

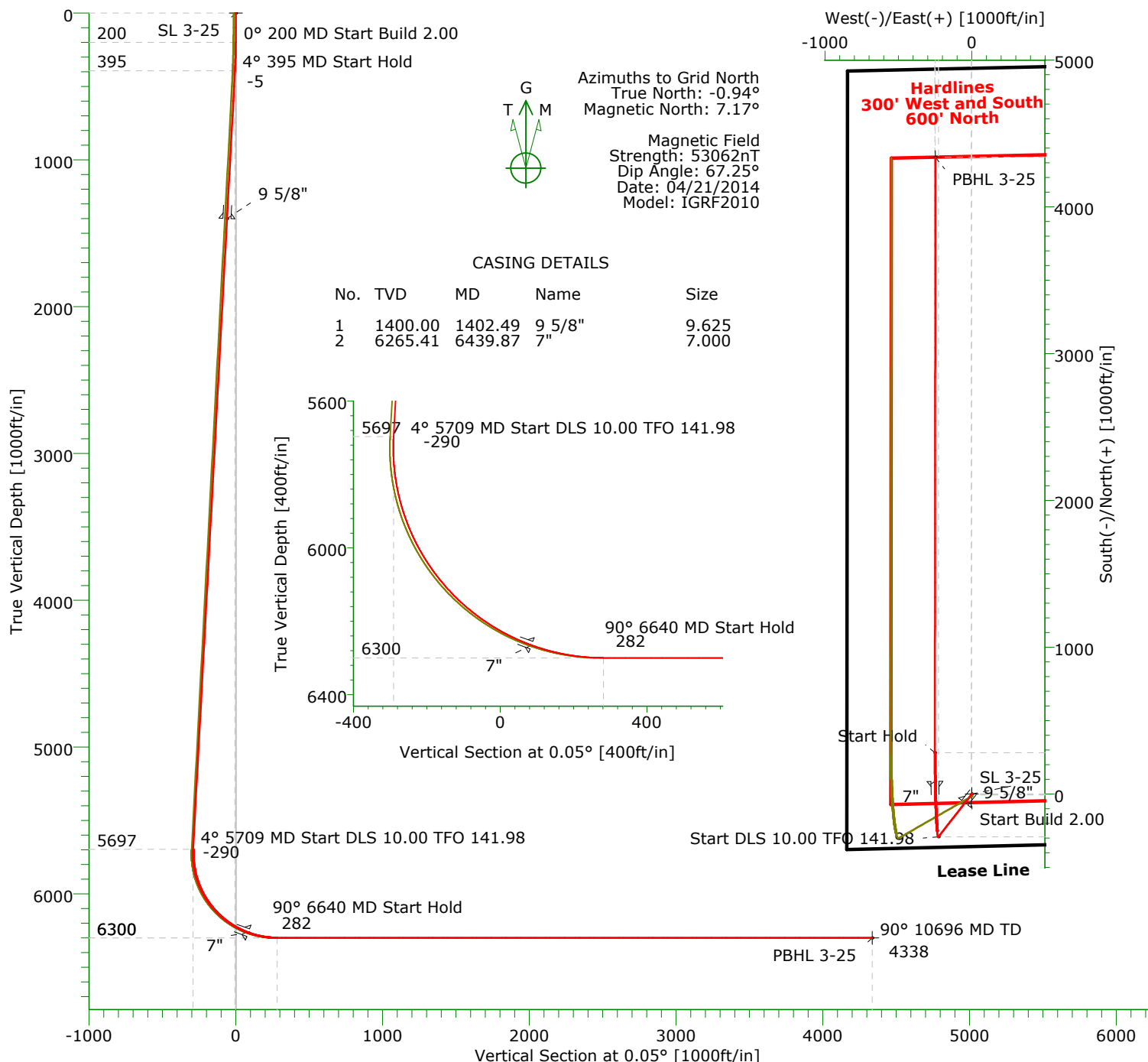


CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
 Site: Hemberger 1-25-8-60 Pad
 Well: 3-25-8-60
 Wellpath: Original Hole
 Plan: Plan #2



