



## Invitation for Bid No. 2022-043

### 12 Mile WRF Grit Facility Odor Control Media Replacement

**Due Date:** June 3, 2022  
**Time:** 2:00 PM Local Time  
**Submittal Location:** Union County Government Center  
Procurement Department  
500 N. Main Street, Suite 709  
Monroe, NC 28112

**Non-Mandatory Pre-Proposal Conference and Site Visit.** May 17, 2022. For the time and location, Refer to page 4 for details.

**Procurement Contact:**

Corey Brooks  
Procurement Specialist  
704.283.3683  
[corey.brooks@unioncountync.gov](mailto:corey.brooks@unioncountync.gov)

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## 2 NOTICE OF ADVERTISEMENT

**Union County, North Carolina**  
**IFB No. 2022-043**  
**12 Mile WRF Grit Facility Odor Control Media Replacement**

Sealed bids for the 12 Mile WRF Grit Facility Odor Control Media Replacement will be received by mail or hand delivery to Union County's Procurement Department until **2:00 PM** (local time) on **June 3, 2022** at the Union County Government Center, 500 North Main Street, Monroe, NC 28112. The public bid opening will be conducted outdoors, in the front entrance area of the Union County Government Center at the specified bid date and time. **Late bids will not be accepted.** If you plan to attend the bid opening, social distancing rules apply. This is a request to purchase and install one steel platform motor truck scale and associated electronic controls as described in this bid document.

\*On **June 3, 2022** beginning at **1:30 PM** local time, bids will be received by the Union County Procurement Department at the bid opening location, outdoors in the front entrance area of the Union County Government Center at 500 North Main Street, Monroe, NC 28112.

Bids will be received for a single prime contract. Bids shall be on a lump sum basis as indicated in the Bid Form.

A Non-Mandatory Pre-Bid and Site Visit Meeting: This is a non-mandatory meeting that will take place on May 17, 2022 at 10:00pm at 12 Mile Water Reclamation Facility located at 8299 Kensington Dr. Waxhaw, NC.

Prospective Bidders may examine the Bidding Documents by downloading from the website(s) listed below.

1. Download the Bid Documents from the Union County Website [www.unioncountync.gov](http://www.unioncountync.gov) (Procurement Page, Current Bids).
2. Download the Bid Documents from the State of North Carolina IPS Web-Site [www.ips.state.nc.us](http://www.ips.state.nc.us) (Bid by Departments, search County of Union).

All questions about the meaning or intent of the Bidding Documents are to be submitted in writing to the Procurement contact person listed on the cover page ([corey.brooks@unioncountync.gov](mailto:corey.brooks@unioncountync.gov)). Deadline for questions is **May 24, 2022 at 5:00 PM** local time.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

Union County encourages good faith effort outreach to Minority Businesses (HUB Certified) and Small Businesses.

**The County reserves the right to reject any and/or all bids, including, without limitation, nonconforming, nonresponsive, unbalanced, or conditional bids. The County also reserves the right to waive informalities and request clarification as needed.**

\*\*\*End of Advertisement\*\*\*

### 3 BID SUBMISSION

#### 3.1 BID SUBMISSION DEADLINE

Bids shall be sealed and labeled on the outside envelope "IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement". IFB's are to be received by the Union County, Procurement Department by 2:00 PM EST on June 3, 2022. **Any proposals received after this date and time shall be rejected without exception.**

#### 3.2 BID DELIVERY REQUIREMENTS

All Bids must be in a sealed box or opaque envelope plainly marked as follows:

[Name of Contractor Submitting Bid]

IFB No. 2022-043

12 Mile WRF Grit Facility Odor Control Media Replacement

Attention: Corey Brooks

**If using a delivery service, your company name and the solicitation number must be visible on the outside delivery box/envelope.** Ship, Mail, or Hand Deliver to the following address:

Union County Government Center

**Procurement Department**

500 North Main Street, Suite 709

Monroe, NC 28112

Attention: Corey Brooks

**Electronic (email) or facsimile submissions will not be accepted.**

There is no expressed or implied obligation for Union County to reimburse firms for any expenses incurred in preparing Bids in response to this request.

**Union County reserves the right to reject any or all Bids, to waive technicalities and to make such selection deemed in its best interest. With limited response, Union County reserves the right to extend the solicitation opening date as appropriate in order to assure a competitive procurement.**

#### 3.3 BID QUESTIONS

Bid questions will be due on or before **May 24, 2022 at 2:00 PM** local time. The primary purpose of this is to provide participating Contractors with the opportunity to ask questions, in writing, related to the IFB.

Submit questions by email to Corey Brooks at [corey.brooks@unioncountync.gov](mailto:corey.brooks@unioncountync.gov) by the deadline shown above. (Do not send question in a graph or Excel sheet format.) The email subject line should be identified as follow: **IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement Questions.**

### 3.4 BID ADDENDUM

Union County may modify the IFB prior to the date fixed for submission of Bids by the issuance of an addendum.

Should an Offeror find discrepancies or omissions in this IFB or any other documents provided by Union County, the Offeror should immediately notify the County of such potential discrepancy in writing via email as noted above.

Any addenda to these documents shall be issued in writing. No oral statements, explanations, or commitments by anyone shall be of effect unless incorporated in the written addenda. Receipt of Addenda shall be acknowledged by the Offeror on Appendix C Addendum and Anti-Collusion Form.

## 4 INSTRUCTIONS

### 4.1 COMMUNICATIONS

All communications, any modifications, clarifications, amendments, questions, responses or any other matters related to the Invitation for Bid (IFB) must be made only through the Procurement Contact noted on the cover of this IFB. A violation of this provision is cause for the County to reject a Company's bid. No contact regarding this document with other County employees is permitted and may be grounds for disqualification.

### 4.2 BIDDERS ACKNOWLEDGMENT

The Bid will remain subject to acceptance for 120 days after the Bid Opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

### 4.3 DUPLICATE BIDS

No more than one (1) bid from any Bidder will be considered by the County. In the event multiple bids are submitted in violation of this provision, the County will have the right to determine which bid will be considered, or at its sole option, reject all such multiple bids.

### 4.4 BID SIGNATURES

An authorized company official must sign Bids. Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the County if the Bidder is determined to be the lowest responsive, responsible Bidder.

### 4.5 BIDDERS RESPONSIBILITIES

The Bidder must be capable, either as a firm or a team, of providing all parts as described under Section 6 - Specifications. Exclusion of any service for this Bid may serve as cause for rejection.

### 4.6 BID SUBMISSION

- a) Bids must be enclosed in a sealed envelope, box, or package, **and clearly marked on the outside with the following: IFB Title, Bid Number, and the Bidder's company name, address, phone, email address, and contact name.**

- b) All costs incurred in the preparation and presentation of the bid is the Bidder's sole responsibility; no pre-bid costs will be reimbursed to any Bidder. All documentation submitted with the bid will become the property of the County.

**UNION COUNTY RESERVES THE RIGHT TO REJECT ANY AND/OR ALL QUALIFICATIONS AND TO WAIVE ANY AND ALL TECHNICALITIES.**

## **5 PURPOSE**

### **5.1 INTRODUCTION**

Union County, North Carolina, through the Public Works Department, is soliciting bids from qualified firms for odor control tower media replacement at the 12 Mile Water Reclamation Facility.

Union County, North Carolina (population 239,859) is located in the central, southern piedmont. The County provides its citizens with a full array of services that include public safety, water/wastewater utilities and sanitation, human services, cultural and recreational activities, and general government administration.

## **6 SPECIFICATIONS**

### **6.1 SCOPE**

The scope of work is turnkey and includes the provision of all materials and equipment for the removal and disposal of spent activated carbon, and provision and placement of new media in the odor control tower. The replacement media must provide odor control using existing vessel and equipment. The primary source of odor at this facility is H<sub>2</sub>S gas. The spent carbon must be disposed of in a proper manner, following all state and local regulations. See attachment for lab results of material to be disposed of.

The work will be performed on the Grit Facility Odor Control Tower. Specifications of the Odor Control tower are provided on page 19, Appendix D for reference.

## **7 EVALUATION OF BIDS AND AWARD PROCEDURES**

### **7.1 BID INFORMATION**

Bids must be made in strict conformance using the Invitation for Bid (IFB) forms provided herein. All blank spaces for bids must be filled in properly. Numbers must be written in ink or typewritten, and the completed forms shall be without erasures, lineation, or alterations. In accepting the bid, the County will assume that no alterations have been made, and if they appear afterward, they shall not be binding on the County.

All Bid Documents shall be signed by an individual who is authorized to contractually bind the company. The signature must indicate the title or position the individual holds in the agency or firm. Agencies or firms which sign contracts with the name of the agency or firm must provide the name of a corporate officer or executive director for signature validation by the County. **All unsigned Bids will be disqualified.** In submitting a Bid,

Offeror affirms all statements contained in the bid are true and accurate.

## 7.2 BID FORMAT

Bids must include the following:

- Appendix A – Price Form
- Appendix B – Bid Submission Form (signed)
- Appendix C – Addendum Receipt and Anti-Collusion Form (signed)

## 7.3 TERMS OF SUBMISSION

All material received from a person or company (“Respondent”) in response to this solicitation shall become the property of Union County and will not be returned to the Respondent. Any and all costs incurred by a Respondent in preparing, submitting, or presenting submissions are the Respondent’s sole responsibility and Union County shall not reimburse the Respondent. All responses to this solicitation will be considered a public record and subject to disclosure under applicable public records law.

Any material in a response which the Respondent considers a trade secret and exempt from disclosure as a public record under applicable law, including N.C.G.S. §§ 132-1.2 and 66-152, must be properly designated as a trade secret. In order to properly designate such material, the Respondent must: (i) submit any trade secret materials in a separate envelope, or file, from all other submitted material, being clearly marked as “Trade Secret – Confidential and Proprietary Information,” and (ii) stamp the same trade secret/confidentiality designation on each page of the materials therein which contain trade secrets.

To the extent consistent with public records law, Union County will make reasonable efforts to maintain the confidential nature of trade secrets, as determined by Union County and subject to the conditions set forth herein. Respondent understands and agrees by submitting a response to this solicitation, that if a request is made to review or produce a copy of any information in the Respondent’s materials which was properly labeled by the Respondent as a trade secret, Union County will notify the Respondent of the request and the date that such materials will be released to the requestor unless the Respondent obtains a court order enjoining that disclosure. If the Respondent fails to obtain the court order enjoining disclosure prior to that date, Respondent understands and agrees that Union County will release the requested information to the requestor on that date.

Furthermore, the Respondent also agrees to indemnify and hold harmless Union County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material that has been designated as a trade secret by Respondent.

## 7.4 EVALUATION OF BIDS

Qualified bids will be evaluated to determine the **lowest responsive, responsible bidder**, taking into consideration quality, performance, and the time specified in the bid for performance of the contract. Consideration of such factors as: price offered; quality of item offered; general reputation and performance capabilities of offeror; substantial conformity



with specifications/other conditions set forth in the bid; suitability of articles for the intended use; related services needed; date of delivery and performance; and such other factors deemed by the County to be pertinent will be used in determining responsiveness and responsibility.

## **7.5 AWARD PROCEDURES & TERM**

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter proposals. If the contract is to be awarded, it will be awarded to the lowest responsible, responsible bidder whose evaluation by the County indicates that the award will be in the best interest of County. The County shall have a period of 120 days after opening of bids in which to award the contract.

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

## **7.6 COST ADJUSTMENTS**

The Unit Pricing for the Initial Term shall be based upon the response to this solicitation. However, the Unit Pricing for any Renewal Term may be adjusted at the beginning of such Renewal Term by multiplying the Unit Pricing effective in the previous term by the quotient of the All Urban Consumers Price Index (CPI-U) (South Region), Others Goods and Services, with the Index Period of 2020-2024 as published by the Bureau of Labor Statistics, United States Department of Labor, in effect ninety (90) days prior to the commencement date of the new Renewal Term divided by such CPI in effect for the same month one (1) year prior to such date. However, any Unit Pricing increase pursuant to the previous sentence shall be capped at a five percent (5%) increase from one term to the next. Any such Unit Pricing adjustment for a Renewal Term must be requested by the Vendor or County within thirty (30) days from the date of the County's notice of its exercise of an option to renew the Contract for a Renewal Term.

## **7.7 APPLICATION OF NORTH CAROLINA GENERAL STATUTES**

The General Statutes of North Carolina regarding purchasing and competitive bidding (G.S. § 143-129) are made a part herein and will govern the bidding process as applicable.

# **8 GENERAL CONDITIONS AND REQUIREMENTS**

## **8.1 MINIMUM REQUIREMENTS FOR BIDDERS**

Bids shall be considered only from companies normally engaged in performing the type of work specified in this solicitation. Union County, in its discretion, shall determine whether the evidence of responsibility and ability to perform is satisfactory.

The individual/firm warrants that he/she is fully qualified, with adequate personnel and experience, to undertake the services required. The Offeror shall also certify that insurance coverage that meets or exceeds industry standards for this type of work will be in force to mitigate risk during performance under the contract.

## **8.2 TERMS AND CONDITIONS**

All payroll taxes, liability and worker's compensation are the sole responsibility of the Offeror. The Offeror understands that an employer/employee relationship does not exist under this contract.

The County reserves the right to reject any and all bids, the right to waive informalities, and the right to disregard nonconforming or conditional bids or counter bids. It is the intention of Union County to execute a final, binding Contract with the successful Offeror which incorporates terms and conditions no less onerous than those appropriate to the engagement of a licensed contracting firm in connection with a project of this magnitude.

All bids submitted in response to this request shall become the property of Union County and as such, may be subject to public review.

## **8.3 IFB EXPENSES**

Expenses for developing the bids are entirely the responsibility of the vendor and shall not be chargeable in any way to the County.

## **8.4 CERTIFICATION**

In response to the IFB Request, the Contractor certifies the following:

- This bid is signed by an authorized representative of the firm;
- It can obtain insurance certificates as required within ten (10) calendar days after notice of award;
- All labor costs, direct and indirect, have been determined and included in the proposed cost;
- The potential Contractor has read and understands the conditions set forth in this solicitation.

## **8.5 FINANCIAL INFORMATION**

The Bidder must have the following financial information readily available and have the ability to provide it to the County, without exception, within twenty-four (24) hours upon request during the bid certification process:

1. Annual audited financial reports for the past five (5) fiscal years;
2. Credit reports, credit bulletins, bank and vendor references, and any other
3. published statements by agencies that have been issued or published about the entity within the past five (5) years;
4. Indicate whether the Company (and/or predecessor, guarantor, or subcontractor) has declared bankruptcy within the last five (5) years;
5. Provide a description of the financial impact of any past or pending legal proceedings and judgments that could materially affect the Bidder's financial position or ability to provide service to the County.

## **8.6 CONTRACTUAL OBLIGATIONS**

The contents of this Bid and the commitments set forth in the Bid shall be considered contractual obligations, if a contract ensues. Failure to accept these obligations may result

in cancellation of the award. All legally required terms and conditions shall be incorporated into final contract agreements with the selected Service

### **8.7 COMPLIANCE WITH LAWS**

Seller represents and warrants that the performance of this order and the furnishing of goods or services required shall be in accordance with the applicable standards, provisions and stipulations of all pertinent Federal, State or County laws, rules, regulations, resolutions and ordinances including but not limited to the Fair Labor Standards Act, the Equal Employment Opportunity rules and regulations and the Occupational Safety and Health Acts.

### **8.8 SUB-CONTRACTOR/PARTNER DISCLOSURE**

A single Company may propose the entire solution. If the Bid by any Company requires the use of sub-contractors, partners, and/or third-party products or services, this must be clearly stated in the Bid. The Company submitting the Bid shall remain solely responsible for the performance of all work, including work that is done by sub-contractors.

### **8.9 MODIFICATION OR WITHDRAWAL OF BID**

Prior to the scheduled closing time for receiving bids, any Contractor may withdraw his bid. After the scheduled closing time for receiving bids, no bid may be withdrawn for 90 days. Only written requests for the modification or correction of a previously submitted bid that are addressed in the same manner as bids and are received by the County prior to the closing time for receiving bids will be accepted. The bid will be corrected in accordance with such written requests, provided that any such written request is in a sealed envelope that is plainly marked "Modification of Bid." Oral, telephone or fax modifications or corrections will not be recognized or considered.

