

# Oil and Gas News Briefs

## Compiled by Larry Persily

### September 16, 2021

#### **Global oil stockpiles shrink to lowest level in 20 months**

(Bloomberg; Sept. 13) - Global crude inventories that ballooned during the pandemic have shrunk to the lowest level in 20 months as an economic rebound in top consumers China and the U.S. drives a robust recovery in fuel demand. About 2.97 billion barrels of crude were stored onshore globally as of Sept. 5, the least since January 2020 before COVID-19 eviscerated demand, according to data analytics firm Kayrros. U.S. stockpiles are at a two-year low, those in China are the smallest since September 2020, and inventories at the African hub of Saldanha Bay are at the lowest since April 2020.

Oil consumption in the world's top guzzlers has surpassed pre-pandemic levels and underpinned a red-hot rally in prices, although it faltered the past couple of months due to the spread of the Delta variant of the virus. China's depleted inventories have some in the market predicting the biggest importer will start refilling its giant reserves again. "China will have to buy crude soon," analysts at Energy Aspects wrote in a Sept. 9 note.

"There was really a surge in crude oil demand, especially in the first half of this year," said Victor Shum, vice president of energy consulting at IHS Markit. However, he predicted that the draw-down of inventories will slow as OPEC+ pumps more, and that demand surges are "probably turning a corner." China's crude stockpiles were at about 966 million barrels on Sept. 5, the lowest since September 2020, although still around 100 million barrels above pre-pandemic levels, according to Kayrros.

#### **OPEC now expects demand in 2022 will exceed 2019 levels**

(The Wall Street Journal; Sept. 13) - The world's thirst for oil will exceed pre-pandemic levels next year, with improving vaccination rates and increasing public confidence in governments' management of COVID-19 spurring a recovery in travel, the Organization of the Petroleum Exporting Countries said Sept. 13. In its monthly market report, OPEC raised its forecast for global oil demand for 2022 by just under a million barrels a day to 100.8 million barrels a day, higher than 2019's demand level of 100.3 million barrels.

OPEC had previously forecast a return to 2019 demand levels in the second half of next year, but the report was the first time the cartel said it expects demand to beat pre-pandemic levels for the full year. OPEC's forecast that oil demand next year will be even higher than before the pandemic comes despite efforts by governments and companies to slash fossil-fuel usage to hit net-zero emissions targets.

The pace of recovery in oil demand is now expected to be stronger than before and to mostly take place in 2022, after the emergence of the highly contagious Delta variant stymied recovery this year. Combined with an unchanged supply-growth forecast for its non-cartel counterparts next year, OPEC's estimates signal a tightening oil market.

### **Bank of America says \$100 oil possible mid-2022**

(Reuters; Sept. 13) - Bank of America Global Research said it could bring forward its \$100 per barrel oil price target to the next six months instead of mid-2022 if this winter is colder than usual, potentially driving a surge in demand and widening a supply deficit. A much colder than normal winter could lead global oil demand to surge by 1 million to 2 million barrels per day, with the winter supply shortfall easily exceeding 2 million in such a scenario, the bank said in a note dated Sept. 10.

The bank maintained its Brent price forecast for the second half of 2021 at \$70 a barrel, predicting range-bound prices, but said it sees Brent at \$75 by year end on "growing upside risks." The downside risks include "a new COVID-19 wave, taper tantrum, a China debt crisis, and the return of Iranian crude barrels. Having said all of that, winter weather risk is quickly becoming the most important driver of energy markets."

### **Hurricane losses negate OPEC+ production gains**

(Bloomberg; Sept. 14) - The world will have to wait until October for additional oil as output losses from Hurricane Ida wipe out increases from OPEC+, the International Energy Agency said. Consumers should have been enjoying "solid gains" in production as the Organization of the Petroleum Exporting Countries and its allies continued their revival of idle capacity, the agency's monthly report said. Instead, supply fell by 540,000 barrels a day in August due to unexpected disruptions and will be flat this month.

The supply disappointment hasn't had a big impact on prices, but that could change. The IEA expects a sharp rebound in demand of 1.6 million barrels a day next month, with continued growth to the end of the year. The matching shifts in supply and demand mean this year's oil-market trend — shrinking inventories — continue unabated. Fuel stockpiles in developed economies fell by 30 million barrels last month, putting them 186 million barrels below the five-year average, according to preliminary IEA estimates.

