

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 February 15, 2012

☒ Original

☐ Amendment

HYDRAULIC FRACTURING FLUID DISCLOSURE

1. WELL API NO.  
30-025-40432

2. Well Name:  
REDTAG #006

3. Well Number:  
006

4. Surface Hole Location:  
Unit:K Lot:K Section:2 Township:20S Range:38E  
Feet from:2270 N/S Line:S  
Feet from:1695 E/W Line:W

5. Bottom Hole Location:  
Unit:K Lot:K Section:2 Township:20S Range:38E  
Feet from:2270 N/S Line:S  
Feet from:1695 E/W Line:W

6. Istitude:  
32.6011604623695  
longitude:  
-  
103.122287261944

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: 5/3/2012    Frac Performed by: Baker Hughes

12. Production Type:  
O

13. Pool Code(s):  
33230, 33250, 78760

14. Gross Fractured Interval:  
6,095 ft to 7,108 ft

15. True Vertical Depth (TVD):  
7,108 ft

16. Total Volume of Fluid Pumped:  
6,708 bbls

17. 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%                                                     | 82.7521%                                                 |
| HCl, 10.1 - 15%                                    | Baker Hughes | Acidizing           | Hydrochloric Acid                                                                           | 7647-01-0                           | 15%                                                      | 0.5466%                                                  |
|                                                    |              |                     | Water                                                                                       | 7732-18-5                           | 85%                                                      | 3.09742%                                                 |
| Superset-U, tote                                   | Baker Hughes | Activator           | Denatured Ethanol                                                                           | 64-17-5                             | 45%                                                      | 0.03982%                                                 |
|                                                    |              |                     | Di (Ethylene Glycol) Ethyl Ether Acetate                                                    | 112-15-2                            | 55%                                                      | 0.04866%                                                 |
| X-Cide 207                                         | Baker Hughes | Biocide             | 2-Methyl-4-Isothiazolin-3-One                                                               | 2682-20-4                           | 5%                                                       | 0.00017%                                                 |
|                                                    |              |                     | 5-Chloro-2-Methyl-4-Isothiazolin-3-One                                                      | 26172-55-4                          | 10%                                                      | 0.00034%                                                 |
|                                                    |              |                     | 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%                                                      | 0.00203%                                                 |
|                                                    |              |                     | Magnesium Chloride                                                                          | 7786-30-3                           | 5%                                                       | 0.00017%                                                 |
|                                                    |              |                     | Magnesium Nitrate                                                                           | 10377-60-3                          | 10%                                                      | 0.00034%                                                 |
| Alpha 125                                          | Baker Hughes | Biocide             | Glutaraldehyde                                                                              | 111-30-8                            | 30%                                                      | 0.00679%                                                 |
| GBW-5                                              | Baker Hughes | Breaker             | Ammonium Persulfate                                                                         | 7727-54-0                           | 100%                                                     | 0.00687%                                                 |
| GBW-15L                                            | Baker Hughes | Breaker             | Enzyme solution                                                                             | Trade Secret                        | 100%                                                     | 0.0701%                                                  |
| ClayCare                                           | Baker Hughes | Clay Control        | Choline Chloride                                                                            | 67-48-1                             | 75%                                                      | 0.0721%                                                  |
|                                                    |              |                     | Water                                                                                       | 7732-18-5                           | 30%                                                      | 0.02884%                                                 |
| CI-14                                              | Baker Hughes | Corrosion Inhibitor | Fatty Acids                                                                                 | 61790-12-3                          | 100%                                                     | 0.00046%                                                 |
|                                                    |              |                     | Methanol                                                                                    | 67-56-1                             | 100%                                                     | 0.0046%                                                  |
|                                                    |              |                     | Olefin                                                                                      | 64743-02-8                          | 5%                                                       | 0.00023%                                                 |
|                                                    |              |                     | Polyoxyalkylenes                                                                            | 68951-67-7                          | 30%                                                      | 0.00138%                                                 |
|                                                    |              |                     | Propargyl Alcohol                                                                           | 107-19-7                            | 5%                                                       | 0.00023%                                                 |
| XLW-10A                                            | Baker Hughes | Crosslinker         | Ethylene Glycol                                                                             | 107-21-1                            | 30%                                                      | 0.02153%                                                 |
|                                                    |              |                     | Sodium Hydroxide                                                                            | 1310-73-2                           | 10%                                                      | 0.00718%                                                 |
