

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.
30-025-40721

2. Well Name:
ENCORE M STATE #008

3. Well Number:
008

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit: J Lot: J Section: 19 Township: 22S Range: 37E
Feet from: 2340 N/S Line: S
Feet from: 1650 E/W Line: E

5. Bottom Hole Location:
Unit: J Lot: J Section: 19 Township: 22S Range: 37E
Feet from: 2340 N/S Line: S
Feet from: 1650 E/W Line: E

6. latitude: longitude:
32.376517374088 -103.198917678274

7. County:
Lea

8. Operator Name and Address:
QUANTUM RESOURCES MANAGEMENT, LLC
1401 McKinney St
Suite 2400
Houston 77010

9. OGRID: 243874

10. Phone Number: 713-634-4696

11. Last Fracture Date: 7/24/2013 Frac Performed by: Frac Specialists

12. Production Type:
O

13. Pool Code(s):
19190

14. Gross Fractured Interval:
6,462 ft to 6,684 ft

15. True Vertical Depth (TVD):
6,940 ft

16. Total Volume of Fluid Pumped:
136,381 gals

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	Quantum	Water	Water	7732-18-5		82.77699%
FBK-133	Frac Specialists	Oxidative Breaker	Ammonium Persulfate	7727-54-0		0.00317%
FBKA-412	Frac Specialists	Gel Breaker Aid	Triethanolamine	102-71-6		0.02196%
			Methyl Alcohol	67-56-1		0.00651%
			Water	7732-18-5		0.0122%
FXL-101L	Frac Specialists	Crosslinker/Buffer	Ethylene Glycol	107-21-1		0.00697%
			Potassium Metaborate	13709-94-9		0.0209%
			Potassium Hydroxide	1310-58-3		0.00348%
			Water	7732-18-5		0.03832%
FNE-342LN	Frac Specialists	Non Emulsifier for Acids	Cocamide Diethanolamine Salt	68603-42-9		0.00013%
			Diethanolamine	111-42-2		6E-05%
			Ethylene Glycol Monobutyl Ether	111-76-2		0.00029%
			Methyl Alcohol	67-56-1		0.00029%
			Water	732-18-5		0.00115%
FBIO-24L	Frac Specialists	Antimicrobial Solution	Tetrahydro-3/5-Dimethyl-2H-1/3/5-thiadiazine-2-thione.	533-73-2		0.00929%
			Sodium Hydroxide	1310-73-2		0.00464%
			Water	7732-18-5		0.02786%
FB7	Frac Specialists	Antimicrobial Solution	Sodium Chloride	7647-14-5		0.0013%
			Sodium Hydroxide	1310-73-2		0.00065%
			Sulfamic acid/N-Bromo/Sodium Salt	1004542-84-0		0.00324%
F ENZYME BREAKER	Frac Specialists	Enzyme Breaker	Water	7732-18-5		0.00909%
			Mannanase Enzymes	0		0.00012%
			Sodium Chloride	7647-14-5		0.0009%
FAI-251LC	Frac Specialists	Corrosion Inhibitor	Water	7732-18-5		0.00499%
			Alcohol Ethoxylate Surfactants	0		0.0005%
			Methyl Alcohol	67-56-1		0.00267%
			n-olefins	0		0.00027%
			Propargyl Alcohol	107-19-7		0.0002%
			thiourea-formaldehyde copolymer	68527-49-1		0.0005%
FFR-51LA	Frac Specialists	Friction Reducer	Hydrotreated Petroleum Distillate	64742-47-8		0.00959%
			Polyacrylamide-co-acrylic acid	9003-06-9		0.01023%
			Water	7732-18-5		0.01118%
			Alcohol Ethoxylate Surfactants	0		0.00256%
FIC-644RL	Frac Specialists	Iron Control	2-Mercaptoethanol	60-24-2		0.00497%
			Aqua Ammonia	1336-21-6		0.00079%
			Cupric Chloride	10125-13-0		0.00033%
			Potassium Iodide	7681-11-0		7E-05%
			Water	7732-18-5		0.00046%
20/40 White	Frac Specialists	Proppant	SILICA/QUARTZ/SIO2	14808-60-7		10.5072%
FGA-15L	Frac Specialists	Water Gelling Agent	White Mineral Oil	8042-47-5		0.12345%
			Guar Powder	900-30-0		0.18518%
FNE-334LN	Frac Specialists	non emulsifier for acids	Cocamide Diethanolamine Salt	68603-42-9		0.00561%
			Diethanolamine	111-42-2		0.0024%
			Ethylene Glycol Monobutyl Ether	111-76-2		0.01202%
			Methyl Alcohol	67-56-1		0.01202%
			Water	732-18-5		0.04807%
15% HCL	Frac Specialists	Hydrochloric Acid	Hydrogen Chloride	7647-01-0		0.32161%
			Water	7732-18-5		1.82246%
20/40 RCS Garnet	Frac Specialists	Proppant	CRYSTALLINE SILICA QUARTZ	14808-60-7		2.67015%
			PENOL-FORMALDEHYDE	9003-35-4		0.14053%
			NOVOLAK RESIN			
Encap-LE	Frac Specialists	Encapsulated Breaker	HEXAMETHYLENETETRAMINE	100-97-0		0.02811%
			Walnut Hulls	0		0.1675%
			Cured Acrylic Resin	0		0.04786%
			Hemicellulase	9025-56-3		0.00479%
			Silica/Crystalline Quartz	14808-60-7		0.01914%
FPD-4LA	Frac Specialists	Paraffin Inhibitor	Toluene	108-88-3		0.00811%
			Trimethylbenzene	95-63-6		0.00162%
			Naphthas (Petroleum) hydrotreated	06474-88-7		0.00162%
100 Mesh	Frac Specialists	Proppant	SILICA/QUARTZ/SIO2	14808-60-7		0.87173%
Solid Scale inhibitor	Frac Specialists	Scale Inhibitor	Dodecylbenzene Sulfonic acid/linear	27176-87-0		0.00192%
			Bis(hexamethylenetriamine penta methylene phosphonic acid salt	35657-77-3		0.00173%
			ISOPROPANOL	67-63-2		0.00011%
			p-Nonylphenol ethoxylated	26027-38-3		0.00192%
			Ethylene Glycol Monobutyl Ether	111-76-2		0.00058%
			Distillates(petroleum)/hydrotreated heavy naphthenic	647-42-478		0.00058%
			Distillates(petroleum)hydrotreated heavy naphthenic	647-42-489		0.00019%
			1/3/5- Trimethylbenzene	108-67-8		0.00043%
			Light Aromatic distillates	64742-95-6		8E-05%
			Alkylaryl Sulfonate	26264-05-1		8E-05%
			1/2/4-Trimethylbenzene	95-63-6		4E-05%
			2-Ethylhexanol	104-76-7		4E-05%
			Toluene	108-88-3		2E-05%
			1/2/3-Trimethylbenzene	526-73-8		1E-05%
			Xylene	1330-20-7		0%

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

Date: 10/25/2013

E-mail Address: cdale@qracq.com

Printed Name: Celeste G Dale

Title: Sr. Regulatory Analyst

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