

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/3/2014
Job End Date:	6/7/2014
State:	North Dakota
County:	McKenzie
API Number:	33-053-04933-00-00
Operator Name:	XTO Energy/ExxonMobil
Well Name and Number:	Loomer 41X-03D
Longitude:	-103.32929200
Latitude:	47.84720000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	11,114
Total Base Water Volume (gal):	3,112,074
Total Base Non Water Volume:	0



## 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	XTO	Water					
			Water	7732-18-5	100.00000	88.14199	None
Silica Sand	Santrol	Proppant					
			Crystalline Silica, Quartz	14808-60-7	100.00000	7.80103	None
Ceramifrac	Ceramifrac Proppants, LLC	Proppant					
			Mullite	1302-93-8	60.00000	1.94568	None
			Corundum	1302-74-5	60.00000	1.94568	None
ECOPOL-2000LMS	Economy Polymers and Chemicals	Gel					
			Petroleum Distillates	64742-47-8	60.00000	0.23658	None
			Guar Gum	9000-30-0	60.00000	0.23658	None
ECOPOL-NE601	Economy Polymers and Chemicals	Surfactant					
			Methanol	67-56-1	70.00000	0.05851	None
			Diethanolamide	Proprietary	70.00000	0.05851	None
			Polyoxyalkylene glycol butyl ether	9004-77-7	50.00000	0.04179	None
ECONO MAX	Economy Polymers and Chemicals	Clay Control					
			Proprietary	Proprietary	100.00000	0.09899	None

ECOPOL -EC101	Economy Polymers and Chemicals	Crosslinker					
			Potassium Metaborate	16481-66-6	25.00000	0.02931	None
			Potassium Hydroxide	1310-73-2	25.00000	0.02931	None
			Ethylene Glycol	107-21-1	25.00000	0.02931	None
ECOPOL BUFFER-HC	Economy Polymers and Chemicals	pH Buffer					
			Water	7732-18-5	60.00000	0.02934	None
			Potassium Carbonate	584-08-7	40.00000	0.01956	None
			Potassium Hydroxide	1310-58-3	30.00000	0.01467	None
EC6106A	Nalco Company	Biocide					
			N-Alkylpropylenediamine	68155-37-3	30.10000	0.00755	None
			Isopropanol	67-63-0	30.00000	0.00752	None
EC6089A	Nalco Company	Scale Inhibitor					
			Ethylene Glycol	107-21-1	20.00000	0.00698	None
			Ammonium Chloride	12125-02-9	10.00000	0.00349	None
			Methanol	67-56-1	5.00000	0.00174	None
ECONOCAP-HP	Economy Polymers and Chemicals	Gel Breaker					
			Ammonium persulfate	7727-54-0	90.00000	0.01008	None
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.							
		Other Chemicals					
			Aliphatic Polymer	Proprietary		0.00336	
			Inorganic Material	Proprietary		0.00336	

\* 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%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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