

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: 30-015-41249				
		2. Well Name: RDX FEDERAL 17 #019				
		3. Well Number: 019				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:M Lot:M Section:17 Township:26S Range:30E Feet from:660 N/S Line:S Feet from:880 E/W Line:W				
		5. Bottom Hole Location: Unit:M Lot:M Section:17 Township:26S Range:30E Feet from:660 N/S Line:S Feet from:880 E/W Line:W				
		6. Latitude: 32.0370312857884 Longitude: -103.909203430327				
		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: 11/29/2013 Frac Performed by: RKI EXPLORATION & PRODUCTION		12. Production Type: O				
13. Pool Code(s): 8090		14. Gross Fractured Interval: Confidential				
15. True Vertical Depth (TVD): 7,404 ft		16. Total Volume of Fluid Pumped: 520,879 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)
Fresh Water	Operator				100%	84.98866%
HYDROCHLORIC ACID 10 -30%	Halliburton		Hydrochloric acid	7647-01-0	30%	0.06522%
SAND - PREMIUM WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	10.06383%
CRC SAND	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	4.298%
			Hexamethylenetetramine	100-97-0	2%	0.08596%
			Phenol / formaldehyde resin	9003-35-4	5%	0.2149%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00302%
Cia-Web™	Halliburton	Additive	Ammonium salt	Confidential Business Information	60%	0.01951%
LoSurf-360W	Halliburton	Surfactant	Complex alkylamine	Confidential Business Information	5%	0.00367%
			Glycerine	56-81-5	10%	0.00733%
			Poly(oxy-1,2-ethanediyl), alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.022%
HpH BREAKER	Halliburton	Breaker	Sodium chloride	7647-14-5	30%	0.00037%
SUPERSET W	Halliburton	Activator	Methanol	67-56-1	60%	0.03109%
			Ethoxylated nonylphenol	Confidential Business Information	60%	0.03109%
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.01268%
			Monoethanolamine borate	26038-87-9	100%	0.04227%
BE-6 MICROBIOCIDE	Halliburton	Biocide	2-Bromo-2-nitro-1,3-propanediol	52-51-7	100%	0.00133%
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00125%
			Walnut hulls	Mixture	100%	0.00418%
Scalechek® SCP-2 Scale Inhibitor	Halliburton	Scale Preventer	Glassy calcium magnesium phosphate	65997-17-3	100%	0.0229%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.17232%
Ingredients Listed Below This Line Are Part of the			1,2-Benzisothiazolin-3-one	2634-33-5	0%	0%
			2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3	0%	0%
			Alkane	Confidential Business Information	0%	0%
			Amine salts	Confidential Business Information	0%	0%
			Amine salts	Confidential Business Information	0%	0%
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%
			C.I. Pigment Red 5	6410-41-9	0%	0%
			Calcium chloride	10043-52-4	0%	0%
			Crystalline Silica, Quartz	14808-60-7	0%	0%
			Cured acrylic resin	Confidential Business Information	0%	0%
			Cured acrylic resin	Confidential Business Information	0%	0%
			Enzyme	Confidential Business Information	0%	0%
			Enzyme	Confidential Business Information	0%	0%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0%	0%
			Hydrogen peroxide	7722-84-1	0%	0%
			Nitrotriactic acid, trisodium salt monohydrate	5064-31-3	0%	0%
			Quaternary amine	Confidential Business Information	0%	0%
			Quaternary amine	Confidential Business Information	0%	0%
			Quaternary amine	Confidential Business Information	0%	0%
			Silica gel	112926-00-8	0%	0%
			Sodium bicarbonate	144-55-8	0%	0%
			Sodium chloride	7647-14-5	0%	0%
			Sodium glycolate	2836-32-0	0%	0%
			Sodium hydroxide	1310-73-2	0%	0%
			Surfactant mixture	Confidential Business Information	0%	0%
			Surfactant mixture	Confidential Business Information	0%	0%
			Water	7732-18-5	0%	0%
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: 6/13/2014						
E-mail Address: hbrehm@rkixp.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.