

|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
| Submit within 45 days of well completion                                                                                                                          | State of New Mexico<br>Energy, Minerals and Natural Resources<br>Oil Conservation Division<br>1220 S. St Francis Dr.<br>Santa Fe, NM 87505 | Revised February 15, 2012                                                                                                           |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 1. WELL API NO:<br>30-025-41061                                                                                                     |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 2. Well Name:<br>ENCORE M STATE #010                                                                                                |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 3. Well Number:<br>010                                                                                                              |                                              |                                     |                                                          |                                                          |
| HYDRAULIC FRACTURING FLUID<br>DISCLOSURE<br><br><input type="checkbox"/> Original<br><input checked="" type="checkbox"/> Amends disclosure submitted on 8/16/2013 |                                                                                                                                            | 4. Surface Hole Location:<br>Unit:M Lot:M Section:17 Township:22S Range:37E<br>Feet from:770 N/S Line:S<br>Feet from:770 E/W Line:W |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 5. Bottom Hole Location:<br>Unit:M Lot:M Section:17 Township:22S Range:37E<br>Feet from:770 N/S Line:S<br>Feet from:770 E/W Line:W  |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 6. Latitude: 32.38670092984 Longitude: -103.191063257578                                                                            |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            | 7. County: Lea                                                                                                                      |                                              |                                     |                                                          |                                                          |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
| 8. Operator Name and Address:<br>QUANTUM RESOURCES MANAGEMENT, LLC<br>1401 McKinney St<br>Suite 2400<br>Houston 77010                                             |                                                                                                                                            | 9. OGRID: 243874                                                                                                                    | 10. Phone Number: 713-634-4696               |                                     |                                                          |                                                          |
| 11. Last Fracture Date: 6/15/2013 Frac Performed by: Cudd Energy Services                                                                                         |                                                                                                                                            | 12. Production Type:<br>O                                                                                                           |                                              |                                     |                                                          |                                                          |
| 13. Pool Code(s):<br>19190, 62700                                                                                                                                 |                                                                                                                                            | 14. Gross Fractured Interval:<br>6,490 ft to 6,757 ft                                                                               |                                              |                                     |                                                          |                                                          |
| 15. True Vertical Depth (TVD):<br>6,874 ft                                                                                                                        |                                                                                                                                            | 16. Total Volume of Fluid Pumped:<br>252,503 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                                                                                                                                                             |                                                                                                                                            | Carrier / Base Fluid                                                                                                                |                                              | 7732-18-5                           | 100%                                                     | 87.21171%                                                |
| Sand                                                                                                                                                              |                                                                                                                                            | Proppant                                                                                                                            | Silicon Dioxide                              | 14808-60-7                          | 100%                                                     | 7.16485%                                                 |
| Super DCILC TLC/THS Opti RCS                                                                                                                                      | Sandtrol                                                                                                                                   | Proppant                                                                                                                            | Silicon Dioxide                              | 14808-60-7                          | 97%                                                      | 2.25228%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | P/F Novolak Resin                            | 9003-35-4                           | 5%                                                       | 0.1161%                                                  |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Hexamethylenetetramine                       | 1009-7-0                            | 1%                                                       | 0.02322%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
| B-15                                                                                                                                                              | Water Science Tech                                                                                                                         | Biocide                                                                                                                             | Tetrakis (hydroxymethyl) phosphonium sulfate | 55566-30-8                          | 20%                                                      | 0.00136%                                                 |
| BF-200                                                                                                                                                            | ASK                                                                                                                                        | Buffer                                                                                                                              | Water                                        | 7732-18-5                           | 80%                                                      | 0.00542%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Potassium Hydroxide                          | 1310-58-3                           | 25%                                                      | 0.01254%                                                 |
| CS-14                                                                                                                                                             | Chemplex, L.C.                                                                                                                             | Clay Control                                                                                                                        | Water                                        | 7732-18-5                           | 80%                                                      | 0.04014%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Non-hazardous salts (Choline)                | Proprietary                         | 66%                                                      | 0.05244%                                                 |
| 15% Hydrochloric Acid                                                                                                                                             | Reagent                                                                                                                                    | Scale Dissolver                                                                                                                     | Water                                        | 7732-18-5                           | 45%                                                      | 0.03575%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | 37% Hydrochloric Acid                        | 7647-01-0                           | 15%                                                      | 0.36198%                                                 |
