

Job Number: CA141782

State/Country: Colorado

Company: Craigs Energy

Declination: 8.4

Lease/Well: Schmunk

Grid:

Location: Eaton

File name: C:\USERS\2CE037~1\DESKTOP\CA141782.SVY

Rig Name: Craigs 7

Date/Time: 05-Sep-14 / 16:53

RKB:

Curve Name: Schmunk EF-31-368HC

G.L. or M.S.L.:

## Crescent Drictional

## WINSERVE SURVEY CALCULATIONS

*Minimum Curvature Method**Vertical Section Plane .00**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
123.00	.10	353.70	123.00	.11	-.01	.11	.11	353.71	.08
213.00	.30	24.50	213.00	.40	.08	.40	.41	10.96	.24
303.00	.10	14.90	303.00	.69	.20	.69	.72	15.81	.22
393.00	.40	46.60	393.00	.98	.44	.98	1.08	24.33	.35
483.00	.40	282.80	483.00	1.27	.37	1.27	1.32	16.10	.78
573.00	.80	262.30	572.99	1.25	-.56	1.25	1.37	335.77	.50
663.00	.40	272.20	662.99	1.18	-1.50	1.18	1.91	308.19	.46
753.00	.30	286.60	752.98	1.26	-2.04	1.26	2.40	301.69	.15
843.00	.80	186.80	842.98	.70	-2.34	.70	2.44	286.72	1.00
933.00	.50	172.00	932.98	-.31	-2.36	-.31	2.38	262.52	.38
1013.00	.50	165.60	1012.97	-.99	-2.22	-.99	2.44	245.93	.07
<b>Projection to bit</b>									
1070.00	.50	165.60	1069.97	-1.48	-2.10	-1.48	2.57	234.91	.00