Bureau of Mines
Report of Investigations 5146

NATIONAL MOTOR-GASOLINE SURVEY
WINTER 1954-55

BY O. C. BLADE

United States Department of the Interior — June 1955

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UNITED STATES DEPARTMENT OF THE INTERIOR
Douglas McKay, Secretary
BUREAU OF MINES
J. J. Forbes, Director

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June 1955

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by

O. C. Blade 1/

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1/ Chemist (petroleum)

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INTRODUCTION

This report on the properties of motor fuels sold through service stations in the United States was made in accordance with a cooperative agreement between the American Petroleum Institute and the Bureau of Mines of the United States Department of the Interior. By agreement with the American Petroleum Institute, identification of the items is confidential.

It presents analytical data for 4,802 samples, representing the products of 117 companies. The samples were collected during December 1954 and January and February 1955. As in previous surveys, the gasolines covered by this survey include those from both large and small suppliers. The data were obtained by laboratories of various refiners, motor manufacturers, and chemical companies and submitted to the Bureau of Mines for compilation. A list of the National Motor-Gasoline Survey reports published during the past 10 years is given on page 5.

SUMMARY

A summary of the characteristics of motor gasoline for the winter 1954-55 is presented in table 1, and for comparison, a similar summary for the winter 1953-54 is shown in table 2. Trends of some of the more important characteristics over a period of years are shown in figures 1 and 2. The following tabulation indicates increases of national average octane numbers during the past three and one-half years:

	Premium-price		Regular-price	
	Research O.N.	Motor O.N.	Research O.N.	Motor O.N.
Winter 1951-52	90.0	82.0	83.1	78.1
Summer 1952	90.6	82.2	83.6	78.4
Winter 1952-53	90.9	82.7	84.0	79.1
Summer 1953	91.1	82.9	84.2	79.3
Winter 1953-54	91.9	83.6	84.7	80.0
Summer 1954	92.9	84.0	85.5	80.3
Winter 1954-55	93.6	84.5	86.2	80.8

Average vapor pressures and distillation temperatures of the winter 1954-55 gasolines indicate they are slightly more volatile than motor fuels of the preceding winter.

EXPLANATION OF TABLES AND FIGURES

Terms used in the surveys have the following meanings:

District: The designation of a marketing area for collecting samples and data. The present arrangement of 17 districts,

Table 1. - Summary of values, motor-gasoline survey, winter 1954-55

Test	Regular-price gasoline			Premium-price gasoline		
	Minimum	Average	Maximum	Minimum	Average	Maximum
Gravity, °A.P.I.	56.9	62.6	71.2	55.0	62.4	69.6
Sulfur content, wt. percent	0.005	0.088	0.438	0.009	0.076	0.304
Gum, mg. per 100 ml.	0.0	2.0	5.0	0.5	2.3	6.0
Tetraethyllead, ml. per gal.	0.30	1.86	2.99	0.00	2.27	3.05
Octane number, Research	80.6	86.2	91.7	87.8	93.6	97.8
Octane number, Motor	76.0	80.8	85.2	79.0	84.5	89.0
Reid vapor pressure, lb.	8.0	10.8	15.0	7.2	10.8	13.5
Distillation test, on evaporated basis						
Initial boiling point, °F.	78	91	106	78	91	104
5 percent	85	105	120	92	104	124
10	89	120	142	101	118	140
20	116	145	175	116	140	168
30	125	171	208	133	163	212
50	148	219	261	175	210	260
70	193	267	307	206	260	317
90	232	334	377	232	330	369
95	250	365	404	248	360	401
End point	311	403	438	293	401	437
Residue, vol. percent	0.2	0.9	1.4	0.3	0.9	1.4
Distillation loss	.9	2.3	8.0	.8	2.0	4.0

Table 2. - Summary of values, motor-gasoline survey, winter 1953-54

Test	Regular-price gasoline			Premium-price gasoline		
	Minimum	Average	Maximum	Minimum	Average	Maximum
Gravity, ° A.P.I.	55.4	62.7	71.4	55.9	62.5	71.7
Sulfur content, wt. percent	0.014	0.088	0.432	0.019	0.077	0.382
Gum, mg. per 100 ml.	0.0	1.7	5.0	0.4	2.0	5.2
Tetraethyllead, ml. per gal.	0.02	1.99	3.06	0.00	2.29	3.26
Octane number Research	78.3	84.7	91.4	85.7	91.9	96.6
Octane number, Motor	75.5	80.0	85.8	78.8	83.6	89.0
Reid vapor pressure, lb.	6.5	10.6	13.5	7.5	10.6	13.7
Distillation test, on evaporated basis						
Initial boiling point, ° F.	81	91	117	78	91	104
5 percent	85	105	131	92	105	121
10	99	120	153	98	119	136
20	114	147	194	116	141	162
30	130	174	223	132	164	189
50	164	223	279	163	211	247
70	183	270	323	202	262	300
90	233	336	376	274	333	374
95	310	365	394	307	362	405
End point	348	405	446	346	402	436
Residue, vol. percent	0.4	1.0	1.5	0.4	1.0	1.5
Distillation loss	.3	2.3	5.0	.5	2.0	6.0

developed by the CFR Committee, 2/ was selected with reference to the specifications on motor gasolines, refinery locations, population centers, and arteries of commerce such as navigable rivers. The states or parts of states in each district are indicated in the headings of table 3 and are shown in figure 3.

Brand: The gasoline sold in a given price group under a given trade name.

Item: The index number assigned to a given brand in a given district. The data for each item represent the average of those submitted for that brand in that district. The number of samples represented follows the item number.

Sample: The individual supply of gasoline obtained at the filling station and analyzed in the laboratory.

Table 3 presents data for gravity, corrosion, sulfur, gum, tetraethyllead, research and motor-method octane numbers, Reid vapor pressure, and distillation characteristics on the motor fuels collected. The tests were made according to procedures standardized by the American Society for Testing Materials.3/

Corrosion test results are compiled by number as reported according to the corrosion scale given in table 1 of D130 in the recent A.S.T.M. manuals.

Gum test data are considered in two classes--true gum and gums oily in character for which the results are abnormally high, presumably because of additives. Only data that appear to represent true gum are given in figures; others are reported as "oily." The distillation temperatures, corrected to barometric pressure at sea level, are on the percent evaporated basis.

2/ Coordinating Fuel and Equipment Research Committee (formerly the Coordinating Fuel Research Committee) of the Coordinating Research Council, Inc. From 1935 to 1948 the motor-gasoline surveys were conducted under a cooperative agreement between the Coordinating Research Council and the Bureau of Mines.

3/ American Society for Testing Materials, A.S.T.M. Standards on Petroleum Products and Lubricants (With Related Information): Philadelphia, 1954, 956 pp.; A.S.T.M. Manual of Engine Test Methods for Rating Fuels: Philadelphia, 1952, 342 pp.; 1953 Supplement to A.S.T.M. Manual of Engine Test Methods for Rating Fuels, 1953, 46 pp.

Average values appear at the foot of the data columnsin table 3 for both regular- and premium-price gasolines for each of the districts. These values are arithmetical averages of the data shown for the items and were computed without reference to the total number of samples represented. Figures giving minimum and maximum values are shown directly below the averages.

The district averages from table 3 are assembled in table 4. The fourth column in table 4 headed "Items (Brands)" indicates the number of brands in the districts whose averages are here summarized. The figures at the foot of each column of data are national averages based on 17 districts.

Figures 1 and 2 illustrate trends in the national averages of certain properties of regular- and premium-price gasolines, respectively. Averages for the winter surveys are plotted on the lines representing the years and for the summer surveys between the lines. Octane-number points are connected for successive surveys, but those for Reid vapor pressure and distillation temperatures are connected by season and appear as two lines on each chart. No surveys were made during the winter of 1941-42 and the summer of 1942.

The districts, locations, and number of samples of gasoline in the present survey are listed in table 5 and shown on the map, figure 3, facing the table. The locations are named for the principal cities in the respective vicinities, and include suburbs and neighboring communities. The area of the circle at each location is proportional to the number of samples obtained. The segments of the large circle in the lower left corner, drawn to the same scale, represent the number of samples for the different districts. The summary at the end of table 5 lists by district the number of locations, samples, and the percentages of the latter based on the total reported.

A summary of the national average, minimum, and maximum values of the characteristics of the motor-gasoline survey for the winter 1954-55 is shown in table 1, and comparative data for the winter 1953-54 are shown in table 2.

SIGNIFICANCE OF DATA

This report does not discuss the significance of the data presented. Reference may be made to the A.S.T.M. specification 4/ of the motor gasoline and its appendix, "Significance of ASTM Specifications for Motor Gasoline," at a technical library.

4/ American Society for Testing Materials, Tentative Specifications for Gasoline (D439-52T): 1952 Book of A.S.T.M. Standards, part 5, Philadelphia 1952, 1,350 pp.

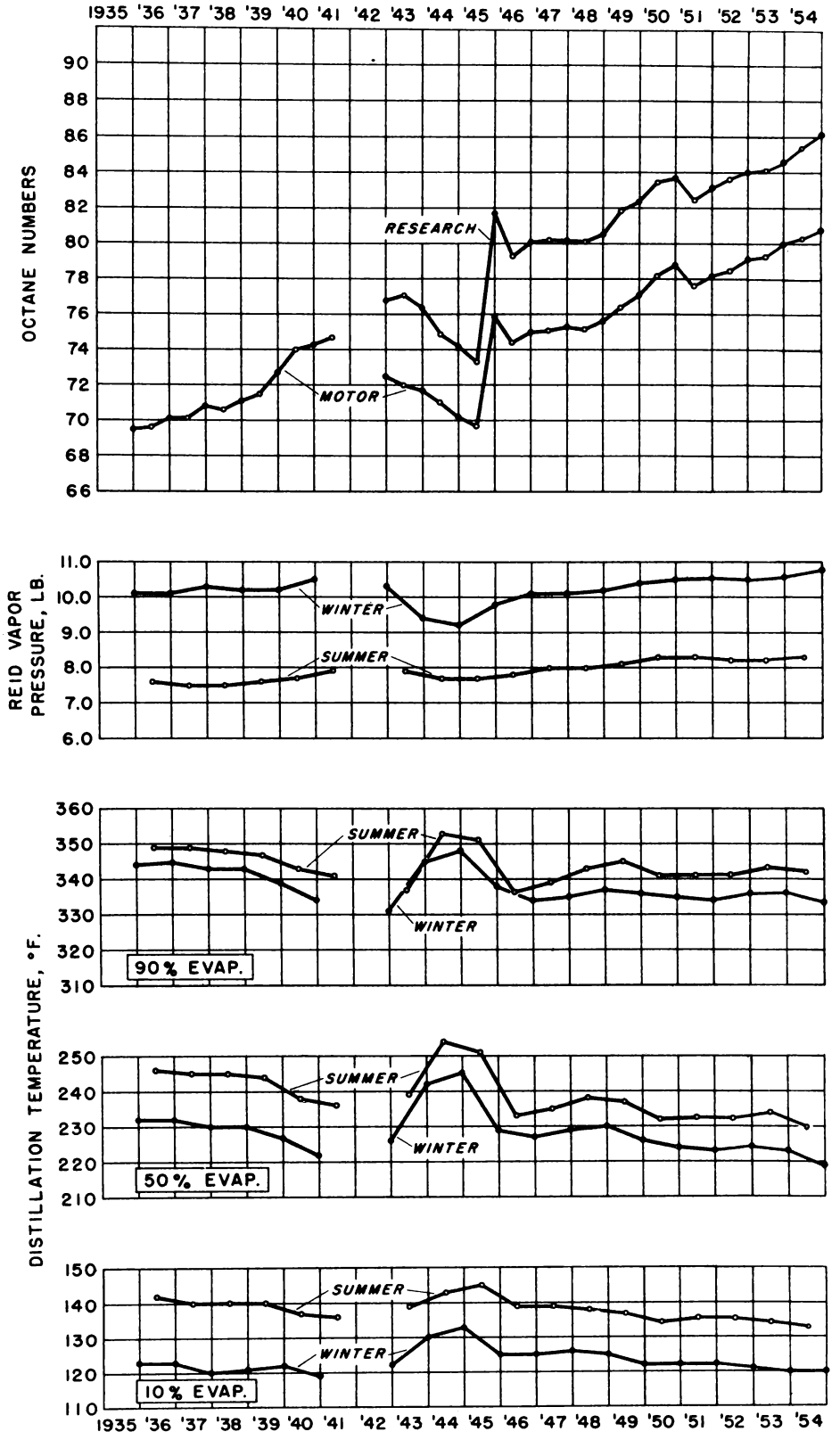

Figure 1.– Trends of certain characteristics of regular-price gasolines.

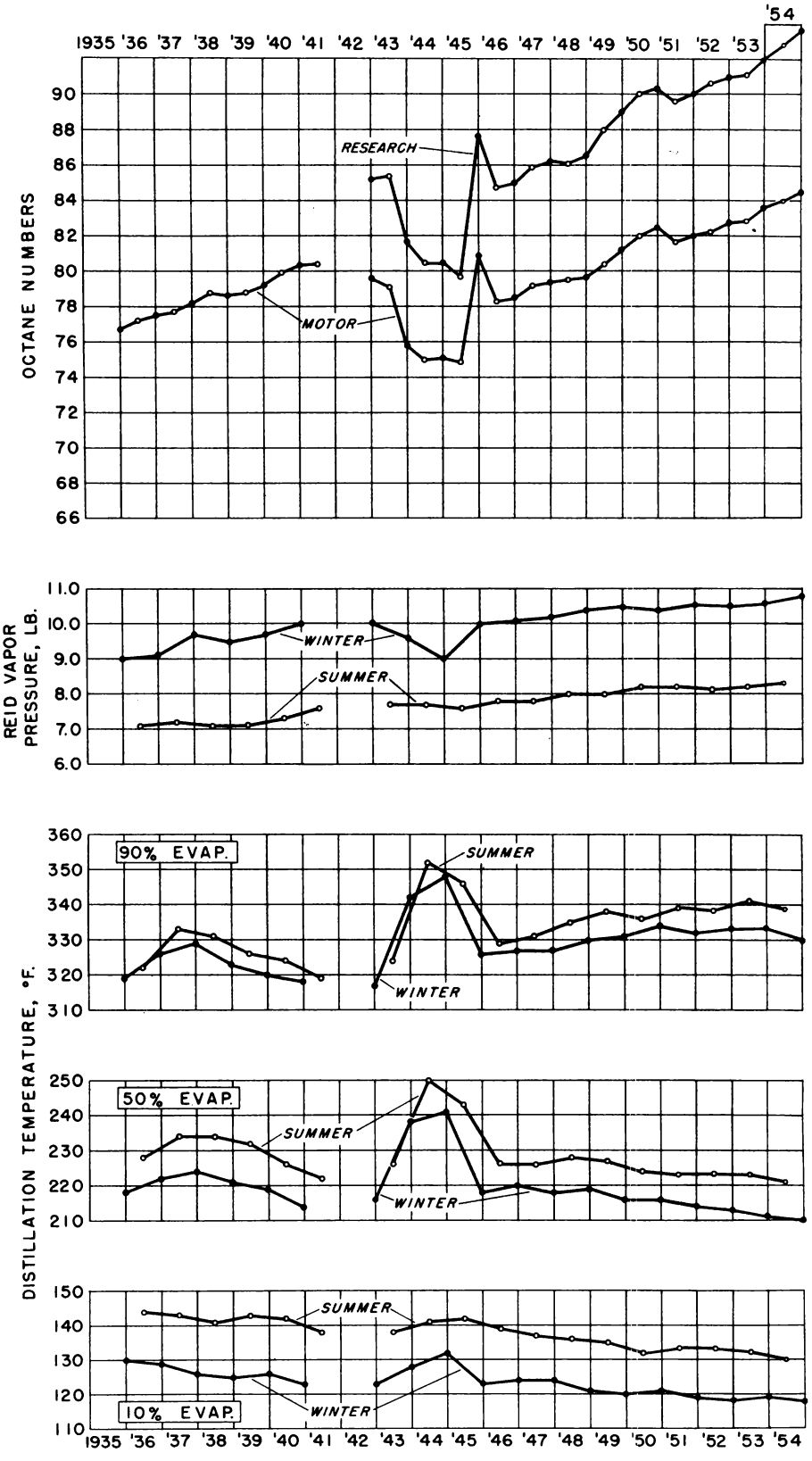

Figure 2.-Trends of certain characteristics of premium-price gasolines.

