

TECHNICAL PROPOSAL

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OOG – METHANE EMISSION QUANTIFICATION

RFP NO. CRFP 0313 DEP2500000001

AUGUST 27, 2024



IN
PARTNERSHIP
WITH



Atlas Technical Consultants LLC
Successor in interest to ATC Group Services LLC
125 Granville Square
Morgantown, West Virginia 26501
304-533-0367
Jeff Rossi, Contract Manager
jeff.rossi@oneatlas.com

A handwritten signature in black ink, appearing to read "Jeff Rossi", written over the printed name and email address.

RECEIVED

2024 AUG 26 AM 9:19

WV PURCHASING
DIVISION



TRANSMITTAL LETTER

August 27, 2024

West Virginia Department of Administration, Purchasing Division
Attention: Josh Hager
2019 Washington Street East
Charleston, WV 25305-0130

RE: Atlas Technical Proposal for DEP OOG - Methane Emission Quantification
Solicitation No.: CRFP 0313 DEP2500000001

Dear Mr. Hager and Selection Committee Members,

The State of West Virginia is committed to prioritizing the closure of orphaned wells that pose threats to human health, safety, the environment, or future mineral development. Additionally, the State aims to obtain quantitative measurements consistent with U.S. Department of Interior (DOI) guidelines. Atlas Technical Consultants LLC (Atlas) understands the State's objective of maintaining consistency in prioritizing all orphaned and abandoned wells. We will employ DOI standards for both state-funded and DOI-funded oil and gas well plugging programs. In partnership with the Well Done Foundation (Well Done), Atlas offers a proven team that understands your goals and priorities, with a demonstrated record of performance in successfully delivering these services nationwide.

PROVEN PERFORMANCE. The Atlas/Well Done Team is the ideal partner to achieve your goals and maintain regulatory compliance. Our team offers the specialized expertise, technical excellence, and equipment needed to screen wells for methane emissions and quantify pre- and post-plugging methane emission rates from selected natural gas and/or oil wells. **We have conducted DOI-compliant measurement and monitoring of 1,600+ wells across 14 states**, which means we provide turnkey solutions to navigate the myriad challenges associated with this work. Atlas/Well Done has assembled a cohesive, best-in-class team with proven experience with **complex, multi-site orphan well program management**; managing and executing the **Infrastructure Investment Jobs Act's (IIJA) largest methane measurement, quantification, and data management project**; developing safe, efficient, and value-added services and results. Our team is at the forefront of carbon credit project development for plugging and abandonment of oil and gas wells and can provide a **carbon credit option for optimizing contract budgets**, resulting in the ability to plug more wells.

DEEP CAPACITY. The Atlas/Well Done partnership provides ample resources to fulfill the project's requirements. Our team consists of more than **7,300 nationwide**, with more than **350 professional and technical staff located in the greater West Virginia region and over 100 in West Virginia**. We have access to the necessary staff and equipment to efficiently and effectively conduct measurement and monitoring services using multiple teams.

QUALITY DELIVERY. While each state has its unique process and procedures for data and document management, the workflows are all essentially the same—the Atlas/Well Done Team works with the regulatory agency to prepare and submit the pre- and post-plugging reports for abandonments. In some cases, as with the State of New Mexico, the platform for pre- and post-plugging methane quantification reporting was designed to comply with the IIJA Program through a proprietary data input process.

In conclusion, the Atlas/Well Done Team offers a cohesive group of teaming partners and subcontractors with extensive experience that will meet or exceed project requirements. Contractually, Atlas will serve as the prime consultant. We are committed to effective administration and successful work performance under this WVDEP contract and look forward to discussing the advantages of the Atlas/Well Done Team in more detail.

Respectfully submitted,


Jeff Rossi
Contract Manager
Jeff.Rossi@oneatlas.com | 304-533-0367

ATLAS


Well Done
FOUNDATION

Atlas Technical Consultants LLC
125 Granville Square, Morgantown, West Virginia 26501

Alignment with Evaluation Criteria

4.2: PROJECT GOALS AND PROPOSED APPROACH

- 4.2.1 Approach and Methodology to Goals and Objectives **3-14**
- 4.2.2 Approach and Methodology to Mandatory Project Requirements **3-14**

4.3: QUALIFICATIONS AND EXPERIENCE

- 4.3.1.1 Qualifications and Experience of Qualified Measurement Specialist **16**
- 4.3.1.2 Demonstrated Success of Vendor Using Equipment **19-29**



“

[The] Investing in America agenda is enabling us to confront long-standing environmental injustices by making a historic investment to plug orphaned wells throughout the country. These investments are good for our climate [and] for the health of our communities...[enabling us] to clean up these toxic sites, reduce methane emissions and safeguard our environment.

*- Deb Haaland
Secretary, U.S. Department of the Interior*

What's Inside

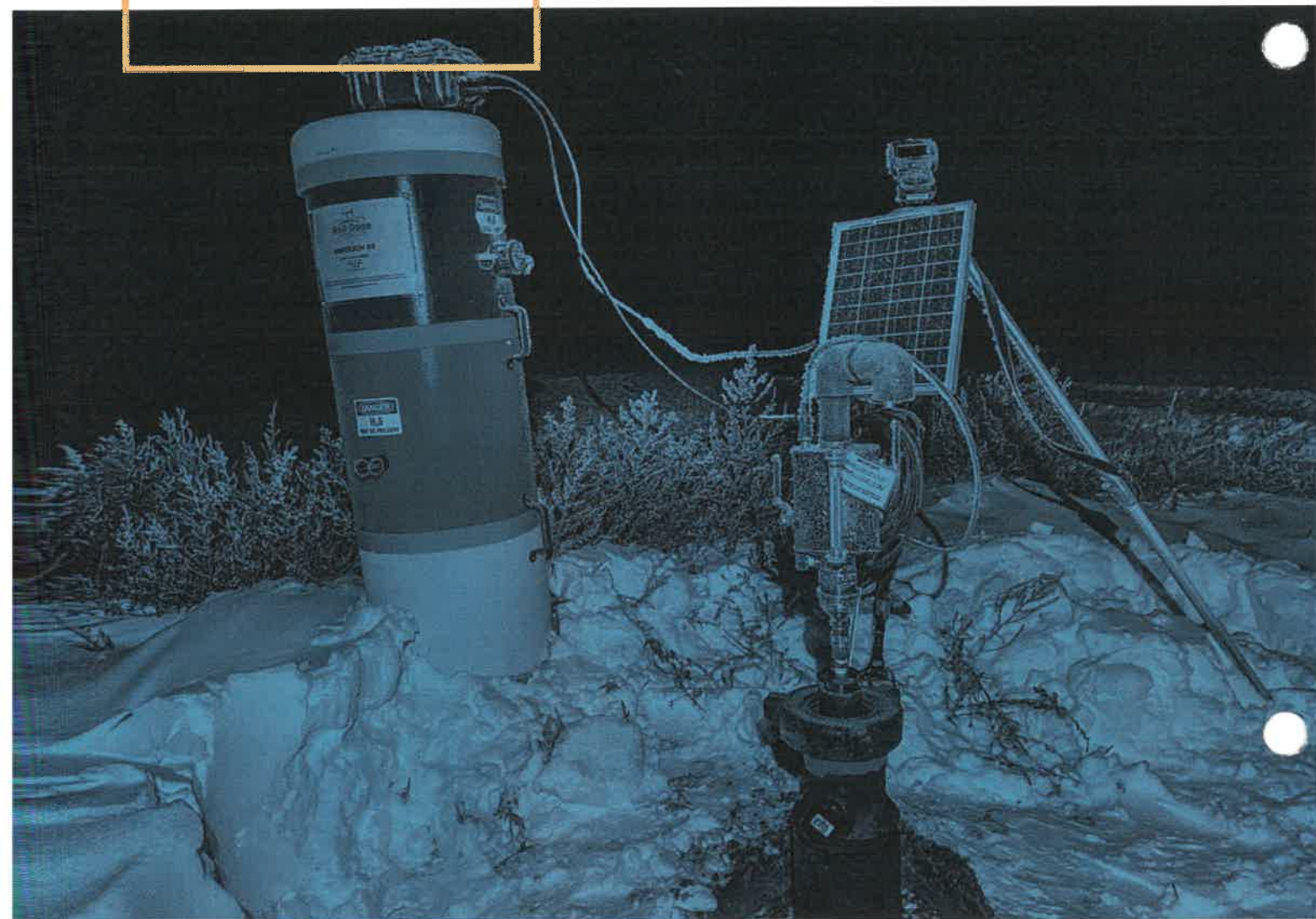
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1 | EXECUTIVE SUMMARY

Atlas/Well Done has thoughtfully curated a team that offers the optimal combination of extensive **experience** in orphaned well measurement and monitoring services, proven delivery of **state and federal programs**, and **deep regional resources**. Our team brings proven performance on orphaned well measurement and monitoring in the United States, along with specialized services to meet WVDEP's needs. Our cohesive, best-in-class team brings demonstrated experience with complex, multi-site orphaned well program management projects and synergies developed over many years of working together to successfully deliver similar work in multiple states.

STRENGTHS OF THE ATLAS/WELL DONE TEAM

- ✓ National Program Leaders
- ✓ Original Sponsor of the American Carbon Registry (ACR) Orphaned Well Carbon Credit Methodology
- ✓ National Leaders in Orphaned Well Methane Measurement under IJIA/Bipartisan Infrastructure Law (BIL)
- ✓ Developers of WDF Well Intel® IoT Platform
- ✓ Developers of WDF Qualified Measurement Specialist (QMS) Certification Program



EXPERIENCE

Well plugging and abandonment projects:

DOI-Compliant Measurement and Monitoring			ACR-Compliant Measurement and Monitoring	
1,600+ WELLS	500+ WELLS		65 WELLS	
in 14 States	in the WV Region		in 7 States	

WHAT THIS MEANS TO YOU: Our extensive experience in measurement and monitoring nationwide enables us to leverage best practices and innovative solutions that translate to efficient delivery, maximizing efficiency in the number of wells serviced with available funding.



STATE AND FEDERAL PROGRAM DELIVERY

Managing Orphaned Well Programs

6
STATES

19

State and Federal Petroleum Programs

WHAT THIS MEANS TO YOU: Our successful delivery of state and federal petroleum-related orphaned well programs in multiple states means we know how to navigate complex requirements and can anticipate issues before they arise, thus maintaining critical budgets and schedules. Moreover, our 40+ year history of delivering work for local, regional, and state agencies means we understand regional requirements and agency procedures, resulting in streamlined delivery with no learning curve.



DEEP REGIONAL RESOURCES

Atlas' West Virginia presence is rapidly expanding. In fact, the WVDEP recently selected us for an Abandoned Mine Lands (AML) reclamation and remediation management contract on 14 sites located in Fayette and Greenbrier Counties throughout southern West Virginia. **This award was the largest of eight competitive AML contracts issued by the WVDEP in 2023.**

WHAT THIS MEANS TO YOU:

Our team's deep pool of state and regional offices and experienced staff enables us to respond quickly and efficiently to any need, whether anticipated or unexpected, resulting in efficient delivery that maximizes your available funding.

40+
YEARS IN
WEST VIRGINIA

380+
REGIONAL
STAFF

43
REGIONAL
OFFICES

6
WEST VIRGINIA
OFFICES



PROVEN LEADERSHIP

The Atlas/Well Done Team will achieve the scheduling and efficiency objectives for this contract by using a dual project management approach. The Atlas PM will coordinate with the Well Done PM to schedule and coordinate the specialized personnel aligned with tasks to be performed in parallel as the work is planned and executed.

BEN STAUD, PE

Project Manager: Engineering Services

Ben brings 23 years of regional experience in environmental remediation and civil engineering. His **expertise includes gas field operations across West Virginia** and Pennsylvania. Throughout his career, Ben has successfully managed a diverse array of projects, ranging from oil and gas permitting to soil and groundwater remediation, as well as stream restoration efforts. His deep expertise and strong relationships with regulatory agencies will be invaluable in navigating compliance challenges and ensuring the project's smooth progress.

CURTIS SHUCK

Project Manager: QMS Services

Curtis is the **nation's foremost expert in orphaned well methane measurement and monitoring** and has led more than 500 DOI-compliant projects, 6 ACR-compliant projects, and 46 MCW compliant projects in the region. Nationally, Curtis has led over 1,600 DOI-compliant projects, 65+-ACR compliant projects, and more than 500 marginal conventional well (MCW)-compliant projects in 14 states. He developed the Well Intel IoT Platform to manage the vast amounts of data associated with each well, which allows for real-time live data viewing, project progress activities, field reports, images uploading, project safety documentation and other key features. Access to Well Intel will be provided to the project team, including WVDEP.

SCOTT McCREADY, LEED AP, PG

Program Manager

Scott has **42 years of experience in environmental assessment, remediation, and regulatory compliance**. He specializes in opportunities related to the assessment, plugging, and restoration of orphaned and marginal conventional wells under the IJA and Inflation Reduction Act (IRA), ensuring compliance with DOI and Department of Energy (DOE) requirements. Scott has extensive experience with oil and gas well site assessment, plugging, and restoration in Ohio. He is also highly knowledgeable in regulatory programs such as the Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Comprehensive Emergency Response, Compensation & Liability Act (CERCLA), Emergency Planning & Community Right to Know Act (EPCRA), and the Clean Air Act (CAA) potential to emit assessment and permitting.

JEFF ROSSI

Contract Manager

Jeff Rossi has 26 years of experience in the environmental consulting field. Mr. Rossi specializes in the client management cycle of activities from contracting through budgeting and invoicing. For the WVDEP contract Jeff will be **responsible for ensuring adequate levels of staffing and the timely delivery of project documents**. Jeff has the benefit of many years of experience in the evaluation and remediation of petroleum and hazardous compounds in soil, surface water, sediment, soil vapor and groundwater.

KEY TEAMING PARTNERSHIPS

Atlas has intentionally crafted our team to include teaming partners with the optimal mix of expertise, deep resources and capacity, and equipment necessary to address any need that may arise.



MEASUREMENT
AND MONITORING



DRONE &
GEOPHYSICAL
SERVICES



LABORATORY
SERVICES



DBE COMMITMENT

Atlas/Well Done believes that small, women-owned, and minority-owned businesses play a crucial role in driving innovation and quality. We foster inclusive partnerships with these businesses, contributing to the growth and success of DBE firms. By working together, we can achieve shared success and create lasting, positive impacts in our communities.

Alignment with Evaluation Criteria

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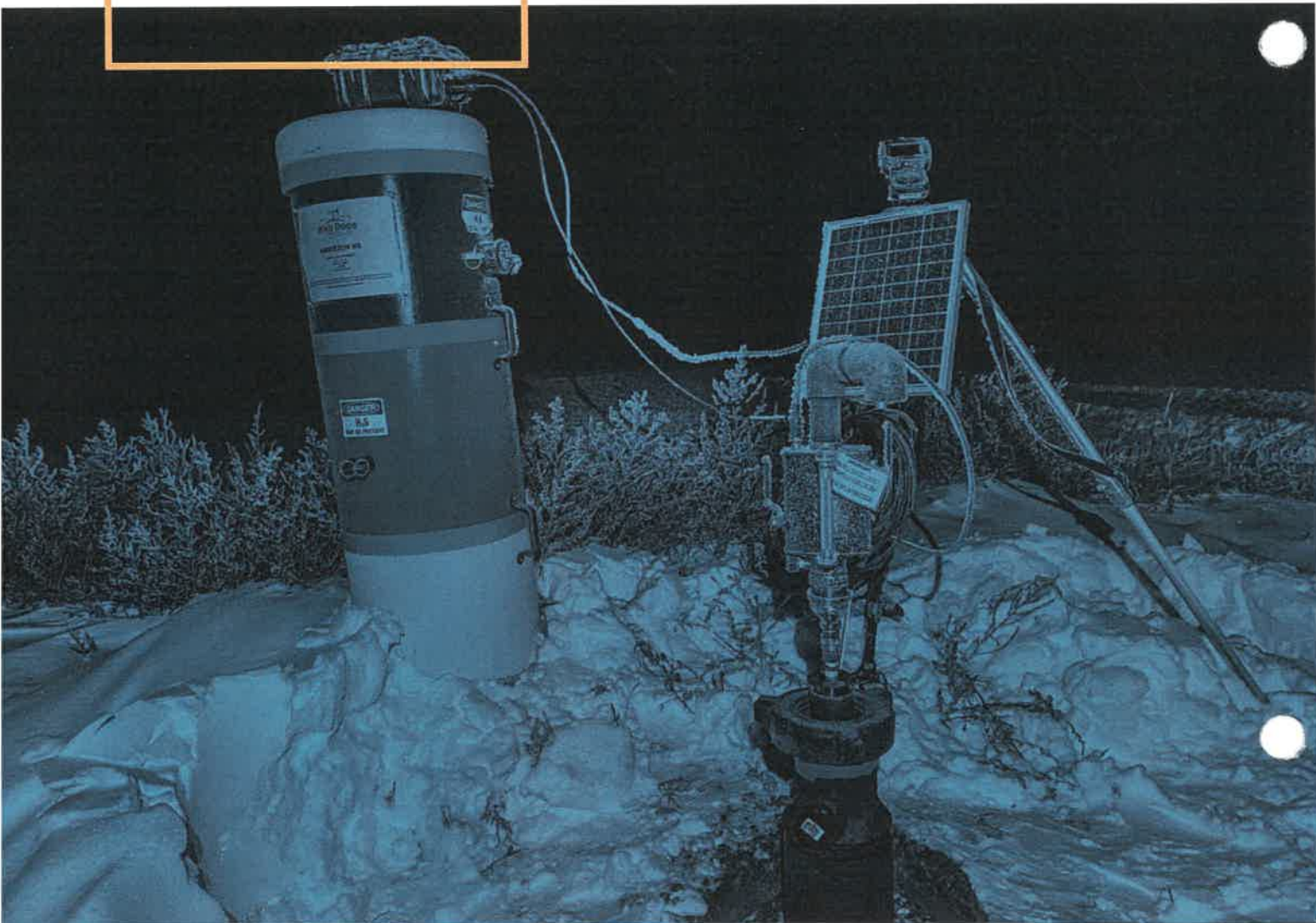
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2 | PROJECT GOALS AND OBJECTIVES (4.2)

As leading nationwide providers of environmental and engineering services, the Atlas/Well Done Team supports a wide range of world-class and high-performing public and private organizations with similar goals. This experience has informed us that **successful execution of multi-disciplinary, environmental engineering contracts requires a flexible, team-based, networked organization.** *Flexible* to adapt to complex environments and satisfy the objectives of multiple stakeholders; *team-based* to provide the depth and breadth of program management, environmental engineering services and aligned objectives; and *networked* to capitalize on standardized processes and platforms necessary to provide consistent, comprehensive, and cost-effective services.

SUPPORTING YOUR MISSION

The State of West Virginia's goal is to safely plug as many orphaned wells as possible with the given budget using sustainable techniques and the most experienced team. The Atlas team is dedicated to your mission to:

- ✔ Quantify methane to report one of the critical return on investment (ROI) metrics for these projects.
- ✔ Prioritize wells for plugging and abandonment.
- ✔ Identify and communicate the scope of the problem to stakeholders and celebrating the successes of responsibly plugged orphaned wells.
- ✔ Eliminate methane and other harmful gases entering the atmosphere.
- ✔ Eliminate safety hazards that pose a threat to the public.



MANAGEMENT APPROACH

A scientifically based approach to this project offers the greatest potential risk reduction per dollar spent and maximizes the return on this critical investment. To accomplish this objective, the Atlas/Well Done Team consists of in-house personnel and other service providers necessary to support the program from planning through execution. The Atlas/Well Done Team composition and experience is tailored to facilitate project management, streamline work reviews and work implementation, and cost-effectively complete all project tasks.

Health and Safety Plan, Job Hazard Analysis, Emergency Response Plan

The Atlas/Well Done Team develops a comprehensive, site-specific Health and Safety Plan (HSP) for every project before beginning fieldwork. The HSP is our primary mechanism to increase employee, environmental, and public safety at the project site. All individuals working under the contract are required to review and sign the HSP to acknowledge their understanding of the information contained within. Each HSP is both site and task specific.

Quality Assurance/Quality Control

Quality Assurance (QA) and Quality Control (QC) refer to the practices, processes, and techniques used to establish objectives prior to performing work, followed by monitoring and verification of the quality of products, materials, equipment, and deliverables at various stages of the project life cycle. While QA addresses the systematic processes and procedures designed to ensure attainment of quality standards, the QC complement

identifies non-conformances so that appropriate corrective actions can be taken. For this project, Atlas will prepare a Quality Assurance Project Plan (QAPP) describing in comprehensive detail the practices and procedures and confirm conformance with requirements and technical standards through planning, implementation, confirmation, and documentation phases. The QAPP will describe and define details regarding required personnel qualifications and certifications, data quality objectives, sample design for environmental and engineering testing, data management, and reporting.

Safety Meetings

We conduct mandatory daily morning "tailgate" safety meetings with all crew members and subcontractors. The meetings include input from crew members who are encouraged to bring potential safety concerns to light and shared learning from current and past projects, as well as discussion of standard protocols such as safe driving, emergency procedures, evacuation areas, and various other relevant topics specific to the site. The meeting

forms are signed by all participants and are retained by Atlas. Job Safety Analyses are subsequently reviewed at the daily meeting.

Communication and Reporting

The Atlas/Well Done Team emphasizes clear and consistent communication, typically favoring a single point of contact. However, for this project, we have assigned co-Project Managers to ensure efficient delivery—Ben Staud will oversee engineering services, while Curtis Shuck will manage field/M&M services. The WVDEP can reach out to either Ben or Curtis, depending on the specific issue. We also recommend holding monthly team meetings with the WVDEP team, with additional meetings during active field activities.

For example, during a recent oil well assessment and sump remediation project, Atlas provided daily verbal status updates and written weekly status reports to the client. These meetings are led by the Atlas and Well Done Project Managers; additional participants may include other Atlas/Well Done Team members, subcontractors, and subject

matter experts as may be necessary to solicit input, provide feedback, and confirm action.

Examples of other routine communication and reporting tools include formal project schedule updates (baseline to actual), project accounting (spend relative to budget, percent complete, earned value), and collection of data required to capture program metrics relative to required federal, GHG reduction, workforce development, and disadvantaged community benefits.

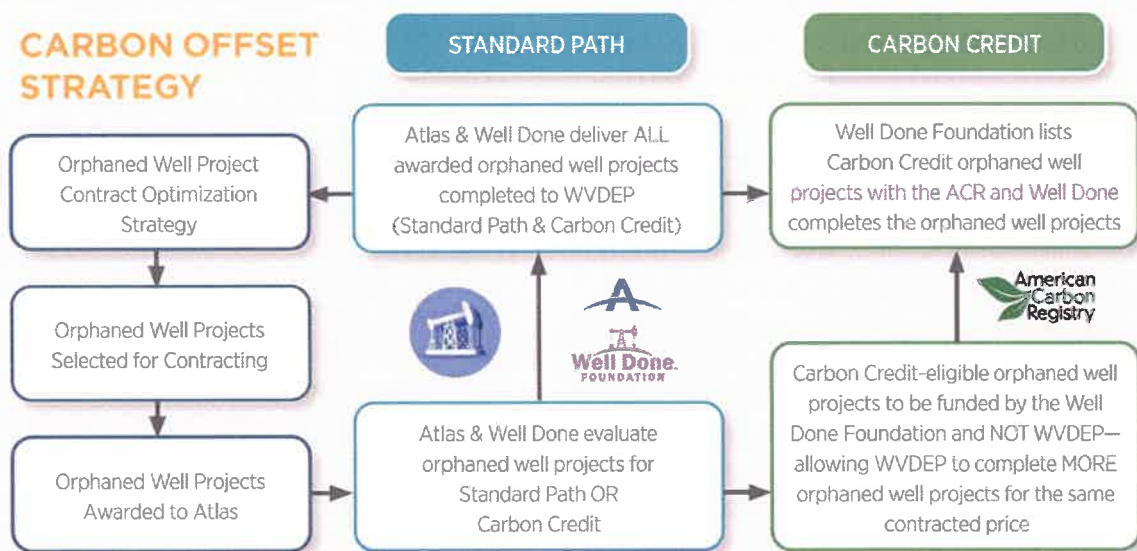
Comprehensive Database and Data Management

The Atlas/Well Done Team will work with WVDEP on integration of project information with the WVDEP database. Our team offers experience with comprehensive electronic databases that could help WVDEP achieve its goals for a database to better handle data collection and analysis, streamline operations and processes, and adhere to requirements in state and federal law.

CARBON CREDIT CONTRACT OPTIMIZATION STRATEGY

As a bonded operator in the state of West Virginia, Well Done is able to provide WVDEP with a new avenue to plug more wells without increasing cost. Marginal and idle wells that qualify for the Well Done ACR program transfer from “marginal and idle” status directly to Well Done, which then schedules the work to be completed.

Well Done, and its foundation, is a leading authority and at the forefront of carbon credit project development for plugging and abandonment of oil and gas wells. As a sponsor and contributor to the first carbon methodology for marginal and idled oil and gas wells, Well Done has acquired extensive knowledge in the monitoring and measurement of methane emissions. Since being established in 2019, Well Done has plugged 40 wells across the U.S. through the American Carbon Registry (ACR) methodology. **Well Done has conducted IJIA- and DOI-compliant measurement and monitoring of 1,600+ wells across 14 states and is leading the largest program of this kind in NM.**

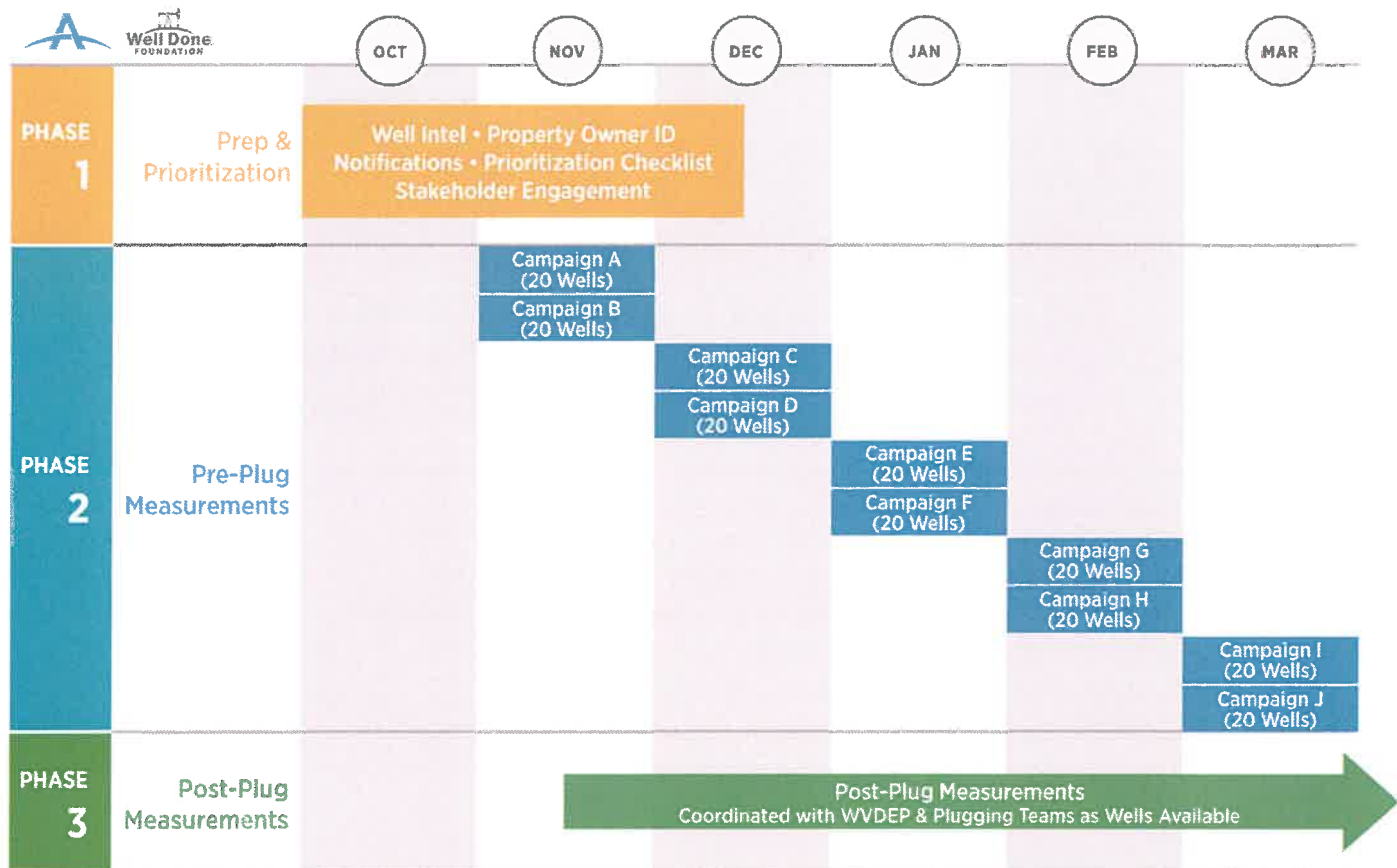




PROJECT APPROACH (4.2.1)

Based on a WVDEP well count, there are more than 4,000 orphaned wells in West Virginia and WVDEP's goal is to target 200 orphaned wells under this program. To support your goal, the Atlas/Well Done Team proposes a three-phased approach.

