

**Longs Peak Resources**  
 Project: Weld County, Co (NAD 83)  
 Site: Motu West Pad  
 Well: Motu West 3304-5NH  
 Wellbore: Wellbore #1  
 Plan: Plan #1 (Motu West 3304-5NH/Wellbore #1)



**WELL DETAILS: Motu West 3304-5NH**

Ground Elevation:: 6049.00  
 RKB Elevation: KB=25' @ 6074.00ft  
 Rig Name:

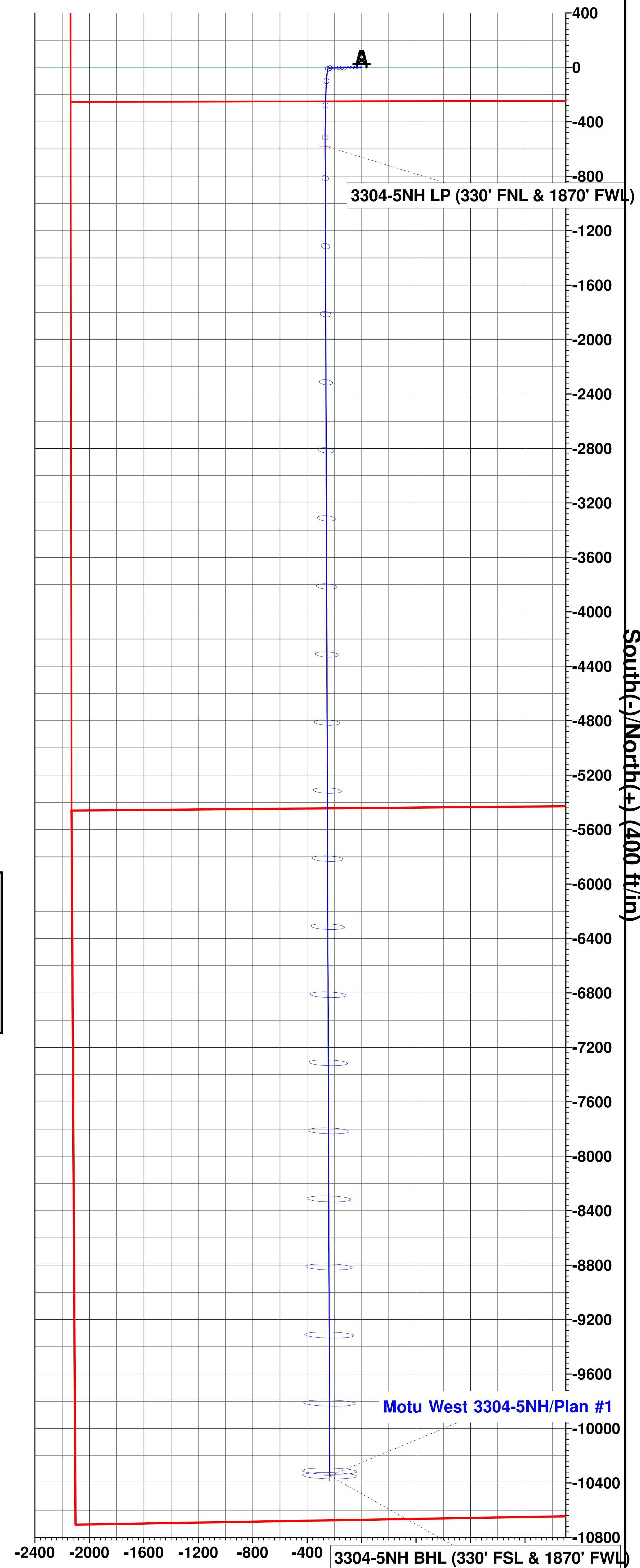
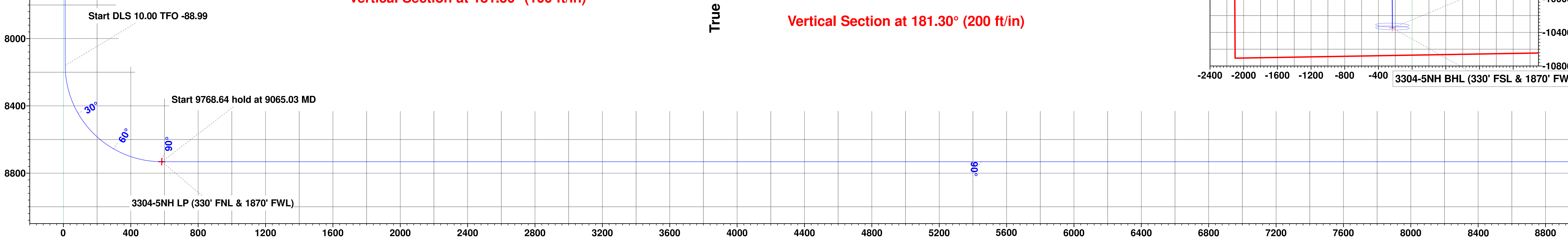
