

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	04/11/2012
State:	California
County:	Kern
API Number:	04-030-45869
Operator Name:	Vintage Prod Of Cal
Well Name and Number:	Sill 1-14H
Longitude:	-119.24988
Latitude:	35.49759
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	8,081
Total Water Volume (gal)*:	326,550

## 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%	70.49972%	
Alpha 125, 263 gl tote	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.00438%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00429%	SmartCare Product
			Water	7732-18-5	97.00%	0.13863%	
BC-3	Baker Hughes	Breaker Catalyst	No Hazardous Ingredients	Trade Secret	100.00%	0.00954%	
BF-7L, Tote	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.22610%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00377%	
			Water	7732-18-5	60.00%	0.22610%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.09098%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00152%	
			Water	7732-18-5	60.00%	0.09098%	
XLW-56, 330 gal tote	Baker Hughes	Crosslinker	D-Glucitol	50-70-4	10.00%	0.01660%	
			Glyoxal	107-22-2	30.00%	0.04981%	
			Sodium Hydroxide	1310-73-2	5.00%	0.00830%	
			Sodium Tetraborate	1330-43-4	10.00%	0.01660%	
GLFC-1B	Baker Hughes	Gelling Agent	Alkanes / Alkenes	Multiple	45.00%	0.26133%	
			Guar Gum	9000-30-0	50.00%	0.29037%	

