



Motor Analysis – RUN #
(BHA Pressure loss -- Intermediate Section)

Customer:
Well Name:
Location:
Rig:

Well Run Data

Run #	Date In	Date Out	Depth In	Depth Out	Hole Size	Motor SN	Bend	Config	Stabilizer	BRT Hours	D&C Hours	RSS	POOH
3	9/8/2024	9/9/2024	4678	7617	8.75"		1.83	7/8 8.5	Near-bit	22.75	9.59	No	Pressure loss

Field Comments

Once on surface motor did not drain but was spinning freely with rotary no other visible damage. Bit was grade 1-3

EDR Summary

- Drilling Parameters are as follows:
 - Flow rate (750) and RPM (55) were kept at the max allowed for this BHA for the entire run
 - Torque consistently reaches values up to 21,000 ft-lbs while on bottom (max for this BHA is rated at 18,710 ft-lbs)
 - Diff pressure during rotation was consistently around 900-1500 psi, and was around 85-150 psi during slides
- There is evidence of stick slip from the start of the run with RPM struggling to stay consistent during very fast drilling (over 800 ft/hr)
- **At about 21:15 (5590' MD) on September 8, after roughly 900 ft into this run, EDR shows a hard stall with Diff pressure spiking to 2622 psi and Standpipe pressure spiking to 5074 psi**
 - RPM drops to 25 as torque spikes to 21,000 ft-lbs
 - The BHA was not hoisted off bottom and no other reactive measures were taken in response to this stall
 - This stand started with ROP around 900 ft/hr and steadily declined to around 350 ft/hr before the stall
- RPM continues to show stick slip for the remainder of the run as differential pressure steadily declines to around 1200 psi during rotation before the final pressure loss at 05:40 on September 9

Job # - Operator - Well - Rig - BHA #



BHA Details

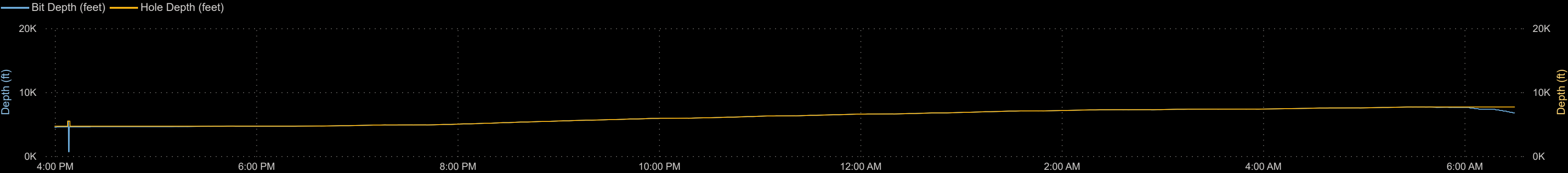
Motor: 7.0" 7/8 8.5 Stg @ 1.83° Fixed
Bit: Varel - 8.75" Vion616 (6x14s)
Flow Range (gpm): 500-750
Max Diff Pressure (psi): 1910
Max Torque (ft-lbs): 18710
Max RPM: 50
Rev/Gal: 0.26

Summary

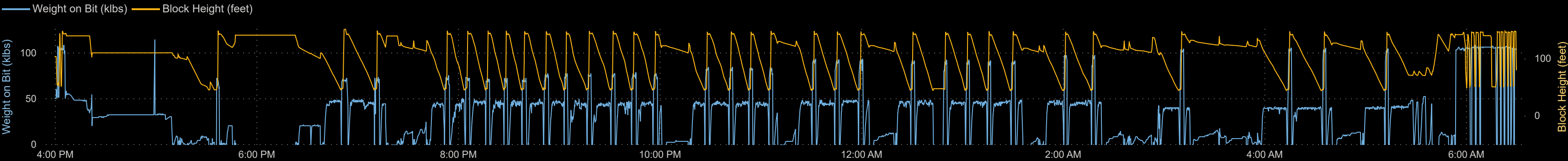
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Bit Grade:
1-3-BT-G-X-I-CT-PR

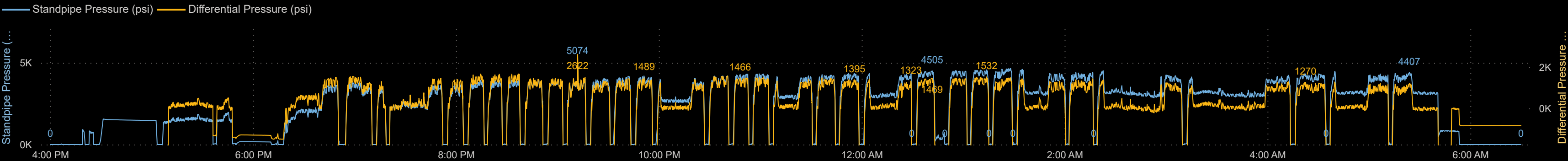
Bit Depth and Hole Depth



Weight on Bit (klbs) and Block Height (feet)



