

ADDRESS

STATE

ZIP

CITY

AGRICULTURAL RESOURCE MANAGEMENT SURVEY

WINTER WHEAT PRODUCTION PRACTICES AND COSTS REPORT



NATIONAL AGRICULTURAL STATISTICS SERVICE

for 2009

U.S. Department of Agriculture, Rm 5030, South Building 1400 Independence Ave., S.W. Washington, DC 20250-2000 Phone: 1-800-727-9540 Fax: 202-690-2090 Email: nass@nass.usda.gov

| VERSION | | ID | TRACT | SUBTRACT | T-TYPE | TABLE | LINE | 7 |
|---|---|-------------------------|------------|------------|--------|---------------------|------|---------------------------|
| 31 | | | 01 | | 0 | 000 | 00 | ECONOMIC RESEARCH SERVICE |
| | | | | | | | | _ |
| | | C | CONTACT F | RECORD | | | | |
| DATE | TIME | | | 1 | NOTES | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| [Introduce yourse We are collecting possible. Author the U.S. Code. States. Respons | INTRODUCTION: [Introduce yourself, and ask for the operator. Rephrase in your own words.] We are collecting information on practices and costs to produce winter wheat and need your help to make the information as accurate as possible. Authority for collection of information on the Winter Wheat Production Practices and Costs Report is Title 7, Section 2204 of the U.S. Code. This information will be used for economic analysis and to compile and publish estimates for your region and the United States. Response to this survey is confidential and voluntary. | | | | | | | |
| we encourage y | ou to refer to your | farm records during the | interview. | | | | | |
| | | | | | | BEGINNIN [MILITA | | HHMM 0004 |
| | | | | | | | | SCREENING BOX |
| | | | | | | | | 0006 |
| [Name, address and partners verified and updated if necessary] | | | | | | | | |
| POID | | | P | POID | | | | |
| PARTNER NAME | | | Р | ARTNER NAM | 1E | | | |
| ADDRESS | | | A | DDRESS | | | | |
| CITY | STATE | ZIP PHONE NU | IMBER C | ITY | S | TATE ZIP | F | PHONE NUMBER |
| POID | | | F | POID | | | _ | |
| PARTNER NAME | | | Р | ARTNER NAM | 1E | | | |

ADDRESS

STATE ZIP

PHONE NUMBER

CITY

PHONE NUMBER

A WINTE

WINTER WHEAT FIELD SELECTION

Α

| | | | TOTAL PLANTED ACRES |
|----|---|--|-----------------------------------|
| 1. | How many acres of wheat (winter, durum and other spri for the 2009 crop year? [For winter wheat, record acres planted | | 0050 |
| | [If no acres planted, review Screening Survey Information item 4 on back page.] | n Form, make notes, then go to | |
| | Of the total (item 1), how many acres were planted for | | TOTAL ACRES |
| | | | 0051 |
| | a. winter wheat? | | • |
| | | | 0052 |
| | b. durum wheat? | | • |
| | c. other spring wheat? | | 0053 |
| | c. other spring wheat? | | • |
| 2. | I will follow a simple procedure to make a random sel fields planted for the 2009 crop. | ection from the winter wheat | TOTAL NUMBER OF FIELDS PLANTED |
| | What is the TOTAL number of winter wheat fields [If only one field, enter "1" and go to item 5.] | | 0020 |
| | 3. Please list these fields according to identifying nather I will tell you which field has been selected. [If there are more than 18 fields, make sure item 2 is TOTAL fields operator's permanent residence. If respondent is unable to identify Grid Supplement.] | s planted and list only the 18 fields closest to the | |
| | FIELD NAME, NUMBER OR DESCRIPTION | FIELD NAME, NUMBER OR | DESCRIPTION |
| 1 | | 10 | |
| 2 | | 11 | |
| 3 | | 12 | |
| 4 | | 13 | |
| 5 | | 14 | |
| 6 | | 15 | |
| 7 | | 16 | |
| 8 | | 17 | |
| 9 | | 18 | |
| | | | |

| APPLY "RANDOM NUMBER" LABEL HERE |
|----------------------------------|
|----------------------------------|

| 4. | [ENUMERATOR ACTION: Circle the pair of numbers on the above label associated with | SELECTED FIELD NUMBER |
|----|--|--------------------------|
| | the last numbered field in item 3. Select the field according to the number you circled on the label, and record the selected number. If only one field, enter 1.] | 0021 |
| E | The field colocted is (field name/number/description) | |
| Э. | The field selected is (field name/number/description). | |
| | During this interview, the winter wheat questions will be about this selected winter wheat field. [Be sure the operator can identify the selected field.] | |

OFFICE USE OY Field Substituted

0022

FIELD CHARACTERISTICS---SELECTED FIELD

| | | | | ACRES |
|----|---|---|-----------------|-----------------|
| 1. | How many acres of winter whe | <u>.</u> | | 1301 |
| | plant in this field for the 2009 c | crop? | | i |
| | | | | CODE |
| | A was the across in this field OF | DTIFIED ODG ANICO | | 1300 |
| | a. Are the acres in this field CE | RTIFIED ORGANIC? | YES = 1 | |
| | [If YES, skip 1b and ask item | 2.] | | CODE |
| | h. NAVe e Aleie Sielel Annu eitämin eine eite | to consider the set and destine in 00000 | | 1399 |
| | b. Was this field transitioning in | to organic winter wheat production in 2009? | YES = 1 | |
| | r | | | |
| | | 1 owned by this operation? | | CODE |
| 2 | Word the care in this field | 2 rented for CASH with the payment being a fixed 3 rented for CASH with the payment being a flexible | | 1302 |
| ۷. | Were the acres in this field | 4 rented for a SHARE of the crop? | | |
| | | 5 rented for some combination of CASH and SHA 6 used RENT FREE? | RE of the crop? | |
| | | | | DOLLARS & CENTS |
| 3. | [If field is CASH RENTED (item 2 | 2 = 2, 3, or 5), ask item 3; else go to item 4.] | | PER ACRE |
| | | er acre for this 2009 winter wheat field? | | 1303 |
| | | | | • |
| | | | | |
| 4. | [If field is SHARE RENTED (item | 1 2 = 4 or 5), ask] | | PERCENT 1304 |
| | What was the landlord's share | of the crop from this field? | | 1304 |
| | | | | |
| 5. | [If field is RENTED (item 2 = 2, 3 | . 4. or 5). <i>ask</i> 1 | | |
| ٠. | • | inputs provided by any landlord or | DOLLARS & CENTS | |
| | | 1 the selected field? (Include the costs for all | | TOTAL DOLLARS |
| | • | s, technical services, custom operations, and irrigation. ne costs paid by the landowner.) | 1305 | 1306 |
| | | | | |
| | | | | YEAR |
| 6. | What year did you (the operator | r listed on the label) start operating this field? | | 1307 |

| | | | | | MM DD YY |
|-----|--|---|----------|--------------------------|---|
| _ | | | | 13 | 08 |
| 7. | On what date was this field planted? | | | · · · · · · · <u> </u> | |
| | a. When planted, was this wheat field planted with the intention of Grazing on the seed contract under other uses.) | ? |))?] | | CODE 09 |
| 0 | What was the cooding rate per care the first time this field was | nlowtod2 | UNITS P | 2 3 4 | UNIT CODE . = POUNDS ? = CWT 8 = TONS 4 = BUSHELS 8 = 50 LB BAGS |
| 8. | What was the seeding rate per acre the first time this field was | s pianted? | | •—— | |
| | | | | | ACRES |
| 9. | How many acres in this field had to be replanted to winter who (Acres replanted = Number of acres x Number of times replanted) | | | 13 | 18 |
| | (Acres replanted – Number of acres x Number of times replanted) | | | | • |
| | _ | | | | |
| | | 1 Purchased?2 Homegrown or tra | aded? | 13 | CODE 19 |
| 10. | Was the source of the winter wheat seed | 3 Both? | ļ | | |
| | a. [If item 10 = 2 or 3, ask] | | | | PERCENT |
| | How much of the winter wheat seed planted in this field was grown (or received in trade) by this operation? | | | | 1320 |
| | | | | | DOLLARS & CENTS PER BUSHEL |
| | (i) What was the cost per bushel for elegating and treating | uthic cood? | | | 1321 |
| | (i) What was the cost per bushel for cleaning and treating | triis seed? | | | • |
| | | | | | UNIT CODE |
| | 11. [<i>If any seed purchased</i> (item 10 = 1 or 3), <i>ask</i>] | | DOLI | _ARS & CENTS PER UNIT | 1 = POUND 2 = CWT 3 = TON 4 = BUSHEL |
| | What was the total cost per unit (including both your and the of purchased seed for this field? (Include cost of seed treatment. | | 1429 | • | 1430 |

| 12. | | d you plant a NON Genetically the school of | y-Modified (GM) herbicide resistant wheat on this field | CODE |
|---|----|---|--|------------------|
| | à. | for 2009 (planted in Fall 2008) |)?YES = 1 | 1403 |
| | b. | for 2008 (planted in Fall 2007) |)?YES = 1 | 1402 |
| | C. | [If item 12a or 12b is YES, ask] Did you choose the NON GM herbicide resistant wheat primarily to | 1 Increase yields through improved pest (weed) control? 2 Decrease herbicide costs? 3 Decrease machinery costs? 4 Improve ability to use or ease of using reduced tillage or no-till system? 5 Improve ability to use or ease of rotating crops? 6 Save management time or labor or improve ease of management? 7 Adopt more environmentally friendly practices? 8 For some other reason? [Specify:] | CODE 1317 |
| 13. If a genetically-modified herbicide resistant (such as Roundup – Ready) wheat seed becomes available, how likely would you be to plant it on this field under the following conditions? Assume that the total cost of the seed (including technology fee) changes based on the following information a. 10 percent seed cost increase. b. 20 percent seed cost increase. c. 30 percent seed cost increase. | | | | |
| 14. | На | s harvest of this field been co | ompleted? YES = 1 | CODE 1343 |