LIST OF NATIONAL MOTOR-GASOLINE SURVEYS, 1945-1955

Author	Season and year	R.I. No.	Published	Pages
In cooperation with the Coordinating Research Council, Inc.				
Blade, O. C.	Winter 1944-45	3820	June 1945	27
Do.	Summer 1945	3883	Jan. 1946	34
Blade, O. C., and Sponsler, C.R.	Winter 1945-46	3959	July 1946	39
Blade, O. C.	Summer 1946	4063	Dec. 1946	37
Do.	Winter 1946-47	4146	Aug. 1947	38
Do.	Summer 1947	4248	Jan. 1948	31
In cooperation with the American Petroleum Institute				
Blade, O. C.	Winter 1947-48	4354	July 1948	31
Do.	Summer 1948	4444	Dec. 1948	33
Do.	Winter 1948-49	4567	July 1949	33
Do.	Summer 1949	4644	Dec. 1949	32
Do.	Winter 1949-50	4702	June 1950	32
Do.	Summer 1950	4765	Dec. 1950	33
Do.	Winter 1950-51	4809	July 1951	34
Do.	Summer 1951	4854	Jan. 1952	24
Do.	Winter 1951-52	4901	July 1952	24
Do.	Summer 1952	4963	Feb. 1953	24
Do.	Winter 1952-53	5000	July 1953	24
Do.	Summer 1953	5041	Mar. 1954	24
Do.	Winter 1953-54	5066	June 1954	24
Do.	Summer 1954	5111	Jan. 1955	24
Do.	Winter 1954-55	This report		

District 3

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Southeast area: North Carolina, South Carolina, Georgia, Florida, Alabama, and eastern Tennessee

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
62	2	61.7	0	0.070	2.5	2.40	86.9	81.3	9.8	102	114	126	150	178	225	271	349	378	411	1.0	2.0
63	20	61.7	0	.059	1.9	1.82	89.0	82.5	10.1	90	107	122	147	172	221	270	339	368	413	.9	1.7
64	24	60.1	0	.071	1.7	2.47	87.8	81.5	9.6	96	110	127	156	182	231	278	342	371	409	1.0	1.7
65	1	63.2	1	.031	2.0	2.32	86.9	82.4	11.0	88	102	118	144	172	226	268	334	360	398	1.0	2.0
66	12	61.5	0	.072	.9	2.83	89.8	83.6	8.9	95	114	129	155	177	216	257	314	343	384	1.0	1.3
67	1	62.5	1	.024	1.0	2.09	87.5	82.4	9.2	100	120	134	156	178	224	266	330	360	406	1.1	1.3
68	13	61.6	1	.062	1.5	2.54	88.3	82.8	10.4	89	108	123	149	174	220	266	334	367	409	.8	1.7
69	7	58.8	1	.050	1.3	1.47	90.9	83.1	9.4	90	104	120	145	167	225	285	359	386	419	1.0	2.0
70	1	61.7	1	.063	1.0	2.46	87.4	81.7	10.8	92	110	126	152	176	222	266	334	368	416	.8	1.2
71	14	62.8	0	.046	1.8	1.70	88.1	82.1	10.1	93	110	124	150	172	216	257	336	373	416	.9	1.7
72	1	62.2	0	.034	1.0	2.55	86.9	83.2	10.0	90	104	120	142	166	216	262	332	360	410	.9	1.3
73	1	60.3	1	.032	1.0	2.65	87.0	83.2	8.6	96	116	132	156	182	232	274	328	370	406	.9	1.5
74	17	61.1	0	.054	2.2	2.05	87.8	81.9	9.6	94	110	126	151	177	223	269	338	372	416	1.0	1.3
75	15	62.7	0	.067	(OILY)	1.59	88.2	81.6	10.8	89	102	115	137	160	210	266	340	373	408	1.0	2.0
76	17	61.3	1	.037	1.9	2.66	87.5	82.8	9.8	93	110	126	153	177	221	262	331	364	399	1.0	1.7
77	22	61.6	0	.050	2.6	2.25	87.5	81.7	10.2	94	109	125	153	180	229	276	345	376	410	.9	1.7
78	5	61.6	0	.042	(OILY)	2.09	87.1	81.5	10.2	97	112	128	156	184	229	273	342	375	416	1.0	1.8
79	4	60.3	1	.058	2.6	2.81	89.4	84.1	9.4	91	107	125	157	184	228	267	326	354	394	.7	2.3
80	8	62.5	0	.047	(OILY)	1.77	89.3	83.1	10.8	92	105	119	144	169	221	274	342	372	421	1.0	2.1
AVERAGE	-	61.5	0	0.051	1.7	2.24	88.1	82.4	9.9	93	109	124	150	175	223	269	337	368	408	0.9	1.7
MINIMUM	-	58.8	0	0.024	0.9	1.47	86.9	81.3	8.6	88	102	115	137	160	210	257	314	343	384	0.7	1.2
MAXIMUM	-	63.2	1	.072	2.6	2.83	90.9	84.1	11.0	102	120	134	157	184	232	285	359	386	421	1.1	2.3
SAMPLES	185																				

Premium-price gasoline

81	13	62.1	1	0.053	(OILY)	2.59	95.5	84.9	10.2	91	106	120	140	160	205	256	324	357	410	0.9	1.5
82	1	61.6	1	.028	1.0	2.40	93.8	85.6	9.4	94	116	132	154	178	224	276	342	372	412	1.1	1.1
83	12	59.8	0	.072	2.7	2.87	94.8	85.2	9.0	94	111	126	149	173	220	271	340	368	403	1.0	1.4
84	1	62.1	1	.037	2.0	2.70	93.4	85.2	11.1	90	106	120	146	170	222	276	348	376	404	.9	1.2
85	24	59.9	0	.053	(OILY)	2.57	95.0	85.3	9.4	97	112	126	150	173	217	268	327	352	396	1.0	1.6
86	19	62.9	0	.050	2.1	2.12	95.1	85.6	9.9	91	107	120	140	159	203	254	323	357	403	.9	1.6
87	2	64.6	0	.045	(OILY)	2.07	94.7	84.6	10.7	97	111	118	135	154	196	254	341	371	409	1.0	2.0
88	8	65.6	0	.045	(OILY)	2.42	96.1	86.6	10.9	92	105	116	134	152	192	239	303	331	387	1.0	1.6
89	4	60.8	1	.049	4.1	2.73	94.6	85.6	9.4	91	106	121	148	174	219	264	324	350	390	.7	2.2
90	6	63.3	0	.046	(OILY)	2.59	94.4	85.2	10.1	95	110	122	142	165	208	261	322	350	398	1.0	1.4
91	22	62.0	0	.047	2.4	2.32	94.7	85.6	10.2	93	108	121	141	162	204	256	340	374	409	.9	1.4
92	16	62.7	0	.040	1.4	.00	94.7	83.3	10.3	93	107	119	139	162	210	260	330	357	390	1.0	1.3
93	15	58.5	1	.068	(OILY)	2.09	94.8	85.4	11.0	89	103	117	143	172	232	279	349	380	412	.9	1.8
94	17	61.1	0	.053	2.3	2.19	94.4	85.0	10.1	93	107	121	145	167	212	262	336	368	405	1.0	1.6
95	1	61.7	1	.046	2.0	2.59	95.0	85.4	10.0	94	110	124	144	164	210	262	330	360	410	.8	1.6
96	1	62.1	1	.035	(OILY)	2.84	95.3	86.6	10.3	92	106	119	138	156	210	260	328	360	404	1.0	1.5
97	14	63.3	0	.047	(OILY)	1.87	95.2	85.1	10.1	94	108	119	138	159	197	246	329	364	411	1.0	1.7
98	1	62.3	1	.057	3.0	2.42	95.4	84.2	10.2	90	108	122	138	158	204	254	322	352	402	1.0	1.2
AVERAGE	-	62.0	0	0.048	2.3	2.30	94.8	85.2	10.1	93	108	121	142	164	210	261	331	361	403	1.0	1.5
MINIMUM	-	58.5	0	0.028	1.0	0.00	93.4	83.3	9.0	89	103	116	134	152	192	239	303	331	387	0.7	1.1
MAXIMUM	-	65.6	1	.072	4.1	2.87	96.1	86.6	11.1	97	116	132	154	178	232	279	349	380	412	1.1	2.2
SAMPLES	177																				

District 1

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Northeast area: Maine, Massachusetts, New Hampshire, Vermont, and northern New York

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
1	1	61.9	0	0.060	2.0	2.46	88.0	81.6	10.4	89	107	127	158	182	225	269	323	347	384	1.0	2.0
2	3	61.7	0	.037	2.0	2.68	88.9	83.1	11.5	91	100	116	142	169	219	268	338	368	405	1.0	2.3
3	15	62.5	1	.080	(OILY)	1.87	91.7	82.9	12.1	87	97	114	142	168	217	264	326	351	395	1.0	3.1
4	3	60.4	1	.057	2.0	2.63	89.8	83.6	9.7	98	112	126	151	175	221	267	339	369	408	1.0	1.5
5	12	64.0	1	.113	3.2	2.69	89.0	83.1	12.7	87	96	110	131	154	205	253	331	365	409	1.0	2.1
6	10	61.6	1	.074	2.5	2.66	90.2	83.2	10.9	89	100	114	138	164	217	270	335	362	396	1.0	2.1
7	4	62.2	1	.083	1.8	1.85	90.1	83.3	11.0	88	97	116	143	164	212	264	336	367	408	1.0	2.3
8	10	63.3	1	.041	2.5	1.51	90.4	83.4	11.9	86	96	110	133	157	204	251	341	375	410	.9	3.0
9	10	62.9	0	.065	(OILY)	2.13	89.2	83.0	12.4	89	100	112	135	160	213	265	338	369	405	1.0	2.3
10	5	63.0	1	.065	1.4	2.68	90.9	84.6	12.5	89	99	113	138	164	214	257	318	344	391	.9	2.5
11	1	62.3	1	.080	1.4	1.90	90.5	83.0	12.0	81	89	108	136	161	211	264	346	374	420	1.0	3.0
12	10	62.1	1	.044	1.4	1.39	90.1	83.4	11.9	89	97	114	140	168	215	262	349	383	415	.9	2.9
13	10	61.1	1	.048	1.2	1.61	91.1	84.2	12.6	85	93	108	132	158	215	270	354	387	420	.9	3.0
14	1	63.9	0	.080	1.0	1.88	90.2	82.4	11.6	87	99	112	135	157	203	257	334	373	428	1.0	1.0
15	11	64.0	1	.045	1.6	2.26	89.5	84.3	11.8	88	99	114	136	157	203	251	318	348	393	.9	2.8
16	7	62.4	1	.070	2.0	2.41	90.3	83.3	11.0	90	105	118	140	163	214	265	330	359	398	1.0	1.8
AVERAGE	-	62.5	1	0.065	1.9	2.16	90.0	83.3	11.6	88	99	115	139	164	213	262	335	365	405	1.0	2.4
MINIMUM	-	60.4	0	0.037	1.0	1.39	88.0	81.6	9.7	81	89	108	131	154	203	251	318	344	384	0.9	1.0
MAXIMUM	-	64.0	1	.113	3.2	2.69	91.7	84.6	12.7	98	112	127	158	182	225	270	354	387	428	1.0	3.1
SAMPLES	113																				

Premium-price gasoline

17	9	65.7	1	0.038	(OILY)	1.56	95.5	85.3	12.0	86	97	109	124	141	183	236	321	358	411	1.0	1.9
18	4	63.1	1	.061	1.9	1.93	95.2	85.3	10.8	88	101	114	136	156	204	257	322	349	404	1.0	1.8
19	10	62.7	1	.056	(OILY)	2.62	95.2	86.3	11.0	91	102	114	136	158	203	252	316	342	382	1.0	1.6
20	12	61.2	1	.097	(OILY)	2.63	95.0	84.8	12.0	86	96	108	133	156	206	260	334	361	392	1.0	2.3
21	3	61.1	1	.056	4.0	2.48	94.3	85.0	11.2	94	105	118	141	164	212	263	327	354	401	1.0	1.5
22	15	65.0	1	.085	(OILY)	2.52	96.8	84.8	12.4	88	96	109	129	148	193	241	304	330	378	1.1	2.4
23	3	64.0	0	.032	1.5	.00	94.8	83.4	12.2	88	99	111	130	152	204	258	331	359	391	1.0	1.5
24	1	61.0	0	.090	2.0	3.00	94.6	83.4	11.6	80	93	113	147	177	229	277	337	361	386	1.0	2.0
25	11	60.5	1	.056	(OILY)	2.46	95.0	85.8	12.4	88	98	113	140	162	222	281	354	386	421	1.0	2.6
26	5	61.7	1	.082	1.4	2.79	95.2	85.6	12.2	89	99	112	136	161	213	265	334	362	396	1.0	2.2
27	10	65.0	1	.036	(OILY)	1.70	95.7	85.5	11.3	91	101	112	129	146	185	234	326	364	412	1.0	1.7
28	7	63.2	1	.061	(OILY)	2.33	96.0	85.4	10.6	90	103	116	135	153	197	248	312	342	395	1.0	1.7
29	12	64.0	1	.040	2.3	2.39	95.2	86.1	11.8	89	99	112	132	152	196	244	312	342	387	.9	2.4
30	1	65.0	0	.070	3.0	1.71	94.8	84.9	10.7	84	96	108	130	152	194	245	322	355	387	1.0	1.0
AVERAGE	-	63.1	1	0.061	2.3	2.15	95.2	85.1	11.6	88	99	112	134	156	203	254	325	355	396	1.0	1.9
MINIMUM	-	60.5	0	0.032	1.4	0.00	94.3	83.4	10.6	80	93	108	124	141	183	234	304	330	378	0.9	1.0
MAXIMUM	-	65.7	1	.097	4.0	3.00	96.8	86.3	12.4	94	105	118	147	177	229	281	354	386	421	1.1	2.6
SAMPLES	103																				

District 2

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Mid-Atlantic Coast region: Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, central and southern New York, and eastern Pennsylvania

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
31	29	61.1	1	0.047	1.9	2.70	89.1	82.8	11.2	87	100	116	144	173	224	271	343	370	402	1.0	2.7
32	35	61.4	1	.032	1.5	1.65	91.0	84.1	12.4	84	94	109	133	159	216	274	357	390	421	1.0	2.8
33	6	63.0	1	.067	1.1	2.04	90.3	83.5	11.2	91	102	117	136	159	210	256	328	358	398	1.0	1.8
34	38	62.1	1	.068	2.0	2.25	90.1	82.2	11.0	90	103	117	142	168	219	271	338	367	402	1.0	2.0
35	7	64.1	1	.074	2.3	2.18	89.4	84.4	11.3	88	99	113	133	156	206	258	330	360	404	.9	2.7
36	2	60.9	1	.048	1.3	2.83	86.2	82.2	9.3	92	111	126	159	189	231	269	325	353	392	1.0	2.0
37	28	61.5	1	.050	1.5	2.56	90.1	83.0	10.0	91	108	123	147	171	220	267	332	359	402	.9	2.0
38	42	62.6	1	.056	(OIL Y)	2.04	90.8	83.2	12.0	86	99	113	139	165	217	265	332	363	411	1.0	2.6
39	16	62.5	1	.068	1.6	2.17	89.4	83.2	10.8	88	101	116	139	163	211	261	330	362	405	.9	1.9
40	38	63.0	1	.057	1.1	2.34	90.9	84.1	11.8	86	98	114	140	165	213	259	325	354	398	1.0	2.6
41	37	63.1	1	.066	1.6	2.58	88.9	82.8	12.0	86	98	113	138	164	213	261	337	371	409	.9	2.4
42	28	63.0	1	.037	1.4	1.75	90.2	83.3	11.1	87	99	115	139	163	208	253	337	371	407	1.0	2.7
43	23	62.5	1	.055	(OIL Y)	1.75	89.1	82.3	12.0	86	97	111	135	160	214	268	343	372	406	.9	2.5
44	21	62.9	1	.046	1.6	2.39	89.5	84.8	11.9	85	96	111	136	161	212	262	334	368	412	.9	2.8
45	19	63.8	1	.093	2.2	1.44	90.6	82.1	11.6	86	98	112	133	155	202	254	334	367	412	1.0	2.4
46	1	62.2	1	.055	3.0	2.61	89.0	82.6	11.7	85	98	114	140	170	224	274	348	380	410	.7	2.5
AVERAGE	-	62.5	1	0.057	1.7	2.21	89.7	83.2	11.3	87	100	115	140	165	215	264	336	367	406	0.9	2.4
MINIMUM	-	60.9	1	0.032	1.1	1.44	86.2	82.1	9.3	84	94	109	133	155	202	253	325	353	392	0.7	1.8
MAXIMUM	-	64.1	1	.093	3.0	2.83	91.0	84.8	12.4	92	111	126	159	189	231	274	357	390	421	1.0	2.8
SAMPLES	370																				

Premium-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
47	36	61.8	1	0.059	1.2	2.48	94.9	85.3	11.8	86	97	112	137	163	216	266	337	368	404	1.0	2.7
48	16	62.9	1	.063	2.2	1.91	94.4	84.6	10.9	87	102	114	133	154	202	254	323	350	397	1.0	1.7
49	40	63.8	1	.054	(OIL Y)	2.55	96.5	86.0	11.7	88	100	111	129	148	191	241	305	339	394	1.0	1.9
50	28	62.4	1	.059	(OIL Y)	2.24	95.4	84.1	10.8	89	105	118	138	158	204	251	313	344	402	.9	1.8
51	2	62.8	1	.029	1.4	2.67	94.4	86.0	10.4	91	103	113	130	152	206	262	330	357	391	.9	1.5
52	7	62.9	1	.065	3.6	2.09	93.1	84.8	11.2	85	96	111	129	154	207	264	333	364	415	.8	2.2
53	35	63.3	1	.057	(OIL Y)	2.51	95.2	85.1	10.7	90	103	117	141	164	211	259	326	354	404	1.0	2.0
54	3	63.8	0	.076	(OIL Y)	2.15	94.6	84.2	10.6	94	106	118	138	157	199	245	318	349	391	1.0	1.4
55	27	64.0	1	.036	1.0	.00	94.6	83.4	11.4	86	97	110	130	152	204	257	330	357	393	.9	2.1
56	1	63.4	1	.047	(OIL Y)	2.35	94.3	86.0	10.3	94	110	121	138	154	192	242	346	380	412	.9	1.3
57	20	62.8	1	.069	2.1	1.74	95.4	84.8	12.4	85	97	112	136	161	206	250	319	353	400	1.0	3.0
58	21	62.7	1	.042	1.8	2.57	94.1	86.3	11.5	88	99	112	133	157	207	260	331	364	408	.9	2.4
59	23	60.1	1	.048	(OIL Y)	2.01	94.7	84.7	12.2	87	97	111	137	166	227	283	356	384	413	1.0	2.9
60	30	64.5	1	.037	(OIL Y)	1.69	95.3	84.7	11.2	88	101	112	129	147	189	239	318	357	412	1.0	1.9
61	33	62.1	1	.061	(OIL Y)	2.76	94.8	85.0	11.9	87	98	111	133	157	209	264	338	364	394	.9	2.6
AVERAGE	-	62.9	1	0.053	1.9	2.11	94.8	85.0	11.3	88	101	114	134	156	205	256	328	359	402	0.9	2.1
MINIMUM	-	60.1	0	0.029	1.0	0.00	93.1	83.4	10.3	85	96	110	129	147	189	239	305	339	391	0.8	1.3
MAXIMUM	-	64.5	1	.076	3.6	2.76	96.5	86.3	12.4	94	110	121	141	166	227	283	356	384	415	1.0	3.0
SAMPLES	322																				

