



**AGRICULTURAL RESOURCE MANAGEMENT SURVEY  
APPLE PRODUCTION PRACTICES  
AND COSTS REPORT**



**NATIONAL  
AGRICULTURAL  
STATISTICS  
SERVICE**

for 2007

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<b>VERSION</b>	<b>ID</b>	<b>TRACT</b>	<b>SUBTRACT</b>	<b>T-TYPE</b>	<b>TABLE</b>	<b>LINE</b>
3	_____	01	01	0	000	00



**CONTACT RECORD**

DATE	TIME	NOTES

**INTRODUCTION:**

*[Introduce yourself, and ask for the operator. Rephrase in your own words.]*

We are collecting information on practices and costs to produce apples and need your help to make the information as accurate as possible. Authority for collection of information on the Apple 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 you to refer to your farm records during the interview.

**H H M M**

**BEGINNING TIME**  
[MILITARY]

0004
_ _ _ _

- Please verify name and mailing address of this operation.  
Make corrections (including the correct operation name) on the label and continue.

[Check if name and address are verified.]
- Please answer the following question(s) for the total acres you (name on label ) operate.

  - Have or will you grow any crops or cut hay in 2007? . . . . .  **Yes** [Go to Item 3]  **No** [Continue]
  - During 2007, did this operation sell any agricultural products or receive government agricultural payments? . . . . .  **Yes** [Go to Item 3]  **No** [Continue]
  - Have or will you own or raise any livestock or poultry? . . . . .  **Yes** [Go to Item 3]  **No** [Go to conclusion]
- Are the day-to-day decisions for this (name on label) operation made by one individual, a hired manager, or partners? [Check one]

One individual - [Enter 1, Go to item 5]

A hired manager - [Enter 8, Go to item 5]

Partners - [Continue]

**OFFICE USE**

<b>REPORTING UNIT</b>
0921

# SCREENING

4. How many individuals are involved in the day-to-day decisions of this operation? . . . . . NUMBER

[Enter the number of partners, including the partner named on the label.  
Identify the other persons in this partnership below, then continue.]  
Partners jointly operate land and share in decision making. Do not include landlords and tenants as partners.

<b>POID</b> _____	<b>POID</b> _____
<i>PARTNER 1: NAME</i>	<i>PARTNER 2: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE NUMBER</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE NUMBER</i>
<b>POID</b> _____	<b>POID</b> _____
<i>PARTNER 3: NAME</i>	<i>PARTNER 4: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE NUMBER</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE NUMBER</i>

5. How many acres of cropland did you operate in 2007?..... ACRES  
0049                      .\_\_\_\_

a. How many acres of apples did you operate **[Operation 1]** in 2007?..... 0056                      .\_\_\_\_

6. **Do you** *[target name]* **make any day-to-day decisions for any other farm or ranch?**  
[If Opdom 99, check 'No' and follow skip instructions.]

**NO** - *[Enter code 1 and then begin the interview with Section A, page 8.]*

**YES** - a. **How many total operating arrangements** *(including the sampled operation)*  
**do you** *(target operator)* **make day-to-day decisions for?**.....

**NUMBER**  
0923

b. *[List or verify names associated with each additional operation on the next page.]*

<b>OPERATION 2:</b> ▶	<b>PARTNERS: POID</b> _____
<i>OPERATION NAME (IF ANY)</i>	
<i>OPERATION NAME</i>	<i>PARTNER 1: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	<b>POID</b> _____
<i>PARTNER 2: NAME</i>	<i>PARTNER 3: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	
<i>PARTNER 4: NAME</i>	
<i>ADDRESS</i>	
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	

a. Are the day-to-day decisions for this farming/ranching operation **[Operation 2]** made by---

- an individual operator? [Enter 1 and Continue]
- a hired manager? [Enter 8 and Continue]
- Partners? [List/verify partners in Partner Boxes above]

**OPERATING  
ARRANGEMENT**

0932

b. How many acres of cropland did you operate in 2007 **[Operation 2]**? .....

**ACRES**

0033

c. How many acres of apples did you operate in 2007 **[Operation 2]**? .....

0034

[Refer to Page 2, Item 6a. Does operator make day-to-day decisions for more than 2 operations?]

- YES** - [Continue]
- NO** - [Go to Operation Selection, Item 7, Page 7]

<b>OPERATION 3:</b> ▶	<b>PARTNERS: POID</b> _____
OPERATION NAME (IF ANY)	
OPERATION NAME	PARTNER 1: NAME
ADDRESS	ADDRESS
CITY                      STATE      ZIP              PHONE	CITY                      STATE      ZIP              PHONE
<b>POID</b> _____	<b>POID</b> _____
PARTNER 2: NAME	PARTNER 3: NAME
ADDRESS	ADDRESS
CITY                      STATE      ZIP              PHONE	CITY                      STATE      ZIP              PHONE
<b>POID</b> _____	
PARTNER 4: NAME	
ADDRESS	
CITY                      STATE      ZIP              PHONE	

a. Are the day-to-day decisions for this farming/ranching operation **[Operation 3]** made by---

- an individual operator? [Enter 1 and Continue]
- a hired manager? [Enter 8 and Continue]
- Partners? [List/verify partners in Partner Boxes above]

<b>OPERATING ARRANGEMENT</b>
0933

b. How many acres of cropland did you operate in 2007 **[Operation 3]**? .....

<b>ACRES</b>
0035

c. How many acres of apples did you operate in 2007 **[Operation 3]**? .....

0036
------

[Refer to Page 2, Item 6a. Does operator make day-to-day decisions for more than 3 operations?]

- YES** - [Continue]
- NO** - [Go to Operation Selection, Item 7, Page 7]

<b>OPERATION 4:</b> ▶	<b>PARTNERS: POID</b> _____
<i>OPERATION NAME (IF ANY)</i>	
<i>OPERATION NAME</i>	<i>PARTNER 1: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	<b>POID</b> _____
<i>PARTNER 2: NAME</i>	<i>PARTNER 3: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	
<i>PARTNER 4: NAME</i>	
<i>ADDRESS</i>	
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	

a. Are the day-to-day decisions for this farming/ranching operation **[Operation 4]** made by---

- an individual operator? [Enter 1 and Continue]
- a hired manager? [Enter 8 and Continue]
- Partners? [List/verify partners in Partner Boxes above]

**OPERATING  
ARRANGEMENT**

0934

b. How many acres of cropland did you operate in 2007 **[Operation 4]**? .....

**ACRES**

0037

c. How many acres of apples did you operate in 2007 **[Operation 4]**? .....

0038

[Refer to Page 2, Item 6a. Does operator make day-to-day decisions for more than 4 operations?]

- YES** - [Continue]
- NO** - [Go to Operation Selection, Item 7, Page 7]

<b>OPERATION 5:</b> ▶	<b>PARTNERS: POID</b> _____
<i>OPERATION NAME (IF ANY)</i>	
<i>OPERATION NAME</i>	<i>PARTNER 1: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	<b>POID</b> _____
<i>PARTNER 2: NAME</i>	<i>PARTNER 3: NAME</i>
<i>ADDRESS</i>	<i>ADDRESS</i>
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>
<b>POID</b> _____	
<i>PARTNER 4: NAME</i>	
<i>ADDRESS</i>	
<i>CITY</i> <i>STATE</i> <i>ZIP</i> <i>PHONE</i>	

a. Are the day-to-day decisions for this farming/ranching operation **[Operation 5]** made by---

- an individual operator? [Enter 1 and Continue]
- a hired manager? [Enter 8 and Continue]
- Partners? [List/verify partners in Partner Boxes above]

**OPERATING  
ARRANGEMENT**

0935

b. How many acres of cropland did you operate in 2007 **[Operation 5]**? .....

