

Longs Peak Resources
Project: Weld County, Co (NAD 83)
Site: Avila East Pad
Well: Avila East 3205-10CH
Wellbore: Wellbore #1
Plan: Plan #1 (Avila East 3205-10CH/Wellbore #1)

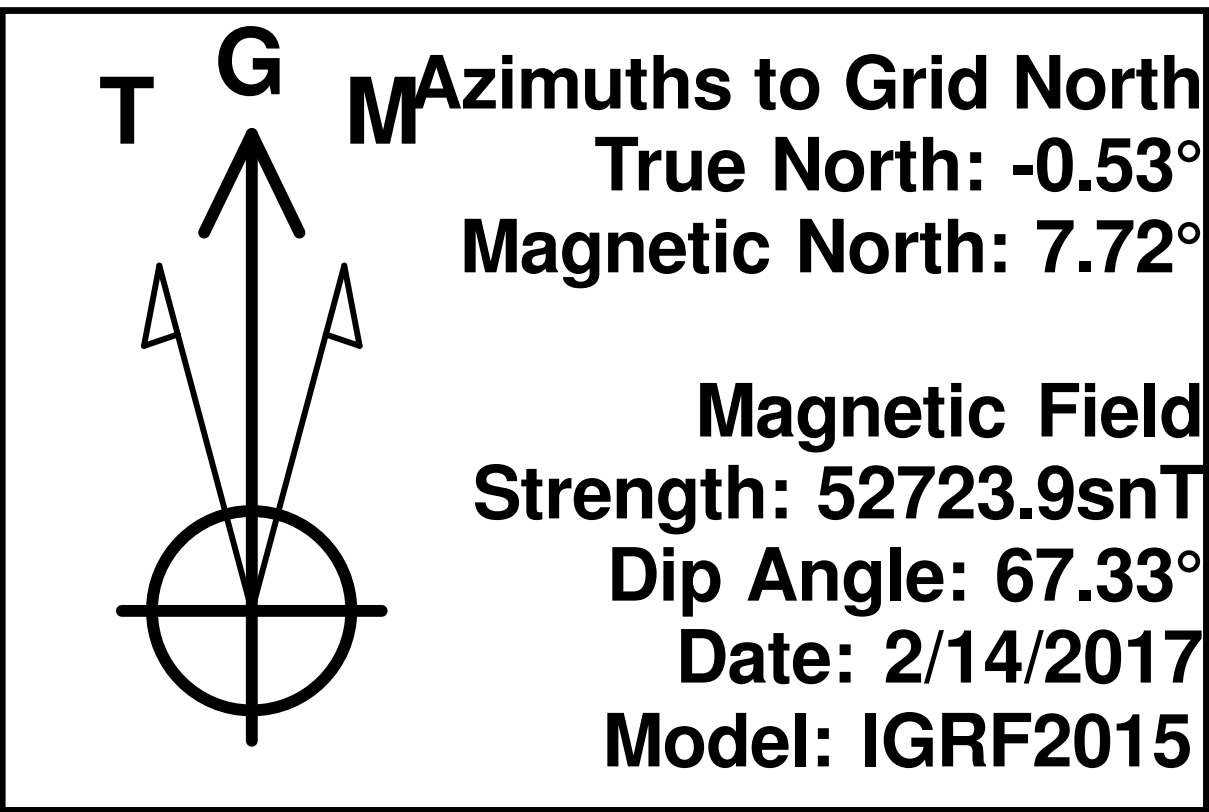


WELL DETAILS: Avila East 3205-10CH

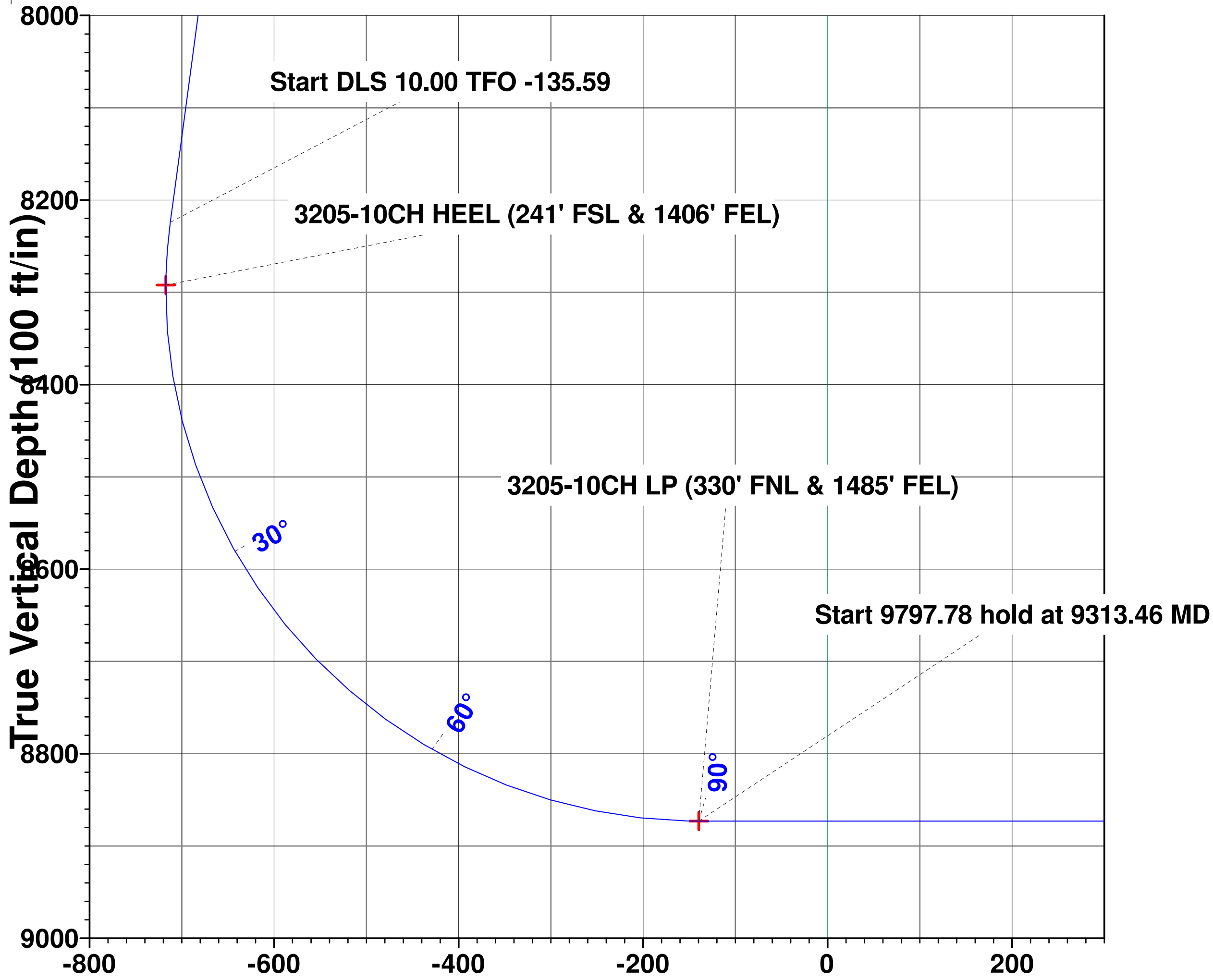
Ground Elevation:: 5978.00
RKB Elevation: KB=25' @ 6003.00ft
Rig Name:

Northing	Easting	Latitude	Longitude
