

**CHESTNUT RIDGE PUBLIC SERVICE DISTRICT
BARBOUR COUNTY, WV**

CONTRACT #1 – WATER SYSTEM IMPROVEMENTS

ADDENDUM #3

NOVEMBER 11, 2022

THRASHER PROJECT #101-010-1052

TO WHOM IT MAY CONCERN:

A. SPECIFICATIONS

Specification Section 099050 – Repainting of Steel Water Storage Facility. Please discard the version previously provided and use the attached.

B. CLARIFICATIONS

1. Project locations with decimal GPS coordinates have been provided as part of this addendum.

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received until 1:00 pm local time on Wednesday, November 16, 2022, at 20 Columbia Street, Philippi, WV. After 1:00 pm local time on November 16, 2022, bids will be received until 2:00 pm local time at the Philippi City Building, City Council Chambers, 344 South Main Street, Philippi, WV. The bids will then be publicly opened and read aloud at 2:00 pm local time at the Philippi City Building, City Council Chambers. The Bid opening will take place at the same location and room where the Pre-Bid Conference was held. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.


STEVEN V. BUCHANAN, P.E.
Project Engineer

Enclosures: Specifications Section 099050 – Repainting of Steel Water Storage Facility
Lead Paint Testing Results
GPS Locations for Tanks, BPS, and PRV

SECTION 099050 - REPAINTING OF STEEL WATER STORAGE FACILITY

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 01, and all related Specification Sections, apply to this section.

1.2 DESCRIPTION

A. Scope:

1. This section of the specifications contains the detailed criteria for the selection of materials, surface preparation, and the furnishing of all paint, labor, equipment and appliances for field painting of steel water storage facilities specified herein: ANSI/AWWA D102 “AWWA Standard for Painting Steel Water Storage Tanks.”

B. Definitions:

1. Specific coating terminology used in this section is in accordance with definitions contained in ASTM D16, ASTM D3960, and the following definitions:
 - a. Dry Film Thickness (DFT): the thickness of one (1) fully cured continuous application of coating.
 - b. Field Coat: the application or the completion of application of the coating system after installation of the surface at the site of the work.
 - c. Shop Coat: One (1) or more coats applied in a shop or plant prior to shipment to the site of erection or fabrication, where the field or finishing coat is applied.
 - d. Tie Coat: An intermediate coat used to bond different types of paint coats. Coatings used to improve the adhesion of a succeeding coat.
 - e. Photochemically Reactive Organic Material: Any organic material that will react with oxygen, excited oxygen, ozone or other free radicals generated by the action of sunlight on components in the atmosphere giving rise to secondary contaminants and reaction intermediates in the atmosphere which can have detrimental effects.
 - f. Volatile Organic Compound (VOC) Content: The portion of the coating that is a compound of carbon, is photochemically reactive, and evaporates during drying or curing, expressed in grams per liter or pounds per gallon.
 - g. Touch-Up Painting: The application of paint on areas of painted surfaces to repair marks, scratches, and areas where the coating has deteriorated to restore the coating film to an unbroken condition.

1.3 PRE-JOB MEETING

- A. A pre-job meeting shall be held to discuss the technical aspects of the specified coatings and their application characteristics. All contractors bidding are highly encouraged to attend this meeting.

1.4 CONTRACTOR PRE-QUALIFICATION

- A. All contractors bidding shall provide documentation of having repainted five (5) potable water tanks within 12 months of the bid date.
B. Access to the site can be obtained by contacting the Owner.

1.5 QUALITY ASSURANCE

A. References:

1. This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.
2. Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids, Invitation to Bid, or on the effective date of the Agreement if there were no Bids. If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued or replaced.

