

State of Colorado

Energy & Carbon Management Commission

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Document Number:

404044846

Date Received:

01/07/2025

Spill report taken by:

Graber, Candice
(Nikki)

Spill/Release Point ID:

488300

SPILL/RELEASE REPORT (SUPPLEMENTAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Refer to ECMC 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 Phone: <u>(303) 860-5800</u> Mobile: <u>()</u> Email: <u>karen.olson@chevron.com</u>
Address: <u>1099 18TH STREET SUITE 1500</u>		
City: <u>DENVER</u>	State: <u>CO</u> Zip: <u>80202</u>	
Contact Person: <u>Karen Olson</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# 403964721Initial Report Date: 10/21/2024 Date of Discovery: 10/18/2024 Spill Type: Recent Spill**Spill/Release Point Location:**QTRQTR SWSE SEC 11 TWP 1S RNG 68W MERIDIAN 6Latitude: 39.973826 Longitude: -104.966440Municipality (if within municipal boundaries): No County: ADAMS

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

☐ Check this box if this spill/release is related to a loss of integrity of a flowline, pipeline, crude oil transfer line, or produced water transfer line.

Reference Location:Facility Type: OIL AND GAS LOCATION☒ Facility/Location ID No 442411Spill/Release Point Name: Ivey LC 11☐ 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): >0 and <1Estimated Condensate Spill Volume(bbl): 0Estimated Flow Back Fluid Spill Volume(bbl): 0Estimated Produced Water Spill Volume(bbl): >=5 and <100Estimated Other E&P Waste Spill Volume(bbl): 0Estimated 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: NON-CROP LAND Other(Specify):

Weather Condition: 50s, dusk

Surface Owner: FEE Other(Specify):

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

A release occurred on 10/18/24 at the Ivey LC 11 facility. Approximately 17 BBL of produced water and 0.25 BBL of crude oil released outside of containment from the firetube on an oil treater vessel. All standing fluid was removed via hydro vac immediately upon discovery followed by the removal of impacted soil via excavation.

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>
10/19/2024	PWS Buffer Area	Skip Masterson	--	
10/19/2024	Surface Owner	N/A	--	
10/19/2024	CPW	Lexi Hamous-Miller	--	
10/19/2024	Adams County	Keith Huck	--	
10/19/2024	Adams County	Greg Dean	--	
10/19/2024	ECMC	Alex Ahmadian	--	

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

Yes 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.): _____

No	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: <input type="checkbox"/> The presence of free product or hydrocarbon sheen Surface Water <input type="checkbox"/> The presence of free product or hydrocarbon sheen on Groundwater <input type="checkbox"/> The presence of contaminated soil in contact with Groundwater <input type="checkbox"/> 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's 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. <input type="checkbox"/> Areas offsite of Oil & Gas Location <input type="checkbox"/> 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: 12/31/2024		
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	1	1	<input type="checkbox"/>
CONDENSATE	0	0	<input type="checkbox"/>
PRODUCED WATER	17	17	<input type="checkbox"/>
DRILLING FLUID	0	0	<input type="checkbox"/>
FLOW BACK FLUID	0	0	<input type="checkbox"/>
OTHER E&P WASTE	0	0	<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): 53 Width of Impact (feet): 97

Depth of Impact (feet BGS): 3 Depth of Impact (inches BGS): _____

How was extent determined?

Two waste characterization samples were collected on 10/21/2024. Thirteen (13) floor samples, FS-01 thru FS-13, were collected from 10/21/2024 to 10/27/2024 at a depth of 0.8' below ground surface (BGS) and submitted to Summit Scientific Inc. in Golden, Colorado and analyzed for ECMC Table 915-1 constituents. Further excavation was conducted and additional confirmation samples were collected from 11/6/2024 to 12/13/2024 to ensure the removal of all impacted material. Laboratory data is provided in Tables 1 to 4; sample locations are shown on Figures 2 to 4. Six (6) background soil samples (see soil samples beginning in "BG") were collected on 10/25/2024 and 10/27/2024 from outside of the area disturbed by Oil and Gas operations, of comparable, nearby, non-impacted, native soil as well as from imported, non-impacted pad material comparable to material at the release point. Analytical results for background samples show arsenic values greater than samples collected in the release area with a 1.25 multiplier applied and selenium background values greater than confirmation sample values. Therefore indicating that As and Se are naturally occurring in the native soil and non-impacted imported fill material thus eliminating such constituents as contaminants of concern, if deemed permissible by the ECMC.

Soil/Geology Description:

SM

Depth to Groundwater (feet BGS) 20 Number Water Wells within 1/2 mile radius: 4

If less than 1 mile, distance in feet to nearest	Water Well	1877	None	<input type="checkbox"/>	Surface Water	432	None	<input type="checkbox"/>
	Wetlands	417	None	<input type="checkbox"/>	Springs		None	<input checked="" type="checkbox"/>
	Livestock	1232	None	<input type="checkbox"/>	Occupied Building	1577	None	<input type="checkbox"/>

Additional Spill Details Not Provided Above:

On 10/25/24, a produced fluids sample was collected from the facility and analyzed for total recoverable metals. These data were used to determine the mass of metals that were released in the 17 bbl spill. This mass was compared to the calculated mass of metals removed as a result of the excavation. Table 5 (barium) and Table 6 (cadmium) provide these calculations and comparisons. Since the mass of barium and cadmium removed were significantly greater than the amount of these metals that were released, the additional metals removed can be attributed to native concentrations and the presence of barium and cadmium in the excavation samples can be considered resolved. As shown on Table 3, pH, EC, SAR and boron must still be resolved. Operator proposes to resample sample "FS-10(3) Floor" to confirm the presence of boron since all the other soil samples were less than the laboratory detection limit. Additionally, operator proposes to delineate the horizontal and vertical extent of the inorganic exceedances which will allow the development of a Reclamation Plan that may allow these exceedances to remain in place. A description of further investigation and remediation of impacts is outlined in Initial Form 27, document number 404041649.

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 12/31/2024

Root Cause of Spill/Release Corrosion

Other (specify)

Type of Equipment at Point of Spill/Release: Other

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

Firetube on oil treater vessel.

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

The release occurred on 10/18/2024 when a hole formed in the firetube on an oil treater vessel as a result of microbial induced corrosion. The facility was scheduled for a corrosion inspection for the week of 10/21/2024.

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

The corroded fire tube was replaced immediately upon the discovery of the release and all other infrastructure at the facility was inspected for corrosion. Moving forward, a more robust chemical corrosion inhibitor solution has been added to infrastructure at this facility. Samples of the chemical will be collected and analyzed on a regular basis to determine the effectiveness of the chemical. Based on the results of the samples the chemical corrosion inhibitor solution can be adjusted to meet the needs of the specific infrastructure that it is in contact with in order to prevent this issue from reoccurring. Regular preventative inspections shall continue to be conducted as a proactive measure.

Volume of Soil Excavated (cubic yards): 40

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: 38377

☐ SUSPECTED Spill/Release did not occur or was below Rule 912.a.(5) reporting thresholds.

OPERATOR COMMENTS:

PDC requests closure of this Spill/Release Point ID: 488300 and transfer to Remediation Project #38377 as assigned in Initial Form 27, document #404041649.

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

Signed: _____ Print Name: Michelle Bartoszek

Title: HSE Advisor Date: 01/07/2025 Email: michelle.bartoszek@chevron.com

COA Type

Description

0 COA	

ATTACHMENT LIST

Att Doc Num

Name

404044885	INITIAL MITIGATION
404044886	REMEDIATION MEASURES

Total Attach: 2 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
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Total: 0 comment(s)