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.
30-021-20661

2. Well Name:
DAHL 1927 #031

3. Well Number:
031

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ **Original**

☐ **Amendment**

4. Surface Hole Location:
Unit:K Lot:K Section:3 Township:19N Range:27E
Feet from:1674 N/S Line:S
Feet from:1662 E/W Line:W

5. Bottom Hole Location:
Unit:K Lot:K Section:3 Township:19N Range:27E
Feet from:1674 N/S Line:S
Feet from:1662 E/W Line:W

6. latitude: 0 longitude: 0

7. County:
Harding

8. Operator Name and Address:
WHITING OIL AND GAS CORPORATION
400 W. Illinois
Midland 79701

9. OGRID: 25078

10. Phone Number: 432-686-6709

11. Last Fracture Date: 10/23/2014 Frac Performed by: Cudd Energy Services

12. Production Type:
C

13. Pool Code(s):
96010

14. Gross Fractured Interval:
Confidential

15. True Vertical Depth (TVD):
3,800 ft

16. Total Volume of Fluid Pumped:
13,433 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%	53.54903%
Sinterlite (Proppant)	Sintex Minerals & Services	Proppant	Bauxite	1318-1607	100%	14.61407%
CS-16	Benchmark	Clay Control	Tetramethylammonium chloride	75-57-0	60%	0.02671%
			Water	7732-18-5	60%	0.02671%
SG-15G	PfP Technology	Polymer	Guar Gum	9000-30-0	50%	0.2478%
			Petroleum Distillate (Mineral Oil)	64742-47-8	55%	0.27258%
			Bentonite Clay	14808-60-7	2%	0.00991%
			Surfactant	68439-51-0	2%	0.00991%
EGB-16HT	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00956%
			Silica, Crystalline-Quartz	14808-60-7	10%	0.00096%
EMS-44+	CESI	Non-emulsifier	Isopropanol	67-63-0	20%	0.01123%
			Cyclohexenes	5989-27-5	30%	0.01685%
			Alcohols	Proprietary	30%	0.01685%
			Alkyl Alkoxylate	Proprietary	30%	0.01685%
FA-510	Chemplex, L.C.	Foaming Agent	Ethanol	64-17-5	30%	0.02622%
			Isopropanol	67-63-0	20%	0.01748%
			Ammonium Alcohol Ether Sulfate	68187-17-7	30%	0.02622%
LGB-14	CESI	Enzyme Gel Breaker	Enzyme Protein	NA	100%	0.0122%
MSI-6	National Petrochem	Scale Inhibitor	Isopropyl Alcohol	67-63-0	20%	0.00642%
			Water	7732-18-5	80%	0.02567%
			Phosphonic Acid	35657-77-3	100%	0.03209%
Petro-Flo	Bio-Cide International, Inc.	Biocide	Sodium Chlorite	7758-19-2	8.35%	0.00144%
			Sodium Chloride	7647-14-5	1%	0.00017%
			Sodium Carbonate	497-19-8	2%	0.00034%
			Sodium Hydroxide	1310-73-2	1%	0.00017%
			Water	7732-18-5	90%	0.0155%
Carbon Dioxide	Various	Foaming Agent	Carbon Dioxide	124-38-9	100%	31.08213%

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: Kay Maddox Title: Regulatory Agent

Date: 11/20/2014

E-mail Address: kay.maddox@whiting.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.