

## Hydraulic Fracturing Fluid Product Component Information Disclosure

<b>Last Fracture Date</b>	<b>07/06/2012</b>
<b>State:</b>	<b>California</b>
<b>County:</b>	<b>Kern</b>
<b>API Number:</b>	<b>04-030-47679</b>
<b>Operator Name:</b>	<b>Vintage Prod Of Cal</b>
<b>Well Name and Number:</b>	<b>Goodshow 14H</b>
<b>Longitude:</b>	<b>-119.34129</b>
<b>Latitude:</b>	<b>35.63039</b>
<b>Long/Lat Projection:</b>	<b>NAD27</b>
<b>Production Type:</b>	<b>Oil</b>
<b>True Vertical Depth (TVD):</b>	<b>8,144</b>
<b>Total Water Volume (gal)*:</b>	<b>238,980</b>

### 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%	69.58893%	
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.00341%	SmartCare Product
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00439%	SmartCare Product
			Water	7732-18-5	97.00%	0.14179%	
BC-3	Baker Hughes	Breaker Catalyst	No Hazardous Ingredients	Trade Secret	100.00%	0.03333%	
BF-7L, Tote	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.15587%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00260%	
			Water	7732-18-5	60.00%	0.15587%	
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60.00%	0.12480%	SmartCare Product
			Potassium Hydroxide	1310-58-3	1.00%	0.00208%	
			Water	7732-18-5	60.00%	0.12480%	
XLW-56, 330 gal tote	Baker Hughes	Crosslinker	D-Glucitol	50-70-4	10.00%	0.01962%	
			Glyoxal	107-22-2	30.00%	0.05886%	
			Sodium Hydroxide	1310-73-2	5.00%	0.00981%	
			Sodium Tetraborate	1330-43-4	10.00%	0.01962%	
GW-4LBF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60.00%	0.42012%	SmartCare Product
			Paraffinic Petroleum Distillate	64742-55-8	60.00%	0.42012%	

