At approximately 03:30 AM on March 4, 2022, ConocoPhillips Alaska observed a natural gas release at Alpine drill site CD1, Well House 5. The gas release is subsurface and below the gravel, and the cause of the release is being investigated. An estimate of the amount of gas being released is not yet available. The Alaska Oil and Gas Conservation Commission has been notified.

The Alpine Emergency Response Team is onsite and working to stop the release and minimize any potential impact to the environment.

There are no injuries associated with this event, and there are no safety concerns outside of the immediate area. No gas has been detected outside the CD1 area.

The Alpine Central Facility is continuing operations and natural gas continues to be supplied to Nuiqsut. The Village of Nuiqsut is approximately nine miles from the CD1 pad.
On March 7, 2022, out of an abundance of caution, ConocoPhillips Alaska took steps to relocate all non-essential personnel from the CD1 pad and the Alpine Central Facility due to the subsurface natural gas release at CD1. The safety zone is limited to the CD1 area. The Alaska Oil and Gas Conservation Commission has been notified.

The Alpine Response Team continues to be onsite. The Anchorage Incident Management Team is providing support to Alpine.

There are no reports of injury or environmental impact to the tundra or wildlife. Air quality continues to be monitored, and no natural gas has been detected outside of the CD1 pad.

We have ongoing monitoring on the pad using natural gas detection monitors. We are also conducting Aerial Infrared Surveys to monitor the pad from the air.

The Alpine Central Facility is continuing essential operations and natural gas continues to be supplied to the Nuiqsut Utility Cooperative.
ConocoPhillips is committed to the safety and well-being of our workforce and community. We have mobilized a significant number of resources to respond to the natural gas release at the CD1 pad at our Alpine Central Facility. At this time, there is no interruption of natural gas being supplied to the community of Nuiqsut, and we do not anticipate the need for a relocation of Nuiqsut residents based on current data.

Ongoing air monitoring is in place both at the facility and in Nuiqsut. A third party contracted by ConocoPhillips has been collecting monthly air samples in the Nuiqsut community since 2014, and the most recent results obtained have not shown anything outside normal conditions. No natural gas has been detected outside of the CD1 area. ConocoPhillips has taken the additional step to install more continuous air monitors in Nuiqsut, including daily sampling of volatile organic compounds (VOCs).

Essential personnel remain on-site supported by subject matter experts, and we remain in regular contact with regulatory agencies and community leaders. Our primary focus is protecting our workforce and the community.
ConocoPhillips is committed to the safety and well-being of our workforce and community. We are working with our subject matter experts to safely commence warm-up operations of Doyon Rig 142 in preparation to proactively address source mitigation of the surface gas release at Alpine CD1.

Ongoing air monitoring continues both at the facility and in Nuiqsut, where the most recent results obtained have not shown anything outside normal conditions. No natural gas has been detected outside of the CD1 area. No injuries have been reported to date, and there has been no impact to the tundra or wildlife.
Beginning Monday, March 14, ConocoPhillips will be hosting periodic situation updates for the community of Nuiqsut. Announcements of upcoming updates will be posted on www.alpineresponse.com. At the designated time, participants should call 1-888-307-1881 and press 2 to join the live update. Questions may be left at that same number by pressing 1 to leave a voicemail, or submitted to www.alpineresponse.com under “Ask a Question” from the menu bar. ConocoPhillips responds to questions as quickly as possible, usually within 24 hours.

The next situation update for the community of Nuiqsut is scheduled for Monday, March 14 at 2:00 pm Alaska Time.
Handheld gas monitors and aerial surveys are being used to monitor natural gas at various locations along the CD1 well row, and currently, there is no detectable gas at the surface. Natural gas has not been detected outside of the CD1 pad at any point since the release began.
The primary objective of our incident response is the safety of the community and our workforce. Air quality monitoring information is now available on the Alpine CD1 Response website, and in-person tours of the monitoring site are available for Nuiqsut residents. There has been no natural gas detected off the pad at CD1 and the ambient air monitoring station at CD1 has not detected any readings outside of the normal range.

