## PRE-BLAST SURVEY, XESXXENXXXV

## I. Basic Information

1. Name of Resident: Iawrence and Michael Fäx
2. Dace: $\qquad$
$\qquad$ Time: 10:00AM
3. Address: Route 1, Amoret, Missouri 64722
4. Locarion: East side of Broadway, north of Washington Street
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: Not Applicable
7. Dates of any temporary or permanent abandonment: Unknown
II. Information Concerning Buildings
(repeat Eor additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addictons: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) Eraning (jolsts, rafters, and stud walls): Metal Building
(b) incerlor walls:
(c) roof:
(d) footings; foundations: Concrete slab
(e) basement walls (indicate how keyed to foocing of floor):

Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable,
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

825 feet at building
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth"and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interlor walls:
2. Receding of doors, windoris:
3. Noticeable settlement:
4. Eoundation cracks:
5. Exterior wall aracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or sperific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activitles.

See survey narrative

## White- Industrial Seismology, Inc. <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256

JOPLIN, NIO 64802-1256
PH. (417) 624-0164

November 13, 1986
Report No. 87056-55
P \& M Map Photo No. 107

Subject: Inspection of the Lawrence and Michael Fox Industrial Property Route 1
Amoret, Missouri 64722
November 10, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the south side of the main building. (Photo 55-1)
ID photograph of the east side. (Photo 55-2)
This is a metal structure on a poured concrete base.
The smaller structure at the north side has a dirt floor.
There is a driveway at the east side. This driveway is spalled and dirty. (Photos 55-3 and 55-4)

There is a sidewalk along the south side. (Photo 55-5)
There is a crack in the sidewalk near the east end. The maximum width is about $1 / 4$ inch. (Photo 55-6)

There is another crack in the sidewalk a few feet further to the west. It is also spalled. (Photo 55-7)

There is another crack in the sidewalk a few more feet to the west. This has a width of $1 / 16$ of an inch. (Photo 55-8)

There is a driveway slab at the south side of the structure. (Photo 55-9)

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The Pittsburg and Midway Coal Mining Company
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There is a diagonal mack across this slab from the doorway. It measures $3 / 16$ of an inch in width maximum. (Photo 55-10)

Photograph of the rest of the sidewalk to the west. (Photo 55-11)
There is also an old driveway at the west end of the structure. This driveway is cracked and spalled. There is grass growing through the cracks. (Photos 55-12, 55-14 thru 55-18)

ID photograph of the west side. (Photo 55-13)
There is a broken window, and the glass is broken out of the door on the west side. (Photos 55-19 and 55-20)

Garage
We are now inside the main garage.
The poured floor is in sections.
Much of the floor area is obscured by materials and automobiles.
There is a hairline crack in the floor near the east end, near the southeast corner. The width is about $1 / 8$ of an inch. (Photos 55-21 thru 55-23)

There is a hairline crack in the floor off the east wall about the center. (Photos 55-24 thru 55-26)

There used to be an office at the southwest corner.

## Office

Carpeted floor.
Walls look like they were paneled.
Ceiling is heavily damaged and bowing. (Photos 55-27 and 55-28)
There is a brick fireplace at the northeast corner. There is no evident cracking in it. (Photos 55-29 thru 55-34)

ID photographs of this roan. (Photos 55-35 thru 55-37)
We are now at the west end of the main building.
There is a crack behind the drivewy entrance, across the floor. It has a width of $1 / 16$ of an inch. (Photos 55-38 thru 55-42)

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The pittsburg and Midway Coal Mining Company
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There is a bathroom at the northwest corner.

Bathroom

Vinyl covering on the floor.
Paneled walls.
Ceiling tiles on the ceiling.
The filing is heavily water stained. (Photos 55-43 and 55-44)
ID photographs. (Photos 55-45 thru 55-48)
There are a pair of upstairs areas at the west end. They are used for storage.

General interior photographs of the building. (Photos 55-49 thru 55-52)
We are now at the attached building on the north side.
This is mainly a storage or work area for field type equipment. There is dirt and hay on the floor. ID photographs. (Photos 55-53 thru 55-55)

General Comments
The Lawrence and Michael Fox Industrial Building is located north of their residence. The ground around the building is generally level. The structure has no guttering or downspouts.

The poured concrete floor is well jointed. However, there were same hairline cracks in areas. Much of the floor area was obscured by machinery and vehicles.

The general condition of the structure is fair. There were broken windows and the bathroom ceiling was heavily water damaged.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

## $\mathrm{RMW} / \mathrm{mp}$

Enclosure: 55 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 107

2- SUMMARY FORM

3- SKETCH OF STRUCIURE


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## 55-1

## I. Basic Infornation

1. Name of Resident: Lawrence and Michael Fox
2. Dace: November 10,1986 Tine: $\qquad$
3. Address: Box 202, Amoret, Missouri 64722
4. Location: Northeast Corner of Broadway and Washington Streets
5. Telephone Number: (816) 925-3222
6. Dates of occupancy by current resident: 1981-Present
7. Dates of any temporary or permanent abandownent: None
II. Information Conce:ning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addicions: None
(a) $\qquad$
(b)
(c)
10. Construction of building:
(a) Eraning ijoists, rafters, and stud walls): Unknown
(b) interior walls: Paneled
(c) rook: Shingled
(d) footings; Eoundations: Poured concrete
(e) basement walls (Indicate how keyed to fooclng of floor):

Could not see
(E) basement. Eloor (keyways, chickness):

Could not see
(g) name of person(s) who constructed bullding: Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

827 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use): None
5. Cisterns or surtace water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures:

See photo survey
8. Description of general grading or landscaplng in vicinity: See photo survey
IV. Any notable existing deterioration or danage See photo survey

1. Cracks in inte-lor walls:
2. Receding of doors, windors:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of resicience, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplamentary drawings See sketch
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VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may extibit an unusual response to normal blasting activities.
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See survey narrative
White Industrial Seismology, Inc.-
2431 RANGELINE SUITE A-B
P.O. BOX 1256JOPLIN, MO 64802-1256
November 13, 1986
Report No. 87056-54
P \& M Map Photo No. 106
Subject: Inspection of the Lawrence and Michael Fox Residence ..... Box 202
Amoret, Misisouri ..... 64722
November ..... 10, 1986
Tb: The Pittsburg and Midway Coal Mining CompanyP. O. Box 8
Amsterdam, Missouri ..... 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.
INTERIOR INSPECTION
Living Room
Carpeted floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-1 thru 54-8)
Nothing noted.
Kitchen
ID photographs. (Photos 54-9 thru 54-11)
Nothing noted.
Storage Room
Carpeted floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-12 thru 54-14)
Nothing noted.
To the west of the kitchen there is a study area.
White Industrial Seismology, Inc.
The Pittsburg and Miclway Coal Mining Company

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## Study Area

Carpeted floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-15 thru 54-17)
There is a bedroom to the south of the study.
Bedroom
Carpeted floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-18 thru 54-21)
Nothing noted.
To the west is another bedroom.
Bedroom
Carpeted floor.
Paneled walls and ceiling.
Nothing is noted in this bedroom.
ID photographs. (Photos 54-22 thru ..... 54-25)
Across the hall from this bedroom is a bathroom.
Bathroom
Vinyl floor.
Partially paneled and papered walls.
Paneled ceiling.
The air vent is stuf:Eed with a shirt. The ceiling is discolored andcracked around the vent. (Photo 54-26)Nothing else noted.
ID photographs. (Photos 54-27 thru 54-29)
Next roam on the north side of the hall is the utility roan.
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The Pittsburg and Midway Coal Mining Company
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Utility Room
Vinyl floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-30 thru 54-32)
Nothing noted.
Hall
Carpeted floor.
Paneled walls and ceiling.
Nothing noted. (Phot: 54-33)
There is a hole in the door of the second south bedroom to the west ofthe kitchen. (Photo 54-34)
There is a bedroon at: the far west end of the hall and there is anattached bathroom on the north side.
Bedroom
Carpeted floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-35 thru 54-38)
Nothing noted.
Now moving into the bathroom.
Bathroom
This is at the northinest corner of the trailer.
Vinyl floor.
Paneled walls and ceiling.
ID photographs. (Photos 54-39 thru 54-43)
Nothing noted.
Basement
There are two fireplaces. One on the south wall and one in thesoutheast corner.

White Industrial Seismology, Inc.

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Poured concrete walls and floor.

There are four brick pillars near the middle of the basement.
We will start the inspection of the basement walls at the west end of the south side.

There is a 15 inch long hairline crack at the lower left corner of the westernmost window. (Photo 54-44)

There is a brick fireplace.
ID photographs of the west side of the fireplace. (Photos 54-45 and 54-46)

No mortar cracks are noted in the west side.

Now looking at the front. (Photos 54-47 thru 54-54)
Now looking at the east side. (Photos 54-55 and 54-56)

There are no evident mortar or brick cracks.

Continuing with the south wall.
There is a 15 inch long hairline crack at the lower right corner of the easternmost window. (Photo 54-57)

There is also a hairline diagonal crack at the lower left corner of the same window. It measures about 22 inches in length. (Photos 54-58 and 54-59)

There is another hairline diagonal crack just below this. It measures 3 feet 8 inches in length. (Photos 54-60 thru 54-63)

There is another brick fireplace at the southeast corner. (Photos 54-64 thru 54-71)

There were no cracks noted in the mortar.
ID photographs of the: south wall. (Photos 54-72 thru 54-75)
Now looking at the east wall.
There is an uneven area in the foundation pour, three sections to the left of the fireplace. (Photo 54-76)

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The Pittsburg and Midway Coal Mining Company
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ID photograph of the east wall. (Photo 54-77)
Now looking at the north foundation wall.
There is a hairline vertical crack at the lower left corner of the easternmost window. This measures about 6 inches in length. (Photo 54-78)

There is a vertical hairline crack following the pour joint between the 10th and llth sections from the east end. (Photos 54-79 thru 54-85)

ID photographs of the north wall. (Photos 54-86 thru 54-89)
Now looking at the west foundation wall.
ID photograph of the west wall. There are no cracks evident in this wall. (Photo 54-90)

There were no cracks noted in the floor.
ID photographs of the brick column supports. (Photos 54-91 thru 54-102)
There were no cracks noted in these brick supports.
General photographs of the basement area. (Photos 54-103 and 54-104)
EXTERIOR INSPECTION
Start the exterior inspection in the patio area at the west end of the basement.

Patio
Brick walls.
Poured concrete flocr.
We will start with the north wall.
ID photographs. (Photos 54-105 and 54-106)
Now looking at the west wall.
The west wall is bowed to the east from lateral pressure by the soil. This has created mortar separations ranging from a hairline to $3 / 4$ of an inch in width. (Phetos 54-107 thru 54-116)

There is a stairstepping mortar separation near the west end of the south wall. It measures $1 / 16$ of an inch in width. (Photo 54-117)

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ID photograph of the south wall. (Photo 54-118)
Now looking at the east wall.
There is a hairline horizontal mortar separation at the upper right of the sliding doors. (Photos 54-119 and 54-120)

There is also a hairline mortar separation at the upper left corner. This stairsteps to the top of the wall. (Photos 54-121 and 54-122)

ID photographs of the east wall. (Photos 54-123 and 54-124)
The north end of the east wall and the east end of the north wall are water stained.

ID photographs of the north and south steps. (Photos 54-125 and 54-126)
At the south steps, there is a mortar separation in the east side wall. It measures $3 / 8$ of an inch in width. This extends the heigth of the wall. (Photo 54-127)

ID photographs of this general area. (Photos 54-128 and 54-129)
ID photograph of the south side of the residence. (Photo 54-130)
There is a mortar separation at the south side of the upper step on the west end. It is about $3 / 16$ of an inch in width. The sidewalk is also spalled underneath. (Photos 54-131 and 54-132)

There is a hairline mortar separation at the lower west end of the south side. (Photo 54-133)

ID photographs of the south wall to the west of the porch. (Photos 54-134 and 54-135)

There is no downspout at the southwest corner.
The porch has settled in the center. There are mortar separations on the west side. The width of these range from a hairline to about 3/16 of an inch. (Photos 54-136 and 54-137)

ID photograph of the porch. (Photo 54-138)
There is a vertical mortar crack above the first step. This has a width of $1 / 16$ of an inch. (Photo 54-139)

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The east side of the porch is also separated due to settling. The separation measures $.5 / 8$ of an inch. (Photo 54-140)

We neglected to obtain photographs of the poured concrete floor in the basement patio. The floor is heavily spalled and cracked. (Photos 54-141 thru 54-145)

There is a crack across the sidewalk at the west side of the front porch. (Photo 54-145)

There are two other sidewalk cracks at the east side of the porch. (Photos 54-147 and 54-148)

ID photographs of the south side to the east of the porch. (Photos 54-149 and 54-150)

We are now in the carport on the east side of the structure.
ID photograph of the east wall of the residence. (Photo 54-151)
ID photograph of the steps into the residence. (Photo 54-152)
Now looking at the east end of the carport.
There is a mortar separation at the top of the southeast column where the wood frame is keyed in. (Photo 54-153)

ID photograph of the east area. (Photo 54-154)
There is a horizontal mortar separation to the right of the door on the north wall. It has a maximum width of $1 / 8$ of an inch. (Photo 54-155)

ID photograph of the north wall. (Photo 54-156)
Also note that the door frame is not flush with the wall. (Photo 54-157)

There is a crack in the poured concrete floor emanating from the north side near the east end. The length of this crack is about 5 feet. (Photos 54-158 thru 54-160)

There is a diagonal crack at the southeast corner of the carport. It measures about 3 feet 2 inches in length and has a maximum width of about $1 / 4$ of an inch. (Photo 54-161)

There is a crack in the poured concrete emanating from the south end. It measures 7 feet 2 inches in length. Some spalling along this crack makes it close to an inch wide. (Photos 54-162 thru 54-165)

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There are no other cracks evident in the carport floor at this time. However, the floor is spalled in areas.

The driveway is also spalled in places. There is a crack at the east side. (Photos 54-165 thru 54-168)

There is a mortar crack in the southeast brick support column on the south side. This cocresponds to the mortar separation that was on the west side of the support. (Photo 54-169)

ID photograph of the east side of the structure. (Photo 54-170)
Now looking at the north side.
There is a concrete block mortar separation near the east end of the carport. It has a width of $1 / 8$ of an inch. (Photo 54-171)

There is a mortar separation at the upper left corner of the door. (Photo 54-172)

The miter joint of the carport door is separated at the upper east corner. (Photo 54-172)

There are indications that the north side of the carport has settled.
There is a foundation crack and mortar separation to the right of the carport door. (Photo 54-173)

ID photograph of the section of the north brick veneer wall to the east of the carport door. (Photo 54-174)

There is no downspout at the northeast corner. (Photo 54-175)
There is a stairstepping mortar separation at the left side of the easternmost house window. It has a maximum width of $1 / 16$ of an inch. (Photo 54-176)

There is a horizontal mortar separation at the left side of the next window that extends east across the wall almost over to the right side of the carport door. This has a maximum width of $1 / 16$ of an inch. (Photos 54-177 thru 54-183)

Grass and weeds are obscuring the north porch foundation.
The step is separated from the porch. (Photo 54-184)

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The Pittsburg and Midway Coal Mining Company
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There is a separation between blocks at the west side of the steps. It measures $1 / 2$ inch in width. (Photo 54-184)

The guttering at the northwest corner drains on top of the patio roof. This accounts for the water stains on the north end of the east wall and the east end of the north wall of the patio. (Photo 54-185)

ID photograph of the north side. (Photo 54-186)
We are now looking at the steps back down into the patio.
There is a large mortar separation on the south step wall. The separation measures 1 and $1 / 4$ inches in maximum width. (Photo 54-187)

There is also a separation on the north side. It measures $1 / 4$ of an inch in width maximun. (Photo 54-188)

ID photographs of the west side of the structure. (Photos 54-189 thru 54-191)

There are no cracks or mortar separations evident on this side.

## General Comments

The Lawrence and Michael Fox residence is located at the northeast corner of Broadway and Washington Streets. The approximate elevation at the residence is 827 feet.

The structure is a brick veneer modular home resting on a poured concrete foundation. It has a full basement.

The interior of the residence was mostly paneled and carpeted. There was nothing notable in the interior with the exception of a hole in a bedroom door.

There were minor haicline cracks in the basement walls. These are of a cosmetic nature at the present time. There were also two brick fireplaces. We could not find any evident cracks in these. The basement is unfinished.

The basement patio exhibited mortar separations in the walls indicative of lateral soil pressure. This was especially noticeable on the west wall. The south porch had settled creating large mortar separations on the east and west sides. There were al so indications of settlement on the north side of the carport.

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The Pittsburg and Midway Coal Mining Company
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There is guttering on the residence, however, the downspouts at the southwest and northeast corners are missing. The downspout at the northwest corner drains on the basement patio roof. This has resulted in water stains on the north and east walls of the patio.

Adverse hydraulic effects to the foundation can be expected to occur due to the lack of adequate drainage around the structure.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 191 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 106
2- SUMMARY FORM
3- SKETCH OF S'TRUCTURE


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## $54-170$





## $54-130$




PRE-BLAST SURVEY, RESIDENTLAL
I. Basic Information

1. Name of Resident: Irene Mears
2. Date: November 3, 1986 Time: 10:00 AM
3. Address: Box 94 Amoret, Mo. 64722
4. Location: Northwest corner of Broadway and Washington Streets
5. Telephone Number: 816-925-3361
6. Dates of occupancy by current resident: Mid 1960's-Present
7. Dates of any temporary or pernanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildlngs)
8. Date of original construction: 1909
9. Date(s) of major remodeling or additions:
(a) Northwest Room Built 1966
(b) Enclosed Porch on South side
(c) Bathroom 1966
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): Stud Walls 2"x4"
(b) 1nterior walls: Sheetrock or plaster
(c) roof: Ccmposition Shingle
(d) Footings; Eoundations: Concrete foundation
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(f) basement: Floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: G.W. Walker
(h) size and direction of any large windows: None
III. Environmental Information
11. Approximate elevation of area: 828 feet at residence
12. Type of soll in area: Silty Clay Loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (Indicate depth•and use): Not used 12 feet deep, covered
15. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
16. Source of water, If not included above: City Water
17. Eve troughs or any other exterior dralnage Eeatures: See Photo. Survey
18. Description of general grading or landscaping fu vicinity: See Photo Survey
IV. Any notable exiscing deterioration or danage See Photo Survey
19. Cracks in interior walls:
20. Recedlag of dours, windurs:
21. NotLceable settlement:
22. Foundation cranks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavenent:
25. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or photographs of walls See Photo Survey
26. North
27. Souch
28. East
29. West
VII. Comnents or supplementary drawings See Sketch
VIII. Discussion or specific coments concerning any unusual features, conscruction techniques, or status of decerioration, that, because of the nature of their construction, materials of which they are constructed, statis of deterioration, may exhibit an unusual response to normal blasting activities.

See Survey Narrative

November 10, 1986
Report №. 87056-61
P \& M Map Photo No. 105

Subject: Inspection of the Irene Meacs Residence Box 94
Amoret, Missouri 64722
November 3, 1986

To: The Pittstourg and Midway Coal Mining Ompany
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the south side. (Photo 61-1)
Starting on the south side.
The downspout by the door drains to the ground. There is no splash block.

The south step has a piece of brick missing at the southeast corner. (Photo 61-2)

The step has settled to the east. The wood around the door is deteriorating. (Photo 61-3)

There is a foundation separation under the right corner of the double window. This separation ranges from $5 / 8$ of an inch to $1 / 8$ of an inch in width. (Photo 6l-4)

The porch on the southeast corner is supported by a brick foundation. The foundation is uneven and the mortar is often separated. (Photos 6l-5 thru 6l-8)

ID photographs of the porch. The siding is deteriorating. (Photos 61-9 and 61-10)

ID photograph of the southeast side of the brick chimney. The chimney appears to be in fatr condition. (Photo 61-11)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-61
P \& M Map Photo No. 1.05
November 3, 1986
Page 2

ID photograph of the east side of the residence. (Photo 6l-12)
There is a separation between the residence foundation and the porch foundation. It measures $1 / 2$ inch in width. (Photo 6l-13)

There is a large foundation separation about 4 feet to the north. It measures 2 inches maximum width. (Photo 61-14)

There is a large diagonal foundation separation near the northeast corner. This separation has a width of 3 inches near the top of the foundation. (Photo 61-15)

There is a foundation separation at the corner of the small L shaped area. It measures 3,4 of an inch maximum width. (Photo 61-16)

ID photograph of the north side. (Photo 61-17)
Photograph of the north side of the chimney. (Photo 61-18)
There are building materials, grown up grass and other materials obscuring the north foundation.

The guttering and downspouts are torn off the north side.
ID photograph of the north part of the west side. (Photo 61-19)
There is a block chimney stack on this side. (Photos 61-20 thru 61-23)
There is a vertical crack in the west side of the chimney stack. (Photo 61-24)

ID photograph of the foundation to the north of the chimney stack. (Photo 6l-25)

There is a large separation in the step. It measures about $1 / 2$ inch in width maximum. (Photo 61-26)

There is a separation in the west foundation about 3 feet to the south of the northwest roan. It measures $3 / 16$ of an inch in width. (Photo 61-27)

ID photograph of the south area of the west side. (Photo 61-28)
There is small storage shed behind the residence. It is wood frame construction with a dirt floor. There is no guttering and the wood is deteriorating. (Photos 61-29 and 61-30)

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The Pittsburg and Midway coal Mining Company
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ID photographs of the south side of the concrete block chimney stack. (Photos 61-31 thru 6l.-34)

There is a metal storage shed that is in poor condition at the northwest corner of the propert.y. This storage shed has no guttering. It is heavily rusted. (Photo 61-35)

INTERIOR INSPECTION
We entered through the south entrance into the enclosed porch.
Enclosed Porch
This is at the southwest corner of the residence.
ID photographs of this room. (Photos 61-36 thru 61-38)
Nothing noted.
We have now moved northward into the kitchen and dining roan.
Kitchen/Dining Room
Vinyl floor.
Papered walls.
There are a pair of seiling separations at the west wall above the cabinets. (Photos 6.1-39 and 61-40)

ID photographs of this room. (Photos 61-41 thru 61-46)
There seems to be a slight northwest slope to the floor.
Moving north out of the kitchen to the northwest room.
Northwest Room
Vinyl floor.
Paneled walls.
Tile ceiling.
According to Mrs. Mears they are in the process of remodeling the ceiling with sheetrock because there have been roof leaks. They are also repairing the roof.

There is evident water danage around the ceiling. The tiles are bulging and water stained. (Photos 61-47 thru 61-51)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 105
November 3, 1986
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ID photographs of this room. (Photos 61-52 thru 61-57)
There is a bathroom at the northeast corner of this roam.
Bathroom

Vinyl floor.
Partially tiled and papered walls.

The ceiling is heavily damaged. Mrs. Mears informed me that they are going to replace the ceiling. (Photos 6l-58 thru 6l-61)

ID photographs of this bathroom. (Photos 61-62 thru 61-66)
The cellar is between the bathroam and the northwest roan.
Gellar
ID photograph from the door into the cellar. (Photo 61-67)
ID photographs of the cellar. (Photos 61-68 thru 6l-72)
The cellar walls and ceiling are in fair condition. However, they are spalled and water stained in same areas. There is water on the cellar floor. The floor is heavily cracked and water stained.

## Living Room

This is at the southeast corner of the residence.
Carpeted floor.
Papered walls.
ID photographs of this room. (Photos 61-73 thru 61-77)
The paper on the west wall is torn near the ceiling. (Photo 61-78)
Now moving north into the bedroom.
Bedroom
Starting the inspection on the north wall.
The wall to the right of the window has numerous hairline cracks.
(Photos 61-79 thru 61-83)

This wall is also heavily cracked above the window and to the left of the window. (Photos 6l-84 thru 6l-91)

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The west wall of this bedroom has no evident cracks. The south wall is heavily cracked around the upper right and upper left of the door. (Photos 61-92 and 61-93)

There is a horizontal hairline crack at the left side of the door that extends over to the right side of the closet door. (Photos 61-94 and 61-95)

There is a hairline diagonal crack at the upper right of the closet door. (Photo 61-96)

There is a hairline vertical crack above the closet door. It extends to the ceiling. (Photo 61-97)

There is a hairline diagonal crack at the upper left of the closet door. It measures about 15 inches in length. (Photo 61-98)

There are hairline horizontal cracks at the left side of the closet door. These extend about 2 feet over to the door. (Photo 6l-99)

Now looking at the east wall.
There is a hairline vertical crack at the upper right of the door in the corner. It extends to the ceiling. (Photo 61-100)

There is a large area of cracking between the upper left of the door and the upper right of the window. The north-south crack has a width of $1 / 8$ of an inch. (Photo 61-101)

There is also an area of cracking below the picture between the door and the window. (Photo 61-102)

There is a diagonal crack at the upper left corner of the window. It extends about 14 inches to the corner. (Photo 61-103)

There is a diagonal crack at the lower left corner of this window. It is partially hidden by a dresser. (Photo 61-104)

There is also a vertical hairline crack along the right side of the window. (Photo 61-105)

ID photographs of this room. (Photos 61-106 thru 61-111)
There is a bedroan at the northeast corner of the residence.

Bedroom

Wood floor.
Paneled walls.

White Industrial Seismology, Inc.
The Pittsburg and Miclway Coal Mining Company
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ID photographs of this room. (Photos 61-112 thru 61-117)
There is a slight separation along a ceiling seam to the east of the light fixture. (Photo 61-118)

General Comments
The Irene Means residence is located at the northwest corner of Broadway and Washington Streets. The approximate elevation at the house is 828 feet.

The guttering and downspouts on the south side are in poor condition. The north guttering has been removed while roof work is in progress. There are no splash blocks and the land around the foundation is generally level.

The foundation where visible exhibited minor cracks typical of material expansion. There were al so larger foundation separations indicative of hydraulic or differential settlement effects.

The cellar walls were spalled and in generally poor condition. The floor contained a pertinent amount of water possibly from hydrostatic pressure through the walls or floor.

The interior of the structure exhibited cracks and separations at some wall joints around doors and windows. These typically occur from natural expansion and differential settlement. Cracks and separations of this type can be expected to worsen and became more numerous with age.

During periods of moderate or heavy rainfall the land surrounding the foundation may become saturated. If this occurs the foundation will be susceptible to hydraulic effects and freezing and thawing.

There is inadequate provision for the drainage of excess water away from the foundation at this time. If this is not corrected, continued hydraulic related foundation problems can be expected.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
RMW/kg
Manager of Technical Services
Enclosures: 118 Photographs

# 1- COPY FROM $P$ \& M's TOWN OF AMORET MAP LOCATION NO. 105 

## 2- SUMMARY FORM

3- SKETCH OF STRUCTURE



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I. Basic Information

1. Name of Resident: Russel and Teresa Ayres
2. Date: November 2, 1986 Time: $10: 45 \mathrm{AM}$
3. Address:_Box 83_Amonet,_Mo. 64722
4. Location: Southeast Corner of Broadtay and Jefferson Streets
5. Telephone Number: 816-925-3499
6. Dates of occupancy by current resident: 1983-Present
7. Dates of any temporary or pemanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addicions:
(a) New Roof
(b) $\qquad$
(c)
10. Construction of building:
(a) franing (joists, rafters, and stud walls): Unknown
(b) interior walls: Sheetrock
(c) roof: Shingled
(d) footings; foundations: Concrete Foundation
(e) basement walls (indicate how keyed to footing of floor): Net Applicable
(E) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: West wall under carport. 9 feet long by 5 feet 6 inches high.
III. Enviromental Information
11. Approximate elevation of area: 836 feet at residence
12. Type of soll in area: Silty clay Loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (Indicate depth*and use): None
15. Cisterns or surface water storage utillzed: (Indicate purpose and approximate volume). None
16. Source of water, lf not included above: City Water
17. Eve troughs or any other exterior dralnage features: See Photo. Survey
18. Description of general grading or landscaping in vicinity: See Photo Survey
IV. Any notable existing deterioration or danage See Photo Survey
19. Cracks in interlor walls:
20. Receding of dours, windows:
21. Noticeable setrlement:
22. Foundation cracks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavement:
25. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or photographs of walls See Photo Survey
26. North
2.e South
27. East
28. West
VII. Comments or supplamentary drawings See Sketch
VIII. Discussion or specific conments concerning any unusual features, construction techaiques, or status of deterioration, that, because of the nature of thelr construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See Survey Narrative

November 6, 1986
Report No. 87056-49
P and M Map Photo No. 101

Subject: Inspection of the Russel and Teresa Ayres Residence P. O. Box 83

Amoret, Missouri 64722
November 2, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

This is a brick structure.
ID photograph of the west side. (Photo 49-1)
We will start at the northwest corner of the west wall.

The downspout at the northwest corner drains to the ground. There is no splash block.

There are mortar and brick cracks and mortar separations near the northwest corner downspout. The width of the large separation is $1 / 2$ inch maximum. (Photos 49-2 thru 49-4)

There is a mortar separation at the lower left corner of the north window. It measures 5 inches long and l/32 of an inch wide. (Photo 49-5)

There is a mortar separation at the upper right corner of the door. (Photo 49-6)

There are mortar separations at the lower left and lower right corners of the door. (Photos 49-7 and 49-8)

The walk is cracked in front of the step. This is 3 feet long and 1 inch wide. (Photo 49-9)

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The Pittsburg and Midway Coal Mining Company
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They are mortar separations under the stoop. These separations range from 3/16 to $1 / 2$ inch in width. (Photos 49-10 thru 49-12)

We are now at the carport.
There is a horizontal separation at the upper left corner of the northernmost large window. (Photo 49-13)

There is another mortar separation above the window to the right. It measures $1 / 8$ of an inch in width. (Photo 49-14)

There is a vertical mortar separation at the lower left corner of this window. It measures $1 / 32$ of an inch in width. (Photo 49-15)

There is an area of mortar separations between the upper right of this window and the upper left of the next large window. These measure $3 / 16$ of an inch wide maximum. (Photo 49-16)

There is a mortar separation at the lower right corner of this window. (Photo 49-17)

Now looking at the next large window to the south.
There is a mortar separation at the lower left corner. This measures 1/8 of an inch wide. (Photo 49-18)

There is a mortar separation and brick crack at the upper right corner. It measures $1 / 8$ of an inch wide. (Photo 49-19)

There is a mortar separation at the lower right corner. (Photo 49-20)
There is a mortar separation and brick crack under the window. It measures a little less than $1 / 8$ of an inch in width. (Photo 49-21)

There is a vertical crack on the interior of the southernmost window. (Photo 49-22)

The poured concrete driveway is heavily cracked. (Photos 49-23 thru 49-29)

The widest crack in this driveway measures $1 / 4$ inch.
The southern side center support appears to have been struck by a car
bumper. (Photo 49-30)
There are three brick columns at the east end of the carport.

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The north and south columns are leaning inward. (Photos 49-31 and 49-32)

The downspout at the southwest corner is extended away from the foundation. However, it appears that water drains from the downspout back north to the driveway.

There are two brick cecorative wing walls at the north and south ends of the west side of the carport.

ID photographs of the east and west sides of the north wing wall. (Photos 49-33 and 49-34)

Now looking at the scuth wing wall.
ID photograph of the west side. (Photo 49-35)
ID photograph of the east side. (Photo 49-36)
There is also a wing wall at the south end of the residence. There are mortar separations above the upper left and toward the upper right of the arch. The larger of these measured $1 / 8$ of an inch in width. (Photos 49-37 and 49-38)

There is a mortar separation where the iron gate intersects the wall. (Photo 49-39)

These same mortar separations are visible on the east side of the south wing wall. (Photos 49-40 thru 49-42)

We are now looking at: the south side of the residence. (Photo 49-43)
There is a hairline nortar separation at the lower right corner of the westernmost window. (Photo 49-44)

There is a hairline nortar separation at the upper right corner of this window. (Photo 49-4.5)

There is a brick barbecue pit at the southeast corner of the residence. (Photo 49-46)

There is a slab crack in front of the barbecue. It measures a little over $1 / 16$ of an inch in width. (Photo 49-47)

There are mortar separations in the upper section of the barbecue. They have widths of $1 / 32$ of an inch and less. (Photo 49-48)

This has all been on the west side of the barbecue.

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Now looking on the south side.
There is a hairline nortar separation toward the lower corner. (Photo 49-49)

There are mortar separations in the upper section. These extend behind the wood pile. They measure $1 / 32$ of an inch in width or less. (Photo 49-50)

There are hairline mortar separations in the upper section on the east side. They extend behind the wood pile. (Photo 49-5l)

There are hairline mortar separations on the north side. (Photos 49-52 and 49-53)

ID photograph of the east side of the residence. (Photo 49-54)
The downspout at the southeast corner of the east roan drains to the ground.

There is a porch at the southeast corner.
Looking at the poured slab porch floor.
There are two major north-south cracks in the floor and a couple of minor east-west cracis. These have a width of $1 / 16$ of an inch maximum. (Photos 49-55 thru 49-61)

Now looking at the east wall of the residence underneath the porch.
There are mortar cracks at the upper left corner of the sliding glass doors. These have a width of $1 / 8$ inch maximum. (Photo 49-62)

There are mortar cracks at the upper right corner. These have a maximum width of $1 / 8$ of an inch. (Photo 49-63)

There is a separation at the southeast corner of the residence. It measures a little over l/4 of an inch in width. (Photo 49-64)

There is a hairline nortar separation at the upper left corner of the window on the south facing wall. (Photo 49-65)

There is a separation between the house and patio wall. It measures $1 / 4$ inch in width. (Photo 49-66)

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There is a vertical mortar separation at the right corner of the southern window on the east facing wall. It measures $1 / 32$ of an inch in width. (Photo 49-67)

There is no cover over the crawl space at this time. This is at the northeast corner. (Fhoto 49-68)

There is a garage at the northeast corner. (Photo 49-69)
There is a walk from the house to the garage.
The walk is cracked rear the house. The crack measures $1 / 4$ inch in width. (Photo 49-70)

There is another walk that extends to the door at the southwest corner of the garage.

There is a small crack at the west end. (Photo 49-71)
There is also a crack across the walk near the door to the garage. It measures $1 / 8$ of an irich in width. (Photo 49-72)

Garage - Exterior Inspection
Starting at the northwest corner.
The wood siding appears to be deteriorating in areas. Also, there is no guttering around the garage.

There are a couple of: cracks across the walk at the northwest corner. These are a little over $1 / 32$ of an inch in width. (Photo 49-73)

The garage foundation under the door is spalled. (Photo 49-74)
ID photograph of the south side of the garage. (Photo 49-75)
Part of the window is missing on this south side. (Photo 49-75)
ID photograph of the east side. (Photo 49-76)
ID photograph of the north side. (Photo 49-77)
The driveway is heavily cracked and spalled at the north end. (Photos 49-78 and 49-79)

There are cracks across the driveway mainly from east to west. The maximum width of these cracks measured $1 / 4$ inch. (Photos $49-80$ thru 49-88)

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Garage - Interior Inspection
Paneled walls.
poured concrete floor.
There is one east-west crack in the garage floor toward the north end. This extends under scme materials on both the east and west walls. It also extends underneath the back end of the car that is currently parked in the garage. This crack has a width of $1 / 8$ of an inch maximum. (Photos 49-89 thru 49-92)

ID photographs of the garage interior. (Photos 49-93 thru 49-96)
Residence - Exterior Inspection Continued
ID photograph of the north side of the residence. (Photo 49-97)
Looking at the easternmost window on the north wall, there are mortar separations at the upper right corner. (Photo 49-98)

There is a stairstepping mortar crack at the upper left corner of the double window. (Phot.0 49-99)

INTERIOR INSPECTION

## Living Room

This is at the northwest corner of the residence.
Paneled south and east walls.
Wall papered west and north walls.
Carpeted floor.
Textured ceiling.
There are ceiling stains. (Photos 49-100 and 49-101)
Mrs. Ayres stated that they have had extensive roof work done and that there had been problems with the roof leaking.

ID photographs of thi.s room. (Photos 49-102 thru 49-106)
Now moving to the east into the kitchen and dining room.

## Kitchen/Dining Room

Carpeted floor.
North wall partially tiled and covered with cabinets. The west wall is papered.

White Industrial Seismology, Inc.

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There are ceiling stains and deformations toward the north wall. (Photos 49-107 and 49-108)

ID photographs of the kitchen. (Photos 49-109 thru 49-112)
Moving eastward, small hall utility roam on the north side.
Utility Room
Vinyl floor.
There are ceiling stains in the utility room. (Photo 49-113)
ID photograph. (Phot:o 49-114)
Moving eastward down the hall.
Room
Carpeted floor.
Papered walls.
Painted ceiling.
There are ceiling stains and an east-west crack across the ceiling. (Photos 49-115 thru 49-117)

ID photographs of thi:s room. (Photos 49-118 thru 49-120)
Bathroom
There is a crack in the ceiling near the south wall. (Photo 49-12l)
ID photograph of the bathroam from the door. (Photo 49-122)
Carpeted floor.
Tiled lower walls. papered upper walls.

Bedroom
Carpeted floor.
Drywall walls.
Painted ceiling.
Looking at the north wall, there is a vertical seam separation above the door. It measures 9 and $1 / 2$ inches in length. (Photo 49-123)

## White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
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Looking at the west 'wall, there is a horizontal hairline crack extending from the northwest corner. It measures 18 inches in length. (Photo 49-124)

There is a vertical hairline crack in the east wall near the northeast corner. It measures 15 inches in length. (Photo 49-125)

There is paint cracking in the southeast corner. (Photos 49-126 and 49-127)

ID photographs of this bedroom. (Photos 49-128 thru 49-130)
Entry
Carpeted floor.
There is a large amount of water damage on the west wall near the ceiling. (Photo 49-131)

There is a vertical nairline crack above the door on the west wall. It measures 13 inches in length. (Photo 49-132)

ID photographs. (Photos 49-133 thru 49-136)
There is a bathroom at the southeast corner of the living roam.

## Bathroom

Vinyl floor.
Partially tiled walls.
The east end of the bathroom is adjacent to the furnace room.
The paint is peeling and chipping on the north wall. (Photos 49-137
thru 49-140)
There is a hole in the south wall. (Photo 49-141)
ID photographs of the bathroom. (Photos 49-142 thru 49-144)

## Bedroom

Carpeted floor.
Partially paneled and wall papered walls.
In the process of remodeling. Sane of the wallpaper is missing off the east wall. (Photo 43-145)

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There is a crack in the ceiling at the northwest corner that extends southward across the ceiling. (Photos 49-146 thru 49-148)

ID photographs of this bedroon. (Photos 49-149 thru 49-151)
Child's Bedroom
Wood floor.
Partially paneled wails.
There is a separation in the northwest corner. (Photo 49-152)
ID photographs. (Photos 49-153 thru 49-157)
Family Room
Carpeted floor.
Mostly paneled walls.
There is an east-west bulge in the ceiling. (Photos 49-158 thru 49-161)
There is brick veneer at the east and south ends of this roam.
There is a fine hairline crack in the ceiling from the northwest corner of the attic cover. (Photos 49-162 and 49-163)

There is a gas fireplace on the south wall near the west end. (Photo 49-164)

The fireplace was te:minated at the ceiling. There is no chimney stack.
ID photographs of the fireplace. (Photos 49-165 and 49-166)
ID photographs of this family room. (Photos 49-167 thru 49-171)
General Comments
The Russel and Teresa Ayres residence is located at the southeast corner of Broadway and Jefferson Streets at an approximate elevation of 836 feet. The guttering and downspouts are in good condition around the residence. However, there are no splash blocks. The land is fairly level so some water can be expected to collect around the foundation during periods of heavy rain.

There were mortar separations and brick cracks around doors and windows in the brick veneer. The carport driveway was heavily cracked as was the east porch slab.

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The interior walls, where not paneled, showed evidence of settlement and material expansion cracks around doors and windows. The ceiling showed water damage in many rooms. Mrs. Ayres stated that they plan to do extensive repair work to the roof.

Continued cracking or the exterior and interior of the residence can be expected fram settlement effects and freezing and thawing of the earth around the foundatior.

That completes the inspection of this property.



Manager of Technical Services
RMW/kg
Enclosure: 171 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 101

2- SUMMARY FORM
3- SKETCH OF STRUCTURE




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(1)

### 49.97












PRE-BLAST SURVEY, RESIDENTIAL
I. Basic Information

1. Name of Resident: Owned by Eulela Matthews
2. Dace: October 27, 1986 Tine: 7:45am
3. Address: Route 1, Amoret, Missouri 64722
4. Location: West side of Y Highway 230 feet north of 52 Highway
5. Telephone Number: No telephone present during inspection
6. Dates of occupancy by current resident:Seegeneral comments main report
7. Dates of any temporary or permanent abandonnent: None
II. Information Concerning Bulldings
(repeat for addicional buildings)
8. Date of original construction: 1971
9. Date(s) of major remodeling or addicions:
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls):
( $2 \times 6$ joists rafters) (stud walls $2^{\prime \prime} \times 4^{\prime \prime}$ ) (rafters $2^{\prime \prime} \times 6^{\prime \prime}$ ) (joists $2^{\prime \prime} \times 6^{\prime \prime}$ )
(b) Interior walls:

Sheetrock
(c) roof: Shingled, hip type
(d) footings; Eoundations: Concrete block foundation
(e) basement walls (indicate how keyed to footing of floor):

1' Not applicable
(E) basement: Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Roy Wymer and Clyde Matthews
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

840 feet at residence
2. Type of soll in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth*and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Recedlag of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417') 624-0164
October 28, 1986
Report No. 87056-48
P \& M Map Photo No. 96

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Subject: Inspection of the George Bohlken Residence (Deceased) Owned by Eulela Matthews Route l Amoret, Missouri 64722 October 27, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723
Attention: Mr. James A. Borders
Transcribed and edited from taped field notes
EXTERIOR INSPECTION
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ID photograph of the east side. (Photo 48-1)

The house has a concrete block foundation. It is covered by a styrofoam insulation.

The foundation on the east side cannot be seen because of the styrofoam covering.

ID photograph of the north side. (Photo 48-2)
ID photograph of the west side. (Photo 48-3)
There is a concrete porch. (Photos 48-4 and 48-5)
ID photograph of the south side. (Photo 48-6)
INTERIOR INSPECTION
Utility Room
Vinyl floor.
Paneled walls.

Nothing noted.
ID photographs. (Photos 48-7 and 48-8)
White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-48
P \& M Map Photo No. 96
October 27, 1986
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Kitchen
The kitchen is at the northwest corner.
Vinyl floor.
Paneled walls.
Nothing noted.
ID photographs. (Photos 48-9 thru 48-12)
Living Room
This is at the northeast corner.
Carpeted floor except: for the entrance.
Paneled walls.
Nothing noted.
ID photographs. (Photos 48-13 thru 48-16)
There is a hall off the living room. On the east side there is a
bathroom.
Bathroom
Tile floor.
Tile lower walls.
Sheetrock upper wallis.
Nothing noted.
ID photographs. (Photos 48-17 thru 48-19)
Bedroom
Carpeted floor.Paneled walls.Nothing noted.
ID photographs. (Photos 48-20 thru 48-23)
Moving westward down the hall and into the bedrom at the southwestcorner of the residence.

White Industrial Seismology, Inc.

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The Pittsburg and Midway Coal Mining Company
Report No. 87056-48
P & M Map Photo No. }9
October 27, 1986
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Bedroom

Carpeted floor.
Paneled walls.

ID photographs. (Photos 48-24 thru 48-28)
There is a storage shed at the northeast corner of the residence.

## Storage Shed

Poured concrete floor.
Wood framed walls and roof.

There appears to be no cracking in the floor.
ID photographs. (Photos 48-29 thru 48-33)
General Comments
This residence is located at an approximate elevation of 840 feet. The roof drainage is good. The land has a gentle northwest slope. However, it appears from the general grading around the residence that some water may stand around the foundation.

The foundation was obscured by a styrofoam covering so we could not see if it had sustained cracking from environmental and settlement effects.

The interior walls were paneled, thus obscuring any cracks or separations in the wall material.

The residence was occupied by George Bohlken who passed away early in 1986. The house is owned by Eulela Matthews who is George Bohlken's daughter. The house will be occupied by Mr. and Mrs. Tom Hutchinson.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/mp
Enclosure: 33 Photographs

1- COPY FROM $P \& M^{\prime}$ 's TOWN OF AMORET MAP LOCATION NO. 96

2- SUMMARY FORM

3- SKETCH OF STRUCTURE


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Sketch of Main Floor
Eulela Mat thews Property

## $48-33$






$48-2$

$\qquad$

I. Basic Information.

1. Name of Resident: Thelma Sergent
2. Date: October 27, 1986 Time:___ $10: 30 \mathrm{am}$
3. Address: Box 153, Amoret, Missouri 64722
4. Location East side of Broadway St. 300 feet south of 52 Highway
5. Telephone Number: (816) 925-3495
6. Dates of occupancy by current resident:1944-Present
7. Dates of any temporary or permanent abandonment: $\qquad$
II. Information Conceraing Buildings
(repeat for additional buildings)
8. Date of original construction: 1910-1920
9. Date(s) of major remodeling or additions:
(a) Southeast room - 1940
(b) New roof - 1976-1977
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): 2 " $x 4$ " stud walls
(b) interior walls:
(c) roof :shingled
(d) Eootings; foundations:
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(E) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Ora Beal
(h) size and direction of any large windows: None
III. Environmental Information

1. Approximate elevation of area:

855 feet at residence
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (indicare depth and use): Not used, covered
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Not used, located under smokehouse
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description oE general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views ar photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techinques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, NO 64802-1256
PH. (417) 624-0164
October 29, 1986
Report No. 87056-39
P \& M Map Photo No. 36

Subject: Inspection of the Thelma Sergent Residence Box 153
Amoret, Missouri 64722
October 27, 1986
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECIION

ID photograph of the west side. (Photo 39-1)
A crack across the sidewalk has a maximum width of $1 / 2$ inch. (Photo 39-2)

The porch has four concrete support pillars with two wood supports on each corner.

The porch slopes to the northwest and the paint is chipped and cracking. (Photos 39-3 thru 39-5)

Looking at the northwest corner, there is a large foundation separation. It measures $1 / 2$ inch maximum in width. (Photo 39-6)

There is a foundation crack toward the southwest corner. It measures $3 / 8$ of an inch maximum in width. (Photo 39-7)

The corner trim on the siding has also pulled away. (Photo 39-8)
ID photograph of the south side. (Photo 39-9)
There is a foundation crack toward the west end. It measures about 1 inch in width. (Photo 39-10)

There is a diagonal foundation crack to the east. This crack has a width of $1 / 8$ of an inch. (Photo 39-11)

White Industrial Seismology, Inc.

The pittsburg and Midway Coal Mining Company
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A short distance more to the east, there is a foundation crack. This crack has a maximum width of $1 / 8$ of an inch. (Photo 39-12)

There is another foundation crack to the east. It measures 1 inch to $1 / 8$ of an inch. (Photo 39-13)

There is a vertical foundation crack a little farther to the east. It has a maximum width of $1 / 16$ of an inch. (Photo 39-14)

There is another vertical foundation crack to the left of the corner of the room, at the southeast corner. It has a width of about $1 / 16$ of an inch. (Photo 39-15)

There is a foundation separation at the west side of the southeast room. (Photo 39-16)

There is a hairline foundation crack near the west end of the southeast room. (Phot 39-17)

ID photograph of the east side of the residence. (Photo 39-18)
At the east foundation of the southeast room, there is a vertical mortar separation near the south end. It measures approximately $1 / 8$ of an inch in width. (Photo 39-19)

There is a downspout at the west side of the southeast room. This downspout drops directly into a pipe that extends into the ground. (Photos 39-20 and 39-21)

There is a storage shed at the east end of the residence. The shed is a wood structure. The roof sags at the east end. (Photos 39-22 and 39-23)

There is a water pump at the northeast corner of the storage shed. (Photo 39-24)

Mrs. Sergent stated that she had the water tested and the water was found to be unfit for drinking.

There is a cellar at the east side of the residence. (Photos 39-25 thru 39-27)

There is water on the cellar floor.
The cellar walls are deteriorating. (Photos 39-28 thru 39-32)
Also note that the cellar door has rotted.

White Industrial Seismology, Inc.
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ID photograph of the north side of the residence. There is no guttering on this side. (Photo 39-33)

There is a vertical crack in the foundation near the electric meter. The width ranges from $1 / 8$ to $1 / 16$ of an inch. (Photo 39-34)

There is another vertical foundation crack to the west. It has a maximum width of $1 / 8$ of an inch. (Photo 39-35)

There is a large separation in the foundation at the air conditioning unit. (Photo 39-36)

There is a vertical foundation crack to the west of the air conditioning unit. It measures $1 / 8$ of an inch maximum in width. (Photo 39-37)

There is an $L$ shaped foundation crack to the right of the crawl space vent. It has a width of $1 / 16$ of an inch to a hairline. (Photo 39-38)

The porch has shifted pulling the northwest wood column support upwards. (Photo 39-39)

INTERIOR INSPECTION

## Living Room

## Carpeted floor.

Papered walls.
There is a hairline diagonal crack at the lower right corner of the window on the west wall. This measures 5 inches in length. (Photo 39-40)

There is a hairline vertical crack at the upper right corner of the window. This measures 14 inches in length. (Photo 39-4l)

There is a paper bulge and crack at the lower left corner of the window. (Photo 39-42)

There is a horizontal. hairline crack at the upper right corner of the door. This measures 3 and 1/2 inches in length. (Photo 39-43)

There is cracking at the upper left corner of the door. (Photo 39-44)
The paper is uneven and cracked diagonally in the southwest corner. (Photo 39-45)

Now looking at the south wall.

White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
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There is a horizontal. L-shaped crack at the upper left of the door which goes into the bedroon. (Photo 39-46)

There is a vertical crack in the eastern section of the living room above the door into the bedroam. This measures 7 inches in length. (Photo 39-47)

There is bulging paper at the upper left corner. (Photo 39-48)

Looking at the east wall.

There is cracking at the top of the entrance into the kitchen. (Photos 39-49 thru 39-51)

There are paper cracks in the northeast corner. (Photo 39-52)
Looking at the north wall.
There are paper cracks in the northwest corner. (Photo 39-53)
The ceiling has some staining. (Photo 39-54)
There is also an east-west crack from the west wall to the light fixture. This is in the western section of the living roam. (Photos 39-55 and 39-56)

The ceiling in both sections of the living roon is stained. (Photos 39-57 thru 39-60)

ID photographs of the living room starting with the west wall and progressing countercl.ockwise. (Photos 39-61 thru 39-66)

There is a bedroom at the southwest corner of the residence.

Bedroom
Carpeted floor.
Papered walls and ceiling.
The wallpaper is cracked at the ceiling on the west wall. (Photo 39-67)
ID photographs of this roam. (Photos 39-68 thru 39-71)
Moving eastward into a bathroom.
White Industrial Sei.smology, Inc.
The Pittsburg and Midway Coal Mining Company
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Bathroom
Bathroon is between two bedrooms.
Carpeted floor.
Tiled lower walls. Papered upper walls.
The paper has pullec away to the left of the door on the west wall. (Photo 39-72)
There is a diagonal paper crack at the upper right corner of the window on the south wall. This paper crack measures 1 and $3 / 4$ inches in length. (Photo 39-73)
ID photographs of this room. (Photos 39-74 and 39-75)
Moving southward int:o the other bedroom.
Bedroom

This is located at the southeast corner of the residence.
Carpeted floor.
Papered walls and ceiling.
Starting with the west wall, there is a hairline paper crack at the upper left corner of: the closet door. (Photo 39-76)

At the upper right corner of the bathroom door, there is a diagonal crack. This measures 1 foot in length. (Photo 39-77)

There is a hairline vertical crack at the upper right corner of the door into the bathroom. This measures 6 inches long. (Photo 39-78)

The paper is bulging along the southwest corner. (Photos 39-79 and 39-80)

Looking at the south wall, there is a vertical crack to the right of the window. This crack extends vertically down the wall and then diagonals to the lower right corner of the window. (Photos 39-81 thru 39-87)

There is a vertical crack at the upper right corner of the window. It measures 20 inches long. (Photo 39-88)

Now looking at the north wall.

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There is a hairline crack about the middle of the wall. This crack extends behind the mirrored dresser. (Photos 39-89 thru 39-92)

There is a hairline crack above the upper left of the door. It measures 3 inches in length. (Photo 39-93)

Toward the ceiling, at the upper right of the door, there is a partial bulge and a crack in the wallpaper. (Photo 39-94)

There is a diagonal crack in the ceiling at the northwest corner. (Photo 39-95)

The paper is cracked around the perimeter of the ceiling. (Photos 39-96 thru 39-99)

ID photographs of this room. (Photos 39-100 thru 39-102)
Now moving eastward out of the living room into the kitchen and dining room.

Kitchen/Dining Room
Carpeted floor.
Partially paneled and papered walls.
The west wall has a diagonal crack above the door back into the living room. This measures about 18 inches in length. (Photo 39-103)

There is a crack in the ceiling toward the southwest corner. (Photo 39-104)

Looking at the south wall, there is a hairline vertical crack at the upper right corner of the door. This measures 20 inches vertically. (Photo 39-105)

There is a hairline vertical crack at the upper left corner of the door. (Photo 39-106)

There is a crack in the ceiling at the southeast corner. (Photo 39-107)
There is a hairline crack at the upper right corner of the door on the east wall. It measures 5 and $1 / 2$ inches long. (Photo 39-108)

There is a crack in the ceiling at the light fixture. (Photo 39-109)
ID photographs of this room starting with the west wall. (Photos 39-110 thru 39-113)

White Industrial Seismology, Inc.
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Moving into the utility room, which is the attached room at the southeast corner of the structure.

Utility Room
Carpeted floor.
Sheetrock walls and ceiling.
Starting on the west wall, there is an L-shaped crack at the right side of the window. It measures 19 inches horizontally and 31 inches vertically. (Photos 39-114 and 39-115)

There is an L-shaped crack at the lower right corner of the window. (Photo 39-116)

There is a vertical crack at the upper right corner of the window. It measures 2 feet in length. (Photo 39-117)

There is a hairline crack at the lower left corner of the window. (Photo 39-118)

There is a horizontal crack at the left side of the window. It measures 13 inches long. (Photo 39-119)

Now looking at the south wall.
There is a horizontal hairline crack from the right side of the window to the corner. It measures 34 inches in length. (Photo 39-120)

There is a vertical crack at the upper right of the window. It measures 20 inches long. (Photo 39-121)

There is a vertical arack at the lower right corner of the window. (Photo 39-122)

There is an S-shaped crack at the upper left of the window. The vertical length is 20 inches. (Photo 39-123)

There is a horizontal crack from the left side of the window to the corner. It measures about 3 feet long. (Photo 39-124)

There is a horizontal crack at the lower left corner that extends behind the aryer. (Photo 39-125)

Now looking at the east wall.
There is a horizontal hairline crack from the right side of the window to the corner. (Photos 39-126 and 39-127)

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There is a vertical crack at the upper right of the window. It measures 23 inches in length. (Photo 39-128)

There is an L-shaped crack at the upper left corner. It measures 23 inches vertically and 17 inches horizontally. (Photo 39-129)

There is a vertical crack at the lower left corner. (Photo 39-130)
Now looking at the north wall.

There is a vertical crack at the upper left corner of the closet door. It measures about 7 inches long. (Photo 39-131)

There is a horizontal crack at the left side of the closet door over to the corner. This measures 5 feet long. (Photos 39-132 thru 39-135)

There is an L-shaped crack at the upper right corner of the door into the kitchen. It measures 1.6 and $1 / 2$ inches vertically and 30 inches horizontally. (Photo 39-136)

There is a horizontal crack at the upper right corner. (Photo 39-137)
Now looking at the ceiling.
There is a north-south hairline crack from the south wall to just past the light fixture. (Photos 39-138 thru 39-142)

There is a hairline crack in the ceiling from the north wall to the light fixture. (Photos 39-143 thru 39-145)

There is a hairline crack in the ceiling at the upper corner of the closet. (Photo 39-146)

There is a north-south hairline crack across the ceiling from the closet to the south wall. (Photos 39-147 thru 39-151)

There is an east-west bulge and crack in the ceiling from the east wall. This intersects this north-south crack. (Photo 39-152)

ID photographs of this room including some ceiling shots. (Photos 39-153 thru 39-159)

Garage
Dirt floor.
wood walls.

The garage roof sags in areas. The garage rafters are not supporting the rof properly.

## White Industrial Seismology, Inc.

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ID photographs. (Photos 39-160 thru 39-165)

## General Comments

This residence is located approximately 855 feet above sea level. The land has a gentle northwest slope. The roof and foundation drainage was poor overall. We noted foundation cracks and separations typical of hydraulic and settlement load effects.

The interior walls showed cracks around doors and windows. There were also ceiling cracks noted in some rooms. These were indicative of settlement and material expansion.

Adverse hydraulic and environmental effects can be expected to continue to occur to the foundation. Continued foundation deterioration will also enhance existing cracks in the interior of the residence.

That completes the inspection of this property.


Randall M. Wheeler Manager of Technical Services

RMW/kg
Enclosure: 165 Photographs

## 1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 36

2- SUMMARY FORM
3- SKETCH OF STRUCIURE



## EMain Fioor jrgent Property










$39-9$
 What

I. Basic Information

1. Nane of Resident: Owned by Teroma Farms, Carlton Hansen, Managing Partner
2. Date:_ October 24,1986 Time:___12:_10PM
3. Address: Amoret, Missouri 64722
4. Location: Iots 14 and 15 Block 25
5. Telephone Number: (816) 444-5379 (Hame)
6. Dates of occupancy by current resident: Owned since 1969
7. Dates of any temporary or permanent abandonnent: Used as a hunting/fishing cabin
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Not known
9. Date(s) of major remodeling or additions: Not known
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Not known
(b) Interior walls: plaster, sheetrock (bath), paneling
(c) roof: Composition shingles
(d) footings; foundations: Not known
(e) basemenc: walls (indicate how keyed to footing of floor):

Not applicable
(f) basement: floor (keyways, thickness):

Not. applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

850 feet
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate depth and use): No
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above:City water
7. Eve troughs or any other exterior drainage features: None.
8. Description of general grading or landscaplag in vicinity:
generally flat
IV. Any notable exlsting deteriorat $10 n$ or damage

1. Cracks in interlor walls: See survey
2. Recedlag of doors, windu'ws: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterlor wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings
VI. Elevation views or photographs of walls
8. North See survey
2.- South See survey
9. East See survey
10. West See survey
VIL. Comments or supplementary drawings See survey
VIII. Discussion or specific coments conceraing any unusual features, construction techriques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, staths of deterioration, may exhlbit an unusual response to normal blasting actlvities.

See survey

PH. (417) 624-0164

October 25, 1986 Report No. 87056-22
P \& M Map Photo No. 35

Subject: Inspection of the House owned by Terama Farms Carlton Hansen, Managing Partner Amoret, Missouri 64722 October 24, 1986

Tb: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

This house is used as a hunting and fishing cabin and is otherwise vacant.

The house is in a very deteriorated condition.
ID photograph of the west side of the house. (Photo 22-1)
ID photograph of the west side of the brick chimney. (Photo 22-2)
ID photograph of the north side of the house. (Photo 22-3)
ID photograph of the north side of the chimney. (Photo 22-4)
ID photograph of the south side of the house. (Photo 22-5)
ID photograph of the south side of the chimney. (Photo 22-6)
ID photographs of the east side of the house. (Photos $22-7$ and $22-8$ )
The east side and most of the north and south sides have a stucco exterior.

Starting on the east side.
There is extensive cracking in the stucco, and sections of stucco are falling off the lower part of the east wall.

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There are three windows on the east side.
The south part of the east wall has a horizontal crack running northward about 5 feet 8 and $1 / 2$ inches to the south window. It ranges from a hairline to about $1 / 4$ of an inch in width. (Photos $22-9$ and 22-10)

There are several other hairline cracks in the upper south part of the east wall. (Photos 22-11 thru 22-14)

At the upper right corner of the south window, there is a horizontal crack about 24 inches long. (Photo 22-15)

Another horizontal crack runs 48 and $1 / 2$ inches to the middle window. It is fran about $1 / 8$ of an inch to a hairline in width. (Photo 22-16)

At about the middle of the south window, there is another horizontal crack that runs to the middle window. (Photos 22-17 and 22-18)

Lower on the wall, there are two other horizontal cracks that run to the middle window. (Photos 22-19 and 22-20)

To the lower right of the south window, there is a larger crack wich runs to the lower left of the middle window. This crack has a vertical branch. Both cracks are about $1 / 8$ of an inch wide. (Photos $22-21$ thru 22-23)

The vertical part of the crack has a faint south trending hairline crack. (Photo 22-24)

The lower wall has a spall about 5 inches long at the vertical crack. (Photo 22-25)

There is a large horizontal crack in the lower east wall to the left of the south window. It measures about 8 feet 11 inches long. (Photos 22-26 thru 22-28)

There are about five foundation cracks at the south end of the east side. (Photos 22-26 thru 22-29)

A foundation crack to the lower right of the south window is about $1 / 8$ of an inch to a hairline wide. (Photo 22-30)

Another hairline foundation crack is below the lower right end of the south window. It is about 8 inches long. (Photo 22-31)

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There is another crack with a branch to the lower left of the south window. It is about. 9 and $1 / 2$ inches long and about $1 / 8$ of an inch wide. (Photo 22-32)

The horizontal branch is about 9 inches long. (Photo 22-33)
Another foundation crack below the window is about 8 and $1 / 2$ inches long and about $1 / 8$ of an inch wide. (Photo 22-34)

There is another hairline foundation crack near the southeast corner. (Photo 22-35)

At the lower left end of the east side, below the large horizontal crack, same of the loose stucco fell off when we touched it. This area of stucco can be expected to continue to deteriorate. (Photos 22-36 and 22-37)

There is a slight crack about 10 and $1 / 4$ inches long at the upper left end of the east wall. (Photo 22-38)

The south window has a cracked and fallen storm window pane. (Photos 22-39 thru 22-42)

The inner windows have deteriorated and cracked caulk seals.
The upper middle stom glass is also cracked. (Photos 22-43 and 22-44)
The inner middle wirdow has severely deteriorated caulk. (Photo 22-45)

There is a vertical crack above the upper right of the middle window. It is about 23 inches long and up to $1 / 4$ of an inch wide. It has two hairline branches. (Photos 22-46 and 22-47)

A horizontal crack runs between the north and middle window. It is 32 and $1 / 2$ inches long between the upper corners and ranges from about a hairline to $1 / 8$ of an inch wide. (Photos 22-48 and 22-49)

Another horizontal crack between the windows is 36 and $1 / 4$ inches long. It is $1 / 16$ of an inch to a hairline wide. (Photo 22-50)

There is a diagonal crack below the lower right corner of the middle window and two cracks below the lower left corner. Both cracks intersect a horizontal crack. (Photos 22-5l and 22-52)

The horizontal crack below the middle window continues to the north window and is from $l / 16$ of an inch to a hairline wide. (Photos 22-52 thru 22-54)

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Below the lower left corner of the north window, a diagonal crack runs 33 and $1 / 2$ inches. (Photo 22-55)

Vines growing through the crack will probably widen it.
There is a large area of fallen stucco below the north window. (Photos 22-56 thru 22-58)

The north window has broken upper and lower storm panes. (Photos 22-59 and 22-60)

A vertical crack in the foundation between the north and middle windows is about ll inches long and from $1 / 4$ to $1 / 8$ of an inch wide. (Photo 22-61)

There is a diagonal crack above the upper right corner of the north window. It ranges from about $1 / 4$ to $1 / 32$ of an inch wide. (Photo 22-62)

The inner north window has deteriorating caulk and paint. (Photos 22-63 and 22-64)

Now to the north side of the house. The house has a stone foundation at the northeast corner. (Photo 22-65)

There is a horizontal crack to the upper left of the door that is from about $1 / 4$ to $1 / 16$ of an inch wide and 13 inches long. (Photo 22-66)

Another horizontal crack to the lower left of the door is just wider than a hairline. (Photo 22-67)

Above the upper right of the door, a stairstepping crack runs to the upstairs window. (Photos 22-68 thru 22-70)

There is a large horizontal crack, about 1 and $l / 2$ inches wide between the northeast door and a sealed door. (Photos 22-71 and 22-72)

There is a vertical crack about $1 / 16$ of an inch wide below the lower right of the upstairs window. It runs to the top of the sealed doorway. (Photo 22-73)

There is a horizontal crack from about $1 / 4$ of an inch to a hairline wide at the upper right of the sealed doorway. (Photo 22-74)

Lower on the wall, there is a horizontal crack, 42 inches long and from about 1 and $1 / 2$ inches to $1 / 16$ of an inch wide. (Photo 22-75)

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There is a 4 and $1 / 2$ inch long diagonal crack to the right of the sealed door. (Photo 22-76)

The upper north window has a crack and a spalled area to the left, and a broken pane, and missing pane. (Photo 22-77)

Note the vines growing up and into the upstairs window.
Series of photographs of the north foundation from east to west. (Photos 22-78 thru 22-83)

The west part of the north side roof is severely deteriorating. (Photos 22-84 and 22-85)

Now on the west side of the house.
There is a loose board above the north window on the west side of the house. (Photo 22-86)

The plywood is delaminating at the northwest corner. (Photos 22-86 and 22-87)

Most of the west side has a sheet metal siding with a brick pattern.
The southwest window has a lot of paint peeling at the top.
A crack in the founclation, behind the gas meter, is about 1 foot long on the diagonal and from about $1 / 4$ to $1 / 16$ of an inch wide. (Photo 22-88)

Note the nails pulling from the fascia on the north part of the west side. (Photo 22-89)

The south part has the same condition, but not as severe.
There is a diagonal crack in the foundation below the southwest window. It is about 8 inches long and $3 / 4$ of an inch at the widest. (Photos 22-90 and 22-91)

The west side of the south porch is severely deteriorated. Vines are growing up onto the roof. (Photos 22-92 and 22-93)

Now on the south side of the house.
The roof of the porch and the house is deteriorating. (Photos 22-94 and 22-95)

There are several torn screens on this porch. (Photos 22-96 and 22-97)

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At the stucco part of the south side, there is a crack that runs the width of the wall. It is roughly horizontal and has several branches. (Photos 22-98 thru 22-100)

One branch runs to the lower left of the upper south window. (Photo 22-99)

There is a horizontal crack to the lower left of the upper window. (Photo 22-101)

The cracks below the upper south window range in width from $3 / 16$ of an inch to a hairline.

A vertical crack below the upper window intersects two horizontal cracks. (Photo 22-102)

There are hairline cracks, vertical and horizontal, just to the right of the window. (Photos 22-103 and 22-104)

The lower east part of the south side has a roughly horizontal crack near the ground. It averages about $1 / 4$ of an inch wide and runs westward behind the bushes as far as I can see. (Photos 22-105 and 22-106)

The south fascia and soffits are rotting and have paint peeling. (Photos 22-107 and 22-108)

There are several hairline cracks at the lower east end of the south wall. (Photo 22-109)

INTERIOR INSPECTION

## North Porch

Wooden walls, floor, and ceiling.
Stucco on the east wall.
Metal siding on the south wall.
The window on the west is uneven in the space. (Photo 22-110)
Windows also on the east and north walls.
The ceiling has rusted nail heads and severe water damage. It has been raining and water is still dripping in at the east end of the ceiling, onto the floor.

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The wooden floor has been replaced with plywood in the northeast corner. At this time it is soaking wet. The porch floor slopes to that area.

Photograph of the west wall. (Photo 22-110)
Photographs of the north wall. (Photos 22-111 and 22-112)
Photographs of the east wall. (Photos 22-113 and 22-114)
Photographs of the south wall. (Photos 22-115 and 22-116)
Two photographs of the ceiling, first the west part, and then the east part. (Photos 22-117 and 2.2-118)

A photograph of the deteriorated floor in the northeast corner. (Photo 22-119)

There are two horizontal cracks to the left and a crack to the lower left of the east window. (Photo 22-120)

There are also cracks to the lower right and upper right of the east window. (Photos 22-121 and 22-122)

Now moving south into the kitchen.

## Kitchen

Linoleum covered wooden floor.
Paneled walls.
White painted ceiling over wallpaper.
Window on the west wall.
Window and a door on the south wall.
Photograph of the west wall. (Photo 22-123)
Photographs of the north wall. (Photos 22-124 and 22-125)
Photographs of the east wall. (Photos 22-126 and 22-127)
The east doorway slants to the north.
Photographs of the south wall. (Photos 22-128 and 22-129)
Series of photographs of the ceiling. (Photos 22-130 thru 22-134)

White Industrial Seismology, Inc.

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There are several cracks in the ceiling, and there appears to be water damage to the south part of the ceiling.

The floor slants to the east. (Photo 22-135)
The baseboard is stained and rotting on the east wall behind the kitchen table. (Photo 22-135)

Now into the southeast roan.
Bedroom
The ceiling, west wall, and east wall are painted white over wall paper and plaster
wooden north wall.
Most of the south wall is paneled.
Windows on the south and east walls.
Restroan enclosure in the southeast corner.
Photograph of the east wall. (Photo 22-136)
A large area of plaster is missing and laths are showing in the northeast corner of the ceiling. (Photo 22-137)

Photographs of the south wall. (Photos 22-138 and 22-139)
Photographs of the west wall. (Photos 22-140 and 22-141)
Photographs of the ceiling. (Photos 22-142 thru 22-145)
The ceiling has several crack and stains.
Photographs of the north wall. (Photos 22-146 and 22-147)
Entrance to the living roan is on the north wall.
There are several cracks above and to the left of the kitchen door.
(Photos 22-148 thru 22-151)
There is a horizontal seam crack to the upper left of the restroom
door. (Photo 22-152)
The east window has several paper cracks above it, to the right, and the lower right. (Photcs 22-153 thru 22-155)

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White Industrial Seismology, Inc.
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The Pittsburg and Midway Coal Mining Company
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## Restroom

Blue painted sheetrock walls. Linoleum floor.

The upper southeast corner has a slight crack. (Photo 22-156)

A photograph looking into the restroom. (Photo 22-157)

## Living Room

Carpet over a wooden floor.
Paneled walls.
Papered ceiling.
Photographs of the west wall. (Photos 22-158 and 22-159)
Photographs of the south wall. (Photos 22-159 and 22-160)
Photograph of the east wall. (Photo 22-161)
Photographs of the north wall. (Photos 22-162 and 22-163)

The ceiling is severely water damaged.

Photographs of the ceiling. The ceiling has two long cracks, one northsouth trending and the other east-west trending. (Photos 22-164 thru 22-167 and 22-170)

The ceiling sags in the northwest corner. (Photo 22-167)
The east wall has two windows.

Door on the north well.

Window to the porch on the west wall.

The north part of the floor has been replaced with plywood.
The door on the north wall is uneven and is deteriorating. (Photo 22-168)

The chimney flue in the southwest corner is severely water damaged. (Photo 22-169)

There is separation and settlement of the baseboards in the northwest corner. (Photo 22-1.71)

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There is a hole below the west window and the window is cracked at the lower right corner in two places. (Photo 22-172)

The east windows show signs of water intrusion.
There is a gap filled with insulation to the lower left of the north door.

The floor rises to a hump near the middle and slopes to the south and north.

The south porch could not be entered because it is full of stored materials.

General Comments
This house is in a severely deteriorated condition. The exterior stucco areas are extensively cracked and areas of stucco have fallen from the walls. A section of stucco crumbled when touched with the tape measure at the south end of the east side.

The numbers of cracks, and lengths and widths of existing cracks in the stucco can be expected to increase over time as the stucco continues to weather.

The house lacks a gutter system, and rainwater can saturate ground adjacent to the foundation which will increase the possibility of further damage to the foundation.

The interior shows severe water damage to the ceilings, floors, and some walls. Water damage can be expected to continue unless the roof is repaired.

The chimney in the living room is especially prone to water damage. plaster spalled from the chimney when it was touched with the tape measure.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate

## CDL/mp

Enclosure: 172 Photographs
l- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 35

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


MADISON_STREET

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PREB-BLAS'U SURVEX, RES[DENLIAL

## I. Baslc Information

1. Name of Resident: Amoret City Hall
2. Date:_ November 21, 1986 TLime: 3:05PM
3. Address:_ P. O. Box 143, Amoret, Missouri 64722
4. Location: Lots 27 and 28 , Block 24
5. Telephone Number: (816) 925-3200
6. Dates of occupancy by current resident: Not known
7. Dates of any tempotary or pernanent abandoment: None
II. Informatlon Concernang BuLldangs
(repeat Eor addltional buildlags)
8. Date of orighal construction: Not known
9. Date(s) of major remodeling or addletons:
(a)

None
(b) $\qquad$
(c) $\qquad$
3. Construction of building:
(a) Eraning (Jolstis, rafters, and stud walls): Not known
(b) Interior walla: Paneling
(c) rook: Composition shingles
(d) footings; Eoundatlons: Concrete footing, block foundation
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed buliding: None
(h) size and direction of any large windows:
III. Enviromantal Information

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1. Approximate elevation of area:
    852 feet
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2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation: Not known.
4. Water weils utilized (Indicate deptheand use): No.
5. Cisterns or surEace water storage utilized: (indicate purpose and approximate volume). No.
6. Source of water, if not Lncluded above: City water.
7. Eve troughs or any other exterior dralnage features: No.
8. Description of general grading or landscaping in vicinity: Generally flat.
IV. Any notable exlsting deterioration or damage
9. Cracks in interlor walls: See survey.
10. Recedling of doors; windurs: See survey.
11. Noticeable settlement: See survey.
12. Foundation cracks: See survey.
13. Extertor wall cracks (brick veneer): Not applicable.
14. Sidewalks, steps, driveway pavement: See survey.
15. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls See survey.
16. North See survey.
2.' Souch See survey.
17. East See survey.
18. West See survey.
VII. Comuents or supplementary drawlings See survey.
VIII. Discussion or specific comments concerning any unusual features, construction techaiques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exthbit an unusual response to nommal blasting aceivicies.

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
December 3, 1986
Report No. 87056-94
P \& M Map Photo NO. 34

Subject: Inspection of the Amoret City Hall
P. O Box 14:3

Amoret, Missouri 64722
November 21, 1986
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Nissouri 64723
Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the front, east side of the building. (Photo 94-1)
ID photograph of the front sidewalk. (Photo 94-2)
This building has a plywood exterior, stained dark red, and a concrete block foundation.

There is a horizontal bulge and a crack in the siding to the left of the front window. (Photo 94-3)

There are about 4 other horizontal cracks below this window. (Photo 94-4)

Below the overhead garage door, the concrete floor is visible. There is a slight crack, trending east-west, below this door. It is about 6 inches long and about $1 / 16$ of an inch wide. (Photo 94-5)

ID photograph of the south side of the building. (Photo 94-6)
This building does not: have gutters.
There are several splits in the plywood siding on the south side.
(Photos 94-7 thru 94-1.0)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-94
P \& M Map Photo No. 34
November 21, 1986
Page 2

There is a mortar separation in the foundation at the east end of the south side. It is about 5 inches long and $1 / 16$ of an inch wide. (Photo 94-11)

There is also a mortar separation to the west that is about 2 inches long and less than 1/16 of an inch wide. (Photo 94-11)

The wooden trim is broken at the southwest corner of the building. (Photo 94-12)

There are some loose battens on the south side below and to the lower left of the window.

ID photograph of west side of the building. (Photo 94-13)
The west side has sane broken and split battens.
ID photograph of the north side of the building. (Photo 94-14)
INTERIOR INSPECTION
South Room
Carpeted floor.
Paneled walls.
Tile ceiling.
Photograph of the weist wall. (Photo 94-15)
Photographs of the north wall. (Photos 94-16 and 94-17)
Photograph of the eaist wall. (Photo 94-18)
Photographs of the south wall. (Photos 94-19 and 94-20)
The lower storm pane is cracked at the south window. (Photo 94-21)
There is a restroom in the northwest corner of the room.
Restroom
Carpeted floor.
Paneled walls.
Tile ceiling.
Photograph looking northward into the restroom. (Photo 94-22)

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White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-94
P & M Map Photo No. 34:
November 21, 1986
Page 3
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The ceiling has a couple of slight stains in the northeast corner. (Photo 94-23)

South Room - Continued.

There is a slight stain in the ceiling just east of the restroom enclosure. (Photo 94-23)

The north end of this building houses the fire truck.
North Room
Gravel floor.
Unfinished sheetrock walls and ceiling.
Photograph of the west. wall. (Photo 94-25)
Photographs of the north wall. (Photos 94-26 and 94-27)
Photograph of the south wall. (Photo 94-28)
Photographs of the ceiling. (Photos 94-29 and 94-30)
General Comments
This building lacks a gutter-downspout system to carry rainwater away from the foundation and exterior siding. The plywood siding and battens have numerous splits and cracks.

The concrete block foundation has a couple of mortar separations near the southeast corner. The concrete floor of the north room has a crack that is visible from the outside of the overhead door. The interior ceilings of the restroom and south room each have a slight water stain.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.

Thisityplie AS Kendall
Christopher D. Landoll Technical Associate

## $\mathrm{CDL} / \mathrm{mp}$

Enclosure: 30 Photographs
l- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 34

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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I. Basic Information

1. Name of Resident: Mr, and Mrs. Qliver Burch
2. Date: October 25, 1986 Time: 9:00AM
3. Address: Box 302A, Amoret, Missouri 64722
4. Location: Cormer of Broadway and Madison Street
5. Telephone Number: (816) 925-3299
6. Dates of occupancy by current resident: 1950-Present
7. Dates of any Eemporary or permanent abandonment:_None
II. InEormation Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Early 1900's
9. Date(s) oE major remodeling or additions:
(a) Fireplace Area 1976-1980
(b)
(c)
10. Construction of building:
(a) Eraning (joists, rafters, and stud walls): Stud wall.s: 2"x4", Floor joists: 2"xl0", Rafters: $2^{\prime \times 6 "}$
(b) interior walls:plaster
(c) roof:Shingled, Gable type
(d) footings: Eoundations: Stucco covered brick
(e) basement walls (indicate how keyed to footing of floor):

Not appilicable
(E) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: North side 5 feet 1 inch across 4 feet 1 inch high
III. Enviromental Information

1. Approximate elevation of area:

860 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundatlon: None
4. Water wells utilized (Indicate depth and use): None
5. Cisterns or surface water storage utilized: (indicare purpose and approximate volume). None
6. Source of water, if not included above ©ity water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable set:tlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specffic comments concerning any unusual features, construction tectiniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative.

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

October 21, 1986
Report No. 87056-7
P \& M Map Photo No. 39

Subject: Inspection of the Oliver Burch Residence Box 302A
Amoret, Misssouri 64722
October 26: 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.
EXTERIOR INSPECTION
ID photograph from the northeast. (Photo 7-1)
There is a sidewalk to the front porch.
There is a north-south crack across the sidewalk. The width of this crack is $1 / 8$ of an inch. (Photo 7-2)

Moving to the east, there is another crack in the sidewalk. It has a maximum width of $1 / 8$ of an inch. (Photo 7-3)

On east, there is a crack and a pair of parallel slab separations. These measure $1 / 8$ of an inch in width maximum. (Photo 7-4)

At the east end of the sidewalk, there is multiple cracking. These cracks have a maximum width of $1 / 4$ of an inch. (Photo 7-5)

There is a crack at the south end of the east foundation. It measures 5 inches long and $1 / 32$ of an inch or less in width. (Photo 7-6)

ID photograph of the poured concrete foundation section. (Photo 7-7)
Now at the older section which is a brick foundation.
There are mortar separations along the foundation. These separations range from $5 / 8$ to $1 / 4$ of an inch. (Photo 7-8)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-7
P \& M Map Photo No. 39
October 26, 1986
Page 2

There are a pair of brick cracks at the south side of the porch in the upper bricks. Maximum width of these are $1 / 8$ of an inch. (Photo 7-9)

There is a vertical crack through a brick on the east side of the south part of the porch. Measures $1 / 8$ inch in width. (Photo 7-10)

The brick foundation to the north of the porch is stucco covered.
There are two hairline vertical cracks in the stucco. These cracks measure 6 inches in length. (Photo 7-1l)

There is a crack in the wall siding at the north end. This measures 9 inches in length. (photo 7-12)

The guttering at the southeast corner of the older part of the residence drops to a splashblock.

ID photograph of the north side. (Photo 7-13)
Also note that the window trim paint is chipped and scarred.
There is a large window on the north wall toward the east end.
There is an impact hole at the lower right corner of the window. (Photo 7-14)

There is a stucco crack 1 foot 4 inches from the east end of the north side. It measures 6 inches long and $1 / 8$ inch in width. (Photo 7-15)

There is a hairline stucco crack 2 feet 1 inch from the east end. It measures 6 inches. (Photo 7-16)

Six feet 2 inches on west, there is another vertical stucco crack. (Photo 7-17)

There is another vertical hairline crack 3 feet 7 inches on west. It measures 6 and $1 / 2$ inches in length. (Photo 7-18)

There is a diagonal crack about 10 inches east of the first L-shaped area. It measures 7 and $1 / 2$ inches. (Photo 7-19)

There is also a slight crack in the corner. It measures 7 and $1 / 2$ inches. (Photo 7-20)

We are now at the north end of the east side of the L-shaped wall.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-7
P \& M Map Photo No. 39
October 26, 1986
Page 3

There is a large foundation separation underneath the downspout. The width of this separation ranges from 1 inch to $5 / 8$ of an inch. (Photos 7-21 and 7-22)

There is a vertical crack 9 inches to the west of the east end of the L-shaped area. It measures 9 inches long. (Photo 7-23)

There is another vertical crack 33 inches from that corner. It measures about 9 and $1 / 2$ inches. Maximum width of this crack is $1 / 8$ of an inch. (Photo 7-24)

Six feet 4 inches from this corner, there is another vertical crack. It measures 11 and $1 / 2$ inches long with a maximum width of $1 / 8$ of an inch. (Photo 7-25)

There is a vertical crack about 4 feet 11 inches from the west end of the L-shaped area. It measures 11 inches long and has a width of about $1 / 8$ of an inch maximum. (Photo 7-26)

Two feet from the west corner of this area, there is a large vertical separation with a width of about $1 / 2$ inch. It measures 10 and $3 / 4$ inches in height. (Fhoto 7-27)

Also note that the lower siding is pushed out against the foundation. (Photos 7-28 thru 7-30)

At the small L-shapec area on the west side, there is a crack 7 inches from the north corner. Measures about 10 and $1 / 2$ inches in length from the ground. It has a maximum width of $1 / 8$ of an inch. (Photo 7-31)

There is a vertical crack to the right of the corner. (Photo 7-32)
There is a vertical crack 4 feet 9 inches from the L-shaped corner. It measures 12 and $1 / 2$ j.nches from the ground. (Photo 7-33)

There is a hairline vertical crack 14 and $1 / 2$ inches west of the previous crack noted. It measures 11 inches from the ground. (Photo 7-34)

There is another vertical crack 2 feet 11 inches from the previous crack noted. It measures 1.2 inches in length. (Photo 7-35)

There is another vertical crack 4 feet 8 inches from the previous crack noted. It measures.$l 2$ and $1 / 4$ inches from the ground. (Photo 7-36)

There is another vertical crack 21 inches from the previous crack. It measures 11 and $1 / 2$ inches and extends behind the power meter line. (Photo 7-37)

White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
Report No. 87056-7
P \& M Map Photo No. 39
October 26, 1986
Page 4

There is another crack about 9 inches from the power meter line. This crack measures 11 inches long. (Photo 7-38)

There is a lot of deformation of the lower stucco near the west end of the north foundation. (Photo 7-39)

There is a hairline vertical crack 3 feet 11 inches east of the west end of the north side. It measures 14 and $1 / 2$ inches long. (Photo 7-40)

There is another crack 23 inches from the west end. It measures 15 and 1/2 inches in length. (Photo 7-41)

There is a vertical crack at the west end of the north side. It measures 14 inches in length. (Photo 7-42)

The downspout at the northwest corner drops directly to the carport slab and surrounding walk. There is no connection between the guttering and the downspout. (Photos 7-43 thru 7-45)

The carport slab is heavily cracked with many intersecting cracks. (Photos 7-46 thru 7-56)

These cracks measure about $1 / 4$ inch in width maximum.
ID photograph of the west side of the residence. (Photo 7-57)
There is a sidewalk from the west end out to the shed.
There is a north-south crack across this sidewalk a couple of feet east of the sidewalk to the garage. Measures 1 foot 11 inches north-south. (Photo 7-58)

General photographs of the west foundation. (Photos 7-59 and 7-60)
Photograph showing the sidewalk locations. (Photo 7-61)
Starting at the north end of the west side.
There are parallel vertical hairline stucco cracks. These have a maximum length of 17 inches. (Photo 7-62)

There is a vertical stucco crack and separation to the right of the downspout. The separation measures $1 / 8$ of an inch in width. (Photo 7-63)

Another stucco separation about 32 inches from the north side of the steps. (Photo 7-64)

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This measures 17 inches long and has a width of about $1 / 4$ of an inch maximum.

There is a piece of the siding chipped off at the lower left corner of the door. (Photo 7-65)

There is a separation between the two intersecting slabs in front of the porch. This separation measures $1 / 2$ inch. (Photo 7-66)

There is a hairline north-south crack in front of the steps. Measures approximately 30 inches in length. (Photo 7-67)

There is a vertical "Y" shaped stucco crack to the right of the steps. (Photo 7-68)

There is also a pair of intersecting horizontal stucco cracks to the right of the steps. (Photo 7-68)

There is a stucco separation near the south end of the west side. It measures 5/8 of an inch in width. (Photo 7-69)

The trim on this corner has deteriorated. (Photo 7-70)
ID photographs of the south side. (Photos 7-71 and 7-72)
Starting at the west end, there are two horizontal cracks in the siding at the left side of the window. These cracks measure from 6 to 7 inches long. (Photo 7-73)

ID photograph of the small L-shaped area at the west end. (Photo 7-74)

There are foundation separations to the left of the porch. These measure 3 and $1 / 2$ inches high with a width of $1 / 8$ of an inch. (Photo 7-75)

There is a hole in the siding behind a small wood pile. (Photo 7-76)
The concrete porch is slightly separated from the foundation by $1 / 8$ of an inch down to no separation. (Photos 7-77 thru 7-79)

Also note that the siding is damaged in places.
The fireplace stack is a rock composition. It appears to be in good condition. (Photos 7-80 thru 7-89 and 7-91 and 7-92)

The downspout at the southwest corner dumps directly to the ground. (Photo 7-90)
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INTERIOR INSPECTION
Entered through the east side into the living room.
Living Room
Carpeted floor.
Textured ceiling.
Papered walls.
The added fireplace area has paneling on the walls.
ID photograph of the fireplace. (Photo 7-93)
The only apparent cracking in the fireplace is at the upper right cornerof the fireplace opering. There are some hairline mortar cracks.(Photo 7-94)
ID photographs of the fireplace area. (Photos 7-95 and 7-96)
ID photographs. (Photos 7-97 thru 7-99)
Move westward into a family room and partial study.
Family Room/Study
Carpeted floor.
Paneled walls.
Ceiling has 3 four by four cross beams.
ID photographs. (Photos 7-100 thru 7-102)
Nothing noted.
Now moving northward into a bedroom.
Bedroom
Carpeted floor.
Paneled walls.
ID photograph of the north wall. (Photo 7-103)
ID photograph of the west wall. (Photo 7-104)
Photograph on top of the dresser has a diagonal crack through it.(Photo 7-105)

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ID photograph of the south wall. (Photo 7-106)
ID photograph of the east wall. (Photo 7-107)
At the southwest side of the family room there is another bedroom.
Bedroom
Carpeted floor.
Paneled walls.
ID photographs of this room from the door. (Photos 7-108 and 7-109)
Nothing noted.
Now moving into the kj.tchen and dining room.
Kitchen/Dining Room
ID photographs of the south wall. (Photos 7-110 and 7-111)
There are souvenier plates on the south wall and portions of the east and west walls.

Toward the east end of the south wall, near the ceiling, there is a vertical crack in the wall. It measures 14 and $1 / 2$ inches long. (Photo 7-112)

There are hairline cracks in the wall to the right of the electrical outlet. The wall measures 3 feet from the top of the ceiling to the tile. (Photos 7-113 thru 7-116)

There is a crack in the wall behind the plates for New Hampshire and Louisiana. It measures 2 feet 4 inches. (Photo 7-117)

There is a vertical crack in the wall above the upper left corner of the door. This hairline crack measures 6 inches. (Photo 7-1l8)

There is a bulge to the upper right corner of the door. (Photo 7-119)
ID photograph of the east wall. (Photo 7-120)
ID photograph of the north wall. (Photo 7-121)
ID photograph of the west wall. (Photo 7-122)

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Looking at the west wall toward the south end, there is a vertical crack at the upper left corner of the door. This measures 8 inches. (Photo 7-123)

There is a separation along the southwest corner. (Photos 7-124 thru 7-127)

There is a separation along the ceiling at this corner. (Photos 7-128 thru 7-131)

Moving westward into the bathroom.

## Bathroom

Carpeted floor.
partially paper and tiled walls.
ID photographs of the shower and tub. (Photos 7-132 and 7-133)
Looking at the north wall, there is a very slight paper crack at the lower right corner of the cabinet doors. (Photo 7-134)

There are separations in the ceiling at the south wall. (Photos 7-135 and 7-136)

Now moving into the utility room.
Utility Room
Vinyl floor.
Paneled walls.
ID photographs. (Photos 7-137 thru 7-140)
Photographs of the ceiling conditions. (Photos 7-141 and 7-142)
At the north end of the bathroom, there is a pantry room.

## Pantry Room

## Vinyl floor. Paneled walls.

ID photographs from the door. (Photos 7-143 and 7-144)
Nothing noted.
Now back on the exterior of the structure.

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Garage
ID photograph of the west side. (Photo 7-145)
There is a vertical foundation separation about the middle of the wall. This is 9 and $1 / 2$ inches vertically and $3 / 8$ of an inch in width. (Photo 7-146)

ID photograph of the south side. (Photo 7-147)
There is a horizontal crack in the westernmost glass windowpane. (Photo 7-148)

There is a crack acrosis the sidewalk next to the garage door. It measures 2 feet 11 inches. Has a width of $1 / 2$ an inch. (Photo 7-149)

ID photograph of the east side. (Photo 7-150)
There is a foundation crack 6 feet 1 inch from the south end. It measures 4 and $l / 2$ inches long and has a width of $1 / 4$ of an inch. (Photo 7-15l)

There is an east-west crack in front of the door. It measures 7 inches and has a width of $1 / 8$ to about $1 / 16$ of an inch. (Photo 7-152)

There is another vertical foundation crack to the right of the door. It measures 7 inches from the ground and has a width of $1 / 8$ of an inch. (Photo 7-153)

ID photograph of the north side. (Photo 7-154)
The driveway into the garage is heavily cracked. (Photos 7-155 and 7-156)

The garage floor is heavily cracked.
There is a wide crack toward the north end. The maximum width of this crack is 1 inch. (Photos 7-157 thru 7-160)

Photographs showing cracks in the rest of the garage floor. (Photos 7-161 thru 7-171)

There are two main north-south cracks and a couple of east-west cracks. The maximum width of the largest of these is about $1 / 4$ inch.

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Storage Shed
This storage shed is at the southwest corner of the property. (Photos 7-172, 7-175, and 7-176)

This storage shed is a wood structure.
Photographs of the interior. (Photos 7-173 and 7-174)
The guttering around the storage shed is filled with leaves. The downspout drops directly to the sides of the shed.

There is also a satellite dish at the southwest corner. (Photos 7-177 thru 7-179)

ID photograph of the property from the southwest. (Photo 7-180)

## General Comments

The Oliver Burch residence is located at an approximate elevation of 860 feet. The land slopes gently to the northwest. The drainage away from the foundation is poor in some areas around the house. The stucco covering over the foundation is cracked in places indicative of foundation settlement and hydraulic effects.

The interior fireplace is in good condition. According to Mr. Burch the fireplace is constructed of Alabama Marble. The exterior rock chimney is in generally good condition. However, it appears the chimney may be leaning slightly to the south.

Much of the interior walls were obscured by paneling. Where paneling was not present, there were various hairline cracks in the walls.

Very little of the foundation of the structure was visible due to the stucco covering. However, the visible stucco cracks and the poor drainage indicate that adverse hydraulic effects have occurred to the foundation and will continue to occur unless steps are taken to give adequate drainage of water away from the foundation.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


RMW/mp
Randall M. Wheeler
Manager of Technical Services
Enclosure: 180 Photographs

## 1- COPY FROM P \& M's TOWN OF AMORET MAP

 LOCATION NO. 392- SUMMARY FORM
3- SKETCH OF STRUCTURE

## $\bar{\Lambda}, \overline{\text { DISON ST. }}$


A
urch House

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7-161 \text { the } 7-171
$$

Garade
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品
Scale: 1 Division = 1-Foot Approx.


| Sketch of Main-Eloor |
| :--- |
| Sk | oliver Burch House
















## PREB-BLAS' SURVEY, RESIDENTIAL

## I. Baslc Information

## 1. Name of Resldent: Carl Wisdam

2. Date: November 21, 1986 TLne: 8:00AM
3. Address:

Box 176, Amoret. Missouri 64722
4. Location: Lot 4, Block 33
5. Telephone Number: $\qquad$
6. Dates of occupancy by currenc res ldent: About the last 9 years
7. Dates of any temporary or permanent abandomment: $\qquad$ L

IL. LuEormation ConcernLug BuLIdLngs
(repeat Eor addlelonal. bulidings)

1. Date oE original coustruction: Not known
2. Date(s) of major remodeling or addleions:
(a)_Remodeled living room_2 years ago
(b) Added bedrocm_August. 1986
(c)
3. Construction of building:
(a) EranLag (Jolsts, rafters, and stud walls): Not known
(b) Luterior walls: Plaster, sheetrock, (paneling)
(c) rooE:Camposition shingles
(d) Eootings; Eoundations: Rock except bedroom (concrete) footing for bedroom only
(e) basement walls (Indicate how keyed to Eooting of eloor):
(E) basement Eloor (keyways, Not applicable

Not applicable
(g) aane of person(s) who constructed building: Original not known Bedroom by Wisdom
(h) size and dirention of any large windows:
III. Enviromantal Informa:ion

1. Approximate elevai=1on of area:

863 feet
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation: Not known.
4. Water wells utllized (indicate depth"and use): Yes, don't use except for dogs.
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). Not known.
6. Source of water, iE not Lncluded above: City water.
7. Eve troughs or any other exterior drainage feacures: No.
8. Description of general grading or landscaplag fu vicinity:

Generally flat.
IV. Any notable extsting deterioration or damage

1. Cracks in incerlor walls: See survey.
2. Receding of doors, whindus: See survey.
3. Noticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls see survey.
8. North See survey.
2.0 South See survey.
9. East See survey.
10. West See survey.
VII. Comments or supplementary drawings See survey.
VIII. Discussion or specific comments concerning any unusual features, constructlon techniques, or status of deterforation, that, because of the nature of thed.r construction, materials of which they are constructed, status of decerioration, may exhibit an unusual response to normal blasting activities.

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
December 2, 1986
Report No. 87056-97
P \& M Map Photo No. 43

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Subject: Inspection of the Carl Wisdom Residence
Box 176
Amoret, Missouri 64722
November 21, 1986 and February 12, 1987
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8
Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
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Transcribed and edit.ed from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, east side of the house. (Photos 97-1 and 97-2)

ID photographs of the city sidewalk, first looking south and then north. (Photos 97-3 and 97-4)

ID photograph of the front sidewalk. (Photo 97-5)
There is a crack in the second slab from the east in the front sidewalk. Part of the crack has been patched. It Y's at the south end and is from about $3 / 16$ to $1 / 16$ of an inch wide. (Photo 97-6)

ID photograph of the front porch. (Photo 97-7)
The east edge of the front porch is cracked at the south joint. It ranges from about 2 and $1 / 2$ inches wide at the top to about $1 / 4$ of an inch at the bottom. (Photo 97-8)

The lower end of the trim at the southeast corner is deteriorating. (Photo 97-9)

Starting at the south end of the front, there is a crack or separation in the foundation located about 3 feet from the south end. It measures about 3 and $1 / 2$ inches vertically and about $1 / 16$ of an inch wide. (Photo 97-10)

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ID photograph of the front foundation, south of the front porch. (Photo 97-11)

The house has severely deteriorated paint.
The south, front window has deteriorating caulk and paint. (Photos 97-12 and 97-13)

There are two about inch wide gaps in the stone foundation below the south front window. (Photo 97-14)

The front porch has about a 4 inch long crack at the south edge that al so runs about 3 inches along the top. It is about $1 / 16$ of an inch wide. (Photo 97-15)

The south porch support is split. (Photo 97-16)
Now at the foundation north of the front porch. This part of the foundation is stone with dry joints. Separations in this area range from about 2 and $1 / 4$ inches to $1 / 4$ of an inch wide. There is a crack in a stone at the northeast corner that is from about $1 / 4$ to $1 / 8$ of an inch wide. (Photos 97-17 and 97-18)

The north front window has deteriorating caulk and paint. (Photo 97-19)
ID photographs of the south side of the house. (Photos 97-20 thru 97-22)

The south upstairs window has deteriorating caulk and paint. (Photo 97-23)

Now inspecting the south foundation from east to west.
Below the lower left of the bathroan window, there is a mortar separation that is about $1 / 16$ of an inch wide. (Photo 97-24)

The bathroom window has deteriorating caulk and paint. (Photo 97-25)

There is a stone missing from the foundation near where the porch attaches to the house. (Photos 97-26 and 97-27)

At the two south facing porch windows, the two east panes are cracked and the two west panes are cracked. (Photos 97-28 and 97-29)

ID photographs of the west side of the house. (Photos 97-30 and 97-31)
There is a concrete well cover and a concrete stoop at the back porch door.

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The wood is deteriorating below this porch door. (Photo 97-32)

The concrete stoop is cracked severely and the south end is settling. Crack widths range from about 1 inch to $1 / 8$ of an inch. (Photo 97-33)

The northwest part of the stoop has a crack that is about $1 / 16$ of an inch wide and about 14 inches long. (Photo 97-34)

The southwest corner of the concrete well cover is broken off. (Photo 97-35)

We were unable to look down into this well because of the hand pump. The hand pump is rather loose where it attaches to the pipe.

Now inspecting the stone foundation on the west side of the house, north of the porch.

Some of the stones appear to have shifted and the joints are $d r y$. (Photos 97-36 and 97--37)

The north bedroom addition has a concrete foundation.
There is a separation between the house and the back porch. (Photos 97-38 and 97-39)

ID photograph of the north side of the back porch. (Photo 97-40)
ID photograph of the west side of the house from the northwest. (Photo 97-41)

ID photographs of the north side of the house. (Photos 97-42 and 97-43)
Where the north addition attaches to the house, there is a roofing board missing below the southwest corner of the addition eaves. (Photo 97-44)

The north addition has unpainted fascia.
Series of photographs; of the stone north foundation from west to east. (Photos 97-45 thru 97-48)

There is very little if any mortar in the north foundation.
The east and upstairs north windows have deteriorated caulk and paint. (Photos 97-49 and 97-50)

This house has two chimneys.

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Starting with the east chimney. ID photographs of the east, north, south, and west sides. Numerous cracks can be seen in the cover. (Photos 97-51 thru 97-54)

ID photographs of the south, east, west, and north sides of the west chimney. Numerous cracks and spalls can be seen in the cover. (Photos 97-55 thru 97-59)

The north edge of the front porch has a horizontal flaw that is about $1 / 2$ an inch at the widest. (Photos 97-60 thru 97-62)

That completes the exterior inspection.
INTERIOR INSPECTION
Living Room
This is the northeast room of the house.
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Windows on the east and north walls.
Entrance to the kitchen on the west wall. Entrance to a bedroom on the south wall.

Photograph of the north wall. (Photo 97-63)
Photographs of the west wall. (Photos 97-64 and 97-65)
Photographs of the east wall. (Photos 97-66 and 97-67)
Photograph of the south wall. (Photo 97-68)
South Bedroon
Carpeted floor.
Papered walls and ceiling over plaster.
Window on the east wall. Door to the bathroam on the south wall. closet enclosure below the stairway in the northwest corner.

Flue on the north wall.
Photographs of the east wall. (Photos 97-69 and 97-70)

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Photographs of the north wall. (Photos 97-71 thru 97-73)
Photograph of the west wall. (Photo 97-74)
Much of the lower west wall cannot be seen due to the washer and dryer.
Photographs of the south wall. (Photos 97-75 and 97-76)
The wall paper appears to be very old and has numerous cracks.
Starting on the east wall. There is a crack above the upper left corner of the window that runs diagonally to the ceiling. It is about 21 inches long and it is a rough tearing paper crack. (Photo 97-77)

On the north wall, there are paper cracks above the upper right, middle, and upper left of the doorway. (Photos 97-78 and 97-79)

To the left of the door, an area of lath is exposed and there is a crack in the plaster that can be partially seen. The crack is about $1 / 16$ of an inch wide. (Photo 97-80)

There is paper cracking and tearing around the flue. (Photo 97-81)
There is a paper crack on the west wall below the cabinet that runs to the floor behind the washer and dryer. (Photo 97-82)

There is a tearing paper crack along the southwest corner. (Photos 97-83 and 97-84)

There is a paper crack above the upper right of the south doorway. It is about 17 inches long. (Photo 97-85)

To the left of the south doorway, there is an exposed area of plaster and laths. Several cracks are visible in the plaster. This area is about 62 inches high and at the widest it is about 15 inches. Cracks range fran about $1 / 16$ of an inch to a hairline wide. (Photo 97-86)

There are a number of holes in the south wall, upper left end. There is also a paper crack a few feet to the upper left of the door. It is about 5 inches long. (Photo 97-87)

The ceiling has a few cracks in the paper. One ceiling crack is east-west trending above the bunk bed. It is about 10 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. There is another crack in the ceiling near the light fixture that is sort of a T-shaped crack. Eight and $1 / 2$ inches is the length of the east-west part of the $T$. The other part of the $T$ is about 19 inches long.

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The wall paper is rather loose along the right side of the south door. (Photo 97-88)

## Bathroom

Linoleum over particleboard floor.
Tile lower walls.
Sheetrock upper walls and ceiling. Fiberglass shower stall.

Window on the south wall.
Photographs of the south wall. (Photos 97-89 and 97-90)
Photograph of the southeast corner. (Photo 97-91)
Photograph of the lower north wall. (Photo 97-92)
There is a missing tile and a cracked tile below the toilet paper holder, and a row of tiles is missing below the cabinet on the north wall. (Photo 97-93)

Photographs of the nest wall. (Photos 97-94 and 97-95)
Photographs of the floor. Same of the linoleum is missing, especially near the bathtub. (Photos 97-96 and 97-97)

The particleboard floor is deteriorating at the corner of the tub. (Photo 97-98)

The caulk seal at the top of the tub is deteriorating. (Photo 97-99)
There is some cracking in the upper sheetrock wall above the shower stall, east wall. These are hairline in width. (Photos 97-100 and 97-101)

At the upper northwest corner, there is a peeling tape joint. (Photo 97-102)

There is a crack above each corner of the door at the tape joints. Both are about 2 inches long. There are also two faint vertical cracks above the door. (Photo 97-103)

There are some hairline cracks in the ceiling near the doorway. (Photos 97-103 and 97-104)

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Kitchen
Carpeted floor.
Paneled walls.
Plaster ceiling.
Doorway on the north wall to the north bedroom.
The etrance to the stairway is at the south end of the east wall.
Photograph of the west wall. (Photo 97-105)
Photographs of the south wall. (Photos 97-106 and 97-107)
Photographs of the east wall. (Photos 97-108 and 97-109)
Photographs of the north wall. (Photos 97-110 and 97-111)
Series of photographs of the ceiling. (Photos 97-112 thru 97-116)
The ceiling has several plaster cracks, same of which have been painted over. The main area of cracking is near the south wall cabinets.

The northeast part of the ceiling has a large patched area that appears to have been water clamaged. (Photo 97-117)

There is a chipping or peeling crack in the northwest part of the ceiling. (Photo 97-118)

North Bedroom
Carpeted floor.
Paneled walls and œiling.
Windows on the north and west walls.
Photograph of the north wall. (Photo 97-119)
Photographs of the east wall. (Photos 97-120 and 97-121)
Photographs of the south wall. (Photos 97-122 and 97-123)
Photographs of the west wall. (Photos 97-124 and 97-125)
Most of the crown molding has not been installed yet.

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## Upstairs

The upstairs consists of two rooms. The north room is used for storage and the south room is a bedroom.

Storage Area
Papered walls and ceiling over plaster. Wooden floor.

Photograph of the nor:th wall. (Photo 97-126)
Photograph of the west wall. (Photo 97-127)
There are visible ridges in the paper on the west wall.
Photograph of the ceiling. (Photo 97-128)
Photographs of the east wall. (Photos 97-129 and 97-130)
The east wall has been replaced with sheetrock.
Bedroom
Wooden floor.
Papered walls and ceiling over plaster.
Window on the south wall.
There is a flue at the north end of the room.
The walls are extensively damaged. Areas of plaster have fallen off exposing the laths.

There is extensive water damage to the ceiling and walls.
Photograph of the south wall. (Photo 97-131)
Much of the plaster has fallen off the south wall.
Photographs of the west wall. (Photos 97-132 and 97-133)
The west sloped ceiling has a large area of plaster missing at the north end.

Photographs of the east wall. (Photos 97-134 thru 97-136)
Two large areas of p.laster are missing from the east sloped ceiling.

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Photograph of the south side of the flue. The south side has a vertical crack that runs upward from the floor about 54 inches. It ranges fram about $1 / 16$ of an inch to a hairline wide. (Photo 97-137)

Photograph of the west side of the flue. The ceiling is damaged around the flue. (Photo 97-138)

Photograph of the west end of the north wall. There are a couple of paper cracks in this area. (Photo 97-139)

Photograph of the east side of the flue. (Photo 97-140)
The floor in this bedroom is sinking around the flue.
Stairway
Two photographs looking down the stairway showing the walls. (Photos 97-141 and 97-142)

There is some paper missing from each wall.
A photograph of the south stairway wall. (Photo 97-143)
The south stairway wall is wood underneath the paper.
Now back outside to enter the porch.

## Porch

West Room
Entering through the west door into a small room.
Plywood floor.
Sheetrock east wall.
Unfinished other wall.s and ceiling.
The door only opens about hal fway.
There is a door on the east that leads to the east roam.
East Room
Wooden œiling.
Vinyl floor.
This room is used for storage.

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A photograph looking eastward into this room. (Photo 97-144)
Photograph of the north wall. (Photo 97-145)
Insulation covers the south wall. (Photo 97-146)
There is apparent water damage to the ceiling at about the middle of the south wall. (Photo 97-146)

There are extensive paper cracks on the west wall. (Photo 97-147)
Now back into the small west roam.
West Room - Continued
A photograph showing floor damage near the south wall. (Photo 97-148)
A photograph looking eastward into this room. (Photo 97-149)
There is apparent water damage to the sheetrock above the door on the east wall. (Photo 97-150)

There is a hole in the floor near the west doorway. (photo 97-151)
Mrs. Wisdom indicated that they plan to remodel the house roam by roam and in time will have the entire house remodeled.

General Corments
The original year of construction of this house is not known, but it appears to be very old.

The original foundation is sandstone. The bathroom and bedroom foundations are concrete. The original foundation has dry joints or most of the mortar has fallen out of the joints over time.

The house lacks a gutter-downspout system to direct rainwater away from the foundation.

The exterior siding and trim have severely deteriorated paint.
The south bedroom and upstairs roams have wallpapered plaster walls and ceilings that are in severely deteriorated conditions.

The living room and kitchen have been remodeled.

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Page 11

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOOGY, INC.
Chinitophe \& Lauball
Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 151 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 43

2- SUMMARY FORM
3- SKETCH OF STRUCTURE




|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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PRE-BLAST SURVEY, RESIDENTLAL
I. Basic Information

1. Name of Resldent: James Finfrock
$\qquad$
2. Dace: November 15,1986 TLue: 8:00AM
3. Address: Route 1, Box 300, Amoret, Missouri. 64722
4. Location: Lot 12, Block 32
5. Telephone Number: (816) 925-3464
6. Dates of occupancy by current resident: 1982 - Present
7. Dates of any temporary or permanent abandoment :Vacant about 1 year before 1982
II. Information Concerning Bulldings
(repeat Eor additlonal buildlings)
8. Date of origlnal construction: Not known
9. Date(s) of major remodeling or addletons:
(a) Remodeling since 1982
(b) $\qquad$
(c)
10. Construction of building:
(a) franing (jolsts, rafters, and stud walls):
$2 \times 6 \quad 2 \times 6 \quad 2 \times 4$
(b) Luterior walls:Plaster, some paneling, mostly papered
(c) roof: Composition shingles
(d) footings: foundatlons: Rock and brick foundation, footing not known
(e) basement walls (Indicate how keyed to footing of floor): Not known
(f) basemenc floor (keyways, thickness):

Not known
(g) nane of person(s) who constructed building: Not applicable
(h) size and direction of any large windows:
III. Enviromantal Information

1. Approximate elevation of area:

860 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate deptheand use): No
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). 2 cisterns, (one used as septic tank, other not used)
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage featuresiyes
8. Description of general grading or landscaping in vicinity:
Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interior walls: See survey
2. Receding of doors, windurs: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaksisee survey
V. Plan view of resiclence, well, outbuildings See survey
VI. Elevation views or photographs of walls See survey
8. North See survey
9. Souch See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

## White- Industrial Seismology, Inc. <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

November 20, 1986
Report No. 87056-53
P \& M Map Photo No. 45

| Subject: | Inspection of the James Finfrock Residence |
| :--- | :--- |
|  | RR l Box 300 |
|  | Amoret, Mj.ssouri 64722 |
|  | November 15, 1986 |
| $\mathrm{To}: \quad$ | The Pittsburg and Midway Coal Mining Company |
|  | P. O. Box 8 |
|  | Amsterdam, Missouri 64723 |
|  | Attention: Mr. Mark Premo |

Transcribed and edited.from taped field notes.

INTERIOR INSPECTION
Living Room
This is the northwest room of the house.

Carpeted floor.
Papered plaster walls. White painted plywood ceiling.

Photograph of the east wall. (Photo 53-1)
Photograph of the north wall. (Photo 53-2)
Photograph of the west wall. (Photo 53-3)
Photograph of the south wall. (Photo 53-4)
Windows on the north and west walls. Front door on the west. Entrance to a bedroom on the south wall. Entrance to the den on the east wall.

West Bedroom
The Finrock's have indicated that they plan to panel the walls of this room in the near future.

Papered plaster walls and ceiling.
Rug over wooden floor.

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Windows on the south and west walls.
Photograph of the west wall. (Photo 53-5)
Photographs of the south wall. (Photos 53-6 and 53-7)
Photograph of the east wall. (Photo 53-8)
Photographs of the north wall. (Photos 53-9 and 53-10)
Photographs of the ceiling. (Photos 53-11 and 53-12)
The west end of the south wall has several cracks or tears in the wallpaper. (Photos 53-13 thru 53-15)

A crack is visible in the plaster at an exposed area, just to the right of the window.

There are some slight cracks visible in the exposed plaster in the northwest corner. (Photo 53-16)

There is a crack in the paper above the upper left of the south window. It is about 12 inches long. (Photo 53-17)

There are paper cracks or tears east of the window on the south wall. (Photo 53-18)

There is tearing paper and a crack above the upper right of the entrance on the north wall to the living roam. It is about 16 inches long. (Photo 53-19)

The ceil ing has a crack that runs southward from above the north doorway about 57 inches to the light fixture, and then turns to the east and trends about 29 inches. (Photo 53-20)

Another crack runs south of the light fixture about 55 inches to the south wall. (Photo 53-21)

Another crack runs from the wast part of the north wall and zigzags toward the light fixture. Measured on a diagonal, it is about 62 inches long. (Photos 53-22 and 53-23)

Another crack runs eastward from above the west window about 44 inches. (Photo 53-24)

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Den
Carpeted floor.
Paneled lower walls.
Papered upper walls and ceiling.
Window on the north wall. Door on the east wall. Two doors on the south wall. Door to the carport on the west wall.

Photograph of the south wall. (Photo 53-25)
Photograph of the east wall. (Photo 53-26)
Photograph of the nor:th wall. (Photo 53-27)
Photograph of the west wall. (Photo 53-28)
The lower, inner east pane, on the north wall, is cracked at the upper left corner. (Photo 53-29)

At the door on the west, to the outside, the second pane from the top is cracked. (Photo 53-30)

In the southwest corner, the west end of the south wall is an old flue, and the wall bulges same what.

## East Bedroom

Hardwood floor.
Papered walls and ceiling over plaster.
Window on the south wall.
Flue in the northwest corner.
Photographs of the north wall. (Photos 53-31 and 53-32)
Photographs of the west wall. (Photos 53-33 and 53-34)
Photograph of the south wall. (Photo 53-35)
Photographs of the east wall. (Photos 53-36 and 53-37)
Closet in the southeast corner.
The east wall has a tear in the paper near the ceiling at about the middle of the wall. It is about a 26 inch long tear. (Photo 53-38)

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There are water stains in the southeast corner at the stairway enclosure. (Photo 53-39)

There is a tear in the paper on the bottom edge of the stairway enclosure. (Photo 53-39)

There is a vertical crack in the paper above the upper left end of the south window. It is about a 17 inch long tearing crack. (Photo 53-39)

There is a vertical paper crack below the lower left of the window. It is about 7 inches long. (Photo 53-40)

To the lower left of the window, there is another paper crack that is about 9 inches long. (Photo 53-41)

There is a stain and folded tearing paper in the upper southwest
corner. (Photo 53-42)
There are tears in the paper at the south end of the west wall. (Photo 53-43)

There are a few tears in the paper at the north end of the west wall. The smaller tear to the left is about 7 inches long and the larger tear is about 18 inches long. (Photo 53-44)

Ib the upper right of the clock on the west wall, there is a roughly diagonal paper crack that is about 8 inches long. (Photo 53-45)

There is a vertical bulge or crack above and below the clock. It runs 17 inches above the clock and about 15 inches below it. (Photos 53-46 and 53-47)

There are water stairs in the lower northwest corner below the flue. (Photo 53-48)

The ceiling also has some paper cracks.
One ceiling crack runs southward from the flue about 27 inches. There are two cracks at about the middle of the ceiling. One is $S$ shaped and measures about 25 inches from end to end.

Just to the east of that crack, there is another ceiling crack that measures about 15 inches.

There are a couple off cracks in the northeast part of the ceiling. The eastern crack measures about 12 inches end to end. The other crack just to the west, measures about 9 inches end to end and is sort of $Y$ shaped. These are all tearing paper cracks.

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There is also a slight ceiling crack at the corner of the stairway enclosure in the southeast part of the ceiling. It measures about 2 inches long.

Kitchen

Vinyl floor.
Papered upper walls and ceiling.
Lower south and west walls are paneled.
Window on the east. Door to the bathroom on the north; and a door to the porch on the south wall.

The walls are all plaster except the upper walls above the cabinets which are pressboard.

Photograph of the east wall. (Photo 53-49)
Photograph of the soith wall. (Photo 53-50)
Photographs of the west wall. (Photos 53-51 and 53-52)
Photographs of the north wall. (Photos 53-53 and 53-54)
Photographs of the ceiling. (Photos 53-55 and 53-56)

## Bathroom

Vinyl floor.
Formica covered walls. White painted sheetrock ceiling.

The crown molding has not been installed yet.
There is a window on the north and a sealed door on the west wall.
Photograph of the east wall. (Photo 53-57)
Photograph of the north wall. (Photo 53-58)
Photograph of the upper west wall. (Photo 53-59)
Now back into the den and moving upstairs.

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## Upstairs

West Room
Wooden floor.
Unfinished walls and ceiling.
Window on the west wall.
Photograph of the west wall. (Photo 53-60)
Photograph of the north wall. (Photo 53-61)
Photograph of the east wall. (Photo 53-62)
Photograph of the south wall (Photo 53-63)
Photographs of the scluth side of the chimney. (Photos 53-64 and 53-65)
Photographs of the west side. (Photos 53-66 thru 53-68)
The top of the chimney appears to have shifted to the north a few inches and there are severe stains in the ceiling around the chimney. (Photos $53-69,53-72$, and $53-74$ )

Photographs of the north side of the chimney. (Photos 53-70 and 53-71)
The chimney is heavily stained and there appears to be same mortar deterioration also.

Photographs of the east side of the chimney. (Photos 53-72 thru 53-74)

## East Roam

Windows on the south and north walls.
Photograph of the north wall. (Photo 53-75)
Photograph of the south wall. (Photo 53-76)
Photographs of the east wall. (Photos 53-77 and 53-78)
The wood members of the south window are deteriorating. A gap at the left side of the south windo is about $1 / 4$ of an inch wide. (Photo 53-79)

The north window also shows signs of water stains.

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Stairway
Plaster walls.
Wooden stairs.
Photograph of the south wall at the top of the stairway. (Photo 53-80)
The east stairway wall has extensive cracking. (Photos 53-81 and 53-82)
Photographs of the west wall. The west wall also has extensive cracks. (Photos 53-83 and 53-84)

At the landing of the stairway, the corner has spalling plaster. (Photo 53-85)

The north wall and ceiling, above the stairway door, are cracked and spalling. (Photos 53-86 and 53-87)

Most of these plaster cracks range from about $1 / 8$ of an inch to a hairline in width.

Photographs of the east and west walls of the stairway from the bottom of the stairs. (Photos 53-88 and 53-89)

Photograph of the stairs. (Photo 53-90)

Porch
Wooden east and south walls.
Exterior siding on north and west walls.
Plywood floor and ceiling.
Photographs of the east wall. (Photos 53-91 and 53-92)
Photographs of the north wall. (Photos 53-93 and 53-94)
Photograph of the wesit wall. (Photo 53-95)
Photographs of the south wall. (Photos 53-96 thru 53-98)
There is a door to the cellar at the east end of the floor.
Cellar
Concrete walls and floor. Unfinished ceiling.

Photographs of the north wall. (Photos 53-99 and 53-100)

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Photographs of the west wall. (Photos 53-101 and 53-102)
Photograph of the south wall. (Photo 53-103)
Photographs of the east wall. (Photos 53-104 and 53-105)
There is a crack in the floor near the stairway. (Photo 53-106)
There is a wet area of floor along the east wall. (Photo 83-107)
There is a crack outlined by moisture in the northwest part of the floor. (Photo 83-108)

The floor has a sump pump in the northeast corner.
There is same cracking at the upper edges of the walls.
There is a crack on the north wall, below the opening to the crawl space, that measures about 15 and $1 / 2$ inches. (Photo 53-109)

The east wall has a patched area at the north end where the pipe comes through. (Photo 53-110)

Photographs of the upper west wall showing slight cracking just below the floor. (Photos 53-111 and 53-112)

To the lower right of the entrance, there is a diagonal crack. (Photo 53-113)

There is slight cracking and spalling above the doorway. (Photo 53-114)
A photograph looking up the stairway. The second step from the bottom is broken. (Photo 53-115)

An area of the floor appears to have been patched in the southeast corner.

EXTERIOR INSPECTION
ID photograph of the front, west side of the house. (Photo 53-116)

ID photograph of the front porch looking northward. (Photo 53-117)
The porch ceiling has an area of peeling paint. (Photo 53-118)
The windows and doorways have deteriorated caulk joints. As an example, a photograph of the front north window. (Photo 53-119)

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A photograph of the front porch floor looking southward. Some of the floorboards are misaligned at the northwest corner. (Photo 53-120)

At the northeast corner of the porch, the step from the carport has settled southward. (Photo 53-121)

The north window of the living room has deteriorated caulk joints. (Photo 53-122)

The west upstairs window has severely deteriorating paint, as does the trim of the house. (Photo 53-123)

ID photograph of the front sidewalk. (Photo 53-124)
The east sidewalk slab has a crack that is about 1 and $1 / 2$ inches at the widest. (Photo 53-125)

ID photographs of the south side of the house. (Photos 53-126 and 53-127)

This house has a stone and brick foundation mostly covered with concrete.

Series of photographs of the south foundation from west to east. The concrete cover has several cracks. (Photos 53-128 thru 53-139)

The concrete block steps to the porch have severe mortar separations and the top step is extensively cracked. (Photos 53-138 and 53-140)

The southeast downspout is loose and it empties close to the foundation. The downspout at the north end of the porch also empties close to the foundation. (Photo 53-141)

ID photograph of the house from the southeast. (Photo 53-141)
ID photograph of the east end of the house. (Photo 53-142)
Series of photographs of the east foundation fram south to north. There are several cracks in the concrete cover. (Photos 53-143 thru 53-149)

There are several cracked and broken siding panels on this house.
There are two old cisterns located near the northeast corner of the house. ID photograph of the west cistern. (Photo 53-150)

The northeast downspout empties close to the foundation and the small brick structure has spalling bricks. (Photo 53-151)

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Looking into this west cistern, it is brick lined with a concrete cover.
The east cistern has a concrete slab cover. (Photo 53-152)
The cover has a crack that runs roughly northeast from the south end. It is about 62 inches long and ranges from a hairline to about $1 / 8$ of an inch wide. (Photos 53-153 thru 53-155)

Looking down into this cistern, it is mostly full of sewage. All sewage but that from the kitchen sink runs into this cistern at this time.

ID photographs of the north side of the house. (Photos 53-156 and 53-157)

Series of photographs of the north foundation from east to west. There are a few cracks in the north foundation. (Photos 53-158 thru 53-165)

Below the right end of the air conditioner, there is a crack that is about 11 and $1 / 2$ inches long and from about $1 / 4$ to $1 / 8$ of an inch wide. This is below a girder. (Photo 53-164)

The east carport window has a broken pane. (Photo 53-166)
ID photographs of the chimney. Several cracks are visible in the exterior cover. (Photos 53-167 thru 53-172)

There is a small wooden shed located northeast of the house.
Shed - Exterior Inspection
ID photograph of the front west end. (Photo 53-173)
ID photograph of the south side. (Photo 53-174)
ID photograph of the east end. (Photo 53-175)
Note the fascia board is loose on the east end.
ID photograph of the north side. (Photo 53-176)
The tin roof is rusting and curling at the edges.
Shed - Interior Inspection
wooden walls.
Unfinished ceiling.
Dirt floor.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-53
P\& M Map Photo No. 45
November 15, 1986
Page 11

Photograph looking eastward. (Photo 53-177)
Photograph looking westward. (Photo 53-178)
General Comments
This is an old house. The year of construction is not known. Most of the interior rooms have been remodeled and the Finfrocks indicated that they intend to remodel the west bedroom in the near future. Numerous tears and cracks were found in the old wallpaper of the bedrooms.

The cellar shows signs of water penetration, possibly leakage from the cistern located close to the northeast corner of the house, or from the northeast downspout. Floor cracks also appear to be avenues for water penetration from below as they are outlined in moisture.

The house foundation has numerous cracks, mainly in the concrete cover of the stone portions. However, the west foundation and the east end of the north foundation are hidden by the front porch and could not be seen. The house has a gutter system, but several downspouts empty close to the foundation. The exterior trim has severe paint deterioration.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMCOGY, INC.


Christopher D. Landoll
Technical Associate
CDL/mp
Enclosure: 178 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 45

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


first floor, James Finfrock Residence












I. Basic Information

1. Name of Resident: Carthal Lewis $\qquad$
2. Date: November 4, 1986 Time: $\qquad$
3. Address: Box 124, Amoret, Missouri 64722
4. Location: West side of Broadway Street, Lot 33, Block 5
5. Telephone Number: (816) 925-3438
6. Dates of occupancy by current resident: $\qquad$
$\qquad$
7. Dates of any temporary or permanent abandonment: Unknown
II. InEormation Concerning Bulldings
(repeat for addltional buildings)
8. Date of original construction: 1973
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Unknown
(b) Interior walls: Paneled
(c) roof: Metal
(d) Eootings; Eoundations: Setting on concrete blocks
(e) basement walis (Indicate how keyed to footing of floor): Not applicable
(E) basement Eloor (keyways, chickness):
(g) nat applicable of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information
11. Approximate elevation of area:

865 feet: at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Ladicate depth and use): None
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). Not used, covered
6. Source of water, if not Lncluded above: City water
7. Eve troughs or any other exterior dralnage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interlor walls:
2. Receding of dours, windu'as:
3. Notlceable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavenent:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
2.: South
9. East
10. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features,
construction techniques, or stacus of deterioration, that, because
of the nature of their construction, materials of which they are
constructed, statis of deterioration, may exhibit an unusual response
to nomal blasting activities.

See survey narrative

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November 11, 1986
Report No. 87056-70
P \& M Map Photo No. 44
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Subject: Inspection of the Carthal Lewis Trailer Box 124
Amoret, Missouri 64722
November 4, 1986
To: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

There is a house to the south of the trailer. Mr. Lewis stated that it is heavily damaged and is now used for storage. He declined to have it inspected.

## EXTERIOR INSPECTION

ID photograph of the east side of the trailer. (Photo 70-1)
We can barely see under the skirting at the east end. Mr. Lewis said that when they left for vacation they nailed up all the skirting. It appears that the trailer is supported by stacked concrete blocks.

ID photograph of the north side of the trailer. (Photo 70-2)
ID photograph of the west side. (Photo 70-3)
ID photograph of the south side. (Photo 70-4)
The cistern located at the northwest corner of the trailer is covered with œment.

Cellar
ID photographs. (Photos $70-5,70-7,70-8,70-10$, and $70-12$ )
There are hairline cracks in the north side wall of the stairs. (Photo 70-6)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-70
P \& M Map Photo No. 44
November 4, 1986
Page 2

There is a vertical crack on the west side in the cement mortar covering. (Photo 70-9)

There is a fine hairline cement mortar crack in the upper area of the south exterior stairway. (Photo 70-11)

We are now inside the cellar.

The west wall is partially obscured but there are no apparent cracks. (Photos 70-13 and 70-14)

There is a snall vertical crack in the south wall. (Photos 70-15 and 70-16)

There are no other evident cracks in the walls. The walls are somewhat obscured by canning shelves. There is an area of the ceiling toward the east end of the north side that appears to be separated. (Photo 70-17)

Now looking at the floor.
There appear to be no cracks. However, the floor is muddy.
ID photographs. (Photos 70-18 thru 70-22)
We can see no evident cracking in the interior walls of the stairwell. (Photos 70-23 thru 70-26)

INTERIOR INSPECTION
East Room
Carpeted floor.
Paneled walls and ceiling.
Nothing noted.
ID photographs. (Photos 70-27 thru 70-31)
There is a small attached bathroan at the southwest corner of this roam.
Bathroom
Carpeted floor.
Paneled walls.
Nothing noted.
Now moving westward into the living room.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-70
P \& M Map Photo No. 44
November 4, 1986
Page 3

## Living Room

Carpeted floor.
Paneled walls.
ID photographs of the living room. (Photos 70-32 thru 70-34)
There is a wood stove at the east end of the living roan.
The ciling is discolored around the pipe. (Photo 70-35)
The dining room is to the west.
Dining Room/Kitchen
Carpeted floor.
Paneled walls.
The ceiling is discolored above the north wall. (Photo 70-36)
The ceiling is also discolored at the northwest corner of the kitchen. (Photo 70-37)

There is a hole in a œiling panel near the west wall of the kitchen. (Photo 70-38)

There is also discoloration of the ceiling near the south wall. (Photo 70-39)

ID photographs of the kitchen and dining rooms. (Photos 70-40 thru 70-42)

Hall
Carpeted floor.
Paneled walls.
This hall is located at the north side of the trailer.
The first room on the south side is a bedroan.
Bedroom
Carpeted floor.
Paneled walls.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-70
P \& M Map Photo No. 44
November 4, 1986
Page 4

The ceiling is bulging and water damaged at the south wall. (Photo 70-43)

ID photographs. (Photos 70-44 thru 70-46)
The next room on the south side is a bathroan.
Bathroom
Carpeted floor.
Paneled walls that are partially papered in places.
There is a water stain in the ceiling at the south wall above the medicine cabinet. (Fhoto 70-47)

ID photographs. (Photos 70-48 thru 70-51)
Now at the west end of the trailer.
Bedroom
Carpeted floor.
Paneled walls.

Nothing noted.
ID photographs. (Photos 70-52 thru 70-55)

There is a walk at the exterior south side of the trailer. The sections are separated. (Photo 70-56)

General Comments
The Carthal Lewis trailer is located on the west side of Broadway Street in Lot 33, Block 5 of the $P$ and M Map of Amoret, Missouri. The approximate elevation of the residence is 865 feet.

The skirting was nailed to the trailer, which made it difficult to view the supports. There was a small amount of skirting we could see behind at the east end. It appeared that the trailer is supported by loosely stacked concrete blocks.

The interior walls of the trailer were paneled. The only noticeable interior conditions were discoloration and water damage to the ceiling. There is no roof guttering around the trailer.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company Report No. 87056-70
P \& M Map Photo No. 44
November 4, 1986
Page 5

There is an old house just south of the trailer that used to be occupied by Mr. and Mrs. Lewis. The house is now abandoned and is mainly used for material storage. Mr. Lewis declined an inspection of this property.

There is a cellar at the southwest corner of the trailer. The cellar was in fair condition overall. However, the cellar exhibited deterioration of the walls, ceiling, and floor.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 56 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 44

2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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## $70-3$





## PREB-BLAST SURVEY, RESCDENTIAL

I. Basic Information

1. Name of Resldent: Mr. and Mrs. Ray Cummings
2. Date: November 25, 1986THue: 10:30 AM
3. Address: Box 299A Amoret, Missouri ..... 64722
4. Localion:_Northeast corner of Broadway and Monroe Streets
5. Telephone Number: $816-925-3350$
6. Dates of occupancy by current resident: ..... 1973-present
7. Dates of any tempotary or permanent abandoment:__During_Remodeling
II. InEormation Concerning Bulidings
(repeat for addltional. bulldhgs)
8. Date of orighal construction:Unknown
9. Date(s) of major remodeling or addLtions:
(a) Remodeled walls (1974)
(b) Added enclosed porch (1977-1978)
(c)3. Construction of building:(a) EramLng (jolst:s, rafters, and stud walls): 2"x4" Stud walls2"x4" Rafters(b) Luterlor walls: Sheetrock 2"x6" Joists
(c) roof: Shingled
(d) Eootings; Coundations:Sandstone Foundation
(e) basenent walls (Indicate how keyed to Eooting of floor): Not applicable.
(E) basement Eloor (keyways, thickness): Not applicable.
(g) name of person(s) who constructed bullding: Unknown.
(h) size and direction of any large windows: None.
III. Enviromaental Infornation
10. Approximate elevarion of area:
860 feet at residence
11. Type of soll in area: Silty clay loam.
12. Type of subgrade drainage at base of Eoundation: None.
13. Water wells ucillzed (Indicate depth and use): $50^{\prime}$ deep, use to water lawn,
14. Cisterns or surface water storage utilized: (Lndicate purpose and approximate volume). Filled in.
15. Source of water, if not included above: City water.
16. Eve troughs or any other exterior dralnage features: See photograph survey.
17. Description of general grading or landscaping in vicinity: See photograph survey.
IV. Any notable exlsting deterioration or damage see photograph survey.
18. Cracks in interlor walls:
19. RecedLng of dours, wLadurs:
20. Noticeable settlement:
21. Foundation cracks:
22. Exterior wall cracks (brick veneer):
23. Sidewalks, steps, driveway pavement:
24. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch.
VI. Elevation views or photographs of walls see photograph survey.
25. North
26. Souch
27. East
28. West
VII. Conuments or supplementary drawings see sketch.
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activities.
See survey narrative.

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (41'7) 624-0164
November 26, 1986
Report No. 87056-86
P \& M Map Photo No. 47

Subject: Inspection of the Ray Cummings Residence Box 299A
Amoret, Misisouri 64722
November 25, 1986
To: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the west side of the residence. (Photo 86-1)
There is a sidewalk to the front door. There are cracks across the sidewalk. (Photos 86-2 thru 86-5)

The siding is stained between the window and the door. (Photo 86-6)
There is a crack in the inside of the southernmost window. (Photo 86-7)
The guttering is misssing at the enclosed porch and there are no downspouts. (Photo 86-8)

Photographs showing the general condition of the rock foundation. The rocks are in fair condition, but the mortar is somewhat deteriorated. (Photos 86-9 thru 86-11)

The porch has a concrete base.
The north end of the porch is slightly separated from the south end of the main residence.

ID photograph of the south side of the residence. (Photo 86-12)
The downspout at the southeast corner drains to the ground. (Photo 86-13)

White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
Report No. 87056-86
P \& M Map Photo No. 47
November 25, 1986
Page 2

The windowsill miter under the air conditioner is cracked. (Photos 86-14 and 86-15)

The south rock founcation has missing mortar and mortar cracks, and the rocks have shifted. (Photos 86-16 thru 86-21)

It appears that the roof is being reshingled. (Photo 86-22)
ID photographs of the east patio area. (Photos 86-23 and 86-24)
This patio is heavily damaged.
There is a small partial basement that houses the furnace. The floor has about 3 inches of water on it. (Photos 86-25 thru 86-33)

ID photographs of the brick steps on the east side. The steps are deteriorating. (Photos 86-34 and 86-35)

ID photographs of the east rock foundation. (Photos 86-36 and 86-37)
Additional photographs of the patio area. (Photos 86-38 and 86-39)
There is a small wood structure at the northeast corner of the residence. It is filled with various materials. (Photos 86-40 thru 86-43)

There is also a wood storage shed at the east end of the property. This is filled with many items. (Photos $86-44$ thru 86-46)

There is a trailer to the south of this. It has been gutted by fire. The blocks under the trailer are leaning and sinking. (Photo 86-47)

ID photograph of the well. (Photo 86-48)
There is a satellite dish on a poured concrete base at the southwest corner of the property. (Photo 86-49)

An additional photograph of the trailer. (Photo 86-50)
ID photograph of the general area east of the residence. (Photo 86-51)
Note the water standing at the southeast corner. (Photo 86-52)
Now on to the north side of the residence.

There is a dog pen.

ID photographs of the rock foundation. (Photos 86-53 thru 86-58)

White Industrial Seismology, Inc.
The pittsburg and Midway Coal Mining Company
Report No. 87056-86
P \& M Map Photo No. 47
November 25, 1986
Page 3

The rock mortar is separated in places.
ID photograph of the north side of the residence. (Photo 86-59)
INTERIOR INSPECTION
We entered through the west side into the enclosed porch.

## Enclosed Porch

Starting on the west wall.
We can see the separation at the northwest corner between the porch and the house. (Photo 86-60)

There is a vertical joint separation above the upper left of the door. (Photo 86-61)

Photograph of the crack in the west window. (Photo 86-62)
The wall is stained and cracked around the window toward the south side. (Photos 86-63 and 86-64)

Looking at the south wall, there is a hairline separation at the upper right corner of the window. (Photo 86-65)

There is a hairline horizontal separation above the window. (Photo 86-66)

ID photographs of this room. (Photos 86-67 thru 86-69)
Now entered into the kitchen and dining room.
Kitchen/Dining Room
Carpeted floor.
Paneled walls.
Textured ceiling.
The wall is stained above the gas cooking stove. (Photo 86-70)
ID photographs of this roam. (Photos 86-71 thru 86-76)
Off the east end of the kitchen is a small hall.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-86
P \& M Map Photo No. 47
November 25, 1986
Page 4

Hall
Vinyl floor.
Paneled walls.
Textured ceiling.
There is a diagonal crack in the door window on the east wall. (Photo 86-77)

The ceiling bows above the upper right of the door, and there is a separation in the ceiling. (Photo 86-78)

The ceiling also bows slightly toward the west end of the hall. (Photo 86-79)

There is a bathroom off the south side of the hall.
Bathroom
Vinyl floor.
Textured ceiling.
papered walls.
The wallcovering is pulled away and deformed around the bathtub/shower area. (Photos 86-80 and 86-81)

ID photographs. (Photos 86-82 thru 86-85)
There is a bedroom at the northeast corner.
Bedroom
Carpeted floor.
Paneled walls.
Textured ceiling.
The closet at the southeast corner of the room is also paneled.
Nothing noted in this roam.
ID photographs. (Photos 86-86 thru 86-90)
The living room is at the southwest corner of the residence.

## Living Room

## Carpeted floor.

Paneled walls.
Textured ceiling.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-86
P \& M Map Photo No. 47
November 25, 1986
Page 5

There are ceramic pieces displayed on the upper east wall. (Photo 86-91)

ID photographs of this room. (Photos 86-92 thru 86-99)
Now moving up the stairs.
Stairway
Carpeted stairs.
Sheetrock upper walls.
The second floor is being remodeled.
Room
This room is unfinished.
ID photographs. (Photos 86-100 and 86-101)
There is a finished bedroom at the south end of the upstairs.
Bedroom
Looking at the north wall, there is a horizontal separation at the upper right corner of the door. (Photo 86-102)

There is also a small separation at the upper left corner. (Photo 86-103)

ID photographs. (Photos 86-104 thru 86-106)
General Comments
The Ray Cummings residence is located at the northeast corner of Broadway and Monrœ Streets. This a wood frame structure on a sandstone rock foundation.

There was little guttering and downspouts around the exterior of the residence. There was al so a noticeable septic smell around the southeast side of the structure.

The interior walls of the residence were generally paneled. There were a few wall joint separations noticeable in some unpaneled areas.

White Industrial Seismology, Inc.

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The Pittsburg and Midway Coal Mining Company
Report No. 87056-86
P & M Map Photo No. 47
November 25, 1986
Page 6
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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/kg
Enclosures: 106 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 47

2- SUMMARY FORM
3- SKETCH OF STRUCTURE













## PREB-BLAS'L SURVEY, RESIDENTIAL

I. Baste Information

1. Name of Resident: Roger Thornton (Owned by Irene Mars)
2. Date: January 2, 1987 Tue: 10:15 AM
3. Address: Box 106, Amoret, Missouri 64722
4. Location: Northwest corner of Broadway and Monroe Streets
5. Telephone Number: (816) 925-3385
6. Dates of occupancy by current resident: 5 years
7. Dates of any temporary or permanent abandonment: None
[I. InEormaclon Concerning Buildings
(repeat for additional buildings)
8. Date of orighal construction: 1891
9. Date (s) of major remodeling or additions:
(a)

Paneled some_areas.
(b) $\qquad$
(c) $\qquad$
3. Construction of building:
(a) framing (Joists, rafters, and stud walls): $2^{\prime \prime} \times 6^{\prime \prime}$ studs $2^{\prime \prime} \times 6^{\prime \prime}$ floor
(b) Lutertor walls: Plaster $2^{\prime \prime} \times 6^{\prime \prime}$ rafters
(c) rook: Shingled.
(d) Eoothogs; Foundations: Rock foundation
(e) basement walls (Indicate how keyed to footing of floor):

Not applicable
(E) basement floor (keyway, thickness):

Not applicable
(g) name of person (s) who constructed buildingialy
(h) size and direction of any large windows None
III. Enviromaental Information

1. Approximate elevation of area:

865 feet at residence
2. Type of soll in area: Sily clay loam
3. Type of subgrade drainage at base of Eoundation: None
4. Water wells utillzed (indicate depth and use): Covered, not used.
5. Cisterns or surface water storage utillzed: (Lndicate purpose and approximate volume). Under porch, not used.
6. Source of water, lf not included above: City water
7. Eve troughs or any other exterior drainage Eeacures: See photo survey.
8. Descripcion of general gradiug or landscaplug in vicinity: See photo survey.
IV. Any notable expsting deterioration or damage see photo survey.

1. Cracks in incerlor walls:
2. Receding of doors, whindurs:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch.
VI. Elevation views or photographs of walls see photo survey.
8. Norch
2.6 South
9. East
10. West
VII. Comuents or supplementary drawlngs See sketch.
VIII. Discussion or specific comments concerning any unusual Eeatures, construction technlques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activities.

See survey narrative.

PH. (417) 624-0164
January 5, 1987
Report No. 87056-100
P \& M Map Photo No. 48

Subject: Inspection of the Roger Thornton Residence Owned by Irene Mears Box 106 Amoret, Missouri 64722 January 2, 1987

To: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the east side of the residence. (Photo 100-1)
ID photograph of the east side of the brick chimney stack. This is at the north end of the residence. It is leaning slightly to the north. There are cracks and mortar separations and the covering is deteriorated. (Photo 100-2)

There is another chimney stack at the south side of the structure. It is in similar condition as the north stack. (Photo 100-3)

There is almost no guttering, downspouts, or splash blocks. There is same very old guttering on the small roam at the north end of the structure.

The residence is sitting on a rock foundation. The rocks appear to be in fair condition, but the mortar around the rocks is deteriorated.

ID photographs of the foundation on the east side, to the south of the porch. (Photos 100-4 thru 100-6)

ID photographs showing the east sidewalk. The sidewalk has some displacement. There is grass growing through the joints. (Photos 100-7 thru 100-9)

The wood porch door has deterioration. (Photo 100-10)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-100
$P$ and M Map Photo No. 48
January 2, 1987
Page 2

ID photographs of the north side of the residence. (Photos 100-11 and 100-12)

ID photograph of the north brick chimney stack from the north side. (Photo 100-13)

Some of the rock founclation can be seen toward the east end. (Photos 100-14 and 100-15)

The wood trim and wood siding is deteriorated.
There is a diagonal crack in the lower left corner of the easternmost window. (Photo 100-16)

There is a small enclosed porch on the north side of the residence. It appears to be on a poured concrete base.

