

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	1/26/2012
State:	CA
County:	Kern
API Number:	04-030-44694
Operator Name:	Chevron USA Inc
Well Name and Number:	Sec 29 1-10C
Longitude:	-119.741801245
Latitude:	35.633595243
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	2,489
Total Water Volume (gal)*:	200,112

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	Chevron	Base Fluid			100.00%	70.74909%	
BC-140	Halliburton	Crosslinker	Monoethanolamine borate	26038-87-9	60.00%	0.02477%	
			Ethylene glycol	107-21-1	30.00%	0.01238%	
BE-3S	Halliburton	Breaker	2-Monobromo-3- nitrilopropionamide	1113-55-9	5.00%	0.00005%	
			2,2 Dibromo-3-nitrilopropionamide	10222-01-2	100.00%	0.00102%	
CAT-3	Halliburton	Activator	EDTA/Copper chelate	Confidential Business Information	30.00%	0.00315%	
CLA-WEB	Halliburton	Clay Stabilizer	Proprietary	Proprietary	60.00%	0.02681%	
FE-1A	Halliburton	Iron Control Additive	Acetic anhydride	108-24-7	100.00%	0.00562%	
			Acetic Acid	64-19-7	60.00%	0.00337%	
LGC-36 UC	Halliburton	Liquid Gel Concentrate	Guar gum	9000-30-0	60.00%	0.15882%	
			Naphtha, hydrotreated heavy	64742-48-9	60.00%	0.15882%	
MO-67	Halliburton	Buffer	Sodium hydroxide	1310-73-2	30.00%	0.00747%	
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00%	0.00161%	
Sand-Premium White-20/40	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%	28.80781%	
SCW-4003	Baker Petrolite	Scale Inhibitor	Phosphonate salt	Trade Secret	15.00%	0.00732%	
			Phosphoric Acid Salt	5-5-7632	5.00%	0.00244%	
			Polyacrylate	Trade Secret	20.00%	0.00976%	
			Sodium Chloride	7647-14-5	5.00%	0.00244%	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)