



**ASBESTOS, LEAD, AND MOLD ASSESSMENT
OF THE OLD DIESEL PLANT LOCATED AT
1551 BARROW STREET, HOUMA, LA 70360**

FOR TERREBONE PARISH CONSOLIDATED GOVERNMENT

May 30, 2023
TES Job #: 1658-23284

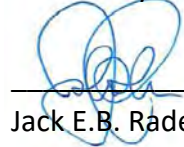
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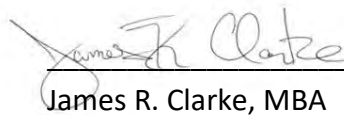
TES Job#: ENV 1658-23284

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1. EXECUTIVE SUMMARY:

Technical Environmental Services, Inc. performed a limited asbestos bulk sampling, limited lead-based paint chip sampling, and limited mold assessment in areas of concern, which were identified by the client's representative, Royal Engineering, at the Old Diesel Plant located at 1551 Barrow Street, Houma, LA. During the survey, fifty-one asbestos bulk samples of suspect materials and forty-four paint chip samples were collected from various homogenous materials. Additionally, a total of eight mold air samples, six interior and two outside samples for comparison, and three mold surface samples were collected from areas due to concern for indoor air quality and suspected mold growth.

Fifteen of the fifty-one asbestos bulk samples showed detections of asbestos in concentrations exceeding the regulatory limit of 1%. The asbestos concentrations ranged from 3% to 6% Chrysotile and 4% Amosite. Forty-three of the forty-four paint chip samples analyzed during this survey contained a detectable concentration of lead in the paint. The lead concentrations ranged from <0.0080 to 26 % by weight. Four of the six interior mold air samples and each of the three mold surface samples analyzed during this survey were not acceptable based on the clearance criteria. It was determined that unacceptable concentrations of airborne and surface mold were present in the Interior Restroom, Training Room, Upstairs Storage, Upstairs Valve Room, and the Downstairs Storage.

The client should consider the development of an asbestos and mold abatement protocol, as well as a lead worker protection plan, prior to renovation or demolition activities. The client should also consider air monitoring to assess the airborne level of asbestos and lead during renovation activities to ensure controls are sufficient while disturbing the lead containing paint and asbestos containing materials. Clearance air monitoring for asbestos and mold should also be considered following abatement of all contaminated materials. All painted components should be tested via toxicity characteristic leaching procedure for lead to determine proper disposal methods, and all asbestos containing materials shall be disposed of per state and federal regulations.

2. PURPOSE AND SCOPE OF SURVEY:

At the request of Mr. Jason Broussard of Royal Engineers & Consultants (Owner's Representative), Technical Environmental Services, Inc. (TES) performed bulk sampling to determine concentrations of asbestos and lead in various homogenous components at client specific locations within the Old Diesel Plant located in Terrebonne Parish, Louisiana. In addition to asbestos and lead sampling, TES performed mold sampling within designated locations to determine the indoor air quality and presence of mold. This sampling was performed in preparation for demolition activities.

3. SITE BACKGROUND:

Royal Engineers & Consultants is a Louisiana based engineering and consulting firm specializing in Civil Engineering, Coastal Services, Construction Management, Project Management, and Disaster Recovery Services. Royal Engineers & Consultants was contracted with the Terrebonne Parish Consolidated Government for the preparation and oversight of the mold, asbestos, and lead sampling services of the Old Diesel Plant located in Houma, Louisiana. Royal Engineers & Consultants is the Owner's

Representative. Terrebonne Parish Consolidated Government is the Owner.

The Old Diesel Plant is an approximately 25,000 square feet structure on a concrete slab with brick exterior walls and a peaked asphalt roof. The interior is comprised of one office/training area with an interior restroom and several storage rooms. The training area is made up of 4' x 2' ceiling tiles and FRP panel walls with vinyl cove bases. The upstairs storage room is made up of 1' x 1' ceiling tile and gypsum walls with vinyl cove bases. The Old Diesel Plant building sustained major structural damage following Hurricane Ida in 2021. Exterior photos of the building and figures including the sample locations and asbestos homogenous areas are detailed in the following figures. Additional information can be viewed in the field notes in **Attachment A**.

Figure 3.1: Exterior of Old Diesel Plant



Figure 3.2: Exterior of Old Diesel Plant



[illegible]

[illegible]

Figure 3.5: ACM and Mold Survey Sample Locations – First Floor

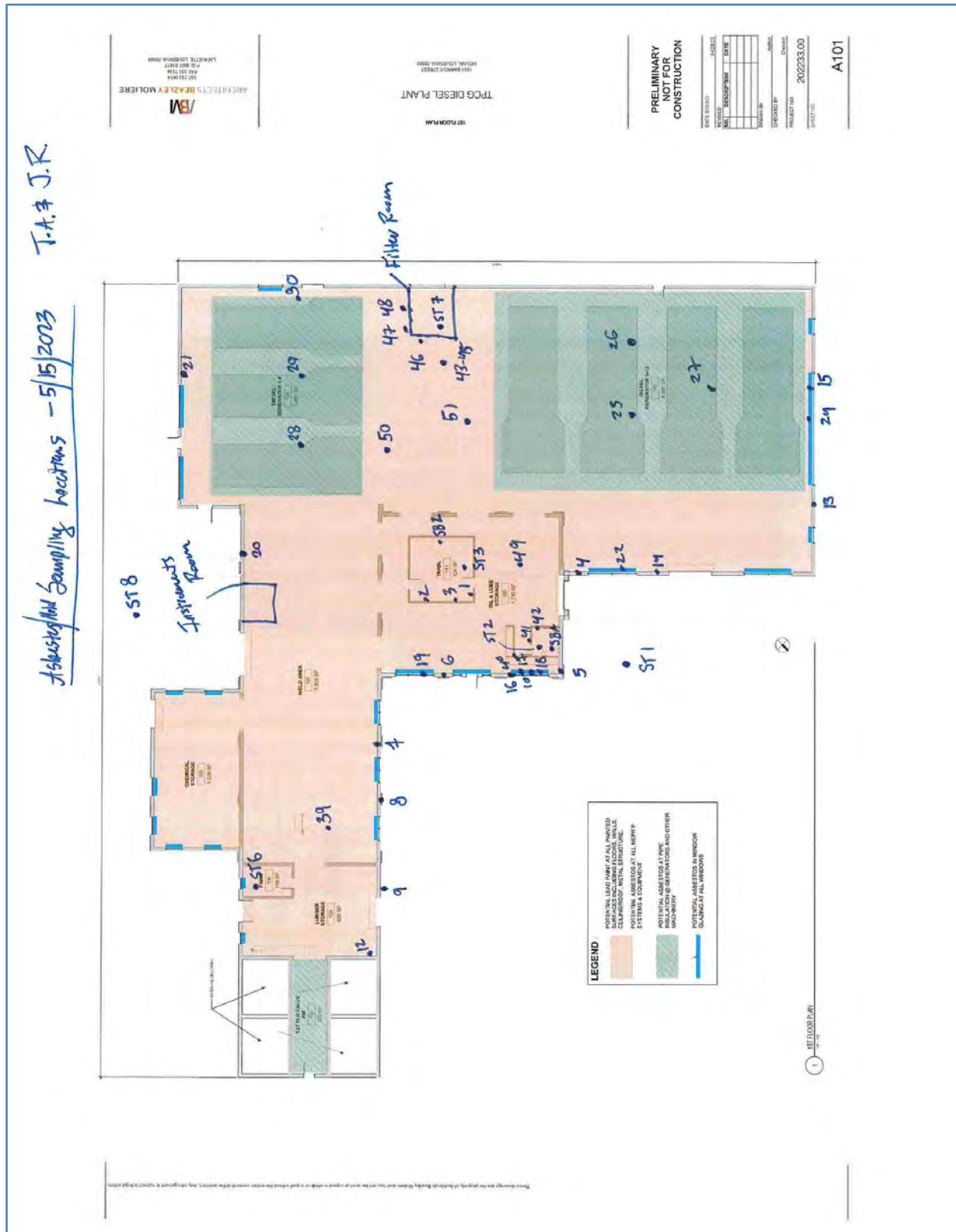
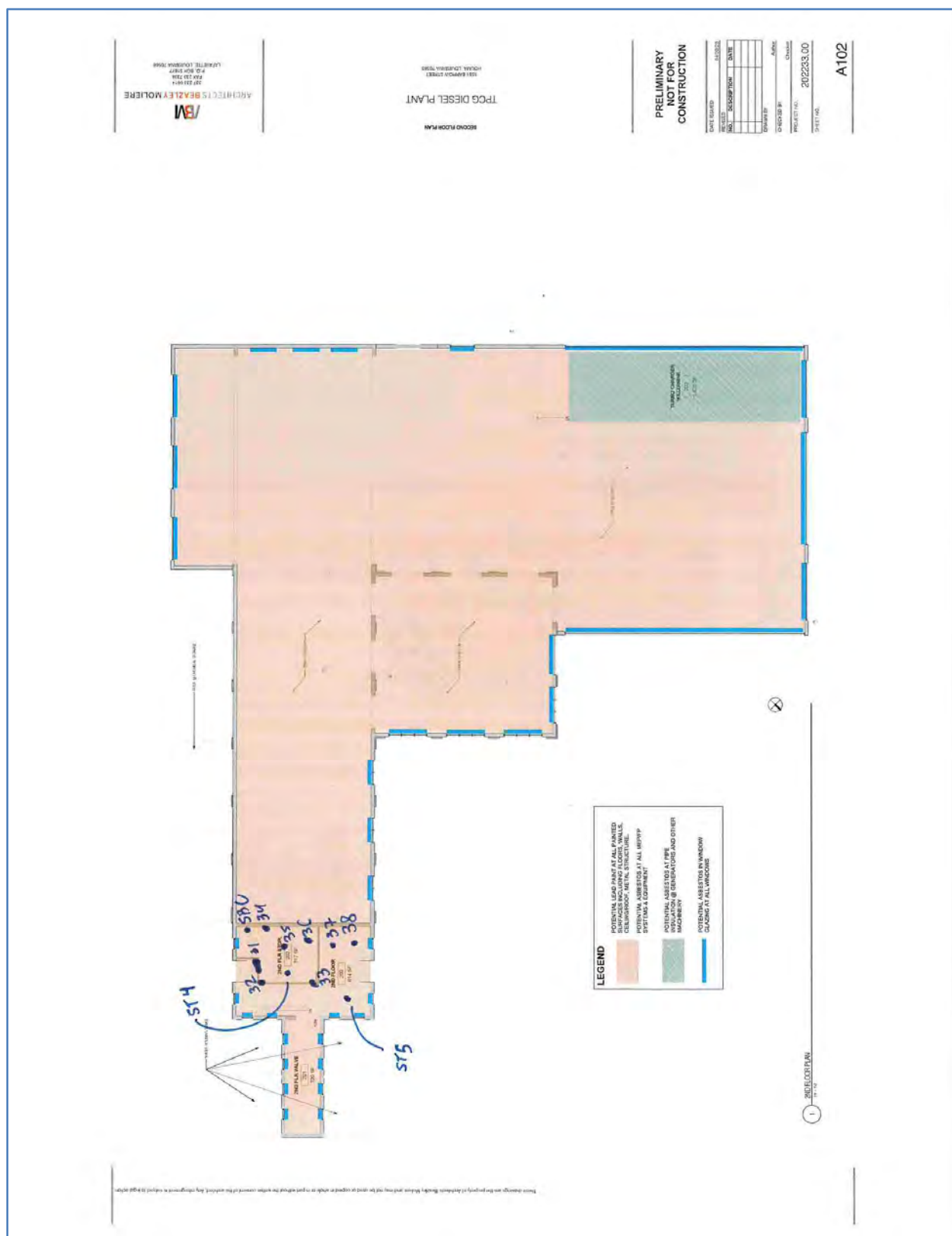


Figure 3.6: ACM and Mold Survey Sample Locations – Second Floor



4. SURVEY METHODOLOGY:

Mr. Thomas L. Arnold Jr., a TES Louisiana Department of Environmental Quality (LDEQ) accredited asbestos inspector, lead inspector, and lead risk assessor performed the onsite surveys on April 14-15, 2023. Mr. Arnold's asbestos, lead inspector, and lead risk assessor certificates can be viewed in **Attachment B**. The locations and suspect materials that were sampled for asbestos and lead during the survey were selected because they will be disturbed by the planned renovation/demolition activities. The locations and suspect materials that were sampled for mold during the survey were selected because they will need to be abated during planned renovation/demolition activities. During the survey, bulk material samples were collected for asbestos and lead concentration analysis. Air and surface samples were also collected for mold analysis. Photographs of the homogenous materials and sample locations were collected. These photographs can be viewed in **Attachment C**.

4.1. Asbestos:

The asbestos sampling was completed by systematically identifying homogenous suspect asbestos containing materials (ACM), collecting the sample, placing the material into a plastic bag, recording the material on a field form, and collecting sufficient samples based on the LDEQ requirements. Following the onsite surveys, a chain of custody was completed, and the samples were shipped to CA Labs, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory, for analysis via Polarized Light Microscopy (PLM).

4.2. Lead:

Bulk samples of paint were collected by scraping at least 1 gram of paint from each component sampled, ensuring that all layers of paint on each component were sampled evenly. The paint chip samples were individually placed into plastic bags and sealed. Following the onsite surveys, a chain of custody was completed, and the samples were shipped to EMSL Analytical Inc., a National Lead Laboratory Accreditation Program (NLLAP) accredited lab, for lead analysis via SW846-7000B method.

4.3. Mold:

Air samples for mold were collected using a Zefon Bio-Pump and spore trap Air-O-Cell cassettes. Each air sample was operated at 15 liters per minute for 10 minutes. Through this sampling method, airborne fungal spores are impacted on an adhesive-coated transparent surface within the cassette (spore trapping) and analyzed under a microscope. Non-cultured analysis includes spores that are viable and those that are non-viable (i.e., unable to grow on a culture medium). Spore trapping allows quick and accurate counting of total spores and Genus level identification of some spores. This method also gives an indication of the total allergen potential of the air contaminants, because both viable and non-viable spores are allergenic.

The surface sample was collected by using a sterile tape lift. An area of approximately 1 square centimeter (cm²) was sampled for each tape lift. The tape was removed from the protective case and detached from the paper backing then adhered to the sampling surface. Once complete with sampling, the tape was placed in its original container. Tape lift samples were collected after the air samples as to not cause dispersion of mold spores. The tape lift samples were analyzed using *Qualitative Spore Count Direct Exam*.

All media was labeled, a chain of custody completed, and mold samples were shipped to Eurofins J3 Resources, Inc., an American Industrial Hygiene Association (AIHA) accredited laboratory for expedited analysis.

5. EXPOSURE LIMITS & HEALTH EFFECTS:

5.1 Asbestos:

Asbestos is a naturally occurring mineral fiber that has been historically used for its heat and corrosion resistance properties. Some of the uses of asbestos include pipe insulation, floor tiles, building materials, fireproofing materials, brake pads, cement pipe, gaskets, textiles, and many more. There are six different known types of asbestos, and the most commonly used types are Chrysotile (“White Asbestos”), Amosite (“Brown Asbestos”), and Crocidolite (“Blue Asbestos”). The most common way for asbestos fibers to enter the body is through inhalation. Inhaled fibers may become trapped in the mucous membranes of the nose and throat, where they can then be removed, but some may pass deep into the lung tissue, which is where they can cause health problems. The three primary diseases associated with exposure to asbestos are Asbestosis, Lung Cancer, and Mesothelioma.

Asbestosis- Asbestosis is a serious chronic, progressive disease that can eventually lead to disability or death in people exposed to high amounts of asbestos over a long period. Asbestos fibers cause the lung tissues to scar; when the scarring spreads, it becomes harder to breathe. Symptoms include shortness of breath, a dry crackling sound in the lungs while inhaling, coughing, and chest pain. The typical latency period is approximately 5-30 years. This condition is permanent and there is no effective treatment. *Lung cancer*- Lung cancer causes the largest number of deaths related to asbestos exposure. The incidence of lung cancer in people who are directly involved in the mining, milling, and manufacturing industries, and use asbestos and its products is much higher than in the general population. The most common symptoms of lung cancer are coughing and a change in breathing. Other symptoms include shortness of breath, persistent chest pains, hoarseness, and anemia. The risk greatly increases in workers who smoke and have been exposed to asbestos. *Mesothelioma*- Mesothelioma is a rare form of cancer that most often occurs in the thin membrane lining of the lungs (pleura), chest, abdomen (peritoneum), and (rarely) heart. About 200 cases are diagnosed each year in the U.S., and virtually all cases are linked with asbestos exposure. Approximately two percent of all miners and textile workers who work with asbestos contract mesothelioma. This cancer is very invasive and spreads quickly, eventually crushing the lungs so that the patient cannot breathe. It is painful and always fatal. It can be caused by very low exposure and is not directly related to the amount inhaled. This cancer may take 30-40 years to develop ⁽¹⁾.

