Frac Sand Glossary
API standards
Benchmark criteria for products and practices of the worldwide oil and natural gas industry established and maintained by the American Petroleum Institute to enhance safety, assure quality, increase efficiency and promote clarity

Blender
Frac spread equipment used to mix proppant, fluids and chemicals in a hydraulic fracturing treatment

Conductivity
A measure of the ability of hydrocarbons to flow in a fractured reservoir; it is the product of fracture width and proppant permeability

Container
A modular device for transporting, storing, and delivering proppant to the frac blender

Crush Resistance
The ability of proppant to withstand formation pressure; API standards

Frac spread
The assembly of equipment used to execute the hydraulic fracturing treatment

Grain size
The diameter of proppant measured on the Krumbein phi scale and specified as the mesh or sieve size; API standards

Gravity transfer
A process of transferring proppant using gravity

Hopper bottom
A truck trailer that unloads proppant through a bottom opening; a gravity transfer method

Hydraulic fracturing
The high-pressure injection of proppant and fluids into the formation to create conductive flow paths for oil and gas

Kermit mine
The first in-basin mine located in the Permian Basin of West Texas; owned and operated by Hi-Crush

Manifest train
A train with mixed rail cars and cargo

Mesh
Grain size sorted by two sieve cuts for maximum and minimum diameters, e.g., 20/40 and 40/70 mesh sand

Mineralogy
In sand processing, refers to a solubility test that describes turbidity or presence of impurities such as clays and silt; API standards

Mobile silo
A transportable device for onsite storage of large volumes of proppant

Multiwell
Typically refers to several wells drilled from the same worksite or pad

Northern White
A high-quality silica sand mined in the Great Lakes Region

Ottawa
A high-quality silica sand mined in the Great Lakes Region

Overburden
Topsoil removed to expose a mine’s sand deposits

Permeability
The measurement of the ability to transmit fluids through a porous media or rock; typically measured in darcies or millidarcies

Permian Basin
A very active oil and gas region in West Texas

Permian Pearl™
A high-quality in-basin silica sand mined in West Texas

Pneumatic transfer
A process of transferring sand using compressed air

Porosity
The percentage of void space in a rock that could contain fluids

Proppant
A highly specified material that holds open the conductive flow path created by hydraulic fracturing

Proppant logistics
The process of mining, moving and managing frac sand

Quartz
The earth’s second most abundant mineral; ranks 7 out of 10 in hardness

Silica dust
Respirable crystalline silica; exposure limits set by OSHA

Silica sand
Granular quartz

Sphericity
The roundness of the sand grain; API standards

Transload facility
Proppant storage and transfer point between the mine and the wellsite

Unit train
A large assembly of rail cars dedicated to a single commodity