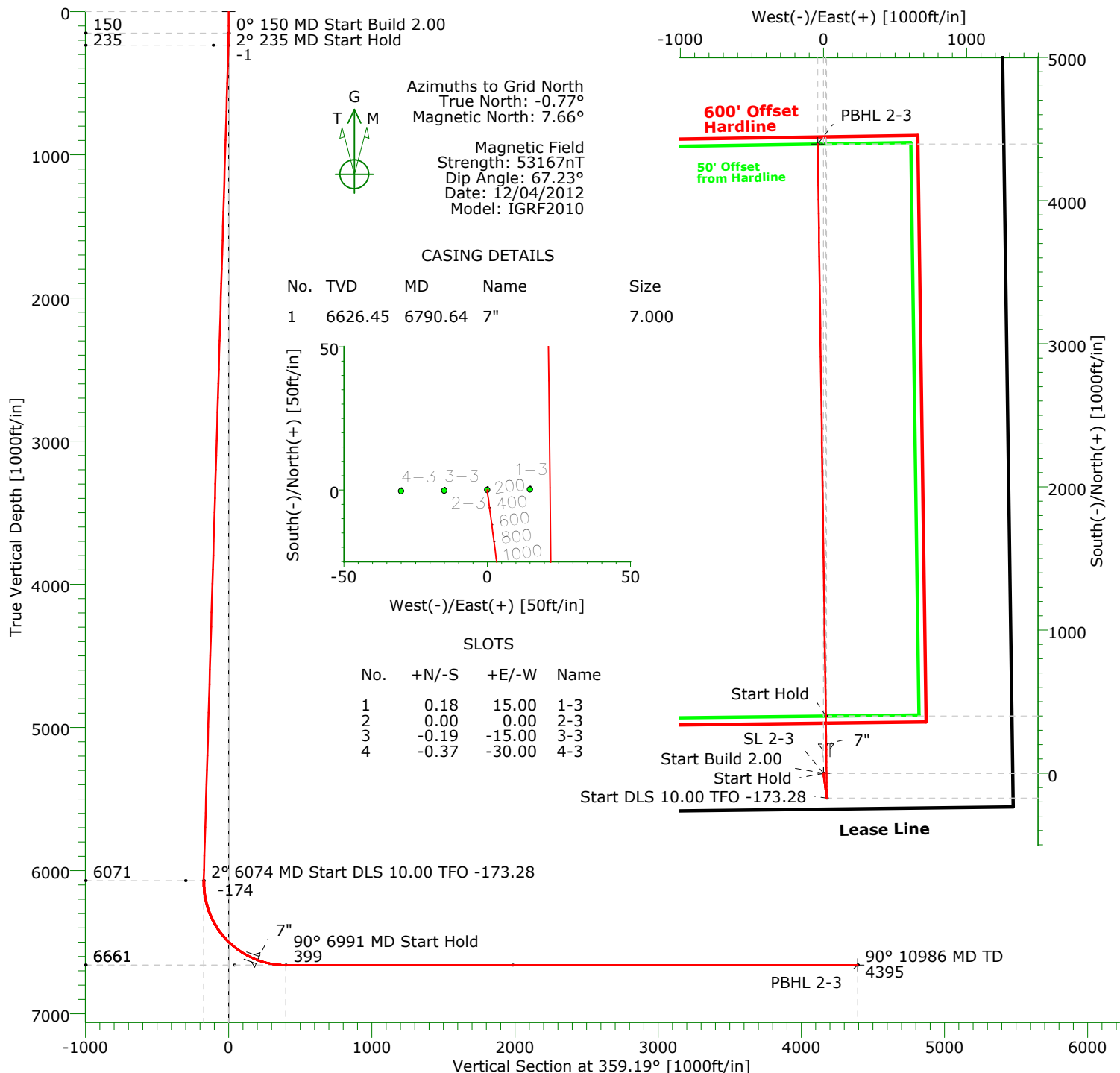




CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
Site: Sievers 1-3-7-62 Pad
Well: 2-3-7-62
Wellpath: Original Hole
Plan: Plan #1



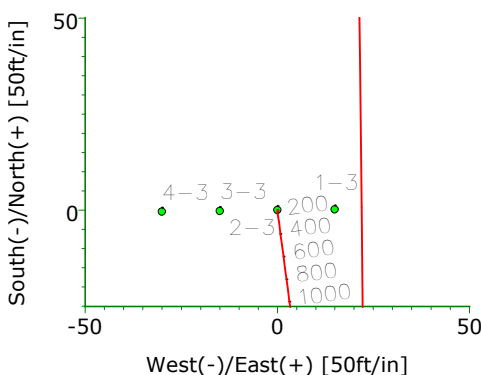
Compass rose showing True North (T), Magnetic North (M), and Grid North (G).

