

**State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505**

1. WELL API NO:  
30-045-35278

2. Well Name:  
ST LOUIS COM #090

3. Well Number:  
090

**HYDRAULIC FRACTURING FLUID DISCLOSURE**  
 Original  
 Amendment

4. Surface Hole Location:  
Unit B Lot B Section 9 Township: 23N Range: 10W  
Feet from: 1150 N/S Line N  
Feet from: 1450 E/W Line E

5. Bottom Hole Location:  
Unit B Lot B Section 9 Township: 23N Range: 10W  
Feet from: 1150 N/S Line N  
Feet from: 1450 E/W Line E

6. Latitude: 0 Longitude: 0

7. County: San Juan

8. Operator Name and Address: DUGAN PRODUCTION CORP  
PO BOX 420 FARMINGTON 87499

9. OGRID: 6515

10. Phone Number:

11. Last Fracture Date: 11/11/2013 Frac Performed by: Baker Hughes

12. Production Type: G

13. Pool Code(s): 71629

14. Gross Fractured Interval: 929 ft to 956 ft

15. True Vertical Depth (TVD): 956 ft

16. Total Volume of Fluid Pumped: 21,714 gals

17. Total Volume of Re-Use Water Pumped: 0 gals

18. Percent of Re-Use Water in Fluid Pumped: %

**19. HYDRAULIC FLUID COMPOSITION AND CONCENTRATION:**

Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)
Water	Dugan Production Corp.	Carrier	Water	7732-18-5		54.76858%
HCl, 10.1-15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	85%	0.99433%
			Water	7732-18-5	85%	0.99433%
Alpha 1427	Baker Hughes	Biocide	Didecyl Dimethyl Ammonium Chloride	7173-51-5	10%	0.00265%
			Ethanol	64-17-5	5%	0.00132%
			Glutaraldehyde	111-30-8	30%	0.00794%
			Quaternary Ammonium Compound	68424-85-1	5%	0.00132%
GBW-5	Baker Hughes	Breaker	Ammonium persulphate	7727-54-0	100%	0.00303%
Enzyme G-I	Baker Hughes	Breaker	contains non-hazardous ingredients which are listed in the non-MSDS section of the report	NA		0.03027%
GBW-33D	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	Trade Secret	100%	0.00151%
BC-6	Baker Hughes	Breaker Catalyst	Triethanolamine	102-71-6	60%	0.0163%
BF-7L	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60%	0.03335%
ClayCare, drum	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.06604%
			Water	7732-18-5	30%	0.02642%
			Fatty Acids	Trade Secret	30%	0.00067%
			Methanol	67-56-1	60%	0.00115%
			Olefin	Trade Secret	5%	0.00077%
			Polyoxyalkylenes	Trade Secret	30%	0.00067%
			Propargyl Alcohol	107-19-7	10%	0.00022%
			Thiourea Polymer	68527-49-1	30%	0.00067%
CorrSorb 3600, 25 lb pail	Baker Hughes	Corrosion Inhibitor	Acid Phosphate Ester	9046-01-9	10%	0.00605%
			Crystalline Silica: Quartz	14808-60-7	1%	0.00061%
			Ethylene Glycol	107-21-1	1%	0.00061%
			Quaternary Ammonium Compound	61789-71-7	30%	0.01815%
XLW-32, 260 gal tote	Baker Hughes	Crosslinker	Boric Acid	10043-35-3	30%	0.0137%
			Methanol	67-56-1	60%	0.02741%
			Methyl Borate	121-43-7	30%	0.0137%
FAW-22	Baker Hughes	Foamer	Alkyl Sulfate (1 of 3)	Trade Secret	1%	0.00239%
			Alkyl Sulfate (2 of 3)	Trade Secret	1%	0.00239%
