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. 30-041-20970
2. Well Name: BROWN EYE GIRL 5 FEE #002H
3. Well Number: 002H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:J Lot:J Section:5 Township:07S Range:34E
Feet from:2400 N/S Line:S
Feet from:2280 E/W Line:E

5. Bottom Hole Location:
Unit:J Lot:J Section:5 Township:07S Range:34E
Feet from:2400 N/S Line:S
Feet from:2280 E/W Line:E

6. latitude: 33.7365696 longitude: -103.4862354

7. County: Roosevelt

8. Operator Name and Address:
MANZANO LLC
PO BOX 2107
ROSWELL 882022107

9. OGRID: 231429

10. Phone Number:

11. Last Fracture Date: 5/20/2017 Frac Performed by: Cudd

12. Production Type: O

13. Pool Code(s): 12450

14. Gross Fractured Interval: 4,750 ft to 11,834 ft

15. True Vertical Depth (TVD): 4,090 ft

16. Total Volume of Fluid Pumped: 3,828,608 gals

17. Total Volume of Re-Use Water Pumped: 0 gals

18. Percent of Re-Use Water in Fluid Pumped: %

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%	83.27748%
Sand		Proppant	Silicon Dioxide	14808-60-7	100%	8.74178%
Super DC/LC TLC/THS Opti RCS	Sandtrol	Proppant	Silicon Dioxide	14808-60-7	97%	1.17606%
			P/F Novolak Resin	9003-35-4	5%	0.06062%
			Hexamethylenetetramine	1009-7-0	1%	0.01212%
AGA-380	Chemplex, L.C.	Acid Gellant	Acetic Acid	64-19-7	1%	0.00015%
			Sodium Bisulfite(Trade Secret)	7631-90-5	64%	0.00991%
			Petroleum Distillate	64742-47-8	35%	0.00542%
FR-601	SNF	Friction Reducer	Copolymer of acrylamide and sodium acrylate	25987-30-8	10%	0.00329%
			Isoparaffinic Solvent	64742-47-8	10%	0.00329%
			Water	7732-18-5	60%	0.01973%
			Nonylphenol	9016-45-9	10%	0.00329%
			Sorbitan Monooleate	1338-43-8	10%	0.00329%
15% Hydrochloric Acid	Reagent	Scale Dissolver	37% Hydrochloric Acid	7647-01-0	15%	0.93744%
			Water	7732-18-5	85%	5.31218%
SG-15G	Multiple Suppliers	Polymer	Guar Gum	9000-30-0	50%	0.06618%
			Petroleum Distillate(Mineral Oil)	64742-47-8	55%	0.0728%
			Bentonite Clay	14808-60-7	2%	0.00265%
			Surfactant	68439-51-0	2%	0.00265%
XL-335	PfP Technology	Crosslinker	Sodium Metaborate	7775-19-1	40%	0.00304%
			Glycerol	56-81-5	45%	0.00342%
GB-2	Multiple Suppliers	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00092%
FE-4	Multiple Suppliers	Iron Control Additive	Citric Acid Anhydrous	77-92-9	55%	0.01893%
			Water	7732-18-5	55%	0.01893%
MCS-376	Ace Completions	Surfactant	Diethanolamine	111-42-2	1%	0.00096%
			Solvent Naptha(Petroleum), Heavy	64742-94-5	1%	0.00096%
			Alcohol	68609-68-7	5%	0.0048%
			Isotridecanol, ethoxylated	9043-30-5	5%	0.0048%
			Poly(oxy-1,2-ethanediyl), alpha hexyl-omega-hydroxy-	31726-34-8	5%	0.0048%
			Coconut diethanolamide	68603-42-9	8%	0.00768%
			Proprietary	NA	15%	0.0144%
			Ethylene Oxide/propylene oxide co-polymer	9003-11-6	10%	0.0096%
			Water	7732-18-5	75%	0.07198%
SI-625	Ace Completions	Scale Inhibitor	Diethylenetriamine penta methy phosphoric acid sodium salts	22042-96-2	20%	0.01038%
			Potassium Hydroxide solution	1310-58-3	2%	0.00104%
			Water	7732-18-5	90%	0.04673%
I-123	Finoric	Corrosion Inhibitor	Ethylene Glycol	107-21-1	40%	0.00245%
			N.N-Dimethylformamide	68-12-2	20%	0.00123%
			1-Decanol	112-30-1	10%	0.00061%
			2-Butoxyethanol	111-76-2	10%	0.00061%
			Cinnamaldehyde	104-55-2	10%	0.00061%
			Ethoxylated Nonylphenol	68412-54-4	10%	0.00061%
			Tar based, quinoline derived, benzyl chloride-quaternized	72480-70-7	10%	0.00061%
			1-Octanol	111-87-5	2.5%	0.00015%
			Isopropyl Alcohol	67-63-0	2.5%	0.00015%
			Triethyl Phosphate	78-40-0	2.5%	0.00015%
Scaleguard II	Carbo Ceramics	Proppant/Scale Inhibitor	Ceramic materials and wares, chemicals	66402-68-4	90%	0.1269%
			Semi permeable coating	Trade Secret	5%	0.00705%
			Diethylenetriamine penta methy phosphoric acid sodium salts	22042-96-2	5%	0.00705%
			Sodium Hydroxide	1310-73-2	0.5%	0.00071%
			Calcium Chloride	10043-52-4	2%	0.00282%

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: Lori Pack Title: Production Analyst

Date: 6/5/2017

E-mail Address: anna-marie@manzanoenergy.com

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