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.
30-015-42150

2. Well Name:
MEDWICK 32 FEDERAL COM #012H

3. Well Number:
012H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:1 Lot:1 Section:32 Township:26S Range:27E
Feet from:210 N/S Line:S
Feet from:710 E/W Line:E

5. Bottom Hole Location:
Unit:1 Lot:1 Section:32 Township:26S Range:27E
Feet from:210 N/S Line:S
Feet from:710 E/W Line:E

6. latitude: 32.0005615012419 longitude: -104.2056430196

7. County:
Eddy

8. Operator Name and Address:
CIMAREX ENERGY CO.
600 N MARIENFELD STREET
SUITE 600
MIDLAND 79701

9. OGRID: 215099

10. Phone Number:

11. Last Fracture Date: 1/9/2015 Frac Performed by: Schlumberger

12. Production Type:
O

13. Pool Code(s):
98018

14. Gross Fractured Interval:
9,557 ft to 9,747 ft

15. True Vertical Depth (TVD):
9,747 ft

16. Total Volume of Fluid Pumped:
8,748,819 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)
WF115, Slickwater	Schlumberger	AntiFoam Agent, Surfactant , Breaker, Gelling Agent, Friction Reducer, Clay Control Agent, Propping	Water (Including Mix Water Supplied by Client)	NA	0%	89.52574%
			Crystalline silica	14808-60-7	97.91151%	10.23371%
			2-hydroxy-N,N,N-trimethylethanaminium chloride	67-48-1	0.71145%	0.07436%
			Guar gum	9000-30-0	0.26257%	0.02744%
			Ammonium sulfate	7783-20-2	0.17667%	0.01847%
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.13038%	0.01363%
			Polyethylene glycol monohexyl ether	31726-34-8	0.1026%	0.01072%
			Diammonium peroxidisulphate	7727-54-0	0.0188%	0.00197%
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.01394%	0.00146%
			Urea	57-13-6	0.00859%	0.0009%
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.0043%	0.00045%
			Vinylidene chloride/methylacrylate copolymer	25038-72-6	0.00248%	0.00026%
			Non-crystalline silica (impurity)	7631-86-9	0.00248%	0.00026%
			Polypropylene glycol	25322-69-4	0.00248%	0.00026%
			Sodium sulfate	7757-82-6	0.002%	0.00021%
			Propan-2-ol	67-63-0	0.00086%	9E-05%
			2-propenamid	Ge0eral	0.00038%	4E-05%
			Tetrasodium ethylenediaminetetraacetate	Ge0eral	0.00019%	2E-05%
			Dimethyl siloxanes and silicones	63148-62-9	0.0001%	1E-05%
			Magnesium silicate hydrate (talc)	14807-96-6	0.0001%	1E-05%
			poly(tetrafluoroethylene)	9002-84-0	0.0001%	1E-05%
			Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	0.0001%	1E-05%
			Octamethylcyclotetrasiloxane	556-67-2	0.0001%	1E-05%
			Decamethyl cyclopentasiloxane	Ge0eral	0.0001%	1E-05%
			Copper(II) sulfate	7758-98-7	0.0001%	1E-05%
			Dodecamethylcyclohexasiloxane	540-97-6	0.0001%	1E-05%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.02194%	0.00229%
Mud Acid 7.5%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	0.04237%	0.00443%
ABF	Petroplex	Acid	Ammonium Hydrogen Fluoride	1341-49-7	0.1034%	0.01081%
			Ammonium Fluoride	12125-01-8	0.00544%	0.00057%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	0.00039%	4E-05%
			Heavy Aromatic Naptha	64742-94-5	0.00039%	4E-05%
			Isopropanol	67-63-0	0.00039%	4E-05%
			Fatty Acids	Proprietary	0.00013%	1E-05%
			Complex Alkylaryl Polyo-Ester	Proprietary	0.00013%	1E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	0.00013%	1E-05%
			Formaldehyde	50-00-0	0.00013%	1E-05%
			Acetylenic Alcohol	Proprietary	7E-05%	1E-05%
			Propargyl Alcohol	107-19-7	7E-05%	1E-05%
			Napthalene	91-20-3	7E-05%	1E-05%
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	0.0366%	0.00383%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	0.00013%	1E-05%
			Isopropanol	67-63-0	0.00076%	8E-05%
			Polyethylene Glycol	25322-68-3	6E-05%	1E-05%
			Napthalene	91-20-3	1E-05%	0%
			Phosphoric Acid Ester	Proprietary	0.00013%	1E-05%
			Oxyalkylated Alcohol	Proprietary	0.00013%	1E-05%
			Oxyalkylated Alkyl Alcohol	Proprietary	0.00013%	1E-05%
ClO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	0.00136%	0.00014%
† Proprietary Technology					0%	0%

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: Skipper Herring Title: Manager Stimulation Operations

Date: 2/12/2015

E-mail Address: sherring@cimarex.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.