

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: 30-015-40277				
		2. Well Name: BURCH KEELY UNIT #646				
		3. Well Number: 646				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:K Lot:K Section:19 Township:17S Range:30E Feet from:2332 N/S Line:S Feet from:1690 E/W Line:W				
		5. Bottom Hole Location: Unit:K Lot:K Section:19 Township:17S Range:30E Feet from:2332 N/S Line:S Feet from:1690 E/W Line:W				
		6. latitude: longitude: 32.819235893933 - 104.014128142389				
		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: 8/14/2012 Frac Performed by: Halliburton		12. Production Type: O				
13. Pool Code(s): 97918		14. Gross Fractured Interval: 4,260 ft to 4,510 ft				
15. True Vertical Depth (TVD): 4,668 ft		16. Total Volume of Fluid Pumped: 2,664 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)
Fresh Water	Operator				100%	85.76006%
HF Acid 12%/3%	Halliburton				100%	1.78168%
CRC 16/30	Halliburton				100%	1.37854%
Premium Brown 16/30	Halliburton				100%	10.60164%
LoSurf-300D	Halliburton	Surfactant	1,2,4 Trimethylbenzene	95-63-6	1%	0.00082%
			Ethanol	64-17-5	60%	0.04941%
			Heavy aromatic petroleum naphtha	64742-94-5	30%	0.02471%
			Naphthalene	91-20-3	5%	0.00412%
			Poly(oxy-1,2-ethanediyl),alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5%	0.00412%
SUPERSET W	Halliburton	Activator	Methanol	67-56-1	60%	0.01985%
			Ethoxylated Nonylphenol	Confidential Business Information	60%	0.01985%
BE-7™	Halliburton	Biocide	Sodium hydroxide	1310-73-2	2%	0.00101%
			Sodium hypochlorite	7681-52-9	30%	0.01516%
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.02269%
			Monoethanolamine borate	26038-87-9	100%	0.07563%
HpH BREAKER	Halliburton	Breaker	Sodium chloride	7647-14-5	30%	0.00025%
CAT-4	Halliburton	Activator	Diethylenetriamine	111-40-0	60%	0.03892%
K-38	Halliburton	Crosslinker	Disodium octaborate tetrahydrate	12008-41-2	100%	0.01838%
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00096%
			Walnut hulls	Mixture	100%	0.00322%
WG-35 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.14916%
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: Chasity Jackson		Title: Regulatory Analyst		
Date: 10/11/2012						
E-mail Address: cjackson@conchoresources.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.