

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 February 15, 2012				
		1. Well API NO: 30-025-40459				
		2. Well Name: HAWK FEDERAL A 5 #009				
		3. Well Number: 009				
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:P Lot:P Section:5 Township:21S Range:37E Feet from:990 N/S Line:S Feet from:990 E/W Line:E				
		5. Bottom Hole Location: Unit:P Lot:P Section:5 Township:21S Range:37E Feet from:990 N/S Line:S Feet from:990 E/W Line:E				
		6. Latitude: Longitude: 32.5034006758322 - 103.179795694749				
		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: 8/9/2012 Frac Performed by: Baker Hughes				12. Production Type: O		
13. Pool Code(s): 6660, 19190, 60240				14. Gross Fractured Interval: 5,849 ft to 6,892 ft		
15. True Vertical Depth (TVD): 6,892 ft				16. Total Volume of Fluid Pumped: 3,878 bbls		
17. 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%	75.57797%
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	0.68598%
			Water	7732-18-5	85%	3.8872%
Superset-W, 330 gl tote	Baker Hughes	Activator	Methanol	67-56-1	50%	0.125%
			Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50%	0.125%
X-Cide 207	Baker Hughes	Biocide	2-Methyl-4-Isothiazolin-3-One	2682-20-4	5%	0.00015%
			5-Chloro-2-Methyl-4-Isothiazolin-3-One	26172-55-4	10%	0.0003%
			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%	0.0018%
			Magnesium Chloride	7786-30-3	5%	0.00015%
			Magnesium Nitrate	10377-60-3	10%	0.0003%
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.01338%
GBW-5	Baker Hughes	Breaker	Ammonium Persulfate	7727-54-0	100%	0.00362%
GBW-15L	Baker Hughes	Breaker	Enzyme solution	Trade Secret	100%	0.09271%
BF-7L, Tote	Baker Hughes	Buffer	Potassium Carbonate	584-08-7	60%	0.1061%
			Potassium Hydroxide	1310-58-3	1%	0.00177%
			Water	7732-18-5	60%	0.1061%
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.07442%
CI-14	Baker Hughes	Corrosion Inhibitor	Water	7732-18-5	30%	0.02977%
			Fatty Acids	61790-12-3	10%	0.00121%
			Methanol	67-56-1	100%	0.01212%
			Olefin	64743-02-8	5%	0.00061%
			Polyoxyalkylenes	68951-67-7	30%	0.00364%
XLW-24, tote	Baker Hughes	Crosslinker	Propargyl Alcohol	107-19-7	5%	0.00061%
			Glyoxal	107-22-2	10%	0.01204%
			Sodium Tetraborate	1303-96-4	30%	0.03612%
FRW-20	Baker Hughes	Friction Reducer	Petroleum Distillates	64742-47-8	30%	0.00162%
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.33554%
			Paraffinic Petroleum Distillate	64742-55-8	60%	0.33554%
			Petroleum Distillate	64742-47-8	60%	0.33554%
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.02452%
			Ammonium Hydroxide	1336-21-6	5%	0.00123%
			Cupric Chloride	7447-39-4	5%	0.00123%
NE-23	Baker Hughes	Non-emulsifier	Isopropanol	67-63-0	100%	0.01039%
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.04665%
			Propylene Glycol	57-55-6	30%	0.02799%
Super LC, 20/40	Baker Hughes	Proppant	Hexamethylenetetramine	1009-7-0	0.01%	0.00176%
			P/F Resin	9003-35-4	5%	0.87931%
			Silicon Dioxide (Silica Sand)	14808-60-7	97%	17.05868%
Ingredients shown above are subject to 29 CFR 1910			Aliphatic Hydrocarbon	Trade Secret	0%	0.0012606%
			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%	0.0001115%
			Modified Thiourea Polymer	68527-49-1	0%	0%
			Oxyalkylated Alcohol	Trade Secret	0%	0.0001082%
			Polyglycol Ester	Trade Secret	0%	4.87E-05%
			Polyol Ester	Trade Secret	0%	5.95E-05%
			Sodium Chloride	7647-14-5	0%	0.0002164%
Vinyl Copolymer	Trade Secret	0%	0.0015149%			
Water	7732-18-5	0%	0.0385959%			
18. 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. Engineering Tech		
Date: 10/22/2012						
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.