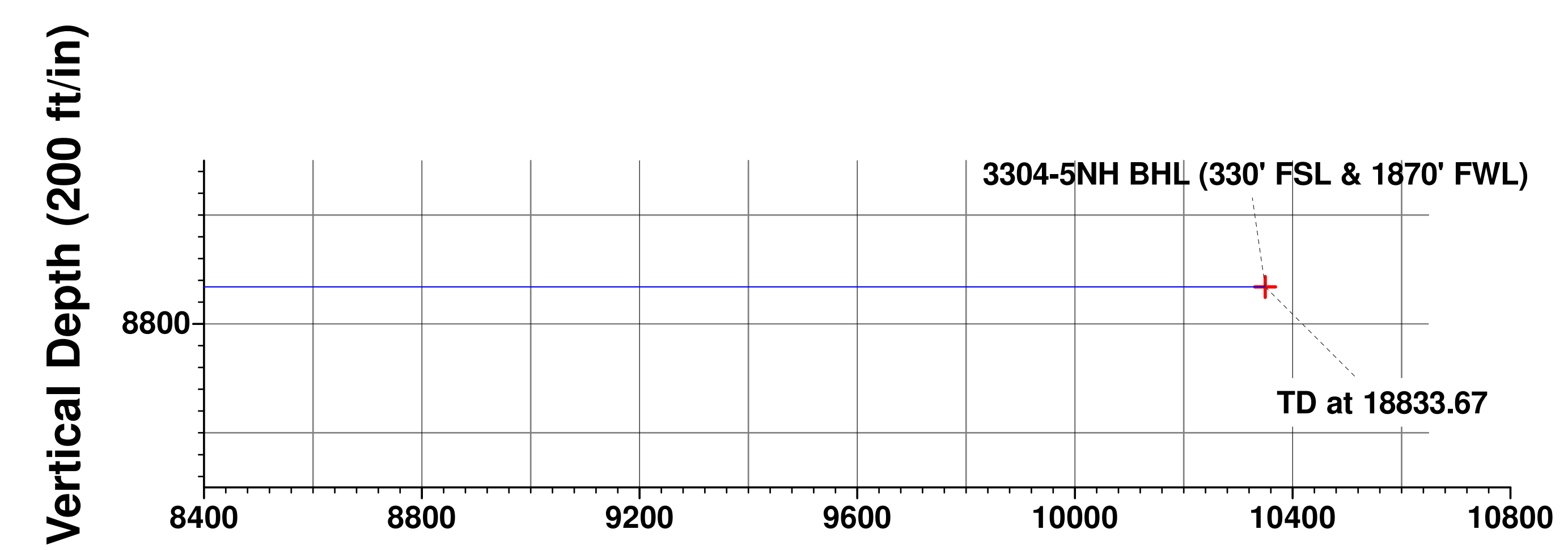
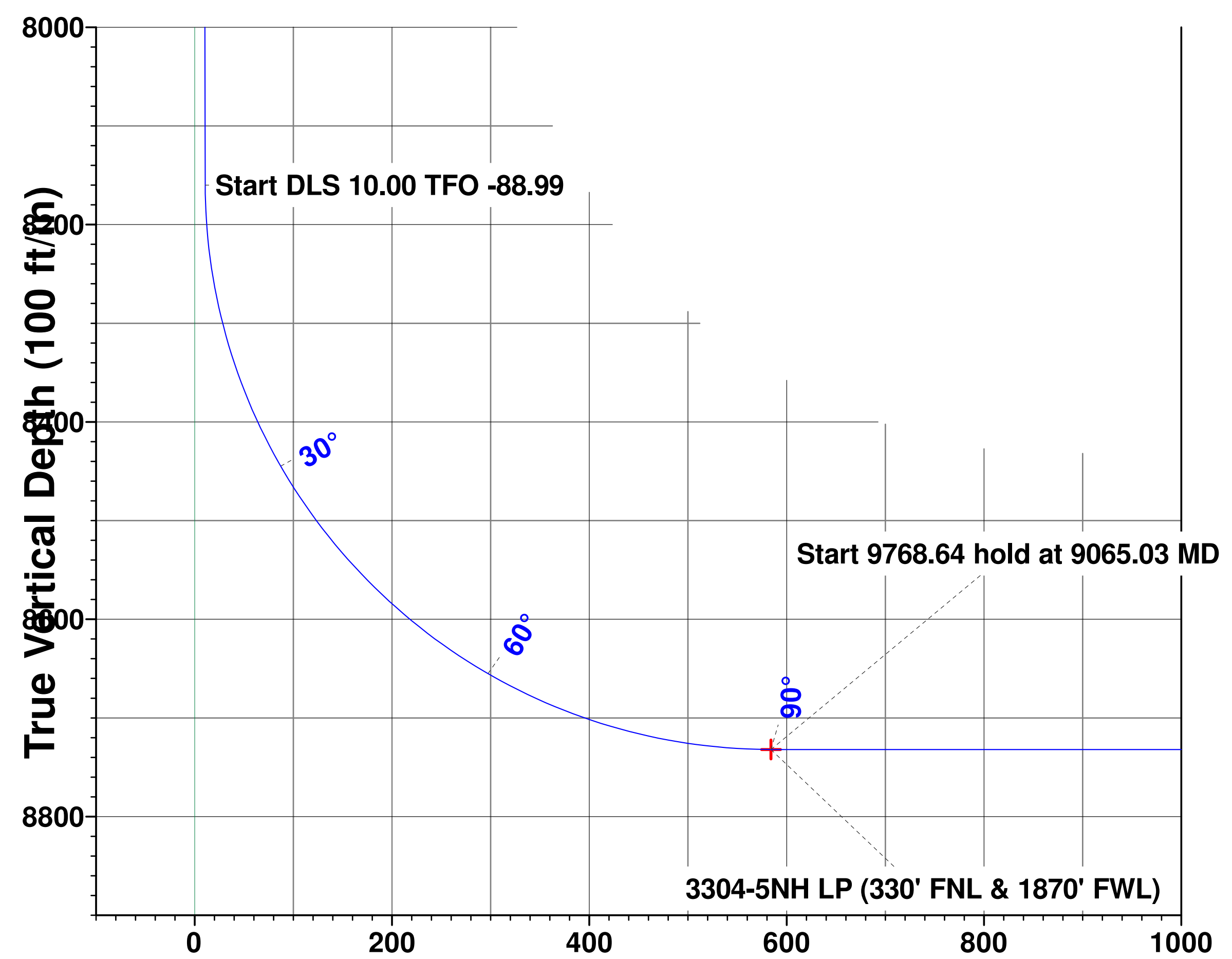
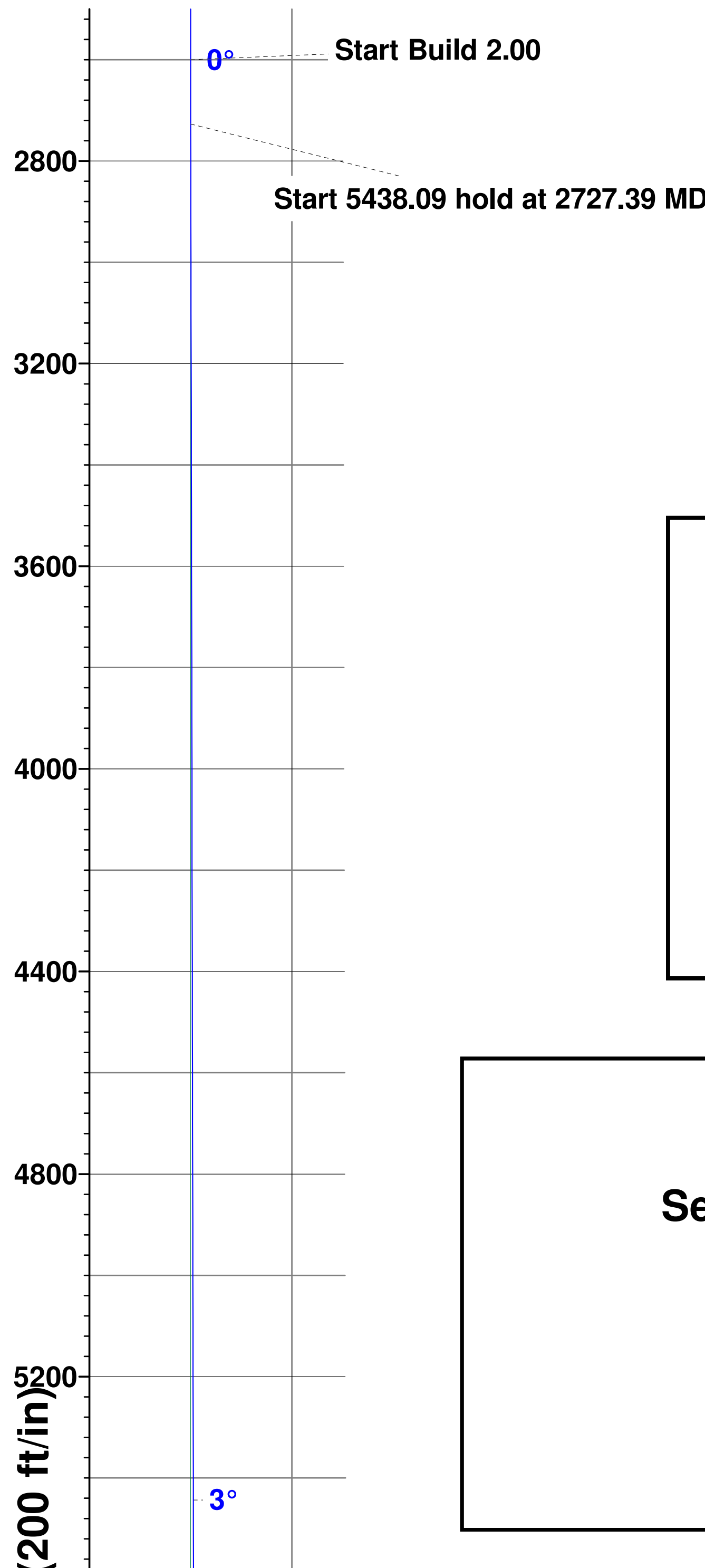
Northing	Easting	Latitude	Longitude
1597936.5547	3229622.0190	40° 58' 18.264 N	104° 40' 6.636 W

