

Longs Peak Resources
Project: Weld County, Co (NAD 83)
Site: Dorada East Pad
Well: Dorada East 1411-9NH
Wellbore: Wellbore #1
Plan: Design #1 (Dorada East 1411-9NH/Wellbore #1)

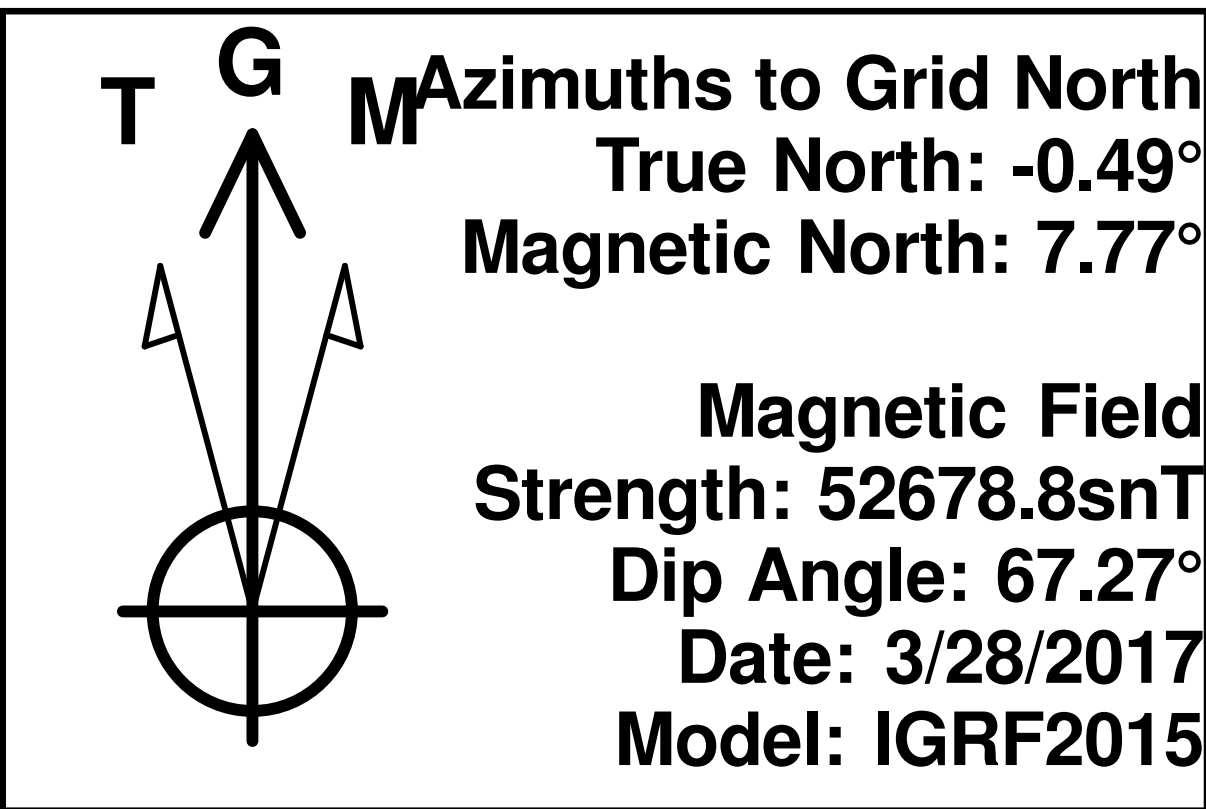
WELL DETAILS: Dorada East 1411-9NH

Ground Elevation:: 5668.00
RKB Elevation: KB=25' @ 5693.00ft
Rig Name:

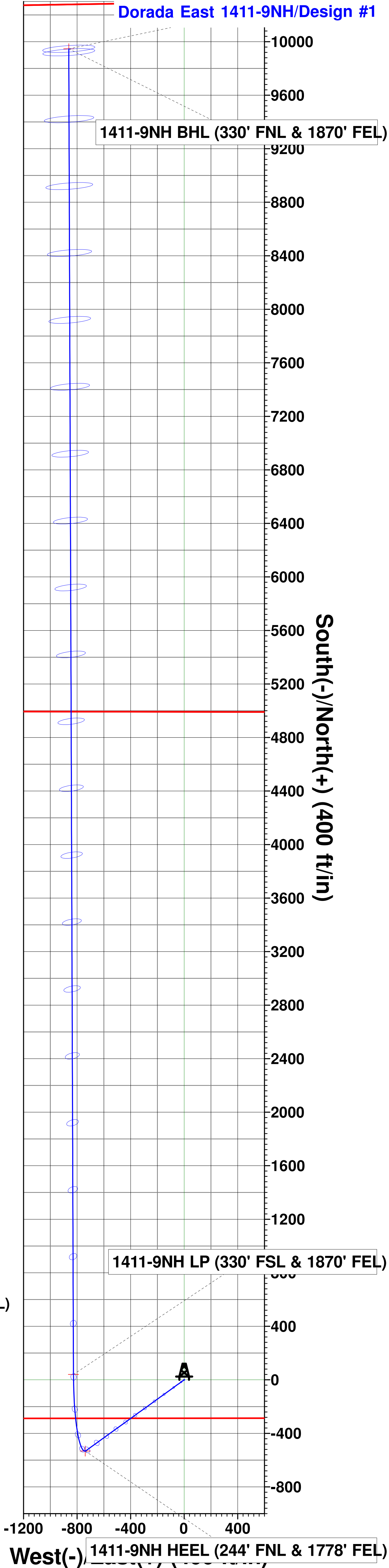
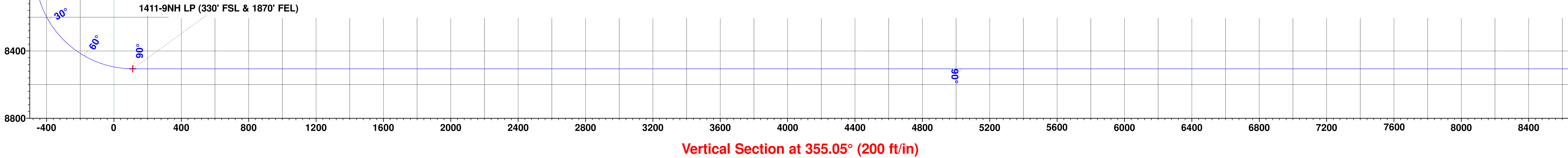
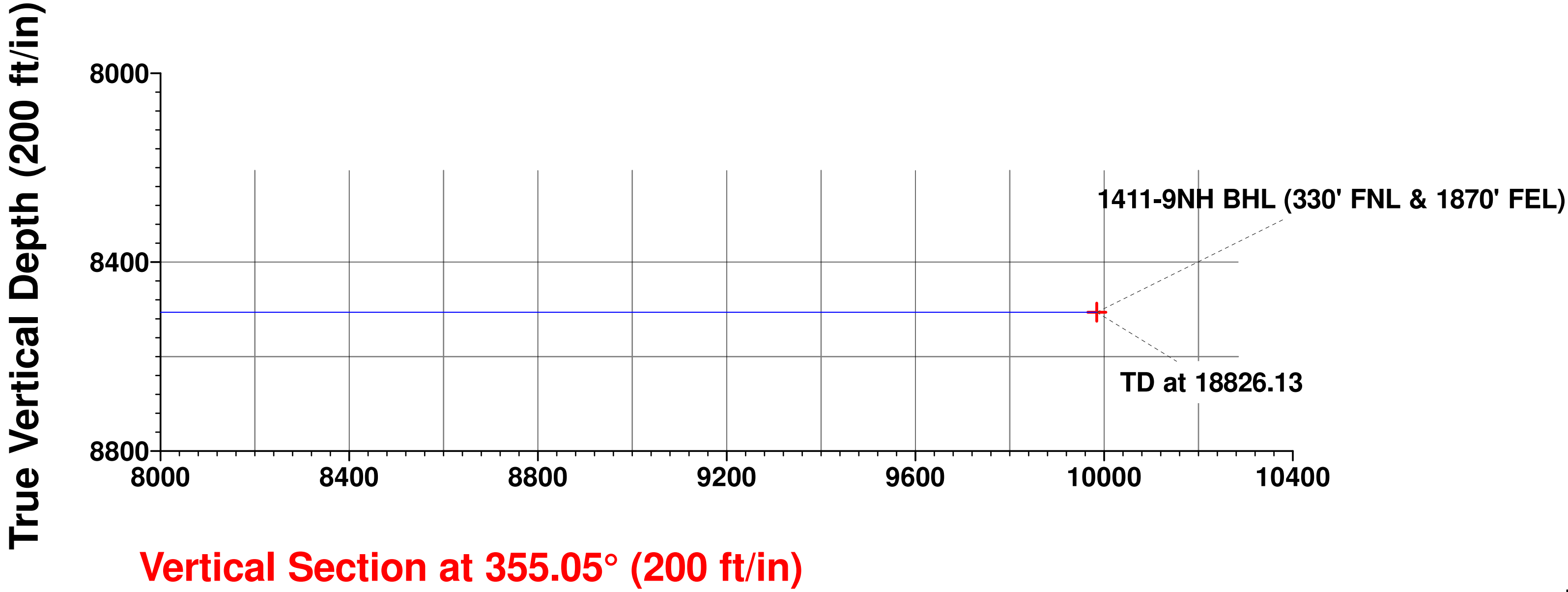
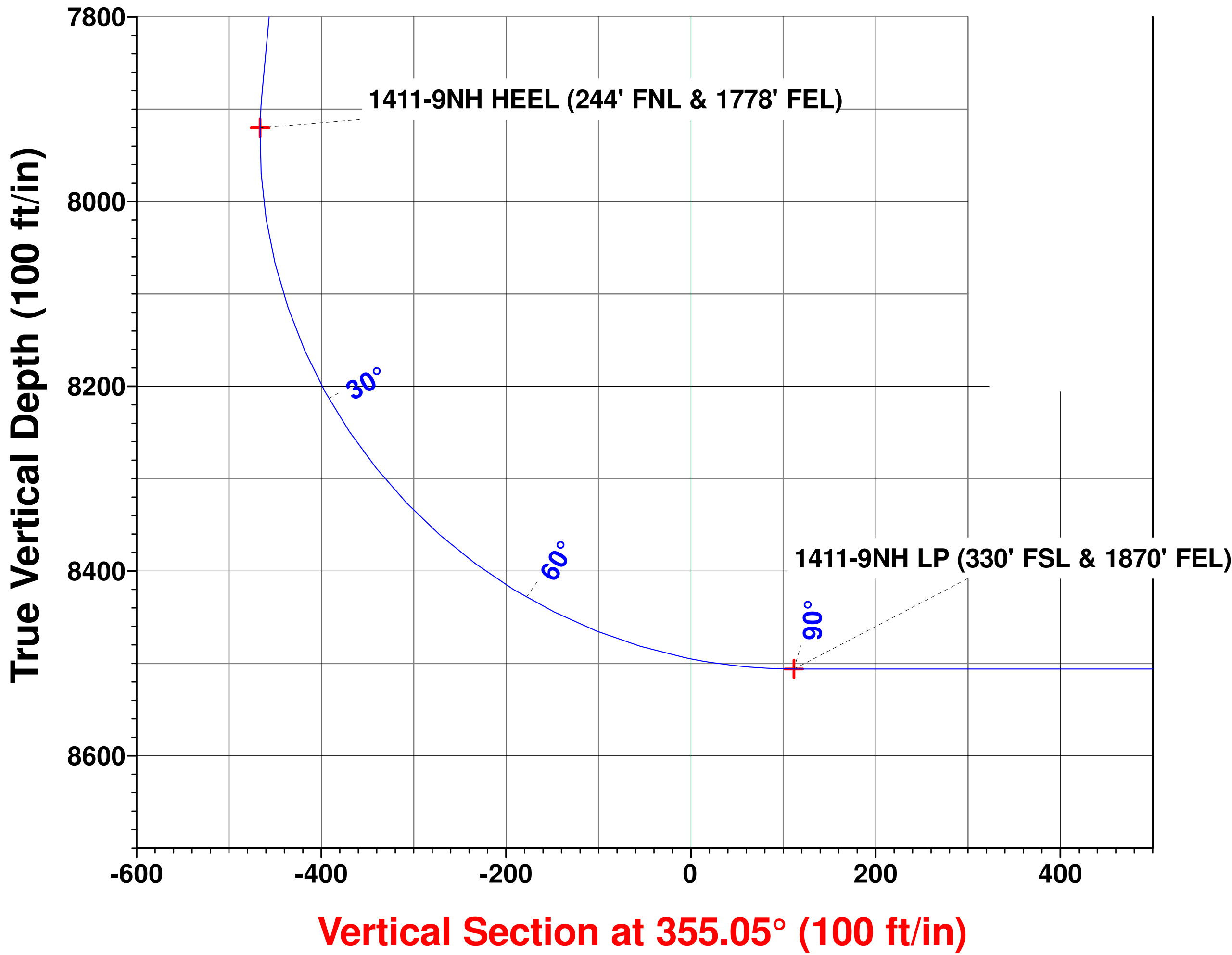