15. Now I need information about the acres harvested (or to be harvested) and the yields from this field.

| How many acres in the winter wheat field were (or will be) | ACRES | What yield per acre did you (or do you expect to) get for wheat UNITS PER ACRE | 2 UNIT CODE 1 POUNDS 2 CWT 3 TONS 4 BUSHELS CODE | What was the protein content per bushel of wheat |
|--|-------|--|--|--|
| a. harvested for grain? | 1346 | 1347 | 1348 | 1345 |
| b. harvested for hay, silage or green chop? | 1349 | 1350 | TONS | |
| c. harvested for commercial seed contract? | 1431 | 1432 | 1433 | |
| d. abandoned? | 1351 | | | |
| e. used for some other purpose? | 1439 | | | |

| 4.0 | 147- | and the second of the second o | CODE |
|-----|------|--|---------------------------|
| Τ0. | _ | s straw harvested from this field? | 1354 |
| | | YES - [Enter code 1 and continue] NO - [Go to item 18] | |
| | | • | ACRES |
| | | | 1355 |
| 17 | Hov | w many acres of wheat straw were harvested from this winter wheat field? | 1333 |
| | | many acres of wheat start were harvested from this whiter wheat held | • |
| | | | TOTAL TONS |
| | | | 1356 |
| | a. | How many tons of wheat straw were harvested from these winter wheat (<i>item 17</i>) acres? | |
| | | | |
| | | $\frac{\cdot}{\text{Tons per Acre}} \times \frac{\cdot}{\text{Acres}} = \frac{\cdot}{\text{Total Tons}} \text{OR} \frac{\cdot}{\text{Bales}} \times \frac{\cdot}{\text{Lbs per Bale}} \div \frac{2000}{\text{Lbs per Ton}} = \frac{\cdot}{\text{Total Tons}}$ | |
| | | PERCENT OR | TONS |
| | h | Of the total wheat straw harvested from this winter wheat field | 1358 |
| | b. | (item 17a). what was the landlord's share of the wheat straw? | 1000 |
| | | Them 17a). What was the landiold's shale of the wheat shaw? | |
| | | | TOTAL DOLLARS |
| | C. | What was the total cost of baler twine/wire used to bale the wheat straw | 1359 |
| | | from this winter wheat field? (Include landlord's share.) | |
| | | | |
| | | | DOLLARS & CENTS |
| | d. | Was any wheat straw sold? | PER TON |
| | | If yes, what was the price received per ton for all wheat straw (item 17a) | 1360 |
| | | sold from this winter wheat field? | • |
| | | | |
| 18 | Did | any livestock graze this wheat field during the 2009 crop year? | CODE |
| | | | 1400 |
| | Ш | YES - [Enter code 1 and continue] | |
| | | | |
| 10 | \A/b | at type of livestock grazed this wheat field 1 Cattle | |
| 19. | | | CODE |
| | | ring the 2009 crop year? (Include livestock 2 Sheep 2 Sheep | 1361 |
| | - | field instead of harvesting wheat.) | |
| | | | HEAD |
| | | | 1362 |
| | a. | About how many head of livestock (<i>item 19</i>) grazed this wheat field? | 1302 |
| | 01. | 9. a o | |
| | | | DAYS |
| | h | How many days did this livestock graze on this wheat field? | 1363 |
| | b. | How many days did this livestock graze on this wheat field? | |
| | | | - |
| | | | CODE |
| | C. | | CODE 1344 |
| | ٨ | Was this wheat field "grazed-out" instead of harvested for grain? YES = 1 | |
| | d. | | |
| | | Was payment received from others for livestock grazing on this field? | |
| | | | 1344 |
| | | Was payment received from others for livestock grazing on this field? | 1344 |
| | | Was payment received from others for livestock grazing on this field? | 1344 1364 TOTAL DOLLARS |
| | | Was payment received from others for livestock grazing on this field? | 1344 |

| | CROP CODE LIST for item 20 – PREVIOUSLY PLANTED CROPS | | | | | | | |
|-----|---|-----|---------------------------|----|--------------------|-----|---------------------|--|
| 190 | Barley | 3 | Dry Beans | 21 | Rice | 193 | Tobacco, burley | |
| 85 | Canola | 17 | Dry Peas | 22 | Rye | 196 | Tobacco, flue cured | |
| 310 | Clover | 311 | Grasses other than clover | 98 | Safflower | 42 | Vegetables | |
| 6 | Corn for grain | 1 | Hay, alfalfa | 25 | Sorghum for grain | 163 | Wheat, durum | |
| 5 | Corn for silage | 11 | Hay, all other | 24 | Sorghum for silage | 164 | Wheat, other spring | |
| 282 | Cotton, Pima | 94 | Mustard Seed | 26 | Soybeans | 165 | Wheat, winter | |
| 281 | Cotton, Upland | 15 | Oats | 28 | Sugarbeets | | | |
| 302 | CRP | 16 | Peanuts | 30 | Sunflowers | 318 | No crop planted | |
| | | 20 | Potatoes | 31 | Sweet Potatoes | | during this period | |

20. Next, I need to know what crops were previously PLANTED on the majority of this field, including cover crops.

| What crops were P | 2 Was this field irrigated? | 3 Was this field no-tilled? 1/ | 4 Was this home- grown seed? | | | |
|------------------------|--------------------------------------|--|--|---------|---------|---------|
| SEASON AND YEAR | CROP NAMES | CROP CODE 1 | CROP CODE 2 | YES = 1 | YES = 1 | YES = 1 |
| FALL of 2008? | Winter Wheat | | | | | |
| SPRING/SUMMER of 2008? | | 1369 | 1326 | 1370 | 1371 | 1333 |
| FALL of 2007? | | 1372 | 1327 | 1373 | 1374 | 1334 |
| SPRING/SUMMER of 2007? | | 1375 | 1328 | 1376 | 1377 | 1335 |
| FALL of 2006? | | 1378 | 1329 | 1379 | 1380 | 1336 |
| SPRING/SUMMER of 2006? | | 1381 | 1330 | 1382 | 1383 | 1337 |
| FALL of 2005? | | 1366 | 1331 | 1367 | 1368 | 1338 |
| SPRING/SUMMER of 2005? | | 1340 | 1332 | 1341 | 1342 | 1339 |

^{1/} Soil and previous crop residue left undisturbed from harvest to planting.

CODE

1401
. YES = 1

a. Did you use a cover crop in conjunction with the 2009 wheat crop on this field?............ YES = 1 $\begin{bmatrix} 1401 \\ 1401 \end{bmatrix}$ [If item 20a is YES, continue; else go to item 21]

| | | | | YEAR | | |
|--------------|---|-----------------|------|-----------------------------|--|--|
| (i) | What year was the cover crop planted? | | | 1466 | | |
| | | 1 Spring/Summer | | CODE | | |
| | | | | 1467 | | |
| (ii) | In what season was the cover crop planted? | 2 Fall | | 1101 | | |
| (:::) | Man the good for the government much and O | | | DOLLARS & CENTS PER ACRE | | |
| (111) | Was the seed for the cover crop purchased? | | 1468 | | | |
| | If yes, what was the seed cost per acre for the cover crop? | | | | | |

21. In 2009, did your land-use practices for this field include any of the following---

| 1 | 2 | 3 | 4 |
|--|-------------------------|---|--|
| LAND-USE PRACTICE | Was this practice used? | What year was this practice first used? | Was (or will there be) an incentive or cost-share received from: 1 Environmental Quality Incentives Program (EQIP)? 2 Conservation Security Program (CSP)? 3 Conservation Reserve Program (CRP)? 4 Any other Federal, State, Local or non-government source? |
| | YES = 1 | YEAR | CODE |
| a. Structures for soil erosion control? | 1421 | | |
| (i) Terraces | 1420 | 1441 | 1451 |
| (ii) Grade stabilization structures | 1422 | 1442 | 1452 |
| b. Structures for storm water runoff control/handling? | 1423 | | |
| (i) Grassed waterways | 1438 | 1443 | 1453 |
| (ii) Structures for water control basins | 1424 | 1444 | 1454 |
| c. Filter strips or other conservation buffers? | 1425 | | |
| (i) Filter strips | 1426 | 1445 | 1455 |
| (ii) Field borders | 1427 | 1446 | 1456 |
| (iii) Riparian buffers (i.e., grass buffers) | 1428 | 1447 | 1457 |
| d. Other Practices? | 1435 | | |
| (i) Contour farming and strip cropping | 1434 | 1448 | 1458 |
| (ii) Other Practices [Specify:] | 1436 | 1450 | 1460 |

OFFICE USE

1440

| | | | | CODE | | | | | |
|--------------------------------------|---|---|---------|------|--|--|--|--|--|
| | the Natural Resource Conservation this field as "Highly Erodible"? | | YES = 1 | 1404 | | | | | |
| 23. Have | 3. Have you been notified by NRCS that this field contains a wetland? YES = 1 | | | | | | | | |
| main | 09, did you receive technical assi taining, or using conservation pr | | | 1406 | | | | | |
| أسمامها | - | (nu nu 40nn) | YES = 1 | | | | | | |
| or the stewa and fil consid | e landlord have received (or expec ardship payments, or incentive pa Iter strips or riparian buffers, or drainage | nservation program contract for which you at to receive) cost sharing payments, ayments? [Be sure to consider grassed waterways area, on or adjoining this field. Also, be sure to let but were made before 2009 or payments that are | YES = 1 | 1407 | | | | | |
| | [If item 25 is YES, ask item 25a; else go to item 25b.] | | _ | | | | | | |
| a | . Have you received (or will you receive) cost sharing or incentive | Environmental Quality Incentives Program (EQIP) Conservation Security Program (CSP) Conservation Reserve Program (CRP) | | 1418 | | | | | |
| b | . Was this field included in a conservation | Environmental Quality Incentives Program (EQIP) Conservation Security Program (CSP) Conservation Reserve Program (CRP) | | 1419 | | | | | |

26. During 2009, did any written plan of the following types cover this field---

(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.)