| I-122                                                                                                                                                             | Chemplex, L.C.                                                                                                                             | Acid Corrosion Inhibitor                                                                                                            | Water                                        | 7732-18-5                           | 85%                                                      | 2.0512%                                                  |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Methanol                                     | 67-56-1                             | 70%                                                      | 0.00083%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Propargyl alcohol                            | 107-19-7                            | 8%                                                       | 0.00017%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Alcohol Ethoxylate Surfactants               | Trade Secret                        | 30%                                                      | 0.00062%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | n-olefins                                    | Trade Secret                        | 10%                                                      | 0.00021%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | thiourea-formaldehyde copolymer              | 68527-49-1                          | 30%                                                      | 0.00062%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
| SG-15G                                                                                                                                                            | PIP Technology                                                                                                                             | Polymer                                                                                                                             | Guar Gum                                     | 9000-30-0                           | 50%                                                      | 0.20096%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Petroleum Distillate (Mineral Oil)           | 64742-47-8                          | 55%                                                      | 0.22106%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Bentonite Clay                               | 14808-60-7                          | 2%                                                       | 0.00804%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Surfactant                                   | 68439-51-0                          | 2%                                                       | 0.00804%                                                 |
| CX-10                                                                                                                                                             | Benchmark                                                                                                                                  | Crosslinker                                                                                                                         | Sodium Borate Decahydrate                    | 1303-96-4                           | 29.9%                                                    | 0.01443%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Water                                        | 7732-18-5                           | 69.1%                                                    | 0.03334%                                                 |
| GB-2                                                                                                                                                              | Fritz Industries, Inc.                                                                                                                     | Breaker                                                                                                                             | Ammonium Persulfate                          | 7727-54-0                           | 99.9%                                                    | 0.00767%                                                 |
| GB-150                                                                                                                                                            | Chemplex, L.C.                                                                                                                             | Breaker                                                                                                                             | Non-hazardous ingredients                    | NA                                  | 100%                                                     | 0.04939%                                                 |
| NE-212                                                                                                                                                            | Chemplex, L.C.                                                                                                                             | Non-emulsifier                                                                                                                      | Isopropanol                                  | 67-63-0                             | 5%                                                       | 0.00021%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Methanol                                     | 67-56-1                             | 50%                                                      | 0.0021%                                                  |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Alkyl Quaternary Ammonium Chlorides          | Mixture                             | 25%                                                      | 0.00105%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Diethanolamine                               | 111422                              | 2%                                                       | 4E-05%                                                   |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | 1,3-Propanediol, 2-amino-2-(hm)-polymer      | Trade Secret                        | 8%                                                       | 0.00034%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | 2-Butoxy-1-ethanol                           | 111-76-2                            | 7%                                                       | 0.00029%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Cocamide                                     | 68603-42-9                          | 2%                                                       | 8E-05%                                                   |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Diethanolamine Salt                          |                                     |                                                          |                                                          |
| FE-360                                                                                                                                                            | Chemplex, L.C.                                                                                                                             | Iron Control Additive                                                                                                               | Cupric Chloride Dihydrate                    | 10125-13-0                          | 7%                                                       | 0.00053%                                                 |
| S-222                                                                                                                                                             | Chemplex, L.C.                                                                                                                             | Flouro Surfactant                                                                                                                   | Thioglycol                                   | 60-24-2                             | 80%                                                      | 0.00608%                                                 |
| Superset W                                                                                                                                                        | Santrol                                                                                                                                    | Resin Activator                                                                                                                     | Methanol                                     | 67-56-1                             | 100%                                                     | 0.07022%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Methanol                                     | 67-56-1                             | 50%                                                      | 0.01603%                                                 |
| SI-106                                                                                                                                                            | Oilfield Solutions, Inc.                                                                                                                   | Scale Inhibitor                                                                                                                     | Poly(oxyethylene) nonyphenol ether           | 9016-45-9                           | 54%                                                      | 0.01731%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Hydrochloric Acid                            | 6747-01-0                           | 100%                                                     | 0.12853%                                                 |
|                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                     | Phosphonate Compound                         | Proprietary                         | 60%                                                      | 0.07712%                                                 |
| 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: Celeste G Dale Title: Sr. Regulatory Analyst                                                                       |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
| Date: 10/25/2013                                                                                                                                                  |                                                                                                                                            |                                                                                                                                     |                                              |                                     |                                                          |                                                          |
| E-mail Address: cdale@qracq.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.