PROJECT TIMELINE West Virginia Department of Environmental Protection



PHASE 1 PREPARATION & PRIORITIZATION

The Atlas/Well Done Team will establish best practices to set the project up for success. Our preliminary actions will include:

- Registering WVDEP Wells on the WDF Well Intel IoT Platform for full transparency with the WVDEP Team.
- Identifying property owners and access routes.
- Working with the WVDEP Team for notifications and authorizations of access and ingress/egress.
- Identifying certain project elements that may impact prioritization, such as possible wetlands, roadway issues, and/or historic and environmental conditions.
- Supporting WVDEP with stakeholder engagement activities in communities where methane measurement work will occur.

PHASE 2 PRE-PLUG MEASUREMENT CAMPAIGNS A-D (4.2.1.1)

To support WVDEP's prioritization and scheduling needs, the Atlas/Well Done Team has segmented the project into four Pre-Plug Measurement Campaigns. This approach enhances efficiency by allowing Pre-Plug Measurement work to commence almost immediately, enabling us to provide timely reports to WVDEP. Concurrently, plugging operations can begin and continue as the Pre-Plug Measurement Campaigns are underway, if WVDEP decides to proceed.

Our strategy facilitates the strategic grouping or bundling of pre-plug measurement missions within specific regions and areas, maximizing efficiency and reducing costs.

To ensure the success of the Atlas/Well Done Pre-Plug Measurement Campaigns (A-D), it is critical that the work begins, is executed, and completed during the Fall/Winter periods. This timing takes advantage of improved access, minimal vegetation, and reduced ground cover. Multiple Pre-Plug Teams may need to operate in parallel, with support from the Data Team, which will manage reporting and WDF Well Intel IoT updates. This is especially important in areas with limited cellular and Starlink connectivity, ensuring that real-time or near real-time data can be delivered to WVDEP.

The Pre-Plug Measurement Campaigns are planned to operate from daylight to dark, seven days a week. Each Pre-Plug Measurement Team will consist of two QMSs to ensure safety and efficiency.

The Atlas/Well Done Pre-Plug Measurement Teams will be equipped with ground-based methane detection and quantification equipment that meets or exceeds the DOI's IJJA/BIL requirements of <1.0 gram per hour for well screening and active leak rate determination, in accordance with the DOI Methane Measurement Guidelines from July 2023. Leak Background testing will be conducted at each well site using a SEMTECH® Hi-Flow2 device. Leak rates will be measured using either a SEMTECH Hi-Flow2 or Ventbuster® system, depending on the well's configuration, flow/leak rates, and methane concentrations, as determined by the QMS. Additionally,

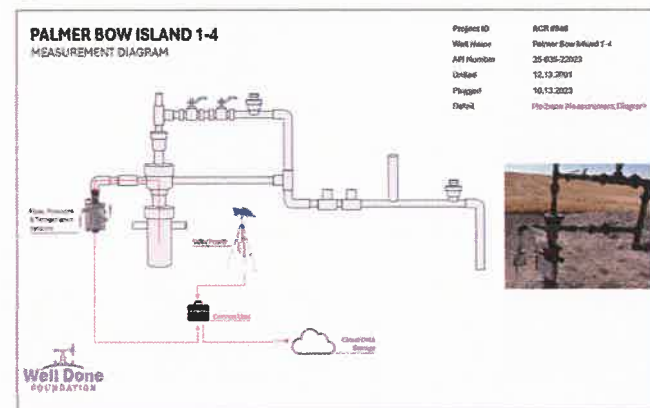
ORPHANED WELL MEASUREMENT PROTOCOLS

The Well Done Foundation has three orphan well measurement protocols approved by the ACR and recognized by the DOI using the Ventbuster System.

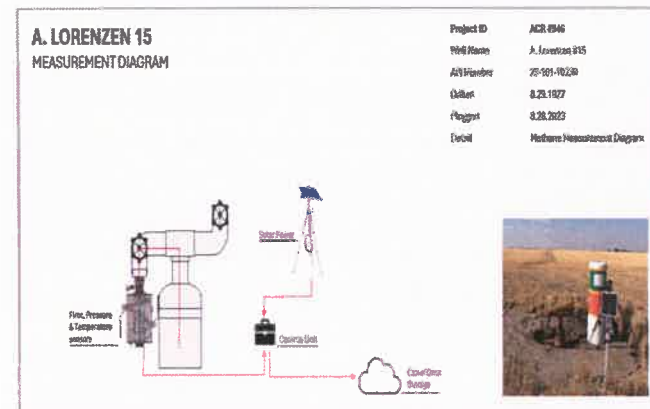
1 Open Hole



2 Production Tubing



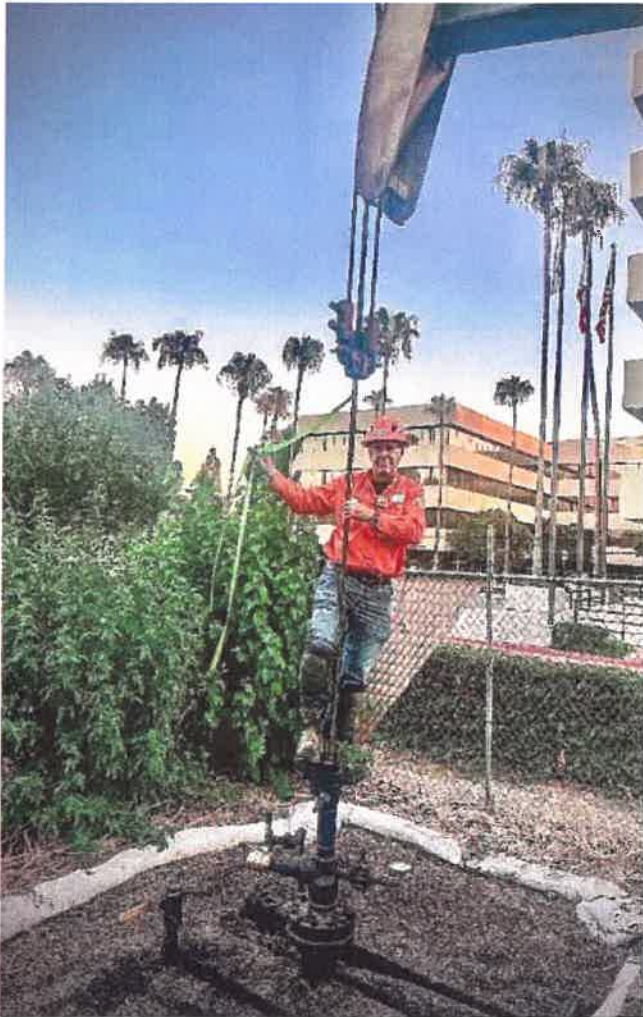
3 Casing



the Pre-Plug Teams will assess each well's "Potential to Emit" during the Pre-Plug Measurement Campaign. This measurement is crucial for prioritizing wells for plugging and identifying potential risk factors.

During the Pre-Plug Measurement Campaigns, gas samples will be collected and tested on-site using the Well

Done ABB Portable Gas Chromatograph (Portable GC). Additional samples will be collected in Tedlar Bags for independent laboratory analysis and reporting. Once the pre-plug methane measurement is completed, the well will be marked with a green ribbon, signaling to the plugging crew that the well is "good to go." The WDF Well Intel IoT system will also be updated accordingly.



Curtis Shuck celebrates completion of pre-plug methane measurement of an orphaned well.

COMPLIANCE WITH DOI REQUIREMENTS

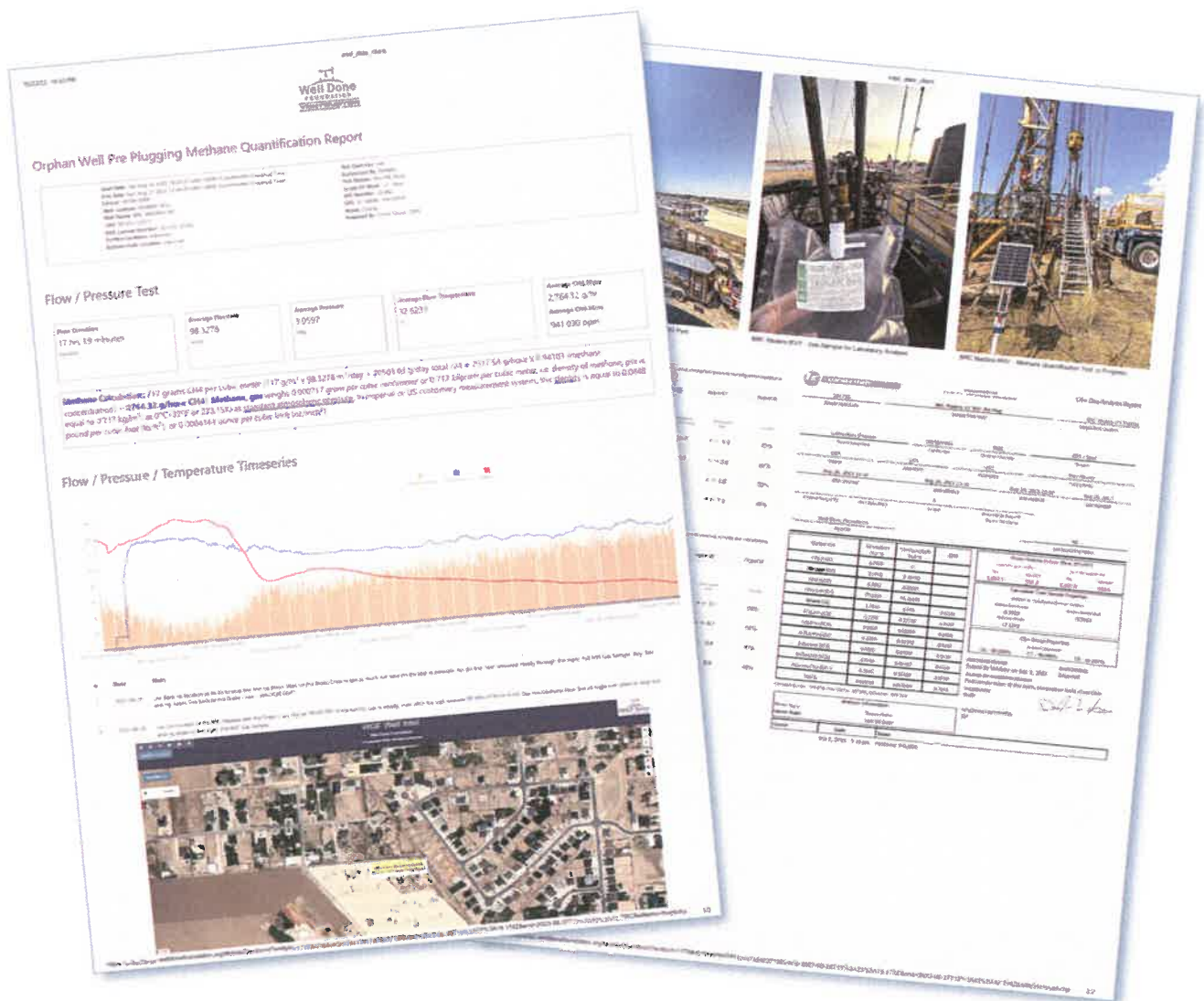
The Atlas/Well Done Team has introduced a compliance checklist approach to ensure adherence to DOI's Pre- and Post-Plugging Methane Measurement Guidelines dated July 2023. This checklist has been designed to streamline the data acquisition process and ensure that all necessary steps are followed in the field. By using this checklist, the team can efficiently track and verify that every required action is completed, reducing the risk of oversight. An example of our checklist can be found in Appendix E.

PHASE 3 POST-PLUG MEASUREMENTS (4.2.1.2)

The Post Plug Measurements for this project will be conducted 48 hours or more after the plugging operations report that cement has reached the surface and the well casing has been cut off below ground level. Atlas/Well Done post-plug measurement teams will then be dispatched to carry out the post-plug methane measurements. Once these measurements are completed, a green ribbon will be placed on the casing, indicating that the well is “good to go” for the installation of the monument plate.

Along with generating the SEMTECH Hi-Flow2 ACR Test Report, a gas sample will be collected and sent to an independent laboratory for analysis..

The Atlas/Well Done Team then prepares a Post-Plug Report similar to the example below for delivery to WVDEP.



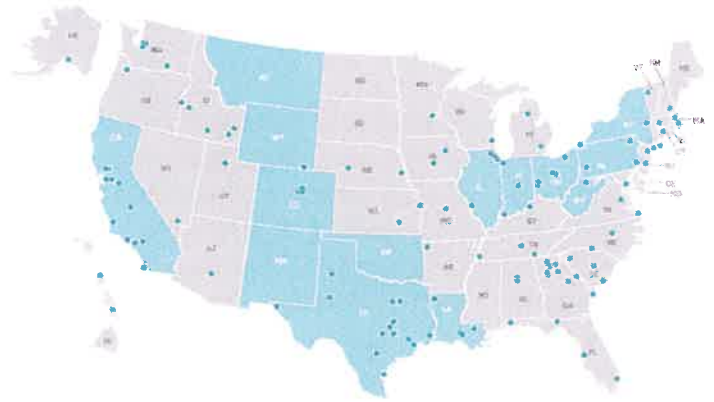
Methane Quantification

Curtis Shuck will facilitate and oversee the day-to-day measurement and monitoring activities for this project. As a Senior QMS, Curtis brings extensive experience in the required processes and workflows for data collection, management, and documentation to meet the DOI's IJJA/BIL requirements. His role is critical in ensuring that projects remain on track with WVDEP's well Plugging and Abandonment (P&A) scheduling objectives.

While each state has unique processes and procedures for data and document management, the core workflows remain consistent. The Atlas/Well Done Team collaborates closely with well engineering teams and regulatory agencies to prepare and submit Pre- and Post-Plugging Reports for well abandonments. In some cases, such as with the State of New Mexico, Well Done played a key role in designing the platform for Pre- and Post-Plugging Methane Quantification Reporting as part of the IJJA Program and continues to manage the data input process.

In the field, the Atlas/Well Done Teams measure and monitor methane emissions both pre- and post-plugging, using methane quantification instrumentation approved by the ACR and DOI Orphaned Wells Program Office. These measurements adhere to the Methane Measurement Guidelines outlined in the July 2023 version of the DOI's guidelines for assessing methane emissions from orphaned wells under the 2021 IJJA.

The Atlas team is involved in every step of the data process, from field troubleshooting and maintenance of the methane quantification instrumentation to data transmission, storage, and presentation for orphaned well projects across 14 states as shown on the map below.



In every case, projects are tracked and data are managed through the WDF Well Intel IoT platform, which enables real-time data viewing and offers features such as project progress tracking, field reports, image uploads, safety documentation, and more. Access to Well Intel will be granted to the entire project team, including WVDEP.

PRE-PLUGGING TESTING PROTOCOLS

The Atlas/Well Done Team has established three ACR/DOI-approved pre-plugging testing protocols

1 Open Hole



2 Production Tubing



3 Casing Vent

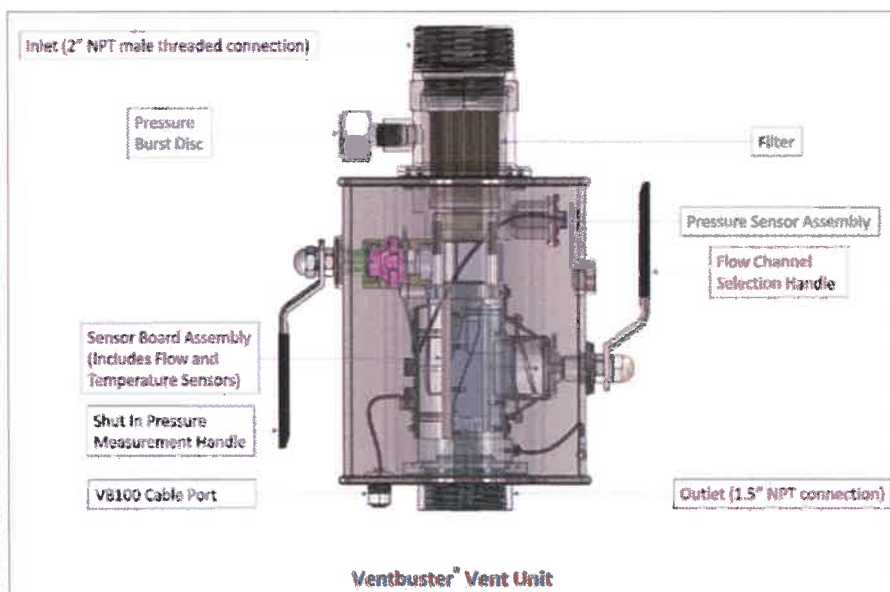


The Atlas/Well Done Team uses industry-proven, DOI- and ACR-approved direct-emission, point-source measurement techniques and equipment, including hand-held natural gas detectors, high-flow samplers, and Ventbuster instruments. **These tools are capable of detecting and quantifying methane emissions at leak rates as low as 1 gram per hour, making them suitable for monitoring orphaned well sites.**

A key tool in our arsenal is the Ventbuster ultra-low flow methane detection and monitoring system, originally developed in Canada to comply with Alberta's stringent oilfield emissions standards (AER Directive 20 and Directive 87). The Ventbuster is a two-piece instrument designed to measure gas flow rates, pressures, and temperatures from venting gases at orphaned wells. It consists of a vent-mounted sensing head and a control or communication unit. The Ventbuster system can measure flows ranging from 0.04 ml/min to 720 m³/day (25.4 mcf/d) under ambient conditions of -40°C to +55°C (-40°F to +130°F) and is pressure-rated up to 7000 kPag (1000 psig).

The Ventbuster system is controlled by a dedicated data acquisition system that provides supervisory control, performs calculations, and offers a user interface. The Communications Unit includes an on-board computer that displays parameters such as flow rate, pressure, and temperature, along with alarms and status notifications. The system is operated via a keypad or a Bluetooth-based Android app, allowing for easy data entry and download, even in remote locations. The Ventbuster sensor head contains pressure and temperature sensors, a flow sensor, and valves for flow and shut-in modes, all connected via a signal and power cable to the Communication Unit, which is safely located outside hazardous areas.

Well Done holds exclusive rights for deploying the Ventbuster system in the United States and actively uses it for baseline reporting on hundreds of orphaned and abandoned oil and gas wells. The system is in the process of being certified for use in the ACR Methodology for quantifying, monitoring, reporting, and verifying greenhouse gas emissions reductions from plugging orphaned wells.



The Ventbuster system is DOI-certified for use in IJA in accordance with DOI methodology and meets BIL guidelines. Precision instruments like the Ventbuster are necessary for accurate methane emissions quantification.

It is crucial to distinguish between simply detecting the presence of gas and accurately determining its concentrations and emission rates. While handheld devices like gas sniffers and OGI cameras are useful for detecting gases, **precision instruments like the Ventbuster are necessary for accurate methane emissions quantification**. These instruments are specifically designed and calibrated to measure both micro and macro flows of methane, differentiating it from other greenhouse gases commonly found at orphaned wells.

Accurately determining the methane emissions rate requires both concentration measurement and a flow measurement. A simple equation is shown below and in the following Test Report from an IJJA Project in New Mexico:

Methane Calculation: 717 grams CH₄ per cubic meter (717 g/m³ x 174.9683 m³/day - 125452.27 g/day total/24 = 5227.18 g/hour x 0.21657 (methane concentration) = **1132.05 g/hour CH₄**). **Methane, gas** weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In imperial or US customary measurement system, the density is equal to 0.0448 pound per cubic foot [lb/ft³], or 0.0004144 ounce per cubic inch [oz/inch³].

To quantify methane emissions, both concentration and flow measurements are required. The Atlas/Well Done Team will use the following equation for this calculation:

$$V \text{ methane} = C \text{ methane} * V$$

Where V methane is the methane-specific flow rate from the well, C methane is the measured concentration of methane from the well, and V is the total flow measured from the orphaned well.

The DOI guidelines specifically reference the use of Ventbuster instrumentation for documenting flow and methane concentration measurements. The Atlas/Well Done Team will also review and incorporate any data requirements referenced by WVDEP, as applicable.

PRE-PLUGGING METHANE SCREENING AND MEASUREMENT PROTOCOL

Rig Up M&M Instrumentation

1. Power up/on personal gas monitoring device (H₂s) and perform "bump test."
2. Power up/on methane screening/detection devices.
3. Log time of well site arrival.
4. Position vehicles and equipment in a safe location with a clear egress.
5. Rig up wind directional indicator.
6. Position fire safety equipment.
7. Perform job hazard analysis.
8. Ensure proper PPE is in place and conduct a well site walk.
9. Take well and site photos (north facing, east facing, south facing, west facing, wellhead, tanks, etc.).
10. Rig up SEMTECH(r) Hi-Flow2 for a leak background test.
11. Collect gas sample(s) for laboratory analysis, marking date, time, well name, well number.
12. Take photo of gas sample @ well sign, wellhead.
13. Secure gas sample(s) in a designated storage device (cooler) and complete chain-of-custody form.
14. Rig up Ventbuster unit to the orphaned well using one of three configurations, zero the VBI device flow.
15. Prepare "start test" with complete metadata in ALL Fields, using well name, UWI and correct contract ID.
16. Start Ventbuster test on high flow (monitor flow results and prepare to zero and restart VB test in low flow).
17. Rig up other methane quantification devices as may be required/specified for the project.
18. Phone/text Joint Well Operations Center (JWOC) for VBI test start confirmation.
19. Write field notes in personal journal.
20. Record field notes in the WDF Well Intel site.
21. Record well site weather observations (temp, humidity, pressure, wind speed, wind direction).
22. Upload all Photos into WDF Well Intel site.
23. Place "test well" informational signage and other project required information at the well site.
24. Secure test location.
25. Record well site departure time in personal journal.

Post-Plugging Methane Measurement

Once an orphaned well has been plugged, the Atlas team initiates the process of post-plugging methane measurement. Typically, testing occurs 48 hours after the final cementing operations are completed, allowing time for any residual ambient emissions from the plugging to disperse. The post-plugging test involves taking field gas readings using handheld methane detection devices at the plugged wellbore and in the surrounding areas. Air and gas samples are also collected for laboratory analysis. In some cases, water testing is conducted to visually detect signs of leakage. Additionally, the Atlas/Well Done Team uses a SEMTECH® Hi-Flow2 device to perform an ACR Post Plug Test. If methane is detected, the protocol is to immediately rig up a Ventbuster to the well casing to calculate the methane flow rate. The results of the post-plugging test will be promptly provided to the WVDEP team.

POST-PLUGGING METHANE MEASUREMENT PROTOCOL

Rig Down M&M Instrumentation

1. Turn on gas monitoring device.
2. Log time of well site arrival.
3. Perform job hazard analysis.
4. Perform field gas analysis (using honeywell four gas meter).
5. Take photo of Gas Analysis Results from Honeywell four gas meter @ well sign.
6. Collect gas sample (e.g., Tedlar bag or suitable for laboratory analysis).
7. Take photo of gas sample in Tedlar bag @ well sign.
8. Stop Ventbuster test.
9. Phone/text JWOC for VBI test end confirmation.
10. Rig down Ventbuster system @ wellhead or Dorothy DFC following VBI instructions.
11. Vacuum VBI flow meter and check for any fluid.
12. Write field notes in journal and WDF Well Intel site.
13. Upload any photos into WDF Well Intel site.
14. Place green ribbon @ wellhead and photograph.
15. Secure test location.

ACR Post Plug Check Report for ACR Post Plug Check [2024-06-14T11:54:27]: McCleary UNit #001 (34-153-21344)

Stastics

	Minimum	Average	Maximum
Stable CH4 Final Concentration	0 PPM	0 PPM	2 PPM
Stable Standard Volume Flow	682 SLPM	719 SLPM	740 SLPM
Stable CH4 Standard Volume Leak Rate	-0.00021 SLPM	0.00030 SLPM	0.00172 SLPM

Checks

Test Completion	COMPLETE
ACR Post Plug CH4 Concentration Check	PASSED

Report demonstrating that methane measurement verified zero emissions and a successful plugging of the well.

The Atlas/Well Done Team conducts each DOI Pre-Plugging Point Source Methane Quantification Test for a minimum of 6 hours, unless otherwise specified by WVDEP. This duration ensures sufficient time for the orphaned well to reach a “normalized flow” or to reveal any unique flow characteristics specific to the well. Similarly, each ACR Pre-Plugging Point Source Methane Quantification Test follows this 6-hour minimum to maintain consistency and accuracy in the data collected.

Methane quantification results are available immediately as “live data” to WVDEP through the WDF Well Intel IoT Platform. Completed tests are also cached in Well Intel

for review before formal submission to WVDEP. Well Done summarizes methane quantification results on an individual orphaned well basis and performs field/project averaging analysis to provide comprehensive insights.

Efficiencies

Our team of experienced partners works closely to ensure that all project tasks are orchestrated and executed efficiently, maximizing productivity across the full scope of work.

CSAU Orphan Well CH4 Averaging - Applied to the 2 Wells Outside Sample Set - CES										
Prepared:	10.22.2023									
Well Name	Well #	API #	County	Purchase Order	Gas Sample	CH4/PPM	Total LBL/PPM	CH4 Flow @ m3/day	Methane Emission @ g/hour	Post Plug CH4
CSAU	5571	30-005-29051	Chaves	52100-72995	24-Feb	216,570	378,410	174.97	1,132 Not Plugged	
CSAU	586	30-005-29025	Chaves	52100-72995	5-Mar	269,940	506,540	0.1488	1.20	0
CSAU	587	30-005-29034	Chaves	52100-72995	2-Mar	114,100	340,098	6.4268	21.91	0
CSAU	97	30-005-10567	Chaves	52100-72995		48,847		7.31	44.97	0
CSAU	518	30-005-27963	Chaves	52100-72995	25-Jan	6,470	43,590	0.0261	0.01	0
CSAU	517	30-005-27962	Chaves	52100-72995	25-Jan	37,770.00	136,100	4.1558	4.69	0
CSAU	531	30-005-27974	Chaves	52100-72995	24-Jan	133,420	264,320	0	0	0
CSAU	127	30-005-20071	Chaves	52100-72995	20-Jan	108,670	190,880	0.3232	1.05	0
CSAU	533	30-005-2798	Chaves	52100-72995	26-Jan	0.00	5,350	0.0048	0	0
CSAU	516	30-005-27973	Chaves	52100-72995	25-Jan	106,720	204,100	0.0155	0.05	0
CSAU	532	30-005-27964	Chaves	52100-72995	24-Jan	2,700	32,040	0	0	0
CSAU	98	30-005-10474	Chaves	52100-72995	18-Jan	0	5,850	0.0021	0	0
CSAU	119	30-005-20103	Chaves	52100-72995	21-Jan	0	5,960	0.0009	0	0
CSAU	960	30-005-29012	Chaves	52100-72995	4-Mar	2,350	15,450	0	0	0
CSAU	520	30-005-28012	Chaves	52100-72995	25-Jan	4,950	18,510	0.1892	0	0
CSAU	595	30-005-27983	Chaves	52100-72995	26-Jan	0	5,060	0.0554	0	0
CSAU	100	30-005-20007	Chaves	52100-72995	18-Jan	250	4,230	0.0009	0	0
CSAU	561	30-005-28029	Chaves	52100-72995	3-Mar	49,180	98,420	0.0635	0.09	0
CSAU	558	30-005-28010	Chaves	52100-72995	24-Feb	1,600	34,090	0.0018	0	0
CSAU	559	30-005-28031	Chaves	52100-72995	3-Mar	0	3,580	0	0	0
CSAU	574	30-005-28027	Chaves	52100-72998	2-Mar	0	7,930	0	0	0
CSAU	545	30-005-27984	Chaves	52100-72998	3-Mar	12,360	84,660	0.2143	0.08	0
CSAU	573	30-005-28016	Chaves	52100-72998	3-Mar	19,520	198,440	1.0351	0.6	0
CSAU	827	30-005-28030	Chaves	52100-72998		48,847		7.31	44.97	0
CSAU	544	30-005-27986	Chaves	52100-72998	24-Feb	9,770	45,290	0.0296	0.01	0
CSAU	822	30-005-28027	Chaves	52100-72998	26-Jan	42,190	65,930	0.0014	0.003	0
CSAU	588	30-005-29027	Chaves		2-Mar	122,760	346,300	2.2454	7.560	0
CSAU	534	30-005-27961	Chaves	52100-72998	25-Jan	6,730	157,700	0.1448	0	0
Total CSAU Wells						Total CH4 PPM 1,270,030 Avg CH4 PPM 48,847.31	Total Explosive Gas PPM 3,230,788	Total Flow m3/day 190.0554 Average Flow m3/day 7.31	Total CH4 Emission g/hour 1,169.23 Total Avg CH4 Emission g/hour 44.97	
		CSAU Well Sample Set	% of Total CSAU Wells							
		26	92.85							

Example of methane qualification results for individual wells.