Azimuths to Grid North
True North: -0.77°
Magnetic North: 7.66°

Magnetic Field
Strength: 53167nT
Dip Angle: 67.23°
Date: 12/04/2012
Model: IGRF2010

CASING DETAILS

No.	TVD	MD	Name	Size
1	6626.45	6790.64	7"	7.000



SLOTS

No.	+N/-S	+E/-W	Name
1	0.18	15.00	1-3
2	0.00	0.00	2-3
3	-0.19	-15.00	3-3
4	-0.37	-30.00	4-3

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 2-3	0.00	0.00	0.00	1462386.89	3332630.89	40°35'47.311N	104°18'07.901W	Point
PBHL 2-3	6661.00	4394.43	-39.75	1466781.32	3332591.14	40°36'30.736N	104°18'07.647W	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	235.22	1.70	172.47	235.21	-1.26	0.17	2.00	0.00	-1.26	
4	6073.72	1.70	172.47	6071.12	-173.41	22.93	0.00	0.00	-173.72	
5	6990.64	90.00	359.19	6661.00	399.27	16.87	10.00	-173.28	398.99	
6	10986.21	90.00	359.19	6661.00	4394.43	-39.75	0.00	0.00	4394.55	PBHL 2-3

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Sievers 1-3-7-62 Pad Well: 2-3-7-62 Wellpath: Original Hole	Date: 12/04/2012 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Plan:	Time: 11:37:01 Well: 2-3-7-62, 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: 2-3-7-62 centered on 1-3		Slot Name: 2-3	
Well Position: +N/-S -0.18 ft	Northing: 1462386.89 ft	Latitude: 40 35 47.311 N	
+E/-W -15.00 ft	Easting : 3332630.89 ft	Longitude: 104 18 7.901 W	
Position Uncertainty: 0.00 ft			

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 4890'GL+17'KB	Height 4907.00 ft	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)	+N/-S	Mag Dip Angle: 67.23 deg	
ft	ft	+E/-W	Direction
		ft	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	
235.22	1.70	172.47	235.21	-1.26	0.17	2.00	2.00	0.00	0.00	
6073.72	1.70	172.47	6071.12	-173.41	22.93	0.00	0.00	0.00	0.00	
6990.64	90.00	359.19	6661.00	399.27	16.87	10.00	9.63	-18.90	-173.28	
10986.21	90.00	359.19	6661.00	4394.43	-39.75	0.00	0.00	0.00	0.00	PBHL 2-3

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	172.47	200.00	-0.43	0.06	-0.43	2.00	2.00	0.00	
235.22	1.70	172.47	235.21	-1.26	0.17	-1.26	2.00	2.00	0.00	
300.00	1.70	172.47	299.96	-3.17	0.42	-3.17	0.00	0.00	0.00	
400.00	1.70	172.47	399.91	-6.12	0.81	-6.13	0.00	0.00	0.00	
500.00	1.70	172.47	499.87	-9.06	1.20	-9.08	0.00	0.00	0.00	
600.00	1.70	172.47	599.83	-12.01	1.59	-12.03	0.00	0.00	0.00	
700.00	1.70	172.47	699.78	-14.96	1.98	-14.99	0.00	0.00	0.00	
800.00	1.70	172.47	799.74	-17.91	2.37	-17.94	0.00	0.00	0.00	
900.00	1.70	172.47	899.69	-20.86	2.76	-20.89	0.00	0.00	0.00	
1000.00	1.70	172.47	999.65	-23.81	3.15	-23.85	0.00	0.00	0.00	
1100.00	1.70	172.47	1099.60	-26.76	3.54	-26.80	0.00	0.00	0.00	
1200.00	1.70	172.47	1199.56	-29.70	3.93	-29.76	0.00	0.00	0.00	
1300.00	1.70	172.47	1299.52	-32.65	4.32	-32.71	0.00	0.00	0.00	
1400.00	1.70	172.47	1399.47	-35.60	4.71	-35.66	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: 2-3-7-62
Wellpath: Original Hole

