

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:
30-015-32918

2. Well Name:
CHOSA DRAW 27 FEDERAL COM #001

3. Well Number:
001

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original
☐ Amendment

4. Surface Hole Location:
Unit:B Lot:B Section:27 Township:25S Range:26E
Feet from:330 N/S Line:N
Feet from:1980 E/W Line:E

5. Bottom Hole Location:
Unit:B Lot:B Section:27 Township:25S Range:26E
Feet from:330 N/S Line:N
Feet from:1980 E/W Line:E

6. latitude: longitude:
32.1071968 -104.2783127

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: 9/16/2016 Frac Performed by: Schlumberger

12. Production Type:
G

13. Pool Code(s):
97354, 97377

14. Gross Fractured Interval:
8,602 ft to 10,674 ft

15. True Vertical Depth (TVD):
10,647 ft

16. Total Volume of Fluid Pumped:
1,911,842 gals

17. Total Volume of Re-Use Water Pumped:
0 gals

18. Percent of Re-Use Water in Fluid Pumped:
%

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)
Slickwater	Schlumberger	Surfactant, Friction Reducer, Clay Control Agent, M300, Propping Agent	Water	7732-18-5	0%	81.78884%
			Urea	57-13-6	49.67859%	9.03294%
			Tetrasodium ethylenediaminetetraacetate	Ge0eral	0.00015%	3E-05%
			Propan-2-ol	67-63-0	0.00045%	8E-05%
			2-Propenamid (impurity)	Ge0eral	0.00025%	5E-05%
			Glutaraldehyde	111-30-8	0.0997%	0.01813%
			Dodecamethylcyclohexasiloxane	540-97-6	5E-05%	1E-05%
			Decamethyl cyclopentasiloxane	Ge0eral	5E-05%	1E-05%
			Octamethylcyclotetrasiloxane	556-67-2	5E-05%	1E-05%
			Potassium chloride	7447-40-7	0.00225%	0.00041%
			Silicon Dioxide	7631-86-9	0.00115%	0.00021%
			Sodium chloride	7647-14-5	0.09091%	0.01853%
			Sodium sulfate	7757-82-6	0.00125%	0.00023%
			Copper(II) sulfate	7758-98-7	5E-05%	1E-05%
			Ammonium sulfate	7783-20-2	0.11179%	0.02033%
			Magnesium chloride	7786-30-3	0.08521%	0.01549%
			Calcium chloride	10043-52-4	0.01194%	0.00217%
			Quartz, Crystalline silica	14808-60-7	49.32164%	8.96803%
			Polyethylene glycol monohexyl ether	31726-34-8	0.02672%	0.00486%
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.08252%	0.015%
			Amines, dicoco alkylmethyl	61788-62-3	0.0002%	4E-05%
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00225%	0.00041%
			Dimethyl siloxanes and silicones	63148-62-9	0.0001%	2E-05%
			Siloxanes and silicones, dimethyl, reaction products with silica	67762-90-7	5E-05%	1E-05%
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.00884%	0.00161%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.01609%	0.00293%
Mud Acid 7.5%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.03107%	0.00565%
ABF	Petroplex	Acid	Ammonium Hydrogen Fluoride	1341-49-7	0.07583%	0.01379%
			Ammonium Fluoride	12125-01-8	0.00399%	0.00073%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	0.00029%	5E-05%
			Heavy Aromatic Naptha	64742-94-5	0.00029%	5E-05%
			Isopropanol	67-63-0	0.00029%	5E-05%
			Fatty Acids	Proprietary	0.0001%	2E-05%
			Complex Alkylaryl Polyo-Ester	Proprietary	0.0001%	2E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	0.0001%	2E-05%
			Formaldehyde	50-00-0	0.0001%	2E-05%
			Acetylenic Alcohol	Proprietary	5E-05%	1E-05%
			Propargyl Alcohol	107-19-7	5E-05%	1E-05%
			Napthalene	91-20-3	5E-05%	1E-05%
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	0.02684%	0.00488%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	9E-05%	2E-05%
			Isopropanol	67-63-0	0.00056%	0.0001%
			Polyethylene Glycol	25322-68-3	5E-05%	1E-05%
			Napthalene	91-20-3	1E-05%	0%
			Phosphoric Acid Ester	Proprietary	9E-05%	2E-05%
			Oxyalkylated Alcohol	Proprietary	9E-05%	2E-05%
			Oxyalkylated Alkyl Alcohol	Proprietary	9E-05%	2E-05%
† Proprietary Technology					0%	0%

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
Title: Operations

Date: 11/3/2016

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.