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.
30-025-43406

2. Well Name:
IVAR THE BONELESS FEDERAL #021H

3. Well Number:
021H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:D Lot:D Section:22 Township:17S Range:32E
Feet from:105 N/S Line:N
Feet from:613 E/W Line:W

5. Bottom Hole Location:
Unit:D Lot:D Section:22 Township:17S Range:32E
Feet from:105 N/S Line:N
Feet from:613 E/W Line:W

6. latitude: 32.82706968 longitude: -103.76085042

7. County:
Lea

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: 11/21/2016 Frac Performed by: Pumpco

12. Production Type:
O

13. Pool Code(s):
44500

14. Gross Fractured Interval:
6,624 ft to 11,061 ft

15. True Vertical Depth (TVD):
6,310 ft

16. Total Volume of Fluid Pumped:
4,834,662 gals

17. Total Volume of Re-Use Water Pumped:
0 gals

18. Percent of Re-Use Water in Fluid Pumped:
%

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)
Water	Operator	Carrier/Base Fluid	Water	7732-18-5	100%	88.55724%
Sand	TSS	Proppant	Silica Substrate	14808-60-7	100%	9.39767%
15% HCL	Reagent	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.28213%
Chemplex 4-N-1	Chemplex	Combination/Iron Control	2-Ethylhexanol	104-76-7	10%	0.00191%
			Acetic Acid	64-19-7	85%	0.01621%
			Alcohol Ethoxylate Surfactants	Proprietary	2%	0.00038%
			Cocamide Diethanolamine Salt	68603-42-9	2%	0.00038%
			Diethanolamine	111-42-2	2%	0.00038%
			Methyl Alcohol	67-56-1	10%	0.00191%
			n-olefins	Proprietary	1%	0.00019%
			Propargyl Alcohol	107-19-7	1%	0.00019%
			thiourea-formaldehyde copolymer	68527-49-1	2%	0.00038%
Plexgel Breaker XPA	Chemplex	Breaker	Hydrogen Peroxide	7722-84-1	7%	0.00236%
Plexslick 957	Chemplex	Friction Reducer	Ammonium Chloride	12125-02-9	5%	0.00344%
			Nonionic Surfactants	Proprietary	1.5%	0.00103%
			Paraffinic, Naphtehenic Solvent	64742-47-8	30%	0.02065%
			Poly (acrylamide-co-acrylic acid), partial sodium salt	62649-23-4	35%	0.0241%
Plexsurf 240E	Chemplex	Non Ionic Surfactant	Methyl Alcohol	67-56-1	20%	0.00852%
			Alcohol Alkoxylate	Proprietary	20%	0.00852%
					0%	0%
					0%	0%
					0%	0%
					0%	0%
					0%	0%

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: Kanicia Carrillo Title: Regulatory Analsyt

Date: 2/24/2017

E-mail Address: kcarrillo@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.