

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

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:B Lot:B Section:20 Township:21S Range:34E
Feet from:190 N/S Line:N
Feet from:1990 E/W Line:E

5. Bottom Hole Location:
Unit:O Lot:O Section:29 Township:21S Range:34E
Feet from:366 N/S Line:S
Feet from:1959 E/W Line:E

6. Latitude: longitude:
32.4710617 -103.4898071

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: 6/7/2015 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97962

14. Gross Fractured Interval:
12,008 ft to 21,416 ft

15. True Vertical Depth (TVD):
11,834 ft

16. Total Volume of Fluid Pumped:
9,062,577 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%	87.70258%
HYDROCHLORIC ACID	Halliburton	Base Fluid	NA	NA	0%	0%
BE-6 MICROBIOCIDE, BE-9, CL-22 UC, CL-31 CROSSLINK	Halliburton	Additive, Biocide, Breaker, Clay Stabilizer, Clay Corrosion Inhibitor, Crosslinker, Defoam	NA	NA	0%	0%
SAND-COMMON WHITE, 100 MESH, 3307 LB BAG, SAND-CR	Halliburton	pH Control, Additive, Proppant, Scale Preventer, Surfactant	NA	NA	0%	0%
Parasorb, Scaletrol	Baker Hughes	Scale Inhibitor	NA	NA	0%	0%
			2-Bromo-2-nitro-1,3-propanediol	52-51-7	100%	3E-05%
			Acetic acid	64-19-7	60%	0.01779%
			Acetic anhydride	108-24-7	100%	0.02964%
			Acrylate polymer	Confidential	1%	0.00021%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00147%
			Alkane	Confidential	1%	0.00043%
			Alkenes	Confidential	100%	0.01111%
			Amine salts	Confidential	0.1%	9E-05%
			Ammonium persulfate	7727-54-0	100%	0.00444%
			Ammonium salt	Confidential	60%	0.02839%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.0078%
			Borate salts	Confidential	60%	0.01252%
			Calcium chloride	10043-52-4	5%	0.00129%
			Citric acid	77-92-9	60%	0.01845%
			Complex alkylamine	Proprietary	5%	0.00216%
			Crystalline silica, quartz	14808-60-7	100%	8.45463%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.00018%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	0.00014%
			Cured acrylic resin	Confidential	30%	0.00133%
			ethylene glycol	107-21-1	30%	0.00771%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00147%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.02701%
			Guar gum	9000-30-0	100%	0.15598%
			Hexamethylenetetramine	100-97-0	2%	0.15836%
			Hydrochloric acid	7647-01-0	60%	1.95287%
			Methanol	67-56-1	60%	0.00294%
			Mineral Oil	8042-47-5	30%	0.00417%
			Olefins	Confidential	5%	0.00059%
			Phenol / formaldehyde resin	9003-35-4	5%	0.3959%
			Poly(oxy-1,2-ethanediyl), alpha -isodecyl- omega -hydroxy-	61827-42-7	30%	0.01297%
			Polypichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.01883%
			Polypropylene glycol	25322-69-4	30%	0.00333%
			Potassium formate	590-29-4	60%	0.01252%
			Potassium hydroxide	1310-58-3	5%	0.00025%
			Potassium metaborate	13709-94-9	60%	0.00295%
			Propargyl alcohol	107-19-7	10%	0.00049%
			Quaternary amine	Confidential	5%	0.00289%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00147%
			Silica gel	112926-00-8	1%	0.00156%
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	30%	0.00333%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium carboxymethyl cellulose	9004-32-4	1%	0.00021%
			Sodium chloride	7647-14-5	5%	0.00264%
			Sodium glycolate	2836-32-0	1%	0.00021%
			Sodium hydroxide	1310-73-2	30%	0.002%
			Sodium persulfate	7775-27-1	100%	0.08948%
			Sodium sulfate	7757-82-6	0.1%	9E-05%
			Surfactant mixture	Confidential	1%	0.00312%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.0042%
			Trimethylamine, N-oxide	1184-78-7	5%	0.00157%
			Water	7732-18-5	100%	3.42969%

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: 8/10/2015

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.