

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: 30-015-39891							
		2. Well Name: IRWIN 23 14 FEDERAL #001							
		3. Well Number: 001							
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amended		4. Surface Hole Location: Unit:A Lot:A Section:23 Township:19S Range:30E Feet from:1300 N/S Line:N Feet from:695 E/W Line:E							
		5. Bottom Hole Location: Unit:A Lot:A Section:23 Township:19S Range:30E Feet from:1300 N/S Line:N Feet from:695 E/W Line:E							
		6. Latitude: longitude: 0 0							
		7. County: Eddy							
8. Operator Name and Address: CIMAREX ENERGY CO. OF COLORADO 600 N. Mariefeld St Suite 600 Midland 79701				9. OGRID: 162683		10. Phone Number: 432-620-1938			
11. Last Fracture Date: 5/1/2012 Frac Performed by: Halliburton				12. Production Type: O					
13. Pool Code(s): 5200				14. Gross Fractured Interval: 8,461 ft to 8,561 ft					
15. True Vertical Depth (TVD): 8,561 ft				16. Total Volume of Fluid Pumped: 54,890 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	Cimarex				0%	0%			
Premium White 20/40	Halliburton				0%	0%			
CRC-20/40	Halliburton				0%	0%			
BA-40L BUFFERING AGENT	Halliburton	Buffer	Potassium carbonate	584-08-7	60%	0.0124%			
SUPERSET W	Halliburton	Activator	Methanol	67-56-1	60%	0.03731%			
			Ethoxylated nonylphenol	Confidential Business Information	60%	0.03731%			
LoSurf-300D	Halliburton	Non-ionic Surfactant	1,2,4 Trimethylbenzene	95-63-6	1%	0.00146%			
			Ethanol	64-17-5	60%	0.08758%			
			Heavy aromatic petroleum naphtha	64742-94-5	30%	0.04379%			
			Naphthalene	91-20-3	5%	0.0073%			
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5%	0.0073%			
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00206%			
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.02249%			
			Monoethanolamine borate	26038-87-9	100%	0.07498%			
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.17324%			
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00152%			
			Walnut hulls	Mixture	100%	0.00506%			
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0%			
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.01438%			
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 Polyo-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	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00045%
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%			
			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%			
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Enzyme	Confidential Business Information	0%				0%			
Oxyalkylated Phenolic Resin	Confidential Business Information	0%				0%			
Oxyalkylated Phenolic Resin	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 Title: Operations									
Date: 5/11/2012									
E-mail Address: sherring@cimarex.com									

NMOCDD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCDD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.