NATIONAL AGRICULTURAL STATISTICS SERVICE
U.S. Department of Agriculture
Rm 5829, South Building
1400 Independence Avenue, S.W.
Washington, D.C. 20250-2000
1-800-727-9540
Fax: 202-690-2090
E-mail: nass-dc@nass.usda.gov

ERS
ECONOMIC RESEARCH SERVICE

AGRICULTURAL RESOURCE MANAGEMENT SURVEY
SOYBEAN PRODUCTION PRACTICES and COSTS REPORT for 2002

Form Approved
O.M.B. Number 0535-0218
Approval Expires 12/31/03
Project Code 906
Phase II

VERSION	ID	TRACT	SUBTRACT	T-TYPE	TABLE	LINE
02	__ __ __ __ __ __ __ __ __	01	____ ____	0	000	00

CONTACT RECORD		
DATE	**TIME**	**NOTES**

R CODES 3 - COMPLETE 5 - OUT OF SCOPE 8 - REFUSAL 9 - INAC./INCOMPL.	
	0910
OPTIONAL	0002
OPTIONAL	0003

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

We are collecting information on practices and costs to produce soybean and need your help to make the information as accurate as possible. Authority for collection of information on the Soybean 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 __ __ __ __

SCREENING BOX 0006

[***ENUMERATOR NOTE*: *If Screening box is code 1, complete the Screening Supplement. If Screening box is not coded, begin with Section* A.]

DRAFT JULY 10, 2002 V9

OFFICE USE

Completion Code 3 = ZERO TARGET 0008

☐ [*Name, address and partners verified and updated if necessary.*]

PARTNERS: **POID** _ _ _ _ _ _ _ _ _ _				**POID** _ _ _ _ _ _ _ _ _ _			
PARTNER NAME				*PARTNER NAME*			
ADDRESS				*ADDRESS*			
CITY	*STATE*	*ZIP*	*PHONE NUMBER*	*CITY*	*STATE*	*ZIP*	*PHONE NUMBER*
POID _ _ _ _ _ _ _ _ _ _				**POID** _ _ _ _ _ _ _ _ _ _			
PARTNER NAME				*PARTNER NAME*			
ADDRESS				*ADDRESS*			
CITY	*STATE*	*ZIP*	*PHONE NUMBER*	*CITY*	*STATE*	*ZIP*	*PHONE NUMBER*

A SOYBEAN FIELD SELECTION A

1. **How many acres of soybeans did this operation plant for the 2002 crop year?**
   [▸ *If no acres planted, review Screening Survey Information Form. Make notes, then go to item 4 on back page.*] . . . . . **TOTAL PLANTED ACRES** 0019 •____

2. **How many of the total** [*item 1*] **soybean acres were--**

		ACRES
a.	owned by this operation?	0044 •____
b.	rented for CASH with the payment being a fixed cash amount? . . .	0045 •____
c.	rented for CASH with the payment being a flexible cash amount? (*Rent paid depends on prices and/or yields, or is otherwise not a fixed amount*) . . .	0046 •____
d.	rented for a SHARE of the crop?	0047 •____
e.	rented for some combination of CASH and SHARE of the crop? . . .	0048 •____
f.	used rent FREE?	0049 •____

[*Total must equal item 1.*]

3. I will follow a simple procedure to make a random selection from the soybean fields planted for the 2002 crop.

   What is the TOTAL number of soybean fields that were planted on this operation? . . . **TOTAL NUMBER OF FIELDS PLANTED** 0020

   [*If only 1 field, enter 1 and go to item 5.*]

4. **Please list these fields according to identifying name/number or describe each field. Then I will tell you which field has been selected.**
   - [*If there are more than 18 fields make sure item 3 is **TOTAL** fields planted, and list only the 18 fields closest to the operator's permanent residence.*
   - *If respondent is unable to identify or describe the fields, use the Field Selection Grid Supplement.*]

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 _____

A SOYBEAN FIELD SELECTION A

APPLY "RANDOM NUMBER" LABEL HERE

5. [**ENUMERATOR ACTION:**
Circle the pair of numbers on the above label associated with the last numbered field in item 4.
Select the field according to the number you circled on the label, and record the selected number.
If only 1 field, enter 1.] . . . . . .

SELECTED FIELD NUMBER
0021

6. **The field selected is (*field name/number/description*).**
During this interview, the soybean questions will be about this selected soybean field.
[*Be sure the operator can identify the selected field.*]

OFFICE USE
OY Field Substituted
0022

B FIELD CHARACTERISTICS---SELECTED FIELD B

1. **How many acres of soybeans did this operation plant in this field for the 2002 crop?** . . . . . ACRES 0935 ._

2. **Were the acres in this field--** . . CODE 0936

   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 SHARE of the crop?
   5 rented for some combination of CASH and SHARE of the crop?
   6 used RENT-FREE?

3. [*If field is CASH RENTED* (*item 2 = 2, 3 or 5*), *ask*--]

   What was the cash rent paid per acre for this 2002 soybean crop? . . . . . DOLLARS & CENTS PER ACRE 0937 ._ _

4. [*If field is SHARE RENTED* (*item 2 = 4 or 5*), *ask*--]

   What was the landlord's share of the crop from this field? . . . . . PERCENT 0938

5. **What year did you start operating this field?** . . . . . YEAR 0939 ____ ____ ____ ____

   a. Do you EXPECT to be operating this field for the next 5 years (*through the 2007 crop year*)? . . . . . YES = 1 CODE 0940

6. **On what date was this field planted?** . . . . . MM DD YY 0941 __ __ __ __ __ __

7. **What was the seeding rate per acre the first time this field was seeded?** . . . . . UNITS PER ACRE 0942 ._ | 0943

   UNIT CODES for Seeding Rate
   1=POUNDS
   2=CWT
   4=BUSHELS
   25=KERNELS/SEEDS

   a. Was the soybean seed-- . . . . . CODE 0944

   1 DRILLED?
   2 PLANTED IN CONVENTIONAL ROWS?
   3 BROADCAST on this FIELD?

8. [*If DRILLED or PLANTED* (*item 7a = 1 or 2*), *ask*--]

   What was the average soybean row width? . . . . . INCHES 0945

9. **Was the source of the soybean seed–** . . . CODE 0946

   1 Purchased?
   2 Homegrown or traded?
   3 Both?

   a. [*If item 9 = 2 or 3, ask*--]

   How much of the soybean seed planted in this field was grown (*or received in trade*) by this operation . . . . . PERCENT 0947

   (1) What was the cost per bushel for cleaning and treating this seed? . . . . . DOLLARS & CENTS PER BUSHEL 0948 ._ _

10. **How many acres in this field had to be reseeded to soybeans?** (*Number of acres times the number of times reseeded.*) . . . . . ACRES 0949 ._

B FIELD CHARACTERISTICS---SELECTED FIELD B

11. **What was the total cost per unit** (*including both your and the landlord's and contractor's share*) **of purchased seed for this field?**
(***Include*** *cost of seed treatment and any seed technology fee.*) . . . . . .

