Directive

9290.16

7/30/07

INSPECTION DATA WAREHOUSE (IDW) FOR GRAIN PROGRAM SERVICES

1. PURPOSE

This directive specifies the policy and technical requirements for official inspection and weighing records transmitted to the Federal Grain Inspection Service (FGIS) Inspection Data Warehouse (IDW) by official service providers under the United States Grain Standards Act (USGSA) and Agricultural Marketing Act of 1946 (AMA).

2. REPLACEMENT HIGHLIGHTS

This directive supersedes FGIS Program Directive 9290.16, Improving Service Delivery and Enhancing Information Sharing Between the Official Agencies and the Official FGIS System, dated 7-30-99. This directive is updated to reflect changes to data record format and data submission requirements.

3. BACKGROUND

Official service providers (FGIS field offices, delegated states, and designated agencies) have been transmitting inspection and weighing records to the National Quality Database (NQDB) since June 1998. File standards were implemented based on the expected adaptation by the grain industry of the Electronic Data Interchange (EDI) software system. Inspection and weighing results, in turn, became available to customers of the official system through electronic transmission.

As the grain and oilseed industries migrated from the EDI to the AgXML standard and as the demand increased for electronic data transfer, the Grain Inspection, Packers and Stockyards Administration (GIPSA) recognized the need to replace the NQDB with a data warehouse that better supports official inspection activities and customer needs. The IDW shall serve as the single GIPSA data warehouse for official inspection and weighing records resulting from services performed under the USGSA and AMA. IDW replaces the current Export Grain Information System (EGIS), Grain Inspection and Weighing Information System (GIWIS), and NQDB. IDW shall also serve as a warehouse for quality control data and enable official service providers to access their respective performance records on a daily basis.

Distribution: A, C, E Originating Office: PPB, FMD

4. POLICY

Official service providers are required to electronically collect and transmit to IDW detail shiplot records and summary records for inspection and weighing services, excluding Class Y weights and Official Commercial Inspection Service (OCIS), beginning **January 2008**. Class Y weights, OCIS, and other than shiplot detail records may be transmitted to IDW at the option of the service provider.

Records must be submitted on a daily basis in either the CSV (comma delimited) or XML format according to the requirements in Attachments 1 - 7. An automatic screening of received data will generate an e-mail notification to official service providers identifying any rejected records and listing the cause for rejection. Service providers must correct rejected records and resubmit them to IDW within one business day.

5. GENERAL REQUIREMENTS

Summary inspection/weighing records report services performed on carriers, lots, and submitted samples. Summary records include the information used to complete the official service certificate. **Detail inspection records** report sublot, component, and subsample results when the combined-lot, Cusum and round-lot inspection plans are used. Detail records are mandatory for shiplots only.

FGIS's Certificate (CRT) and Inspection, Testing, and Weighing (ITW) applications automatically transmit required and optional records to IDW. These applications are available to official service providers upon request. Prior to the deployment of ITW (scheduled for deployment in 2008), the current Cusum application, used for all export shiplot inspections, will provide the required data for IDW.

When portions of grain are only sampled or are sampled and inspected but not loaded on board the carrier during a Cusum inspection, summary records for these portions must be submitted to IDW for reporting purposes. A separate summary record must also be submitted for any material portion that is loaded on board the carrier. FGIS's Cusum application has been modified to provide the following records for certification of shiplot inspections:

- a. Summary record for grain meeting contract specifications and loaded on board the carrier
- b. Detail records for all sublots, components, and/or subsamples inspected, regardless of disposition
- c. Summary record for any material portion loaded on board the carrier
- d. Summary record for any portion returned to the elevator

When at least one factor is analyzed for a portion of grain that is returned to the elevator (referred to as Rejected & Returned or as a Local), Cusum will generate a summary record for a factor-only inspection. No grade will be assigned to this record. When a portion of grain is returned to the elevator without any factor analysis having been made,

Cusum will generate a summary record for a sample-only service.

A data record that has been superseded by a corrected record or a review inspection record should not be marked as a voided record (refer to Attachments 1 and 5 for Purpose Code). Records that have been voided but not issued due to data entry errors should <u>not</u> be transmitted to IDW.

6. RECORD ACCESS AND REPORTS

Official service providers and customers are able to access their respective inspection and weighing results by selecting the IDW application through the FGIS Application Menu website at https://fgis.gipsa.usda.gov. In order to access database records, customers and official inspection personnel must first establish an eAuthentication account with a Level 2 access through the United States Department of Agriculture (USDA) by logging in to the www.usda.gov website. The individual must then request access to the IDW application by selecting the IDW application through the FGIS Application Menu website. Access to different levels of information is granted by a GIPSA application security administrator based on the identity and role of the individual. A customer has access only to records containing that customer's specific customer number. Official agency personnel have access to all records specific to their respective agencies. FGIS personnel have access to records as determined by their assigned identities and roles.

In order to access IDW records, customers must initially request the assignment of a customer number through GIPSA's Customer Information Management (CIM) system. This application is available by visiting GIPSA's Common Business System Menu website at https://gcbs.gipsa.usda.gov. When a customer number has been assigned, the customer is responsible for notifying the service provider to include it on any inspection and weighing record that the customer may want to access through IDW.

Customers may also request daily transmissions of their inspection and weighing records if they have been assigned a customer number by IDW. Customers specify the format (CSV or XML) of the records and the transmission method (email attachment or web server) by entering their preferences on their customer records in CIM.