**Planned Section Details**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00
3	2727.39	2.55	268.79	2727.35	-0.06	-2.83	2.00	268.79	0.12
4	8165.48	2.55	268.79	8160.06	-5.17	-244.51	0.00	0.00	10.71
5	9065.03	90.00	179.80	8732.00	-578.22	-268.00	10.00	-88.99	584.14
6	18833.67	90.00	179.80	8732.00	-10346.80	-234.53	0.00	0.00	10349.46

**Azimuths to Grid North**  
 True North: -0.54°  
 Magnetic North: 7.71°  
**Magnetic Field**  
 Strength: 52727.6snT  
 Dip Angle: 67.33°  
 Date: 2/7/2017  
 Model: IGRF2015

**PROJECT DETAILS: Weld County, Co (NAD 83)**  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Colorado Northern Zone  
 System Datum: Mean Sea Level  
 Local North: Grid



# Longs Peak Resources

Weld County, Co (NAD 83)

Motu West Pad

Motu West 3304-5NH

Wellbore #1

Plan: Plan #1

## Standard Survey Report

07 February, 2017



# Integrity Directional Services, LLC

## Survey Report



<b>Company:</b> Longs Peak Resources	<b>Local Co-ordinate Reference:</b> Well Motu West 3304-5NH
<b>Project:</b> Weld County, Co (NAD 83)	<b>TVD Reference:</b> KB=25' @ 6074.00ft
<b>Site:</b> Motu West Pad	<b>MD Reference:</b> KB=25' @ 6074.00ft
<b>Well:</b> Motu West 3304-5NH	<b>North Reference:</b> Grid
<b>Wellbore:</b> Wellbore #1	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> Plan #1	<b>Database:</b> EDM 5000.1 Multi User Db

<b>Project</b> Weld County, Co (NAD 83)	
<b>Map System:</b> US State Plane 1983	<b>System Datum:</b> Mean Sea Level
<b>Geo Datum:</b> North American Datum 1983	
<b>Map Zone:</b> Colorado Northern Zone	

<b>Site</b> Motu West Pad		
<b>Site Position:</b>	<b>Northing:</b> 1,597,873.4995 usft	<b>Latitude:</b> 40° 58' 17.670 N
<b>From:</b> Lat/Long	<b>Easting:</b> 3,229,307.7717 usft	<b>Longitude:</b> 104° 40' 10.740 W
<b>Position Uncertainty:</b> 0.00 ft	<b>Slot Radius:</b> 13-3/16 "	<b>Grid Convergence:</b> 0.54 °

<b>Well</b> Motu West 3304-5NH		
<b>Well Position</b> +N/-S 0.00 ft	<b>Northing:</b> 1,597,936.5547 usft	<b>Latitude:</b> 40° 58' 18.264 N
+E/-W 0.00 ft	<b>Easting:</b> 3,229,622.0190 usft	<b>Longitude:</b> 104° 40' 6.636 W
<b>Position Uncertainty</b> 0.00 ft	<b>Wellhead Elevation:</b> 0.00 ft	<b>Ground Level:</b> 6,049.00 ft

<b>Wellbore</b> Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/7/2017	8.24	67.33	52,728

<b>Design</b> Plan #1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b> PLAN	<b>Tie On Depth:</b> 0.00		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	181.30

<b>Survey Tool Program</b>		<b>Date</b> 2/7/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	18,833.67	Plan #1 (Wellbore #1)	MWD	MWD - Standard

<b>Planned Survey</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
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	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	

# Integrity Directional Services, LLC

## Survey Report



<b>Company:</b>	Longs Peak Resources	<b>Local Co-ordinate Reference:</b>	Well Motu West 3304-5NH
<b>Project:</b>	Weld County, Co (NAD 83)	<b>TVD Reference:</b>	KB=25' @ 6074.00ft
<b>Site:</b>	Motu West Pad	<b>MD Reference:</b>	KB=25' @ 6074.00ft
<b>Well:</b>	Motu West 3304-5NH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 5000.1 Multi User Db

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Start Build 2.00</b>										
2,700.00	2.00	268.79	2,699.98	-0.04	-1.74	0.08	2.00	2.00	0.00	
2,727.39	2.55	268.79	2,727.35	-0.06	-2.83	0.12	2.00	2.00	0.00	
<b>Start 5438.09 hold at 2727.39 MD</b>										
2,800.00	2.55	268.79	2,799.89	-0.13	-6.06	0.27	0.00	0.00	0.00	
2,900.00	2.55	268.79	2,899.79	-0.22	-10.50	0.46	0.00	0.00	0.00	
3,000.00	2.55	268.79	2,999.69	-0.32	-14.95	0.65	0.00	0.00	0.00	
3,100.00	2.55	268.79	3,099.59	-0.41	-19.39	0.85	0.00	0.00	0.00	
3,200.00	2.55	268.79	3,199.49	-0.50	-23.84	1.04	0.00	0.00	0.00	
3,300.00	2.55	268.79	3,299.39	-0.60	-28.28	1.24	0.00	0.00	0.00	
3,400.00	2.55	268.79	3,399.29	-0.69	-32.72	1.43	0.00	0.00	0.00	
3,500.00	2.55	268.79	3,499.19	-0.79	-37.17	1.63	0.00	0.00	0.00	
3,600.00	2.55	268.79	3,599.10	-0.88	-41.61	1.82	0.00	0.00	0.00	
3,700.00	2.55	268.79	3,699.00	-0.97	-46.06	2.02	0.00	0.00	0.00	
3,800.00	2.55	268.79	3,798.90	-1.07	-50.50	2.21	0.00	0.00	0.00	
3,900.00	2.55	268.79	3,898.80	-1.16	-54.95	2.41	0.00	0.00	0.00	
4,000.00	2.55	268.79	3,998.70	-1.26	-59.39	2.60	0.00	0.00	0.00	
4,100.00	2.55	268.79	4,098.60	-1.35	-63.83	2.80	0.00	0.00	0.00	
4,200.00	2.55	268.79	4,198.50	-1.44	-68.28	2.99	0.00	0.00	0.00	
4,300.00	2.55	268.79	4,298.40	-1.54	-72.72	3.19	0.00	0.00	0.00	
4,400.00	2.55	268.79	4,398.30	-1.63	-77.17	3.38	0.00	0.00	0.00	
4,500.00	2.55	268.79	4,498.21	-1.73	-81.61	3.58	0.00	0.00	0.00	
4,600.00	2.55	268.79	4,598.11	-1.82	-86.06	3.77	0.00	0.00	0.00	
4,700.00	2.55	268.79	4,698.01	-1.91	-90.50	3.97	0.00	0.00	0.00	
4,800.00	2.55	268.79	4,797.91	-2.01	-94.94	4.16	0.00	0.00	0.00	
4,900.00	2.55	268.79	4,897.81	-2.10	-99.39	4.35	0.00	0.00	0.00	
5,000.00	2.55	268.79	4,997.71	-2.20	-103.83	4.55	0.00	0.00	0.00	

