

## Hydraulic Fracturing Fluid Product Component Information Disclosure

|                            |                     |
|----------------------------|---------------------|
| Last Fracture Date         | 02/13/2013          |
| State:                     | California          |
| County:                    | Kern                |
| API Number:                | 04-030-48575        |
| Operator Name:             | Vintage Prod Of Cal |
| Well Name and Number:      | Purple Tiger 10H    |
| Longitude:                 | -119.34731          |
| Latitude:                  | 35.63854            |
| Long/Lat Projection:       | NAD27               |
| Production Type:           | Oil                 |
| True Vertical Depth (TVD): | 8,180               |
| Total Water Volume (gal)*: | 399,504             |

### 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%  | 81.40570%  |                   |
| Enzyme G-I             | Baker Hughes | Breaker       | Hemicellulase Enzyme Concentrate  | 9025-56-3                                | 3.00%  | 0.00147%   | SmartCare Product |
|                        |              |               | Water                             | 7732-18-5                                | 97.00%   | 0.04744%   |                   |
| High Perm CRB          | Baker Hughes | Breaker       | Ammonium Persulphate              | 7727-54-0                                | 60.00%   | 0.00059%   | SmartCare Product |
|                        |              |               | Crystalline Silica Quartz         | 14808-60-7                               | 30.00%   | 0.00029%   |                   |
| BF-8L                  | Baker Hughes | Buffer        | Monoethanolamine                  | 141-43-5                                 | 85.00%   | 0.18999%   |                   |
| XLW-56, 330 gal tote   | Baker Hughes | Crosslinker   | D-Glucitol                        | 50-70-4                                  | 10.00%   | 0.00576%   |                   |
|                        |              |               | Glyoxal                           | 107-22-2                                 | 30.00%   | 0.01729%   |                   |
|                        |              |               | Sodium Hydroxide                  | 1310-73-2                                | 5.00%  | 0.00288%   |                   |
|                        |              |               | Sodium Tetraborate                | 1330-43-4                                | 10.00%   | 0.00576%   |                   |
| GW-3LDF                | Baker Hughes | Gelling Agent | 1-Butoxy-2-Propanol               | 5131-66-8                                | 5.00%  | 0.03519%   | SmartCare Product |
|                        |              |               | Crystalline Silica, Quartz (SiO2) | 14808-60-7                               | 5.00%  | 0.03519%   |                   |
|                        |              |               | Guar Gum                          | 9000-30-0                                | 60.00%   | 0.42225%   |                   |
|                        |              |               | Isotridecanol, ethoxylated        | 9043-30-5                                | 5.00%  | 0.03519%   |                   |
|                        |              |               | Paraffinic Petroleum Distillate   | 64742-55-8                               | 30.00%   | 0.21112%   |                   |
|                        |              |               | Petroleum Distillates             | 64742-47-8                               | 30.00%   | 0.21112%   |                   |
| Ferrotrol 300L (Totes) | Baker Hughes | Iron Control  | Citric Acid                       | 77-92-9                                  | 60.00%   | 0.02773%   | SmartCare Product |

|   |              |            |                             |              |         |               |                   |
|---|--------------|------------|-----------------------------|--------------|---------|---------------|-------------------|
| Sand, White, 20/40  | Baker Hughes | Proppant   | Crystalline Silica (Quartz) | 14808-60-7   | 100.00% | 17.09552%     |                   |
| GasFlo G, 330 gal tote  | Baker Hughes | Surfactant | Methanol                    | 67-56-1      | 30.00%  | 0.04932%      | SmartCare Product |
|   |              |            | Mixture of Surfactants      | Trade Secret | 60.00%  | 0.09865%      |                   |
|   |              |            | Water                       | 7732-18-5    | 50.00%  | 0.08220%      |                   |
| <b>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.</b> |              |            |                             |              |         |               |                   |
|   |              |            | 2-Butoxy-1-Propanol         | 15821-83-7   |         | 0.0005629973% |                   |
|   |              |            | Cured Acrylic Resin         | Trade Secret |         | 0.0002932672% |                   |
|   |              |            | Water                       | 7732-18-5    |         | 0.0184885539% |                   |
| * 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)         |              |            |                             |              |         |               |                   |