

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/16/2019
Job End Date:	8/10/2019
State:	Texas
County:	Andrews
API Number:	42-003-47995-00-00
Operator Name:	Diamondback E&P LLC
Well Name and Number:	UL Blk DDU A 4007WA
Latitude:	32.49439400
Longitude:	-102.22748600
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	9,934
Total Base Water Volume (gal):	23,272,452
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	Operator	Carrier/Base Fluid	Water	7732-18-5	100.00000	89.36594	None
Sand	Sanrol	Proppant	Silica	14808-60-7	100.00000	9.62636	None
HA04-10-15% HCL	Reagent Chemical	Acidizing	Water	7732-18-5	85.00000	0.63742	None
			Hydrogen Chloride	7647-01-0	15.00000	0.11249	None
CFR-61L	Clearpoint Chemicals	Friction Reducer	Water	7732-18-5	76.00000	0.07083	None
			Distillates (petroleum), hydrotreated light	64742-47-8	45.00000	0.04194	None
			Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	69011-36-5	8.00000	0.00746	None
CNS-127L	PFP Industries	Anionic Friction Reducer	Polyacrylamide	9003-05-8	80.00000	0.05645	None
			Nonylphenol Ethoxylate	9016-45-9	50.00000	0.03528	None
BX 1919 FracGlass	BEXCO	Diverter	Synthetic Polymer	Proprietary	82.50000	0.05120	None

CS 14R	BEXCO	Clay Stabilizing Agent					
			Clay Stabilizer	67-48-1	22.50000	0.00565	None
IC5-Iron Control	Solnexus	Iron Control					
			Acetic Acid	64-19-7	60.00000	0.00215	None
			Water	7732-18-5	60.00000	0.00215	None
			Citric Acid	77-92-9	30.00000	0.00108	None
LG1W4	BEXCO	Guar Slurry					
			Trade Secret	64742-47-8	55.00000	0.00090	None
CI200-Corrosion Inhibitor	Economy Polymers	Corrosion Inhibitor					
			Methanol	67-56-1	60.00000	0.00064	None
NE116-Plexbreak 116	Chemplex	N/E Surfactant					
			Methanol	67-56-1	50.00000	0.00028	None
			Alkyl Quarternary Ammonium Chlorides	7173-51-5	25.00000	0.00014	None
			Isopropanol	67-63-0	5.00000	0.00003	None
			Diethanolamide	111-42-2	2.00000	0.00001	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.

* 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)