

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	6/28/2012
State:	California
County/Parish	Kern County
API Number:	0403041964
Operator Name:	Occidental of Elk Hills, Inc.
Well Name and Number:	2-8-36B
Longitude:	-119.461232
Latitude:	35.183978
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	3,304
Total Water Volume (gal)*:	39,647

### 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
YF120ST	Schlumberger	Breaker, Gelling Agent, Bactericide, Propping Agent	Water (Including Mix Water Supplied by Client)*	-		74.20249%	
			Crystalline silica	14808-60-7	99.08671%	25.56190%	
			Guar gum	9000-30-0	0.75215%	0.19404%	
			Diammonium peroxidisulphate	7727-54-0	0.12431%	0.03207%	
			Vinylidene chloride/methylacrylate copolymer	25038-72-6	0.01817%	0.00469%	
			Non-crystalline silica	7631-86-9	0.00987%	0.00255%	
			Tetrakis(hydroxymethyl)p hosphonium sulfate	55566-30-8	0.00782%	0.00202%	
			Magnesium silicate	14807-96-6	0.00096%	0.00025%	

