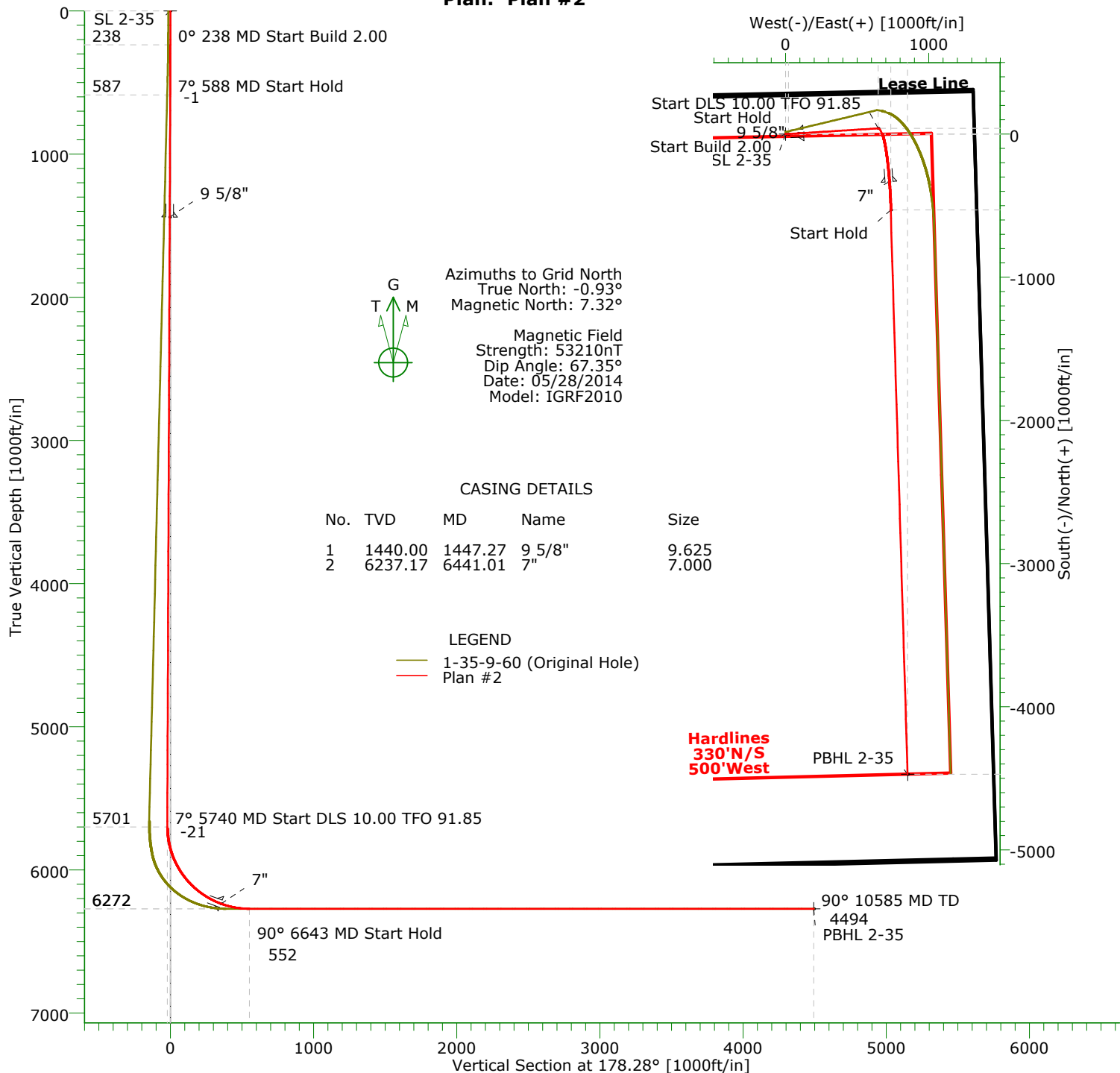




CARRIZO OIL & GAS, INC.

