

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:

403005647

Date Received:

04/06/2022

Spill report taken by:

Brown, Kari

Spill/Release Point ID:

481884

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>	Phone Numbers
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# 403001479

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: 40.304954 Longitude: -104.639140

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 - Separator 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): Unknown Estimated Condensate Spill Volume(bbl): 0

Estimated Flow Back Fluid Spill Volume(bbl): 0 Estimated Produced Water Spill Volume(bbl): Unknown

Estimated Other E&P Waste Spill Volume(bbl): 0 Estimated Drilling Fluid Spill Volume(bbl): 0

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 1 production facility separator. 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 & Wildlife	Brandon Marrette	-	
3/31/2022	Weld Co	NA	-	
3/31/2022	Surface Owner	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: <u>04/06/2022</u>		
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	_____	_____	<input checked="" 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): 15 Width of Impact (feet): 22

Depth of Impact (feet BGS): 5 Depth of Impact (inches BGS): _____

How was extent determined?

On March 31, 2022, a historic release was discovered below the separator during tank battery decommissioning at the Arens 1 tank battery. One soil sample (SEP01-FL) was collected beneath the separator flowline riser 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 approximately 50 cubic yards of impacted material were removed and transported to the North Weld Waste Management Facility for disposal under PDC waste manifests. During excavation activities, groundwater was encountered at approximately 3 feet bgs. Consequently, one groundwater sample (GW01) 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 below applicable COGCC Table 915-1 standards in sample GW01. Following excavation activities, nine samples (SS01 - SS09) were collected from the base and sidewalls of the excavation at depths ranging between 2.5 feet and 5 feet bgs. The samples were submitted for preliminary laboratory analysis of BTEX, 1,2,4-TMB, 1,3,5-TMB, naphthalene, and TPH (C6-C36). Soil Sample SS05 was submitted for additional laboratory analysis of soil suitability for reclamation. Preliminary analytical results indicated that organic concentrations were below the applicable COGCC Table 915-1 standards in all samples collected from the final excavation extent. 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.

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:

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. The final analytical results will be summarized 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: 04/06/2022

Root Cause of Spill/Release Unknown (Historical)

Other (specify) _____

Type of Equipment at Point of Spill/Release: Horizontal Separator

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

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

On March 31, 2022, a historic release was discovered below separator 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): 50

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

Other (specify) _____

Volume of Impacted Ground Water Removed (bbls): 0

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

<u>COA Type</u>	<u>Description</u>

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403005660	TOPOGRAPHIC MAP
403005674	SOIL SAMPLE LOCATION MAP
403005807	ANALYTICAL RESULTS
403005814	PHOTO DOCUMENTATION

Total Attach: 4 Files

General Comments

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

Total: 0 comment(s)