



Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Fabrication Facility
5801 Bluff Road
Hopkins, South Carolina 29061
USA

SCDHEC, BLWM
Kim Kuhn
2600 Bull Street
Columbia, SC 29201

Direct tel: 803.647.1920
Direct fax: 803.695.3964
e-mail: joynerdp@westinghouse.com
Your ref:
Our ref: LTR-RAC-21-01

January 8, 2021

Subject: **December** 2020 CA Progress Report

Ms. Kuhn:

In accordance with Item 19 of Consent Agreement (CA) 19-02-HW, this progress report is being submitted to you, including the following requested information:

- (a) a brief description of the actions which Westinghouse has taken toward achieving compliance with the Consent Agreement during the previous month;
- (b) results of sampling and tests, in tabular summary format received by Westinghouse during the reporting period;
- (c) a brief description of all actions which are scheduled for the next month to achieve compliance with the Consent Agreement, and other information relating to the progress of the work as deemed necessary or requested by the Department; and
- (d) information regarding the percentage of work completed and any delays encountered or anticipated that may affect the approved schedule for implementation of the terms of the Consent Agreement, and a description of efforts made to mitigate delays or avoid anticipated delays.

In response to the above requirements, the following is being reported to the Department since the last progress report submitted on **December 7, 2020**. The following progress report is for work occurring from **December 1- 31, 2020**:

- (a) Actions during the previous month:
Westinghouse began implementation of the Final Remedial Investigation (RI) Work Plan on 6/10/19. To comply with **Item 4** of the CA, the following actions were completed this month.
 - Completed the following activities to support the Southern Storage Area (SSA) Operable Unit (OU) Work Plan:

- Developed the plan to safely excavate soil near a buried electrical utility that is underneath the former C-21 footprint.
 - Completed the following to support the **Phase II** Work Plan.
 - Sediment sampling:
 - Upper Sunset Lake: Samples collected from locations SED-19 and SED-43 through SED-50.
 - Mill Creek: Samples collected from locations SED-57 through SED-59
 - Lithology and Groundwater Screening (DPT):
 - Lithology and groundwater screening samples obtained from L-41 through L-47. A temporary 2-inch PVC well was constructed at location L-43.
 - Groundwater screening only (DPT):
 - Groundwater screening samples obtained from locations L-25 through L-38.
 - Soil Gas Survey
 - Obtained the soil gas sampling devices from the Primary Soil Gas Survey Area.
- (b) Results of sampling and tests:
- A consolidated table and graphics for tetrachloroethylene detections in the SSAOU are included in this monthly report as Attachments A and B, respectively.
- (c) Brief description of all actions which are scheduled for the next month:
In accordance with **Item 4** of the CA, Westinghouse will continue to implement the Work Plan to include the following actions:
- Execute the plan to safely excavate soil near a buried electrical utility that is underneath the former C-21 footprint and exceeds the RSL for tetrachloroethylene (0.0056 mg/kg versus the RSL of 0.0023 mg/kg).
 - Telecommunicate with DHEC to discuss proposed permanent well locations.
 - Complete the following elements of RI Phase II field work, weather permitting.
 - Utility locating for further refinement in the Primary Soil Gas Survey Area and permanent monitoring well installations.
 - Install additional soil gas sampling devices in the Primary Soil Gas Survey Area.
 - Begin installing permanent monitoring wells.
 - Begin installing the pressure transducers in the five monitoring wells around the Gator Pond.
 - Continue preparations for East Lagoon closure in 2021.
- (d) Percentage of work completed and any delays encountered or anticipated:
- 20 % of Phase II Work Scope Completed. Currently there are no anticipated delays.

Please note a minor edit to the November 2020 progress report regarding sediment samples collected from Lower Sunset Lake. The report indicated that samples SED-19 through SED-21 were collected from Lower Sunset Lake. Actually, SED-21 and SED-22 were collected from Lower Sunset Lake, and SED-20 was collected from Upper Sunset Lake. SED-19 was collected from Upper Sunset Lake in December, as reported above.

Respectfully,

A handwritten signature in blue ink, appearing to read "Diana P. Joyner". The signature is fluid and cursive, with the first name "Diana" being the most prominent part.

Diana P. Joyner
Principal Environmental Engineer
Westinghouse Electric Company, CFFF
803.497.7062 (m)

cc: N. Parr, Environmental Manager
J. Ferguson, EH&S Manager
J. Grant, AECOM Project Manager
ENOVIA Records

Attachment A: SSAOU Tabulated Soil Sampling Results – Tetrachloroethylene Detections
Attachment B: Drawings (8) with Soil Sampling Results – Tetrachloroethylene

