

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: 30-015-40029				
		2. Well Name: ARCO STATE #002				
		3. Well Number: 002				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:L Lot:L Section:24 Township:17S Range:28E Feet from:2310 N/S Line:S Feet from:990 E/W Line:W				
		5. Bottom Hole Location: Unit:L Lot:L Section:24 Township:17S Range:28E Feet from:2310 N/S Line:S Feet from:990 E/W Line:W				
		6. latitude: longitude: 32.8202667956111 - 104.135158098039				
		7. County: Eddy				
8. Operator Name and Address: LRE OPERATING, LLC 1111 Bagby Suite 4600 Houston 77002		9. OGRID: 281994		10. Phone Number: 713-292-9517		
11. Last Fracture Date: 7/12/2012 Frac Performed by: BAKER		12. Production Type: O				
13. Pool Code(s): 96210		14. Gross Fractured Interval: 3,740 ft to 5,100 ft				
15. True Vertical Depth (TVD): 5,277 ft		16. Total Volume of Fluid Pumped: 5,113 bbls				
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)
HCL 5.1-7.5%	BAKER	ACIDIZING	Hydrochloric acid	7647-01-0	7.5%	0.31369%
Activator 330	BAKER	ACTIVATOR	ALCOHOLS, C12-14-Secondary	84133-50-6	70%	0.02167%
			Methanol	67-56-1	50%	0.01548%
X-Cide 207	BAKER	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00017%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.00035%
			Crystalline Silica: Cristobalite	14464-46-1	1%	3E-05%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	3E-05%
			Diatomaceous Earth, Calcined	91053-39-3	60%	0.00208%
			Magnesium Chloride	7786-30-3	5%	0.00017%
			Magnesium Nitrate	10377-60-3	10%	0.00035%
			GBW-5	BAKER	BREAKER	Ammonium Persulfate
Enzyme G-1	BAKER	BREAKER	Hemicellulase Enzyme Concentrate	9025-56-3	3%	0.00144%
ClayCare, tote	BAKER	Clay Control	Choline Chloride	67-48-1	75%	0.05566%
CI-27	BAKER	Corrosion Inhibitor	Fatty Acids	Trade Secret	30%	0.0011%
			Methanol	67-56-1	60%	0.0022%
			Olefin	Trade Secret	5%	0.00018%
			Polyoxyalkylenes	Trade Secret	30%	0.0011%
			Propargyl Alcohol	107-19-7	10%	0.00037%
XLW-10A	BAKER	Crosslinker	Ethylene Glycol	107-21-1	30%	0.02907%
			Sodium Hydroxide	1310-73-2	10%	0.00969%
			Sodium Tetraborate	1330-43-4	30%	0.02907%
			Guar Gum	9000-30-0	60%	0.29054%
GW-4LDF	BAKER	Gelling Agent	Paraffinic Petroleum Distillates	64742-55-8	60%	0.29054%
			Petroleum Distillatef	64742-47-8	60%	0.29054%
			2-Mercaptoethanol	60-24-2	100%	0.01816%
Ferotrol 280L	BAKER	Iron Control	Ammonium Hydroxide	1336-21-6	5%	0.00091%
			Cupric Chloride	7447-39-4	5%	0.00091%
			ISOPROPANOL	67-63-0	100%	0.0042%
NE-23	BAKER	Non-emulsifier				
NE-35,330 GL TOTE	BAKER	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.03471%
			Propylene Glycol	57-55-6	30%	0.02082%
Sand Brown 16/30	BAKER	Propant	Crystalline Silica (Quartz)	14808-60-7	100%	9.69093%
SiberProp, 16/30	BAKER	Propant	Quartz (SiO2)	14808-60-7	100%	3.09193%
ScaleSorb 3, (50# bag)	BAKER	Scale Inhibitor	Amino Alkyl Phosphonic Acid	Trade Secret	30%	0.01483%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	0.00049%
			Diatomaceou Earth, Calcined	91053-39-3	100%	0.04944%
			Phosphonic Acid	13598-36-2	1%	0.00049%
ES-4A Greenskeeper Solvent	BAKER	Solvent	Petroleum Distillates Blend	Trade Secret	100%	0.03024%
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: Mike Pippin		Title: Consultant		
Date: 7/24/2012						
E-mail Address: mike@pippinllc.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.