**ACRES**

0039

c. How many acres of apples did you operate in 2007 **[Operation 5]**? .....

0040

**OPERATION SELECTION**

7. [ENUMERATOR Action: **Were Apple Acres reported on any of the operations?**]

**YES** – [Continue]

**NO** – [This concludes the interview. Make notes, then go to item 4 on back page.]

0057

Enter the total number of operations reporting apple acres.....

[If only one operation, Enter 1 and go to Section A.]

**'Apply Random Operation Label'**

8. [ENUMERATOR ACTION:]

Circle the pair of numbers on the above label associated with the number of operations with apples (item 7).  
Select the operation according to the number you circled on the label, and record the selected number.....

0058

9. **The operation selected is** \_\_\_\_\_ (i.e. Operation 1, Operation 2, etc.)

**During this interview, the questions will be about this selected operation.**

[The selected number identifies the counting order of operations with apples and not necessarily the operation number.]

**A**

**APPLE BLOCK SELECTION**

**A**

1. How many acres of apples (both bearing and non-bearing) were on the selected operation for the 2007 crop year? .....

**TOTAL ACRES**

0050 _____
---------------

a. In what year did you start your apple operation? *(Include the establishment of the orchard)* .....

**YEAR**

0051 _____
---------------

b. What year did you start producing apples? *(Exclude the establishment of the orchard)* .....

**YEAR**

0052 _____
---------------

c. Of the total (item 1) acres, please list the varieties and acreage grown for each variety starting with the largest variety.

SPECIFY APPLE VARIETY	i CODE	ii Bearing Acres	iii Non-Bearing Acres	iv Acres Established in 2007
Variety 1:	0059	0064 _____	0074 _____	0084 _____
Variety 2:	0060	0065 _____	0075 _____	0085 _____
Variety 3:	0061	0066 _____	0076 _____	0086 _____
Variety 4:	0062	0067 _____	0077 _____	0087 _____
Variety 5:	0063	0068 _____	0078 _____	0088 _____
All Other		0069 _____	0079 _____	0089 _____
Total		0070 _____	0080 _____	0090 _____

► [If no bearing acres, make notes, then go to item 4 on back page.]

d. Of the total (item 1) acres, how many were **CERTIFIED ORGANIC**? .....

**ACRES**

0053 _____
---------------

2. I will follow a simple procedure to make a random selection from the bearing apple blocks for the 2007 crop.

What is the TOTAL number of bearing apple blocks on this operation for the 2007 apple crop? .....

**TOTAL NUMBER OF BLOCKS**

0020 _____
---------------

► If only one block, enter 1 and go to item 4 and enter 1.]



3. Please list these blocks according to identifying name/number or describe each block, then I will tell you which block has been selected.

▶ [If there are more than 18 blocks make sure item 2 is **TOTAL** blocks of bearing acres, and list only the 18 blocks closest to the operator's permanent residence.]

▶ [If respondent is unable to identify or describe the blocks, use the block Selection Grid Supplement.]

**BLOCK NAME, NUMBER OR DESCRIPTION**

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

7 \_\_\_\_\_

8 \_\_\_\_\_

9 \_\_\_\_\_

**BLOCK NAME, NUMBER OR DESCRIPTION**

10 \_\_\_\_\_

11 \_\_\_\_\_

12 \_\_\_\_\_

13 \_\_\_\_\_

14 \_\_\_\_\_

15 \_\_\_\_\_

16 \_\_\_\_\_

17 \_\_\_\_\_

18 \_\_\_\_\_

**APPLY 'RANDOM NUMBER' LABEL HERE**

4. [ENUMERATOR ACTION:]

*Circle the pair of numbers on the above label associated with the last numbered block in item 3. Select the block according to the number you circled on the label, and record the selected number. [If only 1 block, enter 1].* .....

**SELECTED BLOCK NUMBER**

0021

5. The block selected is \_\_\_\_\_ (block name/number/description.)  
**During this interview, the apple questions will be about this selected apple block.**  
*[Be sure the operator can identify the selected block.]*

**B** BLOCK CHARACTERISTICS—SELECTED BLOCK

**B**

ACRES
1301

1. How many bearing apple acres are in this block for the 2007 crop? .....

CODE
1311

a. Are the acres in this block **CERTIFIED ORGANIC**? ..... YES = 1

[If YES, ask—else go to item 1b.]

YEAR
1322
_____

(i) What year were apples for this block first certified? .....

1351
------

b. Was this block transitioning into organic apple production in 2007? ..... YES = 1

CODE
1302

2. Are the acres in this block --

- |   |  |
|---|--|
| 1 | owned by this operation?                                       |
| 2 | rented for CASH with the payment being a fixed cash amount?    |
| 3 | rented for CASH with the payment being a flexible cash amount? |
| 4 | rented for a SHARE of the crop?                                |
| 5 | rented for some combination of CASH and SHARE of the crop?     |
| 6 | used RENT FREE?  |

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1303		1324
_____		_____

3. [If block is CASH RENTED (item 2 = 2, 3 or 5), ask--, else go to item 4.]  
What was the cash rent paid per acre for this 2007 apple block? .....

[If rent calculated on a per bushel basis, then use the following formula:

\_\_\_\_ per bushel X \_\_\_\_\_ bushels = total cash rent]

PERCENT
1304

4. [If block is SHARE RENTED (item 2 = 4 or 5), ask--]  
What was the landlord's share of the apple crop from this block? .....

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1305		1306
_____		_____

5. [If block is RENTED (item 2 = 2, 3, 4, or 5), ask--]  
What was the total cost for all inputs provided by any landlord or contractor for the 2007 apple crop for this block? .....

(Include the costs for all inputs, such as fertilizer, chemicals, technical services, custom operations, and irrigation. Exclude real estate tax expenses and lime costs paid by the landowner.)

YEAR
1307
_____

6. What year did you (the operator listed on the label) start operating this block? .....

CODE
1325

7. What variety of apples were in this block? .....

[Show list of the most common Apple varieties in Respondent Booklet.]  
[If more than one variety, list the variety with the largest number of acres.]

OFFICE USE
0031

a. [Note: If Apple variety not listed, Specify: \_\_\_\_\_]

8. **What is the total number of apple trees in this block?**.....

**TOTAL NUMBER OF TREES**

1326

[If total number is calculated on a per acre basis, then use the following formula:  
 \_\_\_\_ trees per acre X \_\_\_\_ number of acres = total number of trees]

a. What is the average age of apple trees in this block? .....

**YEARS**

1327

9. **Were your apple trees--**.....

1 Standard?  
 2 Dwarf?  
 3 Semi-dwarf?  
 4 Other?

**CODE**

1401

10. **What type of orchard floor management system did you use in this block--**.....

1 Grass Alleys?  
 2 Vegetative Cover?  
 3 Clear Cultivation?  
 4 Mulches?  
 5 Other?

**CODE**

1402

12. **Were the apple stock planted on this block with the intention of marketing for.**.....

