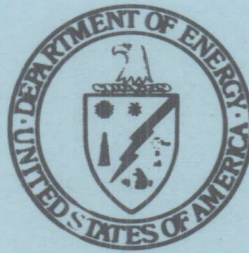


This survey is voluntary and authorized under the Federal Energy Administration Act of 1974 (Public Law 93-275). Information about specific households will be kept strictly confidential. The data will be summarized within large groupings for statistical purposes.

# Residential Energy Consumption Survey

Fall-Winter • 1981-1982



**U.S. Department of Energy**

**Energy Information Administration**

Location # \_\_\_\_\_

111-116

Housing Unit # \_\_\_\_\_

117-118

TIME INTERVIEW STARTED

1. In what year did your family move into this house (apartment)?

- 01  BEFORE 1940
- 02  1940-1949
- 03  1950-1959
- 04  1960-1964
- 05  1965-1969
- 06  1970-1974
- 07  1975-1979
- 08  1980
- 09  1981
- 10  1982

121-122

-- ASK Q. 2

IF "1981" OR "1982," ASK:

2. In which month did you move in? (SPECIFY MONTH AND ENTER LAST DIGIT OF YEAR.)

MONTH:

123-124

YEAR:

3. In what year was this house (building) built? Just your estimate.

- 01  BEFORE 1940
- 02  1940-1949
- 03  1950-1959
- 04  1960-1964
- 05  1965-1969
- 06  1970-1974
- 07  1975-1976
- 08  1977
- 09  1978
- 10  1979
- 11  1980
- 12  1981
- 13  1982

125-126

4. What material is mainly used on the outside walls of your (house/building)? (IF TWO MATERIALS ARE USED ABOUT THE SAME AMOUNT, MARK TWO BOXES.)
- |   |     |
|---|-----|
| <input type="checkbox"/> BRICK                                | 127 |
| <input type="checkbox"/> WOOD                                 | 128 |
| <input type="checkbox"/> CONCRETE                             | 129 |
| <input type="checkbox"/> STUCCO                               | 130 |
| <input type="checkbox"/> STONE                                | 131 |
| <input type="checkbox"/> ALUMINUM SIDING                      | 132 |
| <input type="checkbox"/> COMPOSITION (ASBESTOS SHINGLE, ETC.) | 133 |
| <input type="checkbox"/> GLASS                                | 134 |
| <input type="checkbox"/> OTHER (SPECIFY): _____               | 135 |
- 

5. Altogether (counting all areas that are used as year-round living space), how many rooms do you have in your living quarters? Do not count bathrooms, unheated porches, foyers, or hallways. (SEE INSTRUCTION BELOW.)
- NUMBER OF ROOMS:  136-137
6. How many complete bathrooms and how many half-bathrooms do you have? (A complete bathroom is a room with a flush toilet, bathtub or shower, and a sink/washbasin with running water. A half-bath has at least a flush toilet or bathtub or shower, but does not have all the facilities for a complete bathroom.)

NUMBER OF COMPLETE BATHROOMS:  138  
 NONE

NUMBER OF HALF BATHROOMS:  139  
 NONE

### **INTERVIEWER INSTRUCTIONS:**

Q. 5 -- Generally count any room as long as it is a comfortable place to rest, read, study, etc., year-round.

Do not count laundry rooms, unfinished attics or basements, open porches, or unfinished space used for storage.

HAND RESPONDENT EXHIBIT 7

7. What is the main heating equipment for your home?

- 01[] HOT WATER PIPES RUNNING THROUGH A SLAB FLOOR (RADIANT HEATING)  
 02[] STEAM OR HOT WATER SYSTEM WITH RADIATORS OR CONVECTORS  
 03[] CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (DO NOT  
 COUNT HEAT PUMP HERE) -- ASK Q. 8  
 04[] HEAT PUMP  
 05[] BUILT-IN ELECTRIC UNITS (PERMANENTLY INSTALLED IN WALL, CEILING,  
 OR BASEBOARD)  
 06[] FLOOR, WALL, OR PIPELESS FURNACE  
 07[] ROOM HEATER BURNING GAS, OIL, KEROSENE  
 08[] HEATING STOVE BURNING WOOD, COAL, COKE -- ASK Q. 9  
 09[] FIREPLACE(S)  
 10[] PORTABLE HEATER(S)  
 21[] OTHER (SPECIFY): \_\_\_\_\_  
 96[] DON'T KNOW  
 00[] NO HEATING EQUIPMENT USED -- SKIP TO Q. 23

140-141

IF "CENTRAL WARM AIR," ASK:

8. Is the warm air forced through the  
 ducts by a fan?

- 1[] YES  
 0[] NO  
 6[] DON'T KNOW

142

IF "HEATING STOVE BURNING WOOD, COAL, COKE," ASK:

9. Is the stove airtight?

- 1[] YES  
 0[] NO  
 6[] DON'T KNOW

143

TAKE BACK EXHIBIT 7

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 10. OTHERWISE, SKIP TO Q. 11.

10. Is your home heated by a central system for  
 your building (or group of buildings) or is  
 the main heating equipment for your living  
 quarters only?

- 1[] CENTRAL SYSTEM FOR BUILDING(S)  
 2[] MAIN HEATING EQUIPMENT FOR  
 THESE LIVING QUARTERS ONLY  
 6[] DON'T KNOW

144

HAND RESPONDENT EXHIBIT 11/13

11. What is the main fuel used for heating this house (apartment)?

- 01[] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- 02[] LPG GAS (BOTTLED OR TANK GAS)
- 03[] FUEL OIL
- 04[] KEROSENE OR COAL OIL
- 05[] ELECTRICITY 145-146
- 06[] COAL OR COKE
- 07[] WOOD
- 08[] SOLAR COLLECTORS
- 21[] OTHER (SPECIFY): \_\_\_\_\_
- \_\_\_\_\_
- 96[] DON'T KNOW

TAKE BACK EXHIBIT 11/13

12. In November of 1980 was the main fuel used to heat this house (apartment) the same as it is now?

- 1[] YES -- SKIP TO Q. 14
- 2[] NO 147
- 6[] DON'T KNOW -- SKIP TO Q. 14
- 0[] NO FUEL USED -- SKIP TO Q. 14

IF "NO," ASK:

HAND RESPONDENT EXHIBIT 11/13

13. What was the main fuel used to heat this house (apartment) in November of 1980?

- 01[] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- 02[] LPG GAS (BOTTLED OR TANK GAS)
- 03[] FUEL OIL
- 04[] KEROSENE OR COAL OIL 148-149
- 05[] ELECTRICITY
- 06[] COAL OR COKE
- 07[] WOOD
- 08[] SOLAR COLLECTORS
- 21[] OTHER (SPECIFY): \_\_\_\_\_
- \_\_\_\_\_

TAKE BACK EXHIBIT 11/13

- 00[] NO FUEL USED
- 96[] DON'T KNOW

14. Do you have a thermostat, radiator valve, or other control to adjust the temperature in your (house/apartment) during the heating season?

1[] YES  
0[] NO -- SKIP TO Q. 18

150

IF "YES," ASK:

15. At what temperature do you usually keep your house (apartment) during the day in the wintertime when someone is at home? (SEE INSTRUCTION BELOW.)

DEGREES  
FAHRENHEIT

151-152

95[] HEAT TURNED  
OFF

16. At what temperature do you usually keep your house (apartment) during the day in the wintertime when no one is at home? (SEE INSTRUCTION BELOW.)

DEGREES  
FAHRENHEIT

153-154

95[] HEAT TURNED  
OFF

17. At what temperature do you usually keep your house (apartment) during sleeping hours in the wintertime? (SEE INSTRUCTION BELOW.)

DEGREES  
FAHRENHEIT

155-156

95[] HEAT TURNED  
OFF

### INTERVIEWER INSTRUCTIONS:

Q. 15-17 -- If respondent keeps different sections of the house at different temperatures, we want to know the temperature in the part of the house where the people are. If, for example, the heat is turned off upstairs during the day because the family is downstairs, we want the downstairs temperature.

If respondent doesn't know temperature, but does know thermostat setting, record thermostat setting. Otherwise, probe for best estimate.

HAND RESPONDENT EXHIBIT 18

18. You have already mentioned your main heating equipment. Are any of these types of equipment used in your home in addition to your main equipment?

