

PROJECT CANARY

TrustWell® Rating Summary

Independence. Intelligence. Integrity

Producer: Standard Energy

TrustWell Version ID: TWRG Standard v10.2 - 2 with Low Methane VA

Issue Date: January 1st, 2023

Context

TrustWell Responsibly Sourced Gas is natural gas which has been produced from a well which has gone through the TrustWell evaluation and verification process and has a current TrustWell rating.

Responsibility, particularly in the oil & gas industry, is highly complex with numerous performance metrics and an even larger number of ways to achieve that performance and those metrics.

Goals

The purpose of the overall TrustWell Rating system is to provide a robust, credible and quantified view of overall responsibility in the production of hydrocarbons. In order to deliver this, the TrustWell Rating process includes the following standards, components and processes.



A TrustWell Rating is the most robust mark of quality and achievement in oil & gas operations, risk mitigation and environmental responsibility. TrustWell is underpinned by Project Canary company values, as follows:

| | |
|---------------|--|
| Independence: | Independent company. Leading experts in engineering, responsibility, and stakeholder engagement. |
| Intelligence: | Robust, engineering and performance driven approach. Developed through iteration with numerous industry clients. |
| Integrity: | Diverse engagement from numerous credible stakeholders. |

Standards: What Does A TrustWell Rating Mean?

TrustWell Evaluated



Actively Improving
Score: <75

Demonstrated
dedication to
continuous
improvement.

TrustWell Silver



Good
Score: 75-100

Second quartile
performance going
above and beyond
basic requirements.

TrustWell Gold



Very Good
Score: 100-125

First quartile
performance with
highly effective
risk management
practices.

TrustWell Platinum



Best-in-Class
Score: 125+

Top 10% of peers with a
demonstrated mastery
over risk control and
implementation.

Step 1: Inherent Profile

Unique assessment based on the type of operation and location. Includes over 4.5 million benchmark facilities and risk data points such as:

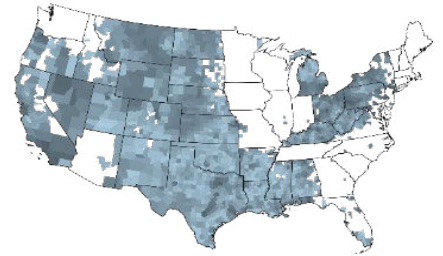
Operation type...

Well complexity

- Well age and type (vertical, directional, horizontal)
- ...and more.

Location proximity to...

- Flow paths
- Communities
- Sensitive areas (environmental, biodiversity)
- ...and more.



Step 2: Control Measures



Controls are evaluated at the levels of policy, plan, and execution. We use technical scoring rubrics and compile these rubrics to compose a view of aggregate control systems in place. Project Canary scoring libraries and rubrics include:

Rubrics 1-10: Downhole

- Surface, Intermediate, and Production Casing
- Surface, Intermediate, and Production Cement
- Subsurface integrity Monitoring
- Well Integrity
- Wellhead/Tree
- ...and more

Rubrics 11-18: Surface Ops

- Spill Prevention and Response
- Pits-Tanks-Impoundments
- Facilities Piping & Equipment
- Well Control (Drilling, Completions)
- Frac Operations
- Emergency Response
- ... and more.

Rubrics 19-26+: Impacts

- Emissions (Exhaust, Flaring, Venting)
- Water Programs
- Community Engagement
- Waste Management
- Reclamation
- ...and more

Step 3: Performance Rating



Project Canary evaluates numerous impact and risk events, which vary depending on the type of facilities. The primary categories are as follows:

Water



Air



Land



Community



Within each of these categories is a range of topics (events) which map to anywhere from 1 to 4 of the categories, depending on the type of scale of event. Some examples included in the analysis are:

- Aquifer Contamination
- Excessive Venting
- Wellhead Release
- Equipment Corrosion
- Operations Disturbance
- Subsurface Contamination
- Blowout
- Storage Vessel Release
- Road Disturbance
- Excessive Flaring
- Water Resources
- Spills and Leaks
- Noxious Emissions
- Waste Disposal
- Offset Well Release
- ... and more.