### **8.10 CONTRACT COMMENCEMENT**

Commencement of a contract shall not begin prior to all necessary County approvals, including County Commission approval where required, and receipt of a County Purchase Order. Commencement of a contract without these approvals is solely at the Bidder's own risk and is likely to result in no payment for services performed or goods received.

### **8.11 DISPUTES**

In case of any doubt or differences of opinion as to the services to be furnished hereunder, the decision of the County shall be final and binding upon both parties.

### **8.12 EQUAL EMPLOYMENT OPPORTUNITY**

All Companies will be required to follow Federal Equal Employment Opportunity (EEO) policies. Union County will affirmatively assure that on any project constructed pursuant to this advertisement, equal employment opportunity will be offered to all persons without regard to race, color, creed, religion, national origin, sex, and marital status, status with regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age.

### **8.13 MINORITY AND SMALL BUSINESS PARTICIPATION PLAN**

It is the policy of Union County that Minority Businesses (MBEs), Disadvantaged Business Enterprises (DBEs) and other small businesses shall have the opportunity to compete fairly in contracts financed in whole or in part with public funds. Consistent with this policy, Union County will not allow any person or business to be excluded from participation in, denied the benefits of, or otherwise be discriminated against in connection with the award and performance of any contract because of sex, race, religion, or national origin.

### **8.14 LICENSES**

The successful Firm(s) shall have and maintain a valid and appropriate business license (if applicable), meet all local, state, and federal codes, and have current all required local, state, and federal licenses.

### **8.15 E-VERIFY**

E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Offeror/Firm shall ensure that Firm and any Subcontractor performing work under this contract: (i) uses E-Verify if required to do so; and (ii) otherwise complies with applicable law.

### **8.16 DRUG-FREE WORKPLACE**

During the performance of this project, the Firm agrees to provide a drug-free workplace for his employees; post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the workplace and specify the actions that will be taken against employees for violations of such prohibition; and state in all solicitations or advertisements for employees placed by or on behalf of the firm that the Firm maintains a drug-free workplace.

For the purposes of this section, “drug-free workplace” means a site for the performance of work done in connection with a specific contract awarded to a Contractor/Firm in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Request.

### **8.17 INSURANCE**

One or more of the following insurance limits may be required if it is applicable to the project. The County reserves the right to require additional insurance depending on the nature of the agreement.

At Contractor’s sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

- A. **WORKERS' COMPENSATION**  
 Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:
  - \$500,000 Each Accident
  - \$500,000 Disease - Each Employee
  - \$500,000 Disease - Policy Limit
  
- B. **COMMERCIAL GENERAL LIABILITY**  
 (for any agreement unless otherwise waived by the Risk Manager)  
 Covering Ongoing and Completed Operations involved in this Agreement.
  - \$2,000,000 General Aggregate
  - \$2,000,000 Products/Completed Operations Aggregate
  - \$1,000,000 Each Occurrence
  - \$1,000,000 Personal and Advertising Injury Limit
  
- C. **COMMERCIAL AUTOMOBILE LIABILITY**  
 (for any agreement involving the use of a contractor vehicle while conducting services associated with the agreement)
  - \$1,000,000 Combined Single Limit - Any Auto
  
- D. **PROFESSIONAL LIABILITY**  
 (only for any agreement providing professional service such as engineering, architecture, surveying, consulting services, etc.)
  - \$1,000,000 Claims Made

Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

**ADDITIONAL INSURANCE REQUIREMENTS**

- A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:
 

**UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECTS TO THE GENERAL LIABILITY INSURANCE POLICY.**

Additional Insured status for Completed Operations shall extend for a period of not less than three (3) years from the date of final payment.
  
- B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.
  
- C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

- D. It is the intention of the parties that the insurance policies afforded by contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.
- E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.
- F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street # 130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.
- G. The Certificate of Insurance should note in the Description of Operations the following:
  - Department: \_\_\_\_\_
  - Contract #: \_\_\_\_\_
- H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.
- I. Certificate Holder shall be listed as follows:
  - Union County
  - Attention: Keith A. Richards, Risk Manager
  - 500 N. Main Street, Suite #130
  - Monroe, NC 28112
- J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

## 8.18 INDEMNIFICATION

Contractor agrees to protect, defend, indemnify and hold Union County, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this agreement and/or the performance hereof that are due, in whole or in part, to the negligence of the Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

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**9 APPENDIX A –PRICE FORM**

**IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement**

**SUBMIT WITH BID**

**Failure to complete the following form(s) shall result in your Bid being deemed nonresponsive and rejected without any further evaluation.**

Bidder will complete the Work in accordance with the Scope of Work and Contract Documents for the following price(s):

Total Lump Sum Turn-Key Price (In US Dollars)	\$
--	----

Insert the number of days to Substantial Complete after NTP: \_\_\_\_\_

Bidder acknowledges that Total Lump Sum Turn-Key Price includes an amount considered by Bidder to be adequate to cover Contractor’s overhead and profit for the complete project.

The Bid will remain subject to acceptance for 120 days after the Bid Openings, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

**Time of Completion:**

Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with the duration days listed above.

Name of company submitting bid: \_\_\_\_\_

Authorized Representative Signature: \_\_\_\_\_

Warranty (Listed in Months): \_\_\_\_\_

\*\*\*End of Price Form\*\*\*



**10 APPENDIX B – BID SUBMISSION FORM**

**I IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement**

**SUBMIT WITH BID**

***This Bid is submitted by:***

Company Legal Name: \_\_\_\_\_

Representative Name: \_\_\_\_\_

Representative Signature: \_\_\_\_\_

Representative Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Website Address: \_\_\_\_\_

**It is understood that Union County reserves the right to reject any and all Bids, to make awards according to the best interest of the County, to waive formalities, technicalities, to recover and re-bid this project. Bid is valid for 120 calendar days from the Bid due date and is submitted by an executive of the company that has authority to contract with Union County, NC.**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**11 APPENDIX C – ADDENDUM AND ANTI-COLLUSION FORM**

**IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement**

**SUBMIT WITH BID**

Please acknowledge receipt of all addenda by including this form with your Bid. Any questions or changes received will be posted as an addendum on [www.co.union.nc.us](http://www.co.union.nc.us) and/or [www.ips.state.nc.us](http://www.ips.state.nc.us). It is your responsibility to check for this information.

Addendum No.	Date Downloaded
_____	_____
_____	_____
_____	_____
_____	_____

**I certify that this Bid is made in good faith and without collusion with any other offeror or officer or employee of Union County.**

Company Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## 12 APPENDIX D – GRIT FACILITY ODOR CONTROL SPECIFICATIONS

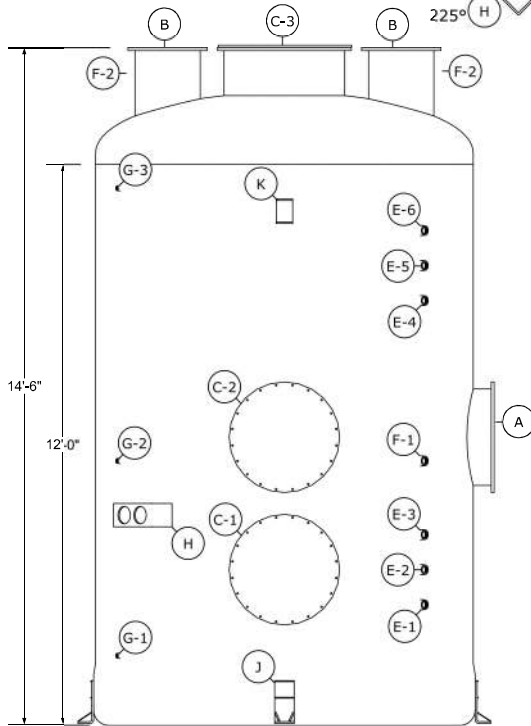
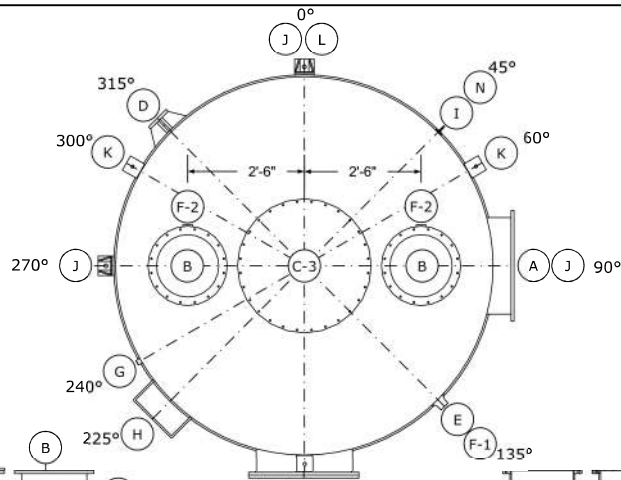
IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement

**Do Not Submit with Bid**

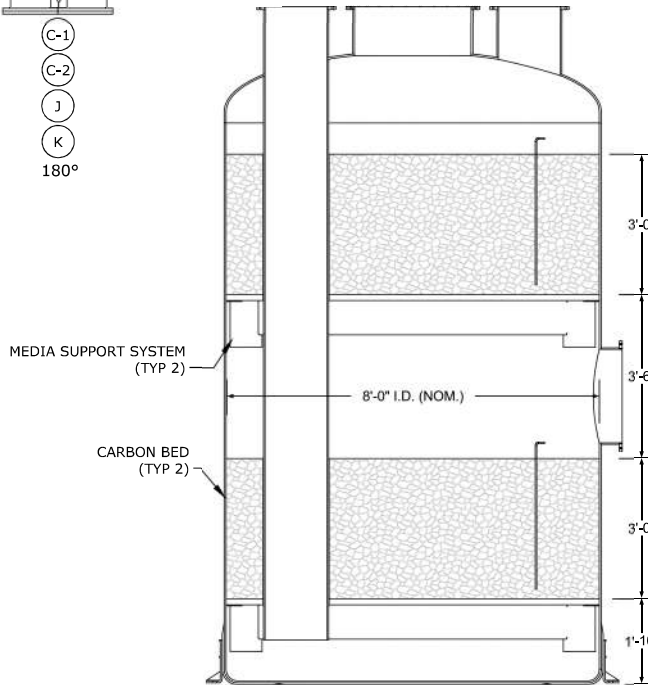
***-----For informational purposes only. -----***



**PLAN**  
SCALE: 3/8" = 1' 0"



**ELEVATION**  
SCALE: 3/8" = 1' 0"



**SECTION**  
SCALE: 3/8" = 1' 0"

SCHEDULE							
NO.	SERVICE	QTY.	SIZE	PROJ.	ELEV.	FITTING	DETAIL
A	INLET	1	24"Ø	6"	6'-2"	NBS	1
B-1	OUTLET	1	16"Ø	1'-3"	TOP	NBS	1
B-2		1	16"Ø	1'-3"	TOP	NBS	1
C-1	MANWAY	1	24"Ø	6"	3'-4"	NBS	1
C-2		1	24"Ø	6"	6'-2"	NBS	1
C-3		1	30"Ø	12"	TOP	NBS	1
D	DRAIN	1	2"Ø	6"	2"	ANSI	1
E-1	CARBON SAMPLE PORT	1	1 1/2"Ø	2"	2'-7"	FNPT	2A
E-2		1	1 1/2"Ø	2"	3'-4"	FNPT	2A
E-3		1	1 1/2"Ø	2"	4'-1"	FNPT	2A
E-4		1	1 1/2"Ø	2"	9'-1"	FNPT	2A
E-5		1	1 1/2"Ø	2"	9'-10"	FNPT	2A
E-6		1	1 1/2"Ø	2"	10'-7"	FNPT	2A
F-1	AIR SAMPLE PORT	1	1 1/2"Ø	3"	5'-8"	FNPT	2
F-2		2	1 1/2"Ø	3"	13'-6"	FNPT	2
G-1	PRESSURE PORT	1	1/2"Ø	3"	1'-6"	FNPT	2
G-2		1	1/2"Ø	3"	5'-8"	FNPT	2
G-3		1	1/2"Ø	3"	11'-6"	FNPT	2
H	DIFF. PRESSURE GAUGE BRACKET	1	-	-	4'-6"	-	3
I-1	GROUNDING ROD	1	-	-	5'-3"	-	4
I-2		1	-	-	11'-8"	-	4
J	ANCHOR LUG	4	-	-	-	-	5
K	GUIDE LUG	3	-	-	11'-0"	-	6
L	LADDER	1	-	-	-	-	-
N	NAMEPLATE	1	-	-	-	-	-

LAMINATE SEQUENCES		
ITEM	MIN. THK.	SEQUENCE
SHELL	0.29"	N, 2C, FW, U, 2FW, A
DISH TOP	0.29"	N, 2C, 2(C, R)C, A
FLAT BOTTOM	0.29"	N, 2C, 2(CR)C
KNUCKLE	0.57"	N, 2C, 3(C, R)C, 2(CR)C
KNUCKLE TO SHELL	0.24"	2(MR)MM
DISH TO SHELL	0.19"	2(MR)M, A

**MATERIAL SPECIFICATION KEY:**  
 A = 1 LAYER "A" GLASS SUFRACE VEIL  
 C = CHOPPER GUN APPLIED, 0.043" THICK (W-CR/ADVANTEK)  
 M = 1 LAYER OF 1 1/2 OZ. MAT OR CHOPPER GUN APPLIED, 0.043" THICK (W-CR/ADVANTEK)  
 N = NEXUS VEIL, 10 MILS  
 R = 1 LAYER OF 24 OZ./YD<sup>2</sup> WOVEN ROVING 0.033" THICK  
 U = 1 LAYER OF 16 OZ./YD<sup>2</sup> UNIDIRECTIONAL  
 FW = 75% FILAMENT WOUND HELICAL CYCLE 250 YIELD GLASS 0.05" THICK MIN.