|                                                    |              |                     | Sodium Tetraborate                                                                          | 1330-43-4                           | 30%                                                      | 0.02153%                                                 |
| FRW-20                                             | Baker Hughes | Friction Reducer    | Petroleum Distillates                                                                       | 64742-47-8                          | 30%                                                      | 0.00579%                                                 |
| GW-4LDF                                            | Baker Hughes | Gelling Agent       | Guar Gum                                                                                    | 9000-30-0                           | 40%                                                      | 0.17063%                                                 |
|                                                    |              |                     | Petroleum Distillates Blend                                                                 | Trade Secret                        | 70%                                                      | 0.2986%                                                  |
| AG-12                                              | Baker Hughes | Gelling Agent       | Acrylic Polymers                                                                            | 26006-22-4                          | 50%                                                      | 0.00238%                                                 |
|                                                    |              |                     | Distillates, Petroleum, Hydrotreated Middle                                                 | 64742-47-8                          | 21.1%                                                    | 0.001%                                                   |
| Ferrotrol 280L                                     | Baker Hughes | Iron Control        | 2-Mercaptoethanol                                                                           | 60-24-2                             | 100%                                                     | 0.01261%                                                 |
|                                                    |              |                     | Ammonium Hydroxide                                                                          | 1336-21-6                           | 5%                                                       | 0.00063%                                                 |
|                                                    |              |                     | Cupric Chloride                                                                             | 7447-39-4                           | 5%                                                       | 0.00063%                                                 |
| NE-23                                              | Baker Hughes | Non-emulsifier      | Isopropanol                                                                                 | 67-63-0                             | 100%                                                     | 0.00359%                                                 |
| NE-945, tote                                       | Baker Hughes | Non-emulsifier      | Oxyalkylated alcohol                                                                        | Trade Secret                        | 5%                                                       | 0.00478%                                                 |
| Sand, White, 20/40                                 | Baker Hughes | Proppant            | Crystalline Silica (Quartz)                                                                 | 14808-60-7                          | 100%                                                     | 7.4549%                                                  |
| Sand, White, 100 mesh                              | Baker Hughes | Proppant            | Crystalline Silica (Quartz)                                                                 | 14808-60-7                          | 100%                                                     | 0.45585%                                                 |
| Super LC, 20/40                                    | Baker Hughes | Proppant            | Hexamethylenetetramine                                                                      | 1009-7-0                            | 0.01%                                                    | 0.00045%                                                 |
|                                                    |              |                     | P/F Resin                                                                                   | 9003-35-4                           | 5%                                                       | 0.22331%                                                 |
|                                                    |              |                     | Silicon Dioxide (Silica Sand)                                                               | 14808-60-7                          | 97%                                                      | 4.33219%                                                 |
| ES-4A, Greenskeeper Solvent                        | Baker Hughes | Solvent             | Petroleum Distillates Blend                                                                 | Trade Secret                        | 100%                                                     | 0.02947%                                                 |
| Ingredients shown above are subject to 29 CFR 1910 |              |                     | Alcohols, C12-14, Ethoxylated Propoxylated                                                  | 68439-51-0                          | 0%                                                       | 0.0213286%                                               |
|                                                    |              |                     | Aliphatic Hydrocarbon                                                                       | Trade Secret                        | 0%                                                       | 0.0044977%                                               |
|                                                    |              |                     | Alkoxyalted Amine                                                                           | Trade Secret                        | 0%                                                       | 0.0095571%                                               |
|                                                    |              |                     | Alkylene Oxide Block Polymer                                                                | Trade Secret                        | 0%                                                       | 0.0108951%                                               |
|                                                    |              |                     | Antifoam                                                                                    | Trade Secret                        | 0%                                                       | 1.91E-05%                                                |
|                                                    |              |                     | Copolymer                                                                                   | Trade Secret                        | 0%                                                       | 0%                                                       |
|                                                    |              |                     | Crystalline Silica, Quartz                                                                  | 14808-60-7                          | 0%                                                       | 0.0213286%                                               |
