



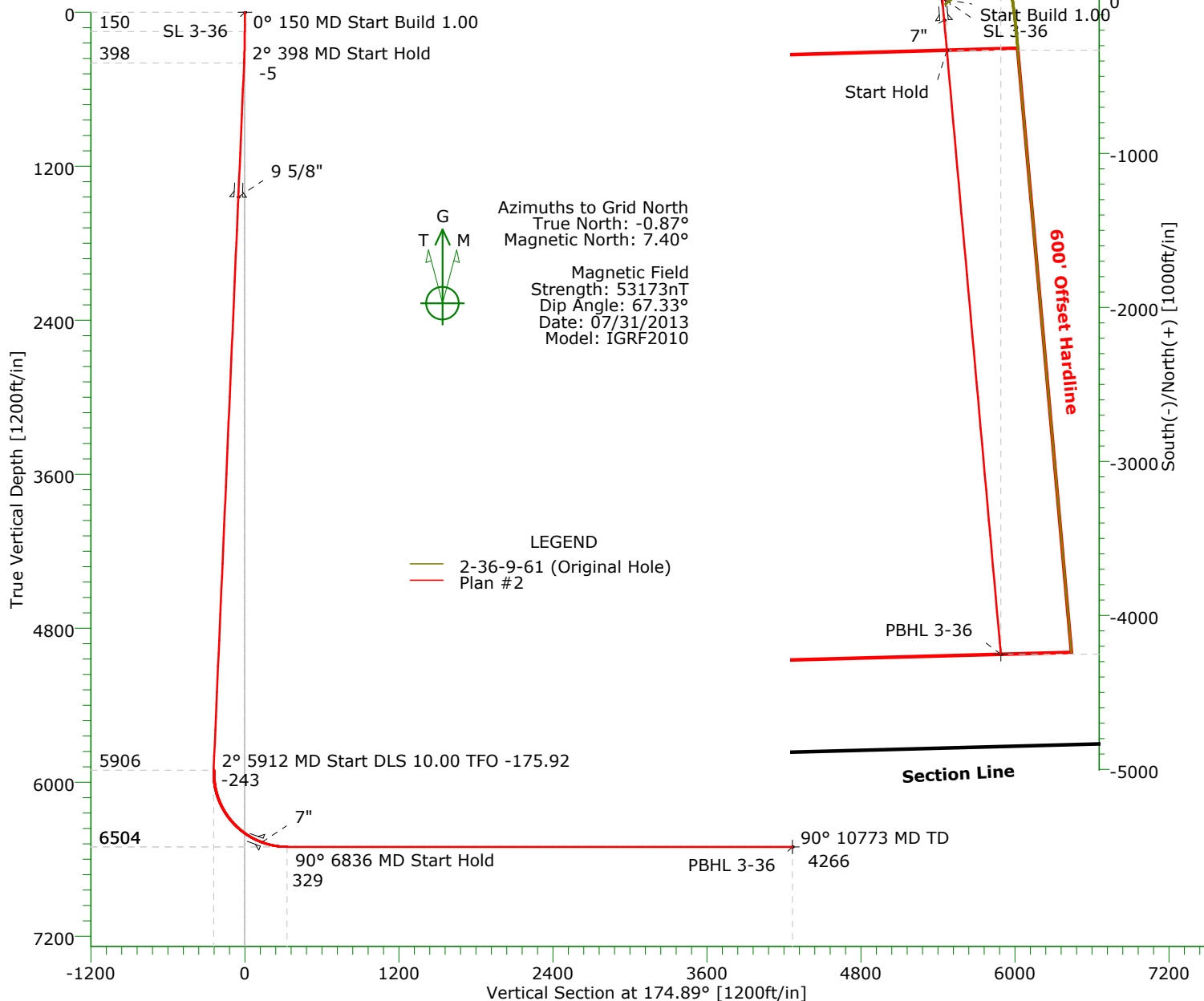
CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
Site: State 2-36-9-61 Pad
Well: 3-36-9-61
Wellpath: Original Hole
Plan: Plan #2



