

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: 30-025-42820 2. Well Name: PAN HEAD FEE #024H 3. Well Number: 024H				
HYDRAULIC FRACTURING FLUID DISCLOSURE <input checked="" type="checkbox"/> Original <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:N Lot:N Section:2 Township:17S Range:32E Feet from:85 N/S Line:S Feet from:2180 E/W Line:W 5. Bottom Hole Location: Unit:N Lot:N Section:2 Township:17S Range:32E Feet from:85 N/S Line:S Feet from:2180 E/W Line:W 6. latitude: longitude: 32.85656312 -103.7385961 7. County: Lea				
8. Operator Name and Address: COG OPERATING LLC		9. OGRID: 229137				
11. Last Fracture Date: 12/16/2016 Frac Performed by: Pump Co Services		10. Phone Number: 432-685-4332				
12. Production Type: O		13. Pool Code(s): 44500				
14. Gross Fractured Interval: 7,025 ft to 12,745 ft		15. True Vertical Depth (TVD): 6,550 ft				
16. Total Volume of Fluid Pumped: 11,534,460 gals		17. Total Volume of Re-Use Water Pumped: 0 gals				
18. Percent of Re-Use Water in Fluid Pumped: %		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	Operator	Carrier/Base Fluid	Water	7732-18-5	100%	88.28908%
Sand	TSS	Proppant	Silica Substrate	14808-60-7	100%	10.41889%
15% HCL	Reagent	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.17484%
Chemplex 4-N-1	Chemplex	Combination/Iron Control	2-Ethylhexanol	104-76-7	10%	0.00133%
			Acetic Acid	64-19-7	85%	0.01133%
			Alcohol Ethoxylate Surfactants	Proprietary	2%	0.00027%
			Cocamide Diethanolamine Salt	68603-42-9	2%	0.00027%
			Diethanolamine	111-42-2	2%	0.00027%
			Methyl Alcohol	67-56-1	10%	0.00133%
			n-olefins	Proprietary	1%	0.00013%
			Propargyl Alcohol	107-19-7	1%	0.00013%
			thiourea-formaldehyde copolymer	68527-49-1	2%	0.00027%
Plexgel Breaker XPA	Chemplex	Breaker	Hydrogen Peroxide	7722-84-1	7%	0.00168%
Plexslick 957	Chemplex	Friction Reducer	Ammonium Chloride	12125-02-9	5%	0.0023%
			Nonionic Surfactants	Proprietary	1.5%	0.00069%
			Paraffinic, Naphtehenic Solvent	64742-47-8	30%	0.01383%

			Poly (acrylamide-co-acrylic acid), partial sodium salt	62649-23-4	35%	0.01613%
Plexsurf 240E	Chemplex	Non Ionic Surfactant	Methyl Alcohol	67-56-1	20%	0.0086%
			Alcohol Alkoxylate	Proprietary	20%	0.0086%

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: _____

Printed Name: _____

Title: _____

Date: _____

E-mail Address: _____

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.