DOLLARS & CENTS PER UNIT	UNIT CODE (1 = POUNDS, 2 = CWT, 4 = BUSHEL, 22 = ACRE, 23 = 50 POUND BAG)
0950 . _ _	0951

SEED TYPE *for item 12* - SOYBEAN
1 Genetically-modified **herbicide resistant** seed variety (*e.g. Roundup Ready*)
2 Non-genetically-modified **herbicide resistant** seed variety (*e.g. STS-soybeans*)
6 *None of the above*

12. **Which type of soybean seed was used on the majority of this field–**
[*Show Seed Type Code List from Respondent Booklet, and choose one code.*]

	CODE
a. in 2002?	0952
b. in 2001? [***Leave blank if soybeans were not in this field in 2001.***]	0953

13. [*If item 12a = 1 or 2, ask--*]
Resistant seed varieties offer several benefits.

Did you choose the resistant seed variety used on this field primarily to–

1	Increase yields through improved weed control?
2	Decrease herbicide input costs?
3	Decrease machinery costs?
4	Improve ability to use or ease of using reduced tillage or no-till systems?
5	Improve ability 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(s)? [*Specify* _____]

. . . . . CODE 0954

14. [*If item 12a = 2 or 6, ask--*]

Were the soybeans from this field sold (*or will be sold*) through a market specifically for non-genetically modified soybeans? . . . . . **YES = 1** CODE 0955

a. [*If item 14 = YES, ask--*]

What was the price premium (*or the expected premium if not yet sold*) received for these non-genetically modified soybeans? . . . . . CENTS per BUSHEL 0956

15. **Has harvest of this field been completed?** . . . . . **YES = 1** CODE 0957

B FIELD CHARACTERISTICS---SELECTED FIELD B

16. **Now I need information about the acres harvested** (*or to be harvested*) **and the yield from this field.**

1 **How many acres in the soybean field were** (*will be*)--	2 **ACRES**	3 **What yield per acre did you get** (*do you expect to get*) **for--** **UNITS PER ACRE**	4 1 = POUNDS 2 = CWT 3 = TONS 4 = BUSHELS **UNIT CODES**
a. harvested for beans?	0958 •____	0959 •____	0960
b. harvested for hay or other forage crop?	0961 •____	0962 •____	**TONS**
c. abandoned?	0963 •____		
d. used for some other purpose?	0966 •____		

CROP CODE LIST *for item 17* **PREVIOUSLY PLANTED CROP was–**			
1 Alfalfa hay	196 Tobacco, flue cured	16 Peanuts	26 Soybeans
11 Hay, all other	193 Tobacco, burley	17 Dry Peas	28 Sugarbeets
190 Barley	281 Cotton, Upland	20 Potatoes	30 Sunflowers
3 Dry Beans	282 Cotton, Pima	21 Rice	142 Vegetables
85 Canola	302 CRP	22 Rye	163 Wheat, durum
310 Clover	311 Grasses other than clover	98 Safflower	164 Wheat, other spring
6 Corn for grain	94 Mustard	25 Sorghum for grain	165 Wheat, winter
5 Corn for silage	15 Oats	24 Sorghum for silage	318 ***No crop planted*** *during this period*
38 Corn for seed	31 Sweetpotatoes		

17. **Next I need to know what crops were previously PLANTED on this field, including cover crops.**

1 **What crop was PLANTED on this field in–**	**CROP NAME**	**CROP CODE**	2 **Was this crop irrigated?** **YES = 1**	3 **Was this crop no-tilled?** 1/ **YES = 1**
a. **FALL** of 2001?		0969	0970	0971
b. **SPRING/SUMMER** of 2001?		0972	0973	0974
c. **FALL** of 2000?		0975	0976	0977
d. **SPRING/SUMMER** of 2000?		0978	0979	0980
e. **FALL** of 1999?		0981	0982	0983
f. **SPRING/SUMMER** of 1999?		0984	0985	0986

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

B FIELD CHARACTERISTICS---SELECTED FIELD B

1 18. **In 2002, did your land-use practices for this field include--**	CODE	2 **In what year were the** (*column 1*) **established in this field?** YEAR	[*If* (*column 1*) *were established before operator began operating this field, enter* ***code 1***.] CODE	3 **In 2002, did** (*or will*) **the Federal or State government pay an annual rental payment for keeping this conservation practice in place?** YES = 1
a. terraces? . . . . . **YES = 1**	0987	0988 ___ ___ ___ ___	0989	
b. temporary or permanent levees? . **YES = 1**	0990	0991 ___ ___ ___ ___	0992	
c. grassed waterways? . . . . . **YES = 1**	0994	0995 ___ ___ ___ ___	0996	0997
d. filter strips or riparian buffers on or adjoining the field? . . . . . **YES = 1**	0998	0999 ___ ___ ___ ___	1000	1001
e. contour farming? . . . . . **YES = 1**	1002			
f. strip cropping? . . . . . **YES = 1**	1003			
g. underground outlets such as tile drainage? . . . . . **YES = 1**	1004			
h. other drainage channels or diversions? . . . . . **YES = 1**	1005			

CODE

19. **Has the Natural Resource Conservation Service** (NRCS) **classified any part of this field as "Highly Erodible"?** . . . . . **YES = 1** 1006

20. **Have you been notified by NRCS that this field contains a wetland?** . . . . . **YES = 1** 1007

21. **In 2002, did you receive technical assistance for planning, installing, maintaining, or using conservation practices or systems on this field?**
(***Include*** *grassed waterways and filter strips or riparian buffers on or adjoining this field.* ***Include*** *assistance from any source whether paid for or free.*) . . . . . **YES = 1** 1008

22. **In 2002, did you** (*or will you*) **receive cost-sharing or incentive payments for conservation practices on this field** [*Be sure to include payments for establishing grassed waterways and filter strips or riparian buffers on or adjoining the field, but exclude rental payments reported in column 3, item 18c and item 18d above.*]**?**
(***Include*** *payments received from any source by either the owner or operator.* ***Exclude*** *rental payments for keeping the land in these practices.*) . . . . . **YES = 1** 1009

B FIELD CHARACTERISTICS---SELECTED FIELD B

23. **During 2002, did any written plan of the following types cover this field and, if so, in what year was the plan implemented?**
(*A "written plan" is a plan prepared in accordance with Federal, State or district standards.*)

	CODE	YEAR IMPLEMENTED
a. Soil conservation plan specifying practices to reduce soil erosion? . . . **YES=1**	1010	1011 ____ ____ ____ ____
b. Nutrient management plan specifying practices for applying commercial fertilizer? . . . . . **YES=1**	1012	1013 ____ ____ ____ ____
c. Nutrient management plan specifying practices for land application of manure? . . . . . **YES=1**	1014	1015 ____ ____ ____ ____
d. Pest management plan specifying pesticide use and/or other practices for controlling weeds, insects, or plant disease? . . . . . **YES=1**	1016	1017 ____ ____ ____ ____
e. Irrigation water management plan specifying practices for applying or conserving irrigation water? . . . . . **YES=1**	1018	1019 ____ ____ ____ ____

24. **Was the soybean crop on this field covered by Crop Insurance in 2002?**

CODE

☐ **YES** - [*Enter code 1 and continue.*] . . . . . **YES=1** 1020

☐ **NO** - [*Go to Section* **C**.]