Date: 12/04/2012
Co-ordinate(NE) Reference: Well: 2-3-7-62, 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: 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
1500.00	1.70	172.47	1499.43	-38.55	5.10	-38.62	0.00	0.00	0.00	
1600.00	1.70	172.47	1599.38	-41.50	5.49	-41.57	0.00	0.00	0.00	
1700.00	1.70	172.47	1699.34	-44.45	5.88	-44.53	0.00	0.00	0.00	
1800.00	1.70	172.47	1799.30	-47.40	6.27	-47.48	0.00	0.00	0.00	
1900.00	1.70	172.47	1899.25	-50.34	6.66	-50.43	0.00	0.00	0.00	
2000.00	1.70	172.47	1999.21	-53.29	7.05	-53.39	0.00	0.00	0.00	
2100.00	1.70	172.47	2099.16	-56.24	7.44	-56.34	0.00	0.00	0.00	
2200.00	1.70	172.47	2199.12	-59.19	7.83	-59.29	0.00	0.00	0.00	
2300.00	1.70	172.47	2299.07	-62.14	8.22	-62.25	0.00	0.00	0.00	
2400.00	1.70	172.47	2399.03	-65.09	8.61	-65.20	0.00	0.00	0.00	
2500.00	1.70	172.47	2498.99	-68.04	9.00	-68.16	0.00	0.00	0.00	
2600.00	1.70	172.47	2598.94	-70.98	9.39	-71.11	0.00	0.00	0.00	
2700.00	1.70	172.47	2698.90	-73.93	9.78	-74.06	0.00	0.00	0.00	
2800.00	1.70	172.47	2798.85	-76.88	10.17	-77.02	0.00	0.00	0.00	
2900.00	1.70	172.47	2898.81	-79.83	10.56	-79.97	0.00	0.00	0.00	
3000.00	1.70	172.47	2998.76	-82.78	10.95	-82.92	0.00	0.00	0.00	
3100.00	1.70	172.47	3098.72	-85.73	11.34	-85.88	0.00	0.00	0.00	
3200.00	1.70	172.47	3198.68	-88.68	11.73	-88.83	0.00	0.00	0.00	
3300.00	1.70	172.47	3298.63	-91.62	12.12	-91.79	0.00	0.00	0.00	
3400.00	1.70	172.47	3398.59	-94.57	12.51	-94.74	0.00	0.00	0.00	
3500.00	1.70	172.47	3498.54	-97.52	12.90	-97.69	0.00	0.00	0.00	
3600.00	1.70	172.47	3598.50	-100.47	13.29	-100.65	0.00	0.00	0.00	
3700.00	1.70	172.47	3698.45	-103.42	13.68	-103.60	0.00	0.00	0.00	
3800.00	1.70	172.47	3798.41	-106.37	14.07	-106.56	0.00	0.00	0.00	
3900.00	1.70	172.47	3898.37	-109.32	14.46	-109.51	0.00	0.00	0.00	
4000.00	1.70	172.47	3998.32	-112.26	14.85	-112.46	0.00	0.00	0.00	
4100.00	1.70	172.47	4098.28	-115.21	15.24	-115.42	0.00	0.00	0.00	
4200.00	1.70	172.47	4198.23	-118.16	15.63	-118.37	0.00	0.00	0.00	
4300.00	1.70	172.47	4298.19	-121.11	16.02	-121.32	0.00	0.00	0.00	
4400.00	1.70	172.47	4398.14	-124.06	16.41	-124.28	0.00	0.00	0.00	
4500.00	1.70	172.47	4498.10	-127.01	16.80	-127.23	0.00	0.00	0.00	
4600.00	1.70	172.47	4598.06	-129.96	17.19	-130.19	0.00	0.00	0.00	
4700.00	1.70	172.47	4698.01	-132.90	17.58	-133.14	0.00	0.00	0.00	
4800.00	1.70	172.47	4797.97	-135.85	17.97	-136.09	0.00	0.00	0.00	
4900.00	1.70	172.47	4897.92	-138.80	18.36	-139.05	0.00	0.00	0.00	
5000.00	1.70	172.47	4997.88	-141.75	18.74	-142.00	0.00	0.00	0.00	
5100.00	1.70	172.47	5097.84	-144.70	19.13	-144.95	0.00	0.00	0.00	
5200.00	1.70	172.47	5197.79	-147.65	19.52	-147.91	0.00	0.00	0.00	
5300.00	1.70	172.47	5297.75	-150.60	19.91	-150.86	0.00	0.00	0.00	
5400.00	1.70	172.47	5397.70	-153.54	20.30	-153.82	0.00	0.00	0.00	
5500.00	1.70	172.47	5497.66	-156.49	20.69	-156.77	0.00	0.00	0.00	
5600.00	1.70	172.47	5597.61	-159.44	21.08	-159.72	0.00	0.00	0.00	
5700.00	1.70	172.47	5697.57	-162.39	21.47	-162.68	0.00	0.00	0.00	
5800.00	1.70	172.47	5797.53	-165.34	21.86	-165.63	0.00	0.00	0.00	
5900.00	1.70	172.47	5897.48	-168.29	22.25	-168.58	0.00	0.00	0.00	
6000.00	1.70	172.47	5997.44	-171.24	22.64	-171.54	0.00	0.00	0.00	
6073.72	1.70	172.47	6071.12	-173.41	22.93	-173.72	0.00	0.00	0.00	
6100.00	0.96	11.23	6097.40	-173.58	23.03	-173.89	10.00	-2.84	-613.49	
6150.00	5.94	1.11	6147.30	-170.58	23.16	-170.89	10.00	9.96	-20.24	
6200.00	10.94	0.22	6196.74	-163.25	23.23	-163.56	10.00	10.00	-1.77	
6250.00	15.94	359.89	6245.35	-151.63	23.23	-151.95	10.00	10.00	-0.67	
6300.00	20.94	359.71	6292.77	-135.83	23.17	-136.14	10.00	10.00	-0.35	
6350.00	25.94	359.60	6338.63	-115.95	23.05	-116.26	10.00	10.00	-0.22	
6400.00	30.94	359.52	6382.59	-92.15	22.86	-92.46	10.00	10.00	-0.15	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Sievers 1-3-7-62 Pad
Well: 2-3-7-62
Wellpath: Original Hole

