

State of Colorado  
Oil and Gas Conservation Commission

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



Document Number:  
402706496  
Receive Date:  
06/08/2021

Report taken by:  
John Heil

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. Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATION

Name of Operator: <u>LOCIN OIL CORPORATION</u>	Operator No: <u>51130</u>	<b>Phone Numbers</b>
Address: <u>2445 TECHNOLOGY FOREST BD #710</u>		
City: <u>THE WOODLANDS</u>	State: <u>TX</u>	Zip: <u>77381</u>
Contact Person: <u>Michael Nicol</u>	Email: <u>mnicol@locinoil.com</u>	Phone: <u>(281) 362-8600</u>
		Mobile: <u>(832) 257-7373</u>

PROJECT, PURPOSE & SITE INFORMATION

**PROJECT INFORMATION**

Remediation Project #: 18766 Initial Form 27 Document #: 402706496

**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: Rule 911.a

**SITE INFORMATION** Yes Multiple Facilities

Facility Type: <u>LEASE</u>	Facility ID: <u>44635</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>FORK UN 2-5-2-1</u>	Latitude: _____	Longitude: _____	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>5</u>	Twp: <u>2S</u>	Range: <u>101W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

Facility Type: <u>PIT</u>	Facility ID: <u>103759</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>FORK UNIT 2-5-2-1</u>	Latitude: <u>39.910079</u>	Longitude: <u>-108.753360</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>5</u>	Twp: <u>2S</u>	Range: <u>101W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

Facility Type: <u>PIT</u>	Facility ID: <u>103762</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>FORK UNIT 2-5-2-1</u>	Latitude: <u>39.910079</u>	Longitude: <u>-108.753360</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>5</u>	Twp: <u>2S</u>	Range: <u>101W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

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Facility Type: <u>WELL</u>	Facility ID: _____	API #: <u>103-08443</u>	County Name: <u>RIO BLANCO</u>
Facility Name: <u>FORK UNIT 2-5-2-1</u>	Latitude: <u>39.910483</u>	Longitude: <u>-108.751267</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>5</u>	Twp: <u>2S</u>	Range: <u>101W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

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Facility Type: <u>LOCATION</u>	Facility ID: <u>315400</u>	API #: _____	County Name: <u>RIO BLANCO</u>
Facility Name: <u>FORK UNIT-62S101W 5NWNE</u>	Latitude: <u>39.910483</u>	Longitude: <u>-108.751267</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NWNE</u>	Sec: <u>5</u>	Twp: <u>2S</u>	Range: <u>101W</u> Meridian: <u>6</u> Sensitive Area? <u>No</u>

**SITE CONDITIONS**

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

**Other Potential Receptors within 1/4 mile**

An ephemeral drainage lies approximately 400 feet to the east.

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> E&P Waste      | <input type="checkbox"/> Other E&P Waste             | <input type="checkbox"/> Non-E&P Waste |
| <input checked="" type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids             | _____                                  |
| <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	Field Screening & Analytical Data

## INITIAL ACTION SUMMARY

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

The Tank Battery, Flowline and Wellhead Closure Checklist will be utilized as guides to inspect and document the location. Initial actions will consist of site delineation and determining impacts at various points on the site location. Soil samples will be collected via hand auguring to a depth of 5 feet below the surface in one (1) foot intervals and field screened using a Photo-Ionizing Detection (PID) unit and a Petroflag. After removal of the separator, a photograph will be taken and the area field screened. After removal of the meter house, a photograph will be taken and the area field screened. The on location flowline will probably be removed. Since the line held pressure prior to abandonment, field screening will be performed and photo documentation done at reasonable distances along the entire evacuation of the on location flowline. The area around the wellhead will be inspected, field screened and photos taken of the excavation and surface areas.

## 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 ):

A minimum of one soil sample will be collected from the area around the separator exhibiting the highest degree of impact, or in the absence of apparent impacts, samples will be collected below the inlet lines and below the dump lines exiting the separator. A soil sample will be taken from the area adjacent to the connection around the meter house. If impacts are determined around the meter house, soil samples will be collected from the area both upstream and downstream of the meter house location. If impacts are determined along the on location flowline, soil samples will be collected from impacted areas. If petroleum impacted soils are encountered during the well head cut and cap operations, a soil sample will be taken; otherwise a soil sample will be collected from the area exhibiting the highest degree of impact, or in the absence of apparent impacts, a soil sample will be collected from the base of the excavation adjacent to the Well. (Continued under "Operator Comments")

### 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**

Number of soil samples collected 10  
Number of soil samples exceeding 915-1 0  
Was the areal and vertical extent of soil contamination delineated? \_\_\_\_\_  
Approximate areal extent (square feet) 0

**NA / ND**

-- Highest concentration of TPH (mg/kg) 0  
-- Highest concentration of SAR 0  
BTEX > 915-1 \_\_\_\_\_  
Vertical Extent > 915-1 (in feet) 0

**Groundwater**

Number of groundwater samples collected 0  
Was extent of groundwater contaminated delineated? No  
Depth to groundwater (below ground surface, in feet) \_\_\_\_\_  
Number of groundwater monitoring wells installed \_\_\_\_\_  
Number of groundwater samples exceeding 915-1 \_\_\_\_\_

Highest concentration of Benzene (µg/l) \_\_\_\_\_  
Highest concentration of Toluene (µg/l) \_\_\_\_\_  
Highest concentration of Ethylbenzene (µg/l) \_\_\_\_\_  
Highest concentration of Xylene (µg/l) \_\_\_\_\_  
Highest concentration of Methane (mg/l) \_\_\_\_\_

**Surface Water**

0 Number of surface water samples collected  
\_\_\_\_\_ 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.

The well has been plugged and abandoned, removing the source. It is unknown at this time if hydrocarbon impacts are present.

