

## Hydraulic Fracturing Fluid Product Component Information Disclosure

|                            |                   |
|----------------------------|-------------------|
| Fracture Date:             | 1/25/2012         |
| State:                     | California        |
| County/Parish              | Kern County       |
| API Number:                | 0403038283        |
| Operator Name:             | OXY USA ELK HILLS |
| Well Name and Number:      | 2-84-19B          |
| Longitude:                 | -119.536516130862 |
| Latitude:                  | 35.2155052573267  |
| Long/Lat Projection:       | NAD83             |
| Production Type:           | Oil               |
| True Vertical Depth (TVD): | 4,300             |
| Total Water Volume (gal)*: | 51,958            |

### 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 |
|----------------|--------------|--|---|--|--|--|----------|
| WF125, YF125ST | Schlumberger | Activator , Surfactant , Breaker, Crosslinker, Gelling Agent, Bactericide, Demulsifier, Propping Agent | Water (Including Mix Water Supplied by Client)* | -  |  | 70.96443%  |          |
|                |              |  | Crystalline silica                              | 14808-60-7                               | 97.01863%  | 28.16991%  |          |
|                |              |  | Guar gum  | 9000-30-0                                | 0.80675%   | 0.23425%   |          |
|                |              |  | Phenolic resin                                  | 9003-35-4                                | 0.79745%   | 0.23155%   |          |
|                |              |  | Propan-2-ol                                     | 67-63-0                                  | 0.34342%   | 0.09971%   |          |
|                |              |  | Alcohol, C7-9-iso, C8, ethoxylated              | 78330-19-5                               | 0.33670%   | 0.09776%   |          |
|                |              |  | 1, 2, 3 - Propanetriol                          | 56-81-5                                  | 0.16069%   | 0.04666%   |          |
|                |              |  | Diammonium peroxidisulphate                     | 7727-54-0                                | 0.15500%   | 0.04501%   |          |

|  |  |  |   |            |          |          |  |
|--|--|--|---|------------|----------|----------|--|
|  |  |  | Methanol  | 67-56-1    | 0.11083% | 0.03218% |  |
|  |  |  | Sodium tetraborate decahydrate                            | 1303-96-4  | 0.09641% | 0.02799% |  |
|  |  |  | Decyl-dimethyl amine oxide                                | 2605-79-0  | 0.06291% | 0.01827% |  |
|  |  |  | Vinylidene chloride/methylacrylate copolymer              | 25038-72-6 | 0.02945% | 0.00855% |  |
|  |  |  | Alcohol, C9-11-iso, C10, ethoxylated                      | 78330-20-8 | 0.01970% | 0.00572% |  |
|  |  |  | Ethoxylated propoxylated 4-nonylphenol-formaldehyde resin | 30846-35-6 | 0.01472% | 0.00428% |  |
|  |  |  | Heavy aromatic naphtha                                    | 64742-94-5 | 0.00995% | 0.00289% |  |
|  |  |  | Quaternary ammonium compounds chlorides derivatives       | 68989-00-4 | 0.00975% | 0.00283% |  |
|  |  |  | Alcohol, C11-14, ethoxylated                              | 78330-21-9 | 0.00975% | 0.00283% |  |
|  |  |  | Non-crystalline silica                                    | 7631-86-9  | 0.00896% | 0.00260% |  |
|  |  |  | Tetrakis(hydroxymethyl)phosphonium sulfate                | 55566-30-8 | 0.00676% | 0.00196% |  |
|  |  |  | Poly(oxy-1,2-ethanediyl)                                  | 25322-68-3 | 0.00438% | 0.00127% |  |
|  |  |  | Naphtalene (impurity)                                     | 91-20-3    | 0.00199% | 0.00058% |  |
|  |  |  | Magnesium silicate hydrate (talc)                         | 14807-96-6 | 0.00155% | 0.00045% |  |
|  |  |  | Decyldimethyl amine (impurity)                            | 1120-24-7  | 0.00101% | 0.00029% |  |
|  |  |  | Hydrogen peroxide (impurity)                              | 7722-84-1  | 0.00060% | 0.00018% |  |

\* 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%

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