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.
30-015-40068

2. Well Name:
WELCH RL STATE #014

3. Well Number:
014

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ **Original**

☐ **Amendment**

4. Surface Hole Location:
Unit:F Lot:F Section:28 Township:17S Range:28E
Feet from:2310 N/S Line:N
Feet from:2310 E/W Line:W

5. Bottom Hole Location:
Unit:F Lot:F Section:28 Township:17S Range:28E
Feet from:2310 N/S Line:N
Feet from:2310 E/W Line:W

6. latitude: 32.8061730000109 longitude: -104.181805670636

7. County:
Eddy

8. Operator Name and Address:
LRE OPERATING, LLC
1111 Bagby
Suite 4600
Houston 77002

9. OGRID: 281994

10. Phone Number: 713-292-9517

11. Last Fracture Date: 4/15/2015 Frac Performed by: PRODUCERS SERVICE

12. Production Type:
O

13. Pool Code(s):
97253

14. Gross Fractured Interval:
2,061 ft to 3,170 ft

15. True Vertical Depth (TVD):
3,660 ft

16. Total Volume of Fluid Pumped:
981,498 gals

17. Total Volume of Re-Use Water Pumped:
981,498 gals

18. Percent of Re-Use Water in Fluid Pumped:
100%

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)
SAND	PSC	PROPPANT	SILICON DIOXIDE	14808-60-7	100%	8.50151%
HYDROCHLORIC ACID	PSC	ACIDIZING	HYDROCHLORIC ACID	7647-01-0	10%	0.04479%
FRA407	PSC	FRICTION REDUCER	PETROLEUM DISTILLATE HYDRATED LIGHT	64742-47-8	40%	0.01579%
			POLYACRYLAMDE SALT	TRADE SECRET	30%	0.01184%
			SODIUM CHLORIDE	7647-14-5	5%	0.00197%
			AMMONIUM CHLORIDE	12135-02-9	5%	0.00197%
			ALCHOLS (C10-16) ETHOXYLATED	TRADE SECRET	5%	0.00197%
			TALL OIL	TRADE SECRET	2%	0.00079%
			TRADE SECRET	TRADE SECRET	1%	0.00039%
PRO HIB 256	PSC	CORROSION INHIBITOR	METHANOL	67-56-1	73%	0.00059%
			PROPARGYL ALCOHOL	107-19-7	7%	6E-05%
PRO REDUCE	PSC	IRON CONTROL	2-MERCAPTOETHANOL	60-24-2	100%	0.00143%
			AQUA AMMONIA	7664-41-7	5%	7E-05%
			CUPRIC CHLORIDE DIHYDATE	10125-13-0	5%	7E-05%
			POTASSIUM IODIDE	7681-11-0	1%	1E-05%
PRO BIA 15G	PSC	BIOCIDE	GLUTARALDEHYDE	111-30-8	14%	0.00353%
			DEDECYL DIMETHYL AMMONIUM CHLORIDE	7173-51-5	3%	0.00076%
			ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE	68424-85-1	3%	0.00076%
			ETHANOL	64-17-5	3%	0.00076%
PRO SCALE 679	PSC	SCALE INHIBITOR	SCALE INHIBITOR	TRADE SECRET	40%	0.01138%
			GLYCERINE	56-81-5	30%	0.00854%
PRO NE 145	PSC	NON-EMULSIFIER	METHANOL	67-56-1	15%	7E-05%
			COCAMIKE DIETHANOLAMINE SALT	68603-42-9	7%	3E-05%
			2-BUTOXYETHANOL	111-76-2	15%	7E-05%
			DIETHANOLAMINE	111-42-2	3%	1E-05%

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: Mike Pippin Title: Consultant

Date: 5/6/2015

E-mail Address: mike@pippinllc.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.