Attachment A

SSAOU Tabulated Soil Sampling Results Tetrachloroethylene Detections

SSAOU Tabulated Soil Sampling Results – Tetrachloroethylene Detections

ID	< or =	Result (mg/kg)	Notes	Limit: 0.0023 mg/kg
C-4-3	<	0.000273	Systematic	
C-7-3	<	0.000315	Systematic	
C-8-3	<	0.000321	Systematic	
C-9-3	<	0.000268	Systematic	
C-10-4	<	0.000297	Systematic	
C-11-5	<	0.000274	Systematic	
C-13-3	<	0.000320	Systematic	
C-15-4	<	0.000281	Systematic	
C-16-2	<	0.000369	Bias	
C-16-3	<	0.000301	Systematic	
C-17-3	<	0.000285	Systematic	
C-18-3	<	0.000295	Systematic	
C-19-3	<	0.000358	Systematic	
C-20-3	=	0.000327	Systematic	
C-21-3	=	0.005040	Systematic; excavation required	
C-21-6	=	0.001280	Bias	
C-21-A	=	0.005630	bias; excavation required	
C-21-B	=	0.000827	bias	
C-22-10	=	0.002240	Bias	
C-22-11	=	0.000489	Bias	
C-22-5	=	0.000986	Systematic	
C-22-C	<	0.000316	bias	
C-22-D	=	0.000839	bias	
C-23-4	<	0.000285	Systematic	
C-23-9	<	0.000275	Bias	
C-23-E	<	0.000273	bias	
C-23-F	<	0.000300	bias	
C-24-3	<	0.000295	Systematic	
C-25+26-3	<	0.000315	Systematic	
C-25+26-6	<	0.000290	Systematic	
C-28-13	<	0.000297	Systematic	
C-28-19	<	0.000289	Bias	
C-28-20	<	0.000289	Bias	
C-29-12	<	0.000262	Systematic	
C-30-18	<	0.000268	Bias	
C-30-7	<	0.000273	Systematic	
C-31-16	<	0.000291	Bias	
C-31-17	<	0.000292	Bias	
C-31-6	<	0.000282	Systematic	
C-32-1	<	0.000300	Systematic	
C-33-3	<	0.000298	Systematic	
C-34-3	<	0.000286	Systematic	
C-35-3	<	0.000279	Systematic	
C-35-6	<	0.000292	Bias	
C-36-1	<	0.000336	Systematic	
C-37-6	<	0.000310	Systematic	
C-38-3	<	0.000307	Systematic	
C-39-3	<	0.000444	Systematic	
C-41-3	<	0.000268	Systematic	

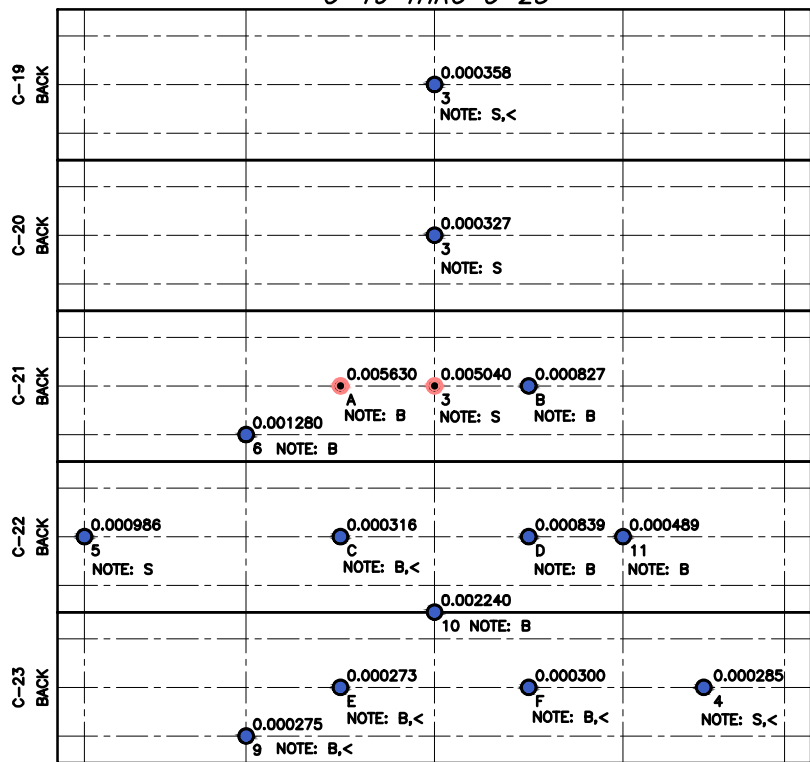
SSAOU Tabulated Soil Sampling Results – Tetrachloroethylene Detections

ID	< or =	Result (mg/kg)	Notes	Limit: 0.0023 mg/kg
C-42-3	<	0.000279	Systematic	
C-43-3	<	0.000309	Systematic	
C-43-6	<	0.000280	Bias	
C-44-3	<	0.000286	Systematic	
C-44-6	<	0.000294	Bias	
C-45-3	<	0.000305	Systematic	
C-46-3	<	0.000295	Systematic	
C-47-5	<	0.000265	Systematic	
C-49-3	<	0.000314	Systematic	
C-51-16	<	0.000296	Bias	
C-51-8	<	0.000399	Systematic	
C-52-14	<	0.000304	Systematic	
C-53-3	<	0.000294	Systematic	
C-54-12	<	0.000268	Systematic	
C-55-3	<	0.000389	Systematic	
C-56-3	<	0.000291	Bias	
C-56-4	=	0.000277	Bias	
C-57-3	<	0.000297	Systematic	
C-57-6	<	0.000281	Bias	
C-57-7	<	0.000280	Bias	
C-57-8	<	0.000277	Bias	
C-58-12	<	0.000301	Systematic	
C-59-6	<	0.000426	Systematic	
C-60-3	<	0.000277	Bias	
C-61-3	<	0.000281	Systematic	
C-62-3	<	0.000388	Systematic	
C-63-3	<	0.000278	Systematic	
C-64-3	=	0.001490	Systematic	
C-65-3	=	0.000569	Systematic	
C-66-2	<	0.000272	Bias	
C-66-3	<	0.000285	Systematic	
C-67-1	<	0.000371	Systematic	
C-69-4	<	0.000269	Systematic	
C-71-8	<	0.000315	Systematic	
ERT-2	<	0.000240	Systematic	
S-16-2	<	0.000256	Systematic	
S-3-2	<	0.000336	Systematic	
S-38-3	<	0.000330	Systematic	
S-45-2	<	0.000262	Systematic	
S-46-2	<	0.000359	Systematic	
S-50-3	<	0.000346	Systematic	
S-5-2	<	0.000309	Systematic	
WEC1000-2	<	0.000270	Systematic	
WEC-1001-2	<	0.000270	Systematic	
WEC400-2	<	0.000275	Systematic	
WEC500-2	<	0.000275	Systematic	
WEC700-2	<	0.000283	Systematic	
WEC800-2	<	0.000279	Systematic	

