



**SPARTAN JAVELIN WITH FRACLOCK WELLHEAD CONNECTIONS:  
CASE STUDY #4: DELAWARE BASIN POST JOB RECAP**



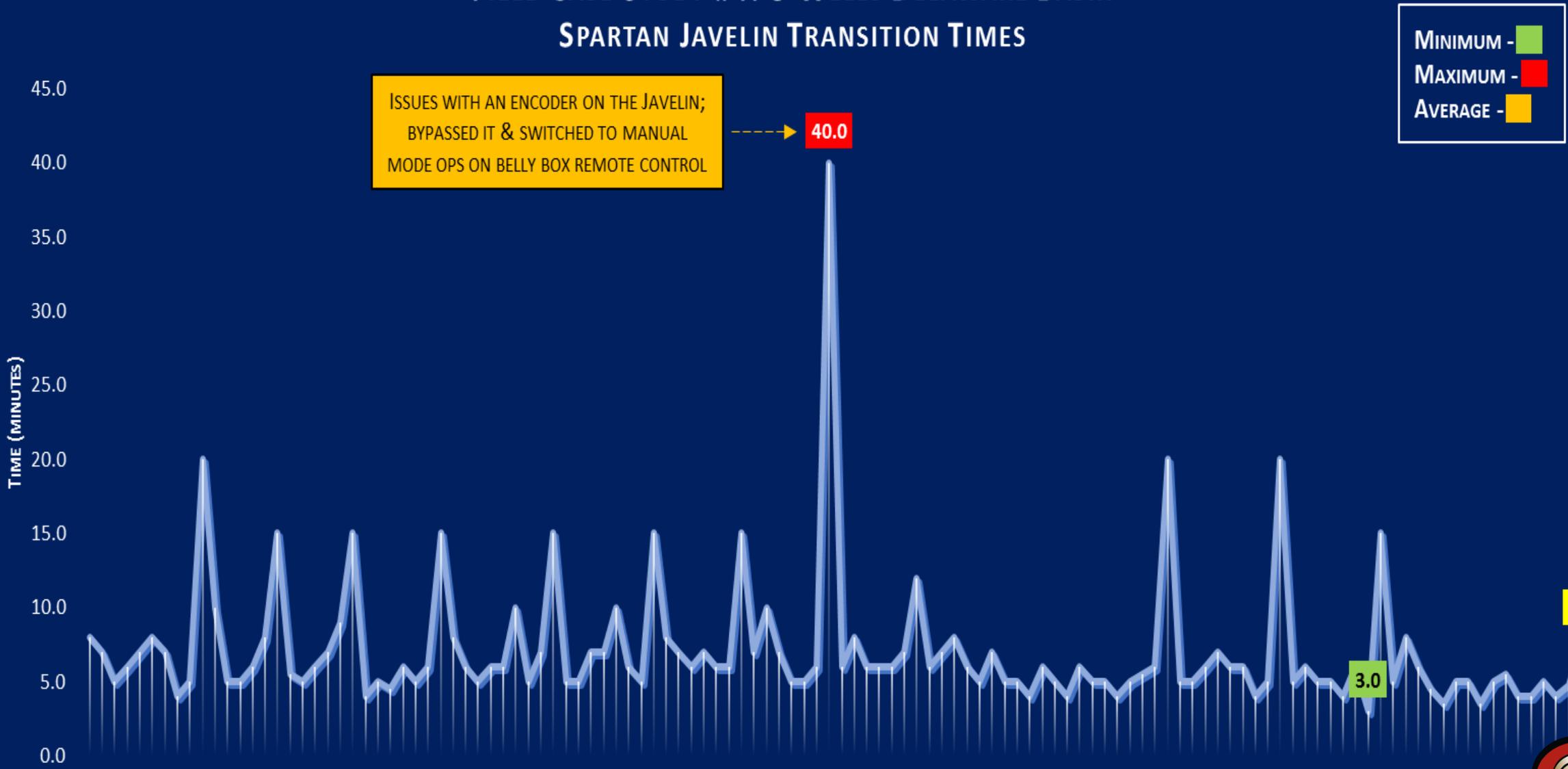
# JOB SUMMARY...

