

<b>Co:</b> NATIVE NAVIGATION	<b>Units:</b> Feet, °, %100ft	<b>VS Az:</b> 339.51	<b>Method:</b> Minimum Curvature
<b>Drillers:</b> WARDELL / SELLERS	<b>Elevation:</b>	<b>Map System:</b> Nad 83, CO Central	
<b>Well Name:</b> KING 12-28	<b>Northing:</b>	<b>Latitude:</b>	
<b>Location:</b> FLORENCE, COLORADO	<b>Easting:</b>	<b>Longitude:</b>	

## King 12-28 Surveys

No.	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
1	11.00	0.00	0.00	0.00	11.00	0.00	0.00	0.00				Tie in to GE 5357'
2	36.00	25.00	0.70	302.82	36.00	0.12	0.08	-0.13	2.80	-228.72	2.80	North Seeking Gyro
3	61.00	25.00	0.75	315.46	61.00	0.39	0.28	-0.37	0.20	50.56	0.67	North Seeking Gyro
4	86.00	25.00	0.77	317.29	86.00	0.70	0.52	-0.60	0.08	7.32	0.13	North Seeking Gyro
5	111.00	25.00	0.72	322.20	110.99	1.00	0.77	-0.81	-0.20	19.64	0.32	North Seeking Gyro
6	136.00	25.00	0.47	324.70	135.99	1.25	0.98	-0.97	-1.00	10.00	1.01	North Seeking Gyro
7	161.00	25.00	0.50	335.93	160.99	1.46	1.16	-1.07	0.12	44.92	0.40	North Seeking Gyro
8	186.00	25.00	0.42	328.83	185.99	1.66	1.34	-1.16	-0.32	-28.40	0.39	North Seeking Gyro
9	211.00	25.00	0.33	340.14	210.99	1.82	1.49	-1.23	-0.36	45.24	0.46	North Seeking Gyro
10	236.00	25.00	0.38	344.53	235.99	1.98	1.63	-1.28	0.20	17.56	0.23	North Seeking Gyro
11	261.00	25.00	0.43	345.81	260.99	2.15	1.80	-1.33	0.20	5.12	0.20	North Seeking Gyro
12	286.00	25.00	0.36	359.84	285.99	2.32	1.97	-1.35	-0.28	56.12	0.48	North Seeking Gyro
13	311.00	25.00	0.34	354.93	310.99	2.47	2.13	-1.36	-0.08	-19.64	0.14	North Seeking Gyro
14	336.00	25.00	0.28	10.73	335.99	2.59	2.26	-1.35	-0.24	63.20	0.42	North Seeking Gyro
15	361.00	25.00	0.34	35.70	360.99	2.68	2.38	-1.30	0.24	99.88	0.59	North Seeking Gyro
16	386.00	25.00	0.41	31.82	385.99	2.78	2.52	-1.21	0.28	-15.52	0.30	North Seeking Gyro
17	411.00	25.00	0.34	19.08	410.99	2.89	2.66	-1.13	-0.28	-50.96	0.43	North Seeking Gyro
18	436.00	25.00	0.32	17.55	435.99	3.00	2.80	-1.09	-0.08	-6.12	0.09	North Seeking Gyro
19	461.00	25.00	0.47	36.47	460.98	3.11	2.95	-1.01	0.60	75.68	0.79	North Seeking Gyro
20	486.00	25.00	0.48	50.10	485.98	3.20	3.10	-0.87	0.04	54.52	0.45	North Seeking Gyro
21	511.00	25.00	0.50	52.85	510.98	3.27	3.23	-0.70	0.08	11.00	0.12	North Seeking Gyro
22	536.00	25.00	0.47	53.58	535.98	3.33	3.36	-0.53	-0.12	2.92	0.12	North Seeking Gyro
23	561.00	25.00	0.61	40.91	560.98	3.42	3.52	-0.36	0.56	-50.68	0.73	North Seeking Gyro
24	586.00	25.00	0.64	51.55	585.98	3.53	3.71	-0.16	0.12	42.56	0.48	North Seeking Gyro