| | 1 | 2 | 3 | 4 |
|----|--|---|--|--|
| | WRITTEN PLAN TYPE | Was this type of written plan used? | What year was this plan implemented? | For any practice that is part of this plan, was (or will there be) an incentive or cost-share payment received from: 1 Environmental Quality Incentives Program (EQIP)? 2 Conservation Security Program (CSP)? 3 Conservation Reserve Program (CRP)? 4 Any other Federal, State, Local or non-government source? |
| | | YES = 1 | YEAR | CODE |
| a. | Conservation plan specifying practices to reduce soil erosion? | 1408 | 1409 | 1461 |
| b. | Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? | 1410 | 1411 | 1462 |
| C. | Nutrient management plan specifying practices for land application of manure only? | 1412 | 1413 | 1463 |
| d. | Pest management plan to implement Integrated Pest Management (IPM) practices to control weeds, insects, and/or plant diseases? | 1414 | 1415 | 1464 |
| e. | Irrigation water management plan specifying practices for applying or conserving irrigation water? | 1416 | 1417 | 1465 |

| 27. | . [<i>If i</i> | item 26a, b, c, d, or e is YES, ask] | | | | | |
|-----|-----------------|---|--|--------------|---------|-------|------------------|
| | | ve you ever paid any technical service | | | | | CODE |
| | | develop or write any of these plans for | | | | | 1352 |
| | we | re reimbursed by the Natural Resource | Conservation Service? | | . YES | S = 1 | |
| | a. | [If YES, ask] | | DOLLARS & CI | | ΛD | TOTAL DOLLARS |
| | | What was the reimbursement amount for | developing these | PER ACRE | = | OR | TOTAL DOLLARS |
| | | plans for this field? (Include landlord's/contra | actor's share. | 1353 | | | 1384 |
| | | (Evolude cost of construction or materials) | | <u>-</u> | | | |
| 28 | Wa | as the winter wheat in this field | | | | | CODE |
| 20. | | vered by Federal Crop Insurance in 200 | 9? | | | | CODE |
| | | YES – [Enter code 1 and continue] | NO – [Go to item 29] | | | | 1385 |
| | | | | | | | CODE |
| | | | 1 Basic catastrophic insurance (Fed | | | | 1386 |
| | | NATION TO THE PARTY OF | 2 Buy-up above basic federal CAT I | evel | | | 1300 |
| | a. | Which coverage did you obtain? | 3 Revenue insurance4 Organic plan insurance | ļ | | | |
| | | | 5 Other Federal Crop insurance | | | | |
| | | | · | | | | PERCENT |
| | | (i) [If item a = 3, ask] | | | | | 1389 |
| | | What was the level of revenue cover | age you obtained for this field? | | | | 1309 |
| | | | | | | | YEAR |
| | b. | In what year did you (the operator listed on | the label first aproll this field | | | | 1387 |
| | IJ. | in the Federal crop insurance program?. | | | | | 1001 |
| | | | | | | E | BUSHELS PER ACRE |
| | | | | | | | 1388 |
| | C. | What is the 2009 Approved APH (actual p | production history) yield for this field? | | | | |
| | | | | DOLLARS & CE | ENTS | | |
| | | | r | PER ACRE | (| OR | TOTAL DOLLARS |
| | d. | What was the premium paid for Federal | or op insurance | 1390 | | | 1391 |
| | | for this field in 2009? (Exclude anv sian-up t | ee.) | <u> </u> | | | |
| | | | | | | | CODE |
| | e. | Did you (or will you) collect an indemnity | nayment on this field? | | VEC. | _ 1 | 1392 |
| | С. | Did you (or will you) collect an indentifility | payment on this held? | | YES = | - 1 | |
| 29. | Wa | as the winter wheat in this field covered | bv | | | | CODE |
| | | vate crop insurance in 2009 (hail, wind, | | | | | 1393 |
| | | YES – [Enter code 1 and continue] | ☐ NO – [Go to item 30] | | | | 1393 |
| | | | | DOLLARS & CE | NTS | | |
| | | | | PER ACRE | | OR | TOTAL DOLLARS |
| | a. | What was the premium paid for private c | rop insurance | 1395 | | | 1396 |
| | | for this field in 2009? (Exclude anv sian-up to | ee.) | <u> </u> | | | |
| | | | | | | | YEAR |
| | b. | In what year did you (the operator listed | | | | | 1397 |
| | | private crop insurance for this field? | | | | | |
| | | | | | | | CODE |
| | C. | Did you (or will you) collect an indemnity | | | | | 1394 |
| | | for private crop insurance? | | | YES = | = 1 | |
| | | | | | | | DOLLARS & CENTS |
| 00 | | | | | | | PER BUSHEL |
| 30. | | nat was the average price received for t ld by this operation for the 2009 crop ve | | | | | 1398 |
| _ | aul | | | · | | | |
| | | NUIKIENI OF FERI | ILIZER APPLICATIONS |)SELECTE | ى:D FIE | :LD | |

CODE EDIT TABLE

| 1. | | | rtilizers applied to this field for | | 0202 | 0201 | | |
|-------------|--|---------|--|------------|------------------------------|--------|--|--|
| 2. | [If COMMERCIAL nutrient or fe | ertiliz | er applied, continue; else go to i | tem 7.] | | NUMBER | | |
| 3. | | | or fertilizer applications were nons made by airplanes and custom applic | | | 0203 | | |
| 4. | Now I need to record information for each application. | | | | | | | |
| ! | CHEC | KI | ∟IST | | | | | |
| ¦✓ | INCLUDE | | | | | | | |
| | Custom applied nutrients or fertilizers | | Micronutrients | | T-TYPE | TABLE | | |
| | Nutrients or fertilizers | | Unprocessed manure | | | | | |
| i I I | applied in the fall of 2008 and those applied earlier if this field was fallow in 2008 | | Nutrients or fertilizers applied to previous crops in this field | | 2 | 001 | | |
| | Commercially prepared manure or compost | | Lime and gypsum/landplaster | Line 99 | Office Use Lines in Table | 0213 | | |

APPLICATION CODES for COLUMN 6

- APPLICATION C

 1 Broadcast, ground without incorporation
 2 Broadcast, ground with incorporation
 3 Broadcast, by aircraft
 4 In seed furrow

- 5 In irrigation water
- 6 Chisel/Injected or knifed in
- Banded in or over row 8 Foliar or directed spray
- 4 2 3 5 6 7 **MATERIALS USED** What When was [Enter How many How was this applied? quantity material acres were this code.] was treated [Enter percentage analysis or actual applied 1 In the fall applied? pounds of plant nutrients applied per acre.] before seeding 1 Pounds in this per acre? application? [Show Common Nutrients or Fertilizers 12 Gallons 2 In the spring [Refer to Ν [Leave this in Respondent Booklet.] before seeding code Ε column blank 3 At seeding 19 Pounds list above.] if actual of actual nutrients 4 After seeding nutrients were Ν P2O5 K₂O S **ACRES** reported.] Nitrogen Phosphate Potash Sulfur 0205 0206 0207 0214 0208 0209 0210 0211 0212 01 0205 0206 0207 0214 0208 0209 0210 0211 0212 02 0205 0206 0207 0214 0208 0209 0210 0211 0212 03 0205 0206 0207 0214 0208 0209 0210 0211 0212 04 0206 0207 0214 0210 0211 0212 0205 0208 0209 05 0205 0206 0207 0214 0208 0209 0210 0211 0212 06 0205 0206 0207 0214 0208 0209 0210 0211 0212 07 0206 0207 0214 0208 0209 0210 0211 0212 0205 80

| T – TYPE | TABLE | LINE |
|----------|-------|------|
| 0 | 000 | 00 |

| 5. | Were any nutrients or fertilizers applied | by custom applicators? | | | |
|-----|--|---|-----------------------------|-------|---------------------|
| | YES - [Continue] | NO - [Go to item 6] | | | |
| | a. Are you able to report the cost of nutrie and custom application separately? | nt or fertilizer materials | | | OFFICE USE |
| | YES - [Continue] | NO - [Go to item 6] | | | 0215 |
| | b. Excluding the cost of the nutrient or fert was spent for custom application of nut (Include landlord and contractor costs. Include Exclude custom application of lime, gypsum, pur [If material and application costs can't be separate | rients or fertilizers on this field? costs for sulfur and micronutrients. chased manure & purchased compost.) | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| | total in item 6.1 | | • | | |
| 6. | What was the TOTAL COST of all nutrier applied to this field? (Include operator, landlo as the costs for sulfur and micronutrients. [If custom a can be separated from application costs, include the | rd, and contractor costs as well pplied and the cost of materials | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| | include both the material and application costs.] Inclu if it was fallow in 2008. Exclude lime, gypsum, purcha | de materials applied to this field | 0221 | | 0222 |
| | in twas ranow in 2000. Exclude inne, gypsam, parene | isca manare and parenasca compost.j | • | | CODE |
| | | | | | 0218 |
| 7. | Was gypsum applied to this field for the | 2009 winter wheat crop? | YE | S = 1 | |
| | | | | В | SUSHELS PER ACRE |
| 8. | What was your yield goal at planting for | this field? | | | 0217 |
| 9. | Was a soil or plant tissue test performed in 2008 or 2009 for the 2009 crop? YES [Continue] NO [Go to it | | | | CODE |
| 10. | Was a soil test for phosphorus performe | d on this winter wheat field | | | 0225 |
| | ==== =: === :=: ==== =: =: : : : | | YES | L | |
| | a. [If phosphorus test done. ask] | | | Г | POUNDS PER ACRE |
| | How many pounds of phosphorus (per | acre) were recommended (by the ph | osphorus test)? | | |
| 11 | Was a soil test for nitrogen performed o | a this winter wheat field | | Γ | CODE 0227 |
| 11. | | | YES | | 0221 |
| | a. [If nitrogen test done. ask] | | | _ | POUNDS PER ACRE |
| | How many pounds of nitrogen (per acre | e) were recommended (by the nitroge | en test)? | | 0228 |
| | | | | | CODE |
| 12. | Was a plant tissue test or leaf analysis foon this field for the 2009 crop? | or nutrient deficiency performed | YE : | S = 1 | 0229 |
| | | | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| 13. | How much was spent for these soil and | | 0230 | | 0231 |
| | on this field? (Include operator, landlord, and co | ntractor costs.) | • | | |
| | a. If tests were done at no cost, explain | Soil/plant tissue test provided free of c by dealer, crop consultant, or extension | charge on service | | CODE |
| | | Soil/plant tissue test costs were include fertilizer costs reported in item 6 | | | 0232 |

14. [ENUMERATOR ACTION: Refer to the Fertilizer Table, column 2. If nitrogen (N) was applied, complete items 15, 16 and 17. If NO nitrogen applied, go to item 18.]

