|  |  |
| --- | --- |
| DOTLOGO2 |  **P.C. Concrete Strengths** |
|  | I.D. Number (1): |  |
|  |
| Inspector No (3): |       | Date Reported (4): |       | Sequence No (5): |       |  | County (2): |  |       |
|  |  |  |
| Type Insp (6): |     | Total Samples (7): | 01 |  | Section: |  |       |
|  |  |  |
| Prod. No (8): |       |  | Prod. Name (9): |       |  | Route: |  |       |
|  |  |  |
| Matl. Code (10): |       |  | Name (11): |       |  | District: |  |       |
|  |  |  |
| Desc. 1 (12): |       | Copy (13): |   | Resp. Loc (14): |     |  | Contract No: |  |       |
|  |  |  |
| Lab (15): |    | Lab Name (16): |       | Compl. Date (17): |       | Test Results (18): |      |  | Job No: |  |       |
|  |  |  |
| Remarks (19): |       |  | Project: |  |       |
|  |  |  |
| Assign (20): | Y |  | Contract (21): |       | Job No (22): |       |  | City: |  |       |
|  |
| Trans:655 |
| Design (23): | Type Const. (24): | Date Cast (25): | Series (26): | Type **C** or **F** (27): | **D**ays or **H**ours (28): | Age (29): | Strength psi (30): | Strength psi (31): | Strength psi (32): | Average psi (33): | Age (34): | Strength psi (35): | Strength psi (36): | Strength psi (37): | Average psi (38): |
|       |    |       |       |   |   |    |       |       |       |       |    |       |       |       |       |
| Remarks (39): |       |
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| Remarks |       |
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| Remarks |       |
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| Remarks |       |
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| Remarks |       |
|       |    |       |       |   |   |    |       |       |       |       |    |       |       |       |       |
| Remarks |       |
|  |
| Reported By (40): |       |  | Remarks (41): |       |  | Copies To (42): |      |
|  | (Printed Name and Signature are required) |  |      |
| Tester (43): |       |  | Agency (44): |       | **C** (45): |   |  |      |
|  | (Printed Name and Signature are required) |  |
| MISTIC INPUT |  | /FOR DTY0300 |
| Date Entered (46): |  |  |
| Initials (47): |  |  |
|  |  |  |

This form has instructions hidden in red. To view the hidden text, the “hidden text” option must be on. Select “File” (upper left corner of your screen), select “Options” (lower part of the box), select “Display”, select “Hidden text” (under the “Always show these formatting marks on screen” heading) and select “OK”. To print the hidden test, select “Print hidden text” (under the “Printing options” heading) and select “OK”.

**P. C. CONCRETE STRENGTHS**

**INSTRUCTIONS**

**BMPR MI655**

1. **I.D. NUMBER:** MISTIC test identification number. Leave blank because MISTIC will generate the test identification number.

2. **PROJECT IDENTIFICATION:** Enter the project information.

3. **INSPECTOR NO.:** Identify the individual who took the sample. For split samples, the same inspector number should be used for both halves of the sample. If another individual made the beams or cylinders, enter this information in Item 19.

 a) IDOT personnel enter the MISTIC inspector number.

b) Contractor, Subcontractor and Producer personnel enter a "9", followed by the District number and seven zeros (0's).

 Example: 960000000 for District 6.

c) Consultant personnel enter their company’s MISTIC inspector number

d) Local agency personnel enter a "9" followed by the District number, which is repeated until field is filled.

 Example: 966666666 for District 6 local agency.

4. **DATE REPORTED:** Enter the date the report was prepared as month, day, and year in mmddyy format. Example: 103112

5. **SEQUENCE NO.:** Enter any combination of letters and/or numbers up to 6 characters in length. It is used to differentiate multiple samples of the same materials taken on the same day.

6. **TYPE INSP.:** See below for the correct 3 letter designation. For additional information see Attachment 4 in the Project Procedures Guide.