25	593.83	7.83	0.63	55.36	593.81	3.55	3.76	-0.09	-0.13	48.66	0.55	North Seeking Gyro
26	696.00	102.17	0.57	105.59	695.97	3.39	3.94	0.86	-0.06	49.16	0.50	Native EM MWD
27	748.00	52.00	0.79	169.48	747.97	2.89	3.52	1.17	0.42	122.87	1.43	Native EM MWD
28	779.00	31.00	0.88	178.36	778.97	2.45	3.07	1.22	0.29	28.64	0.51	Native EM MWD
29	811.00	32.00	0.53	202.97	810.97	2.11	2.69	1.17	-1.09	76.91	1.42	Native EM MWD
30	843.00	32.00	1.01	328.39	842.96	2.28	2.79	0.96	1.50	391.94	4.33	Native EM MWD
31	875.00	32.00	2.02	348.25	874.95	3.11	3.59	0.70	3.16	62.06	3.51	Native EM MWD
32	906.00	31.00	3.91	342.01	905.91	4.71	5.13	0.26	6.10	-20.13	6.18	Native EM MWD
33	941.00	35.00	5.49	340.08	940.79	7.58	7.83	-0.68	4.51	-5.51	4.54	Native EM MWD
34	973.00	32.00	6.86	338.76	972.60	11.02	11.06	-1.89	4.28	-4.13	4.30	Native EM MWD
35	1005.00	32.00	7.51	340.96	1004.35	15.02	14.81	-3.26	2.03	6.87	2.21	Native EM MWD
36	1037.00	32.00	8.35	340.87	1036.05	19.43	18.99	-4.71	2.62	-0.28	2.62	Native EM MWD
37	1068.00	31.00	8.75	339.73	1066.70	24.04	23.32	-6.26	1.29	-3.68	1.40	Native EM MWD
38	1100.00	32.00	9.67	338.94	1098.29	29.16	28.12	-8.07	2.87	-2.47	2.90	Native EM MWD

No.	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
39	1132.00	32.00	10.41	338.85	1129.80	34.74	33.32	-10.08	2.31	-0.28	2.31	Native EM MWD
40	1164.00	32.00	11.65	340.08	1161.21	40.86	39.05	-12.22	3.87	3.84	3.94	Native EM MWD
41	1195.00	31.00	12.57	341.22	1191.52	47.36	45.19	-14.38	2.97	3.68	3.07	Native EM MWD
42	1227.00	32.00	13.80	340.34	1222.67	54.66	52.08	-16.78	3.84	-2.75	3.89	Native EM MWD
43	1259.00	32.00	14.72	338.94	1253.69	62.54	59.47	-19.53	2.87	-4.38	3.07	Native EM MWD
44	1291.00	32.00	16.26	339.55	1284.52	71.09	67.46	-22.55	4.81	1.91	4.84	Native EM MWD
45	1322.00	31.00	17.71	339.38	1314.17	80.14	75.94	-25.73	4.68	-0.55	4.68	Native EM MWD
46	1354.00	32.00	18.90	339.20	1344.55	90.19	85.34	-29.29	3.72	-0.56	3.72	Native EM MWD
47	1386.00	32.00	19.95	338.41	1374.73	100.84	95.26	-33.13	3.28	-2.47	3.38	Native EM MWD
48	1418.00	32.00	20.79	338.94	1404.73	111.97	105.64	-37.18	2.62	1.66	2.69	Native EM MWD
49	1450.00	32.00	21.71	339.46	1434.55	123.57	116.48	-41.30	2.87	1.62	2.93	Native EM MWD
50	1482.00	32.00	22.50	339.55	1464.20	135.61	127.76	-45.52	2.47	0.28	2.47	Native EM MWD
51	1513.00	31.00	22.94	338.50	1492.79	147.58	138.94	-49.80	1.42	-3.39	1.93	Native EM MWD
52	1545.00	32.00	23.73	339.11	1522.18	160.26	150.76	-54.39	2.47	1.91	2.58	Native EM MWD
53	1576.00	31.00	24.96	339.29	1550.42	173.04	162.71	-58.92	3.97	0.58	3.97	Native EM MWD
