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

1. WELL API NO.
30-015-40900

2. Well Name:
MCINTYRE DK FEDERAL #022

3. Well Number:
022

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:P Lot:P Section:17 Township:17S Range:30E
Feet from:1065 N/S Line:S
Feet from:1175 E/W Line:E

5. Bottom Hole Location:
Unit:P Lot:P Section:17 Township:17S Range:30E
Feet from:1065 N/S Line:S
Feet from:1175 E/W Line:E

6. latitude: 32.830279418699 longitude: -103.98945180745

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: 8/1/2013 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
96718

14. Gross Fractured Interval:
4,280 ft to 4,520 ft

15. True Vertical Depth (TVD):
4,814 ft

16. Total Volume of Fluid Pumped:
134,610 gals

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%	84.19989%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.27197%
			Water	7732-18-5	85%	1.54118%
Activator, 330 gal tote	Baker Hughes	Activator	Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.08456%
			Methanol	67-56-1	50%	0.0604%
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00023%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.00045%
			Crystalline Silica: Cristobalite	14464-46-1	1%	5E-05%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	5E-05%
			Diatomaceous Earth, Calcined	91053-39-3	60%	0.0027%
			Magnesium Chloride	7786-30-3	5%	0.00023%
			Magnesium Nitrate	10377-60-3	10%	0.00045%
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100%	0.003%
Enzyme G-I	Baker Hughes	Breaker	No Hazardous Ingredients	NA	100%	0.03816%
CI-27	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret	30%	0.0005%
			Methanol	67-56-1	60%	0.001%
			Olefin	Trade Secret	5%	8E-05%
			Polyoxyalkylenes	Trade Secret	30%	0.0005%
			Propargyl Alcohol	107-19-7	10%	0.00017%
			Thiourea Polymer	68527-49-1	30%	0.0005%
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30%	0.03876%
			Sodium Hydroxide	1310-73-2	10%	0.01292%
			Sodium Tetraborate Decahydrate	1303-96-4	30%	0.03876%
BioSealers MR	Baker Hughes	Degradable Sealers	Non-Hazardous Ingredient	Trade Secret	100%	0.00375%
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer	Aliphatic Hydrocarbon	Trade Secret	30%	0.00121%
			Oxyalkylated Alcohol	Trade Secret	5%	0.0002%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.19772%
			Petroleum Distillate Blend	8042-47-5	70%	0.46136%
			Petrolum Distillate Blend	64742-55-8	70%	0.23068%
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.01033%
			Ammonium Hydroxide	1336-21-6	5%	0.00052%
			Cupric Chloride	7447-39-4	5%	0.00052%
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.04442%
			Propylene Glycol	57-55-6	30%	0.02665%
Sand, White, 16/30	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	10.69649%
SiberProp, 16/30	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100%	1.82601%
Techni-Hib 756	Baker Hughes	Salt Inhibitor	Hydrochloric Acid	7647-01-0	5%	0.0037%
			Phosphoric Acid	7664-38-2	2%	0.00148%
Scaletrol 721, tote	Baker Hughes	Scale Inhibitor	Diethylene Glycol	111-46-6	1%	0.00039%
			Ethylene Glycol	107-21-1	15%	0.0059%
			Synthetic Polymer	Trade Secret	15%	0.0059%
InFlo 250G, 330 gl tote	Baker Hughes	Surfactant	Methanol	67-56-1	30%	0.03153%
			Mixture of Surfactants	Trade Secret	50%	0.05254%
			Water	7732-18-5	30%	0.03153%

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: Robyn Odom Title: Regulatory Analyst

Date: 10/1/2013

E-mail Address: rodom@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.