Occupational Exposure Limits (OELs) for applicable constituents of concern are set by regulatory agencies, such as the Occupational Safety and Health Administration (OSHA). OSHA has established a regulatory permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter (f/cc), and a regulatory excursion limit of 1.0 f/cc for asbestos in 29 CFR 21910.1001. The PEL applies to full shift samples, and the excursion limit applies to thirty-minute samples.

Footnotes:

⁽¹⁾ <https://www.nhlbi.nih.gov/health/health-topics/topics/asb>

5.2 Lead

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of lead in adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people, and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High level exposure in men can damage the organs responsible for sperm production. We have no conclusive proof that lead causes cancer in humans⁽¹⁾.

The Occupational Health and Safety Administration (OSHA) does not set a safe limit of lead content in paint. Rather, OSHA requires lead air sampling be administered on personnel disturbing the paint, and the time weighted average results from the airborne exposure assessments are compared to the OSHA action level (30 $\mu\text{g}/\text{m}^3$), and the OSHA eight-hour permissible exposure limit (50 $\mu\text{g}/\text{m}^3$). The OSHA ten-hour permissible exposure limit (40 $\mu\text{g}/\text{m}^3$). The OSHA PEL is a function of the work shift. If an employee works a shift longer than eight-hours, then the OSHA PEL can be calculated using the following formula: Allowable Employee Exposure in ($\mu\text{g}/\text{m}^3$) = 400 divided by hours worked in the shift.

Footnotes:

⁽¹⁾ <https://www.atsdr.cdc.gov>

5.3 Mold

Currently, there are no regulatory standards that can be used in the interpretation of laboratory analytical findings for fungi and other particulates. Air samples tend to be quite variable and are only considered a snapshot-type indication of what was in the air at the time the sample was collected. The measured fungi concentrations in the indoor air were evaluated by comparing the analytical results of the indoor air samples to that of the outdoor air sample results. TES uses the following mold in air criteria to determine if air in a building is indicative of a well-maintained building:

- Total mold concentrations of each sample collected inside the building are less than the highest control sample collected. A difference of 40 spores per cubic meter (sp/m^3) of air or less is considered negligible. 40 sp/m^3 is roughly equivalent to 2-5 raw count spores.
- Concentrations of all individual mold types and species inside the building must not be greater than the highest control sample collected; if the control sample(s) results for Ascospores, Basidiospores, Cladosporium, or Penicillium / Aspergillus type molds are less than the medium typical concentration for that month in the state in which the samples were collected (if this information is provided the laboratory), use the medium concentration value. Use the highest individual control sample result for comparison purposes. A difference of 40 spores per cubic meter (sp/m^3) of air or less is considered negligible. Stachybotrys type molds must not have any measurable concentrations detected.

Similar to air sample exposure levels, there is currently no regulatory guidance for surface sampling of mold. The tape lift analysis via Qualitative Spore Count Direct Exam indicates which mold types at the Genus level were present in the sample, along with a growth rating from <1+ to 4+ with 4+ indicating the highest mold growth present. The laboratory provides a description of what each growth rating entails. This description along with the growth ratings are detailed in the following table.

Table 1: Qualitative Spore Count Growth Rating Table

Growth Rating	Quantities of molds indicating growth are listed in the MOLD/FUNGAL GROWTH section. Judgement is used in determining the amount of growth present in the sample. For example, if only one portion of the sample has evidence of heavy growth, then it will receive a rating of heavy growth even though, strictly speaking, on a percentage basis of the entire sample, the amount of growth is low.	
	Swab/Tape/Dust/Wipe sample	Bulk Sample
< 1+ (Very Light Growth)	Evidence of very light growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in less than 10% of the microscopic fields examined.	Areas of very light growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
1+ (Light Growth)	Evidence of light growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 10 to 25% of the microscopic fields examined.	Areas of light growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
2+ (Moderate Growth)	Evidence of moderate growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 26 to 50% of the microscopic fields examined.	Areas of moderate growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
3+ (Heavy Growth)	Evidence of heavy growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 51 to 75% of the microscopic fields examined.	Areas of heavy growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
4+ (Very Heavy Growth)	Evidence of very heavy growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found to be nearly confluent in the majority of the microscopic fields examined.	Areas of very heavy growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.

6. SURVEY FINDINGS:

During the survey, fifty-one (51) asbestos bulk samples of suspect materials and forty-four (44) paint chip samples were collected from various homogenous materials and analyzed to determine the asbestos and lead concentrations, respectively. Additionally, a total of eight (8) mold air samples, six (6) interior and two (2) outside samples for comparison, and three (3) mold surface sample were collected from client designated areas and analyzed to determine the concentrations of mold spores present in the indoor locations. A summary of the sample results and their respective locations are tabulated in the following tables. The laboratory reports are provided in **Attachment D**.

Table 6.1: Asbestos Samples and Results

Sample ID	Location	Homogenous #; Description	AHERA Category	Friable	Estimated Quantity	Percent / Type of Asbestos
A01	Office (Training Room)	4'x2' Ceiling Tile	M	Yes	500 square feet	None Detected
A02	Training Room	4'x2' Ceiling Tile	M	Yes	500 square feet	None Detected
A03	Training Room	4'x2' Ceiling Tile	M	Yes	500 square feet	None Detected
B04	Exterior Western Walls	Flat Exterior Plaster	S	No	½ of Bldg.	None Detected
B05	Exterior Western Walls	Flat Exterior Plaster	S	No	½ of Bldg.	None Detected
B06	Exterior Western Walls	Flat Exterior Plaster	S	No	½ of Bldg.	None Detected
C07	Exterior Southern Walls	Textured Exterior Plaster	S	No	½ of Bldg.	None Detected
C08	Exterior Southern Walls	Textured Exterior Plaster	S	No	½ of Bldg.	None Detected
C09	Exterior Southern Walls	Textured Exterior Plaster	S	No	½ of Bldg.	None Detected
D10	Exterior & Interior Northwest Wing	Exterior & Interior Brick Mortar (Old)	S	No	20,000 square feet	None Detected
D11	Exterior & Interior Northwest Wing	Exterior & Interior Brick Mortar (Old)	S	No	20,000 square feet	None Detected
D12	Exterior & Interior Northwest Wing	Exterior & Interior Brick Mortar (Old)	S	No	20,000 square feet	None Detected
E13	New Wing	Exterior & Interior Brick Mortar (New)	S	No	20,000 square feet	None Detected
E14	New Wing	Exterior & Interior Brick Mortar (New)	S	No	20,000 square feet	None Detected
E15	New Wing	Exterior & Interior Brick Mortar (New)	S	No	20,000 square feet	None Detected
F16	Corner by Bathroom	Rose Colored Window Glazing	S	No	3,000 square feet	None Detected
F17	Corner by Bathroom	Rose Colored Window Glazing	S	No	3,000 square feet	None Detected
F18	Corner by Bathroom	Rose Colored Window Glazing	S	No	3,000 square feet	None Detected

Sample ID	Location	Homogenous #; Description	AHERA Category	Friable	Estimated Quantity	Percent / Type of Asbestos
G19	All Old Part of Building - Bathroom	Grey Window Glazing	S	No	+/- 5,000 linear feet	None Detected
G20	All Old Part of Building - Bathroom	Grey Window Glazing	S	No	+/- 5,000 linear feet	None Detected
G21	All Old Part of Building - Bathroom	Grey Window Glazing	S	No	+/- 5,000 linear feet	None Detected
H22	New Wing	White Window Glazing	S	No	+/- 5,000 linear feet	None Detected
H23	New Wing	White Window Glazing	S	No	+/- 5,000 linear feet	None Detected
H24	New Wing	White Window Glazing	S	No	+/- 5,000 linear feet	None Detected
I25	New Generators – Generator #9	Pipe Insulation at 36" Generator Exhaust	TSI	Yes	+/- 120 Linear Feet	6% Chrysotile and 4% Amosite
I26	New Generators – Generator #9					6% Chrysotile and 4% Amosite
I27	New Generators – Generator #10					6% Chrysotile and 4% Amosite
J28	Old Generators – Generator #6	Pipe Insulation at 36" Generator Exhaust	TSI	Yes	+/- 120 Linear Feet	5% Chrysotile
J29	Old Generators – Generator #7					5% Chrysotile
J30	Old Generators – Generator #7					5%Chrysotile
K31	Upstairs Storage – West Central	Joint Compound (White Compound and Green Surfaced White Compound)	M	No	+/- 1,000 Square Feet	3% Chrysotile (White Compound and Green Surfaced White Compound)
K32	Upstairs Storage – Southwest Central					3% Chrysotile (White Compound and Green Surfaced White Compound)
K33	Upstairs Storage - Southeast					3% Chrysotile (White Compound and Green Surfaced White Compound)

Sample ID	Location	Homogenous #; Description	AHERA Category	Friable	Estimated Quantity	Percent / Type of Asbestos
L34	2nd Floor Storage	1x1 Ceiling Tile	M	Yes	+/- 2,000 square feet	None Detected
L35	2nd Floor Storage	1x1 Ceiling Tile	M	Yes	+/- 2,000 square feet	None Detected
L36	2nd Floor Storage	1x1 Ceiling Tile	M	Yes	+/- 2,000 square feet	None Detected
M37	Throughout	Roofing System	M	No	25,000 square feet	None Detected
M38	Throughout	Roofing System	M	No	25,000 square feet	None Detected
M39	Throughout	Roofing System	M	No	25,000 square feet	None Detected
N40	Bathroom	Interior Rusting Panel	M	No	100 square feet	None Detected
N41	Bathroom	Interior Rusting Panel	M	No	100 square feet	None Detected
N42	Bathroom	Interior Rusting Panel	M	No	100 square feet	None Detected
O43	Oil Filter Tanks – Between Old and New Generators	Oil Filter Tank - Black and Yellow Fibrous Insulation	TSI	Yes	+/- 5 Cubic Feet	2% Chrysotile
O44	Oil Filter Tanks – Between Old and New Generators					2% Chrysotile
O45	Oil Filter Tanks – Between Old and New Generators					2% Chrysotile
P46	Filter Room	CB Mortar- Filter Room	S	No	500 square feet	None Detected
P47	Filter Room	CB Mortar- Filter Room	S	No	500 square feet	None Detected
P48	Filter Room	CB Mortar- Filter Room	S	No	500 square feet	None Detected
Q49	Throughout	Concrete Slab	S	No	25,000 square feet	None Detected

Sample ID	Location	Homogenous #; Description	AHERA Category	Friable	Estimated Quantity	Percent / Type of Asbestos
Q50	Throughout	Concrete Slab	S	No	25,000 square feet	None Detected
Q51	Throughout	Concrete Slab	S	No	25,000 square feet	None Detected

Note: AHERA Categories: M = Miscellaneous; TSI = Thermal System Insulation; SM: Surfacing Materials

Table 6.2: Lead-Based Paint Samples and Results

Sample ID	Equipment/Location	Paint Color	Substrate / Component	Lead Concentration (% wt)
01	Exterior Wall – Facing North	White Over Brick	Brick Wall	0.11 %
02	Exterior Exhaust Fan Cover	Silver Over Orange Over Metal	Metal Hood	14 %
03	Exterior Wall – Facing West	White Over Textured Plaster	Textured Plaster	0.028 %
04	Exterior Metal Door – Facing East	White Over Grey Over Red Over Metal	Metal Door	13 %
05	Exterior Door Frame – Facing South	Green Over White Over Wood	Wooden Door Frame	5.8 %
06	Exterior – Cooling Water Line	Blue Over Iron	Ductile Iron	0.058%
07	Exterior – Window Facing East and North	Silver Over Metal	Metal	0.27%
08	2 nd Floor – Outside Storage Room Interior Wall Facing South	Dark Green Over Brick	Brick wall	<0.050%
09	Interior Wall – Facing South	Light Green Over Brick	Brick Wall	1.6 %
10	Interior Separator Wall – Upstairs Facing North	Red Over Drywall (Around Former Fire Extinguisher Location)	Dry Wall	0.84 %
11	Interior Wall – Facing South	Purple Over White Over Brick	Brick Wall	0.57 %
12	Interior Wall – Facing South	Cream Over Light Green Over Brick	Brick Wall	1.3 %
13	Handrail – Upstairs	Grey Over Dark Green Over Metal	Metal Pipe Handrail	5.7 %
14	Valve Stems and Feeder Pipes – Valve Room	Silver Over Metal	Metal Piping and Valves	0.95 %
15	Yellow on Loading Ramp and Rail	Yellow Over Metal	Concrete/Metal	3.4 %
16	Exterior Door Near Southeast Corner	Dark Green Over Silver Over Door	Wooden Door	1.1 %

Sample ID	Equipment/Location	Paint Color	Substrate / Component	Lead Concentration (% wt)
17	1 st Floor – Water Supply Pipe Room – Water Supply	Light Green Over Silver Over Steel	Steel Pipe	.28%
18	1 st Floor – New Stairs and Value Room – Exterior Door	Dark Green Over Silver Over Wood	Wood	1.1%
19	1 st Floor – Paint Room, Exterior Door and Frame	Light Green Over White Over Steel	Steel	7.0%
20	Steel Truss – Roofing System	Light Green Over White Over Steel	Steel Truss	7.0 %
21	Concrete Floor Sealant	Light Grey Over Concrete	Concrete Floor	0.66 %
22	Old Generators	Dark Grey Over Metal	Metal – Generators #6-#8	0.53 %
23	Safety Railing Along Generator Sumps	Yellow Over Primer Over Steel	Steel Rail	26 %
24	Old Generator Room – Circuit Panel	Dark Grey Over Black Over Metal	Metal	0.27%
25	Interior Water Tank	White Over Orange Over Metal	Metal Tank	19 %
26	Gate Valve on Old Generators	Lime Green Over Metal	Metal Valve	5.5 %
27	Compress Air Tank with Old Generators	Red Over Orange Over Black Over Metal	Metal Tank	5.6 %
28	Old Generator room – I Beam	Dark Grey Over Steel	Steel	0.21%
29	Old Generator room – I Beam	Light Green Over Steel	Steel	0.16%
30	Metal Exterior Door	Tan/Brown Over Yellow Over White Over Metal	Metal Door	2.9 %
31	New Generator Room – Generator Filter Tanks	Black Over Steel	Steel	0.26%
32	Piping With New Generators	Orange Over Metal	Metal Piping	9.8 %
33	Piping With New Generators	Light Blue Over Metal	Metal Piping	6.0 %
34	Piping With New Generators	Lime Green Over Metal	Metal Piping	4.3 %
35	New Generator Room – Control Box	Light Green Over Rust Over Metal	Metal	0.17%
36	New Generator Room – Exhaust Pipe	Dark Blue Over Metal	Metal	0.24%
37	New Generator Room – New Generators	Dark Blue Over Dark Green Over Metal	Metal	0.37%
38	New Generator Room – Bottom 5ft of Wires	Dark Green Over Brick	Brick	0.42%
39	New Generator Exhaust Piping	Blue Over Metal	Metal Piping	3.8 %

Sample ID	Equipment/Location	Paint Color	Substrate / Component	Lead Concentration (% wt)
40	New Generator Room – Control Panel	Dark Grey Over Metal	Metal	0.11%
41	New Generator Room – New Generator	Red Over Metal	Metal	0.27%
42	Water Tank and Piping – Mezzanine	Yellow Over Orange Over Metal	Metal Tank	19 %
43	Partition	Dark Grey Over Plaster	Textured Plaster	0.21%
44	Sub Roof	Light Green Over Wood	Wooden Roof	1.3 %

Table 6.3: Mold Air and Surface Samples and Survey Results with Predominant Mold Types