District 4

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Appalachian area: West Virginia, western New York, western Pennsylvania, eastern Kentucky, and a small portion of Maryland

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Loss
99	5	61.9	1	0.064	3.1	2.70	88.3	82.2	11.0	92	98	119	146	172	218	260	327	369	438	1.3	3.2
100	22	61.9	1	.037	1.4	1.10	91.2	83.3	13.5	83	92	104	133	162	217	273	354	386	420	1.0	3.6
101	14	63.0	1	.069	1.0	1.91	90.7	83.6	12.6	85	95	110	135	161	211	260	331	370	412	1.0	3.6
102	2	61.7	1	.060	1.9	2.30	89.3	82.3	10.2	86	99	118	142	167	215	265	330	358	402	1.0	2.5
103	20	62.3	1	.046	1.8	2.29	89.1	82.4	10.7	91	107	124	152	177	222	266	329	361	395	1.0	2.4
104	8	60.3	0	.043	1.4	1.09	87.6	80.6	11.1	89	103	122	153	179	232	282	356	387	426	1.1	2.8
105	22	61.3	1	.051	2.1	1.96	88.9	82.8	10.8	89	103	120	147	174	225	275	340	366	398	1.0	2.3
106	17	64.2	1	.058	2.9	2.45	88.9	82.5	12.2	89	99	116	141	165	210	255	326	358	401	1.0	3.0
107	2	64.5	1	.040	1.3	1.79	90.1	82.2	12.5	85	94	112	137	160	207	255	326	362	401	1.0	3.1
108	12	62.4	1	.061	(0 I L Y)	2.15	91.2	83.7	12.3	83	92	112	141	168	219	264	336	369	423	1.0	3.3
109	8	63.3	0	.057	3.3	2.79	87.3	82.2	11.3	94	106	123	149	174	219	265	336	373	414	1.0	2.8
110	19	62.6	0	.048	2.0	2.19	89.0	82.7	11.4	89	100	117	143	170	219	267	338	372	415	1.0	2.5
111	12	61.3	0	.044	2.3	2.17	89.1	81.7	11.2	89	103	118	144	170	221	275	344	373	408	1.0	2.5
112	4	64.1	0	.047	1.1	2.18	89.6	83.0	11.5	91	106	122	148	174	216	258	324	361	415	1.0	1.6
113	11	64.3	0	.082	2.9	1.95	88.4	81.8	12.1	89	99	111	132	153	199	250	322	356	398	1.1	2.7
114	1	64.1	0	.049	3.0	2.71	88.3	83.2	12.1	90	102	118	140	164	212	262	350	384	424	.9	2.4
115	4	65.3	0	.035	1.7	2.84	88.8	83.7	12.6	88	98	112	135	158	206	259	319	347	384	.9	2.6
116	6	64.3	1	.059	2.0	2.24	88.9	82.6	11.8	88	98	113	137	162	210	256	336	376	411	1.0	2.7
117	1	65.2	1	.037	2.0	2.79	89.4	82.8	12.7	90	104	120	146	172	216	256	316	340	366	.9	2.5
118	2	65.5	0	.023	1.6	2.24	88.8	84.1	13.4	87	93	106	122	138	181	238	310	339	379	.9	2.6
119	9	63.6	1	.058	2.1	2.03	88.6	81.1	11.6	88	101	119	144	168	214	260	329	362	402	1.0	2.9
120	2	64.5	1	.035	1.5	2.99	88.8	82.6	12.4	91	104	121	150	176	220	260	316	341	374	1.0	2.7
121	2	62.0	1	.027	1.6	2.44	91.3	84.3	11.8	88	99	116	142	166	216	267	331	352	401	.9	2.3
122	3	67.1	1	.059	2.2	2.82	87.6	83.8	12.2	94	—	116	145	170	211	250	305	328	384	1.4	6.6
123	1	62.7	1	.042	3.0	2.39	90.0	82.5	11.4	89	111	122	144	172	220	265	337	388	414	1.0	2.0
124	1	64.9	0	.050	(0 I L Y)	1.67	87.2	81.9	10.3	88	101	116	141	163	205	253	320	351	390	1.0	2.0
125	1	64.1	—	—	3.0	2.24	90.0	83.5	12.8	86	95	120	146	172	215	256	315	349	414	1.0	2.0
AVERAGE	-	63.4	1	0.049	2.1	2.24	89.1	82.7	11.8	89	100	117	142	167	214	261	330	362	404	1.0	2.8
MINIMUM	-	60.3	0	0.023	1.0	1.09	87.2	80.6	10.2	83	92	104	122	138	181	238	305	328	366	0.9	1.6
MAXIMUM	-	67.1	1	.082	3.3	2.99	91.3	84.3	13.5	94	111	124	153	179	232	282	356	388	438	1.4	6.6
SAMPLES	211																				

Premium-price gasoline

126	11	62.2	0	0.077	(0 I L Y)	2.38	93.7	85.1	12.1	89	98	111	134	156	210	263	335	370	409	1.0	2.5
127	2	63.5	1	.038	0.9	2.90	93.4	84.6	11.3	91	104	121	144	169	213	256	331	355	406	.9	1.7
128	12	63.3	0	.038	2.8	1.38	93.8	84.1	11.7	89	99	112	133	156	203	257	346	380	403	1.0	2.5
129	19	61.9	1	.044	1.4	2.57	94.4	85.5	12.1	87	97	111	133	157	207	267	356	388	424	1.0	2.6
130	7	62.3	0	.052	3.2	2.92	93.0	84.2	12.0	91	103	120	146	171	220	268	355	396	430	1.1	3.2
131	12	63.7	1	.048	(0 I L Y)	2.58	96.6	85.8	12.2	87	97	110	128	148	192	241	311	348	408	1.0	2.3
132	1	61.7	1	.060	2.2	2.68	95.0	85.0	11.8	78	92	110	137	164	224	282	343	366	394	1.0	2.0
133	17	63.7	1	.059	(0 I L Y)	2.60	94.5	84.9	12.2	88	100	113	136	159	209	261	330	356	390	1.0	2.7
134	23	61.1	1	.045	(0 I L Y)	1.97	94.1	84.4	10.5	90	103	119	143	166	219	275	344	371	414	1.0	2.0
135	8	59.7	0	.042	2.4	1.81	94.5	84.3	10.8	88	102	120	148	175	227	280	353	384	424	1.1	2.4
136	20	63.2	1	.040	(0 I L Y)	2.46	94.8	84.1	10.6	91	106	122	144	164	208	252	311	345	396	1.0	2.3
137	15	63.0	1	.074	1.9	2.42	94.3	85.8	12.2	87	97	115	138	163	213	261	337	372	411	1.0	3.0
138	6	63.8	1	.039	1.3	.00	94.8	84.3	11.5	91	103	118	139	160	205	256	325	353	393	1.1	1.6
139	1	62.2	1	.051	4.0	2.87	93.4	84.6	12.5	88	98	114	144	172	224	278	368	400	426	1.0	2.9
140	4	62.8	0	.018	3.2	2.82	93.9	88.2	11.7	90	103	118	137	157	200	245	306	333	393	.9	1.7
141	6	66.2	1	.059	(0 I L Y)	2.35	94.6	85.4	11.2	92	102	114	131	149	190	235	318	362	403	1.1	2.3
142	1	64.2	1	.020	2.0	2.86	94.4	85.2	12.3	88	102	118	142	166	214	262	324	348	374	.9	1.6
143	2	64.3	0	.024	3.0	2.85	94.7	88.5	12.5	88	97	111	129	150	193	245	307	333	384	.9	2.1
144	10	65.0	0	.066	2.2	2.18	94.1	84.0	11.7	90	103	116	135	154	194	240	316	351	394	1.0	2.1
145	2	64.9	1	.025	3.5	2.68	94.1	84.9	13.3	92	97	111	136	159	211	259	320	343	378	.9	3.2
146	2	61.9	1	.013	1.6	2.78	94.6	86.4	12.0	91	102	113	135	159	212	262	323	346	400	.9	1.9
147	3	63.5	1	.068	(0 I L Y)	2.54	92.9	83.9	10.4	98	106	124	147	171	214	258	337	378	436	1.4	3.6
148	1	61.4	1	.046	1.0	2.27	94.5	85.5	12.5	88	101	114	136	156	206	268	366	401	434	1.0	3.0
149	1	64.3	0	.060	(0 I L Y)	1.57	95.4	84.0	10.2	98	109	121	142	162	202	247	318	353	400	1.0	1.0
150	1	61.2	—	—	4.4	2.19	94.1	83.9	9.8	96	114	136	152	171	216	265	348	366	422	1.0	1.0
AVERAGE	-	63.0	1	0.046	2.4	2.35	94.3	85.1	11.6	90	101	116	139	161	209	259	333	364	406	1.0	2.3
MINIMUM	-	59.7	0	0.013	0.9	0.00	92.9	83.9	9.8	78	92	110	128	148	190	235	306	333	374	0.9	1.0
MAXIMUM	-	66.2	1	.077	4.4	2.92	96.6	88.5	13.3	98	114	136	152	175	227	282	368	401	436	1.4	3.6
SAMPLES	187																				

District 5

Michigan

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Loss
151	6	62.5	1	0.032	2.4	0.99	90.9	83.1	13.7	82	91	107	132	160	215	271	353	384	421	0.9	3.4
152	11	64.9	1	.074	2.6	1.97	87.7	81.2	12.0	82	98	110	130	151	198	251	328	363	404	.9	2.1
153	1	62.5	1	.020	1.0	2.95	86.0	81.9	10.4	100	116	132	154	172	204	236	282	304	332	.7	1.5
154	7	63.2	1	.046	2.0	1.61	88.1	81.8	10.3	88	105	124	153	177	220	263	334	367	400	.8	2.7
155	10	63.5	1	.058	1.6	1.96	88.6	81.3	11.2	84	100	117	142	170	217	261	335	372	405	1.0	2.3
156	1	70.0	1	.025	1.0	.95	88.0	82.4	13.7	86	92	102	116	130	170	230	300	326	360	1.0	2.3
157	15	64.3	1	.087	1.8	1.97	87.5	81.0	12.0	86	100	114	137	159	203	248	318	349	392	.9	2.1
158	1	62.5	1	.070	3.0	2.69	86.6	80.8	11.5	92	112	130	156	182	222	260	314	338	378	.9	2.1
159	13	62.4	1	.066	2.0	1.91	88.2	81.4	10.8	88	102	117	141	167	216	268	331	358	389	.9	1.6
160	10	64.1	1	.050	1.0	1.83	88.2	81.8	12.1	86	100	117	143	166	209	252	328	359	395	.9	2.5
161	5	64.8	0	.060	1.5	2.28	88.4	82.5	11.2	85	100	116	138	162	209	258	330	362	402	1.0	2.0
162	3	61.7	0	.100	2.3	2.73	87.5	81.1	10.3	94	110	127	152	174	216	261	327	357	399	1.0	2.0
163	5	61.8	1	.037	1.8	2.00	89.5	82.1	10.4	86	99	115	140	164	217	271	340	371	407	.9	2.1
164	1	63.4	1	.070	2.0	2.33	86.6	80.4	10.1	90	112	124	146	166	212	262	336	362	390	.8	1.4
AVERAGE	-	63.7	1	0.057	1.9	2.01	88.0	81.6	11.4	88	103	118	141	164	209	257	325	355	391	0.9	2.2
MINIMUM	-	61.7	0	0.020	1.0	0.95	86.0	80.4	10.1	82	91	102	116	130	170	230	282	304	332	0.7	1.4
MAXIMUM	-	70.0	1	.100	3.0	2.95	90.9	83.1	13.7	100	116	132	156	182	222	271	353	384	421	1.0	3.4
SAMPLES	89																				

Premium-price gasoline

165	1	62.7	1	0.093	1.0	2.26	94.0	84.0	11.0	92	112	122	142	174	211	250	326	385	414	1.0	1.0
166	10	63.3	1	.058	(OIL Y)	2.25	93.9	84.8	12.7	81	94	108	128	153	205	262	340	378	412	.9	2.1
167	7	63.8	1	.035	.7	2.48	94.3	84.5	11.0	91	108	120	142	162	206	252	311	345	381	.9	1.7
168	9	66.5	1	.060	1.7	2.33	94.0	84.0	11.5	87	101	115	134	152	189	231	309	347	387	.9	2.1
169	1	62.2	1	.037	(OIL Y)	1.14	92.8	83.2	11.7	92	100	114	132	154	222	276	318	340	372	.7	2.0
170	14	64.2	1	.092	2.2	2.07	94.2	84.1	11.9	86	98	112	133	154	199	247	320	352	386	.9	1.9
171	10	63.1	0	.076	(OIL Y)	2.15	94.5	84.0	12.1	86	99	114	138	159	201	244	317	350	395	.9	2.3
172	1	57.9	1	.047	2.0	2.88	91.7	84.4	10.1	90	104	126	162	190	230	262	306	328	360	.6	3.1
173	12	61.1	1	.035	(OIL Y)	2.14	93.7	84.9	9.9	93	107	120	140	160	208	267	340	367	403	.9	1.6
174	1	63.4	0	.060	2.6	2.07	92.0	82.7	11.1	80	100	115	136	153	195	238	317	357	382	.7	2.3
175	10	63.9	1	.046	2.5	2.33	94.4	85.1	11.9	85	99	112	132	152	197	252	331	364	393	.9	1.6
176	5	66.3	0	.053	(OIL Y)	2.62	93.9	85.8	11.4	86	97	111	133	155	197	243	321	359	400	1.0	2.4
177	2	62.3	1	.098	3.0	2.65	96.3	84.7	11.6	89	97	115	130	153	215	276	345	370	397	.8	2.6
178	5	63.6	1	.034	2.1	1.36	94.2	84.0	11.5	88	100	113	134	157	202	256	341	377	409	.9	2.1
179	1	60.3	1	.027	1.0	3.00	94.1	87.3	11.3	90	102	122	160	194	234	270	320	344	396	.9	2.5
180	1	62.6	0	.057	1.0	3.00	93.4	85.5	11.5	88	103	120	146	172	217	266	343	392	432	1.0	1.8
AVERAGE	-	63.0	1	0.057	1.8	2.30	93.8	84.6	11.4	88	101	116	139	162	208	256	325	360	395	0.9	2.1
MINIMUM	-	57.9	0	0.027	0.7	1.14	91.7	82.7	9.9	80	94	108	128	152	189	231	306	328	360	0.6	1.0
MAXIMUM	-	66.5	1	.098	3.0	3.00	96.3	87.3	12.7	93	112	126	162	194	234	276	345	392	432	1.0	3.1
SAMPLES	90																				

District 6

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

North Illinois area: Northern Indiana, northern Illinois, eastern Iowa, and Wisconsin

