



**SPARTAN JAVELIN WITH FRACLOCK WELLHEAD CONNECTIONS:
CASE STUDY #2: DELAWARE BASIN POST JOB RECAP**



JOB SUMMARY...

- AREA OF OPERATION: DELAWARE BASIN
- NUMBER OF STAGES: 71
- NUMBER OF WELLS: 2
- TOTAL SAND PUMPED: 34,287,601 LBS.
- AVERAGE SAND PER STAGE: 482,924 LBS.
- TOTAL PUMP TIME: 166.2 HOURS
- AVERAGE PUMP TIME PER STAGE: 2.3 HOURS
- AVERAGE STAGES PUMPED PER DAY: 7.1
- MAX STAGES PUMPED IN A DAY: 9
- **AVERAGE JAVELIN TRANSITION TIME: 5.0 MIN.**
- AVERAGE PUMP RATE: 87 BPM
- MAX PUMP RATE: 95 BPM
- AVERAGE TREATING PRESSURE: 11,379 PSI
- MAX TREATING PRESSURE: 12,163 PSI
- AVERAGE HORSEPOWER: 48 MHP
- MAX HORSEPOWER: 58 MHP



FIELD CASE STUDY #2: DELAWARE BASIN

SPARTAN JAVELIN TRANSITION TIMES

10:48
9:36
8:24
7:12
6:00
4:48
3:36
2:24
1:12
0:00



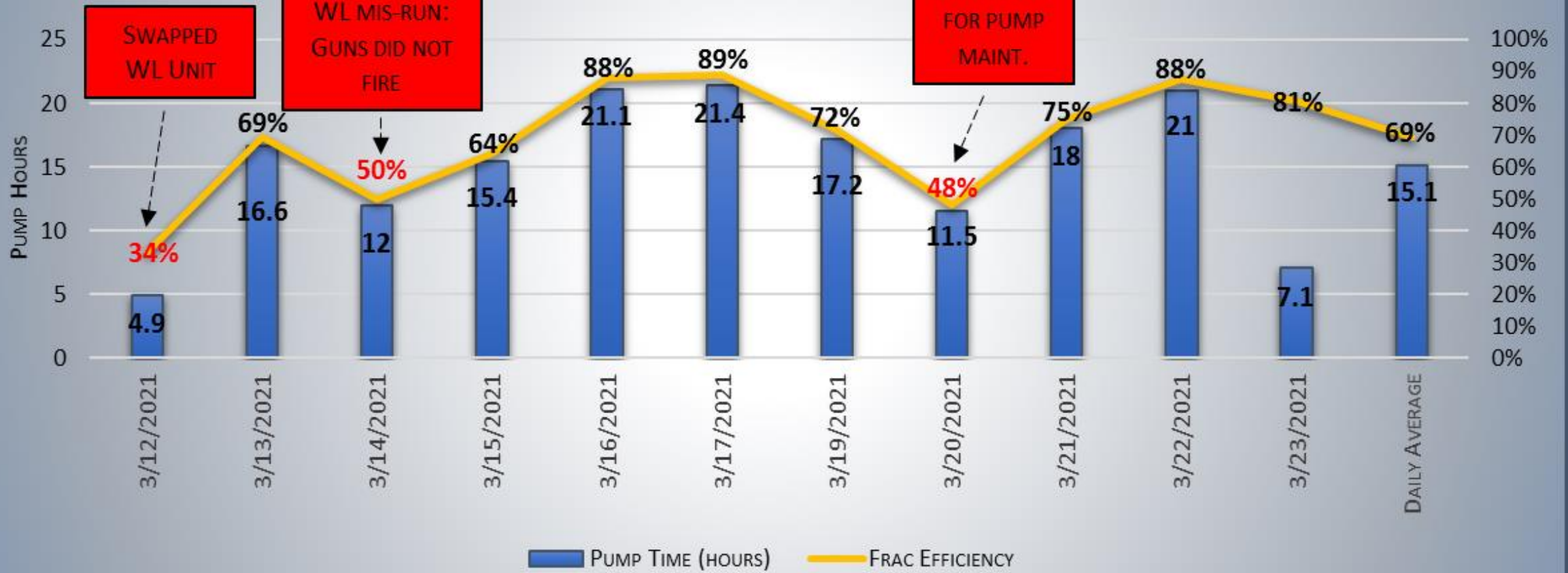
10:05

2:56

5:06



CASE STUDY #2: DELAWARE BASIN FRAC EFFICIENCY



- 21+ HOURS PUMPED ON 3 OF 9 FULL DAYS OF FRAC OPS; OR ~33% OF THE TIME
- +80% FRAC EFFICIENCY (PUMP TIME DIVIDED BY TOTAL TIME IN THAT DAY) ON 4 DIFFERENT DAYS
- ALL 3 DAYS OF LESS THAN 50% FRAC EFFICIENCY WERE ATTRIBUTED TO EQUIPMENT ISSUES FROM OTHER SERVICES ON LOCATION
- MAX STAGES PUMPED IN A DAY: 9 (3/16)

