



# CARRIZO

## CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83

Site: Bringelson Ranch 34-41-9-58 Pad

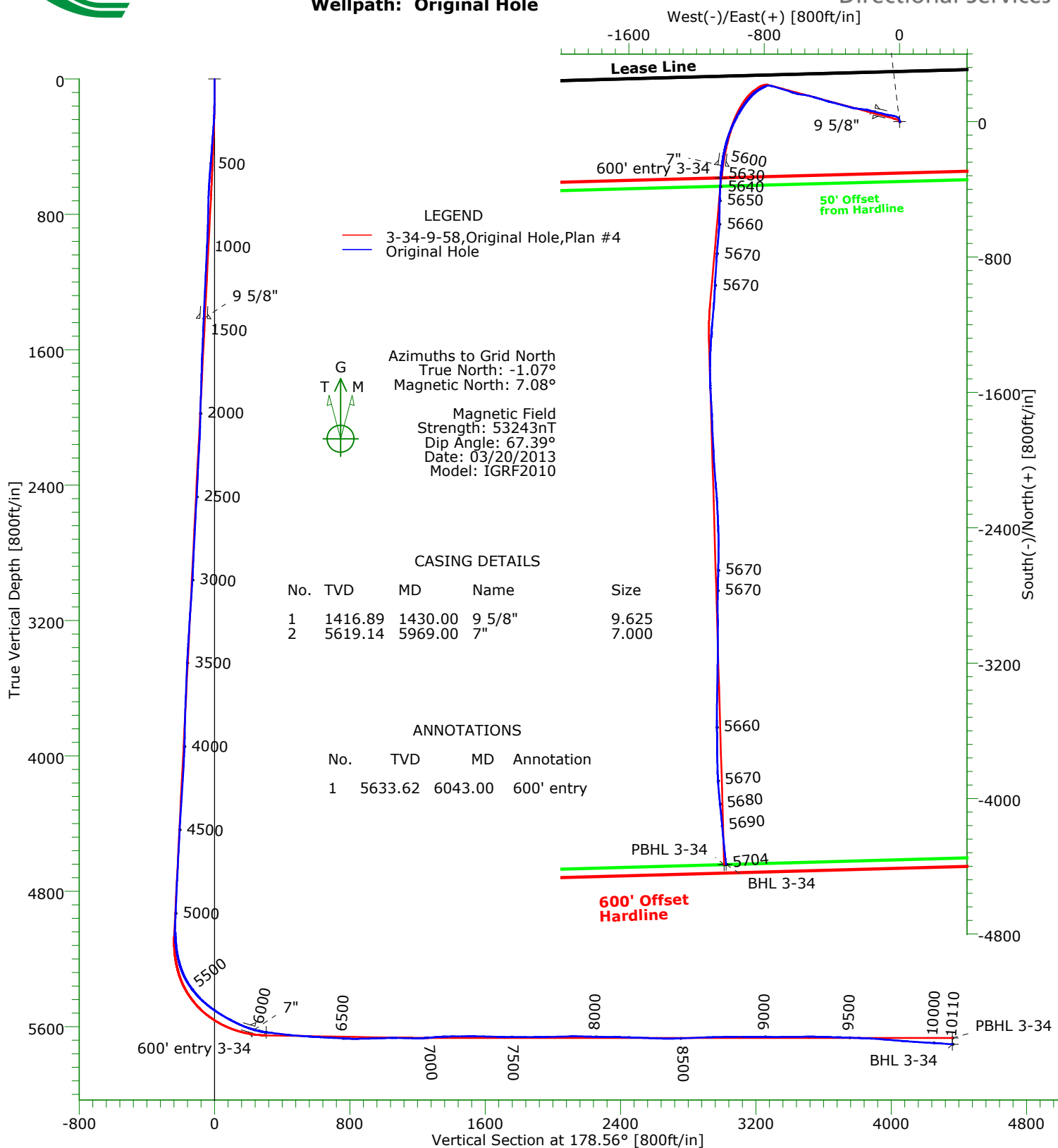
Well: 3-34-9-58

Wellpath: Original Hole



# Precision

Directional Services



### TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Surface 3-34	0.00	0.00	0.00	1507293.53	3458782.17	40°42'50.944N103°50'41.957W		Point
600' entry 3-34	5633.62	-332.15	-1057.73	1506961.38	3457724.44	40°42'47.857N103°50'55.771W		Point
PBHL 3-34	5667.00	-4389.70	-1036.71	1502903.83	3457745.46	40°42'07.767N103°50'56.479W		Point
BHL 3-34	5704.12	-4389.05	-1025.15	1502904.48	3457757.02	40°42'07.771N103°50'56.329W		Point

Wellpath: (3-34-9-58/Original Hole)

Created By: Shane Nelson

Date: 04/02/2013

**PRECISION DIRECTIONAL SERVICES, INC.**

**713.435.6250**

# Precision Directional Services, Inc.

## Survey Report

<b>Company:</b> CARRIZO OIL & GAS, INC. <b>Field:</b> Niobrara CONZ'83 <b>Site:</b> Bringelson Ranch 34-41-9-58 Pad <b>Well:</b> 3-34-9-58 <b>Wellpath:</b> Original Hole	<b>Date:</b> 04/02/2013 <b>Co-ordinate(NE) Reference:</b> Well: 3-34-9-58, Grid North <b>Vertical (TVD) Reference:</b> 4736'GL+17'KB 4753.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,178.56Azi) <b>Survey Calculation Method:</b> Minimum Curvature	<b>Time:</b> 14:37:02 <b>Page:</b> 1 <b>Db:</b> Adapti