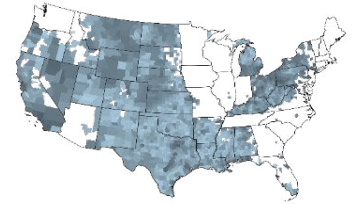
Step 1: Inherent Profile

Every location and type of operation has different risk factors and drivers, our assessment starts by understanding how this type of operation and locations compare to others via systematically evaluating against our facility datasets.

Example: Based on the type of operations, the applicable inherent profile range is narrowed from 0-100 (higher is worse) to 18-67. Then based on local factors exposure, the inherent profile score is determined within that applicable range to be 41.0.

Applicable Range: 18-67

Relative measure of relevant local and asset risk factors



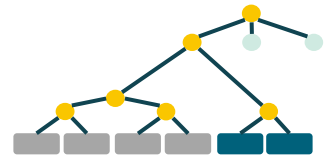
Step 2: Control Measures

Controls are evaluated at the levels of policy, plan, and execution. We assess control quality versus a range of industry practices which we have distilled into approximately 20 technical scoring libraries and rubrics. We then map how controls interact with one another to form a control system and score that control system.

Example: Based on the combination of controls in place, and evaluating with technical rubrics, the controls in place merit a 3.4 overall score out of 5.0 (higher is better).

Max Score: 5.0

Measure of quality of policy, plan and execution framework to control risk



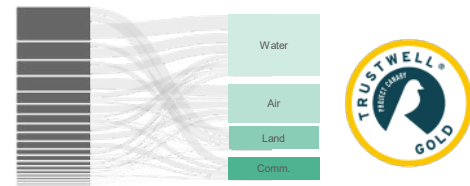
Step 3: Performance Rating

Inherent profile factors and control measures are mapped to specific events. From their combination we calculate a performance score. This is done on the event level, as well as in aggregate for the facility. Events are mapped to the categories of Water, Air, Land and Community, to allow category scoring as well.

Example: The reasonably low inherent risk profile score of 41.0, combined with strong control measures combines for an overall performance score of 112, corresponding to TrustWell Gold.

Max Score: 150

Performance rating for the specific set of assets and operations.



Step 4: Continuous Improvement

A range of analytics is provided which are intended to assist the producer to identify, prioritize and implement actions for continuous risk and impact reduction, and operational improvement.

Examples include risk reduction vs. cost grids, and prioritization bubble charts.



Well Count: 5



Scoring and Analytics Summary – Patriot Pad

Inherent Profile

37.2

What Could Happen?

Relative measure of relevant local and asset risk factors.

Control Measures

3.4

How Well Is It Controlled?

Measure of quality of policy, plan and execution framework to control risk

Performance Rating

116.2

What Is Overall Performance?

Performance rating for the specific set of assets and operations

Water



115.9

What Is Performance for Water?

Performance rating for the events that specifically impact water.

Air



116.5

What Is Performance for Air?

Performance rating for the events that specifically impact air.

Land



117.5

What Is Performance for Land?

Performance rating for the events that specifically impact land.

Community



124.5

What Is Performance for Community?

Performance rating for the events that specifically impact community

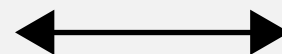
The below table provides a detailed breakdown of the underlying impact and risk drivers and controls which aggregate into the overall Performance Score.

