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.
30-015-32657

2. Well Name:
FEDERAL RR COM #002

3. Well Number:
002

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:I Lot:I Section:24 Township:23S Range:26E
Feet from:1980 N/S Line:S
Feet from:990 E/W Line:E

5. Bottom Hole Location:
Unit:I Lot:I Section:24 Township:23S Range:26E
Feet from:1980 N/S Line:S
Feet from:990 E/W Line:E

6. latitude: 32.2882843125774 longitude: -104.241107706777

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: 8/29/2013 Frac Performed by: Halliburton

12. Production Type:
G

13. Pool Code(s):
73960

14. Gross Fractured Interval:
11,604 ft to 11,756 ft

15. True Vertical Depth (TVD):
12,150 ft

16. Total Volume of Fluid Pumped:
18,706 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)
PREMIUM PROP	Halliburton	Proppant	Crystalline silica, cristobalite	14464-46-1	5%	0.95232%
			Sintered bauxite	1318-16-7	100%	19.04645%
BA-20 BUFFERING AGENT	Halliburton	Buffer	Acetic acid	64-19-7	30%	0.01613%
			Ammonium acetate	631-61-8	100%	0.05378%
GasPerm 1100	Halliburton	Non-ionic Surfactant	Ethanol	64-17-5	30%	0.06956%
			Isopropanol	67-63-0	10%	0.02319%
			Methanol	67-56-1	10%	0.02319%
			Terpenes and Terpenoids, sweet orange-oil	68647-72-3	5%	0.01159%
HC-2	Halliburton	Additive	Inner salt of alkyl amines	Confidential Business Information	30%	0.27448%
			Sodium chloride	7647-14-5	30%	0.27448%
CLA-STA XP ADDITIVE	Halliburton	Clay Stabilizer	Polyepichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.56848%
CL-37 CROSSLINKER	Halliburton	Crosslinker	Glycerine	56-81-5	30%	0.03994%
			Propanol	71-23-8	30%	0.03994%
			Triethanolamine zirconate	101033-44-7	100%	0.13313%
CL-40™ CROSSLINKER	Halliburton	Crosslinker	Triisopropanolamine	122-20-3	30%	0.01838%
WG-18 GELLING AGENT	Halliburton	Gelling Agent	Guar gum derivative	Confidential Business Information	100%	0.24897%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00146%
OPTIFLOIIIA(800581)	Halliburton				100%	0.00732%
CARBON DIOXIDE, LIQUIFIED	Halliburton	Fluid	Carbon dioxide	124-38-9	100%	78.35334%

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: Signed Electronically Printed Name: Brian Maiorino Title: Regulatory Analyst

Date: 11/22/2013

E-mail Address: bmaiorino@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.