

# ENVIRONMENTAL COMPLIANCE & AREA COMPLETION PROJECTS

## Baseline Asbestos Inspection Report of Building 485-D



Q-APG-D-00026  
January 9, 2020



January 9, 2020

**Q-APG-D-00026**  
RSM Track Number 10755

TO: Andrew Macmillan, 730-4B Room 3026

FROM: Ken Padgett, 730-4B

**BASELINE ASBESTOS INSPECTION REPORT OF BUILDING 485-D**

On January 9, 2020 a baseline asbestos inspection was performed in building 485-D. Building 485-D was constructed in 1952. It is a standard updraft industrial cooling tower with recirculating pumps on the north side. The building is constructed of wood, steel, concrete and corrugated fiberglass panels, and has a footprint of approximately 3,800 SF. The facility sits on a reinforced concrete basin.

Six (6) homogenous types of material were evaluated during this inspection. Please see the attached Inspection Survey Table for descriptions, estimated quantities, and location(s) of the materials inspected. Results from SDD-APG-2009-00569 have been reproduced and added to the Inspection Survey Table. The results from this inspection report will serve as the baseline reference of ACM in the building.

**SUMMARY**

All accessible, visible, suspect ACM was evaluated at the time of this inspection. Visible Thermal Systems Insulation (TSI) includes foam glass pipe insulation. This evaluation was based on facility and material knowledge, document review, and the collection of bulk samples for laboratory analysis.

Samples collected in the SDD-APG-2009-00569 report were analyzed at the SRNS LLC. Industrial Hygiene Laboratory, which is accredited by the American Industrial Hygiene Association (AIHA) Laboratory Quality Assurance Program (LQAP) in the Field of Testing (FoT)/Polarized Light Microscopy (PLM). The laboratory ID number is 100642.

Although building 485-D has been deactivated and placed in shutdown condition, the inspector could not verify that the building was de-energized. Therefore, suspect materials may exist inside electrical disconnect boxes and conduit.

**If this report is used for contract bid or regulatory permit purposes, it is the obligation of the user to verify the actual quantities of the materials presented in the Inspection Survey Table.** In accordance with 40CFR part 61.145, a **ten-day notification** must be filed with SC DHEC prior to demolition.

**The removal of all identified ACM and Presumed Asbestos Containing Material (PACM) must be performed by asbestos trained personnel, with proper permitting, and waste disposal procedures.**



**INTEROFFICE MEMORANDUM**

**Q-APG-D-00026**  
RSM Track Number 10755

<u>ASBESTOS INSPECTOR</u>	<u>INSTITUTION</u>	<u>CERT. NO.</u>	<u>STATE</u>	<u>EXP. DATE</u>
William K. Padgett 	AAA Environmental	06-1397	SC	04/17/20

( Included on the SRS long-term in-house group license ABS 8021 )

C: C.R.F., 773-52A  
Site D&D Correspondence File  
J.K. Barrineau, 730-4B  
Mark Wright, 705-3C Room 126

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INSPECTION SURVEY TABLE FOR BUILDING 485-D

Page 1 of 1

Homogeneous Number	SUSPECT MATERIAL	DESCRIPTION OF MATERIAL and SAMPLE NUMBERS	AMOUNT	TEST RESULTS	FRIABLE-NONFRIABLE
H01	Miscellaneous	<b>Description:</b> Canvas pipe wrap - gray <b>Sample Numbers:</b> 485D090304-01, 485D090304-02, 485D090403-03	Approximately 8 LF	Positive	Non-Friable Good Condition
<b>Location:</b> Applied to foam glass pipe insulation below valves CW-V-018 and CW-V-019 at south side of tower					
H02OB	Miscellaneous	<b>Description:</b> Mastic - grey <b>Sample Numbers:</b> 485D090304-04A, 485D090304-04B, 485D090304-04C <b>Sample Number:</b> 485D090304-04A was analyzed via TEM	Approximately 5 LF	Negative	N/A
<b>Location:</b> North side of cooling tower at Cond. Circ. Pumps 001-1, 002-1 and 003-1 (Valves CW-V-182, 178, and 172)					
H03	Miscellaneous	<b>Description:</b> Insulating tape <b>Sample Numbers:</b> 485D090304-05, 485D090304-06, 485D090304-07	Approximately 5 LF	Negative	N/A
<b>Location:</b> North side of cooling tower at Cond. Circ. Pumps 001-1, 002-1 and 003-1 (Valves CW-V-182, 178, and 172)					
H04OB	Miscellaneous	<b>Description:</b> Mastic - grey <b>Sample Numbers:</b> 485D090304-08A, 485D090304-08B, 485D090304-08C <b>Sample Number:</b> 485D090304-08C was analyzed via TEM	Approximately 15 LF	Negative	N/A
<b>Location:</b> North side of cooling tower at Cond. Circ. Pumps 001-1 (Valve CW-V-181) and 003-1 (Valve CW-V-170)					
H05	Miscellaneous	<b>Description:</b> Gaskets <b>Sample Numbers:</b> N/A, inaccessible for evaluation	Not quantified	PACM (See note 1)	Non-Friable Good Condition
<b>Location:</b> North and south side pipe/valve flanges					
H06	TSI	<b>Description:</b> Foam glass insulation <b>Sample Numbers:</b> 683D090415-08A, 683D090415-08B, 683D090415-08C	N/A	N/A	N/A
<b>Location:</b> Applied to piping below valves CW-V-018 and CW-V-019 at south side of tower					