Quantifying methane for state regulatory agencies, as part of the IJIA Bi-Partisan Infrastructure Act, is such an important part of being able to show one of the critical return on investment (ROI) metrics for these projects, as well as being a prioritization tool for the regulators. It also helps us identify and communicate the scope of the problem and celebrate the successes of a responsibly plugged orphaned well.

- Curtis Shuck
Well Done

EQUIPMENT LIST



P.O. Box 10640 Bozeman, Montana 59719

(406) 460-0903

MEMORANDUM

Unit	Description	Total	Notes
Measure1	Ventbuster® Systems	6	
	SCBA	2	
	Escape Pack	2	
	Cascade Air System	1	
	ABB Total Flow X-Core	1	
	ABB Thermal Mass	1	
	ABB Portable Gas Chromatograph	1	
	H2S Sampling Kit	1	
	SEMTECH® Hi-Flow2	1	
	Field Gas Sampling Kit (Tedlar)	1	
	RKI GX6000 Field Gas Analyzer	1	
	Industrial First Aid Kit	1	
	Fire Extinguishers	4	
Measure2	Ventbuster® Systems	6	
	SCBA	2	
	Escape Pack	2	
	H2S Sampling Kit	1	
	SEMTECH® Hi-Flow2	1	
	Field Gas Sampling Kit (Tedlar)	1	
	RKI GX6000 Field Gas Analyzer	1	
	Industrial First Aid Kit	1	
	Fire Extinguishers	4	
Measure3	Ventbuster® Systems	6	
	SCBA	2	
	Escape Pack	2	
	H2S Sampling Kit	1	
	SEMTECH® Hi-Flow2	1	
	Field Gas Sampling Kit (Tedlar)	1	
	RKI GX6000 Field Gas Analyzer	1	
	Industrial First Aid Kit	1	
	Fire Extinguishers	4	

3 | QUALIFICATIONS AND EXPERIENCE (4.3)



PURPOSE-BUILT TEAM

The Atlas/Well Done Team combines extensive national experience in orphaned and abandoned well projects with exceptional regional expertise and substantial resources. Atlas understands the scope and importance of this work, as well as the need to be available and responsive. To meet these demands, we have carefully assembled a team with the ideal mix of technical resources, capacity, and equipment. Our key personnel are highlighted in the team organization chart on the following page, followed by brief profiles showcasing their experience. Full resumes are provided in Appendix B, along with applicable certifications in Appendices C and D.

Perhaps the best indicator of our commitment to WVDEP is our team's staff who live in the region and take pride in being part of projects that improve their communities. **The Atlas team has more than 380 staff and 43 offices within West Virginia and adjacent states to serve this contract.** Our deep local and regional presence enables our team to quickly respond with the right resources to any need that may arise.

Measurement and Monitoring Support



Atlas is a national engineering and environmental consulting firm with more than 3,600 staff that operates out of over 100 offices across the country.

As a leading firm in delivery of orphaned well plugging and abandonment projects, our team includes licensed professional engineers, licensed scientists, geotechnical engineers, certified inspectors, project managers, construction managers, and support personnel, providing the optimal mix of talent to meet WVDEP needs. Moreover, with our primary management office located in Morgantown and additional offices throughout the region, the Atlas team can mobilize quickly, ensuring prompt delivery of services.



The Well Done Foundation (WDF) has extensive experience conducting IJJA- and DOI-compliant measurement and monitoring of 1,600+ wells across 14 states—leading the largest program of this kind in New Mexico. WDF is at the forefront of carbon credit project development for plugging and abandonment of oil and gas wells. They have performed more than 45 ACR-compliant measurement and monitoring projects across 6 states and can provide a carbon credit option for optimizing contract budgets, resulting in the ability to plug more wells.

Drone Aerial Support



Our team offers redundant resources to provide drone aerial support services, should they be required.

Both **T3** and **Atlas** have the expertise to locate wells and perform ground-based geophysics to pinpoint a well and well infrastructure. T3 offers local resources in West Virginia, while Atlas provides redundant resources from our national team of experts, including professionals who are currently providing drone services to locate wells in Arizona.

Laboratory Services



Pace Analytical Services

- 3 West Virginia locations
- 12 additional locations regionally
- 83 locations and 3,500+ employees nationwide

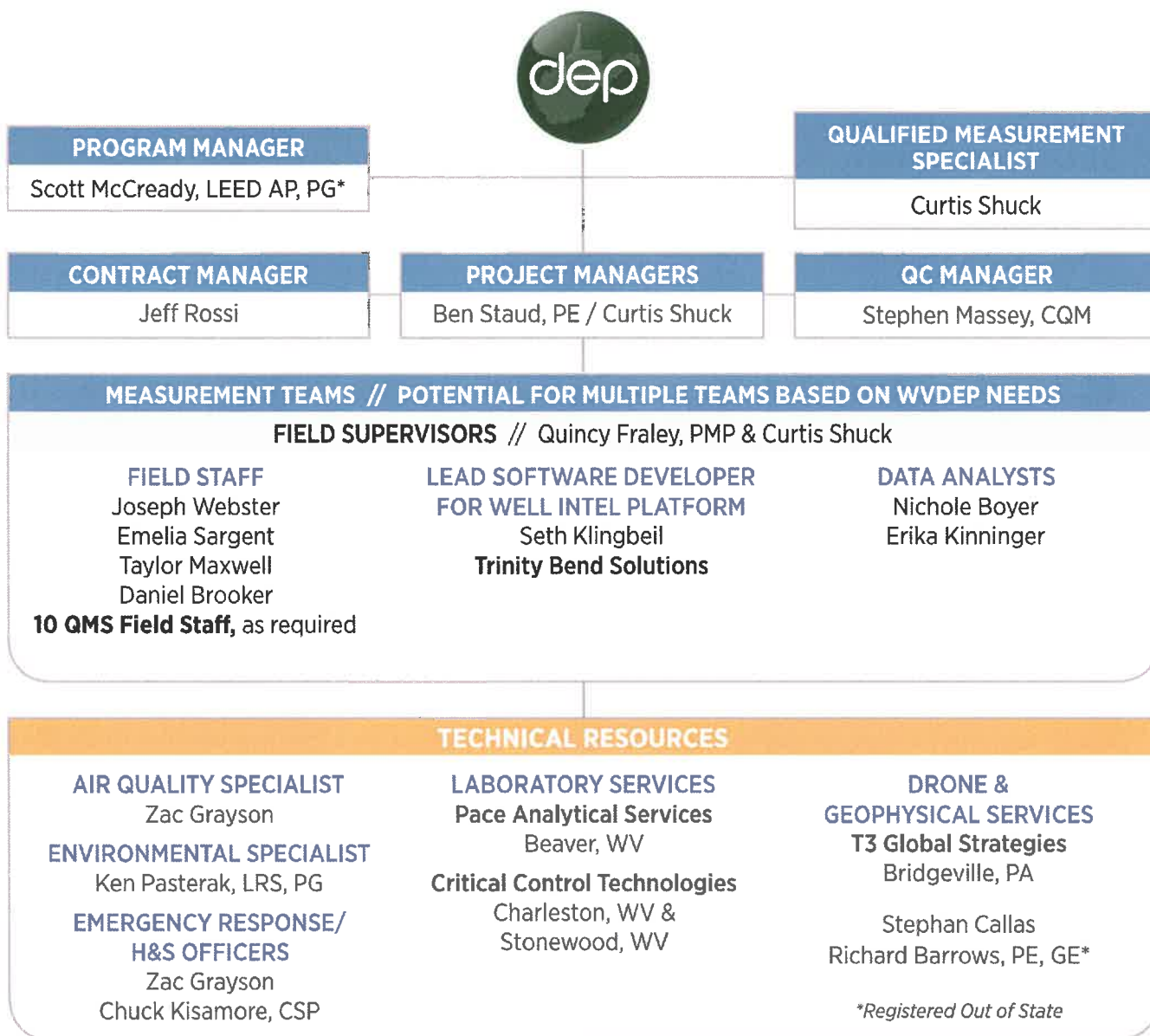


Critical Control Technologies

- 2 West Virginia locations
- 3 additional locations regionally
- 8 locations and 150+ employees nationwide



TEAM ORGANIZATION



ADDITIONAL RESOURCES

Collectively, the Atlas/Well Done Team employs more than 5,800 professional staff in the U.S. and more than 300 professional staff in the West Virginia region who will be available as needed to support and address any potential specialty project needs.

QUALIFIED MEASUREMENT SPECIALISTS (4.3.1 / 4.3.1.1)

Our team includes 11 technical professionals who meet the definition of “qualified measurement specialist” as defined in BIL guidelines. These individuals have earned QMS Certification through the Well Done Foundation’s pioneering training program, which meets and exceeds the standard set by the ACR’s and DOI’s Methane Measurement Guidelines dated July 2023 (see page 19 for further details on this training program).

Key Personnel

We have structured our team with co-Project Managers to ensure that the two primary disciplines involved in this project—Engineering and Measurement and Monitoring—are both adequately represented. Ben Staud will concentrate on engineering aspects and contract administration, including reporting and invoicing, while Curtis Shuck will focus on the efficient execution of measurement and monitoring work. This dual approach allows us to address each discipline's unique demands, ensuring comprehensive oversight and successful project delivery.

Ben Staud, PE

Project Manager: Engineering Services

- 23 years of experience in the environmental remediation and civil engineering fields.
- 6 years of experience with gas field operations, permitting, remediation, geotechnical investigations and stormwater management in West Virginia and Pennsylvania.
- Managed remedial dig and haul projects involving removal of 36,000+ tons of soil/sediment and stream diversions.
- Experienced with permitting oil and gas projects in West Virginia and Pennsylvania.
- Remedial experience includes permitting, river sediment removal, soil excavation, soil vapor extraction/air sparge systems, multiphase extraction systems, barrier walls, river diversions and by-pass pumping, landfill liner/capping and abandoned mine lands (AML) reclamation.
- Civil experience includes permitting, geotechnical investigations, slope failure evaluations/designs, stormwater analysis/design, floodplain modeling, and grading plan development.



The Atlas/Well Done Team [including Ben Staud (left) and Scott McCready (2nd from right)] conduct a demonstration at an orphaned well site in Kentucky.

Curtis Shuck (QMS)

Project Manager: Measurement & Monitoring

- Recognized as the nation's foremost expert in marginal and idle well methane measurement and monitoring and plugging and abandonment.
- Proven ability to develop and lead large, multi-county and multi-state marginal and idle well programs, with state-of-the-industry results.
- Pioneered the use of innovative, technology-based, safe, and cost-effective solutions in oil and gas emissions measurement and monitoring.
- Experience includes data collection for plug and abandonment reporting; equipment/computer troubleshooting; roustabout, well repair and flare operations.



Curtis Shuck measuring methane at a marginal well for Antero Resources in Doddridge County, WV.

Seth Klingbeil

Well Intel IoT Platform Manager

- 14 years providing data management and software development leadership.
- Veteran software development professional with a record of improving designs.
- Successfully evaluates current systems to uncover problems and implement effective solutions that meet customer and business requirements.
- Skilled in Agile Methods, Continuous Deployment Pipeline, Java, C#, .NET, ASP.NET, Web Services, Entity Framework and MS SQL.

Stephen Massey, CQM

Quality Control Manager

- 27 years of experience serving as a Director of Quality Assurance on major site remediation and restoration projects.
- Responsible for implementing the Atlas Quality Management System, including for Atlas' orphaned well contract in California.
- Provides QA support to programs and projects and assists with problem solving and root cause analysis.
- Advises, assists, and mentors Project Managers, Site Quality Managers, and technical staff to implement QA Surveillance Plans, Inspection and Test Plans, and conduct audits on projects.
- Provides quality management support on contracts managed by federal agencies, including USACE, NAVFAC, USAF, DOE, and EPA.

Jeff Rossi

Contract Manager

- 26 years in various operations, project management, and compliance roles.
- Manages the growth and operations of the West Virginia and Pennsylvania regional offices. Responsible for contract compliance, project controls, and close-outs.
- Provided program management on a public-private partnership with the Pennsylvania Department of Transportation to replace 558 structurally deficient bridges under one statewide contract.
- Proven ability to manage schedules and budgets to deliver projects on time and within budget.

Scott McCready, LEED AP, PG

Program Manager

- 42 years of experience in the environmental assessment, remediation and regulatory compliance fields.
- Specializes in the pursuit of opportunities in assessment, plugging, and restoration of orphaned and marginal conventional wells under the IJIA and Inflation Reduction Act (IRA) assuring compliance with DOI and DOE requirements.
- Experience with oil and gas well site assessment, plugging, and restoration in Ohio.
- Resource Conservation and Recovery Act (RCRA) unit permitting, closure, and ongoing monitoring and corrective action program implementation.
- Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permitting and Stormwater Pollution Prevention Plans (SWP3), industrial discharge requirements, Spill Prevention Control & Countermeasure (SPCC) plan.
- Comprehensive Emergency Response, Compensation & Liability Act (CERCLA) investigation and program requirements such as Emergency Planning & Community Right to Know Act (EPCRA).
- Phase I and Phase II Environmental Site Assessments (ESA), soil remediation, solid/hazardous waste management, brownfield program management and material/product recycling programs.
- Hazardous materials assessments, abatement, remediation, and clearance.
- Development and implementation of facility/site environmental auditing programs, and general environmental liability identification and assessment.
- Evaluating and resolving domestic water well issues.
- Clean Air Act (CAA) potential to emit assessment and permitting.



PROVEN EXPERIENCE (4.3.1.2)

The Atlas/Well Done Team brings relevant national experience in orphaned well projects, along with established relationships with our teaming partners and regulatory agencies. **In the last 40+ years, we have successfully delivered more than 550 projects in West Virginia and surrounding states**, the vast majority of which were performed for local, state, or federal entities. This experience gives us a deep understanding of local conditions and practices, as well as established relationships with WVDEP and other regional regulatory agencies. The qualifications and project experience within this section exemplify our depth of knowledge and experience related to measurement and monitoring implementation.

QUALIFIED MEASUREMENT SPECIALIST TRAINING AND CERTIFICATION

The Well Done Team has pioneered the first-of-its-kind QMS Certification Program, introducing a vital workforce development component to its mission. In collaboration with Ventbuster Instruments (VBI) and SEMTECH, the Well Done Foundation (WDF) offers comprehensive QMS training, testing, and certification, with an endorsement in VBI systems. Additional endorsements for other technology systems are also available.

The WDF curriculum includes a blend of computer-based training and facilitator-led classroom sessions, along with hands-on, closely supervised fieldwork at real orphaned oil and gas wells. The program totals 37 hours over 3 days, offering a fast-paced, immersive experience with early mornings, long days, and late nights.

Classes are held regionally in locations where WDF has access to resources, equipment, and orphaned wells for live training exercises. **This training meets and exceeds the standards set by the ACR's and DOI's Methane Measurement Guidelines dated July 2023.**



Methane Quantification Expertise

The Atlas/Well Done Team is a national leader in methane measurement and monitoring both regionally and nationally, as demonstrated by the adjacent table and by the screenshots of Well Intel platform shown below.

PROJECT	DATE	DOI (IIJA)	ACR (CARBON CREDITS)	OPERATOR MCW
WEST VIRGINIA				
Little Kanawha	2023	1		
D1 Demonstration (Performed for WVDEP)	2023	1		
Antero Resources	2022			5
Diversified Energy Company	2023			1
OHIO				
Our Lady of Angels	2022		1	
Total DOI (IIJA) Projects	2023	113		
Total ACR Projects	2021-23		2	
Pine Top Resources	2022			25
PENNSYLVANIA				
Total DOI (IIJA) Projects	2023	337		
Total ACR Projects	2021-23		3	
Seneca Resources	2023			15
KENTUCKY				
Grayson 33259	2023	1		
Total DOI (IIJA) Projects		50		
NATIONWIDE				
Total DOI (IIJA) Projects		1,600+		
Total Operator MCW Projects				500+
Total ACR Projects			65+	



DEMONSTRATION PROJECT

West Virginia

This project was performed as a pilot project for the State of West Virginia Department of Environmental Protection as a marginal conventional well (MCW) demonstration to provide an understanding of best practices for MCW methane quantification in working with operators and regulators to determine current leak rates and the potential for emissions.

Reporting for this project was formatted in a “dashboard” style.

Specific project challenges:

- 1 Wellhead configurations
- 2 Active operations

PROJECT MANAGER

Curtis Shuck
curtis@welldonefoundation.com

TYPE OF PROJECT

IIJA Demonstration

CLIENT REFERENCE

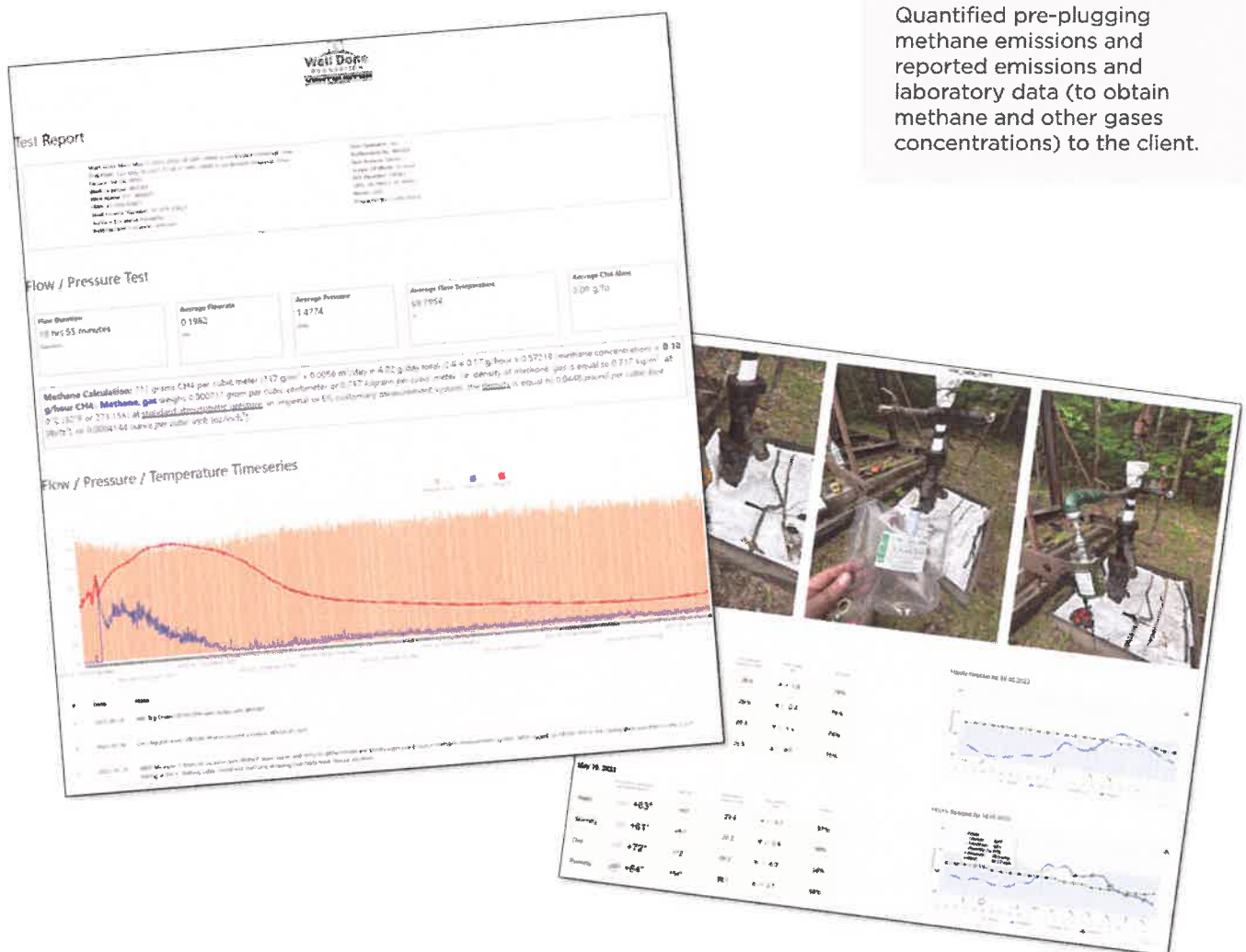
Jason Harmon
WVDEP
henry.j.harmon@wv.gov

GOAL

Accurately measure and quantify methane emission and other harmful gases emitted from the well focused on pre-plugging reporting accordingly

HOW MET

Quantified pre-plugging methane emissions and reported emissions and laboratory data (to obtain methane and other gases concentrations) to the client.



ORPHANED OIL AND GAS WELL PLUGGING AND ABANDONMENT

Statewide California

Atlas was awarded two five-year contracts by the California Department of Conservation's Geologic Energy Management Division (CalGEM) to plug and abandon a multitude of orphaned oil and gas wells in its central and southern districts.

These contracts support state and federal efforts to eliminate methane and other harmful gas emissions from orphaned oil and gas wells, reducing environmental risks and improving community health and safety.

Atlas' scope of work is to provide comprehensive program management services to include:

- Thoroughly assess orphaned wells and well sites.
- Provide DOI-compliant pre- and post-plugging measurement and monitoring.
- Develop plans for safe well plugging.
- Decommission well site facilities, including dismantling and removal of obsolete infrastructure.
- Provide restoration services focused on environmental cleanup, remediation, and land restoration.

Key Challenges

- As development has expanded over the years, many once-remote wells are now located in urban areas requiring additional outreach to stakeholders, property owners, and other interested parties. These locations also require additional safety measures due to the proximity of people and structures.
- Physically locating buried wells using a hand-held GPS and metal detector as they were found to be cut flush with or below the ground.
- Atlas has incorporated the use of drone technology equipped with a magnetometer to locate well and well site features. Ground-based geophysical techniques are also used to fine tune the drone findings and precisely locate buried wells and well infrastructure.

PROJECT MANAGER

Alex Harting, PE
Alex.Harting@oneatlas.com

TYPE OF PROJECT

DOI orphaned well program management

CLIENT REFERENCE

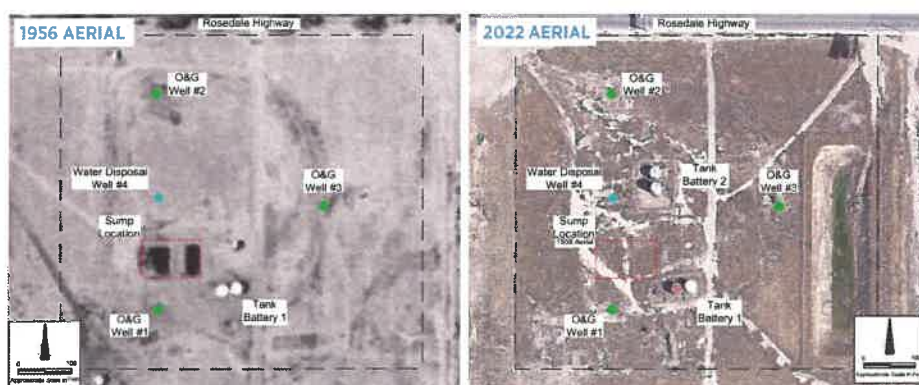
Cameron Campbell, PG
CalGEM
Cameron.Campbell@conservation.ca.gov

GOAL

DOI guidelines-based program. Accurately measure and quantify methane emission and other harmful gases emitted from the well which was focused on pre-plugging reporting accordingly.

HOW MET

Quantified pre-plugging methane emissions and reported emissions and laboratory data (to obtain methane and other gases concentrations) to the client.



Comparing historic and modern aerial images helps identify well locations

GRAYSON 33259 HACK

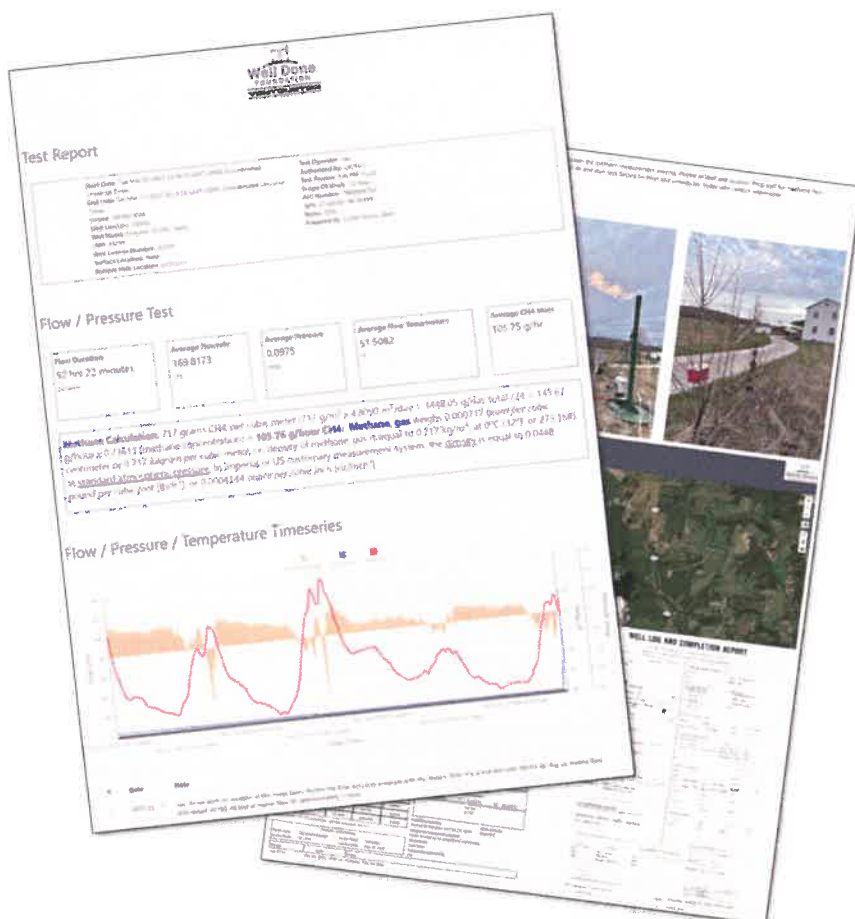
West Virginia

This project was executed for the University of Kentucky (UK), under a 50+ Orphaned Well Measurement Contract across 16 counties. The scope of work for Well Done included pre-plug orphaned well methane quantification and UK staff training.

Reporting for this project was formatted in a “dashboard” style to allow the university to quickly update its database.

Specific project challenges:

- Accessibility
- Wellhead configurations
- Proximity to residences
- Need for emissions flaring due to gas volumes and proximity to residences
- Cellular connectivity
- 2-3 wells per County significantly impacted production rates



PROJECT MANAGER

Curtis Shuck
curtis@welldonefoundation.com

TYPE OF PROJECT

IIJA Methane Quantification

CLIENT REFERENCE

Thomas Parris
University of Kentucky
mparris@uky.edu

GOAL

DOI guidelines-based program. Accurately measure and quantify methane emission and other harmful gases emitted from the well which was focused on pre-plugging reporting accordingly.

HOW MET

Quantified pre-plugging methane emissions and reported emissions and laboratory data (to obtain methane and other gases concentrations) to the client.



The work performed by the Well Done Foundation Team for the University of Kentucky, Kentucky Geological Society, and Kentucky Department of Oil & Gas was invaluable to helping us quantify orphaned well methane emissions and develop emissions modeling.

- Thomas Parris
University of Kentucky

OUR LADY OF ANGELS

Cuyahoga County, Ohio

Located above the Rocky River in Cleveland, this orphaned well was drilled in 1908 into what was likely the "Clinton Formation," one of Ohio's oldest natural gas bearing shale formations, to a depth of approximately 2,700 feet. The well was producing up until the 1950s when it was idled and filled with a clay material, a common industry practice during that era.

