Submit within 45 days of well completion

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

Revised November 6, 2013

1. WELL API NO.
30-025-41576

2. Well Name:
NORTHEAST DRINKARD UNIT #411

3. Well Number:
411

## HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:A Lot:A Section:10 Township:21S Range:37E
Feet from:1075 N/S Line:N
Feet from:1045 E/W Line:E

5. Bottom Hole Location:
Unit:A Lot:A Section:10 Township:21S Range:37E
Feet from:1075 N/S Line:N
Feet from:1045 E/W Line:E

6. latitude: 32.4976886709965 longitude: -103.145751357556

7. County:
Lea

8. Operator Name and Address:
APACHE CORP
303 Veterans Airpark Lane
Suite 3000
Midland 79705

9. OGRID: 873

10. Phone Number: 432-818-1062

11. Last Fracture Date: 3/1/2014 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
22900

14. Gross Fractured Interval:
5,592 ft to 6,693 ft

15. True Vertical Depth (TVD):
6,693 ft

16. Total Volume of Fluid Pumped:
329,406 gals

17. Total Volume of Re-Use Water Pumped:
N/A

18. Percent of Re-Use Water in Fluid Pumped:
Not Disclosed

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 | Operator | Carrier | Water | 7732-18-5 | 100% | 78.92124% |
| HCl, 10.1 - 15% | Baker Hughes | Acidizing | Hydrochloric Acid | 7647-01-0 | 15% | 0.96106% |
| | | | Water | 7732-18-5 | 85% | 5.44598% |
| X-Cide 207 | Baker Hughes | Biocide | 2-Methyl-4-Isothiazolin-3-One | 2682-20-4 | 5% | 0.00016% |
| | | | 5-Chloro-2-Methyl-4-Isothiazolin-3-One | 26172-55-4 | 10% | 0.00031% |
| | | | Crystalline Silica: Cristobalite | 14464-46-1 | 1% | 3E-05% |
| | | | Crystalline Silica: Quartz (SiO2) | 14808-60-7 | 1% | 3E-05% |
| | | | Diatomaceous Earth, Calcined | 91053-39-3 | 60% | 0.00186% |
| | | | Magnesium Chloride | 7786-30-3 | 5% | 0.00016% |
| | | | Magnesium Nitrate | 10377-60-3 | 10% | 0.00031% |
| Alpha 125 | Baker Hughes | Biocide | Water | 7732-18-5 | 75% | 0.01602% |
| GBW-5 | Baker Hughes | Breaker | Ammonium persulphate | 7727-54-0 | 100% | 0.00115% |
| Enzyme G-I | Baker Hughes | Breaker | Contains non-hazardous ingredients which are listed in in the non-MSDS section of the report | NA | 100% | 0.04313% |
| BF-7L | Baker Hughes | Buffer | Potassium Carbonate | 584-08-7 | 60% | 0.08913% |
| ClayCare, tote | Baker Hughes | Clay Control | Choline Chloride | 67-48-1 | 75% | 0.06097% |
| | | | Water | 7732-18-5 | 30% | 0.02439% |
| CI-14 | Baker Hughes | Corrosion Inhibitor | Fatty Acids | Trade Secret | 10% | 0.00079% |
| | | | Methanol | 67-56-1 | 100% | 0.00792% |
| | | | Olefin | Trade Secret | 5% | 0.0004% |
| | | | Polyoxyalkylenes | Trade Secret | 30% | 0.00237% |
| | | | Propargyl Alcohol | 107-19-7 | 5% | 0.0004% |
| CorrSorb 3600, 25 lb pail | Baker Hughes | Corrosion Inhibitor | Acid Phosphate Ester | 9046-01-9 | 10% | 0.00144% |
| | | | Crystalline Silica: Quartz | 14808-60-7 | 1% | 0.00014% |
| | | | Ethylene Glycol | 107-21-1 | 1% | 0.00014% |
| | | | Quaternary Ammonium Compound | 61789-71-7 | 30% | 0.00431% |
| XLW-24, tote | Baker Hughes | Crosslinker | Glyoxal | 107-22-2 | 10% | 0.01086% |
