

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: 30-015-40459							
		2. Well Name: TUMAK FEDERAL #003							
		3. Well Number: 003							
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:M Lot:M Section:14 Township:17S Range:28E Feet from:245 N/S Line:S Feet from:230 E/W Line:W							
		5. Bottom Hole Location: Unit:M Lot:M Section:14 Township:17S Range:28E Feet from:245 N/S Line:S Feet from:230 E/W Line:W							
		6. Latitude: 32.827960129173 Longitude: - 104.15447153277							
		7. County: Eddy							
8. Operator Name and Address: COG OPERATING LLC One Concho Center 600 W. Illinois Ave Midland 79701				9. OGRID: 229137	10. Phone Number: 432-685-4332				
11. Last Fracture Date: 9/24/2012 Frac Performed by: Baker Hughes				12. Production Type: O					
13. Pool Code(s): 96210				14. Gross Fractured Interval: 3,650 ft to 4,922 ft					
15. True Vertical Depth (TVD): 5,215 ft				16. Total Volume of Fluid Pumped: 12,016 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	Operator	Carrier	Water	7732-18-5	100%	83.38039%			
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.35918%			
			Water	7732-18-5	85%	2.03537%			
Activator, 330 gal tote	Baker Hughes	Activator	Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.02159%			
			Methanol	67-56-1	50%	0.01542%			
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00017%			
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.00033%			
			Crystalline Silica: Cristobalite	14464-46-1	1%	3E-05%			
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	3E-05%			
			Diatomaceous Earth, Calcined	91053-39-3	60%	0.002%			
			Magnesium Chloride	7786-30-3	5%	0.00017%			
			Magnesium Nitrate	10377-60-3	10%	0.00033%			
			Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3%	0.00112%
			Water	7732-18-5	97%	0.03606%			
Cl-27	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret	30%	0.00057%			
			Methanol	67-56-1	60%	0.00115%			
			Olefin	Trade Secret	5%	0.0001%			
			Polyoxyalkylenes	Trade Secret	30%	0.00057%			
			Propargyl Alcohol	107-19-7	10%	0.00019%			
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30%	0.02809%			
			Sodium Hydroxide	1310-73-2	10%	0.00936%			
			Sodium Tetraborate	1330-43-4	30%	0.02809%			
			BioSealers MR	Baker Hughes	Degradable Sealers	Non-Hazardous Ingredient	Trade Secret	100%	0.00198%
FRW-18	Baker Hughes	Friction Reducer	Petroleum Distillates	64742-47-8	30%	0.00126%			
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.21504%			
			Paraffinic Petroleum Distillate	64742-55-8	60%	0.21504%			
			Petroleum Distillate	64742-47-8	60%	0.21504%			
Ferotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.01364%			
			Ammonium Hydroxide	1336-21-6	5%	0.00068%			
			Cupric Chloride	7447-39-4	5%	0.00068%			
NE-945, tote	Baker Hughes	Non-emulsifier	Oxyalkylated alcohol	Trade Secret	5%	0.00438%			
Sand, Brown, 16/30	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	11.10882%			
SiberProp, 16/30	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100%	2.08498%			
Scaletrol 721, tote	Baker Hughes	Scale Inhibitor	Diethylene Glycol	111-46-6	1%	0.00032%			
			Ethylene Glycol	107-21-1	15%	0.00484%			
			Synthetic Polymer	Trade Secret	15%	0.00484%			
InFlo 250G, 330 gl tote	Baker Hughes	Surfactant	Methanol	67-56-1	30%	0.02706%			
			Mixture of Surfactants	Trade Secret	50%	0.0451%			
			Water	7732-18-5	30%	0.02706%			
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: Kacie Connally Title: Permitting Tech									
Date: 1/21/2013									
E-mail Address: kconnally@concho.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.									