ASR Samples 17 & 18

Important Information
Please Note:

Read all instructions on the following pages before testing.

- Please allow until July 19th for receipt of these samples.
- There are three materials contained in one box.
  - One bag of fine aggregate for Sample No. 17 is labeled 'ASR Fine Aggregate for ODD Sample No.'.
  - One bag of fine aggregate for Sample No. 18 is labeled 'ASR Fine Aggregate for EVEN Sample No.'.
  - One bag of portland cement to be used in testing the fine aggregates.
- Both fine aggregates must be graded to meet C1260 Table 1 Grading Requirements.
- Intermediate readings of 4, 7, and 11 day are requested for this set of samples. If you take an intermediate reading at an age other than one of these do not report that intermediate reading. Example: A laboratory takes intermediate readings at 3, 7, and 11 days. The laboratory should report the 7 and 11 day readings but not the 3 day reading. Laboratory ratings will not be assigned for intermediate readings and you will not be penalized for not reporting these values.

Submitting Test Results

- On the CCRL home page, enter your lab number and PIN and click on 'SIGN IN'.
- Click on 'Alkali Silica Reactivity' from the menu on the left.
- Click on 'Enter Data'.
- Make sure the information at the top of the screen is accurate.
- Carefully enter your data. Round data properly. Data that is not rounded correctly cannot be submitted until correction is made. You will receive an error saying you have bad data, and the data will not be entered into the website.
- DO NOT enter "N/A" or zeros for data that you are not reporting, leave this data area blank. Zeros will be interpreted as data.
- Once all data has been entered click on the 'Submit' button.
- You should see a confirmation screen. Print the confirmation screen for your records.
- If you have trouble entering or do not receive confirmation visit 'Data Entry Trouble Shooting' or contact CCRL via ccrl@astm.org or by calling 240-436-4800, prior to the closing date. **CCRL cannot make accommodations for data received after the closing date**.
- **Sign out of the website and login again to check that your data was submitted properly.** You may add data or make corrections up to the closing date.
- **The closing date for all test results is August 30, 2024**.

June 27, 2024

TO: Participants in the CCRL ASTM C1260 ASR Proficiency Sample Program

SUBJECT: C1260 ASR Samples No. 17 and No. 18

The current pair of samples for the C1260 ASR Sample has been distributed. **Please allow until July 19, 2024 for receipt of these samples (non-receipt date).** The samples are packaged in one box containing the following: two bags of fine aggregate each weighing 4,200 grams, and one bag of portland cement weighing 2,100 grams. **Please weigh these bags to ensure that you have received the proper amount of each material. If the samples have not been received on this date or if the samples you received were damaged, you need to notify us in writing, so please email us at ccrl@astm.org. Replacement samples will be sent. Failure to notify us by this date may result in you not receiving replacement samples in time to perform the necessary testing. Additional shipping charges will be incurred, if contact is not made by the non-receipt date.**

Use the portland cement to test both fine aggregates. The fine aggregate bags are labeled as follows: Sample No. 17 is labeled "C1260 ASR Odd Sample" on a white label and Sample No. 18 is labeled "C1260 ASR Even Sample" on a red label. **The two fine aggregates must not be mixed.**

Tests are to be conducted separately on each sample. Read the instructions on the following pages before proceeding with any testing. It is mandatory that these instructions and ASTM standard C1260 be followed. These tests should be conducted as soon as possible after the samples are received, and the test results should be promptly reported to CCRL upon completion of testing. Test results should be entered at our website: http://www.ccrl.us/.

Additional samples of this sample pair will be available for sale after the final report has been issued. These samples can be used for research, technician training, and test equipment verification. Contact us for availability and pricing

Sincerely,

Kent Niedzielski
Program Manager, Proficiency Sample Program
Cement and Concrete Reference Laboratory

CEMENT AND CONCRETE REFERENCE LABORATORY
ASTM C1260 ASR PROFICIENCY SAMPLE PROGRAM
Samples No. 17 and No. 18

Instructions

INSTRUCTIONS FOR TESTING

1 CCRL C1260 ASR Proficiency Samples Number 17 and Number 18 were distributed June 27, 2024. You should receive one box with two bags of fine aggregate and one bag of portland cement.

2 Contents of the sample box –

2.1 Two bags of fine aggregate, each weighing approximately 4,200g. The bag containing Sample No. 17 will be labeled: "CCRL C1260 ASR Fine Aggregate **Odd Sample**". The bag containing Sample No. 18 will be labeled "CCRL C1260 ASR Fine Aggregate **Even Sample**". **The two samples of fine aggregate must not be mixed**.

2.2 The fine aggregate must be graded to meet Table 1 of C1260.

2.2.1 Both fine aggregates are normal weight. (relative density exceeds 2.45)

2.3 One bag of Portland cement weighing approximately 2,100g. The Portland cement is to be used as the "Reference Cement", as specified in Section 8.3.1 of C1260, when testing the aggregate.