Sample #: Location Description	<i>Ascospores</i> Results in spores/m ³	<i>Basidiospores</i> Results in spores/m ³	<i>Chaetomium</i> Results in spores/m ³	<i>Cladosporium</i> Results in spores/m ³	<i>Penicillium/Aspergillus</i> Results in spores/m ³	<i>Stachybotrys</i> Results in spores/m ³	Total Spore Results in spores/m ³	Background debris (1-4+)
ST01: Outside North	210	3,000	-	11,000	270	-	16,000	2+
ST02: Interior Restroom	400	3,100	590	620	290	-	5,400	3+
ST03: Training Room	190	830	-	1,600	93	-	2,900	4+
ST04: Upstairs Storage	270	7,700	790	270	1,800	13	11,000	>4+
ST05: Upstairs Valve Room	320	4,000	7	3,000	300	-	7,800	4+
ST06: Downstairs Storage	130	1,700	7	860	-	7	3,000	4+
ST07: Filter Room	190	1,900	-	1,100	-	-	3,500	2+
ST08: Outside South	190	2,500	-	2,500	-	-	8,700	2+
SB01: Interior Restroom	3+ <i>Chaetomium</i> species (spores, hyphal fragments)							
SB02: Training Room	2+ <i>Cladosporium</i> species (budding cells, hyphae)							

Sample #: Location Description	Ascospores Results in spores/m ³	Basidiospores Results in spores/m ³	Chaetomium Results in spores/m ³	Cladosporium Results in spores/m ³	Penicillium/ Aspergillus Results in spores/m ³	Stachybotrys Results in spores/m ³	Total Spore Results in spores/m ³	Background debris (1- 4+)
SB03: Upstairs Storage	4+ <i>Chaetomium</i> species (spores, hyphal fragments)							

Notes: MoldRANGE Typical Outdoor Medium Concentration for Penicillium/Aspergillus during April in Louisiana is 160 spores/m³;

xxx = outside of acceptable criteria

7. DISCUSSION OF THE RESULTS:

7.1. Asbestos:

Asbestos was detected in concentrations greater than regulatory limit of 1% in 15 of 51 samples collected, over five homogenous materials. Asbestos was detected in the following materials: 1) Thermal Pipe Insulation at 36-inch New Generator Exhaust – approximately 120 linear feet located in exhaust piping of all new generators; 2) Thermal Pipe Insulation at 36-inch Old Generator Exhaust – approximately 120 linear feet located in exhaust piping of all old generators; 3) White and Green Surfaced Joint Compound – approximately 1,000 square feet within drywall of second floor storage room; and 4) Thermal System Insulation – approximately 5 cubic feet with oil filter tanks between new and old generators. The detectable asbestos concentrations of these materials ranged from 2% to 5% Chrysotile and 4% Amosite. The above referenced quantities are approximations and should be confirmed by the abatement contractor.

Prior to proceeding with the planned remediation activities, the ACM should be removed in accordance with state and federal regulations and an abatement protocol designed by a LDEQ accredited asbestos designer. The use of wet methods or local exhaust ventilation, respiratory protection, disposable suits, gloves, safety glasses, hand washing stations, demarcation, training, air monitoring, change rooms, medical surveillance, and cleaning, and waste disposal must be in accordance with the regulations and city ordinance of the job location, the State of Louisiana DEQ and such federal agencies as the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). Additionally, the submittals of the AAC-2 and completed ADVF forms must also be in accordance with regulations. The details of the OSHA asbestos regulation can be reviewed in 29 CFR 1926.1101 and 29 CFR 1910.1001. Personnel and area asbestos air monitoring should be performed during the renovation activities in satisfaction of OSHA requirements.

All asbestos and asbestos-contaminated waste must be disposed of at a disposal site authorized for hazardous waste disposal in Louisiana by the Louisiana Department of Environmental Quality, Hazardous Waste Division. Such site must be operated in accordance with the applicable portions of the LAC Title 33:III Chapter 51 - Comprehensive Toxic Air Pollutant Emission Control Program, as administered by Louisiana Department of Environmental Quality, Air Quality Division.

7.2. Lead:

The lead content in the paints were detected in 43 of the 44 paint chip samples collected. An inventory and description of paint chip samples and their respective locations is summarized above in Table 6.2. Prior to any sanding, scraping, blasting renovation activities associated with this component, an additional

sample should be collected. OSHA does not set a safe limit for lead-based paint, but instead set limits for airborne lead concentrations during activities which disturb the lead containing paints. The use of wet methods or local exhaust ventilation, respiratory protection, disposable suits, gloves, safety glasses, hand washing stations, demarcation, training, air monitoring, change rooms, and medical surveillance may be required based on the air sampling results. The details of the OSHA lead regulation can be reviewed in 29 CFR 1926.62. Personnel and area lead air monitoring should be performed during the renovation activities. The air sample plan can be developed to assess the worst-case scenario and can potentially be used in similar projects. The client may already have this objective air monitoring data. If so, the client may use this objective air monitoring data to predict airborne exposures. It should be noted that the objective air monitoring data should be no older than twelve months.

If the surfaces containing lead-based paint will be disposed of instead of recycled, the lead containing components should be analyzed via Toxicity Characteristic Leaching Procedure (TCLP) analysis for lead to ensure proper disposal. If the TCLP results for lead is ≤ 5 ppm then the components can be disposed of as C&D waste. If the TCLP results for lead is greater than 5 ppm, then the components must be disposed of as hazardous waste. If the components are being recycled, the company recycling the units should be made aware of the lead in the paint.

7.3. Mold:

Four of the six interior mold air samples and each of the three mold surface samples analyzed during this survey were not acceptable based on the clearance criteria. It was determined that unacceptable concentrations of airborne and surface mold were present in the Interior Restroom, Training Room, Upstairs Storage, Upstairs Valve Room, and the Downstairs Storage. Based on TES's clearance criteria, four of the six indoor sampled locations were outside of the acceptable ranges for a well-maintained building and not acceptable for occupancy. A mold abatement protocol can be developed, in consideration of the asbestos and lead survey results, using wet methods, HEPA filters, and proper personal protective equipment. The Client should select a licensed mold abatement contractor to perform remediation efforts following the mold abatement protocol. Following completion of remedial efforts, clearance sampling, along with a visual inspection, should be performed to evaluate the effectiveness of the remedial efforts. Following the completion of remedial efforts, the Client should have clearance sampling, along with a visual inspection, performed to evaluate the effectiveness of the remedial efforts and clear the sampled locations for re-occupancy.

For mold-containing, non-asbestos and non-lead containing waste, wrap any contaminated components too large to fit in bags in 6-mil polyurethane and secure with tape. All contaminated waste generated during remediation shall be immediately placed in the appropriate waste container or wrapped after removal. All smaller contaminated components shall be double-bagged into 6-mil trash bags and sealed using the goose-neck technique. Prior to sealing waste bags, evacuate excess air using a HEPA vacuum. All waste bags and wrapped large components shall be HEPA vacuumed prior to leaving the work area. Dispose of waste as ordinary construction debris if no regulated contaminants (e.g., lead or asbestos) are present.

8. RECOMMENDATION(S):

1. The Client should have an LDEQ accredited asbestos designer develop an asbestos project design, an LDEQ accredited lead supervisor develop a lead worker protection plan, and a Certified Industrial Hygienist develop a mold abatement protocol.
2. A state certified asbestos abatement and licensed mold abatement contractor should be contracted to perform the abatement activities in accordance with state and federal regulations and the abatement protocol.
3. The Client should have all identified ACM removed in accordance with the abatement specification and in satisfaction to LDEQ, OSHA, and EPA regulations, prior to proceeding with remediation activities.
 - 3.1. The Client should coordinate the performance of third-party asbestos air monitoring throughout the duration of abatement activities as required by OSHA. Training should be performed for employees disturbing the asbestos containing materials, and certifications should be always readily available throughout the remediation. The Client should require access to OSHA regulation 29 CFR 1926.1101 and LAC Title 33:III Chapter 27 - Asbestos-containing Materials in Schools and State Buildings Regulation, and LAC Title 33:III Chapter 51 - Comprehensive Toxic Air Pollutant Emission Control Program. Additional controls may be reviewed in 29 CFR 1926.1101 and 29 CFR 1910.1001.
 - 3.2. The Client should coordinate disposal of all asbestos and asbestos-contaminated waste at a disposal site authorized for hazardous waste disposal in Louisiana by the LDEQ Hazardous Waste Division. Such site must be operated in accordance with the applicable portions of the LAC Title 33:III Chapter 51 - Comprehensive Toxic Air Pollutant Emission Control Program, as administered by Louisiana Department of Environmental Quality, Air Quality Division.
4. The Client should have all identified lead-based paints removed in accordance with the worker protection plan prior to proceeding with remediation activities.
 - 4.1. The Client should consider performing or requiring contract personnel perform lead air monitoring as required by 29 CFR 1926.62(d)(5), unless 29 CFR 1926.62(d)(4)(ii) applies. Training should be performed regardless of the air monitoring data for employees disturbing the paint containing detectable concentrations of lead. The training should be completed in compliance with 29 CFR 1926.62(l). A hand washing facility should be made available to any personnel disturbing the paint containing detectable concentrations of lead in compliance with 29 CFR 1926.62(i)(5). Additional controls may be required based on the air monitoring data.
 - 4.2. The Client should consider TCLP for lead analysis to determine waste disposal procedures.
5. The Client should have all identified mold contaminated materials abated and all areas with identified mold presence properly clean in accordance with the abatement protocol and Chapter 24-A of title 37, Mold Remediation of the Louisiana Revised Statutes (including the 2022 House Bill No. 602) and such federal agencies as OSHA and EPA.
 - 5.1. Following completion of remedial efforts, the Client should consider clearance sampling, along with a visual inspection, performed by a third party to evaluate the effectiveness of the remedial efforts and clear indoor locations for re-occupancy.

9. ATTACHMENTS:

- A. Field Notes
- B. Inspector Certifications
- C. Photolog
- D. Laboratory Reports

ATTACHMENT A
FIELD NOTES



Client: Terrebonne Parish Location: Old Diesel Plant TES Job #: ENV
What is the address of the dwelling? 1551 Barrow St. Houma Zip Code of building: 70360
Associate's Name: T. Arnold Sample Date: 5-16-23 Weather Conditions: 77°, 76% NRGZ Sunny clear

PROJECT BACKGROUND INFORMATION

Describe the purpose of the mold assessment based on interview(s) of occupant(s): to identify any areas or VMB and collect samples.

Any health effects described by the occupant(s) ☐ Yes or ☒ No; If yes, describe Building abandoned since Hurricane Ida in 2021.

Is there any visible mold growth? ☒ Yes or ☐ No; If yes, describe on paper products in warehouse, interior restroom, upstairs storage. Filter Room.

Is there any evidence of water intrusion? ☒ Yes or ☐ No; If yes, describe Roof is missing in numerous areas, windows broken throughout, doors missing.

Is a musty odor present? ☒ Yes or ☐ No; If yes, describe in restroom and upstairs storage and filter room.

DWELLING TYPE

☐ Commercial Building; ☐ Residential; ☐ Office Space; ☒ Garage/Storage Building; ☐ School; ☐ Other: Warehouse - Pump House

How many square feet is the dwelling? ~ 25,000 SF.

Provide a description of the dwelling:
Carpet? ☐ Yes or ☒ No If Yes, Where? _____ If No, detail construction Concrete Floors

Gypsum Walls? ☒ Yes or ☐ No If Yes, Where? upstairs storage If No, detail construction Brick Walls

Drop-in ceiling? ☒ Yes or ☐ No If Yes, Where? training room bathtub & filter room FRP panels If No, detail construction paint room & upstairs storage

Flat Roof? ☐ Yes or ☒ No If No, detail construction Pitched Asphalt Roof.

Brick Exterior? ☒ Yes or ☐ No If No, detail construction _____

Any garden sprinklers hitting building? ☐ Yes or ☒ No If Yes, Where? _____

Can you secure a drawing of the floor plan? ☒ Yes or ☐ No; If no, then draw the floor plan in the observation form.

Attachment



HVAC SYSTEM

Have the Client safely open the plenum of the HVAC system so the following questions can be answered

☐ Central Air & Heat; ☒ Window Unit(s); ☐ Natural Ventilation; HVAC Description: _____

Fresh Air Dampener(s) ☒ 100% Open; ☐ 100% Closed; ☐ Other _____ Are the filters clean ☐ Yes or ☒ No;

Is the plenum clean ☐ Yes or ☐ No; If No or cannot access, describe N/A

Is water overflowing from the evaporator coils ☐ Yes or ☒ No; Description _____

What MERV rating are the filters ☐ MERV 8; ☐ MERV 11; ☐ MERV 13; ☐ other MERV: N/A

How often are the HVAC filters changed ☐ monthly; ☐ quarterly; ☐ other N/A

Are supply and return air grills clean? ☐ Yes or ☒ No; Describe if No, Dust Bunnies Up.

SAMPLING INFORMATION

Sampling Equipment Used: ☒ Bio-Pump; ☐ Anderson Impactor Serial Number(s) of Equipment: 10891

Sample Media Used: ☒ Spore Trap; ☐ MEA agar; ☐ Swab; ☐ Tape

Cal Device Used: ☒ Rotameter; ☐ na - or bulk sampling only

Pre-Flow Rate(s): ☒ 15 l/m; ☐ 28.3 l/m; ☐ other _____ Post-Flow Rate(s): ☒ 15 l/m; ☐ 28.3 l/m; ☐ other 15

SAMPLE ID	SAMPLE TYPE (ST; Bulk; Anderson)	LOCATION OF SAMPLE	TEMP °F	RH %
1	ST	OUTSIDE NORTH OF DIESEL PLANT	90.3	58.8
2	ST	INTERIOR RestRoom	84.7	48.8
3	ST	Too Training Room	75.7	58.9
4	ST	UPSTAIR STORAGE ROOM	79.8	72.3
5	ST	UPSTAIR VALVE AREA	82.0	62.7
6	ST	Downstairs Storage	82.0	59.4
7	ST	Filter Room	81.8	58.9
8	ST	OUTSIDE SOUTH OF DIESEL PLANT	95.7	46.1
A	SB	INTERIOR Restroom WALL	84.7	48.8
B	SB	INTERIOR TRAINING ROOM.	75.7	58.9
C	SB	UPSTAIRS STORAGE ROOM.	79.8	72.3

Lead Paint Chip Sampling Form

Date: 5/16/23

Project #: 1658-23284

R.O. #

Client: Tennabone Parish

Facility: Diesel Plant

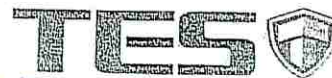
T.A.T. 96-hr

Building: Diesel Plant

Insp.: TA/SA

Project Name: Old Diesel Plant - ALM Survey

Note: "/" means over or on top of



Room	Sample Location ID	Substrate	Component	Paint Colors/Layers	Result	Classification
Exterior	01	Brick	Exterior Wall-FN	White / Only Layer	0.11 %	+
Exterior	02	Metal	Exhaust Fun Cover - FN	Silver on top of Orange	14 %	+
Exterior	03	Textured Plaster	Exterior Wall - FN	White / Only Layer	0.028 %	+
Exterior Door	04	Metal Door	Exterior Door - FE	White / Gray / Red	13 %	+
Exterior - Chim. storage room	05	Wood Frame	Exterior Door Frame FS	Green / White	5.8 %	+
Exterior	06	Painted Iron	Cooling Water Line Inlet - FN	Blue	0.058 %	+
Exterior	07	Metal	Exterior Window - FE FN	Silver	0.27 %	+
2nd Floor - outside storage room	08	Brick	Interior Wall - FS	Dark Green	<0.080 %	-
2nd Floor - " "	09	Brick	Interior Wall - FS	Light Green	1.6 %	+
2nd Floor - Valve Room	11	Brick	Interior Separator Wall - FN	Red (around former Fire Ext.)	0.84 %	+
2nd Floor - Valve Room	12	Brick	Interior Wall - FS	Purple / White	0.57 %	+
2nd Floor - Stair Room	13	Steel Pipe	Steel Pipe Banister	Cream / Light Green	1.3 %	+
2nd Floor - Valve Room	14	Steel Valve	Steel Valve / Stems - Feeder pipes	Gray / Dark Green	5.7 %	+
1st Fl. - Loading Ramp	15	Concrete	Yellow Warning Paint - no Ramp	Silver	0.95 %	+
1st Floor - Water Supply Pipe Room	16	Steel Pipe	Water Supply Piping	Yellow	3.4 %	+
" "	17	" "	" "	Dark Green / Silver	0.27 %	+
1st Floor - Near Stairs	18	Wood	Exterior Door	Light Green / Silver	0.28 %	+
1st Floor - Paint Room	19	Metal	Interior Door Frame	Dark Green / Silver	1.1 %	+
1st Floor	20	Steel	Steel Truss	Dark Green / Light Gray	0.022 %	+
			(Roofing System)	Light Green / White	7.0 %	+