1  YES

0  NO -- TAKE BACK EXHIBIT 18;  
SKIP TO Q. 23

157

IF "YES," ASK:

19. What type(s) do you use? (IF MORE THAN ONE TYPE IS MENTIONED, MARK ONLY THE ONE USED MOST.)

01  HOT WATER PIPES RUNNING THROUGH A SLAB FLOOR (RADIANT HEATING)

02  STEAM OR HOT WATER SYSTEM WITH RADIATORS OR CONVECTORS

03  CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (DO NOT COUNT HEAT PUMP HERE) -- ASK Q. 20

04  HEAT PUMP

05  BUILT-IN ELECTRIC UNITS (PERMANENTLY INSTALLED IN WALL, CEILING, OR BASEBOARD)

06  FLOOR, WALL, OR PIPELESS FURNACE

07  ROOM HEATER BURNING GAS, OIL, KEROSENE

158-159

08  HEATING STOVE BURNING WOOD, COAL, COKE - ASK Q. 21

09  FIREPLACE(S)

10  PORTABLE HEATER(S) 4

21  OTHER (SPECIFY): \_\_\_\_\_

96  DON'T KNOW

IF "CENTRAL WARM AIR," ASK:

20. Is the warm air forced through the ducts by a fan?

1  YES

0  NO

6  DON'T KNOW

160

IF "HEATING STOVE BURNING WOOD, COAL, COKE," ASK:

21. Is the stove airtight?

1  YES

0  NO

6  DON'T KNOW

161

TURN TO EXHIBIT 22

22. What fuel is used by this additional equipment?

01  GAS FROM UNDERGROUND PIPES  
SERVING THE NEIGHBORHOOD

02  LPG GAS (BOTTLED OR TANK GAS)

03  FUEL OIL

04  KEROSENE OR COAL OIL

05  ELECTRICITY

162-163

06  COAL OR COKE

07  WOOD

08  SOLAR COLLECTORS

21  OTHER (SPECIFY): \_\_\_\_\_

96  DON'T KNOW

TAKE BACK EXHIBIT 22

23. Has any wood been burned in your home in the past 12 months?

- 1  YES
- 0  NO -- SKIP TO Q. 29

164

IF "YES," ASK:

HAND RESPONDENT EXHIBIT 24

24. Did your household burn less than a rack, or one rack or more? A rack is 16 in. x 4 ft. x 8 ft. or one-third of a cord.

- 0  LESS THAN ONE RACK -- TAKE BACK EXHIBIT 24; SKIP TO Q. 29 165
- 1  ONE RACK OR MORE

IF "ONE RACK OR MORE," ASK:

25. About how many racks or cords of wood did you burn in the past 12 months? (PROBE FOR BEST ESTIMATE.)

NUMBER OF RACKS  
(16 in. x 4 ft. x 8 ft.)

OR

166-168

NUMBER OF CORDS  
(4 ft. x 4 ft. x 8 ft.):

DON'T KNOW

26. Did you purchase any wood to burn in your home in the last 12 months?

- 1  YES
- 0  NO -- TAKE BACK EXHIBIT 24; SKIP TO Q. 29

169

27. On your household's most recent purchase of wood, how was the wood measured: by the rack, cord, or some other measure? (IF "TRUCKLOAD," PROBE FOR SIZE OF TRUCK).

- 1  RACK
- 2  CORD 170
- 5  OTHER (SPECIFY) \_\_\_\_\_

28. About what was the price per (rack/cord/other measure) on your household's most recent purchase of wood?

PRICE: \$ \_\_\_\_\_

171-173

TAKE BACK EXHIBIT 24



HAND RESPONDENT EXHIBIT 29/31

29. Which fuel is used most for heating water?

- 01[] GAS FROM UNDERGROUND PIPES  
SERVING THE NEIGHBORHOOD
- 02[] LPG GAS (BOTTLED OR TANK GAS)
- 03[] FUEL OIL
- 04[] KEROSENE OR COAL OIL
- 05[] ELECTRICITY
- 06[] COAL OR COKE
- 07[] WOOD 174-175
- 08[] SOLAR COLLECTORS
- 21[] OTHER (SPECIFY): \_\_\_\_\_
- \_\_\_\_\_
- 00[] NO FUEL USED -- TAKE BACK EXHIBIT 29/31;  
SKIP TO Q. 33
- 96[] DON'T KNOW

30. In addition to your main fuel, do you use  
any other fuel for heating water?

- 1[] YES 176
- 0[] NO -- TAKE BACK EXHIBIT 29/31;  
SKIP TO INSTRUCTION FOR Q. 32

IF "YES," ASK:

31. What is the additional fuel?

- 01[] GAS FROM UNDERGROUND PIPES  
SERVING THE NEIGHBORHOOD
- 02[] LPG GAS (BOTTLED OR TANK GAS)
- 03[] FUEL OIL
- 04[] KEROSENE OR COAL OIL 177-178
- 05[] ELECTRICITY
- 06[] COAL OR COKE
- 07[] WOOD
- 08[] SOLAR COLLECTORS
- 21[] OTHER (SPECIFY): \_\_\_\_\_
- \_\_\_\_\_
- 96[] DON'T KNOW

TAKE BACK EXHIBIT 29/31

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 32. OTHERWISE, SKIP TO Q. 33.

32. Is your hot water supplied by a central system  
for your building (or group of buildings) or  
is the water heater for your living quarters  
only?

- 1[] CENTRAL SYSTEM FOR BUILDING(S)
- 2[] FOR THESE LIVING QUARTERS ONLY
- 6[] DON'T KNOW

33. Do you have air-conditioning equipment, either a central system or individual window or wall units? (MARK ALL THAT APPLY.)

- 209-210:02
- YES, CENTRAL SYSTEM 211
- YES, INDIVIDUAL (WINDOW/WALL) UNITS -- SKIP TO Q. 36 212
- NO -- SKIP TO Q. 38

IF "CENTRAL SYSTEM" ON Q. 33, ASK:

34. Does the central air-conditioning system use gas from underground pipes, LPG, or electricity?

- 1  GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- 2  LPG GAS (BOTTLED OR TANK GAS) 213
- 3  ELECTRICITY
- 6  DON'T KNOW

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 35. OTHERWISE SKIP TO Q. 36.

35. Is it a central air-conditioning system for your building (or group of buildings) or is the main air-conditioning equipment for your living quarters only?

- 1  CENTRAL SYSTEM FOR BUILDING 214
- 2  AIR-CONDITIONING IS FOR THESE LIVING QUARTERS ONLY
- 6  DON'T KNOW

36. How many rooms in your house (apartment) can be cooled by your air-conditioning? Do not count bathrooms, hallways, foyers, or enclosed porches.

- NUMBER OF ROOMS:  215-216
- 95  ENTIRE HOUSE OR APARTMENT

HAND RESPONDENT EXHIBIT 37

37. Which of the statements on this exhibit best describes the way you used your air conditioner(s) last summer? (MARK ONLY ONE.)

- 0  DID NOT USE AT ALL
- 1  TURNED ON ONLY A FEW DAYS OR NIGHTS WHEN REALLY NEEDED
- 2  TURNED ON QUITE A BIT 217
- 3  TURNED ON JUST ABOUT ALL SUMMER
- 5  OTHER (SPECIFY): \_\_\_\_\_

TAKE BACK EXHIBIT 37

38. How many doors do you have in your home that go from a heated area to the outside or to an unheated area? (SEE INSTRUCTION BELOW.)

NUMBER OF DOORS:

218-219

NONE -- SKIP TO Q. 45

**HAND RESPONDENT EXHIBIT 39**

39. Please look at this exhibit of different kinds of doors. How many of each of these types of doors do you have?

Q. 39 NUMBER OF DOORS	Q. 40 NUMBER WITH STORM DOOR OR INSULATING GLASS	Q. 41 NUMBER STORM/ INSULATED DOORS PUT IN SINCE JANUARY 1, 1980	Q. 42	Q. 43	Q. 44
a. Sliding glass doors 220  <input type="checkbox"/> NONE	221  <input type="checkbox"/> NONE	222  <input type="checkbox"/> NONE	223-226 MONTH: _____ YEAR: 198____ <input type="checkbox"/> IN PROCESS	227-230 APPROXIMATE COST: \$ _____ .00 <input type="checkbox"/> DON'T KNOW	1 <input type="checkbox"/> DOORS AND HAVING THEM PUT IN 231 2 <input type="checkbox"/> DOORS ONLY 5 <input type="checkbox"/> OTHER (SPECIFY): _____
b. Other doors to the outside 232  <input type="checkbox"/> NONE	233  <input type="checkbox"/> NONE	234  <input type="checkbox"/> NONE	235-238 MONTH: _____ YEAR: 198____ <input type="checkbox"/> IN PROCESS	239-242 APPROXIMATE COST: \$ _____ .00 <input type="checkbox"/> DON'T KNOW	1 <input type="checkbox"/> DOORS AND HAVING THEM PUT IN 243 2 <input type="checkbox"/> DOORS ONLY 5 <input type="checkbox"/> OTHER (SPECIFY): _____

