INSTRUCTION MANUAL
FOR
TANK CAR AND TANK TRUCK
GALLONAGE COMPUTATIONS
FROM NET WEIGHTS

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF MATERIALS MANAGEMENT
ASPHALT MATERIALS SECTION
1600 WEST BROAD STREET
COLUMBUS, OHIO 43223-1298

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TANK CAR AND TANK TRUCK GALLONAGE

A. GENERAL

The importance of careful weighing of uncalibrated tank trucks and distributors cannot be overemphasized in the correct computation of gallonage when bituminous materials are received by tank truck.

B. METHOD OF COMPUTING TANK TRUCK OR CAR GALLONAGE FROM NET WEIGHT.

1. Shipments of bituminous materials in uncalibrated tank trucks, cars and distributors must be weighed to determine the net weight of the material and the net weight converted to gallons at the specified pay temperature.

2. The gallons to be paid for shall be calculated by using the following formula:

$$\text{Gallons to be paid for} = \frac{\text{Net Weight}}{\text{“K” X Specific Gravity}}$$

Where “K” is a variable constant depending upon the coefficients of expansion and the pay temperatures for the various materials. The pay temperatures, coefficients of expansion and the values of “K” are given in paragraph B3.

3. Formulas for calculating pay gallonage from net weight follow. Select the formula which includes under its heading the grade of material in the transport, car or distributor. The material producer’s previous years average specific gravity shall be used to determine if formula 3 or formula 4 is to be used in making the computations for 702.02 and 702.03 materials. Where a producer average specific gravity is not available the specific gravity of the original material shown on the Laboratory report shall be used.

FORMULA 1

702.05 Asphalt Primer for Waterproofing

t = 60F c = 0.00040

K = 8.368

$$\text{Gal} = \frac{\text{Net Weight}}{8.368 \text{ X Specific Gravity}}$$

FORMULA 2

702.05 RC-70, 250, 800, 3000
702.02 MC-30, 70, 250, 800, 3000
702.03 CBAE 350, 800; CBAE 350, 800 Special
702.04 Asphalt Emulsions

For materials having a specific gravity equal to or greater than 0.9622 at 25C/25C

t = 100F c = 0.00035

K = 8.245

$$\text{Gal} = \frac{\text{Net Weight}}{8.245 \text{ X Specific Gravity}}$$

FORMULA 3

702.02 RC-70, 250, 800, 3000
702.02 MC-30, 70, 250, 800, 3000
702.03 CBAE 350, 800; CBAE 350, 800 Special; Primer 20, 100

For materials in the specific gravity range of 0.8458 to 0.9621 at 25C/25C

t = 100F c = 0.00040

K = 8.236

$$\text{Gal} = \frac{\text{Net Weight}}{8.236 \text{ X Specific Gravity}}$$

FORMULA 4

702.01 PG Binder w/or w/o Polymer

t = 300F c = 0.00035

K = 7.690

$$\text{Gal} = \frac{\text{Net Weight}}{7.690 \text{ X Specific Gravity}}$$

4. Calculations and other pertinent information should be shown on Form M&R-575 (attached). This completed form shall be attached and submitted with the invoice for payment for bituminous material where this method of measurement applies. It shall also be used as a record on contract projects on which bituminous materials are furnished by weight.

C. VOLUME CORRECTION TABLES FOR LIQUID PETROLEUM PRODUCTS AND BITUMINOUS MATERIALS

The information in the accompanying Tables has been prepared to facilitate computation of the number of gallons of bituminous materials, heating oils, diesel fuels, kerosene and gasoline when tank car, truck transport or distributor computations from weights have been made at a temperature different from the specified pay temperature shown under 109.01 Measurement of Quantities.

INDEX OF TABLES

An example of the use of these tables to determine the gallonage at temperatures other than the specified pay temperatures or for application rates follows:

Bituminous Material 702.02 MC-800 Gallonage at specified pay temperature, computed from tank truck or distributor net weights.....6,300 Gal.

Observed temperature of material in tank truck or distributor.....203F

Average Producer Specific Gravity 25C/25C or from Laboratory Report.....0.973

The above index shows that MC-800 is covered by Table 4.

MC-800 having this specific gravity is covered by Table 4, Part 1. Under the temperature 203F or “t” in Table 4, Part 1, “D” the divisor is 0.9645.

Then 6,300 ÷ 0.9645 = 6,532 net gallons at applied or observed temperature of 203F.

