



Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 3-3	0.00	0.00	0.00	1462386.70	3332615.89	40°35'47.311N104°18'08.095W		Point
PBHL 3-3	6661.00	4384.58	-674.68	1466771.28	3331941.21	40°36'30.724N104°18'16.074W		Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	
3	350.00	4.00	190.00	349.84	-6.87	-1.21	2.00	190.00	-6.85	
4	620.35	5.86	253.35	619.35	-20.12	-16.07	2.00	104.60	-19.89	
5	6104.55	5.86	253.35	6074.94	-180.39	-552.14	0.00	0.00	-172.57	
6	7020.50	90.00	359.19	6661.00	391.47	-618.08	10.00	105.75	400.17	
7	11014.01	90.00	359.19	6661.00	4384.58	-674.68	0.00	0.00	4393.68	PBHL 3-3

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Sievers 1-3-7-62 Pad Well: 3-3-7-62 Wellpath: Original Hole	Date: 12/04/2012 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Plan:	Time: 11:38:15 Well: 3-3-7-62, Grid North 4890'GL+17"KB 4907.0 Well (0.00N,0.00E,359.19Azi) Plan #1	Page: 1
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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: Sievers 1-3-7-62 Pad			
Weld County, CO			
Site Position:	Northing: 1462387.07 ft	Latitude: 40 35 47.311 N	
From: Map	Easting: 3332645.89 ft	Longitude: 104 18 7.706 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 4890.00 ft		Grid Convergence: 0.77 deg	

Well: 3-3-7-62 centered on 1-3		Slot Name: 3-3	
Well Position: +N/-S -0.37 ft	Northing: 1462386.70 ft	Latitude: 40 35 47.311 N	
+E/-W -30.00 ft	Easting : 3332615.89 ft	Longitude: 104 18 8.095 W	
Position Uncertainty: 0.00 ft			

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 4890'GL+17"KB		Tie-on Depth: 0.00 ft	
Magnetic Data: 12/04/2012		Above System Datum: Mean Sea Level	
Field Strength: 53167 nT		Declination: 8.43 deg	
Vertical Section: Depth From (TVD)		Mag Dip Angle: 67.23 deg	
ft	+N/-S ft	+E/-W ft	Direction deg
0.00	0.00	0.00	359.19

Plan: Plan #1		Date Composed: 12/04/2012	
Principal: No		Version: 1	
		Tied-to: From Surface	

Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	4.00	190.00	349.84	-6.87	-1.21	2.00	2.00	0.00	190.00	
620.35	5.86	253.35	619.35	-20.12	-16.07	2.00	0.69	23.43	104.60	
6104.55	5.86	253.35	6074.94	-180.39	-552.14	0.00	0.00	0.00	0.00	
7020.50	90.00	359.19	6661.00	391.47	-618.08	10.00	9.19	11.55	105.75	
11014.01	90.00	359.19	6661.00	4384.58	-674.68	0.00	0.00	0.00	0.00	PBHL 3-3

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
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	1.00	190.00	200.00	-0.43	-0.08	-0.43	2.00	2.00	0.00	
300.00	3.00	190.00	299.93	-3.87	-0.68	-3.86	2.00	2.00	0.00	
350.00	4.00	190.00	349.84	-6.87	-1.21	-6.85	2.00	2.00	0.00	
400.00	3.87	204.49	399.72	-10.13	-2.21	-10.09	2.00	-0.26	28.98	
500.00	4.35	231.87	499.47	-15.54	-6.60	-15.45	2.00	0.48	27.38	
600.00	5.56	250.57	599.10	-19.49	-14.15	-19.29	2.00	1.21	18.70	
620.35	5.86	253.35	619.35	-20.12	-16.07	-19.89	2.00	1.47	13.67	
700.00	5.86	253.35	698.59	-22.45	-23.86	-22.11	0.00	0.00	0.00	
800.00	5.86	253.35	798.07	-25.37	-33.63	-24.89	0.00	0.00	0.00	
900.00	5.86	253.35	897.54	-28.29	-43.41	-27.67	0.00	0.00	0.00	
1000.00	5.86	253.35	997.02	-31.21	-53.18	-30.46	0.00	0.00	0.00	
1100.00	5.86	253.35	1096.50	-34.14	-62.96	-33.24	0.00	0.00	0.00	
1200.00	5.86	253.35	1195.98	-37.06	-72.73	-36.03	0.00	0.00	0.00	
1300.00	5.86	253.35	1295.46	-39.98	-82.51	-38.81	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Sievers 1-3-7-62 Pad
Well: 3-3-7-62
Wellpath: Original Hole