If YES, which coverages did you obtain?
[*Enter code for all that apply.*]

a. **Basic Catastrophic Insurance** (Federal CAT) bought for a flat fee and protects against crop loss greater than 50% of average yield, at 55% of the price. . **YES=1** 1021

b. **Buy-up on Basic Federal CAT** for higher levels of yield and price protection (*such as 65% of yield and 100% price, Multiperil Crop Insurance*) . . . . . **YES=1** 1022

c. **Revenue Insurance** include Income Protection (IP), Crop Revenue Coverage (CRC), and Revenue Assurance (RA). . . . . **YES=1** 1023

d. **Other Federal Crop Insurance** (*Group Risk Plan, Adjusted Gross Revenue, Group Risk Income Protection, etc.*) . . . . . **YES=1** 1024

e. **Other Private Crop Insurance** (*Hail, wind, freeze, etc.*) . . . . . **YES=1** 1025

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

	CODE	EDIT TABLE
1. **Were commercial FERTILIZERS applied to this field for the 2002 soybean crop?** . . . . . YES=1	0230	0201

[*If COMMERCIAL fertilizer applied, continue, else go to item 5.*]

	NUMBER
2. **How many commercial fertilizer applications were made to this field for the 2002 crop** (*include applications made by airplanes and commercial applicators*)**?**	0231

3. **Now I need to record information for each application.**

CHECK LIST

INCLUDE	EXCLUDE
☐ Custom applied fertilizers	☐ Micronutrients
☐ Fertilizer applied in the fall of 2001 and those applied earlier if this field was fallow in 2001	☐ Unprocessed manure
☐ Commercially prepared manure	☐ Fertilizer applied to previous crops in this field
	☐ Lime and Gypsum

	T-TYPE	TABLE
	2	001
LINE 99	OFFICE USE LINES IN TABLE	0213

LINE	2 → → → MATERIALS USED [*Enter percentage analysis or actual pounds of plant nutrients applied per acre.*] [*Show Common Fertilizers in Respondent Booklet.*]			3 What quantity was applied per acre? [*Leave this column blank if actual nutrients were reported.*]	4 [*Enter material code.*] 1 Pounds 12 Gallons 19 Pounds of actual nutrients	5 When was this applied? 1 In the fall Before seeding 2 In the spring Before seeding 3 At seeding 4 After seeding	6 How was this applied? 1 Broadcast, ground without incorporation 2 Broadcast, ground with incorporation 3 Broadcast, by air 4 In seed furrow 5 In irrigation water 6 Chisel, injected or knifed in 7 Banded/Sidedressed in or over row 8 Foliar or directed spray	7 How many acres were treated in this application? ACRES
	N Nitrogen	P_2O_5 Phosphate	K_2O Potash					
01	0205	0206	0207	0208	0209	0210	0211	0212 •___
02	0205	0206	0207	0208	0209	0210	0211	0212 •___
03	0205	0206	0207	0208	0209	0210	0211	0212 •___
04	0205	0206	0207	0208	0209	0210	0211	0212 •___
05	0205	0206	0207	0208	0209	0210	0211	0212 •___
06	0205	0206	0207	0208	0209	0210	0211	0212 •___
07	0205	0206	0207	0208	0209	0210	0211	0212 •___
08	0205	0206	0207	0208	0209	0210	0211	0212 •___
09	0205	0206	0207	0208	0209	0210	0211	0212 •___
10	0205	0206	0207	0208	0209	0210	0211	0212 •___

T-TYPE	TABLE	LINE
0	000	00

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

T-TYPE	TABLE	LINE
0	000	00

4. **Not including the cost of fertilizer materials, how much was spent for CUSTOM APPLICATION of fertilizers on this field for the 2002 soybean crop?**
(***Include landlord and contractor costs.***
Exclude *custom application of lime, gypsum & purchased manure.*)
[*If material and application costs can't be separated,* ***exclude*** *them here and record the total in item 5.*] . . . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0232 •___ ___		0233

5. **What was the TOTAL MATERIALS cost for all fertilizer, soil conditioners, micronutrients, etc. applied to this field for the 2002 soybean crop?**
(***Include landlord and contractor costs***.
Exclude *lime, gypsum and purchased manure.*
If custom applied, ***include*** *the cost of materials ONLY, unless materials and application costs cannot be separated.*
Include *materials applied to this field before planting and during 2001 fallow period.*) . . . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0234 •___ ___		0235

UNIT CODES
1=POUNDS
2=CWT
3=TONS
4=BUSHELS

UNITS PER ACRE	
0236 •___	0237

6. **What was your yield goal** (*or expected yield*) **for this field?** . . . . . .

7. **Was a soil test for phosphorus performed on this soybean field in 2001 or 2002 for the 2002 crop?** . . . . . **YES = 1** — CODE: 0238

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

   How many pounds of phosphorus (*per acre*) were recommended (*by the phosphorus test*)? . . . . . — POUNDS PER ACRE: 0239

8. **Was a soil test for nitrogen performed on this soybean field in 2001 or 2002 for the 2002 crop?** . . . . . **YES = 1** — CODE: 0240

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

   How many pounds of nitrogen (*per acre*) were recommended (*by the nitrogen test*)? . . . . . — POUNDS PER ACRE: 0241

9. **Was a plant tissue test for nutrient deficiency performed on this field in 2001 or 2002 for the 2002 soybean crop?** . . . . . **YES = 1** — CODE: 0242

10. [*If soil or plant tissue test done, ask–; else go to item 11.*]

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

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0243 •___ ___		0244

a. If tests were done at no cost, explain-- . . . . . — CODE: 0245

1 Soil/plant tissue test provided free of charge by dealer or crop consultant

2 Soil/plant tissue test costs were included in the total fertilizer costs reported in item 5

3 Some other reason

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

11. [***Enumerator Action: Refer to the Fertilizer Table, column 2.***
If nitrogen (N) *was applied, complete items 12 and 13.*
If NO nitrogen applied, go to item 14.]

12. **Was the amount of nitrogen you decided to apply to this field based on–**
[*Enter code for all that apply*.]

		CODE
a.	Results of a soil or plant tissue test? . . . . . YES = 1	0246
b.	Crop consultant recommendation? . . . . . YES = 1	0247
c.	Fertilizer dealer recommendation? . . . . . YES = 1	0248
d.	Extension service recommendation? . . . . . YES = 1	0249
e.	Cost of nitrogen and/or expected commodity price? . . . . . YES = 1	0250
f.	Routine practice (*operator's own determination based on past experience, yield goal, etc.*)? . . . . . YES = 1	0251

13. **Did you use any product to slow the breakdown of nitrogen on this field?**
(*For example a nitrification inhibitor such as N-Serve or a urease inhibitor such as Agrotain*) . . . . . YES = 1 — 0252

CODE

14. **Was lime ever applied to this field?** . . . . . YES = 1 — 0253

a. [*If no lime applied, go to item 15–else continue.*]

YEARS

On average, how many years are there between applications of **lime** to this field? 0254

TONS PER ACRE

b. How many tons of **lime** were applied per acre the last time it was applied to this field? . . . . . 0255 •__ __

c. [*If rented, ask--*]

PERCENT

Considering the last time it was applied, what percent of the total cost of **lime** and its application was paid by the landlord(s)? 0256

CODE

15. **Was sulfur applied to this field for the 2002 crop?** . . . . . YES = 1 — 0257

a. [*If sulfur applied, ask--*]

POUNDS PER ACRE

How many pounds of sulfur were applied per acre? . . . . . 0258 •__ __

CODE

16. **Was gypsum applied to this field for the 2002 crop?** . . . . . YES = 1 — 0259

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

17. **Was manure applied to this field for the 2002 soybean crop?**
(***Exclude*** *commercially prepared manure.*)

CODE

☐ **YES** - [*Enter code 1 and continue.*] 0260

☐ **NO** - [*Go to* ***Section*** **D**.]