| Event | 1 | 2 | 3 | | | | |
|------------------------------|--------------------|----------------------------|------------------------------|-------|-------|-------|-----------|
| | Inherent Profile | Control Measures | Performance Rating | Water | Air | Land | Community |
| | What Could Happen? | How Well is it Controlled? | What is Overall Performance? | | | | |
| OVERALL | 37.2 | 3.4 | 116.2 | 115.9 | 116.5 | 117.5 | 124.5 |
| Annular Migration | 36.0 | 3.5 | 117.4 | 117.4 | | | |
| Auto | 23.7 | 3.3 | 122.3 | | 122.3 | | 122.3 |
| Chemical Release | 36.7 | 3.5 | 116.7 | 116.7 | | 116.7 | |
| Chemical Waste | 33.8 | 3.2 | 113.8 | 113.8 | | 113.8 | |
| Drilling Fluid Contamination | 30.0 | 3.2 | 116.5 | 116.5 | | 116.5 | |
| Equipment Release | 45.7 | 3.5 | 112.2 | 112.2 | 112.2 | 112.2 | |
| Exhaust | 19.7 | 2.8 | 114.0 | | 114.0 | | |
| Flowback Fluids | 50.0 | 3.3 | 106.4 | 106.4 | | 106.4 | |
| Fluid Transfer Release | 31.7 | 3.5 | 120.2 | 120.2 | | 120.2 | |
| Impoundment Release | 40.0 | 3.3 | 111.3 | 111.3 | | 111.3 | |
| Operations Disturbance | 30.8 | 3.9 | 127.8 | | 127.8 | 127.8 | |
| Personnel Safety | 61.5 | 3.4 | 101.1 | | | | 101.1 |
| Produced Water | 27.0 | 3.2 | 118.6 | 118.6 | | 118.6 | |
| Storage Vessel Release | 30.0 | 3.4 | 119.9 | 119.9 | 119.9 | 119.9 | |
| Storm Water Run-off | 18.0 | 4.0 | 136.0 | 136.0 | | 136.0 | |
| Subsurface Well Control | 38.0 | 3.5 | 116.1 | 116.1 | | | |
| Surface Well Control | 64.1 | 3.5 | 101.7 | 101.7 | 101.7 | 101.7 | |
| Uncontrolled Fracture | 55.3 | 3.2 | 102.0 | 102.0 | | | |
| Vessel Corrosion | 29.0 | 3.4 | 120.6 | 120.6 | | 120.6 | |
| VOC Emissions | 33.0 | 3.4 | 117.8 | | 117.8 | | |
| Water Resources | 34.6 | 5.0 | 150.0 | 150.0 | | 150.0 | 150.0 |
| Well Intersection | 24.0 | 3.2 | 120.6 | | | | |
| Wellhead LOPC | 63.3 | 3.0 | 90.5 | 90.5 | | 90.5 | |

Controls are evaluated at the levels of Policy, Plan, and Execution. We assess control quality versus a range of industry practices which we have distilled into approximately 20 technical scoring libraries and rubrics. We then map how controls interact with one another to form a control system, score that control system, and map which control systems control different events.

Legend: Component Scores

1



5

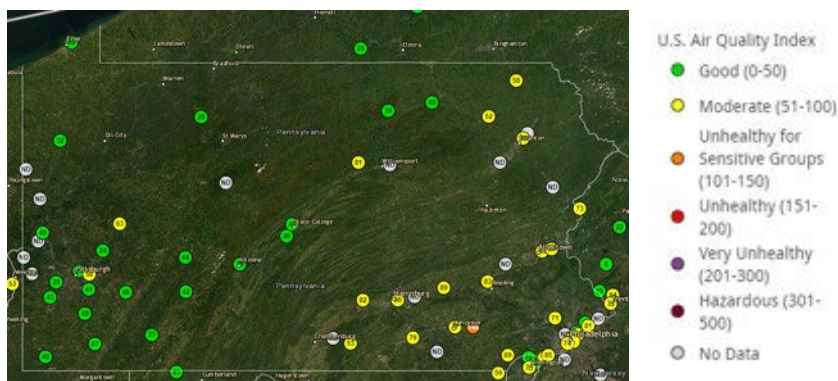
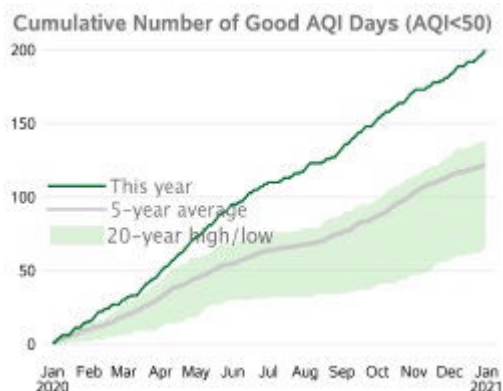
Below
Expectations

