

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		1. WELL API NO: 30-025-41240					
		2. Well Name: CASCADE 29 FEDERAL #002H					
		3. Well Number: 002H					
		4. Surface Hole Location: Unit:C Lot:C Section:29 Township:25S Range:33E Feet from:330 N/S Line:N Feet from:1905 E/W Line:W					
		5. Bottom Hole Location: Unit:C Lot:C Section:29 Township:25S Range:33E Feet from:330 N/S Line:N Feet from:1905 E/W Line:W					
		6. latitude: 32.1079439558144 longitude: -103.596611903453					
		7. County: Lea					
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: 11/8/2013 Frac Performed by: Halliburton		12. Production Type: O					
13. Pool Code(s): 97903		14. Gross Fractured Interval: 9,677 ft to 9,882 ft					
15. True Vertical Depth (TVD): 9,882 ft		16. Total Volume of Fluid Pumped: 6,855,428 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	Water	7732-18-5	100%	89.3809%	
SSA-2	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	3.43263%	
SAND - PREMIUM WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	7.01211%	
Losurf-360	Halliburton	Surfactant	Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.02507%	
FR-66	Halliburton	Friction Reducer	Complex alkylamine	Proprietary	5%	0.00418%	
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.02084%	
BA-20 BUFFERING AGENT	Halliburton	Buffer	Acetic acid	64-19-7	30%	0.00041%	
			Ammonium acetate	631-61-8	100%	0.00136%	
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.03054%	
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00108%	
			Crystalline silica, quartz	14808-60-7	30%	0.00032%	
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00051%	
OptiKleen-WF	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.00437%	
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.0122%	
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	30%	4E-05%	
			Heavy Aromatic Naptha	64742-94-5	30%	4E-05%	
			Isopropanol	67-63-0	30%	4E-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%	1E-05%	
			Propargyl Alcohol	107-19-7	5%	1E-05%	
			Napthalene	91-20-3	5%	1E-05%	
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00407%	
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	1E-05%	
			Isopropanol	67-63-0	60%	8E-05%	
			Polyethylene Glycol	25322-68-3	5%	1E-05%	
			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%	
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00019%	
Ingredients Listed Below This Line Are Part of the			Alcohols, C12-16, ethoxylated	68551-12-2	0%	0%	
			Ammonium chloride	12125-02-9	0%	0%	
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%	
			Crystalline Silica, Quartz	14808-60-7	0%	0%	
			Cured acrylic resin	Proprietary	0%	0%	
			Fatty acid tall oil amide	Proprietary	0%	0%	
			Polyacrylamide copolymer	Proprietary	0%	0%	
			Silica gel	112926-00-8	0%	0%	
			Sodium chloride	7647-14-5	0%	0%	
			Sodium sulfate	7757-82-6	0%	0%	
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	0%	0%	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	0%	0%	
			Surfactant mixture	Proprietary	0%	0%	
			Water	7732-18-5	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: 11/19/2013						
E-mail Address: sherring@cimarex.com							

NMOCDD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCDD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.