

2019 ONTARIO AND QUÉBEC MINI-CORRELATIONS – AGGREGATES INCLUDING SUPERPAVE AGGREGATES

Please read the following Mini-Correlation instructions carefully BEFORE you start testing!

- Testing shall be according to the 2018 MTO instructions within the MS Excel file .xlsx “SASTP MTO provided to your lab in the summer of 2018, except where otherwise stated below for SAMPLES for Mini-Correlation Testing, and for LS-602, LS-607, ASTM D5821, LS-608, ASTM D4791 and LS-629.
- Submission of MS Excel data worksheets referred to in the 2018 MTO instructions is not required.
- If you are unable to locate your copy of the 2018 MTO Instructions in www.ccil.com under “Proficiency Testing”.
- In the event of a conflict between the “SASTPImport.xlsx” instructions and the following mini-correlation instructions, the mini-correlation instructions take precedence.
- Please Report the Results by the date indicated in the letter from CCIL notifying you that an additional testing program (mini-correlation) is required.
- All test results MUST be reported through your CCIL lab portal at <https://portal.ccil.com/>. After signing into the portal, all mini-correlation reporting forms appropriate to your lab all mini-correlation reporting
- **NEW:** Please record the mini-correlation sample identification information found on the sample labels in the “Comments” section of the reporting forms

SAMPLES FOR MINI-CORRELATION TESTING

- Samples for the mini-correlation are shipped to the laboratory when the laboratory is notified a mini-correlation is required.
- The mini-correlation samples are pre-prepared to meet the requirements of the appropriate test method and are to be tested as received.
- Generally, only one sample will be shipped for each test requiring a mini-correlation. Tests for a mini-correlation are not generally carried out in pairs.

ONTARIO AND QUÉBEC MINI-CORRELATION INSTRUCTIONS – AGGREGATES

LS-600:

Dry all aggregate samples to a constant mass at $110 \pm 5^{\circ}\text{C}$.

LS-602: SIEVE ANALYSIS OF AGGREGATES,

If the problem with your original test results was with the fine aggregate sieves, your lab will receive a mini-correlation sample of fine aggregate only. If the problem with your original test results was with the coarse and fine aggregate sieves, your lab will receive a combined coarse aggregate and fine aggregate sample.

If you receive only one fine aggregate **2015** mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm sieve = **46.1%** (coarse aggregate/%fine aggregate split) to calculate the **combined** grading of the fine aggregate. Report the %passing of the fine aggregate combined grading in the reporting form.

If you receive only one fine aggregate **2016** mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm sieve = **51.29%** (coarse aggregate/%fine aggregate split) to calculate the **combined** grading of the fine aggregate. Report the %passing of the fine aggregate combined grading in the reporting form.

If you receive only one fine aggregate **2017** mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm sieve = **50.17%** (coarse aggregate/%fine aggregate split) to calculate the combined grading of the fine aggregate. Report the %passing of the fine aggregate **combined** grading in the reporting form.

If you receive only one fine aggregate **2018** mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm sieve = **44.13%** (coarse aggregate/%fine aggregate split) to calculate the combined grading of the fine aggregate. Report the %passing of the fine aggregate combined grading in the reporting form.

If you receive only one fine aggregate **2019** mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm sieve = **45.14%** (coarse aggregate/%fine aggregate split) to calculate the combined grading of the fine aggregate. Report the %passing of the fine aggregate combined grading in the reporting form.

Example: Using 2017 %passing the 4.75mm sieve = 50.17%:

Sieve (mm)	Fine Aggregate %Passing	(%Passing 4.75mm) /100	Combined Grading% Passing
4.75	100%	0.5017	50.17
2.36	77.7	0.5017	39.0
1.18	58.2	0.5017	29.2
0.600	39.1	0.5017	19.6
0.300	23.2	0.5017	11.6
0.150	14.9	0.5017	7.5
0.075	10.75	0.5017	5.39

If you receive a combined coarse and fine aggregate sample, test the entire sample as specified in LS-602.

Report percent passing each sieve, with the exception of 4.75 mm sieve, to the nearest 0.1% on a cumulative basis. Report the percent passing 4.75 mm sieve to 0.01%. Report the percent passing the 75µm sieve to 0.01%. In the event of a conflict between the rounding of the test results specified in these instructions and the Format for reporting test results required by the Type C reporting form in the lab portal, these instructions take precedence.

**LS-607: PERCENT CRUSHED PARTICLES IN PROCESSED COARSE AGGREGATE AND
ASTM D5821: PERCENTAGE OF FRACTURED PARTICLES IN COARSE AGGREGATE**

The mini-correlation sample is comprised of a single test sample each, representing all of the size fractions combined. Do not separate into sized fractions. Determine the percentage of crushed or fractured particles by mass. Test the entire mini-correlation sample for crushed or fractured particles. Test as a single fraction and report a Percent Crushed or Fractured Particles on that basis. Compute the percent crushed or fractured particles of the entire sample:

$$\text{Percent Crushed or Fractured Particles} = (A/B) \times 100.$$

where: A = mass of fractured particles.

B = mass of test sample.

Report the result to the nearest 0.1%.

LS-608 AND ASTM D4791: PERCENT FLAT AND ELONGATED PARTICLES

The mini-correlation sample is comprised of a single test sample each, representing all of the size fractions combined. Do not separate into sized fractions. Test as a single fraction and report a Percent Flat and Elongated particles on that basis. Compute the percent flat and elongated particles of the entire sample:

$$\text{Percent Flat \& Elongated particles} = (A/B) \times 100.$$

where: A = mass of flat & Elongated Particles.

B = mass of test sample.

Report the result to the nearest 0.1%.

LS-629 UNCOMPACTED VOID CONTENT OF FINE AGGREGATE,

DO NOT use the specific gravity values determined by your lab.

If your lab received a **2014** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of **2.650**.

If your lab received a **2015** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of 2.666.

If your lab received a **2016** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of 2.711

If your lab received a **2017** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of 2.692

If your lab received a **2018** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of 2.631

If your lab received a **2019** CCIL mini-correlation sample, compute the uncompact void content using the specific gravity value of 2.696

Report the uncompact voids to the nearest 0.1%.