Reference	Title
ASTM D16	Standard Terminology Relating to Paint, Varnish, Lacquer and Related Products
ASTM D2200 (SSPC-Vis1)	Pictorial Surface Preparation Standards for Painting Steel Surfaces
ASTM D3359A	Methods for Measuring Adhesion by Tape Test
ASTM D3960	Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings
ASTM D4417	Field Measurement of Surface Profile of Blast-Cleaned Steel
F 595 B	Federal Standard Colors
SSPC	SSPC Painting Manual – Systems and Specifications, Vol. 2

B. Standardization

1. Materials and supplies provided shall be the standard products of Manufacturers. Materials in each coating system shall be the products of a single Manufacturer.

2. The standard products of Manufacturers other than those specified will be accepted when it is demonstrated to the Engineer that they are equal in composition, durability, usefulness and convenience for the purpose intended. Requests for substitutions will be considered, provided the following minimum conditions are met:
 - a. The proposed coating system shall use an equal or greater number of separate coats to achieve the required dry film thickness.
 - b. The proposed coating system shall use coatings of the same generic type as that specified.
 - c. Requests for substitution shall have directions for application and descriptive literature which includes generic type, percent solids by volume, volatile organic content (grams per liter), and information confirming that the substitution is equal to the specified coating system.
 - d. The Contractor shall provide a list of references where paint of the same generic type has been applied. The reference list shall give the project name, city, state, owner, phone number of owner, coating system reference and number, and year paint was applied.

1.6 DELIVERY AND STORAGE

- A. Materials shall be delivered to the job site in their original, unopened containers. Each container shall bear the following:
 1. Manufacturer's name
 2. Coating type
 3. Batch number
 4. Date of manufacture
 5. Storage life
 6. Special directions
- B. Materials shall be stored in enclosed structures and shall be protected from weather and excessive heat or cold. Flammable materials shall be stored in accordance with state and local codes.
- C. Materials exceeding storage life recommended by the Manufacturer shall be removed from the site.

1.7 RESPONSIBILITY

- A. The Contractor shall provide all materials, scaffolding, and other equipment and services required to prepare all surfaces and coat all surfaces as set forth in the Contract Documents. The Contractor shall be responsible for the final finish on all surfaces.

1.8 SUBMITTALS

- A. Before materials are delivered to the job site, the Contractor shall provide the following information in accordance with Section 013000 – Administrative Requirements.
 - 1. For each primer and finish coating, the Contractor shall furnish a Safety Data Sheet (SDS).
 - 2. For each primer and finish coating, the Contractor shall provide the Manufacturer's application instructions, which shall include the following:
 - a. Surface preparation recommendations.
 - b. Primer type, where required.
 - c. Maximum dry and wet mil thickness per coat.
 - d. Minimum and maximum curing time between coats, including atmospheric conditions for each.
 - e. Curing time before submergence in liquid.
 - f. Thinner to be used with each paint.
 - g. Ventilation requirements.
 - h. Minimum atmospheric conditions during which the paint shall be applied.
 - i. Allowable application methods.
 - j. Maximum allowable moisture content.
 - k. Maximum storage life.
 - 3. List of materials proposed to be used under this section and Manufacturer's data for each material.
 - 4. Color charts.

PART 2 – PRODUCTS

2.1 MANUFACTURER(S)

- A. Tnemec Company, Inc.
- B. The Sherwin Williams Company
- C. Engineer's Approved Equal

2.2 MATERIALS SELECTION, COLORS, AND LABELING

- A. The Contractor shall furnish information to the Engineer by way of shop drawing submittal for the proposed materials to be used in execution of the work. The information shall include the following:
 - 1. Complete product specification sheets
 - 2. Manufacturer's instructions
 - 3. Color selection guides
- B. If requested by the Engineer, the Contractor shall also secure a written statement from the

- painting manufacturer attesting to the compatibility of the proposed paint systems with the existing paint described hereinafter.
- C. The Engineer will prepare a color schedule based on the Owner's selections (except where colors are already specified herein) and return the same to the Contractor along with the reviewed shop drawings.
 - D. All materials shall be delivered to the site in manufacturer's sealed containers. The manufacturer shall label each container. Labels shall give the following:
 - 1. Manufacturer's name
 - 2. Brand
 - 3. Type of paint
 - 4. Color of paint
 - 5. Instructions for reducing
 - E. Thinning shall be done only in accordance with direction of the manufacturer and exclusively with the types of reducers recommended. Mixing or job tinting may be done when approved by the Engineer.

