

Company Name: SandRidge Energy
 Peters 0781 16-12H13
 Jackson County, Colorado
 Rig: Patterson #338
 Created By: Shane Robbins
 Date: 4/13/2018

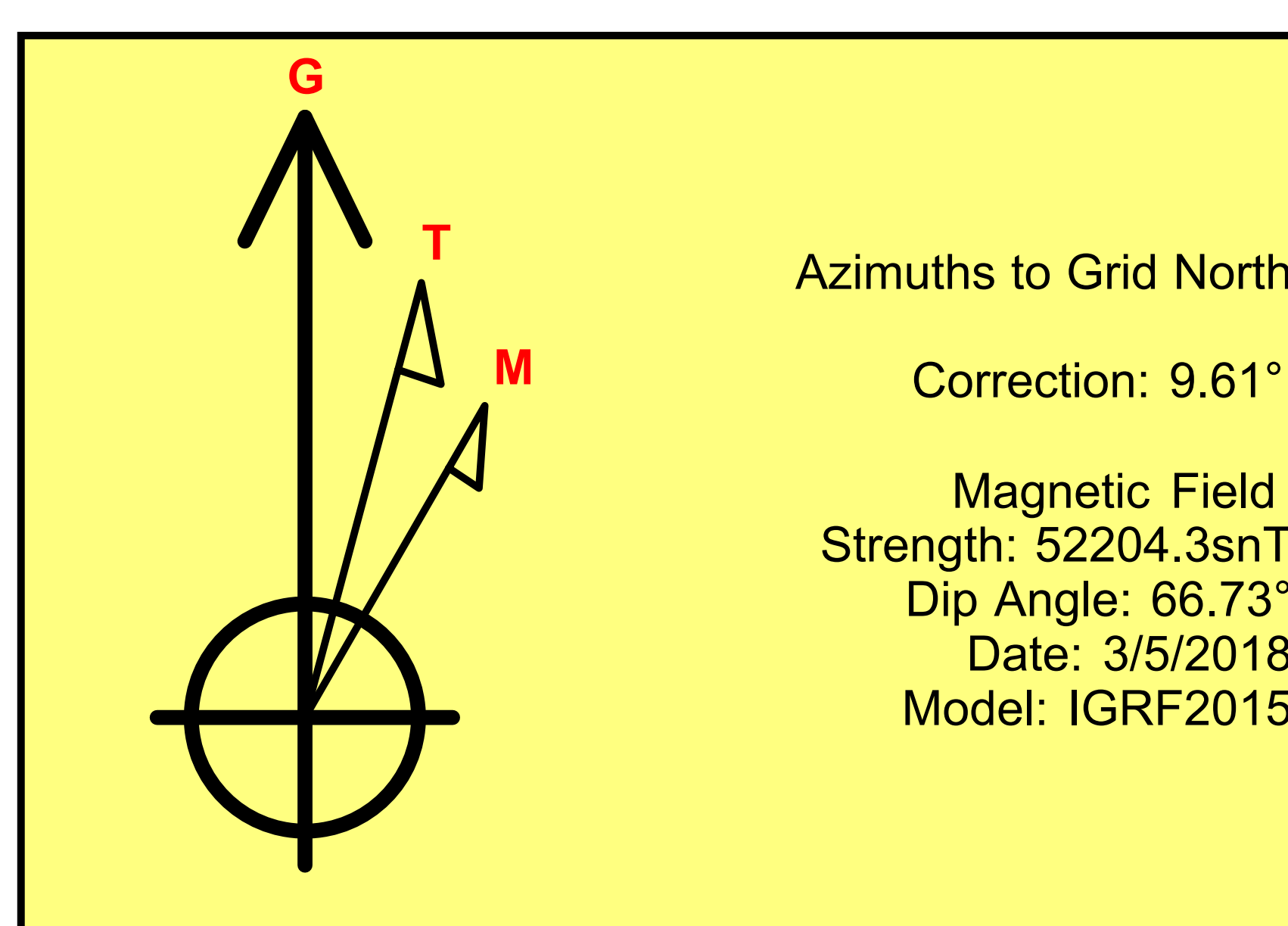
Peters 0781 16-12H13
 Jackson County, Colorado
 Q180395 & RM-180339
 Design #2

