

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Hemberger 2-25-34-8-60 Well: 2-25-34-8-60 Wellpath: Original Hole	Date: 09/06/2012 Co-ordinate(NE) Reference: Well: 2-25-34-8-60, Grid North Vertical (TVD) Reference: 4930'GL+17'KB 4947.0 Section (VS) Reference: Well (0.00N,0.00E,4.41Azi) Survey Calculation Method: Minimum Curvature	Time: 09:28:25 Page: 1 Db: Adapti
---	--	--

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

Site: Hemberger 2-25-34-8-60 S;25,T;8N, R;60W Weld County, CO Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 4930.00 ft	Northing: 1474637.14 ft Easting: 3406304.19 ft Latitude: 40 37 37.423 N Longitude: 104 2 10.348 W North Reference: Grid Grid Convergence: 0.95 deg
--	---

Well: 2-25-34-8-60 Well Position: +N/-S 0.00 ft +E/-W 0.00 ft Position Uncertainty: 0.00 ft	Slot Name: Latitude: 40 37 37.423 N Longitude: 104 2 10.348 W
---	--

Wellpath: Original Hole Current Datum: 4930'GL+17'KB Magnetic Data: 08/09/2012 Field Strength: 53244 nT Vertical Section: Depth From (TVD) ft	Height 4947.00 ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.33 deg Mag Dip Angle: 67.31 deg +N/-S ft +E/-W ft Direction deg
0.00	0.00	0.00 4.41

Survey Program for Definitive Wellpath					
Date: 09/06/2012	Validated: No	Version: 0			
Actual From ft	To ft	Survey	Toolcode	Tool Name	
142.00	10557.00	Survey #1 (142.00-10557.00)	MWD	Std MWD	
10618.00	10618.00	Survey #2 (10618.00-10618.00)	Project	Projection	

Survey										
MD ft	Incl deg	Azim deg	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
142.00	0.20	298.80	142.00	0.12	-0.22	0.10	0.14	0.14	0.00	MWD
234.00	1.50	100.20	233.99	-0.02	0.83	0.05	1.84	1.41	175.43	MWD
326.00	3.40	87.40	325.90	-0.11	4.74	0.26	2.14	2.07	-13.91	MWD
421.00	4.50	88.60	420.68	0.11	11.28	0.98	1.16	1.16	1.26	MWD
513.00	6.10	96.70	512.28	-0.37	19.74	1.15	1.92	1.74	8.80	MWD
604.00	6.90	96.90	602.69	-1.59	29.97	0.72	0.88	0.88	0.22	MWD
696.00	6.30	97.40	694.08	-2.90	40.46	0.22	0.66	-0.65	0.54	MWD
788.00	5.90	96.30	785.56	-4.07	50.17	-0.20	0.45	-0.43	-1.20	MWD
880.00	6.40	97.60	877.03	-5.27	59.95	-0.64	0.56	0.54	1.41	MWD
971.00	6.60	102.10	967.45	-7.04	70.09	-1.63	0.60	0.22	4.95	MWD
1063.00	6.20	100.90	1058.88	-9.08	80.14	-2.90	0.46	-0.43	-1.30	MWD
1155.00	7.20	104.40	1150.25	-11.46	90.60	-4.46	1.17	1.09	3.80	MWD
1247.00	7.80	108.10	1241.46	-14.83	102.12	-6.94	0.84	0.65	4.02	MWD
1338.00	7.60	108.60	1331.64	-18.67	113.69	-9.87	0.23	-0.22	0.55	MWD
1457.00	7.30	111.80	1449.64	-23.99	128.17	-14.06	0.43	-0.25	2.69	MWD
1548.00	7.30	110.90	1539.90	-28.20	138.94	-17.43	0.13	0.00	-0.99	MWD
1640.00	5.60	110.00	1631.31	-31.82	148.62	-20.30	1.85	-1.85	-0.98	MWD
1731.00	5.50	109.00	1721.89	-34.76	156.92	-22.59	0.15	-0.11	-1.10	MWD
1817.00	4.70	105.30	1807.54	-37.03	164.21	-24.29	1.01	-0.93	-4.30	MWD
1901.00	5.80	104.60	1891.19	-39.01	171.64	-25.69	1.31	1.31	-0.83	MWD
1986.00	6.40	108.30	1975.71	-41.58	180.29	-27.59	0.84	0.71	4.35	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Hemberger 2-25-34-8-60 Well: 2-25-34-8-60 Wellpath: Original Hole	Date: 09/06/2012 Co-ordinate(NE) Reference: Well: 2-25-34-8-60, Grid North Vertical (TVD) Reference: 4930'GL+17"KB 4947.0 Section (VS) Reference: Well (0.00N,0.00E,4.41Azi) Survey Calculation Method: Minimum Curvature	Page: 2 Db: Adapti
---	--	---

