

CONOCO/PHILLIPS CO.  
GRIMM 34-4H - Design #2

ARAPAHOE COUNTY CO  
GRIMM 34-4H  
Your Ref:

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7129.13	0	0	7129.13	0	0	0	0
7150	2.296	8.321	7149.99	0.41	0.06	0.42	11
7200	7.796	8.321	7199.78	4.76	0.7	4.81	11
7250	13.296	8.321	7248.92	13.81	2.02	13.96	11
7300	18.796	8.321	7296.95	27.48	4.02	27.78	11
7350	24.296	8.321	7343.44	45.65	6.68	46.13	11
7400	29.796	8.321	7387.96	68.13	9.96	68.86	11
7450	35.296	8.321	7430.09	94.74	13.86	95.75	11
7500	40.796	8.321	7469.45	125.22	18.31	126.55	11
7550	46.296	8.321	7505.68	159.29	23.3	160.98	11
7600	51.796	8.321	7538.44	196.64	28.76	198.73	11
7650	57.296	8.321	7567.43	236.92	34.65	239.44	11
7700	62.796	8.321	7592.38	279.77	40.92	282.75	11
7750	68.296	8.321	7613.07	324.79	47.5	328.24	11
7800	73.796	8.321	7629.31	371.56	54.34	375.51	11
7850	79.296	8.321	7640.94	419.66	61.38	424.12	11
7900	84.796	8.321	7647.85	468.64	68.54	473.62	11
7947.31	90	8.321	7650	515.39	75.38	520.87	11
8000	90	8.321	7650	567.52	83	573.56	0
8100	90	8.321	7650	666.47	97.48	673.56	0
8200	90	8.321	7650	765.42	111.95	773.56	0
8300	90	8.321	7650	864.36	126.42	873.56	0
8400	90	8.321	7650	963.31	140.89	973.56	0
8500	90	8.321	7650	1062.26	155.36	1073.56	0
8600	90	8.321	7650	1161.2	169.83	1173.56	0
8700	90	8.321	7650	1260.15	184.31	1273.56	0
8800	90	8.321	7650	1359.1	198.78	1373.56	0
8900	90	8.321	7650	1458.05	213.25	1473.56	0
9000	90	8.321	7650	1556.99	227.72	1573.56	0
9100	90	8.321	7650	1655.94	242.19	1673.56	0
9200	90	8.321	7650	1754.89	256.66	1773.56	0
9300	90	8.321	7650	1853.84	271.14	1873.56	0

9400	90	8.321	7650	1952.78	285.61	1973.56	0
9500	90	8.321	7650	2051.73	300.08	2073.56	0
9600	90	8.321	7650	2150.68	314.55	2173.56	0
9700	90	8.321	7650	2249.62	329.02	2273.56	0
9800	90	8.321	7650	2348.57	343.49	2373.56	0
9900	90	8.321	7650	2447.52	357.97	2473.56	0
10000	90	8.321	7650	2546.47	372.44	2573.56	0
10100	90	8.321	7650	2645.41	386.91	2673.56	0
10200	90	8.321	7650	2744.36	401.38	2773.56	0
10300	90	8.321	7650	2843.31	415.85	2873.56	0
10400	90	8.321	7650	2942.26	430.32	2973.56	0
10500	90	8.321	7650	3041.2	444.8	3073.56	0
10600	90	8.321	7650	3140.15	459.27	3173.56	0
10700	90	8.321	7650	3239.1	473.74	3273.56	0
10800	90	8.321	7650	3338.05	488.21	3373.56	0
10900	90	8.321	7650	3436.99	502.68	3473.56	0
11000	90	8.321	7650	3535.94	517.15	3573.56	0
11100	90	8.321	7650	3634.89	531.63	3673.56	0
11200	90	8.321	7650	3733.83	546.1	3773.56	0
11300	90	8.321	7650	3832.78	560.57	3873.56	0
11400	90	8.321	7650	3931.73	575.04	3973.56	0
11500	90	8.321	7650	4030.68	589.51	4073.56	0
11600	90	8.321	7650	4129.62	603.99	4173.56	0
11700	90	8.321	7650	4228.57	618.46	4273.56	0
11800	90	8.321	7650	4327.52	632.93	4373.56	0
11873.72	90	8.321	7650	4400.46	643.6	4447.28	0

All data are in feet unless otherwise stated. Directions and coordinates are relative to True North.  
Vertical depths are relative to WELL. Northings and Eastings are relative to Site.

The Dogleg Severity is in Degrees per 100 feet.  
Vertical Section is from Slot and calculated along an Azimuth of 8.321° (True).

Coordinate System is North American Datum 1983 US State Plane 1983, Colorado Central Zone.  
Central meridian is -105.500°.  
Grid Convergence at Surface is 0.604°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 11873.72ft.,  
the Bottom Hole Displacement is 4447.28ft., in the Direction of 8.321° (True).