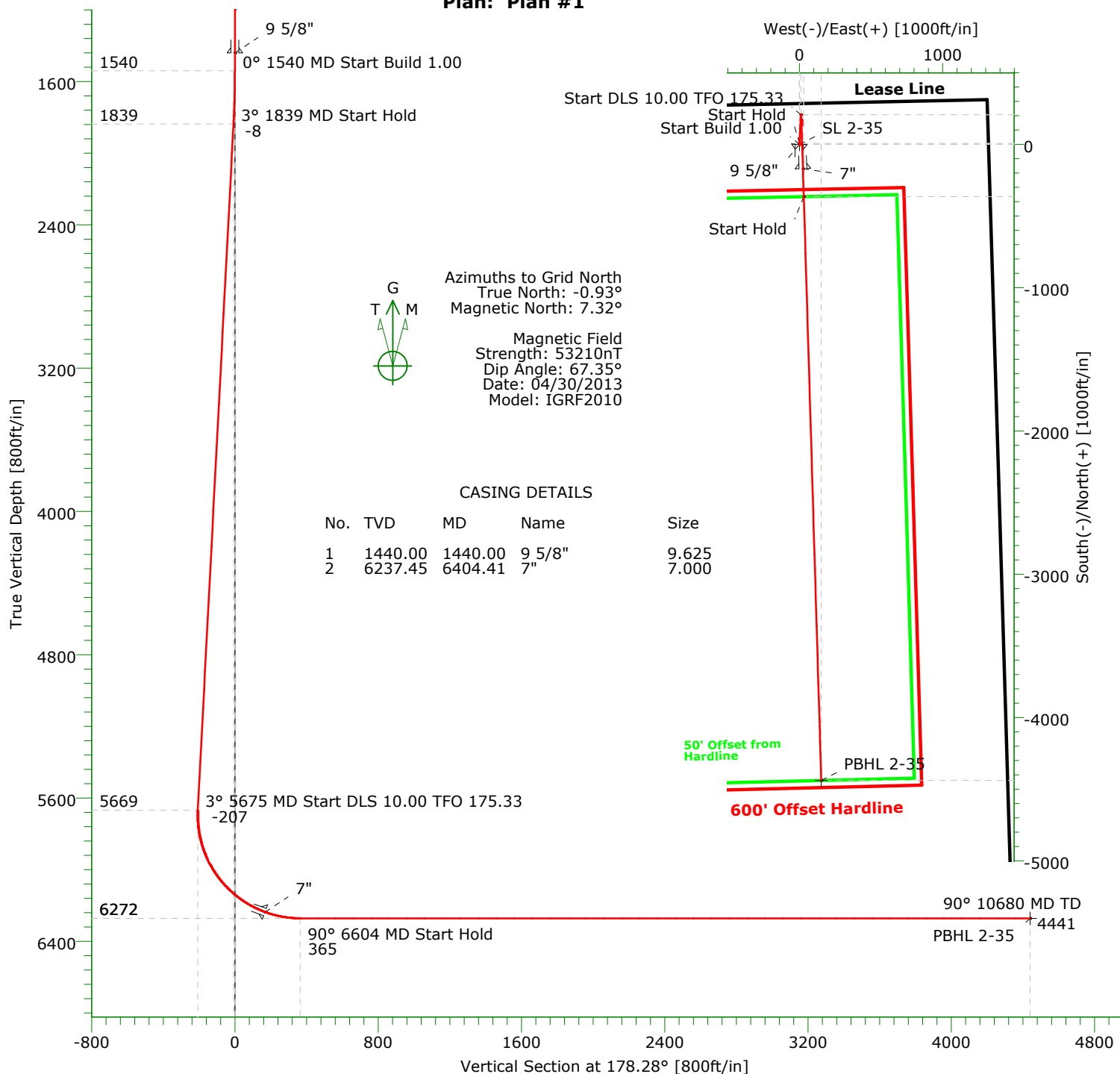




CARRIZO OIL & GAS, INC.