TABLE 1

VOLUME CORRECTION TABLES FOR GASOLINE

Specified pay temperature - 60F
t = Observed temperature in degrees Fahrenheit
D = Divisor for correcting volumes for temperatures other than 60F

Use Part 1 or Part 2 in accordance with
Degrees (60F/60F) . . . A.P.I. shown
on Laboratory Report or Producer's
current average.

Part 1

51.0 to 63.9 degrees A.P.I. at 60F
Coefficient at Expansion 0.00060

t	D	t	D	t	D	t	D
0	1.0361	20	1.0241	40	1.0121	60	1.0000
1	1.0355	21	1.0235	41	1.0115	61	0.9994
2	1.0349	22	1.0229	42	1.0109	62	0.9988
3	1.0343	23	1.0223	43	1.0103	63	0.9982
4	1.0337	24	1.0217	44	1.0097	64	0.9976
5	1.0331	25	1.0211	45	1.0091	65	0.9970
6	1.0325	26	1.0205	46	1.0085	66	0.9964
7	1.0319	27	1.0199	47	1.0079	67	0.9957
8	1.0313	28	1.0193	48	1.0072	68	0.9951
9	1.0307	29	1.0187	49	1.0066	69	0.9945
10	1.0301	30	1.0181	50	1.0060	70	0.9939
11	1.0295	31	1.0175	51	1.0054	71	0.9933
12	1.0289	32	1.0169	52	1.0048	72	0.9927
13	1.0283	33	1.0163	53	1.0042	73	0.9921
14	1.0277	34	1.0157	54	1.0036	74	0.9915

TABLE 1
Part 1 (Continued)

51.0 to 63.9 degrees A.P.I. at 60F
Coefficient at Expansion 0.00060

t	D	t	D	t	D	t	D
15	1.0271	35	1.0151	55	1.0030	75	0.9909
16	1.0265	36	1.0145	56	1.0024	76	0.9903
17	1.0259	37	1.0139	57	1.0018	77	0.9897
18	1.0253	38	1.0133	58	1.0012	78	0.9891
19	1.0247	39	1.0127	59	1.0006	79	0.9885

TABLE 1 (continued)
Part 1
51.0 to 63.9 degrees A.P.I. at 60F
Coefficient at Expansion 0.00060

t	D	t	D	t	D
80	0.9879	95	0.9788	110	0.9696
81	0.9873	96	0.9782	111	0.9690
82	0.9867	97	0.9776	112	0.9684
83	0.9860	98	0.9769	113	0.9678
84	0.9854	99	0.9763	114	0.9672
85	0.9848	100	0.9757	115	0.9666
86	0.9842	101	0.9751	116	0.9660
87	0.9836	102	0.9745	117	0.9654
88	0.9830	103	0.9738	118	0.9647
89	0.9824	104	0.9732	119	0.9641
90	0.9818	105	0.9726	120	0.9635
91	0.9812	106	0.9720	121	0.9629
92	0.9806	107	0.9714	122	0.9623
93	0.9800	108	0.9708	123	0.9617
94	0.9794	109	0.9702	124	0.9611

TABLE 1 (continued)

Part 2

64.0 to 78.9 degrees A.P.I. at 60F
Coefficient at Expansion 0.00070

t	D	t	D	t	D	t	D	t	D
0	1.0419	25	1.0246	50	1.0070	75	0.9894	100	0.9716
1	1.0412	26	1.0239	51	1.0063	76	0.9887	101	0.9709
2	1.0405	27	1.0232	52	1.0056	77	0.9880	102	0.9702
3	1.0398	28	1.0225	53	1.0049	78	0.9872	103	0.9695
4	1.0391	29	1.0218	54	1.0042	79	0.9865	104	0.9688
5	1.0384	30	1.0211	55	1.0035	80	0.9858	105	0.9681
6	1.0377	31	1.0204	56	1.0028	81	0.9851	106	0.9673
7	1.0370	32	1.0197	57	1.0021	82	0.9844	107	0.9666
8	1.0364	33	1.0190	58	1.0014	83	0.9837	108	0.9659
9	1.0357	34	1.0183	59	1.0007	84	0.9830	109	0.9652
10	1.0350	35	1.0176	60	1.0000	85	0.9823	110	0.9645
11	1.0343	36	1.0169	61	0.9993	86	0.9816	111	0.9638
12	1.0336	37	1.0162	62	0.9986	87	0.9809	112	0.9631
13	1.0329	38	1.0155	63	0.9979	88	0.9802	113	0.9624
14	1.0322	39	1.0148	64	0.9972	89	0.9795	114	0.9617
15	1.0315	40	1.0141	65	0.9965	90	0.9788	115	0.9609
16	1.0308	41	1.0134	66	0.9958	91	0.9780	116	0.9602
17	1.0301	42	1.0127	67	0.9951	92	0.9773	117	0.9595
18	1.0294	43	1.0120	68	0.9943	93	0.9766	118	0.9588
19	1.0287	44	1.0113	69	0.9936	94	0.9759	119	0.9581

