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MARKET FACTORS of North Dakota DURUM WHEAT

*1963 shipments
with comparisons*

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STANDING DURUM

HARVESTING DURUM

ELEVATOR DELIVERY

FOREWORD

This publication is a continuation of a series of reports illustrating the quality of North Dakota wheat. The study was made possible through the continued financial assistance from the North Dakota State Wheat Commission. The Department of Agricultural Economics received this grant for a study of the "Factors Affecting the Marketing of North Dakota Wheat." Reports published under this grant are:

1. Wheat Statistics for North Dakota, Ronald A. Anderson, Fred R. Taylor, Agricultural Economics Report No. 20, August 1961.
2. Protein Content of North Dakota Wheat, Ronald A. Anderson, North Dakota Farm Research, March-April 1962.
3. Market Factors of North Dakota Hard Red Spring Wheat, Ronald A. Anderson, Fred R. Taylor, Agricultural Economics Report No. 21, April 1962.
4. North Dakota Hard Red Spring Wheat Shipments, Ronald A. Anderson, Fred R. Taylor, North Dakota Farm Research, September-October 1962.
5. Durum Market Factors, 1962, Ronald A. Anderson, North Dakota Farm Research, January-February 1963.
6. Quality Factors of North Dakota Durum Shipments, 1960, 1961, 1962, Ronald A. Anderson, Fred R. Taylor, Agricultural Economics Report No. 26, January 1963.
7. Durum Data, Anderson, Kurtz, and Taylor, Agricultural Economics Report No. 27, February 1963.
8. Market Factors of North Dakota Hard Red Spring Wheat, 1962 Shipments, Ronald A. Anderson, Fred R. Taylor, Agricultural Economics Report No. 28, February 1963.
9. Market Factors of North Dakota Hard Red Spring Wheat, 1963 Shipments, Clinton D. Kurtz, Fred R. Taylor, Agricultural Economics Report No. 33, March 1964.
10. Market Factors of North Dakota Durum Wheat, 1963 Shipments With Comparisons, Clinton D. Kurtz, Fred R. Taylor, Agricultural Economics Report No. 34, April 1964.
11. Quality of Commodity Credit Corporation Wheat in North Dakota Country Warehouses and Subterminals, Clinton D. Kurtz, Fred R. Taylor, North Dakota Farm Research, May-June 1964.
12. Movement of North Dakota Grain by Truck, October-November, 1963, Clinton D. Kurtz, Fred R. Taylor, North Dakota Farm Research, July-August 1964.
13. Economic Implications of the Wheat Sedimentation Test on the North Dakota Economy, Clinton D. Kurtz, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota.

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MARKET FACTORS OF NORTH DAKOTA DURUM WHEAT
1963 SHIPMENTS WITH COMPARISONS

Clinton D. Kurtz and Fred R. Taylor¹

North Dakota ranks number one in the production of Durum wheat. During the past five years, North Dakota has produced between 77 and 85 per cent of all Durum wheat produced in the United States. The 1963 United States Durum crop totaled 49,763,000 bushels. The 1963 crop was harvested from 1,936,000 acres, with an average yield of 25.7 bushels per harvested acre.

The 1963 North Dakota Durum crop totaled 42,268,000 bushels, or approximately 85 per cent of the United States Durum production. The 1963 North Dakota crop was harvested from 1,595,000 acres, with an average yield of 26.5 bushels per harvested acre. The estimated value of production of the 1963 Durum crop was \$84,536,000, as compared to \$249,724,000 for All Wheat.²

The Northwest, North Central, and Northeast Crop Reporting Districts produced approximately 71 per cent of all North Dakota Durum wheat in 1963. As usual, the 1963 Durum production was largely centered in the counties in the North Central, Northeast, and Central Crop Reporting Districts, the area known as the "Durum Triangle."

The North Dakota State Wheat Commission, through its efforts of making available complete information regarding the size, quality and availability of wheat grown in North Dakota, supports this research. The survey of carlot shipments of Durum wheat was conducted under a grant from the Commission for an overall study entitled, "Factors Affecting the Marketing of North Dakota Wheat."

PROCEDURE

The analysis included in this study is made up of a 10 per cent sample of all Durum carlot shipments held for inspection at the Grand Forks Inspection Point for the period August 1 through October 31, 1963. Location of the railroads in North Dakota indicates that a large share of the Durum moving from the areas of heavy production to the primary markets of Minneapolis and Duluth, Minnesota, moves through the Grand Forks Inspection Point.

This time period is the same as that used in the analysis for the 1960, 1961, and 1962 Crop Years.³ Estimates indicate that approximately one-third of the Durum shipments are normally marketed during this period.

¹Assistant in Agricultural Economics and Agricultural Economist, North Dakota Agricultural Experiment Station.

²Price Trends in North Dakota, 1950-1963, C. J. Heltemes and Fred R. Taylor, North Dakota Crop Reporting Service, Fargo, North Dakota, Agricultural Statistics No. 11, January 1964.

³Quality Factors of North Dakota Durum Shipments, 1960, 1961, 1962, Ronald A. Anderson and Fred R. Taylor, Department of Agricultural Economics, North Dakota Experiment Station, Fargo, North Dakota, Agricultural Economics Report No. 26, January 1963.

All factors of the carlot sample listed on the inspection record were recorded, including the protein content and the origin of the sample by crop reporting district and county. This information was tabulated and analyzed in the following format for each of the quality factors existing in the sample (Appendix Tables B-1 through B-24). They are as follows:

1. The percentage distribution and number of carlots falling within specified ranges of various quality factors by grade for the entire sample.
2. Number of carlots falling within specified ranges of various quality factors by crop reporting districts included in the sample area and the percentage distribution of carlots within these ranges for the 1963 sample and the 1962, 1961, and 1960 samples for comparison.
3. Number of carlots falling within specified ranges of various quality factors by grade for the four crop reporting districts.

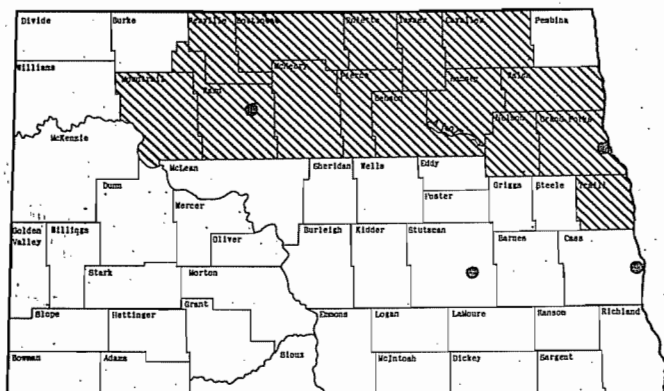
Information found in the Appendix, in addition to the above, includes the average values and range of test weight, moisture, and protein by county and grade for the four crop reporting districts in the sample.

FINDINGS

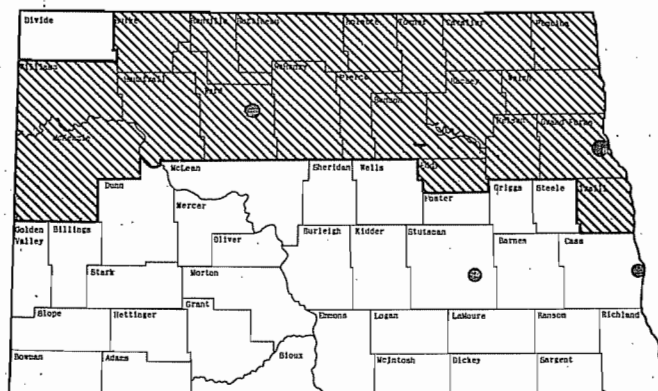
The origins of the carlot samples are shown in Figure 1. The sample areas for the three previous years are also shown in this figure. Durum wheat produced in other areas is marketed through other inspection points located at Minot, Jamestown, and Fargo, and in some out of state points, but these quantities are relatively small in comparison with the carlot shipments entering the Grand Forks Inspection Point. Nine of the top ten Durum producing counties during the 1951-60 period were included in this sample area. The location of these nine high producing counties and the railroads serving that area indicate that the most logical direction of travel to the eastward terminal markets would be through the Grand Forks Inspection Point (Figure 1).