SandRidge Energy



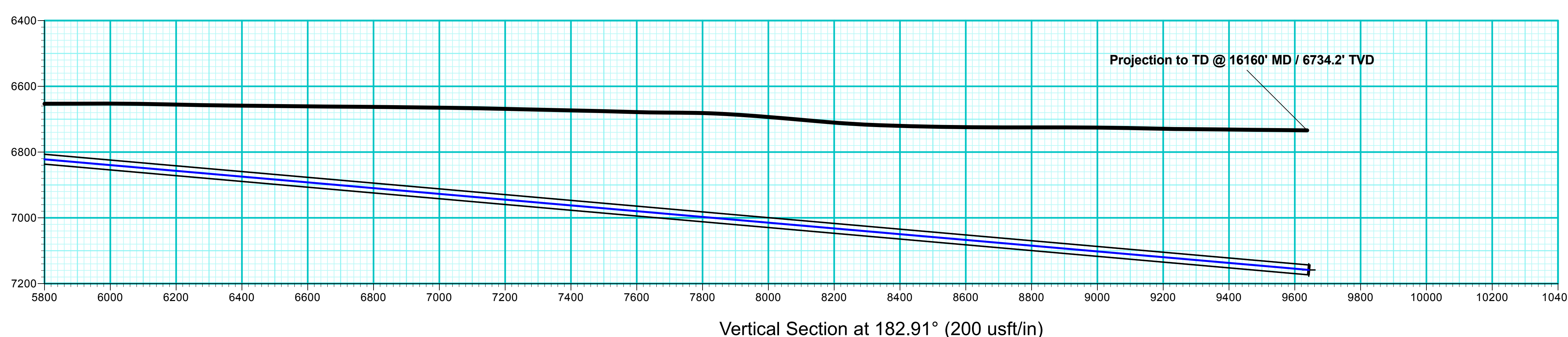
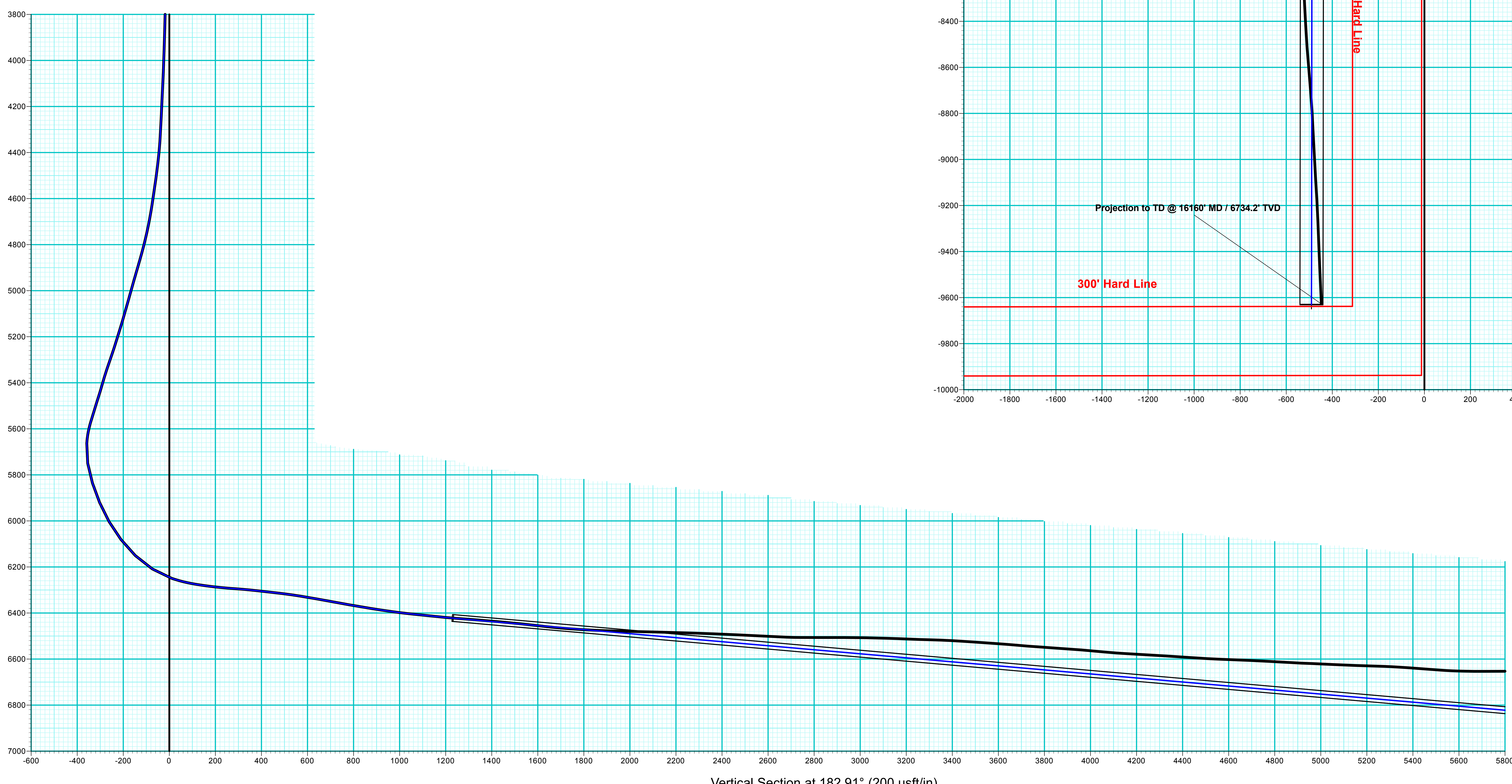
WELL DETAILS: Peters 0781 16-12H13						
				8130.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	1461937.18	2743084.61	40° 35' 51.852 N	106° 25' 30.641 W	