1 Fresh Market?  
 2 Processing?

**CODE**

1403

13. **Were the apples from this block sold (or will they be sold) as organic apples?**..... **YES=1**

1404

a. [If item 13 = YES, ask--]

What was the price premium (or the expected premium if not yet sold) received for these organic apples?.....

**DOLLARS & CENTS PER UNIT**

1407

1=POUNDS 6=BINS, PLASTIC  
 3=TONS 7=BINS, WOOD  
 4=BUSHEL 8=BOXES

1437

14. **Did you rent bees for apple pollination in 2007?**..... **YES=1**

[If item 14 = YES, ask-- else go to item 14d]

**CODE**

1408

a. How many hives/colonies did you rent in 2007?.....

**NUMBER**

1409

b. How much rent did you pay for these bees?.....

**DOLLARS & CENTS PER HIVE/COLONY**

1410

**OR**

**TOTAL**

1411

c. Were these hives/colonies obtained under a contract for 2007?..... **YES=1**

**CODE**

1412

[If item 14c = YES, ask--]

(i) Was this contract.....

1 Written?  
 2 Verbal?

**CODE**

1413

d. Did you have any difficulty getting enough hives/colonies to pollinate this block in 2007? ..... YES=1 CODE  
1414

e. Did you have any difficulty getting enough hives/colonies when needed in 2007? ..... YES=1 CODE  
1415

15. Did you rent bees for apple pollination in 2006? ..... YES=1 CODE  
1416

[If item 15 = YES, ask—else go to item 16]

a. How much rent did you pay for these bees? ..... DOLLARS & CENTS PER HIVE/COLONY OR TOTAL

1417 . \_\_\_\_ \_\_\_\_ 1418

b. Were these hives/colonies obtained under a contract in 2006? ..... YES=1 CODE  
1419

[If item 15b = YES, ask--]

(i) Was this contract ..... 1 Written? 2 Verbal? CODE  
1420

16. Has harvest of this block been completed? ..... YES=1 1328

17. Now I need information about the acres harvested (or to be harvested) and the production from this block.

How many apple acres were (or will be) --	ACRES	1	2
		What was the total production (do you expect to get) for—  QUANTITY	UNIT CODES 1 = POUNDS 3 = TONS 4 = BUSHEL 5 = LOOSE PACK 6 = BINS, WOOD 7 = BINS, PLASTIC 8 = BOXES
a. harvested for fresh market? .....	1329 _____	1330 _____	1331
b. harvested for processing? .....	1332 _____	1333 _____	1334
c. cull? .....		1336 _____	1337
d. abandoned? .....	1338 _____		
e. used for some other purpose? .....	1339 _____		

18. In 2007 did your land–use practices for this block include--	CODE
a. <b>Structures for soil erosion control?</b> . . . . . YES = 1	1421
[if YES, ask –Enter Code “1” for all that apply.]	
(i) terraces. . . . . YES = 1	1358
(ii) grade stabilization structures. . . . . YES = 1	1359
(iii) critical planting acres. . . . . YES = 1	1422
b. <b>Structures for storm water runoff control/handling?</b> . . . . . YES = 1	1423
[if YES, ask –Enter Code “1” for all that apply.]	
(i) grassed water ways. . . . . YES = 1	1360
(ii) structures for water control . . . . . YES = 1	1424
c. <b>Filter strips or other conservation buffers?</b> . . . . . YES = 1	1425
[if YES, ask –Enter Code “1” for all that apply.]	
(i) Filter strips . . . . . YES = 1	1426
(ii) Block borders . . . . . YES = 1	1427
(iii) Riparian buffers . . . . . YES = 1	1428
d. <b>Drainage?</b> . . . . . YES = 1	1429
[if YES, ask –Enter Code “1” for all that apply.]	
(i) Subsurface block drainage. . . . . YES = 1	1430
(ii) Surface block drainage . . . . . YES = 1	1431
e. <b>Other Practices?</b> . . . . . YES = 1	1432
[if YES, ask –Enter Code “1” for all that apply.]	
(i) Agri-chemical mixing facility . . . . . YES = 1	1433
(ii) Contour farming and strip cropping. . . . . YES = 1	1434
(iii) Air quality management . . . . . YES = 1	1435
(iv) Other Practices [Specify: _____] . . . . . YES = 1	1436

**OFFICE USE**

1440
------

		<b>CODE</b>
19. Has the Natural Resource Conservation Service (NRCS) classified any part of this block as "Highly Erodible"?	YES = 1	1366
20. Have you been notified by NRCS that this block contains any wetlands?	YES = 1	1367
21. In 2007, did you receive technical assistance for planning, installing, maintaining, or using conservation practices or systems on this block? <i>(Include grassed waterways and filter strips or riparian buffers, or drainage area, on or adjoining this block. Include assistance from any source whether paid for or free.)</i>	YES = 1	1368
22. Is this block included in an existing conservation program contract for which you or the landlord have received (or expect to receive) cost sharing payments, stewardship payments, or incentive payments? <i>[Be sure to consider grassed waterways and filter strips or riparian buffers, or drainage area, on or adjoining this block. Also, be sure to consider payments that are part of this contract but were made before 2007 or payments that are anticipated for future years.]</i>	YES = 1	<b>CODE</b> 1369

[If item 22 is YES, ask---, else go to item 22b.]

a. Have (or will) you receive cost sharing or incentive payments from---		<b>CODE</b>
(i) Environmental Quality Incentives Program (EQIP)?	YES = 1	1370
(ii) Conservation Security Program (CSP)?	YES = 1	1371
(iii) Conservation Reserve Program (CRP)?	YES = 1	1395
(iv) Other programs? (Specify: _____)	YES = 1	1396

b. Was this block included in an application that was rejected for an existing conservation program and if so, was it rejected from---		<b>CODE</b>
(i) Environmental Quality Incentives Program (EQIP)?	YES = 1	1397
(ii) Conservation Security Program (CSP)?	YES = 1	1398
(iii) Conservation Reserve Program (CRP)?	YES = 1	1399
(iv) Other programs? (Specify: _____)	YES = 1	1400

23. During 2007, did any written plan cover this block and if so, in what year was the plan implemented? <i>(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.)</i>	CODE	YEAR IMPLEMENTED
a. Conservation plan specifying practices to reduce soil erosion? . . . . . YES = 1	1372	1373 _____
b. Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? . . . . . YES = 1	1374	1375 _____
c. Nutrient management plan specifying practices for land application of manure only? . . . . . YES = 1	1376	1377 _____
d. Pest management plan specifying pesticide use and/or other practices controlling weeds, insects, or plant disease? . . . . . YES = 1	1378	1379 _____
e. Irrigation water management plan specifying practices for applying or conserving irrigation water? . . . . . YES = 1	1380	1381 _____

[If items 23a, b, c, d, or e = YES, ask--]

24. Have you ever paid any technical service provider or consultant to develop or write any of these plans for which you or the landowner were reimbursed by the Natural Resource Conservation Service? . . . . . YES = 1

CODE  
1382

a. [If YES, ask--]

What was the reimbursement amount for developing these plans for this block? *(Include landlord's/contractor's share. Exclude cost of construction or materials.)* . . . . .

DOLLARS & CENTS PER ACRE      OR      TOTAL DOLLARS

1383      1384

25. Were the apples in this block covered by Federal Crop Insurance in 2007?

YES – [Enter code 1 and continue]       NO – [Go to Section C]. . . . .