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2072.00	6.20	103.50	2061.19	-44.16	189.36	-29.47	0.65	-0.23	-5.58	MWD
2157.00	6.90	103.90	2145.64	-46.46	198.78	-31.04	0.83	0.82	0.47	MWD
2242.00	6.90	101.80	2230.02	-48.73	208.73	-32.54	0.30	0.00	-2.47	MWD
2327.00	6.50	111.10	2314.44	-51.51	218.22	-34.58	1.36	-0.47	10.94	MWD
2412.00	6.10	109.30	2398.93	-54.73	226.97	-37.12	0.52	-0.47	-2.12	MWD
2498.00	5.70	107.40	2484.47	-57.52	235.36	-39.25	0.52	-0.47	-2.21	MWD
2583.00	5.50	107.40	2569.07	-60.00	243.27	-41.12	0.24	-0.24	0.00	MWD
2668.00	5.50	104.90	2653.68	-62.27	251.10	-42.78	0.28	0.00	-2.94	MWD
2753.00	5.40	106.70	2738.29	-64.46	258.86	-44.37	0.23	-0.12	2.12	MWD
2838.00	5.30	105.10	2822.92	-66.64	266.49	-45.95	0.21	-0.12	-1.88	MWD
2923.00	5.80	102.00	2907.52	-68.55	274.48	-47.24	0.69	0.59	-3.65	MWD
3008.00	6.20	109.90	2992.06	-71.01	282.99	-49.04	1.08	0.47	9.29	MWD
3093.00	5.30	107.80	3076.63	-73.77	291.05	-51.17	1.09	-1.06	-2.47	MWD
3179.00	5.30	103.20	3162.26	-75.89	298.70	-52.70	0.49	0.00	-5.35	MWD
3264.00	5.40	99.30	3246.89	-77.43	306.47	-53.64	0.44	0.12	-4.59	MWD
3348.00	6.60	110.00	3330.43	-79.72	314.90	-55.27	1.95	1.43	12.74	MWD
3434.00	7.10	110.90	3415.82	-83.31	324.51	-58.11	0.59	0.58	1.05	MWD
3519.00	6.30	112.50	3500.24	-86.97	333.73	-61.05	0.97	-0.94	1.88	MWD
3604.00	6.40	115.70	3584.72	-90.81	342.31	-64.22	0.43	0.12	3.76	MWD
3689.00	6.90	115.70	3669.14	-95.08	351.18	-67.79	0.59	0.59	0.00	MWD
3774.00	6.00	119.70	3753.61	-99.49	359.64	-71.54	1.18	-1.06	4.71	MWD
3860.00	6.20	119.40	3839.12	-104.00	367.59	-75.43	0.24	0.23	-0.35	MWD
3945.00	6.00	113.70	3923.64	-108.04	375.65	-78.83	0.75	-0.24	-6.71	MWD
4029.00	6.20	112.00	4007.16	-111.50	383.88	-81.65	0.32	0.24	-2.02	MWD
4115.00	6.00	110.60	4092.68	-114.82	392.39	-84.31	0.29	-0.23	-1.63	MWD
4200.00	5.50	105.80	4177.25	-117.49	400.47	-86.35	0.82	-0.59	-5.65	MWD
4285.00	5.80	99.50	4261.84	-119.31	408.62	-87.54	0.81	0.35	-7.41	MWD
4370.00	6.50	101.10	4346.35	-120.95	417.58	-88.48	0.85	0.82	1.88	MWD
4456.00	6.70	108.50	4431.78	-123.48	427.12	-90.27	1.02	0.23	8.60	MWD