TABLE 1 (continued)

Part 2

64.0 to 78.9 degrees A.P.I. at 60F
Coefficient at Expansion 0.00070

t	D	t	D	t	D	t	D	t	D
20	1.0280	45	1.0106	70	0.9929	95	0.9752	120	0.9574
21	1.0273	46	1.0099	71	0.9922	96	0.9745	121	0.9567
22	1.0266	47	1.0092	72	0.9915	97	0.9738	122	0.9560
23	1.0260	48	1.0084	73	0.9908	98	0.9731	123	0.9552
24	1.0253	49	1.0077	74	0.9901	99	0.9723	124	0.9545

TABLE 2

VOLUME CORRECTION TABLES FOR:

702.05	Asphalt Primer for Waterproofing
ASTM D-396	Heating Oils No. 1 and No. 2
ASTM D-975	Diesel Fuel Oils No. 1D and No. 2D
VVK-211-d	Kerosene

Specified pay temperature 60°F
t = Observed temperature in degrees Fahrenheit
D = Divisor for correcting volumes for temperatures other than 60°F

Use Part 1 or Part 2 in accordance with degrees (60°F/60°F) A.P.I. or Specific Gravity (25°C/25°C) shown on Laboratory Report or Producer’s current average.

TABLE 2

Part 1 (Continued)

35.0 to 50.9 degrees A.P.I.
Specific Gravity 0.775 to 0.850
Coefficient of Expansion 0.00050

t	D	t	D	t	D	t	D
0	1.0298	15	1.0223	30	1.0149	45	1.0075
1	1.0293	16	1.0218	31	1.0144	46	1.0070
2	1.0288	17	1.0214	32	1.0139	47	1.0065
3	1.0283	18	1.0209	33	1.0134	48	1.0060
4	1.0278	19	1.0204	34	1.0129	49	1.0555
5	1.0273	20	1.0199	35	1.0124	50	1.0050
6	1.0268	21	1.0194	36	1.0119	51	1.0045
7	1.0263	22	1.0189	37	1.0114	52	1.0040
8	1.0258	23	1.0184	38	1.0109	53	1.0035
9	1.0253	24	1.0179	39	1.0104	54	1.0030
10	1.0248	25	1.0174	40	1.0099	55	1.0025
11	1.0243	26	1.0169	41	1.0094	56	1.0020
12	1.0238	27	1.0164	42	1.0089	57	1.0015
13	1.0233	28	1.0159	43	1.0084	58	1.0010
14	1.0228	29	1.0154	44	1.0079	59	1.0005

TABLE 2

Part 1 (continued)

35.0 to 50.9 degrees A.P.I.
Specific Gravity 0.775 to 0.850
Coefficient of Expansion 0.00050

t	D	t	D	t	D
60	1.0000	90	0.9851	120	0.9702
61	0.9995	91	0.9846	121	0.9697
62	0.9990	92	0.9841	122	0.9692
63	0.9985	93	0.9836	123	0.9687
64	0.9980	94	0.9831	124	0.9682
65	0.9975	95	0.9826	125	0.9677
66	0.9970	96	0.9821	126	0.9672
67	0.9965	97	0.9816	127	0.9667
68	0.9960	98	0.9811	128	0.9662
69	0.9955	99	0.9806	129	0.9657
70	0.9950	100	0.9801	130	0.9652
71	0.9945	101	0.9796	131	0.9647
72	0.9940	102	0.9791	132	0.9642
73	0.9935	103	0.9786	133	0.9637
74	0.9930	104	0.9781	134	0.9632
75	0.9925	105	0.9776	135	0.9627
76	0.9920	106	0.9771	136	0.9622
77	0.9916	107	0.9766	137	0.9617
78	0.9911	108	0.9761	138	0.9612
79	0.9906	109	0.9756	139	0.9607
80	0.9901	110	0.9751	140	0.9602
81	0.9896	111	0.9746	141	0.9597
82	0.9891	112	0.9741	142	0.9592
83	0.9886	113	0.9736	143	0.9587
84	0.9881	114	0.9731	144	0.9582