CODE  
1385

- |   |   |
|---|---|
| 1 | Basic catastrophic insurance ( <i>Federal CAT</i> ) |
| 2 | Buy-up above basic federal CAT level                |
| 3 | Revenue insurance                                   |
| 4 | Organic Plan Insurance                              |
| 5 | Other Federal Crop insurance                        |

a. Which coverage did you obtain? . . . . .

CODE  
1386

b. In what year did you (*the operator listed on the label*) first enroll this block in any Federal crop insurance program? . . . . .

YEAR  
1387  
\_\_\_\_\_

c. What is the 2007 Approved APH (*Actual production history*) yield for this block? . . . . .

BUSHELS PER ACRE  
1388

d. What was the premium paid for Federal crop insurance for this block in 2007? *[Exclude any sign-up fee.]* . . . . .

DOLLARS & CENTS PER ACRE      OR      TOTAL DOLLARS

1390      1391

e. Did you (*or do you expect to*) collect an indemnity payment on this block for the 2007 crop year? . . . . . YES = 1

CODE  
1392

**C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED BLOCK C**

<p>1. <b>Were commercial FERTILIZERS applied to this block for the 2007 apple crop?</b>..... YES = 1</p> <p>2. <i>[If COMMERCIAL fertilizer applied, continue, else go to item 5.]</i></p> <p>3. <b>How many commercial fertilizer applications were made to this block for the 2007 crop?</b> <i>(Include applications made by airplanes and custom applicators).</i>.....</p> <p>4. <b>Now I need to record information for each application</b></p>	<p><b>CODE</b></p> <p>0202</p>	<p><b>EDIT TABLE</b></p> <p>0201</p>
		<p><b>NUMBER</b></p> <p>0203</p>

✓ <b>INCLUDE</b>	✓ <b>EXCLUDE</b>
<input type="checkbox"/> Custom applied fertilizers	<input type="checkbox"/> Micronutrients
<input type="checkbox"/> Fertilizers applied in the fall of 2006.	<input type="checkbox"/> Unprocessed manure
<input type="checkbox"/> Commercially prepared manure or compost.	<input type="checkbox"/> Lime and Gypsum/landplaster

	<b>T-TYPE</b>	<b>TABLE</b>
	<b>2</b>	<b>001</b>
<b>Line 99</b>	<b>Office Use Lines in Table</b>	0213

APPLICATION CODES for COLUMN 6	
1 Broadcast, ground without incorporation	6 Chisel, injected or knifed in
2 Broadcast, ground with incorporation	7 Banded/Sidedressed
3 Broadcast, by aircraft	8 Foliar or directed spray
5 In irrigation water	10 Air blast

LINE	2 <b>MATERIALS USED</b> <i>[Enter percentage analysis or actual pounds of plant nutrients applied per acre.]</i> <i>[Show Common Fertilizers in Respondent Booklet.]</i>				3 <b>What quantity was applied per acre?</b> <i>[Leave this column blank if actual nutrients were reported.]</i>	4 <i>[Enter material code.]</i> 1 Pounds 12 Gallons 19 Pounds of actual nutrients	5 <b>When was this applied?</b> 6 In the previous fall 7 In the spring 8 In the summer	6 <b>How was this applied?</b> <i>[Refer to code list above.]</i>	7 <b>How many acres were treated in this application?</b>  <b>ACRES</b>
	N Nitrogen	P2O5 Phosphate	K2O Potash	S Sulfur					
	<b>01</b>	0205	0206	0207	0214	0208	0209	0210	0211
<b>02</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>03</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>04</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>05</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>06</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>07</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212
<b>08</b>	0205	0206	0207	0214	0208	0209	0210	0211	0212

<b>T - TYPE</b> 0	<b>TABLE</b> 000	<b>LINE</b> 00
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5. Were any fertilizers applied by custom applicators?

YES - [Continue]  NO - [Go to item 6]

a. Are you able to report the cost of fertilizer materials and custom application separately?

YES - [Continue]  NO - [Go to item 6]

OFFICE USE

0215

b. Excluding the cost of the fertilizer materials, how much was spent for custom application of fertilizers on this block?

(Include landlord and contractor costs. Include costs for sulfur and micronutrients. Exclude custom application of lime, gypsum, purchased manure & purchased compost.) [If material and application costs can't be separated, exclude them here and record the total in item 6.]

DOLLARS & CENTS PER ACRE

0219

OR

TOTAL DOLLARS

0220

DOLLARS & CENTS PER ACRE

0221

OR

TOTAL DOLLARS

0222

6. What was the TOTAL COST of all fertilizer products applied to this block?

(Include landlord and contractor costs. Include costs for sulfur and micronutrients. [If custom applied, include the cost of materials ONLY, unless materials and application costs cannot be separated.] Exclude lime, gypsum, purchased manure and purchased compost.)

CODE

0218

7. Was gypsum applied to this block for the 2007 apple crop?

YES = 1

CODE

0273

8. Were micro-nutrients applied to this block?

YES = 1

1=POUNDS 6=BINS, PLASTIC  
3=TONS 7=BINS, WOOD  
4=BUSHELS 8=BOXES

UNITS PER ACRE

0274

0275

9. What was your yield goal for this block?

CODE

0276

10. Did you apply calcium chloride in 2007 for the 2007 crop?

YES = 1

POUNDS PER ACRE

0277

OR

TOTAL POUNDS

0278

a. [If YES, ASK---]

How many pounds were applied?

11. Was a soil or plant tissue test performed on this apple block in 2006 or 2007 for the 2007 crop?

YES [Continue]  NO [Go to item 16]

CODE

0225

12. Was a soil test for phosphorus performed on this apple block in 2006 or 2007 for the 2007 crop?

YES = 1

POUNDS PER ACRE

0226

a. [If phosphorus test done, ask---]

How many pounds of phosphorus (per acre) were recommended (by the phosphorus test)?

CODE

0227

13. Was a soil test for nitrogen performed on this apple block in 2006 or 2007 for the 2007 crop?

YES = 1

POUNDS PER ACRE

0228

a. [If nitrogen test done, ask---]

How many pounds of nitrogen (per acre) were recommended (by the nitrogen test)?

14. Was a plant tissue test or leaf analysis for nutrient deficiency performed on this block in 2006 or 2007 for the 2007 crop?..... YES = 1

CODE  
0229

15. How much was spent for these soil and plant tissue tests on this block? [Include landlord and contractor costs.].....

DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS

0230 ..... 0231

a. If tests were done at no cost explain---

1 Soil/plant tissue test provided free of charge by dealer, crop consultant, or extension service.		CODE 0232
2 Soil/plant tissue test costs were included in the total fertilizer costs reported in item 6.		
3 Some other reason.		

16. [Enumerator Action: Refer to the Fertilizer Table, column 2. If nitrogen (N) was applied, complete items 17 and 18. If NO nitrogen applied, go to item 19.]