| | | | Sodium Tetraborate | 1303-96-4 | 30% | 0.03259% |
| FRW-18 | Baker Hughes | Friction Reducer | Petroleum Distillates | 64742-47-8 | 30% | 0.00168% |
| GW-3LDF | Baker Hughes | Gelling Agent | 1-butoxy-2-propanol | 5131-66-8 | 5% | 0.02912% |
| | | | Crystalline Silica: Quartz | 14808-60-7 | 5% | 0.02912% |
| | | | Guar Gum | 9000-30-0 | 60% | 0.34946% |
| | | | Isotridecanol, ethoxylated | 9043-30-5 | 5% | 0.02912% |
| | | | Paraffinic Petroleum Distillate | 64742-55-8 | 30% | 0.17473% |
| | | | Petroleum Distillates | 64742-47-8 | 30% | 0.17473% |
| Ferrotrol 280L | Baker Hughes | Iron Control | 2-Mercaptoethanol | 60-24-2 | 100% | 0.01372% |
| | | | Ammonium Hydroxide | 1336-21-6 | 5% | 0.00069% |
| | | | Cupric Chloride | 7447-39-4 | 5% | 0.00069% |
| NE-23, 55 gallon drum | Baker Hughes | Non-emulsifier | Isopropanol | 67-63-0 | 30% | 0.00139% |
| NE-35, 330 gl tote | Baker Hughes | Non-emulsifier | Mixture of Surfactants | Trade Secret | 50% | 0.03463% |
| | | | Propylene Glycol | 57-55-6 | 30% | 0.02078% |
| Preferred Garnet RC 16/30 | Baker Hughes | Proppant | Castor Oil | 8001-79-4 | 5% | 0.63767% |
| | | | Crystalline Slica (Quartz) | 14808-60-7 | 98% | 12.49838% |
| | | | Iron Oxide (colorant) | 1309-37-1 | 1% | 0.12753% |
| Scaletrol 720 | Baker Hughes | Scale Inhibitor | Calcium Chloride | 10043-52-4 | 5% | 0.00439% |
| | | | Ethylene Glycol | 107-21-1 | 30% | 0.02634% |
| Ingredients shown above are subject to 29 CFR 1910 | | | 2-butoxy-1-propanol | 15821-83-7 | 0% | 0.0005824% |
| | | | Benzyl Chloride | 100-44-7 | 0% | 4.65E-05% |
| | | | Ethoxylated Alcohol | Trade Secret | 0% | 0.0001117% |
| | | | Ethoxylated Nonylphenol | 9016-45-9 | 0% | 0.0002323% |
| | | | Formaldehyde | 50-00-0 | 0% | 7.92E-05% |
| | | | Glutaraldehyde | 111-30-8 | 0% | 0.0064085% |
| | | | Glycol Ether | Trade Secret | 0% | 0.0002323% |
| | | | Hemicellulase Enzyme Concentrate | 9025-56-3 | 0% | 0.0012938% |
| | | | Hydrochloric Acid | 7647-01-0 | 0% | 7.92E-05% |
| | | | Methanol | 67-56-1 | 0% | 5.34E-05% |
| | | | Modified Thiorea Polymer | 68527-49-1 | 0% | 0.0005542% |
| | | | Olefin Sulfonate | Trade Secret | 0% | 0.0027877% |
| | | | Poly (acrylamide-co-acrylic acid) | Trade Secret | 0% | 0.0016761% |
| | | | Polyacrylate | Trade Secret | 0% | 0.0175626% |
| | | | Polyester | Trade Secret | 0% | 0.0006969% |
| | | | Potassium Chloride | 7447-40-7 | 0% | 4.39E-05% |
| | | | Potassium Hydroxide | 1310-58-3 | 0% | 0.0014855% |
| | | | Quaternary Amine Compounds | Trade Secret | 0% | 0.0013938% |
| | | | Salt | Trade Secret | 0% | 0.0002793% |
| | | | Sodium Chloride | 7647-14-5 | 0% | 2.63E-05% |
| | | | Sorbitan Monooleate | Trade Secret | 0% | 0.0002793% |
| | | | Water | 7732-18-5 | 0% | 0.1826367% |

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: Reesa R. Holland Title: Sr Staff Reg Tech

Date: 4/8/2014

E-mail Address: reesa.fisher@apachecorp.com

NMOCD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.