Precision
 Directional Services



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 3-25	0.00	0.00	0.00	1474618.96	3403479.72	40°37'37.703N	104°02'46.978W	Point
PBHL 3-25	6300.00	4338.40	-247.83	1478957.36	3403231.89	40°38'20.607N	104°02'49.270W	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	395.09	3.90	218.01	394.94	-5.23	-4.09	2.00	0.00	-5.24	
4	5709.30	3.90	218.01	5696.83	-290.16	-226.75	0.00	0.00	-290.35	
5	6640.06	90.00	0.05	6300.00	282.00	-251.53	10.00	141.98	281.78	
6	10696.46	90.00	0.05	6300.00	4338.40	-247.83	0.00	0.00	4338.18	PBHL 3-25

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.		Date: 04/04/2014		Time: 12:09:57		Page: 1	
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 3-25-8-60, Grid North					
Site: Hemberger 1-25-8-60 Pad		Vertical (TVD) Reference: 4908'GL+17'KB 4925.0					
Well: 3-25-8-60		Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)					
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: Hemberger 1-25-8-60 Pad					
Site Position:		Northing: 1474603.96 ft		Latitude: 40 37 37.555 N	
From: Map		Easting: 3403479.97 ft		Longitude: 104 2 46.978 W	
Position Uncertainty: 0.00 ft				North Reference: Grid	
Ground Level: 4908.00 ft				Grid Convergence: 0.94 deg	

Well: 3-25-8-60		Slot Name: 3-25			
Well Position: +N/-S 15.00 ft		Northing: 1474618.96 ft		Latitude: 40 37 37.703 N	
+E/-W -0.25 ft		Easting : 3403479.72 ft		Longitude: 104 2 46.978 W	
Position Uncertainty: 0.00 ft					

Wellpath: Original Hole		Drilled From: Surface	
Current Datum: 4908'GL+17'KB		Tie-on Depth: 0.00 ft	
Magnetic Data: 04/21/2014		Above System Datum: Mean Sea Level	
Field Strength: 53062 nT		Declination: 8.11 deg	
Vertical Section: Depth From (TVD)		Mag Dip Angle: 67.25 deg	
ft	+N/-S ft	+E/-W ft	Direction deg
0.00	0.00	0.00	0.05

Plan: Plan #2		Date Composed: 04/04/2014	
PBHL 600' off HL		Version: 1	
Principal: No		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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
395.09	3.90	218.01	394.94	-5.23	-4.09	2.00	2.00	0.00	0.00	
5709.30	3.90	218.01	5696.83	-290.16	-226.75	0.00	0.00	0.00	0.00	
6640.06	90.00	0.05	6300.00	282.00	-251.53	10.00	9.25	15.26	141.98	
10696.46	90.00	0.05	6300.00	4338.40	-247.83	0.00	0.00	0.00	0.00	PBHL 3-25

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	2.00	218.01	299.98	-1.38	-1.07	-1.38	2.00	2.00	0.00	
395.09	3.90	218.01	394.94	-5.23	-4.09	-5.24	2.00	2.00	0.00	
400.00	3.90	218.01	399.84	-5.50	-4.29	-5.50	0.00	0.00	0.00	
500.00	3.90	218.01	499.61	-10.86	-8.48	-10.86	0.00	0.00	0.00	
600.00	3.90	218.01	599.37	-16.22	-12.67	-16.23	0.00	0.00	0.00	
700.00	3.90	218.01	699.14	-21.58	-16.86	-21.59	0.00	0.00	0.00	
800.00	3.90	218.01	798.91	-26.94	-21.05	-26.96	0.00	0.00	0.00	
900.00	3.90	218.01	898.68	-32.30	-25.24	-32.32	0.00	0.00	0.00	
1000.00	3.90	218.01	998.45	-37.66	-29.43	-37.69	0.00	0.00	0.00	
1100.00	3.90	218.01	1098.22	-43.03	-33.62	-43.06	0.00	0.00	0.00	
1200.00	3.90	218.01	1197.98	-48.39	-37.81	-48.42	0.00	0.00	0.00	
1300.00	3.90	218.01	1297.75	-53.75	-42.00	-53.79	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Hemberger 1-25-8-60 Pad
Well: 3-25-8-60
Wellpath: Original Hole

