

Submit within 45 days of well completion	<div>State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505</div>	Revised November 6, 2013				
		1. WELL API NO: 30-015-38494				
		2. Well Name: CRESCENT HALE 11 FEDERAL #001				
		3. Well Number: 001				
<div>HYDRAULIC FRACTURING FLUID DISCLOSURE</div> <div><input checked="" type="checkbox"/> Original</div> <div><input type="checkbox"/> Amendment</div>		4. Surface Hole Location: Unit:A Lot:A Section:11 Township:19S Range:30E Feet from:345 N/S Line:N Feet from:545 E/W Line:E				
		5. Bottom Hole Location: Unit:A Lot:A Section:11 Township:19S Range:30E Feet from:345 N/S Line:N Feet from:545 E/W Line:E				
		6. Istitude: 32.6811905 longitude: -103.9359131				
		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: 10/17/2016 Frac Performed by: Liberty Oilfield Services		12. Production Type: O				
13. Pool Code(s): 5200		14. Gross Fractured Interval: 7,717 ft to 8,297 ft				
15. True Vertical Depth (TVD): 8,297 ft		16. Total Volume of Fluid Pumped: 385,503 gals				
17. Total Volume of Re-Use Water Pumped: 0 gals		18. Percent of Re-Use Water in Fluid Pumped: %				
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)
Water	Operator	Carrier	Water	7732-18-5	100%	80.93192%
SFT-72	Liberty Oilfield Services	Non Emulsifier	Ethoxylated Alcohol	68439-46-3	10%	0.00764%
			d-Limonene	5989-27-5	5%	0.00382%
			Methanol	67-56-1	5%	0.00382%
			1,2,4-Trimethylbenzene	95-63-6	0.2%	0.00015%
FRP-E3-8	Liberty Oilfield Services	Friction reduction	Distillates (petroleum), hydrotreated light	64742-47-8	45%	0.02091%
			Alcohols, C12-16, ethoxylated propoxylated	68213-24-1	5%	0.00232%
Bioclear 5000	Lubrizol	Biocide	2,2-dibromo-3-nitriopropionamide	10222-01-2	10%	0.00232%
SCI-38	Liberty Oilfield Services	Scale Control	Ethylene glycol	107-21-1	40%	0.01973%
			Copolymer of Maleic and Acrylic Acid	52255-49-9	30%	0.0148%
			DETA phosphonate	15827-60-8	25%	0.01233%
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	20%	0.00987%
			Phosphino carboxylic acid polymer	71050-62-9	20%	0.00987%
			Hexamethylene Diamine Tetra (Methylene Phosphonic Acid)	23605-74-5	5%	0.00247%
			BX-8L	Liberty Oilfield Services	Crosslinker	Boric Acid, sodium salt
BLR-18	Liberty Oilfield Services	Powder Breaker	Ammonium Persulfate	7727-54-0	99%	0.00257%
BLE-18	Liberty Oilfield Services	Gel Breaker	Ammonium Persulfate	7727-54-0	75%	0.00393%
			Acrylic Copolymer	Proprietary	20%	0.00105%
			Proprietary Ingredient	Proprietary	6%	0.00031%
			Diethylene Glycol Monobutyl Ether	112-34-5	5%	0.00026%
HCL-15	Liberty Oilfield Services	Solvent	Hydrochloric Acid	7647-01-0	30%	0.32654%
FSTI-CI-01	FSTI	Acid Corrosion Inhibitor	Water	7732-18-5	70%	0.76193%
			Methanol	67-56-1	80%	0.00123%
FSTI-IC-001	FSTI	Iron Control	Fatty Acids	Proprietary	10%	0.00015%
FSTI-NE-01	FSTI	Surfactant	Acetic Acid	64-19-7	60%	0.00129%
			Citric Acid	77-92-9	40%	0.00086%
			Methyl Alcohol	67-56-1	70%	0.00061%
			Coconut Benzyl Quaternary Amine	61789-71-7	20%	0.00017%
			Isopropanol	67-63-0	10%	9E-05%
LGA-3J	Liberty Oilfield Services	Guar Slurry	Petroleum Distillates Blend	Proprietary	65%	0.13084%
Pearl RCS / Preferred	Liberty Oilfield Services	Proppant	Quartz (SiO2) (Crystalline Silica)	14808-60-7	99%	2.68561%
			Polyurethane Resin	Proprietary	2%	0.05425%
Crystalline Silica, Quartz / Unimin Corp	Liberty Oilfield Services	Sand	Crystalline Silica in the form of Quartz	14808-60-7	99.9%	14.78158%
† Proprietary Technology					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: 11/3/2016						
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.