### **Russia underproducing from its OPEC+ target**

(Bloomberg commentary; Sept. 12) - Russia is struggling to boost its oil production, even as its allowance under the latest OPEC+ agreement is rising. At least that's what

the current data show. If it's true, we ought to be worried. The country is the largest of the allies that joined with the Organization of Petroleum Exporting Countries last year to agree to a record cut in oil output as COVID-19 slashed demand. Now, as consumption recovers and the group is steadily restoring curtailed supply, Russia is lagging behind.

Its production has flat-lined since April, while the amount it is allowed to pump under the deal has increased by 200,000 barrels a day. That target is set to continue increasing at a rate of 105,000 barrels a day each month for the next year. Maybe Russia has found a new sense of responsibility to pump closer to its OPEC+ target level, having been the group's biggest over-producer in volume terms for much of 2020. But I doubt it. That would require the country to admit, at least privately, to past transgressions.

Part of the uncertainty over Russian production lies in definitions. The OPEC+ deal applies only to crude and excludes condensates — a light form of oil extracted from gas fields. Official Russian numbers, published by the Ministry of Energy, combine the two and, as the world's biggest natural gas producer, the condensate portion is significant. It probably amounts to about 800,000 barrels a day, or 8% of Russia's total oil production.

A question is which of the two types of oil is falling. We don't know if the stagnation in overall production is the result of a drop in condensates, which could mask an increase in crude. But if we look in more detail at individual companies' production, there is some indication that condensates are underperforming. Russia's oil production will be closely watched over the coming months and continued stagnation will raise concerns that the wider OPEC+ group can't raise production by nearly as much as its targets suggest.

### **[China's sales from oil reserves a message that prices are too high](#)**

(Reuters; Sept. 12) - The cat and mouse game between Asia's two biggest oil importers and the major exporters to the region ratcheted up another notch with China's announcement it will sell crude from its strategic reserves. Both China, the world's biggest crude importer, and India, the second-biggest in Asia, now have plans to sell crude from their strategic petroleum reserves (SPRs), a not-so-subtle message that they believe the global oil price has risen far enough.

However, Asia's two heavyweight importers are running the risk that major producers in the OPEC+ group of exporters will retaliate, by changing the amount by which they have agreed to raise output. Benchmark Brent futures have surged 41.5% since the end of last year, and were trading around \$73.30 a barrel in early Asian trading on Sept. 13. There is also some confusion as to what exactly the Chinese government is planning with the auction from the SPR, given that the Sept. 10 announcement lacked details, and wasn't even clear on whether the sale is upcoming or has already taken place.

But even without the exact details on how much crude will be sold, the message was clear. The National Food and Strategic Reserves Administration, which manages

China's SPR, said the sales will "better stabilize domestic market supply and demand, and effectively guarantee the country's energy security," adding that it plans to regularly release and replenish China's oil reserves. In other words, China is now confirming what the market has long suspected, that the SPR, and commercial crude inventories, are being used to ensure that oil prices don't rally to levels that Beijing deems too high.

### **U.S. oil producers working through backlog of uncompleted wells**

(Reuters; Sept. 14) - U.S. producers have cut so deeply into a once-large reserve of oil wells waiting to be turned on that they soon may have to resume drilling to keep production from sagging, executives and analysts said. This would mean an increase in spending that could unsettle investors who have benefited from shale companies' recent prioritization of shareholder returns over ramping up production.

Drilling new wells could add to supply at a time when oil is selling for \$70 per barrel, a profitable level for U.S. shale and OPEC producers. Those high prices, hurricane shut-ins at U.S. offshore wells and a rapidly shrinking backlog of drilled-but-uncompleted shale wells may spur producers to restart drilling and test their pledge to keep spending flat. The backlog of wells waiting to be turned on has fallen, the latest U.S. data shows, shrinking a reserve that allowed companies to maintain output without spending more.

The number of drilled but uncompleted wells, called DUCs, fell to 5,957 in July, the lowest in four years, from nearly 8,900 at its 2019 peak, based on U.S. Energy Information Administration data. Linda Htein, a director at energy consultancy Wood Mackenzie, said completing DUCs was a great way to sustain output without increasing capital expenditure. Unless producers start new wells, exhausting the DUC backlog "could limit oil production growth in the U.S. in the coming months," the EIA said.