TABLE 2

Part 1 (continued)

35.0 to 50.9 degrees A.P.I.
Specific Gravity 0.775 to 0.850
Coefficient of Expansion 0.00050

t	D	t	D	t	D
85	0.9876	115	0.9726	145	0.9577
86	0.9871	116	0.9721	146	0.9572
87	0.9866	117	0.9717	147	0.9567
88	0.9861	118	0.9712	148	0.9562
89	0.9856	119	0.9707	149	0.9557

TABLE 2 (continued)

Part 2

15.0 to 34.9 degrees A.P.I.
Specific Gravity 0.850 to 0.960
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
0	1.0242	30	1.0120	60	1.0000	90	0.9881	120	0.9763
1	1.0238	31	1.0116	61	0.9996	91	0.9877	121	0.9759
2	1.0234	32	1.0112	62	0.9992	92	0.9873	122	0.9755
3	1.0230	33	1.0108	63	0.9988	93	0.9869	123	0.9752
4	1.0226	34	1.0104	64	0.9984	94	0.9865	124	0.9748

TABLE 2

Part 2 (Continued)

15.0 to 34.9 degrees A.P.I.
Specific Gravity 0.850 to 0.960
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
5	1.0222	35	1.0100	65	0.9980	95	0.9861	215	0.9744
6	1.0218	36	1.0096	66	0.9976	96	0.9857	126	0.9740
7	1.0214	37	1.0092	67	0.9972	97	0.9853	127	0.9736
8	1.0210	38	1.0088	68	0.9968	98	0.9849	128	0.9732
9	1.0206	39	1.0084	69	0.9964	99	0.9845	129	0.9728
10	1.0202	40	1.0080	70	0.9960	100	0.9841	130	0.9742
11	1.0198	41	1.0076	71	0.9956	101	0.9837	131	0.9720
12	1.0194	42	1.0072	72	0.9952	102	0.9833	132	0.9716
13	1.0189	43	1.0068	73	0.9948	103	0.9830	133	0.9713
14	1.0185	44	1.0064	74	0.9944	104	0.9826	134	0.9709
15	1.0181	45	1.0060	75	0.9940	105	0.9822	135	0.9705
16	1.0177	46	1.0056	76	0.9936	106	0.9818	136	0.9701
17	1.0173	47	1.0052	77	0.9932	107	0.9814	137	0.9697
18	1.0169	48	1.0048	78	0.9929	108	0.9811	138	0.9694
19	1.0165	49	1.0044	79	0.9925	109	0.9807	139	0.9690
20	1.0161	50	1.0040	80	0.9921	110	0.9803	140	0.9686
21	1.0157	51	1.0036	81	0.9917	111	0.9799	141	0.9682
22	1.0153	52	1.0032	82	0.9913	112	0.9795	142	0.9678
23	1.0148	53	1.0028	83	0.9909	113	0.9791	143	0.9675
24	1.0144	54	1.0024	84	0.9905	114	0.9787	144	0.9671

TABLE 2

Part 2 (Continued)

15.0 to 34.9 degrees A.P.I.
Specific Gravity 0.850 to 0.960
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
25	1.0140	55	1.0020	85	0.9901	115	0.9783	145	0.9667
26	1.0136	56	1.0016	86	0.9897	116	0.9779	146	0.9663
27	1.0132	57	1.0012	87	0.9893	117	0.9775	147	0.9659
28	1.0128	58	1.0008	88	0.9889	118	0.9771	148	0.9655
29	1.0124	59	1.0004	89	0.9885	119	0.9767	149	0.9651

TABLE 3
VOLUME CORRECTION TABLE FOR:

702.02	RC 70, 250, 800, 3000
702.02	MC 30, 70, 250, 800, 3000
702.03	CBAE 350, 800; CBAE 350, 800 Special
702.04	Asphalt Emulsions
702.07	MWS Emulsion
702.13	Rubberized Asphalt Emulsion

Specified pay temperature 100°F
t = Observed temperature in degrees Fahrenheit
D = Divisor for correcting volumes for temperatures other than 100°F

Use Part 1 or Part 2 in accordance with
Specific Gravity (25°C/25°C) shown on Laboratory
Report or Producer's current average.