| 15. | Wa | s the amount of nitrogen you decided | to apply to this field based on | | CODE |
|-----|-------|---|--|------|------------|
| | _ | Decults of a soil or plant tissue test? | YES = 1 | 0233 | |
| | a. | Results of a soil of plant tissue test? | YES = 1 | 0234 | |
| | b. | Crop consultant recommendation? | YES = 1 | 0234 | |
| | | | | 0235 | |
| | C. | Fertilizer dealer recommendation? | YES = 1 | | |
| | d. | Extension Service recommendation? | YES = 1 | 0236 | |
| | | | | 0237 | |
| | e. | Cost of nitrogen and/or expected comm | odity price? YES = 1 | | |
| | f. | Contractor recommendation? | YES = 1 | 0238 | |
| | g. | Routine practice (operator's own detern | | 0239 | |
| | g. | | YES = 1 | | |
| | | | | | CODE |
| 16. | Did | l you purchase any commercial nitrog der contract or otherwise pre-purchas | en fertilizer applied to this field to the fertilizer at a pre-determined | 0223 | OODL |
| | pri | ce prior to planting? | YES = 1 | | |
| | a. | [If YES, ask] | | | CODE |
| | | What month prior to planting for the 200 | • • | 0224 | |
| | | fartilizar used on this field? [Enter code | "1" for Tanijani "2" for Ephrijani pto I | | |
| 17. | did | ich of the following products you use to slow the breakdown | Nitrification inhibitors (such as N-Serve) Urease inhibitors (such as Agrotain) Chemical-coated fertilizers (such as sulfur-coated urea and polymer-coated urea) Other inhibitors | 0241 | CODE |
| | 01 1 | nitrogen on this field? | - Cuter miniotors | | |
| | | | | | CODE |
| 18. | ls l | ime ever applied to this field? | YES = 1 | 0242 | |
| | [If r | no lime applied, go to item 19; else contir | nue.] | • | YEARS |
| | • | · · · | • | 0243 | |
| | a. | On average, how many years are there | between applications of lime to this field? | | |
| | | | | TONS | PER ACRE |
| | b. | How many tons of lime were applied no | er acre the last time it was applied to this field? | 0244 | |
| | υ. | Thow many tons of mile were applied pe | er acre the last time it was applied to this lield? | | · <u> </u> |
| | | | | | CODE |
| | c. | Was lime applied to this field in 2008 or | 2009 for the 2009 crop? YES = 1 | 0240 | |
| | | | • | | |
| | d. | [If field is rented (Section B, item 2 = 2, | 3, 4, or 5), ask] | PI | ERCENT |
| | | Considering the last time it was applied | , what percent of the total cost of lime | 0245 | |
| | | and its application was paid by the land | lord(s)? | | |

| | | al (excluding compost) appli sially prepared manure.) | | | [Co.t | o itom 21] | | | 024 | CODE 6 |
|----|-----|--|-----------|---------------------------------------|---------|--|----------|----------------|-------|-------------|
| | TES | 5 - [Enter code 1 and continu | ej | NO - | [G0 ι | 0 iterri 21] | | | | ACRES |
| | | | | | | | | | 024 | |
| a. | Ho | w many acres in this field wa | s manu | re applied to?. | | | | | . 024 | · |
| | | | | 1 TONS | | CODE | | UNITS PER ACRE | OR | TOTAL UNITS |
| | b. | What was the amount of ma applied to this field? | | 2 GALLONS 3 BUSHELS | | 0248 | AND | 0249 | | 0250 |
| | | | | | | | | | | MILES |
| | c. | What is the distance between | en the m | nanure storage | e/proc | duction location | n and th | is field? | | 0251 |
| | | | | | | 1 TONS |] | CODE | | TOTAL UNITS |
| | d. | What was the capacity of the (or other vehicle) used to have | | | l? | 2 GALLONS 3 BUSHELS | <u> </u> | 0252 | AND | 0253 |
| | e. | Of the total manure applied | to this f | ield for the 200 | 09 | - | _ | | | |
| | | crop, what was the percent | | | | | | | | PERCENT |
| | | (i) in the fall before plantin | g? | | | | | | + | 0254 |
| | | (ii) in the spring before plan | nting? | | | | | | + | 0255 |
| | | (iii) after planting? | | | | | | | + | 0256 |
| | | | | | | | | | | 100% |
| | | | | goon liquid? | | | | | | CODE |
| | f. | Was the manure | | ırry liquid? mi-drv or drv? | | | | | | 0257 |
| | | | 1 Dra | - dt | | | 2.2 | | | |
| | | | | | | thout incorporati th incorporation? | | | | CODE |
| | g. | Was the manure | | cted/knifed in? | ation (| evetame? | | | | 0258 |
| | | | 1 Bee | ef cattle? | | | \neg | | | CODE |
| | h. | Was the major source | 2 Dai | ry cattle? | | | | | | 0259 |
| | | of the manure from | | eep? | | | | | | |
| | | | | ıltry? ıine? | | | | | | |
| | | | 7 Bios | solids (<i>municipa</i> od waste? | ıl slud | ge)? | | | | |
| | | | | er? [Specify: | | | 1[| | | |

| | i. | Was the manure | 1 Produced on this operation?2 Purchased?3 Obtained at no cost off this operation? | | | 026 | CODE | |
|---|------|----------------------------------|--|----------|---------------------------|----------------|---------|--------|
| | | | 4 Obtained with compensation? (Operator | | | | 00 | |
| - | | (i) [<i>If item 19i = 2, as</i> | | | DOLLARS & CEN PER ACRE | ITS OR | TOTAL D | OLLAR |
| | | | Il cost of the purchased manure applied Ide any payment made for transportation costs.) | | 0284 • | | 0285 | |
| | | | | | | С | ODE | |
| | (ii) |) Did you hire someone to o | custom apply the manure? | | YES = 1 | 0286 | | |
| | | (1) [If YES, a | - | -1:l | DOLLARS & PER AC | | OR TOT | AL DOL |
| | | to this fiel | the total cost paid to have manure custom app d? [Do not report custom application cost if it was include ed manure cost.] | ed with | 0287 | | 0288 | |
| | | | | | - | | CODE | |
| | j. | | this field, was any tested for nutrient content pr | | YES | = 1 | 1 | |
| | k. | Was the application rate of | of commercial nitrogen fertilizer on this field redu | uced | YES | = 1 | 2 | |
| | | (i) [If YES, ask] | | | | | PERCENT | |
| _ | | | ou reduce the commercial nitrogen fertilizer s field? | | | 026 | 3 | |
| | | | | | | | CODE | |
| | I. | | wheat harvest date for this field due to | | YES | = 1 028 | 0 | |
| | | | RATES to this field influenced by Federal, | | YES = 1 | 0264 | ODE |] |
| | | titem 20 is YES, ask] | | | | | | _ |
| | W | hat basis was used to deter | mine these manure application rate restrictions- | | | c | ODE | _ |
| | (i) | Nitrogen requirement of th | ne crop? | | YES = 1 | 0265 | | |
| | (ii) |) Phosphorus requirement (| of the crop? | | YES = 1 | 0266 | | |

| . W | as compost applied to this field for t | the 2009 winter wheat crop? | CODE |
|-----|---|---|------------------------|
| | YES - [Enter code 1 and continue] | NO - [Go to Section | 0267 |
| | | | ACRES |
| | | | 0268 |
| a. | To how many acres in this field was | the compost applied? | |
| | | | |
| b. | What was the amount of compost | CODE UNITS PER ACRE OR 1 Tons 0269 0270 | TOTAL UNITS |
| | applied to this field? | | • |
| | | | [Enter up to 3 |
| | | 1 Poof oottle? | source codes] FIRST |
| | | 1 Beef cattle? 2 Dairy cattle? | 0281 |
| | | 3 Hogs? 4 Sheep? | |
| C. | Were the major sources | 5 Poultry? | SECOND |
| | of the compost from | 6 Equine? 7 Biosolids (<i>municipal sludge</i>)? | 0282 |
| | | 8 Food waste? | THIRD |
| | | 9 Crop? [Specify:] 10 Other? [Specify:] | 0283 |
| | d. Was the compost | 1 Produced on this operation? 2 Purchased? 3 Obtained at no cost off this operation? 4 Obtained with compensation? (Operator received payment for according the compact) | CODE 0272 |
| | | DOLLARS & CE PER ACRE of the purchased compost applied payment made for transportation costs.) | |
| | | | CODE |
| | (ii) Did you hire someone to custom | apply the compost? YES = 1 | 0275 |
| | (1) [If YES, ask] | | |
| | ` , - | tal cost paid to have compost PER A | |
| | custom applied t | to this field? [Do not report custom was included with the compost cost.] | 0277 |
| | (iii) [<i>If item 21d = 1</i> , ask] | | MILES |
| | • | ween the compost storage/production location and this field?. | 0299 |

Now I have some questions about all the biocontrols or pesticides used on this field for the 2009 winter wheat

| | | | | | | | | | CODE | EDIT TABLE |
|---------------------------------|-------------------|--|----------------------------|--|---|--|-----------|--------------------------------|---|---|
| | | oicides, insecti vinter wheat fie | | | | er chemicals | | YES = 1 | 0302 | 0301 |
| [Probe for ap this field was | oplica s fallo | ations made in th ow). If no biocon | e fall c trols o | of 2008 (a r pesticid | and those mad les applied, go | de earlier if to Section E . |] | | | |
| | | | 1 | | | | | | T - TYPE | TABLE |
| | | ngicides, herbicides and other pesticides | | Exclud | | ertilizers reported eed treatments. | l | | 3 | 001 |
| Include biologica | l and | botanical pesticide | s. | | | | i ! | LINE 99 | OFFICE USE LINE IN TABLE | 0319 |
| | | 2 | | 3 | 4 | 5 | | 6 | OR 7 | 8 |
| CHEMICAL PRODUCT NAME | L N E | What products were applied to this field? [Show product codes from Respondent Booklet.] | pro bou liquio fo | s this oduct ight in d or dry orm? | Was this part of a tank mix? [If tank mix, enter line number of first product in mix.] | When was this applied? 1 BEFORE planting 3 AT planting 4 AFTER planting | was pe | much applied racre per cation? | What was the total amount applied per application in this field? | [Enter unit code.] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams |
| NAME | 01 | 0305 | | | 0306 | 0307 | 0308 | | 0309 | 0310 |
| | 02 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 03 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 04 | 0305 | | | 0306 | 0307 | 0308 | · | 0309 | 0310 |
| | 05 | 0305 | | | 0306 | 0307 | 0308 | · | 0309 | 0310 |
| | 06 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 07 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 08 | 0305 | | | 0306 | 0307 | 0308 | · | 0309 | 0310 |
| | 09 | 0305 | | | 0306 | 0307 | 0308 | | 0309 | 0310 |
| | 10 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 11 | 0305 | | | 0306 | 0307 | 0308 | · | 0309 | 0310 |
| | 12 | 0305 | | | 0306 | 0307 | 0308 | · | 0309 | 0310 |
| | 13 | 0305 | | | 0306 | 0307 | 0308 | • | 0309 | 0310 |
| | 14 | 0305 | | | 0306 | 0307 | 0308 | | 0309 | 0310 |

| LINE | Pesticide Type (Herbicide, Insecticide Fungicide, etc.) | EPA No. or Trade name and Formulation | Form Purchased (Liquid or Dry) | Where Purchased [Ask ONLY if EPA No. cannot be reported.] |
|------|---|--|-----------------------------------|---|
| | | | | |
| | | | | |