Exemplary

| | 1.0-5.0 Control Quality | Components | | | Comments |
|----------------------------------|-------------------------------|------------|------|-----------|---|
| | | Policy | Plan | Execution | |
| Surface Casing | 3.00 | 3.0 | 3.0 | 3.0 | Standard Surface Casing Practices. |
| Intermediate Casing | 3.00 | 3.0 | 3.0 | 3.0 | Standard Intermediate Casing Practices. |
| Production Casing | 3.67 | 3.0 | 4.0 | 4.0 | Gas-Tight premium threads utilized for Production Casing. |
| Surface Cement | 3.67 | 4.0 | 4.0 | 3.0 | Lab testing performed at actual bottom-hole temperature and pressure obtained through measurements. |
| Intermediate Cement | 4.00 | 5.0 | 4.0 | 3.0 | Open-hole Caliper log was run to verify hole volumes prior to cementing. |
| Production Cement | 4.00 | 5.0 | 4.0 | 3.0 | Cementing Best Practices Document provided outlines a high level of cementing considerations. |
| Emergency Response | 3.67 | 4.0 | 4.0 | 3.0 | No-Notice drills are outlined in Company policy, however there is no evidence of field-level implementation. |
| Environmental Programs (Exhaust) | 3.00 | 3.0 | 3.0 | 3.0 | Standard exhaust mitigation practices. |
| Frac Ops | 3.33 | 3.0 | 3.0 | 4.0 | Standard Frac Ops practices. |
| Pits-Tanks-Impoundments | 2.67 | 4.0 | 2.0 | 2.0 | Tanks are located on adequately sized containment; however, evidence of vegetation and tears are present. |
| Reclamation | 3.00 | 3.0 | 3.0 | 3.0 | Standard Reclamation practices. |
| Spill Response | 5.00 | 5.0 | 5.0 | 5.0 | In-depth Spill Response plan outlines approved spill response equipment and contractors. |
| Well Control (Completions) | 3.67 | 4.0 | 4.0 | 3.0 | Barriers and transitions accounted for in the completions plans. |
| Well Control (Drilling) | 3.33 | 4.0 | 4.0 | 2.0 | BOP requirements and testing procedures are outlined in the Drilling Program. |
| Well Collision | 3.00 | 3.0 | 3.0 | 3.0 | Standard Anti-Collision Practices. |
| Well Integrity | 3.00 | 3.0 | 3.0 | 3.0 | Annuli are monitored through SCADA. |
| Environmental Programs (Venting) | 4.00 | 4.0 | 4.0 | 4.0 | Implementation of Instrument air. |
| Spill Prevention | 4.33 | 5.0 | 5.0 | 3.0 | In-depth Spill Prevention Plan outlining types on containment on each pad, as well as required training for operators. |
| Environmental Programs (Water) | 5.00 | 5.0 | 5.0 | 5.0 | Reports water usage metrics to Colorado State University as a part of the Freshwater Verified Attribute. Recycles 100% of produced water. |
| Operational Impacts | 3.50 | 3.0 | 3.5 | 4.0 | Operator implements voluntary operating hours. |
| Waste Management | 2.77 | 3.3 | 3.0 | 2.0 | Waste Management Plan outlines required training, however there is no evidence of participation. |
| Wellhead | 3.00 | 3.0 | 3.0 | 3.0 | Wellhead utilizes dual master valves. |

Summary: The table above is designed to illustrate key categories within the TrustWell certification. Each category is reviewed at the Policy, Plan, and Execution level.

Every location and type of operation has different risk factors and drivers, our assessment starts by understanding how this type of operation and locations compare to others via systematically evaluating against our facility datasets, leveraging public and proprietary data.



Summary

Standard Energy has placed significant emphasis on emissions reductions across their assets.

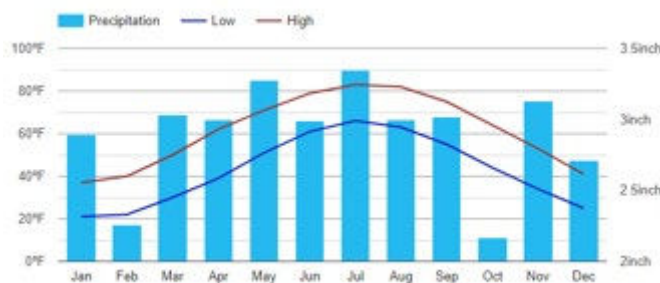
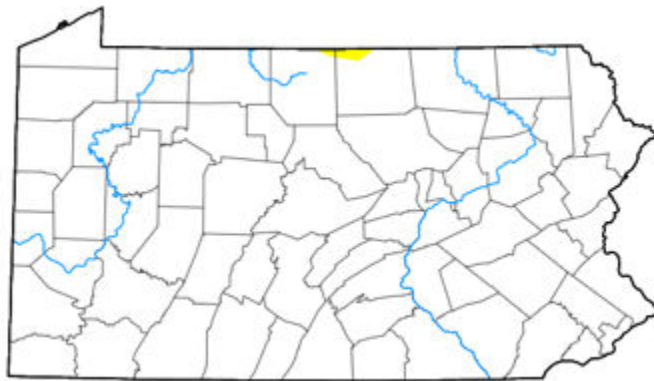
- Implementation of real-time continuous methane monitoring.
- Utilization of Dual Fuel Drilling Rigs and Frac Fleets.
- Installation of low-bleed pneumatic controllers across all assets.
- Actively retrofitting legacy pads with low-bleed pneumatic controllers and LEL sensors.
- Implementation of instrument air in future pads.
- In-depth site-specific LDAR plans outlines leak-prone equipment and provides a monitoring path for technician to follow.