Looking at the east facing wall, there is a crack in the northernmost window. (Photo 100-17)

The foundation of this room is spalled and cracked at the northeast corner. (Photo 100-18)

The lower siding has deterioration. (Photo 100-19)
ID photograph of the northeast corner of this structure, showing the spalled concrete and the loose siding. (Photo 100-20)

Looking at the north facing wall of this small porch.
There are missing windowpanes to the left of the door. (Photo 100-21)
The slab is spalled and cracked under the door. (Photo 100-22)
There is a sidewalk connecting this door to the east walk. It is cracked and separated and many of the sections are missing. (Photos 100-23 and 100-24)

There is a crack in a westernmost windowpane on the north facing wall of the small porch. (Photo 100-25)

This small porch shows evidence of water damage. There is mold and fungus growth on the soffit.

There is a sidewalk extending from the west facing wall of this porch. There are grass, weeds, and vines growing up through the sidewalk joints. (Photos 100-26 thru 100-28)

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There is a well at the northwest corner of the structure.

Well
It is covered with concrete. The slab is separated. (Photos 100-29 and 100-30)

The well appears to be brick lined and the water level appears to be about 5 feet from the surface.

ID photograph of the west side of the residence. (Photo 100-31)
ID photographs of the chimney stacks from the west. (Photos 100-32 and 100-33)

There is a large mound covered with bushes and rocks. It appears to be an old cellar. We cannot penetrate the growth covering it. (Photo 100-34)

There is a pipe along the west side of the residence that drains to the ground.

Some of the foundation can be seen on this side. There is rock visible underneath the small room near the south end of the west side. (Photos $100-35$ and 100-36)

There is a cracked windowpane on the west facing wall of this small room. (Photo 100-37)

The door on the south facing wall is broken and deteriorated. (Photo 100-38)

There is a small concrete slab toward the south end of the west side. There appear to be very fine hairline cracks in areas. (Photos 100-39 and 100-40)

There is a room on the south end of the west side that appears to be resting on a brick foundation. The mortar is separated and deteriorated. (Photo 100-41)

ID photograph of the south side of the residence. (Photo 100-42)
ID photographs of the south facing brick foundation under this room. (Photos 100-43 thru 1.00-45)

There are two diagonal cracks in a second story window. (Photo 100-46)

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ID photographs of the brick foundation under the east facing wall. The foundation is displaced and separated. (Photos 100-47 and 100-48)

ID photographs of the rock foundation visible to the east. (Photos 100-49 thru 100-51)

There is a well defined displacement at the southeast corner. This measures about 1 and $1 / 4$ inches in width. (Photo 100-52)

ID photograph of the south brick chimney stack. (Photo 100-53)
INTERIOR INSPECTION

## Living Room

Carpeted floor. Paneled walls. Ceiling panels.

ID photographs of the room, starting with the north wall. (Photos 100-54 thru 100-57)

The ceiling panels are discolored and hanging downward in the center. (Photos 100-58 and 100-59)

Moving north into the dining room.

## Dining Room

Carpeted floor.
Paneled walls and ceiling.
ID photographs of this roon. (Photos 100-60 thru 100-63)
Many of the ceiling panels are hanging downward and are discolored. (Photos 100-64 and 100-65)

Now moving westward into the kitchen.

## Kitchen

Vinyl floor.
Paneled walls and œiling.
ID photographs of this room. (Photos 100-66 thru 100-69)
Areas of the ceiling are heavily water stained. (Photos 100-70 thru 100-72)

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It appears that the floor may have settled in the center near the north wall. The frame on the door is pitched to the east.

The vinyl floor covering is missing in front of the stove. (Photo 100-73)

Moving northward from the kitchen to a small porch.
Small Porch
Concrete floor.
Wood framed.
The wood is deteriorated.
ID photographs of this room. (Photos 100-74 thru 100-76)
ID photographs of the slab crack that was noted previously. (Photos 100-77 and 100-78)

Small Northwest Bedrocm
Vinyl floor.
Paneled walls and ceiling..
Very little to note except the paint peeling and chipping around the door and window frames.

The paneling is bulging on the south wall. (Photo 100-79)
ID photographs of this room. (Photos 100-80 thru 100-82)
We made a notation during the exterior inspection that there was a pipe on the west side. It appears that there used to be a washer and dryer combination in this room.

There is a bathroom off the west side of the kitchen.

## Bathroom

Vinyl floor.
Paneled walls and ceiling.
ID photographs of this room. (Photos 100-83 and 100-84)
The floor appears to be uneven.

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ID photographs of the floor showing some chipped vinyl around the shower and the water heater. (Photos 100-85 and 100-86)

The shower walls are tiled. The floor is badly water damaged. (Photos 100-87 and 100-88)

There is water dripping from the shower faucet.
There is a storage rocm at the southwest corner of the residence.
Coal Room
This appears to be a room where coal was stored.
The floor in this roam slopes toward the south.
ID photographs of this room. (Photos 100-89 thru 100-92)
The ceiling is sagging and the wood is water damaged. (Photos 100-90 thru 100-92)

Just off the kitchen, there is a small storage and hall area.
Storage/Hall Area
The storage area is underneath the stairs to the second floor.
Paneled walls.
Covered floors.
There is some paper covering on the ceiling that is cracked. (Photos 100-93 and 100-94)

Moving on southward we enter a bedroom.

Bedroom
Vinyl floor.
Paneled walls and ceiling.
ID photographs of the walls. (Photos 100-95 thru 100-98)
There are water stainss on same of the ceiling panels. (Photos 100-99 thru 100-101)

Moving to the south of:f this bedroom, we enter into a small room.

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Snall Room

The floor slopes to the south.
Vinyl floor.
Paneled walls and ceiling.
There is one ceiling panel missing around the middle of the ceiling. We can see the original ceiling which had a paper covering. The ceiling appears to have been lowered from 9 to 8 feet.

ID photographs of the walls. (Photos 100-102 thru 100-105)
Photographs showing the new and the original ceiling. (Photos 100-106 and 100-107)

Also note that back in the bedroom, on the east wall, there is a door into the living room that is loose.

At the north side of the bedroom, toward the east end, there is a stairway to the second floor. The ceiling covering above the stairs, is missing. (Photos 100-108 and 100-109)

The second floor is in need of repairs. The stairs terminate in a hall.
Hall

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We will section off the hall walls to show their condition. (Photos 100-110 thru 100-126)
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## Small Room

At the northwest corner of the hall, there is a small room. The height of the ceiling is about 4 feet. The walls and ceiling are heavily deteriorated. (Photos 100-127 thru 100-132)

Southwest Room
On the south side of the hall, at the west end, there is a room. The walls, ceiling, and floor are heavily deteriorated. (Photos 100-133 thru 100-146)

To the south of this room, there is an enclosed attic area. This room is inaccessible except by a window which we cannot open.

The room is unfinished and there is a brick stack that follows a stairstepping pattern to the roof. (Photos 100-147 thru 100-152)

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Southeast Room
Now moving to the east end of the hall. There is a room at the southeast corner.

ID photographs of this room. These photographs show the deterioration of the walls and ceiling. (Photos 100-153 thru 100-165)
he can also see what appears to be a section of a chimney stack on the west wall. (Photo 100-160)

## Northeast Room

There is another room at the northeast corner of the structure.
Photographs showing the deterioration in this roan. (Photos 100-166 thru 100-186)

Garage
Wood frame walls.
wood floor.
ID photographs of the exterior. The wood has deteriorated and the garage is unstable. (Photos 100-187 and 100-188)

ID photographs of the interior. The ceiling joists and stud walls are deteriorated. (Photos 100-189 thru 100-193)

This garage is significantly deteriorated. The supports are weakened, especially around the perimeter.

General Comments
This is an old wood frame structure owned by Mrs. Irene Mears. The current occupant is her grandson Mr. Roger Thornton. The main structure rests on a sandstone rock foundation.

The exterior of the structure shows the effects of deterioration due to age and weathering. There is no useful guttering around the residence.

In the interior first floor of the residence, the walls were generally paneled. The ceiling panels were often loose and water stained. The floor appeared to sag and slope in the south small room, coal room, and ki tchen.

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The second floor rooms were in very poor condition. The walls and ceilings were heavily deteriorated. There were large pieces of plaster laying on the floors.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 193 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAPLOCATION NO. 48
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


## Sketch of Irene Meas Property Occupied by Roger Thornton

## Small <br> Room













## I. Basic Information

1. Name of Resident: Ruth Dudley
2. Date: November 2,1986 Time: 9:30_AM
3. Address:_Rt._L_Amoret,_Mo_ 64722
4. Location: Southwest corner of Broadway and Mannoe_Streets
5. Telephone Number: $816-925-3336$
6. Dates of occupancy by current resident: 1970-present
7. Dates of any temporary or permanent abandonnent: None
II. Information Concerning Bulldings
(repeat for additional buildings)
8. Date of original construction: 1970
9. Date(s) of major remodeling or additions:
(a) East Room 1978
(b) New Siding 1986
(c)
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): Stud Walls 2"x4" Rafters 2"x6"
(b) interior walls: Paneled
(c) roof: Shingled
(d) Eootings; Eoundations: Poured Concrete Foundation
(e) basement walls (Indicate how keyed to footing of floor): Not Applicable
(E) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None

III, Enviromental Information

1. Approximate elevation of area: 865 feet at residence
2. Type of soll in area: Silty Clay Loam
3. Type of subgrade drainage at base of foundatlon: None
4. Water wells utilized (indicate depth*and use): Not used, covered
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: See photo. survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable exlsting deterioration or damage see photo survey
9. Cracks in interlor walls:
10. Receding of doors, wLadows:
11. Noticeable settlemeat:
12. Foundation cracks:
13. Exterior wall cracks (brick veneer):
14. Sidewalks, steps, driveway pavement:
15. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
16. North
17. South
18. East
19. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techriques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.
See survey narrative

November 5, 1986
Report No. 87056-52
P and M Map Photo No. 49

Subject: Inspection of the Ruth Dudley Residence
Route 1
Amoret, Missouri 64722
November 2, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph from the north. (Photo 52-1)
ID photograph of the west side. (Photo 52-2)
There is a small section of guttering toward the south end of the west wall. There is no clownspout. (Photo 52-3)

ID photograph from the southeast. (Photo 52-4)
The trailer appears to be leaning slighty to the southwest.
Photograph showing the separation between the wood support and the wall at the southeast corner. This is a further indication that the south side of this trailer is leaning to the southwest. (Photo 52-5)

There is a rock step at the east side. (Photos 52-6 and 52-7)
There is condensation on the window. (Photo 52-8)
The east added on room sits on a poured concrete slab.
We are at the east side of this room.
There is a vertical crack in the slab underneath the window. This crack measures two inches long. It has a width of $1 / 32$ of an inch. (Photos 52-9)

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ID photograph of the east side. (Photo 52-10)
There are no guttering or downspouts on the side.
The walk is cracked at the north side of the east room. This crack is 4 feet long. It has a width of $1 / 32$ of an inch to a hairline toward the west end. (Photos 52-11 thru 52-14)

There is another crack in the walk at the second slab from the door. This measures 8 inches in length with a width of $1 / 32$ of an inch. (Photo 52-15)

There is a cellar and a metal shed at the west side of the residence.
ID photograph of the cellar. (Photo 52-16)
Mrs. Dudley stated that she did not use her cellar and that it was severely cracked.

Photographs of the side walls from the door. (Photos 52-17 and 52-18)
Photograph of the brick front face. There is a mortar separation at the top. The width of this separation is $1 / 4$ of an inch. (Photo 52-19)

Detailed photographs of the interior of the cellar. (Photos 52-20 thru 52-24)

The side walls of the cellar entrance and the floor are heavily cracked. The interior walls of the cellar are in fair to poor condition. There was water standing in areas on the floor.

ID photograph of the metal storage shed. (Photo 52-25)
There are two hairline cracks in the poured concrete base at the southwest corner of the storage shed. (Photo 52-26)

At the south side of the storage shed the poured concrete is cracked and spalled. (Photos 52-27 and 52-28)

Detailed photographs of the slab floor of the storage shed. There does not appear to be any cracks in the floor. (Photos 52-29 thru 52-31)

INTERIOR INSPECTION

## East Bedroom

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The Pittsburg and Midway Coal Mining Company
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ID photographs of this room. (Photos 52-32 thru 52-37)
There is a piece of loose ceiling trim above the east window. (Photo 52-38)
The north end of the trailer is split level.
There is an upstairs bedroan and a downstairs bedroom.
Upstairs Bedroom
Carpeted floor.
Paneled walls.
paneled ceiling.
The ceiling paper is separating at the west wall. (Photos 52-39 and 52-40)
ID photographs. (Photos 52-41 and 52-42)
Now moving into the dowstairs bedroam at the north end. This is under the upper bedroom.
Downstairs Bedroom
Carpeted floor.
Paneled walls.
Paneled ceiling.
This roan consists mainly of two small bunk beds and some storage space.
There is insufficient room to take an ID photograph to show any noticeable detail.
Nothing noted.
Bathroom
Carpeted floor. Paneled walls. Paneled ceiling.
ID photograph from the door. (Photo 52-43)
Nothing noted.
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Living Room
Carpeted floor.
Paneled walls.
Panel board ceiling.
ID photographs of the living room. (Photos 52-44 thru 52-46)
Nothing noted.

## Kitchen

Vinyl floor.
Minor amount of paper on the west wall.
ID photographs. (Photos 52-47 thru 52-49)
Bathroom
Carpeted floor.
Paneled and papered walls.
Panel board on the ceiling.
ID photographs from the east and south doors. (Photos 52-50 and 52-51)
Nothing noted.
There is a bedroom at the south end of the trailer.
South Bedroom
Carpeted floor.
Paneled walls.
Panel board ceiling.
ID photographs from the north door. (Photos 52-52 and 52-53)
The ceiling is damaged at the northeast corner. (Photo 52-54)
ID photograph of the west wall of this bedroom. (Photo 52-55)
Hall
Vinyl floor.
Paneled walls.
Nothing noted.

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## General Comments

The Ruth Dudley trailer is located at the southwest corner of Broadway and Monrœ Streets at: an approximate elevation of 865 feet. The land surrounding the trailer is generally level.

There are no downspouts and virtually no guttering for proper roof drainage.

The south end of the trailer appeared to lean slightly to the southwest. The south section of the trailer was covered below floor level.

The cellar floor was heavily cracked and spalled. There was a minor amount of water on the floor. The walls and ceiling were also in poor condition.

The interior walls of the trailer were mostly covered by paneling. Therefore, we could see no evident problems with the interior wall material.

Due to the general grading, excess water will have a propensity for collecting around the foundation at the south and north ends of the trailer. Continued hydraulic and settlement effects can be expected to occur to the foundation due to the grading around the trailer and the lack of adequate roof drainage.

That completes the inspection of this property.


## RMW/kg

## Enclosure: 55 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 49
2- SUMMARY FORM
3- SKETCH OF STRUCTURE

## MONROE STTREFT


(1)




$52.1$


## I. Basic Infomation

1. Name of Resident: David and Marqurrite Bohlken
2. Date: 1986 Tine: 10: 00AM
3. Address: $\qquad$ Box 103, Amoret, Missouri 64722
4. Location: South of Amoret on Broadway
5. Telephone Number: (816) 925-3285
6. Dates of occupancy by current resident: 1970 - Present
7. Dates of any temporary or permanent abandorment: $\qquad$
II. Information Concerning Buildings
(repeat Eor additional buildings)
8. Date of origlnal construction: 1970
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c)
10. Construction of bullding:
(a) Eraming (Jolsts, rafters, and stud wails): $\begin{aligned} & 2^{\prime \prime} \times 6^{\prime \prime} \text { stud walls } \\ & 2^{\prime \prime} \times 6^{\prime \prime} \text { rafters }\end{aligned}$
(b) interior walls: Sheetrock
(c) roof:Shingled
(d) Eootings; Eoundations: Concrete slab foundation
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed building:Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

850 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth*and use): None
5. Cisterns or surbace water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, If not included above: City water
7. Eve troughs or any other exterior dratnage Eeatures: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable exlsting deterioration or danage See photo survey

1. Cracks in interlor walls:
2. Receding of dours, winduws:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawlags See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

## See survey narrative

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

November 12, 1986
Report No. 87056-3

Subject: Inspection of the David and Margurrite Bohlken Residence Box 103
Amoret, Missouri 64722 November 9, 1986

7b: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION

ID photograph of the south side of the residence. (Photo 3-1)
This is a wood frame structure resting on a poured concrete slab.
The house sits on a south to southwesterly slope.
The downspout at the west end of the south side drains directly to the ground.

There is a crack in the slab underneath the front door. It has a width of $3 / 16$ of an inch. (Photo 3-2)

The foundation is partially obscured on the south side by grass and weeds.

There is a foundation separation to the right of the easternmost door. The width ranges from $1 / 8$ of an inch to 1 inch. (Photo 3-3)

ID photograph of the east side of the residence. (Photo 3-4)

The east wall is poured concrete.
ID photographs of the east wall. (Photos 3-5 thru 3-7)
The north side is surrounded by thorn bushes. We cannot make a detailed inspection of the north side.

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ID photograph of the north side of the residence. (Photo 3-8)
The north and west walls are also poured concrete.
ID photograph of the west wall. (Photo 3-9)
There is a hairline crack in the wall at the southwest corner. (Photo 3-10)

There is a crack at the lower left corner of the southernmost window. This area is obscured by bushes and trees. (Photo 3-11)

INTERIOR INSPECIION
We entered through the south entrance, at the west side, into the kitchen and dining room.

Kitchen/Dining Room
Vinyl floor in the kitchen. Area carpet in the dining room. Sheetrock walls and ceiling.

ID photograph of the south wall of the kitchen. (Photo 3-12)
There is a vertical wall separation at the upper right corner of the door. It measures about 4 inches in length. (Photo 3-13)

There is a hairline crack at the upper left corner of the door. It extends to the ceiling. (Photo 3-14)

There is a hairline crack at the upper right corner of the window. It extends to the ceiling. (Photo 3-15)

There is a wall seam separation at the lower right corner of the window. (Photo 3-16)

There are also wall seam separations at the upper left and lower left corners of the window. (Photos 3-17 and 3-18)

ID photograph of the south wall of the dining room. (Photo 3-19)
ID photograph of the east wall. (Photo 3-20)
The north wall is stained behind the refrigerator. (Photo 3-21)
The wall is cracked around the electrical outlet. (Photo 3-22)

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ID photographs of the north wall. (Photos 3-23 and 3-24)
ID photograph of the west wall. (Photo 3-25)
The wall around the stove is heavily stained.
The vinyl floor in the kitchen is torn and pulled up in places. (Photos 3-26 and 3-27)

ID photographs of the ceiling. (Photos 3-28 thru 3-32)
Moving eastward into the living roam.

Living Room
Area carpet on the floor. Sheetrock walls and ceiling.

Start with the south wall.
There are vertical hairline seam separations at the upper right and upper left corners of the door. (Photos 3-33 and 3-34)

There is a wall seam separation at the lower right corner of the double windows. (Photo 3-35)

There is also a similar seam separation at the lower left corner of the window.

ID photographs of the south wall. (Photos 3-36 and 3-37)
The east wall is poured concrete. (Photo 3-38)
There is a hole in the north wall at the end of the couch. (Photo 3-39)
There is al so a hole underneath the light switch. (Photo 3-40)
There is a pair of hairline vertical separations at the upper right and left corners of the door. (Photos 3-41 and 3-42)

ID photographs of the north wall. (Photos 3-43 and 3-44)
ID photograph of the west wall. (Photo 3-45)
ID photographs of the ceiling. (Photos 3-46 thru 3-49)
Now inside a bedroan at the northeast corner of the structure.

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Bedroon

Area carpet on a concrete floor.
Sheetrock walls and ceiling, except for the north and east walls which are poured concrete.

ID photographs of the north wall. (Photos 3-50 and 3-51)
ID photograph of the west wall. (Photo 3-52)
There is a large hole at the base of the west wall, near the south end. (Photo 3-53)

There is a hole in the south wall next to an electrical outlet. (Photo 3-54)

There is a smaller hole a little higher in the wall. (Photo 3-55)
ID photographs of the south wall. (Photos 3-56 thru 3-58)
Looking in the closet.
There is quite a bit of material in here.
Photographs of the poured concrete wall. (Photos 3-59 and 3-60)
ID photograph of the east wall of the roam. (Photo 3-61)
There were no cracks noted in the poured concrete walls on the north or east sides.

Hall
There are a couple of large holes on the south side of the hall. (Photo 3-62)

There are hairline cracks above the upper right and upper left corners of the door back into the living room. These extend to the ceiling. (Photos 3-63 and 3-64)

There is a hairline vertical crack in the north wall above the door into the bathroon and laundry room. (Photo 3-65)

There is another hairline vertical crack to the left of this. (Photo 3-66)

There is a hairline vertical crack above the door into the northwest bedroom. It extends to the ceiling. (Photo 3-67)

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ID photographs of the concrete hall floor. (Photos 3-68 thru 3-70)

Now entered into the combination bathroom/laundry roan on the north side of the hall.

Bathroom/Laundy Room
ID photograph of the painted concrete north wall behind the toilet. (Photo 3-71)

ID photograph of the north wall to the west of the shower. (Photo 3-72)
ID photographs of the west wall. (Photos 3-73 and 3-74)
There is a deformation in the wall behind the washer and dryer. (Photos $3-73$ and 3-74)

ID photographs of the south wall. (Photos 3-75 and 3-76)
ID photographs of the east wall. (Photos 3-77 and 3-78)
There is a hole in the east wall near the toilet. (Photo 3-78)
The floor is poured concrete. It is stained in places. (Photos 3-79 thru 3-81)

There is a hairline crack in the floor between the washer and dryer. It extends to the southeast, across the floor toward the southeast corner. (Photos 3-82 thru 3-85)

There is a small tear in the ceiling just out from the door. (Photo 3-86)

Bedroan
We are now in the bedroom at the northwest corner of the residence.
Area carpet on the concrete Eloor. Concrete north and west walls.

Sane of the concrete floor is visible in this roan.
ID photographs of the north wall. (Photos 3-87 and 3-88)
ID photograph of the west wall. (Photo 3-89)
There were no cracks noted in the poured concrete walls.

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II photographs of the south wall. (Photos 3-90 and 3-91)
ID photograph of the east wall. (Photo 3-92)
There is a hairline crack in the floor that extends from the east wall and curves over to the door on the south wall. It then extends out into the hall where it is obscured by materials on the floor. (Photos 3-93 thru 3-97)

There is a hole in the ceiling near the east wall. There are electrical wires protruding from it. (Photo 3-98)

ID photographs of the ceiling. (Photos 3-99 thru 3-102)
ID photographs of the concrete floor toward the west end of this roam. (Photos 3-103 and 3-104)

General Comments
The David and Margurrite Bohlken residence rests on a poured concrete slab. The east, north, and west walls are poured concrete. The house is located on the south slope of a hill.

With the exception of the south side, the exterior walls were partially obscured by bushes. This was especially evident on the north side which was surrounded by thorn bushes.

The interior walls were sheetrock here they were not part of the exterior concrete. There were expansion cracks and separations in the sheetrock walls, mostly around the doors and windows.

The structure has roof guttering and downspouts. However, the downspouts drain to the ground. The drainage of the area is to the north side of the structure.

That completes the inspection of this property.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 104 Photographs

1- SUMMARY FORM

2- SKETCH OF STRUCTURE
-xaIdat 7 OO世T- EOTSTATGE





I. Basic Information

1. Name of Resident: Harold and Sandy Jones
2. Date: November 8, 1986_Time: 8:00AM
3. Address:__Box_183, Amoret, Missouri 64722
4. Location: Approx. $1 / 2$ mile south of Highway 52 on Broadway
5. Telephone Number: 816-925-3489
6. Dates of occupancy by current resident: Since summer of 1980
7. Dates of any temporary or pemanent abandonment: None
II. Information Concerning Buildings
(repeat Eor additional buildings)
8. Dace of origlnal construction: 1932
9. Date(s) of major remodeling or additions:
(a) 1980 - Present remodeling
(b) added bathroom 10 years ago
(c)
10. Construction of butlding:
(a) framing (Jolsts, rafters, and stud walls): Native hardwood
$2 \times 6$ 2x6 $2 \times 4$
(b) Luterior walls: Lath, plaster, paneled over
(c) rook: Composition shingles (redwood under asbestos
(d) footings; foundations: Concrete block foundation, kitchen concrete
(e) basement walls (indicate how keyed to footing of flocr):
(f) basement $\begin{aligned} & \text { Not known } \\ & \text { Noor (keyways, chickness): }\end{aligned}$

Not known
(g) nane of person(s) who constructed building:Not known
(h) size and direction of any large windows: No
III. Envirompental InEomation

1. Approximate elevation of area:
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: drain at northeast corner runs
4. Water wells utilized (indicate depth"and use):
Yes, do not use
5. Cisterns or surEace water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures: None .
8. Descripcion of general grading or landscaping in vicinity: House sets on a rise, yard slopes away from the house
IV. Any notable existing deterioration or damage
9. Cracks in interior walls: See survey
10. Receding of doors, windows: See survey
11. Noticeable setclement:See survey
12. Foundation cracks: See survey
13. Exterior wall cracks (brick veneer):
Not applicable
14. Sidewalks, steps, driveway pavement:
See survey
15. Basement leaks: See survey
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls See survey
16. North See survey
17. South See survey
18. Easc See survey
19. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioracion, may exhibit an unusual response to normal blasting activitles.

November 12, 1986
Report No. 87056-59

| Subject: | Inspection of th Box 183 |
| :---: | :---: |
|  | Amoret, Missouri |
|  | November 8, 1986 |

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the west, front side of the house. (Photos 59-1 and 59-2)

The house has a concrete block foundation.

At the north end of the front foundation, there are mortar separations. The vertical separation is about $3 / 16$ of an inch wide. The separation that stairsteps down and to the south is about $3 / 8$ of an inch wide. (Photos 59-3 and 59-4)

Another stairstepping mortar crack can be seen below the porch at about the third or fourth block from the north end. (Photo 59-5)

Series of photographs of the foundation underneath the porch. (Photos 59-6 thru 59-10)

There is a major mortar separation at the south end of the front foundation. The width is from about 1 and $1 / 2$ inches at the top to about 3/4 at the bottom. (Photos 59-11 thru 59-14)

The steps at the south end of the front porch have grass growing between them two and are separated by about 1 and $1 / 4$ inches. (Photo 59-15)

The west porch step has a crack on its south end. It is about 9 inches long on the top step. A vertical crack runs through the bottom step and is from about 1 and $3 / 4$ inches wide at the botton to about $1 / 4$ of an inch. (Photos 59-16 thru 59-18)

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There is a spall at the southwest corners of the two steps. There is also a slight crack at the west end of the upper tread. It is about 2 inches long and just wider than a hairline. (Photo 59-19)

At the north edge, the two steps are cracked apart. The crack is about 2 inches wide at the bottom. (Photo 59-20)

ID photographs of the north side of the house. (Photos 59-21 thru 59-23)

Starting at the west end of the north side, inspecting the foundation.
There are separations in the foundation on either side of the narrow block. The left separation ranges from about $1 / 8$ of an inch at the top to near $1 / 16$ of an inch at the bottom. The right side ranges in width from about $5 / 8$ to $1 / 4$ of an inch. (Photos $59-24$ and 59-25)

There is a crack in the foundation below the northwest block. It is about 3 inches long, roughly diagonal, and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 59-26)

There is another mortar separation to the lower left of the narrow block. It is an L-shaped, about a 3 and $1 / 2$ inch separation on the diagonal, and is from about $1 / 8$ to $1 / 32$ of an inch wide. (photo 59-27)

The next vertical mortar joint to the east has a hairline crack 8 inches long. (Photo 59-28)

Moving east to the next joint. It has a slight mortar crack about 5 and 1/2 inches long. (Photos 59-29 and 59-30)

There is a foundation crack below the west window. It runs the height of the block foundation. At the widest point it measures about $5 / 8$ of an inch. (Photo 59-31)

Below the second window from the west, there is a hairline vertical crack through block and mortar. It is about 14 and $1 / 2$ inches long. (Photo 59-32)

There is another vertical crack through block and mortar near the steel rod. It is about 15 inches long and ranges fran about $1 / 4$ to about $1 / 32$ of an inch wide. (photo 59-33)

Now back below the second window from the west. There is a slight crack in an upper vertical joint. It is approximately 5 and $1 / 4$ inches long and from $1 / 16$ of an inch to a hairline wide. (Photo 59-34)

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To the lower left of this window, there is a crack through block and mortar. The bottom crack is fram about $1 / 4$ to $1 / 8$ of an inch wide. The upper is about $1 / 16$ of an inch wide. (Photo 59-35)

Continuing east now.
Between the two east windows, there is a construction joint. There is a vertical separation at this joint that ranges fram about $1 / 2$ to $1 / 16$ of an inch wide. (Photo 59-36)

Tb the lower left of the east window, there is a cracked block in the botton course. About 5 and 1/4 inches are visible and it ranges fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photo $59-37$ ).

Directly below the window, in the top course, there is a cracked block. It is a roughly vertical crack, about 3 inches long and from about 1/8 of an inch to a hairline wide. (Photo 59-38)

A block below the right part of this window in the top course is scaling. (Photo 59-39)

Now moving east.
In the top course, the second block from the east end has a crack. It is about 5 inches long and fram about $1 / 8$ of an inch to a hairline wide. (Photo 59-40)

The upper northeast corner block has a hairline vertical crack that is about 8 and $1 / 2$ inches long. (Photo 59-41)

The lower northeast klock has a barely visible crack, roughly vertical, that is about 6 inches long. (Photo 59-42)

Now taking a series of photographs of the north foundation from east to west. (Photos 59-43 thru 59-52)

At the north window, middle set, right hand row, the second pane from the top has two cracks. A 3 and $1 / 2$ inch crack at the bottom left side and a horizontal crack all the way across. (Photo 59-53)

At the second window from the west, the inner window has deteriorating caulk.

The two east windows also have deteriorating caulk.
ID photographs of the east end of the house. (Photos 59-54 and 59-55)

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Series of photographs of the east foundation from north to south. (Photos 59-56 thru 59-59)

Starting at the north end.
There is a vertical crack at the northeast corner in the middle block. It rusn through the block and is about a hairline wide. (Photo 59-60)

The upper northeast block has a slight crack at the botton that is about 3 inches long. (Photo 59-61)

The windows on the east side have deteriorating caulk.
There is a slight vertical mortar separation in the bottom course just south of the northeast corner. It is about 5 and $5 / 8$ inches long and $1 / 16$ of an inch wide. (Photo 59-62)

There is about a 7 and $1 / 2$ inch long vertical mortar crack and separation just to the south in the lower course. (Photo 59-63)

Continuing south.
There is a stairstepping mortar crack that is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 59-64)

Just to the south, and located to the lower right of the small east window, there are cracked blocks and mortar that connect with the previous crack. These cracks range from about $1 / 8$ to $1 / 32$ of an inch wide. (Photos 59-65 and 59-66)

ID photographs of the south side of the house. (Photos 59-67 thru 59-69)

Series of photographs of the south foundation from east to west. (Photos 59-70 thru 59-76)

Starting at the east end. There is a crack in the middle block that is about 6 inches long and from a hairline to about $1 / 8$ of an inch wide. (Photo 59-77)

There is a stairstepping mortar crack that measures about 23 inches on the diagonal and ranges from about $1 / 8$ to $3 / 8$ of an inch wide. (Photos 59-78 and 59-79)

To the west, there is a large crack through the foundation. It ranges from about $7 / 8$ to $3 / 8$ of an inch wide. (Photo 59-80)

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There is also a mortar crack at the top vertical joint to the east of the large crack. This is about $1 / 16$ of an inch wide. (Photo 59-80)

Now back to the southeast corner. The middle block also has a vertical 8 inch hairline crack. (Photo 59-81)

Moving westward now.
There is a slightly cracked bottam joint just west of that major crack. It is 2 inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 59-82)

Continuing westward.
There is a stairstepping mortar crack through block and mortar that ranges from about $1 / 8$ of an inch to a hairline in width. (Photo 59-83)

There is a separation where the step to the utility room attaches to the foundation. It is about $1 / 16$ of an inch wide. (Photo 59-84)

Ib the west, there are steps to a sealed doorway that are separated from each other. (Photo 59-85)

Now at the east facing foundation, south of the bathroom addition. There are separations in this area that range fram about 1 and $1 / 8$ inches to $1 / 4$ of an inch wide. At the left side of the bottan joint, there is about a $1 / 2$ inch separation. (Photo 59-86)

Now on the south facing foundation again, west of the bathroom.
At the east end, there is a vertical mortar separation that is about $1 / 16$ of an inch wide. (Photo 57-87)

The next joint to the west appears to have been patched. At the top it has a crack that is about $1 / 4$ of an inch to a hairline wide. (Photo 59-88)

Continuing west, below the lower right of the second window from the west, there is a slight vertical mortar separation. It is about 7 and 1/2 inches long and from about $1 / 32$ to a hairline wide. (Photo 59-89)

To the lower left of this window, a stairstepping crack runs the height of the foundation. It is about $1 / 16$ of an inch wide. (Photo 59-90)

Three blocks to the west, there is another stairstepping crack and a partial gap in the mortar. The crack ranges from about $1 / 32$ to $1 / 16$ of an inch and the gap is about $1 / 2$ an inch wide. (Photo 59-91)

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Two blocks west, there is a crack through block and mortar. It is about 14 inches long measured on the diagonal and is about $1 / 16$ of an inch wide. (Photo 59-92)

Three blocks west, and to the lower right of the west window, there is another stairstepping crack and partial gap in the mortar. It measures 15 and $3 / 4$ inches on the diagonal and is about $1 / 4$ of an inch wide at the gap and from about $1 / 16$ to $1 / 8$ of an inch wide at the separation. (Photo 59-93)

Now near the southwest corner.
There is a large separation and a crack through a block. The gap is about $l$ inch wide and the crack is fram about $3 / 16$ to $1 / 8$ of an inch wide. (Photo 59-94)

There is a hairline vertical mortar crack in the lower course that is about 4 inches long, located near the southwest corner. (Photo 59-95)

There is about a $1 / 2$ inch gap between the top of the foundation and the botton of the siding at the southwest corner. (Photo 59-96)

There is a hairline, L-shaped mortar crack at the upper southwest block. (Photo 59-97)

This house has a brick chimney at the west end and a stucco covered chimney at the east end.

ID photographs of the brick chimney. There are several slight mortar cracks visible and there appears to be a cracked brick on the upper west side. (Photos 57-98 thru 59-101 and 59-106)

ID photographs of the stucco chimney. Several cracks are visible in the stucco exterior. (Photos 59-102 thru 59-105)
on the south side of the house, the windows, especially the west window, have deteriorating caulk.

The second story, upper south windowpane, is cracked horizontally. (Photo 59-107)

That completes the exterior inspection of the house.

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INTERIOR INSPECTION
Living Room
This is the northwest: room.
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Front door on the west wall. Windows an the north wall. Entrance on the south to the bedrooms. Entrance on the east to the kitchen.

Photograph of the east wall. (Photo 59-108)
Photographs of the south wall. (Photos 59-109 and 59-110)
Photograph of the west wall. (Photo 59-111)
Photographs of the north wall. (Photos 59-112 and 59-113)
There is a man-made rock area at the west part of the floor below the stove.

At the northwest corner, there is a crack through rock and mortar. It is about 10 inches long and a hairline in width. (Photo 59-114)

At the north edge, the second rock from the west has a slight mortar crack around its perimeter. (Photo 59-115)

There is a slight crack between every joint at the north edge. (Photos 59-116 thru 59-118)

The east edge has cracks at each joint except the very south joint. (Photos 59-119 and 59-120)

The west edge has a crack at each joint. (Photos 59-121 thru 59-123)
There is also an area of this rock material mounted on the south wall behind the stove.

There is a slight vertical mortar crack at each top joint. (Photos 59-124 thru 59-126)

## Kitchen

Tile floor.
Paneled walls.
Textured plaster ceiling.

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Two windows on the north wall; doors on the east and south walls.
Photograph of the east wall. (Photo 59-127)
Photograph of the west wall. (Photo 59-128)
Photographs of the north wall. (Photos 59-129 and 59-130)
Photographs of the south wall. (Photos 59-131 and 59-132)
Photographs of the ceiling. (Photos 59-133 and 59-134)
The floor has several broken tiles. Mrs. Jones indicated that they intend to install new carpet in the near future. (Photos 59-135 thru 59-138)

The door on the east leads to a small storage room.

## Storage Roam

Tile floor.
Paneled walls.
Textured plaster ceiling.
Window on the east wall.

A photograph looking into this room. (Photo 59-139)
There is a slight tear in the ceiling at the light fixture. It is about $1 / 2$ an inch long. (Photo 59-140)

The window has deteriorated caulk and paint. (Photo 59-14l)

## Utility Room

The south door of the kitchen leads to the utility room.
Concrete floor.
Paneled west wall and part of the south wall.
Plaster and sheetrock other walls and ceiling.
The south side of the door to the utility room has been damaged by a dog. (Photo 59-142)

Door to outside on the south wall and a door on the east wall.
There is covered opening in the floor to an old well.

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Looking down into this well, it is brick and stone lined.
Photographs looking into the well. (Photos 59-143 thru 59-145)
The cover of the well is cracked into two pieces. (Photo 59-146)
The porch floor has cracks at the north corners of the well cover that run to the north wall. The northeast crack is about 4 and $1 / 4$ inches long. The northwest crack is about 3 and $1 / 2$ inches long. Both are about $1 / 16$ of an inch wide. (Photos 59-147 and 59-148)

Another floor crack runs from the east door, westward about 53 inches, and then branches to the south and to the northwest. The south branch runs about 19 inches. The northwest branch runs to the north door, about 56 inches. (Photos 59-149 thru 59-153)

A floor crack trends north from the east end of the south door about 25 inches. (Photo 59-154)

There is a crack at the sill of the south door. It is about 6 inches long and about $1 / 18$ of an inch wide. (Photo 59-155)

There is an east-west trending split in the floor at the sill of the south door that continues westward behind the dryer. It ranges from about $3 / 16$ to $1 / 16$ of an inch wide. (Photos 59-156 and 59-157)

There is another slight crack just inside the south doorway. It is roughly east-west trending and is about 17 inches long. It is a branch of the 25 inch crack. (Photo 59-158)

It has a perpendicular branch at its west end that is about 11 inches long. (Photo 59-159)

These floor cracks range from about $1 / 32$ to $1 / 8$ of an inch wide.
Photographs of the west wall. (Photos 59-160 and 59-161)
Photographs of the north wall. (Photos 59-162 and 59-163)
There are holes in the north wall on either side of the door.
Photograph of the east wall. (Photo 59-164)
Photographs of the south wall. (Photos 59-165 thru 59-167)
Photographs of the ceiling. (Photos 59-168 and 59-169)
The door on the east leads to the basement stairway.

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Basement
This is a partial basement.
Photographs looking down the stairway. (Photos 59-170 thru 59-173)
Both stairway walls have several cracks. (Photos 59-172 thru 59-175)
There is a wet area at the bottom of the stairs.
ID photograph of the stairs. (Photo 59-176)
The basement walls are concrete and concrete block.
Photograph of the east wall. (Photo 59-177)
Photographs of the north wall. (Photos 59-178 and 59-179)
Photograph of the west wall. (Photo 59-180)
Photographs of the south wall. (Photos 59-181 thru 59-183)
The floor and walls have numerous silt stains, indicating water penetration.

There is a mortar separation along the horizontal joint between the block and concrete parts of the north wall. It ranges fran about 3/4 to $1 / 2$ an inch wide.

Series of photographs of the north wall from west to east. (Photos 59-184 thru 59-190)

Series of photographs of the east wall from north to south. (Photos 59-191 thru 59-195)

The chimney has some slight cracks at a patch on the upper south side. (Photo 59-194)

The north end of the west wall has a mortar separation that is about $1 / 8$ of an inch wide. (Fhoto 59-196)

There are numerous patches on the walls.
Two photographs of the west wall showing patches. (Photos 59-197 and 59-198)

The south wall also has several patches. (Photo 59-199)

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There is a vertical crack on the south wall near the pipe. It is about 18 inches long below the pipe and 1 and $1 / 2$ inches long above. It is from a hairline to about a $1 / 32$ of an inch in width. (Photos 59-200 and 59-201)

There is a roughly north-south trending floor crack running from the corner of the stairs to the north wall. It is about 92 inches long and a hairline wide. (Photos 59-202 and 59-203)

At the east wall, to the upper right of the window, there is a horizontal separation in the top mortar layer. It is from about $1 / 8$ to 1/16 of an inch wide and about 13 inches long. (Photo 59-204)

Moving back up the stairway, there is a crack through block and mortar on the east wall to the lower left of the window. It is about 18 and $1 / 4$ inches long and from $1 / 8$ to $1 / 16$ of an inch wide. (Photo 59-205)

A bulge in this area was seen from the outside also.
There is a stairstepping mortar crack to the south. It is about 25 inches measured on the diagonal and ranges fram about $1 / 8$ to $1 / 32$ of an inch wide. (Photo 59-206)

The west stairway wall has a crack above the top step. It is roughly a vertical crack about 15 and $1 / 2$ inches long and from about $1 / 2$ to $1 / 4$ of an inch in width. (Photo 59-207)

There is a patch at the lower part of the west wall. There is a crack in this patch just above the third step from the bottom. It is an Lshaped crack that measured on the diagonal is about 11 and $1 / 2$ inches long and from about $1 / 16$ of an inch to a hairline wide. (Photo 59-208)

The top layer of mortar on the east wall has some slight cracks.
(Photos 59-209 and 59-210)
There is a separation of about $3 / 8$ of an inch between the stairs and the east foundation wall. This is near the water heater at the landing of the stairway. (Photo 59-211)

Now back upstairs to the bedroans.
East Bedroom

Carpeted floor.
Paneled walls.
Textured plastered ceiling.

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Window on the south wall.
Door on the west to the west bedroom, and a door on the east to the bathroom.

Photograph of the west wall. (Photo 59-212)
Photographs of the north wall. (Photos 59-213 and 59-214)
Photographs of the east wall. (Photos 59-214 thru 59-216)
Photographs of the south wall. (Photos 59-216 and 59-217)
Photographs of the ceiling. (Photos 59-218 and 59-219)
The northwest corner of the ceiling has the entrance to the attic.
According to Mrs. Jones, the attic has lath and plaster walls that are partially torn up. She indicated that they plan to remodel it sometime in the future and that it is not liveable at this time. She requested that we not enter the attic.

West Bedroom

Wooden floor.
Paneled walls.
Textured plaster ciling.
Photograph of the west wall. (Photo 59-220)
Photograph of the north wal.1. (Photo 59-221)
Closet enclosure in the northeast corner.
Windows on the west and south walls.
Photograph of the south wall. (Photo 59-222)
Photograph of the east wall. (Photo 59-223)
Photographs of the ceiling. (Photos 59-224 and 59-225)
Bathroom

Carpeted floor.
Tile lower walls.
Papered upper sheetrock walls.
Textured plaster ceiling.

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Tile shower walls in the southwest corner.
Part of the north wall is unfinished.
Closet door on the north wall.
Photographs of the east wall. (Photos 59-226 and 59-227)
Photographs of the south wall. (Photos 59-227 and 59-228)
Photographs of the north wall. (Photos 59-229 and 59-230)
Small closet door on the south wall.

There is a slight seam crack in the ceiling, north-south trending, near the upper left end of the south closet door. It is about 4 and $1 / 4$ inches long. (Photos 59-231 and 59-232)

There is some peeling of the textured plaster at the light fixture. (Photo 59-233)

That completes the inspection of the house.
Exterior Inspection - Continued
Now going out to inspect the outbuildings.
Starting with the main barn.
Mr. Roland Sherman, father of Mrs. Jones, accompanied us on the inspection of the outbuildings. He is one-half owner of the land and outbuildings around the Jones residence.

Barn and Grain Bin
This is a tin sided barn with a concrete floor that was recently built and will be used as a farrowing barn.

Mr. Sherman indicated that the floor has a thickness of around 4 inches, but in places it is up to around 10 inches thick.

Starting with a series of photographs of the floor. (Photos 59-234 thru 59-239)

An inscription in the floor gives 1986 as the year of construction.

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There is a crack in the south part of the floor between two poles. It is faint at the east pole and enlarges to about $1 / 4$ of an inch near the middle, and is about $3 / 4$ of an inch wide at spalls. (Photos 59-240 thru 59-242)

The south end of this barn is open and this part of the floor is mostly covered with manure and dirt. (Photo 59-243)

A piece of the floor is chipped at the southeast post. (Photo 59-244)
The apron at the south end of the floor is cracking. (Photo 59-245)
ID photograph of the south end of the barn. (Photo 59-246)
There is a grain bin located just east of the barn. (Photo 59-247)
ID photographs of the east side of the barn and bin. (Photos 59-248 and 59-249)

ID photograph of the north side of the barn. (Photo 59-250)
The north apron has several cracks. (Photos 59-251 and 59-252)
The northwest downspout empties near the foundation. The downspout is loose.

ID photograph of the west side of the barn. Note the bent gutter that could cause water to drain next to the foundation. (Photo 59-253)

It appears that the floor of this barn has a gravel subgrade base. (Photo 59-254)

ID photograph of the south wall of the covered part of the barn. (Photo 59-255)

The grain bin rests on a thick concrete slab and the exterior perimeter of the slab is covered with fiberboard.

Series of photographs of the bin floor. (Photos 59-256 thru 59-258)
There is sane loose and cracked mortar at the beveled edge where the bin wall meets the floor, mainly at the south end. (Photos 59-259 thru 59-261)

There is a slight crack, just wider than a hairline, below the door at the east part of the floor. (Photo 59-262)

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Spring Pond
Mr. Sherman expressed his concern for the spring pond which is located southeast of the barn. He indicated that it is about 19 feet at the deepest, it is about 2 acres in area, and it has never gone dry.

Series of photographs of the spring pond fran south to north. (Photos 59-263 thru 59-266)

This pond is fed by a submerged well located at the north end of the pond. (Photo 59-267)

There are several sheds located between the barn and the house.
Sheds
Mr . Sherman indicated that he intends to tear down some of these sheds in the near future. He also indicated that he is not concerned about these outbuildings whatsoever and requested that we not bother to inspect them. Several identifying photographs were taken, however.

Most are small sheds on skids with dirt floors. Some are tin sided and same are wood.

General photographs of the hog pen area looking northwestward. (Photos 59-268 and 59-269)

ID photographs from the southwest and northwest of a tin shed at the hog pen. It rests on skids. (Photos 59-270 and 59-271)

Photographs of the hog pen and a small shed from the west. (Photos 59-272 thru 59-274)

ID photographs from the east, south, and west of an old shed located west of the hog pen. (Photos 59-275 thru 59-277)

There is a small red wooden shed located northwest of the hog pen. ID photographs from the south and west. (Photos 59-278 and 59-285)

The southwestern shed has a concrete foundation. ID photographs of this shed from the north, west, south, and east. (Photos 59-279 thru 59-282)

General photographs of the outbuildings from the west. (Photos 59-283 and 59-284)

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General Comments
This house was originally built in 1932. It has a concrete block foundation that has numerous cracks. The house lacks a gutter system.

The interior has been remodeled with paneling installed over the old plaster walls. The bathroan was added about ten years ago and has sheetrock walls and a concrete floor that is about 2 inches thick. The attic was not inspected at the request of Mrs. Jones. The partial basement shows signs of water penetration and has numerous patches on the walls.

The main barn was constructed 7 or 8 years ago and the concrete floor was placed in 1986. The barn lacks a gutter along the east side and the west gutter is bent severely.

The remaining outbuildings were not inspected at the request of Mr. Sherman and only ID photographs were taken.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.

CDL/kg


Ghristopher D. Landoll
Technical Associate
Enclosure: 285 Photographs

1- SUMMARY FORM

2- SKETCH OF STRUCTURE

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## $59-279$




## $59-250$



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59-248
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## $59-55$




I. Basic Information

1. Name of Resldent: Robert Holman
2. Date: November 1, 1986 Thue:_ 7: 40AM
3. Address:_Box 206, Amoret, Missouri 64722
4. Location:_Iots 5 and 6, Block 7
5. Telephone Number: (816) 925-3298
6. Dares of occupancy by current resident: 1973 - Present
7. Dates of any temporary or pernanent abandonment: None.
II. InEormation Concerning Buildings
(repeat for additional buildings)
8. Dace of original construction: 1922
9. Date(s) of major remodeling or addlelons:
(a) Kitchen and bathroom remodeled in 1992
(b) bedroom, living room, dining room, remodeling in process
(c) added shop in 1977
10. Construction of building:
(a) Eraming (jolsts, rafters, and stud walls): Not known
(b) Interlor walls: Plaster, sheetrock in kitchen and bathroom
(c) raof: Composition shingles
(d) Eootings; foundations: Rock, concrete foundation, footing not known
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed buliding: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevarion of area: 830 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundatlon: Not known
4. Water wells utilized (indicate depth•and use): Depth unknown, used for garden and
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). No
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drafnage features: Only on shop
8. Description of general grading or landscaping in vicinity: Generally flat
IV. Any notable existing deterioration or damage
9. Cracks in interior walls: See survey
10. Receding of doors, winduris: See survey
11. Noticeable setclement: See survey
12. Foundation cracks: See survey
13. Exterior wall cracks (brick veneer): See survey
14. Sidewalks, steps, driveway pavement: See survey
15. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls See survey
16. North See survey
17. South See survey
18. East See survey
19. West See survey

VIL. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhifit an unusual response to normal blasting activities.

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
November 5, 1986
Report No. 87056-24
P \& M Map Photo No. 79

Subject: Inspection of the Robert Holman Residence
P. O. Box 206

Amoret, Missouri 64722
November 1, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the east end of the house. (Photos 24-1 and 24-2)
The east side was apparently the front porch and entrance, but has been closed and converted into a room.

There are two columns that were probably porch roof supports. The north columns base appears to be deteriorating and there is extensive paint peeling on the concrete block part of the column. (Photo 24-3)

There is caulk separation where the wood siding meets the north support. The separation is from about $1 / 4$ to $1 / 2$ an inch wide. (Photo 24-3)

There is a diagonal crack in the foundation just south of the north column. It is about $1 / 2$ an inch wide. (Photo 24-4)

There is a spall at the northeast corner of the north column. (Photo 24-5)

At the south column, there is also separation of the caulk seal. It is about $1 / 4$ of an inch wide. (Photo 24-6)

The south corners of this support are spalling. (Photo 24-7)
The east slab of the front sidewalk has settled and has numerous cracks. (Photo 24-8)

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The sidewalk slab closest to the house has a north-south crack across the slab. It is about $3 / 16$ of an inch at the widest. (Photo 24-9)

Now views of the city sidewalk, first looking north and then south. (Photos 24-10 and 24-11)

ID photographs of the south side of the house. The last one shows the shop and the garage. (Photos 24-12 thru 24-14)

The main part of the house has a concrete block foundation.
At the east end of the south side, there is a separation between the column and the siding. It is about $3 / 8$ of an inch at the widest. (Photo 24-15)

A photograph of the foundation to the lower left of the east window on the south side. (Photo 24-16)

A photograph of the south end of the east foundation, below the watt meter. There is a cracked block in this area. (Photo 24-17)

Now at the south foundation of the main part of the house. At the east end, there is a vertical mortar separation that is about $3 / 8$ of an inch wide. (Photo 24-18)

Moving west, there is another vertical separation. It is about $1 / 4$ of an inch wide. Just west of that, a block is cracked vertically. The crack is about $1 / 16$ of an inch wide. (Photo 24-19)

Near the telephone line, the mortar joint is separated by about $1 / 16$ of an inch. (Photo 24-20)

The next mortar joint: to the west is also separated by about $1 / 16$ of an inch. (Photo 24-21)

There is a vertical crack in the foundation just east of the chimney. It is about $1 / 16$ of an inch wide. (Photo 24-22)

The concrete at the base of the chimney is spalling. (Photos 24-23 thru 24-25)

Now inspecting the chimney. Series of photographs from top to bottam of the east side. It is not completely flush with the house. (Photos 24-26 thru 24-30)

Series of photographs of the south side from top to bottan. (Photos 24-31 thru 24-34)

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Series of photographs of the west side. (Photos 24-35 thru 24-38)
Now inspecting the foundation, west of the chimney. There is same deteriorated mortar to the west. Dark stains on the block and a hairline crack through a block near the tape in this photograph. (Photo 24-39)

Now at the bay window, west of the chimney. The inner windows have severely deteriorated caulk and peeling paint. Two photographs of the right window. At the left window, there is a heavy condensate which prevents a photograph, however, I do see some deteriorated caulk and peeling paint on this window. (photos 24-40 and 24-41)

There is an older chimney at the ridge of the roof. ID photographs from the southwest. The antenna is strapped to this chimney and a few cracks are visible in the concrete top. (Photos 24-42 and 24-43)

The foundation, west of the bay window, has a cracked block and a slight mortar separation. Separations and cracks in this area have widths from about $1 / 8$ to $1 / 16$ of an inch. (Photo 24-44)

This house does not have a gutter system. It appears that water could pool near the foundation in this area.

Now near the spigot. The foundation is visible again and there is a cracked block and a slight mortar separation near the water line. It is about $1 / 16$ of an inch wide. (Photo 24-45)

There is a cracked block just to the west of the water line. It has a maximum width of about 1 inch at the bottom. (Photo 24-46)

The southeast corner is broken off at the back porch floor. (Photo 24-47)

The back porch has a loose screen on the south wall. (Photo 24-48)
Now at the garage. It has a concrete block foundation.

Garage
ID photograph of the east side. (Photo 24-49)
Starting at the north end of the east foundation, there is a vertical mortar separation, about $1 / 16$ of an inch wide, and the foundation is separated by about 1 and $1 / 2$ inches from the porch foundation. (Photos 24-50 and 24-51)

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The third and fouth vertical mortar joints, from the north, each have a slight vertical crack below them in the horizontal joint. (Photo 24-52)

The fifth vertical mortar joint from the north is separated by about 1/16 of an inch. (Photo 24-53)

Now at the south end of the east foundation. There is a vertical mortar separation at the south end that is about $1 / 16$ of an inch wide. (Photo 24-54)

Now at the concrete apron located at the south end of the garage. This apron is extensively cracked. Crack widths in this slab range from about a hairline to $3 / 4$ of an inch. (Photos $24-55$ thru 24-57)

The garage lacks gutters and has deteriorating paint on the trim. Shop

ID photograph of the east side from the southeast. (Photo 24-58)
The shop has a white painted siding exterior and a composition shingle roof. It does have a gutter and downspout system.

It has two overhead doors on the south wall.
The east overhead door has deteriorating wood at the lower right part. (Photo 24-59)

The entry door has deteriorating header casing. (Photo 24-60)
ID photograph of the west side of the shop. (Photo 24-61)
ID photograph of the front, south side of the shop. (Photo 24-62)
The west side of the foundation has same flaws and areas of aggregate showing.

Starting at the south end and moving northward.
There is a crack in the foundation below the window. It is a hairline vertical crack and about 14 inches long. (Photo 24-53)

It connects with a horizontal crack at the top, which is about 5 inches long and $1 / 16$ of an inch wide. (Photo 24-64)

ID photograph of the west side from the northwest. (Photo 24-65)

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The northwest downspout lacks a tip and a splash block and empties close to the foundation. (Photo 24-66)

ID photograph of the north side of the shop. (Photo 24-67)
About 3 feet east of the north window, there is a hairline crack in the foundation. It is about 11 inches long. (Photo 24-68)

The northeast downspout lacks a tip and splash block. It empties next to the foundation. The siding and trim at this lower corner are deteriorating. (Photo 24-69)

ID photograph of the east side from the northeast. (Photo 24-70)
The north windowpane has a crack at the lower left corner. (Photo 24-71)

ID photograph of the west end of the house. Note the deteriorating roof below the upstairs window. (Photo 24-72)

ID photograph of the older chimney from the west. (Photo 24-73)
Now between the shop and the garage. The west garage window is deteriorating and has a missing pane. (Photo 24-74)

The west side of the garage foundation has some slight mortar cracks and it appears to have shifted somewhat to the west off the slab base. (Photos 24-75 and 24-76)

There is a crack at the north end of the west garage foundation. It runs the height of the block and is about $3 / 16$ of an inch wide. (Photo 24-76)

ID photograph of the north side of the garage. (Photo 24-77)
ID photographs of the north side of the house. (Photos 24-78 and 24-79)
Now back to the north end of the garage. The concrete block foundation has a vertical mortar separation at almost every joint. Starting at the west end, taking a series of photographs. The separations range from about $1 / 16$ to $1 / 32$ of an inch wide. (Photos $24-80$ thru 24-83)

Now on the west facing wall of the back porch. There is a screen missing and a loose screen. (Photo 24-84)

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There is a hole at the edge of the roof where a piece of iron fell through. Mr. Holman indicated that the railroad, located west of the house, cuts brush with an iron blade, which detached and hit the roof, went through and hit the floor. (Photo 24-85)

There is a crack through the porch floor which is about $1 / 8$ of an inch wide. (Photo 24-86)

Now on the north facing wall of the porch. The plastic window covering is loose. (Photo 24-87)

Now inspecting the foundation at the north end of the west side of the house. Below the window and north of the porch, there is same spalling concrete, exposing brick in two areas. There is also a vertical crack that is about $1 / 8$ of an inch wide. (Photos 24-88 thru 24-90)

The west window, north of the porch, has deteriorated caulk and paint. (Photo 24-91)

Now on the north side of the house, moving eastward.
ID photograph of the north side of the old chimney. There are a couple of cracks in the top area of concrete on the north side. Also note the curling shingles. (Photo 24-92)

Near the gas line, there are mortar separations in the foundation. Widths are about $1 / 8$ of an inch. Some of these have been patched and recracked. (Photos 24-93 thru 24-96)

There is also a hairline crack through a block behind the gas line. (Photo 24-95)

There are two cracked blocks below the west window. Widths vary from hairline to about $1 / 8$ of an inch. (Photos 24-97 and 24-98)

There are several patched mortar joints in the area near the crawl space vent. (Photo 24-99)

About 2 and $1 / 2$ blocks east of the vent, there is a cracked mortar joint and a cracked block. Both are about $1 / 16$ of an inch wide . (Photo 24-100)

Below the east window, there are two mortar separations, each about $1 / 16$ of an inch wide. (Photo 24-101)

East of the window, there are two mortar separations. Widths range from about $1 / 16$ to $1 / 8$ of an inch. (Photo 24-102)

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Now at the east end of the front. The concrete foundation is spalling at the bottom. (Photos 24-103 thru 24-105)

There is a separation of the caulk joint at the column. It is about $1 / 8$ of an inch wide. (Photo 24-106)

INTERIOR INSPECTION
Garage
Concrete floor.
Unfinished walls and ceiling.
ID photograph looking northward into the garage. (Photo 24-107)
It is constructed of two by six stud walls and rafters.
There are windows on the east and west walls.
The floor has a diagonal crack in the northeast corner. It is about 98 inches long and $1 / 8$ of an inch wide. (Photos $24-108$ thru 24-110)

The northeast crack has a branch which runs south and connects with another crack. It is about 100 inches long to the other crack and slightly wider than a hairline. (Photos 24-111 and 24-112)

At about the 88 inch mark, it has a faint branch that runs to the east wall below the window. The branch is about 51 inches long and a hairline wide. (Photo 24-113)

Now at the "X" where cracks intersect. The first branch continues southwest to the west wall. It runs about 119 inches from the "X" to the southwest. The crack is just wider than a hairline. (Photos 24-114 thru 24-116)

The northwest-southeast part of the X measured about 201 inches from west to east walls. It has a $Y$ at each end. (Photos $24-117$ thru 24-120)

The south branch of the west. $Y$ is about 29 inches long. (Photo 24-121)
The north branch of the east $Y$ runs to the west wall. It is about 40 inches long. (Photo 24-122)

This northwest-southeast trending crack ranges from about $1 / 2$ an inch wide at spalls down to a hairline. Most of the crack is fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 24-123)

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At the southwest part of the floor, a crack trends fron the south end of the floor northwest to the west wall, to the lower left of the window. This crack is about a hairline and intersects the southwest trending crack. (Photos 24-124 thru 24-129)

The west foundation wall has several mortar separations and cracked mortar joints. Series of photographs from south to north. The third joint from the south has about $1 / 8$ of an inch gap. These separations and cracks range from about a hairline to $1 / 8$ of an inch wide. (Photos 24-130 thru 24-136)

There is a slight mortar separation in the northwest corner that is about $1 / 8$ of an inch wide. (Photo 24-137)

Now at the north foundation. Series of photographs from west to east. The largest separation is at the west end and is about $1 / 8$ of an inch. (Photos 24-138 thru 24-141)

The door on the north leads to the back porch.
The edge of the concrete floor of the porch has about a 2 inch deep spall. (Photo 24-142)

Now a series of photographs of the east foundation wall from north to south. These mortar separations range from about hairline to $1 / 16$ of an inch wide. (Photos 24-143 thru 24-150)

Shop
Concrete floor, unfinished walls and ceiling in the south part. The north part has a gravel floor, plywood walls and ceiling painted white.

Windows on the north and west walls.
There is a lot of dirt and material on the floor.
Photograph of the west wall. (Photo 24-151)
Photographs of the north wall. (Photos 24-152 and 24-153)
Photographs of the east wall. (Photos 24-153 and 24-154)
Photographs of the south wall. (Photos 24-155 and 24-156)
The shop is constructed of two by four rafters, studs, and roof trusses.

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A crack in the concrete floor runs from the west overhead door to the north end, which is about 21. feet 7 inches. It becomes faint at the north end and is very hard to see. It ranges from about $3 / 4$ of an inch wide at spalls to about a hairline. It averages about $1 / 8$ of an inch wide. (Photos 24-157 thru 24-161)

Back Porch
Concrete floor.
Lower walls are masorite type siding. Upper walls are screens.
Exterior asphaltic siding on east wall.
Unfinished ceiling.
A photograph looking northward into the back porch from the garage. (Photo 24-162)

There are extensive water stains in the ceiling. (Photo 24-163)
Door on the east wall to the house.
There is an east-west trending floor crack that trends across the floor and under a piece of furniture. It is widest at the west end. Spalling is about $1 / 2$ an inch wide. The crack width is about $3 / 16$ of an inch and it narrows as it runs to the east. The visible portion is about 8 feet long. From outside, this crack runs vertically through the west end of the slab. (Photos 24-164 thru 24-166)

Photograph of the east wall. (Photo 24-167)
There is a hole in the screen at the lower right corner.
Paint is peeling from the trim of the door and window on the east wall.
Now moving into the house.

## Utility Room

Vinyl floor.
Exterior siding on east and north walls. Sheetrock on the west and south walls. wooden ceiling.

Windows on the east and west walls.
Photograph of the north wall. (Photo 24-168)
Photographs of the west wall. (Photos 24-169 and 24-170)

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Photograph of the south wall. (Photo 24-171)
Photographs of the east wall. (Photos 24-172 and 24-173)
Paint is peeling on the ceiling.
The east window has a cracked pane, deteriorated caulk joints, and a shifted frame member. (Photos 24-174 and 24-175)

There is a separation in the southeast corner. (Photo 24-175)
Paint is peeling from the trin and west door. (Photo 24-176)
There is a crack to the upper left of the west door, in the sheetrock. That is about 4 and $1 / 2$ inches long. (Photo 24-177)

Tape joints are visible and some are peeling on the west wall.
There is a crack to the lower right of the west window at a tape joint. (Photo 24-178)

Below the window, the tape has been removed exposing a seam. (Photo 24-179)

Kitchen
Vinyl floor.
Sheetrock walls and ceiling.
The north and east cabinet area walls are tile.
Photographs of the south wall. (Photos 24-180 and 24-181)
Photograph of the west wall. (Photo 24-182)
Photograph of the north wall. (Photo 24-183)
Photographs of the east wall. (Photos 24-184 and 24-185)
Photograph of the ceiling. (Photo 24-186)
Windows on the north wall, door to the bathroam on the west wall, and a door to the living room on the south wall.

There is a hairline crack at a seam above the upper right of the north window. It is about 7 inches long. (Photo 24-187)

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There are slight cracks in the paint at the tape above the upper right end of the south entrance. The longest is about ll inches. (Photo 24-188)

Above the upper left end, there is a crack at the tape joint that is slightly wider than a hairline and about 13 inches long. (Photo 24-189)

There is a separation in the corner, where the flue meets the south wall. It runs all the way along the corner about 43 inches. (Photo 24-190)

There are a few water stains at the upper west side of the flue and at the ceiling. (Photos 24-191 and 24-192)

There is a slight crack in the ceiling, at the corner of the flue. It is a hairline crack about 3 inches long. (Photo 24-192)

There is a small door on the east wall. There is a slight vertical crack above the upper right corner. It is about 14 inches long. (Photo 24-193)

Tb the upper left of the trim of the east door, there is a slight crack that is about 1 inch long. This is on the north wall. (Photo 24-194)

There is a nail pop at the upper west wall between the two doors. (Photo 24-195)

Dining Room
Vinyl floor.
Paneled walls.
Plywood ceiling.
Windows on the south and west walls.
Photograph of the south wall. (Photo 24-196)
Photograph of the west wall. (Photo 24-197)
Photograph of the north wall. (Photo 24-198)
This room opens to the living roan on the east.
There is a brick area on the floor and the south wall for the wood
stove. (Photos 24-199 thru 24-203)

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There are numerous mortar cracks at the brick floor area. They range up to about $3 / 16$ of an inch wide. The bricks at the northwest corner are loose. (Photos $24-204$ thru 24-207)

Living Room
Yellow painted plaster walls and ceiling. Carpeted floor.

Window and door on the east wall to a bedroom, a door on the north wall to a bedroom, and a window on the south wall.

This room is in the process of being remodeled.
Photograph of the east wall. (Photo 24-208)
Photograph of the south wall. (Photo 24-209)
Photograph of the north wall. (Photo 24-210)
Photograph of the ceiling. (Photo 24-211)
There is same moisture damage and a crack at the south wall, west end near the brick area. The crack runs from the ceiling to the floor and is about a hairline wide. (Photos 24-212 and 24-213)

There is also some moisture damage and a crack in the ceiling. (Photo 24-214)

A vertical crack above the upper right end of the south window is about 15 inches long and just wider than a hairline. (Photo 24-215)

Below the lower right corner, there is a vertical crack behind the TV. (Photo 24-216)

A crack at the lower left corner is about 12 inches long and just wider than a hairline. (Photo 24-217)

There is a vertical crack below the middle of the window. It is about 11 inches long. (Photo 24-218)

South of the window, there is a roughly hairline vertical crack that runs from the floor to about the top of the window. (Photo 24-219)

A hairline vertical crack in the southeast corner runs the length of the corner. (Photos 24-220 and 24-221)

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A vertical crack above the upper right end of the east window runs to the ceiling and is just wider than a hairline. (Photo 24-222)

There is a vertical crack above the upper right of the east door that runs to the ceiling and is about a hairline wide. (Photo 24-223)

There is also a hairline crack above the upper left of the east window that is about 14 inches long above the door. (Photo 24-223)

Above about the middle of the door, there is a slight horizontal and vertical crack. (Photo 24-224)

There is a vertical hairline crack that runs to the ceiling above the upper left corner of the door. (Photo 24-225)

There is a large crack along the entire northeast corner. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 24-226 thru 24-228)

At the upper east end of the north wall, there is a horizontal crack at the intersection of the ceiling that connects with the corner crack. (Photos 24-226 and 24-229)

There is another horizontal crack just below the ceiling to the upper right of the door. It is about 34 inches long and up to $1 / 4$ of an inch wide. (Photo 24-229)

There are three horizontal cracks above the door on the north. (Photo 24-230)

A faint vertical crack below the picture, at the east end of the north wall, runs down behind the bookcase. (Photo 24-231)

There is a vertical crack west of the bedroom door on the north wall. (Photos 24-232 and 24-233)

There is cracking just below the ceiling at the west end of the north wall. (Photos 24-234 and 24-235)

There are numerous cracks in the ceiling. (Photos 24-236 thru 24-239)
Two views of the living room ceiling looking west. (Photos 24-245 and 24-246)

Now into the bedroom to the east.

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East Bedroom
Carpeted floor.
Paneled walls.
Tile ceiling.
Windows on the south and east walls.
There are some water stains in the ceiling tiles along the north end of the west wall. (Photo 24-240)

Photograph of the south wall. (Photo 24-241)
Photograph of the north wall. (Photo 24-242)
Photograph of the east wall. (Photo 24-243)
In the southeast corner, the wall is built around the old column of the former porch. There is separation along the north side of the column. The separation is about $3 / 16$ of an inch wide. (Photo 24-244)

There is some warped paneling on the east wall near the window and some warped paneling on the west wall.

North Bedroom
wooden floor.
Sheetrock north wall.
Old plaster east, south, and west walls.
Upper walls are papered.
Lightly textured sheetrock ceiling.
This room is in the process of being remodeled.
Photograph of the west wall. (Photo 24-247)
Photograph of the north wall. (Photo 24-248)
Photographs of the east wall. (Photos 24-249 and 24-250)
Photographs of the south wall. (Photos 24-251 and 24-252)
Window on the north wall, stairway door and closet door on the west wall, and a closet door on the east wall.

The north wall is sheetrock and has been taped and bedded, but is unfinished.

There is extensive cracking in the old plaster walls.

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Close-up photographs of the east wall. (Photos 24-253, 24-254, and 24-264)

There are horizontal plaster cracks above the east closet door. (Photos 24-255 and 24-256)

There is a crack in the southeast corner. (Photo 24-257)
Plaster cracks in this rom are too numerous to mention and measure since they are in the process of remodeling.

Close-up photographs of the south wall. (Photos 24-258 thru 24-260)
Close-up photographs of the west wall. Note the cracks above the stairway and closet doors. (Photos 24-261 thru 24-263)

Areas of wallpaper are loose above doors and windows.
The east closet is unfinished with a plywood ceiling and has a concrete floor. (Photo 24-26.5)

The north door on the west wall leads to the upstairs.
Two views of the bedroom ceiling. (Photos 24-266 and 24-267)

## Stairway

## wooden floor.

Plastered walls and ceiling.
There is extensive cracking in the stairway walls and ceiling.
The stairs squeak when walked on and they are very steep.
Views of the stairway looking down. (Photos 24-268 and 24-269)
The west stairway wall has several cracks. (Photos 24-270 and 24-271)
The east stairway wall and deiling have several cracks. (Photos 24-272 and 24-273)

At the top of the stairs, there is a small hallway.
Hallway
Wooden floor.
plaster walls and œiling.

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Part of the ceiling appears to have been replaced with sheetrock.
There is a door on the east and a door on the west to bedroans.
Series of photographs of the walls and ceiling of this hallway. (Photos 24-274 thru 24-279)

Note the water damage to the floor near the west doorway. This is below the area of the ceiling that has been replaced. (Photo 24-280)

This upstairs area is unheated and not used for living quarters at this time. It is used as storage. Major remodeling would be necessary to make it livable.

East Bedroan
Plastered walls and ceiling that appear to have been papered and painted over.
Some paneling on the south wall.
Linoleum over wooden floor.
There is a window on the east wall.
The ceiling slopes at the north and south ends. A lot of plaster is falling off at the south end above the paneled wall.

There is extensive cracking in the plaster walls and ceiling.
Photographs of the north wall. (Photos 24-281 and 24-282)
Photographs of the west wall. (Photos 24-283 and 24-284)
Photographs of the south wall. (Photos $24-285$ thru 24-287)
Photographs of the east wall. (Photos 24-288 and 24-289)
Series of photographs of the ceiling. (Photos 24-290 thru 24-293)
There is a water stain in the ceiling near the window.
There are cracks below the lower right of the window, lower left of the window, and north of the window. The north wall is severely cracked above the closet door. There is severe cracking in the ceiling and cracking in the west wall.

A photograph looking into the closet. A crack can be seen on the north wall. (Photo 24-294)

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The bottan windowpane has a crack at the upper left corner. (Photo 24-316)

West Bedroom
Plaster walls and ceiling.
Wooden floor.

Photograph of the west wall. (Photo 24-295)
Photographs of the north wall. (Photos 24-296 thru 24-298)
Photographs of the east wall. (Photos 24-299 and 24-300)
Photographs of the south wall. (Photos 24-301 and 24-302)
There is severe cracking on the south wall above the small doorway.

There is cracking on the west wall to the lower right of the window. There is also a crack below the lower left of the window behind this material.

There is severe cracking on the north wall above the closet door.
Series of photographs of the ceiling. There is severe cracking in the ceiling. (Photos 24-303 thru 24-306)

A view looking into the small closet to the north. (Photo 24-307)
There is water damage at the east part of the ceiling near the flue. There is extreme creosote build up on the brick flue. (Photos 24-308, 24-309, and 24-312)

There is water damage to the linoleum floor near the doorway. (Photo 24-310)

A photograph into the small closet on the south wall. (Photo 24-311)
The upper west windowpane has slipped down about $1 / 4$ of an inch. (Photo 24-313)

There is also a gap at the bottom of this upper pane and along the north side of the storm window. (Photos 24-314 and 24-315)

Stairway - Continued
From the bottom of the stairway, showing severe plaster cracks on the west and east walls. (Photos 24-317 thru 24-319)

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Bathroom

Sheetrock walls and ceiling.
Vinyl floor.
Tile shower walls.
A photograph looking westward into the bathroom. (Photo 24-320)
There are separations and darkened grout in the tile shower walls. (Photos 24-321 and 24-322)

Now back outside to inspect the storm cellar.
Exterior Inspection -- Continued
Cellar
ID photograph of the cellar entrance. Paint is peeling from the door. (Photo 24-323)

The concrete area, above the door, has crazing type cracks. (Photos 24-324 and 24-325)

ID photographs of the north and west sides of the cellar. Note the deteriorating door and the broken concrete on the west side. (Photos 24-326 thru 24-328)

The west stairway wall has a crack above the second step that has been patched. The crack is up to about an inch wide and there are crazing cracks to the north. There is also a crack above the top step. (Photos 24-329 thru 24-331)

A view of the steps. (Photo 24-332)
The east wall of the stairway has a crack at the south end. It is about $3 / 8$ of an inch wide at the top to about 2 inches wide at the bottan. (Photo 24-333)

Photographs looking inside the cellar. There are shelves on the walls that are deteriorating. (Photos 24-334 and 24-335)

There are several inches of water on the floor.
There is a shed locat:ed at the northwest part of the yard.

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Shed
ID photograph from the southeast. (Photo 24-336)
The shed appears to lean northward.
ID photograph from the southwest. (Photo 24-337)
ID photograph from the northwest. (Photo 24-338)
This appears to be a very old shed. It has deteriorating wooden siding. General Comments

This house was orginally built in 1922.
The foundation has numerous cracks, mainly at mortar joints. The house lacks a gutter-downspout system.

The living room, north bedroom, and upstairs have plaster on lath walls and ceilings that are extensively cracked. The Holmans indicated that they are in the process of remodeling these areas. Other rooms have been remodeled. The upstairs rooms are in severely deteriorated conditions.

The garage has a concrete block foundation that has numerous cracked mortar joints and a concrete floor that has several cracks.

The shop was built in 1977. It has a gutter system, but the downspouts empty close to the foundation. A few slight cracks were found in the foundation and one long crack was found in the concrete floor.

The shed and cellar are in severely deteriorated conditions.
That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate

## CDL/kg

Enclosure: 338 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 79

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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$24-67$



## $24.62$



## $24-49$


$24-14$




I. Basic Infonnation

1. Name of Resident: Duane and Betty Wisdom
2. Date: November 8, 1986 Thue: 9:15AM
3. Address:__Box 152, Amoret, Missouri 64722
4. Location: North side of Washington Street and east of First Street
5. Telephone Number: (816) 925-3387
6. Dates of occupancy by current resident: 1985-Present
7. Dates of any temporary or permanent abandonnent: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construccion: 1985 trailer
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (Joists, rafters, and stud walls): $2^{\prime \prime} \times 4^{\prime \prime}$ stud walls
(b) intertor walls: Paneled
(c) rooE: Sheet metal
(d) footings; Foundations: Steel runners on concrete blocks (Could not see under skirting)
(e) basement walls (indicate how keyed to Eooting of floor): Not applicable
(f) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Infornation

1. Approximate elevation of area:

836 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use): Not used, filled and covered
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures: See photo. survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable exlsting deterioration or damage See photo survey

1. Cracks in interlor walls:
2. Receding of doors, windu'vs:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch
VI. Elevation views or photographs of walls See photo survey
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings See sketch

VIIf. Discussion or specific coments concerning any unusual features, construction techniques, or scatus of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

November 12, 1986<br>Report No. 87056-80<br>P \& M Map Photo No. 82

Subject: | Inspection of the Duane and Betty Wisdom Residence |
| :--- |
| Box 152 |
| Amoret, Mi.ssouri 64722 |
| November 8, 1986 |

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
| P. O. Box 8 Missouri 64723 |
| Amsterdam, Misson |

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the south side. (Photo 80-1)
ID photograph of the east side. (Photo 80-2)
ID photograph of the north side. (Photo 80-3)
There is a well at the north end of the property that has been covered over by wood, tires, and other materials. (Photo 80-4)

ID photograph of the west side of the trailer. (Photo 80-5)
Mrs. Wisdom stated that there was no access under the skirting.
INTERIOR INSPECTION
We will start the interior inspection of the trailer on the east end.
Bedroom
Carpeted floor.
Paneled walls and ceiling.
ID photographs of this room. (Photos 80-6 thru 80-9)
Nothing was noted in this bedroom.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-80
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November 8, 1986
Page 2

Moving to the west, to the living roon.
Living Room
Carpeted floor.
Paneled walls and ceiling.
ID photographs of the living room. (Photos 80-10 thru 80-13)
Nothing noted.
Kitchen/Dining Room
Vinyl floor.
Papered or paneled walls.
Paneled ceiling.
ID photographs. (Photos 80-14 thru 80-17)
Nothing noted.
Now moving westward down a hall.
Hall

Carpeted floor.
Paneled walls and ceiling.
First room on the south side is a bedroom.
Bedroom
Carpeted floor.
Paneled walls and ceiling.
There is a hole in the east wall. (Photo 80-18)
ID photographs of this roam. (Photos 80-19 thru 80-21)
Move on westward down the hall into a small laundry area.

Laundry Area
Vinyl floor.
Paneled walls and ceiling.
ID photographs. (Photos 80-22 thru 80-24)
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Page 3
Nothing noted.
There is a bathroom on the south side.
Bathroom
Vinyl floor.
Papered walls.
Paneled ceiling.
The wall is stained behind the toilet. (Photo 80-25)
ID photographs. (Photos 80-26 thru 80-29)
There is a bedroom at the west end of the trailer.
Bedroom
Carpeted floor. Papered walls. Paneled ceiling.
ID photographs. (Photos 80-30 thru 80-33)
Nothing noted in this roam.
General Comments
The Wisdom trailer is located on the north side of Washington Street, east of First Street. There is no roof guttering around the trailer. There was also no access under the skirting without removing the skirting.
The interior walls and ceiling of the trailer were paneled. The floor was either carpeted or vinyl covered. Most of the windows had sane condensation.
That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOOGY, INC.

Randall M. Wheeler Manager of Technical Services

RMW/mp
Enclosure: 33 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 82
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## $80-2$




PRE-BLAST SURVEY, RESIDENTLAL
I. Basic Information

1. Name of Resident: Bettye Bennet (Owned by Duane and Betty Wisdom)
2. Date: November 8, 1986

Tine: 10:00AM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: Southwest corner of First and Washington Streets
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: 1983 - Present
7. Dates of any temporary or pernanent abandonment: $\qquad$
II. Information Concerning Buildings
(repeat for additional buildings)

1. Date of original construction: $\qquad$ Early 1900's
2. Date(s) of major remodeling or additions:
(a) Remodeled living room
(b) Remodeled bedroom
(c) $\qquad$
3. Construction of building:
(a) franing (joists, rafters, and stud walls): $2^{\prime \prime} \mathrm{x} 4^{\prime \prime}$ stud walls
(b) interior walls: Sheetrock and plaster
(c) roof: Shingles
(d) Eootings; foundations: Concrete block foundation
(e) basenent walls (indicate how keyed to footing of floor):

Not applicable
(E) basement Eloor (keyways, thickness):

Note applicable
(g) name of persouls) who constructed bullding: Unknown.
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

831 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Lndicate depth*and use): Occasionally used, covered
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, lf not included above: City water
7. Eve troughs or any other exterior drainage features See photo survey
8. Description of general grading or landscaping in vicinity:

See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Recedlng of doors, windows:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
2.e South
9. East
10. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techriques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey namrative

November 12, 1986
Report No. 87056-82
P \& M Map Photo No. 78

Subject: Inspection of the Bettye Bennet Residence Owned by Duane and Betty Wisdom Route l Amoret, Missouri 64722 November 8, 1986

To: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the east side. (Photo 82-1)
This is an old frame structure on a concrete block foundation.
The 4 by 4 column supports on the porch are deteriorating. (Photos 82-2 and 82-3)

There is no downspout at the southeast corner of the porch.
There is no evident cracking in the porch slab. (Photos 82-4 and 82-5)
The trim around the windows and door is deteriorating. (Photos 82-6 and 82-7)

There is no siding covering the wood to the lower right of the door.
The wood is deteriorating. (Photo 82-8)
The porch roof is sagging and is discolored. (Photos 82-9 and 82-10)
ID photograph of the north side of the residence. The siding is discolored and chipped. (Photo 82-11)

There is a chimney stack on the roof. There are patched areas in the stack covering. (Photo 82-12)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 78
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Page 2

There is a separation near the east end of the north foundation. It measures $1 / 2$ inch in width. (Photo 82-13)

There is also broken siding in this area. (Photo 82-14)
There is a crack in the foundation about 5 feet from the east end. This measures $1 / 32$ of an inch in width. (Photo 82-15)

The north foundation has a number of places where the mortar is separated or missing. (Photos 82-16 thru 82-23)

One large mortar separation measures $3 / 8$ of an inch in width. (Photo 82-16)

There is an area of stairstepping mortar separations near the west end of the north foundation. This area appears to have been patched. (Photo 82-23)

The downspout at the northwest corner is separated from the guttering. (Photo 82-24)

ID photograph of the west side of the structure. Part of the foundation and siding are stained to the right of the crawl space. (Photo 82-25)

There are numerous mortar separations in the west foundation. An attempt has been made to patch some of these. (Photos 82-26 thru 82-31)

There is an enclosed porch at the southwest corner. The steps are separated from the porch. (Photo 82-32)

The porch is supported on the south side by 4 columns of concrete blocks. (Photo 82-33)

ID photograph of the porch. (Photo 82-34)
The paint and wood are deteriorating.
ID photograph of the south side of the residence. (Photo 82-35)
There is a cracked windowpane at the west end of the porch. (Photo 82-36)

The downspout at the southwest corner is missing. (Photo 82-37)
Back on the west side, there is a broken piece of glass in the southernmost window. (Photo 82-38)

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The foundation under the porch is in the same general condition as the rest of the foundation. (Photos 82-39 thru 82-44)

The east steps are separated from the porch. (Photo 82-45)
The siding is broken next to the steps. (Photo 82-46)
Series of photographs showing the condition of the south foundation to the east of the porch. (Photos 82-46 thru 82-48)

The vertical crack through the concrete block meausured $1 / 16$ of an inch in width. (Photo 82-49)

The foundation has numerous mortar separations.
ID photograph of the chimney. (Photo 82-50)
Garage
Dirt floor.
Wood walls.
ID photographs. (Photos 82-51 thru 82-55)
The garage contains numerous materials.
ID photographs of the exterior. The paint and wood are deteriorating. There is no roof guttering. (Photos 82-56 thru 82-58)

Storage Shed
ID photographs of the exterior. The exterior siding is discolored and the trim is deteriorating. There is no roof guttering. (Photos 82-59 thru 82-61)

The shed rests on a poured concrete base.
There is a concrete separation on the north side near the west end. It measures $1 / 2$ inch in width. (Photo 82-62)

There is al so mortar separation near the east end. It measures $1 / 4$ inch in width. (Photo 82-63)

Much of the west side concrete is obscured by boards and plant growth.
There is a separation toward the south end. It measures $3 / 8$ of an inch in width. (Photo 82-64)

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ID photographs showing the south side foundation. (Photos 82-65 and 82-66)

Wood floor.
Wood walls and ceiling.
ID photographs of the interior of the shed. (Photos 82-67 thru 82-69)
There is a sidewalk from the porch of the residence to the shed. It is heavily deteriorated. (Photos 82-70 and 82-71)

There is a cellar at the south side of the residence.

## Cellar

The east side wall is cracked near the top of the steps. (Photos 82-72 and 82-73)

A similar crack is evident in the west side wall. (Photos 82-74 and 82-75)

The cellar floor is very muddy. (Photos 82-76 and 82-77)
The walls are concrete block above the ground surface and poured concrete below. There is condensation on the ceiling. There is also efflorescence at the top of the walls. (Photos $82-78$ thru 82-82)

There is a crack in the west wall, near the north end, behind the canning shelf. It appears to extend to the floor. (Photo 82-83)

There appear to be no other cracks in the walls.
The floor is too muddy to inspect for cracks.
The exterior of the cellar is covered by grass and weeds. (Photos 82-84 and 82-85)

Well
The well is covered by concrete and there is an aluminum pipe extending to the surface. (Photo 82-86)

INTERIOR INSPECTION
We entered through the east entrance into the living room.

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The Pittsburg and Midway Coal Mining Company
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November 8, 1986
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## Living Room

This is at the southeast corner of the structure.
Carpeted floor.
Paneled north wall.
Papered other walls.
ID photographs of the north wall. (Photos 82-87 and 82-88)
The paper around the heather flue is water stained and cracked. (Photo 82-89)

There is a crack across a photograph hanging on the north wall. (Photo 82-90)

The ceiling is cracked above the heater flue. (Photo 82-91)
There is paper deformation at the upper right corner of the door into the dining room on the west wall. (Photo 82-92)

There is a paper crack at the upper left of the door. It extends vertically to the ciling. (Photo 82-93)

Now looking at the south wall.
There is a faint paper crack at the upper right corner of the westernmost window. It extends to the ceiling. (Photo 82-94)

There is a diagonal paper crack at the upper left corner of the westernmost window. It extends to the ceiling. (Photo 82-95)

There is a small paper crack at the lower right corner of this window. (Photo 82-96)

The lower left corner is obscured by the couch.
Now 100 king at the easternmost window on the south wall.
There is a vertical crack at the upper right corner. It extends about 7 inches. (Photo 82-97)

There is a paper tear at the lower right corner of the window. There is also a crack in the paper below the lower right corner of the window. (Photos 82-98 and 82-99)

There is a crack and staining in the ceiling near the center of the south wall. (Photo 82-100)

White Industrial seismology, Inc.

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November 8, 1986
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There is a crack in the wall paper at the lower left corner of the easternnost window. This crack extends about 18 inches. (Photo 82-101)

ID photographs of the south wall. (Photos 82-102 and 82-103)
There is a faint paper bulge and stain at the upper right corner of the window on the east wall. (Photo 82-104)

The lower left corner of the window is obscured by the TV.
There is a paper bulge at the upper right corner of the door. (Photo 82-105)

There is a diagonal paper separation at the lower right corner of the light switch. It extends about 13 inches. (Photo 82-106)

ID photograph of the east wall. (Photo 82-107)
Moving westward out of the living roam and into the kitchen and dining roan.

## Kitchen/Dining Room

Carpeted floor.
Papered walls.
Starting with the north wall, there is a vertical crack at the upper left corner of the door. It extends to the ceiling. (Photo 82-108)

ID photographs of the north wall. (Photos 82-109 and 82-110)
The wallpaper is slightly stained under the cabinets.
Looking at the west wall, there is a paper crack at the lower left corner of the window. (Photo 82-lll)

ID photograph of the west wall. (Photo 82-112)
Some wall paper is missing above the stove to the right of the cabinets. (Photo 82-113)

There is a vertical paper crack at the upper right corner of the door. It extends to the ceiling. (Photo 82-114)

There is a vertical and a horizontal paper bulge at the upper left corner of the door. (Photo 82-115)

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ID photograph of the east end of the south wall. (Photo 82-116)
ID photograph of the east wall. (Photo 82-117)
The enclosed porch is off the south side of the kitchen and dining room.

## Enclosed Porch

Wood floor.
Wood board walls.
Board type ceiling.
There is a hole in the ceiling at the east end. (Photo 82-118)
ID photographs. (Photos 82-1.19 and 82-120)
The walls are cracked at the upper corners of the windows. (Photos 82-121 thru 82-123)

Now moving out of the kitchen and dining roon at the north side to a small hall.

Hall
Carpeted floor. Papered walls.

There is an area of loose wall paper near the ceiling at the north side of the hall. (Photo 82-124)

There is a crack above the door on the east wall at the upper right corner. It extends about 3 and $1 / 2$ inches. (Photo 82-125)

## Bedroom

We are now in the bedroom at the northeast corner of the residence.
Carpeted floor.
Paneled walls.
ID photographs starting with the north wall and progressing counterclockwise. (Photos 82-126 thru 82-129)

ID photographs of the ceiling. (Photos 82-130 and 82-131)
At this time a train is passing by. It is very noticeable in this roam.
The bathroom is on the north side of the hall.

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Bathroon
Carpeted floor.
Tiled lower walls.
Papered upper walls.
The wall paper has been removed from portions of the south and west walls.

ID photographs. (Photos 82-132 thru 82-136)
Now in the bedroan at the northwest corner of the residence.
Bedroom
Carpeted floor.
Sheetrock walls.
Start the inspection of this bedroom with the north wall.
There is a vertically trending crack at the upper right corner of the window. It extends to the ceiling. (Photo 82-137)

There is also a crack at the lower right corner of the window. It extends to the floor. (Photos 82-138 and 82-139)

There is a pair of horizontal cracks above the center of the window. (Photo 82-140)

There is a diagonally trending crack at the upper left corner of the window. It extends to the ceiling. (Photo 82-141)

There is a crack at the lower left corner of the window. It is partially obscured by the bed. (Photos 82-142 and 82-143)

ID photograph of the north wall. (Photo 82-144)
Now looking at the west wall.
There are a couple of tape seam separations at the upper right corner of the window. (Photo 82-145)

There is a vertical crack at the lower right corner of the window. It extends to the floor. (Photo 82-146)

White Industrial Seismology, Inc.

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There is a crack at the upper left corner of the window that also extends across the ceiling. 'The extension across the ceiling measures about 2 feet 6 inches. (Photos 82-147 and 82-148)

ID photograph of the west wall. (Photo 82-149)

ID photographs of the south wall. (Photos 82-150 and 82-151)
Looking at the east wall.
There is a vertical crack above the upper left of the door. It extends to the ceiling. (Photo 82-152)

There is a vertical crack at the upper right corner of the closet door. It extends to the ceiling. (Photo 82-153)

There is a vertical crack in the wall just above the mirror between the door and the closet door. It measures about 4 inches in length. (Photo 82-154)

There is a vertical paper bulge above the upper left of the closet door. (Photo 82-155)

There is a slight horizontal paper bulge at the upper left of the closet. (Photo 82-156)

There is a pair of small separations to the left of the closet door in the wall. These measure 1 to 2 inches in length. (Photo 82-157)

There is a crack in the ceiling extending from the light fixture to the south wall. (Photos 82-158 thru 82-160)

ID photograph of the east wall. (Photo 82-161)
General Comments

This residence it located at the southwest corner of First and Washington Streets. The current occupant is Mrs. Bettye Bennet. The property is owned by Duane and Betty Wisdom.

The exterior wood and siding appear to be deteriorating. Although the residence has guttering, some of the downspouts are missing. The foundation had many mortar separations and cracks.

There were numerous expansion cracks around doors and windows in the interior of the residence.
White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-82
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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.
Parailenvitur
Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 161 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAPLOCATION NO. 78
2- SUMMARY FORM
3- SKETCH OF STRUCTURE



Sketch of Duane and Betty Wisdom Property Occupied by Bettye Bennet




$82 \cdot 56$





## $82-1$ <br> 2

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H
I. Basic Information

1. Name of Resident: Hilda Springer
2. Date: $\qquad$
$\qquad$ THine:_12:00PM
3. Address: P. O. Box 84, Amoret, Missouri 64722
4. Location: Lots 4 thru 8, Block 8
5. Telephone Number: (816) 925-3352
6. Dates of occupancy by current resident: $\qquad$
7. Dates of any temporary or permanent abandoment: Few months, Winter 1985 to Spring 1986
II. InEormation Conceraing Buildings
(repeat for additional buildings)
8. Date of original construction:

Sometime after 1934
2. Date(s) of major remodeling or additions:
(a) Major interior remodeling April 1985 - Present
(b) Built deck and front stoops
(c) and added garage in 1986
3. Construction of building:
(a) Eraming (Joists, rafters, and stud walls): steel beams . $2 \times 4$
(b) incerior walls: Sheetrock and paneling
(c) roof: Composition singles (new)
(d) footings; Eoundations: Concrete
(e) basenent walls (indicate how keyed to footing of floor): Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed building: Not known
(h) size and direction of any large windows: None

III, Enviromental Information

1. Approximate elevation of area:

832 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate depth"and use): Has well, not used, cannot be seen
5. Cisterns or surlace water storage utilized: (indicate purpose and approximate volume). No
6. Source of wacer, if not included above: City water
7. Eve troughs or any other exterior dratnage features: Not at this time

Owner plans to put gutters on soon
8. Description of general grading or landscaping in vicinity:

Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windows: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement:See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to nomal blasting activities.

See survey

November 12, 1986
Report No. 87056-78
P \& M Map Photo No. 77

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Subject: Inspection of the Hilda M. Springer Residence P. O. Box 84
Amoret, Missouri 64722
November 8, 1986 and January 27, 1987
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
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Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the front, east side. (Photos 78-1 and 78-2)
ID photographs of the east chimney from the east, south, and north. (Photos 78-3 thru 78-5)

This chimney has visible cracks at the top on the east, south, and north sides.

ID photographs of the city sidewalk looking north and south. Several of the slabs are cracked. (Photos 78-6 and 78-7)

The front sidewalk is extensively cracked and has been patched. (Photos 78-8 thru 78-10)

There is a vertical crack in the foundation between the south door and the middle window. It is about 6 and $1 / 4$ inches long and fran about $1 / 4$ to $1 / 16$ of an inch wide. (Photo 78-11)

There is a diagonal crack in the foundation between the gas meter and the north front entrance. It is about $1 / 16$ of an inch wide. (Photo 78-12)

Two photographs of the joint where the north part of the front meets the south part. (Photos 78-13 and 78-14)

The rest of the front foundation is hidden by the siding.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-78
P \& M Map Photo No. 77
November 8, 1986 and January 27, 1987
Page 2

The north front window has deteriorating caulk.
ID photograph of the north end of the house. (Photo 78-15)
ID photographs of the east chimney from the north and west. The upper west side of this chimney al so has a crack. (Photos 78-16 and 78-17)

The upper east window on the north side has cracking caulk and deteriorating paint.

Most of the north foundation is hidden behind skirting.
Now in the corner, at the west wall of the dining roan.
Below the dryer vent, there is a slab of concrete that has a couple of cracks. The south crack is about $1 / 16$ of an inch wide and about 3 and 3/4 inches long. (Photo 78-18)

The north crack is from about $1 / 2$ to $1 / 4$ of an inch wide and about 6 inches long, measured along the top. This crack goes through the slab. (Photo 78-19)

This slab is spalled at the north end. (Photo 78-20)
Photographs of this part of the foundation. (Photos 78-21 and 78-22)
These two north facing windows of the porch appear to have some rotting trim. (Photo 78-23)

The middle north window has cracking and deterioraing caulk.
ID photographs of the west side of the house. (Photos 78-24 and 78-25)
The wooden deck supports are set in concrete.
On the north side, at the east post, there are cracks in the concrete with grass growing up through some of the cracks. (Photo 78-26)

On the west side, the concrete around the middle post is cracking. (Photo 78-27)

The north window on the west side has deteriorating caulk.
There is a small weed growing in a crack between the trim of this window and the door. (Photo 78-28)

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November 8, 1986 and January 27, 1987
Page 3

The second window from the north appears to have some rotting trim. This is the bathroom window. (Photo 78-29)

Series of photographs of the north side of the west chimney from top to bottan. (Photos 78-30 thru 78-33)

There is about a $7 / 8$ inch gap between the chimney and the wall at about mid-height on the wall. The gap is wider, higher on the wall. (Photo 78-34)

The chimney appears to lean somewhat to the west. (Photo 78-35)
Series of photographs of the west side of the chimney from top to bottan. There are numerous spalled and cracked bricks on the west side. (Photos 78-36 thru 78-39)

Series of photographs of the south side from top to bottom. Several spalled bricks are visible on the south side. (Photos 78-40 thru 78-45)

The south side of the chimney is separated from the house by about $3 / 4$ of an inch at about mid-height of the wall to about $1 / 4$ of an inch at about the middle of the window. The gap is wider, higher on the wall.

Just south of the chimney and below the left end of the window, there is a crack in the foundation. It runs the height of the visible portion which is about 14 and $1 / 2$ inches and it ranges from about $1 / 4$ to $3 / 16$ of an inch wide. (Photo 78-46)

This window has deteriorating caulk.
Now at the crawl space vent.
There is a vertical crack that is about 3 and $1 / 2$ inches long and about $1 / 8$ of an inch wide below the lower left corner of the vent. (Photo 78-47)

Now at the south window. The upper pane has deterioring caulk at the upper left part.

There is another vertical crack in the foundation at the southwest corner. It is about 10 inches long and from $5 / 16$ to $1 / 8$ of an inch wide. (Photo 78-48)

At the lower southwest corner, the siding is cracked. (Photo 78-49)
ID photographs of the south side of the house. (Photos 78-50 and 78-59)
The west window on the south side has some cracked caulk.

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The east window has slightly cracked caulk.
There is a separation in the foundation at about the middle of the south side that appears to be a construction joint. It is about $1 / 8$ of an inch wide. (Photo 78-51)

The east window on the south side has a crack above each upper corner. A horizontal crack at the upper left corner is about 6 inches long and fron a hairline to about $3 / 16$ of an inch wide. A hairline diagonal crack above the upper right corner is about 8 inches long. (Photos 78-52 and 78-53)

This house has several chipped and cracked siding boards.
ID photograph of the west chimney from the southeast. (Photo 78-54)
ID photographs of the south and west sides of the east chimney. (Photos 78-55 and 78-56)

ID photographs of the east chimney from the southeast and northeast. (Photos 78-57 and 78-58)

The house lacks a gutter system at this time.
Garage
ID photograph of the front, east end. (Photo 78-60)
ID photographs of the south side. (Photos 78-61 and 78-62)
Mrs. Springer indicated that the garage was built in the summer of 1986.
ID photograph of the west end. (Photo 78-63)
ID photograph of the north side. (Photo 78-64)
The garage lacks a gutter system at this time.
There is a crack in the foundation on the north side, just west of the door. It is a diagonal crack about 1 and $3 / 4$ inches long and about $1 / 32$ of an inch wide. (Photo 78-65)

Aggregate is visible at the base of the foundation slab on the north side. (Photos 78-66 and 78-67)

At the northwest corner, there is about a 4 and $1 / 2$ inch gap between the slab and the ground. (Photo 78-68)

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Most of the west foundation is hidden by materials.
INTERIOR INSPECTION
Garage
Concrete floor.
Unfinished walls and ceiling.
'The stud walls are 2 by 4's on 16 inch centers.
It has a 2 by 4 truss roof.
Photograph of the north wall. (Photo 78-69)
Photographs of the west wall. (Photos 78-70 and 78-71)
Photographs of the south wall. (Photos 78-71 and 78-72)
Photographs of the east wall. (Photos 78-72 and 78-73)
Windows on the north and south walls.
The floor has a crack which trends southwest from the north door. Measured on a straight line, it trends about 143 inches to the branching area, and is about $1 / 32$ of an inch wide. It also trends vertically through the slab at the door. (Photos 78-74 thru 78-80)

Another crack trends northward from the intersection point. It is a slightly wider crack and it disappears under a piece of cardboard. The visible portion of this crack is about 41 inches long. (Photos 78-81 and 78-82)

From the intersection point, the first crack continues to the southwest to a drain in the floor. It measures 91 and $1 / 2$ inches on a straight line and is from about $1 / 32$ to $1 / 16$ of an inch wide on average. (Photos 78-83 thru 78-85)

This crack branches before it gets to the drain.
The branch trends southward under the right front wheel of the car. Near the wheel, it turns to the southeast. Meausred on a straight diagonal, it is about 14 feet long to the south wall. It is faint at the north part but enlarges south of the car. It ranges from about $1 / 16$ of an inch to a hairline wide. (Photos 78-86 thru 78-91)

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Another floor crack trends westward from the south overhead door and intersects the first two cracks. Measured on a straight diagonal, it is about 15 feet 9 inches long and about $1 / 32$ of an inch wide. (Photos 78-92 thru 78-99)

Now back to the drain at the west end of the floor.
A crack trends westward under the refrigerator from the drain to the west wall. It is about $1 / 16$ of an inch wide. (Photos $78-100$ and 78-101)

HOUSE

## Living Room

This is the southeast roon.
Carpeted floor.
White painted sheetrock walls and ceiling.
Door on the north to the kitchen.
Door on the west to a bedroon.
Photograph of the south wall. (Photo 78-102)
Windows on the south and east walls.
Photographs of the west wall. (Photos 78-103 and 78-104)
Photograph of the north wall. (Photo 78-105)
Photographs of the east wall. (Photos 78-106 and 78-107)
Photographs of the ceiling. (Photos 78-108 and 78-109)
There is an east-west tape seam near the ceiling fan that has an intermittent hairline crack. (Photos 78-110 and 78-111)

There is a partially visible seam, east-west trending, at the light fixture in the south part of the ceiling. (Photo 78-112)

There is a hairline, $Y$ shaped ceiling crack just west of the light fixture. It is about 5 and $1 / 2$ inches long. (Photos $78-112$ and 78-138)

There is a vertical seam that appears as a bulge above the upper right corner of the north door. It is very slightly cracked in a few places and has been painted over. (Photo 78-113)

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Above the upper left corner, the tape joint appears to have been patched and it is slightly cracked. The crack is just wider than a hairline and runs to the ceiling. (Photo 78-114)

There is another crack above this corner of the door that is about 5 and 1/2 inches long and is barely visible. (Photo 78-115)

There is a visible, vertical tape joint west of the flue on the north wall. (Photos 78-116 and 78-117)

There is an intermittent crack at the north end of the ceiling where the crown molding attaches. (Photos 78-118 thru 78-120)

The east wall has a visible vertical seam at the north end behind the bookcase that runs from the floor to the ceiling. The seam is slightly cracked just wider than a hairline. (Photos 78-121 and 78-122)

At the front door, on the east wall, the tape joint has bulged above the upper left corner. It runs to the ceiling. (Photo 78-123)

The ceiling is slightly cracked above the east door where the crown molding is tearing from the ceiling. (photos 78-123 and 78-124)

There are two hairline vertical cracks at the tape joint above the upper right corner. The lower crack is 5 and $3 / 4$ inches long and the upper one is 6 and 1/2 inches long. (Photo 78-124)

Now at the east window.
Above the upper right corner, the joint is slightly cracked. It trends about to the ceiling and is a hairline wide. (Photo 78-125)

The tape joints are visible above and below each corner of the window. The joint is slightly cracked below the lower left. The crack runs 6 and $1 / 4$ inches up from the baseboard. (Photo 78-126)

Below the lower right corner, the joint is bulged.
Above the upper left corner, the tape joint is bulged and there is a hairline crack about 6 and $1 / 4$ inches long. (Photo 78-127)

There is also a slight: crack that trends vertically about 2 inches above the upper left corner. (Photo 78-128)

The east crown molding is cracking from the ceiling, intermittently accoss the east wall.

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The crown molding is also separated from the ceiling along the south wall. (Photos 78-129 thru 78-131)

Mrs. Springer indicated that this happened within about six to eight weeks since it was last painted.

There is a vertical seam crack above the upper right corner of the south window. It runs to the ceiling and is just wider than a hairline. (Photo 78-132)

There is a bulge at the upper left end, but it does not appear to be cracked.

Numerous tape joints are visible in this roon.
The tape joints below the lower corners of the south window are visible, but do not appear to be cracked.

There is a slight vertical crack along the southwest corner. It appears to have been patched and is an intermittent crack. (Photos 78-133 thru 78-135)

There are a couple of slight water stains in the southwest part of the ceiling. There are also slight cracks at the stains. The cracks are about 1 and $1 / 2$ inches long. (Photo 78-136)

Mrs. Springer indicated that this damage occurred before the new roof was put on, but after the painting. The painting was done the 19 th of September and the roof was shingled on the 28 th of October.

There are two hairline cracks at a small hole in the southwest part of the ceiling. The lengths are about $7 / 8$ of an inch for the south and about $5 / 16$ of an inch for the east crack. (Photo 78-137)

There is about a 2 and $1 / 2$ inch long crack at the crown molding above the picture on the west wall. (Photo 78-139)

There is a roughly vertical crack above the upper left corner of the west door. It is slightly wider than a hairline and is a rough tearing crack. It measures about 12 inches on the diagonal. (Photo 78-140)

There is a vertical crack at a tape joint above the upper right corner. It is a tearing type crack about 11 and $3 / 4$ inches long. (Photo 78-141)

To the upper right of the west door, there is a slight horizontal crack on the west wall, just below the crown molding. (Photo 78-142)

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There is also a slight crack along the northwest corner. (Photos 78-143 thru 78-146)

Now moving into the bedroom to the west.
North Bedroom
Carpeted floor.
White painted sheetrock walls and ceiling.
Doorway on the north to the kitchen.
Doorway on the south to another bedroom.
Window on the west wall.

Photograph of the north wall. (Photo 78-147)
Photographs of the west wall. (Photos 78-148 and 78-149)
Photographs of the south wall. (Photos 78-150 and 78-151)
Photographs of the east wall. (Photos 78-152 and 78-153)
Photographs of the ceiling, first looking west and then east. (Photos 78-154 and 78-155)

The ceiling has a painted area in the southeast corner.

The tape joints are visible in this ceiling.
There is a vertical crack at a joint, above the upper right corner of the east door. It is a tearjng type crack that has been painted over. It runs to the ceiling about 13 and 3/4 inches. (Photo 78-156)

There is a vertical, tearing crack above the upper left corner also. It is about 13 and $1 / 2$ inches long. There is also a nail pop near the top of that crack. (Photo 78-157)

To the right of the doorway, there is a horizontal seam that is bulged. It has been painted over and is about 11 and $3 / 4$ inches long. (Photo 78-158)

Above the upper left end of the north door, there is a vertical, rough tearing type crack. It is about 11 and $1 / 2$ inches on the vertical and just wider than a hairline. (Photo 78-159)

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There is a slight split at the ceiling, north of the west window, and a slight vertical crack in the northwest corner. The corner crack is about $1 / 32$ of an inch wide and not all of this crack can be seen. (Photos 78-160 thru 78-163)

There is a vertical seam crack on the west wall, north of the window. It has a wider opening at the top and it looks like it has been patched at the bottom part. The crack trends down to the floor and is very faint at the lower part of the patch. It ranges fram about $1 / 16$ of an inch wide at the top, down to about a hairline and is about 91 inches long. (Photos 78-164 thru 78-166)

This room was painted last year between April and July, according to Mrs. Springer.

Below the lower right corner of the west window, there is a crack at a tape joint. It is about 15 and $1 / 2$ inches long and fram about $1 / 16$ to 1/32 of an inch wide. (Photo 78-167)

There is also a crack below the lower left corner. (Photo 78-168)
There is an L-shaped crack above the upper left corner. It is about 5 inches long vertically and 1 and $1 / 2$ inches long horizontally. It is a rough tearing crack. (Photo 78-169)

A vertical bulge above the upper right corner of the south door is about 6 and $1 / 2$ inches long and paint is very slightly cracked. (Photo 78-170)

Above the upper left corner of the south door, the tape joint is bulging and partially cracked. The crack is about 12 and $3 / 4$ inches long and a hairline wide. (Photo 78-171)

Mrs. Springer indicated that the southeast corner of this room was once a closet that has since been tom out.

There is a circular nail pop developing above the upper left end of the door.

Now into the bedroan to the south.

## South Bedroom

Carpeted floor.
White painted sheetrock walls and ceiling.
Windows on the south and west walls.

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Closet along the east wall.
Photographs of the north wall. (Photos 78-172 and 78-173)
Photographs of the west wall. (Photos 78-174 and 78-175)
Photograph of the south wall. (Photo 78-176)
Photograph of the east wall. (Photo 78-177)
There is a hairline, east-west trending crack at the north end of the ceiling, above the bed. It is about 27 inches long. (Photos 78-178 and 78-179)

There is a slight vertical crack about 9 inches long and just wider than a hairline above the upper right corner of the door. (Photo 78-180)

Above the upper left oorner, there is a faint L-shaped crack about 10 and $1 / 4$ inches long. (Photo 78-181)

There is a vertical crack at a seam above the upper right corner of the west window. It is about 15 inches long and a hairline wide. (Photo 78-182)

Below the lower right corner, there is a wider crack at a seam. It is about 14 inches long and fran about $1 / 16$ of an inch to a hairline wide. (Photo 78-183)

Below the lower left corner, a vertical tape joint is cracking. It is about 14 and 3/4 inches long. (Photo 78-184)

Above the upper left corner, a vertical tearing type crack runs to the ceiling about 16 and $3 / 4$ inches. It is about $1 / 16$ of an inch wide. (Photo 78-185)

Above the upper right corner of the south window, there is a tearing seam crack that runs to the ceiling about 16 and $3 / 4$ inches. It is about $1 / 32$ of an inch wide. (Photo 78-186)

Below the lower right corner, the tape joint has a rough tearing crack. It is about 15 inches long and about $1 / 16$ of an inch wide. (Photo 78-187)

There is a slight crack below the lower left corner. It is about 2 and $1 / 4$ inches long, but I cannot get a photograph because of the dresser.

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There is a nail pop and a slight tear near the ceiling at the east end of the south wall. The tear is about 1 and $3 / 4$ inches long. (Photos 78-188 and 78-189)

## Kitchen

Vinyl floor.
Sheetrock walls and ceiling.
The west part of the kitchen has paneled walls, a door to the bathroom on the west, and a door to the porch on the north.

Window on the east wall, and a door on the north to the dining room.
Photograph of the west wall of the west extension of the kitchen.
(Photo 78-190)
Photograph of the south wall. (Photo 78-191)
Photograph of the north wall. (Photo 78-192)
There is a hairline crack at the upper left part of the east wall, above the entrance to the kitchen. It is about 5 inches long. (Photo 78-193)

Above about the middle of this entrance, there is a patched crack or seam. (Photo 78-194)

There is a flue on the south wall of the kitchen.
There is a slight crack in the corner along the west side of the flue. About 14 inches are visible above the stove. It is just wider than a hairline. (Photo 78-195)

The upper northeast corner of the flue has about an inch long hairline crack. (Photo 78-196)

There is a hairline crack in the corner where the flue meets the south wall, east side. (Photos 78-197 thru 78-199)

There is a hairline crack above each upper corner of the south door at tape joints. (Photos 78-200 and 78-201)

There are also some water stains in the upper southeast corner. (Photo 78-201)

The seams are visible above and below the corners of the east window.

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A seam crack below the lower right corner of the east window is a hairline wide and trends down approximately 16 inches. (Photo 78-202)

A seam crack above the upper left corner of the east window is about a 13 inch long hairline crack. (Photo 78-203)

There is a slight vertical crack that runs to the ceiling above the upper right corner of the entrance to the dining roan, on the north wall. The crack starts at about the 3 and $1 / 2$ inch mark and runs up about 11 and 1/8 inches. (Photo 78-204)

The tape joint about the upper left corner has been patched and is partially cracked. The crack is about 6 inches long and a hairline wide. (Photo 78-205)

The tape joints are visible at the upper left end of the entrance to the west extension of the kitchen.

A vertical seam is visible at the upper left end of the sink. It has been painted over.

Photographs of the north wall. (Photos 78-206 and 78-207)
Photographs of the west wall. (Photos 78-208 and 78-209)
Photographs of the south wall. (Photos 78-210 thru 78-212)
Photograph of the the east wall. (Photo 78-213)
Photographs of the ceiling. (Photos 78-214 and 78-215)
The ceiling has visible tape joints, sane of which are slightly cracked.
Series of photographs of the ceiling. (Photos 78-216 thru 78-223)
One is a north-south trending crack from the upper right end of the south door. It is located about 40 inches from the east wall and trends to the north wall and is just wider than a hairline. (Photos 78-219 and 78-220)

West of the light fixture, there is another north-south trending seam which is slightly cracked just north of the light. The crack is about 2 and $1 / 2$ inches long and $1 / 16$ of an inch wide.

The crown molding is separated from the ceiling at the north end of the west wall and along the north wall. (photos 78-217, 78-220, 78-222, and 78-223)

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## Bathroom

Carpeted floor.
Formica covered west and east walls at the shower stall. The other walls and ceiling are white painted sheetrock.

Shower stall is in the northwest part.
Window on the west wall.
There is a horizontal seam at the light fixture that is slightly cracked. (Photo 78-224)

There is also a slight crack in the southwest corner. (Photos 78-224 and 78-225)

There are at least 16 slight cracks in a filler material added between the ceiling and the south wall. (Photos 78-226 and 78-227)

There is a separation in the southeast corner. (Photo 78-228)
There are slight cracks at tape joints above the middle and upper right corner of the door. (Photo 78-229)

A large tape joint is visible in the ceiling, trending north-south in the east part of the ceiling. (Photo 78-230)

There is a separation where the shower stall wall meets the ceiling. (Photos 78-231 and 78-232)

Two photographs looking westward into the bathroom. (Photos 78-233 and 78-234)

Porch
Vinyl floor.
Paneled walls.
White painted sheetrock ceiling.
Door and a window on the west wall.
TWo windows on the north wall.
The tape joints are visible in the ceiling.
An east-west trending tape joint has been water damaged near the east wall. The length is about 23 and $1 / 4$ inches and it is fram about $1 / 32$ of an inch to a hairline wide at the crack. (Photo 78-235)

White Industrial Seismology, Inc.

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Photograph of the east wall. (Photo 78-236)
Photograph of the north wall. (Photo 78-237)
Photograph of the west wall. (Photo 78-238)
Photographs of the ceiling looking east and west. (Photos 78-239 and 78-240)

## Dining Room

Paneled walls.
Carpeted floor.
Sheetrock ceiling.
Windows on the north and east walls, and a door on the east wall.
Photograph of the north wall. (Photo 78-241)
Photographs of the west wall. (Photos 78-242 and 78-243)
Photograph of the south wall. (Photo 78-244)
Photographs of the east wall. (Photos 78-245 and 78-246)
Photographs of the ceiling. (Photos 78-247 and 78-248)
Several tape joints are visible in the ceiling.
General Comnents
The house and garage lack a gutter system at this time, but Mrs. Springer indicated that she plans to have gutters installed in the near future.

The house has a concrete foundation that has several cracks, mainly at the south part of the west side.

The interior of the house has numerous cracks, mainly at seams of the sheetrock walls and ceilings. Several photographs of the interior cracks were retaken on January 27, 1987 in an effort to improve picture quality, because same original prints were to dark.

The garage, which was built in 1986, has developed several floor cracks.

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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.
Chuctophes A. Randall
Christopher D. Landoll.
Technical Associate
CDL/mp
Enclosure: 248 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 77
2- SUMMARY FORM
3- SKETCH OF STRUCTURE





### 78.63



$11 \quad 8 \quad 86$









## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: K. N. Ridgway Residence
2. Date: November 7,1986 Tline: $3: 45 \mathrm{PM}$
3. Address: P. O. Box 135, Amoret, Missouri 64722
4. Location: Block 21
5. Telephone Number:
(816) 925-3452
6. Dates of occupancy by current resident: $\qquad$ 1974 - Present
7. Dates of any temporary or permanent abandonment: None

IT. Information Conceralng Buldidings
(repeat Eor additional bulldengs)

1. Date of original construction: Not known
2. Date(s) of major remodeling or addltions:
(a) Added to 3 times from foundation
(b) Remodeled interior 1974 - Present
(c)
3. Construction of bullding:
(a) franing (joists, rafters, and stud walls):
(b) interlor walls: Lath and Plaster, paneling
(c) rooE: Composition Shingles
(d) Footings; foundatlons: Stone, concrete block and concrete
(e) basement walls (indicate how keyed to footling of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

835 feet
2. Type of soll in area: Silty Clay Loam
3. Type of subgrade drainage at base of Eoundation: None
4. Water wells utilized (Indicate depth*and use): None
5. Cisterns or surEace water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not Lncluded above: City water
7. Eve troughs or any other exterior drainage Eeatures: Some .
8. Description of general grading or landscaping in vicinity: Generally flat
IV. Any notable existing deterioration or danage

1. Cracks in interlor walls: See survey
2. Receding of doors, windows: See survey
3. Noticeable setthement See survey
4. Eoundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comants or supplementary drawings See survey
VIII. Discussion or specific comnents concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

November 12, 1986
Report No. 87056-75
P \& M Map Photo No. 75

Subject: Inspection of the K. N. Ridgway Residence
P. O. BOX 135

Amoret, Missouri 64722
November 7 and 9, 1986

To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTIERIOR INSPECTION
ID photograph of the front, south side. (Photo 75-1)
ID photographs of the west side. (Photos 75-2 and 75-3)
ID photograph of the east side. (Photo 75-4)
ID photographs of the north side. (Photos 75-5 and 75-6)
Starting at the west end of the south side.
There is a vertical crack in the foundation near the southwest corner. What can be seen is about 5 inches long and about $1 / 16$ of an inch wide. (Photo 75-7)

A photograph of the west end of the step to the kitchen door. (Photo 75-8)

There is a crack in the foundation east of this step. It is about 2 and 1/2 inches long and 3/16 of an inch wide. (Photo 75-9)

There is another slight vertical foundation crack a few feet east of the kitchen door. It is about 1 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 75-10)

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There is another foundation crack located about 1 foot to the east. It is a vertical crack, about 2 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 75-11)

About another foot to the east, there is another vertical foundation crack. It is about 2 and $3 / 4$ inches $10 n g$ and $1 / 16$ of an inch wide. (Photo 75-12)

There is another vertical foundation crack to the lower left of the air conditioner. It is about 2 and $7 / 8$ inches long and $1 / 16$ of an inch wide. (Photo 75-13)

This concrete actually covers the stone foundation.
There are a couple of other cracks below this window. One is about 2 and $3 / 4$ inches long and $1 / 32$ of an inch wide. (Photo 75-14)

A couple of feet to the east, below the air conditioner, there is another vertical crack about 3 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photos 75-15 and 75-16)

Near the corner to the east, there is a hairline crack and a larger crack that is about $1 / 8$ of an inch wide. Both are about 3 and $1 / 2$ inches long. The larger crack has about a 2 and $1 / 2$ inch horizontal branch. (Photos 75-17 and 75-18)

Part of the concrete foundation cover is missing here in this corner. (Photo 75-19)

The foundation of the addition is concrete block. Now inspecting the west facing foundation of the addition.

There is a slight mortar separation at the north end of this side. It is about 4 and $1 / 2$ inches long and $1 / 32$ of an inch wide. (Photo 75-20)

Part of the foundation is hidden by a small doghouse and a stack of shingles. Mr. Ridgway indicated that the roof has been reshingled recently.

South of the shingle stack, there is a mortar separation. It is about 1/16 of an inch wide and 2 inches long. (Photo 75-21)

Mr. Ridgway also indicated that there is a well somewhere on the property that is capped 4 feet below the surface, he is not sure where it is.

Now on the south side of the addition at the door.

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To the lower left of this door, there is about a 2 inch long mortar separation. It is about $1 / 4$ of an inch wide. (Photo 75-22)

The rest of the south foundation is covered by siding.
Now inspecting the front sidewalks.
Near where the front sidewalk V's, the east branch has a crack across the width. The walk has also shifted. The crack is fram about 1 inch to $1 / 4$ of an inch wide. (Photos 75-23 and 75-24)

Interrupting the exterior inspection because of rain.
INTERIOR INSPECTION

## Kitchen

This is the southwest room of the house.
Vinyl floor.
Papered walls.
Textured sheetrock ceiling.
Tile cabinet area walls.
Windows on the west wall.
Photograph of the north wall. (Photo 75-25)
Photographs of the west wall. (Photos 75-26 and 75-27)
Photograph of the sout:h wall. (Photo 75-28)
Photographs of the east wall. (Photos 75-29 and 75-30)
Photographs of the ceiling. (Photos 75-31 and 75-32)
There are stains in the north part of the ceiling. (Photos 75-33 and 75-34)

There is a crack in the ceiling which trends about 39 inches south from the north wall. It then turns westward. (Photo 75-35)

There is a crack in the northeast corner of the ceiling that runs west about 11 and $3 / 8$ inches from the east wall. It is a hairline to slightly wider. (Photos 75-36 and 75-38)

There is a small stain and a slight crack in the northeast corner of the ceiling that is about 5 and $1 / 2$ inches long. (Photo 75-37)

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The darker stain in the northeast part of the ceiling appears to have a slight crack. (Photo 76-38)

There is a diagonal paper crack above the upper right corner of the south door. It is about 7 and $1 / 2$ inches long. (Photo 75-39)

Above the upper left of the large entrance to the dining roon, there is a diagonal ridge that can be felt underneath the paper. The ridge is about 16 inches long and the paper crack is about 5 and $1 / 2$ inches long. (Photo 75-40)

There is a door to the bathroon on the north wall.
Dining Room
Paneled walls and ceiling.
Carpeted floor.
Window on the south wall.
Door on the north wall to the master bedroom.
Photograph of the south wall. (Photo 75-41)
Photograph of the east wall. (Photo 75-42)
Photographs of the north wall. (Photos 75-43 and 75-44)
Photographs of the west wall. (Photos 75-45 and 75-46)

## Master Bedroom

Hardwood floor.
Paneled walls.
Textured sheetrock ceiling.
Windows on the east and north walls.
Photographs of the east wall. (Photos 75-47 and 75-48)
Photographs of the north wall. (Photos 75-49 and 75-50)
Photographs of the west wall. (Photos 75-51 and 75-52)
Photographs of the south wall. (Photos 75-53 and 75-54)
Photographs of the ceiling. (Photos 75-55 and 75-56)

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There is a water stain in the northeast part of the ceiling. (Photo 75-57)

Door to the bathroom on the west wall and a door to another bedroom on the east wall.

Bathroom
Carpeted floor.
Tile lower walls.
Papered upper walls.
Textured sheetrock ceiling.
Photograph of the west wall. (Photo 76-58)
Photographs of the south wall. (Photos 75-59 and 75-60)
Photograph of the east wall. (Photo 75-61)
Photographs of the north wall. (Photos 75-62 thru 75-64)
There is a horizontal bulge in the wallpaper at the upper left end of the east door. (Photo 75-65)

There is a bulging tile below the lower left corner of the window on the north wall. (Photo 75-66)

There are two folds in the wall paper to the upper right of the south door and there is also a fold in the wallpaper to the upper left of the door. (Photos 75-67 and 75-68)

There are slight gaps in the grout at the northeast corner of the counter area. (Photo 75-69)

Girls Bedroom
Hardwood floor.
Paneled walls.
Textured sheetrock ceiling.
Photograph of the east wall. (Photo 75-70)
Photographs of the south wall. (Photos 75-71 and 75-72)
Photograph of the north wall. (Photo 75-73)
Photograph of the west wall. (Photo 75-74)

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There is a faint stain in the ceiling near the light fixture. (Photos $75-75,75-76$, and 75-78)

There is a water stain in the ceiling to the upper left of the west door. (Photo 75-77)

Door to the living room on the south wall.
Window on the east wall.
Living Room
Carpeted floor.
Paneled walls and ceiling.
Windows on the south and east walls.
Photograph of the south wall. (Photo 75-79)
Photographs of the west wall. (Photos 75-80 and 75-81)
Photograph of the north wall. (Photo 75-82)
Photographs of the east wall. (Photos 75-83 and 75-84)
Photographs of the ceiling. (Photos 75-85 and 75-86)
The entryway is in the southwest part of the room. (Photos $75-87$ and 75-88)

The entryway has a tile floor.
The front door is on the the south wall and a closet door is on the the north wall of the entryway.

The south door in the dining room leads to the utility room.
Utility Room
Vinyl floor.
Green painted sheetrock walls and ceiling.
Photograph of the ceiling. (Photo 75-89)
Photograph of the upper west wall. (Photo 75-90)
Photograph of the upper north wall. (Photo 75-91)

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There is a hairline crack, probably at a tape joint, above the upper right corner of the door. It is about 21 and $1 / 2$ inches long. (Photo 75-92)

There is a tear in the sheetrock above the upper left corner of the breaker box on the east wall. It is about 3 and $3 / 4$ inches long. (Photo 75-93)

There is a hairline separation or crack in the upper northwest corner. (Photos 75-94 and 75-95)

That completes the interior inspection.
Exterior Inspection - Continued
Now inspecting the front sidewalk fram south to north.
There are four cracks across the sidewalk south of where it v's. (Photos 75-96 thru 75-99)

There is a crack just north of where the sidewalk V's. It ranges from about 2 inches wide at the east end to about $3 / 4$ of an inch at the west end and is mostly filled with grass. (Photo 75-100)

There is about a 1 inch separation where the sidewalk V's. (Photo 75-101)

The inspection was suspended due to darkness and the following was inspected on November 9, 1986.

There is a crack across the sidewalk located a few feet north of the $V$. It is about $5 / 8$ of an inch wide. (Photo 75-102)

Continuing north, there is a crack across the sidewalk with grass growing in it. The sidewalk has lifted by about an inch at the east end. (Photo 75-103)

There is a small continuous concrete slab sidewalk running west of the kitchen door. There is a crack across the slab and it is chipping at the south end. The average crack width is about $1 / 8$ of an inch. (Photo 75-104)

To the west, there is a larger crack across the sidewalk with weeds growing in part of the crack. It is about $3 / 8$ of an inch wide on average. (Photo 75-105)

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Now on the west side of the house. There is a crack in the foundation below the kitchen windows. It is about 10 inches long visible and ranges from about $3 / 16$ to $1 / 8$ of an inch wide. (Photo 75-106)

The downspout at the northwest corner lacks a splash block and empties close to the foundation. (Photo 75-107)

Now on the north side of the house.
The west end of north side also has a concrete foundation. There is a separation of about $1 / 2$ an inch where this part of the foundation meets the other foundation. (Photo 75-108)

There is a gutter with no downspout at the northwest corner of the master bedroom. It empties to the ground close to the foundation.
(Photo 75-109)
There is a large vertical crack along the height of the foundation at the northwest corner of the master bedroom. It is about $5 / 8$ of an inch wide. (Photo 75-110)

Now at the north foundation, east of the master bedroom. This area has a stone foundation with a concrete cover.

There is about a 5 inch long hairline diagonal crack to the right of the crawl space door. (Photo 75-111)

East of this door, there is a stairstepping crack about 16 inches long on the diagonal. It has a vertical branch that is about 5 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. (Photos 75-112 thru 75-114)

Moving east a few feet, there is a vertical crack in the concrete foundation cover. It is about 12 and $1 / 2$ inches long measured vertically and fran about $1 / 16$ to $1 / 4$ of an inch wide. (Photo 75-115)

A few feet to the east, there is a larger crack in the foundation cover. It is about 10 and $1 / 2$ inches long vertically and about $1 / 8$ of an inch wide. (Photo 75-116)

Near the corner, there is a roughly vertical crack that is about 9 and $1 / 2$ inches long and from about $1 / 16$ to $1 / 32$ of an inch wide. There is also a hairline crack to the west, above the rock, that is about 6 inches long. (Photo 75-117)

Now on the east facing foundation.

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The north end of the east side has a stone foundation with a concrete cover. There is extensive cracking and spalling at the north end. (Photos 75-118 and 75-119)

The cracks in this area range from about $1 / 4$ of an inch to a hairline wide.

There is a small tree growing next to the foundation.
A horizontal crack follows the outline of a stone and is about $1 / 16$ to 1/32 of an inch wide. (Photo 75-120)

Below the window, there are several cracks. Two vertical cracks below the middle, and a roughly horizontal crack and a vertical crack below the left end.

The north crack runs vertically down about 3 inches and then horizontally about 6 and $1 / 4$ inches. The vertical is about 7 inches long and ranges from a hairline to about $1 / 16$ of an inch wide. (Photos 75-121 and 75-122)

Just to the south, there is a vertical crack with some spalling. The crack is about 5 inches long and $1 / 16$ of an inch wide. (Photo 75-123)

To the lower left of the window, there is a crack, which measured on the dtagonal, is about 14 inches long and from $1 / 16$ of an inch to a hairline wide. (Photo 75-124)

About a foot to the east, there is another vertical crack. It is about 4 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 75-125)

About 1 and $1 / 2$ feet to the south, there is another roughly vertical crack. It is about 4 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 75-126)

Just to the south, there is a spalled area with crazing cracks. They are hairline cracks and the spall is about 1 and $3 / 4$ inches wide. (Photo 75-127)

Just to the south, there is another vertical crack. It is about 4 inches long and about $1 / 16$ of an inch wide. (Photo 75-128)

To the south, there is more spalling at the top of the visible foundation. Two photographs showing the area up to this small tree, to the lower right of the window. (Photos 75-129 and 75-130)

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There are hairline vertical cracks and a horizontal crack, just north of the tree. The horizontal crack is about 7 inches long. The two vertical cracks are about 2 and $1 / 4$ inches long. (Photos 75-131 and 75-132)

There is a spalled area in the foundation behind this small tree. The spall is about 16 inches wide and about 3 inches high. (Photo 75-133)

There are a couple of other slight cracks below this window. A 2 and $1 / 2$ inch long vertical crack becomes horizontal, trends about 16 inches and then becomes vertical again, trending about 4 and $1 / 4$ inches. (Photos 75-134 and 75-135)

To the lower left of this window, there is a spalled area in the foundation cover. This spall is about 7 inches wide and up to 1 and $1 / 4$ inches high. A hairline crack that is about 4 inches long crosses the spall. (Photos 75-136 and 75-137)

There are about four more vertical cracks and two spalled areas to the south. The cracks are about $1 / 16$ of an inch wide and run the height of the visible portion of the foundation cover. (Photos 75-138 and 75-139)

There is a spalled area just south of those cracks. (Photo 75-140)
There is a gap between the two foundation materials that is about $1 / 4$ of an inch wide on either side of a rock. (Photo 75-140)

The rest of the foundation to the south is concrete block.
There is a slight crack in a block at the south end of the east foundation. very little is visible. It is about $1 / 16$ of an inch wide. (Photo 75-141)

The downspout on the east side of the house empties to the ground close to the foundation. This area of the foundation has spalls. (Photo 75142)

The caulk seals on the southeast window are deteriorating, especially the upper, inner window. (Photo 75-143)

East Shed - Exterior Inspection
This shed is located just north of the house.
It has a shingle roof, wooden exterior, and a concrete block foundation.
ID photograph of the south and east sides. (Photo 75-144)

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ID photograph of the north side. (Photo 75-145)
ID photograph of the west side. (Photo 75-146)
Most of the foundation cannot be seen.
There is a spalled area in the foundation at the east part of the north side. It is about 14 inches long and 3 inches high visible. (Photo 75-147)

This shed seems to lean slightly to the north and it lacks gutters.
Interior Inspection - East Shed
Concrete floor.
Plywood walls and ceiling.
Doors on the south and east; window on the west wall.
The window has deteriorating caulk. (Photo 75-148)
There is a crack in the concrete rail near the south end of the east door. (Photo 75-149)

There is a crack in the southeast corner of floor that is about 8 inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 75-150)

Photograph of the east wall. (Photo 75-151)
Photograph of the south wall. (Photo 75-152)
Photograph of the west wall. (Photo 75-153)
Photographs of the north wall. (Photos 75-154 and 75-155)
At the southwest corner, near the door, there is a separation at the edge of the floor, behind the refrigerator. It is about $1 / 8$ of an inch at the west end and gets smaller as it goes eastward. (Photo 75-156)

There is another shed located northwest of the house.

West Shed - Exterior Inspection
ID photograph of the south end. (Photo 75-157)
ID photograph of the east side. (Photo 75-158)
ID photograph of the north end. (Photo 75-159)

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ID photograph of the west side. (Photo 75-160)
It has white masonite siding and rests on a concrete slab, most of which cannot be seen from the outside.

There is a crack in the slab at the east part of the north end. It is about 2 and 3/4 inches long and about $3 / 16$ of an inch wide. (Photo 75-161)

This shed is about 4 years old according to Mrs. Ridgway.
West Shed - Interior Inspection
Unfinished ceiling.
Paneled and plywood walls.
Concrete floor.
A large floor crack trends north from the east end of the door about 52 inches and intersects another crack. It ranges from about 1 and $1 / 4$ inches wide at a spall at its north end, down to about $1 / 4$ of an inch wide at the south end. (Photos 75-162 and 75-163)

There is a major east-west trending crack in the floor which has been partially patched.

The southeast part of the major crack is about 1 and $1 / 4$ inches at the widest. This crack disappears under same insulation in the southeast corner. At this major crack we can see down to the ground and the slab is 3 and $1 / 2$ inches thick. (Photo 75-164)

Now following this crack as it trends northwest near a basket of gourds. It has a branch that runs to the north. It is about an inch wide near the riding lawnmower and has been filled and has recracked. (Photos 75-165 thru 75-168)

The north branch trends under the basket of gourds and apparently trends to the north wall. It is hard to see as it goes under the carpet. The crack is about 1 and $1 / 2$ inches wide counting the filled area. (Photos 75-169 and 75-170)

Photograph of the north wall. (Photo 75-171)
Photograph of the floor. (Photo 75-172)
Photograph of the east wall. (Photo 75-173)
Photograph of the south wall. (Photo 75-174)

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Photograph of the west wall. (Photo 75-175)
This shed is constructed with 2 by 6 rafters and 2 by 4 stud walls.
Dog Pen
This is located west of the west shed.
ID photograph from the southeast. (Photo 75-176)
The slab is cracked at the post at the southeast corner. It is cracked all the way through and is about 17 inches long and $3 / 16$ of an inch wide. (Photo 75-177)

There is another crack in the slab at the northwest corner. It goes all the way through and is about 18 inches long. It is from $1 / 32$ to about $1 / 4$ of an inch wide. (Photo 75-178)

This dog pen is about 3 years old according to Mrs. Ridgway.

## General Comments

This is an old house that has been added to several times. Exact dates of construction are unknown.

The interior has been remodeled. Several stains were found in textured ceilings.

Numerous cracks were found in the foundation.
The house has a gutter system. Three downspouts empty close to the foundation.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.

#  

Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 178 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 75
2- SUMMARY FORM
3- SKETCH OF STRUCTURE










## $45-146$



## 1

## II <br> 9









I. Basic Information

1. Name of Resldent: K. N. Ridgway Building (Old Service Station)
2. Date: $\qquad$ TLue: $\qquad$
3. Address: $\qquad$ P. O. Box 135, Amoret, Missouri 64722
4. Location: $\qquad$ Block 21
5. Telephone Number: $\qquad$ (816) 925-3452 $\qquad$
6. Dates of occupancy by current resident: Owned since October 1983
7. Dates of any temporary or permanent abandonnent: Has been as is for last 7 years
II. InEormation Concerning Bulldings
(repeat Eor additional buildings)
8. Date of original construction: West part (1953) East Part (Since 1970)
9. Date(s) of major remodeling or additions:
(a) Probably 1979 or 1980
(b) Burnt around 1980
(c) $\qquad$
10. Construction of bullding:
(a) Eraning (joists, rafters, and stud wails): Concrete block
(b) incerior walls: Paneling, block
(c) rook:Built up roofing, flat tar
(d) Eootings; foundations: Probably concrete block
(e) basenent walls (indicate how keyed to footing of floor): Not applicable
(f) basement floor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed building: Not known
(h) size and direction of any large windows None
III. Enviromencal Information

1. Approximate elevation of area:

837 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation $\operatorname{Not}$ known
4. Water wells utilized (Indicate depth"and use): None
5. Cisterns or surEace water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage features: None .
8. Description of general grading or landscaping in vicinity: Generall flat
IV. Any notable existing deterioration or damage See survey

1. Cracks 1 n interior walls:See survey
2. Receding of doors, windows: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific coments concerning any unusual features, construction techriques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

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Report No. 87056-76
P\&M Map Photo No. 73

Subject: Inspection of the K. N. Ridgway Building
P. O. Box 135

Amoret, Missouri 64722
November 7, 1986
Tb: $\quad$ The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, south side. (Photos 76-1 thru 76-3)
Starting at the east end of the front. There are two stairstepping cracks through block and mortar at the upper east end of the front. The east crack ranges from about a hairline at the bottom to about $1 / 8$ of an inch wide. The other stairstepping crack ranges from a hairline at the bottom to about $1 / 4$ of an inch wide at the top. (Photos 76-4 thru 76-6)

The top horizontal mortar joint is separated from the east end to about the light fixture. (Photos 76-6 thru 76-8)

The blocks in the top course have numerous cracks. (Photos $76-4$ thru 76-8)

There is a long stairstepping mortar crack that trends from above the light fixture down about 8 feet, measured diagonally. (Photos 76-9 and 76-10)

At the lower east end of the front, a faint stairstepping mortar crack trends about 5 feet 4 inches, measured diagonally. (Photos 76-1l and 76-12)

Now a series of photographs of the front side from east to west. (Photos 76-13 thru 76-25)

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There is extensive mortar cracking along the front. Many of the cracks are of hairline width. There are stairstepping cracks, cracked blocks, and numerous areas of peeling paint.

Many of the mortar joints are deteriorating and mortar is spalling out.
There are extensive mortar cracks, some stairstepping and paint peeling above the east front window. (Photos 76-26 and 76-27)

There are stairstepping hairline mortar cracks and a cracked block below the east window. (Photos 76-28 and 76-29)

The area between the east window and the door has several deteriorating mortar joints. There is a horizontal mortar separation trending from the upper right part of the door to the east window. It is about 5 feet and $3 / 4$ of an inch long. (Photos 76-30 thru 76-32)

There is extensive cracking at the sill of the east front door. (Photos 76-33 thru 76-35)

There are several slight mortar cracks above this door. (Photo 76-36)
A horizontal mortar separation trends from the upper left of the door, westward to the window. (Photos 76-37 and 76-38)

Above the second window from the east, there is a crack through block and mortar stairstepping at the upper right end. It measured about 46 and $1 / 2$ inches on the diagonal. (Photo 76-39)

Several of the blocks in the top course have slight cracks.
The area below this window has several mortar cracks and scaling areas. (Photos 76-40 and 76-41)

Above the third window from the east, there is a stairstepping mortar crack. (Photos 76-42 and 76-43)

The horizontal joint below the top block course has been sealed from the west corner to above the east window.

The major crack is to the upper left of this window at the corner. It has been sealed and has recracked and the blocks have shifted. The top course has shifted about $7 / 8$ of an inch to the west. (Photos 76-43 thru 76-45)

There is a vertical separation along the joint where the two parts of the building meet. (Photos 76-46 thru 76-48)

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Above the second window from the west, there are several mortar separations and cracks. (Photos 76-47 and 76-49)

The west front door is deteriorating. (Photo 76-50)
There is a large patched area at the upper west end of the front. The area has extensive hairline and slightly larger cracks. (Photos 76-52 thru 76-54)

There is a stairstepping mortar crack from the lower left corner of the west window. (Photos 76-51 and 76-53)

The area to the lower left of the west window appears to have been patched and the area is scaling. (Photo 76-55)

ID photographs of the front driveway. (Photos 76-56 thru 76-58)
The concrete bases of the old gas pumps have cracks.
ID photograph of the west slab. It has two large chunks broken off at the east end. (Photo 76-59)

A north-south trending crack runs across the west slab near the east hole. It is about $1 / 32$ of an inch wide on average. (Photo 76-60)

ID photograph of the east slab. The east slab has several spalled areas. (Photo 76-61)

ID photograph of the west end of the building. (Photo 76-62)
The west side has extensive mortar cracks, peeling paint, and a few patched areas.

Series of photographs of the west side from south to north. (Photos 76-63 thru 76-77)

Most cracks on the west side range from hairline width to about $7 / 16$ of an inch maximum.

At the upper south end of the west side, blocks have shifted westward. (Photo 76-78)

The door on the west side is severely damaged. (Photo 76-69)
The concrete step at the doorway is cracked all the way through. The crack is about 17 inches long measured at the top and down the side and is about $1 / 8$ of an inch wide. (Photo 76-79)

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There is a spall in this concrete step at the doorway that is about 4 inches long. (Photo 76-80)

There is a vertical separation where the back part of the building and the front part meet, north of the doorway. (Photos 76-72 and 76-73)

There is a concrete sidewalk along the west side of the building which has several cracks.

