



WATER DELIVERY METHOD RUSH SOUTH PHASE 2

Grande South

Fresh water used for completion operations at the Grande South location will be transported by a temporary water line ("Layflat").

Layflat description: Temporary, above-ground water supply line, typically 12" in diameter and typically made of synthetic rubber or similar "hose" material. They are used for the transfer of water from an identified water source to support company's hydraulic fracturing operations.

"Facilities" associated with use of Layflat lines include the following:

- In-line pumps
- Spools
- Secondary containment equipment
- Ramps

Equipment used for installation may include pick-up trucks, flatbed trailers, skid steer, and skid steer mounted reel winder.

Layflat lines are laid on the surface, at grade and do not require excavation. They do not require staking in order to secure them from movement and are placed at least 10' from the edge of the roadway.

Deployment and retrieval of a Layflat line: a truck carrying spools of hose follows along-side a skid steer tractor. The skid steer carries and straddles the spool of Layflat line and releases the hose by the reel rolling forward. Victaulic couplings are used to assemble segments of Layflat hose. The process of retrieving the Layflat hose involves the same equipment and process in reverse (reel rolling backward). When Layflat lines run alongside road right of way, traffic control plans are implemented to manage and mandate safety procedures.

Route Description

The scope of this fresh water transfer will originate from Sky Ranch Pond located in Section 10, T4S, R65W, Arapahoe County, Colorado. *Both potential routes described below are contingent upon several agreements with various parties and are subject to change.*

Grande South Primary

- From Sky Ranch: South along Hayesmount Rd. via private landowner
- West along Mississippi via private landowner
- Private landowner agreement to enter pad location

Grande South Alternate

- From Sky Ranch: West along south side of future 6th avenue (*City license needed*)
- South along east side Powhaton Rd. via City license #18-87, Exhibit A-6 dated 12/4/18 (*Amendment to City license needed to include roadway easement along Powhaton Rd. and the west half of Section 9*)
- Private landowner agreement to enter pad location