The general public may access summary export inspection and weighing reports through an export grain search screen. A user will not have to be authenticated by USDA or authorized for IDW in order to access this information.

Additionally, any user can view a specific IDW record through the "View an Individual Record" option on the Inspection Data Warehouse System Menu Page by entering the certificate number, date of service, and identification of the carrier, lot, or sample.

Routine export, administrative tonnage fee billing, and supervision fee billing reports will be generated by IDW as the EGIS and GIWIS systems are phased out. Authorized users can create ad hoc reports by selecting and downloading records through the "Search My Certificate Records" option on the menu page.

7. COMPUTER HARDWARE AND SOFTWARE REQUIREMENTS

Service Providers

Official service providers must have a computer system with email capability that supports the collection, storage, and transmission of inspection and weighing records. The inspection and weighing software may be multi-functional to include certification, billing, and other administrative functions. In order to merge all information into a national database, records must conform to the standard record format in Attachments 1-2 or to the AgXML (Version 3) schema.

Service providers utilizing the CRT application's stand-alone version must meet the following requirements:

- a. Windows XP Professional operating system with Service Pack 2 (SP2)
- b. Internet Information Services 5.1 or higher
- c. Microsoft .NET framework 1.1
- d. 512 Mg memory (1 gig recommended)
- e. 1.0 Ghz processor (2.0 or higher recommended)

General Users

Because IDW is a web-based application, the only requirement for accessing it is Internet connectivity.

8. FILE STRUCTURE

CSV Format

Data records are submitted in delimited ASCII flat files. Each record is terminated by the DOS end-of-line sequence, CR-LF. Fields (whether populated or empty) are separated by a delimiting comma (,). All fields are enclosed in double quotes. There are no padding and justification requirements. Data types are character, integer, and decimal. (For IDW purposes, integer and decimal are not binary; they are ASCII strings representing valid integer and decimal numbers.) Values are case-sensitive.

XML Format

The AgXML (Version 3) schema is available at http://www.agxml.org. Attachments 5 – 7 provide the Xpath and values for the elements that comprise the summary and detail records. Values are case-sensitive.

File Naming Convention

In order to ensure that each data file is uniquely labeled, the following naming convention is required for all data submissions to IDW:

- a. Date and time (MMDDYYYYHHMMSS)
- b. Hyphen
- c. Official agency or field office alpha code
- d. Hyphen
- e. Service point number
- f. Period
- g. File extension

Example: 05012007103530-NOFO-123456.xml

File Content

Data files should contain only records from official inspection and weighing services. Detail records may be submitted separately from ITW or bundled with the associated summary record in the same file. When files are compiled, detail records should immediately follow the associated summary record.

9. QUESTIONS

Direct any questions concerning IDW requirements to:

Janine Goodson, IDW Application Administrator

Email: janine.k.goodson@usda.gov

Phone: 816-823-2774

/s/ John C. Giler

John C. Giler, Acting Director Field Management Division

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Record Type	Char	1	S, D	Code that identifies type of record (Summary Inspection and/or Weighing, Detail Inspection)	S = Summary Inspection and/or Weighing, D = Detail Inspection	Mandatory
Certification Location	Integer	7	6-digit service point number	GIPSA-assigned number for the location of the office that issues the certificate		Mandatory
Analysis Weighing Location	Integer	7	6-digit service point number	GIPSA-assigned number for the location where the sample analysis or weighing service is performed		Mandatory when any sample analysis or weighing service (other than with a portable platform scale) is performed
Lot Number	Char	20		Unique alpha-numeric identifier assigned to a lot when Cusum, combined-lot, or round-lot inspections are performed. Detail inspection records are assigned same lot number as assigned to the associated summary inspection/weighing records		Mandatory for all summary records associated with a lot when detail records are generated as a result of a Cusum, combined-lot, or round-lot inspection
File Sample ID	Char	20		Identification assigned by the service provider to a file sample		Mandatory for all products, except processed commodities, if Service Type = EX, OL, OS, QI, SS, or W
Inspection Type	Char	4	O,R,A,B,S,N	Level of inspection (Original, Reinspection, Appeal, Board Appeal, Supervision, New Original)	O = Original, R = Reinspection, A = Appeal, B = Board Appeal, S = Supervision, N = New Original	Mandatory if Service Type ≠ BW, CW, X, or Y
Commodity/Carrier Location	Char	50		Location where the commodity is located at the time of sampling or other service or where the stowage examination is performed (e.g. name of elevator, fleet, rail yard, or warehouse)		Mandatory if Service Type \neq CS, OS, RT, or SS and Product = GR

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
City	Char	30		City where the commodity is located at the time of sampling or other service or where the stowage examination is performed		Mandatory if Service Type ≠ CS, OS, RT, or SS
State	Char	4	Standard 2- character abbreviation	State where the commodity is located at the time of sampling or other service or where the stowage examination is performed		Mandatory if Service Type ≠ CS, OS, RT, or SS
Ordered By	Char	50		Name of the customer requesting service		Mandatory
Cert Number	Char	30	Agency/field office abbreviation plus serial number	Serial number of certificate		Mandatory
Cert Date	Char	8	YYYYMMDD	Date certificate is generated (cert number is assigned)		Mandatory
Service Type ¹	Char	4	BW,CC,CI,CL, CLO,COC,COFP ,CS,CW,ES,EX, FE,OBL,OL,OS, QI,RT,S,SE,SI, SS,W,WF,X,Y	Type of service performed (See Attachment 3)	See Attachment 3	Mandatory
Purpose Code	Char	4	O,C,R,V	Purpose of the record (Original, Void, Duplicate, Corrected)	O = Original, C = Void, R = Duplicate, V = Corrected	Mandatory
Old Cert Number	Char	30		Serial number of a certificate that has been replaced by a duplicate, corrected, or superseded certificate		Mandatory if Purpose Code = V or if Inspection Type = R
Divide Type Code	Char	4	M,D	Code to identify a record as the master or a divide when divided-lot certificates are issued	M = Master, D = Divide	Mandatory if Number of Divides is populated