Field: Niobrara CONZ'83
Site: Shull 1-35-9-60 Pad
Well: 2-35-9-60
Wellpath: Original Hole
Plan: Plan #1



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 2-35	0.00	0.00	0.00	1505907.30	3400764.11	40°42'47.271N	104°03'15.578W	Point
PBHL 2-35	6272.00	-4438.01	152.47	1501469.29	3400916.58	40°42'03.399N	104°03'14.538W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	2.95	0.00	0.00	0.00	0.00	0.00	0.00	
2	1540.00	0.00	2.95	1540.00	0.00	0.00	0.00	2.95	0.00	
3	1838.69	2.99	2.95	1838.55	7.77	0.40	1.00	0.00	-7.76	
4	5674.64	2.99	2.95	5669.29	207.39	10.67	0.00	0.00	-206.98	
5	6604.41	90.00	178.28	6272.00	-364.46	30.37	10.00	175.33	365.21	
6	10679.79	90.00	178.28	6272.00	-4438.01	152.47	0.00	0.00	4440.59	PBHL 2-35

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC. Field: Niobrara CONZ'83 Site: Shull 1-35-9-60 Pad Well: 2-35-9-60 Wellpath: Original Hole	Date: 03/27/2013 Co-ordinate(NE) Reference: Well: 2-35-9-60, Grid North Vertical (TVD) Reference: 4923'GL+17'KB 4940.0 Section (VS) Reference: Well (0.00N,0.00E,178.28Azi) Plan: Plan #1	Time: 11:04:09 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: Shull 1-35-9-60 Pad			
Weld County, CO			
Site Position:	Northing: 1505922.29 ft	Latitude: 40 42 47.419 N	
From: Map	Easting: 3400763.64 ft	Longitude: 104 3 15.581 W	
Position Uncertainty: 0.00 ft		North Reference: Grid	
Ground Level: 4923.00 ft		Grid Convergence: 0.93 deg	

Well: 2-35-9-60 285' FNL 1319' FEL Well Position: +N/-S -14.99 ft +E/-W 0.47 ft Position Uncertainty: 0.00 ft	Slot Name: 2-35 Latitude: 40 42 47.271 N Longitude: 104 3 15.578 W
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Wellpath: Original Hole Current Datum: 4923'GL+17'KB Magnetic Data: 04/30/2013 Field Strength: 53210 nT Vertical Section: Depth From (TVD) ft	Height 4940.00 ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.25 deg Mag Dip Angle: 67.35 deg +E/-W ft Direction deg
0.00	0.00	0.00 178.28

Plan: Plan #1 Principal: No	Date Composed: 03/27/2013 Version: 1 Tied-to: From Surface
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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	2.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1540.00	0.00	2.95	1540.00	0.00	0.00	0.00	0.00	0.00	2.95	
1838.69	2.99	2.95	1838.55	7.77	0.40	1.00	1.00	0.00	0.00	
5674.64	2.99	2.95	5669.29	207.39	10.67	0.00	0.00	0.00	0.00	
6604.41	90.00	178.28	6272.00	-364.46	30.37	10.00	9.36	18.86	175.33	
10679.79	90.00	178.28	6272.00	-4438.01	152.47	0.00	0.00	0.00	0.00	PBHL 2-35