Date: 04/04/2014
Co-ordinate(NE) Reference: Well: 3-25-8-60, Grid North
Vertical (TVD) Reference: 4908'GL+17'KB 4925.0
Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)
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
1400.00	3.90	218.01	1397.52	-59.11	-46.19	-59.15	0.00	0.00	0.00	9 5/8"
1402.49	3.90	218.01	1400.00	-59.24	-46.30	-59.28	0.00	0.00	0.00	
1500.00	3.90	218.01	1497.29	-64.47	-50.38	-64.52	0.00	0.00	0.00	
1600.00	3.90	218.01	1597.06	-69.83	-54.57	-69.88	0.00	0.00	0.00	
1700.00	3.90	218.01	1696.82	-75.20	-58.76	-75.25	0.00	0.00	0.00	
1800.00	3.90	218.01	1796.59	-80.56	-62.95	-80.61	0.00	0.00	0.00	
1900.00	3.90	218.01	1896.36	-85.92	-67.14	-85.98	0.00	0.00	0.00	
2000.00	3.90	218.01	1996.13	-91.28	-71.33	-91.34	0.00	0.00	0.00	
2100.00	3.90	218.01	2095.90	-96.64	-75.52	-96.71	0.00	0.00	0.00	
2200.00	3.90	218.01	2195.67	-102.00	-79.71	-102.07	0.00	0.00	0.00	
2300.00	3.90	218.01	2295.43	-107.36	-83.90	-107.44	0.00	0.00	0.00	
2400.00	3.90	218.01	2395.20	-112.73	-88.09	-112.80	0.00	0.00	0.00	
2500.00	3.90	218.01	2494.97	-118.09	-92.28	-118.17	0.00	0.00	0.00	
2600.00	3.90	218.01	2594.74	-123.45	-96.47	-123.53	0.00	0.00	0.00	
2700.00	3.90	218.01	2694.51	-128.81	-100.66	-128.90	0.00	0.00	0.00	
2800.00	3.90	218.01	2794.28	-134.17	-104.85	-134.26	0.00	0.00	0.00	
2900.00	3.90	218.01	2894.04	-139.53	-109.04	-139.63	0.00	0.00	0.00	
3000.00	3.90	218.01	2993.81	-144.90	-113.23	-144.99	0.00	0.00	0.00	
3100.00	3.90	218.01	3093.58	-150.26	-117.42	-150.36	0.00	0.00	0.00	
3200.00	3.90	218.01	3193.35	-155.62	-121.61	-155.72	0.00	0.00	0.00	
3300.00	3.90	218.01	3293.12	-160.98	-125.80	-161.09	0.00	0.00	0.00	
3400.00	3.90	218.01	3392.88	-166.34	-129.99	-166.45	0.00	0.00	0.00	
3500.00	3.90	218.01	3492.65	-171.70	-134.18	-171.82	0.00	0.00	0.00	
3600.00	3.90	218.01	3592.42	-177.06	-138.37	-177.19	0.00	0.00	0.00	
3700.00	3.90	218.01	3692.19	-182.43	-142.56	-182.55	0.00	0.00	0.00	
3800.00	3.90	218.01	3791.96	-187.79	-146.75	-187.92	0.00	0.00	0.00	
3900.00	3.90	218.01	3891.73	-193.15	-150.94	-193.28	0.00	0.00	0.00	
4000.00	3.90	218.01	3991.49	-198.51	-155.13	-198.65	0.00	0.00	0.00	
4100.00	3.90	218.01	4091.26	-203.87	-159.32	-204.01	0.00	0.00	0.00	
4200.00	3.90	218.01	4191.03	-209.23	-163.51	-209.38	0.00	0.00	0.00	
4300.00	3.90	218.01	4290.80	-214.60	-167.70	-214.74	0.00	0.00	0.00	
4400.00	3.90	218.01	4390.57	-219.96	-171.89	-220.11	0.00	0.00	0.00	
4500.00	3.90	218.01	4490.34	-225.32	-176.08	-225.47	0.00	0.00	0.00	
4600.00	3.90	218.01	4590.10	-230.68	-180.27	-230.84	0.00	0.00	0.00	
4700.00	3.90	218.01	4689.87	-236.04	-184.46	-236.20	0.00	0.00	0.00	
4800.00	3.90	218.01	4789.64	-241.40	-188.65	-241.57	0.00	0.00	0.00	
4900.00	3.90	218.01	4889.41	-246.76	-192.84	-246.93	0.00	0.00	0.00	
5000.00	3.90	218.01	4989.18	-252.13	-197.03	-252.30	0.00	0.00	0.00	
5100.00	3.90	218.01	5088.94	-257.49	-201.22	-257.66	0.00	0.00	0.00	
5200.00	3.90	218.01	5188.71	-262.85	-205.41	-263.03	0.00	0.00	0.00	
5300.00	3.90	218.01	5288.48	-268.21	-209.60	-268.39	0.00	0.00	0.00	
5400.00	3.90	218.01	5388.25	-273.57	-213.79	-273.76	0.00	0.00	0.00	
5500.00	3.90	218.01	5488.02	-278.93	-217.98	-279.12	0.00	0.00	0.00	
5600.00	3.90	218.01	5587.79	-284.30	-222.17	-284.49	0.00	0.00	0.00	
5709.30	3.90	218.01	5696.83	-290.16	-226.75	-290.35	0.00	0.00	0.00	
5750.00	2.60	292.55	5737.48	-290.89	-228.46	-291.09	10.00	-3.20	183.15	
5800.00	6.46	338.29	5787.33	-287.84	-230.54	-288.05	10.00	7.71	91.49	
5850.00	11.25	347.88	5836.72	-280.46	-232.61	-280.66	10.00	9.59	19.17	
5900.00	16.17	351.73	5885.28	-268.79	-234.64	-269.00	10.00	9.84	7.71	
5950.00	21.13	353.82	5932.64	-252.94	-236.61	-253.14	10.00	9.91	4.17	
6000.00	26.10	355.14	5978.44	-233.01	-238.51	-233.22	10.00	9.94	2.64	
6050.00	31.08	356.06	6022.33	-209.16	-240.33	-209.37	10.00	9.96	1.84	
6100.00	36.06	356.75	6063.98	-181.57	-242.05	-181.79	10.00	9.97	1.38	
6150.00	41.05	357.29	6103.07	-150.46	-243.66	-150.67	10.00	9.98	1.08	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Hemberger 1-25-8-60 Pad
Well: 3-25-8-60
Wellpath: Original Hole

