

State of Colorado
Oil and Gas Conservation Commission

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402906374
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12/21/2021
Report taken by:
Steven Arauza

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: <u>MARALEX RESOURCES INC</u>	Operator No: <u>53255</u>	Phone Numbers
Address: <u>P O BOX 338</u>		Phone: <u>(970) 563-4000</u>
City: <u>IGNACIO</u> State: <u>CO</u> Zip: <u>81137</u>		Mobile: <u>(575) 640-9586</u>
Contact Person: <u>Travis Hahn</u>	Email: <u>thahn@maralexinc.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 21532 Initial Form 27 Document #: 402906374

PURPOSE INFORMATION

- Rule 913.c.(1): Pit or Cuttings Trench closure.
- Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- Rule 913.g: Changes of Operator.
- Rule 915.b: Request to leave elevated inorganics in situ.
- Other: _____

SITE INFORMATION

Yes Multiple Facilities

Facility Type: <u>PIT</u>	Facility ID: <u>113496</u>	API #: _____	County Name: <u>GARFIELD</u>
Facility Name: <u>W.T. SPEARS #1-28DF</u>	Latitude: <u>39.419097</u>	Longitude: <u>-108.449836</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SENW</u>	Sec: <u>28</u>	Twp: <u>7S</u>	Range: <u>99W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>
Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>045-06288</u>	County Name: <u>GARFIELD</u>
Facility Name: <u>USA 1-28DF</u>	Latitude: <u>39.419850</u>	Longitude: <u>-108.447805</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>SENW</u>	Sec: <u>28</u>	Twp: <u>7S</u>	Range: <u>99W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

Facility Type: LOCATION Facility ID: 322450 API #: _____ County Name: GARFIELD
Facility Name: USA-67S99W 28SEW Latitude: 39.419827 Longitude: -108.447996
** correct Lat/Long if needed: Latitude: _____ Longitude: _____
QtrQtr: SEW Sec: 28 Twp: 7S Range: 99W Meridian: 6 Sensitive Area? Yes

SITE CONDITIONS

General soil type - USCS Classifications CL Most Sensitive Adjacent Land Use Range land/
Farm land
Is domestic water well within 1/4 mile? No Is surface water within 1/4 mile? Yes
Is groundwater less than 20 feet below ground surface? No

Other Potential Receptors within 1/4 mile

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|---|
| <input type="checkbox"/> E&P Waste | <input type="checkbox"/> Other E&P Waste | <input checked="" type="checkbox"/> Non-E&P Waste |
| <input type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | Wellhead _____ |
| <input type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) | _____ |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	TBD	soil samples

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

N/A

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

8 soil grab samples, will be collected from the location consisting of one (1) at the wellhead, one (1) in the middle of the Earthen pit, one (1) where the separator and dehydrator were placed. Additional sampling will occur below the area where a 50 barrel production tank was placed, as well as the start and end point of the flowline and the end point of the water lines. Areas below the separator, dehydrator and flowline/water lines will be field screened with a PID and/or Petroflag. If concentrations do not indicate a hydrocarbon presence, Maralex is requesting a reduced analyte list consisting of TPH/BTEX and Inorganics (SAR/EC/pH).

Proposed Groundwater Sampling

Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Proposed Surface Water Sampling

Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

Additional alternative investigative actions described in attached Site Investigation Plan (summary):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

NA / ND

Number of soil samples collected <u>8</u>	Highest concentration of TPH (mg/kg) _____
Number of soil samples exceeding 915-1 <u>0</u>	Highest concentration of SAR _____
Was the areal and vertical extent of soil contamination delineated? _____	BTEX > 915-1 _____

Approximate areal extent (square feet) 0

Vertical Extent > 915-1 (in feet) 0

Groundwater

Number of groundwater samples collected 0

Highest concentration of Benzene (µg/l) _____

Was extent of groundwater contaminated delineated? No

Highest concentration of Toluene (µg/l) _____

Depth to groundwater (below ground surface, in feet) 0

Highest concentration of Ethylbenzene (µg/l) _____

Number of groundwater monitoring wells installed 0

Highest concentration of Xylene (µg/l) _____

Number of groundwater samples exceeding 915-1 0

Highest concentration of Methane (mg/l) _____

Surface Water

0 Number of surface water samples collected

0 Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

Were impacts to adjacent property or offsite impacts identified?

Were background samples collected as part of this site investigation?

Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) _____

Volume of liquid waste (barrels) _____

Is further site investigation required?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Wellhead was cut off 3' below the surface and hauled off.

REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

At this time, there is no reason to suspect surface or subsurface soil impacts requiring remediation are present.