ACRES

a. How many acres was manure applied to? . . . . . 0261 •___

b. What was the total amount of manure applied to this field? . . . 1 - TONS / 2 - GALLONS / 3 - BUSHELS . . . . CODE 0262 **AND** TOTAL UNITS 0263 •___ ___ **OR** UNITS PER ACRE 0264 •___ ___

MILES

c. What is the hauling distance between the manure storage and the manured field? . . . . . 0265 •___

d. What was the capacity of the manure spreader used to apply manure to this field? . . . 1 - TONS / 2 - GALLONS / 3 - BUSHELS . . . . . CODE 0266 **AND** TOTAL UNITS 0267 •___ ___

e. What percent of the total manure was applied--

PERCENT

(1) in the fall before planting? . . . . . + 0268

(2) in the spring before planting? . . . . . + 0269

(3) after planting? . . . . . + 0270

100%

f. Was the manure--

1 Dry Broadcast *without* incorporation?
2 Dry Broadcast *with* incorporation?
3 Liquid Broadcast *without* incorporation?
4 Liquid Broadcast *with* incorporation?
5 Injected/knifed in?

. . . . . CODE 0271

g. 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 0272

h. Was the manure--

1 Produced on this operation?
2 Purchased?
3 Obtained at no cost off this operation?

. . . . . CODE 0273

C FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD C

CODE

18. **Were the manure APPLICATION RATES to this field influenced by State or local restrictions?** . . . . . **YES = 1** | 0274 |

a. [*If item 18 = YES, ask*--]

What basis was used to determine these manure application rate restrictions--

(1) Nitrogen requirement of the crop? . . . . . **YES = 1** | 0275 |

(2) Phosphorus requirement of the crop? . . . . . **YES = 1** | 0276 |

D PESTICIDE APPLICATIONS---SELECTED FIELD D

1. **Including both custom applications and applications made by this operation, let's list all the chemicals used on this field for the 2002 soybean crop.**

Were any herbicides, insecticides, fungicides or other chemicals used on the soybean field for the 2002 crop? . . . . . **YES = 1**

CODE	EDIT TABLE
0320	0301

[*Probe for applications made in the fall of 2001* (*and those made earlier if this field was fallow*). *If no pesticides applied, go to Section* **E**.]

Include *defoliants, fungicides, herbicides, insecticides and pesticides.*
Include *biological and botanical pesticides.*

Exclude *fertilizers reported earlier and seed treatments.*

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

Record all pesticide applications on selected field below

NOTES	LINE	2 What products were applied to this field? [*Show product codes from Respondent Booklet.*] PRODUCT CODE	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? 1 BEFORE planting 3 AT planting 4 AFTER planting	6 OR 7 How much was applied per acre per application?	7 What was the total amount applied per application in this field?	8 [*Enter unit code.*] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Ounces 30 Grams
	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 Tradename and Formulation	Form Purchased (Liquid or Dry)	Where Purchased [*Ask only if EPA No. cannot be reported.*]

D PESTICIDE APPLICATIONS---SELECTED FIELD D

APPLICATION CODES for column 9	
1 Broadcast, ground without incorporation	6 Chisel/injected or knifed in
2 Broadcast, ground with incorporation	7 Banded/sidedressed in or over row
3 Broadcast, by air (*Aerial application)*	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.*]

[If column 9 = 9, then columns 6 & 10 must be blank.]

LINE	9 How was this product applied? [*Enter code from above.*]	10 How many acres in this field were treated with this product? ACRES	11 What was the number of times applied? NUMBER	12 Were these applications made by-- 1 Operator, Partner or Family member? 2 Custom applicator? 3 Employee / Other?	OPTIONAL ITEM ④ What was the cost per unit of the product? DOLLARS & CENTS PER UNIT	UNIT CODE 1 POUNDS 12 GALLONS 13 QUARTS 14 PINTS 15 OUNCES 30 GRAMS
01	0311	0312 •___	0313	0316	0317 • ___ ___	0318
02	0311	0312 •___	0313	0316	0317 • ___ ___	0318
03	0311	0312 •___	0313	0316	0317 • ___ ___	0318
04	0311	0312 •___	0313	0316	0317 • ___ ___	0318
05	0311	0312 •___	0313	0316	0317 • ___ ___	0318
06	0311	0312 •___	0313	0316	0317 • ___ ___	0318
07	0311	0312 •___	0313	0316	0317 • ___ ___	0318
08	0311	0312 •___	0313	0316	0317 • ___ ___	0318
09	0311	0312 •___	0313	0316	0317 • ___ ___	0318
10	0311	0312 •___	0313	0316	0317 • ___ ___	0318
11	0311	0312 •___	0313	0316	0317 • ___ ___	0318
12	0311	0312 •___	0313	0316	0317 • ___ ___	0318
13	0311	0312 •___	0313	0316	0317 • ___ ___	0318
14	0311	0312 •___	0313	0316	0317 • ___ ___	0318

T-TYPE	TABLE	LINE
0	000	00

D PESTICIDE APPLICATIONS---SELECTED FIELD D

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

☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 4.*]

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

OFFICE USE 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 field?
(***Include*** *operator, landlord and contractor cost.*) . . . . . .

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0321 . ___ ___		0322

NOTE 1: *For custom applications, If respondent cannot report cost of chemical product separately from application costs, report both in item 4.*

NOTE 2: *If respondent cannot report TOTAL COST, itemize cost for each product in optional columns in Pesticide Table, item D1.*

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

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0325 . ___ ___		0326

(***Include*** *operator, landlord and contractor cost, herbicides, insecticides, fungicides, surfactants, chemicals used to kill cover/nurse crop, wetting agents, growth regulators, and materials applied before planting and during 2001 fallow period.*

Exclude *seed treatments.*)

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

Now I have some questions about your pest management decisions and practices used on this field for the 2002 soybean crop.
By pests, we mean WEEDS, INSECTS and DISEASES.

T-TYPE	TABLE	LINE
0	000	00

1. **Was this field scouted for pests by--**

1 Conducting general observations while performing routine tasks?
2 Performing deliberate scouting activities on a scheduled basis?
3 Performing systematic sampling or counting?
4 This field was not scouted for pests.