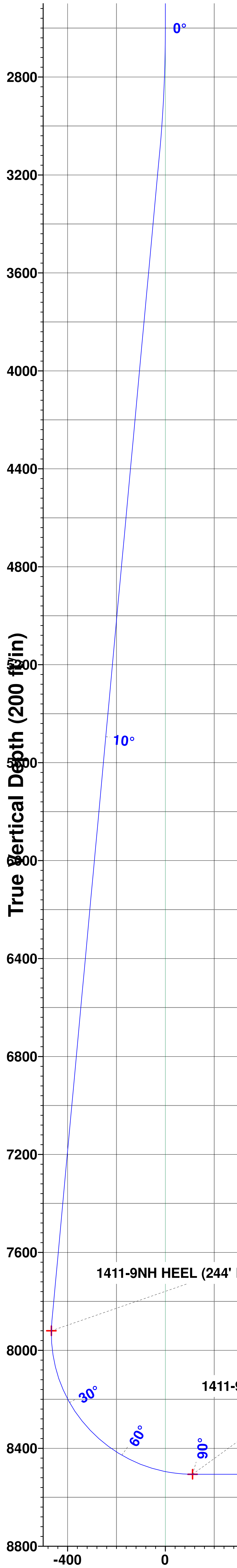
Northing	Easting	Latitude	Longitude
1576887.7924	3210672.5517	40° 54' 51.984 N	104° 44' 16.008 W



