



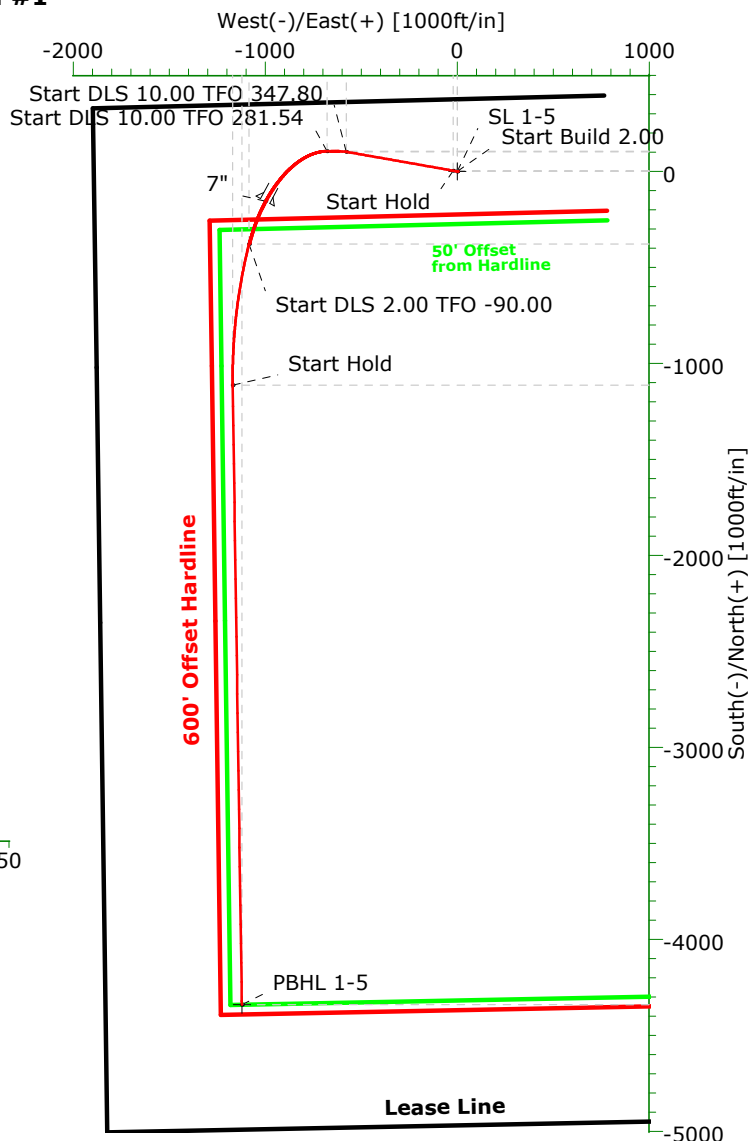
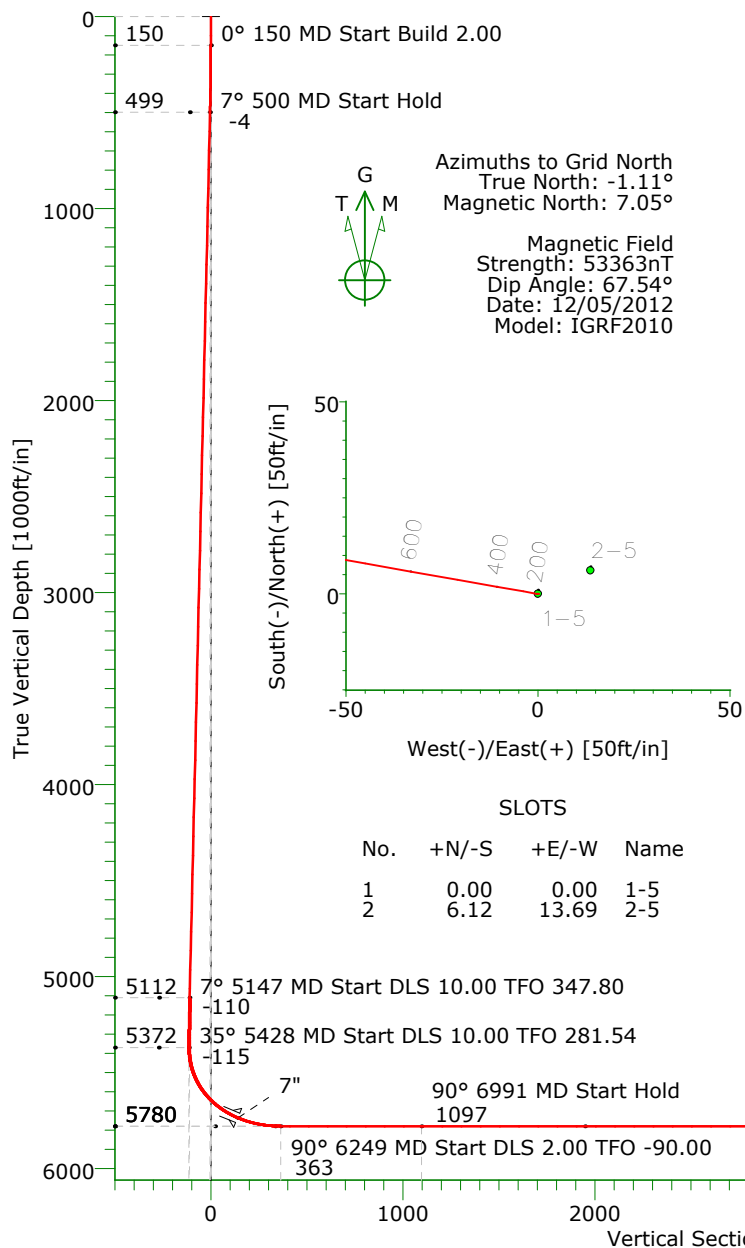
CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
Site: Ohare 5-21-10-57 Pad
Well: 1-5-10-57
Wellpath: Original Hole
Plan: Plan #1