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<b>Field:</b> Niobrara CONZ'83	
<b>Map System:</b> US State Plane Coordinate System 1983 <b>Geo Datum:</b> GRS 1980 <b>Sys Datum:</b> Mean Sea Level	<b>Map Zone:</b> Colorado, Northern Zone <b>Coordinate System:</b> Well Centre <b>Geomagnetic Model:</b> IGRF2010

<b>Site:</b> Bringelson Ranch 34-41-9-58 Pad		
<b>Site Position:</b> <b>From:</b> Map <b>Position Uncertainty:</b> 0.00 ft <b>Ground Level:</b> 4736.00 ft	<b>Northing:</b> 1507293.93 ft <b>Easting:</b> 3458811.93 ft	<b>Latitude:</b> 40 42 50.942 N <b>Longitude:</b> 103 50 41.571 W <b>North Reference:</b> Grid <b>Grid Convergence:</b> 1.07 deg

<b>Well:</b> 3-34-9-58 Centered on 1-23-41-9-58 <b>Well Position:</b> +N/-S -0.40 ft +E/-W -29.76 ft <b>Position Uncertainty:</b> 0.00 ft	<b>Slot Name:</b> <b>Latitude:</b> 40 42 50.944 N <b>Longitude:</b> 103 50 41.957 W
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<b>Wellpath:</b> Original Hole  <b>Current Datum:</b> 4736'GL+17'KB <b>Magnetic Data:</b> 03/20/2013 <b>Field Strength:</b> 53243 nT <b>Vertical Section:</b> Depth From (TVD) ft	<b>Height</b> 4753.00 ft	<b>Drilled From:</b> Surface <b>Tie-on Depth:</b> 0.00 ft <b>Above System Datum:</b> Mean Sea Level <b>Declination:</b> 8.15 deg <b>Mag Dip Angle:</b> 67.39 deg <b>+E/-W</b> ft <b>Direction</b> deg
0.00	0.00	0.00 178.56

