

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	04/11/2013
State:	California
County:	Kern
API Number:	04-030-48750
Operator Name:	Aera Energy Llc
Well Name and Number:	Section 8 5-5A
Longitude:	-119.529813
Latitude:	35.1608888
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	1,001
Total Water Volume (gal)*:	65,436

## 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%	63.55931%	
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5.00%	0.00021%	
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10.00%	0.00042%	
			Crystalline Silica: Cristobalite	14464-46-1	1.00%	0.00004%	
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1.00%	0.00004%	
			Diatomaceous Earth, Calcined	91053-39-3	60.00%	0.00252%	
			Magnesium Chloride	7786-30-3	5.00%	0.00021%	
			Magnesium Nitrate	10377-60-3	10.00%	0.00042%	
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100.00%	0.00699%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00189%	SmartCare Product
			Water	7732-18-5	97.00%	0.06124%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.07577%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00126%	
			Water	7732-18-5	60.00%	0.07577%	
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	0.05088%	
CorrSorb 3600, 25 lb pail	Baker Hughes	Corrosion Inhibitor	Acid Phosphate Ester	9046-01-9	5.47%	0.00127%	
			Crystalline Silica Quartz	14808-60-7	1.00%	0.00023%	