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
181	15	62.7	1	0.062	2.8	1.41	85.2	79.3	11.1	89	101	118	150	180	224	262	337	367	400	1.1	2.7
182	21	63.6	1	.064	1.6	1.22	84.8	79.1	11.0	88	99	114	139	166	213	254	316	345	384	.9	2.4
183	15	64.7	0	.066	1.3	2.16	85.0	79.9	12.1	87	95	113	141	166	207	247	316	355	413	.9	3.4
184	23	65.6	0	.097	.7	1.72	85.1	79.8	12.2	85	95	109	131	155	199	240	306	339	381	1.0	2.7
185	7	65.1	1	.054	2.1	1.95	85.0	81.2	11.6	89	99	111	135	161	213	261	335	369	422	1.1	2.3
186	10	61.7	0	.052	1.2	1.68	85.6	79.8	11.1	88	101	118	148	178	225	268	337	365	402	.9	2.5
187	16	63.1	1	.088	2.4	1.62	84.7	79.8	12.4	88	98	111	132	155	202	251	325	359	409	1.1	2.3
188	5	63.6	1	.039	.0	1.37	84.6	79.9	12.0	92	100	114	141	166	214	259	326	358	402	.7	2.4
189	8	65.6	1	.064	1.4	2.26	85.4	82.2	12.7	90	96	112	138	163	216	260	336	370	406	1.2	3.4
190	1	67.2	1	.023	4.0	2.59	85.5	82.6	11.5	86	100	118	138	177	228	270	333	362	410	.4	2.6
191	9	69.5	0	.035	.7	1.74	84.9	81.7	13.4	85	93	101	116	132	179	243	323	357	406	.9	2.5
192	1	65.0	1	.307	1.0	1.62	84.5	80.3	11.2	87	94	103	138	161	209	259	321	357	422	.5	1.0
193	4	63.6	1	.055	2.1	1.53	85.3	79.7	11.3	92	104	119	148	175	220	261	333	365	402	1.1	3.2
194	6	64.1	1	.057	1.2	1.99	85.6	81.3	11.4	87	99	112	139	167	220	265	333	362	401	1.0	2.4
195	1	63.2	1	.030	2.8	.98	91.0	84.0	14.6	78		89	118	145	202	268	343	374	400	1.0	6.0
196	1	64.7	0	.080	1.8	2.14	85.2	81.4	12.2	86	97	107	132	163	218	265	334	364	397	1.0	4.0
AVERAGE	-	64.6	1	0.073	1.7	1.75	85.5	80.8	12.0	87	98	111	137	163	212	258	328	361	404	0.9	2.9
MINIMUM	-	61.7	0	0.023	0.0	0.98	84.5	79.1	11.0	78	93	89	116	132	179	240	306	339	381	0.4	1.0
MAXIMUM	-	69.5	1	.307	4.0	2.59	91.0	84.0	14.6	92	104	119	150	180	228	270	343	374	422	1.2	6.0
SAMPLES	143																				

Premium-price gasoline

197	20	62.6	1	0.042	(0 I L Y)	1.89	92.4	84.3	10.3	92	104	116	135	154	201	260	337	364	408	1.0	1.7
198	15	66.7	1	.058	2.4	1.76	92.7	83.0	11.3	88	99	112	132	150	188	231	303	337	383	1.0	1.8
199	5	63.7	0	.049	3.5	2.41	93.2	84.8	10.4	93	107	118	136	152	196	255	337	371	416	.4	.9
200	5	64.9	1	.062	(0 I L Y)	2.52	93.7	84.6	11.4	89	100	111	131	152	196	245	320	352	401	1.1	2.1
201	4	66.9	1	.058	1.4	1.99	92.6	83.3	11.7	90	101	112	131	148	186	230	308	341	382	1.0	1.9
202	1	66.8	1	.023	1.0	2.07	91.8	84.8	12.1	89	100	110	129	149	196	248	329	366	423	.3	.9
203	10	68.4	0	.040	.7	2.41	91.5	85.3	13.5	85	93	102	116	133	180	243	328	361	403	.9	2.0
204	4	62.2	1	.030	1.0	2.04	93.8	85.8	12.6	87	94	106	124	159	209	264	338	366	422	.4	2.3
205	8	67.1	1	.063	(0 I L Y)	2.66	93.2	86.2	12.5	88	93	105	124	144	186	241	325	359	414	1.2	3.4
206	5	63.5	1	.058	.5	1.68	92.5	83.7	12.4	90	93	105	128	152	205	262	339	369	415	.7	3.2
207	16	62.6	1	.073	(0 I L Y)	2.13	92.4	84.6	12.2	88	95	109	132	157	209	260	330	360	409	1.1	3.4
208	10	64.4	0	.057	1.2	1.74	93.1	83.5	11.8	89	100	112	133	155	200	250	328	360	400	1.0	1.8
209	7	65.3	1	.062	2.3	2.16	91.7	84.1	11.3	91	102	113	131	151	197	248	329	367	420	1.0	1.6
210	23	63.7	0	.096	1.4	2.06	92.6	82.4	12.0	84	93	106	126	145	192	247	317	345	382	1.0	2.3
211	15	63.8	0	.057	2.2	1.64	93.5	83.4	12.2	86	94	106	124	144	195	261	345	372	404	.8	2.5
212	1	67.4	0	.081	1.8	2.36	94.4	85.8	12.0	89	98	109	124	140	180	234	327	366	430	1.0	2.0
AVERAGE	-	65.0	1	0.057	1.6	2.10	92.8	84.4	11.9	89	98	110	129	149	195	249	328	360	407	0.9	2.1
MINIMUM	-	62.2	0	0.023	0.5	1.64	91.5	82.4	10.3	84	93	102	116	133	180	230	303	337	382	0.3	0.9
MAXIMUM	-	68.4	1	.096	3.5	2.66	94.4	86.2	13.5	93	107	118	136	159	209	264	345	372	430	1.2	3.4
SAMPLES	149																				

District 7

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Central Mississippi area: Western Kentucky, southern Indiana, southern Illinois, and eastern Missouri

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
213	9	62.5	0	0.048	1.6	2.17	86.7	81.3	10.8	94	109	123	151	177	226	271	335	361	393	1.0	1.8
214	11	60.2	1	.035	2.3	.79	86.4	79.8	10.9	93	107	123	151	178	231	284	359	389	430	1.0	2.2
215	5	61.9	1	.030	2.0	.94	91.0	83.5	13.2	85	85	104	133	160	217	272	356	370	422	1.0	5.0
216	7	64.4	1	.032	2.8	1.73	86.7	82.5	11.5	89	98	116	142	168	215	261	328	359	417	1.0	3.0
217	9	64.8	0	.065	1.8	2.39	85.2	80.4	10.8	93	105	119	145	172	217	256	316	347	385	.9	2.2
218	2	65.8	1	.065	(OIL Y)	1.75	84.9	81.0	12.5	88	100	112	131	153	197	248	316	352	397	1.0	2.3
219	2	68.1	0	.034	1.5	1.93	85.0	82.0	12.2	92	101	107	121	138	185	249	325	365	413	.6	1.4
220	2	68.9	1	.028	.9	1.23	84.8	81.8	13.4	86	94	103	117	133	179	243	327	368	415	1.0	1.3
221	9	64.8	0	.067	2.0	1.63	85.3	80.6	12.0	88	99	117	144	170	219	266	331	360	397	.9	2.5
222	11	67.2	1	.038	1.1	1.77	85.0	81.1	12.5	86	97	107	125	145	192	248	321	354	405	.9	1.8
223	1	66.8	1	.040	2.4	1.92	85.0	81.5	11.6	88	96	109	130	148	199	253	325	360	391	1.0	2.0
224	2	64.9	0	.040	.8	2.18	84.7	80.3	11.8	91	104	116	143	169	214	254	313	344	376	1.0	2.0
225	5	63.0	1	.060	1.8	2.65	87.0	81.7	11.1	95	109	126	152	176	221	266	338	373	420	1.0	2.2
226	24	65.7	1	.066	1.5	1.86	84.4	79.6	12.0	88	97	111	133	156	203	249	315	346	389	.8	2.7
227	22	62.2	1	.043	2.1	1.60	85.8	80.3	10.4	91	104	122	149	175	224	272	335	360	393	1.0	2.2
228	1	62.9	1	.036	1.0	1.17	87.9	82.0	12.9	82	98	118	150	180	232	274	348	380	418	1.0	3.0
229	27	65.6	0	.088	2.3	1.68	85.3	80.1	12.4	87	97	110	131	154	200	248	316	345	391	.9	2.7
230	1	58.1	1	.007	1.0	.88	88.5	83.7	9.5	94	116	136	166	190	228	266	318	338	384	.8	2.2
231	4	64.1	1	.043	1.0	.89	89.0	82.0	12.7	83	92	110	135	159	205	252	326	360	410	.8	3.3
232	1	70.4	1	.018	3.0	2.74	84.5	83.0	10.3	97	109	119	133	146	183	226	293	334	379	1.0	1.0
233	4	69.1	1	.048	2.3	2.46	84.4	81.6	10.2	91	107	119	137	156	194	233	288	324	357	1.0	1.8
234	2	60.5	0	.070	2.0	2.87	86.7	81.0	9.3	98	117	135	161	185	231	283	351	381	426	1.0	2.0
AVERAGE	-	64.6	1	0.046	1.8	1.78	86.1	81.4	11.5	90	102	116	140	163	210	258	326	358	400	0.9	2.3
MINIMUM	-	58.1	0	0.007	0.8	0.79	84.4	79.6	9.3	82	85	103	117	133	179	226	288	324	357	0.6	1.0
MAXIMUM	-	70.4	1	.088	3.0	2.87	91.0	83.7	13.4	98	117	136	166	190	232	284	359	389	430	1.0	5.0
SAMPLES	161																				

Premium-price gasoline

235	12	66.9	1	0.035	2.0	1.91	91.8	85.1	12.4	86	96	105	120	137	184	246	325	361	400	0.9	1.8
236	9	62.5	0	.124	1.9	1.59	92.9	82.8	11.1	90	102	116	138	162	213	266	337	369	413	.8	1.8
237	2	66.2	0	.025	1.3	1.97	91.9	85.2	11.5	90	99	108	126	144	19	250	330	364	405	.7	1.6
238	2	65.8	0	.027	2.5	1.97	91.7	84.9	11.9	90	100	108	124	143	191	253	335	368	414	.6	1.9
239	2	62.5	1	.064	(OIL Y)	1.69	92.8	84.6	11.4	90	103	119	143	166	217	270	347	389	430	.9	2.2
240	10	64.8	0	.061	2.9	2.39	92.7	84.7	11.0	92	105	120	142	165	209	250	323	354	387	.9	2.0
241	7	67.7	1	.036	.9	2.37	95.2	85.8	11.3	87	99	112	130	148	189	235	296	324	374	1.0	2.0
242	11	60.5	1	.032	3.0	1.76	94.6	84.8	10.5	93	109	126	155	185	242	295	364	396	437	1.0	1.9
243	9	63.4	0	.048	(OIL Y)	2.55	93.7	85.3	10.3	92	103	121	143	166	209	253	316	350	396	1.0	2.1
244	2	63.0	0	.060	.5	2.50	93.3	84.4	8.9	92	105	117	140	161	203	257	357	393	424	1.0	1.0
245	4	65.0	1	.030	1.1	2.77	93.0	85.0	10.8	90	103	115	135	157	205	257	334	371	413	1.0	1.0
246	1	62.8	1	.053	1.0	2.89	92.5	86.0	9.8	99	111	122	137	154	201	271	354	380	407	1.0	1.0
247	2	61.5	1	.054	2.0	2.43	93.4	85.5	12.0	96	103	114	136	152	200	262	338	369	416	1.0	2.0
248	4	61.8	0	.052	2.0	1.44	93.6	84.4	12.5	84	95	114	137	164	215	270	359	393	428	.9	3.0
249	1	58.7	1	.018	1.0	2.82	93.1	88.4	10.1	100	124	140	168	192	230	268	322	346	382	.8	1.2
250	27	63.2	0	.077	1.4	2.20	92.5	84.6	12.5	87	96	109	130	154	204	257	327	358	407	.9	2.5
251	1	61.8	1	.045	1.0	2.02	93.0	84.0	12.8	82	96	110	136	166	222	272	346	374	410	1.1	2.9
252	22	61.5	1	.037	(OIL Y)	1.93	92.8	84.6	10.6	91	106	119	142	164	214	271	344	371	411	1.0	1.8
253	22	65.6	1	.086	2.4	1.89	92.2	82.9	12.4	88	97	108	125	145	190	244	319	348	385	.8	2.0
254	5	63.0	1	.064	2.7	2.75	93.3	84.8	12.6	88	100	114	138	164	215	269	351	384	421	1.0	2.3
255	2	64.5	0	.052	.6	2.32	92.7	85.8	11.1	92	105	118	142	164	208	248	316	348	380	1.0	2.0
AVERAGE	-	63.5	1	0.051	1.7	2.20	93.0	84.9	11.3	90	103	116	137	160	207	260	335	367	407	0.9	1.9
MINIMUM	-	58.7	0	0.018	0.5	1.44	91.7	82.8	8.9	82	95	105	120	137	184	235	296	324	374	0.6	1.0
MAXIMUM	-	67.7	1	.124	3.0	2.89	95.2	88.4	12.8	100	124	140	168	192	242	295	364	396	437	1.1	3.0
SAMPLES	157																				

District 8

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Lower Mississippi area: Mississippi, Louisiana, eastern and southern Arkansas, and western Tennessee

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
256	28	62.0	0	0.060	(OILY)	2.13	89.1	82.9	10.2	94	107	122	144	170	222	274	340	370	417	1.0	2.0
257	12	62.8	0	.047	1.6	1.44	87.5	81.9	10.1	95	110	122	146	169	211	255	346	389	415	1.1	2.2
258	19	62.7	0	.063	2.0	2.36	87.6	81.5	10.2	93	108	121	144	168	221	274	335	363	400	1.0	1.8
259	9	62.7	0	.084	2.5	2.44	87.2	81.9	9.6	99	113	128	151	173	217	263	337	372	408	1.1	2.0
260	3	65.0	0	.046	1.0	1.73	86.4	81.5	11.1	85	100	113	136	157	202	250	320	354	396	.9	1.1
261	9	62.7	0	.063	2.2	1.70	87.1	81.4	9.5	99	113	125	150	174	218	265	344	386	420	1.0	1.9
262	12	62.5	0	.052	2.7	1.16	87.2	80.8	11.5	91	104	116	143	172	223	267	333	371	405	1.0	2.7
263	4	62.0	0	.025	.8	2.21	87.1	83.0	8.8	98	120	136	159	181	225	270	332	362	408	1.0	1.3
264	1	65.6	0	.070	2.0	2.89	85.0	78.7	10.5	100	112	122	150	170	208	256	346	372	402	1.0	2.0
265	4	65.7	0	.050	1.0	2.57	87.2	82.8	10.0	100	116	126	146	166	212	282	312	354	388	1.0	2.0
266	8	61.8	0	.044	2.7	1.93	87.2	81.7	10.7	97	110	123	149	173	223	269	345	381	411	1.0	2.1
267	2	63.9	0	.040	(OILY)	1.92	86.9	82.1	10.0	100	110	122	144	171	223	270	321	351	406	1.0	2.0
268	9	62.9	1	.059	1.3	2.19	86.9	82.0	9.3	91	105	120	145	169	216	259	323	357	402	1.0	2.0
269	21	60.9	0	.054	2.2	2.11	86.8	81.1	9.6	97	111	126	148	179	232	277	341	368	402	1.0	2.2
AVERAGE	-	63.1	0	0.054	1.8	2.06	87.1	81.7	10.1	96	110	123	147	171	218	267	334	368	406	1.0	2.0
MINIMUM	-	60.9	0	0.025	0.8	1.16	85.0	78.7	8.8	85	100	113	136	157	202	250	312	351	388	0.9	1.1
MAXIMUM	-	65.7	1	.084	2.7	2.89	89.1	83.0	11.5	100	120	136	159	181	232	282	346	389	420	1.1	2.7
SAMPLES	141																				

Premium-price gasoline

270	12	60.2	0	0.056	(OILY)	1.99	94.4	84.3	11.5	90	101	116	142	170	225	279	353	385	416	1.0	2.7
271	9	62.8	0	.073	2.8	2.03	94.7	85.4	9.9	97	112	124	146	171	217	267	348	380	420	1.0	1.9
272	3	64.0	0	.064	1.0	2.19	95.2	84.9	11.5	86	93	105	124	142	188	247	325	365	408	1.0	2.0
273	9	60.2	0	.091	(OILY)	2.54	94.6	85.1	9.6	99	111	124	143	165	214	267	345	370	401	1.0	2.0
274	19	60.9	0	.067	3.2	2.63	94.7	85.3	10.1	95	108	120	142	165	219	280	337	367	403	1.0	2.0
275	12	63.5	0	.040	(OILY)	1.61	94.9	85.1	9.7	97	111	122	139	153	195	247	329	368	414	1.1	1.7
276	31	65.1	0	.048	(OILY)	2.52	96.4	85.8	10.5	96	108	119	135	151	190	239	301	332	385	1.0	1.9
277	21	59.8	0	.046	(OILY)	2.12	94.9	85.2	9.6	96	109	123	146	175	219	275	330	356	397	1.0	2.1
278	9	62.6	1	.049	(OILY)	2.55	94.9	84.4	10.2	92	105	117	135	156	202	252	314	348	398	1.0	1.8
279	2	66.0	0	.040	(OILY)	2.54	95.2	85.6	10.1	100	114	124	141	158	198	246	308	341	384	1.0	2.0
280	8	60.9	0	.058	3.7	2.47	94.2	85.2	11.1	94	107	119	139	162	211	270	346	387	418	1.0	1.8
281	4	60.0	0	.100	2.0	2.74	95.3	85.6	9.8	98	110	122	142	164	222	284	350	382	414	1.0	2.0
282	1	60.8	0	.100	3.0	2.93	92.6	82.0	9.7	100	110	128	160	190	240	290	360	396	400	1.0	3.0
283	4	61.3	0	.033	2.5	2.84	94.3	88.2	8.5	94	116	131	155	178	227	277	344	372	419	1.1	1.4
AVERAGE	-	62.0	0	0.062	2.6	2.41	94.7	85.2	10.1	95	108	121	142	164	212	266	335	368	406	1.0	2.0
MINIMUM	-	59.8	0	0.033	1.0	1.61	92.6	82.0	8.5	86	93	105	124	142	188	239	301	332	384	1.0	1.4
MAXIMUM	-	66.0	1	.100	3.7	2.93	96.4	88.2	11.5	100	116	131	160	190	240	290	360	396	420	1.1	3.0
SAMPLES	144																				

