

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/3/2019
Job End Date:	4/3/2019
State:	Texas
County:	Winkler
API Number:	42-495-34113-00-00
Operator Name:	Oasis Petroleum
Well Name and Number:	UL SUGARLOAF D 20-37-48 5104H
Latitude:	31.67739000
Longitude:	-103.26066900
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,540
Total Base Water Volume (gal):	18,511,243
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	90.77972	Density = 8.340
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.80965	

TRANSCEND-350	Halliburton	Surfactant					
				Listed Below			
FIGHTR EC-1	Halliburton	Friction Reducer					
				Listed Below			
LP-65 MC	Halliburton	Scale Inhibitor					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8626	Halliburton	Biocide					
				Listed Below			
HCL >10%	Halliburton	Solvent					
				Listed Below			
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
SAND-COMMON WHITE-100 MESH, SSA-2, 100 LB SACK (100002158)	Halliburton	Proppant					
				Listed Below			

Cla-Web(TM) II	Halliburton	Clay Stabilizer					
				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
FDP-S1296-17	Halliburton	Corrosion Inhibitor					
				Listed Below			
OptiKleen-WF (TM)	Halliburton	Concentrate					
				Listed Below			
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive					
				Listed Below			
TRANSCEND-425	Halliburton	Surfactant					
				Listed Below			
FDP-S1305-17	Halliburton	Additive					
				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	8.18860	
			Hydrochloric acid	7647-01-0	30.00000	0.22765	
			N/A	Proprietary	100.00000	0.15078	
			Organic phosphonate	Proprietary	60.00000	0.01292	

			Sodium perborate tetrahydrate	10486-00-7	100.00000	0.01084	
			Guar gum	9000-30-0	100.00000	0.00911	
			Ammonium compound	Proprietary	30.00000	0.00904	
			Chlorine compound	Proprietary	30.00000	0.00904	
			Ethoxylated alcohols	Proprietary	30.00000	0.00785	
			Fatty nitrogen derived amides	Proprietary	30.00000	0.00775	
			Hydrotreated light petroleum distillate	Proprietary	30.00000	0.00775	
			Ethoxylated fatty acids	Proprietary	30.00000	0.00775	
			Isopropanol	67-63-0	30.00000	0.00775	
			Ammonium chloride	12125-02-9	30.00000	0.00646	
			Glutaraldehyde	111-30-8	30.00000	0.00606	
			Butyl alcohol	71-36-3	10.00000	0.00258	
			Acetic anhydride	108-24-7	100.00000	0.00229	
			Didecyltrimethylammonium chloride	7173-51-5	10.00000	0.00201	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	10.00000	0.00201	
			Acetic acid	64-19-7	60.00000	0.00138	
			Methanol	67-56-1	100.00000	0.00122	
			Diammonium phosphate	7783-28-0	5.00000	0.00108	
			Ethanol	64-17-5	5.00000	0.00101	
			Quaternary amine	Proprietary	1.00000	0.00060	
			Modified thiourea polymer	Proprietary	30.00000	0.00037	
			Amine salts	Proprietary	1.00000	0.00033	
			Sodium chloride	7647-14-5	1.00000	0.00030	
			Alcohols	Proprietary	1.00000	0.00026	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226

			Polyethylene glycol	25322-68-3	1.00000	0.00026	
			Diethanolamine	111-42-2	1.00000	0.00026	
			Sodium persulfate	7775-27-1	100.00000	0.00025	
			Ethoxylated alcohol	Proprietary	30.00000	0.00022	
			Propargyl alcohol	107-19-7	5.00000	0.00006	
			Amine	Proprietary	0.10000	0.00003	
			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)