|                                                    |              |                     | Ethoxylated Nonylphenal                                                                     | 9016-45-9                           | 0%                                                       | 0%                                                       |
|                                                    |              |                     | Fatty Acid Esters                                                                           | 67701-32-0                          | 0%                                                       | 9.04E-05%                                                |
|                                                    |              |                     | Fatty Acid Oxyalkylate                                                                      | 70142-34-6                          | 0%                                                       | 9.5E-06%                                                 |
|                                                    |              |                     | Formaldehyde                                                                                | 50-00-0                             | 0%                                                       | 0%                                                       |
|                                                    |              |                     | Hydrochloric Acid                                                                           | 7647-01-0                           | 0%                                                       | 0%                                                       |
|                                                    |              |                     | Isotridecanol, Ethoxylated (TDA-6)                                                          | 9043-30-5                           | 0%                                                       | 0.0213286%                                               |
|                                                    |              |                     | Isotridecanol, Ethoxylated (TDA-9)                                                          | 9043-30-5                           | 0%                                                       | 0.0213286%                                               |
|                                                    |              |                     | Methanol                                                                                    | 67-56-1                             | 0%                                                       | 5.66E-05%                                                |
|                                                    |              |                     | Modified Thiourea Polymer                                                                   | 68527-49-1                          | 0%                                                       | 0%                                                       |
|                                                    |              |                     | Organic Sulfonic Acid                                                                       | 27176-87-0                          | 0%                                                       | 0.0001911%                                               |
|                                                    |              |                     | Oxyalkylated Alcohol                                                                        | Trade Secret                        | 0%                                                       | 0.0003861%                                               |
|                                                    |              |                     | Oxyalkylated Alkylphenol                                                                    | 9016-45-9                           | 0%                                                       | 8.57E-05%                                                |
|                                                    |              |                     | Polyglycol                                                                                  | 25322-68-3                          | 0%                                                       | 0.0018159%                                               |
|                                                    |              |                     | Polyglycol Ester                                                                            | Trade Secret                        | 0%                                                       | 0.0001737%                                               |
|                                                    |              |                     | Polyol Ester                                                                                | Trade Secret                        | 0%                                                       | 0.0002123%                                               |
|                                                    |              |                     | Polyquaternary Amine                                                                        | Trade Secret                        | 0%                                                       | 0.0011469%                                               |
|                                                    |              |                     | Quaternary Ammonium Compounds bis [Hydrogenated Tallow Alkyl] Dimethyl Salts With Bentonite | 68953-58-2                          | 0%                                                       | 0.0213286%                                               |
|                                                    |              |                     | Sodium Chloride                                                                             | 7647-14-5                           | 0%                                                       | 0.0007721%                                               |
|                                                    |              |                     | Vinyl Copolymer                                                                             | Trade Secret                        | 0%                                                       | 0.005405%                                                |
|                                                    |              |                     | Water                                                                                       | 7732-18-5                           | 0%                                                       | 0.1316375%                                               |
|                                                    |              |                     | Xylene                                                                                      | 1330-20-7                           | 0%                                                       | 2.86E-05%                                                |
|                                                    |              |                     | diester of sulfosuccinic acid sodium salt                                                   | 2673-22-5                           | 0%                                                       | 2.38E-05%                                                |
|                                                    |              |                     |                                                                                             |                                     | 0%                                                       | 0%                                                       |

18. 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. Engineering Tech

Date: 7/20/2012

E-mail Address: reesa.holland@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.