

		Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505		1. Well APN#: 30-025-40356 2. Well Name: WHITHERSPOON 21 STATE COM #004H 3. Well Number: 004H		
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment				4. Surface Hole Location: Unit: A Lot: A Section: 21 Township: 21S Range: 33E Feet from: 330 N/S Line: N Feet from: 350 E/W Line: E 5. Bottom Hole Location: Unit: A Lot: A Section: 21 Township: 21S Range: 33E Feet from: 330 N/S Line: N Feet from: 350 E/W Line: E 6. Latitude: 32.470664112828 Longitude: 103.570092579925 7. County: Lea		
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: 5/15/2014 Frac Performed by: Halliburton				12. Production Type: O		
13. Pool Code(s): 96403				14. Gross Fractured Interval: 9,378 ft to 9,680 ft		
15. True Vertical Depth (TVD): 9,680 ft				16. Total Volume of Fluid Pumped: 5,687,699 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%	90.75286%
Premium Sand	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	9.07521%
LoSurf-360W	Halliburton	Surfactant	Complex alkylamine	Proprietary	5%	0.00383%
			Glycerine	56-81-5	10%	0.00766%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.02299%
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.02093%
LCA-1	Halliburton	Solvent	Paraffinic solvent	Proprietary	100%	0.00403%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.03383%
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00178%
			Crystalline silica, quartz	14808-60-7	30%	0.00053%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00122%
OptiKleen-WF	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.00481%
K-34	Halliburton	Buffer	Sodium bicarbonate	144-55-8	100%	0.00019%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.00994%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxalkylated Alkylphenol	Proprietary	30%	4E-05%
			Heavy Aromatic Naptha	64742-94-5	30%	4E-05%
			Isopropanol	67-63-0	30%	4E-05%
			Fatty Acids	Proprietary	10%	1E-05%
			Complex Alkylaryl Poly- Ester	Proprietary	10%	1E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	10%	1E-05%
			Formaldehyde	50-00-0	10%	1E-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%	0.00332%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	1E-05%
			Isopropanol	67-63-0	60%	7E-05%
			Polyethylene Glycol	25322-68-3	5%	1E-05%
			Napthalene	91-20-3	1%	0%
			Phosphoric Acid Ester	Proprietary	10%	1E-05%
			Oxalkylated Alcohol	Proprietary	10%	1E-05%
			Oxalkylated Alkyl Alcohol	Proprietary	10%	1E-05%
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00032%
Ingredients Listed Below This Line Are Part of the			Alcohols, C12-16, ethoxylated	68551-12-2	0%	0%
			Alkane	Proprietary	0%	0%
			Ammonium chloride	12125-02-9	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%
			Fatty acid tall oil amide	Proprietary	0%	0%
			Hydrogen peroxide	7722-84-1	0%	0%
			Nitrotriactic acid, trisodium salt monohydrate	5064-31-3	0%	0%
			Polyacrylamide copolymer	Proprietary	0%	0%
			Silica gel	112926-00-8	0%	0%
			Sodium bicarbonate	144-55-8	0%	0%
			Sodium chloride	7647-14-5	0%	0%
			Sodium glycolate			