Attachment B

**Drawings (8) with Soil Sampling Results
Tetrachloroethylene**

C-19 THRU C-23



FRONT (ENTRANCE)
FRONT (ENTRANCE)
FRONT (ENTRANCE)
FRONT (ENTRANCE)
FRONT (ENTRANCE)

F
E
D
C
B
A

F
E
D
C
B
A

CHANGE

NOTES
S SYSTEMATIC POINT
B BIAS POINT
< NON-DETECTED POINT

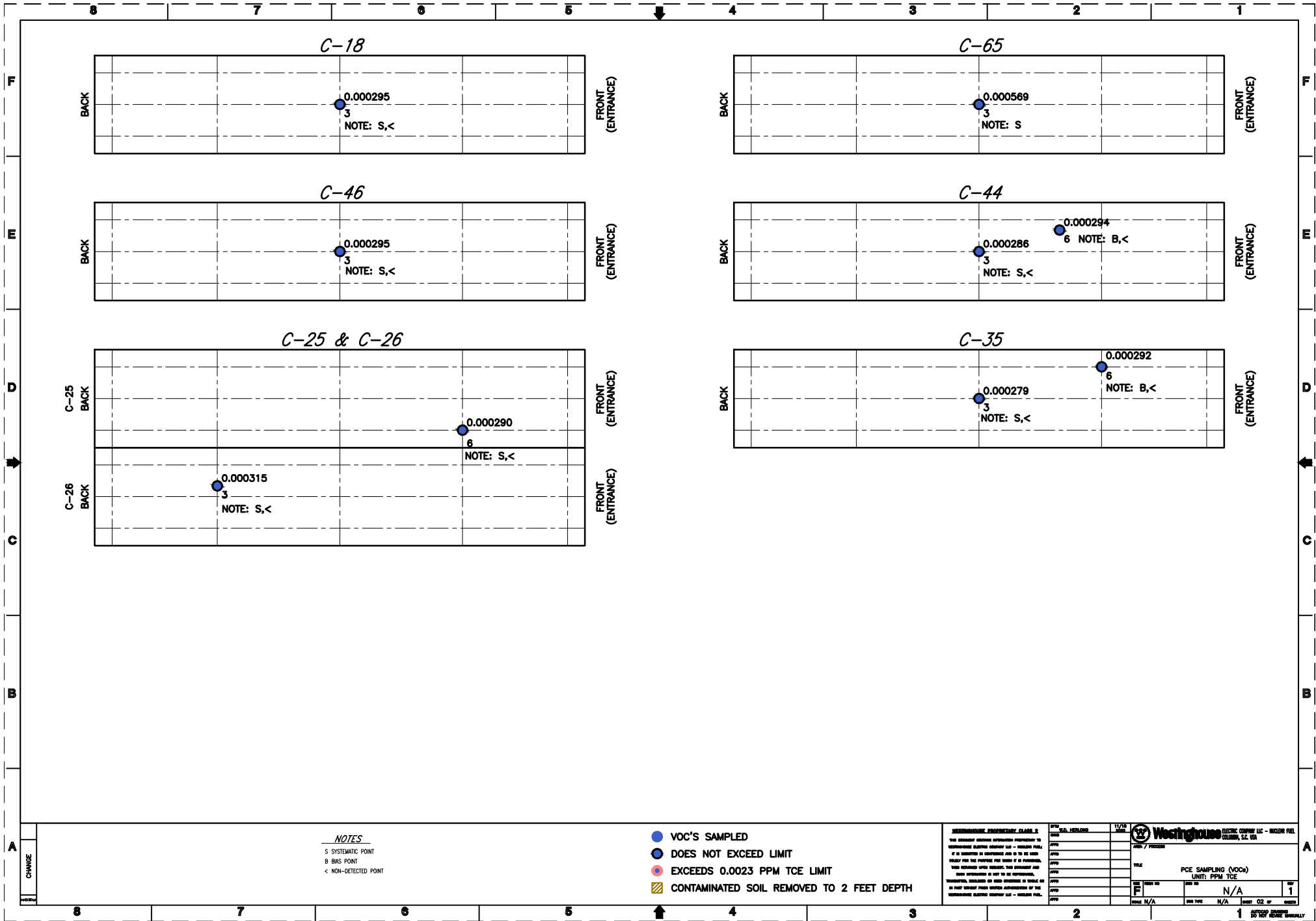
- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

INTERMEDIATE PROXY CLASS 2
THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO WESTINGHOUSE ELECTRIC COMPANY LLC - INDIAN FIELL. IT IS INTENDED AS CONFIDENTIAL AND IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT IS PROVIDED. THIS DOCUMENT AND ITS CONTENTS ARE NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE WESTINGHOUSE ELECTRIC COMPANY LLC - INDIAN FIELL.

DATE	11/20		WESTINGHOUSE ELECTRIC COMPANY LLC - INDIAN FIELL COLUMBIA, SC 29910
SCALE	N/A		PROJECT / NUMBER
TITLE	PCE SAMPLING (VOCs) LIMIT: PPM TCE		
DATE	N/A	ISSUE NO.	01 of 01
SCALE	N/A	ISSUE TYPE	REVISION

