

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: 30-025-40474						
		2. Well Name: HALLERTA U 4 FEDERAL #003H						
		3. Well Number: 003H						
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit: B Lot: B Section: 4 Township: 26S Range: 32E Feet from: 330 N/S Line: N Feet from: 2180 E/W Line: E						
		5. Bottom Hole Location: Unit: B Lot: B Section: 4 Township: 26S Range: 32E Feet from: 330 N/S Line: N Feet from: 2180 E/W Line: E						
		6. Latitude: Longitude: 32.0787922457537 - 103.678499541683						
		7. County: Lea						
8. Operator Name and Address: CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld St Suite 600 Midland 79701		9. OGRID: 162683		10. Phone Number: 918-295-1763				
11. Last Fracture Date: 11/12/2013 Frac Performed by: Halliburton		12. Production Type: O						
13. Pool Code(s): 97903		14. Gross Fractured Interval: 9,434 ft to 9,462 ft						
15. True Vertical Depth (TVD): 9,462 ft		16. Total Volume of Fluid Pumped: 3,410,482 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%	89.93783%		
100 Mesh Sand	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	3.31709%		
Premium White - 40/70	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	6.56692%		
LOSURF-360	Halliburton	Surfactant	Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-, omega.-hydroxy- Complex alkylamine	61827-42-7 Proprietary	30% 5%	0.01346% 0.00224%		
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.02245%		
OptiKleen-WF	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.00755%		
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.04873%		
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate Crystalline silica, quartz	7727-54-0 14808-60-7	100% 30%	0.0024% 0.00072%		
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.0012%		
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.0113%		
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol Heavy Aromatic Naptha Isopropanol Fatty Acids Complex Alkylaryl Poly-o-Ester Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized Formaldehyde Acetylenic Alcohol Propargyl Alcohol Naphthalene	Proprietary 64742-94-5 67-63-0 Proprietary Proprietary 72480-70-7 50-00-0 Proprietary 107-19-7 91-20-3	30% 30% 10% 10% 10% 10%	4E-05% 4E-05% 4E-05% 1E-05% 1E-05% 1E-05%		
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00377%		
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha Isopropanol Polyethylene Glycol Naphthalene Phosphoric Acid Ester Oxyalkylated Alcohol Oxyalkylated Alkyl Alcohol	64742-94-5 67-63-0 25322-68-3 91-20-3 Proprietary Proprietary Proprietary	10% 60% 5% 1% 10% 10% 10%	1E-05% 8E-05% 1E-05% 0% 1E-05% 1E-05% 1E-05%		
ClO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00014%		
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	9005-65-6	0%	0%		
			polyoxyethylene derivative					
			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: 12/16/2013								
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.