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.
30-025-02263

2. Well Name:
VACUUM GRAYBURG SAN ANDRES UNIT #054

3. Well Number:
054

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ **Original**

☐ **Amendment**

4. Surface Hole Location:
Unit:A Lot:1 Section:2 Township:18S Range:34E
Feet from:675 N/S Line:N
Feet from:660 E/W Line:E

5. Bottom Hole Location:
Unit:A Lot:1 Section:2 Township:18S Range:34E
Feet from:675 N/S Line:N
Feet from:660 E/W Line:E

6. latitude: 32.782341 longitude: -103.524826

7. County:
Lea

8. Operator Name and Address:
CHEVRON U S A INC
Attn: Sandy Stedman-Daniel
1400 Smith
Houston 77002

9. OGRID: 4323

10. Phone Number: 713-372-2978

11. Last Fracture Date: 5/28/2015 Frac Performed by: Chemplex

12. Production Type:
O

13. Pool Code(s):
62180

14. Gross Fractured Interval:
4,710 ft to 4,850 ft

15. True Vertical Depth (TVD):
4,853 ft

16. Total Volume of Fluid Pumped:
66,155 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%	80.92422%
Sand	Multiple Suppliers	Proppant	Silicon Dioxide	14808-60-7	100%	10.28828%
Super DC/LC TLC/THS Opti RCS	Sandtrol	Proppant	Silicon Dioxide	14808-60-7	97%	3.43005%
			P/F Novolak Resin	9003-35-4	5%	0.17681%
			Hexamethylenetetramine	1009-7-0	1%	0.03536%
B-15	Brenntag	Biocide	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	20%	0.00587%
			Water	7732-18-5	80%	0.02347%
BF-200	Multiple Suppliers	Buffer	Potassium Hydroxide	1310-58-3	25%	0.02564%
			Water	7732-18-5	80%	0.08206%
FR-601	SNF	Friction Reducer	Copolymer of acrylamide and sodium acrylate	25987-30-8	10%	0.00103%
			Isoparaffinic Solvent	64742-47-8	10%	0.00103%
			Water	7732-18-5	60%	0.00617%
			Nonylphenol	9016-45-9	10%	0.00103%
			Sorbitan Monooleate	1338-43-8	10%	0.00103%
15% Hydrochloric Acid	Reagent	Scale Dissolver	37% Hydrochloric Acid	7647-01-0	15%	0.5917%
			Water	7732-18-5	85%	3.35294%
I-112	Chemplex,L.C.	Acid Corrosion Inhibitor	Methanol	67-56-1	49.6%	0.00305%
			Propargyl Alcohol	107-19-7	4%	0.00024%
SG-15G	PfP Technology	Polymer	Guar Gum	9000-30-0	50%	0.36717%
			Petroleum Distillate (Mineral Oil)	64742-47-8	55%	0.40389%
			Bentonite Clay	14808-60-7	2%	0.01469%
			Surfactant	68439-51-0	2%	0.01469%
CX-10	PfP Technology	Crosslinker	Sodium Borate Decahydrate	1303-96-4	29.9%	0.00885%
			Water	7732-18-5	69.1%	0.02046%
CX-14G	Magnablend	Crosslinker	Petroleum Distillates	Proprietary	100%	0.07707%
			Organic alcohol	Proprietary	100%	0.07707%
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0	99.9%	0.00162%
GB-150	Chemplex, L.C.	Breaker	Non-hazardous ingredients	NA	100%	0.07535%
NE-217	Chemplex, L.C.	Non-emulsifier	Methanol	67-56-1	50%	0.02328%
FE-4	Multiple Suppliers	Iron Control Additive	Citric Acid Anhydrous	77-92-9	55%	0.01194%
			Water	7732-18-5	55%	0.01194%
SI-625	Multiple Suppliers	Scale Inhibitor	Methanol	67-56-1	19.9%	0.01864%
S-222	Chemplex, L.C.	Flouro Surfactant	Methanol	67-56-1	100%	0.05402%
Superset W	Santrol	Resin Activator	Methanol	67-56-1	50%	0.01224%
			Poly(oxyethylene) nonyphenol ether	9016-45-9	54%	0.01322%

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: Denise Pinkerton Title: Regulatory Specialist

Date: 8/31/2015

E-mail Address: leakejd@chevron.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.