In 1979, Our Lady of Angels Apartments, doing business as Franciscan Village, was established as a non-profit collaboration to meet the anticipated demand for affordable independent senior housing. When the first residents began moving into the two-building, 135-unit Franciscan Village, a waiting list of approximately 2,000 people quickly formed. In 1992, Franciscan Village expanded by constructing a third building, adding 41 additional units for a total of 176. During a 2022 expansion project, an orphaned well was discovered in the courtyard, leaking methane. The Well Done Foundation stepped in to adopt and remediate the well.

The Ohio Department of Natural Resources issued the plugging permit on April 8, 2022, and Moore Well Services of Mogador, Ohio, began the remediation work. The team started by drilling out the old plugging material and removing the failed casing pipe. They then drilled a larger 8-inch-diameter hole to create a clean well bore and installed approximately 170 feet of new 8-inch steel casing, which was cemented on the backside between the casing pipe and the formation. Afterward, Moore cleaned out the well bore and, in collaboration with Petroset and Appalachian Well Surveys, cemented the cleaned well bore, set an 8-inch bridge plug, and filled the well with cement all the way to the surface, completing the work by April 28, 2022.

American Carbon Registry Methodology

Two 2-hour continuous monitoring events prior to well plugging using steady-state chamber flow measurement, a gas concentration meter, and lab-verified air quality.



The WellDone Foundation adopted this well from the State of Ohio and plugged it on behalf of the property owner.

PROJECT MANAGER

Curtis Shuck
curtis@welldonefoundation.com

TYPE OF PROJECT

ACR Project

CLIENT REFERENCE

Donnald Heckelmoser
Franciscan Village Senior Center
heackelmoser@lscservice.com

GOALS

ACR guidelines-based program. Accurately measure and quantify methane emission and other harmful gases emitted from the well both pre-plugging and post-plugging and report accordingly.

HOW MET

Quantified pre-plugging and post-plugging methane emissions and reported emissions and laboratory data to the client. A more robust program of sampling and testing sets to meet the ACR requirements and corresponding laboratory analyses (to obtain methane and other gases concentrations) for each set.

BENEFITS AND ACCOMPLISHMENTS

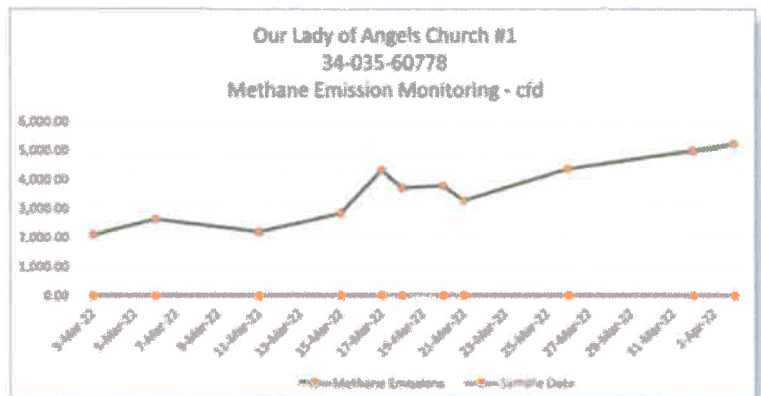
- 16,415 metric tons of CO₂e methane emissions reduced
- 20 days from permit issuance to final well plugging – rapid resolution
- 5 United Nations Envision 2030 goals achieved
- Other achievements:
 - Improved air and water quality
 - Environmental restoration
 - Local jobs creation
 - Community outreach
 - Environmental justice

GOALS ACCOMPLISHED

GOAL	HOW ACCOMPLISHED
Clean Water and Sanitation	Met by improving water quality, reducing pollution, and minimizing release of hazardous chemicals and materials into groundwater. Plugging of the orphaned well supports improvements in air and water quality.
Industry, Innovation, and Infrastructure	Met via the use of flow metering processes that can be used to retrofit industries, making them sustainable, improving resource utilization, and expanding the adoption of clean and environmentally sound technologies. The technology can be used in developing countries and, with mobile capabilities, can be monitored globally using cloud technologies.
Sustainable Cities and Communities	Met by providing access to safe, inclusive, accessible public housing for women, older persons, and persons with disabilities by plugging an orphaned well that emitted methane where they resided.
Responsible Consumption and Production	Met through the project providing sound management of orphaned oil and gas well and methane emissions in accordance with agreed international frameworks, permanently reducing their release to air and water, minimizing their adverse impacts on human health and the environment through prevention and recycling.
Climate Action	Met via the innovative measurement technologies used in the project that were invented to anticipate and meet climate goals, continuing to be refined and its use expanded across many locations.



Continuous monitoring prior to completion.



BEAR RUN TRAILER PARK #001

Erie, PA



Bear Run Trailer Park #001, an undocumented orphaned natural gas well, was featured on the Smithsonian Channel's "How Did They Fix That" (Season 2, Episode 5) as the Well Done Foundation (Well Done California LLC) was performing critical methane measurement and monitoring in November 2022.

The WellDone Foundation adopted this well from the State of Pennsylvania and plugged it on behalf of the property owner.

This marginal and idle well was discovered by the landowner as he was preparing to sell the property. Working closely with the

Pennsylvania Department of Environmental Protection (PADEP), Well Done adopted and successfully plugged this well in February 2023 and restored the impacted surface area in the Spring of 2023.

PROJECT MANAGER

Curtis Shuck
curtis@welldonefoundation.com

TYPE OF PROJECT

ACR Project

CLIENT REFERENCE

Ronald Susmarski
Legal Counsel
suslaw@roadrunner.com

GOAL

Quantify pre-plugging and post-plugging methane emissions and report emissions and laboratory data to the client. A more robust program of sampling and testing sets to meet the ACR requirements and corresponding laboratory analyses for each set.

HOW MET

Quantified pre-plugging and post-plugging methane emissions and reported emissions and laboratory data to the client. A more robust program of sampling and testing sets to meet the ACR requirements and corresponding laboratory analyses (to obtain methane and other gases concentrations) for each set.

ADDITIONAL PROJECT EXAMPLES

Examples of national orphaned well projects and additional West Virginia projects further demonstrating our team's capabilities are included on the following pages.

Additional Orphaned Well Project Examples

MARGINAL AND IDLED WELL SITE ABANDONMENT, REMEDIATION, AND RESTORATION

Statewide Arizona

Atlas was awarded a task order contract under an MSA with the Arizona Department of Environmental Quality (ADEQ) for the Arizona Marginal and idled Well Site Abandonment, Remediation, and Restoration Project. ADEQ plans to plug and abandon legitimately marginal and idled oil and gas, geothermal, and/or helium wells in coordination and in compliance with IJJA requirements, followed by possible reclamation of the associated facilities. The project consists of four tasks including assessment, site characterization, well plugging and abandonment, and site restoration. The site characterization task included screening, measurement, and monitoring.

A key challenge of this project is physically locating each well in unpopulated and undeveloped areas. To address this issue, Atlas uses 4-wheel drive vehicles equipped with GPS units, a satellite phone, and emergency equipment to locate wells. In areas with limited vehicle access, the field team has often hiked more than a mile through rugged terrain using a hand-held GPS unit to track to the well location on foot.

In some cases, wells were located using a metal detector as they were cut flush with or below the ground. Atlas has recently incorporated the use of drone technology equipped with a magnetometer to locate well and well site features. Ground-based geophysical techniques are also used to fine tune the drone findings and precisely locate buried wells and well infrastructure.



MARGINAL AND IDLE WELL PLUGGING PROGRAM

Statewide Montana

Well Done performed plugging and abandonment of ten marginal and idle wells for carbon credit generation in Northern Montana. This project will generate more than 200,000 carbon offsets through the ACR marginal and idle well methodology that will ultimately finance the work and act as a multiplying effect of nearly 1:1.



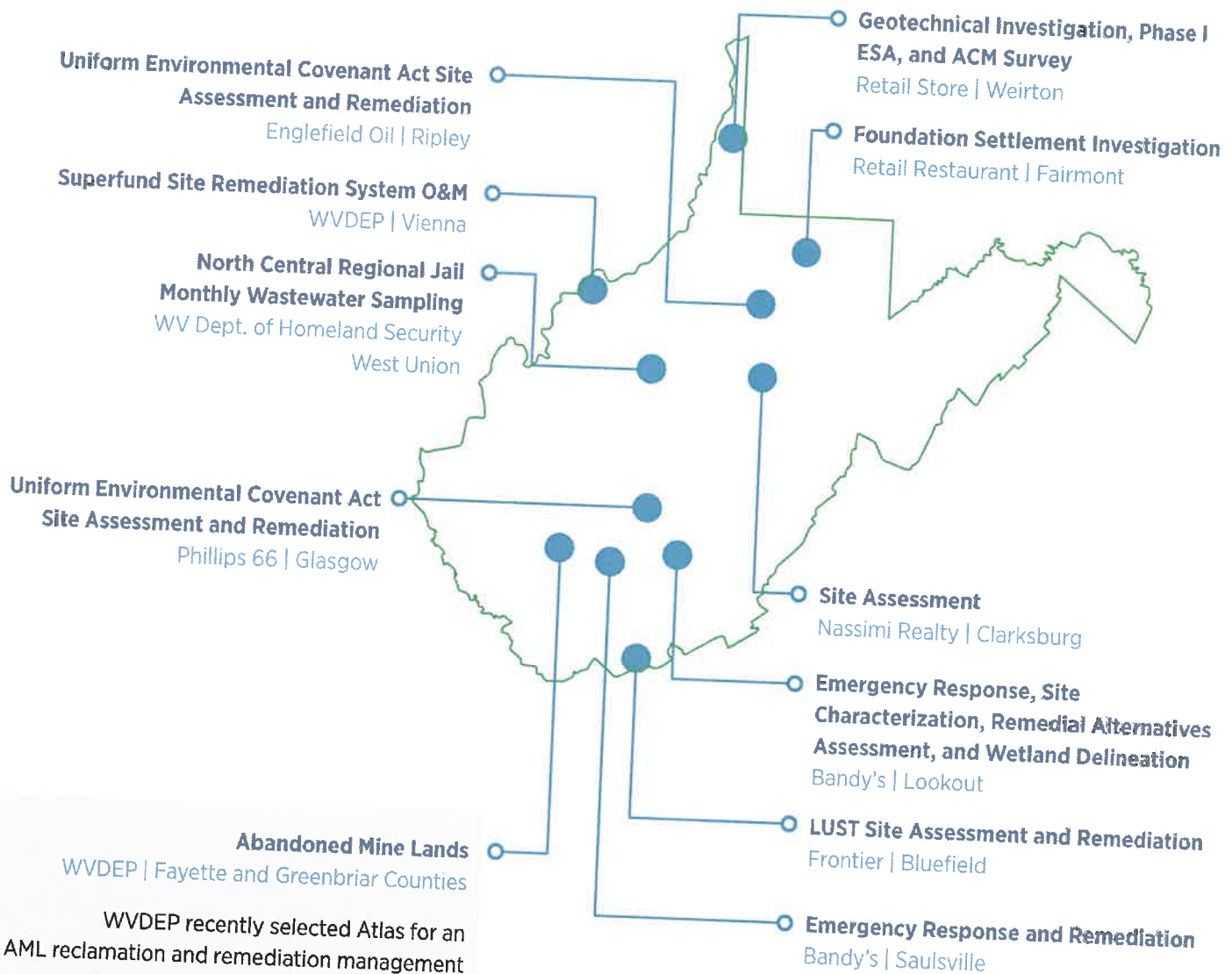
We have been working with the Well Done Team since 2019. To date, Well Done has plugged 12 orphan wells on my land and they have done an amazing job of safely and responsibly executing the work and restoring the surface areas once completed. I happy to be able to partner with the Well Done Foundation.

- Sam Stewart



Additional West Virginia Projects

For over 40 years, Atlas and its legacy companies have been deeply rooted in West Virginia, contributing to the state's growth and development. Our team members are genuinely committed to the success of every project, and know that their work directly benefits the communities they call home. The following projects provide a representative sampling of our work throughout the state.



WVDEP recently selected Atlas for an AML reclamation and remediation management contract on 14 sites throughout southern West Virginia. **This award was the largest of eight competitive AML contracts issued by the WVDEP in 2023.**

○ APPENDIX

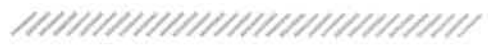


A. REQUIRED FORMS





APPENDIX



A. REQUIRED FORMS



DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Jeff Rossi, Contract Manager

(Address) 125 Granville Square, Morgantown, West Virginia 26501

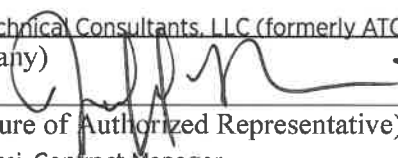
(Phone Number) / (Fax Number) 304-533-0367

(email address) jeff.rossi@oneatlas.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Atlas Technical Consultants, LLC (formerly ATC Group Services LLC)
(Company)


(Signature of Authorized Representative)

Jeff Rossi, Contract Manager

(Printed Name and Title of Authorized Representative) (Date)

304-533-0367

(Phone Number) (Fax Number)

jeff.rossi@oneatlas.com

(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP 0313 DEP2500000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

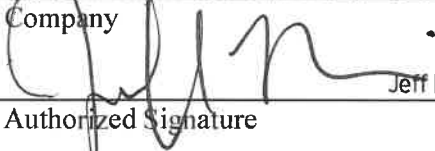
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Atlas Technical Consultants, LLC (formerly ATC Group Services LLC)

Company


Authorized Signature

Jeff Rossi, Contract Manager

08/27/2024

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

SOLICITATION NUMBER: CRFP 0313 DEP2500000001

Addendum Number: No.01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- ☒ Modify bid opening date and time
- ☐ Modify specifications of product or service being sought
- ☒ Attachment of vendor questions and responses
- ☐ Attachment of pre-bid sign-in sheet
- ☒ Correction of error
- ☐ Other

Description of Modification to Solicitation:

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. To publish agency responses to all vendor submitted questions
2. To extend bid close date until 8/27/2024 @ 1:30 PM ET
3. To correct the contract terms from 1 year with 4 renewals to state 1 year with 3 renewals.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

RFI: Questions from vendors for CRFQ DEP25*01 Methane Emissions

Q.1. Does the Agency plan to make one or multiple awards?

A. The Agency is issuing one award regarding this specific RFQ.

Q.2. Does prevailing wage apply to this contract?

A. No, the Davis-Bacon Act only applies to laborers or mechanics, and investigative efforts such as these do not qualify as either.

Q.3. Is a West Virginia Contractor License required to perform this work?

A. No.

Q.4. Section 4.2.1.4 of the RFP states the following:

"If the vendor proposes to provide equipment only, it should describe how it will train Agency personnel to effectively use and deploy such equipment to the standards identified in BIL guidelines."

If a vendor proposes to provide equipment and training, how should the associated costs be presented in the vendor's costing submittal?

A. The agency envisioned that there may be (at least) two approaches to providing MEQ solutions to the state. One approach would involve a vendor providing direct measurements. The other would be the vendor providing equipment and training necessary to allow the agency to perform its own measurements. In either case, the cost structure should be determined on a per-well basis. 200 wells is an estimation on the number of wells that will be plugged annually using these collective funds.

Q.5. Pricing: There are several variables that affect the level of effort needed to complete methane screening and quantification at abandoned and orphaned wells. Is the Agency able to provide additional information and/or parameters to assist with preparing the per well unit cost for Items 1, 2, and 3 in Attachment A of the RFP? Please provide a list of well locations. Please provide information regarding physical access to the wells.

A. There is no pre-selected list of wells as determined by the Agency; therefore, the Agency can not provide specific information regarding per-well unit costs or physical access to well sites. General information regarding West Virginia's unique and diverse geographical layout should be taken into consideration by all vendors when bidding.

Q.6. Are all wells accessible via vehicle?

A. None of the wells have been pre-selected at this time, so it is unknown what the condition of the roads are leading to these wells; however, it is likely that not all of the wells will be accessible by vehicle.

Q.7. If the wells are only accessible via foot, please provide information regarding estimated distance to travel via foot, including types of terrain and need to perform light bushwhacking. Please provide photo-documentation of the wells, if available. Please provide available information regarding the amount and configuration of surface infrastructure remaining at each well.

A. The wells have not been pre-selected so this information is not known.

Q.8. Will the Agency be responsible for obtaining access from private landowners and/or third parties to perform the methane measurement work?

A. Parties under contract with the state will have authority to access property under the terms of W. Va. Code §22-6-2(d).

Q.9. Schedule: Can work be performed as a "milk run" per a schedule prepared by the vendor and approved by the Agency or will the schedule be dictated by others (ex., plug and abandonment firms) and be on an "on-call" basis?

A. The Agency intends to identify groups of wells as plugging packages, and each of those packages will be released on a quasi-regular basis. All pre-plugging measurement data should be collected prior to bidding, so there is a need for prompt service, but not necessarily on-call. The Agency is willing to work with the vendor to develop a schedule that is mutually agreeable.

Q.10. Should the Agency request that 5% of the wells have a second measurement for quality assurance/quality control (QA/QC), wells that receive the second measurement will incur additional costs. How should this be factored into the per well unit pricing?

A. Per-well price structure should include consideration of 5% QA/QC analyses.

Q.11. If overnight travel costs (i.e., lodging and meals) are incurred, should these costs be factored into the per well unit cost or should they be invoiced separately per the applicable United States General Services Administration (GSA) rates?

A. Yes, all costs should be factored in per-well.

Q.12. On page 30, item 4.3, "Qualifications and Experience," the section requests "copies of any staff certifications or degrees applicable to this project." Can you provide examples of certifications/degrees that would be applicable? And, are we expected to provide copies of all degrees for each personnel shown?

A. The Agency is unaware of any technical certifications provided for MEQ analysis, but if any exist and apply to vendor staff, please provide.

Q.13. Is the Agency willing to provide a one week extension for the proposal deadline?

A. Yes, the Agency is willing to provide a one week extension for the proposal deadline.

Q.14. Would be possible to see a map or get coordinates to where the 200 wells are located. Pricing can obviously fluctuate depending on distance required to travel between wells.

A. Wells have not been pre-selected. Also note that the Agency is only estimating 200 wells to be analyzed. The final number may be more or less than 200. The Agency has been awarded multiple grants, each of which require MEQ analysis. The Agency can only estimate the number of wells based on available funding and cost projections.

Q.15. Does WV Department of Environmental Protection Office of Oil and Gas have a predetermined list of 200 orphan wells to measure?

A. No, the wells have not been selected in advance.

Q.16. Will this project be released in sections or in its entirety?

A. Wells will be compiled as packages of approximately 20 wells each. Those wells will be provided to the vendor as a group. Well plugging packages are expected to be released on a semi-regular basis throughout the lifecycle of the contract.

Q.17. If in sections are these sections grouped geographically?

A. Yes, the Agency is focusing on "community level projects" which will be within a county. Overall projects are expected to be released across the state.

Q.18. Is there a minimum measurement duration per unit (well)?

A. The vendor is only responsible for meeting the requirements identified in the MEQ guidelines.

Q.19. Are there any technological requirements or limitations on the measurement equipment?

A. The equipment must meet the technology requirements or limitations cited in the MEQ guidelines.

Q.20. Does US EPA Method 21 Standard meet the 1 gram / hour rate requirement set by the Division of Interior guidelines?

A. MEQ guidelines state that leak quantification and methods appropriate for wellheads/infrastructure follow EPA Method 21 for leak detection methodology. The Agency believes that EPA Method 21 pertains to how leaks are detected and are not specific to the sensitivity of the equipment used to quantify those emissions. Regardless, all methods and approaches should be entirely within the MEQ guidelines.

Q.21. Is there a list of specific requirements or technical specifications for the measurement technologies to be used for the 200 wells?

A. All equipment specifications must meet the MEQ guidelines.

Q.22. In addition to the 1 gram per hour sensitivity defined by the DOI guidelines, are there any other specific requirements for the technology?

A. Only those requirements defined in the MEQ guidelines.

Q.24. What is the time period for the 200 wells to be evaluated pre-abandonment?

A. As the agency anticipates a steady rollout of well plugging packages over the contract period, it expects that the work to be completed in a reasonable time frame.

Q.25. What is the documentation requirement for the pre- and post-P&A evaluations?

A. The Agency will require the Vendor to provide a report for each well (pre- and post-plugging) clearly identifying the rate of methane emissions in the units of g/hr.

Q.26. For the 200 wells reference in the subject RFP, could we please have the following: Well API number, Coordinates (latitude, longitude), Any other well related information you have to determine location.

A. Wells have not been pre-selected.

Q.27. Would you please confirm that the only signature forms that must be included in our RFP response are the following: RFP Form (3 pages), Addendum Acknowledgement Form, Designated Contact Signature Page.

A. Yes

Q.28. Terms & Conditions, Sec. 8 – This says we would be obligated to comply with “any additional insurance requirements contained in the specifications prior to Contract award”. Could you please clarify what those additional requirements are, if any.

A. The only insurance requirements that apply to the solicitation are marked.

Q.29. Terms & Conditions, Sec. 13 – Can you please clarify that Atlas’s pricing is only fixed for the “life of the (one-year) Contract”. We would hope that beyond the initial one-year contract the Atlas team will have the opportunity to re-evaluate it’s pricing based on a new set of wells in different locations and well groupings. Please clarify this for us.

A. This RFP is structured as a 1-year contract that is renewable at the contracted rates if both parties agree. If the winning vendor would elect to restructure the prices, it would necessitate re-bidding.

Q.30. Well Names and API Numbers.

A. Wells have not been pre-selected.

Q.31. Will the Agency provide the contractor with a Letter of Authorization to present to the Landowners confirming that Orphan Well Measurements are official State of WV Business.

A. WV has the authority under W. Va. Code § 22-6-2(d) to inspect any well. Any contractor performing contract work on behalf of the State will have that same authority. The Agency will provide documentation to the winning vendor explaining that authority if necessary.

Q.32. Please confirm if State of WV is obtaining an Official Access Agreement with the Landowners and if same is required for Orphan Well Measurement activities.

A. WV has the authority under W. Va. Code § 22-6-2(d) to inspect any well. Any contractor performing contract work on behalf of the State will have that same authority. No landowner agreements are necessary.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☒ **Term Contract**

Initial Contract Term: The Initial Contract Term will be for a period of One Year. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as Three), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

☐ **Alternate Renewal Term** – This contract may be renewed for successive year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☒ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within days.

REQUEST FOR PROPOSAL

(WVDEP CRFP 25*01)

Proposal 1: Step 1 – $\$1,000,000 / \$1,000,000 = \text{Cost Score Percentage of 1 (100\%)}$
Step 2 – $1 \times 30 = \text{Total Cost Score of 30}$

Proposal 2: Step 1 – $\$1,000,000 / \$1,100,000 = \text{Cost Score Percentage of 0.909091 (90.9091\%)}$
Step 2 – $0.909091 \times 30 = \text{Total Cost Score of 27.27273}$

- 6.8. Availability of Information:** Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Atlas Technical Consultants, LLC (formerly ATC Group Services LLC)
(Company)

Jeff Rossi, Contract Manager
(Representative Name, Title)

304-533-0367
(Contact Phone/Fax Number)

08/27/2024
(Date)



APPENDIX



B. RESUMES



BEN STAUD, PE

PROJECT MANAGER

EDUCATION

MS, Civil Engineering, West Virginia University, 2000
BS, Civil and Environmental Engineering, West Virginia University, 1997

REGISTRATIONS

Professional Engineer;
WV #020372
PA #PE071430
MA #50126
NY (inactive)

CERTIFICATIONS

OSHA 1910.120 40-Hour Safety Training
OSHA 1910.120 8-Hour Refresher Training

EXPERIENCE & RESPONSIBILITIES

Ben Staud has 19 years of project management and design experience involving investigating, designing, permitting, and managing a diverse array of environmental, geotechnical, and civil projects.

PROJECT EXPERIENCE

Natural Gas Well Site Civil Design and Permitting Management; West Virginia and Pennsylvania

Managed the design and permitting of Marcellus natural gas well sites. Responsibilities included bidding and managing contract engineering services, identifying and tracking permits required for location construction, performing extensive technical reviews of draft drawings and permit applications, inspecting completed projects to evaluate design and/or as-built performance, and identifying and incorporating lessons learned from past and present construction projects. Management of these projects required rigorous coordination with all divisions within the company to ensure proposed locations facilitated the development process while simultaneously minimizing construction costs, addressing slope instability concerns, and avoiding unnecessary permitting delays.

Remediation of Former Manufactured Gas Plant (MGP); Massachusetts

Project Manager and Engineer of Record for an impacted sediment removal and stream restoration project that required installation of a structural soil mix barrier wall and complete gravity diversion of a medium-sized stream to facilitate removal and replacement of approximately 25,000 tons of sediment. Responsibilities included development of conceptual design solutions; evaluation of remedial design investigation results; acquiring permits from local, state, and federal regulators (Section 404/401 permits); preparation of remedial design documents; assistance with contractor selection; attaining E&S permits; supervision of field oversight activities; and submittal of completion documentation.

Impacted Sediment and Soil Removal Project at Former MGP Site; New York

Project Manager and Engineer of Record for an impacted sediment/soil removal and stream restoration project adjacent to a commercial facility located in an urban area. Responsibilities included acquisition of a Section 404/401 permit, preparation of remedial design documents, assistance with contractor selection, attaining E&S permits, supervision of field oversight activities, and submittal of completion documentation. This project included sheet pile walls for groundwater control and excavation support, pumped stream bypass, disposal of 12,000 tons of impacted sediments, on-site water pre-treatment, and construction of a vegetated segmental retaining wall.

Construction Inspection and Drilling Oversight; Virginia, West Virginia, and Maryland

Prepared Phase I Environmental Site Assessments for various private and public clients in multiple states.

Construction Inspection and Drilling Oversight; Virginia, West Virginia and Maryland

Conducted field inspection of various municipal and industrial construction projects. Oversaw field drilling operations to support geotechnical and environmental site investigations.

Aluminium Dross Landfill Capping; Alabama

Project Engineer for a capping and leachate treatment project for a 40-acre industrial landfill. Responsibilities included procurement and oversight of geotechnical and environmental drilling programs, historical records review, slope stability analyses, grading plans, cap system design, and construction oversight.

Remedial Design at Former MGP Site; New York

Project Manager and Engineer of Record for an impacted soil removal project at a former manufactured gas plant located in an urban area under complete containment. Project responsibilities included evaluation of remedial design investigation results, attainment of regulatory approval, preparation of remedial design documents, and securing an E&S control permit.

PROJECT MANAGER / QUALIFIED MEASUREMENT SPECIALIST / FIELD SUPERVISOR

Qualifications:

Uniquely qualified to provide effective leadership in the orphan and marginal conventional well methane measurement and monitoring and plugging and abandonment space. Proven ability to develop and lead large, Multi-County and Multi-State orphan well programs, with state of the industry results.

Proven delivery of innovative, technology based, safe and cost effective solutions in the oil & gas emissions measurement and monitoring space. Curtis' work is nationally recognized by the U.S. Department of Interior, U.S. Department of Energy and State Regulatory Agencies and being best in industry.

Work History:

July 2019 - Present: Chairman, Well Done Foundation, Inc. - Bozeman, MT

Inspired by an overwhelming need to take action to address the orphan and marginal conventional well problem in the United States and Canada, the Well Done Foundation was formed as a 501 (c) (3) in November of 2019. Since that time, the Well Done Foundation has performed orphan and marginal conventional well methane measurements on more than 1,600 wells across 15 states and has facilitated the plugging and abandonment of more than 40 orphan wells in 5 states.

The Well Done Foundation was the original sponsor of the American Carbon Registry (ACR) Orphan Well Plugging Methodology for the development of Carbon Credits as a means of helping to finance the scaling up of this important work.

Specific Duties Include:

- ◆ Overseeing Orphan and Marginal Conventional Well Measurement & Monitoring Teams
- ◆ Orphan and Marginal Conventional Well Methane Quantification Data Analysis
- ◆ Well Intel© Orphan and Marginal Conventional Well Program Management IoT
- ◆ Orphan and Marginal Conventional Well Adoption, Plugging & Abandonment Programs

Work History:

July 2017 - Present: President, Universal Exports Limited, LLC - Bozeman, MT

The opportunity to develop and guide my own firm presented itself in July of 2017 and the concept of Universal Exports was born! Universal Exports Limited LLC of Bozeman, MT is passionate about using our extensive experience and relationships in the domestic and international trade, transportation and business development sectors to create real value for our customers by delivering unique and innovative solutions that generate the right opportunities at the right times.

Facilitation of meaningful domestic and international trade, transportation and business development relationships that bring real value, in real time. Delivering integrated collaborations with our customers that are specially designed to be consistent with their own business cultures, philosophies and requirements for a seamless and integrated effort that produces clear results of value that our customers are be proud to own!