**TAKE BACK EXHIBIT 39**

FOR EACH TYPE OF DOOR FOR WHICH ANSWER IS "ONE OR MORE," ASK:

40. (Does/How many of) the \_\_\_\_\_ door(s) have (a storm door/storm doors) or insulating glass? \_\_\_\_\_

FOR EACH TYPE OF STORM DOOR OR DOOR WITH INSULATING GLASS, ASK:

41. How many of the(storm/insulated glass) doors were put in your home since January 1, 1980? \_\_\_\_\_

IF ONE OR MORE, ASK:

42. In what month and year did you get (it/them)? \_\_\_\_\_

43. Approximately what (did/will) the job cost you? (SEE INSTRUCTION BELOW.) \_\_\_\_\_

44. (Did you pay/Are you paying) both for the door(s) and having the door(s) put in, only for the door(s) themselves, or what? \_\_\_\_\_

**INTERVIEWER INSTRUCTIONS:**

Q. 38-39 -- Count each pair of sliding glass doors as one door. Include doors that go to an unheated porch or garage. Do not include doors to a heated hallway in an apartment building, doors that are permanently sealed shut, or doors to an unheated attic or basement.

Q. 43 -- If the job included the cost of more than just this item, and if respondent is unable to break down the cost among the different types, note below what was included, and record the total cost.



IF ONE-FAMILY HOUSE OR MOBILE HOME, ASK Q. 51 ff. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

51. Do you have insulation in all, or some, or none of the outside walls of your home? 1 [ ] ALL  
2 [ ] SOME 259  
0 [ ] NONE  
6 [ ] DON'T KNOW
52. Do you have roof or ceiling insulation? 1 [ ] YES  
0 [ ] NO -- SKIP TO Q. 56 280  
6 [ ] DON'T KNOW -- SKIP TO Q. 56

IF "YES," ASK:

HAND RESPONDENT EXHIBIT 53

53. About how much of the roof or ceiling area is insulated? 0 [ ] NONE, VERY LITTLE (LESS THAN 5%)  
1 [ ] 1/4 (5 - 33%)  
2 [ ] 1/2 (34 - 66%) 281  
3 [ ] 3/4 (67 - 95%)  
4 [ ] ALL (96 - 100%)

TURN TO EXHIBIT 54

54. This exhibit shows different kinds of insulation. Please tell me whether or not you have each one in your roof or ceiling area.

a. BATT/BLANKET	1 [ ] YES 0 [ ] NO 6 [ ] DON'T KNOW	_____ INCHES [ ] DON'T KNOW	282-284
b. LOOSE PARTICLES/ LOOSE FILL	1 [ ] YES 0 [ ] NO 6 [ ] DON'T KNOW	_____ INCHES [ ] DON'T KNOW	285-287
c. FIRM FOAM/ FIRM PLASTIC	1 [ ] YES 0 [ ] NO 6 [ ] DON'T KNOW	_____ INCHES [ ] DON'T KNOW	288-270
d. SPRAYED-IN URETHANE FOAM	1 [ ] YES 0 [ ] NO 6 [ ] DON'T KNOW	_____ INCHES [ ] DON'T KNOW	271-273
e. OTHER (SPECIFY): _____ _____	1 [ ] YES 0 [ ] NO 6 [ ] DON'T KNOW	_____ INCHES [ ] DON'T KNOW	274-276

FOR EACH "YES," ASK:

55. About how many inches of (INSULATION TYPE) do you have in your roof or ceiling area? ↑

TAKE BACK EXHIBIT 54

CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 56

309-310:03

56. Does this house have a basement, an enclosed crawl space, a crawl space open to the outside, a concrete slab, or a combination of these?

- 1[] BASEMENT  
 2[] CRAWL SPACE -- ENCLOSED  
 3[] CRAWL SPACE -- OPEN TO THE OUTSIDE 311  
 4[] CONCRETE SLAB -- SKIP TO Q. 59  
 5[] COMBINATION (MARK ALL THAT APPLY.)  
     [] BASEMENT 312  
     [] CRAWL SPACE -- ENCLOSED 313  
     [] CRAWL SPACE -- OPEN TO THE OUTSIDE 314  
     [] CONCRETE SLAB 315

TAKE BACK EXHIBIT 56

IF "BASEMENT," "CRAWL SPACE," OR "COMBINATION," ASK:

57. Is all, part, or none of the basement or crawl space heated? (SEE INSTRUCTION BELOW.)

- 1[] ALL  
 2[] PART 316  
 0[] NONE

IF "PART" OR "NONE" IS HEATED, ASK:

HAND RESPONDENT EXHIBIT 58

58. About how much of the floor area above the unheated basement or crawl space is insulated?

- 0[] NONE, VERY LITTLE (LESS THAN 5%)  
 1[] 1/4 (5 - 33%)  
 2[] 1/2 (34 - 66%) 317  
 3[] 3/4 (67 - 95%)  
 4[] ALL (96 - 100%)  
 5[] DON'T KNOW

TAKE BACK EXHIBIT 58

**INTERVIEWER INSTRUCTIONS:**

Q. 57 -- If respondent asks, a basement is considered heated if it is a comfortable place to work, read, study, play, etc., year-round.

CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 59

59. Please look at this list and tell me which items, if any, have been added or installed in your home since January 1, 1980. (SEE INSTRUCTION BELOW.)

Q. 59	Q. 60	Q. 61	Q. 62	Q. 63
a. Roof or ceiling insulation 1 <input type="checkbox"/> YES 318 0 <input type="checkbox"/> NO 2 <input type="checkbox"/> IN PROCESS	MONTH: _____ YEAR: 198_____ <input type="checkbox"/> IN PROCESS 319-322	1 <input type="checkbox"/> BATT/BLANKET 323 2 <input type="checkbox"/> LOOSE PARTICLES/LOOSE FILL 3 <input type="checkbox"/> FIRM FOAM/FIRM PLASTIC 4 <input type="checkbox"/> SPRAYED-IN URETHANE FOAM 5 <input type="checkbox"/> OTHER OR COMBINATION (SPECIFY): _____ 6 <input type="checkbox"/> DON'T KNOW	APPROXIMATE COST: \$ _____ .00 <input type="checkbox"/> DON'T KNOW 324-327	1 <input type="checkbox"/> LABOR AND MATERIALS 2 <input type="checkbox"/> MATERIALS ONLY 328 5 <input type="checkbox"/> OTHER (SPECIFY): _____ _____
b. Insulation in the outside walls 1 <input type="checkbox"/> YES 329 0 <input type="checkbox"/> NO 2 <input type="checkbox"/> IN PROCESS	MONTH: _____ YEAR: 198_____ <input type="checkbox"/> IN PROCESS 330-333	1 <input type="checkbox"/> BATT/BLANKET 334 2 <input type="checkbox"/> LOOSE PARTICLES/LOOSE FILL 3 <input type="checkbox"/> FIRM FOAM/FIRM PLASTIC 4 <input type="checkbox"/> SPRAYED-IN URETHANE FOAM 5 <input type="checkbox"/> OTHER OR COMBINATION (SPECIFY): _____ 6 <input type="checkbox"/> DON'T KNOW	APPROXIMATE COST: \$ _____ .00 <input type="checkbox"/> DON'T KNOW 335-338	1 <input type="checkbox"/> LABOR AND MATERIALS 2 <input type="checkbox"/> MATERIALS ONLY 339 5 <input type="checkbox"/> OTHER (SPECIFY): _____ _____
c. Insulation in the basement or crawl space below floor of house 1 <input type="checkbox"/> YES 340 0 <input type="checkbox"/> NO 2 <input type="checkbox"/> IN PROCESS	MONTH: _____ YEAR: 198_____ <input type="checkbox"/> IN PROCESS 341-344	1 <input type="checkbox"/> BATT/BLANKET 345 2 <input type="checkbox"/> LOOSE PARTICLES/LOOSE FILL 3 <input type="checkbox"/> FIRM FOAM/FIRM PLASTIC 4 <input type="checkbox"/> SPRAYED-IN URETHANE FOAM 5 <input type="checkbox"/> OTHER OR COMBINATION (SPECIFY): _____ 6 <input type="checkbox"/> DON'T KNOW	APPROXIMATE COST: \$ _____ .00 <input type="checkbox"/> DON'T KNOW 346-349	1 <input type="checkbox"/> LABOR AND MATERIALS 2 <input type="checkbox"/> MATERIALS ONLY 350 5 <input type="checkbox"/> OTHER (SPECIFY): _____ _____

TAKE BACK EXHIBIT 59

FOR EACH "YES" OR "IN PROCESS" ANSWER, ASK:

60. In what month and year was the work completed? (SEE INSTRUCTION BELOW.)

HAND RESPONDENT EXHIBIT 61

61. What type of insulation is it? (SEE INSTRUCTION BELOW.)

TAKE BACK EXHIBIT 61

62. Approximately what (did/will) the job cost you? (SEE INSTRUCTION BELOW.)

63. (Did you pay/Are you paying) for labor and materials, only for materials, or what?