CASING DETAILS

No.	TVD	MD	Name	Size
1	1440.00	1441.05	9 5/8"	9.625
2	6469.45	6636.28	7"	7.000



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 3-36	0.00	0.00	0.00	1505002.34	3374386.19	40°42'42.439N	104°08'58.257W	Point
PBHL 3-36	6504.00	-4251.19	360.78	1500751.15	3374746.97	40°42'00.383N	104°08'54.414W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	354.42	0.00	0.00	0.00	0.00	0.00	0.00	
2	150.00	0.00	354.42	150.00	0.00	0.00	0.00	354.42	0.00	
3	397.65	2.48	350.82	397.57	5.28	-0.85	1.00	0.00	-5.34	
4	5911.58	2.48	350.82	5906.35	240.49	-38.87	0.00	0.00	-242.99	
5	6836.28	90.00	174.89	6504.00	-329.83	10.26	10.00	-175.92	329.43	
6	10773.27	90.00	174.89	6504.00	-4251.19	360.76	0.00	0.00	4266.43	PBHL 3-36

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.		Date: 06/28/2013	Time: 09:17:36	Page: 1
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 3-36-9-61, Grid North		
Site: State 2-36-9-61 Pad		Vertical (TVD) Reference: 4932'GL+17'KB 4949.0		
Well: 3-36-9-61		Section (VS) Reference: Well (0.00N,0.00E,174.89Azi)		
Wellpath: Original Hole		Plan: Plan #2		

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: State 2-36-9-61 Pad	
Weld County, CO	
Site Position:	Northing: 1504982.85 ft
From: Map	Easting: 3374728.13 ft
Position Uncertainty: 0.00 ft	Latitude: 40 42 42.195 N
Ground Level: 4932.00 ft	Longitude: 104 8 53.821 W
	North Reference: Grid
	Grid Convergence: 0.87 deg

Well: 3-36-9-61	Slot Name: 3-36
272'FNL, 1039'FEL adj 8-26	
Well Position: +N/-S 19.49 ft	Latitude: 40 42 42.439 N
+E/-W -341.94 ft	Longitude: 104 8 58.257 W
Position Uncertainty: 0.00 ft	

Wellpath: Original Hole	Drilled From: Surface
Current Datum: 4932'GL+17'KB	Tie-on Depth: 0.00 ft
Magnetic Data: 07/31/2013	Above System Datum: Mean Sea Level
Field Strength: 53173 nT	Declination: 8.27 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 67.33 deg
ft	+E/-W
	Direction
	deg
0.00	0.00
0.00	174.89

Plan: Plan #2	Date Composed: 06/28/2013
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	354.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	354.42	150.00	0.00	0.00	0.00	0.00	0.00	354.42	
397.65	2.48	350.82	397.57	5.28	-0.85	1.00	1.00	0.00	0.00	
5911.58	2.48	350.82	5906.35	240.49	-38.87	0.00	0.00	0.00	0.00	
6836.28	90.00	174.89	6504.00	-329.83	10.26	10.00	9.47	-19.03	-175.92	
10773.27	90.00	174.89	6504.00	-4251.19	360.76	0.00	0.00	0.00	0.00	PBHL 3-36

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	354.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	354.42	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	354.42	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.50	350.82	200.00	0.22	-0.03	-0.22	1.00	1.00	0.00	
300.00	1.50	350.82	299.98	1.94	-0.31	-1.96	1.00	1.00	0.00	
397.65	2.48	350.82	397.57	5.28	-0.85	-5.34	1.00	1.00	0.00	
400.00	2.48	350.82	399.92	5.38	-0.87	-5.44	0.00	0.00	0.00	
500.00	2.48	350.82	499.83	9.65	-1.56	-9.75	0.00	0.00	0.00	
600.00	2.48	350.82	599.73	13.91	-2.25	-14.06	0.00	0.00	0.00	
700.00	2.48	350.82	699.64	18.18	-2.94	-18.37	0.00	0.00	0.00	
800.00	2.48	350.82	799.55	22.45	-3.63	-22.68	0.00	0.00	0.00	
900.00	2.48	350.82	899.45	26.71	-4.32	-26.99	0.00	0.00	0.00	
1000.00	2.48	350.82	999.36	30.98	-5.01	-31.30	0.00	0.00	0.00	
1100.00	2.48	350.82	1099.27	35.24	-5.70	-35.61	0.00	0.00	0.00	
1200.00	2.48	350.82	1199.17	39.51	-6.39	-39.92	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: State 2-36-9-61 Pad
Well: 3-36-9-61
Wellpath: Original Hole