Date: 12/04/2012
Co-ordinate(NE) Reference: Well: 2-3-7-62, 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
6450.00	35.94	359.46	6424.30	-64.61	22.62	-64.92	10.00	10.00	-0.12	
6500.00	40.94	359.42	6463.45	-33.54	22.32	-33.85	10.00	10.00	-0.09	
6550.00	45.94	359.38	6499.75	0.83	21.96	0.52	10.00	10.00	-0.07	
6600.00	50.94	359.35	6532.91	38.23	21.54	37.92	10.00	10.00	-0.06	
6650.00	55.94	359.32	6562.69	78.37	21.08	78.06	10.00	10.00	-0.05	
6700.00	60.94	359.30	6588.85	120.96	20.56	120.65	10.00	10.00	-0.05	
6750.00	65.94	359.28	6611.20	165.66	20.01	165.36	10.00	10.00	-0.04	
6790.64	70.00	359.26	6626.45	203.32	19.53	203.02	10.00	10.00	-0.04	7"
6800.00	70.94	359.26	6629.57	212.14	19.41	211.85	10.00	10.00	-0.04	
6850.00	75.94	359.24	6643.82	260.05	18.78	259.76	10.00	10.00	-0.04	
6900.00	80.94	359.22	6653.84	309.01	18.12	308.73	10.00	10.00	-0.04	
6950.00	85.94	359.20	6659.56	358.66	17.44	358.38	10.00	10.00	-0.04	
6990.64	90.00	359.19	6661.00	399.27	16.87	398.99	10.00	10.00	-0.03	
7000.00	90.00	359.19	6661.00	408.63	16.74	408.35	0.00	0.00	0.00	
7100.00	90.00	359.19	6661.00	508.62	15.32	508.35	0.00	0.00	0.00	
7200.00	90.00	359.19	6661.00	608.61	13.90	608.35	0.00	0.00	0.00	
7300.00	90.00	359.19	6661.00	708.60	12.49	708.35	0.00	0.00	0.00	
7400.00	90.00	359.19	6661.00	808.59	11.07	808.35	0.00	0.00	0.00	
7500.00	90.00	359.19	6661.00	908.57	9.65	908.35	0.00	0.00	0.00	
7600.00	90.00	359.19	6661.00	1008.56	8.23	1008.35	0.00	0.00	0.00	
7700.00	90.00	359.19	6661.00	1108.55	6.82	1108.35	0.00	0.00	0.00	
7800.00	90.00	359.19	6661.00	1208.54	5.40	1208.35	0.00	0.00	0.00	
7900.00	90.00	359.19	6661.00	1308.53	3.98	1308.35	0.00	0.00	0.00	
8000.00	90.00	359.19	6661.00	1408.52	2.57	1408.35	0.00	0.00	0.00	
8100.00	90.00	359.19	6661.00	1508.51	1.15	1508.35	0.00	0.00	0.00	
8200.00	90.00	359.19	6661.00	1608.50	-0.27	1608.35	0.00	0.00	0.00	
8300.00	90.00	359.19	6661.00	1708.49	-1.68	1708.35	0.00	0.00	0.00	
8400.00	90.00	359.19	6661.00	1808.48	-3.10	1808.35	0.00	0.00	0.00	
8500.00	90.00	359.19	6661.00	1908.47	-4.52	1908.35	0.00	0.00	0.00	
8600.00	90.00	359.19	6661.00	2008.46	-5.94	2008.35	0.00	0.00	0.00	
8700.00	90.00	359.19	6661.00	2108.45	-7.35	2108.35	0.00	0.00	0.00	
