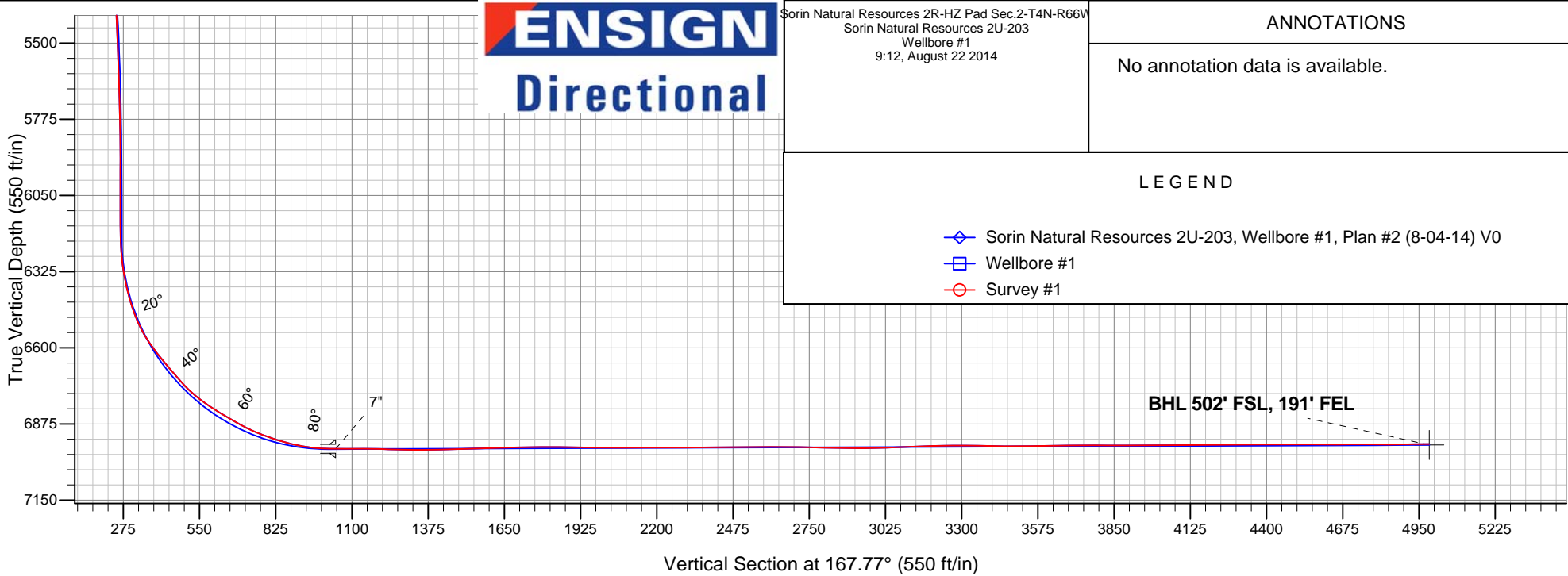
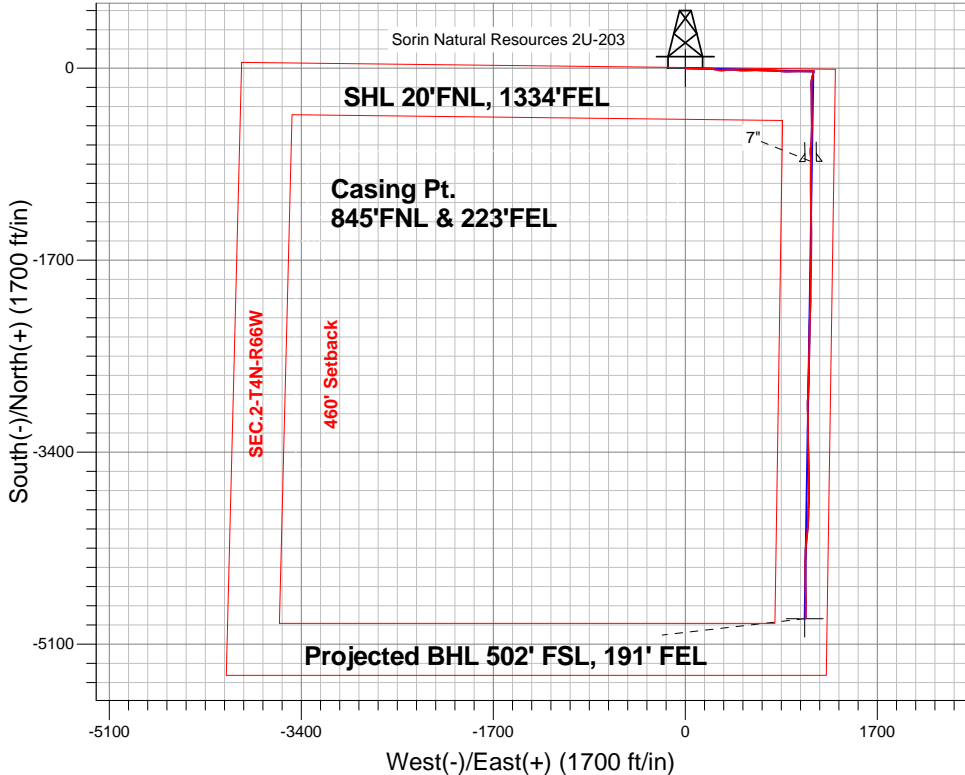


PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Sorin Natural Resources 2U-203**
Surface Location: Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4671.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1370686.18 3211957.26 40.348440 -104.739530
Ensign Rig #136 - RKB 12.5' WELL @ 4684ft (Ensign Rig #136 - RKB 13')

FINAL SURVEY

Projected Bottom Hole Location
11590'MD 6947'TVD 4872'S & 1065'E of SHL
90.8 degree Incl @ 180.9 degree AZM



Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W

Sorin Natural Resources 2U-203

Wellbore #1

9:12, August 22 2014

ANNOTATIONS

No annotation data is available.

LEGEND

- Sorin Natural Resources 2U-203, Wellbore #1, Plan #2 (8-04-14) V0
- Wellbore #1
- Survey #1



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.2-T4N-R66W

Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W

Sorin Natural Resources 2U-203

Wellbore #1

Survey: Survey #1

Standard Survey Report

22 August, 2014

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Sorin Natural Resources 2U-203
Project:	SEC.2-T4N-R66W	TVD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Site:	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W	MD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Well:	Sorin Natural Resources 2U-203	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.2-T4N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W				
Site Position:		Northing:	1,370,685.98 ft	Latitude:	40.348440
From:	Lat/Long	Easting:	3,211,929.38 ft	Longitude:	-104.739630
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.49 °

Well	Sorin Natural Resources 2U-203					
Well Position	+N-S	0.0 ft	Northing:	1,370,686.18 ft	Latitude:	40.348440
	+E-W	0.0 ft	Easting:	3,211,957.26 ft	Longitude:	-104.739530
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,671.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/4/2014	8.42	66.90	52,778

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)	
	0.0	0.0	0.0	167.77	

Survey Program	Date 8/22/2014				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
41.0	11,590.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.02	99.10	1.0	0.0	0.0	0.0	1.71	1.71	0.00
SHL 20'FNL, 1334'FEL									
41.0	0.70	99.10	41.0	0.0	0.2	0.1	1.71	1.71	0.00
131.0	1.10	96.50	131.0	-0.2	1.6	0.6	0.45	0.44	-2.89
223.0	1.50	104.40	223.0	-0.6	3.7	1.4	0.48	0.43	8.59
314.0	2.80	90.90	313.9	-1.0	7.1	2.4	1.52	1.43	-14.84
404.0	4.90	91.00	403.7	-1.1	13.1	3.8	2.33	2.33	0.11
495.0	5.70	94.90	494.3	-1.5	21.5	6.0	0.96	0.88	4.29
586.0	7.00	88.80	584.7	-1.8	31.5	8.4	1.61	1.43	-6.70
677.0	8.80	90.50	674.9	-1.7	44.1	11.0	1.99	1.98	1.87

