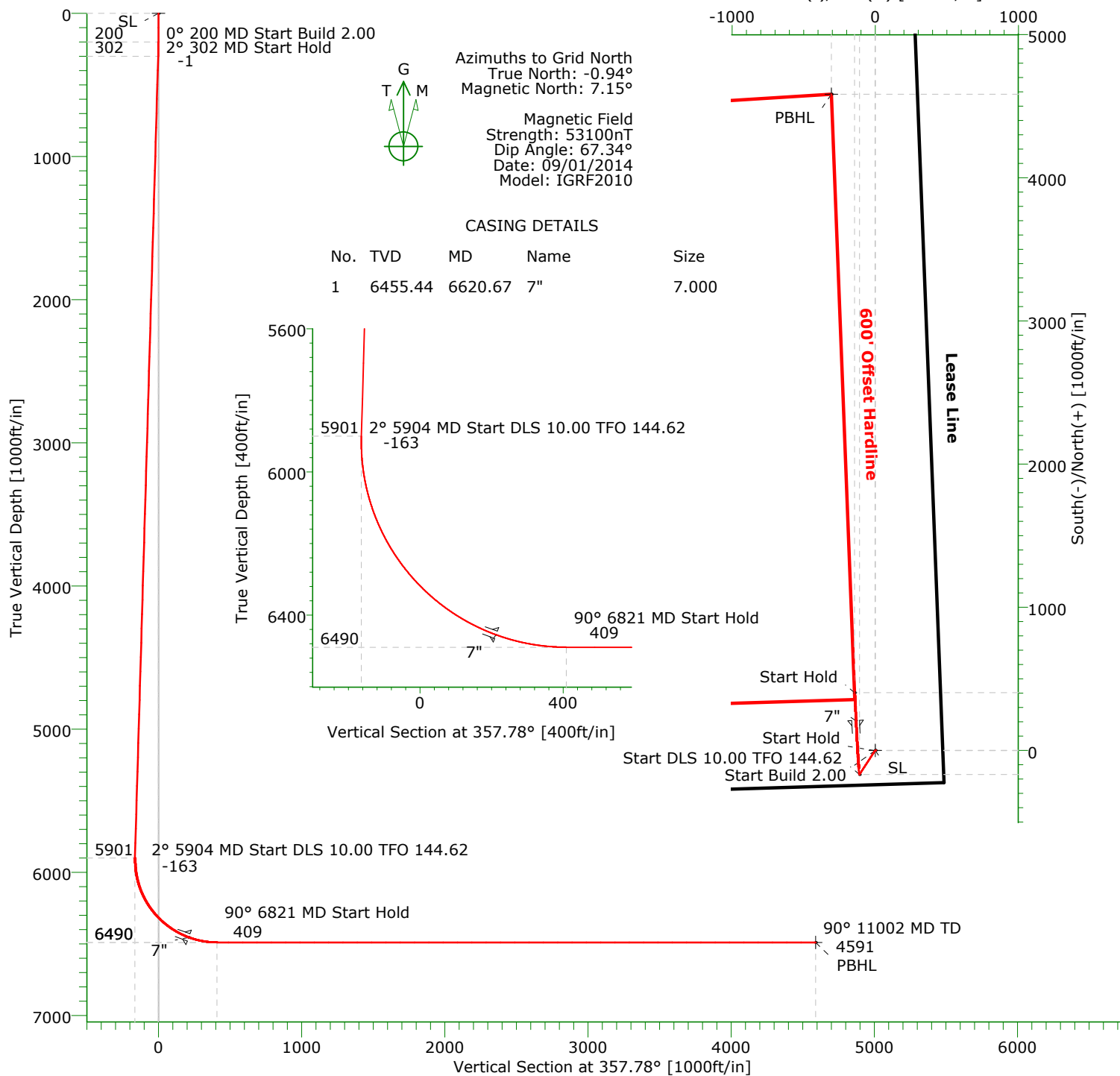




CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
Site: Dietzler 1-11-9-60 Pad
Well: 1-11-9-60
Wellpath: Original Hole
Plan: Plan #1



TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
SL	0.00	0.00	0.00	1522407.81	3401306.65	40°45'30.205N	104°03'05.033W	Point	
PBHL	6490.00	4582.63	-305.75	1526990.44	3401000.90	40°46'15.530N	104°03'08.033W	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	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	301.58	2.03	213.14	301.56	-1.51	-0.98	2.00	0.00	-1.47	
4	5904.14	2.03	213.14	5900.60	-167.82	-109.57	0.00	0.00	-163.45	
5	6820.71	90.00	357.78	6490.00	404.00	-143.84	10.00	144.62	409.27	
6	11002.48	90.00	357.78	6490.00	4582.63	-305.75	0.00	0.00	4591.03	PBHL