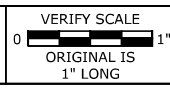
- NOTES:**
1. VESSEL DOME SHALL HAVE FACTORY APPLIED NON-SKID COATING
  2. ALL DIMENSIONS, ELEVATIONS, AND ORIENTATIONS SHALL BE VERIFIED BY THE CONTACTOR
  3. ALL EXTERNAL PLUMBING SHALL BE PROVIDED BY THE CONTRACTOR
  4. NUTS, BOLTS, WASHERS AND GASKETS TO BE PROVIDED BY INSTALLER.
  5. CONTRACTOR IS RESPONSIBLE FOR THE SAFE HANDLING, TRANSPORTATION, AND INSTALLATION OF VESSEL

REVISIONS		
REV	DATE	DESCRIPTION
04	9/26/2018	AS-BUILT

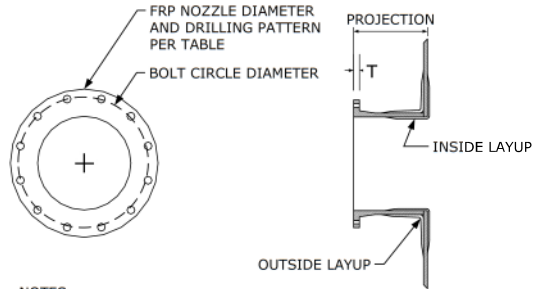
SIZE: B	DWG: 8'Ø CARB. ADS.	DRAWN BY: CB
SCALE: 3/8" = 1' 0"	DIR: 3370 TWELVE MILE	DATE: 12/08/2016

**DANIEL COMPANY**  
FIBERGLASS AIR POLLUTION CONTROL SYSTEMS

1939 W. 11th St. Ste. E  
Upland, CA 91786  
Phone: (909) 982-1555  
Fax: (909) 982-1855



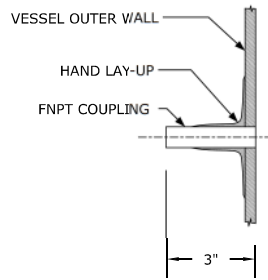
UNION COUNTY, NORTH CAROLINA  
TWELVE MILE CREEK WASTE WATER TREATMENT PLANT  
7.5 MGD EXPANSION  
8'Ø DUAL BED CARBON ADSORBER **11**



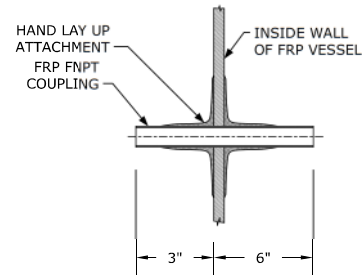
- NOTES:  
1. BOLT HOLES STRADDLE MAJOR CENTERLINES (2-HOLE)  
2. GUSSETS REQUIRED FOR NOZZLES 4"Ø AND SMALLER

FLG SPEC	SIZE (INCHES)	OD OF FLANGE	BOLT CIRCLE DIAMETER	NUMBER OF BOLTS	BOLT HOLE DIAMETER	T (MIN)
ANSI	2"Ø	6 1/2"	4 3/4"	4	3/4"	9/16"
NBS	16"Ø	20 3/8"	19"	16	7/16"	3/4"
NBS	24"Ø	28 3/8"	27"	20	7/16"	3/4"
NBS	30"Ø	34 3/8"	33"	28	7/16"	3/4"

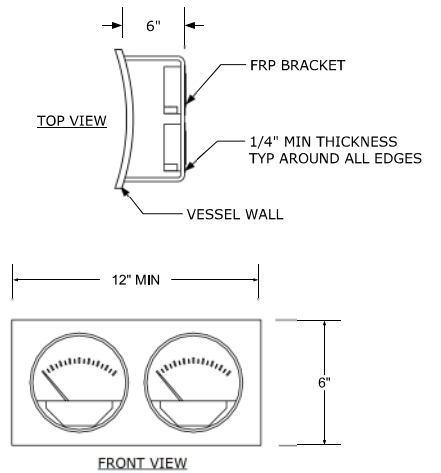
DETAIL 1 - ROUND FLANGES



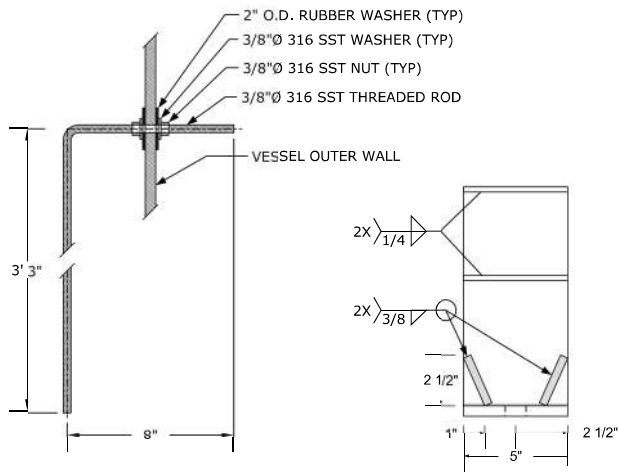
DETAIL 2 - FNPT PORT



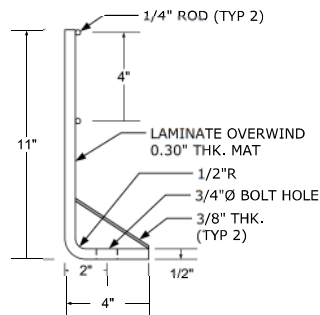
DETAIL 2A - FNPT PORT



DETAIL 3 - PRESSURE GAUGE MOUNT



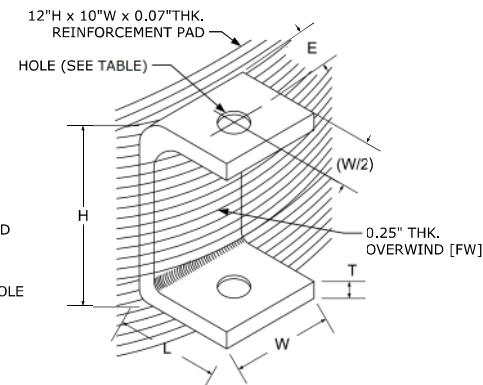
DETAIL 4 - SST GROUNDING ROD



NOTE: LUG TO BE 1/2" FROM BOTTOM OF THE VESSEL

MATERIAL: 316 STAINLESS STEEL

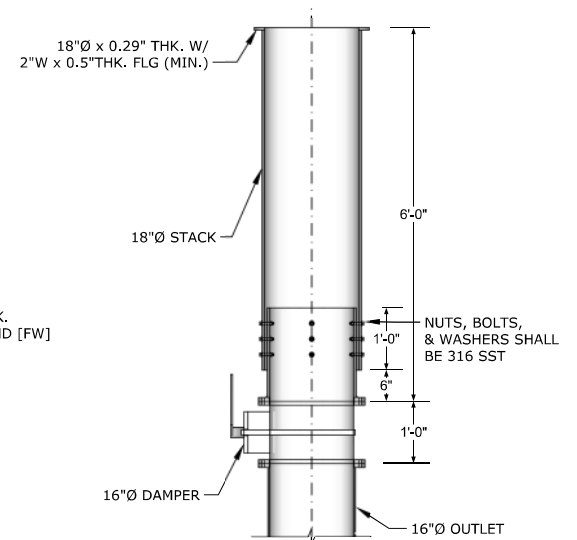
DETAIL 5 - TYPE II ANCHOR LUG



MATERIAL: 316 STAINLESS STEEL

H	W	L	T	E	Ø
6"	5"	4"	0.50"	2 3/8"	3/4"

DETAIL 6 - GUIDE LUG



DETAIL 7 - NO-LOSS EXHAUST STACK

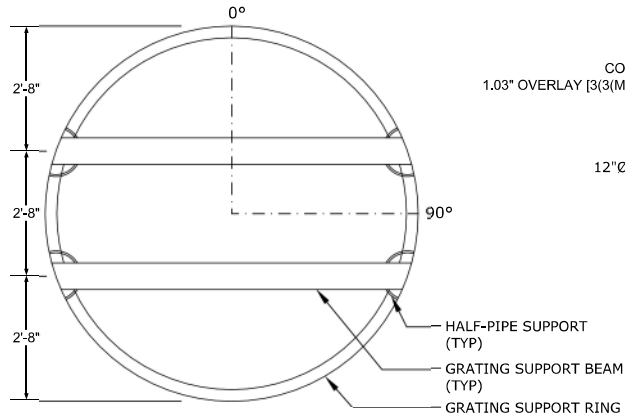
SIZE: B	DWG: CARB. DETAILS	DRAWN BY: CB
SCALE: N/A	DIR: 3370 TWELVE MILE	DATE: 12/08/2016

**DANIEL COMPANY**  
FIBERGLASS AIR POLLUTION CONTROL SYSTEMS

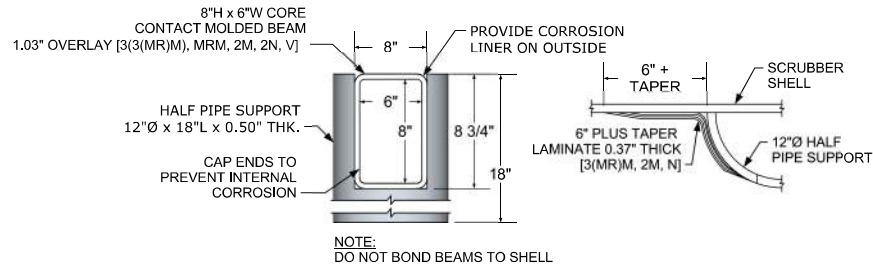
1939 W. 11th St. Ste. E  
Upland, CA 91786  
Phone: (909) 982-1555  
Fax: (909) 982-1855

VERIFY SCALE  
0 1"  
ORIGINAL IS  
1" LONG

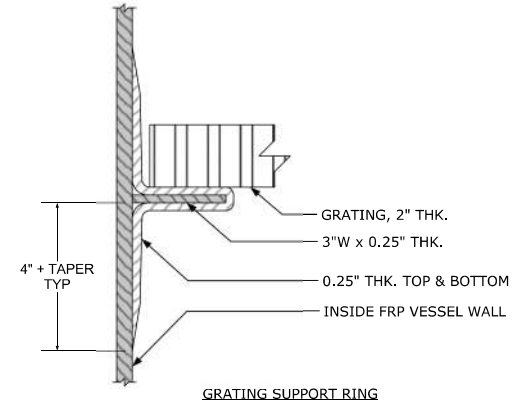
UNION COUNTY, NORTH CAROLINA  
TWELVE MILE CREEK WASTE WATER TREATMENT PLANT  
7.5 MGD EXPANSION  
8"Ø DUAL BED CARBON ADSORBER - DETAILS



SUPPORT SYSTEM ORIENTATION



MEDIA BEAM AND HALF PIPE SUPPORT



GRATING SUPPORT RING

DETAIL 8 - MEDIA SUPPORT SYSTEM

SIZE: B	DWG: CARB. DETAILS	DRAWN BY: CB
SCALE: N/A	DIR: 3370 TWELVE MILE	DATE: 12/08/2016

**DANIEL COMPANY**  
FIBERGLASS AIR POLLUTION CONTROL SYSTEMS

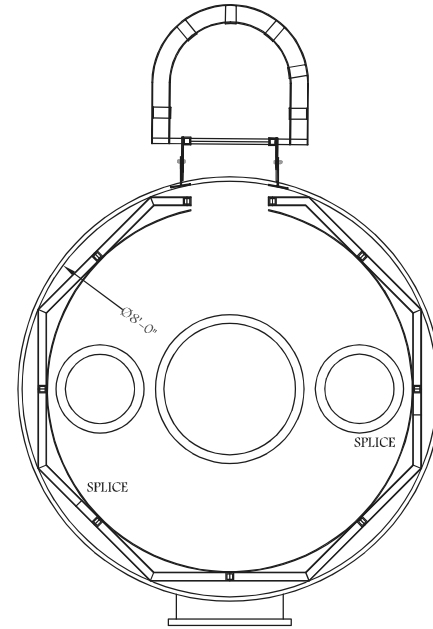
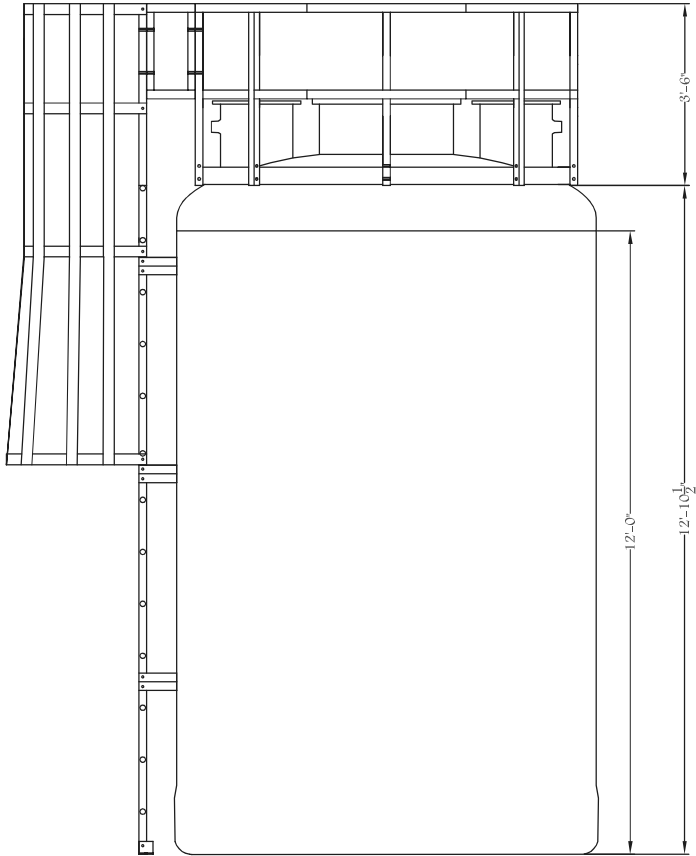
1939 W. 11th St. Ste. E  
Upland, CA 91786  
Phone: (909) 982-1555  
Fax: (909) 982-1855

VERIFY SCALE  
0 1"  
ORIGINAL IS  
1" LONG

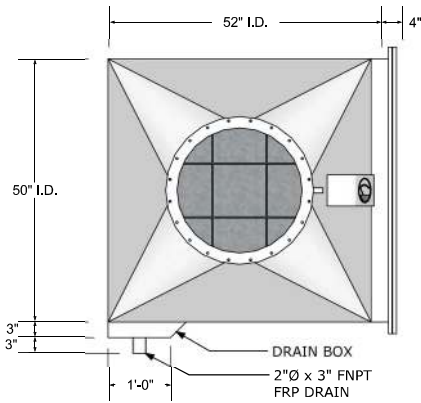
UNION COUNTY, NORTH CAROLINA  
TWELVE MILE CREEK WASTE WATER TREATMENT PLANT  
7.5 MGD EXPANSION  
8" DUAL BED CARBON ADSORBER - DETAILS

BILL OF MATERIALS

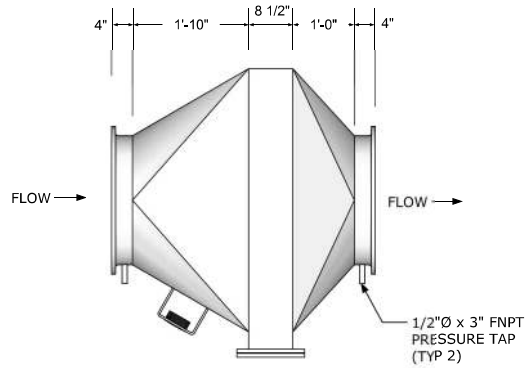
DESCRIPTION	MATERIAL	RESIN
A HANDRAIL POSTS	1-3/4" X 1/2" SQUARE TUBE	ISO FR POLYESTER
B HANDRAIL RAILS	2" X 2" X 1/8" SQUARE TUBE	ISO FR POLYESTER
C HANDRAIL ANCHOR CLIPS	6" X 6" X 1/2" ANGLE	ISO FR POLYESTER
D TOEPLATE CIRCULAR	4" X 1/8" FLAT STRIP	ISO FR POLYESTER
E LADDER RAILS	1-3/4" X 1/2" SQUARE TUBE	ISO FR POLYESTER
F LADDER RUNGS	1-1/4" FLUTED ALL AROUND	ISO FR POLYESTER
G LADDER CAGE	2-1/2" X 1/8" FLAT STRIP	ISO FR POLYESTER
H LADDER CLIPS	4" X 1/2" FLAT STRIP	ISO FR POLYESTER
I LADDER ANCHOR CLIPS	3" X 3" X 1/2" ANGLE	ISO FR POLYESTER
J BOLTING HARDWARE	316 STAINLESS STEEL	
K		
L		



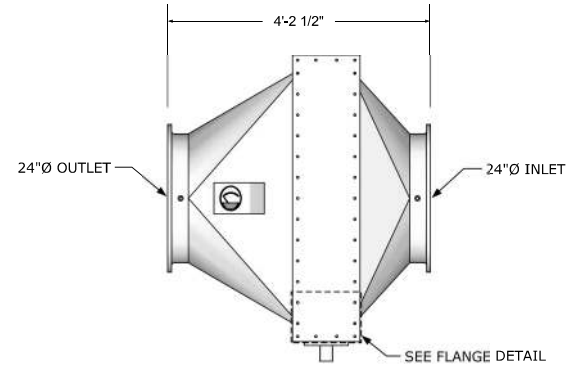
REVISIONS				SCALE NTS	APPROVED BY:	DRAWN BY:
NO:	CHANGES MADE:	DATE:	BY:	DATE: 6/13/2017		AH
-	-	-	-	DANIEL COMPANY RFQ#3370		
-	-	-	-			
				CAGED LADDER WITH TURN-AROUND & TOP HANDRAIL	SHEET NO. 1 OF 1	REV. NO. 0



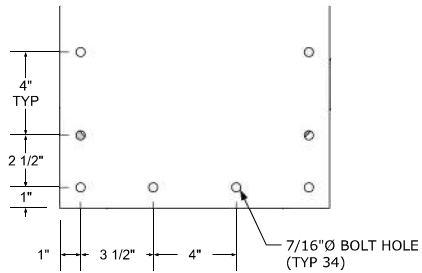
**FRONT VIEW**  
SCALE: 1/2" = 1' 0"