PROJECT DETAILS: Jackson County, Colorado
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level



DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL Peters 0781 16-12H13 D#2	7158.6	-9630.2	-490.2	1452307.01	2742594.41	40° 34' 16.645 N
- plan hits target center						

ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VsectDeparture	Annotation
229.0	0.50	359.60	229.0	1.0	0.0	-1.0	1.0
16160.0	89.30	177.30	6734.2	-9627.5	-447.3	9637.8	10671.0
First MWD Survey @ 229.0' MD / 229.0' TVD							
Projection to TD @ 16160' MD / 6734.2' TVD							



SandRidge Energy

**Jackson County, Colorado
Sec 7, T7N, R80W, 6th PM
Peters 0781 16-12H13**

Wellbore #1

Design: Wellbore #1

QES Survey Report

19 April, 2018



Survey Report



Company: SandRidge Energy	Local Co-ordinate Reference: Well Peters 0781 16-12H13
Project: Jackson County, Colorado	TVD Reference: WELL @ 8155.0usft (Patterson #338)
Site: Sec 7, T7N, R80W, 6th PM	MD Reference: WELL @ 8155.0usft (Patterson #338)
Well: Peters 0781 16-12H13	North Reference: Grid
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Wellbore #1	Database: EDM 5000.1 Single User Db

Project Jackson County, Colorado	
Map System: US State Plane 1983	System Datum: Mean Sea Level
Geo Datum: North American Datum 1983	
Map Zone: Colorado Northern Zone	

Site Sec 7, T7N, R80W, 6th PM		
Site Position:	Northing: 1,461,937.18 usft	Latitude: 40° 35' 51.852 N
From: Map	Easting: 2,743,084.61 usft	Longitude: 106° 25' 30.641 W
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: -0.60 °

Well Peters 0781 16-12H13			
Well Position	+N/-S 0.0 usft	Northing: 1,461,937.18 usft	Latitude: 40° 35' 51.852 N
	+E/-W 0.0 usft	Easting: 2,743,084.61 usft	Longitude: 106° 25' 30.641 W
Position Uncertainty	0.0 usft	Wellhead Elevation: usft	Ground Level: 8,130.0 usft

Wellbore Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/5/2018	9.01	66.73	52,204.31746445

Design Wellbore #1					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	182.91	

Survey Program		Date 4/19/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
229.0	16,160.0	QES MWD Surveys (Wellbore #1)	MWD	OWSG MWD - Standard

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
First MWD Survey @ 229.0' MD / 229.0' TVD										
229.0	0.50	359.60	229.0	1.0	0.0	-1.0	0.22	0.22	0.00	
320.0	0.30	332.00	320.0	1.6	-0.1	-1.6	0.30	-0.22	-30.33	
410.0	0.40	334.40	410.0	2.1	-0.4	-2.1	0.11	0.11	2.67	
500.0	0.40	353.10	500.0	2.7	-0.5	-2.7	0.14	0.00	20.78	
591.0	0.30	12.90	591.0	3.2	-0.5	-3.2	0.17	-0.11	21.76	
682.0	0.40	14.20	682.0	3.8	-0.4	-3.8	0.11	0.11	1.43	
774.0	0.40	325.10	774.0	4.4	-0.5	-4.3	0.36	0.00	-53.37	
864.0	1.20	268.90	864.0	4.6	-1.6	-4.5	1.15	0.89	-62.44	
956.0	1.50	275.70	956.0	4.7	-3.8	-4.5	0.37	0.33	7.39	