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.		Date: 08/01/2014	Time: 10:56:07	Page: 1
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 1-11-9-60, Grid North		
Site: Dietzler 1-11-9-60 Pad		Vertical (TVD) Reference: 5032'GL+17'KB 5048.0		
Well: 1-11-9-60		Section (VS) Reference: Well (0.00N,0.00E,357.78Azi)		
Wellpath: Original Hole		Plan: Plan #1		

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: Dietzler 1-11-9-60 Pad Sec. 11 T9N R60W Weld County, Colorado				
Site Position:	Northing: 1522407.81 ft	Latitude: 40 45 30.205 N		
From: Map	Easting: 3401306.65 ft	Longitude: 104 3 5.033 W		
Position Uncertainty: 0.00 ft		North Reference: Grid		
Ground Level: 5032.00 ft		Grid Convergence: 0.94 deg		

Well: 1-11-9-60		Slot Name:		
Well Position: +N/-S 0.00 ft	Northing: 1522407.81 ft	Latitude: 40 45 30.205 N		
+E/-W 0.00 ft	Easting : 3401306.65 ft	Longitude: 104 3 5.033 W		
Position Uncertainty: 0.00 ft				

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 5032'GL+17'KB	Height 5048.00 ft	Tie-on Depth: 0.00 ft	
Magnetic Data: 09/01/2014		Above System Datum: Mean Sea Level	
Field Strength: 53100 nT		Declination: 8.08 deg	
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 67.34 deg	
ft	ft	+E/-W	Direction
		ft	bearing
0.00	0.00	0.00	357.78

Plan: Plan #1	Date Composed: 08/01/2014
Principal: No	Version: 1
	Tied-to: From Surface

Plan Section Information										
MD ft	Incl deg	Azim bearing	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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
301.58	2.03	213.14	301.56	-1.51	-0.98	2.00	2.00	0.00	0.00	
5904.14	2.03	213.14	5900.60	-167.82	-109.57	0.00	0.00	0.00	0.00	
6820.71	90.00	357.78	6490.00	404.00	-143.84	10.00	9.60	15.78	144.62	
11002.48	90.00	357.78	6490.00	4582.63	-305.75	0.00	0.00	0.00	0.00	PBHL

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
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
301.58	2.03	213.14	301.56	-1.51	-0.98	-1.47	2.00	2.00	0.00	
400.00	2.03	213.14	399.92	-4.43	-2.89	-4.31	0.00	0.00	0.00	
500.00	2.03	213.14	499.85	-7.40	-4.83	-7.21	0.00	0.00	0.00	
600.00	2.03	213.14	599.79	-10.37	-6.77	-10.10	0.00	0.00	0.00	
700.00	2.03	213.14	699.73	-13.33	-8.71	-12.99	0.00	0.00	0.00	
800.00	2.03	213.14	799.67	-16.30	-10.64	-15.88	0.00	0.00	0.00	
900.00	2.03	213.14	899.60	-19.27	-12.58	-18.77	0.00	0.00	0.00	
1000.00	2.03	213.14	999.54	-22.24	-14.52	-21.66	0.00	0.00	0.00	
1100.00	2.03	213.14	1099.48	-25.21	-16.46	-24.55	0.00	0.00	0.00	
1200.00	2.03	213.14	1199.41	-28.18	-18.40	-27.44	0.00	0.00	0.00	
1300.00	2.03	213.14	1299.35	-31.15	-20.34	-30.33	0.00	0.00	0.00	
1400.00	2.03	213.14	1399.29	-34.11	-22.27	-33.23	0.00	0.00	0.00	
1500.00	2.03	213.14	1499.23	-37.08	-24.21	-36.12	0.00	0.00	0.00	
1600.00	2.03	213.14	1599.16	-40.05	-26.15	-39.01	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Dietzler 1-11-9-60 Pad
Well: 1-11-9-60
Wellpath: Original Hole

Date: 08/01/2014
Co-ordinate(NE) Reference: Well: 1-11-9-60, Grid North
Vertical (TVD) Reference: 5032'GL+17'KB 5048.0
Section (VS) Reference: Well (0.00N,0.00E,357.78Azi)
Plan: Plan #1

