

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:
30-015-41589

2. Well Name:
RIVERBEND 14 FEDERAL COM #002H

3. Well Number:
002H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:C Lot:C Section:14 Township:25S Range:28E
Feet from:75 N/S Line:N E/W Line:W
Feet from:1980

5. Bottom Hole Location:
Unit:C Lot:C Section:14 Township:25S Range:28E
Feet from:75 N/S Line:N E/W Line:W
Feet from:1980

6. latitude:
32.1371994 longitude:
-104.0600891

7. County:
Eddy

8. Operator Name and Address:
CIMAREX ENERGY CO.
600 N MARIENFELD STREET
SUITE 600
MIDLAND 79701

9. OGRID:
215099

10. Phone Number:

11. Last Fracture Date: 6/22/2015 Frac Performed by: Schlumberger

12. Production Type:
G

13. Pool Code(s):
97949

14. Gross Fractured Interval:
10,593 ft to 10,763 ft

15. True Vertical Depth (TVD):
10,763 ft

16. Total Volume of Fluid Pumped:
7,681,931 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)			
SlickWater	Schlumberger	Surfactant , Breaker, Gelling Agent, Friction Reducer, Clay Control Agent, Propping Agent	Water (Including Mix Water Supplied by Client)	NA	0%	90.88223%			
			Quartz, Crystalline silica	14808-60-7	98.38507%	8.94629%			
			Ammonium sulfate	7783-20-2	0.14052%	0.01278%			
			Sodium chloride	7647-14-5	0.1178%	0.01071%			
			Diammonium peroxidisulphate	7727-54-0	0.11451%	0.01041%			
			Magnesium chloride	7786-30-3	0.11044%	0.01004%			
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.10375%	0.00943%			
			Polyethylene glycol monohexyl ether	31726-34-8	0.07487%	0.00681%			
			Guar gum	9000-30-0	0.0696%	0.00633%			
			Calcium chloride	10043-52-4	0.01548%	0.00141%			
			Vinylidene chloride/methylacrylate copolymer	25038-72-6	0.01526%	0.00139%			
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.01109%	0.00101%			
			Urea	57-13-6	0.00681%	0.00062%			
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00307%	0.00028%			
			Potassium chloride	7447-40-7	0.00296%	0.00027%			
			Non-crystalline silica (impurity)	7631-86-9	0.00165%	0.00015%			
			Sodium sulfate	7757-82-6	0.00154%	0.00014%			
			Propan-2-ol	67-63-0	0.00066%	6E-05%			
			Magnesium silicate hydrate (talc)	14807-96-6	0.00044%	4E-05%			
			2-propenamid	GeDeral	0.00033%	3E-05%			
			poly(tetrafluoroethylene)	9002-84-0	0.00022%	2E-05%			
			Tetrasodium ethylenediaminetetraacetate	GeDeral	0.00022%	2E-05%			
			Dimethyl siloxanes and silicones	63148-62-9	0.00011%	1E-05%			
			Siloxanes and silicones, dimethyl, reaction products with silica	67762-90-7	0.00011%	1E-05%			
			Octamethylcyclotetrasiloxane	556-67-2	0.00011%	1E-05%			
			Decamethyl cyclopentasiloxane	GeDeral	0.00011%	1E-05%			
			Copper(II) sulfate	7758-98-7	0.00011%	1E-05%			
			Dodecamethylcyclohexasiloxane	540-97-6	0.00011%	1E-05%			
			HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.0279%	0.00254%
			Mud Acid 7.5%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.05389%	0.0049%
			ABF	Petroplex	Acid	Ammonium Hydrogen Fluoride	1341-49-7	0.13152%	0.01196%
			Cronox AK-50	Petroplex	Corrosion Inhibitor	Ammonium Fluoride	12125-01-8	0.00692%	0.00063%
						Oxyalkylated Alkylphenol	Proprietary	0.0005%	5E-05%
Heavy Aromatic Naptha	64742-94-5	0.0005%				5E-05%			
Isopropanol	67-63-0	0.0005%				5E-05%			
Fatty Acids	Proprietary	0.00017%				2E-05%			
Complex Alkylaryl Polyo-Ester	Proprietary	0.00017%				2E-05%			
Tar Bases, Quinolone Derivatives, Benzyl Chloride-Quaternized	72480-70-7	0.00017%				2E-05%			
Formaldehyde	50-00-0	0.00017%				2E-05%			
Acetylenic Alcohol	Proprietary	8E-05%				1E-05%			
Propargyl Alcohol	107-19-7	8E-05%				1E-05%			
Napthalene	91-20-3	8E-05%				1E-05%			
Citric Acid	77-92-9	0.04655%				0.00423%			
EC9546A	Petroplex	Surfactant				Heavy Aromatic Naptha	64742-94-5	0.00016%	1E-05%
			Isopropanol	67-63-0	0.00097%	9E-05%			
			Polyethylene Glycol	25322-68-3	8E-05%	1E-05%			
			Napthalene	91-20-3	2E-05%	0%			
			Phosphoric Acid Ester	Proprietary	0.00016%	1E-05%			
			Oxyalkylated Alcohol	Proprietary	0.00016%	1E-05%			
ClO2	Bosque	Biocide	Oxyalkylated Alkyl Alcohol	Proprietary	0.00016%	1E-05%			
			Chlorine Dioxide	10049-04-4	0.00118%	0.00011%			
† Proprietary Technology									

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

Date: 7/2/2015

E-mail Address: sherring@cimarex.com

Manager Stimulation

Title: Operations

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.