4541.00	4.40	111.10	4516.37	-126.22	434.86	-92.41	2.72	-2.71	3.06	MWD
4626.00	3.80	104.10	4601.16	-128.08	440.64	-93.82	0.92	-0.71	-8.24	MWD
4711.00	6.10	111.60	4685.84	-130.43	447.57	-95.63	2.81	2.71	8.82	MWD
4796.00	6.10	117.40	4770.36	-134.17	455.78	-98.73	0.72	0.00	6.82	MWD
4882.00	6.20	115.70	4855.86	-138.29	464.02	-102.20	0.24	0.12	-1.98	MWD
4967.00	6.90	106.50	4940.31	-141.73	473.05	-104.94	1.48	0.82	-10.82	MWD
5053.00	6.90	102.50	5025.68	-144.32	483.05	-106.75	0.56	0.00	-4.65	MWD
5138.00	6.80	96.20	5110.08	-145.97	493.03	-107.62	0.89	-0.12	-7.41	MWD
5223.00	7.10	89.70	5194.46	-146.48	503.29	-107.35	0.99	0.35	-7.65	MWD
5308.00	7.10	89.80	5278.80	-146.44	513.80	-106.50	0.01	0.00	0.12	MWD
5393.00	6.60	94.60	5363.20	-146.81	523.92	-106.09	0.89	-0.59	5.65	MWD
5479.00	6.60	99.30	5448.63	-148.00	533.72	-106.53	0.63	0.00	5.47	MWD
5564.00	6.70	100.00	5533.06	-149.65	543.43	-107.43	0.15	0.12	0.82	MWD
5624.00	5.80	102.10	5592.70	-150.90	549.84	-108.17	1.55	-1.50	3.50	MWD
5667.00	5.90	101.40	5635.48	-151.79	554.13	-108.73	0.29	0.23	-1.63	MWD
5709.00	8.40	93.00	5677.15	-152.38	559.31	-108.92	6.44	5.95	-20.00	MWD
5752.00	11.40	87.90	5719.50	-152.39	566.69	-108.36	7.26	6.98	-11.86	MWD
5794.00	14.20	78.60	5760.46	-151.22	575.89	-106.49	8.26	6.67	-22.14	MWD
5837.00	16.80	68.40	5801.90	-147.88	586.85	-102.32	8.74	6.05	-23.72	MWD
5879.00	19.40	60.10	5841.82	-142.17	598.54	-95.73	8.70	6.19	-19.76	MWD
5926.00	22.50	55.00	5885.72	-133.12	612.68	-85.61	7.65	6.60	-10.85	MWD
5969.00	27.40	51.30	5924.69	-122.21	627.15	-73.62	11.95	11.40	-8.60	MWD
6011.00	33.40	46.90	5960.91	-108.25	643.15	-58.48	15.23	14.29	-10.48	MWD
6054.00	37.80	40.30	5995.87	-90.10	660.33	-39.06	13.57	10.23	-15.35	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC.	Date: 09/06/2012	Time: 09:28:25	Page: 3
Field: Niobrara CONZ'83	Co-ordinate(NE) Reference: Well: 2-25-34-8-60, Grid North		
Site: Hemberger 2-25-34-8-60	Vertical (TVD) Reference: 4930'GL+17'KB 4947.0		
Well: 2-25-34-8-60	Section (VS) Reference: Well (0.00N,0.00E,4.41Azi)		
Wellpath: Original Hole	Survey Calculation Method: Minimum Curvature	Db: Adapti	