**AGENCY** **QC/QA** **NON QC/QA**

Contractor/Producer/

Consultant PRO -----

IDOT/Consultant IND (split), INV PRO, IND

IND = Independent Assurance

INV = Investigative

PRO = Process Control

7. **TOTAL SAMPLES:** Pre-printed on the form with a “01”.

8. **PROD. NO.:** Enter the MISTIC code number for the concrete producer. Only one plant may be shown on one report. Example: 5362-05

9. **PROD. NAME:** Enter the name of ready mix or jobsite plant.

10. **MATL. CODE:** Enter the MISTIC material code for the concrete mixture. Only one code number is allowed per report. The “M” in the material code signifies a metric mixture. The unit of measure for metric mixtures is cubic meters. All metric contracts should use metric mixtures.

Enter 21601 or 21601M for a portland cement concrete mixture.

Enter 21605 or 21605M for a portland cement and fly ash concrete mixture.

Enter 21606 or 21606M for a portland cement and latex concrete mixture.

Enter 21609 or 21609M for a portland cement and microsilica concrete mixture.

Enter 21611 or 21611M for a portland cement and ground granulated blast-furnace slag concrete mixture.

Enter 21613 or 21613M for a portland cement and high reactivity metakaolin concrete mixture.

Enter 21614 or 21614M for a portland cement, fly ash, and high reactivity metakaolin concrete mixture.

Enter 21620 or 21620 M for a fabric formed concrete revetment mat mixture.

Enter 21621 or 21621M for a controlled low-strength mixture.

Enter 21622 or 21622M for a portland cement, fly ash and microsilica concrete mixture.

Enter 21627 or 21627M for a portland cement, ground granulated blast-furnace slag, and microsilica concrete mixture.

Enter 21629 or 21629M for portland cement, ground granulated blast-furnace slag, and high reactivity metakaolin concrete mixture.

Enter 21632 for a portland blast-furnace slag cement and fly ash concrete mixture.

Enter 21633 for an insertion lining of pipe culverts grout mixture.

Enter 21634 for a portland cement pervious concrete mixture.

Enter 21635 for a portland cement and fly ash pervious concrete mixture.

Enter 21636 for a portland cement and ground granulated blast-furnace slag pervious concrete mixture.

Enter 21637 for a portland cement and Type K concrete mixture.

Enter 21638 for a portland cement, fly ash, and Type K concrete mixture.

Enter 21801 or 21801M for a cement aggregate mixture II.

Enter 21803 or 21803M for a cement aggregate mixture II with fly ash.

Enter 22106 or 22106M for a concrete mixture which uses a rapid hardening cement from the Department’s Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs.

Enter 22107 or 22107M for a concrete mixture which uses calcium aluminate cement.

11. **NAME:** Enter the name of the concrete mixture, which corresponds with the material code.

12. **DESC. 1:** Leave blank.

13. **COPY:** Leave blank.

14. **RESP. LOC.:** Enter the District identification number as a “9” followed by the District number.
Example: 96 for District 6

15. **LAB:** Enter the 2 letter MISTIC lab code.

Laboratory Locations MISTIC Lab Codes

Producer Plant Site Laboratory PP

Producer NonPlant Site Laboratory PL

Producer Construction Site PC

Independent Plant Site Laboratory IP

Independent NonPlant Site Laboratory IL

Independent Construction Site IC

Independent Laboratory IN

IDOT/Local Agency Plant Site Laboratory FP

IDOT/Local Agency Construction Site FC

NOTE**:** A Contractor, Subcontractor, and Producer are to use one of the “Producer” lab codes.

An IDOT Consultant, Contractor Consultant, Subcontractor Consultant, and Producer Consultant are to use one of the “Independent” lab codes.

16. **LAB NAME:** Enter the name of the company which cannot exceed 20 characters.

17. **COMPL. DATE:** Complete date. Enter the most recent date the beams or cylinders were tested, from all tests on the report. Enter the date as month, day, and year in mmddyy format.