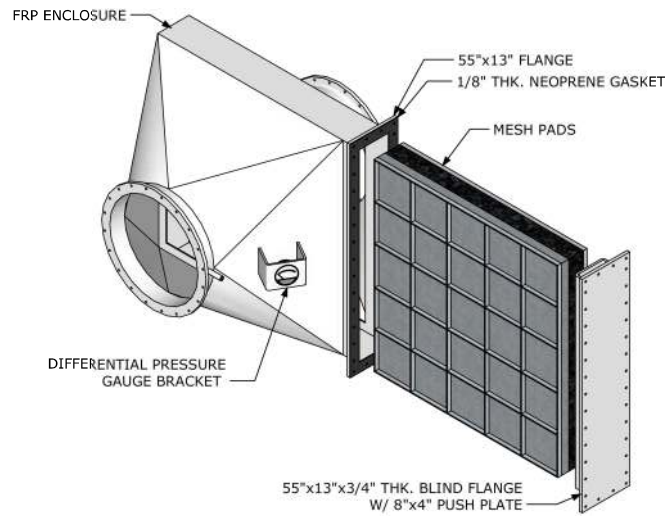
**TOP VIEW**  
SCALE: 1/2" = 1' 0"



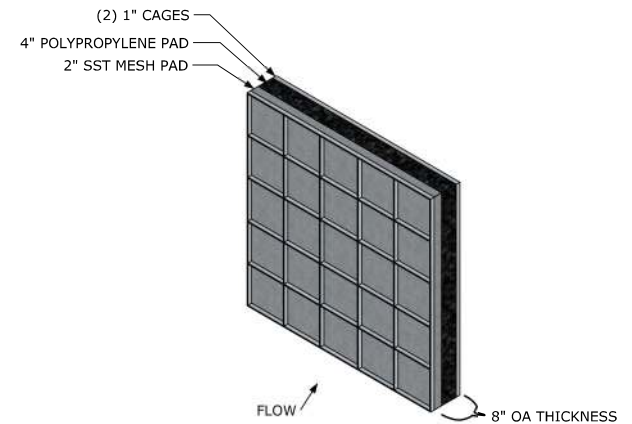
**SIDE VIEW**  
SCALE: 1/2" = 1' 0"



**BOLT PATTERN**  
SCALE: 2" = 1' 0"



**OVERALL VIEW**  
SCALE: 1/2" = 1' 0"



**50"x50" MESH PADS**  
SCALE: 1/2" = 1' 0"

**NOTE:**  
1. HOUSING THICKNESS SHALL BE MINIMUM 1/4" THICK  
2. 316 SST HARDWARE AND 1/8" NEOPRENE GASKETS FOR ALL FLANGES

SIZE: B	DWG: 24"Ø 50x50	DRAWN BY: CB
SCALE: VARIES	DIR: 3370 TWELVE MILE	DATE: 12/15/2016

**DANIEL COMPANY**  
FIBERGLASS AIR POLLUTION CONTROL SYSTEMS

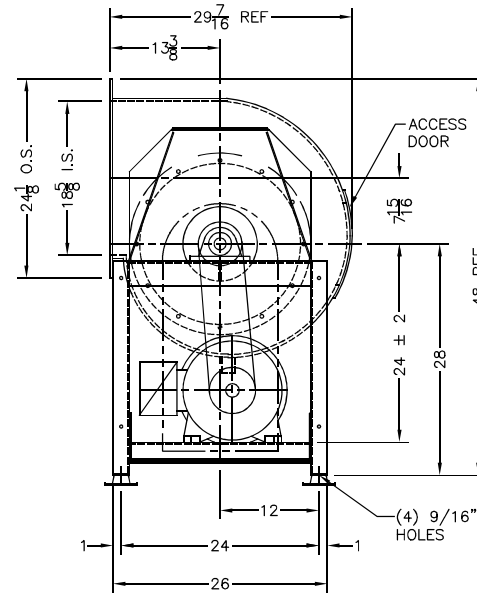
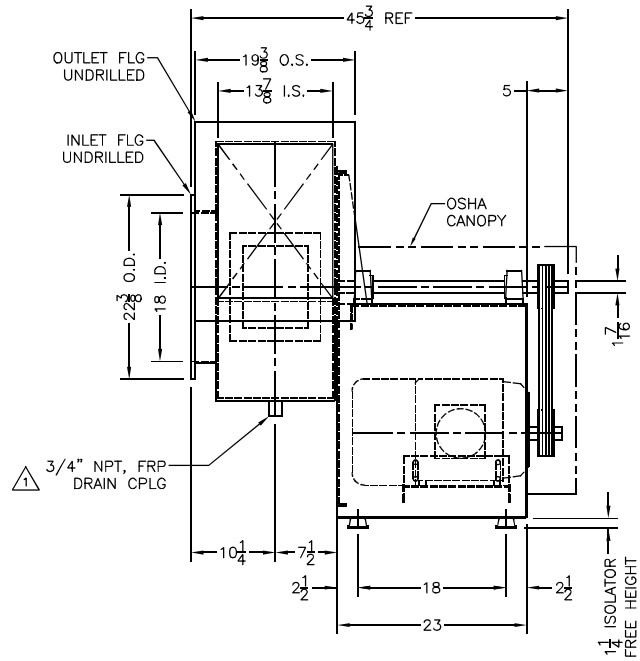
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UNION COUNTY, NORTH CAROLINA  
TWELVE MILE CREEK WASTE WATER TREATMENT PLANT  
7.5 MGD EXPANSION  
ODOR CONTROL MIST ELIMINATOR 15



REV.	DATE	DESCRIPTION	DRWN	CHK'D
1	6/20/17	CLAIRIFIED DRAIN AND ISOLATOR MATERIALS	EDM	EDM
2	8/28/17	ADDED SPACE HEATER TO MOTOR	EDM	EDM



FAN SPECIFICATION			
HOUSING MATERIAL:	DERAKANE 510B-400		
IMPELLER MATERIAL:	DION 9800		
CONSTRUCTION CLASS:	IV		
COLOR:	BLUE		
CFM: 5700	RPM: 3164		
TEMPERATURE:	68° F DB	68° F WB	
	<b>ACTUAL</b>	<b>STD (70° F)</b>	
AIR DENSITY	0.075 LB/CF	0.075 LB/CF	
STATIC PRESS	10.00" W.G.	10.25" W.G.	
BRAKE HP	14.21 BHP	14.57 BHP	
FAN ACCESSORIES			
INLET FLEX CONNECTOR	-	DRILLED	-
OUTLET FLEX CONNECTOR	-	DRILLED	-
SHAFT MATERIAL:	CARBON STEEL		
SHAFT SEAL:	TEFLON		
MOTOR RAILS:	NONE		
DRIVE:	FIXED V-BELT		
VIBRATION MOUNTS:	NEOPRENE, R2-GREEN (4X)		
MOTOR SPEC			
HP	20	PHASE	3
RPM	3600	CYCLE	60
FRAME SIZE	256T	ENCLOSURE	TEFC
VOLTAGE	230/460	WEIGHT	330 LB
CUSTOMER INFORMATION			
P.O. NO.	3370-02		
TAG:	-		

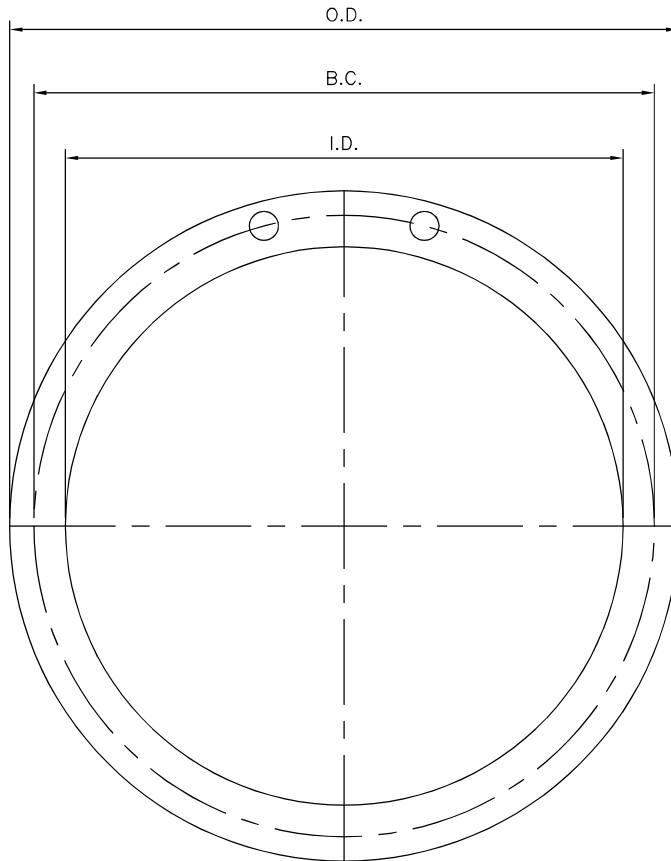
**NOTES:**

- ALL DIMENSIONS ARE IN INCHES.
- ALL DISCHARGE POSITIONS & ROTATIONS ARE VIEWED FROM THE DRIVE SIDE PER AMCA STD 99-2407-66.
- INLET & OUTLET DUCTWORK TO BE INDEPENDENTLY SUPPORTED AND ISOLATED FROM FAN WITH EXPANSION JOINTS (BY OTHERS).
- FAN BASE WILL BE CONSTRUCTED OF CARBON STEEL, FINISHED & PAINTED PER VERANTIS PROCEDURE TYPE "A".
- ALL AIRSTREAM BOLTING HARDWARE IS ENCAPSULATED 316 S.S. GASKET MATERIAL IS EPDM.
- FAN BEARINGS HAVE A MINIMUM L10 LIFE RATING OF 100,000 HOURS.
- IMPELLER CLASS IV CONSTRUCTION WITH STANDARD ENCAPSULATED CARBON STEEL HUB ASSEMBLY.
- FAN FABRICATED IN GENERAL ACCORDANCE WITH ASTM-D4167, NBS PS15-69 AND ASTM-C582.
- FAN NAMEPLATE MATERIAL 316 S.S. ROTATION ARROWS TO BE PROVIDED.
- AMCA CERTIFIED FAN.
- INTERNAL SURFACES INCLUDE (1) LAYER OF "C" GLASS. EXTERNAL SURFACES INCLUDE ULTRAVIOLET INHIBITOR FOR ENVIRONMENTAL PROTECTION.
- STANDARD FAN BASE INCREASED TO NEXT SIZE TO ACCOMMODATE SPECIFIED MOTOR.
- ALL INTERNAL SURFACES COATED WITH CARBON GEL WITH EMBEDDED S.S. GROUNDING LUG WITH STRAP TO FAN BASE.
- FAN PROVIDED WITH EXTENDED BEARING LUBE LINES.
- MOTOR TO BE PROVIDED WITH SPACE HEATER

	<b>CUSTOMER APPROVED FOR FABRICATION</b>	/
DISP.	DRAWING STATUS	DATE

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TITLE	TOLERANCES UNLESS OTHERWISE SPECIFIED	SIZE: B	TOTAL WEIGHT: 650 LB
CLUB-1825 FAN	1 PL DECIMALS ±.015	SCALE: 1:16	SHEET: 1/1
CCW, TOP HORIZ, ARR.10	2 PL DECIMALS ±.010	<b>VERANTIS CORP.</b> 7251 ENGLE RD SUITE 300, PLAZA SOUTH ONE BLDG, MIDDLEBURG HTS, OH, 44130	
CUSTOMER	3 PL DECIMALS ±.005		
DANIEL COMPANY FOR	FRACTIONS ±1/16	<b>5406-001</b> <span style="float: right;">16</span>	
TWELVE MILE CREEK WWTP	ANGLES ±1°		
UNION COUNTY, NC	DRAWN: JY	REV. 2	
	DATE: 1/16/17		

FLANGE SHALL BE DRILLED TO MATCH  
DUCTWORK DRILLING PATTERN.

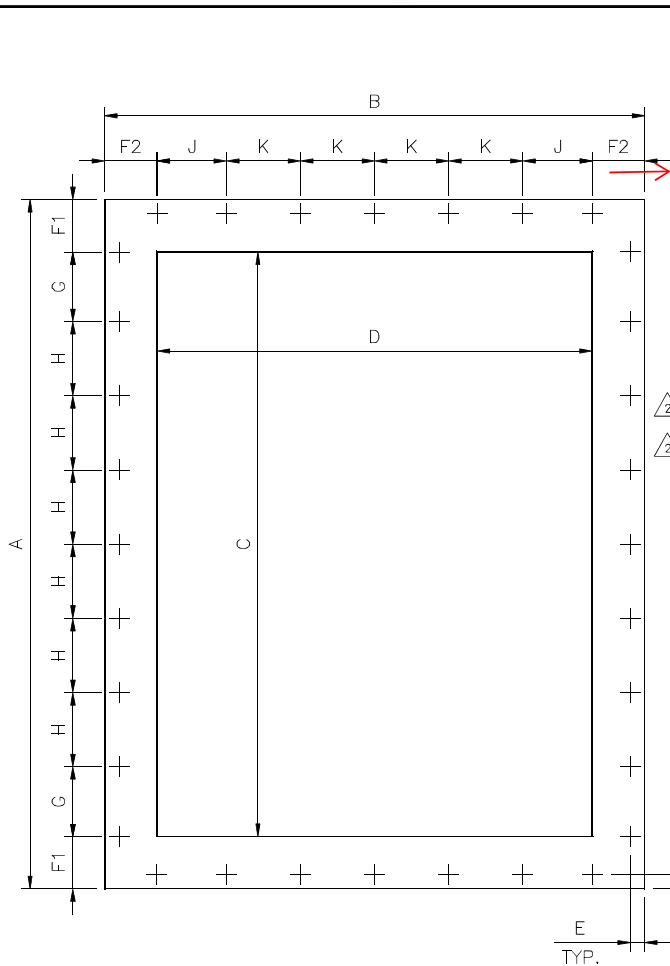


FAN SIZE	I.D.	O.D.	B.C.	HOLES		FLANGE THK.
				QTY.	DIA.	
4	4	8 3/8	7	4	7/16	1/4
6	6	10 3/8	9	8	7/16	1/4
8	8	12 3/8	11	8	"	"
10	10	14 3/8	13	12	"	3/8
12	12	16 3/8	15	12	"	"
14	14	18 3/8	17	12	"	"
16	16	20 3/8	19	16	"	1/2
18	18	22 3/8	<del>21</del>	<del>16</del>	<del>"</del>	<del>"</del>
20	20	24 3/8	23	20	"	"
24	24	28 3/8	27	20	"	"
30	30	34 3/8	33	28	"	"
36	36	40 3/8	39	32	"	"
42	42	46 3/8	45	36	"	5/8
48	48	54 3/8	52	44	9/16	"
54	54	60 3/8	58	44	"	"
60	60	66 3/8	64	52	"	"
72	72	78 3/8	76	60	"	3/4

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- FLANGE DIMENSIONS ARE IN ACCORDANCE WITH TABLE-2 IN PRODUCT STANDARD PS 15-69.
- FLANGES ARE FURNISHED DRILLED ONLY WHEN SPECIFIED ON THE FAN DRAWING.
- BOLT HOLES STRADDLE NATURAL CENTERLINES.