### **IHS Markit says gasoline, diesel demand could peak by 2032**

(Bloomberg; Sept. 13) - Global demand for fossil fuels such as gasoline and diesel could peak as early as in 2032 as the energy transition gathers pace, but dramatically lower oil consumption may still be a couple of decades away. It won't be before 2043 that the burning of refined products derived from crude falls below levels seen in 2019, according to market-tracker IHS Markit. The projection doesn't take into account the consumption of natural gas liquids, mostly used for production of plastics.

The London-based consulting firm joins a growing list of energy forecasters calling for peak fossil fuel demand over the next decade as developed nations including the U.S. boost efforts to decarbonize their economies amid increased concerns about climate change. In July, BloombergNEF projected oil consumption peaking by 2033 and dropping below pre-pandemic levels by 2041.

While the energy transition has accelerated since the start of the pandemic, the prospect of net-zero emissions and much lower oil demand remains outside IHS's most likely scenario because of technological and political barriers, it said. That would require a push to electrification and green hydrogen that is "well beyond the current trajectory."

### **Analysts talk of cold-winter crisis in natural gas prices**

(CNBC; Sept. 13) - Natural gas prices have surged more than 35% in the past month, as worries grow there is not enough gas stored up for the winter should temperatures be especially cold in the Northern Hemisphere. The usually quiet market for the commodity has become hot in the past couple of weeks, as investors focus on the growth in demand around the world and supplies remain below normal. The biggest problem area is Europe, where supply is at a record low for this time of year.

"People are starting to throw the 'crisis' word around" when it comes to Europe, said John Kilduff, partner with Again Capital. He said gas in storage in Europe is 16% below the five-year average, and the volume in storage is a record low for September. "Europe is squarely behind the eight ball going into the winter season." Even in the U.S., the amount of gas in storage is 7.6% below the five-year average, according to recent data from the U.S. Energy Information Administration.

The tipping point could come when it becomes clear what type of winter is ahead for Europe, and also the U.S. Some analysts say in an extreme scenario, U.S. prices could double if there is an extended cold spell, particularly in Europe where shortages could get severe. U.S. gas futures for October jumped nearly 5.3% on Sept. 13, to about \$5.20 per million Btu, up 106% year-to-date and the highest in more than seven years.

### **Goldman Sachs warns of blackout risk in Europe if gas is short**

(Bloomberg; Sept. 15) - Europe's soaring energy markets are exposing the risk of power blackouts this winter, especially if freezing weather worsens the region's already exceptionally low natural gas inventories, according to Goldman Sachs. While higher gas prices can trigger supply and demand adjustments to offset the tight market, these are largely already priced in, Goldman analysts including Samantha Dart said in a note. As a result, a colder-than-average winter would mean Europe needing to compete with Asia for supplies of liquefied natural gas, driving prices even higher.

There's a "non-negligible risk" that LNG directed to Europe won't be enough to prevent a depletion of gas inventories by the end of winter, especially if weather is cold in both Europe and Asia, the analysts said. "Under such an outcome, the only balancing mechanism would be a significant further rally in European gas and power prices

reflective of the need to destroy demand, with curtailed power demand in the industrial sector through blackouts,” they said.

This scenario from the bank adds to mounting concerns about an energy crisis in Europe, just as economies recover from the pandemic. Energy prices are breaking records daily. Gas and coal reserves are well below normal weeks before the heating season begins, while limited gas supplies from Russia, lower North Sea production and competition with Asia for LNG are also stoking the rally.

### **U.S. official worries about Europe’s natural gas supply**

(Bloomberg; Sept. 13) - Europe's energy crunch is deepening, with gas and power prices hitting fresh records after the U.S. warned the continent isn't doing enough to prepare for what could be potentially a dire winter. With about a month to go before the start of the heating season, Europe doesn't have enough gas in storage and isn't building inventories fast enough either. Amos Hochstein, the U.S. State Department's envoy for energy security, said on Sept. 10 he was worried about supplies this winter.

Energy demand is rebounding across the world as economies reopen and people return to the office. Gas stockpiles in Europe are already at the lowest level in more than a decade for this time of year, pushing up the cost of producing electricity. The rally in European energy prices is just a taste of what's to come for other commodities, Goldman Sachs Group said in a report.

Europe is struggling to boost gas supplies, with flows from No. 2 supplier Norway currently limited due to maintenance. Top seller Russia is “is coming off an extended period of inexplicably low supply” at a time when U.S. deliveries of liquefied natural gas can't be increased further, Hochstein said. “I worry because I don't think we should ever be in a position knowing that if it's a cold winter, there's not enough supply,” he told reporters during a visit to Warsaw.

