

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. 30-025-43554								
		2. Well Name: WEST GRAMA RIDGE 8 5 FEDERAL #002H								
		3. Well Number: 002H								
HYDRAULIC FRACTURING FLUID DISCLOSURE  <input checked="" type="checkbox"/> Original  <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:N    Lot:N    Section:8    Township:22S    Range:34E Feet from:280    N/S Line:S Feet from:2000    E/W Line:W								
		5. Bottom Hole Location: Unit:N    Lot:N    Section:8    Township:22S    Range:34E Feet from:280    N/S Line:S Feet from:2000    E/W Line:W								
		6. latitude:    longitude: 32.3997392    -103.4941176								
		7. County: Lea								
8. Operator Name and Address: CIMAREX ENERGY CO. 600 N MARIENFELD STREET SUITE 600 MIDLAND 79701				9. OGRID:    215099		10. Phone Number:				
11. Last Fracture Date:    4/6/2017    Frac Performed by: Halliburton				12. Production Type: O						
13. Pool Code(s): 28432				14. Gross Fractured Interval: 10,290 ft to 10,811 ft						
15. True Vertical Depth (TVD): 10,811 ft				16. Total Volume of Fluid Pumped: 8,823,059 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	Water	7732-18-5	100%	83.66988%				
BC-140 X2	Halliburton	Initiator	Listed Below	Listed Below	0%	0%				
FDP-S1176-15	Halliburton	Friction Reducer	Listed Below	Listed Below	0%	0%				
FDP-S1226-15	Halliburton	Surfactant	Listed Below	Listed Below	0%	0%				
MC B-8614	Halliburton	Biocide	Listed Below	Listed Below	0%	0%				
OPTIFLO-III	Halliburton	Breaker	Listed Below	Listed Below	0%	0%				
OptiKleen-WF	Halliburton	Concentrate	Listed Below	Listed Below	0%	0%				
SAND	Halliburton	Proppant	Listed Below	Listed Below	0%	0%				
SAND-CRC	Halliburton	Proppant	Listed Below	Listed Below	0%	0%				
SP BREAKER	Halliburton	Breaker	Listed Below	Listed Below	0%	0%				
WG-36	Halliburton	Gelling Agent	Listed Below	Listed Below	0%	0%				
MSDS and Non-MSDS Ingredients are listed below					0%	0%				
Ingredients	Listed Above	Listed Above	2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3	0.1%	1E-05%				
			9-Octadecenamide, n,n-bis-2(hydroxy-ethyl)-,(Z)	93-83-4	5%	0.00209%				
			Ammonium chloride	12125-02-9	5%	0.00209%				
			Ammonium persulfate	7727-54-0	100%	0.00117%				
			Castor oil, ethoxylated	61791-12-6	5%	0.00209%				
			Crystalline silica, quartz	14808-60-7	100%	16.07569%				
			Cured acrylic resin	Proprietary	30%	0.00035%				
			Ethanol	64-17-5	1%	0.00021%				
			Ethylene glycol	107-21-1	30%	0.00349%				
			Glutaraldehyde	111-30-8	30%	0.00643%				
			Guar gum	9000-30-0	100%	0.03662%				
			Hdrotreated light petrolem distillates	Proprietary	100%	0.00044%				
			Hexamethylenetetramine	100-97-0	2%	0.04406%				
			Hydrotreated light petroleum distillate	64742-47-8	30%	0.01255%				
			Methanol	67-56-1	0.14%	3E-05%				
			Monoethanolamine borate	26038-87-9	100%	0.01163%				
			Phenol / formaldehyde resin	9003-35-4	5%	0.11016%				
			Phosphoric acid	7664-38-2	0.1%	2E-05%				
			Polyacrylate	Proprietary	30%	0.01255%				
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5%	0.00107%				
			Sobitan, mono-9-ocladeceenoate, (Z)	1338-43-8	5%	0.00209%				
			Sodium chloride	7647-14-5	5%	0.00209%				
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00305%				
			Sodium persulfate	7775-27-1	100%	0.00012%				
								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:    6/15/2017										
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.