**Note 1:** The gaskets were inaccessible for bulk sampling, therefore are considered Presumed Asbestos Containing Material (PACM). If the work (demolition) method used avoids the separation of flanges, they will not be disturbed. Gaskets in unbroken flanges are determined to be encased in a hardened substance therefore they are not subject to regulatory requirements.

OSR 4-434 (Rev 10-11-2006)

# Industrial Hygiene Chain of Custody Lab Report

Washington Savannah River Company  
Industrial Hygiene Laboratory  
Building 735-B, Room 310  
Aiken, SC 29808  
Phone: (803) 952-7449/7459  
Fax: (803) 952-7881

Page <u>1</u> of <u>2</u>	Cost Code PRD70391E	Lab Log-In No. _____
Contaminant(s) SUSPECT ASBESTOS 485-D	Lab Report No. Required <input checked="" type="radio"/> EBL <input type="radio"/> F/H Lab	Lab Method No. and Name NIOSH 9002 (PLM)
Submitted By (Print/Signature) Charles Carter <i>Charles Carter</i>	<b>EBL-IH</b>	Lab Book and Page No. 09-0110-0121
Audited By (Print/Signature) Russ Cochrane <i>Russ Cochrane</i>		Disk No.
		Verbal Results Given (To Whom) How (Check One) <input type="radio"/> Person <input type="radio"/> Voice Mail
	2009-0123-	Date/Time Verbal Results Given /

Sample ID	Sample Media/Size	Requested TAT*	Results/Unit	Reporting Limit	Remarks
485D090304-01		3-18-09	Chry 15-308	1% ASB	H01 Canvas Over Foamglass
485D090304-02		3-18-09	Chry 15-308	↓	H01 Canvas Over Foamglass
485D090304-03		3-18-09	Chry 5-158		H01 Canvas Over Foamglass
485D090304-04A		3-18-09	< 1%		H02OB Grey Mastic on Insulation Tape
485D090304-04B		3-18-09	< 1%		H02OB Grey Mastic on Insulation Tape
485D090304-04C		3-18-09	< 1%		H02OB Grey Mastic on Insulation Tape
485D090304-05		3-18-09	< 1%		H03 Insulation Tape
485D090304-06		3-18-09	< 1%		H03 Insulation Tape

NOTE: Results relate only to the items tested.  
NOTE: Results are not corrected for contamination based on the field blank or other analytical blank.

Analyst/Signature <i>Russ Cochrane</i>	Date Analyzed 3-16-09	Reviewed By (Print) M Bernard 3-17-09	Signature (Lab Director or Designee) <i>Marcus Bernard</i>	Date 3-17-09
Analyst/Signature <i>Russ Cochrane</i>	Date Report Mailed 3-17-09	Report Received By (Print)	Signature (Field Use Only)	Date Received

Comments  
Samples recd in good condition mcs 3/17/09

### Chain of Custody

NOTE: Samples from Radiological Contamination areas must be submitted to 772-F unless free release criteria are met.

