

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: 30-039-31338				
		2. Well Name: LOGOS JICARILLA #009P				
		3. Well Number: 009P				
HYDRAULIC FRACTURING FLUID DISCLOSURE <input checked="" type="checkbox"/> Original <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:P    Lot:P    Section:9    Township:25N    Range:05W Feet from:901    N/S Line:S Feet from:1063    E/W Line:E				
		5. Bottom Hole Location: Unit:P    Lot:P    Section:9    Township:25N    Range:05W Feet from:901    N/S Line:S Feet from:1063    E/W Line:E				
		6. latitude:    36.409887    longitude:    -107.359949				
		7. County: Rio Arriba				
8. Operator Name and Address: LOGOS OPERATING, LLC 4001 N. Butler, Bldg 7101 Farmington 87401		9. OGRID:    289408		10. Phone Number:    832-794-1355		
11. Last Fracture Date:    12/21/2015    Frac Performed by:    Halliburton		12. Production Type: O				
13. Pool Code(s): 97232		14. Gross Fractured Interval: 5,544 ft to 6,915 ft				
15. True Vertical Depth (TVD): 6,915 ft		16. Total Volume of Fluid Pumped: 48,438 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)
Fresh Water	Operator	Base Fluid	Fresh Water	7732-18-5	100%	56.22449%
NITROGEN LIQUEFIED	Halliburton	Fluid	NA	NA	0%	0%
BE-6 MICROBIOCIDE, Cla-Web(TM), HC-2, LOSURF-300D,	Halliburton	Additive, Biocide, Breaker, Gelling Agent, Microbiocide, Non-ionic Surfactant, Proppant	NA	NA	0%	0%
			1,2,4 Trimethylbenzene	95-63-6	1%	0.00023%
			2-Bromo-2-nitro-1,3-propanediol	52-51-7	100%	0.0015%
			Amine salts	Confidential	0.1%	5E-05%
			Ammonium salt	Confidential	60%	0.01608%
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00817%
			C.I. Pigment Red 5	6410-41-9	1%	7E-05%
			Crystalline silica, quartz	14808-60-7	100%	22.85715%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.00016%
			Cured acrylic resin	Confidential	30%	0.00203%
			Enzyme	Confidential	5%	0.00033%
			Ethanol	64-17-5	60%	0.01383%
			Glycerine	56-81-5	5%	0.00941%
			Guar gum	9000-30-0	100%	0.16345%
			Heavy aromatic petroleum naphtha	64742-94-5	30%	0.00692%
			Inner salt of alkyl amines	Proprietary	30%	0.05648%
			Naphthalene	91-20-3	5%	0.00115%
			Nitrogen	7727-37-9	100%	20.49761%
			Oxyalkylated phenolic resin	Confidential	30%	0.00922%
			Poly (oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5%	0.00115%
			Quaternary amine	Confidential	5%	0.00164%
			Silica gel	112926-00-8	1%	0.00163%
			Sodium chloride	7647-14-5	30%	0.05782%
			Sodium persulfate	7775-27-1	100%	0.0131%
			Sodium sulfate	7757-82-6	0.1%	1E-05%
Surfactant mixture	Confidential	1%	0.00327%			
Walnut hulls	NA	100%	0.00655%			
Water	7732-18-5	60%	0.12904%			
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:    Tamra Sessions		Title:    Operations Technician		
Date:    2/1/2016						
E-mail Address:    tsessions@logosresourcesllc.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.