# Integrity Directional Services, LLC

## Survey Report



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<b>Site:</b>	Motu West Pad	<b>MD Reference:</b>	KB=25' @ 6074.00ft
<b>Well:</b>	Motu West 3304-5NH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 5000.1 Multi User Db

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,100.00	2.55	268.79	5,097.61	-2.29	-108.28	4.74	0.00	0.00	0.00	
5,200.00	2.55	268.79	5,197.51	-2.38	-112.72	4.94	0.00	0.00	0.00	
5,300.00	2.55	268.79	5,297.42	-2.48	-117.17	5.13	0.00	0.00	0.00	
5,400.00	2.55	268.79	5,397.32	-2.57	-121.61	5.33	0.00	0.00	0.00	
5,500.00	2.55	268.79	5,497.22	-2.67	-126.05	5.52	0.00	0.00	0.00	
5,600.00	2.55	268.79	5,597.12	-2.76	-130.50	5.72	0.00	0.00	0.00	
5,700.00	2.55	268.79	5,697.02	-2.86	-134.94	5.91	0.00	0.00	0.00	
5,800.00	2.55	268.79	5,796.92	-2.95	-139.39	6.11	0.00	0.00	0.00	
5,900.00	2.55	268.79	5,896.82	-3.04	-143.83	6.30	0.00	0.00	0.00	
6,000.00	2.55	268.79	5,996.72	-3.14	-148.27	6.50	0.00	0.00	0.00	
6,100.00	2.55	268.79	6,096.62	-3.23	-152.72	6.69	0.00	0.00	0.00	
6,200.00	2.55	268.79	6,196.53	-3.33	-157.16	6.89	0.00	0.00	0.00	
6,300.00	2.55	268.79	6,296.43	-3.42	-161.61	7.08	0.00	0.00	0.00	
6,400.00	2.55	268.79	6,396.33	-3.51	-166.05	7.28	0.00	0.00	0.00	
6,500.00	2.55	268.79	6,496.23	-3.61	-170.50	7.47	0.00	0.00	0.00	
6,600.00	2.55	268.79	6,596.13	-3.70	-174.94	7.66	0.00	0.00	0.00	
6,700.00	2.55	268.79	6,696.03	-3.80	-179.38	7.86	0.00	0.00	0.00	
6,800.00	2.55	268.79	6,795.93	-3.89	-183.83	8.05	0.00	0.00	0.00	
6,900.00	2.55	268.79	6,895.83	-3.98	-188.27	8.25	0.00	0.00	0.00	
7,000.00	2.55	268.79	6,995.73	-4.08	-192.72	8.44	0.00	0.00	0.00	
7,100.00	2.55	268.79	7,095.64	-4.17	-197.16	8.64	0.00	0.00	0.00	
7,200.00	2.55	268.79	7,195.54	-4.27	-201.61	8.83	0.00	0.00	0.00	
7,300.00	2.55	268.79	7,295.44	-4.36	-206.05	9.03	0.00	0.00	0.00	
7,400.00	2.55	268.79	7,395.34	-4.45	-210.49	9.22	0.00	0.00	0.00	
7,500.00	2.55	268.79	7,495.24	-4.55	-214.94	9.42	0.00	0.00	0.00	
7,600.00	2.55	268.79	7,595.14	-4.64	-219.38	9.61	0.00	0.00	0.00	
7,700.00	2.55	268.79	7,695.04	-4.74	-223.83	9.81	0.00	0.00	0.00	
7,800.00	2.55	268.79	7,794.94	-4.83	-228.27	10.00	0.00	0.00	0.00	
7,900.00	2.55	268.79	7,894.85	-4.92	-232.72	10.20	0.00	0.00	0.00	
8,000.00	2.55	268.79	7,994.75	-5.02	-237.16	10.39	0.00	0.00	0.00	
8,100.00	2.55	268.79	8,094.65	-5.11	-241.60	10.59	0.00	0.00	0.00	
8,165.48	2.55	268.79	8,160.06	-5.17	-244.51	10.71	0.00	0.00	0.00	
<b>Start DLS 10.00 TFO -88.99</b>										
8,200.00	4.33	215.83	8,194.53	-6.25	-246.04	11.82	10.00	5.15	-153.40	
8,300.00	13.73	190.29	8,293.21	-21.02	-250.38	26.69	10.00	9.41	-25.53	
8,400.00	23.63	185.64	8,387.83	-52.72	-254.48	58.47	10.00	9.90	-4.65	
8,500.00	33.58	183.65	8,475.51	-100.38	-258.22	106.21	10.00	9.96	-2.00	
8,600.00	43.56	182.49	8,553.60	-162.56	-261.48	168.45	10.00	9.97	-1.16	
8,700.00	53.54	181.69	8,619.71	-237.37	-264.17	243.30	10.00	9.98	-0.80	
8,800.00	63.53	181.07	8,671.85	-322.53	-266.20	328.48	10.00	9.99	-0.61	
8,900.00	73.51	180.56	8,708.42	-415.46	-267.51	421.41	10.00	9.99	-0.52	
9,000.00	83.50	180.09	8,728.32	-513.33	-268.06	519.27	10.00	9.99	-0.46	
9,065.03	90.00	179.80	8,732.00	-578.22	-268.00	584.14	10.00	9.99	-0.45	
<b>Start 9768.64 hold at 9065.03 MD</b>										