			Alkyl Sulfate (3 of 3)	Trade Secret	1%	0.00239%
			Ammonium Alkyl Ether Sulfate	Trade Secret	10%	0.02392%
			Isopropanol	67-63-0	30%	0.07177%
			Sodium Sulfonate	68439-57-6	30%	0.07177%
			1-butanol-2-propanol	5131-66-8	5%	0.01419%
			Crystalline Silica: Quartz	14808-60-7	5%	0.01419%
			Guar Gum	9000-30-0	60%	0.17023%
			Isotridecanol, ethoxylated	9043-30-5	5%	0.01419%
			Paraffinic Petroleum Distillate	64742-55-8	30%	0.08511%
			Petroleum Distillates	64742-57-8	30%	0.08511%
Ferrotrol 300L (Totes)	Baker Hughes	Iron Control	Citric Acid	77-92-9	60%	0.00381%
Nitrogen	Baker Hughes	Nitrogen	Liquid Nitrogen	7727-37-9	100%	0.59910%
Sand, Brown, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	34.14131%
ScaleSorb 3 (25# pail)	Baker Hughes	Scale Inhibitor	Amino Alkyl Phosphonic Acid	Trade Secret	30%	0.01815%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	0.00061%
			Diatomaceous Earth, Calcined	91053-39-3	100%	0.0605%
			Phosphonic Acid	13598-36-2	1%	0.00061%
GasFlo G, 330 gal tote	Baker Hughes	Surfactant	Methanol	67-56-1	30%	0.04828%
			Oxyalkylated Alkylphenol (1)	Trade Secret	10%	0.01609%
			Oxyalkylated Alkylphenol (2)	Trade Secret	10%	0.01609%
			Oxyalkylated Amine	Trade Secret	3%	0.00483%
			Polyoxyalkylene	Trade Secret	10%	0.01609%
			2-butyl-1-propanol	15821-83-7	0%	0.0002837%
			85% Phosphoric Acid, FG	10361-85-6	0%	2E-07%
			Boric Acid	10043-35-3	0%	2E-07%
			Calcium Carbonate	471-34-1	0%	0.0001059%
			Calcium Chloride	10043-52-4	0%	3E-07%
			Com Meal	NA	0%	0.0012554%
			Cupric Sulfate 5 H2O, ACS	7758-99-8	0%	2E-07%
			D-Biotin, USP	119616-38-5	0%	2E-07%
			Ethoxylated Alcohol	Trade Secret	0%	0.0023922%
			Ethylene Glycol	107-21-1	0%	0.0023922%
			Fatty Amide Derivative	70851-08-0	0%	0.0023922%
			Ferric Chloride, Hexahydrate	7705-08-0	0%	2E-07%
			Formaldehyde	50-00-0	0%	0.0023933%
			Hemicellulase Enzyme Concentrate	9025-56-3	0%	0.000908%
			Linseed Meal	8001-26-1	0%	0.0001513%
			Magnesium Sulfate	7487-88-9	0%	2E-07%
			Mannan Endo-1,4-B-Mannosidase	37288-54-3	0%	1.7E-06%
			Polyethylene Glycol	25322-68-3	0%	2E-07%
			Potassium Hydroxide	1310-58-3	0%	0.0005559%
			Potassium Sulfate	7778-80-5	0%	2E-07%
			Sodium Chloride	7647-14-5	0%	0.0024488%
			Sodium Molybdate	7631-95-0	0%	2E-07%
			Sodium Sulfate	7757-82-6	0%	0.0023922%
			Soy Isoflavone	486-86-8	0%	2E-07%
			Thiamine-HCl	67-03-8	0%	2E-07%
			Water	7732-18-5	0%	0.2868272%
			Yeast Extract	8013-01-2	0%	2E-07%
			Zinc Sulfate Heptahydrate	7446-19-7	0%	2E-07%

20. I, as Operator, hereby certify that the information shown on this disclosure form is true and complete to the best of my knowledge and belief.

Signature: Signed Electronically Printed Name: TYRA M FEIL ENGINEERING Title: ASSISTANT

Date: 11/27/2013

E-mail Address: tyrafeil@duganproduction.com

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