

Program Notice

FGIS PN-04-12

05-01-04

SAMPLE COLLECTION RESPONSIBILITIES FOR VERIFYING
THE ACCURACY OF MOISTURE METER CALIBRATIONS
CROP YEAR 2004

1. PURPOSE

This program notice transmits revised assignments for collecting samples needed for verifying the accuracy of official moisture meter calibrations. It also restates the procedure for collecting and submitting samples.

2. BACKGROUND

The annual Moisture Meter Calibration Study is conducted on current year crop samples to assess the accuracy of the official inspection system and of NTEP-certified moisture meters. FGIS moisture meter calibrations must be verified over the working moisture ranges, significant production areas, and relevant crop years. Each year, the evaluation is performed on samples submitted to the Inspection Systems Engineering Branch (ISE) from the field offices. After moisture testing, the samples are made available to other programs in the Technical Services Division.

Sample collection assignments for the respective offices are based on crop production within the geographic areas of responsibility. In some cases, additional assignments in the stable moisture ranges are given to export locations. Also, the quotas for corn and Hard Red Winter wheat in the 14-18 percent moisture range are increased slightly to provide enough samples for the NTEP testing program.

It is understood that all requested moisture levels may not be available in all areas every year. Since a wide moisture range is very important to the study, field offices should make all reasonable efforts to provide the requested number of samples in each moisture range. However, extraordinary actions are not expected.

3. EFFECTIVE DATE

This program notice is effective upon receipt for the 2004 crop production. Wheat samples should be submitted by September 15, sunflower samples by November 15, and all other grain samples by November 1, 2004.

4. REPLACEMENT HIGHLIGHTS

This program notice supersedes FGIS PN 03-01, dated May 1, 2003.

5. RESPONSIBILITIES

The collection and submission of samples for the annual Moisture Meter Calibration Study are considered regular duties of the selected field offices. All associated time will be charged to the field office standardization management code.

6. ASSIGNMENTS FOR SELECTED FIELD OFFICES

During the 2004 growing season, the indicated numbers of samples of the commodities listed in Table 1 (Attachment 2) must be collected, tested for moisture, and submitted by the respective field offices to ISE. Each sample should weigh approximately 1500 grams.

7. INSTRUCTIONS

- a. The purpose of this effort is to obtain representative samples from the entire nation. Therefore, it is important to have each office fill its quota at all moisture levels, if possible. However, do not submit extra samples in any moisture range, and do not adjust the moisture level of samples by adding water or by drying in the laboratory.
- b. Samples with moisture levels slightly beyond the established moisture ranges are useful in calibrating the extreme ends of the calibrations and extending the measurement ranges. For this reason, the ranges of requested samples (Table 1) have been extended slightly beyond established limits. When submitting samples, if the moisture falls outside the range of the applicable GAC 2100 calibration, obtain an approximate moisture. The true moisture will later be determined at ISE by air oven.
- c. If dockage is removed for inspection purposes, do not recombine it before submitting the sample.
- d. Significant amounts of time and effort are invested in collecting and submitting the moisture samples. This investment can easily be lost through insect damage, microbial spoilage, or late sample submission. To prevent such loss, please collect the samples during the growing season and at harvest time and submit them promptly. Then, the remaining time until the closing date is still available for submitting those samples which are difficult to obtain.

Samples above 16 percent moisture (above 14% for sunflower seeds and 11% for minor oilseeds) require special handling. A significant number of high-moisture samples are routinely lost by spoilage due to unexpected delays in transportation. To minimize this loss, use the following precautions:

- (1) Keep high moisture samples refrigerated (not frozen) until shipped. Hold them no longer than 1 week before shipping.
 - (2) Ship high-moisture samples by Federal Express (or the current FGIS contract carrier) at least 48 hours before a weekend/holiday.
- e. An easy way to account for samples submitted is to prepare mailing tags for the total number of samples of each commodity to be collected. Write on the back of each tag the commodity and moisture range. When all of the mailing tags are used, the required number of samples have been submitted.
- f. Some offices have inquired why sample test weight is requested on the mailing tag. Most dielectric moisture meters have a built-in test weight correction. These corrections need to be checked using external test weight data. For samples of sufficient volume, test weight will be determined by ISE so it is not necessary to record test weight on the mailing tag. However, some submitted samples are too small to fill the kettle. For such samples, please record the test weight on the tag (or transmittal slip) if it is known.
- g. Questions concerning these instructions should be directed to James Rampton, telephone (816) 891-0450, or Patricia Jackson (816) 891-0445. If there is a special problem with a sample assignment, please notify the Moisture Laboratory, ISE, by telephone as early in the season as possible.
- h. Seal each sample in a polyethylene bag (6 mil thickness). Insert the bag into a canvas grain bag. When shipping several samples in a larger container (box or mail sack), a canvas grain bag around each poly bag is still needed to prevent the poly bags from breaking in transit. Record the field office location, date,

commodity, official meter moisture, and test weight (if sample size is limited) on the back of the mailing tag accompanying the sample. (If preferred, the transmittal form [Attachment 1] may be used and shipped with the sample. Insert the transmittal form between the poly bag and the canvas grain bag.) Attach the mailing tag to the bag. Send samples to:

USDA-GIPSA-FGIS Technical Center
Technical Services Division
Moisture Laboratory
10383 N. Ambassador Drive
Kansas City, MO 64153-1394