The 1963 Durum carlot survey yielded 199 samples, as compared to 269 samples in 1962. In general, the carlots inspected were of higher grade than the three previous years (Table 1). Over 75 per cent of the carlots graded No. 2 Hard Amber Durum or better. Even though the grades were higher in general, the per cent of carlots of the grade No. 1 Hard Amber Durum for 1963 was considerably lower than the three previous years. About 22 per cent of the carlots were No. 1 HAD, while this per cent was 37.2 for 1962, 49.3 for 1961, and 46.3 for 1960. Fifty-four per cent of the carlot samples graded No. 2 Hard Amber Durum. Only six samples for 1963 were of grades No. 4 HAD and less. The modal and median grade for the total sample was No. 2 HAD. No samples of the subclass Durum were present in the sample.

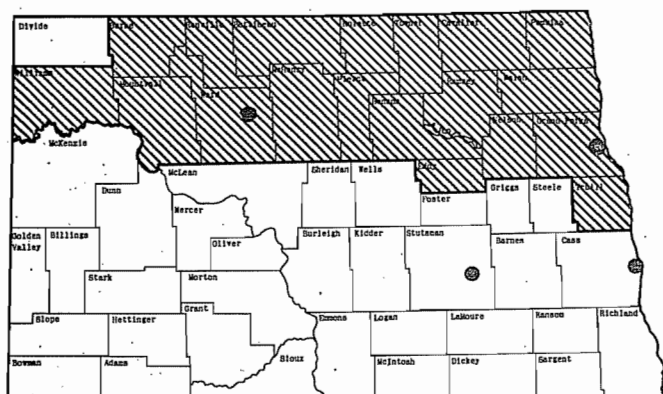
Ninety-two per cent of all shipments originated from the Northeast and North Central Crop Reporting Districts. The Northwest and East Central Districts were also included in the sample area and accounted for only 16 carlot samples, or 8 per cent of the 199 carlot samples in the 1963 survey.



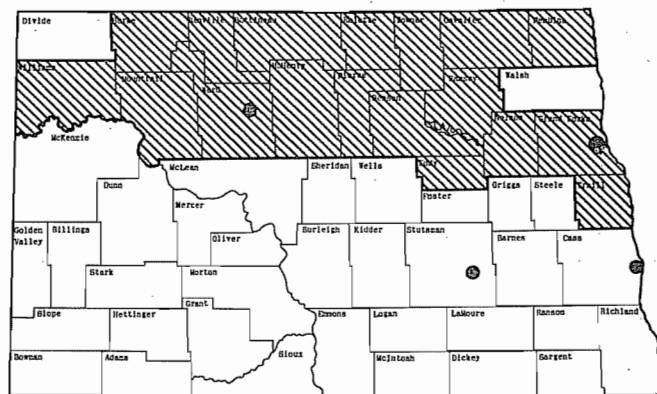
1963 SAMPLE AREA



1962 SAMPLE AREA

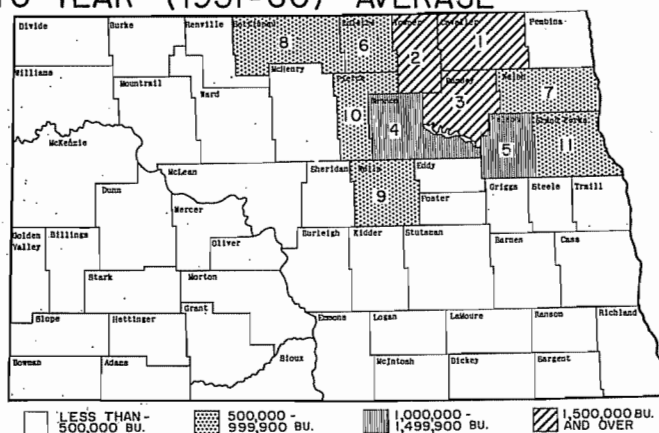


1961 SAMPLE AREA



1960 SAMPLE AREA

DURUM PRODUCTION AND COUNTY RANK, 10 YEAR (1951-60) AVERAGE



NORTH DAKOTA RAILROADS

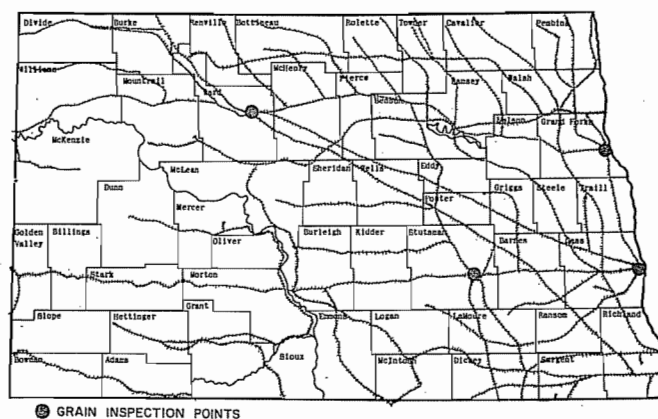


Figure 1. Counties included in 10 per cent samples of carlot inspection at Grand Forks Inspection Point, North Dakota Durum production and county rank, and North Dakota Railroads.

TABLE 1. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOTS INCLUDED IN THE 10 PER CENT SAMPLE SURVEY, BY GRADE, AUGUST THROUGH OCTOBER, 1963, 1962, 1961 AND 1960

Grade	1963		1962		1961		1960	
	Carlots	Per Cent	Carlots	Per Cent	Carlots	Per Cent	Carlots	Per Cent
No. 1 HAD	43	21.6	100	37.2	107	49.3	84	46.3
No. 2 HAD	108	54.2	73	27.1	45	20.7	14	7.7
No. 3 HAD	42	21.2	61	22.7	56	25.7	63	34.8
No. 4 HAD	2	1.0	7	2.6	3	1.4	2	1.1
No. 5 HAD	1	0.5	4	1.5	--	-----	--	-----
Sample Grade HAD	--	-----	1	0.4	--	-----	1	0.6
No. 1 AD	1	0.5	5	1.8	--	-----	2	1.1
No. 2 AD	1	0.5	4	1.5	1	0.5	4	2.2
No. 3 AD	--	-----	9	3.3	2	0.9	8	4.4
No. 4 AD	1	0.5	1	0.4	--	-----	1	0.6
No. 5 AD	--	-----	--	-----	1	0.5	1	0.6
Sample Grade AD	--	-----	--	-----	--	-----	--	-----
No. 1 Du.	--	-----	1	0.4	--	-----	--	-----
No. 2 Du.	--	-----	2	0.7	1	0.5	--	-----
No. 3 Du.	--	-----	1	0.4	1	0.5	--	-----
No. 4 Du.	--	-----	--	-----	--	-----	--	-----
No. 5 Du.	--	-----	--	-----	--	-----	--	-----
Sample Grade Du.	--	-----	--	-----	--	-----	1	0.6
Total - All Durum	199	100.0	269	100.0	217	100.0	181	100.0

Test Weight

The average test weight for the sample area and all crop reporting districts was lower than the three previous years (Table 2). Bushel weights for the sample area ranged from 54.3 to 62.0 pounds with an average of 59.2 pounds. Average bushel weights between districts were quite uniform. The Northeast District had the highest bushel weight with an average of 59.3 pounds. The Northwest District had the lowest with 58.7 pounds per bushel. When tabulated on a county basis, the higher test weights were found in Grand Forks, Ward, and Walsh Counties. Average values and range of test weight by county and grade within crop reporting districts can be found in Appendix Tables B-2 and B-3.

Test weight was found to be the most important of all grading factors in determining the grade. Test weight determined the grade for 123 carlots out of the 155 grading No. 2 or less for all subclasses. Ninety-four per cent of the 108 carlots grading No. 2 Hard Amber Durum were of that grade because of their bushel weight (Table 5).

