

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. 30-015-41115							
		2. Well Name: HACKBERRY 23 FEDERAL COM #001H							
		3. Well Number: 001H							
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment				4. Surface Hole Location: Unit:E Lot:E Section:24 Township:19S Range:30E Feet from:1980 N/S Line:N Feet from:180 E/W Line:W					
				5. Bottom Hole Location: Unit:E Lot:E Section:24 Township:19S Range:30E Feet from:1980 N/S Line:N Feet from:180 E/W Line:W					
				6. latitude: longitude: 32.6476480237078 - 103.933593728811					
				7. County: Eddy					
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: 4/28/2013 Frac Performed by: Halliburton				12. Production Type: O					
13. Pool Code(s): 97020				14. Gross Fractured Interval: 8,440 ft to 8,548 ft					
15. True Vertical Depth (TVD): 8,548 ft				16. Total Volume of Fluid Pumped: 40,848 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%	83.46155%			
Premium White-20/40	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	11.16597%			
CRC Garnett-20/40	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	4.64067%			
			Hexamethylenetetramine	100-97-0	2%	0.09281%			
			Phenol / formaldehyde resin	9003-35-4	5%	0.23203%			
LOSURF-360W	Halliburton				100%	0.00893%			
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.01905%			
			Monoethanolamine borate	26038-87-9	100%	0.06352%			
BA-40L BUFFERING AGENT	Halliburton	Buffer	Potassium carbonate	584-08-7	60%	0.01293%			
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.18982%			
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00146%			
			Walnut hulls	Mixture	100%	0.00486%			
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00064%			
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.01506%			
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	CBI	30%	5E-05%			
			Heavy Aromatic Naptha	64742-94-5	30%	5E-05%			
			Isopropanol	67-63-0	30%	5E-05%			
			Fatty Acids	CBI	10%	2E-05%			
			Complex Alkylaryl Poly-Ester	CBI	10%	2E-05%			
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	10%	2E-05%			
			Formaldehyde	50-00-0	10%	2E-05%			
			Acetylenic Alcohol	CBI	5%	1E-05%			
			Propargyl Alcohol	107-19-7	5%	1E-05%			
			Napthalene	91-20-3	5%	1E-05%			
			Citric Acid	77-92-9	100%	0.00502%			
			EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	2E-05%
						Isopropanol	67-63-0	60%	0.0001%
			Polyethylene Glycol	25322-68.3	5%	1E-05%			
			Napthalene	91-20-3	1%	0%			
			Phosphoric Acid Ester	CBI	10%	2E-05%			
			Oxyalkylated Alcohol	CBI	10%	2E-05%			
			Oxyalkylated Alkyl Alcohol	CBI	10%	2E-05%			
ClO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00017%			
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	Confidential Business Information	0%	0%			
			Cured Acrylic Resin	Confidential Business Information	0%	0%			
			Enzyme	Confidential Business Information	0%	0%			
			Silica gel	112926-00-8	0%	0%			
			Sodium sulfate	7757-82-6	0%	0%			
			Surfactant Mixture	Confidential Business Information	0%	0%			
			Surfactant Mixture	Confidential Business Information	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 Operations			
Date: 5/22/2013									
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.