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. 30-015-42451
2. Well Name: PATRON 23 FEDERAL #004H
3. Well Number: 004H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:A Lot:A Section:23 Township:25S Range:29E
Feet from:190 N/S Line:N
Feet from:660 E/W Line:E

5. Bottom Hole Location:
Unit:P Lot:P Section:23 Township:25S Range:29E
Feet from:665 N/S Line:S
Feet from:671 E/W Line:E

6. latitude: 32.1222382 longitude: -103.9487228

7. County: Eddy

8. Operator Name and Address:
COG PRODUCTION, LLC
600 W. Illinois Ave
Midland 79701

9. OGRID: 217955

10. Phone Number: 432-685-4372

11. Last Fracture Date: 1/10/2016 Frac Performed by: Halliburton

12. Production Type: O

13. Pool Code(s): 98138

14. Gross Fractured Interval: 10,966 ft to 14,696 ft

15. True Vertical Depth (TVD): 10,584 ft

16. Total Volume of Fluid Pumped: 7,447,145 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)
Fresh Water	Operator	Base Fluid	Fresh Water	7732-18-5	100%	89.67768%
HYDROCHLORIC ACID	Halliburton	Base Fluid	NA	NA	0%	0%
BE-9W, Cla-Web(TM), FR-66, HAI-OS ACID INHIBITOR,	Halliburton	Additive, Biocide, Concentrate, Corrosion Inhibitor, Friction Reducer, Proppant, Scale Preventer, Su	NA	NA	0%	0%
Scaletrol 7208	Baker Hughes	Scale Inhibitor	NA	NA	0%	0%
Parasorb	Baker Hughes	Paraffin Inhibitor	NA	NA	0%	0%
			Alcohols ethoxylated	Confidential	5%	0.00319%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00023%
			Alkane	Confidential	1%	0.00045%
			Amide	Confidential	5%	0.00319%
			Amine salts	Confidential	0.1%	0.0001%
			Ammonium chloride	12125-02-9	5%	0.00319%
			Ammonium salt	Confidential	60%	0.02932%
			Calcined Mineral Oil	8042-47-5	30%	0.00197%
			Calciu Chloride (CaCl2)	8042-47-5	5%	0.00262%
			Complex alkylamine	Confidential	5%	0.00225%
			Crystalline silica, quartz	14808-60-7	100%	9.60681%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	7E-05%
			Diatomaceaus Earth	91053-39-3	60%	0.00393%
			Ethylene Glycol	107-21-1	30%	0.01574%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00023%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.0166%
			Glycerine	56-81-5	10%	0.0045%
			Hydrochloric acid	7647-01-0	60%	0.25857%
			Hydrogen peroxide	7722-84-1	0.01%	0%
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.01916%
			Methanol	67-56-1	60%	0.00047%
			Nitrotriacetic acid, trisodium salt monohydrate	5064-31-3	0.01%	0%
			Olefins	Confidential	5%	9E-05%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.0135%
			Polyacrylamide copolymer	Confidential	30%	0.01916%
			Propargyl alcohol	107-19-7	10%	8E-05%
			Propylene glycol	57-55-6	60%	0.02603%
			Quaternary amine	Confidential	5%	0.00298%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00023%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium chloride	7647-14-5	5%	0.00564%
			Sodium glycollate	2836-32-0	0.01%	0%
			Sodium hydroxide	1310-73-2	0.01%	0%
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00705%
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1%	0.00064%
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1%	0.00064%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00434%
			Water	7732-18-5	100%	0.59196%

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: Senior Regulatory Analyst

Date: 3/8/2016

E-mail Address: sdavis@concho.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.