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.
30-025-40497

2. Well Name:
NORTHEAST DRINKARD UNIT #159

3. Well Number:
159

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:C Lot:6 Section:3 Township:21S Range:37E
Feet from:2650 N/S Line:N
Feet from:2000 E/W Line:W

5. Bottom Hole Location:
Unit:C Lot:6 Section:3 Township:21S Range:37E
Feet from:2650 N/S Line:N
Feet from:2000 E/W Line:W

6. latitude: 32.5149319903376 longitude: -103.152964230309

7. County:
Lea

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

9. OGRID: 873

10. Phone Number: 432-818-1168

11. Last Fracture Date: 8/3/2012 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
22900

14. Gross Fractured Interval:
5,775 ft to 6,728 ft

15. True Vertical Depth (TVD):
6,728 ft

16. Total Volume of Fluid Pumped:
140,784 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%	69.8257%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.90574%
			Water	7732-18-5	85%	5.13252%
Superset-W, 330 gl tote	Baker Hughes	Activator	Methanol	67-56-1	50%	0.16046%
			Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50%	0.16046%
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00016%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.00032%
			Crystalline Silica: Cristobalite	14464-46-1	1%	3E-05%
			Crystalline Silica: Quartz (SiO2)	14808-60-7	1%	3E-05%
			Diatomaceous Earth, Calcined	91053-39-3	60%	0.00193%
			Magnesium Chloride	7786-30-3	5%	0.00016%
			Magnesium Nitrate	10377-60-3	10%	0.00032%
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.00597%
GBW-5	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100%	0.00547%
GBW-15L	Baker Hughes	Breaker	Enzyme solution	Trade Secret	100%	0.08258%
BF-7L, Tote	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60%	0.0885%
			Potassium Hydroxide	1310-58-3	1%	0.00147%
			Water	7732-18-5	60%	0.0885%
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.06899%
			Water	7732-18-5	30%	0.0276%
CI-14	Baker Hughes	Corrosion Inhibitor	Fatty Acids	61790-12-3	10%	0.00086%
			Methanol	67-56-1	100%	0.00863%
			Olefin	64743-02-8	5%	0.00043%
			Polyoxyalkylenes	68951-67-7	30%	0.00259%
			Propargyl Alcohol	107-19-7	5%	0.00043%
XLW-24, tote	Baker Hughes	Crosslinker	Glyoxal	107-22-2	10%	0.01053%
			Sodium Tetraborate	1303-96-4	30%	0.03159%
FRW-20	Baker Hughes	Friction Reducer	Petroleum Distillates	64742-47-8	30%	0.00158%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.36855%
			Paraffinic Petroleum Distillate	64742-55-8	60%	0.36855%
			Petroleum Distillate	64742-47-8	60%	0.36855%
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.01638%
			Ammonium Hydroxide	1336-21-6	5%	0.00082%
			Cupric Chloride	7447-39-4	5%	0.00082%
NE-23	Baker Hughes	Non-emulsifier	Isopropanol	67-63-0	100%	0.00505%
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.04142%
			Propylene Glycol	57-55-6	30%	0.02485%
Super LC, 20/40	Baker Hughes	Proppant	Hexamethylenetetramine	1009-7-0	0.01%	0.00217%
			P/F Resin	9003-35-4	5%	1.08662%
			Silicon Dioxide (Silica Sand)	14808-60-7	97%	21.08043%
Ingredients shown above are subject to 29 CFR 1910			Aliphatic Hydrocarbon	Trade Secret	0%	0.001225%
			Copolymer	Trade Secret	0%	0%
			Ethoxylated Nonylphenal	9016-45-9	0%	0%
			Formaldehyde	50-00-0	0%	0%
			Hydrochloric Acid	7647-01-0	0%	0%
			Methanol	67-56-1	0%	4.98E-05%
			Modified Thiourea Polymer	68527-49-1	0%	0%
			Oxyalkylated Alcohol	Trade Secret	0%	0.0001051%
			Polyglycol Ester	Trade Secret	0%	4.73E-05%
			Polyol Ester	Trade Secret	0%	5.78E-05%
			Sodium Chloride	7647-14-5	0%	0.0002103%
			Vinyl Copolymer	Trade Secret	0%	0.0014721%
			Water	7732-18-5	0%	0.0190419%

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: 11/18/2013

E-mail Address: reesa.holland@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.