Date: 12/04/2012
Co-ordinate(NE) Reference: Well: 3-3-7-62, Grid North
Vertical (TVD) Reference: 4890'GL+17'KB 4907.0
Section (VS) Reference: Well (0.00N,0.00E,359.19Azi)
Plan: Plan #1

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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
1400.00	5.86	253.35	1394.93	-42.90	-92.28	-41.59	0.00	0.00	0.00	
1500.00	5.86	253.35	1494.41	-45.83	-102.06	-44.38	0.00	0.00	0.00	
1600.00	5.86	253.35	1593.89	-48.75	-111.83	-47.16	0.00	0.00	0.00	
1700.00	5.86	253.35	1693.37	-51.67	-121.61	-49.95	0.00	0.00	0.00	
1800.00	5.86	253.35	1792.85	-54.59	-131.38	-52.73	0.00	0.00	0.00	
1900.00	5.86	253.35	1892.33	-57.52	-141.16	-55.51	0.00	0.00	0.00	
2000.00	5.86	253.35	1991.80	-60.44	-150.93	-58.30	0.00	0.00	0.00	
2100.00	5.86	253.35	2091.28	-63.36	-160.71	-61.08	0.00	0.00	0.00	
2200.00	5.86	253.35	2190.76	-66.28	-170.48	-63.87	0.00	0.00	0.00	
2300.00	5.86	253.35	2290.24	-69.20	-180.26	-66.65	0.00	0.00	0.00	
2400.00	5.86	253.35	2389.72	-72.13	-190.03	-69.43	0.00	0.00	0.00	
2500.00	5.86	253.35	2489.20	-75.05	-199.81	-72.22	0.00	0.00	0.00	
2600.00	5.86	253.35	2588.67	-77.97	-209.58	-75.00	0.00	0.00	0.00	
2700.00	5.86	253.35	2688.15	-80.89	-219.35	-77.79	0.00	0.00	0.00	
2800.00	5.86	253.35	2787.63	-83.82	-229.13	-80.57	0.00	0.00	0.00	
2900.00	5.86	253.35	2887.11	-86.74	-238.90	-83.35	0.00	0.00	0.00	
3000.00	5.86	253.35	2986.59	-89.66	-248.68	-86.14	0.00	0.00	0.00	
3100.00	5.86	253.35	3086.06	-92.58	-258.45	-88.92	0.00	0.00	0.00	
3200.00	5.86	253.35	3185.54	-95.51	-268.23	-91.70	0.00	0.00	0.00	
3300.00	5.86	253.35	3285.02	-98.43	-278.00	-94.49	0.00	0.00	0.00	
3400.00	5.86	253.35	3384.50	-101.35	-287.78	-97.27	0.00	0.00	0.00	
3500.00	5.86	253.35	3483.98	-104.27	-297.55	-100.06	0.00	0.00	0.00	
3600.00	5.86	253.35	3583.46	-107.20	-307.33	-102.84	0.00	0.00	0.00	
3700.00	5.86	253.35	3682.93	-110.12	-317.10	-105.62	0.00	0.00	0.00	
3800.00	5.86	253.35	3782.41	-113.04	-326.88	-108.41	0.00	0.00	0.00	
3900.00	5.86	253.35	3881.89	-115.96	-336.65	-111.19	0.00	0.00	0.00	
4000.00	5.86	253.35	3981.37	-118.89	-346.43	-113.98	0.00	0.00	0.00	
4100.00	5.86	253.35	4080.85	-121.81	-356.20	-116.76	0.00	0.00	0.00	
4200.00	5.86	253.35	4180.32	-124.73	-365.98	-119.54	0.00	0.00	0.00	
4300.00	5.86	253.35	4279.80	-127.65	-375.75	-122.33	0.00	0.00	0.00	
4400.00	5.86	253.35	4379.28	-130.57	-385.53	-125.11	0.00	0.00	0.00	
4500.00	5.86	253.35	4478.76	-133.50	-395.30	-127.90	0.00	0.00	0.00	
4600.00	5.86	253.35	4578.24	-136.42	-405.08	-130.68	0.00	0.00	0.00	
4700.00	5.86	253.35	4677.72	-139.34	-414.85	-133.46	0.00	0.00	0.00	
4800.00	5.86	253.35	4777.19	-142.26	-424.63	-136.25	0.00	0.00	0.00	
4900.00	5.86	253.35	4876.67	-145.19	-434.40	-139.03	0.00	0.00	0.00	
5000.00	5.86	253.35	4976.15	-148.11	-444.18	-141.82	0.00	0.00	0.00	
5100.00	5.86	253.35	5075.63	-151.03	-453.95	-144.60	0.00	0.00	0.00	
5200.00	5.86	253.35	5175.11	-153.95	-463.73	-147.38	0.00	0.00	0.00	
5300.00	5.86	253.35	5274.58	-156.88	-473.50	-150.17	0.00	0.00	0.00	
5400.00	5.86	253.35	5374.06	-159.80	-483.27	-152.95	0.00	0.00	0.00	
5500.00	5.86	253.35	5473.54	-162.72	-493.05	-155.73	0.00	0.00	0.00	
5600.00	5.86	253.35	5573.02	-165.64	-502.82	-158.52	0.00	0.00	0.00	
5700.00	5.86	253.35	5672.50	-168.57	-512.60	-161.30	0.00	0.00	0.00	
5800.00	5.86	253.35	5771.98	-171.49	-522.37	-164.09	0.00	0.00	0.00	
5900.00	5.86	253.35	5871.45	-174.41	-532.15	-166.87	0.00	0.00	0.00	
6000.00	5.86	253.35	5970.93	-177.33	-541.92	-169.65	0.00	0.00	0.00	
6104.55	5.86	253.35	6074.94	-180.39	-552.14	-172.57	0.00	0.00	0.00	
6150.00	6.36	296.88	6120.15	-179.91	-556.61	-172.03	10.00	1.11	95.76	
6200.00	9.73	324.08	6169.67	-175.24	-561.56	-167.28	10.00	6.75	54.40	
6250.00	14.10	336.06	6218.59	-166.24	-566.52	-158.22	10.00	8.74	23.98	
6300.00	18.79	342.33	6266.53	-152.99	-571.44	-144.90	10.00	9.36	12.52	
6350.00	23.59	346.13	6313.14	-135.60	-576.28	-127.44	10.00	9.62	7.61	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Sievers 1-3-7-62 Pad
Well: 3-3-7-62
Wellpath: Original Hole