Survey Report



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Well:	Peters 0781 16-12H13	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,049.0	1.50	265.00	1,048.9	4.7	-6.2	-4.4	0.30	0.00	-11.51
1,143.0	2.30	258.10	1,142.9	4.2	-9.3	-3.7	0.88	0.85	-7.34
1,236.0	3.40	241.50	1,235.8	2.5	-13.5	-1.8	1.47	1.18	-17.85
1,331.0	3.80	224.80	1,330.6	-1.1	-18.2	2.0	1.18	0.42	-17.58
1,425.0	5.50	229.00	1,424.3	-6.2	-23.8	7.4	1.84	1.81	4.47
1,520.0	5.00	211.20	1,518.9	-12.8	-29.4	14.2	1.79	-0.53	-18.74
1,614.0	2.20	170.30	1,612.7	-18.0	-31.2	19.6	3.87	-2.98	-43.51
1,708.0	1.40	100.80	1,706.6	-20.0	-29.8	21.5	2.29	-0.85	-73.94
1,803.0	1.90	165.90	1,801.6	-21.8	-28.3	23.2	1.92	0.53	68.53
1,897.0	0.80	186.60	1,895.6	-23.9	-28.0	25.3	1.26	-1.17	22.02
1,990.0	0.70	209.80	1,988.6	-25.1	-28.3	26.5	0.34	-0.11	24.95
2,055.0	0.90	199.10	2,053.6	-25.9	-28.7	27.3	0.38	0.31	-16.46
2,170.0	1.00	206.30	2,168.6	-27.7	-29.4	29.1	0.14	0.09	6.26
2,264.0	2.10	44.60	2,262.5	-27.2	-28.6	28.6	3.26	1.17	-172.02
2,359.0	1.60	36.00	2,357.5	-24.9	-26.6	26.2	0.60	-0.53	-9.05
2,453.0	1.30	252.50	2,451.5	-24.1	-26.8	25.4	2.93	-0.32	-152.66
2,547.0	2.70	264.50	2,545.4	-24.7	-30.0	26.1	1.55	1.49	12.77
2,641.0	3.00	301.90	2,639.3	-23.6	-34.3	25.3	1.97	0.32	39.79
2,734.0	5.90	34.70	2,732.1	-18.3	-33.7	20.0	7.25	3.12	99.78
2,828.0	7.20	35.80	2,825.5	-9.6	-27.5	11.0	1.39	1.38	1.17
2,922.0	5.00	18.60	2,919.0	-0.9	-22.7	2.1	3.02	-2.34	-18.30
3,016.0	1.40	359.90	3,012.8	4.1	-21.4	-3.0	3.94	-3.83	-19.89
3,110.0	1.10	22.30	3,106.8	6.1	-21.1	-5.0	0.60	-0.32	23.83
3,207.0	1.00	335.70	3,203.8	7.7	-21.1	-6.6	0.86	-0.10	-48.04
3,300.0	1.30	348.00	3,296.7	9.5	-21.6	-8.4	0.42	0.32	13.23
3,394.0	1.90	300.70	3,390.7	11.3	-23.2	-10.1	1.49	0.64	-50.32
3,488.0	1.20	311.40	3,484.7	12.8	-25.3	-11.5	0.80	-0.74	11.38
3,582.0	1.10	6.30	3,578.7	14.3	-25.9	-13.0	1.13	-0.11	58.40
3,676.0	1.60	327.60	3,672.6	16.3	-26.5	-15.0	1.08	0.53	-41.17
3,770.0	2.30	311.90	3,766.6	18.7	-28.6	-17.2	0.93	0.74	-16.70
3,864.0	2.60	312.10	3,860.5	21.4	-31.6	-19.8	0.32	0.32	0.21
3,958.0	2.90	310.40	3,954.4	24.4	-35.0	-22.5	0.33	0.32	-1.81
4,052.0	3.90	311.60	4,048.2	28.0	-39.2	-26.0	1.07	1.06	1.28
4,146.0	4.20	309.30	4,142.0	32.3	-44.3	-30.0	0.36	0.32	-2.45
4,240.0	4.60	311.40	4,235.7	37.0	-49.7	-34.4	0.46	0.43	2.23
4,334.0	5.10	313.50	4,329.4	42.4	-55.6	-39.5	0.56	0.53	2.23
4,428.0	8.20	319.90	4,422.7	50.4	-63.0	-47.1	3.39	3.30	6.81
4,521.0	11.00	319.00	4,514.4	62.1	-73.0	-58.4	3.01	3.01	-0.97
4,615.0	11.30	322.70	4,606.6	76.2	-84.5	-71.8	0.83	0.32	3.94
4,708.0	13.50	323.40	4,697.5	92.2	-96.5	-87.2	2.37	2.37	0.75
4,802.0	18.10	323.40	4,787.9	112.7	-111.8	-106.9	4.89	4.89	0.00
4,896.0	21.20	320.70	4,876.4	137.6	-131.2	-130.8	3.44	3.30	-2.87
4,989.0	21.70	319.00	4,963.0	163.6	-153.2	-155.6	0.86	0.54	-1.83

