

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: 30-039-29937				
		2. Well Name: JICARILLA CONTRACT 155 #019M				
		3. Well Number: 019M				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit: G Lot: G Section: 29 Township: 26N Range: 05W Feet from: 2380 N/S Line: N Feet from: 2440 E/W Line: E				
		5. Bottom Hole Location: Unit: G Lot: G Section: 29 Township: 26N Range: 05W Feet from: 2380 N/S Line: N Feet from: 2440 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: 11/14/2012 Frac Performed by: Baker Hughes		12. Production Type: G				
13. Pool Code(s): 71599, 72319		14. Gross Fractured Interval: 5,023 ft to 7,298 ft				
15. True Vertical Depth (TVD): 7,298 ft		16. Total Volume of Fluid Pumped: 340,780 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)
Water	Operator	Carrier	Water	7732-18-5	100%	82.49189%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.09473%
			Water	7732-18-5	85%	0.53678%
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10%	0.00721%
Alpha 1427	Baker Hughes	Biocide	Ethanol	64-17-5	5%	0.00361%
			Glutaraldehyde	111-30-8	30%	0.02164%
			Quaternary Ammonium Compound	68424-85-1	5%	0.00361%
			GBW-5	Baker Hughes	Breaker	Ammonium Phosphate
Enzyme G-IV	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	0.05%	0%
CI-27	Baker Hughes	Corrosion Inhibitor	Water	7732-18-5	99.95%	0.00726%
			Fatty Acids	Trade Secret	30%	0.00058%
			Methanol	67-56-1	60%	0.00116%
			Olefin	Trade Secret	5%	0.0001%
			Polyoxyalkylenes	Trade Secret	30%	0.00058%
CorrSorb 3600, 25 lb pail	Baker Hughes	Corrosion Inhibitor	Propargyl Alcohol	107-19-7	10%	0.00019%
			Acid Phosphate Ester	9046-01-9	5.47%	0.00095%
			Crystalline Silica Quartz	14808-60-7	1%	0.00017%
			Diatomaceous Earth, Calcined	91053-39-3	80%	0.01394%
BioSealers MR	Baker Hughes	Degradable Sealers	Quaternary Ammonium Chloride	61789-71	15.06%	0.00262%
			BioSealers MR	Baker Hughes	Degradable Sealers	Non-Hazardous Ingredient
FAW-22, 260 gal. tote	Baker Hughes	Foamer	Alkyl Sulfate	Trade Secret	1%	0.00174%
			Ammonium Alkyl Ether Sulfate	Trade Secret	10%	0.0058%
			Isopropanol	67-63-0	30%	0.0174%
			Sodium Sulfonate	68439-57-6	30%	0.0174%
FRW-20	Baker Hughes	Friction Reducer	Petroleum Distillates	64742-47-8	30%	0.01463%
GW-3LDF	Baker Hughes	Gelling Agent	1-Butoxy-2-Propanol	5131-66-8	5%	0.00274%
			Crystalline Silica, Quartz (SiO2)	14808-60-7	5%	0.00274%
			Guar Gum	9000-30-0	60%	0.03284%
			Isotridecanol, ethoxylated	9043-30-5	5%	0.00274%
			Paraffinic Petroleum Distillate	64742-55-8	30%	0.01642%
			Petroleum Distillates	64742-47-8	30%	0.01642%
Ferrotrol 300L	Baker Hughes	Iron Control	Citric Acid	77-92-9	60%	0.00146%
Nitrogen	Baker Hughes	Nitrogen	Liquid Nitrogen	7737-37-9	100%	4.20435%
Sand, Brown, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	12.21343%
ScaleSorb 3, 25 lb pail	Baker Hughes	Scale Inhibitor	Amino Alkyl Phosphonic Acid	Trade Secret	30%	0.00523%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	0.00017%
GasFlo G, 330 gal. tote	Baker Hughes	Surfactant	Diamaceous Earth, Calcined	91053-39-3	100%	0.01742%
			Phosphonic Acid	13598-36-2	1%	0.00017%
Non-MSDS Ingredients	Baker Hughes		Methanol	67-56-1	30%	0.02257%
			Mixture of Surfactants	Trade Secret	60%	0.04515%
			Water	7732-18-5	50%	0.03762%
Non-MSDS Ingredients			2-Butoxy-1-Propanol	15821-83-7	0%	4.38E-05%
			Aliphatic Hydrocarbon	Trade Secret	0%	0.0113593%
			Ethoxylated Alcohol	NP-R2429_2	0%	0.00058%
			Ethylene Glycol	107-21-1	0%	0.0007438%
			Fatty Amide Derivative	70851-08-0	0%	0.00058%
			Formaldehyde	50-00-0	0%	0.0005898%
			Modified Thiourea Polymer	68527-49-1	0%	0.0002135%
			Oxyalkylated Alcohol	Trade Secret	0%	0.000975%
			Phosphoric Acid	7664-38-2	0%	1.92E-05%
			Polyglycol Ester	Trade Secret	0%	0.0004388%
			Polyol Ester	Trade Secret	0%	6.27E-05%
			Polyoxyalkylenes	78330-21-9	0%	6.27E-05%
			Sodium Chloride	7647-14-5	0%	0.0025398%
			Sodium Sulfate	7757-82-6	0%	0.00058%
			Thioglycolic Acid	68-11-1	0%	0.000254%
			Vinyl Copolymer	Trade Secret	0%	0.0136507%
Water	7732-18-5	0%	0.088157%			
18. I, as Operator, hereby certify that the information shown on this disclosure						