

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/6/2023
Job End Date:	11/10/2023
State:	Texas
County:	Loving
API Number:	42-301-36071-00-00
Operator Name:	COG Operating LLC
Well Name and Number:	UL 20 Gold Spoon 2901H
Latitude:	31.67137000
Longitude:	-103.33911200
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,863
Total Base Water Volume (gal):	10,045,325
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	ConocoPhillips	CARRIER/BASE FLUID					
			WATER	7732-18-5	100.00000	86.42526	None
100 MESH REGIONAL	Atlas Sand	PROPPING AGENT					
			CRYSTALLINE SILICA	14808-60-7	99.90000	12.87193	None
			ALUMINUM OXIDE	1344-28-1	1.00000	0.12885	None
7.5% HCL	FSTI	ACID					
			WATER	7732-18-5	92.50000	0.55169	None
			HYDROGEN CHLORIDE	7647-01-0	7.50000	0.04473	None
ACEFLOW 3300	ACE COMPLETIONS	FRICTION REDUCER					
			DISTILLATES, C8-C26, BRANCHED AND LINEAR	848301-67-7	70.00000	0.04629	None
			POLYACRYLAMIDE	9003-05-8	40.00000	0.02645	None
			FATTY ACID ESTER	Proprietary	5.00000	0.00331	None
			STYRENE-ETHYLENE/PROPYLENE	68648-89-5	5.00000	0.00331	None
PeroxyMAX	CLEAN CHEMISTRY	BIOCIDE					
			Water	7732-18-5	94.20000	0.02442	None
			Sodium Peracetate	64057-57-4	5.80000	0.00150	None

AIM1015	CHAMPIONX	ACID INHIBITOR					
			ISOPROPANOL	67-63-0	60.00000	0.00041	None
			ETHOXYLATED FATTY ALCOHOL	Proprietary	30.00000	0.00020	None
			ETHOXYLATED ALCOHOL	Proprietary	10.00000	0.00007	None
			AROMATIC ALDEHYDE	Proprietary	10.00000	0.00007	None
			ALKOXYLATED FATTY AMINE	Proprietary	5.00000	0.00003	None
			METHANOL	67-56-1	1.00000	0.00001	None
AIC100L	CHAMPIONX	IRON CONTROL					
			CITRIC ACID	77-92-9	60.00000	0.00033	None
ASP301	CHAMPIONX	NON-EMULSIFER					
			POLYALKYLENE GLYCOL	Proprietary	30.00000	0.00007	None
			POLYETHYLENE GLYCOL	25322-68-3	5.00000	0.00001	None
			OXYALKYLATED ALCOHOL	Proprietary	5.00000	0.00001	None
			ORGANIC SULFONIC ACID	Proprietary	1.00000	0.00000	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.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			WATER	7732-18-5	92.50000	0.55169	
			ALUMINUM OXIDE	1344-28-1	1.00000	0.12885	
			POLYACRYLAMIDE	9003-05-8	40.00000	0.02645	
			STYRENE-ETHYLENE/PROPYLENE	68648-89-5	5.00000	0.00331	
			FATTY ACID ESTER	Proprietary	5.00000	0.00331	
			Sodium Peracetate	64057-57-4	5.80000	0.00150	
			ETHOXYLATED FATTY ALCOHOL	Proprietary	30.00000	0.00020	
			ETHOXYLATED ALCOHOL	Proprietary	10.00000	0.00007	
			AROMATIC ALDEHYDE	Proprietary	10.00000	0.00007	
			ALKOXYLATED FATTY AMINE	Proprietary	5.00000	0.00003	
			POLYETHYLENE GLYCOL	25322-68-3	5.00000	0.00001	
			OXYALKYLATED ALCOHOL	Proprietary	5.00000	0.00001	
			METHANOL	67-56-1	1.00000	0.00001	
			ORGANIC SULFONIC ACID	Proprietary	1.00000	0.00000	
			ALUMINUM OXIDE	1344-28-1	1.00000		

\* 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)