



Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 6-26	0.00	0.00	0.00	1474686.22	3402193.34	40°37'38.575N	104°03'03.645W	Point
BHL 6-26	6206.33	4200.52	104.22	1478886.74	3402297.56	40°38'20.060N	104°03'01.403W	Point
600' Entry 6-26	6209.18	147.69	76.29	1474833.91	3402269.63	40°37'40.022N	104°03'02.624W	Point
PBHL 6-26	6234.00	4200.99	108.18	1478887.21	3402301.52	40°38'20.064N	104°03'01.351W	Point

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC.		Date: 10/24/2014		Time: 08:23:49		Page: 1	
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 6-26-8-60, Grid North					
Site: Hemberger 4-26-8-60 Pad		Vertical (TVD) Reference: 4877' GL+17'KB 4894.0					
Well: 6-26-8-60		Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)					
Wellpath: Original Hole		Survey Calculation Method: Minimum Curvature		Db: Adapti			

Field: Niobrara CONZ'83			
Map System: US State Plane Coordinate System 1983		Map Zone: Colorado, Northern Zone	
Geo Datum: GRS 1980		Coordinate System: Well Centre	
Sys Datum: Mean Sea Level		Geomagnetic Model: IGRF2010	

Site: Hemberger 4-26-8-60 Pad Sec 26, T8N, R60W Weld County, CO			
Site Position:	Northing: 1474665.47 ft	Latitude: 40 37 38.374 N	
From: Map	Easting: 3402171.67 ft	Longitude: 104 3 3.930 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 4877.00 ft		Grid Convergence: 0.94 deg	

Well: 6-26-8-60 centerd on 4-26		Slot Name: 6-26	
Well Position: +N/-S 20.75 ft	Northing: 1474686.22 ft	Latitude: 40 37 38.575 N	
+E/-W 21.67 ft	Easting : 3402193.34 ft	Longitude: 104 3 3.645 W	
Position Uncertainty: 0.00 ft			

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 4877' GL+17'KB		Tie-on Depth: 0.00 ft	
Magnetic Data: 10/13/2014		Above System Datum: Mean Sea Level	
Field Strength: 53011 nT		Declination: 8.04 deg	
Vertical Section: Depth From (TVD)		Mag Dip Angle: 67.23 deg	
ft	+N/-S ft	+E/-W ft	Direction bearing
0.00	0.00	0.00	0.05

Survey Program for Definitive Wellpath			
Date: 10/22/2014		Validated: No	
Actual From ft		Version: 4	
To ft		Toolcode	
Survey		Tool Name	
134.00	10513.00	Survey #1 (134.00-10513.00)	MWD
10574.00	10574.00	Survey #2 (10574.00-10574.00)	Project
			Std MWD Projection

