Fracture Start Date/Time:	**7/28/17 8:42**
Fracture End Date/Time:	**7/28/17 11:50**
State:	**Texas**
County:	**Andrews**
API Number:	**42-003-47556-0000**
Operator Number:	
Well Name:	**USL 5-9 #6**
Federal Well:	**No**
Tribal Well:	**No**
Longitude:	**-100.0001**
Latitude:	**10.00001**
Long/Lat Projection:	**NAD27**
True Vertical Depth (TVD):	**12,209'**
Total Clean Fluid Volume* (gal):	**287,364**

Frac Focus
Chemical Disclosure Registry

(e.g. XX-XXX-XXXXX-0000)

Additive	*Specific Gravity*	*Additive Quantity*	*Mass (lbs)*	
Water	1.00	**287,364**	*2,398,053*	gal
Sand (Proppant)	2.65	**303,860**	*303,860*	lb
RCS (Proppant)	2.59	**0**	*0*	lb
Hydrochloric Acid (15%)	1.08	**4,000**	*36,050*	gal
4-N-1 Plus	1.02	**32**	*272*	gal
Plexcide 24L	1.16	**0**	*0*	gal
Plexset 730	0.90	**0**	*0*	gal
Plexsurf 240 E	0.97	**289**	*2,339*	gal
Plexslick 953	1.03	**301**	*2,587*	gal
Plexgel 907 LE	1.18	**0**	*0*	gal
Plexbor 101	1.30	**0**	*0*	gal
Plexgel Breaker 10L	1.01	**0**	*0*	gal
Sodium Persulfate	2.39	**0**	*0*	gal
Buffer 11	1.46	**0**	*0*	gal
Greenhib 679	1.15	**82**	*787*	gal
Clayplex 650	1.15	**285**	*2,735*	gal
Plexcide 15G	1.07	**134**	*1,197*	gal
Payzone845BCD-W	0.88	**0**	*0*	gal
				gal
			Total Slurry Mass (Lbs)	
			2,747,880	

Ingredients Section:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Mass per Component (LBS)	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments	Claimant Company	Claimant First Name	Claimant Last Name	Claimant Email	Claimant Phone (nnn-nnn-nnnn)
Water	Customer	Carrier/Base Fluid	Water	7732-18-5	100.00%	*2,398,053*	*87.26918%*						
Sand (Proppant)	US Silica	Proppant	Silica Substrate	14808-60-7	100.00%	*303,860*	*11.05798%*						
RCS (Proppant)	Momentive	Proppant	Silica Substrate	14808-60-7	100.00%	*0*	*0.00000%*						
Hydrochloric Acid (15%)	CNR	Acidizing	Hydrochloric Acid	7647-01-0	38.80%	*13,988*	*0.50903%*						
4-N-1 Plus	Chemplex	Iron Control,Corr Inhib,Surfactant	Acetic Acid	64-19-7	80.00%	*218*	*0.00793%*						
			Methanol	67-56-1	10.00%	*27*	*0.00099%*						
Plexcide 24L	Chemplex	Biocide	Tetrahydro-3,Dimethyl-2H	533-74-4	24.00%	*0*	*0.00000%*						
Plexset 730	Chemplex	Activator	Secondary Alcohol Ethoxylate	84133-50-6	50.00%	*0*	*0.00000%*						
Plexsurf 240 E	Chemplex	Surfactant	Methyl Alcohol	67-56-1	10.00%	*234*	*0.00851%*						
			Alcohol Alkoxylate	Proprietary	50.00%	*1,170*	*0.04257%*		Chemplex / SOLVAY	Brett	Young	brett.yong@solvay.com	432-488-8799
Plexslick 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8.00%	*207*	*0.00753%*		Chemplex / SOLVAY	Brett	Young	brett.yong@solvay.com	432-488-8799
			Hydrotreated Petroleum Distillate	64742-47-8	30.00%	*776*	*0.02825%*						
			Polyacrylamide-co-Acrylic Acid	9003-06-9	31.00%	*802*	*0.02919%*						
Plexgel 907 LE	Chemplex	Polymer	Guar Gum	9000-30-0	50.00%	*0*	*0.00000%*						
			Mineral Oil	64742-47-8	55.00%	*0*	*0.00000%*						
			Bentonite Clay	14808-60-7	2.00%	*0*	*0.00000%*						
			Surfactant	68439-51-0	2.00%	*0*	*0.00000%*						
Plexbor 101	Chemplex	Crosslinker	Ethylene Glycol	107-21-1	9.99%	*0*	*0.00000%*						
			Potssium Metaborate	13709-94-9	30.00%	*0*	*0.00000%*						
			Potassium Hydroxide	1310-58-3	5.00%	*0*	*0.00000%*						
Plexgel Breaker 10L	Chemplex	Gel Breaker	Mannanase Enzymes	Proprietary	2.00%	*0*	*0.00000%*		Chemplex / SOLVAY	Brett	Young	brett.yong@solvay.com	432-488-8799
			Sodium Chloride	7647-14-5	15.00%	*0*	*0.00000%*						
Sodium Persulfate	Chemplex	Gel Breaker	Sodium Persulfate	7775-27-1	98.00%	*0*	*0.00000%*						
Buffer 11	Chemplex	PH Control	Potassium Hydroxide	1310-58-3	23.00%	*0*	*0.00000%*						
Greenhib 679	Chemplex	Scale Inhibitor	Glycerine	56-81-5	35.00%	*275*	*0.01002%*						
			Proprietary	Proprietary	35.00%	*275*	*0.01002%*		Chemplex / SOLVAY	Brett	Young	brett.yong@solvay.com	432-488-8799
			Water	7732-18-5	30.00%	*236*	*0.00859%*						
Clayplex 650	Chemplex	Clay Stabilizer	Water	7732-18-5	60.00%	*1,641*	*0.05972%*						
			Ethanaminium, 2-hydroxy-N,N,N-trimethyl-, chloride	67-48-1	35.00%	*957*	*0.03484%*						
Plexcide 15G	Chemplex, LC	Biocide	Glutaraldehyde	111-30-8	14.00%	*168*	*0.00610%*						
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00%	*36*	*0.00131%*						
			Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00%	*36*	*0.00131%*						
			Ethanol	64-17-5	3.00%	*36*	*0.00131%*						
Payzone845BCD-W	Catalyst	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	50.00%	*0*	*0.00000%*						
			Ethyl Alcohol	64-17-5	10.00%	*0*	*0.00000%*						
			Methyl Alcohol	67-56-1	40.00%	*0*	*0.00000%*						

*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%
All component information