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.
30-025-40969

2. Well Name:
OSPREY 20 STATE COM #003H

3. Well Number:
003H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit:K Lot:K Section:20 Township:21S Range:34E
Feet from:2590 N/S Line:S
Feet from:1680 E/W Line:W

5. Bottom Hole Location:
Unit:K Lot: Section:29 Township:21S Range:34E
Feet from:1868 N/S Line:S
Feet from:1970 E/W Line:W

6. latitude: 32.4641654279942 longitude: -103.495028690506

7. County:
Lea

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: 11/25/2013 Frac Performed by: Halliburton

12. Production Type:
O

13. Pool Code(s):
97962

14. Gross Fractured Interval:
11,114 ft to 16,269 ft

15. True Vertical Depth (TVD):
10,939 ft

16. Total Volume of Fluid Pumped:
2,888,350 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				100%	83.4482%
HYDROCHLORIC ACID 5-10%	Halliburton		Hydrochloric acid	7647-01-0	10%	0.25582%
CRC Premium - 30/50	Halliburton	Proppant	Crystalline silica, cristobalite	14464-46-1	30%	4.03933%
			Mullite	1302-93-8	100%	13.46443%
			Silica, amorphous - fumed	7631-86-9	30%	4.03933%
CL-22 UC	Halliburton	Crosslinker	Potassium formate	590-29-4	60%	0.0361%
CL-31 CROSSLINKER	Halliburton	Crosslinker	Potassium hydroxide	1310-58-3	5%	0.00173%
			Potassium metaborate	13709-94-9	60%	0.02075%
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2	30%	0.00292%
Cla-Web™	Halliburton	Additive	Ammonium salt	Confidential Business Information	60%	0.02827%
LOSURF-360	Halliburton				100%	0%
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10%	0.00412%
D-AIR 3000L	Halliburton	Defoamer	Alkenes	Confidential Business Information	100%	0.01539%
			Silica, amorphous precipitated	67762-90-7	30%	0.00462%
CLA-STA XP ADDITIVE	Halliburton	Clay Stabilizer	Polyepichlorohydrin, trimethyl amine quaternized	51838-31-4	60%	0.01262%
SCALECHEK LP-55 SCALE INHIBITOR	Halliburton	Scale Inhibitor	Polyacrylate	Confidential Business Information	60%	0.01549%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.10965%
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100%	0.1332%
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100%	0.00053%
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Ammonium persulfate	7727-54-0	100%	0.00831%
			Crystalline silica, quartz	14808-60-7	30%	0.00249%
Scalechek® SCP-2 Scale Inhibitor	Halliburton	Scale Preventer	Glassy calcium magnesium phosphate	65997-17-3	100%	0.02252%

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: Brian Maiorino Title: Regulatory Analyst

Date: 1/7/2014

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.