<b>Survey Program for Definitive Wellpath</b>			<b>Version:</b> 4	
<b>Date:</b> 03/29/2013	<b>Validated:</b> No	<b>Survey</b>	<b>Toolcode</b>	<b>Tool Name</b>
114.00	10054.00	Survey #1 (114.00-10054.00)	MWD	Std MWD
10110.00	10110.00	Survey #2 (10110.00-10110.00)	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
114.00	0.40	96.00	114.00	-0.04	0.40	0.05	0.35	0.35	0.00	MWD
145.00	0.40	83.50	145.00	-0.04	0.61	0.06	0.28	0.00	-40.32	MWD
238.00	3.30	0.80	237.95	2.67	0.97	-2.65	3.52	3.12	-88.92	MWD
331.00	4.80	351.80	330.71	9.20	0.45	-9.19	1.75	1.61	-9.68	MWD
427.00	4.70	322.80	426.40	16.31	-2.50	-16.37	2.48	-0.10	-30.21	MWD
520.00	6.90	314.90	518.92	23.29	-8.76	-23.50	2.51	2.37	-8.49	MWD
614.00	8.30	295.40	612.10	30.19	-18.89	-30.65	3.10	1.49	-20.74	MWD
708.00	9.10	279.20	705.03	34.29	-32.36	-35.09	2.73	0.85	-17.23	MWD
801.00	9.00	275.00	796.88	36.10	-46.87	-37.26	0.72	-0.11	-4.52	MWD
895.00	9.10	279.70	889.71	37.99	-61.52	-39.52	0.79	0.11	5.00	MWD
988.00	10.30	284.50	981.38	41.31	-76.82	-43.23	1.55	1.29	5.16	MWD
1082.00	10.20	284.80	1073.88	45.54	-93.00	-47.86	0.12	-0.11	0.32	MWD
1176.00	9.80	283.60	1166.45	49.55	-108.82	-52.27	0.48	-0.43	-1.28	MWD
1269.00	9.70	283.80	1258.11	53.28	-124.12	-56.38	0.11	-0.11	0.22	MWD
1363.00	9.50	284.10	1350.79	57.06	-139.34	-60.54	0.22	-0.21	0.32	MWD
1479.00	9.10	282.70	1465.27	61.41	-157.57	-65.35	0.40	-0.34	-1.21	MWD
1542.00	9.10	282.50	1527.47	63.58	-167.29	-67.76	0.05	0.00	-0.32	MWD
1635.00	10.20	285.00	1619.16	67.30	-182.43	-71.87	1.27	1.18	2.69	MWD
1729.00	9.30	276.60	1711.80	70.33	-198.01	-75.28	1.79	-0.96	-8.94	MWD
1814.00	11.10	278.80	1795.46	72.37	-212.92	-77.70	2.17	2.12	2.59	MWD
1899.00	10.60	277.30	1878.94	74.62	-228.77	-80.34	0.68	-0.59	-1.76	MWD

# Precision Directional Services, Inc.

## Survey Report

**Company:** CARRIZO OIL & GAS, INC.  
**Field:** Niobrara CONZ'83  
**Site:** Bringelson Ranch 34-41-9-58 Pad  
**Well:** 3-34-9-58  
**Wellpath:** Original Hole