1597138.1525	3226840.0657	40° 58' 10.632 N	104° 40' 42.996 W

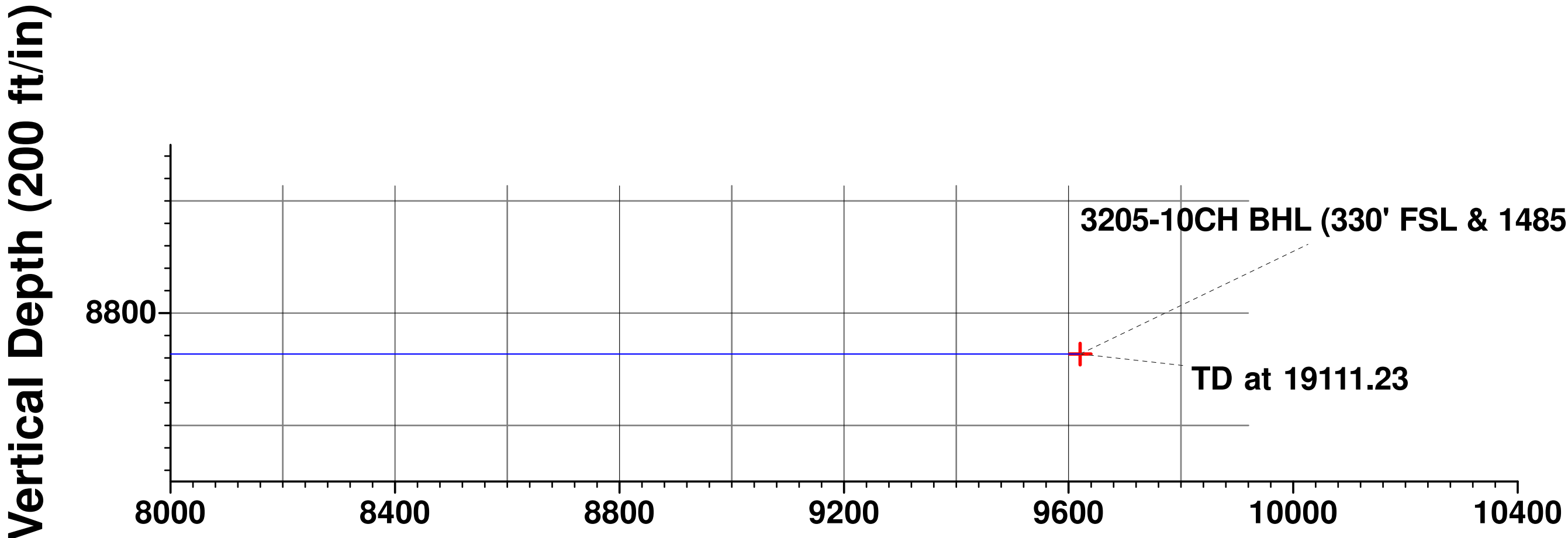
Planned Section Details									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00
3	3173.32	11.47	315.96	3169.50	41.11	-39.74	2.00	315.96	-37.63
4	8331.00	11.47	315.96	8224.24	778.21	-752.44	0.00	0.00	-712.41
5	9313.46	90.00	179.79	8873.00	210.85	-841.54	10.00	-135.59	-139.58
6	19111.23	90.00	179.79	8873.00	-9586.86	-806.38	0.00	0.00	9620.71



