

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	04/12/2013
State:	California
County:	Kern
API Number:	04-030-48747
Operator Name:	Aera Energy Llc
Well Name and Number:	Moco 35 D-192
Longitude:	-119.4089533
Latitude:	35.0843039
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	890
Total Water Volume (gal)*:	54,936

### 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%	68.92073%	
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5.00%	0.00018%	
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10.00%	0.00036%	
			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%	0.00217%	
			Magnesium Chloride	7786-30-3	5.00%	0.00018%	
			Magnesium Nitrate	10377-60-3	10.00%	0.00036%	
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100.00%	0.00677%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00188%	SmartCare Product
			Water	7732-18-5	97.00%	0.06085%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.07312%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00122%	
			Water	7732-18-5	60.00%	0.07312%	
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	0.05329%	
CorrSorb 3600, 25 lb pail	Baker Hughes	Corrosion Inhibitor	Acid Phosphate Ester	9046-01-9	5.47%	0.00082%	
			Crystalline Silica Quartz	14808-60-7	1.00%	0.00015%	