**Date:** 04/02/2013 **Time:** 14:37:02 **Page:** 2  
**Co-ordinate(NE) Reference:** Well: 3-34-9-58, Grid North  
**Vertical (TVD) Reference:** 4736'GL+17"KB 4753.0  
**Section (VS) Reference:** Well (0.00N,0.00E,178.56Azi)  
**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
1985.00	10.70	276.70	1963.45	76.55	-244.54	-82.67	0.17	0.12	-0.70	MWD
2070.00	10.60	275.80	2046.99	78.26	-260.15	-84.78	0.23	-0.12	-1.06	MWD
2155.00	10.50	284.60	2130.56	81.01	-275.43	-87.90	1.90	-0.12	10.35	MWD
2241.00	9.80	285.50	2215.21	84.94	-290.06	-92.20	0.83	-0.81	1.05	MWD
2326.00	9.90	285.50	2298.96	88.82	-304.08	-96.44	0.12	0.12	0.00	MWD
2411.00	10.20	285.20	2382.66	92.75	-318.38	-100.72	0.36	0.35	-0.35	MWD
2497.00	10.40	285.00	2467.27	96.75	-333.23	-105.10	0.24	0.23	-0.23	MWD
2582.00	10.60	285.30	2550.85	100.80	-348.18	-109.52	0.24	0.24	0.35	MWD
2667.00	10.80	285.30	2634.37	104.97	-363.40	-114.07	0.24	0.24	0.00	MWD
2752.00	11.00	284.80	2717.83	109.14	-378.92	-118.63	0.26	0.24	-0.59	MWD
2838.00	10.60	283.60	2802.31	113.10	-394.54	-122.98	0.53	-0.47	-1.40	MWD
2923.00	9.70	281.80	2885.98	116.40	-409.15	-126.64	1.12	-1.06	-2.12	MWD
3008.00	11.20	286.40	2969.57	120.19	-424.08	-130.81	2.02	1.76	5.41	MWD
3094.00	11.60	288.00	3053.87	125.22	-440.32	-136.25	0.59	0.47	1.86	MWD
3179.00	12.40	288.00	3137.01	130.69	-457.12	-142.13	0.94	0.94	0.00	MWD
3264.00	11.40	285.50	3220.19	135.75	-473.90	-147.62	1.32	-1.18	-2.94	MWD
3350.00	12.00	285.90	3304.40	140.47	-490.69	-152.76	0.70	0.70	0.47	MWD
3435.00	10.40	286.00	3387.78	145.01	-506.56	-157.69	1.88	-1.88	0.12	MWD
3521.00	9.00	284.80	3472.55	148.87	-520.53	-161.90	1.64	-1.63	-1.40	MWD
3606.00	9.20	284.50	3556.48	152.26	-533.53	-165.62	0.24	0.24	-0.35	MWD
3691.00	9.20	283.10	3640.38	155.51	-546.73	-169.20	0.26	0.00	-1.65	MWD
3776.00	8.80	278.70	3724.34	158.03	-559.78	-172.05	0.94	-0.47	-5.18	MWD
3862.00	8.60	276.40	3809.35	159.74	-572.67	-174.08	0.47	-0.23	-2.67	MWD
3947.00	8.40	277.30	3893.42	161.24	-585.14	-175.89	0.28	-0.24	1.06	MWD
4033.00	10.20	281.70	3978.28	163.58	-598.83	-178.58	2.25	2.09	5.12	MWD