APPLICATIONS CODES for column 9

- 1 Broadcast, ground without incorporation
- 6 Chisel/Injected or knifed in
- 2 Broadcast, ground with incorporation
- 7 Banded in or over row
- 3 Broadcast, by aircraft
- 8 Foliar or directed spray

4 In seed furrow

9 Spot treatments

5 In irrigation water

| [ENUMERATOR NOTE: |
|--|
| Use these columns only if |
| TOTAL COST |
| (item 4 on next page) cannot be provided.] |

| | 9 | 10 | 11 | 12 |
|------------------|---|--|--------------------------------------|---|
| L I N E | How was this product applied? [Enter code from above.] | How many acres in this field were treated with this product? | How many times was it applied? | Were these applications made by 1 Operator, Partner or family member? 2 Custom applicator? 3 Employee/Other? |
| 01 | 0311 | 0312 | 0313 | 0316 |
| 02 | 0311 | 0312 | 0313 | 0316 |
| 03 | 0311 | 0312 | 0313 | 0316 |
| 04 | 0311 | 0312 | 0313 | 0316 |
| 05 | 0311 | 0312 | 0313 | 0316 |
| 06 | 0311 | 0312 | 0313 | 0316 |
| 07 | 0311 | 0312 | 0313 | 0316 |
| 08 | 0311 | 0312 | 0313 | 0316 |
| 09 | 0311 | 0312 | 0313 | 0316 |
| 10 | 0311 | 0312 | 0313 | 0316 |
| 11 | 0311 | 0312 | 0313 | 0316 |
| 12 | 0311 | 0312 | 0313 | 0316 |
| 13 | 0311 | 0312 | 0313 | 0316 |
| 14 | 0311 | 0312 | 0313 | 0316 |

| OPTIONAL ITEM 4 | | | | | |
|--|---|--|--|--|--|
| What was the cost per unit of the product? | | | | | |
| | UNIT CODE | | | | |
| DOLLARS & CENTS PER UNIT | 1 Pounds 15 Liquid Ounces 12 Gallons 28 Dry Ounces 13 Quarts 30 Grams 14 Pints | | | | |
| 0317 | 0318 | | | | |
| | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |
| 0317 | 0318 | | | | |

| 3. | We | ere any chemicals, biocontrols | , or pesticides applied by custom applicate | ors? | | |
|----|-----|--|---|-----------------------------|-------|---------------------|
| | | YES – [Continue] | □ NO − [Go to item 4] □ | | | OFFICE USE |
| | _ | A | | | | 0324 |
| | a. | Are you able to report the cost | of chemical product and custom application se | eparately? | | |
| | | YES – [Continue] | ☐ NO – [Go to item 4] | | | |
| | h | Excluding the cost of the chemi | ical product, how much was spent | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| | υ. | for custom application of chemi | cals, biocontrols, and pesticides | 0331 | | 0332 |
| 4. | to | nat was the TOTAL COST of all this field? (Include operator, landlor bicides, insecticides, fungicides, surfacta | rd, and contractor cost, defoliants, | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| | and | l materials applied before planting and du | | 0334 | | 0335 |
| | | | | | | |
| | N | OTE 1: If respondent cannot report Table. | TOTAL COST, itemize cost for each product in opt | tional columns in Bio | cont | rol or Pesticide |
| | N | | osts for materials can be separated from application aterial and application costs in item 4. | n costs, include the c | ost i | for materials only. |

NOTES

PEST MANAGEMENT PRACTICES---SELECTED FIELD

Ε

| | Now I have some questions about your pest management decisions and practices Used on this field for the 2009 winter wheat crop. By pests, we mean | | | | | | | | |
|----|--|--|-----------|------|----|--|--|--|--|
| | used on this field for the 2009 winter wheat crop. By pests, we mean | | | | | | | | |
| WE | EDS, INSECTS, and DISEASES. | | 0 | 000 | 00 | | | | |
| _ | | | | | | | | | |
| 1. | [ENUMERATOR ACTION: Were PESTICIDE app | • | | | | | | | |
| | ☐ YES – [Continue] | NO – [Go to item 10] | | | | | | | |
| _ | | | Г | COI | E | | | | |
| 2. | Was weather data used to assist in determinin to make pesticide applications? | | VEC - 1 | 0800 | | | | | |
| | to make pesticide applications: | | . 165-1 | | | | | | |
| 3. | Were any biological pesticides such as Bt (Bac | | r | | | | | | |
| | regulators, neem or other natural/biological ba | | | 0801 | | | | | |
| | to manage pests in this field? | | . YES = 1 | | | | | | |
| 4. | Were pesticides with different mechanisms of | action rotated or tank mixed | [| 0802 | | | | | |
| | for the primary purpose of keeping pests from | | | 0002 | | | | | |
| | | | | | | | | | |
| 5. | [ENUMERATOR ACTION: Were HERBICIDE (pe | | | | | | | | |
| | applications reported | in Section D, item 1, column 2?] | | | | | | | |
| | ☐ YES – [Continue] | NO – [Go to item 8] | | | | | | | |
| | | | - | | | | | | |
| 6. | Were herbicides applied to this winter wheat fi | eld | | 0803 | | | | | |
| | BEFORE weeds emerged? | | . YES = 1 | | | | | | |
| | a. [If item 6 is YES, ask] | 1 routine treatments of what weeds | | | | | | | |
| | Were the herbicides applied BEFORE | are usually present? | | | | | | | |
| | weeds emerged on this winter wheat | OR | | 0804 | | | | | |
| | field based primarily on | 2 weed scouting from the previous year? | | | | | | | |
| | | | _ | | | | | | |
| 7. | Were herbicides applied to this winter wheat fi | eld | | 0805 | | | | | |
| | AFTER weeds emerged? | | YES = 1 | | | | | | |
| | a. [If item 7 is YES, ask] | 1 routine treatments of what weeds | | | | | | | |
| | Were the herbicides applied AFTER | are usually present? | | | | | | | |
| | weeds emerged on this winter wheat | OR | | 0806 | | | | | |
| | field based primarily on | 2 weed scouting from the current year? | | | | | | | |
| | | | | | | | | | |
| 8. | [ENUMERATOR ACTION: Were INSECTICIDE (| | | | | | | | |
| | | in Section D, item 1, column 2?] | | | | | | | |
| | YES – [Continue] | NO – [Go to item 10] | | | | | | | |
| | ı | | | | | | | | |
| _ | | 1 routine treatments of what insects are usually present? | | | | | | | |
| 9. | Were the insecticides applied | OR | Γ | 2027 | | | | | |
| | to this winter wheat field | 2 scouting for insect infestation? | | 0807 | | | | | |

| 10. In 2009, how was this field primarily scouted for insects, weeds, diseases, and/or beneficial organisms? 11. Was an established scouting process (systemor were insect traps used in this field? 12. Was scouting for pests done in this field due a. a pest advisory warning? b. a pest development model? | activities [E 2 By conducting routine tasks 3 This field was [Enter code] matic sampling e to | 3 and go to item 18.] ng, recording counts, | etc.) used | ES = 1 | 0808 0809 0810 0811 |
|--|---|--|-----------------------------|---|------------------------------|
| 1 | | 2 | | 3 | |
| | | [If YES, ask] What was the infestation level for [column 1]? 1 Worse than normal Normal 2 Normal Less than normal | Who di of th for [| id the he sco feolunt partner see by or change of the contract of the score of the | consultant |
| 13. Was this winter wheat field scouted for | YES = 1 | CODE | | COD | E |
| a. weeds? | 0812 | 0813 | 0814 | | |
| b. insects or mites? | 0815 | 0816 | 0817 | | |
| c. diseases? | 0818 | 0819 | 0820 | | |
| [If scouted by crop consultant or commercial scout, else go to item 15.] 14. How much was charged for the scouting ser | | [| OOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
| 14. How much was charged for the scouting ser | VICES IOI tills | S lielu : | · | | OFFICE USE |
| a. [If scouting performed at no cost, explain: _ | | |] | | 0333 |
| 15. Ware unitted or electronic records kent for the | hia fiald to tr | and the entirity | | | CODE |
| 15. Were written or electronic records kept for t or numbers of weeds, insects or diseases?. | | | YE | S = 1 | 0823 |
| 16. Were scouting data compared to published to determine when to take measures to man | | | | ES = 1 | 0824 |
| 17. Did you use field mapping of previous weed weed management decisions? | | | | S = 1 | 0825 |

| T8. | | i you do any of the following other types of pest management for the spec naging or reducing the spread of pests in this field? [Enter code "1" for all | | e or | | |
|-----|----|---|--------------|-------|------------|---------------|
| | | inaging of roducing the options of poole in the florid [E.Mor code 1 Florida | indicappiyi] | | ı | CODE |
| | a. | Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for this field? | | YES = | 1 | 0841 |
| | b. | Plow down crop residue (using conventional tillage)? | | YES = | 1 | 0842 |
| | C. | Remove/burn down crop residue? | | YES = | 1 | 0843 |
| | d. | Rotate crops in this field during the past 3 years? | | YES = | 1 | 0844 |
| | e. | Maintain ground covers, mulches, or other physical barriers? | | YES = | :1 | 0845 |
| | f. | Choose crop variety because of specific resistance to a certain pest? | | YES = | :1 | 0846 |
| | g. | Use no-till or minimum till? | | YES = | :1 | 0847 |
| | h. | Plan planting locations to avoid cross infestation of pests? | | YES = | :1 | 0848 |
| | i. | Adjust planting or harvesting dates? | | YES = | 1 | 0849 |
| | j. | Chop, spray, mow, plow, or burn field edges, lanes, ditches, roadways, or fence lines? | | YES = | : 1 | 0850 |
| | k. | Clean equipment and field implements after completing field work to reduce the spread of pests? | | YES = | : 1 | 0851 |
| | l. | Adjust row spacing, plant density or row directions? | | YES = | : 1 | 0852 |
| | m. | Have the seed used in this field treated for insect or disease control after you purchased the seed? | | YES = | · 1 | 0854 |
| | n. | Maintain a beneficial insect or vertebrate habitat? | | YES = | : 1 | 0855 |
| | 0. | Maintain buffer strips or border rows to isolate organic winter wheat from non-organic crops or land, or did you take a buffer harvest? | | YES = | · 1 | 0856 |
| | p. | Use a flamer to kill weeds? | | YES = | :1 | 0857 |
| | | | | | | CODE |
| 19. | | re any beneficial organisms (insects, nematodes, fungi) applied released in this field to manage pests? | | YES = | 1 | 0853 |
| | | | | | | |
| 20. | | re floral lures, attractants, repellants, pheromone traps or other logical pest controls used on this field? | | YES = | 1 | 0858 |
| | a. | [If item 19 or item 20 is YES, ask] | | | | |
| | | What were the TOTAL materials and application costs | OLLARS & CE | NTS | | |
| | | for all biological pest controls for this field? (Include | PER ACRE | | OR . | TOTAL DOLLARS |
| | | operator, landlord, and contractor shares. <i>Include</i> cost for beneficial organisms (insects, nematodes, and fungi). <i>Exclude</i> biological pesticides.) | 859 • | | | 0860 |

