

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: 30-015-39635				
		2. Well Name: ARCO STATE #001				
		3. Well Number: 001				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:L Lot:L Section:24 Township:17S Range:28E Feet from:1650 N/S Line:S Feet from:530 E/W Line:W				
		5. Bottom Hole Location: Unit:L Lot:L Section:24 Township:17S Range:28E Feet from:1650 N/S Line:S Feet from:530 E/W Line:W				
		6. latitude: longitude: 32.8184397854273 - 104.136672696463				
		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: 8/3/2013 Frac Performed by: ELITE				12. Production Type: O		
13. Pool Code(s): 96210				14. Gross Fractured Interval: 3,740 ft to 3,790 ft		
15. True Vertical Depth (TVD): 5,251 ft				16. Total Volume of Fluid Pumped: 1,381 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)
Sand Brown 16/30	ELITE	Proppant	SILICON DIOXIDE	14808-60-7	100%	11.78672%
RCS	ELITE	Proppant	SILICON DIOXIDE	14808-60-7	100%	2.77335%
AMA-398	CHEMPLEX, LC	Biocide	TETRAHYDRO-3, DIMETHYL-2H-1	533-74-4	98%	0.03175%
SODIUM PERSULFATE	CHEMPLEX, LC	BREAKER	SODIUM PERSULFATE	7775-27-1	98%	0.00993%
FERRIPLEX 66	CHEMPLEX, LC	Iron Control	ACETIC ACID	64-19-7	50%	0.011%
			CITRIC ACID	77-92-9	30%	0.0066%
PLEXBOR 101	CHEMPLEX, LC	Crosslinker	Ethylene Glycol	107-21-1	9.99%	0.00978%
			POTASSIUM METRABORATE	13709-94-9	30%	0.02939%
			POTASSIUM HYDROXIDE	1310-58-3	5%	0.0049%
PLEXBREAK 150	CHEMPLEX, LC	Non-emulsifier	COCAMIDE DIETHANOLAMINE SALT	68603-42-9	30%	0.00103%
			DIETHANOLAMINE	111-42-2	20%	0.00069%
			METHYL ALCOHOL	67-56-1	50%	0.00172%
			TRADE SECRET	Trade Secret	5%	0.00017%
PLEXCIDE 24B	CHEMPLEX, LC	Biocide	TETRAHYDRO-3, DIMETHYL-2H-1	533-73-2	24%	0.00921%
			Sodium Hydroxide	1310-73-2	12%	0.0046%
PLEXGEL BREAKER 10L	CHEMPLEX, LC	BREAKER	MANNANASE ENZYMES	Trade Secret	2%	0.00149%
			SODIUM CHLORIDE	7647-14-5	15%	0.01117%
PLEXHIB 256	CHEMPLEX, LC	Corrosion Inhibitor	METHYL ALCOHOL	67-56-1	70%	0.00458%
			PROPARGYL ALCOHOL	107-19-7	8%	0.00052%
			THIOUREA-FORMALDEHYDE COPOLYMER	68527-49-1	30%	0.00196%
			ALCOHOL ETHOXYLATE SURFACTANTS	Trade Secret	30%	0.00196%
			N-OLEFINS	TRADE SECRET	10%	0.00065%
PLEXSET 730	CHEMPLEX, LC	ACTIVATOR	SECONDARY ALCOHOL ETHOXYLATE	84133-50-6	50%	0.01604%
			METHYL ALCOHOL	67-56-1	50%	0.01604%
PLEXSURF 580 ME	CHEMPLEX, LC	SURFACTANT	METHYL ALCOHOL	67-56-1	20%	0.00074%
			ALCOHOL ETHOXYLATE SURFACTANTS	Trade Secret	20%	0.00074%
15% HYDROCHLORIC ACID	CNR	ACIDIZING	36% HYDROCHLORIC ACID	7647-01-0	53%	0.24282%
PLEXGEL 907 LE	CHEMPLEX, LC	POLYMER	Guar Gum	9000-30-0	50%	0.31953%
			MINERAL OIL	64742-47-8	55%	0.35148%
			BENTONITE CLAY	14808-60-7	2%	0.01278%
			SURFACTANT	68439-51-0	2%	0.01278%
PLEXSURF 580 ME	CHEMPLEX, LC	SURFACTANT	METHYL ALCOHOL	67-56-1	10%	0.00742%
			2-BUTOXYETHANOL	111-76-2	50%	0.03711%
C-41L	CH	LIQUID DEFOAMER	TRIBUTYL PHOSPHATE	126-73-8	40%	0.00132%
			METHYL ALCOHOL	67-56-1	60%	0.00198%
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:		8/4/2013				
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.