**INTERVIEWER INSTRUCTIONS:**

- Q. 59 -- Mark "Yes," "No," or "In Process," for each item. Count as "In Process" any work started but not yet completed. Do not count changes made before this household moved in.
- Q. 60 -- If household has done item more than once, write down the most recent date.
- Q. 61 -- If more than one type of insulation, mark one used most.
- Q. 62 -- If the job included the cost of more than just this item, and if respondent is unable to break down the cost among the different types, note what was included below and record the total cost.

CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 64

64. Please look at this list and as I read each item tell me which, if any, have been added or installed in your home since January 1, 1980. (SEE INSTRUCTION BELOW.)

	Q. 64			Q. 65			
	YES	NO	IN PROCESS	MONTH	YEAR	IN PROCESS	
a. An automatic or clock thermostat	1[]	0[]	2[]	_____	198	[]	351-355
b. Adjustments to thermostat control (recalibration)	1[]	0[]	2[]	_____	198	[]	356-360
c. An additional thermostat (zoned your home)	1[]	0[]	2[]	_____	198	[]	361-365
d. Smaller nozzle or burner or smaller line on furnace	1[]	0[]	2[]	_____	198	[]	366-370
e. Flame retention head burner for furnace (fuel oil)	1[]	0[]	2[]	_____	198	[]	371-375
f. Automatic flue door (vent damper)	1[]	0[]	2[]	_____	198	[]	376-380
g. Electrical or mechanical furnace ignition system (spark ignition)	1[]	0[]	2[]	_____	198	[]	409-410:04 411-415
h. Insulation around heating ducts	1[]	0[]	2[]	_____	198	[]	416-420
i. Insulation around the hot water pipes	1[]	0[]	2[]	_____	198	[]	421-425
j. Insulation around the hot water heater	1[]	0[]	2[]	_____	198	[]	426-430
k. Meter that displays the cost of energy	1[]	0[]	2[]	_____	198	[]	431-435
l. Closeable shutters, plastic sheets, insulating drapes, reflective film	1[]	0[]	2[]	_____	198	[]	436-440
m. Caulking around any windows or doors to the outside	1[]	0[]	2[]	_____	198	[]	441-445
n. Weather stripping around any windows or doors to the outside	1[]	0[]	2[]	_____	198	[]	446-450
o. Heat pump	1[]	0[]	2[]	_____	198	[]	451-455
p. Wood-burning stove	1[]	0[]	2[]	_____	198	[]	456-460

FOR EACH "YES," ASK:

65. In what month and year was the work completed?  
(SEE INSTRUCTION BELOW.)

TAKE BACK EXHIBIT 64

**INTERVIEWER INSTRUCTIONS:**

Q. 64 -- Mark "Yes," "No," or "In Process" for each item. Count as "In Process" any work started but not yet completed. Do not count any changes made before this household moved in.

Q. 65 -- If household has done item more than once, write down the most recent date.



CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

66. Do you have your own swimming pool?  
(SEE INSTRUCTION BELOW.)
- 1[] YES 461  
0[] NO -- SKIP TO Q. 69

IF "YES," ASK:

67. Do you use a heater to heat the water?
- 1[] YES 462  
0[] NO -- SKIP TO Q. 69

IF "YES," ASK:

HAND RESPONDENT EXHIBIT 68

68. What fuel is used for the heater?
- 01[] GAS FROM UNDERGROUND PIPES  
SERVING THE NEIGHBORHOOD  
02[] LPG GAS (BOTTLED OR TANK GAS)  
03[] FUEL OIL  
04[] KEROSENE OR COAL OIL 463-464  
05[] ELECTRICITY  
06[] COAL OR COKE  
07[] WOOD  
08[] SOLAR COLLECTORS  
21[] OTHER (SPECIFY): \_\_\_\_\_  
\_\_\_\_\_  
96[] DON'T KNOW

TAKE BACK EXHIBIT 68

### INTERVIEWER INSTRUCTIONS:

Q. 66 -- Do NOT count ponds, hot tubs, jacuzzis, or children's wading pools as swimming pools.

**ASK EVERYONE**

69. Do you have a refrigerator in your home that you use regularly or occasionally?

- 1[] YES
- 0[] NO -- SKIP TO Q. 73

465

IF "YES," ASK:

70. Do you have one refrigerator or more than one that is presently in use? (How many altogether?)

- 1[] ONE
- 2[] TWO
- 3[] THREE OR MORE

466

ASK ABOUT EACH REFRIGERATOR -- FIRST ASK ABOUT REFRIGERATOR USED MOST: (SEE INSTRUCTION BELOW.)

71. Is it electric or gas?

REFRIGERATOR #1		REFRIGERATOR #2	
1[] ELECTRIC		1[] ELECTRIC	
2[] GAS	467	2[] GAS	469
1[]	468	1[]	470
2[]		2[]	
3[]		3[]	
4[]		4[]	

HAND RESPONDENT EXHIBIT 72

72. Which of these best describes your refrigerator? (MARK ONE)

- Freezer section (or ice cube section) must be defrosted periodically . . . . .
- Freezer section defrosts automatically after frost builds up (catch pan must be emptied). . .
- Full frost-free (frost does not build up). . . . .
- No working freezer section . . . . .

TAKE BACK EXHIBIT 72

73. Do you have a home freezer, one that is separate from the refrigerator, that is presently in use?

- 1[] YES
- 0[] NO -- SKIP TO Q. 77

471

IF "YES," ASK:

74. Do you have one freezer or more than one that is presently in use? (How many altogether?)

- 1[] ONE
- 2[] TWO
- 3[] THREE OR MORE

472

ASK ABOUT EACH FREEZER -- ASK FIRST ABOUT FREEZER USED MOST: (SEE INSTRUCTION BELOW.)

75. Is it electric or gas?

FREEZER #1		FREEZER #2	
1[] ELECTRIC		1[] ELECTRIC	
2[] GAS	473	2[] GAS	475
1[] FROST-FREE	474	1[] FROST-FREE	476
2[] MUST DEFROST		2[] MUST DEFROST	

76. Is it a frost-free freezer or must it be defrosted?

**INTERVIEWER INSTRUCTIONS:**

- Q. 71-72 -- If respondent has more than two refrigerators, ask about two used most.
- Q. 75-76 -- If respondent has more than two freezers, ask about two used most.

HAND RESPONDENT EXHIBIT 77

77. Thinking of all the different kinds of cooking done here, including cooking in the oven, on a range, and with small appliances, which fuel is used most?

- 01[] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- 02[] LPG GAS (BOTTLED OR TANK GAS)
- 03[] FUEL OIL
- 04[] KEROSENE OR COAL OIL
- 05[] ELECTRICITY 511-512
- 06[] COAL OR COKE
- 07[] WOOD
- 21[] OTHER (SPECIFY): \_\_\_\_\_
- 00[] NO COOKING DONE -- SKIP TO Q. 82

TAKE BACK EXHIBIT 77

78. Does your household use an oven of any type, including microwave or convection ovens, for cooking at least occasionally?

- 1[] YES 513
- 0[] NO -- SKIP TO Q. 82

IF "YES," ASK:

79. Do you have one oven or more than one oven that you presently use? (How many altogether?) (SEE INSTRUCTION BELOW.)

- 1[] ONE
- 2[] TWO 514
- 3[] THREE OR MORE

ASK ABOUT EACH OVEN -- ASK FIRST ABOUT OVEN USED MOST: (SEE INSTRUCTION BELOW.)