District 9

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

th Plains area: Minnesota, North Dakota, and South Dakota

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
										Percent evaporated											
284	7	63.4	1	0.067	2.9	1.59	84.8	79.6	10.8	92	105	119	142	168	215	261	329	357	394	1.0	1.3
285	9	69.3	1	.045	2.7	1.52	84.6	81.5	12.0	87	98	108	121	137	180	237	323	365	414	.9	1.7
286	1	62.7	1	.077	4.0	2.40	85.0	80.2	12.4	96	110	128	156	178	217	255	316	360	384	1.0	3.0
287	9	64.7	1	.053	2.8	2.38	84.8	80.6	10.7	91	104	117	141	167	215	259	325	353	401	.8	2.0
288	3	65.7	1	.043	1.6	1.58	84.5	80.5	11.8	90	101	113	135	158	207	256	329	366	407	1.0	2.0
289	3	65.4	1	.030	1.5	1.53	84.6	81.0	12.0	97	104	116	137	159	207	258	329	369	410	1.0	3.0
290	4	65.1	1	.041	2.2	1.66	84.7	80.6	11.2	91	101	113	136	160	209	262	334	369	416	1.0	2.2
291	2	65.3	1	.039	.5	1.77	84.7	80.9	11.6	92	104	115	137	160	209	260	330	367	413	1.0	2.6
292	3	65.6	1	.042	(O I L Y)	1.64	84.5	80.7	11.5	93	100	113	133	155	206	260	335	369	424	1.0	2.0
293	4	63.5	1	.070	1.0	2.81	86.6	81.4	11.0	97	104	116	142	166	222	274	338	366	398	.7	2.8
294	12	64.4	1	.044	2.5	1.23	83.9	79.1	11.9	88	99	114	139	163	210	258	328	361	423	.8	2.5
295	10	64.0	1	.111	2.1	2.02	84.7	79.2	11.0	91	106	120	141	161	204	252	321	355	397	.9	1.8
296	8	64.5	1	.043	1.8	1.71	84.9	80.6	10.9	90	104	117	138	163	212	263	335	367	410	.9	1.6
297	1	66.3	0	.057	2.8	1.57	84.9	80.0	12.2	84	96	107	126	149	201	255	331	363	419	1.0	2.5
298	2	66.1	0	.057	1.4	1.74	85.0	80.8	12.0	85	97	109	128	151	204	257	331	359	416	1.0	2.0
AVERAGE	-	65.1	1	0.055	2.1	1.81	84.8	80.4	11.5	91	102	115	137	160	208	258	329	363	408	0.9	2.2
MINIMUM	-	62.7	0	0.030	0.5	1.23	83.9	79.1	10.7	84	96	107	121	137	180	237	316	353	384	0.7	1.3
MAXIMUM	-	69.3	1	.111	4.0	2.81	86.6	81.5	12.4	97	110	128	156	178	222	274	338	369	424	1.0	3.0
SAMPLES	78																				

Premium-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
										Percent evaporated											
299	4	65.8	1	0.044	1.9	2.31	92.0	84.3	11.8	92	102	112	130	151	201	254	335	367	414	1.0	1.5
300	2	62.5	1	.084	1.0	2.63	92.5	84.3	12.2	96	102	112	132	158	215	276	351	382	412	.8	2.7
301	3	65.4	1	.043	2.8	2.31	92.0	84.2	11.8	92	103	114	132	152	200	254	337	376	415	1.0	1.3
302	3	61.9	1	.098	3.0	2.54	92.4	83.6	11.6	96	108	119	139	162	212	272	344	369	407	1.0	1.3
303	9	65.0	1	.060	5.0	2.47	92.9	85.3	10.3	91	105	118	137	158	204	248	326	360	400	.8	1.8
304	1	56.5	1	.022	1.0	2.88	93.2	86.1	9.9	96	112	134	166	192	230	262	314	340	378	.6	1.9
305	9	66.1	1	.045	2.1	2.12	91.7	84.3	11.8	89	100	111	129	149	197	252	334	369	410	.9	1.7
306	7	61.6	1	.046	(O I L Y)	2.00	92.0	84.0	10.2	95	109	121	138	158	206	268	339	361	408	1.0	1.3
307	2	66.0	0	.046	(O I L Y)	2.15	92.2	84.5	12.1	88	98	108	125	146	197	254	340	369	425	1.0	2.0
308	2	66.9	1	.042	1.5	2.53	93.0	86.0	11.2	91	103	113	130	150	195	245	325	361	415	.9	1.6
309	3	66.0	1	.047	(O I L Y)	2.45	91.9	84.9	11.8	88	96	108	126	146	194	248	332	370	422	1.0	2.8
310	4	62.3	1	.104	1.0	2.90	92.4	83.6	11.9	90	98	110	132	158	212	274	348	380	404	.8	1.7
311	12	65.2	1	.042	3.2	1.71	92.3	83.8	12.0	88	100	112	131	150	192	241	315	346	387	.7	1.9
312	10	61.9	1	.102	(O I L Y)	2.36	92.0	83.5	11.2	90	103	117	139	161	208	264	335	367	412	.9	1.9
313	1	66.3	1	.029	1.0	2.41	92.3	85.2	11.9	96	104	112	130	150	196	250	330	370	406	.8	2.2
314	7	66.2	1	.040	2.9	2.08	92.0	84.4	11.9	94	104	111	129	149	196	250	337	374	417	1.0	1.7
315	1	66.3	0	.054	2.2	2.49	92.5	84.0	12.7	86	97	108	127	148	199	251	340	377	415	1.0	2.0
AVERAGE	-	64.2	1	0.056	2.2	2.37	92.3	84.5	11.5	92	103	114	134	155	203	257	334	367	409	0.9	1.8
MINIMUM	-	56.5	0	0.022	1.0	1.71	91.7	83.5	9.9	86	96	108	125	146	192	241	314	340	378	0.6	1.3
MAXIMUM	-	66.9	1	.104	5.0	2.90	93.2	86.1	12.7	96	112	134	166	192	230	276	351	382	425	1.0	2.8
SAMPLES	80																				

District 10

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Central Plains area: Nebraska, central and western Iowa, northwestern Missouri, and northern Kansas

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
316	7	65.1	1	0.044	1.6	1.62	85.3	80.7	11.2	92	103	116	138	163	213	268	342	376	413	1.0	2.8
317	8	65.7	1	.039	1.2	1.82	85.2	80.7	11.2	93	102	114	136	158	210	264	338	372	416	1.0	2.8
318	3	64.3	1	.048	1.8	1.44	85.5	80.2	11.4	92	104	117	139	161	216	263	337	367	427	.8	2.7
319	14	65.3	1	.059	1.8	1.82	84.7	79.1	11.6	90	101	115	140	164	211	257	319	346	377	.9	3.3
320	3	64.4	1	.018	1.0	1.78	84.4	80.2	9.6	93	115	129	149	167	204	245	311	343	395	.4	1.0
321	10	65.0	1	.039	.4	1.57	85.0	80.3	10.6	94	104	115	135	158	210	261	337	377	415	.9	2.0
322	3	65.1	1	.038	2.0	1.60	85.2	80.4	11.4	92	103	117	140	163	214	268	343	374	423	1.0	2.8
323	2	67.6	1	.046	1.0	1.52	84.6	80.2	12.3	92	105	115	136	158	199	244	320	358	416	.3	1.4
324	7	62.3	1	.059	2.0	1.62	84.8	79.0	10.2	96	109	123	148	171	216	263	336	368	416	.8	1.5
325	14	69.5	1	.049	1.7	1.51	84.8	80.7	12.7	84	94	105	122	139	179	230	332	380	416	.9	2.6
326	10	62.4	1	.058	2.9	1.67	84.8	79.1	10.2	96	109	125	148	172	218	273	340	369	416	.8	2.6
AVERAGE	-	65.2	1	0.045	1.6	1.63	84.9	80.1	11.1	92	104	117	139	161	208	258	332	366	412	0.8	2.3
MINIMUM	-	62.3	1	0.018	0.4	1.44	84.4	79.0	9.6	84	94	105	122	139	179	230	311	343	377	0.3	1.0
MAXIMUM	-	69.5	1	.059	2.9	1.82	85.5	80.7	12.7	96	115	129	149	172	218	273	343	380	427	1.0	3.3
SAMPLES	81																				

Premium-price gasoline

327	10	62.5	1	0.063	(OILY)	1.73	91.8	83.6	10.6	94	106	116	133	152	208	270	351	389	428	1.0	1.8
328	3	64.0	1	.023	1.0	2.62	91.2	83.6	9.6	86	114	125	147	170	213	254	308	331	386	.3	1.2
329	14	66.0	1	.062	1.6	2.58	92.0	82.9	12.2	89	100	111	131	152	194	243	313	342	375	1.0	2.5
330	3	65.4	1	.048	2.4	2.35	91.8	83.8	11.5	88	98	110	130	152	199	252	335	374	428	.9	2.9
331	8	65.8	1	.059	(OILY)	2.32	91.4	83.9	11.0	94	103	116	137	159	199	238	301	344	384	1.0	3.3
332	7	65.0	1	.047	2.1	2.37	92.0	84.4	11.2	92	103	116	141	164	201	255	340	372	407	1.0	3.0
333	11	63.1	1	.087	2.3	1.64	92.0	82.4	10.4	92	105	120	141	161	201	248	321	353	398	.8	1.7
334	13	69.6	1	.049	1.1	1.99	91.6	83.9	13.1	86	94	104	120	137	179	233	326	365	405	.8	2.5
335	8	63.4	1	.081	2.6	1.67	91.8	82.5	10.1	95	109	120	140	159	201	250	324	359	404	.8	1.9
336	2	66.9	1	.058	2.0	2.06	92.1	83.6	12.3	89	99	110	130	151	196	248	327	360	408	.5	1.8
337	3	65.2	1	.040	(OILY)	2.21	91.8	84.5	12.1	90	98	111	131	155	207	260	339	376	427	1.0	2.5
AVERAGE	-	65.2	1	0.056	1.9	2.14	91.8	83.6	11.3	90	103	114	135	156	200	250	326	360	405	0.8	2.3
MINIMUM	-	62.5	1	0.023	1.0	1.64	91.2	82.4	9.6	86	94	104	120	137	179	233	301	331	375	0.3	1.2
MAXIMUM	-	69.6	1	.087	2.6	2.62	92.1	84.5	13.1	95	114	125	147	170	213	270	351	389	428	1.0	3.3
SAMPLES	82																				

District 11

Table 3.- Motor-gasoline survey, winter 1954-55 .
(Average values of different brands)

South Plains area: Southern Kansas, southwestern Missouri, western Arkansas, Oklahoma, and northern Texas

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Residue	Percent Loss
338	19	63.3	1	0.058	1.6	2.04	85.0	80.7	11.0	90	103	119	145	171	222	273	343	370	405	0.8	2.8
339	7	61.3	0	.039	3.0	1.26	84.6	81.1	11.5	93	105	117	138	159	203	257	334	372	425	1.1	2.2
340	12	63.4	0	.056	2.5	1.77	85.6	80.6	9.9	95	110	126	148	171	211	250	318	356	418	1.0	1.5
341	1	64.7	1	.040	.8	1.70	84.9	80.4	10.1	96	114	128	151	170	207	247	310	343	392	1.0	2.0
342	7	66.2	1	.040	1.0	1.71	84.9	81.3	11.6	89	98	107	126	148	204	259	335	367	412	1.0	2.5
343	1	71.2	1	.030	1.6	0.30	86.1	79.2	12.4	91	100	107	117	125	148	193	319	368	412	1.0	2.0
344	2	66.4	1	.028	3.0	1.61	84.3	81.1	10.6	89	104	117	141	161	206	250	315	347	394	.2	1.5
345	3	62.3	0	.030	1.0	2.88	85.9	81.6	9.7	90	108	126	152	178	225	269	329	353	388	1.0	1.3
346	1	65.0	0	.033	2.0	1.76	85.5	79.4	11.4	88	97	109	130	151	199	255	337	367	396	1.0	2.0
347	2	61.7	0	.042	1.0	0.72	85.3	78.2	10.1	88	100	114	141	170	217	262	318	344	373	.8	1.7
348	4	64.6	0	.053	2.5	1.02	86.0	80.9	11.2	89	101	114	137	160	207	259	337	371	408	1.1	1.6
349	1	65.4	0	.035	3.0	2.98	82.8	78.8	9.9	94	112	127	149	171	218	263	315	334	370	.8	1.7
350	2	64.0	0	.136	2.0	1.42	86.5	82.0	11.1	89	100	114	134	155	205	267	337	376	416	1.0	2.0
351	2	65.9	0	.030	1.0	1.31	84.4	81.0	12.0	84	94	106	126	150	200	250	323	364	408	1.0	2.0
352	2	64.2	0	.040	1.0	2.08	84.9	81.2	11.2	87	96	108	132	157	208	259	330	360	404	.9	2.1
353	2	58.4	0	.040	3.0	0.73	87.6	80.8	10.3	100	114	122	146	164	232	292	370	394	428	1.0	2.0
354	5	59.8	0	.083	3.0	2.72	86.8	81.3	10.1	94	111	126	152	179	226	272	340	375	412	1.1	.9
355	8	64.3	1	.033	1.1	1.85	85.2	80.7	11.6	86	92	111	138	167	222	270	330	360	399	.9	3.5
356	13	67.8	0	.044	1.5	1.20	85.0	81.0	11.9	85	95	107	125	144	191	244	317	352	400	.8	2.3
357	17	65.7	0	.053	2.1	1.48	85.2	80.5	11.1	91	101	115	134	154	204	253	326	357	392	.9	2.2
358	2	65.0	1	.045	2.5	2.07	85.0	81.0	11.7	89	102	113	137	161	218	274	339	367	405	.7	2.4
359	1	62.0	1	.063	1.0	0.76	84.7	——	12.0	87	114	130	158	186	233	284	360	375	410	1.0	3.0
360	6	64.2	0	.048	.1	1.89	84.3	80.1	11.1	87	103	116	138	163	210	259	324	355	390	.4	1.9
361	4	66.3	1	.034	.0	1.75	84.5	81.0	11.3	86	100	113	138	161	211	262	331	362	403	.5	1.5
362	8	60.2	0	.063	4.0	0.81	86.9	80.6	10.3	90	103	117	146	175	226	278	327	346	398	1.2	1.8
363	2	66.0	1	.034	1.0	2.31	84.1	81.5	11.5	89	100	113	137	161	211	263	332	362	406	.4	1.4
364	21	61.5	0	.072	1.8	2.64	85.7	81.1	10.2	91	104	121	148	176	230	279	342	366	397	.9	2.7
AVERAGE	-	64.1	0	0.048	1.8	1.66	85.2	80.7	11.0	90	103	116	139	163	211	261	331	362	402	0.9	2.0
MINIMUM	-	58.4	0	0.028	0.0	0.30	82.8	78.2	9.7	84	92	106	117	125	148	193	310	334	370	0.2	0.9
MAXIMUM	-	71.2	1	.136	4.0	2.98	87.6	82.0	12.4	100	114	130	158	186	233	292	370	394	428	1.2	3.5
SAMPLES	155																				

Premium-price gasoline

365	1	64.0	1	0.060	4.4	1.50	92.3	83.0	11.2	94	103	113	130	146	192	248	343	375	416	1.0	2.0
366	7	66.2	1	.037	1.3	2.38	92.5	85.0	11.6	89	98	106	121	136	183	247	330	374	432	1.1	1.9
367	1	64.8	1	.030	1.6	2.91	92.9	84.1	10.9	94	105	118	145	171	218	259	322	349	394	1.0	4.0
368	12	65.5	0	.068	3.6	1.65	94.0	84.6	10.3	92	105	119	138	155	190	232	301	340	385	1.0	1.3
369	7	64.9	0	.044	2.1	1.93	93.0	84.7	11.6	90	101	113	137	161	210	260	342	381	428	1.0	2.1
370	4	62.4	0	.057	3.5	1.80	93.4	84.7	11.1	89	101	115	139	165	218	275	352	382	419	1.0	1.7
371	2	62.6	0	.016	1.0	2.51	92.8	86.8	11.8	90	105	119	144	168	210	252	308	330	369	.9	2.1
372	1	61.3	0	.014	3.0	2.57	92.9	86.9	11.7	86	97	110	136	168	223	270	326	354	407	1.0	2.0
373	2	61.6	0	.040	1.0	2.86	95.3	86.9	10.3	89	105	119	142	165	213	262	336	372	424	1.0	1.9
374	21	62.5	0	.061	(0 I L Y)	2.69	93.7	85.3	10.2	92	103	117	143	167	217	266	338	370	409	.9	2.4
375	2	66.1	1	.029	1.0	2.68	91.1	85.0	11.8	87	96	111	137	161	209	263	337	367	401	.4	1.8
376	8	63.6	0	.068	(0 I L Y)	2.79	97.8	86.0	9.8	93	108	121	143	164	197	236	298	340	404	1.3	1.7
377	4	66.0	1	.040	4.0	2.08	91.6	85.2	11.6	92	105	114	132	150	192	248	349	390	432	.6	1.6
378	5	66.4	—	——	——	2.01	91.9	85.4	12.3	82	92	101	117	133	175	236	320	350	383	.6	2.3
379	1	62.2	1	.060	1.0	2.65	92.2	——	12.0	95	118	130	156	185	234	284	368	380	407	1.0	3.0
380	5	61.5	0	.053	(0 I L Y)	2.62	96.4	86.4	9.5	92	102	116	136	156	204	254	315	348	396	1.2	2.4
381	8	62.1	1	.031	1.2	2.26	92.6	85.0	11.1	86	92	112	141	169	214	256	323	353	395	.8	3.7
382	13	66.1	0	.043	2.0	2.24	92.4	85.0	12.2	87	97	109	126	146	194	252	339	375	412	.8	2.3
383	17	64.5	0	.045	(0 I L Y)	2.17	92.9	84.6	11.4	90	101	112	133	157	207	259	335	365	400	.8	2.5
384	2	63.9	1	.045	3.0	2.60	92.4	84.3	11.8	90	101	112	136	166	212	259	331	366	407	.7	2.3
385	19	63.4	1	.061	1.2	2.36	93.2	85.1	10.7	89	102	116	139	162	212	260	330	359	393	.8	2.5
386	2	62.4	0	.064	1.0	2.54	92.5	84.8	10.9	90	102	117	141	165	216	270	340	370	420	1.0	2.0
387	2	64.8	0	.035	1.0	2.08	92.0	85.1	11.7	89	98	110	130	155	206	255	340	374	418	1.0	2.0
388	2	60.9	0	.182	4.0	2.83	95.3	86.4	11.3	88	100	110	130	152	210	278	358	394	422	1.0	1.0
389	1	66.0	0	.020	2.0	2.91	90.2	86.5	12.9	88	100	112	133	153	198	244	300	326	368	.8	2.2
AVERAGE	-	63.8	0	0.050	2.1	2.38	93.1	85.3	11.3	90	101	114	136	159	206	257	331	363	406	0.9	2.2
MINIMUM	-	60.9	0	0.014	1.0	1.50	90.2	83.0	9.5	82	92	101	117	133	175	232	298	326	368	0.4	1.0
MAXIMUM	-	66.4	1	.182	4.4	2.91	97.8	86.9	12.9	95	116	130	156	185	234	284	368	394	432	1.3	4.0
SAMPLES	149																				