. . . . . CODE 1030

[*If item 1 = 1, 2, or 3, ask--; else go to item 6.*]

1	2	③
2. **Was this soybean field scouted for--** YES=1	[*If* **YES**, *ask--*] **Was the infestation level for** [*column 1*]**--** 1 Worse than normal 2 Normal 3 Less than normal	[*If coumn 1 =* **YES**, *ask--*] **Who did the majority of the scouting for** [*column 1*]**--** 1 Operator, Partner or Family member? 2 an Employee? 3 Farm supply or Chemical dealer? 4 Independent crop consultant or Commercial scout? CODE
a. weeds? 1031	1032	1033
b. insects– 1034	1035	1036
c. diseases (*such as white mold*)? . . 1040	1041	1042

3. [*If scouted by crop consultant or commercial scout, ask--; else go to item 4.*]

How much did you pay for the scouting services for this field? [***Include*** *landlord and contractor cost.*] . . . . . DOLLARS & CENTS PER ACRE 1043 •__ __ OR TOTAL DOLLARS 1044

a. [***Note****: If scouting performed at no cost, explain:*_____] . . . . OFFICE USE 0333

4. **Were electronic or written records kept for this field to track the activity or numbers of weeds, insects or diseases?** . . . . . YES = 1 CODE 1045

5. **Did you use scouting data and compare it to published information on infestation thresholds to determine when to take measures to control pests?** . . YES = 1 CODE 1046

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

6. **[Enumerator Action: *Were* HERBICIDES *used* (*pesticide product codes 4000-4999*), *Section* D, *column 2*?]**

☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 9.*]

7. **After planting, did you apply herbicides to this soybean field BEFORE weeds emerged?** . . . . . **YES = 1** — **CODE** 1047

[*If item 7 = YES, ask*--]

a. Did you select and apply herbicides BEFORE weeds emerged on this soybean field based primarily on--

1 expectations of what **weeds** are usually present each spring?

OR

2 weed scouting from the previous year?

. . . . . **CODE** 1048

8. **Did you apply herbicides to this soybean field AFTER weeds emerged?** . . . . . **YES = 1** — **CODE** 1049

[*If item 8 = YES, ask*--]

a. Did you select and apply herbicides AFTER weeds emerged on the soybean field based primarily on--

1 routine treatments of what **weeds** are usually present?

OR

2 weed scouting from the current year?

. . . . . **CODE** 1050

9. **[Enumerator Action: *Were* INSECTICIDES *used* (*pesticide product codes 1000-1999*), *in Section* D, *column 2*?]**

☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 11.*]

10. **Did you select and apply insecticides to this soybean field based primarily on--**

1 routine treatments or expectations of what **insects** are usually present?

OR

2 scouting for insect infestation?

. . . . . **CODE** 1051

OTHER PEST MANAGEMENT PRACTICES

By pests, we mean WEEDS, INSECTS and DISEASES

11. **Was protection of beneficial organisms a factor in your pest control decisions for this field?** . . . . . **YES = 1** — **CODE** 1052

12. **Did you apply or release any beneficial organisms to control pests in this field?** **YES = 1** — 1088

13. **Did you use water management practices, such as controlled drainage or irrigation scheduling, to control pests in this field?** . . . . . **YES = 1** — 1053

14. **Did you chose planting locations to avoid cross infestation of insects or disease?** . . . . . **YES = 1** — 1054

15. **Did you use tilling, chopping, mowing, burning of field edges, lanes, ditches, roadways or fence lines to control pests in this field?** . . . . . **YES = 1** — 1055

16. **Did you clean equipment and implements after completing field work to reduce the spread of pests from field to field?** . . . . . **YES = 1** — 1056

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

CODE

17. **Did you consider pest resistance when selecting which seed variety to plant in this field?** . . . . . **YES = 1** 1057

18. **Did you have the seed used in this field treated for insect or disease control after you purchased the seed?** . . . . . **YES = 1** 1058

19. **Did you adjust planting or harvesting dates to control pests?** . . . . . **YES = 1** 1059

20. **Did you use soil analysis to detect the presence of soilborne pests or pathogens, such as soybean cyst nematodes, in this field?** . . . . . **YES = 1** 1060

21. **Did you rotate or tank mix pesticides for the primary purpose of keeping pests from becoming resistant to pesticides in this field** (*use pesticides with different mechanisms of action*)**?** . . . . . **YES = 1** 1061

22. **Did you adjust row spacing or plant density to control pests in this field?** . . . . . **YES = 1** 1062

23. **Did you remove or plow down crop residues to control pests?** . . . . . **YES = 1** 1063

24. **Did you rotate crops on this field during the past 3 years to control pests?** . . . . **YES = 1** 1064

25. **Did you use biological pest controls on this field?**
[*Biological pest controls include beneficial insects, floral lures, attractants or repellants applied to the field, pheromones and pheromone traps.*] . . . . . **YES = 1** 1065

a. [*If item 25 = YES, ask–*]

What were the TOTAL materials and application costs for all biological pest controls for this field?
[***Include*** *landlord's and contractor's share.*] . . . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1066 •__ __		1067

CODE

26. **Did you monitor weather data to help determine when to make pesticide applications?** . . . . . **YES = 1** 1068

27. **Did you maintain ground covers, mulches or physical barriers to reduce pest problems?** . . . . . **YES = 1** 1069

28. **Did you use field mapping of previous weed problems to assist you in making weed management decisions?** . . . . . **YES = 1** 1070

29. **Did you cultivate this field for weed control during the growing season?** . . . . . **YES = 1** 1071

a. [*If item 29 = YES, ask--*]

NUMBER

How many times did you cultivate this field for weed control during the growing season? 1072

30. **Did you do any other type(s) of pest management to control pests in this field?** . . . . . **YES = 1** 1073

a. [*If item 30 = YES, ask--*]

What did you do? [*List other activities.*]

_____

_____

_____

OFFICE USE

1075

1076

1077

E PEST MANAGEMENT PRACTICES--SELECTED FIELD E

CODE

31. **Did you detect any soybean aphids in this field in 2002?** . . . . . **YES = 1** | 1080 |

a . [*If item 31 = YES, ask–*]

If untreated, how much yield loss (*e.g. bushels per acre*) do you think that SOYBEAN APHIDS would most likely cause on this field? . . . . . .

UNITS PER ACRE	UNIT CODES: 1=POUNDS, 2=CWT, 3=TONS, 4=BUSHELS
1081 •___	1082

CODE

32. **Did you detect any soybean cyst nematodes in this field in 2002?** . . . . . **YES = 1** | 1083 |

a . [*If item 32 = YES, ask–*]

If untreated, how much yield loss (*e.g. bushels per acre*) do you think that SOYBEAN CYST NEMATODES would most likely cause on this field? . . . . . .

UNITS PER ACRE	UNIT CODES: 1=POUNDS, 2=CWT, 3=TONS, 4=BUSHELS
1084 •___	1085

PEST MANAGEMENT INFORMATION

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

What was your primary outside source of information on pest management practices and products for the 2002 soybean crop?