2.3 EXISTING PAINT SYSTEMS

- A. The existing interior coatings on the storage tank are to be completely removed in accordance with Steel Structures Painting Council Specifications SSPC-SP10 "Near White Blast". The exterior finish will be cleaned by using 3,000-4,000 PSI, 3.0 GPM minimum, pressure wash with Great Lakes Laboratories Extra Muscle Pre-Paint Cleaner or Engineer's Approved Equal and cleaned following SSPC-SP2 and SSPC-SP3 standards.
 - a. If holes in steel occur during sandblasting of existing water storage tanks, tanks shall be patched with steel plate before repainting is to occur.
- B. Protection of Grounds
 - 1. Contractor shall provide scaffolding and containment during sand blasting, priming and painting for protection of people and property, including all landscaping, driveways, roads, walks, buildings, utilities, etc. Any damage to such items shall be corrected by the Contractor at the Contractor's expense to the Owner's satisfaction.
- C. Abatement of Lead Based Paint
 - 1. The exterior paint system has been tested for lead paint. The interior paint system has NOT been tested for lead paint. Lead based paint test results will be included at the end of this specification. The Contractor shall provide containment of all loose paint removed from the interior and exterior tank where lead is present. The Contractor shall submit a lead paint abatement plan to the Engineer for approval prior to the start of any work performed on the tank.
 - 2. The Contractor shall comply with West Virginia State Code CFR16-35 cited as the West

Virginia "Lead Abatement Act."

3. The Contractor shall perform the following duties as part of the lead paint abatement plan:
 - a. Ensure that each of his or her employees or agents who will come in contact with lead or who will be responsible for a lead abatement project is licensed. Employees will be required to take a blood test prior to beginning work on this project. The blood test results shall be submitted to the Owner. Should the test results be greater than 40 micrograms/dl, the employee will not be permitted to work on this project.
 - b. Ensure that the project is supervised by a licensed lead abatement supervisor.
 - c. Maintain sampling records for each contained work area of a lead abatement project until it meets the minimum clearance standards established by the West Virginia Department of Environmental Protection.
 - d. Keep a record of the project and make the record available to the division and the divisions of commerce, labor, and environmental protection upon request. Records required by this subsection shall be kept for at least three years and shall include at a minimum:
 1. The name, address and license number of the individual who supervised the lead abatement project and each employee or agent who worked on the project.
 2. The location and design of the project, if applicable, and the amount of lead-containing material that was removed.
 3. The starting and completion date of the project and a summary of the procedures that were used to comply with all federal and state standards.
 4. The name and address of each disposal site where lead-contaminated waste was deposited and the disposal site receipts.
 - e. Contractor will be responsible for proper disposal of all discarded paint, rust debris, and sandblasting material for each tank. The tank(s) may or may not contain lead-based paint. If lead-based paint is encountered, the Contractor shall be responsible for legally removing, storing and disposing of the discarded lead-contaminated material. One (1) paint sample was taken from each of the following water storage tanks: Chestnut Ridge, Olive Hill, Arden, Sunrise, and Clemtown. The results are included at the end of this section for information only.

2.4 SCHEDULE OF NEW PRODUCTS

A. Products specified are as manufactured by Sherwin Williams or Tnemec Company, Inc.

1. Products for each specified function and system shall be of a single manufacturer.
2. All materials in contact with potable water must have been tested and approved by the ANSI/NSF Standard 61.

