

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: 30-039-22800							
		2. Well Name: JICARILLA 89 #005A							
		3. Well Number: 005A							
HYDRAULIC FRACTURING FLUID DISCLOSURE <input checked="" type="checkbox"/> Original <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:I Lot:I Section:14 Township:27N Range:03W Feet from:1520 N/S Line:S Feet from:790 E/W Line:E							
		5. Bottom Hole Location: Unit:I Lot:I Section:14 Township:27N Range:03W Feet from:1520 N/S Line:S Feet from:790 E/W Line:E							
		6. latitude: longitude: 36.5703346862843 - 107.10781430908							
		7. County: Rio Arriba							
8. Operator Name and Address: ENERGEN RESOURCES CORPORATION 2010 Afton Place Farmington 87401		9. OGRID: 162928		10. Phone Number: 505-324-4154					
11. Last Fracture Date: 4/8/2013 Frac Performed by: Halliburton		12. Production Type: G							
13. Pool Code(s): 77360		14. Gross Fractured Interval: 3,731 ft to 3,771 ft							
15. True Vertical Depth (TVD): 6,100 ft		16. Total Volume of Fluid Pumped: 551 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)			
2% KCL Water	Operator				100%	46.57259%			
HYDROCHLORIC ACID 10-30%	Halliburton		Hydrochloric acid	7647-01-0	30%	0.63795%			
SAND - PREMIUM WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	27.52525%			
LGC-36 UC	Halliburton	Liquid Gel Concentrate	Guar gum	9000-30-0	60%	0.0999%			
BC-140	Halliburton	Crosslinker	Naphtha, hydrotreated heavy	64742-48-9	60%	0.0999%			
			Ethylene glycol	107-21-1	30%	0.02365%			
			Monoethanolamine borate	26038-87-9	60%	0.04731%			
AQF-2 FOAMING AGENT	Halliburton	Foaming Agent	Ethylene glycol monobutyl ether	111-76-2	30%	0.03968%			
			Diethylene glycol	111-46-6	10%	0.01323%			
SuperFlo 2000	Halliburton	Surfactant	Methanol	67-56-1	10%	0.00276%			
			Terpene	Confidential Business Information	30%	0.00828%			
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor	Methanol	67-56-1	60%	0.00106%			
			Propargyl alcohol	107-19-7	10%	0.00018%			
GBW-30 BREAKER	Halliburton	Breaker	Hemicellulase enzyme	9012-54-8	15%	0.00115%			
			Carbohydrates	Confidential Business Information	95%	0.00726%			
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00201%			
			Walnut hulls	Mixture	100%	0.00669%			
NITROGEN LIQUEFIED	Halliburton	Fluid	Nitrogen	7727-37-9	100%	23.35433%			
Ingredients Listed Below This Line Are Part of the			Alcohols, C14-C15, ethoxylated	68951-67-7	0%	0%			
			Alkyl Sulfonate	68439-57-6	0%	0%			
			C.I. Pigment Red 5	6410-41-9	0%	0%			
			Crystalline silica, quartz	14808-60-7	0%	0%			
			Cured Acrylic Resin	Mixture	0%	0%			
			Cured Acrylic Resin	9002-98-6	0%	0%			
			Enzyme	9025-56-3	0%	0%			
			Fatty acids, tall oil	61790-12-3	0%	0%			
			Fatty alcohol polyglycol ether surfactant	9043-30-5	0%	0%			
			Isopropanol	67-63-0	0%	0%			
			Olefins	3452-07-1	0%	0%			
			Olefins	629-73-2	0%	0%			
			Olefins	112-88-9	0%	0%			
			Olefins	1120-36-1	0%	0%			
			Proprietary	106-24-1	0%	0%			
			Proprietary	106-25-2	0%	0%			
			Proprietary	68603-42-9	0%	0%			
			Proprietary	106-22-9	0%	0%			
			Proprietary	78-70-6	0%	0%			
			Proprietary	9063-06-3	0%	0%			
			Proprietary	26027-38-3	0%	0%			
			Proprietary	9004-99-3	0%	0%			
			Proprietary	68391-01-5	0%	0%			
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl) dimethyl salts with bentonite	68953-58-2	0%	0%			
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	0%	0%			
			Water	7732-18-5	0%	0%			
			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: <u>Signed Electronically</u>		Printed Name: <u>Anna Stotts</u>		Title: <u>Regulatory Analyst</u>		
			Date: <u>5/10/2013</u>						
			E-mail Address: <u>astotts@energen.com</u>						

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.