

Hydraulic Fracturing Fluid Product Component Information Disclosure

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|----------------------------|--------------------|
| Fracture Date: | 6/25/2011 |
| State: | Texas |
| County: | Andrews |
| API Number: | 42-003-42493 |
| Operator Name: | SM Energy |
| Well Name and Number: | Univ. 7 Berkley #6 |
| Longitude: | -102.53784939 |
| Latitude: | 32.22150712 |
| Long/Lat Projection: | NAD83 |
| Production Type: | Oil |
| True Vertical Depth (TVD): | 10,110 |
| Total Water Volume (gal)*: | 709,296 |

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 |
|-----------------------|-----------|--------------------------|------------------------------|--|--|--|----------|
| HVG-1 | Frac Tech | water gelling agent | Guar Gum | 9000-30-0 | 50.00% | 0.15350% | |
| | | | Petroleum Distillate | 6472-47-8 | 55.00% | 0.16890% | |
| | | | Clay | 14808-60-7 | 2.00% | 0.00610% | |
| | | | Surfactant | 68439-51-0 | 2.00% | 0.00610% | |
| BXL-2 | Frac Tech | Borate Crosslinker | Sodium Metaborate | 10555-76-7 | 25.00% | 0.03960% | |
| | | | Boric Acid | 10043-35-3 | 15.00% | 0.03900% | |
| | | | Potassium hydroxide | 1310-58-3 | 12.00% | 0.02410% | |
| FE-100L | Frac Tech | Iron Control | Citric Acid | 77-92-9 | 55.00% | 0.00460% | |
| CI-150 | Frac Tech | Acid Corrosion Inhibitor | Isopropanol | 67-63-0 | 60.00% | 0.00360% | |
| | | | Dimethylformamide | 68-12-2 | 10.00% | 0.00060% | |
| | | | Organic amine resin salt | Proprietary | 30.00% | 0.00180% | |
| | | | Quaternary ammonium compound | Proprietary | 10.00% | 0.00060% | |
| | | | Aromatic aldehyde | Proprietary | 10.00% | 0.00060% | |
| CS-250-SI | Frac Tech | Scale Inhibitor | Ethylene glycol | 103-21-1 | 10.00% | 0.00210% | |
| LTB-1 | Frac Tech | Breaker | Ammonium Persulfate | 7727-54-0 | 75.00% | 0.00390% | |
| | | | Cured acrylic resin | not available | 16.00% | 0.00080% | |
| | | | Silica Crystalline-Quartz | 14808-60-7 | 10.00% | 0.00050% | |
| NE-100 | Frac Tech | Non-emulsifier | 2-Butoxyethanol | 111-76-2 | 10.00% | 0.00250% | |
| | | | 2-Propanol | 67-63-0 | 10.00% | 0.00250% | |
| | | | Dodecylbenzenesulfonic acid | 27176-87-0 | 5.00% | 0.00120% | |
| Shale Surf 1000 | Frac Tech | Surfactant | Alkylaryl ethoxylate | 9016-45-9 | 20.00% | 0.00460% | |
| | | | 2-Butoxyethanol | 111-76-2 | 10.00% | 0.00230% | |
| | | | 2-Propanol | 67-63-0 | 10.00% | 0.00230% | |
| | | | Cyclohexene | 5989-27-5 | 10.00% | 0.00230% | |
| | | | Methanol | 67-56-1 | 10.00% | 0.00230% | |
| 15% Hydrochloric Acid | Frac Tech | Acidizing | Hydrochloric Acid | 7647-01-0 | 15.00% | 2.47470% | |

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|-------|-----------|----------|--------------------|------------|---------|-----------|--|
| Water | Operator | Carrier | Water | 7732-18-5 | 100.00% | 90.33230% | |
| Sand | Frac Tech | Proppant | Crystalline Silica | 14808-60-7 | 100.00% | 6.63930% | |

* 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%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.