Documentation

Documentation Reviewed during the TrustWell Certification includes:

- Site Visit Observations
- Subject Matter Expert (SME) Interviews
- Site-Specific LDAR Plans
- Standard_Facility_Upgrades_2022
- Standard_Air_Monitoring_Plan_2022

Standard Energy's area of operations has a very low water stress index, suggesting that the use of freshwater would have a limited impact on the local area.



Annual Precipitation: 34.83"

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|--------|-------|-------|-------|-------|------|
| Current | 99.79 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week 05-24-2022 | 99.79 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago 03-01-2022 | 86.33 | 13.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-04-2022 | 87.66 | 12.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Water Year 09-28-2021 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| One Year Ago 06-01-2021 | 86.30 | 13.70 | 0.00 | 0.00 | 0.00 | 0.00 |

Intensity:

| | |
|---------------------|------------------------|
| None | D2 Severe Drought |
| D0 Abnormally Dry | D3 Extreme Drought |
| D1 Moderate Drought | D4 Exceptional Drought |

Standard Energy operates in a region that generally lacks significant water stress. That said, significant water challenges exist as a result of topography, spill pathways, and precipitation severity.

- 100% flowback/produced water volumes recycled for completions activities.
- Installation of permanent water transfer pipelines.
- Pads have well-maintained berms and excellent stormwater management practices.
- Water sampling program beyond regulatory requirement.
- Recycles produced water from nearby operators.

Documentation reviewed during the TrustWell Certification includes:

- Site Visit Observations
- Subject Matter Expert (SME) Interviews
- Stormwater Management Practices
- Standard_WaterTracking_2022
- Spill Prevention Control and Countermeasures Program

Land values in Pennsylvania are relatively consistent. The localized area is predominately rural, with small towns appearing throughout the region.

Pennsylvania provides unique topographical challenges for operations.



Farm Real Estate Average Value per Acre – Regions, States, and United States: 2017-2021

| Region and State | 2017 | 2018 | 2019 | 2020 | 2021 | Change 2020-2021 |
|---------------------|-----------|-----------|-----------|-----------|-----------|---------------------|
| | (dollars) | (dollars) | (dollars) | (dollars) | (dollars) | (percent) |
| Northeast | 5,380 | 5,550 | 5,690 | 5,710 | 6,000 | 5.1 |
| Connecticut | 12,100 | 12,300 | 12,200 | 12,000 | 12,500 | 4.2 |
| Delaware | 8,250 | 8,410 | 8,950 | 8,950 | 9,300 | 3.9 |
| Maine | 2,370 | 2,370 | 2,410 | 2,490 | 2,600 | 4.4 |
| Maryland | 7,620 | 7,860 | 8,060 | 8,080 | 8,670 | 7.3 |
| Massachusetts | 10,800 | 10,900 | 11,100 | 11,300 | 13,700 | 21.2 |
| New Hampshire | 4,860 | 4,900 | 4,980 | 5,000 | 5,050 | 1.0 |
| New Jersey | 13,400 | 13,500 | 13,500 | 13,600 | 14,400 | 5.9 |
| New York | 3,160 | 3,230 | 3,250 | 3,150 | 3,270 | 3.8 |
| Pennsylvania | 6,030 | 6,250 | 6,470 | 6,600 | 6,800 | 3.0 |
| Rhode Island | 14,900 | 15,200 | 15,600 | 16,000 | 16,400 | 2.5 |
| Vermont | 3,470 | 3,540 | 3,630 | 3,550 | 3,900 | 9.9 |

Local topography has a significant impact on operations both from a site selection standpoint and EHS perspective. Standard Energy has appropriately mitigated the risks affiliated with operational impacts.

