

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:
30-025-41640

2. Well Name:
WEST COPPERLINE 29 FED STATE COM #002H

3. Well Number:
002H

HYDRAULIC FRACTURING FLUID DISCLOSURE

☒ Original

☐ Amendment

4. Surface Hole Location:
Unit D Lot D Section 29 Township 23S Range 34E
Feet from 330 N/S Line N
Feet from 660 E/W Line W

5. Bottom Hole Location:
Unit M Lot Section 29 Township 23S Range 34E
Feet from 349 N/S Line S
Feet from 420 E/W Line W

6. latitude: 32.2819798013688 longitude: -103.498440787918

7. County: Lea

8. Operator Name and Address:
CAZA OPERATING, LLC
200 N LORAIN
STE 1550
MIDLAND 79701

9. OGRID: 249099

10. Phone Number: 432-682-7424

11. Last Fracture Date: 3/27/2014 Frac Performed by: Nabors Completion & Production Services

12. Production Type:
O

13. Pool Code(s):
2209

14. Gross Fractured Interval:
10,822 ft to 14,864 ft

15. True Vertical Depth (TVD):
10,565 ft

16. Total Volume of Fluid Pumped:
55,063 gals

17. Total Volume of Re-Use Water Pumped:
0 gals

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

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	Caza Operating, LLC	Water	Water	7732-18-5	100%	84.6468502%
HCL Acid (12.5%-18.0%)	Nabors Completion & Production Ser	Bulk Acid	Hydrogen Chloride	7647-01-0	18%	0.210259%
Acid Inhibitor 3M (AL-3M)	Nabors Completion & Production Ser	Acid Corrosion Inhibitors	water	7732-18-5	87.5%	1.022094%
			1-DECANOL	112-30-1	5%	0.000238%
			1-OCTANOL	111-87-5	2.5%	0.000119%
			2-Butoxyethanol	111-76-2	7%	0.000333%
			Cinnamaldehyde	104-55-2	6%	0.000286%
			Ethoxylated Nonyphenol	68412-54-4	5%	0.000238%
			Ethylene Glycol	107-21-1	40%	0.001905%
			Isopropyl Alcohol	67-63-0	2.5%	0.000119%
			N,N-Dimethylformamide	68-12-2	20%	0.000952%
			Polyethylene-Glycol	25322-68-3	1%	4.8E-05%
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	13%	0.000619%
			Triethyl Phosphate	78-40-0	2.5%	0.000119%
KR-153SL	Nabors Completion & Production Ser	Biocides	water	7732-18-5	25%	0.00119%
			2,2-dibromo-3-nitropropionamide	1022-01-2	20%	0.004152%
			Polyethylene-Glycol	25322-68-3	50%	0.01038%
Clay Treat LT	Nabors Completion & Production Ser	Clay Control Additives	water	7732-18-5	80%	0.016608%
			ammonium,(2-Hydroxyethyl)trimethyl-chloride	67-48-1	80%	0.073256%
XL-11	Nabors Completion & Production Ser	Cross-Linker	Water	7732-18-5	65%	0.059521%
			Ethylene Glycol	107-21-1	10%	0.010408%
			Potassium Hydroxide	1310-58-3	5%	0.005204%
			Potassium Metaborate	13709-94-9	30%	0.031224%
OB-2	Nabors Completion & Production Ser	Gel Breaker	water	7732-18-5	75%	0.078059%
			Ammonium Persulfate	7727-54-0	100%	0.005967%
			Silica,crystalline quartz	7631-86-9	10%	0.000597%
			vinylidene chloride-methyl acrylate copolymer	25038-72-6	25%	0.001492%
EXP-F0829-13	Nabors Completion & Production Ser	Gel Breakers	Hemicellulase Enzyme	Proprietary	1%	5.5E-05%
			Proprietary	Proprietary	0%	0.004964%
			Proprietary	Proprietary	0%	0.001103%
LSG-100	Nabors Completion & Production Ser	Gelling Agents	Crystalline Silica (in the form of quartz)	14808-60-7	2%	0.006637%
IC-500	Nabors Completion & Production Ser	Iron Control Additives	guar gum	9000-30-0	50%	0.165925%
			Organophylic Clay	68953-58-2	2%	0.006637%
			Petroleum Distillates	64742-47-8	60%	0.19911%
			Surfactant	68439-51-0	2%	0.006637%
			water	7732-18-5	75%	0.002753%
Super Green Solent-M	Nabors Completion & Production Ser	Paraffin & Scale Additives	Aqua Ammonia	1336-21-6	5%	0.000184%
			Cupric Chloride	10125-13-0	7%	0.000257%
			Potassium Iodide	7681-11-0	1%	3.7E-05%
			water	7732-18-5	7%	0.000257%
			Aliphatic Hydrocarbons	Proprietary	95%	0.006433%
Super TSC-LTS	Nabors Completion & Production Ser	Paraffin & Scale Additives	Dodecane	Proprietary	14%	0.000948%
			Tetradecane	Proprietary	11%	0.000745%
			Undecane	Proprietary	8%	0.000542%
			Proprietary	Proprietary	15%	0.002858%
Super OW 3	Nabors Completion & Production Ser	Surfactant & Foamers	Proprietary	Proprietary	15%	0.002858%
			Proprietary	Proprietary	15%	0.002858%
			Proprietary	Proprietary	15%	0.011433%
			water	7732-18-5	60%	0.000607%
Super-Flo RPM	Nabors Completion & Production Ser	Surfactants & Foamers	Dimethylcocoamine,bis(chlorethyl) ether,diquaternary ammo	68607-28-3		
			Dimethyldiallylammonium chloride	7398-69-8	5%	5.1E-05%
			Isopropyl Alcohol	67-63-0	60%	0.000607%
			Methanol	67-56-1	30%	0.000304%
			water	7732-18-5	60%	0.000607%
			D-Limonene	5989-27-5	20%	0.016512%
			Isopropanol	67-63-0	20%	0.016512%
			N-Methyl Pyrrolidone	872-50-4	30%	0.024768%
			Proprietary	Proprietary	20%	0.016512%
			Proprietary	Proprietary	40%	0.033024%
Proprietary	Proprietary	25%	0.02064%			
Proprietary	Proprietary	10%	0.008256%			
TX Specific 40/70 mesh Sand	Nabors Completion & Production Ser	Bulk Sand	water	7732-18-5	40%	0.033024%
			Aluminum Oxide	1344-28-1	1.1%	0.004072%
Carbo Ceramics Carbolite 20/40	Nabors Completion & Production Ser	Manufactured - Carbo Ceramics Propant	Crystalline Silica, Quartz	14808-60-7	99.9%	0.369835%
			Iron Oxide	1309-37-1	0.1%	0.00037%
			Titanium Oxide	13463-67-7	0.1%	0.00037%
			Mullite	1302-93-8	85%	11.166673%
			Silica Crystalline-Cristobalite	14464-46-1	20%	2.627453%
			Silicon Dioxide	7631-86-9	35%	4.598042%

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: Richard Wright

Title: _____

Date: 4/9/2014

E-mail Address: rwright@cazapetro.com

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