Date: 12/04/2012
Co-ordinate(NE) Reference: Well: 3-3-7-62, Grid North
Vertical (TVD) Reference: 4890'GL+17'KB 4907.0
Section (VS) Reference: Well (0.00N,0.00E,359.19Azi)
Plan: Plan #1

Page: 3

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
6400.00	28.47	348.70	6358.06	-114.18	-581.02	-105.96	10.00	9.74	5.14	
6450.00	33.37	350.57	6400.94	-88.91	-585.61	-80.63	10.00	9.81	3.74	
6500.00	38.30	352.01	6441.46	-59.98	-590.02	-51.64	10.00	9.86	2.88	
6550.00	43.25	353.17	6479.31	-27.61	-594.21	-19.21	10.00	9.89	2.31	
6600.00	48.20	354.13	6514.21	7.96	-598.16	16.41	10.00	9.91	1.92	
6650.00	53.16	354.95	6545.88	46.45	-601.83	54.95	10.00	9.92	1.64	
6700.00	58.12	355.67	6574.09	87.57	-605.20	96.12	10.00	9.93	1.44	
6750.00	63.09	356.32	6598.63	131.02	-608.23	139.60	10.00	9.94	1.30	
6800.00	68.06	356.91	6619.29	176.45	-610.92	185.07	10.00	9.94	1.19	
6819.49	70.00	357.13	6626.27	194.62	-611.86	203.25	10.00	9.94	1.13	7"
6850.00	73.03	357.46	6635.94	223.52	-613.23	232.17	10.00	9.95	1.09	
6900.00	78.01	357.99	6648.44	271.88	-615.15	280.55	10.00	9.95	1.05	
6950.00	82.98	358.49	6656.69	321.16	-616.66	329.84	10.00	9.95	1.01	
7000.00	87.96	358.99	6660.63	370.97	-617.75	379.67	10.00	9.95	0.99	
7020.50	90.00	359.19	6661.00	391.47	-618.08	400.17	10.00	9.95	0.98	
7100.00	90.00	359.19	6661.00	470.96	-619.21	479.67	0.00	0.00	0.00	
7200.00	90.00	359.19	6661.00	570.95	-620.62	579.67	0.00	0.00	0.00	
7300.00	90.00	359.19	6661.00	670.94	-622.04	679.67	0.00	0.00	0.00	
7400.00	90.00	359.19	6661.00	770.93	-623.46	779.67	0.00	0.00	0.00	
7500.00	90.00	359.19	6661.00	870.92	-624.88	879.67	0.00	0.00	0.00	
7600.00	90.00	359.19	6661.00	970.91	-626.29	979.67	0.00	0.00	0.00	
7700.00	90.00	359.19	6661.00	1070.90	-627.71	1079.67	0.00	0.00	0.00	
7800.00	90.00	359.19	6661.00	1170.89	-629.13	1179.67	0.00	0.00	0.00	
7900.00	90.00	359.19	6661.00	1270.88	-630.55	1279.67	0.00	0.00	0.00	
8000.00	90.00	359.19	6661.00	1370.87	-631.96	1379.67	0.00	0.00	0.00	
8100.00	90.00	359.19	6661.00	1470.86	-633.38	1479.67	0.00	0.00	0.00	
8200.00	90.00	359.19	6661.00	1570.85	-634.80	1579.67	0.00	0.00	0.00	
8300.00	90.00	359.19	6661.00	1670.84	-636.21	1679.67	0.00	0.00	0.00	
8400.00	90.00	359.19	6661.00	1770.83	-637.63	1779.67	0.00	0.00	0.00	
8500.00	90.00	359.19	6661.00	1870.82	-639.05	1879.67	0.00	0.00	0.00	
8600.00	90.00	359.19	6661.00	1970.81	-640.47	1979.67	0.00	0.00	0.00	
8700.00	90.00	359.19	6661.00	2070.80	-641.88	2079.67	0.00	0.00	0.00	