80. Is your oven electric or gas?

IF "ELECTRIC," ASK:

81. Is it a microwave oven?

OVEN #1		OVEN #2	
1[] ELECTRIC		1[] ELECTRIC	
2[] GAS	515	2[] GAS	517
1[] YES	516	1[] YES	518
0[] NO		0[] NO	

**INTERVIEWER INSTRUCTIONS:**

Q. 79 -- Do NOT count toaster ovens in count of ovens.

Q. 80 -- If respondent has more than two ovens, ask about two used most.

HAND RESPONDENT EXHIBIT 82

82. Please look at this list and, as I read each item, tell me which of these you use here in your (home/apartment)?

ELECTRIC RANGE (STOVE-TOP OR BURNERS)	<i>1</i> [ ] YES	<i>o</i> [ ] NO	519
GAS RANGE (STOVE-TOP OR BURNERS)	<i>1</i> [ ] YES	<i>o</i> [ ] NO	520
OUTDOOR GAS GRILL	<i>1</i> [ ] YES	<i>o</i> [ ] NO	521
AUTOMATIC CLOTHES WASHER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	522
WRINGER WASHING MACHINE (ELECTRIC)	<i>1</i> [ ] YES	<i>o</i> [ ] NO	523
ELECTRIC DISHWASHER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	524
ELECTRIC CLOTHES DRYER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	525
GAS CLOTHES DRYER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	526
OUTDOOR GAS LIGHT	<i>1</i> [ ] YES	<i>o</i> [ ] NO	527
ELECTRIC DEHUMIDIFIER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	528
ELECTRIC HUMIDIFIER	<i>1</i> [ ] YES	<i>o</i> [ ] NO	529
EVAPORATIVE COOLER (SWAMP COOLER)	<i>1</i> [ ] YES	<i>o</i> [ ] NO	530
BLACK AND WHITE TELEVISION SET	[ ] YES	[ ] NO	<sup>531</sup> NUMBER: <input type="text"/>
COLOR TELEVISION SET	[ ] YES	[ ] NO	<sup>532</sup> NUMBER: <input type="text"/>

IF "YES" FOR BLACK AND WHITE TV SET, ASK:

83. How many black and white television sets do you use here in your home? \_\_\_\_\_

IF "YES" FOR COLOR TV SET, ASK:

84. How many color television sets do you use here in your home? \_\_\_\_\_

TAKE BACK EXHIBIT 82

Now some questions about cars.

85. How many members of your household can drive a car? NUMBER OF DRIVERS:  533-534  
[] NONE

**HAND RESPONDENT EXHIBIT 86**

86. Do you or other members of your household own or have the regular use of any cars, trucks, vans, or similar vehicles? (DO NOT INCLUDE MOTORCYCLES OR MOPEDS.) (SEE INSTRUCTION BELOW.) 1[] YES  
0[] NO -- TAKE BACK EXHIBIT 86; SKIP TO Q. 91 535

IF "YES," ASK:

87. How many do you have? NUMBER OF VEHICLES:  536-537

**ASK ABOUT EACH VEHICLE.**

88. Which type(s) do you have? (SEE INSTRUCTION BELOW.)

					V E H I C L E   N U M B E R					
					1	2	3	4		
	STATION WAGON	01[]	538-		01[]	546-	01[]	554-	01[]	562-
	AUTOMOBILE	02[]	539		02[]	547	02[]	555	02[]	563
	JEEP OR SIMILAR VEHICLE	03[]			03[]		03[]		03[]	
	PASSENGER VAN OR MINIBUS	04[]			04[]		04[]		04[]	
	CARGO VAN	05[]			05[]		05[]		05[]	
	PICKUP TRUCK	06[]			06[]		06[]		06[]	
	OTHER TRUCK	07[]			07[]		07[]		07[]	
	MOTOR HOME	08[]			08[]		08[]		08[]	
	OTHER (SPECIFY):	21[]			21[]		21[]		21[]	
					540-541	548-549	556-557	564-565		
					542-543	550-551	558-559	566-567		
					19	19	19	19		
					544-545	552-553	560-561	568-569		
					MAKE	MAKE	MAKE	MAKE		
					MODEL YEAR	MODEL YEAR	MODEL YEAR	MODEL YEAR		
					MODEL NAME	MODEL NAME	MODEL NAME	MODEL NAME		

**TAKE BACK EXHIBIT 86**

89. Please tell me the make and model year (of each one). ENTER LAST TWO DIGITS OF MODEL YEAR.)

90. What is the model name (of each one)? (SEE INSTRUCTION BELOW.)

**INTERVIEWER INSTRUCTIONS:**

- Q. 86 -- "Regular use" means keeping the vehicle at home.
- Q. 88 -- If household has more than four vehicles, mark answers for the four vehicles used most.
- Q. 90 -- For pick-up trucks and vans, be sure to get a specific model name (examples: Chevrolet Luv, Ford Courier, GMC G1500, or Datsun 620, etc.) If respondent does not know model name, probe for size of truck (1/2 ton, 3/4 ton, etc.).

91. Now I have some questions about the people who live here. Please tell me who they are in relation to (HOUSEHOLDER). I also would like to know their ages on their last birthday. Please begin with (HOUSEHOLDER). (SEE INSTRUCTION BELOW.)

PERSON NUMBER	WHO IS RESPONDENT?	RELATIONSHIP TO HOUSEHOLDER	SEX		AGE
			FEMALE	MALE	
1		HOUSEHOLDER	1[]	2[]	
2			1[]	2[]	
3			1[]	2[]	
4			1[]	2[]	
5			1[]	2[]	
6			1[]	2[]	
7			1[]	2[]	
8			1[]	2[]	
9			1[]	2[]	
10			1[]	2[]	
11			1[]	2[]	
12			1[]	2[]	

609-610:06

611-616

621-626

631-636

641-646

651-656

661-666

671-676

709-710:07

711-716

721-726

731-736

741-746

751-756

I have listed (READ RELATIONSHIPS FROM Q. 91 ABOVE). Have I missed.....

FOR OFFICE USE ONLY:

757-758

- ... 92. Any babies or small children?  YES (ADD TO LISTING)  
 NO
- ... 93. Any lodgers, boarders, or persons in your employ who live here?  YES (ADD TO LISTING)  
 NO
- ... 94. Anyone who usually lives here but is away traveling or in the hospital? (SEE INSTRUCTION BELOW.)  YES (ADD TO LISTING)  
 NO
- ... 95. Anyone else staying here who does not have a regular residence elsewhere?  YES (ADD TO LISTING)  
 NO

96. Does another family share your home with you?  YES (SEE INSTRUCTION BELOW.)  
 NO

**INTERVIEWER INSTRUCTIONS:**

For questions on this and the following pages, where the term "HOUSEHOLDER" is inserted, use the appropriate designation -- you, your husband, wife, partner -- depending on who is the householder and whom you are interviewing.

- Q. 91 -- Be sure to list relationships, not names. Include members of a second family that share the housing unit. Check box to indicate which household member is the respondent.
- Q. 94 -- Persons who are normally members of the household but who are now living away from home (e.g., college students or members of the Armed Forces) should not be listed.
- Q. 96 -- If another family has a separate apartment that is defined by our rules as a separate housing unit, the additional housing unit should be listed on your housing unit address list for this location. See sampling instructions as to whether an additional interview should be completed. Go back over this interview, excluding that part of the house that is defined as a separate housing unit.

If the second family's space does not meet the definition of a separate housing unit, be sure that the members of this second family are included in the list of household members above.

INTERVIEWER: MARK ANSWER. ASK, IF NECESSARY.

HOUSEHOLDER'S  
MARITAL STATUS

97. Which of the following best describes (HOUSEHOLDER): now married, widowed, divorced or separated, or never married?

- 1  NOW MARRIED  
2  WIDOWED  
3  DIVORCED OR SEPARATED  
4  NEVER MARRIED

759

HAND RESPONDENT EXHIBIT 98

98. Which of the groups on this exhibit best describes (HOUSEHOLDER)?

- 1  WHITE  
2  BLACK OR NEGRO  
3  AMERICAN INDIAN, ALASKAN NATIVE  
4  ASIAN, PACIFIC ISLANDER  
5  OTHER (SPECIFY): \_\_\_\_\_  
\_\_\_\_\_

760

TAKE BACK EXHIBIT 98

99. Is (HOUSEHOLDER) of Spanish or Hispanic origin or descent?

- 1  YES  
0  NO

761

I have just a few questions for background statistical purposes.