Specific Duties Include:

- ◆ Business to Business Collaborations
- ◆ Outsourced Sales and Marketing Consulting
- ◆ Strategic Planning and Policy Consulting

Curtis E. Shuck Jr. - Curriculum Vitae

Work History:

August 2017 - 2021: Executive Director, Great Northern Corridor Coalition - Williston, North Dakota

Appointed by the General Membership in August 2017 as the first Executive Director of the Great Northern Corridor Coalition, a Public/Private Partnership formed in 2011 between the BNSF Railway Company, the Port of Vancouver USA and the Port of Northern Montana. The GNCC has gone on to increase its membership to include eight (8) state Departments of Transportation, ten (10) Public Ports, Departments of Commerce, Departments of Agriculture, Cities, Towns, Trade Offices, Economic Development Authorities, Port Associations and various Private Sector interests.

Responsible for managing the day to day implementation of the GNCC's annual Business Plan, coordinating with the Executive Board, the Steering Committee and General Members.

May 2016 - July 2017: President, Red River Oilfield Services, Inc. Williston, North Dakota

As President of Red River Oilfield Services, Inc. primary responsibilities are to oversee the day to day affairs of the company's \$32.6M annual business with 50 employees and \$40.0M in assets working directly with the Board of Directors, Corporate Legal Counsel and Executive Staff.

Specific Duties Included:

Develop Annual Operating Budgets, Corporate Key Initiatives and Departmental Goals and Objectives. Lead and support Staff in the execution of the Departmental Goals and Objectives. Oversee business development and sales efforts in the Energy, Industrial Products and Renewable Energy Sectors, focused on diversifying the book of business for long term sustainability.

Has the primary responsibility for dealing with the BNSF and Union Pacific Railroads, industry partners and for creating synergies for business development opportunities and collaborative execution strategies and initiatives.

Lead the organization forward, coordinating with shareholders, customers, community leaders and employees to optimize returns and overall business effectiveness.

2015 - 2016: Vice President of Business Development, Red River Oilfield Services, Inc.

A member of Red River's Executive Team, directly responsible for the oversight of the Marketing and Business Development strategy to generate a diverse portfolio and grow market share during the strong economic headwinds created by the global collapse of the oil and gas industry.

Specific Duties Included:

Develop executable sales strategies that support existing customers and provide growth opportunities in emerging markets.

Optimize business units with growth potential and shutter operations struggling to maintain profitability. Minimize staff reduction through cross training, retraining and repurposing initiatives.

Manage a culture of change and creative thinking in a 37 Year Old local family owned business through creating a shared vision, transformation execution strategy, staff and resource coaching.

Curtis E. Shuck Jr. - Curriculum Vitae

2014 - 2015: Senior Sales Director, Port of Vancouver USA

As a member of the Port of Vancouver USA's newly created Global Sales Team, Curtis' primary role was to identify, develop and pursue business opportunities related to the Advantaged Supply Chain Initiative that optimize the port's infrastructure and operational capabilities.

Specific Duties Included:

Lead business development and sales efforts in the Energy, Industrial Products and Agricultural sectors by working with existing port customers to help them realize their full potential and developing *NEW* partners through creating *NEW* business opportunities in traditional as well as non-traditional spaces. Spearhead the port's Midcontinent Strategy by overseeing the Williston, North Dakota Field Office.

2005 - 2014: Director of Economic Development and Facilities, Port of Vancouver USA

Member of the Port of Vancouver USA's Executive Management Team, leading the third largest public port in the state of Washington to continued success in marine cargo movements, economic and business development activities, rail infrastructure improvements and property development.

Specific Duties Included:

Directing a high performance team that manages all aspects of the port's rail program, industrial properties and real estate, economic and business development activities and capital project delivery. In all, over 50 track miles of rail infrastructure, 800 acres of marine and industrial property with 2 million square feet of warehouse, manufacturing and office space occupied by more than 50 diverse tenants. The Facilities and Rail Departments of the port generate in excess of \$10.9 million dollars in gross revenues annually. Capital projects include the port's \$275.0 million dollar West Vancouver Freight Access Project, a partnership with the BNSF Railway Company.

References:

Jim Griswold	New Mexico Energy, Minerals & Natural Resources - Orphan Well Program
Thomas Parris	University of Kentucky, Kentucky Geological Society—Orphan Well Program
Randy Pacheco	Chief Executive Officer, A-Plus P & A, LLC
Susan Nash,	American Association of Petroleum Geologists

Education:

1979 to 1981	Charismatic Bible College - Anchorage, Alaska Theology
1982	University of San Diego School of Law - San Diego, California Graduate Paralegal Program
1982	Republican National Committee - Washington, District of Columbia Internship, College Field Program
1986 to 1990	Bates Technical College - Tacoma, Washington Carpenters Apprenticeship Program, United Brotherhood of Carpenters Journeyman Carpenter/Pile Driver

STEPHEN MASSEY, CQM

QC MANAGER

EDUCATION

BS, Geology, San Diego State University, 1985

TRAINING AND CERTIFICATIONS

Construction Quality Management (CQM) Certificate, USACE, 1999, 2004, 2011, and 2016;

Certified Quality Engineer (CQE), American Society for Quality (ASQ), 1989

Certified Quality Auditor (CQA), ASQ, 1989

EXPERIENCE & RESPONSIBILITIES

Stephen Massey has provided quality management support on contracts managed by numerous government agencies, including USACE, NAVFAC, Air Force, DOE, and EPA. Most projects involved engineering, construction, and environmental remediation as the prime contractor QA Manager, implementing quality assurance to verify subcontractors followed procedures and performed QC inspections. He advises, assists, and mentors Project Managers, Site Quality Managers, Non-Destructive Testing (NDT), and technical staff who are responsible for implementing QA Surveillance Plans and Inspection and Test Plans and conducts project audits. Mr. Massey's experience includes assisting project teams with root cause analysis (RCA) support for performance deficiencies and assisting with Nonconformance Reports (NCR), Corrective Action Requests (CAR), and audits. Sample RCA assignments are featured in the Project Experience section below.

Mr. Massey authored *Best Practices for Environmental Project Teams*, marketed globally by Elsevier, Amsterdam, The Netherlands, in 2011 (ISBN: 978-0-444-53721-8). The 2nd edition was published in March, 2022. He has presented quality management topics at national conferences and workshops, including the American Society for Quality (ASQ). In March, 2018, Stephen presented "Effectively Implementing Root Cause Analysis on Projects Involving Advanced Geophysics" at the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP) National Conference.

EMPLOYMENT HISTORY

Atlas Technical Consultants

QA Director/Program Quality Manager. Responsible for implementing the Atlas Quality Management System (QMS), including the NDT QMS, companywide, providing QA support to programs and projects, and assisting with problem solving. (2020 - present)

PTIM Federal Services

Program QA/QC Manager. Helped project teams develop and implement flexible quality management systems tailored to site-specific technical and regulatory requirements. He independently verified environmental documents, results, and data met Performance Work Statement (PWS) performance standards and complied with government QA Surveillance Plan (QASP) requirements. (2017 - 2020)

CB&I Federal Services*. (2014 - 2017)

Shaw Group*. (2003 - 2014).

IT Corporation*. (1998 - 2003).

OHM Remediation Services*. (1995 - 1998).

General Atomics

Project Quality Engineer. Responsible for developing and implementing project quality plans on nuclear decontamination and decommissioning projects in accordance with the client contract, ASME NQA-1 and U.S. Nuclear Regulatory Commission (NRC)

* Employer change due to acquisition.

requirements. Projects included the nuclear fuel fabrication facility and radiological hot cell laboratory. (1987 - 1995).

Chem-tronics

Receiving Inspector. Responsible for inspecting and prescribing damage shop repair actions and quality control procedures for commercial aircraft fan blades. (1985 - 1987).

PROJECT EXPERIENCE

California Department of Conservation's Geologic Energy Management Division (CalGEM) Project

Developed and implemented the Quality Assurance and Quality Control (QA/QC) Plan which describes the process that Atlas and its subcontractors implement to verify Oil and Gas well Plugging and Abandonment (P&A) work is planned, performed and documented in accordance with the contract. The QA/QC Plan applies to each awarded site-specific task order and CalGEM-approved Notice of Intention to Abandon (NOI) for each of the Orphan Wells scheduled for abandonment. The Atlas quality process and objectives apply to the P&A lifecycle, from pre-mobilization through final QA audit. CalGEM has identified thousands of oil and gas wells statewide that are orphaned, hazardous, or potentially hazardous. Proper plugging and abandonment of wells is necessary to mitigate or eliminate the danger they currently pose to life, health, and natural resources.

Clean, Inspect, and Repair of Fuel Storage Tank; Pt. Mugu, CA

Provided QA root cause analysis followed by QA corrective action support for tank shell shrinkage following weld repairs by subcontractor. Causes included lack of pre-weld bracing plan (deviation from spec), failure to control heat during welding on thin .223" shell, compounded by the high heat E7018 electrode (instead of E6010), and improper weld technique (continual vs. step-back method). Additionally, the Certified Welding Inspector (CWI) was not onsite to conduct surveillance and enforce hold points for shell bracing, confirm proper weld rod, monitor weld technique, and perform timely dimensional tank shell inspections per API-650.

Clean, Inspect, and Repair Fuel Storage Tank 14; JRM Anderson, Guam

Provided QA root cause analysis with forensic investigation consultant following tank roof collapse during abrasive

blasting operations by a subcontractor. Root causes that triggered structural roof failure included excess spike in vacuum pressure caused by a combination of sealing the tank shell vents (subcontractor workaround to accelerate drop in relative humidity target), malfunctioning tank dehumidifier unit (with no replacement), activation of a dust collector prior to blasting that created rapid spike in vacuum and blocking a tank manway opening. This combination triggered a structural failure in the vicinity of weld repairs to three structural roof beams, which fell to the floor and missed the subcontractors. Authored root cause analysis report for the U.S. Navy.

Bridge Repair Damage Root Cause Analysis; U.S.EPA, Navajo Nation, NM

As Corporate QA Manager, led emergency response root cause analysis with engineering team at request of EPA following a 100-year thunderstorm and flash flood. Bridge repair was under construction by an EPA subcontractor at the time of the damage and EPA was concerned the design was defective due to the extent of damage. Identified and documented the root causes for severe erosion and bridge damage, which identified inadequate implementation of sediment and erosion controls during bridge repair construction, and identified opportunities for design improvement (stiffeners) for structural enhancement.

Aqueous Film Forming Foam (AFFF) Replacement and Disposal at North Atlantic Division; Air Force/USACE

Program QA Manager responsible for implementing field surveillance and oversight of fire protection system subcontractor. QA field surveillance covered safely removing, containerizing, and disposing C8-AFFF; source inspection of replacement tank bladders; receiving inspection of replacement tanks and bladders per specifications; managing submittals for new hardware and installed products; leak testing repaired fire suppression systems; and documenting the completed work including test results. During project execution, assisted installation teams and fire protection team subcontractor with corrective action support for nonconforming tank bladders that were not manufactured per the dimensional specifications.

SCOTT MCCREADY, LEED AP, PG

PROGRAM MANAGER

EDUCATION

BA, Geology, Indiana University, 1982

REGISTRATIONS

Professional Geologist
IN #741, 1987

LEED AP, 2009

CERTIFICATIONS

OSHA Certified Hazardous Waste
Supervisor, 1992

OSHA 40-Hour HAZWOPER
Training, 1987

EXPERIENCE & RESPONSIBILITIES

Scott McCready is a Principal Consultant and Program Director in Atlas' National Programs Group. He is responsible for national business development, client management, technical direction, and project team assembly for numerous government, industrial, and commercial accounts. Mr. McCready has 42 years of experience in designing, negotiating, and implementing environmental projects and programs in multiple areas. His areas of expertise span numerous regulatory programs and include:

- ▶ National Strategic Growth Initiative leader in the pursuit of opportunities in assessment, plugging, and restoration of orphaned and marginal conventional wells (MCW) under the Infrastructure, Investment & Jobs Act (IIJA), Inflation Reduction Act (IRA), assuring compliance with Department of Interior (DOI) and Department of Energy (DOE) requirements.
- ▶ Resource Conservation and Recovery Act (RCRA) unit permitting, closure, and ongoing monitoring.
- ▶ RCRA corrective action program implementation.
- ▶ Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permitting and Storm Water Pollution Prevention Plans (SWP3), industrial discharge requirements, Spill Prevention Control & Countermeasure (SPCC) plans.
- ▶ Comprehensive Emergency Response, Compensation & Liability Act (CERCLA) investigation and program requirements such as Emergency Planning & Community Right to Know Act (EPCRA).
- ▶ Phase I and Phase II Environmental Site Assessments (ESA), soil remediation, solid/hazardous waste management, brownfield program management, and material/product recycling programs.
- ▶ Hazardous materials (e.g., asbestos, lead paint, mold, universal wastes) assessments, abatement, remediation, and clearance.
- ▶ Indoor air quality and vapor intrusion assessment and remediation.
- ▶ Development and implementation of facility/site environmental auditing programs and general environmental liability identification and assessment.
- ▶ Evaluating and resolving domestic water well issues.
- ▶ Clean Air Act (CAA) potential to emit assessment and permitting.

Mr. McCready has experience in the areas of Occupational Safety & Health Administration (OSHA) Hazard Communications (HazCom) programs, OSHA personal exposure monitoring, personal protective equipment (PPE) selection, hazardous energy control (lock out/tag out), and confined space program requirements.

PROJECT EXPERIENCE

Oil & Gas Well Site Assessment, Plugging and Restoration

- ▶ National Program Director leading multiple pursuits of orphan and idle oil and gas well opportunities nationwide.
- ▶ National Program Director for initial pursuit and subsequent award for a five-year contract by the California Department of Conservation's Geologic Energy Management Division (CalGEM) to plug and abandon a multitude of orphaned oil and gas wells in its central district. This contract supports state and federal efforts to eliminate methane and other harmful gas emissions from orphaned oil and gas wells, reducing environmental risks and improving community health and safety. Atlas' scope of work is to provide comprehensive program management services to thoroughly assess orphaned wells and well sites, develop plans for safe well plugging and decommissioning of well site facilities, dismantle and remove obsolete infrastructure, and deliver restoration services focused on environmental cleanup, remediation, and land restoration.
- ▶ Supported expansion of initial award of a task order contract under an MSA with the Arizona Department of Environmental Quality (ADEQ) for the Arizona Marginal and Idled Well Site Abandonment, Remediation, and Restoration Project. The expanded scope of the task order was for 400 additional wells along with addition of subcontractors to perform well plug design and firms to provide well plugging and abandonment. ADEQ plans to plug and abandon legitimately marginal and idled oil and gas, geothermal, and/or helium wells in coordination and in compliance with IIJA requirements, followed by possible reclamation of the associated facilities. The project consists of four tasks including assessment, site characterization, well plugging and abandonment, and site restoration. The site characterization task included screening, measurement, and monitoring.

Indoor Air Quality, Multiple Clients and Locations

Client management of multiple client portfolios, project managers, and field staff in the completion of site assessments of indoor air hazards such as volatile organic compounds, mold, asbestos, lead-based paint, and other substances to evaluate risks and develop solutions. Services provided range from initial assessment through turn-key remediation recommendations and implementation to meet applicable program and regulatory requirements.

Due Diligence and Site Development; Multiple Clients and Locations

Management of multiple client site development needs involving due diligence (Phase I and II ESAs), hazardous materials surveys, geotechnical exploration, wetlands delineation and permitting, and stormwater detention requirements. Services provided on a variety of sites range from initial assessment through turn-key remediation recommendation and implementation to meet applicable program and regulatory requirements.

Facility/Property Management; Multiple Clients and Locations

Management of multiple client facility management needs from manufacturing to office and retail involving compliance with air emissions permit requirements, stormwater discharge permits, RCRA Corrective Action and unit closures, brownfield compliance requirements, and built structures settlement investigations. Services provided range from permit development, negotiated and tailored compliance management solutions, and ongoing compliance monitoring.

JEFF ROSSI

CONTRACT MANAGER

EDUCATION

Master of Public Administration,
University of Pittsburgh
BS, Business Administration,
Robert Morris University

EXPERIENCE & RESPONSIBILITIES

Jeff Rossi has 26 years of experience serving in various operations and project management roles, with 10 years in the A/E/C industry. He has been responsible for branch management, contract management, business development, client management, and public engagement. His skills include quality assurance/quality control, client management, regulatory compliance, and risk management.

PROJECT EXPERIENCE

Operations Manager; Pennsylvania, West Virginia

Responsible for the overall growth, performance, and operations of Atlas' West Virginia and Pennsylvania branch offices. Specific responsibilities include client management, successful project delivery, business development, and contract management, including negotiation, compliance, change orders, invoicing, and close-out.

Program Manager; Pennsylvania

Program manager for an \$899 million public-private partnership (P3) design-build contract to replace 558 structurally deficient bridges throughout Pennsylvania. Led PennDOT district progress meetings, NEPA/permitting compliance, public outreach, project communications, community engagement team, and customer service group.

Regulatory and Compliance Manager; Pennsylvania

Director of regulatory affairs in 32 states. Oversaw corporate compliance for institutional licensing and regulatory requirements. Primary point of contact with state legislative and executive branches and regulatory agencies. Secured more than \$60 million annually from state and federal programs and held a variety roles with state and national industry associations.

QUINCY FRALEY

FIELD SUPERVISOR

EDUCATION

BS, Environmental Science,
Alderson Broaddus University,
2017

CERTIFICATIONS

APNGA Portable Nuclear Gauge
Safety

OSHA 30-Hour Construction
Safety and Health

EXPERIENCE & RESPONSIBILITIES

Quincy Fraley has five years of hands-on, practical experience in construction management and construction inspection. Mr. Fraley's current areas of focus are project management, client relations, field report analysis, and marketing.

PROJECT EXPERIENCE

Project Manager; West Virginia

Coordinated and managed construction projects across various industries, ensuring timely and professional completion. Assigned and supervised personnel for optimal project execution. Monitored material allocations and expenditures to maintain costs below budgeted amounts. Scheduled and coordinated projects with diverse clients, ensuring deadlines were met. Collaborated with clients to uphold quality assurance, ensuring projects met or exceeded client expectations.

Construction Management; Ohio, Pennsylvania, West Virginia

Coordinated and managed site operations of construction for natural gas well pads, roadways, reclamation sites, and pipeline construction projects. Inspections of these operations were completed by comparing the prepared plan sheet to the completed construction activities. Collaborated with clients to uphold quality assurance, ensuring projects met or exceeded client expectations.

Water Quality Inspection; West Virginia, Ohio, Pennsylvania

Completed collection of water quality samples based on parameters set by the client. The results were compiled into spreadsheets/reports for the clients' comparison to allotted amounts of material being tested for application to permitting process.

Environmental Inspections; West Virginia, Ohio, Pennsylvania

Completed inspection of environmental issues across various industries and compiled reports-of-finding for submittal to the client. Conducted follow-up inspections and oversaw calibration of all monitoring equipment.

Report Writing

Assisted in writing virtual inspection reports for construction sites. Completed daily reports from active sites for client submittal. Reconciled materials used on the site daily to cross reference for the client.

JOSEPH WEBSTER

MEASUREMENT FIELD TECHNICIAN

EDUCATION

BS, Geology, Cleveland State University, 2002

AS, Physical Science, Cuyahoga Community College, 2000

CERTIFICATIONS

OSHA 1910.120 40-Hour Initial HAZWOPER Training

OSHA 1910.120 HAZWOPER 8-Hour Refresher Training (current)

OSHA 1910.120 HAZWOPER 8-Hour Site Supervisor Training (current)

OSHA 30-Hour Construction Safety Training

Pennsylvania Asbestos Building Inspector License (current)

Rig Pass Safeland Training

OSHA 510/500 Outreach Trainer courses

Certified Hazardous Materials Manager (CHMM) – Institute of Hazardous Materials Management

EXPERIENCE & RESPONSIBILITIES

Joseph Webster has more than 20 years of experience with projects in the environmental industry. His current areas of focus includes environmental monitoring, site characterization, underground storage tank (UST) closures, aquifer testing, Phase I and Phase II Environmental Site Assessments (ESA), and scope of work (SOW) implementation. In his role as Senior Environmental Scientist, Mr. Webster is responsible for conducting field monitoring and investigations, documentation, and report preparation.

PROJECT EXPERIENCE

Environmental Scientist; Atlas (2022 - present)

Current specific field activities conducted by Mr. Webster include contractor oversight for monitoring and recovery well install, groundwater sampling, soil logging in accordance with U.S. Geological Survey standards, contaminate assessment, monitoring well design, aquifer analysis via slug testing, and vapor intrusion sampling.

Project Scientist II; Clinton, PA (2009 – 2022)

Project Scientist responsible for the characterization and remediation of sites impacted by polychlorinated biphenyls (PCB) and heavy metals in accordance with the Toxic Substance Control Act (TSCA) and the Resource Conservation and Recovery Act (RCRA). In this role, Mr. Webster conducted field activities that included sampling of various media; managed contractors during large to small excavations, demolition, and construction of large and small structures; and managed waste streams during demolition and remediation projects. During these field activities, Mr. Webster generated documentation that was used to prepare Remedial Action Completion Final Reports (RACFR) and Risk Management Plans (RMP) for submission to the Environmental Protection Agency (EPA). All reports were prepared by Mr. Webster with the assistance of licensed Professional Geologists. Ancillary to these responsibilities, Mr. Webster also managed the Health and Safety program for the company, prepared Site Specific Safety Plans (SSSP) for all field projects, and conducted safety training for both field managers and project managers. In addition, Mr. Webster performed extensive groundwater sampling using low-flow methods and managed field events associated with soil characterization using drilling and geoprobe methods. The constituents associated with the sites and activities performed included volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polycyclic aromatic hydrocarbons (PAH), RCRA metals, and PCBs.

Associate Scientist; Cranberry Township, PA (2004 – 2009)

Associate Scientist responsible for implementing remedial action SOW at sites impacted by gasoline and diesel constituents as part of the Pennsylvania Department of Environmental Protection (PADEP) Corrective Action Process for storage tanks (Chapter 245). Mr. Webster conducted environmental monitoring and assessment and managed field activities during site characterization and remediation, which included managing contractors, implementing the corporate Health and Safety Plan, and generating field documentation that was used to prepare environmental reports for the Pennsylvania Storage Tank Cleanup Program. These reports included

JOSEPH WEBSTER

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Site Characterization Reports (SCR), Remedial Action Plans (RAP), Remedial Action Progress Reports (RAPR), and Remedial Action Completion Reports (RACR). All reports were prepared by Mr. Webster with the assistance of licensed Professional Geologists and Professional Engineers.

EMELIA SARGENT

MEASUREMENT FIELD TECHNICIAN

EDUCATION

BS, Environmental Science,
University of Pittsburgh, 2023
Certificates: Geographic
Information Systems and
Sustainability

REGISTRATIONS

OSHA Hazardous Waste
Operations and Emergency
Response (40-Hour 29 CFR
1910.120e)
American Traffic Safety
Services Association Flagger
Certification

EXPERIENCE & RESPONSIBILITIES

Emelia Sargent (she/her) is an Environmental Investigation and Remediation Scientist who is responsible for field operations, report writing, Phase I and Phase II Environmental Assessments (ESA), and data analysis and assurance. Ms. Sargent completes field operations associated with groundwater and soil sampling and the development of monitoring wells as part of Phase II projects and site characterization efforts. She performs report writing associated with Phase I and II ESAs, Site Characterization Reports, Remedial Action Plans, and Remedial Action Progress Reports. Ms. Sargent is responsible for the analysis, interpretation, and modeling of groundwater data using ProUCL and Excel.

PROJECT EXPERIENCE

Underground Storage Tank Release Remediation; Various Sites, PA

Environmental Technician working on the remediation of sites through the Pennsylvania Storage Tank and Spill Prevention Program (Chapter 245). Responsibilities include oversight of well installation, completing groundwater and soil sampling, completing remedial actions, attainment monitoring, and remedial action completion reporting. Responsible for working on quarterly reports to show progress toward attainment of the selected remediation standard. Remediation efforts have ranged from removal of light non-aqueous phase liquid (LNAPL) to monitored natural attenuation of constituents of concern (COC) in groundwater. Throughout the characterization and remediation process, she coordinated with regulators, clients, and the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) to close releases and obtain Relief of Liability for clients as efficiently as possible, while limiting clients' cleanup costs.

Environmental Due Diligence; Various Sites, WV, PA, NC, SC, IL, CA, NY, NJ, MO

Responsible for working on due diligence-related projects for commercial and industrial sites in support of real estate or financial transactions. For Phase I ESAs, relevant tasks include performing site inspections, reviewing historical documentation and environmental database listings, and preparing a Phase I ESA report for delivery to the client.

Superfund Site; Vienna, WV (ongoing)

Environmental Technician responsible for groundwater monitoring and sampling activities, investigative derived waste (IDW) sampling, and well inventory. Responsibilities include collecting measurements of depth to water, depth to LNAPL, and total depth from monitoring wells and extraction wells and collecting groundwater samples from monitoring wells and carbon unit.

TAYLOR MAXWELL

MEASUREMENT FIELD TECHNICIAN

EDUCATION

BS, Environmental Chemistry,
Slippery Rock University, 2022

CERTIFICATIONS

OSHA Hazardous Waste
Operations and Emergency
Response (40-Hour 29 CFR
1910.120e)

American Traffic Safety Services
Association Flagger Certification

APNGA Portable Nuclear Gauge
Safety & U.S. D.O.T. Hazmat
Certification

Certified Commercial Pesticide
Applicator

EXPERIENCE & RESPONSIBILITIES

Taylor Maxwell (she/her) is an Environmental Technician who is responsible for field operations, report writing, data analysis, and assurance. Ms. Maxwell completes field operations associated with groundwater and soil sampling and the development of monitoring wells as part of Phase II projects and site characterization efforts. She performs report writing for Site Characterization Reports, Remedial Action Plans, and Remedial Action Progress Reports. Ms. Maxwell is responsible for the analysis, interpretation, and modeling of groundwater data using ProUCL and Excel.

PROJECT EXPERIENCE

Underground Storage Tank Release Remediation; Various Sites, PA

Environmental Technician working on the remediation of sites through the Pennsylvania Storage Tank and Spill Prevention Program (Chapter 245). Responsibilities include oversight of well installation, completing groundwater and soil sampling, completing remedial actions, attainment monitoring, and remedial action completion reporting. Responsible for working on quarterly reports to show progress toward attainment of the selected remediation standard. Remediation efforts have ranged from removal of light non-aqueous phase liquid (LNAPL) to monitored natural attenuation of constituents of concern (COC) in groundwater. Throughout the characterization and remediation process, coordinated with regulators, clients, and the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) to close releases and obtain Relief of Liability for clients as efficiently as possible, while limiting clients' cleanup costs.

Environmental Due Diligence; Various Sites, PA, TN, CA

Responsible for working on due diligence-related projects for commercial and industrial sites in support of real estate or financial transactions. For Phase I ESAs, relevant tasks include performing site inspections, reviewing historical documentation and environmental database listings, and preparing a Phase I ESA report for delivery to the client.

PRIOR EXPERIENCE

ROW Maintenance; PA

Responsible for identifying and mapping invasive plant populations located along impacted natural gas rightS-of-way intersecting state forests. Created geodatabases using ArcGIS Pro and Field Maps and authored reports. Responsible for analysis and interpretation of field data to provide population data on target species.

Wetland Delineation; PA

Assisted in delineation and characterization of wetlands throughout northwestern and central Pennsylvania. Responsible for completing plots, data sheets, and reporting.

DANIEL BROOKER

MEASUREMENT FIELD TECHNICIAN

EDUCATION

BS, Environmental Biology with Minor in Sustainability, Clarion University, 2022

CERTIFICATIONS

OSHA Hazardous Waste Operations and Emergency Response (40-Hour 29 CFR 1910.120e)

OSHA 1910.120 8-Hour Refresher Training (current)

APNGA Portable Nuclear Gauge Safety & U.S. D.O.T. Hazmat Certification

American Traffic Safety Services Association Flagger Certification
CPR First Aid Certified

EXPERIENCE & RESPONSIBILITIES

Daniel Brooker is an Environmental Technician with an educational background in wetlands and abandoned mine land (AML) sites. He is responsible for completing field operations, report writing, and coordinating the use of environmental equipment. Mr. Brooker completes field operations associated with groundwater, soil, and vapor sampling. He also completes report writing associated with Site Characterization Reports, Remedial Action Plans, and Remedial Action Progress Reports. Mr. Brooker is responsible for maintenance and coordination of environmental equipment at the Pittsburgh office, including ordering rental equipment, scheduling repair work, and taking inventory of sampling bottleware.