Survey Report



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Site:	Sec 7, T7N, R80W, 6th PM	MD Reference:	WELL @ 8155.0usft (Patterson #338)
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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,083.0	20.90	318.80	5,050.5	189.3	-175.6	-180.2	0.85	-0.85	-0.21	
5,177.0	20.90	324.40	5,138.4	215.6	-196.4	-205.3	2.12	0.00	5.96	
5,270.0	21.50	326.70	5,225.1	243.3	-215.4	-232.1	1.10	0.65	2.47	
5,365.0	23.50	326.50	5,312.8	273.7	-235.4	-261.4	2.11	2.11	-0.21	
5,458.0	20.10	325.00	5,399.2	302.2	-254.9	-288.9	3.70	-3.66	-1.61	
5,552.0	21.30	328.80	5,487.1	330.1	-273.0	-315.8	1.92	1.28	4.04	
5,646.0	21.10	321.10	5,574.8	357.8	-292.4	-342.5	2.97	-0.21	-8.19	
5,740.0	22.70	282.40	5,662.4	375.0	-320.9	-358.2	15.19	1.70	-41.17	
5,834.0	22.70	250.60	5,749.5	372.9	-355.9	-354.3	12.91	0.00	-33.83	
5,928.0	24.70	229.10	5,835.7	353.9	-387.9	-333.8	9.38	2.13	-22.87	
6,022.0	26.60	216.00	5,920.5	324.0	-415.1	-302.5	6.35	2.02	-13.94	
6,116.0	31.30	202.30	6,002.8	284.3	-436.8	-261.8	8.62	5.00	-14.57	
6,210.0	37.40	187.00	6,080.5	233.3	-449.6	-210.2	11.20	6.49	-16.28	
6,304.0	46.10	183.30	6,150.6	171.0	-455.0	-147.7	9.62	9.26	-3.94	
6,398.0	57.50	183.80	6,208.7	97.4	-459.6	-73.9	12.13	12.13	0.53	
6,491.0	70.90	180.60	6,249.0	13.9	-462.7	9.6	14.74	14.41	-3.44	
6,585.0	79.90	179.90	6,272.7	-76.9	-463.1	100.3	9.60	9.57	-0.74	
6,679.0	83.60	180.80	6,286.2	-169.9	-463.6	193.3	4.05	3.94	0.96	
6,773.0	86.10	181.20	6,294.6	-263.5	-465.3	286.8	2.69	2.66	0.43	
6,868.0	83.50	181.30	6,303.2	-358.1	-467.3	381.4	2.74	-2.74	0.11	
6,961.0	83.50	181.00	6,313.8	-450.5	-469.2	473.7	0.32	0.00	-0.32	
7,054.0	80.90	181.50	6,326.4	-542.6	-471.2	565.8	2.85	-2.80	0.54	
7,083.0	80.60	181.00	6,331.1	-571.2	-471.8	594.4	1.99	-1.03	-1.72	
7,177.0	79.40	180.80	6,347.4	-663.8	-473.3	687.0	1.29	-1.28	-0.21	
7,272.0	80.10	181.30	6,364.3	-757.3	-475.0	780.4	0.90	0.74	0.53	
7,366.0	80.80	180.80	6,379.9	-849.9	-476.7	873.0	0.91	0.74	-0.53	
7,459.0	82.00	179.90	6,393.8	-941.9	-477.3	964.9	1.61	1.29	-0.97	
7,554.0	84.30	180.80	6,405.1	-1,036.2	-477.8	1,059.1	2.60	2.42	0.95	
7,648.0	83.90	181.20	6,414.8	-1,129.7	-479.5	1,152.6	0.60	-0.43	0.43	
7,742.0	85.70	181.90	6,423.3	-1,223.3	-482.0	1,246.2	2.05	1.91	0.74	
7,837.0	85.70	181.90	6,430.4	-1,317.9	-485.1	1,340.9	0.00	0.00	0.00	
7,931.0	84.80	181.90	6,438.2	-1,411.6	-488.2	1,434.5	0.96	-0.96	0.00	
8,024.0	84.20	182.00	6,447.1	-1,504.1	-491.4	1,527.1	0.65	-0.65	0.11	
8,118.0	83.40	182.60	6,457.3	-1,597.5	-495.1	1,620.5	1.06	-0.85	0.64	
8,212.0	85.10	180.60	6,466.7	-1,690.9	-497.8	1,714.0	2.78	1.81	-2.13	
8,306.0	87.10	179.20	6,473.1	-1,784.7	-497.6	1,807.7	2.60	2.13	-1.49	
8,400.0	88.00	177.50	6,477.1	-1,878.6	-494.9	1,901.3	2.04	0.96	-1.81	
8,493.0	88.60	177.60	6,479.9	-1,971.5	-490.9	1,993.8	0.65	0.65	0.11	
8,587.0	88.60	178.20	6,482.2	-2,065.4	-487.5	2,087.5	0.64	0.00	0.64	
8,681.0	88.40	178.20	6,484.6	-2,159.3	-484.5	2,181.1	0.21	-0.21	0.00	
8,775.0	88.30	178.40	6,487.3	-2,253.2	-481.7	2,274.8	0.24	-0.11	0.21	
8,868.0	87.60	177.60	6,490.7	-2,346.1	-478.5	2,367.4	1.14	-0.75	-0.86	
8,962.0	87.40	178.00	6,494.8	-2,439.9	-474.9	2,460.9	0.48	-0.21	0.43	

