

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: 30-025-40197
2. Well Name: OHIO STATE #005
3. Well Number: 005
4. Surface Hole Location: Unit:K Lot:K Section:7 Township:18S Range:35E Feet from:1920 N/S Line:S Feet from:2130 E/W Line:W
5. Bottom Hole Location: Unit:K Lot:K Section:7 Township:18S Range:35E Feet from:1920 N/S Line:S Feet from:2130 E/W Line:W
6. latitude: 32.7604276779977 longitude: -103.498479882172
7. County: Lea

**HYDRAULIC FRACTURING FLUID DISCLOSURE**

- Original  
 Amendment

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: 7/14/2014 Frac Performed by: Elite Well Services	12. Production Type: O	
13. Pool Code(s): 61900	14. Gross Fractured Interval: 7,504 ft to 8,422 ft	
15. True Vertical Depth (TVD): 9,235 ft	16. Total Volume of Fluid Pumped: 2,207,772 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	Customer	Carrier/Base Fluid	Water	7732-18-5	100%	95.85907%
Sand (Proppant)	US Silica	Proppant	Silica Substrate	14808-60-7	100%	1.45423%
RCS (Proppant)	Momentive	Proppant	Silica Substrate	14808-60-7	100%	2.25966%
Hydrochloric Acid	CNR	Acidizing	Hydrochloric Acid	7647-01-0	38.8%	0.05458%
Claymax	Chemplex	Clay Stabilizer	Choline Chloride	67-48-1	62%	0%
4-N-1 Plus	Chemplex	Iron Control, Corr Inhib	Acetic Acid	64-19-7	80%	0.00085%
			Methanol	67-56-1	10%	0.00011%
Plexicide 24L	Chemplex	Biocide	Tetrahydro-3 Dimethyl 2H	533-74-4	24%	0.00626%
Plexset 730	Chemplex	Activator	Secondary Alcohol Ethoxylate	84133-50-6	50%	0%
Plexsurf 580 ME	Chemplex	Surfactant	Methyl Alcohol	67-56-1	10%	0%
			2-Butoxyethanol	111-76-2	50%	0%
Plexslick 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8%	0.01192%
			Hydrotreated Petroleum Distillate	64742-47-8	30%	0.0447%
			Polyacrylamide-co-Acrylic Acid	9003-06-9	31%	0.04619%
AMA 398	Chemplex	Biocide	Tetrahydro-3 Dimethyl 2H	533-74-4	98%	0%
Plexgel 907 LE	Chemplex	Polymer	Guar Gum	9000-30-0	50%	0%
			Mineral Oil	64742-47-8	55%	0%
			Bentonite Clay	14808-60-7	2%	0%
			Surfactant	68439-51-0	2%	0%
Plexbor 101	Chemplex	Crosslinker	Ethylene Glycol	107-21-1	9.99%	0%
			Potassium Metaborate	13709-94-9	30%	0%
			Potassium Hydroxide	1310-58-3	5%	0%
Plexgel Breaker 10L	Chemplex	Gel Breaker	Mannanase Enzymes	Proprietary	2%	0%
			Sodium Chloride	7647-14-5	15%	0%
Sodium Persulfate	Chemplex	Gel Breaker	Sodium Persulfate	7775-27-1	98%	0%
Buffer 11	Chemplex	PH Control	Potassium Hydroxide	1310-58-3	23%	0%
Greenhib 679	Chemplex	Scale Inhibitor	Glycerine	56-81-5	35%	0.03857%
			Proprietary	Proprietary	35%	0.03857%
			Water	7732-18-5	30%	0.03306%
Scalesorb 3	Baker Hughes	Scale Inhibitor	Diatomaceous Earth Calcined	91053-39-3	69%	0%
			Amino Alkyl Phosphonic Acid	Proprietary	30%	0%
			Phosphonic Acid	13598-36-2	1%	0%
			Crystalline Silica; Quartz (SiO2)	14808-60-7	1%	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: <u>Signed Electronically</u>	Printed Name: <u>Deana Weaver</u>	Title: <u>Production Clerk</u>
Date: <u>7/16/2014</u>		
E-mail Address: <u>deanap@mackenergycorp.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.