

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:
30-015-42132

2. Well Name:
JACK FEDERAL #002H

3. Well Number:
002H

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:L Lot:3 Section:31 Township:25S Range:27E
Feet from:240 N/S Line:N
Feet from:330 E/W Line:W

5. Bottom Hole Location:
Unit:4 Lot:4 Section:31 Township:25S Range:27E
Feet from:361 N/S Line:S
Feet from:401 E/W Line:W

6. latitude: longitude:
32.0628613450474 -104.23689123144

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: 7/26/2014 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
97818

14. Gross Fractured Interval:
7,586 ft to 11,600 ft

15. True Vertical Depth (TVD):
7,420 ft

16. Total Volume of Fluid Pumped:
8,960,994 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		91.07739%
HCl, 5.1 - 7.5%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0		0.06635%
Supersol-W, 55 gal drum	Baker Hughes	Activator	Methanol	67-56-1		0.0091%
			Poly (Oxyethylene)	9016-45-9		0.0091%
			Nonylphenol Ether			
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8		0.00889%
GBW-5	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0		0.00293%
Enzyme G-III	Baker Hughes	Breaker	Contains non-hazardous ingredients which are listed in the non-MSDS section of the report	NA		0%
High Perm CRB	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0		0.00219%
Clay/Care, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1		0.01846%
			Water	7732-18-5		0.00738%
Clay Master-5C	Baker Hughes	Clay Control	Oxyalkylated Amine Quat	Trade Secret		0.00617%
CI-27	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret		0.0004%
			Methanol	67-56-1		0.0008%
			Olefin	Trade Secret		7E-05%
			Polyoxyalkylenes	Trade Secret		0.0004%
			Propargyl Alcohol	107-19-7		0.00013%
			Thiourea Polymer	68527-49-1		0.0004%
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1		0.0077%
			Sodium Hydroxide	1310-73-2		0.00277%
			Sodium Tetraborate	1330-43-4		0.0037%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0		0.01435%
			Hydrotreated Light Distillate	64742-47-8		0.00717%
			Mineral Oil	8042-47-5		0.01674%
			Paraffinic Petroleum Distillate	64742-55-8		0.00717%
GW-4	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0		0.08838%
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2		0.00232%
			Ammonium Hydroxide	1336-21-6		0.00012%
			Cupric Chloride	7447-39-4		0.00012%
NE-35, 330 gal tote	Baker Hughes	Non-emulsifier	Propylene Glycol	57-55-6		0.00012%
Parasorb 5000, bag	Baker Hughes	Paraffin Inhibitor	Acetic acid ethenyl ester, polymer with ethene	Trade Secret		0.00131%
			Crystalline Silica (Cristobalite)	14464-46-1		9E-05%
			Crystalline Silica (Quartz)	14808-60-7		9E-05%
			Diatomaceous Earth, Calcined (kieselguhr)	91053-39-3		0.0061%
			Diatomaceous Earth, Natural (kieselguhr)	61790-53-2		0.00087%
			Mineral Oil	Trade Secret		0.00131%
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7		6.1438%
Super LC, 20/40	Baker Hughes	Proppant	P/F Resin	9003-35-4		0.07681%
			Silicon Dioxide (Silica Sand)	14808-60-7		1.4901%
Scaletrol 720	Baker Hughes	Scale Inhibitor	Calcium Chloride	10043-52-4		0.00059%
			Ethylene Glycol	107-21-1		0.00528%
ScaleSorb 7 (50 lb)	Baker Hughes	Scale Inhibitor	Crystalline Silica (Quartz)	14808-60-7		5E-05%
			Diatomaceous Earth, Calcined	91053-39-3		0.00488%
			Organo Phosphorus Salt	Trade Secret		0.00146%
			Sodium Chloride	7647-14-5		0.00049%
InFlo 251G	Baker Hughes	Surfactant	Ethanol	64-17-5		10%
Ingredients shown above are subject to 29 CFR 1910			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9		0%
			Alcohols, C10-16, ethoxylated propoxylated	Trade Secret		0.0018374%
			Alcohols, C6-12, ethoxylated propoxylated	Trade Secret		0.0018374%
			Alcohols, ethoxylated	Trade Secret		0.0020999%
			Amines, unsatd, alkyl, ethoxylated	Trade Secret		0.00105%
			Benzenesulfonic acid, hexadecyl(sulfofenoxyl)-, disodium salt	Trade Secret		1.66E-05%
			Formaldehyde	50-00-0		7E-07%
			Hemicellulase Enzyme Concentrate	9025-56-3		0.0004089%
			Hexamethylenetetramine	100-97-0		0.0001536%
			Hydrated Magnesium Silicate	Trade Secret		2.19E-05%
			Methanol	67-56-1		7.41E-05%
			Nonionic glycol ester	Trade Secret		0.0002077%
			Poly (Tetrafluoroethylene)	Trade Secret		1.1E-05%
			Potassium Chloride	7447-40-7		0.0001173%
			Sodium Bisulfate	7631-90-5		4.88E-05%
			Sodium Chloride	7647-14-5		0.0003604%
			Sodium Sulfonate	870-72-4		2.44E-05%
			Sodium lauriminodipropionate	Trade Secret		8.3E-06%
			Sodium octylimodipropionate	Trade Secret		2.49E-05%
			Vinylidene Chloride-Methyl Acrylate Polymer	Trade Secret		0.0005485%
			Water	7732-18-5		0.8704599%

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: 2/26/2015

E-mail Address: sdavis@conchoresources.com

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