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.
30-015-40598

2. Well Name:
DODD FEDERAL UNIT #586

3. Well Number:
586

## HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ **Original**

☐ **Amendment**

4. Surface Hole Location:
Unit:O Lot:O Section:11 Township:17S Range:29E
Feet from:990 N/S Line:S
Feet from:2310 E/W Line:E

5. Bottom Hole Location:
Unit:O Lot:O Section:11 Township:17S Range:29E
Feet from:990 N/S Line:S
Feet from:2310 E/W Line:E

6. latitude: 32.8446169550869 longitude: -104.044412446989

7. County:
Eddy

8. 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: 11/18/2014 Frac Performed by: Elite Well Services

12. Production Type:
O

13. Pool Code(s):
97917

14. Gross Fractured Interval:
4,090 ft to 4,365 ft

15. True Vertical Depth (TVD):
4,551 ft

16. Total Volume of Fluid Pumped:
205,338 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 | Customer | Carrier/Base Fluid | Water | 7732-18-5 | 100% | 86.33812% |
| Sand (Proppant) | US Silica | Proppant | Silica Substrate | 14808-60-7 | 100% | 11.18214% |
| RCS (Proppant) | Momentive | Proppant | Silica Substrate | 14808-60-7 | 100% | 1.35235% |
| Hydrochloric Acid (15%) | CNR | Acidizing | Hydrochloric Acid | 7647-01-0 | 38.8% | 0.17619% |
| Claymax | Chemplex | Clay Stabilizer | Choline Chloride | 67-48-1 | 62% | 0% |
| 4-N-1 Plus | Chemplex | Iron Control,Corr Inhib,Surfactant | Acetic Acid | 64-19-7 | 80% | 0.00274% |
| | | | Methanol | 67-56-1 | 10% | 0.00034% |
| Plexcide 24L | Chemplex | Biocide | Tetrahydro-3,Dimethyl-2H | 533-74-4 | 24% | 0% |
| Plexset 730 | Chemplex | Activator | Secondary Alcohol Ethoxylate | 84133-50-6 | 50% | 0.00775% |
| Plexsurf 580 ME | Chemplex | Surfactant | Methyl Alcohol | 67-56-1 | 10% | 0.00776% |
| | | | 2-Butoxyethanol | 111-76-2 | 50% | 0.03879% |
| Plexslick 953 | Chemplex | Friction Reducer | Alcohol Ethoxylate Surfactants | Proprietary | 8% | 0% |
| | | | Hydrotreated Petroleum Distillate | 64742-47-8 | 30% | 0% |
| | | | Polyacrylamide-co-Acrytic Acid | 9003-06-9 | 31% | 0% |
| AMA 398 | Chemplex | Biocide | Tetrahydro-3,Dimethyl-2H | 533-74-4 | 98% | 0.00148% |
| Plexgel 907 LE | Chemplex | Polymer | Guar Gum | 9000-30-0 | 50% | 0.19737% |
| | | | Mineral Oil | 64742-47-8 | 55% | 0.21711% |
| | | | Bentonite Clay | 14808-60-7 | 2% | 0.00789% |
| | | | Surfactant | 68439-51-0 | 2% | 0.00789% |
| Plexbor 101 | Chemplex | Crosslinker | Ethylene Glycol | 107-21-1 | 9.99% | 0.01472% |
| | | | Potssium Metaborate | 13709-94-9 | 30% | 0.04421% |
| | | | Potassium Hydroxide | 1310-58-3 | 5% | 0.00737% |
| Plexgel Breaker 10L | Chemplex | Gel Breaker | Mannanase Enzymes | Proprietary | 2% | 0.00066% |
| | | | Sodium Chloride | 7647-14-5 | 15% | 0.00497% |
| Sodium Persulfate | Chemplex | Gel Breaker | Sodium Persulfate | 7775-27-1 | 98% | 0% |
| Buffer 11 | Chemplex | PH Control | Potassium Hydroxide | 1310-58-3 | 23% | 0% |
| Greenhib 679 | Chemplex | Scale Inhibitor | Glycerine | 56-81-5 | 35% | 0% |
| | | | Proprietary | Proprietary | 35% | 0% |
| | | | Water | 7732-18-5 | 30% | 0% |
| Scalesorb 3 | Baker Hughes | Scale Inhibitor | Diatomaceous earth, calcined | 91053-39-3 | 69% | 0% |
| | | | Amino alkyl phosphonic acid | Proprietary | 30% | 0% |
| | | | Phosphonic acid | 13598-36-2 | 1% | 0% |
| | | | Crystalline silica: Quartz (SiO2) | 14808-60-7 | 1% | 0% |
| Plexgel Breaker XPA | Chemplex, LC | Gel Breaker | Hydrogen Peroxide | 7722-84-1 | 7% | 0% |

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: Chasity Jackson Title: Regulatory Analyst

Date: 12/12/2014

E-mail Address: cjackson@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.