Date: 06/28/2013 **Time:** 09:17:36
Co-ordinate(NE) Reference: Well: 3-36-9-61, Grid North
Vertical (TVD) Reference: 4932'GL+17'KB 4949.0
Section (VS) Reference: Well (0.00N,0.00E,174.89Azi)
Plan: Plan #2

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	2.48	350.82	1299.08	43.77	-7.08	-44.23	0.00	0.00	0.00	9 5/8"
1400.00	2.48	350.82	1398.99	48.04	-7.77	-48.54	0.00	0.00	0.00	
1441.05	2.48	350.82	1440.00	49.79	-8.05	-50.31	0.00	0.00	0.00	
1500.00	2.48	350.82	1498.89	52.30	-8.45	-52.85	0.00	0.00	0.00	
1600.00	2.48	350.82	1598.80	56.57	-9.14	-57.16	0.00	0.00	0.00	
1700.00	2.48	350.82	1698.71	60.84	-9.83	-61.47	0.00	0.00	0.00	
1800.00	2.48	350.82	1798.61	65.10	-10.52	-65.78	0.00	0.00	0.00	
1900.00	2.48	350.82	1898.52	69.37	-11.21	-70.09	0.00	0.00	0.00	
2000.00	2.48	350.82	1998.43	73.63	-11.90	-74.40	0.00	0.00	0.00	
2100.00	2.48	350.82	2098.33	77.90	-12.59	-78.71	0.00	0.00	0.00	
2200.00	2.48	350.82	2198.24	82.16	-13.28	-83.02	0.00	0.00	0.00	
2300.00	2.48	350.82	2298.15	86.43	-13.97	-87.33	0.00	0.00	0.00	
2400.00	2.48	350.82	2398.05	90.70	-14.66	-91.64	0.00	0.00	0.00	
2500.00	2.48	350.82	2497.96	94.96	-15.35	-95.95	0.00	0.00	0.00	
2600.00	2.48	350.82	2597.87	99.23	-16.04	-100.26	0.00	0.00	0.00	
2700.00	2.48	350.82	2697.77	103.49	-16.73	-104.57	0.00	0.00	0.00	
2800.00	2.48	350.82	2797.68	107.76	-17.42	-108.88	0.00	0.00	0.00	
2900.00	2.48	350.82	2897.59	112.02	-18.11	-113.19	0.00	0.00	0.00	
3000.00	2.48	350.82	2997.49	116.29	-18.80	-117.50	0.00	0.00	0.00	
3100.00	2.48	350.82	3097.40	120.55	-19.49	-121.81	0.00	0.00	0.00	
3200.00	2.48	350.82	3197.31	124.82	-20.18	-126.12	0.00	0.00	0.00	
3300.00	2.48	350.82	3297.21	129.09	-20.87	-130.43	0.00	0.00	0.00	
3400.00	2.48	350.82	3397.12	133.35	-21.56	-134.74	0.00	0.00	0.00	
3500.00	2.48	350.82	3497.03	137.62	-22.24	-139.05	0.00	0.00	0.00	
3600.00	2.48	350.82	3596.93	141.88	-22.93	-143.36	0.00	0.00	0.00	
3700.00	2.48	350.82	3696.84	146.15	-23.62	-147.67	0.00	0.00	0.00	
