

Hydraulic Fracturing Fluid Product Component Information Disclosure

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|-----------------------------------|---------------------------|
| Last Fracture Date | 05/08/2012 |
| State: | California |
| County: | Kern |
| API Number: | 04-030-47162 |
| Operator Name: | Aera Energy Llc |
| Well Name and Number: | Belridge V 7339D-2 |
| Longitude: | -119.6878364 |
| Latitude: | 35.4332078 |
| Long/Lat Projection: | NAD83 |
| Production Type: | Oil |
| True Vertical Depth (TVD): | 1,980 |
| Total Water Volume (gal)*: | 90,552 |

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 | Operator | Carrier | Water | 7732-18-5 | 100.00% | 77.77463% | |
| GBW-5 | Baker Hughes | Breaker | Ammonium Persulfate | 7727-54-0 | 100.00% | 0.00309% | SmartCare Product |
| Enzyme G-I | Baker Hughes | Breaker | Hemicellulase Enzyme Concentrate | 9025-56-3 | 3.00% | 0.00093% | SmartCare Product |
| | | | Water | 7732-18-5 | 97.00% | 0.02999% | |
| Clay Master-5C (Tote) | Baker Hughes | Clay Control | Oxyakylated Amine Quat | 138879-94-4 | 60.00% | 0.05047% | |
| XLW-10A | Baker Hughes | Crosslinker | Ethylene Glycol | 107-21-1 | 30.00% | 0.02336% | SmartCare Product |
| | | | Sodium Hydroxide | 1310-73-2 | 10.00% | 0.00779% | |
| | | | Sodium Tetraborate | 1330-43-4 | 30.00% | 0.02336% | |
| GW-3LDF | Baker Hughes | Gelling Agent | Acyclic Hydrocarbon Blend | Trade Secret | 60.00% | 0.13723% | SmartCare Product |
| | | | Alcohols, C12-14, Ethoxylated Propoxylated | 68439-51-0 | 5.00% | 0.01144% | |
| | | | Crystalline Silica, Quartz | 14808-60-7 | 5.00% | 0.01144% | |
| | | | Guar Gum | 9000-30-0 | 60.00% | 0.13723% | |
| Sand, Brown, 20/40 | Baker Hughes | Proppant | Crystalline Silica (Quartz) | 14808-60-7 | 100.00% | 21.70054% | |
| ScaleSorb 3, (25# pail) | Baker Hughes | Scale Inhibitor | Amino Alkyl Phosphonic Acid | Trade Secret | 30.00% | 0.00618% | SmartCare Product |
| | | | Crystalline Silica: Quartz (SiO2) | 14808-60-7 | 1.00% | 0.00021% | |
| | | | Diatomaceous Earth, Calcined | 91053-39-3 | 100.00% | 0.02060% | |

| | | | | | | | |
|--|--|--|--|------------|-------|---------------|--|
| | | | Phosphonic Acid | 13598-36-2 | 1.00% | 0.00021% | |
| 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. | | | | | | | |
| | | | Isotridecanol, Ethoxylated (TDA-6) | 9043-30-5 | | 0.0114355846% | |
| | | | Isotridecanol, Ethoxylated (TDA-9) | 9043-30-5 | | 0.0114355846% | |
| | | | Quaternary Ammonium Compounds bis[Hydrogenated Tallow Alkyl] Dimethyl Salts With Bentonite | 68953-58-2 | | 0.0114355846% | |
| | | | Water | 7732-18-5 | | 0.0270110215% | |
| * 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% | | | | | | | |
| Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS) | | | | | | | |