



Precision

Survey Report

Client	Bighorn Directional Inc.	MWD Operator	N LaRubbio/ S Loggie
Well Name	Snow King 9-32	Rig Name	Extreme 11
Location	Genoa, CO	End Date	01/05/2015
Start Date	12/27/2015	Proposed Direction	0.0

SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS %/100'
TIE IN	283	0.80	281.10	282.99	0.01	0.63	271.44	3.03
1	401	0.3	2.0	400.99	0.48	-0.17	0.48	0.7
2	493	0.3	21.2	492.98	0.94	-0.07	0.94	0.1
3	584	0.1	62.2	583.98	1.20	0.08	1.20	0.3
4	676	0.2	243.7	675.98	1.17	0.01	1.17	0.3
5	770	0.2	279.4	769.98	1.12	-0.30	1.12	0.1
6	885	0.2	270.8	884.98	1.16	-0.70	1.16	0.0
7	953	0.2	319.3	952.98	1.25	-0.89	1.25	0.2
8	1045	0.2	271.3	1044.98	1.37	-1.16	1.37	0.2
9	1130	0.1	4.1	1129.98	1.45	-1.30	1.45	0.3
10	1215	0.1	268.5	1214.98	1.52	-1.37	1.52	0.2
11	1386	0.3	150.2	1385.98	1.13	-1.30	1.13	0.2
12	1471	0.1	172.2	1470.98	0.87	-1.18	0.87	0.2
13	1556	0.2	144.2	1555.98	0.67	-1.08	0.67	0.1
14	1642	0.1	259.3	1641.98	0.54	-1.06	0.54	0.3
15	1727	0.2	223.2	1726.98	0.41	-1.24	0.41	0.2
16	1812	0.2	90.9	1811.98	0.30	-1.19	0.30	0.4
17	1898	0.2	171.3	1897.98	0.15	-1.02	0.15	0.3
18	1983	0.2	233.9	1982.98	-0.08	-1.12	-0.08	0.2
19	2069	0.3	204.7	2068.98	-0.37	-1.33	-0.37	0.2
20	2154	0.2	168.9	2153.98	-0.72	-1.40	-0.72	0.2
21	2241	0.2	180.9	2240.98	-1.02	-1.37	-1.02	0.0
22	2327	0.3	175.7	2326.98	-1.40	-1.36	-1.40	0.1
23	2412	0.5	225.4	2411.97	-1.88	-1.60	-1.88	0.4
24	2492	0.4	210.1	2491.97	-2.37	-1.99	-2.37	0.2
25	2583	0.5	199.8	2582.97	-3.02	-2.29	-3.02	0.1
26	2668	0.6	220.1	2667.96	-3.70	-2.70	-3.70	0.3
27	2754	0.7	199.1	2753.96	-4.55	-3.16	-4.55	0.3
28	2840	0.7	214.3	2839.95	-5.48	-3.63	-5.48	0.2
29	2925	1.0	218.1	2924.94	-6.49	-4.38	-6.49	0.4
30	3011	1.1	205.4	3010.93	-7.82	-5.19	-7.82	0.3
31	3090	1.3	226.1	3089.91	-9.13	-6.17	-9.13	0.6
32	3139	1.1	226.0	3138.90	-9.84	-6.90	-9.84	0.4
33	3224	1.0	228.6	3223.89	-10.90	-8.05	-10.90	0.1
34	3309	0.8	228.1	3308.88	-11.79	-9.05	-11.79	0.2
35	3395	0.9	215.7	3394.87	-12.74	-9.89	-12.74	0.2
36	3480	1.0	207.5	3479.85	-13.94	-10.62	-13.94	0.2
37	3565	0.7	204.3	3564.85	-15.07	-11.17	-15.07	0.4
38	3651	0.7	220.1	3650.84	-15.95	-11.73	-15.95	0.2
39	3736	0.7	216.4	3735.83	-16.76	-12.37	-16.76	0.1
40	3821	0.6	231.4	3820.83	-17.46	-13.03	-17.46	0.2
41	3907	0.4	226.6	3906.82	-17.95	-13.60	-17.95	0.2
42	3992	0.6	213.1	3991.82	-18.52	-14.06	-18.52	0.3
43	4077	0.6	213.1	4076.82	-19.27	-14.54	-19.27	0.0
44	4163	0.4	214.0	4162.81	-19.89	-14.96	-19.89	0.2
45	4248	0.4	206.4	4247.81	-20.41	-15.25	-20.41	0.1
46	4334	0.4	210.1	4333.81	-20.94	-15.54	-20.94	0.0
47	4419	0.5	199.8	4418.81	-21.54	-15.81	-21.54	0.2
48	4505	0.5	220.1	4504.80	-22.18	-16.18	-22.18	0.2
49	4590	0.7	199.1	4589.80	-22.96	-16.59	-22.96	0.3
50	4676	0.7	230.2	4675.79	-23.79	-17.17	-23.79	0.4
51	4761	0.1	245.1	4760.79	-24.15	-17.63	-24.15	0.7
52	4846	0.4	305.9	4845.79	-24.01	-17.94	-24.01	0.4
53	4932	0.4	267.9	4931.79	-23.84	-18.48	-23.84	0.3



