

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. 30-015-41406			
		2. Well Name: BARNSDALL FEDERAL #021			
		3. Well Number: 021			
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:N Lot:N Section:27 Township:17S Range:29E Feet from:990 N/S Line:S Feet from:2310 E/W Line:W			
		5. Bottom Hole Location: Unit:N Lot:N Section:27 Township:17S Range:29E Feet from:990 N/S Line:S Feet from:2310 E/W Line:W			
		6. Latitude: Longitude: 32.8009737660488 - 104.063649111759			
		7. County: Eddy			

8. Operator Name and Address: APACHE CORP 303 Veterans Airpark Lane Suite 3000 Midland 79705				9. OGRID: 873	10. Phone Number: 432-818-1062	
11. Last Fracture Date: 2/5/2014 Frac Performed by: Baker Hughes				12. Production Type: O		
13. Pool Code(s): 96610				14. Gross Fractured Interval: 4,100 ft to 5,499 ft		
15. True Vertical Depth (TVD): 5,499 ft				16. Total Volume of Fluid Pumped: 390,558 gals		
17. Total Volume of Re-Use Water Pumped: N/A				18. Percent of Re-Use Water in Fluid Pumped: Not Disclosed		
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)
Water	Baker Hughes	Carrier	Water	7732-18-5	100%	84.490219%
Chlorine Dioxide	Baker Hughes	Biocide	Chlorine Dioxide	10049-04-4	0.3%	0%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.176459%
			Water	7732-18-5	85%	0.999937%
GBW-15L	Baker Hughes	Breaker	Enzyme solution	Trade Secret	100%	0.024013%
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.00785%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.205363%
			Petroleum Distillate Blend (1)	64742-47-8	70%	0.23959%
			Petroleum Distillate Blend (2)	64742-55-8	70%	0.23959%
			Petroleum Distillate Blend (3)	8042-47-5	70%	0.23959%
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.003942%
			Ammonium Hydroxide	1336-21-6	5%	0.000197%
			Cupric Chloride	7447-39-4	5%	0.000197%
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30%	0.036206%
			Sodium Hydroxide	1310-73-2	10%	0.012069%
			Sodium Tetraborate Decahydrate	1303-96-4	30%	0.036206%
ClayCare	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.030092%
			Water	7732-18-5	30%	0.012037%
CI-14	Baker Hughes	Corrosion Inhibitor	Formaldehyde	50-00-0	1%	3.2E-05%
			Hydrochloric acid	7647-01-0	1%	3.2E-05%
			Water	7732-18-5	1%	3.2E-05%
			Modified Thiourea Polymer	68527-49-1	7%	0.000224%
Activator	Baker Hughes	Activator	Methanol	67-56-1	50%	0.024272%
			Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.033981%
Inflo 250G	Baker Hughes	Surfactant	Mixture of Surfactants	Trade Secret	50%	0.039035%
			Methanol	67-56-1	30%	0.023421%
			Water	7732-18-5	30%	0.023421%
NE-35	Baker Hughes	Non-emulsifier	Propylene Glycol	57-55-6	30%	0.022062%
			Mixture of Surfactants	Trade Secret	50%	0.03677%
Sand, Brown	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	10.638173%
GBW-5	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100%	0.001038%
SiberProp	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100%	2.354854%
Ingredients shown above are subject to 29 CFR 1910			Fatty Acids	Trade secret	0%	0.00032%
			Methanol	67-56-1	0%	6.5E-05%
			Methanol	67-56-1	0%	0.003197%
			Olefin	Trade secret	0%	0.00016%
			Polyoxyalkylenes	Trade secret	0%	0.000959%
			Propargyl Alcohol	107-19-7	0%	0.00016%
			Water	7732-18-5	0%	0%
			Water	7732-18-5	0%	0.019625%
			Water	7732-18-5	0%	0.000473%
		Water	7732-18-5	0%	0.024138%	
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: Fatima Vasquez Title: Regulatory Tech						
Date: 4/1/2014						
E-mail Address: fatima.vasquez@apachecorp.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.