### **Global gas market pays the price of rising demand**

(The Wall Street Journal; Sept. 11) - Natural gas could really use an OPEC-style, coordinated production ramp-up right now. U.S. Henry Hub natural gas prices, at around \$5 per million Btu, have more than doubled from a year earlier. When the benchmark broke \$4 in early August it was a rare milestone — especially so far ahead of the winter heating season. The sticker shock is even greater elsewhere in the world: East Asian benchmark futures are four times where they were a year ago, while European gas spot prices are five times as high. Both benchmarks have exceeded \$18.

Europe's prices typically track lower than those seen in Asia, but they have had to rise to attract liquefied natural gas cargoes. The prices are more alarming considering the fact that the once-gas-glutted U.S. is itself behind on stocking up for winter. How did we get here? U.S. consumption isn't the driving force. Overall domestic gas consumption through June was in line with 2020, according to the U.S. Energy Information Administration. The culprit is international demand and inadequate new production.

Normally, excess U.S. gas during the summer that isn't liquefied and exported would go into underground storage, said Stan Brownell, an analyst at Argus Media. That domestic stockpiling hasn't been happening as much this year as the U.S. flexes its LNG export capacity. In the first half of the year, the U.S. exported roughly 10% of its natural gas, according to EIA data. Samer Mosis, an analyst at S&P Global Platts, said Asia still needs to build more supply than usual this fall to reach comfortable levels heading into winter. Meanwhile, gas in storage in Europe is 16% below the five-year average.

### **Shortfall in wind power exacerbates U.K. electricity shortage**

(The Wall Street Journal; Sept. 13) - Natural gas and electricity markets were already surging in Europe when a fresh catalyst emerged: The wind in the stormy North Sea stopped blowing. The sudden slowdown in wind-driven electricity production off the coast of the U.K. in recent weeks whipsawed through regional energy markets. Gas and coal-fired electricity plants were called in to make up for the shortfall from wind.

Natural gas prices, already boosted by the pandemic recovery and a lack of fuel in storage caverns and tanks, hit all-time highs. Thermal coal, long shunned for its carbon emissions, has emerged from a long price slump as utilities are forced to turn on backup power sources. The episode underscored the precarious state the region's energy markets face heading into the long European winter.

The electricity price shock was most acute in the U.K., which has leaned on wind farms to eradicate net-carbon emissions by 2050. Wind accounted for about 25% of U.K. power last year, according to the system operator. After the wind dropped this month, National Grid asked an operator to restart a coal power station. That won't be possible in the future: The government has said all coal plants must close by 2024. To be sure, abundant wind has at times provided cheap electricity. This month, however, U.K. wind farms produced less than one gigawatt on some days. Full capacity is 24 gigawatts.

### **Global energy transition will challenge future of natural gas**

(Wood Mackenzie commentary; Sept. 9) - The LNG market is on fire. Producers are in clover with soaring gas prices in Europe (\$18 per million Btu) and Asia (\$20), well above oil parity, delivering record earnings and cash flow. After plumbing the depths a year

ago, the outlook for LNG has fundamentally improved with gas demand recovering strongly from the 2020 downturn and supply growth slowing. “We believe robust prices and margins will prevail for several years,” says a Wood Mackenzie analysis.

The rosy outlook, though, masks the reality of uncertainty: The LNG industry is starting to come to grips with the upheaval the energy transition presents. An upcycle usually brings a flurry of final investment decisions on new projects but, so far, Wood Mackenzie has seen only two this year: Qatar’s expansion and Russia’s Baltic LNG are both huge and low cost. The volumes mop up most of the demand through to 2028.

But international oil companies have yet to come to the party. Gas and LNG are central to the energy transition strategies of many IOCs, including all the majors, as well as specialist LNG players. But monetizing the gas is a challenge. Capital discipline reigns, and high-cost, capital-intensive and long-payback projects are well down the pecking order for investment. Uncertainty over long-term gas demand is another factor in a sector where conventional project paybacks typically are 10 to 15 years.

The big question is whether there is sufficient confidence in the industry to commit to higher-cost brownfield projects. Policymakers in Europe and Japan have reducing gas consumption firmly in their sights as they push to net-zero emissions. These are early signs that, the days for gas are numbered, despite its relatively low-carbon intensity.

