79
1741.00	9.01	163.27	1715.00	-232.69	118.89	261.18	261.30	152.94	.68
1836.00	9.03	149.25	1808.84	-246.22	124.84	275.91	276.06	153.11	2.31
1931.00	8.45	138.78	1902.74	-257.88	133.26	290.18	290.27	152.67	1.78
2027.00	9.07	134.74	1997.62	-268.51	143.28	304.32	304.35	151.92	.91

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
2122.00	9.46	127.21	2091.39	-278.50	154.82	318.64	318.64	150.93	1.34
2216.00	8.68	125.76	2184.21	-287.32	166.72	332.10	332.19	149.87	.86
2312.00	9.14	124.17	2279.05	-295.84	178.91	345.44	345.73	148.84	.54
2407.00	9.06	127.97	2372.86	-304.68	191.05	359.03	359.62	147.91	.64
2503.00	8.78	128.03	2467.69	-313.84	202.78	372.71	373.65	147.13	.29
2598.00	9.03	133.74	2561.55	-323.46	213.88	386.49	387.78	146.53	.97
2694.00	8.73	134.02	2656.40	-333.73	224.56	400.64	402.25	146.06	.32
2790.00	9.48	137.15	2751.19	-344.59	235.18	415.27	417.19	145.69	.94
2885.00	9.62	143.16	2844.88	-356.68	245.26	430.72	432.86	145.49	1.06
2992.00	9.64	145.47	2950.37	-371.22	255.69	448.49	450.76	145.44	.36
3065.00	9.26	140.42	3022.38	-380.78	262.90	460.34	462.72	145.38	1.25
3160.00	8.66	138.85	3116.22	-392.06	272.48	474.84	477.44	145.20	.68
3255.00	9.81	147.41	3209.99	-404.26	281.54	489.90	492.64	145.15	1.88
3351.00	9.30	155.29	3304.66	-418.20	289.19	505.80	508.45	145.34	1.46
3446.00	9.62	151.57	3398.37	-432.15	296.18	521.39	523.91	145.57	.73
3542.00	9.52	148.17	3493.04	-445.95	304.19	537.34	539.82	145.70	.60
3637.00	10.65	157.55	3586.57	-460.74	311.68	553.91	556.26	145.92	2.09
3732.00	9.75	159.03	3680.07	-476.37	317.91	570.61	572.71	146.28	.99
3828.00	9.96	158.87	3774.66	-491.70	323.82	586.89	588.75	146.63	.22
3922.00	11.20	150.39	3867.06	-507.22	331.26	604.07	605.81	146.85	2.11
4016.00	10.18	149.91	3959.43	-522.35	339.93	621.51	623.22	146.94	1.09
4111.00	9.39	158.21	4053.05	-536.81	347.02	637.59	639.21	147.12	1.70
4207.00	9.09	158.02	4147.81	-551.11	352.76	652.90	654.34	147.38	.31
4302.00	7.84	152.08	4241.77	-563.80	358.61	666.83	668.18	147.54	1.60
4397.00	7.24	153.39	4335.95	-574.87	364.32	679.29	680.60	147.64	.66
4493.00	7.93	170.29	4431.12	-586.81	368.15	691.59	692.73	147.90	2.42
4587.00	8.75	168.22	4524.13	-600.20	370.70	704.55	705.45	148.30	.93
4683.00	7.94	170.78	4619.11	-613.89	373.26	717.78	718.46	148.70	.93
4778.00	9.02	173.80	4713.07	-627.78	375.11	730.84	731.31	149.14	1.23
4873.00	9.86	175.26	4806.78	-643.29	376.59	745.14	745.41	149.65	.92
4968.00	9.84	155.02	4900.41	-658.75	380.69	760.67	760.84	149.98	3.63
5063.00	9.34	153.81	4994.08	-673.03	387.52	776.47	776.62	150.07	.57
5158.00	11.70	148.78	5087.48	-688.19	395.92	793.80	793.95	150.09	2.66
5253.00	12.77	147.30	5180.32	-705.26	406.58	813.90	814.06	150.04	1.17
5349.00	12.09	146.70	5274.07	-722.59	417.83	834.51	834.70	149.96	.72
5442.00	11.56	145.21	5365.10	-738.39	428.50	853.49	853.71	149.87	.66
5537.00	10.44	154.15	5458.36	-753.95	437.68	871.55	871.78	149.86	2.14
5633.00	9.36	153.59	5552.93	-768.77	444.95	888.04	888.25	149.94	1.13
5728.00	9.22	157.11	5646.68	-782.70	451.34	903.33	903.51	150.03	.62