Part 1

Specific Gravity equal to or greater than 0.9622 at 25°C/ 25°C Coefficient of Expansion 0.00035

t	D	t	D	t	D	t	D	t	D
0	1.0350	20	1.0281	40	1.0211	60	1.0141	80	1.0070
1	1.0347	21	1.0277	41	1.0208	61	1.0137	81	1.0067
2	1.0343	22	1.0274	42	1.0204	62	1.0133	82	1.0063
3	1.0340	23	1.0270	43	1.0201	63	1.0130	83	1.0060
4	1.0336	24	1.0267	44	1.0197	64	1.0126	84	1.0056

TABLE 3

Part 1 (Continued)

Specific Gravity equal to or greater than 0.9622 at 25°C/ 25°C Coefficient of Expansion 0.00035

t	D	t	D	t	D	t	D	t	D
5	1.0333	25	1.0263	45	1.0194	65	1.0123	85	1.0053
6	1.0329	26	1.0260	46	1.0190	66	1.0119	86	1.0049
7	1.0326	27	1.0256	47	1.0186	67	1.0116	87	1.0046
8	1.0322	28	1.0253	48	1.0183	68	1.0112	88	1.0042
9	1.0319	29	1.0249	49	1.0179	69	1.0109	89	1.0038
10	1.0315	30	1.0246	50	1.0176	70	1.0105	90	1.0035
11	1.0312	31	1.0242	51	1.0172	71	1.0102	91	1.0031
12	1.0308	32	1.0239	52	1.0169	72	1.0098	92	1.0028
13	1.0305	33	1.0235	53	1.0165	73	1.0095	93	1.0024
14	1.0301	34	1.0232	54	1.0162	74	1.0091	94	1.0021
15	1.0298	35	1.0228	55	1.0158	75	1.0088	95	1.0017
16	1.0294	36	1.0225	56	1.0155	76	1.0084	96	1.0014
17	1.0291	37	1.0221	57	1.0151	77	1.0081	97	1.0010
18	1.0287	38	1.0218	58	1.0148	78	1.0077	98	1.0007
19	1.0284	39	1.0214	59	1.0144	79	1.0074	99	1.0003
100	1.0000	130	0.9896	160	0.9792	190	0.9689	220	0.9587
101	0.9997	131	0.9892	161	0.9788	191	0.9686	221	0.9584
102	0.9993	132	0.9889	162	0.9785	192	0.9682	222	0.9580
103	0.9990	133	0.9885	163	0.9782	193	0.9679	223	0.9577
104	0.9986	134	0.9882	164	0.9778	194	0.9675	224	0.9574
105	0.9983	135	0.9878	165	0.9775	195	0.9672	225	0.9570
106	0.9979	136	0.9875	166	0.9771	196	0.9669	226	0.9567
107	0.9976	137	0.9871	167	0.9768	197	0.9665	227	0.9563
108	0.9972	138	0.9868	168	0.9764	198	0.9662	228	0.9560
109	0.9969	139	0.9864	169	0.9761	199	0.9658	229	0.9557

TABLE 3

Part 1 (Continued)

Specific Gravity equal to or greater than 0.9622 at 25°C/ 25°C Coefficient of Expansion 0.00035

t	D	t	D	t	D	t	D	t	D
110	0.9965	140	0.9861	170	0.9758	200	0.9655	230	0.9553
111	0.9962	141	0.9857	171	0.9754	201	0.9652	231	0.9550
112	0.9958	142	0.9854	172	0.9751	202	0.9648	232	0.9547
113	0.9955	143	0.9851	173	0.9747	203	0.9645	233	0.9543
114	0.9951	144	0.9847	174	0.9744	204	0.9641	234	0.9540
115	0.9948	145	0.9844	175	0.9740	205	0.9638	235	0.9536
116	0.9944	146	0.9840	176	0.9737	206	0.9635	236	0.9533
117	0.9941	147	0.9837	177	0.9734	207	0.9631	237	0.9530
118	0.9937	148	0.9833	178	0.9730	208	0.9628	238	0.9526
119	0.9934	149	0.9830	179	0.9727	209	0.9624	239	0.9523
120	0.9930	150	0.9826	180	0.9723	210	0.9621	240	0.9520
121	0.9927	151	0.9823	181	0.9720	211	0.9618	241	0.9516
122	0.9923	152	0.9819	182	0.9716	212	0.9614	242	0.9513
123	0.9920	153	0.9816	183	0.9713	213	0.9611	243	0.9509
124	0.9916	154	0.9813	184	0.9710	214	0.9607	244	0.9506
125	0.9913	155	0.9809	185	0.9706	215	0.9604	245	0.9503
126	0.9909	156	0.9806	186	0.9703	216	0.9601	246	0.9499
127	0.9906	157	0.9802	187	0.9699	217	0.9597	247	0.9496
128	0.9902	158	0.9799	188	0.9696	218	0.9594	248	0.9493
129	0.9899	159	0.9795	189	0.9693	219	0.9590	249	0.9489