A

1



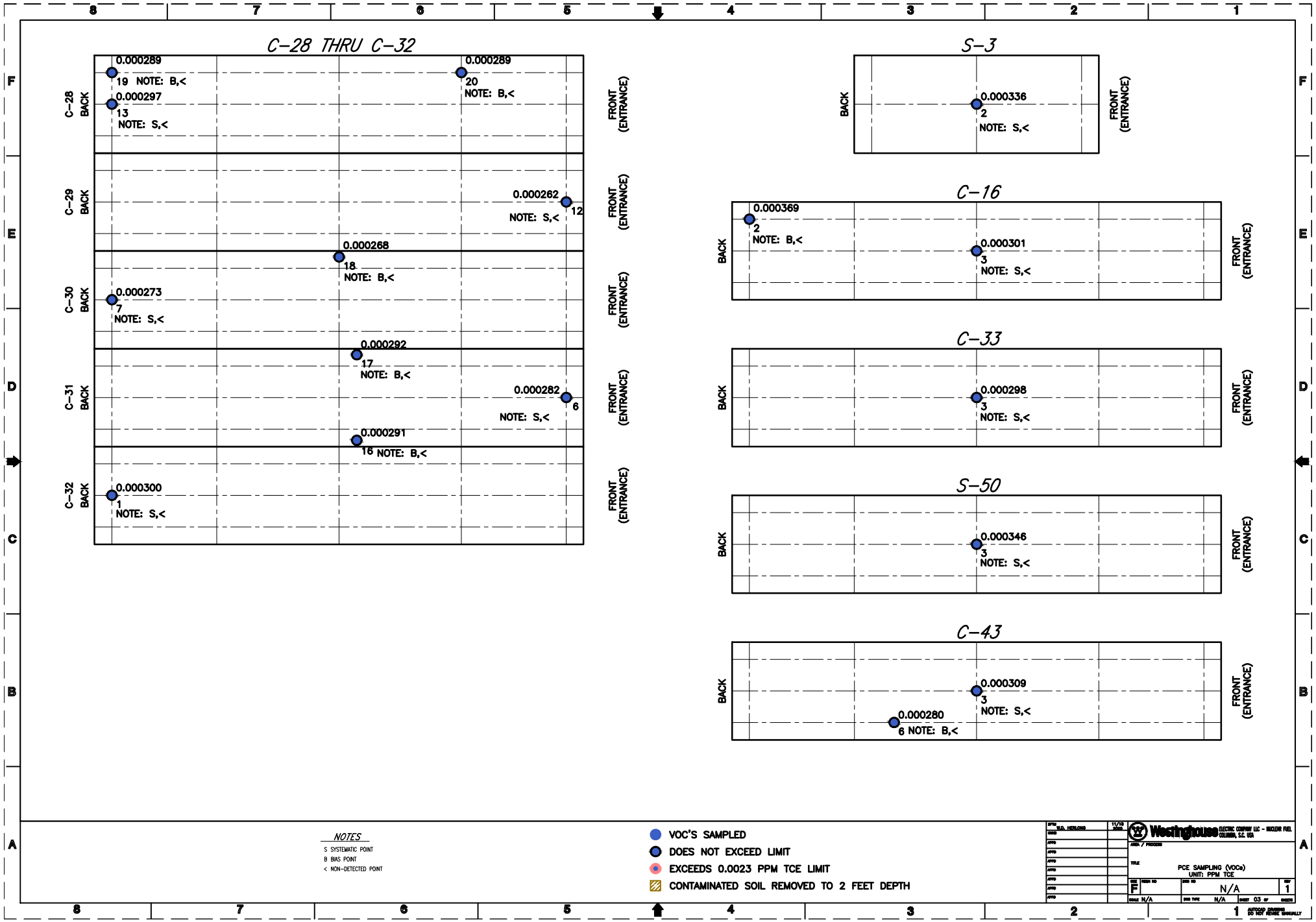
CHANGE

NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

INTERMEDIATE SUPPLEMENTARY CLAIM 3
 THIS AGREEMENT CONTAINS INFORMATION PROPRIETARY TO
 WESTINGHOUSE ELECTRIC COMPANY LLC - INDIANAPOLIS, IND.
 IT IS ISSUED AS CONFIDENTIAL AND IS TO BE USED
 ONLY FOR THE PURPOSE FOR WHICH IT IS ISSUED.
 THIS AGREEMENT AND ITS TERMS SHALL BE NULL AND
 VOID IF IT IS REPRODUCED OR USED IN ANY MANNER
 WHATSOEVER, INCLUDING IN ANY MANNER IN WHICH IT
 IS FIRST REPRODUCED FROM ANY SOURCE OTHER THAN
 WESTINGHOUSE ELECTRIC COMPANY LLC - INDIANAPOLIS, IND.