CASING DETAILS

p.	TVD	MD	Name	Size
	5737.56	6004.63	7"	7.000



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 1-5	0.00	0.00	0.00	1566026.96	3476071.85	40°52'27.928N	103°46'42.669W	Point
PBHL 1-5	5780.00	-4340.41	-1122.25	1561686.55	3474949.60	40°51'45.264N	103°46'58.368W	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	500.00	7.00	280.00	499.13	3.71	-21.03	2.00	280.00	-4.00	
4	5147.11	7.00	280.00	5111.60	102.05	-578.77	0.00	0.00	-110.12	
5	5428.40	35.00	270.00	5371.65	105.09	-678.32	10.00	347.80	-114.55	
6	6249.01	90.00	194.00	5780.00	-378.60	-1084.85	10.00	281.54	363.42	
7	6991.08	90.00	179.16	5780.00	-1113.72	-1169.64	2.00	-90.00	1097.29	
8	10218.11	90.00	179.16	5780.00	-4340.41	-1122.25	0.00	0.00	4324.32	PBHL 1-5

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Ohare 5-21-10-57 Pad Well: 1-5-10-57 Wellpath: Original Hole	Date: 12/06/2012 Co-ordinate(NE) Reference: Well: 1-5-10-57, Grid North Vertical (TVD) Reference: 4917'GL+17"KB 4938.0 Section (VS) Reference: Well (0.00N,0.00E,179.20Azi) Plan: Plan #1	Time: 15:07:05 Page: 1
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Field: Niobrara CONZ'83 Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level	Map Zone: Colorado, Northern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010
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Site: Ohare 5-21-10-57 Pad			
Weld County, CO			
Site Position:	Northing: 1566026.96 ft	Latitude: 40 52 27.928 N	
From: Map	Easting: 3476071.85 ft	Longitude: 103 46 42.669 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 4921.00 ft		Grid Convergence: 1.11 deg	