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Sorin Natural Resources 2U-203
Project:	SEC.2-T4N-R66W	TVD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Site:	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W	MD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Well:	Sorin Natural Resources 2U-203	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
768.0	9.80	91.90	764.7	-2.0	58.8	14.4	1.13	1.10	1.54
859.0	11.30	90.30	854.1	-2.3	75.4	18.3	1.68	1.65	-1.76
884.0	11.50	92.60	878.6	-2.5	80.3	19.4	1.99	0.80	9.20
967.0	12.70	91.60	959.8	-3.1	97.7	23.7	1.47	1.45	-1.20
1,058.0	12.00	91.90	1,048.7	-3.7	117.2	28.4	0.77	-0.77	0.33
1,149.0	11.90	91.60	1,137.7	-4.3	136.0	33.0	0.13	-0.11	-0.33
1,240.0	11.40	91.90	1,226.8	-4.8	154.4	37.4	0.55	-0.55	0.33
1,331.0	13.50	93.10	1,315.7	-5.7	174.0	42.4	2.33	2.31	1.32
1,421.0	12.00	89.80	1,403.5	-6.2	193.8	47.2	1.85	-1.67	-3.67
1,512.0	10.40	87.20	1,492.7	-5.8	211.5	50.5	1.84	-1.76	-2.86
1,603.0	11.30	94.00	1,582.1	-6.0	228.6	54.3	1.72	0.99	7.47
1,694.0	11.70	98.80	1,671.3	-8.1	246.6	60.1	1.14	0.44	5.27
1,785.0	12.70	99.70	1,760.2	-11.2	265.6	67.2	1.12	1.10	0.99
1,875.0	13.60	103.70	1,847.9	-15.3	285.6	75.5	1.42	1.00	4.44
1,966.0	13.90	94.40	1,936.3	-18.7	306.9	83.3	2.45	0.33	-10.22
2,057.0	12.80	88.40	2,024.8	-19.3	327.9	88.3	1.94	-1.21	-6.59
2,143.0	12.20	84.20	2,108.8	-18.1	346.5	91.1	1.27	-0.70	-4.88
2,270.0	12.30	82.80	2,232.9	-15.0	373.2	93.7	0.25	0.08	-1.10
2,365.0	12.40	85.80	2,325.7	-13.0	393.4	96.1	0.68	0.11	3.16
2,461.0	12.50	89.60	2,419.4	-12.2	414.1	99.6	0.86	0.10	3.96
2,556.0	12.80	98.10	2,512.1	-13.6	434.8	105.4	1.98	0.32	8.95
2,651.0	13.10	96.80	2,604.7	-16.3	455.9	112.6	0.44	0.32	-1.37
2,746.0	13.10	95.40	2,697.3	-18.6	477.3	119.3	0.33	0.00	-1.47
2,842.0	12.50	91.00	2,790.9	-19.8	498.5	125.0	1.19	-0.63	-4.58
2,937.0	11.90	88.40	2,883.7	-19.7	518.6	129.2	0.86	-0.63	-2.74
3,031.0	11.30	87.50	2,975.8	-19.1	537.5	132.5	0.67	-0.64	-0.96
3,126.0	12.10	87.00	3,068.8	-18.1	556.7	135.7	0.85	0.84	-0.53
3,221.0	12.50	87.50	3,161.7	-17.2	577.0	139.0	0.44	0.42	0.53
3,316.0	12.40	92.80	3,254.4	-17.2	597.4	143.4	1.21	-0.11	5.58
3,412.0	12.60	89.80	3,348.1	-17.7	618.2	148.3	0.71	0.21	-3.13
3,507.0	12.90	92.80	3,440.8	-18.2	639.1	153.2	0.77	0.32	3.16
3,602.0	12.10	89.50	3,533.6	-18.6	659.7	157.9	1.13	-0.84	-3.47
3,697.0	13.40	92.30	3,626.2	-19.0	680.6	162.7	1.51	1.37	2.95
3,791.0	13.60	88.90	3,717.6	-19.2	702.6	167.6	0.87	0.21	-3.62
3,887.0	13.50	91.70	3,810.9	-19.3	725.1	172.5	0.69	-0.10	2.92
3,981.0	13.50	91.00	3,902.3	-19.8	747.0	177.6	0.17	0.00	-0.74
4,077.0	11.70	89.80	3,996.0	-20.0	767.9	182.2	1.89	-1.88	-1.25
4,172.0	10.80	96.80	4,089.2	-21.0	786.4	187.1	1.72	-0.95	7.37
4,267.0	11.50	99.30	4,182.4	-23.6	804.6	193.5	0.90	0.74	2.63
4,362.0	12.00	96.10	4,275.4	-26.2	823.8	200.1	0.86	0.53	-3.37
4,457.0	11.30	94.60	4,368.5	-28.0	842.9	205.9	0.80	-0.74	-1.58
4,552.0	11.80	92.80	4,461.5	-29.2	861.8	211.1	0.65	0.53	-1.89
4,647.0	11.70	93.10	4,554.6	-30.2	881.2	216.2	0.12	-0.11	0.32
4,742.0	12.80	90.30	4,647.4	-30.8	901.3	221.0	1.32	1.16	-2.95
4,838.0	12.00	88.60	4,741.2	-30.6	921.9	225.2	0.92	-0.83	-1.77
4,933.0	13.50	88.40	4,833.8	-30.0	942.9	229.1	1.58	1.58	-0.21
5,028.0	12.90	87.30	4,926.3	-29.2	964.5	232.9	0.68	-0.63	-1.16
5,123.0	12.00	84.00	5,019.1	-27.7	985.0	235.7	1.21	-0.95	-3.47
5,219.0	12.00	90.00	5,113.0	-26.6	1,004.9	238.9	1.30	0.00	6.25
5,314.0	12.00	90.50	5,205.9	-26.7	1,024.6	243.2	0.11	0.00	0.53
5,409.0	10.60	88.20	5,299.0	-26.5	1,043.2	246.9	1.55	-1.47	-2.42
5,504.0	10.90	91.70	5,392.4	-26.5	1,060.9	250.7	0.76	0.32	3.68
5,599.0	9.50	89.60	5,485.9	-26.7	1,077.8	254.4	1.52	-1.47	-2.21