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6097.00	41.60	33.40	6028.97	-68.11	676.72	-15.87	13.52	8.84	-16.05	MWD
6139.00	46.60	27.80	6059.13	-42.95	691.53	10.35	15.08	11.90	-13.33	MWD
6182.00	49.10	24.30	6087.99	-14.31	705.51	39.98	8.38	5.81	-8.14	MWD
6224.00	53.60	25.10	6114.22	15.48	719.22	70.74	10.82	10.71	1.90	MWD
6326.00	64.30	21.10	6166.77	95.78	753.28	153.42	11.01	10.49	-3.92	MWD
6369.00	68.20	19.30	6184.08	132.71	766.86	191.29	9.85	9.07	-4.19	MWD
6411.00	72.50	18.30	6198.20	170.15	779.60	229.59	10.48	10.24	-2.38	MWD
6453.00	76.70	17.20	6209.35	208.71	791.94	268.98	10.31	10.00	-2.62	MWD
6495.00	81.30	15.70	6217.37	248.24	803.61	309.29	11.50	10.95	-3.57	MWD
6538.00	86.30	14.20	6222.01	289.52	814.63	351.31	12.13	11.63	-3.49	MWD
6551.00	87.63	13.53	6222.70	302.13	817.74	364.11	11.44	10.23	-5.12	600' entry
6581.00	90.70	12.00	6223.13	331.38	824.37	393.79	11.44	10.23	-5.11	MWD
6623.00	93.00	9.00	6221.78	372.65	832.02	435.52	9.00	5.48	-7.14	MWD
6655.00	93.90	7.20	6219.85	404.27	836.52	467.39	6.28	2.81	-5.62	MWD
6697.00	93.70	3.70	6217.07	445.98	840.50	509.29	8.33	-0.48	-8.33	MWD
6740.00	92.30	0.90	6214.82	488.88	842.22	552.19	7.27	-3.26	-6.51	MWD
6782.00	90.30	359.80	6213.86	530.87	842.47	594.08	5.43	-4.76	-2.62	MWD
6825.00	89.70	358.80	6213.86	573.86	841.95	636.90	2.71	-1.40	-2.33	MWD
6868.00	89.10	0.50	6214.31	616.86	841.69	679.75	4.19	-1.40	3.95	MWD
6909.00	89.10	0.50	6214.96	657.85	842.04	720.65	0.00	0.00	0.00	MWD
6952.00	90.00	3.20	6215.30	700.82	843.43	763.60	6.62	2.09	6.28	MWD
6994.00	90.00	2.60	6215.30	742.77	845.56	805.59	1.43	0.00	-1.43	MWD
7037.00	89.90	2.60	6215.33	785.72	847.51	848.57	0.23	-0.23	0.00	MWD
7079.00	89.20	5.10	6215.66	827.62	850.33	890.56	6.18	-1.67	5.95	MWD
7122.00	89.70	7.40	6216.08	870.36	855.01	933.53	5.47	1.16	5.35	MWD
7164.00	89.30	6.90	6216.44	912.04	860.24	975.48	1.52	-0.95	-1.19	MWD
7207.00	89.70	9.10	6216.82	954.61	866.22	1018.39	5.20	0.93	5.12	MWD
7249.00	89.60	9.10	6217.07	996.08	872.86	1060.25	0.24	-0.24	0.00	MWD
7292.00	89.30	9.30	6217.49	1038.53	879.74	1103.10	0.84	-0.70	0.47	MWD
7334.00	88.50	8.30	6218.29	1080.03	886.16	1144.97	3.05	-1.90	-2.38	MWD
7377.00	90.70	9.00	6218.59	1122.53	892.63	1187.85	5.37	5.12	1.63	MWD
7419.00	89.40	7.20	6218.56	1164.11	898.54	1229.76	5.29	-3.10	-4.29	MWD
7462.00	89.60	7.40	6218.93	1206.76	904.01	1272.70	0.66	0.47	0.47	MWD
7504.00	89.50	7.60	6219.26	1248.40	909.49	1314.64	0.53	-0.24	0.48	MWD
7547.00	87.90	5.80	6220.24	1291.09	914.51	1357.59	5.60	-3.72	-4.19	MWD
7590.00	86.80	4.90	6222.23	1333.86	918.51	1400.54	3.30	-2.56	-2.09	MWD
7632.00	88.30	5.30	6224.02	1375.65	922.24	1442.49	3.70	3.57	0.95	MWD
7675.00	90.50	6.20	6224.47	1418.43	926.55	1485.48	5.53	5.12	2.09	MWD
7717.00	90.40	6.00	6224.14	1460.19	931.01	1527.46	0.53	-0.24	-0.48	MWD
7760.00	90.20	6.30	6223.92	1502.94	935.62	1570.44	0.84	-0.47	0.70	MWD
7802.00	90.00	5.80	6223.84	1544.71	940.04	1612.42	1.28	-0.48	-1.19	MWD
7845.00	89.00	5.10	6224.22	1587.51	944.13	1655.41	2.84	-2.33	-1.63	MWD
7887.00	88.50	5.30	6225.13	1629.33	947.93	1697.39	1.28	-1.19	0.48	MWD
7930.00	89.60	5.80	6225.85	1672.12	952.09	1740.38	2.81	2.56	1.16	MWD
7972.00	89.00	5.60	6226.36	1713.91	956.26	1782.37	1.51	-1.43	-0.48	MWD
8015.00	89.00	6.70	6227.11	1756.66	960.87	1825.34	2.56	0.00	2.56	MWD
8057.00	88.90	4.90	6227.88	1798.43	965.11	1867.32	4.29	-0.24	-4.29	MWD
8100.00	89.10	2.80	6228.63	1841.33	968.00	1910.31	4.91	0.47	-4.88	MWD
8139.00	89.10	3.20	6229.24	1880.27	970.04	1949.29	1.03	0.00	1.03	MWD
8181.00	90.30	1.90	6229.46	1922.22	971.91	1991.27	4.21	2.86	-3.10	MWD
8224.00	89.80	2.10	6229.43	1965.20	973.41	2034.23	1.25	-1.16	0.47	MWD
8267.00	90.00	3.50	6229.50	2008.14	975.51	2077.21	3.29	0.47	3.26	MWD
8309.00	90.00	2.50	6229.50	2050.09	977.71	2119.20	2.38	0.00	-2.38	MWD
8352.00	89.00	1.80	6229.88	2093.05	979.32	2162.16	2.84	-2.33	-1.63	MWD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Hemberger 2-25-34-8-60 Well: 2-25-34-8-60 Wellpath: Original Hole	Date: 09/06/2012 Co-ordinate(NE) Reference: Well: 2-25-34-8-60, Grid North Vertical (TVD) Reference: 4930'GL+17"KB 4947.0 Section (VS) Reference: Well (0.00N,0.00E,4.41Azi) Survey Calculation Method: Minimum Curvature	Page: 4 Db: Adapti
---	--	---