Previously relocated employees from the Alpine Operations Camp (located in CD1 pad) are returning as warm-up operations have commenced at Doyon Rig 142. Regular operational flights to and from Alpine will resume starting Wednesday, March 16.

In addition to regular updates to regulators, ConocoPhillips met with key Alaska agencies to update them on the status of Alpine CD1 response operations on Monday, March 14. The 18 meeting attendees represented five agencies, including Alaska’s Department of Natural Resources (DNR), Department of Military and Veterans Affairs (MVA), Department of Environmental Conservation (DEC), Office of General Counsel (OGC), and Health and Social Services (HSS). We will continue to engage with government and community stakeholders as response operations continue. The safety of our workforce, nearby communities, the environment and wildlife is our top priority.
The attached timeline describes key events that have occurred since natural gas was detected at the CD1 pad.

ConocoPhillips Alaska is continuing to respond to the subsurface natural gas release identified on March 4 at our CD1 gravel pad within the Colville River Unit (commonly referred to as Alpine) on Alaska's North Slope. Our primary focus remains the safety and well-being of our workforce and community. As of March 15, there are intermittent small amounts of detectable gas at the surface of the CD1 pad. There has been no natural gas detected off the CD1 pad, no wildlife impacts and no damage to the tundra. Natural gas continues to be supplied to the community of Nuiqsut. Total production for the Alpine field has been reduced by an average estimate of approximately 8,000 BOEPD primarily due to the release response measures. See the Timeline: Alaska North Slope – Alpine CD1 Gas Release Timeline
ConocoPhillips Alaska is continuing to respond to the subsurface natural gas release identified on March 4 at our CD1 gravel pad within the Colville River Unit (commonly referred to as Alpine) on Alaska’s North Slope. Our primary focus remains the safety and well-being of our workforce and community. As of March 15, there are intermittent small amounts of detectable gas at the surface of the CD1 pad. There has been no natural gas detected off the CD1 pad, no wildlife impacts and no damage to the tundra. Natural gas continues to be supplied to the community of Nuiqsut. Total production for the Alpine field has been reduced by an average estimate of approximately 8,000 BOEPD primarily due to the release response measures.

**Response Facts**

- There has been no natural gas detected off the pad at CD1, no wildlife impacts and no damage to the tundra.
- Natural gas continues to be supplied to the community of Nuiqsut.
- Total production for the Alpine field has been reduced by an average estimate of approximately 8,000 BOEPD primarily due to the release response measures.
ConocoPhillips continues to respond to the subsurface natural gas release identified on March 4 at our Alpine CD1 gravel pad within the Colville River Unit (commonly referred to as Alpine) on Alaska’s North Slope. Our primary focus remains the safety and well-being of our workforce and community.

Based on the most current information from our investigation, the likely source is a low pressure, shallow formation and not associated with the deeper formation from where we produce. Currently, there are only intermittent small amounts of detectable gas at the surface. No natural gas has been detected outside of the CD1 area and there has been no impact to the tundra or wildlife. No recordable injuries have been reported.

As of March 14, we began bringing back non-essential personnel to the site to resume normal operations outside of the response. And as of March 16, flights resumed in and out of Alpine.

At this time, normal production operations have not resumed at CD1. However, natural gas continues to be supplied to the Nuiqsut Utility Cooperative at no cost per our normal agreement.
The following summary describes the events between March 4 and March 17 related to the subsurface natural gas release from the CD1 pad.

The release was first identified on March 4, 2022. On that date, ConocoPhillips immediately took steps to ensure the safety of our personnel and mobilized North Slope and Anchorage response and technical resources to identify and seal the release source.

