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. 30-025-41781
2. Well Name: MCDONALD STATE AC 2 #037
3. Well Number: 037

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:A Lot:A Section:13 Township:22S Range:36E
Feet from:990 N/S Line:N
Feet from:990 E/W Line:E

5. Bottom Hole Location:
Unit:A Lot:A Section:13 Township:22S Range:36E
Feet from:990 N/S Line:N
Feet from:990 E/W Line:E

6. latitude: 32.3963691805547 longitude: -103.213581775864

7. County: Lea

8. Operator Name and Address:
APACHE CORP
303 Veterans Airpark Lane
Suite 3000
Midland 79705

9. OGRID: 873

10. Phone Number: 432-818-1062

11. Last Fracture Date: 7/18/2014 Frac Performed by: Cudd

12. Production Type: O

13. Pool Code(s): 19190, 60240, 62700

14. Gross Fractured Interval: 6,269 ft to 7,321 ft

15. True Vertical Depth (TVD): 7,600 ft

16. Total Volume of Fluid Pumped: 96,480 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		Carrier / Base Fluid		7732-18-5	100%	83.84123%
Super DC/LC TLC/THS Opti RCS	Sandtrol	Proppant	Silicon Dioxide	14808-60-7	97%	12.16944%
			P/F Novolak Resin	9003-35-4	5%	0.62729%
			Hexamethylenetetramine	1009-7-0	1%	0.12546%
B-15	Water Science Tech	Biocide	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	20%	0.0017%
			Water	7732-18-5	80%	0.00682%
BF-200	ASK	Buffer	Potassium Hydroxide	1310-58-3	25%	0.02232%
			Water	7732-18-5	80%	0.07143%
CS-14	Chemplex, L.C.	Clay Control	Non-hazardous salts (Choline)	Proprietary	66%	0.05327%
			Water	7732-18-5	45%	0.03632%
15% Hydrochloric Acid	Reagent	Scale Dissolver	37% Hydrochloric Acid	7647-01-0	15%	0.35029%
			Water	7732-18-5	85%	1.98495%
I-122	Chemplex,L.C.	Acid Corrosion Inhibitor	Methonol	67-56-1	70%	0.00075%
			Propargyl alcohol	107-19-7	8%	0.00015%
			Alcohol Ethoxylate Surfactants	Trade Secret	30%	0.00056%
			n-olefins	Trade Secret	10%	0.00019%
			thiourea-formaldehyde copolymer	68527-49-1	30%	0.00056%
SG-15G	PfP Technology	Polymer	Guar Gum	9000-30-0	50%	0.2988%
			Petroleum Distillate (Mineral Oil)	64742-47-8	55%	0.32868%
			Bentonite Clay	14808-60-7	2%	0.01195%
			Surfactant	68439-51-0	2%	0.01195%
CX-10	Benchmark	Crosslinker	Sodium Borate Decahydrate	1303-96-4	29.9%	0.02115%
			Water	7732-18-5	69.1%	0.04888%
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00052%
GB-150	Chemplex, L.C.	Breaker	Non-hazardous ingredients	NA	100%	0.03919%
NE-212	Chemplex, L.C.	Non-emulsifier	Isopropanol	67-63-0	5%	9E-05%
			Methanol	67-56-1	50%	0.00094%
			Alkyl Quanternary Ammonium Chlorides	Mixture	25%	0.00047%
			Diethanolamine	111422	2%	2E-05%
			1,3-Propanediol, 2-amino-2-(hm)-polymer	Trade Secret	8%	0.00015%
			2-Butoxy-1-ethanol	111-76-2	7%	0.00013%
			Cocamide Diethanolamine Salt	68603-42-9	2%	4E-05%
NE-227	CESI	Non-emulsifier	Isopropanol	67-63-0	15%	0.01179%
			Methanol	67-56-1	15%	0.01179%
			Ethoxylated Nonylphenol	9016-45-9	20%	0.01572%
FE-360	Chemplex, L.C.	Iron Control Additive	Cupric Chloride Dihydrate	10125-13-0	7%	0.0005%
			Thioglycol	60-24-2	80%	0.00574%
SI-625	Keltech	Scale Inhibitor	Methanol	67-56-1	19.9%	0.00841%
Superset W	Santrol	Resin Activator	Methanol	67-56-1	50%	0.12969%
			Poly(oxyethylene) nonyphenol ether	9016-45-9	54%	0.14007%

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: Reesa R. Holland Title: Sr Staff Reg Tech

Date: 9/22/2014

E-mail Address: reesa.fisher@apachecorp.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.