

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/4/2016
Job End Date:	1/7/2016
State:	Texas
County:	Andrews
API Number:	42-003-47243-00-00
Operator Name:	Elevation Resources, LLC
Well Name and Number:	University 1-28 A Unit #2H
Longitude:	-102.50827200
Latitude:	32.16949200
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	10,100
Total Base Water Volume (gal):	3,380,433
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
Fresh Water	Elevation Resources	Carrier / Base Fluid					
			Water	7732-18-5	100.00000	89.12205	
30-50 mesh White Sand, Area 1	Universal Pressure Pumping, Inc.	PROPPANT					
			Silica, Quartz, SiO2	14808-60-7	100.00000	4.72275	
15% HCl Acid, Area 1	Universal Pressure Pumping, Inc.	HYDROCHLORIC ACID (Uninhibited)					
			Water	7732-18-5	74.00000	1.99222	
			Hydrogen Chloride	7647-01-0	37.00000	0.99611	
100 mesh White Sand, Area 1	Universal Pressure Pumping, Inc.	PROPPANT					
			Silica, Quartz, SiO2	14808-60-7	100.00000	1.73345	
Preferred RCS	Universal Pressure Pumping, Inc.	Resin Coated Proppants					
			QUARTZ (SiO2) (CRYSTALLINE SILICA)	14808-60-7	98.00000	1.21632	
			POLYURETHANE RESIN	00-00-0	5.00000	0.06206	
			COLORANT	00-00-0	1.00000	0.01241	
WGA-1A SLR	Universal Pressure Pumping, Inc.	GELLING AGENTS FOR WATER					
			Petroleum Distillates	64742-47-8	60.00000	0.10869	
			Polysaccharide blend	00-00-0	60.00000	0.10869	

WFR-4	Universal Pressure Pumping, Inc.	FRICTION REDUCERS					
			Isoparaffinic Solvent	64742-47-8	45.00000	0.03223	
			Water	7732-18-5	35.00000	0.02506	
			Copolymer of acrylamide and sodium acrylate	25987-30-8	34.00000	0.02435	
			Surfactant blend	00-00-0	6.00000	0.00430	
NE-1	Universal Pressure Pumping, Inc.	NON-EMULSIFIER AND DE-EMULSIFIERS					
			Water	7732-18-5	66.00000	0.04741	
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00000	0.01077	
			Methyl Alcohol	67-56-1	15.00000	0.01077	
			Cocamide Diethanolamine Salt	68603-42-9	10.00000	0.00718	
			Diethanolamine	111-42-2	5.00000	0.00359	
CX-9	Universal Pressure Pumping, Inc.	CROSSLINKERS AND DELAYERS					
			Water	7732-18-5	75.00000	0.03925	
			Potassium Metaborate	13709-94-9	30.00000	0.01570	
			Ethylene Glycol	107-21-1	10.00000	0.00523	
			Potassium Hydroxide	1310-58-3	5.00000	0.00262	
SI-1	Universal Pressure Pumping, Inc.	SCALE CONVERTERS, SOLVENTS, AND INHIBITORS					
			Bis(hexamethylenetriamine penta)methylene phosphonic acid salt	35657-77-3	60.00000	0.03220	
			Caustic Soda	1310-73-2	20.00000	0.01073	
I-2L	Universal Pressure Pumping, Inc.	IRON CONTROL ADDITIVES					
			ACETIC ACID	64-19-7	82.00000	0.01099	
			Water	7732-18-5	20.00000	0.00268	
AGA - 2	Universal Pressure Pumping, Inc.	ACID GELLING AGENTS					
			Amine Surfactant	00-00-0	60.00000	0.00284	
			Methanol	67-56-1	50.00000	0.00237	
			Water	7732-18-5	25.00000	0.00118	
			Acetic Acid	64-19-7	15.00000	0.00071	
B-5E	Universal Pressure Pumping, Inc.	BREAKERS AND BREAKER CATALYSTS					
			Ammonium Persulfate	7727-54-0	60.00000	0.00348	
			Cured Acrylic Resin	00-00-0	25.00000	0.00145	
			Silica, Crystalline - Quartz	14808-60-7	16.00000	0.00093	
BIO-15G	Universal Pressure Pumping, Inc.	BIOCIDES					
			Glutaraldehyde	111-30-8	14.00000	0.00324	
			Ethanol	64-17-5	3.00000	0.00069	
			Alkyl Dimethyl Benzyl Ammonium Chloride	68424-85-1	3.00000	0.00069	

			Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00069	
CIA - 5	Universal Pressure Pumping, Inc.	ACID CORROSION INHIBITORS					
			Methyl Alcohol	67-56-1	40.00000	0.00431	
			PROPARGYL ALCOHOL	107-19-7	8.00000	0.00086	
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 Ingredients					
			As residual acrylamide	79-06-1			

\* 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)