- Our detailed site investigation began immediately and continued over several days. We used ground-penetrating radar (GPR), satellite imagery, hand-held gas monitors, drones with optical gas imaging, Forward Looking Infra-Red (FLIR) sensors, and other tools to monitor the release and identify the source.
- Our site investigation determined that the likely source of the natural gas release is a low pressure, shallow formation not associated with the deeper formation from where we produce oil and gas.
- Once the likely source was determined, we took immediate steps to mitigate the release. Ongoing mitigation efforts to reduce the amount of natural gas released to the surface have included relieving pressure by flowing gas from well CD1-15, which is completed in a shallow gas formation, and by producing gas from the outer annulus of well WD-03. These steps have been productive. The release has largely ceased, and there are only intermittent low levels of natural gas being detected along the CD1 well row.
- This remains the case elsewhere on the CD1 pad. Several cracks, up to 1/4-inch maximum width, were observed on the CD1 pad on March 7, near the Doyon 142 rig and the CD1 well row. Since March 7, occasionally, minute levels of natural gas have been detected in the vicinity of the cracks. Flowing gas is not present. We continue to monitor the entire pad using LiDAR (Light Detection and Ranging) and Ground Penetrating Radar (GPR). Primary interpretation of recent data confirms that the pad remains stable.
- The March 4 gas release coincided with a drilling operation on well slot CD1-50 to complete a permitted and regulated waste disposal well, identified as WD-03. On March 4, drilling operations were suspended, and the well was not completed or put into service following the detection of natural gas. Since that time, flowing gas from this well has been a productive mitigation step, and we believe further work on this well may be important to permanently seal the gas release source.
- The Alpine Central Facility is continuing essential operations, and natural gas continues to be supplied to the Nuiqsut Utility Cooperative at no cost to the community. Formal and informal updates continue to be provided by ConocoPhillips to the village of Nuiqsut.
- The Alpine Response Team continues to be onsite. The Anchorage Incident Management Team is providing support to Alpine. Our response will continue until the gas source has been sealed.

**Next Steps**

- ConocoPhillips
  - Alaska
Next Steps

- The Doyon Rig 142, which drilled well WD-03, is undergoing rigorous safety checks, as it is warmed up to begin diagnostic work on well WD-03 that will inform our next steps for sealing the source of the release.
- Once the gas source is pinpointed, it will be targeted and sealed off with cement.

Please visit alpinereponse.com for up-to-date information on the response as well as daily air monitoring reports for Nuiqsut.
ConocoPhillips updated regulators March 17 as part of a continuing dialogue regarding its response to a subsurface natural gas release that was first identified on March 4, 2022. On that date, ConocoPhillips immediately took steps to ensure the safety of our personnel and mobilized North Slope and Anchorage response and technical resources to identify and seal the release source. The primary objective throughout our incident response has been the safety of the community and our workforce.

- Our detailed site investigation began immediately and continued over several days. We used ground-penetrating radar (GPR), satellite imagery, hand-held gas monitors, drones with optical gas imaging, Forward Looking Infra-Red (FLIR) sensors, and other tools to monitor the release and identify the source.
- Our site investigation determined that the likely source of the natural gas release is a low pressure, shallow formation not associated with the deeper formation from where we produce oil and gas.
- Once the likely source was determined, we took immediate steps to mitigate the release. Ongoing mitigation efforts to reduce the amount of natural gas released to the surface have included relieving pressure by flowing gas from well CD1-15, which is completed in a shallow gas formation, and by producing gas from the outer annulus of well WD-03. These steps have been productive. The release has largely ceased, and there are only intermittent low levels of natural gas being detected along the CD1 well row.
- This remains the case elsewhere on the CD1 pad. Several cracks, up to 1/4-inch maximum width, were observed on the CD1 pad on March 7, near the Doyon 142 rig and the CD1 well row. Since March 7, occasionally, minute levels of natural gas have been detected in the vicinity of the cracks. Flowing gas is not present. We continue to monitor the entire pad using LiDAR (Light Detection and Ranging) and Ground Penetrating Radar (GPR). Primary interpretation of recent data confirms that the pad remains stable.
- The March 4 gas release coincided with a drilling operation on well slot CD1-50 to complete a permitted and regulated waste disposal well, identified as WD-03. On March 4, drilling operations were suspended, and the well was not completed or put into service following the detection of natural gas. Since that time, flowing gas from this well has been a productive mitigation step, and we believe further work on this well may be important to permanently seal the gas release source.
- The Alpine Central Facility is continuing essential operations, and natural gas continues to be supplied to the Nuiqsut Utility Cooperative at no cost to the community. Formal and informal updates continue to be provided by ConocoPhillips to the village of Nuiqsut.