2.5 EXTERIOR REPAINT SYSTEM

A. The exterior surfaces shall be painted using the following system:

	Tnemec	Sherwin Williams
Prime – Gray	Tnemec Series 135-33GR IN05 Gray Chembuild @ 3.0 – 5.0 mils DFT.	Macropoxy 646 Fast Cure Epoxy @ 3.0 – 5.0 mils DFT.
Intermediate – Contrast Prime and Finish	Tnemec Series 135 Chembuild @ 3.0-5.0 mils DFT. *	Macropoxy 646 Fast Cure Epoxy @ 3.0 – 5.0 mils DFT.*
Finish – Selected by Owner	Tnemec Series 1075 Endure-Shield II @ 2.0 – 3.0 mils DFT.	Acrolon 218 HS or Hi-Solids Polyurethane @ 2.0 – 3.0 mils DFT.*
Total DFT	8.0 – 12.0 mils	8.0 – 12.0 mils
*Notes:	Apply one (1) complete coat of each paint. Certain finish coat colors may require two (2) coats. Color shall be determined by Engineer/Owner	Apply one (1) complete coat of each paint. Certain finish coat colors may require two (2) coats. Color shall be determined by Engineer/Owner.

- B. The Contractor shall furnish to the Owner at least one (1) extra gallon to finish paint specified above for exterior paint for touch-up repairs.
- C. All materials shall be applied in accordance with manufacturer's directions and any thinning required shall be done in a manner and exclusively with the type of reduce recommended.
- D. Spray application may be used in conformance with applicable section of AWWA D102.
- E. All materials shall be applied under adequate illumination.

2.5 INTERIOR REPAINT SYSTEM

A. The interior surfaces shall be painted using the following system:

	Tnemec	Sherwin Williams
Prime - Gray	Series 94-H20 Hydro Zinc @ 2.0 – 4.0 mils DFT.*	Corothane 1 Galvapac 1K Zinc Rich Primer @ 2.0 – 4.0 mils DFT.*
Stripe Coat – Contrast Prime and Intermediate Coat	Series N140-15BL Tank White Pota-Pox Plus @ 2.0 – 3.0 mils DFT. Applied by brush or roller to all weld and sharp edges.	Macropoxy 5500 @ 2.0 – 3.0 mils DFT. *
Intermediate Coat – Contrast Weld Coat	Series N140-1255 Beige Pota-Pox Plus @ 4.0 – 6.0 mils DFT.	Macropoxy 5500 @ 4.0 – 6.0 mils DFT. *
Finish – Selected by Owner	Series N140-15BL Tank White Pota-Pox Plus @ 5.0 – 6.0 mils DFT.	Macropoxy 5500 @ 5.0 – 6.0 mils DFT.
Total DFT	11.0 – 16.0 mils	11.0 – 16.0 mils
*Notes:	Apply one (1) complete coat of each paint. For the Weld Coat, apply by brush to all welds and sharp edges. Otherwise, apply by spray application.	Apply one (1) complete coat of each paint. For the Weld Coat, apply by brush to all welds and sharp edges. Otherwise, apply by spray application.

- B. All coatings shall be a “system” and shall be thoroughly compatible each with the other. Not coatings or primers of different manufacturers shall be applied upon each other. The contractor shall submit the coatings schedule to the Owner. Coatings must be approved for potable water use.
- C. Paint shall not be applied when the temperature of the steel or paint is below 40 degrees F. Paint shall not be applied when the surface temperature is expected to drop 32 degrees F before the paint has dried. With chemically cured coatings, (catalyzed epoxies, etc.) particular care shall be exercised to follow manufacturer’s special temperature requirements (usually 50 degrees F or above).
- D. Paint shall not be applied in rain, snow fog, mist or when the steel temperature is below the dew point, resulting in condensation.
- E. Each coat of paint shall be in proper state of cure or dryness before the application of the succeeding coat. A minimum of 24 hours shall be allowed between coats.
- F. All weld seams shall receive one (1) brush coat of the specified primer after the sandblasting and cleaning has been completed. The brush prime coat is in addition to the specified prime coat.
- G. All coats shall be smooth, free of brush marks, streaks, laps or pile up of paints, and skipped or missed area.

