

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 8, 2013

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:P Lot:P Section:25 Township:19S Range:34E
Feet from:240 N/S Line:S
Feet from:430 E/W Line:E

5. Bottom Hole Location:
Unit:P Lot:P Section:36 Township:19S Range:34E
Feet from:340 N/S Line:S
Feet from:378 E/W Line:E

6. latitude: 32.624612 longitude: -103.506074

7. County: Lea

8. Operator Name and Address:
COG OPERATING LLC
One Concho Center
800 W. Illinois Ave
Midland 79701

9. OGRID: 229137

10. Phone Number: 432-685-4332

11. Last Fracture Date: 8/20/2015 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
37570

14. Gross Fractured Interval:
11,218 ft to 15,325 ft

15. True Vertical Depth (TVD):
11,049 ft

16. Total Volume of Fluid Pumped:
6,554,027 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		88.61429%
HYDROCHLORIC ACID	Halliburton	Base Fluid	NA	NA		0%
BE-9, CL-28M	Halliburton	Additive, Biocide, Breaker, Clay Stabilizer, Clay	NA	NA		0%
CROSSLINKER, CL-31		Stabilizer, Corrosion Inhibitor, Crosslinker, Gelli				
CROSSLINKER, CLA-S						
SAND-COMMON WHITE-100 MESH, SSA-2, BULK (100003676	Halliburton	Scale Preventer, Surfactant	NA	NA		0%
Parasorb 5000, Scaletrol 720	Baker Hughes	Additive, Scale Inhibitor	NA	NA		0%
			Acetic acid	64-19-7	60%	0.00532%
			Acetic anhydride	108-24-7	100%	0.00887%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00044%
			Alkane	Confidential	1%	0.00046%
			Aluminum oxide	1344-28-1	5%	0.05898%
			Aluminum silicate	1302-76-7	10%	0.11797%
			Amine salts	Confidential	0.1%	0.0001%
			Ammonium persulfate	7727-54-0	100%	0.00507%
			Ammonium salt	Confidential	60%	0.02996%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00724%
			Borate salts	Confidential	60%	0.0128%
			Calcium Chloride	10043-52-4	5%	0.00133%
			Citric acid	77-92-9	60%	0.00552%
			Complex alkylamine	Proprietary	5%	0.00228%
			Crystalline silica	14808-60-7	1%	9E-06%
			Crystalline silica, cristobalite	14464-46-1	5%	0.05898%
			Crystalline silica, quartz	14808-60-7	100%	9.37115%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.00014%
			Cured acrylic resin	Confidential	30%	0.00152%
			Diatomaceous earth, calcined	91053-39-3	60%	0.00526%
			Ethylene Glycol	107-21-1	30%	0.00797%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00044%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.01704%
			Guar gum	9000-30-0	100%	0.14478%
			Hydrochloric acid	7647-01-0	60%	0.19825%
			Inorganic mineral	Confidential	5%	0.00107%
			Iron oxide	1309-37-1	1%	0.0118%
			Methanol	67-56-1	60%	0.00088%
			Mineral oil	8042-47-5	30%	0.00263%
			Olefins	Confidential	5%	0.00018%
			Poly(oxy-1,2-ethanediyl), ,alpha.-isodecyl- omega.-hydroxy-	61827-42-7	30%	0.0137%
			Polypichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.00781%
			Polymer	Proprietary	1%	0.00021%
			Potassium hydroxide	1310-58-3	5%	0.00047%
			Potassium metaborate	13709-94-9	60%	0.00567%
			Propargyl alcohol	107-19-7	10%	0.00015%
			Quaternary amine	Confidential	5%	0.00305%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00044%
			Silica gel	112926-00-8	1%	0.00145%
			Sintered bauxite	1318-16-7	100%	1.17968%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium chloride	7647-14-5	5%	0.00258%
			Sodium hydroxide	1310-73-2	30%	0.00247%
			Sodium persulfate	7775-27-1	100%	0.09325%
			Sodium sulfate	7757-82-6	0.1%	9E-06%
			Surfactant mixture	Confidential	1%	0.0029%
			Titanium dioxide	13463-67-7	1%	0.0118%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00444%
			Trimethylamine, N-oxide	1184-78-7	5%	0.00065%
			Water	7732-18-5	100%	0.49558%

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: 9/16/2015

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.