



1120 Lincoln Street, Suite 801  
Denver, CO 80203

October 3, 2014

A.M. O'Hare, President  
Maralex Resources, Inc.  
P.O. Box 338  
Ignacio, CO 81137

RE: Katie Eileen 34-7-35 #3, COGCC Facility ID #311960  
Denial of Approval of Form 27 Submitted September 8, 2014

Dear Mr. O'Hare,

The Colorado Oil and Gas Conservation Commission (COGCC) has received and reviewed the Form 27, Site Investigation and Remediation Workplan, for the lined pit at the above-referenced Oil and Gas Location in La Plata County, Colorado. The Form 27 as submitted is not approved.

A site inspection (COGCC Document # 674900002) on April 11, 2014 documented a pit at the location of the Katie Eileen 34-7-35 #3 well. According to COGCC records, the Katie Eileen 34-7-35 #3 well was completed on June 1, 2007, with no indication of the closure the drilling pit. COGCC Rules 901, 902, 905, and 1003 specify the requirements for pit closure. Exploration and production (E&P) waste shall be managed in accordance to COGCC 900 Series Rules, in particular Rule 907.

The Form 27 states the following:

- "The State has inspected and analyzed the soil in the pit with two samples."
- "The State has found no evidence of contamination beyond an elevated SAR."
- "There is no evidence of contaminants in the pit except for high SAR."

While the COGCC did collect grab samples of material contained in the pit, the COGCC did not conduct a characterization for the absence or presence of potential impact from the use of the Pit Facility, nor were the contents of the pit completely characterized.

The Form 27 also states:

- "The pit was not closed upon well completion because the landowner has assumed ownership of the pit."



- "Maralex recommends the following actions to the landowner who has assumed responsibility for the pit: If it is determined that the pit is contaminated from the sampling that the landowner will conduct, then the pit should be excavated to a depth at which there is no visual evidence of contamination. The soils in the pit should then be analyzed again for any contaminants that exceeded the Table 910-1 [sic] limits. The liner in the pit should also be removed and disposed of with Transit Waste or other licenced [sic] facility or service. "
- "The pit is currently in use by the landowner and there is no remediation anticipated at this time."

While COGCC Rule 1001.c. does allow for a surface owner waiver of certain provisions of Rules 1002, 1003, and 1004, it does so with the express limitation that the Operator is not relieved from the requirements of the 900 Series Rules. Drilling pit closure is required under Rule 905.a. and proper E&P waste disposal is required by Rule 907. Any waivers under Rule 1001.c. must demonstrate that compliance with such rules is not necessary to protect public health, safety, and welfare, including prevention of significant environmental impacts.

Within 30 days of receipt of this letter, submit a revised Form 27 which addresses the following:

1. Remove fluids, if any, from the pit as soon as practicable. Documentation of the volume of fluids disposed and location(s) of disposal must be provided to COGCC.
2. Provide a summary of past use and current use of the Pit Facility.
3. Characterize the E&P Waste contents of the pit. E&P Waste shall not be allowed to remain in the pit in exceedence of Table 910-1 standards.
4. Complete a sensitive area determination in accordance with COGCC Rule 901.e. to demonstrate that no impacts to surface or groundwater occurred. If impacts are identified through this process, a supplemental Form 27 shall be submitted with a plan to fully investigate and remediate the impacts.
5. Discrete soil samples shall be collected from beneath the pit liner(s) at the bottom and along the sidewalls of the pit to adequately characterize whether an impact has occurred. Additionally, discrete samples shall be collected from beneath the pit liner where the liner has been compromised. Composite samples will NOT be accepted for this purpose. Samples shall be analyzed for the constituents listed in Table 910-1.
6. Notify the COGCC at least 72 hours, prior to removal of the pit liner(s), sampling, investigation, and remedial activities. Notifications shall be made to Alex Fischer (alex.fischer@state.co.us 303-894-2100 x5138) and Jim Hughes (jimo.hughes@state.co.us 970-903-4072) by email or phone.

Mr. A.M. O'Hare

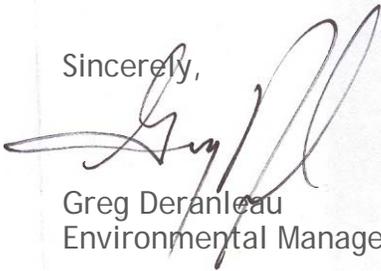
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Based upon the results of the completed investigations and remediation, if necessary, the Operator may file for a variance in accordance with 502.b. for final pit closure, interim reclamation and final reclamation as necessary for the surface owner to maintain the pit for uses other than oil and gas related activities.

Since the work at this Oil and Gas Location is subject to current COGCC enforcement action, please continue to correspond regarding enforcement matters to COGCC's representative at the Attorney General's office, Mari Deminski. For technical questions regarding this letter or future investigations and workplans, please contact me or Alex Fischer, Western Environmental Supervisor.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Deranleau", is written over a light gray rectangular background.