8800.00	90.00	359.19	6661.00	2208.44	-8.77	2208.35	0.00	0.00	0.00	
8900.00	90.00	359.19	6661.00	2308.43	-10.19	2308.35	0.00	0.00	0.00	
9000.00	90.00	359.19	6661.00	2408.42	-11.60	2408.35	0.00	0.00	0.00	
9100.00	90.00	359.19	6661.00	2508.41	-13.02	2508.35	0.00	0.00	0.00	
9200.00	90.00	359.19	6661.00	2608.40	-14.44	2608.35	0.00	0.00	0.00	
9300.00	90.00	359.19	6661.00	2708.39	-15.86	2708.35	0.00	0.00	0.00	
9400.00	90.00	359.19	6661.00	2808.38	-17.27	2808.35	0.00	0.00	0.00	
9500.00	90.00	359.19	6661.00	2908.37	-18.69	2908.35	0.00	0.00	0.00	
9600.00	90.00	359.19	6661.00	3008.36	-20.11	3008.35	0.00	0.00	0.00	
9700.00	90.00	359.19	6661.00	3108.35	-21.52	3108.35	0.00	0.00	0.00	
9800.00	90.00	359.19	6661.00	3208.34	-22.94	3208.35	0.00	0.00	0.00	
9900.00	90.00	359.19	6661.00	3308.33	-24.36	3308.35	0.00	0.00	0.00	
10000.00	90.00	359.19	6661.00	3408.32	-25.77	3408.35	0.00	0.00	0.00	
10100.00	90.00	359.19	6661.00	3508.31	-27.19	3508.35	0.00	0.00	0.00	
10200.00	90.00	359.19	6661.00	3608.30	-28.61	3608.35	0.00	0.00	0.00	
10300.00	90.00	359.19	6661.00	3708.29	-30.03	3708.35	0.00	0.00	0.00	
10400.00	90.00	359.19	6661.00	3808.28	-31.44	3808.35	0.00	0.00	0.00	
10500.00	90.00	359.19	6661.00	3908.27	-32.86	3908.35	0.00	0.00	0.00	
10600.00	90.00	359.19	6661.00	4008.26	-34.28	4008.35	0.00	0.00	0.00	
10700.00	90.00	359.19	6661.00	4108.25	-35.69	4108.35	0.00	0.00	0.00	
10800.00	90.00	359.19	6661.00	4208.24	-37.11	4208.35	0.00	0.00	0.00	
10900.00	90.00	359.19	6661.00	4308.23	-38.53	4308.35	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: 2-3-7-62 Wellpath: Original Hole	Date: 12/04/2012 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Plan:	Time: 11:37:01 Well: 2-3-7-62, 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
10986.21	90.00	359.19	6661.00	4394.43	-39.75	4394.55	0.00	0.00	0.00	PBHL 2-3

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<--- Longitude --->		
SL 2-3			0.00	0.00	0.00	1462386.89	3332630.89	40	35	47.311 N	104	18	7.901 W
PBHL 2-3			6661.00	4394.43	-39.75	1466781.32	3332591.14	40	36	30.736 N	104	18	7.647 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
6790.64	6626.45	7.000	8.750	7"