

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: 30-025-41242							
		2. Well Name: CASCADE 29 FEDERAL #004H							
		3. Well Number: 004H							
		4. Surface Hole Location: Unit:A Lot:A Section:29 Township:25S Range:33E Feet from:330 N/S Line:N Feet from:735 E/W Line:E							
5. Bottom Hole Location: Unit:A Lot:A Section:29 Township:25S Range:33E Feet from:330 N/S Line:N Feet from:735 E/W Line:E		6. latitude: longitude: 32.1079328034088 -103.58810235902							
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: 12/10/2014 Frac Performed by: Halliburton		12. Production Type: O							
13. Pool Code(s): 97903		14. Gross Fractured Interval: 9,847 ft to 9,878 ft							
15. True Vertical Depth (TVD): 9,878 ft		16. Total Volume of Fluid Pumped: 6,723,939 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%	89.54609%			
Premium White Sand	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	10.32328%			
PermVis VFR-10	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.02544%			
			Alcohols, C12-16, ethoxylated	68551-12-2	10%	0.00848%			
			Ammonium chloride	12125-02-9	10%	0.00848%			
			9-Octadecenamide, n,n-bis-2 (hydroxy-ethyl)-, (Z)	93-83-4	5%	0.00424%			
			Complex alkylamine	Proprietary	5%	0.0042%			
LoSurf-360W	Halliburton	Surfactant	Glycerine	56-81-5	10%	0.0084%			
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-, omega.-hydroxy-	61827-42-7	30%	0.0252%			
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00427%			
OptiKleen-WF	Halliburton	Concentrate	Hydrochloric Acid	7647-01-0	15%	0.00595%			
HCL 15%	Petroplex	Acid	Oxyalkylated Alkylphenol	Proprietary	30%	2E-05%			
Cronox AK-50	Petroplex	Corrosion Inhibitor	Heavy Aromatic Naptha	64742-94-5	30%	2E-05%			
			Isopropanol	67-63-0	30%	2E-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%	0.00199%			
			EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	1E-05%
			Isopropanol	67-63-0	60%	4E-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%						
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00013%			
Ingredients Listed Below This Line Are Part of the			Alcohols ethoxylated	Proprietary	0%	0%			
			Alkane	Proprietary	0%	0%			
			Amide	Proprietary	0%	0%			
			Ammonium chloride	12125-02-9	0%	0%			
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0%	0%			
			Hydrogen peroxide	7722-84-1	0%	0%			
			Nitrotriacetic acid, trisodium salt monohydrate	5064-31-3	0%	0%			
			Polyacrylamide copolymer	Proprietary	0%	0%			
			Sodium bicarbonate	144-55-8	0%	0%			
			Sodium chloride	7647-14-5	0%	0%			
			Sodium glycollate	2836-32-0	0%	0%			
			Sodium hydroxide	1310-73-2	0%	0%			
			Sorbitan monooleate	9005-65-6	0%	0%			
			polyoxyethylene derivative						
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	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: 1/15/2015						
			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.