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.
30-025-41508

2. Well Name:
RUBY FEDERAL #046

3. Well Number:
046

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:B Lot:B Section:18 Township:17S Range:32E
Feet from:330 N/S Line:N
Feet from:2310 E/W Line:E

5. Bottom Hole Location:
Unit:B Lot:B Section:18 Township:17S Range:32E
Feet from:330 N/S Line:N
Feet from:2310 E/W Line:E

6. latitude: 32.8409790141778 longitude: -103.804830195769

7. County:
Lea

8. Operator Name and Address:
CONOCOPHILLIPS COMPANY
3401 E. 30th Street
Farmington 87402

9. OGRID: 217817

10. Phone Number: 505-326-9518

11. Last Fracture Date: 2/6/2014 Frac Performed by: Cudd Energy Services

12. Production Type:
O

13. Pool Code(s):
44500

14. Gross Fractured Interval:
5,422 ft to 6,572 ft

15. True Vertical Depth (TVD):
6,918 ft

16. Total Volume of Fluid Pumped:
388,047 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%	80.00709%
Sand		Proppant	Silicon Dioxide	14808-60-7	100%	14.20284%
Super DC/LC TLC/THS Opti RCS	Santrol	Proppant	Silicon Dioxide	14808-60-7	97%	2.09645%
			P/F Novolak Resin	9003-35-4	5%	0.10806%
			Hexamethylenetetramine	1009-7-0	1%	0.02161%
B-115	Reef	Liquid Biocide	Gluteraldehyde	111-30-8	15%	0.00754%
			Methanol(Proprietary)	67-56-1	85%	0.04273%
			Water(Proprietary)	7732-18-5	85%	0.04273%
15% Hydrochloric Acid	Reagent	Scale Dissolver	37% Hydrochloric Acid	7647-01-0	15%	0.41554%
			Water	7732-18-5	85%	2.35473%
I-112	Chemplex,L.C.	Acid Corrosion Inhibitor	Methanol	67-56-1	49.6%	0.00107%
			Propargyl Alcohol	107-19-7	4%	9E-05%
SG-15G	PfP Technology	Polymer	Guar Gum	9000-30-0	50%	0.25101%
			Petroleum Distillate (Mineral Oil)	64742-47-8	55%	0.27611%
			Bentonite Clay	14808-60-7	2%	0.01004%
			Surfactant	68439-51-0	2%	0.01004%
XL-335	ASK	Crosslinker	Ethylene Glycol	107-21-1	25%	0.02303%
			Potassium Hydroxide	1310-58-3	25%	0.02303%
			Proprietary	Proprietary	25%	0.02303%
			Proprietary	Proprietary	15%	0.01382%
			Proprietary	Proprietary	10%	0.00921%
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00099%
GB-150	Chemplex, L.C.	Breaker	Non-hazardous ingredients	NA	100%	0.07484%
EGB-16LT	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00816%
			Silica, Crystalline-Quartz	14808-60-7	10%	0.00082%
NE-212	Chemplex, L.C.	Non-emulsifier	Isopropanol	67-63-0	5%	0.00011%
			Methanol	67-56-1	50%	0.00112%
			Alkyl Quanternary Ammonium Chlorides	Mixture	25%	0.00056%
			Diethanolamine	111422	2%	2E-05%
			1,3-Propanediol, 2-amino-2-(hm)-polymer	Trade Secret	8%	0.00018%
			2-Butoxy-1-ethanol	111-76-2	7%	0.00016%
			Cocamide Diethanolamine Salt	68603-42-9	2%	4E-05%
NE-227	CESI	Non-emulsifier	Isopropanol	67-63-0	15%	0.01131%
			Methanol	67-56-1	15%	0.01131%
			Ethoxylated Nonylphenol	9016-45-9	20%	0.01508%
FE-4	Chemplex, L.C.	Iron Control Additive	Citric Acid Anhydrous	77-92-9	55%	0.00839%
			Water	7732-18-5	55%	0.00839%
Superset W	Santrol	Resin Activator	Methanol	67-56-1	50%	0.01754%
			Poly(oxyethylene) nonyphenol ether	9016-45-9	54%	0.01895%

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: Ashley Martin Title: Staff Regulatory Technician

Date: 2/10/2014

E-mail Address: Ashley.Martin@conocophillips.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.