For further analysis, a distribution of carlots falling with one pound bushel ranges by grade within crop reporting districts and the total sample can be found in Appendix Tables B-4 through B-6. The percentage distribution of test weight between years for the sample area is indicated in Appendix Table B-5 for further comparison.

Moisture Content

Moisture content for the sample area ranged from 9.2 to 13.5 per cent. The average moisture content was 11.3 per cent, compared to 12.4 in 1962 (Table 3). There were no samples with a moisture content in excess of 13.5 per cent; therefore, the grade designation "Tough" was not present on any of the grades in the sample.

The highest average moisture content was found in the Northwest Crop Reporting District (11.6 per cent) and the lowest in the East Central District (10.4 per cent). The average values and range of moisture content in the sample by county are listed in Appendix Table B-2.

Seventy-four per cent of the carlots had a moisture content falling between 10.0 and 11.9 per cent (Appendix Table B-7). Less than nine per cent of the carlots had a moisture content greater than 12.5 per cent.

Protein Content

The average protein content for the 1963 period (14.3 per cent) was higher than for 1962 (13.1 per cent). Samples ranged from 11.4 to 16.5 per cent (Table 4). The crop reporting district having the highest average protein content was the North Central District with 14.6 per cent. The East Central District, with only two carlot samples present in the survey, had the lowest protein content with an average of 14.0 per cent.

TABLE 2. AVERAGE VALUE AND RANGE OF BUSHEL WEIGHTS OF CARLOT SAMPLES OF DURUM WHEAT SHIPMENTS, BY AREA, AUGUST THROUGH OCTOBER, 1963, 1962, 1961, AND 1960

Year and Area	Total Number of Shipments	Bushel Weight, Pounds	
		Average	Range
<u>1963</u>			
Northwest	14	58.7	54.3 - 61.5
North Central	57	59.1	56.5 - 62.0
Northeast	126	59.3	55.0 - 62.0
East Central	<u>2</u>	<u>59.2</u>	<u>58.7 - 59.6</u>
Total	199	59.2	54.3 - 62.0
<u>1962</u>			
Northwest	20	61.5	60.0 - 63.0
North Central	78	60.6	57.0 - 63.2
Northeast	<u>171</u>	<u>59.6</u>	<u>54.7 - 62.7</u>
Total	269	60.0	54.7 - 63.2
<u>1961</u>			
Northwest	10	61.1	60.0 - 62.3
North Central	37	61.3	58.5 - 63.0
Northeast	<u>170</u>	<u>61.5</u>	<u>57.0 - 63.0</u>
Total	217	61.4	57.0 - 63.0
<u>1960</u>			
Northwest	21	60.0	58.5 - 62.0
North Central	52	60.9	58.0 - 62.5
Northeast	<u>108</u>	<u>60.8</u>	<u>58.5 - 63.3</u>
Total	181	60.6	58.0 - 63.3

TABLE 3. AVERAGE VALUE AND RANGE OF MOISTURE CONTENT OF CARLOT SAMPLES OF DURUM WHEAT SHIPMENTS, BY AREA, AUGUST THROUGH OCTOBER, 1963, 1962, 1961, AND 1960

Year and Area	Total Number of Shipments	Moisture Content, Per Cent	
		Average	Range
<u>1963</u>			
Northwest	14	11.6	10.3 - 12.7
North Central	57	11.2	9.2 - 13.5
Northeast	126	11.3	9.6 - 13.4
East Central	<u>2</u>	<u>10.4</u>	<u>10.1 - 10.7</u>
Total	199	11.3	9.2 - 13.5
<u>1962</u>			
Northwest	20	11.6	10.0 - 12.7
North Central	78	11.8	10.0 - 14.3
Northeast	<u>171</u>	<u>12.7</u>	<u>10.7 - 15.0</u>
Total	269	12.4	10.0 - 15.0
<u>1961</u>			
Northwest	10	9.8	8.9 - 11.4
North Central	37	10.5	8.6 - 12.0
Northeast	<u>170</u>	<u>11.2</u>	<u>8.8 - 15.5</u>
Total	217	11.0	8.6 - 15.5
<u>1960</u>			
Northwest	21	10.8	9.0 - 12.2
North Central	52	11.2	9.4 - 13.0
Northeast	<u>108</u>	<u>11.8</u>	<u>10.6 - 13.7</u>
Total	181	11.5	9.0 - 13.7

TABLE 4. AVERAGE VALUES AND RANGES FOR PROTEIN CONTENT OF CARLOT SAMPLES OF DURUM WHEAT SHIPMENTS, BY AREA, AUGUST THROUGH OCTOBER, 1963, 1962, 1961, AND 1960

Year and Area	Total Number of Shipments	Protein Content, Per Cent	
		Average	Range
<u>1963</u>			
Northwest	14	14.1	12.7 - 16.5
North Central	57	14.6	12.0 - 16.3
Northeast	126	14.2	11.4 - 16.0
East Central	<u>2</u>	<u>14.0</u>	<u>----</u> <u>----</u>
Total	199	14.3	11.4 - 16.5
<u>1962</u>			
Northwest	20	13.6	12.2 - 15.5
North Central	78	13.3	11.3 - 16.0
Northeast	<u>171</u>	<u>12.9</u>	<u>11.4 - 15.0</u>
Total	269	13.1	11.3 - 16.0
<u>1961</u>			
Northwest	10	16.2	15.2 - 17.2
North Central	37	15.0	13.6 - 16.7
Northeast	<u>170</u>	<u>14.9</u>	<u>10.2 - 16.3</u>
Total	217	15.0	10.2 - 17.2
<u>1960</u>			
Northwest	21	15.8	13.4 - 17.2
North Central	52	15.0	13.0 - 16.9
Northeast	<u>108</u>	<u>14.3</u>	<u>11.5 - 16.6</u>
Total	181	14.7	11.5 - 17.2

TABLE 5. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES DETERMINING THE GRADE BY VARIOUS GRADING FACTORS FOR THE TOTAL CARLOT SAMPLE OF DURUM WHEAT LEAVING NORTH DAKOTA ORIGINS BY GRADE, AUGUST THROUGH OCTOBER, 1963

Grade and Percentage Distribution	Not Applicable	Test Weight	Total Damage	Grading Factors			Wheat of Other Classes	Other Grains	No. of Samples
				Shrunken and Broken	Foreign Material				
No. 1 HAD Per Cent	43 100.0	---	---	---	---	---	---	---	43 100.0
No. 2 HAD Per Cent	---	101 93.5	13 ¹ 12.0	---	2 ² 1.9	---	---	---	108 100.0 ⁴
No. 3 HAD Per Cent	---	18 42.9	12 ³ 28.6	10 23.8	4 9.5	---	---	---	42 100.0 ⁴
No. 4 HAD Per Cent	---	2 100.0	1 ² 50.0	---	---	---	---	---	2 100.0 ⁴
No. 5 HAD Per Cent	---	---	---	---	1 100.0	---	---	---	1 100.0
No. 1 AD Per Cent	1 100.0	---	---	---	---	---	---	---	1 100.0
No. 2 AD Per Cent	---	1 100.0	1 ² 100.0	---	---	---	---	---	1 100.0 ⁴
No. 4 AD Per Cent	---	1 100.0	---	---	---	---	---	---	1 100.0
ALL GRADES Per Cent	44 22.1	123 61.8	27 13.6	10 5.0	7 3.5	---	---	---	199 100.0 ⁴

¹Test weight was also a factor determining the grade for seven carlot samples.

²Test weight was also a factor determining the grade for one carlot sample.

³Test weight was also a factor determining the grade for two carlot samples.

⁴Summation of the Percentage Distribution does not equal 100.0 per cent. In some cases, two grading factors determined the grade for the carlot sample and therefore is included under both grading factors.

Sixty-three of the 199 carlot samples fell in a range of 14.0 to 14.4 per cent protein (Appendix Table B-10). This was the modal and median range of protein content. Only 6.5 per cent of the carlots inspected had a protein content less than 13 per cent, and one sample, or 0.5 per cent of the total number, was less than 12.0 per cent. In 1962, the modal protein range was 13.0 to 13.4 per cent. This study indicates that 85.5 per cent of the carlots in the 1963 survey had a protein content greater than 13.4 per cent, indicating Durum wheat of higher quality than 1962.