District 12

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Southern Texas

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) Percent evaporated I.B.P.	5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
390	17	62.0	0	0.055	2.8	1.81	87.1	81.9	9.6	96	111	127	151	175	216	258	321	351	395	1.0	1.8
391	19	62.0	0	.032	1.4	2.64	87.2	83.8	9.7	91	105	121	146	171	217	260	328	359	401	.9	1.5
392	1	63.5	0	.135	1.0	1.20	84.2	78.0	11.2	90	106	116	134	154	200	254	336	370	411	1.0	1.0
393	1	64.0	0	.120	3.0	2.56	84.3	80.0	9.9	96	108	118	135	151	198	264	377	404	430	.9	1.1
394	9	64.6	0	.032	1.7	2.51	88.1	85.2	10.2	99	111	121	140	161	204	255	315	347	397	1.0	2.0
395	3	59.8	0	.042	1.0	2.79	87.1	81.9	9.7	96	110	125	157	189	234	277	337	362	401	1.0	2.0
396	16	62.1	0	.101	2.1	2.69	86.8	81.9	9.9	97	112	125	147	171	215	260	336	377	412	1.0	2.0
397	1	62.0	0	.011	1.0	1.93	81.6	81.2	9.2	95	110	133	164	186	221	252	302	322	352	.7	2.3
398	2	63.3	0	.064	4.0	1.81	87.5	81.7	9.6	95	111	124	144	166	206	244	310	352	400	1.0	1.5
399	22	58.8	0	.055	3.5	.73	87.4	81.2	9.9	94	108	124	154	183	232	282	339	368	418	.9	1.9
400	1	63.7	0	.008	5.0	2.17	86.3	85.1	8.2	104	118	134	154	168	188	206	232	250	311	.7	2.1
401	20	59.8	0	.074	1.6	2.73	87.4	81.3	9.5	95	111	126	154	183	233	281	346	372	402	.9	2.0
402	1	66.5	0	.013	1.0	2.31	82.3	82.1	9.7	90	104	120	140	158	194	235	304	340	388	1.1	1.9
403	10	63.1	0	.086	(OILY)	2.12	87.5	81.6	10.8	94	107	118	139	161	210	259	332	363	400	1.0	1.9
404	1	64.8	0	.017	4.0	2.87	84.4	83.4	10.6	92	112	129	155	178	219	254	310	330	373	1.0	1.0
405	7	61.6	0	.022	1.9	1.55	88.0	82.8	10.3	92	107	121	148	174	217	258	318	347	385	.8	2.2
406	9	61.7	0	.050	2.2	1.83	87.4	82.3	9.7	98	113	128	154	174	218	262	323	362	398	1.0	1.8
AVERAGE	-	62.5	0	0.054	2.3	2.13	86.2	82.1	9.9	95	110	124	148	171	213	257	322	352	393	0.9	1.8
MINIMUM	-	58.8	0	0.008	1.0	0.73	81.6	78.0	8.2	90	104	116	134	151	188	206	232	250	311	0.7	1.0
MAXIMUM	-	66.5	0	.135	5.0	2.87	88.1	85.2	11.2	104	118	134	164	189	234	282	377	404	430	1.1	2.3
SAMPLES	140																				

Premium-price gasoline

407	17	59.4	0	0.084	(OILY)	2.82	95.1	84.8	9.7	97	113	125	146	166	215	270	342	367	393	1.0	1.8
408	3	61.8	0	.041	1.5	2.51	94.7	86.0	10.7	94	105	116	139	162	210	259	329	358	395	1.0	1.8
409	13	61.0	0	.032	1.8	2.88	96.6	88.0	10.5	99	108	120	139	162	217	267	322	349	392	1.0	2.1
410	1	62.5	0	.113	2.0	2.76	93.7	84.4	10.0	94	105	115	128	143	186	254	363	394	425	1.0	1.5
411	1	57.1	0	.022	1.0	1.88	92.9	87.4	11.3	89	100	115	148	194	248	283	334	356	408	1.0	2.0
412	18	61.4	0	.039	(OILY)	2.85	95.9	87.7	9.9	91	105	118	138	159	210	260	314	342	405	1.0	1.5
413	17	61.9	0	.063	3.4	2.58	94.7	85.5	10.0	93	110	124	144	166	211	259	324	356	391	1.0	1.6
414	9	60.8	0	.065	(OILY)	2.68	95.1	85.7	9.7	96	107	123	142	163	208	265	329	359	400	1.0	1.7
415	7	61.7	0	.039	2.2	1.71	95.0	85.1	10.5	92	105	117	139	163	213	267	333	358	389	.9	2.0
416	10	59.4	0	.085	(OILY)	2.49	95.1	86.4	11.3	89	99	110	131	156	218	281	355	386	410	1.0	2.1
417	20	59.6	0	.059	(OILY)	2.68	95.5	85.9	9.2	96	112	128	152	176	218	263	320	342	383	.9	1.8
418	1	63.8	0	.009	3.0	3.00	89.6	87.1	8.4	98	117	134	154	168	190	206	232	248	293	.6	1.4
419	23	62.1	0	.063	(OILY)	2.75	97.7	87.1	10.0	94	109	122	144	165	202	240	298	326	389	1.0	1.9
420	2	63.2	0	.076	(OILY)	2.64	94.9	84.9	9.7	98	110	124	143	161	201	255	317	345	398	1.0	1.5
AVERAGE	-	61.1	0	0.056	2.1	2.59	94.8	86.1	10.1	94	108	121	142	165	211	259	322	349	391	1.0	1.8
MINIMUM	-	57.1	0.	0.009	1.0	1.71	89.6	84.4	8.4	89	99	110	128	143	186	206	232	248	293	0.6	1.4
MAXIMUM	-	63.8	0	.113	3.4	3.00	97.7	88.0	11.3	99	117	134	154	194	248	283	363	394	425	1.0	2.1
SAMPLES	142																				

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

South Mountain states: Southwestern Kansas, panhandles of Oklahoma and Texas, western Texas, New Mexico, Colorado, Utah, Arizona, Nevada, and eastern California

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
421	7	66.3	1	0.068	1.0	0.84	83.1	76.9	11.5	84	96	108	128	150	198	250	321	351	388	0.6	2.5
422	5	60.7	0	.094	1.0	2.33	83.1	78.1	9.2	92	105	125	157	190	242	290	352	376	409	1.0	2.0
423	8	64.5	0	.076	2.5	1.06	82.6	78.4	10.5	91	105	117	141	164	212	257	320	349	396	.8	1.7
424	7	66.0	—	—	—	2.12	84.3	80.7	8.0	95	112	121	135	148	190	261	359	387	420	.7	1.3
425	21	66.1	1	.040	1.6	1.52	84.2	80.1	10.8	88	101	113	133	153	202	265	340	371	417	.9	2.1
426	8	63.2	0	.116	(OIL Y)	2.27	85.3	80.8	9.2	98	113	122	140	157	205	272	357	393	431	1.0	1.7
427	5	69.9	0	.051	2.0	1.48	82.4	78.8	10.4	93	102	112	122	131	156	212	315	360	409	1.0	2.0
428	1	61.7	1	.120	1.2	.60	87.0	78.7	9.7	89	113	130	153	175	220	267	334	364	426	1.0	2.0
429	2	59.7	0	.184	3.0	1.16	82.7	76.3	9.3	93	104	121	149	175	223	279	351	381	409	1.1	1.9
430	2	61.1	0	.129	2.0	1.58	83.8	78.7	9.7	89	106	123	150	175	222	272	341	370	392	1.1	1.9
431	2	61.7	0	.144	3.0	1.20	83.5	77.1	11.2	89	102	126	157	186	232	273	327	355	383	1.1	1.9
432	7	65.6	0	.026	.9	.77	82.0	78.2	10.0	93	106	116	135	156	204	259	323	353	389	.9	1.7
433	1	66.5	0	.092	3.0	1.50	83.4	79.1	11.6	90	103	111	126	138	177	240	340	386	434	1.0	1.0
434	2	58.8	0	.166	1.0	1.85	83.8	78.8	10.2	94	103	125	158	186	239	286	342	362	392	.8	2.7
435	2	66.4	1	.061	3.3	1.28	82.6	79.0	10.5	90	103	112	125	137	177	241	338	381	426	1.0	2.0
436	1	60.3	0	.152	1.0	1.55	84.5	78.2	10.0	91	104	120	143	168	219	274	346	373	407	1.1	1.9
437	4	63.7	0	.046	1.0	1.01	82.6	78.1	10.9	89	104	120	146	172	219	262	326	360	410	1.1	1.9
438	16	65.4	0	.025	1.0	1.70	83.3	80.2	9.9	89	102	117	139	163	209	261	330	360	398	.7	2.1
439	19	61.3	1	.155	1.8	1.66	83.6	78.9	9.0	98	116	130	153	177	226	270	338	365	395	1.0	1.9
440	22	61.0	0	.138	1.8	1.77	82.9	79.2	9.3	93	109	127	157	186	236	279	335	361	397	.9	2.1
441	1	62.3	0	.030	5.0	2.88	80.8	78.8	11.1	90	104	128	165	192	236	276	328	350	382	1.0	2.8
442	28	60.4	1	.096	1.6	1.88	83.5	78.1	88	94	114	131	160	183	233	279	338	362	390	.9	1.7
443	1	67.4	0	.018	3.0	2.65	81.5	81.3	9.6	94	120	131	152	172	212	246	290	310	360	1.0	1.8
444	2	66.0	0	.005	3.0	2.72	80.6	79.3	15.0	84	—	98	146	191	236	275	326	348	384	1.0	8.0
445	8	62.1	1	.116	2.3	1.64	83.9	78.7	10.0	100	116	128	150	172	218	265	339	366	393	1.0	1.5
446	6	61.9	1	.210	3.0	.64	83.3	76.3	10.1	95	104	118	140	167	219	269	337	362	388	1.0	2.3
447	1	60.1	0	.205	2.0	1.86	83.5	78.0	9.1	96	105	121	147	173	227	280	340	360	391	.8	2.2
448	5	59.5	1	.214	2.7	1.71	84.0	78.1	9.9	94	111	127	154	181	238	290	349	373	398	1.0	1.3
449	7	58.6	1	.060	1.0	2.79	82.5	80.7	10.0	98	120	142	175	202	247	292	353	377	399	1.0	2.0
AVERAGE	-	63.0	0	0.101	2.1	1.66	83.3	78.8	10.2	92	107	121	146	170	216	267	336	364	401	0.9	2.1
MINIMUM	-	58.6	0	0.005	0.9	0.60	80.6	76.3	8.0	84	96	98	122	131	156	212	290	310	360	0.6	1.0
MAXIMUM	-	69.9	1	.214	5.0	2.88	87.0	81.3	15.0	100	120	142	175	202	247	292	359	393	434	1.1	8.0
SAMPLES	201																				

Premium-price gasoline

450	20	60.0	1	0.101	(OIL Y)	1.75	92.1	84.2	8.9	96	114	129	152	174	219	269	336	362	395	1.0	1.6
451	16	64.6	0	.031	4.0	1.67	91.8	84.5	9.4	91	104	119	143	166	212	263	331	361	402	.8	2.3
452	4	62.1	0	.045	3.0	1.66	90.6	83.6	11.1	90	104	120	145	169	222	276	352	386	421	1.1	1.7
453	1	55.0	0	.025	3.0	2.05	93.3	86.2	9.9	90	106	126	165	212	260	293	340	360	407	.8	2.2
454	2	61.7	1	.066	4.1	1.89	92.6	83.8	12.0	87	98	112	136	162	216	274	362	397	428	1.1	2.7
455	2	65.8	0	.023	3.0	2.92	90.6	89.0	9.4	96	105	122	139	153	185	216	258	279	328	.5	2.0
456	1	60.7	0	.091	4.0	2.66	92.8	84.3	11.1	88	97	110	137	166	220	280	360	400	430	1.0	2.0
457	7	63.5	0	.045	1.7	.96	90.3	81.9	10.0	91	105	116	136	156	206	259	327	354	389	.9	1.7
458	2	61.9	0	.109	6.0	2.43	87.8	82.4	10.8	90	111	126	152	181	224	258	312	337	356	1.0	3.0
459	2	61.5	0	.015	2.0	2.82	94.2	88.7	10.2	92	99	115	139	160	202	244	295	319	376	1.0	2.5
460	2	58.6	0	.094	3.0	2.91	92.6	85.6	9.5	94	105	125	156	182	225	264	317	340	381	.9	2.6
461	1	61.7	1	.090	2.0	1.90	93.4	81.6	8.4	90	115	132	159	182	225	269	317	345	381	1.0	1.0
462	5	63.0	0	.022	1.0	2.78	90.7	86.7	10.5	90	100	115	138	162	202	236	292	316	360	.9	2.1
463	9	61.5	0	.096	(OIL Y)	2.74	95.1	85.1	8.2	104	116	127	144	159	195	245	308	337	383	1.0	1.9
464	7	61.6	1	.140	1.5	2.99	94.3	85.4	9.2	101	122	134	153	172	211	246	296	321	349	1.0	1.3
465	7	65.1	1	.095	1.1	1.10	89.9	82.1	10.8	87	100	111	132	155	198	249	319	351	395	.5	2.0
466	5	59.4	0	.107	2.0	2.39	89.3	81.6	9.0	88	103	118	150	182	240	299	369	390	419	1.1	1.9
467	8	63.3	0	.085	3.0	1.57	90.5	82.8	10.8	89	105	116	137	160	208	256	325	362	407	.9	1.6
468	7	66.0	—	—	—	1.54	92.1	83.8	7.2	97	115	126	139	153	191	248	315	342	388	.5	1.5
469	19	64.7	1	.055	1.6	1.94	90.9	82.4	10.6	88	100	112	131	151	201	267	341	371	403	.9	2.3
470	5	60.3	1	.067	1.3	2.68	94.1	86.1	9.6	91	109	123	145	169	212	253	301	332	380	1.0	1.4
471	1	61.2	0	.056	1.0	2.96	94.7	87.7	9.7	90	111	122	144	166	208	245	303	326	371	1.0	1.0
472	6	56.4	1	.032	2.5	2.85	93.3	88.4	10.4	99	112	128	160	195	239	275	327	350	390	1.0	2.5
473	8	59.1	1	.029	3.0	2.83	93.6	87.4	9.8	95	110	125	149	175	221	262	319	342	382	1.0	2.0
474	29	61.5	0	.097	(OIL Y)	2.36	92.1	83.4	8.8	92	111	126	150	174	219	267	333	360	407	1.0	1.5
475	1	60.9	0	.049	4.0	2.88	88.3	82.0	9.9	88	109	125	154	180	230	279	344	373	416	1.1	1.9
476	21	62.6	0	.095	1.4	2.56	92.2	84.0	9.4	95	112	126	148	169	217	257	306	328	355	.9	1.7
AVERAGE	-	61.6	0	0.068	2.6	2.29	92.0	84.6	9.8	92	107	122	146	170	215	261	322	350	389	0.9	1.9
MINIMUM	-	55.0	0	0.015	1.0	0.96	87.8	81.6	7.2	87	97	110	131	151	185	216	258	279	328	0.5	1.0
MAXIMUM	-	66.0	1	.140	6.0	2.99	95.1	89.0	12.0	104	122	134	165	212	260	299	369	400	430	1.1	3.0
SAMPLES	198																				

District 14

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

North Mountain states: Wyoming, Montana, Idaho, eastern Washington, and eastern Oregon