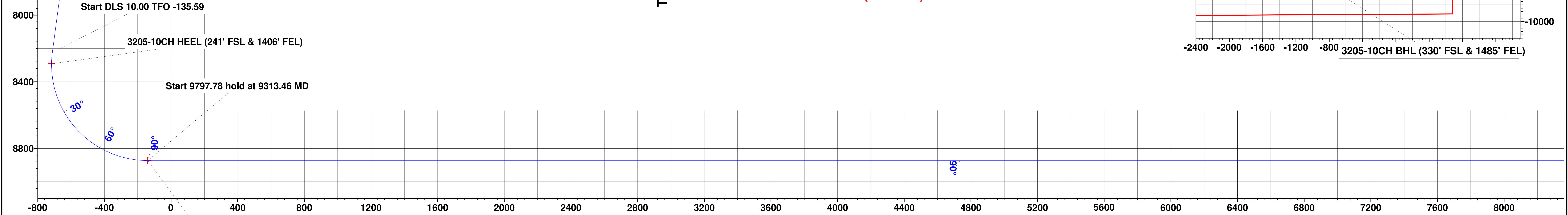
PROJECT DETAILS: Weld County, Co (NAD 83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: Grid



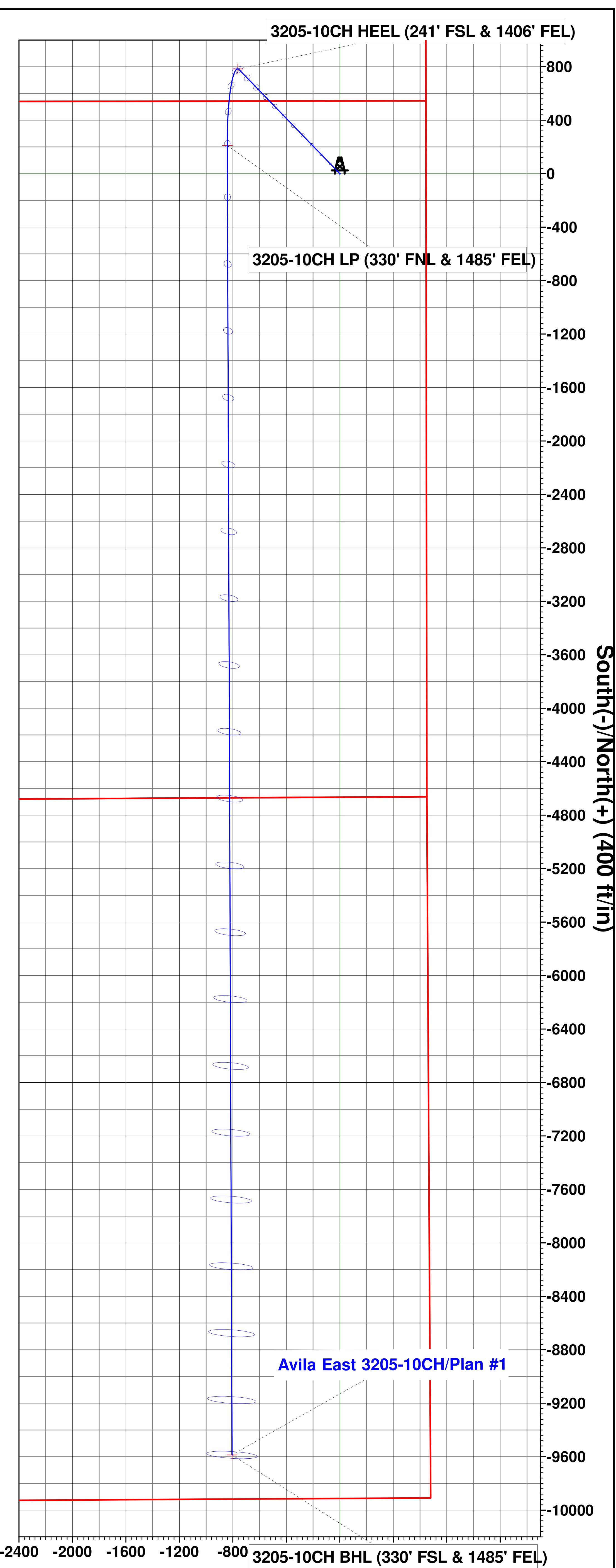
Vertical Section at 184.81° (100 ft/in)