**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.

If it is determined soils exceed COGCC Table 915-1 thresholds, they will be excavated via backhoe/track hoe and stockpiled onsite for further evaluation. Once field screening results indicate that all impacted soils have been excavated and soils satisfy COGCC Table 915-1 thresholds, additional confirmation samples will be collected from within the location. Confirmation samples will consist of one final full COGCC Table 915-1 sample collected from the pit bottom. Confirmation samples from the pit side walls and other sampled locations will be collected if initial sampling and analysis indicated exceedances. The pit side walls and other sampled locations will be analyzed for only the exceedances noted in the initial sampling.

**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  
\_\_\_\_\_ Natural Attenuation  
\_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_ Name of Licensed Disposal Facility or COGCC Facility ID # \_\_\_\_\_

\_\_\_\_\_ Excavate and onsite remediation  
\_\_\_\_\_ Land Treatment  
\_\_\_\_\_ Bioremediation (or enhanced bioremediation)  
\_\_\_\_\_ Chemical oxidation  
\_\_\_\_\_ Other \_\_\_\_\_

### **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.

Groundwater impacts are not expected at this time.

## **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.

The location will be reclaimed to the present grade of the location or to the approximate original contour of the landscape and consistent with the 1000-series Rule.  
Seeding of the disturbed area will be performed in accordance with its intended use. The seed mix will be prescribed by the landowner. There are known noxious weeds in the immediate area of the disturbance.

Is the described reclamation complete? \_\_\_\_\_

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? \_\_\_\_\_

## SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. \_\_\_\_\_

Proposed date of completion of Reclamation. \_\_\_\_\_

## 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). 06/22/2021

Proposed site investigation commencement. \_\_\_\_\_

Proposed completion of site investigation. \_\_\_\_\_

### REMEDIAL ACTION DATES

Proposed start date of Remediation. \_\_\_\_\_

Proposed date of completion of Remediation. \_\_\_\_\_

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

(Continued from "Proposed Soil Sampling") Five soil (5) samples will be collected from the pit; one (1) from the bottom and four (4) from each of the side walls. A grab sample will be submitted from the pit bottom with the highest field screening result for a full COGCC Table 915-1 analysis. Additional samples collected from the location will be submitted to the lab for the interval with the highest field screening reading. Locin is requesting a reduced analyte list to consist of the TPH (DRO & GRO) and BTEX for the pit side walls and other sampled locations if the sample from the pit bottom sample does not exceed Metals/PAH, as well as inorganics as samples will be collected at a depth greater than 3ft, allowing for consideration request. Samples from comparable, nearby non-impacted native soil will be collected and analyzed for purposes of establishing background soil conditions.

Information within this Initial Form 27 is to outline the site investigation and delineation procedures necessary for closure of all Oil and Gas Facilities pursuant to Rule 911 including the earthen blow down pit and to obtain a remediation number (REM#). Should initial sampling results indicate soils satisfy COGCC Table 915-1 thresholds, a Supplemental Form 27 will be submitted, requesting closure. If soils exceed Table 915-1 thresholds, a Supplemental Form 27 will be submitted outlining the proposed remediation actions to be implemented.

Pit Facility #103759 and Pit Facility #103762 are included in this Form 27. Pit Facility #103759 appears to be a duplicate for Pit Facility #103762. Pit Facility #103759 is listed on the COGCC records as operated by Chandler & Associates and does not have any Documents, COAs, Orders, Inspections or Related Facilities in the COGCC records database. We have conducted a reviewed the COGCC database and identified the Pit Inventory provided by the previous operator, Chandler & Associates. This document #2224021 dated April 7, 2000 only identifies one pit for this location and this pit was assigned Facility #103759. Within the documents on file for Facility #103762, is Document #00691426. This document is an Application for Permit to Use Earthen Pit filed by Northwest Pipeline Corporation, gas purchaser at the time of the filing. The pit identified by COGCC as Facility #103762, operated by Locin, is the pit associated with the gas sales meter. We have looked at Google Earth and made a site visit of the area. We have determined there were no additional pits at this well location other than the single pit.

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

Signed: Michael Nicol \_\_\_\_\_

Title: Manager \_\_\_\_\_

Submit Date: 06/08/2021 \_\_\_\_\_

Email: mnicol@locinoil.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: John Heil \_\_\_\_\_

Date: 06/30/2021 \_\_\_\_\_

Remediation Project Number: 18766 \_\_\_\_\_

## Condition of Approval

### COA Type

### Description

	Operator states "If impacts are determined along the on location flowline, soil samples will be collected from impacted areas." A minimum of one soil sample shall be collected from the area around the flowline.
	Operator shall comply with Rule 913.b.(2).
2 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

402706496	FORM 27-INITIAL-SUBMITTED
402711262	SOIL SAMPLE LOCATION MAP

Total Attach: 2 Files

## General Comments

### User Group

### Comment

### Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)