Relinquished By				Received By			
Name	Signature	Date	Time	Name	Signature	Date	Time
Charles Carter	<i>Charles Carter</i>	3/4/2009	1330	RM Cooke	<i>RM Cooke</i>	3/5/09	0850

\*TAT - Turn Around Time      Disk No. - Only applicable to asbestos fiber counting.  
Retention - Permanent

OSR 4-434 (Rev 10-11-2006)

Washington Savannah River Company  
 Industrial Hygiene Laboratory  
 Building 735-B, Room 310  
 Aiken, SC 29808  
 Phone: (803) 952-7449/7459  
 Fax: (803) 952-7881

# Industrial Hygiene Chain of Custody Lab Report

Page <u>2</u> of <u>2</u>	Cost Code PRD70391E	Lab Log-In No. _____
Contaminant(s)	Lab Report No. Required <input checked="" type="radio"/> EBL <input type="radio"/> F/H Lab  <b>EBL-IH</b>	Lab Method No. and Name <u>NIOSH 9002 (PCM)</u>
Submitted By (Print/Signature) Charles Carter <i>Charles Carter</i>	2009-0123-	Lab Book and Page No. <u>09-0110-0121</u>
Audited By (Print/Signature) Russ Cochrane <i>Russ Cochrane</i>		Disk No. Verbal Results Given (To Whom) _____ How (Check One) <input type="radio"/> Person <input type="radio"/> Voice Mail
		Date/Time Verbal Results Given <u>1</u>

Sample ID	Sample Media/Size	Requested TAT*	Results/Unit	Reporting Limit	Remarks
485D090304-07		3-18-09	< 1% 1% AB		H03 Insulation Tape
485D090304-08A		3-18-09	< 1%	↓	H04OB Grey Mastic on Insulation Tape
485D090304-08B		3-18-09	< 1%		H04OB Grey Mastic on Insulation Tape
485D090304-08C		3-18-09	< 1%		H04OB Grey Mastic on Insulation Tape

NOTE: Results relate only to the items tested.  
 NOTE: Results are not corrected for contamination based on the field blank or other analytical blank.

Analyst/Signature <i>RM Coole</i>	Date Analyzed <u>3-16-09</u>	Reviewed By (Print) <i>M Bernard</i>	Signature (Lab Director or Designee) <i>Maureen Bernard</i>	Date <u>3-17-09</u>
Analyst/Signature <i>Russ Cochrane</i>	Date Report Mailed <u>3-17-09</u>	Report Received By (Print)	Signature (Field Use Only)	Date Received

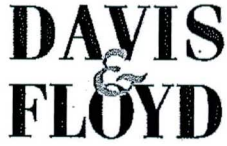
Comments

### Chain of Custody

NOTE: Samples from Radiological Contamination areas must be submitted to 772-F unless free release criteria are met.

Relinquished By				Received By			
Name	Signature	Date	Time	Name	Signature	Date	Time
Charles Carter	<i>Charles Carter</i>	3/4/2009	1330	<i>RM Coole</i>	<i>RM Coole</i>	3/5/09	0850

\*TAT - Turn Around Time      Disk No. - Only applicable to asbestos fiber counting.  
 Retention - Permanent



## LABORATORY ANALYSIS REPORT

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April 2, 2009

James Koch II  
Savannah River Nuclear Solutions, LLC  
735-B Room 133  
Aiken, SC 29804-6809

Re: Job 09072 Asbestos Analysis – TEM

On March 25, 2009, the Davis & Floyd, Inc. laboratory received two solid waste sample from the Savannah River Nuclear Solutions LLC. The sample listed on the Chain-of-Custody (COC) form arrived at Davis & Floyd Laboratory intact. A fourteen-day turnaround was requested on the COC.

The samples were subcontracted to the RJ Lee Group, Inc. in Monroeville, PA for analysis of Asbestos by TEM. The sample(s) were received by the RJ Lee Group and logged in for analysis on March 27, 2009 as follows:

SRNS ID	RJ Lee Sample Number
09072-485D090304-04A	0165232.HT
09072-485D090304-08C	0165233.HT

Enclosed are the Chain-of-Custody Records and the RJ Lee Group laboratory analysis report. Please contact me if you have any questions.

Sincerely,  
Davis & Floyd, Inc.