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	3110.13	10.20	234.18	3107.44	-26.51	-36.73	2.00	234.18	-23.24
4	7959.97	10.20	234.18	7880.59	-529.29	-733.29	0.00	0.00	-464.02
5	8919.19	90.00	359.80	8506.00	40.28	-826.80	10.00	125.19	111.50
6	18826.13	90.00	359.80	8506.00	9947.16	-861.89	0.00	0.00	9984.44



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)

Dorada East Pad

Dorada East 1411-9NH

Wellbore #1

Plan: Design #1

Standard Survey Report

31 March, 2017



Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Dorada East 1411-9NH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 5693.00ft
Site:	Dorada East Pad	MD Reference:	KB=25' @ 5693.00ft
Well:	Dorada East 1411-9NH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Multi User Db

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

Site	Dorada East Pad		
Site Position:		Northing:	1,576,887.1115 usft
From:	Lat/Long	Easting:	3,210,592.3996 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	40° 54' 51.984 N
		Longitude:	104° 44' 17.052 W
		Grid Convergence:	0.49 °

Well	Dorada East 1411-9NH		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	40° 54' 51.984 N
		Longitude:	104° 44' 16.008 W
		Ground Level:	5,668.00 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	3/28/2017	8.26
			Dip Angle (°)
			67.27
			Field Strength (nT)
			52,679

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)
	0.00	0.00	0.00
			Direction (°)
			355.05

Survey Tool Program	Date 3/28/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
0.00	18,826.13	Design #1 (Wellbore #1)	MWD
			Description
			MWD - Standard

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)
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

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	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
2,700.00	2.00	234.18	2,699.98	-1.02	-1.42	-0.90	2.00	2.00	0.00
2,800.00	4.00	234.18	2,799.84	-4.08	-5.66	-3.58	2.00	2.00	0.00
2,900.00	6.00	234.18	2,899.45	-9.18	-12.72	-8.05	2.00	2.00	0.00
3,000.00	8.00	234.18	2,998.70	-16.32	-22.61	-14.30	2.00	2.00	0.00
3,100.00	10.00	234.18	3,097.47	-25.47	-35.29	-22.33	2.00	2.00	0.00
3,110.13	10.20	234.18	3,107.44	-26.51	-36.73	-23.24	2.00	2.00	0.00
3,200.00	10.20	234.18	3,195.89	-35.83	-49.64	-31.41	0.00	0.00	0.00
3,300.00	10.20	234.18	3,294.31	-46.20	-64.00	-40.50	0.00	0.00	0.00
3,400.00	10.20	234.18	3,392.72	-56.56	-78.36	-49.59	0.00	0.00	0.00
3,500.00	10.20	234.18	3,491.14	-66.93	-92.73	-58.68	0.00	0.00	0.00
3,600.00	10.20	234.18	3,589.56	-77.30	-107.09	-67.76	0.00	0.00	0.00
3,700.00	10.20	234.18	3,687.98	-87.66	-121.45	-76.85	0.00	0.00	0.00
3,800.00	10.20	234.18	3,786.40	-98.03	-135.81	-85.94	0.00	0.00	0.00
3,900.00	10.20	234.18	3,884.82	-108.40	-150.17	-95.03	0.00	0.00	0.00
4,000.00	10.20	234.18	3,983.24	-118.76	-164.54	-104.12	0.00	0.00	0.00
4,100.00	10.20	234.18	4,081.66	-129.13	-178.90	-113.21	0.00	0.00	0.00
4,200.00	10.20	234.18	4,180.07	-139.50	-193.26	-122.29	0.00	0.00	0.00
4,300.00	10.20	234.18	4,278.49	-149.87	-207.62	-131.38	0.00	0.00	0.00
4,400.00	10.20	234.18	4,376.91	-160.23	-221.99	-140.47	0.00	0.00	0.00
4,500.00	10.20	234.18	4,475.33	-170.60	-236.35	-149.56	0.00	0.00	0.00
4,600.00	10.20	234.18	4,573.75	-180.97	-250.71	-158.65	0.00	0.00	0.00
4,700.00	10.20	234.18	4,672.17	-191.33	-265.07	-167.74	0.00	0.00	0.00
4,800.00	10.20	234.18	4,770.59	-201.70	-279.44	-176.82	0.00	0.00	0.00
4,900.00	10.20	234.18	4,869.01	-212.07	-293.80	-185.91	0.00	0.00	0.00
5,000.00	10.20	234.18	4,967.42	-222.43	-308.16	-195.00	0.00	0.00	0.00
5,100.00	10.20	234.18	5,065.84	-232.80	-322.52	-204.09	0.00	0.00	0.00
5,200.00	10.20	234.18	5,164.26	-243.17	-336.89	-213.18	0.00	0.00	0.00