PROJECT EXPERIENCE

Underground Storage Tank Release Remediation; Various Sites, PA

Environmental Technician working on the remediation of sites through the Pennsylvania Storage Tank and Spill Prevention Program (Chapter 245). Responsibilities include oversight of well installation, completing groundwater and soil sampling, completing vapor point installation and sampling, aquifer testing, completing remedial actions, attainment monitoring, and remedial action completion reporting. As part of characterization of releases, completed vapor intrusion evaluation using the Pennsylvania Land Recycling Program Technical Guidance Manual for Vapor Intrusion into Buildings from Groundwater and Soil under Act 2 guidance. Responsible for working on quarterly reports to show progress toward attainment of the selected remediation standard. Remediation efforts have ranged from removal of light non-aqueous phase liquid (LNAPL) to monitored natural attenuation of constituents of concern (COC) in groundwater. Throughout the characterization and remediation process, coordinated with regulators, clients, and the Pennsylvania Underground Storage Tank Indemnification Fund (USTIF) to close releases and obtain Relief of Liability for clients as efficiently as possible, while limiting clients' cleanup costs.

Superfund Site; Painesville, OH

Environmental Technician. Completes quarterly groundwater monitoring activities at an operating unit of a 1,100 acre-remediation project regulated under the US EPA CERCLA program (proposed NPL status). Responsibilities include collecting measurements of depth to water; depth to DNAPL; and total depth from monitoring wells, piezometers, and extraction wells; and collecting groundwater samples from monitoring wells. Mr. Brooker prepares quarterly monitoring reports that are submitted to the US EPA.

Wetland and Waterway Delineation, Fayette County, WV

Environmental Technician. Performed a wetland and waterway delineation, which required research on site location by using topographic maps. The task included identifying the wetland by plotting it using a tablet and a GPS receiver. Plant/tree species were identified and logged in order of dominance. Soil samples were collected to determine if they met the conditions. Hydrology sources were also identified by

assessing the topography to predict where runoff would accumulate. Following the field work, Mr. Brooker provided reporting and data entry.

Emergency Responses; Various Sites, WV and PA

Complete environmental response efforts for releases resulting from vehicle overfills, malfunctioning equipment, and fuel tanker accidents at retail fuel stations. These efforts have included initial on-site release assessment, initial clean-up, coordination with emergency response contractors, and communication with clients to provide guidance on regulatory requirements. Following initial environmental response work, provide follow-up reporting to state environmental agencies, along with additional sampling and characterization, as needed.

Construction Materials Testing; Various Sites, PA

Responsible for inspecting site operations and completing field work during the construction and rebuild of commercial properties, commercial buildings, industrial buildings, large parking areas, roadways, and gas piping trenches. Field work includes sampling and testing of concrete, asphalt, grout, mortar, aggregate, and soils.

PCB Soil Sampling Assessment, Buffalo Niagara International Airport, NY

Environmental Technician. Performed a PCB soil assessment at the Buffalo Niagara International Airport remote transmitter/receiver site. Soil sampling locations were plotted and collected surrounding the towers and buildings. The sample locations were marked using a tablet and GPS receiver. Provided reporting and data entry of the results.

SETH KLINGBEIL



LEAD SOFTWARE DEVELOPER FOR WELL INTEL PLATFORM

SUMMARY

Veteran software development professional with record of improving designs. Successful at evaluating current systems to uncover problems and implementing effective solutions that meet customer and business requirements.

Results-driven with strong history of contributing to system architecture design, establishing team objectives and overseeing project milestones. Methodical and well-coordinated professional with experience in Scrum framework and Agile-based environments.

SKILLS

Agile Methods, Continuous Deployment Pipeline, Java, C#, .NET, ASP.NET, Web Services, Entity Framework, MS SQL

EXPERIENCE

10/2020 to Present	Data Manager / Software Development Lead Well Done Foundation – Minot, North Dakota
09/2020 to Present	Lead Software Developer Trinity Solutions, Inc – Minot, North Dakota
12/2019 to Present	Owner Ringin Axe Software, LLC
03/2020 to Present	Communications Lead / IT Infrastructure Grant County Emergency Operations Center – John Day, Oregon
01/2017 to 04/2019	Professional Software Developer AT&T Inc. – Canyon City, Oregon
10/2014 to 01/2017	Senior Software Developer DIRECTV – Fargo, North Dakota
05/2012 to 10/2014	Software Developer II Multiband Corporation – Fargo, North Dakota
06/2010 to 04/2012	Software Developer Infotech Minot Technology Center – Minot, North Dakota
10/2006 to 05/2010	Student Manager Intern Student Technology Services of NDSU – Fargo, North Dakota

EDUCATION AND TRAINING

2010	Bachelor of Science: Computer Science NDSU – Fargo, North Dakota, US
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NICHOLE K. BOYER

DATA ANALYST

RELATED SKILLS & CERTIFICATIONS

- | | | |
|---|-----------------------|---|
| - Continuous Improvement Specialist (Lean, Six Sigma) | - Strategic Planning | - Design Thinking for Business Innovation |
| - Data & Metrics Analysis | - Project Management | - KPI Development |
| - Cost Analysis | - Customer Experience | - Technical Writing |
| | - Market Analysis | - Change Management |

PROFESSIONAL EXPERIENCE

VICE PRESIDENT BUSINESS ANALYTICS

Well Done Foundation — Bozeman, MT

Vice President Business Analytics Sep 2023 - Present

- ◆ Drive process change and improve efficiency through Lean principles
- ◆ Manage project development pipeline for carbon credit and offset projects
- ◆ Provide analytics and data calculations for project feasibility, eligibility and project development
- ◆ Manage relationship with carbon registry, VVB's and other relevant entities throughout project lifecycle
- ◆ Define and develop tools, frameworks, and templates to facilitate project evaluation, design, and implementation

BUSINESS ANALYST

Wilks Brothers — Fort Worth, TX

Business Analyst Sep 2018 – Sep 2023

- ◆ Created business plan for new carbon credit project development for orphaned oil and gas wells.
- ◆ Developed and oversaw company-wide Learning Management program encompassing onboarding, needs assessments and career path learning objectives aligned to company strategy and goals.
- ◆ Developed preventative maintenance program for sand mining operation, resulting in a 40% reduction in unplanned downtime.
- ◆ Developed inventory management program identifying 1.1M in inventory value lost and implemented best practices – 5S warehouse, standardized procurement process, cycle counts, set re-order limits and developed KPI's.
- ◆ Optimized fluid end manufacturing process resulting in 95% cycle-time improvement.
- ◆ Worked with executive leadership to develop steady-state processes and standards for new start-up SaaS online auction business.
- ◆ Drafted and implemented corporate-wide policies for Mobile Device, Corporate Credit Card, Business Travel, Mileage Reimbursement, IT Workstation and Company Vehicles.
- ◆ Drafted and implemented standard operation procedures (SOP's) for financial lending business to meet new credit facility and periodic bank exam requirements.
- ◆ Led project to implement electronic expense reports and payroll reimbursement for business expenses.

NICHOLE K. BOYER
BUSINESS CONSULTANT

Southwest Airlines — Dallas, TX

Continuous Improvement Business Consultant – Network Operations Control, Aug 2015 – Sep 2018

Continuous Improvement Business Consultant utilizing Lean and Six Sigma methodologies to identify waste and streamline processes while effectively collaborating with multiple departments to align priorities and drive the development and implementation of best practices for future state operational needs with a strong emphasis on data driven analytics and results.

- ♦ Led a team of 35 subject matter experts as part of a 2-yr high-profile continuous improvement initiative to regain operational efficiencies and decrease customer trip disruptions due to network volatility. This effort produced a new process to decrease aircraft swaps and network disruption by 25%, and improve overall maintenance work package planning and execution, reclaiming annually \$15M in hard costs and ~\$40M in lost revenue opportunity.
- ♦ Led cross departmental team aimed at improving crew hold decision making and better understanding decision tradeoffs with a focus on downline flight disruptions, customer trip disruptions, crew reroutes, unplanned deadheads and unplanned overnights. Improvement efforts resulted in a 20% reduction of crew holds and 0.4% improvement to on time performance, \$4.4M annually.

Customer Experience & Innovation Analyst – Information Technology, 2013 - 2015

- ♦ **Customer Experience Analyst** gathering customer experience insights and market trends to identify and prioritize improvements in customer experience across the Technology Commercial Portfolio. Actively applies customer experience impact assessments to new initiatives as an integrated part of the governance process, while building organizational awareness, knowledge, and passion for customers through targeted proactive communication and efforts to strengthen and support a customer-centric culture.
- ♦ **Innovation Lead**, worked collaboratively with technology executive leadership and internal business customers to define the strategy and program design for an innovation program, with the purpose of driving transformational thought and change throughout Southwest Airlines while adding value in customer experience, efficiency and overall profit. Ongoing efforts include partnering with technology leaders and internal business customers to help foster innovative ideas, define stage gate criteria, develop trial/prototype plans and metrics for objective reporting, prioritization and recommendation to key stakeholders.

Strategic Planning Analyst – Strategic Planning and Implementation, 2011 – 2013

Contracted as a Strategic Planning Analyst responsible for the planning and oversight of enterprise and department level strategic initiatives. Provided analytic insights to develop and assess solutions to a diverse range of initiatives (i.e. AirTran integration, international flying, Multi-fleet program) that were key to the future success of Southwest Airlines.

TRAINING ADMINISTRATOR – LOCKHEED MARTIN – GRAND PRAIRIE, TX

Feb 2011 – Jul 2011

PRODUCTION COORDINATOR – GULFSTREAM AEROSPACE — DALLAS, TX

2005 – 2009

AIRCRAFT STRUCTURAL MECHANIC – USAF

2003 – 2005

Erika Kinninger, MS

DATA ANALYST



Professional Summary

I am an accomplished early-career environmental science professional, adept at developing technically derived solutions and effectively communicating complex concepts to diverse stakeholders. Adaptable and successful in fast-paced environments, I am passionate about protecting the planet and driving positive change through innovative solutions.

Education

University of Michigan, Ann Arbor, MI

School for Environment and Sustainability (SEAS)

August 2021- April 2023

- Master's of Science in Environmental Science and Sustainability

San Diego State University, San Diego, CA

- Bachelor's of Arts in Sustainability

Work History

Environmental Project Manager/ QMS, Well Done Foundation, Montana

May 2024- Present

- Conduct data analysis to assess the impact of WDF's efforts on reducing methane and other GHG emissions from orphaned oil & gas wells.
- Support the Qualified Measurement Specialist (QMS) program and conduct educational training, integrating Computer Based Training (CBT) for remote learning, facilitator-led classroom sessions, and hands-on fieldwork with orphaned oil & gas wells.
- Identify and author detailed grant applications, securing funding for various projects.
- Partner with college campus organizations and departments to educate and promote the organization's initiatives and efforts.
- Develop engaging and informative weekly newsletters for the foundation subscribers, highlighting key updates, events, and initiatives.
- Manage the updating and maintenance of internal database, ensuring accuracy and relevancy of data.

Environmental Fellow, Well Done Foundation, Montana

March 2024- May 2024

- Develop engaging and informative weekly newsletters for the foundation subscribers, highlighting key updates, events, and initiatives.
- Partner with college campus organizations and departments to educate and promote the organization's initiatives and efforts.
- Manage the updating and maintenance of internal database, ensuring accuracy and relevancy of data.

Sustainability Consultant, Master's Research Project Client: Meijer, Grand Rapids, MI

January 2022 – April 2023

- Spearheaded foundational framework to calculate and manage GHG Scope 3 emissions across Meijer's entire supply chain in alignment with the GHG protocol internationally accepted accounting and reporting standards.
- Produced a detailed GHG emissions analysis, wrote of a comprehensive report, and delivered a presentation outlining a strategic roadmap for reducing emissions.
- Conducted extensive market research for comprehensive benchmarking analysis to understand methodologies employed by peer companies.
- Managed the project, identifying and recommending improvements to ensure target timeline was met and project stayed within budget.

Clinical Trials Assistant II Biosplice Therapeutics (previously Samumed), San Diego, California

February 2021 – August 2021

- Ensured electronic Trial Master File (eTMF) Binders were current, accurate, and audit ready by performing quarterly eTMF quality control reviews.
- Managed 5 clinical study's eTMF platforms to ensure accurate regulatory submissions and assisted the Regulatory department by submitting study updates in compliance with Food and Drug Administration (FDA).
- Facilitated correspondence between the Institutional Review Board for 5 clinical studies.
- Assisted the Quality Assurance department by revising team training materials in addition to managing study team training forms.

Clinical Trials Assistant I Biosplice Therapeutics (previously Samumed), San Diego, California

February 2019 – February 2021

Skills

- | | | |
|-------------------------|-------------------------|--------------------------|
| • Microsoft Office | • Project Management | • Stakeholder Engagement |
| • Educational Outreach | • Regulatory Compliance | • Data Analysis |
| • Environmental Science | • Quality Assurance | • Grant Writing |

ZAC GRAYSON

AIR QUALITY SPECIALIST / EMERGENCY RESPONSE / HEALTH & SAFETY OFFICER

EDUCATION

BS, Environmental Science,
Bethany College, 2011

CERTIFICATIONS

Method 9 certification
RSO (Radiation Safety Officer)
8-Hour Hazwoper Supervisor
ISO 9001/14001 auditor
RCRA DOT/Hazmat
Mobile Equipment Certifications
CPR certification
OSHA 10
LOTO
Class K Wastewater Operator
License (in progress)

EXPERIENCE & RESPONSIBILITIES

Zac Grayson specializes in environmental compliance, regulatory analysis, and development. Mr. Grayson has 12 years of experience overseeing regulatory and compliance in various industries. His experience centers around Title V air permitting, hazardous waste, stormwater, wastewater, above-ground storage tank programs, and Health, Safety, and Environmental (HSE) compliance.

PROJECT EXPERIENCE

Water Compliance Program Support; United States Postal Service, Nationwide

Completed environmental compliance reviews of SPCC Plans, SWPPP, and No Exposure Certificate (NEC) certifications in various states involving assessment of both processing and distribution centers and vehicle maintenance facilities.

Environmental Compliance Program Support; Various Companies, Nationwide

Assisted with environmental audits, SPCC/SWPPP site visits, and various aspects of environmental compliance. Contributed to numerous NPDES/NEC permit renewals and Title V/SMOP air permit renewals. Developed a Potential to Emit (PTE) database for multiple facilities and created SPCC/SWPPP training programs and plans, and supported daily facility compliance activities in the water, waste, and air sectors.

Environmental Compliance Management; Asphalt Emulsion, Nationwide

Conducts annual air compliance evaluations for 11 facilities across the United States. Performs SPCC/SWPPP updates for all facilities and supports environmental compliance reporting for air, water, waste, and chemical management. Completes environmental permitting for air, water, and waste at all locations. Manages daily compliance of storage tanks and oversees all aspects of environmental compliance for each facility.

Environmental and Safety Program Support; Remediation, Ohio

Assists with environmental compliance through site audits, hazardous waste contingency plans, lock-out/tag-out procedures, environmental inspections, and the facility's HASP. Developed and implemented an Electronic Inspection Program to enhance facility compliance.

Other Environmental and Safety Experience; Various Industries, Nationwide

As an Environmental and HSE Manager, managed programs for a Title V air permitting facility and Ohio's largest hazardous waste generator. Oversaw HSE/ North American Electric Reliability Corporation (NERC) programs at a natural gas power plant in Illinois. Ensured compliance with hazardous waste, storm water, wastewater, and storage tank regulations, including permit adherence and regulatory reporting for chemical, aluminum smelting, and R&D operations. Supervised on-site personnel and contractors, conducted inspections, managed SPCC/SWPPP plans, and coordinated with agencies during audits and remediation efforts. Served as the Radiation Safety Officer, supporting health and safety programs, providing training, managing plant environmental projects, and leading sustainability initiatives. Additionally, handled

small minor operating permit (SMOP) permit renewal, Air Information Management System (AIMS) reporting, Request for Determination (RFD) submissions, semi-annual emissions reporting, National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance, air emissions inventory, and potential to emit calculations. Managed wastewater treatment, storm water, drinking water sampling, and permit renewals; conducted Superfund Amendments and Reauthorization Act (SARA) reporting, Pennsylvania hazardous substance form submissions, storage tank compliance, chemical release prevention, and PCB management.

KEN PASTERAK, LRS, PG

ENVIRONMENTAL SPECIALIST

EDUCATION

MBA, University of Pittsburgh,
Katz Graduate School of Business

MS, Environmental /Earth
Studies, Adelphi University

BS, Geology, West Virginia
University

REGISTRATIONS

Licensed Remediation Specialist
WV 243

Professional Geologist
PA 3733

PROFESSIONAL AFFILIATIONS

National Groundwater Association

PA Environmental Professionals

Geological Society of America

PA Council of Professional
Geologists

American Institute of Professional
Geologists

Pittsburgh Geological Society

Air & Waste Management
Association

EXPERIENCE & RESPONSIBILITIES

Ken Pasterak has over 30 years of industry experience in environmental due diligence and assessment/remediation services. He specializes in overcoming environmental obstacles to real estate development, auditing environmental management systems, and performing pre-purchase environmental management capital/O&M budget forecasting to support industrial/commercial property acquisitions. Mr. Pasterak has extensive experience developing and implementing site assessment and remediation plans for petroleum hydrocarbon and hazardous substance releases. He regularly performs Phase I and II environmental due diligence and compliance audits and prepares Site Characterization Report (SCRs), Remedial Action Plans (RAP), Remedial Action Progress Reports (RAPR), Remedial Action Completion Reports (RACR), Risk Assessments, Remedial Investigation Report (RIRs), Fianl Report(FRs), and compliance audits and due diligence reports for his clients. Mr. Pasterak designs, installs, and operates remediation systems using dual/multi-phase extraction, soil vapor extraction, air/ozone sparge, LNAPL recovery, and carbon trap and treat injection/enhanced bioremediation technologies.

Additionally, Mr. Pasterak develops and implements soil and groundwater management plans for site development and develops and installs vapor intrusion (VI) mitigation systems for existing and new construction. He performs human health risk assessment and VI/solute transport modeling and has successfully deployed various VI to indoor air mitigation and/or methane mitigation technologies. Mr. Pasterak has presented regulatory agency VI to indoor air assessment training. He has a working knowledge of SPCC, Pennsylvania Clean Fill Policy, RCRA hazardous waste regulations, and SPCC and NPDES storm water management requirements. Mr. Pasterak has provided forensic analysis for Potentially Responsible Party (PRP) dispute resolution, expert testimony, and other litigation support and has performed human health risk assessment and fate and transport analysis.

PROJECT EXPERIENCE

Environmental Due Diligence; Various Sites, WV, PA, OH, NY, CT, KS, WI, GA, CO & CA

Performed Phase I and II ESAs for transactional due diligence purposes at more than 100 sites.

Site Assessment and Groundwater MNA Monitoring at a WV UECA Site, Confidential Retail Petroleum Client, Ripley, WV

LRS responsible for site assessment, supplemental site assessment, HHRA support, and enhanced MNA remedial approach for a release of gasoline to groundwater and soil at a retail petroleum distribution facility. Performed VI to indoor air assessment. Utilized oxygen releasing groundwater remedy for enhanced MNA to address recalcitrant hydrocarbons in groundwater.

KEN PASTERAK, LRS, PG

PAGE 2

Multiple Fuel Spills, Lookout, Saulsville, Pax, and other Sites, Confidential Insurance Carrier, WV Site Assessment and Groundwater MNA Monitoring at a WV UECA Site, Confidential Retail Petroleum Client, Ripley, WV

Project Manager responsible for site assessment, sampling, emergency response, and remediation at multiple fuel tanker spill sites.

Dry Cleaner ESA, Confidential Commercial Property Owner Clarksburg, WV

PG responsible for site characterization for an innocent purchaser of a dry cleaner site. Currently evaluating VI to indoor air pathway. Planning is underway to prepare to enter the site into the WV VRRP.

Mixed Use Redevelopment of Former Manufacturing Facilities, including Fast-Track Remediation and Vapor Intrusion Mitigation; Pittsburgh, PA

Prepared and implemented assessment and remediation plans in response to the discovery of potential significant environmental liabilities, including polycyclic aromatic hydrocarbons and lead in soil and halogenated volatile organic compounds (VOC) in groundwater, during pre-purchase due diligence activities. To reduce costs, multiple properties (including parcels separated by a public right-of-way) targeted for mixed-use redevelopment were aggregated into one Act 2 site to reduce costs and fast-track site cleanup. The Special Industrial Area provision of Pennsylvania Act 2 was used to avoid investigation and delineation of an off-site VOC groundwater plume, significantly reducing costs. Following clean-up, the Pennsylvania DEP issued a Pennsylvania Act 2 release of liability for the site. Soil and Groundwater Management Plans were prepared and implemented during site demolition and construction activities to cost-effectively manage impacted media. Designed and coordinated the installation of multiple VI mitigation systems consisting of sub-slab depressurization and vapor barrier technologies in buildings undergoing redevelopment, as part of activity and use limitations.

LNAPL Remediation and Pennsylvania Act 2 Clean-up and Liability Relief; PA

Prepared and implemented an LNAPL clean-up plan, performed human health risk assessment, solute transport and VI to indoor air modeling, and prepared a Remedial

Investigation and Final Report to obtain PADEP relief of liability pursuant to Pennsylvania Act 2 for a heating oil release site where heating oil was effectively recovered to PADEP requirements.

Dual Phase Extraction and/or Soil Vapor Extraction Remediation of Petroleum-Impacted Soil at Industrial Facilities; Various Sites, PA

Operated soil vapor extraction (SVE) and/or dual phase extraction (DPE) remediation systems and achieved remedial objectives for petroleum-impacted soil at multiple sites. A buyer-seller agreement, multi-party/PADEP negotiation, and remediation concurrent with site development were coordinated to satisfy stakeholder interests.

Mining Facility Assessment, Remediation, Litigation Support, and Trial Expert Witness Support; KS

Investigated the extent of constituents of concern in groundwater, evaluated the performance of groundwater remediation systems, and performed fate and transport analysis for groundwater. Provided defendant technical litigation support, including expert testimony.

Retail Petroleum Distribution Facility Assessment and Remediation; Various Sites, PA

Prepared and implemented Site Characterization Plans, Remedial Action Plans, Remedial Action Progress Reports, and Remedial Action Completion Reports for multiple sites. Obtained Pennsylvania Storage Tank Program relief of liability by demonstrating attainment to multiple standards. Performed human health risk assessment, fate and transport analysis, and VI to indoor air evaluation. Active remediation was performed using dual phase extraction, in situ chemical oxidation, enhanced in situ bioremediation, source removal, vapor extraction groundwater extraction (VEGE), and/or multi-phase extraction.

Close-Out of Multiple Sites with Subsurface LNAPL; PA

Prepared and implemented LNAPL recovery plans, implemented active LNAPL remediation, and effectively demonstrated LNAPL recovery to the maximum extent practicable (MEP) using decline curve analysis methods and other lines of evidence to expedite closure of sites with residual, non-migrating LNAPL in the subsurface. The close-outs included human health risk assessment and pathway elimination strategies. PADEP approved the attainment and LNAPL MEP demonstrations.

CHUCK KISAMORE, CSP

INDUSTRIAL HYGIENIST

EDUCATION

BS, Science, Safety Management,
Slippery Rock University, 2015

CERTIFICATIONS

Certified Safety Professional
(CSP) Certification, #CSP39383

Pennsylvania Asbestos Building
Inspector, #056086

Pennsylvania Radon Employee,
#9011

NRSB Radon Measurement
Specialist, #22SS030

Pennsylvania Lead Inspector,
#007051

West Virginia Asbestos Inspector,
#A1010836

Ohio Hazard Evaluation
Specialist, ES547641

EXPERIENCE & RESPONSIBILITIES

Chuck Kisamore is an Industrial Hygienist whose responsibilities include asbestos surveys, mold assessments, radon surveys, assisting with ventilation surveys, lead paint surveys, quantitative and qualitative respirator fit testing and industrial hygiene surveys for various hazards, including noise, hexavalent chromium, crystalline silica, and arsenic. He also is the acting Branch Health and Safety Officer. His duties include training, holding monthly meetings, incident investigations, and performing site audits.

PROJECT EXPERIENCE

Radon Sampling; Arkansas Public Housing, Little Rock, AR

Mr. Kisamore conducted radon sampling for 200 apartments in a public housing facility. Duties included setting liquid scintillation vials, taking notes, and picking the vials up when sampling was complete.

Asbestos Surveys; City of Pittsburgh, PA

Mr. Kisamore conducted multiple pre-demolition asbestos surveys. The surveys consisted of collecting asbestos samples of the suspect building material and reporting for the projects.

Asbestos Surveys; Confidential Retail Client

Mr. Kisamore conducted several asbestos surveys for a large retail client. Duties included sampling suspect building materials and uploading documents and photos.

Asbestos and Lead Paint Surveys; Confidential Petroleum Client

Mr. Kisamore conducted a small asbestos and lead paint survey for an oil gas client. Survey consisted of a limited asbestos survey and lead samples to one small building.

Health and Safety Specialist; Various Locations Nationwide

Prior to joining Atlas, Mr. Kisamore traveled extensively throughout the United States while working as a Safety Specialist. His job functions included on-site program management, daily audit, exposure monitoring, regulated material surveys, and reporting. These sites included active and future demolition and remediation sites. Mr. Kisamore also maintained client relations while on site. During his tenure, he conducted a very large regulated material survey in Louisiana. Mr. Kisamore's duties on-site included serving as the Field Team Lead and Licensed Louisiana Asbestos Inspector, and collecting lead paint samples. This survey included eight buildings on the property that consisted of two laboratories, one production area, and five warehouse-style buildings with offices.

STEPHAN CALLAS

DRONE & GEOPHYSICAL SPECIALIST

EDUCATION

BS, Geophysics, University of California, Santa Barbara

CERTIFICATIONS

OSHA 40-Hour Health and Safety Training (with annual updates)

EXPERIENCE & RESPONSIBILITIES

Stephan Callas' experience includes performing and managing geophysical studies for engineering, geotechnical, environmental, and exploration projects. He has five years of experience and has conducted geophysical evaluations for resource exploration, schools, medical centers, power generating facilities, transportation corridors, landfills, treatment plants, pipelines, commercial properties, and residential developments. Areas of geophysical expertise include electromagnetics, magnetics, seismic, ground penetrating radar, electrical resistivity tomography, Magnetotellurics, and vibration monitoring.

PROJECT EXPERIENCE

California Department of Conservation's Geologic Energy Management Division (CalGEM) Project

Led a team of five including geophysicists and technicians that successfully investigated over 30 Orphan well sites covering about 1,200 acres of land. As a licensed drone pilot, was tasked with piloting a Heavy Lift Blue Listed Drone, manufactured by Inspired Technologies, to find wells and well appurtenances that were located below ground or obstructed by vegetation. Successfully met project challenges of winds and topographic variability, flying 30 to 50 feet above ground and having to clear trees that were in some cases 80 feet tall.

Huntsman Mental Health Institute Receiving Center; Salt Lake City, UT (2D ReMi)

Project Geophysicist responsible for performing a geophysical evaluation for the expansion of the current University of Utah health care facility. The purpose of the study was to characterize the subsurface through collection of surface wave seismic data. Surface waves (specifically Rayleigh waves) were recorded along transects labeled RL-1 and RL-2 using a 2D roll along ReMi method that allows for the generation of 2D profiles. The primary purpose of the ReMi evaluations was to characterize the seismic shear-wave velocity properties of the subsurface beneath the areas of the seismic traverses. Unlike the seismic refraction method, the ReMi method does not require an increase of material velocity with depth; therefore, low velocity zones (velocity inversions) are not a significant limitation when conducting surface wave methods. The depth of exploration is dependent on the length of the geophone array and the frequency content of the recorded signal. The result for each spread is a one-dimensional shear-wave velocity model of the site at each roll-along data gather position with roughly an 85 to 95 percent accuracy based on published studies of the ReMi method. In the case for RL-1 and RL-2, the 1D models are then run in a robust data modeling inversion process to develop a 2D profile for each line. The findings and recommendations from the evaluation were presented in an illustrated project report.