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



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	-4470.54	853.75	1501436.76	3401617.86	40°42'02.964N	104°03'05.441W	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	238.00	0.00	0.00	238.00	0.00	0.00	0.00	0.00	0.00	
3	587.92	7.00	86.41	587.05	1.33	21.30	2.00	0.00	-0.69	
4	5740.30	7.00	86.41	5701.05	40.60	647.84	0.00	0.00	-21.13	
5	6642.58	90.00	178.28	6272.00	-530.00	735.03	10.00	91.85	551.82	
6	10584.91	90.00	178.28	6272.00	-4470.56	853.15	0.00	0.00	4494.15	PBHL 2-35

Precision Directional Services, Inc.

Planning Report

Company: CARRIZO OIL & GAS, INC.		Date: 05/28/2014	Time: 14:07:24	Page: 1
Field: Niobrara CONZ'83		Co-ordinate(NE) Reference: Well: 2-35-9-60, Grid North		
Site: Shull 1-35-9-60 Pad		Vertical (TVD) Reference: 4923'GL+17'KB 4940.0		
Well: 2-35-9-60		Section (VS) Reference: Well (0.00N,0.00E,178.28Azi)		
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: Shull 1-35-9-60 Pad	
Weld County, CO	
Site Position:	Northing: 1505922.29 ft
From: Map	Easting: 3400763.64 ft
Position Uncertainty: 0.00 ft	Latitude: 40 42 47.419 N
Ground Level: 4923.00 ft	Longitude: 104 3 15.581 W
	North Reference: Grid
	Grid Convergence: 0.93 deg

Well: 2-35-9-60	Slot Name: 2-35
285' FNL 1319' FEL	
Well Position: +N/-S -14.99 ft	Northing: 1505907.30 ft
+E/-W 0.47 ft	Latitude: 40 42 47.271 N
Position Uncertainty: 0.00 ft	Easting : 3400764.11 ft
	Longitude: 104 3 15.578 W

Wellpath: Original Hole		Drilled From: Surface
Current Datum: 4923'GL+17'KB	Height 4940.00 ft	Tie-on Depth: 0.00 ft
Magnetic Data: 05/28/2014		Above System Datum: Mean Sea Level
Field Strength: 53210 nT		Declination: 8.25 deg
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 67.35 deg
ft	ft	+E/-W
		ft
0.00	0.00	0.00
		178.28

Plan: Plan #2	Date Composed: 05/28/2014
Adj slot, LP and BHL	Version: 1
Principal: No	Tied-to: From Surface

Plan Section Information										
MD ft	Incl deg	Azim bearing	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	
238.00	0.00	0.00	238.00	0.00	0.00	0.00	0.00	0.00	0.00	
587.92	7.00	86.41	587.05	1.33	21.30	2.00	2.00	0.00	0.00	
5740.30	7.00	86.41	5701.05	40.60	647.84	0.00	0.00	0.00	0.00	
6642.58	90.00	178.28	6272.00	-530.00	735.03	10.00	9.20	10.18	91.85	
10584.91	90.00	178.28	6272.00	-4470.56	853.15	0.00	0.00	0.00	0.00	PBHL 2-35

Survey										
MD ft	Incl deg	Azim bearing	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	
238.00	0.00	0.00	238.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	1.24	86.41	300.00	0.04	0.67	-0.02	2.00	2.00	0.00	
400.00	3.24	86.41	399.91	0.29	4.57	-0.15	2.00	2.00	0.00	
500.00	5.24	86.41	499.63	0.75	11.95	-0.39	2.00	2.00	0.00	
587.92	7.00	86.41	587.05	1.33	21.30	-0.69	2.00	2.00	0.00	
600.00	7.00	86.41	599.04	1.43	22.77	-0.74	0.00	0.00	0.00	
700.00	7.00	86.41	698.30	2.19	34.93	-1.14	0.00	0.00	0.00	
800.00	7.00	86.41	797.55	2.95	47.09	-1.54	0.00	0.00	0.00	
900.00	7.00	86.41	896.81	3.71	59.25	-1.93	0.00	0.00	0.00	
1000.00	7.00	86.41	996.06	4.48	71.41	-2.33	0.00	0.00	0.00	
1100.00	7.00	86.41	1095.32	5.24	83.57	-2.73	0.00	0.00	0.00	
1200.00	7.00	86.41	1194.57	6.00	95.73	-3.12	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: 05/28/2014 **Time:** 14:07:24
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 #2

