

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:
30-025-42420

2. Well Name:
THISTLE UNIT #023H

3. Well Number:
023H

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original
☐ Amendment

4. Surface Hole Location:
Unit:M Lot:M Section:34 Township:23S Range:33E
Feet from:89 N/S Line:S
Feet from:1200 E/W Line:W

5. Bottom Hole Location:
Unit:M Lot:M Section:34 Township:23S Range:33E
Feet from:89 N/S Line:S
Feet from:1200 E/W Line:W

6. latitude: 32.25414148 longitude: -103.56486608

7. County: Lea

8. Operator Name and Address:
DEVON ENERGY PRODUCTION COMPANY, LP
333 W. Sheridan Avenue
Oklahoma City 73102

9. OGRID: 6137

10. Phone Number: 405-228-8588

11. Last Fracture Date: 7/22/2015 Frac Performed by: FTS International Services

12. Production Type:
O
Confidential

13. Pool Code(s):
96193

14. Gross Fractured Interval:
Confidential

15. True Vertical Depth (TVD):
8,989 ft

16. Total Volume of Fluid Pumped:
43,898,651 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%	84.315546%
APB-1	FTSI	Gel breaker	Ammonium Persulfate	7727-54-0	100%	0.0002346%
CI-150	FTSI	Acid Corrosion Inhibitor	Isopropanol	67-63-0	30%	0.000269%
			Dimethylformamide	68-12-2	10%	8.97E-05%
			Organic amine resin salt	Proprietary	30%	0.000269%
			Quaternary ammonium compound	Proprietary	10%	8.97E-05%
			Aromatic aldehyde	Proprietary	10%	8.97E-05%
			Ethylene Glycol	107-21-1	30%	0.000269%
			Water	7732-18-5	5%	4.48E-05%
			Fatty Acid	Proprietary	0.1%	9E-07%
			Fatty Acid Salt	Proprietary	0.1%	9E-07%
			Aliphatic alcohol	Proprietary	0.1%	9E-07%
			Alkylene Oxide Block Polymer	Proprietary	10%	8.97E-05%
			Diethylene glycol	111-46-6	1%	9E-06%
			Sodium chlorite	7758-19-2	5%	0.0013643%
			Water	7732-18-5	95%	0.0259225%
			Sodium Hydroxide	1310-73-2	0%	2E-07%
CS POLYBREAK 210	FTSI	Polymer breaker	Tetrasodium EDTA	64-02-8	41%	0.0004851%
			Sodium Hydroxide	1310-73-2	2%	2.37E-05%
FE-200L	FTSI	Iron Control	Trisodium Nitriiotriacetic acid	5064-31-3	2%	2.37E-05%
			Ethylenediaminetriaceticacid, trisodium salt	19019-43-3	0.8%	9.5E-06%
			Water	7732-18-5	60%	0.0007099%
			Sodium formate	141-53-7	0.6%	7.1E-06%
			Sodium glycolate	2838-32-0	1.5%	1.77E-05%
			Iminodiacetate disodium salt	17593-73-6	0.2%	2.4E-06%
			Petroleum distillate hydrotreated light	64742-47-8	26%	0.0074122%
			Acrylamide P/W acrylic acid, ammonium salt	26100-47-0	25%	0.0071271%
			Water	7732-18-5	48%	0.013684%
			Sorbitan Monooleate	1338-43-8	3%	0.0008552%
			Alcohols (C12-C14), ethoxylated	68439-50-9	4%	0.0011403%
			Alcohols (C12-C16), ethoxylated	68551-12-2	4%	0.0011403%
			Alcohols (C10-C16), ethoxylated	68002-97-1	4%	0.0011403%
			Acrylamide	79-06-1	0.1%	2.85E-05%
			Dewaxed heavy paraffinic	64742-65-0	1.5%	0.0004276%
FRW-200	FTSI	Friction reducer	Ammonium Acrylate	10604-69-0	0.5%	0.0001425%
			Ammonium Chloride	12125-02-9	12%	0.003421%
			Polyethylene glycol monooleate	9004-96-0	3%	0.0008552%
			Alkylloxypolyethyleneoxyethanol	84133-50-6	1%	0.0002851%
			Sorbitol Tetraoleate	61723-83-9	2%	0.0005702%
			Copolymer of acrylamide and sodium acrylate	25987-30-8	33%	0.0094077%
			Surfactant	Proprietary	7%	0.0019956%
			Hydrotreated heavy paraffinic	64742-54-7	5%	0.0014254%
			Isopropanol	67-63-0	0.3%	8.55E-05%
			Ammonium Persulfate	7727-54-0	100%	0.0108067%
			Cured acrylic resin	Proprietary	100%	0.0108067%
			Silica, Crystalline- Quartz	14808-60-7	10%	0.0010807%
			Proprietary	Proprietary	0%	0%
			2-Butoxyethanol	111-76-2	10%	0.0083205%
			2-Propanol	67-63-0	10%	0.0083205%
NE-100	FTSI	Non-emulsifier	Dodecylbenzenesulfonic acid	27176-87-0	5%	0.0041602%
			Water	7732-18-5	90%	0.0748942%
			Sulfuric Acid	7664-93-9	0.01%	1.16E-05%
			Sulfur Dioxide	7446-09-5	0%	1.2E-06%
			Benzene, C10-16 Alkyl Derivatives	68648-87-3	0.04%	3.49E-05%
			Unsulphonated Matter	Proprietary	0.03%	2.33E-05%
			Hydrogen Chloride	7647-01-0	37%	0.1894253%
			Water	7732-18-5	63%	0.322535%
			Ammonium Persulfate	7727-54-0	100%	0.0009909%
			Cured acrylic resin	Proprietary	100%	0.0009909%
			Silica, Crystalline- Quartz	14808-60-7	10%	9.91E-05%
			Proprietary	Proprietary	0%	0%
			Ethylene glycol	107-21-1	10%	0.0001074%
			Water	7732-18-5	60%	0.0006442%
			Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione, Sodium Hydroxide	533-74-4	24%	0.0057935%
20/40 White	FTSI	proppant	Water	7732-18-5	23%	0.0055521%
			Silica, Quartz	14808-60-7	55%	0.0132769%
			Silica, Quartz	14808-60-7	100%	5.4828109%
30/70 White	FTSI	proppant	Silica, Quartz	14808-60-7	100%	9.465562%

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: Rebecca Deal

Date: 3/2/2016

E-mail Address: rebecca.deal@dvn.com

Title: Regulatory Professional

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