Page: 2

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
1700.00	2.03	213.14	1699.10	-43.02	-28.09	-41.90	0.00	0.00	0.00	
1800.00	2.03	213.14	1799.04	-45.99	-30.03	-44.79	0.00	0.00	0.00	
1900.00	2.03	213.14	1898.97	-48.96	-31.97	-47.68	0.00	0.00	0.00	
2000.00	2.03	213.14	1998.91	-51.93	-33.90	-50.57	0.00	0.00	0.00	
2100.00	2.03	213.14	2098.85	-54.89	-35.84	-53.46	0.00	0.00	0.00	
2200.00	2.03	213.14	2198.79	-57.86	-37.78	-56.36	0.00	0.00	0.00	
2300.00	2.03	213.14	2298.72	-60.83	-39.72	-59.25	0.00	0.00	0.00	
2400.00	2.03	213.14	2398.66	-63.80	-41.66	-62.14	0.00	0.00	0.00	
2500.00	2.03	213.14	2498.60	-66.77	-43.59	-65.03	0.00	0.00	0.00	
2600.00	2.03	213.14	2598.53	-69.74	-45.53	-67.92	0.00	0.00	0.00	
2700.00	2.03	213.14	2698.47	-72.71	-47.47	-70.81	0.00	0.00	0.00	
2800.00	2.03	213.14	2798.41	-75.67	-49.41	-73.70	0.00	0.00	0.00	
2900.00	2.03	213.14	2898.35	-78.64	-51.35	-76.59	0.00	0.00	0.00	
3000.00	2.03	213.14	2998.28	-81.61	-53.29	-79.49	0.00	0.00	0.00	
3100.00	2.03	213.14	3098.22	-84.58	-55.22	-82.38	0.00	0.00	0.00	
3200.00	2.03	213.14	3198.16	-87.55	-57.16	-85.27	0.00	0.00	0.00	
3300.00	2.03	213.14	3298.09	-90.52	-59.10	-88.16	0.00	0.00	0.00	
3400.00	2.03	213.14	3398.03	-93.48	-61.04	-91.05	0.00	0.00	0.00	
3500.00	2.03	213.14	3497.97	-96.45	-62.98	-93.94	0.00	0.00	0.00	
3600.00	2.03	213.14	3597.91	-99.42	-64.91	-96.83	0.00	0.00	0.00	
3700.00	2.03	213.14	3697.84	-102.39	-66.85	-99.72	0.00	0.00	0.00	
3800.00	2.03	213.14	3797.78	-105.36	-68.79	-102.61	0.00	0.00	0.00	
3900.00	2.03	213.14	3897.72	-108.33	-70.73	-105.51	0.00	0.00	0.00	
4000.00	2.03	213.14	3997.65	-111.30	-72.67	-108.40	0.00	0.00	0.00	
4100.00	2.03	213.14	4097.59	-114.26	-74.61	-111.29	0.00	0.00	0.00	
4200.00	2.03	213.14	4197.53	-117.23	-76.54	-114.18	0.00	0.00	0.00	
4300.00	2.03	213.14	4297.47	-120.20	-78.48	-117.07	0.00	0.00	0.00	
4400.00	2.03	213.14	4397.40	-123.17	-80.42	-119.96	0.00	0.00	0.00	
4500.00	2.03	213.14	4497.34	-126.14	-82.36	-122.85	0.00	0.00	0.00	
4600.00	2.03	213.14	4597.28	-129.11	-84.30	-125.74	0.00	0.00	0.00	
4700.00	2.03	213.14	4697.21	-132.08	-86.23	-128.64	0.00	0.00	0.00	
4800.00	2.03	213.14	4797.15	-135.04	-88.17	-131.53	0.00	0.00	0.00	
4900.00	2.03	213.14	4897.09	-138.01	-90.11	-134.42	0.00	0.00	0.00	
5000.00	2.03	213.14	4997.03	-140.98	-92.05	-137.31	0.00	0.00	0.00	
5100.00	2.03	213.14	5096.96	-143.95	-93.99	-140.20	0.00	0.00	0.00	
5200.00	2.03	213.14	5196.90	-146.92	-95.93	-143.09	0.00	0.00	0.00	
5300.00	2.03	213.14	5296.84	-149.89	-97.86	-145.98	0.00	0.00	0.00	
5400.00	2.03	213.14	5396.77	-152.85	-99.80	-148.87	0.00	0.00	0.00	
5500.00	2.03	213.14	5496.71	-155.82	-101.74	-151.77	0.00	0.00	0.00	
5600.00	2.03	213.14	5596.65	-158.79	-103.68	-154.66	0.00	0.00	0.00	
5700.00	2.03	213.14	5696.59	-161.76	-105.62	-157.55	0.00	0.00	0.00	
5800.00	2.03	213.14	5796.52	-164.73	-107.56	-160.44	0.00	0.00	0.00	
5904.14	2.03	213.14	5900.60	-167.82	-109.57	-163.45	0.00	0.00	0.00	
5950.00	3.16	335.92	5946.43	-167.35	-110.53	-162.94	10.00	2.45	267.75	
6000.00	8.01	349.40	5996.18	-162.66	-111.74	-158.21	10.00	9.72	26.95	
6050.00	12.98	352.67	6045.33	-153.66	-113.10	-149.16	10.00	9.93	6.55	
6100.00	17.97	354.15	6093.50	-140.41	-114.60	-135.87	10.00	9.97	2.96	
6150.00	22.96	355.00	6140.33	-123.01	-116.24	-118.42	10.00	9.98	1.70	
6200.00	27.95	355.56	6185.46	-101.60	-117.99	-96.96	10.00	9.99	1.12	
6250.00	32.95	355.97	6228.56	-76.34	-119.86	-71.64	10.00	9.99	0.80	
6300.00	37.94	356.27	6269.28	-47.42	-121.81	-42.67	10.00	9.99	0.61	
6350.00	42.94	356.52	6307.32	-15.06	-123.85	-10.25	10.00	9.99	0.49	
6400.00	47.94	356.72	6342.39	20.49	-125.95	25.36	10.00	10.00	0.41	
6450.00	52.94	356.89	6374.22	58.97	-128.09	63.89	10.00	10.00	0.35	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Dietzler 1-11-9-60 Pad
Well: 1-11-9-60
Wellpath: Original Hole

