

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: 30-025-40180				
		2. Well Name: RANGER FEDERAL #001				
		3. Well Number: 001				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:D Lot:4 Section:1 Township:18S Range:32E Feet from:990 N/S Line:N Feet from:990 E/W Line:W				
		5. Bottom Hole Location: Unit:D Lot:4 Section:1 Township:18S Range:32E Feet from:990 N/S Line:N Feet from:990 E/W Line:W				
		6. Latitude: longitude: 32.7809592613382 - 103.72520836168				
		7. County: Lea				
8. Operator Name and Address: MACK ENERGY CORP PO Box 960 11344 Lovington Hwy Artesia 88211		9. OGRID: 13837		10. Phone Number: 575-748-1288		
11. Last Fracture Date: 1/14/2013 Frac Performed by: Elite Well Services LLC		12. Production Type: O				
13. Pool Code(s): 65350		14. Gross Fractured Interval: 8,238 ft to 8,778 ft				
15. True Vertical Depth (TVD): 999 ft		16. Total Volume of Fluid Pumped: 8,475 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		Carrier Base Fluid	Water	7732-18-5	100%	84.86833%
Sand (Proppant)		Proppant	Silicon Dioxide	14808-60-7	100%	10.75669%
RCS (Proppant)		Proppant	Silicon Dioxide	14808-60-7	100%	2.83712%
AMA-398	Chemplex, LC	Biocide	Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine-2-Thione	533-74-4	98%	0.02972%
Ammonium Persulfate	Chemplex, LC	Gel Breaker	Ammonium Persulfate	7727-54-0	98%	0.0042%
Claymax	Chemplex, LC	Clay Stabilizer	Choline Chloride	67-48-1	62%	0.0579%
Ferriplex 66	Chemplex LC	Iron Control	Water	7732-18-5	38%	0.03549%
			Acetic Acid	64-19-7	50%	0.00343%
			Citric Acid	77-92-9	30%	0.00206%
Greenhib 679	Chemplex, LC	Scale Inhibitor	Water	7732-18-5	35%	0.0024%
			Glycerine	56-81-5	35%	0.04755%
			Trade Secret	Trade Secret	35%	0.04755%
Plexbor 101	Chemplex, LC	Crosslinker	Water	7732-18-5	50%	0.06793%
			Ethylene Glycol	107-21-1	9.99%	0.01179%
			Potassium Metaborate	13709-94-9	30%	0.03543%
			Potassium Hydroxide	1310-58-3	5%	0.00591%
Plexbreak 150	Chemplex, LC	Non-Emulsifier	Water	7732-18-5	75%	0.08859%
			Cocamide Diethanolamine Salt	68603-42-9	30%	0.02332%
			Diethanolamine	111-42-2	20%	0.01555%
			Methyl Alcohol	67-56-1	50%	0.03886%
Plexgel Breaker 10L	Chemplex, LC	Gel Breaker	Trade Secret	Trade Secret	5%	0.00389%
			Mannanase Enzymes	Trade Secret	2%	0.00107%
			Sodium Chloride	7647-14-5	15%	0.00804%
			Water	7732-18-5	90%	0.04827%
Plexhib 256	Chemplex LC	Corrosion Inhibitor	Methyl Alcohol	67-56-1	70%	0.00143%
			Progargyl Alcohol	107-19-7	8%	0.00016%
			Thiourea-Formaldehyde Copolymer	68527-49-1	30%	0.00061%
			Alcohol Ethoxylate Surfactants	Trade Secret	30%	0.00061%
			N-Olefins	Trade Secret	10%	0.0002%
Plexset 730	Chemplex LC	Activator	Secondary Alcohol Ethoxylate	84133-50-6	60%	0.01775%
			Methyl Alcohol	67-56-1	50%	0.01479%
Plexsurf 240 E	Chemplex LC	Surfactant	Methyl Alcohol	67-56-1	20%	0.01496%
			Alcohol Ethoxylate Surfactants	Trade Secret	20%	0.01496%
			Water	7732-18-5	80%	0.05984%
15% Hydrochloric Acid	CNR	Acid	36% Hydrochloric Acid	7647-01-0	38%	0.05521%
			Water	7732-18-5	62%	0.09008%
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: Signed Electronically Printed Name: Deana Weaver Title: Production Clerk						
Date: 1/15/2013						
E-mail Address: deanap@mackenergycorp.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.						