Survey										
MD ft	Incl deg	Azim bearing	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
134.00	0.30	191.00	134.00	-0.34	-0.07	-0.34	0.22	0.22	0.00	MWD
225.00	0.30	178.30	225.00	-0.82	-0.11	-0.82	0.07	0.00	-13.96	MWD
316.00	1.70	182.20	315.98	-2.40	-0.15	-2.40	1.54	1.54	4.29	MWD
407.00	2.20	182.20	406.93	-5.50	-0.27	-5.50	0.55	0.55	0.00	MWD
498.00	2.30	160.00	497.86	-8.96	0.29	-8.96	0.96	0.11	-24.40	MWD
589.00	2.40	158.30	588.78	-12.45	1.62	-12.44	0.13	0.11	-1.87	MWD
680.00	3.90	162.10	679.64	-17.16	3.27	-17.16	1.66	1.65	4.18	MWD
770.00	4.20	159.70	769.42	-23.16	5.36	-23.16	0.38	0.33	-2.67	MWD
861.00	4.20	161.40	860.17	-29.45	7.58	-29.44	0.14	0.00	1.87	MWD
952.00	4.40	163.00	950.92	-35.94	9.66	-35.94	0.26	0.22	1.76	MWD
1042.00	4.40	163.00	1040.65	-42.55	11.68	-42.54	0.00	0.00	0.00	MWD
1135.00	4.20	165.10	1133.39	-49.25	13.60	-49.24	0.27	-0.22	2.26	MWD
1226.00	4.40	165.50	1224.14	-55.85	15.33	-55.84	0.22	0.22	0.44	MWD
1318.00	4.50	167.40	1315.86	-62.79	17.00	-62.77	0.19	0.11	2.07	MWD
1406.00	4.50	168.50	1403.59	-69.54	18.44	-69.52	0.10	0.00	1.25	MWD
1491.00	4.40	167.10	1488.33	-75.99	19.83	-75.97	0.17	-0.12	-1.65	MWD
1576.00	4.40	163.20	1573.08	-82.29	21.50	-82.27	0.35	0.00	-4.59	MWD
1660.00	4.20	163.90	1656.84	-88.33	23.29	-88.31	0.25	-0.24	0.83	MWD
1746.00	4.00	157.40	1742.62	-94.12	25.31	-94.10	0.59	-0.23	-7.56	MWD
1830.00	3.70	161.30	1826.43	-99.39	27.31	-99.37	0.47	-0.36	4.64	MWD
1916.00	3.30	157.20	1912.27	-104.30	29.16	-104.28	0.55	-0.47	-4.77	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Hemberger 4-26-8-60 Pad Well: 6-26-8-60 Wellpath: Original Hole	Date: 10/24/2014 Time: 08:23:49 Page: 2 Co-ordinate(NE) Reference: Well: 6-26-8-60, Grid North Vertical (TVD) Reference: 4877' GL+17'KB 4894.0 Section (VS) Reference: Well (0.00N,0.00E,0.05Azi) Survey Calculation Method: Minimum Curvature Db: Adapti
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Survey

