

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|------------------------|
| Job Start Date: | 8/19/2016 |
| Job End Date: | 8/30/2016 |
| State: | Texas |
| County: | Reagan |
| API Number: | 42-383-39596-00-00 |
| Operator Name: | Permian Resources |
| Well Name and Number: | University 10RE 0632HE |
| Latitude: | 31.28895500 |
| Longitude: | -101.47038200 |
| Datum: | NAD27 |
| Federal Well: | NO |
| Indian Well: | NO |
| True Vertical Depth: | 7,200 |
| Total Base Water Volume (gal): | 16,091,789 |
| Total Base Non Water Volume: | 0 |



Hydraulic Fracturing Fluid Composition:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|------------|-------------------------|----------------------|--|--|--|--|----------|
| Water | Permian Resources, Inc. | Carrier / Base Fluid | | | | | |
| | | | Carrier / Base Fluid - Water | 7732-18-5 | 100.00000 | 91.99179 | |
| 100 Mesh | WFT | Proppant | | | | | |
| | | | Crystalline Silica in the form of Quartz | 14808-60-7 | 100.00000 | 7.87042 | |
| 7.5% HCL | WFT | Acid | | | | | |
| | | | Hydrochloric Acid | 7647-01-0 | 7.50000 | 0.04891 | |
| WFR-54LA | WFT | Friction Reducer | | | | | |
| | | | Distillates (petroleum), hydrotreated light | 64742-47-8 | 45.00000 | 0.03532 | |
| WIC-644L | WFT | Iron Control | | | | | |
| | | | acetic acid glacial | 64-19-7 | 90.00000 | 0.00341 | |
| WIC-641L | WFT | Iron Control | | | | | |
| | | | Citric acid | 77-92-9 | 60.00000 | 0.00264 | |
| WAI-251LC | WFT | Inhibitor | | | | | |
| | | | Ethylene Glycol | 111-76-2 | 40.00000 | 0.00061 | |
| | | | N,N-Dimethylformamide | 68-12-2 | 20.00000 | 0.00031 | |
| | | | Tar bases, quinoline derivs, benzyl chloride-quaternized | 72480-70-7 | 10.00000 | 0.00015 | |

| | | | | | | |
|-----------|-----|------------|-------------------------|------------|----------|---------|
| | | | 2-Butoxyethanol | 111-76-2 | 10.00000 | 0.00015 |
| | | | 1-Decanol | 112-30-1 | 5.00000 | 0.00008 |
| | | | Isopropyl Alcohol | 67-63-0 | 5.00000 | 0.00008 |
| | | | Triethylphosphate | 78-40-0 | 5.00000 | 0.00008 |
| | | | 1-Octanol | 111-87-5 | 5.00000 | 0.00008 |
| | | | Ethoxylated Nonylphenol | 68412-54-4 | 5.00000 | 0.00008 |
| WNE-366LN | WFT | Surfactant | | | | |
| | | | Methanol | 67-56-1 | 45.00000 | 0.00030 |

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

| Other Ingredients | | Other Chemicals | | | | |
|-------------------|--|-----------------|-----------------------------------|-------------|--|---------|
| | | | Cinnamaldehyde | 104-55-2 | | 0.00008 |
| | | | Proprietary Surfactant Compound 1 | Proprietary | | 0.00003 |
| | | | Proprietary Surfactant Compound 2 | Proprietary | | 0.00003 |
| | | | Dioxane | 123-91-1 | | 0.00002 |
| | | | Acetaldehyde | 75-07-0 | | 0.00002 |
| | | | Ethylene Oxide | 75-21-8 | | 0.00002 |

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)