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
1540.00	0.00	2.95	1540.00	0.00	0.00	0.00	0.00	0.00	0.00	
1640.00	1.00	2.95	1639.99	0.87	0.04	-0.87	1.00	1.00	0.00	
1740.00	2.00	2.95	1739.96	3.49	0.18	-3.48	1.00	1.00	0.00	
1838.69	2.99	2.95	1838.55	7.77	0.40	-7.76	1.00	1.00	0.00	
1840.00	2.99	2.95	1839.86	7.84	0.40	-7.83	0.00	0.00	0.00	
1940.00	2.99	2.95	1939.73	13.05	0.67	-13.02	0.00	0.00	0.00	
2040.00	2.99	2.95	2039.59	18.25	0.94	-18.21	0.00	0.00	0.00	
2140.00	2.99	2.95	2139.46	23.45	1.21	-23.41	0.00	0.00	0.00	
2240.00	2.99	2.95	2239.32	28.66	1.47	-28.60	0.00	0.00	0.00	
2340.00	2.99	2.95	2339.18	33.86	1.74	-33.79	0.00	0.00	0.00	
2440.00	2.99	2.95	2439.05	39.06	2.01	-38.99	0.00	0.00	0.00	
2540.00	2.99	2.95	2538.91	44.27	2.28	-44.18	0.00	0.00	0.00	
2640.00	2.99	2.95	2638.78	49.47	2.55	-49.37	0.00	0.00	0.00	
2740.00	2.99	2.95	2738.64	54.68	2.81	-54.57	0.00	0.00	0.00	
2840.00	2.99	2.95	2838.50	59.88	3.08	-59.76	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Shull 1-35-9-60 Pad
Well: 2-35-9-60
Wellpath: Original Hole

Date: 03/27/2013
Co-ordinate(NE) Reference: Well: 2-35-9-60, Grid North
Vertical (TVD) Reference: 4923'GL+17'KB 4940.0
Section (VS) Reference: Well (0.00N,0.00E,178.28Azi)
Plan: Plan #1