Soil Remediation Summary

In Situ

Ex Situ

_____ Bioremediation (or enhanced bioremediation)

_____ Excavate and offsite disposal

_____ Chemical oxidation

_____ If Yes: Estimated Volume (Cubic Yards) _____

_____ Air sparge / Soil vapor extraction

_____ Name of Licensed Disposal Facility or COGCC Facility ID # _____

_____ Natural Attenuation

_____ Excavate and onsite remediation

_____ Other _____

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

Groundwater Remediation Summary

- _____ Bioremediation (or enhanced bioremediation)
- _____ Chemical oxidation
- _____ Air sparge / Soil vapor extraction
- _____ Natural Attenuation
- _____ Other _____

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

- Quarterly Semi-Annually Annually Other _____

Request Alternative Reporting Schedule:

- Semi-Annually Annually Other _____

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

- Report Type:** Groundwater Monitoring Land Treatment Progress Report O&M Report
 Other _____

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? _____

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards _____

E&P waste (solid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

Volume of E&P Waste (liquid) in barrels _____

E&P waste (liquid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

RECLAMATION PLAN

RECLAMATION PLANNING

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.

Location will be recontoured and reseeded with a seed mixture approved by the COGCC and chosen by High Lonesome Ranch (landowner)

Is the described reclamation complete? No _____

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

Interim Final

Did the Surface Owner provide the seed mix? Yes _____

If YES, does the seed mix comply with local soil conservation district recommendations? Yes _____

Did the local soil conservation district provide the seed mix? Yes _____

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 06/08/2022

Proposed date of completion of Reclamation. 06/30/2022

IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

PRIOR DATES

Date of Surface Owner notification/consultation, if required. _____

Actual Spill or Release date, or date of discovery. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 09/15/2021

Proposed site investigation commencement. 06/15/2022

Proposed completion of site investigation. 06/16/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 06/29/2022

Proposed date of completion of Remediation. 06/30/2022

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

OPERATOR COMMENT

Please forward onto Steven Arauza

This Initial Form 27 is being submitted to request a REM# for the closure of the location and associated facility ID's on the Dry Fork Federal 1-28 location.

If during the site investigation process hydrocarbon impacted soils are discovered, equipment onsite will be used to delineate vertical and horizontal extent of impacts. Detailed documentation along with analytical results will then be submitted to the COGCC with proposed course of actions.

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

Signed: Travis Hahn

Title: Regulatory/Production Tec

Submit Date: 12/21/2021

Email: thahn@maralexinc.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Steven Arauza

Date: 01/12/2022

Remediation Project Number: 21532

Condition of Approval**COA Type****Description**

	<p>Earthen Pit Permit, doc #651961, for Pit Facility ID #113496 reports pit dimensions of 100 ft x 50 ft with a depth of 8 ft. The attached site diagram (doc #402906436) reports pit dimensions as 35 ft x 35 ft with a depth of 8 ft.</p> <p>Operator shall ensure that the pit sample described is collected from a depth corresponding to the depth of the base of the earthen pit. The Operator shall confirm the as-built dimensions of the earthen pit on a Supplemental Form 27.</p>
	Operator shall comply with Rule 915.e.(2).B by collecting samples from areas most likely to have been impacted and by collecting an appropriate number of representative soil samples to delineate the horizontal and vertical extents of contamination.
	Comply with Rule 912 if historical impacts are discovered.
	Comply with COGCC Rule 1105 flowline abandonment requirements, including notification and verification requirements.
	Operator shall collect sample(s) from comparable, nearby non-impacted native soil for purposes of establishing background soil conditions including pH, electrical conductivity (EC) and sodium adsorption ratio (SAR), per Rule 915.e.(2).D.
	Per Rule 913.b.(2), the Operator will conduct sampling and analysis of soil, and groundwater--if encountered, to determine the horizontal and vertical extent of any contamination in excess of the cleanup concentrations in Table 915-1 for soil and groundwater. The Operator shall analyze samples for the complete Table 915-1 list and shall delineate the extent of impacts using the Table 915-1 Protection of Groundwater Soil Screening Level Concentrations.
6 COAs	

Attachment Check List

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num**Name**

402906374	FORM 27-INITIAL-SUBMITTED
402906436	SITE MAP

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Environmental	<p>Operator's request of a reduced analyte suite is NOT approved at this time. See COAs above.</p> <p>Per Rule 915.e.(2).C, the Operator may make a request to modify the list of contaminants concerned based on site-specific E&P Waste Profile and process knowledge. Any future requests to modify the list of contaminants of concern shall be based on site-specific analytical data and shall pertain to a specific area of investigation (e.g., wellhead, former pit, flowline, etc.)</p>	01/12/2022

Total: 1 comment(s)