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Sorin Natural Resources 2U-203
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Site:	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W	MD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Well:	Sorin Natural Resources 2U-203	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,695.0	8.20	91.90	5,580.7	-26.9	1,092.5	257.7	1.40	-1.35	2.40	
5,790.0	6.80	90.90	5,674.9	-27.2	1,104.9	260.7	1.48	-1.47	-1.05	
5,885.0	5.80	90.70	5,769.3	-27.4	1,115.3	263.0	1.05	-1.05	-0.21	
5,980.0	4.40	86.60	5,864.0	-27.2	1,123.8	264.7	1.52	-1.47	-4.32	
6,076.0	2.60	69.40	5,959.8	-26.2	1,129.5	264.9	2.15	-1.88	-17.92	
6,171.0	1.80	80.70	6,054.7	-25.2	1,133.0	264.7	0.95	-0.84	11.89	
6,234.0	1.50	79.40	6,117.7	-24.9	1,134.8	264.7	0.48	-0.48	-2.06	
6,266.0	1.40	88.20	6,149.7	-24.8	1,135.6	264.8	0.76	-0.31	27.50	
6,298.0	1.50	107.70	6,181.7	-24.9	1,136.4	265.1	1.57	0.31	60.94	
6,330.0	2.00	152.40	6,213.7	-25.6	1,137.0	265.9	4.40	1.56	139.69	
6,361.0	4.00	185.30	6,244.6	-27.1	1,137.2	267.4	8.26	6.45	106.13	
6,393.0	6.50	194.00	6,276.5	-30.0	1,136.6	270.1	8.18	7.81	27.19	
6,425.0	9.10	197.00	6,308.2	-34.2	1,135.5	273.9	8.22	8.13	9.38	
6,457.0	11.20	195.60	6,339.7	-39.6	1,133.9	278.9	6.61	6.56	-4.38	
6,488.0	13.80	194.90	6,369.9	-46.1	1,132.1	284.8	8.40	8.39	-2.26	
6,520.0	16.40	194.40	6,400.8	-54.1	1,130.0	292.3	8.14	8.13	-1.56	
6,552.0	18.10	194.40	6,431.4	-63.3	1,127.7	300.8	5.31	5.31	0.00	
6,583.0	20.60	193.50	6,460.6	-73.3	1,125.2	310.0	8.12	8.06	-2.90	
6,615.0	23.70	192.10	6,490.3	-85.0	1,122.5	320.9	9.83	9.69	-4.38	
6,647.0	27.40	190.20	6,519.1	-98.6	1,119.9	333.6	11.84	11.56	-5.94	
6,679.0	30.50	187.90	6,547.1	-113.9	1,117.4	348.0	10.29	9.69	-7.19	
6,710.0	34.20	183.50	6,573.3	-130.4	1,115.8	363.8	14.14	11.94	-14.19	
6,742.0	37.50	178.80	6,599.3	-149.1	1,115.5	382.0	13.42	10.31	-14.69	
6,774.0	39.10	176.80	6,624.4	-168.9	1,116.3	401.6	6.32	5.00	-6.25	
6,806.0	39.70	177.20	6,649.1	-189.2	1,117.3	421.6	2.04	1.88	1.25	
6,837.0	39.50	177.90	6,673.0	-208.9	1,118.2	441.1	1.58	-0.65	2.26	
6,869.0	40.80	178.90	6,697.4	-229.6	1,118.7	461.4	4.53	4.06	3.13	
6,901.0	43.30	179.50	6,721.2	-251.0	1,119.0	482.4	7.91	7.81	1.88	
6,933.0	45.70	181.60	6,744.0	-273.4	1,118.8	504.2	8.80	7.50	6.56	
6,964.0	49.60	181.40	6,764.9	-296.3	1,118.2	526.5	12.59	12.58	-0.65	
6,996.0	52.90	180.30	6,784.9	-321.3	1,117.8	550.8	10.66	10.31	-3.44	
7,028.0	55.90	178.60	6,803.6	-347.3	1,118.1	576.3	10.32	9.38	-5.31	
7,060.0	57.70	177.30	6,821.1	-374.0	1,119.1	602.6	6.57	5.63	-4.06	
