

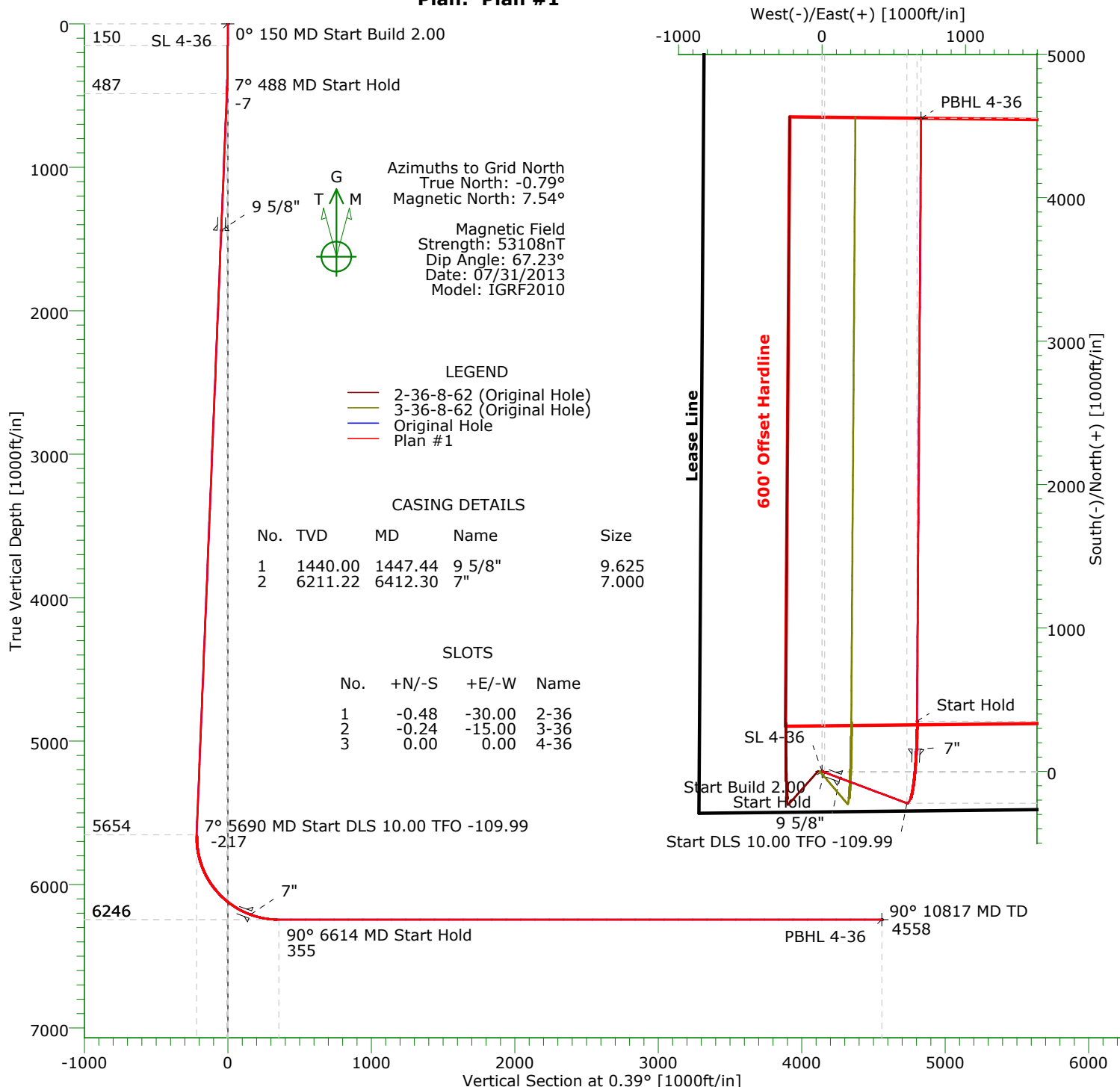


CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
 Site: Bob White 2-36-8-62 Pad
 Well: 4-36-8-62
 Wellpath: Original Hole
 Plan: Plan #1



