

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	1/23/2013
State:	Texas
County:	Palo Pinto County
API Number:	42-363-36105
Operator Name:	Veritas Energy, LLC
Well Name and Number:	JD Johnson Rnach #1 - Stages #1-4
Longitude:	-98.22478
Latitude:	32.97992
Long/Lat Projection:	NAD83
Production Type:	Oil
True Vertical Depth (TVD):	4,900
Total Water Volume* (gal):	620510 (gal)

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	Veritas Energy, LLC	Carrier / Base Fluid	Carrier / Base Fluid - Water		100.00%	87.83602%	
Super LC 20/40 (2.51 sg)	WFT	Proppant	Crystalline Silica (Quartz)	14808-60-7	72.98%	1.41628%	
			Formaldehyde	50-00-0	0.01%	0.00019%	
			Hexamethylenetetramine	100-97-0	1.00%	0.01941%	
			Hydrated Aluminum Silicate	1332-58-7	5.00%	0.09703%	
			Iron Oxide (fume)	1309-37-1	15.00%	0.29110%	
			Phenol	108-95-2	0.01%	0.00019%	
			Phenol-Formaldehyde Resin	9003-35-4	6.00%	0.11644%	
100 Mesh Sand	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100.00%	7.57087%	
40/70 Premium	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100.00%	2.16257%	
Bio-Clear® 5000	WFT	Bactericide	2,2-dibromo-3-nitrilopropionamide	10222-01-2	5.00%	0.00105%	
			Polyethylene Glycol	25322-68-3	50.00%	0.01054%	
WFR-55LA (W)	WFT	Friction Reducers	No ingredients as hazardous according to OSHA 29 CFR 1910.1200		0.00%	0.00000%	
WSI-681L	WFT	Inhibitor	No ingredients as hazardous according to OSHA 29 CFR 1910.1200		0.00%	0.00000%	
WNE-363L	WFT	Surfactant	2-Ethylhexanol	104-76-7	7.00%	0.00561%	
			DB-964	9003-11-6	30.00%	0.02404%	
			Dodecylbenzenesulfonic acid, monoethanolamine salt	26836-07-7	15.00%	0.01202%	
			Poly(oxy-1,2-ethanediyl), a-isotridecyl-w-hydroxy-	9043-30-5	5.00%	0.00401%	
28% HCL	WFT	Acid	Hydrochloric Acid	7647-01-1	28.00%	0.09877%	
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.							
			Anionic water soluble polymer	Mixture		0.00709%	
			Deionized Water	7732-18-5		0.01054%	