A crack trends roughly east-west across the third and part of the fourth sidewalk slabs from the south. It is about 38 inches long and $1 / 32$ of an inch wide. (Photo 76-81)

The fifth slab from the south has a crack trending across it. The crack is very faint at the east end and is about 34 inches long and $1 / 32$ of an inch wide. (Photos 76-82 and 76-83)

Near the doorway, there is a diagonal crack in the sidewalk. About 2 feet of that crack was visible. (Photo 76-84)

Much of the sidewalk is covered with mud and dirt and cannot be seen.
Where the sidewalk and the large concrete slab meet, there is a beveled pieqe of concrete which has numerous cracks. The north part of this area is covered with dirt and grass and cannot be seen. (Photos 76-85 thru 76-95)

ID photographs of the concrete slab located west of the building. (Photos 76-96 and 76-97)

There is a crack in the northeast part of the slab that trends to the lift. Six feet 5 inches of this crack is visible. It is an irregular crack and is from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 76-98)

Another crack trends from the southeast part of the lift to the edge, 6 feet 8 and $1 / 4$ inches. It is a hairline wide at the east end and about $1 / 8$ of an inch at the west end. (Photos 76-99 thru 76-101)

There is a branching crack east of the middle of the lift. Roughly 11 inches is visible. (Photo 76-102)

Another crack trends northwest of the lift. It has grass and weeds growing up through it and is about 9 feet 2 inches long to this small shed. It is about $1 / 2$ an inch wide. (Photos 76-103 and 76-104)

At the southwest part of the slab, a crack trends north-south about 68 inches to the south part of the lift. It is about $1 / 4$ of an inch wide. (Photo 76-105)

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There is a crack between the two ramps of the lift that is approximately 40 inches long and $1 / 32$ of an inch wide. (Photo 76-106)

There is a grass filled crack at the southwest corner of the slab. (Photo 76-107)

There are extensive cracks at the west end of the slab. Several have grass growing through them. The main crack is about 10 feet 8 inches long. These cracks range from about $1 / 4$ of an inch to just wider than a hairline. (Photos 76-108 thru 76-112)

There is extensive cracking in the concrete area northwest of the small shed. (Photos 76-113 and 76-114)

ID photographs of the north side of the building. (Photos 76-115 and 76147)

Starting at the west end of the north side.
There is a hole in the wall that is about 14 and $1 / 4$ inches wide. (Photo 76-116)

Series of photographs of the north wall from west to east. (Photos 76-117 thru 76-142)

The west part of the north side is severely stained and there are several slight stairstepping mortar cracks. The fascia appears to be partially burnt.

There are areas of mortar deteriorating on the north side, especially just east of the watt meter.

At the east end, there is a horizontal mortar separation below the top block and that block is cracked vertically. (Photo 76-141)

There is also a horizontal separation below the fourth block course from the top. It is about $3 / 16$ of an inch wide. (Photos 76-14l and 76-144)

There is also a stairstepping crack at the upper east end of the north side. (Photos 76-141 and 76-144)

ID photograph of the concrete patio on the north side of the building. (Photo 76-143)

This patio has a block foundation.

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There is a mortar separation in the patio foundation. It is about 2 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 76-145)

There is a stairstepping crack below the lower right of the north window. It measures 4 feet 9 inches on the diagonal and is about $1 / 32$ of an inch wide. There is also a cracked block to the lower right of the window. (Photo 76-146)

There is a slight mortar separation to the lower right of the door that ranges from about $3 / 16$ of an inch to a hairline wide.

ID photograph of the east end of the building. (Photo 76-148)
The east side has numerous cracks and scaled areas.
There is a major crack through block and mortar at the north end of the east side. It is 17 and $1 / 4$ inches long from the fourth block course down to below the sixth. It is from about $1 / 4$ to $1 / 16$ of an inch wide. (Photo 76-149)

There is a horizontal mortar separation along the fourth joint from the top. At its north end, it cuts diagonally through a block. At the block it is 11 inches long and from about $1 / 4$ of an inch to a hairline wide. The horizontal separation continues southward about 5 blocks, and then runs vertically to the top of the wall. This separation is about 3/16 of an inch wide on average. (Photos 76-150 thru 76-152 and 76-155)

Series of photographs of the east wall from north to south. (Photos 76-151 thru 76-157 and 76-159 thru 76-165)

At about the middle of the east side, there is a $V$ shaped crack at the upper wall. It measures 2 feet 3 and $1 / 2$ inches from the top and is from about $1 / 32$ of an inch to a hairline wide. (Photo 76-158)

There is a vertical crack through block and mortar above the upper right corner of the east window. It is about 3 feet 8 and $1 / 4$ inches long. (Photo 76-161)

There is a horizontal separation at the fourth mortar joint from the top. It runs about 17 feet 7 inches north from the south end of the building and it is about $1 / 16$ of an inch wide. (Photos 76-162 and 76-164)

There is a stairstepping crack through block and mortar to the upper left of the east window. It is fran about $1 / 16$ to $1 / 8$ of an inch wide. (Photos 76-166 and 76-167)

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There are two smaller stairstepping mortar cracks at the upper south end of the east side. (Photo 76-168)

ID photograph of the east sidewalk. (Photo 76-169)
The east sidewalk has several cracks and grass has grown up through same of them.

At the north end of the east side the sidewalk is separated from the building by about $3 / 4$ of an inch and by about 1 and $1 / 8$ inches a few feet to the south. (Photos 76-170 and 76-171)

The sidewalk is separated by about 1 and $7 / 8$ inches at an area about 7 feet from the north end. (Photo 76-172)

There is a diagonal crack through a sidewalk slab near the north end of the building. It is from about a hairline to $1 / 4$ of an inch wide at a spall. (Photo 76-173)

The sidewalk is separated by about $1 / 8$ of an inch near the middle of the east side of the building. (Photo 76-174)

A photograph of the severely cracked area in the sidewalk near the middle of the east side. (Photo 76-175)

There are several cracks in the sidewalk at the south end of the east side. (Photos 76-176 and 76-177)

There is about a 6 inch long crack in the sidewalk at the southeast corner of the building. It is about $1 / 16$ of an inch wide. (Photo 76-178)

The sidewalk separation at the south end of the east side is about $1 / 4$ of an inch. (Photos 76-178 and 76-179)

The front sidewalk is also separated from the building. The separation is about $1 / 4$ of an inch at the east part of the front side and increases to the west to about $1 / 2$ an inch. (Photos 76-180 thru 76-182)

INTERIOR INSPECTION

## Main Room

Mostly carpeted concrete floor.
The middle south part of the floor is tile.
Paneled walls.
Sheetrock ceiling, partially textured.

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There are three windows and the front door on the south wall and a window and a door on the north wall.

Doorway on the west wall.
Photographs of the north wall. (Photos 76-183 thru 76-185)
Photographs of the west wall. (Photos 76-186 and 76-187)
Photographs of the east wall. (Photos 76-188 and 76-189)
Photographs of the south wall. (Photos 76-190 and 76-191)
Photographs of the north part of the ceiling. (Photos 76-192 thru 76-199)

Most of the sheetrock ceiling is taped and bedded and part of it has been textured.

The northeast part of the ceiling has stains and mold. (Photos 76-195 thru 76-197)

There is a dark spot in the ceiling near the middle of the north wall. (Photo 76-198)

Also, there is a dark spot in the ceiling near the west wall. (Photos 76-199)

The girder that runs across the ceiling has been textured and it also has stains. (Photos 76-200 thru 76-205)

At about the middle of the ceiling, south of the girder, there is a circular stain. (Photo 76-206)

A photograph of the south part of the ceiling looking eastward. (Photo 76-207)

A photograph of the south part of the ceiling looking westward. (Photo 76-208)

There is an area at the south part of the ceiling that is bare of texture. (Photo 76-208)

At the south end of the ceiling, near the doorway there is a bowed and stained section. (Photos 76-209 and 76-210)

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There are several cracks along the tape joints of the ceiling. At the southwest part of the ceiling, one of the cracks trends north-south and another trends east-west in a roughly $L$ shape. It measures 39 inches east-west. The north-south part is actually a bulge with plaster flaking off and is about 44 inches long. (Photos 76-211 and 76-212)

There is a north-south trending ceiling crack that trends roughly 63 inches from the corner of the east wall southward to another seam. (Photos 76-213 and 76-214)

The main east-west seam is at about the center of the south part of the ceiling. It trends fran about the second window from the west, eastward to the bar area. At the bar area it intersects a crack in the ceiling that trends north-south and then continues to the east wall.

Several other tape joints are visible in the ceiling.

Series of photographs of these ceiling cracks in the south part of the main roon. There are two east-west cracks at tape joints with an intersecting connecting crack. (Photos 76-215 thru 76-218)

## East Room

Concrete block walls.
Concrete floor.
Textured sheetrock ceiling.
Photograph of the south wall. (Photo 76-219)
Photograph of the north wall. (Photo 76-220)
Photographs of the west wall. (Photos 76-221 and 76-222)
Photographs of the east wall. (Photos 76-223 and 76-224)
There is extensive paint peeling from the east and south walls and there is some efflorescence on the walls.

There is a vertical crack in the northeast corner. It is about $1 / 16$ of an inch wide at the top and gets narrower toward the bottam. It runs about 10 blocks down from the ceiling. (Photos 76-225 and 76-226)

The ceiling has a piece of cardboard over a vent. There has been a fire here as evidenced by charred wooden ceiling joists. Rainwater can probably penetrate through this opening. (Photo 76-227)

The west end of the girder has stains on the bottom and north sides. (Photo 76-228)

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Photographs of the floor. F'irst looking south, then north. (Photos
76-229 and 76-230)
There is a water stain in the ceiling near the south wall. (Photo
76-231)
There is a peeling tape joint east-west trending south of the girder in the ceiling. It is about 37 inches long. (Photo 76-232)
Now moving to the restroom area.
Hallway
Paneled walls.
Textured sheetrock ceiling.
Carpeted floor.
Photograph looking eastward down the hall. (Photo 76-233)
There is a stain in the ceiling near the south wall.
This building has no electricity at this time.
Ladies Restroom
Paneled walls except for the south which is block.
Textured sheetrock ceiling.
Carpeted floor.
A photograph looking into the ladies restroom. (Photo 76-234)
Mens Restroan
Concrete floor.
Concrete block east and south walls.
Paneled west and north walls.
Textured sheetrock ceiling.
Paint is peeling from the upper east wall. (Photo 76-235)
There is a vertical crack along the southeast corner that runs from the ceiling to the floor. This crack is over \(1 / 8\) of an inch wide at the top and decrease down to about a hairline at the bottan. (Photos 76-236 thru 76-238)
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The stool is cracked. (Photo 76-239)

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Now moving to the west room of the building.
West Room
Concrete floor.
Concrete block walls.
Sheetrock ceiling.
Photographs of the west wall. (Photos 76-240 and 76-241)
Photographs of the south wall. (Photos 76-242 and 76-243)
Photographs of the east wall. (Photos 76-244 and 76-245)
Photograph of the north wall. (Photo 76-246)
The southwest part of the ceiling is hanging severely. (Photo 76-247)
The ceiling has a peeled area along a joint, east-west trending near the south wall. (Photo 76-248)

The east part of the sheetrock cover of the girder is deteriorating. (Photo 76-249)

The northwest corner of the ceiling is sagging. (Photos 76-250 and 76-252)

There is a hole in the northeast corner of the ceiling. (Photo 76-251)
Starting on the east wall. There are two cracks above the door at mortar joints. There is a hairline to a slightly wider crack below a hole above the upper right end. The mortar cracks are about $1 / 16$ of an inch wide. (Photo 76-253)

There is a slight crack to the lower left of the door. It is about 18 and $1 / 4$ inches long and fran about $1 / 8$ of an inch to a hairline wide. (Photo 76-254)

There is a crack in a block at the upper left side of the door. It is about 6 inches long and $1 / 32$ of an inch wide. (Photo 76-255)

THere is a stairstepping crack, about 41 and $1 / 2$ inches long and $1 / 32$ of an inch wide near the switch box. (Photos 76-256 and 76-257)

There is a sealed doorway at the north end of the east wall.

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There is a stairstepping mortar crack south of this sealed doorway. It measures about 7 feet 6 inches on the diagonal and is fran about $1 / 16$ of an inch to a hairline wide. (Photos 76-258 thru 76-260)

There are several mortar separations to the upper right of this sealed doorway. These range from a hairline to about $1 / 16$ of an inch wide. There are al so two cracked blocks. (Photos 76-261 and 76-262)

There is a separation of about $3 / 4$ of an inch above the sealed doorway. (Photo 76-263)

Photograph of the sealed doorway. (Photo 76-264)
Now on the north wall.
There are several stairstepping mortar cracks at the east part of the north wall. These range in width fran about $1 / 8$ of an inch to a hairline. (Photos 76-265 thru 76-268)

The west part of the north wall has a peeling section of vinyl and paint is also peeling. (Photo 76-269)

There is a crack in a block at the upper left corner of the north wall. It is about 4 and $1 / 2$ inches long above the pipe and about 3 inches long below the pipe. (Photos 76-270 and 76-271)

The north part of the west wall has a peeling section of vinyl and areas of peeling paint. The northwest corner of the ceiling also has peeling paint. (Photo 76-272)

The west wall has areas of peeling paint, south of the door. (Photo 76-273)

Now on the south wall. It also has areas of peeling paint. A photograph of the lower west end of the south wall. (Photo 76-274)

There is a slight stairstepping crack above the upper left end of the south window. It is about 33 and $1 / 2$ inches long and a hairline wide. (Photo 76-275)

There is a flaw or a crack in the southeast part of the floor. It is northwest-southeast trending and is about 7 feet 3 inches long. (Photo 76-276)

The west part of the floor has a wet and stained area. (Photo 76-277)

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Northwest Room
Concrete floor.
Concrete block walls.
Unfinished ceiling.
There is extensive cracking where the ceiling attaches to the south wall and light can be seen through the gap. It is about $1 / 4$ of an inch wide in certain areas east of the door.

Photographs of the north wall. (Photos 76-278 and 76-279)
Photograph of the west wall. (Photo 76-280)
Photographs of the south wall. (Photos 76-281 and 76-282)
The south wall is wet and stained and paint is peeling from the door and door jambs. The lower parts of the door and door jambs have rotted

Photograph of the east wall. (Photo 76-283)
The ceiling is severely water damaged, especially at the north and south ends. (Photos 76-284 thru 76-288)

The northwest part of the ceiling is rotting.
There is a slight mortar crack in the northeast corner. It ranges from about $1 / 16$ of an inch to a hairline wide and runs from the pipe down three blocks and disappears. (Photo 76-289)

There are cracks and a spalled area on the west part of the north wall. This area is about 3 feet high by about 3 and $1 / 2$ feet wide. These blocks are bulging inward. The cracks range fran about a hairline to $1 / 8$ of an inch wide. (Photos 76-290 and 76-291)

There is a stairstepping mortar crack above the upper right corner of the south door. It measures about 22 and $1 / 2$ inches on the diagonal and is about $1 / 16$ of an inch wide average. (Photo 76-292)

There is a horizontal mortar separation east of the door, above the fifth block course from the bottam. There is also some staining on the lower east part of the south wall. There is also a stairstepping mortar crack at the east end of the south wall that is fran about $1 / 8$ of an inch wide to a hairline at the top. (Photos 76-293 thru 76-296)

There is a gap in the southeast corner at the fifth block from the floor. It is about $3 / 16$ of an inch wide. (Photo 76-297)

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There is a north-south trending crack in the floor, probably at a joint. It runs from the doorway to the north wall and is about $1 / 16$ of an inch wide. (Photos 76-298 thru 76-300)

The floor also has slight cracking at the doorway. (Photos 76-298 and 76-300)

The east front door of this building is very difficult to close.
General Comments
The west part of this building was constructed in 1953 and the larger, west part was added in 1970.

It was partially burned in a fire around 1980 that apparently was confined to the roof.

The exterior walls have numerous cracks, some of which have been patched and there are many scaled areas.

The interior block walls have several cracks and there are several water damaged areas in ceilings.

The building has no gutter downspout system to divert roof water runoff away from the foundation and sides of the building.

That completes the inspection of the this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 300 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 73
2- SUMMARY FORM
3- SKETCH OF STRUCTURE




$76-1$


## PRE-BLAST SURVEY, RESIDENTLAL

I. Basic InEormation

1. Name of Resident: Hilda M. Springer Trailer
2. Date:_November 8, 1986 Tine:__ 2:30PM
3. Address: P. O. Box 84, Amoret, Missouri 64722
4. Location:Iots 19 thru 23, Block 20
5. Telephone Number: (816) 925-3352
6. Dates of occupancy by current resident:Used as a guest house
7. Dates of any temporary or permanent abandoment: Not known
II. InEormation Concernlag Bulidings
(repeat for additional buildings)
8. Date of original construction: Not known
9. Date(s) of major remodeling or additions:
(a)

N/A
(b) $\qquad$
(c)
3. Construction of building:
(a) fraining (joists, rafters, and stud walls):
(b) interfor walls:Paneled
(c) rooE: Metal
(d) footings; foundations: Concrete block foundation and footings
(e) basement walls (indicate how keyed to footlng of floor):

Not applicable
(E) basement floor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Vagabond Trailer
(h) size and direction of any large windows: $N / A$
III. Enviromental Information

1. Approxirate elevarion of area:

837 feet
2. Type of soll in area:Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth*and use):
Two wells, not used, depths unknown
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dratnage Eeatures: No
8. Description of general grading or landscaping in vicinity:
Generally flat
IV. Any notable existing deterioration or danage

1. Cracks in interlor walls: See survey
2. Receding of doors, windows: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
2.• South See survey
9. East See survey
10. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterforation, may exhlbit an unusual response to normal blasting activities.

See survey

# SUBJECT: INSPECTION OF HILDA M. SPRINGER TRAILER P. O. BOX 84 AMORET, MISSOURI 64722 NOVEMBER 8, 1986 

TO:
THE PITTSBURG AND MIDWAY COAL MINING COMPANY P. O. BOX 8

AMSTERDAM, MISSOURI 64723

Attention: Mr. Mark Premo

BY: WHITE INDUSTRIAL SEISMOLOGY, INC. 2431 RANGELINE ROAD, SUITE A/B
P. O. BOX 1256

JOPLIN, MISSOURI 64801

November 12, 1986
Report No. 87056-79
P \& M Map Photo No. 76

Subject: Inspection of the Hilda M. Springer Trailer P. O. Box 84

Amoret, Missouri 64722
November 8, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERRIOR INSPECTION
ID photograph of the front, north side. (Photo 79-1)
ID photograph of the west end. (Photo 79-2)
ID photograph of the south side. (Photo 79-3)
ID photograph fo the east end. (Photo 79-4)
This trailer has a brick sidewalk with dry joints. There are several cracked and broken bricks. (Photos 79-5 thru 79-8)

The front steps are concrete block with dry joints.
A couple of the bricks in the front walkway near the step are spalling.
There is a concrete slab covering a well located north of the trailer. The slab appears to have settled to the southwest. (Photo 79-9)

This slab has a slight crack west of the hand pump. It runs about 17 inches along the top and down the edge. It is from about $1 / 32$ of an inch to a hairline in width. (Photos 79-10 and 79-11)

There is al so a crack at the south end of the slab. It measures 11 and $1 / 2$ inches along the top and down the edge and ranges from about $1 / 32$ of an inch to a hairline in width. (Photo 79-12)

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There are actually several slight surface cracks or flaws in the slab. (Photos 79-13 thru 79-15)

A crack at the north edge is about 7 inches long and from about $1 / 32$ of an inch to a hairline wide. (Photo 79-15)

Now looking down into the well. The water surface is just below ground level. It is a rock lined well. (Photo 79-16)

Operating the hand pump, the water was muddy at first but became much clearer. (Photos 74-17 and 79-18)

At the south side of the trailer, there is an open well. The water looks fairly clear and is just below the level of the ground. (Photo 79-19)

Note the condition of the small bathroom window on the south side. There is film coating that is cracked extensively. (Photo 79-20)

On the east end of the trailer, the lower windowpane is cracked. (Photo 79-21)

Back on the south side, the east window is cracked at three apparent bullet holes. (Photo 79-22)
@llar
There is a concrete cellar located southwest of the trailer. ID photograph of the front, west end. (Photo 79-23)

ID photograph of the south side. (Photo 79-24)
ID photographs of the east end. (Photos 79-25 and 79-26)
ID photographs of the north side. (Photos 79-26 and 79-27)
This cellar has many cracks.
On the south side, there is a roughly horizontal crack that is about 85 inches long and fran about $1 / 8$ to $1 / 32$ of an inch wide. (Photos 79-28 thru 79-32)

There are other crazing type cracks of varying lengths and small widths on this arched top. They are about $1 / 16$ of an inch average widths.

On the front side, there is a crack to the upper right of the doorway. It is about 15 inches long and from about $1 / 4$ to $1 / 32$ of an inch wide. (Photo 79-33)

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There is a vertical crack above the doorway that is about 20 inches long and from about $1 / 32$ to $1 / 4$ of an inch wide. (Photo 79-34)

The inscription on this structure gives 1914 as the year of construction.

To the left of the door, there is a crack that is about 15 and $1 / 2$ inches long and from about $1 / 32$ of an inch to a hairline wide. There is also some spalling concrete below the crack. (Photo 79-35)

There is an east-west trending crack across the top of the structure. It runs the entire length and ranges from about $1 / 4$ of an inch to a hairline wide. (Photo 79-36)

The stairway walls are extensively cracked.

First showing the north wall. The north wall, at the top step, has a crack that is from 2 and $1 / 2$ to $3 / 16$ of an inch wide. (Photo 79-37)

The south wall has about a 2 inch wide crack near the top step. (Photo 79-38)

The north wall has a large crack that is about 4 inches at the widest. (Photo 79-39)

Interior Inspection -- Cellar

Now inside the cellar.

It has a concrete floor that is severely heaved and cracked. (Photos 79-40 thru 79-42)

The north wall has a horizontal crack along its length. It is about $1 / 4$ of an inch wide. (Photo 79-43)

The east wall has a wider horizontal crack with a vertical branch. The maximum width is about 1 inch. (Photo 79-44)

The south wall has a large horizontal crack with two vertical branches. The maximum width is about $l$ inch. (Photos 79-45 and 79-46)

The ceiling has an east-west crack that was visible from the outside. It is about $1 / 8$ of an inch wide. (Photos 79-47 and 79-48)

The west wall has a horizontal crack at both sides of the entrance. (Photos 79-53 and 79-54)

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There is a crack above each corner of the doorway. Both run to the ceiling. (Photos 79-50 and 79-51)

The steps are severely deteriorated and cracked. (Photos 79-49 and 79-52)

The south wall has a slight horizontal crack with mineral deposits in it. It trends the length of the wall. (Photos 79-55 and 79-56)

The wooden door is rotting.
There is some water and a lot of mud on the floor, and the upper walls are moist.

Trailer
INTERIOR INSPECIION

## Kitchen/Dining Room

Carpeted and tile floor.
Paneled walls.
Tile ceiling.
Windows on the north and west walls.
Photograph of the west wall. (Photo 79-57)
Photograph of the south wall. (Photo 79-58)
Photograph of the north wall. (Photo 79-59)
There is a water stain in the northwest corner of the ceiling.
The living room is to the east.

## Living Room

Carpeted floor.
Paneled walls.
Tile ceiling.
Windows on the north and south walls.

Entrance to the hallway on the east.
Photograph of the south wall. (Photo 79-60)
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Photograph of the east wall. (Photo 79-61)
Photograph of the north wall. (Photo 79-62)
There is a stain in the ceiling to the upper right of the hall
entrance. (Photo 79-63)
The ceiling has water stains to the upper right and upper left of the
south window. (Photos 79-64 and 79-65)
There is a stain in the ceiling above the north window.
Hallway
Paneled walls.
Tile ceiling.
Carpeted floor.
A photograph looking eastward down the hallway. (Photo 79-63)
The west door on the south wall leads to a small bedroam.
West Bedroom
Carpeted floor.
Paneled walls.
Tile ceiling.
Window on the south wall.
There is a water stained area in the southeast corner of the ceiling.(Photo 79-67)
A photograph looking into this bedroon. (Photo 79-75)
Bathroom
Carpeted floor.
Tile ceiling.
Formica walls.
Window on the south wall.
A photograph looking into the bathroom. (Photo 79-74)

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## East Bedroom

Tile floor mostly covered with a rug.
Paneled walls.
Tile ceiling.
Windows on the north, east, and south walls.
There is a water stain in the southwest part of the ceiling. (Photo 79-66)

Closets on the east wall.
The south closet has two water stains in the ceiling along the east wall. (Photo 79-68)

The north closet also has a water stain in the ceiling near the east wall. (Photo 79-69)

Photograph of the east wall. (Photo 79-70)
Photograph of the south wall. (Photo 79-71)
Photograph of the west wall. (Photo 79-72)
Photograph of the north wall. (Photo 79-73)

## General Comments

This trailer is used as a guest house by Mrs. Springer. It rests on a concrete block foundation, which could not be seen because no access panel could be found and the skirting was firmly attached.

Several water stains in ceilings and broken windows were the only damages found in the trailer.

The cellar is a very old concrete structure, which has suffered the effects of time as evidenced by severe cracks in walls and a severely heaved floor. Some cracks serve as avenues for water penetration.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


CDL/mp
Enclosure: 75 Photographs

Christopher D. Landoll Technical Associate

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 76

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Infomation

1. Name of Resident: Betty Daugherty
2. Date: $\qquad$ November 8. 1986 TLue: 3:35PM
3. Address: Box 104, Amoret, Missouri_ 64722
4. Location: Lot 18, Block 23
5. Telephone Number: (816) 925-3380
6. Dates of occupancy by current resident: $\qquad$ 1977 - Present
7. Dates of any temporary or permanent abandoment: None

IT. InEormation Conceralng Bulldings
(repeat for addithonal buildings)

1. Date of original construction: $\qquad$ old trailer, date unknown
2. Date(s) of major remodeling or additions:
(a) $\qquad$
Porch 1979
(b) Addition 1981
(c)
3. Construction of bullding:
(a) Eraning (joists, rafters, and stud walls):
$2 \times 4$ in addition
(b) interior walls: Sheetrock on addition
(c) roof: Singles, composition on addition and porch
(d) footings; foundatlons: has footing for addition, don't know dimensions
(e) basenent walis (indicate how keyed to foocing of floor): Not applicable
(E) basement Eloor (keyways, thickness): Not applicable
(g) name of person(s) who constructed building: Harold Johnson built addition
(h) size and direction of any large windows:
$27^{\prime}$ long by $2^{\prime}$ high at north and south sides of trailer
III. Enviromental Infonmat ion high at north and south sides of trailer
4. Approxfmate elevation of area:

850 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Lndicate depth and use): Yes, doesn't work now. Used up to and until December 1984. Water was good.
5. Cisterns or surface water storage utilized: (indicate purpose and approxinate volume) No
6. Source of water, If not Lncluded above: City water
7. Eve troughs or any other exterior drainage Eeatures: No .
8. Description of general grading or landscaping in vicinity:

Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windoris: See survey
3. Noticeable setclement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawlngs See survey
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

November 13, 1986
Report No. 87056-68
P \& M Map Photo No. 4

Subject: Inspection of the Betty Daugherty Residence P. O. Box 104 Amoret, Missouri 64722 November 8, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Mi ssouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, south side of the structure. (Photos 68-1 and 68-2)

ID photograph of the front patio. (Photo 68-3)
ID photograph of the front sidewalk. (Photo 68-4)
There is a crack at the northwest corner of the sidewalk that goes through the slab and along the expansion joint. It is 16 and $1 / 2$ inches to the expansion joint and about $1 / 16$ of an inch wide. It goes into the expansion joint about 7 inches. (Photos 68-5 and 68-6)

The next expansion joint to the south is cracked across the width. (Photos 68-7 and 68-8)

There is a faint north-south trending crack in the patio slab near the window. It is about 7 feet 4 inches long. (Photos 68-9 thru 68-11)

The bottom pane of the south facing window of the addition is cracked. (Photo 68-12)

The porch has a plywood floor.
The east end of the addition is separated from the trailer by about 1 and $3 / 4$ inches. (Photo 68-13)

White Industrial Seismology, Inc.
The pittsburg and Midway Coal Mining Company
Report No. 87056-68
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November 8, 1986
Page 2

ID photograph of the east side. (Photo 68-14)
The bottom pane of the east facing window of the addition is cracked. (Photo 68-15)

The skirting is loose at the east end of the trailer. (Photo 68-16)
The trailer has concrete blocks for a foundation.
The blocks at the tongue of the trailer are sinking into the ground and one of them is cracked. That crack in the block is about $1 / 8$ of an inch wide. (Photos 68-16 thru 68-18)

ID photographs of the north side. (Photos 68-19 thru 68-21)
The skirting is rigidly attached on the north side.
The north side of the trailer has many dark rusted stains.
There is an apparent BB hole in the upper west window. (Photo 68-22)
ID photograph of the west end of the residence. (Photo 68-23)
The trailer appears to lean to the north and there is a separation where the addition attaches to the trailer. The separation ranges fran about an inch at the top to about $3 / 8$ of an inch at the bottom. (Photos 68-24 thru 68-26)

The addition has a concrete block foundation. A photograph of the visible portion of the north foundation. (Photo 68-27)

Below the lower right end of the west window of the addition, there is a vertical mortar separation. It is just over $1 / 16$ of an inch wide. (Photo 68-28)

Below the lower left end of the window, there is a slight vertical mortar separation. (Photo 68-29)

The top of the trailer is deteriorating where the slanting roof of the addition meets the trailer. (Photo 68-30)

The slanted soffit is rotting at the west end. (Photo 68-31)
ID photograph of the air conditioner support. (Photo 68-32)
There is a wooden shed located west of the trailer.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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Page 3

## West Shed

ID photograph of the south side. (Photo 68-33)
There are holes in the roof on the south side.
ID photograph of the east side. (Photo 68-34)
The lower siding boards are rotting on the east side.
ID photograph of the north side. (Photo 68-35)
Note the sagging roof on the north side.
The shed has a rock and concrete foundation.

ID photograph of the west side. (Photo 68-36)
The door is hanging on the west side.
Looking inside, the floor appears to have collapsed. (Photo 68-37)
This shed is mostly full of stored material.
There is a crack in the foundation below the west door. It is about $1 / 8$ of an inch wide and about 5 inches long. (Photo 68-38)

The north part of the west foundation has a large crack at the corner that is over an inch wide. (Photo 68-39)

Series of photographs of the north foundation from west to east.
(Photos 68-40 thru 68-42)
There is a large crack at the northeast corner of the foundation that is about an inch wide. (Photo 68-42)

There is a well house located just west of the shed.
Well House
ID photograph of the west side. (Photo 68-43)
ID photograph of the north side. (Photo 68-44)
ID photograph of the south and east sides of the well house. (Photo 68-45)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-68
P\&M Map Photo No. 4
November 8, 1986
Page 4

Looking down into the well, it is rock lined, and the water level is within 2 or 3 feet of the surface. Mrs. Daugherty said the water was good as of Christmas of 1984 when she was hooked onto city water. (Photos 68-46 and 68-47)

There is a small shed located southeast of the trailer.

## East Shed

ID photograph of the west side. (Photo 68-48)
This shed leans considerably to the south.
ID photograph of the north side. (Photo 68-49)
ID photograph of the east side. (Photo 68-50)
ID photograph of the south side. (Photo 68-51)
This shed is full of stored material and very little of the interior could be seen.

That completes the exterior inspection.
INTERIOR INSPECTION
Starting in the east end of the trailer.
Kitchen/Dining Room
Carpeted floor.
wood paneled walls and ceiling.
A photograph looking west into the kitchen. (Photo 68-52)
Photograph of the east wall. (Photo 68-53)
Photographs of the north wall. (Photos 68-54 and 68-55)
Photograph of the south wall. (Photos 68-56 and 68-57)
There is some warping in the wood panels in the lower northeast corner. (Photo 68-58)

There is a small door to the roof in the northeast corner of the kitchen ceiling. This door is hanging down slightly.

West of the kitchen, there is a small storage room.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 4
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Storage Room
Plywood floor mostly carpeted. Paneled walls and ceiling.

Window on the north wall.
It also has a small window on the east that is boarded over.
Doorway on the west wall to the bathroam.
Photograph looking eastward into this roon. (Photo 68-59)
Bathroom
Wood paneled and formica ceiling.
Formica and wooden walls.
Carpeted over plywood floor.
A photograph looking westward into the bathroom. (Photo 68-60)
The bedroon is to the west.

## Bedroom

Carpeted floor.
Paneled walls and ceiling.
Windows on the north wall.
Two photographs looking northward into the bedroon. (Photos 68-61 and 68-62)

The ceiling is warped at the east end, especially the northeast corner. (Photos 68-63 and 68-64)

Mrs. Daugherty indicated that her roof had leaked causing the ceiling damage, but the roof has been repaired.

Now moving southward into the addition.
Living Room
Lightly textured sheetrock walls and cei.ling.
Door on the south wall and a window on the west wall.

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The Pittsburg and Midway Coal Mining Company
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Entrance on the east wall to another bedroom.

Closet enclosure in the southeast corner.
Photograph of the west wall. (Photo 68-65)
Photographs of the north wall. (Photos 68-66 and 68-67)
Photograph of the east wall. (Photo 68-68)
Photographs of the south wall. (Photos 68-69 and 68-70)
Photographs of the ceiling. (Photos 68-71 and 68-72)
There is a slight crack in the southwest corner of this roan at a tape joint. It is a hairline wide along most of the corner but is slightly
larger about a foot below the ceiling. (Photo 68-73)
There is an L-shaped crack east of the door on the north wall at a tape joint. It is 36 and $1 / 4$ inches long, measured on the diagonal, and is a rough tearing crack. It ranges from about $1 / 16$ of an inch to a hairline wide. (Photos 68-74 thru 68-78)

To the upper right of the north door, there is a roughly horizontal crack. It is about 4 and $3 / 4$ inches long and is just wider than a hairline. (Photo 68-79)

There is a vertical crack at a tape joint above the upper left end of the door on the south wall. It is a tearing type crack ranging fran about $1 / 16$ of an inch to a hairline. (Photo 68-80)

There is a hairline crack above upper right corner that is about 4 inches long. (Photo 68-81)

Above the upper left of the closet door, there is a faint vertical crack that is about 5 and $1 / 8$ inches long.

## Bedroom

Carpeted floor.
Lightly textured sheetrock walls and ceiling.
Windows on the east and south walls.
Photograph of the east wall. (Photo 68-82)
Photographs of the south wall. (Photos 68-83 and 68-84)

White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 4
November 8, 1986
Page 7

Photographs of the west wall. (Photos 68-85 and 68-86)
Photographs of the north wall. (Photos 68-86 and 68-87)
There is a vertical crack at the tape joint in the southeast corner. It is hairline along most of the corner but enlarges slightly at about mid-level. (Photos 68-88 and 68-89)

There is a slight vertical crack at a tape joint to the upper right of the south window with a diagonal crack at the upper right corner. The vertical crack is about 10 and $5 / 8$ inches long and has a slight horizontal extension at the top trending about 2 inches westward. The diagonal crack is about 3 inches long and fran about $1 / 32$ of an inch to a hairline wide. (Photos 68-90 and 68-91)

## General Comments

The Daugherty residence consits of an older model trailer with a wood framed addition which was built in 1981.

The trailer is on a concrete block foundation, and it appears to lean northward same what. This apparently has caused a separation to develop between the trailer and the addition. The trailer exterior has suffered the effects of weathering over time.

The interior of the trailer has wood paneled walls and ceilings and some areas have been water damaged.

The addition has several cracks at tape joints of the sheetrock walls. These are probably the result of shrinkage and expansion of framing materials. These cracks, where possible, will probably enlarge naturally, with time, and their widths will probably vary with humidity changes.

The front sidewalk and patio appear to be fairly new.
The patio has a crack that will likely enlarge naturally with time, and the sidewalk has two cracks that will also probably enlarge in time. The sidewalk will also probably develop cracks at the other expansion joints.

The two sheds are in severely deteriorated condition and can be expected to deteriorate further in time due to weathering.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-68
P \& M Map Photo No. 4
November 8, 1986
Page 8

That completes the inspection of this property.
WHITE INDUSIRIAL SEISMOLOGY, INC.

Cowitarhe il tanerote
Christopher D. Landoll Technical Associate

CDL/kg
Enclosure: 91 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 4

2- SUMMARY FORM

3- SKETCH OF STRUCTURE

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## I. Baslc InEomation

1. Name of Resldent: Linda McCammon
2. Date: 11-22-86 TLine: 8:00 AM
3. Address: Route 1 Box 221 Amoret, Missouri 64722
4. Location: E/2 Lots 3-6 Block 3
5. Telephone Number: $\qquad$
6. Dates of occupancy by current res ident: Since November 20, 1986
7. Dates of any temporary or permanent abandornent: No
II. Information Concerning Bulldags
(repeat for addletional buildlags)
8. Date of orighal construction: Not Known
9. Date(s) of major femodeling or addtcions:
(a) Remodeled in 1972 or 1973 .
(b) Garage after 1972 or 1973.
(c)
10. Construceion of batlding:
(a) framing (Jolsts, rafters, and stud walls): Standard built.
(b) interior walls: Sheetrock.
(c) roof: Composition shingle.
(d) footings; Eoundathons: Concrete fooring and foundation.
(e) basement walls (indicate how keyed to footing of floor): Not applicable.
(E) basemenc floor (keyways, chLckness): Not applicable.
(g) nane of person(s) who constructed building: Martha and Alan Grimsley
(h) size and direction of any large windows ino.
III. Enviromantal Infomation
11. Approximate elevation of area:

835 feet
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation:Not known.
4. Water wells ucillaed (indicate deptheand use): No.
5. Clsterns or surface water storage utillzed: (Lndicate purpose and approximate volume). No.
6. Source of water,if not lncluded above: City.
7. Eve troughs or any other exterior drainage Eeatures: No.
8. Description of general grading or landscaplug in vicinity: Generally flat.
IV. Any notable exlsting deterioracton or damage

1. Cracks in interlor walls: See survey.
2. Receding of doors, whindu's: See survey.
3. Nuticeable settlenent: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer) Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see sunvey.
VI. Elevation views or photographs of walls see survey.
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings See survey.
VIII. Discussion or specific couments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.
See survey.

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (41'7) 624-0164
December 3, 1986
Report No. 87056-60
P \& M Map Photo No. 130

```
Subject: Inspection of the Linda McCammon Residence Route l, Box 221 Amoret, Missouri 64722 November 22, 1986
To: \(\quad\) The Pittsburg and Midway Coal Mining Company P. O. Box 8
Amsterdam, Missouri 64723
```

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the east side of the house. (Photos 60-1 thru 60-3)
The roof of the south part of the house has a couple of areas that have been replaced and there are numerous deteriorated shingles.

The north end of the east side has deteriorating lower siding and the paint is peeling from the fascia. (Photos 60-3 and 60-4)

There is a crack in the foundation at about the middle of the east side below the window. It measures about 5 inches on the vertical and ranges in width fram about $3 / 16$ to $1 / 8$ of an inch. It has a spall at the top that is about an inch wide. (Photo 60-5)

At the southeast door, the caulk seal is separating along the sides of the doorway. (Photos 60-6 thru 60-8)

To the lower right of the door, a siding board is split horizontally. The length is about 3 inches. (Photo 60-6)

There is a crack at the south end of the east foundation. It measures about 4 inches vertically and about 3/8 of an inch wide. (Photo 60-9)

The southeast part of: the roof has deteriorating shingles. (Photo 60-10)

ID photograph of the south side of the house. (Photo 60-11)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-60
P\& M Map Photo No. 130
November 22, 1986
Page 2

There is a crack in the south foundation, below the east windows. It is a large, roughly diagonal crack that measures about 7 and $1 / 2$ inches long and ranges from about 1 inch to $1 / 4$ of an inch wide. (Photo 60-12)

The caulk seal is separating slightly around this window.
At about the middle of the south foundation, there is a vertical crack that is about 8 inches long and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 60-13)

There is another crack in the foundation just to the west. It measures about 9 and $1 / 4$ inches vertically and fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 60-14)

The inner west, lower window has deteriorating caulk. (Photo 60-15)
There is a large crack in the foundation at the southwest corner. It measures about 12 inches vertically and is about l inch wide. It has been filled with some plastic material. (Photo 60-16)

ID photographs of the west side of the house. (Photos 60-17 and 60-18)
The west side of the roof has several missing and deteriorating shingles. (Photo 60-19)

There is a crack in the west foundation to the lower left of the south window. It measures about 11 inches on the vertical and about $1 / 8$ of an inch wide. There is some plastic filling in the opening above the crack. (Photo 60-20)

About 4 feet to the north, there is a vertical crack in the foundation. It measures about 12 and $3 / 4$ inches long and about $1 / 8$ of an inch wide. (Photo 60-21)

At the north end of the original foundation, there is a crack that measures about 11 and $1 / 2$ inches long and about $1 / 2$ an inch wide. It has been filled with insulation. (Photo 60-22)

There is a separation of about $3 / 16$ of an inch at the joint between the original foundation and the north addition foundation. (photo 60-22)

The north addition does have a footing according to Ms. McCammon. It is not known for sure whether the orginal foundation has a footing.

The north window on the west side has a cracking caulk seal.

White Industrial Seismology, Inc.
The Pittsburg and Midway coal Mining Company
Report No. 87056-60
P\&M Map Photo No. 130
November 22, 1986
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The third window from the north has a misaligned storm screen and some caulk has fallen out of the botton inner window. (Photo 60-23)

The south window on the west side has crazing cracks at the upper right side of the outer caulk seal.

ID photograph of the north end of the house. Note the peeling paint on the fascia. (Photo 60-24)

To the lower right of the west window, there is a diagonal foundation crack that is partially filled with insulation. It measures about 14 inches long and ranges in width from about an inch to $1 / 8$ of an inch. The foundation has shifted about $7 / 8$ of an inch along the crack. (Photo 60-25)

There is another construction joint at the east end of the north side. There is about $1 / 8$ of an inch separation at this joint. (Photo 60-26)

The outer caulk seal of the east window on this side has slight crazing type cracks.

Now back to the east side of the house at the patio.

## Patio

ID photograph of the patio. (Photo 60-27)
At the north end of the patio, where the step joins, there is same spalling. The widest spall is about 2 and $1 / 2$ inches and the total length of this area. is about 23 inches. (Photo 60-28)

A sidewalk leads northward to the garage from the patio. (Photo 60-29)
The south slab of the sidewalk has a slight crack. It is about 11 and $1 / 2$ inches long and from a hairline to about $1 / 16$ of an inch wide. (Photo 60-30)

The third sidewalk slab from the south has a diagonal crack across the southwest corner. The crack measures about 23 inches long and a hairline wide. (Photo 60-31)

The fourth slab from the south has a crack all the way across. It measures about 23 jnches long and is wider than a hairline. (Photo 60-32)

The ninth slab from the south has a crack all the way across. It is about $1 / 32$ of an inch wide and 23 inches long. (Photo 60-33)

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Garage
ID photograph of the front, south end of the garage. (Photo 60-34)
The garage does not have a gutter system.
The sidewalk is cracked and heaved at the southeast corner of the step to the garage. It is cracked from the corner of the step to the east and is heaved by about $7 / 8$ of an inch. (Photo 60-35)

The sidewalk, east of the step, is separated from the step by about $7 / 8$ to $1 / 4$ of an inch. (Photo 60-36)

The caulk joint around the garage door has crazing cracks and is separating, especially along the right side. (Photos 60-37 and 60-38)

There is a crack in the garage floor below the left end of the doorway. It is about 2 and $1 / 4$ inches long and a hairline wide. The step is separated from the filoor by about $1 / 8$ of an inch. (Photo 60-39)

The window on the south has slight caulk cracks and a slight caulk separation.

ID photograph of the east side of the garage. (Photo 60-40)
The window on the east side has slight cracks and separations in the caulk and the trim has deteriorating paint. (Photo 60-41)

Most of the east foundation is covered and cannot be seen.
ID photograph of the north end of the garage. (Photo 60-42)
ID photograph of the west side of the garage. (Photo 60-43)
The fascia of the garage has deteriorating paint.
The north window on the west side has crazing cracks in the caulk seal along the sides. The caulk is also slightly separated, especially along the bottom. The trim has deteriorating paint. (Photo 60-44)

There is a vertical crack at about the middle of the west foundation. It is about a hairline wide and 9 inches long. (Photo 60-45)

The south window on the west side has slight cracks in the caulk joints and deteriorating paint. (Photo 60-46)

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There is a large spalled, deteriorating area in the foundation near the southwest corner. This area measures about 4 and $1 / 2$ inches high by about 19 inches wide. (Photo 60-47)

There is a vertical crack in the foundation, where the front step meets the foundation at the southwest corner. It measures about 8 inches long and $3 / 16$ of an inch wide. (Photo 60-48)

That completes the exterior inspection.
INTERIOR INSPECTION

## Garage

Starting in the south room.
South Room
Concrete floor.
Unfinished sheetrock walls and ceiling.
Windows on the south, east, and west walls.
Door on the north to the main area of the garage. Door on the south to the outside.

Photograph of the east wall. (Photo 60-49)
Photograph of the west wall. (Photo 60-50)
Photographs of the north wall. (Photos 60-51 and 60-52)
Photographs of the south wall. (Photos 60-53 and 60-54)
Photographs of the ceiling. (Photos 60-55 and 60-56)
The floor has a crack that runs eastward from the north part of the west wall. At the north cabinet, it turns southeastward and ends at the south wall to the lower left of the window. This crack is about $1 / 32$ of an inch wide. Series of photographs from west to east. (Photos 60-57 thru 60-61)

That crack has a hairline branch near the north door which runs southward to the south door. It measures about 92 and $1 / 2$ inches long. (Photos 60-62 thru 60-64)

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The first crack alsc has a hairline branch that runs to the east wall from the area across from the south window. This crack, measured on a straight line, is akout 8 feet long. (Photos 60-65 thru 60-68)

The previous crack a branch that runs northwestward to the cabinets. It measures about 47 iriches long. (Photos $60-69$ and 60-70)

The east crack branches near the east wall. The branch measures about 20 inches long and hairline in width. (Photo 60-71)

## Parking Area

Concrete floor.
Unfinished walls and ceiling.
Two overhead doors on the east wall.
Window on the west wall.
Photograph of the north wall. (Photo 60-72)
Photograph of the east wall. (Photo 60-73)
Photograph of the sputh wall. (Photo 60-74)
Photograph of the wast wall. (Photo 60-75)
The concrete floor has intersecting cracks.
The main crack runs from the south wall northward and intersects an east-west trending crack. The crack runs about 17 feet 10 inches from the south wall and it has a $Y$ at its south end. Series of photographs from south to north. (Photos 60-76 thru 60-80)

The east-west trending crack runs from the south overhead door to the west wall. (Photos 60-81 thru 60-84)

Both floor cracks range from about $1 / 32$ of an inch to a hairline in width.

At the east end of the floor, there is a slight crack below the south overhead door. The crack measures about 9 and $1 / 4$ inches long.

There appears to be a slight crack developing below the north overhead door. It is about 5 and $1 / 4$ inches long and about a hairline wide.

That completes the garage inspection.

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House
Utility Room
Photographs taken in the utility room turned out too dark to use and were retaken on 6-12-87.

This is the northeast room of the house.

Carpeted floor.
Wallpapered walls.
Textured plaster ceiling.
Windows on the north and east walls.
Closet in the southwest corner.
The closet enclosure and south walls have a brick pattern paneling.
Photograph of the west wall. (Photos 60-153 and 60-154)
Photographs of the south wall. (Photos 60-155 and 60-156)
Photographs of the east wall. (Photos 60-157 and 60-158)
Photograph of the north wall. (Photo 60-159)
Above the upper right of the entrance to the kitchen, on the west wall, there is a vertical tearing crack in the wallpaper. It measures about 11 and $3 / 4$ inches long and is about a hairline wide. (photo 60-160)

The ceiling has a slight stain around the vent at the north end of the ceiling. (Photo 60-161)

## Kitchen

Carpeted floor.
Textured plaster ceiling.
Sheetrock walls.
Tile cabinet area walls.
Windows on the north and west walls.
The upper north and east walls are papered above the cabinets.
Photograph of the north wall. (Photo 60-85)
Photograph of the east wall. (Photo 60-86)

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Photographs of the south wall. (Photos 60-87 and 60-88)
Photographs taken of the west wall turned out too dark to use and were retaken on 6-12-87.

Photographs of the west wall. (Photos 60-162 and 60-163)
The southwest corner contains the bathroam enclosure.
Entrance to the living room on the south wall.
At the east wall, to the upper left of the door to the utility room, there is a branching crack that measures about 4 inches horizontally and from about $1 / 16$ to $1 / 32$ of an inch wide. (Photo 60-89)

There is a very slight, horizontal crack at the upper right corner that is barely visible. It measures about 2 and $3 / 4$ inches long. (Photo 60-90)

There is a very slight crack, or tear, about 1 and $1 / 4$ inches long, where the north cabinet wall meets the west wall. (Photo 60-91)

The west window has a crack at a tape joint above the upper left end. It measures about 12 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. (Photo 60-92)

The tape seam is cracked below the middle of the window. It runs to the baseboard and measures about 21 inches long and about $1 / 32$ of an inch wide. (Photo 60-93)

Above the upper right: of the bathroom door, there is a vertical crack at a tape joint. It is an L-shaped crack about 12 inches long and about 1/32 of an inch wide. (Photo 60-94)

## Bathroom

Carpeted floor.
Tile lower walls.
Textured sheetrock upper walls.
Textured plaster ceilling.
Window on the west wall.
A photograph looking westward into the bathroom. (Photo 60-95)
There is a separation in the southwest corner that ranges from about $1 / 8$ of an inch to a hairline wide. (Photos 60-96 thru 60-98)

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There are three loose tiles at the lower southwest corner and one loose tile above the northwest corner of the tub. (Photo 60-99)

The caulk is deteriorating at the joint of the tile walls and the bathtub. (Photos 60-99 and 60-100)

At the lower northeast corner of the bathtub, there is a separation and about a $1 / 4$ of an inch wide crack in the caulk. (Photo 60-101)

There is a separation where the ceiling meets the south wall. (Photo 60-102)

There is a water stain in the ceiling and wall at the southwest corner. (Photos 60-96 and 60-103)

There is a slight crack to the lower left of the window. It is about 5 and $1 / 2$ inches long and fran about a hairline to $1 / 32$ of an inch wide.

It continues downward into the caulk joint about five tiles below the window. (Photos 60-104 and 60-105)

There are two slight cracks at the tape joint above the upper left end of the entrance. They range fran about $1 / 32$ of an inch to a hairline wide. (Photo 60-106)

At the upper right end of the door, a horizontal crack trends to the south wall. It is about 2 and $3 / 4$ inches long and from about $1 / 16$ to $1 / 32$ of an inch wide. (Photo 60-107)

The closet door on the south wall has two vertical hairline cracks above the upper right corner. The lengths are about 9 and 10 inches. (Photo 60-108)

Above the upper right of the closet door there is an apparent nail pop or patched area in the ceiling. (Photo 60-109)

## Living Room

Carpeted floor.
Paneled lower walls.
Papered upper walls.
Textured plaster ceiling.
Front entrance and a window on the east wall. Entrance to a bedroom on the west wall. Entrance to a small bedroom hallway on the south wall.

Photographs of the east wall. (Photos 60-110 and 60-111)

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Photograph of the north wall. (Photo 60-112)
Photograph of the west wall. (Photo 60-113)
Photographs of the scuth wall. (Photos 60-114 and 60-115)

## Entry Hall

Carpeted floor.
Sheetrock walls.
Textured plaster ceiling.
There is a horizontal seam crack to the upper left of the entry door. It measures about 6 and $1 / 2$ inches long. (Photo 60-116)

Above the upper right: corner of the entry door, there is a crack in the sheetrock that runs horizontally to the corner, then upward along the corner to the ceiling. It measures about 16 inches on the diagonal and is fram about $1 / 16$ of: an inch to a hairline wide. (Photo 60-117)

North Bedroom
Paneled north wall.
Papered other walls.
Carpeted floor.
Textured plaster ceiling.
Closet door on the south wall. Window on the west wall.
Photograph of the north wall. (Photo 60-118)
Photographs of the east wall. (Photos 60-119 and 60-120)
Photographs of the south wall. (Photos 60-121 and 60-122)
Photographs of the west wall. (Photos 60-123 and 60-124)
The middle section of paneling on the north wall is loose at the ends. (Photo 60-125)

Bedroom Hallway
Carpeted floor.
Sheetrock walls.
Textured plaster ceiling.
Doors to bedrooms on the west and south walls.

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A photograph looking southward into the hallway. (Photo 60-126)
Above the upper right: corner of the west door, there are two vertical cracks at the tape joint. One measures about 4 inches and the other about 6 inches. These range from hairline to about $1 / 32$ of an inch wide. (Photo 60-127)

The east wall, below the entrance to to the living room, has a slight horizontal crack. It: is about 1 and $1 / 2$ inches long. (Photo 60-128)

## East Bedroon

Carpeted floor.
Sheetrock walls.
Textured plaster ceiling.
Windows on the south and east walls. Closet door on the north wall.
Photograph of the east wall. (Photo 60-129)
Photographs of the north wall. (Photos 60-130 and 60-131)
Photograph of the west wall. (Photo 60-132)
Photographs of the south wall. (Photos 60-133 and 60-134)
Between the entry door and the closet door, there is a horizontal crack. It is about 11 and $3 / 8$ inches long and about $1 / 16$ of an inch wide. (Photo 60-135)

Below the lower left end of the east window, there is a slight vertical crack. It is about $\sigma$ inches long. (Photo 60-136)

There is a cracked seam below the lower right corner of the east window that runs to the floor. It is about $1 / 32$ of an inch wide and 31 and $1 / 4$ inches long. (Photo 60-137)

There is a split in the southeast corner that runs from the ceiling to the floor. (Photos 60-138 and 60-139)

There is a long diagonal crack trending from the lower left corner of the east, south window. It measures about 30 inches long and is a rough tearing crack, ranging from a hairline to about $1 / 32$ of an inch wide. (Photo 60-140)

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## South Bedroan

Carpeted floor.
Sheetrock walls.
Textured plaster ceiling.
Windows on the south and west walls. Closet door on the north wall.
Photograph of the west wall. (Photo 60-141)
Photograph of the south wall. (Photo 60-142)
Photographs of the east wall. (Photos 60-143 and 60-144)
Photograph of the north wall. (Photo 60-145)
There is a large diagonal crack above the upper right corner of the closet door. This crack measures about 28 inches long and from a hairline to about $1 / 16$ of an inch in width. (Photo 60-146)

There is a roughly diagonal crack above the upper right of the entry door. This crack appears to have been painted over. It measures about 13 inches long. (Photo 60-147)

There is a peeling tape joint in the southeast corner at about the middle of the wall. (Photo 60-148)

The tape joint in the southwest corner is also peeling a few feet below the ceiling. (Photo 60-149)

Above the upper left corner of the west window, there is a vertical crack that runs to the ceiling. It is about 13 and $1 / 2$ inches long and $1 / 32$ of an inch in width. (Photo 60-150)

There is a slight water stain and a crack in the ceiling at the southeast corner of the south vent. The crack is a hairline wide and about 1 and $3 / 4$ inches in length. There is also a slight stain along the east side of the vent. (Photo 60-151)

There is same peeling paint in the upper northwest corner on the north wall. (Photo 60-152)

## General Comments

This house lacks a gutter-downspout system to drain rainwater away from the foundation and sides of the house.

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The roof of the original part of the house has deteriorating shingles. parts of the roof have been replaced. Several shingles are missing.

The concrete foundation has several cracks, apparently the result of set tlement.

The interior has numerous cracks in the sheetrock walls, many of which have occurred at seans. The major cracks were found in the two southern bedroans.

The garage also lackss a gutter-downspout system. A few cracks were found in the foundation and concrete floor.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC. fienetopelei de. tenctiolf
Christopher D. Landoll Technical Associate
$\mathrm{CDL} / \mathrm{kg}$
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## $60-43$

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PREB-bLAS'I SURVEY, RESIDENTILAL
I. Baslc Information

1. Naus of Resldent: Roberta Lilliston
2. Date: 11-22-86 TLue: $1: 45 \mathrm{pm}$
3. Address: Box 126 Amoret, Mo. 64722/Present Address: Rt. 4 Box 107 Independence, Mo.
4. Location: Lots 1-4 Blook 12
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: February 1976 to Present
7. Dates of any temporary or permanent abandonent: Vacant 2 years before February 1976
LI. Information Concernhig Bulldings
(repeat for addithomil bulldhags)
8. Date of orlginal construction: About 1974
9. Date(s) of major remodeling or addlcions:
(a) Garage 1976
(b) Detached Garage 1976
(c) $\qquad$
10. Construction of juilding:
(a) framLng (Jolsts, rafters, and stud walls): Not known
(b) Luterlor walls:Sheetrock
(c) roof: Composition shingle
(d) footings; Eoundatlons: Foundation (concrete, block, and rock) Footing-Unknown
(e) basenent walls (Indicate how keyed to footing of floor): Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed building: Jack Sanz
(h) size and direction of any large windows:

None
III. Enviromental Infornation

1. Approximate elevation of area:

837 feet
2. Type of soll in area:

Silty clay loam.
3. Type of subgrade drainage at base of Eoundation: Not known.
4. Water wells utilized (indicate depth"and use): Yes, not used.
5. Clsterns or surface water storage utilized: (Lndicate purpose and approximate volume).

No.
6. Source of water, le not Lacluded above:

City water.
7. Eve troughs or any other exterior dralnage features: Yes.
8. Description of general grading or landscaplig Ln vicinfty:

Generally flat.
IV. Any notable extsting deterioration or danage

1. Cracks in incerlor walls: See survey.
2. Receding of doors, windurs: See survey.
3. Noticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls See survey.
8. North
9. South
10. East
11. West
VII. Comments of supplementary drawlngs

See survey.
VIII. Discussion or specilic comments concerning any unusual Eeatures, construction technlques, or status of deterioration, that, because of the nature of thelr construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to nomal blasting activities.
See survey.

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SUBJECT: INSPECTION OF THE ROBERTA LILLESTON RESIDENCE BOX 126 AMORET, MISSOURI 64722 NOVEMBER 22, 1986
TO: THE PITTSBURG AND MIDWAY COAL MINING COMPANY P. O. BOX 8 AMSTERDAM, MISSOURI 64723
Attention: Mr. Mark Premo

BY: WHITE INDUSTRIAL SEISMOLOGY, INC. 2431 RANGELINE ROAD, SUITE A/B
P. O. BOX 1256

JOPLIN, MISSOURI 64801

December 4, 1986
Report No. 87056-95
P \& M Map Photo No. 129

Subject: | Inspection of the Roberta Lilleston Residence |
| :--- |
| P. O. Box 126 |
| Amoret, Missouri 64722 |
| November 22, 1986 |

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
| P. O. Box 8 |
| Amsterdam, Missouri 64723 |

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the front, east side of the house. (Photos 95-1 and 95-2)

The front driveway has extensive cracks. The cracks range from about $3 / 8$ to $1 / 8$ of an inch wide. (Photos $95-3$ and $95-4$ )

The west section of the driveway has an east-west trending crack that measures about 66 inches total. The crack runs vertically through the slab below the grate. This crack ranges from about $3 / 16$ to $1 / 8$ of an inch wide. (Photos 95-5 thru 95-7)

There is also some cracking in the driveway just outside the overhead garage door. (Photo 95-8)

A crack runs eastward from the northeast corner of the garage to the end of the slab. It is about 66 inches long and averages about $1 / 8$ of an inch wide. (Photos 95-9 and 95-10)

Another crack runs fi:om the northeast corner of the grate, eastward to the expansion joint. It measures 27 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Pnoto 95-11)

A section of the soffit is sagging above the north door of the garage. It appears to be water damaged. (Photo 95-12)

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There is a crack in the front sidewalk just south of the front patio. It measures about 5 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 95-13)

There is a crack along the juncture of the front patio and sidewalk that ranges from about $1 / 3$ to $1 / 16$ of an inch wide. (Photo 95-14)

The south section of the front patio is spalling at its north end. The major spall is about 4 and $1 / 2$ inches wide and is located at the west end. (Photo 95-15)

There are numerous hairline crazing cracks in the south greenish colored section of the patio. (Photo 95-16)

The third section of the patio slab from the south has a $T$-shaped crack. The north-south part is about 38 and $1 / 4$ inches long and about 1/16 of an inch wide. (Photo 95-17)

The east-west part of the $T$ branches onto the north section of the patio. The total length of this crack is about 86 inches. It is from about $3 / 16$ to $1 / 16$ of an inch in width. It is also visible running through the east edge of the slab which is about 2 and $1 / 2$ inches. (Photos 95-18 thru 95-20)

The north section of the patio has crazing hairline cracks. They appear in a whitish outline. (Photo 95-2l)

There is a crack in the concrete area below the lower left end of the north front window. It measures about 6 inches long and $1 / 16$ of an inch wide. (Photo 95-22)

The north end of the front foundation has a concrete cover applied. There are a number of cracks in this area. The major crack is vertical, located to the lower right of the window, and is about $1 / 4$ of an inch wide. Other cracks in this area are about $1 / 16$ of an inch wide. (Photos 95-23 and 95-24)

The front inner windows have deteriorating caulk joints. First showing the lower north window. (Photo 95-25)

The two windows to the south have the same condition. The lower areas are most severe. (Photos 95-26 and 95-27)

The front door is ve:y difficult to open from the outside and the front storm door is uneven. (Photo 95-28)

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The window, south of the door, has deteriorating caulk at the bottan and some plastic has been placed in a gap at the bottom of the storm window. (Photo 95-29)

The downspout at the northeast corner of the garage drains into the grate in front of the garage door. The grate drains at its south end.

The southeast downspout lacks a curved tip and empties to a piece of rubber that serves as a splash block. (Photo 95-30)

ID photograph of the south side of the house. (Photo 95-31)
The siding at the lower east end of the south side is deteriorating and has paint peeling.

There are separations at the east end of the south side between the fascia and soffit. (Photo 95-32)

The east window has severe deterioration of the caulk joints, mainly at the lower horizontal joint. (Photo 95-33)

The west window on this side also has deteriorating caulk joints. (Photo 95-34)

ID photographs of the west side of the house. (Photos 95-35 and 95-36)
The roof and fascia appear to sag sanewhat at the south end of the west side where the garage attaches to the house.

The screen door on the west side is uneven in its space. It slopes somewhat to the south.

At the concrete block foundation, just north of the garage, the south vertical mortar joint has a slight vertical crack. It is about a 5 inch long hairline crack. (Photo 95-37)

Another mortar joint, located to the lower right of the south window, has a 7 inch long slight separation. (Photo 95-38)

At the north end of the block portion of the foundation, there is a large stairstepping crack. The maximum width is about $1 / 2$ an inch. The total length fram end to end is about 17 inches. (Photo 95-39)

The north part of the foundation is sandstone.
At the south end of the stone foundation, there is about a one inch wide vertical separation. (Photo 95-40)

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The stone part of the foundation has extensive mortar cracks. Series of photographs fran south to north. (Photos 95-41 thru 95-48)

The major crack in this area is located near the north end and is about $3 / 8$ of an inch wide. There are numerous hairline cracks in the mortar.

The south window has deteriorating caulk joints at the inner window.

The two northern west: windows are covered with plastic and cannot be seen well enough to cletermine their condition.

There is a small brick structure on the west side of the house that is probably an old cistern.

ID photograph of the top. It has a couple of cracks in the top mortar, and one piece of mort:ar on the east side is loose. (Photo 95-49)

ID photograph of the north end of the house. (Photo 95-50)
The north end has a concrete foundation.

There is a spall between the window and the west end of the north foundation. It is akout 5 inches wide by 2 and $1 / 2$ inches high. (Photo 95-51)

There is a hairline vertical crack in the foundation near the pole. It measures about 4 and 1/4 inches long. (Photo 95-52)

The north windows are covered with plastic and there is a lot of condensation making i.t difficult to see the inner windows.

The northeast downspout lacks a splash block and empties close to the foundation. (Photo 95-53)

Well
West of the house, there is an old well that is covered with a concrete slab.

ID photograph of the concrete cover from the west. (Photo 95-54)
A crack goes through the slab, trending east-west. It ranges from a hairline at the east end to about $1 / 32$ of an inch wide. (Photos 95-54 and 95-55)

Looking down into the hole, it is a brick lined well and the water level is within about 3 feet of the ground surface.

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There is a garage located southwest of the house.
Detached Garage
ID photograph of the north side. (Photo 95-56)
It has a leanto shed at the south side.
ID photograph of the east, front side. (Photo 95-57)
The lower siding is deteriorating on the east side and one of the panels of the overhead door is damaged. There is also some separation at the bottan of the door. (Photo 95-58)

ID photograph of the west end. (Photo 95-59)
ID photograph of the south side. (Photo 95-60)
The garage has a concrete foundation and it lacks a gutter system.
There is a large vertical crack at the north end of the west foundation. It measures about 8 inches vertically and about $1 / 4$ of an inch wide. (Photo 95-61)

Most of the west foundation cannot be seen.
There is a crack in the siding to the lower left of the southwest window.

Most of the north foundation cannot be seen either.

The lower ends of the siding are deteriorating on the north side of the garage.

There is a crack and spall in the foundation below the north door. It is about 3 inches high and is about 4 inches at the widest. (Photo 95-62)

ID photograph looking westward into the leanto, showing the rest of the south side of the garage. (Photo 95-63)

INTERIOR INSPECIION

Detached Garage
Concrete floor.
Unfinished walls and ceiling.

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Photograph of the east wall. (Photo 95-64)
There are extensive water stains on the overhead door and east wall.
Photograph of the sJuth wall. (Photo 95-65)
Photographs of the west wall which also has water stains. (Photos 95-66 and 95-67)

Photographs of the north wall. It also has extensive water stains. (Photos 95-68 and 95-69)

The concrete floor has extensive cracking.
The main crack runs east-west across the floor. It has two branches that run to the north wall. Another branch runs to the south wall and connects with smaller branches.

In the southeast corner of the floor, a crack runs from the south wall to the east wall, under the door. (Photo 95-70)

Series of photographs of floor cracks. (Photos 95-70 thru 95-76)
The floor cracks range from about $5 / 8$ of an inch wide down to $1 / 8$ of an inch. The widest floor crack is in the northwest corner. There is a lot of dirt on the floor at the east end.

The north foundation wall, to the lower right of the west window, has a crack all the way through it. It measures about $1 / 4$ of an inch wide. (Photo 95-77)

There is another foundation crack just west of the north door. It is about 4 inches long and about $1 / 8$ of an inch wide. (Photo 95-78)

Light can be seen through a hole in the north door. (Photo 95-79)
The south foundation wall has a vertical crack all the way through. It measures 4 and $1 / 4$ inches along the top and north edge and about $5 / 8$ of an inch wide. (Photo 95-80)

There is a separation in the southwest corner of the foundation that is about 3 inches long and 1/4 of an inch wide. (Photo 95-81)

That completes the detached garage inspection.

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## Garage

Concrete floor.
Sheetrock ceiling and walls except part of the north wall is an exterior type siding.

Two windows on the south wall. A door on the west wall. A door on the north wall to the kitchen.

Photograph of the west wall. (Photo 95-82)
Photographs of the north wall. (Photos 95-83 and 95-84)
Photograph of the east wall. (Photo 95-85)
Photographs of the sכuth wall. (Photos 95-86 and 95-87)
There is a shower enclosure in the northwest corner.
The tape joints are visible in the ceiling.
There is a drain at about the middle of the western third of the floor.
Starting at the east end of the floor. There is a faint hairline crack that runs from the south wall, northward, intersects an east-west trending crack, and continues northward for about 31 inches and then branches. (Photos 95-88 thru 95-92)

One east branch runs northeastward about 24 inches and ranges from a hairline to about $1 / 16$ of an inch wide. (Photo 95-93)

The west branch runs northwestward about 50 inches and is about $1 / 16$ of an inch wide. (Photos 95-94 and 95-95)

The east-west trending crack runs about 69 and $1 / 2$ inches westward and then Y's. (Photos 95-96 and 95-97)

The two branches of the $Y$ are connected by about a 20 inch long hairline crack. (Photo 95-98)

The south branch of the $Y$ runs about 29 and $1 / 2$ inches and intersects another crack. (Photo 95-99)

The north brach of the $Y$ runs about 46 and $1 / 2$ inches and intersects a wider crack that runis from the step at the north wall to the south wall. It is from about $1 / 32$ to $1 / 16$ of an inch wide. (Photos 95-100 thru 95-102)

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Near the south wall, the crack branches eastward about $2 l$ inches. The branch then Y's. One branch of the $Y$ runs to the south wall about 51 inches and one branch of the $Y$ runs to the east-west trending crack about 36 inches. (Photos 95-103 thru 95-105)

Another crack runs westward to the drain about 89 inches and continues west of the drain about 49 inches and intersects another crack. It is about $1 / 16$ of an inch wide. (Photos 95-106 thru 95-108)

This north-south trending crack runs from the north wall, crosses the previous crack, and then runs southwesterly to a point underneath the barbecue. Measured on a straight line, it runs 71 inches from its south end to its intersecting point. It ranges from about $1 / 16$ of an inch to a hairline wide. (Photos 95-109, 95-110, 95-112 and 95-113)

The north-south crack has a hairline branch near the barbecue that runs southward about 24 and 1/2 inches. (Photo 95-111)

The east-west trending crack continues westward about 57 inches underneath a piece of carpet near the shower. (Photos 95-114 and 95-115)

Now back to the east-west crack, east of the drain. It has two hairline branches that runs southward. One disappears underneath the west end of the freezer and the other disappears under about the middle of the freezer. Forty-two inches are visible of the west crack and 44 inches are visible of the east crack. (Photos 95-116 and 95-117)

There is same paint cracking above the overhead door on the east wall. (Photos 95-118 and 95-119)

## Kitchen

Vinyl floor.
Paneled lower walls.
Textured plaster upper walls.
Blown on plaster ceiling.
Front door and a window on the east wall. Entrance to the living room on the north wall.

Photographs of the east wall. (Photos 95-120 and 95-121)
Photograph of the north wall. (Photo 95-122)
Photographs of the west wall. (Photos 95-123 and 95-124)
Photograph of the south wall. (Photo 95-125)

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To the upper left of the front door, there is a horizontal crack that is about 5 and $3 / 4$ inches long and from about $1 / 16$ of an inch to a hairline wide. (Photo 95-126)

Above the upper right corner, there is a large crack that measures about 16 and $1 / 2$ inches on the diagonal and from a hairline at the top to about $3 / 16$ of an inch wide at the bottom. (Photo 95-127)

There is a slight crack in the southwest corner. (Photo 95-128)
Above the east window, there is a slightly peeling tape joint. (Photo 95-129)

## Living Room

Carpeted floor.
Paneled lower walls.
Textured plaster upper walls.
Blown on plaster ceiling.
Two windows on the east wall. Window on the north wall. Door on the east wall. Three entrances on the west wall.

Photograph of the north wall. (Photo 95-130)
Photographs of the west wall. (Photos 95-131 and 95-132)
Photograph of the south wal.l. (Photo 95-133)
Photographs of the east wall. (Photos 95-134 and 95-135)
There is a horizontal plaster crack running from the left side of the northeast window to the north wall. It is probably at a seam of sheetrock. It is about 29 and $1 / 4$ inches long and about a hairline wide. (Photo 95-136)

North Bedroom
Carpeted floor.
Textured plaster walls.
Blown on plaster ceiling.
Windows on the north and west walls.
Closet enclosure in the northeast corner.
Photograph of the west wall. (Photo 95-137)

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Photographs of the north wall. (Photos 95-138 and 95-139)
Photographs of the east wall. (Photos 95-140 and 95-141)
Photographs of the south wall. (Photos 95-142 and 95-143)
There is a horizontal tape joint that has bulged, slightly cracking the plaster. This is about 4 feet above the floor, at the west end of the north wall. It mea:sures about 13 inches long. (Photo 95-144)

There is a hairline crack along the northwest corner.
Middle Bedroom
Carpeted floor.
Textured plaster wa:lls.
Blown on plaster ceiling.
Window on the west wall.
Photograph of the west wall. (Photo 95-145)
Photographs of the north wall. (Photos 95-146 and 95-147)
Photographs of the east wall. (Photos 95-148 and 95-149)
Photographs of the ;30uth wall. (Photos 95-150 and 95-151)
The south wall has a slight horizontal split at a tape joint. This crack starts about 71 and $1 / 2$ inches from the east wall and runs 72 and $1 / 2$ inches to the west. It is a hairline crack in the plaster. (Photo 95-152)

This crack is intermittent and is visible in a couple of other areas. There are a couple of about 2 inch long extensions of the crack and about a 17 inch long extension near the west wall. (Photo 95-153)

There is a very slight split located about 5 feet above the floor in the southwest corner. .It is about 2 and $1 / 4$ inches long. (Photo 95-154)

There is another intermittent, hairline horizontal crack in the plaster at a tape joint on the north wall. There are three visible parts of this crack within about 3 feet of the west wall. (Photo 95-155)

There is a larger crack at the east end of the north wall that is about 4 feet 7 inches lony measured from the east wall. (Photo 95-156)

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White Industrial Seismology, Inc.
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Bedroom Hallway
This is a small room at the southwest corner of the living room.
Carpeted floor.
Textured plaster walls.
Blown on plaster ceiling.
Door to the bathroom on the west wall.
Bathroom
Vinyl floor.
Papered walls.
Blown on plaster ceiling.
Formica bathtub area walls.
Window on the west wall.
Photograph of the west wall. (Photo 95-157)
Photograph of the north wall. (Photo 95-158)
Photograph of the east wall. (Photo 95-159)
South Bedroom
Carpeted floor.
Lightly textured sheetrock walls.
Blown on plaster ceiling.
Photographs of the west wall. (Photos 95-160 and 95-161)
Photograph of the north wall. (Photo 95-162)
Photographs of the east wall. (Photos 95-163 and 95-164)
Closet enclosure in northwest corner.
There is a hairline crack along the southwest corner. (Photos 95-165
and 95-166)
There is a slight horizontal crack at a tape joint located at the south
end of the east wall. It measures about }8\mathrm{ inches and is a hairline
wide. This crack is intermittent and picks up again above the dresser
and is present for about }69\mathrm{ inches to the north. It ends just north of
the middle of the east wall and is barely visible. (Photo 95-167)
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There is a slight stain or discoloration in the ceiling trending north from the south wall"

Above the upper right of the entry door, there is a slight horizontal crack that measures about 4 and $1 / 2$ inches long and is just wider than a hairline.

## General Comments

This is a relatively new house, built around 1974.
The foundation consists of sandstone, concrete block, and concrete. Several cracks were found in the foundation, mainly mortar cracks.

The house has a gutter-downspout system, except on the back, west side. Same of the downspouts empty close to the foundation.

The driveway is extensively cracked as are the garage floors.
The interior sheetrock walls were found to have several cracks, mostly at seams of the sheetrock.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 167 Photographs
l- COPY FROM P \& M's TOWN OF AMORET MAPLOCATION NO. 129
2- SUMMARY FORM
3- SKETCH OF STRUCTURE




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## $95-31$



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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: James and Dorris Mitchel_
2. Date: October 25, 1986 Time: $10: 45 \mathrm{AM}$
3. Address: Box 198, Amoret, Missouri 64722
4. Location: Lots 5, 6, 7, and 8 Block 12
5. Telephone Number:__(816) 925-3354
6. Daces of occupancy by current resident: 1977-Present
7. Dates of any temporary or permanent abandonnent:House was empty for l-2 years before Mitchells moved in
II. Information Concerning Buildings
(repeat for additj.onal buildings)
8. Date of original construction: 60-70 years ago
9. Date(s) of major remodeling or additions:
(a)

None
(b)
(c) $\qquad$
3. Construction of building:
(a) framing (joists, rafters, and stud walls): Not known by resident
(b) interior walls:Sheetrock
(c) roof:Comqosition shingles
(d) footings; foundations: Concrete block and concrete foundation footingnot known
(e) basement walls (indicate how keyed to footing of floor):

Not arplicable
(f) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building:Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

840 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known by resident
4. Water wells utilized (indicate depth and use): Well filled in
5. Cisterns or surface water storage utilized: (Indicate purpose and approxinate volume). Used for septic tank
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: No .
8. Descripcion of general grading or landscaping in vicinity: generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of dours, windurs: See survey
3. Noticeable sett: Lement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings
VI. Elevation views or photographs of walls
8. North See survey
2.* South See survey
9. East See survey
10. West See survey

VIL. Comments or supplamentary drawlngs See survey
VIII. Discussion or speriEic comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response ro normal blasting activities.

See survey

October 31, 1986<br>Report No. 87056-38<br>P \& M Map Photo No. 127<br>Subject: Inspection of the James and Doris Mitchell Residence Box 198<br>Amoret, Missouri 64722<br>October 25 and December 12, 1986<br>To: The Pittsburg and Midway Coal Mining Company P. O. Box 8<br>Amsterdam, Missouri 64723<br>Attention: Mr. James A. Borders<br>Transcribed and edited from taped field notes.

INTERIOR INSPECTION

## Living Room

This is the southeast room of the house.

Carpeted floor over hardwood.
White painted sheetrock walls and ceiling.
Two windows on the south wall.
Three doorways on the north wall to bedrooms.
Kitchen door on the west wall.
Photograph of the east wall. (Photo 38-1)
Photographs of the south wall. (Photos 38-2 thru 38-4)
Photograph of the west wall. (Photo 38-5)
Photographs of the rorth wall. (Photos 38-6 thru 38-8)
Two photographs of the ceiling. (Photos 38-9 and 38-10)
Starting on the west wall.
There is a vertical crack above each corner of the kitchen doorway.

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Both cracks are at tape joints and are about $1 / 32$ of an inch to a hairline in width and run from the top of the doorway to the ceiling which is about 14 and $1 / 2$ inches. (Photos 38-11 and 38-12)

Now on the south wall.
The west window on the south wall has a crack above the upper right corner. It is about $1 / 32$ of an inch wide and 9 and $1 / 2$ inches long. (Photo 38-13)

There is a smaller crack at a bulging tape joint above the upper left corner. It is about a hairline in width and 9 and $1 / 2$ inches long. (Photo 38-14)

There is a diagonal crack above the upper right corner of the entrance doorway. It is about $1 / 32$ of an inch wide and about 11 inches long. (Photo 38-15)

Above the upper left corner of the door, there is a crack, 13 and $3 / 4$ inches long and just larger than a hairline. (Photo 38-16)

This doorway lacks casing at this time. (Photos 38-17 and 38-18)
There is a crack above the upper left corner of the east window on the south wall. It is just under $1 / 32$ of an inch wide and about 9 and $5 / 8$ inches long. (Photo 38-19)

There is also a crack: above the upper right corner. It is just under $1 / 32$ of an inch wide and about 10 inches long. (Photo 38-20)

There is a vertical crack below the lower right corner of this window. It runs to the base molding about 15 and $1 / 2$ inches. (Photo 38-21)

There is a chair in the way and I cannot see below the lower left corner of this window.

The window on the east wall has a slight vertical crack above the upper left corner. It is about 9 inches long. (Photo 38-22)

This window has an air conditioner and the trim at the base of the window appears to be somewhat loose. (Photo 38-23)

There is crack at a seam and an area of wallpaper missing below the left end of this window. The crack is about $1 / 16$ of an inch wide and runs from the window to the base molding. (Photo 38-23)

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There is a crack and peeling paint below the lower right corner of the window. (Photo 38-24)

The east doorway on the north wall has a crack above the upper right corner that is about 7 and $1 / 8$ inches long. (Photo 38-25)

There is a larger, diagonal crack, above the upper left corner. It is about $1 / 16$ of an inch wide and 15 inches long. (Photo 38-26)

That crack has a bulging branch which connects with a ceiling crack that runs above the doorway. (Photo 38-27)

The ceiling crack trends east-west and is about $1 / 32$ of an inch wide. (Photo 38-28)

An extension of the ceiling crack comes down about 3 and $3 / 4$ inches above the right end of the door. It is about $1 / 32$ of an inch to a hairline in width. (Photo 38-29)

There is a slight vertical crack about 20 inches long on the lower north wall, just west of the heater. (Photo 38-30)

There is a large vertical crack above the upper right of the middle north doorway. It is about $1 / 16$ of an inch wide and 13 and $1 / 2$ inches long. (Photo 38-31)

There is another vertical crack above the upper left part of this doorway. It is about: $1 / 16$ of an inch wide and 13 and $1 / 2$ inches long. (Photo 38-32)

This crack is near a north-south trending tape joint in the ceiling that has a very slight hai.rline crack.

There is a vertical crack above the west door on the north wall. It is just wider than a hairline and is about 12 and $1 / 2$ inches long. (Photo 38-33)

There is a hairline vertical crack about 6 inches long above the upper left corner of that door. (Photo 38-34)

The ceiling has some hairline cracks at the tape joints, north-south and east-west trending.

There are also some very slight hairline cracks in the ceiling just north of the entrance doorway. (Photo 38-35)

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There is a hairline ceiling crack, east-west trending, about 20 and $1 / 4$ inches long located about 3 or 4 feet north of the doorway. (Photo 38-36)

Another hairline crack trends parallel to this crack just to the north. It is 13 and $3 / 4$ inches long. (Photo 38-37)

These slight ceiling cracks are very hard to see.
There are some nail heads showing east of the light fixture at about the middle of the ceiling. (Photos 38-38 and 38-39)

There is also a slightly larger ceiling crack, east-west trending, located east of the light fixture. It is about 52 and $1 / 2$ inches long. (Photos 38-40 and 38-41)

There is a slight crack about 11 and $1 / 2$ inches long between a couple of nail heads showing in that area. (Photo 38-42)

## East Bedroom

Carpet over hardwood floor. Green painted sheetrock walls. Lightly textured sheetrock ceiling.

Windows on north and east walls.
Closet enclosure in the southwest corner.
Photograph of the ncrth wall. (Photo 38-43)
Photographs of the east wall. (Photos 38-44 thru 38-46)
Photographs of the south wall. (Photos 38-47 and 38-48)
Photographs of the west wall. (Photos 38-49 and 38-50)
Photographs of the ceiling. (Photos 38-51 thru 38-53)
The east wall 'window has a crack above each upper corner. Both cracks are just wider than a hairline and run from the top of the window to the ceiling. (Photos 38-54 and 38-55)

A crack runs from the lower left corner of the window to the baseboard 14 and $1 / 2$ inches ard is about $1 / 32$ of an inch wide. (Photo 38-56)

The lower inner pane of this window has two cracks at the upper left corner. (Photo 38-57)

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A vertical crack belo'w the lower right corner runs from the baseboard to the window. (Photo 33-58)

There is a faint vertical crack at a seam on the lower east wall between the window and the north wall. It is 36 and $3 / 4$ inches long and is about a hairline to a little larger in width. (Photos 38-59 and 38-60)

There is a vertical crack in the northeast corner that is about $1 / 32$ of an inch wide. (Photos 38-61 and 38-62)

There is a large crack above the upper left end of the north window that runs to the ceiling. It is about $1 / 8$ of an inch at the widest. (Photo 38-63)

There is a separation at the ceiling and north wall intersection, just west of the window. It is about $1 / 16$ of an inch at the widest. (Photos 38-64 and 38-65)

There is a slight crack in the northwest corner that runs onto the west wall in a couple of places. It is about $1 / 16$ of an inch wide. (Photos 38-66 thru 38-68)

There is a vertical crack on the south part of the west wall that runs the length of the wall at a seam of the sheetrock. It is just wider than a hairline. (Photos 38-69 thru 38-71)

The west part of the ceiling has a north-south trending crack at a tape joint. It runs from the north wall to the south wall and has a slight intersecting crack at the north end. (Photos $38-72$ thru 38-74)

The ceiling also has an east-west trending crack at a tape joint near the light fixture. The east part of the crack is 58 inches long and the west part is 42 inches long. (Photos $38-75$ thru $38-78$ )

There is a slight east-west trending ceiling crack near the closet door in the southwest correr. It connects with the main north-south trending ceiling crack. (Photo 38-79)

There is a large separation above each corner of the entrance door.
The separation above the right end is about $1 / 8$ of an inch wide and continues across the joint with the ceiling. (Photos $38-80$ and $38-81$ )

The crack above the upper left end of the doorway also continues along the ceiling, south wall intersection. (Photos 38-82 and 38-83)

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## Middle Bedroom

Blue painted sheetrock walls.
White painted ceiling.
Rug over hardwood floor.
Closet enclosure in the southeast corner.
Window on the north wall.
Photograph of the north wall. (Photo 38-84)
Photographs of the east wall. (Photos 38-85 and 38-86)
Photographs of the scuth wall. (Photos 38-87 thru 38-89)
Photographs of the west wall. (Photos 38-90 thru 38-92)
There is a roughly vertical crack above the upper right corner of the window. It is about $1 / 32$ of an inch wide. (Photo 38-93)

The area below the lower left end of the window cannot be seen. A lot of the wall areas carnot be seen due to stored clothing and toys.

There is an L-shaped crack above the upper left corner of the doorway. It ranges in width from $1 / 16$ of an inch to a hairline. (Photo 38-94)

There is also a smaller crack at the upper left corner. (Photo 38-95)
There is a vertical crack above the upper right corner of the closet door. (Photo 38-96)

There is a slight separation where the north wall of the closet enclosure meets the east wall. (Photo 38-97)

The ceiling has several nail indentations and you can see the tape joints. The joints do not appear to be cracked, however, these tape joints are likely areas for cracks to develop.

West Bedroom
Carpeted floor.
Blue painted sheetrock walls.
White painted sheetrock ceiling.
Closet enclosure in the southwest corner.
Window on the north wall.

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Photograph of the north wall. (Photo 38-98)
Photographs of the west wall. (Photos 38-99 and 38-100)
Photographs of the east wall. (Photos 38-101 thru 38-103)
Photographs of the south wall. (Photos 38-104 and 38-105)
The closet door has a bent piece of trim at the upper right end. (Photo 38-106)

Two photographs of the ceiling, first looking north and then looking south. (Photos 38-107 and 38-108)

The north window has a crack above each upper corner.
The crack above the upper right corner is about $1 / 32$ of an inch wide and runs to the ceiling. (Photo 38-109)

The crack above the upper left corner is about a hairline wide and 5 inches long. (Photo 38-110)

There is a vertical crack below the lower right corner of the window. It is just wider than a hairline and runs to the baseboard. (Photo 38-111)

There is a vertical rrack which runs to the baseboard below the lower left corner of the window. It is behind the dresser and we were unable to get a measurement. (Photo 38-112)

The west wall has a vertical row of nail pops just north of the closet. (Photo 38-113)

There are also a few nail pops to the upper left of the dresser on the west wall. (Photo 38-114)

The tape joints are visible in the ceiling, as is a row of nail indentations in a north-south line located just north of the closet.

There is a vertical crack above the upper left of the doorway in the upper southeast corner. It is about $1 / 32$ of an inch wide. (Photo 38-115)

There is about a $1 / 4$ inch gap along the left side of the doorway where the lower piece of molding is missing. (Photo 38-116)

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There is a very slight crack about an inch long and a hairline wide and a longer bulge above the upper right corner of the doorway. (Photo 38-117)

## Kitchen

Vinyl floor.
Sheetrock walls and ceiling.
There is some wallpaper on the west wall above the cabinets.
Windows on the south and west walls.
The north wall of the room has a door to the outside.
The bathroom enclosure is in the northeast corner.
Photographs of the north wall. (Photos 38-118 and 38-119)
Photographs of the east wall. (Photos 38-120 thru 38-122)
Photograph of the south wall. (Photo 38-123)
Photographs of the west wall. (Photos 38-124 thru 38-126)
Photographs of the ceiling. (Photos 38-127 and 38-128)
The north wall of the kitchen has an area of plywood to the lower right of the door.

There is not any casing around the north door at this time.
Starting on the east wall.
There are two cracks above the upper right end of the door. The larger crack is about $1 / 16$ of an inch wide. (Photo 38-129)

The crack above the upper right corner is about 11 inches long. (Photo 38-130)

The larger crack connects with an east-west trending ceiling crack at a tape joint. It is 70 and $1 / 2$ inches long and just wider than a hairline. That ceiling crack can be expected to increase in length with time. (Photos 38-131 and 38-132)

There is a slight crack above the upper left corner of the east doorway. (Photo 38-133)

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There is a horizontal separation behind the refrigerator on the bathroom enclosure wall. It is about $3 / 16$ of an inch wide. (Photo 38-134)

At the lower, outer corner of the bathroom enclosure, there is a vertical crack and the base molding is misaligned. The crack is 12 and $1 / 2$ inches long and about $1 / 8$ of an inch to a hairline in width. (Photos 38-135 and 38-136)

There is also a small hole at the southwest corner of the bathroom enclosure.

There is a hole to the upper right of the bathroom door. (Photo 38-137)
There is a slight vertical crack at a joint above the upper right corner of the bathroom door. (Photo 38-137)

There is also a slight vertical crack at a joint above the upper left corner of the bathroom door. These photographs were taken on December 12, 1986. (Photos 38-255 and 38-256)

There is a vertical hairline crack, about ll inches long, at a joint above the upper right corner of the north door of the kitchen. (Photo 38-138)

There is a smaller crack about 3 and $3 / 4$ inches long and about a hairline wide near the upper right corner of the north door. (Photo 38-138)

Above the upper left end, there is a horizontal crack about 4 inches long and about $1 / 32$ of an inch wide. (Photo 38-139)

There is about a 1 inch gap to the right of the door above the plywood section. (Photo 38-140)

The wall to the lower left of the bathroom door is partially plywood. (Photo 38-141)

Now to the south wall of the kitchen.
There are cracks above the upper left and right ends of the south window.

The crack above the dpper left end runs to the ceiling about 17 inches and is just wider than a hairline. (Photo 38-142)

To the lower left of the window, there are cracks in the sheetrock at a joint that range from $3 / 16$ to $1 / 8$ of an inch wide. (Photo 38-143)

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The crack above the upper right corner of the window is a vertical crack at a seam. It is about $1 / 16$ of an inch to a hairline in width. (Photo 38-144)

There is a hairline vertical crack at a joint that runs to the base molding. (Photo 38-145)

There is a slight bulge, about 11 inches long, above the right part of the window with a dark outline that looks like a crack. (Photo 38-146)

There is a cut out area to the right of the door on the east wall. It measures about 15 inches by 53 and 1/4 inches. (Photo 38-147)

There is a slight crack in the southeast corner. It is about 37 inches long and just wider than a hairline. (Photos 38-148 and 38-149)

There is another area of peeling tape in the ceiling at an east-west trending joint near the light fixture. The peeling area is about 5 inches long.

The cabinets are separating from the ceiling along the west wall. The separation ranges from about $5 / 16$ to $3 / 16$ of an inch. (Photos 38-150 thru 38-155)

There are stains in the ceiling and the cabinets are delaminating, indicating water intrusion. (Photos 38-151 thru 38-155)

Bathroom

Vinyl floor.
Yellow painted sheetrock walls.
White painted sheetrock ceiling.
The lower north wall of the bathroom has been replaced with plywood.
Photographs of the east wall. (Photos 38-156 and 38-157)
Photographs of the south wall. (Photos 38-158 thru 38-160)
Photographs of the west wall. (Photos 38-161 thru 38-163)
Photographs of the rorth wall. (Photos 38-164 and 38-165)
There is a hole in the west wall to the upper left of the door. (photo 38-159)

There is a hole at the lower north end of the west wall. (Photo 38-166)

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The window lacks casing at this time. (Photo 38-167)
There is a seam crack above the upper left end of the window that runs vertically to the ceiling. It runs about 2 and $1 / 2$ inches westward in the ceiling. (Photos $38-167$ and $38-168$ )

The taped northeast corner has a slight crack above the plywood. It is about $1 / 32$ of an inch wide and 4 and $3 / 4$ inches long. (Photo 38-169)

The lower south wall has water damage. (Photo 38-170)
There is a slight crack in the lower southwest corner. (Photo 38-171)
There is a vertical crack at a tape joint above the upper right corner of the doorway. (Photo 38-172)

The side casing of this doorway is not installed at this time.
There is a large separation in the northwest corner. It is from about $1 / 4$ to $3 / 16$ of an inch wide. (Photos $38-173$ thru 38-175)

There is a crack, 14 and $1 / 2$ inches long, to the lower left of the north window. (Photos $38-1.76$ and 38-177)

Photograph of the bathroom ceiling. (Photo 38-178)
That completes the interior inspection.
EXTERIOR INSPECTION
ID photographs of the front, south side. (Photos 38-179 and 38-180)
ID photograph of the front sidewalk. (Photo 38-181)
That front patio slab has two north-south trending cracks along the length. Both are about $1 / 8$ of an inch wide. Three photographs of the east crack. (Photos $38-182$ thru $38-184$ )

The west crack is about $1 / 8$ of an inch wide. (Photos 38-185 and 38-186)
The patio slab is cracked at the sidewalk and there is differential settlement of the two. (Photo 38-187)

The front roof has a missing shingle and several cupped shingles. (Photos 38-188 thru 38-190)

This house has no gutter and downspout system.

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There is a missing board above the front entrance. (Photo 38-191)
There is a lot of pairit peeling on this house.
There is a rotting board above the upper left end of the middle front window. (Photo 38-192)

The area below the front door appears to be rotting. (Photo 38-193)
The middle front window lacks a storm sash and the wood members have peeling paint and caul.k. (Photos 38-194 and 38-195)

The west patio slab has a crack $1 / 16$ of an inch to a hairline wide.
The west front window has paint peeling from the trim and the inner windows have caulk deterioration. (Photos 38-196 and 38-197)

The concrete block foundation looks like it has dry joints.
Mr. Mitchell indicated that since they have lived here, the house has shifted northward off the foundation.

Below the west front window, you can see from the paint line that the house has shifted. The shift is about 3 inches at the southwest corner. (Photos 38-198 and 38-199)

Two photographs showing the shifting below the right end of the west front window. (Photos 38-200 and 38-201)

ID photograph of the west side of the house. (Photo 38-202)
There are a few broken mortar joints on the west side foundation.
There is a small mortar separation just north of the southwest corner. (Photo 38-203)

At the southwest corner, there is a separation that is about $3 / 8$ of an inch wide. (Photos 38-204 and 38-205)

The next two mortar joints to the north are also cracked or separated. (Photos 38-206 and 38-207)

The rest of the foundation looks to be concrete.
There is a tree or a shrub growing up between the two areas of foundation. (Photo 38-208)

Pipes are visible below the west window. (Photo 38-209)

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A view looking north along the lower west side of the house. (Photo 38-210)

At the north end of the west side, behind the area hidden by the doors, there is a separation in the foundation about 1 and $3 / 4$ inches wide. (Photo 38-211)

ID photographs of the north side of the house. (Photos 38-212 thru 38-214)

ID photograph of the east end of the house. (Photo 38-215)
Now on the north side of the house working from west to east.
There is extensively cracked concrete below the west doorway.
The cracks are in an area of concrete that was added to cover the separation between the patio and the foundation. (Photos 38-216 thru 38-218)

The separation at the porch is about $1 / 2$ inch on average. (Photos 38-219 thru 38-221)

There is a diagonal crack in the porch below an old discarded toilet. Only part of the crack is visible. It is about $1 / 32$ to $1 / 16$ of an inch wide. (Photo 38-222)

A view of this patio slab looking westward. (Photo 38-223)
A small sidewalk runs northward from the patio and has severely heaved sections. (Photos 38-224 and 38-225)

Note that the inner bathroom window has deteriorating caulk, mainly at the lower part. (Photo 38-226)

The next window to the east has a torn screen at the storm window and deteriorating caulk at the inner window. (Photos 38-227 and 38-228)

The siding is deteriorating and has green stains below this window. (Photo 38-229)

There is an opening in the foundation about 17 inches wide to the lower right of the second window from the east. (Photo 38-230)

Some of the lower siding boards are split.

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The second window from the east has caulk deterioration at the inner windows. (Photos 38-231 and 38-232)

To the lower left of this window, there is a vertical crack in the concrete foundation. It is about 4 and $1 / 4$ inches long and $1 / 4$ of an inch wide. (Photo 38-233)

There is another separation or crack in the foundation to the lower right of the east window. It is about 4 inches long visible and about l/2 inch wide. (Photo 38-234)

A lot of the north foundation is hidden behind material piled up against it.

There is deteriorating siding below this east window. (Photos 38-235 and 38-236)

The east window has ceteriorated caulk and peeling paint. (Photos 38-237 and 38-238)

Now on the east side of the house.
There is a large crack, over 2 inches wide, in the east foundation at the north end. (Photos 38-239 and 38-240)

The lower siding is rotting in that area.
The north window has deteriorated caulk and paint. (Photos 38-241 and 38-242)

The sill of this window is rotting. (Photo 38-243)
The upper pane of the south window has slipped down. (Photos 38-244 and 38-246)

There is a crack in the foundation, about $3 / 8$ of an inch wide between the two east windows. (Photo 38-245)

The caulk is deteriorating on the lower inner sash of the south window. (Photo 38-247)

A lot of the paint has peeled around this window. (Photo 38-248)
Two photographs of the chimney from the northeast. (Photos 38-249 and 38-250)

Now back to the front: side of the house.

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The southeast corner: has a large gap, over 2 inches wide in the foundation. (Photos 38-251 and 38-252)

The east front window has deteriorated caulk and a torn screen. (Photos 38-253 and 38-254)

General Comments
This house is about 60 to 70 years old and sets on a relatively flat lot.

The house has shifted about 3 inches northward off the block foundation at the west end of the south front side, which indicates possible settlement of the house.

The house lacks a gutter system to carry water away from the foundation. This condition will allow rain water to saturate the ground adjacent to the foundation. Freezing of this saturated ground could cause additional foundation cracks or aggravate existing cracks.

The interior has several cracks at joints of the sheetrock walls and ceilings. These cracks will vary in width with humidity changes, and those that have potential to increase in length will probably do so naturally over a period of time.

Overall, this house is in need of some general maintenance such as exterior paint, recall king around windows, and as the stains in the kitchen ceiling indicate, possible roof work. The addition of a gutter system would reduce significantly the likelihood of further foundation damage.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.

Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 256 Photographs

## 1- COPY FROM P \& M's TOWN OF AMORET MAP

 LOCATION NO. 127
## 2- SUMMARY FORM

3- SKETCH OF STRUCTURE









PRE-BLAST SURVEY, RESIDENTIAL
I. Basic Information

1. Name of Resident: Marion Wisdom
2. Date: October 31, 1986 Time: 8:00AM
3. Address: Boix 209 Amoret, Missouri 64722
4. Location: Lots 6, 7, 8, 14, 15, and 16 Block 13
5. Telephone Number: (816) 925-3471
6. Daces of occupancy by current resident: 1967 - Present $\qquad$
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Bulldings
(repeat for addicional buildings)
8. Date of original construction: at least 70 years ago
9. Date(s) of major remodeling or additlons:
(a) Front porch, interior remodeling before 1967
(b) Rebuilt hedroom $=1986$
(c)
10. Construction of building:
(a) framing (Joists, rafters, and stud walls):
(b) intertor walls: Sheetrock, paneling
(c) roof: Compostion shingles
(d) footings; foundations: Sandstone, concrete front, footing unknown
(e) basement: walls (indicate how keyed to footing of floor):

Not applicable
(E) basement: Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: Not applicable
III. Enviromental Information

1. Approximate elevation of area:

842 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundatlon: Not known
4. Water wells utilized (Indicate depth•and use): Don't use 40 feet deep
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not lncluded above: City water
7. Eve troughs or any other exterior drafnage features: No .
8. Description of general grading or landscaping in vicinity: flat
IV. Any notable existing deterioration or damage

1. Cracks in intertor walls: See survey
2. Receding of doors, wLaduws: See survey
3. Noticeable set:thent: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings
VI. Elevation views or photographs of walls
8. North See survey
9. Souch See survey
10. East See survey
11. West See survey
VII. Conments or supplementary drawings See survey
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activities.
See survey

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

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November 2, 1986
Report No. 87056-67
P and M Map Photo No. 128
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| Subject: | Inspection of the Marion Wisdom Residence |
| :--- | :--- |
| P. O. Box 209 |  |
| Amoret, Missouri 64722 |  |
| October 31, 1986 and January 2, 1987 |  |
| $\mathrm{To}: \quad$The Pittsburg and Midway Coal Mining Company <br> P. O. Box 8 <br> Amsterdam, Missouri 64723 |  |
| Attention: Mr. Mark Premo |  |

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, south side. (Photos 67-1 thru 67-3)
The front sidewalk has several cracked and heaved slabs. (Photos 67-4 thru 67-6)

An area of unreinforced concrete was placed at the end of this sidewalk in the driveway. This area of concrete is extensively cracked and the surface appears to be deteriorating. (Photos 67-5, 67-83 and 67-84)

The fascia is rotting at the east end of the front porch and house. (Photos 67-7 thru 67-9)

The south end of the concrete porch has a major east-west trending crack. It is about 1 and $1 / 8$ inches at the widest and about 21 feet 7 inches long. At this time the crack goes through the porch at the east end. This crack can be expected to worsen and eventually this entire piece will probably break off. Possible causes include inadequate footing or reinforcenent coupled with the weight of the porch roof. (Photos 67-10 thru 67-16)

This major crack has a couple of smaller branches. One branch trends north-south west of the window. It is about 31 inches long and about $3 / 8$ of an inch at the widest. (Photo 67-17)

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The main crack has another branch that goes through the porch. This is just west of the second porch support from the west. It measures about 11 inches on top and about $3 / 8$ of an inch wide. It measures about 14 inches on the vertical and is about $1 / 2$ an inch at the widest. (Photos 67-18 and 67-19)

The west, front window has deteriorating caulk and paint. (Photo 67-20)
Now at the bay window. The upper west facing pane of the bay has slipped downward. (photo 67-21)

There is no caulk at the bottom of the window and it looks like the pane could easily fall out. (Photo 67-22)

The south facing windows of the bay have deteriorating caulk and paint. (Photos 67-23 and 67-24)

The east facing bay window also has deteriorating caulk and paint. (Photo 67-25)

The trim on this house has deteriorating paint which will hasten the deterioration of the wooden trim.

The front entry door at this boxed in porch has two cracked panes that have been taped over. (Photo 67-26)

A peice has spalled from the porch near the door. (Photo 67-27)
There is a chip in the porch to the lower right of the porch door. (Photo 67-28)

There is about a $3 / 8$ of an inch separation between the porch and the house. The visible separation in the porch is approximately 34 inches long. (Photos 67-28 and 67-29)

ID photograph of the east side of the house. (Photo 67-30)
A sidewalk runs east of the house. It has cracked and heaved sections near the house. (Photos 67-31 and 67-32)

This boxed in porch has a concrete foundation and is an addition to the house.

The house lacks a gutter and downspout system which will allow the water to possibly damage the siding and cause foundation damage.

There are some nails pulling from the fascia at the south end of the east side of the house. (Photo 67-33)

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The inner, north window on the east side, has deteriorating caulk and paint. (Photo 67-34)

The foundation is covered on most of the east side.
ID photographs of the north side of the house. (Photos 67-35 and 67-36)
Note the leaning antenna mast located northwest of the house. (Photo 67-36)

The foundation is covered on the north side.
There is an old sidewalk at the northeast corner of the house that is heaved and cracked. (Photos 67-37 thru 67-39)

The east window on the north side has deteriorated caul $k$ and paint. (Photo 67-4l)

Moving west to the next window. It has the same conditions, deteriorating caulk and paint. The sill is rotting and there is condensate under the plastic cover. (Photo 67-41)

Now at the west window on the north side. There is water condensate under the plastic, peeling paint, and deteriorating caulk. It also has a rotting sill. (Photo 67-42)

ID photograph of the west end of the house. (Photo 67-43)
The northwest window has deteriorating caulk and peeling paint. (Photo 67-44)

Now at the west door. The veneer door is delaminating and paint is peeling from the trin. (Photo 67-45)

ID photographs of the brick chimney, north side. (Photos 67-46 thru 67-48)

There are a few cracked mortar joints on the north side. The upper cracks are just above the level of the window and the bottom is just below the header of the window. (Photos 67-49 and 67-50)

There is a gap, about: $3 / 8$ of an inch wide, level with the air conditioner, where the chimney meets the siding. (Photo 67-5l)

There are several slightly cracked mortar joints below the air conditioner. (Photos 67-52 and 67-53)

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There is severe paint and caulk deterioration at this window. (Photos 67-54 and 67-55)

ID photographs of the west side of the chimney. (Photos 67-56 thru 67-58)

The west side of the chimney has a slight mortar crack just north of the soot hole. It is just wider than a hairline. (Photo 67-59)

There is a slight mortar crack at each upper end of the west side, where the chimney starts to narrow. (Photos 67-60 and 67-61)

ID photographs of the south side of the chimney. (Photos 67-62 thru 67-65)

There is a slight mortar crack at the lower right part of the south side of the chimney. (Photo 67-66)

There are a couple of mortar cracks below the roof line on the south side of the chimney. (Photo 67-67)

There is a gap between the back of the chimney and the house on the south side. (Photo 67-68)

ID photograph of the upper east side of the chimney. (Photo 67-69)
East of the house, there is an old smokehouse and several barns. Mr. Wisdon indicated that he did not want us to inspect any of these buildings as he intends to tear them down or let them fall down.

He indicated that he has no concern for these building whatsoever as they are beyond repair.

However, I will just take a few general photographs of these structures.

Smokehouse
ID photograph of the smokehouse fron the southeast. (Photo 67-70)
ID photograph of the smokehouse from the northwest. (Photo 67-71)
The smokehouse interior has a wooden floor and walls.
The roof of the smokehouse is severely deteriorated. The wooden siding is also deteriorating.

There are several barns located east of the smokehouse.

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## Barns

ID photograph of the west sides of the small wooden shed and the northwest barn. (Photo 67-72)

ID photograph of the north side of the shed. (Photo 67-73)
The northwest barn appears that it is about to fall down and the shed has a loose, hanging piece of fascia.

The middle barn is located farther to the east and is severely deteriorated and the roof is caving in.

ID photograph of the middle barn from the west. The west wall leans toward the west. (Fhoto 67-74)

ID photograph of the south side of the middle barn. (Photo 67-75)
ID photograph of the east side of the middle barn. (Photo 67-79)
There are two other barns located farther to the east.
ID photograph of the southeast barn from the southwest. (Photo 67-76)
ID photograph of the east side of the southeast barn. (Photo 67-77)
ID photograph of the northeast barn from the southeast. (Photo 67-78)
ID photograph of the northeast barn from the southwest. (Photo 67-80)
The northeast barn is severely deteriorated. The roof is caving in and the wooden siding is rotting.

The southwest barn has a tractor and a boat inside and appears that it is about ready to fall down. ID photographs of this barn from the north and west. (Photos 67-81 and 67-82)

There is an old dug well located just south of the house. Looking into the well, water can be seen a few feet below the surface and the rock walls appear stable.

The slab over the well is cracked and appears to be caving in on itself. (Photo 67-85)

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INTERIOR INSPECTION
Porch
Concrete floor.
Sheetrock on south and east walls.
Exterior siding on north and west walls.
White painted sheetrock ceiling.
Windows on the south and east walls.
There is a door on the west to the house.
There is an east-west trending crack in the floor below the doorway. It is about 37 inches long and about $1 / 8$ of an inch wide. (Photo 67-86)

It has a faint branch trending north from the right end of the door that goes all the way across the floor. About 45 inches is visible and it ranges in width from a hairline at the north end to about $1 / 32$ of an
inch. (Photos 67-87 and 67-88)
Photograph of the east wall. (Photo 67-89)
Photographs of the north wall. (Photos 67-90 and 67-91)
Photographs of the south wall. (Photos 67-92 and 67-93)
Photograph of the west wall. (Photo 67-94)
There are some cracked siding boards above the west doorway. (Photos 67-94 and 67-95)

The ceiling has a water stain at the light fixture. (Photos 67-96 and 67-97)

There are also water stains at the north edge of the ceiling. (Photo 67-96)

There is a vertical crack above the upper left end of the south doorway. It is about 8 inches long and ranges from $1 / 8$ of an inch to a hairline wide. (Photo 67-98)

Paint is peeling fron the trim of both doors in the porch.
There is a hairline vertical crack above the doorway that is about 6 inches long. (Photos 67-99 and 67-100)

There are also water stains above this door.

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There is a hairline vertical crack below the lower left corner of the east window. It looks to be about 3 inches long. (Photo 67-101)

A general view of the ceiling looking eastward. (Photo 67-102)
Dining Room/Living Room
Vinyl floor.
Paneled walls.
Textured plaster ceiling.
Windows on the south and west walls.
Photograph of the west wall. (Photo 67-103)
Photographs of the south wall. (Photos 67-104 thru 67-106)
Photographs of the north wall from west to east. (Photos 67-107 thru 67-109)

Photograph of the east wall. (Photo 67-110)
The entrance to the kitchen is on the east wall.
Above each corner of the west door, there is a slight separation at the seam of different panels. (Photos 67-111 and 67-112)

There are separations at each corner above the west window. (Photos 67-113 and 67-114)

These separations continue below the window. (Photos 67-115 and 67-116)
Two views of the ceiling. (Photos 67-117 and 67-118)
The bay window area walls are old plaster and wall paper. The wall paper is peeling and there are several cracks on these walls. We cannot get in to measure these cracks. (Photos 67-119 and 67-120)

The bay area has a tile ceiling that appears to sag some what. (Photo 67-121)

Kitchen
Tile floor.
Textured plaster ceil.ing and walls over sheetrock.
Window on the east wall.

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Photograph of the east wall. (Photo 67-122)
Photograph of the north wall. (Photo 67-123)
Photograph of the south wall. (Photo 67-124)

Photographs of the west wall. (Photos 67-125 and 67-126)
Photographs of the ceiling. (Photos 67-127 and 67-128)
There is a seam crack above each upper corner of the north doorway. Both are about 13 inches long and just wider than a hairline. (Photos 67-129 and 67-130)

There is a boxed in area at the upper west wall and ceiling that houses the water line.

The caulk seal is separating where the cabinet attaches to the south wall. It is separated almost all the way along the wall except in a couple of places it is still attached. (Photos 67-131 thru 67-133)

The north door leads to a storage room.
Storage Room
Tile floor.
Lightly textured platster ceiling over sheetrock. Sheetrock walls.

There is a door on the east wall.

Window on the north wall.

Cabinets cover the west wall and much of the south wall.

There are seam cracks above each upper corner of the south door. The upper right is just wider than a hairline and the upperleft is about $1 / 16$ of an inch wide. (Photos 67-134 and 67-135)

There is a vertical crack above the upper right of the east door that diagonals at the top. It is about $1 / 16$ of an inch wide. (Photo 67-136)

Above the upper left. corner, there is an inverted "L" shaped crack. It is a rough tearing like crack about $1 / 16$ of an inch wide. (Photo 67-137)

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There are peeling tape joints to the upper left of the north window. (Photo 67-138)

Above the upper right of the window, there is another taped joint. (Photo 67-139)

Much of the lower walls cannot be seen.
A photograph into the roam looking northward from the kitchen. (Photo 67-140)

West Bedroom
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Windows on north and west walls.
Both windows have unpainted wooden sashes. There is water damage to both window, especially the north window. There is rotting wood at the lower right corner and a slight gap along the right side where the wood sash has shifted. Light can be seen through the gap. The gap is about $3 / 8$ of an inch wide. (Photos 67-141 and 67-142)

Photographs of the north wall. (Photos 67-143 and 67-144)
Photograph of the west wall. (Photo 67-145)
Photographs of the east wall. (Photos 67-146 and 67-147)
Photograph of the south wall. (Photo 67-148)
Photographs of the ceiling, first 100 king south and then looking north. (Photos 67-149 and 67-150)

There is a long crack trending from the north wall to the south wall in the ceiling at a tape joint. It ranges from about $1 / 16$ to a hairline wide. (Photos 67-151 thru 67-153)

The ceiling appears to sag at the north part of the crack.
That crack is located about 5 inches from the east wall and has a short connecting crack abcve the upper left of the door that is about 5 inches long and just wider than a hairline. (Photos 67-152 and 67-153)

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There is a œiling crack above the upper left end of the west window. It runs eastward from the west wall to near the light fixture about 3 feet 10 inches and then disappears. It reappears very close to the east wall. (Photos 67-154 and 67-155)

The ceiling has a gold glitter embedded in it.
Hallway
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Door on the west to a bedroom, door on the south to the bathroom, and a door on the east to a bedroam.

The hall floor seems to slope somewhat to the west.
A view of the hallway looking eastward. (Photo 67-156)
Two views of the hallway ceiling. (Photos 67-157 and 67-158)
The west end of the ceiing appears to have water stains. (Photo 67-157)
Bathroon
Vinyl floor.
Sheetrock ceiling, west, and south walls.
Plywood north and south walls.
Tile bathtub and shower stall walls.
The floor slopes to the west.
Photographs of the north wall. (Photos 67-159 and 67-160)
Photographs of the east wall. (Photos 67-160 and 67-161)
Photographs of the west wall. (Photos 67-162 and 67-163)
Photographs of the ceiling. (Photos 67-164 thru 67-168)
The œiling has peeling paint above the shower area. (Photos 67-167 and 67-168)

There is a separation between the dividing wall and the ceiling at the shower. The separation is about $1 / 2$ an inch maximum. (Photos 67-169 and 67-170)

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There is a north-south trending bulge at a tape joint at the west end of the ceiling, which is partially cracked. It is cracked at the south end and at the very north end. It is about 26 inches long at the south part and 5 inches long at the north end. The north part is about a hairline wide and the south part is wider than a hairline. (Photos 67-171 and 67-172)

That ceiling crack has a slight west trending branch above the south part of these cabinets. (Photo 67-173)

The crown molding is separating at the west wall. (Photos 67-173 thru 67-175)

The plywood north wall has separations at the joints above and below the window and an "L" shaped separation left of the window. (Photos 67-176 thru 67-179)

The upper right separation is about 11 inches long and just wider than a hairline.

The ceiling has a crack at a joint along the east wall, north end. It is about 47 inches long and from about $1 / 16$ to a hairline wide. The ceiling sags slightly at the north end of the crack. (Photos 67-180 and 67-181)

There is a vertical separation at a seam above the upper left of the entrance. It is about $1 / 8$ of an inch at the widest. (Photo 67-182)

## East Bedroan

There is a lot of stored material in this room.
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Window on the north wall.
This is a small room with so much material that I cannot get a good photograph of the walls.

The ciling has embeded glitter and there are water stains in two places near the west wall. (Photo 67-183)

Photographs of the ceiling. (Photos 67-183 thru 67-185)
Photograph of the north part of the east wall and the east part of the north wall. (Photo 67-186)

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A photograph into the roan, looking eastward from the hall. (photo 67-187)

Cellar
The cellar was inspected on January 2, 1987 and is located at the northeast corner of the house.

It is a concrete scructure that is mostly full of water at this time. Two photographs looking down the stairway. (Photos 67-188 and 67-189)

A photograph of the concrete retaining wall above the doorway. (Photo 67-190)

There is a slight horizontal crack in this wall above the upper left of the door. (Photo 67-191)

The arched lintel is separated from the wall. (Photo 67-192)
ID photographs of the cellar exterior fron the south and east. (Photos 67-193 and 67-194)

General Comnents
This house is at least 70 years old and rests on a sandstone foundation that is hidden fran view. The addition has a concrete foundation.

The interior has several cracks, mainly in the textured plaster ceilings along seams. These seams are very susceptible to cracking and those cracks that have potential to increase in length probably will in time. Widths of these cracks vary with humidity changes. These cracks are usually caused by shinkage and expansion of framing materials or loads transmitted from the roof.

The floors of the hallway and bathroon sloped considerably westward, indicating weak floor joists.

Mr. Wisdom has installed plastic around the base of the house, apparently in an effort to divert water away from the foundation. It is questionable whether this method will be effective. There is no gutter downspout system on this house.

There are several outbuildings on the property and they are all in extremely deteriorated conditions. Mr. Wisdom indicated that he had no concern for these buildings and requested that we not inspect them. Identifying photographs were taken of each structure, however.

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Cracking in the front sidewalk and driveway can be expected to continue and worsen due to frost action and driving vehicles on the unreinforced concrete part of the driveway

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate
$\mathrm{CDL} / \mathrm{kg}$
Enclosure: 194 Photographs
1- COPY FROM $P$ \& M's TOWN OF AMORET MAP LOCATION NO. 128
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


planiview of the Marion Wisdon Residence and outbuild ngs



## $67-78$














PRE-BLAST SURVEY, RESCDENTIAL
I. Baslc Information

1. Name of Resident: Bob and Kathy Matthews
2. Date: November 7, 1986 THue: $\qquad$
3. Address:_ Box 178, Amoret, Missouri 64722
4. Location: Lot 1 , Block 17
5. Telephone Number:__(816) 925-3398
6. Dates oE occupancy by current resident: Past 14 years
7. Dates of any temporary or permanent abandonment: Not known
II. Information Concerining Bulldings
(repeat for additional buildings)
8. Date of original construction: Not known
9. Date(s) of major remodeling or addicions:
(a) New roof, siding, insulation, wiring, and pipes (11 years ago - Present)
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) Eraning (jolsts, rafters, and stud walls): Not known
(b) Lnterior walls: Sheetrock
(c) rook: Composition Shingles
(d) footings; Eoundations: Concrete foundation, footings and dimensions not known
(e) basemenc walls (indicate how keyed to footing of floor):

Not applicable
(E) basement Eloor (keyways, chickness):

Not applicable
(g) aane of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

843 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate depth*and use): No, covered by patio slab
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above:City water
7. Eve troughs or any other exterior drainage Eearures: Yes
8. Description of general grading or landscaping in vicinity: Generally Elat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, whudu'Ns :See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Extertor wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
2.' South See survey
9. East See survey
10. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterforation, may exhibit an unusual response to normal blasting activities.

See survey

November 11, 1986
Report No. 87056-73
P \& M Map Photo No. 126

Subject: Inspection of the Bob Matthe ws Residence P. O. Box 178 Amoret, Missouri 64722 November 7, 1986

To: The Pittsbung and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the east side. (Photo 73-1)
ID photograph of the south side. (Photo 73-2)
ID photographs of the north side. (Photos 73-3 and 73-4)
ID photographs of the west side. (Photos 73-5 and 73-6)
The house has a concrete foundation, most of which cannot be seen because of the siding.

The gutter along the south part of the back porch lacks a downspout and water drops to the sidewalk. (Photo 73-7)

Much of the trim of this house has paint peeling.
Starting on the east side of the house. There is a separation at the bottam of the porch window. The separation is about $1 / 16$ of an inch wide. (Photos 73-8 and 73-9)

The upper pane of this storm window is cracked at the upper right corner. The upper piece is loose. (Photo 73-10)

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To the lower right of this window, where the porch attaches to the main part of the house, there is a separation of the caulk seal. The upper joint is well caulked, but the bottom is separated by about $3 / 16$ of an inch. (Photo 73-11)

The foundation, below this area, has a loose piece of concrete, and there is a gap of about 1 and $1 / 8$ inches. (Photo 73-12)

There is a crack in the foundation about 2 feet to the north that is filled with insulation. It is about an inch wide. (Photo 73-13)

Note the deterioration of the bottom edge of the siding. (Photos 73-13 thru 73-15)

There is separation at the peak of the soffits and fascia. (photo 73-16)
paint is peeling from the soffit.
Now at the east window. This window has paint peeling extensively from the trim. The caulk is cracking and the bottom pane has a crack at the lower left corner. The upper pane has a slight crack at the upper right corner. (Photos 73-17 and 73-18)

About a foot to the north of this window, there is a crack in the foundation that has been filled with insulation. It is very difficult to see, but it is about 1 and $3 / 4$ inches wide. (photo 73-19)

At the north end of the east side, the lower siding board is deteriorating. (Photc 73-20)

The botton of the trim at the northeast corner is deteriorating. (Photo 73-21)

A photograph looking south along the east side of the house. Some of the siding appears to be warped. (Photo 73-22)

Now on the north side of the house. The house has a gutter-downspout system to deliver water away from the foundation. However the ground in this area is saturated and it has been raining. It appears that water can pool next to the f.oundation in a couple of places on the north side of the house. (Photo 73-23)

The northeast corner trim is also deteriorating at the bottan on the north side. (Photo 73-24)

The siding appears to be unpainted.

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Note the mound of soil along the siding at the northeast corner.
The second window from the east has severely deteriorating caulk along the inner window. Paint is peeling from the trim. (Photos 73-25 and 73-26)

The concrete at the base of the antenna mast is cracked. (Photo 73-27)
Below the second window fram west, there are a couple of concrete blocks at the crawl space entrance. It appears that water could drain toward the foundation at this area. (Photo 73-28)

There are two other blocks to the west, and there is a piece of siding and insulation laying here. (Photo 73-29)

The second window fron the west has deteriorating caulk and peeling paint. (Photos 73-30 and 73-31)

The west window also has deteriorating caulk and paint. The storm window has a crack at the lower left corner of the upper pane. (Photos 73-32 and 73-33)

Below this window, there are three or four termite tubes on the foundation leading up to the house. (Photo 73-34)

The northwest corner of the foundation has a vertical crack that runs the height of the visible portion. This crack is about $1 / 16$ of an inch wide. (Photos 73-35 and 73-36)

The trim at the southwest corner is deteriorating along with the lower edge of the siding. (Photo 73-37)

Now on the west side of the house.
At the north window, the bottam storm glass is cracked and the trim has peeling paint. (Phot:o 73-38)

There is a hole in the soffit where a wire comes through above the window. There is a bird nest in the hole. (Photo 73-39)

The west gutter is mostly full of leaves at this time.
Now at the two south windows. Paint is peeling from the trim and the inner windows have severely deteriorated caulk. (Photos 73-40 and 73-41)

The inner, lower left: window is cracked. (Photo 73-42)

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The bottam storm glass of the left window is cracked. (Photo 73-43)
The bottom right storm glass is cracked horizontally in two places. (Photos 73-44 thru 73-46)

The siding at the south end of the west side is deteriorating at the bottan. (Photos 73-47 and 73-48)

At the southwest corner, the trim has peeling paint and is deteriorating at the bottom. (Photo 73-49)

ID photograph of the patio at the south side of the house. (Photo 73-50)

At the southwest corner, there is a separation of about $5 / 6$ of an inch . and a stain in the solfit. (Photo 73-51)

The west window on the south side of the house has deteriorating caulk and paint. (Photo 73--52)

The south living room windows have deteriorating caulk and paint. (Photos 73-53 thru 73--58)

There is a gap between the patio and the house. At the enclosed porch, there is deteriorating trim and a separation of about $1 / 8$ to $3 / 8$ of an inch with the patio. (Photos 73-59 thru 73-64)

At the enclosed porch, there is rotting trim and a separation of about $1 / 8$ to $3 / 8$ of an inch with the patio. (Photos 73-61 thru 73-64)

INTERIOR INSPECTION

## Porch

This is the southeast room of the house.
Concrete floor.
Paneled walls.
Tile ceiling.
Photograph of the west wall. (Photo 73-65)
Photograph of the east wall. (Photo 73-66)
Photographs of the south wall. (Photos 73-67 and 73-68)
Photographs of the north wall. (Photos 73-69 and 73-70)

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Two windows an the south and one on the east wall.

The floor has a large crack that is about 79 inches long with a branch that diagonals to the northeast under a dresser. The branch runs to the wall about 3 feet. The major crack ranges from about $3 / 16$ of an inch wide at the north end to about 3 inches wide at the branch area, including spalling. rhis crack has been partially filled. The branch ranges from about 1 and $1 / 2$ inches at the joint to about $3 / 4$ of an inch near the dresser. (Photos 73-71 thru 73-75)

There is a spall in the floor at the south door that is about 8 and $1 / 2$ inches long and about 4 and $1 / 4$ inches wide. (Photo 73-76)

There is a separation between the floor slab and the sidewalk. This is about $3 / 16$ of an inch wide. There is slight cracking at the west end of the doorway in the sidewalk slab that is about $1 / 4$ of an inch wide. (Photos 73-77 and 73-78)

The window on the north wall has deteriorating caulk. (Photos 73-79 and 73-80)

At the northeast part of the ceiling, several tiles have been removed and several tiles nearby are stained. (Photo 73-8l)

The west end of the ceiling has a large area of missing tiles and several stained tiles. (Photos 73-82 and 73-83)

Now into the living room to the west.

Living Room
Carpeted floor.
Sheetrock walls and ceiling.
Windows on the south wall.

Doors on the north and east walls to bedrooms and on the west wall to the kitchen.

Photographs of the south wall. (Photos 73-84 and 73-85)
Photographs of the east wall. (Photos 73-86 and 73-87)
Photographs of the west wall. (Photos 73-88 and 73-89)
Photographs of the north wall. (Photos 73-90 and 73-91)

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Photographs of the ceiling, first looking west, then east. (Photos 73-92 and 73-93)

The east wall has a taped crack above the upper left corner of the entry door at a tape joint. It is about 13 inches long and has a short horizontal branch into the ceiling to the north. (Photo 73-94)

There is a horizontal crack that runs to the south wall from the upper right corner of this door. It is about 13 and $3 / 4$ inches long and is a rough tearing crack. (Photo 73-95)

Above the upper right of the bedroom entrance on the east wall, there is a $Y$-shaped crack. The left branch is about 8 and $1 / 2$ inches long and the right part diagonals about 14 and $1 / 4$ inches. The upper left part of the $Y$ is fran about $1 / 16$ of an inch to a hairline in width. It is a bulging type crack. (Photos 73-96 and 73-97)

Above the upper left of this door, there is a tearing crack at a tape joint. It is about 15 and $1 / 4$ inches long and about $1 / 16$ of an inch to a hairline wide. There is also a bulging crack trending down from the ceiling about 2 and 1/4 inches. (Photos 73-98 and 73-99)

A vertical crack runs the length of the northeast corner and onto the north wall in about four places. (Photos 73-100 and 73-101)

There is a hairline crack above the middle of the doorway on the north wall. It is about 2 and $1 / 8$ inches long. (Photo 73-102)

There is a diagonal crack above the upper left corner of this door that ranges from about a hairline to $1 / 16$ of an inch wide. It is about 19 inches long. (Photo 73-103)

There is a vertical crack above the upper right corner of the kitchen door. It runs to the ceiling and is about $1 / 32$ of an inch wide. (Photo 73-104)

Above the left part of the west door, there is a hairline to a slightly wider crack that runs to the ceiling. (Photo 73-105)

Tb the upper left of the kitchen door, there are two roughly horizontal cracks. The south crack is about 7 and $1 / 8$ inches long and is a hairline crack. The other is about 6 inches long and is slightly wider. (Photos 73-106s and 73-107)

There is a nail pop below the picture on the west wall, just above the couch. (Photo 73-108)

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There is a slight split along the ceiling, west wall intersection. This is about a hairline wide and located about 4 feet from the south wall. (Photo 73-109)

There is a vertical crack along the southwest corner. It also runs anto the west wall in places. (Photos 73-110 thru 73-113)

There is a diagonal crack above the upper right corner of the south window. It is a faint 14 and $1 / 2$ inch long crack. (Photos $73-114$ and 73-115)

There is a vertical cack below the middle of the south window at a seam of the sheetrock. It runs to the base trim about 20 and $1 / 2$ inches. The width is from about $1 / 16$ of an inch to a hairline. (Photo 73-116)

There is a faint diagonal crack from the lower left corner of this window. It is 23 inches long and about a hairline in width. (Photo 73-117)

Above the upper left corner of the south window, there is a faint diagonal crack that is about 12 inches long. (Photos 73-118 and 73-119)

There is an east-west trending crack at about the middle of the ceiling at a joint of the sheetrock. It is roughly 6 feet 8 inches long and has been painted over. Paint fills the crack and all that can be seen is a ridge. (Photo 73-120)

East Bedroom
Hardwood floor.
Sheetrock walls and ceiling.
Windows on the east and south walls.
Photographs of the east wall. (Photos 73-121 and 73-122)
Photographs of the north wall. (Photos 73-123 and 73-124)
Photographs of the west wall. (Photos 73-125 and 73-126)
Photograph of the south wall. (Photo 73-127)
Photographs of the ceiling. (Photos 73-128 and 73-129)
Starting on the west wall. There is a taped area above the upper right corner of the door. (Photo 73-130)

The seam above the upper left corner is also taped. (Photo 73-131)

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Above the upper right corner of the south window, there is a diagonal crack. It is about 22 and $1 / 2$ inches long and fran about $1 / 16$ of an inch to a hairline wide. (Photos 73-132 and 73-133)

There is also a hairline crack from the upper right of the window that is about 2 and 1/4 inches long. (Photo 73-133)

There is a bulge below the lower right corner at a tape joint. It is about 1 and 5/8 inches long. (Photo 73-134)

Below the lower left corner, there is a peeling tape joint behind the bed. It runs froin the window to the floor. (Photo 73-135)

Now on the east wall. There is a horizontal bulge and a nail pop below the receptacle. (Phot: 73-136)

There is a rectangular patch above the bed about 5 feet up the wall. There is a crack along the lower edge of the patch and a crack from the left end of the patch trending toward the window. That patch is 16 inches long north-south. (Photo 73-137)

This hairline crack from the left runs about 7 and $5 / 8$ inches toward the window. (Photo 73-133)

The tape joint below the lower right corner of the east window is peeling. (Photo 73-139)

The east window is cracked and has a patch in the lower right corner. (Photo 73-140)

There is a taped over crack or seam above the upper right corner of this window. It is about 12 inches long. (Photo 73-141)

There is another taped crack or seam above the upper left corner. The tape is starting to peel. It is about 19 inhces long. (Photos 73-142 and 73-143)

A horizontal bulge from the left side of the window continues to the north wall at about 4 feet above the floor, and then runs across the north wall. It has a hairline crack.

The door on the north wall, to the restroam, has about a $1 / 2$ inch gap at the top. (Photo 73-144)

There appears to be a slight crack starting at the tape joint above this door. It is about 13 and $1 / 4$ inches long. (Photo 73-145)

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There is a diagonal crack above the upper left corner of this door. It is about 20 and $1 / 2$ inches long. There is also a 2 and $1 / 4$ inch long crack at the upper left corner. These both range from a hairline to about $1 / 32$ of an inch wide. (Photos 73-146 and 73-147)

There is a slight horizontal crack to the left of the doorway. It runs about 7 and 7/8 inches. (Photo 73-148)

The northwest corner has a slight crack. It runs down to the floor behind the bookcase. (Photos 73-149 and 73-150)

Now back to the doorway on the north. There is a horizontal split near the ceiling that is approximately 71 inches long from the upper right to the upper left part of the door. (Photos 73-151 thru 73-154)

Now into the bathroon at the north.
Bathroon
Vinyl floor.
Tile ceiling.
Formica wall covering, excpet the west which is a closet.
Two photographs looking northward into the bathroan. (Photos 73-155 and 73-156)

Now into the bedroom north of the living room.
West Bedroam
Hardwood floor.
paneled walls.
White painted sheetrock ceiling.
Two windows on the north wall.
Closet enclosure in the southwest corner.
Photograph of the east wall. (Photo 73-157)
Photographs of the south wall. (Photos 73-158 thru 73-160)
Photograph of the west wall. (Photo 73-161)
Photographs of the north wall. (Photos 73-162 and 73-163)
Photographs of the ceiling. (Photos 73-164 and 73-165)

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The ceiling has an entrance to the attic and a vent at the south end, above the doorway.

The closet has paneled walls.
There is an intermittent crack along the middle of the ceiling. It trends from the west wall to the east.

There is a slight œiling crack at the northeast corner of the vent running to the attic entrance. It is about a hairline wide and 3 and 3/4 inches long. (Phcto 73-166)

The tape seam in the ceiling, south of the vent, has a hairline crack at the west end. The crack is about 4 and $1 / 2$ inches long. (Photo 73-167)

Now into the kitchen.
Kitchen
Hardwood floor.
Paneled walls.
Tile counter area wall.s.
Window above the sink on the west wall. Window on the north wall.
Photograph of the north wall. (Photo 73-168)
Photographs of the eaist wall. (Photos 73-169 and 73-170)
Photograph of the south wall. (Photo 73-171)
Photographs of the ceiling, first looking south and then north. (Photos $73-172$ and 73-173)

There is some peeling paint in the southwest corner of the ceiling. (Photos 73-174 thru 73-176)

There is a separation of the paneling above the upper right of this north window. The separation is about $3 / 16$ of an inch wide. (Photo 73-177)

There is a faint ceiling crack just south of the north window trending east-west. It starts above the refrigerator, near the east wall, and runs westward about 45 inches. It has a very short extension to the north that is about 1 and 1/4 inches long. (Photos 73-178 and 73-179)

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The upper southwest corner has a gap in the paneling, exposing the older plaster wall. There is a crack visible in the plaster. The separation is from $1 / 8$ to $1 / 2$ an inch. (Photo 73-180)

Above the upper left of the south door, there is a slight separation in the paneling. At the top it is about $1 / 4$ of an inch wide. (Photo 73-181)

There is a slight crack in the ceiling above the south doorway, roughly east-west trending. It is actually two cracks, one is about 7 and $1 / 4$ inches long, and the other is about 16 inches long. (Photo 73-182)

There is a slight crack where the crown molding meets the ceiling to the upper left of this doorway. It is about 12 and $1 / 4$ inches long. Slightly wider than a hairline. (Photo 73-183)

The west wall, below the window, has about seven tiles missing. (photos 73-184 and 73-185)

There is a crack in the wall below the lower right corner of the west window. The crack is about $3 / 16$ of an inch wide and about 3 inches long. (Photo 73-186)

Now in the utility room to the south.
Utility Roon
Paneled walls.
Older tile floor covered with linoleum.
The east wall is green painted sheetrock.
Sheetrock ceiling.
Door to the outside and a window on the south wall. Windows on the west wall.

Photograph of the west wall. (Photo 73-187)
Photographs of the south wall. (Photos 73-188 and 73-189)
Photograph of the east wall. (Photo 73-190)
Photographs of the north wall. (Photos 73-191 and 73-192)
photographs of the ceiling, first looking east, then looking west.
(Photos 73-193 and 73-194)

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The ceiling has some cracks in the southeast corner near the heating unit. One crack runs from the flue pipe, roughly east-west about 46 and $1 / 2$ inches. It is frcm about a hairline to slightly wider. (Photos 73-195 thru 73-197)

A ceiling crack runs from the southwest corner of the heat duct about 12 and $3 / 4$ inches. It is slightly wider than a hairline. (Photo 73-198)

Another ciling crack runs roughly southwest from this area about 44 inches. It is from about a hairline to slightly wider. (Photos 73-199 and 73-200)

There is a slight nort:h-south trending ceiling crack from the north wall at a tape joint. It measures about 21 and $1 / 2$ inches and a hairline wide. (Photo 73-201)

There is a faint ceiling crack to the south of the light, east-west trending. It is about a hairline wide and 9 and $3 / 4$ inches long. (Photo 73-202)

Photographs of the floor. (Photos 73-203 and 73-204)
The upper right corner of the south window on the west wall has a crack. (Photo 73-205)

Shed - Exterior Inspection
This shed is located west of the house.
ID photograph of the south and east sides. (Photo 73-206)
ID photograph of the south and west sides. (Photo 73-207)
ID photograph of the north side. (Photo 73-208)
The shed has deteriorating paint and it lacks a gutter system.
Shed - Interior Inspection
Plywood, particleboard, and plank floors.
Unfinished walls and ceiling.
Two windows on the north wall, one each on the east and west walls.
Photographs of the north wall. (Photos 73-209 and 73-210)
Photographs of the west wall. (Photos 73-210 and 73-212)

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Photograph of the east. wall. (Photo 73-211)
The middle part of the floor bows toward the middle.
Well House
There is a concrete block well house located south of the shed.

ID photographs of the south, west, north, and east sides, respectively. (Photos 73-213 thru 73-216)

Two photographs looking inside the structure. (Photos 73-217 and 73-218)

It has a few hairline vertical mortar cracks on the north side at the top tier.

General Comments
The exterior siding and trim of this house shows some deterioration, especially the lower areas, and evidence of possible termite infestation was found. A few foundation cracks were found, but most of the foundation was not observable. The house has several cracked windows. The gutter at the southeast corner lacks a downspout and empties to the sidewalk.

The interior has numerous cracks, mainly at seams of the sheetrock walls and ceilings, with the major cracks located above corners of doors and windows. The porch floor is severely cracked and the ceiling has water damage.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 218 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 126

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## $73-4$




I. Basic Information

1. Name of Resident: Hubert Weddle
2. Date: November 3, 1986 Tline: 2:00 PM
3. Address: Box 142 Amoret, Mo. 64722
4. Location: West side of Fourth Street south of Jefferson Street
5. Telephone Number: 816-925-3283
6. Dates of occupancy by current resident: 1974-Present
7. Dates of any temporary or pernanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1974
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b)
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Modular trailer:unknown
(b) interior: walls: Paneled
(c) roof: Composition shingles
(d) Eootings; Eoundations: Poured concrete anduconcrete block foundation
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(f) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information
11. Approximate elevation of area:

845 feet at residence
2. Type of soll in area: Silty Clay Loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (indicate depth*and use): None
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeacures: See Photo Survey
8. Description of general grading or Landscaping in vicinity: See Photo Survey
IV. Any notable existing deterioration or damage See Photo Survey

1. Cracks in interlor walls:
2. Receding of doors, wLaduris:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavenent:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or: photographs of walls See Photo Survey
8. North
9. South
10. East
11. West

VIL. Comments or supplementary drawings See Sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See Survey Narrative

November 10, 1986
Report No. 87056-66
P \& M Map Photo No. 125

| Subject: | Inspection of the Hubert Weddle Residence <br> Box 142 <br> Amoret, Missouri 64722 <br> November 3, 1986 |
| :--- | :--- |
| Ib: $\quad$The Pittsburg and Midway Coal Mining Company <br> P. O. Box 8 <br> Amsterdam, Missouri 64723 |  |
| Attention: Mr. Mark Premo |  |

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
The residence is a modular home. It is on a poured concrete and concrete block foundation.

ID photograph of the east side. (Photo 66-1)
There is a vertical crack in the foundation near the south end of the patio. It measures $1 / 32$ of an inch in width. (Photo 66-2)

There is a vertical crack in the foundation just to the left of the steps. It has a width of $1 / 8$ of an inch. (Photo 66-3)

There is a crack across the patio at the south side of the steps. It has a width of $1 / 4$ of an inch. (Photo 66-4)

There is a hairline crack in the patio slab a few feet north of the south end. This extends to the foundation. (Photos 66-5 thru 66-7)

There are splash blocks for the downspouts at the southeast and northeast corners.

ID photograph of the north side of the house. (Photo 66-8)
The foundation on the north end is concrete block.
There is a hairline stairstepping mortar crack three blocks west from the east end. (Photo 66-9)

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There is a hairline mortar crack to the left of the vent. (Photo 66-10)
There are mortar cracks around the vent. The maximum width of these is about $1 / 8$ of an inch. (Photo 66-11)

ID photograph of the west side of the residence. The foundation is discolored around the base of the siding. (Photo 66-12)

There is a crack in the foundation a foot or so to the left of the air conditioning system.. It has a width of $1 / 8$ of an inch. (Photo 66-13)

There is a foundation crack under the sliding glass door. It measures $1 / 32$ of an inch in width. (Photo 66-14)

This west slab is separated by $3 / 8$ of an inch. The slab is tilted to the east. There is a smaller crack across the slab fron the steps. This has a width of $1 / 4$ inch. (Photos 66-15 thru 66-17)

The steps are heavily cracked and spalled. (Photos 66-18 thru 66-20)
There is a foundation crack about 5 or 6 feet south of the steps. It has a width of $1 / 32$ of an inch. (Photo 66-21)

On south, there is a crack across the sidewalk. This is 5 or 6 feet north of the south end. It has a width of $1 / 8$ of an inch. (Photo 66-22)

There is no splash block for the downspout at the southwest corner of the residence.

There is a hairline crack in the driveway at this corner. It measures roughly 6 feet in length. (Photos 66-23 thru 66-25)

ID photograph of the south side. (Photo 66-26)
There is a $V$ shaped pattern of loose siding on the south side. (Photo 66-26)

The foundation on this side is concrete block.
There is spalled and cracked concrete at the southwest corner. There also appears to be efflorescence around the mortar joints. (Photo 66-27)

There is a north-south crack across the driveway near the middle of the wall. It has a width of about $1 / 8$ of an inch. (Photos 66-28 thru 66-30)

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There are a pair of mortar separations near the southeast corner. (Photo 66-31)

The siding trim is separated at the southeast corner. (Photo 66-32)
ID photograph of the east side of the garage. There is no guttering on the garage. (Photo 66-33)

Now looking at the :nterior of the garage.
There is a diagonal crack across the garage floor starting about 4 feet from the east end of: the south wall. It diagonals over to about 7 or 8 feet from the east end of the north wall. This crack has a width of a little over $1 / 16$ of an inch. (Photos 66-34 thru 66-38)

There is another crack across the floor of the garage a few feet more to the west. This starts near the middle of the south wall and angles over to about $2 / 3$ of the way up the north wall. It has a width of $1 / 16$ of an inch. (Photos 66-39 thru 66-43)

There are no other cracks evident in the garage floor.
ID photographs of the garage interior. (Photos 66-44 thru 66-46)
INTERIOR INSPECTION

We entered through the east door into the living roon.
Living Room/Dining Foom
Carpeted floor.
Paneled walls.
Ceiling panels.
Mr. Weddle said a carpenter tried to install a hanging lamp near the northeast corner, and they discovered that there was a water leak. Now there is a small stain on the ceiling. (Photo 66-47)

ID photographs of this room. (Photos 66-48 thru 66-57)

## Kitchen

Vinyl floor.
Papered and paneled walls.
ID photographs of the kitchen. (Photos 66-58 and 66-59)

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Another section of the living room is located to the south of the kitchen.