| | left fallow in the spring/summer of 2008 to hel | | YES = 1 | 0864 |
|--|--|----------------------|---------|---------------------------|
| drainage, or tı | anagement practices such as irrigation sched reatment of retention water used on this field t ucing fungi and bacteria? | to manage for pests | YES = 1 | 0861 |
| | on of beneficial organisms a factor in your pest | | YES = 1 | 0862 |
| PEST MANAGEM | ENT INFORMATION | | | |
| 25. [Show Pest Ma | anagement Information Sources Code List from Re | espondent Booklet.1 | | |
| - | e sources of information on pest management | · - | | |
| were used for | the 2009 winter wheat crop? | | | |
| | be meet influential in data maining the meet meet a | | | |
| | he most influential in determining the pest manage | ement practices usea | | |
| | ne most influential in determining the pest manage on, enter codes for up to three sources.] | ement practices used | | |
| on this operation | | · | | [Enter up t |
| on this operation | on, enter codes for up to three sources.] | · | | [Enter up t source cod |
| PEST MANA 1 County, (Public | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations | · | | source cod |
| on this operation PEST MANA 1 County, (Public 2 Farm Su | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, cations or Demonstrations pply or Chemical Dealer | · | | source cod FIRST |
| 1 County, 0 Public 2 Farm Su 3 Commer | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer cial Scouting Service | · | | source cod |
| 1 County, 0 Public 2 Farm Su 3 Commer 4 Independ | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, cations or Demonstrations pply or Chemical Dealer | · | | FIRST 0826 |
| 1 County, 0 Public 2 Farm Su 3 Commer 4 Independent or Pes 5 Other Gr | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer cial Scouting Service dent Crop Consultant st Control Advisor/Custom Applicator rowers or Producers | · | | FIRST 0826 SECONI |
| 1 County, 6 Public 2 Farm Su 3 Commer 4 Independence 5 Other Gr 6 Producer | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer roial Scouting Service dent Crop Consultant est Control Advisor/Custom Applicator rowers or Producers r Associations, Newsletters or Trade Magazines | · | | FIRST 0826 |
| 1 County, (Public Farm Su 3 Commer 4 Independ or Pes 5 Other Gr 6 Producer 7 Electroni | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, cations or Demonstrations pply or Chemical Dealer ricial Scouting Service dent Crop Consultant st Control Advisor/Custom Applicator rowers or Producers r Associations, Newsletters or Trade Magazines ic Information Services | · | | FIRST 0826 SECONI |
| 1 County, (Public 2 Farm Su 3 Commer 4 Independ or Pes 5 Other Gr 6 Producer 7 Electroni (DTN, II | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, cations or Demonstrations pply or Chemical Dealer cial Scouting Service dent Crop Consultant st Control Advisor/Custom Applicator rowers or Producers or Associations, Newsletters or Trade Magazines ic Information Services internet, World Wide Web, etc.) | · | | FIRST 0826 SECONI |
| 1 County, Coun | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer cial Scouting Service dent Crop Consultant st Control Advisor/Custom Applicator rowers or Producers or Associations, Newsletters or Trade Magazines ic Information Services Internet, World Wide Web, etc.) see Pest Advisor | , | | FIRST 0826 SECONI 0827 |
| 1 County, Coun | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer recial Scouting Service dent Crop Consultant est Control Advisor/Custom Applicator rowers or Producers ar Associations, Newsletters or Trade Magazines in Information Services and the Information Services and Information Se | , | | FIRST 0826 SECONI |
| 1 County, Coun | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer cial Scouting Service dent Crop Consultant st Control Advisor/Custom Applicator rowers or Producers or Associations, Newsletters or Trade Magazines ic Information Services Internet, World Wide Web, etc.) see Pest Advisor | , | | FIRST 0826 SECONI 0827 |
| 1 County, Coun | GEMENT INFORMATION SOURCES CODE LIST Cooperative, or University Extension Advisor, eations or Demonstrations pply or Chemical Dealer recial Scouting Service dent Crop Consultant est Control Advisor/Custom Applicator rowers or Producers ar Associations, Newsletters or Trade Magazines in Information Services and the Information Services and Information Se | , | | FIRST 0826 SECONI 0827 |

| Completion Code for Pest Management Data | | | | | |
|--|------|--|--|--|--|
| 1 Incomplete/Refusal | 0340 | | | | |

| 1. | Now I need to list all tractors used to produce |
|----|---|
| | winter wheat on the selected field. |

| CHECK LIST | | | | | |
|--|---------------------------------------|--|--|--|--|
| Include Exclude | | | | | |
| Tractors owned, rented, leased or borrowed | Tractors provided by custom operators | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 |
|----|--|---|--|--------------------------------|--|
| _ | What tractors were used on this field? 1 John Deere & Company 2 AGCO (Challenger, Massey-Ferguson, Caterpillar) 3 Ford New-Holland (Case) 4 Kubota 5 Other [Specify:] | What is the model year? (Example: 2004) | Is this vehicle a? 2 2-wheel drive tractor 3 2-wheel drive tractor with front wheel assist 4 4-wheel drive tractor 5 crawler or other tracked-tractor 6 other tractor | What is its PTO Horsepower? | Is it? 1 diesel 2 gasoline 3 LP gas 9 other |
| | CODE | YEAR | CODE | PTO HORSEPOWER | CODE |
| 1 | 0110 | 0120 | 0121 | 0122 | 0123 |
| 2 | 0111 | 0124 | 0125 | 0126 | 0127 |
| 3 | 0112 | 0128 | 0129 | 0130 | 0131 |
| 4 | 0113 | 0132 | 0133 | 0134 | 0135 |
| 5 | 0114 | 0136 | 0137 | 0138 | 0139 |
| 6 | 0115 | 0140 | 0141 | 0142 | 0143 |
| 7 | 0116 | 0144 | 0145 | 0146 | 0147 |
| 8 | 0117 | 0148 | 0149 | 0150 | 0151 |
| 9 | 0118 | 0152 | 0153 | 0154 | 0155 |
| 10 | 0119 | 0156 | 0157 | 0158 | 0159 |

| 2. | Was a self-propelled combine and/or swather used to harvest the winter wheat field? | | | |
|----|---|--|------|------|
| | | YES – [Continue] NO – [Go to item 2c] | | |
| | | | | YEAR |
| | a. | What is the model year of the self-propelled harvester(s) used to harvest winter wheat | 0830 | |
| | | from this field? (Report the average year if more than one was used.) | ı | |
| | | | | VEAD |

| | | _ | CODE |
|----|--|---------|------|
| C. | Did you use a defoliant in place of a swather in preparing to harvest the winter wheat | | 0832 |
| | from this field? Y | 'ES = 1 | |
| | | | |

| 3. | Including custom operations, I need to list field work performed |
|----|---|
| | by machines on this field for the 2009 winter wheat crop. Please. |

- ▶ begin with the first field operation after harvest of previous crop, including operations for a cover crop established since the previous crop harvested [if fallow during 2008, list operations starting with fall 2007];
- ▶ list the operations in order through harvest and hauling of this crop to storage or first point of sale; and
- ▶ maintain the order of tandem hook-ups.

CODES FOR COLUMN 5

- 1 You (the Operator)
- 2 Partner
- 3 Unpaid Worker
- 4 Paid Part-time or Seasonal Worker
- 5 Paid Full-time Worker
- 6 Custom Applicator

| CHECK LIST | | | | | | |
|--|--|--|--|--|--|--|
| Include all field work using machines for | | | | | | |
| Land Forming/Levee Building | | | | | | |
| Tillage | | | | | | |
| Preparing for Irrigation | | | | | | |
| Planting | | | | | | |
| Fertilizer & Pesticide applications | | | | | | |
| Harvesting & Hauling wheat and wheat straw to storage or first point of sale | | | | | | |
| Exclude | | | | | | |
| Lime & Gypsum/landplaster applications | | | | | | |

| 2 | 3 | 4 | 5 | | [IF CUSTOM | (column 5 = code 6 | 6), skip columns 6-1 | 0] |
|----------------|--|--|---|--|---|--|---|---|
| | | | | 6 | 7 | 8 | 9 | 10 |
| S E QÜ E N C E | What operation or equipment was used? | [Record machine code from Respondent Booklet.] | Who was the machine operator? [Enter code from above.] | What was the size or swath of the [machine] used? | [Record size unit code.] 1 Feet 2 Row 3 Moldboard (bottoms) Hauling 4 Pounds 5 Bushels 6 Tons | What was the power source? [Record tractor line number from item 1.] OR 66 Animal Drawn 77 Pick up 99 Self-Propelled 1/ | How many acres were covered? [Exclude land forming and hauling operations] | How many TOTAL HOURS were spent on land forming and hauling? [Example: backhoes, disk border maker, ditcher, rear mounted blade, trucks, wagons forklifts, etc.] |
| No. | | CODE | CODE | | CODE | | ACRES | HOURS |
| 0351 | | 0352 | 0353 | 0354 | 0355 | 0356 | 0357 | 0359 |
| 0361 | | 0362 | 0363 | 0364 | 0365 | 0366 | 0367 | 0369 |
| 0371 | | 0372 | 0373 | 0374 | 0375 | 0376 | 0377 | 0379 |
| 0381 | | 0382 | 0383 | 0384 | 0385 | 0386 | 0387 | 0389 |
| 0391 | | 0392 | 0393 | 0394 | 0395 | 0396 | 0397 | 0399 |
| 0401 | | 0402 | 0403 | 0404 | 0405 | 0406 | 0407 | 0409 |
| 0411 | | 0412 | 0413 | 0414 | 0415 | 0416 | 0417 | 0419 |
| 0421 | | 0422 | 0423 | 0424 | 0425 | 0426 | 0427 | 0429 |
| 0431 | | 0432 | 0433 | 0434 | 0435 | 0436 | 0437 | 0439 |
| 0441 | | 0442 | 0443 | 0444 | 0445 | 0446 | 0447 | 0449 |
| 0451 | | 0452 | 0453 | 0454 | 0455 | 0456 | 0457 | 0459 |
| 0461 | | 0462 | 0463 | 0464 | 0465 | 0466 | 0467 | 0469 |
| 0471 | | 0472 | 0473 | 0474 | 0475 | 0476 | 0477 | 0479 |
| 0481 | | 0482 | 0483 | 0484 | 0485 | 0483 | 0487 | 0489 |
| 0491 | | 0492 | 0493 | 0494 | 0495 | 0496 | 0497 | 0499 |
| 0501 | | 0502 | 0503 | 0504 | 0505 | 0506 | 0507 | 0509 |
| 0511 | | 0512 | 0513 | 0514 | 0515 | 0516 | 0517 | 0519 |
| 0521 | | 0522 | 0523 | 0524 | 0525 | 0526 | 0527 | 0529 |

1/ If trucks other than pick-ups are used as the power source, use truck codes in Respondent Booklet.