# Integrity Directional Services, LLC

## Survey Report



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<b>Well:</b>	Motu West 3304-5NH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
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Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,100.00	90.00	179.80	8,732.00	-613.19	-267.88	619.10	0.00	0.00	0.00	
9,200.00	90.00	179.80	8,732.00	-713.19	-267.53	719.07	0.00	0.00	0.00	
9,300.00	90.00	179.80	8,732.00	-813.19	-267.19	819.03	0.00	0.00	0.00	
9,400.00	90.00	179.80	8,732.00	-913.19	-266.85	919.00	0.00	0.00	0.00	
9,500.00	90.00	179.80	8,732.00	-1,013.19	-266.51	1,018.97	0.00	0.00	0.00	
9,600.00	90.00	179.80	8,732.00	-1,113.19	-266.16	1,118.93	0.00	0.00	0.00	
9,700.00	90.00	179.80	8,732.00	-1,213.19	-265.82	1,218.90	0.00	0.00	0.00	
9,800.00	90.00	179.80	8,732.00	-1,313.19	-265.48	1,318.86	0.00	0.00	0.00	
9,900.00	90.00	179.80	8,732.00	-1,413.18	-265.14	1,418.83	0.00	0.00	0.00	
10,000.00	90.00	179.80	8,732.00	-1,513.18	-264.79	1,518.80	0.00	0.00	0.00	
10,100.00	90.00	179.80	8,732.00	-1,613.18	-264.45	1,618.76	0.00	0.00	0.00	
10,200.00	90.00	179.80	8,732.00	-1,713.18	-264.11	1,718.73	0.00	0.00	0.00	
10,300.00	90.00	179.80	8,732.00	-1,813.18	-263.77	1,818.69	0.00	0.00	0.00	
10,400.00	90.00	179.80	8,732.00	-1,913.18	-263.42	1,918.66	0.00	0.00	0.00	
10,500.00	90.00	179.80	8,732.00	-2,013.18	-263.08	2,018.63	0.00	0.00	0.00	
10,600.00	90.00	179.80	8,732.00	-2,113.18	-262.74	2,118.59	0.00	0.00	0.00	
10,700.00	90.00	179.80	8,732.00	-2,213.18	-262.39	2,218.56	0.00	0.00	0.00	
10,800.00	90.00	179.80	8,732.00	-2,313.18	-262.05	2,318.52	0.00	0.00	0.00	
10,900.00	90.00	179.80	8,732.00	-2,413.18	-261.71	2,418.49	0.00	0.00	0.00	
11,000.00	90.00	179.80	8,732.00	-2,513.18	-261.37	2,518.46	0.00	0.00	0.00	
11,100.00	90.00	179.80	8,732.00	-2,613.18	-261.02	2,618.42	0.00	0.00	0.00	
11,200.00	90.00	179.80	8,732.00	-2,713.18	-260.68	2,718.39	0.00	0.00	0.00	
11,300.00	90.00	179.80	8,732.00	-2,813.18	-260.34	2,818.35	0.00	0.00	0.00	
11,400.00	90.00	179.80	8,732.00	-2,913.18	-260.00	2,918.32	0.00	0.00	0.00	
11,500.00	90.00	179.80	8,732.00	-3,013.18	-259.65	3,018.29	0.00	0.00	0.00	
11,600.00	90.00	179.80	8,732.00	-3,113.18	-259.31	3,118.25	0.00	0.00	0.00	
11,700.00	90.00	179.80	8,732.00	-3,213.17	-258.97	3,218.22	0.00	0.00	0.00	
11,800.00	90.00	179.80	8,732.00	-3,313.17	-258.63	3,318.18	0.00	0.00	0.00	
11,900.00	90.00	179.80	8,732.00	-3,413.17	-258.28	3,418.15	0.00	0.00	0.00	
12,000.00	90.00	179.80	8,732.00	-3,513.17	-257.94	3,518.12	0.00	0.00	0.00	
12,100.00	90.00	179.80	8,732.00	-3,613.17	-257.60	3,618.08	0.00	0.00	0.00	
12,200.00	90.00	179.80	8,732.00	-3,713.17	-257.26	3,718.05	0.00	0.00	0.00	
12,300.00	90.00	179.80	8,732.00	-3,813.17	-256.91	3,818.01	0.00	0.00	0.00	
12,400.00	90.00	179.80	8,732.00	-3,913.17	-256.57	3,917.98	0.00	0.00	0.00	
12,500.00	90.00	179.80	8,732.00	-4,013.17	-256.23	4,017.95	0.00	0.00	0.00	
12,600.00	90.00	179.80	8,732.00	-4,113.17	-255.88	4,117.91	0.00	0.00	0.00	
12,700.00	90.00	179.80	8,732.00	-4,213.17	-255.54	4,217.88	0.00	0.00	0.00	
12,800.00	90.00	179.80	8,732.00	-4,313.17	-255.20	4,317.84	0.00	0.00	0.00	
12,900.00	90.00	179.80	8,732.00	-4,413.17	-254.86	4,417.81	0.00	0.00	0.00	
13,000.00	90.00	179.80	8,732.00	-4,513.17	-254.51	4,517.78	0.00	0.00	0.00	
13,100.00	90.00	179.80	8,732.00	-4,613.17	-254.17	4,617.74	0.00	0.00	0.00	
13,200.00	90.00	179.80	8,732.00	-4,713.17	-253.83	4,717.71	0.00	0.00	0.00	
13,300.00	90.00	179.80	8,732.00	-4,813.17	-253.49	4,817.67	0.00	0.00	0.00	

