

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 February 15, 2012				
		1. WELL API NO: 30-045-35422				
		2. Well Name: LOGOS #006				
		3. Well Number: 006				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☐ Original ☒ Amends disclosure submitted on 11/1/2013		4. Surface Hole Location: Unit:G Lot:G Section:8 Township:23N Range:08W Feet from:1662 N/S Line:N Feet from:1973 E/W Line:E				
		5. Bottom Hole Location: Unit:G Lot:G Section:8 Township:23N Range:08W Feet from:1662 N/S Line:N Feet from:1973 E/W Line:E				
		6. latitude: 36.24444 longitude: -107.70245				
		7. County: San Juan				
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: 10/31/2013 Frac Performed by: Baker Hughes		12. Production Type: G				
13. Pool Code(s): 47540, 71599		14. Gross Fractured Interval: 5,108 ft to 5,996 ft				
15. True Vertical Depth (TVD): 6,175 ft		16. Total Volume of Fluid Pumped: 956,483 gals				
17. 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	7731-18-5	100%	89.74017%
HCL, 10.1%-15%	Baker Hughes	Acidizing	Hydrochloric Acid	7847-01-0	15%	0.16318%
Alpha 1427	Baker Hughes	Biocide	Didecyl Dimethyl Ammonium Chloride	7173-51-5	10%	0.00359%
			Ethanol	64-17-5	5%	0.0018%
			Glutaraldehyde	111-30-8	30%	0.01078%
			Quaternary Ammonium Compound	68424-85-1	5%	0.0018%
GBW-5	Baker Hughes	Breaker	Ammonium persulphate	7727-54-0	100%	0.00889%
CI-27	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade secret	30%	0.00075%
			Methanol	67-56-1	60%	0.0015%
			Olefin	Trade secret	5%	0.00013%
			Polyoxyalkylenes	Trade secret	30%	0.00075%
BioSealers MR	Baker Hughes	Degradable Sealers	Propargyl Alcohol	107-19-7	10%	0.00025%
			Thiourea Polymer	68527-49-1	30%	0.00075%
FAW-22, 260 gal tote	Baker Hughes	Foamer	Non-hazardous Ingredients	Trade Secret	100%	0.00056%
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer	Alkyl Sulfate (1 of 3)	Trade Secret	1%	0.00059%
			Alkyl Sulfate (2 of 3)	Trade secret	1%	0.00059%
			Alkyl Sulfate (3 of 3)	Trade secret	1%	0.00059%
			Ammonium Alkyl Ether Sulfate	Trade secret	10%	0.00587%
			Isopropanal	67-63-0	30%	0.01761%
			Sodium Sulfonate	68439-57-6	30%	0.01761%
Ferrotrol 300L	Baker Hughes	Iron Control	Aliphatic Hydrocarbon	Trade secret	30%	0.01299%
			Oxyalkylated Hydrocarbon	Trade Secret	5%	0.00217%
			Citric Acid	77-92-9	60%	0.00355%
Nitrogen	Baker Hughes	Nitrogen	Liquid Nitrogen	7727-37-9	100%	4.04658%
NE-900, tote	Baker Hughes	Non-emulsifier	Methanol	67-56-1	30%	0.00041%
			Nonyl phenyl polyethylene glycol ether	9016-45-9	10%	0.00014%
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	0.57141%
Sand, non-API, 40/70 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	4.30305%
ScaleSorb 3, (25# pail)	Baker Hughes	Scale Inhibitor	Amino Alkyl Phosphonic Acid	Trade secret	30%	0.00245%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	8E-05%
			Diatomaceous Earth, Calcined	91053-39-3	100%	0.00816%
			Phosphonic Acid	13598-36-2	1%	8E-05%
GasFlo G, 330 gal tote	Baker Hughes	Surfactant	Methanol	67-56-1	30%	0.0199%
			Mixture of Surfactants	Trade secret	60%	0.03979%
			Water	7732-18-5	50%	0.03316%
Non-MSDS Ingredients			Copolymer	Trade secret	0%	0.0005481%
			Ethoxylated Alcohol	Trade secret	0%	0.0005869%
			Ethylene Glycol	107-21-1	0%	0.0005869%
			Fatty Amide Derivative	70851-08-0	0%	0.0005869%
			Formaldehyde	50-00-0	0%	0.0005881%
			Sodium Chloride	7647-14-5	0%	0.0005994%
			Sodium Sulfate	7757-82-6	0%	0.0005869%
			Water	7732-18-5	0%	0.0495838%
18. 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: 11/1/2013						
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.