/s/ David Orr

David Orr, Director
Field Management Division

Attachments

Moisture Sample Transmittal Form

Field Office Use Only:

OFFICE _____ MOISTURE _____

DATE _____ TEST WT. _____

COMMODITY _____

ISE Use Only: Date Received

Moisture Sample Transmittal Form

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Table 1. Sample collection assignments, 2004 Crop Year

		<u>Moisture Range (%)</u>						
		<u>7-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>		
1. Barley, Six-Rowed	Office							
	California	2	2	2	1	7		
	Grand Forks	8	8	7	7	30		
	Minneapolis	2	3	3	2	10		
	Moscow	3	3	3	3	12		
	Toledo	3	3	3	2	11		
		<u>Moisture Range (%)</u>						
		<u>7-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>		
2. Barley, Two-Rowed	Office							
	Grand Forks	6	7	6	6	25		
	Moscow	8	9	9	8	34		
	Washington	3	3	3	3	12		
		<u>Moisture Range (%)</u>						
		<u>7-11</u>	<u>11-14</u>	<u>14-18</u>	<u>18-22</u>	<u>22-26</u>	<u>26-31</u>	<u>All</u>
3. Corn	Office							
	Cedar Rapids	10	10	14	10	10	10	64
	Grand Forks	3	4	6	4	3	3	23
	Kansas City	6	7	10	6	6	6	41
	League City	1	2	2	1	1	1	8
	Minneapolis	6	7	10	7	7	6	43
	New Orleans	2	3	3	0	0	0	8
	Stuttgart	3	3	3	3	2	2	16
	Toledo	7	8	12	8	7	7	49
	Wichita	6	7	10	7	6	6	42
		<u>Moisture Range (%)</u>						
		<u>7-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>		
4. Oats	Cedar Rapids	5	5	5	5	20		
	Grand Forks	8	8	8	7	31		
	Minneapolis	10	10	10	9	39		

Attachment 2
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5. Rough Rice, Long Grain	Office	Moisture Range (%)					All
		7-11	11-14	14-18	18-22	22-26	
	League City	3	4	4	3	3	17
	New Orleans	5	5	5	5	4	24
	Stuttgart	10	10	10	10	9	49

6. Rough Rice, Medium Grain	Office	Moisture Range (%)					All
		7-11	11-14	14-18	18-22	22-26	
	California	11	11	11	11	10	54
	New Orleans	2	2	1	1	1	7
	Stuttgart	6	6	6	5	5	28

7. Sorghum	Office	Moisture Range (%)					All
		7-11	11-14	14-18	18-22	22-26	
	Kansas City	3	3	3	3	3	15
	League City	5	5	5	5	4	24
	New Orleans	3	3	3	0	0	9
	Stuttgart	2	3	2	2	2	11
	Wichita	5	5	4	4	4	22

8. Soybeans	Office	Moisture Range (%)					All
		7-11	11-14	14-17	17-21		
	Cedar Rapids	11	12	11	11		45
	Grand Forks	6	6	6	6		24
	Kansas City	8	8	8	8		32
	League City	2	2	0	0		4
	Minneapolis	8	8	7	7		30
	New Orleans	2	2	0	0		4
	Stuttgart	5	6	5	5		21
	Toledo	10	10	9	9		38
	Wichita	6	6	6	6		24

9. Sunflower Seed, Oil Type	Office	Moisture Range (%)						All
		4-7	7-10	10-14	14-18	18-22	22-26	
	Grand Forks	16	16	16	16	16	15	95
	Wichita	6	6	6	6	6	5	35

10. Wheat, Durum	Office	Moisture Range (%)				
		6-11	11-14	14-17	17-21	All
	California	5	5	5	5	20
	Duluth	3	3	2	0	8
	Grand Forks	10	10	10	10	40
	Moscow	4	4	4	4	16

11. Wheat, Hard Red Spring	Office	Moisture Range (%)				
		6-11	11-14	14-17	17-21	All
	Duluth	2	2	0	0	4
	Grand Forks	8	8	8	8	32
	Minneapolis	4	4	4	4	16
	Moscow	4	4	4	4	16
	Washington	2	2	2	1	7

12. Wheat, Hard Red Winter	Office	Moisture Range (%)				
		7-11	11-14	14-17	17-21	All
	California	2	2	4	2	10
	Grand Forks	2	3	6	2	13
	Kansas City	3	3	6	2	14
	League City	3	3	3	0	9
	Moscow	2	2	3	1	8
	Washington	0	1	1	0	2
	Wichita	8	8	12	7	35

Attachment 2
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		<u>Moisture Range (%)</u>				
13. Wheat, Hard White	Office	<u>6-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>
	California	8	8	8	7	31
	Moscow	6	6	6	5	23
	Washington	4	4	4	3	15
	Wichita	2	2	1	1	6

		<u>Moisture Range (%)</u>				
14. Wheat, Soft Red Winter	Office	<u>6-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>
	Cedar Rapids	2	2	2	2	8
	Kansas City	2	3	3	2	10
	New Orleans	3	3	2	2	10
	Stuttgart	3	4	3	3	13
	Toledo	6	6	6	5	23

		<u>Moisture Range (%)</u>				
15. Wheat, Soft White	Office	<u>7-11</u>	<u>11-14</u>	<u>14-17</u>	<u>17-21</u>	<u>All</u>
	Moscow	6	7	7	6	26
	Portland	3	3	2	0	8
	Toledo	2	2	2	0	6
	Washington	8	8	8	8	32