# Integrity Directional Services, LLC

## Survey Report



<b>Company:</b>	Longs Peak Resources	<b>Local Co-ordinate Reference:</b>	Well Motu West 3304-5NH
<b>Project:</b>	Weld County, Co (NAD 83)	<b>TVD Reference:</b>	KB=25' @ 6074.00ft
<b>Site:</b>	Motu West Pad	<b>MD Reference:</b>	KB=25' @ 6074.00ft
<b>Well:</b>	Motu West 3304-5NH	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 5000.1 Multi User Db

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,400.00	90.00	179.80	8,732.00	-4,913.16	-253.14	4,917.64	0.00	0.00	0.00	
13,500.00	90.00	179.80	8,732.00	-5,013.16	-252.80	5,017.61	0.00	0.00	0.00	
13,600.00	90.00	179.80	8,732.00	-5,113.16	-252.46	5,117.57	0.00	0.00	0.00	
13,700.00	90.00	179.80	8,732.00	-5,213.16	-252.12	5,217.54	0.00	0.00	0.00	
13,800.00	90.00	179.80	8,732.00	-5,313.16	-251.77	5,317.50	0.00	0.00	0.00	
13,900.00	90.00	179.80	8,732.00	-5,413.16	-251.43	5,417.47	0.00	0.00	0.00	
14,000.00	90.00	179.80	8,732.00	-5,513.16	-251.09	5,517.44	0.00	0.00	0.00	
14,100.00	90.00	179.80	8,732.00	-5,613.16	-250.74	5,617.40	0.00	0.00	0.00	
14,200.00	90.00	179.80	8,732.00	-5,713.16	-250.40	5,717.37	0.00	0.00	0.00	
14,300.00	90.00	179.80	8,732.00	-5,813.16	-250.06	5,817.33	0.00	0.00	0.00	
14,400.00	90.00	179.80	8,732.00	-5,913.16	-249.72	5,917.30	0.00	0.00	0.00	
14,500.00	90.00	179.80	8,732.00	-6,013.16	-249.37	6,017.26	0.00	0.00	0.00	
14,600.00	90.00	179.80	8,732.00	-6,113.16	-249.03	6,117.23	0.00	0.00	0.00	
14,700.00	90.00	179.80	8,732.00	-6,213.16	-248.69	6,217.20	0.00	0.00	0.00	
14,800.00	90.00	179.80	8,732.00	-6,313.16	-248.35	6,317.16	0.00	0.00	0.00	
14,900.00	90.00	179.80	8,732.00	-6,413.16	-248.00	6,417.13	0.00	0.00	0.00	
15,000.00	90.00	179.80	8,732.00	-6,513.16	-247.66	6,517.09	0.00	0.00	0.00	
15,100.00	90.00	179.80	8,732.00	-6,613.15	-247.32	6,617.06	0.00	0.00	0.00	
15,200.00	90.00	179.80	8,732.00	-6,713.15	-246.98	6,717.03	0.00	0.00	0.00	
15,300.00	90.00	179.80	8,732.00	-6,813.15	-246.63	6,816.99	0.00	0.00	0.00	
15,400.00	90.00	179.80	8,732.00	-6,913.15	-246.29	6,916.96	0.00	0.00	0.00	
15,500.00	90.00	179.80	8,732.00	-7,013.15	-245.95	7,016.92	0.00	0.00	0.00	
15,600.00	90.00	179.80	8,732.00	-7,113.15	-245.61	7,116.89	0.00	0.00	0.00	
15,700.00	90.00	179.80	8,732.00	-7,213.15	-245.26	7,216.86	0.00	0.00	0.00	
15,800.00	90.00	179.80	8,732.00	-7,313.15	-244.92	7,316.82	0.00	0.00	0.00	
15,900.00	90.00	179.80	8,732.00	-7,413.15	-244.58	7,416.79	0.00	0.00	0.00	
16,000.00	90.00	179.80	8,732.00	-7,513.15	-244.23	7,516.75	0.00	0.00	0.00	
16,100.00	90.00	179.80	8,732.00	-7,613.15	-243.89	7,616.72	0.00	0.00	0.00	
16,200.00	90.00	179.80	8,732.00	-7,713.15	-243.55	7,716.69	0.00	0.00	0.00	
16,300.00	90.00	179.80	8,732.00	-7,813.15	-243.21	7,816.65	0.00	0.00	0.00	
16,400.00	90.00	179.80	8,732.00	-7,913.15	-242.86	7,916.62	0.00	0.00	0.00	
16,500.00	90.00	179.80	8,732.00	-8,013.15	-242.52	8,016.58	0.00	0.00	0.00	
16,600.00	90.00	179.80	8,732.00	-8,113.15	-242.18	8,116.55	0.00	0.00	0.00	
16,700.00	90.00	179.80	8,732.00	-8,213.15	-241.84	8,216.52	0.00	0.00	0.00	
16,800.00	90.00	179.80	8,732.00	-8,313.14	-241.49	8,316.48	0.00	0.00	0.00	
16,900.00	90.00	179.80	8,732.00	-8,413.14	-241.15	8,416.45	0.00	0.00	0.00	
17,000.00	90.00	179.80	8,732.00	-8,513.14	-240.81	8,516.41	0.00	0.00	0.00	
17,100.00	90.00	179.80	8,732.00	-8,613.14	-240.47	8,616.38	0.00	0.00	0.00	
17,200.00	90.00	179.80	8,732.00	-8,713.14	-240.12	8,716.35	0.00	0.00	0.00	
17,300.00	90.00	179.80	8,732.00	-8,813.14	-239.78	8,816.31	0.00	0.00	0.00	
17,400.00	90.00	179.80	8,732.00	-8,913.14	-239.44	8,916.28	0.00	0.00	0.00	
17,500.00	90.00	179.80	8,732.00	-9,013.14	-239.10	9,016.24	0.00	0.00	0.00	
17,600.00	90.00	179.80	8,732.00	-9,113.14	-238.75	9,116.21	0.00	0.00	0.00	