- The Alpine Response Team continues to be onsite. The Anchorage Incident Management Team is providing support to Alpine. Our response will continue until the gas source has been sealed.

**Next Steps**
The Doyon Rig 142, which drilled well WD-03, is undergoing rigorous safety checks, as it is warmed up to begin diagnostic work on well WD-03 that will inform our next steps for sealing the source of the release. Once the gas source is pinpointed, it will be targeted and sealed off with cement.

Please visit alpinereponse.com for up-to-date information on the response as well as daily air monitoring reports for Nuiqsut.
Over the weekend, ConocoPhillips wells personnel continued rigorous safety checks and preparation for the Doyon Rig 142 restart. The rig, which suspended drilling operations when natural gas was detected at the CD-1 pad on March 4, will conduct wellbore diagnostics on well WD-03. The work will commence following an Alaska Oil and Gas Conservation Commission (AOGCC) inspection of critical rig systems; a procedure that is required before every drilling operation on Alaska’s North Slope.

Upon approval from the regulator, rig operators and technical advisors will begin a process of preparing the well to run diagnostic logs. Results of the well diagnostics will take several days to acquire and interpret.
Warm-up operations on Doyon Rig 142 are complete. On March 22, the well liner was pulled from the wellbore in preparation for cementing activities and subsequent diagnostic work to inform our next steps for addressing source mitigation of the natural gas release.

In response to the Nuiqsut community’s request for snow sample collections, we conducted snow sampling in the area to determine if BTEX (benzene, toluene, ethylbenzene and xylene) compounds were present.

The analysis, which reflected samples taken on March 17 across six different collection locations between the CD1 pad and the community of Nuiqsut, indicate no presence of BTEX compounds. Click here to see the report. (https://copresponse-jtti.s3.us-west-2.amazonaws.com/wp-content/uploads/sites/11/2022/03/22191306/Snow-Sample-BTEX-Results_For-Publication.pdf)

ConocoPhillips continues to be committed to the safety and well-being of our workforce and community.
ConocoPhillips Alaska continues to take steps towards gathering well logging diagnostics from the WD-03 well at well slot CD1-50. These diagnostics will aid our subject matter experts in identifying and remediating the source of the natural gas release.

The natural gas that was originally detected in areas of the CD1 well pad is now being allowed to flow in a controlled manner utilizing the outer annulus of WD-03 and is going to Alpine Central Facility. This is being done to prevent the gas from being released into the atmosphere and to potentially alleviate the uncontrolled release to the surface through other pathways.

The natural gas that we are capturing from WD-03 is predominately methane and believed to be from the C-10 Halo formation, with lesser amounts from the Qannik formation. These low pressure, shallow formations are approximately 3,000 to 4,000 feet below the surface.

We are seeing decreasing levels of gas detected inside of wellhouses, and no gas is being detected outside of the wellhouses.

ConocoPhillips continues to be committed to the safety and well-being of our workforce and community.
ConocoPhillips is committed to the safety and well-being of our workforce and community as well as protecting our environment.

We completed the cementing of the planned disposal section of WD-03. Well logging diagnostics and interpretation continues throughout the weekend and will inform our next steps, which are expected to take place early next week. We continue our regular communication with regulators and will provide an update in our next meeting on March 29.

ConocoPhillips recognizes that it is a privilege to operate on the North Slope and has operated responsibly in Alaska for over five decades and on the North Slope for 30 years.
ConocoPhillips is committed to the safety and well-being of our workforce and community as well as protecting our environment.

We continue to analyze the results of the well logging diagnostics (acoustic logs) from well WD-03 at well slot CD1-50 to pinpoint and confirm the natural gas source. Well logging results so far indicate the source of gas is originating from a sand layer in the C-10 Halo formation in the WD-03 well and not from any other formation. The diagnostics were conducted using highly sensitive acoustic measuring devices which listen for gas flow. The interpretation of these results will inform our next steps, which are expected to take place in the coming days.