OFFICE USE

| 0032 | | |
|------|--|--|
| | | |

4. Now I need some additional information about your labor.

Please report the paid and unpaid labor that worked on this field to produce the 2009 winter wheat crop. (*Exclude* labor that was reported for field work performed by machines.)

| | How many hou | 1 How many hours did (type of worker) spend on this field | | | | |
|--|---|---|--------------------------------------|--|--|--|
| | a. | b. | C. | | | |
| | scouting for weeds, insects and diseases? | irrigating? | performing other work by hand? | | | |
| TYPE OF WORKERS | HOURS | HOURS | HOURS | | | |
| You (the operator) | 1101 | 1102 | 1103 | | | |
| Partner(s) | 1104 | 1105 | 1106 | | | |
| Unpaid workers | 1107 | 1108 | 1109 | | | |
| Paid part-time or seasonal workers (<i>Exclude</i> custom and contract labor) | 1110 | 1111 | 1112 | | | |
| Paid full-time workers (Exclude custom and contract labor) | 1113 | 1114 | 1115 | | | |

| | | DOLLARS & CENTS PER HOUR |
|----|---|-----------------------------|
| 5. | What was the average hourly wage rate paid to part-time or seasonal hired workers? (Exclude custom and contract workers, pavroll taxes and benefits.) | 1119 |
| | | DOLLARS & CENTS PER HOUR |
| 6. | What was the average hourly wage rate paid to full-time hired workers? (Exclude custom and contract workers, payroll taxes and benefits.) | 1118 |
| | | CODE |
| 7. | Was any contract labor used on this field? YES = 1 | 1116 |
| | a. [If YES, ask] | DOLLARS & CENTS PER ACRE |
| | What was the average cost per acre for this contract labor? (Include operator, landlord, and contractor costs.) | 1117 |
| | | |
| 8. | What percent of the total number of unpaid hours worked on this field was performed by | PERCENT |
| | workers under 16 years of age? (Estimates of labor costs for unpaid workers are based on off-farm wage rates, which are different for workers under 16 relative to those 16 and older.) | 1120 |

9. Now I need some information on how much was spent for custom services used on this field for the 2009 winter wheat crop.

| | CUSTOM SERVICE Which of the following services were performed for the 2009 winter wheat crop on this field? | and o how for this t | Including erator, landlord, contractor costs, much was spent r [column 1] on field for the 2009 ter wheat crop? |
|-----|---|-------------------------------|---|
| ✓ | ← [Check box for each service performed; refer to item 3 if necessary.] | | PER ACRE |
| | a. Custom land preparation, shaping and/or leveling x x = ÷ == | 1121 | |
| | Cost per Hour X Total Hours = Total Dollars ÷ Total Acres in the Field = Dollars & Cents per Acre) | | · |
| | b. Custom cultivating | 1122 | • |
| | c. Custom planting and/or reseeding | 1123 | |
| | | 1124 | • |
| Ш | d. Custom harvesting | 1126 | ·—— |
| | · x ÷ = | 1120 | |
| Ш | (Dollars & Cents per Unit x Total Units Hauled from Field ÷ Acres Harvested in Field = Dollars & Cents per Acre) | 1107 | ·— — |
| | f. Harvesting and hauling from field to storage or point of first sale ——————————————————————————————————— | 1127 | |
| Ш | (Dollars & Cents per Unit x Total Units Hauled from Field ÷ Acres Harvested in Field = Dollars & Cents per Acre) | · | |
| | g. Custom raking, baling, and hauling the straw from this field | 1128 | |
| | (Dollars & Cents per Unit x Total Units Hauled from Field ÷ Acres Harvested in Field = Dollars & Cents per Acre) | | · |
| 10. | Did you hire any technical or consultant services to make recommendations (such as for nutrient, pest control, irrigation, or precision farming) for this field? YES – [Continue] NO – [Go to item 12] | | |
| | Which of the following services did you obtain? | | CODE |
| | a. Nutrient recommendations/management service? | FS = 1 | 1129 |
| | | | 1130 |
| | b. Soil or tissue sample collection? | ES = 1 | |
| | c. Pest control recommendations/management service? | ES = 1 | 1131 |
| | d. Pest scouting? | ES = 1 | 1132 |
| | e. Irrigation management service (i.e. irrigation scheduling)? | ES = 1 | 1133 |
| | f. Yield map or remote sensing map development/interpretation? | ES = 1 | 1134 |
| | g. Other custom or technical service? [Specify:] Y | ES = 1 | 1135 |
| 11 | If YES to any of these services, what was the cost for all of these DOLLARS & CEN | | |
| | Services? (Include operator, landlord, and contractor costs. Exclude cost of | | TOTAL DOLLARS |
| | soil/tissue tests or scouting cost reported earlier. Do not report costs for any of these services if they were previously reported as part of the costs of materials and/or application.) | | 1137 |

| 12. | 1138 | | | | | | | | |
|-----|---|---|--|---|--|--|--|--|--|
| | this | | | | | | | | |
| | a. | YES, continue; else go to item 13] Was there (or will there be) a yield reinformation from the yield monitor? | map produced from this harvest using | YES = 1 | 1139 | | | | |
| | b. | Did you use the yield monitor inform | nation to | | | | | | |
| | | (i) monitor crop moisture content to | o determine need for crop drying? | YES = 1 | 1140 | | | | |
| | | (ii) add/improve tile drainage? | | YES = 1 | 1141 | | | | |
| | | (iii) add/improve irrigation equipmer | nt/irrigation water application? | YES = 1 | 1142 | | | | |
| | | (iv) conduct in-field experiments (e.g. | | YES = 1 | 1143 | | | | |
| | | | 23. GIGT: | | 1144 | | | | |
| | | (vi) document yields for crop insura | nce, real estate tax, or farm | YES = 1 | 1145 | | | | |
| | | (vii) accurately divide crop production | on among partners and/or for | YES = 1 | 1146 | | | | |
| | | | | | 1147 | | | | |
| | | (VIII) Other uses [specify. | | 169 = 1 | | | | | |
| 13. | 13. During 2008 or 2009, was a GPS (Global Positioning System) device used to produce a map of the soil properties (such as nitrate levels, PH, soil type, etc.) of this field? YES = 1 | | | | | | | | |
| | а | [If YES, ask] | 1 soil tests from this field? | | | | | | |
| | | | | | | | | | |
| | ••• | Was the information collected above based on | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] | | 1149 | | | | |
| 14. | Dic | Was the information collected above based on d you have an airplane or satellite | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] | YES = 1 | 1149 | | | | |
| | Dic of t | Was the information collected above based ond you have an airplane or satellite paths field either at the start or during | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? | YES = 1 | 1151 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite p this field either at the start or durin as a variable rate applicator used o | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | | | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or durings a variable rate applicator used of fertilization or lime application? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | YES = 1 | 1151 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | | 1151 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate application? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? In this field for | YES = 1 | 1151 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | YES = 1 YES = 1 | 1151 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? In this field for | YES = 1 | 1151 1152 1153 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? (2) phosphorus applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? In this field for | YES = 1 YES = 1 | 1151 1152 1153 1154 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? (2) phosphorus applications? (3) potash applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | YES = 1 YES = 1 | 1151 1152 1153 1154 1155 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? (2) phosphorus applications? (3) potash applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? In this field for | YES = 1 YES = 1 YES = 1 YES = 1 | 1151 1152 1153 1154 1155 | | | | |
| | Dic of t | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? on this field for | YES = 1 YES = 1 YES = 1 YES = 1 | 1151 1152 1153 1154 1155 1156 1157 1158 | | | | |
| | Dictor of the War | Was the information collected above based on d you have an airplane or satellite paths field either at the start or during as a variable rate applicator used of fertilization or lime application? (i) [If YES, ask] Did you use a variable rate applications? (2) phosphorus applications? (3) potash applications? (4) lime applications? (5) manure applications? | 2 a machine that measured electrical conductivity of the soil in this field (e.g. Veris machine)? 3 other? [Specify:] provide an image or photograph at the 2009 growing season? In this field for | YES = 1 YES = 1 YES = 1 YES = 1 YES = 1 | 1151 1152 1153 1154 1155 1156 | | | | |

NOTES

G IRRIGATION G

| | ACRES |
|-----------------|-------|
| ter wheat crop? | 1160 |

| 1. | How many acres in this field were irrigated for the 2009 winter wheat crop? |
|----|---|
| | [If none, go to Section H]. |