2.6 TOUCH-UP AND REPAIR

- A. At completion, all painted surfaces and coatings shall be inspected. All damaged spots, whether due to defective materials or workmanship or defects of surfaces covered shall be touched up and the finish restored. Additional coats of paint and coatings required to cover all spots or discoloration of every sort shall be applied at no additional costs to the Owner.
- B. The contractor shall furnish to the Owner at least one (1) extra gallon of finish paint specified above of exterior paint for touch-up repairs due to vandalism.

2.7 MISCELLANEOUS REPAIRS

- A. The Contractor shall perform the following miscellaneous repairs to the existing water storage tanks:
 - 1. Seal the bottom of the tank to the foundation using a polyurethane caulk approved by AWWA.
 - 2. Pressure wash the exterior of the tank, hand tool clean, surface preparation according to SSPC-SP2 and SSPC-SP3, spot prime, and repair the exterior of the tank. Weld pit, 1-inch diameter, repair as needed.
 - 3. Seal interior seams using Sikaflex 1a (or Engineer's approved equal) on all un-welded interior roof lap seams.
 - 4. Seal circumference roof to rim angle connection using Sikaflex 1a. (or Engineer's approved equal)
 - 5. Clean debris from the interior of the tank.
 - 6. Sand blast interior to an SSPC #10, stripe coat all seams and welds and repair interior of the tank.
 - 7. Perform all other repairs and upgrades shown in the drawings for each water storage tank.

2.8 CATHODIC PROTECTION SYSTEM

- A. Cathodic protection system for the tanks shall be of the impressed current design. The impressed current cathodic protection shall conform to AWWA D104 latest edition.

PART 3 – EXECUTION

3.1 MANUFACTURER(S)

- A. Surfaces shall be clean, dry, and adequately protected from dampness. Surfaces shall be free of any material, which will adversely affect adhesion or appearance of painting and coating.
- B. Cleanliness shall be checked by wiping the prepared steel surface with a white cloth dampened with manufacturer's thinner for the particular paint system. If the surface is not clean, the contractor shall take steps to clean the surface more thoroughly before applying paint.
- C. All surface preparation procedures should be done in conformance with local, state, and federal OSHA and EPA guidelines. Waste generation and removal should be in conformance with all OSHA and EPA guidelines.

3.2 INTERIOR SURFACES

- A. Interior surfaces shall have all existing paint removed with surface preparation SSPC –SP10 (near white metal blast). All rust pits, which penetrate 50% or more of the thickness of the steel, shall be repaired by welding. All welding shall be done in conformity with “ANSI/AWWA D100-96 Welded Steel Tanks for Water Storage”.

3.3 EXTERIOR SURFACES

- A. Exterior surfaces shall have existing paint removed with surface preparation to include 3,000-4,000, 3.0 GPM minimum, high-pressure wash with Great Lakes Laboratories Extra Muscle Pre-Paint Cleaner or Engineer's approved equal and cleaned following SSPC-SP2 and SSPC-SP3 standards.

3.4 WELDS

- A. Existing weld spatter or weld spatter introduced during repair or renovation procedures shall be removed by power tool cleaning.

3.5 APPLICATION

- A. All materials shall be applied in accordance with manufacturer's directions and any thinning required shall be done in a manner and exclusively with the type of reducer recommended.
- B. All materials shall be applied under adequate illumination.
- C. Materials shall be thoroughly mixed and kept at a uniform consistency during application. Pot life limitations will be enforced.

- D. Finished work shall be uniform and of the approved color. Make edges of paint adjoining other materials or colors sharp and clean without overlapping.
- E. Total minimum dry film thickness of paint films specified herein will be measured with an Elcometer or similar instrument to determine acceptability. Special attention shall be given to weld seams.
- F. No painting or finishing shall be done under conditions, which are unsuitable for the production of good results. The surfaces to be painted shall be at least 5 feet above the dew point. Apply all paint consistent with temperature limitations as noted by the manufacturer. Do not apply finishes in spaces where dust is being generated.

3.6 FIRST ANNIVERSARY INSPECTION

- A. The Owner shall establish a time period for inspection of paint systems within the contract guarantee period in accordance with Section 9 of AWWA D102. The Contractor shall comply with said Section 9 at no additional cost to the Owner.