Page: 2

Survey

MD ft	Incl deg	Azim bearing	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	86.41	1293.83	6.76	107.89	-3.52	0.00	0.00	0.00	9 5/8"
1400.00	7.00	86.41	1393.08	7.52	120.05	-3.92	0.00	0.00	0.00	
1447.27	7.00	86.41	1440.00	7.88	125.80	-4.10	0.00	0.00	0.00	
1500.00	7.00	86.41	1492.34	8.29	132.21	-4.31	0.00	0.00	0.00	
1600.00	7.00	86.41	1591.59	9.05	144.37	-4.71	0.00	0.00	0.00	
1700.00	7.00	86.41	1690.85	9.81	156.53	-5.11	0.00	0.00	0.00	
1800.00	7.00	86.41	1790.10	10.57	168.69	-5.50	0.00	0.00	0.00	
1900.00	7.00	86.41	1889.36	11.33	180.85	-5.90	0.00	0.00	0.00	
2000.00	7.00	86.41	1988.61	12.10	193.01	-6.30	0.00	0.00	0.00	
2100.00	7.00	86.41	2087.87	12.86	205.17	-6.69	0.00	0.00	0.00	
2200.00	7.00	86.41	2187.12	13.62	217.33	-7.09	0.00	0.00	0.00	
2300.00	7.00	86.41	2286.37	14.38	229.50	-7.49	0.00	0.00	0.00	
2400.00	7.00	86.41	2385.63	15.14	241.66	-7.88	0.00	0.00	0.00	
2500.00	7.00	86.41	2484.88	15.91	253.82	-8.28	0.00	0.00	0.00	
2600.00	7.00	86.41	2584.14	16.67	265.98	-8.68	0.00	0.00	0.00	
2700.00	7.00	86.41	2683.39	17.43	278.14	-9.07	0.00	0.00	0.00	
2800.00	7.00	86.41	2782.65	18.19	290.30	-9.47	0.00	0.00	0.00	
2900.00	7.00	86.41	2881.90	18.95	302.46	-9.87	0.00	0.00	0.00	
3000.00	7.00	86.41	2981.16	19.72	314.62	-10.26	0.00	0.00	0.00	
3100.00	7.00	86.41	3080.41	20.48	326.78	-10.66	0.00	0.00	0.00	
3200.00	7.00	86.41	3179.67	21.24	338.94	-11.06	0.00	0.00	0.00	
3300.00	7.00	86.41	3278.92	22.00	351.10	-11.45	0.00	0.00	0.00	
3400.00	7.00	86.41	3378.18	22.76	363.26	-11.85	0.00	0.00	0.00	
3500.00	7.00	86.41	3477.43	23.53	375.42	-12.25	0.00	0.00	0.00	
3600.00	7.00	86.41	3576.69	24.29	387.58	-12.64	0.00	0.00	0.00	
3700.00	7.00	86.41	3675.94	25.05	399.74	-13.04	0.00	0.00	0.00	
3800.00	7.00	86.41	3775.20	25.81	411.90	-13.44	0.00	0.00	0.00	
3900.00	7.00	86.41	3874.45	26.57	424.06	-13.83	0.00	0.00	0.00	
4000.00	7.00	86.41	3973.71	27.34	436.22	-14.23	0.00	0.00	0.00	
4100.00	7.00	86.41	4072.96	28.10	448.38	-14.63	0.00	0.00	0.00	
4200.00	7.00	86.41	4172.22	28.86	460.54	-15.02	0.00	0.00	0.00	
4300.00	7.00	86.41	4271.47	29.62	472.70	-15.42	0.00	0.00	0.00	
4400.00	7.00	86.41	4370.73	30.38	484.86	-15.82	0.00	0.00	0.00	
4500.00	7.00	86.41	4469.98	31.15	497.02	-16.21	0.00	0.00	0.00	
4600.00	7.00	86.41	4569.24	31.91	509.18	-16.61	0.00	0.00	0.00	
4700.00	7.00	86.41	4668.49	32.67	521.34	-17.01	0.00	0.00	0.00	
4800.00	7.00	86.41	4767.75	33.43	533.50	-17.40	0.00	0.00	0.00	
4900.00	7.00	86.41	4867.00	34.19	545.66	-17.80	0.00	0.00	0.00	
5000.00	7.00	86.41	4966.26	34.96	557.82	-18.20	0.00	0.00	0.00	
5100.00	7.00	86.41	5065.51	35.72	569.98	-18.59	0.00	0.00	0.00	
5200.00	7.00	86.41	5164.77	36.48	582.14	-18.99	0.00	0.00	0.00	
5300.00	7.00	86.41	5264.02	37.24	594.30	-19.39	0.00	0.00	0.00	
5400.00	7.00	86.41	5363.28	38.00	606.46	-19.78	0.00	0.00	0.00	
5500.00	7.00	86.41	5462.53	38.77	618.62	-20.18	0.00	0.00	0.00	
5600.00	7.00	86.41	5561.79	39.53	630.78	-20.58	0.00	0.00	0.00	
5700.00	7.00	86.41	5661.04	40.29	642.94	-20.97	0.00	0.00	0.00	
5740.30	7.00	86.41	5701.05	40.60	647.84	-21.13	0.00	0.00	0.00	
5750.00	7.03	94.35	5710.67	40.59	649.03	-21.09	10.00	0.36	81.88	
5800.00	9.04	127.83	5760.20	37.95	655.18	-18.26	10.00	4.01	66.95	
5850.00	12.80	145.59	5809.30	30.96	661.42	-11.10	10.00	7.51	35.51	
5900.00	17.19	154.92	5857.60	19.70	667.69	0.35	10.00	8.79	18.66	
5950.00	21.84	160.46	5904.72	4.23	673.93	16.00	10.00	9.30	11.08	
6000.00	26.61	164.11	5950.30	-15.32	680.11	35.72	10.00	9.54	7.30	
6050.00	31.45	166.71	5994.01	-38.80	686.18	59.38	10.00	9.68	5.21	

