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.
30-025-41181

2. Well Name:
GUNNER 8 FEDERAL COM #006H

3. Well Number:
006H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ **Original**

☐ **Amendment**

4. Surface Hole Location:
Unit:N Lot:N Section:8 Township:26S Range:34E
Feet from:190 N/S Line:S
Feet from:2625 E/W Line:W

5. Bottom Hole Location:
Unit:C Lot:C Section:5 Township:26S Range:34E
Feet from:351 N/S Line:N
Feet from:2296 E/W Line:W

6. latitude: 32.0511703 longitude: -103.4919586

7. County:
Lea

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: 10/18/2015 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97892

14. Gross Fractured Interval:
10,102 ft to 19,543 ft

15. True Vertical Depth (TVD):
9,889 ft

16. Total Volume of Fluid Pumped:
18,529,936 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%	87.88829%
HYDROCHLORIC ACID	Halliburton	Base Fluid	NA	NA	0%	0%
BE-9, Cla-Web(TM), FE-1A ACIDIZING COMPOSITION, FE	Halliburton	Additive, Biocide, Breaker, Concentrate, Corrosion Inhibitor, Friction Reducer, Gelling Agent, Propp	NA	NA	0%	0%
WG-36 GELLING AGENT	Halliburton		NA	NA	0%	0%
Parasorb, Scalesorb, Scaletrol	Baker Hughes	Paraffin Inhibitor, Scale Inhibitor	NA	NA	0%	0%
			1,2-Benzisothiazolin-3-one	2634-33-5	0.1%	0%
			Acetic acid	64-19-7	60%	0.00287%
			Acetic anhydride	108-24-7	100%	0.00478%
			Alcohols ethoxylated	Confidential	5%	0.00066%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00024%
			Alkane	Confidential	1%	0.00043%
			Amide	Confidential	5%	0.00066%
			Amine salts	Confidential	0.1%	0.0001%
			Ammonium chloride	12125-02-9	5%	0.00066%
			Ammonium salt	Confidential	60%	0.02952%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00568%
			C.I. Pigment Red 5	6410-41-9	1%	1E-05%
			Calcium chloride	10043-52-4	0.1%	0%
			Calcium Chloride	10043-52-4	5%	0.00133%
			Citric acid	77-92-9	60%	0.00297%
			Complex alkylamine	Proprietary	5%	0.00216%
			Crystalline silica, quartz	14808-60-7	100%	10.77192%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.00011%
			Crystalline silica: Quartz	14808-60-7	1%	0.00013%
			Cured acrylic resin	Confidential	30%	0.00044%
			Diatomaceous earth, calcined	91053-39-3	65%	0.00836%
			Enzyme	Confidential	5%	7E-05%
			Ethylene Glycol	107-21-1	30%	0.00799%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00024%
			Guar gum	9000-30-0	100%	0.11362%
			Hydrochloric acid	7647-01-0	60%	0.61437%
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.00398%
			Methanol	67-56-1	60%	0.00048%
			Mineral oil	8042-47-5	30%	0.00127%
			Olefins	Confidential	5%	0.0001%
			Organophosphorous salt	Confidential	40%	0.00358%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.01298%
			Polyacrylamide copolymer	Confidential	30%	0.00398%
			Propargyl alcohol	107-19-7	10%	8E-05%
			Quaternary amine	Confidential	5%	0.003%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00024%
			Silica gel	112926-00-8	1%	0.00114%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium chloride	7647-14-5	30%	0.00321%
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00114%
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1%	0.00013%
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1%	0.00013%
			Surfactant mixture	Confidential	1%	0.00227%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00437%
			Walnut hulls	NA	100%	0.00142%
			Water	7732-18-5	100%	1.15166%

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: 12/1/2015

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.