

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:

403005498

Date Received:

04/06/2022

Spill report taken by:

Brown, Kari

Spill/Release Point ID:

481885

**SPILL/RELEASE REPORT (SUPPLEMENTAL)**

This form is to be submitted by the party responsible for the oil and gas spill or release. Refer to COGCC Rule 912.b. for reporting requirements of spills or releases of E&P Waste, produced Fluids, or unauthorized Releases of natural gas. Submit a Site Investigation and Remediation Workplan (Form 27) if Rule 913.c. applies.

**OPERATOR INFORMATION**

Name of Operator: <u>PDC ENERGY INC</u>	Operator No: <u>69175</u>	<b>Phone Numbers</b>
Address: <u>1775 SHERMAN STREET - STE 3000</u>		Phone: <u>(303) 597-6847</u>
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>		Mobile: <u>( )</u>
Contact Person: <u>Phillip Porter</u>		Email: <u>COGCCSpillRemediation@pdce.com</u>

Transfer of Operatorship: Pursuant to Rule 912.f, this Supplemental Form 19 is being submitted to designate the Buying Operator as the responsible Operator for this Spill and Release.

**INITIAL SPILL/RELEASE REPORT**

Initial Spill/Release Report Doc# 403001490

Initial Report Date: 03/31/2022 Date of Discovery: 03/31/2022 Spill Type: Historical Release

**Spill/Release Point Location:**

QTRQTR NWNW SEC 23 TWP 4N RNG 65W MERIDIAN 6

Latitude: 40.304871 Longitude: -104.639266

Municipality (if within municipal boundaries): \_\_\_\_\_ County: WELD

Enter Lat./long measurement of the actual Spill/Release Point. Lat./Long. Data shall meet standards of Rule 216.

**Reference Location:**

Facility Type: OIL AND GAS LOCATION  Facility/Location ID No 472424  
 Spill/Release Point Name: Arens 1 - Crude Tank  Well API No. (Only if the reference facility is well) 05- -  
 No Existing Facility or Location ID No.

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): <u>Unknown</u>	Estimated Condensate Spill Volume(bbl): <u>0</u>
Estimated Flow Back Fluid Spill Volume(bbl): <u>0</u>	Estimated Produced Water Spill Volume(bbl): <u>0</u>
Estimated Other E&P Waste Spill Volume(bbl): <u>0</u>	Estimated Drilling Fluid Spill Volume(bbl): <u>0</u>

Specify: \_\_\_\_\_

Has the subject Spill/Release been controlled at the time of reporting? Yes

**Land Use:**

Current Land Use: CROP LAND Other(Specify): \_\_\_\_\_

Weather Condition: Warm and sunny

Surface Owner: FEE Other(Specify): \_\_\_\_\_

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

PDC discovered a reportable releases at the Arens location production facility production (40.304871, -104,639266). Release clean-up and delineation activities are underway.

**List of Agencies and Other Parties Notified Pursuant to Rule 912.b.(7)-(11):**

**OTHER NOTIFICATIONS**

<u>Date</u>	<u>Agency/Party</u>	<u>Contact</u>	<u>Phone</u>	<u>Response</u>
3/31/2022	Colorado Parks and Wildlife	NA	-	
3/31/2022	Surface Owner	NA	-	
3/31/2022	Weld Co	NA	-	
3/31/2022	COGCC	Kari Brown	-	

**REPORT CRITERIA**

**Rule 912.b.(1) Report to the Director (select all criteria that apply):**

Yes Rule 912.b.(1).A: A Spill or Release of any size that impacts or threatens to impact any Waters of the State, Public Water System, residence or occupied structure, livestock, wildlife, or publicly-maintained road.

Waters of the State: Threatened to Impact Public Water System: n/a  
Residence or Occupied Structure: n/a Livestock: n/a  
Wildlife: n/a Publicly-Maintained Road: n/a

No Rule 912.b.(1).B: A Spill or Release in which 1 barrel or more of E&P Waste or produced fluids is spilled or released outside of berms or other secondary containment.

No Rule 912.b.(1).C: A Spill or Release of 5 barrels or more of E&P Waste or produced Fluids regardless of whether the Spill or Release is completely contained within berms or other secondary containment.