18. **TEST RESULTS:** Use “COMP” to indicate completed tests.

19. **REMARKS:** Enter any remark that pertains to the report.

20. **ASSIGN:** Pre-printed on form with a “Y”.

21. **CONTRACT:** Enter the 5 digit contract number. If it is a local agency contract without a 5 digit number, then enter the 16 or 17 character MFT (Motor Fuel Tax) contract number.

22. **JOB NO.:** Enter the 8 character job number that corresponds with the 5 digit contract number. If the contract number is not 5 digits, leave this field blank.

23. **DESIGN:** Enter the 9 character mixture design number assigned by the District, for the concrete mixture being tested. Example: 86PCC1234

24. **TYPE CONST.:** Enter the 2 letter code for the type of construction.

|  |  |  |
| --- | --- | --- |
| MISTIC Code |  | Construction Type |
|  |  |  |
| 01 |  | PCC Base Course |
| 02 |  | PCC Base Course Widening |
| 03 |  | PCC Curb |
| 04 |  | PCC Gutter |
| 05 |  | PCC Combination Curb & Gutter |
| 06 |  | PCC Step Curb & Gutter |
| 07 |  | PCC Hub Guard & Gutter |
| 08 |  | PCC Paved Ditch |
| 09 |  | PCC Median |
| 10 |  | PCC Pavement |
| 11 |  | CRCP Pavement |
| 12 |  | PCC Railroad Crossing |
| 13 |  | PCC Sidewalk |
| 14 |  | PCC Slope Wall |
| 15 |  | Structures\* |
| 16 |  | Bridge Deck |
| 17 |  | Pavement Patching |
| 18 |  | Bridge Deck Patching |
| 19 |  | Precast Deck Slab |
| 20 |  | Precast Prestressed Beams |
| 21 |  | Headwalls |
| 22 |  | Handrail |
| 23 |  | Seal Coat |
| 24 |  | Precast Piling |
| 25 |  | Precast Prestressed Piling |
| 26 |  | Pneumatic Concrete (Shotcrete) |
| 27 |  | Bridge Deck Concrete Overlay |
| 28 |  | Latex Concrete |
| 29 |  | PCC Shoulders |
| 30 |  | Sub-base |
| 31 |  | Incidental |
| 32 |  | CLSM for Backfill |

\* This item includes foundations such as drilled shafts, repairs such as formed concrete repair, bridge approach slab, and the “bridge approach footing” beneath the bridge approach slab.

25. **DATE CAST:** Enter the date the beams or cylinders were made as month, day, and year in mmddyy format.

26. **SERIES:** Enter the 6 letter and /or number combination, assigned to the beam or cylinder series.

Example: 1P-A = Contractor 762 mm (30 in.) beam to be broken at 7 days.

 1P-B = Contractor 762 mm (30 in.) beam to be broken at 14 days.

 1P-C = IDOT 762 mm (30 in.) beam to be broken at 14 days.

 Enter as “1P” and not as “1P-A”, “1P-B” and ‘1P-C”. If the A, B and C letter designation is included, MISTIC would interpret this as 3 series instead of 1 series with 3 beams. The beams are differentiated by age in BMPR MI655.

(NOTE: Use same series designation for BMPR MI654.)

27. **TYPE C or F:** Enter “F” for flexural strength (Beam) or “C” for compressive strength (cylinder).

28. **DAYS OR HOURS:** Enter “D” if the beam/cylinder age to break is in days or “H” if the age is in hours. The age designation is applicable to Items 29 and 34.

29. **AGE:** At time of test, indicate the age of first 762 mm (30 in.) beam, or first set of cylinders/beams. The age must be between 0 and 99.

30. **STRENGTH:** Enter the compressive or flexural strength for the first cylinder or beam tested or for the first break on a 762 mm (30 in.) beam; at the age indicated in Item 29. The strength must be between 0 and 999999 kPa (psi).