Riverside County Water District (RCWD) Proposed El Calamar Pipeline Project; Temecula, CA (Seismic Refraction)

Project Geophysicist responsible for performing a geophysical evaluation pertaining to the RCWD El Calamar Pipeline project. The project included the collection of P-wave

refraction data using a 24-channel Geometrics Geode digital seismograph and 24 14.5-Hz vertical component geophones. The travel times of the seismic P-waves are used in conjunction with the shot-to-geophone distances to obtain thickness and velocity information on the subsurface material. The collected data was processed using SIPwin (Rimrock Geophysics, 2003), a seismic interpretation program, and analyzed using SeisOpt Pro (Optim, 2008). SeisOpt Pro uses first arrival picks and elevation data to produce subsurface velocity models through a nonlinear optimization technique called adaptive simulated annealing. The resulting velocity model provides a tomography image of the estimated geologic conditions. Both vertical and lateral velocity information is contained in the tomography model. Changes in layer velocity are revealed as gradients rather than discrete contacts, which typically are more representative of actual conditions. The findings and recommendations from the evaluation were presented in an illustrated project report

Santa Felicia Dam Outlet Works Improvement Project; Ventura, CA (Seismic Refraction)

Project Geophysicist responsible for the performance of a detailed geophysical study to develop subsurface velocity profiles of the project area and to evaluate the apparent rippability of the subsurface materials. Project challenges included performing seismic traverses perpendicular to elevation contours along the nose of a steep promontory where hillsides in the area contained loose, unconsolidated, heavily weathered outcrops exposed at the surface. The project included the collection of P-wave refraction data using a 24-channel Geometrics Geode digital seismograph and 24 14.5-Hz vertical component geophones. The travel times of the seismic P-waves are used in conjunction with the shot-to-geophone distances to obtain thickness and velocity information on the subsurface material. The collected data was processed using SIPwin (Rimrock Geophysics, 2003), a seismic interpretation program, and analyzed using SeisOpt Pro

(Optim, 2008). SeisOpt Pro uses first arrival picks and elevation data to produce subsurface velocity models through a nonlinear optimization technique called adaptive simulated annealing. The resulting velocity model provides a tomography image of the estimated geologic conditions. Both vertical and lateral velocity information is contained in the tomography model. Changes in layer velocity are revealed as gradients rather than discrete contacts, which typically are more representative of actual conditions. The findings and recommendations from the evaluation were presented in an illustrated project report.

Catch Basin No. 3; Santa Clarita, CA (MAG, Ground Conductivity, Electrical Resistivity Tomography)

Project Geophysicist responsible for performing a geophysical evaluation pertaining to the Catch Basin No. 3 project. The project included the collection of electromagnetic (EM), magnetic (MAG), and electrical resistivity (Sting) evaluations at portions of the site. The primary purpose of the study was to evaluate the presence of buried metallic objects and/or subsurface features, such as drilling sumps, lateral pipelines, and evidence of previous drilling operations (vertical borings, metallic well casings, and/or concrete well cellars) and to better understand lithologic conditions at the project site. This was accomplished through the collection of EM and MAG data across the study area using a Geonics EM31-MK2 terrain conductivity meter, ground penetrating radar (GPR), and a Geometrics G-858 cesium vapor magnetometer with a Trimble Pro XRS global positioning system (GPS) for spatial control. Additionally, one Sting profile was conducted using an AGI Super Sting R8 resistivity meter and 56 stainless steel electrodes. Identifying the areal extent of buried structures was accomplished through the collection of EM31, MAG, and GPR data. The Sting profile was conducted primarily to assess the presence of a drilling sump and to gather more information about lithologic features. The findings and recommendations from the evaluation were presented in an illustrated project report.

RICHARD BARROWS, PE, GE

DRONE & GEOPHYSICAL SPECIALIST

EDUCATION

MS, Civil Engineering, Portland State University, 1994

BS, Geotechnical Engineering, Portland State University, 1986

REGISTRATION

Professional Engineer, Civil and Geotechnical Engineering
OR* #14910 (2010)

EXPERIENCE & RESPONSIBILITIES

Richard Barrows has 37 years of experience innovating corporate technology practices in leadership development, nationwide roadway deployment, and goal and process advancement for technology implementation. He developed strategies and business lines to build Atlas' Western Federal Lands Highway geotechnical team into a top-level "hands-on" engineering delivery team. Mr. Barrows serves as a nationwide technical resource for project development and geotechnical staff technological development and identifies technical competency needs and related training programs. He provided geotechnical support and guidance on policy to the Federal Highway Administration (FHWA) division offices and participated in planning the National Geotechnical Program and developing and implementing new technologies.

Mr. Barrows' experience includes analyzing large nationwide organizational program delivery capabilities with respect to quality, sustainability, policy compliance, and employee and customer needs. He has worked with corporate executive leadership to establish new boundaries for change and engaged teams and employees to develop new structures and business practices that work within the established boundaries.

Mr. Barrows is an accomplished engineering organizational leader and mentor focused on building competitive teams of providers offering premier engineering services. He promotes creative, innovative engineering solutions to achieve project and customer goals within scope, schedule, and budget and builds alliances with leadership, peers, and employees. Mr. Barrows highly values teamwork, collaboration, and opportunities to implement innovative techniques and processes.

PROJECT EXPERIENCE

California Department of Conservation's Geologic Energy Management Division (CalGEM)

Coordinated a team of geophysicists that successfully investigated over 30 Orphan well sites covering about 1,200 acres of land. Investigations employed the use of a Heavy Lift Blue Listed Drone manufactured by Inspired Technologies along with ground-based geophysical techniques to pinpoint wells and other well site features that were located below ground or obstructed by vegetation.

Western Federal Lands Highway Division, Vancouver, WA (July 2013 – May 2022)

Mr. Barrows served as construction branch chief managing approximately 70 full-time employees (FTE) with an annual construction program of over \$300 million. He was responsible for bid-build, design-build, and Construction management/general contracting (CM/GC) contract administration. Mr. Barrows repeatedly worked in all five Federal Lands Highway (FLH) program areas (Federal Lands Access, Federal Lands Transportation, Tribal Transportation, Emergency Relief for Federally Owned Roads, and Defense Access Roads). He set expectations with Construction Operations Engineers (COE) for continuous improvement initiatives and worked with COEs to develop an understanding of construction staff concerns and employee retention issues. Mr. Barrows oversaw the development of remedial actions and plans to address employee needs.

RICHARD BARROWS, PE, GE

PAGE 2

Central Federal Lands Highway Division, Vancouver, WA (July 2012)

Mr. Barrows served as acting director of project delivery, managing approximately 120 FTEs, and was responsible for all aspects of project delivery for an approximately \$300 million highway design and construction program. He worked directly with the division engineer on initiatives and program delivery strategies. He was the division spokesperson for project delivery to Central Federal Lands Highway Division (CFLHD) partner agencies.

Western Federal Lands Highway Division, Vancouver, WA (January 2008 – July 2013)

Mr. Barrows served as geotechnical discipline leader and worked within the operational guidelines set by the FLH board of directors to develop and administer an annual FLH-wide discipline improvement work plan. He served as an FLH-wide technical resource for project development and geotechnical staff technological development. Mr. Barrows identified technical competency needs and related training programs. He provided geotechnical support and guidance on policy to FHWA division offices. He participated in planning the National Geotechnical Program and developing and implementing new technologies.

Western Federal Lands Highway Division, Vancouver, WA (November 2016 – March 2017)

Mr. Barrows served as acting chief of business operations, managing approximately 70 FTEs was responsible for

managing and overseeing the WFLHD finance, acquisitions, planning, programming, and building and grounds teams. Mr. Barrows worked directly with the WFL division director on initiatives and was responsible for completing the Financial Integrity Review and Evaluation (FIRE) program quarterly work plan objectives. He served as the division spokesperson on innovation and Everyday Counts initiatives at the Portland, Oregon, round of EDC4 summits.

Central Federal Lands Highway Division, Vancouver, WA (March 2002 – January 2008)

Mr. Barrows served as geotechnical division leader and was responsible for all aspects of the delivery of the CFLHD Geotechnical Program, which consisted of roadway investigations, project geotechnical designs, staff training, and technical outreach functions. He supervised seven geotechnical team members and managed multiple A&E geotechnical task orders. Mr. Barrows actively sought out employee activities and accomplishments for employee praise and recognition. He coached geotechnical engineers in career development and technical excellence and used monthly business-focused team meetings to develop continuous improvement initiatives.



APPENDIX



C. PERSONNEL CERTIFICATIONS



Ben Staud, PE | Project Manager

Search: Details

Name:	BENJAMIN T. STAUD
WV Professional Engineer:	PE License Number: 020372
	PE License Status: Active
	PE Issue Date: 08/05/2013
	PE Expiration Date: 12/31/2024
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement: 31.50
	Carryover Hours for Next Renewal: 1.50
	Last Renewal or Reinstatement Date*: 12/23/2022
WV Engineer Intern:	EI Certification Number: 7096
	EI Issue Date: 06/25/1997
Primary Address of Record:	270 WILLIAM PITT WAY BUILDING A3 3RD FLOOR PITTSBURGH, PA 15238
Primary Employer of Record:	ATLAS 270 WILLIAM PITT WAY BUILDING A3 3RD FLOOR PITTSBURGH, PA 15238
<p>* This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.</p>	

This data was retrieved on 8/22/2023.



West Virginia State Board of Registration for Professional Engineers

BENJAMIN T. STAUD
WV PE #020372

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2024

Scott McCready, LEEP AP, PG | Program Manager

Scott McCready

LPG Number: 741
Date Licensed: 12/11/1987
License Expires: 12/31/2025
License Status: Current
Specialty: Environmental Geology, Hydrogeology, Remediation

Company: ATC Group Services, LLC
Address: 8100 Snowville Road
 Brecksville OH 44141
Phone: 440-262-1292
Email Address: scott.mccready@atcgs.com
Web Address: www.atcgroupservices.com

Stephen Massey, CQM | QC Manager

SOUTHWEST DIVISION NAVAL FACILITIES ENGINEERING COMMAND



PRESENTS THIS CERTIFICATE TO
Steve Massey
 WHO HAS SUCCESSFULLY COMPLETED
U.S.A.C.E. Construction Quality Management for Contractors

DATE: September 15-16, 1999
 GIVEN AT: San Diego, California (The Kidd Club)

Facilitator/Quality Control Manager:
 Kasper Penlandarone (619)552-9767

Facilitator/Construction Manager:
 James K. Stencell (619)552-3624

This Certificate Expires Five Years from above date

SOUTHWEST DIVISION NAVAL FACILITIES ENGINEERING COMMAND



PRESENTS THIS CERTIFICATE TO
Stephen Massey
 WHO HAS SUCCESSFULLY COMPLETED
U.S.A.C.E. Construction Quality Management for Contractors

DATE: August 2nd & 4th, 2004
 GIVEN AT: MSC, San Diego Chapter, Inc.

Facilitator/Quality Control Manager:
 James B. McCord

Facilitator/Construction Manager:
 Walter F. Bradburn

This Certificate Expires Five Years From The Above Date

U.S. ARMY CORPS OF ENGINEERS
 USACE LEARNING CENTER
 HUNTSVILLE, ALABAMA




CERTIFICATE
Stephen Massey
 NAB061201011

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course
CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

DATE: 08 October 2011
 Location: Calverton, Maryland
 Training Date(s): 08 October 2011
 Telephone: 410-965-3032
 Facilitator/Instructor: [Signature]

Facilitator/Instructor Signature:
 [Signature]

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

U.S. ARMY CORPS OF ENGINEERS
 USACE LEARNING CENTER
 HUNTSVILLE, ALABAMA




CERTIFICATE
Stephen Massey
 SPK-USACE 02-16-00160

has completed the Corps of Engineers and Naval Facility Engineering Command Training Course
CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS - #784

San Diego, CA
 Location: 5/18/16 - 5/19/16
 Training Dates: 5/18/16 - 5/19/16
 Telephone: 916-557-7779
 Facilitator/Instructor: [Signature]

Facilitator/Instructor Signature:
 [Signature]

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Ken Pasterak, LRS, PG | Environmental Specialist



west virginia department of environmental protection

Division of Land Restoration
601 57th Street SE
Charleston, WV 25304

Harold D. Ward, Cabinet Secretary
dep.wv.gov

February 6, 2023

Kenneth Pasterak
Atlas Technical Consultants
6825 Reynolds Street
Pittsburgh, PA 15238

Renewal - Licensed Remediation Specialist Certification

Dear Mr. Pasterak:

Congratulations! We are pleased to inform you that you have filed your renewal application in accordance with appropriate time frames along with evidence of continuing education in the environmental remediation field. You have completed in a timely manner all of the license renewal requirements.

Please find your Licensed Remediation Specialist Renewed License Certificate enclosed and you may continue to practice as a licensed remediation specialist.

Sincerely,


Robert Rice
Director

Enclosure: LRS License Renewal Certificate
cc: LRS file: Registration Number 243


Promoting a healthy environ

Renewal



West Virginia
Department of
Environmental Protection

PASTERAK, KENNETH
Licensed Remediation Specialist
Registration Number: 243

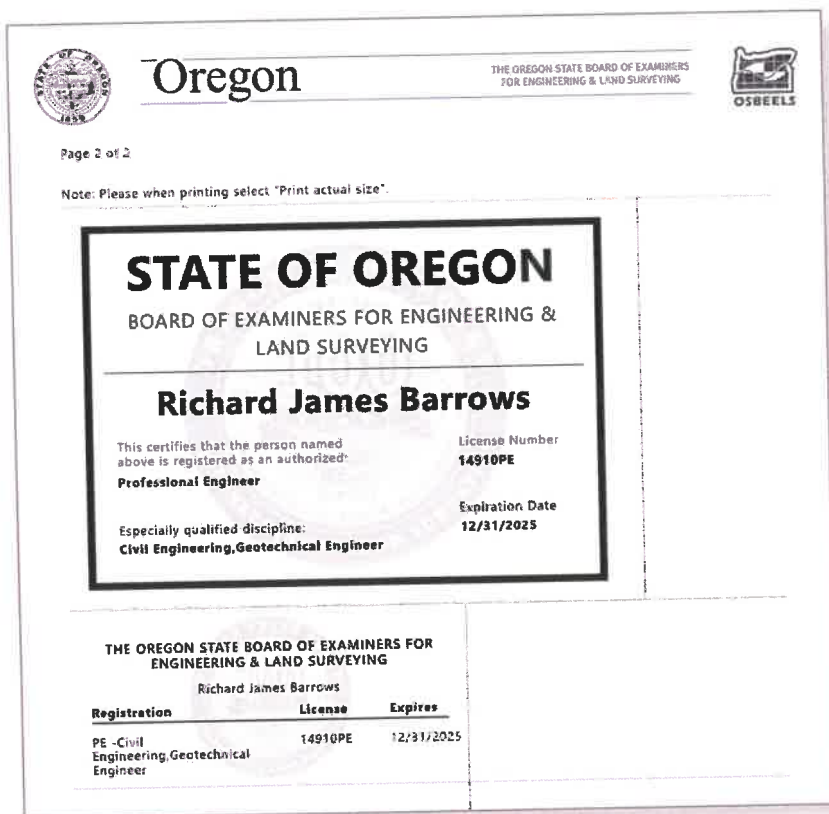

Director, Division of Land Restoration

04/01/2023 - 03/31/2025
Date Issued - Date Expires

Chuck Kisamore, CSP | Emergency Response/Health & Safety Officer



Rich Barrows, PE, GE | Drone and Geophysical Services





APPENDIX



D. OFFICE CERTIFICATIONS



State of West Virginia



Certificate

*I, Mac Warner, Secretary of State,
of the State of West Virginia, hereby certify that*

ATLAS TECHNICAL CONSULTANTS, LLC

has filed the appropriate registration documents in my office according to the provisions of the
West Virginia Code and hereby declare the organization listed above as duly registered with the
Secretary of State's Office.

*Given under my hand and
the Great Seal of West Virginia
on this day of
December 02, 2021*



Mac Warner

Secretary of State



Scott A. Adkins, Acting Commissioner

January 12, 2023

Account # 52663-0

Atlas Technical Consultants, LLC
5750 Johnson St Ste 400
Lafayette, LA 70503

Dear Employer:

Information provided by you shows that you have acquired the entire organization, trade or business or substantially all the assets from ATC Group Services LLC, dba Atlas Technical account 94028-3 as of January 1, 2022. The contribution and benefit experience records of the predecessor employer will be combined with those of your account. This is in accordance with the Unemployment Compensation Act, Article 5, Section 10- b.

Reports should be filed covering the combined operations under account number 0000526630. The contribution rate for the year 2023 is 8.5%.

Attached please find your certificate of registration with this Division.

Effective January 1, 2016, Workforce West Virginia will no longer be mailing quarterly wage and contribution reports. You can file online and pay by ACH debit at www.workforcewv.org. If you do not have access to the internet or are otherwise unable, you will need to fill out the enclosed waiver to be eligible to continue to receive the quarterly mailing.

In accordance with provision of the Commissioner's Regulations, Regulation 96 CSR 2, an employer who desires to dispute a decision or action by the Commissioner, or designee, is required to file a complete and timely request for reconsideration; otherwise, the Bureau's decision or action becomes final after thirty (30) days receipt of this decision.

A request for reconsideration shall be filed within thirty (30) days of the employer's receipt of the disputed decision, or in absence of such a receipt, within sixty (60) days of the date of the Commissioner, or designee, making such disputed decision.

The request for reconsideration shall be filed with the Commissioner, Attention: Glen J. Hughes, Director of Unemployment Compensation (5101), 1900 Kanawha Blvd E, Building 3 Room 300, Charleston, West Virginia 25305.

If you have any questions, you can contact me at (304) 558-2677, direct dial (304)352-3777, by fax at (304) 558-1324, or email LaShawna.G.Johnson@wv.gov.

Sincerely,

LaShawna Johnson
Employment Program Specialist
Status Determination Unit

Unemployment Compensation Division
Contribution Accounting
1900 Kanawha Blvd. East * Building 3 Suite 300 * Charleston, WV 25305

An agency of the Department of Commerce
An equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities.

www.workforcewv.org

A proud partner of the AmericanJobCenter® network



CONTRACTOR LICENSE

AUTHORIZED BY THE
West Virginia Contractor
Licensing Board

NUMBER: WV057368

CLASSIFICATION:

SPECIALTY
ENVIRONMENTAL/HAZARDOUS WASTE

ATC GROUP SERVICES LLC
DBA ATLAS TECHNICAL
5750 JOHNSTON ST STE 400
LAFAYETTE, LA 70503

DATE ISSUED

JULY 12, 2024

EXPIRATION DATE

JULY 12, 2025

Authorized Signature

Chair, West Virginia Contractor
Licensing Board



A copy of this license must be readily available for inspection by the Board on every job site where contracting work is being performed. This license number must appear in all advertisements, on all bid submissions, and on all fully executed and binding contracts. This license is non-transferable. This license is being issued under the provisions of West Virginia Code, Chapter 30, Article 42.

Search: Details

Legal Name:	ATC GROUP SERVICES, LLC
WV Company COA:	COA Number: C01371
	COA Status: Active
	COA Issue Date: 02/13/2003
	COA Expiration Date: 12/31/2025
Primary Address of Record:	5750 JOHNSTON STREET SUITE 400 LAFAYETTE, LA 70503
Engineer In Responsible Charge:	CHAD JOHN HARRISON
	PE License Number: 023116
	PE License Status: Active
	PE License Expiration: 12/31/2024

Search: Details

Legal Name:	ATLAS TECHNICAL CONSULTANTS LLC
WV Company COA:	COA Number: C06508
	COA Status: Active
	COA Issue Date: 06/28/2021
	COA Expiration Date: 12/31/2025
Primary Address of Record:	13215 BEE CAVE PKWY, BLDG B SUITE 230 AUSTIN, TX 78738
Engineer In Responsible Charge:	BENJAMIN T. STAUD
	PE License Number: 020372
	PE License Status: Active
	PE License Expiration: 12/31/2024



APPENDIX



E. SUPPORTING DOCUMENTATION FROM PAST PROJECTS



APPENDIX



E. SUPPORTING DOCUMENTATION FROM PAST PROJECTS



TO: West Virginia Department of Environmental Quality (WVDEP)

FROM: Curtis Shuck, Well Done Foundation

DATE: August 7, 2024

RE: Proposed Pre and Post Plugging Orphan Well Methane Quantification Protocols for
DEP OOG - Methane Emission Quantification Solicitation No.: CRFP0313 DEP2500000001

MEMORANDUM

Formed in 2019, the Well Done Foundation, Inc. a Montana based 501(c)(3) has been at the forefront of orphan and marginal well methane measurement and monitoring. In 2020, Well Done entered into an agreement with the American Carbon Registry (ACR) as the original sponsor of the METHODOLOGY FOR THE QUANTIFICATION, MONITORING, REPORTING AND VERIFICATION OF GREENHOUSE GAS EMISSIONS REDUCTIONS AND REMOVALS FROM PLUGGING ORPHAN OIL AND GAS WELLS IN THE U.S. AND CANADA. To date, Well Done has plugged more than 45 orphan wells in 5 States.

The Well Done Foundation, Inc. and Well Done New Mexico LLC (Well Done) have been performing pre and post plugging methane measurement and monitoring (emissions quantification) for the State of New Mexico (NMOCD) since August 2022. Presently, Well Done has conducted pre pugging methane quantification on more than >1,600 orphan and marginal conventional wells nationwide under the DOI's BIL/IIJA Program, giving Well Done the largest orphan and marginal conventional well methane quantification database in the United States.

Additionally, Well Done has performed pre and post plugging methane quantifications on more than 1,000 orphan wells nationwide under the ACR's METHODOLOGY FOR THE QUANTIFICATION, MONITORING, REPORTING AND VERIFICATION OF GREENHOUSE GAS EMISSIONS AND REMOVALS FROM PLUGGING ORPHAN OIL AND GAS WELLS IN THE U.S. AND CANADA, VERSION 1.0 May 2023 (sponsored by the Well Done Foundation).

Measurements proposed for this project are to be performed consistent with the U.S. Department of Energy (DOE) Methane Measurement Guidelines for Marginal Conventional Wells – Version 1.0 dated April 17, 2024 and the U.S. Department of Interior (DOI) Orphaned Wells Program Office Assessing Methane Emissions from Orphaned Wells to Meet Reporting Requirements of the 2021 Infrastructure Investment and Jobs Act: Methane Measurement Guidelines July 2023 Version.


Pre and Post Plugging Point-Source Methane Quantification Techniques – Explained

Performed by Qualified Measurement Specialists (QMS)¹, the Well Done Team uses hand-held natural gas detectors, high-flow samplers and Ventbuster Instruments, that are industry proven and DOE/DOI approved direct-emission, point source measurement techniques and equipment that require an individual to be present at the well site². These techniques and equipment are capable of detecting and quantifying methane

¹ QMS defined by the DOE April 2024 Methane Measurement Guidelines, Section 4.1 and DOI July 2023 Methane Guidance, pg.15-16.

² Instrumentation used to measure methane, defined by the DOI July 2023 Methane Guidance, pg. 7-8.

emissions at leak rates of *<1 gram per hour or lower*, making them suitable for orphaned well sites and are the same techniques and equipment currently being used by Well Done Team members for DOI/IIJA orphan well emissions reporting³ The following is the Well Done Pre-Plugging Methane Screening & Measurement Protocol, shown in Image 2.1⁴:



**Well Done
FOUNDATION**

333 Main Street Shelby, MT 59474 | P.O. Box 10640 Bozeman, Montana 59719 | (406) 460-0903

TO: WDF Measure 1 Qualified Measurement Specialists (QMS) for CalGEM Projects

FROM: Curtis Shuck, Chairman

DATE: May 6, 2024

RE: Orphan Well Methane Screening & Measurement Protocol – Rig Up Checklist

MEMORANDUM

1. Power up/on Personal Gas Monitoring Device (H2s) and perform "Bump Test"
2. Power up/on methane screening/detection devices
3. Log Time of Wellsite Arrival
4. Position vehicles and equipment in a safe location with a clear egress
5. Record Qualified Measurement Specialist (QMS) conducting the Orphan Well Pre Plug Monitoring
6. Rig up Wind Directional Indicator
7. Record on-site weather conditions
8. Position Fire Safety Equipment
9. Perform Job Hazard Analysis (JHA)
10. Ensure proper PPE is in place and conduct a Wellsite Walk
11. Take Well and Site Photos (North Facing, East Facing, South Facing, West Facing, Wellhead, Tanks, etc.)
12. Record Well Class: (not detected, detected, or detected + may be high)
13. Perform Field Gas Analysis using the project specified methane screening/detection device(s)
14. Take Photo of Gas Analysis Results from screening/detection devices
15. Record Methane Background Concentration Levels
16. Record: highest concentration of methane in ppm, leak location(s), gas smell, gas audible, gas venting can be observed or felt, gas venting through surface waters, methane concentrations detected >1,000 ppm anywhere in the well vicinity
17. Collect Gas Sample(s) in Tedlar Bag(s) for laboratory analysis, marking date, time, Well Name, Well Number
18. Take Photo of Gas Sample in Tedlar Bag @ well sign, wellhead
19. Secure Gas Sample(s) in a designated storage device (cooler) and complete Chain of Custody Form
20. Rig up Ventbuster™ Unit, or SEMTECH Hi-FLOW2 to the orphan well using one of three (3) configurations, zero the device flow and concentration according to the manufacturer's guidelines
21. Prepare "Start Test" with complete metadata in ALL Fields, using well name, UWI and Correct Contract ID
22. Start Ventbuster or SEMTECH HiFLOW2 Test on High Flow (monitor flow results and prepare to zero and restart VB Test in Low Flow)
23. Rig up other methane quantification devices as may be required/specified for the project
24. Phone/Text Joint Well Operations Center (JWOC) for VBI Test Start Confirmation
25. Write Field Notes in Personal Journal
26. Record Field Notes in the WDF Well Intel™ Site
27. Upload all Photos into WDF Well Intel™ Site
28. Place "Test Well" informational signage and other project required information at the Well Site
29. Secure Test Location
30. Record Wellsite departure time in Personal Journal

Image 2.1 – Well Done's Pre Plugging Orphan and Marginal Conventional Well Methane Screening & Measurement Protocol – Rig Up Checklist, that covers the recording requirements as set forth in the DOI July 2023 Methane Guidance, pg.21.

Pre Plugging Methane Emissions Quantification and Reporting: Flow Rate and Concentration

It is important to differentiate between detecting the presence of methane gas and being able to accurately determine gas types, concentrations and quantify their emission rates⁵. Handheld devices, such as gas sniffers and OGI cameras should be utilized to detect/estimate the presence and concentrations of gases

³ Well Done Foundation/Well Done New Mexico LLC have performed pre and post methane measurement and monitoring for the State of New Mexico, State of Kentucky, State of Pennsylvania and State of Colorado since August 2022 on >300 orphan wells.

⁴ Image 2.1 - WDF Orphan Well Screening & Measurement Protocol – Rig Up, attached.

⁵ "Screening" defined in the DOI July 2023 Methane Guidance, pg.14.

only. Methane emissions quantification requires precision instrumentation and testing protocols, specifically designed, and calibrated to measure micro and macro flows and concentrations of methane gas and can differentiate the “other” greenhouse⁶ gasses that are typically present in orphan oil & gas wells.

Additionally, collecting background methane levels for each well, or in the case of dense well spacings, a representative background test is to be performed by Well Done using a SEMTECH® Hi-Flow2 and running an ACR Leak Background Test and generating Leak Background Report⁷, as show below in Image 3.1:

ACR Leak Background Report for ACR Leak Background [2024-07-22T18:26:32] - KCL A78-4 (04-029-08259) Pre Plug (West Corner of Well Pad)					
Statistics					
		Minimum	Average	Maximum	
Stable CH4 Final Concentration		-1 PPM	-0 PPM	0 PPM	
Stable Standard Volume Flow		0 SLPM	0 SLPM	0 SLPM	
Stable CH4 Standard Volume Leak Rate		0.00000 SLPM	0.00000 SLPM	0.00000 SLPM	
Calibrations					
	Preceding Calibration Date	Following Calibration Date	Preceding Calibration Value	Following Calibration Value	Calibration Variance
Zero Offset	7/23/2024, 12:27:08 AM		-2.187		
Span Factor	7/23/2024, 12:27:08 AM		1.005		

Image 3.1: Leak Background Test Report



Image 3.2: Pre Plug Leak Background



Image 3.3: Leak Background During Plugging

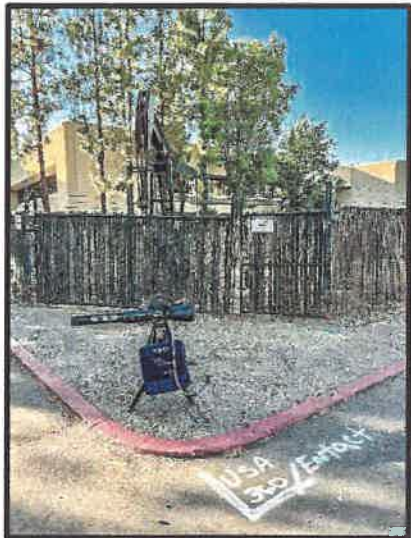


Image 3.4: Pre Plug Leak Background

⁶ Other Gasses” defined in the DOI July 2023 Methane Guidance, pg. 8.

