

**Siennica 1**

Two Stage Fracturing Operation

Description	Volume or Mass
Water Supplied by Client*, m <sup>3</sup>	2016.32
100MESH, kg	31336
40/80 ISP, kg	152882
CO <sub>2</sub> , m <sup>3</sup>	438.25

CAS Number	Chemical Name	Weight Percentage	
		Minimum	Maximum
111-76-2	2-Butoxyethanol	0.2145%	0.3575%
55965-84-9	5-Chloro-2-Methyl-2H-Isithiazol-3-One and 2-Methyl-2H-Isouthiazol-3-One (3:1)	0.0007%	0.0012%
-	Aliphatic alcohol polyglycol ether	0.0008%	0.0016%
-	Amphoteric alkyl amine	0.0226%	0.0604%
-	Aromatic hydrocarbon	0.0001%	0.0006%
-	Aromatic ketones	0.0072%	0.0121%
61789-77-3	Dicoco dimethyl quaternary ammonium chloride	0.0002%	0.0019%
3586-55-8	Ethylendioxy dimethanol	0.0474%	0.0711%
107-21-1	Ethylene glycol	0.0036%	0.0059%
50-00-0	Formaldehyde	0.0001%	0.0006%
64-18-6	Formic acid	0.0308%	0.0308%
7647-01-0	Hydrochloric Acid	0.1510%	0.1510%
10377-60-3	Magnesium Nitrate	0.0059%	0.0119%
67-56-1	Methanol	0.0006%	0.0012%
-	Oxyalkylated alcohol	0.0135%	0.0251%
-	Polysaccharide derivative	0.1292%	0.2154%
231-211-8	Potassium Chloride	1.1879%	1.9799%
7681-11-0	Potassium Iodide	0.0018%	0.0030%
107-19-7	Prop-2-yn-1-ol	0.0001%	0.0006%
67-63-0	Propan-2-ol	0.0154%	0.0478%
-	Salt of aliphatic acid	0.0281%	0.0563%
7789-38-0	Sodium bromate	0.0463%	0.0772%
1310-73-2	Sodium hydroxid	0.0002%	0.0010%
64-02-8	Tetranatriumethylendiamintetraacetate	0.0060%	0.0121%
-	Water Supplied by Client*	98.0846%	96.8700%

\* Mix water is supplied by the client. No analysis of this water has been performed and there is no breakdown of components that may have been added to the water by third-parties. Disclosure as per MSDS for standard formulation. Additive densities estimated as 1.0 g/cm<sup>3</sup>.