

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/23/2022
Job End Date:	2/16/2022
State:	Texas
County:	Ward
API Number:	42-475-38219-00-00
Operator Name:	Continental Resources, Inc
Well Name and Number:	UTL 1308C 4104H
Latitude:	31.63328300
Longitude:	-103.20383000
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,342
Total Base Water Volume (gal):	23,352,552
Total Base Non Water Volume:	77,901



### 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	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	89.18780	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.24123	

MC B-8626	MultiChem	Biocide					
				Listed Below			
ScavGen 192	NexGen	Additive					
				Listed Below			
WG-35 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive					
				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
NexGen ScavGen 2180	NexGen	Scavenger					
				Listed Below			
SAND-LOCAL, 40/70	Halliburton	Proppant					
				Listed Below			
HYDROCHLORIC ACID, 28%	Halliburton	Solvent					
				Listed Below			
OptiKleen-WF (TM)	Halliburton	Concentrate					

				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
FE-2A	Halliburton	Additive					
				Listed Below			
LEGEND LD-9450	MultiChem	Completion/Stimulation					
				Listed Below			
Excelerate EC-7	Halliburton	Friction Reducer					
				Listed Below			
FDP-S1443-21	Halliburton	Corrosion Inhibitor					
				Listed Below			
SAND-LOCAL, 100M	Halliburton	Proppant					
				Listed Below			
FightR-LXD	Halliburton	Friction Reducer					
				Listed Below			
LEGEND(TM) LD-7830	MultiChem	Scale Inhibitor					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Crystalline silica, quartz	14808-60-7	100.00000	10.51663	
			Hydrochloric acid	7647-01-0	30.00000	0.05168	
			Polymer	Proprietary	100.00000	0.02072	
			Methanol	67-56-1	100.00000	0.00553	
			Glutaraldehyde	111-30-8	30.00000	0.00418	
			Glutaraldehyde	111-30-8	26.70000	0.00418	
			Acetic anhydride	108-24-7	100.00000	0.00319	
			Sodium perborate tetrahydrate	10486-00-7	100.00000	0.00302	
			Acetic acid	64-19-7	60.00000	0.00234	
			Citric acid	77-92-9	60.00000	0.00221	
			Ethoxylated alcohols	Proprietary	5.00000	0.00213	
			Fatty amine salt	Proprietary	5.00000	0.00213	
			Didecyl dimethyl ammonium chloride	7173-51-5	10.00000	0.00139	
			Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides	68424-85-1	10.00000	0.00139	
			Polymer salt #1	Proprietary	10.00000	0.00136	
			Didecyl dimethyl ammonium chloride	7173-51-5	7.97000	0.00125	
			Ethanol	64-17-5	5.00000	0.00115	
			Alkyl dimethyl benzyl ammonium chloride (C 12-16)	68424-85-1	5.31000	0.00083	
			Modified thiourea polymer	Proprietary	30.00000	0.00082	
			Guar gum	9000-30-0	100.00000	0.00081	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00071	
			Ethoxylated alcohols	Proprietary	30.00000	0.00071	
			Polymer salt #2	Proprietary	5.00000	0.00068	
			Methoxymethanol	Proprietary	25.00000	0.00043	

			Propargyl alcohol	107-19-7	5.00000	0.00010	
			Hexadecene	629-73-2	5.00000	0.00010	
			Aldehyde	Proprietary	5.00000	0.00010	
			Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.00010	
			Acrylamide polymer	Proprietary	30.00000	0.00010	
			Sodium persulfate	7775-27-1	100.00000	0.00005	
			1-Hexadecene	629-73-2	1.00000	0.00002	
			1-Octadecene	112-88-9	1.00000	0.00002	
			Sodium chloride	7647-14-5	5.00000	0.00002	
			Oleic acid, ethoxylated	9004-96-0	5.00000	0.00002	
			Ethylene oxide	75-21-8	0.01000	0.00000	
			Polyalkylated phosphates	Proprietary	1.00000	0.00000	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00000	
			C12-C15 Ethoxylated alcohols	68131-39-5	1.00000	0.00000	
			Phosphoric acid	7664-38-2	0.10000	0.00000	
			Sodium sulfate	7757-82-6	0.10000	0.00000	

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)