				ITEM		NOTICE:		VERANTIS CORP.	
				FAN INLET & TRANSITION OUTLET FLANGES (PS 15-69)		THIS DRAWING IS THE PROPERTY OF VERANTIS CORP. IT IS LOANED TO YOU SUBJECT TO RETURN ON DEMAND. THE CONTENTS ARE CONFIDENTIAL & MUST NOT BE COPIED OR GIVEN TO ANY THIRD PARTIES FOR USE OR EXAMINATION UNLESS OTHERWISE AGREED TO IN WRITING BY VERANTIS CORP.		7251 Engle Rd. Suite 300/Plaza South One Middleburg Hts., OH 44130	
2	11/15/11	ADDED FAN SIZE #4 TO CHART	MCS					DRAWN: KZ	CHK'D.:
1	10/29/99	RE-DRAWN	KZ					DATE: 10/29/99	DATE:
REV.	DATE	DESCRIPTION	DFT	CHK					FAN STD F-1
									REV. 2



SIZE	A	B	C	D	E	F1	F2	G	H	J	K	THK.	HOLE DIA.	QTY.
1225	18	14 3/4	12 1/2	9 1/4	3/4	2 5/8	2 5/8	4 1/4	4 1/4	4 3/4	4 3/4	5/16	7/16	14
1500	21 1/4	17 1/4	15 3/4	11 3/4	3/4	2 5/8	2 5/8	4	4	4	4	5/16	7/16	18
1825	24 1/8	19 3/8	18 5/8	13 7/8	3/4	2 11/16	2 9/16	3 3/4	3 3/4	3 9/16	3 9/16	5/16	7/16	22
2225	28 1/8	22 3/8	22 5/8	16 7/8	3/4	2 5/8	2 11/16	3 13/16	3 13/16	4 1/4	4 1/4	5/16	7/16	24
2550	31 1/2	25 1/8	26	19 5/8	3/4	2 5/8	2 9/16	4 3/8	4 3/8	4	4	5/16	7/16	26
3000	36	28 1/4	30 1/2	22 3/4	3/4	2 1/2	2 1/2	3 7/8	3 7/8	3 7/8	3 7/8	5/16	7/16	32
3650	42 5/8	33 1/8	37 1/8	27 5/8	3/4	2 3/4	2 9/16	4 1/8	4 1/8	4	4	3/8	7/16	36
4450	50 3/4	39 1/4	45 1/4	33 3/4	3/4	2 7/8	2 7/8	4 1/2	4 1/2	4 3/16	4 3/16	3/8	7/16	40
4850	54 7/8	42 1/4	49 3/8	36 3/4	7/8	2 11/16	2 9/16	4 1/8	4 1/8	4 1/8	4 1/8	1/2	9/16	46
5425	60 3/4	46 5/8	55 1/4	41 1/8	7/8	2 3/8	2 3/8	4	4	4 3/16	4 3/16	5/8	9/16	52
6000	67	51 3/8	61	45 3/8	7/8	3	3	3 11/16	4 1/8	4 1/8	4 1/8	5/8	9/16	56
7300	81	62	74 1/4	55 1/4	1 1/4	3 3/8	3 3/8	4 1/8	4 1/8	4 15/16	4 1/8	5/8	9/16	66

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- FLANGES ARE FURNISHED DRILLED ONLY WHEN SPECIFIED ON THE FAN DRAWING.

FLANGE SHALL BE DRILLED TO MATCH  
DUCTWORK DRILLING PATTERN.

REV.	DATE	DESCRIPTION	DFT	CHK
2	9/22/11	HOLE DIA. WAS 7/16(4850), 1/2(5425)	MCS	
1	11/4/99	RE-DRAWN	KZ	

ITEM	FAN OUTLET FLANGES (FOR CLUB FANS)
------	---------------------------------------

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VERANTIS CORP. 7251 Engle Rd. Suite 300/Plaza South One Middleburg Hts., OH 44130	
DRAWN: KZ	CHK'D:
DATE: 11/4/99	DATE:
FAN STD F-5	
REV. 2	18

**Data for Model: CLUB-1825**

**Reference Number:**

<b>Standard Conditions</b>	
Volume Flow Rate (CFM)	5700
Static Pressure (In. WC)	10.25
Temperature (°F)	68.00
Density (lb/ft3)	0.0750
Elevation (ft)	0.00
Power (BHP)	14.57
Static Efficiency (%)	63.10
Outlet Velocity (FPM)	2968.75
Tip Speed (FPM)	15118.62
Class	4
Max RPM	3767

<b>Operating Conditions</b>	
Volume Flow Rate (CFM)	5700
Static Pressure (In. WC)	10.00
Temperature (°F)	68.00
Density (lb/ft3)	0.0750
Elevation (ft)	0.00
Power (BHP)	14.21
RPM	3164
Static Efficiency (%)	63.10

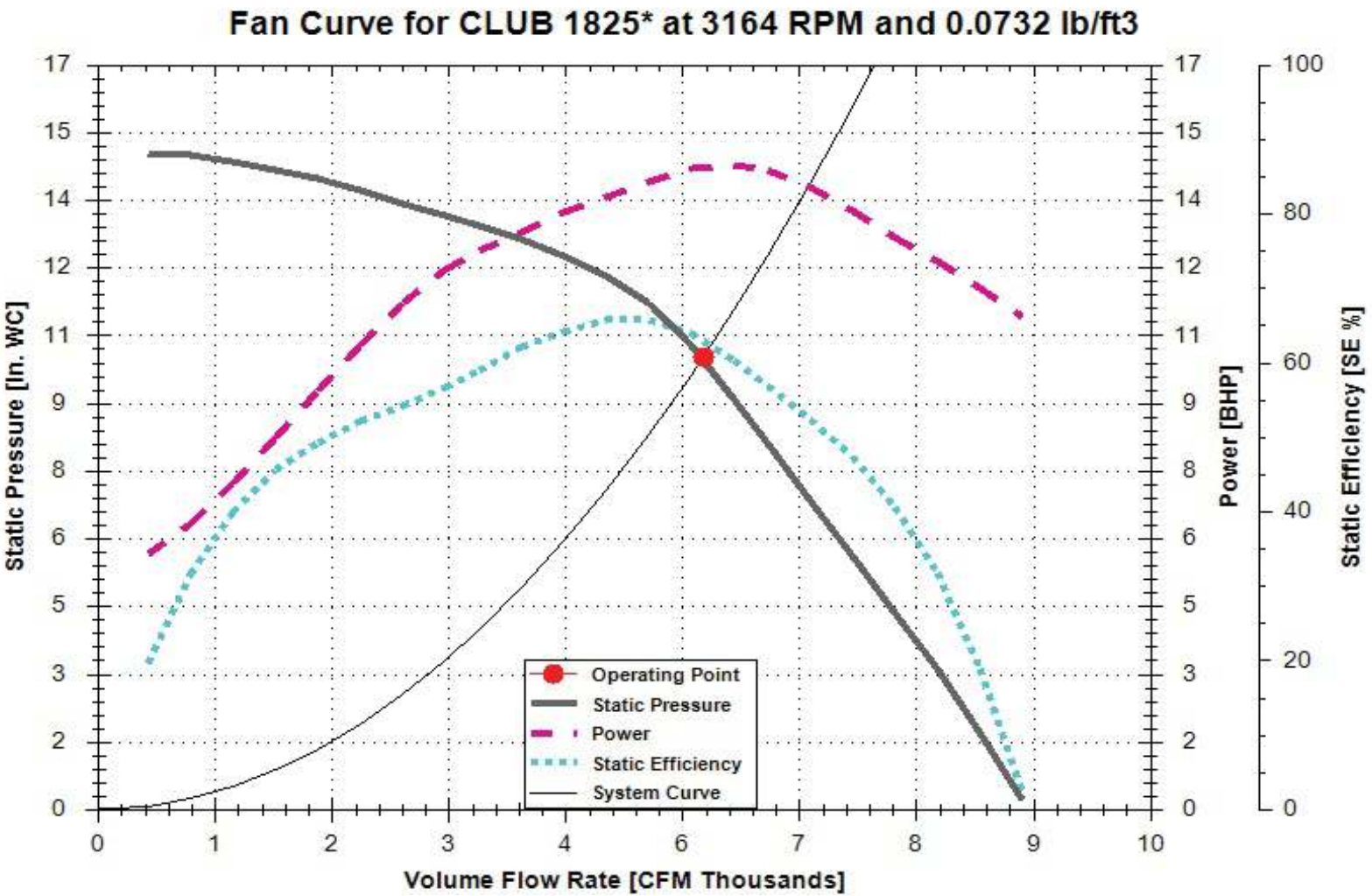
<b>Sound Power Levels</b>								
Octave Band	1	2	3	4	5	6	7	8
OB Center Freq.	63	125	250	500	1000	2000	4000	8000
AMCA Lw	100	102	100	99	91	90	89	88
LwA Octave Ban	75	87	92	96	91	91	90	87
Weighted LwA: 100 dBA								

<b>Estimated Sound Pressure at 3.00 ft</b>	
Open Inlet and Open Outlet	96.0 dBA
Open Inlet and Ducted Outlet	93.0 dBA
Ducted Inlet and Ducted Outlet	76.0 dBA

The table represents sound power levels of the selected Verantis fan. Sound power is neither environment dependent nor distance dependent. Sound power belongs strictly to the sound source. Sound pressure is the perceived sound level at a certain distance from the fan within a certain environment.

The sound power levels shown in the table are estimates based on Verantis test data. Verantis sound tests are conducted in accordance with AMCA Standards 300 (Reverberant Room Method for Sound testing of Fans) and 301 (Generalized Sound Format).

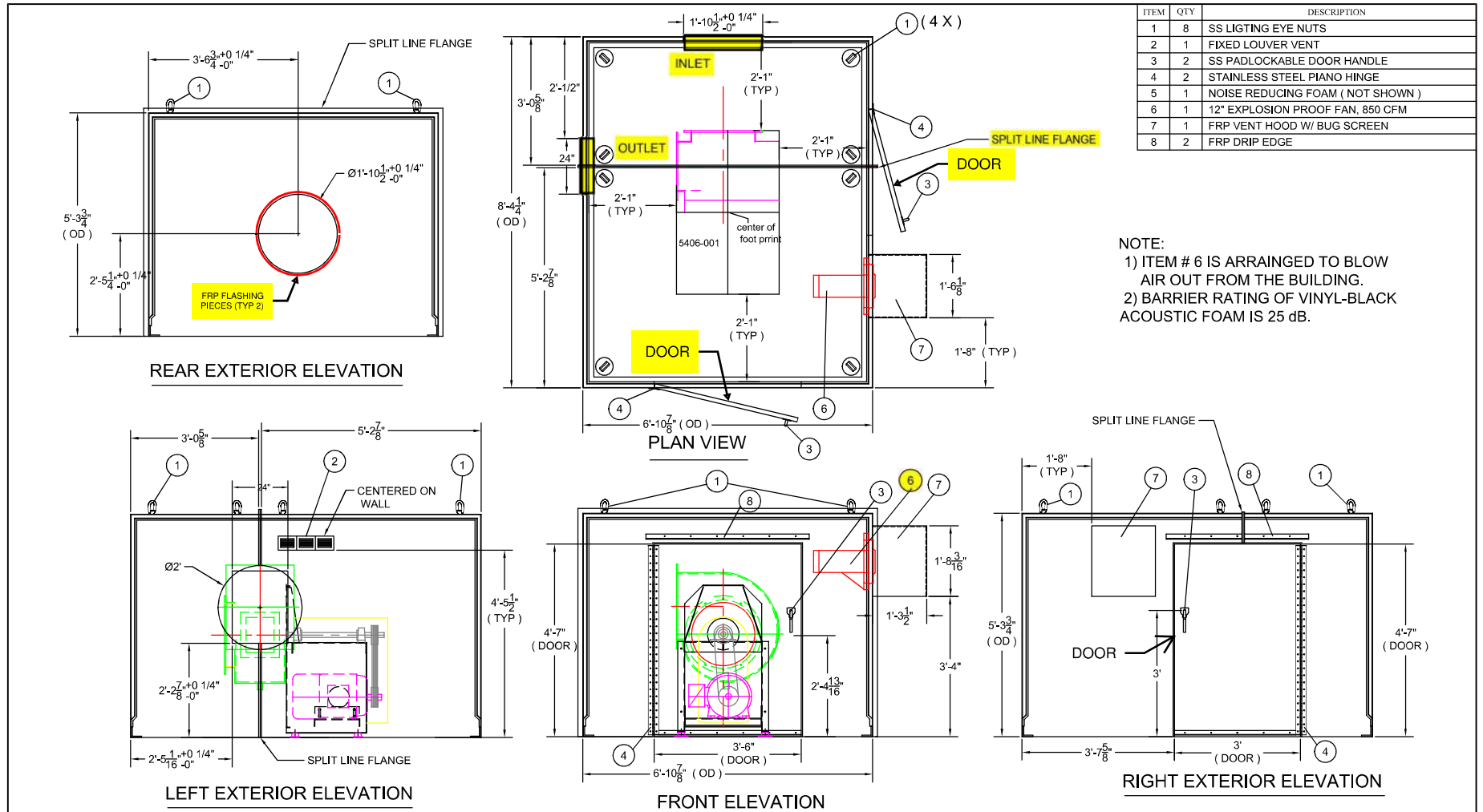
Reference Number:



Plaza South One | 7251 Engle Road, Suite 300 | Middleburg Heights, Ohio 44130 | +1 (440) 243-0700 tel

+1 (440) 234-3486 fax | +1 (800) 554-8673 | info@verantis.com | www.verantis.com

Verantis Corporation

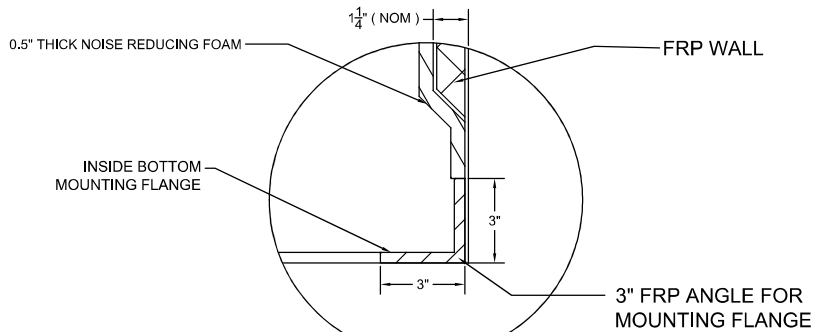


REV.	DATE	DESCRIPTION	DRWN	CHK'D	TITLE	SCALE	APPROVED	DATE	SHT.	
4	9/5/17	CORRECTED DRAWING	LVR		SOUND ENCLOSURE FOR CLUB-1825	NONE	EDM	2/10/17	1 OF 2	
3	7/14/17	CORRECTED DRAWING	LVR							
2	6/22/17	CORRECTED DRAWING	LVR	EDM						
1	5/2/17	CORRECTED DRAWING	EDM	EDM						
					CUSTOMER	DANIEL COMPANY UPLAND, CA USA				
					NOTICE:		VERANTIS CORP.			
					THIS DRAWING IS THE PROPERTY OF VERANTIS CORP. IT IS LOANED TO YOU SUBJECT TO RETURN ON DEMAND. THE CONTENTS ARE CONFIDENTIAL & MUST NOT BE COPIED OR GIVEN TO ANY THIRD PARTIES FOR USE OR EXAMINATION UNLESS OTHERWISE AGREED TO IN WRITING BY VERANTIS CORP.		7251 Engle Rd, Suite 300 Plaza South One Bldg, Middleburg Hts. OH 44130			
					VERANTIS SUCCESSOR IN INTEREST TO CEILCOTE AIR POLLUTION CONTROL		DRAWN: EDM			
					DATE: 2/10/17		CHK'D: EDM			
					DATE: 2/10/17		5406-002			
							REV. 4			

CAD File: 5418-002

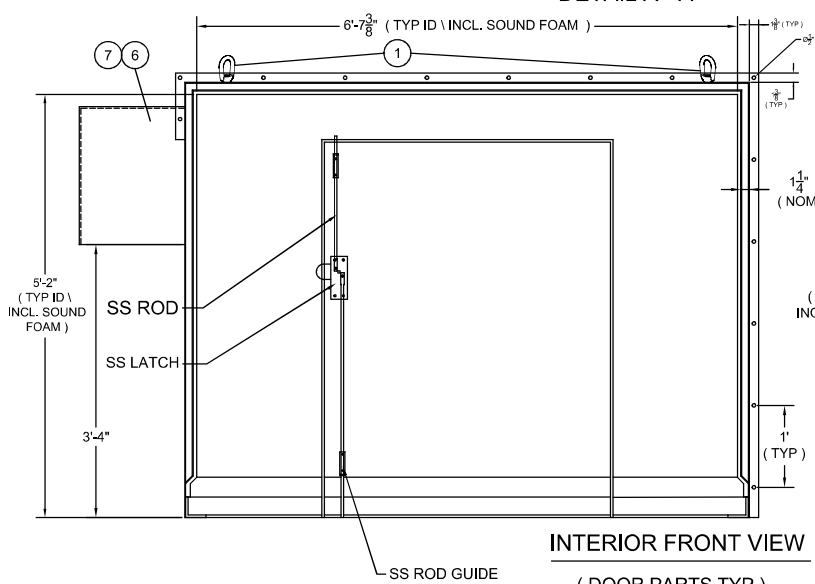
CUST.

SUB.