3.7 DISINFECTION AND STERILIZATION

- A. Sufficient cure, per the manufacturer's recommendations, of the final coat on the interior wet surface shall be allowed before the elevated tank is sterilized and filled with water.
- B. The tank shall be sterilized using Chlorination Method No. 2 or 3 per the requirements of AWWA C652.
- C. The Owner, free of charge to the Contractor, shall furnish and dispose of sufficient water for testing and sterilization. The water shall be at proper pressure to fill the tank to the maximum working level. Any leaks in the tank that are disclosed by this test shall be repaired by gouging out defective areas and re-welding. No repair work shall be done on any joint unless the water in the tank is at least two (2) feet below the joint being repaired. Any paint damaged by repairs shall be properly restored.
- D. Upon completion of the sterilization procedure, the Owner or his representative shall arrange and bear the cost of any bacteriological testing of water samples from the tank may be required. The tank shall not be placed in service until safe test results are obtained.

3.8 WORKMANSHIP AND CLEANUP

- A. The contractor shall keep the premises clean at all times and shall remove all rubbish as often as directed by the Engineer. All debris is to be removed from the grounds.

3.9 BASIS OF PAYMENT

- A. Measurement and payment for all work and materials described in these specifications shall

be included in the Contractor's lump sum bid prices as shown in the Bid Schedule.

END OF SECTION 099050



DATE/TIME SAMPLED:* C

DATE-TIME RECEIVED: 10-27-22 1703

LABORATORY ID: TG 221027-1

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination

Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

O Out of holding. Time does not meet 40 CFR 136.141 compliance.

T This result is not supported by our certification ID.

A Does not meet 40 CFR 136/141 compliance.

C Does not meet 47 CSR 32 compliance.

Narrative: C: NO SAMPLER/SAMPLER SIGNATURE OR DATE/TIME SAMPLED ON COC.

Approved



VICTORIA L. HOOPS, PRESIDENT

COMPANY: THE THRASHER GROUP

DATE/TIME SAMPLED:* C

SAMPLE ID: OLIVE HILL TANK

DATE/TIME RECEIVED: 10-27-22 1703

SAMPLED BY: C

LABORATORY ID: TG 221027-2

[illegible]

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

E Estimated Reported value exceeded calibration range.

Reported value is an estimate because concentration is less than reporting limit.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in OC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U	Compound was analyzed for, but not detected.
---	--

O Out of holding. Time does not meet 40 CFR 136.141 compliance.

T This result is not supported by our certification ID.

A Does not meet 40 CFR 136/141 compliance.

C Does not meet 47 CSR 32 compliance.

Narrative: C: NO SAMPLER SAMPLER SIGNATURE OR DATE TIME SAMPLED ON COC.

Approved

2 apl



DATE/TIME SAMPLED:* C

DATE TIME RECEIVED: 10-27-22 1703

LABORATORY ID: TG 221027-3

*Client Provided

****See Attached.** The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

O Out of holding. Time does not meet 40 CFR 136.141 compliance.

This result is not supported by our certification ID.

A Does not meet 40 CFR 136/141 compliance.

C Does not meet 47 CSR 32 compliance.

Narrative: C: NO SAMPLER/SAMPLER SIGNATURE OR DATE/TIME SAMPLED ON COC.

Approved

2-4-16



DATE/TIME SAMPLED:* C

DATE-TIME RECEIVED: 10-27-22 1703

LABORATORY ID: TG 221027-4

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted.

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

E Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and/or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

O Out of holding. Time does not meet 40 CFR 136.141 compliance.

This result is not supported by our certification ID.

A Does not meet 40 CFR 136.141 compliance.

C Does not meet 47 CSR 32 compliance.

Narrative: C: NO SAMPLER SAMPLER SIGNATURE OR DATE TIME SAMPLED ON COC.