Well: 1-5-10-57	Slot Name:
Well Position: +N/-S 0.00 ft	Latitude: 40 52 27.928 N
+E/-W 0.00 ft	Longitude: 103 46 42.669 W
Position Uncertainty: 0.00 ft	

Wellpath: Original Hole	Drilled From: Surface
Current Datum: 4917'GL+17"KB	Tie-on Depth: 0.00 ft
Magnetic Data: 12/05/2012	Above System Datum: Mean Sea Level
Field Strength: 53363 nT	Declination: 8.16 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 67.54 deg
ft	+N/-S ft
0.00	+E/-W ft
	Direction deg
	179.20

Plan: Plan #1	Date Composed: 12/31/2012
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	
500.00	7.00	280.00	499.13	3.71	-21.03	2.00	2.00	0.00	280.00	
5147.11	7.00	280.00	5111.60	102.05	-578.77	0.00	0.00	0.00	0.00	
5428.40	35.00	270.00	5371.65	105.09	-678.32	10.00	9.95	-3.56	347.80	
6249.01	90.00	194.00	5780.00	-378.60	-1084.85	10.00	6.70	-9.26	281.54	
6991.08	90.00	179.16	5780.00	-1113.72	-1169.64	2.00	0.00	-2.00	-90.00	
10218.11	90.00	179.16	5780.00	-4340.41	-1122.25	0.00	0.00	0.00	0.00	PBHL 1-5

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	
100.00	0.00	0.00	100.00	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	
200.00	1.00	280.00	200.00	0.08	-0.43	-0.08	2.00	2.00	0.00	
300.00	3.00	280.00	299.93	0.68	-3.87	-0.74	2.00	2.00	0.00	
400.00	5.00	280.00	399.68	1.89	-10.74	-2.04	2.00	2.00	0.00	
500.00	7.00	280.00	499.13	3.71	-21.03	-4.00	2.00	2.00	0.00	
600.00	7.00	280.00	598.38	5.82	-33.03	-6.28	0.00	0.00	0.00	
700.00	7.00	280.00	697.64	7.94	-45.03	-8.57	0.00	0.00	0.00	
800.00	7.00	280.00	796.89	10.06	-57.03	-10.85	0.00	0.00	0.00	
900.00	7.00	280.00	896.15	12.17	-69.04	-13.14	0.00	0.00	0.00	
1000.00	7.00	280.00	995.40	14.29	-81.04	-15.42	0.00	0.00	0.00	
1100.00	7.00	280.00	1094.66	16.41	-93.04	-17.70	0.00	0.00	0.00	
1200.00	7.00	280.00	1193.91	18.52	-105.04	-19.99	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Ohare 5-21-10-57 Pad
Well: 1-5-10-57
Wellpath: Original Hole