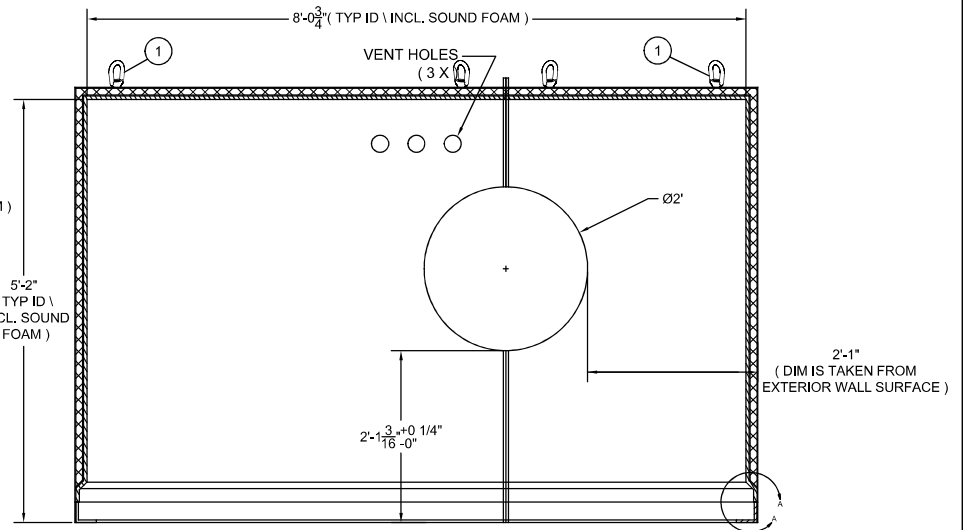


DETAIL A - A

ITEM	QTY	DESCRIPTION
1	8	SS LIGHTING EYE NUTS
2	1	FIXED LOUVER VENT
3	2	SS PADLOCKABLE DOOR HANDLE
4	2	STAINLESS STEEL PIANO HINGE
5	1	NOISE REDUCING FOAM ( NOT SHOWN )
6	1	12" EXPLOSION PROOF FAN, 850 CFM
7	1	FRP VENT HOOD W/ BUG SCREEN
8	2	FRP DRIP EDGE



INTERIOR FRONT VIEW  
( DOOR PARTS TYP )



INTERIOR LEFT VIEW

REV.	DATE	DESCRIPTION	DRWN	CHK'D	TITLE	SCALE:	APPROVED:	DATE:	SHT.:	
4	9/5/17	CORRECTED DRAWING	LVR		SOUND ENCLOSURE FOR CLUB-1825 CUSTOMER DANIEL COMPANY UPLAND, CA USA	NONE	EDM	2/10/17	2 OF 2	
3	7/14/17	CORRECTED DRAWING	LVR							
2	6/22/17	CORRECTED DRAWING	LVR	EDM						
1	5/2/17	CORRECTED DRAWING	EDM	EDM						
<p>NOTICE: THIS DRAWING IS THE PROPERTY OF VERANTIS CORP. IT IS LOANED TO YOU SUBJECT TO RETURN ON DEMAND. THE CONTENTS ARE CONFIDENTIAL, &amp; MUST NOT BE COPIED OR GIVEN TO ANY THIRD PARTIES FOR USE OR EXAMINATION UNLESS OTHERWISE AGREED TO IN WRITING BY VERANTIS CORP.</p>						<p><b>VERANTIS CORP.</b> 7251 Engle Rd, Suite 300 Plaza South One Bldg, Middleburg Hts. OH 44130 VERANTIS SUCCESSOR IN INTEREST TO CEILCOTE AIR POLLUTION CONTROL</p>				
						<p>DRAWN: EDM DATE: 2/10/17</p>	<p>CHK'D.: EDM DATE: 2/10/17</p>	<p><b>5406-002</b></p>		<p>REV. 4</p>

CAD File: 5418-002

CUST.

SUB.

DATE  
DEC. 30, 2010  
CAT. #: EPO202

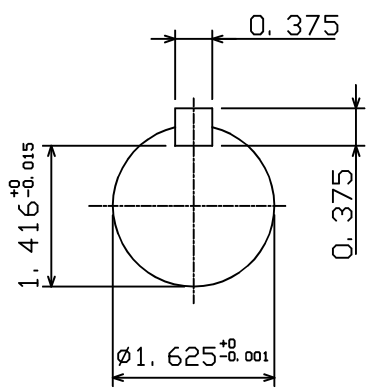
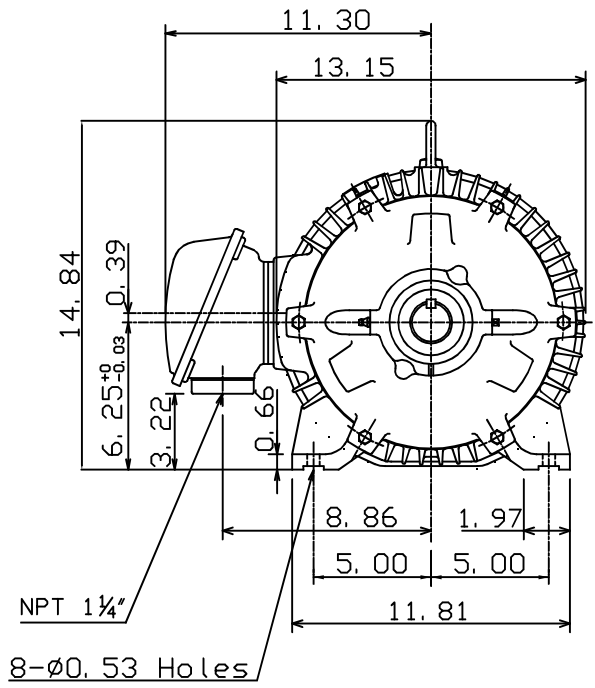
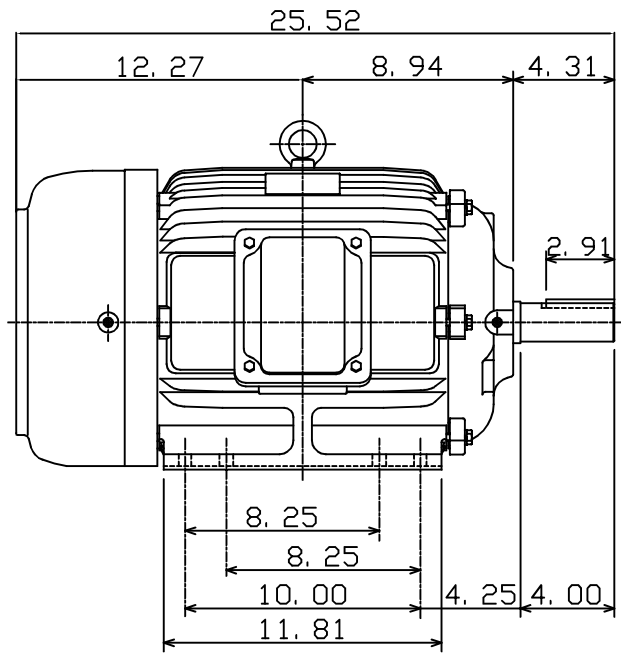
OUTLINE DIMENSIONS  
3-PHASE INDUCTION MOTOR

MOTOR TYPE:  
AEHH8N  
FRAME NO. 256T

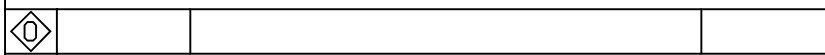
Pole	HP	kW	Hz	VOLT	Syn. Speed r/min(rpm)
2	20	15.0	60	230/460	3600

Ins	Rating	Dimension in	Approx Weight	Bearings
F	CONT.	inches	344 lbs.	DE: 6309ZZ NDE: 6307ZZ

Totally Enclosed Fan-Cooled Type. Squirrel-cage Rotor.



Motor to be purchased with integrated space heater.



DWN.	K. L. KUO	01-10-05
CHKD.	C. H. KAO	01-28-05
APPD.	M. C. TSAI	01-28-05



DWG NO.  
31057H358520



# TECO Westinghouse

ISSUED <b>8/15/2014</b>	<b>PERFORMANCE DATA</b> <b>3-PHASE INDUCTION MOTOR</b>	ENCLOSURE <b>TEFC</b>
TYPE <b>AEHH8N</b>		CATALOG# <b>EP0202</b>

### NAMEPLATE INFORMATION

OUTPUT		POLE	FRAME SIZE	VOLTAGE	HZ	RATED AMBIENT	INS. CLASS	NEMA DESIGN	TIME RATING	SERVICE FACTOR
HP	KW									
<b>20</b>	<b>14.9</b>	<b>2</b>	<b>256T</b>	<b>230/460</b>	<b>60</b>	<b>40°C</b>	<b>F</b>	<b>B</b>	<b>CONT.</b>	<b>1.15</b>

### VARIABLE FREQUENCY DRIVE SERVICE

VARIABLE TORQUE				OHMS/PHASE EQUIVALENT WYE CIRCUIT (AT RATED OPERATING TEMPERATURE 25°C)				
HZ	HP	RPM	TORQUE (lb-ft)	R1	R2	X1	X2	X <sub>m</sub>
<b>3~60</b>	<b>0.0025~20</b>	<b>180~3600</b>	<b>0.073~29.83</b>	<b>0.2419</b>	<b>0.3099</b>	<b>0.8788</b>	<b>1.4624</b>	<b>63.333</b>

CONSTANT TORQUE				CONSTANT HORSEPOWER			
HZ	HP	RPM	TORQUE (lb-ft)	HZ	HP	RPM	TORQUE (lb-ft)
<b>6~60</b>	<b>2~20</b>	<b>360~3600</b>	<b>29.83</b>	<b>60~90</b>	<b>20</b>	<b>3600~5400</b>	<b>29.83~19.89</b>

### TYPICAL PERFORMANCE

FULL LOAD RPM	EFFICIENCY				POWER FACTOR			SOUND PRESSURE LEVEL @ 3 FT Db(A)
	FULL LOAD		3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	
	MIN.%	NOM.%						
<b>3520</b>	<b>91</b>	<b>92.4</b>	<b>93</b>	<b>93.6</b>	<b>92.5</b>	<b>91.5</b>	<b>88</b>	<b>73</b>

CURRENTS									NEMA KVA CODE LETTER	SAFE STALL TIME IN SECONDS	
NO LOAD			FULL LOAD			LOCKED ROTOR				COLD	HOT
AT 208 VOLT	AT 230 VOLT	AT 460 VOLT	AT 208 VOLT	AT 230 VOLT	AT 460 VOLT	AT 208 VOLT	AT 230 VOLT	AT 460 VOLT			
<b>7.48</b>	<b>8.28</b>	<b>4.14</b>	<b>48.43</b>	<b>43.80</b>	<b>21.90</b>	<b>262.3</b>	<b>290.0</b>	<b>145</b>	<b>G</b>	<b>17</b>	<b>12</b>

TORQUE				INERTIA			ACCEL TIME (DOL)		ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR %FLT	PULL UP %FLT	BREAK DOWN %FLT	ROTOR WR <sup>2</sup> (lb-ft <sup>2</sup> )	NEMA LOAD WK <sup>2</sup> (lb-ft <sup>2</sup> )	MAX ALLOWABLE WK <sup>2</sup> (lb-ft <sup>2</sup> )	NEMA LOAD WK <sup>2</sup> Sec	MAX ALLOWABLE WK <sup>2</sup> Sec	COLD	HOT
<b>29.83</b>	<b>210</b>	<b>180</b>	<b>260</b>	<b>1.407</b>	<b>21</b>	<b>42</b>	<b>3.96</b>	<b>7.68</b>	<b>2</b>	<b>1</b>

APPROVED:	<b>M. PRATER</b>	DRAWING NO.	<b>31057EP0202</b>	REVISION:	<b>1</b>
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# RESEARCH AIR FLO, INC.

## Fan Test Report

**Project:** 12 Mile Creek - WWTP Odor Control Fan (Phase 1) **TB#:** 33640  
**Test Date:** 10/24/2018 **Tested By:** L. Locklear

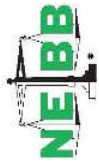
Unit Data		Notes	
Fan Number	OC Fan		
Service	Exhaust		
Manufacturer	Verantis		
Model Number	CLUB-1825		
Airflow Data		Design	Actual
CFM (Unit Total)	5700	5829	
CFM ( Connected Load)	5660	5711	
Pressure Data		Design	Actual
Total SP (in.wc.)	10.00	5.81	
Suction (in.wc.)	-	1.56	
Discharge (in.wc.)	-	4.25	
Motor / Fan Data		Rated	Actual
Voltage	460	484	
Amps	21.9	20.6	
Motor RPM	3520	3514	
Fan RPM	3164	3153	
Motor Manufacturer	Westinghouse		
Motor HP	20.00		
Phase	3		
Service Factor	1.15		
VFD Setting (HZ.)	-		
Drive Data		Notes	
Fan Sheave Size	6" OD		
Fan Bore Size	1-7/16"		
Motor Sheave Size	5-3/8" OD		
Motor Bore Size	1-5/8"		
Belt Size	BX50		
Number Of Belts	3		
Center Distance	17-3/4"		

Unit Data		Notes	
Fan Number			
Service			
Manufacturer			
Model Number			
Airflow Data		Design	Actual
CFM (Unit Total)			
CFM ( Connected Load)			
Pressure Data		Design	Actual
Total SP (in.wc.)			
Suction (in.wc.)	-		
Discharge (in.wc.)	-		
Motor / Fan Data		Rated	Actual
Voltage			
Amps			
Motor RPM			
Fan RPM			
Motor Manufacturer			
Motor HP			
Phase			
Service Factor			
VFD Setting (HZ.)			
Drive Data		Notes	
Fan Sheave Size			
Fan Bore Size			
Motor Sheave Size			
Motor Bore Size			
Belt Size			
Number Of Belts			
Center Distance			

Remarks:





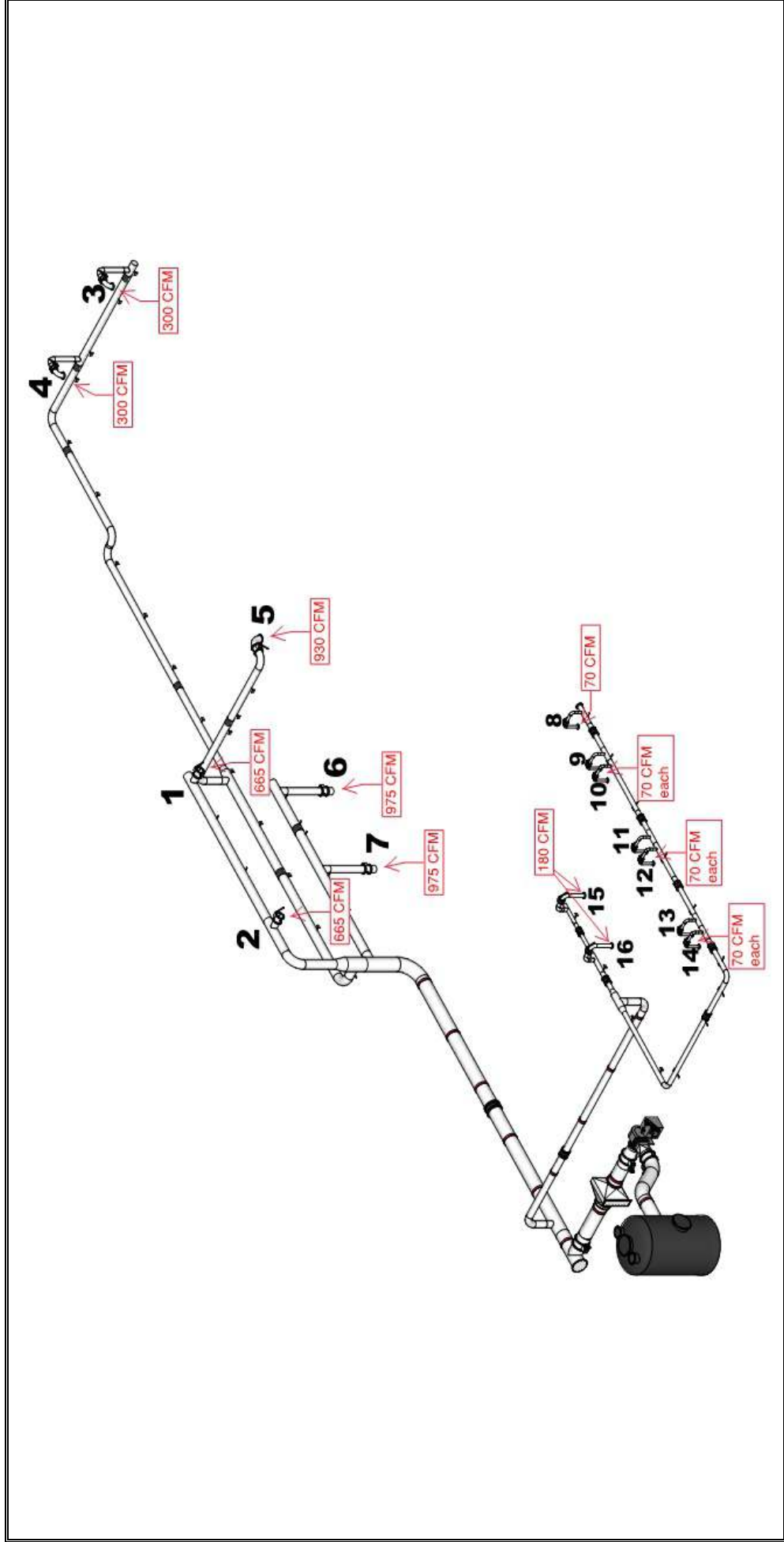


# RESEARCH AIR FLO, INC.

## System Diagram

Project: 12 Mile Creek - WWTP Odor Control Fan (Phase 1) TB#: 33640

Project Address		Drawing Number	Sketch
8299 Kensington Drive		Floor Plan	Mechanical
Waxhaw, NC 28173		Drawing By	MDL
		System	Odor Control Ductwork