2.3.1 (This cement is a Type I-II Portland with equivalent Na_2O of 0.96%).

3 **Verify that you have received the three bags of material, that you have the correct amount of each material, and that they are in good condition. Notify CCRL (by phone via 240-436-4800) of any damaged or missing material by the July 19th non-receipt date, in order to ensure replacement samples can be received in time to perform testing**.

4 Perform all testing in accordance with ASTM Standard C1260-21. A copy of this edition of the standard, may be obtained directly from the ASTM website: www.astm.org.

INSTRUCTIONS FOR REPORTING

5 Report test results on the CCRL website. It will be helpful to use the following reporting forms since they mimic the website data entry format.

6 Report test values to the number of decimal places requested on the following page and the website.

7 Report the following Readings –

7.1 Initial reading – taken when specimens are removed from the molds (24±2 h). See Section 9.1.

7.2 Zero reading – taken after specimens are removed from 80°C tap water and before the specimens are placed in 80°C NaOH solution (48 h). See Section 9.2.

7.3 **All readings beyond the Zero reading are the specimens' ages in days after the zero reading.** (Example: 14-day readings are taken 14 days after the zero reading.)

7.4 Expansion of a bar – Length change of a bar expressed as a percent expansion for each time frame to the nearest 0.001%. Example: [(14-day reading – zero reading) / (effective gauge length)] x 100

7.5 Average expansion – the average expansion of three bars to the nearest 0.01%.

Note: Intermediate readings of 4, 7, and 11 day are requested for this set of samples. If you take an intermediate reading at an age other than one of these do not report that intermediate reading. Example: A laboratory takes intermediate readings at 3, 7, and 11 days. The laboratory should report the 7 and 11 day readings but not the 3 day reading.

8 Test results must be reported in the units and to the nearest significant numbers indicated for each test on the reporting forms.

FINAL REPORT - LABORATORY RATINGS AND SUMMARY OF STATISTICS

1 Individual laboratory ratings will be assigned for Average 14-day and 28-day Expansion test results.

2 Statistics will be available for –

2.1 Average 4-day Expansion

2.2 Average 7-day Expansion

2.3 Average 11-day Expansion

2.4 Average 14-day Expansion

2.5 Average 21-day Expansion

2.6 Average 28-day Expansion

CCRL PROFICIENCY SAMPLE PROGRAM
C1260 POTENTIAL ALKALI REACTIVITY OF AGGREGATES
SAMPLES NO. 17 AND NO. 18

RETURN TO:
Cement and Concrete Reference Laboratory
4441 Buckeystown Pike, Ste C
Frederick, Maryland 21704
FAX: 610-834-7066

Enter results at our website: www.ccrl.us

FROM: _____

e-mail: _____

Test Results

Initial reading [2005] *(nearest 0.0001 inch)*	**Sample No. 17**	**Sample No.18**
Bar #1		
Bar #2		
Bar #3		
Zero reading [2010] *(nearest 0.0001 inch)*	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
4-day Specimens		
4-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
4-day Average expansion [2020] *(nearest 0.01%)*		
7-day Specimens		
7-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
7-day Average expansion [2030] *(nearest 0.01%)*		

Tests performed by _____ Date _____
Tests reported by _____ Title _____
Phone _____ Fax _____ CCRL Laboratory Number _____

CCRL PROFICIENCY SAMPLE PROGRAM
C1260 POTENTIAL ALKALI REACTIVITY OF AGGREGATES
SAMPLES NO. 17 AND NO. 18

11-day Specimens		
11-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
11-day Average expansion [2040] *(nearest 0.01%)*		
14-day Specimens		
14-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
14-day Average expansion [2050] *(nearest 0.01%)*		
21-day Specimens		
21-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
21-day Average expansion [2060] *(nearest 0.01%)*		

Tests performed by _____ Date _____
Tests reported by _____ Title _____
Phone _____ Fax _____ CCRL Laboratory Number _____

CCRL PROFICIENCY SAMPLE PROGRAM
C1260 POTENTIAL ALKALI REACTIVITY OF AGGREGATES
SAMPLES NO. 17 AND NO. 18

28-day Specimens		
28-day Expansion (0.001%)	**Sample No. 17**	**Sample No. 18**
Bar #1		
Bar #2		
Bar #3		
28-day Average expansion [2070] *(nearest 0.01%)*		

Type of 80° C storage used: ☐ storage oven ☐ water bath ☐ other (specify in "Remarks")

Mold release agent used: ☐ Teflon tape ☐ other (specify in "Remarks")

Remarks:

Tests performed by _____ Date _____
Tests reported by _____ Title _____
Phone _____ Fax _____ CCRL Laboratory Number _____