

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 February 15, 2012						
		1. WELL API NO: 30-025-40436						
		2. Well Name: HALLERTAU 5 FEDERAL #001H						
		3. Well Number: 001H						
HYDRAULIC FRAC TURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:P Lot:P Section:5 Township:26S Range:32E Feet from:330 N/S Line:S Feet from:330 E/W Line:E						
		5. Bottom Hole Location: Unit:P Lot:P Section:5 Township:26S Range:32E Feet from:330 N/S Line:S Feet from:330 E/W Line:E						
		6. Latitude: 32.0658785299222 Longitude: - 103.689702163002						
		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: 4/8/2013 Frac Performed by: Halliburton		12. Production Type: O						
13. Pool Code(s): 97903		14. Gross Fractured Interval: 10,420 ft to 10,581 ft						
15. True Vertical Depth (TVD): 10,420 ft		16. Total Volume of Fluid Pumped: 46,231 bbls						
17. 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				100%	83.48391%		
Premium White-20/40	Halliburton				100%	11.68103%		
Garnett CRC-20/40	Halliburton				100%	4.45423%		
Losurf 360W	Halliburton	Surfactant	Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy- Complex alkylamine	61827-42-7	0.3%	0.00059%		
LCA-1	Halliburton	Solvent	Paraffinic solvent	CBI	0.05%	0.0001%		
BC-140 X2	Halliburton	Initiator	Ethylene glycol Monoethanolamine borate	107-21-1 26038-87-9	30% 100%	0.01889% 0.06297%		
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.18716%		
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz Walnut hulls	14808-60-7 Mixture	30% 100%	0.00139% 0.00462%		
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00027%		
K-34	Halliburton	Buffer	Sodium bicarbonate	144-55-8	100%	0.00098%		
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.01512%		
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol Heavy Aromatic Naptha Isopropanol Fatty Acids Complex Alkylaryl Polyo-Ester Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized Formaldehyde Acetylenic Alcohol Propargyl Alcohol Naphthalene	CBI 64742-94-5 67-63-0 CBI CBI 72480-70-7 50-00-0 CBI 107-19-7 91-20-3	30% 30% 30% 10% 10% 10% 10% 5% 5% 5%	5E-05% 5E-05% 5E-05% 2E-05% 2E-05% 2E-05% 2E-05% 1E-05% 1E-05% 1E-05%		
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00047%		
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 CBI CBI CBI	10% 60% 5% 1% 10% 10% 10%	2E-05% 0.0001% 1E-05% 0% 2E-05% 2E-05% 2E-05%		
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00022%		
Ingredients Listed Below This Line Are Part of the			2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3	0%	0%		
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%		
			C.I. Pigment Red 5	6410-41-9	0%	0%		
			Crystalline Silica, Quartz	14808-60-7	0%	0%		
			Cured Acrylic Resin	Mixture	0%	0%		
			Cured Acrylic Resin	9002-98-6	0%	0%		
			Enzyme	9025-56-3	0%	0%		
			Silica gel	112926-00-8	0%	0%		
			Sodium sulfate	7757-82-6	0%	0%		
			Surfactant Mixture	67254-71-1	0%	0%		
			Surfactant Mixture	56449-46-8	0%	0%		
			Water	7732-18-5	0%	0%		
			18. 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	
			Date:	4/15/2013			Title:	Operations
			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.