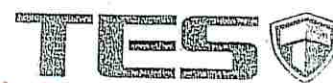
Lead Paint Chip Sampling Form

" " ^{surprised}

Date: 5/16/23

Project #: ENN-1658-23284 P.O. #

T.A.T 96-hr



Client: Terrence Parish

Facility Diesel Pump

Building Diesel Pump

Project Name: Old Diesel Plant- ALM Survey

Insp.: TA/JSN

Room	Sample Location ID	Substrate	Component	Paint Colors/Layers	Result	Classification
Old Generator Room	21	Concrete	Concrete Floor			
" "	22	Steel	Old Generator (#6)	Dark Grey	0.66%	+
" "	23	Steel	Steel Railing along generator rooms	Dark Grey	0.53%	+
" "	24	Metal	Circuit Panel	Yellow/Primer	26%	+
" "	25	Metal	Interior Wall	Dark Grey/Black	0.27%	+
" "	26	Metal	Gate Valve on Old Generator	White/Orange	19%	+
" "	27	Metal	Camp. Tank w/ Old Generator	Light Green	5.5%	+
" "	28	Steel	I-Beam	Red/Orange/Black	5.6%	+
" "	29	Steel	I-Beam	Dark Grey	0.21%	+
Exterior Door	30	Metal	Metal Exterior	Light Green	0.16%	+
New Generator Room	31	Steel	Generator Filter	Tarnish Brown (Unlabeled)/Yellow/White	29%	+
" "	32	Steel	Pipings w/ new generators	Black	0.26%	+
" "	33	" "	" "	Light Green Orange	9.8%	+
" "	34	" "	" "	Light Blue	6.0%	+
" "	35	Metal	Control Box b/w new & old generators	Light Green	4.3%	+
" "	36	Metal	New Generator Exhaust Piping	Light Green/Rust	0.17%	+
" "	37	Metal	New Generators	Dark Blue	0.29%	+
" "	38	Brick	Bottom 5' of wall w/ new	Dark Blue/Dark Green	0.37%	+
" "	39	Metal	New Generator Exhaust Piping	Dark Green	0.42%	+
" "	40	Metal	New Generator Control Panel	Blue	3.8%	+
				Dark Grey	0.11%	+

Lead Paint Chip Sampling Form

Date: 5-16-23

Project #: 1658-23244 P.O. #

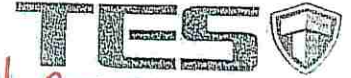
Client: Terrehorre Paris 14

Facility

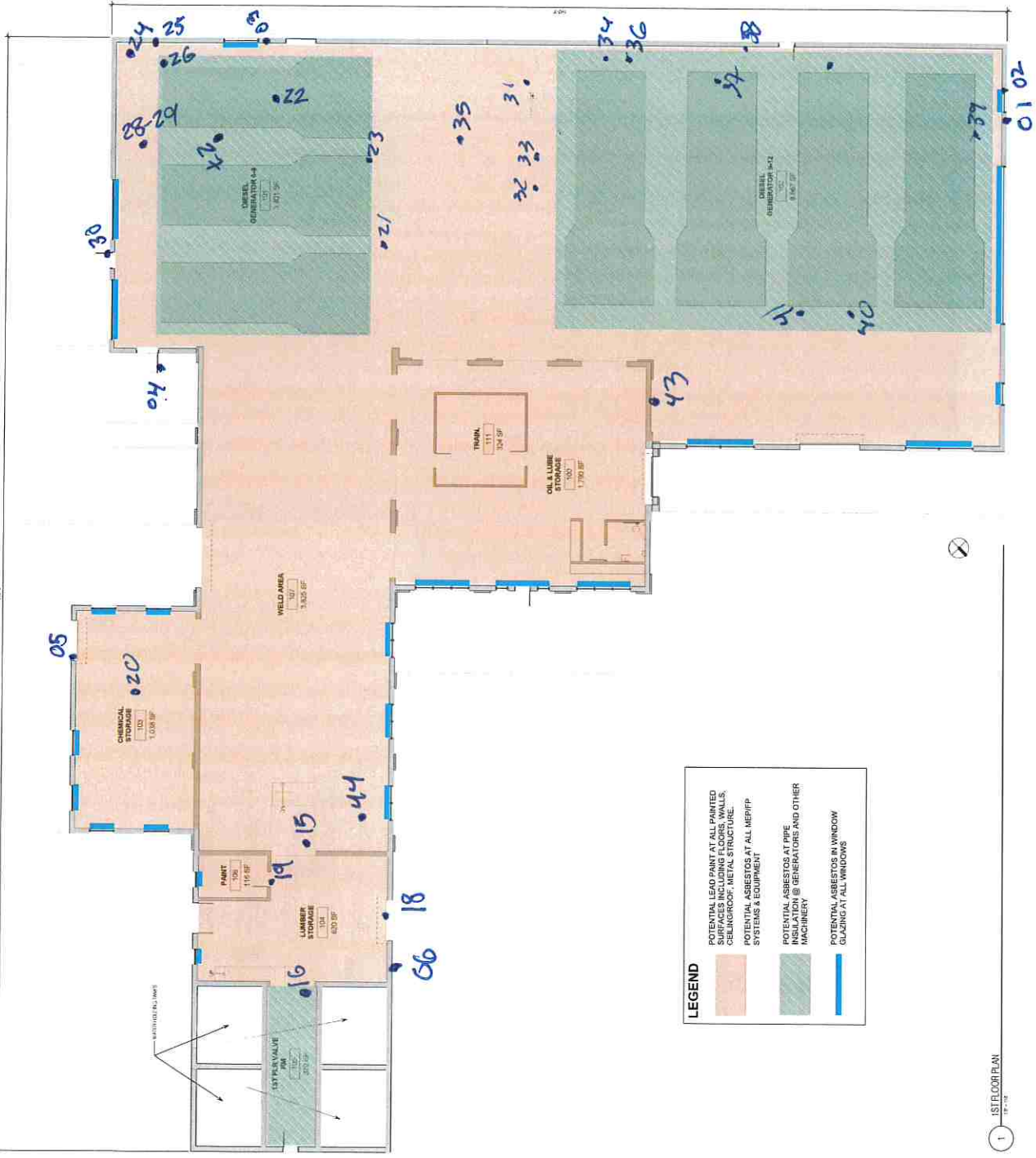
T.A.T

Building Old Dresa

Insp.: TAL JR

[illegible]

Paint Chip Sampling Locations



LEGEND

- POTENTIAL LEAD PAINT AT ALL PAINTED SURFACES INCLUDING FLOORS, WALLS, CEILING, ROOF, METAL STRUCTURE.
- POTENTIAL ASBESTOS AT ALL MEPP, SYSTEMS & EQUIPMENT
- POTENTIAL ASBESTOS AT PIPE INSULATION, GENERATORS AND OTHER MACHINERY
- POTENTIAL ASBESTOS IN WINDOW GLAZING AT ALL WINDOWS

1 1ST FLOOR PLAN

ARCHITECTS BEAZLEY MOLIÈRE
247 238 6614
P.O. BOX 51877
LAVERGNE, LOUISIANA 70506

TPCG DIESEL PLANT
181 FLOOR PLAN
181 BARBOUX STREET
HOUMA, LOUISIANA 70309

PRELIMINARY
NOT FOR
CONSTRUCTION

DATE ISSUED	04/05/22		
REVISION			
NO.	DESCRIPTION	DATE	
DRAWN BY	Author		
CHECKED BY	Checker		
PROJECT NO.	202233.00		
SHEET NO.			

Asbestos Inspection Form



Client: Jamestown Parish
 Facility: Furner Diesel Plant
 Address: 1551 Bourne Street
 Project: ALM Inspection

Inspection Date: 5/15/23
 TES Project #: ENV-1658-23284
 Inspector Name (print): Tommy A.
 Inspector Signature: TA

Homogenous #	Sample #	Material Description	Functional Space (locations)	Estimated Quantity	(1) AHERA Category	(2) Condition	Friable (Y/N)	(3) ACM (Y/N)
A	01 ^{PL}	4'x2' Ceiling Tile	Office Room ^(Training Room)	500 SF	M	Warping	Y	N
A	02	" "	Training Room	" "	↓	↓	↓	↓
A	03	" "	" "	" "	↓	↓	↓	↓
B	04	Flat Exterior ^{Plaster}	Exterior - western walls	1/2 Building	S	Intact	N	N
B	05	" "	" "	↓	↓	↓	↓	↓
B	06	" "	" "	↓	↓	↓	↓	↓
^{DE} C	07	Textured Exterior ^{Plaster}	Exterior - Southern walls	1/2 Building	S	Intact	N	N
C	08	" "	" "	↓	↓	↓	↓	↓
C	09	" "	" "	↓	↓	↓	↓	↓
D	10	Exterior & Interior Brick Mortar (old)	Exterior & Interior - new wing	20,000 SF	S	Intact	N	N
P	11	" "	" "	↓	↓	↓	↓	↓
P	12	" "	" "	↓	↓	↓	↓	↓
E	13	Exterior & Interior Brick Mortar (New)	New wings	20,000 SF	S	Intact	N	N
E	14	" "	" "	↓	↓	↓	↓	↓
E	15	" "	" "	↓	↓	↓	↓	↓
F	16	Rose Colored Window Glazing	Exterior corner by bathroom	3000 LF	S	Cracking	N	N
F	17	" "	" "	↓	↓	↓	↓	↓
F	18	" "	" "	↓	↓	↓	↓	↓
.								

Asbestos Inspection Form



Client: Terrebonne Parish
 Facility: Former Diesel Plant
 Address: 1551 Bayou Street
 Project: ALM Inspection

Inspection Date: 5/5/23
 TES Project #: FW-1658-23284
 Inspector Name (print): Tammy A.
 Inspector Signature: _____

Homogenous #	Sample #	Material Description	Functional Space (locations)	Estimated Quantity	⁽¹⁾ AHERA Category	⁽²⁾ Condition	Friable (Y/N)	⁽³⁾ ACM (Y/N)
G	19	Grey Window Glazing	All old part of building - bathroom	±5000 sq ft	S	Cracking	N	N
G	20	" "	" "	↓	↓	↓	↓	↓
G	21	" "	" "	↓	↓	↓	↓	↓
H	22	white Window Glazing	New wing	±5000 sq ft	S	Cracking	N	N
H	23	" "	" "	↓	↓	↓	↓	↓
H	24	" "	" "	↓	↓	↓	↓	↓
I	25	Pipe insulation 36" at generator exhaust	Newer	1200 sq ft (generators TS)	TS	Hard White (intact)	TSF	Y
I	26	Hard white TSF	Generators	9-12	↓	↓	↓	↓
I	27	9 Fibrous TSF		↓	↓	↓	↓	↓
J	28	Pipe Insulation at generator exhaust	Older	Generators 6-8 TS	TS	Intact	Y	Y
J	29	(TSF) 36"	Older Gen exhaust	1200 sq ft	↓	↓	↓	↓
J	30	↓		↓	↓	↓	↓	↓
K	31	Drywall & Slat compound	2nd Floor Party Storage	±1000 sq ft	S	Mossy Intact	N	Y
K	32	↓	" "	↓	↓	↓	↓	↓
K	33	↓	" "	↓	↓	↓	↓	↓
L	34	1x1 Ceiling Tile	2nd Floor Storage	±2000 sq ft	M	Molded	Y	N
L	35	↓	" "	↓	↓	↓	↓	↓
L	36	↓	" "	↓	↓	↓	↓	↓
M	37	Roofing System (1 layer of asphalt shingles, 1 layer for paper)	Throughout	25,000 sq ft	M	Damaged	N	N

Asbestos Inspection Form

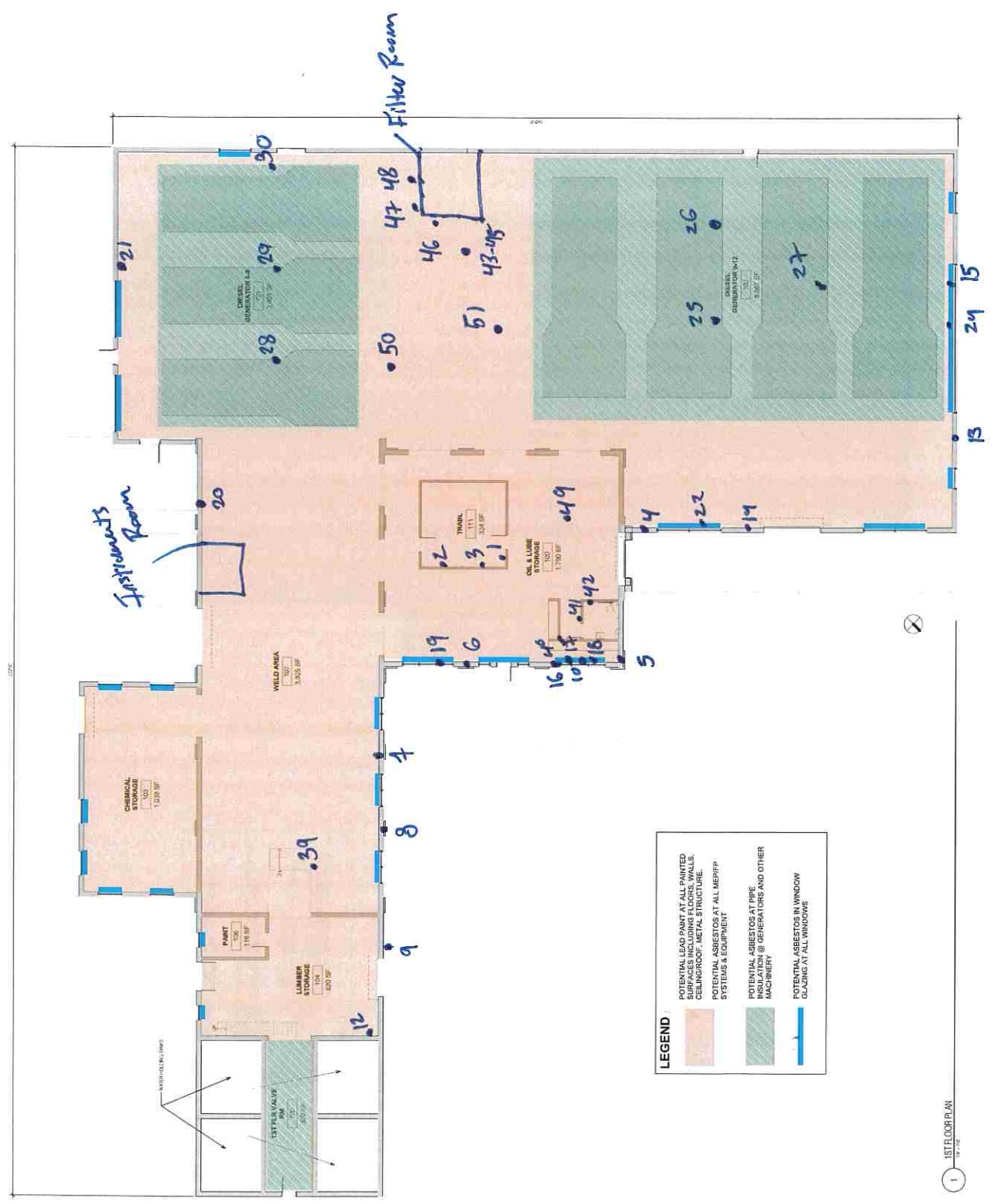


Client: Tennelone Parish
 Facility: Former Diesel Plant
 Address: 1551 Bourne St.
 Project: ALM Inspection

Inspection Date: 5/5/23
 TES Project #: ENV-1658-23284
 Inspector Name (print): Tommy A.
 Inspector Signature: _____

Homogenous #	Sample #	Material Description	Functional Space (locations)	Estimated Quantity	⁽¹⁾ AHERA Category	⁽²⁾ Condition	Friable (Y/N)	⁽³⁾ ACM (Y/N)
M	38	" "	throughout	25000 SF	M	Damaged	N	N
M	39	" "	↓	↓	↓	↓	↓	↓
N	40	Insulation Packing Panel	basement	25 100 SF	M	Intact	N	N
N	41	" "	↓	↓	↓	↓	↓	↓
N	42	" "	↓	↓	↓	↓	↓	↓
O	43	Oil Tank Filter TSI	b/w old 3 new generators	1-5 CF	TS1	Intact	Y	Y
O	44	" "	↓	↓	↓	↓	↓	↓
O	45	" "	↓	↓	↓	↓	↓	↓
P	46	CB Mortar - Filter Room	Filter Room	500 SF	S	Intact	N	N
P	47 47	" "	" "	500 SF	↓	↓	↓	↓
P	48	" "	" "	↓	↓	↓	↓	↓
Q	49	Concrete Slab	throughout	25,000 SF	S	Intact	N	N
Q	50	" "	" "	↓	↓	↓	↓	↓
Q	51	" "	" "	↓	↓	↓	↓	↓

Asbestos Sampling Locations - 5/15/2023 T.A. & J.R.