3800.00	2.48	350.82	3796.75	150.41	-24.31	-151.98	0.00	0.00	0.00	
3900.00	2.48	350.82	3896.65	154.68	-25.00	-156.29	0.00	0.00	0.00	
4000.00	2.48	350.82	3996.56	158.95	-25.69	-160.60	0.00	0.00	0.00	
4100.00	2.48	350.82	4096.46	163.21	-26.38	-164.91	0.00	0.00	0.00	
4200.00	2.48	350.82	4196.37	167.48	-27.07	-169.22	0.00	0.00	0.00	
4300.00	2.48	350.82	4296.28	171.74	-27.76	-173.53	0.00	0.00	0.00	
4400.00	2.48	350.82	4396.18	176.01	-28.45	-177.84	0.00	0.00	0.00	
4500.00	2.48	350.82	4496.09	180.27	-29.14	-182.15	0.00	0.00	0.00	
4600.00	2.48	350.82	4596.00	184.54	-29.83	-186.46	0.00	0.00	0.00	
4700.00	2.48	350.82	4695.90	188.80	-30.52	-190.77	0.00	0.00	0.00	
4800.00	2.48	350.82	4795.81	193.07	-31.21	-195.08	0.00	0.00	0.00	
4900.00	2.48	350.82	4895.72	197.34	-31.90	-199.39	0.00	0.00	0.00	
5000.00	2.48	350.82	4995.62	201.60	-32.59	-203.70	0.00	0.00	0.00	
5100.00	2.48	350.82	5095.53	205.87	-33.28	-208.01	0.00	0.00	0.00	
5200.00	2.48	350.82	5195.44	210.13	-33.97	-212.32	0.00	0.00	0.00	
5300.00	2.48	350.82	5295.34	214.40	-34.66	-216.63	0.00	0.00	0.00	
5400.00	2.48	350.82	5395.25	218.66	-35.35	-220.94	0.00	0.00	0.00	
5500.00	2.48	350.82	5495.16	222.93	-36.04	-225.25	0.00	0.00	0.00	
5600.00	2.48	350.82	5595.06	227.20	-36.72	-229.56	0.00	0.00	0.00	
5700.00	2.48	350.82	5694.97	231.46	-37.41	-233.87	0.00	0.00	0.00	
5800.00	2.48	350.82	5794.88	235.73	-38.10	-238.18	0.00	0.00	0.00	
5900.00	2.48	350.82	5894.78	239.99	-38.79	-242.49	0.00	0.00	0.00	
5911.58	2.48	350.82	5906.35	240.49	-38.87	-242.99	0.00	0.00	0.00	
6000.00	6.37	176.47	5994.63	237.47	-38.88	-239.99	10.00	4.41	-197.18	
6100.00	16.37	175.49	6092.55	217.82	-37.42	-220.29	10.00	10.00	-0.98	
6200.00	26.37	175.25	6185.55	181.55	-34.47	-183.90	10.00	10.00	-0.24	
6300.00	36.37	175.13	6270.82	129.74	-30.10	-131.90	10.00	10.00	-0.12	
6400.00	46.37	175.06	6345.77	63.97	-24.45	-65.89	10.00	10.00	-0.07	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: State 2-36-9-61 Pad
Well: 3-36-9-61
Wellpath: Original Hole

