

Streamlining Proppant Logistics with SENTINEL

SENTINEL DIFFERENCE

- 90% reduction in proppant delivery downtime leading to emission reductions.
- 35% decrease in drivers needed for a job, lowering Liberty footprint on the road.
- 33% decrease in total time required to deliver a load of proppant.
- Leverages real-time data from each frac location.
- Understand cadence of every job and proactively plan for proppant delivery.

ADVANCEMENTS IN LIBERTY DATA

- Eliminates need for third party data aggregators.
- Standardized data across basins
- Supports Liberty partnerships with trucking companies.
- Enhanced control of data and reporting format.



Liberty's Sentinel platform stands out as an advanced system that can harness real-time data from every frac location to provide insight into current operations and material inventories.

Liberty's Sentinel platform stands out as an advanced system that can harness real-time data from every frac location to precisely predict on-site proppant volumes for the upcoming 24- hours. This comprehensive data set comprises current inventory levels, consumption rate trends, proppant truck count, truck locations, loading facility wait times, traffic conditions, and weather updates. Sentinel's visibility and predictive analytics have allowed Liberty to maximize pick-up and delivery efficiencies while substantially reducing our overall active truck count.

Liberty leverages the power of Sentinel to efficiently manage the logistics of moving proppant to support our frac fleets and ensure our inventory levels are optimized on location.

Our strategic combination of the entire proppant supply chain and logistics eliminates supply interruptions and stabilizes costs, reflecting our commitment to excellence and efficient execution.

LIBERTYENERGY.COM

Job forecast is built and delivered

24-hour logistics plan is developed

Job begins pumping

Data is routed through our integrated system

Liberty specialist can view data in real-time to determine when to order

Unplanned downtime on location may pause need for inbound deliveries

11

Liberty logistics team can determine if loads need to be re-routed to other locations

When operations resume, Liberty can instantly resume ordering and routing loads to location SENTINEL

III

බ

Ħ

 \bigcirc

0

 $\langle \rangle$

Liberty logistics specialists monitor and reroute proppant loads during well-site downtime.

> Read the Paper Here