17. Was the amount of nitrogen you decided to apply to this block based on--- [Enter code "1" for all that apply.]

a. Results of a soil or plant tissue test?.....	YES = 1	CODE 0233
b. Crop consultant recommendation?.....	YES = 1	0234
c. Fertilizer dealer recommendation?.....	YES = 1	0235
d. Extension Service recommendation?.....	YES = 1	0236
e. Cost of nitrogen and/or expected commodity price?.....	YES = 1	0237
f. Contractor recommendation?.....	YES = 1	0238
g. Routine practice (operator's own determination based on past experience, yield goal, etc.)?.....	YES = 1	0239

18. Did you use any product to slow the breakdown of nitrogen on this block? (For example a nitrification inhibitor such as N-Serve or a urease inhibitor such as Agrotain)..... YES = 1

CODE  
0241

19. Is lime ever applied to this block?..... YES = 1

CODE  
0242

a. [If no lime applied, go to item 20, else continue.]

On average, how many years are there between applications of **lime** to this block?.....

YEARS  
0243

b. How many tons of **lime** were applied per acre the last time it was applied to this block?.....

TONS PER ACRE  
0244

c. Was lime applied to this block in 2006 or 2007 for the 2007 crop?..... YES = 1

CODE  
0240

d. [If rented, (Section B, item 2 =2, 3, 4, or 5) ask---]

Considering the last time it was applied, what percent of the total cost of lime and its application was paid by the landlord(s)?.....

PERCENT  
0245

20. Was unprocessed manure or other organic material (excluding compost) applied to this block for the 2007 apple crop? (Exclude commercially prepared manure.)

YES - [Enter code 1 and continue]

NO - [Go to item 22].

CODE

0246

ACRES

0247

a. How many acres in this block was manure applied to?

b. What was the amount of manure applied to this block?

- 1 TONS
- 2 GALLONS
- 3 BUSHELS

CODE

0248

AND

UNITS PER ACRE

0249

OR

TOTAL UNITS

0250

c. What is the distance between the manure storage/production location and this manured block?

MILES

0251

d. What was the capacity of the manure spreader used to apply manure to this block?

- 1 TONS
- 2 GALLONS
- 3 BUSHELS

CODE

0252

AND

TOTAL UNITS

0253

e. Of the total manure applied to this block for the 2007 crop, what was the percent of manure applied---

PERCENT

(i) in the fall?

+

0254

(ii) in the spring?

+

0255

(iii) in the summer?

+

0256

100%

f. Was the manure---

- 1 Lagoon liquid?
- 2 Slurry liquid?
- 3 Semi-dry or dry?

CODE

0257

g. Was the manure---

- 1 Broadcast or sprayed without incorporation?
- 2 Broadcast or sprayed with incorporation?
- 3 Injected/knifed in?
- 4 Sprayed using irrigation systems?

CODE

0258

h. Was the major source of the manure from---

- 1 Beef cattle?
- 2 Dairy cattle?
- 3 Hogs?
- 4 Sheep?
- 5 Poultry?
- 6 Equine?
- 7 Biosolids (municipal sludge, food waste, etc.)?
- 8 Other? (Specify)

CODE

0259

i. Was the manure---

- 1 Produced on this operation?
- 2 Purchased (including any payment for transportation or application)?
- 3 Obtained at no cost off this operation?
- 4 Obtained with compensation?  
(Operator received payment for accepting the manure.)

CODE

0260

j. Was any manure applied to this block tested for nutrient content prior to application? . . . . YES = 1 CODE  
0261

k. Was the application rate of commercial nitrogen fertilizer on this block reduced due to manure application? . . . . . YES = 1 CODE  
0262

[If YES, ask--]

(i) By what percent did you reduce the commercial nitrogen fertilizer application rate on this block? . . . . . PERCENT  
0263

l. Did you adjust the apple harvest date in this block due to the application of manure? . . . . YES = 1 CODE  
0280

21. Were the manure APPLICATION RATES to this block influenced by Federal, State, or local restrictions? . . . . . YES = 1 CODE  
0264

a. [If item 21 is YES, ask--]  
What basis was used to determine these manure application rate restrictions--

(i) Nitrogen requirement of the crop? . . . . . YES = 1 0265

(ii) Phosphorus requirement of the crop? . . . . . YES = 1 0266

22. Was compost applied to this block for the 2007 apple crop?

YES - [Enter code 1 and continue]     NO - [Go to Section D]. . . . . CODE  
0267

a. How many acres in this block was the compost applied to? . . . . . ACRES  
0268

b. What was the amount of compost applied to this block? . . . . .

1 Tons 2 Cubic Yards	CODE	0269	AND	UNITS PER ACRE	0270	OR	TOTAL UNITS	0271
-------------------------	------	------	-----	----------------	------	----	-------------	------

c. Were the major sources of the compost from-- . . . . .

1 Beef cattle? 2 Dairy cattle? 3 Hogs? 4 Sheep? 5 Poultry? 6 Equine? 7 Biosolids (food waste)? 8 Crop? (Specify) _____ 9 Other? (Specify) _____		FIRST	0281
		SECOND	0282
		THIRD	0283

[Enter up to 3 source codes]

d. Was the compost-- . . . . .

1 Produced on this operation? 2 Purchased (including any payment for transportation or application)? 3 Obtained at no cost off this operation? 4 Obtained with compensation? (Operator received payment for accepting the manure.)		CODE	0272
--	--	------	------

**NOTES**

**D PESTICIDE APPLICATIONS---SELECTED BLOCK**

**D**

Now I have some questions about all the pesticides used on this block for the 2007 apple crop including both custom applications and applications made by this operation.

1. Were any herbicides, insecticides, fungicides or other chemicals used on this apple block for the 2007 crop? ..... YES = 1

[Include biological pesticides such as Bt, insect growth regulators, pheromones, etc.]

[Probe for applications made in the fall of 2006 .]  
[If no pesticides applied, go to Section E.]

CODE	EDIT TABLE
0302	0301

**Include** fungicides, herbicides, insecticides, growth regulators and other pesticides.  
**Include** biological and botanical pesticides.

**Exclude** fertilizers reported earlier and seed treatments.  
**Exclude** any post harvest treatments.

T - TYPE	TABLE
3	001
LINE 99	OFFICE USE LINE IN TABLE 0319

CHEMICAL PRODUCT NAME	LINE	2 What products were applied to this block? [Show product codes from Respondent Booklet.]	3 Was this product bought in liquid or dry form? [Enter L or D]	4 Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]	5 When was this applied? 6 In the Fall 7 In the Spring 8 In the Summer	6 OR 7		8 [Enter unit code.] 1 Pounds 30 Grams 12 Gallons 40 Kilograms 13 Quarts 41 Liters 14 Pints 46 Spirals 15 Liquid Oz. 47 Packets 28 Dry Oz. 50 Other Specify _____)
						6 How much was applied per acre per application?	7 What was the total amount applied per application in this block?	
	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

2. [For pesticides not listed in Respondent Booklet, specify---]

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
5 In Irrigation water	9 Spot treatments
	10 Air Blast

**[ENUMERATOR NOTE:**

Use these columns only if TOTAL COST  
(item 4 on next page) cannot be provided.]

