

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:
30-025-41439

2. Well Name:
BETTIS 20 STATE COM #005H

3. Well Number:
005H

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original
☐ Amendment

4. Surface Hole Location:
Unit:M Lot:M Section:20 Township:24S Range:33E
Feet from:200 N/S Line:S
Feet from:380 E/W Line:W

5. Bottom Hole Location:
Unit:D Lot:4 Section:20 Township:24S Range:33E
Feet from:330 N/S Line:N
Feet from:388 E/W Line:W

6. latitude:
32.1964604544922 longitude:
-103.601669523014

7. County:
Lea

8. Operator Name and Address:
MURCHISON OIL & GAS INC
1100 Mira Vista Blvd.
Plano 75093

9. OGRID:
15363
O

10. Phone Number:
972-931-0700

11. Last Fracture Date:
9/7/2014 Frac Performed by:
Baker Hughes

12. Production Type:
O

13. Pool Code(s):
96674

14. Gross Fractured Interval:
Confidential

15. True Vertical Depth (TVD):
11,156 ft

16. Total Volume of Fluid Pumped:
3,145,674 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)
Water	Operator	Carrier	Water	7732-18-5	100%	85.50371%
HCl, 7.6 - 10%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	10%	0.12606%
			Water	7732-18-5	90%	1.13458%
Activator, 330 gal tote	Baker Hughes	Activator	Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.01631%
			Methanol	67-56-1	50%	0.01165%
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.00552%
GBW-5	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0	100%	0.00505%
High Perm CRB	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0	100%	0.00293%
BF-9L, 55 gal drum	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60%	0.0626%
			Potassium Hydroxide	1310-58-3	30%	0.0313%
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.06497%
			Water	7732-18-5	30%	0.02599%
CI-27	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret	30%	0.00031%
			Methanol	67-56-1	60%	0.00062%
			Olefin	Trade Secret	5%	5E-05%
			Polyoxyalkylenes	Trade Secret	30%	0.00031%
			Propargyl Alcohol	107-19-7	10%	0.0001%
			Thiourea Polymer	68527-49-1	30%	0.00031%
XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	25%	0.02938%
			Sodium Hydroxide	1310-73-2	9%	0.01058%
			Sodium Tetraborate	1330-43-4	12%	0.0141%
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer	1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino], polymer with 2-propenamide, sodium	Trade Secret	60%	0.0066%
			Hydrotreated Light Distillate	64742-47-8	30%	0.0033%
			Oxyalkylated alcohol	Trade Secret	5%	0.00055%
			Sodium Chloride	7647-14-5	5%	0.00055%
			Water	7732-18-5	60%	0.0066%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.00683%
			Hydrotreated Light Distillate	64742-47-8	30%	0.00342%
			Mineral Oil	8042-47-5	70%	0.00797%
			Paraffinic Petroleum Distillate	64742-55-8	30%	0.00342%
GW-4	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	100%	0.19899%
AG-12	Baker Hughes	Gelling Agent	Acrylic Polymers	Trade Secret	60%	0.00426%
			Hydrotreated Light Distillate	64742-47-8	30%	0.00213%
			Oxyalkylated Alkylphenol	Trade Secret	5%	0.00036%
NE-35, 330 gi tote	Baker Hughes	Non-emulsifier	Propylene Glycol	57-55-6	15%	0.01232%
			Water	Trade Secret	80%	0.06569%
Parasorb 5000, bag	Baker Hughes	Paraffin Inhibitor	Acetic acid ethenyl ester, polymer with ethene	Trade Secret	15%	0.00391%
			Crystalline Silica (Cristobalite)	14464-46-1	1%	0.00026%
			Crystalline Silica (Quartz)	14808-60-7	1%	0.00026%
			Diatomaceous Earth, Calcined (kieselguhr)	91053-39-3	70%	0.01826%
			Diatomaceous Earth, Natural (kieselguhr)	61790-53-2	10%	0.00261%
			Mineral Oil	Trade Secret	15%	0.00391%
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	0.33917%
OilPlus Bulk (30/50)	Baker Hughes	Proppant	Quartz (Silica)	14808-60-7	100%	1.82567%
Sand, Arizona	Baker Hughes	Proppant	Crystalline Silica; Quartz	14808-60-7	100%	10.27818%
Scaletrol 720	Baker Hughes	Scale Inhibitor	Calcium Chloride	10043-52-4	5%	0.00141%
			Ethylene Glycol	107-21-1	45%	0.01286%
Ingredients shown above are subject to 29 CFR 1910			2-Propenoic Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9	0%	0.0056282%
			Benzenesulfonic acid, hexadecyl (sulfophenoxy)-, disodium salt	Trade Secret	0%	0.0016422%
			Fatty Acid Esters	67701-32-0	0%	0.0001349%
			Fatty Acid Oxyalkylate	70142-34-6	0%	1.42E-05%
			Formaldehyde	50-00-0	0%	5E-07%
			Hydrated Magnesium Silicate	Trade Secret	0%	2.93E-05%
			Methanol	67-56-1	0%	4.6E-05%
			Nonionic glycol ester	Trade Secret	0%	0.0205273%
			Poly (Tetrafluoroethylene)	Trade Secret	0%	1.47E-05%
			Polyoxyethylene sorbitan monooleate	9005-65-6	0%	0.0005502%
			Potassium Chloride	7447-40-7	0%	0.0002814%
			Sodium Chloride	7647-14-5	0%	0.0002866%
			Sodium lauriminodipropionate	Trade Secret	0%	0.0008211%
			Sodium octylimodipropionate	Trade Secret	0%	0.0024633%
			Sorbitan, mono-(9Z)-9-octadecenoate	1338-43-8	0%	0.0005502%
			Vinylidene Chloride-Methyl Acrylate Polymer	Trade Secret	0%	0.0007335%
			Water	7732-18-5	0%	0.1104654%
			Xylene	1330-20-7	0%	4.26E-05%
			diester of sulfosuccinic acid sodium salt	2673-22-5	0%	3.55E-05%

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
Date: 10/8/2014
E-mail Address: ccottrell@dmil.com

Printed Name: Cindy Cottrell

Title: Regulatory Coordinator

NMOCOD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCOD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.