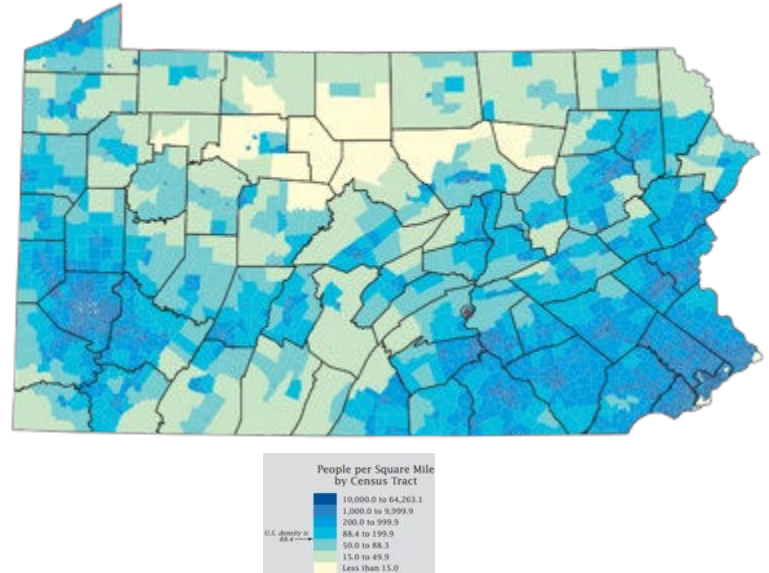
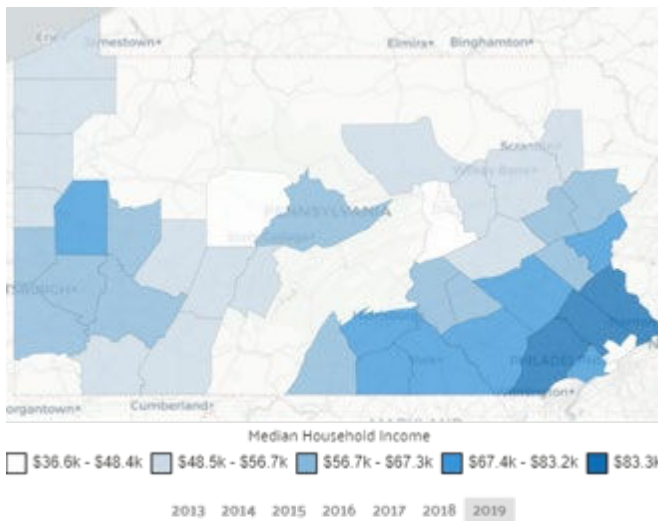
- Implementation of voluntary operating hours.
- In-depth pad selection process involving environmental and community impact studies.
- Geotechnical Surveys are performed prior to pad construction to verify geologic integrity.
- Voluntary improvement of local infrastructure (Roads, parks, etc.)
- Light modeling is performed prior to pad construction to minimize impacts to nearby landowners.
- Surface waters are monitored throughout construction and heavy operation phases.

Documentation reviewed during the TrustWell Certification includes:

- StandardEnergy_MasterERP
- Patriot_Area_of_Review
- Subject Matter Expert (SME) Interviews
- Site Visit Observations
- Standard_AHG_Study

Standard Energy's operations have limited urban interaction outside of traffic & hauling considerations, but nearby landowners are prevalent.

The local area is relatively familiar with oil & gas activities.



Income & Poverty

| | |
|--|----------|
| Median household income (in 2020 dollars), 2016-2020 | \$64,994 |
| Per capita income in past 12 months (in 2020 dollars), 2016-2020 | \$35,384 |
| Persons in poverty, percent | 11.4% |

Summary

Operations are in established rural communities, that have had direct interactions with the oil & gas industry. Observed no immediate issues with landowners, roadways and pads were in excellent condition.

- Waste is deliberately routed away from townships and residential areas.
- Pads implement continuous monitoring and remote shut-in capabilities on wells.
- Strong relationship with local first responders through the participation in site tours and training.
- Geotechnical Surveys are performed prior to pad construction to verify geologic integrity.
- Involvement with local schools and communities provides education on oil and gas operations.
- Formal process in place for continuous public input and engagement.

