

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		
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		1. WELL API NO. 30-039-31170		2. Well Name: JICARILLA B #003R		
		3. Well Number: 003R		4. Surface Hole Location: Unit: J Lot: J Section: 15 Township: 26N Range: 05W Feet from: 1930 N/S Line: S Feet from: 2300 E/W Line: E		
		5. Bottom Hole Location: Unit: J Lot: J Section: 15 Township: 26N Range: 05W Feet from: 1930 N/S Line: S Feet from: 2300 E/W Line: E		6. Latitude: longitude: 0 0		
		7. County: Rio Arriba				
8. Operator Name and Address: ENERVEST OPERATING L.L.C. 1001 Fannin Street Suite 800 Houston 77002		9. OGRID: 143199		10. Phone Number: 713-659-3500		
11. Last Fracture Date: 8/12/2013 Frac Performed by: Baker Hughes		12. Production Type: G				
13. Pool Code(s): 71599, 72319		14. Gross Fractured Interval: 4,908 ft to 7,608 ft				
15. True Vertical Depth (TVD): 7,657 ft		16. Total Volume of Fluid Pumped: 399,890 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	7732-18-5	100%	81.86821%
Sand, Brown, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	10.9131%
Nitrogen	Baker Hughes	Nitrogen	Liquid Nitrogen	7727-37-9	100%	4.36326%
Super LC, 20/40	Baker Hughes	Proppant	Silicon Dioxide (Silica Sand)	14808-60-7	97%	1.43286%
			P/F Resin	9003-35-4	5%	0.07386%
			Hexamethylenetetramine	100-97-0	0.01%	0.00015%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Water	7732-18-5	85%	0.65575%
			Hydrochloric Acid	7647-01-0	15%	0.11572%
GasFlo G, 330 gal. tote	Baker Hughes	Surfactant	Mixture of Surfactants	Trade Secret	60%	0.4512%
			Water	7732-18-5	50%	0.0376%
			Methanol	67-56-1	30%	0.02256%
GW-3LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.03948%
			Petroleum Distillates	64742-47-8	30%	0.01974%
			Paraffinic Petroleum Distillate	64742-55-8	30%	0.01974%
			Crystalline Silica: Quartz	14808-60-7	5%	0.00329%
			1-butoxy-2-propanol	5131-66-8	5%	0.00329%
			Isotridecanol, ethoxylated	9043-30-5	5%	0.00329%
FAW-22, 260 gal. tote	Baker Hughes	Foamer	Sodium Sulfonate	68439-57-6	30%	0.02994%
			Isopropanol	67-63-0	30%	0.02994%
			Ammonium Alkyl Ether Sulfate	Trade Secret	10%	0.00998%
			Alkyl Sulfate (3 of 3)	Trade Secret	1%	0.001%
			Alkyl Sulfate (1 of 3)	Trade Secret	1%	0.001%
			Alkyl Sulfate (2 of 3)	Trade Secret	1%	0.001%
Alpha 1427	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.03796%
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10%	0.01265%
			Ethanol	64-17-5	5%	0.00633%
			Quaternary Ammonium Compound	68424-85-1	5%	0.00633%
Superset-W, 55 gal drum	Baker Hughes	Activator	Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50%	0.00866%
MaxPerm-20A, 265 gal tote	Baker Hughes	Friction Reducer	Aliphatic Hydrocarbon	Trade Secret	30%	0.01316%
			Oxyalkylated Alcohol	Trade Secret	5%	0.00219%
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100%	0.00712%
BioSealers MR	Baker Hughes	Degradable Sealers	Non-Hazardous Ingredient	Trade Secret	100%	0.00545%
CI-27	Baker Hughes	Corrosion Inhibitor	Methanol	67-56-1	60%	0.00131%
			Polyoxyalkylenes	Trade Secret	30%	0.00066%
			Fatty Acids	Trade Secret	30%	0.00066%
			Thiourea Polymer	68527-49-1	30%	0.00066%
			Propargyl Alcohol	107-19-7	10%	0.00022%
			Olefin	Trade Secret	5%	0.00011%
Ferrotrol 300L	Baker Hughes	Iron Control	Citric Acid	77-92-9	60%	0.00263%
Enzyme G-IV	Baker Hughes	Breaker	Contains Non-Hazardous Ingredients which are listed in the Non-MSDS section.	NA	0%	0%
Non-MSDS Ingredients			Water	7732-18-5	0%	0.15642%
			Anionic Terpolymer			