Date: 08/01/2014
Co-ordinate(NE) Reference: Well: 1-11-9-60, Grid North
Vertical (TVD) Reference: 5032'GL+17'KB 5048.0
Section (VS) Reference: Well (0.00N,0.00E,357.78Azi)
Plan: Plan #1

Page: 3

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
6500.00	57.94	357.04	6402.58	100.07	-130.27	105.04	10.00	10.00	0.30	
6550.00	62.93	357.18	6427.24	143.49	-132.46	148.52	10.00	10.00	0.27	
6600.00	67.93	357.30	6448.02	188.90	-134.64	193.97	10.00	10.00	0.25	
6620.67	70.00	357.35	6455.44	208.17	-135.54	213.27	10.00	10.00	0.24	7"
6650.00	72.93	357.42	6464.76	235.95	-136.81	241.07	10.00	10.00	0.23	
6700.00	77.93	357.53	6477.33	284.28	-138.94	289.45	10.00	10.00	0.22	
6750.00	82.93	357.64	6485.64	333.52	-141.02	338.74	10.00	10.00	0.21	
6800.00	87.93	357.74	6489.63	383.31	-143.03	388.56	10.00	10.00	0.21	
6820.71	90.00	357.78	6490.00	404.00	-143.84	409.27	10.00	10.00	0.21	
6900.00	90.00	357.78	6490.00	483.23	-146.91	488.56	0.00	0.00	0.00	
7000.00	90.00	357.78	6490.00	583.15	-150.78	588.56	0.00	0.00	0.00	
7100.00	90.00	357.78	6490.00	683.08	-154.65	688.56	0.00	0.00	0.00	
7200.00	90.00	357.78	6490.00	783.00	-158.53	788.56	0.00	0.00	0.00	
7300.00	90.00	357.78	6490.00	882.93	-162.40	888.56	0.00	0.00	0.00	
7400.00	90.00	357.78	6490.00	982.85	-166.27	988.56	0.00	0.00	0.00	
7500.00	90.00	357.78	6490.00	1082.78	-170.14	1088.56	0.00	0.00	0.00	
7600.00	90.00	357.78	6490.00	1182.70	-174.01	1188.56	0.00	0.00	0.00	
7700.00	90.00	357.78	6490.00	1282.63	-177.89	1288.56	0.00	0.00	0.00	
7800.00	90.00	357.78	6490.00	1382.55	-181.76	1388.56	0.00	0.00	0.00	
7900.00	90.00	357.78	6490.00	1482.48	-185.63	1488.56	0.00	0.00	0.00	
8000.00	90.00	357.78	6490.00	1582.40	-189.50	1588.56	0.00	0.00	0.00	
8100.00	90.00	357.78	6490.00	1682.33	-193.37	1688.56	0.00	0.00	0.00	
8200.00	90.00	357.78	6490.00	1782.25	-197.24	1788.56	0.00	0.00	0.00	
8300.00	90.00	357.78	6490.00	1882.18	-201.12	1888.56	0.00	0.00	0.00	
8400.00	90.00	357.78	6490.00	1982.10	-204.99	1988.56	0.00	0.00	0.00	
8500.00	90.00	357.78	6490.00	2082.03	-208.86	2088.56	0.00	0.00	0.00	
8600.00	90.00	357.78	6490.00	2181.95	-212.73	2188.56	0.00	0.00	0.00	
8700.00	90.00	357.78	6490.00	2281.88	-216.60	2288.56	0.00	0.00	0.00	
8800.00	90.00	357.78	6490.00	2381.80	-220.48	2388.56	0.00	0.00	0.00	
