# ASPHALT CONTENT & VIRGIN AGGREGATE DETERMINATION

North Dakota Department of Transportation, Construction

SFN 18674 (Rev. 04-2000)

| Date | | |
|---|---|---|
| Project | Contractor | |
| Scheduled Hours | Target Ac Content | Target Virgin Aggr. % |

| Test No. | TIME | | (1) Aggr. Tons Rdg. | (2) Salv. Bit. Tons Rdg. | % VIR. AGGR. = (1) / (1) + (2) | (3) BITUMEN | (4) Wt. Per Gal. | (5) AC TONS | (6) AC Percent Added |
|---|---|---|---|---|---|---|---|---|---|
| | Random Number | Test Time | (Dry Tons) | (Dry Tons) | (Dry Tons) | Flow Meter Reading (Gal) | | Tons Used = (3)x(4) /2000 | $= \dfrac{(5)}{(1)+(2)+(5)}$ |
| 1 | | | | | | | | | |
| | | | | | | | | | |
| 2 | | | | | | | | | |
| | | | | | | | | | |
| 3 | | | | | | | | | |
| | | | | | | | | | |
| 4 | | | | | | | | | |
| | | | | | | | | | |

| CUTOFF REPORT COMPARISON | Totalizer Cutoff | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Totals from the Cutoff Report | Total Mix Produced = —————————— | | | Total Bitumen Used = —————————— | | | |

AVERAGE VIRGIN AGGR. %
SUM  %
NUMBER =  ——————

REMARKS

————————————————————
Inspector's Signature

DISTRIBUTION: Project Records

# ASPHALT CONTENT & VIRGIN AGGREGATE DETERMINATION

This form is used to determine the asphalt content and the percent of virgin aggregate of the mix during the production day.

Bitumen content uniformity specifications call for the bitumen content to be determined 4 times during a full production day. The pay quantity for virgin aggregate added to recycled mix is determined by the percentage of virgin aggregate used based on plant settings. This form is set up to allow the determination of the asphalt content and the percentage of virgin aggregate at the same time. If the plant is down at the time called for by the random numbers, but the plant starts up again and continues running, take another cutoff as soon as production has stabilized and note the new test time on the form.

## EXPLANATION OF COLUMNS:

Column (1)  This information is taken from the totalizer. If the total is continuous, the reading when the plant starts will have to be recorded. The totalizer reading should be Zeroed out or read and recorded after dry batching and before production starts.

Column (2)  This information is also taken from the totalizer.

%  virgin aggregate is determined by dividing the virgin aggregate tons used during the period by the sum of virgin aggregate and salvage bituminous material used during the period. The percentage and added are the average percentage computers.

Column (3)  This information is taken from the totalizer. Some plants will read in tons. This information will not have to be converted. Tons  reading can be recorded in Column (5)

Column (4)  Asphalt weight-per-Gallon is listed on the manifests This should be the same as the plant setting.

Column (5)  Compute the tons Used     $(5) = \dfrac{(3) \; X \; (4)}{200}$

Column (6)  Compute the asphalt percentage. The aggregate tons do not include the asphalt and must be added to the aggregate.

## Average Virgin Aggregate %

Compute the average percent of virgin aggregate by adding test results and dividing by the number of test taken. Do not use the final totalizer cut off values to compute the average.

Check with the plant operator to determine if the totalizer reads in wet tons or dry tons. It may be necessary to compute dry tons before entering the tonnage onto the form.