54	1608.00	32.00	25.71	339.38	1579.34	186.73	175.52	-63.76	2.34	0.28	2.35	Native EM MWD
55	1640.00	32.00	25.84	339.11	1608.16	200.65	188.53	-68.69	0.41	-0.84	0.55	Native EM MWD
56	1671.00	31.00	26.59	339.02	1635.97	214.34	201.32	-73.58	2.42	-0.29	2.42	Native EM MWD
57	1703.00	32.00	26.50	338.15	1664.59	228.64	214.63	-78.80	-0.28	-2.72	1.25	Native EM MWD
58	1734.00	31.00	27.47	339.02	1692.22	242.70	227.73	-83.93	3.13	2.81	3.38	Native EM MWD
59	1766.00	32.00	28.30	338.50	1720.50	257.67	241.68	-89.36	2.59	-1.63	2.70	Native EM MWD
60	1798.00	32.00	28.87	338.76	1748.60	272.98	255.94	-94.94	1.78	0.81	1.82	Native EM MWD
61	1829.00	31.00	29.36	339.29	1775.69	288.06	270.02	-100.33	1.58	1.71	1.79	Native EM MWD
62	1861.00	32.00	29.79	339.64	1803.52	303.85	284.81	-105.87	1.34	1.09	1.45	Native EM MWD
63	1893.00	32.00	30.45	340.43	1831.20	319.91	299.90	-111.36	2.06	2.47	2.41	Native EM MWD
64	1958.00	65.00	31.55	340.78	1886.91	353.38	331.48	-122.47	1.69	0.54	1.71	Native EM MWD
65	2055.00	97.00	32.61	338.67	1969.10	404.89	379.79	-140.33	1.09	-2.18	1.59	Native EM MWD
66	2150.00	95.00	31.73	338.23	2049.52	455.46	426.84	-158.91	-0.93	-0.46	0.96	Native EM MWD
67	2245.00	95.00	33.27	338.94	2129.64	506.50	474.36	-177.54	1.62	0.75	1.67	Native EM MWD
68	2340.00	95.00	32.39	338.32	2209.46	557.99	522.32	-196.30	-0.93	-0.65	0.99	Native EM MWD
69	2435.00	95.00	31.42	337.27	2290.11	608.18	568.81	-215.27	-1.02	-1.11	1.18	Native EM MWD
70	2531.00	96.00	32.48	338.94	2371.57	658.96	615.94	-234.20	1.10	1.74	1.44	Native EM MWD
71	2625.00	94.00	31.73	338.85	2451.19	708.91	662.55	-252.19	-0.80	-0.10	0.80	Native EM MWD
72	2719.00	94.00	32.08	339.38	2530.99	758.59	708.97	-269.90	0.37	0.56	0.48	Native EM MWD
73	2813.00	94.00	30.59	338.50	2611.28	807.47	754.59	-287.46	-1.59	-0.94	1.66	Native EM MWD
74	2910.00	97.00	30.81	339.38	2694.68	856.99	800.80	-305.25	0.23	0.91	0.52	Native EM MWD
75	3004.00	94.00	31.29	341.40	2775.22	905.46	846.47	-321.52	0.51	2.15	1.22	Native EM MWD
76	3099.00	95.00	32.26	340.78	2855.98	955.47	893.79	-337.73	1.02	-0.65	1.08	Native EM MWD
77	3193.00	94.00	32.91	339.99	2935.18	1006.08	941.48	-354.73	0.69	-0.84	0.83	Native EM MWD
78	3288.00	95.00	32.17	337.97	3015.27	1057.17	989.17	-373.05	-0.78	-2.13	1.38	Native EM MWD
79	3382.00	94.00	31.68	337.09	3095.05	1106.85	1035.11	-392.04	-0.52	-0.94	0.72	Native EM MWD
80	3479.00	97.00	31.25	336.39	3177.79	1157.42	1081.62	-412.04	-0.44	-0.72	0.58	Native EM MWD
81	3533.00	54.00	31.02	336.00	3224.01	1185.30	1107.17	-423.31	-0.43	-0.72	0.57	Proj. to Bit