

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:
30-025-43178

2. Well Name:
AZORES FEDERAL #012H

3. Well Number:
012H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:N Lot:N Section:29 Township:24S Range:32E
Feet from:210 N/S Line:S
Feet from:1680 E/W Line:W

5. Bottom Hole Location:
Unit:D Lot:D Section:29 Township:24S Range:32E
Feet from:97 N/S Line:N
Feet from:1009 E/W Line:W

6. latitude: longitude:
32.18173496 -103.6997951

7. County:
Lea

8. Operator Name and Address:
COG PRODUCTION, LLC
600 W. Illinois Ave
Midland 79701

9. OGRID: 217955

10. Phone Number: 432-685-4372

11. Last Fracture Date: 11/6/2016 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97899

14. Gross Fractured Interval:
9,335 ft to 13,860 ft

15. True Vertical Depth (TVD):
9,149 ft

16. Total Volume of Fluid Pumped:
10,201,786 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	Water	7732-18-5	100%	89.59312%
Cia-Veeb(TM)	Halliburton	Additive	Listed Below	Listed Below	0%	0%
DCA-23002	Halliburton	Friction Reducer	Listed Below	Listed Below	0%	0%
FDP-S1007-11	Halliburton	Surfactant	Listed Below	Listed Below	0%	0%
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive	Listed Below	Listed Below	0%	0%
FE-2A	Halliburton	Additive	Listed Below	Listed Below	0%	0%
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor	Listed Below	Listed Below	0%	0%
HYDROCHLORIC ACID	Halliburton	Solvent	Listed Below	Listed Below	0%	0%
K-34	Halliburton	Buffer	Listed Below	Listed Below	0%	0%
LCA-1	Halliburton	Solvent	Listed Below	Listed Below	0%	0%
N-ZYME 3	Halliburton	Enzyme	Listed Below	Listed Below	0%	0%
OptiKleen-WF(TM)	Halliburton	Concentrate	Listed Below	Listed Below	0%	0%
SAND-COMMON WHITE-100 MESH, SSA-2, BULK (100003676	Halliburton	Proppant	Listed Below	Listed Below	0%	0%
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant	Listed Below	Listed Below	0%	0%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Listed Below	Listed Below	0%	0%
Parasorb 5000	Baker Hughes	Additive	Listed Below	Listed Below	0%	0%
Scalesorb 7	Baker Hughes	Scale Inhibitor	Listed Below	Listed Below	0%	0%
Scaletrol 720	Baker Hughes	Scale Inhibitor	Listed Below	Listed Below	0%	0%
ACS 100	Brenntag	Biocide	Listed Below	Listed Below	0%	0%
ACS 200	Brenntag Southwest Inc	Biocide	Listed Below	Listed Below	0%	0%
Optiflo HTE Placchol	Halliburton	Breaker	Listed Below	Listed Below	0%	0%
ACS 300	Occidental Chemical Coporation	Biocide	Listed Below	Listed Below	0%	0%
MSDS and Non-MSDS Ingredients are listed below the					0%	0%
Ingredients	Listed Above	Listed Above	1,2-Benzisothiazolin-3-one	2634-33-5	0.1%	0%
			Acetic acid	64-19-7	60%	0.00088%
			Acetic anhydride	108-24-7	100%	0.00147%
			Acrylamide acrylate copolymer	9003-06-9	60%	0.04979%
			Acrylonitrile	107-13-1	0.1%	8E-05%
			Amine salts	Proprietary	0.1%	0.0001%
			Calcium chloride (CaCl2)	10043-52-4	5%	0.00132%
			CI Pigment Red 5	6410-41-9	1%	1E-05%
			Citric acid	77-92-9	60%	0.00091%
			Citrus extract	94266-47-4	10%	0.00437%
			Crystalline silica, quartz	14808-60-7	100%	9.64253%
			Crystalline silica, quartz	14808-60-7	30%	0.00015%
			Crystalline silica: Quartz (SiO2)	14808-60-7	1%	0.0001%
			Cured Acrylic Resin	Proprietary	30%	0.00015%
			Diatomaceous earth, calcined	91053-39-3	65%	0.00854%
			Enzyme	Proprietary	5%	3E-05%
			Ethoxylated alcohols	Proprietary	30%	0.0024%
			Ethoxylated fatty acid	Proprietary	10%	0.00437%
			Ethylene glycol	107-21-1	30%	0.00793%
			Fatty acids, tall oil	Proprietary	30%	0.00022%
			FD&C Blue 1	3844-45-9	5%	0%
			Glycerine	56-81-5	60%	2E-05%
			Glycol	Proprietary	5%	0.00437%
			Glycosidase	9032-92-2	5%	0%
			Guar gum	9000-30-0	100%	0.01972%
			Hdrotreated light petroleum distillates	Proprietary	100%	0.00232%
			Hydrochloric acid	7647-01-0	60%	0.2958%
			Hydrogen Chloride	7647-01-0	15%	0.00077%
			Hydroxyalkylammonium chloride	Proprietary	60%	0.02938%
			Isopropanol	67-63-0	30%	0.0131%
			Methanol	67-56-1	60%	0.00044%
			Mineral Oil	8042-47-5	30%	0.00116%
			Olefins	Proprietary	5%	9E-05%
			Organic salt	Proprietary	0.1%	4E-05%
			Organophosphorous salt	Trade Secret	40%	0.00382%
			Propargyl alcohol	107-19-7	10%	7E-05%
			Quaternary amine	Proprietary	5%	0.00299%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00022%
			Sodium bicarbonate	144-55-8	100%	0.00021%
			Sodium chloride	7647-14-5	100%	0.08542%
			Sodium Chloride	7647-14-5	10%	0.00101%
			Sodium Chlorite	7758-19-2	35%	0.00295%
			Sodium Hydroxide	001310-73-2	2%	0.00012%
			Sodium Hypochlorite	007681-52-9	13%	0.00077%
			Sodium perborate tetrahydrate	10486-00-7	100%	0.00995%
			Walnut Hulls	CAS Not Assigned	100%	0.00051%
			Water	7732-18-5	100%	0.56104%

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: Stormi Davis

Date: 2/1/2017

E-mail Address: sdavis@concho.com

Senior Regulatory

Title: Analyst

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