

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



BAKER HUGHES

	09/07/2012
Last Fracture Date	
State:	California
County:	Kern
API Number:	04-030-47543
Operator Name:	Aera Energy Llc
Well Name and Number:	Lost Hills One 7399A
Longitude:	-119.7243445
Latitude:	35.6067619
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	2,240
Total Chemical Mass (lbs)*:	771,614
Total Max. Ingredient Mass (lbs)*:	771,987
Total Product Volume (gal)*:	77,787
Total Water Volume (gal)*:	68,460

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%	570,806	
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5.00%	0.900000	
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10.00%	1.800000	
			Crystalline Silica: Cristobalite	14464-46-1	1.00%	0.180000	
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1.00%	0.180000	
			Diatomaceous Earth, Calcined	91053-39-3	60.00%	10.800000	
			Magnesium Chloride	7786-30-3	5.00%	0.900000	

			Magnesium Nitrate	10377-60-3	10.00%	1.800000	
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	10.255494	SmartCare Product
			Water	7732-18-5	97.00%	331.594306	
BF-8L	Baker Hughes	Buffer	Monoethanolamine	141-43-5	85.00%	613.163922	
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	129.853680	
XLW-4	Baker Hughes	Crosslinker	Sodium Borate Decahydrate	1303-96-4	30.00%	79.107168	SmartCare Product
GW-3LDF	Baker Hughes	Gelling Agent	1-Butoxy-2-Propanol	5131-66-8	5.00%	102.877500	SmartCare Product
			Cyrstalline Silica, Quartz (SiO ₂)	14808-60-7	5.00%	102.877500	
			Guar Gum	9000-30-0	60.00%	1,234.530000	
			Isotridecanol, ethoxylated	9043-30-5	5.00%	102.877500	
			Paraffinic Petroleum Distillate	64742-55-8	30.00%	617.265000	
			Petroleum Distillates	64742-47-8	30.00%	617.265000	
Ferotrol 300L (Totes)	Baker Hughes	Iron Control	Citric Acid	77-92-9	60.00%	100.869408	SmartCare Product
Sand, Brown, 8/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	196,920.000000	
ScaleSorb 3, (25# pail)	Baker Hughes	Scale Inhibitor	Amino Alkyl Phosphonic Acid	Trade Secret	30.00%	30.300000	SmartCare Product
			Crystalline Silica: Quartz (SiO ₂)	14808-60-7	1.00%	1.010000	
			Diatomaceous Earth, Calcined	91053-39-3	100.00%	101.000000	
			Phosphonic Acid	13598-36-2	1.00%	1.010000	
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		1.646040	
			Glycerin	56-81-5			
			Water	7732-18-5		67.246272	
<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)							