Other Grade Factors

The other grade factors inherent to the sample, such as damaged kernels, shrunken and broken kernels, and foreign material, played a minor role in determination of grade. The grade factor, damaged kernels, was the most important of these factors, but still was relatively minor to the grade factor, test weight, in determining the grade (Table 5). Total damage determined the grade for 17 per cent of the samples grading No. 2 HAD or less, and foreign material determined the grade for 4.5 per cent of the shipments. For grades No. 3 and less of all subclasses, the grade factor, shrunken and broken kernels, determined the grade for 10 carlots of the 199 in the sample.

Appendix Tables B-13 through B-21 give the percentage distribution and number of carlots falling within specified ranges by grade for crop reporting districts and the entire sample area of all grade factors inherent to the sample. These appendix tables only list those values which were present on the Inspection Certificate. All samples are expected to contain a certain amount of these grade factors, but usually were not listed on the Inspection Certificate if they did not determine the grade.

Dockage

Dockage, as defined in the "Official Grain Standards of the United States," shall be weed seeds, weed stems, straw, chaff, grain other than wheat, sand, dirt, and any material other than wheat, which can be removed readily from the wheat by the use of appropriate sieves and cleaning devices. Also defined as dockage are underdeveloped, shriveled, and small pieces of wheat kernels removed in properly separating the material other than wheat and which cannot be recovered by properly rescreening or recleaning.

The dockage present in a sample is not factor affecting the grade, but is of importance when considering the weight or volume of the shipment. Transportation rates are based on weight of the total shipment and not just the actual weight of the commodity itself. Therefore, it is of interest to consider just how much of this material is present in the wheat which would affect the transportation cost and indirectly its price. It is assumed that this dockage material has some value, but usually not enough to cover the cost of handling and transportation.

Approximately 48 per cent of the carlot samples has less than one per cent dockage. No carlots had more than 5.9 per cent, and only 17 per cent of the carlots had dockage between 2 and 5.9 per cent (Appendix Table B-22). This clearly indicates that country elevators delivering the Durum wheat are doing an excellent job of cleaning the wheat before delivery to the terminal market.

APPENDIX A

OFFICIAL GRAIN STANDARDS FOR DURUM WHEAT

Durum Wheat: This class shall include all varieties of white (amber) Durum wheat and may not include more than 10.0 per cent of wheat of other classes. This class shall be divided into the following three subclasses:

1. Hard Amber Durum Wheat: This subclass shall be Durum wheat with 75 per cent or more of hard and vitreous kernels of amber color.
2. Amber Durum Wheat: This subclass shall be Durum wheat with 60 per cent or more but less than 75 per cent of hard and vitreous kernels of amber color.
3. Durum Wheat: This subclass shall be Durum wheat with less than 60 per cent of hard and vitreous kernels of amber color.

A-1. MAXIMUM FACTOR ALLOWANCES FOR DURUM WHEAT

Grade	Minimum test weight per bushel Pounds	Maximum Limits of-				
		<u>Damaged Kernels</u>			Wheats of other classes	
		Total Per Cent	Heat damaged kernels Per Cent	Foreign material Per Cent	Total Per Cent	Soft Red Winter, White and/or Red Durum Per Cent
1 ¹	60	2.0	0.1	0.5	5.0	1.0
2 ¹	58	4.0	0.2	1.0	5.0	2.0
3 ¹	56	7.0	0.5	2.0	10.0	5.0
4	54	10.0	1.0	3.0	10.0	10.0
5	51	15.0	3.0	5.0	10.0	10.0
Sample Grade	Sample grade shall be wheat which does not meet requirements for any of the grades from No. 1 to No. 5 inclusive; or which contains more than 16.0 per cent of moisture; or which contains stones; or which is musty, or sour, or heating, or which has any commercially objectionable foreign odor except of smut or garlic; or which contains a quantity of smut so great that any one or more of the grade requirements cannot be applied accurately; or which is otherwise of distinctly low quality.					

¹The wheat in grades No. 1 and No. 2 of each of these classes may contain not more than either (a) 5.0 per cent of shrunken and broken kernels or (b) 8.0 per cent of shrunken and broken kernels together with broken kernels of wheat of any size which remain in the sieved sample; and wheat in grade No. 3 of each of these classes may contain not more than either (a) 8.0 per cent of shrunken and broken kernels or (b) 12.0 per cent of shrunken and broken kernels together with broken kernels of wheat of any size which remain in the sieved sample.

SOURCE: Official Grain Standards of the United States, Revised 1960 Edition, SRA-AMS-177, Grain Division, AMS, USDA.

APPENDIX B

Additional Data on Durum Shipments

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B-2. AVERAGE VALUES AND RANGES FOR PROTEIN CONTENT, BUSHEL WEIGHT AND MOISTURE OF CARLOT SAMPLES OF DURUM WHEAT, BY CROP REPORTING DISTRICT AND COUNTY, AUGUST THROUGH OCTOBER, 1963

District and County	Protein Content, %		Bushel Weight, lb.		Moisture Content, %		No. of Carlots
	Average	Range	Average	Range	Average	Range	
Burke	-----	-----	-----	-----	-----	-----	--
Divide	-----	-----	-----	-----	-----	-----	--
Mountrail	13.1	-----	54.7	-----	12.3	-----	1
Renville	14.2	12.7 - 16.5	58.9	54.3 - 61.5	11.5	10.3 - 12.7	12
Ward	13.1	-----	60.2	-----	12.1	-----	1
Williams	-----	-----	-----	-----	-----	-----	--
NORTHWEST	14.1	12.7 - 16.5	58.7	54.3 - 61.5	11.6	10.3 - 12.7	14
Benson	15.4	13.8 - 16.3	59.1	57.5 - 60.5	10.9	10.1 - 11.9	9
Bottineau	14.6	13.6 - 15.6	59.3	57.6 - 60.8	11.0	9.3 - 12.1	25
McHenry	13.2	12.2 - 14.3	58.8	56.5 - 60.0	11.7	11.2 - 12.3	4
Pierce	15.0	12.7 - 16.2	58.8	57.0 - 62.0	11.2	9.2 - 12.5	10
Rolette	13.7	12.0 - 14.3	59.3	56.6 - 61.2	12.1	10.2 - 13.5	9
NORTH CENTRAL	14.6	12.0 - 16.3	59.1	56.5 - 62.0	11.2	9.2 - 13.5	57
Cavalier	14.2	13.0 - 15.0	58.5	55.0 - 60.0	11.5	10.0 - 13.1	40
Grand Forks	13.7	11.4 - 15.6	60.2	57.7 - 62.0	11.2	10.0 - 13.4	21
Nelson	14.1	13.0 - 14.6	59.5	58.7 - 60.6	11.3	10.3 - 11.8	7
Pembina	-----	-----	-----	-----	-----	-----	--
Ramsey	14.5	12.6 - 15.5	59.3	57.5 - 61.0	11.1	9.6 - 12.8	35
Towner	14.4	12.7 - 16.0	59.6	58.5 - 62.0	11.3	9.7 - 12.8	21
Walsh	12.7	12.3 - 13.0	61.3	60.5 - 62.0	11.3	-----	2
NORTHEAST	14.2	11.4 - 16.0	59.3	55.0 - 62.0	11.3	9.6 - 13.4	126
Barnes	-----	-----	-----	-----	-----	-----	--
Cass	-----	-----	-----	-----	-----	-----	--
Griggs	-----	-----	-----	-----	-----	-----	--
Steele	-----	-----	-----	-----	-----	-----	--
Trail	14.0	-----	59.2	58.7 - 59.6	10.4	10.1 - 10.7	2
EAST CENTRAL	14.0	-----	59.2	58.7 - 59.6	10.4	10.1 - 10.7	2

B-3. AVERAGE VALUES AND RANGES FOR PROTEIN CONTENT, BUSHEL WEIGHT, AND MOISTURE OF CARLOT SAMPLES OF DURUM WHEAT, BY GRADE AND CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963