100. What is the highest grade (or year) (HOUSEHOLDER) attended in school?
- |  |               |
|--|---------------|
| 00[] NEVER ATTENDED SCHOOL -- SKIP TO Q. 102 |               |
| 01[] FIRST                                   | 07[] SEVENTH  |
| 02[] SECOND                                  | 08[] EIGHTH   |
| 03[] THIRD                                   | 09[] NINTH    |
| 04[] FOURTH                                  | 10[] TENTH    |
| 05[] FIFTH                                   | 11[] ELEVENTH |
| 06[] SIXTH                                   | 12[] TWELFTH  |

762-763

COLLEGE (ACADEMIC YEARS)

- |         |                 |
|---------|-----------------|
| 13[] C1 | 16[] C4         |
| 14[] C2 | 17[] C5         |
| 15[] C3 | 18[] C6 OR MORE |

101. Did (HOUSEHOLDER) finish that grade (or year)?
- |         |     |
|---------|-----|
| 1[] YES |     |
| 0[] NO  | 764 |
102. At any time in 1980, did (HOUSEHOLDER) work for pay at a job or business?
- |                          |     |
|--------------------------|-----|
| 1[] YES                  |     |
| 0[] NO -- SKIP TO Q. 104 | 765 |

IF "YES," ASK:

103. During 1980, how many weeks did (HOUSEHOLDER) work even for a few hours? Include paid vacation and sick leave as work.

NUMBER  
OF WEEKS:

766-767

IF LESS THAN 50 WEEKS ON Q. 103, OR "NO" ON Q. 102, ASK:

HAND RESPONDENT EXHIBIT 104/109

104. What was the main reason (HOUSEHOLDER) did not work (the remaining weeks) in 1980?
- |   |         |
|---|---------|
| 01[] LOOKING FOR WORK (OR ON LAY-OFF)   |         |
| 02[] ILL OR DISABLED AND UNABLE TO WORK |         |
| 03[] TAKING CARE OF FAMILY              |         |
| 04[] GOING TO SCHOOL                    | 768-769 |
| 05[] UNABLE TO FIND WORK                |         |
| 06[] IN ARMED FORCES                    |         |
| 07[] RETIRED                            |         |
| 08[] DOING SOMETHING ELSE               |         |

TAKE BACK EXHIBIT 104/109



IF HOUSEHOLDER HAS A SPOUSE/PARTNER IN THE HOUSEHOLD, ASK Q. 105 ff. OTHERWISE SKIP TO Q. 110.

809-810:08

105. What is the highest grade (or year) that (SPOUSE/PARTNER) attended in school? (SEE INSTRUCTION BELOW.)

00[] NEVER ATTENDED SCHOOL -- SKIP TO Q. 107

- 01[] FIRST                      07[] SEVENTH
- 02[] SECOND                    08[] EIGHTH
- 03[] THIRD                     09[] NINTH
- 04[] FOURTH                   10[] TENTH
- 05[] FIFTH                    11[] ELEVENTH
- 06[] SIXTH                    12[] TWELFTH

COLLEGE (ACADEMIC YEARS)

811-812

- 13[] C1                        16[] C4
- 14[] C2                        17[] C5
- 15[] C3                        18[] C6 OR MORE

106. Did (SPOUSE/PARTNER) finish that grade (or year)?

- 1[] YES
- 0[] NO

813

107. At any time in 1980, did (SPOUSE/PARTNER) work for pay at a job or business?

- 1[] YES
- 0[] NO -- SKIP TO Q. 109

814

IF "YES," ASK:

108. During 1980, how many weeks did (SPOUSE/PARTNER) work even for a few hours? Include paid vacation and sick leave as work.

NUMBER OF WEEKS:

815-816

IF LESS THAN 50 WEEKS ON Q. 108, OR "NO" ON Q. 107, ASK:

HAND RESPONDENT EXHIBIT 104/109

109. What was the main reason (SPOUSE/PARTNER) did not work (the remaining weeks) in 1980?

- 01[] LOOKING FOR WORK (OR ON LAY-OFF)
- 02[] ILL OR DISABLED AND UNABLE TO WORK
- 03[] TAKING CARE OF FAMILY
- 04[] GOING TO SCHOOL
- 05[] UNABLE TO FIND WORK
- 06[] IN ARMED FORCES
- 07[] RETIRED
- 08[] DOING SOMETHING ELSE

817-818

TAKE BACK EXHIBIT 104/109

**INTERVIEWER INSTRUCTIONS:**

For questions on this page, where the term "SPOUSE/PARTNER" is inserted, use the appropriate designation -- you, your husband, wife, partner -- depending on who is the householder and whom you are interviewing.

HAND RESPONDENT EXHIBIT 110

110. In 1980 did you or any member of your family living here receive any money from: (INTERVIEWER, READ EACH ITEM.)
- |   |                              |                             |     |
|---|------------------------------|-----------------------------|-----|
| A. Wages or salaries?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 819 |
| B. Self employment from business or farm?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 820 |
| C. Dividends, estates, trusts, interest on savings accounts or bonds?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 821 |
| D. Net rental income?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 822 |
| E. Government employee pensions?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 823 |
| F. Social Security or Railroad Retirement payments?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 824 |
| G. Private pensions or annuities?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 825 |
| H. Disability payments from Social Security or Railroad?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 826 |
| I. Aid to Families with Dependent Children (AFDC)?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 827 |
| J. Supplementary Security Income (SSI)?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 828 |
| K. Other public assistance? (SPECIFY):  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 829 |
| <hr/>   |                              |                             |     |
| L. Veterans' payments?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 830 |
| M. Unemployment compensation?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 831 |
| N. Workmen's compensation?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 832 |
| O. Alimony or child support?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 833 |
| P. Regular contributions from non-family members living in this household or from people outside the household? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 834 |
| Q. Any other source of income? (SPECIFY):   | <input type="checkbox"/> YES | <input type="checkbox"/> NO | 835 |

TAKE BACK EXHIBIT 110

111. In 1980 did you or any member of your family living here receive food stamps?
- |                              |     |
|------------------------------|-----|
| <input type="checkbox"/> YES | 836 |
| <input type="checkbox"/> NO  |     |

HAND RESPONDENT EXHIBIT 112

112. Since October 1980, did you or any member of your family living here receive any of the following forms of assistance from the government in paying your energy costs? (INTERVIEWER, READ EACH ITEM.)
- |   |     |
|---|-----|
| <input type="checkbox"/> Cash payment to household specifically to help pay for energy costs                                    | 837 |
| <input type="checkbox"/> Vouchers or coupons to give to utility companies or fuel dealers to help pay for energy costs          | 838 |
| <input type="checkbox"/> Government payments to your utility company or fuel dealer on your behalf to help pay for energy costs | 839 |
| <input type="checkbox"/> Other energy assistance: (SPECIFY) _____   | 840 |

TAKE BACK EXHIBIT 112

HAND RESPONDENT EXHIBIT 113

113. Now let's look at this list of income groups. Please tell me which group letter best describes the total combined income in 1980 of all members of your family living here, from all sources -- wages, dividends, Social Security, and so forth -- before taxes and deductions. (Family includes all related persons living in this household.)

841-842

CIRCLE LETTER FOR INCOME GROUP

01 A LOSS	09 I \$9,000 - \$9,999	17 Q \$20,000 - \$24,999
02 B \$0 - \$2,999	10 J \$10,000 - \$10,999	18 R \$25,000 - \$29,999
03 C \$3,000 - \$3,999	11 K \$11,000 - \$11,999	19 S \$30,000 - \$34,999
04 D \$4,000 - \$4,999	12 L \$12,000 - \$12,999	20 T \$35,000 - \$39,999
05 E \$5,000 - \$5,999	13 M \$13,000 - \$13,999	21 U \$40,000 - \$49,999
06 F \$6,000 - \$6,999	14 N \$14,000 - \$14,999	22 V \$50,000 - \$74,999
07 G \$7,000 - \$7,999	15 O \$15,000 - \$16,999	23 W \$75,000 OR OVER
08 H \$8,000 - \$8,999	16 P \$17,000 - \$19,999	96 <input type="checkbox"/> DON'T KNOW
		97 <input type="checkbox"/> REFUSED

TAKE BACK EXHIBIT 113

114. Do you or members of your household own your home or do you rent?
- 1  OWN (BUYING)
- 2  RENT -- SKIP TO Q. 116
- 3  OCCUPIED WITHOUT PAYMENT OF RENT -- SKIP TO Q. 117

843

IF "OWN (BUYING)," ASK:

115. Is this house (apartment) part of a condominium or cooperative?
- 1  YES, CONDOMINIUM
- 2  YES, COOPERATIVE
- 0  NO

844

IF "RENT," ASK:

116. What is the monthly rent of your house/apartment? \$ \_\_\_\_\_ .00 PER MONTH
- OCCUPIED WITHOUT PAYMENT

845-848

IF RENT IS NOT PAID BY THE MONTH, NOTE IN THE SPACE BELOW THE TIME PERIOD COVERED AND THE AMOUNT PAID PER TIME PERIOD.