Carpeted floor.
Paneled walls.
ID photographs of this area. (Photos 66-60 thru 66-62)
Now moving down a hall.
Hall
Carpeted floor.
Paneled walls.
The first room on the west is the utility room.
Utility Room
Vinyl floor.
Paneled walls.
There is a water stain on the ceiling above the south wall. (Photo 66-63)

ID photographs of this room. (Photos 66-64 and 66-65)
The next room on the west side of the hall is a bathroom.
Bathroom
Vinyl floor.
Partially papered and paneled walls.
There is a ceiling stain on the north wall. This corresponds to the ceiling stain that was noted in the laundry room. (Photo 66-66)

There is also a ceiling stain at the southwest corner above the bathtub and shower area. (Photo 66-67)

ID photographs of the bathroom. (Photos 66-68 thru 66-71)
There is a bedroom at the southwest corner of the trailer.
Bedroom
Carpeted floor. Paneled walls.
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Nothing noted.
ID photographs of this room. (Photos 66-72 thru 66-75)
There is also a bedroan at the southeast corner of the residence. Thereis a bathroom at the south end of the bedroom.
Bedroom
Carpeted floor.
Paneled walls.
Nothing noted.
ID photographs of this roon. (Photos 66-76 thru 66-78)
Bathroom
Vinyl floor.
Paneled walls.
Nothing noted.
ID photographs. (Photos 66-79 thru 66-81)
There is another bedroam at the north end of the southeast bedroan.
Bedroom
Carpeted floor.
Paneled walls.
Nothing noted.
ID photographs. (Photos 66-82 thru 66-86)
General Comments
The Hubert Weddle residence is located on the west side of Fourth Streetsouth of Jefferson Street. The approximate elevation at the residenceis 845 feet.The guttering and downspouts appear to be in good condition. The landis generally level and in same places the general grading is toward thefoundation.

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The foundation exhibited minor expansion cracks and separations. These types of cracks typically occur due to hydraulic or settlement effects.

The interior walls of the residence were generally paneled. There were ceiling stains in the utility roan and adjacent bathroom.

The general drainage around the residence is good. However, some continued hydraulic and settlement related foundation effects can be expected.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/kg

Enclosure: 86 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 125
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


Sketch of Hubert Weddle House


$66-33$




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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Paul Carroll
2. Date: October 31, 1986 Time: 2:50PM
3. Address:_ P. O. Box 215, Amoret, Missouri 64722
4. Location: West half North half: Lots 12 thru 16, Block 16
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: $\qquad$ Since May 24. 1986
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Bulidings
(repeat for additional buildings)
8. Date of original construction: $\qquad$
9. Date(s) of major remodeling or addicions:
(a) $\qquad$
(b) $\qquad$
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Not known
(b) incerior walls: Sheetrock
(c) roof: Composition shingles
(d) Eootings; foundations: Concrete block foundaiton footing unknown
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(f) basement: Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: George Meints (Deceased)
(h) size and direction of any large windows: George Dykman
III. Enviromental Information

1. Approximate elevation of area:

847 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate depthand use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Yes, don't use covered
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior drainage Eeatures: Yes .
8. Description of general grading or landscaping fu vicinity:

Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windu'ws: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer) : Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific counents concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to nomal blasting activities.

## See survey

November 8, 1986
Report No. 87056-50
P and M Map Photo No. 124
$\begin{array}{ll}\text { Subject: } & \text { Inspection of the Paul Carroll Residence } \\ \text { P. O. Box } 215 \\ \text { Amoret, Missouri } 64722 \\ \text { October 31, } 1986\end{array}$
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the front, west side. (Photos 50-1 and 50-2)
There is a gap in the foundation about $1 / 2$ an inch wide just south of the front step. (Photo 50-3)

The south side of the foundation to the front stoop has a shifted block, and there is about a $1 / 2$ inch wide separation. (Photo 50-4)

The stoop foundation is separated from the house. (Photo 50-5)
The step is separated from the stoop foundation. (Photo 50-6)
The west side of the stoop foundation has a mortar separation that is about $1 / 8$ of an inch wide. (Photo 50-7)

There are two slight cracks at the south end and two at the west end of the stoop. These are very slight surface cracks. (Photos 50-8 thru 50-10)

This stoop is separated from the house slightly. (Photos 50-11 and 10-12)

There are slight mortar separations on the north side of the stoop foundation. (Photos 50-13 thru 50-15)

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Now inspecting the foundation, north of the stoop. There is a slight vertical mortar separation just north of the stoop. It is about $1 / 16$ of an inch wide. (Photo 50-16)

The front step has shifted northward about 1 and $1 / 2$ inches from the stoop. (Photo 50-17)

Now back to the foundation, north of the stoop.
There is a slight vertical mortar separation just south of the gas meter. It is about $1 / 16$ of an inch wide. (Photo 50-18)

There is a slight mortar separation in the corner behind the gas meter. (Photo 50-19)

There is a mortar separation behind the gas meter that is about $1 / 8$ of an inch wide. This is at the south facing foundation of the west bedroom. (Photo 50-20)

There is another mortar separation behind the flower planter on the west facing foundation. It is about $1 / 8$ of an inch wide. (Photo 50-21)

There is a hairline crack at the next block to the north. (Photo 50-22)
Continuing north, there is another mortar separation at the second block from the north end. It is about $3 / 16$ of an inch wide. (Photo 50-23)

There is paint peeling from the trim and the caulk seals are deteriorating around the large front window. (Photos 50-24 thru 50-26)

ID photograph of the north side of the house. (Photo 50-27)
There is a large separation at the northwest corner of the foundation. At this time it is about $5 / 8$ of an inch wide. (Photo 50-28)

The next mortar joint to the east is separated by about $1 / 8$ of an inch. (Photo 50-29)

There is a slight horizontal separation to the lower left of the west window. (Photo 50-30)

Just to the east, there is another slight mortar separation. (Photo 50-31)

Continuing eastward, there is a major crack in the foundation at about the middle of the north side. It is $5 / 8$ of an inch at the widest. (Photo 50-32)

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There is a hairline separation below the right end of the east window. (Photo 50-33)

There are some mortar cracks and slight separations to the left of the window. These are about $1 / 16$ of an inch wide. (Photo 50-34)

There are a couple of other slight mortar cracks and separations near the northeast corner. The widest separation is about $1 / 8$ of an inch. (Photo 50-35)

The west window on the north side has deteriorating caulk. (Photo 50-36)

The east window also has deteriorated caulk. (Photos $50-37$ and $50-38$ )
ID photographs of the east side. (Photos 50-39 thru 50-41)
Starting at the south end of the east side. There is a mortar separation and a patch in the foundation. The separation is about $1 / 8$ of an inch at the widest. (Photo 50-42)

The next mortar joint to the north is separated by about $1 / 8$ of an inch at the widest. (Photo 50-43)

The mortar joint is deteriorating below the top block course. (Photos $50-43$ and $50-44$ )

Continuing north, the next three mortar joints are separated slightly. (Photos 50-45 and 50-46)

Behind this small brick structure, there is a vertical mortar separation in the garage foundation. It is about $1 / 16$ of an inch wide. (Photo 50-47)

This brick structure is the old cistern intake.
ID photograph of the east side. (Photo 50-48)
ID photograph of the south side. (Photo 50-49)
ID photograph of the north side. (Photo 50-50)
Now on the north facing foundation of the garage.
There is a mortar separation about $1 / 8$ of an inch wide at the east end. (Photo 50-51)

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There is a slight separation where the garage and house foundations meet. (Photo 50-52)

Now at the house foundation. Just north of garage, there is a broken and separated mortar joint. The separation is about $1 / 16$ of an inch wide. (Photo 50-53)

Continuing north, there are two slight mortar separations. They are both about $1 / 32$ of an inch wide. (Photo 50-54)

The next joint to the north has been patched and it has recracked; the next joint is slighty separated. Both are about $1 / 32$ of an inch wide. (Photo 50-55)

The back stoop has a north-south trending surface crack with a short branch running west near the left end of the door. Both cracks are about hairline in width. The long crack is about 47 inches long and the other is about 11 inches long. (Photos 50-56 and 50-57)

The stoop foundation, east side, has a slight mortar separation that is about $1 / 8$ of an inch wide. (Photo 50-58)

The stop foundation is separated slightly from the foundation of the house. It is about $1 / 4$ of an inch wide at the top. (Photo 50-59)

Continuing northward with the foundation. There are two separated mortar joints, each about $1 / 16$ of an inch wide, between the second and third windows from the north. (Photo 50-60)

There is a patched upper joint and two separated lower mortar joints just south of the previous area. The separations are about $1 / 4$ and $1 / 8$ of an inch wide. (Photo 50-61)

There is a slight stairstepping mortar crack below the left end of the second window from the north. It ranges in width from about $1 / 16$ to $1 / 8$ of an inch. (Photo 50-62)

The next mortar joint north is separated by about $1 / 32$ of an inch. (Photo 50-63)

There are mortar separations between the two north windows. The largest is about $1 / 8$ of an inch wide and the other is about $1 / 16$ wide. (Photo 50-64)

At the north end of the east foundation, there are mortar separations. They range from about $3 / 16$ of an inch wide down to about $1 / 16$ wide. (Photo 50-65)

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The concrete cover to the cistern is severely deteriorated. (Photos 50-66 thru 50-69)

It is an octagonal shaped slab and it can be expected to continue to spall and crack due to water and frost action.

ID photographs of the south side of the house. (Photos $50-70$ and $50-71$ )
The south side of the garage foundation has several mortar separations. Series of photographs from east to west. (Photos 50-72 thru 50-81)

The east mortar joint is separated by about a hairline, and the second from the east by about $1 / 8$ of an inch. (Photo 50-72)

The next two joints to the west look good, but the fifth and sixth joints from the east are each separated by about $1 / 8$ of an inch. (Photo 50-73)

The next joint has a slight separation that is less than $1 / 16$ of an inch wide. This is below the lower right end of the window. (Photo 50-74)

The next two joints to the west are slightly separated. The first is a hairline the next is just a little wider. (Photo 50-75)

The next joint westward has a hairline separation. This is below the lower left corner of the window. (Photo 50-76)

The next joint westward, near the telephone line, has about a $1 / 16$ of an inch wide separation. (Photo 50-77)

The next joint westward also has about a $1 / 16$ of an inch separation. (Photo 50-78)

The next joint westward is slightly shifted and is separated by about $1 / 16$ of an inch. (Photo 50-79)

The next two joints westward are very slightly separated. (Photo 50-80)
At the west end of the garage foundation, there is a separation that is about $1 / 8$ of an inch wide. (Photo $50-81$ )

This garage window has peeling paint and deteriorated caul $k$ joints. (Photos $50-82$ and $50-83$ )

Now on the west side of the garage. There is a broken mortar joint and a cracked block just south of the door. The crack is fram a hairline to about $1 / 16$ of an inch wide and the gap is about 1 inch at the widest. (Photo 50-84)

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There is about a $1 / 2$ inch wide gap where the garage foundation attaches to the house. (Photo 50-85)

Now on the south side of the house, west end. There is a slight shift at a block and a separation below the air conditioner. It is about $1 / 16$ of an inch wide. (Photo 50-86)

The foundation has shifted about $3 / 4$ of an inch at the next joint to the west. (Photo 50-87)

There is a shifted block and slight mortar separation to the lower left of the window. The shift is about $1 / 2$ an inch. (Photo 50-88)

The west mortar joint on the south side is separated by about $1 / 8$ of an inch. (Photo 50-89)

The south window has deteriorated caulk joints. (Photos 50-90 thru 50-92)

INTERIOR INSPECTION
Living Room
Carpeted floor.
White painted sheetrock walls and ceiling.
Large window on the west. Entry to kitchen on the east wall.
Entry to bedroon area on the north wall.
Window on south wall.
Photograph of the north wall. (Photo 50-93)
Photographs of the west wall. (Photos 50-94 and 50-95)
Photograph of the south wall. (Photo 50-96)
Photographs of the east wall. (Photos 50-97 and 50-98)
There is a vertical crack above the upper right part of the entrance on the northeast to the hallway. It is about 15 inches long and a hairline wide. (Photo 50-99)

There is a hairline diagonal split, about 2 and $1 / 2$ inches long, to the lower right of the picture window. (Photo 50-100)

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There is a darkened area in the ceiling along the west wall to the upper left of the front door. (Photo 50-101)

There is a hairline vertical crack to the upper right of the south window at a tape joint. (Photo 50-102)

There is a patched area at a tape joint below the lower right of this window that has not recracked.

There is a very faint, hairline vertical crack at the joint above the upper left end. (Photo 50-103)

There are two hairline vertical cracks to the upper right of the arched entry to the kitchen. (Photo 50-104)

There is also a slight separation at the upper right of the arch. (Photo 50-105)

Hallway
Hardwood floor.
Sheetrock walls and ceiling painted wite.
A view looking into this hall. (Photo 50-106)
The ceiling has a visible tape joint trending north-south. It is partially cracked, hairline width. (Photo 50-107)

This hall has doors on the east to the bathroom, north to a bedroom, and west to a bedroom.

There is a hairline vertical crack at a seam above the upper right of the north door. It is about 10 inches long at this time. (Photo 50-108)

There is a slight hairline crack to the upper left of the door to the living roan. It is about 2 and $1 / 2$ inches long vertically. (Photo 50-109)

West Bedroom
Hardwood floor.
Sheetrock walls and ceiling.
Windows on north and west walls.
Photograph of the north wall. (Photo 50-110)

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Photographs of the east wall. (Photos $50-111$ and 50-112)
Photograph of the south wall. (Photo 50-113)
Photographs of the west wall. (Photos 50-114 and 50-115)
There is a hairline diagonal crack about 5 inches long below the lower right corner of the west window. (Photo 50-116)

There is a hairline vertical crack below the lower left corner of the window, 5 and $1 / 2$ inches long. (Photo 50-117)

There is a vertical crack, about 2 inches long and $1 / 16$ of an inch wide, above the upper left of the closet door on the east wall. (Photo 50-118)

There is a north-south trending crack in the ceiling at a tape joint. It is about 43 inches long and a hairline wide.

The ceiling has another hairline crack, offset to the west from the previous crack. It is about 21 inches long.

East Bedroom
Hardwood floor.
Sheetrock walls and ceiling. Lightly textured ceiling.

Windows on north and east walls.
Photograph of the west wall. (Photo 50-119)
Photograph of the north wall. (Photo 50-120)
Photographs of the east wall. (Photos 50-121 and 50-122)
Photograph of the south wall. (Photo 50-123)
The tape joints are visible in the ceiling.
Bathroom
Tile floor and lower walls.
Sheetrock upper walls and ceiling.
Tiled shower stall.
A photograph looking eastward into the bathroom. (Photo 50-124)

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Window on the east wall.
There appears to be a very slight crack in the ceiling at the northsouth trending, tape joint. It is cracked mainly at the south part and at the light fixture.
Kitchen
Tile floor.
Sheetrock walls.
Textured plaster ceiling.
Tile cabinet area walls.
Door to garage on south, door to utility room an north. Window on the east wall.
Photograph of the east wall. (Photo 50-125)
Photograph of the south wall. (Photo 50-126)
Photograph of the north wall. (Photo 50-127)
Photographs of the west wall. (Photos 50-128 and 50-129)
There is a slight split at each upper side of the arch on the west wall. (Photos 50-130 and 50-132)
There is a slight vertical crack about 7 inches long above the upper left of the arch. (Photo 50-131)
There is a hairline crack about 1 inch long above the upper right of the north door. (Photo 50-133)
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## Utility Room

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Vinyl floor.
Sheetrock walls and ceiling.
Window and a door on the east wall.
Photograph of the east wall. (Photo 50-134)
Photographs of the rorth wall. (Photos 50-135 and 50-136)
Photograph of the west wall. (Photo 50-137)
Photographs of the south wall. (Photos 50-138 and 50-139)
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Garage
Concrete floor.
Sheetrock walls and ceiling.
Window on south and two doors on the north.
Closets on the east wall.
Photograph of the east wall. (Photo 50-140)
Photographs of the rorth wall. (Photos 50-141 and 50-142)
Photograph of the west wall. (Photo 50-143)
Photographs of the south wall. (Photos $50-144$ and 50-145)
The east floor slab has a diagonal crack at the south end. It is about 76 inches long and about $1 / 2$ an inch wide. (Photos 50-146 thru 50-148)

This crack has a short branch that is about a hairline wide and 15 inches long. (Photo 50-149)

The floor has two sections. There is differential heaving between the slabs. The west slab is elevated at the south end and the east slab is elevated at the north end. (Photos 50-150 thru 50-152)

At the north wall, east end, there are two cracks in this concrete rail. The west crack is about $1 / 4$ an inch wide and the east crack is about $1 / 8$ of an inch wide. (Photo 50-153)

There is about a $1 / 4$ inch gap between the floor and the rail. (Photo 50-154)

The west floor slab has an "X" shaped crack. The northeast branch trends about 94 inches from the north wall to the intersection. From the intersection point it trends about another 64 inches southwest to the overhead door. (Photos 50-155 thru 50-160)

The branch of the " $x$ " that trends northwest from the center is about 71 inches long. (Photos 50-161 and 50-162)

The branch that trends southeast from the "X" is about 71 inches long. (Photos 50-163 and 50-164)

Widths of the cracks that form the " X " are from about $1 / 8$ to $1 / 16$ of an inch.

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The south edge of the west slab is separated from the foundation wall by about $3 / 8$ of an inch. (Photo 50-165)

Part of the house foundation is in the garage. In the northwest corner of the garage, there are same broken and separated mortar joints. They range from about $1 / 4$ to $1 / 16$ of an inch in width. (Photos $50-166$ and 50-167)

Several mortar joints are also broken or separated on the south wall of the garage. This part of the foundation was visible from the outside. Series of photographs from east to west. (Photos 50-168 thru 50-173)

The mortar separations in the south foundation range fran about $1 / 4$ of an inch down to a hairline.

The east door on the north wall has a filled crack above the upper left corner and a peeling tape joint above the upper right corner. (Photos 50-174 and 50-175)

There are two other visible tape joints above the door. (Photo 50-176)
The tape joints are visible and there is some slight cracking in the joint to the lower right of the window. It forms an upside down "L" shape. (Photo 50-177)

The tape joint is cracked above the upper left corner of the overhead door. It is about $1 / 16$ of an inch wide. (Photo 50-178)

The tape joint above the upper right corner is also cracked. It is about $1 / 16$ of an inch wide. (Photo 50-179)

There are folds and slight cracks in the northwest corner. (Photos 50-180 thru 50-182)

The ceiling has a slightly cracked tape joint trending east-west at the attic door. Only part of this tape joint is cracked. (Photo 50-183)

There is a cracked block in the north foundation. It is about $1 / 16$ of an inch wide. (Photo 50-184)

There is also a chipped peice of concrete at the northeast corner of the west floor slab. (Photo 50-184)

That completes the inspection of this property.

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General Comments
This house was built. in 1953. It has a concrete block foundation that has numerous cracks, mainly at mortar joints. The most severe foundation damage is at the northeast corner and on the north side. These cracks indicate that the house has experienced same settling.

The house is equipped with a gutter and downspout system that drains rainwater to the east side of the house, several feet from the foundation.

The interior has several cracks, mainly at seams of the sheetrock walls and ceilings. These were probably caused by material expansion or the natural movement of the house. These cracks can be expected to increase in length, naturally over time, where possible, and all widths will vary with humidity changes.

The garage floor has cracks that were probably caused, and are likely to be aggravated, by hydrostatic pressure.

WHITE INDUSTRIAL SEISMGOGY, INC.


Christopher D. Landoll Technical Associate
$\mathrm{CDL} / \mathrm{kg}$
Enclosure: 184 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 124

2- SUMMARY FORM
3- SKETCH OF STRUCTURE





50.41



## $50 \cdot 27$





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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Paul Castle
2. Date: Octaber 25, 1986 Time: $1: 45 \mathrm{PM}$
3. Address:Box 315, Amoret, Missouri 64722
4. Location: Fourth Street, 220 feet south of 52 Highway
5. Telephone Number: (816) 925-3284
6. Dates of occupancy by current resident: 1974-Present
7. Dates of any temporary or permanent abandownent: None

IT. Information Concerning Buildings
(repeat for additional buildings)

1. Date of original construction: 1974
2. Date(s) of major remodeling or additions:
(a) 1968-Built Garage
(b) $\qquad$
(c)
3. Construction of building:
(a) Eraming (joists, rafters, and stud walls): 2 " $x 4^{\prime \prime}$ stud walls
(b) interfor walls: sheetrock
(c) roof :Gable type, shingled
(d) footings; Eoundations: Poured concrete
(e) basement walls (indicate how keyed to footing of floor):

2" wide, 2" deep V-shaped
(f) basement floor (keyways; thickness):

Unknown
(g) name of person(s) who constructed building:paul Castle
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

825 feet at residence
2. Type of soil in area:silty clay loam
3. Type of subgrade drainage at base of foundation: clay tile
4. Water wells utilized (Indicate depth and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior dralnage features: See photo. survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual Eeatures, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioracion, may exhibit an unusual response to normal blasting activities.

See survey narrative

White-Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (41'7) 624-0164

October 31, 1986 Report No. 87056-8 P \& M Map Photo No. 65

Subject: Inspection of the Paul Castle Residence Box 315
Amoret, Missouri 64722 October 25, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

According to Mr. Castle, he built the house in 1974.
ID photograph of the east side. (Photo 8-1)
Looking at the poured concrete foundation, there is a hairline vertical crack. It measures 6 inches from the ground to the bottom of the siding. (Photo 8-2)

This crack is roughly 16 feet 6 inches from the south side of the residence.

There is a brick flower box at the south side of the porch.
ID photographs showing the general condition. (Photos 8-3 and 8-4)
There is a separation between the flower box and the porch of $5 / 8$ of an inch. (Photo 8-5)

There is a north-south crack across the driveway. The general width is about $1 / 16$ of an inch. It measures 12 feet 4 inches. (Photos 8-6 thru 8-8)

The driveway is also cracked at the corners of the garage entrance. Measures 8 inches at the southeast corner. Measures 8 to 9 inches at the northeast corner. (Photos 8-9 and 8-10)

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There is another crack across the driveway to the east of the larger one. It measures 8 feet 6 inches. (Photos 8-ll thru 8-16)

The foundation is spalled at the northeast corner. (Photo 8-17)
There is also no splashblock. The downspout drains directly to the driveway and the foundation. (Photo 8-17)

ID photograph of the north side. (Photo 8-18)
The walk is separated along the length of the foundation by $1 / 4$ of an inch. (Photos 8-19 and 8-20)

Six inches west of the east end, there is a hairline vertical crack in the foundation. This measures 6 inches. (Photo 8-2l)

Twelve feet west of the east end, there is another hairline foundation crack. It measures 7 inches. (Photo 8-22)

There is another hairline crack in the foundation about 2 feet 5 inches west. It measures 8 inches. (Photo 8-23)

There is another hairline crack in the foundation 2 feet 5 inches to the west. It measures 8 inches. (Photo 8-24)

Two feet 3 inches on west, there is another hairline crack in the foundation. It measures 8 and $1 / 2$ inches. (Photo 8-25)

Approximately 2 feet more west, there is another hairline foundation crack. It measures 5 inches. (Photo 8-26)

The last hairline foundation crack on the north side is 2 feet 1 inch from the west end. It measures 6 and $1 / 2$ inches. (Photo 8-27)

ID photographs of the west side. (Photos 8-28 and 8-29)
The separation between the two slabs on the west side measures $1 / 4$ of an inch. (Photo 8-30)

Looking at the foundation at the right side of the door, there is a horizontal crack. I.t measures 6 inches. (Photo 8-31)

There is a vertical foundation crack 3 feet 3 inches from the south end of the slab. Measures 6 inches long. (Photo 8-32)

There is another vertical foundation crack 1 foot from the slab. These are hairline cracks. Measures 6 inches in length. (Photo 8-33)

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At the right side of the slab, there is a vertical hairline foundation crack. Measures 7 inches. (Photo 8-34)

Behind the drainpipe, there is a vertical hairline foundation crack. Measures 10 and 1/2 inches. (Photo 8-35)

There is a hairline vertical foundation crack 3 feet 2 inches from the south end of the northernmost window. (Photo 8-36)

There is another hairline foundation crack 2 feet 10 inches south of the previous one paralleling the pour joint. This measures 10 inches from the ground. (Photo 8-37)

There is another hairline foundation crack 4 feet 1 inch farther south. It measures 6 inches. (Photo 8-38)

There is a hairline vertical foundation crack 10 and $1 / 2$ inches north of the south end of the foundation. It measures 7 inches. (Photo 8-39)

The downpout at this corner drops directly into the foundation subgrade drainage pipe.

ID photograph of the south side. (Photo 8-40)
We are now on the south side.
There is a hairline vertical foundation crack 11 inches from the west end. It measures 8 inches from the ground. (Photo 8-41)

There is a hairline vertical foundation crack 5 feet to the west of the western end of the easternmost basement window. It measures 8 inches. (Photo 8-42)

There is a hairline vertical foundation crack 9 inches west of the east end of the foundation. It measures 8 inches from the ground. (Photo 8-43)

The downspout at the southeast corner also drops directly into the subgrade drainage pipe.

We are now inside the garage.

Garage
This is at the northest corner of the residence.
Single slab poured concrete floor.
Plywood walls.

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ID photograph of the interior of the garage. (Photos 8-44 thru 8-47)
Looking at the north foundation of the garage, there is a vertical hairline crack. (Photo 8-48)

This is 8 feet 3 inches from the east end. It measures the height of the noticeable foundation, 6 and $1 / 2$ inches.

There is another hairline foundation crack 5 feet 7 inches from the previous crack. It measures 5 and $1 / 2$ inches. (Photo 8-49)

The south side of the garage is partially obscured by benches and other materials. It is possible that there are some hairline vertical foundation cracks that can't be seen in this area.

There is a hairline vertical foundation crack in the south foundation 2 feet 2 inches from the east end. It measures 7 inches vertically. (Photo 8-50)

On the south wall, there is a wood stove stack through the garage that is insulated. (Photos 8-51 thru 8-53)

Basement
Southeast Bedroom
The poured concrete walls are noticeable on the south and east sides.
Paneled north and west walls.
Carpeted floor.
Paneled ceiling.
There is a window on the south wall and there are diagonal hairline cracks at the corners.

The diagonal crack at the lower right corner intersects the joint and follows it to the floor. This crack measures about 4 inches before it meets the pour joint. (Photo 8-54)

The diagonal at the lower left corner measured 32 inches. (Photos 8-55
thru 8-57)
Looking at the east wall, there is a roughly horizontal hairline crack at the lower right corner of the window. It measures approximately 7 inches. (Photo 8-58)

A faint vertical crack at the lower left corner measured 1 and $3 / 4$ inches. (Photo 8-59)

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ID photographs. (Photos 8-60 and 8-61)

## Family Room

ID photographs of the east wall. (Photos 8-62 and 8-63)
Looking at the lower right corner of the window, there is a diagonal hairline crack. The diagonal crack measures 5 feet 2 inches. (Photos 8-64 thru 8-68)

There is a hairline diagonal crack at the lower left corner of the window. (Photo 8-69)

There is another hairline diagonal crack just below this. (Photos 8-70 thru 8-72)

That diagonal crack at the lower left corner measured 11 inches.
The one below that measured about 15 inches.
There is another slight diagonal crack a little lower in the wall. It measures about 15 inches. (Photos 8-73 thru 8-75)

ID photographs. (Photos 8-76 thru 8-78)
There is a diagonal hairline crack at the lower right corner of the west window. It measures 10 inches. (Photo 8-79)

There is also a hairline djagonal crack below this. It measures 12 inches. (Photo 8-80)

At the lower corner of the window, there is a vertical crack in the wall. It tends to diagonal toward the north. This crack measures 38 inches diagonally. (Photos 8-81 thru 8-84)

South wall and west wall of this area are paneled.
Now moving into the unfinished portion of this basement.
Unfinished Area
This is at the southwest corner.
We are looking at the west foundation wall. There is a diagonally trending crack to the north. It measures 2 feet. (Photos 8-85 thru 8-87)

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There is another hairline vertical crack in the foundation. It measures 1 foot 1 inch. (Photo 8-88)

There is another hairline vertical crack to the south. This measures roughly 12 inches. (Photo 8-89)

We are now looking at the south wall.
Thre are very fine hairline cracks at the lower right and lower left corners of the window. The one at the lower right corner measures 3 and $1 / 2$ inches. The one at the lower left corner measures $l$ foot. (Photos 8-90 thru 8-93)

Looking at the floor, there is a north-south crack at the head of the back of the stairs. (Photos 8-94 thru 8-97)

Looking at the corners of the sump pump, there is a diagonal crack at the northwest corner; diagonal crack at the northeast corner; and a diagonal crack at the southeast corner.

These floor cracks have a maximum width of about $1 / 16$ of an inch.
The northwest corner crack measures 45 inches. (Photos 8-98 thru 8-100)
The northeast corner crack measured about 75 inches. (Photos 8-101 thru 8-104)

The crack to the southeast measures about 31 inches. (Photo 8-105)
ID photographs of this room. (Photos 8-106 thru 8-111)
Main Floor

## Living Room

This is at the northeast corner of the structure.
Carpeted floor.
Paneled walls.
Textured ceiling.
ID photographs of the living room, starting with the east wall, continuing with the north, west and south walls. (Photos 8-112 thru 8-117)

Nothing noted.

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## Dining Room

Vinyl floor.
Sheetrock walls.
Textured ceiling.
Looking at the east wall, there is a tape seam crack above the upper left of the door into the living room. This crack measures 4 inches. (Photo 8-118)

There is also a vertical hairline crack above the upper right of the door. (Photo 8-119)

Nothing else noted in the dining room.
ID photographs. (Photos 8-120 thru 8-122)
There is a china cabinet on the north wall.
Now moving northward off the dining room into the utility room.
Utility Room
This is directly behind the garage.
Poured concrete floor.
Sheetrock walls.
Textured ceiling.
Looking at the west wall, there is a hairline vertical crack above the upper left corner of the door. This measures 3 and $1 / 2$ inches. (Photo 8-123)

There is no evident cracking in the floor or in the ceiling.
ID photographs. (Photos 8-124 thru 8-126)
The kitchen is to the south of the dining room.
Kitchen
Vinyl floor.
Textured ceiling.
Sheetrock east wall.
ID photographs of the kitchen. (Photos 8-127 and 8-128)
Nothing noted.

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We are now moving southward down a hall.
Hall
We see nothing notable in this hall.
ID photograph to the south. (Photo 8-129)
The bathroom is located on the west side of the hall.
Bathroom
Nothing is noted in the bathroom.
ID photographs from the door. (Photos 8-130 and 8-131)
Southwest Bedroom
Carpeted floor.
Sheetrock walls.
Textured ceiling.
ID photographs of this bedroom from the door. (Photos 8-132 thru 8-134)
Nothing noted.
Now moved across the hall into the southeast bedroom
Southeast Bedroom
Carpeted floor.
Sheetrock walls.
Textured ceiling.
ID photographs. (Photos 8-135 thru 8-138)
Nothing noted.
Detached Garage
Single slab poured concrete floor.
There is an east-west crack across the floor toward the north end. It
measures about 7 feet 6 inches. (Photos 8-139 thru 8-146)
There is another east-west hairline crack across the floor near the
center of the floor. (Photos 8-147 and 8-148)
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## White Industrial Seismology, Inc.

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ID photographs. (Photos 8-149 and 8-150)
ID photograph of the chimney stack. This appears to be in good condition. (Photo 8-15l)

## General Comments

The Paul Castle residence is located at an approximate elevation of 825 feet above sea level. The surrounding land slopes gently to the northwest. The roof drainage is good. The foundation shows evidence of settlement load effects in the form of vertical expansion cracks. These are hairline in nature at the present time. However, these cracks can be expected to increase in size in response to the environmental effects of freezing and thawing.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 151 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 65

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## $8-149$





## $8-28$



## $8-18$



PRE-BLAST SURVEY, RESIDENTIAL
I. Basic Information

1. Name of Resident: John Crim

2. Address: Box 174, Amoret, Missouri 64722
3. Location: Lots 20 and 21, Block 26
4. Telephone Number: (816) 925-3232
5. Dates of occupancy by current resident: Since 1975
6. Dates of any temporary or permanent abandonnent: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
7. Date of original construction: 1927
8. Date(s) of major remodeling or additions:
(a)Back addition (Kitchen, bedroom, bath) built in 1963 or 1964
(b) $\qquad$
(c)
9. Construction of building:
(a) framing (joists, rafters, and stud walls): Hardwood floor joists: $2 \times 6$ Ceiling joists: $2 \times 4$, rafters: $2 \times 4$, Stud walls $2 \times 4$
(b) interior walls: Plaster on old part

## Sheetrock on new part

(c) roof: Composition shingles
(d) footings; Eoundations: Concrete continuous
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(f) basement Eloor (keyways, chickness): Not applicable
(g) name of person(s) who constructed bullding: Paul Castle built addition
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximata elevation of area:
$850^{\prime}$
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundat Lon: Unknown
4. Water wells utilized (indicate depth and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approxinate volume). Yes but don't use
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: Yes .
8. Description of general grading or landscaping in vicinity: Generally flat:
IV. Any notable existing deterioration or damage
9. Cracks in interior walls: See survey
10. Receding of doors, windows: See survey
11. Noticeable settlement: See survey
12. Foundation cracks:See survey
13. Exterior wall cracks (brick veneer): Not applicable
14. Sidewalks, steps, driveway pavement: See survey
15. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls see survey
16. North
17. South
18. East
19. West
VII. Comments or supplementary drawings see survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of detertoration, may exhibit an unusual response to normal blasting activitles.

See survey

October 27, 1986
Invoice No. 87056-14
P \& M Map Photo No. 66

## Subject: Inspection of the John Crim Residence

 P. O. Box 174Amoret, Missouri 64722
October 24 and November 11, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the front, east side. (Photo 14-1)
ID photograph of the east side of the chimney. (Photo 14-2)
The east part of the roof has some deteriorating shingles. (Photos 14-2 thru 14-4)

ID photographs of the south side of the house. (Photos 14-5 and 14-6)
ID photographs of the north side of the house. (Photos $14-7$ and 14-8)
ID photographs of the chimney from the northwest. (Photos $14-9$ and 14-10)

The west side of the chimney has a bulge in the concrete cover. (Photo 14-10)

ID photographs of the west side of the house. (Photos 14-11 and 14-12)
Starting on the front side, south end.
The front porch has separated from the front foundation along its length. The separation ranges from about $1 / 4$ of an inch at the south part to $1 / 2$ an inch near the north end. (Photos $14-13$ thru 14-18)

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The Pittsburg and Midway Coal Mining Company
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Mr . Crim indicated that recent rainwater had caused the porch to heave. It then settled and separated from the wall.

There is a diagonal crack at the north end of the porch, measuring about 7 feet 7 inches long and about 1 and $1 / 4$ inches wide near the east end. (Photos 14-19 thru 14-21)

This crack has a north trending branch about 57 inches long and $1 / 4$ inch wide. (Photos 14-22 thru 14-24)

There is an east-west trending crack with a "Y" at its west end, just south of the front step. It is about 89 inches long and averages about $1 / 4$ of an inch wide to about 2 inches at the widest. (Photos 14-25 thru 14-27)

A photograph of the south side of the south porch support. (Photo 14-28)

There are cracks on the lower north side of the south support. They range in width from a hairline to about 1 inch wide including spalls. (Photo 14-29)

The lower south side of the middle support has a slight stairstepping crack. It is about 10 inches long measured diagonally and from a hairline to about $1 / 8$ of an inch wide. (Photo 14-30)

The east side of this support has a slight mortar crack at the top. It is about 4 inches long and just wider than a hairline. (Photo 14-31)

The north side also has a hairline crack in the mortar at the top. It is about 4 inches long. (Photo 14-32)

The west side has a roughly horizontal mortar crack below the top brick course and another near the bottom. Each is about 13 and $1 / 2$ inches long and $1 / 8$ inch wide. (Photos 14-33 and 14-34)

The north support is severely cracked at the lower south side. Cracks range from hairline to about 1 inch wide and are confined to the lower 12 inches of the column. (Photos 14-35 and 14-36)

There is a slight mortar crack at the top of the south side. It is about $1 / 32$ of an inch wide and 3 and $1 / 4$ inches long. (Photo 14-37)

The lower front side has several broken mortar joints in the bottom 12 inches of the column. (Photos 14-38 and 14-39)

The top, northeast brick is spalled on this support. (Photo 14-40)

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The top bricks on the north side are also spalled. (Photo 14-41)
The bottom of the north side has several broken mortar joints in the bottom 12 inches. (Photos 14-42 and 14-43)

The bottom of the west side has a patched area and a few spalled bricks. (Photos 14-44 and 14-45)

Mr. Crim indicated that he damaged this column by backing into it with a truck when they were moving into the house.

There is a separation or gap in the foundation at the northeast corner. It is over 2 inches wide and about 4 and $1 / 2$ inches is visible on the vertical. (Photos $14-46$ and 14-47)

Now a photograph of the crack at the north end of the front porch showing that it goes through the slab. (Photo 14-48)

There is caulk separation along the right side of the north front window. (Photos 14-49 and 14-50)

There is caulk separation at the upper right end of the porch roof where it attaches to the house. (Photo 14-51)

Along the left side of the north window, there is caulk separation, mainly at the lower part. (Photos 14-52 and 14-53)

There is a spalled crack in the foundation between the north front window and step. The crack is about $1 / 2$ an inch wide. (Photo 14-54)

There is also a spall in the foundation to the lower right of the north window. (Photo 14-55)

The front step is separated from the foundation by about $3 / 8$ of an inch. (Photos 14-56 and 14-57)

There is some caulk separation along the left side of the front door trim. (Photo 14-58)

There is caulk separation along the right side of the south front window. (Photos 14-59 and 14-60)

A view of the porch ceiling. (Photo 14-61)
Now a view looking west along the south soffit. (Photo 14-62)

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There is a crack in the foundation at the southeast corner that ranges from $1 / 8$ of an inch to a hairline in width. (Photo 14-63)

There is a large crack in the foundation, about $1 / 2$ inch wide below the east, south window. (Photos $14-64$ and 14-65)

There is a crack in the foundation about $1 / 4$ of an inch wide below the middle south window. (Photo 14-66)

There is another crack in the foundation about $3 / 8$ of an inch wide, just west of the faucet. (Photo 14-67)

There is another foundation crack at the southwest corner of the older, front part of the house. This crack has been filled with a concrete patch. The patch is about 1 and $1 / 4$ inches wide with about $1 / 8$ of an inch wide separation along the sides of the patch. (Photo 14-68)

ID photograph of the cistern intake from the southeast. (Photo 14-69)
It is a brick structure covered with concrete and is presently clogged.
It has a crack that is about 5 inches long measured at the top and down to the south side. It is about $1 / 16$ of an inch wide. (Photo 14-70)

A photograph from the northwest of the cistern intake. (Photo 14-71)
The west branch of this downspout dumps outside the cistern intake. This water will probably contribute to further damage to the house foundation.

Some of the concrete cover has fallen off at the upper ends of the west side. (Photos 14-72 and 14-73)

A photograph showing slippage of the siding at the south end of the west wall of the original part of the house. (Photo 14-74)

Along the bottom and sides of the middle south window, there is caulk separation. (Photos 14-75 and 14-76)

The east, south window also has caulk separation along the left and right sides. (Photos 14-77 thru 14-80)

The west, south window has caulk separation along the right and left sides. (Photos 14-81 thru 14-84)

The screen sash of the storm window has fallen and the bottom part of the frame is missing. (Photo 14-85)

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The Pittsburg and Midway Coal Mining Company
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ID photograph of the chimney from the southwest. (Photo 14-86)
Photographs of the west part of the roof. (Photos $14-87$ thru 14-89)
Note that the south gutter of the west wing is full of leaves.
The concrete cover of the cistern has a north-south trending crack on both sides of the cap. The north part is $3 / 16$ of an inch wide at a spall to a hairline in width. The crack south of the cap is from $1 / 8$ of an inch to a hairline in width. (Photos $14-90$ and 14-91)

Looking into the cistern, water is visible at a level about 2 feet below ground level. The water looks cloudy. The cistern is brick lined and does not appear to be collapsed.

A photograph of a concrete block walkway with dry joints located near the door on the south side of the house. (Photo 14-92)

There is caulk separation along the sides of the south door. (Photos 14-93 thru 14-96)

There is an area of siding missing below the right part of this door. (Photo 14-97)

The stoop at this door is separated from the house by about 1 and $1 / 2$ inches. (Photo 14-98)

Now to the west side of the house.
The caulk seal at the southwest corner is deteriorating. (Photos 14-99 and 14-100)

Some of the siding has slipped at about the middle of the west wall and north of the middle. (Photos $14-101$ and 14-102)

The west window has caulk separation along the right side. (Photos 14-103 and 14-104)

The north end of the west soffit has dark stains. (Photos 14-105 and 14-106)

There is separation of the caulk seal at the northwest corner. (Photos 14-106 and 14-107)

The composition siding is deteriorating at the lower west end of the north side. (Photos 14-108 and 14-109)

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The north soffit of the west wing of the house is stained. (Photo 14-110)

There is some deteriorating siding between the two north windows of the west wing. (Photo 14-111)

The septic line is backed up and sewage is pooling near the house at the north side of the west wing. (Photo 14-112)

This condition will contribute to the formation of additional cracks in the foundation.

There is some deteriorating siding on the west facing wall at the north side of the house. (Photos 14-113 and 14-114)

There is an area of siding missing below the watt meter. (Photos 14-115 thru 14-117)

Now a view of the north soffit of the original part of the house. (Photo 14-118)

There is caulk separation around the window just east of the watt meter. (Photos 14-119 thru 14-121)

The east, north window has caulk separation along the left side. (Photo 14-122)

There is a crack in the foundation, about 2 inches wide below the east north window. (Photos 14-123 and 14-124)

The foundation is spalling at the northeast corner. (Photos 14-125 and 14-126)

The caulk seal is separating at the northeast corner. (Photos 14-126 and 14-127)

The north end of the front porch roof is separating from the house. (Photo 14-128)

ID photograph of the chimney from the northeast. (Photo 14-129)
The front sidewalk is being overgrown with grass. (Photo 14-130)
INTERIOR INSPECTION

## Living Room

This is the southeast room of the house.

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Tile floor.
Papered walls and ceiling over plaster.
Windows on south and east walls.
Front door on the east.
Entrance to a bedroom on the north wall.
Photograph of the south wall. (Photo 14-131)
Photographs of the west wal.l. (Photos 14-132 and 14-133)
Photographs of the north wall. (Photos 14-134 and 14-135)
Photographs of the east wall. (Photos 14-136 and 14-137)
Photographs of the ceiling. (Photos 14-138 and 14-139)
There are stains in the northeast corner at the flue. (Photo 14-140)
There are cracks above the north doorway in the wallpaper. (Photos 14-141 and 14-142)

Mr. Crim indicates that all of these cracks in here are probably in the wallpaper only.

There is a paper crack north of the front door on the east wall. (Photo 14-143)

There is a crack above the upper right corner of the front door. (Photo 14-144)

There are two areas of paper missing between the door and east window. (Photos 14-145 and 14-146)

There is a vertical crack below the lower right corner of the east window. (Photo 14-147)

The south wall has a horizontal crack just below the ceiling. (Photos 14-148 and 14-149)

The lower east part of the south wall has an area of plaster missing. (Photo 14-150)

There is a patch at the lower west part of the south wall. (Photo 14-151)

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There is a hole and a patch on the west wall to the lower right of the doorway. (Photo 14-152)

There is a crack above the north part of the west doorway. (Photo 14-153)

The ceiling has several paper cracks and ridges underneath the paper.
These paper cracks are irregular tears ranging in width from hairline to about $1 / 8$ of an inch.

There is a north-south trending crack in the ceiling near the north door. It is about 32 inches long. (Photo 14-154)

There is an east-west trending ceiling crack near the east window. It is about 17 inches long. (photo 14-155)

Offset south and west a few inches from the previous crack, there is another east-west trending ceiling crack. It is about 22 inches long. (Photo 14-156)

That crack has a faint branch trending south about 15 inches. (Photo 14-157)

There is another tear in the ceiling wallpaper trending east-west above the left end of the east window. (Photo 14-157)

There are two bulging ridges in the ceiling, north of the light
fixture. (Photo 14-158)
Northeast Bedroom
Tile floor
Plaster walls and ceiling.
Closet enclosure in the northwest corner.
Door on the west wall to another bedroom.
The walls and ceiling have been stripped to the plaster and several patched cracks are evident.

Mr. Crim indicated that he intends to refinish this bedroom's walls and ceiling.

Photographs of the east wall. (Photos 14-159 and 14-160)

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Photographs of the south wall. (Photos 14-161 and 14-162)
Photographs of the west wall. (Photos 14-163 and 14-164)
Photographs of the north wall. (Photos 14-165 and 14-166)
There are cracks above the west door that range from $1 / 8$ of an inch to a hairline in width. (Photos 14-167 and 14-168)

There are cracks above the south doorway. (Photos 14-169 thru 14-171)
The wall and ceiling have several cracks above the east window. (Photo 14-172)

The northeast corner of the room has several patched cracks. (Photo 14-173)

There is a crack above the upper left end of the north window. (Photo 14-174)

There is a horizontal crack to the left of the north window. (Photo 14-175)

The ceiling is extensively cracked. The main crack runs from the upper left of the south doorway, northwest about 8 feet 4 inches to a point north of the light fixture. It intersects a roughly east-west trending crack and is about $1 / 16$ of an inch wide. (Photos 14-176 thru 14-180)

The east-west trending crack zigzags to the west wall about 7 feet 1 inch and is about $1 / 16$ of an inch wide. (Photos 14-179 thru 14-182)

Dining Room
Sheetrock walls and ceiling. Vinyl over linoleum floor.

Mr. Crim indicated that he intends to spray the ceiling with plaster, and trowel plaster on the walls. He also indicated that he intends to either remodel this house or build a new house.

Photograph of the south wall. (Photo 14-183)
Photographs of the west wall. (Photos 14-184 and 14-185)
Photograph of the north wall. (Photo 14-186)
Photographs of the east wall. (Photos 14-187 thru 14-189)

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The flue in the northeast corner is severely water damaged. (Photos 14-188, 14-189, 14-193 thru 14-195)

Photographs of the ceiling. (Photos 14-190 and 14-191)
Window on the south wall.
Door to the kitchen on the west wall.
Door on north wall to a bedroom.
There is a peeling tape joint above the upper left end of the east doorway. (Photo 14-187)

There is a crack at the tape joint above the upper right end of the east doorway. About 15 inches of the crack is visible, the rest is taped over. It is about $1 / 16$ of an inch wide. (Photo 14-192)

The north wall doorway has a crack above each corner at the tape joint. The one above the left end goes 2 feet to the ceiling and is a rough, tearing crack. The one above the right end goes up about 20 and $1 / 2$ inches and is taped over. (Photos 14-196 and 14-197)

The west door has a mostly taped over crack above the upper left corner. It is about 26 inches long on the diagonal and about $1 / 8$ of an inch wide. (Photo 14-198)

There is a taped diagonal crack, about 15 inches long above the upper right corner of the west doorway. (Photo 14-199)

The south window has a taped over crack above the upper right end. It is about 22 inches long. (Photo 14-200)

The tape seam has bulged below the lower right corner of the window. It runs down to the floor. (Photos 14-201 and 14-202)

The tape joint has cracked below the lower left corner of the window. It is about 26 inches long and is an irregular tearing crack. (Photo 14-203)

## Middle Bedroom

Tile floor.
Blue painted plaster walls and ceiling that have been papered.
Photographs of the north wall. (Photos 14-204 and 14-205)
Photographs of the east wall. (Photos 14-206 and 14-207)

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Photographs of the south wall. (Photos 14-208 and 14-209)
Photographs of the west wall. (Photos 14-210 and 14-211)
Photographs of the ceiling. (Photos 14-212 and 14-213)
There are extensive ridges underneath the paper of the ceiling, and the walls are extensively cracked.

There is a vertical crack in the northwest corner that runs up about 6 feet from the bottom. (Photo 14-214)

There is a a patched area at a vertical crack on the north wall, west end. It extends about 7 feet 4 inches above the floor. It ranges from $3 / 8$ to $1 / 16$ of an inch in width. (Photos 14-214 thru 14-216)

There is a diagonal crack below the lower left corner of the window. It is a tearing crack about 10 inches long. (Photo 14-217)

There is a vertical tearing crack in the paper above the upper right end of the window. It is about 18 and $1 / 2$ inches long from the ceiling to the top of the window. (Photo 14-218)

There is a patched crack to the upper left of the door on the east wall. It measures 16 inches horizontally from wall to door. (Photo 14-219)

There are three paper cracks above the upper right part of the east door. These are tearing cracks that range from 4 to 10 inches long. (Photo 14-220)

There is extensive cracking above the south door. These range from faint hairline cracks to large tearing paper cracks. (Photos 14-221 thru 14-223)

## Kitchen

Tile floor.
Sheetrock walls and ceiling.
Photograph of the west wall. (Photo 14-224)
Photographs of the south wall. (Photos 14-225 and 14-226)
Photograph of the east wall. (Photo 14-227)
Photographs of the north wall. (Photos 14-228 and 14-229)

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Photographs of the ceiling looking west and east. (Photos 14-230 and 14-231)

Window and a door on the south wall.
Door to the master bedroom on the north wall, west part.
Bathroom door at the east part of the north wall.
There are several stain spots on the upper east wall and ceiling. (Photo 14-232)

There is a slight crack above the upper right corner of the east doorway. The crack is about 7 and $1 / 2$ inches long, ranging from a hairline to about $1 / 16$ of an inch wide. (Photo 14-233)

There is a seam crack about $1 / 16$ of an inch wide that runs to the ceiling above the right end of that door. (Photo 14-234)

There is a vertical crack at a seam above the upper left end of the bathroom door. It is a tearing crack about 13 and $1 / 2$ inches long. (Photo 14-235)

There are stains on the wall and ceiling near the bathroom door. (Photos 14-235 and 14-236)

There is a horizontal tearing crack about 8 and $1 / 4$ inches long at the upper right corner of the entrance to the master bedroom. There are also stains above the doorway. (Photo 14-237)

There is a crack above the upper left corner of the south doorway that is about 8 inches long and about $1 / 16$ of an inch wide. (Photo 14-238)

There is a peeling tape seam above the upper right corner of the south door. It is about 14 and $1 / 2$ inches long. (Photo 14-239)

There is a crack above the upper right of the window that is about $1 / 8$ of an inch to a hairline in width and about 13 inches long. (Photo 14-240)

The tape is peeling below the lower right of the window. (Photo 14-241)
There is a diagonal tearing crack about 5 inches long near the bottom of the wall, to the lower right of the window. (Photo 14-242)

There is a vertical tearing tape crack below the lower left of the window, 21 inches long. (Photo 14-243)

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There are two cracks above the upper left end of the window. One is a vertical, tearing tape seam crack about 14 inches long and $1 / 8$ of an inch wide. The other is at the corner and is from $1 / 8$ of an inch to a hairline wide and 12 and $1 / 2$ inches long. (Photos 14-244 and 14-245)

There are several tiles missing on the west and north counter walls. (Photos 14-246 thru 1.4-248)

These are 4 and $1 / 4$ inch square tiles.

## Master Bedroom

Rug over tile floor.
Green painted sheetrock walls and ceiling.
Windows on the north and west walls.
Closet door on the east wall.
A photograph of the west wall. (Photo 14-249)
A photograph of the east wall. (Photo 14-250)
Photographs of the north wall. (Photos 14-251 and 14-252)
Photographs of the south wall. (Photos 14-253 and 14-254)
Photographs of the ceiling. (Photos 14-255 and 14-256)
There is a crack above the upper right corner of the closet door, about 12 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 14-257)

There is a crack above the upper left corner of the closet door, about 13 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 14-258)

A crack above the upper left end of the north window is about 21 and $1 / 2$ inches long and from $1 / 16$ of an inch to a hairline in width. (Photo 14-259)

There is a vertical seam crack below the lower left corner of the north window that is about 21 inches long. There are also stains below this window. (Photo 14-260)

The area to the lower right of this window cannot be seen because of materials stacked in the way.

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There is a split in the northwest corner about $1 / 16$ of an inch wide that runs the length of the corner. (Photos 14-261 and 14-262)

There is a diagonal crack about 10 inches long and $1 / 32$ of an inch wide above the upper right of the west window. (Photo 14-263)

The area to the lower right of the west window cannot be seen because of the bed.

There is a faint vertical crack above the upper left part of the entrance, about 13 and $1 / 2$ inches long. (Photo 14-264)

There is a diagonal crack above the upper left corner of the entrance about 5 inches long and $1 / 16$ of an inch wide. (Photo 14-265)

Bathroom
Tile floor.
Pink sheetrock walls and ceiling.
The tile has been removed from the lower walls.

Window on the north wall.
Photograph of the north wall. (Photo 14-266)
Photographs of the west wall. (Photos 14-267 and 14-268)
Photographs of the east wall. (Photos 14-269 and 14-270)
Photographs of the south wall. (Photos 14-271 and 14-272)
Photographs of the ceiling. (Photos 14-273 and 14-274)
There is a vertical split along the length of the upper northwest corner. (Photo 14-275)

There is a hairline split along the upper northeast corner. (Photo 14-276)

There is a vertical tape seam crack above the upper right corner of the door, 13 and $1 / 2$ inches long. (Photo 14-277)

The ceiling and east wall are separated by about $1 / 8$ of an inch to a hairline. (Photos 14-278 and 14-279)

There is a taped crack, about 11 inches long to the upper left of the window. (Photo 14-280)

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The lower walls are deteriorated around the bathtub. (Photos 14-281 thru 14-285 and 14-287)

The floor is rotting out below the toilet. (Photo 14-286)
Mr. Crim indicated that water from a broken pipe had caused the bathroom floor to rot.

General Comments
The Crim residence sets on a nearly flat lot. The house has gutters and downspouts except at the front porch and the north end of the original part of the house. Water dumping to the north side of the house will increase the probability of the formation of foundation cracks.

Most of the gutters apparently drain to the old cistern intake which is now clogged. One branch of the downspout at the cistern intake dumps directly to the ground. This water will increase the probability of the formation of more foundation cracks.

Water from the front porch roof, dumping to the ground will also likely increase cracks already present in the front porch and help create new cracks.

Effluent from the clogged septic line pools along the north side of the house. This condition also will contribute to the formation of foundation cracks if it is not corrected.

The interior has numerous cracks in the sheetrock walls. Those that have the potential to increase in length probably will with time due mainly to the shrinking and swelling of the tape seam. Crack widths will also vary with humidity changes. The plaster walls and ceiling also have numerous cracks that will likely increase in length and width due to seasonal humidity changes and the natural movement of the house over time.

There are severe water stains around the flue in the living and dining rooms. Water stains are also evident on the ceiling and east wall of the kitchen indicating a water leak where the addition attaches to the original part of the house.

In the bathroom, the floor is rotting due to a water leak and the lower walls, stripped of tile, show signs of water damage.

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That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate
CDL/mp
Enclosure: 286 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 66

2- SUMMARY FORM

3- SKETCH OF STRUCTURE









## I. Basic Information

1. Name of Resident: James Platt
2. Date: November 3, 1986______12:00
3. Address:__Box 207 Amoret, Mo_ 64722
4. Location: Northwest corner of Madison_and_Fourth_Streets
5. Telephone Number: 816-925-3293
6. Dates of occupancy by current resident: 1951-Present
7. Daces of any temporary or pernanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or additions:
(a) Added everything from the kitchen on west in 1960's
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) Eramlng (Joists, rafters, and stud walls): $2^{\prime \prime} x 4^{\prime \prime}$ stud walls
(b) incerior walls: plasterboard 2"x4" rafters 2"x6" joists
(c) roof: shingled
(d) footings; foundations: concrete foundation
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(E) basement Eloor (keyways, chickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information
11. Approximate elevation of area:

850 feet at residence
2. Type of soll in area: Silty Clay Loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth*and use): Covered By Concrete
5. Cisterns or surEace water storage utilized: (Indicate purpose and approximate volume). Not used
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: See Photo Survey
8. Description of general grading or landscaping fu vicinity:

See Photo Survey
IV. Any notable extsting deterioration or damage See Photo Survey

1. Cracks in interlor walls:
2. Recedlag of doors, wLadows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or photographs of walls See Photo Survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See Sketch
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See Survey Narrative

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Subject: Inspection of the James Platt Residence Box 207
Amoret, Missouri 64722 November 3, 1986
To: \(\quad\) The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
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Transcribed and edited from taped field notes.

## INTERIOR INSPECTION

The house is a frame structure on a concrete foundation. There are composition shingles on the roof.

Living Room
wood floor.
Paneled walls.
Acoustical tile ceiling.
Nothing noted.
ID photographs of this room. (Photos 63-1 thru 63-6)
There is an enclosed porch to the east of the living roam.
Enclosed Porch
Poured concrete floor.
Paneled walls.
Nothing noted.
ID photographs of this room. (Photos 63-7 thru 63-10)

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Kitchen/Dining Room
Vinyl floor. Paneled walls. Acoustical tile ceiling.

Nothing noted.
ID photographs of this room. (Photos 63-11 thru 63-14)
Moving westward out of the kitchen/dining room into a bedroam.
Bedroom
wood floor.
Plaster walls and ceiling.
There is a vertical bulge at the upper right corner of the door on the west wall. (Photo 63-15)

There is a diagonal hairline crack at the upper left of the door. It measures about 20 inches in length. (Photo 63-16)

Looking at the south wall, there is a crack below the lower left corner of the window. It extends about 2 feet to the floor trim. (Photo 63-17)

There is also a fine hairline crack at the upper right corner of the window. It is about 6 inches long. (Photo 63-18)

There is a diagonal crack at the upper right corner of the door on the east wall. It extends about 14 inches to the ceiling. (Photo 63-19)

ID photographs of this room. (Photos 63-20 thru 63-24)
There is a bathroan at the west side of this bedroan.
Bathroom
Vinyl floor.
Starting with the north wall.
There is a vertical hairline crack at the upper right corner of the door. It extends 14 inches to the ceiling. (Photo 63-25)

Now looking at the west wall.

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There is a hairline vertical crack at the lower left corner of the window. (Photo 63-26)

Looking at the south wall, there is a diagonal crack at the upper left corner of the window. It measures about 6 and $1 / 2$ inches in length. (Photo 63-27)

Looking at the east wall.
There is a vertical hairline crack at the upper right corner of the door. It measures about 6 inches long. (Photo 63-28)

ID photographs of the bathroom. (Photos 63-29 thru 63-32)
Utility Room
Slab floor.
The hot water heater sets on an old well.
Looking at the south wall.
There is a vertical separation at the upper left corner of the door. (Photo 63-33)

ID photographs of this rom. (Photos 63-34 thru 63-45)
There is a bedroom on the north side of the kitchen/dining roan.
Bedroom
Wood floor.
Paneled walls.
Tile ceiling.
Nothing noted.
ID photographs of this room. (Photos 63-46 thru 63-49)
There is another bedroon to the west.
Bedroon

Vinyl floor.
There is a diagonal hairline crack at the lower right corner of the window on the north wall. It measures roughly 1 foot in length. (Photo 63-50)

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There is a vertical hairline crack at the upper right corner of the door on the east wall. It extends close to the ceiling. (Photo 63-51)

There is a slight crack along the ceiling above the door on the east wall. (Photo 63-52)

ID photographs of this room. (Photos 63-53 thru 63-59)

## EXTERIOR INSPECTION

ID photograph of the east side. (Photo 63-60)

The driveway has a large north-south separation and toward the east end it is spalled and cracked. The width of the separation ranges from about l/2 inch to 2 inches. (Photos 63-61 thru 63-64)

The driveway is also cracked at the southeast corner of the residence. This crack is $1 / 8$ of an inch wide. (Photo 63-65)

Detailed photographs of the east foundation. (Photos 63-66 and 63-67)
Photograph of the north foundation under the porch. (Photo 63-68)
The upper porch slab is honeycombed.
ID photograph of the north side. (Photo 63-69)
The north foundation is partially covered by plastic.
There is a foundation crack below the single, east window. This crack is $1 / 4$ of an inch in width. (Photo 63-70)

There is another foundation crack to the west that is partially obscured by the plastic covering. The crack measures about $1 / 4$ inch in width. (Photo 63-71)

The concrete slab on the north side of the residence is heavily cracked. (Photos 63-72 and 63-73)

ID photograph of the west side. (Photo 63-74)
ID photograph of the south side of the residence. (Photo 63-75)
There is a heavily cracked and deteriorated concrete driveway on this side. (Photo 63-76)

We are now under the carport.

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Carport
There is a hairline vertical crack in the foundation about 1 foot to the east of the corner. (Photo 63-77)

There is another hairline crack in the foundation 2 or 3 feet more to the east. (Photo 63--78)

There is a deformation of the foundation a couple of feet to the east of the door. (Photo 63-79)

There is a foundation separation underneath the right side of the window. This is about 4 feet west of the L-shaped area. The separation has a maximum width of close to $1 / 2$ inch. (Photo 63-80)

There is an attached slab of concrete under the 4 by 4 carport supports. (Photos 63-81 thru 63-85)

There is a north-south crack across the carport. This crack is in a patched area. (Photos 63-86 thru 63-88)

The center colunn support for the carport is a 4 by 6 .
There is a small walk at the west side of the carport and there is a crack across the walk. It has a width from $1 / 8$ of an inch up to 1 and 1/2 inches at the south end. (Photo 63-89)

There is a metal storage shed at the west end of the property. (Photos 63-90 thru 63-99)

There are no evident cracks in the poured slab floor.
Mr. Platt has a cistern in another lot. This is to the northwest of the structure. The cistern is holding water at this time. Mr. Platt stated that they no longer use it. (Photos 63-100 thru 63-103)

## General Comments

The James platt residence is located at the northwest corner of Madison and Fourth Streets. The approximate elevation at the house is 850 feet.

The hip roof had no guttering or downspouts to provide for drainage of water away from the foundation. The 1 and is generally level around the residence.

There were minor cracks in the foundation indicative of material expansion. There were al so foundation separations possibly indicating differential settlement.

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The interior walls of the residence, where not paneled, exhibited cracks and separations at same wall joints around doors and windows. These typically occur from material expansion and differential movement. Cracks and separations of this type can be expected to worsen and become more numerous with age.

During periods of moderate to heavy rainfall, the land surrounding the foundation may become saturated. If this occurs, the foundation will be susceptible to hydraulic effects from freezing and thawing of the ground. There is inadequate provision for draining excess water away from the foundation at this time. If this condition is not corrected, hydraulic related foundation problems can be expected to continue and worsen with time.

That completes the inspection of this property.


Randall M. Wheeler Manager of Technical Services

RMW/kg
Enclosures: 103 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 67

2- SUMMARY FORM

3- SKETCH OF STRUCTURE


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## $63-69$



## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: Thelma Hammett
2. Date: October 28,_1986_Time:_4:00_PM
3. Address: Rt. 1 Amoret, Mo. 64722
4. Location: Southwest corner of Monroe and Fourth Streets
5. Telephone Number: 816-925-3384
6. Dates of occupancy by current resident: 1952-Present
7. Dates of any temporary or perinanent abandoment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or additions:
(a) Built front porch and southeast bedroom 1965-1966
(b) Extended living room to the east 1965-1966
(c) Built fireplace 1976
10. Construction of building:
(a) Eraning (joists, rafters, and stud walls): 2 " $x 4$ " stud walls
(b) Interlor walls: Sheetrock or plaster $2^{\prime \prime} x 6^{\prime \prime}$ floor joists
(c) roof: composition shingle
(d) footings; foundations: Concrete foundation new areas Cement mortar covering old areas
(e) basenent walls (indicate how keyed to footing of floor): Not Applicable
(E) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromnental Information
11. Approximate elevation of area:

855 feet at residence
2. Type of soll in area: Silty Clay Loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use): 85' deep, watex garden and chickens
5. Cisterns or surface water storage utilized: (Indicate purpose and approxinate volume). None
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior drainage Eeatures: See Photo Survey
8. Description of general grading or landscaplug in vicinity: See Photo Survey
IV. Any notable existing deterioration or damage See Photo Survey

1. Cracks in lnterlor walls:
2. RecedIng of dours, wLiduws:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or photographs of walls See Photo Survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to nomal blasting activities.

See survey narrative

November 5, 1986
Report No. 87056-21
P and M Map Photo No. 69

Subject: Inspection of the Ray and Thelma Harmett Residence Route 1 Amoret, Missouri 64722 October 28, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
This is a frame structure.
There is a chimney and rock fireplace at the south end of the residence.
ID photograph from the northeast. (Photo 21-1)
At the southeast corner the ground slopes into the foundation. (Photo 2l-2)

ID photograph of the east sidewalk conditions. The sidewalk is cracked and spalled in places. (Photo 2l-3)

The downspout is extended out from the foundation at the northeast corner. (Photo 21-3)

We could not see much of the foundation on the east side. The siding extends close to the ground.

On the north side near the east end, there is a vertical crack in the foundation. The width of this crack is $1 / 8$ of an inch. (Photo 21-4)

ID photograph showing the new and older foundation sections. The siding is also separated and cracked here. (Photo 21-5)

Looking along the north wall to the west, we can see that the lower siding is bent northward. (Photos 21-6 and 21-7)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-2l
P and M Map Photo No. 69
October 28, 1986
Page 2

There is a foundation crack underneath the westernmost pair of windows. It has a width of $1 / 8$ of an inch. (Photo $21-8$ )

There are cracks and separations in the siding a few feet east of the west end of the north wall. (Photo 21-9)

ID photograph of the west side of the residence. (Photo 21-10)
ID photographs of the stove stack. The stack appears to be in fair condition with the exception of some thermal expansion cracks in the covering. (Photos $21-11$ and 21-65 thru 21-67)

There is a patched foundation crack a few feet to the north of the south end of the west side. It has a width of $1 / 16$ of an inch. (Photo 21-12)

ID photographs of the west foundation. (Photos 21-13 and 21-14)
There is a storage structure at the southwest corner of the residence. It has a dirt floor with a small concrete ramp just inside the door. (Photos 21-15 and 21-16)

ID photographs of the interior and exterior of the shed. (Photos 21-17 thru 21-21)

ID photograph of the south side of the residence. (Photo 2l-22)
There is a poured concrete slab on this side in two sections.
Near the south end of the west slab, there is crack that is 69 inches long and has a width of $1 / 4$ of an inch. (Photo 21-23)

There is a smaller crack in this part of the west slab that extends to the south. This crack has a length of about 51 inches. (Photos 2l-24
and 21-25)
There is a crack in the eastern slab. This crack has a width of $1 / 2$ inch maximum and a length of about 74 inches. (Photos 21-26 thru 21-28)

There is also a crack extending to the south end of the slab. It measures about 83 inches in length. (Photos 21-29 thru 21-31)

There is a hairline diagonal crack to the southeast. It measures about 4 feet in length. (Photos 21-32 thru 21-34)

There is another hairline crack to the southwest. (Photo 2l-35)
ID photographs of the concrete slabs. (Photos 21-36 and 21-37)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-21
P and M Map Photo No. 69
October 28, 1986
Page 3

ID photographs of the porch steps. (Photos 21-38 and 21-39)
There is a chimney stack on the south side of the house.
There is a patched area between the house and the chimney on the west side. (Photo 21-40)

Looking at the west side of the chimney, there is a small mortar crack. This is about 2 feet 7 inches up from ground level. (Photo 2l-41)

There are very slight mortar cracks on the south side of the chimney. (Photos 2l-42 thru 2l-48)

Detailed photographs of the south side of the chimney. (Photos 21-49 thru 21-52)

Detailed photographs of the west and east sides of the chimney. (Photos 21-53 thru 21-64)

The soffit, at the sides of the chimney, is deteriorated. (Photos 2l-53 and 21-60)

The siding is cracked and broken in areas around the residence.
Near the southeast corner of the residence there are chicken coops, an old tin building, and a frame building. These are in very poor condition. There is no guttering on any of these structures. (Photos 21-68 and 2l-69)

We are entering the residence on the east side.
INTERIOR INSPECTION

## Entrance Area

Vinyl floor. Sheetrock walls.

This is at the northeast corner of the residence.
We will start on the east wall.
There is a hairline horizontal crack at the upper right corner of the south window that extends to the southeast corner. (Photo 2l-70)

There is a horizontal tape seam separation at the lower left corner. (Photo 2l-71)

There is a hairline vertical crack extending to the ceiling above the upper right of the door. (Photo 21-72)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-21
P and M Map Photo No. 69
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There is an area between the upper left of the door and the upper right of the north window that has been painted over. There seems to be a rectangular area of separation. (Photo 21-73)

There is a hairline horizontal crack that has been painted over at the left side of the north window. It extends to the northeast corner. (Photo 21-74)

There is a hairline vertical crack at the lower right corner of the fuse box on the north wall. It measures about 4 inches in length. (Photo 21-75)

There is also a hairline vertical crack at the upper left corner of the fuse box. It measures a little over 3 inches in length. (Photo 2l-76)

There is a paint crack in the northwest corner. (Photos 21-77 and 21-78)

Looking at the west wall, there is a hairline vertical crack at the upper right of the door. It extends to the ceiling. (Photo 21-79)

There is also a hairline vertical crack at the upper left of the door. It measures about 8 and $1 / 2$ inches in length. (Photo 21-80)

There is nothing notable on the south wall.
There is a noticeable tape seam in the ceiling out from the east wall. (Photo 21-81)

ID photographs of this room. (Photos 21-82 thru 21-85)
Now moving westward into the living room.

## Living Room

Carpeted floor.
papered walls.
We will start the living roan inspection on the north wall.
There is a hairline paper crack at the lower right corner of the westernmost window. It is about 5 inches in length. (Photo 2l-86)

ID photographs of the living room. (Photos $21-87$ thru 21-91)
There is an east-west crack across the ceiling between the living room and the fireplace room. (Photos 2l-92 thru 21-96)

White Industrial seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P and M Map Photo No. 69
October 28, 1986
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ID photograph of the rock fireplace. (Photo 21-97)
There are mortar cracks above the upper right of the mantel. The widths of these are about l/16 of an inch or less. (Photo 21-98)

Detailed photographs of the fireplace. (Photos 21-99 thru 21-107)
There are mortar separations at the upper left of the fireplace opening. (Photo 2l-101)

ID photographs of the east and west walls of this area. (Photos 2l-108 and 21-109)

Southeast Bedroom
wood floor.
Paneled walls.
The ceiling is bulging and cracked to the north of the light. (Photo 21-110)

ID photographs of this room. (Photos 21-111 and 21-112)
Kitchen
Vinyl floor.
paneled walls.
ID photographs of the kitchen. (Photos 21-113 thru 21-117)
Nothing noted.
Utility Room
Vinyl floor.
Paper covering on the east wall.
We will start the inspection with the north wall.
There is a hairline crack at the upper left corner of the door. It extends to the ceiling. (Photo 21-118)

There is ceiling deformation where the water heater pipe extends into the ceiling. (Photo 21-119)

Now looking at the west wall.

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White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P and M Map Photo No. }6
October 28, 1986
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There is a vertical crack at the upper right corner of the north window. This extends to the ceiling. (Photo 2l-120)

There is a hairline crack at the upper left corner of the window. It extends to the ceiling. (Photo 2l-121)

We cannot see the lower corner of the southernmost window because of the washer/dryer combination.

Now looking at the south wall.
There is a horizontal separation at the upper right corner of the door. (Photo 21-122)

There is a horizontal crack between the upper left of the door and the upper right of the window. (Photo 21-123)

There is a diagonal crack at the upper left of the window. This extends to the ceiling and measures about 9 inches diagonally. (Photo 21-124)

There is a small vertical crack at the lower left corner of this window. (Photo 21-125)

ID photographs of this room. (Photos 21-126 thru 21-129)
There is a bathroam at the northwest corner of the residence.
Bathroom
Carpeted floor.
Partially tiled and papered walls.
Looking at the south wall, there is a hairline paper crack at the upper left corner of the door. This extends to the ceiling. (Photo 21-130)

ID photographs of this roon. (Photos 21-131 thru 21-133)
Upstairs
Carpeted floor.
Painted plaster walls.
North Room
Looking at the north wall, there is a diagonal crack at the upper right corner of the window. It extends to the angled ceiling. (Photo 2l-134)

White Industrial seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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There is a horizontal crack at the right side of the window. It measures about 13 inches in length. (Photo 2l-135)

There is a diagonal crack at the lower right of the window. It extends to the angled ceiling. (Photo 2l-136)

There is a vertical crack at the lower right corner of the window. It measures about 3 inches. (Photo 2l-137)

There is a diagonal crack below the lower right corner of the window. It measures about 13 inches in length. (Photo 21-138)

There is an area of heavy cracking at the lower left corner of the window. (Photo 21-139)

There is a diagonal crack at the left side of the window that extends behind the dresser. (Photo 21-140)

There is a horizontal crack at the upper left of the window that extends to the angled ceiling. (Photo 21-141)

There is a diagonal crack above the upper left corner of the window. It extends to the angled ceiling. (Photos 21-142 and 21-143)

There are hairline cracks across the ceiling in this area. (Photos 21-144 thru 21-158)

There is a large deformation of the ceiling between the two rooms. (Photos 21-159 thru 21-161)

There is a crack at the left side of the support column. There are also some water stains. (Photos 2l-162 thru 2l-166)

South Roon
There are expansion cracks in the ceiling. (Photos 21-167 thru 21-174)
Looking at the south wall, there is a diagonal crack above the upper left corner of the window. It extends to the angled ceiling and across the ceiling a short distance. (Photo 2l-175)

There is also a hairline crack at the upper right side of the window that extends to the angled ceiling. (Photo 2l-176)

The bed partially obscures the lower corners of the window.
There is a crack at the lower left corner. (Photo 2l-177)

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In this room there are many fine expansion cracks in the ceiling and walls, especially around the windows.

ID photographs down the stairs. (Photos 21-178 and 21-179)
There is a diagonal crack at the top of the stairs. It extends from the corner of a step to the trim. (Photo 2l-180)

There is a hairline diagonal crack to the west. (Photo 21-181)
There is a vertical crack in the wall and a horizontal crack off that to the corner. (Photos 21-182 and 21-183)

ID photographs of this area. (Photos 21-184 thru 21-189)

## General Comments

The residence is located at the southwest corner of Monroe and Fourth Streets. The approximate elevation at the house is 855 feet.

The only downspout is at the northeast corner of the residence. There is no guttering on the west side of the structure. The land slopes toward the foundation on the south side.

In the newer areas the foundation is made of a concrete composition. In the older areas, the foundation is covered above ground level with a stucco or cement mortar mixture. There were minor cracks in these materials indicative of expansion effects from seasonal changes. There were also separations possibly indicating differential foundation settlement.

The interior of the structure exhibited cracks and separations at some wall joints around doors and windows. These typically occur from natural expansion and differential movement. Cracks and separations of this type can be expected to worsen and becane more numerous with age.

During periods of heavy rainfall the land surrounding the foundation can be expectected to become saturated. The foundation may then be susceptible to the effects of freezing and thawing. The general grading around the foundation is inadequate for the drainage of excess water. As conditions now exist, hydraulic related foundation problems can be expected to continue and worsen with time.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company Report No. 87056-21
P and M Map Photo No. 69
October 28, 1986
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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/kg

Enclosures: 189 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 69
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## I. Basic Information

1. Name of ResLdent: $\qquad$ John F. Dickerson
2. Date: $\qquad$ November 19, 1986 Thue: 12:50PM
3. Address: $\qquad$ Box 165, Amoret, Missouri 64722
4. Location: Lots 8 thru 11 , Block 16
5. Telephone Number "_(816) 925-3310
6. Daces of occupancy by current resldent:Last 6 months $\qquad$
7. Dates of any tempotary or pernanent abandonment: $\qquad$ None
[I. Information Conceraing Bulidings
(repeat for addltional buildhags)
8. Date of orighal construction: About 26 years ago
9. Date(s) of major remodeling or addltions:
(a) None
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) franing (jolsts, rafters, and stud walls):
(b) Luter Lor walls: Sheetrock
(c) roof: Composition shingles
(d) Eootings; Eoundatlons: Concrete footing about $2^{\prime}$ wide, concrete and block foundation
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(E) basement Eloor (keyways, thickness): Not applicable
(g) nane of person(s) who constructed building: Not known
(h) size and direction of any large windows:Living room, south wall
III. Envirownental Information

1. Approximate elevation of area:
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of Eoundat Lon: Not known
4. Water wells utilized (indicate depth and use): 2 wells, don't use
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage Eeatures: Yes
8. Description of gereral grading or landscaplug in vicinity: Generally flat
IV. Any notable existing deterioration or damage
9. Cracks in interlor walls: See survey
10. Receding of doors, wLindu'as: See survey
11. Noticeable settlement: See survey
12. Foundation cracks: See survey
13. Exterior wall cracks (brick veneer): Not applicable
14. Sidewalks, steps, driveway pavenent: See survey
15. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls See survey
16. North See survey
2.* Souch See survey
17. East See survey
18. West See survey
VII. Comments or supplementary drawlags See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or stacus of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlift an unusual response to normal blasting activities.


November 24, 1986
Report No. 87056-87
P \& M Map Photo No. 122

Subject: \begin{tabular}{l}
Inspection of the John Dickerson Residence <br>
P. O. Box 1.65 <br>
Amoret, Missouri 64722 <br>
November 19 and 21,1986

 To: 

The Pittsburg and Midway Coal Mining Company <br>
P. O. Box 8 <br>
Amsterdam, Missouri 64723
\end{tabular}

Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Living Room
Carpeted floor.
White painted sheetroc:k walls.
Lightly textured ceil:ing.
Picture window on the south wall, windows on the west and east walls. Closet door on the east, entrance on the north to the hallway, and an entrance to the kitchen on the west wall.

Photograph of the south wall. (Photo 87-1)
Photographs of the east wall. (Photos 87-2 and 87-3)
Photograph of the north wall. (Photo 87-4)
Photographs of the west wall. (Photos 87-5 and 87-6)
Starting on the west wall at the window south of the front door.
Above the upper right corner of the window, there is a roughly horizontal hairline crack. It measures about 8 and $1 / 2$ inches horizontally and it has a short vertical branch that is also a hairline and about 3 and $1 / 4$ inches long. (Photo 87-7)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-87
P \& M Map Photo No. 122
November 19 and 21, 1986
Page 2

At the lower right corner, there is a horizontal tape joint that runs to the casing of the door. (Photo 87-8)

Above the upper left corner of this window, a vertical crack ranging from hairline to slightly wider runs to the ceiling. (Photo 87-9)

Below the lower left corner, a vertical crack at a tape seam runs from the bottan of the window to the base molding. It is about $1 / 32$ of an inch wide. (Photo 87-10)

Above the upper left corner of the front door, there are two patched seam cracks. The left one is slightly cracked near the ceiling. There is also a slight crack in ceiling in this area that is about 2 and $3 / 4$ inches long. (Photo 87-11)

There is a crack along the west wall-ceiling intersection above this doorway. It is about 45 inches long. (Photo 87-12)

Above the upper right of the front door, there is a crack that is about 15 inches long and hass a slight horizontal branch that is about 3 and $1 / 2$ inches long. (Photos 87-13 and 87-14)

Above the upper left corner of the kitchen entrance, there is a hairline vertical crack at a seam. (Photo 87-15)

Above the upper right corner, there is a hairline crack that appears to have been patched. .it runs 14 and $3 / 4$ inches to the ceiling. (Photo 87-16)

Now on the north wall.
Above the upper left corner of the doorway, there is a ridge of plaster that resemble a slightly cracked tape joint.

Above the upper right corner, there is a hairline crack at a tape joint that appears to have been patched at one time. (Photo 87-17)

Now on the east wall.
There is a slight crack above the upper left corner of the closet door. It is about 1 and 3/4 inches long. (Photo 87-18)

Above the upper right corner, a hairline crack runs from above the door to the ceiling. (Photo 87-19)

Above the upper left corner of the window on the east wall, a crack runs to ceiling about 13 and $1 / 2$ inches. (Photo 87-20)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-87
P \& M Map Photo No. 12?
November 19 and 21, 1936
Page 3

There is a vertical crack below the lower right corner of this window behind the console. It appears to run to the floor. (Photo 87-210)

Above the upper left corner of the window on the south wall, a slight vertical crack runs to the ceiling, about 13 and $1 / 2$ inches. The area has been patched. (Photo 87-221)

There is a bulging tape seam above the upper right and below the lower left corners of this window. Neither appears to be cracked.

Below the lower right corner, there is a crack at the tape seam. (Photo 87-23)

The ceiling has a crack running west about 21 and $5 / 8$ inches from above the east closet door. It is from about $1 / 32$ of an inch to a hairline wide and is probaly at a seam.

At the west end of the ceiling, just east of the kitchen entrance, there is a crack that trends north-south. It is about 19 and $1 / 2$ inches long and about a hairline wide. It appears to have been painted over.

## Kitchen

Vinyl floor.
White painted sheetrock walls and ceiling.
Lower walls are paneled.
Counter area walls are formica.
Windows on the west and south walls.
Photograph of the west. wall. (Photo 87-24)
Photographs of the south wall. (Photos 87-25 and 87-26)
Photograph of the east: wall. (Photo 87-27)
Photographs of the nor:th wall. (Photos 87-28 and 87-29)
The south window has a painted over, cracked seam above the upper left corner that measures 13 and $1 / 2$ inches. Above the upper right corner, there is a slight bulge that is about 11 and $1 / 2$ inches long. (photos 87-30 and 87-31)

There is a gap of about $1 / 8$ of an inch between the cabinet trim and the ceiling in the northwest corner.

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Above the upper left of the north doorway to the hall, there is a bulging tape joint that appears to have been patched and there is a hairline vertical crack that is about 13 inches long. (Photo 87-32)

Above the upper left corner of the entrance to the living roan on the east wall, there is a bulging joint. It is about 14 and $1 / 2$ inches long.

The ceiling has a slight crack running south from the cabinet above the refrigerator. It is á hairline crack measuring about 39 and $1 / 4$ inches.

The moldings above the: cabinets are separating from the ceiling, most notably in the northwest corner.

Moving into the hallway to the north.
Hallway
Tile and carpeted floor.
White painted sheetrook walls.
Lighly textured ceiling.
This hall runs east-west and has an extention that runs north to a door to the outside.

There is a door on the west wall to the utility room.
Closet doors on the north wall.
The east end of the hall has bedroom doors on the north, east, and south walls and a closet door on the south wall.

Photograph looking westward down the hall. (Photo 87-33)
Photograph looking eastward. (Photo 87-34)
Photograph of the north wing of the hall. (Photo 87-35)
Starting at the west end of the hall at the utility room door.
Above the upper right corner of this door, there is a hairline crack that measures about 2 and $1 / 2$ inches from end to end. It is almost an L-shaped crack.

At the north wall above the west closet door, there is a horizontal row of nail pops just below and in the ceiling. There are about four nail pops in the wall above the closet and about two in the ceiling. (Photo 87-36)

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Now in the north wing of the hall. At the upper west wall, there are a couple of nail pops.

The south door on the west wall of this wing leads to the restroom.
At the upper left corner, there is a bulging tape joint that does not appear to be cracked.

The north door leads to the den. It has a bulging tape joint at the upper left that does not appear to be cracked.

There is a hairline horizontal crack between these two doors. It measures 13 and 5/8 irches. (Photo 87-37)

There are about 7 nail pops evident along the east wall of this wing. (Photos 87-38 and 87-59)

Now back into the mair hall.
There is a slight horizontal seam crack between the closet door on the north wall and the next door to the east. It is about 2 and $1 / 4$ inches long. (Photo 87-40)

This next door to the east is to the bathroom. Above the upper right corner, there is a hajrline crack at a joint. It is about 14 and $1 / 8$ inches long.

Moving east to the nex:t door which is to a bedroom. There is a bulged tape joint above the left end. It is 13 and $1 / 4$ inches long. (Photo 87-41)

Above the upper right end, the joint has a hairline crack. (photo 87-42)

There is a bedroom door on the east wall of the hall. There is a horizontal crack at the upper right of this door that runs to the corner and to the upper left corner of the east door on the south wall. (Photo 87-43)

Now on the south wall. There is a roughly diagonal crack above the upper right corner of the east door. It is about 13 and $1 / 4$ inches long and from a hairline to slightly wider. (Photo 87-44)

Most of these cracks have either been patched or painted over, making them appear as bulges and difficult to see.

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Now at the entrance to the living room. Above the upper left corner, there is a bulged joint: which is slightly cracked at the bottan. The crack is about $5 / 8$ of an inch long. (Photo 87-45)

Above the upper right corner of this doorway, there is a bulged joint that has a hairline crack that runs to the ceiling. It is about 12 and 7/8 inches long. (Photo 87-46)

Now at the kitchen entrance on the south wall. There is a bulging tape joint above each corner: The upper left is not cracked. The upper right has a slight crack that runs to the ceiling. The joint measures about 13 inches and the crack is about 5 and $3 / 4$ inches long from the ceiling. (Photo 87-47)

The ceiling has several cracks. There is a patched area to the upper right of the kitchen door. There are several nail pops near the wall in the œiling.

One seam crack in the ceilng runs north from above the kitchen doorway and intersects another seam that runs east-west across the north wing ceiling. It measures about 38 and $3 / 8$ inches long. (Photos $87-48$ and 87-49)

The north wing has the cold air shaft in the ceiling.
The main hallway has an attic fan in the ceiling. A ceiling crack runs from each corner to a wall. Each of the cracks are about 1 and $1 / 2$ inches long and range from hairline to about $1 / 32$ of an inch wide.

There is another vent in the ceiling at the east end of the hall. It has a crack running south from the southwest corner to the south wall. It measures about 8 and $1 / 2$ inches and is about a hairline wide.

There is an east-west trending crack in the ceiling between the light fixture and this vent. It measures about 18 and $3 / 4$ inches and is about a hairline wide. It appears to have been patched. (Photo 87-50)

There is also a crack at the northeast corner of this vent. It measures about 3 and l/2 inches and it appears to be filled with paint. (Photo 87-51)

## Utility Room

Tile floor.
Linoleum covered lower walls.
Sheetrock upper walls and ceiling.
Window on the west wall.

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Photograph of the sout:h wall. (Photo 87-52)
Photographs of the eaist wall. (Photos 87-53 and 87-54)
Photographs of the north wall. (Photos 87-55 and 87-56)
Photographs of the weist wall. (Photos 87-57 and 87-58)
The window on the west wall has a vertical crack above the upper right corner. It is about $1 / 32$ of an inch wide and the visible portion measures 8 inches. (Photo 87-59)

There is a hairline caack above the upper left corner. It is about 4 inches long and is barely visible. (Photo 87-60)

There is a crack aove the upper left of the door on the east wall. It measures about 13 inches long and about l/32 of an inch wide. (Photo 87-61)

Restroom
Carpeted floor.
White painted sheetrock upper walls and ceiling. Formica covered lower walls.

This room is very small. Photographs looking into the restroom.
(Photos 87-62 and 87-63)
Shower in the northwest corner.

The shower stall has tile walls. There is a hairline horizontal crack at the upper right of the shower entrance. It is about 8 inches long. (Photo 87-64)

At the upper left corner, there appears to be a hairline horizontal crack also. It is akout 3 inches long.

A horizontal bulging crack runs to the north wall from the upper left of the entrance. It is slightly wider than a hairline. (Photo 87-65)

Above the upper left of the mirror on the north, there is a diagonal ridge. It is about 8 inches long and has been painted over. (Photo 87-66)

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Den
Carpeted floor.
Paneled walls.
Tile ceiling.
Windows on the east and west walls.
Door to the garage on the north wall.
Photograph of the south wall. (Photo 87-67)
Photographs of the east wall. (Photos 87-68 and 87-69)
Photograph of the north wall. (Photo 87-70)
Photographs of the west wall. (Photos 87-71 and 87-72)
There are some warped and stained ceiling tiles in the southeast part of the roan. (Photo 87-73)

## Bathroom

Vinyl floor.
Tile lower walls.
Sheetrock upper walls and ceiling.
Window on the north wall.
Photograph looking northward into the bathroom. (Photo 87-74)
The north window has a seam crack above the upper right corner that runs to the ceiling. It has been painted over. (Photo 87-75)

There is a diagonal bulge above the upper left corner that is about 14 inches long. (Photo (37-76)

The ceiling has a smal. 1 area of paint peeling in the northwest corner.
There appears to be paint cracking and about ready to peel at the north end of the ceiling.

There is a closet enclosure in the southwest part of this room.
There is a slight crack in the ceiling at a patched area at the corner at the closet enclosure. The crack is about 7 inches long.

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There is a nail pop above the tile on this north facing wall of the closet.

The upper south end of the east wall has a couple of nail pops.
There is a hairline crack running the length of the corner to the upper right of the entry docr. (Photo 87-77)

There is a tear or crack in the ceiling and a nail pop above the doorway. (Photo 87-78)

Now back into the hallway, moving east to the first bedroom door on the north wall.

## West Bedroom

Carpeted floor.
White painted sheetrock walls.
Lightly textured ceiling.
Window on the north wiall.

Photographs of the nor:th wall. (Photos 87-79 and 87-85)
Photographs of the east wall. (Photos 87-80 and 87-81)
Photographs of the south wall. (Photos 87-82 and 87-83)
Photographs of the west wall. (Photos 87-84)
There is a vertical crack a tape joint above the upper right corner of the entry door that runs to the ceiling. It has been painted over and is about $1 / 32$ of an inch wide. It measures 13 inches vertically. (Photo 87-80)

There is a crack running along the northwest corner. (Photos 87-86 thru 87-88)

A bulging vertical crack runs to the ceiling above the upper left end of the north window. It is about 13 and $3 / 4$ inches long and fran a hairline to slightly wider. (Photo 87-89)

## East Bedroan

Carpeted floor.
White painted sheetrcck walls.
Lightly textured ceiling.

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Windows on the north and east walls.
Photograph of the north wall (Photo 87-90)
Photographs of the east wall. (Photos 87-91 and 87-92)
Photograph of the south wall. (Photo 87-93)
Photographs of the west wall. (Photos 87-94 and 87-95)
Closet door on the west wall.
There is a vertical crack at a tape joint, below the lower right corner of the north window. It has been painted over. The length is 23 and 3/4 inches. (Photo 87-96)

Above the upper right corner of the doorway, a vertical seam crack runs to the ceiling about 1.4 inches. It is a bulge with a hairline crack and looks to have been painted over. (Photo 87-97)

There is a vertical crack along the southeast corner. (Photos 87-98 and 87-99)

There is a hairline vertical crack at a tape joint below the lower right corner of the east window. It is about 21 and $1 / 2$ inches long. (Photo 87-100)

Below the lower left corner, there is a hairline crack at the tape joint. It is about 13 and $1 / 2$ inches long and looks to have been patched over. (Photo 87-101)

Above the upper left corner of the east window, there is a hairline vertical crack at a tape joint. It is about 13 and $3 / 8$ inches long. (Photo 87-102)

Above the upper right corner, there is a hairline vertical seam crack that runs to the ceiling which is about 13 and $3 / 8$ inches. (Photo 87-103)

There are two cracks in the ceiling at tape joints above the east window running west. One is about 26 and $1 / 2$ inches long and the other is about 14 inches long.

There is a slight crack were the ceiling meets the east wall to the upper left of the window. It is about 21 and $3 / 8$ inches long.

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There is a slight crack where the ceiling meets the west wall above the door. It runs southward from the crack above the upper right corner of the door to the south wall which is about 37 inches.

South Bedroom
Carpeted floor.
White painted sheetrock walls.
Lighly textured ceiling.
Photograph of the east wall. (Photo 87-104)
Photographs of the south wall. (Photos 87-105 and 87-106)
Photograph of the west wall. (Photo 87-107)
Photographs of the north wall. (Photos 87-108 and 87-109)
Windows on the south and east walls.
Closet door on the west wall.
The closet door has hairline cracks above each upper corner. The upper right has two cracks, a 10 and $1 / 2$ inch and about a 1 and $3 / 4$ inch long crack. These are both hairline, barely visible cracks.

The upper left end hass a hairline vertical crack that runs to the œiling about 13 and $3 / 16$ inches.

Above the upper right corner of the window on the south, a vertical seam crack runs to the ceiling about 13 and $1 / 2$ inches. (Photo 87-105)

Below the lower right corner of the window, there is a crack at a tape joint that runs to the molding about 21 and $1 / 4$ inches. These are all hairline to slightly l.arger than hairline cracks. (Photo 87-110)

Above the upper left corner, there is a vertical crack a tape joint. It is about 13 and $l / 4$ inches long and just wider than a hairline. (Photo 87-111)

Below the lower left corner, there is a larger crack at a tape joint. It runs to the floor and is about 21 and $1 / 2$ inches long and ranges fram about $1 / 16$ of an inch to a hairline. (Photo 87-112)

Above the upper right corner of the east window, there is a bulge at a tape seam.

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Below the lower right oorner, there is also a slight bulge at the tape joint.

There is a vertical crack in the northeast corner. This corresponds with the crack in the southeast corner of the east bedroom. It is wider at the top and narrows down at the bottom and becomes barely visible. (Photos 87-113 and 87-114)

There are also two hairline cracks in the ceiling at this corner. The north-south trending crack is about 2 and $5 / 8$ inches long and the eastwest crack is about 10 and $1 / 2$ inches long.

There is a vertical crack at a tape joint that runs to the ceiling above the upper right of the entry door. It is 13 and $1 / 4$ inches long and about $1 / 16$ of an inch wide. (Photo 87-115)

The ceiling and north wall are separated by about $1 / 32$ of an inch from this crack westward to the west wall which is about 35 and $1 / 2$ inches. (Photo 87-115)

Garage
Concrete floor.
Paneled walls.
Plywood œiling.
Windows on the north, doors on the west and east, and an overhead door on the west wall.

Photographs of the north wall. (Photos 87-116 and 87-117)
Photograph of the east wall. (Photo 87-118)
Photographs of the south wall. (Photos 87-119 and 87-120)
Photograph of the west wall. (Photo 87-121)
The floor has several cracks. The main crack runs from the west wall, fran between the two doors, roughly northeast and goes under the freezer. It is intersected by a north-south trending crack near the middle of the floor. The visible portion is 17 feet long and ranges in width from about $1 / 4$ to $1 / 16$ of an inch wide. (Photos 87-122 thru 87-124)

At the west end of the crack, there are two diagonal branches. One runs northwest and one ruris southwest.

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The crack that runs northwest measures about 77 inches to the apron. It is fram about $1 / 8$ of an inch to a hairline wide. This crack also has a faint branch that runs northward about 29 inches. (Photos 87-125 thru 87-127)

A branch off the main crack runs southeast about 57 and $3 / 4$ inches. It ranges from a hairline and averages about $1 / 16$ of an inch. It has several wider areas at spalls. (Photos 87-128 and 87-129)

A crack that crosses the main crack runs southward to the old stove, about 79 inches. It is a rough crack ranging from about $1 / 16$ of an inch to a hairline. It has a branch running east. (Photos 87-130 thru 87-132)

It is a faint branch that runs eastward under the refrigerator. About 37 and $3 / 4$ inches are visible and is fran about $1 / 16$ of an inch to a hairline wide. (Photc 87-133)

The crack that crosses the main crack continues to the north wall. It is 74 and $3 / 4$ inches long and ranges in width from a hairline at the north end to about $1 / \varepsilon$ of an inch. (Photos 87-134 and 87-135)

The east wall has a concrete block foundation. (Photos 87-136 and 87-137)

The upper north vertical joint is slightly cracked. (Photo 87-136)
The south vertical joint is slighly separated. (Photos 87-137)
That completes the interior inspection.
EXTERIOR INSPECTION
ID photographs of the front, west side of the house. (Photos 87-138 and 87-139)

ID photographs of the north side. (Photos 87-140 and 87-141)
ID photographs of the east side. (Photos 87-142 thru 87-144)
ID photographs of the south side. (Photos 87-145 and 87-146)
Starting at the north end of the west side at the garage.
There are two slight cracks in the foundation. The diagonal is 7 inches long and the vertical crack is about 4 and $1 / 2$ inches long. Both are about $1 / 16$ of an inch wide. (Photo 87-147)

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There is a crack at the corner of the apron that has been patched and recracked. It is about 21 inches long. The other crack on the apron was shown during the interior inspection. (Photo 87-148)

At the door to the garage, there is a slight crack in the walk area in front of the doorway. This crack measures about 11 inches and is about $1 / 16$ of an inch wide. (Photo 87-149)

The exterior inspection was suspended due to rain, and the following was inspected on November 21, 1986.

During the rain, we noted that water was dripping from almost every seam of the gutters.

Now on the south wall of the garage. In the foundation, there is a vertical crack located a few feet from the west end. It is 4 inches long and about $1 / 16$ of: an inch wide. (Photo 87-150)

Now on the west foundation of the house. There is a vertical crack behind the gas meter that is about 2 and $1 / 2$ inches long and about 1/32 of an inch wide. (Photo 87-151)

About 10 inches to the south, there are two vertical foundation cracks. The larger is about 2 inches long and $1 / 8$ of an inch wide. The smaller is a branch and is about $1 / 16$ of an inch wide and less than 2 inches long. (Photo 87-152)

There is a crack in the foundation to the lower left of the second window from the south on the west wall. It is about 2 inches long and about $1 / 32$ of an inch wide. (Photo 87-153)

Note the spalling and deterioration of the front patio. (Photo 87-154)
The front sidewalk has several cracks. One sidewalk runs west of the patio, and another sidewalk runs northward toward the garage. The east-west sidewalk has three cracks across the width. The west crack averages about $1 / 4$ of an inch in width, the middle crack measures from about $1 / 8$ to about $1 / 4$ of an inch wide. The east crack measures about $1 / 2$ an inch average width. Photographs of the three cracks fram west to east. (Photos 87-155 and 87-156)

The crack across the south end of the north running sidewalk ranges from about $3 / 8$ to $1 / 4$ of an inch wide. (Photo 87-156)

A few feet to the north, there is another crack across the sidewalk. This crack is about 1./4 of an inch wide on average. (Photo 87-157)

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Where the sidewalk turns to the northwest, it is cracked all the way through and grass grows through the crack. It is heaved by about an inch. (Photo 87-158)

At the north end of the sidewalk, there is a crack all the way across. This crack is from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 87-159)

There is a concrete slab covering a well located at the west side of the house. The hand pump is loose. Looking down into the small hole, water can be seen. (Photo 87-160)

Now on the south side of the house.
There is a small ditch along the south side of the house. (Photos 87-161 and 87-162)

There is a crack in the foundation behind this downspout and to the lower right of the wirdow. It measures about 4 inches long and about $1 / 8$ of an inch in width. This is between the east windows of the south and east bedroams. (Fhoto 87-163)

Now at the east end of the north facing foundation. There is a slight crack in the foundation to the lower right, below the middle window of this area. It is about 3 and $3 / 4$ inches long and about a hairline wide. (Photo 87-164)

There is another foundation crack below the window, which is just east of the door. It is about 5 inches long and about $1 / 32$ of an inch wide. (Photo 87-165)

There is a small ditch along the north side of the house also, which drains to the north. (Photo 87-166)

From the north entrance to the house, there is a small sidewalk leading to the cellar. The sidewalk is cracked across its width. (Photo 87-167)

As an example of leaking gutter seams, at the north end of the east side a seam has been patched and has separeted. (Photo 87-168)

There is a slight crack in the concrete at the east door to the garage. It measures about 11 inches long and up to about $l$ and $1 / 2$ inches wide at a spall. (Photos 87-169 and 87-170)

The lower screen on this door is loose at the lower left corner. (Photo 87-169)

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Now at the north end of: the garage foundation. There is a vertical hariline crack at the east end. It is about 4 inches long. (Photo 87-171)

There is a vertical foındation crack, about 7 and $1 / 2$ inches long and about $1 / 32$ of an inch wide, below the north garage window. (Photo 87-172)

There is a diagonal crack in the foundation at the northwest corner. It is about 6 and $1 / 2$ inches long and ranges from about $1 / 8$ to $1 / 32$ of an inch in width. (Photo 87-173)

Cellar
The cellar is located just east of the garage. ID photograph of the cellar from the north. (Photo 87-174)

There is a vertical crack through the lintel that is from about $1 / 8$ to $1 / 32$ of an inch wide. (Photo 87-175)

There is a spalling crack at the top of the the west wall of the stairway. (Photo 87-176)

Photograph looking down the stairway. (Photo 87-177)
The east wall of the stairway has a crack above the third step that runs to the top of the wall. It measures about 37 inches and is from about $1 / 8$ of an inch to a hairline in width. (Photo 87-178)

The cellar has an arched ceiling, concrete floor and walls.
The floor is heaved and cracked rather severely. These cracks appear to serve as aveunues for water penetration. (Photos 87-179 and 87-180)

There is a hole for a sump in the southeast corner that is full of water.

Photograph of the north wall. (Photo 87-181)
Photographs of the east and west walls. (Photos 87-182 and 87-183)
The crack at the lintel continues across the ceiling to the north wall. It is about $1 / 16$ of an inch wide. (Photos $87-184$ and 87-185)

There is a slight horizontal crack along the spring line at the west wall. It runs from the south wall to the north wall. (Photos 87-186 and 87-187)

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There is a hairline crack along the spring line of the east wall.
There is a crack in koth the southeast and southwest corners. Both of these separations range from about $1 / 4$ to $1 / 16$ of an inch wide. (Photos 87-188 thru 87-190)

The east wall, north end, has a diagonal crack that is about $1 / 16$ of an inch wide. (Photo 87-191)

The wooden shelves show signs of rotting, indicating that the cellar floods.

Photograph looking back up the steps. The bottom two steps have cracks ranging from about 1/8 to $1 / 32$ of an inch in width. (Photo 87-192)

Slab
There is an old slab of concrete, located northeast of the house. It $1 \infty k s$ to be buckled and cracked severely. (Photo 87-193)

It has wood underneat:h the top layer of concrete that is rotting.
There are extensive cracks in the slab. Four north-south cracks run all the way across. (Photos 87-195 thru 87-197)

The west end has a ccack that connects with a north-south trending crack and runs to the west end of the slab. (Photo 87-194)

Another crack connects the three north-south trending cracks.
Cracks vary in width from about 1 and $1 / 4$ inches to about $1 / 8$ of an inch.

There is a small wooden shed located north of this slab.
Shed
ID photographs of the south and west sides. (Photos 87-198 and 87-199)
This shed has a shake shingle roof and rests on a concrete slab.
ID photograph of the east end. (Photo 87-200)
The south window has a broken upper left pane. The lower right pane is loose, and the middle right pane has fallen slightly. (Photo 87-201)

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There is a large crack in the concrete slab at the southeast corner of the shed. It is partially full of grass and measures about 2 and 1/2 inches wide. (Phot 87-202)

At about the middle of the south side, there is a crack with grass growing through it. This crack is about 1 and $1 / 2$ inches wide. (Photo 87-203)

At the west end of the south side, there is another crack that has grass growing through it. It is about $3 / 4$ of an inch wide. (Photo 87-204)

This shed has a wooden floor and unfinished walls and ceiling.
There is a barn to the southeast.

## Barn

ID photograph of the north side. (Photo 87-205)
ID photograph of the west side. (Photo 87-206)
ID photograph of the south side. (Photo 87-207)
ID photograph of the e:ast side. (Photo 87-208)
Starting at the southeast corner.
The concrete foundation is severely cracked at the southeast corner. The crack is about 1 and $3 / 4$ inches wide. (Photo 87-209)

About 4 feet north, on the east side, there is a vertical crack in the foundation. It is abrout 9 inches long and about $1 / 4$ of an inch wide. (Photo 87-210)

At about the middle of the east side, there is a vertical crack in the foundation. It is about 10 and $1 / 2$ inches long and $1 / 2$ of an inch wide. (Photo 87-211)

A few feet to the north, there is another foundation crack that has been patched and has recracked. This crack is about 9 and $1 / 2$ inches long and about an inch wide. (Photo 87-212)

Near the northeast conner, there is a vertical foundation crack measuring about 20 inches long and from about $1 / 2$ to $1 / 4$ of an inch wide. (Photo 87-213)

There is a large separation at the northeast corner of the foundation. It ranges from about 3 inches to 1 and $1 / 2$ inches wide. (Photo 87-214)

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Now on the north side of the barn.
About 4 feet from the east end, there is a large vertical foundation crack. It measures about 15 and $1 / 2$ inches long and about $3 / 4$ of an inch wide. (Photo 87-215)

About 8 feet to the west, there is a Y-shaped foundation crack. It is about 14 inches long and about $1 / 4$ of an inch wide. (Photo 87-216)

Below the door on the north side, there is a vertical foundation crack that is about 6 and $1 / 2$ inches long and about $1 / 4$ of an inch wide. (Photo 87-2172)

Just west of the middle of the north side, there is a vertical crack in the foundation. It is about 8 inches long and about $1 / 4$ of an inch wide. (Photo 87-218)

The rest of the north Eoundation cannot be seen.
The northwest corner o: the foundation has spalled. (Photo 87-219)
Now on the west side, north end.
There is a crack in the foundation that is about 11 and $1 / 2$ inches long and from about $1 / 8$ to $1 / 4$ of an inch wide. (Photo $87-220$ )

About 4 feet to the south, there is another vertical crack in the foundation. It is about 4 and $3 / 4$ inches long and about $1 / 4$ of an inch wide. (Photo 87-221)

About 3 feet south, there is a vertical foundation crack that is about 3 and $1 / 2$ inches long and about $1 / 4$ of an inch wide. (Photo 87-222)

About 4 feet to the south, there is another vertical foundation crack. It is about 5 inches long. At the lower spall, it is about an inch wide and the crack is about $1 / 4$ of an inch wide. (Photo $87-223$ )

About 5 feet to the south, there are two foundation cracks. Both are about 4 inches long and about $1 / 4$ of an inch wide. (Photo 87-224)

About 5 feet to the south, there is another foundation crack. It is about 3 inches long and about $3 / 16$ of an inch wide. (Photo 87-225)

There is another foundation crack about 2 feet to the south. It is behind these vines and is about an inch wide. (photo 87-226)

The fascia of the barn is deteriorating, especially on the west side.

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There is a large vertical crack at the west end of the south foundation. It is about 3 and $3 / 4$ inches long and 1 and $1 / 4$ inches wide. (Photo 87-227)

There is a crack in the south foundation between the west and middle doors. It is about 8 and $1 / 2$ inches $l o n g$ and 1 and $1 / 4$ inches wide. (Photo 87-228)

There is a patched area in the south foundation, east end. This part of the foundation leans sJuthward. (Photo 87-229)

Inside, the barn has a dirt floor, unfinished walls and ceiling.
At the south end of the east foundation, the patched crack is visible. It is about 2 inches wide near the middle. (Photo 87-230)

There is a foundation crack to the lower west of the southeast door. It is about 3/4 of an inch wide and about 7 inches long. (Photos 87-231 and 87-232)

At the west end of the barn, braces have been installed to hold the roof up. The west part of the roof sags and part of it has been replaced. (Photos 87-233 and 87-234)

East Well
Between the barn and the house, there is an octanganal concrete well cover. ID photograph from the east. (Photo 87-235)

Looking through the small hole, the water level is within about 8 feet of the ground surface.

Southwest of this well., there is a covered septic tank. The concrete is breaking off at the northeast corner. (Photo 87-236)

General Comments
This is a ranch style house that is about 26 years old. It has sheetrock interior walls and ceilings. Numerous cracks were found on interior walls and ceilings, most of which occurred at seams of the sheetrock.

The house has a concrete and concrete block foundation and several cracks were found.

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The shed, slab, cellar, and barn are in several deteriorated conditions and all of these structures appear to be very old. Mr. Dickerson did not know the dates of construction of these structures and indicated that he has no concern for them.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.
Chuitrpued Leebell
Christopher D. Landoll
Technical Associate

## CDL/mp

Enclosure: 236 Photographs

1- COPY FROM $P$ \& M's TOWN OF AMORET MAP LOCATION NO. $12 ?$

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


$87-169,176$
I Sketch of the som dickerson Residence



## ketch af the outbuitdings, john Dickerson residence

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## 87-208


$87-207$



## $87-205$



## $87-200$











I. Basic Information

1. Name of Residen: Willie Dykman
2. Date: November 10, 1986 TLine: 8:00AM
3. Address: Box: 205, Amoret, Missouri 64722
4. Location: Lots 6 and 7, Block 17
5. Telephone Number: (816) 925-3339
6. Dates of occupency by current resident: Past 4 years
7. Dates of any temporary or permanent abandoment: None
II. Information Concerning Bulidings
(repeat for additional buildings)
8. Date of original constructlon: Not known
9. Date(s) of majur remodeling or additions:
(a) Porch roof and ceiling fans by Dykman.
(b) Was paneled before they moved in
(c)
10. Construction cE bullding:
(a) Erainlig (Jolsts, rafters, and stud walls): Not known
(b) Luterlor walls: Plaster under paneling except kitchen which is sheetrock
(c) roof: Composition shingles
(d) Eootings; foundatlons: Concrete block foundation, footings unknown
(e) basenent walls (indicate how keyed to Eooting of Eloor): Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) nane of fierson(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

848 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate deptheand use): No
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volune). Yes, used to water flowers
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures: Yes .
8. Description of general grading or landscaping in vicinity: Generally f.lat
LV. Any notable existing deterioration or damage

1. Cracks in interior walls: See survey
2. Receding of doors, wLnduws: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall c:acks (brick veneer) : Not applicable
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific coments concerning any unusual features, construction techntques, or status of deterforation, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survery

November 17, 1986
Report No. 87056-69
P \& M Map Photo No. 121

Subject: Inspection cf the Willie Dykman Residence Amoret, Missouri 64722
November 10, 1986
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and editec from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the south side. (Photo 69-1)
ID photographs of the west side. (Photos 69-2 and 69-3)
ID photographs of the north side. (Photos 69-4 and 69-5)
ID photographs of the east side. (Photos 69-6 and 69-7)
At this time, the house has guttering at the east edge of the porch. However, the downspouts empty to the ground close to the foundation. (Photo 69-8)

ID photographs of the chimney. The outer covering is extensively cracked. (Photos 69-9 thru 69-12)

Now at the front sidewalk. The south slab is heaved by about $5 / 8$ of an inch at its north edge. (Photo 69-13)

ID photograph of the front sidewalk. (Photo 69-14)
Separations between slabs of the front sidewalk range fran about $1 / 2$ to about $1 / 8$ of an inch wide.

The front step has several cracks. These cracks range from about a hairline to $1 / 8$ of an inch wide. (Photos 69-15 and 69-16)

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A crack on the top side of the step is about 9 inches long and from about $1 / 32$ to a hairline wide. The east edge has a vertical crack. (Photo 69-17)

Series of photographs of the front porch foundation. There is no mortar in these joints. The largest separation is at the east end and is about 1 and $1 / 4$ inches wide. Others range down to $1 / 8$ of an inch. (Photos 69-18 thru 69-22)

The house foundation is concrete block. The front part has been covered with concrete.

Just west of the front step, the house foundation has some slight cracks. (Photo 69-23)

Now on the south facing front foundation. At the corner, there are extensive slight cracks. Cracks in this area range fram about $1 / 8$ of an inch to a hairline wide. (Photo 69-24)

Series of photographs of the front, south side of the house's foundation from east to west. The mortar joints have been patched with concrete and have recracked. Crack widths range from hairline to about $1 / 4$ of an inch. (Photos 69-24 thru 69-29)

The south side of the house has some paint peeling from the siding and the west window has deteriorating caulk.

Now on the west side of the house.
Mortar joints in the foundation have been patched at the south end of the west side. There are several hairline cracks in the patched mortar at the south end. (Piotos 69-30 and 69-31)

Moving to the north, there are separations and slight cracks in this patched area. The foundation appears to have shifted westward in this area. Cracks and separations range in width from about $1 / 8$ of an inch to a hairline in that area. (Photo 69-32)

To the north, there is a slight vertical and horizontal crack. The horizontal measures about 20 inches long. They are both just wider than hairlines. It has a small horizontal extension that is about 1 and $1 / 2$ inches long. (Photos 69-33 and 69-34)

Below the air conditioner, a vertical crack runs through a patched mortar joint and a block. It ranges from about a hairline to $1 / 16$ of an inch wide. (Photo 69-35)

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Below the lower left end of the window, there are two slightly cracked vertical mortar jointsi. (Photo 69-36)

The next two mortar joints to the north are also slightly cracked.
(Photo 69-37)
Below the right end of: the crawl space vent, there is a hairline to slightly wider vertical mortar crack. (Photo 69-38)

About two blocks north of that vent, there is a slight vertical crack in a patched joint. (Photo 69-39)

The next two joints to the north also have slight cracks. (Photos 69-40 and 69-41)

There is a slight vertical mortar crack below the north window. (photo 69-42)

Now at the north end of this part of the foundation. Behind the pipe, there is a stairstepping mortar crack. (Photo 69-43)

The major cracking is at the north end of the original west foundation. (Photo 69-44)

Mortar cracks and separations on the west side range from about $1 / 2$ an inch at the north end to hairline in width.

The joint at the base of the house, where it meets the west foundation, is separating. (Photo 69-45)

The air conditioner is pulling out of the window. (Photo 69-46)
Both west windows have deteriorating caulk, and there is extensive paint peeling at the south part of the west side. (Photo 69-47)

The north window on the west side looks to have a new caulk seal.
The north end of the west foundation is a newer concrete block and it has a very slight mortar crack at the upper south joint. It is about 7 and $1 / 2$ inches long and about a hairline wide. (Photo 69-48)

The ground it very saturated along this side of the foundation.
There is a stairstepping crack, partially full of insulation, at the north end of the addition foundation. The crack at the footing is about $1 / 4$ of an inch wide. The upper right part of that crack is about $1 / 8$ of an inch wide. (Photo 69-49)

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The crack at the footing is about $1 / 4$ of an inch wide. The upper right part of that crack is about $1 / 8$ of an inch wide. The two gaps filled with insulation are about $3 / 4$ of an inch wide.

Now on the north side of the addition foundation.
The north windows of the addition have deteriorating caulk and peeling paint.

There is a very slight mortar crack just to the right of the crawl space door. It is about 6 and $1 / 2$ inches long and slightly wider than a hairline. (Photo 69-50)

At the east end of the north side of the addition foundation, there is a stairstepping mortar separation that ranges fram about $1 / 2$ to $1 / 16$ of an inch wide. (Photo 69-51)

Now on the east side of the addition foundation.
There is a slight L-shaped mortar crack just to the right of the step. It is about 8 inches long measured diagonally and about a hairline wide. (Photo 69-52)

South of the step, there is a partial slight mortar separation and there is a filled area in the corner that has slight separations on both sides ranging from about 1/1.6 of an inch to a hairline wide. (Photos 69-53 and 69-54)

The north end of this; step is separated from the addition foundation by about $3 / 4$ of an inch. (Photo 69-55)

The bottom step to this door is extensively cracked. Mr. Dykman indicated that this happened recently. Separations and cracks range from about $3 / 4$ an inch to about a hairline wide. (Photos 69-56 and 69-57)

Now on the north facing foundation of the house.
Behind the gas meter, there is a slight L-shaped mortar separation. It is about 8 inches long and $1 / 32$ of an inch wide. (Photo 69-58)

There is also a slight, 3 inch mortar separation behind the gas meter. (Photo 69-59)

Below the kitchen window, there is a stairstepping mortar seaparation and crack that ranges fram about $1 / 8$ of an inch to a hairline wide. (Photos 69-60 and 69-61)

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The kitchen window, above the gas meter, has extensive caulk deterioration.

To the lower left of the window, there is a slight vertical mortar separation. It is absout 8 and $1 / 2$ inches long and a hairline wide. (Photo 69-62)

The east porch foundation is separated by about 1 and $1 / 4$ inches from the house foundation. The gap has insulation in it. (Photo 69-63)

There is a crack at the northwest corner of the east sidewalk. It is about $1 / 8$ of an inch wide. This is at the northeast corner of the house. (Photo 69-64)

There is a concrete block sidewalk that leads from the east porch to the utility room door. It has cracks at the southeast corner. The cracks range from about $3 / 4$ of an inch to a hairline wide. (Photo 69-65)

ID photographs of this sidewalk. (Photos 69-66 and 69-67)
This sidewalk tilts somewhat to the south. It has several separated mortar joints.

There is a sidewalk that runs to the northwest to the outbuildings. It has a couple of cracked blocks and it has settled some what. Same of the blocks are loose. Three of the blocks are cracked and a lot of the mortar is cracked, separated, and deteriorating. (Photos 69-68 thru 69-72)

Now back to the east side of the house. There is a small concrete block step to the east porch that has dry joints. (Photo 69-73)

The concrete slab, above the cistern has two large cracks east of the pump. The widths range from $3 / 4$ of an inch to $1 / 8$ of an inch. The cracks go all the way through the slab. A spall at the south crack is about 3 inches wide. (Photos 69-74 thru 69-76 and 69-78)

The southwest crack runs to the house and is about $1 / 4$ of an inch wide. (Photo 69-75)

The crack at the northwest corner is about $3 / 4$ of an inch wide. (Photo 69-76)

Cracks in the concret:e, under the pump, are about $3 / 8$ of an inch to a hairline wide. (Phol:0 69-77)

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The south end of the porch has some cracking in the concrete cover of the foundation. Cracks range from about $3 / 8$ to $1 / 16$ of an inch wide. (Photos 69-79 thru 69-82)

Two gutters are unconnected from downspouts and empty to the sidewalk at the southeast cornec of the east porch. (Photo 69-83)

The north facing foundation of this wooden porch is concrete block with dry joints. There is about a $3 / 4$ inch separation at the west end. One of the blocks is broken at the northeast corner. (Photos 69-84 and 69-85)

Series of photographs of the east foundation of this porch from north to south. Some of the blocks have shifted. Separations in that area range from about $3 / 8$ to $1 / 16$ of an inch wide. (Photos 69-86 thru 69-89)

The south facing window of the front porch has extensive caulk deterioration. (Photo 69-90)

The window on the east side of the porch has deteriorating caulk.
ID photograph of the east sidewalk leading to the house. (Photo 69-91)
Sheds
There are two utility sheds located north of the house.
ID photographs from the east, north, west, and south. (Photos 69-92 thru 69-96)

The sidewalk in front of these two sheds has been heaved by the root of a tree, and it has a couple of cracks. It is heaved by about 2 inches and separated by about 1 inch to $1 / 2$ an inch. (Photo 69-97)

At the northeast corner of the south shed, there is a crack across the slab. It is from about $1 / 2$ to $1 / 16$ of an inch wide. (Photo 69-98)

The sidewalk is cracked diagonally across the slab in front of the north building. It ranges from about $1 / 16$ of an inch to a hairline wide. (Photo 69-99)

A photograph looking into the south shed. (Photo 69-100)
A photograph looking into the north shed. (Photo 69-101)
Both sheds have concrete floors, unfinished walls and ceilings. Note how the water pools around the west side of the north shed. (Photo 69-102)

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## INTERIOR INSPECTION

## Dining Roorn

This is the southeast room of the house.
Carpeted floor.
Paneled walls.
Papered ceiling over plaster.
Windows on the south and east walls.
Front door on the south wall.
Photographs of the west wall. (Photos 69-103 and 69-104)
Photograph of the south wall. (Photo 69-105)
Photograph of the east wall. (Photo 69-106)
Photograph of the north wall. (Photo 69-107)
The only cracking evident in this room is in the ceiling.
Series of photographs of the ceiling, starting with the northwest, and then the northeast, the southeast, and the southwest parts. Several ridges and slight cracks that appears to be only in the paper are visible. (Photos 69-108 thru 69-112)

The window on the sou:h wall has a crack at the lower left corner. (Photo 69-113)

The molding above the doors has a loose piece in the northwest corner.
This room has a door on the west to the living room, a door on the west to the bathroom and a door on the north to the kitchen.

Bathroom
Carpeted floor.
Paneled walls. Formica ceiling.

A photograph looking westward into the bathroom. (Photo 69-114)
There is a crack in the paneling above the upper left of the shower entrance. It is about 2 inches long. (Photo 69-115)

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The bathroom has a door on the west to the bedroom. The right side of the casing to this door is loose. The towel rack is in the way of the casing. (Photo 69-116)

Bedroom
Carpeted floor. Paneled walls. Papered ceiling.

Window on the west waill. Closet enclosure in the southwest corner. Door on the north to the utility roam.

Photograph of the south wall. (Photo 69-117)
Photographs of the west wall. (Photos 69-118 and 69-119)
Photograph of the north wall. (Photo 69-120)
Photographs of the east wall. (Photos 69-121 and 69-122)
The ceiling has extensive cracks and ridges.
Two photographs of the ceiling looking south, and two looking north. (Photos 69-123 thru 69-126)

The main ceiling cracks are in the southwest part of the room. There is al so a crack at the t.wo west corners of the attic entrance.

There are three or four cracks above the north entrance.
Utility Room
Carpeted floor.
Formica œeiling.
Paneled walls.
Windows on the north wall and a door on the east wall.
Photographs of the north wall. (Photos 69-127 and 69-128)
Photograph of the east wall. (Photo 69-129)
Photographs of the south wall. (Photos 69-130 and 69-131)
Photograph of the west wall. (Photo 69-132)

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The south wall has buckling paneling on either side of the door.