Grade	Protein Content, %		Bushel Weight, lb.		Moisture Content, %		No. of Carlots
	Average	Range	Average	Range	Average	Range	
NORTHWEST DISTRICT							
No. 1 HAD	13.4	12.7 - 14.7	60.6	60.0 - 61.5	11.8	11.0 - 12.1	4
No. 2 HAD	14.0	13.5 - 14.7	59.2	58.2 - 61.0	11.1	10.3 - 12.5	4
No. 3 HAD	14.9	14.0 - 16.5	58.3	57.0 - 61.0	11.4	11.0 - 11.8	4
No. 4 HAD	14.3	-----	54.3	-----	12.7	-----	1
No. 4 AD	13.1	-----	54.7	-----	12.3	-----	1
ALL GRADES	14.1	12.7 - 16.5	58.7	54.3 - 61.5	11.6	10.3 - 12.7	14
NORTH CENTRAL DISTRICT							
No. 1 HAD	13.9	12.0 - 15.8	60.5	60.0 - 62.0	11.5	10.0 - 13.2	17
No. 2 HAD	14.9	12.7 - 16.3	58.9	58.0 - 59.7	11.0	9.2 - 13.2	26
No. 3 HAD	14.7	13.1 - 16.2	58.0	56.5 - 60.2	11.2	10.2 - 13.5	13
No. 5 HAD	13.7	-----	58.7	-----	11.9	-----	1
ALL GRADES	14.6	12.0 - 16.3	59.1	56.5 - 62.0	11.2	9.2 - 13.5	57
NORTHEAST DISTRICT							
No. 1 HAD	14.1	12.7 - 15.3	60.6	60.0 - 62.0	11.4	10.3 - 13.4	22
No. 2 HAD	14.4	12.3 - 16.0	59.1	58.0 - 62.0	11.2	9.6 - 13.1	76
No. 3 HAD	14.0	12.6 - 15.6	58.7	56.2 - 61.5	11.3	10.0 - 12.7	25
No. 4 HAD	14.8	-----	55.0	-----	12.5	-----	1
No. 1 AD	11.4	-----	62.0	-----	11.8	-----	1
No. 2 AD	12.6	-----	59.7	-----	11.3	-----	1
ALL GRADES	14.2	11.4 - 16.0	59.3	55.0 - 62.0	11.3	9.6 - 13.4	126
EAST CENTRAL DISTRICT							
No. 2 HAD	14.0	-----	59.2	58.7 - 59.6	10.4	10.1 - 10.7	2
ALL GRADES	14.0	-----	59.2	58.7 - 59.6	10.4	10.1 - 10.7	2

B-4. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM GRADES FALLING WITHIN 1 POUND BUSHEL WEIGHT RANGES FOR THE ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963

Grade	Bushel Weight, Pounds														TOTAL
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	
No. 1 HAD	--	--	--	--	--	--	--	--	--	--	34	6	3	--	43
No. 2 HAD	--	--	--	--	--	--	--	--	43	57	5	2	1	--	108
No. 3 HAD	--	--	--	--	--	--	6	13	8	6	4	5	--	--	42
No. 4 HAD	--	--	--	--	1	1	--	--	--	--	--	--	--	--	2
No. 5 HAD	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 AD	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1
No. 2 AD	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 AD	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AREA TOTAL	--	--	--	--	2	1	6	13	52	64	43	13	5	--	199
Percentage Distribution	--	--	--	--	1.0	0.5	3.0	6.5	26.2	32.2	21.6	6.5	2.5	--	100.0

B-5. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 POUND BUSHEL WEIGHT RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 AND COMPARISONS

Crop Reporting District	Bushel Weight, Pounds														TOTAL
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	
Northwest	--	--	--	--	2	--	--	3	2	1	3	3	--	--	14
North Central	--	--	--	--	--	--	2	6	16	14	17	1	1	--	57
Northeast	--	--	--	--	--	1	4	4	33	48	23	9	4	--	126
East Central	--	--	--	--	--	--	--	--	1	1	--	--	--	--	2
Total	--	--	--	--	2	1	6	13	52	64	43	13	5	--	199
Percentage Distribution-1963	--	--	--	--	1.0	0.5	3.0	6.5	26.2	32.2	21.6	6.5	2.5	--	100.0
Percentage Distribution-1962	0.7	--	--	--	--	0.4	2.2	2.6	6.3	14.9	34.2	20.1	17.1	1.5	100.0
Percentage Distribution-1961	--	--	--	--	--	--	--	0.5	0.9	1.4	9.3	32.2	47.9	7.8	100.0
Percentage Distribution-1960	--	--	--	--	--	--	--	--	2.2	7.2	34.3	38.1	17.1	1.1	100.0

B-6. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 1 POUND BUSHEL WEIGHT RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

Grade	Bushel Weight, lb.													TOTAL	
	50	51	52	53	54	55	56	57	58	59	60	61	62		63
NORTHWEST DISTRICT															
No. 1 HAD	--	--	--	--	--	--	--	--	--	--	3	1	--	--	4
No. 2 HAD	--	--	--	--	--	--	--	--	2	1	--	1	--	--	4
No. 3 HAD	--	--	--	--	--	--	--	3	--	--	--	1	--	--	4
No. 4 HAD	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
No. 4 AD	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
TOTAL	--	--	--	--	2	--	--	3	2	1	3	3	--	--	14
NORTH CENTRAL DISTRICT															
No. 1 HAD	--	--	--	--	--	--	--	--	--	--	15	1	1	--	17
No. 2 HAD	--	--	--	--	--	--	--	--	13	13	--	--	--	--	26
No. 3 HAD	--	--	--	--	--	--	2	6	2	1	2	--	--	--	13
No. 5 HAD	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1
TOTAL	--	--	--	--	--	--	2	6	16	14	17	1	1	--	57
NORTHEAST DISTRICT															
No. 1 HAD	--	--	--	--	--	--	--	--	--	--	16	4	2	--	22
No. 2 HAD	--	--	--	--	--	--	--	--	27	42	5	1	1	--	76
No. 3 HAD	--	--	--	--	--	--	4	4	6	5	2	4	--	--	25
No. 4 HAD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
No. 1 AD	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1
No. 2 AD	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1
TOTAL	--	--	--	--	--	1	4	4	33	48	23	9	4	--	126
EAST CENTRAL DISTRICT															
No. 2 HAD	--	--	--	--	--	--	--	--	1	1	--	--	--	--	2
TOTAL	--	--	--	--	--	--	--	--	1	1	--	--	--	--	2

B-7. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOTS OF DURUM WHEAT GRADES FALLING WITHIN 0.5 PER CENT MOISTURE RANGES FOR THE ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963

Grade	Moisture Content, Per Cent															TOTAL
	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	
8.9	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	
No. 1 HAD	--	--	--	5	6	12	7	8	3	2	--	--	--	--	--	43
No. 2 HAD	--	2	7	20	17	22	21	11	5	3	--	--	--	--	--	108
No. 3 HAD	--	--	--	5	7	14	8	6	1	--	1	--	--	--	--	42
No. 4 HAD	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	2
No. 5 HAD	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 AD	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
No. 2 AD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 AD	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AREA TOTAL	--	2	7	30	30	49	38	26	11	5	1	--	--	--	--	199
Percentage Distribution	--	1.0	3.5	15.1	15.1	24.6	19.1	13.1	5.5	2.5	0.5	--	--	--	--	100.0

B-8. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 0.5 PER CENT MOISTURE CONTENT RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS

	Moisture Content, Per Cent															
	8.5 to 8.9	9.0 to 9.4	9.5 to 9.9	10.0 to 10.4	10.5 to 10.9	11.0 to 11.4	11.5 to 11.9	12.0 to 12.4	12.5 to 12.9	13.0 to 13.4	13.5 to 13.9	14.0 to 14.4	14.5 to 14.9	15.0 to 15.4	15.5 to 15.9	TOTAL
Crop Reporting District	8.5 to 8.9	9.0 to 9.4	9.5 to 9.9	10.0 to 10.4	10.5 to 10.9	11.0 to 11.4	11.5 to 11.9	12.0 to 12.4	12.5 to 12.9	13.0 to 13.4	13.5 to 13.9	14.0 to 14.4	14.5 to 14.9	15.0 to 15.4	15.5 to 15.9	TOTAL
Northwest	--	--	--	1	1	4	3	3	2	--	--	--	--	--	--	14
North Central	--	2	2	9	10	10	10	10	1	2	1	--	--	--	--	57
Northeast	--	--	5	19	18	35	25	13	8	3	--	--	--	--	--	126
East Central	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--	2
TOTAL	--	2	7	30	30	49	38	26	11	5	1	--	--	--	--	199
Percentage Distribution 1963	--	1.0	3.5	15.1	15.1	24.6	19.1	13.1	5.5	2.5	0.5	--	--	--	--	100.0
Percentage Distribution 1962	--	--	--	2.2	3.7	13.4	10.0	21.9	17.2	14.1	11.5	5.2	0.4	0.4	--	100.0
Percentage Distribution 1961	1.4	2.3	6.0	20.2	12.9	22.1	13.8	14.3	3.2	2.8	--	0.5	--	--	0.5	100.0
Percentage Distribution 1960	--	1.1	2.2	5.5	7.7	26.5	21.0	26.0	6.1	3.3	0.6	--	--	--	--	100.0

BB-9. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 0.5 PER CENT MOISTURE CONTENT RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

[illegible]

B-10. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM GRADES FALLING WITHIN 0.5 PROTEIN RANGES FOR THE ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963

Grade	Protein Range, Per Cent															TOTAL
	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	
10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.4	
No. 1 HAD	--	--	--	--	2	3	3	8	19	6	1	--	--	--	--	43
No. 2 HAD	--	--	--	--	1	1	9	11	29	28	18	7	4	--	--	108
No. 3 HAD	--	--	--	--	--	4	3	6	14	4	6	2	2	1	--	42
No. 4 HAD	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	2
No. 5 HAD	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 AD	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 AD	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AREA TOTAL	--	--	1	--	3	9	16	26	63	39	25	10	6	1	--	199
Percentage Distribution	--	--	0.5	--	1.5	4.5	8.0	13.1	31.7	19.6	12.6	5.0	3.0	0.5	--	100.0

B-11. PERCENTAGE DISTRIBUTION AND NUMBERS OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 0.5 PER CENT PROTEIN RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS

Crop Reporting District	Protein Range, Per Cent															TOTAL
	10.0 to 10.4	10.5 to 10.9	11.0 to 11.4	11.5 to 11.9	12.0 to 12.4	12.5 to 12.9	13.0 to 13.4	13.5 to 13.9	14.0 to 14.4	14.5 to 14.9	15.0 to 15.4	15.5 to 15.9	16.0 to 16.4	16.5 to 16.9	17.0 to 17.4	
	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	
Northwest	--	--	--	--	--	1	2	3	5	2	--	--	--	1	--	14
North Central	--	--	--	--	2	1	3	8	15	6	10	7	5	--	--	57
Northeast	--	--	1	--	1	7	11	15	41	31	15	3	1	--	--	126
East Central	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	2
TOTAL	--	--	1	--	3	9	16	26	63	39	25	10	6	1	--	199
Percentage Distribution 1963	--	--	0.5	--	1.5	4.5	8.0	13.1	31.7	19.6	12.6	5.0	3.0	0.5	--	100.0
Percentage Distribution 1962	--	--	0.7	4.5	14.5	21.6	33.5	12.3	6.7	3.7	1.8	--	0.7	--	--	100.0
Percentage Distribution 1961	0.5	--	--	--	0.5	--	1.4	2.8	11.4	21.2	38.2	15.2	7.4	0.9	0.5	100.0
Percentage Distribution 1960	--	--	--	1.1	1.1	1.6	10.6	9.4	13.3	18.8	24.3	9.4	3.3	5.5	1.6	100.0

B-12. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 0.5 PER CENT PROTEIN RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

Grade	Protein Range, Per Cent															TOTAL
	10.0 to 10.4	10.5 to 10.9	11.0 to 11.4	11.5 to 11.9	12.0 to 12.4	12.5 to 12.9	13.0 to 13.4	13.5 to 13.9	14.0 to 14.4	14.5 to 14.9	15.0 to 15.4	15.5 to 15.9	16.0 to 16.4	16.5 to 16.9	17.0 to 17.4	
	NORTHWEST DISTRICT															
No. 1 HAD	--	--	--	--	--	1	1	1	1	--	--	--	--	--	--	4
No. 2 HAD	--	--	--	--	--	--	2	1	1	1	--	--	--	--	--	4
No. 3 HAD	--	--	--	--	--	--	--	--	2	1	--	--	--	1	--	4
No. 4 HAD	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1
No. 4 AD	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
TOTAL	--	--	--	--	--	1	2	3	5	2	--	--	--	1	--	14
NORTH CENTRAL DISTRICT																
No. 1 HAD	--	--	--	--	2	--	1	4	8	1	--	1	--	--	--	17
No. 2 HAD	--	--	--	--	--	1	1	1	4	4	7	5	3	--	--	26
No. 3 HAD	--	--	--	--	--	--	1	2	3	1	3	1	2	--	--	13
No. 5 HAD	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
TOTAL	--	--	--	--	2	1	3	8	15	6	10	7	5	--	--	57
NORTHEAST DISTRICT																
No. 1 HAD	--	--	--	--	--	2	1	3	10	5	1	--	--	--	--	22
No. 2 HAD	--	--	--	--	1	--	8	8	22	23	11	2	1	--	--	76
No. 3 HAD	--	--	--	--	--	4	2	4	9	2	3	1	--	--	--	25
No. 4 HAD	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1
No. 1 AD	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1
TOTAL	--	--	1	--	1	7	11	15	41	31	15	3	1	--	--	126
EAST CENTRAL DISTRICT																
No. 2 HAD	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	2
TOTAL	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	2

B-13. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 1 PER CENT DAMAGE RANGES FOR ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963

Grade	Not Listed as a 1 Grading Factor	Damage Range, Per Cent																TOTAL
		0.0 to	1.0 to	2.0 to	3.0 to	4.0 to	5.0 to	6.0 to	7.0 to	8.0 to	9.0 to	10.0 to	11.0 to	12.0 to	13.0 to	14.0 to		
		0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9		
No. 1 HAD	36	--	--	7	--	--	--	--	--	--	--	--	--	--	--	--	43	
No. 2 HAD	95	--	--	--	7	6	--	--	--	--	--	--	--	--	--	--	108	
No. 3 HAD	27	--	--	--	--	3	7	2	3	--	--	--	--	--	--	--	42	
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	2	
No. 5 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
No. 2 AD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AREA TOTAL	162	--	--	7	7	10	7	2	3	--	--	1	--	--	--	--	199	
Percentage Distribution	81.4	--	--	3.5	3.5	5.1	3.5	1.0	1.5	--	--	0.5	--	--	--	--	100.0	

¹Content of Damaged Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-14. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT DAMAGE RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS

		Damage Range, Per Cent																
Crop Reporting District	Not Listed as a Grading ¹ Factor	0.0 to 0.9	1.0 to 1.9	2.0 to 2.9	3.0 to 3.9	4.0 to 4.9	5.0 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.9	9.0 to 9.9	10.0 to 10.9	11.0 to 11.9	12.0 to 12.9	13.0 to 13.9	14.0 to 14.9	TOTAL	
NW	12	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	14	
NC	55	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	57	
NE	93	--	--	5	7	10	7	2	2	--	--	--	--	--	--	--	126	
EC	<u>2</u>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<u>2</u>	
TOTAL	162	--	--	7	7	10	7	2	3	--	--	1	--	--	--	--	199	
Per Cent Dist.-1963	81.4	--	--	3.5	3.5	5.1	3.5	1.0	1.5	--	--	0.5	--	--	--	--	100.0	
Per Cent Dist.-1962	86.7	--	0.4	3.7	1.8	1.8	0.4	0.4	1.5	0.7	--	0.7	0.7	0.4	0.4	0.4	100.0	
Per Cent Dist.-1961	82.9	0.5	--	4.2	6.9	1.8	1.8	0.5	0.9	--	--	--	--	--	0.5	--	100.0	
Per Cent Dist.-1960	94.4	--	--	1.6	1.1	0.6	1.1	--	--	--	--	--	0.6	--	--	0.6	100.0	