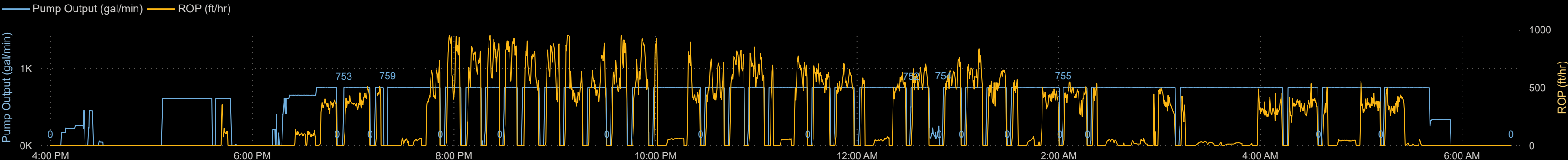
Standpipe Pressure (psi) and Differential Pressure (psi)



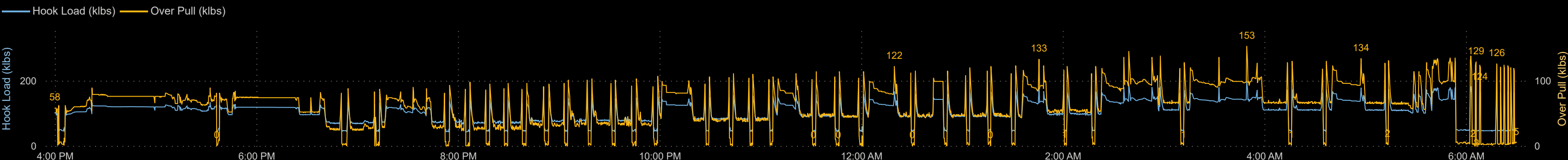
Torque (ft-lbs) and RPM



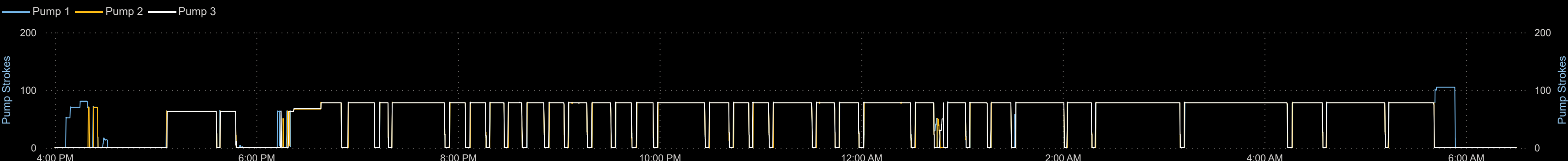
Pump Output (gal/min) and ROP (ft/h)



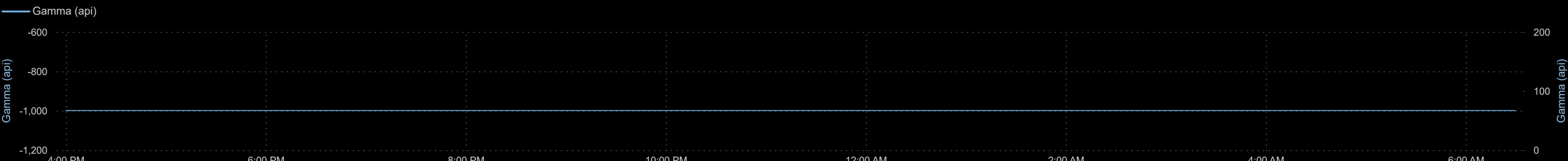
Hook Load (klbs) and Over Pull (klbs)



Pump Strokes Per Minute



Gamma (api)



