

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				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		1. WELL API NO: 30-015-43038				
		2. Well Name: RDX FEDERAL 28 #024				
		3. Well Number: 024				
		4. Surface Hole Location: Unit:H Lot:H Section:28 Township:26S Range:30E Feet from:1650 N/S Line:N Feet from:990 E/W Line:E				
5. Bottom Hole Location: Unit:H Lot:H Section:28 Township:26S Range:30E Feet from:1650 N/S Line:N Feet from:990 E/W Line:E		6. latitude: longitude: 32.0161319553849 -103.880906699189				
7. County: Eddy						
8. Operator Name and Address: RKI EXPLORATION & PRODUCTION, LLC 210 PARK AVENUE SUITE 900 OKLAHOMA CITY 73102		9. OGRID: 246289	10. Phone Number: 405-996-5774			
11. Last Fracture Date: 10/7/2015 Frac Performed by: RKI EXPLORATION & PRODUCTION		12. Production Type: O				
13. Pool Code(s): 52800		14. Gross Fractured Interval: Confidential				
15. True Vertical Depth (TVD): 7,496 ft		16. Total Volume of Fluid Pumped: 388,182 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	RKI Exploration & Production	Carrier / Base Fluid	Carrier / Base Fluid - Water		100%	87.58125%
Ottawa Sand 16/30 (2.63 sg)	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100%	9.31185%
Super LC 16/30 (2.56 sg)	WFT	Proppant	Crystalline Silica (Quartz)	14808-60-7	78.99%	1.35769%
			Formaldehyde	50-00-0	0.01%	0.00017%
			Hexamethylenetetramine	100-97-0	1%	0.01719%
			Hydrated Aluminum Silicate	1332-58-7	5%	0.08594%
			Iron Oxide (fume)	1309-37-1	15%	0.25782%
			Phenol	108-95-2	0.01%	0.00017%
			Phenol-Formaldehyde Resin	9003-35-4	6%	0.10313%
WBK-133	WFT	Breaker	Ammonium Persulfate	7727-54-0	100%	0.0032%
Superset W	Sanrol	Activator	Methanol	67-56-1	50%	0.01263%
			Poly(oxytethylene) nonylphenol ether	9016-45-9	50%	0.01263%
Bio-ClearA® 5000	WFT	Bactericide	2,2-dibromo-3-nitriopropionamide	10222-01-2	5%	0.00123%
			Dibromoacetoneitrile	3252-43-5	0.5%	0.00012%
			Polyethylene Glycol	25322-68-3	65%	0.01593%
			Sodium Bromide	7647-15-6	1.5%	0.00037%
BioBalls MR	Sanrol Proppants	Diverting agent	Poly lactide Resin	9051-89-2	100%	0.08934%
WGA-15L	WFT	Gelling Agents	Petroleum Distillates	64742-47-8	60%	0.272%
WAI-251LC	WFT	Inhibitor	1-Decanol	112-30-1	5%	0.00051%
			1-Octanol	111-87-5	5%	0.00051%
			2-Butoxyethanol	111-76-2	10%	0.00101%
			Ethoxylated Nonylphenol	68412-54-4	5%	0.00051%
			Ethylene Glycol	111-76-2	40%	0.00406%
			Isopropyl Alcohol	67-63-0	5%	0.00051%
			N,N-Dimethylformamide	68-12-2	20%	0.00203%
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	10%	0.00101%
			Triethylphosphate	78-40-0	5%	0.00051%
WIC-641L	WFT	Iron Control	Citric acid	77-92-9	60%	0.00705%
WPB-584L	WFT	ph Adjusting Agents	Potassium Carbonate	584-08-7	40%	0.05513%
			Potassium Hydroxide	1310-58-3	20%	0.02757%
WNE-363L	WFT	Surfactant	2-Ethylhexanol	104-76-7	7%	0.00364%
			Dodecylbenzenesulfonic acid, monoethanolamine salt	26836-07-7	15%	0.0078%
			Ethylene/Propylene Oxide Polymer	9003-11-6	30%	0.0156%
			Poly(oxy-1,2-ethanediytl), a-isotridecyl-w-hydroxy-	9043-30-5	5%	0.0026%
WSI-696L	WFT	Inhibitor	Ammonium Chloride	12125-02-9	2.5%	0.00127%
			Phosphonated compound	129828-36-0	15%	0.00764%
15% HCL	WFT	Acid	Hydrochloric Acid	7647-01-0	15%	0.33769%
			2-Butoxyethanol	111-76-2	0%	0.00453%
			Acetaldehyde	75-07-0	0%	0.0001%
			Alcohol Ethoxylate	68002-97-1	0%	0.00453%
			Alcohols, C12-16, Ethoxylated	68551-12-2	0%	0.00453%
			Ammonia	7664-41-7	0%	0.00015%
			Ariacel 83	8007-43-0	0%	0.00453%
			Choline Chloride	67-48-1	0%	0.13446%
			Cinnamaldehyde	104-55-2	0%	0.00051%
			Crystalline Silica in the form of Quartz	14808-60-7	0%	0.00453%
			Dioxane	123-91-1	0%	0.0001%
			Ethylene Oxide	75-21-8	0%	0.0001%
			Guar gum	9000-30-0	0%	0.22667%
			Proprietary Ingredient	Proprietary	0%	0.02267%
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: Heather Brehm		Title: Regulatory analyst				
Date: 2/10/2016						
E-mail Address: hbrehm@rkixp.com						

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