Certificate of Proper Installation - Activated Carbon Odor Control System

Project Information

Project Name: Twelve Mile Creek WWTP 7.5 MGD Expansion  
 Owner: Union County, North Carolina  
 Engineer: Hazen & Sawyer  
 Contractor: Adams Robinson

Date: 10/25/18

Equipment Description

<b>Vessel:</b>	<b>Blower</b>
Dimensions: 8'-0" dia. x 14'-6"	Capacity: 5700 cfm
Flow Capacity: 5,700 CFM	Total Static Pressure: 10" w.c.
Media Height: 3 ft (per bed)	Motor HP: 20 HP

Description of Installation Checks	OK	NG	Comments
<b>FRP Carbon Adsorber Vessel</b>			
FRP vessel condition (visual)	✓		
Hold down lugs/anchor bolts secured	✓		
FRP ladders/handrails installed	✓		
Manway covers installed	✓		
Vessel drains/P-Trap	✓		No P-trap, but hard piped. OK.
FRP ductwork connections	✓		
Carbon media loaded	✓		
<b>In-line Mist/Grease Filter</b>			
FRP housing condition (visual)	✓		
Mesh pads installed	✓		
Drain/P-trap	✓		
Cover installed	✓		
FRP ductwork connections	✓		
<b>FRP blower</b>			
Anchor bolts secured	✓		
Drain/P-trap	✓		
FRP ductwork connections	✓		
Hardware check	✓		
Bump and check rotation	✓		
<b>Control Panel</b>			
Secured to foundation	✓		
<b>Instrumentation</b>			
Differential Pressure Gauge (lower bed)	✓		
Differential Pressure Gauge (upper bed)	✓		
Differential Pressure Gauge (mist/grease)	✓		
Differential Pressure Switch (lower bed)	✓		
Differential Pressure Switch (upper bed)	✓		
Differential Pressure Switch (mist/grease)	✓		

Contractor: Adams Robinson

Manufacturer: Daniel Company

Signature

Date

Signature

Date

*Hazell P. Sawyer*

10/25/18









---

## Report of Analysis

**HAZ-MAT Transportation and Disposal, Inc.**  
PO Box 37392  
Charlotte, NC 28237  
Attention: Neil Danziger

Lot Number: **XC14067**  
Date Completed: 04/10/2022

04/11/2022 12:21 PM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

# PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## Case Narrative HAZ-MAT Transportation and Disposal, Inc. Lot Number: XC14067

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18.

Where applicable, all soil sample results (including LOQ and DL if requested) are corrected for dry weight unless flagged with a "W" qualifier.

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

The pH analysis associated with the sample(s) in this report was/were performed after the method recommended 15 minute holding time.

### **TCLP Volatiles Analysis-Method 8260D**

The sample was analyzed at a 10x dilution due to matrix interference. The reporting limits were raised accordingly.

### **Volatile Organic Analysis-Method 8260D**

Sample XC14067-001 had the surrogate Bromofluorobenzene and Toluene-d8 recovered outside of the acceptance limits. Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported

### **PCB Analysis-Method 8082A**

The continuing calibration verification (CCV) associated with sampleXC14067-001 had 1016 and 1260 recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present

# PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

The sample was analyzed at a 50x dilution due to matrix interference. The reporting limits were raised accordingly.

Sample XC4067-001 had the surrogate Tetrachloro-m-xylene recovered outside of the acceptance limits due to confirmed matrix interference.

# PACE ANALYTICAL SERVICES, LLC

---

## Sample Summary HAZ-MAT Transportation and Disposal, Inc. Lot Number: XC14067

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	Lower Sample	Solid	03/07/2022 1230	03/14/2022
002	Upper Sample	Solid	03/07/2022 1230	03/14/2022

(2 samples)

# PACE ANALYTICAL SERVICES, LLC

---

## Detection Summary HAZ-MAT Transportation and Disposal, Inc. Lot Number: XC14067

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	Lower Sample	Solid	Paint Filter Test	9095B	Pass		pass/fail	5
001	Lower Sample	Solid	Ethylbenzene	8260D	2100	Q	ug/kg	7
001	Lower Sample	Solid	Toluene	8260D	12000	Q	ug/kg	7
001	Lower Sample	Solid	Xylenes (total)	8260D	6100	Q	ug/kg	7
002	Upper Sample	Solid	Paint Filter Test	9095B	Pass		pass/fail	11
002	Upper Sample	Solid	Ethylbenzene	8260D	2100	Q	ug/kg	13
002	Upper Sample	Solid	Toluene	8260D	27000	Q	ug/kg	13

(7 detections)

# Inorganic non-metals

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-001</b>
Description: <b>Lower Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>84.1 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Paint Filter) 9095B	1	04/01/2022 1441	KMC		
1		(Soil pH meas) 9045D	1	04/08/2022 1116	KMC		37634

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Paint Filter Test		9095B	Pass			pass/fail	1
Soil pH measured in water @ 14.9 ° C		9045D	9.5			su	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Volatiles

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-001</b>
Description: <b>Lower Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>84.1 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260D	10	03/18/2022 1452	BWS		35403	03/16/2022 2043

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Benzene	71-43-2	8260D	ND		0.050	mg/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		0.10	mg/L	1
Carbon tetrachloride	56-23-5	8260D	ND		0.050	mg/L	1
Chlorobenzene	108-90-7	8260D	ND		0.050	mg/L	1
Chloroform	67-66-3	8260D	ND		0.050	mg/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		0.050	mg/L	1
1,1-Dichloroethene	75-35-4	8260D	ND		0.050	mg/L	1
Tetrachloroethene	127-18-4	8260D	ND		0.050	mg/L	1
Trichloroethene	79-01-6	8260D	ND		0.050	mg/L	1
Vinyl chloride	75-01-4	8260D	ND		0.010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		82	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-001</b>
Description: <b>Lower Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>84.1 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	2	03/16/2022 1733	JM1		35075	5.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Benzene	71-43-2	8260D	ND	Q	680	ug/kg	1
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260D</b>	<b>2100</b>	<b>Q</b>	<b>680</b>	<b>ug/kg</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260D</b>	<b>12000</b>	<b>Q</b>	<b>680</b>	<b>ug/kg</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260D</b>	<b>6100</b>	<b>Q</b>	<b>1400</b>	<b>ug/kg</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	16	47-138
1,2-Dichloroethane-d4		87	53-142
Toluene-d8	N	35	68-124

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Semivolatiles

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-001</b>
Description: <b>Lower Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>84.1 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270E	1	03/25/2022 1747	SCD	03/23/2022 1740	35832	03/21/2022 1914

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,4-Dichlorobenzene	106-46-7	8270E	ND	H	0.040	mg/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND	H	0.080	mg/L	1
Hexachlorobenzene	118-74-1	8270E	ND	H	0.040	mg/L	1
Hexachlorobutadiene	87-68-3	8270E	ND	H	0.040	mg/L	1
Hexachloroethane	67-72-1	8270E	ND	H	0.040	mg/L	1
2-Methylphenol	95-48-7	8270E	ND	H	0.040	mg/L	1
3+4-Methylphenol	106-44-5	8270E	ND	H	0.040	mg/L	1
Nitrobenzene	98-95-3	8270E	ND	H	0.040	mg/L	1
Pentachlorophenol	87-86-5	8270E	ND	H	0.20	mg/L	1
Pyridine	110-86-1	8270E	ND	HS	0.040	mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND	H	0.040	mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND	H	0.040	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl	H	70	37-129
2-Fluorophenol	H	43	24-127
Nitrobenzene-d5	H	85	38-127
Phenol-d5	H	43	28-128
Terphenyl-d14	H	86	10-148
2,4,6-Tribromophenol	H	108	41-144

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# PCBs by GC

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-001</b>
Description: <b>Lower Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>84.1 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Cleanup	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	3660B/3665A	8082A	50	03/18/2022 1559	DAL1	03/17/2022 1116	35168

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Aroclor 1016	12674-11-2	8082A	ND	Q	1000	ug/kg	1
Aroclor 1221	11104-28-2	8082A	ND	Q	1000	ug/kg	1
Aroclor 1232	11141-16-5	8082A	ND	Q	1000	ug/kg	1
Aroclor 1242	53469-21-9	8082A	ND	Q	1000	ug/kg	1
Aroclor 1248	12672-29-6	8082A	ND	Q	1000	ug/kg	1
Aroclor 1254	11097-69-1	8082A	ND	Q	1000	ug/kg	1
Aroclor 1260	11096-82-5	8082A	ND	Q	1000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Decachlorobiphenyl		62	41-132
Tetrachloro-m-xylene	N	26	35-106

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Metals

Client: **HAZ-MAT Transportation and Disposal, Inc.**

Laboratory ID: **XC14067-001**

Description: **Lower Sample**

Matrix: **Solid**

Date Sampled: **03/07/2022 1230**

% Solids: **84.1 03/21/2022 2300**

Date Received: **03/14/2022**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3010A	6010D	1	03/24/2022 1620	KSH2	03/24/2022 0108	35842	03/21/2022 1914
1	1311/7470A	7470A	1	03/24/2022 0717	JAB2	03/24/2022 0354	35915	03/21/2022 1914

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6010D	ND		0.15	mg/L	1
Barium	7440-39-3	6010D	ND		0.25	mg/L	1
Cadmium	7440-43-9	6010D	ND		0.050	mg/L	1
Chromium	7440-47-3	6010D	ND		0.10	mg/L	1
Lead	7439-92-1	6010D	ND		0.10	mg/L	1
Mercury	7439-97-6	7470A	ND		0.0020	mg/L	1
Selenium	7782-49-2	6010D	ND		0.20	mg/L	1
Silver	7440-22-4	6010D	ND		0.10	mg/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Inorganic non-metals

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-002</b>
Description: <b>Upper Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>80.7 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Paint Filter) 9095B	1	04/01/2022 1441	KMC		
1		(Soil pH meas) 9045D	1	04/08/2022 1121	KMC		37634

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Paint Filter Test		9095B	Pass			pass/fail	1
Soil pH measured in water @ 13.9 ° C		9045D	9.7			su	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Volatiles

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-002</b>
Description: <b>Upper Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>80.7 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/5030B	8260D	10	03/18/2022 1517	BWS		35403	03/16/2022 2043

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Benzene	71-43-2	8260D	ND		0.050	mg/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		0.10	mg/L	1
Carbon tetrachloride	56-23-5	8260D	ND		0.050	mg/L	1
Chlorobenzene	108-90-7	8260D	ND		0.050	mg/L	1
Chloroform	67-66-3	8260D	ND		0.050	mg/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		0.050	mg/L	1
1,1-Dichloroethene	75-35-4	8260D	ND		0.050	mg/L	1
Tetrachloroethene	127-18-4	8260D	ND		0.050	mg/L	1
Trichloroethene	79-01-6	8260D	ND	S	0.050	mg/L	1
Vinyl chloride	75-01-4	8260D	ND		0.010	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		100	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-002</b>
Description: <b>Upper Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>80.7 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035 High	8260D	4	03/16/2022 1757	JM1		35075	5.07

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Benzene	71-43-2	8260D	ND	Q	1500	ug/kg	1
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260D</b>	<b>2100</b>	<b>Q</b>	<b>1500</b>	<b>ug/kg</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260D</b>	<b>27000</b>	<b>Q</b>	<b>1500</b>	<b>ug/kg</b>	<b>1</b>
Xylenes (total)	1330-20-7	8260D	ND	Q	2900	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene	N	14	47-138
1,2-Dichloroethane-d4		88	53-142
Toluene-d8	N	27	68-124

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Semivolatiles

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-002</b>
Description: <b>Upper Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>80.7 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3520C	8270E	1	03/25/2022 1813	SCD	03/23/2022 1740	35832	03/21/2022 1914

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,4-Dichlorobenzene	106-46-7	8270E	ND	H	0.040	mg/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND	H	0.080	mg/L	1
Hexachlorobenzene	118-74-1	8270E	ND	H	0.040	mg/L	1
Hexachlorobutadiene	87-68-3	8270E	ND	H	0.040	mg/L	1
Hexachloroethane	67-72-1	8270E	ND	H	0.040	mg/L	1
2-Methylphenol	95-48-7	8270E	ND	H	0.040	mg/L	1
3+4-Methylphenol	106-44-5	8270E	ND	H	0.040	mg/L	1
Nitrobenzene	98-95-3	8270E	ND	H	0.040	mg/L	1
Pentachlorophenol	87-86-5	8270E	ND	H	0.20	mg/L	1
Pyridine	110-86-1	8270E	ND	H	0.040	mg/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND	H	0.040	mg/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND	H	0.040	mg/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl	H	58	37-129
2-Fluorophenol	H	31	24-127
Nitrobenzene-d5	H	72	38-127
Phenol-d5	H	36	28-128
Terphenyl-d14	H	71	10-148
2,4,6-Tribromophenol	H	84	41-144

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# PCBs by GC

Client: <b>HAZ-MAT Transportation and Disposal, Inc.</b>	Laboratory ID: <b>XC14067-002</b>
Description: <b>Upper Sample</b>	Matrix: <b>Solid</b>
Date Sampled: <b>03/07/2022 1230</b>	% Solids: <b>80.7 03/21/2022 2300</b>
Date Received: <b>03/14/2022</b>	

Run	Prep Method	Cleanup	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	3660B/3665A	8082A	50	03/18/2022 1644	DAL1	03/17/2022 1116	35168

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Aroclor 1016	12674-11-2	8082A	ND	QS	1000	ug/kg	1
Aroclor 1221	11104-28-2	8082A	ND	Q	1000	ug/kg	1
Aroclor 1232	11141-16-5	8082A	ND	Q	1000	ug/kg	1
Aroclor 1242	53469-21-9	8082A	ND	Q	1000	ug/kg	1
Aroclor 1248	12672-29-6	8082A	ND	Q	1000	ug/kg	1
Aroclor 1254	11097-69-1	8082A	ND	Q	1000	ug/kg	1
Aroclor 1260	11096-82-5	8082A	ND	QS	1000	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Decachlorobiphenyl	N	39	41-132
Tetrachloro-m-xylene	N	7.8	35-106

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# TCLP Metals

Client: **HAZ-MAT Transportation and Disposal, Inc.**

Laboratory ID: **XC14067-002**

Description: **Upper Sample**

Matrix: **Solid**

Date Sampled: **03/07/2022 1230**

% Solids: **80.7 03/21/2022 2300**

Date Received: **03/14/2022**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Leachate Date
1	1311/3010A	6010D	1	03/24/2022 1642	KSH2	03/24/2022 0108	35842	03/21/2022 1914
1	1311/7470A	7470A	1	03/24/2022 0725	JAB2	03/24/2022 0354	35915	03/21/2022 1914

