

Tenwell No. 1

Long-Term Management Program Community Update

September 2023

Ongoing Operation and Management of the Historic Well

The Orphan Well Association (OWA) wants to keep residents informed of activities and the management of the old gas well that is located within the greenspace between 63rd and 64th Streets in the Brennan Subdivision (playground area). There are a few activities planned for the site that we would like Brennan residents to be aware of.

Ongoing Monitoring

We continue to perform quarterly environmental monitoring events at the well. Results of our monitoring have been extremely positive, with no material detections of methane in the soil around the well for over a year now. This tells us that the intervention work we did on this well back in the fall of 2020 was successful in pulling gas into the well where we can safely control it through the long-term Active Methane Mitigation System (AMMS). Shallow groundwater is also measured quarterly, and we continue to see declining rates of gas in the water with only minor periodic levels detected, usually in mid-winter. These detections are due to the "degassing" of the aquifer as it lowers in the soil profile during winter.

Ambient air is also measured regularly for any methane that may be venting into the air around the well. To date, no material detections have been made in the ambient air near the well.

AMMS Unit

The new long-term AMMS unit was essentially completed last summer and is now handling methane emissions directly from the well. Each day between 16 and 20m³ of gas is discharging from the well and being safely combusted by a flameless heater system associated with the AMMS installation. This ensures that no methane is released to the atmosphere.

As intended, the soil vacuum component of the AMMS unit is not required and only serves as a backup system if conditions in the well change. There are no plans to turn this unit on. We have

determined however that noise levels are too high when the unit does run, so we are making some minor modifications to the vent systems and piping associated with the building over the fall and winter of 2023/24 to ensure if the unit does run, it will not disturb residents. Most of this work will be very minor in nature and likely involve a few days of work by a one- or two-person crew and one truck. Use of the playground will remain unaffected.

Ongoing Operations

We continue to have operational visits to the site on a weekly basis to ensure the system is running as intended. As the system has been working quite well, these visits will likely be altered to be of less duration but maintain a weekly frequency.

Home Purchase and Removal

In late 2022 the OWA purchased the home at 5224 63rd Street, immediately east of the historic well. Since this time the Association has been working with the Town to maintain the property and to determine future use of the property. After several months of examination, it has been determined that the home will be either moved or demolished in late 2023 and the lot maintained as an extension of the greenspace/park. We are doing our best to salvage the house, but moving costs for this type of home can be considerable.

There are no plans to bring a rig to site and attempt another well abandonment, but the OWA felt it was important to at least increase space around the well if a rig decommissioning is required at any point in the future. By removing the house, we believe we would have ample space for a service/drilling rig if ever needed.

The garage is also going to be moved from the lot for use by the Vermilion Fire Department. Once converted to lawn, the lot will be given to the Town and maintained as green space.

THANK YOU! – The OWA wants to thank residents of the Brennan community, and the staff and officials of the Town of Vermilion for their continued cooperation and patience respecting this project.

Stay Up-To-Date –Get the most up-to-date information on the project from our website http://www.orphanwell.ca/community/

Questions? – If you have questions about this project; contact Dave Marks, Manager – Land, Stakeholder Relations, Support Services, with the OWA (403.297.8555). Or email us at community@orphanwell.ca.

Well Installation



Final AMMS installation at the historic gas well