Vertical Section at 184.81° (200 ft/in)



Vertical Section at 184.81° (200 ft/in)



Longs Peak Resources

Weld County, Co (NAD 83)

Avila East Pad

Avila East 3205-10CH

Wellbore #1

Plan: Plan #1

Standard Survey Report

14 February, 2017



Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Avila East 3205-10CH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 6003.00ft
Site:	Avila East Pad	MD Reference:	KB=25' @ 6003.00ft
Well:	Avila East 3205-10CH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #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	Avila East Pad				
Site Position:		Northing:	1,597,315.9475 usft	Latitude:	40° 58' 12.396 N
From:	Lat/Long	Easting:	3,226,758.3266 usft	Longitude:	104° 40' 44.040 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.53 °

Well	Avila East 3205-10CH					
Well Position	+N/-S	0.00 ft	Northing:	1,597,138.1525 usfl	Latitude:	40° 58' 10.632 N
	+E/-W	0.00 ft	Easting:	3,226,840.0657 usfl	Longitude:	104° 40' 42.996 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,978.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/14/2017	8.25	67.33	52,724

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	184.81	

Survey Tool Program	Date	2/14/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	19,111.23	Plan #1 (Wellbore #1)	MWD	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	

Integrity Directional Services, LLC

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Well:	Avila East 3205-10CH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #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
Start Build 2.00									
2,700.00	2.00	315.96	2,699.98	1.25	-1.21	-1.15	2.00	2.00	0.00
2,800.00	4.00	315.96	2,799.84	5.02	-4.85	-4.59	2.00	2.00	0.00
2,900.00	6.00	315.96	2,899.45	11.28	-10.91	-10.33	2.00	2.00	0.00
3,000.00	8.00	315.96	2,998.70	20.04	-19.38	-18.35	2.00	2.00	0.00
3,100.00	10.00	315.96	3,097.47	31.29	-30.25	-28.64	2.00	2.00	0.00
3,173.32	11.47	315.96	3,169.50	41.11	-39.74	-37.63	2.00	2.00	0.00
Start 5157.68 hold at 3173.32 MD									
3,200.00	11.47	315.96	3,195.65	44.92	-43.43	-41.12	0.00	0.00	0.00
3,300.00	11.47	315.96	3,293.65	59.21	-57.25	-54.20	0.00	0.00	0.00
3,400.00	11.47	315.96	3,391.66	73.50	-71.07	-67.29	0.00	0.00	0.00
3,500.00	11.47	315.96	3,489.66	87.79	-84.89	-80.37	0.00	0.00	0.00
3,600.00	11.47	315.96	3,587.66	102.08	-98.70	-93.45	0.00	0.00	0.00
3,700.00	11.47	315.96	3,685.67	116.38	-112.52	-106.53	0.00	0.00	0.00
3,800.00	11.47	315.96	3,783.67	130.67	-126.34	-119.62	0.00	0.00	0.00
3,900.00	11.47	315.96	3,881.68	144.96	-140.16	-132.70	0.00	0.00	0.00
4,000.00	11.47	315.96	3,979.68	159.25	-153.98	-145.78	0.00	0.00	0.00
4,100.00	11.47	315.96	4,077.69	173.54	-167.79	-158.87	0.00	0.00	0.00
4,200.00	11.47	315.96	4,175.69	187.83	-181.61	-171.95	0.00	0.00	0.00
4,300.00	11.47	315.96	4,273.69	202.12	-195.43	-185.03	0.00	0.00	0.00
4,400.00	11.47	315.96	4,371.70	216.42	-209.25	-198.12	0.00	0.00	0.00
4,500.00	11.47	315.96	4,469.70	230.71	-223.07	-211.20	0.00	0.00	0.00
4,600.00	11.47	315.96	4,567.71	245.00	-236.89	-224.28	0.00	0.00	0.00
4,700.00	11.47	315.96	4,665.71	259.29	-250.70	-237.36	0.00	0.00	0.00
4,800.00	11.47	315.96	4,763.71	273.58	-264.52	-250.45	0.00	0.00	0.00
4,900.00	11.47	315.96	4,861.72	287.87	-278.34	-263.53	0.00	0.00	0.00
5,000.00	11.47	315.96	4,959.72	302.16	-292.16	-276.61	0.00	0.00	0.00