4118.00	10.60	286.20	4061.89	167.29	-613.71	-182.66	1.06	0.47	5.29	MWD
4203.00	10.60	283.80	4145.44	171.33	-628.81	-187.08	0.52	0.00	-2.82	MWD
4289.00	10.60	291.50	4229.97	176.12	-643.85	-192.25	1.65	0.00	8.95	MWD
4374.00	10.30	290.40	4313.56	181.63	-658.25	-198.12	0.42	-0.35	-1.29	MWD
4459.00	9.80	287.10	4397.26	186.41	-672.28	-203.25	0.90	-0.59	-3.88	MWD
4545.00	9.30	286.60	4482.07	190.55	-685.94	-207.73	0.59	-0.58	-0.58	MWD
4630.00	9.10	286.60	4565.97	194.43	-698.96	-211.93	0.24	-0.24	0.00	MWD
4715.00	9.30	287.80	4649.88	198.45	-711.94	-216.28	0.33	0.24	1.41	MWD
4800.00	8.40	289.20	4733.87	202.59	-724.35	-220.73	1.09	-1.06	1.65	MWD
4886.00	9.40	283.20	4818.83	206.26	-737.12	-224.72	1.59	1.16	-6.98	MWD
4971.00	9.50	282.70	4902.68	209.39	-750.72	-228.19	0.15	0.12	-0.59	MWD
5056.00	10.60	283.90	4986.38	212.81	-765.15	-231.97	1.32	1.29	1.41	MWD
5113.00	10.10	272.20	5042.45	214.26	-775.23	-233.67	3.78	-0.88	-20.53	MWD
5156.00	14.30	251.90	5084.49	212.75	-784.06	-232.39	13.82	9.77	-47.21	MWD
5198.00	18.90	245.10	5124.73	208.28	-795.16	-228.19	11.87	10.95	-16.19	MWD
5241.00	22.40	243.30	5164.97	201.66	-808.81	-221.92	8.27	8.14	-4.19	MWD
5284.00	25.90	241.00	5204.20	193.42	-824.34	-214.08	8.43	8.14	-5.35	MWD
5326.00	29.50	236.80	5241.38	183.31	-841.03	-204.39	9.75	8.57	-10.00	MWD
5369.00	32.90	229.10	5278.17	169.86	-858.72	-191.38	12.18	7.91	-17.91	MWD
5412.00	36.80	223.50	5313.46	152.86	-876.43	-174.83	11.72	9.07	-13.02	MWD
5454.00	40.20	220.00	5346.33	133.34	-893.81	-155.76	9.61	8.10	-8.33	MWD
5497.00	43.60	216.80	5378.33	110.83	-911.62	-133.70	9.34	7.91	-7.44	MWD
5539.00	46.90	213.80	5407.90	86.48	-928.83	-109.80	9.35	7.86	-7.14	MWD
5582.00	50.30	210.30	5436.34	59.14	-945.92	-82.89	9.99	7.91	-8.14	MWD
5625.00	53.30	208.50	5462.93	29.70	-962.49	-53.88	7.71	6.98	-4.19	MWD
5667.00	56.50	206.20	5487.08	-0.82	-978.26	-23.77	8.84	7.62	-5.48	MWD
5710.00	58.70	202.50	5510.12	-33.89	-993.21	8.92	8.88	5.12	-8.60	MWD
5753.00	60.80	200.10	5531.79	-68.49	-1006.70	43.17	6.86	4.88	-5.58	MWD