ATTACHMENT B
INSPECTOR CERTIFICATES

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Thomas L Arnold Jr.

**Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of**

Asbestos Inspector

Accreditation No. JI211452

AI No. 211452

Date of Issuance January 10, 2023

Expiration January 12, 2024

**Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.**



**Permit Support Services Division
Office of Environmental Services**

LOUISIANA

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Thomas L Arnold Jr.

**Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of**

Lead Inspector

Accreditation No. AI211452

AI No. 211452

Date of Issuance March 31, 2022

Expiration April 15, 2023

**Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.**



**Public Participation & Permit Support Division
Office of Environmental Services**

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Thomas L Arnold Jr.

**Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of**

Lead Risk Assessor

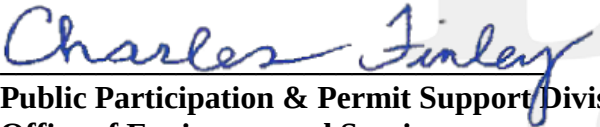
Accreditation No. OR211452

AI No. 211452

Date of Issuance November 16, 2022

Expiration October 15, 2023

**Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.**


**Public Participation & Permit Support Division
Office of Environmental Services**

ATTACHMENT C
PHOTOLOG

























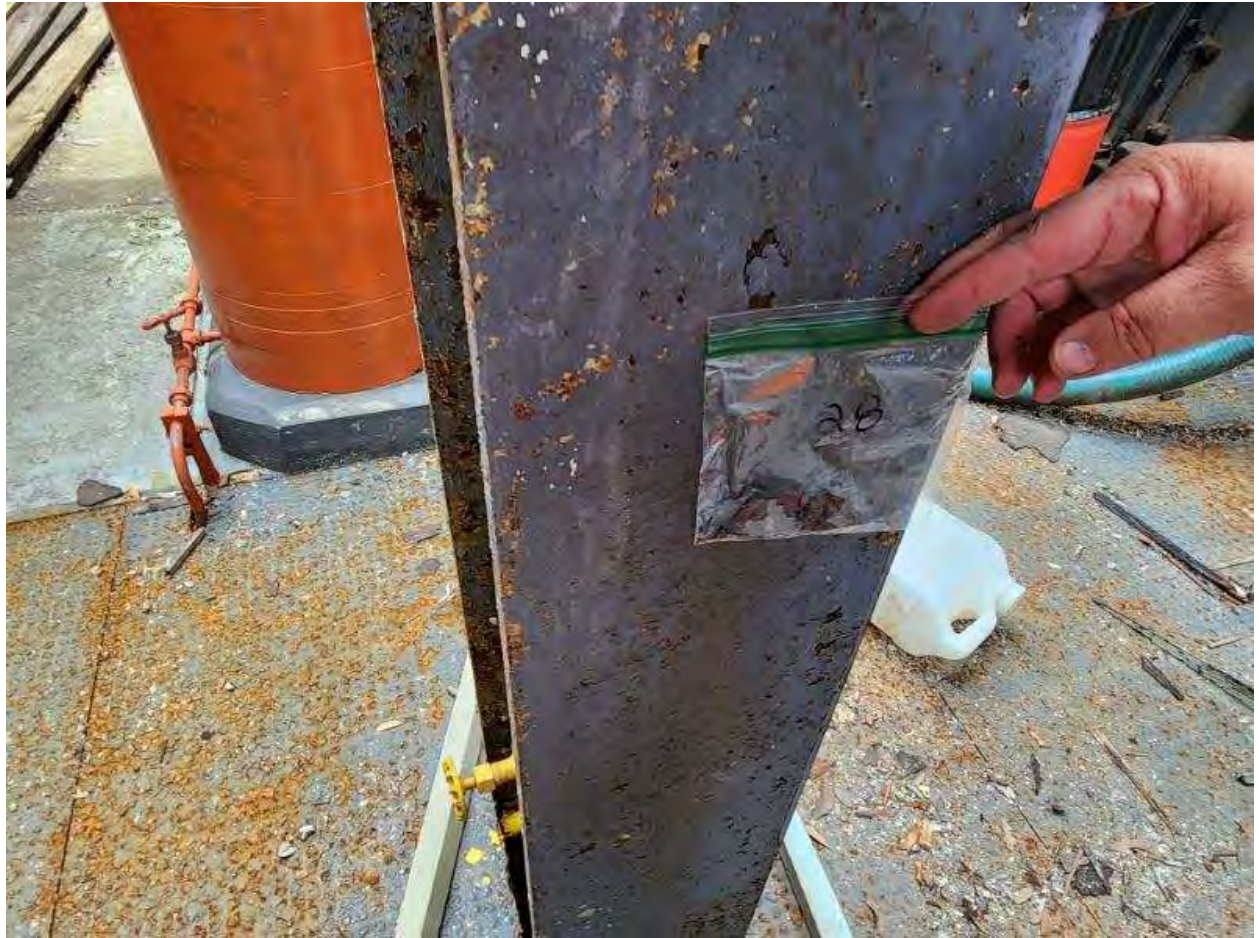
















































































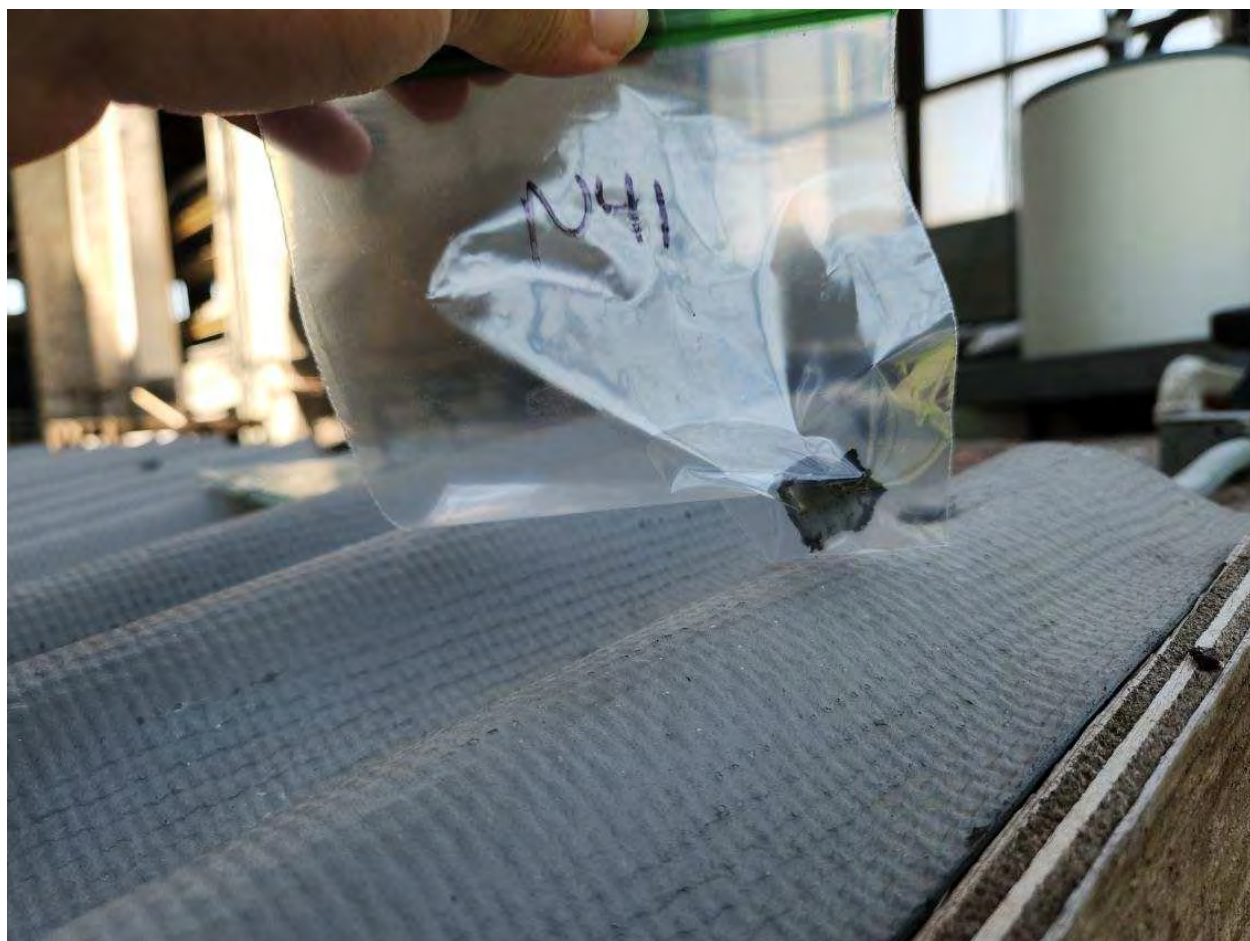
















































FIRE ESCAPE EXITS AND FIRE FIGHTING EQUIPMENT LOCATIONS DIESEL PLANT





















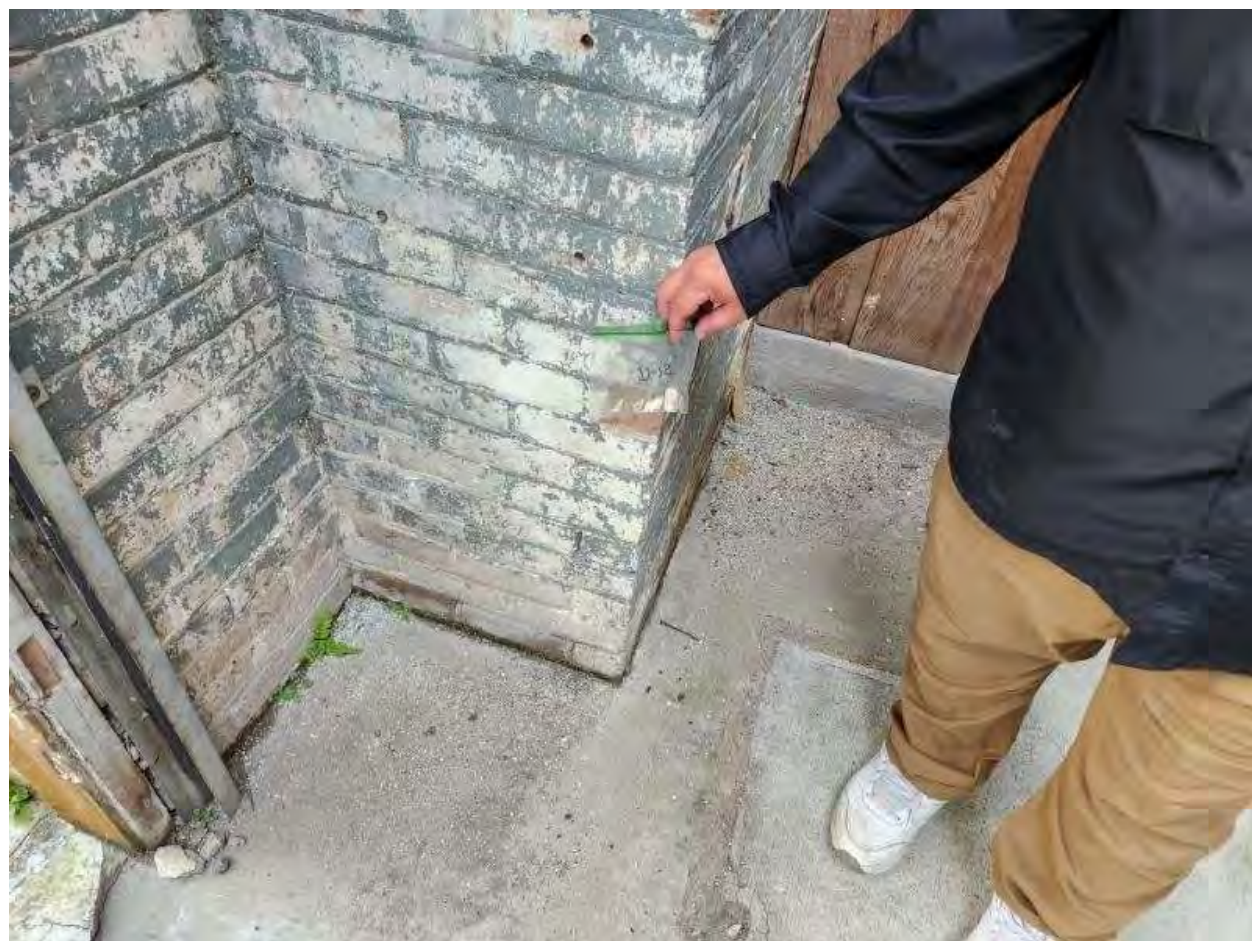






































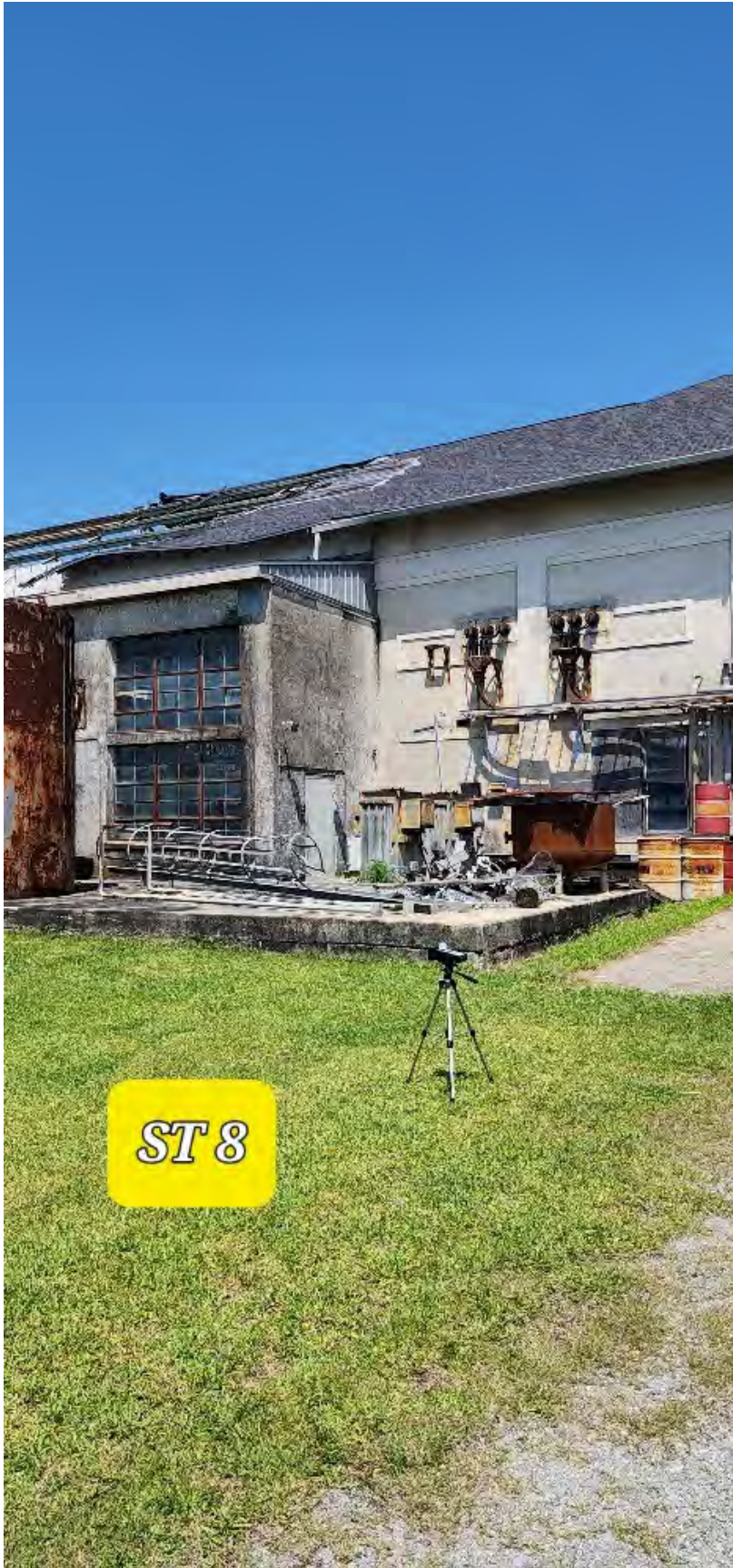




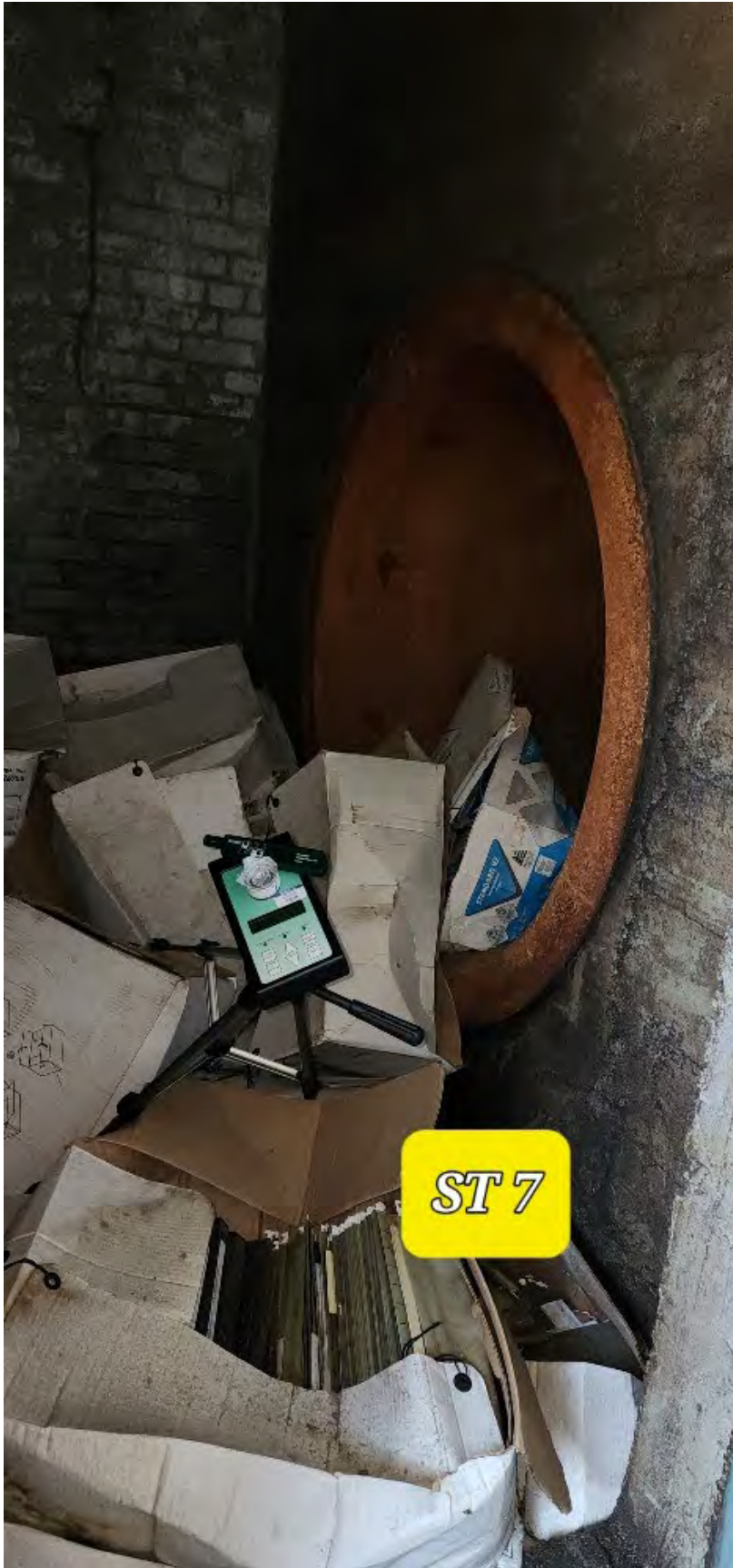








ST 8



ST 7







ST 6





ST 5



SB C





TECH
INSTRUMENTS

ON/OFF HOLD MIN/MAX

°F/°C CAL RESET

**Humidity/
Temperature Pen**
445580

72.3%
79.8°F



ST 4

PROPERTY OF
TES, Inc.
(504) 348-3098
0200

RUN TIME 0:00:23
SET TIME 0:10:00

SAMPLE COMPLETE LOW BATTERY CHARGING

START
STOP

POWER



QUICK
SAMPLE

SET









ST 3





ST2
SB A





ST 2



SBA

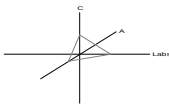








ATTACHMENT D
LABORATORY REPORTS



Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Technical Environmental Services, Inc.

5133 Taravella Rd
Marrero, LA 70072

Attn: James Clarke

Customer Project: Terrebonne Parish-Old Diesel Plant

Reference #: CBR23053446

Date: 5/23/2023

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved)). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are performed. Calibrated liquid refractive oils are used as liquid mounting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjunction with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found by PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite-vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

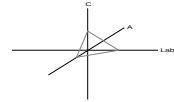
Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as ≤1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one of these disciplines. Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.



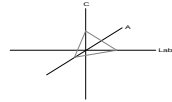
Overview of Project Sample Material Containing Asbestos

Customer Project:		Terrebonne Parish-Old Diesel Plant		CA Labs Project #:	CBR23053446
Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types	
I25	I25-1	White and Gray Insulation	6% Chrysotile 4% Amosite	White and Gray Insulation Brown Insulation Green Surfaced White Compound White Compound Beneath Tape Black and Yellow Fibrous Insulation	
I26	I26-1	White and Gray Insulation	6% Chrysotile 4% Amosite		
I27	I27-1	White and Gray Insulation	6% Chrysotile 4% Amosite		
J28	J28-1	Brown Insulation	5% Chrysotile		
J29	J29-1	Brown Insulation	5% Chrysotile		
J30	J30-1	Brown Insulation	5% Chrysotile		
K31	K31-1	Green Surfaced White Compound	3% Chrysotile		
K31	K31-2	White Compound Beneath Tape	3% Chrysotile		

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate	pe - perlite	fg - fiberglass	pa - palygorskite (clay)
gypsum - gypsum	qu - quartz	mw - mineral wool	
bi - binder		wo - wollastonite	
or - organic		ta - talc	
ma - matrix		sy - synthetic	
mi - mica		ce - cellulose	
ve - vermiculite		br - brucite	
ot - other		ka - kaolin (clay)	

This report relates to the items tested. This report is not to be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, AIHA LAP, LLC, or any other agency of the federal government. This report may not be reproduced except in full without written permission from CA Labs. These results are submitted pursuant to CA Labs' current terms and sale, condition of sale, including the company's standard warranty and limitations of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, CA Labs will store the samples for a period of ninety (90) days before discarding. A shipping or handling fee may be assessed for the return of any samples.



Overview of Project Sample Material Containing Asbestos

Customer Project:	Terrebonne Parish-Old Diesel Plant		CA Labs Project #:	CBR23053446
Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

K32	Green Surfaced White K32-1 Compound	3% Chrysotile
-----	--	----------------------

K32	White Compound Beneath K32-2 Tape	3% Chrysotile
-----	--	----------------------

K33	Green Surfaced White K33-1 Compound	3% Chrysotile
-----	--	----------------------

K33	White Compound Beneath K33-2 Tape	3% Chrysotile
-----	--	----------------------

O43	Black and Yellow Fibrous O43-1 Insulation	2% Chrysotile
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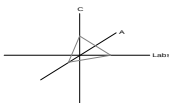
O44	Black and Yellow Fibrous O44-1 Insulation	2% Chrysotile
-----	--	----------------------

O45	Black and Yellow Fibrous O45-1 Insulation	2% Chrysotile
-----	--	----------------------

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate	pe - perlite	fg - fiberglass	pa - palygorskite (clay)
gypsum - gypsum	qu - quartz	mw - mineral wool	
bi - binder		wo - wollastinite	
or - organic		ta - talc	
ma - matrix		sy - synthetic	
mi - mica		ce - cellulose	
ve - vermiculite		br - brucite	
ot - other		ka - kaolin (clay)	

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Polarized Light Asbestiform Materials Characterization

Customer Info: Attn: James Clarke
Technical Environmental Services, Inc.
5133 Taravella Rd
Marrero, LA 70072

Customer Project:
Terrebonne Parish-Old Diesel
Plant

CA Labs Project #:
CBR23053446

Phone # 504-348-3098
Fax # 504-348-3043

Turnaround Time: 5 day

Date: 5/23/2023
Samples Received: 5/17/2023
Date Of Sampling: 5/15/2023
Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
A01			A01-1 Tan Ceiling Tile	N	None Detected	20% fg 50% ce	30% qu, ma, bi
A02			A02-1 Tan Ceiling Tile	N	None Detected	20% fg 50% ce	30% qu, ma, bi
A03			A03-1 Tan Ceiling Tile	N	None Detected	20% fg 50% ce	30% qu, ma, bi
B04			B04-1 Gray Plaster	Y	None Detected		100% qu, ma, ca
B05			B05-1 White and Gray Plaster	N	None Detected		100% qu, ma, ca
B06			B06-1 Gray Plaster	Y	None Detected		100% qu, ma, ca
C07			C07-1 Gray Plaster	Y	None Detected		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for
identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

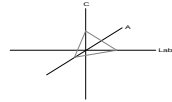

Zo Andriampenanana
Analyst


Senior Analyst
Alicia Stretz


Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze

6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested



Polarized Light Asbestiform Materials Characterization

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CA Labs Project #:
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Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
C08			C08-1 Gray Plaster	Y	None Detected		100% qu, ma, ca
C09			C09-1 Gray Plaster	Y	None Detected		100% qu, ma, ca
D10			D10-1 Gray Mortar	Y	None Detected		100% qu, ma, ca
D11			D11-1 Gray Mortar	Y	None Detected		100% qu, ma, ca
D12			D12-1 Gray Mortar	Y	None Detected		100% qu, ma, ca
E13			E13-1 Gray Mortar	Y	None Detected		100% qu, ma, ca
E14			E14-1 Gray Mortar	Y	None Detected		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for
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bi - binder	ot - other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

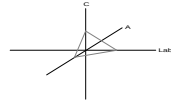

Zo Andriampenomanana
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Senior Analyst
Alicia Stretz


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Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
E15			E15-1 Gray Mortar	Y	None Detected		100% qu, ma, ca
F16			F16-1 Pink Sealant	Y	None Detected		100% qu, ma, ca
F17			F17-1 Pink Sealant	Y	None Detected		100% qu, ma, ca
F18			F18-1 Pink Sealant	Y	None Detected		100% qu, ma, ca
G19			G19-1 Gray Sealant	Y	None Detected		100% qu, ma, ca
G20			G20-1 Gray Sealant	Y	None Detected		100% qu, ma, ca
G21			G21-1 Gray Sealant	Y	None Detected		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

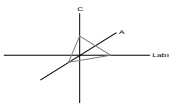
Approved Signatories:


Zo Andriampenanana
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Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
H22			H22-1 White Sealant	Y	None Detected		100% qu, ma, ca
H23			H23-1 White Sealant	Y	None Detected		100% qu, ma, ca
H24			H24-1 White Sealant	Y	None Detected		100% qu, ma, ca
I25			I25-1 White and Gray Insulation	N	6% Chrysotile 4% Amosite		90% qu, ma, ca
I26			I26-1 White and Gray Insulation	N	6% Chrysotile 4% Amosite		90% qu, ma, ca
I27			I27-1 White and Gray Insulation	N	6% Chrysotile 4% Amosite		90% qu, ma, ca
J28			J28-1 Brown Insulation	Y	5% Chrysotile	3% fg	92% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for
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ma - matrix	qu - quartz	sy - synthetic	

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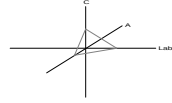

Zo Andriampenanana
Analyst


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Alicia Stretz


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10. TEM analysis suggested



Polarized Light Asbestiform Materials Characterization

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Technical Environmental Services, Inc.
 5133 Taravella Rd
 Marrero, LA 70072

Customer Project:
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CA Labs Project #:
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Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
J29		J29-1	Brown Insulation	Y	5% Chrysotile	3% fg	92% qu, ma, ca
J30		J30-1	Brown Insulation	Y	5% Chrysotile	3% fg	92% qu, ma, ca
K31			Green Surfaced White K31-1 Compound	N	3% Chrysotile		97% qu, mi, bi, ca
			White Compound Beneath K31-2 Tape	Y	3% Chrysotile		97% qu, mi, ca
			K31-3 White Drywall with Paper	N	None Detected	10% ce	90% qu, gy
K32			Green Surfaced White K32-1 Compound	N	3% Chrysotile		97% qu, mi, bi, ca
			White Compound Beneath K32-2 Tape	Y	3% Chrysotile		97% qu, mi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
 Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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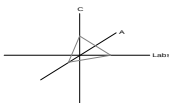
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Polarized Light Asbestiform Materials Characterization

Customer Info: Attn: James Clarke
Technical Environmental Services, Inc.
5133 Taravella Rd
Marrero, LA 70072

Customer Project:
Terrebonne Parish-Old Diesel
Plant

CA Labs Project #:
CBR23053446

Phone # 504-348-3098
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Turnaround Time: 5 day

Date: 5/23/2023
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Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
----------	-------------	------------	---	-------------------------------	--	--------------------------------------	-------------------------------

	K32-3 White Drywall with Paper			N	None Detected	10% ce	90% qu, gy
--	---------------------------------------	--	--	----------	----------------------	--------	------------

K33			Green Surfaced White K33-1 Compound	N	3% Chrysotile		97% qu, mi, bi, ca
-----	--	--	--	----------	----------------------	--	-----------------------

			White Compound Beneath K33-2 Tape	Y	3% Chrysotile		97% qu, mi, ca
--	--	--	--	----------	----------------------	--	----------------

	K33-3 White Drywall with Paper			N	None Detected	10% ce	90% qu, gy
--	---------------------------------------	--	--	----------	----------------------	--------	------------

L34			L34-1 Brown Ceiling Tile	Y	None Detected	100% ce	
-----	--	--	---------------------------------	----------	----------------------	---------	--

L35			L35-1 Brown Ceiling Tile	Y	None Detected	100% ce	
-----	--	--	---------------------------------	----------	----------------------	---------	--

L36			L36-1 Brown Ceiling Tile	Y	None Detected	100% ce	
-----	--	--	---------------------------------	----------	----------------------	---------	--

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

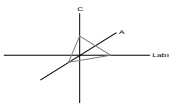
Zo Andriampenanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

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2. Fire Damage no significant fiber damages effecting fibrous percentages
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9. < 1% Result point counted positive
10. TEM analysis suggested



Polarized Light Asbestiform Materials Characterization

Customer Info: Attn: James Clarke
Technical Environmental Services, Inc.
5133 Taravella Rd
Marrero, LA 70072

Customer Project:
Terrebonne Parish-Old Diesel
Plant

CA Labs Project #:
CBR23053446

Phone # 504-348-3098
Fax # 504-348-3043

Turnaround Time: 5 day

Date: 5/23/2023
Samples Received: 5/17/2023
Date Of Sampling: 5/15/2023
Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
M37		M37-1	Black Shingle with Black Gravel	N	None Detected	15% fg	85% qu, bi
M38		M38-1	Black Shingle with Black Gravel	N	None Detected	15% fg	85% qu, bi
M39		M39-1	Black Shingle with Black Gravel	N	None Detected	15% fg	85% qu, bi
N40			Gray Surfaced Black Felt and N40-1 Tar	N	None Detected	40% ce	60% qu, ma, bi
N41			Gray Surfaced Black Felt and N41-1 Tar	N	None Detected	40% ce	60% qu, ma, bi
N42			Gray Surfaced Black Felt and N42-1 Tar	N	None Detected	40% ce	60% qu, ma, bi
O43			Black and Yellow Fibrous O43-1 Insulation	Y	2% Chrysotile	78% fg	20% qu, ma, bi