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Number of Divides	Integer	4		Number of divided certificates issued for a lot		Mandatory if divided-lot certificate is issued
Movement	Char	4	I,O,L,E	In, Out, Local, Export	I = In, O = Out, L = Local, E = Export	Mandatory if Service Type = CI, CL, CW, EX, OL, W, X, or Y and product is a grain
Carrier Type	Char	4	T,R,B,L,C,S,O	Type of carrier used to transport the commodity (Truck, Rail, Barge, Lash Barge, Container, Ship, Other)	T = Truck, R = Rail, B = Barge, L = Lash Barge, C = Container, S = Ship, O = Other	Mandatory if product is a grain and Movement = E, O or I (Do not populate this field for submitted samples)
Number of Carriers	Integer	4		Number of carriers comprising the lot		Mandatory if product is a grain and Movement = E, O, or I and Carrier Type = T, R, B, L, or C
Identification	Char	100		Identification of the carrier, lot, or submitted sample		Mandatory
Sampling Method	Char	4	P,M,C,L,W,H,X, B,O	Method used to obtain the official sample (Probe, Mechanical Diverter, Ellis Cup, Pelican, Woodside, Mechanical Probe, Multiple, Bag Trier, Other)	P = Probe, M = Mechanical Diverter, C = Ellis Cup, L = Pelican, W = Woodside, H = Mechanical Probe, X = Multiple, B = Bag Trier, O = Other	Mandatory if Service Type = CL, OL, W, or S and product is a grain
Top Feet Sampled	Integer	2		Depth that the probe is inserted into a commodity if the bottom of the carrier is not sampled		Mandatory if sample is obtained by probing and the bottom of the carrier is not sampled
Date Sampled	Char	8	YYYYMMDD	Date sampling of the sublot or lot is completed		Mandatory if Sampling Method is populated
Time Sampled	Char	4	ННММ	Time sampling of the sublot or lot is completed		Optional
Grade	Char	4	CHP,PHP,1,2,3, 4,5,6,SG,NG, SUBSTD	Level of quality or value as specified in the standards	CHP = Choice Handpicked, PHP = Prime Handpicked, SG = Sample Grade, NG = No Grade, SUBSTD = Substandard. NOTE: Add + for "or better"	Mandatory whenever a grade is assigned

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CSV Summary Record Field Definitions

Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Commodity Class	Char	10	Standard GIPSA abbreviation	Lowest level of agricultural commodity class or subclass as defined in the Agricultural Product Standards		Mandatory if Service Type ≠ ES, FE, SE, or SI
Special Grade ²	Char	4	Standard GIPSA abbreviation	Special factor or condition present in a commodity that is supplemental to the grade		Mandatory whenever a special grade is assigned
Quantity/Official Weight	Integer	9		Volume, weight, or size of the lot or sample inspected or weighed		Mandatory if Service Type ≠ CS, OS, RT, SS, ES, FE, SE, or SI
Quantity/Official Weight Unit of Measure	Char	4	LB,MT,BU,GR, QT,TL,CL,CT, BA,BL	Description of how the lot or sample is measured	LB = Pounds, MT = Metric Tons, BU = Bushels, GR = Grams, QT = Quarts, TL = Trucklot, CL = Carlot, CT = Containerlot, BA = Bargelot, BL = Bales	Mandatory if Quantity/Official Weight is populated
Cert Signature Inspector Number	Integer	5	5-digit number	GIPSA-assigned number for the individual whose name appears on the certificate		Mandatory
Date of Service	Char	8	YYYYMMDD	Date inspection or weighing is completed		Mandatory
Time of Service	Char	4	ННММ	Time inspection or weighing is completed		Optional
Remarks	Char	8000		Information from the remarks section of the certificate that is not reported in any other field		Mandatory if remarks are included on certificate
Agency Field Office Code	Char	10	Standard 2 - 4 character abbreviation	Official agency or field office that performs the inspection or weighing service		Mandatory

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Service Request Number	Char	25	Service point number plus date service is requested (YYYYMMDD) plus 3-character sequential number	Unique number assigned to each request for service that is used to link inspection & weighing records to the request for service		Mandatory if product is a grain and Movement = E or when detail records are generated as a result of a Cusum, combined-lot, or round-lot inspection
Load Order Number	Char	50		Unique lot identifier for the inspection and/or weighing log		Optional
Stowage Area Examined	Char	1	Y,N	Indication as to whether or not a stowage area of a carrier has been examined		Mandatory if Movement = E or O
GIPSA File Sample ID	Integer	9		Unique number automatically assigned by IDW to each incoming inspection record for original service or review inspection service- basis new sample		IDW will populate this field
Superseded By	Char	25		Certificate number of the superseding record. Populated by IDW		IDW will populate this field
Customer Number	Integer	18		GIPSA-assigned number for the customer. Required for a customer to access data from IDW		Mandatory for administrative tonnage fee billing or when specified by the customer
GIPSA Fee	Char	1	Y,N	Field to indicate if record is to be used for computing supervision or administrative tonnage fees	Y = Yes, N = No	Mandatory
Date Started	Char	8	YYYYMMDD	Date weighing begins		Optional
Time Started	Char	4	ННММ	Time weighing begins		Optional
Type Shipment	Char	4	BU,SA	Bulk or sack	BU = Bulk, SA = Sack	Mandatory if Service Type ≠ CS, ES, FE, OS, RT, SE, SI, or SS