- AREA OF OPERATION: DELAWARE BASIN
- NUMBER OF STAGES: 120
- NUMBER OF WELLS: 3
- WELL SPACING: 15'
- TOTAL SAND PUMPED: 53,244,608 LBS.
- AVERAGE SAND PER STAGE: 443,705 LBS.
- TOTAL PUMP TIME: 300.1 HOURS
- AVERAGE PUMP TIME PER STAGE: 2.5 HOURS
- AVERAGE STAGES PUMPED PER DAY: 7.1
- MAX STAGES PUMPED IN A DAY: 8
- **AVERAGE JAVELIN TRANSITION TIME: 7.9 MIN.**
- AVERAGE PUMP RATE: 85 BPM
- MAX PUMP RATE: 96 BPM
- AVERAGE TREATING PRESSURE: 11,504 PSI
- MAX TREATING PRESSURE: 11,704 PSI
- AVERAGE HORSEPOWER: 41 MHP
- MAX HORSEPOWER: 47 MHP

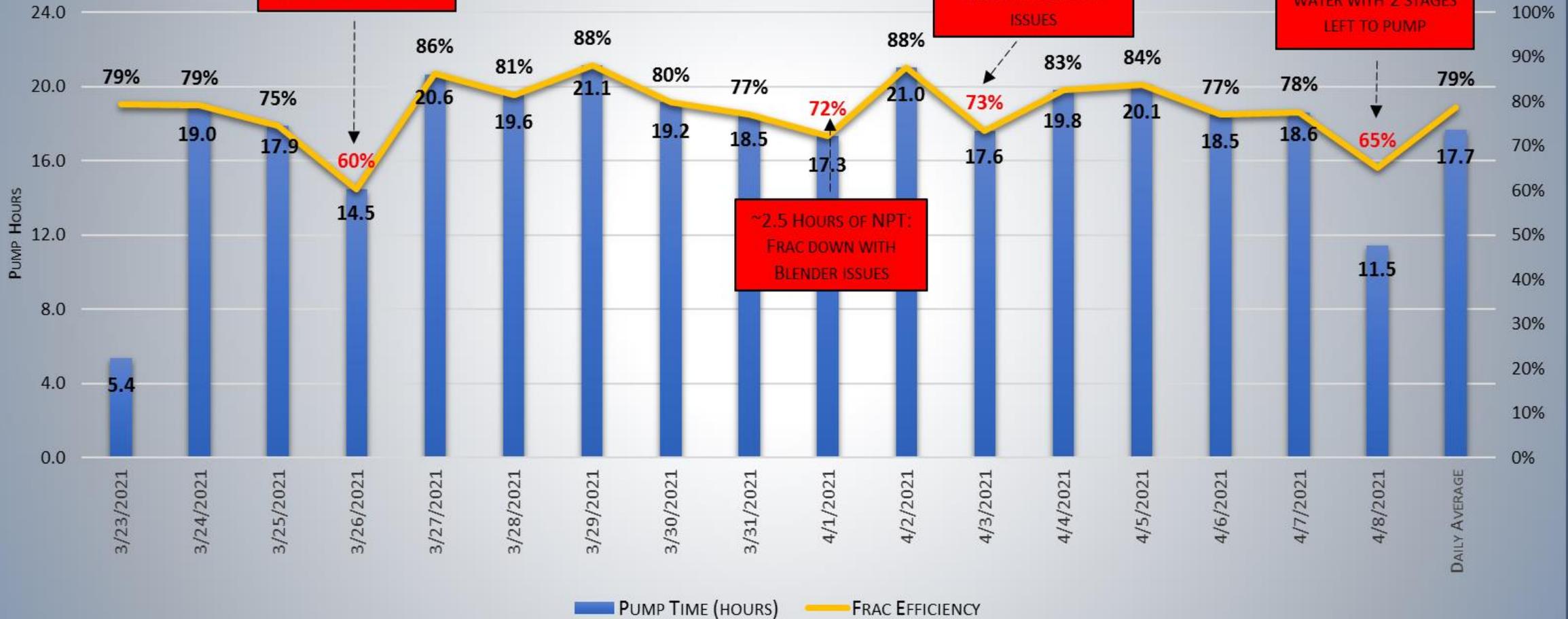


# FIELD CASE STUDY #4: 3 WELLS DELAWARE BASIN

## SPARTAN JAVELIN TRANSITION TIMES



## CASE STUDY #4: 3 WELLS DELAWARE BASIN FRAC EFFICIENCY



- **80%+ FRAC EFFICIENCY ON 7 OF 15 FULL DAYS OF FRAC OPS; OR ~47% OF THE TIME**
- **~79% FRAC EFFICIENCY FOR DURATION OF THE JOB IS NEW HIGH WHEN USING THIS SYSTEM**
- **BOTH DAYS OF LESS THAN 65% FRAC EFFICIENCY WERE ATTRIBUTED TO EQUIPMENT ISSUES FROM OTHER SERVICES ON LOCATION**



# FRACLOCK UNIVERSAL WELLHEAD CONNECTION PROVES TO BE COIL TUBING CAPABLE...