Date: 12/06/2012
Co-ordinate(NE) Reference: Well: 1-5-10-57, Grid North
Vertical (TVD) Reference: 4917'GL+17"KB 4938.0
Section (VS) Reference: Well (0.00N,0.00E,179.20Azi)
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	7.00	280.00	1293.17	20.64	-117.04	-22.27	0.00	0.00	0.00	
1400.00	7.00	280.00	1392.42	22.75	-129.05	-24.55	0.00	0.00	0.00	
1500.00	7.00	280.00	1491.68	24.87	-141.05	-26.84	0.00	0.00	0.00	
1600.00	7.00	280.00	1590.93	26.99	-153.05	-29.12	0.00	0.00	0.00	
1700.00	7.00	280.00	1690.19	29.10	-165.05	-31.40	0.00	0.00	0.00	
1800.00	7.00	280.00	1789.44	31.22	-177.05	-33.69	0.00	0.00	0.00	
1900.00	7.00	280.00	1888.69	33.34	-189.05	-35.97	0.00	0.00	0.00	
2000.00	7.00	280.00	1987.95	35.45	-201.06	-38.26	0.00	0.00	0.00	
2100.00	7.00	280.00	2087.20	37.57	-213.06	-40.54	0.00	0.00	0.00	
2200.00	7.00	280.00	2186.46	39.68	-225.06	-42.82	0.00	0.00	0.00	
2300.00	7.00	280.00	2285.71	41.80	-237.06	-45.11	0.00	0.00	0.00	
2400.00	7.00	280.00	2384.97	43.92	-249.06	-47.39	0.00	0.00	0.00	
2500.00	7.00	280.00	2484.22	46.03	-261.07	-49.67	0.00	0.00	0.00	
2600.00	7.00	280.00	2583.48	48.15	-273.07	-51.96	0.00	0.00	0.00	
2700.00	7.00	280.00	2682.73	50.27	-285.07	-54.24	0.00	0.00	0.00	
2800.00	7.00	280.00	2781.99	52.38	-297.07	-56.52	0.00	0.00	0.00	
2900.00	7.00	280.00	2881.24	54.50	-309.07	-58.81	0.00	0.00	0.00	
3000.00	7.00	280.00	2980.50	56.61	-321.07	-61.09	0.00	0.00	0.00	
3100.00	7.00	280.00	3079.75	58.73	-333.08	-63.37	0.00	0.00	0.00	
3200.00	7.00	280.00	3179.00	60.85	-345.08	-65.66	0.00	0.00	0.00	
3300.00	7.00	280.00	3278.26	62.96	-357.08	-67.94	0.00	0.00	0.00	
3400.00	7.00	280.00	3377.51	65.08	-369.08	-70.23	0.00	0.00	0.00	
3500.00	7.00	280.00	3476.77	67.20	-381.08	-72.51	0.00	0.00	0.00	
3600.00	7.00	280.00	3576.02	69.31	-393.08	-74.79	0.00	0.00	0.00	
3700.00	7.00	280.00	3675.28	71.43	-405.09	-77.08	0.00	0.00	0.00	
3800.00	7.00	280.00	3774.53	73.54	-417.09	-79.36	0.00	0.00	0.00	