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Inspection Weighing Service	Char	4	I,W,IW	Classification of service as inspection only, weighing only, or inspection & weighing	I = Inspection Only, W = Weighing Only, IW = Inspection & Weighing	Mandatory if product is a grain and if Service Type = CI, CW, EX, OL, S, WF, X, or Y
Destination Quantity ³	Integer	9		Weight or size of the lot inspected or weighed for export under the USGSA		Mandatory if Destination is populated
Destination Quantity Unit of Measure ³	Char	4	LB,MT,BU,TL, CL,CT, BA,BL	Description of how the lot is measured	LB = Pounds, MT = Metric Tons, BU = Bushels, TL = Trucklot, CL = Carlot, CT = Containerlot, BA = Bargelot, BL = Bales	Mandatory if Destination Quantity is populated
Destination ³	Integer	4	Standard 4-digit code	Country of destination for export shipments based on Commerce Department codes		Mandatory if Movement = E and Divide Type Code \neq D
Moisture Load ⁴ Order	Char	4	MI,MA,AV	Specified moisture load order requirement (minimum, maximum, or average)	MI = Minimum, MA = Maximum, AV = Average	Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Moisture Load Order Percent ⁴	Integer or Decimal	4		Specified moisture load order requirement (percent)		Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Protein Load Order ⁵	Char	4	MI,MA,AV,OR	Specified protein load order requirement (minimum, maximum, average, or ordinary)	MI = Minimum, MA = Maximum, AV = Average, OR = Ordinary	Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Protein Load Order Percent ⁵	Integer or Decimal	4		Specified protein load order requirement (percent)		Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Oil Load Order ⁶	Char	4	MI,MA,AV,OR	Specified oil load order requirement (minimum, maximum, average, or ordinary)	MI = Minimum, MA = Maximum, AV = Average, OR = Ordinary	Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Oil Load Order Percent ⁶	Integer or Decimal	4		Specified oil load order requirement (percent)		Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Starch Load Order ⁷	Char	4	MI,MA,AV,OR	Specified starch load order requirement (minimum, maximum, average, or ordinary)	MI = Minimum, MA = Maximum, AV = Average, OR = Ordinary	Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Starch Load Order Percent ⁷	Integer or Decimal	4		Specified starch load order requirement (percent)		Mandatory if specified in the load order for a shiplot of grain and if Service Type = EX
Sublots With Insects	Integer	4		Number of sublots containing one or more live insects		Mandatory for shiplots if Service Type = EX
Components Infested	Integer	4		Number of Infested Components		Mandatory for shiplots if Service Type = EX
Insects Per Lot	Integer	4		Total number of live insects in the lot		Mandatory for shiplots if Service Type = EX
Insecticide	Char	4	AC,MA,RE,OT	Type of insecticide applied to a component, sublot, or lot	AC = Actellic, MA = Malathion, RE = Reldan, OT = Other	Mandatory for shiplots if Service Type = EX and insecticide was applied
Dust Suppressant	Char	4	OI,WA,OT	Type of dust suppressant applied to a component, sublot, or lot (e.g. oil)	OI = Oil, WA = Water, OT = Other	Mandatory for shiplots if Service Type = EX and dust suppressant was applied
Dye	Char	1	Y,N	Field for capturing if a dye is applied to a component, sublot, or lot	Y = Yes, N = No	Mandatory for shiplots if Service Type = EX
Fumigant	Char	4	PH, OT	Type of fumigant applied to a component, sublot, or lot (e.g. aluminum phosphide)	PH = Aluminum phosphide, OT = Other	Mandatory for shiplots if Service Type = EX and fumigant was applied
Aflatoxin Test Basis	Char	4	CP,SL,OT, BO	Basis of the sample used for aflatoxin analysis (e.g. composite, sublot, other, both composite and sublot)	CP = Composite, SL = Sublot, OT = Other, BO = Both composite & sublot	Mandatory for shiplots if Service Type = EX and if Factor Code = AFLA

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Factor Code ⁸	Char	10	Standard GIPSA abbreviation	Analytical factor measured		Mandatory if Service Type = CL, CS, EX, OL, OS, QI, RT, SS, or W
Inspection Result ⁸	Char	50	See Attachment 4	Result from the analysis of a factor		Mandatory if Factor Code is populated
Inspection Result Unit of Measure ⁸	Char	20	%, ct, F, gr lb/bu, n/a, ppb, ppm	Format for reporting inspection results as specified in the Agricultural Product Standards	% = Percent, ct = Count, F = Fahrenheit, gr = Grams, lb/bu = Pounds Per Bushel, n/a = Not Applicable, ppb = Parts Per Billion, ppm = Parts Per Million	Mandatory if Factor Code is populated
Factor Remarks ⁸	Char	250		Supplemental information related to an inspection result (e.g. 12% moisture basis for a protein result)		Populate when applicable
License Number ⁸	Integer	5	5-digit number	GIPSA-assigned number for the individual who performs the inspection or weighing service		Optional
Factor Test Equipment ⁸	Char	50		Serial number or unique identifier of the equipment used in the factor analysis		Optional
Factor Test Location ⁸	Integer	7	6-digit service point number	GIPSA-assigned number for the location where the analysis is performed		Optional