5824.00	8.72	158.86	5741.51	-796.57	456.96	918.19	918.34	150.16	.59
5920.00	9.16	154.39	5836.34	-810.25	462.89	933.03	933.15	150.26	.86
6014.00	11.37	146.73	5928.83	-824.75	471.21	949.74	949.86	150.26	2.76
6110.00	10.74	148.25	6023.05	-840.27	481.10	968.11	968.25	150.21	.72

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
6206.00	10.30	148.51	6117.44	-855.19	490.29	985.61	985.77	150.17	.46
6301.00	10.04	151.11	6210.95	-869.68	498.73	1002.38	1002.54	150.17	.56
6397.00	11.10	146.04	6305.32	-884.68	507.94	1019.95	1020.12	150.14	1.47
6492.00	10.82	147.24	6398.59	-899.76	517.87	1037.95	1038.15	150.08	.38
6588.00	10.28	146.43	6492.96	-914.47	527.48	1055.48	1055.70	150.02	.58
6683.00	8.29	151.43	6586.72	-927.55	535.45	1070.78	1071.01	150.00	2.26
6779.00	7.10	159.80	6681.85	-939.20	540.81	1083.57	1083.77	150.07	1.70
6874.00	7.14	163.30	6776.12	-950.37	544.53	1095.14	1095.31	150.19	.46
6969.00	5.68	155.47	6870.53	-960.30	548.18	1105.61	1105.74	150.28	1.79
7064.00	3.09	161.13	6965.24	-967.00	550.96	1112.82	1112.94	150.33	2.76
7160.00	2.27	172.90	7061.13	-971.33	552.03	1117.13	1117.24	150.39	1.02
7255.00	1.73	229.78	7156.08	-974.13	551.17	1119.16	1119.25	150.50	2.07
7351.00	2.01	295.06	7252.04	-974.35	548.54	1118.09	1118.15	150.62	2.12
7447.00	2.35	300.29	7347.97	-972.64	545.31	1115.04	1115.08	150.72	.41
7542.00	2.22	286.82	7442.90	-971.13	541.87	1112.06	1112.08	150.84	.58
7637.00	1.99	288.52	7537.83	-970.07	538.54	1109.53	1109.54	150.96	.25
7732.00	2.05	275.33	7632.78	-969.39	535.29	1107.36	1107.36	151.09	.49
7827.00	1.88	279.78	7727.72	-968.97	532.06	1105.44	1105.44	151.23	.24
7923.00	2.47	313.84	7823.65	-967.27	529.02	1102.48	1102.48	151.33	1.45
8018.00	2.39	311.94	7918.57	-964.53	526.07	1098.65	1098.66	151.39	.12
8113.00	1.66	340.49	8013.51	-961.91	524.13	1095.43	1095.43	151.41	1.29
8205.00	1.42	6.48	8105.48	-959.52	523.82	1093.18	1093.19	151.37	.79
8301.00	1.42	348.59	8201.45	-957.17	523.71	1091.07	1091.08	151.31	.46
8395.00	1.13	333.14	8295.43	-955.20	523.07	1089.04	1089.04	151.29	.48
8490.00	1.13	319.63	8390.41	-953.65	522.04	1087.18	1087.19	151.30	.28
8585.00	1.11	302.62	8485.39	-952.44	520.65	1085.46	1085.46	151.34	.35
8692.00	.91	294.94	8592.37	-951.52	519.01	1083.86	1083.87	151.39	.23
8788.00	.27	243.02	8688.37	-951.31	518.12	1083.24	1083.25	151.43	.81
8884.00	.42	213.28	8784.37	-951.70	517.72	1083.40	1083.41	151.45	.24
8980.00	.54	205.64	8880.36	-952.40	517.33	1083.82	1083.84	151.49	.14
9075.00	.91	214.60	8975.36	-953.43	516.71	1084.42	1084.44	151.54	.41
9171.00	1.22	218.84	9071.34	-954.85	515.64	1085.15	1085.18	151.63	.33
9266.00	1.45	211.87	9166.31	-956.66	514.37	1086.13	1086.17	151.73	.30
9362.00	1.81	216.88	9262.28	-958.91	512.82	1087.34	1087.42	151.86	.40
9456.00	2.33	224.49	9356.21	-961.46	510.59	1088.51	1088.62	152.03	.62
9551.00	2.16	227.08	9451.14	-964.05	507.92	1089.50	1089.67	152.22	.21
9646.00	1.36	213.10	9546.10	-966.22	506.00	1090.46	1090.69	152.36	.95
Projected To TD									
9846.00	1.36	213.10	9746.04	-970.19	503.40	1092.70	1093.02	152.58	.00