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: 05/28/2014
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 #2

Page: 3

Survey

MD ft	Incl deg	Azim bearing	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6100.00	36.33	168.68	6035.50	-66.03	692.09	86.78	10.00	9.76	3.94	
6150.00	41.23	170.24	6074.47	-96.82	697.80	117.72	10.00	9.81	3.11	
6200.00	46.16	171.52	6110.61	-130.91	703.26	151.96	10.00	9.84	2.56	
6250.00	51.09	172.60	6143.65	-168.06	708.43	189.25	10.00	9.87	2.17	
6300.00	56.03	173.54	6173.34	-207.98	713.27	229.29	10.00	9.88	1.88	
6350.00	60.98	174.38	6199.45	-250.36	717.74	271.79	10.00	9.90	1.68	
6400.00	65.93	175.14	6221.79	-294.89	721.82	316.43	10.00	9.91	1.52	
6441.01	70.00	175.72	6237.17	-332.78	724.84	354.39	10.00	9.91	1.42	7"
6450.00	70.89	175.85	6240.18	-341.23	725.47	362.85	10.00	9.92	1.37	
6500.00	75.85	176.51	6254.48	-389.01	728.65	410.71	10.00	9.92	1.33	
6550.00	80.81	177.15	6264.59	-437.89	731.36	459.65	10.00	9.92	1.27	
6600.00	85.77	177.76	6270.43	-487.48	733.56	509.28	10.00	9.92	1.24	
6642.58	90.00	178.28	6272.00	-530.00	735.03	551.82	10.00	9.93	1.22	
6700.00	90.00	178.28	6272.00	-587.39	736.75	609.24	0.00	0.00	0.00	
6800.00	90.00	178.28	6272.00	-687.35	739.75	709.24	0.00	0.00	0.00	
6900.00	90.00	178.28	6272.00	-787.30	742.74	809.24	0.00	0.00	0.00	
7000.00	90.00	178.28	6272.00	-887.26	745.74	909.24	0.00	0.00	0.00	
7100.00	90.00	178.28	6272.00	-987.21	748.74	1009.24	0.00	0.00	0.00	
7200.00	90.00	178.28	6272.00	-1087.17	751.73	1109.24	0.00	0.00	0.00	
7300.00	90.00	178.28	6272.00	-1187.12	754.73	1209.24	0.00	0.00	0.00	
7400.00	90.00	178.28	6272.00	-1287.08	757.72	1309.24	0.00	0.00	0.00	
7500.00	90.00	178.28	6272.00	-1387.04	760.72	1409.24	0.00	0.00	0.00	
7600.00	90.00	178.28	6272.00	-1486.99	763.72	1509.24	0.00	0.00	0.00	
7700.00	90.00	178.28	6272.00	-1586.95	766.71	1609.24	0.00	0.00	0.00	
7800.00	90.00	178.28	6272.00	-1686.90	769.71	1709.24	0.00	0.00	0.00	
7900.00	90.00	178.28	6272.00	-1786.86	772.71	1809.24	0.00	0.00	0.00	
8000.00	90.00	178.28	6272.00	-1886.81	775.70	1909.24	0.00	0.00	0.00	
8100.00	90.00	178.28	6272.00	-1986.77	778.70	2009.24	0.00	0.00	0.00	