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
477	9	63.8	0	0.047	2.0	1.54	84.9	78.4	10.7	87	94	114	142	171	221	265	327	355	402	0.8	3.8
478	6	62.3	0	.149	2.0	.80	86.2	78.1	10.9	87	92	116	148	175	233	277	340	365	401	.8	4.0
479	10	60.3	1	.262	1.9	.96	84.0	78.1	9.5	95	110	125	153	181	236	282	338	362	401	.9	2.4
480	10	62.7	1	.122	2.4	.50	85.7	78.0	10.9	85	101	118	145	171	218	263	332	367	414	.9	3.1
481	7	61.6	1	.103	.0	.55	83.6	78.0	11.4	88	108	119	142	168	220	267	320	350	410	.6	1.9
482	2	61.4	1	.090	.4	2.17	84.4	78.5	10.5	90	107	122	150	183	239	288	355	376	407	1.0	3.0
483	2	57.7	1	.170	1.0	1.36	84.5	78.8	10.2	106	113	134	167	206	256	294	356	384	418	1.0	2.0
484	5	62.9	1	.043	1.1	2.53	83.4	80.6	8.6	97	115	130	157	182	232	275	332	361	407	1.0	1.6
485	1	63.3	0	.020	1.0	2.28	84.0	80.0	13.1	87	95	120	156	185	226	262	310	330	364	.8	3.2
486	5	64.9	0	.076	2.0	.84	82.6	78.5	11.2	94	106	118	138	162	211	255	319	353	413	1.0	2.0
487	1	58.9	0	.120	5.0	1.73	83.6	76.5	9.0	98	114	135	167	197	247	296	347	364	396	1.0	2.5
488	13	64.0	1	.060	1.0	1.63	84.4	79.4	11.2	93	114	121	150	178	226	272	332	363	392	.7	3.1
489	20	61.2	1	.094	1.7	1.83	84.2	78.6	9.8	92	111	128	154	180	229	278	338	364	400	.9	2.1
490	8	61.6	1	.137	1.5	2.38	84.7	79.3	11.4	94	109	128	157	184	233	277	336	365	406	.9	2.0
491	3	60.8	1	.130	2.9	1.29	85.2	79.2	10.4	89	106	125	155	183	238	286	347	387	425	.8	2.7
AVERAGE	-	61.8	1	0.108	1.7	1.49	84.4	78.7	10.6	92	106	124	152	180	231	276	335	363	404	0.9	2.6
MINIMUM	-	57.7	0	0.020	0.0	0.50	82.6	76.5	8.6	85	92	114	138	162	211	255	310	330	364	0.6	1.6
MAXIMUM	-	64.9	1	.262	5.0	2.53	86.2	80.6	13.1	106	115	135	167	206	256	296	356	387	425	1.0	4.0
SAMPLES	102																				

Premium-price gasoline

492	1	64.2	0	0.035	(OILY)	2.66	90.7	80.6	12.7	88	98	116	147	176	228	270	322	345	397	1.0	3.0
493	5	63.8	1	.043	2.1	2.86	92.6	84.9	8.7	97	115	127	146	171	211	258	314	338	367	.9	1.2
494	2	60.3	1	.160	5.0	1.97	94.8	83.7	9.4	104	114	124	146	168	214	258	327	358	404	1.0	1.0
495	2	58.7	1	.110	1.0	2.44	88.9	81.2	9.9	98	113	125	153	186	245	297	366	388	416	1.0	3.0
496	7	65.4	1	.057	1.0	1.07	90.7	83.5	10.9	87	108	122	144	162	198	240	294	313	351	.3	1.0
497	10	64.8	1	.070	1.2	1.59	93.1	82.3	10.9	89	106	118	140	161	205	245	298	322	362	.8	2.3
498	10	57.4	1	.187	3.3	1.56	91.6	82.7	9.0	96	115	132	159	185	234	287	353	377	411	.9	1.7
499	6	61.1	0	.151	4.0	.67	93.0	81.2	10.5	89	104	120	146	169	222	276	345	371	402	1.0	2.8
500	9	63.2	0	.046	4.0	2.28	92.3	81.9	10.8	87	97	118	149	177	227	271	333	359	399	.8	3.6
501	3	59.2	1	.165	2.9	2.10	93.5	83.1	10.1	93	106	120	145	172	228	286	357	387	422	.8	1.8
502	8	59.7	1	.174	2.3	2.93	93.4	83.7	9.6	98	113	130	155	180	225	264	323	356	406	1.0	2.4
503	20	61.3	1	.120	3.5	2.15	91.6	81.7	9.6	93	110	124	149	173	221	266	327	350	390	1.1	1.7
504	13	62.5	1	.040	6.0	2.38	92.0	83.4	11.1	90	107	115	144	171	227	280	347	374	403	.7	3.3
505	1	56.6	0	.165	4.0	3.05	89.9	79.0	7.7	96	114	133	167	197	254	303	354	373	395	1.2	.8
506	5	60.7	0	.123	4.0	.70	89.8	81.1	10.6	94	109	121	144	168	225	281	353	382	408	1.0	1.5
AVERAGE	-	61.3	1	0.110	3.2	2.03	91.9	82.3	10.1	93	109	123	149	174	224	272	334	360	396	0.9	2.1
MINIMUM	-	56.6	0	0.035	1.0	0.67	88.9	79.0	7.7	87	97	115	140	161	198	240	294	313	351	0.3	0.8
MAXIMUM	-	65.4	1	.187	6.0	3.05	94.8	84.9	12.7	104	115	133	167	197	254	303	366	388	422	1.2	3.6
SAMPLES	102																				

District 15

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Pacific Northwest: Western Washington and western Oregon

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Loss
507	6	60.4	1	0.196	3.0	1.92	84.4	78.6	10.2	97	108	124	154	187	237	283	354	382	411	1.0	2.3
508	1	58.8	0	.202	3.0	1.01	83.3	78.3	10.7	86	98	111	140	174	235	290	358	382	409	1.0	3.0
509	7	58.5	1	.215	1.3	1.97	83.4	78.4	9.0	98	114	132	165	194	240	285	353	378	413	1.0	1.7
510	7	60.5	1	.104	3.3	2.81	84.6	79.9	10.1	94	106	121	146	175	228	278	344	372	405	1.0	2.1
511	6	59.0	1	.360	2.7	1.80	84.2	78.3	8.9	101	119	134	162	189	241	285	338	368	394	1.0	1.2
512	6	59.5	1	.213	2.3	1.62	84.5	78.1	10.4	91	109	124	155	184	240	291	352	378	407	1.0	2.0
513	7	57.9	1	.170	2.3	1.17	84.5	78.5	9.9	93	111	127	167	206	257	296	351	382	408	1.0	2.2
514	7	59.7	1	.209	3.7	.99	84.4	78.6	10.9	93	106	121	147	175	239	295	358	382	413	1.0	2.5
AVERAGE	-	59.3	1	0.209	2.7	1.66	84.2	78.6	10.0	94	109	124	155	186	240	288	351	378	408	1.0	2.1
MINIMUM	-	57.9	0	0.104	1.3	0.99	83.3	78.1	8.9	86	98	111	140	174	228	278	338	368	394	1.0	1.2
MAXIMUM	-	60.5	1	.360	3.7	2.81	84.6	79.9	10.9	101	119	134	167	206	257	296	358	382	413	1.0	3.0
SAMPLES	47																				

Premium-price gasoline

515	6	58.2	1	0.204	3.7	2.46	94.6	84.3	10.0	103	111	123	149	174	225	279	351	377	401	1.0	2.3
516	7	60.8	1	.157	3.0	2.90	93.4	83.1	10.1	96	109	124	149	175	223	272	340	370	410	1.0	1.8
517	7	60.9	1	.184	2.3	2.74	94.9	83.5	9.3	98	112	126	148	169	214	257	308	332	360	1.0	1.6
518	1	60.8	0	.166	2.0	1.82	92.5	83.2	11.0	92	104	115	140	166	216	260	327	354	399	1.0	2.0
519	6	59.7	1	.117	2.5	2.40	93.9	84.7	10.9	91	100	111	135	161	220	283	360	387	414	1.0	1.8
520	6	61.6	1	.147	5.0	2.22	93.4	84.0	11.0	89	104	117	140	163	214	258	320	352	390	1.0	1.7
521	7	59.8	1	.138	3.7	1.49	94.9	83.1	10.0	96	112	123	146	169	216	261	333	365	406	1.0	1.1
522	6	59.5	1	.110	2.3	2.12	93.4	83.2	10.0	94	111	126	149	173	225	278	341	366	399	1.0	1.5
AVERAGE	-	60.2	1	0.153	3.1	2.27	93.9	83.6	10.3	95	108	121	145	169	219	269	335	363	397	1.0	1.7
MINIMUM	-	58.2	0	0.110	2.0	1.49	92.5	83.1	9.3	89	100	111	135	161	214	257	308	332	360	1.0	1.1
MAXIMUM	-	61.6	1	.204	5.0	2.90	94.9	84.7	11.0	103	112	126	149	175	225	283	360	387	414	1.0	2.3
SAMPLES	46																				

District 16

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Northern California

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
523	6	58.2	1	0.186	1.3	1.36	84.8	78.9	9.2	94	110	130	165	200	248	288	348	375	409	1.0	2.0
524	6	59.2	1	.240	3.3	1.42	84.2	77.9	10.5	93	102	122	155	186	233	295	353	385	411	1.0	3.0
525	5	58.9	1	.225	2.0	1.38	84.7	77.5	11.2	105	115	129	157	183	235	285	357	379	404	1.0	2.3
526	5	59.8	1	.200	2.0	.80	84.8	77.5	10.4	96	109	126	155	184	241	294	361	387	416	1.0	2.0
527	5	59.5	1	.250	2.5	1.79	83.0	80.8	8.2	99	116	135	164	191	239	279	332	354	391	1.0	1.3
528	6	60.7	1	.129	2.0	2.79	84.7	80.4	10.0	88	102	119	150	180	233	283	349	372	395	1.0	2.2
529	6	59.7	1	.231	3.3	2.50	83.5	78.5	9.6	93	109	127	159	189	240	287	349	373	398	1.0	1.9
AVERAGE	-	59.4	1	0.209	2.3	1.72	84.2	78.8	9.9	95	109	127	158	188	238	287	350	375	403	1.0	2.1
MINIMUM	-	58.2	1	0.129	1.3	0.80	83.0	77.5	8.2	88	102	119	150	180	233	279	332	354	391	1.0	1.3
MAXIMUM	-	60.7	1	.250	3.3	2.79	84.8	80.8	11.2	105	116	135	165	200	248	295	361	387	416	1.0	3.0
SAMPLES	39																				

Premium-price gasoline

530	5	60.2	1	0.090	1.0	2.21	93.5	83.0	9.6	96	109	125	147	169	217	269	340	368	409	1.0	1.5
531	6	56.7	1	.125	3.3	2.58	94.6	84.6	10.5	96	111	132	166	197	242	280	329	352	390	1.0	2.4
532	6	59.6	1	.150	3.0	2.54	93.7	84.0	10.5	91	107	123	150	175	219	265	328	359	392	1.0	1.5
533	6	58.8	1	.135	2.3	1.84	95.1	83.6	9.9	95	108	123	147	172	222	273	347	378	406	1.0	1.9
534	6	61.3	1	.165	2.0	2.95	95.0	84.1	9.9	95	111	125	149	176	210	247	300	329	375	1.0	1.3
535	6	60.8	1	.160	4.7	2.96	93.5	83.0	10.2	90	107	120	145	172	218	269	335	362	415	1.0	1.5
536	5	58.0	1	.205	4.0	2.74	94.1	84.3	8.8	98	111	127	154	181	227	274	349	378	400	1.0	2.0
AVERAGE	-	59.3	1	0.147	2.9	2.55	94.2	83.8	9.9	94	109	125	151	177	222	268	333	361	398	1.0	1.7
MINIMUM	-	56.7	1	0.090	1.0	1.84	93.5	83.0	8.8	90	107	120	145	169	210	247	300	329	375	1.0	1.3
MAXIMUM	-	61.3	1	.205	4.7	2.96	95.1	84.6	10.5	98	111	132	166	197	242	280	349	378	415	1.0	2.4
SAMPLES	40																				

District 17

Table 3.- Motor-gasoline survey, winter 1954-55
(Average values of different brands)

Southern California

Regular-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
537	25	59.2	0	0.259	1.1	2.18	84.4	79.8	9.0	90	112	129	160	190	241	283	339	364	395	1.0	2.3
538	1	57.8	0	.196	3.0	1.15	84.6	78.2	9.6	94	99	124	165	202	252	292	349	374	403	1.1	3.4
539	26	59.6	0	.352	1.0	1.76	84.4	77.9	9.0	92	112	128	155	184	233	276	337	366	395	1.0	1.6
540	1	60.0	0	.204	3.0	.59	84.1	79.1	10.8	88	96	106	124	148	228	290	352	373	413	1.0	3.5
541	27	57.9	0	.176	1.1	1.09	84.8	78.8	10.2	87	105	123	163	204	253	291	345	379	406	1.0	2.9
542	1	58.9	0	.140	2.0	.61	83.4	76.9	9.4	90	104	122	159	199	242	282	338	363	398	1.0	3.0
543	26	60.3	0	.160	1.8	2.10	83.9	79.7	9.0	90	112	129	160	188	231	266	330	367	405	1.0	2.1
544	1	56.9	0	.138	3.0	0.68	82.3	78.0	8.9	93	104	129	171	208	255	292	337	353	387	1.0	3.3
545	1	57.1	0	.438	4.0	2.49	81.5	76.0	8.6	95	108	128	168	205	259	307	363	382	405	1.0	3.0
546	1	57.3	0	.295	3.0	1.94	82.3	77.5	9.4	96	110	130	164	196	252	299	355	375	397	1.0	3.0
547	25	57.2	0	.158	1.1	1.75	83.8	79.0	8.4	93	116	135	173	204	248	286	335	359	386	1.0	1.9
548	25	58.8	0	.098	1.0	2.60	84.6	80.1	9.2	90	112	129	160	192	241	290	352	376	403	1.0	2.1
549	1	58.4	0	.155	1.0	1.00	84.5	78.7	10.5	94	103	124	165	206	251	288	339	367	406	1.0	4.0
550	26	60.4	0	.209	2.3	.73	84.1	78.1	10.8	87	99	112	134	161	237	291	350	375	403	1.0	2.1
551	1	57.7	0	.228	2.0	.85	83.7	77.6	10.3	92	106	120	150	188	261	305	361	388	412	1.0	2.0
552	1	59.8	0	.336	1.0	1.49	84.0	77.6	9.1	92	111	126	156	185	235	278	347	377	411	1.0	2.0
AVERAGE	-	58.6	0	0.221	2.0	1.44	83.8	78.3	9.5	91	107	125	158	191	245	289	346	371	402	1.0	2.6
MINIMUM	-	56.9	0	0.098	1.0	0.59	81.5	76.0	8.4	87	96	106	124	148	228	266	330	353	386	1.0	1.6
MAXIMUM	-	60.4	0	.438	4.0	2.60	84.8	80.1	10.8	96	116	135	173	208	261	307	363	388	413	1.1	4.0
SAMPLES	189																				

Premium-price gasoline

Item	Samples	Gravity A.S.T.M. D287 ° A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, ° F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Percent Loss
553	1	61.0	0	0.124	3.0	1.68	94.7	83.9	9.8	88	100	116	142	167	209	252	323	353	392	1.0	2.0
554	1	63.3	0	.304	2.0	2.88	89.8	80.2	11.6	88	96	111	138	163	209	245	298	328	373	1.0	3.8
555	1	57.3	0	.229	3.0	1.53	93.5	81.5	9.8	92	112	124	149	174	223	283	365	394	426	1.0	2.8
556	26	60.7	0	.139	1.2	1.75	93.6	82.7	10.1	87	105	121	141	166	218	262	320	345	385	1.0	2.0
557	25	58.7	0	.170	2.4	2.93	93.3	82.8	8.8	95	114	127	152	177	229	278	338	360	405	1.0	1.6
558	1	60.8	0	.125	3.0	1.65	95.0	83.7	10.4	93	108	120	143	166	212	253	329	363	405	1.0	2.5
559	2	57.3	0	.163	3.0	2.50	95.0	83.7	9.8	91	105	125	150	184	235	281	344	373	409	1.0	2.8
560	25	61.1	0	.202	1.0	2.72	94.5	83.4	9.6	91	108	122	144	168	213	253	304	327	356	1.0	1.7
561	25	61.0	0	.098	1.2	2.78	93.4	83.9	9.6	89	109	123	145	168	216	265	334	361	391	1.0	1.9
562	1	59.1	0	.121	4.0	1.68	95.5	83.0	10.3	92	99	114	139	165	217	268	335	359	401	1.1	2.5
563	26	58.0	0	.216	4.8	2.82	94.1	84.0	9.5	91	109	124	149	176	224	274	348	373	398	1.0	2.0
564	26	60.4	0	.120	2.0	1.72	94.5	83.4	10.2	87	105	118	143	169	217	260	329	361	400	1.0	2.0
565	1	59.8	0	.158	2.0	1.09	93.7	83.7	9.2	92	110	122	146	170	217	260	317	339	389	1.0	2.0
566	1	57.5	0	.158	1.0	1.15	92.3	83.7	9.1	91	104	122	152	180	230	280	344	370	395	1.2	2.3
567	26	57.3	0	.131	1.8	2.04	94.0	83.6	9.7	88	104	117	143	170	232	292	366	389	413	1.0	1.2
568	1	57.2	0	.179	2.0	2.58	94.2	83.7	8.4	94	115	127	151	175	230	317	348	365	395	1.0	1.5
AVERAGE	-	59.4	0	0.165	2.3	2.09	93.8	83.2	9.7	91	106	121	145	171	221	270	334	360	396	1.0	2.2
MINIMUM	-	57.2	0	0.098	1.0	1.09	89.8	80.2	8.4	87	96	111	138	163	209	245	298	327	356	1.0	1.2
MAXIMUM	-	63.3	0	.304	4.8	2.93	95.5	84.0	11.6	95	115	127	152	184	235	317	366	394	426	1.2	3.8
SAMPLES	189																				