# Precision Directional Services, Inc.

## Survey Report

**Company:** CARRIZO OIL & GAS, INC.  
**Field:** Niobrara CONZ'83  
**Site:** Bringelson Ranch 34-41-9-58 Pad  
**Well:** 3-34-9-58  
**Wellpath:** Original Hole

**Date:** 04/02/2013 **Time:** 14:37:02 **Page:** 3  
**Co-ordinate(NE) Reference:** Well: 3-34-9-58, Grid North  
**Vertical (TVD) Reference:** 4736'GL+17'KB 4753.0  
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**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
5795.00	62.00	197.80	5551.89	-103.37	-1018.67	77.74	5.59	2.86	-5.48	MWD
5838.00	63.90	193.80	5571.45	-140.21	-1029.08	114.30	9.39	4.42	-9.30	MWD
5881.00	66.80	191.30	5589.39	-178.35	-1037.56	152.22	8.57	6.74	-5.81	MWD
5923.00	69.70	189.40	5604.95	-216.72	-1044.56	190.40	8.08	6.90	-4.52	MWD
5988.00	76.30	186.70	5623.95	-278.23	-1053.23	251.68	10.90	10.15	-4.15	MWD
6031.00	82.10	183.60	5632.01	-320.28	-1057.01	293.61	15.23	13.49	-7.21	MWD
6043.00	82.47	183.29	5633.62	-332.15	-1057.73	305.46	4.04	3.09	-2.62	600' entry
6073.00	83.40	182.50	5637.31	-361.88	-1059.23	335.15	4.04	3.10	-2.62	MWD
6116.00	83.00	182.30	5642.40	-404.54	-1061.02	377.75	1.04	-0.93	-0.47	MWD
6158.00	82.90	182.00	5647.55	-446.19	-1062.58	419.35	0.75	-0.24	-0.71	MWD
6201.00	85.60	181.10	5651.86	-488.96	-1063.74	462.07	6.62	6.28	-2.09	MWD
6244.00	85.80	180.80	5655.08	-531.83	-1064.45	504.91	0.84	0.47	-0.70	MWD
6286.00	86.30	180.40	5657.98	-573.73	-1064.89	546.79	1.52	1.19	-0.95	MWD
6329.00	86.50	183.40	5660.68	-616.61	-1066.31	589.62	6.98	0.47	6.98	MWD
6371.00	86.70	185.10	5663.17	-658.42	-1069.42	631.34	4.07	0.48	4.05	MWD
6414.00	87.10	185.00	5665.49	-701.19	-1073.20	674.00	0.96	0.93	-0.23	MWD
6457.00	86.60	184.40	5667.86	-743.98	-1076.71	716.69	1.81	-1.16	-1.40	MWD
6499.00	86.60	184.30	5670.35	-785.79	-1079.89	758.40	0.24	0.00	-0.24	MWD
6542.00	89.20	183.70	5671.92	-828.65	-1082.89	801.18	6.21	6.05	-1.40	MWD
6609.00	91.00	183.70	5671.81	-895.51	-1087.21	867.90	2.69	2.69	0.00	MWD
6651.00	91.50	183.40	5670.89	-937.42	-1089.81	909.74	1.39	1.19	-0.71	MWD
6694.00	91.90	182.30	5669.61	-980.35	-1091.95	952.60	2.72	0.93	-2.56	MWD
6737.00	91.30	183.40	5668.41	-1023.27	-1094.09	995.46	2.91	-1.40	2.56	MWD
6779.00	90.80	183.20	5667.64	-1065.20	-1096.51	1037.31	1.28	-1.19	-0.48	MWD