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

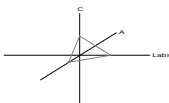

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Polarized Light Asbestiform Materials Characterization

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Technical Environmental Services, Inc.
5133 Taravella Rd
Marrero, LA 70072

Customer Project:
Terrebonne Parish-Old Diesel
Plant

CA Labs Project #:
CBR23053446

Phone # 504-348-3098
Fax # 504-348-3043

Turnaround Time: 5 day

Date: 5/23/2023
Samples Received: 5/17/2023
Date Of Sampling: 5/15/2023
Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
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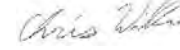
Black and Yellow Fibrous							
O44	O44-1 Insulation			Y	2% Chrysotile	78% fg	20% qu, ma, bi
Black and Yellow Fibrous							
O45	O45-1 Insulation			Y	2% Chrysotile	78% fg	20% qu, ma, bi
P46	P46-1 Tan and Gray Mortar			N	None Detected		100% qu, ma, ca
P47	P47-1 Tan and Gray Mortar			N	None Detected		100% qu, ma, ca
P48	P48-1 Tan and Gray Mortar			N	None Detected		100% qu, ma, ca
Q49	Q49-1 Gray Concrete			Y	None Detected		100% qu, ma, ca
Q50	Q50-1 Gray Concrete			Y	None Detected		100% qu, ma, ca

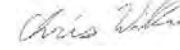
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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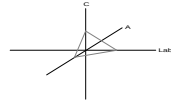

Zo Andriampenomanana
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Polarized Light Asbestiform Materials Characterization

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Technical Environmental Services, Inc.
5133 Taravella Rd
Marrero, LA 70072

Customer Project:
Terrebonne Parish-Old Diesel
Plant

CA Labs Project #:
CBR23053446

Phone # 504-348-3098
Fax # 504-348-3043

Turnaround Time: 5 day

Date: 5/23/2023
Samples Received: 5/17/2023
Date Of Sampling: 5/15/2023
Purchase Order #: ENV-1658-23289

Sample #	Com ment	Layer #	Analysts Physical Description of Subsample	Homo- geneo us (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
----------	-------------	------------	---	-------------------------------	--	--------------------------------------	-------------------------------

Q51		Q51-1 Gray Concrete		Y	None Detected		100% qu, ma, ca
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Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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C.A. Labs, LLC.
12232 Industripark
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

Client Name: TES, Inc. CA Labs job # CBR 23053446
Client Address: 5133 Tarkenton Rd. Billing Address: same
Harvey, LA 70092 (if different)
phone number: 504 348 3098
fax number: Send Reports to: Katie Hofmann
Project Number: ENV-1658-23289 Project Name: Terrebonne Parish - Old Diesel Plant ALM Survey
Contact: Katie Hofmann Reports Results
VIA: EMAIL FAX VERBAL

Total # Samples Submitted: 51 Total # Samples to be Analyzed: 51 (some bags have 2 components to analyze as noted) Material Matrix: Air / Bulk / Water

Asbestos: please call ahead for availability of all rush and/or after hours samples.

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		Circle analysis and TA time		Allergen Particle: 2 hour	
AHERA	4 hour	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cycllex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	24 hour	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	<u>5 days</u>	PCM: NIOSH 7400	5-10 days

Lead: Circle analysis and TA time

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	8 hour	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
A01	4x2' Ceiling Tile	5/15/2023 AM	Bulk
A02			
A03			
B04	Flat Exterior Plaster		
B05			

data\wordpro\forms\ChainofCustody.lwp

Revision 2 3/12/01

Page 1 of 3

Custody Information:

Samples relinquished:

Signature / Date / Time

Samples relinquished:

Signature / Date / Time

Samples received:

Signature / Date / Time

Samples received:

Signature / Date / Time

K. HOFMANN @ TES CONSULT. CAN

4:50
5/17/23

Page 2 of 3

Client Name:

Client Address:

phone number:

fax number:

Project Number:

Contact:

CA Labs job # CBR 23053446

Billing Address:

(if different)

Send Reports to:

Project Name:

Reports Results

VIA: EMAIL ___ FAX ___ VERBAL ___

* Continued from Pg. 1

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
B06	Flat Exterior Plaster	5/15/23 AM	Bulk
C07	Textured Exterior Plaster		
C08			
C09			
D10	Exterior/Interior Brick Mortar (old)		
D11			
D12			
D13 E13	" " (new)		
D14 E14			
D15 E15			
D16 F16	Pink Colored Window Glazing		
D17 F17			
D18 F18			
D19 G19	Grey Window Glazing		
G20			
G21			
H22	White Window Glazing		
H23			
H24			
I25	Pipe Insulation at Generator Exhaust (2 types w/in sample bag) (old new w/in sample bag)		
I26			
I27			
J28	" " (old generators)		
J29			

For internal use:

Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:

Samples relinquished:

Samples relinquished:

Signature / Date / Time
5-16-23 5:00pm

Signature / Date / Time

Samples received:

Samples received:

Signature / Date / Time
Carel Bracey 9:50 5/17/23

Signature / Date / Time

Page 3 of 3.

Client Name:

Client Address:

phone number:

fax number:

Project Number:

Contact:

CA Labs job # CBR 23053446

Billing Address:

(if different)

Send Reports to:

Project Name:

Reports Results

VIA: EMAIL ___ FAX ___ VERBAL ___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
J30	Same as J28 & J29	5/15/23 7M	Bulk
K31	Drum & Joint Compound		
K32			
K33			
L34	1x1 Ceiling Tile		
L35			
L36			
M37	Roofing System (1 layer of		
M38	shingles and 1 layer		
M39	of tar paper)		
N40	Interior Roofing Panel		
N41			
N42			
O43	Oil Tank Filter TSI		
O44			
O45			
P46	CB Master - Filter Room		
P47			
P48			
Q49	Concrete Slab		
Q50			
Q51			

For internal use:

Any initial changes regarding project (indicate yes by checking line) _____

Custody Information:

Samples relinquished:

[Signature] 5/16/23 5:00pm
Signature / Date / Time

Samples received:

[Signature] 5/17/23 9:50
Signature / Date / Time

Samples relinquished:

Signature / Date / Time

Samples received:

Signature / Date / Time



EMSL Analytical, Inc.

18369 Petroleum Drive, Baton Rouge, LA 70809

Phone/Fax: (225) 755-1920 / (225) 755-1989

<http://www.EMSL.com>

batonrougelab@emsl.com

EMSL Order: 252302458
CustomerID: TECH55
CustomerPO:
ProjectID:

Attn: **Katie Hofmann**
Technical Environmental Service, Inc.
PO Box 1601
Marrero, LA 70073

Phone: (504) 348-3098
Fax: (504) 348-3043
Received: 5/17/2023 09:50 AM
Collected: 5/16/2023

Project: **ENV 1658-23289**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Weight	Lead Concentration
01	252302458-0001	5/16/2023	5/22/2023	0.2501 g	0.11 % wt
Site: EXT WALL F.N.					
02	252302458-0002	5/16/2023	5/22/2023	0.2502 g	14 % wt
Site: EXHAUST F.N.					
03	252302458-0003	5/16/2023	5/22/2023	0.2511 g	0.028 % wt
Site: EXT. WALL F.N.					
04	252302458-0004	5/16/2023	5/22/2023	0.2507 g	13 % wt
Site: EXT DOOR F.E.					
05	252302458-0005	5/16/2023	5/22/2023	0.2509 g	5.8 % wt
Site: EXT Door Frame F.S.					
06	252302458-0006	5/16/2023	5/22/2023	0.2552 g	0.058 % wt
Site: Cooling Water Line F.N.					
07	252302458-0007	5/16/2023	5/22/2023	0.2518 g	0.27 % wt
Site: EXT. Window FE&N					
08	252302458-0008	5/16/2023	5/22/2023	0.2510 g	<0.080 % wt
Site: INT. WALL F.S.					
09	252302458-0009	5/16/2023	5/22/2023	0.2509 g	1.6 % wt
Site: INT. WALL F.S.					
10	252302458-0010	5/16/2023	5/22/2023	0.2504 g	0.84 % wt
Site: INT. WALL UPSTAIRS F.N.					
11	252302458-0011	5/16/2023	5/22/2023	0.2567 g	0.57 % wt
Site: INT. WALL UPSTAIRS F.S.					
12	252302458-0012	5/16/2023	5/22/2023	0.2501 g	1.3 % wt
Site: INT. WALL UPSTAIRS F.S.					
13	252302458-0013	5/16/2023	5/22/2023	0.2510 g	5.7 % wt
Site: HAND RAIL					
14	252302458-0014	5/16/2023	5/22/2023	0.2511 g	0.95 % wt
Site: VAULE Assembly UPSTAIRS					
15	252302458-0015	5/16/2023	5/22/2023	0.2516 g	3.4 % wt
Site: Yellow RAMP RAIL					

Martiana Beach, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Baton Rouge, LA LELAP 01950; A2LA Accredited - Certificate #2845.03

Report Amended: 05/24/2023 08:50:00 Replaces the Initial Report 05/23/2023 13:09:23. Reason Code: Client-Change to Project

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Marrero, LA 70073

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Fax: (504) 348-3043
Received: 5/17/2023 09:50 AM
Collected: 5/16/2023

Project: **ENV 1658-23289****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)***

Client Sample Description	Lab ID	Collected	Analyzed	Weight	Lead Concentration
16	252302458-0016	5/16/2023	5/22/2023	0.2545 g	0.27 % wt
Site: Water Supply Pipe					
17	252302458-0017	5/16/2023	5/22/2023	0.2517 g	0.28 % wt
Site: Water Supply Pipe					
18	252302458-0018	5/16/2023	5/22/2023	0.2532 g	1.1 % wt
Site: EXT., Door Near S/E Corner					
19**	252302458-0019	5/16/2023	5/22/2023	0.1225 g	0.022 % wt
Site: Storage Door					
20	252302458-0020	5/16/2023	5/22/2023	0.2515 g	7.0 % wt
Site: Roof Truse					
21	252302458-0021	5/16/2023	5/22/2023	0.2501 g	0.66 % wt
Site: Concrete Floor					
22	252302458-0022	5/16/2023	5/22/2023	0.2506 g	0.53 % wt
Site: OLA Generator #8					
23	252302458-0023	5/16/2023	5/22/2023	0.2509 g	26 % wt
Site: SAFTEY Railing by Gen.					
24	252302458-0024	5/16/2023	5/22/2023	0.2523 g	0.27 % wt
Site: Circuit Panel S/W Corner					
25	252302458-0025	5/16/2023	5/22/2023	0.2507 g	19 % wt
Site: INT. Water TANK					
26	252302458-0026	5/16/2023	5/22/2023	0.2501 g	5.5 % wt
Site: GRATE VALVE on Gen.					
27	252302458-0027	5/16/2023	5/22/2023	0.2542 g	5.6 % wt
Site: Air TANK OLA Gen.					
28	252302458-0028	5/16/2023	5/22/2023	0.2513 g	0.21 % wt
Site: I Beam S/W (BOT)					
29	252302458-0029	5/16/2023	5/22/2023	0.2539 g	0.16 % wt
Site: I Beam S/W (Top)					
30	252302458-0030	5/16/2023	5/22/2023	0.2522 g	2.9 % wt
Site: S/W Metal Door					

Martiana Beach, Laboratory Manager
or other approved signatory

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Fax: (504) 348-3043
Received: 5/17/2023 09:50 AM
Collected: 5/16/2023

Project: **ENV 1658-23289****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)***

Client Sample Description	Lab ID	Collected	Analyzed	Weight	Lead Concentration
31	252302458-0031	5/16/2023	5/22/2023	0.2523 g	0.26 % wt
Site: Oil Filter TANK Gen. 9					
32	252302458-0032	5/16/2023	5/22/2023	0.2515 g	9.8 % wt
Site: Piping By New Gen. 9					
33	252302458-0033	5/16/2023	5/22/2023	0.2517 g	6.0 % wt
Site: Piping By New Gen. 9					
34	252302458-0034	5/16/2023	5/22/2023	0.2514 g	4.3 % wt
Site: Piping By New Gen. 9					
35	252302458-0035	5/16/2023	5/22/2023	0.2541 g	0.17 % wt
Site: CONTROL PANEL/BOX					
36	252302458-0036	5/16/2023	5/22/2023	0.2511 g	0.24 % wt
Site: EXHAUST GEN. 9					
37	252302458-0037	5/16/2023	5/22/2023	0.2508 g	0.37 % wt
Site: GENERATOR 9 (BOTTOM)					
38	252302458-0038	5/16/2023	5/22/2023	0.2504 g	0.42 % wt
Site: INT WALL (North)					
39	252302458-0039	5/16/2023	5/23/2023	0.2502 g	3.8 % wt
Site: EXHAUST Generator #12					
40	252302458-0040	5/16/2023	5/23/2023	0.2506 g	0.11 % wt
Site: CONTROL PANEL GEN #12					
41	252302458-0041	5/16/2023	5/23/2023	0.2514 g	0.27 % wt
Site: Turbine Gen #11					
42	252302458-0042	5/16/2023	5/23/2023	0.2501 g	19 % wt
Site: Water tank-LOFT.					
43	252302458-0043	5/16/2023	5/23/2023	0.2508 g	0.21 % wt
Site: Textured WALL-Partition					
44	252302458-0044	5/16/2023	5/23/2023	0.2550 g	1.3 % wt
Site: ROOF WOOD BEAMS					

** Data reported may not reach applicable analytical sensitivity due to insufficient sample weight submitted. Suggested weight for analysis is 0.2-0.25g.