Additionally, CD1-03 is being restarted for water injection to promote a mitigation pathway for the natural gas while remediation activities on WD-03 take place.

We continue our regular communication with regulators and will provide an update in our next meeting on March 29.

ConocoPhillips recognizes that it is a privilege to operate on the North Slope and has operated responsibly in Alaska for over five decades and on the North Slope for 30 years.
In addition to regular updates that we have been providing to regulators, ConocoPhillips met with key agencies today to update them on the status of our Alpine CD1 response progress. WD-03 is no longer producing natural gas from the outer annulus due to source control operations that are in progress. Well logging results indicated the source of gas is originating from a sand layer in the C-10 Halo formation in the WD-03 well.

We continue to have regular communications with the Nuiqsut community through our village outreach liaisons.

The response site provides the latest news on the event and our progress, including new FAQs (https://alpineresponse.com/frequently-asked-questions/) that were recently added.

ConocoPhillips recognizes that it is a privilege to operate on the North Slope and has operated responsibly in Alaska for over five decades and on the North Slope for 30 years.
Source Remediation

ConocoPhillips wells personnel continued operations to isolate the source of the natural gas release. As previously shared, well logging results and gas isotope analysis confirmed the C10 Halo interval as the source of the natural gas release on the CD1 well row.

Source control activities included circulating kill weight fluid into the wellbore followed by diagnostic logs to verify that the natural gas source was controlled. As a result of these activities, the flow of gas up the WD-03 outer annulus ceased on March 28.

Source remediation activities commenced March 30. This involves placing cement in multiple steps to isolate the C10 Halo interval. These remediation activities will be ongoing over the next several days leading to the final plug and abandonment of the WD-03 well.

Natural Gas Release Estimate

ConocoPhillips concluded its assessment of the volume of natural gas released to the subsurface strata and reported its estimate to regulators today.

The volume of natural gas released into the subsurface strata under CD1 that was not captured into our Alpine Central Facility is estimated at 7.2 million standard cubic feet (MMSCF).

Most of the 7.2 MMSCF gas released into the subsurface strata is believed to have escaped to the atmosphere between March 4 and March 8. Some small amount of gas that was released to the subsurface strata may continue to escape to the atmosphere over time.

Well site monitoring remains ongoing with low levels of natural gas detected inside wellhouses and no gas has been detected outside of the wellhouses. Natural gas has not been detected off the CD1 pad.

Ongoing air monitoring continues in Nuiqsut, where the most recent results obtained have not shown anything outside normal
Ongoing air monitoring continues in Nuiqsut, where the most recent results obtained have not shown anything outside normal conditions.

ConocoPhillips will continue to review the information gathered throughout the response to better understand why this event occurred and how we can learn from it.
ConocoPhillips wells personnel continue source remediation activities, including placing kill weight fluid and cement in multiple steps to isolate the natural gas release from the C10 Halo interval. Natural gas monitoring continues at the well row and no gas has been detected outside of the wellhouses. Remediation activities will be ongoing, leading up to the final plug and abandonment of the WD-03 well.

To understand the geology in the area below the CD1 pad, shallow 3D seismic operations are underway. Ongoing air monitoring continues in Nuiqsut, where the most recent results obtained have not shown anything outside normal conditions. Air quality monitoring reports and situation response updates are available daily on the response site. Communications with regulators remain ongoing including the most recent update on April 4. The next meeting is planned for April 11.
ConocoPhillips is committed to the safety and well-being of our workforce and community as well as protecting our environment. We are also committed to keeping our stakeholders informed and have posted the video below to the alpineresponse.com site. Our goal in providing this response overview is to share that the source of the natural gas release at Alpine CD1 has been identified and controlled, and that the WD-03 well is being permanently cemented.

Remediation activities at CD1 continue, leading up to the final plug and abandonment of the WD-03 well.

(https://alpineresponse.com/response-overview/)
Abandonment operations on the WD-03 well progressed with placement of the cement abandonment plug at 3,000 feet measured depth. Abandonment operations will continue following successful testing of this cement plug, witnessed by Agency personnel.