6822.00	89.00	185.30	5667.72	-1108.08	-1099.69	1080.09	6.43	-4.19	4.88	MWD
6864.00	89.10	185.30	5668.42	-1149.89	-1103.57	1121.79	0.24	0.24	0.00	MWD
6907.00	88.80	185.00	5669.20	-1192.71	-1107.43	1164.50	0.99	-0.70	-0.70	MWD
6950.00	91.00	184.60	5669.28	-1235.56	-1111.03	1207.25	5.20	5.12	-0.93	MWD
6992.00	94.50	183.40	5667.26	-1277.40	-1113.95	1249.00	8.81	8.33	-2.86	MWD
7035.00	95.00	182.90	5663.70	-1320.19	-1116.31	1291.72	1.64	1.16	-1.16	MWD
7078.00	93.40	182.50	5660.55	-1363.02	-1118.33	1334.49	3.83	-3.72	-0.93	MWD
7120.00	90.90	180.90	5658.98	-1404.97	-1119.57	1376.39	7.07	-5.95	-3.81	MWD
7163.00	90.80	180.00	5658.34	-1447.96	-1119.91	1419.36	2.11	-0.23	-2.09	MWD
7205.00	90.90	179.90	5657.72	-1489.96	-1119.88	1461.34	0.34	0.24	-0.24	MWD
7248.00	90.70	179.30	5657.12	-1532.95	-1119.57	1504.33	1.47	-0.47	-1.40	MWD
7291.00	88.50	176.70	5657.42	-1575.92	-1118.07	1547.32	7.92	-5.12	-6.05	MWD
7333.00	88.50	177.20	5658.52	-1617.84	-1115.84	1589.29	1.19	0.00	1.19	MWD
7376.00	88.00	176.50	5659.83	-1660.76	-1113.48	1632.25	2.00	-1.16	-1.63	MWD
7418.00	88.00	176.70	5661.30	-1702.66	-1110.99	1674.20	0.48	0.00	0.48	MWD
7461.00	90.00	178.60	5662.05	-1745.61	-1109.23	1717.19	6.41	4.65	4.42	MWD
7504.00	90.10	177.90	5662.01	-1788.59	-1107.91	1760.18	1.64	0.23	-1.63	MWD
7546.00	90.00	177.40	5661.97	-1830.56	-1106.19	1802.18	1.21	-0.24	-1.19	MWD
7589.00	89.60	176.90	5662.12	-1873.50	-1104.05	1845.17	1.49	-0.93	-1.16	MWD
7631.00	89.70	176.90	5662.38	-1915.44	-1101.78	1887.15	0.24	0.24	0.00	MWD
7674.00	91.40	177.60	5661.97	-1958.39	-1099.72	1930.13	4.28	3.95	1.63	MWD
7717.00	91.20	176.50	5660.99	-2001.32	-1097.51	1973.11	2.60	-0.47	-2.56	MWD
7759.00	91.20	175.80	5660.11	-2043.21	-1094.69	2015.06	1.67	0.00	-1.67	MWD
7802.00	91.40	175.50	5659.13	-2086.08	-1091.43	2057.99	0.84	0.47	-0.70	MWD
7845.00	91.40	175.10	5658.08	-2128.92	-1087.90	2100.91	0.93	0.00	-0.93	MWD
7887.00	88.80	175.50	5658.01	-2170.78	-1084.46	2142.84	6.26	-6.19	0.95	MWD
7930.00	88.90	175.80	5658.87	-2213.64	-1081.20	2185.77	0.74	0.23	0.70	MWD
7973.00	88.50	177.40	5659.85	-2256.56	-1078.65	2228.74	3.83	-0.93	3.72	MWD
8015.00	88.70	176.90	5660.88	-2298.49	-1076.57	2270.71	1.28	0.48	-1.19	MWD
8058.00	89.60	177.80	5661.51	-2341.44	-1074.58	2313.70	2.96	2.09	2.09	MWD