Approved

[Handwritten signature]

VICTORIA L. HOOPS, PRESIDENT

COMPANY: THE THRASHER GROUP

DATE/TIME SAMPLED:* C

SAMPLE ID: CLEMTOWN TANK

DATE TIME RECEIVED: 10-27-22 1703

SAMPLED BY: C

LABORATORY ID: TG 221027-5

[illegible]

*Client Provided

**See Attached. The following results meet or exceed requirements and standards set forth by the certifying authority except where noted

Data Qualifiers

B Analyte found in reagent blank. Indicates possible reagent or background contamination.

Estimated Reported value exceeded calibration range.

J Reported value is an estimate because concentration is less than reporting limit.

PND Precision not determined.

R Sample results rejected because of gross deficiencies in QC or method performance. Re-sampling and or re-analysis is necessary.

RND Recovery not determined.

U Compound was analyzed for, but not detected.

0 Out of holding. Time does not meet 40 CFR 136.141 compliance.

This result is not supported by our certification ID.

Does not meet 40 CFR 136/141 compliance.

C Does not meet 47 CSR 32 compliance.

Narrative: C: NO SAMPLER: SAMPLER SIGNATURE OR DATE/TIME SAMPLED ON COC.

Approved

24/11

This non-conformance sheet is being used for the following reasons:

Client *THE THASSEN GROUP*

Date/Time Received: *10-27-22 1703*

☐ Chain of Custody does not meet one or more of the requirements of 47 CSR 32 S.1.1a-h.

☐

Explanation of any items checked:

- ☐ Sample(s) not properly preserved by 40 CFR 136.
- ☐ Temperature of sample(s) received is not $\leq 6^{\circ}\text{C}$.
- ☐ Temperature of biological sample(s) received are not $< 10^{\circ}\text{C}$.
- ☐ Sample(s) received frozen.
- ☐ Sample(s) received outside of EPA maximum holding time.
- ☐ Sample(s) not received in EPA approved container(s).
- ☒ Chain of Custody is missing one or more; sampling location, date and time of collection, collector's name, type(s) of preservation, number of containers per sample, type of sample (grab or composite) and any remarks.
- ☐ Sample ID's not labeled on container(s) and/or chain of custody.
- ☐ Chain of Custody not signed by client during one or more transfers.
- ☐ No Chain of Custody form received with sample(s)
- ☐ See Narrative

☐ Chain of Custody marked indicating one or more samples were improperly preserved.

☐ Analytical data resulting from samples improperly preserved will not be accepted as being in compliance.

Receiving Technician Signature: *LL*

Chestnut Ridge PSD Locations for Tanks, BPS, & PRV

Tank Locations		
Tank	Lat (Deg.)	Long (Deg.)
Arden	39.209812	-79.989006
Chestnut Ridge	39.158711	-80.011844
Clemtown	39.231829	-79.972089
Locust Grove	39.246512	-79.867735
Matlick	39.195657	-79.903789
Olive Hill	39.153440	-79.990563
Sunrise/Nestorville	39.180276	-79.925916

BPS Locations		
BPS	Lat (Deg.)	Long (Deg.)
BPS #1 (Morrel Hollow)	39.152208	-80.027601
BPS #2 (Polecat Hollow)	39.157045	-80.009126
BPS #3 (Clemtown)	39.228572	-79.991454
BPS #4 (Moatsville)	39.214874	-79.926650
BPS #5 (Richman)	39.191457	-79.913625
BPS #6 (Hiram)	39.253416	-79.907017
BPS #7 (Newlon)	39.242953	-79.879189

PRV Locations		
PRVs	Lat (Deg.)	Long (Deg.)
Bowmar Hill PRV and Solenoid Control Valve	39.199568	-79.995014
Clemtown PRV	39.223297	-79.952333
Dantown Bridge PRV	39.155371	-79.971193
Sunrise PRV and Solenoid Control Valve	39.176387	-79.927787
Righman PRV	39.190892	-79.915265
Hiram PRV	39.285374	-79.935783
Moatsville PRV	39.233899	-79.911977