

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: 30-015-42262				
		2. Well Name: LIBERTY 24 FEDERAL COM #004H				
		3. Well Number: 004H				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:D Lot:D Section:24 Township:25S Range:26E Feet from:330 N/S Line:N Feet from:660 E/W Line:W				
		5. Bottom Hole Location: Unit:D Lot:D Section:24 Township:25S Range:26E Feet from:330 N/S Line:N Feet from:660 E/W Line:W				
		6. latitude: 32.1217685182547 longitude: -104.252772186451				
		7. County: Eddy				
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: 9/10/2014 Frac Performed by: Halliburton		12. Production Type: O				
13. Pool Code(s): 97494		14. Gross Fractured Interval: 7,000 ft to 7,205 ft				
15. True Vertical Depth (TVD): 7,205 ft		16. Total Volume of Fluid Pumped: 3,037,027 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%	83.17007%
Premium White-20/40	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	11.59555%
CRC Garnett- 20/40	Halliburton	Proppant	Quartz (SiO2) (Crystalline Silica)	14808-60-7	98%	4.55444%
			Polyurethane Resin	Proprietary	5%	0.23237%
			Colorant	Proprietary	1%	0.04647%
BA-40L BUFFERING AGENT	Halliburton	Buffer	Potassium carbonate	584-08-7	60%	0.00108%
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.01323%
			Monocethanolamine borate	26038-87-9	100%	0.04411%
LoSurf-360W	Halliburton	Surfactant	Complex alkylamine	Proprietary	5%	0.00452%
			Glycerine	56-81-5	10%	0.00905%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.02714%
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00537%
			Crystalline silica, quartz	14808-60-7	30%	0.00161%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00389%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.17738%
K-34	Halliburton	Buffer	Sodium bicarbonate	144-55-3	100%	0.00082%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.01606%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	30%	6E-05%
			Heavy Aromatic Naptha	64742-94-5	30%	6E-05%
			Isopropanol	67-63-0	30%	6E-05%
			Fatty Acids	Proprietary	10%	2E-05%
			Complex Alkylaryl Poly-Ester	Proprietary	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	Proprietary	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%	0.00536%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	2E-05%
			Isopropanol	67-63-0	60%	0.00011%
			Polyethylene Glycol	25322-68-3	5%	1E-05%
			Napthalene	91-20-3	1%	0%
			Phosphoric Acid Ester	Proprietary	10%	2E-05%
			Oxyalkylated Alcohol	Proprietary	10%	2E-05%
			Oxyalkylated Alkyl Alcohol	Proprietary	10%	2E-05%
ClO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	8E-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%
			Alkane	Proprietary	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%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0%	0%
			Hydrogen peroxide	7722-84-1	0%	0%
			Nitrotriacetic acid, trisodium salt monohydrate	5064-31-3	0%	0%
			Silica gel	112926-00-8	0%	0%
			Sodium bicarbonate	144-55-3	0%	0%
			Sodium glycolate	2836-32-0	0%	0%
			Sodium hydroxide	1310-73-2	0%	0%
			Sodium sulfate	7757-82-6	0%	0%
			Surfactant mixture	Proprietary	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: 10/9/2014						
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.