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.
30-015-41242

2. Well Name:
SHOELESS JOE 32 STATE #004H

3. Well Number:
004H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:M Lot:M Section:32 Township:19S Range:30E
Feet from:600 N/S Line:S
Feet from:190 E/W Line:W

5. Bottom Hole Location:
Unit:M Lot:M Section:32 Township:19S Range:30E
Feet from:600 N/S Line:S
Feet from:333 E/W Line:E

6. latitude: 32.6113042014006 longitude: -104.002207258904

7. County:
Eddy

8. Operator Name and Address:
COG OPERATING LLC
One Concho Center
600 W. Illinois Ave
Midland 79701

9. OGRID: 229137

10. Phone Number: 432-685-4332

11. Last Fracture Date: 10/15/2013 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
49622

14. Gross Fractured Interval:
8,526 ft to 12,775 ft

15. True Vertical Depth (TVD):
8,378 ft

16. Total Volume of Fluid Pumped:
3,163,381 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)
Fresh Water	Operator				100%	82.84756%
HYDROCHLORIC ACID 5-10%	Halliburton		Hydrochloric acid	7647-01-0	10%	0.18641%
Premium White- 20/40	Halliburton				100%	11.87314%
CRC - 20/40	Halliburton				100%	2.98166%
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30%	0.01001%
			Monoethanolamine borate	26038-87-9	100%	0.03337%
Cla-Web™	Halliburton	Additive	Ammonium salt	Confidential Business Information	60%	0.03262%
HpH BREAKER	Halliburton	Breaker	Sodium chloride	7647-14-5	30%	0.00013%
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2	30%	0.00025%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00479%
SUPERSET W	Halliburton	Activator	Methanol	67-56-1	60%	0.04574%
			Ethoxylated nonylphenol	Confidential Business Information	60%	0.04574%
LOSURF-360	Halliburton				100%	0%
D-AIR 3000L	Halliburton	Defoamer	Alkenes	Confidential Business Information	100%	0.00676%
			Silica, amorphous precipitated	67762-90-7	30%	0.00203%
CLA-STA XP ADDITIVE	Halliburton	Clay Stabilizer	Polyepichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.00956%
SCA-130 INHIBITOR	Halliburton	Inhibitor	Acetaldehyde	75-07-0	1%	0.00026%
			Aldol	107-89-1	60%	0.01532%
			Crotonaldehyde	123-73-9	2%	0.00051%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.14398%
BE-6 MICROBIOCIDE	Halliburton	Biocide	2-Bromo-2-nitro-1,3-propanediol	52-51-7	100%	8E-05%
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz	14808-60-7	30%	0.00185%
			Walnut hulls	Mixture	100%	0.00615%
Scalechek® SCP-2 Scale Inhibitor	Halliburton	Scale Preventer	Glassy calcium magnesium phosphate	65997-17-3	100%	0.02198%

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: Brian Maiorino Title: Regulatory Analyst

Date: 11/5/2013

E-mail Address: bmaiorino@concho.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.