Precision
 Directional Services



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 4-36	0.00	0.00	0.00	1467812.69	3340101.27	40°36'39.913N	104°16'30.096W	Point
PBHL 4-36	6246.00	4553.76	690.21	1472366.45	3340791.48	40°37'24.812N	104°16'20.330W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	110.51	0.00	0.00	0.00	0.00	0.00	0.00	
2	150.00	0.00	110.51	150.00	0.00	0.00	0.00	110.51	0.00	
3	487.72	6.75	110.51	486.94	-6.97	18.62	2.00	0.00	-6.84	
4	5690.41	6.75	110.51	5653.52	-221.32	591.76	0.00	0.00	-217.28	
5	6613.59	90.00	0.39	6246.00	350.71	661.55	10.00	-109.99	355.20	
6	10816.74	90.00	0.39	6246.00	4553.76	690.21	0.00	0.00	4558.35	PBHL 4-36

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.		Date: 06/17/2013	Time: 13:15:39	Page: 1
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 4-36-8-62, Grid North		
Site: Bob White 2-36-8-62 Pad		Vertical (TVD) Reference: 4939'GL+17'KB 4956.0		
Well: 4-36-8-62		Section (VS) Reference: Well (0.00N,0.00E,0.39Azi)		
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: Bob White 2-36-8-62 Pad				
Weld County				
Site Position:	Northing: 1467812.21 ft	Latitude: 40 36 39.912 N		
From: Map	Easting: 3340071.27 ft	Longitude: 104 16 30.485 W		
Position Uncertainty: 0.00 ft		North Reference: Grid		
Ground Level: 4939.00 ft		Grid Convergence: 0.79 deg		

Well: 4-36-8-62 centered on 2-36		Slot Name: 4-36		
Well Position: +N/-S 0.48 ft	Northing: 1467812.69 ft	Latitude: 40 36 39.913 N		
+E/-W 30.00 ft	Easting : 3340101.27 ft	Longitude: 104 16 30.096 W		
Position Uncertainty: 0.00 ft				

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 4939'GL+17'KB		Tie-on Depth: 0.00 ft	
Magnetic Data: 07/31/2013		Above System Datum: Mean Sea Level	
Field Strength: 53108 nT		Declination: 8.33 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	0.39

Plan: Plan #1		Date Composed: 06/17/2013	
Principal: Yes		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	110.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	110.51	150.00	0.00	0.00	0.00	0.00	0.00	110.51	
487.72	6.75	110.51	486.94	-6.97	18.62	2.00	2.00	0.00	0.00	
5690.41	6.75	110.51	5653.52	-221.32	591.76	0.00	0.00	0.00	0.00	
6613.59	90.00	0.39	6246.00	350.71	661.55	10.00	9.02	-11.93	-109.99	
10816.74	90.00	0.39	6246.00	4553.76	690.21	0.00	0.00	0.00	0.00	PBHL 4-36

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	110.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	110.51	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	110.51	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	1.00	110.51	200.00	-0.15	0.41	-0.15	2.00	2.00	0.00	
300.00	3.00	110.51	299.93	-1.38	3.68	-1.35	2.00	2.00	0.00	
400.00	5.00	110.51	399.68	-3.82	10.21	-3.75	2.00	2.00	0.00	
487.72	6.75	110.51	486.94	-6.97	18.62	-6.84	2.00	2.00	0.00	
500.00	6.75	110.51	499.13	-7.47	19.98	-7.33	0.00	0.00	0.00	
600.00	6.75	110.51	598.44	-11.59	30.99	-11.38	0.00	0.00	0.00	
700.00	6.75	110.51	697.74	-15.71	42.01	-15.42	0.00	0.00	0.00	
800.00	6.75	110.51	797.05	-19.83	53.02	-19.47	0.00	0.00	0.00	
900.00	6.75	110.51	896.36	-23.95	64.04	-23.51	0.00	0.00	0.00	
1000.00	6.75	110.51	995.66	-28.07	75.06	-27.56	0.00	0.00	0.00	
1100.00	6.75	110.51	1094.97	-32.19	86.07	-31.60	0.00	0.00	0.00	
1200.00	6.75	110.51	1194.27	-36.31	97.09	-35.65	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Bob White 2-36-8-62 Pad
Well: 4-36-8-62
Wellpath: Original Hole