Integrity Directional Services, LLC

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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)
5,300.00	10.20	234.18	5,262.68	-253.53	-351.25	-222.27	0.00	0.00	0.00
5,400.00	10.20	234.18	5,361.10	-263.90	-365.61	-231.36	0.00	0.00	0.00
5,500.00	10.20	234.18	5,459.52	-274.27	-379.97	-240.44	0.00	0.00	0.00
5,600.00	10.20	234.18	5,557.94	-284.64	-394.34	-249.53	0.00	0.00	0.00
5,700.00	10.20	234.18	5,656.36	-295.00	-408.70	-258.62	0.00	0.00	0.00
5,800.00	10.20	234.18	5,754.77	-305.37	-423.06	-267.71	0.00	0.00	0.00
5,900.00	10.20	234.18	5,853.19	-315.74	-437.42	-276.80	0.00	0.00	0.00
6,000.00	10.20	234.18	5,951.61	-326.10	-451.79	-285.89	0.00	0.00	0.00
6,100.00	10.20	234.18	6,050.03	-336.47	-466.15	-294.97	0.00	0.00	0.00
6,200.00	10.20	234.18	6,148.45	-346.84	-480.51	-304.06	0.00	0.00	0.00
6,300.00	10.20	234.18	6,246.87	-357.20	-494.87	-313.15	0.00	0.00	0.00
6,400.00	10.20	234.18	6,345.29	-367.57	-509.24	-322.24	0.00	0.00	0.00
6,500.00	10.20	234.18	6,443.71	-377.94	-523.60	-331.33	0.00	0.00	0.00
6,600.00	10.20	234.18	6,542.12	-388.30	-537.96	-340.42	0.00	0.00	0.00
6,700.00	10.20	234.18	6,640.54	-398.67	-552.32	-349.50	0.00	0.00	0.00
6,800.00	10.20	234.18	6,738.96	-409.04	-566.69	-358.59	0.00	0.00	0.00
6,900.00	10.20	234.18	6,837.38	-419.41	-581.05	-367.68	0.00	0.00	0.00
7,000.00	10.20	234.18	6,935.80	-429.77	-595.41	-376.77	0.00	0.00	0.00
7,100.00	10.20	234.18	7,034.22	-440.14	-609.77	-385.86	0.00	0.00	0.00
7,200.00	10.20	234.18	7,132.64	-450.51	-624.13	-394.95	0.00	0.00	0.00
7,300.00	10.20	234.18	7,231.06	-460.87	-638.50	-404.04	0.00	0.00	0.00
7,400.00	10.20	234.18	7,329.47	-471.24	-652.86	-413.12	0.00	0.00	0.00
7,500.00	10.20	234.18	7,427.89	-481.61	-667.22	-422.21	0.00	0.00	0.00
7,600.00	10.20	234.18	7,526.31	-491.97	-681.58	-431.30	0.00	0.00	0.00
7,700.00	10.20	234.18	7,624.73	-502.34	-695.95	-440.39	0.00	0.00	0.00
7,800.00	10.20	234.18	7,723.15	-512.71	-710.31	-449.48	0.00	0.00	0.00
7,900.00	10.20	234.18	7,821.57	-523.07	-724.67	-458.57	0.00	0.00	0.00
7,959.97	10.20	234.18	7,880.59	-529.29	-733.29	-464.02	0.00	0.00	0.00
8,000.00	8.54	256.77	7,920.10	-532.05	-739.06	-466.26	10.00	-4.15	56.44
8,100.00	11.58	314.24	8,018.78	-526.73	-753.51	-459.72	10.00	3.04	57.47
8,200.00	19.85	335.89	8,115.03	-504.18	-767.67	-436.03	10.00	8.27	21.64
8,300.00	29.19	344.62	8,205.94	-465.07	-781.11	-395.90	10.00	9.35	8.73
8,400.00	38.85	349.33	8,288.74	-410.60	-793.42	-340.57	10.00	9.65	4.71
8,500.00	48.62	352.39	8,360.92	-342.42	-804.22	-271.72	10.00	9.78	3.06
8,600.00	58.46	354.64	8,420.28	-262.60	-813.19	-191.42	10.00	9.84	2.25
8,700.00	68.32	356.46	8,465.02	-173.57	-820.05	-102.14	10.00	9.87	1.82
8,800.00	78.21	358.05	8,493.78	-78.04	-824.60	-6.57	10.00	9.88	1.58
8,900.00	88.10	359.52	8,505.68	21.10	-826.69	92.38	10.00	9.89	1.47
8,919.19	90.00	359.80	8,506.00	40.28	-826.80	111.50	10.00	9.89	1.45
9,000.00	90.00	359.80	8,506.00	121.10	-827.09	192.04	0.00	0.00	0.00
9,100.00	90.00	359.80	8,506.00	221.09	-827.44	291.70	0.00	0.00	0.00
9,200.00	90.00	359.80	8,506.00	321.09	-827.80	391.35	0.00	0.00	0.00
9,300.00	90.00	359.80	8,506.00	421.09	-828.15	491.01	0.00	0.00	0.00

