

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:  
30-015-42135

2. Well Name:  
JACK FEDERAL #005H

3. Well Number:  
005H

HYDRAULIC FRACTURING FLUID  
DISCLOSURE

☒ Original  
☐ Amendment

4. Surface Hole Location:  
Unit:A    Lot:A    Section:31    Township:25S    Range:27E  
Feet from:190    N/S Line:N  
Feet from:500    E/W Line:E

5. Bottom Hole Location:  
Unit:P    Lot:P    Section:31    Township:25S    Range:27E  
Feet from:330    N/S Line:S  
Feet from:424    E/W Line:E

6. latitude:    32.0930679848454    longitude:    -104.222332318143

7. County:  
Eddy

9. Operator Name and Address:  
COG OPERATING LLC  
One Concho Center  
600 W. Illinois Ave  
Midland 79701

9. OGRID:    229137

10. Phone Number:    432-685-4332

11. Last Fracture Date:    11/23/2014    Frac Performed by:    Baker Hughes

12. Production Type:  
O

13. Pool Code(s):  
97318

14. Gross Fractured Interval:  
7,754 ft to 11,903 ft

15. True Vertical Depth (TVD):  
7,517 ft

16. Total Volume of Fluid Pumped:  
11,116,883 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%                                                     | 92.72306%                                                |
| HCl, 5.1 - 7.5%                                    | Baker Hughes | Acidizing           | Hydrochloric Acid                                                                         | 7647-01-0                           | 7.5%                                                     | 0.05445%                                                 |
| Superset-W, 330 gl tote                            | Baker Hughes | Activator           | Methanol                                                                                  | 67-56-1                             | 50%                                                      | 0.00869%                                                 |
|                                                    |              |                     | Poly (Oxyethylene) Nonylphenol Ether                                                      | 9016-45-9                           | 50%                                                      | 0.00869%                                                 |
| Alpha 125                                          | Baker Hughes | Biocide             | Glutaraldehyde                                                                            | 111-30-8                            | 30%                                                      | 0.00706%                                                 |
| GBW-5                                              | Baker Hughes | Breaker             | Ammonium Persulphate                                                                      | 7727-54-0                           | 100%                                                     | 0.0005%                                                  |
| Enzyme G-III                                       | Baker Hughes | Breaker             | Contains non-hazardous ingredients which are listed in the non-MSDS section of the report | NA                                  | 0%                                                       | 0%                                                       |
| High Perm CRB                                      | Baker Hughes | Breaker             | Ammonium Persulphate                                                                      | 7727-54-0                           | 100%                                                     | 0.00135%                                                 |
| Clay Master-5C (Tote)                              | Baker Hughes | Clay Control        | Oxyalkylated Amine Quat                                                                   | Trade Secret                        | 60%                                                      | 0.00227%                                                 |
| Ferrotrol 280L , 330 gl tote                       | Baker Hughes | Clay Control        | 2-Mercaptoethanol                                                                         | 60-24-2                             | 100%                                                     | 0.00109%                                                 |
|                                                    |              |                     | Ammonium Hydroxide                                                                        | 1336-21-6                           | 5%                                                       | 5E-05%                                                   |
|                                                    |              |                     | Cupric Chloride                                                                           | 7447-39-4                           | 5%                                                       | 5E-05%                                                   |
| ClayCare, Clay Treat-2C, 330 gl tote               | Baker Hughes | Clay Control        | Choline Chloride                                                                          | 67-48-1                             | 75%                                                      | 0.01798%                                                 |
|                                                    |              |                     | Water                                                                                     | 7732-18-5                           | 30%                                                      | 0.00719%                                                 |
| CI-27                                              | Baker Hughes | Corrosion Inhibitor | Fatty Acids                                                                               | Trade Secret                        | 30%                                                      | 0.0002%                                                  |
|                                                    |              |                     | Methanol                                                                                  | 67-56-1                             | 60%                                                      | 0.00041%                                                 |
|                                                    |              |                     | Olefin                                                                                    | Trade Secret                        | 5%                                                       | 3E-05%                                                   |
|                                                    |              |                     | Polyoxyalkylenes                                                                          | Trade Secret                        | 30%                                                      | 0.0002%                                                  |
|                                                    |              |                     | Propargyl Alcohol                                                                         | 107-19-7                            | 10%                                                      | 7E-05%                                                   |
|                                                    |              |                     | Thiourea Polymer                                                                          | 68527-49-1                          | 30%                                                      | 0.0002%                                                  |
| XLW-10A                                            | Baker Hughes | Crosslinker         | Ethylene Glycol                                                                           | 107-21-1                            | 30%                                                      | 0.00586%                                                 |
|                                                    |              |                     | Sodium Hydroxide                                                                          | 1310-73-2                           | 10%                                                      | 0.00195%                                                 |
|                                                    |              |                     | Sodium Tetraborate                                                                        | 1330-43-4                           | 20%                                                      | 0.00391%                                                 |
| GW-4                                               | Baker Hughes | Gelling Agent       | Guar Gum                                                                                  | 9000-30-0                           | 100%                                                     | 0.07254%                                                 |
| NE-35, 330 gl tote                                 | Baker Hughes | Non-emulsifier      | Propylene Glycol                                                                          | 57-55-6                             | 15%                                                      | 7E-05%                                                   |
| Parasorb 5000, bag                                 | Baker Hughes | Paraffin Inhibitor  | Acetic acid ethenyl ester, polymer with ethene                                            | Trade Secret                        | 15%                                                      | 0.00105%                                                 |
|                                                    |              |                     | Crystalline Silica (Cristobalite)                                                         | 14464-46-1                          | 1%                                                       | 7E-05%                                                   |
|                                                    |              |                     | Crystalline Silica (Quartz)                                                               | 14808-60-7                          | 1%                                                       | 7E-05%                                                   |
|                                                    |              |                     | Diatomaceous Earth, Calcined (kieselguhr)                                                 | 91053-39-3                          | 70%                                                      | 0.0049%                                                  |
|                                                    |              |                     | Diatomaceous Earth, Natural (kieselguhr)                                                  | 61790-53-2                          | 10%                                                      | 0.0007%                                                  |