8800.00	90.00	359.19	6661.00	2170.79	-643.30	2179.67	0.00	0.00	0.00	
8900.00	90.00	359.19	6661.00	2270.78	-644.72	2279.67	0.00	0.00	0.00	
9000.00	90.00	359.19	6661.00	2370.77	-646.14	2379.67	0.00	0.00	0.00	
9100.00	90.00	359.19	6661.00	2470.76	-647.55	2479.67	0.00	0.00	0.00	
9200.00	90.00	359.19	6661.00	2570.75	-648.97	2579.67	0.00	0.00	0.00	
9300.00	90.00	359.19	6661.00	2670.74	-650.39	2679.67	0.00	0.00	0.00	
9400.00	90.00	359.19	6661.00	2770.73	-651.80	2779.67	0.00	0.00	0.00	
9500.00	90.00	359.19	6661.00	2870.72	-653.22	2879.67	0.00	0.00	0.00	
9600.00	90.00	359.19	6661.00	2970.71	-654.64	2979.67	0.00	0.00	0.00	
9700.00	90.00	359.19	6661.00	3070.70	-656.06	3079.67	0.00	0.00	0.00	
9800.00	90.00	359.19	6661.00	3170.69	-657.47	3179.67	0.00	0.00	0.00	
9900.00	90.00	359.19	6661.00	3270.68	-658.89	3279.67	0.00	0.00	0.00	
10000.00	90.00	359.19	6661.00	3370.67	-660.31	3379.67	0.00	0.00	0.00	
10100.00	90.00	359.19	6661.00	3470.66	-661.73	3479.67	0.00	0.00	0.00	
10200.00	90.00	359.19	6661.00	3570.65	-663.14	3579.67	0.00	0.00	0.00	
10300.00	90.00	359.19	6661.00	3670.64	-664.56	3679.67	0.00	0.00	0.00	
10400.00	90.00	359.19	6661.00	3770.63	-665.98	3779.67	0.00	0.00	0.00	
10500.00	90.00	359.19	6661.00	3870.62	-667.39	3879.67	0.00	0.00	0.00	
10600.00	90.00	359.19	6661.00	3970.61	-668.81	3979.67	0.00	0.00	0.00	
10700.00	90.00	359.19	6661.00	4070.60	-670.23	4079.67	0.00	0.00	0.00	
10800.00	90.00	359.19	6661.00	4170.59	-671.65	4179.67	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Sievers 1-3-7-62 Pad Well: 3-3-7-62 Wellpath: Original Hole	Date: 12/04/2012 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Plan:	Time: 11:38:15 Well: 3-3-7-62, Grid North 4890'GL+17"KB 4907.0 Well (0.00N,0.00E,359.19Azi) Plan #1	Page: 4
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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
10900.00	90.00	359.19	6661.00	4270.58	-673.06	4279.67	0.00	0.00	0.00	
11000.00	90.00	359.19	6661.00	4370.57	-674.48	4379.67	0.00	0.00	0.00	
11014.01	90.00	359.19	6661.00	4384.58	-674.68	4393.68	0.00	0.00	0.00	PBHL 3-3

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->		
SL 3-3			0.00	0.00	0.00	1462386.70	3332615.89	40	35	47.311 N	104	18	8.095 W
PBHL 3-3			6661.00	4384.58	-674.68	1466771.28	3331941.21	40	36	30.724 N	104	18	16.074 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
6819.49	6626.27	7.000	8.750	7"