

Case study
Environmental

Great Lakes Wellhead, Inc.

Tech-Driven Compliance: Great Lakes Wellhead Success Story



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**GREAT LAKES
WELLHEAD, INC.**

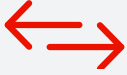
Juston Iburg

Director of Business Development

Challenges



Changing regulations requires aggressive inspection schedules with severe penalties for delays and non-compliance



Underground storage facilities are often obscured by the changing landscape of aboveground structures, making location of assets a challenge



Outdated, incomplete accounting of assets means that clients are unaware of potential risks or compliance issues, increasing exposure and hindering planning efforts



Multiple regulators requiring different inspections can result in many different trips to the same site for wasted time and effort

Key Outcomes



Fulcrum allows inspections to be performed quickly, with **time savings of 80% or more**



Fulcrum captures the geographic data automatically, so location information is independent of surface landmarks



With accurate reports and raw data made possible using Fulcrum, clients are made into “subject matter experts” of their own assets to mitigate risk and allow for more informed decision making



Using Fulcrum, GLW can combine trips and perform multiple different functions and inspections while on site at one location

Started as a partnership in 1985 and later incorporated in 2009, Great Lakes Wellhead, Inc. (GLW) was founded to serve the oil and gas industry, with services including exploration and production (E&P), wellhead maintenance, gas storage, and wellhead disposal.

“About half of our business is in the gas and storage industry,” says Juston Iburg, Director of Business Development. “The other half is in the E&P market, drilling new wells for oil and natural gas, carbon captures and all kinds of similar projects.”

To aid in its highly-regulated and potentially dangerous work, GLW adopted Fulcrum in 2020.

New federal regulations spurring increased inspections

“While our gas clients drill for gas and produce it year round, there is little demand for it in the summer. So, in order to keep the price for natural gas steady, and ensure there is enough of it to

get its customers through the winter months, the gas is stored in formations underground until it’s needed,” explains Iburg. “Over the years there have been incidents with these underground gas storage installations, including leaks and even explosions.” These recurring dangers have prompted the United States Pipeline and Hazardous Materials Safety Administration of the US Department of Transportation to enact new safety standards for underground natural gas storage facilities, starting with inspections.

“So the new regulations required the entire United States inventory of natural gas storage facilities – about 17,000 wells – inspected over the next few years, with 40 percent completed by March of 2024, and 100 percent inspected by March of 2027,” says Iburg. “It’s a huge undertaking, and our clients count on us to be able to keep them compliant with the regulations and have them completed before the deadlines. Fulcrum is key in our ability to be able to keep the inspections moving forward so our clients won’t miss deadlines and be subject to penalties.”

“ Rather than sending 100 people a year to do different inspections and tasks at the same site, **a crew of two people can do it all at once using Fulcrum.** ”



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Faster field inspections

Fulcrum allows GLW to perform the visual inspections quickly and efficiently, with uniformly accurate results and irrefutable location data. “For visual inspections taken using Fulcrum, it’s really quick,” says Iburg. “If we didn’t have Fulcrum, each inspection would take at least five times longer to perform, with significantly less thorough and accurate results.”

The time component is particularly important with the urgency of the new regulations. “With the new inspection rules, public utility companies will be spending a lot of time – and millions of dollars – performing inspections. With Fulcrum, that time can be cut by 80% or more, and allow for significant cost savings,” says Iburg.

Empowering clients with data

GLW is often called upon to help clients when a compliance issue is discovered, or in response to a large government initiative like the underground storage inspection regulations. “We’ll get the call and go in and assess client installations, and they’re amazed with what is there, and what we find,” says Iburg. “Sometimes we’ll get clients that received assets in an acquisition, and never got a full accounting of what they had. These inspections will

discover compliance issues they didn’t know existed, and leaks and everything that might be an issue. It’s not always a comfortable experience.”