John H. McCord Jr.  
Laboratory Manager

Enclosure:

Laboratory

# CHAIN-OF-CUSTODY

Copyright 2000 Washington Savannah River Company

09072	Customer Name: Carter, Charles	RL	Company: Davis & Floyd
	Customer Department: SDD		
Contract Number AC39041N	Customer Address: 707-49B	Attention: Carl Burrell, 864-229-4413	
	Customer Phone/Beeper: 507-4764 20730		

<b>Washington Savannah River Company</b> <b>Aiken, SC 29808</b>  <b>Environmental Services Section</b> <b>Waste Sample Management Group</b>  COC creation date: <b>3/20/09</b> Matrix: S=Soil, SO=Solid, SL=Sludge, O=Organic, A=Aqueous, SM=Smear Sample Analysis Requested <b>TEM for Asbestos (362)</b>	Sample ID:	Sample ID:	Sample ID:
	09072-485D090304-04A	09072-485D090304-08C	
	Collect Date: 3/4/09	Collect Date: 3/4/09	Collect Date:
	Collect Time: 0800	Collect Time: 0800	Collect Time:
	No. Containers: 1	No. Containers: 1	No. Containers:
Matrix: SOLID ✓	Matrix: SOLID ✓	Matrix:	

14 Day TAT **RAD SCREEN REQUIRED? NO** STR Authorization *ROU for J. Koch*

1 Relinquished by: <i>Keelin Cooke</i>	Date/Time: 3/23/09	Received by: <i>CE Lewis</i>	2 Relinquished by: <i>CE Lewis</i>	Date/Time: 3/23/09	Received by: <i>Minnie Mightower</i>
(Sign) <i>Keelin Cooke</i>	(Date) 1355	(Sign) <i>CE Lewis</i>	(Sign) <i>CE Lewis</i>	(Date) 1420	(Sign) <i>Minnie Mightower</i>
3 Relinquished by: <i>Minnie Mightower</i>	Date/Time: 3/24/09	Received by: <i>C/S Shipping</i>	4 Relinquished by: <i>Tisa S. Hall</i>	Date/Time: 3-25-09	Received by: <i>Dwa S. Hall</i>
(Sign) <i>Minnie Mightower</i>	(Date) 1000	(Sign) <i>C/S Shipping</i>	(Sign) <i>Tisa S. Hall</i>	(Date) 1115	(Sign) <i>Dwa S. Hall</i>

Cooler 0530



RJ Lee Group, Inc.

350 Hochberg Road, Monroeville, PA 15146

Tel: (724) 325-1776 | Fax: (724) 733-1799

## Final Laboratory Report

### TEM Compositional Analysis

Mr. John H. McCord, Jr.  
Davis & Floyd, Inc.  
P.O. Drawer 428  
Greenwood, SC 29649  
USA

Report Date: 4/1/2009  
Sample Receipt Date: 3/27/2009  
RJ Lee Group Job No.: ATH903028  
Authorization/P.O. No.:  
Samples Received: 2  
Client Job No./Name: 62664\_01

Method: Chatfield Technical Consulting Limited, SOP-1988-02.Rev1.

Client Sample Number	RJLG Sample Number	Sample Description	Starting Weight (gm)	Weight Percent					Total Asbestos	Amphibole Type
				Organic	Acid Soluble	Residue	Chry	Amph		
09072-485D090 304-04A	0165232.HT		0.20750	76	0	24	0	0	0	
09072-485D090 304-08C	0165233.HT		0.20080	10	Trace	90	0	0	0	

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

/mb

Kimberly A. Allison, Manager - TEM Analysis

#### Notes:

- "<" indicates results less than analytical sensitivity. "--" indicates that sample was not analyzed.
- Sample(s) for this project were analyzed at our: Monroeville, PA (AIHA #100364, NVLAP #101208-0, NY ELAP #10844) facility.
- If RJ Lee Group, Inc. did not collect the samples analyzed, the verifiability of the laboratory's results are limited to the reported values.
- Trace indicates <1% asbestos was identified.
- Abbreviations: N/A-Not Applicable, Chry-Chrysotile Asbestos, Amph-Amphibole Asbestos, NSD-No Structures Detected.
- Samples will be held for 90 days and then disposed of per Federal regulations.
- These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which these results are used or interpreted.

## DISCLAIMER

P4

Caution must be applied when interpreting the results of samples prepared using indirect sample preparation techniques. Studies have shown that indirect preparation techniques may result in substantial increases in the fiber count when compared to fiber counts which would have been obtained using direct sample preparation.

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for select test methods for airborne asbestos analysis (TEM), asbestos fiber analysis (PLM), New York Department of HEALTH Environmental Laboratory Program (ELAP), and by the American Industrial Hygiene Association (AIHA). This test report relates only to the items tested. This report may not be used to claim product endorsement by NVLAP, any agency of the US Government, or any other laboratory accrediting agency. Any reproduction of this document must be in full in order for the report to be valid. This report is not valid unless it bears the name of a NVLAP-approved signatory.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limiting 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, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any sample.

