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. 30-025-41302
2. Well Name: THISTLE UNIT #050H
3. Well Number: 050H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location: Unit:P Lot:P Section:34 Township:23S Range:33E Feet from:200 N/S Line:S Feet from:660 E/W Line:E
5. Bottom Hole Location: Unit:P Lot:P Section:34 Township:23S Range:33E Feet from:200 N/S Line:S Feet from:660 E/W Line:E
6. latitude: 32.2544682714568 longitude: -103.55376815041
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: 3/26/2014 Frac Performed by: Halliburton
12. Production Type: O
13. Pool Code(s): 59900
14. Gross Fractured Interval: Confidential
15. True Vertical Depth (TVD): 11,288 ft
16. Total Volume of Fluid Pumped: 2,671,826 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	100%	85.44354%
Premium White - 30/50	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	7.86394%
100 Mesh	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	3.48758%
CRC 20/40	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	2.52143%
			Hexamethylenetetramine	100-97-0	2%	0.12607%
			Phenol / formaldehyde resin	9003-35-4	5%	0.05043%
HYDROCHLORIC ACID 10-30%	Halliburton	Solvent	Hydrochloric acid	7647-01-0	30%	0.42199%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.11755%
RockOn™ MX 5-2556	Multi-Chem	Surfactant	Propoxylated Alcohol	Proprietary	13%	0.03157%
			Ethoxylated Alcohol	Proprietary	13%	0.03157%
SUPERSET W	Halliburton	Activator	Methanol	67-56-1	60%	0.01365%
			Ethoxylated nonylphenol	Proprietary	60%	0.01365%
Cla-Web™	Halliburton	Additive	Ammonium salt	Proprietary	60%	0.02523%
CL-22 UC	Halliburton	Crosslinker	Potassium formate	590-29-4	60%	0.02243%
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.01623%
CL-31 CROSSLINKER	Halliburton	Crosslinker	Potassium metaborate	13709-94-9	60%	0.00538%
			Potassium hydroxide	1310-58-3	5%	0.00045%
OptiKleen-WF™	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	100%	0.0057%
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2	30%	0.00461%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00404%
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00127%
			Crystalline silica, quartz	14808-60-7	30%	0.00038%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00031%
Ingredients shown above are subject to 29 CFR 1910			Acrylate polymer	Proprietary	0%	0%
			Sodium carboxymethyl cellulose	9004-32-4	0%	0%
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	0%	0%
			Bentonite, benzyl (hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%
			Sodium glycollate	2836-32-0	0%	0%
			Amine salts	Proprietary	0%	0%
			Alcohols, C12-16, ethoxylated	68551-12-2	0%	0%
			Borate salts	Proprietary	0%	0%
			Fatty acid tall oil amide	Proprietary	0%	0%
			Cured acrylic resin	Proprietary	0%	0%
			Silica gel	112926-00-8	0%	0%
			Quaternary amine	Proprietary	0%	0%
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	0%	0%
			Sodium glycollate	2836-32-0	0%	0%
			Water	7732-18-5	0%	0%
			Sodium sulfate	7757-82-6	0%	0%
			Surfactant mixture	Proprietary	0%	0%
			Crystalline silica, quartz	14808-60-7	0%	0%
			Sodium chloride	7647-14-5	0%	0%
			Polyacrylamide copolymer	Proprietary	0%	0%
			Ammonium chloride	12125-02-9	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: Sara Cook Title: Regulatory Associate

Date: 3/4/2015

E-mail Address: sara.cook@dvn.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.