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
8395.00	88.30	359.70	6230.89	2136.04	979.88	2205.06	5.15	-1.63	-4.88	MWD
8437.00	87.50	357.00	6232.43	2177.99	978.68	2246.79	6.70	-1.90	-6.43	MWD
8480.00	88.10	356.00	6234.08	2220.87	976.05	2289.35	2.71	1.40	-2.33	MWD
8522.00	89.70	353.50	6234.89	2262.68	972.21	2330.74	7.07	3.81	-5.95	MWD
8565.00	91.70	352.10	6234.36	2305.34	966.82	2372.86	5.68	4.65	-3.26	MWD
8608.00	91.80	351.90	6233.05	2347.90	960.84	2414.83	0.52	0.23	-0.47	MWD
8650.00	92.60	353.30	6231.44	2389.52	955.43	2455.91	3.84	1.90	3.33	MWD
8693.00	94.20	355.10	6228.89	2432.22	951.10	2498.15	5.60	3.72	4.19	MWD
8735.00	94.50	354.90	6225.70	2473.94	947.45	2539.47	0.86	0.71	-0.48	MWD
8777.00	93.30	357.00	6222.84	2515.73	944.49	2580.91	5.75	-2.86	5.00	MWD
8819.00	92.10	357.70	6220.86	2557.64	942.55	2622.55	3.31	-2.86	1.67	MWD
8861.00	88.80	359.30	6220.53	2599.62	941.45	2664.31	8.73	-7.86	3.81	MWD
8904.00	88.30	359.50	6221.62	2642.60	941.00	2707.14	1.25	-1.16	0.47	MWD
8945.00	88.10	359.50	6222.91	2683.58	940.64	2747.96	0.49	-0.49	0.00	MWD
8988.00	87.80	358.80	6224.45	2726.55	940.00	2790.76	1.77	-0.70	-1.63	MWD
9030.00	88.10	359.80	6225.95	2768.52	939.49	2832.56	2.48	0.71	2.38	MWD
9073.00	89.80	359.30	6226.74	2811.51	939.15	2875.40	4.12	3.95	-1.16	MWD
9116.00	91.80	357.70	6226.14	2854.49	938.03	2918.16	5.96	4.65	-3.72	MWD
9158.00	91.60	357.40	6224.89	2896.43	936.23	2959.84	0.86	-0.48	-0.71	MWD
9201.00	92.30	358.80	6223.43	2939.38	934.81	3002.56	3.64	1.63	3.26	MWD
9243.00	92.90	0.90	6221.52	2981.33	934.70	3044.38	5.20	1.43	5.00	MWD
9286.00	90.80	2.30	6220.14	3024.29	935.90	3087.30	5.87	-4.88	3.26	MWD
9329.00	89.50	3.30	6220.02	3067.24	938.00	3130.28	3.81	-3.02	2.33	MWD
9371.00	89.20	3.00	6220.50	3109.17	940.31	3172.27	1.01	-0.71	-0.71	MWD
9414.00	89.30	3.50	6221.06	3152.10	942.75	3215.26	1.19	0.23	1.16	MWD
9456.00	89.10	3.70	6221.65	3194.01	945.38	3257.25	0.67	-0.48	0.48	MWD
9499.00	88.90	3.50	6222.40	3236.92	948.08	3300.24	0.66	-0.47	-0.47	MWD
9541.00	88.60	3.00	6223.32	3278.84	950.46	3342.22	1.39	-0.71	-1.19	MWD
9584.00	89.80	3.00	6223.92	3321.78	952.71	3385.20	2.79	2.79	0.00	MWD
