

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	9/5/2011
State:	CA
County:	Los Angeles
API Number:	04-237-23033
Operator Name:	Occidental (OXY)
Well Name and Number:	C-245A
Longitude:	-118.138301
Latitude:	33.740001
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	6,507
Total Water Volume (gal)*:	135,902

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%	75.86803%	
FlexSand LS	BHI	Proppant	Resin coated cellulose	Proprietary	97.00%	6.33482%	
Brady Sand	BHI	Proppant	Silicon Dioxide (Silica Sand)	14808-60-7	99.90%	14.47551%	
			Aluminum Oxide	1344-28-1	0.80%	0.11592%	
			Iron Oxide	1309-37-1	0.10%	0.01449%	
			Titanium Oxide	13463-67-7	0.10%	0.01449%	
Potassium Chloride	BHI	Clay Control	Potassium Chloride	7447-40-7	100.00%	0.01259%	
BF-7L	BHI	Buffer	Potassium Carbonate	584-08-7	50.00%	0.20739%	
Enzyme G-I	BHI	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00419%	
			Water	7732-18-5	97.00%	0.13549%	
GBW-5	BHI	Breaker	Ammonium Persulfate	7727-54-0	99.00%	0.04010%	
GW-3LDF	BHI	Gellant	Petroleum Distillate Blend	CBI	70.00%	0.35699%	
			Guar Gum	9000-30-0	40.00%	0.20399%	
High Perm CRB	BHI	Breaker	Ammonium Persulphate	7727-54-0	100.00%	0.00705%	
			Crystalline Silica Quartz	14808-60-7	15.00%	0.00106%	
Inflo 250W	BHI	Surfactant	Surfactants	CBI	80.00%	0.11506%	
			2-Butoxyethanol	111-76-2	20.00%	0.02876%	