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9,400.00	90.00	359.80	8,506.00	521.09	-828.51	590.67	0.00	0.00	0.00
9,500.00	90.00	359.80	8,506.00	621.09	-828.86	690.32	0.00	0.00	0.00
9,600.00	90.00	359.80	8,506.00	721.09	-829.21	789.98	0.00	0.00	0.00
9,700.00	90.00	359.80	8,506.00	821.09	-829.57	889.64	0.00	0.00	0.00
9,800.00	90.00	359.80	8,506.00	921.09	-829.92	989.29	0.00	0.00	0.00
9,900.00	90.00	359.80	8,506.00	1,021.09	-830.28	1,088.95	0.00	0.00	0.00
10,000.00	90.00	359.80	8,506.00	1,121.09	-830.63	1,188.61	0.00	0.00	0.00
10,100.00	90.00	359.80	8,506.00	1,221.09	-830.99	1,288.26	0.00	0.00	0.00
10,200.00	90.00	359.80	8,506.00	1,321.09	-831.34	1,387.92	0.00	0.00	0.00
10,300.00	90.00	359.80	8,506.00	1,421.09	-831.69	1,487.58	0.00	0.00	0.00
10,400.00	90.00	359.80	8,506.00	1,521.09	-832.05	1,587.23	0.00	0.00	0.00
10,500.00	90.00	359.80	8,506.00	1,621.09	-832.40	1,686.89	0.00	0.00	0.00
10,600.00	90.00	359.80	8,506.00	1,721.09	-832.76	1,786.55	0.00	0.00	0.00
10,700.00	90.00	359.80	8,506.00	1,821.08	-833.11	1,886.20	0.00	0.00	0.00
10,800.00	90.00	359.80	8,506.00	1,921.08	-833.47	1,985.86	0.00	0.00	0.00
10,900.00	90.00	359.80	8,506.00	2,021.08	-833.82	2,085.52	0.00	0.00	0.00
11,000.00	90.00	359.80	8,506.00	2,121.08	-834.17	2,185.17	0.00	0.00	0.00
11,100.00	90.00	359.80	8,506.00	2,221.08	-834.53	2,284.83	0.00	0.00	0.00
11,200.00	90.00	359.80	8,506.00	2,321.08	-834.88	2,384.49	0.00	0.00	0.00
11,300.00	90.00	359.80	8,506.00	2,421.08	-835.24	2,484.14	0.00	0.00	0.00
11,400.00	90.00	359.80	8,506.00	2,521.08	-835.59	2,583.80	0.00	0.00	0.00
11,500.00	90.00	359.80	8,506.00	2,621.08	-835.94	2,683.46	0.00	0.00	0.00
11,600.00	90.00	359.80	8,506.00	2,721.08	-836.30	2,783.11	0.00	0.00	0.00
11,700.00	90.00	359.80	8,506.00	2,821.08	-836.65	2,882.77	0.00	0.00	0.00
11,800.00	90.00	359.80	8,506.00	2,921.08	-837.01	2,982.43	0.00	0.00	0.00
11,900.00	90.00	359.80	8,506.00	3,021.08	-837.36	3,082.08	0.00	0.00	0.00
12,000.00	90.00	359.80	8,506.00	3,121.08	-837.72	3,181.74	0.00	0.00	0.00
12,100.00	90.00	359.80	8,506.00	3,221.08	-838.07	3,281.40	0.00	0.00	0.00
12,200.00	90.00	359.80	8,506.00	3,321.08	-838.42	3,381.05	0.00	0.00	0.00
12,300.00	90.00	359.80	8,506.00	3,421.07	-838.78	3,480.71	0.00	0.00	0.00
12,400.00	90.00	359.80	8,506.00	3,521.07	-839.13	3,580.37	0.00	0.00	0.00
12,500.00	90.00	359.80	8,506.00	3,621.07	-839.49	3,680.02	0.00	0.00	0.00
12,600.00	90.00	359.80	8,506.00	3,721.07	-839.84	3,779.68	0.00	0.00	0.00
12,700.00	90.00	359.80	8,506.00	3,821.07	-840.20	3,879.34	0.00	0.00	0.00
12,800.00	90.00	359.80	8,506.00	3,921.07	-840.55	3,978.99	0.00	0.00	0.00
12,900.00	90.00	359.80	8,506.00	4,021.07	-840.90	4,078.65	0.00	0.00	0.00
13,000.00	90.00	359.80	8,506.00	4,121.07	-841.26	4,178.31	0.00	0.00	0.00
13,100.00	90.00	359.80	8,506.00	4,221.07	-841.61	4,277.96	0.00	0.00	0.00
13,200.00	90.00	359.80	8,506.00	4,321.07	-841.97	4,377.62	0.00	0.00	0.00
13,300.00	90.00	359.80	8,506.00	4,421.07	-842.32	4,477.28	0.00	0.00	0.00
13,400.00	90.00	359.80	8,506.00	4,521.07	-842.67	4,576.93	0.00	0.00	0.00
13,500.00	90.00	359.80	8,506.00	4,621.07	-843.03	4,676.59	0.00	0.00	0.00
13,600.00	90.00	359.80	8,506.00	4,721.07	-843.38	4,776.25	0.00	0.00	0.00

Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Dorada East 1411-9NH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 5693.00ft
Site:	Dorada East Pad	MD Reference:	KB=25' @ 5693.00ft
Well:	Dorada East 1411-9NH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	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)
13,700.00	90.00	359.80	8,506.00	4,821.07	-843.74	4,875.90	0.00	0.00	0.00
13,800.00	90.00	359.80	8,506.00	4,921.07	-844.09	4,975.56	0.00	0.00	0.00
13,900.00	90.00	359.80	8,506.00	5,021.06	-844.45	5,075.22	0.00	0.00	0.00
14,000.00	90.00	359.80	8,506.00	5,121.06	-844.80	5,174.87	0.00	0.00	0.00
14,100.00	90.00	359.80	8,506.00	5,221.06	-845.15	5,274.53	0.00	0.00	0.00
14,200.00	90.00	359.80	8,506.00	5,321.06	-845.51	5,374.19	0.00	0.00	0.00
14,300.00	90.00	359.80	8,506.00	5,421.06	-845.86	5,473.84	0.00	0.00	0.00
14,400.00	90.00	359.80	8,506.00	5,521.06	-846.22	5,573.50	0.00	0.00	0.00
14,500.00	90.00	359.80	8,506.00	5,621.06	-846.57	5,673.16	0.00	0.00	0.00
14,600.00	90.00	359.80	8,506.00	5,721.06	-846.93	5,772.81	0.00	0.00	0.00
14,700.00	90.00	359.80	8,506.00	5,821.06	-847.28	5,872.47	0.00	0.00	0.00
14,800.00	90.00	359.80	8,506.00	5,921.06	-847.63	5,972.13	0.00	0.00	0.00
14,900.00	90.00	359.80	8,506.00	6,021.06	-847.99	6,071.78	0.00	0.00	0.00
15,000.00	90.00	359.80	8,506.00	6,121.06	-848.34	6,171.44	0.00	0.00	0.00
15,100.00	90.00	359.80	8,506.00	6,221.06	-848.70	6,271.10	0.00	0.00	0.00
15,200.00	90.00	359.80	8,506.00	6,321.06	-849.05	6,370.75	0.00	0.00	0.00
15,300.00	90.00	359.80	8,506.00	6,421.06	-849.40	6,470.41	0.00	0.00	0.00
15,400.00	90.00	359.80	8,506.00	6,521.06	-849.76	6,570.07	0.00	0.00	0.00
15,500.00	90.00	359.80	8,506.00	6,621.05	-850.11	6,669.72	0.00	0.00	0.00
15,600.00	90.00	359.80	8,506.00	6,721.05	-850.47	6,769.38	0.00	0.00	0.00
15,700.00	90.00	359.80	8,506.00	6,821.05	-850.82	6,869.04	0.00	0.00	0.00
15,800.00	90.00	359.80	8,506.00	6,921.05	-851.18	6,968.69	0.00	0.00	0.00
15,900.00	90.00	359.80	8,506.00	7,021.05	-851.53	7,068.35	0.00	0.00	0.00
16,000.00	90.00	359.80	8,506.00	7,121.05	-851.88	7,168.01	0.00	0.00	0.00
16,100.00	90.00	359.80	8,506.00	7,221.05	-852.24	7,267.66	0.00	0.00	0.00
16,200.00	90.00	359.80	8,506.00	7,321.05	-852.59	7,367.32	0.00	0.00	0.00
16,300.00	90.00	359.80	8,506.00	7,421.05	-852.95	7,466.98	0.00	0.00	0.00
16,400.00	90.00	359.80	8,506.00	7,521.05	-853.30	7,566.63	0.00	0.00	0.00
16,500.00	90.00	359.80	8,506.00	7,621.05	-853.66	7,666.29	0.00	0.00	0.00
16,600.00	90.00	359.80	8,506.00	7,721.05	-854.01	7,765.95	0.00	0.00	0.00
16,700.00	90.00	359.80	8,506.00	7,821.05	-854.36	7,865.60	0.00	0.00	0.00
16,800.00	90.00	359.80	8,506.00	7,921.05	-854.72	7,965.26	0.00	0.00	0.00
16,900.00	90.00	359.80	8,506.00	8,021.05	-855.07	8,064.92	0.00	0.00	0.00
17,000.00	90.00	359.80	8,506.00	8,121.05	-855.43	8,164.57	0.00	0.00	0.00
17,100.00	90.00	359.80	8,506.00	8,221.04	-855.78	8,264.23	0.00	0.00	0.00
17,200.00	90.00	359.80	8,506.00	8,321.04	-856.13	8,363.89	0.00	0.00	0.00
17,300.00	90.00	359.80	8,506.00	8,421.04	-856.49	8,463.54	0.00	0.00	0.00
17,400.00	90.00	359.80	8,506.00	8,521.04	-856.84	8,563.20	0.00	0.00	0.00
17,500.00	90.00	359.80	8,506.00	8,621.04	-857.20	8,662.86	0.00	0.00	0.00
17,600.00	90.00	359.80	8,506.00	8,721.04	-857.55	8,762.51	0.00	0.00	0.00
17,700.00	90.00	359.80	8,506.00	8,821.04	-857.91	8,862.17	0.00	0.00	0.00
17,800.00	90.00	359.80	8,506.00	8,921.04	-858.26	8,961.83	0.00	0.00	0.00
17,900.00	90.00	359.80	8,506.00	9,021.04	-858.61	9,061.48	0.00	0.00	0.00
18,000.00	90.00	359.80	8,506.00	9,121.04	-858.97	9,161.14	0.00	0.00	0.00

Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Dorada East 1411-9NH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 5693.00ft
Site:	Dorada East Pad	MD Reference:	KB=25' @ 5693.00ft
Well:	Dorada East 1411-9NH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	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)
18,100.00	90.00	359.80	8,506.00	9,221.04	-859.32	9,260.80	0.00	0.00	0.00
18,200.00	90.00	359.80	8,506.00	9,321.04	-859.68	9,360.45	0.00	0.00	0.00
18,300.00	90.00	359.80	8,506.00	9,421.04	-860.03	9,460.11	0.00	0.00	0.00
18,400.00	90.00	359.80	8,506.00	9,521.04	-860.39	9,559.77	0.00	0.00	0.00
18,500.00	90.00	359.80	8,506.00	9,621.04	-860.74	9,659.42	0.00	0.00	0.00
18,600.00	90.00	359.80	8,506.00	9,721.04	-861.09	9,759.08	0.00	0.00	0.00
18,700.00	90.00	359.80	8,506.00	9,821.03	-861.45	9,858.74	0.00	0.00	0.00
18,800.00	90.00	359.80	8,506.00	9,921.03	-861.80	9,958.39	0.00	0.00	0.00
18,826.13	90.00	359.80	8,506.00	9,947.17	-861.89	9,984.44	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
1411-9NH HEEL (244 - plan hits target center - Point	0.00	0.00	7,920.15	-532.05	-739.06	1,576,355.743 5	3,209,933.490 1	40° 54' 46.790 N	104° 44' 25.693 W
1411-9NH BHL (330' I - plan hits target center - Point	0.00	0.00	8,506.00	9,947.17	-861.89	1,586,834.937 5	3,209,810.659 0	40° 56' 30.336 N	104° 44' 26.124 W
1411-9NH LP (330' F - plan hits target center - Point	0.00	0.00	8,506.00	40.28	-826.80	1,576,928.074 7	3,209,845.750 2	40° 54' 52.452 N	104° 44' 26.772 W

Checked By: _____ Approved By: _____ Date: _____