Date: 06/17/2013
Co-ordinate(NE) Reference: Well: 4-36-8-62, Grid North
Vertical (TVD) Reference: 4939'GL+17'KB 4956.0
Section (VS) Reference: Well (0.00N,0.00E,0.39Azi)
Plan: Plan #1

Page: 2

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
1300.00	6.75	110.51	1293.58	-40.43	108.10	-39.69	0.00	0.00	0.00	9 5/8"
1400.00	6.75	110.51	1392.89	-44.55	119.12	-43.74	0.00	0.00	0.00	
1447.44	6.75	110.51	1440.00	-46.51	124.35	-45.66	0.00	0.00	0.00	
1500.00	6.75	110.51	1492.19	-48.67	130.14	-47.78	0.00	0.00	0.00	
1600.00	6.75	110.51	1591.50	-52.79	141.15	-51.83	0.00	0.00	0.00	
1700.00	6.75	110.51	1690.80	-56.91	152.17	-55.87	0.00	0.00	0.00	
1800.00	6.75	110.51	1790.11	-61.03	163.19	-59.92	0.00	0.00	0.00	
1900.00	6.75	110.51	1889.42	-65.15	174.20	-63.96	0.00	0.00	0.00	
2000.00	6.75	110.51	1988.72	-69.27	185.22	-68.01	0.00	0.00	0.00	
2100.00	6.75	110.51	2088.03	-73.39	196.23	-72.05	0.00	0.00	0.00	
2200.00	6.75	110.51	2187.33	-77.51	207.25	-76.10	0.00	0.00	0.00	
2300.00	6.75	110.51	2286.64	-81.63	218.27	-80.14	0.00	0.00	0.00	
2400.00	6.75	110.51	2385.95	-85.75	229.28	-84.19	0.00	0.00	0.00	
2500.00	6.75	110.51	2485.25	-89.87	240.30	-88.23	0.00	0.00	0.00	
2600.00	6.75	110.51	2584.56	-93.99	251.31	-92.28	0.00	0.00	0.00	
2700.00	6.75	110.51	2683.86	-98.11	262.33	-96.32	0.00	0.00	0.00	
2800.00	6.75	110.51	2783.17	-102.23	273.35	-100.37	0.00	0.00	0.00	
2900.00	6.75	110.51	2882.48	-106.35	284.36	-104.41	0.00	0.00	0.00	
3000.00	6.75	110.51	2981.78	-110.47	295.38	-108.46	0.00	0.00	0.00	
3100.00	6.75	110.51	3081.09	-114.59	306.39	-112.50	0.00	0.00	0.00	
3200.00	6.75	110.51	3180.39	-118.71	317.41	-116.55	0.00	0.00	0.00	
3300.00	6.75	110.51	3279.70	-122.83	328.43	-120.59	0.00	0.00	0.00	
3400.00	6.75	110.51	3379.01	-126.95	339.44	-124.64	0.00	0.00	0.00	
3500.00	6.75	110.51	3478.31	-131.07	350.46	-128.68	0.00	0.00	0.00	
3600.00	6.75	110.51	3577.62	-135.19	361.48	-132.73	0.00	0.00	0.00	
3700.00	6.75	110.51	3676.92	-139.31	372.49	-136.77	0.00	0.00	0.00	