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6010D	ND		0.15	mg/L	1
Barium	7440-39-3	6010D	ND		0.25	mg/L	1
Cadmium	7440-43-9	6010D	ND		0.050	mg/L	1
Chromium	7440-47-3	6010D	ND		0.10	mg/L	1
Lead	7439-92-1	6010D	ND		0.10	mg/L	1
Mercury	7439-97-6	7470A	ND		0.0020	mg/L	1
Selenium	7782-49-2	6010D	ND		0.20	mg/L	1
Silver	7440-22-4	6010D	ND		0.10	mg/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      L = LCS/LCSD failure  
 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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**Chain of Custody  
and  
Miscellaneous Documents**

# PACE ANALYTICAL SERVICES, LLC



**PACE ANALYTICAL SERVICES, LLC**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.pacelabs.com

**Number 129205**

<b>Client</b> Haz-mat Env. Address 221 Dighton Ave City Charlotte State NC 28206 Zip Code Project Name Twelve Mile Creek WWTP Project No.		<b>Report to Contact</b> Pacey Trendoway Sampler's Signature [Signature] Printed Name Matt Ferrell		Telephone No. / E-mail 704-701-6243 / Pacey@hazmatenv.com Analysis (Attach list if more space is needed)		Clottle No. Page 1 of 1	
Sample ID / Description (Combination for each sample may be combined on one line)		P.O. No. Category Category Category		Collection Time (Military)		Matrix Matrix Matrix	
Lower Sample 3/7/22 12:30 G		3/7/22 3/7/22 12:30 G		12:30 12:30 G		Matrix Matrix Matrix	
Upper Sample 3/7/22 12:30 G		3/7/22 3/7/22 12:30 G		12:30 12:30 G		Matrix Matrix Matrix	

Turn Around Time Required (Prior lab approval required for expedited TAT)	Standard	Rush (Specify)	Sample Disposal <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab	Possible Hazard Identification		OC Requirements (Specify)	
				1. Volatile <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	2. Received by	Date	Time
1. Requested by	3/9/22	10:00	3/9/22	10:00	Secure area	3/9/22	1800
2. Relinquished by	3/14/22	0955	3/14/22	0955	Secure area	3/14/22	0955
3. Relinquished by	3/14/22	1607	3/14/22	1607	Secure area	3/14/22	1607
4. Relinquished by							

Laboratory received by [Signature] LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No <input type="checkbox"/> Ice Pack		Receipt Temp. 1.0 °C	
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Note: All samples are retained for four weeks from receipt unless other arrangements are made.  
 DISTRIBUTION: WHITE & YELLOW-Return in laboratory with Samples; PINK-Field/Client Copy  
 Document Number: MED00242-01

# PACE ANALYTICAL SERVICES, LLC



**Sample Receipt Checklist (SRC) (ME0018C-15)**  
Issuing Authority: Pace ENV - WCOL

Revised: 9/29/2020  
Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Haz-mat Cooler Inspected by/date: KNR / 03/14/2022 Lot #: XC14067

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>22-3</u> 1.0 / 1.0 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>3</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TRN/cyanide/pheno/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) _____ were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>KDRW</u> Date: <u>03/14/2022</u>	

Comments:

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## 13 APPENDIX E – VENDOR PAYMENT LETTER

IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement

**Do Not Submit with Bid**

*-----For informational purposes only. -----*

**ATTENTION: ACCOUNTS PAYABLE VENDORS**

As part of our Fraud Prevention Program, Union County now prefers two methods for payments to vendor accounts. These methods allow for faster and easier payments to vendors.

The first and preferred method available is to accept a VISA card payment from the County. If you accept payment via VISA, payment is made at the time of the transaction or upon receipt and approval of the invoice.

The second method is an Electronic Funds Transfer. (EFT) This means that you will receive payment of invoices due directly into your bank account. With this method, you will get an email confirmation giving you the date, invoice numbers, and total amount paid. Your payment will be available to you on Monday (or the first banking day if Monday is a bank holiday) following receipt of an approved invoice from the County department invoiced.

An EFT Enrollment Form to enroll in the program is attached for your convenience. You can also visit the Union County website at [www.unioncountync.gov](http://www.unioncountync.gov) at any time to get a new form if your banking information changes. If the banking information changes and you do not notify us, it will delay receipt of payment for invoices.

If you wish to receive payment via the County's VISA card, please contact Alex Whitaker at 704-283-3538 or Christi Climbingbear at 704-283-3543, or send an email to [alex.whitaker@unioncountync.gov](mailto:alex.whitaker@unioncountync.gov) and you will be added to the list of vendors accepting the VISA card method of payment.

Union County prefers all vendors participate in one of the two methods described above.

Thank you in advance for your participation.



Please return this completed form and supporting documents to:



Union County -Finance Office  
Suite 714, 7th Floor, 500 N. Main Street, Monroe NC 28112

**Phone:** (704) 283-3886 **Fax:** (704) 225-0664

**Email:** ap@unioncountync.gov

**Authorization for payment via Electronic Funds Transfer (EFT)**

Initial Enrollment

Change Information

Today's Date \_\_\_\_\_

Company Name \_\_\_\_\_

Street Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

By signing below, I hereby authorize Union County to electronically deposit funds into the account indicated below. I understand that if my banking information changes and Union County is not made aware of this change, then payment may be delayed.

Bank Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Routing/ABA # \_\_\_\_\_ Bank Acct No. \_\_\_\_\_

**Payment Notification:** I hereby authorize the following individual to receive an email notification of payment details for all funds deposited to the above account by Union County.

Name & Title \_\_\_\_\_

Email Address \_\_\_\_\_

Phone Number \_\_\_\_\_

Officer Name & Title \_\_\_\_\_

Phone Number \_\_\_\_\_

Signature: \_\_\_\_\_

**FOR ACCOUNT VERIFICATION, PLEASE ATTACH A VOIDED CHECK.**

This authorization will remain in effect until Union County has received written notice to discontinue.

Print Form

## 14 APPENDIX F – TEMPLATE AGREEMENT

IFB 2022-043 12 Mile WRF Grit Facility Odor Control Media Replacement

**Do Not Submit with Bid**

*-----For informational purposes only. -----*



STATE OF NORTH CAROLINA

AGREEMENT

COUNTY OF UNION

THIS AGREEMENT is made and entered into as of \_\_\_\_\_, by and between UNION COUNTY, a political subdivision of the State of North Carolina, whose address is 500 N. Main Street, Monroe, NC 28112, hereinafter "Union," and [Contractor's full legal name], a [type of business (corporation, limited liability company, etc.) and state where incorporated], whose address is \_\_\_\_\_, hereinafter "Contractor."

W I T N E S S E T H

WHEREAS, Union desires that Contractor perform certain [briefly describe services here] services; and

WHEREAS, Contractor is willing to perform such services as described in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto do each contract and agree with the other as follows:

1. SERVICES PERFORMED. Contractor agrees to perform the services as set forth in the attached Scope of Work [or, if the full RFP is to be attached as the scope of work, state the RFP number and full RFP title], which is incorporated herein by reference (hereinafter the "Services"), in accordance with the terms of this Agreement.

2. FEE AND PAYMENT SCHEDULE. Union shall pay Contractor [insert payment amount or rate] for performance of the Services. Contractor shall invoice Union on a monthly basis for Services performed, or upon such other schedule as may be agreed upon by the parties. Payment is due within thirty (30) days of receipt of an accurate invoice by Union's Finance Division. All payments shall be conditioned upon appropriation by the Union County Board of Commissioners of sufficient funds for each request for services.

3. TERM AND TERMINATION. The Effective Date is the date of mutual execution of this Agreement. This Agreement shall have a term of [insert agreement time length] (the "Initial Term"). [*The following sentence to be used only if renewals might be needed or desired, and then only if the RFP lists the possible number of renewals. If the contract is just for a single term, this sentence may be deleted.*] Upon completion of the Initial Term, Union may, in its sole discretion, elect to renew this Agreement for up to \_\_\_\_ [number of possible additional terms, as stated in the RFP] additional \_\_\_\_ [number of years in each renewal term]-year terms, each a "Renewal Term," upon written notice to the Contractor. Union may terminate this Agreement at any time, without cause, upon provision of ten (10) days' written notice to Contractor. In the event of termination without cause, Contractor shall be paid for services performed to the date of notification of termination by Union.

4. OWNERSHIP OF DOCUMENTS. All deliverables and any other contract documents prepared by Contractor, or any subcontractors or subconsultants under the terms of this Agreement ("the Documents"), shall be the property of Union. Contractor further acknowledges that Union is subject to Chapter 132 of the North Carolina General Statutes, the Public Records Act (the "Act"), and that this Agreement, as well as any of the Documents as defined herein, shall be a public record as defined in such Act, and as such, will be open to public disclosure and copying.

5. INSURANCE. The attached Exhibit A, Insurance Requirements, is incorporated herein by reference.

6. INDEMNIFICATION. Contractor agrees to protect, defend, indemnify and hold Union, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof that are due, in whole or in part, to the negligence of Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide defense for, and defend the same at its sole expense and agrees to bear all other costs and expenses related thereto.

7. DECLARATION BY CONTRACTOR. Contractor declares that Contractor has complied with all federal, state and local laws regarding business permits, certificates, and licenses that may be required to carry out the work to be performed under this Agreement.

8. FEDERAL, STATE, AND LOCAL TAXES. Neither federal, nor state, nor local income tax nor payroll tax of any kind shall be withheld or paid by Union on behalf of Contractor or the employees of Contractor. Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes.

9. NOTICE TO CONTRACTOR REGARDING ITS TAX DUTIES AND LIABILITIES. Contractor understands that Contractor is responsible to pay, according to law, Contractor's income tax. If Contractor is not a corporation, Contractor further understands that Contractor may be liable for self-employment (social security) tax, to be paid by Contractor according to law.

10. FRINGE BENEFITS. Because Contractor is engaged in Contractor's own independently established business, Contractor is not eligible for, and shall not participate in, any employee pension, health or other fringe benefit plan of Union.

11. UNION NOT RESPONSIBLE FOR WORKERS' COMPENSATION. No workers' compensation insurance shall be obtained by Union concerning Contractor or the employees of Contractor. Contractor shall comply with the workers' compensation law concerning Contractor and the employees of Contractor.

12. NO AUTHORITY TO BIND UNION. Contractor has no authority to enter into contracts or agreements on behalf of Union. This Agreement does not create a partnership or any form of agency between the parties.

13. ASSIGNMENT. Neither Union nor Contractor shall assign, sublet or transfer any rights under or interest in this Agreement (including, but without limitation, monies that may become due or monies that are due) without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to assignment, no assignment shall release or discharge the assignor from any duty or responsibility under this Agreement.

14. NON-WAIVER. The failure of either party to exercise any of its rights under this agreement for a breach thereof shall not be deemed to be a waiver of such rights or a waiver of any subsequent breach.

15. HOW NOTICES SHALL BE GIVEN. Any notice given in connection with this agreement shall be given in writing and shall be delivered either by hand to the party or by certified mail, return receipt requested, to the party at the party's address stated herein. Any party may change its address stated herein by giving notice of the change in accordance with this paragraph.

16. APPLICABLE LAW AND JURISDICTION. This Agreement shall be construed and enforced in accordance with the laws of the State of North Carolina. The parties to this Agreement confer exclusive jurisdiction of all disputes arising hereunder upon the General Courts of Justice of Union County, North Carolina.

17. COMPLETE AGREEMENT. This Agreement contains the complete agreement of the parties regarding the terms and conditions of the Agreement, and there are no oral or written conditions, terms, warranties, understandings or other agreements pertaining thereto which have not been incorporated herein. This Agreement may be modified only by written instrument duly executed by both parties, or their respective successors in interest.

18. SEVERABILITY. The provisions hereof are severable, and should any provision be determined to be invalid, unlawful or otherwise null and void by any court of competent jurisdiction, the other provisions shall remain in full force and effect and shall not thereby be affected unless such ruling shall make further performance hereunder impossible or impose an unconscionable burden upon one of the parties.

19. AUTHORITY. Each party warrants that it has the corporate or other organizational power and authority to execute, deliver and perform this Agreement. Each party further warrants that the execution, delivery and performance by it of the Agreement has been duly authorized and approved by all requisite action of the party's management and appropriate governing body.

20. E-VERIFY. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any subcontractor performing work under this Agreement: (i) uses E-Verify if required to do so by North Carolina law; and (ii) otherwise complies with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. A breach of this provision by Contractor will be considered a breach of this Agreement, which entitles Union to terminate this Agreement, without penalty, upon notice to Contractor.

*[Signatures follow on the next page.]*

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have hereunto set their hands and seals, and have caused this Agreement to be duly executed, this the day and year first above written.

WITNESS:

UNION COUNTY

BY: \_\_\_\_\_  
Lynn G. West, Clerk to the Board

BY: \_\_\_\_\_(SEAL)  
William M. Watson, County Manager

WITNESS:

[Contractor's Full Legal Name]

BY: \_\_\_\_\_

BY: \_\_\_\_\_(SEAL)

Approved as to Legal Form \_\_\_\_\_

This instrument has been preaudited in the manner required by The Local Government Budget and Fiscal Control Act.

\_\_\_\_\_  
Deputy Finance Officer

**Exhibit A**  
**Insurance Requirements**

**I. BASIC INSURANCE REQUIREMENTS.** At Contractor's sole expense, Contractor shall procure and maintain the following minimum insurances with insurers authorized to do business in North Carolina and rated A-VII or better by A.M. Best, or as otherwise authorized by the Union County Risk Manager.

**A. WORKERS' COMPENSATION**

Statutory (coverage for three or more employees) limits covering all employees, including Employer's Liability with limits of:

\$500,000	Each Accident
\$500,000	Disease - Each Employee
\$500,000	Disease - Policy Limit

**B. COMMERCIAL GENERAL LIABILITY**

Covering all operations involved in this Agreement.

\$2,000,000	General Aggregate
\$2,000,000	Products/Completed Operations Aggregate
\$1,000,000	Each Occurrence
\$1,000,000	Personal and Advertising Injury Limit

**C. COMMERCIAL AUTOMOBILE LIABILITY**

\$1,000,000	Combined Single Limit - Any Auto
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**D. PROFESSIONAL LIABILITY**

\$1,000,000	Claims Made
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Contractor shall provide evidence of continuation or renewal of Professional Liability Insurance for a period of two (2) years following termination of the Agreement.

**E. POLLUTION LIABILITY INSURANCE**

\$1,000,000	Claims Made
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Contractor shall provide evidence of continuation or renewal of Pollution Liability Insurance for a period of two (2) years following termination of the Agreement.

F. NETWORK SECURITY & PRIVACY LIABILITY (CYBER)

\$1,000,000 Claims Made  
\$3,000,000 Aggregate Limit

Contractor shall provide evidence of continuation or renewal of Network Security & Privacy Liability Insurance for a period of two (2) years following termination of the Agreement.

**II. ADDITIONAL INSURANCE REQUIREMENTS.**

A. The Contractor's General Liability policy shall be endorsed, specifically or generally, to include the following as Additional Insured:

**UNION COUNTY, ITS OFFICERS, AGENTS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO THE GENERAL LIABILITY INSURANCE POLICY.**

B. Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

C. Contractor shall have no right of recovery or subrogation against Union County (including its officers, agents and employees).

D. It is the intention of the parties that the insurance policies afforded by Contractor shall protect both parties and be primary and non-contributory coverage for any and all losses covered by the above-described insurance.

E. Union County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

F. Notwithstanding the notification requirements of the Insurer, Contractor hereby agrees to notify County's Risk Manager at 500 N. Main Street, Suite #130, Monroe, NC 28112, within two (2) days of the cancellation or substantive change of any insurance policy set out herein. Union, in its sole discretion, may deem failure to provide such notice as a breach of this Agreement.

G. The Certificate of Insurance should note in the Description of Operations the following:

Department:   
Contract #:

H. Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, save harmless and defend Union County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

I. Certificate Holder shall be listed as follows:

Union County  
Attention: Keith A. Richards, Risk Manager  
500 N. Main Street, Suite #130  
Monroe, NC 28112

J. If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.