31. **STRENGTH:** Enter the compressive or flexural strength for the second cylinder or beam tested or for the second break on a 762 mm (30 in.) beam; at the age indicated in Item 29. The strength must be between 0 and 999999 kPa (psi).

 (NOTE: If the second break is not performed at that same age as Item 29, omit

 Items 31 through 33 and enter under Items 34 and 35, on the same line.)

32. **STRENGTH:** Enter the compressive strength for the third cylinder tested at the age indicated in Item 29. The strength must be between 0 and 999999 kPa (psi).

 (NOTE: Only enter a third compressive strength if 100 mm by 200 mm (4 in. by 8 in.) cylinders are cast.)

33. **AVERAGE:** Enter the average strength of the breaks (Items 30 through 32).

34. **AGE:** At time of test, indicate the age of second 762 mm (30 in.) beam, or second set of cylinders/beams. The age must be between 0 and 99. (NOTE: The beam or cylinder must correspond with Item 26.)

35. **STRENGTH:** Enter the compressive or flexural strength for the first cylinder or beam tested or for the first break on a 762 mm (30 in.) beam; at the age indicated in Item 34. The strength must be between 0 and 999999 kPa (psi).

36. **STRENGTH:** Enter the compressive or flexural strength for the second cylinder or beam tested or for the second break on a 762 mm (30 in.) beam; at the age indicated in Item 34. The strength must be between 0 to 999999 kPa (psi).

37. **STRENGTH:** Enter the compressive strength for the third cylinder tested at the age indicated in Item 34. The strength must be between 0 and 999999 kPa (psi).

 (NOTE: Only enter a third compressive strength if 100 mm by 200 mm (4 in. by 8 in.) cylinders are cast.)

38. **AVERAGE:** Enter the average strength of the breaks (Items 35 through 37).

39. **REMARKS:** Enter any remark that pertains to the set of beams/cylinders. For “IND” tests the sample comparison information is entered in this field.

For “IND” inspection, a comparison remark is required, because the assurance test is from a split sample. For an acceptable comparison, enter the following:

• Enter “C” when tests compare within acceptable limits of precision.

• Enter date of comparison.

• Enter initials for “IND” inspector.

• If the sample was witnessed by the “IND” inspector, indicate as “ws”.

 NOTE: The sample should always be witnessed.

• Example: C - 100197 JLK ws.

For an unacceptable comparison, enter the following:

• Enter “X” when tests do not compare within acceptable limits of precision.

• Enter date of comparison.

• Enter initials for “IND” inspector.

• If the sample was witnessed by the “IND” inspector, indicate as “ws”.

 NOTE: The sample should always be witnessed.

• Explain reason for unacceptable comparison.

• Examples are: Contractor obtained sample incorrectly; IDOT equipment required repair; Contractor performed test method incorrectly; Problem was not identified, will investigate further if problem continues.

• Example: X - 100297 JLK ws Contractor performed test method incorrectly.

40. **REPORTED BY:** Print the name of the individual who completed the report. The individual’s signature is also required.

41. **REMARKS:** Enter any remark that pertains to the report.

42. **COPIES TO:** Enter the distribution of this report. QC/QA - The original goes to the District Materials Engineer. A copy goes to Resident Engineer and the file copy goes to the QC Manager. Non-QC/QA - Same as above except that the file copy stays with the tester or the individual who completed the report.

43. **TESTER:** Print the name of the individual who tested the cylinders or beams. The individual’s signature is also required.

44. **AGENCY:** Enter the tester’s employer.

45. **C:** MISTIC convert flag for English data. If the data on the form is in English units, then mark "Y" and the MISTIC system will convert it to metric values (except for quantity). If the data on the form is in metric units, then leave blank. All test data that is stored in MISTIC must be metric.

46. **DATE ENTERED:** Leave blank. IDOT will enter the date the results are entered into MISTIC as month, day, and year in mmddyy format.

47. **INITIALS:** Leave blank. IDOT will enter the initials of the person entering the test results into MISTIC.