7,091.0	59.20	177.30	6,837.3	-400.4	1,120.3	628.7	4.84	4.84	0.00	
7,123.0	59.80	178.60	6,853.6	-428.0	1,121.3	655.8	3.97	1.88	4.06	
7,155.0	60.90	179.30	6,869.4	-455.8	1,121.8	683.1	3.93	3.44	2.19	
7,186.0	63.40	180.90	6,883.9	-483.2	1,121.7	709.9	9.27	8.06	5.16	
7,218.0	66.00	181.70	6,897.5	-512.1	1,121.1	738.0	8.43	8.13	2.50	
7,250.0	68.90	182.60	6,909.8	-541.6	1,120.0	766.6	9.43	9.06	2.81	
7,282.0	70.70	183.50	6,920.9	-571.6	1,118.4	795.6	6.21	5.63	2.81	
7,313.0	73.00	183.70	6,930.5	-601.0	1,116.5	823.9	7.44	7.42	0.65	
7,345.0	75.00	183.50	6,939.3	-631.7	1,114.6	853.5	6.28	6.25	-0.63	
7,377.0	76.90	183.80	6,947.1	-662.7	1,112.6	883.4	6.01	5.94	0.94	
7,409.0	79.30	182.40	6,953.7	-694.0	1,110.9	913.6	8.64	7.50	-4.38	
7,440.0	82.10	180.00	6,958.7	-724.5	1,110.3	943.3	11.83	9.03	-7.74	
7,472.0	84.90	179.10	6,962.3	-756.3	1,110.5	974.4	9.19	8.75	-2.81	
7,504.0	88.20	179.10	6,964.3	-788.3	1,111.0	1,005.7	10.31	10.31	0.00	
7,541.0	90.01	179.39	6,964.8	-825.3	1,111.5	1,042.0	4.96	4.90	0.78	
7"										
7,555.0	90.70	179.50	6,964.7	-839.3	1,111.7	1,055.7	4.96	4.90	0.78	
7,646.0	88.90	180.50	6,965.1	-930.2	1,111.7	1,144.6	2.26	-1.98	1.10	
7,737.0	89.00	179.80	6,966.7	-1,021.2	1,111.4	1,233.5	0.78	0.11	-0.77	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Sorin Natural Resources 2U-203
Project:	SEC.2-T4N-R66W	TVD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Site:	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W	MD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Well:	Sorin Natural Resources 2U-203	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,829.0	89.10	179.60	6,968.3	-1,113.2	1,111.9	1,323.5	0.24	0.11	-0.22
7,924.0	91.60	180.30	6,967.7	-1,208.2	1,112.0	1,416.4	2.73	2.63	0.74
8,019.0	91.50	179.50	6,965.1	-1,303.2	1,112.2	1,509.2	0.85	-0.11	-0.84
8,114.0	92.10	179.10	6,962.1	-1,398.1	1,113.3	1,602.2	0.76	0.63	-0.42
8,210.0	90.90	178.90	6,959.6	-1,494.1	1,115.0	1,696.4	1.27	-1.25	-0.21
8,305.0	90.30	180.50	6,958.6	-1,589.1	1,115.5	1,789.3	1.80	-0.63	1.68
8,400.0	89.30	180.70	6,958.9	-1,684.0	1,114.5	1,881.9	1.07	-1.05	0.21
8,495.0	89.40	181.60	6,960.0	-1,779.0	1,112.6	1,974.3	0.95	0.11	0.95
8,591.0	89.80	181.20	6,960.7	-1,875.0	1,110.2	2,067.6	0.59	0.42	-0.42
8,685.0	90.70	180.50	6,960.3	-1,969.0	1,108.9	2,159.2	1.21	0.96	-0.74
8,780.0	89.50	181.40	6,960.1	-2,064.0	1,107.3	2,251.7	1.58	-1.26	0.95
8,875.0	90.70	181.40	6,960.0	-2,158.9	1,105.0	2,344.0	1.26	1.26	0.00
8,970.0	90.80	181.90	6,958.7	-2,253.9	1,102.2	2,436.2	0.54	0.11	0.53
