

Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	05/25/2012
State:	California
County:	Kern
API Number:	04-030-46675
Operator Name:	Vintage Prod Of Cal
Well Name and Number:	Goodshow 11H
Longitude:	-119.34973
Latitude:	35.63027
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	8,369
Total Water Volume (gal)*:	290,388

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%	72.55985%	
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.00483%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00461%	SmartCare Product
			Water	7732-18-5	97.00%	0.14906%	
BC-3	Baker Hughes	Breaker Catalyst	No Hazardous Ingredients	Trade Secret	100.00%	0.03767%	
BF-7L, Tote	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.03585%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00060%	
			Water	7732-18-5	60.00%	0.03585%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.21329%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00355%	
			Water	7732-18-5	60.00%	0.21329%	
XLW-56, 330 gal tote	Baker Hughes	Crosslinker	D-Glucitol	50-70-4	10.00%	0.02224%	
			Glyoxal	107-22-2	30.00%	0.06673%	
			Sodium Hydroxide	1310-73-2	5.00%	0.01112%	
			Sodium Tetraborate	1330-43-4	10.00%	0.02224%	
GLFC-1B	Baker Hughes	Gelling Agent	Alkanes / Alkenes	Multiple	45.00%	0.29476%	
			Guar Gum	9000-30-0	50.00%	0.32751%	