1/Service Type: Repeat 10 x 2/ Special Grade: Repeat 7 x

3/ Destination Quantity, Destination Quantity Unit of Measure, Destination: Repeat as a set 10 x 4/ Moisture Load Order, Moisture Load Order Percent: Repeat as a set 3 x 5/ Protein Load Order, Protein Load Order Percent: Repeat as a set 3 x

6/ Oil Load Order, Oil Load Order Percent: Repeat as a set 3 x

7/ Starch Load Order, Starch Load Order Percent: Repeat as a set 3 x 8/ Factor Code, Inspection Result, Inspection Result Unit of Measure, Factor Remarks, License Number, Factor Test Equipment,

Factor Test Location: Repeat as a set 40 x

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Record Type	Char	1	S, D	Code that identifies type of record (Summary Inspection and/or Weighing, Detail Inspection)	S = Summary Inspection and/or Weighing, D = Detail Inspection	Mandatory
Agency Field Office Code	Char	10	Standard 2 - 4 character abbreviation	Official agency or field office that performs the inspection or weighing service		Mandatory
Lot Number	Char	20		Unique alpha-numeric identifier assigned to a lot when Cusum, combined-lot, or round-lot inspections are performed. Detail inspection records are assigned same lot number as assigned to the associated summary inspection/weighing records		Mandatory
Sample Identification	Char	20		Identification of the sample analyzed during the inspection of the lot (e.g. sublot #, material portion #, railcar ID)		Mandatory
Sequence Number	Integer	4		Sequential number that indicates the sublot inspection order during a Cusum inspection		Mandatory for Cusum inspections
Level	Char	4	L,C,S	Portion of the lot represented by the sample	L = Sublot, C = Component, S = Subsample	Mandatory
Disposition	Char	4	L,O,R,S,X	Status of the commodity after sampling or inspection	L = Local, O = On Board, R = Rejected & Returned, S = Superseded, X = Transfer	Mandatory

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Inspection Type	Char	4	O,R,A,B,S,N	Level of inspection (Original, Reinspection, Appeal, Board Appeal, Supervision, New Original)	O = Original, R = Reinspection, A = Appeal, B = Board Appeal, S = Supervision, N = New Original	Mandatory
Date Sampled	Char	8	YYYYMMDD	Date sampling of the sublot or lot is completed		Mandatory
Time Sampled	Char	4	ННММ	Time sampling of the sublot or lot is completed		Optional
Date of Service	Char	8	YYYYMMDD	Date inspection or weighing is completed		Optional
Time of Service	Char	4	ННММ	Time inspection or weighing is completed		Optional
Quantity/Official Weight	Integer	9		Volume, weight, or size of the lot or sample inspected or weighed		Mandatory
Quantity/Official Weight Unit of Measure	Char	4	LB,MT,BU, GR,QT,TL, CL,CT,BA,BL	Description of how the lot or sample is measured	LB = Pounds, MT = Metric Tons, BU = Bushels, GR = Grams, QT = Quarts, TL = Trucklot, CL = Carlot, CT = Containerlot, BA = Bargelot, BL = Bales	Mandatory
Remarks	Char	250		Information from the remarks section of the inspection log that is not reported in any other field		Optional

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Service Request Number	Char	25	Service point number plus date service is requested (YYYYMMDD) plus 3-character sequential number	Unique number assigned to each request for service that is used to link inspection & weighing records to the request for service		Mandatory if product is a grain and Movement = E or when detail records are generated as a result of a Cusum, combined-lot, or round-lot inspection
Customer Number	Integer	18		GIPSA-assigned number for the customer. Required for a customer to access data from IDW		Mandatory when specified by the customer
File Sample ID	Char	20		Identification assigned by the service provider to a file sample		Mandatory if Service Type = EX, OL, or QI
GIPSA File Sample ID	Integer	9		Unique number automatically assigned by IDW to each incoming inspection record for original service or review inspection service- basis new sample		IDW will populate this field
Cert Number	Char	30	Agency/field office abbreviation plus serial number	Serial number of certificate		Optional
Factor Code ¹	Char	4	Standard GIPSA abbreviation	Analytical factor measured		Mandatory except for sampling only
Inspection Result ¹	Char	50	See Attachment 4	Result from the analysis of a factor		Mandatory if Factor Code is populated

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Field Name	Format	Length	Value(s)	Definition	Key	Requirements
Inspection Result Unit of Measure ¹	Char	20	%, ct, F, gr lb/bu, n/a, ppb, ppm	Format for reporting inspection results as specified in the Agricultural Product Standards	% = Percent, ct = Count, F = Fahrenheit, gr = Grams, lb/bu = Pounds Per Bushel, n/a = Not Applicable, ppb = Parts Per Billion, ppm = Parts Per Million	Mandatory if Factor Code is populated
Factor Remarks ¹	Char	250		Supplemental information related to an inspection result (e.g. 12% moisture basis for a protein result)		Populate when applicable
License Number ¹	Integer	5	5-digit number	GIPSA-assigned number for the individual who performs the inspection or weighing service		Optional
Factor Test Equipment ¹	Char	50		Serial number or unique identifier of the equipment used in the factor analysis		Optional
Factor Test Location ¹	Integer	7	6-digit service point number	GIPSA-assigned number for the location where the analysis is performed		Optional

