Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	**4/4/2011**
State:	**New Mexico**
County:	**Rio Arriba**
API Number:	**30-039-06527**
Operator Name:	**XTO Energy**
Well Name and Number:	**Breech C #244**
Longitude:	**-107.43096**
Latitude:	**36.49157**
Long/Lat Projection:	**NAD27**
Production Type:	**Gas**
True Vertical Depth (TVD):	**7,576**
Total Water Volume (gal)*:	**72,078**

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				7732-18-5	100.00%	52.68445%	
Sand	Halliburton	Proppant	Crystaline Silica	14808-60-7	100.00%	5.98571%	
Sand - Resin Coated	Halliburton	Proppant- Resin Coated					
			Crystaline Silica	14808-60-7	100.00%	6.54437%	
			Phenalic Resin	9003-35-4	5.00%	0.32722%	
Nitrogen Liquified	Halliburton	Foam Fluid	Nitrogen	7727-37-9	100.00%	31.17245%	
310B	H&M	Biocide	Dimethyldithiocarbamate		9.00%	0.00798%	
			cocodiamine	61788-93-0	91.00%	0.08066%	
SF-147	H&M	Clay stabilizer	Propanal	67-63-0	22.00%	0.01380%	
			quaternary ammonium	61789-18-2	78.00%	0.04893%	
Water	Halliburton	mix acid	Water	7732-18-5	100.00%	1.44657%	
Hydrochloric Acid 15%	Halliburton	Acid					
			Hydrochloric acid	7647-01-0	30.00%	0.31037%	
			Water	7732-18-5	70.00%	0.72420%	
FE-1A	Halliburton	FE control					
			Acetic anhydride	108-24-7	100.00%	0.01922%	
			Acetic acid	64-19-7	60.00%	0.01153%	
FE-2A	Halliburton	FE Control					
			Citric acid	77-92-9	60.00%	0.01330%	
			Water	7732-18-5	40.00%	0.00887%	
HAI-81M	Halliburton	Corrosion Inhibitor					
			Isopropanol	67-63-0	5.00%	0.00014%	
			Ethyl octynol	5877-42-9	5.00%	0.00014%	
			Kerosene	8008-20-6	5.00%	0.00014%	

			Propargyl alcohol	107-19-7	5.00%	0.00014%	
			Methanol	67-56-1	30.00%	0.00084%	
BA-40L Buffering Agent	Halliburton	Buffer					
			Potassium Carbonate	584-08-7	60.00%	0.00802%	
LGC-36 UC	Halliburton	Liquid Gel Concentrate					
			Naphtha, hydrotreated heavy	64742-48-9	60.00%	0.16308%	
			Polysaccharide		60.00%	0.16308%	
AQF-2	Halliburton	Foaming Agent					
			Diethylene glycol	111-46-6	10.00%	0.01454%	
			Ethylene glycol monobutyl ether	111-76-2	30.00%	0.04361%	
HC-2	Halliburton	Foaming Agent					
			Inner salt of alkyl amines		30.00%	0.03482%	
			Sodium chloride	7647-14-5	30.00%	0.03482%	
BC-200 UC	Halliburton	Crosslinker					
			Hydrotreated Light Petroleum Distillate	64742-47-8	30.00%	0.02758%	
			Crystalline Silica, Quartz	14808-60-7	5.00%	0.00460%	
GasPerm 1100	Halliburton	Non-Ionic Surfactant					
			Terpenes and Terpenoids, sweet orange-oil	68647-72-3	5.00%	0.00251%	
			Ethanol	64-17-5	60.00%	0.03015%	
Optiflo-III	Halliburton	Breaker					
			Ammonium persulfate	7727-54-0	100.00%	0.00638%	
			Crystalline silica, quartz	14808-60-7	30.00%	0.00192%	
SP Breaker	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00%	0.00665%	
BBC Activator	Halliburton	Resin activator					
			Methanol	67-56-1	60.00%	0.13359%	
			Ethanol	64-17-5	60.00%	0.13359%	
			Heavy Aromatic Petroleum Naphtha	64742-94-5	10.00%	0.02226%	
			Naphthalene	91-20-3	1.00%	0.00223%	
			1,2,4 Trimethylbenzene	95-63-6	1.00%	0.00223%	
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonphenyl)-omega-hydroxy-,branched	127087-87-0	5.00%	0.01113%	

* 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%

All component information listed was obtained from the supplier′ s Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration′ s (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.