

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. 30-015-27030				
		2. Well Name: SANTA FE FEDERAL #004				
		3. Well Number: 004				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:H Lot:H Section:35 Township:22S Range:28E Feet from:1730 N/S Line:N Feet from:910 E/W Line:E				
		5. Bottom Hole Location: Unit:H Lot:H Section:35 Township:22S Range:28E Feet from:1730 N/S Line:N Feet from:910 E/W Line:E				
		6. latitude: longitude: 32.3517512559746 - 104.052757409787				
		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: 3/1/2014 Frac Performed by: RKI EXPLORATION & PRODUCTION		12. Production Type: O				
13. Pool Code(s): 30670		14. Gross Fractured Interval: Confidential				
15. True Vertical Depth (TVD): 6,370 ft		16. Total Volume of Fluid Pumped: 59,356 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		Carrier / Base Fluid		7732-18-5	100%	77.63377%
Sand		Proppant	Silicon Dioxide	14808-60-7	100%	16.14746%
Super DC/LC TLC/THS Opti RCS	Sandtrol	Proppant	Silicon Dioxide	14808-60-7	97%	1.56265%
			P/F Novolak Resin	9003-35-4	5%	0.08055%
B-15	Water Science Tech	Biocide	Hexamethylenetetramine	1009-7-0	1%	0.01611%
			Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	20%	0.002%
BF-200	ASK	Buffer	Water	7732-18-5	80%	0.00798%
			Potassium Hydroxide	1310-58-3	25%	0.02819%
CS-14	Chemplex, L.C.	Clay Control	Water	7732-18-5	80%	0.09021%
			Non-hazardous salts (Choline)	Proprietary	66%	0.06619%
15% Hydrochloric Acid	Reagent	Scale Dissolver	Water	7732-18-5	45%	0.04513%
			37% Hydrochloric Acid	7647-01-0	15%	0.52721%
I-122	Chemplex,L.C.	Acid Corrosion Inhibitor	Water	7732-18-5	85%	2.98754%
			Methonol	67-56-1	70%	0.00135%
			Propargyl alcohol	107-19-7	8%	0.00027%
			Alcohol Ethoxylate	Trade Secret	30%	0.00101%
			Surfactants			
			n-olefins	Trade Secret	10%	0.00034%
			thiourea-formaldehyde copolymer	68527-49-1	30%	0.00101%
SG-15G	PIP Technology	Polymer	Guar Gum	9000-30-0	50%	0.28346%
			Petroleum Distillate (Mineral Oil)	64742-47-8	55%	0.3118%
			Bentonite Clay	14808-60-7	2%	0.01134%
			Surfactant	68439-51-0	2%	0.01134%
CX-10	Benchmark	Crosslinker	Sodium Borate Decahydrate	1303-96-4	29.9%	0.02581%
			Water	7732-18-5	69.1%	0.05965%
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00942%
GB-150	Chemplex, L.C.	Breaker	Non-hazardous ingredients	NA	100%	0.08632%
NE-217	Chemplex, L.C.	Non-emulsifier	Methanol	67-56-1	50%	0.00289%
NE-227	CESI	Non-emulsifier	Isopropanol	67-63-0	15%	0.01202%
			Methanol	67-56-1	15%	0.01202%
			Ethoxylated Nonylphenol	9016-45-9	20%	0.01602%
FE-360	Chemplex, L.C.	Iron Control Additive	Cupric Chloride Dihydrate	10125-13-0	7%	0.00081%
			Thioglycol	60-24-2	80%	0.00921%
Superset W	Santrol	Resin Activator	Methanol	67-56-1	50%	0.01012%
			Poly(oxyethylene) nonyphenol ether	9016-45-9	54%	0.01093%
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: 3/4/2014						
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.