^{1/} Factor Code, Inspection Result, Inspection Result Unit of Measure, Factor Remarks, License Number, Factor Test Equipment, Factor Test Location: Repeat as a set 40 x

Values for Service Type Field

Service Type	Value	Act
Bulkweighing	BW	AMA
Checkcounting	CC	AMA
Condition Inspection	CI	Both
Commercial Sample-Lot	CL	USGSA
Checkloading	CLO	AMA
Condition of Food Containers	COC	AMA
Commodity Operations Fumigation Protocol	COFP	AMA
Commercial Submitted	CS	USGSA
Checkweighing	CW	Both
Examination Service	ES	AMA
Export	EX	USGSA
Facility Examination	FE	AMA
Observation of Loading	OBL	AMA
Official Sample-Lot	OL	USGSA
Official Submitted	OS	USGSA
Lot (Quality) Inspection	QI	AMA
Registered Type-Sample	RT	AMA
Sampling Service	S	Both
Stowage Examination	SE	Both
Plant Sanitation Inspection	SI	AMA
Submitted Sample	SS	AMA
Warehouseman's Sample-Lot	W	USGSA
Witness Fumigation	WF	Both
Class X Weights	X	USGSA
Class Y Weights	Y	USGSA

Note: When sampling and stowage examinations are performed as part of another service (e.g. Official Sample-Lot or Export), do not report them as a separate service type. Sampling Service applies when a lot is officially sampled but not analyzed by the service provider. The following table lists the service types that apply individually or in combination with each type of inspection and weighing certificate.

Type of Certificate	Service Type
	BW, CC, CI, CLO, COC, COFP, CW,
Commodity Inspection	ES, FE, OBL, QI, S, SI, WF
Commodity Submitted Sample Inspection	RT, SS
Commodity Weight	BW, CW
Official Commercial Sample-Lot Inspection	CL
Official Commercial Submitted Sample Inspection	CS
Official Export Inspection	EX
Official Grain Weight	CW, X
Official Sample-Lot Inspection	CI, OL, S, WF
Official Stowage Examination	SE
Submitted Sample Inspection	OS
Supervision of Grain Weight	Y
Warehouseman's Sample-Lot Inspection	W

Inspection Result Values for IDW Records

- 1. Percent: Integer or decimal number to the precision required for the factor (e.g. tenths, hundredths)
- 2. Count: 1/3 and 2/3 to be reported as .33 and .67, respectively
- 3. Condition (e.g. Odor): Standard GIPSA abbreviation
- 4. StarLink: Report as "Positive" or "Negative". Report complete statement in the Factor Remarks field.
- 5. Mycotoxins: In order to reduce the variability in which the results are reported, the following rules apply:
 - A. If the statement contains "equal to or less than", report the result as: <=
 - B. If the statement contains "does not exceed", report the result as: <
 - C. If the statement contains "exceeds", report the result as: >
 - D. If the Factor Code is AFLA and the statement contains "not detected", report the result as: <5
 - E. If the Factor Code is DON or FUM and the statement contains "not detected", report the result as: <0.5

Report complete statement in the Factor Remarks field.

Mycotoxin Examples:			
Factor Code	(Certificate Statement)	Inspection Result	Inspection Result Unit Of Measure
AFLA	*equal to or less than 20 ppb	<=20	ppb
AFLA	*does not exceed 5 ppb	<5	ppb
AFLA	*exceeds 20 ppb	>20	ppb
AFLA	*not detected	<5	ppb
AFLA	*13 ppb	13	ppb
DON	*equal to or less than 2 ppm	<=2	ppm
DON	*exceeds 2.5 ppm	>2.5	ppm
DON	*not detected	<0.5	ppm
DON	*equal to or less than 0.5 ppm	<=0.5	ppm
DON	*2 ppm	2	ppm
FUM	*equal to or less than 0.5 ppm	<=0.5	ppm
FUM	*2 ppm	2	ppm
FUM	*exceeds 5 ppm	>5	ppm
FUM	*not detected	<0.5	ppm
ZEAR	*exceeds 1000 ppb	>1000	ppb
ZEAR	*equal to or less than 50 ppb	<=50	ppb
ZEAR	*does not exceed 1000 ppb	<1000	ppb
ZEAR	200 ppb	200	ppb

IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Record Type		
Certification Location	Quality Certificate Header/Inspection Service Provider/Issued From/Location Information/Location Identifier	6-digit service point number
Analysis Weighing Location	Quality Certificate Header/USDA Specific Header/Analysis Weighing Location	6-digit service point number
Lot Number	Quality Certificate Header/USDA Specific Header/Lot Number	
File Sample ID	Quality Certificate Header/USDA Specific Header/File Sample Identifier	
Inspection Type	Quality Certificate Header/Inspection Level Type	Appeal, Board Appeal, New Original, Original, Reinspection, Supervision
Commodity/Carrier Location	Quality Certificate Header/USDA Specific Header/Carrier Location/Location Information/Location Name	
City	Quality Certificate Header/USDA Specific Header/Carrier Location/Location Information/Address/City	
State	Quality Certificate Header/USDA Specific Header/Carrier Location/Location Information/Address/Country Region Code	Standard 2-character abbreviation
Ordered By	Quality Certificate Header/Service Requester/Entity Information/Entity Name	
Cert Number	Quality Certificate Header/Quality Certificate Identifier	
Cert Date	Quality Certificate Header/Issue Date Time/Date	YYYY-MM-DD
Service Type ¹	Quality Certificate Header/USDA Specific Header/Service Type	BW, CC, CI, CL, CLO, COC, COFP CS, CW, ES, EX, FE, OBL, OL, OS, QI, RT, S, SE, SI, SS, W, WF, X, Y
Purpose Code	Quality Certificate Header/Quality Certificate Status	Corrected, Duplicate, Original, Void
Old Cert Number	Quality Certificate Header/Old Quality Certificate Identifier	
Divide Type Code	Quality Certificate Header/USDA Specific Header/Divide Type Code	M, D
Number Of Divides	Quality Certificate Header/USDA Specific Header/Number of Divides	
Movement	Quality Certificate Header/Service Event	Export, Inbound, Local, Outbound
Carrier Type	Quality Certificate Header/Transportation Mode	Barge, Container, Lash Barge, Other, Rail, Truck, Vessel
Number Of Carriers	Quality Certificate Header/USDA Specific Header/Number of Carriers	

