

Hydraulic Fracturing Fluid Product Component Information Disclosure

|                            |                  |
|----------------------------|------------------|
| Fracture Date              | 5/27/2011        |
| State:                     | CA               |
| County:                    | Ventura          |
| API Number:                | 04-111-22084     |
| Operator Name:             | Occidental (OXY) |
| Well Name and Number:      | Grubb #477       |
| Longitude:                 | -119.351209      |
| Latitude:                  | 34.328099        |
| Long/Lat Projection:       | NAD27            |
| Production Type:           | Oil              |
| True Vertical Depth (TVD): | 8,474            |
| Total Water Volume (gal)*: | 361,620          |

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%                                                    | 75.86803%                                                  |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| Super LC          | BHI      | Proppant            | Silicon Dioxide (Silica Sand)    | 14808-60-7                               | 97.00%                                                     | 20.75130%                                                  |          |
|                   |          |                     | Phenol Formaldehyde Resin        | 9003-35-4                                | 5.00%                                                      | 1.06965%                                                   |          |
|                   |          |                     | Hexamethylenetetramine           | 1009-7-0                                 | 0.01%                                                      | 0.00214%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| Ammonium Chloride | BHI      | Clay Control        | Ammonium Chloride                | 12125-02-9                               | 100.00%                                                    | 0.01259%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| BC-3              | BHI      | Breaker Catalyst    | Non-hazardous                    | -                                        | 100.00%                                                    | 0.00439%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| BF-7L             | BHI      | Buffer              | Potassium Carbonate              | 584-08-7                                 | 50.00%                                                     | 0.20739%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| CI-27             | BHI      | Corrosion Inhibitor | Methanol                         | 67-56-1                                  | 60.00%                                                     | 0.00454%                                                   |          |
|                   |          |                     | Thiourea Polymer                 | 68527-49-1                               | 30.00%                                                     | 0.00227%                                                   |          |
|                   |          |                     | Tall Oil Acid                    | 61790-12-3                               | 30.00%                                                     | 0.00227%                                                   |          |
|                   |          |                     | Ethoxylated Alcohols^ C14-15     | 68951-67-7                               | 30.00%                                                     | 0.00227%                                                   |          |
|                   |          |                     | Propargyl Alcohol                | 107-19-7                                 | 10.00%                                                     | 0.00076%                                                   |          |
|                   |          |                     | Alkenes^ C>10 Alpha-             | 64743-02-8                               | 5.00%                                                      | 0.00038%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| Clay Master-5C    | BHI      | Clay Control        | Oxyakylated Amine Quat           | 138879-94-4                              | 60.00%                                                     | 0.04720%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| Enzyme G-I        | BHI      | Breaker             | Hemicellulase Enzyme Concentrate | 9025-56-3                                | 3.00%                                                      | 0.00419%                                                   |          |
|                   |          |                     | Water                            | 7732-18-5                                | 97.00%                                                     | 0.13549%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |
| Ferrotrol 210     | BHI      | Iron Control        | Erythorbic Acid                  | 89-65-6                                  | 100.00%                                                    | 0.00302%                                                   |          |
|                   |          |                     |                                  |                                          |                                                            |                                                            |          |

|                |     |                 |                                        |            |         |          |  |
|----------------|-----|-----------------|----------------------------------------|------------|---------|----------|--|
| Ferrotrol 300L | BHI | Iron Control    | Citric Acid                            | 77-92-9    | 70.00%  | 0.01482% |  |
|                |     |                 |                                        |            |         |          |  |
| GW-3LDF        | BHI | Gellant         | Petroleum Distillate Blend             | CBI        | 70.00%  | 0.35699% |  |
|                |     |                 | Guar Gum                               | 9000-30-0  | 40.00%  | 0.20399% |  |
|                |     |                 |                                        |            |         |          |  |
| HCl:HF         | BHI | Acidizing       | Hydrochloric Acid                      | 7647-01-0  | 30.00%  | 0.75619% |  |
|                |     |                 | Hydrofluoric Acid                      | 7664-39-3  | 7.00%   | 0.17644% |  |
|                |     |                 |                                        |            |         |          |  |
| High Perm CRB  | BHI | Breaker         | Ammonium Persulphate                   | 7727-54-0  | 100.00% | 0.00705% |  |
|                |     |                 | Crystalline Silica Quartz              | 14808-60-7 | 15.00%  | 0.00106% |  |
|                |     |                 |                                        |            |         |          |  |
| Inflo 250W     | BHI | Surfactant      | Surfactants                            | CBI        | 80.00%  | 0.11506% |  |
|                |     |                 | 2-Butoxyethanol                        | 111-76-2   | 20.00%  | 0.02876% |  |
|                |     |                 | Methanol                               | 67-56-1    | 30.00%  | 0.04315% |  |
|                |     |                 |                                        |            |         |          |  |
| NE-118         | BHI | Non-emulsifier  | Aromatic Hydrocarbon Solvent           | 64742-94-5 | 35.00%  | 0.00069% |  |
|                |     |                 | Xylene                                 | 1330-20-7  | 5.00%   | 0.00010% |  |
|                |     |                 | Isopropyl Alcohol                      | 67-63-0    | 65.00%  | 0.00129% |  |
|                |     |                 | Naphthalene                            | 91-20-3    | 5.00%   | 0.00010% |  |
|                |     |                 |                                        |            |         |          |  |
| Scalesorb 3    | BHI | Scale Inhibitor | Calcined Diatomaceous Earth            | 91053-39-3 | 100.00% | 0.04030% |  |
|                |     |                 | Amino Tri (Methylene Phosphonic Acid)  | 6419-19-8  | 30.00%  | 0.01209% |  |
|                |     |                 | Phosphonic Acid                        | 13598-36-2 | 1.00%   | 0.00040% |  |
|                |     |                 | Crystalline Silica Quartz              | 14808-60-7 | 1.00%   | 0.00040% |  |
|                |     |                 |                                        |            |         |          |  |
| XLW-56         | BHI | Crosslinker     | Glyoxal                                | 107-22-2   | 30.00%  | 0.06562% |  |
|                |     |                 | Sodium Tetraborate                     | 1330-43-4  | 10.00%  | 0.02187% |  |
|                |     |                 | Sodium Hydroxide                       | 1310-73-2  | 5.00%   | 0.01094% |  |
|                |     |                 | D-Glucitol                             | 50-70-4    | 10.00%  | 0.02187% |  |
|                |     |                 |                                        |            |         |          |  |
| X-Cide 207     | BHI | Biocide         | 5-Chloro-2-Methyl-4-Isothiazolin-3-One | 26172-55-4 | 10.00%  | 0.00032% |  |
|                |     |                 | 2-Methyl-4-Isothiazolin-3-One          | 2682-20-4  | 5.00%   | 0.00016% |  |
|                |     |                 | Magnesium Nitrate                      | 10377-60-3 | 10.00%  | 0.00032% |  |
|                |     |                 | Magnesium Chloride                     | 7786-30-3  | 5.00%   | 0.00016% |  |
|                |     |                 | Diatomaceous Earth, Calcined           | 91053-39-3 | 60.00%  | 0.00190% |  |
|                |     |                 | Crystalline Silica: Cristobalite       | 14464-46-1 | 1.00%   | 0.00003% |  |
|                |     |                 | Crystalline Silica: Quartz (SiO2)      | 14808-60-7 | 1.00%   | 0.00003% |  |
|                |     |                 |                                        |            |         |          |  |
|                |     |                 |                                        |            |         |          |  |

\* 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.