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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
2940.00	2.99	2.95	2938.37	65.08	3.35	-64.95	0.00	0.00	0.00	
3040.00	2.99	2.95	3038.23	70.29	3.62	-70.15	0.00	0.00	0.00	
3140.00	2.99	2.95	3138.10	75.49	3.88	-75.34	0.00	0.00	0.00	
3240.00	2.99	2.95	3237.96	80.70	4.15	-80.53	0.00	0.00	0.00	
3340.00	2.99	2.95	3337.83	85.90	4.42	-85.73	0.00	0.00	0.00	
3440.00	2.99	2.95	3437.69	91.10	4.69	-90.92	0.00	0.00	0.00	
3540.00	2.99	2.95	3537.55	96.31	4.96	-96.12	0.00	0.00	0.00	
3640.00	2.99	2.95	3637.42	101.51	5.22	-101.31	0.00	0.00	0.00	
3740.00	2.99	2.95	3737.28	106.72	5.49	-106.50	0.00	0.00	0.00	
3840.00	2.99	2.95	3837.15	111.92	5.76	-111.70	0.00	0.00	0.00	
3940.00	2.99	2.95	3937.01	117.12	6.03	-116.89	0.00	0.00	0.00	
4040.00	2.99	2.95	4036.87	122.33	6.29	-122.08	0.00	0.00	0.00	
4140.00	2.99	2.95	4136.74	127.53	6.56	-127.28	0.00	0.00	0.00	
4240.00	2.99	2.95	4236.60	132.73	6.83	-132.47	0.00	0.00	0.00	
4340.00	2.99	2.95	4336.47	137.94	7.10	-137.66	0.00	0.00	0.00	
4440.00	2.99	2.95	4436.33	143.14	7.37	-142.86	0.00	0.00	0.00	
4540.00	2.99	2.95	4536.19	148.35	7.63	-148.05	0.00	0.00	0.00	
4640.00	2.99	2.95	4636.06	153.55	7.90	-153.24	0.00	0.00	0.00	
4740.00	2.99	2.95	4735.92	158.75	8.17	-158.44	0.00	0.00	0.00	
4840.00	2.99	2.95	4835.79	163.96	8.44	-163.63	0.00	0.00	0.00	
4940.00	2.99	2.95	4935.65	169.16	8.70	-168.82	0.00	0.00	0.00	
5040.00	2.99	2.95	5035.52	174.37	8.97	-174.02	0.00	0.00	0.00	
5140.00	2.99	2.95	5135.38	179.57	9.24	-179.21	0.00	0.00	0.00	
5240.00	2.99	2.95	5235.24	184.77	9.51	-184.40	0.00	0.00	0.00	
5340.00	2.99	2.95	5335.11	189.98	9.78	-189.60	0.00	0.00	0.00	
5440.00	2.99	2.95	5434.97	195.18	10.04	-194.79	0.00	0.00	0.00	
5540.00	2.99	2.95	5534.84	200.38	10.31	-199.98	0.00	0.00	0.00	
5640.00	2.99	2.95	5634.70	205.59	10.58	-205.18	0.00	0.00	0.00	
5674.64	2.99	2.95	5669.29	207.39	10.67	-206.98	0.00	0.00	0.00	
5740.00	3.57	174.38	5734.62	207.07	10.96	-206.65	10.00	0.89	262.29	
5840.00	13.56	177.28	5833.38	192.22	11.82	-191.78	10.00	9.99	2.89	
5940.00	23.56	177.73	5928.05	160.46	13.18	-159.99	10.00	10.00	0.45	
6040.00	33.56	177.92	6015.77	112.75	14.98	-112.25	10.00	10.00	0.19	
6140.00	43.56	178.03	6093.87	50.53	17.18	-49.99	10.00	10.00	0.11	
6240.00	53.56	178.10	6159.97	-24.30	19.70	24.88	10.00	10.00	0.08	
6340.00	63.56	178.16	6212.07	-109.46	22.47	110.09	10.00	10.00	0.06	
6404.41	70.00	178.19	6237.45	-168.59	24.35	169.25	10.00	10.00	0.05	7"
6440.00	73.56	178.21	6248.57	-202.38	25.41	203.05	10.00	10.00	0.05	
6540.00	83.56	178.26	6268.38	-300.22	28.43	300.94	10.00	10.00	0.04	
6604.41	90.00	178.28	6272.00	-364.46	30.37	365.21	10.00	10.00	0.04	
6640.00	90.00	178.28	6272.00	-400.04	31.44	400.80	0.00	0.00	0.00	
6740.00	90.00	178.28	6272.00	-499.99	34.43	500.80	0.00	0.00	0.00	
6840.00	90.00	178.28	6272.00	-599.95	37.43	600.80	0.00	0.00	0.00	
6940.00	90.00	178.28	6272.00	-699.90	40.42	700.80	0.00	0.00	0.00	
7040.00	90.00	178.28	6272.00	-799.86	43.42	800.80	0.00	0.00	0.00	
7140.00	90.00	178.28	6272.00	-899.81	46.42	900.80	0.00	0.00	0.00	
7240.00	90.00	178.28	6272.00	-999.77	49.41	1000.80	0.00	0.00	0.00	
7340.00	90.00	178.28	6272.00	-1099.72	52.41	1100.80	0.00	0.00	0.00	
7440.00	90.00	178.28	6272.00	-1199.68	55.40	1200.80	0.00	0.00	0.00	
7540.00	90.00	178.28	6272.00	-1299.63	58.40	1300.80	0.00	0.00	0.00	
7640.00	90.00	178.28	6272.00	-1399.59	61.40	1400.80	0.00	0.00	0.00	
7740.00	90.00	178.28	6272.00	-1499.54	64.39	1500.80	0.00	0.00	0.00	
7840.00	90.00	178.28	6272.00	-1599.50	67.39	1600.80	0.00	0.00	0.00	
7940.00	90.00	178.28	6272.00	-1699.45	70.38	1700.80	0.00	0.00	0.00	

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.
Field: Niobrara CONZ'83
Site: Shull 1-35-9-60 Pad
Well: 2-35-9-60
Wellpath: Original Hole