9,065.0	89.70	181.20	6,958.3	-2,348.8	1,099.7	2,528.5	1.37	-1.16	-0.74
9,161.0	90.80	181.70	6,957.9	-2,444.8	1,097.2	2,621.8	1.26	1.15	0.52
9,256.0	88.50	180.70	6,958.5	-2,539.8	1,095.2	2,714.2	2.64	-2.42	-1.05
9,350.0	88.90	180.50	6,960.6	-2,633.8	1,094.2	2,805.8	0.48	0.43	-0.21
9,445.0	89.00	180.30	6,962.3	-2,728.7	1,093.6	2,898.5	0.24	0.11	-0.21
9,540.0	91.70	183.70	6,961.7	-2,823.7	1,090.3	2,990.5	4.57	2.84	3.58
9,635.0	92.10	181.70	6,958.6	-2,918.5	1,085.8	3,082.3	2.15	0.42	-2.11
9,730.0	92.30	179.60	6,955.0	-3,013.4	1,084.7	3,174.8	2.22	0.21	-2.21
9,825.0	90.10	179.30	6,953.0	-3,108.4	1,085.6	3,267.8	2.34	-2.32	-0.32
9,921.0	89.10	179.50	6,953.6	-3,204.4	1,086.6	3,361.8	1.06	-1.04	0.21
10,016.0	89.30	179.30	6,955.0	-3,299.4	1,087.6	3,454.9	0.30	0.21	-0.21
10,111.0	91.30	179.10	6,954.5	-3,394.3	1,089.0	3,548.0	2.12	2.11	-0.21
10,206.0	90.20	179.30	6,953.2	-3,489.3	1,090.3	3,641.1	1.18	-1.16	0.21
10,301.0	90.90	177.30	6,952.3	-3,584.3	1,093.1	3,734.5	2.23	0.74	-2.11
10,396.0	89.30	179.50	6,952.1	-3,679.2	1,095.8	3,827.8	2.86	-1.68	2.32
10,491.0	90.60	182.10	6,952.2	-3,774.2	1,094.4	3,920.4	3.06	1.37	2.74
10,587.0	90.50	181.90	6,951.3	-3,870.1	1,091.1	4,013.4	0.23	-0.10	-0.21
10,682.0	89.70	180.90	6,951.1	-3,965.1	1,088.8	4,105.8	1.35	-0.84	-1.05
10,777.0	90.30	184.90	6,951.1	-4,060.0	1,084.0	4,197.5	4.26	0.63	4.21
10,872.0	91.10	185.10	6,950.0	-4,154.6	1,075.7	4,288.2	0.87	0.84	0.21
10,968.0	90.50	184.20	6,948.6	-4,250.3	1,067.9	4,380.0	1.13	-0.63	-0.94
11,063.0	89.50	180.90	6,948.6	-4,345.2	1,063.7	4,471.9	3.63	-1.05	-3.47
11,158.0	89.80	180.20	6,949.2	-4,440.2	1,062.8	4,564.5	0.80	0.32	-0.74
11,253.0	90.70	179.30	6,948.8	-4,535.2	1,063.2	4,657.4	1.34	0.95	-0.95
11,348.0	89.50	178.00	6,948.6	-4,630.1	1,065.4	4,750.7	1.86	-1.26	-1.37
11,444.0	90.20	180.20	6,948.9	-4,726.1	1,066.9	4,844.9	2.40	0.73	2.29
11,533.0	90.80	180.90	6,948.1	-4,815.1	1,066.1	4,931.6	1.04	0.67	0.79
11,590.0	90.80	180.90	6,947.3	-4,872.1	1,065.2	4,987.2	0.00	0.00	0.00
BHL 500' FSL, 200' FEL									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,541.0	6,964.8	7"	7	7-1/2	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Sorin Natural Resources 2U-203
Project:	SEC.2-T4N-R66W	TVD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Site:	Sorin Natural Resources 2R-HZ Pad Sec.2-T4N-R66W	MD Reference:	WELL @ 4683.5ft (Ensign Rig #136 - RKB 12.5')
Well:	Sorin Natural Resources 2U-203	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Checked By: _____	Approved By: _____	Date: _____
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