**]**

LINE	9	10	11	12	13	OPTIONAL ITEM 4	
	How was this product applied? <i>[Enter code from above.]</i>	How many acres in this block were treated with this product?  ACRES	How many times was it applied?  NUMBER	What percent of the rows were covered?  PERCENT	Were these applications made by—  1 Operator, Partner or family member? 2 Custom applicator? 3 Employee/Other?	What was the cost per unit of the product? UNIT CODE	
				100 All Rows 50 Every Other Row --- Other		DOLLARS and CENTS PER UNIT	1 Pounds 30 Grams 12 Gallons 40 Kilograms 13 Quarts 41 Liters 14 Pints 46 Spirals 15 Liquid Oz. 47 Packet 28 Dry Oz. 50 Other (Specify _____)
01	0311	0312	0313	0315	0316	0317	0318
02	0311	0312	0313	0315	0316	0317	0318
03	0311	0312	0313	0315	0316	0317	0318
04	0311	0312	0313	0315	0316	0317	0318
05	0311	0312	0313	0315	0316	0317	0318
06	0311	0312	0313	0315	0316	0317	0318
07	0311	0312	0313	0315	0316	0317	0318
08	0311	0312	0313	0315	0316	0317	0318
09	0311	0312	0313	0315	0316	0317	0318
10	0311	0312	0313	0315	0316	0317	0318
11	0311	0312	0313	0315	0316	0317	0318
12	0311	0312	0313	0315	0316	0317	0318
13	0311	0312	0313	0315	0316	0317	0318
14	0311	0312	0313	0315	0316	0317	0318

T-TYPE	TABLE	LINE
0	000	00

3. Were any chemicals or pesticides applied by custom applicators?

YES - [Continue]                       NO - [Go to item 4]

OFFICE USE

a. Are you able to report the cost of chemical product and custom application separately?

0324

YES - [Continue]                       NO - [Go to item 4]

b. Excluding the cost of the chemical product, how much was spent for custom application of chemicals and pesticides on this block?

(Include operator and landlord cost.) . . . . .

DOLLAR & CENTS  
PER ACRE

OR TOTAL DOLLARS

0331

0332

DOLLAR & CENTS  
PER ACRE

OR TOTAL DOLLARS

0334

0335

4. What was the TOTAL COST of all chemical products applied to this block? . . . . .

Include operator and landlord cost, defoliants, herbicides, insecticides, fungicides, surfactants, wetting agent and growth regulators.

**NOTE 1:** If respondent cannot report TOTAL COST, itemize cost for each product in optional columns in Pesticide Table.

**NOTE 2:** For custom applications: If respondent cannot report cost of chemical product separately from application costs, report both in item 4.





10. In 2007, how was this block primarily scouted for insects, weeds, diseases, and/or beneficial organisms---

- |   |  |
|---|--|
| 1 | By deliberately going to the block specifically for scouting activities? [Enter code 1 and go to item 11.] |
| 2 | By conducting general observations while performing routine tasks? [Enter code 2 and go to item 13.]       |
| 3 | This block was not scouted. [Enter code 3 and go to item 18.]  |

CODE  
0808

11. Was an established scouting process used (systematic sampling, recording counts, etc.) or were insect traps used in this block? .....

CODE  
0809  
YES = 1

12. Was scouting for pests done in this block due to---

- a. a pest advisory warning? .....
- b. a pest development model? .....

CODE  
0810  
0811  
YES = 1  
YES = 1

1	2	3
13. Was this apple block scouted for –	[If YES, ask---] Was the infestation level for [column 1]—	[If column 1 = YES, ask---] Who did the majority of the scouting for [column 1]---
YES = 1	CODE	CODE
a. Weeds? .....	1 Worse than normal 2 Normal 3 Less than normal	1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout
b. Insects or mites? .....		
(i) Codling Moth? .....		
(ii) Aphids? .....		
(iii) Thrips? .....		
(iv) Plum Curculio? .....		
(v) Other? .....		
c. Diseases? .....		
(i) Apple Scab? .....		
(ii) Flyspeck/Sooty Blotch? .....		
(iii) Powdery Mildew? .....		
(iv) Fireblight? .....		
(v) Other? .....		

14. [If item 13, column 3 = 3 or 4), ask--- else go to item 15.]

How much did you pay for the scouting services for this block?

[Include landlord and contractor cost]. .....

DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS  
0835 0836

a. [Note: If scouting performed at no cost, explain: .....

OFFICE USE  
0333

	<b>CODE</b>	
15. <b>Were written or electronic records kept for this block to track the activity or numbers of weeds, insects or diseases?</b> .....	YES = 1	0838
16. <b>Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests in block?</b> .....	YES = 1	0839
17. <b>Did you use field mapping of previous weed problems to assist you in making weed management decisions?</b> .....	YES = 1	0840
18. <b>Did you do any of the following other type(s) of pest management practices for the specific purpose of managing or reducing the spread of pests in this block?</b> [Enter code "1" for all that apply.]		<b>CODE</b>
a. Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for this block?.....	YES = 1	0841
b. Remove crop residue, leaf litter, or remove prunings?.....	YES = 1	0843
c. Maintain ground covers, mulches, or other physical barriers?.....	YES = 1	0845
[If 18c = 1, ask, else go to item 18d]		
(i) Was this a living mulch?.....	YES = 1	0832
d. Choose crop variety because of specific resistance to certain pest?.....	YES = 1	0846
e. Adjust harvesting dates?.....	YES = 1	0849
f. Chop, spray, mow or plow, lanes, ditches, roadways, or fences lines or row middles?.....	YES = 1	0850
g. Clean equipment and field implements after completing block work to reduce the spread of pests?.....	YES = 1	0851
h. Maintain a beneficial insect or vertebrate habitat?.....	YES = 1	0855
[If this is a <b>CERTIFIED ORGANIC</b> block, item 1a, <b>Section B</b> is positive, ask 18j]		
i. Maintain buffer strips or border rows to isolate organic apples from non-organic crops or land, or did you take a buffer harvest?.....	YES = 1	0856
j. Use a flamer to kill weeds?.....	YES = 1	0857
19. <b>Did you cultivate this block for weed control?</b> .....	YES = 1	0863
[If yes, ask --]		
a. How many times?.....		<b>NUMBER</b> 0864
20. <b>Were any beneficial organisms (insects, nematodes, fungi) applied or released in this block to manage pests?</b> .....	YES = 1	0853
21. <b>Were floral lures, attractants, repellants, pheromone traps or other biological pest controls used on this block?</b> .....	YES = 1	0858
[If item 20 or 21 = YES, ask--]		
a. <b>What were the TOTAL materials and application costs for all biological pests controls for this block?</b>		
[Include landlord's and contractor's share. Include cost for beneficial organisms (insects, nematodes, and fungi). Exclude biological pesticides].		
	<b>DOLLARS &amp; CENTS PER ACRE</b>	<b>OR TOTAL DOLLARS</b>
	0859	0860

22. Did you use any non-chemical controls for deer on this block? ..... YES = 1 CODE  
0830

[If YES, ask --]

a. What was the cost of all non-chemical deer control used on this block in 2007? (**Include** any controls other than permanent structures) ..... TOTAL DOLLARS  
0831

b. [NOTE: If non-chemical controls for deer done at no cost explain: \_\_\_\_\_]

23. Were water management practices such as irrigation scheduling, controlled drainage, or treatment of retention water used on this block to manage for pests or toxic producing fungi and bacteria (*i.e. aflatoxin*)? ..... YES = 1 CODE  
0861

24. Was protection of beneficial organisms a factor in your pest control decisions for this block? ..... YES = 1 0862

**PEST MANAGEMENT INFORMATION**

25. [Show Pest Management Information Sources Code List from Respondent Booklet.]

**Which outside sources of information on pest management practices and products were used for the 2007 apple crop?**

(Starting with the most influential in determining the pest management practices used on this operation, enter code(s) for up to 3 sources.)