Integrity Directional Services, LLC

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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	11.47	315.96	5,057.73	316.46	-305.98	-289.70	0.00	0.00	0.00
5,200.00	11.47	315.96	5,155.73	330.75	-319.79	-302.78	0.00	0.00	0.00
5,300.00	11.47	315.96	5,253.74	345.04	-333.61	-315.86	0.00	0.00	0.00
5,400.00	11.47	315.96	5,351.74	359.33	-347.43	-328.95	0.00	0.00	0.00
5,500.00	11.47	315.96	5,449.74	373.62	-361.25	-342.03	0.00	0.00	0.00
5,600.00	11.47	315.96	5,547.75	387.91	-375.07	-355.11	0.00	0.00	0.00
5,700.00	11.47	315.96	5,645.75	402.20	-388.89	-368.19	0.00	0.00	0.00
5,800.00	11.47	315.96	5,743.76	416.50	-402.70	-381.28	0.00	0.00	0.00
5,900.00	11.47	315.96	5,841.76	430.79	-416.52	-394.36	0.00	0.00	0.00
6,000.00	11.47	315.96	5,939.76	445.08	-430.34	-407.44	0.00	0.00	0.00
6,100.00	11.47	315.96	6,037.77	459.37	-444.16	-420.53	0.00	0.00	0.00
6,200.00	11.47	315.96	6,135.77	473.66	-457.98	-433.61	0.00	0.00	0.00
6,300.00	11.47	315.96	6,233.78	487.95	-471.80	-446.69	0.00	0.00	0.00
6,400.00	11.47	315.96	6,331.78	502.24	-485.61	-459.77	0.00	0.00	0.00
6,500.00	11.47	315.96	6,429.78	516.54	-499.43	-472.86	0.00	0.00	0.00
6,600.00	11.47	315.96	6,527.79	530.83	-513.25	-485.94	0.00	0.00	0.00
6,700.00	11.47	315.96	6,625.79	545.12	-527.07	-499.02	0.00	0.00	0.00
6,800.00	11.47	315.96	6,723.80	559.41	-540.89	-512.11	0.00	0.00	0.00
6,900.00	11.47	315.96	6,821.80	573.70	-554.70	-525.19	0.00	0.00	0.00
7,000.00	11.47	315.96	6,919.81	587.99	-568.52	-538.27	0.00	0.00	0.00
7,100.00	11.47	315.96	7,017.81	602.28	-582.34	-551.36	0.00	0.00	0.00
7,200.00	11.47	315.96	7,115.81	616.58	-596.16	-564.44	0.00	0.00	0.00
7,300.00	11.47	315.96	7,213.82	630.87	-609.98	-577.52	0.00	0.00	0.00
7,400.00	11.47	315.96	7,311.82	645.16	-623.80	-590.60	0.00	0.00	0.00
7,500.00	11.47	315.96	7,409.83	659.45	-637.61	-603.69	0.00	0.00	0.00
7,600.00	11.47	315.96	7,507.83	673.74	-651.43	-616.77	0.00	0.00	0.00
7,700.00	11.47	315.96	7,605.83	688.03	-665.25	-629.85	0.00	0.00	0.00
7,800.00	11.47	315.96	7,703.84	702.32	-679.07	-642.94	0.00	0.00	0.00
7,900.00	11.47	315.96	7,801.84	716.62	-692.89	-656.02	0.00	0.00	0.00
8,000.00	11.47	315.96	7,899.85	730.91	-706.71	-669.10	0.00	0.00	0.00
8,100.00	11.47	315.96	7,997.85	745.20	-720.52	-682.19	0.00	0.00	0.00
8,200.00	11.47	315.96	8,095.86	759.49	-734.34	-695.27	0.00	0.00	0.00
8,300.00	11.47	315.96	8,193.86	773.78	-748.16	-708.35	0.00	0.00	0.00
8,331.00	11.47	315.96	8,224.24	778.21	-752.44	-712.41	0.00	0.00	0.00
Start DLS 10.00 TFO -135.59									
8,400.00	8.11	279.38	8,292.29	783.94	-762.02	-717.31	10.00	-4.87	-53.03
8,500.00	11.76	222.22	8,390.99	777.53	-775.86	-709.76	10.00	3.65	-57.16
8,600.00	20.24	202.19	8,487.10	753.90	-789.28	-685.09	10.00	8.48	-20.03
8,700.00	29.66	194.08	8,577.69	713.79	-801.86	-644.06	10.00	9.42	-8.11
8,800.00	39.35	189.66	8,660.02	658.40	-813.23	-587.92	10.00	9.69	-4.42
8,900.00	49.14	186.77	8,731.57	589.42	-823.03	-518.36	10.00	9.80	-2.89
9,000.00	58.99	184.64	8,790.19	508.95	-830.98	-437.50	10.00	9.85	-2.14
9,100.00	68.87	182.91	8,834.08	419.42	-836.82	-347.81	10.00	9.88	-1.73
9,200.00	78.77	181.39	8,861.91	323.57	-840.39	-252.00	10.00	9.89	-1.51