Date: 04/04/2014
Co-ordinate(NE) Reference: Well: 3-25-8-60, Grid North
Vertical (TVD) Reference: 4908'GL+17'KB 4925.0
Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)
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
6200.00	46.04	357.73	6139.30	-116.06	-245.15	-116.27	10.00	9.98	0.89	
6250.00	51.04	358.11	6172.39	-78.62	-246.51	-78.84	10.00	9.98	0.75	
6300.00	56.03	358.43	6202.10	-38.44	-247.72	-38.66	10.00	9.99	0.65	
6350.00	61.02	358.72	6228.20	4.17	-248.77	3.96	10.00	9.99	0.58	
6400.00	66.02	358.98	6250.49	48.90	-249.67	48.69	10.00	9.99	0.52	
6439.87	70.00	359.18	6265.41	85.86	-250.26	85.64	10.00	9.99	0.49	7"
6450.00	71.01	359.23	6268.79	95.41	-250.39	95.19	10.00	9.99	0.47	
6500.00	76.01	359.45	6282.98	143.33	-250.94	143.12	10.00	9.99	0.46	
6550.00	81.00	359.67	6292.94	192.31	-251.32	192.10	10.00	9.99	0.44	
6600.00	86.00	359.88	6298.60	241.98	-251.51	241.76	10.00	9.99	0.42	
6640.06	90.00	0.05	6300.00	282.00	-251.53	281.78	10.00	9.99	0.42	
6700.00	90.00	0.05	6300.00	341.94	-251.48	341.73	0.00	0.00	0.00	
6800.00	90.00	0.05	6300.00	441.94	-251.38	441.73	0.00	0.00	0.00	
6900.00	90.00	0.05	6300.00	541.94	-251.29	541.73	0.00	0.00	0.00	
7000.00	90.00	0.05	6300.00	641.94	-251.20	641.73	0.00	0.00	0.00	
7100.00	90.00	0.05	6300.00	741.94	-251.11	741.73	0.00	0.00	0.00	
7200.00	90.00	0.05	6300.00	841.94	-251.02	841.73	0.00	0.00	0.00	
7300.00	90.00	0.05	6300.00	941.94	-250.93	941.73	0.00	0.00	0.00	
7400.00	90.00	0.05	6300.00	1041.94	-250.84	1041.73	0.00	0.00	0.00	
7500.00	90.00	0.05	6300.00	1141.94	-250.75	1141.73	0.00	0.00	0.00	
7600.00	90.00	0.05	6300.00	1241.94	-250.65	1241.73	0.00	0.00	0.00	
7700.00	90.00	0.05	6300.00	1341.94	-250.56	1341.73	0.00	0.00	0.00	
7800.00	90.00	0.05	6300.00	1441.94	-250.47	1441.73	0.00	0.00	0.00	
7900.00	90.00	0.05	6300.00	1541.94	-250.38	1541.73	0.00	0.00	0.00	
8000.00	90.00	0.05	6300.00	1641.94	-250.29	1641.73	0.00	0.00	0.00	
8100.00	90.00	0.05	6300.00	1741.94	-250.20	1741.73	0.00	0.00	0.00	
8200.00	90.00	0.05	6300.00	1841.94	-250.11	1841.73	0.00	0.00	0.00	
8300.00	90.00	0.05	6300.00	1941.94	-250.02	1941.73	0.00	0.00	0.00	
8400.00	90.00	0.05	6300.00	2041.94	-249.92	2041.73	0.00	0.00	0.00	
8500.00	90.00	0.05	6300.00	2141.94	-249.83	2141.73	0.00	0.00	0.00	