3800.00	6.75	110.51	3776.23	-143.43	383.51	-140.82	0.00	0.00	0.00	
3900.00	6.75	110.51	3875.54	-147.55	394.52	-144.86	0.00	0.00	0.00	
4000.00	6.75	110.51	3974.84	-151.67	405.54	-148.91	0.00	0.00	0.00	
4100.00	6.75	110.51	4074.15	-155.79	416.56	-152.95	0.00	0.00	0.00	
4200.00	6.75	110.51	4173.45	-159.91	427.57	-157.00	0.00	0.00	0.00	
4300.00	6.75	110.51	4272.76	-164.03	438.59	-161.04	0.00	0.00	0.00	
4400.00	6.75	110.51	4372.07	-168.15	449.60	-165.09	0.00	0.00	0.00	
4500.00	6.75	110.51	4471.37	-172.27	460.62	-169.13	0.00	0.00	0.00	
4600.00	6.75	110.51	4570.68	-176.39	471.64	-173.18	0.00	0.00	0.00	
4700.00	6.75	110.51	4669.98	-180.51	482.65	-177.22	0.00	0.00	0.00	
4800.00	6.75	110.51	4769.29	-184.63	493.67	-181.27	0.00	0.00	0.00	
4900.00	6.75	110.51	4868.59	-188.75	504.68	-185.31	0.00	0.00	0.00	
5000.00	6.75	110.51	4967.90	-192.87	515.70	-189.36	0.00	0.00	0.00	
5100.00	6.75	110.51	5067.21	-196.99	526.72	-193.40	0.00	0.00	0.00	
5200.00	6.75	110.51	5166.51	-201.11	537.73	-197.45	0.00	0.00	0.00	
5300.00	6.75	110.51	5265.82	-205.23	548.75	-201.49	0.00	0.00	0.00	
5400.00	6.75	110.51	5365.12	-209.35	559.77	-205.54	0.00	0.00	0.00	
5500.00	6.75	110.51	5464.43	-213.47	570.78	-209.58	0.00	0.00	0.00	
5600.00	6.75	110.51	5563.74	-217.59	581.80	-213.63	0.00	0.00	0.00	
5690.41	6.75	110.51	5653.52	-221.32	591.76	-217.28	0.00	0.00	0.00	
5700.00	6.49	102.51	5663.05	-221.63	592.81	-217.59	10.00	-2.77	-83.42	
5800.00	10.71	36.42	5762.11	-215.36	603.87	-211.25	10.00	4.22	-66.09	
5900.00	19.65	18.53	5858.57	-191.88	614.76	-187.70	10.00	8.95	-17.89	
6000.00	29.28	11.83	5949.50	-151.91	625.15	-147.65	10.00	9.62	-6.70	
6100.00	39.08	8.26	6032.14	-96.64	634.71	-92.32	10.00	9.80	-3.57	
6200.00	48.95	5.95	6103.97	-27.77	643.17	-23.39	10.00	9.87	-2.31	
6300.00	58.85	4.24	6162.82	52.61	650.27	57.04	10.00	9.91	-1.70	
6400.00	68.78	2.87	6206.89	142.07	655.78	146.53	10.00	9.92	-1.38	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Bob White 2-36-8-62 Pad
Well: 4-36-8-62
Wellpath: Original Hole