PEST MANAGEMENT INFORMATION SOURCES CODE LIST [*Choose one.*]

1	Extension Advisor, Publications or Demonstrations (*County, Cooperative or University*)
2	Farm Supply or Chemical Dealer
3	Commercial Scouting Service
4	Independent Crop Consultant or Pest Control Advisor
5	Other Growers or Producers
6	Producer Associations, Newsletters or Trade Magazines
7	Electronic Information Services (*DTN, Internet, World Wide Web, etc.*)
8	Other - (*Specify:* _____)
9	None - *Operator used no* ***outside*** *information source*

[*Choose one source and enter code.*]

. . . . . | 1086 |

PEST MANAGEMENT TRAINING

CODE

34. **Have you** (*the operator*) **attended any training session on pest identification and management since October 1, 2001 other than pesticide applicator training?** . . . **YES = 1** | 1087 |

OFFICE USE

0340

F FIELD OPERATIONS --- SELECTED FIELD F

1. **Now I need to list all tractors and self-propelled harvesters used to produce soybeans on this selected field.**

CHECK LIST

Include	Exclude
☐ Tractors owned, rented, leased or borrowed	☐ Tractors & self propelled harvesters provided by custom operators
☐ Self propelled harvesters & combines owned, rented, leased or borrowed	☐ Harvesters & combines that are not self propelled

1	2 **What tractors and self-propelled harvesters were used on this field?** **MAKE and MODEL**	3 **What was the model year?** (*Example: 2000*) **YEAR**	4 **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? 7 self-propelled harvester? **CODE**	[*If TRACTOR, ask--*] 5 **What is its PTO horsepower?** **PTO HORSEPOWER**	[*If TRACTOR, ask--*] 6 **Is it–** 1 diesel? 2 gasoline? 3 LP gas 9 other? **CODE**
1		0120 ___ ___ ___ ___	0121	0122	0123
2		0124 ___ ___ ___ ___	0125	0126	0127
3		0128 ___ ___ ___ ___	0129	0130	0131
4		0132 ___ ___ ___ ___	0133	0134	0135
5		0136 ___ ___ ___ ___	0137	0138	0139
6		0140 ___ ___ ___ ___	0141	0142	0143
7		0144 ___ ___ ___ ___	0145	0146	0147
8		0148 ___ ___ ___ ___	0149	0150	0151
9		0152 ___ ___ ___ ___	0153	0154	0155
10		0156 ___ ___ ___ ___	0157	0158	0159
11		0160 ___ ___ ___ ___	0161	0162	0163
12		0164 ___ ___ ___ ___	0165	0166	0167
13		0168 ___ ___ ___ ___	0169	0170	0171
14		0172 ___ ___ ___ ___	0173	0174	0175
15		0176 ___ ___ ___ ___	0177	0178	0179
16		0180 ___ ___ ___ ___	0181	0182	0183
17		0184 ___ ___ ___ ___	0185	0186	0187
18		0188 ___ ___ ___ ___	0189	0190	0191
19		0192 ___ ___ ___ ___	0193	0194	0195
20		0196 ___ ___ ___ ___	0197	0198	0199

F FIELD OPERATIONS --- SELECTED FIELD F

2. **Including custom operations, I need to list field work performed by machines on this field for the 2002 soybean crop. Please...**
   - Begin with the first field operation after harvest of previous crop, (*If fallow during 2001, list operations starting with fall 2000.*)
   - 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 --[*Go to Column 11.*]

CHECK LIST
Include all field work using machines for–
☐ Land Forming/Levee Building
☐ Tillage
☐ Preparing for Irrigation
☐ Planting/Cultivation
☐ Fertilizer & Pesticide applications
☐ Harvesting **&** Hauling to storage or first point of sale
☐ Planting and chemical operations for cover/nurse crop
Exclude
☐ Lime & Gypsum applications

2 SEQUENCE 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 6-10.*] 6 What was the size or swath of the [*machine*] used?	7 1 Feet 2 Row 3 Moldboard (*bottoms*) **Hauling** 4 Pounds 5 Bushels 6 Tons CODE	8 Which tractor/ self-propelled harvester was used? [*Record line number from item 1.*] 66 Animal Drawn 77 Pick-Up 99 Self-Propelled 1/	9 How many acres were covered? 2/ ACRES	10 How many acres were covered per hour? ACRES PER HOUR	11 In what month was this operation done? MM YY
0351		0352	0353	0354	0355	0356	0357 .___	0358 .___	0359 __ __ __ __
0361		0362	0363	0364	0365	0366	0367 .___	0368 .___	0369 __ __ __ __
0371		0372	0373	0374	0375	0376	0377 .___	0378 .___	0379 __ __ __ __
0381		0382	0383	0384	0385	0386	0387 .___	0388 .___	0389 __ __ __ __
0391		0392	0393	0394	0395	0396	0397 .___	0398 .___	0399 __ __ __ __
0401		0402	0403	0404	0405	0406	0407 .___	0408 .___	0409 __ __ __ __
0411		0412	0413	0414	0415	0416	0417 .___	0418 .___	0419 __ __ __ __
0421		0422	0423	0424	0425	0426	0427 .___	0428 .___	0429 __ __ __ __
0431		0432	0433	0434	0435	0436	0437 .___	0438 .___	0439 __ __ __ __
0441		0442	0443	0444	0445	0446	0447 .___	0448 .___	0449 __ __ __ __
0451		0452	0453	0454	0455	0456	0457 .___	0458 .___	0459 __ __ __ __
0461		0462	0463	0464	0465	0466	0467 .___	0468 .___	0469 __ __ __ __
0471		0472	0473	0474	0475	0476	0477 .___	0478 .___	0479 __ __ __ __
0481		0482	0483	0484	0485	0486	0487 .___	0488 .___	0489 __ __ __ __
0491		0492	0493	0494	0495	0496	0497 .___	0498 .___	0499 __ __ __ __
0501		0502	0503	0504	0505	0506	0507 .___	0508 .___	0509 __ __ __ __
0511		0512	0513	0514	0515	0516	0517 .___	0518 .___	0519 __ __ __ __
0521		0522	0523	0524	0525	0526	0527 .___	0528 .___	0529 __ __ __ __

1/ *If trucks other than pick-ups are used as the power source, use truck codes in Respondent Booklet.*
2/ *For backhoes, disk border maker, ditch closer, ditcher, levee-plow disk, quarter drain machine and rear mounted blade and hauling operations, enter **TOTAL HOURS**, and leave column 10 blank.*

OFFICE USE
0032

3. **I need some information about the additional labor, other than the labor just reported operating machines, that worked on this field.**

   Please report the paid and unpaid labor that worked on this field to produce the 2002 soybean crop.

TYPE OF WORKERS	1 How many hours did (*type of worker*) spend on this field-- a. scouting for weeds and insects? HOURS	b. irrigating? HOURS	c. drying the harvested crop? HOURS	d. for overhead activities (*moving and loading materials, and management*) HOURS	2 What was the average hourly wage rate paid (*type of worker*)? DOLLARS & CENTS PER HOUR
Operator, partners, family members, and other unpaid workers	1100	1101	1102	1103	
Full-time hired workers (***Exclude*** *custom and contract labor*)	1105	1106	1107	1108	1109 ___ • ___ ___
Part-time or seasonal hired workers (***Exclude*** *custom and contract labor*)	1110	1111	1112	1113	1114 ___ • ___ ___

a. Was any contract labor used on this field? . . . . . **YES = 1** — **CODE** 1115

(1) *If YES, ask* -- What was the average cost per acre for this contract labor? (***Include*** *landlord and contractor costs.*) . . . . . — **DOLLARS & CENTS PER ACRE** 1116 •___ ___

4. [*If UNPAID labor was reported, ask*--]