8600.00	90.00	0.05	6300.00	2241.94	-249.74	2241.73	0.00	0.00	0.00	
8700.00	90.00	0.05	6300.00	2341.94	-249.65	2341.73	0.00	0.00	0.00	
8800.00	90.00	0.05	6300.00	2441.94	-249.56	2441.73	0.00	0.00	0.00	
8900.00	90.00	0.05	6300.00	2541.94	-249.47	2541.73	0.00	0.00	0.00	
9000.00	90.00	0.05	6300.00	2641.94	-249.38	2641.73	0.00	0.00	0.00	
9100.00	90.00	0.05	6300.00	2741.94	-249.29	2741.73	0.00	0.00	0.00	
9200.00	90.00	0.05	6300.00	2841.94	-249.19	2841.73	0.00	0.00	0.00	
9300.00	90.00	0.05	6300.00	2941.94	-249.10	2941.73	0.00	0.00	0.00	
9400.00	90.00	0.05	6300.00	3041.94	-249.01	3041.73	0.00	0.00	0.00	
9500.00	90.00	0.05	6300.00	3141.94	-248.92	3141.73	0.00	0.00	0.00	
9600.00	90.00	0.05	6300.00	3241.94	-248.83	3241.73	0.00	0.00	0.00	
9700.00	90.00	0.05	6300.00	3341.94	-248.74	3341.73	0.00	0.00	0.00	
9800.00	90.00	0.05	6300.00	3441.94	-248.65	3441.73	0.00	0.00	0.00	
9900.00	90.00	0.05	6300.00	3541.94	-248.56	3541.73	0.00	0.00	0.00	
10000.00	90.00	0.05	6300.00	3641.94	-248.46	3641.73	0.00	0.00	0.00	
10100.00	90.00	0.05	6300.00	3741.94	-248.37	3741.73	0.00	0.00	0.00	
10200.00	90.00	0.05	6300.00	3841.94	-248.28	3841.73	0.00	0.00	0.00	
10300.00	90.00	0.05	6300.00	3941.94	-248.19	3941.73	0.00	0.00	0.00	
10400.00	90.00	0.05	6300.00	4041.94	-248.10	4041.73	0.00	0.00	0.00	
10500.00	90.00	0.05	6300.00	4141.94	-248.01	4141.73	0.00	0.00	0.00	
10600.00	90.00	0.05	6300.00	4241.94	-247.92	4241.73	0.00	0.00	0.00	
10696.46	90.00	0.05	6300.00	4338.40	-247.83	4338.18	0.00	0.00	0.00	PBHL 3-25

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Hemberger 1-25-8-60 Pad
Well: 3-25-8-60
Wellpath: Original Hole

Date: 04/04/2014
Co-ordinate(NE) Reference: Well: 3-25-8-60, Grid North
Vertical (TVD) Reference: 4908'GL+17'KB 4925.0
Section (VS) Reference: Well (0.00N,0.00E,0.05Azi)
Plan: Plan #2

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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 3-25			0.00	0.00	0.00	1474618.96	3403479.72	40	37	37.703	N	104	2 46.978 W
PBHL 3-25			6300.00	4338.40	-247.83	1478957.36	3403231.89	40	38	20.607	N	104	2 49.270 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1402.49	1400.00	9.625	12.250	9 5/8"
6439.87	6265.41	7.000	8.500	7"