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9,300.00	88.67	179.98	8,872.84	224.31	-841.57	-152.98	10.00	9.90	-1.41
9,313.46	90.00	179.79	8,873.00	210.85	-841.54	-139.58	10.00	9.90	-1.39
Start 9797.78 hold at 9313.46 MD									
9,400.00	90.00	179.79	8,873.00	124.31	-841.23	-53.36	0.00	0.00	0.00
9,500.00	90.00	179.79	8,873.00	24.31	-840.87	46.25	0.00	0.00	0.00
9,600.00	90.00	179.79	8,873.00	-75.69	-840.51	145.87	0.00	0.00	0.00
9,700.00	90.00	179.79	8,873.00	-175.69	-840.15	245.49	0.00	0.00	0.00
9,800.00	90.00	179.79	8,873.00	-275.69	-839.79	345.11	0.00	0.00	0.00
9,900.00	90.00	179.79	8,873.00	-375.69	-839.44	444.72	0.00	0.00	0.00
10,000.00	90.00	179.79	8,873.00	-475.69	-839.08	544.34	0.00	0.00	0.00
10,100.00	90.00	179.79	8,873.00	-575.69	-838.72	643.96	0.00	0.00	0.00
10,200.00	90.00	179.79	8,873.00	-675.69	-838.36	743.58	0.00	0.00	0.00
10,300.00	90.00	179.79	8,873.00	-775.68	-838.00	843.19	0.00	0.00	0.00
10,400.00	90.00	179.79	8,873.00	-875.68	-837.64	942.81	0.00	0.00	0.00
10,500.00	90.00	179.79	8,873.00	-975.68	-837.28	1,042.43	0.00	0.00	0.00
10,600.00	90.00	179.79	8,873.00	-1,075.68	-836.92	1,142.05	0.00	0.00	0.00
10,700.00	90.00	179.79	8,873.00	-1,175.68	-836.56	1,241.66	0.00	0.00	0.00
10,800.00	90.00	179.79	8,873.00	-1,275.68	-836.21	1,341.28	0.00	0.00	0.00
10,900.00	90.00	179.79	8,873.00	-1,375.68	-835.85	1,440.90	0.00	0.00	0.00
11,000.00	90.00	179.79	8,873.00	-1,475.68	-835.49	1,540.52	0.00	0.00	0.00
11,100.00	90.00	179.79	8,873.00	-1,575.68	-835.13	1,640.13	0.00	0.00	0.00
11,200.00	90.00	179.79	8,873.00	-1,675.68	-834.77	1,739.75	0.00	0.00	0.00
11,300.00	90.00	179.79	8,873.00	-1,775.68	-834.41	1,839.37	0.00	0.00	0.00
11,400.00	90.00	179.79	8,873.00	-1,875.68	-834.05	1,938.98	0.00	0.00	0.00
11,500.00	90.00	179.79	8,873.00	-1,975.68	-833.69	2,038.60	0.00	0.00	0.00
11,600.00	90.00	179.79	8,873.00	-2,075.68	-833.33	2,138.22	0.00	0.00	0.00
11,700.00	90.00	179.79	8,873.00	-2,175.68	-832.97	2,237.84	0.00	0.00	0.00
11,800.00	90.00	179.79	8,873.00	-2,275.67	-832.62	2,337.45	0.00	0.00	0.00
11,900.00	90.00	179.79	8,873.00	-2,375.67	-832.26	2,437.07	0.00	0.00	0.00
12,000.00	90.00	179.79	8,873.00	-2,475.67	-831.90	2,536.69	0.00	0.00	0.00
12,100.00	90.00	179.79	8,873.00	-2,575.67	-831.54	2,636.31	0.00	0.00	0.00
12,200.00	90.00	179.79	8,873.00	-2,675.67	-831.18	2,735.92	0.00	0.00	0.00
12,300.00	90.00	179.79	8,873.00	-2,775.67	-830.82	2,835.54	0.00	0.00	0.00
12,400.00	90.00	179.79	8,873.00	-2,875.67	-830.46	2,935.16	0.00	0.00	0.00
12,500.00	90.00	179.79	8,873.00	-2,975.67	-830.10	3,034.78	0.00	0.00	0.00
12,600.00	90.00	179.79	8,873.00	-3,075.67	-829.74	3,134.39	0.00	0.00	0.00
12,700.00	90.00	179.79	8,873.00	-3,175.67	-829.39	3,234.01	0.00	0.00	0.00
12,800.00	90.00	179.79	8,873.00	-3,275.67	-829.03	3,333.63	0.00	0.00	0.00
12,900.00	90.00	179.79	8,873.00	-3,375.67	-828.67	3,433.25	0.00	0.00	0.00
13,000.00	90.00	179.79	8,873.00	-3,475.67	-828.31	3,532.86	0.00	0.00	0.00
13,100.00	90.00	179.79	8,873.00	-3,575.67	-827.95	3,632.48	0.00	0.00	0.00
13,200.00	90.00	179.79	8,873.00	-3,675.67	-827.59	3,732.10	0.00	0.00	0.00
13,300.00	90.00	179.79	8,873.00	-3,775.67	-827.23	3,831.72	0.00	0.00	0.00

Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Avila East 3205-10CH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 6003.00ft
Site:	Avila East Pad	MD Reference:	KB=25' @ 6003.00ft
Well:	Avila East 3205-10CH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #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)
13,400.00	90.00	179.79	8,873.00	-3,875.66	-826.87	3,931.33	0.00	0.00	0.00
13,500.00	90.00	179.79	8,873.00	-3,975.66	-826.51	4,030.95	0.00	0.00	0.00
13,600.00	90.00	179.79	8,873.00	-4,075.66	-826.16	4,130.57	0.00	0.00	0.00
13,700.00	90.00	179.79	8,873.00	-4,175.66	-825.80	4,230.18	0.00	0.00	0.00
13,800.00	90.00	179.79	8,873.00	-4,275.66	-825.44	4,329.80	0.00	0.00	0.00
13,900.00	90.00	179.79	8,873.00	-4,375.66	-825.08	4,429.42	0.00	0.00	0.00
14,000.00	90.00	179.79	8,873.00	-4,475.66	-824.72	4,529.04	0.00	0.00	0.00
14,100.00	90.00	179.79	8,873.00	-4,575.66	-824.36	4,628.65	0.00	0.00	0.00
14,200.00	90.00	179.79	8,873.00	-4,675.66	-824.00	4,728.27	0.00	0.00	0.00
14,300.00	90.00	179.79	8,873.00	-4,775.66	-823.64	4,827.89	0.00	0.00	0.00
14,400.00	90.00	179.79	8,873.00	-4,875.66	-823.28	4,927.51	0.00	0.00	0.00
14,500.00	90.00	179.79	8,873.00	-4,975.66	-822.93	5,027.12	0.00	0.00	0.00
14,600.00	90.00	179.79	8,873.00	-5,075.66	-822.57	5,126.74	0.00	0.00	0.00
14,700.00	90.00	179.79	8,873.00	-5,175.66	-822.21	5,226.36	0.00	0.00	0.00
14,800.00	90.00	179.79	8,873.00	-5,275.66	-821.85	5,325.98	0.00	0.00	0.00
14,900.00	90.00	179.79	8,873.00	-5,375.66	-821.49	5,425.59	0.00	0.00	0.00
15,000.00	90.00	179.79	8,873.00	-5,475.65	-821.13	5,525.21	0.00	0.00	0.00
15,100.00	90.00	179.79	8,873.00	-5,575.65	-820.77	5,624.83	0.00	0.00	0.00
15,200.00	90.00	179.79	8,873.00	-5,675.65	-820.41	5,724.45	0.00	0.00	0.00
15,300.00	90.00	179.79	8,873.00	-5,775.65	-820.05	5,824.06	0.00	0.00	0.00
15,400.00	90.00	179.79	8,873.00	-5,875.65	-819.70	5,923.68	0.00	0.00	0.00
15,500.00	90.00	179.79	8,873.00	-5,975.65	-819.34	6,023.30	0.00	0.00	0.00
15,600.00	90.00	179.79	8,873.00	-6,075.65	-818.98	6,122.92	0.00	0.00	0.00
15,700.00	90.00	179.79	8,873.00	-6,175.65	-818.62	6,222.53	0.00	0.00	0.00
15,800.00	90.00	179.79	8,873.00	-6,275.65	-818.26	6,322.15	0.00	0.00	0.00
15,900.00	90.00	179.79	8,873.00	-6,375.65	-817.90	6,421.77	0.00	0.00	0.00
16,000.00	90.00	179.79	8,873.00	-6,475.65	-817.54	6,521.39	0.00	0.00	0.00
16,100.00	90.00	179.79	8,873.00	-6,575.65	-817.18	6,621.00	0.00	0.00	0.00
16,200.00	90.00	179.79	8,873.00	-6,675.65	-816.82	6,720.62	0.00	0.00	0.00
16,300.00	90.00	179.79	8,873.00	-6,775.65	-816.47	6,820.24	0.00	0.00	0.00
16,400.00	90.00	179.79	8,873.00	-6,875.65	-816.11	6,919.85	0.00	0.00	0.00
16,500.00	90.00	179.79	8,873.00	-6,975.64	-815.75	7,019.47	0.00	0.00	0.00
16,600.00	90.00	179.79	8,873.00	-7,075.64	-815.39	7,119.09	0.00	0.00	0.00
16,700.00	90.00	179.79	8,873.00	-7,175.64	-815.03	7,218.71	0.00	0.00	0.00
16,800.00	90.00	179.79	8,873.00	-7,275.64	-814.67	7,318.32	0.00	0.00	0.00
16,900.00	90.00	179.79	8,873.00	-7,375.64	-814.31	7,417.94	0.00	0.00	0.00
17,000.00	90.00	179.79	8,873.00	-7,475.64	-813.95	7,517.56	0.00	0.00	0.00
17,100.00	90.00	179.79	8,873.00	-7,575.64	-813.59	7,617.18	0.00	0.00	0.00
17,200.00	90.00	179.79	8,873.00	-7,675.64	-813.24	7,716.79	0.00	0.00	0.00
17,300.00	90.00	179.79	8,873.00	-7,775.64	-812.88	7,816.41	0.00	0.00	0.00
17,400.00	90.00	179.79	8,873.00	-7,875.64	-812.52	7,916.03	0.00	0.00	0.00
17,500.00	90.00	179.79	8,873.00	-7,975.64	-812.16	8,015.65	0.00	0.00	0.00
17,600.00	90.00	179.79	8,873.00	-8,075.64	-811.80	8,115.26	0.00	0.00	0.00

Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Avila East 3205-10CH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 6003.00ft
Site:	Avila East Pad	MD Reference:	KB=25' @ 6003.00ft
Well:	Avila East 3205-10CH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #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)
17,700.00	90.00	179.79	8,873.00	-8,175.64	-811.44	8,214.88	0.00	0.00	0.00
17,800.00	90.00	179.79	8,873.00	-8,275.64	-811.08	8,314.50	0.00	0.00	0.00
17,900.00	90.00	179.79	8,873.00	-8,375.64	-810.72	8,414.12	0.00	0.00	0.00
18,000.00	90.00	179.79	8,873.00	-8,475.64	-810.36	8,513.73	0.00	0.00	0.00
18,100.00	90.00	179.79	8,873.00	-8,575.63	-810.01	8,613.35	0.00	0.00	0.00
18,200.00	90.00	179.79	8,873.00	-8,675.63	-809.65	8,712.97	0.00	0.00	0.00
18,300.00	90.00	179.79	8,873.00	-8,775.63	-809.29	8,812.59	0.00	0.00	0.00
18,400.00	90.00	179.79	8,873.00	-8,875.63	-808.93	8,912.20	0.00	0.00	0.00
18,500.00	90.00	179.79	8,873.00	-8,975.63	-808.57	9,011.82	0.00	0.00	0.00
18,600.00	90.00	179.79	8,873.00	-9,075.63	-808.21	9,111.44	0.00	0.00	0.00
18,700.00	90.00	179.79	8,873.00	-9,175.63	-807.85	9,211.05	0.00	0.00	0.00
18,800.00	90.00	179.79	8,873.00	-9,275.63	-807.49	9,310.67	0.00	0.00	0.00
18,900.00	90.00	179.79	8,873.00	-9,375.63	-807.13	9,410.29	0.00	0.00	0.00
19,000.00	90.00	179.79	8,873.00	-9,475.63	-806.78	9,509.91	0.00	0.00	0.00
19,100.00	90.00	179.79	8,873.00	-9,575.63	-806.42	9,609.52	0.00	0.00	0.00
19,111.23	90.00	179.79	8,873.00	-9,586.86	-806.38	9,620.71	0.00	0.00	0.00
TD at 19111.23									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
3205-10CH HEEL (24	0.00	0.01	8,292.16	783.94	-762.01	1,597,922.090	3,226,078.061	40° 58' 18.447 N	104° 40' 52.834 W
- plan hits target center									
- Point									
3205-10CH BHL (330	0.00	0.00	8,873.00	-9,586.86	-806.38	1,587,551.310	3,226,033.691	40° 56' 35.988 N	104° 40' 54.660 W
- plan hits target center									
- Point									
3205-10CH LP (330' F	0.00	0.00	8,873.00	210.85	-841.54	1,597,349.004	3,225,998.527	40° 58' 12.792 N	104° 40' 53.940 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
2600	2600	0	0	Start Build 2.00
3173	3170	41	-40	Start 5157.68 hold at 3173.32 MD
8331	8224	778	-752	Start DLS 10.00 TFO -135.59
9313	8873	211	-842	Start 9797.78 hold at 9313.46 MD
19,111	8873	-9587	-806	TD at 19111.23

Integrity Directional Services, LLC

Survey Report



Company:	Longs Peak Resources	Local Co-ordinate Reference:	Well Avila East 3205-10CH
Project:	Weld County, Co (NAD 83)	TVD Reference:	KB=25' @ 6003.00ft
Site:	Avila East Pad	MD Reference:	KB=25' @ 6003.00ft
Well:	Avila East 3205-10CH	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.1 Multi User Db

Checked By: _____ Approved By: _____ Date: _____