

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. 30-045-35688				
		2. Well Name: HEROS 2308 09L COM #001H				
		3. Well Number: 001H				
HYDRAULIC FRACTURING FLUID DISCLOSURE <input checked="" type="checkbox"/> Original <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:L Lot:L Section:9 Township:23N Range:08W Feet from:1476 N/S Line:S Feet from:210 E/W Line:W				
		5. Bottom Hole Location: Unit:E Lot:E Section:16 Township:23N Range:08W Feet from:2380 N/S Line:N Feet from:1310 E/W Line:W				
		6. latitude: longitude: 36.238493 -107.694942				
		7. County: San Juan				
8. Operator Name and Address: LOGOS OPERATING, LLC 2010 Afton Place Farmington 87401		9. OGRID: 289408	10. Phone Number: 832-794-1355			
11. Last Fracture Date: 9/11/2017 Frac Performed by: Halliburton		12. Production Type: O				
13. Pool Code(s): 47540		14. Gross Fractured Interval: 4,852 ft to 5,275 ft				
15. True Vertical Depth (TVD): 5,275 ft		16. Total Volume of Fluid Pumped: 1,312,841 gals				
17. Total Volume of Re-Use Water Pumped: 918,989 gals		18. Percent of Re-Use Water in Fluid Pumped: 70%				
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%	54.84219%
BE-7(TM)	Halliburton	Biocide	Listed Below	Listed Below	0%	0%
Cla-Web(TM)	Halliburton	Additive	Listed Below	Listed Below	0%	0%
GBW-30 BREAKER	Halliburton	Breaker	Listed Below	Listed Below	0%	0%
HC-2	Halliburton	Additive	Listed Below	Listed Below	0%	0%
HCL >10%	Halliburton	Solvent	Listed Below	Listed Below	0%	0%
LOSURF-300D	Halliburton	Non-ionic Surfactant	Listed Below	Listed Below	0%	0%
NITROGEN LIQUEFIED	Halliburton	Fluid	Listed Below	Listed Below	0%	0%
OPTIFLO-HTE	Halliburton	Breaker	Listed Below	Listed Below	0%	0%
SAND-PREMIUM WHITE-20/40, BULK	Halliburton	Proppant	Listed Below	Listed Below	0%	0%
WG-35 GELLING AGENT	Halliburton	Gelling Agent	Listed Below	Listed Below	0%	0%
MSDS and Non-MSDS Ingredients are listed below the					0%	0%
Ingredients	Listed Above	Listed Above	1,2,4 Trimethylbenzene	95-63-6	1%	0.00024%
			Amine salts	Proprietary	0.1%	6E-05%
			C.I. Pigment Red 5	6410-41-9	1%	4E-05%
			Crystalline silica, quartz	14808-60-7	100%	28.50577%
			Cured acrylic resin	Proprietary	30%	0.00133%
			Enzyme	Proprietary	5%	0.00021%
			Ethanol	64-17-5	60%	0.01415%
			Glycerine	56-81-5	5%	0.00352%
			Guar gum	9000-30-0	100%	0.07334%
			Heavy aromatic petroleum naphtha	64742-94-5	30%	0.00707%
			Hemicellulase enzyme	9012-54-8	30%	0.00129%
			Hydrochloric acid	7647-01-0	30%	0.07792%
			Hydroxyalkylammonium chloride	Proprietary	60%	0.01758%
			Inner salt of alkyl amines	Proprietary	30%	0.02113%
			Lactose	63-42-3	100%	0.00429%
			Naphthalene	91-20-3	5%	0.00118%
			Nitrogen	7727-37-9	100%	16.17251%
			Oxylated phenolic resin	Proprietary	30%	0.00943%
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5%	0.00118%
			Quaternary amine	Proprietary	5%	0.00179%
			Sodium chloride	7647-14-5	30%	0.02259%
			Sodium hydroxide	1310-73-2	2%	0.00032%
			Sodium hypochlorite	7681-52-9	30%	0.00476%
			Walnut hulls	CAS Not Assigned	100%	0.00428%
Water	7732-18-5	100%	0.33545%			
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: 11/22/2017						
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.