### **LNG tankers line up at Qatar as buyers load up**

(Bloomberg; Sept. 13) - More than a dozen liquefied natural gas tankers are waiting to fill up at Qatar’s port of Ras Laffan in a clear sign of how tight the global gas market has become. South Korean and Pakistani buyers are among those seeking to maximize shipments under long-term supply contracts with the Middle Eastern emirate, one of the world’s biggest natural gas exporters, according to traders with knowledge of the matter.

The term cargoes are linked to oil prices and cost about half of the current rate in spot gas markets, where a global supply crunch has pushed prices rise to seasonal highs. Utilities and city gas suppliers around the world are vying to lock in a finite amount of gas before the winter, when demand for the fuel peaks in the Northern Hemisphere. Qatar is seeking to sign more contracts to underpin a massive LNG expansion and has been more willing than its rivals to adjust contract volumes, whether up as currently or down as during the peak of demand destruction because of the coronavirus epidemic.

Over a dozen LNG carriers are offshore Qatar’s coast, while another five are currently loading, according to ship-tracking data compiled by Bloomberg.

## **Japanese utilities may restart oil-fueled power plants this winter**

(S&P Global Platts; Sept. 15) - Japan may see restarts of oil-fired power generation units this winter, amid soaring LNG and coal prices, Petroleum Association of Japan President Tsutomu Sugimori said Sept. 15, as refiners carry out contingency planning in response to the tightened power supply-and-demand balance over the past season.

"If this steep rise continues, it would be a matter of comparing costs between oil, coal and LNG thermal power and looking at which sources are cheap and expensive," Sugimori told an online press conference. "By a simple cost comparison, competitiveness of oil-fired power will likely increase amid soaring coal and LNG [prices]." He continued, "In case of oil-fired power being competitive, there is a possibility of seeing a part of oil-fired power plants being restarted."

"In such occasion, we are uncertain how much we can meet supply requests," he added, citing the reduced oil share in the thermal power generation mix. Refiners, however, will "maximize efforts" to ensure their fuel oil supply for power generation, he said. Amid the rising spot LNG price, some Japanese power utilities have moved to buy fuel oil domestically, with some having filled their tanks in the summer, according to a source with one Japanese refiner. The price of generation fuels has surged across the board, making life difficult for those Asian utilities that have yet to ramp up procurement.

## **Lukoil critical of Ghana proposal to take bigger stake in oil project**

(Bloomberg; Sept. 14) – Russia's Lukoil said Ghana's plans to acquire a bigger stake in one of its key oil projects could pose a risk to its execution. Ghana National Petroleum Corp. last month won parliamentary approval to negotiate increasing its share of the Deepwater Tano/Cape Three Points block and South Deepwater Tano field. But Lukoil, which owns 38% of the assets, fears the change may affect project financing and development schedules, according to a letter sent to Ghana's energy minister.

State-owned GNPC, currently holding 10% of DWT/CTP and about a third of South Deepwater Tano, is seeking to drive up revenue for government coffers after a shortfall in oil receipts amid the pandemic deepened last year's budget deficit. Ghana's hydrocarbon resources will also increasingly have to compete for investment as the use of cleaner energy grows. The nation estimates it will need more than \$1 billion to acquire a 37% stake in the DWT/CTP asset, operated by Aker Energy, and a 70% share of the South Deepwater Tano field operated by AGM Petroleum Ghana.

Lukoil was not made aware of plans to alter ownership and operatorship, it said in its letter to the energy minister. In response, Energy Minister Matthew Opoku Prempeh said GNPC had the financial backing and technical competence to buy the stakes and participate in the projects, according to a separate letter seen by Bloomberg. The proposed acquisition is still in its early stages and remains under negotiation.

## **Global investors propose standards to judge climate initiatives**

(Reuters; Sept. 15) - Investors managing more than \$10 trillion published on Sept. 15 an ambitious blueprint for energy companies seeking to tackle climate change, including sharp cuts to greenhouse gas emissions and winding down oil and gas production. The unprecedented initiative — dubbed the Net Zero Standard for Oil and Gas — details 10 standards to help money managers compare companies' strategies and judge whether they are aligned with U.N.-backed efforts to cut carbon emissions to net zero by 2050.

