

# Hydraulic Fracturing Fluid Product Component Information Disclosure: Maximum Ingredient Weight in Pounds Format



**BAKER  
HUGHES**

	12/28/2011
Last Fracture Date	
State:	California
County:	Kern
API Number:	04-030-44830
Operator Name:	Aera Energy Llc
Well Name and Number:	Lost Hills Two 7046
Longitude:	-119.757639
Latitude:	35.6584906
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	1,720
Total Chemical Mass (lbs)*:	199,906
Total Max. Ingredient Mass (lbs)*:	199,860
Total Product Volume (gal)*:	20,548
Total Water Volume (gal)*:	18,354

## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Weight in HF Fluid (lbs mass)	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00%	153,032	
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5.00%	0.300000	
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10.00%	0.600000	
			Crystalline Silica: Cristobalite	14464-46-1	1.00%	0.060000	
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1.00%	0.060000	
			Diatomaceous Earth, Calcined	91053-39-3	60.00%	3.600000	
			Magnesium Chloride	7786-30-3	5.00%	0.300000	

			Magnesium Nitrate	10377-60-3	10.00%	0.600000	
GBW-5	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100.00%	10.000000	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	3.001608	SmartCare Product
			Water	7732-18-5	97.00%	97.051992	
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	135.756120	
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30.00%	53.550000	SmartCare Product
			Sodium Hydroxide	1310-73-2	10.00%	17.850000	
			Sodium Tetraborate	1330-43-4	30.00%	53.550000	
GW-3LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	40.00%	253.261260	SmartCare Product
			Petroleum Distillate Blend	Trade Secret	70.00%	443.207205	
Sand, Brown, 8/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	45,720.000000	
<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>							
			Crystalline Silica	14808-60-7			
			Ethylene Glycol Monobutyl Ether	111-76-2			
			Poly (oxy-1,2-ethanediyl)	24938-91-8			
			Quaternary Ammonium Compounds bis[Hydrogenated Tallow Alkyl] Dimethyl Salts With Bentonite	68953-58-2			
			Water	7732-18-5		35.700000	
<p>* Total Chemical Mass is the total amount of Trade Name volume, supplied to the customer, converted to pounds.          * Total Max. Ingredient Mass is the summation of all masses listed in the Maximum Ingredient Weight (pounds) column.          * Total Product Volume is the total amount of Water plus Trade Name volume in gallons supplied to the customer or Baker Hughes.          * Total Water Volume is the total amount of water volume in gallons used on the hydraulic fracture treatment.          ** Information is based on the maximum potential for concentration and thus the total may be over 100%</p>							
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)							