

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:  
30-015-42139

2. Well Name:  
CROW FEDERAL COM #034H

3. Well Number:  
034H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒Original

☐Amendment

4. Surface Hole Location:  
Unit:M    Lot:M    Section:3    Township:17S    Range:31E  
Feet from:905    N/S Line:S  
Feet from:570    E/W Line:W

5. Bottom Hole Location:  
Unit:M    Lot:M    Section:3    Township:17S    Range:31E  
Feet from:905    N/S Line:S  
Feet from:570    E/W Line:W

6. latitude:    32.8588098499265    longitude:    -103.864366898384

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:    9/29/2014    Frac Performed by:    Baker Hughes

12. Production Type:  
O

13. Pool Code(s):  
26770

14. Gross Fractured Interval:  
6,203 ft to 10,460 ft

15. True Vertical Depth (TVD):  
5,200 ft

16. Total Volume of Fluid Pumped:  
3,789,618 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%	90.9868%
Superset-W, 55 gal drum	Baker Hughes	Activator	Listed with Chemicals in Ingredients	N/A	0%	0.0658%
Alpha 125	Baker Hughes	Biocide	Listed with Chemicals in Ingredients	N/A	0%	0.0201%
ClayCare	Baker Hughes	Clay Control	Listed with Chemicals in Ingredients	N/A	0%	0.0977%
ClayCare, ClayTreat-2C, 330 gl tote	Baker Hughes	Clay Control	Listed with Chemicals in Ingredients	N/A	0%	0.0977%
CI-27	Baker Hughes	Corrosion Inhibitor	Listed with Chemicals in Ingredients	N/A	0%	0.0034%
FRW-18	Baker Hughes	Friction Reducer	Listed with Chemicals in Ingredients	N/A	0%	0.1388%
Ferrotrol 280L	Baker Hughes	Iron Control	Listed with Chemicals in Ingredients	N/A	0%	0.0063%
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Listed with Chemicals in Ingredients	N/A	0%	0.0039%
Sand, White, 40/70	Baker Hughes	Proppant	Listed with Chemicals in Ingredients	N/A	0%	3.2293%
Sand, White, 100 mesh	Baker Hughes	Proppant	Listed with Chemicals in Ingredients	N/A	0%	3.2278%
Super LC, 40/70	Baker Hughes	Proppant	Listed with Chemicals in Ingredients	N/A	0%	1.9525%
S-200	Baker Hughes	Surfactant	Listed with Chemicals in Ingredients	N/A	0%	0.0941%
Chemical Ingredients	Baker Hughes	Treatment System	2-Mercaptoethanol	60-24-2	100%	0.006344%
			Alcohols, C10-16, ethoxylated propoxylated	69227-22-1	5%	0.004701%
			Alcohols, C12-16, ethoxylated	68551-12-2	2%	0.002773%
			Alcohols, C6-12 ethoxylated propoxylated	68937-66-6	5%	0.004701%
			Alcohols, ethoxylated	68551-12-2	4%	0.003761%
			Amines, unsatd. alkyl, ethoxylated	68155-39-5	2%	0.00188%
			Ammonium Chloride	12125-02-9	3%	0.00416%
			Ammonium Hydroxide	1336-21-6	5%	0.000317%
			Benzenesulfonic acid, hexadecyl(sulfophenoxy) -, disodium salt	65143-89-7	2%	7.9E-05%
			Choline Chloride	67-48-1	75%	0.146409%
			Crystalline Silica (Quartz)	14808-60-7	100%	6.451732%
			Cupric Chloride	7447-39-4	6%	0.000317%
			Ethanol	64-17-5	10%	0.009402%
			Fatty Acids	61790-12-3	30%	0.001026%
			Formaldehyde	50-00-0	0.05%	2E-06%
			Glutaraldehyde	111-30-8	30%	0.00604%
			Hexamethylenetetramine	100-97-0	0.01%	0.000195%
			Hydrotreated Light Distillate	64742-47-8	30%	0.041597%
			Methanol	67-56-1	60%	0.034987%
			Nonionic glycol ester	68400-71-5	25%	0.000891%
			Oleamide DEA	93-93-4	2%	0.002773%
			Olefin	64743-02-8	5%	0.000171%
			Phenolic Resin	9003-35-4	5%	0.097546%
			Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50%	0.032885%
			Poly (acrylamide-co-acrylic acid) partial sodium salt	62649-23-4	30%	0.041597%
			Polyoxyalkylenes	68951-67-7	30%	0.001026%
			Polyoxyethylene Sorbitan Monooleate	9005-65-6	0.5%	0.000693%
			Propargyl Alcohol	107-19-7	10%	0.000342%
			Propylene Glycol	57-55-6	15%	0.000589%
			Silicon Dioxide (Silica Sand)	14808-60-7	97%	1.892398%
			Sodium Chloride	7647-14-5	5%	0.00695%
			Sodium lauriminodipropionate	14960-06-6	1%	3.9E-05%
			Sodium octylimodipropionate	94441-92-6	3%	0.000118%
			Sorbitan Monooleate	1338-43-8	0.5%	0.000693%
			Thiourea Polymer	68527-49-1	30%	0.001026%
			Water	7732-18-5	85%	0.212977%
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:    3/21/2015

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

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