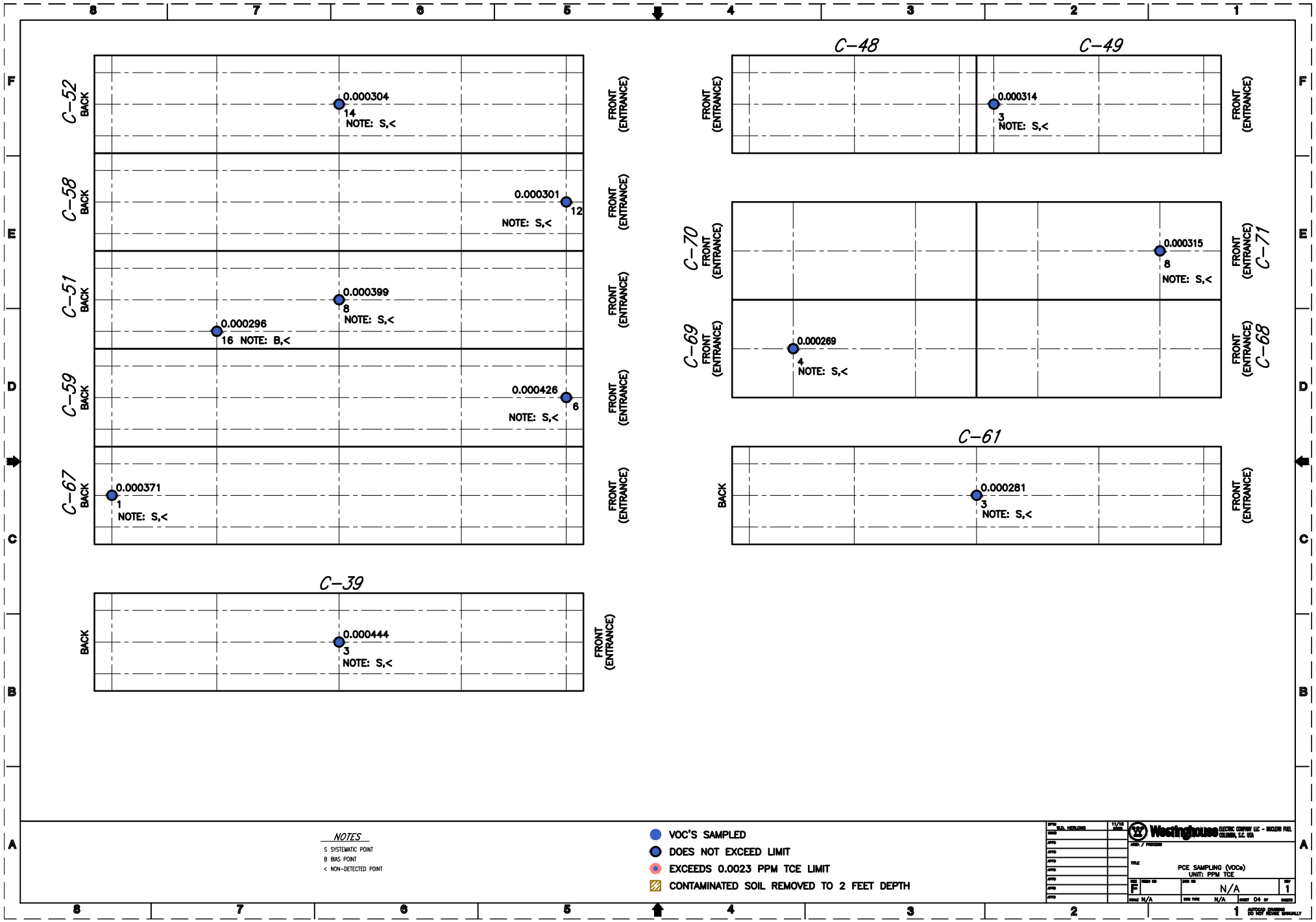
DATE	NO. 12/26	WESTINGHOUSE ELECTRIC COMPANY LLC - INDIANAPOLIS, IND. COLUMBUS, SC, USA	
FILE	REV / PAGES		
TITLE	PCE SAMPLING (VOCs) LIMIT: PPM TCE		
REV	REV NO	REV DATE	REV OF
1	N/A		1
DATE N/A	REV DATE N/A	REV OF 02 of 0000	



NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

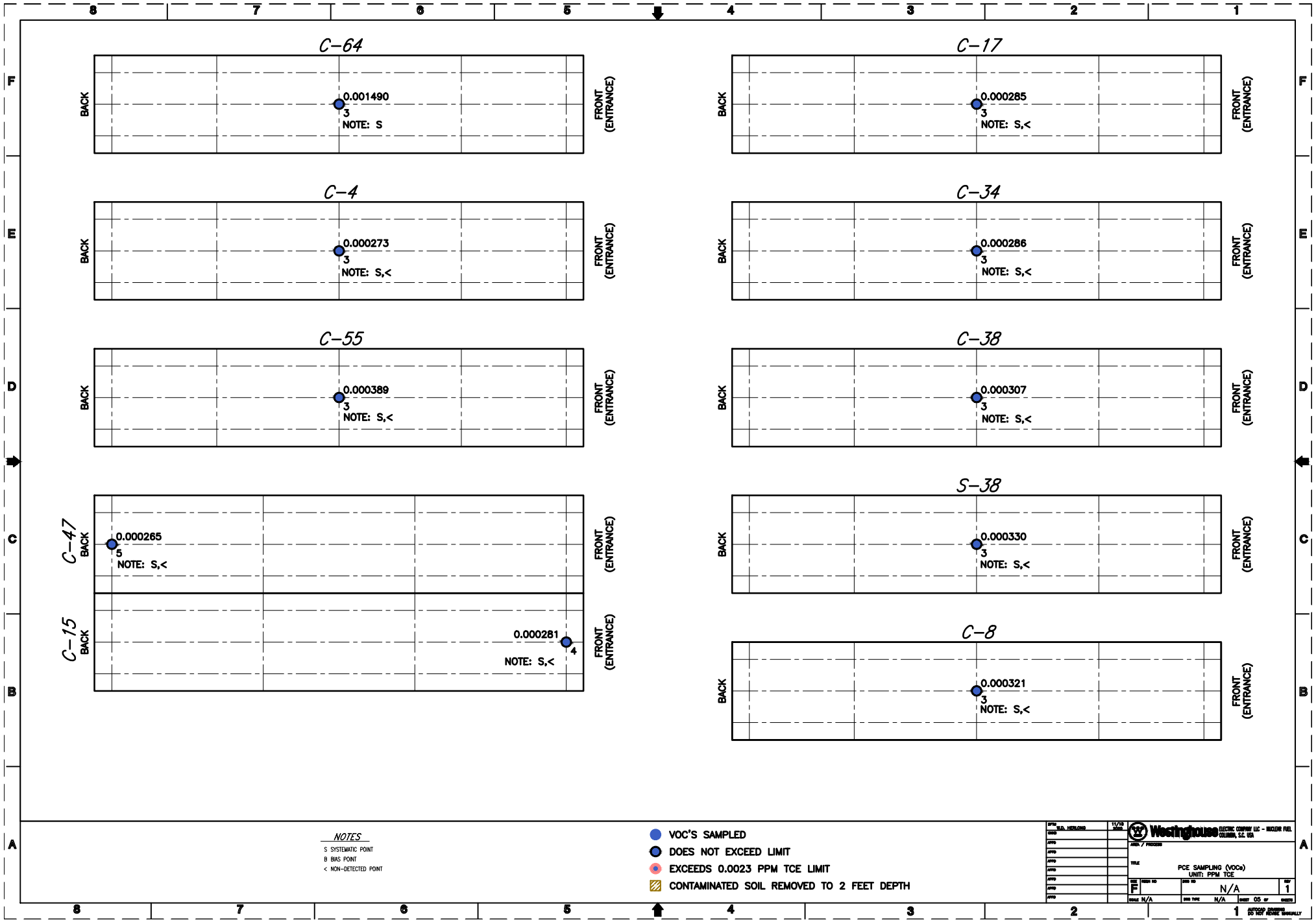
DATE	11/20		<small>ELECTRIC COMPANY LLC - MOORE HILL COLUMBIA, SC 29910</small>
BY			<small>PROJECT / REGION</small>
NO.		<small>TITLE</small>	<small>PCE SAMPLING (VOCs) LIMIT: PPM TCE</small>
REV		<small>DATE</small>	<small>REV</small>
DATE		<small>SCALE</small>	<small>NO. OF SHEETS</small>
BY		<small>DATE</small>	<small>REV</small>
DATE		<small>SCALE</small>	<small>NO. OF SHEETS</small>
BY		<small>DATE</small>	<small>REV</small>
DATE		<small>SCALE</small>	<small>NO. OF SHEETS</small>



NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

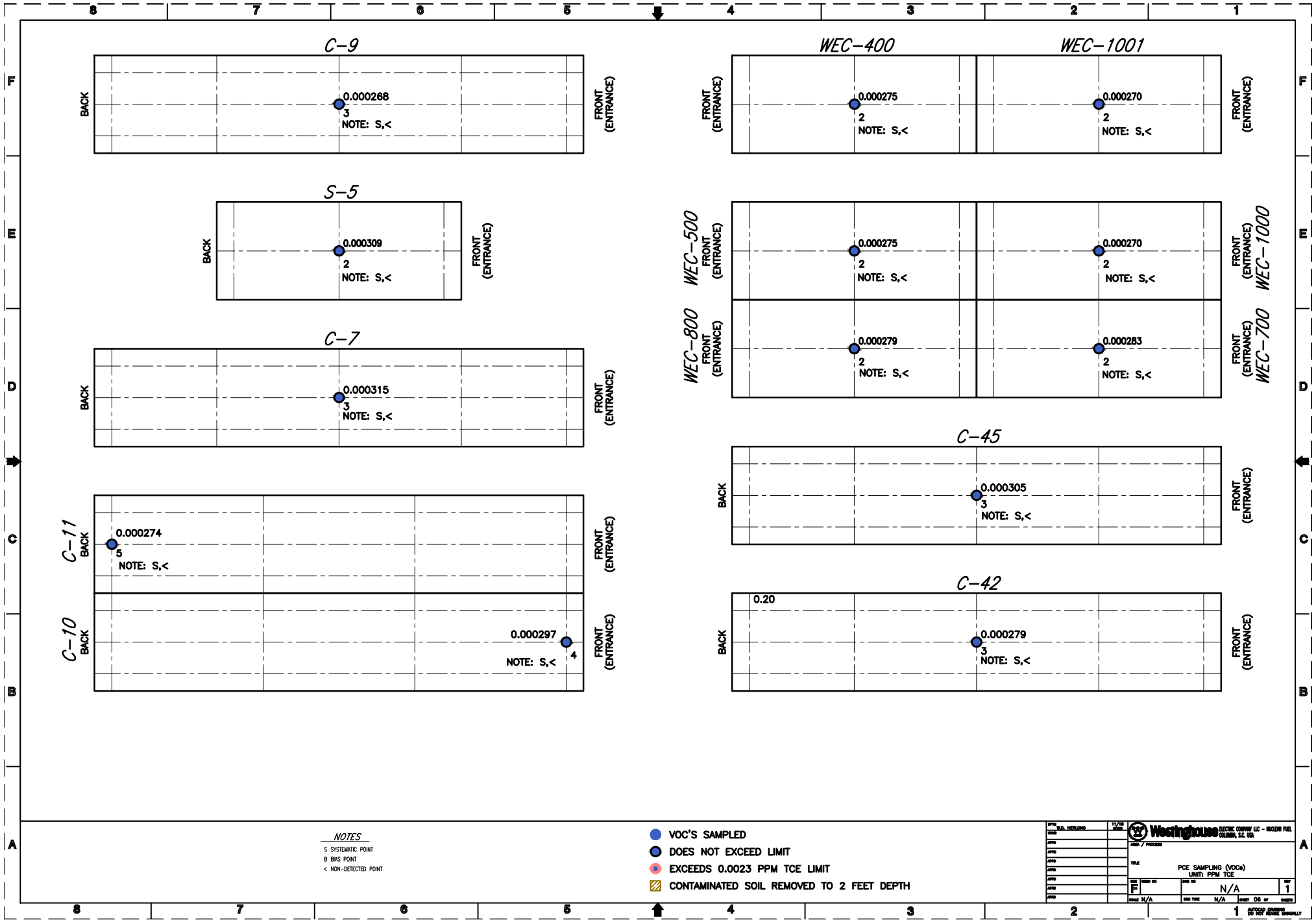
DATE	11/20		<small>ELECTRIC CONCRETE LLC - MOORE HILL COLUMBIA, SC 293</small>
BY			<small>PROJECT / REGION</small>
NO.		<small>TITLE</small>	<small>PCE SAMPLING (VOCs) LIMIT: PPM TCE</small>
REV		<small>REV NO</small>	<small>REV DATE</small>
DATE		<small>DATE</small>	<small>DATE</small>
TIME		<small>TIME</small>	<small>TIME</small>
SCALE	N/A	<small>SCALE</small>	<small>SCALE</small>
NO. OF SHEETS	1	<small>TOTAL SHEETS</small>	<small>TOTAL SHEETS</small>



NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

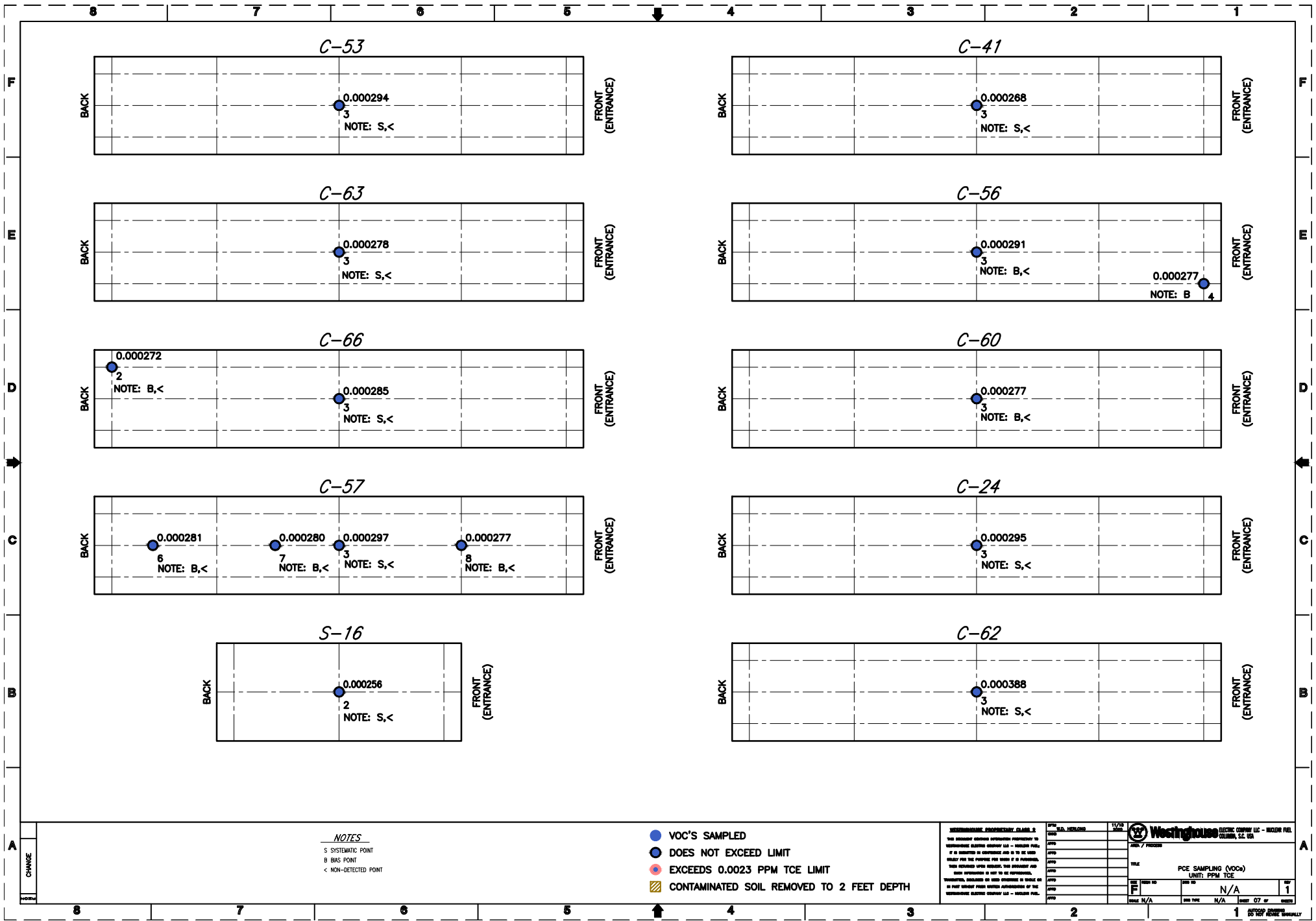
DATE		11/20		ELECTRIC COMPANY LLC - MOORE HILL COLUMBIA, SC 29210	
SHEET NO.		1			
PROJECT		PCE SAMPLING (VOCs) LIMIT: PPM TCE			
DATE	NO. OF	DATE	NO. OF	DATE	NO. OF
11/20	1	11/20	1	11/20	1
DATE	NO. OF	DATE	NO. OF	DATE	NO. OF
11/20	1	11/20	1	11/20	1
DATE	NO. OF	DATE	NO. OF	DATE	NO. OF
11/20	1	11/20	1	11/20	1



NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

DATE		11/20		ELECTRIC COMPANY LLC - MOORE HILL	
SHEET NO.		1		COLUMBIA, SC 291	
SHEET TITLE		PCE SAMPLING (VOCs)			
SHEET NO.		LIMIT: PPM TCE			
DATE		N/A		PAGE 1	
SCALE		N/A			
DRAWN BY		DATE			
CHECKED BY		DATE			