**PEST MANAGEMENT INFORMATION SOURCES CODE LIST**

<p>1 County, Cooperative, or University Extension Advisor, Publications or demonstrations</p> <p>2 Farm Supply or Chemical Dealer</p> <p>3 Commercial Scouting Service</p> <p>4 Independent Crop Consultant or Pest Control Advisor/Custom Applicator</p> <p>5 Other Growers or Producers</p> <p>6 Producer Associations, Newsletters or Trade Magazines</p> <p>7 Electronic Information Services (DTN, Internet, World Wide Web, etc.)</p> <p>8 Employee Pest Advisor</p> <p>9 Packinghouse or warehouse consultant</p> <p>10 Product lists of approved organic products (OMRI, WSDA, etc.)</p> <p>11 Other – (Specify: _____)</p> <p>12 None – Operator used no <b>outside</b> information source</p>	<p>[Enter up to 3 source codes.]</p> <p><b>FIRST</b> 0865</p> <p><b>SECOND</b> 0866</p> <p><b>THIRD</b> 0867</p>
---	--

26. Other than pesticide applicator training, have you (the operator) attended any training session on pest identification and management since October 1, 2006? ..... YES = 1 CODE  
0868

Completion Code for Pest Management Data	
1- Incomp/R	0340

**1. Including custom operations, I need to list work performed by machines on this block for the 2007 apple crop. Please...**

- ▶ Begin with the first **block** operation after harvest of previous crop,
- ▶ 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? – [Skip columns 6-11]

**CHECK LIST**



**Include** all block work using machines for--

- Land Forming/Levee Building
- Tillage
- Preparing for Irrigation
- Fertilizer & Pesticide applications
- Harvesting
- Hauling to storage or first point of sale

**Exclude**

- Lime & Gypsum/landplaster applications
- Non-Commercial Manure applications & Compost

2 S E Q U E N C E  No.	3 What operation or equipment was used?	4 [Record machine code from Respondent Booklet.] CODE	5 Who was the machine operator- [Enter code from above.] CODE	[IF CUSTOM(column 5 = code 6), skip columns 6-11]					
				6 What was the size or swath of the [machine] used?	7 [Record size code.] CODE	8 How many acres were covered? [Exclude land forming and hauling operations] ACRES	OR 9 How many TOTAL HOURS were spent on land forming and hauling? [Example: backhoes, disk border maker, ditcher, rear mounted blade, trucks, wagons, forklifts, etc.] HOURS	10 Which Power Source was used? <sup>1/</sup> CODE	11 What was the fuel type of the tractor? [Record fuel type only if Power code equals 1-5] CODE
0351		0352	0353	0354	0355	0356	0359	0357	0358
0361		0362	0363	0364	0365	0366	0369	0367	0368
0371		0372	0373	0374	0375	0376	0379	0377	0378
0381		0382	0383	0384	0385	0386	0389	0387	0388
0391		0392	0393	0394	0395	0396	0399	0397	0398
0401		0402	0403	0404	0405	0406	0409	0407	0408
0411		0412	0413	0414	0415	0416	0419	0417	0418
0421		0422	0423	0424	0425	0426	0429	0427	0428
0431		0432	0433	0434	0435	0436	0439	0437	0438
0441		0442	0443	0444	0445	0446	0449	0447	0448
0451		0452	0453	0454	0455	0456	0459	0457	0458
0461		0462	0463	0464	0465	0466	0469	0467	0468
0471		0472	0473	0474	0475	0476	0479	0477	0478
0481		0482	0483	0484	0485	0486	0489	0487	0488
0491		0492	0493	0494	0495	0496	0499	0497	0498
0501		0502	0503	0504	0505	0506	0509	0507	0508
0511		0512	0513	0514	0515	0516	0519	0517	0518
0521		0522	0523	0524	0525	0526	0529	0527	0528

<sup>1/</sup> If a truck was used for hauling, use power source code 99. If a truck was used to power another machine, use truck codes in Respondent Booklet.

OFFICE USE

**ENUMERATOR NOTE: Please complete the checklist at top of page for this table.**

0032

2. Now I need some additional information about your labor. Exclude labor that was reported for block work performed by machines.

Please report the paid and unpaid labor that worked on this block to produce the 2007 apple crop.

TYPE OF WORKERS	1 How many hours did (type of worker) spend on this block---				
	a. scouting for weeds, insects and diseases?	b. irrigating?	c. hand pruning/thinning?	d. hand harvesting?	e. other work performed by hand?
	HOURS	HOURS	HOURS	HOURS	HOURS
You (the operator)	1101	1102	1229	1230	1103
Partner(s)	1104	1105	1231	1232	1106
Unpaid workers	1107	1108	1233	1234	1109
Paid part-time or seasonal workers (Exclude custom and contract labor)	1110	1111	1235	1236	1112
Paid full-time workers (Exclude custom and contract labor)	1113	1114	1237	1238	1115
Contract workers	1195	1196	1197	1199	1198

DOLLARS & CENTS  
PER HOUR

3. What was the average hourly wage rate paid to full-time hired workers on this block?  
(Exclude custom and contract workers, payroll taxes and benefits.)

1116

DOLLARS & CENTS  
PER HOUR

4. What was the average hourly wage rate paid to part-time or seasonal hired workers on this block?  
(Exclude custom and contract workers, payroll taxes and benefits.)

1117

CODE

5. Was any contract labor used on this block? YES = 1

1118

DOLLARS & CENTS  
PER ACRE

OR

TOTAL DOLLARS

a. If YES, ask – What was the average cost per acre for this contract labor?  
(Include landlord and contractor costs.)

1119

1239

PERCENT

6. What percent of the total hours worked on this block by UNPAID workers was worked by children under 16 years old?

1120

7. Now I need some information on how much was spent for custom services used on this block for the 2007 apple crop.

1	2
CUSTOM SERVICE	Including landlord's/contractor's cost, how much was spent for [column 1] on this block for the 2007 apple crop?
Which of these services were done for the 2007 apple crop on this block? [Check <input checked="" type="checkbox"/> box for each service performed; refer to Item 1, column 5 if necessary.]	DOLLARS & CENTS PER ACRE
<input checked="" type="checkbox"/> a. custom harvesting?.....	1124 _____
<input type="checkbox"/> b. custom hauling to storage or point of first sale?..... ( _____ X _____ ÷ _____ = _____ Dollars & Cents per acre.)	1126 _____
<input type="checkbox"/> c. custom harvesting and hauling from field to storage or point of first sale?..... ( _____ X _____ ÷ _____ = _____ Dollars & Cents per acre.)	1127 _____

8. Did you hire any technical or consultant services to make recommendations for this block? (such as for nutrient, pest control, irrigation, or precision farming recommendations)

YES - [Continue]       NO - [Go to Section G]

	CODE
a. Nutrient recommendations/management service?..... YES = 1	1129
b. Collect soil or tissue samples?..... YES = 1	1130
c. Pest control recommendations/management service?..... YES = 1	1131
d. Pest scouting?..... YES = 1	1132
e. Irrigation management service (i.e. irrigation scheduling)?..... YES = 1	1133
f. Yield map or remote sensing map development/interpretation?..... YES = 1	1134
g. Other custom or technical service? (Specify: _____) ..... YES = 1	1135

9. If YES to any of these services, what was the cost for all of these services?

(Include landlord/contractor cost.