2. Now, I have some questions about irrigation systems and water used on this field for the 2009 winter wheat crop.

| | ↓ | | UNIT | SYSTEM 1 | SYSTEM 2 |
|----|--|---|------------------------------|----------|----------|
| a. | What type(s) of irrigation system(s) was (this field? [Show System Type Codes in the Resystem Type Code for up to two systems covering | SYSTEM TYPE CODE | 1161 | 1175 | |
| | | | INCHES PER ACRE | 1162 | 1176 |
| b. | What was the total quantity of water appli the entire growing season? (Include ALL wand off-farm sources.) | ater used from both on-farm | OR TOTAL ACRE-FEET | 1163 | 1177 |
| | [If operator cannot provide item 2b, ask (i | i) & (ii), else go to 2c1 | | | |
| | (i) What is the total number of hours th apply water to this field during the wir | | TOTAL HOURS | 1164 | 1178 |
| | (ii) How many gallons per minute were a | GALLONS PER MINUTE | 1165 | 1179 | |
| C. | What percent of the water used to irrigate system came from surface water sources | PERCENT | 1166 | 1180 | |
| d. | What was the number of times this field winter wheat growing season using this spre-plant irrigation.) | ystem? (<i>Include</i> any | NUMBER OF IRRIGATIONS | 1167 | 1181 |
| e. | Was the pump type [If more than one pump in the system, enter type for pump closest to water source.] | 1 TURBINE? 2 SUBMERSIBLE? 3 CENTRIFUGAL? 4 BOOSTER? 5 SIPHON? 99 NO PUMP? [If code 99, go to item j.] | CODE | 1168 | 1182 |
| f. | What was the average pumping rate? | | GALLONS PER MINUTE | 1169 | 1183 |
| g. | [If item 2a = code 1-9 (PRESSURE SYST What was the system operating pressure | | POUNDS PER SQUARE INCH | 1170 | 1184 |
| h. | What was the primary motor type used to pump the water? | 1 DIESEL 2 GASOLINE 3 LP GAS 4 NATURAL GAS 5 ELECTRICITY 6 SOLAR POWER | CODE | 1171 | 1185 |
| i. | What was the average motor size? | | HORSEPOWER | 1172 | 1186 |
| j. | [If NO PUMP was used (item 2e = 99), as What was the average flow rate? | | GALLONS PER MINUTE | 1173 | 1187 |
| k. | How many other acres on this operation withis field's irrigation system during the 20 (Exclude this field.). | 09 growing season? | ACRES | 1174 | 1188 |

| | | DOLLARS & CENTS PER ACRE | OR | TOTAL DOLLARS |
|--|-------------------------|-----------------------------|----|---------------|
| | | 1189 | | 1190 |
| 3. What was the cost of the fuel or electricity used | to irrigate this field? | · | | |

| , | | | CODE |
|----|---------------|--|---------------|
| 4. | | s any water purchased to irrigate this field? (Include landlord's share and purchases from all sources.) | 1191 |
| | | YES – [Enter code 1 and continue.] \square NO – [Go to item 5.] | |
| | | | PERCENT |
| | | | 1192 |
| | a. | What percent of the water used on this field was purchased? | |
| | | DOLLARS & CENTS | |
| | | what was the total cost for the water parchased for this field | TOTAL DOLLARS |
| | | during the 2009 growing season? (Include landlord and contractor | 1194 |
| | | costs and ditch maintenance costs for this field.) | |
| | | | |
| | | | |
| | | | |
| | | | TOTAL DOLLARS |
| 5. | [If S | IPHON TUBES were used (item 2a = 10 or 11), ask] | 1201 |
| | Wha | at would be the total cost to replace all the siphon tubes used on this field? | |
| _ | [14.0 | OLV DIDE system was used (term 2s - 14) selv. I | |
| 6. | - | OLY PIPE system was used (item 2a = 14) ask] | TOTAL DOLLARS |
| | | at was the total amount spent for poly pipe used on this field during the | 1202 |
| | 200 | 9 growing season? | |
| 7. | [If C | SATED PIPE system was used (item 2a = 15 or 16), ask] | INCHES |
| ٠. | Į <i>ii</i> C | 77 LD 1 II L 3ystelli was asea (itelli za = 15 oi 10), ask | 1203 |
| | a. | What was the average diameter of gated pipe used to irrigate this field? | |
| | | 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | FEET |
| | | | 1204 |
| | b. | What was the total length of gated pipe used? | 1204 |
| 0 | | | CODE |
| 8. | | re wells used to supply irrigation water for this field? | 1205 |
| | | YES – [Enter code 1 and continue] | 1205 |
| ^1 | | | NUMBER |
| | | | 1206 |
| | a. | How many wells were used to irrigate this field? | 1200 |
| | | , | INCHES |
| | | | 1207 |
| | b. | What was the average diameter of the outer well casing? | 1207 |
| | | | FEET |
| | | What was the average pumping depth of these wells during the irrigation season? [Pumping depth is the depth to water at the start of the irrigation season, plus an average decline in the | 1208 |
| | | water level caused by pumping during the irrigation season.] | |
| | | | CODE |
| | | | 1209 |
| | d. | Did the well(s) have a water meter or other flow measurement device? YES = 1 | |
| | | | |
| | e. | Were other fields irrigated using water pumped from well(s) that supplied | CODE |
| | | water to the selected field? | 1210 |
| | | \square YES – [Enter code 1 and continue] \square NO – [Go to item 9] | 1210 |
| | | <u> </u> | ACRES |
| | f. | Excluding this field, how many other acres on this operation were irrigated | 1211 |
| | | using the same well(s) during the 2009 growing season? | |
| | | | |

| 9. | | | • | ipe used to carry water from the so de any system pipe within the selected field.) | urce to the system | |
|-----|--------|---|------------|---|--------------------|--------|
| | | YES – [Continue] | O – | [Go to item 10] | | |
| | | | | | | INCHES |
| | a. | What was the average diameter (<i>ir</i> of this additional pipe used? | | thes) of the most common type | | 1212 |
| | | | | | | FEET |
| | b. | How many feet of this additional pi | pe v | vere used to bring water to this field?. | | 1213 |
| | | | | | 1 | |
| | | | | RUN-OFF CODES | | |
| | | | 1 | retained at the end of the field? | | CODE |
| | | | 2 | reused to irrigate on the farm? | | 1214 |
| 10. | . Is t | he run-off from this field | 3 | collected in evaporation ponds on the farm? | | |
| | | | 4 | drained from the farm? | | |
| | | | 5 | there is no run-off | | |

H MANAGEMENT H

| 1. | | response to higher or more volatile fuel prices during the 2009 crop year winter wheat, did you | | |
|----|-------------|---|---------|---------|
| | a. | reduce the number of field operations such as tillage, cultivation, or nutrient | | CODE |
| | | and pesticide applications on this field (i.e., compared to what you would have | | 1220 |
| | | otherwise applied)? | 'ES = 1 | |
| | b. | reduce the amount of irrigation water on this field (i.e., compared to what you would have otherwise annlied)? | 'ES = 1 | 1222 |
| | C. | change other production practices on this field? [If yes, specify:] | YES = 1 | 1223 |
| 2. | | response to higher or more volatile fertilizer prices during the 2009 crop year winter wheat, did you | | CODE |
| | a. | reduce the application rate of commercial nitrogen fertilizer on this field (i.e., compared to what you would have otherwise applied)? | YES = 1 | 1224 |
| | | (i) [If YES, ask] | | PERCENT |
| | | By what percent did you reduce the amount of commercial nitrogen fertilizer applied for 2009? | | 1225 |
| | h | change the type of commercial nitrogen fertilizer products applied on this field | | CODE |
| | | (i.e., compared to what you would have otherwise applied)? [e.g. less anhydrous ammonia and more UAN] | /ES = 1 | 1226 |
| | C. | increase the application rate of manure or other organic fertilizers on this field (i.e., compared to what you would have otherwise applied)? | YES = 1 | 1227 |
| | d. | manage fertilizer more closely, with such practices as soil testing, split applications, | | |
| | | variable rate applications, or soil incorporation on this field (i.e., compared to what you would have otherwise done)? | YES = 1 | 1228 |
| 3. | | s this field irrigated in 2008 and in 2009? YES – [Continue] NO – [Go to Conclusion] | | |
| | | | | CODE |
| 4. | Dic of v | l you alter production practices in 2009 due specifically to reduced availability water supplies for irrigation on this field? | /ES = 1 | 1221 |
| | [If \ | /ES, continue; else go to Conclusion] | | |
| | a. | Did you shift to wheat production on this field in 2009 due to reduced availability of water supplies? | /ES = 1 | 1229 |
| | b. | Did you reduce the water applied to this field in 2009 due to reduced availability of water supplies? | /ES = 1 | 1230 |

CONCLUSION

| _ | I need to locate on this map. | e the selected field of | winter wheat | | OLINITY NAM | - | OFFICE USE |
|----|----------------------------------|---|---|--|-------------------------------|------------------------------|------------------|
| | on uns map. | | | | OUNTY NAM | | COUNTY FIPS CODE |
| | What county is | the selected winter | wheat field in? | | | | 0010 |
| | Field description | on | | | | | |
| FC | R STATES WITH | GPS UNITS ONLY | | LATITUDE | | LON | GITUDE |
| | Field location. | | N 005 | 4 | . v | 0055 | |
| | | | | d d m m | s s | d d d | m m s s |
| 2. | [ENUMERATOF | R ACTION: Mark map Be sure th | o to indicate where ne "X" marked on | e the selected win map is in the cour | ter wheat fi nty identifie | eld is located. d above.] | |
| 3. | | dditional information to collect it. I'll call y | | | | | |
| | | | | | | | CODE |
| 4. | | to receive a free cop available on the Internet at | | | | VEC - 1 | 0099 |
| | (Results will also be | available on the internet at | niip://www.nass.usda | .gov/ & nup://www.ers | .usua.gov/.) | 123-1 | HH MM |
| | | | | | | | 0005 |
| 5. | ENDING TIME [| MILITARY] | | | | | |
| | CORDS USE | | | | | | |
| _ | | una farma/ranah ranan | da ta ramant 1 | | | | |
| 6. | Dia responaent | use farm/ranch record | is to report] | | | | CODE |
| | a. [fertilizer da | ata?] | | | | YES = 1 | 0011 |
| | | | | | | | 0012 |
| | b. [pesticide d | lata?] | | | | YES = 1 | |
| | - Francis vita af | this | | | | | 0013 |
| | c. [majority of t | this expense data?] | | | | YES = 1 | |
| | | | | | | | NUMBER |
| SU | JPPLEMENTS US | SED | | | | FERTILIZER APPLICATIONS | 0041 |
| 7. | | I number of each type e this interview.] | | | | PESTICIDE APPLICATIONS | 0042 |
| | | | | | | FIELD OPERATIONS | 0043 |
| | Reported by: | | | Telephone | e: ()_ | | |
| | Response | Respondent | Mode | Enum | Eval. | Date | Optional |
| | Meapoliae | Nespondent | Mouc | Liidiii | ∟vai. | MM DD VV | Οριιστίαι |

| Response | | Respor | ndent | Mode | | Enum | Eval. Date | | Opt | Optional | |
|-------------------------|------|--|-------|-------------------------|------|------|------------|----------|------|----------|--|
| | | | | | 1 | | | MM DD YY | | | |
| 1-Comp 2-R 3-Inac | 9901 | 1- Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Other | 9902 | 2-Tel 3-Face-to-Face | 9903 | 0098 | 0100 | 9910 | 0002 | 0003 | |
| S/E Name | | | | | | | | | | | |