

Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	06/07/2011
State:	California
County:	Colusa
API Number:	04-011-20830
Operator Name:	Venoco Incorporated
Well Name and Number:	Unit 25 16
Longitude:	-121.927585
Latitude:	39.124214
Long/Lat Projection:	NAD83
Production Type:	Gas
True Vertical Depth (TVD):	6,850
Total Water Volume (gal)*:	15,162

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%	76.29523%	
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%	
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00392%	SmartCare Product
			Water	7732-18-5	97.00%	0.12691%	
High Perm CRB	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0	100.00%	0.00604%	SmartCare Product
			Crystalline Silica Quartz	14808-60-7	15.00%	0.00091%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	50.00%	0.04933%	SmartCare Product
XLW-32	Baker Hughes	Crosslinker	Boric Oxide	1303-86-2	20.00%	0.00980%	
			Methanol	67-56-1	90.00%	0.04408%	
GW-3LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	40.00%	0.19160%	SmartCare Product
			Petroleum Distillate Blend	Trade Secret	70.00%	0.33530%	

[illegible]