What percent of the total hours worked on this field by UNPAID workers was worked by children under 16 years old? . . . . . — **PERCENT** 1117

5. **Now I need some information on how much was spent for custom and technical services used on this field for the 2002 soybean crop.**

✓	1 **CUSTOM or TECHNICAL SERVICE** **Which of these services were done for the 2002 soybean crop on this field?** [*Check ✓ box for each service performed; refer to item 2 if necessary.*]	2 **Including landlord's and contractor's cost, how much was spent for** [*column 1*] **on this field for the 2002 soybean crop?** **DOLLARS & CENTS PER ACRE**
☐	a. custom land preparation, shaping and/or leveling?	1118 • ___ ___
☐	b. custom cultivating?	1119 • ___ ___
☐	c. custom planting and/or reseeding?	1120 • ___ ___
☐	d. custom harvesting?	1121 • ___ ___
☐	e. custom hauling to storage or point of first sale? . . . . . (__ __ • __ __ x _____ ÷ _____ = __ __ • __ __ Dollars & Cents per unit. X Total units hauled from field ÷ Acres harvested in field = Dollars & Cents per acre.)	1122 • ___ ___
☐	f. [*If custom harvesting and custom hauling cannot be separated ask–*] Custom harvesting and custom hauling from this field?	1123 • ___ ___
☐	g. other custom and/or technical services? (*specify*_____) (***Include*** *fees for developing yield maps and remotely sensed images, and other consultant services not previously reported.* ***Exclude*** *custom fertilizer, chemical applications, commercial scouting and custom drying.*)	1124 • ___ ___

6. **Was there** (will there be) **a yield monitor on the equipment used to harvest this soybean field?** . . . . . **YES = 1** — CODE 1125

[*If YES, continue; else go to item 7.*]

a. Was there (will there be) a yield map produced from this harvest using information from the yield monitor? . . . . . **YES = 1** — 1126

[*If YES, ask*; *else go to item 6b.*]

(1) Was a custom service/consultant hired to produce a map? . . . . . **YES = 1** — 1127

b. Did you use the yield monitor information to–
[*Enter code for all that apply.*]

(1) monitor crop moisture content to determine need for crop drying? . . . . . **YES = 1** — 1128

(2) add/improve tile drainage? . . . . . **YES = 1** — 1129

(3) add/improve irrigation equipment/irrigation water application? . . . . . **YES = 1** — 1130

(4) conduct in-field experiments (*e.g., compare fertilizer application rates, seed varieties, herbicides, pesticides, etc.*)? . . . . . **YES = 1** — 1131

(5) negotiate new crop leases? . . . . . **YES = 1** — 1132

(6) document yields for crop insurance, real estate tax, or farm program purposes? . . . . . **YES = 1** — 1133

(7) accurately divide crop production among partners and/or for landlord crop shares? . . . . . **YES = 1** — 1134

(8) other uses [*specify* _____] . . . . . **YES = 1** — 1135

7. **During 2001 or 2002, was a GPS** (*Global Positioning System*) **device used to geo-reference and/or produce a map of the soil properties of this field, such as soil nitrate levels, pH, etc.?** . . . . . **YES = 1** — CODE 1136

[*If item 7 = YES, ask 7a and 7b; else go to item 8.*]

a. Was a map (*or will a map be*) produced based on soil tests from this field? . . . . . **YES = 1** — 1137

b. Was a map (*or will a map be*) produced based on a machine that measured electrical conductivity of the soil (*e.g. Veris machine*)? . . . . . **YES = 1** — 1138

CODE

8. **Did you have an airplane or satellite make an image or photograph of this field either at the start of or during the 2002 growing season?** . . . . . **YES = 1** — 1139

a. *If YES, ask* -- Was a custom service/consultant hired for this activity? . . . . . **YES = 1** — 1140

9. **Was a variable rate applicator** (*i.e., variable rate technology or VRT*) **used on this field for--**

a. fertilization or liming? . . . . . **YES = 1** — 1141

(1) *If YES, ask* -- Did you use a variable rate applicator for-- [*Enter code for all that apply.*]

a. nitrogen applications? . . . . . **YES = 1** — 1142

b. phosphorous applications? . . . . . **YES = 1** — 1143

c. potash applications? . . . . . **YES = 1** — 1144

d. lime applications? . . . . . **YES = 1** — 1145

e. manure applications? . . . . . **YES = 1** — 1146

(2) *If YES, ask* -- Was a custom service/consultant hired for this activity? . . . . . **YES = 1** — 1147

b. seeding? . . . . . **YES = 1** — 1148

(1) *If YES, ask* -- Was a custom service/consultant hired for this activity? . . . . . **YES = 1** — 1149

c. pesticide applications? . . . . . **YES = 1** — 1150

(1) *If YES, ask*-- Was a custom service/consultant hired for this activity? . . . . . **YES = 1** — 1151

10. **Was a guidance or parallel swathing system** (*connected to G.P.S.*) **used with any machine operation on this field** (*e.g. light bar*)**?** . . . . . **YES = 1** — 1152

G IRRIGATION --- SELECTED FIELD G

1. **How many acres in this field were irrigated for the 2002 soybean crop?** [*If none, go to Section* **H**.] . . . . . ACRES 1160 .____

2. **Now, I have some questions about irrigation systems and water used on this field for the 2002 soybean crop.**

↓	UNIT	SYSTEM 1	SYSTEM 2
a. What type(s) of irrigation system(s) were used to irrigate this field? [*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 field during the entire growing season? [***Include*** *ALL water used from both on-farm and off-farm sources.*]	**INCHES PER ACRE** **OR** **TOTAL ACRE-FEET**	1162 1163	1176 1177
[*If operator* ***cannot provide item 2b****, ask* (1) & (2)--] (1) What is the **total** number of **hours** this system was used to apply water to this field during the soybean growing season?	**TOTAL HOURS**	1164	1178
(2) How many gallons per minute were applied?	**GALLONS PER MINUTE**	1165	1179
c. What percent of the water used to irrigate this field through this system came from surface water sources?	**PERCENT**	1166	1180
d. What was the number of times this field was irrigated during the soybean growing season using this system? [***Include*** *any pre-plant irrigation.*]	**NUMBER OF IRRIGATIONS**	1167	1181
e. Was the pump type-- [*Enter code for most common 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 motor type? **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?	**HORSE-POWER**	1172	1186
j. [*If NO PUMP was used, ask*-- (*item e = 99*)*;* What was the average flow rate?	**GALLONS PER MINUTE**	1173	1187
k. How many **other** acres on this operation were irrigated using this field's irrigation system during the 2002 growing season? [***Exclude*** *this field.*]	**ACRES**	1174 .____	1188 .____

3. **Was any water purchased to irrigate this field?**
(***Include*** *landlord's share and purchases from all sources.*)

CODE 1189

☐ **YES** - [*Enter code 1 and continue.*] ☐ **NO** - [*Go to item 4.*] . . . . . .

PERCENT 1190

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

b. What was the total cost for the water purchased for this field during the 2002 growing season?
(***Include*** *landlord and contractor costs and ditch maintenance costs.*) . . .