MD ft	Incl deg	Azim bearing	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2000.00	3.80	162.70	1996.11	-109.19	30.92	-109.16	0.72	0.60	6.55	MWD
2085.00	3.30	157.40	2080.95	-114.14	32.70	-114.11	0.70	-0.59	-6.24	MWD
2171.00	3.30	154.20	2166.81	-118.65	34.73	-118.62	0.21	0.00	-3.72	MWD
2255.00	4.40	157.10	2250.62	-123.80	37.03	-123.76	1.33	1.31	3.45	MWD
2340.00	3.70	158.60	2335.40	-129.35	39.30	-129.32	0.83	-0.82	1.76	MWD
2425.00	4.40	162.90	2420.19	-135.02	41.26	-134.99	0.90	0.82	5.06	MWD
2509.00	5.60	170.60	2503.87	-142.15	42.88	-142.11	1.63	1.43	9.17	MWD
2594.00	5.70	172.50	2588.46	-150.42	44.11	-150.39	0.25	0.12	2.24	MWD
2678.00	5.80	174.30	2672.04	-158.78	45.08	-158.74	0.25	0.12	2.14	MWD
2763.00	6.20	176.60	2756.57	-167.64	45.77	-167.60	0.55	0.47	2.71	MWD
2848.00	6.20	176.20	2841.07	-176.80	46.35	-176.76	0.05	0.00	-0.47	MWD
2933.00	5.80	178.70	2925.61	-185.67	46.75	-185.63	0.56	-0.47	2.94	MWD
3018.00	5.10	179.40	3010.22	-193.75	46.89	-193.70	0.83	-0.82	0.82	MWD
3103.00	4.70	177.30	3094.91	-201.00	47.09	-200.96	0.52	-0.47	-2.47	MWD
3186.00	4.50	167.60	3177.65	-207.58	47.95	-207.54	0.97	-0.24	-11.69	MWD
3271.00	3.80	164.40	3262.42	-213.55	49.43	-213.51	0.87	-0.82	-3.76	MWD
3356.00	4.40	164.30	3347.20	-219.40	51.07	-219.36	0.71	0.71	-0.12	MWD
3442.00	5.00	166.40	3432.91	-226.22	52.84	-226.17	0.73	0.70	2.44	MWD
3526.00	5.30	166.00	3516.58	-233.54	54.64	-233.49	0.36	0.36	-0.48	MWD
3610.00	5.60	165.00	3600.20	-241.26	56.64	-241.21	0.37	0.36	-1.19	MWD
3695.00	5.60	165.80	3684.79	-249.29	58.73	-249.24	0.09	0.00	0.94	MWD
3780.00	5.80	164.10	3769.37	-257.44	60.92	-257.39	0.31	0.24	-2.00	MWD
3865.00	6.00	167.10	3853.92	-265.90	63.09	-265.85	0.43	0.24	3.53	MWD
3950.00	5.50	170.20	3938.49	-274.25	64.78	-274.19	0.69	-0.59	3.65	MWD
4035.00	3.80	160.40	4023.21	-280.92	66.41	-280.86	2.20	-2.00	-11.53	MWD
4120.00	3.00	152.80	4108.06	-285.55	68.38	-285.49	1.08	-0.94	-8.94	MWD
4205.00	3.30	160.20	4192.93	-289.83	70.22	-289.77	0.59	0.35	8.71	MWD
4289.00	3.20	168.70	4276.80	-294.40	71.50	-294.34	0.59	-0.12	10.12	MWD
4373.00	3.30	181.30	4360.66	-299.12	71.90	-299.05	0.86	0.12	15.00	MWD
4458.00	4.10	179.70	4445.49	-304.60	71.86	-304.54	0.95	0.94	-1.88	MWD
4543.00	4.80	170.40	4530.23	-311.15	72.47	-311.08	1.18	0.82	-10.94	MWD
4628.00	5.50	171.50	4614.89	-318.68	73.67	-318.62	0.83	0.82	1.29	MWD
4713.00	4.60	174.30	4699.56	-326.10	74.61	-326.04	1.10	-1.06	3.29	MWD
4798.00	3.10	167.40	4784.36	-331.74	75.45	-331.67	1.84	-1.76	-8.12	MWD
4883.00	2.10	160.70	4869.27	-335.45	76.47	-335.38	1.23	-1.18	-7.88	MWD
4968.00	2.60	171.80	4954.20	-338.83	77.26	-338.76	0.79	0.59	13.06	MWD
5052.00	3.90	155.30	5038.07	-343.31	78.72	-343.24	1.89	1.55	-19.64	MWD
5137.00	4.00	146.90	5122.87	-348.42	81.55	-348.35	0.69	0.12	-9.88	MWD
5222.00	3.70	140.00	5207.67	-353.00	84.93	-352.93	0.65	-0.35	-8.12	MWD
5307.00	3.70	156.90	5292.50	-357.63	87.77	-357.55	1.28	0.00	19.88	MWD
5393.00	3.40	157.10	5378.33	-362.53	89.85	-362.45	0.35	-0.35	0.23	MWD
5478.00	2.70	146.90	5463.21	-366.53	91.92	-366.45	1.04	-0.82	-12.00	MWD
5561.00	2.00	134.40	5546.14	-369.18	94.03	-369.10	1.04	-0.84	-15.06	MWD
5604.00	1.80	123.10	5589.12	-370.07	95.13	-369.99	0.99	-0.47	-26.28	MWD
5647.00	1.10	50.00	5632.11	-370.18	96.01	-370.09	4.22	-1.63	-170.00	MWD
5689.00	4.40	1.30	5674.06	-368.31	96.36	-368.22	8.97	7.86	-115.95	MWD
5731.00	8.20	356.90	5715.80	-363.70	96.23	-363.62	9.11	9.05	-10.48	MWD
5773.00	11.40	357.80	5757.18	-356.56	95.91	-356.48	7.63	7.62	2.14	MWD
5815.00	14.90	0.60	5798.07	-347.01	95.81	-346.93	8.47	8.33	6.67	MWD
5857.00	17.10	356.70	5838.44	-335.45	95.51	-335.36	5.83	5.24	-9.29	MWD
5900.00	20.80	357.40	5879.11	-321.50	94.80	-321.42	8.62	8.60	1.63	MWD
5943.00	24.80	357.40	5918.74	-304.86	94.04	-304.78	9.30	9.30	0.00	MWD
5985.00	29.00	358.10	5956.19	-285.88	93.30	-285.80	10.03	10.00	1.67	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC.	Date: 10/24/2014	Time: 08:23:49	Page: 3
Field: Niobrara CONZ'83	Co-ordinate(NE) Reference: Well: 6-26-8-60, Grid North		
Site: Hemberger 4-26-8-60 Pad	Vertical (TVD) Reference: 4877' GL+17'KB 4894.0		
Well: 6-26-8-60	Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)		
Wellpath: Original Hole	Survey Calculation Method: Minimum Curvature		Db: Adapti

