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.
30-015-41988

2. Well Name:
LEE FEDERAL #064

3. Well Number:
064

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:C Lot:C Section:20 Township:17S Range:31E
Feet from:95 N/S Line:N
Feet from:1835 E/W Line:W

5. Bottom Hole Location:
Unit:C Lot:C Section:20 Township:17S Range:31E
Feet from:95 N/S Line:N
Feet from:1835 E/W Line:W

6. latitude: 32.8270294523288 longitude: -103.894536236832

7. County:
Eddy

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: 12/22/2014 Frac Performed by: Baker Hughes

12. Production Type:
O

13. Pool Code(s):
96831

14. Gross Fractured Interval:
4,550 ft to 6,200 ft

15. True Vertical Depth (TVD):
6,200 ft

16. Total Volume of Fluid Pumped:
468,342 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%	86.9763%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Listed with Chemicals in Ingredients	N/A	0%	1.8393%
Activator, 330 gal tote	Baker Hughes	Activator	Listed with Chemicals in Ingredients	N/A	0%	0.0347%
Alpha 125	Baker Hughes	Biocide	Listed with Chemicals in Ingredients	N/A	0%	0.0235%
GBW-15L	Baker Hughes	Breaker	Listed with Chemicals in Ingredients	N/A	0%	0.0421%
ClayCare, tote	Baker Hughes	Clay Control	Listed with Chemicals in Ingredients	N/A	0%	0.0154%
CI-14	Baker Hughes	Corrosion Inhibitor	Listed with Chemicals in Ingredients	N/A	0%	0.0057%
XLW-10A	Baker Hughes	Crosslinker	Listed with Chemicals in Ingredients	N/A	0%	0.1435%
FRW-18	Baker Hughes	Friction Reducer	Listed with Chemicals in Ingredients	N/A	0%	0.0146%
GW-3	Baker Hughes	Gelling Agent	Listed with Chemicals in Ingredients	N/A	0%	0.1025%
Ferrotrol 280L	Baker Hughes	Iron Control	Listed with Chemicals in Ingredients	N/A	0%	0.0088%
NE-23, 330 gallon tote	Baker Hughes	Non-emulsifier	Listed with Chemicals in Ingredients	N/A	0%	0.0049%
Sand, White, 16/30	Baker Hughes	Proppant	Listed with Chemicals in Ingredients	N/A	0%	8.8992%
SiberProp, 16/30	Baker Hughes	Proppant	Listed with Chemicals in Ingredients	N/A	0%	1.7504%
INFLO 72	Baker Hughes	Surface Tension Reducer	Listed with Chemicals in Ingredients	N/A	0%	0.0862%
Chemical Ingredients	Baker Hughes	Treatment System	2-Mercaptoethanol	60-24-2	100%	0.008792%
			Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.024276%
			Alcohols, C12-16, ethoxylated	68551-12-2	2%	0.000291%
			Ammonium Chloride	12125-02-9	3%	0.000437%
			Ammonium Hydroxide	1336-21-6	5%	0.00044%
			Benzyl Chloride	100-44-7	1%	4.9E-05%
			Bis (hydroethyl) cocamine	68439-72-5	1%	4.9E-05%
			Choline Chloride	67-48-1	75%	0.011528%
			Crystalline Silica (Quartz)	14808-60-7	100%	8.893766%
			Cupric Chloride	7447-39-4	5%	0.00044%
			Enzyme solution	9012-54-8	100%	0.042052%
			Ethoxylated Nonylphenol	9016-45-9	5%	0.000246%
			Ethylene Glycol	107-21-1	25%	0.035841%
			Fatty Acids	61790-12-3	10%	0.000565%
			Formaldehyde	50-00-0	1%	5.7E-05%
			Glutaraldehyde	111-30-8	30%	0.007037%
			Guar Gum	9000-30-0	100%	0.102413%
			Hydrochloric Acid	7647-01-0	15%	0.27579%
			Hydrotreated Light Distillate	64742-47-8	30%	0.004371%
			Isopropanol	67-63-0	30%	0.027325%
			Methanol	67-56-1	100%	0.02305%
			Modified Thiourea Polymer	68527-49-1	7%	0.000396%
			Nonionic Alkoxylate	70559-25-0	10%	0.008616%
			Oleamide DEA	93-83-4	2%	0.000291%
			Olefin	64743-02-8	5%	0.000283%
			Olefin Sulfonate	30965-85-6	30%	0.002957%
			Orange Terpene	68647-72-3	5%	0.004308%
			Organic Polyol	112-27-6	15%	0.012923%
			Poly (acrylamide-co-acrylic acid) partial sodium salt	62649-23-4	30%	0.004371%
			Polyester	68511-95-1	15%	0.000739%
			Polyethers	68815-65-6	30%	0.025847%
			Polyethylene glycol	25322-68-3	5%	0.001734%
			Polyoxyalkylenes	68951-67-7	30%	0.001696%
			Polyoxythylene Sorbitan Monooleate	9005-65-6	0.5%	7.3E-05%
			Propargyl Alcohol	107-19-7	5%	0.000283%
			Quartz (SiO2)	14808-60-7	100%	1.749352%
			Quaternary Amine Compounds	61789-68-2	30%	0.001478%
			Sodium Chloride	7647-14-5	5%	0.000729%
			Sodium Hydroxide	1310-73-2	9%	0.012903%
			Sodium Tetraborate	1330-43-4	12%	0.017204%
			Sorbitan Monooleate	1338-43-8	0.5%	7.3E-05%
			Surfactant	68131-39-5	1.5%	0.003015%
			Water	7732-18-5	85%	1.715604%
Ingredients shown above are subject to 29 CFR 1910					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: Fatima Vasquez Title: Regulatory Analyst

Date: 4/17/2015

E-mail Address: fatima.vasquez@apachecorp.com

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