## Living Room

```
Paneled walls.
Carpeted floor.
Papered ceiling.
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Windows on the south and west walls.
Photograph of the south wall. (Photo 69-133)
Photograph of the west: wall. (Photo 69-134)
Photograph of the north wall. (Photo 69-135)
Photographs of the east wall. (Photos 69-136 and 69-137)
Series of photographs of the ceiling. (Photos 69-138 thru 69-143)
The ceiling has some ridges and a few slight cracks. It has a small water stain in the northeast corner. (Photo 69-144)

There is a œiling ridge, roughly east-west trending, near the east wall. This is about 3 feet long. (Photo 69-145)

There is another ceiling ridge above the upper right of the entrance. (Photo 69-145)

## Kitchen

Carpeted floor.
White painted sheetrock walls.
Tile ceiling.
Cabinets line the upper west wall.
Door on the east to the porch.
Photograph of the north wall. (Photo 69-146)
Photographs of the east wall. (Photos 69-147 and 69-148)
Photographs of the south wall. (Photos 69-149 and 69-150)
Series of photographs of the ceiling. (Photos 69-151 thru 69-156)

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An area of the ceiling in the west part has been touched up with paint.
(Photos 69-151 and 69-152)
There is also a painted area to the upper right of the south door. (Photo 69-156)

The window on the north wall has a vertical seam crack above each corner. Both run from the top of the window to the ceiling. Both are about $1 / 32$ of an inch wide. (Photos 69-157 and 69-158)

There is a horizontal hairline crack on the south wall between the doorway and the light fixture. (Photo 69-159)

There is a hairline crack on the north wall below the cabinet. It is about 5 and $3 / 4$ inches long. This area appears to have been patched. (Photo 69-160)

East Porch
Vinyl floor.
Exterior siding on the west and south walls.
Plywood ceiling.
Wooden north and east walls.
Photograph of the solith wall. (Photo 69-161)
Photograph of the north wall. (Photo 69-162)
Photographs of the west wall. (Photos 69-163 and 69-164)
There is a cracked siding board to the upper left of the west door.
The lower north part of the west wall has same cracked siding boards. (Photo 69-165)

Photographs of the east wall. (Photos 69-166 and 69-167)

## General Comments

This is a very old house from the looks of the old concrete block foundation. The year: of construction is not known.

The original foundat:ion has numerous cracks, mainly at mortar joints and many of the joints have been patched.

The interior has plaster walls, covered by paneling, and plaster ceilings covered with wallpaper, except the kitchen which is sheetrock. A few seam cracks were found in the kitchen. The interior ceilings were

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found to have numerous cracks and ridges, especially in the bedroom and dining room.

The house lacks a gutter system except on the east side, however, these gutters have unconnected downspouts and empty close to the house.

The exterior siding has areas of peeling paint and the roof has darkened areas and appears to be deteriorating, especially on the west and north sides of the house.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOOGY, INC.
Christopher 0 . Lusedell
Christopher D. Landoll
Technical Associate

CDL/mp
Enclosure: 167 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 121
2- SUMMARY FORM
3- SKETCH OF STRUCTURE













PRE-BLAST SURVEY, RESLDENTIAL
I. Basic Information

1. Name of Resident: Charles and Fern Glassmire
2. Date: November 4, 1986 T___________ Tine: $9: 30 \mathrm{AM}$
3. Addres 5: Box 172, Amoret, Missouri 64722
4. Location: Northeast corner of Main and Third Streets
5. Telephone Number: (816) 925-3465
6. Dates of occupancy by current resident: 1977 - Present
7. Dates of any temporary or permanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1890-1910
9. Date(s) of major remodeling or additions:
(a) New ceiling
(b) Remodled Kitchn - Spring 1286
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): 2 " $x 4$ " stud walls
(b) Incerior walls: Painted sheetrock or plaster
(c) roof: Composition shingles
(d) footings; foundations: Cement mortar covering on foundations
(e) basement walls (indlcate how keyed to footing of floor):

Not applicable
(f) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Gil Walker
(h) size and direction of any large windows: None
III. Environnental Information

1. Approximate elevation of area:

845 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade: drainage at base of foundation: None
4. Water wells utilized (Lndicate depthand use): Dug well, used to water garden
5. Cisterns or surliace water storage utilized: (lndicate purpose and approximate volume). Cistern under porch
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage Eeatures: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable extsting deterioration or danage

See photo survey

1. Cracks in interlor walls:
2. Receding of doors, whudurs:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comuents or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

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Report No. 87056-56
P \& M Map Photo No. 119

Subject: Inspection of the Charles and Fern Glassmire Residence Box 172
Amoret, Missouri 64722
November 4, 1986
$\mathrm{Tb}: \quad$ The Pittsbucg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
We entered through the south entrance from the porch.
Bedroom
Plaster walls and ceiling.
We will start with the north wall of this room. About 3 feet from the northeast corner, there is a vertical hairline crack in the wall. This crack extends from the ceiling and angles off behind a metal storage cabinet. The wall height in this roan is 8 feet. (Photos $56-1$ thru 56-6)

There is a vertical rairline crack in the wall about a foot to the left of the storage cabinet. This crack measures 6 feet 6 inches in length. (Photo 56-7)

There are hairline cracks along the south and east sides of the covered fireplace flue. The horizontal crack measures 9 inches long. The vertical crack measures 6 inches. (Photo 56-8)

There are hairline cracks at the upper right corner of the door and along the west side of the covered flue. The corner crack measures 5 inches long. The vertical wall crack measures 4 feet 10 inches long. (Photos 56-9 and 56-1.0)

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There is a hairline vertical crack near the upper right corner of the door. This measures 9 inches in length. (Photo 56-11)

There is a hairline vertical crack to the right of center of the door. It extends 9 inches to the ceiling. (Photo 56-12)

There is a hairline diagonal crack at the upper left corner of the door. It measures 9 i.nches long. (Photo 56-13)

There is a horizontal hairline crack in the north wall extending 14 inches to the northwest corner. (Photo 56-14)

There is a vertical hatirline crack in the west wall that angles over to the northwest corner. This crack is about 6 feet long. (Photos 56-14 and 56-15)

There is a diagonal hairline crack in the west wall at the lower right of the wood clock. This extends behind the dresser mirror. (Photo 56-16)

There is a vertically trending hairline crack along the outside, left edge of the wood clock. it extends from the ceiling down behind the dresser mirror. (Photos 56-17 and 56-18)

There is a roughly L-shaped hairline crack at the upper right corner of the window. It measures 15 inches horizontally and 9 inches vertically. (Photo 55-19)

There is a 9 inch long hairline vertical crack at the upper right corner of the window. (Photo 56-20)

There is a 13 inch hairline diagonal crack at the lower right side of the window. (Photo 56-21)

There is a hairline vertical crack above the window. (Photo 56-22)
There is a hairline vertical crack at the upper left corner of the window that extends to the ceiling. (Photo 56-23)

There is a hairline diagonal crack off the southwest corner that is about 2 feet 2 inches long. There is also a slight separation in the southwest corner. (Photos 56-24 and 56-25)

Now looking at the south wall.
There is a hairline crack in the wall about a foot to the right of the upper right corner of the window. It measures 11 inches in length. (Photo 56-26)

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There is a vertical hairline crack at the upper right corner of the window. It measures 9 inches in length. (Photo 56-27)

There is a 9 inch long hairline vertical crack to the left of center of the window. (Photo 56-28)

There is a 9 inch hairline vertical crack near the upper left corner of the window. (Photo 56i-29)

There is a hairline diagonal crack at the upper left corner of the window. It measures 21 inches in length. (Photo 56-30)

Now looking at the east wall.
There is a 29 inch horizontal hairline crack extending from the southeast corner. (Photo 56-31)

This intersects a very fine vertical crack that appears to extend the height of the wall. (Photos 56-32 thru 56-36)

There is a 9 inch hairline vertical crack at the upper. right corner of the window. (Photo 56-37)

There are a pair of hatirline diagonal cracks and a horizontal crack at the upper left corner of the window. (Photo 56-38)

There is a very fine vertical crack in the wall that extends from behind a picture down to the floor trim. (Photos 56-39 thru 56-41)

## Living Room

This room has a ceiling height of about 10 feet.
Start the living room inspection on the north wall.
There is a 30 inch diagonal hairline crack to the right of the center of the window. (Photo 55-42)

There is a 31 inch diagonal hairline crack at the upper left corner of the window. (Photo 55-43)

There are fine cracks to the left of the window. (Photos 56-44 thru 56-47)

There are hairline cracks at the upper right corner of the heater vent. one measures 17 inches horizontally. (Photo 56-48)

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There is a 31 inch hairline diagonal crack at the upper right corner of the large doorway. (Photo 56-49)

There is a 22 inch vertical hairline crack near the center of the doorway. (Photo 56-50)

There is a 3 foot long fine diagonal crack at the upper left corner of the doorway. (Photo 56-51)

There is a vertical crack in the wall at the upper left corner of the door. This diagonals down to the corner. It measures 31 inches long. The maximum width is close to $1 / 16$ of an inch. (Photos $56-52$ and 56-53)

There is a hairline crack in the wall about a foot farther west. This measures about 20 inches long. (Photo 56-54)

There is another curving hairline crack in the wall about a foot more to the west. This extends behind a large painting and on down behind the couch. (Photos 56-55 thru 56-57)

There is a diagonal hairline crack out from the northwest corner on this north wall. It measures about 2 feet long. (Photo 56-58)

There is also a line of vertical cracking along the northwest corner. (Photos 56-58 thru 56-60)

There are three sections of the west wall.
At the north section, there is a pair of hairline cracks at the upper right corner of a decorative shelf. The height from the top of the shelf to the ceiling is 34 inches. (Photo 56-61)

There is a hairline crack along the corner of the north section. (Photo 56-62)

There is cracking at the upper right corner of the window. The horizontal distance from the window to the corner is 5 and $1 / 2$ inches. (Photo 56-63)

There is a hairline crack along the south corner of the iniddle section of the wall. (Photos $56-64$ and $56-65$ )

There is hairline cracking at the upper left corner of the window on the south section of the west wall. The distance from the upper left corner of the window to the corner is 5 inches. (Photo 56-66)

There is a vertical crack along the corner of the south section of the west wall. (Photo 56-67)

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Now looking at the south wall.
There is an area of hairline crisscross cracking above the door. The distance from the top of the door to the ceiling is 31 inches. (Photo 56-68)

There is an L-shaped hairline crack at the upper left corner of the door. This crack extends 31 inches from the ceiling vertically. (Photo 56-69)

There is a hairline horizontal crack that extends from the right side of the door and intersects a diagonal crack in the wall. (Photo 56-70)

There is a hairline diagonal crack in the wall between the door to the exterior and the door to the bedroan. This crack extends fram the ceiling to the floor trim. (Photos 56-71 thru 56-73)

There is a 31 inch diagonal hairline crack at the upper right corner of the door. It extends to the ceiling. (Photo 56-74)

There is a crack at the upper left corner of the double doors into the bedroom. This crack branches and extends to the ceiling. (Photo 56-75)

There is a horizontal hairline crack at the left side of the doorway. This extends over to the right side of a rectangular picture frame and then extends vertically behind the piano. An extension of this crack appears at the left side of the picture frame and extends vertically behind the piano. (Fhotos 56-76 thru 56-78)

There are hairline wall cracks at the upper right corner of the window and along the right side of the window. (Photos 56-79 thru 56-82)

There is a vertical hairline crack above the approximate center of the window. It extends to the ceiling. (Photos 56-83 and 56-84)

Looking at the east wall, there is a vertical hairline crack in the wall between the window and the southeast corner. This crack extends behind a painting and cabinet. (Photos 56-85 thru 56-87)

There is a vertical crack at the upper right corner of the window that extends to the ceiling. (Photo 56-88)

There is also a hair.ine vertical crack at the upper left corner of the window that extends to the ceiling. (Photo 56-89)

There is a stain in the ceiling a few feet out from the east end. (Photo 56-90)

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ID photographs of thiss room starting with the east end of the north wall and progressing counterclockwise. (Photos 56-91 thru 56-98)

Now moving northward into the dining room.
Dining Room
Carpeted floor. wood paneled lower walls. Papered upper walls. Tiled ceiling.

According to Mrs. Glassmire, this roan was freshly papered in the spring. We can see areas behind the paper where there are apparent cracks in the walls.

One indication of this is to the left of the large doorway on the south wall. Another good indicator is at the right side of the door into the kitchen on the north wall. (Photos 56-99 thru 56-101)

ID photographs of the roam. (Photos 56-102 thru 56-107)
There is an enclosed porch at the east side of the dining room.
Enclosed Porch
Vinyl floor.
Wood walls and ceiling.
Nothing notable in here.
The porch is sectioned off at the north end of this area with a piece of plastic.

ID photographs. (Photos 56-108 and 56-109)
There is a storage room to the east off the kitchen.

## Storage Room

Poured concrete floor.
Wood walls and ceiling.
This is also an exterısion of the porch.
There is a door to the east into another storage area. The cellar is at the north side of this next storage room.

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ID photographs of this area. (Photos 56-110 thru 56-113)
Looking at the poured concrete floor, there is a slight floor crack about 3 or 4 feet west of the east door. (Photos 56-114 and 56-115)

There is a larger floor crack to the west of this in front of the steps. This crack has a width of $3 / 16$ of an inch. (Photo 56-116)

We have now moved eastward into the next storage roam.

## Storage Room

Wood walls.
Concrete floor.
Examined the floor area and there are no cracks visible. However, there are materials covering the floor, both in this roan and in the previous roon we were in.

Looking at the cellar steps on the north side of the cellar wall, there are cracks at the second step from the top. (Photo 56-117)

There are also cracks along the south side wall of the stairway to the cellar. (Photos 56-118 thru 56-121)

Cellar
Now moving into the main cellar.
Part of the cellar walls are covered by canning jars and other materials.

There is a fine horizontal crack to the right of the window filled with insulation. (Photo 5,6-123)

There are hairline cracks in the west wall to the left of the door. (Photos 56-129 and 56-130)

There is a horizontal crack near the top of the east wall. (Photo 56-136)

ID photographs of the walls. (Photos 56-122, 56-124 thru 56-128 and 56131 thru 56-135)

The ceiling appears to be in good shape.
Now looking at the floor.

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There is a diagonal crack across the floor from the corner of the sump pump housing. (Photo 56-137)

There is also a hairline floor crack at the southwest corner of the sump pump. (Photos 56-138 and 56-139)

Kitchen
Vinyl floor.
Paneled lower walls.
Tiled ceiling.
Plaster covered upper walls.
ID photographs. (Photos 56-140 thru 56-143)
Now moving into the bedroom at the northwest corner.
Bedroom
Vinyl floor.
Papered walls.
Note that this room appears to have been repapered. In the ceiling we can see areas where there are underlying cracks. There are also bulges above some doors.

Photographs of the ceiling showing the patched areas that are showing through. (Photos 56-144 thru 56-148)

There is a bulge above the door into the bathroom on the south wall. (Photo 56-149)

There is a paper tear in the northwest corner. The paper is stained. (Photo 56-150)

ID photographs of this room. (Photos 56-151 thru 56-156)
There is a bathroom at the southwest corner of the bedroan.
Bathroom
Vinyl floor.
Partially paneled and papered walls. Tiled ceiling.

There is a œiling stain at the west wall. This is near the south corner. (Photo 56-157)

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ID photographs. (Phot:os 56-158 thru 56-162)
EXTERIOR INSPECTION
ID photograph of the west side. (Photo 56-163)
There is a foundation crack toward the north end of the west wall. (Photo 56-164)

There is another vertical hairline foundation crack a few feet to the south of the north end. (Photo 56-165)

The guttering on this side deposits to a splash block that is not properly seated. (Photo 56-166)

There is a foundation separation between two rooms. This is about 5 or 6 feet to the north o: the porch. (Photo 56-167)

There is a hairline diagonal foundatin crack about a foot on south. (Photo 56-168)

There is an area of foundation cracking at the north end of the porch. This area appears to have been patched. (Photos 56-169 and 56-170)

There is a crack across the top section of the porch step wall. This is on the north side. (Photo 56-171)

ID photograph of the porch. (Photo 56-172)
Much of the paint on the porch is chipped and cracked. (Photos 56-173 and 56-174)

There is a hairline crack at the west end of the porch. (Photo 56-175)
The porch is supported at the southwest corner by a stucco covered column.

There are horizontal nairline cracks around the column. (Photos 56-176 thru 56-181)

There is a crack in the porch foundation to the right of the steps. (Photos 56-182 and 56-183)

The paint is peeling at the south side of the porch steps. (Photo 56-184)

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There is a horizontal area of porch foundation cracking on the south side. It appears to have been patched. (Photos $56-185$ and 56-186)

There is also a separation of the porch foundation from the main structure foundation of $1 / 2$ inch on the south side. (Photo 56-186)

ID photograph of the south side. (Photo 56-187)
There is a covered chimney. The covering is heavily cracked and chipped. (Photos 56-188 and 56-199)

There are vertical hairline cracks in the south foundation. (Photos 56-189 thru 56-197)

ID photograph of the east side. (Photo 56-198)
There is an L-shaped foundation crack at the south end of the east side. It measures about $1 / 32$ of an inch in width. (Photo 56-200)

There is a hairline foundation crack a couple of feet to the north. (Photo 56-201)

There is another hairline vertical foundation crack a couple of feet farther to the north. (Photo 56-202)

There are foundation cracks in the L-shaped area. (Photo 56-203)
These continue around the corner. (Photo 56-204)
There are a series of foundation cracks near the north end of the next L-shaped area. (Photo 56-205)

The enclosed porch foundation is covered by a plastic material.
Al so, much of the forndation is obscurred by a mound of earth material. (Photo 56-206)

There is a brick chimney at the east end of the small storage building. This covering is chipped and cracked. (Photos 56-207 thru 56-21l)

ID photograph of the north side of the residence. (Photo 56-212)
There is a brick flower bed at the north side of the residence. There are mortar separations in the flower bed. (Photos 56-213 thru 56-215)

The north side foundation is visible toward the west end.

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There are foundation cracks to the west of the crawl space opening. (Photos 56-216 and 56-217)

There is a foundation crack near the west end of the foundation. This crack measures about $1 / 16$ of an inch in width. (Photo 56-218)

There is a crack across the north walk in front of the door. It measures $1 / 4$ of an inch in width. (Photo 56-219)

There is another crack across the sidewalk a few feet farther to the north. It measures about $1 / 8$ of an inch in width. (Photo 56-220)

There is another crack in the sidewalk a few more feet farther to the north. It measures $3 / 16$ of an inch in width. (Photo 56-221)

There is an old garage at the northeast corner of the residence. (Photo 56-222)

Much of the exterior foundation is not visible.
There is a small crack in the foundation at the north end. (Photo 56-223)

The garage is filled with materials.
ID photographs. (Photos 56-224 and 56-225)
There is a dug well at the north side of the house. (Photo 56-231)
There is a crack in the surface slab at the northwest corner. (Photo 56-226)

The upper section of the well is composed of brick. (Photos 56-227 thru 56-230)

From what we can see, the well seems to be in good condition. It is holding water. The well water is approximately 5 feet below the surface at the present time.

General Corments
The Charles and Fern Glassmire residence is located at the northeast corner of Main and Third Streets. The approximate elevation of the house is 845 feet.

The residence appearsi to have adequate guttering for roof drainage. However, the earth around the foundation was saturated during our inspection.

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The paint around the exterior of the house is chipped and peeling. It also appears that the wood is deteriorating in areas around the structure.

The structure foundation appeared to be in fair condition. The paint covering was chipped and peeling in places. There were cosmetic cracks in the foundation indicative of expansion effects and possibly some minor differential settlement.

The interior of the house exhibited numerous cracks in the walls in the southeast bedroom and living roam. Sane roans, such as the dining roam, had been repapered. Hidden cracks in the walls and ceiling were evident by bulges and lines in the new wall paper. These cracks can be expected to appear in the new paper in time.

The house is quite old and has deteriorated due to weathering and other environmental factors. This natural deterioration can be expected to continue with time.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

## RMW/mp

Enclosure: 231 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAPLOCATION NO. 119
2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: J. R. Ayres
$\qquad$
2. Address: P. O. Box 144, Amoret, Missouri 64722
3. Location: Lots $10 \mathrm{~W} \mathrm{18'} 11,12,$, Block 18
4. Telephone Number: (816) 925-3417
5. Dates of occupency by current resident: Jan. or March of 1984_ - Present
6. Dates of any temporary or pernanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
7. Date of original construction: $\qquad$
8. Date(s) of major remodeling or additions:
(a) Not known ky resident, plans to remodel in spring 1987
(b)
(c)
9. Construction of building:
(a) framing ( (oists, rafters, and stud walls): Not known
(b) intertor walls:Paneling and wallpaper over plaster
(c) roof: Camposition shingles
(d) footings; foundations:Concrete
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
$(g)$ name of persom(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

840 Feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (indicate depth*and use): No
5. Cisterns or surliace water storage utilized: (indicate purpose and approximate volune) Yes, not used, covered
6. Source of wacer, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures: Yes .
8. Description of general grading or landscaping in vicinity: Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windows :See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
2.0 Sourh See survey
9. East See survey
10. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

JOPLIN, MO 64802-1256
PH. (41'7) 624-0164

November 5, 1986
Report No. 87056-1
P \& M Map Photo No. 117

Subject: Inspection of the J. R. Ayres Residence P. O. Box 144 Amoret, Missouri 64722 November 1, 1986

To: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 3

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, south side. (Photos l-1 and l-2)
There is not a splash block at the southeast corner. The downspout empties close to the foundation.

The east, front window has deteriorating caulk joints and paint peeling from the trim. (Photos $1-3$ and l-4)

The middle, front window also has deteriorating caulk and paint peeling from the trim. (Phctos 1-5 and 1-6)

ID photograph of the south chimney from the southeast. (Photo 1-7)
The west front window has deteriorating caulk and paint. (Photos 1-8 and 1-9)

The inner window, at the upper left corner, has a crack and a hole. (Photo l-10)

ID photograph of the sidewalk leading to the house. (Photo l-ll)
There is a crack across the second sidewalk slab from the north. It is about 1/8 of an inch wide. (Photo 1-12)

At the lower southwest corner of the house, south of the wooden porch, a piece of trim appears to be loose. (Photo l-13)

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The Pittsburg and Midway Coal Mining Company
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ID photograph of this porch. Note the deteriorating paint at the south end of the proch. (Photo 1-14)

The south end of the porch roof is separated from the house from about $1 / 4$ to $1 / 8$ of an inch. (Photos l-15 and l-16)

ID photographs of the west side of the house. (Photos 1-17 and 1-18)
The porch roof appears to sag sanewhat at the north end where it attaches to the house and there is a dark, apparently deteriorating area of the house siding above the north end of the porch roof. (Photos 1-17 and 1-18)

ID photographs of the west side of the chimney. Same of the chimney bricks appear to be deteriorating. (Photos l-19 and l-20)

The middle window on the west side has a cracked pane at the lower left corner. (Photo l-2l)

This window has detertorated caulk and some paint peeling from the trim. (Photos 1-22 and 1-23)

To the lower left of this window, there is a vertical crack through the foundation crack that is up to about $3 / 4$ of an inch wide. It intersects a horizontal crack. (Photos l-24 thru l-26)

The horizontal crack ranges fram about a hairline to $1 / 2$ an inch wide.
The south part of the horizontal crack intersects a vertical hairline crack that trends the height of the foundation. The horizontal crack continues about 8 inches south of the vertical crack. (Photos 1-27 and 1-28)

The large horizontal crack also has a vertical hairline branch that trends to the ground just south of the large vertical crack. (Photo 1-29)

There is a patch in the foundation near this alcove corner. The patch is beginning to spall. (Photo 1-30)

There is a separation at this alcove, in the corner where the two different foundations meet. It is about $1 / 4$ of an inch wide at the bottom and smaller where it has been sealed. (Photo l-31)

There is a foundation crack to the lower left of the north window on the west side. It is about 18 inches long and $1 / 32$ of an inch wide. (Photo 1-32)

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To the north, there iss a foundation crack that Y's at the top. It is about $1 / 4$ of an inch at the widest. It has a smaller vertical crack just to the south that is about 10 inches long. (Photos 1-33 and 1-34)

Note the northwest downspout empties to the foundation. There is no splash block. Paint is peeling from the lowest siding board behind the downspout. (Photo 1-35)

ID photograph of the west side of the house from the northwest. (Photo 1-36)

Note the area of peeling paint on the south facing wall.
ID photograph of the south chimney from the northwest. (Photo 1-37)
ID photograph of the north chimney from the northwest. (Photo 1-38)
ID photographs of the north side of the house. (Photos 1-39 and 1-40)
At the northwest corner of the foundation, there is a branching, Y-shaped crack. It ranges in width from about $5 / 8$ of an inch wide at the bottom to about $1 / 16$ of an inch at the upper left part to a hairline for the other part. Total length is about 22 inches. (Photos $1-41$ and 1-42)

To the lower right of the west window, there is another vertical foundation crack that ranges from a hairline to about $1 / 32$ of an inch wide. It is about 26 inches long on the diagonal. (Photo l-43)

Just to the right of the crawl space entrance, there is another slight vertical crack that is about a hairline wide. The vertical crack is about 10 inches long and there is a slight horizontal crack to the upper right of the door that is about 4 inches long. (Photos 1-44 and 1-45)

A diagonal crack at the upper left corner of this door is about 9 inches long and about $1 / 16$ of an inch to a hairline wide. (Photo l-46)

The west window on the north side has deteriorating caulk. (Photo 1-47)
Below the second window from the west, there is a hairline crack in the foundation that is barely visible. It is a hairline crack and is about 17 inches long. (Photo 1-48)

The east window on the north side has deteriorating caulk at the lower inner window. (Photo l-49)

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Some of the foundation is covered with plywood in this area. Above this area, the trim at the roof is deteriorating and a section has fallen. (Photos 1-50 and 1-51)

To the lower right of this window, there is a spall in the foundation and a roughly horizontal flaw. (Photo l-52)

There is a vertical crack in the foundation below this window. It is about 22 inches long and 1/16 of an inch wide. (Photo 1-53)

The east end of the north side is the back porch. It has asphaltic paper covering the foundation, and looking underneath, a small area of brick and stone foundation can be seen. (Photo 1-54)

The northeast downspout appears to empty close to the foundation. (Photo 1-54)

There is a gutter on the porch roof upslope from the edge that has no downspout but apparently empties close to the foundation. (Photos 1-55 and 1-56)

The roof of the back porch tends to sag somewhat and the gutter is bent.
Mr. Ayres indicated that he plans to tear off this back porch in the spring of 1987. He also indicated that water leakage through the porch roof has caused damace to the porch interior.

ID photograph of each chimney from the northeast. (Photos 1-57 and 1-58)

The south chimney appears to have spalling bricks. (Photo 1-58)
ID photographs of the: east side of the house. (Photos 1-59 thru 1-61)
These two north windows of the porch have rusty and torn screens and deteriorated caulk and paint. (Photos l-62 thru l-64)

The window with the air conditioner has a crack at the lower right corner of the bottom pane. It al so has deteriorated caulk seals and paint. (Photo 1-65)

There is a crack in the foundation located north of the telephone inlet, and just south of the porch. It is about 7 and $1 / 2$ inches long and $3 / 4$ of an inch wide at the bottom. (Photo l-66)

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There is another crack in the foundation between the air conditioner window and the telephone inlet. The foundation has shifted about $1 / 4$ of an inch and the crack is about $1 / 8$ of an inch at the widest. The length is about 6 and $3 / 4$ inches. (Photos 1-67 and 1-68)

A refrigerator rests on top of an old cistern. (Photos 1-63 and 1-69)

## Shed

ID photograph of the south side. (Photo 1-70)
The south side has peeling paint.
ID photograph of the east side. (Photo 1-71)
The shed has a downspout at the northeast corner that empties at the foundation. The shed rests on a concrete slab.

ID photograph of the north side. (Photo 1-72)
ID photograph of the west side. (Photo 1-73)
Note the bowed roof and the paint peeling from the fascia on the west side. (Photo l-74)

A corner is broken off at the south end of the concrete floor of the open area, west of the shed.

The shed has unfinished walls and ceiling and a concrete floor. (Photo 1-75)

INTERIOR INSPECTION

## Living Room

This is the southeast room of the house.
Carpeted floor.
Paneled walls.
Tiled ceiling.
Windows on the east and south walls.
Two doorways on the west wall to bedrooms and a door on the north to the kitchen.

Photograph of the east wall. (Photo 1-76)

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Photographs of the north wall. (Photos 1-77 and 1-78)
Photograph of the west: wall. (Photo 1-79)
Photographs of the south wall. (Photos 1-80 and 1-81)

## South Bedroom

Carpeted floor.
Papered walls.
Wallpapered plaster ceiling.
There is a window on the south wall, a door to the outside porch on the west wall, and a door to the other bedroom on the north wall.

Photograph of the west wall. (Photo 1-82)
Photographs of the south wall. (Photos 1-83 and 1-84)
Photographs of the eaist wall. (Photos 1-85 and 1-86)
Photographs of the north wall. (Photos 1-87 and 1-88)
There is extensive cracking in the ceiling.
Series of photographs of the ceiling. (Photos 1-89 thru 1-96)
North Bedroom
Carpeted floor.
Papered walls.
Tile œiling.
Door on the north wall and a closet door on the east wall.
Window on the west wall, doors to the porch, and to the other bedroon on the south wall.

Photographs of the north wall. (Photos 1-97 and 1-98)
Photographs of the east wall. (Photos 1-99 and 1-100)
Photographs of the south wall. (Photos 1-101 thru 1-103)
Photograph of the west wall. (Photo 1-104)
The door to the bedroom on the south wall is uneven at the top.

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The wallpaper is slightly loose at the southwest corner of the closet enclosure in the northeast part of the roam.

There are several ridges and bulges underneath the wall paper visible on most walls.

The major ridges are located to the upper right of the west window and above the north door. (Photos l-105 and 1-106)

## Utility Room

Wooden floor partially covered with linoleum. Paneled walls.
Tile ceiling.
Windows on the west and north walls.
Closet enclosure in the northeast corner.
Door to a small hallway on the east wall.
Photograph of the north wall. (Photo 1-107)
Photographs of the west wall. (Photos 1-108 and 1-109)
Photographs of the east wall. (Photos 1-110 and l-111)
Photograph of the south wall. (Photo 1-112)
Hallway
Paneled walls.
White painted plaster ceiling.
The hallway looks like it had a tile floor but most of it has been removed.

A photograph looking eastward into the hall. (photo 1-113)
The ceiling has a hairline north-south trending crack running from the south wall almost to the north wall. It intersects an east-west trending crack which trends to each wall. (Photos l-114 and l-115)

## Bathroom

## Carpeted floor.

Tile pattern linoleum wall covering over sheetrock.
Plywood ceiling.

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Photographs looking rorthward and eastward into the bathroom. (Photos 1-116 and 1-117)

Window on the north wall.
The lower right windowpane is cracked at its lower right corner. (Photo 1-118)

Kitchen
Vinyl floor.
Paneled walls.
Sheetrock ceiling.
Window on the north wall and a door to the living room on the south wall.

Photograph of the south wall. (Photo 1-119)
Photographs of the we:st wall. (Photos 1-120 and 1-121)
Photograph of the north wall. (Photo 1-122)
Photograph of the east wall. (Photo 1-123)
Photographs of the ceiling. (Photos 1-124 and 1-125)
The east door of the kitchen leads to the back porch.
Back Porch
Linoleum floor covering. Sheetrock walls and ceiling.
Exterior siding on west wall.
Photographs of the east wall. (Photos 1-126 and 1-127)
Photograph of the north wall. (Photo l-128)
Photographs of the we:st wall. (Photos 1-129 and 1-130)
Photographs of the scuth wall. (Photos 1-131 and 1-132)
The sheetrock walls and ceiling are severely water damaged and stained.
Mr. Ayres indicated that they had a severe roof leak this fall.

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There are three windows and a door on the east wall.
There is a lot of stored material in here.
The filing is sagging in the northeast and southeast corners. (Photos 1-133 and 1-134)

The southeast corner of the room has the worst damage. (Photos 1-132 and 1-134 thru 1-136)

## General Comments

This is an old house, date of construction is not known. It has a concrete foundation that has several cracks.

The house has a gutter system. Downspouts at the northwest, northeast, and southeast corners of the house empty close to the foundation.

The shed has a gutter along the east side. The downspout empties close to the slab foundation.

The interior has been partially remodeled before the present owners purchased the house. In the south bedroom, which apparently has not been remodeled, numerous ceiling cracks were found. The north bedroom has several bulged areas in the walls underneath the wallpaper.

The back porch is in a severely damaged condition and will be removed in the spring of 1987 according to Mr. Ayres.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC. enuitophu D. Kendall
Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 136 photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 117
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## I. Basle Information

1. Name of Resident: Ernest Feyler (Vacant at this time)
2. Date: November 20, 1986 T1une: 8:20AM
3. Address: $\qquad$
4. Location: Lots 13-16, Bloxk 18
5. Telephone Number:__(314) 649-3293
6. Dates of occupancy by current resldent: $N / A$
7. Dates of any cemporary or permanent abandomment:_N/A

IL. Information Concerning Bulidings
(repeat for addlchonal bulldlugs)

1. Date of orlghal construction: $\qquad$
2. Date(s) oE major remodeling or addltions:
(a) $\qquad$
(b) $\qquad$
(c)
3. Construction of butiding:
(a) framing (jolsts, rafters, and stud walls):
(b) interlor walls: plaster, paneling.
(c) roof: Compostion shingles.
(d) Eootings; Eoundations: Stone foundation.
(e) basemenc walls (indicate how keyed to footing of Eloor):

Not applicable.
(E) basement ELoor (keyways, thlckness):

Not applicable.
(g) gane of person(s) who constructed building:
(h) size and direction of any large windows:
III. Enviromuental Infommation

1. Approximate elevation of area:

840 feet
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation:
4. Water wells utillzed (Indicate depch'and use):
5. Cisterns or surface water storage utillzed: (Lndicate purpose and approximate volume).
6. Source of water, lif not Included above: City water.
7. Eve troughs or any other exterior dralnage Eeacures:
8. Description of general grading or landscaplug in vicindty: Generally flat.
IV. Any notable extscing deterioration or damage

1. Cracks in interlor walls: See survey.
2. Receding of doors, winduws: See survey.
3. Noticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, Iriveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings See survey.
VI. Elevation views or photographs of walls
8. North See survey.
2.ه South See survey.
9. East See survey.
10. West See survey.
VII. Comments or supplementary drawings

See survey.
VIIL. Discussion or specifice comments concerning any unusual features, construction techniques, or status of decerioration, that, because OE the nature of chefr construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response so nomal blasting activities.

November 25, 1986
Report No. 87056-88
P \& M Map Photo No. 116
$\begin{array}{ll}\text { Subject: } & \begin{array}{l}\text { Inspection of a House Owned by Ernest Feyler } \\ \text { Amoret, Mi ssouri } 64722 \\ \\ \text { November 20, } 1986\end{array} \\ \mathrm{To}: \quad & \begin{array}{l}\text { The Pittsburg and Midway Coal Mining Company } \\ \text { P. O. Box 8 } \\ \text { Amsterdam, Missouri } 64723\end{array}\end{array}$
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

Mr. Feyler lives at 324 Wilbur, East Prairie, Missouri 63845.
This house is vacant at this time.
EXTERIOR INSPECTION
ID photograph of the front, south side of the house. (Photo 88-1)
The front sidewalk is: being overgrown by grass. (Photo 88-2)
The sidewalk slab closest to the porch is extensively cracked. (Photo 88-3)

The front porch is extensively cracked and some cracks have been patched. The east end of the front porch has several cracks, ranging in width from about $1 / 16$ of an inch to a hairline. (Photos $88-4$ and $88-5$ )

There are two north-south trending cracks, near the east front window, that run across the porch. The east crack ranges from about $1 / 4$ of an inch to a hairline wi.de. The west crack has been patched. The two cracks are connected by an east-west trending crack. (Photos 88-6 thru 88-8)

The three eastern, north-south trending cracks are connected by an east-west trending crack at the south end of the porch. It is about $1 / 4$ of an inch wide. (Photo 88-9)

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Near the east end of the front door, a north-south crack runs across the porch. It ranges fran about $3 / 8$ to $1 / 8$ of an inch wide. (Photos $88-10$ and 88-11)

There is a smaller north-south trending crack to the lower right of the door that ranges from a hairline to $1 / 16$ of an inch wide and runs almost to the end of the porch. (Photos $88-10$ and $88-11$ )

Just west of the door, another crack trends across the porch. The crack is partially patched and ranges from about $3 / 8$ to $1 / 8$ of an inch wide. (Photos 88-12 and 88-13)

Another north-south trending crack runs across the porch from the lower left of the west front window. (Photo 88-14)

The west part of the porch is severely cracked. Some of these cracks have been patched. Most cracks in this area range from about an inch to 1/4 of an inch wide. (Photos 88-14 thru 88-22)

The largest crack on the porch is north-south trending and has been patched. It ranges from about $3 / 4$ to 3 and $1 / 2$ inches wide.

A crack runs east-west from the southwest corner of the house to the west end of the porch.

The west part of the porch has settled to the west.
The porch slab has puilled away from the west side of the house. The separation is about $3 / 4$ of an inch wide. (Photo $88-20$ )

ID photograph of the west side of the house. (Photo 88-23)
At the west edge of the porch, three of the cracks run vertically
through the porch. (Photos 88-24 thru 88-26)
The windows of the house have deteriorated caulk seals and paint.
At the northwest corner of the porch, the trim has a large separation. (Photo 88-27)

There is a vertical crack in the south side of the base of the second porch roof support from the south, on the west side. The crack is about 1/16 of an inch wide., (Photo 88-28)

The northwest support: has crazing cracks in its concrete base. (Photo 88-29)

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At the northwest corner of the porch, evidence of settlement can be seen. The porch has separated from the house by about 2 and $1 / 8$ inches. (Photo 88-30)

The foundation of the house is sandstone, some of which is covered with concrete.

Below the watt meter, on the west side of the house, there is a vertical crack in the foundation cover. It measures about 9 inches long and fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 88-31)

The concrete cover, south of that crack, is loose. (Photo 88-32)

Below the telephone line, there is a crack through a sandstone block and the concrete cover. It is about 8 inches long and ranges from about $3 / 16$ to $1 / 16$ of an inch wide. (Photo $88-33$ )

From below the small 'west window, northward to the corner, there are several foundation cracks. These cracks range from about $1 / 4$ of an inch to a hairline wide. (Photos 88-34 thru 88-37)

Now in this corner, a photograph of this area of the foundation. (Photo 88-38)

Now on the north facing foundation of the pantry. There are several mortar cracks in this area ranging from about $1 / 16$ to $1 / 8$ of an inch wide. (Photos 88-39 and 88-40)

Now on the west facing foundation of the kitchen. There are a few mortar cracks in this area. (Photos 88-41 and 88-42)

Part of the north foundation of the kitchen has been covered or repaired with concrete block. (Photo 88-43)

At the east end of this area, the stone foundation can be seen. (Photo 88-44)

The back shed has separated from the house. The separation ranges from about 5 inches at the top, down to about $1 / 4$ of an inch. (Photos 88-45 and 88-46)

The shed is in a severely deteriorated condition.

ID photographs of the west side of the house from the northwest.
(Photos 88-47 and 88-48)
ID photograph of the north end of the house. Note the leaning shed (Photo 88-49)

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Now at the west side of the shed foundation. The shed foundation is stone and wood and has extensive mortar cracks. (Photos 88-50 and 88-54 thru 88-56)

The step to the shed has several cracks. Cracks range from about $1 / 8$ of an inch to a hairline in width. (Photos 88-51 thru 88-53)

Note the deteriorating siding on this shed.
The shed roof is bowed. (Photo 88-57)
There are several cracks on the north side of the shed foundation. Cracks range from about $1 / 4$ to $1 / 16$ of an inch wide. (Photos $88-58$ and 88-59)

ID photographs of the east side of the house. (Photos 88-60 and 88-61)
The shed roof and fascia are deteriorating severely on the east side.
There is a heavy growth of weeds along the east side of the house, making it hard to see the foundation.

There is a mortar separation at the northeast corner of the shed that ranges from about $1 / 4$ to $1 / 16$ of an inch wide. Series of photographs of the east side of the shed's foundation. (Photos 88-62 thru 88-64)

The east shed window lacks a glass pane.
Now on the north facing foundation of the house, east of the shed. There are a few slight mortar cracks in this area that range from about $1 / 8$ of an inch to a hairline in width. (Photo 88-65)

Series of photographs of the east foundation of the house fram north to the first window. The north end has been repaired with concrete block and there are a few mortar cracks that are about $1 / 16$ of an inch wide. (Photos 88-66 thru 88-68)

The north window on the east side, has paint peeling extensively fron the trim, a loose sash in the storm window, and the caulk seal is deteriorating severely. (Photo 88-69)

The east upstairs window has a cracked upper pane and deteriorating caulk and paint. (Photo 88-70)

The small bathroom window has severe caulk deterioration. (Photo 88-71)

Series of photographs of the rest of the east stone foundation. (Photos 88-72 thru 88-74)

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ID photograph of the east side of the house from the southeast. (Photo 88-75)

Note that the front porch roof sags.
This house does not have a gutter-downspout system.
The antenna has fallen at the west side of the roof.
This house has two brick chimneys.
ID photograph of the south chimney from the southwest. (Photo 88-76)
ID photograph of the north chimney from the southwest. (Photo 88-77)
ID photograph of the north chimney from the northwest. (Photo 88-78)
ID photographs of each chimney from the northeast, first the north and then the south. (Photos 88-79 and 88-80)

ID photographs of the chimneys from the southeast, first the north. (Photos 88-81 and 88-82)

Both chimneys have deteriorated, separated, and cracked mortar.
INTERIOR INSPECTION

## Living Room

This is the southwest room.

Rug over a wooden flow. Paneled walls.
Tile ceiling.
Windows on the west and south walls. Large entrance on the north wall to the dining room. Large entrance on the east wall to the south bedroom.

The floor in this room slopes to the northeast.
The north entrance slants eastward toward the center of the house. The east doorway is somewhat uneven also.

Photograph of the north wall. (Photo 88-83)
Photograph of the south wall. (Photo 88-84)

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Photographs of the east wall. (Photos $88-85$ and $88-86$ )
The ceiling is uneven along the east wall. It is higher in the southeast corner and slopes to the north.

The front door was very difficult to open and shut.
The flue in the northeast corner of this room has a loose piece of paneling. Under the paneling, the old plaster bulges outward. (Photo 88-87)

There are water damage: ceiling tiles around the flue. (Photo 88-87)
Dining Room
Wooden floor.
Paneled walls.
Tile ceiling.
Two windows on the west wall. Door on the south wall to the front porch. Door to the north bedroom on the east wall. Door on the north wall to the kitchen.

The floor of this roam slopes eastward.
At the south entrance, the floor is bowed downward.
Photographs of the nor:th wall. (Photos 88-88 and 88-89)
Photographs of the wesit wall. (Photos 88-90 and 88-91)
Photographs of the south wall. (Photos 88-92 and 88-93)
The south window on the west wall has a crack at the upper left corner of the lower pane. (photo 88-94)

This room also has a filue in the northeast corner.
There is a whitish material, probably plaster, visible at the lower west side of the flue. (Photo 88-95)

Kitchen
Linoleum floor.
Paneled walls.
Lightly textured plaster ceiling.

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Window on the west wall. Door on the west wall to the pantry. Door on the east wall to the freezer roam.

Photograph of the north wall. (Photo 88-96)
Photographs of the east wall. (Photos 88-97 and 88-98)
Photographs of the scuth wall. (Photos 88-99 and 88-100)
Photographs of the west wall. (Photos 88-101 and 88-102)
The linoleum floor is very wrinkled. (Photo 88-103)
There is a dark stain located at the northwest part of the ceiling. (Photo 88-104)

The plaster ceiling ras extensive hairline to slightly wider cracks. The cracks are most prevalent in the west part of the ceiling, especially the northwest part. (Photos 88-105 thru 88-109)

Pantry
Linoleum floor.
Paneled walls.
Textured plaster ceiling.
Window on the west wall. Cabinets cover most of the east wall.
There are a few slight cracks in the ceiling.
Photographs of the northwest, northeast, and south parts of the ceiling. Most of the ceiling cracks are in the north part of the ceiling. They range from about a hairline to $1 / 32$ of an inch wide. (Photos 88-110 thru 88-112)

## Freezer Room

Exterior siding on the east, west, and south walls. The north wall is wooden and has a door that leads to the shed. wooden ceiling. Linoleum floor.

Window on the south wall to a bedroom.
A photograph 100 king eastward into this room. (Photo 88-113)

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Shed

Linoleum covered wooden floor.
Unfinished wooden waills and ceiling.
A photograph looking northward into the shed. (Photo 88-114)
In the southwest corner, the shed leans westward and has separated from the house. This shed appears about ready to collapse. (Photo 88-115)

The west window has a cracked lower left pane and the upper left pane has a hole.

The shed roof has separated from the house at the east end. (Photo 88-116)

## South Bedroom

Hardwood floor.
plastered walls and ceiling.
Windows on the south and east walls. Door to the hallway on the north. Door to the living room on the west.

The floor of this rom slopes from south to north, toward the center of the house.

Photograph of the east wall. (Photo 88-117)
Photograph of the south wall. (Photo 88-118)
Photographs of the west wall. (Photos 88-119 and 88-120)
Photographs of the north wall. (Photos 88-121 thru 88-123)
The ceiling has a patched area in the northwest corner. (Photo 88-123)
The ceiling has a stain in the southeast corner. (Photo 88-124)
There are several hairline cracks in the ceiling.
The walls have exterisive, mostly hairline cracks.
There is an L-shaped crack in the ceiling above the south window.
(Photo 88-125)
There is a large crack along the southwest corner. It ranges from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 88-126 and 88-127)

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The south wall has apparent water stains on the baseboard. The south end of the floor also has stains. (Photo 88-128)

There is a vertical crack above the upper left corner of the south window. There are al so two other vertical cracks above the window with a connecting crack. All of the vertical cracks run to the ceiling and are fran about 1/32 of an inch to a hairline wide. (Photo 88-129)

There is a cross shaped crack on the south wall, east of the window. The main, vertical part, runs from the ceiling to the floor. It has a couple of intersecting perpendicular cracks. There is also a crack in the southeast corner. (Photos 88-129 and 88-130)

The east wall has two cracks above the window, and cracks to the right of the window. There are al so cracks to the left of the window, sane of which have been patched. (Photos 88-131 thru 88-133)

The north wall has several stairstepping, hairline cracks, east of the door. (Photos 88-134 and 88-135)

There are a couple of slight cracks above the north door, and in the upper northwest corner. (Photo 88-136)

There is a patched crack and another crack above the west doorway.
There are intersecting hairline cracks, vertical and horizontal, south of the door on the west wall. (Photos 88-137 and 88-138)

There is a crack along part of the west wall-ceiling intersection. It is about $1 / 4$ of an irich wide and extends northward about 41 inches from the south end. (Phot: 88-138)

Hallway
wooden floor.
Green painted plaster: walls.
White plaster ceiling.
Part of the west wall has been painted white or patched.
A photograph looking northward into the hall. (Photo 88-139)
The walls are extensively cracked.
Entrance on the north wall to a bedroom. Doors on the east wall to the bathroam and the stairway.

The wall above the north door has several cracks.

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There are also several. cracks above the east doors. (Photos 88-140 and 88-141)

There is a patched crack and other cracks above the south door. (Photo 88-143)

The south part of the west wall has a major vertical crack which was patched and another vertical crack at the north part. Both run to the ceiling from the floor. There is also a crack on the lower west wall at about the middle. (Photos 88-143 and 88-144)

The ceiling is extensivly cracked. (Photos $88-142,88-145$ and 88-146)
Bathroom
Carpeted floor.
Linoleum covered lower walls.
Green painted plaster upper walls.
Textured plaster ceiling.
Window on the east wall above the bathtub.
The upper plaster walls are extensively cracked.
Photograph of the east wall. (Photo 88-147)
There is a large diagonal crack to the right of the east window and a vertical crack above it. (Photo 88-148)

Photograph of the upper south wall. (Photo 88-149)
There are cracks above the doorway on the west wall.
Photograph of the upper north wall. (Photo 88-150)
The stairway enclosure in the upper northeast corner has a few cracks. (Photo 88-151)

Photographs of the north wall below the stairway. There is damage behind the water heater. (Photos $88-152$ and $88-153$ )

The ceiling has several hairline cracks. (Photos 88-154 and 88-155)
North Bedroom
Carpeted floor over wood.
Plaster walls.
Drop panel ceiling.

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Windows on the north and east walls.

Closet entrance on the north wall.

Photographs of the north wall. (Photos 88-156 and 88-157)

Photographs of the east wall. (Photos 88-158 and 88-159)
Photographs of the south wall. (Photos 88-160 and 88-161)
Photograph of the west wall. (Photo 88-162)
The floor slopes from the north wall, southwestward toward the center of the house.

The walls are extensively cracked and patched. The north part of the west wall has two long diagonal cracks. (Photos 88-163 and 88-164)

There are cracks above each upper corner of the west door. (Photo 88-165)

There are cracks above the left end of the south door. (Photo 88-166)
Close-up photographs of the south wall. (Photos 88-167 and 88-168)
Close-up photographs of the east wall. (Photos 88-169 and 88-170)
There are cracks above the east window. (Photo 88-171)
There is a crack north of the east window. (Photo 88-172)

These are mainly hairline to slightly wider cracks. Most have been patched and many have recracked.

There are cracks on both sides, above, and below the north window. (Photos 88-173 thru 88-176)

The north window is uneven and slopes to the west.

## Closet

Wooden floor.
Plaster walls and ceiling, mostly stripped of wall paper.
Photographs 100 king rorthward into the closet. (Photos 88-177 and 88-178)

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An area of lath is erposed at the north end of the west wall and ceiling.

The walls and ceiling are extensively cracked.
Photographs of the ceiling. (Photos 88-179 thru 88-181)
Stairway
Wooden stairs.
Plaster walls.
Photographs of the south stairway wall. It has several slight cracks. (Photos 88-182 and 83-183)

Photographs of the north stairway wall. It has much larger cracks, some of which have been taped over. (Photos 88-184 thru 88-187)

There is a large crack in the northeast corner of the stairway.
There are cracks on the east wall of the stairway. (Photos 88-188 and 88-189)

There is extensive cracking on the south wall at the top of the stairway. (Photos 88-190 and 88-191)

There is extensive cracking in the ceiling. (Photo 88-192)
Upstairs Hallway
Plaster walls and ceiling.
wooden floor.
Doors on the south, north, and west walls to bedrooms.
Photograph of the north wall. (Photo 88-193)
Photographs of the west wall. (Photos 88-194 and 88-195)
Photograph of the south wall. (Photo 88-196)
Photograph of the east wall. (Photo 88-197)
The walls and ceiling are extensively cracked.
There is a flue in the southwest corner and another in the northwest corner.

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Photographs of the ceiling. (Photos 88-198 and 88-199)
The walls and ceiling are deteriorating severely around the north flu. (Photos 88-200 thru 88-202)

North Bedroom
Wooden floor.
plaster walls.
Doorway on the north wall.
There are numerous taped cracks and most of the tape is peeling.
Photograph of the west wall. (Photo 88-203)
Photographs of the south wall. (Photos 88-204 and 88-205)
Photograph of the east wall. (Photo 88-206)
Most of the tape is peeling in the northeast corner and along the ceiling-east wall junction.

Photographs of the north wall. (Photos 88-207 and 88-208)

Two photographs of the ceiling, one looking west and one looking east. (Photos 88-209 and 83-210)

Note that the door to this room is difficult to open. It drags along the floor.

South Bedroom
Wooden floor.
Blue painted plaster walls.
Textured plaster ceiling.
Windows on the south wall.
Closet door on the north wall.
Photograph of the south wall. (Photo 88-2ll)
Photographs of the east wall. (Photos 88-212 and 88-213)
Photographs of the north wall. (Photos 88-214 thru 88-216)

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Photographs of the west wall. (Photos 88-217 and 88-218)
The walls are extensively cracked. There is a large crack in the southeast corner. There are cracks above and below the corners of the south window.

The ceiling is also extensively cracked. (Photos 88-219 thru 88-227)
Most of the ceiling cracks are located at the south end and in the northeast corner.

Closet
wooden floor.
White painted plaster walls and ceiling.
The walls and ceilirg are extensively cracked.
Photograph of the north wall. (Photo 88-228)
Photograph of the west wall. (Photo 88-229)
Photograph of the scuth wall. (Photo 88-230)
Photograph of of the east wall. (Photo 88-231)
Photographs of the ceiling, one looking south and one looking north. (Photos 88-232 and 88-233)

There is a large separation in the northwest corner that ranges from about $1 / 2$ to $1 / 16$ of: an inch wide. The other corners are also separated.

There are cracks above both doors.
The walls appear to have been wallpapered and painted over.
West Bedroom
wooden floor.
Yellow painted plaster walls.
White painted plaster ceiling.
Window on the west wall.
Photographs of the west wall. (Photos 88-234 and 88-235)
Photographs of the north wall. (Photos 88-236 and 88-237)

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The west wall has several hairline cracks. The crack above the upper right of the window runs to the ceiling. The cracks below the window run to the floor. They are from a hairline to about $1 / 32$ of an inch in width.

The north wall has several hairline cracks, mainly vertical or stairstepping, same of: which have been patched and many have recracked.

Photographs of the south wall. (Photos 88-238 and 88-239)
The south wall has several patched and recracked, roughly diagonal cracks.

Photographs of the east wall. (Photos 88-240 and 88-241)
The east wall also hass several slight cracks, mainly vertical.
Series of photographs of the ceiling. (Photos 88-242 thru 88-246)
There is an area of lath exposed in the ceiling near the east wall.
The main ceiling cracks are in the west part and range from a hairline to about $1 / 16$ of an inch wide.

There is a patched area in the northwest corner of the ceiling.
Some of the ceiling cracks have been taped over and some of the tape is peeling or missing.

There is a crack along each corner of this room.
Overall, the upstairs is in an extreme state of deterioration.
Stairway - Continued
Now moving back down the stairway, there are cracks above the stairway door that range from about $1 / 8$ of an inch to a hairline wide. (Photo 88-247)
General Comments
This is a very old house that has suffered the effects of time.
It has a sandstone foundation that is partially covered with concrete and has been repaired with concrete block in a few areas. Numerous cracks and separations where found in the foundation.

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The front porch is extensively and severely cracked, apparently the result of settlement, which has al so caused the porch roof to sag considerably. The house lacks a gutter-downspout system to carry rainwater away from the foundation and sidewalls. The wooden lap siding has several cracks and is deteriorating in places.

The interior walls and ceilings were originally plaster on lath and same of the downstairs rooms have been paneled. Several rooms have the original plaster walls, and these are extensively cracked, especially the upstairs.

Most downstairs floors and doorways were noticed to slope considerably toward the center of the house, indicating possibly damaged or weakened floor joists.

The exterior paint is deteriorating considerably.
The back shed is in a severe state of deterioration and appears to be on the brink of collapse.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate
CDL/mp
Enclosure: 247 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 116

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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Sketch of the Upstairs floor finest Feyler Resiluenee







I. Basic Information

1. Name of Resident: Bates County National Bank
2. Date:_ October 31, 1986 Time:_12:55PM
3. Address: P. O. Box 138, Amoret, Missouri. 64722
4. Location: Lot=s 13 W. 5', 14, 15, Block 19
5. Telephone Number: (816) 925-3213
6. Dates of occupancy by current resident: $\qquad$
7. Dates of any temporary or permanent abandownent: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: $\qquad$
9. Date(s) of major remodeling or additions:
(a) 1967 addition
(b)
(c) $\qquad$
10. Construction of bullding:
(a) Eraning (joists, rafters, and stud walls):
addition $2 \times 4$ studs, main part: masonry walls
(b) interior walls: Stucco, sheetrock
(c) rook: Composition shingles
(d) footings; foundations: Not known
(e) basenent walls (indicate how keyed to footing of floor):

Not applicable
(E) basement: floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building:
(h) size and direction of any large windows: $25^{\prime} \times 5^{\prime}$ panes on the front.
III. Envirommental Information

1. Approxirate elevation of area:

845 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (indicate depth*and use): No
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). No
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior drainage Eeatures: Yes .
8. Descripcton of general grading or landscaping in vicinity:
Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls:See survey
2. Receding of doors, windows: See survey
3. Noticeable settlenent: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevarion views or photographs of walls
8. North See swevey
2.0 South See survey
9. East See survey
10. West See survey
VII. Comuents or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techntques, or stacus of deterioration, that, because of the nature of their construction, materials of which they are constructed, statis of deterioration, may exhibit an unusual response to normal blasting activities.

JOPLIN, MO 64802-1256
PH. (417) 624-0164
November 7, 1986
Report No. 87056-62
P and M Map Photo No. 92

Subject: Inspection of the Bates County National Bank P. O. Box 138 Amoret, Missouri 64722 October 3l, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 3 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front south side. (Photos 62-1 and 62-2)
ID photographs of the west side. (Photos 62-3 and 62-4)
ID photograph of the north side. (Photo 62-5)
ID photographs of the east side. (Photos 62-6 and 62-7)
The front sidewalk has several cracks. (Photo 62-8)
ID photograph of the driveway at the east side of the bank. It has several cracks. (Photo 62-9)

Series of photographs of the parking lot showing extensive cracks. (Photos 62-10 thru 62-16)

Starting at the west end of the front of the building. To the upper left of the window, there are mortar cracks and separations and two cracked bricks. The total length of the cracking is about 13 and $1 / 2$ inches and the width ranges fram about $1 / 4$ of an inch at the top, down to a hairline at the bottom. (Photos $62-17$ and 62-18)

There is another mortar crack in the same general area but on the west side of the canopy. It is about $1 / 8$ of an inch wide. (Photos 62-19)

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The Pittsburg and Midway coal Mining Company
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There are mortar separations and deterioration and a very slight crack between the west window and the front door, just below the canopy. (Photos 67-20 and 67-21)

There is a mortar æparation and a slight mortar crack between the east window and the front door. (Photos 62-22 and 62-23)

There is a slight horizontal separation or crack to the upper right of the east front window. (Photo 62-24)

Above the canopy, there are a few visible mortar cracks and cracked bricks. Series of photographs of the upper front from east to west. (Photos 62-25 thru 62-30)

There is a crack in the sill below the front door. It runs about 5 inches across the top and down through the visible thickness of the sill. It is about $1 / 32$ of an inch wide. (Photo 62-31)

There is separation around the frame of the front door. (Photos 62-32 thru 62-36)

Above the lintel of the east window, the mortar appears to be deteriorating. (Photos 62-37 and 62-38)

The mortar above the lintel of the west window is also deteriorating. (Photos 62-39 and 62-40)

Series of photographs of the lower, front brick wall from west to east. (Photos 62-41 thru 62:-44)

The sidewalk is heaved and cracked at the southeast corner of the building. There is about $1 / 4$ of an inch gap and it is vertically heaved about 1 and $1 / 2$ inches. (Photo 62-44)

Now on the east side of the building. This side has a stucco exterior with some brick at the corner. (Photos 62-45 and 62-46)

This stucco has extensive cracks. One crack trends horizontally from the corner above the depository to the teller window. (Photos 62-47 and 62-48)

There is also a horizontal crack trending from the corner below the depository toward the teller window. (Photos 62-49 and 62-50)

Most of these stucco cracks are very faint with widths ranging fron a hairline to about $1 / 32$ of an inch.

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There is a crack above the upper left corner of the teller window. It runs to the top of the wall about 34 inches and is just wider than a hairline. (Photo 62-51)

There is a faint vertical crack above the teller window. (Photo 62-52)
There is a faint crack above the upper right corner of the teller window. It stairsteps to the top of the wall. (Photo 62-53)

There are several slight cracks below the teller window. (Photos 62-54 thru 62-56)

A photograph of the east wall between the teller window and the door to the north. (Photo 62-57)

There is a vertical and a horizontal crack above the upper right corner of the east door. The vertical crack runs to the top of the wall, and the horiontal crack runs to the window to the north. (Photo 62-58)

There is a horizontal crack lower on the wall between the door and the window. (Photo 62-59)

There is a hairline crack in the sill of this door. (Photo 62-60)
This sidewalk is separated from the bank by about $3 / 4$ of an inch at its north end. Most of the gap has been filled with mortar which has numerous cracks. (Photos 62-61 thru 62-71)

Now continuing with the east side. At the window, south of the watt meter, there is a crack above the upper right corner. It stairsteps up about 32 inches and has a horizontal branch that runs northward to the end of this part of the building. (Photos 62-72 and 62-73)

Another crack runs horizontally from the upper right of this window, and then stairsteps to the north end of the main part of the building. (Photos 62-74 and 62-75)

There are several slight cracks below the window. (Photos 62-76 thru 62-78)

A vertical branch from the stairstepping crack comes down above the watt meter. (Photo 62-79)

There is a crack along the joint where the two parts of the building meet. It is from abcut $1 / 16$ of an inch to a hairline wide. (Photos 62-80 thru 62-83)

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The lower north end of the east side has several slight vertical cracks. (Photos 62-8.4 thru 62-89)

The northeast downspout lacks a curved tip and dumps directly to the foundation. This condition could cause foundation problems in the future if it is not corrected. (Photo 62-89)

Now on the north side of the building.
This end has a newer looking stucco exterior.
There is a very slight vertical crack below the lower right corner of the east window. Actually there are about three cracks here. The first crack runs down about 28 inches. Just to the right of the end of that crack, there is another faint crack, which is about 10 inches long and it runs behind a concluit. Then directly below the lower right corner of the window, a crack runs from the ground up about 3 feet. Those are very faint, barely noticeable cracks. (Photos 62-90 thru 62-93)

Above the upper left corner of the east window, there is a diagonal hairline crack that j.s about 10 inches long. (Photo 62-94)

A vertical crack belcw the lower right corner runs down about 7 and $1 / 2$ inches and branches horizontally in both directions. (Photo 62-95)

The east horizontal kranch is about 22 inches long. The west branch is about 15 inches long. (Photos 62-96 and 62-97)

The west branch is so faint that I cannot see it through the camera.
Now on the west side of the building working from north to south.
There are several sli.ght horizontal and stairstepping cracks at the lower north end. These appear to follow the outline of concrete blocks. (Photos 62-98 thru 62-100)

Now almost to the window, there are two slight vertical cracks low on the wall. (Photo 62-101)

Below this window, a vertical crack runs to the ground. (Photos 62-102 and 62-103)

There is a very slight vertical crack below the lower left corner of this window. It is about 7 inches long visible. (Photo 62-104)

There is a very slight crack, about 2 inches long, above the upper right end of this window. (Photo 62-105)

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There is a horizontal split just above the ground that runs both directions from the window. (Photos 62-106 thru 62-108)

There is a vertical separation along the joint where the two parts of the building meet. It: is about $1 / 16$ of an inch wide. (Photos 62-109 thru 62-111)

To the lower right of the joint there are several slight cracks. (Photo 62-109)

Now at the larger part. of the building. There is extensive cracking in the stucco. These cracks appear to follow the outlines of the concrete block wall.

Series of photographs of the west side of the larger part of the bank from north to south. (Photos 62-112 thru 62-118)

Most of these cracks are barely visible. The major cracks are a horizontal crack at the north end of the bank and two horizontal cracks at the south end. (Photos 62-119 and 62-120)

The southwest window has a stairstepping crack above each upper corner and several cracks below the window. (Photo 62-115)

At the southwest corner, in the brick area, there is mortar deterioration and several stairstepping mortar cracks. (Photos 62-121 thru 62-123)

INTERIOR INSPECTIION

## Lobby

Carpeted floor.
Stucco south, east, and west walls. Wooden north wall.
Tile ceiling.
Photograph of the east wall. (Photo 62-124)
Photograph of the west wall. (Photo 62-125)
Photographs of the south wall. (Photos 62-126 and 62-127)
The east wall has a hairline, horizontal crack behind the clock. It runs from the north to the south wall. (Photos 62-128 thru 62-130)

South of the safe, on the east wall, there are two faint horizontal stucco cracks. (Photo 62-131)

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There is a hairline crack in the upper southeast corner. It is visible running about 14 inches down from the ceiling. (Photo 62-132)

On the north face of the safe, there is a roughly horizontal hairline crack. (Photo 62-133)

There are two horizontal cracks on the south wall trending from the left end of the east front window to the southeast corner. (Photos 62-131 and 62-134)

A horizontal crack below the east window runs from the door to the east wall and stairsteps at the east end. (Photos 62-135 thru 62-138)

From the lower right corner of the east window, a horizontal crack runs about 20 inches to the door. (Photo 62-139)

There is a diagonal crack, about 7 inches long, above the upper left corner of the east window. (Photo 62-140)

The horizontal crack running from the lower right corner of the window al so runs across the east recessed face of the doorway about 5 and $1 / 2$ inches. (Photo 62-141)

There is a vertical crack on the east recessed face of the doorway. It is about 23 inches long. (Photo 62-142)

There are 3 hairline ccacks in the concrete sill of this door. (Photos 62-143 thru 62-145)

There is a crack above the upper right corner of this door. (Photos 62-146 and 62-147)

There is a hairline vertical crack to the upper left of the west front window. It is about 9 inches long. (Photo 62-148)

There is a hairline horizontal crack to the upper right of the west window and a slightly wider vertical crack at the upper recessed face. (Photo 62-149)

A hairline horizontal crack runs from the lower right corner of the window to the west wall. (Photo 62-150)

There is a hairline horizontal crack on the west wall trending from the southwest corner behind the bulletin board. (Photo 62-151)

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At the bottom of the west wall, a horizontal crack runs almost the length of the wall. It is about 55 inches long. (Photos 62-152 thru 62-155)

Teller's Area

Tile ceiling.
Carpeted floor.
Stucco walls.
Photograph of the west wall. (Photo 62-156)
Photographs of the north wall. (Photos 62-157 and 62-158)
Photograph of the east wall. (Photo 62-159)
Photographs of the ceiling. (Photos 62-190 and 62-191)
There is a crack above the upper right corner of the teller's window on the east wall. This area appears to have been patched. The crack is about $1 / 16$ of an inch wide and 17 inches long. (Photo 62-160)

The south end of the east wall has a horizontal crack above the burglar alarm box. It is about a 20 inch long hairline crack. (Photo 62-161)

To the upper left of the east window, there is a crack in the stucco that is about 2 inches long and a hairline wide. (Photo 62-162)

There is a vertical seam or a bulge to the upper left of the window but it is not cracked at this time. (Photo 62-162)

Tb the lower left of the east window, there is a stairstepping and vertical crack that is about 3 feet long on the vertical and up to about $1 / 16$ of an inch wide. There appear to be water stains to the lower left of the window. (Photo 62-163)

There is a vertical crack which intersects two horizontal cracks below the middle of the east window. (Photos 62-164 thru 62-167)

There is a door at the east end of the north wall to the copy room.
To the upper right of the door, there is a crack that is about 3 inches long and $1 / 16$ of an inch wide. (Photo 62-168)

Above the upper left corner, there is a vertical crack that is about 13 inches long and from about a hairline to $1 / 32$ of an inch in width. (Photo 62-169)

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A hairline horizontal crack trends froin the north window toward the vault door. It runs about 32 inches west of the telephone. (Photo 62-170)

A hairline vertical crack, to the upper right of the vault door, runs about 30 inches. (Photo 62-171)

There is a horizontal crack above the vault door. It is about 48 inches long and from about $1 / 32$ of and inch to a hairline wide. It appears to have been partially patched. (Photos 62-172 thru 62-174)

Now on the west wall. There are two hairline horizontal cracks at the upper north end. (Photo 62-175)

There is a hairline vertical crack to the upper right of the west window. (Photo 62-176)

There is a vertical crack above the upper left of the window that runs to the ceiling. It is about $1 / 32$ of an inch wide. (Photo 62-177)

Vault
A photograph looking northward into the vault. (Photo 62-176)
Unfinished sheetrock ceiling.
Concrete walls.
Carpeted floor.
There are several slight cracks in the northwest corner. Unable to measure. (Photo 62-179)

There is a horizontal crack at the north end of the east wall. Only a small part is visible. (Photo 62-180)

An area of the ceiling has been removed at the doorway. (Photo 62-181)
Now into the room north of the teller's area.

## Copy Room

Carpeted floor.
Stucco on north, east, and south walls over sheetrock
Sheetrock ceiling.
Cabinets and paneling on the west wall.
Photograph of the north wall. (Photo 62-182)
Photographs of the east wall. (Photos 62-183 and 62-184)

White Industrial Seismology, Inc.

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Photographs of the west wall. (Photos 62-185 and 62-186)
Photograph of the south wall. (Photo 62-187)
Photographs of the ceiling. (Photos 62-188 and 62-189)
Starting on the south wall. There is a vertical crack above the upper right corner of the door. It is about 17 inches long and $1 / 16$ of an inch wide. (Photo 62-192)

Above the window on the south wall, a vertical hairline crack runs to the ceiling about 26 inches. (Photo 62-193)

There is a crack in the upper southeast corner. It ranges from about $1 / 16$ of an inch down to a hairline in width and is visible to about 50 inches below the ceiling. (Photos 62-194 and 62-195)

Now on the east wall. To the upper right of the door, there is a 4 and l/2 inch long horizontal hairline crack that runs to the southeast corner. it is about $1 / 32$ of an inch wide. (Photo 62-196)

There is also a slight crack to the upper left of the south door that runs to the corner. (Photo 62-196)

A horizontal crack runs from upper left of the east door to the east window. It has been painted over and is very hard to distinguish. (Photo 62-197)

There is a diagonal crack to the upper left of the window on the east wall. It is about 8 inches long and $1 / 16$ of an inch wide. (Photo 62-198)

There is a horizontal crack at the upper north end of the east wall just below the ceiling. We estimate this crack to be about 38 inches long and $1 / 16$ of an inch wide. (Photo 62-199)

There is a hairline crack above the upper left end of the door on the north. It is a vertical crack that runs to the ceiling. (Photo 62-200)

The upper east end of the south wall has about four nail pops. (Photo 62-201)

There are two east-west trending hairline cracks in the west part of the ceiling. These are at seams of the sheetrock. (Photo 62-202)

Now moving north into the offices and break roan area.

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## Bathroom

Carpeted floor.
Light yellow painted sheetrock walls.
Textured plaster ceiling.
A photograph looking into the restroon. (Photo 62-203)
There is a slight separation at the east part of the north wall ceiling intersection. (Photo 62-204)

At the upper north end of the east wall, there is a slight crack at the tape joint It is about 2 and $1 / 2$ inches long. There is also wrinkling and folding in the northeast corner. (Photo 62-205)

At the southeast corner of the ceiling, there is a slight crack at a tape joint. It is about 3 inches long. (Photo 62-206)

There are a couple of nail pops at the upper right of the west wall. (Photo 62-207)

Break Room

Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Photograph of the north wall. (Photo 62-208)
Photographs of the west wall. (Photos 62-209 and 62-210)
Photograph of the south wall. (Photo 62-211)
Photographs of the east wall. (Photos 62-212 and 62-213)
Two views of the ceiling, first looking north and then looking south. (Photos 62-214 and 6:2-215)

Offices
Paneled walls.
Carpeted floor.
Textured plaster ceil.ing.
Photograph of the north wall. (Photo 62-216)
Photographs of the west wall. (Photos 62-217 and 62-218)
Photograph of the soluth wall. (Photo 66-219)

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Photographs of the east wall. (Photos 66-220 and 66-221)
This room is divided into two halves, a north and south part.
Photographs of the south and north parts of the ceiling, respectively. (Photos 62-222 and 62-223)

That completes the interior inspection.
General Comnents
The original building was built in 1954 with concrete blocks. The addition was added in 1967 and is of wooden frame construction.

The exterior has a brick veneer on the front with the rest of the building having a stucco exterior.

The front brick veneer has several mortar cracks, mainly above corners of windows and doors. These were probably the result of slight settlement of the building which caused cracks to develop at these weakened areas of the wall.

The stucco exterior has numerous cracks, most of wich were hairline to slightly larger cracks that appeared to follow the outlines of the concrete blocks.

These cracks can be caused by many different factors, one of wich is weathering of the stucco. This stucco can be expected to continue to crack over time as it continues to suffer weathering effects.

The building has a gutter along the east side but lacks a gutter on the west side. A downspout empties next to the foundation of the northeast corner of the building. This will increase the liklihood of foundation problems in the future if it is not corrected.

The driveway, sidewalks, and parking lot are extensively cracked and can be expected to deteriorated futher with the effects of weathering.

The interior stucco walls, in the lobby, tellers area, and vault have several cracks. Most of these were found around wall openings, such as windows and doors and were probably caused by natural settlement of the building over time.

These walls can be expected to continue to develop cracks and existing cracks enlarge naturally over time.

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The walls and ceilings in the addition are sheetrock with either stucco, paneling, or textured plaster coverings.

Several cracks were found in the copy room, mainly at seams of the sheetrock walls and ceiling. These cracks are usually caused by shrinkage and expansion of framing materials and roof loading. These cracks vary in width with humidity changes. Sane of these cracks have potential to increase in length, and probably will do so, naturally with time.

This completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/kg
Enclosure: 223 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 92
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


Bates County National Bank


62.28

## $\equiv \equiv$





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62.4
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PRE-BLAST SURVEY, RESIDENTTAL
I. Basic Information

1. Name of Resident: Bowers Snack Bar (Emery Bowers)
2. Date: October 22, 1986 Time:___ $8:$ _
3. Address:__Box_193, Amoret, Missouri_ 64722
4. Location: Northeast corner of 52 Highway and Seoond Street
5. Telephone Number: (816) 925-3333
6. Dates of occufancy by current resident: Spring 1984-Present
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction:_ Spring 1984
9. Date(s) of major remodeling or additions:
(a)
(b) $\qquad$
(c)
10. Construction of building: Metal building
(a) framing (joists, rafters, and stud walls): $2^{\prime \prime} x 4$ " stud walls 2"z8" floor joists
(b) interior walls: Sheetrock
(c) roof: Shingled, gable type
(d) footings; foundations: Poured concrete foundation
(e) basement walls (indicate how keyed to footing of floor):

Unable to see
(E) basement floor (keyways, thickness):

Unable to see
(g) name of person(s) who constructed building:

West Construction Company
(h) size and direction of any large windows: None
III. Envirorruental Information

1. Approximate elevation of area:

845 feet at structure
2. Type of sofl in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depthend use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch
VI. Elevation views or photographs of walls See photo survey
8. North
2.* South
9. East
10. West
VII. Comnents or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterforation, may exhibit an unusual response to nomal blasting activities.

See survey narrative

White- Industrial Seismology,
2431 RANGELINE SUITE A-B
P.O. BOX 1256 JOPLIN, MO 64802-1256

PH. (417) 624-0164
October 25, 1986 Invoice No. 87056-41 P \& M Map Photo No. 88

Subject: Inspection of the Bowers Snack Bar P. O. Box 193

Amoret, Missouri 64722
October 22, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Sheetrock walls.
Plaster ceiling.
Vinyl floor.
This is the main room. There is a storage area at the east side and a kitchen at the north end.

Main Room
Start the inspection in the main area by taking ID photographs of the south wall. (Photos 41-1 and 41-2)

There are ceiling stains around the central air vent above the counter. (Photo 4l-3)

ID photographs of the east wall. (Photos 41-4 thru 41-6)
ID photograph of the north wall. (Photo 41-7)
Now looking at the west wall.
At the upper right corner of the northernmost window, there is a diagonal hairline crack. It measures 3 and $1 / 2$ inches. (Photo 4l-8)

At the upper left corner of the window there is a very fine crack underneath the window cover. Measures 1 and $1 / 8$ inches. (Photo 4l-9)

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The Pittsburg and Midway Coal Mining Company
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Looking at the west wall, to the left of the window, there is a vertical crack in the wall. Measures about 22 inches. (Photo 41-10)

There is also a crack across the ceiling. Measures about 42 and $3 / 4$
inches. (Photo 4l-11)

To the right of the door there is a vertical crack in the wall. There is also a crack acrosis the ceiling. This crack extends down to the paneling which is abolut halfway up the wall. The crack is partially obscured by some video arcade machines. Measures 3 feet 11 and 3/4 inches from the paneling. Has a width of $1 / 16$ of an inch to a hairline. (Photo 41-12)

The crack across the ceiling from the west wall to the first light measures about 33 and $3 / 4$ inches. It has an average width of about $1 / 16$ of an inch. (Photo 41-13)

The crack then extends from the east end of the light fixture over to the west end of the next light fixture. We measure 6 feet 8 inches between light fixtures. (Photos 41-14 thru 41-17)

The crack then extends from the end of the easternmost light fixture to the east wall. This is 19 and 3/4 inches. (Photo 41-18)

On the ceiling at the fifth light, from the south end of the west side, there is a fine east-west crack at the upper southeast corner. Measures 1 and $7 / 8$ inches. (Photo 41-19)

At the upper right corner of the door on the west wall, there is a diagonal crack. Measures 8 and $1 / 4$ inches. (Photo 41-20)

There is a vertical crack parallel with the door. Measures 7 and $3 / 4$
inches. (Photo 4l-21)
There is another hairline vertical crack a little farther down the wall. Measures 7 and $1 / 8$ inches. (Photo 4l-22)

There is a vertical crack at the upper left corner of the entrance. Measures 5 and 1/8 inches. (Photo 41-23)

It also continues back into the door about 4 inches. (Photo 4l-24)

There is a series of cracks at the second light fixture from the south end on the east side at the southeast corner. (Photo 41-25)

ID photographs of the west wall. (Photos 41-26 thru 41-28)

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Looking back on the east wall, there is a vertical crack a few feet to the left of the door to the storage room. This hairline crack measures 5 inches. (Photo 41-29)

There is a fine separation between the ceiling and the wall toward the northeast corner. (Photo 41-30)

We have now moved east:ward into the storage area at the south end.

## Storage Area

ID photograph of the north wall. (Photo 41-31)
Looking at the west wall to the left of the southernmost door, there is a vertical crack in the wall. It measures 1 foot 5 and $1 / 2$ inches. (Photo 41-32)

ID photographs of the west wall. (Photos 41-33 and 41-34)
Now moving westward down the rectangular area behind the front counter. ID photographs of the north wall of this area. (Photos 41-35 and 41-36)

Now looking at the west wall of this area.
There is a faint hairline separation in the northwest corner. Measures 56 and 1/4 inches. (Photo 4l-37)

ID photograph of the west wall. (Photo 4l-38)
Now looking at the south wall.
There is a hairline separation in the southwest corner. (Photo 4l-39)
There is a diagonal crack at the upper right corner of the door. This measures 4 inches. (Photo 4l-40)

There is a vertical crack near the upper left corner. Measures 14 and $7 / 8$ inches. (Photo 41-41)

There is a hairline diagonal crack at the upper left corner. Measures 3 and $1 / 2$ inches. (Photo 41-42)

ID photographs of the south wall. (Photos 41-43 and 41-44)
There is a hairline separation in the southeast corner. (Photos 41-45 and 4l-46)

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We are now looking at the east wall.
There is a vertical hairline crack above the door. It measures 12 and $1 / 2$ inches. (Photo 41-47)

There is a very fine hairline crack at the upper left corner of the door. It measures about 1 and $1 / 4$ inches. (Photo 41-48)

ID photographs of the east wall. (Photos 41-49 thru 41-51)
There is a slight crack in the ceiling at the corner of a wood enclosure. (Photo 41-52)

We will now examine the floor. This is a single slab poured concrete floor.

We are starting at the west end behind the main counter.
There is a hairline north-south crack that extends the width of this area. (Photos 4l-53 and 4l-54)

A few feet farther to the east there is another north-south crack across the floor. Measures $1 / 32$ of an inch to a hairline in width. There is a lot of material on the floor. (Photo 41-55)

We have now moved out into the main storage area.
There is a north-south crack that Y's off in two directions. Measurement to the $Y$ is 9 feet 7 inches. At the $Y$ it branches to the west and to the east. This crack has a width of about $1 / 16$ of an inch. (Photos 41-56 and 41-57)

Photographs of the first branch to the west. (Photos 41-58 and 41-59)
This crack is a hairline and extends approximately 31 and $1 / 2$ inches.
There is a branching crack off this one to the north. It is also a very fine hairline. Measures about 16 inches. (Photo 41-60)

We will now look at the other major branch to the east. This crack extends about 32 inches and then Y's off again. It has a width of about 1/8 of an inch maximum. (Photo 4l-61)

There is a $Y$ to the east off this crack that extends underneath some boxes. Probably extends to the wall. (Photo 4l-61)

Photographs of this area. (Photos 41-62 thru 41-66)

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The $Y$ branch to the west wall measured 15 and $1 / 2$ inches to the boxes. (Photo 4l-67)

There is another $Y$ branch off this crack that progresses northward to another slab. (Photos 41-68 thru 41-73)

This crack measured 13 feet 7 inches with a width of $1 / 16$ inch to a hairline.

There is a floor crack extending from the east wall to the door. This crack becomes very fine. It has a width of $1 / 16$ of an inch down to a very fine hairline. (Photos 4l-74 thru 41-77)

There is evidence of water damage in the northeast corner. (Photo 41-78)

There is a hairline crack from the floor joint to the cold storage door. Measures 3 feet 9 and l/2 inches. (Photo 4l-79)

Cold Storage Area
Poured concrete floor.
Sheetrock walls and ceiling.
ID photograph of the south wall. (Photo 41-80)
ID photographs of the east wall. (Photos 41-81 and 41-82)
ID photograph of the rorth wall. (Photo 4l-83)
ID photographs of the west wall. (Photos 41-84 and 41-85)
There is a fine hairline crack in the ceiling. Measures 6 and $3 / 4$ inches. (Photo 41-86)

There is a separation of the wall near the ceiling. Measures 6 inches in length. It is $1 / 16$ of an inch wide. (Photo 4l-87)

We have been looking at the east wall.
There is a slight vertical crack in the west wall. It measures 5 and $3 / 8$ inches near the north end. (Photo 4l-88)

There is another vertical crack a little farther down the wall. Measures 10 and $1 / 2$ inches in length. (Photo 41-89)

Some of the wall is damaged where the lighting unit was installed. (Photo 41-90)

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Looking at the floor starting at the south end.
There is a diagonal crack across the floor. Partially obscured by some boxes. Probably extends to the wall. (Photos 41-91 and 41-92)

This crack has a width of $1 / 16$ of an inch to a hairline.
There is another crack that extends east-west across the floor. Obscured by a lot of materials. Width is about $3 / 16$ of an inch maximum. (Photos 41-93 thru 41-95)

There is also a hairline that Y's off the west side. Measures 2 feet 3 and $1 / 4$ inches over to boxes in the middle of the floor. (Photo 41-96)

There is another east-west crack across the floor toward the north end. Width of about $1 / 8$ of an inch to a hairline. (Photos 41-97 thru 41-99)

Now we are back in the main floor area.

## Bathroom

This is at the northwest corner.
ID photographs of the interior from the door. (Photos 44-100 thru 44-102)

Nothing noted.

## Kitchen

Kitchen is located at the northeast corner.
Vinyl floor.
Sheetrock walls.
Plaster ceiling.
ID photographs of the west wall. (Photos 41-103 and 41-104)
Some deformation of the wall covering in a corner to the left of the entrance into the kitchen. Measures approximately 19 and $1 / 4$ inches in length. (Photo 41-105)

ID photographs of the south wall. (Photos 41-106 and 41-107)
ID photograph of the east wall. (Photo 41-108)
A minor hairline separation in the northeast corner. (Photo 41-109)

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ID photographs of the north wall. (Photo 41-110 and 41-111)
There are nail pops toward the south end in the ceiling. (Photo 41-112)

## Bathroom

There is some separation of the wall material around the door. This is on the east wall. (Photos 4l-113 thru 41-117)

There are some very minor hairline separations in the northwest and southwest corners. (Photos 41-118 and 41-119)

ID photograph from the door. (Photo 41-120)

## Basement

Poured concrete floor and walls. Unfinished wood ceiling.

ID photograph of the west wall. (Photo 41-121)
ID photographs of the south wall. (Photos 41-122 and 41-123)
ID photograph of the east wall. (Photo 41-124)
ID photographs of the north wall. (Photos 41-125 and 41-126)
There is a hairline diagonal crack at the north end of the west wall. Measures 33 and $1 / 4$ inches. (Photos 41-127 thru 4l-129)

There is a vertical crack along the southwest corner which diagonals over to the south wall and up to the top of the wall. (Photos 41-130 thru 41-137)

The diagonal part of this crack measures 35 inches to the corner.
The measurement to the floor is 49 and $1 / 2$ inches.
There is a hairline crack that extends just above the crack previously noted. It is 7 inches long. (Photo 41-138)

Now moving to the east along the south wall.
There is a vertical crack in the second section over. This crack measures 37 and $3 / 4$ inches. (Photos 41-139 thru 41-141)

Moving on eastward along the south wall.

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There is another vertical trending crack. Measures approximately 45 inches in length. (Photos 4l-142 thru 41-145)

The next vertical crack occurs approximately 34 inches to the east. It measures 24 inches in length. (Photos 4l-146 thru 41-148)

There is a diagonal crack in the foundation. It extends behind a light switch. (Photos 4l-149 thru 4l-152)

There is a diagonal crack at the east end of the south wall. This crack extends from the top of the wall down to a sewer pipe. It then diagonals on down across the wall to the corner. Measures 41 and $1 / 2$ inches to the corner. (Photos 41-153 thru 41-155)

There is a vertical crack in the southeast corner that almost extends to the top of the wall. (Photos 4l-156 and 4l-157)

Now moving northward along the east wall.
There is a vertical crack in the second pour from the south end. Measured 22 and $1 / 2$ inches in length. (Photo 4l-158)

Looking in the northeast corner there is a crack along the corner. Measures 52 and $1 / 2$ inches in length. (Photos 4l-159 thru 41-161)

A very fine extension of this crack diagonals across the north wall 20 inches. (Photo 4l-162)

We are now looking at the north wall at the fifth slab over from the east end.

There is a vertical hairline crack that measures 46 and $1 / 2$ inches. (Photos 4l-163 and 41.-164)

There is a very fine vertical crack paralleling the joint between the fifth and sixth slabs from the east end. (Photos 41-165 thru 41-169)

There is a very fine 10 inch long crack at the sixth slab over from the east end. (Photo 41-170)

There is a fine vertical crack at the top of the seventh slab over from the east end. It measures 6 and $3 / 4$ inches. (Photo 41-171)

At about the seventh slab, there is a vertically diagonalling crack. It follows the joint down to the floor. (Photos 41-172 thru 41-174)

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Looking at the first major slab over from the west end, still on the north wall, there is a slight hairline vertical crack. This crack follows the wall joint down to the floor. (Photos 4l-175 thru 41-177)

Photograph of the area at the northwest corner. (Photo 41-178)
The floor is cracked. There are cracks that extend both the north-south and east-west widths of the floor with quite a few extensions. These are too numerous to describe individually. (Photos 41-179 thru 41-193)

The cracks in the floor are as wide as $3 / 16$ to $1 / 4$ of an inch counting the spalling factor. The average widths of the cracks seems to be around $1 / 16$ of an inch but many of them are as thin as a hairline.

ID photographs of the entryway to the basement. (Photos 41-194 thru 41-197)

## EXTERIOR INSPECTION

ID photographs of the east side. (Photos 41-198 and 41-199)
The east sidewalk is cracked and displaced. (Photos 41-200 and 41-201 and 41-204 thru 41-207)

ID photograph of the north side. (Photo 41-202)
A photograph showing the water drainage at the northeast corner. There is no splashblock. (Photo 41-203)

There are no visible cracks in the north side foundation.
ID photograph of the west side. (Photo 41-208)
Photographs of the west sidewalk. (Photos 4l-209 thru 41-219)
Some of the larger cracks toward the north end had widths of 1 inch. At the south end some of the smaller cracks in the walk were $3 / 8$ of an inch in width.

ID photograph of the south side. (Photo 41-220)

## General Comments

The Bowers Snack Bar is located at the corner of 52 Highway and Second Street at an approxinate elevation of 845 feet above sea level. There is a gentle northwest slope to the surrounding land. The drainage around the foundation is poor. The guttering drains to the foundation or sidewalks.

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Many cracks were noted in the basement floor and walls. These cracks appear to be caused by either hydraulic or structural load effects. These cracks may be expected to increase in size with age, and further cracking can be expected.

The inadequate water drainage around the structure has contributed to major differential displacements of the sidewalk. Unless proper steps are taken to provide good roof drainage away from the foundation, we would expect the foundation to sustain cracking and the basement to leak in later years.

That completes the inspection of this property.


RMW/mp
Enclosure: 220 Photographs
l- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 88

2- SUMMARY FORM
3- SKETCH OF STRUCTURE





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110
$$

## 41-208




## $41-199$

## I



18

## $41-198$



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PRE-BLAST SURVEY, RESIDENTIAL
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## I. Basic Infommation

1. Name of Resident: Amoret Community Center
2. Date: October 28, 1986_Time:_12:45 pm
3. Address: Rt. I Amoret, MO. 64722
4. Location: Northwest corner of Main and Second Streets
5. Telephone Number: None
6. Dates of occupancy by current resident: Not Applicable
7. Dates of any lemporary or permanent abandonnent: Not Applicable
II. Information Concerning Bulldings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addicions: None (used to be general store)
(a) $\qquad$
(b)
(c)
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): unknown
(b) interfor walls: plywood
(c) rook: shingled
(d) Eootings; Eoundations: concrete foundation
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(E) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information
11. Approximate elevarion of area: 843 feet at building
12. Type of soll in area: Silty Clay Loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (indicate depth*and use): None
15. Cisterns or surface water storage utilized: (Indtcare purpose and approximate volune). None
16. Source of water, if not Included above: City Water
17. Eve troughs or any other exterior drainage Eeatures: See photo survey
18. Description of general grading or landscaping in vicinity: See photo survey
```
    IV. Any notable existin; deterioration or damage See photo survey
    1. Cracks in interior walls:
    2. Receding of doors, windows:
    3. Noticeable settlement:
    4. Foundation cracks:
    5. Exterior wall cracks (brick veneer):
    6. Sidewalks, steqs, driveway pavement:
    7. Basement leaks:
    V. Plan view of residence, well, outbuildings See sketch
    VI. Elevarion views or photographs of walls See photo survey
    1. North
    2. Souch
    3. East
    4. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific couments concerning any unusual features,
    construction techniques, or status of deterioration, that, because
    of the nature of their construction, materials of which they are
    constructed, status of deterioration, may exhibit an unusual response
    to normal blasting activities.
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See survey narative

White- Industrial Seismology,
2431 RANGELINE SUITE A-B
P.O. BOX 1256 JOPLIN, MC 64802-1256

PH. (417) 624-0164
November 5, 1986 Report No. 87056-13 P \& M Map Photo No. 87

Subject: Inspection of the Amoret Community Center Route 1
Amoret, Missouri 64722
October 28, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
The exterior is covered with stucco.
ID photograph of the south side. (Photo 13-1)
Detailed photographs of the upper south side. There appear to be many fine stucco cracks. (Photos 13-2 thru 13-7)

There is stucco cracking at the upper left corner of the westernmost window. (Photo 13-8)

There is a crack in the stucco at the lower left corner of this window. There is also a vertical crack in the foundation. (Photo 13-9)

The foundation crack has a width of approximately $1 / 8$ of an inch.
There is a fine stucco crack below the window to the left of the center of the window. (Photio 13-10)

There is another vertical stucco crack below the window to the right of the center of the window. (Photo 13-11)

There are stucco cracks at the lower right corner of the window. (Photos 13-12 and 13-13)

There is a vertical stucco crack between the two windows. (Photos 13-14 thru 13-19)

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There is a vertical foundation crack underneath the lower left corner of the easternmost window. The width of this crack ranges from $1 / 4$ inch to a hairline. (Photo 13-20)

There are vertical stucco cracks underneath the left side of this window. (Photo 13-21)

There is a vertical stucco crack at the upper left corner of the window. (Photo 13-22)

There are vertical stucco cracks above the window. (Photos 13-23 and 13-24)

There are vertical hairline stucco cracks to the right of center underneath the window.. (Photos 13-25 and 13-26)

There are also fine hairline stucco cracks at the right side of this window. (Photos 13-27 thru 13-30)

There are hairline stucco cracks to the left of the entrance door. (Photos 13-31 thru 13-36)

There are fine stucco cracks at the right side of the door. (Photos 13-37 thru 13-42)

ID photographs of the entrance and walk conditions. (Photos 13-43 and 13-44)

Looking at the east wall, there is a large area of stucco deformation at the lower south corner. (Photo 13-45)

ID photograph of the east side. (Photo 13-46)
Detailed photographs of the south side. There are many stucco cracks in this wall. (Photos 13-47 thru 13-68)

There is a diagonal stucco separation at the lower northeast corner. It has a width of 2 and $3 / 4$ inches to about $1 / 2$ inch. (Photo 13-68)

ID photograph of the north side. (Photo 13-69)
There is an $L$ shaped stucco crack at the upper left corner of the easternmost window. (Photo 13-70)

There is an extension of the corner separation at the northeast corner. (Photo 13-71)

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There are horizontal and vertical stucco cracks at the lower corner. (Photos 13-72 and 13-73)

There is an L shaped stucco crack at the upper right corner of the window. (Photo 13-74)

The stucco is bowed and separated at the foundation, at the right side of the door. (Photo 13-75)

There is a separation between the wood frame room and the stucco wall. (Photo 13-76)

There is a vertical stucco crack at the upper right corner of the westernmost window. (Photo 13-77)

ID photograph of the paint deterioration on the wood frame room. It also appears that the wood is deteriorating. (Photo 13-78)

ID photograph of the west side of the Community Center. (Photo 13-79)
Mr. Gaston stated that they are building a restroom where the concrete block foundation is being constructed. (Photos $13-80$ and 13-81)

Within this area, there is a vertical crack in the Community Center foundation. The width is $1 / 8$ of an inch down to a hairline. (Photo 13-82)

There is a hairline vertical crack in the foundation toward the north end. (Photo 13-83)

Moving on southward along the foundation.
There is a vertical foundation crack to the south of the bathroom construction. (Pho:0 13-84)

The large gap at the base has a width of 2 inches. The width decreases to about $1 / 8$ of an inch near the middle of the foundation.

A few feet more to the south, there is another vertical crack in the foundation. This crack has a width of about $1 / 16$ of an inch. (Photo 13-85)

A few feet more to the south, there is another vertical crack in the foundation. This crack has a width of 2 inches at the top of the foundation down to about $1 / 8$ of an inch at the base. (Photo 13-86)

There is a separation of the foundation at the lower left corner of the crawl space vent. It has a width of $1 / 2$ inch. (Photo 13-87)

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There are many very fine stucco cracks and deformations in the west wall. (Photos 13-88 thru 13-105)

INTERIOR INSPECTION

## Main Hall

Wood floor.
Paneled walls.
Modern ceiling panels and light fixtures on the ceiling.
ID photograph of the south wall. This photograph will show separations of the ceiling panels from the top of the windows. (Photo 13-106)

ID photographs of the east wall. (Photos 13-107 thru 13-109)
ID photograph of the north wall. (Photo 13-110)
ID photographs of the west wall. (Photos 13-111 and 13-112)
There is ceiling damage above the flue pipe for the utility stove. (Photo 13-113)

## Kitchen/Cleanup Area

Carpeted floor.
Quarter inch plywood walls.
There is a piece of ceiling trim hanging at the east wall. (Photo 13-114)

Toward the west end of the north wall, there is a ceiling panel that is hanging. (Photo 13-115)

ID photographs of this room. (Photos 13-116 thru 13-121)
Wood Framed Room
Wood floor.
Paneled walls and ceiling.
There is a bathroom at the southwest corner of this room.
Bathroom
Carpeted floor.
Paneled walls.

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ID photographs of this room. (Photos 13-122 thru 13-127)

## General Comments

The Amoret Community Center is located at the northwest corner of Main and Second Streets at an approximate elevation of 843 feet. The land is generally level around the foundation. The exterior was mostly stucco covered and the interior was mostly paneled. The exterior stucco covering extended to the ground on the east and north sides.

There are no gutters or downspouts around the building. The foundation showed evidence of hydraulic and settlement effects.

The stucco was heavily cracked and separated in some areas. Stucco is extremely susceptible to cracking from seasonal temperature changes. These stucco cracks can be expected to became more numerous and worsen with time.

Foundation cracks anci separations can be expected to continue. In particular, hydraulic related foundation problems should continue since there are no provisions for adequate foundation drainage.

The concrete block foundation was under construction for the new bathroom. The current construction showed no evidence of cracking at this time. However, concrete block foundations are often susceptible to strain cracks from loading.

WHTTE INDUSTRIAL SEISMOLOGY, INC.


Manager of Technical Services
RMW/rd
Enclosure: 127 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 87

2- SUMMARY FORM
3- SKETCH OF STRUCTURE








I. Basic InEomation

1. Name of Resldent: Edward and Velma Synovec
2. Date:

November 20, 1987
TLue: 7:15AM
3. Address:_ Box 156, Amoret, Missouri 64722
4. Location: S 75 feet Lots $1-3, S 75$ feet $E 15$ feet, Lot 4, Block 24
5. Telephone Number: (816) 925-3325
6. Dates of occupancy by current resident: Nov. 1979 - Present
7. Dates of any cemporary or permanent abandonnent: $\qquad$
[I. InEormation Concernlng BuLIdings
(repeat for addictonal buildings)

1. Date of orighal construction: Finished 1979
2. Date(s) of major remodeling or additions:
(a) $\qquad$ Porch - 1983
(b)
(c)
3. Construction of building:
(a) framing (Jolsts, rafters, and stud wails): Not known
(b) Luterlor walls: Sheetrock, paneling
(c) rook: Composition shingles
(d) foothogs; Eoundathons: Concrete foundation, footing unknown
(e) basenenc walls (Indlcate how keyed to Eooting of floor):

Not applicable
(E) basement ELoor (Keyways, thackness):

Not applicable
(g) name of person(s) who constructed buliding: Not known
(h) size and diraction of any large windows: Living Room $3^{\prime \prime} 8^{\prime \prime} \times 4^{\prime} 4^{\prime \prime}$.
III. Enviromantal Infomation

1. Approxirate elevation of area:

850 Eeet
2. Type of soll in ar'ea: Silty clay loam
3. Type of subgrade cirainage at base of Equndation: Not known
4. Water welis utilized (Lndicate deptheand use): No
5. Cisterns or surface water storage utilized: (Indlcate purpose andapproximate volume). No
6. Source of water, l: not Lncluded above: City Water
7. Eve rroughs or any other exterior dralnage Eeatures: No
8. Descrlpeion of general grading or landscaplng in vicinity:Generally flat
IV. Any notable expsing jeterioration or damage

1. Cracks 1 in fnterlor walls: See survey
2. Receding of doors, whiduns: See survey
3. Noticeable settlenent: See survey
4. Foundation craciss: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavement: ..... See sunvey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings ..... See survey
VI. Elevation views or photographs of walls See survey
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings ..... See survey
VIII. Discussion or specific coments concerning any unusual features,construction cechniques, or status of dererioration, that, becauseof the nature of their construction, materials of which they areconstructed, status of deterloration, may exhlbit an unusual responseto normal blasting activities.
See survey

November 24, 1986
Report No. 87056-96
P \& M Map Photo No. 33

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Subject: Inspection of the Edward Synovec Residence P. O. Box 156
Amoret, Missouri 64722
November 20, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8
Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.
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INTERIOR INSPECTION
Living Room
Carpeted floor.
Fabric wall paper.
Tile ceiling.
Brick fireplace on the south wall.
Two windows and the front door on the east wall.
Photograph of the nort:h wall. (Photo 96-1)
Photographs of the west wall. (Photos 96-2 and 96-3)
Photograph of the sout:h wall. (Photo 96-4)
Photographs of the east wall. (Photos 96-5 and 96-6)
Photograph of the fireplace. (Photo 96-7)
There is a small hallway north of the living roam.
Hallway
Tile ceiling.
Carpeted floor.
Paneled walls.

White Industrial Seismology, Inc.

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The west wall has door's to the bathroom and a bedroom.

Bedroom door on the east wall.
A photograph looking down the hallway. (Photo 96-8)
There is a closet door at the north end of the hall.

Bathroom
Vinyl floor.
Lightly textured sheet:rock walls and ceiling.

Shower stall at the south end.

The shower walls are covered with a waterproof wall paper. Some of the wallpaper film is folded in the southeast corner and on the lower south wall. (Photos 96-9 thru 96-11)

There are two gaps in the southwest corner of the sheetrock walls. The upper gap is about $1 / B$ of an inch wide and about 8 and $1 / 4$ inches long. The lower one is about: $1 / 16$ of an inch wide and about 14 and $1 / 2$ inches long. (Photo 96-12)

A photograph looking into the bathroom. (Photo 96-13)
East Bedroom
Carpeted floor.
Paneled walls.
Textured plaster ceiling.

Windows on the east and north walls.
Photograph of the east wall. (Photo 96-14)
Photograph of the north wall. (Photo 96-15)
Photographs of the west wall. (Photos 96-16 and 96-17)
Photographs of the south wall. (Photos 96-17 and 96-18)

West Bedroom
Carpeted floor.
Paneled walls.
Textured plaster ceiling.

White Industrial Seismology, Inc.

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The Pittsburg and Midw'ay Coal Mining Company
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November 20, 1986
Page 3
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Windows on the north and west walls. Closet door on the east wall. Door to the attached shower roam on the south wall.

Photograph of the west wall. (Photo 96-19)
Photograph of the south wall. (Photo 96-20)
Photograph of the north wall. (Photo 96-21)
Photograph of the east: wall. (Photo 96-22)
The œiling has a slight water stain in the southwest corner along the west wall. It measures about 14 and $1 / 4$ inches long and about 1 and $1 / 2$ inches wide at this time.

The ciling also has a water stain along the north wall in the northeast corner. This stain measures about 23 inches long and about 2 and $1 / 4$ inches wide at this time.

Shower Room
Vinyl floor.
Fabric wall paper.
Textured plaster ceiling.
Fiberglass shower.
Window on the west wall.
A view looking southward into the bathroam. (Photo 96-23)
At about the middle of the ceiling, along the east wall, there is a sagging section of sheetrock at a seam. It hangs down about $3 / 4$ of an inch and the plaster is cracking. It measures about 24 inches long. (Photo 92-24)

## Kitchen/Dining Room

Vinyl floor.
Sheetrock walls.
Textured plaster ceiling.
Z-brick counter area west and north walls.
Window and a sliding door on the west wall. Window on the south wall.
Photograph of the north wall. (Photo 96-25)
Photographs of the west wall. (Photos 96-26 and 96-27)

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The Pittsburg and Midway Coal Mining Company
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Photograph of the south wall. (Photo 96-28)
Photographs of the east wall. (Photos 96-29 and 96-30)

The closet enclosure in the northeast corner contains the hot water heater and furnace.

Some of the Z-brick has fallen off the west facing wall near the stove, and a few of the bricks are cracked at the south end of this area. The fifth and sixth bricks from the top have cracks at the south end. The sixth brick from the top, second from the south, has a loose piece in the middle. A couple of other bricks, lower on the wall, are chipped. These are mostly hairiine cracks. (Photos 96-31 and 96-32)

The tape joints are visible above each upper corner of the entrance to the living room on the east wall. At this time neither joint appears to be cracked. (Photo 96-33)

Back into the living room.
Living Room - Continued
The west end of the south wall has mirror tiles on the wall. The third tile from the top at the left side has a crack and a chip. The third from the top on the right side has a chip at its lower right corner. The upper left tile has a slight crack at its lower right corner. (Photo 96-34)

That completes the interior inspection.
EXTERIOR INSPECTION
ID photograph of the front east side of the house. (Photo 96-35)
The west part of the front sidewalk has two cracks trending the width of the sidewalk. The west crack is from about $1 / 8$ of an inch down to $1 / 16$ of an inch wide. The east crack is about $1 / 16$ of an inch wide. (Photo 96-36)

The plywood sheathing and the two by six joists of the front porch have extensive water stains. (Photos 96-37 thru 96-43)

ID photograph of the north side of the house. (Photo 96-44)
At the crawl space dcor on the north side, there is a crack above each corner.

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The upper right crack measures about 3 inches long and from $1 / 8$ to $1 / 16$ of an inch wide. (Photo 96-45)

The crack above the upper left corner is about 3 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 96-46)

ID photograph of the west side of the house. (Photo 96-47)
The north window on the west side has a hole in the screen of the storm window.

There is a crack in the foundation to the lower left of the south window on the west side. This is just to the north of the faucet. The crack measures about 5 and $1 / 4$ inches vertically and is from about $1 / 16$ of an inch to a hairline in width. (Photo 96-48)

The foundation has a crack at a fin to the lower left of the sliding doors. It is about 1.0 and $1 / 2$ inches long and fram about $1 / 16$ of an inch to a hairline wide. (Photo 96-49)

The frame of the sliding screen door is bent and the screen has been patched with a piece of wood at the lower part. (Photo 96-50)

The trim of this house has deteriorating paint.
ID photographs of the south side of the house. (Photos 96-51 and 96-55)
The west side foundation al so has a crack below the north end of the sliding glass doors and behind the steps. It runs the height of the foundation and is from about $1 / 16$ of an inch to a hairline wide. (Photos 96-52 and 96-53)

There is a diagonal crack in the foundation at the west end of the south side. This crack measures about 15 inches long and ranges from about a hairline to $1 / 16$ of an inch wide. (Photo 96-54)

This house lacks a gidter system.
There is a shed located southwest of the house.
Shed
This shed rests on concrete blocks.
ID photograph of the east side. (Photo 96-56)
ID photograph of the north end. (Photo 96-57)

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The Pittsburg and Midway Coal Mining Company
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ID photograph of the vest side. (Photo 96-58)
ID photograph of the south end. (Photo 96-59)
Inside, the shed has a plywood floor; unfinished walls and ceiling.
It is constructed with two by four studs and rafters.
A photograph looking into the shed. (Photo 96-60)

The east side of the shed has stains at the upper areas of the siding.
The shed does not have a gutter system.
General Comments
This house was built in 1979. Several cracks were found in the concrete foundation. The house lacks a gutter system and the exterior trim has deteriorating paint. The porch roof has extensive water stains.

The west bedroom ceiling has a couple of slight water stains and the attached bathroom has a large seam crack and a sagging section of sheetrock in the ceiling

The kitchen has a few cracked, missing, or loose bricks at the counter area walls, and the living rom has a few cracked or chipped mirror tiles.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 60 photographs

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2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident:James Gleeson, Sre,_James Jr. and William (Sons) (Owners)
2. Date: October 24,1986 Time:___8:15am
3. Address: Amcret, Missouri 64722
4. Locarion: Southwest oorner of Broadway and Main Street
5. Telephone Number: (816) 942-6669 (Home)
6. Dates of occupancy by current resident: Since 1957
7. Dates of any temporary or permanent abandonment: Vacant before 1957 was a garage at one time
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Believed to be 1902
9. Date(s) of major remodeling or additions:
(a) Added toilet and shower about 15 years ago
(b) Installed running water
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Brick Construction
(b) interior walis: Plaster
(c) roof: Not Known
(d) footings; foundations: Concrete, details unknown
(e) basement: walls (indicate how keyed to footing of floor): Not applicable
(E) basement floor (keyways, thickness): Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: All windows boarded up
III. Environmental Information
11. Approximate elevation of area:

847 feet
2. Type of soil in area: Silty Clay Loam
3. Type of subgrade drainage at base of Eoundation: Unknown
4. Water wells utilized (Indicate depth*and use): No
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: At west end only
8. Description of general grading or landscaplng in vicinity: Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor wal.1s: extensive cracks, falling plaster
2. Receding of doors, windurs: See survey
3. Noticeable setclement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Several severe cracks
6. Sidewalks, steps, driveway pavement: Severe heaving and cracks
7. Basement leaks: Not Applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
2.- South See survey
9. East See survey
10. West See survey
VII. Comments or supplenentary drawings
VIII. Discussion or specific conments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of detertoration, may exhibit an unusual response to normal blasting activities.

> October 25, 1986
> Invoice No. $87056-18$
> P \& M Map Photo No. 31

Subject: Inspection of the Janes Gleeson Building Old Amoret Bank Building
Amoret, Missouri 64722 October 24, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Iranscribed and edited from taped field notes.

INTERIOR INSPECTION

## East Room

This is a large room that is used for storage and as a sleeping room by a hunting club.

Concrete floor mostly covered with carpet.
Concrete block on the east half of the north and the east walls. Plastered south and west walls.

This room has a partition at the north end of the west wall.
There is extensive water damage to the ceiling and numerous cracks on the walls.

Photographs of the east wall. (Photos 18-1 and 18-2)
Photographs of the south wall. (Photos 18-3 and 18-4)
Photographs of the west wall. (Photos 18-5 and 18-6)
Photographs of the north wall. (Photos $18-7$ and 18-8)
The ceiling has peeling areas of paint at the west end. (Photos 18-9 and $18-10$ )

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The Pittsburg and Midiway Coal Mining Company
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The ceiling, along the north wall, also has peeling areas. (photos 18-11 and 18-12)

There is an area of plaster missing from the north wall to the lower left of the window, exposing the brick. (Photo 18-13)

The plaster below the window is also beginning to spall. (Photo 18-14)
Plaster is also spalling along the west side of the window. (Photo 18-15)

Along the left edge of the block area of the north wall, there is a crack in the caulk joint. It is about $1 / 16$ of an inch wide. (Photos 18-16 thru 18-18)

Now at the boarded over, east north window.
There is a cracked block below the left end. The crack is just wider than a hairline. (Photo 18-19)

Paint and mortar are deteriorating below this window. (Photo 18-20)
The original entrance to the old bank was at the northeast corner. It has been boarded over.

There is severe water damage at the east part of the ceiling. (Photos 18-21 thru 18-25)

A horizontal crack runs eastward along the lower north foundation wall from near the northeast window. Most of the crack cannot be seen because it is behind some beds.

The east wall has a large sealed entranceway that was used when the building housed a garage, previous to 1957.

There is a vertical crack below the lower left end of the east concrete block wall. The width ranges from $1 / 8$ of an inch to about a hairline. (Photo 18-26)

There is a large separation at the south end of the east block wall. It looks like it has been sealed. (Photo 18-27)

The upper southeast corner has severe water damage. (Photo 18-28)
The lower east end of of the south wall has spalled and buckling plaster. (Photos 18-29 thru 18-32 and 18-34)

The damage goes all the way across the lower wall.

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There is a hole in the floor for the water pipes near the east wall. (Photo 18-33)

The carpet does not cover this part of the floor and part of a large crack is visible trencling roughly southwest-northeast. The visible part of the crack is about $3 / 4$ of an inch wide. (Photo 18-35)

Another floor crack intersects the previous crack just to the north. It is about $5 / 8$ of an inch wide. (Photo 18-36)

Continuing with photographs of the damaged lower south wall fran the east duct westward. (Photos 18-37 thru 18-43)

There is a door at the south end of the west wall to a long narrow storage roan.

Now inspecting the upper walls.
There are horizontal and vertical cracks at the west end of the south wall.

A horizontal crack runs eastward from the west doorway, behind the duct, and behind the hanging shirts and coats. (Photos 18-44 and 18-45)

There is a slight vertical crack about 41 inches long, at about the middle of this section of the wall, that connects the upper horizontal crack with a lower crack. (Photos 18-46 and 18-47)

A 45 inch long horizontal crack dips down to the spalled lower wall, behind the freezer. iPhotos 18-48 and 18-49)

A stairstepping crack trends about 9 feet between the two ducts on the south wall. (Photos $18-50$ thru 18-52)

There is a vertical crack located east of the east duct that runs from the ceiling down to the spalled area behind those coats. The crack is about $1 / 8$ of an inch wide. (Photos 18-53 thru 18-55)

There are some water stains on the upper south wall near this duct. (Photos 18-54 and 18-55)

Now inspecting the west wall.
The west wall has an entrance at the south end to a storage room and an entrance to the old bank vault.

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A duct enters the wall above the hall doorway, and there is a roughly horizontal crack to the left of the duct. (Photo 18-56)

There is a vertical separation of plaster in the southwest corner. (Photos 18-56 thru 18-59)

There are also a couple of cracks above the upper left end of the doorway. (Photo 18-57)

The plaster is crackecl along the upper right side of this door. (Photo 18-60)

A section of plaster was replaced above the duct and there are two cracks in that area. (Photo 18-61)

There are several cracks on the upper west wall above the vault entrance. (Photo 18-62)

There are a couple of hairline cracks above the upper left corner of the vault entrance. (Photos 18-63 and 18-64)

There are some slight cracks along the corner, north of the vault entrance. (Photos 18-65 and 18-66)

The lower corner has a horizontal crack and a spalled piece of plaster. The cracks are about 3/16 of an inch wide. (Photos 18-67 and 18-68)

## Vault

Concrete floor.
Concrete covered walls and ceiling.
This room is used for storage.
Photograph of the west wall. (Photo 18-69)
Photograph of the north wall. (Photo 18-70)
Photograph of the sout.h wall. (Photo 18-71)
Photograph of the east: wall. (Photo 18-72)
The concrete floor has; a north-south trending crack near the middle. It runs under the freezer and a shelf. The visible portion is 27 inches long and about $3 / 16$ of: an inch wide. (Photo 18-73)

Two areas of plaster have spalled, exposing brick at the east half of the north wall. (Photos 18-74 and 18-75)

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There are several other smaller spalls to the east. (Photo 18-76)
There is a very slight crack at the upper right end of the north wall. It is about 20 inches long and about $1 / 32$ of an inch wide.
(Photo 18-77)
There is a crack above the upper left corner of the door. It is about 1/32 of an inch wide. (Photo 18-78)

There is a crack above the upper right corner of the door. It is about 1/32 of an inch wide. (Photo 18-79)

The upper left end of the south wall has a diagonal crack about 14 inches long and a hairline wide. (Photo 18-80)

East Room - Continued
The lower west wall, between the two doorways, has several cracks. (Photos 18-81 thru 18-83)

Storage Room
Plaster walls except the west which is unfinished.
Concrete floor.
This is a long narrow room.
A photograph looking west into the room. (Photo 18-84)
The lower east of the south wall has an area of spalled plaster, exposing the brick wall. (Photo 18-85)

There is a large diagonal crack on the south wall. Light can be seen through the crack. Ihe crack measures about 2 inches at the widest part and runs all the way up the wall. It has been patched and has recracked. (Photos 18-86 thru 18-91)

The west part of the lower south wall also has spalled plaster exposing brick. (Photos 18-92. and 18-93)

There is deterioration along the right side of the doorway. There is about a 1 inch gap at. the right side of the door. (Photos 18-94 and 18-95)

There are extensive crazing cracks on the north wall. (Photo 18-96)
There is a window like opening at the upper east end of the north wall.

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Looking up through wi:h the light, I can see the rafters and brick wall. A photograph looking through the window. (Photo 18-97)

Dining Area
Carpeted floor.
Plastered walls excep: the east which is a wooden partition.
The large window on the north wall has been boarded over.
There is spalling and deteriorating plaster on the lower north wall.
Photographs of the north wall. (Photos 18-98 thru 18-102, 18-105, and 18-106)

The lower right pane of the window is cracked. It looks like a BB hole. (Photo 18-102)

Photographs of the west wall. (Photos 18-103 and 18-104)
Photographs of the south wall. (Photos 18-107 thru 18-110)
Photograph of the east wall. (Photo 18-1ll)
There is extensive cracking to the upper left of the west door. (Photos 18-112 and 18-113)

There are three horizontal cracks left of the door. (Photos 18-113 and 18-114)

To the upper right of door, there is a crack in the northwest corner. (Photo 18-115)

There is peeling paint at the northwest part of the ceiling. (Photos 18-116 and 18-117)

There is extensive moisture damage at the upper north wall. (Photos 18-117 and 18-118)

The middle of the south wall has a long horizontal crack. (Photos 18-110 and 18-119)

The upper west end of the south wall has a diagonal and vertical crack. (Photos 18-110 and 18-120)

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Bathroom
Concrete floor.
Sheetrock on west wali.
plaster south and north walls.
Wooden ceiling.
Shower stall at the east end.
There are several cracks and an area of laths showing at the upper left end of the north wall. (Photos 18-121 thru 18-123)

There are several other cracks at the lower left part of the north wall. (Photos 18-124 and 18-125)

The west wall has a sealed doorway.
There is a crack above the upper right end of the sealed door. (Photo 18-126)

The lower south wall has deteriorated and spalled plaster, exposing brick. (Photos 18-127 and 18-128)

Photograph of the upper south wall. (Photo 18-129)
Photographs of the east wall and shower stall. Two tiles on the lower east wall have been replaced. (Photos 18-130 and 18-131)

The grout is separating slightly in the lower southeast corner and along the upper north and east walls of the shower stall. (Photos 18-132 and 18-133)

The bathroom floor has a branching crack at the west end. This crack is about 1/32 of an inch wide. (Photos 18-134 and 18-135)

## Kitchen

Concrete floor.
Plastered walls.
There is extensive deterioration of the walls, especially in the northwest corner.

Photographs of the north wall. (Photos 18-136 and 18-137)
Photographs of the east wall. (Photos 18-138 thru 18-142)
Photographs of the west wall. (Photos 18-143 thru 18-146)

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There are several cracks at the upper left end of the west wall. (Photo 18-144)

Photographs of the south wall. (Photos 18-147 thru 18-150)
There are large cracks above the upper left and right corners of the door on the south wall. (Photos 18-147 and 18-149)

The south wall has several cracks in the upper wall and to the lower right of the door.

There is a 65 inch diagonal crack that is about $1 / 8$ of an inch wide to the right of the south door. (Photos 18-151 thru 18-153)

The south wall has several slight cracks below the duct. (Photo 18-154)
There is severe damage in the upper northwest corner. (Photos 18-155 and 18-159)

There are cracks above the window on the north wall. (Photo 18-1.56)
The lower north wall has deteriorating plaster. (Photos 18-157 and 18-158)

The north end of the west wall has spalling plaster. (Photos 18-159 thru 18-161)

There is a crack, and a spalled area below the north window on the west wall. (Photos 18-162 and 18-163)

There is a large crack to the upper left of this window. (Photo 18-164)
There is a large north-south trending crack at the south end of the floor. The west side of this crack is elevated higher than the east side. Forty inches are visible, south of the heating unit. It is about $l$ inch wide. It continues along the front of the furnace. (Photo 18-165)

A floor crack runs from the north wall to the range. It is 6 feet 11 inches long and is abcut 1 and $1 / 8$ inches wide. (Photos $18-166$ thru 18-168)

An east-west trending branch at the west part of the floor runs from the sink to the furnace. The visible part measures 71 inches long and 3/4 of an inch wide. (Phctos 18-169 and 18-170)

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The east wall has extensive cracks above the upper right and upper left ends of the door. (Photos 18-171 thru 18-173 and 18-176)

There is severe cracking in the northeast corner, to the upper left of the east door. (Photos 18-173 thru 18-175)

Views of the kitchen looking southward fron the north door. (Photos 18-177 and 18-178)

There is a large vertical separation at about the midale of the east wall. (Photos 18-179, 18-141, and 18-142)

Mr. Gleeson stated that there are many leaks in the roof of this building.

EXTERIOR INSPECTION
ID photograph of the east end of the building. (Photo 18-180)
The upper southeast corner has shifted. (Photo 18-181)
Series of photographs of the east end of the building. (Photos 18-182 thru 18-194)

The upper part of the east end has several mortar separations.
There is a stairstepping mortar crack, 58 and 1/2 inches measured diagonally at the lower left part of the front block area. It ranges from $1 / 4$ of an inch to a hairline in width. (Photos 18-195 thru 18-197)

There is some cracking at the lower left part of the east wall and in the foundation. (Photos 18-198 and 18-199)

There is a stairstepping mortar crack in the brick area at the lower south end. It ranges from about $1 / 8$ of an inch to a hairline in width. (Photo 18-200)

There is a large separation, about 3 and $1 / 2$ inches wide, between the apron and the floor of the building. (Photo 18-201)

There is a diagonal crack at the southeast part of the apron. It is 29 inches long and about 1 inch wide. (Photos 18-202 and 18-203)

There is a 39 inch lorg, east-west trending crack at about the middle of the apron. It is about $1 / 4$ of an inch wide. (Photos $18-204$ and 18-205)

There is cracking and a separation at the lower right end of the block area. (Photos 18-206 and 18-207)

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There is also a crack, about 5/8 of an inch wide, through the foundation here. (Photos 18-207 and 18-208)

There is a crack along the joint where the block wall meets the brick at the northeast corner. (Photos 18-209 and 18-210)

There is also separation along the right jamb of the wooden garage door. (Photos 18-211 thru 18-213)

ID photograph of the rortheast corner of the building. (Photo 18-214)
There is a vertical crack in the foundation to the lower left of the northeast door. It is about $3 / 8$ of an inch wide. (Photos 18-215 and 18-216)

There is also a horizontal crack and spall to the lower left of the door. (Photo 18-217)

There is a vertical crack and a spalled area to the lower right of the door. (Photos 18-218 thru 18-222)

The step at this door leans toward the building. (Photo 18-222)
The sidewalks are severely cracked and heaved. (Photos 18-223 thru 18-225)

There are mortar separations and cracks at the northeast corner of the building. (Photos 18--226 thru 18-229)

ID photographs of the north side of the building. (Photos 18-230 and 18-231)

The sidewalk along the north side of the building is severely deteriorated. (Photos 18-232 thru 18-235)

There is a diagonal crack and a spall in the foundation at the east end of the north side. It: is about $3 / 4$ of an inch wide. (Photos 18-236 and 18-237)

There is a separation where the east end of the north block area meets the brick. (Photos 18-238 thru 18-240)

There are spalling brjcks near the east end of the steel beam. (Photo 18-238)

Series of photographs of the north wall from top to bottom, east to west. (Photos 18-241 thru 18-259)

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There is a large stairstepping crack in the mortar to the upper right of the block area. (Photo 18-247)

There are mortar cracks in the upper brick area between the two western windows.

There is a stairstepping crack above the upper left corner of the west window. (Photo 18-260)

There are major cracks above the north doorway. (Photos 18-261 and 18-262)

Back to the east end of the north side.
There is a stairstepping mortar crack below the lower left corner of the east window. It is 35 inches on the diagonal. (Photo 18-263)

There is another stairstepping mortar crack below the left end of the east window. (Photos 18-264 and 18-265)

There are same cracks and spalling mortar below the lower right part of the window. (Photo 18-266)

There is a cracked block below the lower right end of the window. (Photo 18-267)

There are also some patched mortar joints in this area.
There is a stairstepping crack below the lower right end of the window. (Photo 18-268)

There is a separation where the west end of the block area meets the brick. (Photos 18-269 thru 18-272)

At the east end of the brick part of the north wall, there is a hairline vertical crack in the foundation. (Photo 18-273)

There is another hairline vertical crack in the foundation below the second window from the east. (Photo 18-274)

There is a crack in the foundation between the second and third windows from the east. It is about $1 / 4$ of an inch wide. (Photos 18-275 and 18-276)

There is a separation along both sides of the second window from the east. (Photos 18-277 and 18-278)

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There is a vertical foundation crack below the third window from the east. It ranges from about 2 inches to a hairline wide. (Photos 18-279 and 18-280)

The screen on this window is ripped, and the window has a slight crack at the lower left corner.

The lower left corner of the lintel is slightly cracked above this window. (Photo 18-281)

The foundation has a hairline vertical crack to the lower right of this window. (Photo 12-282)

The sidewalk, along the north side of building, has a lot of gray painted material that has fallen from the windows.

There is another hairline vertical crack in the foundation between this window and the west window. (Photo 18-283)

There is a vertical crack in the foundation, about $1 / 4$ inch wide, below the left end of the west window. (Photo 18-284)

There is a separation and a stairstepping crack at the upper left end of the west window. (Phctos 18-285 thru 18-287)

There is a crack in the foundation, about $1 / 2$ inch wide, just east of the door. (Photo 18-288)

There are mortar separations, a spalled brick and a slight mortar crack to the lower left of the door. (Photo 18-289)

There are two cracks in the foundation below and to the lower right of the door. The widest is about 1 inch and the other ranges fram about $1 / 8$ to $1 / 4$ of an inch. (Photos 18-290 thru 18-292)

This lintel of the docr, and the wall above the lintel, are severely damaged. (Photo 18-293)

The sidewalk is severely heaved and cracked along the north side of the building. (Photos 18-294 thru 18-299)

ID photographs of the west end of the building. (Photos 18-300 and 18-301)

The west side has several major cracks.
The parapet wall has shifted at the upper northwest corner. (Photo 18-302)

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Series of photographs of the west wall. (Photos 18-303 thru 18-314)
The south parapet wall seems to lean outward and there are several cracks in the area. (Photos 18-309 and 18-310)

There is a stairstepping crack to the lower right of the north window. (Photos 18-315 and 18-316)

The northwest splashblock is cracked. (Photo 18-317)
A photograph of the area to the lower left of the north window. There are several patched mortar joints in this area which were hidden by a board in previous phot:ographs. (Photo 18-318)

The foundation has a slight crack crack between the two north windows. (Photo 18-319)

Part of the west foundation is hidden behind junk.
There is a cracked bri.ck to the lower right of the south window. (Photo 18-320)

There is a hairline foundation crack in that same general area. (Photo 18-321)

There is a large separation at the right side of the lintel of the south door. (Photos 18-322 and 18-323)

ID photographs of the south side of the building. (Photos 18-324 thru 18-327)

There are numerous sealed stairstepping mortar cracks on the south side.
Series of photographs of the south side fran east to west. (Photos 18-328 thru 18-344)

At the upper southwest: corner, a stairstepping crack becomes vertical. (Photo 18-343)

There are several cracked bricks and mortar joints east of the middle. The cracks range from $3 / 16$ to $1 / 16$ of an inch wide. (Photos 18-347 and 18-348)

There is a large patched area of stairstepping joints just east of the watt meter. This area probably corresponds to the major cracks in the long storage hall. (Jhotos 18-346 and 18-349 thru 18-352)

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There is a stairstepping crack below the watt meter. It measures about ll feet on the diagonal and averages about $1 / 2$ an inch wide. (Photos 18-345 and 18-353 thru 18-357)

There is a stairstepping crack about 80 inches long, at the lower west end of the south side. (Photos 18-358 and 18-359)

There is a concrete slab below the trash cans that has several cracks. They range from about $3 / 8$ to $3 / 4$ of an inch wide. (Photos 18-360 thru 18-362)

There are several loose and broken mortar joints and bricks at the lower east end of the south side. (Photos 18-363 thru 18-366)

Note that this building has no downspouts or gutters except at the west side and northwest corner.

General Comments
This building is in a severely deteriorated condition.
The interior plaster walls can be expected to continue to spall and deteriorate due mainly to moisture effects.

The ceilings can also be expected to continue to deteriorate due to moisture unless the roof is repaired.

The exterior walls are extensively cracked, indicating settlement of the building. These walls can be expected to continue to crack and deteriorate further, due mainly to the age of the building and the lack of needed repair.

Effluent from the northwest downspout empties to the sidewalk, and this condition will contribute to additional heaving and cracking.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 366 Photographs

# 1- COPY FROM P \& M's TOWN OF AMORET MAP 

 LOCATION NO. 31
## 2- SUMMARY FORM

3- SKETCH OF STRUCTURE




$18-326$



## $18-230$

## $\square$

8-180


COMMERCIAL
PREFBLAS'T SURVEY, XXXXXXXXXXXX
I. Baslc Information

1. Name of ResIdent: Craw-Kan Telephone Cooperative, Inc.
2. Date: January 27, 1987 The: 10:15AM
3. Address: Amoret, Missouri 64722
4. Location: Lots ? and 8, Block 25
5. Telephone Number: (316) 724-8235 (Girard Office)
6. Dates of occupancy by current resident: 1965 to Present
7. Dates of any temporary or pernanent abandonnent: None

If. Information Conceraing Bulldings
(repeat for addlctonal buildhags)

1. Date of orighal construction:

1965
2. Date(s) of major remodeling or addltions:
(a) Brick veneer and_composition roofed in 1978
(b)
(c) $\qquad$
3. Construction of building:
(a) framLng (Jolsts, rafters, and stud walls):
(b) Lnterior walls: Concrete block.
(c) root Composition shingles.
(d) footings; Eoundatlons: Concrete.
(e) basement walls (Indicate how keyed to footing of Eloor):

Not applicable.
(E) basement floor (keyways, chickness):

Not applicable.
(g) name of person(s) who consiructed building: Not known.
(h) size and direction of any large windows: None.

III, Enviromantal InEomation

1. Approximate elevation of area:

843 feet.
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Equndation: Not known.
4. Water wells utilized (indicate depth*and use): None.
5. Cisterns or surfate water storage utilized: (Indicate purpose and approximate volume). None.
6. Source of water, LE not Lacluded above: None.
7. Eve troughs or any other exterior dralnage Eeacures: Yes.
8. Description of general grading or landscaplug in vicinity: Generally flat.
IV. Any notable exiscing deterioration or damage

1. Cracks in interlor walls: See survey.
2. Receding of doors, whadurs: See survey.
3. Noticeable settlement: See survey.
4. Foundarion cracks: See survey.
5. Exterlor wall cracks (brick veneer): See survey.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, ourbuildings see survey.
VI. Elevation views or photographs of walls See survey.
8. North See survey.
2.' South See survey.
9. East See survey.
10. West See survey.
VII. Comments or supplementary drawings See survey.
VIII. Discussion or spectific couments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of thelr construction, materials of which they are constructed, status of deterforation, may exhlbit an unusual response to normal blasting activities.

January 28, 1987
Report No. 87056-102
P \& M Map Photo No. 60


To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Tile floor.
Concrete block walls.
Concrete ceiling.
Photographs of the west wall. (Photos 102-1 thru 102-3)
Photographs of the south wall. (Photos 102-4 thru 102-8)
Photographs of the east wall. (Photos 102-9 thru 102-13)
Photographs of the north wall. (Photos 102-14 thru 102-18)
Photographs of the ceil ing. (Photos 102-19 and 102-20)
Starting on the west wall. There is a horizontal mortar separation below the top course of blocks. It runs from the north wall, almost to the south wall and then stairsteps down. (Photos 102-21 thru 102-24)

At the south end of the west wall, a crack runs through a block and mortar. There is a separation in the southwest corner that is about 1/16 of an inch wide. (Photos 102-24 thru 102-26)

At about the middle of the west wall, below the electrical outlet, there is a stairstepping mortar separation. (Photo 102-27)

White Industrial Seismology, Inc.

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These mortar separations range from about $1 / 16$ of an inch to smaller in width.

Now on the north wall.
There is a slight mol:tar separation below the upper northwest block. (Photo 102-28)

There is a stairstepping mortar separation at the lower west part of the north wall. (Photo 102-30)

Another stairstepping mortar separation at the west end of the north wall runs from the ninth block from the floor, down and to the east. (Photos 102-29 and 102-31)

There is a separation at the intersection of the north wall and ceiling. (Photos 102-28 and 102-32 thru 102-34)

The lower north wall has several slight mortar separations below the conduit. (Photos 10:2-35 and 102-36)

Above the upper left end of the north door, there is a stairstepping mortar separation that runs up to the ceiling. It ranges in width from about $1 / 16$ of an inch to a hairline. (Photos 102-37 thru 102-39)

Also, above this door, a slight mortar separation runs up and to the right. (Photo 102-40)

Now on the east wall. There is a horizontal mortar separation below the top block course that: runs along the east wall to about the middle and then stairsteps down. There are a couple of cracked blocks at about the middle area. This separation also runs onto the north wall below the upper right block. (Photos 102-40 thru 102-43)

There are two other stairstepping mortar separation below the duct on the east wall. (Photos 102-44 thru 102-46)

Below the fire extinguisher, at the lower north end of the east wall, there are two slight mortar separations. (Photo 102-47)

There is a horizontal. mortar separation above the fire extinguisher. (Photo 102-48)

At the lower south end of the east wall, there is a slight stairstepping mortar crack. (Photos 102-49 thru 102-51)

Now on the south wall. .

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At the upper west end of the south wall, there is a slight horizontal mortar separation to the lower right of the vent. (Photo 102-52)

South Room

Photographs of the south wall. (Photos 102-53 thru 102-55)
The south wall has several major mortar separations. There is a large horizontal mortar separation below the top course of blocks that runs from the west wall about 4 blocks. It has two connecting stairstepping mortar separations. (Photos 102-56 thru 102-59)

There is a crack along the southwest corner. (Photos 102-60, 102-98 and 102-99)

At about the middle of the south wall, there are a few more mortar separations. One steps down and to the east, and cuts through a block. (Photos 102-61 thru 102-63)

At the upper east end of the south wall, there is a stairstepping mortar separation. (Photos 102-64 and 102-65)

At the lower east end of the south wall, there are a couple of slight vertical mortar separations. (Photo l02-66)

Now on the east wall.
Photographs of the east wall. (Photos 102-67 thru 102-71)
The east wall has a large horizontal mortar separation below the top block course. It runs from the south wall, northward and becomes stairstepping near the middle of the wall. It is fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 102-72 thru 102-74)

Near the middle of the east wall, there is a vertical crack that runs through block and mortar, down behind some drawings. It is about $1 / 8$ of an inch wide. At about the fifth course from the bottom, this crack stairsteps along mortar joints in each direction to the floor. Both are hairline to slightly wider. (Photos 102-75 thru 102-78 and 102-81 and 102-82)

There is another stairstepping mortar crack at the lower north end of the east wall. (Photo 102-79)

Another stairstepping mortar crack runs up and to the north, above the drawings. (Photo 102-80)

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Now on the north wall. Photographs of the north wall. (Photos 102-83 theu 102-87)

Above the upper left corner of the door, there is a slight stairstepping mortar crack that runs up and to the west. (Photo 102-88)

The vent at the upper left end of the north wall has a horizontal mortar separation that runs from the lower left corner, then upward along the northwest corner to the ceiling. It is from about $1 / 32$ to $1 / 16$ of an inch wide. There is a slight separation along the rest of the northwest corner. (Photos 102́-89 thru 102-91)

Now on the west wall. Photographs of the west wall. (Photos 102-92 thru 102-95)

Starting at the south end. There is a stairstepping mortar separation at the upper south end of the west wall. It runs down behind the dehumidifier and cuts through a block. (Photos 102-96 thru 102-99)

A stairstepping mortiar crack runs from the lower south end of the west wall up and to the rorth. It connects with another stairstepping mortar crack that runs down and north from the upper south part of the wall. (Photos 102-100 thri 102-104)

Near the receptacle, another stairstepping mortar crack runs from the floor, up and to the north. (Photos 102-105 and 102-106)

The north end of the west wall has a roughly vertical crack that runs from the floor, upward, and branches in both directions. It cuts through several blocks and ranges from about $1 / 8$ of an inch to a hairline. (Photos $1.02-107$ thru 102-110)

Most of the other separations are from about $1 / 16$ of an inch wide to hairline.

Series of photographs of the ceiling. (Photos 102-111 thru 102-116)
The ceiling is white painted concrete and the outlines of the plywood forms can be seen.

EXTERIOR INSPECTION
ID photograph of the front, north side of the building. (Photo 102-117)
The front sidewalk has an east-west trending crack all the way across. It is about $1 / 16$ of an inch wide. (Photo 102-118)

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The front step is separated from the building. The northeast downspout lacks a splash block and empties close to the foundation. (Photo 102-119)

There is a slight stairstepping mortar crack to the lower left of the door. It is about $1 / 32$ of an inch wide and consists of four slight cracks in the joints. (Photo 102-120)

There is a crack in the foundation at the northwest corner on the front side. It measures about 5 inches on the diagonal and about $1 / 16$ of an inch wide. (Photo 102-121)

ID photograph of the west side of the building. (Photo 102-122)
The northwest downspout has no splash block and it empties close to the foundation. (Photo j.02-123)

There is a crack in the foundation at the north end of the west side. It is about 6 inches long and about $3 / 16$ of an inch wide. (Photo 102-123)

Just north of the northwest downspout, there is a crack through brick and mortar. It is about 10 inches long and $1 / 32$ of an inch wide. (Photo 102-124)

The southwest downspout empties close to the foundation and has no splash block or curved tip. (Photo 102-125)

ID photographs of the south end of the building. (Photos 102-126 and 102-127)

There is a slight crack, barely visible, located about 4 feet from the west end, on the south side of the roof slab. There are also numerous cobwebs up there.

There is a leak in the gutter at the southeast corner.
ID photographs of the east side of the building. (Photos 102-128 and 102-129)

The southeast downspout empties close to the foundation. (Photo 102-130)

There is a crack in the foundation behind the southwest downspout. It is about 4 inches long and about $1 / 16$ of an inch wide. (Photo 102-130)

The caulk is separated around the duct. (Photos 102-131 and 102-132)

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There is a crack in the foundation at the north end of the east side, near the downspout. It is about 8 and $1 / 2$ inches long and about $3 / 16$ of an inch wide. (Photo 102-133)

The gutter is dripping at the northeast corner.
ID photographs of the building from the northeast. (Photos 102-134 and 102-135)

Now back to the front: door. The caulk seal is cracked around the door. (Photos 102-136 thru 102-142)

To the lower left of the door, there is a crack in the foundation. It is about 4 and $1 / 4$ inches long and about $1 / 16$ of an inch wide. (Photo 102-143)

The floor, to the lower left of the door, has a gap that has been filled with mortar. (Photo 102-144)

Just above the door, there is a hairline crack visible in the roof slab. (Photo 102-14.5)

To the upper right of the door, there is another hairline crack in the roof slab. (Photo 102-146)

At about the middle of the front side, there is another hairline crack in the roof slab. It: is a very faint crack. (Photo 102-147)

The gutter is dripping at the northwest corner.
Along the west side of the building, the bottam mortar joint appears to be separated from the foundation. (Photos 102-148 and 102-149)

The west end of the Eront side has the same condition. (Photo 102-150)

## General Comments

This building was ori.ginally a concrete block structure that was built in 1965. The brick veneer was added in 1978. The building has a gutter-downspout system, but all four downspouts lack a splash block. They empty close to the foundation.

Several cracks were found in the concrete foundation and a few cracks were found in the brick veneer.

The concrete roof slab has several hairline cracks.

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The interior block walls have numerous mortar cracks, some of which are rather severe and cut through concrete blocks.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.
thuitoran \& A And all
Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 150 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 60

2- SUMMARY FORM
3- SKETCH OF STRUCTURE






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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Ruby Clay
2. Date: October 25, 1986 Time:___ 9:45am
3. Address: Box 197 Amoret, Missouri 64722
4. Location: South $1 / 2$ lot 9 and lot 10 , Block 25
5. Telephone Number: (816)925-3396
6. Dates of occurancy by current resident: Since 1980
7. Daces of any temporary or permanent abandonment: Unknown, bought trailer used Broadmore Mobile Home
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1973
9. Date(s) of major remodeling or additions:
(a) Added porch summer of 1986
(b)
(c)
10. Construction of building:
(a) framing ijolsts, rafters, and stud walls): Standard mobile home
(b) interfor walls: Paneling
(c) roof: Metal
(d) Eootings; Eoundations: Block foundation
(e) basement walls (indicate how keyed to foocing of floor): Not applicable
(£) basement Eloor (keyways, chickness): Not ajpplicable
(g) name of person(s) who constructed bullding: Broadmore Company
$(h)$ size and direction of any large windows: None
III. Envirommental Information
11. Approximate elevation of area:
$845^{\prime}$
12. Type of soll in area: silty clay loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (Indicate depth and use): None
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Yes, don't use
16. Source of water, if not included above: City water
17. Eve troughs or any other exterior drainage features: No
18. Description of general grading or landscaping in vicinity:

Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interior walls: See survey
2. Recedlng of doors, windows: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: Not applicable
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views cr photographs of walls
8. North See survey
9. South See sirvey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction tecimiques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

October 27, 1986
Report No. 87056-11
P \& M Map Photo No. 59

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Subject: Inspection of the Ruby Clay Residence Box 197
Amoret, Missouri 64722
October 25 and December 12, 1986
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Tb: $\quad$ The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Beginning the interior inspection of the Ruby Clay trailer, starting in the living room.

Living Room
Carpeted floor.
Paneled walls.
Fiber panel ciling.
There are three wooden beams across the ceiling.
There are windows or the west and east walls.
The front door is on the west wall.
The living room joins with the kitchen on the north and has an entrance to a bedroan on the south.

Photograph of the scuth wall. (Photo ll-1)
Photographs of the east wall. (Photos 11-2 and 11-3)
Photographs of the west wall. (Photos 11-4 and ll-5)
Photographs of the ceiling. (Photos 11-6 and 1l-7)

White Industrial Seismology, Inc.
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Kitchen
Vinyl floor.
Paneled walls.
Fiber panel œiling.
Window above the sink on the west wall.
Window on the east wall.
Photograph of the north wall. (Photo 11-8)
Photograph of the east wall. (Photo ll-9)
Photograph of the west wall. (Photo 1l-10)
Photographs of the ceiling. (Photos $11-11$ and 11-12)
There is a water stain in the ceiling above the east window. (Photo 11-13)

There are also some stains in the southwest part of the kitchen ceiling. (Photo 11-14)

There is a hallway south of the kitchen.
Hallway
Carpeted floor.
Paneled walls.
Fiber panel œiling.
Window on the east wall.
The piece of paneling at the sill of the window is warped. (Photos 11-15 and 11-16)

There is a slight water stain in the southeast part of the hall ceiling. (Photo ll-17)

A view of the hallway looking southward. (Photo ll-18)
The hallway has a dcor to a storage room on the west wall.
Storage Room
Vinyl floor. Paneled walls. Fiber panel ceiling.
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Windows on the west wall.
Closet on the south wall.
Photograph of the west wall. (Photo 11-19)
Photograph of the north wall. (Photo 11-20)
Photograph of the south wall. (Photo ll-2l)
Photographs of the east wall. (Photos 11-22 and 11-23)
Photograph of the ceiling. (Photo ll-24)
The utility room is north of the hallway.
Utility Room
Carpeted floor.
Paneled walls.
Fiber panel ceiling.
Door to the outside on the east wall.
Closet door and bedroom door on the north wall.
Door to the bathroom on the west wall.
A view looking south into the utility room. (Photo ll-25)
Photograph of the north part of the east wall. (Photo ll-26)
Photograph of the north wall. (Photo 11-27)
A view of the ceiling looking north. (Photo 11-28)
Now into the north bedroom.
North Bedroom
Carpeted floor.
Paneled walls.
Fiber panel ceiling.
Windows on the north and west walls.

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Closet along the east wall.
Photograph of the north wall. (Photo 11-29)
Photographs of the west wall. (Photos 11-30 and 11-31)
Photographs of the south wall. (Photos 11-31 and 11-32)
Photographs of the east wall. (Photos 11-32 and 11-33)
A view of the ceilirg looking north. (Photo 11-34)
A view of the ceiling looking south. (Photo 11-35)
There is a water stain in the ceiling above the west window. (Photo 11-36)

Bathroom
Vinyl floor.
Papered and paneled walls.
Shower stall at the south wall.
Formica upper walls in the shower area.
There is a small window on the west wall.
The ceiling panels are warped and water stained above the shower, at the vent, and along the west wall.

Photographs of the south wall. (Photos 1l-37 and 11-38)
Photograph of the floor. (Photo 11-39)
Photographs of the west wall. (Photos 11-40 thru ll-42)
Photographs of the north wall. (Photos 11-43 thru 11-45)
Photographs of the east wall. (Photos 11-46 thru 11-48)
Tho photographs of the ceiling showing the water stains at the vent and along the west wall. (Photos 11-49 and 11-50)

There are severe water stains in the ceiling above the west end of the shower. There is also a ceiling batten hanging above the shower. (Photos 11-51 and 11-52)

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## South Bedroom

Carpeted floor.
Paneled walls.
Fiber panel œiling.
Bay window on the south wall.
Windows on the west wall.
Lavatory in the southeast corner.
Bathroom enclosure ir the northeast corner.
Photographs of the scuth wall. (Photos 11-53 and 11-54)
Photographs of the west wall. (Photos 11-55 and 11-56)
Photographs of the north wall. (Photos 11-57 and 11-58)
Photographs of the east wall. (Photos 11-59 thru 1l-62)
Photographs of the ceiling. (Photos 11-63 thru 11-65)
The ceiling has a narrow band of stains along the west wall above the window. (Photos 11-65 thru 11-68)

The second upper pane from the left of the south bay window is broken. (Photo 1l-69)

There is a slight water stain in the ceiling above the bathroom entrance. (Photo 11-70)

Bathroom
Carpeted floor. Paneled north wall.
Papered east wall.
Window on the east wall.
Shower stall at the south end.
The bathroom ceiling is stained. (Photos ll-7l thru ll-73)
Two photographs looking eastward into the bathrooin. (Photos 11-74 and 11-75)

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Note that the bathroom floor has a weak spot that gives quite a bit when stepped on. (Photo 11-76)

I was unable to get photographs of the other walls of the bathroom due to its small size.

EXTERIOR INSPECTION
ID photographs of the front, west side of the trailer. (Photos 11-77 thru 11-79)

ID photograph of the south end. (Photo 11-80)
ID photographs of the east side. (Photos ll-81 thru 11-83)
ID photograph of the north end. (Photo 11-84)
There is a concrete slab located north of the trailer. It has grass growing through cracks at the east and west ends. (Photo 11-85)

There is an old sidewalk leading north to the street from the concrete slab. It is being cvergrown with grass. (Photo ll-86)

The trailer has same loose skirting at the northeast corner. (Photos 11-87 and 11-88)

Some of the skirting is also loose at the northwest corner. (Photo 11-89)

Note the rusted rivets on this trailer which have caused rust stains on the sides of the trailer. (Photo ll-90)

There are three parallel scratches in the siding below the north window. (Photo 11-90)

The north door on the west side is severely dented. (Photo ll-91)
The fascia is loose at the north part of the west side. (Photo 1l-92)
The third window from the north has a piece of paneling hanging from the top. (Photos 11-93 and 11-94)

At this time the ground is extremely saturated and very soft around this trailer.

The front door is delaminating and warping. (Photos ll-95, ll-96, and 11-98)

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The lower panel of the front screen door is bent. (Photo 11-97)
Note the tilted condition of the light fixture. (Photo 11-96)
Now to the south side of the trailer.
A photograph of the south bay window area. (Photo 11-99)
Now to the east side of the trailer.
Photographs showing the air conditioner, its support and the broken seal along the left side. (Photos 11-100 and 11-101)

The wooden steps at the northeast part of the trailer lean eastward. (Photos 11-102 and 11-103)

There is a garage located southeast of the trailer.
Garage
ID photograph of the north side. (Photo 11-104)
The metal siding is rusting and the unpainted fascia is rotting.
ID photograph of the east side. (Photo ll-105)
ID photograph of the south end. (Photo 11-106)
ID photograph of the west side. (Photo ll-107)
Same of the roofing is bent upward on the west part of the roof.
Garage - Interior Inspection
Gravel floor.
Unfinished walls and ceiling.
Photographs of the north wall. (Photos 11-108 and 11-109)
Photographs of the east wall. (Photos 11-109 and 11-110)
Photographs of the west wall. (Photos 11-111 and 11-112)
Photographs of the south wall. (Photos 11-113 and 11-114)
A photograph looking up at the ceiling. (Photo 11-115)

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## Cistern

There is an old cistern located east of the trailer.
It is covered with an octagonal concrete slab.
We were unable to open the lid to look inside the cistern.
ID photographs of the cistern cover. (Photos 11-116 and 11-117)
Trailer - Continued
The trailer is founded on concrete blocks with block footings.
Three photogrpahs of the foundation, looking west and south from the access panel at the northeast end of the trailer. (Photos ll-118 thru 11-120)

## General Comments

This trailer has or has had a leaking roof as evidenced by the water stains in the ceilirgs. The major area of damage is in the main bathroom.

The floor of the south bathroom has a very weak spot just inside the doorway, which is probably water damage al so.

The front door and some of the windows have severe water damage also. That completes the inspection of this property.


Christopher D. Landoll Technical Associate

CDL/kg
Enclosure: 120 Phot:ographs

## l- COPY FROM P \& M's TOWN OF AMORET MAP

 LOCATION NO. 592- SUMMARY FORM
3- SKETCH OF STRUCTURE




. ....... $11-105$







## $11 \cdot 79$



## PRE-BLAST SURVEX, RESIDENTIAL

I. Basic Information

1. Name of Resident: Effie Hall
2. Date: October 31, 1986 Tine: $\qquad$
3. Address: Box 71, Amoret, Missouri 64722
4. Location:Lots 11, 12, and 13 Block 25
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: 1955-Present
7. Dates of any temporary or permanent abandonment: $\qquad$ None
II. Information Concerning Bulldings
(repeat for additional buildings)
8. Date of original construction: Not known, very old
9. Date(s) of major remodeling or addicions:
(a) lowered ceilings, paneled walls, off and on since 1957
(b) new roof 1963
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Native hardwood $2 \times 8$ joists
(b) interior walls: Old plaster, sheetrock $2 \times 4$ stud walls
(c) roof: Pressed shingles
(d) footings; foundations: Concrete (west), stone (east) footing - not known
(e) basemenc walls (indicate how keyed to footing of floor): Not applicable
(f) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows:

North, $3^{\prime} \times 10^{\prime \prime}$ square pane
III. Enviromental Information

1. Approximate elevation of area:

845 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation:

Gravel and rock
4. Water wells utilized (Indicate depth"and use): Shallow well, not used
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior dralnage features: Some on west and south
8. Description of general grading or landscaping in vicinity:

Generally flat, yard on east side slopes northward
IV. Any notable existing deterioration or damage

1. Cracks in Lnterlor walls: See survey
2. Recedling of doors, windu's: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer):

See survey
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings. See survey
VI. Elevation views or: photographs of walls

1. North See survey
2.* South See survey
2. East See survey
3. West See survey
VII. Comments or supplementary drawings see survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

November 4, 1986
Report No. 87056-58
P \& M Map Photo No. 32

Subject: Inspection of the Effie Hall Residence
P. O. Box 1.71

Amoret, Misssouri 64722
October 31, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, north side. (Photos 58-1 and 58-13)
The north side has a stucco exterior that is extensively cracked.
The sidewalk along the north side is extremely overgrown with grass and has several cracked sections. (Photo 58-2)

The sidewalk along the west side of the building is also overgrown with grass and has several cracked sections. (Photo 58-3)

Series of photographis of the north side of the building from the west to the east showing extensive cracks in the stucco. (Photos 58-4 thru 58-12)

Most of these cracks are hairline crazing cracks. The major crack is between the front window and the northwest facing door. This crack is about $1 / 8$ of an inch wide. (Photo 58-14)

There are horizontal cracks above the door and there are several areas of peeling paint.

The front screen door lacks an upper pane and there is cracking along the corner to the upper right of the door.

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The large window on the front has a 3 foot 10 inch square pane. There is separation along both sides of the window. Paint is peeling from the trim. (Photos 58-15 thru 58-17)

Now at the front door: . There is a broken piece of concrete to the lower right of the door. (Photos 58-18 thru 58-20)

The step leading to the door dips toward the building and there is about a 1 and $1 / 2$ inch separation. (Photo 58-21)

ID photographs of the west side of the building. (Photos 58-22 thru 58-24 and 58-30)

This side of the buijding has a gray hardboard siding exterior.

The gutters along the west side and back porch roof connect to a downspout which empties into the ground at the southwest corner of the building.

The north window on the west side has a cracked pane and what appears to be a bullet hole in it. (Photo 58-25)

Several nail heads ace rusting and the wall has several patched areas below this window.

There are several cracked siding boards on this side of the building.
Now at the second window from the north. Inside the storm window, the inner header has several rust stains. (Photo 58-26)

Now at the third window from the north. The bottom storm pane has two taped areas. (Photo 58-27)

The west part of the foundation appears to be concrete; the rest I beleive is stone.

Now at the fifth window from the north. There are two holes and a crack in the upper storm pane, lower left corner. (Photo 58-28)

The bottan storm parel also has a couple of slight cracks. (Photo 58-29)

The west windows have deteriorating paint on the trim.
A view of the west sidewalk looking north. (Photo 58-31)
ID photograph of the south side of the building. (Photo 58-32)

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The south side of the main part of the building has a composition type siding, which has extensive cracking due probably to weathering and age. The addition has gray hardboard siding. Series of photographs of the south side. (Photos 58-33 thru 58-39)

The deck to the attic door is sagging severely. Mrs. Hall said the stairway has been removed and that she plans to have this deck removed also.

The window with the air conditioner has deteriorated caulk seals. (Photo 58-40)

Note the taped areas of siding above the southwest doorway. (Photos 58-41, 58-42 and 58-45)

There is a crack across the sidewalk near this door. It ranges from about $1 / 8$ of an inch to about an inch wide at a spall. (Photo 58-43)

Note how the step dips toward the foundation. (Photo 58-44)
Now at the west window of the south addition. The interior caulk seals are deteriorating ancl cracking. (Photos 58-46 and 58-47)

The sidewalk which leads from the southwest door to the southeast door has three cracks with. grass growing in them. (Photo 58-48)

Now at the south wall of the addition. There is a window and a door.
The window has cracking caulk joints. (Photo 58-49)
The door has warping veneer. (Photo 58-50)
Just southeast of the building, there is a circular concrete slab with a hand pump covering arı old well.

ID photographs of the east side of the building. (Photos 58-51 thru 58-54)

The land on the east side slopes to the north.
The east side has canposition siding mostly with hardboand siding at the south end.

There are some loose siding boards to the upper right of the south window, just below the roof. (Photo 58-55)

Where the hardboard and shingle exteriors meet, there is some cracking along the joint. (Photos 58-56 and 58-57)

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The shingle siding on the east side of the building has extensive cracks and cupping due probably to weathering and age. (Photos $58-58$ thru 58-65)

The north end of east. side has a stucco exterior. (Photo 58-65)
The north door on the east side looks to be unusable. It has a crack at the upper left corner of the pane, and a taped area at the bottom. Two peices of glass were used for the pane. The bottom, larger pane has a crack at the upper right corner. (Photos 58-66 and 58-67)

The north window on this side has a deteriorating caulk seal. (Photo 58-68)

The second window frcm the north also has deteriorating caulk. (Photo 58-69)

The second window from the south has severely deteriorating caulk. (Photos 58-70 and 58-71)
paint is deteriorating from all trim on the east side of the building.
Note the bent antenna mast on the east side of the building. (Photo 58-72)

The east and north sides of the building lack gutters. This will allow rainwater to drain from the roof to the ground near the foundation which can cause foundation damage.

The sidewalk, northeast of the building, is being overgrown with grass. (Photo 58-73)

The old sign in front of the building has a loose neon tube that appears about ready to fall. (Photo 58-74)

Now back on the north side of the building. There is a separation between the sidewalk and the building, partially filled with grass. (Photos 58-75 and 58-76)

The gap is about $1 / 2$ an inch wide and is an avenue for rainwater to penetrate to the foundation. This has probably caused the heaving in the sidewalk.

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INTERIOR INSPECTION

## Kitchen

This is the southwest room.
Tile floor.
Paneled walls.
Tile ceiling.
Lower east, south and west walls have tile pattern linoleum. Tile west counter wal.l.

Three windows on the west wall.
Entry to the living room on the north wall.
Entry to the bathroom on the east wall.
Window on the south wall.
Photograph of the north wall. (Photo 58-77)
Photographs of the east wall. (Photos 58-78 and 58-79)
Photograph of the south wall. (Photo 58-80)
Photographs of the west wall. (Photos 58-81 and 58-82)
Photographs of the ceiling. One looking north and one looking south. (Photos 58-83 and 58-84)

The floor has a depressed area in the northeast part.
Mrs. Hall indicated that the floor had this condition before they purchased the buildirig.

The linoleum wall covering is drying out and cracking below the south window. (Photo 58-8.5)

The linoleum wall covering at the south end of the east wall is buckling. (Photo 58--86)

Below the south window on the west wall, the linoleum has buckled and torn. (Photos 58-87 and 58-88)

The north window on the west wall has a cracked inner pane that has been taped. This was not visible from outside. (Photo 58-89)

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Southeast Roon
Vinyl floor. Lavender painted sheetrock walls. Tile ceiling.

Door to the outside on the south wall.
windows on each wall.
Photograph of the south wall. (Photo 58-90)
Photographs of the west wall. (Photos 58-91 and 58-92)
Photograph of the north wall. (Photo 58-93)
Photographs of the east wall. (Photos 58-94 and 58-95)
Photographs of the ceiling, first looking north and then south. (Photos 58-96 and 58-97)

The south end of the ceiling has several water stains. (Photos 58-98 thru 58-101)

The southeast corner of the ceiling has a large circular stain with sagging ceiling tiles. (Photo 58-98)

The southwest corner also has a large stain and sagging tiles. (Photos 58-99 and 58-100)

Another ceiling stain is located to the upper left of the west window. (Photo 58-101)

There are several slight water stains near the light fixture. (Photos 58-102 and 58-103)

There are a few slight ceiling stains along the west wall and near the flue. (Photo 58-104)

There is a nail pop above the upper right end of the south window. (Photo 58-105)

There is a roughly horizontal crack above the upper left corner of the window on the north wall to the bedroam. It is about 10 inches long and is a rough tearing crack just wider than a hairline. (Photo 58-106)

The north window has deteriorating caulk. (Photo 58-107)

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Another photograph of the stained, sagging southwest corner of the ceiling. (Photo 58-1(08)

South Bedroon
Tile floor and ceiling.
Lavender painted sheetrock walls.
There is a closet enclosure in the northeast corner.
Window on the east wall.
Photograph of the north wall. (Photo 58-109)
Photograph of the south wall. (Photo 58-110)
Photograph of the east: wall. (Photo 58-111)
Photographs of the west wall. (Photos 58-112 and 58-113)
Photographs of the ceiling. (Photos 58-114 thru 58-116)
The floor slopes from the northeast to the southwest.
There is a slight crack at a tape joint below the lower right corner of the east window. It is a tearing, hairline crack about 21 and $1 / 2$ inches long. (Photo 58-117)

There are also water stains below the east window. (Photos $58-117$ and 58-118)

There is a hairline crack at a joint above the right end of the closet door. It is about 5 and $1 / 2$ inches long. (Photo 58-119)

To the upper left of the closet door, there is a roughly horizontal crack about 12 and $1 / 2$ inches long and just wider than a hairline. (Photo 58-120)

To the upper left of the door on the north wall, there is a hairline horizontal crack about 6 inches long. (Photo 58-121)

The window on the south has a roughly horizontal crack to the upper right. It is about 7 and $1 / 2$ inches long. (Photo 58-122)

The crown molding is broken above the south door. (Photo 58-123)
All together there are four splits in that molding. (Photo 58-124)

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Now looking inside the closet. It has green painted, old wall paper walls. There is cracked paper in the northeast corner. (Photo 58-125)

There is also a vertical hairline crack at a oorner that runs all the way down as far as I can see, at least to the shelf. (Photo 58-126)

Back to the window or the south wall. There are two cracks to the lower left. The long crack: is about 14 inches long and the short crack is about 3 and $1 / 4$ inches long. These are both hairline cracks and the bottom is a bulging type crack. (Photo 58-127)

Bathroom
Green tile floor.
Tile lower walls and ceiling.
Lavender painted sheetrock upper walls.
Window on the east wall.
Photograph of the east wall. (Photo 58-128)
Photographs of the north wall. (Photos 58-129 and 58-130)
Photograph of the south wall. (Photo 58-131)
Photograph of the weist wall. (Photo 58-132)
Most of the south wall has a cabinet and the shower enclosure.
The sink is separated from the north wall by about $1 / 2$ of an inch. (Photo 58-133)

Above the upper right: of the door to the kitchen, there is a vertical crack at a seam. It is about 14 inches long and it ranges fram a hairline at the top $:=$ about $1 / 16$ of an inch wide at the bottom. (photo 58-134)

The window on the east wall has a water stained sill that tilts eastward. There is a gap at the lower south corner of the storm window indicating that this east wall might be sinking. (Photos 58-135 and 58-136)

The heater below this window is rusting. (Photo 58-137)
North Bedroom
Vinyl floor. Tile ceiling. Sheetrock walls.

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The floor is humped 1 ip in the southeast part near the trapdoor to the crawl space.

There is a door on the north and a window on the east wall.
Door on the south to the bathroom.

Photographs of the north wall. (Photos 58-138 and 58-139)
Photographs of the west wall. (Photos 58-139 and 58-140)
Photographs of the south wall. (Photos 58-141 and 58-142)
Photographs of the east wall. (Photos 58-143 and 58-144)
There is a vertical, bulged seam above the upper left corner of the south door to the bathroam. It is 17 inches long and has a hairline crack at the bottom. (Photo 58-145)

There is a patched area to the upper right of this door. (Photo 58-146)

There is a slight crack in the upper southeast corner. It is a hairline crack and is almost 20 inches long. (Photo 58-147)

The sill of the east window is tilted down severely to the east. (Photo 58-148)

Mrs. Hall informed me that the windows on the east side of the building had to have custom made storm windows to fit the unsquare openings and that this condition was present when they bought the building.