Greg Deranleau  
Environmental Manager

- cc. Alex Fischer - Western Environmental Supervisor, COGCC
- Matt Lepore - Director, COGCC
- Mari Deminski - Assistant Attorney General, Natural Resources and Environment Section
- Naomi Azulai - Production Technician, Maralex Resources, Inc. (via email)

State of Colorado  
**Oil and Gas Conservation Commission**



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FOR OGCC USE ONLY  
SEP 08 2014  
OGCC  
OGCC Employee  
 Spill  Complaint  
 Inspection  NOAV  
Tracking No:

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

Spill or Release  Plug & Abandon  Central Facility Closure  Site/Facility Closure  Other (describe): Pit Closure

OGCC Operator Number: <u>53255</u>	Contact Name and Telephone: <u>Naomi Azulai</u>
Name of Operator: <u>Maralex Resources, Inc.</u>	No: <u>970-563-4000</u>
Address: <u>PO Box 338</u>	Fax: <u>970-563-4116</u>
City: <u>Ignacio</u> State: <u>CO</u> Zip: <u>81137</u>	
API Number: <u>05-067-09351</u>	County: <u>La Plata</u>
Facility Name: _____	Facility Number: <u>TBD</u>
Well Name: <u>Katie Eileen 34-7-35</u>	Well Number: <u>3</u>
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SWSE Sec 35 T34N R7W 6PM</u>	Latitude: <u>37.1426</u> Longitude: <u>-107.5742</u>

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Drill Cuttings

Site Conditions: Is location within a sensitive area (according to Rule 901e)?  Y  N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): non-cropland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Arboles clay 3 to 12 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): 270' from Spring Creek

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>Inside Pit</u>	<u>COGCC</u>
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

**REMEDIALTION WORKPLAN**

Describe initial action taken (if previously provided, refer to that form or document):

The State has inspected and analyzed the soil in the pit with two samples. The pit was not closed upon well completion because the landowner has assumed ownership of the pit.

Describe how source is to be removed:

The State has found no evidence of contamination beyond an elevated SAR. Maralex recommends the following actions to the landowner who has assumed responsibility for the pit: If it is determined that the pit is contaminated from the sampling that the landowner will conduct, then the pit should be excavated to a depth at which there is no visual evidence of contamination. The soils in the pit should then be analyzed again for any contaminants that exceeded the Table 910-1 limits. The liner in the pit should also be removed and disposed of with Transit Waste or other licensed facility or service.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

There is no evidence of contaminants in the pits except for high SAR. To allow vegetation to grow over the backfilled pit, Maralex recommends that the landowner use clean soil with an SAR less than 12 for the top three feet of soil when backfilling the pit. If it is determined that excavation of the pit is required, then the soil should be landfarmed on site by the landowner according to the following parameters: The affected soil will be placed on plastic sheeting to a loose depth no greater than 3' as indicated by using a device on the surface of the liner designating depth. The area required will be determined by the volume of soil excavated from the pit. The area is calculated by dividing the volume of soil by 3' deep. A composite sample should be analyzed for the Table 910-1 parameters that were exceeded during initial sampling. The soil should be cultivated monthly by manually operated equipment and the facility should be regularly inspected during routine site visits.



Tracking Number: Name of Operator: OGCC Operator No: Received Date: Well Name & No: Facility Name & No:

Page 2 REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

It is not believed that groundwater is impacted; however, if it is determined through the process of remediating/reclaiming the pit that groundwater has been impacted, a ground water monitoring plan should be developed by the landowner.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Once analytical results indicate all Table 910-1 constituents are within regulatory parameters, the landowner should backfill the pit by compacting soil in one foot lifts. The top three feet of the pit should be filled with clean native soil with a SAR < 12.

The samples of the soil in the pit should be collected when this plan is approved. In order for the results of the testing to be available by the end of September, the samples should be collected before 9/15/2014.

Reclamation should commence and be completed in 10/2014.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? [X] Y [ ] N If yes, describe:

Three or four samples should be taken from under the pit liner. One of the samples should be analyzed for all the Table 910-1 parameters. The other samples should be tested for the following parameters, based on the history of the pit and the results of the testing that the State conducted in 4/2014; TPH, EC, SAR, pH, and arsenic. A background sample should also be collected to obtain a background value to arsenic since it is believed that the soil has natural levels of arsenic above the Table 910-1 limit.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

If E&P waste is encountered, it should be disposed of in accordance with applicable local, State and Federal requirements. The preferred treatment method for any impacted soils removed from the pit will be to landtreat and use the soil onsite for grading once parameters test under the Table 910-1 limits.

The pit liner should be disposed of with Transfer Waste or other licensed service or facility.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 4/11/2014 Date Site Investigation Completed: Date Remediation Plan Submitted: 9/8/2014 Remediation Start Date: Anticipated Completion Date: 10/31/2014 Actual Completion Date:

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Naomi Azulai Signed: Date: 9/8/2014 Title: Production Technician

OGCC Approved: NOT APPROVED Title: Date:

**Katie Eileen 34-7-35 #2**

**&**

**Katie Eileen 34-7-35 #3**



**Katie Eileen 34-7-35 #2 Pit**

**Katie Eileen 34-7-35 #3 Pit**

