

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:
30-015-42665

2. Well Name:
FEDERAL 13 COM #010H

3. Well Number:
010H

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original
☐ Amendment

4. Surface Hole Location:
Unit:D Lot:D Section:13 Township:25S Range:26E
Feet from:108 N/S Line:N
Feet from:660 E/W Line:W

5. Bottom Hole Location:
Unit:D Lot:D Section:13 Township:25S Range:26E
Feet from:108 N/S Line:N
Feet from:660 E/W Line:W

6. latitude: 32.1369360257315 longitude: -104.252873995767

7. County:
Eddy

8. Operator Name and Address:
CIMAREX ENERGY CO. OF COLORADO
202 S. Cheyenne Ave, Ste 1000
Tulsa 74103

9. OGRID: 162683 10. Phone Number: 918-295-1763

11. Last Fracture Date: 10/18/2015 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97494

14. Gross Fractured Interval:
7,192 ft to 7,271 ft

15. True Vertical Depth (TVD):
7,271 ft

16. Total Volume of Fluid Pumped:
3,237,479 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%	84.04585%
BA-40L BUFFERING AGENT, BC-140 X2, LOSURF-360, OPT	Halliburton	Breaker, Buffer, Concentrate, Friction Reducer, Gelling Agent, Initiator, Proppant, Surfactant	Crystalline silica, quartz	14808-60-7	100%	15.70577%
			Guar gum	9000-30-0	100%	0.07832%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.02414%
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.0136%
			Inorganic salt	Proprietary	30%	0.0136%
			Polyacrylate	Proprietary	30%	0.0136%
			Monoethanolamine borate	26038-87-9	100%	0.01319%
			Alcohols, C12-16, ethoxylated	68551-12-2	10%	0.00453%
			Ammonium chloride	12125-02-9	10%	0.00453%
			Complex alkylamine	Proprietary	5%	0.00402%
			Potassium carbonate	584-08-7	60%	0.00398%
			Ethylene glycol	107-21-1	30%	0.00396%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00392%
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00246%
			9-Octadecenamide, n,n-bis-2 (hydroxy-ethyl)-,(Z)	93-83-4	5%	0.00227%
			Fatty acid ester	Proprietary	5%	0.00227%
			Ammonium persulfate	7727-54-0	100%	0.00224%
			Surfactant mixture	Proprietary	1%	0.00157%
			Alkane	Proprietary	1%	0.0008%
			Silica gel	112926-00-8	1%	0.00078%
			Cured acrylic resin	Proprietary	30%	0.00067%
			Sodium persulfate	7775-27-1	100%	0.00054%
			2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3	0.1%	1E-05%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	1E-05%
			Sodium bicarbonate	144-55-8	0.01%	1E-05%
			Sodium sulfate	7757-82-6	0.1%	0%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.00757%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	30%	3E-05%
			Heavy Aromatic Naptha	64742-94-5	30%	3E-05%
			Isopropanol	67-63-0	30%	3E-05%
			Fatty Acids	Proprietary	10%	1E-05%
			Complex Alkylaryl Polyo-Ester	Proprietary	10%	1E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	10%	1E-05%
			Formaldehyde	50-00-0	10%	1E-05%
			Acetylenic Alcohol	Proprietary	5%	0%
			Propargyl Alcohol	107-19-7	5%	0%
			Napthalene	91-20-3	5%	0%
			Citric Acid	77-92-9	100%	0.00253%
Citric Acid EC9546A	Petroplex	Iron Control Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	1E-05%
			Isopropanol	67-63-0	60%	5E-05%
			Polyethylene Glycol	25322-68-3	5%	0%
			Napthalene	91-20-3	1%	0%
			Phosphoric Acid Ester	Proprietary	10%	1E-05%
			Oxyalkylated Alcohol	Proprietary	10%	1E-05%
			Oxyalkylated Alkyl Alcohol	Proprietary	10%	1E-05%
ClO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00016%

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: Skipper Herring

Manager Stimulation

Date: 10/21/2015

Title: Operations

E-mail Address: sherring@cimarex.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.