There is a slight horizontal crack above the upper right corner of the door on the north wail. It is a hairline wide and about 4 and $1 / 2$ inches long. (Photo 58-149)

There is a separation, about $1 / 8$ of an inch wide, along the left side of the north door. (Photos 58-150 and 58-151)

## Living Room

Carpeted floor.
Paneled walls.
Tile ceiling.
Window on the west wall.

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Door on the north to the front room.
Photograph of the north wall. (Photo 58-152)
Photographs of the east wall. (Photos 58-153 and 58-154)
Photographs of the scuth wall. (Photos 58-154 and 58-155)
Photograph of the wesit wall. (Photo 58-156)
Photographs of the ceiling looking southeast and northwest. (Photos 58-157 and 58-158)

There is a slight dietgonal crack above the upper left corner of the south entrance to the kitchen. It is about 3 inches long and about a hairline wide. (Phot:o 58-159)

Front Roam
Tile floor and ceilirig.
Paneled walls.
This room is used for: storage and is unheated.
Door on the northwest.
Windows on the north and west walls. Closed off door on the east wall.
Photographs of the east wall. (Photos 58-160 and 58-161)
Photographs of the south wall. (Photos 58-162 and 58-163)
Photograph of the weist wall. (Photo 58-164)
Photographs of the north wall. (Photos 58-165 and 58-166)
Photographs of the ceiling, first looking east then looking west. (Photos 58-167 thru 58-170)

The northwest door has warping and peeling veneer. (Photos 58-171 and 58-172)

There is a slight crack at the upper left corner of the west windowpane. The crack measures about 3 inches long. (Photo 58-173)

There is a loose piece of crown molding at the east part of the south wall. (Photo 58-174)

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There appears to be water damage to the œeiling in the northeast corner. Some of the tiles are warped. This part of the ceiling appears to have been replaced. (Photos 58-175 thru 58-178)

Part of the floor has been replaced in the northeast corner.
The floor seems to slope slightly to the northeast.
EXTERIOR INSPECTICN -. CONTINUED

## Garage and Incinerator:

ID photograph of the north side of the garage. (Photo 58-179)
ID photograph of the east side of the garage. (Photo 58-180)
ID photograph of the east side of the incinerator. (Photo 58-181)
The garage appears to lean to the west.
ID photograph of the south side of the garage. Note the hole in the siding. (Photo 58-182)

ID photograph of the rest side. (Photo 58-183)
The garage has no gutcering.
A small sidewalk runs from the house to the garage and it is being overgrown with grass. (Photo 58-184)

There are three crack:s across the sidewalk near the incinerator. (Photos 58-185 and 58-186)

ID photograph of the south side of the incinerator. (Photo 58-187)
ID photograph of the north side of the incinerator. (Photo 58-188)
ID photograph of the west side of the incinerator. (Photo 58-189)
The incinerator is a ancrete structure with same brick on the inner walls. The stucco exterior of the chimney is extremely cracked.

Cracks in the stucco of the chimney range from hairline to about $1 / 8$ of an inch wide. (Photois 58-190 thru 58-193)

West of the chimney, the top of the incinerator has several cracks. (Photos 58-194 and 58-196)

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The major crack is on the front of the incinerator and is about $1 / 4$ of an inch wide. (Photo 58-195)

INTERIOR INSPECTION

## Garage

Photographs of the south wall. (Photos 58-197 and 58-198)
Photographs of the weist wall. (Photos 58-199 and 58-200)
Photographs of the nor:th wall. (Photos 58-200 and 58-201)
Photograph of the east: wall. (Photo 58-202)
The garage is constructed of 2 by 4 stud walls, and 2 by 6 joists and 2 by 4 rafters.

A shed is attached at the north end of the garage.
The west end of the shed has a wooden floor that is extremely rotted and deteriorated. (Photo 58-203)

The sidewalk just inside the garage, is heaved. (Photos 58-204 and 58-205)

There are two cracks across the sidewalk just outside the doorway. One of them is about 1 and $1 / 2$ inches at the widest and the other is about $1 / 2$ an inch at the widest. (Photo 58-206)

The wooden exterior of the garage has severely deteriorating paint.
The leaning of the garage will probably worsen over time unless some bracing is added.

General Comments
This is a very old building, date of construction is unknown.
The exterior is a combination of stucco, hardboard siding and asphaltic siding.

The stucco exterior has extensive crazing cracks and other larger cracks which are probably the result of weathering.

The asphaltic siding is deteriorating, also probably due to weathering and age.

White Industrial Seismology, Inc.

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Numerous cracks were found in interior sheetrock walls, mainly at the seams above and below doors and windows. These cracks are probably the result of expansion and shrinkage of framing materials. Some of these cracks have the potential to increase in length and will likely do so, naturally over time. Widths of these cracks vary with humidity changes.

Several floors were noticed to slope, mainly to the center of the building, indicating weak floor joists.

The east windows of the north bedroom and bathroom have tilted sills, indicating settlement of the building eastward.

The building lacks a gutter along the north and east sides. This condition will allow rainwater to saturate ground adjacent to the foundation which could cause foundation damage. It could also allow water to run down the sides of the building, contributing to weathering of the exterior.

Only a small portion of the foundation was visible. This was at the northeast and northwest corners of the building.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/kg
Enclosure: 206 Photographs

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2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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## $58-30$





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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Infornation

1. Name of Resident: Amoret Christian Church
2. Date: October 30,1986 Time: 7:30AM
3. Address: Amoret, Missouri
4. Location: Lots 1 thru 4, Block 26
5. Telephone Number: (816) 925-3404 (Victor Sherman) $\qquad$
6. Dates of occupancy by current resident: Not known
7. Dates of any lemporary or permanent abandonnent: Not known
II. Informarion Concerning Bulldings
(repeat for additional buildings)
8. Date of origital construction: Unknown
9. Date(s) of major remodeling or addicions:
(a) Sanctuary remodeled around 1978
(b) Addition around 1978
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls):

Stud walls $2 \times 4$ Joists and rafters $2 \times 6$
(b) interior walls: Sheetrock, paneling
(c) roof: Composition shingles
(d) Eootings; foundations: Concrete, concrete block foundation, footin unknown
(e) basement walls (indicate how keyed to footing of floor):

Concrete
(E) basement floor (keyways, chickness):

Concrete, keyways and thickness not known
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: No large windows
III. Envirornental Information

1. Approximate elevation of area:

850 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (Indicate depth and use): No
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage Eeatures: Yes
8. Description of general grading or landscaping in vicinity: Generally flat
IV. Any notable existirg deteriorathon or danage

1. Cracks in interlor walls: See survey
2. Recedlag of doors, windurs: See survey
3. Noticeable settlenent: See survey
4. Foundation cracks: See survey
5. Exterior wall eracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: See survey
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activities.

See survey
White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. EOOX 1256
JOPLIN, MO 64802-1256
PH. (41'7) 624-0164
November 1, 1986 Report No. 87056-47 P \& M Map Photo No. 63
Subject: Inspection of the Amoret Christian Church Amoret, Missouri 64722 October 30, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box $\varepsilon$ Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.
INTERIOR INSPECTION

## Sanctuary

Paneled walls.
Carpeted floor.
Tile ceiling.
Stairway to the basement in the northeast corner.
Door to the hallway on the south wall.
There are doors on the west wall to the entryway.
Photograph of the nor:th wall. (Photo 47-1)
Photographs of the we:st wall. (Photos 47-2 and 47-3)
Photographs of the east wall. (Photos 47-4 and 47-5)
Photographs of the south wall. (Photos 47-6 and 47-7)
Photographs of the ceiling. (Photos 47-8 and 47-9)
Entryway
Carpeted floor.
Paneled walls.
White painted sheetrock ceiling.

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Two entry doors on the west with stained glass panes above the doors.
Photographs of the ceiling. (Photos 47-10 and 47-12)
Photograph of the north wall. (Photo 47-11)
This roon has a hole in the ceiling where a wire cones through. (Photo 47-12)

The panes above the west doors have a film covering that is peeling. (Photos 47-13 and 47-1.4)

The north pane has a crack at the lower right corner. (Photo 47-14)
Now back into the sanctuary.
Sanctuary - Continued
There are two windows on the east wall, two on the west, and three on the north.

The panes of these wirdows are stained.
At the south window on the east wall, the upper left pane has a crack at the lower left corner. (Photo 47-15)

There are doors between the windows on the east wall to a small roan that is used as a closet.

Closet
Paneled walls and ceiling.
Carpeted floor.
Two stained glass windows on the east wall.
Two views looking into this room. (Photos 47-16 and 47-17)
Hallway
Tile floor.
White painted sheetrock walls and ceiling.
Window on the east wa.ll.
Two photographs looking southward down the hallway. (Photos 47-18 and 47-19)

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The floor has some cracked tiles at the north doorway back to the sanctuary. (Photos 47-20 and 47-21)

There is a vertical seam crack above the upper right corner of the door on the south to the classroam. It runs from the casing almost to the ceiling. It ranges from about $1 / 32$ of an inch wide at the bottan to a hairline at the top. (Photo 47-22)

The west wall has a slight vertical crack at the corner piece. It is about a hairline wide and 4 and $1 / 4$ inches long. (Photo 47-23)

Also at this upper corner, there is a hairline vertical crack on the north wall of the east-west part of the hall. It is about 3 inches long. (Photo 47-24)

There is a hairline ceiling crack trending south from this corner. It is about 4 and $1 / 2$ irches long. (Photo 47-25)

There is a ceiling crack along the tape seam and the tape is peeling. It trends from the bathroan enclosure almost to the south wall of the hallway. At this time the crack measures 3 feet 6 and $1 / 2$ inches. It ranges fran a hairlire to about $1 / 16$ of an inch wide at the north end. (Photos 47-26 thru 47-28)

Now moving west down the hallway.
The mens restroom entrance is the east door on the north wall.
The ladies restroom entrance is the middle door on the north wall.
The west door on the north wall is to the baptistry.
There is a vertical crack at a seam above the upper right corner of the baptistry door. It ranges from a hairline to $1 / 32$ of an inch wide and is about 11 and 1/2 inches long. (Photos 47-29 and 47-30)

There is a door on the west wall to the outside.
There is a door at the west end of the south wall to the basement stairway.

Ladies Restroom
Tile floor.
Sheetrock walls and ceiling.
Entrance to the attic: in the ceiling.

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Mens Restroom
Tile floor.
Sheetrock walls and ceiling.
Classroom
Tile floor.
Sheetrock walls and oeiling.
Two windows on the south and one on the east wall.
There is an enclosure in the northwest corner for the basement stairway.
There is a vertical hairline paint crack in the southeast corner. It runs along most of the corner very faintly and is slightly larger about 6 feet above the floor. (Photo 47-31)

At the south end of the stairway enclosure, there is a slight crack in the ceiling north-south trending. It is fram a hairline to about $1 / 32$ of an inch wide and about 4 inches long. (Photo 47-32)

Photograph of the east wall. (Photo 47-33)
Photographs of the north wall. (Photos 47-34 and 47-35)
Photographs of the west wall. (Photos 47-35 and 47-36)
Photographs of the scuth wall. (Photos 47-37 and 47-38)
Photographs of the ceiling looking eastward and then westward. (Photos 47-39 and 47-40)

There is a slight paint crack in the northeast corner. (Photos 47-41)
Hallway - Continued
A photograph looking northward toward the sanctuary. (Photo 47-42)
Now two views of the hallway looking westward toward the door. (Photos 47-43 and 47-44)

## Baptistry

Tile floor.
Sheetrock walls and ceiling.

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A photograph of the east wall. (Photo 47-46)
A photograph of the west wall. (Photo 47-47)
There is a large fiberglass baptismal tub in the floor.
There is a siding panel on the north that opens to the sanctuary.
There is a vertical seam crack above the upper left corner of this panel. It runs 14 inches from the ceiling to the casing above the door and is from about a hairline to $1 / 32$ of an inch wide. (Photo 47-48)

The north wall, upper west end, has a nail pop. (Photo 47-49)
The ceiling slopes downward at the west end.
There is a very faint crack along the joint where the ceiling bends downward. (Photos 47-50 and 47-51)

There are slight cracks along the corner piece on the east wall of the stairway.

There is a faint vertical crack at the upper left end of the entrance on the south as you go back down the stairs. It is a hairline crack and is about 6 inches long. (Photo 47-52)

Where this enclosed area above the stairs meets the west wall, there is a slight horizontal crack. It is about 4 inches long and ranges fram about $1 / 16$ of an inch to a hairline wide. (Photo 47-53)

Where the flat ceiling and the sloped ceiling meet at the south wall, there is a hairline crack. (Photo 47-54)

At the flat ceiling, above the top stair, there is an east-west trending hairline crack that runs about 10 inches. (Photo 47-55)

Above the upper left of the door back to the hallway, there is a diagonal hairline crack about 2 inches long. (Photo 47-56)

There is a nail pop at the upper north end of the east wall of the stairway. (Photo 47-57)

Addition Basement Stairway
Sheetrock walls and ceiling.
Views of the stairway walls, looking south, east and west respectively. (Photos 47-58 thru 47-60)

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Now going down the stairs.
Above the second step from the bottom, on the east wall, there is a vertical crack at a tape joint. This is below the south wall of the stairway and is about $1 / 32$ of an inch wide. (Photo 47-61)

Addition Basement
South Room
Carpeted floor. White painted concrete east and west walls. Paneled north wall.
Tile ceiling.
One window each on the east and west walls, and two on the south wall.
The basement walls show signs of water intrusion.
There are dark stains in the lower southeast and southwest corners.
Photograph of the east wall. (Photo 47-62)
Photographs of the south wall. (Photos 47-63 and 47-64)
Photograph of the west wall. (Photo 47-65)
Photographs of the north wall. (Photos 47-66 and 47-67)
The ceiling has a duct, covered with paneling, at about the middle running north-south.

There is a stained ceiling tile near the east window on the south wall. (Photo 47-68)

Inspecting the south concrete wall. There is a hairline diagonal crack below the lower left corner of the east window. It is a very faint crack measuring about 7 and $1 / 2$ inches on the diagonal. (Photos 47-69 and 47-70)

There is another faint diagonal crack below the lower right corner. It is about 16 inches long. (Photos 47-71 and 47-72)

There is a slight diagonal crack below the lower left corner of the west window on the south wall. It is about 10 and $1 / 2$ inches long and is very faint. (Photos 47-73 and 47-74)

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There are also faint water stains on the wall and silt around the aluminum window sashes which indicates water intrusion.

There is a slight diagonal crack below the lower right corner of this window. It is about 11 inches long. (Photos 47-75 and 47-76)

There is a water stain in the lower southwest corner. (Photo 47-77)
Now at the west wall window.
Below the lower right corner, a hairline vertical crack runs down and into the fin. (Photos 47-78 and 47-79)

There is a water stain in the lower southeast corner. (Photo 47-80)
Series of photographs of the lower south and east walls showing water stains. (Photos 47-81 thru 47-85)

The east window has a hairline crack below the lower left corner. It is about 21 inches long and roughly vertical. (Photos 47-86 thru 47-91)

North Room
Carpeted floor.
Concrete block and concrete north wall.
paneled south wall.
Concrete east and west walls.
Tile ceiling.
This room houses a water heater and heating unit.
There is a concrete block enclosed area on the north wall which is below the baptismal tub.

There is a sump pump in the northeast corner.
There are windows on the east and west concrete walls.
There is a closet under the stairway in the southwest corner.
Photographs of the east wall. (Photos 47-92 and 47-93)
Photographs of the south wall. (Photos 47-94 and 47-95)
Photographs of the west wall. (Photos 47-96 and 47-97)
Photographs of the north wall. (Photos 47-93, 47-98 and 47-99)

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The ceiling has slight: stains around the sewer drainpipe. (Photo 47-100)

There are several stains in the north and west parts of the ceiling. (Photos 47-101 thru 47-103)

There are also some water stains just south of the entrance to the block room, near the duct in the ceiling. (Photo 47-104)

There are water stainss on the lower northwest corner walls. (Photos 47-105 and 47-106)

The lower south part of the west wall has water stains. (Photos 47-107 and 47-108)

Two views looking into the concrete block room. (Photos 47-109 and 47-110)

This is the area below the baptismal tub. A drainpipe comes through the ceiling in the northwest corner, and there is a water stain in the ceiling tile around the pipe. (Photo 47-11l)

There is a cracked block above a drainpipe that goes through the east wall. It is about $1 / 16$ of an inch wide. (Photo 47-112)

Now to the east wall window. There are two cracks below the lower right corner trending roughly vertically. The total length is about 29 inches including both cracks. The upper crack is about 14 inches long and the bottom crack is about 17 inches long. They are both hairline in width. (Photos 47-113 thru 47-117)

There is a slight separation of mortar and a slight crack that has been painted over in the northwest corner, where the block north wall meets the west concrete wall. The crack is located from about the 16 inch mark down to about the 20 and 1/2 mark. (Photos 47-118 and 47-119)

The cracks in the conerete walls of the addition basement will probably increase in size naturally over time with the shrinkage and expansion of the soil adjacent to the foundation.

Now moving back upstairs to the sanctuary to the stairway to the older part of the basement.

Old Basement Stairway.
A view looking down the stairway. (Photo 47-120)
Green painted concrete walls.

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There is severe water damage to the lower northeast corner of the stairway. (Photos 47-121 and 47-122)

The stairs seem to dip to the northeast.
There is a roughly diagonal crack about 13 inches long and no wider than a hairline on the lo'wer east wall of the stairway. (Photo 47-123)

Two photographs of the stairway east wall. (Photos 47-124 and 47-125)

## Old Basement

Kitchen
Concrete floor.
Concrete north and east walls.
Light green painted fiberboard south and west walls and ceiling.
There is a window on the north and a window on the east.
Photograph of the west wall. (Photo 47-126)
Photographs of the north wall. (Photos 47-127 and 47-128)
Photographs of the east wall. (Photos 47-129 thru 47-131)
Photographs of the south wall. (Photos 47-132 and 47-133)
Photographs of the ceiling. (Photos 47-134 and 47-135)
Series of photographs of the floor which is extensively cracked. (Photos 47-136 thru 47-140)

Note the water pooling and the sloping of the floor along the east wall.
Starting on the north wall.
The north wall has severe moisture damage, spalling concrete, cracks and peeling paint.

There is a vertical crack below the lower left end of the north window. It runs to the floor and has been partially patched. It ranges fram
about $1 / 8$ of an inch to a hairline wide. (Photos 47-141 and 47-142)
A hairline horizontal crack trends across the north wall. (Photos 47-143 thru 47-146)

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The east end of the north wall has spalling areas. (Photo 47-147 and 47-148)

Now inspecting the east wall.
There is a horizontal crack to the lower left of the east window. It is a hairline crack and is about 49 and $1 / 2$ inches long visible. It intersects a vertical crack to the lower left of that window which becomes roughly horizontal. (Photos 47-149 and 47-150)

That crack runs about 15 inches down and then diagonals down and to the north behind the stairway. It is just wider than a hairline. (Photos 47-151 thru 47-155)

There is severe water damage to the east wall. (Photos 47-149 thru 47-156)

The south wall has cracks at the tape joints.
There is a vertical tape crack at the east part of the south wall. (Photo 47-157)

Another joint is cracked behind the sink. (Photos 47-158 and 47-159)
The next joint to the west is also cracked. (Photo 47-160)
At the serving window, there is a tape joint crack above the upper left corner. It is about 11 and $1 / 2$ inches long. (Photo 47-161)

Below the right end of the duct, near the ceiling, on the south, there is a crack about 6 and $1 / 2$ inches long and about a hairline wide. (Photo 47-162)

There is also a crack above the right end of the duct on the south wall. It is about 2 and $1 / 2$ inches long. (Photo 47-163)

The taped joint to the upper right of this serving window is cracked very slightly. (Photo 47-164)

A floor crack trends east-west near the north wall and branches at the east end. There are also water stains in the floor. (Photos 47-165 thru 47-168)

There is a door on the west wall to a furnace room.

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A floor crack diagonais to the southeast from the north crack, from a point about 40 inches east of the refrigerator. It trends approximately 90 inches, and intersects another crack that runs due south to the cabinets. (Photos 47--169 thru 47-172)

This crack that runs south to the cabinets is just over 50 inches long. (Photos 47-173 thru 47-175)

These floor cracks average about $1 / 16$ of an inch wide not including spalls.

The crack which diagonals southeast has a spall that is about 2 inches wide. (Photo 47-176)

The southeast branch turns eastward and diagonals to the northeast corner. It measures roughly 77 inches on the diagonal. (Photos 47-177 thru 47-180)

This crack has a branch near the sump that trends southeast to the stove. It is approxinately 55 inches on the diagonal. It is about $1 / 2$ an inch at the widest. (Photos 47-181 thru 47-183)

The east part of the floor slumps eastward.
Most of these floor cracks appear to have been sealed and have recracked.

A crack trends east-west from about the middle of the floor, about 118 inches to the west door. This crack has been sealed and continues into the furnace roon. (Photos 47-184 thru 47-187)

A branch runs south to the cabinets just east of the window on the south wall. It is roughly 56 inches long and ranges from about $1 / 4$ to $1 / 16$ of an inch wide. (Photcs 47-188 thru 47-190)

It has a branch that diagonals to the southwest. This crack runs from the door on the south, in a northeastwardly direction, intersects the north-south trending crack and intersects the major crack near the middle of the floor. (Photos 47-191 thru 47-195)

A floor crack trends east-west at the south doorway. (Photo 47-196)
The floor cracks widths near the west and south doors range from about $1 / 32$ of an inch to akout $1 / 4$ of an inch at spalls.

There is a diagonal floor crack near the west end of the cabinet that runs northwest to the west door about 68 inches. It is about $1 / 8$ of an inch wide. (Photos 47-197 thru 47-199)

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The kitchen floor will. probably continue to crack; existing cracks will enlarge and sections of the floor heave because of hydraulic pressure.

## Furnace Room

Two photographs looking westward into the furnace room. (Photos 47-200 and 47-201)

The floor is concrete and has extensive cracks.
The west, south, east walls and most of the ceiling are unfinished.
The north wall is stucco and concrete and is scaling severely. (Photos 47-202, 47-203 and 47-206))

There is a window and a flue on the north wall.
The floor joists of the original church are visible. They are hardwood 2 by 6's on about 16 inch centers.

There is extensive cracking in the walls of the flue, and spalling and scaling on the lower sides of the flue. (Photas 47-204 thru 47-211 and 47-213 thru 47-219)

There are cracks below the north window. (Photos 47-206, 47-218 and 47-219)

A horizontal crack trends across the north wall, east of the flue. it is about $1 / 16$ of an inch wide. (Photo 47-212)

There is a hole in the northeast part of the ceiling where electrical wires come through. (Photo 47-209)

Series of photographs of the floor which has extensive cracks. (Photos 47-220 thru 47-228)

Some of those floor cracks appear to be avenues for water seepage from below.

The major floor crack is about $3 / 4$ of an inch wide not including spalled areas.

Dining Room
Green painted concrete floor.
Concrete south, east and west walls.
Wooden north wall.
Green painted fiberbcard ceiling.

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There are two windows on the west, one on the east, and two on the south wall. A window and a door on the south wall have been sealed.

There is extensive cracking in the walls and floor.
Photographs of the west wall. (Photos 47-229 and 47-230)
Photographs of the south wall. (Photos 47-231 and 47-232)
Photographs of the east wall. (Photos 47-233 and 47-234)
Photographs of the no:th wall. (Photos 47-235 and 47-236)
Four photographs of the ceiling. (Photos 47-237 thru 47-240)
There is a door on the west to a small stairway which leads outside. South of the door, there is extensive cracking and scaling in the west wall. These cracks are about hairline in width. There is also efflorescence on the wall to the lower left of the door. (Photos 47-241 thru 47-243)

There are two patched cracks to the upper right of the north window on the west wall. (Photos 47-244 and 47-245)

There are a couple of patches below this window, a crack to the lower left, and a spall to the lower right. (Photos 47-246 and 47-247)

There is severe water damage to the lower west wall below the window. (Photos 47-247 thru 47-249)

A photograph of the nest wall between the two windows. (Photo 47-250)
Photographs of the west wall below the south window. There are scaled areas below the window. (Photos 47-251 and 47-253)

The scaling and cracking will probably worsen with continued water intrusions.

Now on the south wall. There is scaling below the west window and to the east. (Photos 47-254 thru 47-258)

There is severe damace at the east end of the south wall.
A diagonal crack runs from the lower left corner of the east window on the south wall to the southeast corner. It is about $1 / 4$ of an inch at the widest. (Photos 47-259 and 47-260)

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A major crack runs from the lower left corner of this east window to the floor. It is about $1 / 2$ an inch wide with a spall up to 10 inches wide. This crack is an avenue for water intrusion. (Photos 47-261 thru 47-264 and 47-267)

The sill of this window is broken and there is a horizontal separation below the sill. (Photo 47-265)

Light can be seen through the crack below the window.
The south wall is scaling to the lower right of the east window. The scaled area looks like it is about ready to fall. (Photo 47-266)

The walls are scaling and water intrudes in the southeast corner. (Photos 47-268 thru 47-270)

Now inspecting the east wall.
There is severe scaling, cracking and water stains at the lower south end of the east wall. The cracks emanate from the lower right of the window. (Photos 47-2:71 thru 47-273 and 47-277)

These cracks range from hairline to about $1 / 8$ of an inch in width. Most have been patched and some are avenues for water penetration.

This area of the wall. appears that it is about ready to spall.
The upper south end of the east wall has several slight cracks and scaling areas. (Phot:os 47-274 thru 47-276)

From the lower left corner of this window, a crack trends diagonally a few inches and becomes horizontal and then trends to the north wall. It is about $1 / 32$ of an inch wide. (Photos 47-278 thru 47-283)

There is extensive scaling at the lower north end of the east wall. (Photos 47-282 and 47-283)

There are areas of water and silt on the floor along the east wall.
Now inspecting the floor.
Intersecting cracks run the length and width of the floor.
A branching floor crack trends from the north to the south wall at the west end of the room. (Photos 47-284 thru 47-288)

There is a diagonal floor crack in the southwest corner. (Photo 47-289)

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Another diagonal crack runs northeast from the southwest corner and connects with a crack that trends east-west along the south wall. (Photos 47-290 and 47-291)

Photographs looking eastward showing floor cracks along the south wall. (Photos 47-292, 47-29.3 and 47-298)

Views of branching cracks in the southwest part of the floor. (Photos 47-294 thru 47-297)

Now back to the north wall. Another floor crack trends morth-south from the second door from the west. This door leads into the furnace roam.

This crack trends soulh and connects with an east-west trending crack that trends the length of the floor at about the northern $1 / 3$ of the floor. (Photos 47-299 thru 47-301)

The north-south trending crack continues south to the cracked area of the floor at the south end. This crack has been patched.

Now back to the north end of the floor.
Series of photographs of the north end of the floor from the west to the east. (Photos 47-302 thru 47-305)

A north-south trending crack intersects an east-west trending crack that canes from the kitchen doorway. It diagonals southeastward and connects with another crack. (Photo 47-303)

There are water stains and intersecting cracks in the northeast corner of the floor. (Photos 47-304, 47-305 and 47-308)

Two steel posts have been installed along the east wall, north end, to help support the ceiling.

The ceiling sags along the east wall. (Photos 47-306 and 47-307)
A floor crack trends east-west along the length at about the northern third of the floor. (Photos 47-309 thru 47-313)

Several cracks intersect this crack, roughly perpendicular. (Photos 47-309 thru 47-313)

Another crack trends east-west at about the southern third of the floor. (Photo 47-314)

Series of photographs of the south part of the floor from west to east. (Photos 47-315 thru 47-319)

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Series of photographs of the east part of the floor. The east part of the floor is severely cracked, especially the southeast corner. (Photos 47-319 thru 47-322)

This floor is severely cracked and cracks will probably continue to develop and existing cracks enlarge due to hydraulic pressure from below.

Many of the cracks have been sealed and have recracked.
The widths of the floor cracks range fran about 1 inch at a spall to a hairline.

Now looking into the west door on the north wall.
Storage Room
Stucco west and north walls.
Plywood east and south walls and ceiling. Concrete floor.

There is extensive cracking in the floor and walls and the stucco walls are scaling.

A photograph looking northward into this room. (Photo 47-323)
Photographs of the west wall. (Photos 47-324 and 47-329 thru 47-331)
Photograph of the east wall. (Photo 47-325)
There are several cracks in the south part of the floor. (Photos 47-326 and 47-327)

Photograph of the north wall. (Photo 47-328)
There is a large separation in the lower northwest corner. (Photos 47-332 thru 47-334)

The major crack is on the north end of the west wall. It is a vertical crack trending from the ceiling down to a scaled area. (Photo 47-335)

There is a crack at the north end of the floor. (Photos 47-336 and 47-337)

Much of the floor cannot be seen.

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There is a roughly east-west. trending crack across about the middle of the floor. (Photo 47-338)

Now back into the diring room.
The middle door on the north wall leads to the furnace room.
Furnace Room - Contirued
There are several cracks in the south end of the floor. (Photos 47-339 thru 47-342)

Now at the stairway west of the dining room.
West Stairway
Wooden upper walls.
Concrete lower walls and floor.
Fiberboard ceiling.
Photograph of the stairway. The steps and walls are scaling severely. (Photo 47-343)

Photographs of the north wall. (Photos 47-344 and 47-348)
Photograph of the south wall. (Photo 47-345)
There is mildew above the south window. (Photo 47-346)
Paint is peeling on the upper east wall. (Photo 47-347)
There are floor cracks at the base of the stairway. Note that the lower ends of the door jambs are rotting. (Photo 47-349)

The lower north stair:way wall has several cracks; some have been patched. (Photo 47-350)

There is a large diagonal crack on the south stairway wall. It is about $3 / 8$ of an inch wide with spalls a couple of inches wide. (Photos 47-351 thru 47-353)

The east end of the south wall has a slight crack. (Photo 47-354)
There is a separation to the upper right of the east door. (Photo 47-355)

The lower east wall appears to be water damaged.

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There is a horizontal crack above the upper left corner of the east door. (Photo 47-356)

The tape joint is cracked above and below the right end of the south window. It runs to the ceiling above the window and about 12 inches below. The width ranges from about $1 / 8$ of an inch down to a hairline. (Photos 47-357 and 47-358)

This stairway door wass difficult to shut and a small strip of wood has been nailed on the left side. I had to push down hard on the handle to get it to shut.

## EXTERIOR INSPECTION

ID photographs of the front, north side. (Photos 47-359 and 47-360)
ID photographs of the chimney from the northwest. (Photos 47-361 and 47-362)

The chimney appears to have several loose bricks at the top.
ID photographs of the front and west sidewalks. (Photos 47-363 thru 47-365)

The front steps are extensively cracked on the north side. The steps have many hairline and slightly larger cracks, sane of which have been patched. The third riser from the bottom has cracks up to $3 / 4$ of an inch wide. (Photos 47-366 thru 47-370)

The top of the stoop has several cracks, some of which are patched. These cracks range fran about an inch wide at a spall down to about a hairline. (Photos 47-371 and 47-372)

The older original part of the church foundation has a stucco exterior painted gray with numerous cracks.

Where the steps attach to the foundation, there is a gap of about 3/8 of an inch. (Photo 47-373)

Now on the east face of these steps. The stucco exterior is extremely cracked. (Photos 47-373 and 47-374)

The widest crack on the east side of the steps is below the third tread from the bottom and is about $3 / 8$ of an inch wide. A spall at the bottom of that crack is about 1 and $1 / 8$ inches wide.

Photograph of the west end of the front foundation. There is a patched area to the right of an old coal chute. (Photo 47-375)

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There is a spalled area of stucco at the upper left of this area. It measures about 10 inches wide by about 1 foot high. That area will probably continue to spall. (Photo 47-376)

Now on the west facirg foundation. It has a diagonal crack about $1 / 32$ of an inch wide along the height of the wall. (Photo 47-377)

There are two cracks at the south end of this area; each are about $1 / 32$ of an inch wide. The bottom crack is about 17 inches long and the upper crack is about 30 inches long. (Photo 47-378)

On the north facing foundation, between the bulletin board and the downspout, there is a vertical crack. It is about $1 / 32$ of an inch wide and 43 inches long. It has a hairline branch that trends eastward about 10 and $1 / 2$ inches. (Photo 47-379)

Now at the west, front basement window. There appears to be a hairline crack below each lower corner of this window. (Photos 47-380 and 47-381)

There is also a hairline crack below about the middle of this window. (Photo 47-382)

The slab that the air conditioner rests on is separated from the foundation by over $1 / 8$ of an inch. (Photo 47-383)

Now at the east front basement window. It has a crack below the lower right corner that is about 6 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 47-384)

There is also a crack below the sill. It is a hairline crack and is about 5 inches long. (Photo 47-385)

There is a barely visible crack below the lower left corner. (Photo 47-386)

There is some scaling on the lower east end of the front foundation. (Photo 47-387)

There is a vertical crack just to the west of that scaled area. It is a hairline crack that runs the length of the wall, 3 feet 8 and $1 / 2$ inches long. (Photos 47-388 and 47-389)

ID photograph of the front from the northeast. (Photo 47-390)
A veiw of the front sidewalk looking west. It has several cracked sections. (Photo 47-391)

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Grass is growing through some of the cracks and there is a depressed section across from the bulletin board.

The major north-south crack in the depressed section is about 3 and $3 / 4$ of an inch wide. Other sidewalk cracks range down to about $1 / 32$ of an inch wide. (Photo 47--392)

ID photographs of the east side of the church. (Photos 47-393 and 47-394)

The northeast downspout dumps to a splash block, which is tilted to the north.

There is a vertical arack in the foundation at this corner. It runs the length of the wall and is about $1 / 32$ of an inch wide and is about 43 inches long. (Photo 47-395)

There are several other slight cracks in this part of the foundation. These are hairline cracks. (Photos 47-396 thru 47-399)

Water from the sump plump in the basement kitchen drains and pools at the northeast part of the church. The soil is very saturated in this area. (Photo 47-400)

Now at the north basement window. There is a crack below the lower right corner. (Photo 47-401)

The exterior paint of this church is peeling extensively.
South of the window, there is a slight vertical crack and a slight horizontal crack. The vertical crack is very faint at the top and can barley be seen through the paint. The horizontal crack runs southward, branches upward and becomes vertical. (Photos 47-402 and 47-403)

There is a slight vertical crack in the east foundation wall, just north of the concrete block alcove. (Photo 47-404)

There is a separation between the block and concrete foundations. It is about $3 / 4$ of an inch wide at the bottom. (Photo 47-405)

The north side of the block foundation has a stairstepping mortar crack that is about $3 / 8$ of an inch at the widest. (Photo 47-406)

ID photograph of this north facing concrete block portion of the foundation. (Photo 47-407)

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There is a very faint horizontal crack below the top mortar joint that runs from the stairstepping crack to the corner. (Photo 47-408)

Now on the east facing block foundation.
The lower north end has peeling paint and several mortar cracks. Crack widths in this area range from about $1 / 2$ an inch to a hairline. A couple of blocks ace cracked also, connecting the stairstepping mortar cracks. (Photos 47-4:09 thru 47-411)

Now on the south facing foundation of this alcove.
There is a major crack through block and mortac and there are several patched mortar joints on this wall. The crack is about $1 / 8$ of an inch wide and slightly wicler at spalls. It runs the height of the wall and stairsteps at the bottom. (Photos 47-412 and 47-413)

Now on the stucco portion of the east foundation south of the block alcove.

There are some faint hairline cracks between the alcove and the basement window to the south. (Photo 47-414)

ID photographs of this part of the foundation. (Photos 47-415 and 47-416)

At the lower left corner of this basement window, there is a crack. It is about $1 / 4$ of an inch wide. (Photo 47-417)

There are several hairline cracks in the stucco area south of this window. (Photos 47-418 thru 47-4221)

There are cracks in the stucco near this downspout. They range from about a hairline to $1 / 16$ of an inch in width. (Photo 47-422)

This downspout lacks a splash block and empties next to the foundation.
Now on the south facing wall of the original part of the church.
This is the area of major cracks found in the basement dining room.
There are several slight cracks east of the basement window. (Photos 47-423 and 47-424)

There is a horizontal separation below this window. It is about $1 / 4$ of an inch wide. (Photos 47-425 and 47-426)

Now at the concrete foundation of the addition.

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Where the drain for the baptismal tub exits the wall, there are two slight cracks in the mortar. They range fran about a hairline to $1 / 16$ of an inch wide. (Photo 47-427)

Now at the north basement window of the addition. There is a crack below the lower left corner that is just wider than a hairline. About 23 inches are visible. (Photo 47-428)

Now at the south basement window. There is a vertical hairline crack below the lower right corner that runs to the ground about 17 inches. (Photo 47-429)

The southeast downspcut lacks a splashpan and empties to the foundation along with the baptismal drainpipe. (Photo 47-430)

ID photographs of the church from the southeast. (Photos 47-431 and 47-432)

ID photograph of the south end of the church. (Photo 47-433)
There is a slight vertical crack below the lower right corner of the east basement window on the south end of the addition. It is a hairline crack about 9 inches long visible. (Photo 47-434)

There is a vertical hairline crack below the lower left corner. It has about 9 inches visible. (Photo 47-435)

Now at the west basement window.
Between the two windows, there is a slight vertical hairline crack that runs down about 7 inches to the fin. (Photo 47-436)

There is a very slight crack below the lower right corner of this west window. (Photo 47-4.37)

There is also a slight crack below the sill of this window. (Photo 47-438)

There is a hairline crack below the left end of the window that runs to the ground. (Photo 47-439)

ID photographs of the west side of the church. (Photos 47-440 thru 47-443)

The ground slopes northward toward the foundation between the steps of the addition and the original part of the church.

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Note that the roof of the main structure appears to sag somewhat and many of the shingles appear to be deteriorating.

ID photograph of the south side of the chimney. (Photo 47-444)
The southwest downspout lacks a splash block and empties next to the foundation. (Photo 47-445)

Now at the south basement window on the west side of the addition.
There is a hairline crack below the lower left corner; about 2 and $1 / 2$ inches are visible. (Photo 47-446)

This concrete slab ancl steps are separated from the foundation by about $3 / 8$ of an inch. (Phot.o 47-447)

The steps and slab tilt toward the foundation. (Photo 47-448)
There is a cracked sicling board to the lower right of the south door on the west side. It is about $1 / 16$ of an inch wide and it runs the length of the board. (Photo 47-449)

Now at the second basement window from the south.
There is a hairline crack below the lower right corner of this window, about 3 inches long. (Photo 47-450)

Now at the south facing wall of the original church near the gas meter.
There are vines growing in the corner.
There is a hairline crack in the sill of the south facing basement window. It is about ? inches in length. (Photo 47-451)

Below the watt meter, there is a vertical crack in the stucco exterior running from the top of the wall down to the ground. It is about $1 / 16$ of an inch wide. (Photos 47-452 and 47-453)

The downspout and splash block are misaligned at the southeast corner of the original church and there are plants growing here. It appears that water could flow back toward the foundation. (Photo 47-454)

Now on the west facing stucco foundation.
There are several hairline cracks in the stucco between the downspout and the basement window to the north. (Photos 47-455 thru 47-457)

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Now at the south basement window of the original church. There are several hairline craciks in the stucco north of this window. (Photo 47-458 thru 47-460)

Now at the north basement window. The foundation is spalling north of this window. (Photo 47-461)

This area has several hairline cracks in the stucco exterior. (Photos 47-462 thru 47-465)

Note the rusty gutter above the stairway leading to the old part of the basement. (Photo 47--466)

Now at the south facing wall of the stairway.
The foundation is spalling to the lower left of the window. The spall is about 4 inches wide. (Photo 47-467)

There are roots of a shrub or bush next to the foundation. Concrete has spalled off the foundation and is laying on the ground next to the foundation. (Photo 47-468)

This south facing window of the stairway has deteriorated caulk and paint. (Photo 47-469)

Now at the south side of the front steps. There is extensive cracking in the stucco exterior. The widest crack was about $3 / 4$ of an inch. (Photos 47-470 thru 47-473)

There are cracks in the sidewalk south of the front steps. (Photos 47-474 thru 47-476)

The door to the basement stairway is uneven at the bottom. (Photo 47-477)

A sidewalk that runs south of the church and has grass growing up through sane of the joints. There are heaved and cracked sections. (Photo 47-478)

Now on the west side of the front steps.
There is extensive cracking in the stucco and several patched areas. (Photos 47-479 thru 47-483)

This stucco exterior can be expected to continue to spall and crack due to weathering.

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General Comments
The original church iss very old. The exact date of construction is not known. The interior was remodeled and the addition was built around 1978.

The interior of the sanctuary has paneled walls and a tile ceiling and no cracks were observable.

The addition has sheetrock interior walls and ceilings and several cracks were found, mainly at seams above or below openings such as doors and windows. Cracks commonly develop at these seams and are usually caused by expansion and shrinkage of framing materials, and in the case of ceilings, effects of roof loading. Several of these cracks have potential to increase in length and probably will do so naturally over time. Widths of these cracks may vary with humidity changes.

The basement walls in the addition were found to have several slight cracks below corners of windows. These are probably the result of forces exerted by the shrinkage and swelling of the soil adjacent to the foundation and can be expected to enlarge over time. Silt and water stains on these walls indicate water seepage into the basement.

The original church basement has extremely cracked walls and floors. Sane of these cracks act as avenues for water intrusion into the basement. The wall cracks are probably the result of forces exerted by the ground adjacent to the foundation and settlement of the building. The floor cracks are likely the result of hyraulic pressure from below.

Several downspouts, the drainpipe of the sump in the basement kitchen, and the baptismal drain all empty close to the foundation. These will contribute to saturation of ground adjacent to the foundation which will exert additional forces on the foundation especially when the saturated ground freezes. This condition has probably contributed to the formation of existing cracks and will increase the likelihood of the formation of future cracks and the enlargenent of existing cracks.

The exterior stucco covering of the foundation has numerous cracks, mainly hairline in width. This type of cracking can be expected to continue with the aging and weathering of the stucco.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.

CDL/mp
Enclosure: 483 Photographs
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2- SUMMARY FORM
3- SKETCH OF STRUCTURE





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## PRE-BLAST SURVEY, RESIDENTIAL

## I. Basic Information

1. Name of Resident:_______Be Dykman
2. Date:_Octobsar 25, 1986___ Time:_____
3. Address: Anoret, Missouri 64722
4. Location: Lots 5, 6, and 7 Block 26 (East Main Street)
5. Telephone Number: (816) 925-3286
6. Dates of occupancy by current resident: Since 1968
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Not known
9. Date(s) of major remodeling or addicions:
(a) Put sheetrock up when bought
(b) $\qquad$
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Unknown
(b) interior walls: Sheetrock, plaster, paneling
(c) roof: Camposition shingles
(d) Eootings; foundations: Footing: unknown Foundation: concrete
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: George Pullman
(h) size and direction of any large windows:

None
III. Enviromental Information

1. Approximate elevation of area:

850 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (indicate depth*and use): No
5. Cisterns or sureace water storage utilized: (Indicare purpose and approximate volune).Yes, filled
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: Some on, some off Mr. Dykman wants to remove others
8. Description of general grading or landscaping in vicinity: generally Elat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Recedlag of docrs, windu'ns See survey
3. Noticeable sett lement: See survey
4. Foundation cracks: See survey
5. Exterior wall eracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, statis of deterioration, may exhlbit an umsual response co normal blasting activities.

See survey

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B P.O. BOX 1256

JOPLIN, MO 64802-1256 PH. (417) 624-0164

November 1, 1986
Report No. $87056-15$
P \& M Map Photo No. 62

Subject: Inspection of the R. H. Dykman Residence Amoret, Missouri 64722 October 25, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

## INTERIOR INSPECIION

Living Room
This is the northwest room of the house.

Carpeted floor.
Light yellow painted sheetrock walls.
Lightly textured sheetrock ceiling.
Windows on the northwest and west walls.

Front door on the north wall.
Large entrance on the east wall to a bedroom.
Entrance on south wall to the dining room.
Photograph of the west wall. (Photo 15-1)
Photographs of the north wall. (Photos 15-2 and 15-3)
Photographs of the east wall. (Photos 15-3 and 15-4)
Photographs of the scuth wall. (Photos 15-5 and 15-6)
Photographs of the ceiling. (Photos 15-7 thru 15-9)
There is a crack above the upper left end of the front door at a seam of sheetrock and is about $1 / 32$ of an inch wide. (Photo 15-10)

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There is also a seam crack above the upper right corner. It is a little wider than a hairline. (Photo 15-11)

The northwest window has a very slight crack, probably in the paint, above the upper right corner. It is 3 and $1 / 4$ inches long and a hairline wide. (Photo 15-12)

There is a slight paint crack in the corner north of the window. It is about 54 inches long. (Photos 15-13 and 15-14)

This corner also has a hairline crack, about 4 inches long near the ceiling. (Photo 15-15)

There is also a crack at the corner to the lower left of the window. It is 9 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 15-16)

There is a chip to the upper left of the window. (Photo 15-17)
Now at the west window. There is a vertical crack at a seam above the upper right corner. (Photo 15-18)

There is also a seam crack above the upper left corner. These are both about 1/32 of an inch wide. (Photo 15-19)

There is a slight vertical crack below the lower right corner. It is an 11 and $1 / 4$ inch long hairline crack and runs to the baseboard. (Photo 15-20)

There is a slight crack below the lower left corner of the window that runs to the floor. It cannot be measured due to the couch. (Photo 15-21)

The upper right corner of the inner west window has a taped area. (Photo 15-22)

There is a vertical seam crack above the upper right corner of the south entrance to the dining room. It is 12 and $1 / 2$ inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 15-23)

There is a slight diagonal crack about $1 / 32$ of an inch wide above the upper left corner. (Photo 15-24)

There are some cracks in the southeast corner, behind the stove pipe. They range in width from $1 / 4$ of an inch to a hairline. (Photos 15-24 thru 15-26)

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There is a vertical seam crack above the upper right corner of the east entrance. It is about: $1 / 32$ of an inch wide at the top. (Photo 15-27)

There is another vertical seam crack above the upper left corner. It is about $1 / 32$ of an inch wide. (Photo 15-28)

There is a slight separation at the upper left end of the east doorway. (Photos 15-29 and 15-30)

There are a couple of nail pops to the upper right of the doorway.
There are a couple of nail pops near the ceiling at the upper left end of the east wall. (Photo 15-31)

There is a slight crack along the right side of the north doorway. (Photos 15-32 thru 15-34)

Dining Room
Carpeted floor over wood.
Paneled walls.
Lightly textured sheetrock ceiling.
Door on the south to the bathroom.
Door on the east to a bedroom.
Large entrance to the kitchen on the west wall.
Photograph of the north wall. (Photo 15-35)
Photographs of the east wall. (Photos 15-36 and 15-37)
The doorway to the east bedroom has a piece of split trim at the header. (Photo 15-36)

The crown molding is not flush with the ceiling in the southeast corner. (Photo 15-37)

Photograph of the south wall. (Photo 15-38)
Photographs of the west wall. (Photos 15-39 and 15-40)
Two views of the ceiling. (Photos 15-41 and 15-42)
There is a loose piece of trim at the flue on the north wall. There is about a 3/4 inch gap at the top. (Photo 15-43)

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## South Bedroom

Carpeted floor.
Yellow painted walls cver wallpaper over plaster.
Textured plaster ceiling.
Closet enclosure in the northeast corner.
This ceiling is much righer than the other ceilings of the house.
The walls are extensively cracked.
Photographs of the north wall. (Photos 15-44 and 15-45)
Photographs of the east wall. (Photos 15-46 thru 15-49)
Photographs of the south wall. (Photos 15-50 and 15-51)
Photographs of the west wall. (Photos 15-52 thru 15-55)
Photographs of the cejling. (Photos 15-56 thru 15-60)
There are several craciks above the west door. They are about $1 / 16$ to a hairline wide. (Photos 15-61 and 15-62)

There is a crack in the ceiling to the upper right of the west door. It is about 16 and $1 / 4$ inches long and about a hairline wide. (Photo 15-63)

That ceiling crack hass a hairline perpendicular branch running to the north, which then curves eastward toward the closet enclosure. It runs 13 and $1 / 2$ inches north and then 22 and $1 / 4$ inches east toward the closet. (Photos 15-64 and 15-65)

Another hairline crack at the north end of the ceiling runs east-west to the closet enclosure. (Photo 15-66)

A ceiling crack runs parallel to the west wall of the closet enclosure. It is from about $1 / 8$ of an inch to a hairline wide. (Photo 15-67)

Most of the other cei.ling cracks are hairline in width.
There is a diagonal crack in the northwest corner of the ceiling. (Photo 15-68)

There are several cracks above the north door. These cracks range from $1 / 4$ of an inch to a hairline wide. (Photos $15-69$ thru 15-73)

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The upper north end of the west wall has a horizontal crack close to the ceiling. It trends 54 and $1 / 2$ inches from the north wall, and then goes into the west wall-ceiling intersection and then comes back down at the south part of the west wall. (Photo 15-74)

There is a crack along the northwest corner. (Photos 15-75 and 15-76)
There is a crack along the southwest corner. (Photos 15-77 and 15-78)
There are slight ceiling cracks in the southwest corner. (Photo 15-80)
There are several hairline cracks above the south window. (Photos 15-81 and 15-82)

There is a large separation in the southeast corner. (Photos $15-83$ and 15-85)

There is a bulging crack below the lower right corner of the south window. (Photo 15-84)

There is a crack below the lower left corner of the window that runs to the baseboard hidden behind the bed.

There are several hairline cracks to the lower left of the south window. (Photo 15-85)

There are several hairline cracks above the right end of the east window. (Photos 15-86 and 15-87)

A horizontal crack cornects the two cracks above the upper right of the east window and runs t.o the south wall. (Photos 15-87 and 15-88)

Above the upper left of the east window, there are two cracks. One is a vertical, $1 / 32$ inch wide crack and the other is hairline and stairsteps northward about 41 inches on the diagonal. (Photos 15-89 and 15-90)

There is a crack below the lower right corner of the east window. It is 8 inches long to the baseboard and about $1 / 32$ of an inch wide. (Photo 15-91)

Another crack stairsteps to the south from the lower right corner of the window. It is 19 and $1 / 4$ inches long on the diagonal and $1 / 32$ of an inch wide. (Photo 15--92)

To the lower left of the window, there are hairline pattern cracks.
A vertical crack below the lower left corner of the window, is 7 and $1 / 4$ inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 15-93)

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A hairline vertical crack, left of the window, is 49 and $3 / 4$ inches long. (Photo 15-94)

There is a 14 and $1 / 2$ inch long hairline crack left of the east window. (Photo 15-95)

There is a 61 inch long hairline crack left of the east window. (Photos 15-96 and 15-97)

A horizontal hairline branch of the crack runs about 12 inches southward. (Photo 15-98)

Back to the west wall. There is a vertical crack to the right of the door. This connects with the horizontal crack at the top of the wall and runs down behind a dresser.

There is a larger separation to the right of the light switch. (Photo 15-99)

North Bedroom
Carpeted floor.
Yellow painted sheetrock walls.
Lightly textured sheetrock ceiling.
Closet enclosure in the southwest corner.
Windows on the north and northeast walls.
Photograph of the north wall. (Photo 15-100)
Photographs of the east wall. (Photos 15-101 and 15-102)
Photographs of the south wall. (Photos 15-103 and 15-104)
Photographs of the west wall. (Photos 15-104 and 15-105)
Photographs of the ceiling. (Photos 15-106 and 15-108)
There are cracks in the northeast corner on either side of the window. Three photographs from top to bottom of the crack along the right side. This crack ranges in width from $1 / 8$ of an inch at the bottom to a hairline at the top. (Photos 15-109 thru 15-111)

The crack along the left side is not nearly as severe and looks to be possibly in the wallpaper or paint. It runs from the floor to the ceiling, but it is very faint at the top. (Photos 15-112 thru 15-114)

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Below the lower left corner of this window, there is an 8 and $1 / 2$ inch long hairline crack. (Photo 15-114)

Paint is cracking slightly along the right side of the north window. The crack runs down about 52 inches but I cannot get into a position to show the lower part. (Photos 15-115 and 15-116)

There is a diagonal crack above the upper left corner. The width ranges from a hairline to about $1 / 32$ of an inch. It is about 10 and $1 / 4$ inches long. (Photo 15-117)

There is a 3 and $1 / 4$ inch, hairline crack below the lower left of the north window. (Photo 15-118)

There is a vertical seam crack above the upper right of the west entrance to the living room. It is about 8 inches long and just wider than a hairline. (Photos 15-119 and 15-120)

Above the upper left corner, a vertical seam crack runs to the ceiling. It is just wider than a hairline. (Photo 15-121)

Along the right side of the south door, there is a roughly vertical paint crack. (Photo 15-122)

There is also paint cracking at the upper left side. (Photo 15-123)
Now to the east window.
There is a vertical seam crack above the upper right corner. It is just wider than a hairline. (Photo 15-124)

There are two vertical cracks above the upper left end. They range in width from about $1 / 32$ of an inch to a hairline. (Photo 15-125)

There is a larger seam separation to the lower right of the east window. It is about $1 / 8$ of an inch wide. (Photo 15-126)

A slight seam crack runs to the baseboard below the lower left corner. (Photo 15-127)

## Kitchen

Lightly textured ceiling.
Paneled walls.
Tile cabinet area walls.
Photograph of the south wall. (Photo 15-128)

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Photograph of the north wall. (Photo 15-129)
Photographs of the west wall. (Photos 15-130 and 15-131)
Photographs of the ceiling. (Photos 15-132 and 15-133)
The tile west wall, south of the window, has a taped area and a couple of cracked tiles. (Photos 15-134 and 15-135)

These are four by four inch tiles.
A photograph of the ncrth part of the west tile wall. (Photo 15-136)
The north tile wall has three tiles missing. (Photo 15-137)
Bathroom
Carpeted floor.
Tile lower walls.
Plaster upper walls arid ceiling under paper that has been painted white.
Window on the south wall.
Photograph of the south wall. (Photo 15-138)
Photographs of the weist wall. (Photos 15-139 and 15-140)
Photographs of the nor:th wall. (Photos 15-141 thru 15-144)
Photographs of the east wall. (Photos 15-145 thru 15-147)
The ceiling has several areas where the textured plaster has fallen off. (Photos 15-148 thru 15-150)

The north wall, left of the door, has five tiles missing.
There is a tear in the upper northwest corner. (Photo 15-151)
There are slight paper cracks above the upper left end of the door.
(Photos 15-152 and 15-153)
A crack in the northeast corner comes down 46 inches from the ceiling. (Photos 15-154 and 15-155)

There is a crack in the ceiling at the northeast corner. (Photo 15-156)

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There is a slight paper crack at the upper right part of the east wall. (Photo 15-157)

There is a patched area on the east wall above the bathtub. (Photo 15-158)

There appears to be moisture damage in the southwest corner above the window. (Photos 15-159 and 15-160)

The southwest corner has a slight vertical separation. (Photo 15-161)
There is a slight, roughly north-south trending crack in the ceiling near the window. (Photo 15-162)

There is a slight vertical crack to the upper right of the door. (Photo 15-163)

Porch
Carpeted floor.
Pink painted sheetrock ceiling.
Beige painted sheetrock north and south walls.
Wooden closets on the west and east walls.

There is a small window and a door on the south wall.
Photographs of the south wall. (Photos 15-164 and 15-165)
Photograph of the west wall. (Photo 15-166)
Photographs of the north wall. (Photos 15-167 thru 15-169)
Photographs of the east wall. (Photos 15-170 and 15-171)
Photographs of the ceiling. (Photos 15-172 and 15-173)
The tape joints are visible in the ceiling and on the south wall.
There is a seam crack above the upper left corner of the south window. It is 5 and $3 / 4$ inches long and about a hairline in width. (Photo 15-174)

There is about a 13 inch long seam crack on the south wall below the fuse box. (Photo 15-175)

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## EXTERIOR INSPECTION

ID photograph of the firont, north side. (Photo 15-176)
The front steps and sidewalk are severely cracked and heaved. (Photos 15-177 thru 15-179)

ID photograph of the east side of the house. (Photo 15-180)
ID photograph of the south side of the house. (Photo 15-181)
ID photographs of the west side of the house. (Photos 15-182 and 15-183)

The house has a concrete foundation.
Now on the front porch.
There are cracking and deteriorating inner caulk seals at the front window. (Photos 15-184 and 15-185)

The northwest window lacks an upper storm window. (Photo 15-186)
The inner northwest window has deteriorating caulk seals. (Photos 15-186 thru 15-189)

Note the condition of the northwest porch support, it is sinking at the north end. (Photo l5-190)

A photograph of the foundation between the two front steps. (Photo 15-191)

The front sidewalk is extensively cracked. The cracks range from about 2 and $1 / 4$ inches to $1 / 8$ of an inch wide. (Photos 15-192 thru 15-196)

The sidewalk cracks can be expected to increase in size due to frost action.

Now inspecting the foundation starting at the northwest corner and moving southward.

There is a partially sealed diagonal crack in the foundation at the northwest corner. It measured about 1 and $1 / 2$ inches at the widest. (Photos 15-197 thru 15-199)

There is a vertical crack in the west side foundation, below the north window. It is about $1 / 8$ of an inch wide. (Photo 15-200)

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Note that the storm window is missing here and the inner window has deteriorating caulk seals. (Photo 15-201)

There are two cracks in the foundation at the vent. The north crack is about $1 / 4$ of an inch wide and the other is about $1 / 8$ of an inch to a hairline wide. (Photos 15-202 and 15-203)

There is a patched foundation crack below the south window on the west side. (Photo 15-204)

Note that this inner window seems unsquare in the space. (Photo 15-205)
There is another crack in the foundation to the lower right of this window. It has a 5 and $1 / 2$ inch gap at the bottom and a $1 / 4$ inch gap at the top. (Photo 15-206)

A photograph of the north facing foundation of the back porch. (Photo 15-207)

A downspout just north of the porch, dumps to the foundation. This condition will likely enlarge existing foundation cracks and help create new cracks.

There are cracks in the foundation on the west side of the back porch. The two vertical cracks are about $1 / 4$ of an inch wide and there is a spall at the south end of the porch. (Photos 15-208 thru 15-210)

ID photograph of the concrete slab at the south end of the house. (Photo 15-211)

Note the buckling and deteriorating lower siding boards at the southwest corner. (Photo 15-212)

There is no downspout at the southwest corner and water dumps directly to the concrete slab. This condition will contribute to the formation of cracks in the slab and the foundation.

There is a crack through this slab south of the cistern opening. It ranges in width from about $1 / 8$ of an inch to a hairline. (Photo 15-213)

The cistern is full of debris.
Another crack in the slab trends east-west 21 and $1 / 2$ inches and is about 1/16 of an inch wide. (Photo 15-214)

It intersects a north-south crack which runs the length of the slab and is about $1 / 8$ of an inch wide. (Photo 15-215)

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There is separation between the slab and the house. (Photo 15-216)
There is deteriorating caulk at the small bathroom window.
The wooden back door window has been painted and taped over. (Photo 15-217)

The sidewalk slab is separated from the patio slab. (Photo 15-218)
The sidewalk has a crack across the next slab to the south. (Photo 15-219)

Now at the east end of the south porch. The gutter lacks a downspout and discharges to the foundation. This condition will increase the size of foundation cracks and help create new cracks.

Note the rotting fascia and the bird's nest at the southeast corner of the bathroom enclosure. (Photo 15-220)

This part of the house is an addition to the original house.
The east window on the south side has severely deteriorated caulk. (Photos 15-221 thru 15-223)

There is a crack in the foundation at the southeast corner. It is from about $1 / 8$ of an inch to a hairline wide. (Photo 14-224)

In the original foundation, there appears to be too much aggregate and there are areas of sli.ght flaws.

The south window on the east side has severely deteriorated paint and caulk, and the upper storm glass is gone. (Photos 15-225 and 15-226)

There is a vertical foundation crack to the lower right of this window. Including spalling, it: ranges from about 1 inch to $1 / 2$ an inch in width. (Photo 15-227)

Now at the north window on the east side.

The storm window glass is missing and there is severe deterioration of the caulk at the inner panes. (Photos 15-228 and 15-229)

ID photograph of the areaway between the two windows. (Photo 15-230)
There is a crack in the foundation between the north window and the front porch. It ranges from about $5 / 8$ of an inch at the widest to about 1/4 of an inch. (Photo 15-231)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company Report No. 87056-15
P \& M Map Photo No. 62:
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The northeast facing window has a missing storm glass and the caulk is cracking. (Photo 15-232)

The south window on the east side has a slight cracked pane at the left side. It is 2 and $1 / 83$ inches long. (Photo 15-233)

ID photograph of the north side of the chimney. (Photo 15-234)
A couple of cracks are visible on the north side.
ID photograph of the east side of the chimney. (Photo 15-235)
Several cracks can be seen on the east side.
ID photograph of the south side of the chimney. (Photo 15-236)
Several cracks can be seen on the south side.
ID photograph of the west side of the chimney. (Photo 15-237)
Cracks are also visible on the west side.
The northwest corner of the fascia has a hole with wire mesh covering the hole. (Photo 15-238)

Garage
The garage is located south and east of the house.
ID photograph of the north side. (Photo 15-239)
This appears to be a very old wooden structure.
It has peeling paint and rotting lower siding.
ID photograph of the west side. (Photo 15-240)
The west side appears to lean to the east at the north end. (Photo 15-241)

The roof has a swag.
ID photograph of the south end. (Photo 15-242)
ID photographs of the east side. (Photos 15-243 and 15-244)
Note on the east side how this tree has grown into the roof. (Photo 15-245)

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The post is split at the southeast corner. (Photo 15-246)
Garage - Interior Inspection
Gravel floor.
Unfinished walls and ceiling.
The garage frame is constructed of hardwood two by fours and two by sixes.

Photograph of the north wall of the garage. (Photo 15-247)
Photograph of the east wall. (Photo 15-248)
The west wall is mostly covered. (Photo 15-249)
General Corments
The original plaster walls and ceiling in the east bedroon are extensively cracked. Sane of these cracks which have the potential to increase in length can be expected to do so naturally over a period of time. The widths of all the cracks can vary with changes in humidity.

Most of the interior walls were replaced with sheetrock and some walls are paneled. The sear cracks in the sheetrock are typical in this type of construction. These seam cracks, where possible, will probably lengthen naturally in time, and widths will vary over time as the material reacts to changes in humidity.

Existing cracks in the foundation indicate that sane settlement has taken place. These existing cracks are likely to be aggravated by frost action in saturated ground adjacent to the foundation caused by improper drainage of rainwater from the roof. Correcting and completing the gutter system will decrease the probability of further foundation damage.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


CDL/mp
Enclosure: 249 Photographs

Christopher D. Landoll Technical Associate

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 62

2- SUMMARY FORM
3- SKETCH OF STRUCTURE

## MAIN ST.



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## PLLi-BLASI SURVEY, RESIDENTLAL

I. BasLc Lnformation

1. Naut of ResLdent: Glessner Nelson
2. Date: November: 20, 1987 ..... TLue: 3:00PM
3. Address: Route 1 , Amoret, Missouri ..... 64722
4. Location: Lots 8-1.3, Block 2
5. Telephone Number: ..... (816) 925-3468
6. Dates of occupancy by current resident: ..... 1970 - Present
7. Dates of any temporary or permanent abandomment:

$\qquad$
$\qquad$
[1. InEormation Concerning Bulidings
(repeat Eor addletonal buildings)

1. Date of orighal construction: Not known
2. Dace(s) of major remodeling or additions:
(a) Bathroom added 1970
(b) Remodeled interior 1970
(c)
3. Construction of building:
(a) Eraning (Jolsts, rafters, and stud walls): Not known by resident
(b) interior walls: Paneling over sheetrock
(c) rook: Composition shingles
(d) Eootings; Eoundatlons: Concrete, addition has original part, unsure
(e) basement walls (Indicate how keyed to Eooting of Eloor):
Not applicable
(E) basement Elocr (keyways, chlckness):
Not applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromaental Information
4. Approximate elevacion of area:
850 feet
5. Type of soll in area: Silty clay loam
6. Type of subgrade drainage at base of foundation: Gravel base
7. Water wells utili:ed (Indicace depth'and use):No
8. Cisterns or surtace water storage utilized: (Lndicate purpose and approximate volume). No
9. Source of water, Lif not Lacluded above: City water
10. Eve troughs or any other exterior dralnage Eeatures: No
11. Descripcion of general grading or landscaping in vicinity:
Generally flat
IV. Any notable existing deterioration or damage
12. Cracks in interlor walls: See survey
13. Receding of dours, wLudu'ws: See survey
14. Noticeable settlement: See survey
15. Eoundation cracks: See survey
16. Exterlor wall cracks (brick veneer): Not applicable
17. Sidewalks, steps, driveway pavement: See survey
18. Basement leaks: Not applicable
V. Plan view of residence, well, outbulldings see survey
VI. Elevation views or photographs of walls See survey
19. North See survey
20. South See survey
21. East See survey
22. West See survey
VII. Comments or supplementary drawlogs
VII. Discussion or specific coments concerning any unusual features, construction techniques, or stacus of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may extalbit an unusual response to normal blasting activities.

See survey

White- Industrial Seismology,
2431 RANGELINE SUITE A-B
P.O. BOX 1256

## Inc. $\sqrt{\sqrt{h}}$

 JOPLIN, MO 64802-1256PH. (417) 624-0164

December 1, 1986
Report No. 87056-89
P \& M Map Photo No. 61
\(\left.\begin{array}{ll}Subject: \& Inspection of the Glessner Nel son Residence <br>
\& Route 1 <br>
\& Amoret, Missouri 64722 <br>

\& November 20, 1986\end{array}\right\}\)\begin{tabular}{l}

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
|  |
|  |
| P. O. Box 8 | <br>

Amsterdam, Missouri 64723
\end{tabular}

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the front, north side of the house. (Photo 89-1)
This house has a yellow painted masonite type exterior siding and a concrete foundation.

Starting at the northwest corner of the foundation. There is a large vertical crack which has been patched and has recracked. It is about 10 and $1 / 2$ inches long and from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 89-2)

The wooden front porch floor has some deteriorating areas. (Photos 89-3 thru 89-5)

East of the porch, there is a separation of about $1 / 4$ of an inch at a construction joint in the foundation. (Photo 89-6)

ID photograph of the front sidewalk. (Photo 89-7)
The north slab of the sidewalk is cracked. One crack trends north-south all the way across the north slab and is about $1 / 8$ of an inch wide. There is a diagonal crack that is about $1 / 8$ of an inch wide and an eastwest trending crack that is about $1 / 4$ of an inch wide.

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ID photographs of the front steps near the roadway. The middle riser is deteriorating and there is a crack at the left and right rails. Both are separated by about $3 / 4$ of an inch. The entire middle step is deteriorated and is loose. (Photos 89-8 and 89-10)

The front step to the porch and the sidewalk slab are cracked apart. The width of the crack ranges fram about $3 / 4$ to $1 / 8$ of an inch. (Photo 89-9)

The front sidewalk is spalling at the expansion joints. (Photo 89-11)
ID photographs of the west side of the house. (Photos 89-12 thru 89-14)
ID photograph of the north end of the west addition. (Photo 89-15)
Now inspecting the west foundation. There is a large vertical crack in the foundation below the north window. It measures 9 and $3 / 4$ inches vertically and about $3 / 16$ of an inch wide. (Photo 89-16)

Now at the west addition.
There is a vertical crack and several smaller cracks in the foundation to the lower left of the small middle window. They range from about $1 / 8$ of an inch to a hairline in width. (Photo 89-17)

The lower siding board on this addition has deteriorating paint.
There is a crack in the foundation located about 5 feet from the south end. It is about 7 and $3 / 4$ inches long and from $1 / 16$ of an inch to a hairline wide. (Phcto 89-18)

ID photographs of the south side of the house. (Photos 89-19 and 89-20)
Most of the south foundation cannot be seen.
There is deteriorating caulk and paint at the west window. (Photo 89-21)

The north side of the cellar slopes toward the house.
In this area, the lower siding board is deteriorating. The corner trim is missing and the sheathing is torn, exposing wood at the lower southeast corner of the addition. (Photo 89-22)

There is a foundation separation, measuring 3 and $1 / 2$ inches vertically in the corner where the addition meets the house. It is about $3 / 16$ of an inch wide. (Photo 89-23)

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The kitchen window hais deteriorating caulk joints and paint. (Photo 89-24)

There is about a 4 inch, roughly vertical, foundation crack below this window. It is about 3/16 of an inch wide. (Photo 89-25)

To the lower left of the east window, there is a vertical crack in the foundation that measures about 3 and $1 / 4$ inches long and about $1 / 16$ of an inch wide. (Photo 89-26)

There is a crack in the foundation below about the middle of this window. It is about 1 and $3 / 4$ inches long and about $3 / 4$ of an inch wide. (Photo 89-27)

The concrete patio has an east-west trending crack across it with a branch running north to the wall. The east-west crack goes through the slab and there has been some shifting. At a spall, it is about 2 inches wide. The main part of the crack is about $1 / 8$ of an inch wide. (Photos 89-28 thru 89-30)

The patio south of the crack is heaved by about $1 / 4$ of an inch higher than the north part, and the north part has shifted westward by about $1 / 4$ of an inch.

The north crack runs about 64 inches to the north wall. The large spall is about 4 and $1 / 2$ inches wide, and the main crack is about $1 / 8$ of an inch wide, but has much wider spalled areas. (Photo 89-30)

The patio also has a diagonal crack across the southwest corner. It measures about 86 inches long and about $1 / 16$ of an inch in width. The inscription on this patio gives 1975 as the date of construction. (Photos 89-31 and 89-32)

ID photographs of the east side of the house. (Photos 89-33 and 89-34)
The patio slab has a chip at the botton of its northeast corner. It measures about 3 inches long and about $3 / 16$ of an inch wide. (Photo 89-35)

Below the left end of the air conditioner, there is a vertical crack or separation in the foundation. It measures 2 and $1 / 4$ inches long and about $1 / 8$ of an inch wide. (Photo 89-36)

Oellar
ID photograph of the front, east side of the cellar. (Photo 89-37)

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To the upper right of the doorway, there is a 7 and $1 / 2$ inch long crack. It is about $1 / 16$ of an inch wide. (Photo 89-38)

North of the door, the concrete has a patched crack that is about 20 inches long. (Photo 39-39)

ID photograph of the north side of the cellar entrance. The exterior concrete has same slight crazing cracks. (Photo 89-40)

ID photograph of the south outer wall of the stairway. It also has several slight cracks. (Photo 89-41)

There is a patched diagonal crack at the south end of the front concrete piece. (Photo 89-42)

ID photograph of the cellar from the south. (Photo 89-43)
ID photograph of the west end. (Photo 89-44)
ID photographs of the north side. The top has slight crazing cracks near the vent and the rocks on the north side appear to be loose. (Photos 89-45 and 89-46)

ID photograph of the inside of the south stairway wall. The cellar is partially full of water at this time and a horizontal crack is visible just above the water line on the south stairway wall. (Photo 89-47)

ID photograph of the inside of the north stairway wall. (Photo 89-48)
Photographs looking westward into the cellar. The cellar door is severely deteriorated. A horizontal crack is visible on the west wall of the cellar. (Photos 89-49 and 89-50)

There is a small metal shed located south of the house.

## Shed

ID photograph from the northeast. (Photo 89-51)
The north window does not have a glass pane.
ID photograph from the southwest. The shed has some bent roofing. (Photo 89-52)

Neither the south nor the west windows have glass panes.
This shed has unfinished walls and ceiling and a plywood floor.

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The north end is full of stored material.
It has a railroad tie, concrete block, and stone foundation, most of which cannot be seen.

A photograph of the visible portion of the foundation located at the north end of the east side. (Photo 89-53)

INTERIOR INSPECTION
Living Room
This is the northeast room.
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Windows on the north and east walls.
The south wall has an entrance to the kitchen.
The west wall has an entrance to a bedroom.
Photograph of the east: wall. (Photo 89-54)
Photographs of the south wall. (Photos 89-55 and 89-56)
Photographs of the north wall. (Photos 89-57 and 89-58)
Photograph of the west: wall. (Photo 89-59)
The southeast part of the ceiling has an area of water damage. (Photo 89-60)

Mrs. Nelson indicated that she has had some roof problems in the past which have since been corrected.

North Bedroom
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Windows on the west and north walls. Door on the south to the hallway. Door on the west to a restroom.

Photograph of the west wall. (Photo 89-61)

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Photographs of the north wall. (Photos 89-62 and 89-63)
Photographs of the east wall. (Photos 89-63 and 89-64)
Photographs of the south wall. (Photos 89-64 and 89-65)
Restroam
Vinyl floor.
Formica covered lower walls. Paneled upper walls.
Textured plaster ceiling.
Small window on the north wall.
A photograph looking into the restroom. (Photo 89-66)
Hallway
A photograph looking southward down the hallway. (Photo 89-67)
Carpeted floor.
Paneled walls. Sheetrock ceiling.

Door to the bathroom on the west wall. Door to a bedroom on the south wall. Entrance to the kitchen on the east wall.

Bathroom
Vinyl floor.
Formica covered lower walls.
Paneled upper walls.
Textured plaster ceiling.
Window on the west wall.
Photograph of the west wall. (Photo 89-68)
Photograph of the south wall. (Photo 89-69)
The formica wall covering is deteriorating above the bathtub. (Photos 89-68 and 89-70)

The ceiling has a peeling tape joint north of the light fixture. (Photos 89-71 and 89-73)

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A ceiling crack trencls to the southeast from the vent. Measured from end to end, it is abcut 26 inches long and ranges fram about $1 / 16$ of an inch to a hariline wide. (Fhotos 89-72 and 89-74)

Hallway - Continued
Back into the hallway. The ceiling has some stains, mainly at the south part. The south part of the ceiling al so has an L-shaped crack at a tape joint that measured about 18 inches from end to end. (Photos 89-75 and 89-76)

There is another slight crack in the ceiling near the southwest corner of the door. It is about 17 inches long and trends north-south.

There is a peeling tape joint between the west wall and the southwest corner of the ceiling door.

This ceiling appears to have been wall papered and then painted over. There is a loose piece of trim to the upper right of the door on the east wall to the kitchen. There is also a slight crack in the southeast corner of the ceiling. It is about 4 inches long and from about hariline to $1 / 32$ of an inch wide. (Photo 89-77)

South Bedroom

Carpeted floor. Paneled walls. Textured plaster ceil.ing.

Windows on the south and west walls. Closet enclosure in southwest corner.

Photograph of the south wall. (Photo 89-78)
Photographs of the west wall. (Photos 89-79 and 89-80)
Photograph of the nor:th wall. (Photo 89-81)
Photographs of the east wall. (Photos 89-82 and 89-83)
The ceiling is severely water damaged. Mrs. Nelson indicated that this happened during the recent heavy rains and that the roof has since been repaired.

Photographs of the ceiling. (Photos 89-84 thru 89-88)

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Tape joints are visible in the ceiling. A seam is cracked is at about the middle of the ceiling. It starts as an L-shaped crack from the corner of the closet enclosure and connects with the major area of damage near the east wall. (Photos 89-89 and 89-90)

## Kitchen/Dining Room

Textured plaster ceiling.
Carpeted and vinyl floor.
Paneled walls expect the upper south and west walls which are wall papered. Formica covered cabinet area walls.

Two windows on the south wall. Entrance to the living room on the north wall. Entrance to the utility room on the east wall.

Photographs of the nor:th wall. (Photos 89-91 and 89-92)
Photographs of the weist wall. (Photos 89-93 and 89-94)
Photograph of the east: wall. (Photo 89-95)
Photographs of the south wall. (Photos 89-96 and 89-97)
Tape joints are visible in the textured sheetrock ceiling.
Some of the wallpaper is loose or folded at the upper south and west walls. (Photos 89-94, 89-96, 89-97, and 89-109)

A piece of paneling is loose above the east doorway. (Photo 89-98)

## Utility Room

Vinyl floor.
Paneled walls.
Textured plaster ceiling.
Window on the east wall, and a door on the south wall.
Closet enclosure in the southeast corner.
Photograph of the north wall. (Photo 89-99)
Photograph of the east wall. (Photo 89-100)
Photographs of the south wall. (Photos 89-101 and 89-102)
Photographs of the west wall. (Photos 89-103 and 89-104)

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The ceiling has stains and a sagging section of sheetrock at the north end of the roam. A tape joint is peeling also. (Photos 89-105 and 89-106)

There is severe water damage to the ceiling in the northwest corner. (Photo 89-107)

The ceiling has a water stain around the flue. (Photo 89-108)
There is a loose piece of crown molding at the north wall, just east of the large stain.

General Comments
This house lacks a gutter system.
Several cracks were found in the concrete foundation. The lower siding board is deteriorating in several areas.

The interior damages were mainly confined to the ceilings. The south bedroom, bathroom, and utility roan have severely damaged ceilings.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate
$\mathrm{CDL} / \mathrm{mp}$
Enclosure: 109 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 61
2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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> PRUB-BLAST SURVEY, RESIDEN'IAL
I. Baslc InEotmation

1. Name of Resident: Virgil Bowers
2. Date: November 22, 1986 'l'une: 9:55AM
3. Address: Route 1 , Box 315A
4. Locacion: Lots 1-6, Block 27
5. Telephone Number: (816) 925-3421
6. Dates oE occupancy by current resident: $\qquad$ Since 1974 or 1975
7. Dates of any tempotaty or permanent abandonnent: $\qquad$
IL. LnEormation Concerning; Bulldings
(repeat Eot addltional Uullulugs)
8. Date of orighal construction: Not known
9. Date(s) of major remodeling or addltions:
(a)_Remodeling_by Bowers, New_ roof
(b) In process of remodeling bathroom
(c) Garage built by Bowers
10. Construction oE building:
(a) Eraming (Jolsiss, rafters, and stud walls):
$2 \times 52 \times 4$ or $2 x 6$ 2x4
(b) Luterlor walla: Sheetrock or plaster
(c) rook: Composition shingles.
(d) footings; Eoundacluns: Concrete.
(e) basement walls (indicate how keyed to footing of floor):

Not applicable.
(E) basement ELoor (keyways, thLckness):

Not applicable.
(g) nane of person(s) who constructed building: Not known.
(h) size and direction of any large windows: None.
III. Enviromaental Infomation

1. Approximate elevation of area:

850 feet.
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of foundatlon: Not known.
4. Water wells utilized (Lndlcate depth*and use): Yes, don't use.
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Yes, don't use.
6. Source of water, lf not Lncluded above: City water.
7. Eve troughs or any other exterior dralnage features: Some.
8. Description of general grading or landscaphen lin vicinity:

Generally flat.
IV. Any notable exlsting deterioration or damage

1. Cracks in interior walls: See survey.
2. Receding of doors, wLudu'ws: See survey.
3. Nuticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls see survey.
8. North See survey.
9. South See survey.
10. East See survey.
11. West See survey.
VII. Comments or supplementary drawlings See survey.
VIII. Discussion or specific coments concerning any unusual Eeatures, construction technfques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activicies.

See survey.

## White- Industrial Seismology, Inc.

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
December 4, 1986
Report No. 87056-85
P \& M Map Photo No. 64

Subject: Inspection of the Vingil Bowers Residence Box 315A
Amoret, Missouri 64722
November 22, 1986
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the front north side of the house. (Photo 85-1)
ID photograph of the front sidewalk. It has a branching crack in the north slab that is akout $1 / 16$ of an inch wide. Grass grows through parts of the crack. (Photo 85-2)

The front sidewalk also has grass growing through the expansion joints.
Now at the front porch.
At the northwest corner, there is a crack below the roof support. It measures about 6 inches along the north edge and the top and is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo $85-3$ )

There is a crack in the top of the north wall of the porch. It measures about 18 inches along the top and edges and has a branch measuring about 13 and $1 / 4$ inches to the west. These cracks are from about $1 / 32$ to $1 / 16$ of an inch wide. (Photos 85-4 and 85-5)

There are several crazing cracks on the north side of the porch wall, west of the steps. These cracks range from hairline to about $1 / 32$ of an inch wide. (Photos $85-6$ and 85-7)

The west wall of the front step is separated from the porch from about 1 inch to $1 / 2$ an inch. (Photo $85-8$ )

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East of the steps, there is a large diagonal crack in the porch wall. It is about 2 and 1/4: inches wide at a spall and averages about $3 / 16$ of an inch wide. It has some slight hairline branches. (Photos 85-9 and 85-10)

There are several cracks on the north wall of the porch, east of the steps. These range from hairline to about $1 / 16$ of an inch in width. (Photos 85-11 and 85-12)

The floor of the front porch has a major crack that trends north-south all the way across the slab. This crack has been partially patched and at this time averages about 1 and $1 / 4$ inches wide. The patched area at the south end is about 9 inches wide. (Photos 85-13 and 85-14)

There is a crack at the southwest corner of the step where it attaches to the porch. It is about an inch wide. (Photo 85-14)

The step and the porch floor are separated from about 1 inch to $1 / 2$ an inch.

The west porch wall is separated from the house by about $3 / 4$ of an inch. (Photo 85-15)

The top of the west wall has a north-south trending crack that measures about 22 inches long, south of the post, and ranges from about $1 / 16$ of an inch to a hairline wide. (Photo 85-16)

This crack continues north of the post, and runs to the northwest post. It ranges from about $1 / 8$ of an inch to a hairline wide. (Photo 85-17)

The top of the north wall has a crack at the west end. It is about 10 and $1 / 2$ inches long and from about $1 / 16$ of an inch to a hairline wide. (Photo 85-18)

The inside of the west wall of the porch has crazing cracks. (Photos 85-19 and 85-20)

The inside of the north wall, west hal $f$, has numerous crazing cracks. (Photos 85-21 and 85-22)

The main horizontal crack on the west part of the north wall, measures about 31 inches long and is fram about $1 / 16$ of an inch to a hairline wide.

The north wall, east part, has several slight cracks at the west end. The longest is about 45 and $1 / 2$ inches. (Photo 85-23)

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At the east end of the north wall, a vertical crack trends about 17 and $1 / 2$ inches above the porch floor.

The east porch wall is separated from the house by about $3 / 4$ of an inch. (Photo 85-24)

East of the front door, the floor has a crack trending north-south the width of the porch. The main part of the crack is about an inch wide, but it has some wider areas up to about 2 and $3 / 4$ inches that have been patched. (Photos 85-25 and 85-26)

It has a couple of branches on the west side that run roughly southward. The south branch is about 34 inches long and from $1 / 16$ of an inch to a hairline wide. The north branch about 10 and $1 / 2$ inches long and is about a hairline wide. (Photos 85-25 and 85-26)

There are numerous cracks and separations in the narrow strip of mortar that fills the joint between the porch floor and the house. (Photos 85-27 thru 85-29)

There is a hairline crack in the southeast part of the porch floor that is about 51 inches long.

The open face of the east part of the north wall of the porch has a crack that connects with other cracks. It measures about 8 inches long and $1 / 16$ of an inch wide. (Photo 85-30)

Two photographs of the inside of the north porch wall, east half. (Photos 85-31 and 85-32)

Some of the porch roof supports at the north wall appear to have shifted same what. (Photo 85-33)

The outer east wall of the porch has numerous crazing cracks. These range from about $1 / 16$ of an inch to a hairline wide. (Photo 85-34)

There is a hairline vertical crack at the northeast corner of the foundation. It is akout 11 inches long. (Photo 85-35)

There is an H-shaped crack in the east foundation below the north window. The horizontal part is about 15 inches long and the two vertical parts trend the height of the foundation. It ranges from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 85-36)

There is a hairline crack in the foundation below the lower left corner of the window that measures about 3 inches long. (Photo 85-36)

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Just north of the east side porch, there is a diagonal crack in the foundation. It is about 14 inches long and about $1 / 8$ of an inch wide. (Photo 85-37)

This northeast window has deteriorating caulk and paint and the lower left corner of the top storm window is cracked. (Photo 85-38)

ID photographs of the east side of the house from the northeast. (Photos 85-39 and 85-40)

The east porch steps have extensive cracks. The widths range from hairline to about $1 / 15$ of an inch. (Photos $85-41$ and 85-42)

The wood below the east porch door is deteriorating. (Photo 85-42)
There are numerous cracked siding boards on this house.
ID photographs of the east side of the house from the southeast. (Photos 85-43 and 85-44)

This house does not have a gutter system except at the south porch.
ID photographs of the south side of the house. (Photos $85-45$ and 85-46)
The south side of the back porch foundation has a horizontal crack along the length and a patched area. The crack ranges from about $3 / 16$ to $1 / 16$ of an inch wide. There is a vertical crack at the patch that is about 1/16 of an inch wide and about 11 inches long. (Photos 85-47 and 85-48)

The semicircular concrete slab has a crack below the half barrel planter. It goes all the way through the slab. At the south edge it measures about 4 inches long and about $3 / 16$ of an inch in width. (Photo 85-49)

There is a patched area in the foundation at the southwest corner of the back porch. It measures about 10 inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 85-50)

ID photographs of the west side of the house. (Photos $85-51$ and 85-52)
The west foundation of the back porch has several cracks. There is a patched area at the south end with a vertical crack that is about 16 inches long and about $1 / 32$ of an inch wide. (Photos $85-53$ and 85-54)

There is a large vertical crack in the foundation below the west porch window. It is about 12 and $1 / 2$ inches long and fram about $3 / 4$ to $1 / 2$ of an inch wide. (Photo 85-55)

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At the north end of the porch foundation, the horizontal crack
branches. The branch measures about 19 inches horizontally and is up to about 1 inch wide. (photo 85-56)

The west window of the back porch has severe deteriorating caulk and paint. (Photo 85-57)

The gutter at the soulthwest corner of the porch is disconnected, causing it to drain near the foundation. (Photo 85-58)

The downspout of the gutter empties into an old cistern. The cistern intake is a brick structure covered with concrete. There are extensive cracks on the south side of the cover. They range from a hairline to about $3 / 16$ of an inch wide. (Photo 85-59)

There are a couple of cracks in the east side of the cover. A stairstepping crack is about 11 and $1 / 2$ inches long and ranges fram a hairline to about $1 / 15$ of an inch wide. (Photo 85-60)

At the cistern intake, a branch of the downspout empties outside of the structure and there is extensive cracking on the west side. The cracks widths range from about $1 / 8$ of an inch to a hairline. (Photos $85-61$ and 85-67)

Looking into the cistern, it is filled, and the inner concrete covered walls are extensively cracked. (Photos 85-62 and 85-63)

The south foundation of the house has a crack where the gas line enters. It is a diagonal crack measuring about 13 inches long and about 3 and $1 / 2$ inches at the widest. (Photo 85-64)

There is a large crack in the south foundation below the watt meter. The separation is about $3 / 8$ of an inch. The spalled area is about 3 inches at the widest. (Photo 85-65)

The west window on the south side of the house has deteriorating paint and caulk. (Photo 85-66)

Now moving north along the west side of the house.
The two bedroom windows have deteriorating caulk and paint. (Photo 85-68)

There is a crack in the foundation below the left end of the window. About 2 inches are visible vertically and it is about $1 / 8$ of an inch wide. (Photo 85-69)

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There is a vertical foundation crack a few feet north of the window. It is about 2 and $1 / 2$ irches long and about $3 / 16$ of an inch wide. (Photo 85-70)

About 2 feet to the north, there are two vertical foundation cracks. They are both about 2 inches long and about $1 / 16$ of an inch wide. (Photo 85-71)

The bathroon window has deteriorating caulk, mainly at the bottom inner window. (Photo 85-72)

The north window, on the west side, also has deteriorating caulk, mainly at the lower window. (Photo 85-73)

There are two roughly parallel diagonal cracks in the foundation at the north end of the west side. Both are about $1 / 16$ of an inch wide. (Photo 85-74)

There is a gap that ranges from about $3 / 4$ to $1 / 2$ of an inch between the west porch wall and the house. (Photo 85-75)

The west edge of the top of the west porch wall has a slight crack that is about 4 inches long and a hairline wide. It is between the two roof supports. (Photo 85-76)

There is a vertical crack below the south support on the west edge. It is about 5 and $1 / 4$ inches long and a hairline wide. (Photo 85-77)

ID photograph of the house from the northwest. Note the stained lower areas of siding. (Photo 85-78)

Some shingles on the north part of the roof appear to be deteriorating.
Garage
ID photograph of the north side. (Photo 85-79)
The garage has gutters and downspouts.
The northeast downspout lacks a splash block and empties close to the foundation. (Photo 85-80)

The north window has a separating outer caulk seal. (Photo 85-81)
ID photograph of the east side. (Photo 85-82)
The caulk is separating around the east window also. (Photos 85-83 and 85-84)

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ID photograph of the south side. (Photo 85-85)
The southeast downspout empties close to the foundation and lacks a splash block. (Photc 85-86)

The south window has a separating caulk seal. (Photo 85-87)
ID photograph of the front, west side. (Photo 85-88)
According to Mr. Bowers, the garage has a 6 inch thick, unreinforced concrete floor. The foundation consists of posts set 5 feet into the ground which rest on a 4 inch concrete footing.

The concrete drive area, in front of the garage, has several cracks.
There are two cracks at the southwest corner, below the truck. (Photos 85-89, 85-91, and 85-96)

There is a crack at the southeast part of the drive. (Photos 85-90 and 85-92)

A crack runs across the northwest corner of the drive. (Photo 85-93)
The cracks range in width fran about $1 / 16$ to $1 / 2$ of an inch. The main crack trends east-west under the car. (Photos 85-94 and 85-95)

There is a crack in the drive that runs from the northwest corner of the garage to the end of the slab. It is about $1 / 16$ of an inch wide.
(Photo 85-97)
There is a crack in the garage floor, visible from outside, below the north overhead door. It is about $1 / 8$ of an inch wide. (Photo 85-98)

INTERIOR INSPECTION

## Garage

Unfinished walls and ceiling.
Concrete floor.
It is mostly full of stored materials.
Windows on the north, south, and east walls. Overhead doors on the west wall.

Photograph of the east wall. (Photo 85-99)
Photographs of the south wall. (Photos 85-100 and 85-101)

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Photographs of the west wall. (Photos 85-101 and 85-102)
Photographs of the north wall. (Photos 85-103 and 85-104)
Most of the floor is covered.
At about the middle of the floor, a floor crack is visible trending roughly east-west and a couple of other cracks run to the south. A photograph of the crack that runs south. (Photo 85-105)

A photograph of a crack that runs to the east. (Photo 85-106)
The major floor crack runs from the east wall, roughly southwest, and intersects the main sruth trending crack. (Photos 85-107 and 85-108)

These are rough, irregular cracks that range from about $1 / 8$ to $1 / 2$ an inch wide.

Another floor crack runs southward from the north wall. Only part of it can be seen. It is from about $1 / 4$ to $1 / 8$ of an inch wide. It connects with the cracks near the middle of the floor. (Photos 85-109 and 85-110)

House

## Living Room

This is the northwest room of the house.
Carpeted floor.
Sheetrock walls and ceiling over old plaster.
Windows on the north and west walls.
Photograph of the west wall. (Photo 85-1ll)
Photographs of the soluth wall. (Photos 85-112 and 85-113)
Photographs of the eaist wall. (Photos 85-114 and 85-115)
Photographs of the north wall. (Photos 85-116 and 85-117)
There is a hairline crack at a joint above the left end of the north window. It is about 12 and $1 / 2$ inches long. (Photo 85-118)

There is a horizontal crack, probably at a joint to the upper right of the front door. It is about 6 and $3 / 4$ inches long and about $1 / 32$ of an inch wide. (Photo 85-119)

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To the upper right of the entrance on the south to the dining room, there are slight cracks that cover an area of about 26 inches high and up to about 1 foot wide. (Photos $85-120$ and $85-121$ )

Above the upper right of the door, there is a separation at a seam. It is about 3 and $3 / 4$ inches long. (Photos 85-120 and 85-121)

The sheetrock is separated from the right side of the south doorway by about 1/8 of an inch. (Photo 85-122)

Dining Room
Carpeted floor.
Sheetrock walls.
Textured plaster ceiling.
Doorway and a window on the east wall to the east porch. Doorway on the south wall to the kitchen. Doorway on the west to the bathroom. Doorway on the north to a bedroom.

Photograph of the south wall. (Photo 85-123)
Photographs of the we:st wall. (Photos 85-124 and 85-125)
Photograph of the north wall. (Photo 85-126)
Photographs of the east wall. (Photos 85-127 and 85-128)
The floor in this rocm slopes to the west and east fram a hump in the middle.

The west wall doorway slants to the south and there is a crack in the wall above each corner.

Above the upper right corner, there is a diagonal crack that is about 16 and $1 / 2$ inches long and from $1 / 16$ of an inch to a hairline in width. (Photo 85-129)

The crack above the upper left corner measures about 27 inches long and from about $1 / 4$ of an inch to a hairline wide. (Photo 85-130)

To the upper right of the door, the sheetrock has pulled out from the doorway by about $1 / 2$ an inch. (Photo 85-131)

There is a roughly diagonal crack on the south wall to the upper right of the door. It measures about 17 inches long and about $1 / 8$ of an inch wide. (Photo 85-132)

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There is a bulging crack above the upper left corner of the south door. It is an L-shaped crack measuring about 34 inches long on the diagonal. (Photo 85-133)

Also above the upper left corner, there is a slight diagonal crack that is about 3 inches long. (Photo 85-134)

This south doorway slants to the west.
There is a roughly vertical crack above the upper right corner of the window on the east wall. The total length is about 27 inches. There are crazing cracks at a peeling area of paint at the upper part of the crack. (Photo 85-135)

There is a slight vertical crack at a seam above the upper right end of the door to the living room on the north wall. It is about 3 inches long and a hairline wide. (Photo 85-136)

The north doorway also slants to the west.
There is a slight crack in the ceiling that runs northward from the south wall about 41 inches. It is barely visible at the north end and is slightly wider at the south end. (Photo 85-133)

There is a slight water stain around the flue in the south part of the ceiling.

The ceiling has two slight cracks at the southwest corner at the flue plate. Both are hairline cracks. One is about 2 inches long; the other is about 4 inches long.

North Bedroom
This is the northeast room of the house.
Carpeted floor.
Sheetrock walls.
Drop panel ceiling.
Windows on the north and east walls.
Photograph of the north wall. (Photo 85-137)
Photographs of the east wall. (Photos 85-138 and 85-139)
Photographs of the soluth wall. (Photos 85-140 and 85-141)
Photographs of the west wall. (Photos $85-142$ and 85-143)

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The north window slants somewhat to the east.
There is a slight separation in the upper northwest corner. At the top it is about $1 / 8$ of an inch wide, and it narrows down to a hairline. It measures 13 and $1 / 2$ inches down fram the ceiling. (Photo 85-144)

There is also a slight crack in the upper northeast corner. (Photo 85-145)

There is a hairline seam crack above the upper left corner of the east window. It is about 13 and 3/4 inches long. (Photo 85-146)

There is a hairline crack at the tape joint below the lower right corner of the east window. It measures about 5 and $1 / 2$ inches long. (Photo 85-147)

There is a door at the east end of the south wall to the east porch.
Above the upper left corner, there is a vertical seam crack that runs to the ceiling. It measures 14 inches long and from a hairline to $1 / 16$ of an inch wide. (Photo 85-148)

There is a crack above the upper right corner of the entry door at a seam of the sheetrock. It measures about 14 inches long. This section of sheetrock is bulging outward from the wall. (Photos $85-149$ and 85-150)

## Bathroom

Vinyl floor.
Lightly textured sheetrock ceiling.
Painted sheetrock walls.
Tile shower area walls.
Tile on most of the south and west walls.
Two photographs looking into the bathroom, first looking west, then southwest. (Photos 85-151 and 85-152)

There are a few vinyl tiles missing on the floor.
Window on the west wall.
There are several tiles missing in the bathtub area. (Photo 85-153)
There is a bulge in the tile area of the west wall to the lower right of the window.

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There is a caulk separation where the north wall of the shower meets the west wall. The separation is about $3 / 16$ of an inch wide. (Photos 85-154 and 85-155)

There is a crack above the upper right corner of the window at a sheetrock joint. It is about a hairline wide and runs to the ceiling. (Photo 85-155)

There is a vertical crack above the upper right corner of the door on the south wall to the bedroan. This crack is fram about a hairline to $1 / 16$ of an inch wide and is about 7 and $1 / 4$ inches long. (Photo 85-156)

Photograph of the east wall. Note how the doorway slants to the south. (Photo 85-157)

There is an area of peeling paint to the upper left of the east door. (Photo 85-158)

There is a crack above the upper right corner of the east door that is about 7 inches long and fram about $1 / 16$ of an inch to a hairline wide. (Photo 85-159)

There is an area of peeling wall paper on the east wall behind the furnace. (Photo 85-160)

There is a water stain in the ceiling around the furnace flue. (Photos 85-161 and 85-162)

There is some cracking at seams of the ceiling in the northeast corner. (Photo 85-162)

There is an L-shaped hairline crack in the ceiling at the southeast corner of the light fixture. It measures about 14 and $3 / 4$ inches from end to end. (Photo 85-163)

The Bowers' indicated that they intend to remodel this bathroom in the near future.

South Bedroom
Carpeted floor.
Sheetrock walls.
Tile ceiling.
Windows on the south and west walls.
Photograph of the south wall. (Photo 85-164)

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Photographs of the west wall. (Photos 85-165 and 85-166)
Photograph of the north wall. (Photo 85-167)
Photographs of the east wall. (Photos 85-168 and 85-169)
Note how the door on the east wall to the kitchen slants to the north.
There are two cracks above the upper right part of the west window. Both are vertical, run to the ceiling and are about 4 inches long and $1 / 32$ of an inch wide. (Photo 85-170)

Above the upper left end of the west window, there is a slight vertical crack at a seam that runs to the ceiling. It is from a hairline to slightly wider and about 3 and $1 / 4$ inches long. (Photo 85-171)

There is a crack along the northwest corner that ranges from about $1 / 32$ of an inch to a hairline wide. (Photo 85-172)

On the south wall, to the upper right of the window, there are several slight cracks. One runs horizontally about 20 and $1 / 2$ inches from the window. It has a vertical hairline extension running upward about 7 inches, and a vertical extension running down about 8 inches to the switch box. (Photo 85-173)

There is a seam crack above the upper right corner of the window. It runs about 6 and $3 / 4$ inches to the top of the wall and is a hairline wide. (Photo 85-173)

Above the upper left corner of the window, there is a vertical crack that runs to the ceiling. It measures about 7 inches long and $1 / 32$ of an inch wide. (Photc 85-174)

There is a slight, 2 inch long crack at the upper left corner of the window. (Photo 85-175)

There is an L-shaped crack to the upper right of the east door. It measures about 30 and $1 / 2$ inches from end to end and ranges from a hairline to about $1 / 1.6$ of an inch wide. It has a hairline branch that runs to the south wall. (Photo 85-176)

The main vertical crack continues to the floor behind the dresser. (Photo 85-177)

Above the upper left corner of this door, there is a vertical crack and a few inches below it, there is a horizontal crack. Both are about 4 and $1 / 2$ inches long and from about $1 / 16$ of an inch to a hairline wide. (Photos 85-178 and 85-179)

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Note how the north door to the bathroom is uneven. (Photo 85-180)
The east door is difficult to open because it drags severely against the floor.

Kitchen
Vinyl floor.
Tile ceiling.
Sheetrock walls.
Counter area walls are tile.
It has a window above the sink on the east wall to the east porch. Door on the south wall to the back porch. Door on the north to the dining room.

Photograph of the south wall. (Photo 85-181)
Photograph of the east wall. (Photo 85-182)
Photographs of the north wall. (Photos 85-183 and 85-184)
Photographs of the west wall. (Photos 85-185 and 85-186)
There are several slight cracks on the flue that radiate from this circular area. At this time, cracks cover an area of about 25 inches vertically by about 17 and 1/2 inches. (Photo 85-187)

Mr. Bowers indicated that this flu will be removed during remodeling in the near future.

Along the west side of the flue, there is some peeling paint or plaster and a slight crack in the corner. (Photos 85-188 and 85-189)

A crack runs from the upper right corner of the north door to the flue. It is about 12 inches long and from about $1 / 16$ of an inch to a hairline in width. (Photo 85-189)

There is a large diaconal crack above the upper left corner of the north door. It is about $2 \varepsilon$ and $1 / 2$ inches long and fram a hairline to about $3 / 16$ of an inch wide.. (Photo 85-190)

The north doorway slopes same what to the west.
There is a large crack that runs to the ceiling above the upper right corner of the west doorway. It measures about 29 and $1 / 2$ inches vertically and from about $1 / 8$ of an inch to a hairline wide. (Photo 85-191)

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Above the upper left corner, a vertical crack runs down from the ceiling about 14 inches. it is fran about $1 / 16$ of an inch to a hairline wide. (Photo 85-192)

Back Porch
This is the utility room.
Concrete floor.
wooden ceiling and walls.
Sheetrock lower south and east walls.
Windows on the south and east walls. Door on the east wall.
Photograph of the west wall. (Photo 85-193)
Photographs of the north wall. (Photos 85-194 and 85-195)
Photograph of the east wall. (Photo 85-196)
Photographs of the south wall. (Photos 85-197 and 85-198)
There is a floor crack that runs southwestward from the refrigerator to a wooden door. It ranges in width from about $1 / 8$ of an inch at the north end to about $3 / 16$ of an inch at the south end. (Photo 85-199)

There is a vertical crack in the south concrete foundation. It is about 6 and $1 / 2$ inches long and fram about $1 / 16$ of an inch to a hairline wide. (Photo 85-200)

East Porch
Wooden floor.
Sheetrock walls.
Lightly textured ceiling.
This porch is mostly full of stored material at this time and not much can be seen.

Photograph of the north wall. (Photo 85-201)
Photograph looking southward. (Photo 85-202)
There appears to be some water damage, including peeling paint at the upper south end of the east wall. (Photo 85-203)

The ceiling has several water stains.

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Most of the ceiling stains are just south of the light fixture. (Photos 85-204 and 85-205)

There is another slight ceiling stain to the north of the east door. (Photo 85-206)

There is some slight cracking in the sheetrock wall to the right of the west doorway. (Photos 85-207 and 85-208)

That completes the interior inspection.
Well House
This is a wooden structure over a concrete slab, located south of the garage.

Looking down in the well, water can be seen at a distance, probably 15 or 20 feet below ground level.

ID photograph from the southeast. (Photo 85-209)
ID photograph from the southwest. (Photo 85-210)
General Comments
This is apparently a very old house, date of construction is not known.
It lacks a complete gutter- đownspout system at this time. The concrete foundation and front porch have numerous cracks.

The interior has been partially remodeled. Several cracks were found in the sheetrock walls and ceilings. Several doorways slant considerably and the dining roan floor slopes east and west fran a hump in the midale. The Bowers indicated that they plan to remodel the bathroom and probably other roams in the near future.

The garage has a gutter system, but the downspouts empty close to the foundation. The concrete garage floor has same major cracks, however, most of the floor could not be seen.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


CDL/mp
Enclosure: 210 Photographs

Christopher D. Landoll Technical Associate

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 64

2- SUMMARY FORM
3- SKETCH OF STRUCTURE





\section*{1} Sketch of the $\overline{\text { Pirgili Beques Reistaen }}$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
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## $85-85$




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$85-43$



## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: Lola Wilson (Duane and Betty Wisdom, Owners)
2. Date: November 10,1986

Thne: 11:30AM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: Northeast corner of Washington and Second Streets
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: 1985-Present
7. Dates of any temporary or permanent abandorunent: None
II. Information Concerning Bulidings
(repeat Eor additional buildings)

1. Date of original construction: 1985 (Trailer)
2. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c)
3. Construction of bullding:
(a) Eraning (Joists, rafters, and stud walls): $2^{\prime \prime} \mathrm{x} 4$ " stud walls
(b) interfor walls: Paneled
(c) roof: Shi:ngled
(d) footings; foundations: Steel runners on concrete blocks
(e) basement walls (Indicate how keyed to Eooting of Eloor): Not applicable
(E) basement Eloor (keyways, chickness):

Not applicable
$(g)$ name of fierson(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromantal Information

1. Approximate elevation of area:

837 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth*and use): None
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume).None
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior dralnage Eeatures: See photo survey
8. Description of general grading or landscaping in vicinity:
IV. Any notable existing deterioration or danage See photo survey1. Cracks in intertor walls:
2. Receding of doors, windows:3. Noticeable settlement:4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings ..... See sketch
VI. Elevation views or photographs of walls See photo survey

1. North
2. South
3. East
4. West
VII. Comments or supplenentary drawings See sketchVIII. Discussion or specific comments concerning any unusual features,construction techniques, or status of deterioration, that, becauseof the nature of their construction, materials of which they areconstructed, status of deterioration, may exhibit an unusual responseco normal blasting activities.

November 13, 1986
Report No. 87056-81
P \& M Map Photo No. 83


To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the south side of the residence. (Photo 81-1)
The first window to the east of the door is cracked, both on the interior and exterior. (Photo 81-2)

We cannot see underneath the skirting. It is nailed to the trailer.
ID photograph of the east side. (Photo 8l-3)
ID photograph of the north side. (Photo 81-4)
ID photograph of the west side. (Photo 81-5)
INTERIOR INSPECTION
We entered through the south entrance.
We will start at the east end of the trailer in a bedroom.

Bedroom
Carpeted floor.
Paneled walls and ceiling.
Nothing noted.

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The Pittsburg and Midway Coal Mining Company
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ID photographs. (Photos 81-6 thru 81-10)
Now moved westward out of this bedroom into the living room.

## Living Room

Carpeted floor.
Paneled walls and ceiling.
Looking at the north wall.
There is a water stain on the ceiling at the upper right corner of the window. (Photo 81-11)

There is another water stain toward the northeast corner. (Photo 81-12)
There is a water stain on the ceiling above the windows. (Photo 81-13)
Looking at the south wall.
Photograph of the cracked window that we noted outside. (Photo 81-14)
ID photographs of the living room. (Photos 81-15 thru 81-17)
Moving on westward into the kitchen and dining room.
Kitchen/Dining Room
Vinyl floor.
Paneled walls and ceiling.
ID photographs. (Photos 81-18 and 81-19)
There is a separation of the vinyl floor at the entrance. (Photo 81-20)
Hall
Carpeted floor.
Paneled walls.
There is a œiling stain at the east end. (Photo 81-21)
First roan on the south side is a bedroam.
Bedroom
Carpeted floor.
Paneled walls and ceiling.

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There is a small ceiling stain above the window on the south wall.
(Photo 81-22)
ID photographs. (Photos 81-23 and 81-24)
Back in the hall, there is a ceiling stain to the left of the window. (Photo 8l-25)

There is also a ceiling stain near the upper right corner of the door. (Photo 81-26)

Next room on the south side of the hall is the bathroom.
Bathroom
Vinyl floor.
Partially papered and paneled walls. Paneled ceiling.

There are lights on the east and west walls. The wallpaper is separated at the sides of the light. (Photos 81-27 and 81-28)

There is a ceiling stain at the south wall above the medicine cabinet. (Photo 81-29)

ID photographs. (Photos 81-30 thru 81-32)
Laundry Area
There is a ceiling stain at the south wall. (Photo 81-33)
There are ceiling stains above the door on the north wall. (Photo 81-34)

ID photograph back to the east along the hall. (Photo 81-35)
Now in the bedroam at the west end of the trailer.
Bedroom
Start with the north wall.
There are a couple of ceiling stains at the upper right of the window. (Photo 81-36)

The ceiling is stained and bowed toward the east end. (Photo 81-37)

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There are a pair of ceiling stains above the bed at the east wall. (Photo 81-38)

There is also a œiling stain at the south wall of the south closet. (Photo 81-39)

ID photographs. (Photos 8l-40 thru 81-43)
General Corments
This trailer is owned by Duane and Betty Wisdom. The current occupant is Ms. Lola Wilson. The trailer is located at the northwest corner of Washington and Second Streets.

There is no roof guttering around the trailer. There was also no access under the skirting without removing the skirting.

The interior walls anc ceiling were paneled. There were ceiling stains in many of the rooms.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 43 Photographs

1- COPY FROM $P \& M^{\prime}$ 's TOWN OF AMORET MAP LOCATION NO. 83

2- SUMMARY FORM

3- SKETCH OF STRUCTURE



Sketch of Duane and Betty Wisdom property Occupied by Lola wilson

| rom | Bedroom |  |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

> Dining Room Kitchen

Scale: 1 Division $=1$ Foot-Approx.




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PREB-BLAST SURVEY, RESIDEN'ILNL
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I. BasLe Infomation

1. Name of Resldent: Mary Malone
2. Date: October 27 and November 24, 1986 Tine: 1:00PM
3. Address:_Route___Box_162,_Amoret, Missouri 64722
4. Location: West side of Second Street, North of Jefferson
5. Nelephone Number: (816) 925-3474
6. Dates of occupancy by current resident: 1959 - Present
7. Dates of any temporary or pemanent abandomant: $\qquad$
[I. InEormacion Concerning Bulidings
(repeat Eor addltional buildlags)
8. Date of orighial constructlon: Unknown
9. Date(s) of major remodeling or addletons:
(a) $\qquad$
(b)
(c) $\qquad$
10. Construction oE building:
(a) Eranling (Jolsts, rafters, and stud walls): Stud walls: $2^{\prime \prime} \mathrm{x}$ 4"
(b) LaterLor walls: plaster, wallpapered
(c) rook: Shingled
(d) Eootings; foundations: Rock and mortar
(e) basement walls (indicate how keyed to footing of Eloor):

Not applicable.
(E) basement Elour (keyways, thlckness):

Not applicable.
(g) name of person(s) who constricted buliding: Unknown.
(h) size and direction of any large windows: None.
III. Envirownental Infomation

1. Approximate elevation of area:

845 feet at residence
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of foundation: None.
4. Water wells utillzed (indlcate depth*and use): Covered, unused.
5. Cisterns or surface water storage utilized: (Lndicate purpose and approximate volume). Covered, unused.
6. Source of water,if not Lneluded above: City water.
7. Eve troughs or any other exterior drainage Eeacures: See photo survey.
8. Description of general grading or landscaplug lin vicinity: See photo survey.
IV. Any notable exlsting deterioration or damage See photo survey.

1. Cracks in interlor walls:
2. RecedLing of doors, whidurs:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch.
VI. Elevation views or photographs of walls see photo survey.
8. North
9. Souch
10. East
11. West
VII. Conuments or supplementary drawings See sketch.
VIII. Discussion or specific counents concerning any unusual features, construction techaques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of detertoracion, may exhlbit an unusual response to normal blasting activities.

October 29, 1986
Report No. 87056-33
P and M Map Photo No. 84

| Subject: | Inspection of the Mary Malone Residence |
| :--- | :--- |
|  | Box 162 |
| Amoret, Missouri 64722 |  |
|  | October 27 and November 24,1986 |
| To: | The Pittsburg and Midway Coal Mining Company |
|  | P. O. Box 8 |
|  | Amsterdam, Missouri 64723 |

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION

This is a frame structure with a stucco covered rock foundation.
ID photograph of the east side. (Photo 33-1)

Photograph of the porch. (Photo 33-2)

The porch roof is bowed.
There is evidence of water leakage under the southernmost window. (Photo 33-3)

Photograph of the east brick chimney stack. This stack appears to be in fair condition, however, it is leaning to the north. (photos 33-4 and 33-22)

The sidewalk to the residence is cracked and displaced. (Photos 33-5 thru 33-7)

Photographs of the foundation condition to the south of the porch. The stucco covering is cracked and separated. (Photos 33-8 thru 33-12)

The porch is supported by bricks and there are three wood support columns.

Photographs of the stucco covered foundation north of the porch. The stucco is cracked and separated. (Photos 33-13 and 33-14)

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The largest of these has a width of $1 / 2$ inch. They generally have a width of about $1 / 8$ to $3 / 16$ of an inch.

Photographs back into the porch. (Photos 33-15 and 33-16)
Photograph of the north side of the residence. (Photo 33-17)
There are stucco cracks and separations to the left of the crawl space vent. (Photos 33-18 and 33-19)

A shrub is obscurring some of the foundation. We are looking at the west side of an L-shaped area on the north side of the house.

There is a large foundation separation near the corner. This has a width of $5 / 8$ of an inch. (Photo 33-20)

Photograph of the foindation toward that corner. (Photo 33-21)
The guttering and downspout, toward the west end of the north side, is loose from the house.

ID photograph of the north end of the west side of the residence. (Photo 33-24)

ID photographs of the west chimney stack. The chimney stack appears to be in good condition. (Photos 33-23, 33-25 and 33-54)

There are two small wood buildings at the northwest corner of the lot. These buildings are heavily deteriorated. (Photo 33-26)

We could not open the one on the east side.
The west building is a tool shed.
Photographs of the inside of the building on the west side. (Photos $33-27$ and 33-28)

There is a deteriorating wood structure at the west end of the residence. There is a brick chimney stack on the roof. (Photos 33-29 thru 33-31 and 33-36 and 33-37)

With the exception o: some minor mortar deformation, this chimney stack appears to be in fair condition.

Photographs of the north foundation of this structure. (Photos 33-32 and 33-33)

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Photographs of the west foundation of this structure. (Photos 33-34 and 33-35)

Photographs of the south foundation of this small structure. There are no evident cracks in the foundation. (Photos 33-38 and 33-39)

At the east side, there is a set of stairs leading down to the cellar.
The concrete slab patio, between the residence and this building, is heavily cracked. (Photos 33-40 thru 33-44)

According to Mrs. Malone, the well is not used. (Photo 33-45)
Cellar
There are cracks in the plaster walls. Also, the ceiling is in poor condition. The floor is wet and dirty and difficult to see. (photos 33-46 thru 33-51)

Exterior Inspection - Continued
ID photographs of the west patio area. (Photos 33-52 and 33-53)
ID photograph of the west side of the residence. (Photo 33-55)
There are stains below the southernmost window.
ID photograph of the south side of the residence. (Photo 33-56)
There is a small plaster covered chimney stack on the second story. There may be same very fine plaster cracks. (Photo 33-57)

Photographs of the south porch. (Photos 33-58 thru 33-61)
The exterior siding and painted wood are heavily deteriorated and chipped.

The south porch slopes to the southeast.
The guttering and downspouts, where present, are in poor shape around the residence. Quite often they are loose and hanging.

There is a garage at the north side of the residence.

## Garage

This is a wood structure with a dirt floor. We could not open the doors. (Photos 33-62 thru 33-64)

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This structure is deteriorating and appears to be unused.
There is another deteriorating wood stucture to the northwest of the garage. (Photos 33-65 thru 33-68)

INTERIOR INSPECTION
Entered through the east entrance into a dining room.
Dining Room
Vinyl floor.
Papered walls.
Modern ceiling panels.
On the north wall, there is a diagonal paper crack at the upper left corner of the door into a bedroam. It measures 8 and $1 / 2$ inches in length. (Photo 33-63)

There is a vertical paper crack in the wall at the lower left corner of the stove flue. (Photo 33-70)

Another vertical paper crack in the wall below the gun rack. It measures 16 inches in length. (Photo 33-71)

There is a diagonal paper crack at the upper right corner of a small cabinet on the west wall. It measures 3 inches in length. (Photo 33-72)

There is also a diagonal crack at the upper left corner of this cabinet. It measures 9 and $1 / 2$ inches in length. (Photo 33-73)

There is a diagonal crack at the upper right of the door into the kitchen. It measures 7 and $1 / 2$ inches. (Photo 33-74)

There is a vertical crack at the upper left corner of the same door. It measures 6 inches in length. (Photo 33-75)

There is a separation of the wallpaper from the left side of the door. (Photo 33-76)

There is a diagonal crack at the upper right corner of the door that leads to the stairs. This measures 5 inches in length. (Photo 33-77)

There is also a diagonal crack at the upper left corner. It measures 4 and $1 / 2$ inches in length. (Photo 33-78)

Now looking at the south wall.

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There is a large separation and an area of staining in the wall paper. (Photo 33-79)

There is a vertical crack at the upper right of the door into the living roam. It measures 8 and $1 / 2$ inches in length. (Photo 33-80)

There is a vertical arack at the upper left corner of the door into the living room. It measures 3 and $1 / 2$ inches in length. (Photo 33-81)

The door is tilted.
The wall paper is separated from the window at the lower right corner. (Photo 33-82)

The window is cracked. (Photo 33-83)
The wallpaper is separated from the wall at the upper corner of a cabinet. The gap between the wall paper and the wall is roughly $1 / 2$ inch. (Photo 33-84)

There is a horizontal wallpaper separation at the upper left corner of the door. It measures 2 inches. (Photo 33-85)

There are wallpaper separations in the corner. (Photo 33-86)
ID photographs of this roon starting with the north wall and progressing counterclockwise. (Photos 33-87 thru 33-90)

Moved northward into a bedroam.

## Bedroom

Carpeted floor.
Papered walls and ceiling.
Start with the north wall.
There are stains at the paper seams, and the wall paper is separated in the northeast corner. (Photos 33-91 and 33-92)

There is a vertical rack above the upper right of the window. It measures 18 inches in length. (Photo 33-93)

There is also a crack at the lower right corner. It measures 4 and $1 / 2$ inches in length. (Photo 33-94)

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There is a crack at the upper left corner and at the lower left corner. These measure 17 inches and 4 inches, respectively. (Photos 33-95 and 33-96)

The wallpaper is cracked and separated in the northwest corner. (Photos 33-97 and 33-98)

Looking at the west wall, there is a large area of paper separation and cracking in this wall. (Photos 33-99 thru 33-101)

The closet in the southwest corner is leaning to the east.
The separation near the ceiling is about 1 and $1 / 2$ inches. The botton is nearly flush with the wall. (Photo 33-102)

Looking at the south wall, there is a vertical crack above the right side of the door. It measures 2 feet in length. (Photo 33-103)

There is also a small vertical crack near the ceiling. It measures 4 inches. (Photo 33-104)

There is a series of paper cracks from the upper left of the door to the corner. (Photo 33-105)

The wallpaper is cracked and separated in the southeast corner. (Photos 33-106 and 33-107)

Looking at the east wall, there is a rectangular area of paper cracking just off the southeast corner. (Photos 33-108 and 33-109)

There is a diagonal crack at the upper left corner of the window. It measures 12 and $1 / 2$ inches in length. (Photo 33-110)

There is also a diagonal crack at the left side of the window. This measures 36 and $1 / 2$ inches in length. (Photo 33-111)

Kitchen
Vinyl floor.
Papered walls and ceiling.
At the west end of the kitchen, there is a small room housing a water heater. There is a bathroom to the south of this.

Start with the north wall.
Photographs of the ceiling to show how the paper is pulling away and hanging from the ceiling. (Photos 33-112 thru 33-114)

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There is an area of wall paper which is cracking above the upper right of the easternmost window. (Photo 33-115)

There is also an area of paper cracking to the upper left of the window. (Photo 33-116)

The wallpaper to the left of the window is separated and cracked. (Photo 33-117)

The larger paper separation measures $1 / 8$ of an inch in width.
A windowpane is cracked in the east window. (Photo 33-118)
There is a horizontal crack at the upper right corner of the next window west. It measures 5 inches in length. (Photo 33-119)

There is a very fine diagonal crack at the upper left of the window. It measures 8 and $1 / 2$ inches in length. (Photo 33-120)

There is a vertical crack near the ceiling above the window. It measures 5 and $3 / 8$ inches in length. (Photo 33-121)

There is a vertical crack in the wallpaper near the west end. This is to the left of the electrical outlet. (Photo 33-122)

Photograph of the condition of the paper at the northwest corner. (Photo 33-123)

Now looking at the west wall.
There are paper separations and cracks above the door into the pantry. (Photos 33-124 and 33-126)

There is a diagonal crack at the upper left corner and the wall bulges outward. The crack measures 7 and $1 / 2$ inches in length. (Photo 33-125)

The wall buiges outward about $3 / 8$ of an inch at the upper right of the door to the bathroom. (Photo 33-127)

The wall paper is stained above the stovepipe. (Photo 33-128)
The paper is heavily stained along the wall parallel to the right side of the door leading into the bathroom. (Photo 33-129)

There is a fine crack in the wall paper to the left of the water stain. (Photo 33-130)

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There is also an area of paper cracking to the upper right of the door. (Photo 33-131)

ID photograph of the southwest corner and the conditions above the door. (Photo 33-132)

Looking at the south wall, there is a diagonal crack at the lower right corner of the window. It measures 4 inches in length. (Photo 33-133)

There is a vertical trending crack above the window, toward the right side. It measures 14 and $1 / 2$ inches. (Photo 33-134)

There is a crack across the windowpane. (Photo 33-135)
There is a diagonal paper crack at the upper left corner of the window. It measures 6 and l/2 inches in length. (Photo 33-136)

There is a vertical crack in the wallpaper, from the ceiling, 3 feet to the left of the upper left of the window. It measures 1 foot in length. (Photo 33-1.37)

There is a small vertical crack in the paper near the ceiling. This is to the right of the southeast corner. It measures 6 and $1 / 2$ inches in length. (Photo 33-1.38)

There is a diagonal crack in the wall paper near the southeast corner. It measures 7 inches in length. (Photo 33-139)

Looking at the east wall, there is a horizontal crack at the upper right of the door. (Photo 33-140)

There is a vertical paper crack at the upper left of the door measuring 16 and 3/4 inches long. (Photo 33-141)

There is a small vertical crack in the paper paralleling the right side of a cabinet. (Photo 33-142)

There is a diagonal crack at the lower right and upper left of the light switch. (Photo 33-.143)

There are cracks in the ceiling paper. (Photos 33-144 thru 33-148)
ID photographs of this room starting with the north wall and progressing counterclockwise. (Photos 33-149 thru 33-153)

There is a pantry off the northwest corner of the kitchen containing the water heater.

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## Pantry

The paper covering is heavily cracked and stained in this room. (Photos 33-154 thru 33-170)

Also note that the floor covering is pulling up. (Photo 33-171)
Now moving off the west side of the kitchen into a bathroom.
Bathroom
There is a crack across the bathroom mirror. (Photo 33-172)
There is a large amount of paper cracking on the walls. (Photos 33-173 thru 33-184)

Photographs of the floor. (Photos 33-185 and 33-186)
Now moving off the dining roam into the living roam.

## Living Room

Carpeted floor.
Papered walls.
Modern ceiling panels.
Start with the north wall.
Note that the door framing leans to the east. (Photo 33-187)
It appears that this room slopes to the east.
There is a vertical paper crack to the left of a pair of ceramic dancing jesters. The crack measures 8 inches in length. (Photo 33-188)

There is another wall paper crack toward the ceiling to the west. It measures 10 inches in length. (Photo 33-189)

At the northwest corner, the paper separates along a seam and there is a large area of water staining on the wall. (Photos 33-190 and 33-191)

Now looking at the nest wall.
There is a crack in the paper near the ceiling. It measures 5 inches long. (Photo 33-192)

Another crack in the paper near the ceiling to the right of the stove pipe flue. It measures 5 inches in length. (Photo 33-193)

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There is a diagonal arack to the left of a painting of The Last Supper. (Photo 33-194)

There is a small wall paper crack about a foot from the floor trim. (Photo 33-195)

There is a large separation of the paper surrounding the stove flue. This separation measures $1 / 8$ of an inch in width. (Photo 33-196)

There is a horizontal paper crack above the door into a bedroom. It measures 7 and 1/4 inches long. (Photo 33-197)

Now looking at the south wall.
There is a small paper crack between the corner and the right side of the window. (Photo 33-198)

There is a very small paper crack paralleling the right side of the window. (Photo 33-199)

There is a diagonal paper crack near the upper left corner of the window. It measures 10 inches long. (Photo 33-200)

There is a vertical crack at the lower left of the window. (Photo 33-201)

There is a horizontal crack at the upper left corner of the door. It measures 3/4 of an inch in length. (Photo 33-202)

There is a vertical crack at the upper right corner of the window on the east wall. (Photo 33-203)

There is also a crack at the lower right corner of the window. (Photo 33-204)

There is a vertical crack at the upper left corner of the window. (Photo 33-205)

There is a crack at the lower left corner of the window. (Photo 33-206)
There is paper cracking in the northeast corner. (Photos 33-207 and 33-208)

ID photographs of this room starting with the north wall in a counterclockwise direction. (Photos 33-209 thru 33-212)

Moving into the southeast bedroom.

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Bedroom

Wood floor.
Papered walls and ceiling.

Start with the north wall.
There are paper separations along the ceiling. (Photos 33-213 and 33-214)

There is a diagonal crack that extends behind some boxes. (Photo 33-215)

There is a fine vertical crack in the wall close to the west end. It measures 6 and $1 / 2$ inches in length. (Photo 33-216)

Looking at the west wall.
There is a series of three cracks in the wall at the north end. (Photo 33-217)

There is a vertical crack at the upper right corner of the window. It measures 12 and $1 / 2$ inches in length. (Photo 33-218)

There is a small crack at the lower right corner of the window. (Photo 33-219)

There is a small vertical crack at the upper left corner of the window. (Photo 33-220)

There is a crack at the lower left corner of the window. (Photo 33-22l)

There are a couple of: ceiling cracks near the south end of the west wall. (Photo 33-222)

Now looking at the south wall, there is a vertical crack at the upper right corner of the window. There is also another crack left of this and the ceiling paper is separated. (Photo 33-223)

There is a diagonal crack at the lower right corner of the window. (Photo 33-224)

There is a vertical paper separation below the window near the left end. (Photo 33-225)

There is a diagonal crack at the upper left corner of the window. It measures 4 and 1/2 inches long. (Photo 33-226)

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There is an area of missing paper at the left side of the window. (Photo 33-227)

There is also an area of chipped paper below that. (Photo 33-227)
There is a vertical paper crack in the wall between the left side of the window and the corner. It measures 17 inches in length. (Photo 33-228)

The wallpaper is separated and bulging throughout the southeast corner. (Photos 33-229 and 33-230)

Looking at the east wall.
There is a vertical crack below the lower right of the window. (Photo 33-231)

There is a diagonal crack at the upper left corner of the window. It measures 10 inches in length. (Photo 33-232)

There is a vertical paper separation at the lower left corner of the window and next to this there is a very fine crack. (Photo 33-233)

There is a vertical crack above the door near the right end. It measures 22 inches long. (Photo 33-234)

There is a vertical crack at the upper left of the door. (Photo 33-235)
There is a fine hairline crack to the left of the door. It measures 7 inches long. (Photo 33-236)

There is a small vertical crack near the northeast corner measuring 7 inches long. (Photo 33-237)

There are cracks in the ceiling paper. (Photos 33-238 thru 33-240)
ID photographs of this room starting with the north wall. (Photos 33-241 thru 33-246)

Small Room/Stairs
We are in a small room that contains the stairs to the second floor.
Wooden floor.
Papered walls and ceiling.
At the north wall, the ceiling is bulging and has water stains. (Photo 33-247)

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There is a 13 inch long vertical paper crack in the north wall near this ceiling bulge. (Photo 33-248)

There is paper cracking in the northwest corner and above the door on the west wall. (Photo 33-249)

There is a vertical paper crack and water staining on the west wall above the upper left of the door. (Photo 33-250)

There is a diagonally trending paper crack to the left of this door that extends over to the corner. (Photo 33-251)

There is a 15 inch long crack in the ceiling above the lower section of the stairs. (Photo 33-252)

There is a crack across the ceiling near the hanging light. (Photo 33-253)

There are numerous hairline paper cracks above the door on the east wall. (Photos 33-254 and 33-255)

There are numerous paper cracks in the south and west walls flanking the stairs to the second floor. There are also water stains visible around the west window. (Photos 33-256 thru 33-268)

Second Floor Landing
Looking at the north wall of the second floor landing. There are a number of paper cracks to the right of the window. (Photos 33-269 thru 33-271)

There are water stains in the east wall to the left of the door into a bedroam. (Photo 33-272)

There is a stain on the ceiling above this. (Photo 33-273)
There is a large area of ceiling deformation at the southeast corner. (Photo 33-274)

Moving into the bedroom at the southeast corner.
Southeast Bedroan
wood floor.
Papered walls and ceiling.
The papered walls and ceiling are heavily cracked.

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Series of photographs of wall and ceiling cracks, stains and damages.
(Photos 33-275 thru 33-302)
Now moving into the bedroom on the south side.
South Bedroom
Wood floor.
Papered walls and ceiling.
Although the walls in this room are not quite so heavily cracked as the walls in the other room, there are numerous water stains.

There is nothing notable on the north wall. ID photograph. (Photo 33-303)

Looking at the west wall.
There is a paper crack along the northwest corner. Toward the ceiling it diagonals out onto the wall. (Photos 33-304 and 33-305)

There is a paper crack at the upper right corner of the window. It extends to the ceiling. (Photo 33-306)

There is a diagonal paper crack at the lower left corner of the window. (Photo 33-307)

Toward the south end of the wall, there is an L-shaped paper crack. (Photo 33-308)

This L-shaped crack extends along the southwest corner. (Photo 33-309)
Now on the south wall.
There are vertical and horizontal paper cracks at the upper right corner of the window. The vertical crack extends to the ceiling. (Photos 33-310 and 33-311)

There is a small horizontal paper crack between the left side of the window and the paper seam. (Photo 33-312)

There is paper cracking along the southeast corner. (Photo 33-313)
There is a hairline L -shaped crack at the right side of the window on the east wall. It extends to the southeast corner. (Photo 33-314)

There is a 4 inch long hairline diagonal crack at the upper right corner of the window. (Photo 33-3.15)

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There is a vertical paper crack at the upper left corner of the window. It extends to the ceiling. (Photo 33-316)

There is a diagonal crack in the wall to the left of the window. It extends fran the ceiling down to the lower part of the window. (Photos 33-317 thru 33-319)

There is a paper crack near the middle of the wall extending 2 feet upward from the flocr trim. (Photo 33-320)

ID photographs of this room. (Photos 33-321 thru 33-325)
There is a crack in the west window. (Photo 33-326)
The wood on the door is split and the door is difficult to close. (Photo 33-327)

There is a 23 inch long ceiling crack emanating from the north wall above the door. (Photos 33-328 and 33-329)

There is another 23 inch long ceiling crack to the left of the door. (Photo 33-330)

There is a bulge in the ceiling at the east wall. (Photo 33-331)
There is a 24 inch long ceiling crack emanating fram the south wall near the left corner of the window. (Photos 33-332 and 33-333)

## Stairs

An additional photograph of the water stains under the west window. The window appears not to shut campletely. (Photo 33-334)

Also note that there are cracks in the window. (Photo 33-335)
General Comments
The Mary Malone residence is an old two story frame structure. The foundation appears to be composed of sandstone rock covered by a stucco or cement mortar mixture. The cement mortar covering the foundation was often cracked or significantly displaced.

The paint and wood siding on the exterior of the residence is deteriorating. There is no guttering around the structure with the exception of the east porch. In this case the guttering is deteriorating and the drainage is to the porch foundation. The siding is also stained in areas.

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The interior walls of the residence were generally plaster with paper covering. There were numerous cracks in the walls around doors and windows, especially in the second floor rooms. The cracks in the wallpaper are probably indicative of underlying plaster cracks in many cases. The paper covered ceilings were also cracked in places. Based on the amount of staining on the walls and ceilings of the residence, there appears to be significant water damage.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

RMW/ kg
Enclosure: 335 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 84

2- SUMMARY FORM

3- SKETCH OF STRUCTURE



## Sketch Of Mary Malone Residence


Sketch of the second pion
Mary Malone Residence


## 33-66
















pre-blast survey, residential
I. Basic Information

1. Name of Resident: Mr. Morris Payne (Owned by Duane and Betty Wisdom)
2. Date: $\qquad$ Thue: 12:30PM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: East side of Second Street. P \& M Map Block 19 Lot 5
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: 1985 - Present
7. Dates of any temporary or pernanent abandownent Unknown
II. Information Concernifig Buildings
(repeat for additional buildings)
8. Date of original construction: Early 1900's
9. Date(s) of major remodeling or additions:
(a) Added bathroom (1960's)
(b) Remodeled living room
(c) Kitchen, back porch
10. Construction of building:
(a) framing (foists, rafters, and stud walls):2" $\times 4$ " stud walls
(b) interior walls: Plaster and sheetrock
(c) roof: Shingled
(d) footings; foundatlons: Rock and brick foundation
(e) basement walls (Indicate how keyed to footing of floor):

Not. applicable
(f) basement Eloor (keyways, thickness):
(g) name of ferson(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Environmental Information

1. Approximate elevation of area:

845 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (indicate depth"and use): Covered, not used
5. Cisterns or surtace water storage utilized: (indicate purpose and approxinate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity:

See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
2.e South
9. East
10. West
VII. Comments or supplenentary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction technlques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of decerioracion, may exhlbit an unusual response to normal blasting activiries.

See survey narrative

## White - Industrial Seismology, Inc. <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

November 12, 1986
Report No. 87056-83
P \& M Map Photo No. 90

| Subject: | Inspection of the Morris Payne Residence Owned by Duane and Betty Wisdom <br> P. O. Box 175 <br> Amoret, Missouri 64722 <br> November 8, 1986 |
| :---: | :---: |
| To: | The Pittsburg and Midway Coal Mining Company P. O. Box 8 <br> Amsterdam, Missouri 64723 |

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION

This is an old frame structure resting on a rock and mortar or brick foundation. The paint and wood shows deterioration.

ID photograph of the west side of the residence. (Photo 83-1)
The bricks in the chimney are uneven and some bricks are missing at the top. It appears to lean toward the north. (Photos 83-2 and 83-3)

The driveway at the scuthwest corner of the residence is heavily deteriorated. (Photo 83-4)

The front stoop slab appears to be in good condition. (Photos 83-5 and 83-6)

The southernmost window on the west side is covered. The screen is torn on the front door. The screen on the northernmost window is also damaged.

The concrete along the sides of the driveway is cracked and heaved.
(Photos 83-7 thru 83-1.1)
The west side foundation is obscured by the wood siding and the concrete porch.

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ID photographs of the south side of the residence. (Photos 83-12 and 83-13)

Additional photograph of the west brick chimney stack from the south side. (Photo 83-14)

There is another brick chimney stack toward the east end of the structure. This chimrey has bricks missing at the top. (Photo 83-15)

Series of photographs showing the visible foundation underneath the western section of the south side. (Photos 83-16 thru 83-18)

The foundation is partially obscured toward the east section of the south side. (Photos 83-19 thru 83-21)

Many of the windows are broken and covered.
ID photograph of the east side of the residence. (Photo 83-22)
The yard has not been recently mowed.
Series of photographs of the east foundation. (Photos 83-23 thru 83-25)
There is an old garage and a metal storage shed at the southeast corner of the residence. (Photo 83-26)

ID photograph of the east brick chimney from the east side. (Photo 83-27)

Cellar
The exterior of the cellar is covered with grass and weeds.
There is no door on the cellar.
The cellar is filled with debris and the floor is covered with mud.
The interior walls appear to be in fair condition. (Photos 83-28 thru 83-33)

There is a crack along the front of the cellar entrance. It extends underneath the door. (Photos 83-34 and 83-35)

ID photographs of the exterior of the cellar. (Photos 83-36 and 83-37)
ID photograph of the garage and storage shed. (Photo 83-38)
ID photograph of the north side of the residence. (Photo 83-39)

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Another photograph of the east brick chimney from the north side. (Photo 83-40)

This side of the residence is heavily grown up with weeds.
A small amount of the rock foundation can be seen on this side. (Photo 83-41)

Also note that the north wall bows outward. (Photo 83-42)
Photograph of the west brick chimney from the north side. (Photo 83-43)
Garage
Dirt floor.
ID photographs of the interior. (Photos 83-44 thru 83-49)
ID photograph of the exterior south side. (Photo 83-50)
The west window is missing and the east window is cracked.
INTERIOR INSPECTION
We entered through the west entrance into the living room.
Living Room
Carpeted floor.
Drywall walls.
Plaster ceiling.
ID photograph of the north wall. (Photo 83-51)
Now looking at the west wall.
There is a small horizontal separation at the lower right corner of the window. It measures about 1 and $1 / 2$ inches in length. (Photo 83-52)

There is a vertical hairline crack at the upper left corner of the window. It extends tc the ceiling. (Photo 83-53)

There is a small wall deformation at the upper left corner of the door. (Photo 83-54)

ID photograph of the west wall. (Photo 83-55)

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There are two holes in the south wall. (Photos 83-56 and 83-57)
There is a horizontal hairline crack along the lower section of the flue. It measures 3 to 4 inches in length. (Photo 83-58)

There is a vertical hairline crack at the upper right corner of the door. It extends to the ceiling. (Photo 83-59)

The wood framing of the door is separated from the wall. (Photo 83-60)
There is a horizontal hairline crack at the upper left of the door. It extends about 10 inches. (Photo 83-61)

ID photograph of the south wall. (Photo 83-62)
ID photograph of the east wall. (Photo 83-63)
None of the electric outlets, windows, or doors have any trim around them in this room.

We have now moved southward out of the living room.
Southwest Room
Carpeted floor.
Papered walls.
Paper covered ceiling.
The wall paper is cracked in the northeast corner. (Photo 83-64)
There is a hairline crack at the upper right corner of the door. It appears to extend about 7 inches. It is difficult to see this crack for the cobwebs. (Photo 83-65)

There is a vertical paper crack at the upper left corner of the door. It extends to the ceiling. (Photo 83-66)

The wall paper is cracked along the right side of the flue. (Photo 83-67)

The wallpaper is also cracked along the left side of the flue. (Photo 83-68)

ID photograph of the north wall. (Photo 83-69)
Photograph of visible ceiling tape seams near the northwest corner. (Photo 83-70)

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Now looking at the west wall.
There is an area of cracking and paper deformation at the upper right of the window. (Photo 83-71)

There is an area of wall deformation at the lower left corner of the window. (Photo 83-72)

ID photograph of the west wall. (Photo 83-73)
Now looking at the south wall.
There is a hole in the wall to the right of the window. (Photo 83-74)
There is a large area of wall deformation at the upper right of the window that has been covered over by a piece of plastic. (Photo 83-75)

There is a paper separation at the lower right corner of the window. (Photo 83-76)

The wallpaper is also separated at the lower left corner of the window. (Photo 83-77)

ID photograph of the south wall. (Photo 83-78)
Now looking at the easit wall.
There is a section of the wall paper that is cracked a couple of feet to the right of the blocked door. (Photo 83-79)

The lower corners of the door are obscured by a desk.
There is wallpaper cracking at the upper left corner of the door. (Photo 83-80)

ID photograph of the east wall. (Photo 83-81)
ID photographs of the ceiling. (Photos 83-82 thru 83-84)
Moved eastward out of the living roan into the kitchen and dining room.
Kitchen/Dining Room
Vinyl floor.
Drywall walls and ceiling.
Start with the north wall.

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There is a fine hairline crack at the upper right corner of the window. It measures about 1 inch in length. (Photo 83-85)

ID photograph of the north wa.ll. (Photo 83-86)
Now looking at the west wall.
There is a hole in the wall underneath the cabinets. (Photo 83-87)
ID photograph at the west wall. (Photo 83-88)
Now looking at the south wall.
Toward the east end, there is a vertical hairline crack at the upper right corner of the door into a bedroan. It extends to the ceiling. (Photo 83-89)

There is also a horizontal hairline crack at the upper left corner. This extends 2 inches to the east wall. (Photo 83-90)

ID photographs of the south wall. (Photos 83-91 and 83-92)
Now looking at the east wall.
ID photographs of the upper section of the stove flue. The flue is discolored and cracked around the pipe. (Photos 83-93 and 83-94)

ID photograph of the east wall. (Photo 83-95)
There is a crack in the ceiling near the south wall. (Photo 83-96)
There is a hairline crack in the ceiling emanating from the stove flue. (Photo 83-97)

There is a bathroom at the northeast corner of the kitchen.
Bathroom
Vinyl tile floor.
Drywall walls.
On the north wall, there is a vertical crack at the upper right corner of the window. This crack has a maximum width of $1 / 16$ of an inch and extends to the ceiling. (Photo 83-98)

The exterior wall is missing underneath and to the left of the window. The visible insulation is in poor condition. (Photo 83-99)

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The œiling is also cracked above this area. (Photo 83-101)
Looking at the west wall, there is a hairline vertical crack at the upper left corner of the door. It extends to a tape seam near the ceiling. (Photo 83-100)

Some of the floor tiles are missing around the toilet. (Photo 83-102)
ID photographs of this bathroom. (Photos 83-103 thru 83-106)
Now moving out of the southeast corner of the kitchen into the utility roan.

## Utility Room

Vinyl floor.
wood walls and ceiling.
This area is also used for storage.
ID photographs of this room. (Photos 83-107 thru 83-111)
'There is a very small bedroom at the southeast corner of the kitchen.
Bedroom
Vinyl floor.
Paneled walls.
Looking at the south wall.
The window trim is cracked at the upper corners. (Photo 83-112)
ID photographs of this room. (Photos 83-113 thru 83-115)
Some of the ceiling covering has been removed.
There is another bedroan at the southwest corner of the kitchen and dining room.

Bedroom
Carpeted floor.
Papered walls and ceiling.
Starting with the north wall.