Survey Report



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9,056.0	87.30	178.20	6,499.1	-2,533.8	-471.8	2,554.5	0.24	-0.11	0.21	
9,151.0	87.10	178.20	6,503.7	-2,628.6	-468.8	2,649.0	0.21	-0.21	0.00	
9,246.0	89.60	179.10	6,506.5	-2,723.5	-466.6	2,743.7	2.80	2.63	0.95	
9,340.0	90.20	179.40	6,506.6	-2,817.5	-465.3	2,837.5	0.71	0.64	0.32	
9,434.0	89.80	179.10	6,506.6	-2,911.5	-464.1	2,931.3	0.53	-0.43	-0.32	
9,527.0	88.80	180.30	6,507.8	-3,004.5	-463.6	3,024.2	1.68	-1.08	1.29	
9,621.0	88.50	180.10	6,510.0	-3,098.5	-463.9	3,118.0	0.38	-0.32	-0.21	
9,714.0	87.40	181.50	6,513.3	-3,191.4	-465.2	3,210.9	1.91	-1.18	1.51	
9,808.0	88.70	182.00	6,516.5	-3,285.3	-468.1	3,304.8	1.48	1.38	0.53	
9,901.0	86.90	181.90	6,520.1	-3,378.2	-471.3	3,397.8	1.94	-1.94	-0.11	
9,997.0	85.90	182.00	6,526.1	-3,473.9	-474.5	3,493.6	1.05	-1.04	0.10	
10,091.0	86.10	183.30	6,532.7	-3,567.6	-478.9	3,587.3	1.40	0.21	1.38	
10,185.0	85.00	183.30	6,540.0	-3,661.2	-484.3	3,681.0	1.17	-1.17	0.00	
10,279.0	86.00	182.00	6,547.3	-3,754.8	-488.6	3,774.7	1.74	1.06	-1.38	
10,373.0	86.10	181.00	6,553.8	-3,848.5	-491.0	3,868.5	1.07	0.11	-1.06	
10,466.0	85.40	181.00	6,560.7	-3,941.3	-492.7	3,961.2	0.75	-0.75	0.00	
10,560.0	84.60	180.50	6,568.9	-4,034.9	-493.9	4,054.8	1.00	-0.85	-0.53	
10,651.0	86.50	181.20	6,576.0	-4,125.6	-495.2	4,145.4	2.22	2.09	0.77	
10,742.0	86.80	181.00	6,581.3	-4,216.4	-497.0	4,236.2	0.40	0.33	-0.22	
10,833.0	86.40	180.80	6,586.7	-4,307.3	-498.4	4,327.0	0.49	-0.44	-0.22	
10,923.0	86.10	180.80	6,592.6	-4,397.1	-499.7	4,416.7	0.33	-0.33	0.00	
11,014.0	86.70	180.80	6,598.3	-4,487.9	-500.9	4,507.5	0.66	0.66	0.00	
11,104.0	88.10	181.30	6,602.4	-4,577.8	-502.6	4,597.4	1.65	1.56	0.56	
11,195.0	87.40	180.80	6,605.9	-4,668.7	-504.2	4,688.2	0.95	-0.77	-0.55	
11,287.0	87.00	180.60	6,610.4	-4,760.6	-505.4	4,780.1	0.49	-0.43	-0.22	
11,378.0	86.70	181.50	6,615.4	-4,851.4	-507.0	4,870.9	1.04	-0.33	0.99	
11,469.0	87.80	181.00	6,619.8	-4,942.3	-509.0	4,961.7	1.33	1.21	-0.55	
11,563.0	87.20	179.60	6,623.9	-5,036.2	-509.5	5,055.5	1.62	-0.64	-1.49	
11,657.0	88.00	180.80	6,627.8	-5,130.1	-509.8	5,149.4	1.53	0.85	1.28	
11,751.0	88.30	180.80	6,630.9	-5,224.0	-511.1	5,243.2	0.32	0.32	0.00	
11,845.0	86.60	179.20	6,635.0	-5,317.9	-511.1	5,337.0	2.48	-1.81	-1.70	
11,939.0	85.40	179.10	6,641.6	-5,411.7	-509.7	5,430.6	1.28	-1.28	-0.11	
12,032.0	86.20	178.50	6,648.4	-5,504.4	-507.8	5,523.1	1.07	0.86	-0.65	
12,126.0	88.60	180.60	6,652.7	-5,598.3	-507.1	5,616.8	3.39	2.55	2.23	
12,221.0	90.30	181.20	6,653.6	-5,693.3	-508.6	5,711.8	1.90	1.79	0.63	
12,315.0	90.20	180.80	6,653.2	-5,787.3	-510.2	5,805.7	0.44	-0.11	-0.43	
12,409.0	90.20	180.80	6,652.8	-5,881.3	-511.5	5,899.6	0.00	0.00	0.00	
12,502.0	89.90	180.60	6,652.8	-5,974.3	-512.6	5,992.6	0.39	-0.32	-0.22	
12,597.0	89.30	180.50	6,653.4	-6,069.2	-513.6	6,087.5	0.64	-0.63	-0.11	
12,691.0	88.50	180.30	6,655.2	-6,163.2	-514.2	6,181.4	0.88	-0.85	-0.21	
12,785.0	88.90	178.40	6,657.4	-6,257.2	-513.2	6,275.2	2.07	0.43	-2.02	
12,880.0	89.40	178.70	6,658.8	-6,352.2	-510.7	6,369.9	0.61	0.53	0.32	
12,974.0	89.40	178.90	6,659.8	-6,446.1	-508.8	6,463.6	0.21	0.00	0.21	
13,069.0	89.40	179.40	6,660.8	-6,541.1	-507.4	6,558.4	0.53	0.00	0.53	

