

Job Number: 33D0710103  
Company: SAMSON  
Lease/Well: S. UTE 32-7-9 #6  
Location: SEC 09-T32N-R7W  
Rig Name: HP 292  
RKB: 6258  
G.L. or M.S.L.: 6242

State/Country: COLORADO/ USA  
Declination: 9.97  
Grid: 1.30  
File name: D:\WINSERVE\SUTE#6.SVY  
Date/Time: 16-Jul-10 / 06:28  
Curve Name: WORK

## Scientific Drilling

WINSERVE SURVEY CALCULATIONS  
*Minimum Curvature Method*  
*Vertical Section Plane 106.45*  
*Vertical Section Referenced to Wellhead*  
*Rectangular Coordinates Referenced to Wellhead*

<i>Measured Depth FT</i>	<i>Incl Angle Deg</i>	<i>Drift Direction Deg</i>	<i>True Vertical Depth</i>	<i>N-S FT</i>	<i>E-W FT</i>	<i>Vertical Section FT</i>	<i>C L O S U R E Distance FT</i>	<i>Direction Deg</i>	<i>Dogleg Severity Deg/100</i>
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
86.00	.59	215.28	86.00	-.36	-.26	-.14	.44	215.28	.69
123.00	.71	146.42	123.00	-.71	-.24	-.03	.75	198.65	2.00
159.00	1.41	142.36	158.99	-1.24	.15	.50	1.25	172.91	1.95
195.00	2.63	122.89	194.97	-2.04	1.12	1.65	2.33	151.30	3.84
231.00	4.21	117.32	230.90	-3.10	2.99	3.74	4.30	136.06	4.48
268.00	6.30	115.68	267.74	-4.60	6.02	7.08	7.58	127.38	5.66
322.00	7.92	112.27	321.33	-7.30	12.14	13.71	14.16	121.01	3.10
392.00	9.44	107.85	390.53	-10.88	22.06	24.24	24.60	116.26	2.37
452.00	9.25	103.34	449.73	-13.50	31.44	33.98	34.22	113.24	1.26
513.00	10.67	103.82	509.81	-15.98	41.69	44.51	44.65	110.98	2.33
574.00	13.13	110.81	569.50	-19.80	53.66	57.07	57.19	110.25	4.67
635.00	14.26	111.54	628.76	-25.02	67.12	71.46	71.63	110.44	1.87
695.00	16.50	108.93	686.61	-30.49	82.06	87.33	87.54	110.39	3.91
759.00	17.89	108.70	747.75	-36.59	99.97	106.24	106.45	110.11	2.17
822.00	19.39	109.23	807.44	-43.14	119.01	126.35	126.59	109.93	2.40
886.00	20.93	108.64	867.52	-50.29	139.87	148.39	148.64	109.78	2.43
949.00	22.80	105.94	925.99	-57.24	162.27	171.84	172.08	109.43	3.37
1013.00	24.25	105.37	984.66	-64.13	186.87	197.38	197.57	108.94	2.29
1077.00	26.25	105.76	1042.55	-71.46	213.17	224.68	224.83	108.53	3.14
1141.00	28.47	105.25	1099.38	-79.32	241.51	254.09	254.20	108.18	3.49
1205.00	30.58	105.77	1155.07	-87.76	271.90	285.62	285.71	107.89	3.32
1268.00	32.83	105.67	1208.66	-96.73	303.77	318.72	318.80	107.66	3.57
1332.00	33.75	106.39	1262.16	-106.43	337.53	353.85	353.91	107.50	1.56
1396.00	33.65	105.69	1315.41	-116.24	371.66	389.36	389.41	107.37	.63

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 Distance FT	Direction Deg	Dogleg Severity Deg/100
1459.00	33.02	105.29	1368.04	-125.49	405.02	423.98	424.01	107.21	1.06
1523.00	32.94	104.34	1421.73	-134.40	438.70	458.80	458.82	107.03	.82
1585.00	33.23	103.36	1473.68	-142.50	471.56	492.61	492.62	106.81	.98
1649.00	33.28	103.85	1527.20	-150.75	505.67	527.66	527.66	106.60	.43
1713.00	32.46	103.65	1580.95	-159.01	539.41	562.36	562.36	106.42	1.29
1777.00	32.61	103.56	1634.91	-167.11	572.86	596.73	596.74	106.26	.25
1841.00	34.19	105.38	1688.34	-175.92	606.97	631.94	631.95	106.16	2.92
1904.00	34.48	105.23	1740.36	-185.30	641.24	667.47	667.48	106.12	.48
1968.00	33.88	105.01	1793.30	-194.68	675.95	703.41	703.43	106.07	.96
2032.00	32.68	105.19	1846.81	-203.82	709.86	738.52	738.54	106.02	1.88
2096.00	31.98	106.13	1900.89	-213.06	742.81	772.74	772.76	106.00	1.35
2160.00	34.85	106.83	1954.30	-223.07	776.60	807.98	808.00	106.03	4.52
2224.00	35.29	107.43	2006.68	-233.90	811.74	844.75	844.77	106.07	.87
2288.00	34.64	108.09	2059.13	-245.08	846.67	881.42	881.43	106.14	1.18
2351.00	33.79	108.07	2111.23	-256.08	880.35	916.83	916.84	106.22	1.35
2415.00	33.06	107.97	2164.64	-266.98	913.87	952.07	952.07	106.29	1.14
2479.00	31.97	108.06	2218.61	-277.62	946.59	986.46	986.46	106.35	1.70
2542.00	31.79	107.94	2272.11	-287.90	978.23	1019.72	1019.72	106.40	.30
2606.00	32.90	106.74	2326.17	-298.10	1010.92	1053.95	1053.95	106.43	2.00
2668.00	32.65	105.75	2378.30	-307.49	1043.14	1087.51	1087.51	106.42	.95
2732.00	31.94	105.46	2432.40	-316.69	1076.07	1121.70	1121.70	106.40	1.14
2796.00	31.35	105.86	2486.89	-325.75	1108.40	1155.28	1155.28	106.38	.98
2859.00	32.89	107.33	2540.24	-335.33	1140.50	1188.77	1188.77	106.38	2.74
2923.00	30.70	107.13	2594.64	-345.32	1172.70	1222.49	1222.49	106.41	3.43
2986.00	28.00	107.11	2649.55	-354.41	1202.21	1253.36	1253.36	106.43	4.29
3050.00	28.38	102.38	2705.96	-362.09	1231.43	1283.56	1283.56	106.39	3.54
3114.00	29.98	101.80	2761.84	-368.62	1261.94	1314.67	1314.68	106.28	2.54
3178.00	28.27	106.28	2817.75	-376.14	1292.15	1345.77	1345.78	106.23	4.33
3241.00	28.45	102.33	2873.19	-383.53	1321.13	1375.66	1375.67	106.19	2.99
3305.00	29.88	99.33	2929.08	-389.37	1351.76	1406.69	1406.72	106.07	3.19
3369.00	30.16	99.98	2984.50	-394.74	1383.32	1438.48	1438.54	105.93	.67
3433.00	28.33	99.42	3040.34	-400.01	1414.14	1469.53	1469.63	105.79	2.89
3497.00	28.56	101.92	3096.61	-405.66	1444.09	1499.85	1499.99	105.69	1.89
3586.00	27.61	103.78	3175.13	-414.96	1484.94	1541.66	1541.83	105.61	1.45
<b>Projection to Bit</b>									
3640.00	27.61	103.78	3222.98	-420.93	1509.24	1566.66	1566.84	105.58	.00