Part 1 (concluded)

TABLE 3
VOLUME CORRECTION TABLE FOR:

702.02	RC 70, 250, 800, 3000
702.02	MC 30, 70, 250, 800, 3000
702.03	CBAE 350, 800; CBAE 350, 800 Special; Primer 20, 100

Specified pay temperature 100°F
t = Observed temperature in degrees Fahrenheit
D = Divisor for correcting volumes for temperatures other than 100°F

Use Part 1 or Part 2 in accordance with Specific Gravity (25°C/25°C) shown on Laboratory Report or Producer's current average.

Part 2

Specific Gravity Range 0.8458 to 0.9621 (25°C/ 25°C)
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
0	1.0417	20	1.0330	40	1.0246	60	1.0163	80	1.0081
1	1.0412	21	1.0326	41	1.0242	61	1.0158	81	1.0076
2	1.0408	22	1.0322	42	1.0237	62	1.0154	82	1.0072
3	1.0404	23	1.0318	43	1.0233	63	1.0150	83	1.0068
4	1.0399	24	1.0313	44	1.0229	64	1.0146	84	1.0064
5	1.0395	25	1.0309	45	1.0225	65	1.0142	85	1.0060
6	1.0391	26	1.0305	46	1.0221	66	1.0138	86	1.0056
7	1.0386	27	1.0301	47	1.0216	67	1.0134	87	1.0052
8	1.0382	28	1.0296	48	1.0212	68	1.0130	88	1.0048
9	1.0378	29	1.0292	49	1.0208	69	1.0125	89	1.0044
10	1.0373	30	1.0288	50	1.0204	70	1.0121	90	1.0040
11	1.0369	31	1.0284	51	1.0200	71	1.0117	91	1.0036
12	1.0365	32	1.0280	52	1.0196	72	1.0113	92	1.0032
13	1.0360	33	1.0275	53	1.0192	73	1.0109	93	1.0028
14	1.0356	34	1.0271	54	1.0187	74	1.0105	94	1.0024

TABLE 3

Part 2 (Continued)

Specific Gravity Range 0.8458 to 0.9621 (25°C/ 25°C)
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
15	1.0352	35	1.0267	55	1.0183	75	1.0101	95	1.0020
16	1.0348	36	1.0263	56	1.0179	76	1.0097	96	1.0016
17	1.0343	37	1.0258	57	1.0175	77	1.0093	97	1.0012
18	1.0339	38	1.0254	58	1.0171	78	1.0089	98	1.0008
19	1.0335	39	1.0250	59	1.0167	79	1.0085	99	1.0004

TABLE 3

Part 2 (Continued)

t	D	t	D	t	D	t	D	t	D
100	1.0000	130	0.9881	160	0.9766	190	0.9652	220	0.9542
101	0.9996	131	0.9877	161	0.9762	191	0.9649	221	0.9538
102	0.9992	132	0.9874	162	0.9758	192	0.9645	222	0.9535
103	0.9988	133	0.9870	163	0.9754	193	0.9641	223	0.9531
104	0.9984	134	0.9866	164	0.9750	194	0.9638	224	0.9527
105	0.9980	135	0.9862	165	0.9746	195	0.9634	225	0.9524
106	0.9976	136	0.9858	166	0.9743	196	0.9630	226	0.9520
107	0.9972	137	0.9854	167	0.9739	197	0.9627	227	0.9517
108	0.9968	138	0.9850	168	0.9735	198	0.9623	228	0.9513
109	0.9964	139	0.9846	169	0.9731	199	0.9619	229	0.9509
110	0.9960	140	0.9842	170	0.9728	200	0.9615	230	0.9506
111	0.9956	141	0.9839	171	0.9724	201	0.9612	231	0.9502
112	0.9952	142	0.9835	172	0.9720	202	0.9608	232	0.9499
113	0.9948	143	0.9831	173	0.9716	203	0.9604	233	0.9495
114	0.9944	144	0.9827	174	0.9712	204	0.9601	234	0.0492

TABLE 3

Part 2 (Continued)

