

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. 30-015-38643				
		2. Well Name: JACK FEDERAL #001H				
		3. Well Number: 001H				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:D Lot:1 Section:31 Township:25S Range:27E Feet from:330 N/S Line:N Feet from:380 E/W Line:W				
		5. Bottom Hole Location: Unit:M Lot:4 Section:31 Township:25S Range:27E Feet from:689 N/S Line:S Feet from:634 E/W Line:W				
		6. latitude: 32.0926149125026 longitude: - 104.23672961396				
		7. County: Eddy				
8. Operator Name and Address: COG OPERATING LLC 550 W TEXAS SUITE 1300 MIDLAND 79701		9. OGRID: 229137		10. Phone Number:		
11. Last Fracture Date: 5/17/2012 Frac Performed by: Halliburton		12. Production Type: O				
13. Pool Code(s): 97818		14. Gross Fractured Interval: 9,859 ft to 13,600 ft				
15. True Vertical Depth (TVD): 9,654 ft		16. Total Volume of Fluid Pumped: 7,581 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%	89.88052%
HYDROCHLORIC ACID 5-10%	Halliburton	Solvent	Hydrochloric acid	7647-01-0	10%	2.20246%
SSA-2	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	0.49911%
30/50 CRC Premium	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	6.75845%
			Hexamethylenetetramine	100-97-0	2%	0.13517%
			Phenol / formaldehyde resin	9003-35-4	5%	0.33792%
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2	30%	0.00895%
CL-22 UC	Halliburton	Crosslinker	Potassium formate	590-29-4	60%	0.04033%
CL-31 CROSSLINKER	Halliburton	Crosslinker	Potassium hydroxide	1310-58-3	5%	0.00205%
			Potassium metaborate	13709-94-9	60%	0.02459%
FR-48	Halliburton	Friction Reducer	Contains no hazardous substances	Mixture	100%	0.0704%
CLA-STA XP ADDITIVE	Halliburton	Clay Stabilizer	Polyepichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.00956%
CLA-WEB™	Halliburton	Additive	Ammonium salt	Confidential Business Information	50%	0.00698%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00393%
LoSurf-300D	Halliburton	Non-ionic Surfactant	1,2,4 Trimethylbenzene	95-63-6	1%	0.00089%
			Ethanol	64-17-5	60%	0.05345%
			Heavy aromatic petroleum naphtha	64742-94-5	30%	0.02673%
			Naphthalene	91-20-3	5%	0.00445%
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)- omega-hydroxy-, branched	127087-87-0	5%	0.00445%
D-AIR 3000L	Halliburton	Defoamer	Alkenes	Confidential Business Information	100%	0.01348%
			Silica, amorphous precipitated	67762-90-7	30%	0.00404%
3rd Party Scale Inhibitor	Operator	*3rd Party Additive	*Supplied by Operator		100%	0.06919%
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00846%
			Crystalline silica, quartz	14808-60-7	30%	0.00254%
OptiKleen-WF™	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.00186%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.18098%
Scalechek® SCP- 2 Scale Inhibitor	Halliburton	Scale Preventer	Glassy calcium magnesium phosphate	65997-17-3	100%	0.01692%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00186%
Ingredients Listed Below This Line Are Part of the			2,2'-Azobis-[2-(imidazolin- 2-yl)propane]- dihydrochloride	27776-21-2	0%	0%
			Acrylamide	Confidential Business Information	0%	0%
			Acrylate Polymer	Confidential Business Information	0%	0%
			Aluminum chloride, basic	1327-41-9	0%	0%
			Amine Salts	Confidential Business Information	0%	0%
			Amine Salts	Confidential Business Information	0%	0%
			Ammonium salt	Confidential Business Information	0%	0%
			Ammonium Sulfate	7783-20-2	0%	0%
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%
			Borate salts	Confidential Business Information	0%	0%
			Crystalline silica, quartz	14808-60-7	0%	0%
			Cured Acrylic Resin	Confidential Business Information	0%	0%
			Glycerine	56-81-5	0%	0%
			Oxyalkylated Phenolic Resin	Confidential Business Information	0%	0%
			Oxyalkylated Phenolic Resin	Confidential Business Information	0%	0%
			Polyacrylate	Confidential Business Information	0%	0%
			Polydimethyl dially ammonium chloride	26062-79-3	0%	0%
			Polymer	Confidential Business Information	0%	0%
			Polypropylene glycol	25322-69-4	0%	0%
			Quaternary Amine	Confidential Business Information	0%	0%
			Quaternary Amine	Confidential Business Information	0%	0%
			Quaternary Amine	Confidential Business Information	0%	0%
			Silica gel	112926-00-8	0%	0%
			Sodium carboxymethyl cellulose	9004-32-4	0%	0%
			Sodium chloride	7647-14-5	0%	0%
			Sodium glycollate	2836-32-0	0%	0%
			Sodium sulfate	7757-82-6	0%	0%
			Surfactant blend	Proprietary	0%	0%
			Surfactant Mixture	Confidential Business Information	0%	0%
			Surfactant Mixture	Confidential Business Information	0%	0%
			Trimethylamine, N-oxide	1184-78-7	0%	0%
			Water	7732-18-5	0%	0%
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: <u>Signed Electronically</u>		Printed Name: <u>Monti Sanders</u>		Permitting / ROW Title: <u>Technician</u>		
Date: <u>7/19/2012</u>						
E-mail Address: <u>msanders@concho.com</u>						

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