Date: 06/28/2013
Co-ordinate(NE) Reference: Well: 3-36-9-61, Grid North
Vertical (TVD) Reference: 4932'GL+17'KB 4949.0
Section (VS) Reference: Well (0.00N,0.00E,174.89Azi)
Plan: Plan #2

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
6500.00	56.37	175.01	6408.12	-13.76	-17.70	12.13	10.00	10.00	-0.05	
6600.00	66.37	174.97	6455.97	-101.09	-10.04	99.79	10.00	10.00	-0.04	7"
6636.28	70.00	174.96	6469.45	-134.64	-7.08	133.47	10.00	10.00	-0.04	
6700.00	76.37	174.93	6487.87	-195.36	-1.71	194.43	10.00	10.00	-0.03	
6800.00	86.37	174.90	6502.85	-293.72	7.04	293.18	10.00	10.00	-0.03	
6836.28	90.00	174.89	6504.00	-329.83	10.26	329.43	10.00	10.00	-0.03	
6900.00	90.00	174.89	6504.00	-393.30	15.93	393.15	0.00	0.00	0.00	
7000.00	90.00	174.89	6504.00	-492.90	24.84	493.15	0.00	0.00	0.00	
7100.00	90.00	174.89	6504.00	-592.50	33.74	593.15	0.00	0.00	0.00	
7200.00	90.00	174.89	6504.00	-692.11	42.64	693.15	0.00	0.00	0.00	
7300.00	90.00	174.89	6504.00	-791.71	51.54	793.15	0.00	0.00	0.00	
7400.00	90.00	174.89	6504.00	-891.31	60.45	893.15	0.00	0.00	0.00	
7500.00	90.00	174.89	6504.00	-990.91	69.35	993.15	0.00	0.00	0.00	
7600.00	90.00	174.89	6504.00	-1090.52	78.25	1093.15	0.00	0.00	0.00	
7700.00	90.00	174.89	6504.00	-1190.12	87.16	1193.15	0.00	0.00	0.00	
7800.00	90.00	174.89	6504.00	-1289.72	96.06	1293.15	0.00	0.00	0.00	
7900.00	90.00	174.89	6504.00	-1389.33	104.96	1393.15	0.00	0.00	0.00	
8000.00	90.00	174.89	6504.00	-1488.93	113.86	1493.15	0.00	0.00	0.00	
8100.00	90.00	174.89	6504.00	-1588.53	122.77	1593.15	0.00	0.00	0.00	
8200.00	90.00	174.89	6504.00	-1688.14	131.67	1693.15	0.00	0.00	0.00	
8300.00	90.00	174.89	6504.00	-1787.74	140.57	1793.15	0.00	0.00	0.00	
8400.00	90.00	174.89	6504.00	-1887.34	149.48	1893.15	0.00	0.00	0.00	
8500.00	90.00	174.89	6504.00	-1986.94	158.38	1993.15	0.00	0.00	0.00	
8600.00	90.00	174.89	6504.00	-2086.55	167.28	2093.15	0.00	0.00	0.00	
8700.00	90.00	174.89	6504.00	-2186.15	176.18	2193.15	0.00	0.00	0.00	
8800.00	90.00	174.89	6504.00	-2285.75	185.09	2293.15	0.00	0.00	0.00	
8900.00	90.00	174.89	6504.00	-2385.36	193.99	2393.15	0.00	0.00	0.00	
9000.00	90.00	174.89	6504.00	-2484.96	202.89	2493.15	0.00	0.00	0.00	
9100.00	90.00	174.89	6504.00	-2584.56	211.80	2593.15	0.00	0.00	0.00	
9200.00	90.00	174.89	6504.00	-2684.16	220.70	2693.15	0.00	0.00	0.00	
9300.00	90.00	174.89	6504.00	-2783.77	229.60	2793.15	0.00	0.00	0.00	
9400.00	90.00	174.89	6504.00	-2883.37	238.50	2893.15	0.00	0.00	0.00	
9500.00	90.00	174.89	6504.00	-2982.97	247.41	2993.15	0.00	0.00	0.00	
9600.00	90.00	174.89	6504.00	-3082.58	256.31	3093.15	0.00	0.00	0.00	
9700.00	90.00	174.89	6504.00	-3182.18	265.21	3193.15	0.00	0.00	0.00	
9800.00	90.00	174.89	6504.00	-3281.78	274.12	3293.15	0.00	0.00	0.00	
9900.00	90.00	174.89	6504.00	-3381.38	283.02	3393.15	0.00	0.00	0.00	
10000.00	90.00	174.89	6504.00	-3480.99	291.92	3493.15	0.00	0.00	0.00	
10100.00	90.00	174.89	6504.00	-3580.59	300.82	3593.15	0.00	0.00	0.00	
10200.00	90.00	174.89	6504.00	-3680.19	309.73	3693.15	0.00	0.00	0.00	
10300.00	90.00	174.89	6504.00	-3779.80	318.63	3793.15	0.00	0.00	0.00	
10400.00	90.00	174.89	6504.00	-3879.40	327.53	3893.15	0.00	0.00	0.00	
10500.00	90.00	174.89	6504.00	-3979.00	336.44	3993.15	0.00	0.00	0.00	
10600.00	90.00	174.89	6504.00	-4078.60	345.34	4093.15	0.00	0.00	0.00	
10700.00	90.00	174.89	6504.00	-4178.21	354.24	4193.15	0.00	0.00	0.00	
10773.27	90.00	174.89	6504.00	-4251.19	360.76	4266.43	0.00	0.00	0.00	PBHL 3-36

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
SL 3-36			0.00	0.00	0.00	1505002.34	3374386.19	40	42	42.439 N	104	8	58.257 W
PBHL 3-36			6504.00	-4251.19	360.78	1500751.15	3374746.97	40	42	0.383 N	104	8	54.414 W

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: State 2-36-9-61 Pad Well: 3-36-9-61 Wellpath: Original Hole	Date: 06/28/2013 Time: 09:17:36 Page: 4 Co-ordinate(NE) Reference: Well: 3-36-9-61, Grid North Vertical (TVD) Reference: 4932'GL+17'KB 4949.0 Section (VS) Reference: Well (0.00N,0.00E,174.89Azi) Plan: Plan #2
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Targets

Name	Description		TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->		
	Dip.	Dir.						Deg	Min	Sec	Deg	Min	Sec

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1441.05	1440.00	9.625	12.250	9 5/8"
6636.28	6469.45	7.000	8.500	7"