Specific Gravity Range 0.8458 to 0.9621 (25°C/ 25°C)
Coefficient of Expansion 0.00040

t	D	t	D	t	D	t	D	t	D
115	0.9940	145	0.9823	175	0.9709	205	0.9597	235	0.9488
116	0.9936	146	0.9819	176	0.9705	206	0.9593	236	0.9485
117	0.9932	147	0.9815	177	0.9701	207	0.9589	237	0.9481
118	0.9928	148	0.9812	178	0.9697	208	0.9586	238	0.9477
119	0.9924	149	0.9808	179	0.9694	209	0.9582	239	0.9474
120	0.9921	150	0.9804	180	0.9690	210	0.9578	240	0.9470
121	0.9917	151	0.9800	181	0.9686	211	0.9575	241	0.9467
122	0.9913	152	0.9796	182	0.9682	212	0.9571	242	0.9463
123	0.9909	153	0.9792	183	0.9678	213	0.9567	243	0.9460
124	0.9905	154	0.9788	184	0.9675	214	0.9564	244	0.9456
125	0.9901	155	0.9785	185	0.9671	215	0.9560	245	0.9452
126	0.9897	156	0.9781	186	0.9667	216	0.9557	246	0.9449
127	0.9893	157	0.9777	187	0.9664	217	0.9553	247	0.9445
128	0.9889	158	0.9773	188	0.9660	218	0.9549	248	0.9441
129	0.9885	159	0.9769	189	0.9656	219	0.9546	249	0.9438

Part 2 (concluded)

TABLE 4

VOLUME CORRECTION TABLE FOR:

702.01 PG Binder w/ or w/o polymer

Specified pay temperature 300°F
t = Observed temperature in degrees Fahrenheit
D = Divisor for correcting volumes for temperatures other than 300°F
Coefficient of Expansion 0.00035

t	D	t	D	t	D	t	D
150	1.0526	175	1.0438	200	1.0350	225	1.0265
151	1.0523	176	1.0435	201	1.0347	226	1.0262
152	1.0519	177	1.0431	202	1.0343	227	1.0258
153	1.0516	178	1.0428	203	1.0340	228	1.0255
154	1.0512	179	1.0424	204	1.0336	229	1.0251
155	1.0509	180	1.0421	205	1.0333	230	1.0248
156	1.0505	181	1.0417	206	1.0329	231	1.0244
157	1.0502	182	1.0414	207	1.0326	232	1.0241
158	1.0498	183	1.0410	208	1.0322	233	1.0237
159	1.0495	184	1.0407	209	1.0319	234	1.0233
160	1.0491	185	1.0403	210	1.0315	235	1.0230
161	1.0488	186	1.0400	211	1.0312	236	1.0226
162	1.0484	187	1.0396	212	1.0308	237	1.0222
163	1.0480	188	1.0393	213	1.0305	238	1.0219
164	1.0477	189	1.0389	214	1.0301	239	1.0215

Table 4 (continued on next page)

TABLE 4 (continued)

165	1.0473	190	1.0386	215	1.0298	240	1.0211
166	1.0470	191	1.0382	216	1.0294	241	1.0208
167	1.0466	192	1.0379	217	1.0291	242	1.0204
168	1.0463	193	1.0375	218	1.0287	243	1.0201
169	1.0459	194	1.0372	219	1.0284	244	1.0197
170	1.0456	195	1.0368	220	1.0281	245	1.0194
171	1.0452	196	1.0365	221	1.0278	246	1.0190
172	1.0449	197	1.0362	222	1.0275	247	1.0186
173	1.0445	198	1.0358	223	1.0273	248	1.0183
174	1.0442	199	1.0354	224	1.0269	249	1.0179

TABLE 4 (continued)

t	D	t	D	t	D	t	D
250	1.0176	280	1.0070	310	0.9965	340	0.9861
251	1.0172	281	1.0067	311	0.9962	341	0.9857
252	1.0169	282	1.0063	312	0.9958	342	0.9854
253	1.0165	283	1.0060	313	0.9955	343	0.9851
254	1.0162	284	1.0056	314	0.9951	344	0.9847

Table 4 (continued on next page)