⁷ ACR Leak Background Report using a SEMTECH® Hi-Flow2

Accurately determining the methane emissions rate requires both a methane gas concentration analysis, and a methane gas flow measurement, that reflects a minimum 2-hour period of normalized flow⁸, as seen in the following Image 3.1 and 3.2, attached. A simple equation is shown below and in the following Test Report from the CalGEM DOI IJA/BIL Project: **Needham Bloemer #001 (04-029-85759) – Pre Plug Methane Quantification**:

Methane Calculation: 717 grams CH₄ per cubic meter (717 g/m³ x 0.1564 m³/day = 112.14 g/day total /24 = 4.67 g/hour x 0.71014 (methane concentration) = **3.32 g/hour CH₄**). **Methane, gas** weighs 0.000717 gram per cubic centimeter or 0.717 kilogram per cubic meter, i.e. density of methane, gas is equal to 0.717 kg/m³; at 0°C (32°F or 273.15K) at standard atmospheric pressure. In imperial or US customary measurement system, the density is equal to 0.0448 pound per cubic foot (lb/ft³), or 0.0004144 ounce per cubic inch (oz/inch³).

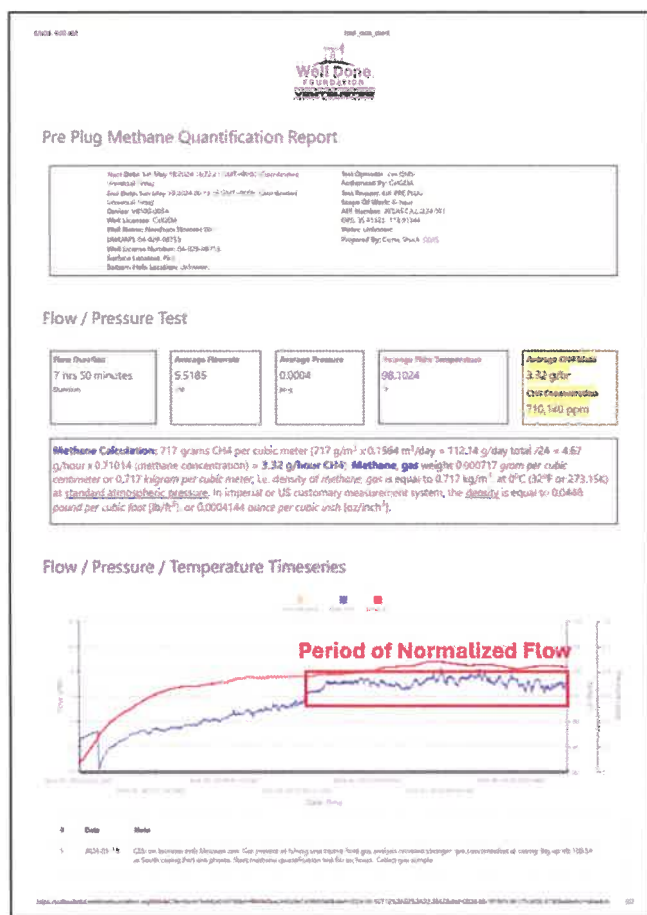


Image 4.1 – Needham Bloemer #001 Orphan Well Pre Plug Methane Quantification Report, pg.1.

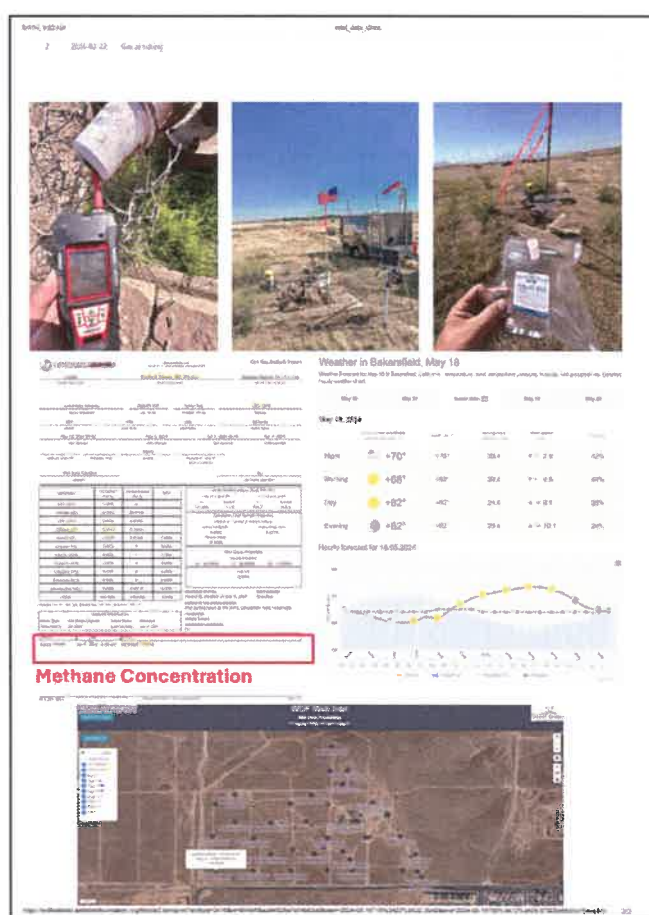


Image 4.2 – Needham Bloemer #001 Orphan Well Pre Plug Methane Quantification Report, pg.2.

As mentioned in the July 2023 DOI guidance document, these flow and methane concentration measurements are being done for orphan wells with intact ports where the sensors can be plugged in by the Well Done group using the Ventbuster instrumentation⁹.

⁸ "Normalized Flow" is required by the ACR's METHODOLOGY FOR THE QUANTIFICATION, MONITORING, REPORTING AND VERIFICATION OF GREENHOUSE GAS EMISSIONS AND REMOVALS FROM PLUGGING ORPHAN OIL AND GAS WELLS IN THE U.S. AND CANADA, VERSION 1.0 May 2023 (sponsored by the Well Done Foundation).

⁹ Ventbuster Instruments White Paper on Methane Emissions Monitoring & Measurements, attached.

Well Done has three (3) ACR/DOE/DOI/BIL approved pre plugging methane testing protocols¹⁰:

1. Open Hole¹¹
2. Casing¹²
3. Production Tubing¹³

Each Pre Plugging Point Source Methane Quantification Test is conducted for a minimum of 6-hours, unless otherwise specified by WVDEP. This provides adequate time for the orphan well to achieve a “normalized flow” level or reveal a flow characteristic unique to the subject well.

Methane Quantification tests are immediately visible as “Live Data” to WVDEP through the Well Done “Well Intel© IoT Platform” and the completed tests are also cached as reports in Well Intel© for review prior to formal submission to WVDEP. Additionally, the Well Intel© platform acts as a real time Project Management Site that is shared by the WVDEP, the Plugging Contractor and the Well Done and contains photo images, field notes, well data and other useful project information.

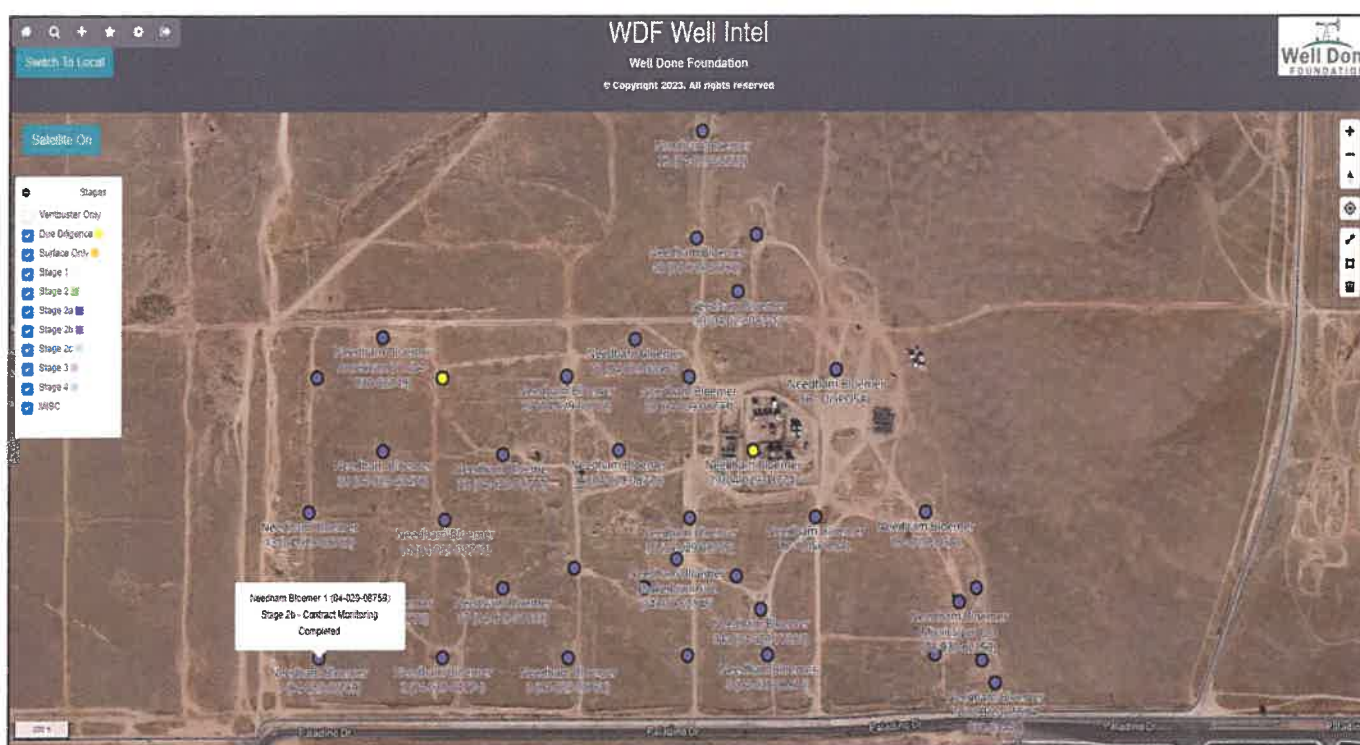


Image 5.1 – Screen Shot of Well Intel© IoT Platform Screen with Needham Bloemer #001 (04-029-08759) selected.

Measurement equipment certifications are provided to ensure compliance with DOI's guidance and all data is recorded in accordance with the DOE April 17, 2024 Methane Measurement Guidelines for Marginal Conventional Wells and the DOI July 2023 Methane Guidelines, pg. 24-28 and ATLAS will provide the required QA/QC results.

¹⁰ Well Done methane quantification protocols area, attached.

¹¹ ACR Open Hole PPT, attached.

¹² ACR Casing PPT, attached.

¹³ ACR Production Casing, attached.

Well Done summarizes the pre plugging methane quantification results as reports on an individual orphan well basis¹⁴ and performs field/project averaging analysis¹⁵ periodically at the request of WVDEP:

CSAU Orphan Well CH4 Averaging - Applied to the 2 Wells Outside Sample Set - CES										
Prepared:	10.22.2023									
Well Name	Well #	API #	County	Purchase Order	Gas Sample	CH4/PPM	Total LELs/PPM	CH4 Flow @ m3/day	Methane Emission @ g/hour	Post Plug CH4
CSAU	5571	30-005-29051	Chaves	52100-72995	24-Feb	216,570	378,410	174.97	1,132	Not Plugged
CSAU	586	30-005-29025	Chaves	52100-72995	5-Mar	269,940	506,540	0.1488	1.20	0
CSAU	587	30-005-29024	Chaves	52100-72995	2-Mar	114,100	340,098	6.4268	21.91	0
CSAU	97	30-005-10567	Chaves	52100-72995		48,847		7.31	44.97	0
CSAU	518	30-005-27963	Chaves	52100-72995	25-Jan	6,470	43,590	0.0261	0.01	0
CSAU	517	30-005-27962	Chaves	52100-72995	25-Jan	37,770.00	136,100	4.1558	4.69	0
CSAU	531	30-005-27974	Chaves	52100-72995	24-Jan	153,420	294,320	0	0	0
CSAU	127	30-005-20071	Chaves	52100-72995	20-Jan	108,670	190,880	0.3232	1.05	0
CSAU	533	30-005-27988	Chaves	52100-72995	26-Jan	0.00	5,350	0.0048	0	0
CSAU	516	30-005-27973	Chaves	52100-72995	25-Jan	106,720	204,100	0.0155	0.05	0
CSAU	532	30-005-27964	Chaves	52100-72995	24-Jan	2,730	32,040	0	0	0
CSAU	96	30-005-10474	Chaves	52100-72995	18-Jan	0	5,850	0.0021	0	0
CSAU	119	30-005-20103	Chaves	52100-72995	21-Jan	0	5,960	0.0009	0	0
CSAU	520	30-005-28012	Chaves	52100-72995	4-Mar	2,350	15,450	0	0	0
CSAU	520	30-005-28012	Chaves	52100-72995	25-Jan	4,950	18,510	0.1892	0	0
CSAU	535	30-005-27983	Chaves	52100-72995	26-Jan	0	5,060	0.0554	0	0
CSAU	100	30-005-20007	Chaves	52100-72995	18-Jan	250	4,230	0.0009	0	0
CSAU	561	30-005-28029	Chaves	52100-72995	3-Mar	49,180	98,420	0.0635	0.09	0
CSAU	558	30-005-28010	Chaves	52100-72995	24-Feb	1,800	34,090	0.0018	0	0
CSAU	559	30-005-28011	Chaves	52100-72995	3-Mar	0	3,580	0	0	0
CSAU	574	30-005-28017	Chaves	52100-72998	2-Mar	0	7,930	0	0	0
CSAU	545	30-005-27984	Chaves	52100-72998	3-Mar	12,360	84,660	0.2143	0.08	0
CSAU	573	30-005-28016	Chaves	52100-72998	3-Mar	19,500	198,440	1.0351	0.5	0
CSAU	827	30-005-29030	Chaves	52100-72998		48,847		7.31	44.97	0
CSAU	544	30-005-27986	Chaves	52100-72998	24-Feb	9,770	45,250	0.0296	0.01	0
CSAU	822	30-005-29027	Chaves	52100-72998	26-Jan	42,190	65,930	0.0014	0.000	0
CSAU	538	30-005-29027	Chaves	52100-72998	2-Mar	122,760	348,300	2.2454	7.560	0
CSAU	534	30-005-27961	Chaves	52100-72998	25-Jan	8,730	157,700	0.1448	0	0
Total CSAU Wells						Total CH4 PPM	Total Explosive Gas PPM	Total Flow m3/day	Total CH4 Emission g/hour	
28						1,270,030	3,230,788	190.0554	1,169.25	
		CSAU Well Sample Set	% of Total CSAU Wells			Avg CH4 PPM		Average Flow m3/day	Total Avg CH4 Emission g/hour	
		28	92.85			48,847.31		7.31	44.97	

Image 6.1 – Field Averaging Report Summary – Cato San Andres Unit, Chaves County, NM.

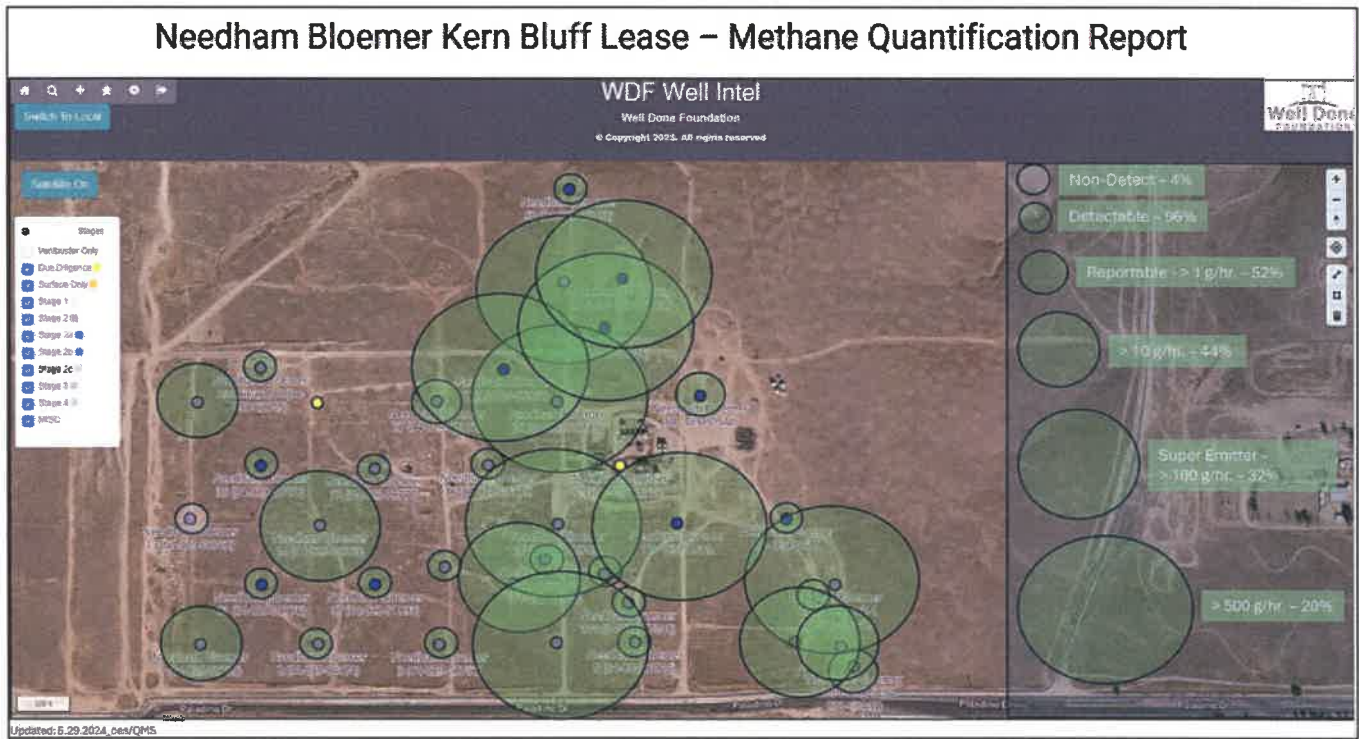


Image 6.2 – Field Methane Emission Impact Report Summary – Kern Bluff Field, Kern County, CA.

¹⁴ Needham Bloemer #001 (04-029-08759) Pre Plug Report, attached.

¹⁵ CSAU Field Averaging Report Summary, attached.

Post Plugging Methane Measurement and Reporting

Once an orphan well has been plugged, the Well Done Team begins the process of post plugging methane measurement. Typically, the test is taken after 48+ hours the final cementing operations have been completed, to allow the dispersion of any ambient emissions from the well plugging.

The Post Plugging Test consists of taking field gas readings using handheld methane detection devices at the plugged wellbore and in the immediately adjacent areas. Air/Gas samples are collected for laboratory analysis. Water testing may be employed for visual signs of any leakage.

A SEMTECH® Hi-Flow2 gas analyzer is used to perform an ACR Method, 5-Minute continuous Post Plug Test:



Image 7.1: Post Plug Sampling



Image 7.2: Post Plug sampling after cutoff

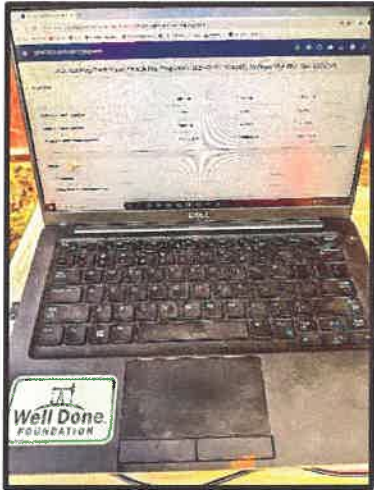


Image 7.3: Field Verification – Post Plug

ACR Post Plug Check Report for ACR Post Plug Check [2024-06-14T11:54:27]: McCleary UNIT #001 (34-153-21344)			
Statistics			
	Minimum	Average	Maximum
Stable CH4 Final Concentration	-0 PPM	0 PPM	2 PPM
Stable Standard Volume Flow	682 SLPM	719 SLPM	740 SLPM
Stable CH4 Standard Volume Leak Rate	-0.00021 SLPM	0.00030 SLPM	0.00172 SLPM
Checks			
Test Completion	COMPLETE		
ACR Post Plug CH4 Concentration Check	PASSED		

Image 7.4: SEMTECH® Hi-Flow2 Post Plug Report

Post plugging methane test results¹⁶ and emissions reduction reports¹⁷, along with photo images of the process, are made immediately available to the Utah Team upon completion and are uploaded to the Well Done Well Intel© platform.

CSAU #587 Post Plug Gas Analysis

Sample Point Clock: 185746 | Sample Point Name: CSAU #587 Post Plug | Sample Point Location: CSAU #587

Laboratory Services: 2023076537 | Lab File No: BAG | CES - Spot | Source Laboratory: USA | Container Identity: Sampler | Facility Name: New Mexico

Object: USA | Area Name: USA | Field Name: USA | Date Sampled: Sep 30, 2023 19:05 | Date Received: Oct 2, 2023 15:11 | Date Reported: Oct 10, 2023

System Administrator: [Name] | Ambient Temp (°F): [Value] | Flow Rate (Mcf): [Value] | Analyte: [Value] | Press PS @ Temp °F: [Value] | Source Conditions: [Value]

Well Done Foundation Operator: [Name] | Lab Source Description: NG

Component	Normalized Mol %	Un-Normalized Mol %	GRM
H2S (H2S)	0.0000	0	
Nitrogen (N2)	99.3410	99.341	
CO2 (CO2)	0.0630	0.063	
Methane (C1)	0.0000	0	
Ethane (C2)	0.2630	0.263	0.0700
Propane (C3)	0.1950	0.195	0.0540
i-Butane (iC4)	0.0410	0.041	0.0130
n-Butane (nC4)	0.0970	0.097	0.0310
i-Pentane (iC5)	0.0000	0	0.0000
n-Pentane (nC5)	0.0000	0	0.0000
Hexanes Plus (C6+)	0.0000	0	0.0000
TOTAL	100.0000	100.0000	0.1680

Gross Heating Values (Btu/lb): [Value] | Calculated Total Sample Properties: [Value] | C6+ Group Properties: [Value]

Method(s): Gas C6+ - GPA 2201, Expanded Gas - GPA 2205, Calculator - GPA 2172

Analyzer Information: Device Type: [Value] | Device Make: [Value] | Device Model: [Value] | Last Cal Date: [Value]

Source: [Value] | Date: [Value] | Notes: [Value]

Validator Comments: [Value]

Image 8.1 – CSAU #587 Post Plug Gas Analysis.

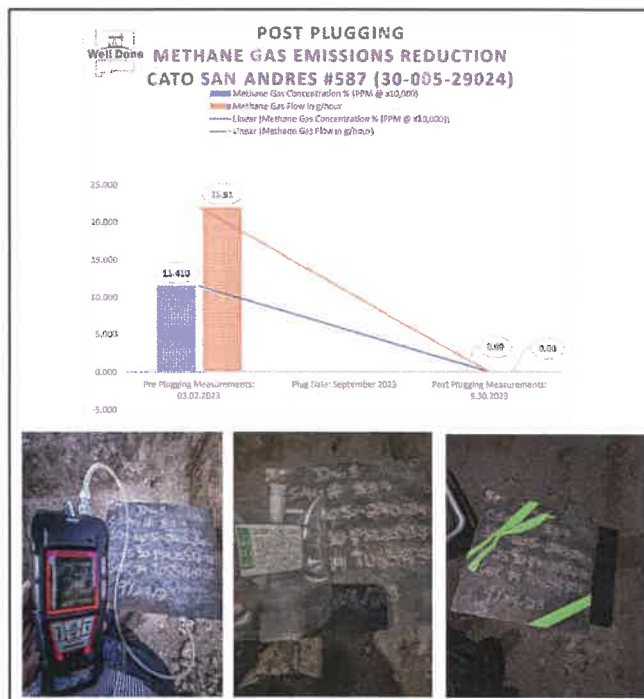


Image 8.2 – CSAU #587 Post Plug Methane Emissions Reduction Report.

During the Post Plug Methane Testing process, if any Methane is detected, the protocol is to re-test and immediately rig up a Ventbuster® to the well casing to calculate a Methane flow rate and notify WVDEP.

Conclusion

The Well Done Team leads the way in orphan and marginal conventional well Methane Quantification. Well Done has developed the preceding processes and procedures over the past Five (5) + years, and thousands of wells tested to safely, efficiently and economically execute the work, using the WDF Well Intel© IoT Platform as a reporting and project management tool that is fully accessible to our customers and their stakeholders.

¹⁶ CSAU #587 Post Plugging Gas Analysis, attached.

¹⁷ CSAU #587 Post Plugging Methane Emissions Reduction Report, attached.

**Well Done Foundation Pre & Post Plugging Procedure Compliance Checklist:
WVDEP Pre and Post Plugging Measurement of Methane Emissions and Other Gasses Review
to U.S. Department of Interior's Methane Measurement Guidelines dated July 2023**

July 2024

Bipartisan Infrastructure Law (BIL) or IIJA Requirement		Well Done Methods
Ground Based Technology w/ <1 gram per hour capability		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT
Qualified Measurement Specialist Requirement		Yes – QMS Certification Required and Provided
Method of Measurement & Calculation for methane quantification specifically requires a QMS to measure Concentration and Flow: (WDF & VBI pg. 8 – Footnote 1)		Yes – QMS Certification Required and Provided
Database & Database Interface (pg. 16)		Yes – WDF Well Intel© IoT + Agency Spreadsheet
Well Screening & Gas Detection Equipment (pg.19)		Yes – RKI GX600 Detector + Laboratory Gas Analysis for any well with CH4 detection
Background Screening (pg.20)		Yes – Using Hi Flow Sampler
Reporting (pg.21)		Yes – WDF Pre Plug Methane Quantification Reports & WDF Well Intel© IoT
Pre Plug Methane Quantification methods conform with ACR (pg. 22)		Yes – 6 hour minimum period of measurement to establish a 2-hour normalized flow, per ACR
Pre Approval of instrumentation and approach (pg.22)		Yes – WDF DOI Approved (pg.8 – Footnote 1) of Ventbuster® and SEMTECH® Hi-Flow2
Qualified Measurement Specialist Requirement (pg.22)		Yes – Required and Documented in Standard WDF Well Report & WDF Well Intel© IoT and confirmed by QMS
Operating Conditions (pg.23)		Yes – Equipment is Certified for Hazardous Area Use by Manufacturer and confirmed by QMS
Minimum Detection Limits (pg.23)		Yes – Equipment Meets/Exceeds DOI Requirement and confirmed by QMS

Bipartisan Infrastructure Law (BIL) or IIJA Requirement		Well Done Methods
Precision (pg.23)		Yes – Equipment Meets/Exceeds Requirement, as confirmed by QMS
Accuracy (pg.23)		Yes – Equipment Meets/Exceeds Requirement, as confirmed by QMS
Documentation (pg.23)		Yes – Equipment Meets/Exceeds Requirement, as confirmed by QMS
QA/QC (pg.23)		Yes – ATLAS performs the QA/QC Function
Units of Measure – grams/hour (pg.24)		Yes – As confirmed by QMS
Reporting Non-Detects (pg.24)		Yes – Included in Standard WDF Well Report & Well Intel© IoT and confirmed by QMS
Preferred protocol when infrastructure is present (pg.24)		Yes – WDF Includes three (3) standard protocols, approved by ACR, recognized by DOI: a. Open Hole b. Production Tubing c. Casing
Recording multiple leaks (pg. 24)		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT
Selecting measurement equipment and methods (pg.24)	Yes – HiFlow Sampler (not Hazardous Area Certified)	Yes – Ventbuster (Hazardous Area Certified)
Data Collection (pg.24)		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT
QA/QC: Demonstrating precision(pg.24)		Yes – There is a 5% additional sampling required and confirmed by QMS
QA/QC: Demonstrating accuracy (pg. 25)		Yes – Laboratory Precisions and Calibrations are documented
Exceptional Circumstances (pg.25)		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT and confirmed by QMS
What to Record (pg.27)		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT and confirmed by QMS

Bipartisan Infrastructure Law (BIL) or IIJA Requirement		Well Done Methods
Field Reports (pg.27)		Yes – Included in Standard WDF Well Report & WDF Well Intel© IoT prepared by QMS
Audits (pg. 28)		Yes - Available Upon Request and confirmed by ATLAS