TIME PERIOD COVERED: \_\_\_\_\_

AMOUNT PAID PER TIME PERIOD: \$ \_\_\_\_\_ .00

HAND RESPONDENT EXHIBIT 117

117. We may have covered some of these points before, but just to be sure, please look at this exhibit and tell me whether these fuels are used for these purposes in your household.

909-910:09

	USED	NOT USED	PAID BY HOUSEHOLD	INCLUDED IN RENT	OTHER (SPECIFY)	
<u>ELECTRICITY</u>						
a. FOR HOT WATER	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	911-912
b. FOR HEATING YOUR HOME	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	913-914
c. FOR AIR-CONDITIONING (CENTRAL OR WINDOW/WALL UNITS)	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	915-916
d. FOR COOKING	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	917-918
e. FOR LIGHTING AND OTHER APPLIANCES	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	919-920
<u>GAS FROM UNDERGROUND PIPES SERVING YOUR NEIGHBORHOOD</u>						
f. FOR HOT WATER	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	921-922
g. FOR HEATING YOUR HOME	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	923-924
h. FOR CENTRAL AIR-CONDITIONING	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	925-926
i. FOR COOKING	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	927-928
j. FOR OTHER APPLIANCES (INCLUDE OUTSIDE GAS LIGHT HERE)	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	929-930
<u>LPG GAS (BOTTLED OR TANK GAS)</u>						
k. FOR HOT WATER	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	931-932
l. FOR HEATING YOUR HOME	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	933-934
m. FOR CENTRAL AIR-CONDITIONING	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	935-936
n. FOR COOKING INSIDE HOME	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	937-938
o. FOR COOKING ON OUTDOOR GRILL	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	939-940
p. FOR OTHER APPLIANCES (INCLUDE OUTSIDE GAS LIGHT HERE)	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	941-942
<u>FUEL OIL OR KEROSENE</u>						
q. FOR HOT WATER	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	943-944
r. FOR HEATING YOUR HOME	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	945-946
s. FOR COOKING	1 <input type="checkbox"/>	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	5 <input type="checkbox"/>	947-948

FOR EACH USE OF EACH FUEL, ASK:

118. Is that paid for by your household, included in your rent, or do you get it some other way?



TAKE BACK EXHIBIT 117

IF UNDERGROUND GAS IS NOT USED, ASK Q. 119. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 120.

119. Is gas from underground pipes available in this neighborhood?

- 1  YES
- 0  NO
- 6  DON'T KNOW

949

IF ALL FUEL BILLS ARE INCLUDED IN RENT, SKIP TO Q. 136.

IF HOUSEHOLD USES AND PAYS FOR LPG GAS (SEE QUESTIONS 117-118, PARTS k-p), ASK Q. 120 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 123.

120. About how many deliveries of LPG does your household usually get in a year? NUMBER OF DELIVERIES:  950-951
- 94[] CASH AND CARRY, PICK UP AT STORE
- 95[] LIVED HERE LESS THAN 1 YEAR

121. Did you buy LPG for this house (apartment) in the past 12 months from one company or from more than one company? 1[] ONE COMPANY 952  
2[] MORE THAN ONE COMPANY

IF "MORE THAN ONE COMPANY," ASK:

122. How many different companies? 2[] TWO  
3[] THREE 953  
4[] FOUR OR MORE

IF HOUSEHOLD USES AND PAYS FOR FUEL OIL OR KEROSENE (SEE QUESTIONS 117-118, PARTS q-s), ASK Q. 123 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 126.

123. About how many deliveries of fuel oil/kerosene does your household usually get in a year? NUMBER OF DELIVERIES:  954-955
- 95[] LIVED HERE LESS THAN 1 YEAR

124. Did you buy fuel oil/kerosene for this house (apartment) in the past 12 months from one company or from more than one company? 1[] ONE COMPANY 956  
2[] MORE THAN ONE COMPANY

IF "MORE THAN ONE," ASK:

125. How many different companies? 2[] TWO  
3[] THREE 957  
4[] FOUR OR MORE

IF HOUSEHOLD USES AND PAYS FOR ELECTRICITY, GAS (FROM UNDERGROUND PIPES OR LPG), OR FUEL OIL/ KEROSENE IN Q. 118, ASK Q. 126 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

HAND RESPONDENT EXHIBIT 126

126. Do any of your household electric, gas, fuel oil, or kerosene bills include charges for fuel used for purposes other than for your own living quarters, such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else? 1  YES 958  
0  NO -- TAKE BACK EXHIBIT 126  
SKIP TO INSTRUCTION FOR Q. 132.

IF "YES," ASK:

127. Which fuel bills include charges for fuel used for purposes other than your own living quarters? (MARK AS MANY AS APPLY.) 959
- ELECTRICITY 960
  - GAS FROM UNDERGROUND PIPES 961
  - LPG GAS (BOTTLED OR TANK GAS) 962
  - FUEL OIL OR KEROSENE

TURN TO EXHIBIT 128-131

IF "ELECTRICITY" ON Q. 127, ASK:

128. About how much of your household's electricity bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else? 963
- 0  VERY LITTLE (LESS THAN 5%)
  - 1  1/4 (5 - 33%)
  - 2  1/2 (34 - 66%)
  - 3  3/4 (67 - 95%)

IF "GAS FROM UNDERGROUND PIPES" ON Q. 127, ASK:

129. About how much of your household's gas bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else? 964
- 0  VERY LITTLE (LESS THAN 5%)
  - 1  1/4 (5 - 33%)
  - 2  1/2 (34 - 66%)
  - 3  3/4 (67 - 95%)

IF "LPG GAS" ON Q. 127, ASK:

130. About how much of your household's LPG bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else? 965
- 0  VERY LITTLE (LESS THAN 5%)
  - 1  1/4 (5 - 33%)
  - 2  1/2 (34 - 66%)
  - 3  3/4 (67 - 95%)

IF "FUEL OIL OR KEROSENE" ON Q. 127, ASK:

131. About how much of your household's fuel oil/kerosene bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else? 966
- 0  VERY LITTLE (LESS THAN 5%)
  - 1  1/4 (5 - 33%)
  - 2  1/2 (34 - 66%)
  - 3  3/4 (67 - 95%)

TAKE BACK EXHIBIT 128-131

CONTINUE IF ANY ELECTRIC, GAS (FROM UNDERGROUND PIPES OR LPG), OR FUEL OIL/KEROSENE BILLS ARE PAID BY HOUSEHOLD. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

132. In addition to the types of fuel you use, we are interested in the quantities used and in the amount that people pay for electricity, gas, fuel oil, or kerosene in different parts of the United States.

I have a form that would authorize the companies that supply your household to provide that information to Response Analysis Corporation. The authorization applies to the period from January 1981 through April 1985.

Since this study is being done nationwide, it will give a good picture of the differences in fuel cost and usage all over the country. The information is needed to help establish important national energy policies.

INTERVIEWER: REMOVE THE AUTHORIZATION FORM FROM THE QUESTIONNAIRE AND HAND TO RESPONDENT. EITHER YOU OR RESPONDENT SHOULD FILL IN THE NAME(S) OF COMPANIES. IF MORE THAN ONE LPG OR FUEL OIL OR KEROSENE COMPANY HAS BEEN USED SINCE JANUARY 1, 1981, FILL IN ADDITIONAL COMPANY NAMES ON OTHER SIDE OF FORM. PLEASE PRINT.

1[] AUTHORIZATION FORM SIGNED

0[] AUTHORIZATION FORM NOT SIGNED -- INTERVIEWER, EXPLAIN BELOW:

967

IF AUTHORIZATION FORM IS SIGNED, ASK Q. 133 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

133. Do your fuel bills come addressed to (LAST NAME OF SIGNATURE ON AUTHORIZATION FORM), or are they in another name?

1[] SAME AS LAST NAME -- SKIP TO INSTRUCTION FOR Q. 135

2[] ANOTHER NAME

968

IF BILL IS IN ANOTHER NAME, ASK:

134. What is that name and address:

BILLING NAME: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

CITY AND STATE: \_\_\_\_\_

ZIP CODE: \_\_\_\_\_

IF HOUSEHOLD SIGNED THE AUTHORIZATION FORM, ASK Q. 135. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

135. Would it be possible for you to give me your customer number at your electric/gas company? This number is on your bills from the company.

