

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: 06-Sep-14 / 11:56

RKB:

Curve Name: Schmunk EF-31-369HN

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	.60	277.10	123.00	.08	-.64	.08	.64	277.10	.49
213.00	.60	320.90	212.99	.50	-1.40	.50	1.49	289.73	.50
303.00	.10	29.40	302.99	.94	-1.66	.94	1.91	299.42	.63
393.00	.10	184.40	392.99	.93	-1.63	.93	1.88	299.65	.22
483.00	.30	138.50	482.99	.67	-1.48	.67	1.63	294.45	.27
573.00	.70	137.50	572.99	.09	-.95	.09	.96	275.47	.44
663.00	.50	168.20	662.98	-.70	-.50	-.70	.86	215.63	.41
753.00	.40	126.30	752.98	-1.27	-.17	-1.27	1.28	187.50	.37
843.00	.40	97.60	842.98	-1.50	.40	-1.50	1.55	165.13	.22
933.00	.40	98.70	932.98	-1.59	1.02	-1.59	1.88	147.26	.01
1013.00	.60	86.80	1012.97	-1.60	1.71	-1.60	2.35	133.11	.28
<b>Projection to bit</b>									
1070.00	.60	86.80	1069.97	-1.57	2.31	-1.57	2.79	124.22	.00