

# Hydraulic Fracturing Fluid Product Component Information Disclosure

<b>Last Fracture Date</b>	<b>10/31/2012</b>
<b>State:</b>	<b>California</b>
<b>County:</b>	<b>Kern</b>
<b>API Number:</b>	<b>04-030-48611</b>
<b>Operator Name:</b>	<b>Aera Energy Llc</b>
<b>Well Name and Number:</b>	<b>Belridge Iii 7155C-3</b>
<b>Longitude:</b>	<b>-119.6990436</b>
<b>Latitude:</b>	<b>35.4376862</b>
<b>Long/Lat Projection:</b>	<b>NAD83</b>
<b>Production Type:</b>	<b>Oil</b>
<b>True Vertical Depth (TVD):</b>	<b>1,211</b>
<b>Total Water Volume (gal)*:</b>	<b>29,526</b>

## 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%	70.15184%	
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100.00%	0.00570%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00128%	SmartCare Product
			Water	7732-18-5	97.00%	0.04148%	
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	0.04878%	
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30.00%	0.02424%	SmartCare Product
			Sodium Hydroxide	1310-73-2	10.00%	0.00808%	
			Sodium Tetraborate	1330-43-4	30.00%	0.02424%	
GW-3LDF	Baker Hughes	Gelling Agent	1-Butoxy-2-Propanol	5131-66-8	5.00%	0.00954%	SmartCare Product
			Cyrstalline Silica, Quartz (SiO2)	14808-60-7	5.00%	0.00954%	
			Guar Gum	9000-30-0	60.00%	0.11454%	

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

**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.**

			2-Butoxy-1-Propanol	15821-83-7		0.0001527154%	
			Water	7732-18-5		0.0161571980%	

[illegible]

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