Job # - Operator - Well - Rig - BHA #



BHA Details

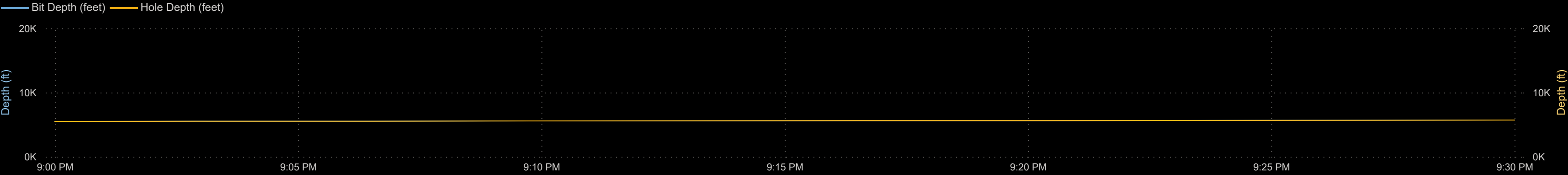
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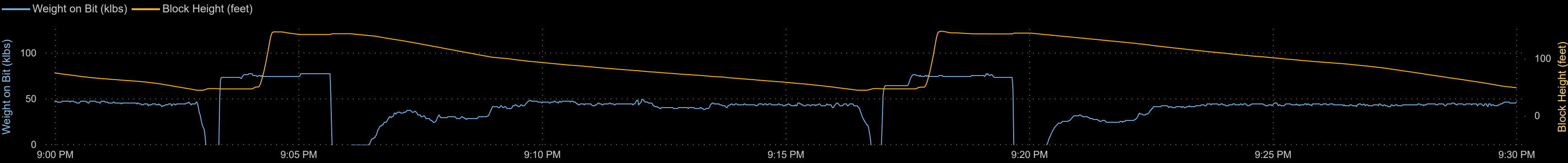
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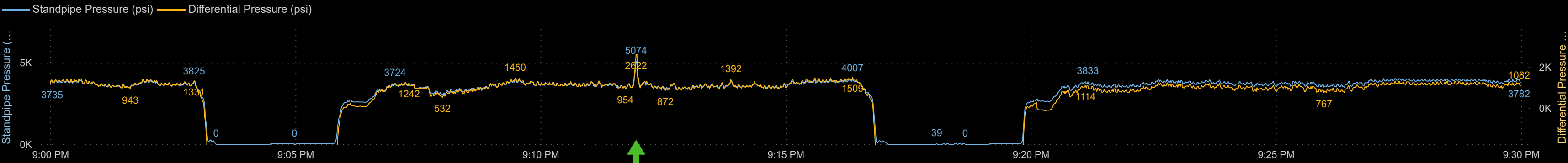
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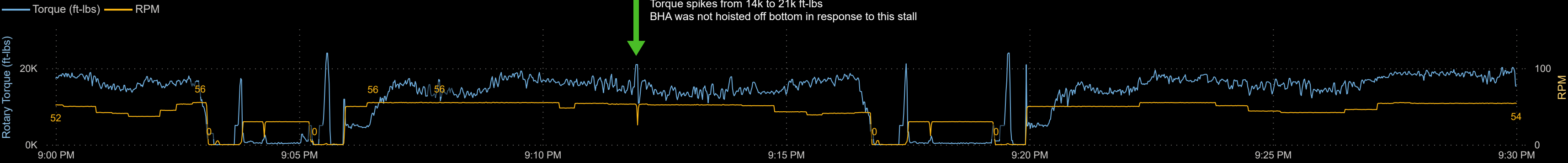
Weight on Bit (klbs) and Block Height (feet)



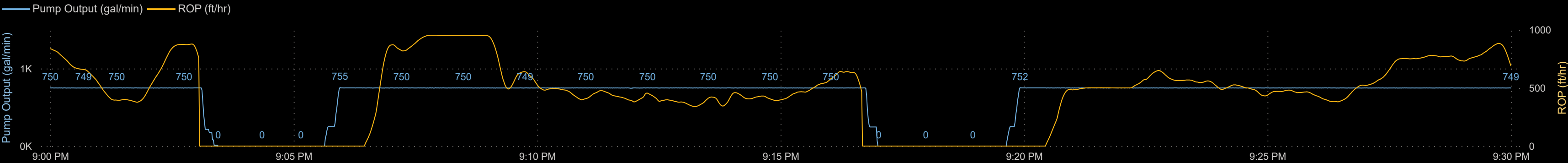
Standpipe Pressure (psi) and Differential Pressure (psi)



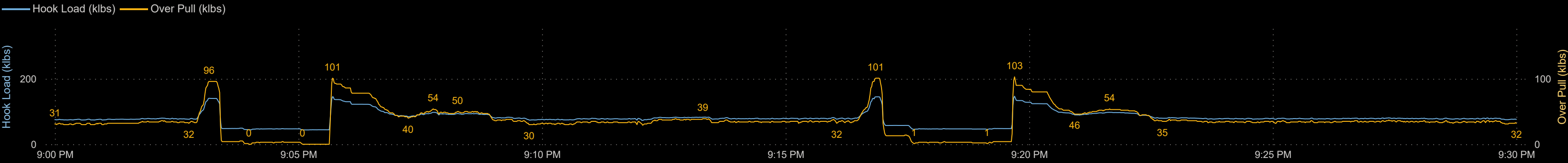
Torque (ft-lbs) and RPM



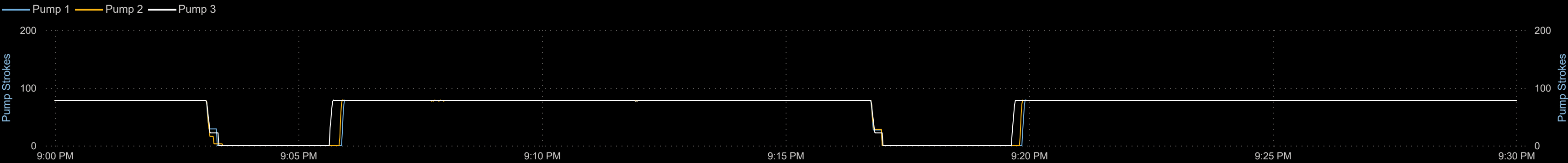
Pump Output (gal/min) and ROP (ft/h)



Hook Load (klbs) and Over Pull (klbs)



Pump Strokes Per Minute



Gamma (api)