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IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Identification	Quality Certificate Header/Vehicle Identification/Vehicle Identifier	
Sampling Method	Quality Certificate Header/Sample Information/Sample Method	Bag Trier, Ellis Cup, Mechanical Diverter, Mechanical Probe, Multiple, Other, Pelican, Probe, Woodside
Top Feet Sampled	Quality Certificate Header/Sample Information/Probe Sample Depth	
Date Sampled	Quality Certificate Header/Sample Information/Sample Taken Date Time/Date	YYYY-MM-DD
Time Sampled	Quality Certificate Header/Sample Information/Sample Taken Date Time/Time	HH:MM
Grade	Quality Certificate Header/Commodity Information/Commodity Standard Grade	Choice Handpicked, No Grade, Prime Handpicked, Substandard, U.S. No 1, U.S. No 2, U.S. No 2 or Better, U.S. No 3, U.S. No 3 or Better, U.S. No 4, U.S. No 4 or Better, U.S. No 5, U.S. No 5 or Better, U.S. No 6, U.S. No 6 or Better, U.S. Sample, Sample Grade or Better, Substandard or Better
Commodity Class	Quality Certificate Header/Commodity Information/Commodity Name Code	Name of commodity, class, or subclass as per GIPSA's Agricultural Products Standards (APS)
Special Grade ²	Quality Certificate Header/Commodity Information/Commodity Special Grade	Aromatic, Bleached, Blighted, Bright, Chips, Choice Handpicked, Coated, Extra Heavy, Ergoty, Flint and Dent, Flint, Garlicky, Glutinous, Granulated, High Moisture, Heavy, Infested, Large, Light Garlicky, Light Smutty, Parboiled, Parboiled Dark, Parboiled Light, Prime Handpicked, Plump, Purple Mottled & Stained, Small, Smutty, Thin, Treated, Undermilled, Waxy
Quantity/Official Weight	Quality Certificate Header/Lot Quantity	

IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Quantity/Official Weight Unit of Measure	Quality Certificate Header/Lot Quantity/@unit of Measure	BL, BUA, C4, CH, GRM, LBR, NB, QT, TC, TNE
Cert Signature Inspector Number	Quality Certificate Header/Inspection Service Provider/Inspector/Entity Identifier	5-digit number
Date of Service	Quality Certificate Header/Inspection Date Time/Date	YYYY-MM-DD
Time of Service	Quality Certificate Header/Inspection Date Time/Time	HH:MM
Remarks	Quality Certificate Header/Sample Information/Remark	
Agency Field Office Code	Quality Certificate Header/Inspection Service Provider/Entity Information/Entity Identifier	Standard 2 - 4 character abbreviation
Service Request Number	Quality Certificate Header/USDA Specific Header/Service Request Number	
Load Order Number	Quality Certificate Header/USDA Specific Header/Load Order Number	
Stowage Area Examined	Quality Certificate Header/USDA Specific Header/Stowage Area Examined	Y, N
GIPSA File Sample ID	Quality Certificate Header/USDA Specific Header/GIPSA File Sample Identifier	
Superseded By	Quality Certificate Header/USDA Specific Header/Superseded By	
Customer Number	Quality Certificate Header/USDA Specific Header/Customer Number	
GIPSA Fee	Quality Certificate Header/USDA Specific Header/GIPSA Fee	Y, N
Date Started	Quality Certificate Header/USDA Specific Header/Weight Service Start Date Time/Date	YYYY-MM-DD
Time Started	Quality Certificate Header/USDA Specific Header/Weight Service Start Date Time/Time	HH:MM
Type Shipment	Quality Certificate Header/USDA Specific Header/Type Shipment	BU, SA
Inspection Weighing Service	Quality Certificate Header/USDA Specific Header/Inspection Weighing Service	I, IW, W
Destination Quantity Unit Of Measure ³	Quality Certificate Header/USDA Specific Header/Export Shipment Quantity/Destination Quantity/@unit of Measure	BL, BUA, C4, CH, GRM, LBR, NB, QT, TC, TNE
Destination ³	Quality Certificate Header/USDA Specific Header/Export Shipment Quantity/Destination Country	Standard 4-digit Commerce Department or 2-character ISO code
Destination Quantity ³	Quality Certificate Header/USDA Specific Header/Export Shipment Quantity/Destination Quantity	