No Rule 912.b.(1).D: Within 6 hours of discovery, a Grade 1 Gas Leak. For a Grade 1 Gas Leak from a Flowline, the Operator also must submit the Form 19 – Initial, document number on a Form 44, Flowline Report, for the Grade 1 Gas Leak

Enter the approximate time of discovery \_\_\_\_\_ (HH:MM)  
Enter the Document Number of the Grade 1 Gas Leak Report, Form 44 \_\_\_\_\_  
Was there a reportable accident associated with either a Grade 1 Gas Leak or an E&P waste spill or release? \_\_\_\_\_  
Enter the Document Number of the Initial Accident Report, Form 22 \_\_\_\_\_  
Was there damage during excavation? \_\_\_\_\_  
Was CO 811 notified prior to excavation? \_\_\_\_\_

No Rule 912.b.(1).E: The discovery of 10 cubic yards or more of impacted material resulting from a current or historic Spill or Release. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards.

Estimated Volume of Impacted Solids (cu. yd.): \_\_\_\_\_

Yes Rule 912.b.(1).F: The discovery of impacted Waters of the State, including Groundwater. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards. The presence of free product or hydrocarbon sheen on Groundwater or surface water is reportable. The presence of contaminated soil in contact with Groundwater or surface water is reportable. Check all that apply:

The presence of free product or hydrocarbon sheen Surface Water

The presence of free product or hydrocarbon sheen on Groundwater

The presence of contaminated soil in contact with Groundwater

The presence of contaminated soil in contact with Surface water

No Rule 912.b.(1).G: A suspected or actual Spill or Release of any volume where the volume cannot be immediately determined, including a spill or release of any volume that daylight from the subsurface.

No Rule 912.b.(1).H: Spill or Release resulting in vaporized hydrocarbon mists that leave the Oil and Gas Location or Off-Location Flowline right of way from an Oil and Gas Location and impacts or threatens to impact off-location property.

Areas offsite of Oil & Gas Location  Off-Location Flowline right of way

No Rule 912.b.(1).I: A Release of natural gas that results in an accumulation of soil gas or gas seeps.

No Rule 912.b.(1).J: A Release that results in natural gas in Groundwater.

### SPILL/RELEASE DETAIL REPORTS

#1 Supplemental Report Date: 04/05/2022

FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	_____	_____	<input checked="" type="checkbox"/>
CONDENSATE	<u>0</u>	<u>0</u>	<input type="checkbox"/>
PRODUCED WATER	<u>0</u>	<u>0</u>	<input type="checkbox"/>
DRILLING FLUID	<u>0</u>	<u>0</u>	<input type="checkbox"/>
FLOW BACK FLUID	<u>0</u>	<u>0</u>	<input type="checkbox"/>
OTHER E&P WASTE	<u>0</u>	<u>0</u>	<input type="checkbox"/>

specify: \_\_\_\_\_

Was spill/release completely contained within berms or secondary containment? NO Was an Emergency Pit constructed? NO

*Secondary containment, including walls & floor regardless of construction material, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

**A Form 15 Pit Report shall be submitted within 30 calendar days after the construction of an emergency pit**

Impacted Media (Check all that apply)  Soil  Groundwater  Surface Water  Dry Drainage Feature

Surface Area Impacted: Length of Impact (feet): 37 Width of Impact (feet): 23

Depth of Impact (feet BGS): 6 Depth of Impact (inches BGS): \_\_\_\_\_

How was extent determined?

On March 31, 2022, a historic release was discovered below the above ground storage tank (AST) during tank battery decommissioning at the Arens 1 tank battery. One soil sample (AST01-DL) was collected beneath the above ground storage tank (AST) dump line connection from impacted source material and submitted for laboratory analysis of the full COGCC Table 915-1 analytical suite. Preliminary analytical results indicated organic concentrations were in exceedance of the COGCC Table 915-1 Protection of Groundwater SSLs. Following the discovery, excavation activities were initiated and to date, approximately 216 CY of impacted have been removed and transported to the North Weld Waste Management Facility for disposal under PDC waste manifests and approximately 520 barrels (bbls) of groundwater were removed from the excavation and transported to NGL C4 for disposal under PDC waste manifests. Between March 31 and April 5, 2022, 20 samples (S01 - S20) have been collected from the base and sidewalls of the excavation at depths ranging between 2.5 feet and 6 feet bgs. Soil samples S01 - S07, S09 - S13, S15, S16, S18, and S19 were submitted for preliminary laboratory analysis of BTEX, 1,2,4-TMB, 1,3,5-TMB, naphthalene, and TPH (C6-C36). Preliminary analytical results indicated that organic concentrations were below the applicable COGCC Table 915-1 standards in the soil samples collected from the final excavation extent. Soil Samples S08, S14, S17, and S20 were submitted for laboratory analysis of soil suitability for reclamation. During excavation activities, groundwater was encountered at approximately 4 feet bgs. Consequently, one groundwater sample (GW02) was collected from the excavation and submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, and 1,3,5-TMB. Analytical results indicated that organic concentrations were above applicable COGCC Table 915-1 standards in sample GW02.

