

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

402140345

Receive Date:

Report taken by:

## Site Investigation and Remediation Workplan (Supplemental 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: IMPETRO RESOURCES LLC	Operator No: 10690	<b>Phone Numbers</b> Phone: (970) 593-8626 Mobile: (970) 593-8626
Address: 2820 LOGAN DRIVE		
City: LOVELAND	State: CO Zip: 80538	
Contact Person: Sam Bradley	Email: sbradley.impetro@gmail.com	

### PROJECT, PURPOSE & SITE INFORMATION

#### PROJECT INFORMATION

Remediation Project #: 7096 Initial Form 27 Document #: 2229186

#### PURPOSE INFORMATION

- |  |  |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination                                       | <input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water                   |
| <input type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure                             | <input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b. |
| <input type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation                            | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project                                  |
| <input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste                      | <input type="checkbox"/> Rule 906.c.: Director request   |
| <input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure | <input checked="" type="checkbox"/> Other SKIM PIT ABANDONMENT   |

#### SITE INFORMATION

N Multiple Facilities ( in accordance with Rule 909.c. )

Facility Type: PIT	Facility ID: 102634	API #:	County Name: WASHINGTON
Facility Name: WALTERS 1 & 12-21		Latitude: 40.133564	Longitude: -102.865957
		** correct Lat/Long if needed: Latitude:	Longitude:
QtrQtr: CNW	Sec: 21	Twp: 2N	Range: 49W Meridian: 6 Sensitive Area? No

#### SITE CONDITIONS

General soil type - USCS Classifications SM Most Sensitive Adjacent Land Use DRY LAND

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

NONE.

# SITE INVESTIGATION PLAN

## TYPE OF WASTE:

☒ E&P Waste

☐ Other E&P Waste

☐ Non-E&P Waste

☐ Produced Water

☐ Workover Fluids

☒ Oil

☐ Tank Bottoms

☐ Condensate

☐ Pigging Waste

☐ Drilling Fluids

☐ Rig Wash

☐ Drill Cuttings

☐ Spent Filters

☐ Pit Bottoms

☐ Other (as described by EPA)

## DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
	SOILS	MINIMAL TO NO IMPACT	SOIL SAMPLE ANALYSIS

## INITIAL ACTION SUMMARY

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

REMOVED SOIL (APPROX. 35 SQUARE YARDS) FROM THE OLD SKIM PIT AND STOCK-PILED IT LOCATION FOR LAND TREATMENT ON SITE. TOOK SOIL SAMPLE FROM THE BASE OF THE SKIM PIT AFTER THE SOIL WAS REMOVED AND HAD THE SOIL ANALYZED PER COGCC INSTRUCTION.

## 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 ):

Samples were taken by Diamond operating and submitted with the attached and related form 27's. Impetro Resources LLC will go take additional samples over the landfarm area and submit the results.

### 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 ):

Visual inspection of the landfarm area shows no visual impact. Vegetation is healthy across the landfarm area.

# SITE INVESTIGATION REPORT

## SAMPLE SUMMARY

### Soil

Number of soil samples collected \_\_\_\_\_ 0

Number of soil samples exceeding 910-1 \_\_\_\_\_

Was the areal and vertical extent of soil contamination delineated? \_\_\_\_\_

Approximate areal extent (square feet) \_\_\_\_\_

### NA / ND

\_\_\_\_\_ Highest concentration of TPH (mg/kg) \_\_\_\_\_

\_\_\_\_\_ Highest concentration of SAR \_\_\_\_\_

\_\_\_\_\_ BTEX > 910-1 \_\_\_\_\_

\_\_\_\_\_ Vertical Extent > 910-1 (in feet) \_\_\_\_\_

### 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 910-1 \_\_\_\_\_

\_\_\_\_\_ 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 910-1

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

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No \_\_\_\_\_

## SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Please see related 27 and attached 27 showing landfarm plan.

## REMEDICATION 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.

All work was completed by Diamond Operating prior to Impetro Resources LLC purchasing the lease. Impetro will take additional samples across the remediation area and submit to the COGCC.

## Soil Remediation Summary

☒ **In Situ**

Yes Bioremediation ( or enhanced bioremediation )

No Chemical oxidation

No Air sparge / Soil vapor extraction

Yes Natural Attenuation

No Other \_\_\_\_\_

☐ **Ex Situ**

Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) \_\_\_\_\_

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

Excavate and onsite remediation

Yes Land Treatment

Yes Bioremediation (or enhanced bioremediation)

No Chemical oxidation

No Other \_\_\_\_\_

## Groundwater Remediation Summary

No Bioremediation ( or enhanced bioremediation )

No Chemical oxidation

No Air sparge / Soil vapor extraction

No Natural Attenuation

No 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.

N/A

## REMEDIATION PROGRESS UPDATE

### PERIODIC REPORTING

**Frequency:** ☐ Quarterly ☐ Semi-Annually ☐ Annually ☒ Other Per COGCC Request

**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? Yes \_\_\_\_\_

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

Landfarming per the attached and related Form 27's.

Volume of E&P Waste (solid) in cubic yards \_\_\_\_\_ 35

E&P waste (solid) description Oil impacted soil \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_ 0

Non-COGCC Disposal Facility: n/a \_\_\_\_\_

Volume of E&P Waste (liquid) in barrels \_\_\_\_\_ 0

E&P waste (liquid) description n/a \_\_\_\_\_

COGCC Disposal Facility ID #, if applicable: \_\_\_\_\_ 0

Non-COGCC Disposal Facility: n/a \_\_\_\_\_

## REMEDIATION COMPLETION REPORT

### REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? No \_\_\_\_\_

Do all soils meet Table 910-1 standards? No \_\_\_\_\_

Does the previous reply indicate consideration of background concentrations? \_\_\_\_\_

Are the only residual soil impacts pH, SAR, or EC at depths greater than 3 feet below ground surface? Yes \_\_\_\_\_

Does Groundwater meet Table 910-1 standards? Yes \_\_\_\_\_

Is additional groundwater monitoring to be conducted? No \_\_\_\_\_

## 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.

WILL BACK FILL SKIM PIT USING CLEAN FILL DIRT.

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

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

☐ Interim? ☒ Final?

Did the Surface Owner approve the seed mix? Yes \_\_\_\_\_

If NO, does the seed mix comply with local soil conservation district recommendations? Yes \_\_\_\_\_

## IMPLEMENTATION SCHEDULE

### PRIOR DATES

Date of Surface Owner notification/consultation, if required. \_\_\_\_\_

Actual Spill or Release date, if known. \_\_\_\_\_

### SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 03/15/2012

Date of commencement of Site Investigation. 03/15/2012

Date of completion of Site Investigation. 04/10/2012

### REMEDIAL ACTION DATES

Date of commencement of Remediation. 03/15/2012

Date of completion of Remediation. 05/15/2012

### SITE RECLAMATION DATES

Date of commencement of Reclamation. 03/15/2012

Date of completion of Reclamation. 05/15/2012

### OPERATOR COMMENT

Please see related form 27 and attached form 27. This lease was acquired from Diamond Operating. Work described in the related and attached 27's has been completed. Impetro Resources LLC will take additional analytical and submit to the COGCC.

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

Signed: Sam Bradley

Title: Managing Member

Submit Date: \_\_\_\_\_

Email: sbradley.impetro@gmail.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: \_\_\_\_\_

Date: \_\_\_\_\_

Remediation Project Number: 7096

### COA Type

### Description

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### 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

402140346	RECLAMATION PLAN
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Total Attach: 1 Files

### General Comments

### User Group

### Comment

### Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)