TABLE 4 (continued)

t	D	t	D	t	D	t	D
255	1.0158	285	1.0053	315	0.9948	345	0.9844
256	1.0155	286	1.0049	316	0.9944	346	0.9840
257	1.0151	287	1.0046	317	0.9941	347	0.9837
258	1.0148	288	1.0042	318	0.9937	348	0.9833
259	1.0144	289	1.0038	319	0.9934	349	0.9830
260	1.0141	290	1.0035	320	0.9930	350	0.9826
261	1.0137	291	1.0031	321	0.9927	351	0.9823
262	1.0133	292	1.0028	322	0.9923	352	0.9819
263	1.0130	293	1.0024	323	0.9920	353	0.9816
264	1.0126	294	1.0021	324	0.9916	354	0.9813
265	1.0123	295	1.0017	325	0.9913	355	0.9809
266	1.0119	296	1.0014	326	0.9909	356	0.9806
267	1.0116	297	1.0010	327	0.9906	357	0.9802
268	1.0112	298	1.0007	328	0.9902	358	0.9799
269	1.0109	299	1.0003	329	0.9899	359	0.9795
270	1.0105	300	1.0000	330	0.9896	360	0.9792
271	1.0102	301	0.9997	331	0.9892	361	0.9788
272	1.0098	302	0.9993	332	0.9889	362	0.9785
273	1.0095	303	0.9990	333	0.9885	363	0.9782
274	1.0091	304	0.9986	334	0.9882	364	0.9778
275	1.0088	305	0.9983	335	0.9878	365	0.9775
276	1.0084	306	0.9979	336	0.9875	366	0.9771
277	1.0081	307	0.9976	337	0.9871	367	0.9768
278	1.0077	308	0.9972	338	0.9868	368	0.9764
279	1.0074	309	0.9969	339	0.9864	369	0.9761

Table 4 (continued on next page)

TABLE 4 (continued)

t	D	t	D	t	D	t	D
370	0.9758	400	0.9655	430	0.9553	460	0.9452
371	0.9754	401	0.9652	431	0.9550	461	0.9449
372	0.9751	402	0.9648	432	0.9547	462	0.9446
373	0.9747	403	0.9645	433	0.9543	463	0.9442
374	0.9744	404	0.9641	434	0.9540	464	0.9439
375	0.9740	405	0.9638	435	0.9536	465	0.9436
376	0.9737	406	0.9635	436	0.9533	466	0.9432
377	0.9734	407	0.9631	437	0.9530	467	0.9429
378	0.9730	408	0.9628	438	0.9526	468	0.9426
379	0.9727	409	0.9624	439	0.9523	469	0.9422
380	0.9723	410	0.9621	440	0.9520	470	0.9419
381	0.9720	411	0.9618	441	0.9516	471	0.9416
382	0.9716	412	0.9614	442	0.9513	472	0.9412
383	0.9713	413	0.9611	443	0.9509	473	0.9409
384	0.9710	414	0.9607	444	0.9506	474	0.9405
385	0.9706	415	0.9604	445	0.9503	475	0.9402
386	0.9703	416	0.9601	446	0.9499	476	0.9399
387	0.9699	417	0.9597	447	0.9496	477	0.9395
388	0.9696	418	0.9594	448	0.9493	478	0.9392
389	0.9693	419	0.9590	449	0.9489	479	0.9389
390	0.9689	420	0.9587	450	0.9486	480	0.9385
391	0.9686	421	0.9584	451	0.9483	481	0.9382
392	0.9682	422	0.9580	452	0.9479	482	0.9379
393	0.9679	423	0.9577	453	0.9476	483	0.9375
394	0.9675	424	0.9574	454	0.9472	484	0.9372

Table 4 (continued on next page)

TABLE 4 (continued)

t	D	t	D	t	D	t	D
395	0.9672	425	0.9570	455	0.9469	485	0.9369
396	0.9669	426	0.9567	456	0.9466	486	0.9365
397	0.9665	427	0.9563	457	0.9462	487	0.9362
398	0.9662	428	0.9560	458	0.9459	488	0.9359
399	0.9658	429	0.9557	459	0.9456	489	0.9356

Table 4 (concluded)

MR-575

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

ITEM (KIND OF BITUMINOUS MATERIAL)_____

LOADED AT (PLANT NAME AND LOCATION)_____

PURCHASE ORDER NUMBER (OR PROJECT NO.)_____

DISTRIBUTOR NO. _____ DISTRIBUTOR CAPACITY_____GALS.

COMPUTATION

GROSS WT._____ LBS. (_____)
NET WT. LBS

TARE WT._____ LBS. _____ =
_____**GALS**.

NET WT._____ LBS. **(_____) X (_____)**
FACTOR **SP. GRAVITY**

CERTIFIED CORRECT

_____ _____
CONSUMER'S REPRESENTATIVE **DATE**

DOT-1732