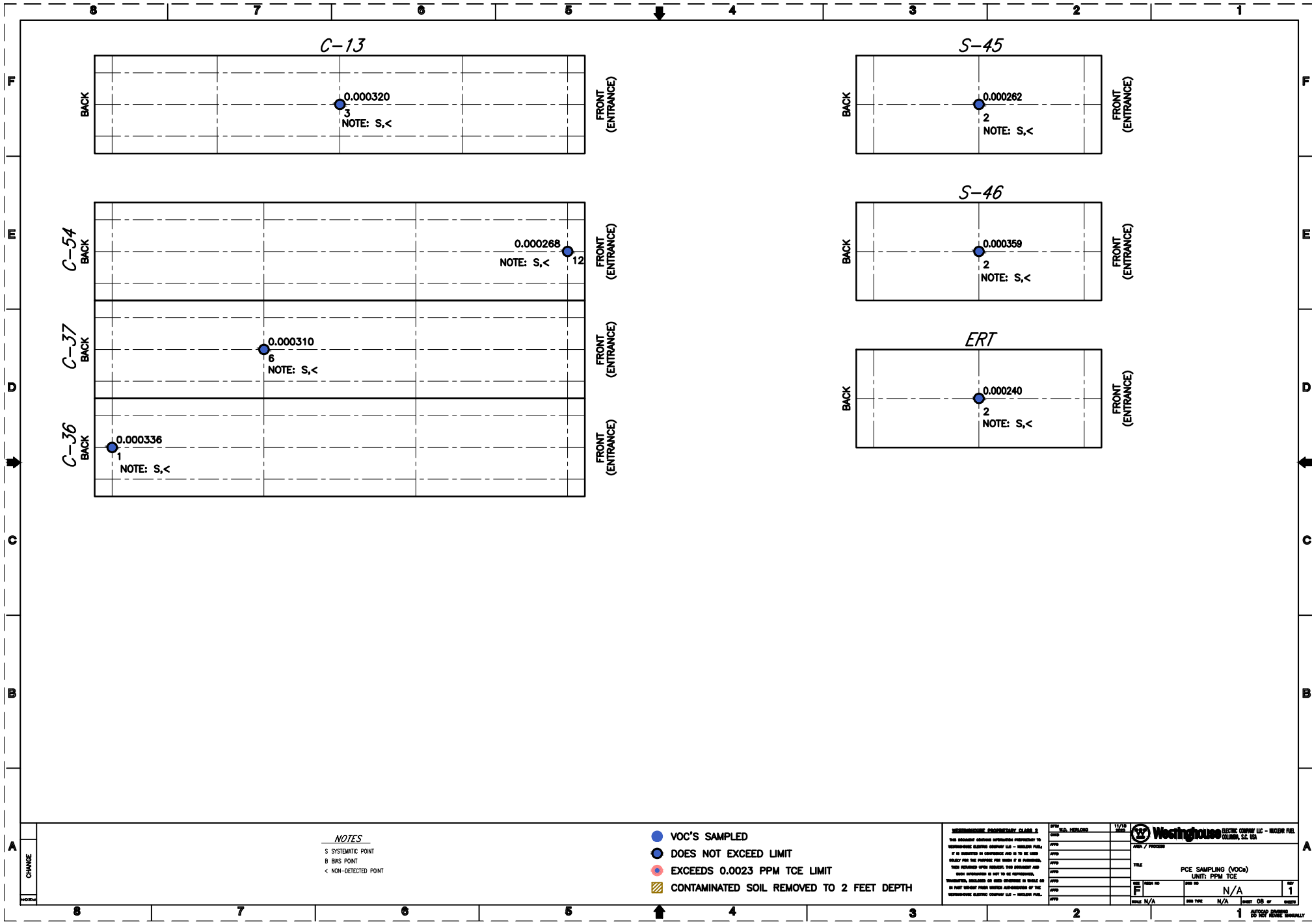
CHANGE

NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

INTERIM/PROVISIONAL CLAIM 3
 THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO
 WESTINGHOUSE ELECTRIC COMPANY LLC - INDIAN FIEL
 IT IS ISSUED AS CONFIDENTIAL AND IS TO BE USED
 ONLY FOR THE PURPOSES FOR WHICH IT IS ISSUED.
 THIS DOCUMENT AND ITS CONTENTS ARE UNCLASSIFIED AND
 PUBLIC RELEASE IS NOT TO BE REPRESENTED,
 REPRODUCED, INCLUDED OR USED IN ANY MANNER OR AS
 A PART THEREOF WITHOUT EXPRESS APPROVAL OF THE
 WESTINGHOUSE ELECTRIC COMPANY LLC - INDIAN FIEL.

DATE	11/20		ELECTRIC COMPANY LLC - INDIAN FIEL COLUMBIA, SC 29914
BY			
NO. OF SHEETS		TITLE	PCE SAMPLING (VOCs)
		LIMIT:	PPM TCE
REV		DATE	11/20
BY		NO. OF SHEETS	1
DATE	N/A	REV	07

NO. OF SHEETS: 1



NOTES
 S SYSTEMATIC POINT
 B BIAS POINT
 < NON-DETECTED POINT

- VOC'S SAMPLED
- DOES NOT EXCEED LIMIT
- EXCEEDS 0.0023 PPM TCE LIMIT
- ▨ CONTAMINATED SOIL REMOVED TO 2 FEET DEPTH

INTERMEDIATE REMEDIATION PLAN 2
 THIS REMEDIATION PLAN IS SUBJECT TO THE APPROVAL OF THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (DHEC). THIS PLAN IS NOT TO BE USED AS A BASIS FOR LIABILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THIS PLAN IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF WESTINGHOUSE ELECTRIC COMPANY LLC - MOORE HILL, SOUTH CAROLINA.

DATE	11/20/2019	SCALE	AS SHOWN
PROJECT	WESTINGHOUSE ELECTRIC COMPANY LLC - MOORE HILL	DATE	11/20/2019
CLIENT	WESTINGHOUSE ELECTRIC COMPANY LLC - MOORE HILL	SCALE	N/A
PROJECT NO.	1	DATE	11/20/2019
PROJECT NAME	PCE SAMPLING (VOCs)	SCALE	N/A
PROJECT NO.	1	DATE	11/20/2019
PROJECT NAME	LIMIT: PPM TCE	SCALE	N/A
PROJECT NO.	1	DATE	11/20/2019
PROJECT NAME	WESTINGHOUSE ELECTRIC COMPANY LLC - MOORE HILL	SCALE	N/A



WESTINGHOUSE ELECTRIC COMPANY LLC - MOORE HILL
 11/20/2019
 SCALE: N/A