

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. 30-015-40977				
		2. Well Name: HIGGINS TRUST 13 A #002				
		3. Well Number: 002				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:A Lot:A Section:13 Township:18S Range:26E Feet from:330 N/S Line:N Feet from:330 E/W Line:E				
		5. Bottom Hole Location: Unit:A Lot:A Section:13 Township:18S Range:26E Feet from:330 N/S Line:N Feet from:330 E/W Line:E				
		6. latitude: 32.7542498597608 longitude: -104.327793442063				
		7. County: Eddy				
8. Operator Name and Address: LIME ROCK RESOURCES II-A, L.P. 1111 Bagby Street Suite 4600 Houston 77002		9. OGRID: 277558		10. Phone Number: 713-292-9517		
11. Last Fracture Date: 8/28/2013 Frac Performed by: BAKER		12. Production Type: O				
13. Pool Code(s): 51120		14. Gross Fractured Interval: 3,025 ft to 4,034 ft				
15. True Vertical Depth (TVD): 4,308 ft		16. Total Volume of Fluid Pumped: 15,243 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)
HCL 5.1-7.5%	BAKER	ACIDIZING	Hydrochloric acid	7647-01-0	7.5%	0.06976%
Activator 330	BAKER	ACTIVATOR	ALCOHOLS, C12-14-Secondary Methanol	84133-50-6 67-56-1	70% 50%	0.00539% 0.00385%
X-Cide 207	BAKER	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00014%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.00028%
			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%	0.00168%
			Magnesium Chloride	7786-30-3	5%	0.00014%
			Magnesium Nitrate	10377-60-3	10%	0.00028%
GBW-5	BAKER	BREAKER	AMMONIUM PHOSPHATE	7727-54-0	100%	0.0055%
Enzyme G-1	BAKER	BREAKER	NO HAZARDOUS INGREDIENTS	NA	0%	0%
BF-9L	BAKER	buffer	Potassium Carbonate	584-08-7	60%	0.02224%
			Potassium Hydroxide	1310-58-3	30%	0.01112%
Claycare, tote	BAKER	Clay Control	choline chloride	67-48-1	75%	0.03976%
CI-27	BAKER	Corrosion Inhibitor	Fatty Acids	Trade Secret	30%	0.00021%
			Methanol	67-56-1	60%	0.00043%
			Olefin	Trade Secret	5%	4E-05%
			Polyoxyalkylenes	Trade Secret	30%	0.00021%
			Propargyl Alcohol	107-19-7	10%	7E-05%
			THIOUREA POLYMER	68527-49-1	30%	0.00021%
XLW-10A	BAKER	Crosslinker	Ethylene Glycol	107-21-1	30%	0.0181%
			Sodium Hydroxide	1310-73-2	10%	0.00603%
			Sodium Tetraborate	1303-96-4	30%	0.0181%
MAXPERM-20A, 265 GAL TOTE	BAKER	Friction Reducer	Oxyalkylated alcohol	Trade Secret	5%	0.00237%
			petroleum distallate blend	64742-47-8	30%	0.01425%
			Polyacrylate	Trade Secret	60%	0.0285%
			Sodium Chloride	7647-14-5	3%	0.00142%
GW-4LDF	BAKER	Gelling Agent	Guar Gum	9000-30-0	60%	0.11317%
			petroleum distallate blend	64742-47-8	70%	0.13203%
			Petroleum Distillate Blend	8042-47-5	70%	0.13203%
			Petroleum Distillates Blend	64742-55-8	70%	0.13203%
Ferrotrol 280L	BAKER	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.00391%
			Ammonium Hydroxide	1336-21-6	5%	0.0002%
			Cupric Chloride	7447-39-4	5%	0.0002%
NE-35,330 GL TOTE	BAKER	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.04774%
			Propylene Glycol	57-55-6	30%	0.02864%
Sand Brown 16/30	BAKER	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	7.05864%
Sand White 100 mesh	BAKER	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	0.08246%
SiberProp, 16/30	BAKER	Proppant	Quartz (SiO2)	14808-60-7	100%	0.67016%
TECHNI-HIB 756	BAKER	SALT INHIBITOR	Hydrochloric acid	7647-01-0	5%	0.00219%
			PHOSPHORIC ACID	7664-38-2	2%	0.00088%
ScaleSorb 7 (50 lb)	BAKER	Scale Inhibitor	Crystalline Silica (Quartz)	14808-60-7	1%	0.00036%
			Diotomaceous Earch, Calcined	91053-39-3	100%	0.03642%
			Organo Phosphorus Salt	Trade Secret	30%	0.01093%
			Sodium Chloride	7647-14-5	10%	0.00364%
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: 9/6/2013						
E-mail Address: mike@pippinllc.com						

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