

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/10/2023
Job End Date:	5/6/2023
State:	Texas
County:	Upton
API Number:	42-461-42210-00-00
Operator Name:	Apache Corporation
Well Name and Number:	Sidewinder D 4HM
Latitude:	31.30610330
Longitude:	-101.83654660
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8,948
Total Base Water Volume (gal):	54,868,663
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	90.97268	None
Other Chemical (s)	Listed Above	See Trade Name (s) List					
			Water	7732-18-5		0.09706	

SI-150	SolNexus Chemical	Scale Inhibitor					
				Listed Below			
Soda Ash	Innospec Oilfield Services	Buffer					
				Listed Below			
30%-HCl	HM Acid Services,LLC	Acidizing					
				Listed Below			
HiRate 635	Innospec Oilfield Services	Friction Reducer					
				Listed Below			
Methanol	Innospec Oilfield Services	Solvent					
				Listed Below			
Bleach 12.5%	Solugen Blending	Iron Control					
				Listed Below			
BioSuite GQ2510	BioSuite	Biocide					
				Listed Below			
22.5%-HCl	HM Acid Services,LLC	Acidizing					
				Listed Below			
Blue Dye Blend	Innospec Oilfield Services	Fracking Dye					

				Listed Below			
IXP 2132FR	Innospec Oilfield Services	Friction Reducer					
				Listed Below			
Sand (Proppant)	TSS	Proppant					
				Listed Below			

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

			Silica Substrate	14808-60-7	100.00000	8.79464	None
			Proprietary	Proprietary		0.07013	
			Hydrogen Chloride	7647-01-0		0.03260	
			Distillates (petroleum), hydrotreated light	64742-47-8		0.02451	
			Glutaraldehyde	111-30-8		0.00492	
			Proprietary Polyacrylamide	Proprietary		0.00325	
			Quaternary Ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1		0.00201	
			Sodium Hypochlorite	7681-52-9		0.00129	
			Methanol	67-56-1		0.00056	
			Ethanol	64-17-5		0.00019	
			sodium hydroxide	1310-73-2		0.00015	
			Sodium Carbonate	497-19-8		0.00004	
			Acid Blue 9, Disodium Salt	3844-45-9		0.00003	
			Acrylamide (as residual)	79-06-1		0.00001	

\* 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)