

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 8, 2013

1. WELL API NO:
30-015-43073

2. Well Name:
MARSH OWL FEDERAL COM #001H

3. Well Number:
001H

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original
☐ Amendment

4. Surface Hole Location:
Unit:O Lot:O Section:12 Township:26S Range:26E
Feet from:10 N/S Line:S
Feet from:2180 E/W Line:E

5. Bottom Hole Location:
Unit:I Lot:I Section:7 Township:26S Range:27E
Feet from:1969 N/S Line:S
Feet from:338 E/W Line:E

6. latitude: longitude:
32.0498288596824 -104.245085931964

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: 7/14/2015 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97494

14. Gross Fractured Interval:
9,693 ft to 14,195 ft

15. True Vertical Depth (TVD):
9,975 ft

16. Total Volume of Fluid Pumped:
5,480,665 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		86.19128%
HCl < 10%		Base Fluid	NA	NA	0%	0%
BC-140 X2, BE-9, CLA-STA XP ADDITIVE, Cla-Web(TM),	Halliburton	Additive, Biocide, Breaker, Clay Stabilizer, Clay Stabilizer, Corrosion Inhibitor, Gelling Agent, Ini	NA	NA	0%	0%
WG-36 GELLING AGENT	Halliburton	Scale Preventer, Surfactant	NA	NA	0%	0%
Parasorb, Scaletrol 720	Baker Hughes	Clay Control, 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%	3E-05%
			Alcohols, C14-C15, ethoxylated	68951-67-7	30%	0.00036%
			Alkane	Confidential	1%	0.00043%
			Aluminum oxide	1344-28-1	100%	2.52457%
			Amine salts	Confidential	0.1%	9E-05%
			Ammonium salt	Confidential	60%	0.02848%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	5%	0.00505%
			C.I. Pigment Red 5	6410-41-9	1%	5E-05%
			Calcium chloride	10043-52-4	0.1%	0%
			Calcium Chloride	10043-52-4	5%	0.00108%
			Complex alkylamine	Proprietary	5%	0.00215%
			Crystalline Silica	14809-60-7	1%	0.00011%
			Crystalline silica, cristobalite	14464-46-1	5%	0.12623%
			Crystalline silica, quartz	14808-60-7	100%	10.21512%
			Crystalline Silica, Quartz	14808-60-7	0.1%	0.0001%
			Cured acrylic resin	Confidential	30%	0.00168%
			Diatomaceous earth, calcined	91053-39-3	60%	0.00667%
			Enzyme	Confidential	5%	0.00027%
			Ethylene glycol	107-21-1	30%	0.0084%
			Ethylene Glycol	107-21-1	30%	0.00649%
			Ethylenediaminetetraacetic acid, tetrasodium salt	64-02-8	0.01%	0%
			Fatty acids, tall oil	Confidential	30%	0.00036%
			Formaldehyde, polymer with 4-nonylphenol and phenol	40404-63-5	5%	0.12623%
			Formaldehyde-4,4'-isopropylidene diphenol	25085-75-0	5%	0.12623%
			Glassy calcium magnesium phosphate	65997-17-3	100%	0.01414%
			Guar gum	9000-30-0	100%	0.10102%
			Iron oxide	1309-37-1	30%	0.75737%
			Methanol	67-56-1	60%	0.00073%
			Mineral Oil	8042-47-5	30%	0.00333%
			Monoethanolamine borate	26038-87-9	100%	0.02801%
			Mullite	1302-93-8	5%	0.12623%
			NFIDB:HCl < 10%	NFIDB:HCl < 10%	100%	0.73927%
			Olefins	Confidential	5%	0.00015%
			Phenol	108-95-2	0.1%	0.00252%
			Poly(oxy-1,2-ethanediyl), ,alpha.-isodecyl- omega.-hydroxy-	61827-42-7	30%	0.01289%
			Polypichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.00722%
			Propargyl alcohol	107-19-7	10%	0.00012%
			Quaternary amine	Confidential	5%	0.0029%
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30%	0.00036%
			Silica gel	112926-00-8	1%	0.00101%
			Sodium bicarbonate	144-55-8	0.01%	0%
			Sodium chloride	7647-14-5	30%	0.00252%
			Sodium hydroxide	1310-73-2	30%	0.00127%
			Surfactant mixture	Confidential	1%	0.00202%
			Titanium dioxide	13463-67-7	5%	0.12623%
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00418%
			Trimethylamine, N-oxide	1184-78-7	5%	0.0006%
			Walnut hulls	NA	100%	0.00541%
			Water	7732-18-5	100%	0.13767%

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 Title: Regulatory Analyst

Date: 8/25/2015

E-mail Address: sdavis@conchoresources.com

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