DOLLARS & CENTS PER ACRE 1191 •__ __ OR TOTAL DOLLARS 1192

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

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

TOTAL DOLLARS 1193

5. [*If POLY PIPE system was used* (*line a of item 2 = 14*), *ask*--]

What was the total amount spent for poly pipe used on this field during the 2002 growing season? . . . . . .

TOTAL DOLLARS 1194

6. [*If GATED PIPE system was used* (*line a of item 2 = 15 or 16*), *ask*--]

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

INCHES 1195

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

FEET 1196

7. **Were wells used to supply irrigation water for this field?**

CODE 1197

☐ **YES** - [*Enter code 1 and continue.*] ☐ **NO** - [*Go to item 8.*] . . . . . .

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

NUMBER 1198

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

INCHES 1199

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.*] . . . . . .

FEET 1200

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

CODE 1201

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

☐ **YES** - [*Enter code 1 and continue.*] ☐ **NO** - [*Go to item 8.*]

(1) How many other acres on this operation were irrigated using the same well(s) during the 2002 growing season? . . . . . .

ACRES 1202 •__

8. **Other than pipe that is part of the system, was any additional mainline or lateral pipe used to carry water from the source to this field?**
(***Include*** *underground pipe.*)

☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 9.*]

PIPE TYPE CODES

1	ALUMINUM - (*NON-HI-PRESSURE*)
2	ALUMINUM - (*HI-PRESSURE*)
3	STEEL
4	PLASTIC
5	OTHER (*SPECIFY*:_____)

a. What was the most common type of additional pipe used? . . . . . **CODE** 1203

b. What was the average diameter (*in inches*) of the most common type of this additional pipe used? . . . . . **INCHES** 1204

c. How many feet of this additional pipe were used to bring water to this field? . . . . . **FEET** 1205

RUN-OFF CODES

1	retained at the end of the field?
2	re-used to irrigate on the farm?
3	collected in evaporation ponds on the farm?
4	drained from the farm?
5	there is no run off.

9. **Is the run-off from this field–** . . . . . **CODE** 1206

H DRYING--SELECTED FIELD H

1. **Was** (or will) **most of the soybean crop from this field--**
(***Include*** *landlords share*.)

1	**Custom dried** - *Continue.*
2	**Dried other than custom dried** - *go to item 3*.
3	**Not dried** - *Go to Section* I.

. . . . . **CODE** 0830

2. [*If* **CUSTOM DRIED** (*item 1 is code 1*), *ask*--]

What was (will be) the cost of custom drying the soybeans from this field?
[*If no cost, explain* _____] . . . . . **CENTS PER BUSHEL** 0831 **OR TOTAL DOLLARS** 0832

[*Go to Section* I.]

OFFICE USE 0105

3. [*If* **DRIED OTHER THAN CUSTOM** (*item 1 is code 2*), *ask*--]

a. Was the main fuel type used to dry soybeans from this field--

1	Diesel
2	Gasoline
3	LP Gas
4	Natural Gas
5	Electricity
6	Other

. . . . . **CODE** 0833

b. On the average, what percent of moisture was (will be) removed from the beans from this field? . . . . . **PERCENTAGE POINTS** 0834 .___

I LANDLORD/CONTRACTOR COSTS I

1. **Did a landlord or contractor contribute any cost for the soybeans produced on this field in 2002?** [*Show Landlord/Contractor Cost items in the Respondent Booklet.*]

CODE 0840

☐ **YES** - [*Enter 1 and continue.*] ☐ **NO** - [*Enter 3 and go to Conclusion.*] . . . . . .

1 **Which items?** [*Check ✓ all that are YES.*]	2 [*For each item checked in column 1, ask--*] **How much did your landlord and/or contractor spend for** [*column 1 item*] **for this field?** PERCENT	OR	TOTAL DOLLARS
Seed Costs			
☐ a. Purchased seed	0841		0842
Fertilizer Costs (***Exclude*** *Lime and Gypsum.*)			
☐ b. Fertilizer custom applications	0843		0844
☐ c. Fertilizer materials	0845		0846
Chemicals/Pesticides Costs			
☐ d. Chemical/pesticides custom applications	0847		0848
☐ e. Chemical/pesticides materials	0849		0850
Technical Services			
☐ f. Soil tests or plant tissue tests	0851		0852
☐ g. Scouting services	0853		0854
☐ h. Biological pest controls and their application	0855		0856
Custom Field Operations and Services			
☐ i. Custom land preparation, shaping, and/or leveling . . .	0857		0858
☐ j. Custom cultivating	0859		0860
☐ k. Custom planting and/or reseeding	0861		0862
☐ l. Custom harvesting	0863		0864
☐ m. Custom hauling	0865		0866
☐ n. Custom drying	0867		0868
☐ o. Custom harvesting and hauling	0869		0870
☐ p. Contract and other paid labor	0871		0872
☐ q. Other custom and/or technical services	0873		0874
Drying Costs			
☐ r. Fuel and/or electricity for drying	0875		0876
☐ s. Repairs of the facilities used for drying	0877		0878
Irrigation and Water Management Costs			
☐ t. Purchased irrigation water	0879		0880
☐ u. Fuel, lubrication, and electricity for irrigation	0881		0882

NOTES and CALCULATIONS:

CONCLUSION

LOCATION OF SELECTED FIELD

	COUNTY NAME	OFFICE USE COUNTY FIPS CODE
1. **I need to locate the selected field of corn on this map. What county is the selected corn field in?** . .		0010
Field Description		

NORTH CAROLINA ONLY

	LATITUDE	LONGITUDE
Field location	**N** 0050 __ __ ▪ __ __ __ __ __	**W** 0051 __ __ ▪ __ __ __ __ __

2. [**ENUMERATOR ACTION:**
*Mark map to indicate where the selected **soybean** field is located. Be sure the "X" marked on map is in county identified above.*]

3. **We will need additional information to complete this study. We will contact you in February or March, 2003, to collect it. I'll call you then to set up a time that's good for you.**

4. **Would you like to receive a copy of the results of this survey in the mail?**
(Results will also be available on the Internet at ***http://www.usda.gov/nass/***) . . . . . **YES = 1** — CODE 0099

RECORDS USE

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

		CODE
a. [***fertilizer** data?*]	**YES = 1**	0011
b. [***pesticide** data?*]	**YES = 1**	0012
c. [*majority of this **expense** data?*]	**YES = 1**	0013

SUPPLEMENTS USED

6. [*Record the total number of each type of supplement used to complete this interview.*] . . . . . — NUMBER

FERTILIZER APPLICATIONS	0041
PESTICIDE APPLICATIONS	0042
FIELD OPERATIONS	0043

RESPONDENT

1	**OPERATOR/MANAGER**
2	**SPOUSE**
3	**ACCOUNTANT/BOOKKEEPER**
4	**OTHER**
8	**OFFICE HOLD**
9	**PARTNER**

. . . . . CODE 0101

Respondent's name [*if code 3, 4, or 9*] . . . . . _____

Phone . . . . . (_____) _____

ENDING TIME [*MILITARY*] . . . . . — MILITARY TIME H H M M — 0005 __ __ __ __

DATE: . . . . . — MM DD YY — 0007 __ __ __ __ **02**

ENUMERATOR NAME _____ . . . . . — ENUMERATOR ID 0098

EVALUATION 0100

CONCLUSION