3900.00	7.00	280.00	3873.79	75.66	-429.09	-81.64	0.00	0.00	0.00	
4000.00	7.00	280.00	3973.04	77.78	-441.09	-83.93	0.00	0.00	0.00	
4100.00	7.00	280.00	4072.30	79.89	-453.09	-86.21	0.00	0.00	0.00	
4200.00	7.00	280.00	4171.55	82.01	-465.10	-88.49	0.00	0.00	0.00	
4300.00	7.00	280.00	4270.81	84.13	-477.10	-90.78	0.00	0.00	0.00	
4400.00	7.00	280.00	4370.06	86.24	-489.10	-93.06	0.00	0.00	0.00	
4500.00	7.00	280.00	4469.31	88.36	-501.10	-95.35	0.00	0.00	0.00	
4600.00	7.00	280.00	4568.57	90.47	-513.10	-97.63	0.00	0.00	0.00	
4700.00	7.00	280.00	4667.82	92.59	-525.10	-99.91	0.00	0.00	0.00	
4800.00	7.00	280.00	4767.08	94.71	-537.11	-102.20	0.00	0.00	0.00	
4900.00	7.00	280.00	4866.33	96.82	-549.11	-104.48	0.00	0.00	0.00	
5000.00	7.00	280.00	4965.59	98.94	-561.11	-106.76	0.00	0.00	0.00	
5100.00	7.00	280.00	5064.84	101.05	-573.11	-109.05	0.00	0.00	0.00	
5147.11	7.00	280.00	5111.60	102.05	-578.77	-110.12	0.00	0.00	0.00	
5200.00	12.22	274.72	5163.73	103.07	-587.52	-111.27	10.00	9.87	-9.98	
5300.00	22.18	271.51	5259.14	104.45	-617.02	-113.05	10.00	9.96	-3.21	
5400.00	32.16	270.24	5347.99	105.06	-662.62	-114.30	10.00	9.98	-1.27	
5428.40	35.00	270.00	5371.65	105.09	-678.32	-114.55	10.00	9.99	-0.84	
5500.00	37.02	258.30	5429.64	100.71	-720.02	-110.76	10.00	2.82	-16.34	
5600.00	41.51	244.15	5507.20	80.11	-779.46	-90.99	10.00	4.49	-14.15	
5700.00	47.43	232.62	5578.65	43.22	-838.69	-54.92	10.00	5.92	-11.53	
5800.00	54.29	223.23	5641.82	-8.85	-895.91	-3.66	10.00	6.86	-9.39	
5900.00	61.77	215.40	5694.80	-74.50	-949.37	61.24	10.00	7.47	-7.84	
6000.00	69.63	208.61	5735.96	-151.75	-997.45	137.81	10.00	7.86	-6.78	
6004.63	70.00	208.32	5737.56	-155.57	-999.53	141.60	10.00	8.01	-6.38	7"
6100.00	77.72	202.50	5764.07	-238.26	-1038.70	223.73	10.00	8.10	-6.10	
6200.00	85.95	196.76	5778.27	-331.39	-1071.87	316.39	10.00	8.22	-5.74	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Ohare 5-21-10-57 Pad
Well: 1-5-10-57
Wellpath: Original Hole