Precision

Survey Report

Client	Bighorn Directional Inc.	MWD Operator	N LaRubbio/ S Loggie
Well Name	Snow King 9-32	Rig Name	Extreme 11
Location	Genoa, CO	End Date	01/05/2015
Start Date	12/27/2015	Proposed Direction	0.0

SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS °/100'
54	5017	0.4	274.3	5016.78	-23.83	-19.08	-23.83	0.1
55	5102	0.4	263.3	5101.78	-23.84	-19.67	-23.84	0.1
56	5188	0.5	268.9	5187.78	-23.89	-20.34	-23.89	0.1
57	5273	0.4	212.3	5272.78	-24.14	-20.87	-24.14	0.5
58	5358	0.4	203.6	5357.78	-24.67	-21.15	-24.67	0.1
59	5444	0.5	151.3	5443.77	-25.27	-21.09	-25.27	0.5
60	5529	1.1	147.7	5528.76	-26.29	-20.47	-26.29	0.7
61	5614	1.8	133.7	5613.74	-27.90	-19.07	-27.90	0.9
62	5699	1.5	132.4	5698.70	-29.57	-17.28	-29.57	0.4
63	5725	0.9	118.8	5724.70	-29.90	-16.85	-29.90	2.5
64	5870	0.7	111.0	5869.68	-30.76	-15.03	-30.76	0.2
65	5956	0.8	116.5	5955.67	-31.22	-14.00	-31.22	0.1
66	6041	0.7	122.8	6040.67	-31.77	-13.03	-31.77	0.2
67	6127	0.6	148.4	6126.66	-32.44	-12.36	-32.44	0.4
68	6212	0.4	134.5	6211.66	-33.02	-11.91	-33.02	0.3
69	6297	0.6	159.7	6296.66	-33.65	-11.55	-33.65	0.3
70	6383	0.5	164.2	6382.65	-34.43	-11.29	-34.43	0.1
71	6468	0.6	149.9	6467.65	-35.17	-10.96	-35.17	0.2
72	6555	0.5	173.2	6554.64	-35.94	-10.69	-35.94	0.3
73	6641	0.7	177.6	6640.64	-36.84	-10.62	-36.84	0.2
74	6726	0.5	185.3	6725.63	-37.73	-10.64	-37.73	0.3
75	6811	0.5	180.4	6810.63	-38.47	-10.67	-38.47	0.1
76	6896	0.5	151.5	6895.63	-39.17	-10.50	-39.17	0.3
77	6982	0.4	171.9	6981.63	-39.79	-10.28	-39.79	0.2
78	7067	0.6	169.0	7066.62	-40.52	-10.15	-40.52	0.2
79	7152	0.4	186.0	7151.62	-41.26	-10.10	-41.26	0.3
80	7237	0.6	171.8	7236.62	-41.99	-10.06	-41.99	0.3
81	7323	0.4	178.3	7322.61	-42.74	-9.99	-42.74	0.2
82	7408	0.5	175.1	7407.61	-43.40	-9.95	-43.40	0.1
83	7537	0.6	129.8	7536.60	-44.40	-9.38	-44.40	0.3
84	7623	0.5	108.0	7622.60	-44.80	-8.68	-44.80	0.3
85	7708	0.5	106.4	7707.60	-45.02	-7.97	-45.02	0.0
86	7793	0.9	112.6	7792.59	-45.38	-7.00	-45.38	0.5
87	7879	0.9	106.2	7878.58	-45.83	-5.73	-45.83	0.1
88	7964	0.8	103.9	7963.57	-46.16	-4.51	-46.16	0.1
89	8089	0.8	109.7	8088.56	-46.66	-2.84	-46.66	0.1
90	8135	0.8	115.0	8134.55	-46.91	-2.25	-46.91	0.2
91	8220	0.6	89.4	8219.55	-47.15	-1.27	-47.15	0.4
92	8305	0.4	83.7	8304.54	-47.11	-0.53	-47.11	0.2
93	8390	0.5	112.7	8389.54	-47.23	0.11	-47.23	0.3
94	8460	0.6	107.3	8459.54	-47.45	0.74	-47.45	0.2
PTB	8510	0.6	107.3	8509.54	-47.61	1.24	-47.61	0.0
96								
97								
98								
99								
100								
101								
102								
103								
104								
105								
106								
107								