Martiana Beach, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Baton Rouge, LA LELAP 01950; A2LA Accredited - Certificate #2845.03

Report Amended: 05/24/2023 08:50:00 Replaces the Initial Report 05/23/2023 13:09:23. Reason Code: Client-Change to Project

EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

PHONE: ()

FAX: ()

2458

Company: TECHNICAL ENVIRONMENTAL SERVICES, INC.		EMSL-Bill to: ☐ Same ☒ Different If Bill to is Different note Instructions in Comments**		
Street: 5133 TARAVELLA RD		Third Party Billing requires written authorization from third party		
City: MARRERO	State/Province: LA	Zip/Postal Code: 70072	Country: USA	
Report To (Name): KATIE HOFMANN		Telephone #: 504.348.3098		
Email Address: KAHOFMANN@TESCONSULT.COM		Fax #:	Purchase Order:	
Project Name/Number: ENV 1658-23284		Please Provide Results: ☐ Fax ☒ Email		
U.S. State Samples Taken:		CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt		
Turnaround Time (TAT) Options* - Please Check				
☐ 3 Hour	☐ 6 Hour	☐ 24 Hour	☐ 48 Hour ☒ 72 Hour ☒ 96 Hour ☐ 1 Week ☐ 2 Week	
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide				
Matrix	Method	Instrument	Reporting Limit	Check
Chips ☒ % by wt. ☐ mg/cm ² ☐ ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	☒
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	☐
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	☐
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	☐
Wipe* ☐ ASTM non ASTM ☐ *if no box checked, non-ASTM Wipe assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	☐
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	☐
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO ₃ pH < 2 ☐	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO ₃ pH < 2 ☐	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	☐
Other:				☐
Name of Sampler:		Signature of Sampler:		
Sample #	Location	Volume/Area	Date/Time Sampled	
01	EXT WALL F.N.	1" x 1"	5/16/23 AM	
02	EXHAUST F.A.	↓	↓	
Client Sample #s		Total # of Samples:	44	
Relinquished (Client):	Date:	Time:		
Received (Lab):	Date:	Time:		
Comments:				
INVOICE TO: BADAMS@TESCONSULT.COM				

⑦ 7966 3199 4124
181



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

LEAD (Pb) CHAIN OF CUSTODY
EMSL ORDER ID (Lab Use Only):

2458

PHONE: ()

FAX: ()

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
03	EXT. WALL F.N.	1" x 1"	5-6-23 AM
04	EXT Door F.E.		
05	EXT Door Frame F.S.		
06	Cooling Water Line F.N.		
07	EXT. Window PE+N		
08	INT. WALL F.S.		
09	INT. WALL F.S.		
10	INT. WALL ^{UPSTAIRS} F.N.		
11	INT. WALL ^{UPSTAIRS} F.S.		
12	INT. WALL ^{UPSTAIRS} F.S.		
13	Hand Rail ^{UPSTAIRS}		
14	Valve Assembly ^{UPSTAIRS}		
15	Yellow Ramp Rail		
16	Water Supply Pipe		
17	Water Supply Pipe		
18	EXT. Door ^{near} S/E corner		
19	Roof Truse ^{Storage} DOOR		✓
20	Roof Truse	1" x 1"	5-6-23 AM
Comments/Special Instructions:			

Page 2 of 4 pages



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

LEAD (Pb) CHAIN OF CUSTODY
EMSL ORDER ID (Lab Use Only):

2458

EMSL Analytical, Inc.
18369 Petroleum Drive

Baton Rouge, LA 70809

PHONE: (225) 755-1920

FAX: (225) 755-1989

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
21	Concrete Floor	1" x 1"	5-16-23 PM
22	Old Generator # 8		
23	SAFETY RAILING ^{by} Gen.		
24	Circuit Panel S/W _{COMMON}		
25	INT. WATER TANK.		
26	GATE VALVE on Gen.		
27	Air Tank Old Gen.		
28	I Beam S/W (Bot)		
29	I Beam S/W (Top)		
30	S/W Metal Door		
31	Oil Filter Tank Gen. 9		
32	Piping By New Gen. 9		
33	↓ ↓ ↓		
34			
35	CONTROL PANEL/BOX		
36	EXHAUST GEN. 9		
37	GENERATOR 9 (BOTTOM)		
38	INT WALL (NORTH)	1" x 1"	5-16-23 PM
Comments/Special Instructions:			
Bill To: TES, PO BOX 1601, Marrero, LA, 70073, US Attention: TES - Clarke Phone: 5043483098 Email: npocley@tesconsult.com Purchase Order:			

Page 3 of 4 pages

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL ORDER ID (Lab Use Only):

2458

FAX: (225) 755-1989

[illegible]

BillTo: TES, PO BOX 1601, Marrero, LA, 70073, US
Attention: TES - Clarke Phone: 5043483098 Email: npooley@tesconsult.com Purchase Order:

Report for:

Bradley Bigner
Technical Environmental Services
5133 Taravella Rd.
Marrero, LA 70072

Regarding: Eurofins J3 Resources, Inc.
Project: ENV 1558-23284; Houma Diesel Plant
EML ID: 3262946

Approved by:

Dates of Analysis:
Spore trap analysis: 05-22-2023



Lab Director
Scott Ward

Service SOPs: Spore trap analysis (EM-MY-S-1038)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Information supplied by the client which can affect the validity of results: sample air volume.

Eurofins J3 Resources, Inc. ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	ST-1: Outside North		ST-2: Interior Restroom		ST-3: Training Room		ST-4: Upstairs Storage	
Comments (see below)	A		B		C		D	
Lab ID-Version‡:	15822864-1		15822865-1		15822866-1		15822867-1	
Analysis Date:	05/22/2023		05/22/2023		05/22/2023		05/22/2023	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	7	47			2	13	6	40
Ascospores	8	210	15	400	7	190	10	270
Aureobasidium	1	7					3	20
Basidiospores	113	3,000	118	3,100	31	830	289	7,700
Bipolaris/Drechslera group							1	7
Cercospora	48	320	5	33	3	20	2	13
Chaetomium			89	590			119	790
Cladosporium	1,586	11,000	93	620	240	1,600	10	270
Curvularia	18	120	2	13	3	20	3	20
Epicoccum					2	13		
Fusarium	2	13						
Ganoderma	1	7	4	27				
Nigrospora	2	13	1	7			5	33
Other brown					2	13		
Other colorless	4	27						
Penicillium/Aspergillus types†	20	270	43	290	14	93	67	1,800
Peronospora	1	7						
Pithomyces	1	7			2	13	2	13
Polythrincium	1	7	1	7				
Pyricularia	4	27						
Rusts	10	67			1	7		
Smuts, Periconia, Myxomycetes	59	390	8	53	3	20		
Spegazzinia	1	7						
Stachybotrys							2	13
Torula							10	67
Zygomycetes	20	130	30	200	3	20	1	7
Background debris (1-4+)††	2+		3+		4+		> 4+	
Hyphal fragments/m3	47		60		40		230	
Pollen/m3	< 7		53		67		60	
Skin cells (1-4+)	< 1+		1+		2+		1+	
Sample volume (liters)	150		150		150		150	
§ TOTAL SPORES/m3		16,000		5,400		2,900		11,000

Comments: A) 1547 of the raw count *Cladosporium* spores were present as nineteen clumps of 188,171,136,122,119,103,96,82,78,72, 68,65,59,57,50, 43, 33,29,26, and 22. 13 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump. B) 43 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump. 93 of the raw count *Cladosporium* spores were present as two clumps of 78 and 15. C) 238 of the raw count *Cladosporium* spores were present as six clumps of 88, 42,38,36, 19, and 15. D) Large macroscopic particulates preventing proper mounting of sample media. Reported results may be low.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³, per spore and per sample.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	ST-5: Upstairs Valve Rm.		ST-6: Downstairs Storage		ST-7: Filter Room		ST-8: Outside South	
Comments (see below)	E		F		G		H	
Lab ID-Version‡:	15822868-1		15822869-1		15822870-1		15822871-1	
Analysis Date:	05/22/2023		05/22/2023		05/22/2023		05/22/2023	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	13	3	20	5	33	11	73
Ascospores	12	320	5	130	7	190	7	190
Aureobasidium	6	40						
Basidiospores	149	4,000	62	1,700	73	1,900	95	2,500
Bipolaris/Drechslera group	2	13	1	7	2	13	22	150
Cercospora	10	67	17	110	9	60	13	87
Chaetomium	1	7	1	7				
Cladosporium	429	3,000	117	860	164	1,100	331	2,500
Curvularia	1	7	4	27	4	27	44	290
Epicoccum	1	7	1	7	1	7	11	73
Ganoderma			2	13	2	13		
Nigrospora	6	40	10	67	1	7	12	80
Other brown			2	13			1	7
Other colorless	1	7						
Penicillium/Aspergillus types†	45	300						
Peronospora							40	270
Pithomyces			1	7			103	690
Polythrincium					5	33	2	13
Pyricularia					2	13		
Rusts							1	7
Smuts, Periconia, Myxomycetes	7	47	1	7	4	27	175	1,200
Spegazzinia							7	47
Stachybotrys			1	7				
Tetraploa							1	7
Torula			4	27			85	570
Zygomycetes	1	7			4	27	2	13
Background debris (1-4+)††	4+		4+		2+		2+	
Hyphal fragments/m3	13		13		< 7		53	
Pollen/m3	80		280		13		20	
Skin cells (1-4+)	1+		< 1+		< 1+		< 1+	
Sample volume (liters)	150		150		150		150	
§ TOTAL SPORES/m3		7,800		3,000		3,500		8,700

Comments: E) 422 of the raw count *Cladosporium* spores were present as nine clumps of 22, 33, 38, 43, 44, 48, 55, 65, 74. 45 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump. F) Large macroscopic particulates preventing proper mounting of sample media. Reported results may be low. 113, 38, G) 164, of the raw count *Cladosporium* spores were present as five clumps of 21, 26, 34, 36, and 47. H) 318 of the raw count *Cladosporium* spores were present as eight clumps of 61, 54, 47, 38, 34, 31, 29, and 24.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m³ divided by the raw count, expressed in spores/m³, per spore and per sample.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: ST-1, Outside North

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: May				State: LA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	47	7	27	320	40	7	27	330	42
Aureobasidium	7	5	13	270	< 1	-	-	-	< 1
Bipolaris/Drechslera group	-	7	13	160	11	7	13	160	25
Chaetomium	-	7	13	220	10	7	13	220	4
Cladosporium	11,000	27	430	6,700	90	27	530	9,000	91
Curvularia	120	7	20	270	10	7	33	1,200	48
Epicoccum	-	7	27	270	20	7	20	270	24
Fusarium	13	7	13	210	2	7	27	220	9
Ganoderma	7	13	53	210	< 1	7	28	880	< 1
Nigrospora	13	7	13	110	8	7	27	320	33
Other brown	-	7	22	150	27	7	13	130	23
Other colorless	27	7	27	440	4	7	27	550	7
Penicillium/Aspergillus types	270	13	160	2,000	55	26	240	4,000	66
Pithomyces	7	7	13	130	5	7	13	270	19
Polythrincium	7	7	13	190	3	7	20	220	4
Stachybotrys	-	7	13	530	2	7	13	250	1
Torula	-	7	14	180	8	7	20	220	12
Zygomycetes	130	7	17	53,000	< 1	-	-	-	< 1
Seldom found growing indoors**									
Ascospores	210	13	320	9,900	79	27	370	9,000	91
Basidiospores	3,000	13	390	16,000	89	29	750	30,000	95
Cercospora	320	7	27	200	10	7	40	480	35
Peronospora	7	7	13	80	< 1	7	13	82	1
Pyricularia	27	7	20	320	4	7	21	690	10
Rusts	67	7	22	270	17	7	13	180	11
Smuts, Periconia, Myxomycetes	390	7	53	1,000	65	7	53	690	72
Spegazzinia	7	7	13	150	1	7	13	930	6
Tetraploa	-	7	13	53	< 1	7	13	270	5
§ TOTAL SPORES/m3	16,000								

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: ST-8, Outside South

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: May				State: LA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	73	7	27	320	40	7	27	330	42
Aureobasidium	-	5	13	270	< 1	-	-	-	< 1
Bipolaris/Drechslera group	150	7	13	160	11	7	13	160	25
Chaetomium	-	7	13	220	10	7	13	220	4
Cladosporium	2,500	27	430	6,700	90	27	530	9,000	91
Curvularia	290	7	20	270	10	7	33	1,200	48
Epicoccum	73	7	27	270	20	7	20	270	24
Fusarium	-	7	13	210	2	7	27	220	9
Ganoderma	-	13	53	210	< 1	7	28	880	< 1
Nigrospora	80	7	13	110	8	7	27	320	33
Other brown	7	7	22	150	27	7	13	130	23
Other colorless	-	7	27	440	4	7	27	550	7
Penicillium/Aspergillus types	-	13	160	2,000	55	26	240	4,000	66
Pithomyces	690	7	13	130	5	7	13	270	19
Polythrincium	13	7	13	190	3	7	20	220	4
Stachybotrys	-	7	13	530	2	7	13	250	1
Torula	570	7	14	180	8	7	20	220	12
Zygomycetes	13	7	17	53,000	< 1	-	-	-	< 1
Seldom found growing indoors**									
Ascospores	190	13	320	9,900	79	27	370	9,000	91
Basidiospores	2,500	13	390	16,000	89	29	750	30,000	95
Cercospora	87	7	27	200	10	7	40	480	35
Peronospora	270	7	13	80	< 1	7	13	82	1
Pyricularia	-	7	20	320	4	7	21	690	10
Rusts	7	7	22	270	17	7	13	180	11
Smuts, Periconia, Myxomycetes	1,200	7	53	1,000	65	7	53	690	72
Spegazzinia	47	7	13	150	1	7	13	930	6
Tetraploa	7	7	13	53	< 1	7	13	270	5
§ TOTAL SPORES/m3	8,700								

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

MoldRANGE™: Extended Outdoor Comparison

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m³. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

* The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

** These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by Eurofins EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, Eurofins EMLab P&K may not have received and tested a representative number of samples for every region or time period. Eurofins EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

Report for:

Bradley Bigner
Technical Environmental Services
5133 Taravella Rd.
Marrero, LA 70072

Regarding: Eurofins J3 Resources, Inc.
Project: ENV 1558-23284; Houma Diesel Plant
EML ID: 3262946

Approved by:

Dates of Analysis:
Direct microscopic exam (Qualitative): 05-22-2023



Lab Director
Scott Ward

Service SOPs: Direct microscopic exam (Qualitative) (EM-MY-S-1039)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins J3 Resources, Inc. ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Technical Environmental Services
C/O: Bradley Bigner
Re: ENV 1558-23284; Houma Diesel Plant

Date of Submittal: 05-17-2023
Date of Receipt: 05-17-2023
Date of Report: 05-22-2023

DIRECT MICROSCOPIC EXAMINATION REPORT

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 15822861-1, Analysis Date: 05/22/2023: Tape sample ST-A: Interior Restroom				
Scant	Very few	3+ <i>Chaetomium</i> species (spores, hyphal fragments)	None	Mold growth
Lab ID-Version: 15822862-1, Analysis Date: 05/22/2023: Tape sample ST-B: Interior Training				
Light	Very few	2+ <i>Cladosporium</i> species (budding cells, hyphae)	None	Mold growth
Lab ID-Version: 15822863-1, Analysis Date: 05/22/2023: Tape sample ST-C: Upstairs Storage				
Scant	Very few	4+ <i>Chaetomium</i> species (spores, hyphal fragments)	None	Mold growth

* Indicative of normal conditions, i.e. seen on surfaces everywhere. Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded <1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
The limit of detection is < 1+ when mold growth is detected.

For additional information necessary for the interpretation of the results, all readers are advised to refer to the document "Direct Exam Details Page" which is available on our website at:
www.emlab.com/services/mold-testing/direct-microscopic-exam-qualitative/

CONTACT INFORMATION

Company: **TES** Address: **5133 TRAVERA A. MARLTON, NJ 08053**
Contact: **BROD BIGNER** Special Instructions: **70360**
Phone: **(504) 348-3058** BBIGNER@TESCONSULT.COM

PROJECT INFORMATION

Project ID: **ENV 1658-23284** STD - Standard (DEFAULT)
Project Description: **Hanna Diesel Plant** ND - Next Business Day
Project Zip Code: **70360** SD - Same Business Day Rush
Sampling Date & Time: **5/16/03 9 AM** WH - Weekend / Holiday
PO Number: **T.A. / J.R.**

Sample ID	Description	Sample Type (Below)	TAT (Below)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, etc.)
ST-1	OUTSIDE NORTH	ST	STD	150 L	AW 70358.8
2	INTERIOR RESTROOM				184.748.8
3	TRAINING ROOM				75758.9
4	UPSTAIRS STORAGE				75758.9
5	UPSTAIRS VALVE RM.				82.0627
6	DOWNSTAIRS STORAGE				82.0594
7	FILTER ROOM				81.8527
ST-8	OUTSIDE SOUTH	ST		150 L	95.7461
SB A	INTERIOR RESTROOM	SW		1'x1'	184.748.8
SB B	INTERIOR TRAINING	SW		1'x1'	75758.9
SB C	UPSTAIRS STORAGE	SW		1'x1'	7998723

SAMPLE TYPE CODES

BC - BioCassette™ CP - Contact Plate T - Tape D - Dust
A1S - Andersen ST - Spore Trap Zofen. SW - Swab W - Digitar
SAS - Surface Air Sampler Allergenco, Burkard ... B - Bulk SD - Sol
O - Other

RELINQUISHED BY



DATE & TIME

5/16/03 5:00pm AT 5-17 10:00

RECEIVED BY

DATE & TIME

FUNGAL ANALYSIS

REQUEST (Check)

Non-Culturable
Spore Trap
Tape Swab Bulk
BioCa Water

003262946

Spore Trap Analysis	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Spore Trap Analysis - Other particles	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Direct Microscopic Exam (Qualitative)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Quantitative Spore Count Direct Exam	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Dust Characterization	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Air Fungi (Genus ID + Asp. speciation)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Air Fungi - Full speciation Pen. & Chyd. genus only	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Air Fungi - Full speciation	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
1-Media Surface Fungi (Genus ID + Asp. speciation)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
1-Media Surface Fungi - Full spec. Penicillid genus only	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
1-Media Surface Fungi - Full speciation	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
2-Media Surface Fungi (Genus ID + Asp. speciation)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
2-Media Surface Fungi - Full spec. Penicillid genus only	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
2-Media Surface Fungi - Full speciation	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
3-Media Surface Fungi (Genus ID + Asp. speciation)	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
3-Media Surface Fungi - Full spec. Penicillid genus only	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
3-Media Surface Fungi - Full speciation	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