



Hydraulic fracturing is a temporary industrial activity that is sometimes performed in the vicinity of homes and schools. Since inception, Liberty Energy has worked to minimize the potential nuisance from fracturing activity. Nearby residents may be affected by elevated noise levels, dust and truck traffic associated with fracking. Liberty is the first pumping service provider to address all three of these issues.

Liberty introduced last-mile proppant transport to the DJ Basin in 2013. Boxed sand solutions improve logistics and minimize dust and noise. Following that, we pioneered low-concentration crosslinked gels to the DJ, significantly reducing truck traffic associated with chemical deliveries.

In 2016, Liberty invented a new state-of-the-art for frac equipment that dramatically reduced noise levels associated with pumping. Numerous patent-pending sound reduction features lessen sounds levels by more than three-fold (10+ dB noise reduction) at every measured frequency from 20-20,000 Hz, as well as a reduction of 20+ dBC at the lower, most impactful side of the noise spectrum.

Sound levels at a 1,000' setback from a Quiet Fleet™ frac location are now quieter than a typical indoor conversation. In fact, a Liberty Quiet Fleet™ as heard from 500' away is almost twice as quiet as a conventional fleet located 1000' away. In addition to noise reduction benefits, our quiet fleets are equipped with a 3 tier AFEX fire suppression system that provides our crews with early fire detection and a safer way to frac. This technology is a game changer for frac jobs in urban settings. Liberty aims to be everyone's best neighbor.

3X QUIETER THAN A CONVENTIONAL FRACTURING FLEET

Noise Level	Comparison
110	Rock Concert
105	Stadium Sporting Event
85	Food Blender (@ 3 feet)
80	Heavy Traffic
70	Neighbor's Lawnmower
65	Conventional Frac Fleet (@ 1000 feet)
60	Normal Conversation
50	Liberty Quiet Fleet™ (@ 1000 feet)
30	Library
5	Threshold of Hearing