Exclude cost of 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.)

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1136 _____		1137 _____

ACRES

1. How many acres in this block were irrigated for the 2007 apple crop?

[If none, go to Section H]. . . . .

1160	.____
------	-------

2. Now, I have some questions about irrigation systems and water used on this block for the 2007 apple crop.

		UNIT	SYSTEM 1	SYSTEM 2
↓				
a. What type(s) of irrigation system(s) was used to irrigate this block? [Show System Type Codes in the Respondent Booklet. Enter System Type Code for up to two systems covering the most field acres.]		SYSTEM TYPE CODE	1161	1175
b. What was the total quantity of water applied to this block during the entire growing season? [Include ALL water used from both on-farm and off-farm sources]. . . . .		INCHES PER ACRE	1162	1176
		OR TOTAL ACRE-FEET	1163	1177
[If operator cannot provide item 2b, ask (i) & (ii)---, else go to 2c]				
(i) What is the total number of hours this system was used to apply water to this block during the apple growing season? . . . . .		TOTAL HOURS	1164	1178
(ii) How many gallons per minute were applied? . . . . .		GALLONS PER MINUTE	1165	1179
c. What percent of the water used to irrigate this block through this system came from surface water sources? . . . . .		PERCENT	1166	1180
d. What was the number of times this block was irrigated during the apple growing season using this system? [Include any pre-plant irrigation.]		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 SYSTEM), ask---] 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), ask---] What was the average flow rate? . . . . .		GALLONS PER MINUTE	1173	1187
k. How many other acres on this operation were irrigated using this block's irrigation system during the 2007 growing season? (Exclude this block)		ACRES	1174	1188

DOLLARS & CENTS  
PER ACRE

OR TOTAL DOLLARS

3. What was the cost of the fuel or electricity used to irrigate this block? . . . . .

1189	.____
------	-------

1190
------



4. Was any water purchased to irrigate this block?

(Include landlord's share and purchases from all sources.)

CODE

YES - [Enter code 1 and continue]

NO - [Go to item 5].

1191

PERCENT

a. What percent of the water used on this block was purchased?

1192

DOLLARS & CENTS PER ACRE

OR

TOTAL DOLLARS

b. What was the total cost for the water purchased for this block during the 2007 growing season?

(Include landlord and contractor costs and ditch maintenance costs).

1193

1194

5. [If SIPHON TUBES were used (item 2a = 10 or 11), ask--]

TOTAL DOLLARS

What would be the total cost to replace all the siphon tubes used on this block?

1201

6. [If POLY PIPE system were used (item 2a = 14) ask--]

TOTAL DOLLARS

What was the total amount spent for poly pipe used on this block during the 2007 growing season?

1202

7. [If GATED PIPE system were used (item 2a = 15 or 16), ask--]

INCHES

a. What was the average diameter of gated pipe used to irrigate this block?

1203

FEET

b. What was the total length of gated pipe used?

1204

8. Were wells used to supply irrigation water for this block?

CODE

YES - [Enter code 1 and continue]

NO - [Go to item 9].

1205

NUMBER

a. How many wells were used to irrigate this block?

1206

INCHES

b. What was the average diameter of the outer well casing?

1207

FEET

c. 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 water level caused by pumping during the irrigation season].

1208

CODE

d. Did this well(s) have a water meter or other flow measurement device? YES = 1

1209

e. Were other blocks irrigated using water pumped from well(s) that supplied water to the selected block?

CODE

YES - [Enter code 1 and continue]

NO - [Go to item 9].

1210

ACRES

(i) Excluding this block, how many other acres on this operation were irrigated using the same well(s) during the 2007 growing season?

1211

9. **Was any mainline or lateral pipe used to carry water from the source to the system in the orchard block?**  
(*Include underground pipe. Exclude any system pipe within the orchard block.*)

**YES** - [Continue]

**NO** - [Go to item 10]

a. What was the average diameter (*in inches*) of the most common type of this pipe used? .....

**INCHES**

1212
------

b. How many feet of this additional pipe were used to bring water to this block? .....

**FEET**

1213
------

<b>RUN-OFF CODES</b>	
1	retained at the end of the block?
2	reused to irrigate on the farm?
3	collected in evaporation ponds on the farm?
4	drained from the farm?
5	there is no run-off.

10. **Is the run-off from this block** .....

**CODE**

1214
------

1. In response to high fuel prices during the 2007 apple crop year, did you:

- a. reduce the number of block operations such as tillage, cultivation, or nutrient and pesticide applications on this block (i.e., compared to what you would have otherwise done )? ..... YES = 1 CODE  
1220
- b. reduce the amount of irrigation water on this block (i.e., compared to what you would have otherwise applied)? ..... YES = 1 1222
- c. change other production practices on this block? [If yes, specify \_\_\_\_\_] YES = 1 1223

2. In response to high fertilizer prices during the 2007 crop year for apples, did you:

- a. reduce the application rate of commercial nitrogen fertilizer on this block (i.e., compared to what you would have otherwise applied )? ..... YES = 1 1224
- [If YES, ask--]
- (i) by what percent did you reduce the amount of commercial nitrogen fertilizer for 2007? ..... PERCENT  
1225
- b. change the type of commercial nitrogen fertilizer products applied on this block (i.e., compared to what you would have otherwise applied)? [e.g. less anhydrous ammonia and more UAN]. ..... YES = 1 CODE  
1226
- c. increase the application rate of manure or other organic fertilizers on this block (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 block (i.e., compared to what you would have otherwise done)? ..... YES = 1 1228

# CONCLUSION

## LOCATION OF SELECTED BLOCK

1. I need to locate the selected block of apple on this map.

COUNTY NAME

OFFICE USE  
COUNTY FIPS  
CODE

What county is the apple block in? .....



Block description .....

## FOR STATES WITH GPS UNITS ONLY

LATITUDE

LONGITUDE

Block location .....

N

0054	_____ . _____ . _____
	d d . m m s s

W

0055	_____ . _____ . _____
	d d d . m m s s

2. [ENUMERATOR ACTION:

*Mark map to indicate where the selected apple block is located.  
Be sure the "X" marked on map is in the county identified above.]*

3. We will need additional information to complete this study. We will contact you in February or March 2008 to collect it. I'll call you then to set up a time that is good for you.

4. Would you like to receive a free copy of the results of this survey in the mail?

(Results will also be available on the Internet at <http://www.nass.usda.gov/> & <http://www.ers.usda.gov/>.) ..... YES = 1

CODE

HH MM

5. ENDING TIME [MILITARY] .....

## RECORDS USE

6. [Did respondent use farm/ranch records to report--]

a. [fertilizer data?] ..... YES = 1

b. [pesticide data?] ..... YES = 1

c. [majority of this expense data?] ..... YES = 1

CODE

0011
0012
0013

## SUPPLEMENTS USED

7. [Record the total number of each type of supplement used to complete this interview.] .....

FERTILIZER APPLICATIONS  
PESTICIDE APPLICATIONS  
FIELD OPERATIONS

NUMBER

0041
0042
0043

Reported by: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

PARTNERS STRATUM SAMPLE 182					Duplication Adjustor		Office Use for POID			
OFFICE USE	0925	0926	0927	0928	0922		0789			
Response	Respondent		Mode		Enum	Eval.	Date		Optional	
							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
_____ <b>07</b> _____										
S/E Name										