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. 30-015-42785
2. Well Name: BOSE IKARD 4 STATE COM #027H
3. Well Number: 027H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:M Lot:M Section:4 Township:17S Range:29E
Feet from:990 N/S Line:S
Feet from:330 E/W Line:W

5. Bottom Hole Location:
Unit:P Lot:P Section:4 Township:17S Range:29E
Feet from:970 N/S Line:S
Feet from:350 E/W Line:W

6. latitude: 32.859179808994 longitude: -104.087360415184

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: 5/24/2015 Frac Performed by: Halliburton

12. Production Type: O

13. Pool Code(s): 96610

14. Gross Fractured Interval: 4,792 ft to 8,858 ft

15. True Vertical Depth (TVD): 4,521 ft

16. Total Volume of Fluid Pumped: 1,922,438 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)
Fresh Water	Operator	Base Fluid	Fresh Water	7732-18-5	100%	78.30459%
HCl > 10%	Halliburton	Base Fluid	NA	NA	0%	0%
BC-140 X2, BE-6 MICROBIOCIDE, BE-9, HpH BREAKER, L	Halliburton	Biocide, Breaker, Gelling Agent, Initiator, Microbiocide, Proppant, Scale Preventer, Surfactant	NA	NA	0%	0%
CAT 106 SI	Catalyst Oilfield Services LLC	Scale Inhibitor	NA	NA	0%	0%
			1,2-Benzisothiazolin-3-one	2634-33-5	0.1%	0%
			2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3	0.1%	6E-05%
			2-Bromo-2-nitro-1,3-propanediol	52-51-7	100%	0.00012%
			Alkane	Confidential	1%	0.00046%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00784%
			C.I. Pigment Red 5	6410-41-9	1%	8E-05%
			Calcium chloride	10043-52-4	0.1%	0%
			Complex alkylamine	Proprietary	5%	0.00231%
			Crystalline silica, quartz	14808-60-7	100%	18.96044%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.00016%
			Cured acrylic resin	Confidential	30%	0.00252%
			Enzyme	Confidential	5%	0.00041%
			Ethylene glycol	107-21-1	30%	0.0168%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.01896%
			Guar gum	9000-30-0	100%	0.15673%
			Hexamethylenetetramine	100-97-0	2%	0.06067%
			Hydrochloric Acid	Proprietary	1%	0.00041%
			Monoethanolamine borate	26038-87-9	100%	0.056%
			NFIDB:HCl > 10%	NFIDB:HCl > 10%	100%	2.37211%
			Phenol / formaldehyde resin	9003-35-4	5%	0.15168%
			Phosphonate Compound	Confidential	60%	0.02435%
			Poly(oxy-1,2-ethanediyl), .alpha.-isodecyl-.omega.-hydroxy-	61827-42-7	30%	0.01387%
			Silica gel	112926-00-8	1%	0.00157%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium chloride	7647-14-5	30%	0.00023%
			Surfactant mixture	Confidential	1%	0.00313%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00378%
			Walnut hulls	NA	100%	0.00813%
			Water	7732-18-5	100%	0.10728%

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: Chasity Jackson Title: Regulatory Analyst

Date: 6/18/2015

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.