8200.00	90.00	178.28	6272.00	-2086.72	781.69	2109.24	0.00	0.00	0.00	
8300.00	90.00	178.28	6272.00	-2186.68	784.69	2209.24	0.00	0.00	0.00	
8400.00	90.00	178.28	6272.00	-2286.63	787.69	2309.24	0.00	0.00	0.00	
8500.00	90.00	178.28	6272.00	-2386.59	790.68	2409.24	0.00	0.00	0.00	
8600.00	90.00	178.28	6272.00	-2486.54	793.68	2509.24	0.00	0.00	0.00	
8700.00	90.00	178.28	6272.00	-2586.50	796.68	2609.24	0.00	0.00	0.00	
8800.00	90.00	178.28	6272.00	-2686.45	799.67	2709.24	0.00	0.00	0.00	
8900.00	90.00	178.28	6272.00	-2786.41	802.67	2809.24	0.00	0.00	0.00	
9000.00	90.00	178.28	6272.00	-2886.36	805.66	2909.24	0.00	0.00	0.00	
9100.00	90.00	178.28	6272.00	-2986.32	808.66	3009.24	0.00	0.00	0.00	
9200.00	90.00	178.28	6272.00	-3086.27	811.66	3109.24	0.00	0.00	0.00	
9300.00	90.00	178.28	6272.00	-3186.23	814.65	3209.24	0.00	0.00	0.00	
9400.00	90.00	178.28	6272.00	-3286.18	817.65	3309.24	0.00	0.00	0.00	
9500.00	90.00	178.28	6272.00	-3386.14	820.65	3409.24	0.00	0.00	0.00	
9600.00	90.00	178.28	6272.00	-3486.09	823.64	3509.24	0.00	0.00	0.00	
9700.00	90.00	178.28	6272.00	-3586.05	826.64	3609.24	0.00	0.00	0.00	
9800.00	90.00	178.28	6272.00	-3686.00	829.63	3709.24	0.00	0.00	0.00	
9900.00	90.00	178.28	6272.00	-3785.96	832.63	3809.24	0.00	0.00	0.00	
10000.00	90.00	178.28	6272.00	-3885.91	835.63	3909.24	0.00	0.00	0.00	
10100.00	90.00	178.28	6272.00	-3985.87	838.62	4009.24	0.00	0.00	0.00	
10200.00	90.00	178.28	6272.00	-4085.82	841.62	4109.24	0.00	0.00	0.00	
10300.00	90.00	178.28	6272.00	-4185.78	844.62	4209.24	0.00	0.00	0.00	
10400.00	90.00	178.28	6272.00	-4285.73	847.61	4309.24	0.00	0.00	0.00	
10500.00	90.00	178.28	6272.00	-4385.69	850.61	4409.24	0.00	0.00	0.00	
10584.91	90.00	178.28	6272.00	-4470.56	853.15	4494.15	0.00	0.00	0.00	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: 05/28/2014
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 #2

Page: 4

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 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	-4470.54	853.75	1501436.76	3401617.86	40	42	2.964	N	104	3 5.441 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1447.27	1440.00	9.625	12.250	9 5/8"
6441.01	6237.17	7.000	8.500	7"