District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

Form C-147 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Recy	cling	Facility	Only

Type of action: Permit Registration Modification Closure Other (explain)			
Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.			
I, (F)			
Operator: Cimarex Energy Co. (For multiple operators attach page with information) OGRID #:215099			
Address: 220 S. Cheyenne Ave Ste 1000 Tulsa, OK 74103			
Facility or well name (include API# if associated with a well): Vaca Draw SWD			
OCD Permit Number:(For new facilities the permit number will be assigned by the district office)			
U/L or Qtr/Qtr SE/SE Section 21 Township 25S Range 33E County: LEA			
Surface Owner: Federal State Tribal Trust or Indian Allotment			
2.			
Recycling Facility:			
Location of recycling facility (if applicable): Latitude <u>32.1106148</u> Longitude <u>-103.5708542</u> NAD83			
Proposed Use: ☐ Drilling* ☐ Completion* ☐ Production* ☐ Plugging *			
*The re-use of produced water may NOT be used until fresh water zones are cased and cemented			
Other, requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on			
groundwater or surface water.			
☐ Fluid Storage			
Above ground tanks			
Activity permitted under 19.15.36 NMAC explain type: Dther explain			
Closure Report (required within 60 days of closure completion): Recycling Facility Closure Completion Date:			
3. Variances:			
Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the			
environment.			
Check the below box only if a variance is requested: Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the			
variance information on a separate page and attach it to the C-147 as part of the application.			
If a Variance is requested, it must be approved prior to implementation.			
4. Operator Application Certification:			
I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.			
Name (Print): Robert Huizenga Title: Water Resource Manager: Engineering			
Signature: Date: April 23, 2018			
e-mail address: rhuizenga@cimarex.com Telephone: 918-295-1700			
e-mail address: mulzenga@emarex.com			
5. 6/5/2018			
ocd Representative Signature: Approval/Registration Date: 6/5/2018			
Title: _Environmental Specialist OCD Permit Number: 1RF-30			
OCD Conditions			
Additional OCD Conditions on Attachment			

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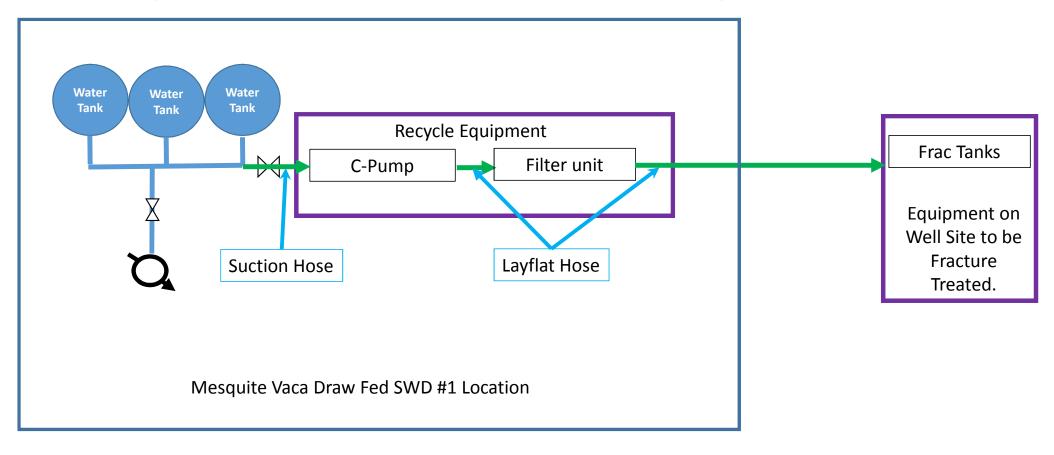
Oil Conservation Division

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Cimarex Energy Co. Produced Water Reuse Plan

Simple Schematic of PW Reuse by Cimarex



Process Overview

- Pull water from the water tanks only when it is needed during the fracture treatment.
- Dispose of water in SWD during time water is not needed.
- Only suspended solids will be removed.
 - Cut point will be 25 microns
- TDS will not be conditioned or removed from the water
- Lines flushed and pigged with FW before rigging down of units

Centrifugal Pump



Filter Unit

- Produced water is filtered with a 25micron sock filter
- Filters unit is placed in containment
- Roll off bin to store used filters are placed in containment
- Used filters are disposed of at approved land fills



Containments for Frac Tanks/Filter Unit

- Geomat placed on the ground to prevent punctures of the liner
- Double lined with a minimum of a 40 mil liner & 60 mil liner
- All Frac Tanks that will have Produced Water in them will have containments
- Frac tanks are removed as soon as we stop moving PW to location.