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There is a pair of hairline diagonal cracks to the left of the door. The maximum length of these is about 2 feet. (Photo 83-116)

The paper is cracked in the northwest corner. (Photo 83-117)
Looking at the west wall.
There is a hairline crack in the paper to the right of the door. it measures about 15 inches in length. (Photo 83-118)

The wallpaper is cracked to the left of the door above the mirror. (Photo 83-119)

The south wall is partially covered by a piece of wallboard.
The wallpaper is cracked in the southwest and southeast corners. (Photos 83-120 and 83-121)

There are holes in the wall paper near the south end of the east wall. (Photo 83-122)

A piece of wall paper is missing about the middle of the east wall. (Photo 83-123)

There is an area of paper cracking in the east wall toward the north end. (Photo 83-124)

There are holes in the wall paper to the upper left of this. (Photo 83-125)

The ceiling is bowing above the bed and it is discolored. (Photo 83-126)

ID photographs of this bedroom. (Photos 83-127 thru 83-130)
Also note that there are water stains on the walls. (Photos 83-131 and 83-132)

General Comments
This residence is an old frame structure. The foundation appears to be rock in sane areas and brick in others. The exterior walls show deterioration. The siding on the east section is chipped and broken in places. There is no roof guttering around the residence. Some of the shingles were uneven and discolored.

There are many cracks around corners of doors and windows on the interior of the structure.

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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

## RMW/mp

Enclosure: 132 Photographs

I- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 90

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Nelle_Tones
2. Date: October 26, 1986 Tine:_12:30PM
3. Address:_ P. De_Box 81,_Amoret,_Missouri 64722
4. Location: Second Street 200'feet north of 52 Highway
5. Telephone Number: (816) 925-3340
6. Dates of occupancy by current resident: 1971 - Present
7. Dates of any temporary or permanent abandorment:Unknown
II. InEormation Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addicions: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): $2^{\prime \prime} x 8^{\prime \prime}$ joists
(b) interior walls: Papered or paneled 2"x4" Stud walls
(c) roof: Shingled, gable type
(d) footings; foundations: Rock and mortar
(e) basement walls (indicate how keyed to footing of floor): Could not see
(f) basement floor (keyways, thickness): Could not see
(g) name of person(s) who constructed building: Unknown
$(h)$ size and direction of any large windows: None
III. Envirommental Information
11. Approximate elevation of area:

843 feet at residence
2. Type of soil in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use) None5. Cisterns or surface water storage utilized: (indicate purpose andapproximate volume). None
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavenent:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.
See survey narrative

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256 JOPLIN, MO 64802-1256

PH. (417) 624-0164

November 4, 1986 Report No. 87056-28 P \& M Map Photo No. 86

Subject: Inspection of the Nelle Jones Residence Box 81 Amoret, Missouri 64722 October 26, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the east side. (Photo 28-1)
The wood porch on the east side is supported by five columns on the front and two at the sides.

The wood porch roof is deteriorating. (Photos 28-2 thru 28-4)
The east front door is uneven and it leans to the south. (Photo 28-5)
The wood walls and columns are also deteriorating. (Photos 28-6 and 28-7)

This is a two story frame structure with a rock foundation.
There are no downspouts at the northeast or southeast corners of the structure.

Photographs of the general conditions of the sidewalk at the front of the residence. This sidewalk is cracked and separated. (Photos 28-8 and 28-9)

The largest of the separations measures 1 and $7 / 8$ inches.
ID photographs of the north side. (Photos 28-10 and 28-11)

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The mortar is deteriorating in the foundation around the rocks. I will start on the east end and section off the foundation for detailed photographs from east to west. (Photos $28-12$ thru $28-26$ )

The height of the foundation from ground level at the east end of the north side is about ? inches.

The height of the foundation at the west end is 2 feet.
The paint on the wood siding is chipped and scarred in many places.
The shingles on the roof toward the west end are wavy and uneven. (Photo 28-27)

The brick chimney stack appears to be in good condition at this time. (Photos 28-28 and 28-47)

There is an L-shaped section at the northwest corner.
The enclosed porch leans to the northwest and there is a separation from the main house. (Photo 28-29)

At the northwest corner, there is evidence of settlement to the northwest. Much of the foundation is broken up and pushed outward. (Photos 28-30 thru 28-34)

ID photograph of the west side. (Photo 28-35)
The west foundation at the north end is loosely composed of brick and rock. (Photos 28-36 thru 28-38)

There is a partial basement underneath the south end of the west side. The basement window is leaning to the west. (Photos $28-39$ thru 28-45)

ID photograph of the south side. (Photo 28-46)
There is no downspout connected to the guttering at the southwest
corner. (Photo 28-43)
There is a vertical foundation crack measuring 2 feet 1 inch in length at the west end of the south side. (Photo 28-49)

There is a hairline crack to the right of this. (Photo 28-50)
There is a hairline foundation crack at the east end of this rom. (Photo 28-51)

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Moving around to the L-shaped area, there is a vertical foundation crack measuring $l$ foot 9 and $1 / 2$ inches. (Photo 28-52)

The foundation to the east is rock and mortar. Once again, in places the mortar is cracked, separated, or missing. (Photos 28-53 thru 28-67)

## Basement

It is a very small basement and there is very little light.
There is water on the floor.
There is no electrical outlet for us to use for additional lighting.
ID photographs starting with the north wall. (Photos 28-68 thru 28-85)
The rock and mortared walls are in generally poor condition. The mortar is separated and cracked in many places. The poured concrete walls appear to be in generally good condition. The concrete steps are also cracked.

INTERIOR INSPECTION
Entered at the east side.
Carpeted floor.
Paneled walls.
Looking at the west wall, there is a vertical paper crack above the upper left of the door. This paper crack measures 1 foot. (Photo 28-86)

There is a diagonal crack in the paper at the upper right corner of the south door. It measures 8 inches in length. (Photo 28-87)

ID photographs of this room. (Photos 28-88 thru 28-95)
Moving southward into the living room.

## Living Room

Carpeted floor.
Papered walls and ceiling.
Starting on the north wall. There is a vertical separation of the paper at the left side of the northernmost window on the east wall. This paper separation extends from the ceiling trim to the floor trim. This measures about 7 feet. (Photos 28-96 and 28-97)

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There is also a horizontal bulge and crack in the paper above the door measuring about 2 feet. (Photos 28-98 and 28-99)

We are now looking at the south wall. There is a diagonal crack at the upper right corner of the window. It measures 9 inches. (Photo 28-100)

There is a diagonal crack in the southernmost window on the east wall. (Photo 28-101)

ID photographs of this room. (Photos 28-102 thru 28-105)
Now moving westward out of the living room and into the dining room.

## Dining Room

Hardwood floor with a large area of carpet.
Papered walls.
Looking at the south wall. There is a vertical paper crack above the upper left corner of the westernmost window. This crack measures 7 inches. (Photo 28-106)

ID photographs of this room. (Photos 28-107 thru 28-110)
There is a bedroom to the north.
Bedroom
Carpeted floor.
Paneled walls.
Acoustical tile ceiling.
Nothing noted.
ID photographs of this room. (Photos 28-111 thru 28-115)
There is a bathroom at the northwest corner of this bedroom.

Bathroom
Vinyl floor.
Painted sheetrock walls.
Paper covered ceiling.
There is an area of water damage to the ceiling at the northeast corner. (Photos 28-116 and 28-117)

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ID photographs starting with the west wall. (Photos 28-118 thru 28-123)
Moving southward out of the bathroom into the utility room.
Utility Room
Wood floor.
Papered walls and ceiling.
Start with the north wall. There is a diagonal paper crack at the upper right corner of the door. The paper crack measures 32 inches. (Photo 28-124)

There are two vertical paper cracks above the coat rack. The longest of theses measures about 14 inches. (Photo 28-125)

The paper is bulging and separated along the ceiling. (Photos 28-126 and 28-127)

The floor slopes to the east.
There is a deformation of the paper at the left side of the door. This measures 11 inches at maximum length. (Photo 28-128)

There is a paper crack about the center height of the northwest corner. This measures 11 inches. (Photo 28-129)

Now looking at the west wall. There is a diagonal paper crack at the upper left corner of the window. This measures 20 inches. (Photo 28-130)

There is a horizontal paper crack in the wall intersecting a paper seam. It measures akout 7 inches. (Photo 28-131)

There is a vertical trending paper crack at the upper right corner of the door. This extends from the ceiling to the top of the door. It measures 29 inches. (Photo 28-132)

There is a smaller vertical crack toward the upper left of the door. It measures 10 inches. (Photo 28-133)

There is a separation of the paper at the southwest corner. (Photo 28-134)

Now on the south wall. There is a vertical paper crack measuring 8 and $1 / 2$ inches. (Photo 28-135)

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There is a horizontal crack in the wall between the upper right of the south door and the upper left of the door on the west wall. It measures 33 inches. (Photo 28-136)

There is a crack in the wall paralleling a paneled section. This measures about 13 inches diagonally. (Photo 28-137)

Still on the south wall, the ceiling is water damaged around the vent near the southeast corner. (Photo 28-138)

Looking at the east wall, there is an area of water stains on the ceiling. (Photo 28-139)

There is an east to west crack in the ceiling. (Photos $28-140$ and 28-141)

There is also a north to south crack in the ceiling that intersects this. (Photo 28-142)

ID photographs starting with the north wall. (Photos $28-143$ thru 28-147)

ID photographs of the ceiling. (Photos $28-148$ thru $28-151$ )
Now moving southward to the kitchen.

## Kitchen

Vinyl floor. Paneled walls.

ID photographs starting with the west wall. (Photos $28-152$ thru 28-157)
Nothing noted.
Moving southward out of the kitchen into a bedroom.
Bedroom
Carpeted floor.
Paneled walls.
Papered ceiling.
There is water damage on the ceiling toward the south wall and the east wall. (Photos 28-158 thru 28-161)

ID photographs of this room. (Photos 28 -162 thru 28-164)

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There is an enclosed porch to the west off the utility room.
Porch

As was noted previousily this porch leans to the west.
Wood floor, walls, and ceiling.
ID photographs of this room. (Photos 28-165 thru 28-170)
Upstairs

East Bedroom
Wood floor with an area carpet.
Papered walls and ceiling.
At the north end of this bedroom there is a small storage room.
Starting at the north wall. There is a diagonal crack in the paper at the northeast corner. This crack also follows the northeast corner. The diagonal measures 11 inches. (Photos 28-171 and 28-172)

There is a vertical crack at the upper right corner of the door to the storage room. There is also a vertical crack at the upper left corner. These measure 15 inches and 13 inches, respectively. (Photos 28-173 and 28-174)

There is a crack across the hanging mirror on the west wall. (Photo 28-175)

There is a horizontal crack between two vertical tape seams. This crack measured 18 inches. (Photo 28-176)

There is a separation of the paper across the south wall. (Photos 28-177 and 28-178)

There is paper cracking in the southwest corner. (Photo 28-179)
Looking at the east wall, there is a vertical trending crack and it extends behind a painted board. It measures 4 feet in length. (Photo 28-180)

There is a horizontal crack between two paper joints. It measures 18 inches. (Photo 28-181)

There is a vertical crack through the paper that intersects a horizontal splice in the paper. It measures 3 feet 7 inches. (Photo 28-182)

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Still on the east wall, there is a vertical paper crack at the lower right corner of the window. It measures 8 inches. (Photo 28-183)

ID photographs of this room. (Photos 28-184 thru 28-188)
This room leans slightly to the southeast.
There are also some minor tape seam separations in the ceiling to the north of the light. (Photos 28-189 thru 28-192)

Now moving westward down the hall.
Hall
There is a horizontal crack near the ceiling at the east end of the hall. (Photo 28-193)

Looking at the south side of the hall, above the upper left corner of the door into the bedroom, there is a horizontal crack that has been plastered over. It measures 11 inches. (Photo 28-194)

Looking at the north side of the hall, there is a diagonal crack at the upper northeast corner. It measures 6 inches. (Photo 28-195)

There is a hairline horizontal crack in the wall just below that. This measures 12 inches. (Photo 28-196)

Still looking at the north wall, there is a large horizontal separation of the wall near the ceiling. This measures about 63 inches. The width of this separation is close to $1 / 8$ of an inch. (Photos $28-197$ thru 28-199)

There is cracking above the door on the west wall. (Photo 28-200)
There is a crack in the ceiling at the west end. This crack measures approximately 4 feet 6 inches. (Photo 28-201)

The room on the south side of the hall is a bedroom.
Bedroom
Wood floor and area carpeting. Papered walls.

Looking at the north wall, there is a diagonal crack at the upper right of the door. It measures 5 inches. (Photo 28-202)

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Looking at the west wall, there are paper cracks underneath the area where the wall angles in. (Photo 28-203)

Looking at the south wall, there is a long diagonal crack at the right side of the window. It measures 31 inches. (Photo 28-204)

Also on the south wall there is a diagonal crack and a vertical crack at the upper left corner of the window. The vertical crack measures 2 feet 2 inches. (Photo 28-205)

There are more paper separations at the east end of the south wall, underneath the wall where it angles inward. (Photo 28-206)

There is a paper separation at the corner. The separation measures about 2 feet. (Photo 28-207)

There is a crack in the ceiling above the light. (Photo 28-208)
There is also a crack in the ceiling near the west end. (Photos 28-209 and 28-210)

ID photographs of this room. (Photos 28-211 and 28-212)
There is a bedroom at the west end of the hall.
Bedroom
Carpeted floor.
Sheetrock walls.
Acoustical tile ceiling.
There is a vertical crack in the north wall. It extends behind some pictures and a dresser. (Photos 28-213 thru 28-217)

There is an area of cracking toward the west end of the north wall. It measures approximately 4 feet maximum length. (Photo 28-218)

Now looking at the west wall, there is a diagonal crack at the upper left of the window. It measures 13 inches. (Photo 28-219)

Looking at the south wall, there is a horizontal crack at the lower right of the window. This extends all the way to the wall. It measures 39 inches. (Photo 28-220)

There is a hairline crack towards the east end of the south wall. It measures approximately 60 inches. (Photo 28-221)

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There is a horizontal crack at the lower left corner of the window. It measures 38 inches. (Photo 28-222)

There is an area of ceiling staining above the east door. (Photo 28-223)

There is a large area of the ceiling that has fallen out by the south wall. (Photo 28-224)

Also a couple of ceiling stains around the center of the ceiling. (Photo 28-225)

ID photographs. (Photos 28-226 and 28-227)
Now moving into the room on the north side of the hall.
Room
Wood floor on one side and vinyl on the other.
Paneled walls.
There is a bathroom to the west.
ID photographs. (Photos 28-228 thru 28-230)
Bathroom
There is a diagonal crack toward the south end of the west wall. It measures 2 feet 2 inches. (Photo 28-231)

There is another diagonal crack to the right of this. It measures 1 foot 5 inches. (Photo 28-232)

There is a deformation of the south wall to the left of the mirror. It measures 5 inches. (Photo 28-233)

There is a fine hairline crack through this deformation. This hairline crack measures 20 inches. (Photos 28-234 thru 28-236)

To the left of this there is a vertical trending hairline crack in the wall. It measures 2 feet 2 inches. (Photos 28-237 thru 28-239)

There is horizontal cracking near the ceiling at the corner. This measures 2 feet 2 inches long. (Photo 28-240)

There is also a vertical separation of the corner. (Photos 28-241 and 28-242)

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There is cracking in the east wall near the south corner. This measures 9 inches. (Photo 28-243)

There are some minor cracks in the ceiling. (Photos $28-244$ thru 28-247)
ID photographs of this room. (Photos 28-248 and 28-249)
Photographs down the stairway. (Photos 28-250 thru 28-253)
There is a diagonal crack at the upper right corner of the door back downstairs. This measures 12 inches. (Photo 28-254)

Now back outside at the garage.
Garage
They have no key to the garage available for us to look inside.
ID photograph. (Photo 28-255)
There are two large horizontal mortar separations above the right and left corners of the door on the south wall. These measures 15 inches. (Photo 28-256)

There is a stairstepping mortar separation near the upper right of the door. It measures 31 inches vertically. (Photo 28-257)

There is a stairstepping mortar separation at the lower left corner and a piece of missing concrete. The separation measures 17 inches vertically. (Photo 28-258)

The crack in the slab under the door measures $1 / 4$ of an inch in width. (Photo 28-259)

There is a mortar separation and a diagonal crack through a block farther west of the door. This is 26 inches long and has a width of about $1 / 16$ of an inch. (Photo 28-260)

Another slight mortar separation toward the west end and a hairline block crack. Maximum width of about $1 / 16$ of an inch. (Photo 28-261)

Above this, there is a hairline stairstepping mortar separation. It measures 2 feet long. (Photo 28-262)

Now looking at the west side, there is a stairstepping mortar separation of the upper block t.oward the south end. It has a width of about $1 / 16$ of an inch. (Photo 28-263)

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There is a stairstepping mortar separation at the north end of the west side. This measures 5 feet 1 inch vertically. It measures 1 and $1 / 2$ inches maximum width. (Photos 28-264 and 28-265)

There is a separation at the lower left corner of the window measuring 1 and $1 / 2$ inches in length. (Photo 28-266)

There are mortar separations at the upper left and upper right corners of the window.

The upper left separation has a width of $1 / 4$ of an inch. (Photo 28-267)
The upper right separation has a width of $1 / 8$ to $1 / 16$ of an inch.
(Photo 28-268)
ID photograph of the west side. (Photo 28-269)
ID photographs eastward down the north wall. (Photos 28-270 thru 28-272)

Now at the east side of the garage.
There is a large mortar separation at the upper left corner of the doors. It measures 8 inches in length and has a width of $l / 4$ of an inch. (Photo 28-273)

There is also a mortar separation at the upper right corner. It measures 11 inches long with a width of $1 / 8$ of an inch. (Photo 28-274)

ID photographs of the cellar. (Photos 28-275 thru 28-279)
The cellar is full of water. We cannot even see the bottom of the steps. The date 1913 is inscribed in the concrete.

There is an old concrete slab at the southwest side of the property. (Photo 28-280)

## General Corments

The Nelle Jones residence is located at an approximate elevation of 843 feet. The general drainage of water away from the foundation is poor. The guttering and dowspouts are either missing or in poor condition.

The foundation is mostly a rock and mortar composition. The mortar is heavily deteriorated in the foundation.

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The basement walls were concrete in some area and rock and mortar in others. The concrete walls were in fair condition. The rock and mortar walls were in poor condition. The mortar was generally heavily cracked and separated. There was also water on the basement floor.

The interior walls showed evidence of settlement cracks around doors and windows. There were also areas of water damage to the ceiling in some rooms.

The condition of the foundation and the interior of the residence cannot be significantly improved without extensive foundation repair. The lack of adequate water drainage away from the foundation will continue to enhance the deterioration of the foundation. This will in turn enhance already existing interior cracks and probably cause the development of new cracks.

That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services
$\mathrm{RMW} / \mathrm{mp}$
Enclosure: 280 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 86
2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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| Sketch-of | Basement |
| Nelle Jones House |  |




## $28-46$




28-35




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## I. Basic Informatior

1. Name of Resident: Ruth Garrison
2. Date: October 26,1986 Time: $4: 15 \mathrm{pm}$
3. Address: Box 321, Amoret, Missouri 64722
4. Location: Corner of Second and Madison Streets
5. Telephone Number:_(816) 925-3469
6. Dates of occupancy by current resident: 1982 _ Present
7. Dates of any temporary or permanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Dace of original construction: Unknown
9. Date(s) of major remodeling or addicions:
(a) Remodeled_kitchen_January 1986
(b)
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls):

Owner did not know
(b) interior walls: Papered
(c) roof: Shingled, hip type
(d) footings; Eoundations:Concrete
(e) basement walls (indicate how keyed to footing of Eloor): Not applicable
(E) basement floor (keyways, chickness): Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

859' Eeet at residence
2. Type of soll in area: silty clay loam
3. Type of subgrade drainage at base of foundat lon: None
4. Water wells utilized (Indicate deptheand use): Not used, covered
5. Cisterns or surface water storage utilized: (indicare purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage features: See photo. survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks 1 n interior walls:
2. Receding of doors, windows:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavenent:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comments or supflementary drawings See sketch

VIIL. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

October 28, 1986
Report No. 87056-16
P \& M Map Photo No. 19

| Subject: | Inspection of the Ruth Garrison Residence <br> Box 321 <br> Amoret, Missouri 64722 <br> October 26 and 27, 1986 |
| :---: | :---: |
| To: | The Pittsburg and Midway Coal Mining Company <br> P. O. Box 8 <br> Amsterdam, Missouri 64723 |

Attention: Mr. James A. Borders
Transcribed and edit.ed from taped field notes.

EXTERIOR INSPECTION
ID photograph of the east side. (Photo 16-1)
The house is a wood frame stucture with a concrete foundation.
Starting with the foundation toward the south end of the east side, there is a large mortar separation. It is a diagonal, 9 and $1 / 2$ inches in length and $1 / 2$ inch wide maximum. (Photo $16-2$ )

ID photographs of the porch and steps. The steps are cracked on the sides. (Photos 16-3 thru 16-6)

There is a foundation crack on the north side of the porch. It is 13 inches long with a width of $1 / 8$ an inch. This area appears to have been patched over previously. (Photo 16-7)

ID photograph of the north side. (Photo 16-8)
There is a crack in the foundation at the lower left of the easternmost window. The vertical length is 14 inches. The width near the base is $1 / 4$ of an inch. (Photo 16-9)

There is a foundation crack near the lower right of the westernmost window. This measures 15 inches. (Photo l6-10)

There is an L-shaped hairline foundation crack to the right. It is 19 inches long horizontally and 6 inches vertically. (Photo 16-1l)

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The Pittsburg and Midway Coal Mining Company
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October 26 and 27, 1.986
Page 2

There are foundation cracks at the west end of the north side. These are 21 and $1 / 2$ inches long with a width of $1 / 8$ of an inch maximum. (Photo 16-12)

Now on the west side. (Photo 16-13)
There is an area of foundation cracking in a patched area under the northernmost window. The foundation measures 21 inches from ground level. The width of: these is $1 / 8$ of an inch to a hairline. (Photo 16-14)

There are foundation cracks underneath the crawl space vent. The vertical length is $L 1$ and $1 / 2$ inches with a width of $1 / 4$ of an inch to $1 / 16$ of an inch. (Photos 16-15 and 16-16)

There is a stairstepping foundation crack and many vertical hairline cracks around it. The vertical length is 13 inches. (Photo 16-17)

There is a horizontal hairline crack along the foundation near the south end. This is about 4 feet 11 inches long. (Photo 16-18)

The well is covered by bricks.
The steps and small walk are heavily cracked. (Photo 16-19)
ID photograph of the south side. (Photo 16-20)
The enclosed porch, on the south side, is supported by bricks and concrete blocks. (photo 16-21)

There are separations around the crawl space vent. (Photo 16-22)
The sidewalk around this section of the house is cracked in places. The widths are about $5 / 8$ of an inch to $1 / 8$ of an inch. (Photos 16-23 and 16-24)

There is a section of the walk that is chipped off. (Photo 16-25)
ID photograph from the southeast. (Photo 16-26)
There is a garage at the west side of the residence. There is no guttering or downspouts around the garage. (Photo 16-27)

There is also a cellar. (Photo 16-28)
The walk to the garage is separated. (Photo 16-29)
The garage has a poured concrete foundation.
There is no noticeable cracking in the foundation.

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The Pittsburg and Midway Coal Mining Company
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INTERIOR INSPECTION
Entered through the east entrance.
Wood floor with area carpets.
papered walls and ceiling.

## Living Room

On the east wall there is deformation of the paper around the light switch. (Photo l6-30)

There is a diagonal paper crack at the upper left corner of the window. Measures 13 inches. (Photo 16-31)

Looking at the north wall, the paper is pulled away and stained at the lower corners of the window. (Photos 16-32 and 16-33)

The paper is cracking along the northwest corner. The cracking along this corner measures about 3 feet 7 inches. (Photos $16-34$ and 16-35)

The seams on the east and north walls are water stained.
Looking on the west wall, there is a vertical crack at the upper right of the door. (Photo 16-36)

There is also a diagonal crack at the upper left corner, and there is another diagonal crack below this. (Photos $16-37$ and 16-38)

Looking at the east wall, there is a hairline crack at the upper right corner of the door. It measures 5 and $1 / 2$ inches. (Photo 16-39)

ID photographs starting with north wall. (Photos $16-40$ thru 16-44)
Moving to the south of the living room into a bedroom.

## Bedroom

Wood floor with area rugs.
Papered walls and ceiling.
Starting with the north wall, there is a hairline diagonal crack from the ceiling down to a paper seam. This diagonal almost extends to the height of the wall. This crack is extremely faint at the lower end and difficult to see. It measures 5 feet 10 inches in diagonal length. (Photos $16-45$ thru 16-51)

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P \& M Map Photo No. 19
October 26 and 27, 1986
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There is a vertical crack above the right corner of the door. (Photo 16-52)

There is a vertical crack along the northwest corner. This crack extends the height of the wall which is 8 feet. (Photos 16-53 thru 16-55)

Looking at the west wall, there is a hairline vertical paper crack that extends the height of the wall. (Photos 16-56 thru 16-60)

There is another hairline vertical crack in the wallpaper. (Photos 16-61 thru 16-67)

On the south wall, there is a faint hairline crack in the paper extending the height of the wall. (Photos 16-68 thru 16-76)

There is a stairstepping hairline crack to the left of the window that extends the length of the wall from the ceiling to the floor trim. (Photos 16-77 thru 16-85)

The lower part of this extends behind the bed.
Now looking at the east wall.
There is a hairline vertical trending crack toward the south end that extends behind a montage of pictures down to the base of the wall. (Photos 16-86 thru 16-91)

Another vertical trending crack toward the north end of the east wall.
(Photos 16-92 thru 16-99)
ID photographs of this room. (Photos 16-100 thru 16-103)
Moving westward into the kitchen/dining room area.
Kitchen/Dining Room
Vinyl floor.
Looking at the north wall, there is a hairline vertical crack above the door to the bathroom. It is 11 and $1 / 2$ inches long. (Photo 16-104)

ID photographs. (Photos 16-105 thru 16-108)
Bathroom
Tile floor.
Tile lower walls.
Sheetrock upper walls.

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Between the kitchen and the bathroom there is a small room containing the water heater.

Looking at the south wall of the bathroom, there are vertical cracks above the upper right and upper left corners of the door. These cracks measure 5 inches and 4 and 1/2 inches, respectively. (Photos 16-109 and 16-110)

The tile is separated at the east wall near the bathtub. (Photo 16-111)
ID photograph of the bathroom. (Photo 16-112)
Now at the small area between the bathroom and kitchen.
There is a vertical hairline crack above the upper left corner of the door to the kitchen. This measures 8 and $1 / 2$ inches. (Photo 16-113)

There is a crack across the ceiling. It is 23 inches long. (Photo 16-114)

There is a crack in the southwest corner. (Photo 16-115)
There is a bedroom at the north side of the kitchen.
Bedroom
Carpeted floor.
Sheetrock walls.
Starting with the south wall, there is a diagonal crack at the upper right corner of the door, and there are two hairline cracks that extend off it. (Photo 16-1.16)

At the end of the two hairline cracks, there is another hairline vertical crack in the wall. It extends about 31 inches from the ceiling. (Photos $16-117$ thru $16-121$ )

There is a vertical hairline crack above the center of the door. (Photo 16-122)

Now looking at the east wall, there is a horizontal hairline crack at the west corner of the closet. (Photo 16-123)

There is a long diagonal crack on this wall. There is also a horizontal crack at this diagorial and it extends along the upper part of the three adjacent wall decorations. (Photos 16-124 thru 16-135)

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ID photograph of the east wall. (Photo 16-136)
Looking at the west wall, there is a faint vertical crack above the upper right of the window. It measures 2 and $1 / 2$ inches to 2 and $3 / 4$ inches long. (Photo 16-137)

ID photographs of the north and west walls. (Photos $16-138$ and 16-139)
Porch
This porch leans to the southeast.
It is very poorly supported outside. ID photographs. (Photos 16-140 and 16-141)

Garage
Dirt floor.
Used for storage.
ID photographs of the interior. (Photos 16-142 thru 16-145)
Cellar
The cellar is totally unused and the door on the outside has rotted.
The door appears to be nailed shut. It will not open.
We can see a little of the interior. There seems to be a lot of material scattered around.

The floor looks like it is wet.

## General Corments

The Ruth Garrison residence is located near the corner of Second and Madison Streets at an approximate elevation of 859 feet. The general drainage of water away from the foundation is good. The guttering and downspouts are in good condition and each downspout had a splashblock. However, the ground was damp around the perimeter of the foundation.

The foundation showed evidence of settlement load and hydraulic effects. The currert foundation cracks and separations can be expected to worsen with age from continued settlement and adverse environmental effects.

## White Industrial Seismology, Inc.

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The Pittsburg and Midway Coal Mining Company
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P & M Map Photo No. 19
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The interior inspection showed cracks around doors and windows typical of settlement and expansion. These cracks can be expected to increase in size and number with age.

That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/mp
Enclosure: 145 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 19

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


ain Floor on House and Garage







## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic InEomation

1. Name of Resident: Unoccupied, Owned by Edna MoCoy
2. Date: November 8,_1986_Tine: 3:00PM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: Northeast corner of Madison and Second Streets
5. Telephone Number: None
6. Dates of occupancy by current resident: Not applicable.
7. Dates of any temporary or permanent abandorunent:Unoccupied
II. Information Conceralng Buildings
(repeat for additional buildings)
8. Date of original construction: late 1880's
9. Date(s) of major remodeling or addicions:
(a) Kitchen - 1965
(b) Bathroom - 1965
(c)
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): 2" x 4" stud walls
(b) interior wallsplaster and sheetrock
(c) roof: Shingled
(d) footlngs; Eoundations: Cinder block foundation visible
(e) basement walls (Indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

854 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth'and use): Unused, covered
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable exlsting deterioration or damage See photo survey

1. Cracks in interlor walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techriques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.
See survey narrative

November 12, 1986
Report No. 87056-36
P \& M Map Photo No. 22

Subject: Inspection of the Edna McCoy Property Route 1
Amoret, Missouri 64722
November 8, 1986
Ib: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri. 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

Mrs. McCoy lives in Archie, Missouri.
EXTERIOR INSPECTION
ID photograph of the south side. (Photo 36-1)
The foundation is covered by siding on the south side.
ID photograph of the east side. The siding also covers the foundation on this side. (Photo 36-2)

There is no guttering around the residence.
There is a dug rock well at the east side of the property.
Well
The water is no more than 4 or 5 feet from the ground surface. ID photographs. (Photos 36-3 thru 36-5)

Mrs. McCoy said she had the water tested 2 or 3 years ago and it was found to be unfit for drinking.

Now looking at the north side of the structure. The lower part of the siding is discolored. (Photo 36-6)

There are mortar separations between blocks near the east end. The width of the largest separation is $3 / 4$ of an inch maximum. (Photo 36-7)

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There are various mortar separations ranging in width from about $3 / 8$ of an inch to a hairline. (Photos 36-8 thru 36-10)

There is evidence of block displacement at the northwest corner. The width of this is 1 and $1 / 4$ inches. (Photo $36-11$ )

Now looking at the west side foundation.
There is a block that is displaced about an inch out from the foundation. (Photo 36-12)

ID photographs of the visible west block foundation. (Photos 36-13 and 36-14)

ID photograph of the west side of the residence. (Photo 36-15)
There is a small brick chimney stack. It appears to be in good condition. (Photo 36-16)

The patio slab, at the southwest corner of the residence, is cracked east to west in two places. The maximum width of the northernmost crack is 1 inch. The maximum width of the southernmost crack is $3 / 8$ of an inch. (Photos 36-17 and 36-18)

The screen on the southernmost window is torn and the window is taped.
ID photograph of the chimney stack from the east side. (Photo 36-19)
There are two outbuildings at the east side of the property. (Photo 36-20)

The door to the larger shed will not open because the ground has grown up against the base and nails have been put across the door. Scme of the windows are broken or covered. The interior appears to have a wood floor. (Photos 36-21 thru 36-23)

There is a small white painted storage shed on a poured concrete slab. The floor is partially obscured. There are no evident cracks in the floor. (Photos 36-24 thru 36-28)

There is no guttering on these buildings.
Mrs. MCDOy also owns the adjacent lot to the south. There is a covered well on this lot. (Photo 36-29)

White Industrial Seismology, Inc.

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INTERIOR INSPECTION
Entered through the east door.
Kitchen/Dining Roam
Vinyl floor.
Sheetrock walls.
This is at the southeast corner of the residence.
Starting on the north wall.
There is a patched wall separation at the upper right corner of the door into the bathroom. The separation has a width of $1 / 8$ of an inch. (Photo 36-30)

There is also a patched separation at the upper left corner of the door into the bathroam. (Photo 36-31)

Adjacent to this is a patched separation at the upper right corner of the door to the water heater. (Photo 36-31)

The northwest corner is separated above a cabinet. (Photo 36-32)
ID photograph of the north wall. (Photo 36-33)
Now looking at the west wall.
There is a separation at the upper right corner of the door into the living room. (Photo 36-34)

There is also a separation at the upper left corner. (Photo 36-35)
This section of the kitchen is papered.
ID photographs will show that the paper is peeling in places. (Photos 36-36 and 36-37)

Now looking at the south wall.
There are wall joint separations at the upper right and left corners of the window. (Photos 36-38 and 36-39)

There is a vertical joint separation in the wall near the east end. (Photo 36-40)

ID photograph of the south wall. (Photo 36-41)

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Now looking at the east wall.
There are water stains above the window. (Photo 36-42)
There is a patched joint separation at the upper left corner of the window. (Photo 36-43)

There is a joint separation at the upper right corner of the door. (Photo 36-44)

There is a water stain above the upper left corner of the door. (Photo 36-45)

There is no ceiling covering and we can see the separations along the panel joints. (Photos 36-46 thru 36-49)

There is a bathroom at the north end of the northeast corner of the kitchen and dining room.

## Bathroom

Vinyl floor.
Partially papered walls.
Starting with the north wall.
There is a vertical paper crack along a wall joint at the upper right corner of the window. (Photo 36-50)

There is a vertical paper crack along a wall joint at the upper left corner of the window. (Photo 36-51)

There is a large area of water stains on the west wall and on the ceiling. (Photos 36-52 thru 36-56)

There is a vertical paper crack at the upper left corner of the door on the south wall. (Photo 36-57)

ID photographs of this room. (Photos 36-58 thru 36-61)
Also note that the bathroom door will not shut.
Now moving into the living roan.

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## Living Room

This is at the southwest corner of the structure.
Vinyl floor.
Papered walls.
There are a large number of paper tears and water stains on the north wall. The ceiling bows inward toward the center of the roam. (Photos 36-62 and 36-63)

The floor tends to slope toward the north wall of the residence.
ID photographs of the west wall. (Photos $36-64$ and 36-65)
There is a hairline diagonal crack at the upper left corner of the window. (Photo 36-66)

ID photograph of the south wall. (Photo 36-67)
ID photographs of the east wall. (Photos 36-68 and 36-69)
ID photographs of the ceiling. The covering on the ceiling is damaged and deteriorating. (Photos 36-70 thru 36-73)

Now moving into the bedroom at the northwest corner.

## Bedroom

Area carpet on the floor.
Papered walls.
Tiled ceiling.
The wall paper in the northeast corner is cracked. (Photo 36-74)
ID photograph of the north wall. (Photo 36-75)
ID photograph of the west wall. (Photo 36-76)
Looking at the south wall.
There is a hairline diagonal paper crack at the upper left corner of the west door. (Photo 36-77)

There are vertical paper cracks at the upper right and upper left corners of the door into the living roam. (Photos 36-78 and 36-79)

ID photograph of the south wall. (Photo 36-80)

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Looking at the east wall.
The closet door is missing and the closet is not finished.
ID photograph of the east wall. (Photo 36-81)
Now in the bedroom at the northeast corner of the residence.
Bedroom
Wood floor.
Papered walls.
Starting with the north wall.
There is a vertical paper crack at the upper left corner of the window. (Photo 36-82)

ID photograph of the north wall. (Photo 36-83)
ID photographs of the west wall. (Photos 36-84 and 36-85)
Looking at the south wall.
There is a vertical paper crack at the upper left corner of the door. (Photo 36-86)

The paper is bulging in a rectangular pattern on this wall also.
ID photographs of the south wall. (Photos $36-87$ and $36-88$ )
Now looking at the east wall. (Photo 36-89)
The paper is bulging around the power box.
ID photographs of the ceiling. (Photos 36-90 thru 36-95)
There are ceiling stains and an east-west tape seam separation across the ceiling.

ID photograph of the closet ceiling. (Photo 36-96)
General Conments
The Edna McCoy property is located at the northeast corner of Madison and second Streets. 'The approximate elevation at the residence is 854 feet.

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The exterior foundation was not visible on the south and east sides. On these sides, the siding extended to the ground. A block foundation was visible on the north and west sides of the residence. There were many areas of missing mortar and block displacement. There is no guttering around the structure.

The interior of the residence showed evidence of deterioration. Mrs. McCoy lives in Archie, Missouri and the stucture is unoccupied at this time. The living roar floor sagged indicating inadequate floor support. There were also water stains on the ceiling and walls of same rooms.

The structure exhibits the effects of age and settlement. Much of the interior deterioration is cosmetic in nature. However, there were indications of possible problems with floor and ceiling supports.

That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 96 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 22

2- SUMMARY FORM
3- SKETCH OF STRUCTURE

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## of the Edna Mccoy Property










## $36-1$



## II. 86

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PRE-BLAST SURVEY, RESIDENTIAL
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## I. Basic Information

1. Name of Resident: Ruby McDaniel
2. Date: October 23, 1986 Time: 2:10 PM
3. Address: Box 175 Amoret. Mo. 64722
4. Location: Lots 9, 10 Block 33
5. Telephone Number: _816-925-3321
6. Dates of occupancy by current resident: September 1968 to Present
7. Dates of any temporary or permanent abandonnent: Vacant when purchased, was parsonage of the
II. InEormation Concerning Buildings Presbyterian Church
(repeat for additional buildings)
8. Date of original construction: Very old, date unknown
9. Date(s) of major remodeling or additions:
(a) Remodeled_in 1968
(b) Back porch and Cellar added in 1968
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Not known by resident
(b) incerior walls: plaster (papered and painted over)
(c) roof: Shingle
(d) footings; foundations: Stone and concrete block foundation Footing (Unknown)
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(E) basement: floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Grandfather of Fern Glassmire helped build
(h) size and direction of any large windows: None
III. Enviromental Information
11. Approximate elevation of area: 865 feet
12. Type of soll in area: Silty Clay Loam
13. Type of subgrade drainage at base of foundation: Not known by resident
14. Water wells utilized (indicate depth*and use): Used for drinking water
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Yes, not used
16. Source of water,if not Lncluded above: City water and well water
17. Eve troughs or any other exterior dralnage features: Yes, some clogged
18. Description of general grading or landscaplng in vicinity: Generally flat
IV. Any notable existing deterioration or damage
19. Cracks in interlor walls: See Survey
20. Receding of doors, windo'ns: See Survey
21. Noticeable setclement: See Survey
22. Eoundation cracks: See Survey
23. Exterior wall cracks (brick veneer): Not Applicable
24. Sidewalks, steps, driveway pavement: See Survey
25. Basement leaks: Not Applicable
V. Plan view of residence, well, outbuildings See Survey
VI. Elevarion views or photographs of walls
26. North See Survey
2.* South See Survey
27. East See Survey
28. West See Survey
VII. Comments or supplementary drawings See Survey
VIII. Discussion or specific coments concerning any unusual features, construction tectiniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an umsual response to normal blasting activities.

See Survey

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

October 24, 1986
Invoice No. 87056-37
P \& M Map Photo No. 15

Subject: Inspection of the Ruby McDaniel Residence
P. O. Box 175

Amoret, Missouri 64722
October 23, 1986
To: $\quad$ The pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the front, south side. (Photo 37-1)
The roof has cupping shingles on the south side. (Photos $37-2$ and $37-3$ )
ID photograph of the brick chimney from the south. (Photo 37-4)
ID photograph of the north side of the chimney. (Photo 37-5)
D photograph of the the west side of the chimney. (Photo 37-6)
ID photographs of the porch at the south side of the house. (Photos 37-7 and 37-8)

The porch is founded on rocks and bricks.
The front sidewalk is being overgrown with grass. (Photos 37-9 and 37-10)

ID photographs of the city sidewal $k$ south of the house. This sidewalk is severely overgrown with grass. (Photos 31-11 and 37-12)

There is a crack in the front step, about 12 inches long and from 3/16 to a hairline in width. (Photo 37-13)

The sidewalk is cracked near the step and has about a 3/4 inch gap. (Photos 37-14 and 37-15)

White Industrial seismology, Inc.

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ID photograph of south side of the back porch. (Photo 37-16)
The back porch has concrete block walls.
Series of photographs of the south block wall of the porch. (Photos 37-17 thru 37-19)

There is a patched area with a hairline vertical mortar crack below the middle window. The crack is about 30 and $1 / 2$ inches long. (Photo 37-20)

The east side of the house has an area of siding missing to the lower right of the upper south window. This area has been covered with a gray material. (Photo 37-21)

ID photograph of the east side of the house. (Photo 37-22)
ID photographs of the east side of the roof. (Photos 37-23 and 37-24)
The lower south window on the east side has deteriorating paint at the trim and there is a separation at the top of the window. (Photo 37-25)

The upper south window also has deteriorating paint.
Now inspecting the east foundation.
At the south end, in the stone foundation, there is a gap $1 / 2$ inch wide and about 6 inches high. (Photos 37-26 and 37-27))

The next mortar joint to the north has an $1 / 8$ of an inch wide gap. (Photo 37-28)

The steps have settled at the east side of the back porch. (Photo 37-29)

The east side of the porch has a hairline stairstepping crack, south of the door. (Photos 37-30 and 37-31)

North of the door, there is a larger crack through block and mortar. (Photos 37-32 and 37-33)

The concrete sidewalk north of the steps has several cracks. They range in width from $1 / 2$ an inch to a hairline. (Photos 37-34 thru 37-40)

The windows on this back porch have severely deteriorated caulk seals and paint.

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ID photographs of the three east windows north the door, from left to right. (Photos 37-4l thru 37-43)

ID photograph of the east window south of the door. (Photo 37-44)
ID photographs of the three south facing windows. (Photos 37-45 thru 37-47)

The west pane of the middle south window has a horizontal crack. (Photo 37-46)

The lower south window on the east side of the house has deteriorated caulk and peeling paint. (Photos 37-48 and 37-49)

There is a very faint crack in the east block wall of the porch, below the middle window, north of the door. It is about 2 feet long. (Photos $37-50$ and 37-51)

There is slight stairstepping mortar crack at the north end of the west side. It measured about 11 inches on the diagonal and is just wider than a hairline. (Fhoto 37-52)

ID photographs of the north side of the house. (Photos 37-53 thru 37-56)

There is a narrow trench about 10 feet north of the house, paralleling the north side.

The northeast corner of the back porch has a stairstepping mortar crack. It measures 7 and $1 / 4$ inches on the diagonal. (Photo 37-57)

There is a crack through block and mortar at about the middle of the north porch wall. It measured 31 inches in length and from about $1 / 16$ of an inch to a hairline in width. (Photos 37-58 and 37-59)

Mortar is cracked and falling out of the joint where the porch attaches to the house. (Photos 37-60 and 37-61)

The old cistern is severely deteriorated and cracked.
ID photograph of the north side. (Photo 37-62)
ID photograph of the east side. (Photo 37-63)
ID photograph the west side. (Photo 37-64)
Now a view looking in the west compartment. (Photo 37-65)

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Now a view into the east compartment. (Photo 37-66)
This cistern is clogged at this time.
Continuing the foundation inspection.
West of the porch, there is a block missing and a screen covers the hole. (Photo 37-67)

A downspout empties to the house foundation behind the cistern. Moss is growing on the foundation and siding in this area indicating execessive moisture. This condition will contribute to the formation of foundation cracks. (Photo 37-68)

The north windows, near the gas meter, have deteriorating caulk and paint. (Photos 37-69 and 37-70)

There are mortar gaps between blocks below the window east of the meter. (Photos 37-71 and 37-72).

Now at a west facing wall. The kitchen sink discharges under the house inside the wire covered area. This condition will contribute to the formation of foundation cracks. (Photos $37-73$ and 37-74)

This house has many cracked and broken siding panels.
There are several cracked panels on the lower north side near the gas meter.

There is severe caulk and paint deterioration at this west facing kitchen window. (Photo 37-75)

There is a mortar separation about 9 inches long and about $3 / 16$ of an inch wide at the north facing foundation west of the kitchen. (Photos $37-76$ and 37-77)

The next mortar joint to the west is also separated. (Photos 37-78 and 37-79)

Part of this foundation area is hidden.
Now at the west facing wall of the hallway.
There are several mortar cracks and separations in this area. (Photos 37-80 thru 37-85)

Separations in this area range from about an inch wide to roughly hairline.

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The two west facing windows of the hallway have severe caulk deterioration and peeling paịnt. (Photos 37-86 thru 37-88)

Now on the main part of the west side of the house.
There are several mortar separations and cracks between blocks in this area of the foundation.

Series of photographs of this area of the foundation from north to south. Separations and cracks range from hairline to about 1 and 3/4 inches wide. (Photos 37-89 thru 37-98)

The first floor west bedroom window has a broken pane sealed with electrical tape. (Photo 37-99)

A view of the upstairs west window. (Photo 37-100)
ID photographs of the west side of the house. (Photos $37-101$ and 37-102)

Now on the south side of the house, west end.
There is a cracked and shifted block and mortar separations at the southwest corner. (Photos 37-103 and 37-104)

The next block to the east has a mortar separation at its right end. (Photo 37-105)

There is also separation at the right side of the next block to the east, below the west window. (Photo 37-106)

There is a horizontal separation below the third block fron the west end. (Photo 37-107)

The fourth mortar joint from the west is slightly cracked. That is to the lower right end of the window. (Photo 37-108)

The next joint to the east is separated. (Photo 37-109)
There are large gaps, about $1 / 2$ inch wide, at the next two joints to the east. (Photos 37-110 and 37-111)

There is gap in the south foundation that is covered with wire. (Photo 57-112)

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There is a mortar separation below the lower left of the east window. The width varies from $1 / 4$ of an inch at the top to narrower at the bottan. (Photos 37-112 and 37-113)

The next joint to the east has a large gap, and the block is also cracked. This is below the window. The crack is about $1 / 8$ of an inch wide and the gap is about $3 / 4$ of an inch wide. (Photos 37-114 thru 37-116)

The next three mortar joints to the east are separated. (Photos 37-117 thru 37-122)

There is a cracked block to the lower left of the wooden porch, and horizontal and vertical mortar separation. (Photos 37-121 and 37-122)

The separations in the south foundation range from $5 / 8$ to $1 / 8$ of an inch wide.

There are several cracks in siding panels near the telephone inlet. (Photos 37-123 and 37-124)

The windows on the south side of the house, have deteriorated paint and caulk.

First a photograph of the lower west window. (Photo 37-125)
Now the of upper west window. (Photo 37-126)
Now the lower middle window. (Photos 37-127 and 37-128)
Now the upper middle window. (Photo 37-129)
Last, the upper east window. (Photos 37-130 and 37-131)
INTERIOR INSPECTION
Beginning the interior inspection in the living room, which is the southeast room of the house.

## Living Room

Wooden floor.
Beige painted walls, over wallpaper, over plaster. The ceiling is white painted over wall paper, over plaster.

There is extensive cracking in the ceiling and some hanging wall paper in the northwest part of the ceiling.

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There are extensive cracks on the walls also.
Windows on the east and south walls.
Arched entryway to a bedroom on the west wall.
Photograph of the west wall. (Photo 37-132)
Photographs of the north wall. (Photos 37-133 and 37-134)
Photograph of the east wall. (Photo 37-135)
Photographs of the south wall. (Photos 37-136 and 37-137)
A photograph of the southeast part of the ceiling. (Photo 37-138)
A photograph of the west part of the ceiling. (Photo 37-139)
A photograph of the north part of the ceiling. (Photo 37-140)
The ceiling has two slight cracks trending east-west across the length of the ceiling. These are at about the middle of the ceiling and have connecting intersecting cracks perpendicular to them. (Photos 37-141 thru 37-147)

There is a patched area in the northwest part of the ceiling. (Photos 37-148 and 37-149)

There is a crack below the flue in the northwest corner, to the upper left of the small closet door. It is 25 and $3 / 4$ inches long, and fram $1 / 16$ of an inch to a hairline in width. (Photos $37-150$ and 37-151)

There are two cracks above this small closet on the east facing wall. (Photos 37-152 and 37-153)

There is also a crack to the upper right of the flue plate. (Photo 37-154)

There is a crack directly above, and another to the lower left of the plate. (Photos 37-155 and 37-156)

There is a roughly horizontal crack to the left of the kitchen entrance on the north wall. It is about a 16 inch long hairline crack. (Photo 37-157)

A crack above the upper right corner of the east window runs to the ceiling, 21 inches. (Photo 37-158)

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There is a damaged area to the lower left of the east window. (Photos 37-159 and 37-160)

There is a roughly diagonal crack about 10 and $1 / 2$ inches long to the upper left of the east window. (Photo 37-161)

There is a damaged area to the lower right of the window. (Photo 37-162)

There is a vertical crack above the right corner of the front door on the south wall. It is just wider than a hairline. (Photo 37-163)

There is a water stain above the south window in the southwest part of ceiling. (Photo 37-164)

There is a faint horizontal crack to the upper right of the window that is about 7 and $1 / 2$ inches long. (Photo 37-165)

To the upper left of the west entrance, there is a crack about 26 and $3 / 4$ inches long. (Photos 37-166 and 37-167)

There are several nail pops along the right recessed face of the bedroon entrance. (Photo 37-168)

Bedroom
Wooden floor.
Yellow painted, over wall paper, over plaster walls.
White painted wallpapered, plaster walls.
There is extensive cracking in the ceiling.
Windows on the south and west walls.
Photograph of the south wall. (Photo 37-169)
Photographs of the west wall. (Photos 37-170 and 37-172)
Photograph of the north wall. (Photo 37-172)
Photographs of the east wall. (Photos 37-173 and 37-174)
There is a wooden closet in the northeast corner.
There is torn and hanging wallpaper in the east part of the ceiling. (Photos 37-175 thru 37-180)

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There are two roughly north-south trending paper cracks in the southeast corner of the ceiling. (Photos 37-179 and 37-180)

There is a tear in the ceiling paper above the south window. (Photo 37-181)

There are a few other cracks in the ceiling near the west window. (Photos 37-182 and 37-183)

There are a couple of stained areas in the ceiling near the north wall.
There is a vertical hairline crack above the upper left end of the north door. (Photo 37-184)

There are nail pops in the northwest corner. (Photos 37-185 and 37-187)
Below the lower right end of the west window, there is a hairline vertical crack. (Photo 37-186)

The west wall, north of the window, has ridged areas that indicate plaster cracks under the paper. (Photos 37-187 and 37-188)

There is cracking and peeling paper below the lower left end of the west window. (Photo 37-189)

There is a faint diagonal crack above the upper left of the west window. (Photos 37-190 and 37-191)

The upper south end of the west wall has a branching vertical crack that is just wider than a hairline. (Photo 37-192)

There are cracks above and to the upper right of the south window. (Photos 37-193 thru 37-195)

Below the lower right corner of the south window, a hairline crack runs vertically and then horizontally to the west wall, behind the bed. (Photos 37-196 and 37-197)

There is a patched area to the lower left of the window. (Photo 37-198)
There is a taped crack to the upper right of the east entry. (Photo 37-199)

There is also a taped crack at the upper left of the east entry. (Photo 37-200

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## Kitchen

Vinyl floor.
Green painted, papered, plaster walls. White painted, papered, plaster ceiling.

Windows on north and west walls.
Door to the back porch on the east.
Entrance to the hallway and two small closet doors on the west wall.
The ceiling has extensive cracks especially the northwest part.
Photographs of the hest wall. (Photos 37-201 and 37-202)
Photograph of the north wall. (Photo 37-203)
Photograph of the east wall. (Photo 37-204)
Photographs of the south wall. (Photos 37-205 and 37-206)
Photographs of the ceiling. (Photos 37-207 thru 37-210)
There is water damage to the ceiling that was caused by leaky plumbing upstairs, according to Mrs. McDaniel. (Photos 37-2ll thru 37-213)

Mrs. McDaniel indicated that there are two ceilings and the plumbing is between the two. She said that in 1980 her pipes froze and caused this damage.

A few feet from the west window, there are three ceiling bulges. (Photos 37-214 and 37-215)

West of the light fixture the ceiling is cracking along joints. (Photos 37-215 and 37-216)

There is a vertical crack above the upper right end of the east door. (Photo 37-217)

The pane of the east door i.s cracked. (Photo 37-218)
There is a diagonal crack above the left end of the south wall arch. (Photo 37-219)

There is torn paper in the upper southwest corner. (Photo 37-220)

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There are vertical cracks above the upper ends of the north window. The upper right is about a hairline wide and the upper left is about $1 / 16$ of an inch in width. (Photos 37-221 and 37-222)

There are two horizontal cracks, south of the sink on the north facing wall. The top is 25 inches long and just wider than a hairline, and the bottom is about 20 inches long and is a tearing type crack. (Photos 37-223 and 37-224)

The northeast part of the ceiling has a slight separation at a joint. (Photo 37-225)

Back Porch
The porch door is very difficult to shut. I had to lift very hard on the handle to get the door to shut.

Concrete floor.
Concrete block lower walls except the west. Pine paneling on the ceiling, upper walls, and west.

The middle west pane is cracked on the south wall, west window.
Photographs of the south wall. (Photos 37-226 and 37-227)
Photographs of the east wall. (Photos 37-228 thru 37-230)
Photograph of the north wall. (Photo 37-231)
Photographs of the west wall. (Photos 37-232 and 37-233)
The west window on the south wall has severe water damage to the lower part. (Photo 37-234)

The east wall, south of the door, has a large mortar separation through which light can be seen. (Photos 37-235 thru 37-237)

There is a slight st:airstepping crack through a block and mortar, just south of the east door. It is about $1 / 16$ of an inch wide. (Photos 37-238 and 37-239)

There is a very slight stairstepping mortar crack at the south end of the east wall. (Photo 37-240)

There is a large crack through block and mortar that has been sealed north of the east door. Light can be seen through the separation which is about $1 / 4$ of an inch at the widest. (Photos 37-241 thru 37-243)

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There is a vertical crack through block and mortar on the north wall between the west and middle windows. This crack extends the length of the block wall and ranges from $1 / 16$ of an inch to a hairline wide. (Photos 36-244 and 37-245)

The lower north end of the west wooden wall looks to be water damaged. (Photo 37-246)

The northeast part of the ceiling has a warped board that is displaced by about $3 / 8$ of an inch. (Photo 37-247)

The floor has cracks radiating from the cistern cover.
One crack diagonals rougly to the northwest, about 105 inches. It ranges from about $1 / 8$ of an inch at the widest at a spalled area to just wider than a hairline. (Photos 37-248 thru 37-250)

A crack diagonals to the northeast under the stove from the northeast corner of the section. It is about $1 / 8$ of an inch wide. (Photo 37-251)

Another crack at the north end of this area runs roughly west towards the door. It is about 59 inches long and about $1 / 16$ inch wide and it has a very slight branch near the door. (Photos 37-252 and 37-253)

The floor also has a crack at the southwest corner of this drain, it runs under the freezer and is just wider than a hairline. (Photo 37-254)

There is another small floor crack at the southeast corner. (Photo 37-255)

The previous crack intersects the largest floor crack which runs roughly east-west from the east door under the freezer and to the west wall. The width varies from about $1 / 8$ of an inch to a hairline. (Photos 37256 thru 37-258)

There are numerous filoor cracks at the east doorway. (Photo 37-259)
The large east-west trending crack has a very faint, hairline branch to the south, 24 inches long. (Photos 37-260 thru 37-262).

There is moisture damage below the northwest window. (Photo 37-263)
Now a photograph showing the west door and how it fails to close. (Photo 37-264)

There is another floor crack in the northwest corner. It is a diagonal crack, aproximately 27 inches long. (Photo 37-265)

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We were unable to remove the cistern cover to look inside.
Now back into the kitchen and into the hallway.
Hall
Tile floor.
Papered walls and ceiling.
Window on west wall.
Stairway along north wall.
Photograph looking westward into the hall. (Photo 37-266)
There are a lot of water stains in the ceiling.
There is deteriorating paper on the south wall.
There is a vertical crack above the east entrance back into the kitchen and a hanging piece of paper at the ceiling. (Photos 37-267 and 37-268)

The south wall has several water stains.

Photographs of the south wall. (Photos 37-269 thru 37-272)
Photograph of the west wall. (Photo 37-273)
There is a paper tear at the upper north end of the west wall. (Photo 37-274)

Now moving up the stairs.
Stairway
Papered walls and ceiling.
There is an area of shredded paper on the lower north wall above the second step. (Photo 37-275)

There is a large crack on the north wall. It is about 6 feet long vertically and diagonals back down the stairs about 6 feet. (Photos 37-276 thru 37-279)

Two areas of plaster are showing at the diagonal crack. (Photos 37-280 and 37-281)

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## Upstairs Hallway

Tile floor.
Papered walls and ceiling.
Photograph of the east wall. (Photo 37-282)
Photograph of the west wall. (Photo 37-283)
Photographs of the south wall. (Photos 37-284 and 37-285)
Photographs of the north wall. (Photos 37-286 thru 37-288)
There is torn and peeling paper to the upper left of the door on the north wall. (Photos 37-289 and 37-290)

The west door on the south wall has paper cracks above it. (Photo 37-291)

Another photograph of the crack above the stairway on the east facing wall. (Photo 37-292.)

There are some paper cracks in the ceiling at the west wall. (Photo 37-293)

The door on the west wall leads to a snall walk-in closet.
There is an L-shaped crack in the southeast corner of the ceiling. (Photo 37-294)

There is a 3 inch long vertical crack above the upper right corner of the east door on the south wall. (Photo 37-295)

Closet
Linoleum over wooden floor. papered walls and ceiling.

Small window on the west wall.
There is a patched area on the upper east end of the south wall. (Photo 37-296)

There is also a horizontal patch at the middle of the south wall. (Photo 37-297)

There are stains on the west wall below the window. (Photo 37-298)

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There are stains in the ceiling. (Photo 37-299)
Upstairs Hallway - Continued
The upstairs hallway has three missing tiles and several others are loose or cracked. (Photo 37-300)

West Bedroon
Papered walls and ceiling.
Tile floor.
The tile floor seems to bow toward the center.
Two windows on the west and one on the south wall.
Photograph of the south wall. (Photo 37-301)
Photographs of the west wall. (Photos 37-302 and 37-303)
There is a vertical crack, west of the door, on the north wall. (photo 37-304)

Photographs of the north wall. (Photos 37-305 and 37-306)
There is a roughly diagonal crack at the upper right end of the north wall. It becomes vertical and runs down the northeast corner. (Photos 37-307 thru 37-309)

The crack in the lower northeast corner is about a $1 / 4$ of an inch wide.
There are also stains in the northeast corner.
Photographs of the east wall. (Photos 37-310 and 37-311)
There is a heat register at the north end of the east wall with a diagonal crack at the upper right corner, and a gap at the upper right end. (Photos 37-312 and 37-313)

There is a horizontal tear in the paper at the upper left corner. (Photo 37-314)

The southeast corner has a tear in the paper along its length. (Photo 37-315)

There is a tear or crack in the lower southwest corner. (Photo 37-316)
Photographs of the ceiling. (Photos 37-317 and 37-318)

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The floor has some missing areas of tile and cracked tiles, mainly in the middle and southwest parts. (Photos 37-319 and 37-320)

The cracked tiles are near the south window. (Photo 37-321)
East Bedroom

Tile floor. Papered walls. Papered ceiling.

Two windows on the south and one on the east wall.

Door to a storage roam on the north wall.
The floor in this roon sags considerably toward the middle.
There are a couple of areas of missing tiles and sane cracks in the tile floor. (Photos 37-322 and 37-323)

Photograph of the south wall. (Photo 37-324)
Photograph of the east wall. (Photo 37-325)
Photograph of the north wall. (Photo 37-326)
Photographs of the west wall. (Photos 37-327 and 37-328)
A wooden closet covers most of the west wall.

There is extensive cracking in the walls and ceiling.
There is a large area of water damage in the southwest corner of the ceiling. (Photos 37-329 thru 37-331)

The northwest corner of the ceiling is also water damaged. (Photos 37-332 and 37-333)

To the upper left of the north closet door, there are some cracks that are about $1 / 16$ of an inch wide and a few areas of missing paper. (Photo 37-334)

Series of photographs of the ceiling. (Photos 37-335 thru 37-343)
There is a vertical crack above the upper left end of the south wall, east window. (Photo 37-344)

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There is another vertical crack to the upper right of the window. These both appear to be in the paper. (Photo 37-345)

There is a roughly diagonal paper crack to the upper left of the west south window. (Photo 37-346)

There are two cracks above the upper right corner. (Photos 37-347 and 37-348)

There is a vertical crack above the upper right end of the closet at the west end of the north wall. (Photo 37-349)

There is a roughly horizontal paper crack left of the closet door and another crack in the exposed area of plaster. (Photos 37-350 and 37-351)

There is a diagonal crack at the upper east part of the north wall. (Photo 37-352)

The east wall window has a crack above the upper left end. (Photo 37-353)

There is a paper crack to the upper right of the east window. (Photo 37-354)

## Storage Room

This is the northeast roon.
Tile floor.
Papered walls and ceiling.
Windows on the north and east walls.

Closet enclosure in the northwest corner.
Photograph of the south wall. (Photo 37-355)
Photographs of the west wall. (Photos 37-356 and 37-357)

Photograph of the north wall. (Photo 37-358)
Photographs of the east wall. (Photos 37-359 and 37-360)
This room has a lot of stored material hiding much of the east and south walls.

Photographs of the ceiling. (Photos 37-361 and 37-362)

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There are water stains in the northwest part of the ceiling and there is a vertical paper crack in this corner. (Photos 37-363 thru 37-365)

There is a crack above the upper left of the north window. (Photo 37-364)

There is a paper crack above the upper left of the east window. (Photo 37-366)

There is a vertical crack in the paper above the upper right corner. (Photo 37-367)

There is a vertical crack in the paper at the south part of the east wall. (Photo 37-368)

There is some damage on the west wall, south end at the upper door hinge. (Photo 37-369)

There are water stains at about mid height on the south part of the west wall. (Photo 37-370)

Bathroom
The hallway floor, leading to the bathroom, slopes somewhat to the north. (Photo 37-371)

Wooden lower walls.
Papered upper walls and ceiling.
Tile floor.
Window on the north wall.
There are several cracks in the walls.
Photograph of the east wall. (Photo 37-372)
Photograph of the north wall. (Photo 37-373)
Photograph of the the ceiling. (Photo 37-374)
The ceiling sags down in the middle along the east wall. At the middle of the east wall, the distance between the ceiling and the top of the lower wall measures 2 feet 9 inches and in the northeast corner the distance measures 2 feet 10 inches. (Photos 37-375 and 37-376)

Photographs of the south wall. (Photos 37-377 and 37-378)

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Photographs of the west wall. (Photos 37-379 and 37-380)
There is separation where the walls meet the bathtub. (Photo 37-381)
There is a crack in the paper and a bulge to the upper right of the window. (Photo 37-382)

There is a patched area at the cold water knob of the bathtub. (Photo 37-383)

There is a paper crack left of the window. (Photo 37-384)
There is a vertical paper crack at the upper left end of the west wall. (Photo 37-385)

There is a paper crack on the east wall to the lower right of the light fixture. (Photo 37-386)

There is also a crack at the upper left end of the mirror. (Photo 37-387)

There is a crack to the upper right of the mirror. (Photo 37-388)
There are also some stains on the walls.
Most of these paper cracks will probably increase in size over time, especially in the bathroom where moisture is present.

The bathroom œeiling slopes from a high point in the northwest to the southeast.

Back into the upstairs hallway.

Upstairs Hallway - Continued
The lower left part of the south wall, to the right of the east doorway, has paper separating. (Photo 37-389)

Another photograph of the east wall of the stairway. (Photo 37-390)
There is a diagonal paper crack at the lower left end of the east wall.
Garage - Exterior Inspection
The garage is located east of the house.
ID photograph of the west side. (Photo 37-391)

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ID photograph of the south side. (Photo 37-392)
The fascia board at the east end of the front is missing.
ID photographs of the east side. (Photos 37-393 and 37-394)
The south and east sides have sane broken siding panels.
The roof has deteriorated and cupping shingles.
ID photograph of the north side. (Photo 37-395)
The east wall has two windows with severely deteriorated caulk. (Photos 37-396 and 37-397)

The southeast corner has damaged siding panels. (Photo 37-398)
The west overhead door has deteriorating panels. (Photo 37-399)
The concrete apron at the west door has several cracks. These cracks range from $3 / 4$ of an inch wide including spalls to about $1 / 8$ of an inch wide. (Photos 37-400 and 37-401)

Grass has grown into some of the cracks.
The apron at the east door is extremely deteriorated. Grass has grown up through most of i.t. (Photos 37-402 thru 37-404)

The west window has deteriorated caulk joints. (Photo 37-405)
There is a large crack in the west foundation between the door and the window. It is about: $1 / 2$ inch at the widest. (Photos $37-406$ and $37-407$ )

There is a large, roughly diagonal crack about 5 or 6 feet from the west end of the north side foundation. It is about $1 / 2$ inch at the widest. (Photos 37-408 and 37-409)

There is another crack in the north side of the foundation just east of the middle. It is about $3 / 4$ inch at the widest. (Photos $37-410$ and 37-411)

The rest of the north foundation is covered by a brush pile.
There are several hairline cracks on both sides at the northeast corner. (Photos 37-412 thru 37-415)

Most of the east foundation is covered.

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Garage - Interior Inspection
Unfinished walls and ceiling. Concrete floor.

Two by four stud walls and rafters.
Photographs of the east wall. (Photos 37-416 and 37-417)
Photographs of the south wall. (Photos 37-418 and 37-419)
Photographs of the west wall. (Photos 37-420 and 37-422)
Photograph of the north wall. (Photo 37-421)
Photograph of the ceiling. (Photo 37-423)
There is a large east-west trending crack at the east part of the floor under the car. It runs all the way across and ranges fram about $3 / 4$ to $1 / 2$ an inch wide. (Fhotos $37-424$ and $37-425$ )

The slab is raised at the north end of the crack.
There is a large system of cracks at the north end of the east half of the floor.

The major crack trends roughly east-west and ranges from $3 / 4$ to $1 / 2$ an inch wide. The cracks converge in an X pattern north of the car. (Photos 37-426 and 37-427)

From the $X$, one crack trends to the southeast, one to the northeast, and one to the northwest. These cracks range from about $1 / 8$ to $1 / 2$ an inch wide.

These floor cracks cannot get any longer since they already run to the ends of the slab. They could possibly get wider or heave due to frost action.

The crack trending to the southeast is about 85 inches long. (Photos 37-428 and 37-429)

The crack trending to the northeast is about 4 feet 9 inches long. (Photos 37-430 thru 37-432)

The crack trending to the northwest is about 47 inches long. (Photos 37-433 and 37-434)

Now inspecting the west half of the floor.

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A long crack on the west slab trends north-south the length of the slab. This crack ranges from 1 inch to $1 / 8$ of an inch wide. (Photos $37-435,37-439,37-441$, and 37-442)

The main crack has a $Y$ at the north end. The west branch of the $Y$ runs about 66 inches and is about $1 / 2$ inch wide. (Photos 37-435 and 37-443)

The east branch of the north $Y$ runs about 59 inches and is about 1 inch at the widest. (Photo 37-435)

The main crack has an east trending branch that runs to the middle of the floor about 7 feet 1 inch. It ranges fran about $1 / 8$ to $1 / 4$ inch wide. (Photos 37-436 thru 37-438)

Near the west window, the main floor crack has two branches to the east. These range in width from about $1 / 16$ of an inch to hairline.

The north branch runs eastward about 40 inches and then Y's. (Photos $37-440,37-445$, and $37-446$ )

The north branch of this $Y$ runs 38 inches northeast. (Photo 37-447)
The south branch of this $Y$ runs southeast about 40 inches. (Photos 37-448 and 37-449)

The south branch off the main crack, near the west window, is a smaller crack running southeast about 65 inches. (Photos $37-450$ and 37-451)

The south end of the floor has a crack that runs from the middle of the floor, westward, and connects with the main floor crack. It is about 9 feet 4 inches long and has a width ranging from $1 / 2$ an inch including spalls to $1 / 16$ of an inch. (Photos $37-452$ thru 37-454)

A crack in the southwest corner is a diagonal branch of the main crack. It is about 31 inches long and from $1 / 4$ of an inch to a hairline wide including spalls. (Photos 37-441 and 37-444)

Cellar
ID photograph of the cellar and the well house. (Photo 37-455)
There are cracks in the concrete at the cellar entrance. These range from hairline to about $1 / 4$ inch wide. (Photos 37-456 and 37-457)

Photographs of the north and south walls of the cellar stairway.
(Photos 37-458 and 37-459)

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Now inside the cellar.
Concrete walls, floor, and ceiling.
There is tarpaper intertwined in the concrete walls and ceiling.
Photograph of the west wall. (Photo 37-460)
Photograph of the east wall. (Photo 37-461)
Photograph of the north wall. (Photo 37-462)
Photographs of the ceiling. (Photos 37-463 and 37-464)
Most of the south wall is hidden by a shelf.
Well
Looking inside the well house, all that can be seen is the pump.
Mrs. McDaniel stated that the well has not gone dry in the past 10 years and that she prefers the taste of the well water over city water.

General Comments
This is a very old two story house, date of construction is unknown.
There are extensive cracks and water stains on walls and ceilings throughout the house.

The kitchen ceiling, damaged by leaky pipes which have been repaired, will probably contirue to deteriorate at the damaged areas over time.

Rooms containing old wallpaper such as the hall, and upstairs rooms can be expected to experience further cracking and tearing due mainly to the age of the paper combined with the repeated effects of humidity changes over time.

The upstairs bedroom floors sag considerably indicating weak floor joists or poor construction.

Mrs. McDaniel stated, when answering basic information questions, that about 3 years ago an exterminator had recomended new floor joists on the first floor due to water damage.

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The house has a gutter system, however, they all drain to the north side of the house, directly to the foundation. This situation will increase the likelihood of the formation of foundation cracks, unless the effluent is diverted away from the house.

That completes the inspection of this property.

## WHITE INDUSTRIAL SEISMOLOGY

Tusitrpher $A_{\text {L }}$ handel
Christopher D. Landoll
Technical Associate
$\mathrm{CDL} / \mathrm{kg}$
Enclosure: 464 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 15

2- SUMMARY FORM
3- SKETCH OF STRUCTURE






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## $37-22$



I. Basic Information

1. Name of Resident: Clarence and Ruth Bond
2. Date: October 23, 1986 $\qquad$
3. Address: Box 123, Amoret, Missouri 64722
4. Location: Lots 11, 12, and south half of 13 Block 33
5. Telephone Number: (816) 925-3416
6. Dates of occupancy by current resident:March of 1972 to present
7. Dates of any temporary or permanent abandonnent: Previous owner had_not lived here for an unknown period of time.
II. InEormation Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown, house was moved to present location from an unknown coal mining area.
9. Date(s) of major remodeling or additions:
(a)Remodled interior in Fall of 1971 and Spring of 1972
(b) $\qquad$
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): $2 \times 8$ 2x4 $2 \times 4$
(b) interfor walls:

Paneling and sheetrock
(c) roof:

Composjition shingles
(d) Eootings; foundations: Concrete block
(e) basement: walls (indicate how keyed to footing of floor): N/A
(E) basement floor (keyways, chickness):

N/S
(g) name of person(s) who constructed building: Unknown
$(h)$ size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:
2. Type of soil in area:silty clay loam
3. Type of subgrade drainage at base of foundation: Unknown, probably none
4. Water wells utilized (indicate depth and use): About 15 feet deep, don't use
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: None, except back porch
8. Description of general grading or landscaping in vicinity: generally flat, see survey
IV. Any notable existing deterioration or damage
9. Cracks in interior walls: See survey
10. Receding of dours, windows See survey
11. Noticeable settlement: See survey
12. Foundation cracks: Extensive, see survey
13. Exterior wall cracks (brick veneer): See survey
14. Sidewalks, steps, driveway pavement: See survey
15. Basement leaks: $N / A$
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
16. North See survey
17. South See survey
18. East See survey
19. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of ceterioration, may exhibit an unusual response co normal blasting activities.
The Bond residence lacks a gutter-downspout system except at the porch. The foundation will likely continue to crack with the freezing of saturated ground adjacent to it. Mortar joints in the block foundation will be especially vulnerable to further cracking. The driveway, due to its construction, will also be very prone to further cracking.

PH. (417) 624-0164

October 24, 1986
Report No. 87056-4
P \& M Map Photo No. 17

Subject: Inspection of the Clarence and Ruth Bond Residence Box 123
Amoret, Missouri 64722
October 23, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box is Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the front, west side of the house. (Photo 4-1)
Mr. Bond indicated that this house was moved to its present location from an unknown coal mining area many years ago.

ID photograph of the brick chimney from the west. (Photo 4-2)
The west side of the chimney has deteriorating mortar.
ID photograph of the chimney from the north. (Photo $4-3$ )
The north side has a cracked brick, a spalled brick, and mortar deterioration.

ID photographs of the chimney from the south. (Photos 4-4 and 4-5)
The lower south side of the chimney has a separation at the flashing material.

The front concrete block foundation has mortar separations and cracks throughout.

Series of photographs of the front foundation from the south end to the porch. (Photos 4-6 thru 4-9)

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The separations at the south part of the front foundation range from $1 / 4$ of an inch to $1 / 8$ of an inch. The $1 / 4$ of an inch is a full gap under the south front window.

Series of photographs of the front foundation from the porch to the north end. (Photos 4-10 thru 4-19)

The foundation, north of the porch, has separations and mortar cracks that range from about 1 and $1 . / 4$ inch to a hairline in width.

The front porch leans westward slightly and the front steps tilt toward the house. The northwest corner of the porch is rotting. (Photo 4-20)

The front steps, upper riser, has a horizontal crack across its length near mid-height, and there is a crack between that riser and the lower tread. These cracks range from $1 / 4$ of an inch to a hairline in width. (Photos 4-21 and 4-22)

The bottom riser has three slight horizontal cracks, partially filled with efflorescence. They are hairline in width and together they measure about 24 inches in length. (Photo 4-21)

The north edge of the steps has a crack ranging from 5/8 of an inch to $1 / 4$ of an inch wide along the width of the top step. (Photo 4-23)

The south side of the top step has three smaller cracks. (Photo 4-24)
ID photograph of the Eront sidewalk. (Photo 4-25)
The second sidewalk slab, west of the house, has cracks that range from 1 inch, including spalls, to a hairline in width. (Photo 4-26)

The front sidewalk is being overgrown with grass.
ID photographs of the south side of the house. (Photos 4-27 and 4-28)
ID photograph of the chimney from the southeast. (Photo 4-29)

The south foundation has extensive mortar gaps, separations, cracks, and some shifted blocks. These gaps and separations range from about $3 / 4$ to $1 / 32$ of an inch.

The southwest block has a vertical crack along its height. It is from about $1 / 8$ of an inch to a hairline in width. (Photo 4-30)

Series of photographs of the south foundation from west to east.
(Photos 4-30 thru 4-37)

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Two photographs of the southeast part of the roof. (Photos 4-38 and 4-39)

The roof appears to have some warped areas at the east end.
Series of photographs of the porch foundation from west to east. (Photos 4-40 thru 4-4.4)

The south side of the porch has a gutter. The downspout dumps next to the foundation. This condition will likely contribute to future formation of cracks. (Photo 4-44)

The sidewalk located just east of the porch, has a slab that is cracked across its width and heaved by about $3 / 4$ of an inch. (photos $4-45$ and 4-46)

The sidewalk slabs located south of the well have extensive cracks. The cracks range from about $3 / 8$ to $1 / 32$ of an inch in width. (Photos 4-47 thru 4-49)

ID photograph of the concrete well cover. (Photo 4-50)
Looking into the well, water is visible about 3 feet below ground
level. The well is rock lined and looks to be in good condition.
A sidewalk slab just west of the shed is heaved. (Photo 4-5l)
This sidewalk can be expected to continue to crack and heave with freezing and thawing of water that could easily penetrate the various cracks.

ID photographs of the east side of the house. (Photos 4-52 and 4-53)
The east side has areas lacking siding. These are around the middle window and at the lower south end. (Photos 4-54 thru 4-56)

There are a few nails that have popped out below the window with the air conditioner. (Photos 4-55 and 4-56)

Most of the foundation on this side is hidden by the siding.
The north end of the east foundation is visible.
A block has a diagonal crack to the lower left of the black plastic vent pipe. The crack measures about 8 inches long to the ground and is from $1 / 4$ of an inch to a hairline in width. (Photo 4-57)

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There is a stairstepping crack at the north end of the east foundation. It measures about 10 inches long and from $1 / 4$ of an inch to $1 / 16$ of an inch in width. (Photo 4-58)

ID photographs of the north side of the house. (Photos 4-59 and 4-60)
ID photograph of the chimney from the northeast. (Photo 4-61)
It has a spalled brick at its northeast corner at about mid-height and there is a crack at the lower east part of the flashing material.

The north foundation has extensive mortar cracks and separations.
Series of photographs from east to west of the north foundation. (Photos 4-62 thru 4-74 and 4-76 thru 4-85)

Most separations and cracks in the north foundation range from 1 inch to l/l6 of an inch in width.

The siding is cupping and curling at the east part of the north side of the house. (Photo 4-75)

The trim is separating at the corner, to the lower left of this west facing window. (Photo 4-76)

The foundation, below this west facing window, has fiberglass insulation packed in some of the mortar joints. (Photos 4-77 thru 4-79)

The older west part of the north foundation also has some mortar joints packed with insulation. (Photos 4-80 thru 4-85)

There is about a 2 inch shift at a block in this area of the foundation. This block looks to be newer than the neighboring blocks. (Photo 4-85)

A photograph looking eastward at the sewer ditch along the north side of the house. (Photo 4-86)

Two photographs showing the severely cracked and overgrown city sidewalk located west of the house. (Photos 4-86 and 4-87)

INTERIOR INSPECTION

Living Room
Carpeted floor.
Paneled walls.
Textured plaster ceiling.

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Windows on the south and west walls.
Front door on the west.
Door on the north wall to a bedroom.
Flue on the north wall.
Entrance to the kitchen on the east wall.
The south end of the east wall has a bulge in the paneling near the ceiling and another lower on the wall. The bulges feel very solid, and do not give when pushed on. (Photo 4-88)

The crown molding at the south wall is not flush with the wall. There is about a $1 / 2$ inch gap between the molding and the wall.

The south window has a piece of loose trim at the lower left side. The gap at the bottom is about 2 inches wide. (Photo 4-89)

Photograph of the south wall. (Photo 4-90)
Photographs of the east wall. (Photos 4-91 and 4-92)
Photograph of the north wall. (Photo 4-93)
Photographs of the west wall. (Photos 4-94 and 4-95)
Photograph of the ceiling. (Photo 4-96)
Moving north into the bedroom.

## West Bedroom

Hardwood floor.
Paneled walls.
Textured plaster ceiling.
Windows on the north and west walls.
Doorway on the east wall to a sewing room.
Closet enclosure in southeast corner.
Photograph of the west wall. (Photo 4-97)
Photographs of the south wall. (Photos 4-98 and 4-99)

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Photograph of the east wall. (Photo 4-100)
Photographs of the north wall. (Photos 4-101 and 4-102)
Photograph of the ceiling. (Photo 4-103)
Moving east into the sewing room which is also used as a bedroom.
Sewing Room/Bedroom
Carpeted floor.
Papered sheetrock walls except the south, which is textured plaster.
Textured plaster ceiling.
The ceiling slants down from south to north.
Windows on the north and west walls.
The ceiling has a north-south trending crack along the width. It is a hairline wide at the south end and gets larger at the north end to a maximum width of about $3 / 8$ of an inch. (Photos 4-104 thru 4-109)

There is a ceiling crack in the northwest corner and paralleling the west and north walls at a tape joint. (Photos 4-110 thru 4-114)

There is a vertical tearing crack in the wallpaper above the upper left corner of the west door. It runs to the ceiling about 9 and $1 / 4$ inches. (Photo 4-115)

There is a roughly horizontal tearing crack to the lower left of the north window. It measures about 12 inches horizontally and 2 inches vertically at its west end. (Photo 4-116)

The small door on the east wall leads to the pantry.
Pantry
This is a very small room.
Linoleum floor.
Textured plaster walls and ceiling over sheetrock.
The ceiling slants down from south to north.
There is a slight horizontal crack near the ceiling along the south wall. (Photos 4-117 and 4-118)

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The ceiling has a stain in the southwest corner. (Photo 4-117)
There is a crack about 2 inches long at a seam above the upper left corner of the door. (Photo 4-119)

Sewing Room - Continued
The ceiling has a slight crack in the plaster near the east wall, just to the north of the south door. The crack is intermittent and measures 26 and $1 / 2$ inches total. (Photos 4-120 and 4-121)

Photograph of the north wall. (Photo 4-122)
Photograph of the east wall. (Photo 4-123)
Photograph of the west wall. (Photo 4-124)
Photographs of the south wall. (Photos 4-125 and 4-126)
Photograph of the ceiling. (Photo 4-127)
Now moving east of the sewing room into a small hallway.
Hallway
Vinyl floor.
Paneled walls.
Textured plaster ceiling.
This is a small room with a door to the bathroom on the east wall.
Entrance to the kitchen on the south wall.
Photograph of the hallway looking north from the kitchen. (Photo 4-128)
Bathroom
Vinyl floor.
Papered walls.
Textured plaster ceiling.
Shower stall in the southeast corner.
The ceiling slopes down from south to north.
Window on the east wall.

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The ceiling has an east-west patch and a hairline crack in this patch near the west wall. This crack is about 17 and $1 / 2$ inches long and the patch is 6 inches wide by 17 inches long. (Photo 4-129)

A photograph into the bathroom looking northeast. (Photo 4-130)
Photograph of the ceiling. (Photo 4-131)
Kitchen
Vinyl floor.
Paneled walls.
Textured plaster ceiling.
Tile counter area walls in the northwest corner.
Photographs of the west wall. (Photos 4-132 and 4-133)
Photographs of the north wall. (Photos 4-134 and 4-135)
Photographs of the south wall. (Photos 4-136 and 4-137)
Photograph of the east wall. (Photo 4-138)
Photographs of the ceiling. (Photos 4-139 and 4-140)
Two windows on the east wall.
Window on the south wall.
Closet enclosure on the north wall.

There is a slight crack in the ceiling to the upper right of the closet. It is about $3 / 4$ of an inch long. (Photo 4-141)

There is another slight ceiling crack to the upper left of the closet door. It is about $3 / 4$ of an inch long. (Photo 4-142)

The wallpaper above the cabinets, on the west wall, is wedged up against the ceiling and is now peeling down. (Photos 4-143 and 4-144)

The southeast corner of the kitchen has a china cabinet containing antique dishes. (Photo 4-145)

Garage - Exterior Inspection
ID photographs of the front, west side, of the garage. (Photos 4-146 and 4-147)

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From the front, the garage appears to lean to the north.
ID photographs of the south side. (Photos 4-148 and 4-149)
Note that the south side roof sags considerably.
The upper left pane of the south window is broken at its lower left corner, and the two bottom panes are missing. (Photo 4-149)

ID photograph of the east side. (Photo 4-150)
The east window lacks glass panes.

ID photographs of the north side. (Photos 4-151 and 4-152)
The north part of the roof also sags and the fascia and lower siding boards are rotting.

Note the uneven door and window on the north side.
Garage - Interior Inspection
Dirt floor.
Unfinished walls and ceiling.
The joists in the ceiling are sagging.
Photographs of the inside looking east and southeast. (Photos 4-153 and 4-154)

Shed - Exterior Inspection
ID photograph of the shed from the southeast. (Photo 4-155)
ID photograph of the shed from the northwest. (Photo 4-156)
The siding is rotting at the lower north side.
ID photograph of the east end. (Photo 4-157)
ID photograph of the south side. (Photo 4-158)
The fascia board on the south side is partly missing and the lower ends of the siding boards are rotting.

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Shed - Interior Inspection
wooden floor.
Unfinished walls and ceiling.
Photographs of the interior looking east and then looking west. (Photos 4-159 and 4-160)

Driveway
ID photograph of the driveway. (Photo 4-161)
The driveway is an unfinished, continuous slab of concrete with no expansion joints.

There are several cracks at the west end. (Photo 4-161)
These cracks were probably caused when vehicles were driven into and out of the driveway, and the cracking will probably continue. Water can penetrate and freeze in these cracks and this will probably cause them to widen and lengthen.

There is a crack across the width of the driveway slab, near the city sidewalk. (Photo 4-162)

This crack will probably become wider when freeze-thaw action occurs unless it is sealed.

Two additional photographs of the driveway. (Photos 4-163 and 4-164)
That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


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## CDL/mp

Enclosure: 164 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 17

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


















## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: Ralph Masoner
2. Date: $\qquad$ T1me: 8:00AM
3. Address:_ Box 186, Amoret, Missouri 64722
4. Location: Lots 5 and 6, Block 34
5. Telephone Number: (816) 925-3389
6. Dates of occupancy by current resident: 1985 - Present $\qquad$
7. Dates of any temporary or permanent abandoment: Not known
II. Intormation Concernlng Bulldings
(repeat Eor additional buildings)
8. Date of origdnal construction: 1973 Model
9. Date(s) of major remodeling or addicions:
(a) $\qquad$
(b) $\qquad$
(c)
10. Construction of building:
(a) Eraming (Jolsts, rafters, and stud walls): Standard trailer
(b) Interior walls: Paneled
(c) roof: Sheet metal
(d) Eootlngs; Eoundations: On concrete slab, has footing, dimensions unknown
(e) basemens walls (Indicate how keyed to footing of Eloor):

Not applicable
(E) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: Sliding glass doors on west
III. Envirommental Information

1. Approximate elevation of area:

863 feeet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Has drains
4. Water wells utslized (Indicate depth and use):

Uses well for drinking water occasionally, good water according to resident
5. Cisterns or surbace water storage utilized: (indicate purpose and resident approximate volume). No
6. Source of wates, if not Included above: City and well water
7. Eve troughs or any other exterior drainage Eeatures: No .
8. Description of general grading or landscaping in vicinity: Generally filat
IV. Any notable existing deterioration or danage

1. Cracks in interlor walls: Not applicable
2. Receding of doors, windows: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views ot photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of decerioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

November 13, 1986
Report No. 87056-72
P \& M Map Photo No. 16

Subject: $\begin{aligned} & \text { Inspection of the Ral ph Masoner Residence } \\ & \text { Box } 186 \\ & \text { Amoret, Missouri } 64722 \\ & \text { November } 9,1986\end{aligned}$.

To: $\quad$ The Pittskurg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited fron taped field notes.

EXTERIOR INSPECTION

This trailer sets on a concrete slab.

ID photographs of the front east side. (Photos 72-1 and 72-2)
The front sidewalk is misaligned and has two broken slabs. (Photo 72-3)
Photographs of the city sidewalk looking north and then south. (Photos 72-4 and 72-5)

Starting at the south end of the front of the residence.
The screen sash of the south window is bent. (Photo 72-6)
The front door is delaminating. (Photo 72-7)
The window of the front door is cracked. (Photo 72-8)
To the lower left of the north front window, a piece of the concrete slab is cracked. It is about 10 inches in length. It is broken all the way through and is loose. (Photo 72-9)

There is also a piece of cracked concrete below the north end of the front steps. It is about 5 inches long and is broken completely through. (Photo 72-10)

ID photograph of the south end of the trailer. (Photo 72-11)

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There is a hairline crack in the foundation slab located roughly 7 feet 8 inches from the east end of the south edge. It is about 4 and $1 / 2$ inches long. (Photo 72-12)

Just to the right of the service panel, there is another hairline crack. It measures 6 and $1 / 4$ inches on the top and down the side. (Photo 72-13)

This south door is sealed and is bent at the bottom. (Photo 72-14)

ID photographs of the west side of the trailer. (Photos 72-15 and 72-16)

It appears that the foundation slab was laid over a gravel base.
ID photograph of the concrete block back step. It has dry joints. (Photo 72-17)

The seal below the sliding glass doors is deteriorating. (Photos 72-18 and 72-19)

The sliding south door appears to be bent and the screen is torn. (Photo 72-20)

The south sliding door appears to have some condensation on the glass.
To the lower left of the sliding door, there is a wet area of the slab foundation. (Photo 72-21)

There is also a wet area at the northwest corner of the slab. Both areas have a greenish color. (Photo 72-22)

ID photograph of the north end of the trailer. (Photo 72-23)
There is a crack in the foundation below the lower left corner of the west window on the north side. It is about 13 and $1 / 4$ inches long measured on the top and down the north edge and about $1 / 32$ of an inch wide. (Photo 72-24)

The screws have pulled out at the top of the east north window. (Photo 72-25)

Now back to the front. The porch roof has three supports which are set in concrete. A photograph of each concrete area from north to south. (Phots 72-26 thru 72-28)

Another photograph of the front sidewalk. (Photo 72-29)

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There is a small shed located west of the trailer.

## Shed

ID photograph of the east side. (Photo 72-30)

The shed has asphaltic type siding with a shake shingle roof.
The roof shingles are deteriorating severely on this side.
ID photograph of the north, front side. (Photo 72-31)
The shed leans considerably to the east.
The siding boards are rotting on the front side.
ID photograph of the west side. (Photo 72-32)
The shingles on the west side of the roof are deteriorating. A few areas of the siding are missing on the west and north sides.

ID photograph of the south side. (Photo 72-33)
Inside it has a dirt floor and unfinished walls.

We 11
There is a concrete slab over a well located near the southwest corner of the trailer. (Photo 72-34)

Looking down into the well, the water level is about 3 or 4 feet below ground level. It is a rock lined well and does not appear to be collapsed. (Photos 72-35 and 72-36)

Operating the hand pump, the water looks clear.
INTERIOR INSPECTION

## Living Room

Carpeted floor.
Paneled walls.
Fiber panel ceiling.
Windows on the north and east walls.

Photographs of the north wall. (Photos 72-37 and 72-38)

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Photographs of the east wall. (Photos 72-39 and 72-40)
Photograph of the south wall. (Photo 72-41)
Photographs of the west wall. (Photos 72-42 and 72-43)
The west wall has a large entrance to the dining room.
The ceiling has extensive and severe water stains. These are mainly along the west, north, and east walls. (Photos 72-44 thru 72-53)

Dining Room
Vinyl floor.
Paneled walls.
Fiber panel ceiling.
Photograph of the east wall. (Photo 72-54)
Photographs of the south wall. (Photos 72-55 and 72-56)
Photograph of the west wall. (Photo 72-57)
Photograph of the north wall. (Photo 72-58)
There is severe water damage to the ceiling along the west wall.
(Photos 72-59 thru 72-62)
The rest of the ceiling has numerous, smaller water stains. (Photos 72-63 thru 72-65)

North Bedroom
Vinyl floor.
Paneled walls.
Fiber panel ceiling.
Most of the ceiling panels have been removed and a sheet of clear plastic has been installed at the ceiling.

Photographs of the north wall. (Photos 72-66 and 72-67)
Photographs of the east wall. (Photos 72-68 and 72-69)
Photograph of the south wall. (Photo 72-70)
Photographs of the west wall. (Photos 72-71 and 72-72)

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There is a closet enclosure in the southeast corner.

There are water stains on the remaining ceiling panel.
Series of photographs of the ceiling. (Photos 72-73 thru 72-78)
Mr. Masoner indicated that his roof has not been repaired yet and that he is trying to get the former owner to repair the damage. He indicated that the roof leaked when he purchased the trailer. The roof in the north bedroom collapsed and he had to put the plastic up.

Kitchen
Vinyl floor.
Paneled walls.
Fiber panel ceiling.
Photograph of the south wall. (Photo 72-79)
Photograph of the floor. (Photo 72-80)
Photographs of the west wall. (Photos 72-81 and 72-82)
Photographs of the east wall. (Photos 72-83 and 72-84)
Photographs of the north wall. (Photos 72-85 and 72-86)
The ceiling has several slight water stains. (Photos 72-87 thru 72-90)
The kitchen opens to the utility room to the south.

## Utility Room

Vinyl floor.
Paneled walls.
Fiber panel ceiling.
This room opens to the hallway to the north.
The bathroom door is on the west wall.
The utility room ceiling has several water stains, the most severe is around the light fixture. (Photos 72-91 and 72-92)

Hallway
Vinyl floor.
Paneled walls.
Fiber panel ceiling.

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The Pittsburg and Midway Coal Mining Company Report No. 87056-72
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The ceiling has several water stains, mainly at the south and north ends.

Two photographs of the hallway ceiling, one looking north and one looking south. (Photos 72-93 and 72-94)

The hallway has two bedroom doors on the east wall.
ID photograph of the hallway 100 king southward. (Photo 72-95)
Bathroom
Vinyl floor.
Paneled walls.
Fiber panel ceiling.
The shower stall walls have formica covering.
Window on the west wall.
Photograph of the south wall. (Photo 72-96)
The ceiling has severe water stains at the south end and along the west wall. (Photos 72-97 and 72-98)

The ceiling also has severe stains at the north end. (Photos 72-99 and 72-100)

ID photograph of the bathtub. (Photo 72-101)
The west paneled wall is rotting below the window. (Photos 72-102 and 72-103)

The trim below the window is separated at a joint. (Photo 72-104)
The casing is missing at right side of the door.
The bathroom floor is wet around the stool and bathtub. (Photo 72-104)
South Bedroom
Paneled walls.
Carpeted floor.
Fiber panel ceiling.
Photograph of the east wall. (Photo 72-106)
Photograph of the south wall. (Photo 72-107)

White Industrial Seismology, Inc.

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Photographs of the north wall. (Photos 72-108 and 72-109)
Photograph of the west wall. (Photo 72-110)
Closet door on the west wall.
The ceiling is severely water stained. (Photos 72-111 thru 72-116)
The east end of the floor has collapsed.
Series of photographs of the floor damage. (Photos 72-117 thru 72-122)
Water apparently has caused the east part of the floor, which is pressboard, to rot cut.

The closet is full of stored material. The ceiling is water stained.
The crown molding along the west wall is separating from the ceiling by about $3 / 4$ of an inch at the most. (Phots 72-123 and 72-124)

East Bedroom
Carpeted floor.
Paneled walls.
Fiber panel ceiling.
Window on the east and a closet door on the west wall.
Photograph of the east wall. (Photo 72-125)
Photograph of the north wall. (Photo 72-126)
Photograph of the west wall. (Photo 72-127)
Photographs of the south wall. (Photos 72-128 and 72-129)
The ceiling is severely water damaged above the east window and above the doorway on the west. (Photos 72-130 thru 72-132)

There is a slight water stain in the northwest corner of the ceiling. (Photo 72-133)

The crown molding is rotting at the stain along the east wall. (Photos 72-134 and 72-136)

It appears that part of a stain has been painted at about the middle of the ceiling. (Photo 72-135)

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The bottom casing of the window is partially missing and there is a gap at the lower left corner of the casing. (Photos 72-137 and 72-138)

The ceiling batten is loose above the doorway and is hanging down about $3 / 4$ of an inch. (Photo 72-139)

Now looking inside the closet. It has a vinyl floor, particleboard walls, and the sane type of ceiling.

The closet filing has severe water stains and mold. (Photo 72-140)
General Comments
This is a 1973 model trailer that was placed at its present location in 1985 on a concrete slab foundation.

The trailer lacks a gutter system to divert water away from the foundation slab. This will increase the liklihood of the formation of cracks on the foundation slab in the future. A few cracks were found in the slab and these cracks can be expected to enlarge as the structure settles.

The interior ceilings are all water damaged, some severely. These ceilings can be expected to continue to deteriorate further with time, especially if the roof continues to leak. The paneling can also be expected to deteriorate due to water effects.

That completes the inspection of this property.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate

CDL/mp
Enclosure: 140 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 16

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


Cl

$72-31$


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 $-2.20$





$72-2$


I. Basic Information

1. Name of Resident: Cecil Gaston
2. Date: October 28, 1986 Time: 7:30 am
3. Address: Box 155 Amoret, MO. 64722
4. Location: Second and Monroe Streets
5. Telephone Number: 816-925-3305
6. Dates of occupancy by current resident: 1984-Present
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings (double wide trailer)
(repeat for additional buildings)
8. Date of original construction: 1984
9. Date(s) of major remodeling or additions:
(a) Covered patio 1986
(b) built porch 1986
(c)
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): 2" X 6" Stud walls
(b) interior walls: paneled
(c) roof: shingled
(d) footings; foundations: concrete block perimeter
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(f) basement floor (keyways, chickness): Not Applicable
(g) name of person(s) who constructed building: American Standard Homes, Anderson, MO.
(h) size and direction of any large windows: None
III. Envirommental Information
11. Approximate elevation of area: 862 feet at residence
12. Type of soil in area: Silty clay loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utolized (Indicate depth and use): None
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
16. Source of water, if not included above: City Water
17. Eve troughs or any other exterior drainage features: See photo survey
18. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey
19. Cracks in interior walls:
20. Recedlng of doors, windows:
21. Noticeable settlement:
22. Foundation cracks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavement:
25. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
26. North
27. South
28. East
29. West
VII. Comnents or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narative

White - Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256 JOPLIN, MO 64802-1256

PH. (417) 624-0164

> November 4, 1986 Report No. $87056-17$ P \& M Map No. 13

Subject: Inspection of the Cecil Gaston Residence Box 155
Amoret, Missouri 64722
October 28, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the south side of the residence. (Photo 17-1)
This is a double wide trailer sitting on a concrete block perimeter foundation. According to Mr. Gaston there are concrete block pillars and poured concrete runners.

We will start at the west end of the south foundation.
There is a hairline mortar separation near the west end. This measures 7 inches in length. (Photo 17-2)

There is a rock walk to the front porch steps.
There are mortar separations in the walk. (Photos 17-3 thru 17-6)
There is a hairline mortar separation in the foundation to the right of the vent. (Photo 17-7)

There is a block crack near the east end of the south foundation. It measures 6 inches in length and $1 / 16$ of an inch in width. (Photo 17-8)

The downspout is directed away from the foundation at the southeast corner. (Photo 17-9)

ID photograph of the east side. (Photo 17-10)
There is a mortar separation near the south end of the east foundation. It measures about $1 / 8$ of an inch in width. (Photo 17-11)

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There is a mortar separation at the north end of the east side. It measures $1 / 8$ of an inch in width. (Photo 17-12)

A photograph showing the downspout at the northeast corner. (Photo 17-13)

ID photograph of the north side. (Photo 17-14)
There is a hairline mortar crack a couple of blocks to the left of the crawl space vent. (Photo 17-15)

There is another hairline mortar crack a little farther to the west. (Photo 17-16)

There is a crawl space entrance at the northwest corner. There are hairline cracks in the concrete block entrance to the crawl space. (Photos 17-17 thru 17-21)

A photograph showing the walk conditions near the northwest corner. There is a diagonal crack at the north end. (Photo 17-22)

There is a cellar at the northwest corner.
Starting on the east side.
There is a block chip at the lower left corner. (Photo 17-23)
There is a separation between the concrete block and the walk. This separation measures $5 / 8$ of an inch maximum. (Photo 17-24)

There is a mortar separation at the lower right corner of the cellar. It measures $1 / 8$ of an inch in width. (Photo 17-25)

Now looking at the rorth side.
There is a stairstepping concrete block separation. This is contiguous with the separation on the east side. This separation has a maximum width of $1 / 4$ of an inch. (Photo 17-26)

There is a hairline mortar separation at the upper left corner of this wall. (Photo 17-27)

There is concrete block displacement above the wood door. (Photo 17-28)
There are mortar separations toward the west end of the wall. (Photos 17-29 and 17-30)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 13
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There is a spalled block at the lower right corner. (Photo 17-31)
ID photographs. (Photos 17-32 and 17-33)
There is a vertical mortar separation on the west side behind the downspout. (Photo 17-34)

Now looking at the south side of the cellar.
There is a vertical mortar separation near the west end. It has a maximum width of $1 / 8$ of an inch. (Photo 17-35)

There is a slight mortar separation above the closed window. This is l/16 of an inch in width. (Photo 17-36)

There is an L-shaped mortar separation at the upper right corner. It measures about $1 / 8$ of an inch in width. (Photo 17-37)

Now take a look inside the cellar.
General photographs of the interior. (Photos 17-38 thru 17-60)
The interior is heavily cracked at the walls and ceiling.
The floor is also heavily cracked and spalled.
There is a walk at the southwest corner.
The walk is displaced and cracked. The tree root system has probably contributed to this occurrence.

The widths of these cracks are close to one inch. (Photos 17-61 thru 17-66)

There are no noticeable cracks in the porch.
There are three outbuildings on the west side of the property.
ID photographs showing their general location. (Photos 17-67 and 17-68)
The building on the south end is Mrs. Gaston's ceramic shop.

## Ceramic Shop - Exterior Inspection

There is a large crack across the walk on the east side of this shop. This crack measures about $3 / 4$ of an inch in width. (Photo 17-69)

There is a hairline crack about the middle of the walk. (Photo 17-70)

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Toward the south end there are many surface crazing cracks in the walk. (Photo 17-71)

Looking at the east side of the ceramic shop, there is a vertical crack in the foundation to the right of the door. (Photo 17-72)

There is a vertical mortar separation near the north end. (Photo 17-73)
There is a crack across a small slab next to the walk. This crack is $3 / 8$ of an inch wide. (Photo 17-74)

General photographs of the north side foundation of this ceramic shop. (Photos 17-75 and 17-76)

There is mortar deformation and block cracking toward the south end of the west side. (Photo 17-77)

There are mortar separations near the north end of the west side. These are about $1 / 4$ to $1 / 16$ of an inch in width. (Photo 17-78)

General photograph of the foundation on this side. (Photo 17-79)
ID photographs of the south side foundation. (Photos 17-80 thru 17-82)
Ceramic Shop - Interior Inspection
ID photographs of the interior. (Photos 17-83 thru 17-88)
Nothing noted.
Garage - Exterior Inspection
ID photograph of the south side. (Photo 17-89)
The poured concrete foundation is noticeable on the west side. There is no evident cracking in it. (Photos 17-90 thru 17-93)

Garage - Interior Inspection
Single slab poured concrete floor.
There is a hairline crack in the floor near the east wall.
This crack becomes extremely fine about the middle quarter of the floor toward the northeast corner. It Y's a few feet from the wall. One part extends diagonally toward the northwest and the other extends to the south. (Photos 17-94 thru 17-104)

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The northwest arm becomes so faint after it extends under the sanding table that we can't see it without extremely close visual inspection. The south arm also becomes extremely fine.

This is a large single slab floor. These cracks were probably caused by expansion of the concrete. These can be expected to increase with time. New cracks can also be expected to occur from continued concrete expansion.

ID photographs of the interior. (Photos 17-105 thru 17-110)
Storage Shed
There is a storage shed at the north side of the garage.
ID photograph from the east. (Photo 17-111)
The interior of the shed is filled with materials. Not much of the floor can be seen.

ID photographs of the interior. (Photos 17-112 thru 17-114)
There are no evident cracks in the foundation.

INTERIOR INSPECTION
We entered through the west entrance into Mrs. Gaston's workroom.
Workroom
Paneled west and south walls.
Papered north and east walls.
ID photographs of this room. (Photos 17-115 thru 17-118)
Nothing noted.
The next room on the north side of the hall is a bathroom.

## Bathroom

Carpeted floor.
Papered walls.
Nothing noted in the bathroom.
ID photographs. (Photos 17-119 thru 17-121)
There is a closet at the south side of the workroom.

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White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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Closet
Paneled walls.
Carpeted floor.
Nothing noted.
There is a bedroom on the south side of the hall.
Bedroom
Carpeted floor.
Paneled walls with the exception of the east wall which is papered.
ID photographs of this room. (Photos 17-122 thru 17-125)
Nothing noted.
Living Room
Carpeted floor.
Paneled south wall.
Papered east and west walls.
ID photographs. (Photos 17-126 thru 17-128)
Nothing noted.
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## Dining Room/Kitchen

Dining room has a carpeted floor with papered west and north walls. Kitchen has a carpeted floor with papered north, east and south walls.

ID photographs. (Photos 17-129 thru 17-131)
Nothing noted.
There is a utility room at the east end of the kitchen.
Utility Room
Carpeted floor. Paneled walls.

There are ceiling stains at the east side of the light. (Photo 17-132)
Nothing else noted.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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There is a bedroom at the east end of the living room.
Bedroom
Carpeted floor.
Paneled south and north walls.
papered east and west walls.
ID photographs. (Photos 17-133 thru 17-136)
There is a bathroom at the northeast corner of the trailer.

Bathroom
Carpeted floor.
Papered walls except for the south wall which is paneled.
There are ceiling stains at the light fixture. (Photos 17-137 and 17-138)

ID photographs. (Photos 17-139 and 17-140)
There is a closet to the west of the bathrom at the northwest corner of the bedroom.

The closet is paneled.
Nothing noted.
General Comments
The Cecil Gaston residence is located at an approximate elevation of 862 feet. The surrounding land has a gentle northwest slope. The roof drainage is fairly good and the guttering and downspouts are in good condition. However, the general grading around the foundation is such that some water will collect around the foundation during heavy rainfall.

The garage had a large single slab poured concrete floor. This floor, with the exception of a couple of very fine hairline cracks, was in good condition. However, the concrete can be expected to crack with time due to strains induced by expansion and contraction of the concrete from seasonal changes.

Very little was noted in the interior of the residence. The walls were either paneled or papered. There were some indications of water problems in the ceiling of the utility room and the northeast bathroom.

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The Pittsburg and Midway Coal Mining Company Report No. 87056-17
P \& M Map Photo No. 13
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The foundation showed the effects of settlement and the adverse environmental effects of freezing and thawing. These effects can be expected to continue with time.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/rd
Enclosure: 140 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP
LOCATION NO. 13
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## $17-10$



## I. Basic Information

1. Name of Resident: James Craft
2. Date: November 2, 1986 Time: 2:00 pM
3. Address: Rt. I Amoret, Mo. Box 309
4. Location: 250 feet south of Monroe Street on West side of the Third Street
5. Telephone Number: 316-925-3300
6. Dates of occupancy by current resident: 1064-present
7. Dates of any temporary or permanent abandonnent: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original conscruction: Unknown
9. Date(s) of major remodeling or additions:
(a)_Remodeled_Roams.
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Stud walls 2 " $x 4$ "
(b) interior walls: Sheetrock

Rafters: 2"x4" Joists: 2"x6"
(c) roof:
(d) footings; Eoundations: Rock and Mortar
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(f) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: No
III. Enviromental Information

1. Approxirate elevation of area: 858 feet at residence
2. Type of soll in area:Silty Clay Loam
3. Type of subgrade drainage at base of foundatlon: None
4. Water wells utilized (Indicate depth and use): Well watering garden and 25-26' and livestock, covered
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage features: See Photo Survey
8. Description of general grading or landscaping in vicinity: See Photo Survey
IV. Any notable existing deterioration or damage See Photo Survey
9. Cracks in interior walls:
10. Receding of doors, windows:
11. Noticeable setclement:
12. Foundation cracks:
13. Exterior wall cracks (brick veneer):
14. Sidewalks, steps, driveway pavement:
15. Basement leaks:
V. Plan view of residence, well, outbuildings see Sketch
VI. Elevation views or photographs of walls See Photo Survey
16. North
2.: South
17. East
18. West
VII. Comments or supplementary drawings See Photo Survey

VIIL. Discussion or specific coments concerning any unusual features, construction techniques, or stacus of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to nomal blasting activities.

PH. (417) 624-0164
November 6, 1986
Report No. 87056-51
P \& M Map Photo No. 50

Subject: Inspection of the Jim Craft Residence
Route l, Box 309
Amoret, Missouri 64722 November 2, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the north side. (Photo 5l-1)
Foundation is covered by a stucco or cement mortar mixture.
ID photograph of the north porch foundation. (Photo 51-2)
Part of the foundation is obscured by bushes toward the east end. There is a crack in the stucco near the east end of the north wall. (Photo 51-3)

The paint on the siding is chipped and cracked and is in generally poor condition.

Photograph showing the stucco on the foundation where not obscured by the bushes. (Photo 51-4)

ID photograph of the west side. (Photo 51-5)
The walk between the back step and the garage is heavily separated. (Photos 5l-6 and 5l-7)

There is a stucco crack to the left of the rock step. (Photo 51-8)
Same of the siding is loose and chipped on this side. (Photos 51-9 and 51-10)

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The Pittsburg and Midway Coal Mining Company
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There is no splashblock at the northwest corner.
ID photograph of the south side of the residence. (Photo 51-11)
The siding is loose and uneven in many places on this side.
There are hairline stucco cracks at the west end of the south side. (Photo 5l-12)

There is a stucco crack near the east end of the south side. It measures $1 / 4$ of an inch to $1 / 16$ of an inch in width. (Photo 51-13)

There is a vertical stucco crack a couple of feet from the corner. It has a width of about $1 / 32$ of an inch. (Photo 51-14)

There is a vertical stucco separation near the corner. It measures 3/16 of an inch wide. (Photo 5l-15)

ID photograph of the east side of the residence. (Photo 51-16)
The sidewalk to the front porch is heavily cracked. (Photo 5l-17)
There are two hairline cracks in the second step up to the porch. (Photo 51-18)

The corner trim is separated at the northeast corner of the living room. (Photo 5l-19)

## Garage

ID photograph of the east side of the garage. (Photo 51-20)
The driveway is sectioned into two slabs. The northernmost slab has a crack across the east-west length. (Photos 5l-21 thru 51-24)

ID photograph of the north side. (Photo 5l-25)
There is a hairline crack near the middle of the north foundation. (Photo 51-26)

ID photograph of the south side. (Photo 5l-27)
There is a separation between the driveway slab and foundation at the south side. The separation has a maximum width of $1 / 2$ inch at the bottom. (Photo 51-28)

ID photograph of the west side. (Photo 5l-29)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report №. 87056-51
P \& M Map Photo No. 50
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There is no guttering around the garage.
We are now inside the garage.
There are two cars in the garage.
Starting at the west end.
There is a morth-south crack across the floor.
There will be three photographs. One from the south side of the south car, another one between the cars, and the third one at the north side of the car at the north end. (Photos 51-30 thru 51-32)

There is a hairline crack in the slab at the south door. It extends about 4 feet 8 inches from the door. (Photos 51-33 and 51-34)

There is a north-south trending crack that extends over to the south garage area. There are two branches. One branch extends over to the east wall. The other branch extends northward across the floor and then curves back toward the east wall. (Photos 51-35 thru 51-40)

ID photographs of the interior of the garage. (Photos 51-41 thru 51-44)
Cellar
ID photograph of the east side of the cellar. (Photo 51-45)
Photograph of the cellar entrance. The entrance walls are in fair condition. (Photo 51.-46)

The floor has heaved and is heavily cracked. (Photos 51-47 and 51-48)
Detailed photographs of the cellar walls. (Photos 51-49 thru 51-53)
The covering on the lower walls is cracked and some sections are missing. The wall area above ground level is in fairly good condition.

ID photograph of the metal barn in the field. This structure has a dirt floor. There is no guttering around the roof. (Photo 51-54)

INTERIOR INSPECTION
Entered through the north door of the porch into the living room.

## Living Room

Carpeted floor.
plaster ceiling.

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The Pittsburg and Midway Ooal Mining Company
Report No. 87056-51
P \& M Map Photo No. 50
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Start on the north wall.
There is a horizontal hairline seam separation at the upper left of the door. It measures 8 inches in length. (Photo 51-55)

There is a vertical hairline tape seam separation above the upper right of the door. It measures 8 and $1 / 2$ inches in length. (Photo 51-56)

There is a hairline crack at the northeast corner of the ceiling. (Photo 5l-57)

There is also a hairline crack in the ceiling at the southeast corner. (Photo 5l-58)

On the west wall, there is a hairline crack at the upper left corner of the entrance into an adjacent roam. It measures 7 and $1 / 2$ inches in length. (Photo 5l-59)

There is also a hairline crack at the upper right corner. It measures approximately 8 inches in length. (Photo 5l-60)

ID photographs. (Phot:os 51-61 thru 51-63)
Adjacent Room
Looking at the east wall, there is a hairline crack at the upper right corner of the entrance. (Photo 5l-64)

Looking at the south wall, there is a vertical hairline crack at the upper left corner of the window. It measures about 11 inches in length. (Photo 5l-65)

There is a hairline crack and bulge in the wall at the upper right corner of the window. (Photo 51-66)

There are two vertical hairline cracks at the lower left corner of the window. These measure about 9 inches in length. (Photo 51-67)

There is a vertical hairline crack at the lower right corner of the window. It measures about 9 inches in length. (Photo 51-68)

Now looking at the west wall.
There is a vertical separation at the upper left corner of the door. (Photo 51-69)

Now looking at the north wall.

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P \& M Map Photo No. 50
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There is a small horizontal crack at the east end. (Photo 51-70)
ID photographs. (Photos 51-71 thru 51-73)
Kitchen/Dining Room
This is at the southwest corner of the residence.
Carpeted floor.
Papered and paneled walls.
Nothing noted in this roan.
ID photographs. (Photos 51-74 thru 51-77)
Utility Roam
This is at the northwest corner of the residence.
Vinyl floor.
There is a hairline separation at the upper left corner of the door on the west wall. It measures 2 inches long. (Photo 51-78)

There is a hairline crack at the upper right corner of the door. (Photo 51-79)

There is a wall separation at the northeast corner. (Photo 51-80)
ID photographs. (Photos 51-81 and 51-82)
The bathroom is located at about the middle of the north wall.
Bathroom
Vinyl floor.
Nothing moted in this bathroom.
ID photograph. (Photos 51-83 and 51-84)
We are now in the bedroom at the northeast corner.
Bedroom
Carpeted floor.
Papered walls.
Acoustical tile ceiling.

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The Pittsburg and Midway Coal Mining Company
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There is a vertical hairline crack above the upper left corner of the window. It measures 8 inches in length. (Photo 51-85)

That was on the east wall.
There is a vertical paper crack at the upper right corner of the door on the west wall. It measures 9 and $1 / 2$ inches in length. (Photo 51-86)

There is also a paper crack at the upper left corner. (Photo 5l-87)
There is a paper crack at the lower left corner of the window on the north wall. It measures 13 and $3 / 4$ inches in length. (Photo 51-88)

There is also a crack at the lower right corner. (Photo 51-89)
ID photographs. (Photos 51-90 thru 51-94)

## North Upstairs Room

Carpeted floor.
Paneled walls.
Nothing noted.
ID photographs. (Photos 51-95 and 51-96)
South Upstairs Room
Carpeted floor.
Wood walls and ceiling.
There is a small vertical crack above the upper left of the window.
(Photo 51-97)
Nothing else noted in this room.
ID photographs. (Photos 51-98 and 51-99)
The stairway is carpeted and paneled. (Photo 51-100)
General Comments
The Jim Craft residence is located south of Monroe Street on the west side of Third Street. The land around the residence is generally level.

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The residence has guttering on the west side and on the east side along the porch. There are downspouts at the northwest corner of the residence and at the northeast corner of the porch. There are no splash blocks.

The foundation is covered above the surface with a stucco or cement mortar mixture. There were minor hairline cracks in the stucco indicative of expansion and contraction effects from seasonal changes. There were also major separations in the stucco, possibly indicating differential foundation displacement or cracking. According to Mr. Craft the foundation is rock and mortar.

The poured concrete driveway and garage floor had minor cracks caused by natural expansion. Cracks of this type can be expected to continue to occur from seasonal effects and possible differential settlement of the garage foundation.

The cellar floor was displaced and cracked. This is possibly due to hydrostatic pressure since the water table has been near the surface in many wells we have observed. The cement mortar covering on the lower walls of the cellar was missing and cracked in various places.

The interior of the structure showed cracks and separations at some wall joints around door and windows. These types of cracks can be expected to become more numerous with time.

During periods of heavy rainfall, the land surrounding the foundation may be expected to becone saturated. The foundation may then be susceptible to the effects of freezing and thawing. There is no roof guttering at the east end of the south side of the residence.

That completes the inspection of this property.


## RMW/kg

Enclosure: 100 Photographs

1- COPY FROM P \& M'S TOWN OF AMORET MAP LOCATION NO. 50

2- SUMMARY FORM
3- SKETCH OF STRUCTURE





## $51-29$



## $51-27$



## $51-20$







## I. Basic Information

1. Name of Restdent: Thelma Bond
2. Date: October 22, 1986_Time:_12:30PM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: On Third Street 200 feet south of 52 Highway
5. Telephone Number: (816) 925-3397
6. Dates of occupancy by current resident: 1951-Present
7. Dates of any temporary or permanent abandotunent: Unknown
II. InEormation Concerning Bulldings
(repeat for additional buildings)
8. Dace of original construction: Unknown
9. Date(s) of major remodeling or addicions:
(a) Kitchen expanded_north - approximately 1969
(b) Bedroom-bathroom-porch-utility room prior to 1969
(c) Carport - 1983
10. Construction of building:
(a) franing (joists, rafters, and stud walls): Owner did not now
(b) interior walls: Paneled or papered.
(c) roof: Hip type, shingled
(d) footings; foundations: Concrete foundation.
(e) basenent walls (Indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, chickness):

Not applicable
(g) nane of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approxirate elevation of area:

850 feet at residence
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth'and use): Not used, could not see
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Not used, could not see
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dratnage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windors:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings see photo survey
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioracion, may exhlbit an unusual response to normal blasting activities.

## See survey narrative

## White- Industrial Seismology, Inc. 7 /h <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256 <br> JOPLIN, MO 64802-1256

PH. (417) 624-0164

October 31, 1986
Report No. $87056-5$
P \& M Map Photo No. 58

Subject: Inspection of the Thelma Bond Residence Route 1 Amoret, Missouri 64722 October 22, 1986

To: The Pittsbung and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Living Room
Entered through the west entrance.
The living room is located at the northwest corner of the residence.
Carpeted floor.
paneled walls.
Painted paper ceiling.
There is an east-west hairline crack across the ceiling. (Photos 5-1 thru 5-4)

ID photographs. (Photos 5-5 thru 5-7)

The heater is sitting on brick flooring toward the east wall and there is a crack at the northwest corner of the flooring. It has a width of $1 / 32$ of an inch. (Photo 5-8)

ID photographs of the south section of the living room. (Photos 5-9 thru 5-11)

Now moving east into the bedroom.

The Pittsburg and Midway Coal Mining Company
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Bedroom
The floor is sloping eastward.

Carpeted floor.
Papered walls and ceiling.

ID photographs from the door. (Photos 5-12 thru 5-14)
Now in the kitchen/dining rocm.

## Kitchen/Dining Room

Floor is either carpeted or vinyl.
Walls are either paneled or papered.
A small amount of tiling above the stove and sink.
Either plaster or papered ceiling.
There is some chipping of the plaster at the upper wall of the added on kitchen. (Photos 5-15 thru 5-18)

There is also a vertical crack at the upper right corner. (photo 5-25)
Nothing else noted.
ID photographs. (Photos 5-19 thru 5-23)

There is a small washroan just off the kitchen.
Washroom
Carpeted floor.
Mostly paneled walls.
Papered ceiling.
Small piece of cracked panel on the south wall. (Photo 5-24)
Hall
Looking at the west wall, there is a vertical paper crack above the upper left corner of the door. Measures about 7 and $1 / 2$ inches in length. (Photo 5-26)

The hall is partially papered and paneled.
There is a separation of the wall panel at the upper right corner of the entrance into the bathroom. There is also a separation of the door trim. (Photo 5-27)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company Report No. 87056-5
P \& M Map Photo No. 58
October 22, 1986
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The trim separation measures $1 / 8$ of an inch.
Now moving into the bathroam.
Bathroom

Carpeted floor.
Tiled lower walls.
Papered upper walls and ceiling.
Looking at the west wall, there is a paper crack above the upper left corner of the door. Measures about 10 and $1 / 4$ inches. (Photo 5-28)

Looking at the east wall, there is a paper crack at the upper right corner of the window. This crack measures about 12 and $1 / 2$ inches long. (Photo 5-29)

The paper in the northeast corner is not smooth. (Photo 5-30)
ID photograph from the door. (Photo 5-31)
We have now moved into the bedroom.
Bedroom

This is at the southeast corner of the residence.
Carpeted floor.
Papered walls and ceiling.
Looking at the northwest corner of the closet, there is a slight separation of the trim from the wallpaper. (Photo 5-32)

ID photographs from the doorway. (Photos 5-33 thru 5-35)
We are now at the utility rocm which is located at the northeast corner of the residence.

Utility Room
Carpeted floor.
The cistern is covered by a couple of pads of carpet.
Painted wood walls and ceiling.
On the west end there is a shower.

ID photograph toward the north wall. (Photo 5-36)

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The Pittsburg and Midway Coal Mining Company
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Page 4

ID photograph of the south wall. (Photo 5-37)
The door is not finished around the perimeter. (Photo 5-38)
The small shower area located at the northwest side is mostly tiled. The upper wall is papered or wallboard.
Sheetrock ceiling.

There is a slight crack in the wall at the upper left corner of the window. It measures 2 and $3 / 4$ inches. (Photo 5-39)

There is also a paper separation at the top of the wall. (Photo 5-40)
Nothing else noted in this small shower area.

## EXTERIOR INSPECTION

ID photograph of the west side of the structure. (Photo 5-41)
Photographs of the brick chimney. The chimney appears to be in good condition at this time. (Photos 5-42 and 5-55)

There is no guttering or downspouts on the west side.
We can see part of the foundation at the north end of the west side. There is a slight crack in the foundation near the north end. Measures about 8 inches long and $1 / 16$ of an inch in width. (Photo 5-43)

ID photograph of the north side. (Photo 5-44)
Starting at the west end of the north wall.
Diagonal separation in the foundation. Measures 9 inches fram ground level. Has a maximum width of $3 / 4$ of an inch. (Photo 5-45)

To the east of this, a couple of feet, there are two diagonal cracks in the foundation. One is much smaller than the other. Maximum length is 7 and $1 / 2$ inches. Smaller crack measures about 2 and $1 / 2$ inches. The smaller is a hairline, the larger has a width of $1 / 16$ of an inch.
(Photo 5-46)
A couple of feet further east, there are two cracks and spalling of the foundation. Spalling is about 3 inches wide. (Photo 5-47)

There is a foundation separation at the L-shaped area. It measures 6 inches long. Width of $1 / 4$ of an inch. (Photo 5-48)

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Moving on eastward we see that the opening to the crawl space is uncovered. There is water trickling in through the opening. (Photo 5-49)

The foundation L's at the added on rooms. There is a small diagonal crack to the right of this area. It measures 6 inches in length and $3 / 16$ of an inch in width. (Photo 5-50)

To the east of this there is a vertical crack in the foundation. It measures 4 and $1 / 2$ inches long. Maximum width of $1 / 4$ of an inch. (Photo 5-51)

Just east of that, about 6 inches or so, there is a hole in the concrete. (Photo 5-5.2)

There is a crack in the foundation behind the electric meter. This is 3 and $1 / 2$ inches in length. Width of $1 / 4$ of an inch maximum. (Photo 5-53)

ID photograph of the east side of the house. (Photo 5-54)

On the east side of the structure, there is a north-south crack across the walk. Width ranges from $1 / 4$ of an inch to $1 / 16$ of an inch. (Photo 5-56)

The foundation is covered by a plastic material along the east wall to the left of the door.

There is another east-west crack through the walk. (Photo 5-57)
The downspout at the northeast corner has a splashblock. However, the general grading of the area tends to be toward the residence.

There is a carport at the south end of the structure.
The driveway area underneath the carport is heavily cracked.
There are three poured concrete sections under the carport.
Starting at the east end of the carport, there are quite a few crisscrossing cracks at the northeast end. The widths of these cracks are about 1 inch at a large spalled area down to a hairline. (Photo 5-58)

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Continue with more photographs of the cracking in the concrete driveway near the east end. (Fhotos 5-59 thru 5-66)

Now starting with photographs in the second poured concrete section. (Photos 5-67 thru 5-78)

The car is parked on the third poured concrete section. (Photos 5-79 thru 5-85)

There is a separation of the carport driveway from the foundation. At the west end, this separation measures $1 / 2$ inch. (Photos 5-86 thru 5-90)

ID photographs of the area underneath the carport. (Photos 5-91 and 5-92)

Now at the southwest corner of the carport.
There is a diagonal crack across the driveway. It measures 30 inches. (Photo 5-93)

A spalled piece of concrete at the corner of the walk. (Photo 5-94)
A separation between the walk and porch slab of 1 inch. (Photo 5-95)
At the southeast corner of the property there is a small storage shed.
It sits on a poured concrete foundation.
There is no evident cracking in the slab. (Photos 5-96 thru 5-98)
General Comments
The Thelma Bond residence is located at an approximate elevation of 850 feet above sea level. The land surrounding the residence has a gentle northwest slope. There is essentially verylittle drainage of water away from the foundation. At the time of this inspection, the ground around the foundation was saturated and very soft. Where visible, the foundation often had cracks indicative of hydraulic or load bearing effects.

Much of the interior walls of the residence were paneled. Some of the papered walls showed evidence of settlement cracks above doors and windows. These types of cracks can be expected to be present under the paneled walls also. These cracks can be expected to increase in size with time.

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The Pittsburg and Midway Coal Mining Company Report No. 87056-5
P \& M Map Photo No. 58 October 22, 1986
Page 7

Unless proper steps are taken to give adequate drainage of water away from the foundation, adverse hydraulic effects can be expected to continue.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMCLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 98 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 58

2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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## I. Basic Information

1. Name of Resident: Missouri Woodworking (Larry West, Owner)
2. Date: $\qquad$ THue: 9:40AM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: Block 4, Lots 1-3 E 104'
5. Telephone Number: (816) 925-3264
6. Dates of occupancy by current resident:

Past 4 years
7. Dates of any temporary or permanent abandoment: $\qquad$
II. Information Conceraing Bulldings
(repeat for addtcional buildtugs)

1. Dace of original coustruction: 1975 or 1976
2. Date(s) of major remodeling or additions:
(a) North end added a few years ago, will finish concrete soon (b) $\qquad$
(c) $\qquad$
3. Construction of building:
(a) framing (joists, rafters, and stud walls): $6 \times 6$ hardwood posts
(b) interior walls: Paneled or unfinished $2 \times 6$ roof trusses
(c) roof:Metal
(d) footings; Eoundat Lons: Not known
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(E) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

825 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of Eoundation Not known
4. Water wells utilized (Andicate depth and use): No
5. Cisterns or surface water storage utilized: (indicate purpose andapproximate volume). No
6. Source of water, if not Included above: City water
7. Eve troughs or any other exterior drainage features: Yes
8. Description of general grading or landscaping in vicinity:Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windu'ws: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls See survey
8. North See survey
2.' South See survey
9. Easc See survey
10. West See survey
VII. Comments or supplementary drawings ..... See survey
VIII. Discussion or specific coments concerning any unusual features,construction techniques, or status of detertoration, that, becauseof the nature of their construction, materials of which they areconstructed, status of detertoration, may exhlbit an unusual responseco normal blasting activities.

November 24, 1986
Report No. 87056-92
P \& M Map Photo No. 108

Subject: Inspection of the Missouri Woodworking Building Route 1
Amoret, Missouri 64722
November 19, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECIION

ID photographs of the west side of the building. (Photos 92-1 thru 92-4)

The north end of the building has a new addition with no floor. Mr. West said he intends to have a concrete floor added in the near future.

There is a large area of concrete on the west side of the building. Series of ID photographs. (Photos 92-5 thru 92-8)

Starting at the south end of the front.
This building has a gutter system. The southwest downspout empties to the sidewalk. (Photo 92-9)

The caulk is deteriorating around the front door. (Photos 92-10 thru 92-13)

There is some dented siding below the south window. (Photo 92-14)
The gutters are rusting at seams.
At the second overhead door from the south, the trim is bent. (Photo 92-15)

The third overhead door from the south has some bent and missing areas of trim, and two of the glass panes are missing. (Photo 92-16)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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P\& M Map Photo No. 108
November 19, 1986
Page 2

The north overhead door is misaligned and the trim is bent on both sides. (Photos 92-17 thru 92-19)

This compartment is full of stored wood material.
The ceiling is plywood. The south wall is unfinished and there is insulation on the north and east walls. It has a concrete floor. (Photo 92-20)

The north wall has some torn insulation. (Photo 92-21)
Photographs of the south wall and ceiling. (Photos 92-22 and 92-23)
The floor has an east-west trending crack at the west part of the floor. Only about 65 and $1 / 2$ inches are visible. It ranges in width from about $1 / 4$ to $1 / 8$ of an inch wide. (Photos 92-24 and 92-25)

At the northwest part of this building, the downspout empties to the concrete area. (Photo 92-26)

The north edge of this concrete slab has soil washing out from underneath. (Photos 92-26 thru 92-28)

The slab has a diagonal crack at the west part of the north edge. It is about 1 inch wide at the edge. (Photo 92-29)

Now at the north end of the main part of the building, inside the addition. The north end of the floor is spalling. Series of photographs from west to east. (Photos 92-30 thru 92-33)

ID photograph of the north side of the original building. (Photo 92-34)
Photographs of the inside of the east wall of the addition. (Photos 92-35 and 92-36)

Photograph of the north wall. (Photo 92-37)
Now inspecting the front concrete area. A lot of this area is covered with sawdust, stored wood, and other materials.

There is a crack in the west part of the concrete area, west of the north overhead door. This crack runs about 80 and $1 / 2$ inches from east to west and then fades out. It is from about $1 / 8$ of an inch to a hairline in width. (Photos 92-38 and 92-39)

White Industrial Seismology, Inc.
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There is a diagonal crack at the southwest corner of the slab across from the middle of the building. This crack Y's at its south end. Total length is about 42 inches. It ranges from about $1 / 32$ to $1 / 8$ of an inch wide. (Photo 92-40)

The next slab to the south has a crack running from its north end southward. It has a $Y$ at its south end. It is about 131 inches long and ranges in width from a hairline at the south end to about $1 / 4$ of an inch at spalls. (Photos 92-41 thru 92-43)

This slab also has a large crack trending east-west. The crack runs about 25 feet all the way across. The width ranges from about $1 / 4$ to $1 / 8$ of an inch with wider spalled areas. (Photos 92-44 thru 92-46)

This slab has another crack that branches off this main crack, and runs to the south end of the slab. It is about 12 feet 2 inches long and is from about $1 / 16$ to $1 / 8$ of an inch wide and wider at spalls. (Photos 92-47 thru 92-49)

Now at the crack with the $Y$ at its south end. The east branch of the $Y$ runs about 71 inches and intersects the main east-west crack. It ranges from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos $92-50$ and 92-51)

The southwest slab has a crack trending south from the north end. It runs under this Ford pickup and to the south end of the slab. It ranges from about $3 / 16$ to $1 / 16$ of an inch in width. Spalls are slightly wider. (Photos 92-52 and 92-53)

The southeast slab has an east-west trending crack. It runs from the joint eastward to the overhead door and averages about $1 / 16$ of an inch in width. (Photos 92-54 thru 92-56)

There is a north-south trending crack in front of the office doorway that also runs onto the slab at the southwest corner of building. It is about 13 feet long and from about $1 / 16$ of an inch wide to $1 / 2$ an inch wide at spalls. (Photos 92-57 thru 92-60)

ID photograph of the south end of the building. (Photo 92-61)
There is a sidewalk along the south end of the building that is mostly overgrown with grass and weeds. (Photo 92-62)

The botton left pane of the east window is cracked. (Photo 92-63)
The caulk is cracking around the south door.
The southeast downspout empties close to the foundation. (Photos 92-64 and 92-65)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-92
P \& M Map Photo No. 108
November 19, 1986
Page 4

ID photographs of the east side of the building. (Photos 92-66 and 92-79 thru 92-81)

The south window on the east side has caulk separation along the sides and a missing pane that has been boarded over. (Photos 92-67 and 92-68)

The second window from the south has separating caulk. (Photos 92-69 and 92-70)

Soil is washing out from under the foundation between the middle and north windows on this side. (Photo 92-71)

The north window lacks glass panes and has separating caulk. (Photos 92-72 and 92-73)

Note the rusty area above the window. This is below a seam of the gutter that is leaking. There is also a rusty area between this window and the middle window. (Photo 92-73)

At the east door, same of the caulk seal is falling out along the sides. (Photos 92-74 thru 92-77)

There is a tree growing close to the building, north of the door. (Photo 92-78)

The downspout is disconnected at the northeast corner and the downspout is clogged. (Photos $92-82$ and $92-83$ )

There are no gutters on the addition.
ID photograph of the north end of the addition. (Photo 92-84)
A ditch runs along the north and east sides of the building.
ID photograph of the north side of the original part of the building. The downspout is disconnected from the gutter at the northwest corner. (Photo 92-85)

That completes the exterior inspection.
INTERIOR INSPECTION

## Office

This is at the southwest corner of the building.
Vinyl floor covering.
Paneled walls.
Tile ceiling.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company Report No. 87056-92
P \& M Map Photo No. 108
November 19, 1986
Page 5

Windows an the west and south walls.

There is a brick fireplace on the east wall.
Photograph of the north wall. (Photo 92-86)
Photographs of the west wall. (Photos 92-87 and 92-88)
Photograph of the south wall. (Photo 92-89)
Photograph of the chimney. (Photo 92-90)
Photograph of the east wall. (Photo 92-91)
This room has a door on the north wall to the work area.
The ceiling has two areas that have apparently been touched up with paint. One area is above the south window and the other area is at the light fixture. (Photos 92-92 and 92-93)

There are water stains in the ceiling near the west window, south end. This stain is about 3 feet long east-west and it has 4 slight perpendicular extensions. (Photo 92-94)

Now moving into the work area to the north.
Work Area
Unfinished walls and ceiling covered with insulation. Concrete floor.

There is a door on the south wall to the restroom area.

## Restroom Area

Vinyl floor.
Paneled walls.
Tile ceiling.
Brick fireplace on the west wall.
Window on the south wall.
Photograph of the south wall. (Photo 92-95)
The bathroam enclosure is in the southeast corner. It has formica covered walls. (Phot:o 92-96)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-92
P \& M Map Photo No. 108
November 19, 1986
Page 6

Photographs of the east wall. (Photos 92-96 and 92-97)
Photograph of the north wall. (Photo 92-98)
Photographs of the west wall. (Photos 92-99 and 92-100)
The tile ceiling has same stains near the bathroam entrance. (Photo 92-101)

Two ceiling tiles have been replaced just north of the bathroom enclosure.

The north part of the bathroom enclosure is a shower that is currently full of material. (Photo 92-102)

Bathroom
Vinyl floor.
Paneled and formica covered walls.
Tile ceiling.
Two photographs looking into the bathroom. (Photos 92-103 and 92-104)
The ceiling has two stains near the light fixture. (Photo 92-105)
The floor is deterioraing near the stool. (Photos 92-106 and 92-107)
Work Area - Continued
Photographs of the east wall. (Photos 92-108 thru 92-110)
Photographs of the scuth wall. (Photos 92-111 thru 92-113)
Photographs of the west wall. (Photos 92-114 thru 92-116)
Photograph of the north wall. (Photo 92-117)
The north wall is plywood.
Photographs of the ceiling. (Photos 92-118 and 92-119)
There is some hanging paper at each skylight.
Upstairs Area
This is the finishing roan.
Plywood floor.
Insulation covering on walls and ceiling.

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The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 108
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Photograph of the west wall. (Photo 92-120)
Photographs of the south wall. (Photos 92-121 and 92-122)
Photograph of the east wall. (Photo 92-123)
Photographs of the north wall. (Photos 92-124 and 92-125)
Work Area - Continued

The work area has a concrete floor, mostly covered with sawdust.
From the upstairs area, photographs of the work area floor. (Photos 92-126 and 92-127)

Photographs of the north end of the ceiling. (Photos 92-128 and 92-129)
Photographs of the east wall from north to south. (Photos 92-130 and 92-131)

Photographs of the west wall from north to south. (Photos 92-132 and 92-133)

There is a floor crack trending north-south, located just west of the rip saw. It is about $1 / 16$ of an inch wide and runs about 9 feet 5 inches south of the joint and fades out just south of the planer. (Photo 92-134)

General Comments
This building has metal exterior siding and a concrete floor. One crack was found in the floor, however, much of the floor was covered.

The front concrete area has several cracks and it was also partially covered.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 134 photographs

I- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 108

2- SUMMARY FORM

3- SKETCH OF S'RRUCTURE


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$92-84$






## $92 \cdot 4$



## $92-3$



I. Basic Infomation

1. Name of Resideat: Ronald and Dorothy Huffman
2. Date: October 30,1986 Tlue: 4:10PM
3. Address:_P. Q._Box 82,_Amoret, Missouri__64722
4. Location: Lots 1 thru 5, Block 18
5. Telephone Number: (816) 925-3202
6. Dates of occupancy by current resident: 1979 - Present
7. Dates of any temporary or pernanent abandonment: $\qquad$
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1974 or 1976
9. Date(s) of major remodeling or additions:
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building: Standard Built
(a) framing (joists, rafters, and stud walls):
(b) Joists: $2 \times 10$ Rafters: $2 \times 6$ and $2 \times 8$ over garage, stud walls: $2 \times 4$ Sheetrock
(c) roof: Composition Shingles
(d) Eootings; foundations: Concrete, details not known
(e) basement walls (indicate how keyed to footing of floor): Not known
(E) basement floor (keyways, thickness): Concrete thickness unknown
(g) nane of person(s) who constructed building: Not known
(h) size and direction of any large windows: $4^{\prime} \times 4^{\prime}$ storm window on front.
III. Enviromental Information
11. Approximate elevation of area:

837 feet
2. Type of soll in area:Silty clay loam
3. Type of subgrade drainage at base of Eoundat lon: Not known
4. Water wells utilized (Indicate depth and use):

Covered well, used only for irrigation
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not included above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: Yes .
8. Descripcton of general grading or landscaping in vicinity: Generally flat
IV. Any notable exlsting deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windurs: See survey
3. Noticable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: See survey
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Dlscussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterforation, may exhibtt an unusual response to normal blasting actlvities.

See survey

November 4, 1986
Report No. 87056-25
P and M Map Photo No. 113

Subject: Inspection of the Ronald and Dorothy Huffman Residence P. O. Box 82

Amoret, Missouri 64722
October 30, 1986
Tb: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photographs of the front, east side. (Photos 25-1 thru 25-4)
This house has white masonite siding, a concrete foundation, and a full basement. There is styrofoam insulation covering the outer foundation on the front and south sides.

Now at the front steps. Note that the sidewalk dips away from the house. (Photo 25-5)

The sidewalk and front steps are separated by about $3 / 8$ of an inch. (Photo 25-6)

The front screen door has a cracked pane. (Photo 25-7)
Now at the large front window. The inner panes have same deteriorating caulk on the muntins, mainly at the lower left part. (Photo 25-8)

The sidewalk is heaved at the front gate. (Photos 25-9 and 25-10)
The front driveway has a large east-west trending crack that has been sealed. It trends across the two western slabs. (Photo 25-11)

This crack has a slight branch in the second slab from the west that diagonals to the southwest, about 5 feet 9 inches. It is about $1 / 16$ of an inch wide. (Photo 25-12)

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The west slab has a north-south trending crack all the way across that has been sealed. It is about $1 / 2$ an inch wide. (Photos 25-13 and 25-14)

The main east-west trending crack has a smaller, unsealed extension that trends about 53 inches to the overhead doors. It ranges from about $1 / 16$ to $1 / 8$ of an inch wide. (Photos $25-15$ and 25-16)

Now at the third slab from the west. It has an east-west trending crack that has not been sealed. This crack runs the length of the slab and is about $3 / 8$ of an inch average width. (Photos $25-17$ thru 25-19)

The east slab has slight intersecting cracks. An east-west crack trends about 88 inches from the east end, is offset by about six inches to the south, and continues westward to the next expansion joint which is about 56 inches. It ranges fran about $1 / 16$ to $1 / 8$ of an inch wide. (Photos 25-20 thru 25-23)

That crack is intersected by a roughly north-south trending crack which turns roughly southwest near the middle. It is approximately 204 inches long and from $1 / 16$ to about $1 / 8$ of an inch wide. (Photos $25-24$ thru 25-29)

ID photograph of the north side of the house. (Photo 25-30)
There is a hairline foundation crack at the second form line from the east. (Photo 25-31)

Moving west to about the middle of the next section of the foundation, there is another hairline crack about 4 and $1 / 2$ inches long. (Photo 25-32)

There is a sealed crack through the foundation to the lower left of the window. (Photo 25-33)

Directly below the left end of the window, there is a hairline foundation crack about 9 inches long. (Photo 25-34)

The major foundation crack on the north side is at the form line to the lower right of the window. It has been sealed and it is offset slightly. It is about $1 / 8$ of an inch wide. (Photo 25-35)

There is a hairline, vertical foundation crack about 4 inches long near the west end of the north side. (Photo 25-36)

ID photographs of the west side of the house. (Photos 25-37 thru 25-40)

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There is a hairline vertical crack about 6 inches long at the north end of the west foundation. (Photo 25-41)

There is another hairline foundation crack between the north end and the north steps. It is about 5 and $1 / 4$ inches long. (Photo 25-42)

ID photograph of the patio. (Photo 25-43)
Note that the patio has settled along the house. Mr. Huffinan has sealed the joint with the house. You can see where the edge of the styrofoam is raised above the slab. Mr. Huffman indicated that at one time the stycofoam was even with the slab. The settlement ranges from about 3 inches at the north end of the patio to about 2 inches at the south end. (Photos 25-44 thru 25-47)

The patio has several cracks. The major crack runs south from the north end of the patio, about 138 inches to a branching area, and continues southward approximately an additional 77 inches. (Photos 25-48 thru 25-53)

A faint east-west trending crack crosses the major crack at about the lll inch mark. (Photo 25-50)

The southwest branch runs about 159 inches and intersects a 34 inch crack at the northwest corner of the steps at the sliding doors. Both cracks are about $1 / 8$ of an inch wide. (Photos 25-54 thru 25-58)

The east branch trends about 66 and $1 / 2$ inches to the house. It is about $1 / 16$ of an inch wide. (Photos 25-59 and 25-60)

The east branch connects with the other east-west trending crack that intersects the major crack.

