

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

HYDRAULIC FRACTURING FLUID
DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:B Lot:B Section:4 Township:26S Range:32E
Feet from:330 N/S Line:N
Feet from:2180 E/W Line:E

5. Bottom Hole Location:
Unit:B Lot:B Section:4 Township:26S Range:32E
Feet from:330 N/S Line:N
Feet from:2180 E/W Line:E

6. latitude: longitude:
32.0787922457537 -103.678499541683

7. County:
Lea

8. Operator Name and Address:
CIMAREX ENERGY CO. OF COLORADO
202 S. Cheyenne Ave, Ste 1000
Tulsa 74103

9. OGRID: 162683

10. Phone Number: 918-295-1763

11. Last Fracture Date: 11/5/2014 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97903

14. Gross Fractured Interval:
9,345 ft to 9,440 ft

15. True Vertical Depth (TVD):
9,440 ft

16. Total Volume of Fluid Pumped:
4,023,308 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)
Fresh Water	Operator	Base Fluid	Fresh Water	7732-18-5	100%	88.87786%
Premium White Sand	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100%	10.926%
LoSurf-360	Halliburton	Surfactant	Complex Alkylamine	100545-50-4	100%	0.01018%
			Poly(oxy-1,2-ethanediyl), alpha -isodecyl- omega -hydroxy-	61827-42-7	30%	0.03053%
PermVis VFR-10	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30%	0.02849%
			Alcohols, C12-16, ethoxylated	68551-12-2	10%	0.0095%
			Ammonium chloride	12125-02-9	10%	0.0095%
			9-Octadecenamide,n,n-bis-2 (hydroxy-ethyl)-,(Z)	93-83-4	5%	0.00475%
OptiKleen-WF	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7	30%	0.00021%
OPTIFLO-III	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.01549%
			Crystalline silica, quartz	14808-60-7	100%	0.00039%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.02927%
SP	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00041%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.00816%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	Proprietary	30%	3E-05%
			Heavy Aromatic Naptha	64742-94-5	30%	3E-05%
			Isopropanol	67-63-0	30%	3E-05%
			Fatty Acids	Proprietary	10%	1E-05%
			Complex Alkylaryl Polyo-Ester	Proprietary	10%	1E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	10%	1E-05%
			Formaldehyde	50-00-0	10%	1E-05%
			Acetylenic Alcohol	Proprietary	5%	0%
			Propargyl Alcohol	107-19-7	5%	0%
			Napthalene	91-20-3	5%	0%
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00272%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	1E-05%
			Isopropanol	67-63-0	60%	6E-05%
			Polyethylene Glycol	25322-68-3	5%	0%
			Napthalene	91-20-3	1%	0%
			Phosphoric Acid Ester	Proprietary	10%	1E-05%
			Oxyalkylated Alcohol	Proprietary	10%	1E-05%
			Oxyalkylated Alkyl Alcohol	Proprietary	10%	1E-05%
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.0001%
Ingredients Listed Below This Line Are Part of the			Alcohols, C12-16, ethoxylated	68551-12-2	0%	0%
			Ammonium chloride	12125-02-9	0%	0%
			Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4	0%	0%
			Crystalline Silica, Quartz	14808-60-7	0%	0%
			Cured acrylic resin	Proprietary	0%	0%
			Fatty acid tall oil amide	Proprietary	0%	0%
			Silica gel	112926-00-8	0%	0%
			Sodium chloride	7647-14-5	0%	0%
			Sorbitan monooleate	9005-65-6	0%	0%
			polyoxyethylene derivative			
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	0%	0%
			Surfactant mixture	Proprietary	0%	0%
			Water	7732-18-5	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

Manager Stimulation

Date: 11/20/2014 Title: Operations

E-mail Address: sherring@cimarex.com

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