

PROJECT PROFILE: Glacier County, MT



The Palmer Bow Island 3-14, an orphan natural gas well, located in Glacier County, Montana, holds a unique place within the energy and environmental landscape. Designated by API number 25-035-22026, this gas-producing well was part of the Cut Bank field; drilled in the early 2000s at a depth of approximately 2,100'. Situated within the Blackfeet Indian Reservation, this orphaned well symbolizes the complex relationship between natural resource extraction, environmental stewardship, and Indigenous lands. The Palmer Bow Island 3-14 was plugged in 2023, the methane emissions eliminated, and the surface areas fully restored.

PALMER BOW ISLAND 3-14: PROJECT IMPACT

120,145

Metric tons of CO₂e emissions reduced

26,119

The equivalent of automobiles driven each year

5.4M

Equivalent to the climate benefit of 5.4 million mature trees

SUSTAINABLE DEVELOPMENT GOALS



CLEAN WATER & SANITIZATION

The shallow aquifers in this region supply domestic and agricultural water. Plugging Palmer Bow Island 3-14 prevented contamination, protecting both groundwater and surface water resources.



INDUSTRY, INNOVATION & INFRASTRUCTURE

Enabled by solar-powered flow metering technology, this innovative solution supports the adoption of clean technologies, optimizes resource use, and, with mobile and cloud capabilities, provides global scalability, particularly benefiting developing regions.



SUSTAINABLE CITIES & COMMUNITIES

On the Blackfeet Reservation, efforts to mitigate abandoned wells protect vital land and water resources, contribute to healthier living conditions, create jobs for Tribal Members and uphold cultural and environmental resilience for Indigenous communities.



RESPONSIBLE CONSUMPTION & PRODUCTION

Achieved by promoting responsible consumption and production through the proper management of resources, reducing waste, and adopting sustainable technologies to minimize environmental impact.



CLIMATE ACTION

Achieved by taking urgent action to combat climate change through the reduction of greenhouse gas emissions, such as plugging abandoned wells, and adopting clean, sustainable technologies to mitigate environmental impacts.



PROJECT PROFILE: Glacier County, MT (continued)



For decades, local farmer Grant Ostby had been farming around the Palmer Bow Island orphan wells. Left behind and forgotten, these wells posed significant health and safety risks in addition to the environmental impacts they were creating.

Always mindful of the dangers, extra precautions were required to avoid hitting the wells while farming. Grant tried to encourage the State of Montana Board of Oil & Gas Conservation to get the wells plugged, but the state had no available funds.

When the Well Done Foundation, a Montana-based 501(c)(3) non-profit, reached out to Grant Ostby in 2021 and presented a plan to adopt the wells, the farmer was all in.

Working together with the Blackfeet Tribe, the State of Montana Board of Oil & Gas Conservation, and farmer Grant Ostby, the Well Done Foundation formally adopted the Palmer Bow Island orphan wells in Glacier County in February of 2022.

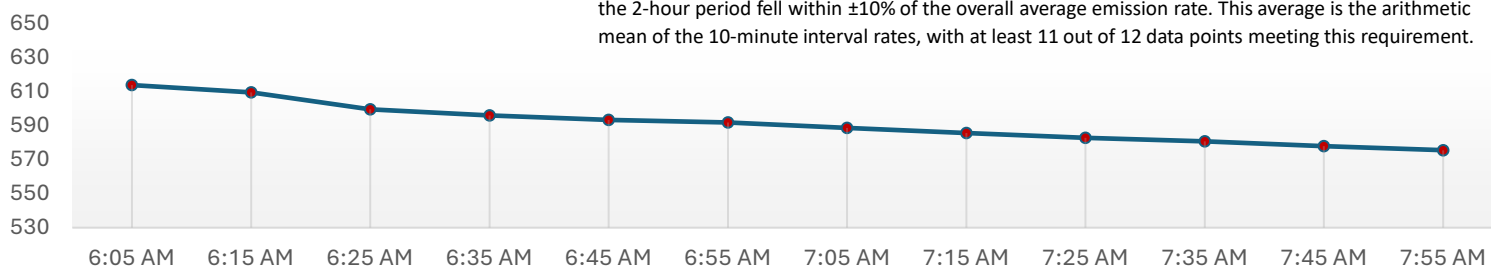
The Well Done Foundation initiated a program to measure methane gas to quantify the emissions and determine the environmental impact. Additionally, fundraising began for the Glacier County Palmer Bow Island project, and finally, in the summer of 2023, the green light was given to plug these orphan wells.

Organizing and scheduling the work began, including hiring local Blackfeet Tribal members to be part of the plugging crew. The Palmer Bow Island 3-14 was plugged on October 20, 2023. The methane emissions were eliminated, and the impacted surface areas have been fully restored. The Well Done Foundation conducts annual ex-post methane monitoring to ensure the integrity of the plug and confirm methane elimination.



PROJECT ID	CarbonPath WDF24.003
WELL NAME	Palmer Bow Island 3-14
API NUMBER	25-035-22026
MEASUREMENT DATE	06/08/2023
METHANE CONCENTRATION	.86280

2-HR FLOW



Emission Rate Stability:** The 10-minute interval emission rates (scf/hr) did not vary by more than a factor of 10 across the 2-hour period. *Consistency Requirement:** Each 10-minute emission rate within the 2-hour period fell within $\pm 10\%$ of the overall average emission rate. This average is the arithmetic mean of the 10-minute interval rates, with at least 11 out of 12 data points meeting this requirement.