

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:2 Section:6 Township:25S Range:35E
Feet from:225 N/S Line:N
Feet from:1905 E/W Line:E

5. Bottom Hole Location:
Unit:G Lot:G Section:7 Township:25S Range:35E
Feet from:2299 N/S Line:N
Feet from:1977 E/W Line:E

6. latitude: 32.165976 longitude: -103.403726

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: 5/31/2016 Frac Performed by: Halliburton

12. Production Type: O

13. Pool Code(s): 98098

14. Gross Fractured Interval: 12,791 ft to 19,536 ft

15. True Vertical Depth (TVD): 12,900 ft

16. Total Volume of Fluid Pumped: 13,881,845 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%	88.77467%
HYDROCHLORIC ACID	Halliburton	Solvent	NA	NA	0%	0%
CL-28M CROSSLINKER, CL-31 CROSSLINKER, Cla-Web(TM)	Halliburton	Additive, Breaker, Concentrate, Corrosion Inhibitor, Crosslinker, Friction Reducer, Gelling Agent, p	NA	NA	0%	0%
SAND-COMMON WHITE-100 MESH, SSA-2, SAND-CRC PREMIU	Halliburton	Scale Preventer, Surfactant	NA	NA	0%	0%
Parasorb 5000, Scaletrol 720	Baker Hughes, Inc.	Paraffin Inhibitor, Scale Inhibitor	NA	NA	0%	0%
			Acetic acid	64-19-7	60%	0.0033%
			Acetic anhydride	108-24-7	100%	0.0055%
			Acrylamide	79-06-1	0.01%	0%
			Acrylamide, sodium acrylate polymer	25987-30-8	30%	0.00797%
			Alcohols, C12-13, ethoxylated	66455-14-9	30%	0.01367%
			Alcohols, C12-16, ethoxylated	68551-12-2	5%	0.00075%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00027%
			Amine	Confidential	0.1%	0.0001%
			Amine salts	Confidential	1%	0.0011%
			Ammonium persulfate	7727-54-0	100%	0.00303%
			Ammonium salt	Confidential	30%	0.01479%
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00431%
			Borate salts	Confidential	60%	0.00854%
			Calcium chloride	10043-52-4	1%	0.00026%
			Chlorine compound	Confidential	30%	0.01479%
			Citric acid	77-92-9	60%	0.00342%
			Citrus extract	94266-47-4	10%	0.0044%
			Crystalline silica, quartz	14808-60-7	100%	10.34881%
			Crystalline Silica, Quartz	14808-60-7	0.1%	9E-05%
			Crystalline silica, Quartz	14808-60-7	0.1%	1E-05%
			Cured acrylic resin	Confidential	30%	0.00091%
			Ethoxylated branched C13 alcohol	78330-21-9	5%	0.00133%
			Ethylene glycol	107-21-1	30%	0.00788%
			Ethylene oxide	75-21-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00027%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.01725%
			Guar gum	9000-30-0	100%	0.08621%
			Hexamethylenetetramine	100-97-0	2%	0.13389%
			Hydrochloric acid	7647-01-0	60%	0.34598%
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.00797%
			Inorganic mineral	Confidential	5%	0.00071%
			Isopropanol	67-63-0	30%	0.01321%
			Methanol	67-56-1	60%	0.00055%
			Mineral Oil	8042-47-5	20%	0.00136%
			Olefins	Confidential	5%	0.00011%
			Phenol / formaldehyde resin	9003-35-4	5%	0.33472%
			Polymer	Proprietary	1%	0.00014%
			Potassium hydroxide	1310-58-3	5%	0.00041%
			Potassium metaborate	13709-94-9	60%	0.00486%
			Propargyl alcohol	107-19-7	10%	9E-05%
			Quaternary amine	Confidential	1%	0.0012%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00027%
			Silica gel	112926-00-8	1%	0.00086%
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	5%	0.00133%
			Sodium chloride	7647-14-5	5%	0.00251%
			Sodium diacetate	126-96-5	5%	0.00133%
			Sodium hydroxide	1310-73-2	30%	0.00164%
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00209%
			Sodium persulfate	7775-27-1	100%	0.00023%
			Sodium sulfate	7757-82-6	0.1%	0%
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	5%	0.00133%
			Surfactant mixture	Confidential	1%	0.00173%
			Water	7732-18-5	100%	0.67595%

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: 7/8/2016

E-mail Address: sdavis@conchoresources.com

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