9627.00	90.00	3.50	6223.99	3364.71	955.15	3428.19	1.25	0.47	1.16	MWD
9668.00	89.20	2.60	6224.28	3405.65	957.33	3469.18	2.94	-1.95	-2.20	MWD
9711.00	88.80	2.80	6225.03	3448.59	959.36	3512.15	1.04	-0.93	0.47	MWD
9753.00	89.10	2.60	6225.80	3490.54	961.33	3554.13	0.86	0.71	-0.48	MWD
9796.00	89.60	3.70	6226.28	3533.47	963.70	3597.11	2.81	1.16	2.56	MWD
9839.00	89.40	3.20	6226.66	3576.39	966.29	3640.10	1.25	-0.47	-1.16	MWD
9882.00	89.40	3.30	6227.11	3619.32	968.72	3683.09	0.23	0.00	0.23	MWD
9925.00	90.70	2.80	6227.07	3662.26	971.01	3726.08	3.24	3.02	-1.16	MWD
9967.00	91.00	2.10	6226.45	3704.22	972.81	3768.05	1.81	0.71	-1.67	MWD
10009.00	91.30	1.90	6225.61	3746.18	974.27	3810.00	0.86	0.71	-0.48	MWD
10052.00	90.70	1.20	6224.86	3789.16	975.43	3852.94	2.14	-1.40	-1.63	MWD
10093.00	90.30	1.10	6224.50	3830.15	976.26	3893.88	1.01	-0.98	-0.24	MWD
10136.00	90.00	0.90	6224.39	3873.14	977.01	3936.80	0.84	-0.70	-0.47	MWD
10178.00	90.40	0.50	6224.24	3915.14	977.52	3978.71	1.35	0.95	-0.95	MWD
10221.00	90.40	0.20	6223.94	3958.14	977.78	4021.60	0.70	0.00	-0.70	MWD
10264.00	91.50	359.50	6223.23	4001.13	977.67	4064.46	3.03	2.56	-1.63	MWD
10306.00	91.60	359.30	6222.09	4043.11	977.23	4106.28	0.53	0.24	-0.48	MWD
10349.00	91.30	359.00	6221.00	4086.09	976.59	4149.09	0.99	-0.70	-0.70	MWD
10434.00	90.30	358.10	6219.82	4171.06	974.44	4233.63	1.58	-1.18	-1.06	MWD
10520.00	89.70	357.40	6219.82	4256.99	971.07	4319.05	1.07	-0.70	-0.81	MWD
10557.00	89.30	356.80	6220.14	4293.94	969.19	4355.75	1.95	-1.08	-1.62	MWD
10618.00	89.30	356.80	6220.88	4354.84	965.79	4416.21	0.00	0.00	0.00	PROJECTED to TD

Precision Directional Services, Inc.

Survey Report

Company: CARRIZO OIL & GAS, INC.	Date: 09/06/2012	Time: 09:28:25	Page: 5
Field: Niobrara CONZ'83	Co-ordinate(NE) Reference: Well: 2-25-34-8-60, Grid North		
Site: Hemberger 2-25-34-8-60	Vertical (TVD) Reference: 4930'GL+17'KB 4947.0		
Well: 2-25-34-8-60	Section (VS) Reference: Well (0.00N,0.00E,4.41Azi)		
Wellpath: Original Hole	Survey Calculation Method: Minimum Curvature	Db: Adapti	

Annotation

MD ft	TVD ft	
6551.00	6222.70	600' entry