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IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Load Order Factor ⁴	Quality Certificate Header/USDA Specific Header/Load Order/Load Order Factor Code	Standard factor abbreviation as per GIPSA's Agricultural Products Standards (APS)
Load Order Requirement ⁴	Quality Certificate Header/USDA Specific Header/Load Order/Load Order Requirement	AV, MI, MA, OR
Load Order Percent ⁴	Quality Certificate Header/USDA Specific Header/Load Order/Load Order Percent	
Sublots With Insects	Quality Certificate Header/USDA Specific Header/Sublots With Insects	
Components Infested	Quality Certificate Header/USDA Specific Header/Components Infested	
Insects Per Lot	Quality Certificate Header/USDA Specific Header/Insects Per Lot	
Insecticide	Quality Certificate Header/USDA Specific Header/Insecticide	AC, MA, RE, OT
Dust Suppressant	Quality Certificate Header/USDA Specific Header/Dust Suppressant	OI, OT, WA
Dye	Quality Certificate Header/USDA Specific Header/Dye	Y, N
Fumigant	Quality Certificate Header/USDA Specific Header/Fumigant	PH, OT
Aflatoxin Test Basis	Quality Certificate Header/USDA Specific Header/Aflatoxin Test Basis	BO, CP, OT, SL
Factor Code ⁵	Quality Factors/Quality Factor Information/Quality Factor Code	Standard factor abbreviation as per GIPSA's Agricultural Products Standards (APS)
Inspection Result ⁵	Quality Factors/Quality Factor Information/Quality Factor Measurement/Quality Factor Value	
Inspection Result Unit of Measure ⁵	Quality Factors/Quality Factor Information/Quality Factor Measurement/Quality Factor Value/@ unit of Measure	59, 61, EA, FAH, GRM, LB/BU, N/A, P1
Factor Remarks ⁵	Quality Factors/Quality Factor Information/Remark	,
License Number ⁵	Quality Factors/Quality Factor Information/Inspector License Number	5-digit number
Factor Test Equipment ⁵	Quality Factors/Quality Factor Information/Test Equipment	
Factor Test Location ⁵	Quality Factors/Quality Factor Information/Test Location	6-digit service point number

Summary Record AgXML Format

- 1/Service Type: Repeat 10 x 2/ Special Grade: Repeat 7 x
- 3/ Destination Quantity, Destination Quantity Unit of Measure, Destination: Repeat as a set 10 x
- 4/ Load Order Factor, Load Order Requirement, Load Order Percent: Repeat as a set 3 x 5/ Factor Code, Inspection Result, Inspection Result Unit of Measure, Factor Remarks, License Number, Factor Test Equipment,

Factor Test Location: Repeat as a set 40 x

Detail Record AgXML Format

IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Record Type		
Agency Field	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Inspection Service	Standard 2 – 4 character
Office Code	Provider /Entity Information/Entity Identifier	abbreviation
Lot Number	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Lot Number	
Sample Identification	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Sample Identifier	
Sequence Number	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Sequence Number	
Level	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Sample Level	C, L, S
Disposition	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Disposition	L, O, R, S, X
Inspection Type	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Inspection Level Type	Appeal, Board Appeal, New Original, Original, Reinspection, Supervision
Date Sampled	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Sample Taken Date Time/Date	YYYY-MM-DD
Time Sampled	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detai lHeader/Sample Taken Date Time/Time	HH:MM
Date of Service	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Inspection Date Time/Date	YYYY-MM-DD
Time of Service	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Inspection Date Time/Time	HH:MM
Quantity/Official Weight	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Lot Quantity	
Quantity/Official Weight Unit of Measure	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Lot Quantity/@ unit of Measure	BL, BUA, C4, CH, GRM, LBR, NB, QT, TC, TNE
Remarks	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Remark	
Service Request Number	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Service Request Number	
Customer Number	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Customer Number	
File Sample ID	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/File Sample Identifier	
GIPSA File Sample ID	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/GIPSA File Sample Identifier	
Certificate Number	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Certificate Detail Header/Quality Certificate Identifier	

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Detail Record AgXML Format

IDW Field Name	XPath Conforming to AgXML v3.0 Schema	Values
Factor Code ¹	Quality Certificate Sub Lot Detail/Quality Certificate Detail/ Quality Factor Information/Quality Factor Code	Standard factor abbreviation
		as per GIPSA's Agricultural
		Peoducts standards (APS)
Inspection Result ¹	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Quality Factor Measurement	
	/Quality Factor Value	
Inspection Result	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Quality Factor Measurement	59, 61, EA, FAH, GRM,
Unit of Measure ¹	/Quality Factor Value/@ unit of Measure	LB/BU, N/A, P1
Factor Remarks ¹	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Remark	
License Number ¹	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Inspector License Number	5-digit number
Factor Test	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Test Equipment	
Equipment ¹		
Factor Test	Quality Certificate Sub Lot Detail/Quality Certificate Detail/Quality Factor Information/Test Location	6-digit service point number
Location ¹		

^{1/} Factor Code, Inspection Result, Inspection Result Unit of Measure, Factor Remarks, License Number, Factor Test Equipment, Factor Test Location: Repeat as a set 40 x

AgXML Values for Units of Measure

Unit of Measure	Value
Bargelot	NB
Bales	BL
Bushels	BUA
Carlot	C4
Containerlot	СН
Count	EA
Grams	GRM
Fahrenheit	FAH
Metric Tons	TNE
Not Applicable	N/A
Parts per billion	61
Parts per million	59
Percent	P1
Pounds	LBR
Pounds per bushel	LB/BU
Quarts	QT
Trucklot	TC