

Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	06/28/2012
State:	New Mexico
County:	Eddy
API Number:	30-015-40111
Operator Name:	Apache Corp
Well Name and Number:	Washington 33 State 59
Longitude:	-104.18317
Latitude:	32.78693
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	4,005
Total Water Volume (gal)*:	171,486

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%	86.29469%	
Superset-W, 330 gl tote	Baker Hughes	Activator	Methanol	67-56-1	50.00%	0.02267%	
			Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50.00%	0.02267%	
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.00542%	SmartCare Product
GBW-5	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100.00%	0.00362%	SmartCare Product
GBW-15L	Baker Hughes	Breaker	Enzyme solution	Trade Secret	100.00%	0.04915%	SmartCare Product
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75.00%	0.02800%	SmartCare Product
			Water	7732-18-5	30.00%	0.01120%	
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30.00%	0.03460%	SmartCare Product
			Sodium Hydroxide	1310-73-2	10.00%	0.01153%	
			Sodium Tetraborate	1330-43-4	30.00%	0.03460%	
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60.00%	0.27967%	SmartCare Product
			Paraffinic Petroleum Distillate	64742-55-8	60.00%	0.27967%	
			Petroleum Distillate	64742-47-8	60.00%	0.27967%	
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Mixture of Surfactants	Trade Secret	50.00%	0.03549%	
			Propylene Glycol	57-55-6	30.00%	0.02129%	

Sand, White, 16/30	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	9.95836%	
Super LC, 16/30	Baker Hughes	Proppant	Hexamethylenetetramine	1009-7-0	0.01%	0.00024%	
			P/F Resin	9003-35-4	5.00%	0.12071%	
			Silicon Dioxide (Silica Sand)	14808-60-7	97.00%	2.34172%	
Scaletrol 767W, 330 gl tote	Baker Hughes	Scale Inhibitor	Methanol	67-56-1	30.00%	0.01187%	
			Organic Phosphonate	Trade Secret	30.00%	0.01187%	
InFlo 250G, 330 gl tote	Baker Hughes	Surfactant	Methanol	67-56-1	30.00%	0.02249%	
			Mixture of Surfactants	Trade Secret	50.00%	0.03749%	
			Water	7732-18-5	30.00%	0.02249%	
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
			Methanol	67-56-1		0.0000451651%	
			Water	7732-18-5		0.0587730721%	

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

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