

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	3/1/2012
State:	Pennsylvania
County:	Armstrong
API Number:	37-005-30720
Operator Name:	EQT PRODUCTOIN
Well Name and Number:	WRIGHT 590660
Longitude:	-79.421139
Latitude:	40.722833
Long/Lat Projection:	NAD83
Production Type:	Gas
True Vertical Depth (TVD):	7,132
Total Water Volume (gal)*:	7,013,832

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
HCl	Halliburton	15% HCl Acid	Hydrochloric Acid	7647-01-0	28%	0.0374%	
HCl	Halliburton	Corrosion Inhibitor	Propargyl Alcohol	107-19-7	10%	0.0001%	
HCl	Halliburton	Corrosion Inhibitor	Methanol	67-56-1	60%	0.0004%	
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.0299%	
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.0046%	
LP-65	Halliburton	Scale Inhibitor	Ammonium chloride	12125-02-9	10%	0.0027%	
WG-36	Halliburton	Gelling Agent	Guar Gum	9000-30-0	100%	0.0056%	
WG-36	Halliburton	Gelling Agent	Naptha, hydrotreated heavy	64742-48-9	0%	0.0000%	
SP Breaker	Halliburton	Oxidizing Breaker	Sodium Persulfate	7775-27-1	100%	0.0002%	
GBW-30	Halliburton	Enzyme Breaker	Hemicellulase Enzyme	9012-54-8	15%	0.00000%	
BA-40L	Halliburton	Buffer	Potassium carbonate	584-08-7	60%	0.00006%	

* 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)