Oil and gas companies have published targets and strategies aimed at battling climate change, but the huge variation in scope, definitions and ambition makes analysis and comparison exceedingly difficult for investors. At the same time, pressure has grown on portfolio managers and banks to ensure that their investments chime with the 2015 Paris accords to limit global warming. With the next round of global climate talks taking place in November, concern is growing that too many plans are flaky and unlikely to provide help by reducing absolute emissions at the rate needed to limit global warming.

“We need to have a level playing field now on disclosure because it’s not possible to compare and contrast across the sector,” said Adam Matthews, head of responsible investment at the Church of England Pensions Board, who chaired the process to develop the new initiative. Others to back the plan include Amundi, Europe’s biggest asset manager; Britain’s Legal & General Investment Management; HSBC Global Asset Management; and state-backed Canadian investor Caisse des Depots, among others.

## **Seller uses forest conservation projects to claim carbon-neutral LNG**

(Bloomberg; Sept. 14) - Japan’s natural gas industry is making controversial claims about the fuel to make it more appealing to climate-conscious buyers. Tokyo-based Inpex Corp. this month said it sold two “carbon-neutral” liquefied natural gas shipments to Shizuoka Gas and Toho Gas, offsetting the fuel’s lifetime emissions using credits from projects that include forest conservation in Indonesia.

Those credits would offset more than 450,000 tons of carbon-dioxide emissions from the two shipments, covering the entire value chain from production to combustion, according to spokespeople at Shizuoka Gas and Toho Gas. The three Japanese companies said they will use the credits to meet their targets for zero emissions. The companies didn’t disclose who paid for the credits, the price or supplier.

But terms such as “carbon neutral” and “net zero” imply balancing emissions by removing an equivalent amount of carbon from the atmosphere. Climate scientists at bodies including the U.N.-backed Science-Based Targets initiative say measures such as preventing deforestation or supporting renewable energy projects actually do little to extract additional carbon from the air, and shouldn’t contribute to net-zero claims.

The trend of calling LNG shipments “carbon neutral” has garnered criticism as there is no standard for measuring emissions from LNG, nor is there government oversight to ensure that offsets come from projects that deliver the carbon savings promised.

### **Texas regulators limit one producer’s flaring approval**

(Bloomberg; Sept. 14) - Getting a permit to burn excess natural gas at Texas oil wells is getting a little bit harder. Texas Railroad Commissioners limited an oil driller to flaring gas for just one year as opposed to the two years the company sought at a meeting Sept. 14. The commission approved 31 other requests from oil and gas companies, including five more to flare gas, without any changes.

Commissioner Jim Wright said a well not having pipeline service is no longer a good enough reason to flare, the industry practice of burning off natural gas produced as a by-product of drilling for oil. The comments mark a shift in thinking at the agency, which has been widely criticized for rubber stamping thousands of flaring permits without requiring oil companies to come up with a plan to curb the practice.

Calling flaring an “unnecessary waste of our natural resources,” Wright said there are too many alternatives, such as electric power generation for Bitcoin mining and graphene production, which can be set up at remote sites to use the excess fuel. The flaring request that irked Wright was made last year by Houston-based Oasis Petroleum for one its Permian Basin oil leases where the company did not have pipeline service. Oasis later sold all of its Permian Basin assets in a series of deals worth \$481 million.

### **Investigators say tampering led to oil train accident in Washington**

(KUOW public radio; Seattle; Sept. 10) - Federal investigators say someone apparently tampered with the brakes and couplers on an oil train before it derailed and caught fire north of Bellingham, Washington, last December. On top of the apparent tampering, BNSF Railway managers and crew failed to follow their own safety rules for transporting hazardous material, according to a report by the Federal Railroad Administration.

The combination of factors led the mile-long train to split into two pieces, then crash into itself, with 10 tanker cars full of highly flammable Bakken oil derailed and three catching fire. Trains’ failsafe emergency brakes are designed to engage if a train comes apart for any reason but, as a KUOW investigation found in June, this train’s brakes had been disabled. The train carrying three million gallons of Bakken crude was on the last leg of a six-day journey from North Dakota to the Phillips 66 refinery in Ferndale, Washington.

The long string of oil tankers stopped outside the small town of Custer, Washington, for a crew change. It sat on the rural tracks before sunrise for about two hours until its crew

went home at the end of their shift. Federal investigators say the train sat unattended for three hours before a replacement crew arrived. Those hours, according to investigators, left the train's couplers and brake valves vulnerable to "possible vandalism." The FBI launched a criminal investigation of the incident almost immediately in December 2020. It is unknown whether the agency ever identified any suspects.