# Precision Directional Services, Inc.

## Survey Report

**Company:** CARRIZO OIL & GAS, INC.  
**Field:** Niobrara CONZ'83  
**Site:** Bringelson Ranch 34-41-9-58 Pad  
**Well:** 3-34-9-58  
**Wellpath:** Original Hole

**Date:** 04/02/2013 **Time:** 14:37:02 **Page:** 4  
**Co-ordinate(NE) Reference:** Well: 3-34-9-58, Grid North  
**Vertical (TVD) Reference:** 4736'GL+17"KB 4753.0  
**Section (VS) Reference:** Well (0.00N,0.00E,178.56Azi)  
**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
8100.00	89.30	177.10	5661.92	-2383.40	-1072.71	2355.69	1.81	-0.71	-1.67	MWD
8143.00	88.90	179.30	5662.59	-2426.37	-1071.36	2398.68	5.20	-0.93	5.12	MWD
8186.00	88.60	178.50	5663.53	-2469.35	-1070.53	2441.67	1.99	-0.70	-1.86	MWD
8228.00	87.80	180.90	5664.85	-2511.32	-1070.31	2483.63	6.02	-1.90	5.71	MWD
8271.00	87.70	180.00	5666.54	-2554.29	-1070.65	2526.58	2.10	-0.23	-2.09	MWD
8314.00	88.20	181.10	5668.08	-2597.26	-1071.06	2569.52	2.81	1.16	2.56	MWD
8356.00	87.80	180.60	5669.54	-2639.23	-1071.69	2611.46	1.52	-0.95	-1.19	MWD
8399.00	88.70	181.50	5670.86	-2682.20	-1072.47	2654.40	2.96	2.09	2.09	MWD
8441.00	90.60	181.60	5671.11	-2724.18	-1073.61	2696.34	4.53	4.52	0.24	MWD
8484.00	92.00	180.90	5670.14	-2767.16	-1074.55	2739.28	3.64	3.26	-1.63	MWD
8527.00	92.20	180.80	5668.56	-2810.12	-1075.19	2782.22	0.52	0.47	-0.23	MWD
8569.00	92.20	180.40	5666.95	-2852.09	-1075.62	2824.16	0.95	0.00	-0.95	MWD
8612.00	92.20	179.30	5665.30	-2895.06	-1075.51	2867.12	2.56	0.00	-2.56	MWD
8654.00	92.10	179.20	5663.72	-2937.03	-1074.96	2909.08	0.34	-0.24	-0.24	MWD
8697.00	91.10	180.60	5662.52	-2980.01	-1074.89	2952.05	4.00	-2.33	3.26	MWD
8740.00	91.20	180.20	5661.66	-3023.00	-1075.19	2995.02	0.96	0.23	-0.93	MWD
8782.00	90.80	179.70	5660.93	-3064.99	-1075.15	3037.00	1.52	-0.95	-1.19	MWD
8825.00	90.30	179.30	5660.51	-3107.99	-1074.78	3080.00	1.49	-1.16	-0.93	MWD
8868.00	90.30	179.70	5660.29	-3150.98	-1074.40	3122.99	0.93	0.00	0.93	MWD
8910.00	90.00	181.80	5660.18	-3192.98	-1074.95	3164.96	5.05	-0.71	5.00	MWD
8953.00	89.50	180.80	5660.36	-3235.97	-1075.93	3207.91	2.60	-1.16	-2.33	MWD
8995.00	88.60	179.90	5661.06	-3277.96	-1076.18	3249.88	3.03	-2.14	-2.14	MWD
9038.00	90.00	181.50	5661.59	-3320.95	-1076.71	3292.84	4.94	3.26	3.72	MWD
9081.00	90.50	181.60	5661.40	-3363.93	-1077.87	3335.78	1.19	1.16	0.23	MWD
9123.00	90.70	181.10	5660.96	-3405.92	-1078.86	3377.73	1.28	0.48	-1.19	MWD
9166.00	90.40	180.80	5660.55	-3448.91	-1079.57	3420.69	0.99	-0.70	-0.70	MWD
9208.00	90.60	180.40	5660.18	-3490.91	-1080.01	3462.66	1.06	0.48	-0.95	MWD
9251.00	90.70	179.90	5659.69	-3533.90	-1080.13	3505.65	1.19	0.23	-1.16	MWD
9294.00	88.60	179.30	5659.95	-3576.90	-1079.83	3548.63	5.08	-4.88	-1.40	MWD
9336.00	88.20	178.30	5661.13	-3618.87	-1078.95	3590.62	2.56	-0.95	-2.38	MWD
9379.00	88.70	180.60	5662.29	-3661.85	-1078.53	3633.59	5.47	1.16	5.35	MWD
9422.00	88.80	180.00	5663.23	-3704.84	-1078.76	3676.56	1.41	0.23	-1.40	MWD
9464.00	87.70	177.90	5664.51	-3746.81	-1077.99	3718.54	5.64	-2.62	-5.00	MWD
9507.00	88.00	178.80	5666.12	-3789.76	-1076.75	3761.51	2.20	0.70	2.09	MWD
9550.00	88.30	179.20	5667.51	-3832.74	-1076.00	3804.48	1.16	0.70	0.93	MWD
9592.00	87.60	176.90	5669.02	-3874.68	-1074.58	3846.45	5.72	-1.67	-5.48	MWD
9635.00	86.10	175.30	5671.38	-3917.51	-1071.66	3889.35	5.10	-3.49	-3.72	MWD
9678.00	85.90	175.30	5674.38	-3960.26	-1068.14	3932.17	0.47	-0.47	0.00	MWD
9720.00	85.50	174.60	5677.53	-4001.98	-1064.45	3973.97	1.92	-0.95	-1.67	MWD
9763.00	85.30	174.10	5680.98	-4044.64	-1060.23	4016.72	1.25	-0.47	-1.16	MWD
9806.00	85.10	173.70	5684.57	-4087.24	-1055.68	4059.42	1.04	-0.47	-0.93	MWD
9848.00	86.10	175.10	5687.80	-4128.92	-1051.60	4101.19	4.09	2.38	3.33	MWD
9891.00	86.00	174.60	5690.76	-4171.64	-1047.74	4144.00	1.18	-0.23	-1.16	MWD
9976.00	87.00	174.80	5695.95	-4256.12	-1039.91	4228.64	1.20	1.18	0.24	MWD
10054.00	86.30	173.20	5700.51	-4333.56	-1031.77	4306.26	2.24	-0.90	-2.05	MWD
10110.00	86.30	173.20	5704.12	-4389.05	-1025.15	4361.90	0.00	0.00	0.00	Project

### Annotation

MD ft	TVD ft	
6043.00	5633.62	600' entry