Soil/Geology Description:

Aquolls and Aquepts, Flooded

Depth to Groundwater (feet BGS) 3

Number Water Wells within 1/2 mile radius: 13

If less than 1 mile, distance in feet to nearest

Water Well 945 None

Surface Water 95 None

Wetlands 45 None

Springs \_\_\_\_\_ None

Livestock 1340 None

Occupied Building 1500 None

Additional Spill Details Not Provided Above:

Additionally, five background soil samples (BKG01) were collected from the native material up-gradient of the tank battery and submitted to the laboratory for analysis of the COGCC Table 915-1 metals. Pending receipt of the remaining Table 915-1 laboratory results, PDC will be submitting an analyte reduction request for the director approval based on the constituents identified in the samples collected from the source material. Excavation and confirmation soil sampling activities are on-going and will be summarized with the final analytical results in a forthcoming Supplemental Form 27.

Preliminary soil analytical results are summarized in Table 1. Groundwater analytical results are summarized in Table 2. GPS coordinates and PID readings for the soil samples collected during initial excavation activities are summarized in Table 3. A topographic map is attached as Figure 1. The current excavation extent and sample locations are illustrated on Figure 2. The draft laboratory reports are included in Attachment A and the tank battery decommissioning field notes and photo logs are included in Attachment B.

### CORRECTIVE ACTIONS

#1 Supplemental Report Date: 04/05/2022

Root Cause of Spill/Release Unknown (Historical)

Other (specify) \_\_\_\_\_

Type of Equipment at Point of Spill/Release: Other

If "Other" selected above, specify or describe here:

Above ground storage tank (AST)

Describe Incident & Root Cause (include specific equipment and point of failure)

On March 31, 2022, a historic release was discovered below above ground storage tank (AST) during decommissioning activities at the Arens 1 Tank Battery. Due to the historic nature of the release, a root cause was not identified.

Describe measures taken to prevent the problem(s) from reoccurring:

The production facility and associated infrastructure was removed and will not be replaced.

Volume of Soil Excavated (cubic yards): 216

Disposition of Excavated Soil (attach documentation)  Offsite Disposal  Onsite Treatment

Other (specify) \_\_\_\_\_

Volume of Impacted Ground Water Removed (bbls): 520

Volume of Impacted Surface Water Removed (bbls): 0

## REQUEST FOR CLOSURE

**Spill/Release Reports should be closed when impacts have been remediated or when further investigation and corrective actions will take place under an approved Form 27.**

- Basis for Closure:
- Corrective Actions Completed (documentation attached, check all that apply)
    - Horizontal and Vertical extents of impacts have been delineated.
    - Documentation of compliance with Table 915-1 is attached.
    - All E&P Waste has been properly treated or disposed.
  - Work proceeding under an approved Form 27 (Rule 912.c).  
Form 27 Remediation Project No: 21378
  - SUSPECTED Spill/Release did not occur or was below Rule 912.a.(5) reporting thresholds.

### OPERATOR COMMENTS:

Field activities and final analytical results will be summarized in a forthcoming Supplemental Form 27.

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

Signed: \_\_\_\_\_ Print Name: Phillip Porter  
Title: Snr. Environmental Rep. Date: 04/06/2022 Email: COGCCSpillRemediation@pdce.com

### Condition of Approval

#### COA Type

#### Description

	Operator shall provide an updated Form 27 for Remediation #21378 indicating groundwater monitoring and soil sampling plan in compliance with Table 915-1 within 60 days of approval of this Form 19 and prior to installation of monitoring wells.
1 COA	

### Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403005498	SPILL/RELEASE REPORT(SUPPLEMENTAL)
403005512	TOPOGRAPHIC MAP
403005748	SOIL SAMPLE LOCATION MAP
403005763	ANALYTICAL RESULTS
403005771	PHOTO DOCUMENTATION
403016967	FORM 19 SUBMITTED

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)