|                                                    |              |                     | Mineral Oil                                                                               | Trade Secret                        | 15%                                                      | 0.00105%                                                 |
| Sand, White, 20/40                                 | Baker Hughes | Proppant            | Crystalline Silica (Quartz)                                                               | 14808-60-7                          | 100%                                                     | 5.00691%                                                 |
| Super LC, 20/40                                    | Baker Hughes | Proppant            | P/F Resin                                                                                 | 9003-35-4                           | 5%                                                       | 0.06438%                                                 |
|                                                    |              |                     | Silicon Dioxide (Silica Sand)                                                             | 14808-60-7                          | 97%                                                      | 1.24901%                                                 |
| ScaleSorb 3, (50# bag)                             | Baker Hughes | Scale Inhibitor     | Amino Trimethylene Phosphonic Acid                                                        | Trade Secret                        | 28%                                                      | 0.00119%                                                 |
|                                                    |              |                     | Crystalline Silica (Quartz)                                                               | 14808-60-7                          | 1%                                                       | 4E-05%                                                   |
| Scaletrol 720, 330 gl tote                         | Baker Hughes | Scale Inhibitor     | Calcium Chloride                                                                          | 10043-52-4                          | 5%                                                       | 0.00044%                                                 |
| InFlo 251G                                         | Baker Hughes | Surfactant          | Ethylene Glycol                                                                           | 107-21-1                            | 45%                                                      | 0.00398%                                                 |
| Ingredients shown above are subject to 29 CFR 1910 |              |                     | Ethanol                                                                                   | 64-17-5                             | 10%                                                      | 0.0021%                                                  |
|                                                    |              |                     | 2-Propanoic, Polymer with Sodium Phosphinate, Sodium Salt                                 | 71050-62-9                          | 0%                                                       | 0.0017657%                                               |
|                                                    |              |                     | Alcohols, C10-16, ethoxylated propoxylated                                                | Trade Secret                        | 0%                                                       | 0.0014732%                                               |
|                                                    |              |                     | Alcohols, C6-12, ethoxylated propoxylated                                                 | Trade Secret                        | 0%                                                       | 0.0014732%                                               |
|                                                    |              |                     | Alcohols, ethoxylated                                                                     | Trade Secret                        | 0%                                                       | 0.0016837%                                               |
|                                                    |              |                     | Amines, unsatd, alkyl, ethoxylated                                                        | Trade Secret                        | 0%                                                       | 0.0008419%                                               |
|                                                    |              |                     | Benzenesulfonic acid, hexadecyl(sulfo)phenoxy)-, disodium salt                            | Trade Secret                        | 0%                                                       | 9.5E-06%                                                 |
|                                                    |              |                     | Crystalline Silica: Cristobalite                                                          | Trade Secret                        | 0%                                                       | 4.25E-05%                                                |
|                                                    |              |                     | Diatomaceous Earth, Calcined                                                              | 91053-39-3                          | 0%                                                       | 0.0031461%                                               |
|                                                    |              |                     | Formaldehyde                                                                              | 50-00-0                             | 0%                                                       | 3E-07%                                                   |
|                                                    |              |                     | Hemicellulase Enzyme concentrate                                                          | 9025-56-3                           | 0%                                                       | 0.0003163%                                               |
|                                                    |              |                     | Hexamethylenetetramine                                                                    | 100-97-0                            | 0%                                                       | 0.0001288%                                               |
|                                                    |              |                     | Hydrated Magnesium Silicate                                                               | Trade Secret                        | 0%                                                       | 1.35E-05%                                                |
|                                                    |              |                     | Methanol                                                                                  | 67-56-1                             | 0%                                                       | 5.89E-05%                                                |
|                                                    |              |                     | Nonionic glycol ester                                                                     | Trade Secret                        | 0%                                                       | 0.0001193%                                               |
|                                                    |              |                     | Phosphonic Acid                                                                           | 13598-36-2                          | 0%                                                       | 4.25E-05%                                                |
|                                                    |              |                     | Poly (Tetrafluoroethylene)                                                                | Trade Secret                        | 0%                                                       | 6.8E-06%                                                 |
|                                                    |              |                     | Potassium Chloride                                                                        | 7447-40-7                           | 0%                                                       | 8.84E-05%                                                |
|                                                    |              |                     | Sodium Chloride                                                                           | 7647-14-5                           | 0%                                                       | 0.0001788%                                               |
|                                                    |              |                     | Sodium lauriminodipropionate                                                              | Trade Secret                        | 0%                                                       | 4.8E-06%                                                 |
|                                                    |              |                     | Sodium octylimodipropionate                                                               | Trade Secret                        | 0%                                                       | 1.43E-05%                                                |
|                                                    |              |                     | Vinylidene Chloride-Methyl Acrylate Polymer                                               | Trade Secret                        | 0%                                                       | 0.0003376%                                               |
|                                                    |              |                     | Water                                                                                     | 7732-18-5                           | 0%                                                       | 0.7172402%                                               |

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:    Stormi Davis    Title:    Regulatory Analyst

Date:    2/10/2015

E-mail Address:    sdavis@conchoresources.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.