¹Content of Damaged Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-15. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT DAMAGE RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

Not Listed as a Grading Factor		Damage Range, Per Cent															
		0.0 to	1.0 to	2.0 to	3.0 to	4.0 to	5.0 to	6.0 to	7.0 to	8.0 to	9.0 to	10.0 to	11.0 to	12.0 to	13.0 to	14.0 to	
Grade	Factor	0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9	TOTAL
NORTHWEST DISTRICT																	
No. 1 HAD	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4
No. 2 HAD	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4
No. 3 HAD	3	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	4
No. 4 HAD	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	12	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	14
NORTH CENTRAL DISTRICT																	
No. 1 HAD	15	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	17
No. 2 HAD	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26
No. 3 HAD	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13
No. 5 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	55	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	57
NORTHEAST DISTRICT																	
No. 1 HAD	17	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	22
No. 2 HAD	63	--	--	--	7	6	--	--	--	--	--	--	--	--	--	--	76
No. 3 HAD	11	--	--	--	--	3	7	2	2	--	--	--	--	--	--	--	25
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1
TOTAL	93	--	--	5	7	10	7	2	2	--	--	--	--	--	--	--	126
EAST CENTRAL DISTRICT																	
No. 2 HAD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
TOTAL	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2

¹Content of Damaged Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-16. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 1 PER CENT SHRUNKEN AND BROKEN RANGES FOR ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963

Grade	Not Listed as a 1 Grading ¹ Factor	Shrunken and Broken Range, Per Cent																TOTAL
		0.0 to	1.0 to	2.0 to	3.0 to	4.0 to	5.0 to	6.0 to	7.0 to	8.0 to	9.0 to	10.0 to	11.0 to	12.0 to	13.0 to	14.0 to		
		0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9		
No. 1 HAD	40	--	--	--	--	--	--	1	2	--	--	--	--	--	--	--	43	
No. 2 HAD	105	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	108	
No. 3 HAD	32	--	--	--	--	--	--	--	--	6	1	2	1	--	--	--	42	
No. 4 HAD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	
No. 5 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
No. 2 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AREA TOTAL	183	--	--	--	--	--	--	1	5	6	1	2	1	--	--	--	199	
Percentage Distribution	92.0	--	--	--	--	--	--	0.5	2.5	3.0	0.5	1.0	0.5	--	--	--	100.0	

¹Content of Shrunken and Broken Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-17. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT SHRUNKEN AND BROKEN RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS

		Shrunk and Broken Range, Per Cent																TOTAL
		Not Listed	0.0 to 0.9	1.0 to 1.9	2.0 to 2.9	3.0 to 3.9	4.0 to 4.9	5.0 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.9	9.0 to 9.9	10.0 to 10.9	11.0 to 11.9	12.0 to 12.9	13.0 to 13.9	14.0 to 14.9	
Crop Reporting District	Grading Factor																	
NW	10	--	--	--	--	--	--	--	--	--	2	--	1	--	1	--	--	14
NC	51	--	--	--	--	--	--	--	--	1	1	3	--	1	--	--	--	57
NE	120	--	--	--	--	--	--	--	--	--	2	3	--	1	--	--	--	126
EC	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
TOTAL	183	--	--	--	--	--	--	--	--	1	5	6	1	2	1	--	--	199
Per Cent Dist.-1963	92.0	--	--	--	--	--	--	--	--	0.5	2.5	3.0	0.5	1.0	0.5	--	--	100.0
Per Cent Dist.-1962	74.7	--	--	--	--	--	--	0.7	--	1.1	8.6	5.3	5.9	0.7	2.3	0.7	--	100.0
Per Cent Dist.-1961	77.4	0.9	--	--	--	--	--	--	--	0.5	6.0	8.3	1.8	2.8	1.8	0.5	--	100.0
Per Cent Dist.-1960	51.9	--	--	--	--	--	--	--	0.6	0.6	7.7	12.6	14.4	5.5	5.0	0.6	1.1	100.0

¹Content of Shrunk and Broken Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-18. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT SHRUNKEN AND BROKEN RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

Shrunk and Broken Range, Per Cent																	
Not Listed as a 1 Grading		0.0 to	1.0 to	2.0 to	3.0 to	4.0 to	5.0 to	6.0 to	7.0 to	8.0 to	9.0 to	10.0 to	11.0 to	12.0 to	13.0 to	14.0 to	TOTAL
Grade	Factor	0.9	1.9	2.9	3.9	4.9	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9	
NORTHWEST DISTRICT																	
No. 1 HAD	2	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	4
No. 2 HAD	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4
No. 3 HAD	2	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	4
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	10	--	--	--	--	--	--	--	--	2	--	1	--	1	--	--	14
NORTH CENTRAL DISTRICT																	
No. 1 HAD	16	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	17
No. 2 HAD	25	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	26
No. 3 HAD	9	--	--	--	--	--	--	--	--	--	3	--	1	--	--	--	13
No. 5 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	51	--	--	--	--	--	--	--	1	1	3	--	1	--	--	--	57
NORTHEAST DISTRICT																	
No. 1 HAD	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22
No. 2 HAD	74	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	76
No. 3 HAD	21	--	--	--	--	--	--	--	--	--	3	--	1	--	--	--	25
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	120	--	--	--	--	--	--	--	--	2	3	--	1	--	--	--	126
EAST CENTRAL DISTRICT																	
No. 2 HAD	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
TOTAL	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2

¹Content of Shrunk and Broken Kernels unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-19. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 0.5 PER CENT FOREIGN MATERIAL RANGES FOR ENTIRE SAMPLE AREA, BY GRADE, AUGUST THROUGH OCTOBER, 1963

Grade	Not Listed as a 1 Grading Factor	Foreign Material Range, Per Cent										TOTAL
		0.0 to	0.5 to	1.0 to	1.5 to	2.0 to	2.5 to	3.0 to	3.5 to	4.0 to	4.5 to	
		0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	
No. 1 HAD	43	--	--	--	--	--	--	--	--	--	--	43
No. 2 HAD	106	--	1	1	--	--	--	--	--	--	--	108
No. 3 HAD	38	--	--	1	3	--	--	--	--	--	--	42
No. 4 HAD	2	--	--	--	--	--	--	--	--	--	--	2
No. 5 HAD	--	--	--	--	--	--	--	--	--	--	1	1
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	1	--	--	--	--	--	--	--	--	--	--	1
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	1
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--
AREA TOTAL	192	--	1	2	3	--	--	--	--	--	1	199
Percentage Distribution	96.5	--	0.5	1.0	1.5	--	--	--	--	--	0.5	100.0

¹Content of Foreign Material unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-20. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 0.5 PER CENT FOREIGN MATERIAL RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS

Crop Reporting District	Not Listed as a Grading Factor	Foreign Material Range, Per Cent											TOTAL
		0.0 to 0.4	0.5 to 0.9	1.0 to 1.4	1.5 to 1.9	2.0 to 2.4	2.5 to 2.9	3.0 to 3.4	3.5 to 3.9	4.0 to 4.4	4.5 to 4.9	5.0 to 5.4	
Northwest	13	--	1	--	--	--	--	--	--	--	--	--	14
North Central	55	--	--	--	1	--	--	--	--	--	--	1	57
Northeast	122	--	--	2	2	--	--	--	--	--	--	--	126
East Central	2	--	--	--	--	--	--	--	--	--	--	--	2
TOTAL	192	--	1	2	3	--	--	--	--	--	--	1	199
Percentage Distribution-1963	96.5	--	0.5	1.0	1.5	--	--	--	--	--	--	0.5	100.0
Percentage Distribution-1962	93.8	0.7	1.1	2.2	1.8	0.4	--	--	--	--	--	--	100.0
Percentage Distribution-1961	78.8	0.5	13.8	5.4	0.5	0.5	0.5	--	--	--	--	--	100.0
Percentage Distribution-1960	96.7	--	1.1	1.6	--	0.6	--	--	--	--	--	--	100.0

