

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: 30-025-41921							
		2. Well Name: CUERVO FEDERAL #023H							
		3. Well Number: 023H							
		4. Surface Hole Location: Unit:D Lot:D Section:14 Township:23S Range:32E Feet from:330 N/S Line:N Feet from:375 E/W Line:W							
5. Bottom Hole Location: Unit:D Lot:D Section:14 Township:23S Range:32E Feet from:330 N/S Line:N Feet from:375 E/W Line:W		6. latitude: 32.3109861569388 longitude: -103.652760748493							
7. County: Lea									
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: 12/11/2014 Frac Performed by: Halliburton		12. Production Type: O							
13. Pool Code(s): 17644		14. Gross Fractured Interval: 9,741 ft to 9,847 ft							
15. True Vertical Depth (TVD): 9,847 ft		16. Total Volume of Fluid Pumped: 5,533,538 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%	88.10529%			
Sand	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	11.77591%			
PermVis VFR-10	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.00811%			
			Alcohols, C12-16, ethoxylated	68551-12-2	10%	0.0027%			
			Ammonium chloride	12125-02-9	10%	0.0027%			
			9-Octadecenamide, n,n-bis-2 (hydroxy-ethyl)-,(Z)	93-83-4	0.05%	0.00135%			
LOSURF-360W	Halliburton	Surfactant	Complex alkylamine	Proprietary	5%	0.00468%			
			Glycerine	56-81-5	10%	0.00936%			
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl- omega.-hydroxy-	61827-42-7	30%	0.02809%			
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	8E-05%			
LCA-1	Halliburton	Solvent	Paraffinic solvent	Proprietary	100%	0.0019%			
OptiKleen-WF	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.00528%			
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.00774%			
Mud Acid 7.5%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	7.5%	0%			
ABF	Petroplex	Acid	Ammonium Hydrogen Fluoride	1341-49-7	95%	0%			
			Ammonium Fluoride	12125-01-8	5%	0%			
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	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00258%
			EC9546A	Petroplex	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%			
Chlorine Dioxide	10049-04-4	100%				0.00017%			
Alcohols ethoxylated	Proprietary	0%				0%			
Alkane	Proprietary	0%				0%			
Amide	Proprietary	0%				0%			
Ammonium chloride	12125-02-9	0%				0%			
CIO2	Bosque	Biocide	Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0%	0%			
			Hydrogen peroxide	7722-84-1	0%	0%			
			Nitrotriactic 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 glycolate	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: 1/16/2015									
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.