Survey

MD ft	Incl deg	Azim bearing	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6028.00	32.90	356.60	5993.06	-263.79	92.26	-263.71	9.24	9.07	-3.49	MWD
6070.00	36.00	355.20	6027.69	-240.10	90.55	-240.02	7.62	7.38	-3.33	MWD
6113.00	40.10	354.30	6061.54	-213.72	88.12	-213.64	9.62	9.53	-2.09	MWD
6155.00	45.10	353.90	6092.45	-185.45	85.20	-185.37	11.92	11.90	-0.95	MWD
6198.00	51.50	353.90	6121.04	-153.54	81.79	-153.47	14.88	14.88	0.00	MWD
6233.00	57.40	354.30	6141.38	-125.23	78.86	-125.16	16.88	16.86	1.14	MWD
6313.00	70.00	357.10	6176.76	-53.86	73.59	-53.79	16.06	15.75	3.50	MWD
6358.00	76.70	359.40	6189.65	-10.79	72.29	-10.73	15.67	14.89	5.11	MWD
6404.00	81.00	1.30	6198.54	34.33	72.57	34.39	10.19	9.35	4.13	MWD
6450.00	84.00	1.70	6204.54	79.91	73.77	79.98	6.58	6.52	0.87	MWD
6495.00	87.00	2.40	6208.07	124.74	75.37	124.81	6.84	6.67	1.56	MWD
6518.00	87.50	2.20	6209.18	147.69	76.29	147.76	2.34	2.17	-0.87	600' Entry
6541.00	88.00	2.00	6210.08	170.66	77.14	170.73	2.34	2.17	-0.87	MWD
6625.00	91.30	2.50	6210.59	254.58	80.43	254.65	3.97	3.93	0.60	MWD
6710.00	91.30	1.30	6208.67	339.51	83.25	339.59	1.41	0.00	-1.41	MWD
6794.00	91.20	1.50	6206.83	423.47	85.30	423.54	0.27	-0.12	0.24	MWD
6880.00	90.70	0.10	6205.41	509.44	86.50	509.52	1.73	-0.58	-1.63	MWD
6965.00	92.80	2.40	6202.81	594.37	88.36	594.45	3.66	2.47	2.71	MWD
7049.00	91.90	2.90	6199.37	678.21	92.24	678.29	1.23	-1.07	0.60	MWD
7133.00	89.70	3.10	6198.19	762.08	96.63	762.17	2.63	-2.62	0.24	MWD
7218.00	90.30	0.80	6198.19	847.03	99.52	847.12	2.80	0.71	-2.71	MWD
7303.00	90.30	0.10	6197.75	932.02	100.19	932.11	0.82	0.00	-0.82	MWD
7388.00	90.60	1.70	6197.08	1017.01	101.53	1017.10	1.92	0.35	1.88	MWD
7471.00	89.10	0.30	6197.30	1099.99	102.97	1100.08	2.47	-1.81	-1.69	MWD
7558.00	92.20	1.00	6196.31	1186.97	103.96	1187.06	3.65	3.56	0.80	MWD
7643.00	90.30	0.60	6194.46	1271.94	105.15	1272.03	2.28	-2.24	-0.47	MWD
7727.00	89.60	359.60	6194.53	1355.93	105.29	1356.03	1.45	-0.83	-1.19	MWD
7812.00	89.50	358.80	6195.20	1440.92	104.11	1441.01	0.95	-0.12	-0.94	MWD
7898.00	91.10	358.10	6194.75	1526.89	101.78	1526.98	2.03	1.86	-0.81	MWD
7982.00	90.50	359.70	6193.58	1610.86	100.17	1610.95	2.03	-0.71	1.90	MWD
8067.00	89.50	359.40	6193.58	1695.86	99.50	1695.94	1.23	-1.18	-0.35	MWD
8153.00	88.80	358.30	6194.85	1781.83	97.78	1781.91	1.52	-0.81	-1.28	MWD
8238.00	88.10	359.20	6197.15	1866.78	95.92	1866.86	1.34	-0.82	1.06	MWD
8323.00	91.20	1.50	6197.67	1951.76	96.44	1951.84	4.54	3.65	2.71	MWD