However, GLW sees its role to not only do inspections for its clients, but to empower them with what it discovers. “We utilize Fulcrum to get this data and provide it to our clients, not just as reports, but as a direct line to the raw data. With this information, they can see categories of risk involved with their assets that they didn’t previously know about,” says Iburg. “With Fulcrum, we are able to make our clients into subject matter experts on their own assets, so they can accurately assess risk and mitigate exposure instead of just hoping for the best.”

Legacy wellheads and changing landscapes

The underground storage facilities are located in diverse locations, from rural to urban and everywhere in between, causing some challenges in performing inspections. “Much of these are legacy wellheads, created long before structures on the property were erected,” says Iburg. “So we’ll get facilities in a farmer’s field, or right next to a person’s house, or even in the middle of a busy downtown. The underground storage was there before, and remained even as the landscape around it changed.”

Automatically capturing detailed geospatial information is a must for GLW to be able to inform its clients. “We can’t count on outdated landmarks anymore,” says Iburg. “Having the coordinates is critical, so whatever happens on the ground above it, we still know exactly where the gas is stored underneath. Fulcrum captures the geographic data automatically, so exact locations are never in question.”

Not just one and done

While the new federal regulations call for a complete accounting of existing wellheads, it doesn’t end there. “Going forward, there will be a continuing rolling requirement for inspections,” says Iburg. “We also anticipate that more regulations will be added with increased public and governmental demand for ESG [environmental, social, and governance] initiatives.”

With this ongoing demand for wellhead accountability, having an accurate, up-to-date inventory remains critical. “We can’t expect to simply do some inspections and be done with it,” says Iburg. “We will be revisiting the same places, rechecking the same locations, to keep in compliance with these regulations. And as new

work is done, conditions change, or regulations evolve, the need for the information to be up-to-date and shareable between contractors, clients, and regulators remains.”

One trip, multiple tasks

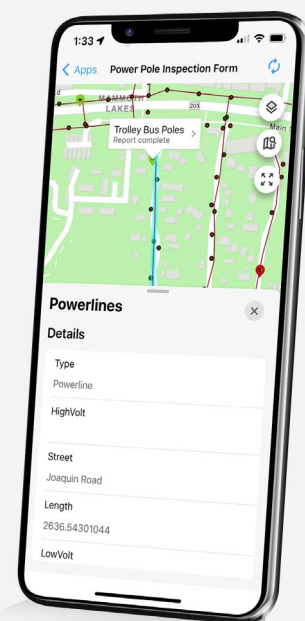
In addition to federal oversight, GLW’s clients also are subject to state regulations. One that has been drawing a lot of attention recently is the FLIR (forward-looking infrared) inspection, where an infrared camera shows the smallest of gas leaks. “New York mandates six FLIR inspections per storage facility per year, which can be very cumbersome for utilities,” says Iburg.

This is not the case when using Fulcrum, however. “We’re already on site, doing work and upkeep on assets,” says Iburg. “We’re doing the annual maintenance, or different categories of jobs. While we’re there, we can do these inspections using Fulcrum, saving time and saving a trip. So, rather than sending 100 people a year to do different inspections and tasks at the same site, a crew of two people can do it all at once using Fulcrum”

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Conclusion

“Environmental regulations are not easing up any time soon, and we anticipate them to become more numerous and rigorous as public and political will demands greater attention to ESG initiatives,” says Iburg. The continuous evolution of environmental standards highlights the increasing demand for oil and gas service providers that use technology to stay ahead of the curve.

Great Lakes Wellhead recognizes the need for innovative solutions like Fulcrum to efficiently address compliance issues, empower clients with valuable data, and adapt to ongoing inspection requirements. “Great Lakes Wellhead is a service provider, right? So, you bring us your problem, and we build out a process or a product line based on that problem to fix it,” says Iburg. “With Fulcrum, we know we have the technology capable of getting jobs done. It’s just that simple.”

Ready to create your own digital transformation success story?

Contact us for a no-obligation chat to get started today!