# Integrity Directional Services, LLC

## Survey Report



<b>Company:</b> Longs Peak Resources	<b>Local Co-ordinate Reference:</b> Well Motu West 3304-5NH
<b>Project:</b> Weld County, Co (NAD 83)	<b>TVD Reference:</b> KB=25' @ 6074.00ft
<b>Site:</b> Motu West Pad	<b>MD Reference:</b> KB=25' @ 6074.00ft
<b>Well:</b> Motu West 3304-5NH	<b>North Reference:</b> Grid
<b>Wellbore:</b> Wellbore #1	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> Plan #1	<b>Database:</b> EDM 5000.1 Multi User Db

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,700.00	90.00	179.80	8,732.00	-9,213.14	-238.41	9,216.18	0.00	0.00	0.00
17,800.00	90.00	179.80	8,732.00	-9,313.14	-238.07	9,316.14	0.00	0.00	0.00
17,900.00	90.00	179.80	8,732.00	-9,413.14	-237.72	9,416.11	0.00	0.00	0.00
18,000.00	90.00	179.80	8,732.00	-9,513.14	-237.38	9,516.07	0.00	0.00	0.00
18,100.00	90.00	179.80	8,732.00	-9,613.14	-237.04	9,616.04	0.00	0.00	0.00
18,200.00	90.00	179.80	8,732.00	-9,713.14	-236.70	9,716.01	0.00	0.00	0.00
18,300.00	90.00	179.80	8,732.00	-9,813.14	-236.35	9,815.97	0.00	0.00	0.00
18,400.00	90.00	179.80	8,732.00	-9,913.14	-236.01	9,915.94	0.00	0.00	0.00
18,500.00	90.00	179.80	8,732.00	-10,013.13	-235.67	10,015.90	0.00	0.00	0.00
18,600.00	90.00	179.80	8,732.00	-10,113.13	-235.33	10,115.87	0.00	0.00	0.00
18,700.00	90.00	179.80	8,732.00	-10,213.13	-234.98	10,215.84	0.00	0.00	0.00
18,800.00	90.00	179.80	8,732.00	-10,313.13	-234.64	10,315.80	0.00	0.00	0.00
18,833.67	90.00	179.80	8,732.00	-10,346.80	-234.53	10,349.46	0.00	0.00	0.00
<b>TD at 18833.67</b>									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
3304-5NH LP (330' FI) - hit/miss target - Shape	0.00	0.00	8,732.00	-578.22	-268.00	1,597,358.339 9	3,229,354.022 8	40° 58' 12.576 N	104° 40' 10.200 W
- plan hits target center - Point									
3304-5NH BHL (330' I) - plan hits target center - Point	0.00	0.00	8,732.00	-10,346.80	-234.53	1,587,589.772 2	3,229,387.493 8	40° 56' 36.060 N	104° 40' 10.956 W

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2600	2600	0	0	Start Build 2.00
2727	2727	0	-3	Start 5438.09 hold at 2727.39 MD
8165	8160	-5	-245	Start DLS 10.00 TFO -88.99
9065	8732	-578	-268	Start 9768.64 hold at 9065.03 MD
18,834	8732	-10,347	-235	TD at 18833.67

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_