8408.00	89.30	1.50	6197.30	2036.72	98.67	2036.81	2.24	-2.24	0.00	MWD
8494.00	88.80	0.40	6198.73	2122.70	100.09	2122.78	1.40	-0.58	-1.28	MWD
8579.00	90.00	0.60	6199.62	2207.69	100.83	2207.77	1.43	1.41	0.24	MWD
8664.00	90.50	359.40	6199.24	2292.69	100.83	2292.77	1.53	0.59	-1.41	MWD
8749.00	89.00	358.30	6199.62	2377.66	99.13	2377.75	2.19	-1.76	-1.29	MWD
8834.00	90.30	358.50	6200.13	2462.63	96.75	2462.71	1.55	1.53	0.24	MWD
8919.00	90.00	359.60	6199.91	2547.61	95.35	2547.70	1.34	-0.35	1.29	MWD
9004.00	88.80	1.30	6200.80	2632.60	96.01	2632.68	2.45	-1.41	2.00	MWD
9089.00	88.70	0.40	6202.66	2717.57	97.27	2717.65	1.07	-0.12	-1.06	MWD
9174.00	89.90	0.10	6203.69	2802.56	97.64	2802.65	1.46	1.41	-0.35	MWD
9259.00	89.80	357.40	6203.92	2887.53	95.79	2887.62	3.18	-0.12	-3.18	MWD
9344.00	89.70	357.80	6204.29	2972.46	92.23	2972.54	0.49	-0.12	0.47	MWD
9429.00	89.90	358.70	6204.58	3057.42	89.64	3057.49	1.08	0.24	1.06	MWD
9514.00	89.40	2.00	6205.10	3142.40	90.15	3142.48	3.93	-0.59	3.88	MWD
9599.00	91.50	6.60	6204.44	3227.13	96.52	3227.22	5.95	2.47	5.41	MWD
9684.00	90.60	7.80	6202.88	3311.45	107.18	3311.54	1.76	-1.06	1.41	MWD
9768.00	88.00	3.40	6203.91	3395.01	115.37	3395.11	6.08	-3.10	-5.24	MWD
9853.00	87.20	2.20	6207.46	3479.83	119.52	3479.94	1.70	-0.94	-1.41	MWD
9938.00	89.90	359.40	6209.62	3564.78	120.70	3564.88	4.58	3.18	-3.29	MWD
10023.00	90.70	359.20	6209.17	3649.77	119.67	3649.88	0.97	0.94	-0.24	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Hemberger 4-26-8-60 Pad Well: 6-26-8-60 Wellpath: Original Hole	Date: 10/24/2014 Time: 08:23:49 Page: 4 Co-ordinate(NE) Reference: Well: 6-26-8-60, Grid North Vertical (TVD) Reference: 4877' GL+17'KB 4894.0 Section (VS) Reference: Well (0.00N,0.00E,0.05Azi) Survey Calculation Method: Minimum Curvature Db: Adapti
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Survey

MD ft	Incl deg	Azim bearing	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
10106.00	90.00	358.10	6208.66	3732.75	117.71	3732.85	1.57	-0.84	-1.33	MWD
10191.00	89.60	358.80	6208.96	3817.71	115.41	3817.81	0.95	-0.47	0.82	MWD
10276.00	89.70	358.70	6209.48	3902.69	113.56	3902.79	0.17	0.12	-0.12	MWD
10361.00	90.40	358.10	6209.41	3987.66	111.18	3987.75	1.08	0.82	-0.71	MWD
10446.00	90.60	358.30	6208.66	4072.61	108.51	4072.71	0.33	0.24	0.24	MWD
10513.00	91.20	358.00	6207.61	4139.57	106.35	4139.66	1.00	0.90	-0.45	MWD
10574.00	91.20	358.00	6206.33	4200.52	104.22	4200.61	0.00	0.00	0.00	Project

Annotation

MD ft	TVD ft	
6518.00	6209.18	600' Entry