ELECTRIC COMPANY -- CUSTOMER NUMBER: \_\_\_\_\_

[] NOT AVAILABLE/REFUSED

969

GAS (FROM UNDERGROUND PIPES) -- CUSTOMER NUMBER: \_\_\_\_\_

[] NOT AVAILABLE/REFUSED

970



## U.S. DEPARTMENT OF ENERGY SURVEY

### Authorization Form for Residential Energy Consumption Survey

I hereby give permission to the company (companies) below to provide information to Response Analysis Corporation (or other designee of the U.S. Department of Energy) for confidential use in connection with their survey for the U.S. Department of Energy.

This authorization covers use of fuels (electricity, natural gas or LPG, fuel oil or kerosene) by my household from January 1, 1981 through April 30, 1985, including:

- 1) the total amount of fuels used by my household.
- 2) the total price charged for fuels by my household.

Companies are authorized to provide this information by monthly periods or by delivery date, whichever applies.

A photocopy of this authorization may be accepted with the same authority as the original.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

PLEASE PRINT

YOUR NAME		
ADDRESS	APT. NO.	
CITY OR POST OFFICE	STATE	ZIP CODE
TELEPHONE		
AREA CODE: _____	NUMBER: _____	

**PLEASE COMPLETE ONE BLOCK BELOW FOR EACH FUEL USED BY YOUR HOUSEHOLD**  
(IF MORE THAN ONE SUPPLIER OF A PARTICULAR FUEL USE THE OTHER SIDE OF THIS SHEET)

ELECTRICITY

PRINT FULL NAME OF ELECTRIC COMPANY	
LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE	
TELEPHONE	
AREA CODE: _____	NUMBER: _____

GAS   
from underground pipes  
or LPG (bottled or tank gas)

PRINT FULL NAME OF GAS COMPANY	
LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE	
TELEPHONE	
AREA CODE: _____	NUMBER: _____

FUEL OIL   
or KEROSENE

PRINT FULL NAME OF OIL COMPANY	
LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE	
TELEPHONE	
AREA CODE: _____	NUMBER: _____



**GAS** →  
LPG (bottled  
or tank gas)

**SECOND GAS COMPANY**

<i>PRINT FULL NAME OF GAS COMPANY</i>
<i>LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE</i>
<i>TELEPHONE</i> <i>AREA CODE: _____ NUMBER: _____</i>

**THIRD GAS COMPANY**

<i>PRINT FULL NAME OF GAS COMPANY</i>
<i>LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE</i>
<i>TELEPHONE</i> <i>AREA CODE: _____ NUMBER: _____</i>

**FUEL OIL** →  
or KEROSENE

**SECOND FUEL OIL/KEROSENE COMPANY**

<i>PRINT FULL NAME OF OIL COMPANY</i>
<i>LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE</i>
<i>TELEPHONE</i> <i>AREA CODE: _____ NUMBER: _____</i>

**THIRD FUEL OIL/KEROSENE COMPANY**

<i>PRINT FULL NAME OF OIL COMPANY</i>
<i>LOCATION OF COMPANY (IF KNOWN) - CITY AND STATE</i>
<i>TELEPHONE</i> <i>AREA CODE: _____ NUMBER: _____</i>

IF HOUSEHOLD HAS ONE OR MORE FUELS "INCLUDED IN RENT" OR "OTHER" (SEE Q. 118), ASK Q. 136. OTHERWISE, SKIP TO Q. 137.

136. We may be needing some additional information about fuels used in this building (house). May I have the name of the person or company to whom you pay rent or who is responsible for paying the fuel bills for this building (house)?

NAME: \_\_\_\_\_

971

TELEPHONE NUMBER: (AREA CODE: \_\_\_\_\_) \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

CITY OR TOWN/STATE/ZIP CODE: \_\_\_\_\_

ASK EVERYONE

137. For interview verification purposes, may I have your name, phone number, and mailing address please?

RESPONDENT'S NAME: \_\_\_\_\_

TELEPHONE NUMBER: (AREA CODE: \_\_\_\_\_) \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

CITY OR TOWN/STATE/ZIP CODE: \_\_\_\_\_

138. So far, we've been talking about things in your household that affect your energy use. What we need also is a measure of your year-round living space.

With your permission, I would like to measure your home. I can do it from the inside or the outside. With your home, I think it would be most accurate to do it on the (inside/outside). (SEE INSTRUCTION BELOW.)

1009-1010:10

INDICATE WHETHER THE MEASUREMENT IS DONE INSIDE OR OUTSIDE THE HOME.

- 1  INSIDE
- 2  OUTSIDE
- 5  OTHER (PLEASE SPECIFY): \_\_\_\_\_

139. Are any of the areas measured not heated during most of the heating season?

- 1  YES -- INDICATE UNHEATED AREA(S) ON THE DIAGRAM WITH LINES LIKE THIS (/////).
- 0  NO

INTERVIEWER OBSERVATION:

140. MARK TYPE OF HOUSING UNIT:

- 1  MOBILE HOME OR TRAILER
- 2  ONE-FAMILY HOUSE
  - 1  ONE STORY
  - 2  TWO STORY
  - 3  THREE STORY
  - 4  SPLIT LEVEL
  - 5  OTHER (SPECIFY): \_\_\_\_\_
- 3  APARTMENT BUILDING OR OTHER STRUCTURE WITH TWO OR MORE UNITS

} IF ONE-FAMILY HOUSE, MARK STYLE

**INTERVIEWER INSTRUCTIONS:**

Q. 138 -- The general rule for this question is to include measurements for all parts of the housing unit enclosed from the weather. Include basements that are enclosed from the weather, whether or not there is finished space, and attached garages that are enclosed from the weather. Include attics only if there is some heated or finished space.

Do not include: Crawl spaces, sheds, garages, carports, or porches that are open to the weather or detached from the house; attics that do not have finished or heated space.

Note any measurement problems on page 37. Use the back cover for rough sketches.

FOR OFFICE USE ONLY

Q. 138	Q. 139	Q. 140 Type	Q. 140 Style	Control	LQT
1011	1012	1013	1014	1015	1016-1018

RECORD MEASUREMENTS ON DIAGRAM TO NEAREST FOOT

RECTANGULAR SHAPE

OR

DIAGRAM OTHER SHAPES

Basement 1 <input type="checkbox"/> Full      2 <input type="checkbox"/> Half Basement	

First story 1 <input type="checkbox"/> Full story      2 <input type="checkbox"/> Half story	

DIAGRAM SECOND AND THIRD STORY ON NEXT PAGE.

FOR OFFICE USE ONLY

B

1

Flr Codes			Unit A				Unit B				Unit C			Unit D			# of Units
1019	20	21	22	23-24	25-26	27	28-29	30-31	32	33-34	35-36	37	38-39	40-41	42		
1043	44	45	46	47-48	49-50	51	52-53	54-55	56	57-58	59-60	61	62-63	64-65	66		

RECORD MEASUREMENTS ON DIAGRAM TO NEAREST FOOT

RECTANGULAR SHAPE

OR

DIAGRAM OTHER SHAPES

Second story  
 1  Full story    2  Half story

The diagram shows a rectangle with a vertical bracket on the right side and a horizontal bracket below it, both with empty square boxes next to them for recording measurements.

Third story  
 1  Full story    2  Half story

The diagram shows a rectangle with a vertical bracket on the right side and a horizontal bracket below it, both with empty square boxes next to them for recording measurements.

FOR OFFICE USE ONLY  
 1109-1110:11

	Flr Codes				Unit A				Unit B				Unit C				Unit D				# of Units
	1111	12	13	14	15-16	17-18	19	20-21	22-23	24	25-26	27-28	29	30-31	32-33	34					
2																					
3	1135	36	37	38	39-40	41-42	43	44-45	46-47	48	49-50	51-52	53	54-55	56-57	58					

1209-1210:12

TOTAL

	Heated	Unheated	DK Htd/Unhtd	TOTALS		
				H	UH	DK
	1211-1215	1216-1220	1221-1225	26	27	28

INTERVIEWER REPORT ON MEASUREMENT OF YEAR-ROUND LIVING SPACE

A. What problems, if any, did you have in measuring this house/apartment?

B. What effect, if any, did these problems have on the accuracy of your measurement?

TIME INTERVIEW COMPLETED: \_\_\_\_\_ LENGTH OF INTERVIEW: \_\_\_\_\_ MINUTES

INTERVIEWER'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

INTERVIEWER'S I.D. #: \_\_\_\_\_

1229-  
1231

1232-  
1235

1236-  
1240

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