Date: 12/06/2012
Co-ordinate(NE) Reference: Well: 1-5-10-57, Grid North
Vertical (TVD) Reference: 4917'GL+17'KB 4938.0
Section (VS) Reference: Well (0.00N,0.00E,179.20Azi)
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
6249.01	90.00	194.00	5780.00	-378.60	-1084.85	363.42	10.00	8.26	-5.63	
6300.00	90.00	192.98	5780.00	-428.18	-1096.74	412.83	2.00	0.00	-2.00	
6400.00	90.00	190.98	5780.00	-526.00	-1117.50	510.35	2.00	0.00	-2.00	
6500.00	90.00	188.98	5780.00	-624.48	-1134.83	608.58	2.00	0.00	-2.00	
6600.00	90.00	186.98	5780.00	-723.51	-1148.71	707.40	2.00	0.00	-2.00	
6700.00	90.00	184.98	5780.00	-822.96	-1159.13	806.70	2.00	0.00	-2.00	
6800.00	90.00	182.98	5780.00	-922.71	-1166.07	906.34	2.00	0.00	-2.00	
6900.00	90.00	180.98	5780.00	-1022.65	-1169.53	1006.22	2.00	0.00	-2.00	
6991.08	90.00	179.16	5780.00	-1113.72	-1169.64	1097.29	2.00	0.00	-2.00	
7000.00	90.00	179.16	5780.00	-1122.64	-1169.51	1106.21	0.00	0.00	0.00	
7100.00	90.00	179.16	5780.00	-1222.63	-1168.04	1206.21	0.00	0.00	0.00	
7200.00	90.00	179.16	5780.00	-1322.62	-1166.57	1306.21	0.00	0.00	0.00	
7300.00	90.00	179.16	5780.00	-1422.61	-1165.10	1406.21	0.00	0.00	0.00	
7400.00	90.00	179.16	5780.00	-1522.60	-1163.63	1506.21	0.00	0.00	0.00	
7500.00	90.00	179.16	5780.00	-1622.59	-1162.16	1606.21	0.00	0.00	0.00	
7600.00	90.00	179.16	5780.00	-1722.58	-1160.70	1706.21	0.00	0.00	0.00	
7700.00	90.00	179.16	5780.00	-1822.57	-1159.23	1806.21	0.00	0.00	0.00	
7800.00	90.00	179.16	5780.00	-1922.56	-1157.76	1906.21	0.00	0.00	0.00	
7900.00	90.00	179.16	5780.00	-2022.55	-1156.29	2006.21	0.00	0.00	0.00	
8000.00	90.00	179.16	5780.00	-2122.54	-1154.82	2106.21	0.00	0.00	0.00	
8100.00	90.00	179.16	5780.00	-2222.53	-1153.35	2206.21	0.00	0.00	0.00	
8200.00	90.00	179.16	5780.00	-2322.51	-1151.88	2306.21	0.00	0.00	0.00	
8300.00	90.00	179.16	5780.00	-2422.50	-1150.42	2406.21	0.00	0.00	0.00	
8400.00	90.00	179.16	5780.00	-2522.49	-1148.95	2506.21	0.00	0.00	0.00	
8500.00	90.00	179.16	5780.00	-2622.48	-1147.48	2606.21	0.00	0.00	0.00	
8600.00	90.00	179.16	5780.00	-2722.47	-1146.01	2706.21	0.00	0.00	0.00	
8700.00	90.00	179.16	5780.00	-2822.46	-1144.54	2806.21	0.00	0.00	0.00	
8800.00	90.00	179.16	5780.00	-2922.45	-1143.07	2906.21	0.00	0.00	0.00	
8900.00	90.00	179.16	5780.00	-3022.44	-1141.61	3006.20	0.00	0.00	0.00	
9000.00	90.00	179.16	5780.00	-3122.43	-1140.14	3106.20	0.00	0.00	0.00	
9100.00	90.00	179.16	5780.00	-3222.42	-1138.67	3206.20	0.00	0.00	0.00	
9200.00	90.00	179.16	5780.00	-3322.41	-1137.20	3306.20	0.00	0.00	0.00	
9300.00	90.00	179.16	5780.00	-3422.40	-1135.73	3406.20	0.00	0.00	0.00	
9400.00	90.00	179.16	5780.00	-3522.39	-1134.26	3506.20	0.00	0.00	0.00	
9500.00	90.00	179.16	5780.00	-3622.37	-1132.80	3606.20	0.00	0.00	0.00	
9600.00	90.00	179.16	5780.00	-3722.36	-1131.33	3706.20	0.00	0.00	0.00	
9700.00	90.00	179.16	5780.00	-3822.35	-1129.86	3806.20	0.00	0.00	0.00	
9800.00	90.00	179.16	5780.00	-3922.34	-1128.39	3906.20	0.00	0.00	0.00	
9900.00	90.00	179.16	5780.00	-4022.33	-1126.92	4006.20	0.00	0.00	0.00	
10000.00	90.00	179.16	5780.00	-4122.32	-1125.45	4106.20	0.00	0.00	0.00	
10100.00	90.00	179.16	5780.00	-4222.31	-1123.98	4206.20	0.00	0.00	0.00	
10200.00	90.00	179.16	5780.00	-4322.30	-1122.52	4306.20	0.00	0.00	0.00	
10218.11	90.00	179.16	5780.00	-4340.41	-1122.25	4324.32	0.00	0.00	0.00	PBHL 1-5

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->				
								Deg	Min	Sec	Deg	Min	Sec		
SL 1-5			0.00	0.00	0.00	1566026.96	3476071.85	40	52	27.928	N	103	46	42.669	W
PBHL 1-5			5780.00	-4340.41	-1122.25	1561686.55	3474949.60	40	51	45.264	N	103	46	58.368	W

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Ohare 5-21-10-57 Pad
Well: 1-5-10-57
Wellpath: Original Hole

Date: 12/06/2012
Co-ordinate(NE) Reference: Well: 1-5-10-57, Grid North
Vertical (TVD) Reference: 4917'GL+17"KB 4938.0
Section (VS) Reference: Well (0.00N,0.00E,179.20Azi)
Plan: Plan #1

Page: 4

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
6004.63	5737.56	7.000	8.750	7"