8900.00	90.00	357.78	6490.00	2481.73	-224.35	2488.56	0.00	0.00	0.00	
9000.00	90.00	357.78	6490.00	2581.65	-228.22	2588.56	0.00	0.00	0.00	
9100.00	90.00	357.78	6490.00	2681.58	-232.09	2688.56	0.00	0.00	0.00	
9200.00	90.00	357.78	6490.00	2781.50	-235.96	2788.56	0.00	0.00	0.00	
9300.00	90.00	357.78	6490.00	2881.43	-239.84	2888.56	0.00	0.00	0.00	
9400.00	90.00	357.78	6490.00	2981.35	-243.71	2988.56	0.00	0.00	0.00	
9500.00	90.00	357.78	6490.00	3081.28	-247.58	3088.56	0.00	0.00	0.00	
9600.00	90.00	357.78	6490.00	3181.20	-251.45	3188.56	0.00	0.00	0.00	
9700.00	90.00	357.78	6490.00	3281.13	-255.32	3288.56	0.00	0.00	0.00	
9800.00	90.00	357.78	6490.00	3381.05	-259.19	3388.56	0.00	0.00	0.00	
9900.00	90.00	357.78	6490.00	3480.98	-263.07	3488.56	0.00	0.00	0.00	
10000.00	90.00	357.78	6490.00	3580.90	-266.94	3588.56	0.00	0.00	0.00	
10100.00	90.00	357.78	6490.00	3680.83	-270.81	3688.56	0.00	0.00	0.00	
10200.00	90.00	357.78	6490.00	3780.75	-274.68	3788.56	0.00	0.00	0.00	
10300.00	90.00	357.78	6490.00	3880.68	-278.55	3888.56	0.00	0.00	0.00	
10400.00	90.00	357.78	6490.00	3980.60	-282.43	3988.56	0.00	0.00	0.00	
10500.00	90.00	357.78	6490.00	4080.53	-286.30	4088.56	0.00	0.00	0.00	
10600.00	90.00	357.78	6490.00	4180.45	-290.17	4188.56	0.00	0.00	0.00	
10700.00	90.00	357.78	6490.00	4280.38	-294.04	4288.56	0.00	0.00	0.00	
10800.00	90.00	357.78	6490.00	4380.30	-297.91	4388.56	0.00	0.00	0.00	
10900.00	90.00	357.78	6490.00	4480.23	-301.79	4488.56	0.00	0.00	0.00	
11002.48	90.00	357.78	6490.00	4582.63	-305.75	4591.03	0.00	0.00	0.00	PBHL

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Dietzler 1-11-9-60 Pad
Well: 1-11-9-60
Wellpath: Original Hole

Date: 08/01/2014
Co-ordinate(NE) Reference: Well: 1-11-9-60, Grid North
Vertical (TVD) Reference: 5032'GL+17'KB 5048.0
Section (VS) Reference: Well (0.00N,0.00E,357.78Azi)
Plan: Plan #1

Page: 4

Targets

Name	Description	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->				
	Dip.							Deg	Min	Sec	Deg	Min	Sec		
SL			0.00	0.00	0.00	1522407.81	3401306.65	40	45	30.205	N	104	3	5.033	W
PBHL			6490.00	4582.63	-305.75	1526990.44	3401000.90	40	46	15.530	N	104	3	8.033	W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
6620.67	6455.44	7.000	8.750	7"