Date: 06/17/2013
Co-ordinate(NE) Reference: Well: 4-36-8-62, Grid North
Vertical (TVD) Reference: 4939'GL+17'KB 4956.0
Section (VS) Reference: Well (0.00N,0.00E,0.39Azi)
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
6412.30	70.00	2.71	6211.22	153.56	656.34	158.03	10.00	9.93	-1.26	7"
6500.00	78.71	1.66	6234.85	237.87	659.54	242.36	10.00	9.93	-1.19	
6600.00	88.65	0.54	6245.84	337.12	661.44	341.61	10.00	9.94	-1.12	
6613.59	90.00	0.39	6246.00	350.71	661.55	355.20	10.00	9.94	-1.11	
6700.00	90.00	0.39	6246.00	437.12	662.14	441.61	0.00	0.00	0.00	
6800.00	90.00	0.39	6246.00	537.11	662.82	541.61	0.00	0.00	0.00	
6900.00	90.00	0.39	6246.00	637.11	663.50	641.61	0.00	0.00	0.00	
7000.00	90.00	0.39	6246.00	737.11	664.19	741.61	0.00	0.00	0.00	
7100.00	90.00	0.39	6246.00	837.11	664.87	841.61	0.00	0.00	0.00	
7200.00	90.00	0.39	6246.00	937.10	665.55	941.61	0.00	0.00	0.00	
7300.00	90.00	0.39	6246.00	1037.10	666.23	1041.61	0.00	0.00	0.00	
7400.00	90.00	0.39	6246.00	1137.10	666.91	1141.61	0.00	0.00	0.00	
7500.00	90.00	0.39	6246.00	1237.10	667.59	1241.61	0.00	0.00	0.00	
7600.00	90.00	0.39	6246.00	1337.09	668.28	1341.61	0.00	0.00	0.00	
7700.00	90.00	0.39	6246.00	1437.09	668.96	1441.61	0.00	0.00	0.00	
7800.00	90.00	0.39	6246.00	1537.09	669.64	1541.61	0.00	0.00	0.00	
7900.00	90.00	0.39	6246.00	1637.09	670.32	1641.61	0.00	0.00	0.00	
8000.00	90.00	0.39	6246.00	1737.09	671.00	1741.61	0.00	0.00	0.00	
8100.00	90.00	0.39	6246.00	1837.08	671.69	1841.61	0.00	0.00	0.00	
8200.00	90.00	0.39	6246.00	1937.08	672.37	1941.61	0.00	0.00	0.00	
8300.00	90.00	0.39	6246.00	2037.08	673.05	2041.61	0.00	0.00	0.00	
8400.00	90.00	0.39	6246.00	2137.08	673.73	2141.61	0.00	0.00	0.00	
8500.00	90.00	0.39	6246.00	2237.07	674.41	2241.61	0.00	0.00	0.00	
8600.00	90.00	0.39	6246.00	2337.07	675.10	2341.61	0.00	0.00	0.00	
8700.00	90.00	0.39	6246.00	2437.07	675.78	2441.61	0.00	0.00	0.00	
8800.00	90.00	0.39	6246.00	2537.07	676.46	2541.61	0.00	0.00	0.00	
8900.00	90.00	0.39	6246.00	2637.06	677.14	2641.61	0.00	0.00	0.00	
9000.00	90.00	0.39	6246.00	2737.06	677.82	2741.61	0.00	0.00	0.00	
9100.00	90.00	0.39	6246.00	2837.06	678.51	2841.61	0.00	0.00	0.00	
9200.00	90.00	0.39	6246.00	2937.06	679.19	2941.61	0.00	0.00	0.00	
9300.00	90.00	0.39	6246.00	3037.06	679.87	3041.61	0.00	0.00	0.00	
9400.00	90.00	0.39	6246.00	3137.05	680.55	3141.61	0.00	0.00	0.00	
9500.00	90.00	0.39	6246.00	3237.05	681.23	3241.61	0.00	0.00	0.00	
9600.00	90.00	0.39	6246.00	3337.05	681.92	3341.61	0.00	0.00	0.00	
9700.00	90.00	0.39	6246.00	3437.05	682.60	3441.61	0.00	0.00	0.00	
9800.00	90.00	0.39	6246.00	3537.04	683.28	3541.61	0.00	0.00	0.00	
9900.00	90.00	0.39	6246.00	3637.04	683.96	3641.61	0.00	0.00	0.00	
10000.00	90.00	0.39	6246.00	3737.04	684.64	3741.61	0.00	0.00	0.00	
10100.00	90.00	0.39	6246.00	3837.04	685.32	3841.61	0.00	0.00	0.00	
10200.00	90.00	0.39	6246.00	3937.03	686.01	3941.61	0.00	0.00	0.00	
10300.00	90.00	0.39	6246.00	4037.03	686.69	4041.61	0.00	0.00	0.00	
10400.00	90.00	0.39	6246.00	4137.03	687.37	4141.61	0.00	0.00	0.00	
10500.00	90.00	0.39	6246.00	4237.03	688.05	4241.61	0.00	0.00	0.00	
10600.00	90.00	0.39	6246.00	4337.02	688.73	4341.61	0.00	0.00	0.00	
10700.00	90.00	0.39	6246.00	4437.02	689.42	4441.61	0.00	0.00	0.00	
10800.00	90.00	0.39	6246.00	4537.02	690.10	4541.61	0.00	0.00	0.00	
10816.74	90.00	0.39	6246.00	4553.76	690.21	4558.35	0.00	0.00	0.00	PBHL 4-36

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Bob White 2-36-8-62 Pad
Well: 4-36-8-62
Wellpath: Original Hole

Date: 06/17/2013
Co-ordinate(NE) Reference: Well: 4-36-8-62, Grid North
Vertical (TVD) Reference: 4939'GL+17'KB 4956.0
Section (VS) Reference: Well (0.00N,0.00E,0.39Azi)
Plan: Plan #1

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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 4-36			0.00	0.00	0.00	1467812.693340	101.27	40	36	39.913	N	104	16 30.096	W
PBHL 4-36			6246.00	4553.76	690.21	1472366.453340	791.48	40	37	24.812	N	104	16 20.330	W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1447.44	1440.00	9.625	12.250	9 5/8"
6412.30	6211.22	7.000	8.500	7"