Documentation

Documentation reviewed during the TrustWell Certification includes:

- Site Visit Observations
- Subject Matter Expert (SME) Interviews
- Waste_Management_Program
- Standard_TableTop_2022

Our assessment of Control Measure quality is driven by a number of tangible strengths and opportunities which are highlighted below.

Strengths

An Ideal Neighbor

Standard Energy is a great neighbor to local communities, working to educate, accommodate, and create economic and environmental value through efforts such as:

- Facilitating strong relationships with local first responders through annual emergency response training and Pad/Rig tours.

Continuous Emissions Monitoring

Emissions: Industry-leading performance in methane emission reduction. Very strong LDAR program.

Standard Energy has implemented Continuous monitoring systems throughout their assets. This provides real-time emissions monitoring reported to the Standard Energy dashboard every minute allowing for immediate notification, mitigation, and response.

Environmental Leadership

Standard Energy shows dedication to reducing impacts to the environment through the reuse and recycling of produced water. Not satisfied with recycling 100% of their own produced water, Standard Energy actively accepts produced water from nearby operators.

Executive and Management lead by example, participating in the training and exercises.

Opportunities

Continued Emissions Reduction

Standard Energy has made amazing strides towards reducing emissions through the installation of low-bleed pneumatic devices and use of Instrument air on future pads.

Retrofitting existing pads with instrument air will completely mitigate venting associated with pneumatics.

Installation of a blanket gas system can mitigate further corrosion and eliminate tank venting.

Spill Prevention and Response

Standard Energy assets exhibit well maintained berms and site drainage to mitigate potential risk from spills. However, there is a high risk of potential freshwater contamination due to the local topography. The addition of secondary containment under all fluid processing equipment and vegetation management within existing containment will further mitigate spill risk. In addition, annual table-top exercises with local first responders, stakeholders and management will ensure a proper spill response.

Basis of Designs

Standard Energy has performed a significant amount of due diligence during the development of their assets. This can be further supplemented through:

- A formal stress check which accounts for variables such as tri-axial stresses and temperature variations to validate engineering design.
- The development of a central document (Basis of Design) that incorporates various factors such as geology, temperature variations, safety factors and stress checks which will serve as a governing document for future D/C operations.

Summary: Standard Energy has a demonstrated commitment to environmental stewardship and being a good corporate citizen to the communities it operates in.

The areas highlighted as opportunities may serve to further cement Standard Energy's approach and assist in mitigating any future or potential challenges.

Project Canary recognizes that risk and impact management is an exercise in recognizing and prioritizing tradeoffs. The following lists opportunities and best practices which will have the greatest impact on improvement in the Performance Score.

Frac Ops

- Utilize multiple layers of containment to mitigate risk associated with unwanted spills or releases.
- Create a “valve” handling team to prevent future instances of closing the well on wireline.
- Utilize technology to keep contractors out of the red zone such as Riglock or Intelligent Well Systems.
- Outline potential faults and hazards in the Completion Program.
- Outline equipment and pressure testing requirements in the Completion Program.

Well Control
Drilling

- Incorporate no-notice drills into operations.
- Send existing and future drilling engineers and operators to well control school.
- Hire an external contractor to assess operations and perform a well control “audit”.

Spill
Prevention

- Place all fluid processing equipment on permanent containment.
- Retrofit existing containment to be pre-cast concrete containment to mitigate damage caused by vegetation.
- Soil cement the pad to mitigate soil contamination

Spill
Response

- Implementation of a Preventative Maintenance program to address breaches of secondary containment (Vegetation, tears, etc.)
- Hold Table-Top Exercises with Local First Responders, management, and stakeholders.
- Outline remediation methods, waste management and strategies within the SPCC plan.
- Provide guidance within the SPCC plan for offsite transporter accidents.

Pits-Tanks-
Impoundments

- Implementation of a Blanket Gas System to mitigate unwanted venting and internal corrosion.
- Utilize SCADA to monitor tank levels.
- Repair liners within existing containment.

Waste
Management

- Track and record waste and quantities from generation to disposal.
- Review and revise Waste Management Plan annually.
- Waste Management Plan is coordinated with operations and monitored for compliance.
- Outline waste minimization and recycling plans within the Waste Management Plan.

Well
Collision

- Create well-specific anti-collision documentation.
- Create a governing document outlining anti-collision methodology and practices.