Survey Report



Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 16-12H13
Project:	Jackson County, Colorado	TVD Reference:	WELL @ 8155.0usft (Patterson #338)
Site:	Sec 7, T7N, R80W, 6th PM	MD Reference:	WELL @ 8155.0usft (Patterson #338)
Well:	Peters 0781 16-12H13	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,163.0	89.50	179.80	6,661.7	-6,635.1	-506.7	6,652.3	0.44	0.11	0.43
13,258.0	89.70	180.10	6,662.3	-6,730.1	-506.6	6,747.1	0.38	0.21	0.32
13,352.0	89.40	180.50	6,663.1	-6,824.1	-507.1	6,841.0	0.53	-0.32	0.43
13,446.0	89.20	180.80	6,664.2	-6,918.1	-508.2	6,935.0	0.38	-0.21	0.32
13,540.0	89.20	181.20	6,665.5	-7,012.1	-509.8	7,028.9	0.43	0.00	0.43
13,633.0	89.00	181.50	6,667.0	-7,105.0	-512.0	7,121.9	0.39	-0.22	0.32
13,727.0	88.50	181.90	6,669.0	-7,199.0	-514.8	7,215.8	0.68	-0.53	0.43
13,821.0	88.70	182.20	6,671.3	-7,292.9	-518.2	7,309.8	0.38	0.21	0.32
13,915.0	88.60	182.60	6,673.5	-7,386.8	-522.1	7,403.7	0.44	-0.11	0.43
14,008.0	88.80	182.70	6,675.7	-7,479.6	-526.4	7,496.7	0.24	0.22	0.11
14,102.0	88.00	181.30	6,678.3	-7,573.5	-529.7	7,590.7	1.71	-0.85	-1.49
14,195.0	89.90	181.90	6,680.0	-7,666.5	-532.3	7,683.6	2.14	2.04	0.65
14,289.0	88.90	181.50	6,681.0	-7,760.4	-535.1	7,777.6	1.15	-1.06	-0.43
14,383.0	86.80	178.20	6,684.5	-7,854.4	-534.8	7,871.4	4.16	-2.23	-3.51
14,476.0	85.50	178.00	6,690.7	-7,947.1	-531.7	7,963.8	1.41	-1.40	-0.22
14,571.0	85.30	178.20	6,698.4	-8,041.7	-528.6	8,058.2	0.30	-0.21	0.21
14,665.0	84.80	179.60	6,706.5	-8,135.4	-526.8	8,151.6	1.58	-0.53	1.49
14,759.0	86.30	177.80	6,713.8	-8,229.0	-524.7	8,245.1	2.49	1.60	-1.91
14,853.0	88.00	176.80	6,718.4	-8,322.8	-520.3	8,338.5	2.10	1.81	-1.06
14,948.0	88.40	177.30	6,721.4	-8,417.6	-515.4	8,433.0	0.67	0.42	0.53
15,043.0	89.00	175.50	6,723.6	-8,512.4	-509.4	8,527.3	2.00	0.63	-1.89
15,137.0	89.70	175.40	6,724.6	-8,606.1	-502.0	8,620.5	0.75	0.74	-0.11
15,231.0	89.70	175.20	6,725.1	-8,699.8	-494.3	8,713.7	0.21	0.00	-0.21
15,326.0	90.30	176.90	6,725.1	-8,794.6	-487.7	8,808.0	1.90	0.63	1.79
15,422.0	89.70	177.10	6,725.1	-8,890.4	-482.7	8,903.5	0.66	-0.63	0.21
15,517.0	89.60	176.90	6,725.7	-8,985.3	-477.7	8,998.0	0.24	-0.11	-0.21
15,612.0	89.00	176.80	6,726.9	-9,080.2	-472.5	9,092.4	0.64	-0.63	-0.11
15,707.0	88.60	176.40	6,728.9	-9,175.0	-466.9	9,186.8	0.60	-0.42	-0.42
15,802.0	89.60	178.00	6,730.4	-9,269.8	-462.2	9,281.4	1.99	1.05	1.68
15,897.0	89.30	177.80	6,731.3	-9,364.8	-458.7	9,376.0	0.38	-0.32	-0.21
15,991.0	89.30	177.50	6,732.4	-9,458.7	-454.9	9,469.6	0.32	0.00	-0.32
16,085.0	89.60	177.50	6,733.3	-9,552.6	-450.8	9,563.2	0.32	0.32	0.00
16,103.0	89.30	177.30	6,733.5	-9,570.6	-450.0	9,581.1	2.00	-1.67	-1.11
Projection to TD @ 16160' MD / 6734.2' TVD									
16,160.0	89.30	177.30	6,734.2	-9,627.5	-447.3	9,637.8	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
229.0	229.0	1.0	0.0	First MWD Survey @ 229.0' MD / 229.0' TVD
16,160.0	6,734.2	-9,627.5	-447.3	Projection to TD @ 16160' MD / 6734.2' TVD

Survey Report



Company:	SandRidge Energy	Local Co-ordinate Reference:	Well Peters 0781 16-12H13
Project:	Jackson County, Colorado	TVD Reference:	WELL @ 8155.0usft (Patterson #338)
Site:	Sec 7, T7N, R80W, 6th PM	MD Reference:	WELL @ 8155.0usft (Patterson #338)
Well:	Peters 0781 16-12H13	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Checked By: _____	Approved By: _____	Date: _____
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