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.
30-025-40421

2. Well Name:
TJG 3 FEDERAL COM #001H

3. Well Number:
001H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:P Lot:P Section:3 Township:19S Range:32E
Feet from:400 N/S Line:S
Feet from:330 E/W Line:E

5. Bottom Hole Location:
Unit:P Lot:P Section:3 Township:19S Range:32E
Feet from:400 N/S Line:S
Feet from:330 E/W Line:E

6. latitude: 32.6832309625598 longitude: -103.746593555569

7. County:
Lea

8. Operator Name and Address:
MARSHALL & WINSTON INC
PO BOX 50880
MIDLAND 79710

9. OGRID: 14187

10. Phone Number:

11. Last Fracture Date: 11/6/2013 Frac Performed by: Pro Petro

12. Production Type:
O

13. Pool Code(s):
41442

14. Gross Fractured Interval:
9,930 ft to 13,807 ft

15. True Vertical Depth (TVD):
9,467 ft

16. Total Volume of Fluid Pumped:
3,385,284 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%	88.78814%
Sand (Proppant)		Proppant	Silica	14808-60-7	100%	8.48518%
Hydrochloric Acid	Reagent Chemical		Hydrogen Chloride	7647-01-0	40%	0.38086%
			Water	7732-18-5	67%	0.54062%
IC-5	Economy Polymers	Iron Control	Acetic Acid	64-19-7	60%	0.00273%
			Citric Acid	77-92-9	30%	0.00136%
			Water	7732-18-5	60%	0.00242%
CI-200	Economy Polymers	Corrosion Inhibitor	Methanol	67-56-1	60%	0.00081%
LGW-01	Economy Polymers	Gellant	Petroleum Distillates	64747-47-8	60%	0.08261%
			Polysaccharide Blend	NA	60%	0.08261%
CL-03	ASK Chemical	Crosslinker	Potassium Hydroxide	1310-58-3	25%	0.01209%
			Ethylene Glycol	107-21-1	25%	0.01209%
			Proprietary Component	NA	25%	0.01209%
			Proprietary Component	NA	15%	0.00725%
			Proprietary Component	NA	10%	0.00484%
BR-1	Enonomy Polymers	Breaker	Ammonium Persulfate	7727-54-0	98%	0.17745%
BR03	Economy Polymers	Breaker	Ammonium Persulfate	7727-54-0	60%	0%
			Cured Acrylic Resin	NA	25%	0%
			Silica, Crystalline-Quartz	14808-60-7	15%	0%
FRB-01	ASK Chemical	Friction Breaker	Ammonium Persulfate	7727-54-0	100%	0%
FR-01	Economy Polymers	Friction Reducer	Trade Secret	Trade Secret	100%	0.07062%
NE-602	Environmental Energy Service	Surfactant	Trade Secret	Trade Secret	100%	0.08911%
BC-1058	Buckman Lab.	Biocide	Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	533-74-4	24%	0.00609%
			Sodium Hydroxide	1310-73-2	11%	0.00279%
SI-300	Colossal Chemical	Scale Inhibitor	Sodium Chloride	7647-14-5	7%	0.00155%
			Methanol	67-56-1	30%	0.00666%

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: Sherry Roberts Title: Operations Secretary

Date: 7/9/2014

E-mail Address: sroberts@mar-win.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.