Date: 03/27/2013
Co-ordinate(NE) Reference: Well: 2-35-9-60, Grid North
Vertical (TVD) Reference: 4923'GL+17'KB 4940.0
Section (VS) Reference: Well (0.00N,0.00E,178.28Azi)
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
8040.00	90.00	178.28	6272.00	-1799.41	73.38	1800.80	0.00	0.00	0.00	
8140.00	90.00	178.28	6272.00	-1899.36	76.38	1900.80	0.00	0.00	0.00	
8240.00	90.00	178.28	6272.00	-1999.32	79.37	2000.80	0.00	0.00	0.00	
8340.00	90.00	178.28	6272.00	-2099.27	82.37	2100.80	0.00	0.00	0.00	
8440.00	90.00	178.28	6272.00	-2199.23	85.37	2200.80	0.00	0.00	0.00	
8540.00	90.00	178.28	6272.00	-2299.18	88.36	2300.80	0.00	0.00	0.00	
8640.00	90.00	178.28	6272.00	-2399.14	91.36	2400.80	0.00	0.00	0.00	
8740.00	90.00	178.28	6272.00	-2499.09	94.35	2500.80	0.00	0.00	0.00	
8840.00	90.00	178.28	6272.00	-2599.05	97.35	2600.80	0.00	0.00	0.00	
8940.00	90.00	178.28	6272.00	-2699.00	100.35	2700.80	0.00	0.00	0.00	
9040.00	90.00	178.28	6272.00	-2798.96	103.34	2800.80	0.00	0.00	0.00	
9140.00	90.00	178.28	6272.00	-2898.91	106.34	2900.80	0.00	0.00	0.00	
9240.00	90.00	178.28	6272.00	-2998.87	109.33	3000.80	0.00	0.00	0.00	
9340.00	90.00	178.28	6272.00	-3098.82	112.33	3100.80	0.00	0.00	0.00	
9440.00	90.00	178.28	6272.00	-3198.78	115.33	3200.80	0.00	0.00	0.00	
9540.00	90.00	178.28	6272.00	-3298.73	118.32	3300.80	0.00	0.00	0.00	
9640.00	90.00	178.28	6272.00	-3398.69	121.32	3400.80	0.00	0.00	0.00	
9740.00	90.00	178.28	6272.00	-3498.64	124.31	3500.80	0.00	0.00	0.00	
9840.00	90.00	178.28	6272.00	-3598.60	127.31	3600.80	0.00	0.00	0.00	
9940.00	90.00	178.28	6272.00	-3698.56	130.31	3700.80	0.00	0.00	0.00	
10040.00	90.00	178.28	6272.00	-3798.51	133.30	3800.80	0.00	0.00	0.00	
10140.00	90.00	178.28	6272.00	-3898.47	136.30	3900.80	0.00	0.00	0.00	
10240.00	90.00	178.28	6272.00	-3998.42	139.29	4000.80	0.00	0.00	0.00	
10340.00	90.00	178.28	6272.00	-4098.38	142.29	4100.80	0.00	0.00	0.00	
10440.00	90.00	178.28	6272.00	-4198.33	145.29	4200.80	0.00	0.00	0.00	
10540.00	90.00	178.28	6272.00	-4298.29	148.28	4300.80	0.00	0.00	0.00	
10640.00	90.00	178.28	6272.00	-4398.24	151.28	4400.80	0.00	0.00	0.00	
10679.79	90.00	178.28	6272.00	-4438.01	152.47	4440.59	0.00	0.00	0.00	PBHL 2-35

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->		
SL 2-35			0.00	0.00	0.00	1505907.30	3400764.11	40	42	47.271 N	104	3	15.578 W
PBHL 2-35			6272.00	-4438.01	152.47	1501469.29	3400916.58	40	42	3.399 N	104	3	14.538 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1440.00	1440.00	9.625	12.250	9 5/8"
6404.41	6237.45	7.000	8.500	7"