¹Content of Foreign Material unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-21. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 0.5 PER CENT FOREIGN MATERIAL RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963

Grade	Not Listed as a 1 Grading Factor	Foreign Material Range, Per Cent										TOTAL	
		0.0 to	0.5 to	1.0 to	1.5 to	2.0 to	2.5 to	3.0 to	3.5 to	4.0 to	4.5 to		5.0 to
		0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9		5.4
		NORTHWEST DISTRICT											
No. 1 HAD	4	--	--	--	--	--	--	--	--	--	--	4	
No. 2 HAD	3	--	1	--	--	--	--	--	--	--	--	4	
No. 3 HAD	4	--	--	--	--	--	--	--	--	--	--	4	
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	1	
No. 4 AD	1	--	--	--	--	--	--	--	--	--	--	1	
TOTAL	13	--	1	--	--	--	--	--	--	--	--	14	
NORTH CENTRAL DISTRICT													
No. 1 HAD	17	--	--	--	--	--	--	--	--	--	--	17	
No. 2 HAD	26	--	--	--	--	--	--	--	--	--	--	26	
No. 3 HAD	12	--	--	--	1	--	--	--	--	--	--	13	
No. 5 HAD	--	--	--	--	--	--	--	--	--	--	1	1	
TOTAL	55	--	--	--	1	--	--	--	--	--	1	57	
NORTHEAST DISTRICT													
No. 1 HAD	22	--	--	--	--	--	--	--	--	--	--	22	
No. 2 HAD	75	--	--	1	--	--	--	--	--	--	--	76	
No. 3 HAD	22	--	--	1	2	--	--	--	--	--	--	25	
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	1	
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	1	
No. 2 AD	1	--	--	--	--	--	--	--	--	--	--	1	
TOTAL	122	--	--	2	2	--	--	--	--	--	--	126	
EAST CENTRAL DISTRICT													
No. 2 HAD	2	--	--	--	--	--	--	--	--	--	--	2	
TOTAL	2	--	--	--	--	--	--	--	--	--	--	2	

¹Content of Foreign Material unknown. This grade requirement did not determine the grade, therefore was not listed as a grading factor on the Inspection Certificate.

B-22. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT GRADES FALLING WITHIN 1 PER CENT DOCKAGE RANGES, FOR ENTIRE SAMPLE AREA, AUGUST THROUGH OCTOBER, 1963¹

Grade	Less Than ² 1%	Dockage												TOTAL
		1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	
No. 1 HAD	25	11	3	3	1	--	--	--	--	--	--	--	--	43
No. 2 HAD	54	37	7	6	2	--	--	--	--	--	--	--	--	108
No. 3 HAD	14	19	4	1	2	--	--	--	--	--	--	--	--	42
No. 4 HAD	1	1	--	--	--	--	--	--	--	--	--	--	--	2
No. 5 HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	1
S.G. HAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	--	1	--	--	--	--	--	--	--	--	--	--	--	1
No. 3 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 AD	--	--	--	1	--	--	--	--	--	--	--	--	--	1
No. 5 AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. AD	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 1 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 2 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 3 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 4 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
No. 5 DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
S.G. DURUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AREA TOTAL	95	69	14	11	6	4	--	--	--	--	--	--	--	199
Percentage Distribution	47.8	34.7	7.0	5.5	3.0	2.0	--	--	--	--	--	--	--	100.0

¹All percentages are calculated on basis of weight. According to the Official Grain Standards of the United States, all percentages are stated in terms of a whole per cent. Fractions of a per cent are disregarded. When a sample has less than 1 per cent dockage, it is classified on the Inspection Certificate as zero per cent.

²These samples are listed as zero per cent dockage on the Inspection Certificate.

B-23. PERCENTAGE DISTRIBUTION AND NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT DOCKAGE RANGES, BY CROP REPORTING DISTRICT, AUGUST THROUGH OCTOBER, 1963 WITH COMPARISONS¹

Crop Reporting District	Less Than ² 1%	Dockage												TOTAL
		1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	
Northwest	8	4	1	1	--	--	--	--	--	--	--	--	--	14
North Central	29	20	6	--	1	1	--	--	--	--	--	--	--	57
Northeast	57	44	7	10	5	3	--	--	--	--	--	--	--	126
East Central	<u>1</u>	<u>1</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>2</u>
TOTAL	95	69	14	11	6	4	--	--	--	--	--	--	--	199
Percentage Distribution-1963	47.8	34.7	7.0	5.5	3.0	2.0	--	--	--	--	--	--	--	100.0
Percentage Distribution-1962	36.0	49.9	11.9	1.8	0.4	--	--	--	--	--	--	--	--	100.0
Percentage Distribution-1961	47.0	31.4	12.4	2.3	3.2	0.5	1.8	0.9	--	--	--	--	0.5	100.0
Percentage Distribution-1960	50.8	42.5	5.5	0.6	0.6	--	--	--	--	--	--	--	--	100.0

¹All percentages are calculated on basis of weight. According to the Official Grain Standards of the United States, all percentages are stated in terms of a whole per cent. Fractions of a per cent are disregarded. When a sample has less than 1 per cent dockage, it is classified on the Inspection Certificate as zero per cent.

²These samples are listed as zero per cent dockage on the Inspection Certificate.

B-24. NUMBER OF CARLOT SAMPLES OF DURUM WHEAT FALLING WITHIN 1 PER CENT DOCKAGE RANGES, BY CROP REPORTING DISTRICT AND GRADE, AUGUST THROUGH OCTOBER, 1963¹

Grade	Dockage Range, Per Cent												TOTAL	
	Less Than ²													
	1%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%		12%
NORTHWEST DISTRICT														
No. 1 HAD	4	--	--	--	--	--	--	--	--	--	--	--	--	4
No. 2 HAD	1	2	1	--	--	--	--	--	--	--	--	--	--	4
No. 3 HAD	2	2	--	--	--	--	--	--	--	--	--	--	--	4
No. 4 HAD	1	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 4 AD	--	--	--	1	--	--	--	--	--	--	--	--	--	1
TOTAL	8	4	1	1	--	--	--	--	--	--	--	--	--	14
NORTH CENTRAL DISTRICT														
No. 1 HAD	12	3	2	--	--	--	--	--	--	--	--	--	--	17
No. 2 HAD	13	12	1	--	--	--	--	--	--	--	--	--	--	26
No. 3 HAD	4	5	3	--	--	1	--	--	--	--	--	--	--	13
No. 5 HAD	--	--	--	--	1	--	--	--	--	--	--	--	--	1
TOTAL	29	20	6	--	1	1	--	--	--	--	--	--	--	57
NORTHEAST DISTRICT														
No. 1 HAD	9	8	1	3	1	--	--	--	--	--	--	--	--	22
No. 2 HAD	39	22	5	6	2	2	--	--	--	--	--	--	--	76
No. 3 HAD	8	12	1	1	2	1	--	--	--	--	--	--	--	25
No. 4 HAD	--	1	--	--	--	--	--	--	--	--	--	--	--	1
No. 1 AD	1	--	--	--	--	--	--	--	--	--	--	--	--	1
No. 2 AD	--	1	--	--	--	--	--	--	--	--	--	--	--	1
TOTAL	57	44	7	10	5	3	--	--	--	--	--	--	--	126
EAST CENTRAL DISTRICT														
No. 2 HAD	1	1	--	--	--	--	--	--	--	--	--	--	--	2
TOTAL	1	1	--	--	--	--	--	--	--	--	--	--	--	2

¹All percentages are calculated on basis of weight. According to the Official Grain Standards of the United States, all percentages are stated in terms of a whole per cent. Fractions of a per cent are disregarded. When a sample has less than 1 per cent dockage, it is classified on the Inspection Certificate as zero per cent.

²These samples are listed as zero per cent dockage on the Inspection Certificate.