Table 4.- Motor-gasoline survey, winter 1954-55
(Average values for brands from different districts)

Regular-price gasoline

District No.	Name	Samples	Items (Brands)	Gravity A.S.T.M. D287 °A.P.I.	Corrosion A.S.T.M. D130 No.	Sulfur A.S.T.M. D90 percent	Gum A.S.T.M. D381 mg./100 ml.	TEL A.S.T.M. D526 ml./gal.	Octane number Research A.S.T.M. D908	Octane number Motor A.S.T.M. D357	R.V.P. A.S.T.M. D323 lb.	Distillation, A.S.T.M. Method D86 Temperature range, °F.(Corrected to sea level) I.B.P.	Percent evaporated 5	10	20	30	50	70	90	95	End point	Percent Resid.	Loss
1	NORTHEAST AREA	113	16	62.5	1	0.065	1.9	2.16	90.0	83.3	11.6	88	99	115	139	164	213	262	335	365	405	1.0	2.4
2	MID-ATL COAST REGION	370	16	62.5	1	.057	1.7	2.21	89.7	83.2	11.3	87	100	115	140	165	215	264	336	367	406	.9	2.4
3	SOUTHEAST AREA	185	19	61.5	0	.051	1.7	2.24	88.1	82.4	9.9	93	109	124	150	175	223	269	337	368	408	.9	1.7
4	APPALACHIAN AREA	211	27	63.4	1	.049	2.1	2.24	89.1	82.7	11.8	89	100	117	142	167	214	261	330	362	404	1.0	2.8
5	MICHIGAN	89	14	63.7	1	.057	1.9	2.01	88.0	81.6	11.4	88	103	118	141	164	209	257	325	355	391	.9	2.2
6	NORTH ILLINOIS AREA	143	16	64.6	1	.073	1.7	1.75	85.5	80.8	12.0	87	98	111	137	163	212	258	328	361	404	.9	2.9
7	CENTRAL MISS AREA	161	22	64.6	1	.046	1.8	1.78	86.1	81.4	11.5	90	102	116	140	163	210	258	326	358	400	.9	2.3
8	LOWER MISS AREA	141	14	63.1	0	.054	1.8	2.06	87.1	81.7	10.1	96	110	123	147	171	218	267	334	368	406	1.0	2.0
9	NORTH PLAINS AREA	78	15	65.1	1	.055	2.1	1.81	84.8	80.4	11.5	91	102	115	137	160	208	258	329	363	408	.9	2.2
10	CENTRAL PLAINS AREA	81	11	65.2	1	.045	1.6	1.63	84.9	80.1	11.1	92	104	117	139	161	208	258	332	366	412	.8	2.3
11	SOUTH PLAINS AREA	155	27	64.1	0	.048	1.8	1.66	85.2	80.7	11.0	90	103	116	139	163	211	261	331	362	402	.9	2.0
12	SOUTHERN TEXAS	140	17	63.5	0	.054	2.3	2.13	86.2	82.1	9.9	95	110	124	148	171	213	257	322	352	393	.9	1.8
13	SOUTH MOUNTAIN STATES	201	29	63.0	0	.101	2.1	1.66	83.3	78.8	10.2	92	107	121	146	170	216	267	336	364	401	.9	2.1
14	NORTH MOUNTAIN STATES	102	15	61.8	1	.108	1.7	1.49	84.4	78.7	10.6	92	106	124	152	180	231	276	335	363	404	.9	2.6
15	PACIFIC NORTHWEST	47	8	59.3	1	.209	2.7	1.66	84.2	78.6	10.0	94	109	124	155	186	240	288	351	378	408	1.0	2.1
16	NORTHERN CALIFORNIA	39	7	59.4	1	.209	2.3	1.72	84.2	78.8	9.9	95	109	127	158	188	238	287	350	375	403	1.0	2.1
17	SOUTHERN CALIFORNIA	189	16	56.6	0	.221	2.0	1.44	83.8	78.3	9.5	91	107	125	158	191	245	289	346	371	402	1.0	2.6
AVERAGE		--	--	62.6	1	0.088	2.0	1.86	86.2	80.8	10.8	91	105	120	145	171	219	267	334	365	403	0.9	2.3
SAMPLES		2,445																					

Premium-price gasoline

1	NORTHEAST AREA	103	14	63.1	1	0.061	2.3	2.15	95.2	85.1	11.6	88	99	112	134	156	203	254	325	355	396	1.0	1.9
2	MID-ATL COAST REGION	322	15	62.9	1	.053	1.9	2.11	94.8	85.0	11.3	88	101	114	134	156	205	256	328	359	402	.9	2.1
3	SOUTHEAST AREA	177	18	62.0	0	.048	2.3	2.30	94.8	85.2	10.1	93	108	121	142	164	210	261	331	361	403	1.0	1.5
4	APPALACHIAN AREA	187	25	63.0	1	.046	2.4	2.35	94.3	85.1	11.6	90	101	116	139	161	209	259	333	364	406	1.0	2.3
5	MICHIGAN	90	16	63.0	1	.057	1.8	2.30	93.8	84.6	11.4	88	101	116	139	162	208	256	325	360	395	.9	2.1
6	NORTH ILLINOIS AREA	149	16	65.0	1	.057	1.6	2.10	92.8	84.4	11.9	89	98	110	129	149	195	249	328	360	407	.9	2.1
7	CENTRAL MISS AREA	157	21	63.5	1	.051	1.7	2.20	93.0	84.9	11.3	90	103	116	137	160	207	260	335	367	407	.9	1.9
8	LOWER MISS AREA	144	14	62.0	0	.062	2.6	2.41	94.7	85.2	10.1	95	108	121	142	164	212	266	335	368	406	1.0	2.0
9	NORTH PLAINS AREA	80	17	64.2	1	.056	2.2	2.37	92.3	84.5	11.5	92	103	114	134	155	203	257	334	367	409	.9	1.8
10	CENTRAL PLAINS AREA	82	11	65.2	1	.056	1.9	2.14	91.8	83.6	11.3	90	103	114	135	156	200	250	326	360	405	.8	2.3
11	SOUTH PLAINS AREA	149	25	63.8	0	.050	2.1	2.38	93.1	85.3	11.3	90	101	114	136	159	206	257	331	363	406	.9	2.2
12	SOUTHERN TEXAS	142	14	61.1	0	.056	2.1	2.59	94.8	86.1	10.1	94	108	121	142	165	211	259	322	349	391	1.0	1.8
13	SOUTH MOUNTAIN STATES	198	27	61.6	0	.068	2.6	2.29	92.0	84.6	9.8	92	107	122	146	170	215	261	322	350	389	.9	1.9
14	NORTH MOUNTAIN STATES	102	15	61.3	1	.110	3.2	2.03	91.9	82.3	10.1	93	109	123	149	174	224	272	334	360	396	.9	2.1
15	PACIFIC NORTHWEST	46	8	60.2	1	.153	3.1	2.27	93.9	83.6	10.3	95	108	121	145	169	219	269	335	363	397	1.0	1.7
16	NORTHERN CALIFORNIA	40	7	59.3	1	.147	2.9	2.55	94.2	83.8	9.9	94	109	125	151	177	222	268	333	361	398	1.0	1.7
17	SOUTHERN CALIFORNIA	189	16	59.4	0	.165	2.3	2.09	93.8	83.2	9.7	91	106	121	145	171	221	270	334	360	396	1.0	2.2
AVERAGE		--	--	62.4	1	0.076	2.3	2.27	93.6	84.5	10.8	91	104	118	140	163	210	260	330	360	401	0.9	2.0
SAMPLES		2,357																					

Table 5. - Locations and numbers of samples, motor-gasoline survey, Winter 1954-55

State	Location	Samples
District 1 (Northeast area)		
Maine	Bangor	2
	Portland	17
Massachusetts	Boston area	189
	Fall River	2
New Hampshire	Manchester	4
Vermont	Barre	2
	6 locations	216
District 2 (Mid-Atlantic Coast region)		
Connecticut	Hartford	3
D.C. and vicinity	Washington area	35
Maryland	Baltimore	53
New Jersey and New York	New York City area	317
New York	Albany	58
Pennsylvania	Allentown	2
	Philadelphia area	165
Rhode Island	Providence	30
Virginia	Fredericksburg	1
	Lynchburg	4
	Richmond	24
	11 locations	692
District 3 (Southeast area)		
Alabama	Birmingham	10
	Guntersville	2
	Mobile	6
	Montgomery	8
Florida	Daytona Beach	9
	Ft. Lauderdale	2
	Jacksonville	81
	Miami	26
	Tampa	16
Georgia	Atlanta	74
	Savannah	12
North Carolina	Charlotte	58
	Wilmington	44
Tennessee	Knoxville	14
	14 locations	342
District 4 (Appalachian area)		
Kentucky	Ashland	2
	Lexington	2
New York	Buffalo area	56
	Wellsville	23
Ohio	Canton	2
	Cincinnati	45
	Cleveland	106
	Columbus	11
	Dayton	8
	Lima	21
	Mansfield	2
	Toledo	23
Pennsylvania	Bradford	2
	Clarion	1
	Oil City	8
	Pittsburgh	80
	Warren	2
West Virginia	Charleston	4
	18 locations	398
District 5 (Michigan)		
Michigan	Alma	2
	Detroit	139
	Flint	6
	Grand Rapids	22
	Lansing	4
	Mt. Pleasant	4
	Owosso	1
	Saginaw	1
	8 locations	179
District 6 (North Illinois area)		
Illinois and Indiana	Chicago area	184
Indiana	South Bend	29
Wisconsin	Madison	38
	Milwaukee	41
	4 locations	292
District 7 (Central Mississippi area)		
Indiana	Indianapolis	108
	Terre Haute	2
Kentucky	Louisville	75
Missouri and Illinois	St. Louis area	133
	4 locations	318
District 8 (Lower Mississippi area)		
Arkansas	El Dorado	18
	Little Rock	25
Louisiana	Lafayette	4
	Lake Charles	22
	New Orleans	78
	Shreveport	24
Mississippi	Greenville	8
	Hattiesburg	8
Tennessee	Memphis	66
	Nashville	32
	10 locations	285
District 9 (North Plains area)		
Minnesota	Duluth	2
	Minneapolis-St.Paul	150
South Dakota	Aberdeen	6
	3 locations	158
District 10 (Central Plains Area)		
Kansas and Missouri	Kansas City area	111
Nebraska	Omaha	52
	2 locations	163
District 11 (South Plains area)		
Arkansas	Ft. Smith	2
Kansas	Coffeyville	3
	Pittsburg	2
	Wichita	70
Oklahoma	Altus	4
	Bartlesville	4
	Cyril	2
	Duncan	2
	Oklahoma City	20
	Ponca City	2
	Tulsa	100
Texas	Abilene	16
	Dallas-Ft. Worth	53
	Gladewater	2
	Greggton	4
	Mt. Pleasant	2
	Sherman	2
	Tyler	14
	18 locations	304
District 12 (Southern Texas)		
Texas	Beaumont	4
	Beeville	2
	Corpus Christi	63
	Falfurrias	1
	Harlingen	14
	Houston	142
	McAllen	4
	Odessa	4
	San Antonio	48
	9 locations	282
District 13 (South Mountain states)		
Arizona	Phoenix	12
	Tucson	14
California	Bakersfield	52
	Fresno	14
Colorado	Denver	94
Nevada	Ely	10
	Winnemucca	14
New Mexico	Artesia	2
	Roswell	4
Texas	Amarillo	80
	El Paso	39
	Midland	13
Utah	Salt Lake City	49
	Vernal	2
	14 locations	399
District 14 (North Mountain states)		
Idaho	Boise	2
Montana	Billings	46
	Cut Bank	2
	Great Falls	34
	Kevin	2
	Laurel	2
	Sunburst	2
Washington	Pasco	4
	Spokane	56
Wyoming	Casper	50
	Cheyenne	2
	Newcastle	2
	12 locations	204
District 15 (Pacific Northwest)		
Oregon	Portland	14
Washington	Seattle	79
	2 locations	93
District 16 (Northern California)		
California	San Francisco Bay area	79
	1 location	79
District 17 (Southern California)		
California	Los Angeles area	378
	1 location	378
	Total:	137 locations 4,802

DISTRICT	LOCATIONS	SAMPLES	PERCENT
1	6	216	4.5
2	11	692	14.4
3	14	362	7.5
4	18	398	8.3
5	8	179	3.7
6	4	292	6.1
7	4	318	6.6
8	10	285	5.9
9	3	158	3.3
10	2	163	3.4
11	18	304	6.3
12	9	282	5.9
13	14	399	8.3
14	12	204	4.3
15	2	93	1.9
16	1	79	1.7
17	1	378	7.9
Total	137	4,802	100.0

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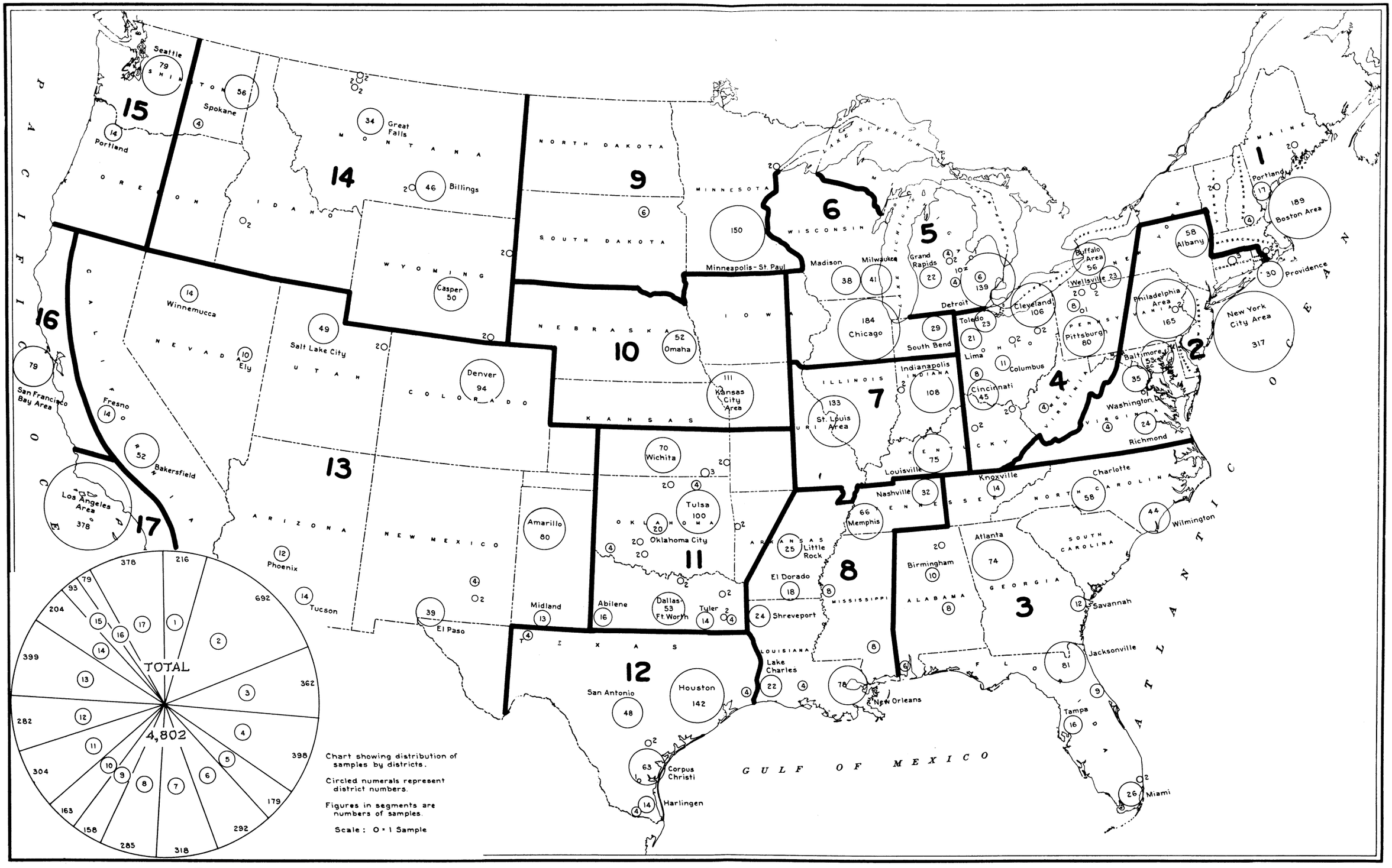

Figure 3. – Map showing locations and numbers of samples for the National Motor – Gasoline Survey, Winter 1954 - 1955.