The other crack trends about 55 inches westward from the intersection to the major crack; it is offset by about 1 inch, then continues 87 inches to the west end of the slab. This crack is about a hairline wide. (Photos 25-61 thru 25-66)

A photograph showing the relative widths of the cracks at the branching area. (Photo 25-67)

There is a crack in the patio slab at the northwest corner of the flower planter. The visible portion is about 4 inches long and $1 / 8$ of an inch wide. (Photo 25-68)

The south part of the west foundation is covered with styrofoam.
ID photograph of the south side of the house. (Photo 25-69)

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The foundation is covered on the south side also.
A well is located at the southeast corner of the property. It is covered by a hand pump.

The house is equipped with a downspout-gutter system that should provide good drainage and the yard appears to be well graded, as it slopes away from the house.

INTERIOR INSPECTION
Garage
Concrete floor.
White painted sheetrock walls and ceiling.
Window on the north wall.
Two overhead doors on the east wall.
Door to the backyard on the west wall.
Basement stairway in the southwest corner.
There is a vertical crack at a joint above the upper right corner of the north window. It is about 13 inches long and $1 / 16$ of an inch wide. (Photo 25-70)

There is a vertical crack above the upper left corner of the north overhead door. It is about 20 inches long and from a hairline at the top to about $1 / 8$ of an inch wide. (Photo 25-71)

There is a slight horizontal crack between the two overhead doors. It is about 3 inches long and about a hairline wide. (Photo 25-72)

There is a slight vertical crack at a seam above the upper right end of the south overhead door. It runs to the ceiling. (Photo 25-73)

There is a slight crack at a joint above the upper right of the door on the south. It is jusit over 8 inches long. (Photo 25-74)

There is a row of nail pops just below the ceiling on the north wall. (Photos 25-75 thru 25-77)

There is a slight vertical seam crack below the north window. It runs to the floor. (Photo 25-78)

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There is also a horizontal crack at a tape seam to the upper left of the north overhead door. It is about 10 inches long and $1 / 16$ of an inch
wide. (Photo 25-79)

The floor has a crack which trends northeast from the stairway and disappears under the front of the car. It is over 70 inches long and about $1 / 8$ of an inch wide and has a couple of branches. (Photos 25-80 and 25-81)

One branch trends roughly southeast near the stairway entrance. It is 17 inches long and is roughly a hairline wide. (Photo 25-82)

The other hairline branch trends westward to the carpeted area near the stairway. (Photo 25-80)

Photographs of the north wall. (Photos 25-83 and 25-84)
Photograph of the east wall. (Photo 25-85)
Photographs of the south wall. (Photos 25-86 and 25-87)
Photograph of the west wall. (Photo 25-88)
Photograph looking down the stairway. (Photo 25-89)
Stairway
Carpeted stairs and west wall.
Concrete east wall.
The east stairway wall has a horizontal split with a vertical crack at each end. The crack at the north end is about $1 / 16$ of an inch wide. The horizontal crack is about $1 / 16$ of an inch at its north end but enlarges to about $1 / 4$ of an inch at the south part. This is probably a separation where the garage floor was placed over the stem wall. (Photos 25-90 thru 25-92)

Basement
Main Room
Carpeted floor.
Paneled walls. Tile ceiling.

This roon contains a lot of stored material and plants.
Photographs of the south wall. (Photos 25-93 and 25-94)

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Photographs of the west wall. (Photos 25-95 thru 25-97, and 25-102)

Photographs of the east wall. (Photos 25-98 thru 25-100)
Photograph of the north wall. (Photo 25-101)

## Utility Area

Green painted concrete floor with a drain in the middle. Unfinished walls except the west wall which is concrete. Unfinished ceiling.

The floor joists are visible and appear to be two by tens. They are cross bridged and the plywood subfloor is visible.

There is a steel girder running north-south below the first floor. The girder is not continuous, but is welded together, probably near the middle.

The interior walls appear to be 2 by 4 studs on 16 inch centers.
Photographs of the west wall. (Photos 25-103 and 25-104)
Photographs of the north wall. (Photos 25-105 and 25-106)
Photograph of the east wall. (Photo 25-107)
Photograph of the south wall. (Photo 25-108)
ID photograph of the sump. (Photo 25-109)
There is a crack in the floor at the north end of the hole at the pipe. It is over $1 / 8$ of an inch wide. (Photo 25-110)

There is a crack in the west wall, at the south end, behind the sewer pipe. The length is about 55 inches and it is fran about $1 / 16$ to a hairline wide. (Photos 25-111 thru 25-113)

Kitchen/Dining Room
Carpeted floor.
Yellow painted sheetrock walls.
Lightly textured sheetrock ceiling.
Tile counter area walls.
Two windows above the sink on the west wall.

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The dining roon is at the south end.

The entrance to the living room is on the east and the bedroom hallway is to the south.

Photographs of the east wall. (Photos 25-114 and 25-115)
Photograph of the north wall. (Photo 25-116)
Photographs of the west wall. (Photos 25-117 and 25-118)
Photograph of the south wall. (Photo 25-119)
Sliding glass doors on the west wall.
There is a separation to the upper left of the north kitchen door. It is about 11 inches long. (Photo 25-120)

There is a slight vertical crack that runs up to the lowered ceiling, to the upper left of the west kitchen window. It is about $1 / 32$ of an inch wide and 2 and $1 / 2$ inches long. (Photo 25-121)

At this corner, on the lowered ceiling, there is a slight crack that appears to have been painted or patched over. (Photo 25-122)

At the ceiling fan, a peice of the plaster has come off. (Photos 25-123 and 25-124)

There is a slight hairline ceiling crack, east-west trending at a seam, above the west end of the bar. (Photo 25-125)

There is a vertical seam crack that runs to the ceiling above the upper right end of the entrance to the living roam. It is just wider than a hairline. (Photo 25-126)

Hallway
Carpeted floor.
Yelow painted sheetrock walls.
Textured plaster ceiling.
Photographs looking southward down the hall. (Photos 25-127 and 25-128)
Three doors on the west wall and three on the east.

Above the upper right of the north door on the east wall, there is a slight vertical crack at a seam. It is just wider than a hairline. (Photo 25-129)

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Above the upper left of the middle door on the east wall, there is a vertical bulge at a seam. There is also a slight horizontal crack at the upper right corner that is probably in the paint. (Photos 25-130 and 25-131)

At the north end of the hall entrance, there are slight hairline cracks in the ceiling along tape joints. (Photo 25-132)

The north door on the east wall is to a closet.

The other two east doors are to bedrooms.
The north door on the west wall is to the bathroon.

## Bathroom

Vinyl floor.
Sheetrock walls.
Tile lower north and west walls.
Window on the west wall.

Bathtub enclosure in the southwest corner.
Photograph of the west wall. (Photo 25-133)
Photograph of the north wall. (Photo 25-134)
Photograph of the east wall. (Photo 25-135)
Photograph of the lower north and west tile walls. (Photo 25-136)
Tho views of the bathroam ceiling. (Photos 25-137 and 25-138)
Southwest Bedroom
Carpeted floor.
Pink painted sheetrock walls.
Lightly textured ceiling.
Windows on west and south walls.
Photograph of the south wall. (Photo 25-139)
Photographs of the west wall. (Photos 25-140 and 25-141)
Photograph of the north wall. (Photo 25-142)

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Photographs of the east wall. (Photos 25-143 and 25-144)
There is a closet door on the north wall.
There is a vertical crack at a seam above the upper right part of the south window. It is a hairline crack that runs to the ceiling about 14 inches. (Photo 25-145)

There is a hairline ceiling crack at a tape seam along the east wall. It is an intermittent crack along the seam. It has about a 2 inch west trending crack from its north end. (Photos $25-146$ thru 25-150)

The ceiling above the west window has a hairline crack at a tape seam and a water stain. (Photo 25-151)

The southwest corner of the ceiling also has a slight crack at a tape seam. (Photo 25-152)

Southeast Bedroom
Green painted sheetrock walls.
Lightly textured ceiling.
Green carpeted floor.
Windows on the south and east walls.
Photograph of the south wall. (Photo 25-153)
Photograph of the east wall. (Photo 25-154)
Photograph of the north wall. (Photo 25-155)
Photographs of the west wall. (Photos 25-156 and 25-157)
This room has a door to an attached bathroom on the south end of the west wall.

Bathroom
Green carpeted floor. Green sheetrock upper walls. Lightly textured ceiling.
Tile lower, north, south, and west walls.
Window on the south wall.
A view into the bathroom looking westward. (Photo 25-158)

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White Industrial Seismology, Inc.
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## Northeast Bedroon

Blue painted sheetrock walls. Lightly textured ceiling. Carpeted floor.

Closet enclosure along the west wall.
Window on the east wall.
This room is used for storage of craft materials. Very little of the walls can be seen.

Photograph of the north wall. (Photo 25-159)
Photograph of the east wall. (Photo 25-160)
Photograph of the south wall. (Photo 25-161)
Photograph of the west wall. (Photo 25-162)
To the upper left of the closet door, there is a hairline horizontal crack about 5 inches long. (Photo 25-163)

Living Room
Carpeted floor.
Papered walls.
Lightly textured ceiling.
Window on the east wall.
Photograph of the north wall. (Photo 25-164)
Photograph of the west wall. (Photo 25-165)
Photograph of the south wall. (Photo 25-166)
Photographs of the east wall. (Photos 25-167 and 25-168)

## General Comments

This is a modern standard built house, built in the mid 1970 's.
The house has a good gutter-downspout system and a yard that slopes away fron the house which should provide good drainage.

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The concrete foundation has several slight cracks that can be expected to naturally increase in size over time. These were found mainly on the north side, and the north part of the west side, which is the garage foundation. Two larger sealed cracks were found in the north foundation that indicate some settlement of the house. However, most of the foundation was covered and could not be seen.

One crack was found in the west wall of the basement utility room. This crack will probably enlarge naturally with time.

Interior cracks were found mainly at seams of the sheetrock walls and ceilings. Their lengths will probably increase naturally, where possible, and the widths will vary over time with humidity changes.

The back patio has moved in relation to the house and has several cracks which indicate possible hydraulic forces under the slab. These cracks will probably enlarge in time due to hydraulic forces or frost action.

The front driveway is extensively cracked. Cracks will probably continue to develop and existing cracks enlarge, unless they are sealed to prevent water intrusion.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL/kg

Enclosure: 168 Photographs1- COPY FROM P \& M's TOWN OF AMORET MAPLOCATION NO. 113
2- SUMMARY FORM
3- SKETCH OF STRUCTURE




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PRE-BLAST SURVEY, RESIDENTIAL
I. Basic Information

1. Name of Resident: Mary Mangles
2. Date: October 29, 1986 Tine:_12:30PM
3. Address: Box 154, Amoret, Missouri 64722
4. Location: Lots 17 and 18, Block 26
5. Telephone Number: (816) 925-3494
6. Dates of occupancy by current resident: 4 $4 \frac{1}{2}$ years, son lived here 6 months before
7. Dates of any temporary or permanent abandonment: Empty for several years
before son moved in
II. InEormation Concerning Buildings
(repeat Eor addicional buildings)
8. Date of original construction: $\qquad$ Unknown
9. Date(s) of major remodeling or addicions:
(a) presently enlarging bathroom
(b)
(c)
10. Construction of building:
(a) franing (joists, rafters, and stud walls): Not known by resident
(b) interior walls: Sheetrock and paneling
(c) roof: Composition shingles
(d) footings; foundations: Concrete and concrete block foundation footing unknown
(e) basement walls (indicate how keyed to foocing of floor):

Not applicable
(E) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Not known
(h) size and direction of any large windows: None
III. Enviromental Information

1. Approximate elevation of area:

855 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation:

Not known
4. Water wells utilized (indicate depthend use): Used as a drain for bath and sink
5. Cisterns or surtace water storage utilized: (Indicate purpose and approximate volume). No
6. Source of water, if not Lncluded above: City Water
7. Eve troughs or any other exterior dralnage Eeatures: No
8. Description of general grading or landscaping in vicinity: Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windows: See survey
3. Noticeable settlement: See survey
4. Eoundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavenent: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
2.* South See survey
9. East See survey
10. West See survey
VII. Comments or supplementary drawings see survey
VIII. Discussion or specific coments concerning any unusual features, construction techaiques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

PH. (417) 624-0164

October 31, 1986
Report No. 87056-34
P and M Map Photo No. 55

Subject: Inspection of the Mary Mangles Residence P. O. BOX 154 Amoret, Missouri 64722 October 29, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the front, west side. (Photo 34-1)
ID photographs of the south side. (Photos 34-2 and 34-3)
ID photographs of the east side. (Photos 34-4 and 34-5)
The roof on the east side has cupping and deteriorating shingles.
ID photographs of the north side. (Photos 34-6 and 34-7)
Starting on the west side.
The porch roof has a hole at its northwest corner. (Photo 34-8)
The post support for the porch roof is split. (Photo 34-9)
The house has a block foundation with some concrete at the north end of the west side.

The concrete foundation is spalling, exposing aggregrate at the northwest corner. (Photos 34-10 thru 34-12)

There is a gap between the block and concrete portions of the west foundation. The gap is about 3/4 of an inch wide. (Photo 34-13)

The next mortar joint to the south is also separating. (Photo 34-14)

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The next mortar joint to the south has deteriorated mortar. (Photo 34-15)

There is a sidewalk at this side of the house. The southwest slab has a diagonal crack at its southwest corner. The crack is approximately 3 feet long and about $1 / 8$ of an inch wide. The crack can be expected to increase in width due to frost action. (Photo 34-16)

The sidewalk has a lot of grass growing up through it.

The porch slab has a roughly east-west trending crack near the middle. part of this crack runs under a rug. This crack is superficial and is about a hairline wide. (Photo 34-17)

There is some spalling at the northwest corner of the porch below the porch support. (Photo 34-18)

The northeast corner of the porch is deteriorating. (Photo 34-19)
ID photographs of the porch slab. (Photos 34-20 and 34-21)
The middle window on the west side has a couple of cracks in the lower pane. (Photo 34-22)

This window has very deteriorated caulk seals. (Photo 34-23)
The west side of the house has several cracked siding boards.
There are a few cracked siding boards to the left and below the middle window. (Photos 34-24 thru 34-26)

The ceiling of the porch has rotting boards at the north end. (Photos 34-27 and 34-28)

The piece of trim at the north end of the ceiling sags. (Photo 34-27)
There is a door to the house at the south end of the porch.
ID photograph of the doorway. Note the deteriorating siding to the lower right of this door. (Photo 34-29)

The caulk joint is separating and deteriorating where the porch wall meets the house. (Photos 34-30 and 34-31)

Now at the south end of the west side.

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There are panels attached to the lower wall and the lower siding boards appear to be water damaged and deteriorating. (Photo 34-32)

The west window to this porch has separating caulk seals and loose
panes. (Photos 34-33 and 34-34)
The west part of the roof has a sagging section at the north part and cupping and deteriorating shingles. (Photos 34-35 thru 34-37)

Now to the south side of the house.
The south porch windows have deteriorated caulk. The wooden sashes show signs of rot and decay. (Photos 34-38 thru 34-41)

The wooden roof planks are rotting at the south end of the porch. (Photo 34-42)

The caulk seal is separating where the porch attaches to the house. (Photos 34-43 thru 34-45)

The south side of the house has several broken and cracked siding panels. (Photos 34-46 thru 34-52)

Some nails are beginning to pop out at the lower siding panels.
The upstairs south window has same holes in the screen and the bottom storm screen is loose. There also appears to be a crack in the inner window. (Photo 34-53)

The main south window has a rotting sill and paint is peeling. It does have a storm window. (Photos 34-54 and 34-55)

The inner windows have deteriorated caulk. (Photos 34-56 thru 34-59)
There is a cracked siding board to the lower left of the upper window. (Photo 34-60)

There is another cracked siding board above the upper right of the main window. (Photo 34-61)

Several of the south siding boards have holes. (Photo 34-62)
Now inspecting the south foundation starting at the west end.
There are several gaps at the mortar joints and some of the blocks have shifted in relation to each other.

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The three westmost mortar joints are separated. Width range from about $1 / 2$ to $1 / 4$ of an inch. (Photos 34-63 thru 34-65)

A mortar joint below the left end of the window has a gap that is about $5 / 8$ of an inch at the widest. This block has al so shifted. (Photos 34-66 and 34-67)

The next mortar joint to the east has a gap about $1 / 2$ an inch wide. (Photo 34-68)

A mortar joint to the lower right of the window and near the watt meter has separated by about $1 / 8$ of an inch. (Photo 34-69)

There is a crack through a block below the watt meter. The crack is about $1 / 8$ of an inch wide. (Photo 34-70)

This block also has shifted northward about 1 and $1 / 2$ inches relative to the block to the west. (Photo 34-71)

There is a $1 / 2$ inch wide crack in the foundation below the east end of that block. (Photo 34-72)

The next mortar joint eastward is separated by about $1 / 4$ of an inch at the widest. (Photo 34-73)

Below the telephone line, the foundation is concrete. There is a separation where the block and concrete meet. It is about $3 / 8$ of an inch at the widest. (Photo 34-74)

A general photograph showing the concrete part of the south foundation, west of the steps. (Photo 34-75)

The back steps have a concrete block foundation. There are several mortar separations at the west side of the block foundation ranging from about $5 / 8$ to $1 / 16$ of an inch wide. (Photos $34-76$ thru 34-78)

There is about a $1 / 2$ inch gap between the step and the foundation. (Photo 34-79)

The top of the stoop is cracked at its west end. The cracks roughly follow the outlines of the wire reinforcement and range fran hairline to about $1 / 16$ of an inch wide. (Photos 34-80 thru 34-82)

The stoop has settled away from the sill of the door. (Photo 34-83)
The west edge of the step has a slight crack. (Photo 34-84)

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The top of the step has several cracks. They range from about $1 / 8$ of an inch to a hairline in width. (Photos 34-85 thru 34-87)

The front edge of the steps has several cracks. They are about $1 / 16$ of an inch wide. (Photos 34-88 and 34-89)

The east side of the step has an exposed, spalling and deteriorating brick. There is a $5 / 8$ of an inch mortar gap and a $1 / 4$ inch wide crack in the concrete on the east side of the stoop foundation. (Photos 34-90 thru 34-92)

Some grass is growing up through the middle step.
The east end of the south foundation, is concrete and there is a lot of aggregate visible. (Photos 34-93 thru 34-96)

At the southeast corner, there is a vertical crack or a gap that is about 2 inches at the widest. (Photos $34-95$ and 34-96)

Aggregate has spalled off the foundation and is laying on the ground at the southeast corner.

The south door and trim are not flush with the wall. (Photos 34-97 thru 34-99)

The east window on the south side has deteriorating caulk and paint, and the screen has several small holes. The trim appears to be rotting. (Photos 34-100 and 34-101)

Now on the east side of the house.
The foundation is deteriorating at the southeast corner. Moss is growing on the foundation and a lot of aggregate is laying on the ground next to the foundation. (Photos 34-102 and 34-103)

Below the window, there is a flaw in the foundation. (Photo 34-104)
There is another flawed area of the foundation between the window and the door to the north. (Photo 34-105)

The foundation below the door has green moss growing on it and some of the aggregate is falling out. (Photos $34-106$ and $34-107$ )

About 8 or 9 feet fron the north end, there is a foundation flaw that has been filled with insulation. It is about 2 inches at the widest and about 13 inches vertically. (Photo 34-108)

The east side of the house has several broken siding boards.

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The soffit is loose at the north end of the east side. There is a bird nest visible in there and the entire fascia is rotting. (Photos 34-109 thru 34-111)

The small east window has a hole in the screen at the lower right corner and the inner window has deteriorating caulk and peeling paint. The outer trim has peeling paint and is deteriorating. (Photo 34-112)

Now on the north side of the house.
There is a patch in the foundation below the east window. A crack at the left end of the patch is about $1 / 8$ of an inch at the widest. (Photos 34-113 thru 34-115)

There is another crack in the foundation at the main floor girder. This has been patched and the patch is slightly cracked. There is a roughly diagonal flaw below this girder with aggregate falling out. (Photo 34-116)

Straw has been laid against the foundation on the north side.
There is an access hole in the north foundation. It measures about 22 inches wide. (Photo 34-117)

The sill plate of this house is deteriorating. (Photos 34-113 thru 34-123)

There is a flaw in the foundation just west of the crawl space hole. It is about 2 inches wide. (Photo 34-118)

There are materials piled up along the west end of the north side foundation.

The west end of the north foundation has a concrete exterior cover.
This cover is cracked to the lower right of the window. (Photos 34-119 and 34-120)

There is a vertical crack to the west that is about $1 / 32$ of an inch wide. It is about 6 and $1 / 4$ inches visible. (Photo 34-121)

The west end of the north foundation has severe deterioration of the exterior cover. The main spall is about 10 inches wide and about 3 inches high. (Photos 34-122 and 34-123)

The north side of the house has several cracked siding panels.

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The trim is deteriorating at the west window and the aluminum sash of the storm window is bent. (Photos 34-124 and 34-125)

The upper window has a misaligned screen sash. (Photo 34-126)
The middle lower window has a deteriorated sill. This is the bathroom window. (Photo 34-127)

The east window with the air conditioner has deteriorating trim. The sill has a greenish moss growing on it. (Photos 34-128 thru 34-130)

There is also a diagonal crack in the siding above the upper left corner of the window. It is about 4 inches long and a hairline wide. (Photo 34-131)

The caulk along the outer frame of the window is separating. (Photos 34-132 and 34-133)

The inner window has deteriorating caulk. (Photos 34-134 thru 34-136)
The sewer line canes out at the north side of the house and discharges into the yard.

Now to the west side of the house. The sidewalk tilts westard and is being overgrown with grass.

The birdbath in the front yard has cracks that range from a $1 / 8$ of an inch to a hairline in width. A piece of concrete has spalled from the stem. (Photos 34-137 thru 34-140)

The well is located east of the house.
Well
ID photograph of the west side of the well house. (Photo 34-141)
ID photographs of the south side. (Photos $34-142$ and 34-143)
ID photograph of the east side. (Photo 34-144)
ID photograph of the north side. (Photo 34-145)
There are some slight flaws in the concrete structure.
There appears to be a patched area at the northwest corner.
The top is mostly covered with material.

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Looking inside, the structure is mostly full of water and cannot be entered. (Photo 34-146)

INTERIOR INSPECTION

## Living Room

Rug over a wooden floor.
Paneled walls.
Tile ceiling.
Door to the kitchen on the east wall.
Windows on the south and west walls.
Door on the west to the porch.
Door to the stairs on the north.
Photographs of the east wall. (Photos 34-147 and 34-148)
Photographs of the north wall. (Photos 34-149 and 34-150)
Photographs of the west wall. (Photos 34-151 and 34-152)
Photographs of the south wall. (Photos 34-153 and 34-154)
Series of photographs of the ceiling. (Photos 34-155 thru 34-158)
The ceiling has several areas that were spray painted or patched.
The lower right pane on the south wall has two cracks at its upper right corner. (Photo 34-159)

Part of the light fixture hangs from the ceiling. (Photo 34-160)
This light also has a broken glass at one of the light bulbs.
There are several warped, bulged and stained tiles mainly at the north end of the ceiling. (Photos 34-161 thru 34-166)

There is a hole in a œiling tile near the south wall. (Photo 34-167)
The ceiling tiles are one foot squares and the damage appears to be the effect of water.

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The door to the back porch on the west wall has a loose windowpane that rattles when $I$ shake the door lightly. Also, at the right hand side the bead is broken. (Photo 34-168)

Porch

Paneling on each wall except the east, which has exterior siding. Fiberboard ceiling.
Concrete floor covered by a rug.
Has two windows on the south wall and one on the west wall.
There is a door on the north wall.

The windows show water damage at the sills.
The ceiling slopes down to the west.
The ceiling is severely water stained in the southwest part. (Photos 34-169 and 34-170)

A view looking westward into the room. (Photo 34-171)
A view of the south wall. (Photo 34-172)
There are broken siding panels below and to the lower right of the doorway. (Photos 34-173 and 34-174)

The southeast corner has a gap and light can be seen through it. This corner has been sealed but has separated. (Photos 34-175 and 34-176)

There is a loose piece of paneling at the upper north wall. (Photo 34-177)

There is light visible above the door on the north. (Photo 34-178)
There is a room north of the living room that leads to the stairway.
Stairway Room
Wooden floor.
Paneled walls except the east which is unfinished.
Tile ceiling.
Views looking northward into this room. (Photos 34-179 and 34-257)
Window on the west wall.

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Views of the east wall. (Photos 34-180 and 34-181)
The board at the top of the east wall bows downward. (Photo 34-180)
View of the west wall. (Photo 34-182)
View of the ceiling. (Photo 34-183)
Bathroom

Wooden floor, part of which has been removed and replaced with plywood at the north end.
Paneling on the south wall.
Unfinished sheetrock on the other walls.
Part of east wall is not completed near the doorway.
The ceiling is tile for the most part, however an area has been cut out revealing and older sheetrock ceiling that had been papered and textured lightly.

There is a window on the north wall.
Photograph of the north wall. (Photo 34-184)
Photograph of the west wall. (Photo 34-185)
Photograph of the floor. (Photo 34-186)
Photographs of the east wall, north part. (Photos 34-187 and 34-188)
Photograph of the south wall. (Photo 34-189)
Photographs of the south part of the east wall. (Photos 34-190 and 34-191)

Views of the ceiling. (Photos 34-192 thru 34-195)
There are several cracks and a hole in the exposed older sheetrock ceiling. (Photos 34-196 thru 34-199)

There is a vertical crack below each lower corner of the north window. This is in an area of the wall that has not been replaced. Each of those cracks are about 14 inches long and about $1 / 8$ of an inch wide. (Photos 34-200 and 34-201)

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Bedroam

Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Window on the north wall.

Closet on the west wall.
Photograph of the north wall. (Photo 34-202)
Photographs of the east wall. (Photos 34-203 and 34-204)
Photographs of the south wall. (Photos 34-205 and 34-206)
Photographs of the west wall. (Photos 34-207 and 34-208)
Photographs of the ceiling. (Photos 34-209 thru 34-216)
A section of the east end of the ceiling has been replaced. There are water stains and areas of missing texture above the bed. There is a crack in a tape joint trending north-south. Mrs. Mangles indicated that the roof had leaked but has been repaired. (Photos 34-213 thru 34-216)

The ceiling sags down somewhat in this area also.
There is not any crown molding along the east wall.
The east wall has warped paneling.
The patch measures 5 feet 10 inches north-south and at the widest point it measures about 39 inches. The crack measured about 5 feet 6 and $3 / 4$ inches.

The ceiling has a slight east-west crack near the south wall. It is along a seam, and is about 2 feet 5 inches long and $1 / 16$ of an inch wide. (Photo 34-217)

There is some cracking paper on the south end of the west wall of the closet. (Photo 34-218)

The bedroom has a œor to the kitchen on the south.

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## Kitchen

Vinyl floor.
Paneled lower walls.
Papered upper walls.
Tile counter area wall.s.
Textured plaster ceiling.
Tile area on west wall.
Mrs. Mangles indicated that a new floor has been put in the kitchen.
Photographs of the west wall. (Photos 34-219 and 34-220)
Photographs of the south wall. (Photos 34-221 and 34-222)
Photographs of the east wall. (Photos 34-223 and 34-224)
Photograph of the north wall. (Photo 34-225)
Photographs of the ceiling. (Photos 34-226 thru 34-229)
There is a long north-south trending stain in the ceiling along a joint. It is about 7 feet 10 inches long. (Photos 34-230 thru 34-233)

A visible joint in the ceiling runs to the east window from the cracked joint. (Photo 34-234)

The north-south trending joint continues south and has a hairline crack visible intermittently along the length of the joint. (Photos 34-235 and 34-236)

The cabinets along the east wall are not flush with the ceiling. This is to allow roon for the doors to swing. (Photos 34-237 thru 34-240)

The east window on the south wall has loose trim at the lower left side. (Photo 34-241)

The kitchen does not have crown molding in place except to the upper left of the west door.

An area at the ceiling and north wall intersection is not flush. An area of chipping in the older plaster can be seen to the upper left of the north door. (Photos 34-242 and 34-243)

Now moving upstairs.

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Stairs
Wooden stairway.
Paneled walls and ceiling.
North Bedroan
Paneled walls and sloping ciling.
Tile flat ceiling.
Vinyl floor.
This roon is used for storage.
Photograph of the south wall. (Photo 34-244)
Photographs of the east wall. (Photos 34-245 and 34-246)
Photograph of the north wall. (Photo 34-247)
Photograph of the west wall. (Photo 34-248)
The sloped ceiling has same loose paneling.
The north wall window has a storm window with a bent sash. (Photo 34-249)

A view of the ceiling looking southward. (Photo 34-250)
There is a door on the south to another roam.

## South Bedroom

Vinyl floor.
Paneled walls and sloped ceiling.
Tile flat ceiling.
Closet enclosure in the northwest corner.
Window on the south wall.
Photograph of the south wall. (Photo 34-251)
Photograph of the east wall. (Photo 34-252)
Photograph of the west wall. (Photo 34-253)
Photograph of the north wall. (Photo 34-254)

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Photograph of the ceiling looking southward. (Photo 34-255)
There appears to be some loose paneling at the south end of the east and west sloped ceiling.

There is a diagonal crack in the inner lower window. The outer caulk seals of this window are deteriorating. The screen sash is leaning inward and has several small holes. (Photo 34-256)

That completes the house inspection.
Shed
There is a small shed located southeast of the house. This shed was inspected on Januacy 9 and 16, 1987. It has galvanized steel siding and roofing with a dirt floor and unfinished interior. It lacks a gutter system.

ID photograph of the front, west side. (Photo 34-258)
ID photograph of the north side. (Photo 34-259)
ID photograph of the east side. (Photo 34-260)
ID photograph of the south side. (Photo 34-261)
ID photograph of the roof. (Photo 34-262)

## General Comments

This house lacks a gutter and downspout system to direct rainwater away from the foundation. This condition will allow ground adjacent to the foundation to become saturated which will increase the liklihood of further foundation damage.

At this time, the concrete part of the foundation is deteriorating. The block part of the foundation has numerous cracks, likely caused by settlement and shrinkage and swelling of soil adjacent to the foundation.

The exterior trim is deteriorating and is in need of new paint. The roof has sagging areas and appears to have deteriorating shingles. Interior ceiling damage suggests that the roof leaks or has in the past.

At this time, the bathroom is being enlarged and most of the interior has been remodeled.

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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC. Envitoplue $D$. Lasedoll
Christopher D. Landoll Technical Associate
$\mathrm{CDL} / \mathrm{kg}$
Enclosure: 262 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 55

2- SUMMARY FORM
3- SKETCH OF STRUCTURE







## $34-6$





## $34-1$



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PREB-BLAS'I SURVEY, RESIDENTLAL
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I. Basle Infomation

1. Name of Resident: Tery Cameron
2. Dace:12-12-86 'l'Lne: 12:20 PM
3. Address: Route 1 Amoret, Missourj 64722
4. Location:Lot 1 Block 32
5. Telephone Number: _ $816-925-3235$
6. Dates of occupancy by current resident: Past two years
7. Dates of any cempotary or permanent abamdonment: No
LI. LnEormathon ConcernLing BuLidings
(repeat Eor addiclonal bulidings)
L. Date of origlnal construction: 1979 Trailer
8. Date(s) of major remodeling or addltions:
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
9. Construction of building:
(a) Eranling (Jolsts, rafters, and stud walls):
(b) interlor walls:
(c) 5OOE:
(d) Eootings; EoundatLons:
(e) basement walls (indicate how keyed to Eooting of floor):
(E) basement Eloor (keyways, thackness):
(g) name of person(s) who constructed buliding:
(i) size and direction of any large windows:
III. Enviromaental Information
10. Approximace elevation of area:

860 feet
2. Type of soli in area: Silty clay loam.
3. Type of subgrade drainage at base of foundation: No.
4. Water wells utilized (Indicate depth*and use): No.
5. Cisterns or surface water scorage utilized: (indicate purpose and approximate volume). No.
6. Source of water, lf not lncluded above: City.
7. Eve rroughs or any other exterior dralnage Eeatures: No.
8. Description of general grading or Landscapling in vicinity: Generally flat.
IV. Any notable exlsting deterioration or damage

1. Cracks in interlor walls: See survey.
2. Receding of doors, windurs: See survey.
3. Noticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings See survey.
VI. Elevation views or photographs of walls See survey.
8. Norch
2.e South
9. East
10. West
VII. Comuents or supplementary drawings See survey.
VIII. Discussion or speciEfic comnents concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to nomal blasting activicies.
See survey.

December 15, 1986
Report No. 87056-98

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Subject: Inspection of the Terry Cameron Residence
    Route 1, Box }17
    Amoret, Missouri. }6472
    December 12 and 19, }198
To: The Pittsburg and Midway Coal Mining Company
        P. O. Box }
        Amsterdam, Missouri 64723
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    Attention: Mr. Mark Premo
    Transcribed and edited from taped field notes.
This is a double wide trailer.
INTERIOR INSPECTION
Living Room/Entry
Carpeted floor.
Paneled walls.
Sheetrock ceiling.

Windows on the west, north, and south walls.

The living room opens to the entry area and dining room to the east.
Photograph of the south wall. (Photo 98-1)
Photographs of the west wall. (Photos 98-2 and 98-3)
Photographs of the north wall. (Photos 98-4 and 98-5)
Photograph of the east wall of the entry area. (Photo 98-6)
Photograph of the south wall of the entry area. (Photo 98-7)
There is a wood stove in the living room. Under the stove, the floor is brick with dry joints. The wall behind the stone is Z-brick material. (Photos 98-8 and 98-9)

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At the north end of the Z-brick wall, a corner of a brick has chipped off. (Photo 98-10)

The Z-brick is backed by a piece of plywood. (Photo 98-11)
The lower right brick al so has a corner broken off. (Photo 98-12)
At about the center of the ceiling, there is a gap, apparently lacking trim where the two halves of the trailer are joined together. (Photos 98-13 and 98-14)

## Dining Room

Carpeted floor.
Paneled walls.
Sheetrock ceiling.
Photograph of the north wall. (Photo 98-15)
Photograph of the south wall. (Photo 98-16)
Photograph of the east: wall. (Photo 98-17)
Kitchen
Vinyl floor.
Papered and paneled walls.
Sheetrock ceiling.
Photograph of the east: wall. (Photo 98-18)
Photographs of the south wall. (Photos 98-19 and 98-20)
Photographs of the north wall. (Photos 98-21 and 98-22)
Door on the north wall to a bedroan.
West Bedroom
Carpeted floor.
Paneled walls.
Sheetrock ceiling.
Window on the north wall.
This room is currently used for storage.
Photograph of the north wall. (Photo 98-23)

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Photograph of the west wall. (Photo 98-24)
There is a closet along the east wall.
Photographs of the east wall. (Photos 98-25 and 98-26)
Hallway
Paneled walls.
Carpeted floor.
Sheetrock ceiling.
Door on the south wall to the bathroom.
Door on the east wall to a bedroom.
Door on the north wall to the master bedroom.
Bathroom
Vinyl floor.
Papered walls.
Sheetrock ceiling.
Photograph of the south wall. (Photo 98-27)
Photograph fo the west wall. (Photo 98-28)
Small window on the south wall.
Photograph of the east wall. (Photo 98-29)
Photographs of the north wall. (Photos 98-30 and 98-31)
Formica covered shower stall walls in the northeast part of the
bathroom.
Master Bedroom
Carpeted floor.
Paneled walls.
Sheetrock ceiling.
Window on the north wall. Closet along the west wall.
Photograph of the north wall. (Photo 98-32)
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Photograph of the east wall. (Photo 98-33)
Photographs of the south wall. (Photos 98-34 and 98-35)
Photograph of the west wall. (Photo 98-36)
The west wall has a door to an attached shower roam.
Shower Room
Carpeted floor.
Formica covered walls.
Small window on the north wall.
East Bedroom
Paneled walls.
Carpeted floor.
Sheetrock ceiling.
Window on the south wall.
Photograph of the east wall. (Photo 98-37)
Photograph of the south wall. (Photo 98-38)
Photographs of the west wall. (Photos 98-39 thru 98-41)
Photograph of the north wall. (Photo 98-42)
The ceilings throughout the trailer are lightly textured.
Hallway - Continued
A photograph looking westward down the hallway. (Photo 98-43)
A photograph looking eastward down the hallway. (Photo 98-44)
That completes the interior inspection.
EXTERIOR INSPECTION
Mrs. Cameron indicated that they are planning to move the trailer to a different location in the near future.

ID photographs of the front, north side of the trailer. (Photos 98-45 and 98-46)

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The trailer has a concrete block foundation.
Series of photographs from east to west showing the front block foundation. (Photos 98-47 thru 98-50)

ID photograph of the west end of the trailer. (Photo 98-51)
ID photographs of the south side of the trailer. (Photos 98-52 and 98-53)

There is a partial gutter along the south side of the trailer, the downspout is loose and sways in the wind. It lacks a tip, and empties to the ground below the trailer.

Series of photographs of the south foundation from west to east. (Photos 98-54 thru 98-56)

The screen is ripped on the kitchen door.
ID photographs of the east end of the trailer. (Photos 98-57 and 98-59)
A photograph of the east end of the foundation. (Photo 98-58)
Northwest of the trailer, there is a driveway area. It is old concrete that is extensively cracked with missing areas. Series of photographs. (Photos 98-60 thru 98-64)

General Comments
This is a 1979 , double wide trailer.
It rests on a concrete block foundation. The block footings have sunken some what into the soil. The trailer lacks a gutter-downspout system, except for a partial gutter on the back side.

Mrs. Cameron indicated that they intend to move the trailer to a new location in the near future.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC. thinitanlud. Rubel
CDL/kg
Enclosure: 64 Photographs

Christopher D. Landoll
Technical Associate

1- SUMMARY FORM
2- SKETCH OF STRUCTURE







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PRE-BLAST SURVEY, RESIUENTINL
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I. Baslc Information

1. Name of Res Ldent: ..... Robert L. Stevens
2. Date:

$\qquad$
December 12, 1986
1'Lue: 1:00PM
3. Address: $\qquad$ Box 179, Amoret, Missouri 64722
4. Location: Lots 1 and 2, Block 32
5. Telephone Number: No phone (925-3494 Mother)
6. Dates of occupancy by current resident: June 21, 1986 - Present
7. Dates of any tempotary or permanent abandonnent: Vacant before moved_ in
[L. InEormation Conceralng BuLLdings
(repeat Eor addithomal bullulugs)

1. Date of orfghal coustructlon: Not known
2. Date(s) of major remodeling or addleions:
(a) Plan to remodel at Ist of 1987 (Replace plaster with sheetrock)
(b) Some sheetrock in living room was done by Virginia Howser (Former owner)
(c)
3. Construction oE building:
(a) Eraming (Jolsts, rafters, and stud walls): hardwood $2 \times 6 \quad 2 \times 4$. $2 \times 4$
(b) Lutevior walis: Mainly plaster on lath, some sheetrock.
(c) roof: Composition shingles.
(d) Eootings; Eoundations: Stone, block (footing doubtful)
(e) basement walls (indicate how keyed to footing oE Eloor):
Not applicable.
(E) basement Eloor (keyways, thlckness):
Not applicable.
(g) nane of person(s) who constructed building: Unknown
(h) size and direction of any large windows:
None.
III. Enviromantal Infomation
4. Approximate elevation of area:
858 feet.
5. Type of soll in area: Silty clay loam.
6. Type of subgrade drainage at base of Eoundation: Doubtful.
7. Water wells utilized (Indicate depth and use): Yes, used as septic by Cammeron
8. Cisterns or surface water storage utilized: (Lndfailer purpose and approximate volume). No.
9. Source of water, if not included above: City water.
10. Eve troughs or any other exterior dralnage Eeatures: Some.
11. Description of general grading or landscaping in vicinity: Generally flat.
IV. Any notable existing deteriotation or damage
12. Cracks in interlor walls: See survey.
13. Recedlag of dours, whindu's: See survey.
14. Notlceable setthenent: See survey.
15. Foundation cracks: See survey
16. Exterior wall cracks (brick veneer): Not applicable.
17. Sidewalks, steps, driveway pavement: See survey.
18. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls See survey.
L. North See survey.
19. South See survey.
20. Easc See survey.
21. West See survey.
VII. Comuents or supplementary drawings See survey.
VIII. Discussion or specific comments concerning any unusual features, construction technlques, or status of deterioration, that, because of the nature of thefr construction, materials of which they are constructed, status of detertoration, may extilbit an unusual response to normal blasting activities.

See survey.
White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B P.O. BOX 1256 JOPLIN, MO 64802-1256

            PH. (417) 624-0164
    December 15, 1986
Report №. 87056-99
P \& M Map Photo No. 53
Subject: Inspection of the Robert Stevens Residence Box 179
Amoret, Missouri 64722
December 12, 1986
To: The Pittsburg and Midway Coal Mining Oompany P. O. Box 8 Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INPSECTION

ID photographs of the north, front side of the house. (Photos 99-1 and 99-2)
ID photographs of the west side of the house. (Photos 99-3 thru 99-6)
ID photograph of the south side. (Photo 99-7)
ID photographs of the east side. (Photos 99-8 and 99-9)
ID photograph of the north porch from the east. The fascia is deteriorating and there is some cracked concrete east of the porch. (Photo 99-10)
This house has two brick chimneys.
ID photographs of each side of the south chimney. (Photos 99-11 thru 99-14)
ID photographs of each side of the north chimney. (Photos 99-15 thru 99-18)
The east porch has a plywood floor that has a couple of holes at the east end. The floor of this porch gives considerably when walked upon. (Photo 99-19)

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On the east porch, there is a window on the north wall and two windows on the west wall.

The northwest window has deteriorating caulk joints and some of the caulk has fallen out at the lower right side. The trim has deteriorating paint. (Photo 99-20)

Also, part of the caulk joints are falling out at the upper left window. (Photo 99-21)

The south window on the porch also has deteriorating caulk and paint. (Photos 99-22 and 99-23)

The third sidewalk slab east of the house has some cracks at the southwest corner. They cover an area of about 11 and $1 / 2$ inches long and range from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 99-24)

The second slab from the house is cracked in its southwest corner. The crack measures about 6 and 1/4 inches long and about $1 / 16$ of an inch wide. (Photo 99-25)

The second slab from the east is also cracked. This is under the car tire. (Photo 99-26)

The east upstairs window has deteriorating caulk, paint, and trim. (Photo 99-27)

The east downstairs window also has deteriorating caulk and paint. (Photos 99-28 and 99-29)

The house has a stone foundation with dry joints.
Series of photographs of the east foundation, north of the porch, from south to north. Separations and gaps range from about $1 / 8$ of an inch to 1 inch wide. (Photos 99-30 thru 99-34)

At the northeast corner of the house, the retaining wall is cracked in two. There is about a $l$ and $l / 4$ inch wide separation between the two pieces. (Photo 99-35)

Now on the north side of the house.
The foundation, east of the north porch, is brick. This area is apparently collapsing. (Photo 99-36)

The first floor, east front window has severely deteriorating paint and caulk. The lower storm window is cracked all the way across. The upper storm window has a taped crack. (Photos 99-37 and 99-38)

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The trim around the front door appears to be unsquare. (Photo 99-39)
The west front window has blackened caulk and deteriorating paint. (Photo 99-40)

The ceiling of this front porch has peeling paint and deterioration. The ceiling also looks to be uneven, it slants downward from east to west roughly. (Photos 99-41 thru 99-43)

The front porch is mostly covered with shingles. It has a large crack all the way through and across, just east of the door. At the north edge, the crack averages about $5 / 8$ of an inch wide. (Photos 99-44 thru 99-46)

The west part of the front porch also has a crack all the way through the north edge. This crack ranges in width fram about $1 / 2$ to $1 / 8$ of an inch. This crack trends all the way across the porch. (Photo 99-47)

ID photograph of the north upstairs window. (Photo 99-48)
ID photograph of the west side of the front porch. Note the sagging roof, the deteriorating fascia on the west edge, and the shingles that are buckled and cupped. (Photo 99-49)

The bottan course of siding shingles on the house are pushed up as if the house were settling. (Photo 99-50)

An area of wooden siding is exposed at the lower west end of the front. (Photo 99-51)

The west side of the house has a hole in the soffit and a hole at the upper north end of the siding. The soffit and fascia have deteriorating paint. (Photo 99-52)

There are also a few other patched holes on this side. (Photo 99-53)
ID photograph of the west upstairs window. (Photo 99-54)
The west downstairs window has deteriorating and peeling paint. (Photo 99-55)

Now at the north end of the back porch, there is a piece of particleboard covering the crawl space entrance. (Photo 99-56)

ID photograph of the north side of the back porch. (Photo 99-57)
The back porch has a concrete block foundation mainly.

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A piece of plastic covers four of the west windows of this porch. (Photos 99-58 and 99-59)

The porch windows are severely deteriorated.
There is a gutter along the west side of this porch, however, it lacks a downspout and empties close to the foundation.

The concrete stoop at this west porch door has deteriorated severely. (Photo 99-60)

A sidewalk runs westward from the porch to the Camerons' trailer. (Photos 99-61 and 99-62)

The east sidewalk slab has a crack across it that is about $1 / 16$ of an inch wide. This area is also spalling. There is also a crack or a joint to the west. (Photo 99-63)

The sidewalk has a couple of other cracks to the west with grass growing through them.

Now on the south side of the house.
The south porch windows are deteriorating severely. (Photos 99-64 and 99-65)

The south kitchen window has deteriorating caulk and paint. (Photo 99-66)

Series of photographs of the south foundation from west to east. (Photos 99-67 thru 99-74)

The block foundation, below the west window, has a number of hairline mortar cracks.

The drain from the washing machine empties along the south side of the house. (Photo 99-70)

There is an old flower bed rail along the south side of the house, part of which has been removed. It has a crack at the west part that goes all the way through and measures about $5 / 8$ of an inch wide. (Photos 99-75 and 99-76)

The east section of the rail is cracked at its west end. (Photo 99-77)
There is a hairline crack across the east part of the rail. (Photo 99-78)

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There is another concrete rail along the east side of the house. (Photo 99-79)

The east rail has a crack all the way through that is about $1 / 4$ of an inch wide. (Photo 99-80)

Well
There is an old well located west of the house. It is used as a septic tank for the Cameron trailer.

It has a concrete cover with extensive cracks. Series of photographs of the cover. (Photos 99-81 thru 99-85)

Looking inside, it is full of sewage and some is draining out on the east side.

At this time, the cracks range from about $1 / 16$ of an inch to a hairline wide on the east side. The main crack is north-south trending and has been patched. Part of the patch is falling out. It is about 3 inches wide. (Photo 99-85)

West of the old well, the ground is saturated with sewage. (Photo 99-86)

There is an old cellar located southwest of the house.
Cellar
ID photograph of the front, east side. (Photo 99-87)
The cellar is partially full of water at this time.
The walls of the cellar stairway are cracked severely.
The north wall has a large horizontal crack near the bottom and a vertical crack near the top step. (Photos 99-88 and 99-89)

The south wall of the stairway is cracked severely. (Photo 99-90)
Cracks widths on the stairway walls range from about 1 and $1 / 2$ inches to a hairline.

The top three steps are cracked. (Photo 99-91)
The area above the entrance has several cracks. (Photos 99-92 and 99-93)

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The concrete just outside the stairway entrance is cracked. (Photo 99-94)

ID photographs of the north and south sides of the cellar. (Photos 99-95 and 99-96)

Inside, the south, east, and west walls have connecting horizontal cracks. (Photos 99-97 thru 99-99)

A photograph of the cellar ceiling. (Photo 99-100)
At this time, the water level is up to the second step, and it appears to have been higher.

That completes the exterior inspection.
INTERIOR INSPECTION

## Living Room

This room is in the process of being remodeled.
Unfinished sheetrock walls and ceiling.
Carpeted floor.
Windows on the east wall.
Entrance to the kitchen on the south wall.
Door on the north to the family room.
Stairway entrance on the north wall. Door on the west to the bathroom.
Photographs of the east wall. (Photos 99-101 and 99-102)
Photographs of the south wall. (Photos 99-103 and 99-104)
Photographs of the west wall. (Photos 99-105 and 99-106)
Photographs of the north wall. (Photos 99-107 and 99-108)
Photographs of the ceiling. (Photos 99-109 thru 99-112)
Mrs. Stevens indicated that they plan to remodel the entire house, probably tearing out all plaster walls and replacing with sheetrock, and probably paneling the walls.

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The north part of the ceiling is covered with a tarp and the sheetrock has been removed.

In the northeast corner, there is apparent termite damage at the bottom edge of the two north ceiling joists. (Photo 99-113)

Family Room
This is the northeast room of the house.
Carpeted floor.
Papered walls over plaster.
Tile ceiling.
Door to a bedroom on the west wall.
Windows on the north, east, and south walls.
Photograph of the north wall. (Photo 99-114)
Photographs of the east wall. (Photos 99-115 and 99-116)
Photographs of the south wall. (Photos 99-117 and 99-118)
Photographs of the west wall. (Photos 99-119 thru 99-121)
There are extensive cracks in the papered walls.
Series of photographs of the north wall from east to west. (Photos
99-122 thru 99-124)
The west doorway appears to slant from north to south.
Series of photographs of the west wall. (Photos 99-125 thru 99-129)
Series of photographs of the south wall. (Photos 99-130 thru 99-132)
Series of photographs of the east wall. (Photos 99-133 thru 99-135)
To the upper left of the east window, there is a large bulged area.
There are water stains in the northwest corner of the ceiling. The wall paper is peeling and stained above the north door. (Photo 99-136)

Some of the ceiling tiles are water damaged above the north window. (Photo 99-137)

The floor in this room feels somewhat uneven in certain areas.

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## Northwest Room

Papered walls and ceiling over plaster. Carpeted floor.

Windows on the north and west walls.

The south wall has a sealed doorway.
Photographs of the south wal.1. (Photos 99-138 thru 99-140)
There is a closet enclosure below the stairway in the southeast corner.
There is an area of exposed plaster and damaged trim at the lower corner of the closet. (Photo 99-141)

Photographs of the west wall. (Photos 99-142 and 99-143)
Photographs of the north wall. (Photos 99-144 and 99-145)
Photographs of the east wall. (Photos 99-146 thru 99-150)
There is also a small closet in the northeast corner.
There are several cracks in the walls.

There is a branching crack in the southwest corner of the ceiling. This crack measures about 18 inches from end to end. (Photo 99-15l)

The west wall has numerous ridges in the wallpaper.
There is a tearing paper crack above the upper right corner of the west window. It measures about 11 and $1 / 2$ inches long. (Photo 99-152)

There is a tearing crack above the upper left corner of the north window that is about 14 and 1/2 inches long. (Photo 99-153)

## Bathroom

Tile floor.
Sheetrock walls and ceiling. Tile lower walls.

Small window on the north wall.

Photographs of the west wall. (Photos 99-154 and 99-155)

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The west wall has several tiles missing.
Photographs of the north wall. (Photos 99-156 and 99-157)
Photographs of the east wall. (Photos 99-158 thru 99-160)
Photographs of the south wall. (Photos 99-161 and 99-162)
The south wall has numerous missing tiles.
Photographs of the ceiling. (Photos 99-163 thru 99-167)
The north end of the ceiling is covered with a tarp and plastic.
There is an X -shaped crack at about the center of the ceiling, and the ceiling sags somewhat. in this area. The crack measures about 32 inches north-south and about. 24 inches east-west. It ranges from about $1 / 8$ of an inch to a hairline wide. (Photo 99-166)

There is extensive peeling and cracking paint.
There is an area of peeling paint at the southwest corner of the ceiling above the hot water tank. (Photo 99-167)

A photograph looking up into the hole in the ceiling. There are water stains on the roof decking. (Photo 99-168)

## Kitchen

Linoleum floor.
Papered walls and ceiling over plaster.
Wooden lower walls.
Windows on the south, east, and west walls.
Door on the west wall to the back porch.
There is extensive and severe cracking in the walls and ceiling. Most of the wall paper has been removed from the walls.

Photographs of the west wall. (Photos 99-169, 99-183 and 99-184)
Photographs of the north wall. (Photos 99-170 thru 99-173)
Photographs of the east wall. (Photos 99-174 thru 99-176)
Photographs of the south wall. (Photos 99-177 thru 99-182)

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Photographs of the ceiling. (Photos 99-185 thru 99-190)
There is a large crack in the northwest corner, and the plaster to the right of the west door is loose. (Photo 99-191)

There are cracks above and to the lower right of the south window. (Photo 99-192)

There are cracks in the southwest corner. (Photos 99-193 and 99-194)
Back Porch
Linoleum over concrete floor.
Sheetrock walls and ceiling.
Windows on the north, south, and west walls.
Photographs of the north wall. (Photos 99-195 and 99-196)
Photographs of the west wall. (Photos 99-197 and 99-198)
Photograph of the south wall. (Photo 99-199)
Photographs of the east wall. (Photos 99-200 and 99-201)
The bathroom enclosure walls have had some of the sheetrock torn out where they insulated the pipes. (Photo 99-202)

There is severe damage to the ceiling.
There is a hole in the ceiling at the northwest corner. The ceiling joists have, apparent severe termite damage, and the roof decking has severe water damage. (Photo 99-203)

The lower north end of the west wall is water damaged. (Photo 99-204)
Series of photographs of the ceiling. (Photos 99-205 thru 99-211)
There are two holes in the ceiling above the freezer, south of the bathroom enclosure.

The tape joints are visible in the ceiling and there is extensive cracking at these joints. Many of the joints are peeling.

There is an X-shaped crack east of the attic entrance and another one south of the attic entrance. (Photos 99-210 and 99-211)

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There is extensive paint cracking in the ceiling, apparently water damage.

The windows have several broken panes.
The lower left pane is cracked at the second window north of the west door. (Photo 99-212)

The lower left pane of the third window north of the door is cracked. (Photo 99-213)

The lower left pane of the fourth window north of the door is cracked. (Photo 99-214)

The upper left pane of the north window on the west wall is cracked. (Photo 99-215)

The lower left pane of the south window on the west wall is cracked. (Photo 99-216)

The lower right pane of the west window on the south wall is cracked. (Photo 99-217)

The upper left pane of the third window from the west on the south wall is cracked. (Photo 99-218)

The window on the east, to the kitchen, has a deteriorated, apparently termite damaged sill. There is also a separation in the southeast corner. (Photos 99-219 and 99-220)

There is a crack below the lower left corner of the east window. It is about 19 inches long and is a tearing type crack that ranges from $1 / 16$ of an inch to a hairline wide. (Photo 99-221)

Stairway
Photographs of the east wall of the stairway. (Photos 99-222 and 99-223)

Photograph of the west wall of the stairway. (Photo 99-224)
There is exposed plaster and lath at the south end of the east wall.
The wall paper is peeling on both walls.
West Bedroom
Now in the bedroom at the top of the stairway.

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Papered walls and ceiling over plaster.
Window on the west wall.
Door to another bedroom on the east wall.
Photographs of the south wall. (Photos 99-225 thru 99-227)
Photographs of the west wall. (Photos 99-228 thru 99-230)
Photographs of the north wall. (Photos 99-231 thru 99-233)
There is a small closet in the northeast corner.
Photographs of the east wall. (Photos 99-234 thru 99-236)
The walls have extensive cracks ranging from about $1 / 8$ of an inch to a hairline wide.

There is a hole in the lower east wall above the stairway.
Photographs of the ceiling. It has numerous cracks and areas of paper missing. A large area of plaster is missing above the door on the east wall. (Photos 99-237 and 99-238)

## East Bedroom

Plywood flooring.
Papered walls and ceiling over plaster.
Photograph of the east wall. (Photo 99-239)
Photographs of the south wall. (Photos 99-240 thru 99-242)
Photographs of the west wall. (Photos 99-243 and 99-244)
Photographs of the north wall. (Photos 99-245 thru 99-247)
A large area of plaster is missing from the southwest part of the sloped ceiling.

There are numerous water stains in the papered walls.
There are several areas of paper missing from the walls.
There are numerous cracks in the walls that range from about $1 / 8$ of an inch to a hairline wide.

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An area of plaster is missing on the sloped north ceiling, lower west end.

Series of photographs of the ceiling. (Photos 99-248 thru 99-251)
There is an area of plaster missing just to the northeast of the attic entrance.

There is a north-south trending crack that runs all the way across the east part of ceiling.

There are areas of missing and peeling paper, numerous cracks, and water stains around the flue. (Photo 99-252)

The wall paper in this room is very brittle.
The flue has numerous cracks ranging fran about $1 / 16$ of an inch to $a$ hairline wide. (Photos 99-252 thru 99-256)

The north sloped ceiling has sane cracking paper at its west edge near the window. (Photo 99-257)

Stairway - Continued
Two photographs looking down the stairway. (Photos 99-258 and 99-259)
General Comments
This is a very old house, date of construction is not known. It lacks a gutter system except at the back porch. This gutter empties close to the foundation.

The foundation is mostly sandstone, that was apparently constructed without mortar. The back porch has a concrete block foundation. Much of the foundation is hidden by the siding.

The interior walls and ceilings are mostly plaster on lath with wall paper.

Most rooms seem to have several layers of wallpaper and these are probably the original walls of the house. These walls and ceilings are extensively cracked and in severe states of deterioration.

Many of the walls have peeling wallpaper. Several roans have apparent water damage.

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The bathroom and back porch, which are additions to the original house, have sheetrock walls and ceilings, and these are al so severely damaged, mainly due to water apparently.

The living room is in the process of being remodeled with sheetrock, and Mrs. Stevens indicated that they intend to remodel the entire house in time.

The living room and bathroom ceilings have been water damaged, with the damaged areas of sheetrock removed and covered with plastic tarps.

The roof is apparently in the process of being reshingled.
That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 259 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 53

2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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Hown an
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I. Basic Infornation

1. Name of Resident: Jack and Susan Smalley
2. Dace: October 30, 1986 T1me: $12: 45 \mathrm{PM}$
3. Address:__Route 1, Box 308, Amoret, Missouri 64722
4. Location:Iots 3 thru 6, Block 32 and Lots 1 thru 14 Block 31
5. Telephone Number: (816) 925-3335
6. Dates of occupancy by current resident: 1985- Present
7. Dates of any temporary or permanent abandrgaent: Vacant before they moved in
II. Information Conceraing Buildings
(repeat for additional buildings)
8. Date of original construction: $70-80$ years ago
9. Date(s) of major remodeling or additions:
(a) Interior remodeling started in 1985 ..
(b) Back added at unknown date
(c) $\qquad$
10. Construction of bullding:
(a) Eraning (joists, rafters, and stud walls):
joists: $2 \times 6$, rafters: $2 \times 4$, and stud walls: $2 \times 4$
(b) Interlor walls: Grooved $1^{\prime} \mathrm{x} 4^{\prime \prime}$ laths plastered and papered
(c) roof: Sheetrock in addition
(d) footings; foundations: Rock (original), concrete block (addition) Footing unknown
(e) basenent walls (indicate how keyed to Eooting of floor): Not applicable
(f) basement floor (keyways, chickness):

Not applicable
(g) nane of person(s) who constructed building: Not known
(h) size and direction of any large windows: Not applicable
III. Enviromental Information

1. Approximate elevation of area:

855 feet
2. Type of soll in areasilty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (indicate depth and use): 2 wells, used only for irrigation one on porch, depth unknwon, one located southeast of horse barn for irrigation
Cisterns or surface water storage utilized: (indicate purpose ald 11 feet approximate volume). $7^{\prime}$ deep brick lined, not used.
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage features: Some
8. Description of general grading or landscaping in vicinity:

Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interior walls: See survey
2. Recedling of doors, windu's: See survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Extertor wall cracks (brick veneer):

Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls

1. Norch See survey
2.* South See survey
2. East See survey
3. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

PH. (41.7) 624-0164

November 3, 1986
Report No. 87056-40
P \& M Map Photo No. 51 \& 52

Subject: Inspection of the Jack and Susan Smalley Residence Box 308
Amoret, Missouri 64722
October 30, 1986
To: $\quad$ The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the front east side of the house. (Photo 40-1)
The sidewalk which runs to the south has several cracked sections. It has grass growing up through the cracks and it can be expected to deteriorate further. (Photo 40-2)

The sidewalk that diagonals to the southwest also has cracked sections with grass growing in the cracks. (Photo 40-3)

The front sidewalk has a crack through the width. The widest point of this crack, at a spall, is almost an inch wide. (Photo 40-4)

Note that the southeast downspout empties to a bucket. The bucket is now full of water. (Photo 40-5)

The northeast downspout dumps to the foundation of the front porch. This condition could cause settlement of the foundation. (Photo 40-6)

Starting at the south end of the east side, inspecting the foundation.
The south part of the east foundation is sandstone with extensive mortar cracks. (Photos 40-7 and 40-8)

Mortar cracks and separations in this area range in width from a hairline to about $1 / 4$ an inch.

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There are also some broken siding panels just south of the front porch. (Photo 40-9)

Most of the front foundation is hidden by the front porch.
Caulk is separating around the front door. (Photos 40-10 thru 40-13)
There is a cracked siding board at the left side of the door.
The caulk seal is separating around the south front window. (Photos 40-14 thru 40-16)

The north window also has caulk separating around it. (Photos 40-17 thru 40-20)

The north end of the front foundation has several mortar cracks. The cracks range in width from about a hairline to a gap of about $3 / 4$ of an inch. (Photos 40-21 and 40-22)

ID photographs of the north side of the house. (Photos $40-23$ thru 40-25)

Starting at the east end of the north side.
There are a lot of gaps and same mortar cracks in the north stone foundation.

A crack through a stone is about $1 / 4$ of an inch wide. (Photo 40-26)
Series of photographs of the original north foundation fran east to west. (Photos 40-26 thru 40-37)

There is a gap about $3 / 4$ of an inch wide at a stone near the east end. (Photo 40-27)

The north foundation is constructed of stones of different material. Same appear to be sandstone and others appear to be limestone or shale.

Several of the lower siding boards are chipped off at the bottom.
(Photos 40-38 and 40-39)
ID photograph of the east facing wall of the addition. (Photo 40-40)
The addition of the house has a concrete block foundation.
There is a crack in block and mortar at the left end of the areaway. The crack is just over $1 / 8$ of an inch wide. (Photo 40-41)

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There is a vertical crack in a block to the lower right of the vent. It is about 3 inches long and about $1 / 16$ of an inch wide. (Photo 40-42)

The second window from the east has deteriorating caulk at the inner window and a cracked siding panel to the lower left. (Photos 40-43 thru 40-45)

At the middle north window, left side, there is separating caulk.
(Photos $40-46$ and 40-47)
There are cracked siding boards on this east facing wall of the addition to the lower right of the window. (Photos $40-48$ and 40-49)

There are cracked siding panels above the upper right and left ends and below the lower right end of the window. (Photos 40-50 thru 40-52)

The northeast corner of this addition has been patched with a piece of sheet metal. The nail heads are rusted at the patch. (Photo 40-53)

There are also some kroken siding boards at this corner.
There is a slight mortar separation in the east foundation near the north end of the addition. (Photo 40-54)

Now on the north side of the addition.
The north facing wall has some cracked lower siding boards and a mortar joint is cracked. The width of the mortar crack is about $1 / 8$ of an inch at the widest. This is just to the right of the downspout. (Photo 40-55)

There is another broken mortar joint a few feet west of the corner. It is about $1 / 16$ of an inch in width. (Photo $40-56$ )

There are several cracked siding boards, and the west downspout is loose and lacks a splash block. Effluent from this downspout will increase the probability of additional foundation cracks. (Photo 40-57)

The north window of the addition has two cracked siding boards to the left. The cracks are about $1 / 32$ of an inch wide. (Photo 40-58)

Caulk is separating along the left side of the window. (Photos 40-59 and 40-60)

There are also some cracked siding boards to the right of the window. (Photos 40-61 and 40-62)

ID photographs of the west side of the house. (Photos $40-63$ and 40-64)

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Most of the foundation cannot be seen on the west side.

The screen on the north window has been patched and there are cracked siding boards to the lower left and right of the window. (Photos 40-65 thru 40-67)

There are nails pulling out of the siding at the third course of siding from the bottam. (Photo 40-68)

Now at a south facing wall of the addition at an areaway.
There is a sealed joint and sone cracked siding boards low on this wall. The siding board cracks are about $1 / 16$ to $1 / 32$ of an inch wide. (Photo 40-69)

The caulk seal in the corner is deteriorating and separating. (Photos 40-70 thru 40-73)

Paint is peeling from the fascia on the west side of the house. (Photos 40-74 and 40-75)

Several lower siding boards are cracked and there are some vines growing up between the siding below the kitchen window. (Photos 40-76 thru 40-78)

The kitchen window has severe deterioration of the caulk along the outer right and left sides. (Photos 40-79 and 40-80)

The inner window also has severely deteriorated caulk. (Photos 40-81 and 40-82)

Part of the west foundation is visible below the telephone line. Some slight separations, fran about $1 / 8$ of an inch to a little wider are visible. A view of this area. (Photo 40-83)

Now at the shed attached to the house.
This appears to be an old shed with extensive peeling of paint and rotting lower siding boards.

There is a gap, about 1 inch at the top, where the shed attaches to the house. (Photos 40-84 and 40-85)

ID photographs of the north side of the shed. Note the bowing of the roof. (Photos 40-86 and 40-87)

ID photograph of the west end of the shed. The shed appears to lean to the south. (Photo 40-88)

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ID photographs of the south side of the house and shed. (Photos 40-89 thru 40-91)

The shed roof has sagging areas on the south side. (Photos $40-92$ and 40-93)

Note the rotted fascia and bent gutter above the porch, east of the shed. (Photo 40-94)

There is a sidewalk which runs westward along the south side of the shed. It has stone sections several of which are cracked and overgrown with grass. ID photograph of the sidewalk looking west. (Photo 40-95)

There is a stone sidewalk along the west side of the shed. It is mostly overgrown with grass. (Photo 40-96)

A slab sidewalk on the south side of the shed is severely cracked and overgrown with grass. (Photos 40-97 and 40-98)

Now at the porch just east of the shed.
A view of the foundation between the shed and the porch door. (photo 40-99)

The step to the porch is spalling. (Photo 40-100)
The west edge of the step has cracks that are about $1 / 8$ of an inch wide. (Photo 40-101)

There is deterioration at the southeast part of the step. (Photos 40-102 and 40-103)

The foundation east of the porch door is brick, block, and concrete.
There is about a $3 / 8$ inch gap between the steps and the foundation.
Series of photographs of the foundation east of the porch door. There are several mortar cracks in the brick area. (Photos 40-104 thru 40-107)

This porch has a couple of windows. The west windowpane has slipped in its sash and is cracked. (Photo 40-108)

The east window of the porch is broken. (Photo 40-109)

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A downspout dumps into a brick structure at the east end of this porch and it appears that water could possibly flow back to the foundation. This condition could cause further cracks in the foundation in the future. (Photo 40-110)

There is some spalling and scaling mortar at the southwest part of the original foundation. (Photos 40-111 and 40-112)

There is an opening in the foundation to an old cellar. Mrs. Smalley indicated that they are in the process of filling this area in. (Photo 40-113)

The window above the opening has deteriorated inner caulk seals and a hole in the screen. There is separation along the left side. There is also a small crack near the top of the storm window. (Photos 40-114 and 40-115)

The foundation for the bay window has a few mortar cracks. The largest is about a $1 / 2$ inch wide separation. (Photos $40-116$ and 40-117)

The foundation below the south facing window of the bay has a slight mortar crack and same mortar deterioration. (Photos 40-118 and 40-119)

There are mortar separations and cracks below the east window of the bay. The major crack is diagonal and is about $1 / 4$ of an inch at the widest. (Photos 40-120 and 40-121)

There is a slight separation between the bay and the house foundations.
Continuing with the south foundation east of the bay window. There are extensive mortar separations and deterioration. (Photos 40-122 thru 40-126)

The east window on the south side has a broken lower storm glass and deteriorating inner caulk seals. (Photo 40-127)

Most of the exterior trim on this house has peeling paint, which will encourage deterioration.

## Southwest Shed

There is an old wooden shed with tin siding and roofing located southwest of the house.

ID photograph from the northeast. (Photo 40-128)
ID photograph of the south side. (Photo 40-129)

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Looking inside the shed, it has unfinished walls and ceiling with a wooden floor.

The floor is severely deteriorated. (Photos 40-130 thru 40-132)
There is a hole at the southwest part of the roof. (Photo 40-133)
INTERIOR INSPECTION
Starting in the shed which attaches to the house.
Attached Shed
This shed is used to store wood.
It has unfinished walls and ceiling and a severely bowed wooden floor.
Photographs of the floor. (Photos 40-134 and 40-135)
A photograph looking northward into the shed. (Photo 40-136)
Mrs. Smalley indicated that they intend to tear down this shed.
Cistern
South of the house there is a cistern. It is brick lined and water can be seen a few feet below the surface. (Photo 40-137)

Now entering the house through the front door.

## Entryway

Vinyl floor.
Papered walls.
Tile ceiling.
Shutter door on the north wall to a sewing room.
Entrance to the living roam on the south.
A photograph looking north into the hall. (Photo 40-138)

## Living Room

Carpeted floor.
Papered walls.
Tile ceiling.

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Windows an south and east walls.
Arched entry to the piano roan on the west wall.
Photograph of the east wall. (Photo 40-139)
Photograph of the south wall. (Photo 40-140)
Photograph of the west wall. (Photo 40-141)
Photographs of the north wall. (Photos 40-142 and 40-143)
Piano Room
Papered walls.
Tile ceiling.
Carpeted floor.
Bay window on the south wall.
Photograph of the west wall. (Photo 40-144)
Photograph of the south wall. (Photo 40-145)
Photographs of the east wall. (Photos 40-146 and 40-147)
Photograph of the north wall. (Photo 40-148)
There is a brick area on the north wall behind the wood stove. (Photos 40-149 and 40-150)

The west edge of the brick backing is not flush with the wall. (Photos $40-151$ and 40-152)

The brick floor below the wood stove has several slight mortar cracks. They range in width from $1 / 32$ of an inch to a hairline. (Photos 40-153 thru 40-160)

The east edge of the brick area has about a $1 / 2$ inch gap from the wall at the top and 3/4 at the bottan. (Photos 40-161 thru 40-164)

There is a slight vertical mortar crack on the east edge that is about 1/l6 of an inch wide. (Photos 40-161 and 40-162)

Entrance to the kitchen on the west wall.
Door to the baby's bedroon on the north wall.

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Entrance to the sewing room on the northeast.
The bay window area has a brick floor. (Photo 40-165)
I counted five hairline width, cracked bricks on the north wall. (Photos 40-166 thru 40-168)

Kitchen
Carpeted floor.
Papered walls.
Textured plastered ceiling.
Window on the west wall above the sink.

Door to the porch on south wall. Doors to the bathroom and master bedroom on the north wall.

Photograph of the north wall. (Photo 40-169)
Photographs of the east wall. (Photos 40-170 and 40-171)
Photographs of the south wall. (Photos 40-171 and 40-172)
Photograph of the west wall. (Photo 40-173)
The ceiling has visible tape joints. (Photos 40-174 thru 40-177)
These joints are likely areas for plaster cracks to develop.
Above the east door, there was a transom that has been patched over. There are a couple of tears in the paper and sane folded paper to the upper right of the door. (Fhoto 40-178)

Bathroom

## Vinyl floor.

Sheetrock walls and ceiling.
Styrofoam tile ceiling, partially installed over sheetrock.
A view looking north into the bathroan. (Photo 40-179)
Photograph of the east wall. (Photo 40-180)
Photograph of the ceiling. (Photo 40-181)
Photograph of the south wall. (Photo 40-182)

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The bathroom has a door to the master bedroom on the west wall.

Master Bedroom

Carpeted floor.
Blue painted sheetrock on north, east, and south walls. papered west wall.
Textured plaster ceiling.
Windows on west and north walls.

Closet door on east wall.
Photograph of the north wall. (Photo 40-183)
Photographs of the west wall. (Photos 40-184 and 40-185)
Photograph of the south wall. (Photo 40-186)
Photographs of the east wall. (Photos 40-187 and 40-188)
Photographs of the ceiling. (Photos 40-189 and 40-190)
A view looking into the closet. (Photo 40-191)
The closet has blue painted sheetrock walls and ceiling.

The north window has a hairline vertical crack at a joint below the
lower right corner. (Photo 40-192)
There is also a vertical crack at the joint below the lower left corner. (Photo 40-193)

The tape joint has bulged to the upper left of the window. (Photo 40-194)

There is a very slight crack to the upper left of the door to the bathrocm. (Photo 40-195)

There is a separation, about 2 inches long, in the ceiling to the upper left of the bathroom door. This appears to be water damage. (Photo 40-196)

There is a vertical hairline crack to the upper right of the door to the kitchen. It is about: 6 and $1 / 2$ inches long. (Photo 40-197)

There is a slight paint crack to the upper left of the door. (Photo 40-198)

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There is moisture danage to the ceiling at the upper west end of the south wall. (Photo 40-199)

There is a vertical row of nail pops at the west end of the south wall. (Photos 40-200 and 40-201)

A vertical bulge has been papered over below the west window. (Photo 40-202)

The wooden members of this window show signs of water damage.
The south end of the ceiling has an east-west trending, hairline crack at a joint. It runs eastward from the west wall and disappears. At this time the crack extends about 5 feet 9 inches to the east. This crack will probably extend the length of the joint in time. (Photos 40-203 and 40-204)

Mrs. Smalley indicated that she applied the textured plaster to the kitchen and bedroan ceilings.

There is an east-west trending, hairline ceiling crack, running from the west wall, above the window, about 20 and $1 / 2$ inches. This crack will also probably extend the length of the joint in time. (Photo 40-205)

Porch
Mrs. Smalley indicated that they intend to tear down this porch and build a new one.

Wooden floor and ceiling. Sheetrock south and part of west walls. Wooden north, east, and most of west walls.

Door to the outside on south wall.
Two windows on south wall.
Photographs of the south wall. (Photos 40-206 and 40-207)
Photograph of the east wall. (Photo 40-208)
Photographs of the north wall. (Photos 40-209 thru 40-211)
Photograph of the west wall. (Photo 40-212)
Now showing the wooden ceiling, part of which has been patched in the southwest corner. (Photos 40-213 and 40-214)

White Industrial Seismology, $\operatorname{In}_{C}$.

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The floor has a door to the cellar in the southeast corner.

There is a door on the west wall to a small storage room.
Storage Room
Unfinished wooden walls and ceiling.
It has a boarded window on the south wall.
old wooden door on the north wall.
Sane insulation on the east wall.
Light can be seen around the south window. (Photo 40-215)
The south window has a broken pane. (Photo 40-216)
The south part of the floor is concrete and the rest is wooden. (Photo 40-217)

The concrete part of the floor has a wooden door which covers an old dug well. This door could only be opened slightly, enough to see that it is stone lined and water is visible a few feet from the surface. This well was inspected on January 9, 1987.

Now back into the porch.
Porch - Continued
There is a crack in the sheetrock above the upper left corner of the east window on the south wall and a crack above the west window on the south wall. (Photos 40-218 and 40-219)

The crack above the upper left corner of the window is about 7 and $1 / 2$ inches long and about $1 / 16$ of an inch at the widest.

The crack above the west window is about 5 and $1 / 2$ inches long by about $1 / 8$ of an inch wide.

The sheetrock is damaged to the left of the door on the west wall. (Photo 40-220)

There is a crack to the upper right of the south door. It is about 4 and $1 / 2$ inches long by about $1 / 32$ of an inch wide. (Photo 40-221)

Note that the south door appears to be somewhat unsquare.

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The flooring is deteriorating in the southwest corner. (Photos 40-222 and 40-223)

Baby's Bedroom
Pink carpeted floor. Papered walls.
Tile ceiling.
Window on the north wall.

Door on the east wall.
Photograph of the north wall. (Photo 40-224)
Photograph of the east wall. (Photo 40-225)
Photograph of the west wall. (Photo 40-226)
Photograph of the south wall. (Photo 40-227)

## Sewing Room

Carpeted floor.
Papered walls.
Tile ceiling.
Door to the bedroom on the west wall.
Windows on north and east walls.
Photographs of the east wall. (Photos 40-228 and 40-229)
Photographs of the south wall. (Photos 40-230 thru 40-232)
Photographs of the north wall. (Photos 40-233 and 40-234)
Photograph of the west wall. (Photo 40-235)
There is a slight tear in the paper near the ceiling to the upper right of the shutter doors. (Photo 40-236)

Barn - Exterior Inspection
This is a severely damaged concrete block barn located southeast of the house.

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ID photograph of the north side. (Photo 40-237)
Note the large swag in the roof.
ID photograph of the west end. (Photo 40-238)
ID photographs of the south side. (Photos 40-239 and 40-240)
ID photograph of the east end. (Photo 40-241)
The east side has a major crack through block and mortar at the upper left end. It is about $1 / 2$ of an inch at the widest. (Photo 40-242)

At about the middle of the east end, there is a crack and a hole in the wall. The crack is about $1 / 8$ of an inch at the widest. (Photo 40-243)

The upper right end of the east side has deteriorating mortar. (Photo 40-244)

There is a diagonal crack in a block and a mortar separation at the north side, upper east end. The mortar separation is about $1 / 8$ of an inch wide. (photo 40-245)

There are several slight mortar cracks and patched joints just west of the east end. (Photos 40-246 and 40-247)

The east window on the north side has a major crack in block and mortar below the lower right corner. There is also sane shifting in the wall. The crack is about $1 / 4$ an inch wide and the wall has shifted about $5 / 8$ of an inch. The east part has shifted southward. (Photo 40-248)

There is a stairstepping crack to the upper right of the window through block and mortar. It is about $1 / 16$ of an inch wide. (Photo 40-249)

Below the lower left corner of the middle window, a vertical crack runs through block and mortar all the way to the ground. It is about $1 / 8$ of an inch wide. (Photos 40-250 and 40-251)

There are a couple of mortar cracks to the upper left of the middle window. They range from 1/32 of an inch to a hairline wide. (Photo 40252)

A block has a diagonal crack about 4 inches long to the upper right of the window. It is about $1 / 32$ of an inch wide. (Photo 40-253)

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There are cracked blocks above the upper left and upper right corners of the west window. The upper left is about $1 / 8$ of an inch wide and the crack to the upper right is about $1 / 32$ of an inch wide. (Photos 40-254 and 40-255)

There is a major stairstepping mortar crack and several cracked blocks below the lower right of the window. The cracks are about $1 / 8$ of an inch wide. (Photos 40-256 thru 40-258)

There is a major crack through block and mortar at the northwest corner. It is about $1 / 8$ of an inch wide. (Photos 40-258 thru 40-260)

Now on the west wide. The lower north end has a stairstepping mortar crack. It is about $1 / 4$ of an inch at the widest. (Photo 40-261)

There are cracks to the upper right and left of the door. The upper left crack is about $1 . / 16$ of an inch wide and the upper right is about $1 / 8$ of an inch wide. (Photos 40-262 and 40-263)

There is a separation and a crack below the door. The separation is about $5 / 8$ of an inch wide and is below the left end, and the crack is about $1 / 16$ of an inch wide and is below the right end. (Photos 40-264 and 40-265)

There is major cracking and shifting at the southwest corner. The wall has shifted about an inch to the east. The crack ranges in width from about 1 and $1 / 4$ inches to a hairline at the bottom. (Photos $40-266$ thru 40-269)

Now on the south side, west end. There are several severe cracks and separations. They range from about 1 to $l / l 6$ of an inch wide. (Photos 40-270 thru 40-272)

The middle section of the south side has a major mortar separation that is about $1 / 2$ an inch wide and several slight separations. (Photos 40-273 thru 40-275)

Now at the east end of the south side. There are several patched mortar joints and cracks. One block is split and has shifted outward about 1/2 an inch. (Photos 40-276 and 40-277)

The blocks above the window are shifted outward by about $3 / 4$ of an inch. (Photo 40-278)

To the lower right of the east window, there is a stairstepping mortar crack. It ranges from about. $1 / 8$ to $1 / 16$ of an inch wide. (Photo 40-279)

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The Pittsburg and Midway Coal Mining Conpany Report No. 87056-40 P \& M Map Photo No. $51 \& 52$
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Barn - Interior Inspection
Concrete block walls.
Dirt floor.
Unfinished ceiling.
Note that the roof sags severely.
Photograph of the west wall. (Photo 40-280)
Photograph of the east wall. (Photo 40-281)
Photograph of the north wall. (Photo 40-282)
At this time the barn is used as a horse barn.
A well is located southeast of this barn, near a small creek. It is about 11 feet deep and is lined with a clay pipe, which has two slight cracks visible at the top end. Water is visible just below the ground surface. This well was inspected on January 16, 1987. (Photos 40-283 thru 40-285)

General Comments
The original house was built between 70 to 80 years ago on a stone foundation. The addition was built at an undetermined date on a concrete block foundation.

The stone foundation has numerous mortar cracks as should be expected for its age. The block foundation has a few mortar cracks.

The house lacks a complete gutter and downspout systern and all but one downspout lacks a splash block to help divert water away from the foundation. As is, this gutter system is inadequate to provide proper drainage of water away from the foundation, and additional foundation problems could result from this.

The attached wood shed is in a severely deteriorated condition and needs much maintenance to prevent further deterioration.

The interior of the house is in the process of being remodeled, and at this time most is complete except the bathroom and porch.

Most of the interior cracks were found in the master bedroon at seams of the sheetrock walls and ceiling, mainly at the doorways and windows. The width of these cracks will vary with humidity changes and those that have the potential to increase in the length probably will, naturally with time. These type of cracks can be caused by shrinkage and

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expansion of the framing materials, and in the case of ceiling cracks, effects of roof loading.

The concrete block barn is in a severely damaged condition and can be expected to deteriorate further unless inajor repairs are made. The barn lacks a gutter system and severe settlement appears to have taken place.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC. Thrietpren D. Randall

Christopher D. Landoll Technical Associate

## CDL/kg

Enclosure: 285 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. $51 \& 52$
2- SUMMARY FORM
3- SKETCH OF STRUCIURE


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## fack Simaliey Residence



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## $40-240$




## $40-90$






## $40-63$



## $40-25$



## $40-1$





```
PRE-BLAST SURVEY, RESIDENTIAL
```

I. Basic Information

1. Name of Resident: William S. Grimslev, Jr.
2. Date: Ortciher 28, 1986 Time: 10:00 am
3. Address: Rt. l Amoret, MO. 64722
4. Location: Washington Street, 250 feet west of Folurth Street
5. Telephone Number: 816-925-3426
6. Dates of occupancy by current resident: 1974- Present
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1974 (Modular Home)
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Jnists 2" X 6" rafters 2" X 4"
(b) interfor walls: paneled
(c) roof: shingled, Gable Type
(d) footings; foundations: noured concrete foundation
(e) basement walls (indicate how keyed to footing of floor): Not Applicable
(f) basement floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Marlette Homes, Garden City, Kanses
(h) size and direction of any large windows: south wall near east end 5 feet long by 3 feot high
III, Enviromental Information
11. Approximate elevation of area: 830 feet at residence
12. Type of soil in area: Silty Clay Loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (Indicate depth"and use): None
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
16. Source of water, if not included above: City Water
17. Eve troughs or any other exterior dralnage Eeatures: See photo survey
18. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey
19. Cracks in interior walls:
20. Receding of doors, winduws:
21. Noticeable setclement:
22. Foundation cracks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavement:
25. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevarion views or photographs of walls See photo survey
26. North
27. South
28. East
29. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of cheir construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narative.

November 4, 1986
Report No. 87056-19
P \& M Map Photo No. 110

Subject: | Inspection of the William S. Grimsley, Jr. Residence |
| :--- |
| Route One |
| Amoret, Missouri 64722 |
| October 28,1986 |

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
| P. O. Box 8 |
| Amsterdam, Missouri 64723 |

Attention: Mr. James A. Borders

## EXTERIOR INSPECTION

ID photograph of the south side. There is no guttering on the south side. (Photo 19-1)

There is a vertical hairline crack in the poured concrete foundation near the west end of the south side. (Photo 19-2)

There is a hairline crack at the lower right corner of the westernmost crawl space vent. It has a maximum width of $1 / 4$ of an inch. (Photo 19-3)

ID photograph of the east side. (Photo 19-4)
Looking at the foundation toward the south end, there is a hairline crack. (Photo 19-5)

ID photograph of the north side. (Photo 19-6)
Now looking at the north side foundation. There are no evident cracks.
ID photograph of the west side. (Photo 19-7)
The west foundation is partially obscured by vines.
There is a hairline crack in the foundation a couple of feet to the left of the electric meter. (Photo 19-8)

Nothing else noted. However, it is difficult to see the foundation because of the growth covering the foundation.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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The downspout is missing from the northwest corner. It is laying on the ground. (Photos 19-9 and 19-10)

## Garage

ID photographs. There is no guttering around the garage. (Photos 19-11 thru 19-13)

The garage has a single slab poured concrete floor.
There is a hairline crack in the foundation on the west side, about the center. (Photo 19-14)

The paint on the garage door is cracked and chipped.
The garage serves al.so as a shop.
The shop is on the south side.
The single car garage is on the north side.
Starting in the south room.
There is a long crack across the floor.
This crack extends from the about the middle of the door over to the north wall. This crack has a width range from about $1 / 4$ to $1 / 16$ of an inch. The length is approximately 12 feet 10 inches. (Photos 19-15 thru 19-22)

There is a hairline extension off this crack to the southwest. This extension measures about 5 feet. (Photos 19-23 thru 19-27)

Toward the west end of the shop, there is a hairline crack in the floor, from the south to the north wall. (Photos 19-28 thru 19-34)

ID photographs. (Photos 19-35 thru 19-39)
Now move into the single car garage area.
There is a diagonal crack across the floor. This is toward the east end of the garage. Width of this is about $1 / 16$ of an inch to a hairline. (Photos 19-40 thru 19-50)

This intersects another diagonal crack across the floor to the northwest. (Photos 19-51 thru 19-59)

There is a hairline $Y$ at the northwest end of this crack. The two cracks that $Y$ off extend a very short distance. The width of these ranges from a little over $1 / 16$ down to a hairline.

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The Pittsburg and Midway Coal Mining Company
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ID photographs of the interior. (Photos 19-60 thru 19-62)
INTERIOR INSPECTION
Now inside the modular structure.
The living room is at the southeast corner.
Living Room
Carpeted floor.
Paneled walls.
ID photographs. (Photos 19-63 thru 19-65)
Nothing noted.
Dining Room
Dining room is at the northeast corner.
Vinyl floor.
Paneled walls.
ID photographs. (Photos 19-66 and 19-67)
There is ceiling discoloration near the west wall. (Photo 19-68)
Kitchen
Vinyl floor.
Papered walls.
ID photographs. (Photos 19-69 and 19-70)
There is discoloration on the kitchen ceiling. (Photos 19-71 and 19-72)
Smal1 Bedroom
Vinyl floor.
Paneled walls.
There is water damage at the air vent. (Photo 19-73)
There is nothing else noted.
Moving westward out of the living room down the hall.
```

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-19
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The first door is to a closet.
The ceiling is discolored at the west end of the hall. (Photos 19-74 thru 19-77)

First room on the south side is a bedroom.
Bedroom
Carpeted floor.
Paneled walls.
ID photographs. (Photos 19-78 thru 19-83)
Nothing noted.
We are now in the bedroom at the southwest corner.
Southwest Bedroom
There is a stain on the ceiling. (Photo 19-84)
ID photographs. (Photos 19-85 thru 19-88)
Now in the room at the northwest corner.
Northwest Bedroom
Carpeted floor.
Paneled walls.
ID photographs. (Photos 19-89 and 19-90)
A bathroom is on the north side of the hall.

## Bathroom

Vinyl floor.
Paneled walls.
There is a stain on the ceiling around the air vent. (Photo 19-91)
ID photographs. (Photos 19-92 and 19-93)
There is another ceiling stain above the area where the heating unit is housed. (Photo 19-94)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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October 28, 1986
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## GENERAL COMMENTS

The William S. Grimsley, Jr. residence is located approximately 830 feet above sea level. The surounding land has a gentle northwest slope. The general grading around the residence is fairly level.

The foundation showed evidence of minor cracks indicative of hydraulic and settlement effects. The interior walls were mostly paneled. There were ceiling stains in the bathrooms and southeast bedroom.

Expansion cracks in the poured concrete garage and shop floors were noted.

Continued and enhanced cracking in the foundation can be expected due to the adverse effects of freezing, thawing and settlement.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/rd
Enclosure: 94 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 110
2- SUMMARY FORM
3- SKETCH OF STRUCTURE



$19-13$





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19-6
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## I. Basic Information

1. Name of Resident: Ethel Harper
2. Date: November 3, 1986_Time: 7:30 AM
3. Address: Box 127 Amoret, Mo. 64722
4. Location: North side of 52 Highway 150 feet west of Fourth Street
5. Telephone Number: 816-925-3363
6. Dates of occupancy by current resident: 1964-Present
7. Dates of any temporary or permanent abandonment: Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1910's
9. Date(s) of major remodeling or additions:
(a) Utility Room 1968
(b)
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Stud Walls 2"x4"
(b) Incerlor walls: Sheetrock or plaster
(c) roof: Composition Shingle
(d) footings; foundations: Cement mortar covering rock aggregate
(e) basenent walls (Indicate how keyed to footing of floor): Not Applicable
(E) basemenc floor (keyways, thickness): Not Applicable
(g) name of person(s) who constructed building: Drysdole (Deceased)
(h) size and direction of any large windows: None
III. Envirommental Information
11. Approximate elevarion of area: 847 feet at residence
12. Type of soll in area: Silty Clay Loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (indicate depth"and use): Water Garden, 30 feet deep
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
16. Source of wacer, if not Lncluded above: City Water
17. Eve troughs or any other exterior dralnage features: See Photo. Survey
18. Description of general grading or landscaping In vicinity: See Photo Survey
IV. Any notable existirg deterioration or damage See Photo Survey
19. Cracks in interlor walls:
20. Receding of doors, winduws:
21. Noticeable settlement:
22. Foundation cracks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavement:
25. Basement leaks:
V. Plan view of residence, well, outbuildings See Sketch
VI. Elevation views or photographs of walls See Photo Survey
26. North
27. South
28. East
29. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific coments concerning any unusual features, construction techaiques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

## See survey narrative

## White- Industrial Seismology, Inc. <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

November 6, 1986
Report No. 87056-23
P\&M Map Photo No. 120

Subject: Inspection of the Ethel Harper Residence Box 127
Amoret, Missouri 64722
November 3, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the south side of the house. (Photo 23-1)
This is a frame structure with a rock aggregate foundation covered with cement mortar.

There is a vertical crack in an upper interior windowpane of the south window. (Photo 23-2)

ID photographs of the porch. (Photos 23-3 and 23-4)
There is a crack across the south end of one of the sidewalk sections. The width ranges from 1 and $1 / 4$ inches to $1 / 4$ inch. (Photo 23-5)

There is a walk around the east side of the residence. There is a crack and separation in this walk. The separation has a width of $3 / 4$ of an inch. (Photo 23-6)

We are on the east side of the residence.
There is a diagonal crack in the foundation about 6 to 8 feet from the south end. It has a width of $1 / 4$ inch. (Photo 23-7)

The step is separated from the foundation by 1 and $1 / 2$ inches. (Photo 23-8)

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There is a diagonal crack across the walk to the left of the step. It has a width of $1 / 2$ inch maximum. (Photo 23-9)

There are foundation cracks to the right of the step. The maximum width of these is $1 / 4$ inch. (Photo 23-10)

There is a foundation separation 2 feet from the north end. This separation is $1 / 4$ inch in width. (Photo 23-11)

ID photograph of the east side. (Photo 23-12)
There is a brick chimney stack. The stack appears to be in good condition. (Photos 23-13 and 23-14 and 23-31)

We are now on the north side.
There is a foundation separation about 7 or 8 feet from the east end. It has a width of $1 / 4$ inch. (Photo 23-15)

The utility room has a concrete block foundation.
There is a large separation between the step and the porch base. This separation is 1 inch wide. (Photo 23-16)

There are cracks in the block foundation above the first step. These have an approximate width of $1 / 16$ of an inch. (Photo 23-17)

Detailed photographs of the concrete block foundation. (Photos 23-18 and 23-19)

ID photograph of the north side of the residence. (Photo 23-20)
Now on the west side of the residence. (Photo 23-21)
Detailed photographs of the concrete block foundation section. (Photos 23-22 and 23-23)

There is a separation between the concrete block and concrete foundations. The maximum width measures 1 and $1 / 4$ inches. (Photo 23-24)

Ib the right of this a couple of feet, there is an area of spalled and cracked concrete. (Photo 23-25)

There is a foundation crack to the left of the downspout. This is located near the center of the wall. It measures $1 / 32$ to $1 / 16$ of an inch in width. (Photo 23-26)

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The Pittsburg and Midway Coal Mining Company
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There is a separation of the cement mortar overing on the foundation about 4 feet to the right of the downspout. The separation is about 2 inches wide near the bottom. (Photo 23-27)

Detailed photographs of this foundation. (Photos 23-28 thru 23-30)
A garage is at the northeast corner of the property.
ID photographs. (Photos 23-32 thru 23-35)
There is a small attached room at the north side of the garage. There is a separation in the foundation on the west side. (Photo 23-36)

There is a separation in the foundation toward the north end of the west side of the main garage. It measures 1 inch in width. (Photo 23-37)

The window panes are cracked. (Photo 23-38)
Mrs. Harper had stated that many of her relatives use the garage for storage.

Very little of the floor can be seen.
ID photographs. (Photos 23-39 thru 23-44)
The east sidewalk is cracked and separated toward the north end of the porch. (Photo 23-45)

INTERIOR INSPECTION
Utility Room
We will start with the east wall.
There is a hairline diagonal crack at the upper right corner of the door. It measures 11 inches in length. (Photo 23-46)

There is a horizontal crack at the upper left corner of the door that extends to the upper right corner of the window. (Photo 23-47)

This is a hairline diagonal crack at the lower right corner of the window. It measures 4 inches in length. (Photo 23-48)

There is a vertical hairline crack at the upper left corner of the window. It measures 6 and $1 / 2$ inches in length. (Photo 23-49)

ID photographs of the east wall. (Photos 23-50 and 23-51)

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Now looking at the north wall.
There is a small hairline crack in the north wall near the ceiling. This is above the upper left corner of the window. (Photo 23-52)

ID photograph of the north wall. (Photo 23-53)
Nothing noted on the west wall. (Photo 23-54)
There is a separation in the southwest corner. (Photo 23-55)
Looking at the south wall, there is a diagonal hairline crack at the upper right of the door. It measures 15 inches in length. (Photo 23-56)

There is a vertical crack above the door. It measures 9 inches in length. (Photo 23-57)

There is a diagonal crack at the upper left of the door. It measures 8 inches long. (Photo 23-58)

Dining Room
This is located on the east side of the residence between the kitchen and the living room.

Carpeted floor.
East wall is paneled.
Other walls are papered.
We will start with the north wall.
There is a horizontal paper crack from the northeast corner extending behind the china cabinet to the right side of the door. (Photos 23-59 and 23-60)

There is a vertical crack at the upper right corner of the door. It measures 2 and $1 / 2$ inches in length. (Photo 23-61)

Now looking at the south wall.
There is a horizontal crack to the left of the entrance into the living roan. It measures about 1 foot in length. (Photo 23-62)

There is a vertical crack at the lower right corner of the window. It measures about 9 and $1 / 2$ inches in length. (Photo 23-63)

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There is a diagonal crack at the upper left corner of the window. It measures about 1 foot in length. (Photo 23-64)

There is a vertical crack at the lower left corner of the window. It measures about 4 and J/2 inches in length. (Photo 23-65)

The ceiling is cracked in places. Mrs. Harper stated that they may remodel the ceiling in the spring. (Photos 23-66 thru 23-71)

ID photographs of this room. (Photos 23-72 thru 23-76)

Kitchen
Vinyl floor.
Papered walls.
Tiled ceiling.
There is a paper tear in the southwest corner. (Photo 23-77)
There is a vertical crack above the upper left of the doorway. It extends to the ceiling. (Photo 23-78)

Now looking at the west wall.
There is a diagonal crack at the upper right corner of the door into the hall. It measures about 6 inches long. (Photo 23-79)

There is also a vertical crack above this door. It extends to the ceiling. (Photo 23-80)

Looking at the south wall, there is a diagonal crack at the upper right corner of the door. It measures about 1 foot in length. (Photo 23-81)

The door to the dining room is tilting slightly west. (Photo 23-82)
The door to the enclosed porch on the east wall is not horizontal with
the floor. (Photo 27-83)
The tiled ceiling is stained. (Photo 27-84)
ID photographs. (Photos 23-85 thru 23-90)
The floor appears to slope slightly to the west.

## Bathroom

Vinyl floor.
Partially tiled and papered walls.
Tile ceiling.

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Looking at the north wall.
There is a vertical crack about a foot to the left of the glass cabinet. The paper is also water stained. (Photo 23-91)

There is a vertical paper crack above the light. It extends to the ceiling. (Photo 23-92)

There are paper cracks in the northwest corner. (Photo 23-93)
The caulking is separated at the northwest corner of the shower. (Photo 23-94)

There is a paper crack on the west wall to the left of the window. It measures about 20 inches in length. (Photo 23-95)

There is a paper crack in the southwest corner. (Photo 23-96)
Looking at the south wall, there is a paper crack near the ceiling a couple of feet to the east of the southwest corner. It measures about 8 inches in length. (Photo 23-97)

Looking at the east wall, there are paper cracks to the right of the door. (Photo 23-98)

There is a hairline vertical paper crack above the upper right of the door. It measures about 3 inches in length. (Photo 23-99)

There is a hairline paper crack near the ceiling above the door. (Photo 23-100)

There is a hairline paper crack above the upper left of the door. (Photo 23-101)

There is a horizontal paper crack to the left of the door extending to the corner. (Photo 23-102)

ID photographs of the bathroon. (Photos 23-103 and 23-104)
There is a small hall between the bathroan and the kitchen.
Hall
Vinyl floor.
Papered walls and ceiling.
There is a paper separation above the door on the east wall. (Photo 23-105)

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## Bedroom

Carpeted floor.
Papered walls.
Tile ceiling.
There is a noticeable slope of the floor to the northwest.
Starting on the north wall.
There is a vertical crack above the door. It measures about 8 inches in length. (Photo 23-106)

Looking at the west wall.
There is a diagonal crack at the upper right corner of the window. This crack measures 11 inches in length. (Photos 23-107 and 23-108)

There is also a diagonal crack near the lower right corner of the window. It measures about 4 feet in length. (Photos 23-109 thru 23-112)

There is a vertical paper crack at the upper left corner of the window. It extends to the ceiling. (Photo 23-113)

There is a paper seam separation at the lower left corner of the window. (Photo 23-114)

There is a paper separation on the south wall at the upper left corner of the door. (Photo 23-115)

There is a paper crack in the south wall, a foot or so to the right of the heating unit. It measures about 13 inches in length. (Photo 23-116)

ID photographs of this bedroom. (Photos 23-117 thru 23-120)
Living Room
Carpeted floor.
Papered walls.
Tiled ceiling.
Start on the north wall.
There is a brick flue. (Photos 23-121 thru 23-123)

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There is a very fine paper crack behind the mirror on the north wall. (Photo 23-124)

There is also a vertical paper bulge at the lower right of this mirror. (Photo 23-125)

There is a diagonal paper crack at the upper right of the door. It measures 10 and $1 / 2$ inches in length. (Photo 23-126)

There is paper cracking in the northwest corner above the door. (Photo 23-127)

Looking at the west wall, there is a vertical paper crack above the upper right of the window. It extends about 1 foot to the ceiling. (Photo 23-128)

There is a paper crack at the lower right corner of the window. (Photo 23-129)

There are also paper cracks at the upper left corner of the window. (Photo 23-130)

Now looking at the south wall.
There is a horizontal area of paper cracking from the right side of the window to the southwest corner. (Photos 23-131 and 23-132)

There is a very fine paper crack at the lower left corner of the window. (Photo 23-133)

There is a paper crack toward the east end of the south wall about 2 or 3 feet from the corner. It measures about 11 inches in length. (Photo 23-134)

Now looking at the east wall.
There is a vertical paper crack at the upper left corner of the door. It extends 9 and $1 / 2$ inches to the ceiling. (Photo 23-135)

ID photographs of this room. (Photos 23-136 thru 23-141)
There is an enclosed porch to the east of the kitchen.
Enclosed Porch
Vinyl floor.
Painted wood slat walls.
wood ceiling.

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Nothing noted.
ID photographs. (Phot:os 23-142 thru 23-145)
Stairs
The stairs to the second floor are carpeted and the walls are papered.
There is an area of paper separation in a corner. (Photo 23-146)
Upstairs South Bedroom
Carpeted floor.
Papered walls and ceiling.
There are numerous areas of wallpaper separation and cracks. This condition mainly occurs along the ceiling joints, below the window on the south wall and on the heater flue. (Photos 23-147 thru 23-156)

Small West Room
Carpeted floor.
Papered walls.
The papered walls are heavily cracked around the ceiling and window areas. (Photos 23-157 thru 23-174)

We are now in the main area of the upstairs.
Main Center Area
Detailed photographs of paper separations and cracks in this area. (Photos 23-175 thru 23-193)

There is in particular one separation where it appears a ceiling panel is hanging. This location measures about 1 inch in differential movement. (Photo 23-191)

## General Corments

The Ethel Harper residence is located on the north side of 52 Highway approximately 150 feet west of Fourth Street. The elevation at the residence is about 847 feet. The land around the structure is generally level.

The roof guttering and downspout, where present, are in poor condition. The gutters drain to the ground and there are no splash blocks.

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The concrete aggregate foundation is covered above the surface with a cement mortar mixture. There were minor cracks in the cement mortar indicative of expansion and contractive effects. There were also major separations in the cement mortar possibly indicating differential foundation settlement.

The interior of the structure showed cracks and separations typical of structures of similar age and construction. These mainly occur around doors and windows and can be expected to worsen with time.

During periods of intense rainfall, the land surrounding the foundation may becone saturated. The foundation may then be susceptible to freezing and thawing effects.

That completes the inspection of this property.


RMW/kg
Enclosures: 193 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 120

2- SUMMARY FORM

3- SKETCH OF STRUCTURE


Sketch of Ethel Harper Property



Scale: 1 division=1 foot approx.







## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Naue of Resident: Harry Lynch (In hospital, Response by Mrs. Thernton)
2. Date: October 27, 1986 Time: 8:30am
3. Address: Box 113, Amoret, Missouri 64722
4. Location: 52 Highway 180 feet west of $Y$ Highway
5. Telephone Number:_(816) 925-3402
6. Dates of occupancy by current resident: 1967-Present
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1935-1936
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Unknown, could not see
(b) interior walls: Sheetrock
(c) roof: Shingled, gable ty ${ }^{\frac{1}{2}} \mathrm{e}$
(d) footings; Foundations: Could not see
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(f) basement floor (keyways, thickness): Not applicable
(g) name of person(s) who constructed building: Roy and Ted Castle
(h) size and direction of any large windows: None
III. Environmental Information
11. Approximate elevation of area:

845 feet at residence
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None4. Water wells utilized (indicate depth"and use): None
5. Cisterns or surface water storage utilized: (indicate purpose andapproximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: None
8. Description of general grading or landscaping in vicinity:See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features,construction techniques, or status of deterforation, that, becauseof the nature of their construction, materials of which they areconstructed, status of deterioration, may exhibit an unusual responseto normal blasting activitles.

2431 RANGELINE SUITE A-B
P.O. BOX 1256 JOPLIN, MO 64802-1256

PH. (417) 624-0164

October 28, 1986
Report No. 87056-32
P \& M Map Photo No. 29

| Subject: | Inspection of the Box 113 |
| :---: | :---: |
|  | Amoret, Missouri |
|  | October 27, 1986 |

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
This is a one room structure.
ID photograph of the north side. (Photo 32-1)
ID photograph of the west side. (Photo 32-2)
ID photograph of the south side. (Photo 32-3)
ID photograph of the east side. (Photo 32-4)
The plaster covered chimney stack is cracked. (Photo 32-5)
INTERIOR INSPECTION
Wood floor with area carpet.
Sheetrock walls.

Start with the north wall.
There is a hairline vertical crack at the upper right corner of the door. It measures 5 and $1 / 4$ inches in length. (Photo 32-6)

There are numerous cobwebs on the walls.

There is a hairline crack along the northwest corner measuring 4 feet 5 inches. (Photos 32-7 and 32-8)

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Looking at the west wall, there is a seam separation at the left side of the window. It measures 2 feet 1 inch and has a width of $1 / 16$ of an inch. (Photo 32-9)

There is a vertical wall separation at the lower left corner of the window. This measures 4 feet 3 inches. (Photo 32-10)

There is a slight separation of the wall along the southwest corner. (Photos 32-11 and 32-12)

There is a housing for the stove pipe flue on the south end. It is cracked. (Photos 32-13 thru 32-16)

The ceiling is bowed and water damaged around the flue. (Photo 32-13)
There is a hairline vertical crack above the center of the door. It measures 4 and $1 / 2$ inches. (Photo 32-17)

There is a hairline crack above the upper left of the door. It measures 20 inches. (Photos 32-18 and 32-19)

There is a hairline separation in the southeast corner. (Photos 32-20 and 32-21)

Looking at the east wall, there is a hairline vertical crack at the upper right corner of the air conditioning unit. It measures 18 inches long. (Photo 32-22)

There is a hairline corner separation at the northeast corner. (Photos 32-23 and 32-24)

ID photographs. (Photos 32-25 thru 32-30)
There is a metal garage building to the south of the residence.
Garage
Dirt floor.
ID photograph. (Photo 32-31)
Nothing noted.

## Storage Shed

Can see no cracking or deformations of the floor.

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The Pittsburg and Midway Coal Mining Company
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ID photograph. (Photo 32-32)
General Comments
Mrs. Gene Thornton accompanied us during our inspection of the Harry Lynch residence. According to Mrs. Thornton, the building once housed the Post Office.

The siding extended to the ground and no foundation material was visible. There are no gutters or downspouts around the building perimeter.

The interior walls showed evidence of settlement and material expansion cracks. The ceiling was water damaged around the stove flue. The small chimney stack at the south end had thermal expansion cracks in the plaster covering.

This small structure is in rather poor condition and can be expected to continue to deteriorate with age.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 32 Photographs

# SUBJECT: SUPPLEMENTAL INSPECTION OF THE HARRY LYNCH RESIDENCE P. O. BOX 113 AMORET, MISSOURI 64722 JANUARY 2, 1987 

TO: THE PITWSBURG AND MIDWAY COAL MINING COMPANY P. O. BOX 8 AMSTERDAM, MISSOURI 64723

Attention: Mr. Mark Premo

BY: WHITE INDUSTRIAL SEISMOLOGY, INC.
2431 RANGELINE ROAD, SUITE A/B
P. O. BOX 1256

JOPLIN, MISSOURI 64801

## Garage

This is a metal structure with wood supports. There is a dirt floor. There is no guttering around the garage.

ID photographs of the interior. (Photos 32-33 thru 32-37)
Storage Shed and Outhouse
ID photographs of the poured concrete floors. There are no cracks visible. (Photos 32-38 thru 32-40)

General Comments
The exterior siding extends to the ground around most of the residence. There is a small amount of foundation visible on the north end of the west side. This area was obscured by plant growth during the original inspection. We can see no cracks or separations in the minor amount of concrete that is visible. (Photos 32-41 thru 32-43)

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
Enclosure: 11 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 29

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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Sketch of Harry Iynch Property
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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Clyde Matthews
2. Date: October 21,1986 Time: 2:00PM
3. Address:_Box_218,_Amoret,_Missouri 64722
4. Location: South side of 52 Highway 500 Feet west of Y Highway
5. Telephone Number: $\qquad$
6. Dates of occupancy by current resident: 1948-Present
7. Dates of any temporary or permanent abandonnent: Inknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1910-1925
9. Date(s) of major remodeling or additions:
(a) 2 west bedrooms built in 1960 's
(b)closed in porches in 1970's.
(c) $\qquad$
10. Construction of building:
(a) Eraning (joists, rafters, and stud walls): stud walls $2^{\prime \prime} \times 4^{\prime \prime}$
(b) interior walls: Sheetrock
(c) roof: Hip type, shingled
(d) Eootings; Eoundations Brick and concrete block
(e) basement walls (indicate how keyed to footing of floor): Partial basement
(E) basemenc Eloor (keyways, thickness):

Could not be seen
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

845 feet at residence
2. Type of soil in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (indicate depth*and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in int:erior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls
See photo survey
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings
See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.
See survey narrative

October 25, 1986
Report No. 87056-35
P \& M Map Photo No. 26

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Subject: Inspection of the Clyde Matthews Residence Box 218
Amoret, Misssouri 64722
October 21, 1986
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To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

The structure is wood frame on a concrete block and brick foundation.

ID photograph from the southwest. (Photo 35-1)
Near the west end there is an entrance into the small crawl space. (Photo 35-2)

There is another small crawl space entrance surrounded by bricks. (Photo 35-3)

There is a crack in the foundation toward the last third of the wall. Measures 4 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 35-4)

There is another foundation crack just to the right of this. It measures 4 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 35-5)

Another foundation crack in the brick foundation before it becomes poured concrete. This measures 8 and $1 / 4$ inches in length and has a width of $3 / 16$ of an inch to a hairline. (Photo 35-6)

The paint on the south side siding is heavily chipped and cracked.
ID photograph of the east side. (Photo 35-7)

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There is a north-south crack across the length of the stoop. This crack has a maximum width including the spalling area of 1 and $1 / 8$ inches. (Photos 35-8 and 35-9)

There is also an east-west crack at the southeast corner between the walk to the garage and the stoop. It measures 4 feet 2 inches with a maximum width of 1 and $1 / 2$ inches. (Photo 35-10)

Now looking at the concrete block foundation to the left of the step.
There is a diagonal crack in the foundation and a vertical mortar separation. These measure 8 and $3 / 4$ inches with a width of $1 / 16$ of an inch. (Photos 35-11 and 35-12)

Where the concrete block foundations intersect at the porch, there is a separation. Separation is $1 / 8$ of an inch wide. (Photo 35-13)

There are also additional mortar separations to the north. (Photos 35-14 thru 35-16)

Now starting on the foundation toward the east end.
There is a stairstepping mortar crack. Measures 15 and $1 / 2$ inches vertically and has a width of $1 / 16$ of an inch. (Photo 35-17)

Mortar separation and mortar cracking at a foundation vent. Measures 7 and $3 / 4$ inches and has a width of $1 / 16$ of an inch. (Photo 35-18)

This photograph shows a 9 feet 4 inch horizontal mortar crack in the foundation. It has a maximum width of $1 / 8$ of an inch. (Photo 35-19)

Detailed photographs of the foundation. (Photos 35-20 thru 35-25)
There is a noticeable crack to the right of the foundation vent. (Photo 35-26)

Moving on west to the west wall of the L-shaped area.
There are some foundation mortar cracks.
These have a nominal width of about $1 / 8$ of an inch. One measured 7 and $3 / 4$ inches in length and $1 / 16$ of an inch wide. (Photos 35-27 and 35-28)

There is a vertical separation along the intersection of the block and brick foundations. Measures 1 foot 7 and $1 / 4$ inches. Nominal width of about $1 / 8$ of an inch. (Photo 35-29)

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Also a separation at the other side measuring 1 foot 7 and $1 / 2$ inches. Width of about $1 / 8$ of an inch. (Photo 35-30)

There are minor mortar separations toward the west end of the north wall. These separations range from $1 / 8$ of an inch to a hairline in width. (Photos 35-31 thru 35-34)

ID photograph of the north side. (Photo 35-35)
ID photograph of the west side. (Photo 35-36)
Detailed photographs of the west foundation. There are very minor mortar deformations. (Photos 35-37 thru 35-41)

## Partial Basement

There is a small part:ial basement at the southeast corner of the structure. There is a lot of water on the floor.

The west and north walls are obscured by shelving and materials. (Photo 35-43)

The south wall has a pair of patched cracks near the window. (Photos 35-42 and 35-45)

There is a horizontal crack in the south wall at the lower right corner of the window. (Photo 35-44)

The entrance steps and walls are in generally fair condition. A pair of steps are chipped. (Photos 35-46 thru 35-48)

## INTERIOR INSPECTION

We entered through the east entrance into the laundry room.
Laundry Room
Vinyl floor.
Partially tiled and sheetrock walls.
Sheetrock ceiling.
ID photograph of the north side. (Photo 35-49)
ID photograph toward the south end. (Photo 35-50)
Now moving westward into the kitchen.

White Industrial Seismology, Inc.

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Kitchen
Vinyl floor.
Paneled walls. Acoustical tile ceiling.

Nothing noted in the kitchen.
ID photographs. (Photos 35-51 and 35-52)
We have now moved northward into the dining room.
Dining Room
Hardwood floor.
Wallpapered walls.
Plaster ceiling.
ID photographs starting with the north wall. (Photos 35-53 thru 35-56)
Nothing noted in this bedroom.
Now moved into the living room and back out to an enclosed porch area.
Enclosed Porch
Vinyl floor.
Paneled walls.
Painted ceiling.
There is a crack in the ceiling above the westernmost window on the north wall. Measures approximately 35 and $1 / 2$ inches. $1 / 32$ of an inch in width. (Photo 35-57)

ID photographs. (Photos 35-57 and 35-58)
Now moving into the living room.
Living Room
Hardwood floor.
Plastered paper covered walls.
Sheetrock ceiling.
ID photographs starting with the north wall. (Photos 35-59 thru 35-62)
Nothing noted in the living room.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-35
P \& M Map Photo No. 26
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There is a hall off the west end of the living room.
Hallway
Hardwood floor.
Plaster walls and ceiling.
Nothing noted.
Moving on westward into the northwest bedroom.
Northwest Bedroom
Hardwood floor.
Sheetrock walls and ceiling.
Start with the north wall.
There is a vertical hairline crack at the lower left corner of the window. Measures 5 and $1 / 2$ inches. (Photo 35-63)

There is a 6 and $1 / 2$ inch hairline crack at the upper right corner. (Photo 35-64)

The ceiling is stained above the window. (Photo 35-65)
There is a very fine separation in the northwest corner. (Photo 35-66)
ID photograph of the rorth side. (Photo 35-67)
There is a hairline corner separation at the southwest corner. (Photo 35-68)

ID photographs of the west wall. (Photos 35-69 and 35-70)
ID photograph of the south wall. (Photo 35-71)
There is a faint crack at the upper left corner of the door. Measures 2 and 3/4 inches. (Photo 35-72)

There is also a hairline crack across the ceiling from the upper right corner of the wall. Measures 20 and $1 / 4$ inches. (Photo 35-73)

ID photograph of the east wall. (Photo 35-74)
Now moving into the southwest bedroom.

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Southwest Bedroom
Hardwood floor.
Sheetrock walls and ceiling.
ID photographs of the north wall. (Photos $35-75$ and $35-76$ )

Starting on the north wall, there is a crack above the upper left of the door. This crack extends to the ceiling and across the ceiling to the left side of the air vent. Measures 13 and $1 / 2$ inches to the ceiling. Measures about 39 inches across the ceiling. (Photos $35-77$ and $35-78$ )

ID photograph of the west wall. (Photo 35-79)
Slight crack at the lower right corner of the window on the south wall. Measures 7 inches. (Photo 35-80)

Very fine hairline crack at the lower left corner of the window. Measures 3 and $1 / 4$ inches. (Photo 35-81)

ID photographs of the south wall. (Photos $35-82$ and $35-83$ )
ID photograph of the east wall. (Photo 35-84)
Now moved back into the living room and back south around the living room to a small bedrcom.

Bedroom
Hardwood floor.
Paneled walls.
Sheetrock ceiling.
ID photographs. (Photos 35-85 thru 35-87)
We have now moved southward out of the dining room to the furnace room.
Furnace Room
Looking at the south wall, there is a diagonal hairline crack at the upper right corner of the entrance into the bathroom. Measures 11 and $1 / 2$ inches. (Photo 35-88)

Looking at the north wall, above the upper right corner of the door back into the dining room, there is a diagonal crack near the ceiling. This crack is a 6 and $3 / 4$ inch hairline. (Photo 35-89)

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There are also a pair of diagonal cracks at the upper left corner of the same door. Measures 14 and $1 / 4$ inches diagonal length. (Photo 35-90)

There is a crack at the power box at the lower right corner. This crack extends about 42 and $1 / 2$ inches. (Photo 35-91)

Also at the upper left corner. This crack extends approximately 20
inches. (Photo 35-92)
Now moving on southward into the bathroom.
Bathroom
Vinyl floor.
Tiled lower walls.
Sheetrock or wallpapered upper walls.
Sheetrock ceiling.
Starting at the north wall, there is a diagonal crack at the upper left corner of the door. Measures 12 and $3 / 4$ inches. Has a width of $1 / 32$ of an inch. (Photo 35-93)

The wall to the left of the door contains many extremely fine cracks. These cracks are too fine to be measured with photographs.

Looking at the west wall, there is a very fine horizontal crack at the ceiling, 2 inches long. (Photo 35-94)

The floor to the left. of the toilet and around the toilet is damaged. (Photo 35-95)

ID photograph from the door. (Photo 35-96)
Workshop
Poured concrete floor:
wood walls.
ID photograph of the south side. (Photo 35-98)
ID photographs of the east side. (Photos 35-97 and 35-99)
ID photograph of the north side. (Photo 35-100)
ID photograph of the west side. (Photo 35-101)
There is a crack in the west side foundation about the middle of the wall. Measures 5 and $1 / 2$ inches in length and $1 / 4$ inch in width. (Photo 35-102)

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The floor is heavily covered with materials.
No evident cracking can be seen in the floor.
ID photographs. (Photos 35-103 thru 35-108)
There is also a storage shed at the far south end of the property.
Storage Shed
ID photograph from the northwest. (Photo 35-109)
The storage shed is sitting on a single slab poured concrete floor. There are no evident cracks in the floor.

Interior photographs. (Photos 35-110 thru 35-112)
General Comments
The Clyde Matthews residence is located at an approximate elevation of 845 feet above sea level. There is a gentle northwest slope to the land surrounding the house. The guttering around the structure is good. However, the downspouts drain directly to the ground without splashblocks. The structure foundation shows evidence of hydraulic and settlement effects.

The interior walls, where not covered by paneling or other materials, showed expansion and settlement cracks above and below doors and windows. The partial basement (cellar) had about $1 / 4$ to $1 / 2$ inch of water on the floor.

Continued hydraulic related problems may be expected to continue with the foundation and basement unless steps are taken to improve the drainage around the structure.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
RMW/mp
Enclosure: 112 Photographs

1- COPY FROM P AND M's TOWN OF AMORET MAP LOCATION NO. 26

2- SUMMARY FORM
3- SKETCH OF STRUCIURE



## of Main Floor Matthew's House




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## 1

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## I. Basic Information

1. Name of Resident: Della Smalley
2. Dare: November 4, 1986 Tine: 4:001 MM
3. Address: Box 316, Amoret, Missouri 64722
4. Location: East of Amoret, north side of 52 Highway
5. Telephone Number: (816) 925-3460
6. Dates of occupancy by current resident:1950 - Present
7. Dates of any temporary or permanent abandonment: $\qquad$
II. Information Concerning Buildings
(repeat for addithonal buildings)
8. Dace of original construction: $\qquad$
9. Date(s) of major remodeling or additions:
(a) East bathroom - 1963
(b) Paneled walls and lowered ceilings within last 15 years
(c) $\qquad$
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): 2" x 4" stud walls, 2" x 4" rafters, 2" x 6" joists
(b) incerior walls: Plaster, paneled over
(c) roof: Composition chingles
(d) Eootings; Eoundations: Rock and Mortar
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(E) basement floor (keyways, thickness):

Not applicable
(g) nane of person(s) who constructed building: Unknown
(h) size and direction of any large windows: South wall
III. Enviromental Information

1. Approximate elevation of area:

840 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (indicate depthand use):

Not used, covered
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior dralnage features:

See photo survey
8. Description of general grading or landscaping in vicinity:

See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interlor walls:
2. Receding of doors, windows:
3. Noticeable sett lement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings

## See sketch

VI. Elevation views or photographs of walls See photo survey

1. North
2. South
3. East
4. West
VII. Comnents or supplenentary drawlngs

VIIL. Discussion or specific comments concerning any unusual features, construction tectiniques, or stacus of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

November 11, 1986
Report No. 87056-64

Subject: | Inspection of the Della Smalley Residence |
| :--- |
| Route 1, Box 316 |
| Amoret, Missouri 64722 |
| November 4, 1986 |

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
|  |
| P. O. Box 8 |
|  |
| Amsterdam, Missouri 64723 |
|  |
| Attention: Mr. Mark Premo |

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the south side of the house. (Photo 64-1)
The roof is stained around the stovepipe and the brick chimney.
There is a small amount of the south foundation visible to the left of the porch. The grass and plant growth are obscuring part of the foundation. (Photos 64-2 thru 64-4)

ID photograph showing the condition of the foundation to the right of the porch. (Photo 64-5)

The mortar has cracked and separated in places. Same of the foundation to the left of the porch has shifted.

We are now on the east side of the residence. ID photograph of the south end of the foundation. (Photo 64-6)

Now looking at the south side of the concrete block foundation to the added bathroom.

There is a hairline crack through a block. (Photo 64-7)
Now looking at the east side of the concrete block foundation. (Photo 64-8)

There is a block separation at a small L-shaped area. It measures 3/4 of an inch in width. The wood trim is also cracked. (Photo 64-9)

White Industrial Seismology, Inc.

The Pittsburg and Midway Coal Mining Company
Report No. 87056-64
November 4, 1986
Page 2

There is a flower bed contained on two sides by bricks and on one side by railroad ties. (Fhoto 64-10)

ID photograph of the east side. (Photo 64-11)
ID photograph of the brick chimney. (Photo 64-12)
The foundation is separated behind the flower box. The separations are about $1 / 2$ inch in width. (Photo 64-13)

Also note that the wood siding is loose and cracked. (Photo 64-13)
ID photograph of the north side of the residence. (Photo 64-14)
The brick chimney appears to lean to the west near the top. (photo 64-15)

ID photograph showing the foundation condition near the east end of the north side behind the flower box. (Photo 64-16)

ID photographs of the foundation in the small L-shaped area just to the right of the back step. (Photos 64-17 and 64-18)

There is a foundation separation about 6 feet to the east of the west end of the north wall. It measures 1 and $1 / 2$ inches in width. (Photo 64-19)

There is plant growth obscuring part of the foundation. (Photo 64-20)
There is only about 5 inches of the foundation visible in this area.
ID photograph of the west side of the residence. (Photo 64-21)
There are deteriorated wood boards at the west end of the south side. (Photo 64-22)

There is no guttering around this residence.
Another photograph of the brick chimney. Sane of the mortar is missing and the bricks are uneven in areas. (Photo 64-23)

There is a metal garage at the northeast corner of the residence. It has a gravel floor. (Photo 64-24)

There is a well at the east end of the property. Mrs. Smalley stated that it is no longer used. The walls are rock and it is probably about 4 or 5 feet to the water table. (Photos 64-25 thru 64-27)

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INTERIOR INSPECTION

Dining Room
Carpeted floor.
Paneled walls.

There are bulges in the ceiling out from the south wall. These are possible tape seams or evidence of old cracking.

ID photographs of this roan. (Photos 64-28 thru 64-32)
Moving westward out of the dining roan and into the living roam.
Living Room
Carpeted floor.
Paneled walls.

ID photographs of this room. (Photos 64-33 thru 64-38)
The next room to the west is a bedroan.

Bedroon
Carpeted floor.
Paneled walls.
Ceiling panels.
There is loose ceiling trim near the southwest corner. (Photo 64-39)
Thece is also loose paneling on the south wall. It appears that the finishing nails have pulled out. (Photo 64-40)

A deformation in a wall panel on the east wall. (Photo 64-41)
There are various areas where the finishing nails may have pulled out of tha paneling. (Photos 64-42 thru 64-44)

ID photographs of this room. (Photos 64-45 thru 64-49)
Now moving westward out of the northwest corner of the dining room into another bedroom.

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The Pittsburg and Midway Coal Mining Company
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Bedroom
Vinyl floor.
Paneled walls.
Tiled ceiling.
A pair of ceiling panels are chipped. (Photo 64-50)
The floor tile is broken near the southwest corner. (Photo 64-51)
ID photographs of this roan. (Photos 64-52 thru 64-57).
Now moving out of the northeast corner of the dining room into the kitchen.

Kitchen
Vinyl floor.
Paneled walls.
There is a crack in the ceiling to the east of the light fixture. (Photos 64-58 and 64-59)

ID photographs starting with the north wall. (Photos 64-60 thru 64-65)
Note that a normal walk across the kitchen floor elicits a vibration response at the northwest corner fron behind the refrigerator.

Moving eastward out of the kitchen into the utility roam.

## Utility Roorn

Partially vinyl and carpeted floor.
Paneled walls.
Tiled ceiling.
There is a difference in floor height between the kitchen and the utility roan.

There is a damaged wall panel on the east wall near the northeast corner. (Photo 64-66)

The north wall paneling is bowed to the right of the window. (Photos 64-67 and 64-68)

We can also feel a hump in the floor underneath the carpeting. This is about a foot to the right of the west doorway.

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The Pittsburg and Midway Coal Mining Company
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ID photographs of this room starting with the north wall. (Photos 64-69 thru 64-74)

There is a bathroom off the northeast corner of the dining room.
Bathroom
Carpeted floor.
Partially vinyl and sheetrock walls.
The paint is peeled and chipping in the ceiling. (Photos 64-75 and 64-76)

Starting with the west wall, there is a horizontal hairline crack at the upper right of the door. It extends to the northwest corner. (Photo 64-77)

There is a vertical bulge above the door, possibly related to a tape seam. This could develop into a crack fran material expansion. (Photo 64-78)

There is a minor paint crack near the ceiling in the southwest corner. (Photo 64-79)

There is also paint cracking in the southeast corner. (Photo 64-80)
There is paint cracking in the wall near the window. (Photo 64-81)
This same type of paint cracking occurs on the left side of the window. (Photo 64-82)

Another photograph of the ceiling conditions toward the east end. (Photo 64-83)

Looking at the north wall, there is a wall deformation near the ceiling. (Photo 64-84)

There are paint splotches to the right of the mirror. These may not be visible in the photographs. (Photos 64-85 and 64-86)

The ceiling is cracked above the mirror. (Photo 64-87)
The ceiling is cracked near the west end. (Photo 64-88)
ID photographs of this room. (Photos 64-89 thru 64-94)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-64
November 4, 1986
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General Comments

The Della Snalley residence is located east of Amoret, Missouri on the north side of 52 Highway. It is a frame structure on a rock and mortar foundation. The east bathroom, which was added in 1963, has a concrete block foundation.

The interior walls were generally paneled with the exception of the bathroam. Same of the panels in the west bedroan and utility roam were loose from the walls. The finishing nails appeared to be missing in these areas.

There is no roof guttering around the exterior of the residence. Much of the foundation mortar is cracked or missing. Same of the rock slabs appear to have shifted.

The foundation of this residence has suffered the effects of time. The lack of adequate water drainage has probably contributed significantly to the deterioration of the foundation.

That completes the inspection of this property.


Randall M. Wheeler Manager of Technical Services

RMW/rpp
Enclosure: 94 Photographs

## 1- SUMMARY FORM

2- SKEICH OF STRUCTURE


## $64-24$




## $64-11$




## I. Basic Information

1. Name of Resident: Elvis Steele
2. Date:_ October 20, 1986 Time: $9: 40 \mathrm{AM}-12: 25 \mathrm{PM}$
3. Address: Route 1, Amoret, Missouri 64722
4. Location: On 52 Highway, $3 / 4$ mile west of Y Highway
5. Telephone Number: (816) 925-3334
6. Dates of occupancy by current resident: Since 1972
7. Dates of any temporary or permanent abandonment: Inknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1972
9. Date(s) of major remodeling or additions:
(a) 1980 Closed in front porch
(b)
(c) $\qquad$
10. Construction of bullding:
(a) framing (joists, rafters, and stud walls): $2^{\prime \prime} x 4$ " stud walls floor joists and rafters not observable
(b) interior walls: Sheetrock
(c) rook: Hip type, shingled
(d) footings; foundations: Mostly concrete block foundation
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement floor (keyways, chickness): Not applicable
(g) name of person(s) who constructed building: Francis Castle and
(h) size and direction of any large windows:

One large window in the south wall of the living room.
III. Enviromental Information

1. Approximate elevation of area: 845' at house site
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: Not observable
4. Water wells utilized (Indicate depth*and use): None
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
6. Source of water, if not included above: Rural water system
7. Eve troughs or any other exterior dralnage features: Guttering.and downspouts are around house. Generally good drainage away from foundation on north side.
8. Description of general grading or landscaping in vicinity: Mostly level, slight north slope.
IV. Any notable existing deterioration or damage
9. Cracks in interior walls: See photo survey
10. Receding of doors, windows: See photo survey
11. Noticeable set:clement: See photo survey
12. Foundation cracks: See photo survey
13. Exterior wall cracks (brick veneer): See photo survey
14. Sidewalks, steps, driveway pavement: See photo survey
15. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See photo survey
VI. Elevarion views or photographs of walls See photo survey
16. North
17. South
18. East
19. West
VII. Coments or supplementary drawings Sketch attached
VIII. Discussion or specific comments concerning any unusual features, construction rechniques, or status of deterforation, that, because of the nature of thefr construction, materials of which they are constructed, status of deterforation, may exhibit an unusual response to normal blasting activitles.

See narrative with photo survey

October 21, 1986
Invoice No. 87056-42

Subject: Inspection of the Elvis Steele Residence Route 1
Amoret, Missouri 64722
October 20, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
The exterior of the structure is covered with a fiber type siding. Possibly masonite.

ID photograph of the west part of the south side concrete block foundation. (Photo 42-2)

There is a small area of missing mortar to the right of the crawl space vent. The total length of the separation is 10 and $3 / 4$ inches. The width of the missing mortar is about $1 / 4$ of an inch. (Photos $42-1$ and 42-3)

There are a couple of minor mortar separations a few feet to the east of the vent opening. These measure 7 and $3 / 4$ inches in height and less than $1 / 8$ of an inch in width. (Photos 42-4 and 42-5)

There is a large mortar separation to the left of the large south window. This separation is $3 / 8$ of an inch wide. The height of the block is 7 and $3 / 4$ inches. (Photo 42-6)

There is also a horizontal mortar crack off this measuring 3 inches.
This crack is less than $1 / 8$ of an inch wide and terminates into another mortar separation which is $1 / 8$ of an inch wide. Another crack extends off this one. It is 4 and $1 / 4$ inches long and has a width of $1 / 8$ of an inch. (Photo 42-7)

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The Pittsburg and Midway Coal Mining Company
Report No. 87056-42
October 20, 1986
Page 2

There is a small mortar crack to the left of this. It is 2 inches long and $1 / 32$ of an inch in width down to a hairline. (Photo 42-7)

There is a vertical mortar crack to the right of the previous crack noted. It is 8 and $l / 4$ inches long and $1 / 32$ of an inch wide down to a hairline. (Photo 42-8)

There is a vertical block crack underneath the lower left corner of the large window on the south wall. It is 7 and $3 / 4$ inches in height and less than $1 / 32$ of an inch in width. (Photo 42-9)

About 2 inches to the right of this crack, there is a mortar crack. It is the height of the block, which is 7 and $3 / 4$ inches, and it is less than $1 / 32$ of an inch in width. (Photo 42-10)

There is a vertical hairline mortar separation at the next mortar joint. It is 4 inches long. (Photo 42-11)

There is a hairline horizontal crack measuring 10 feet 9 inches long under the window. There are a large number of bushes obscuring the foundation. (Photos 42-12 and 42-13)

There is another vertical hairline mortar separation under the eastern third of the window. It is 7 and $3 / 4$ inches in height. (Photo 42-14)

There is a hairline mortar separation at the next block to the east. (Photo 42-15)

The step at the front entrance of the house is separated from the foundation. The maxjmum width of the separation appears to be $3 / 8$ of an inch. (Photos 42-16 thru 42-18)

There is a small walk and driveway entrance into the garage.
There is a north-south crack between the walk and the driveway. This crack is 35 inches in length. It has a maximum width of $1 / 2$ inch with an average width of about $3 / 16$ of an inch. (Photo 42-19)

To the right of the porch step there is a stairstepping mortar separation in the foundation. This separation is 2 inches long and $1 / 16$ of an inch wide. (Photo 42-20)

There is another vertical separation in the mortar 4 inches high and $1 / 16$ of an inch wide. (Photo 42-21)

There is a stairstepping hairline crack a couple of feet to the right of the door. (Photo 42-22)

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This crack stairsteps over to a vertical hairline mortar separation. It measures 2 and $2 / 3$ inches horizontally and 2 and $1 / 8$ inches vertically. (Photo 42-23)

There is another hairline vertical mortar separation to the right. It is 4 inches long. (Photo 42-24)

The walk is slightly separated from the foundation at the left of the garage door. This separation is $1 / 8$ of an inch. (Photo 42-25)

Now looking at the foundation to the right of the garage door.
There appear to be three stairstepping hairline mortar separations.
The west one is 3 and $1 / 2$ inches in height. (Photo 42-26)
This stairsteps horizontally and connects with another mortar separation. The horizontal distance is 3 and 5/8 inches and the vertical length of the separation is 3 inches. (Photo 42-27)

The middle separation is 1 and $3 / 4$ inches high.
The east mortar separation is 2 and $1 / 4$ inches high. (Photo 42-28)
We are now on the east side of the structure. (Photo 42-29)
There is an entrance into the garage. The step is separated from the foundation by $3 / 4$ of an inch. (Photo 42-30)

There are hairline mortar separations toward the southeast corner. They measure 2 inches to 2 and $1 / 2$ inches in length. (Photos $42-31$ thru 42-34)

Toward the north end of the east side, there are concrete steps. (Photo 42-35)

There is a small concrete slab that is not attached to the main step. (Photo 42-36)

The steps and the foundation are separated from $1 / 2$ to 1 inch. (Photos 42-37 and 42-38)

ID photograph of the north side. (Photo 42-39)
There is a mortar separation at the northeast corner 2 and $1 / 2$ inches in length and $1 / 32$ of an inch in width. (Photo 42-40)

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There is a crack to the right of the westernmost vent on the north side. This crack is 10 and $1 / 2$ inches in length and has a width of $1 / 32$ of an inch or less. (Photo 42-41)

Now on the west side of the residence. (Photo 42-42)
There is a stairstepping mortar crack at the northwest corner.
This crack measures 18 inches in total length. Its maximum width is $1 / 16$ of an inch. (Photo 42-43)

At the south end of the entrance into the crawl space, the wood door is separated from the concrete foundation. This separation is 19 inches long and varies in width from $3 / 16$ to a hairline. (Photo 42-44)

There is an air conditioning unit. It rests on a concrete slab. (Photo 42-45)

There are two downspouts on the residence. They are at the northeast and northwest corners. There are no downspouts on the south side.

The downpouts drain to the ground; there are no splashblocks. However, they are extended out from the foundation.

Storage Shed
At the northeast corner of the residence there is a small storage shed. (Photo 42-46)

There is a concrete flower bed at the south side of this structure.
There is a concrete crack on the south side of the flower box at about the center. It measures 4 inches along the top and 7 and $1 / 2$ inches in length down the side. (Photo 42-47)

There is a large separation of the concrete at the southeast corner. The width of this separation is $7 / 16$ of an inch. The length along the top is 3 and $1 / 2$ inches and along the side is 6 and $3 / 4$ inches. (Photo 42-48)

There is an area of cracking in the concrete flower box toward the north end of the east side. This measures 6 and $1 / 2$ inches vertically and 8 and $1 / 2$ inches horizontally with a width of $1 / 8$ inch to a hairline. (Photo 42-49)

ID photographs of the east, north, and west sides. (Photos 42-50 thru 42-52)

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There is a separation at the intersection of the concrete flower box wall and the foundation. Separation measures 15 inches in height with a width of $1 / 2$ to $1 / 16$ of an inch. (Photo 42-53)

The interior has a single slab poured concrete floor and wood walls.
The floor is somewhat obscured in some areas, however, there appear to be no cracks in this west section of the storage shed. (Photos 42-54 and 42-55)

There is also an east section which is used as a canning room.
There appears to be no cracking in the concrete floor at this time. (Photo 42-56)

INTERIOR INSPECTION

## Garage

The garage is located at the southeast corner of the residence.
It is a single car garage.
Single slab poured concrete floor.
Paneled walls and ceiling.
There is an east-west crack across the floor toward the south end. This crack is partially obscured by a car and by some other materials on the floor. It extends from the east wall to the west wall 13 feet 3 inches. The width of this crack ranges from $1 / 16$ of an inch to a hairline. (Photo 42-57)

At the southwest corner of the garage there is a diagonal crack. This crack measures 55 inches in length and has a width range of $1 / 4$ inch to less than 1/32 of an inch or a hairline. (Photos 42-58 and 42-59)

The slab floor is slightly separated from the west foundation wall. The width of this separation is $3 / 16$ of an inch. (Photos $42-60$ and 42-61)

Laundry Room
Vinyl floor.
Painted sheetrock wa.lls.
Plaster ceiling.
At the southwest corner there is a vertical crack above the upper left of the door to the garage. The length of this crack is 13 inches and the width is $1 / 32$ of an inch down to a hairline. (Photo 42-62)

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At the upper right of the door there is a faint vertical bulge. This will probably develop into a crack in the future. It measures 2 and $1 / 2$ inches in height. (Photo 42-63)

There is a horizontal hairline crack at the upper right of a door into a clothes closet. This crack measures 5 inches. (Photo 42-64)

Looking at the east wall there is a hairline crack above the upper left corner of the door. This crack is 13 inches in length. (Photo 42-65)

ID photograph of the east wall. (Photo 42-66)
There is a small horizontal hairline crack at the lower left corner of the window on the north wall. This crack measures 2 and $1 / 4$ inches in length. (Photo 42-67)

Now looking at the west wall.
There is a vertical crack above the upper right of the door. This crack measures 13 inches in length. (Photo 42-68)

There is also a slight bulge at the upper left corner of this door. This bulge currently measures 2 inches. (Photo 42-69)

There is an area of missing plaster next to the hot water pipe extending into the ceiling. (Photo 42-70)

Now moving westward into the kitchen.

## Kitchen

## Linoleum floor.

Plaster ceiling.
Partially tiled and sheetrock walls.
Looking at the east wall, there are vertical and diagonal trending cracks at the upper right and upper left corners of the door into the laundry room.

At the upper right corner there is a diagonal crack 13 and $1 / 4$ inches in length. There is also a 2 and $1 / 4$ inch vertical crack next to it. (Photo 42-71)

The width of the diagonal crack is $1 / 32$ of an inch to a hairline. The smaller crack is a hairline.

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There is a diagonal hairline crack at the upper left corner. This crack measures 7 and $1 / 2$ inches in length. (Photo 42-72)

The rest of the east wall and the north wall are covered by kitchen cabinets and tiling. (Photos 42-73 and 42-74)

Now moving westward into the dining room.
Dining Room
Carpeted floor.
Sheetrock walls.
Plaster ceiling.
ID photograph of the north wall of the dining room. (Photo 42-75)
There is a china cabinet at the west wall. (Photo 42-76)

## Living Room

This is located on the south side of the residence next to the garage.
Carpeted floor.
Plaster ceiling.
White painted sheetrock walls.
ID photographs of the south wall of the living room. (Photos 42-77 and 42-78)

Above the upper right of the door to the patio room, there is a diagonal hairline crack. This crack measures 13 and $1 / 4$ inches. (Photo 42-79)

There is a hairline diagonal crack at the upper left corner of the door. It measures 3 inches in length. (Photo 42-80)

At the southeast corner of the south wall there is an air vent. There is a diagonal hairline crack at the lower right corner. Crack is 4 and $3 / 4$ inches long. (Photo 42-81)

ID photograph of the east wall. (Photo 42-82)
ID photograph of the north wall. (Photo 42-83)
There is a very small crack at the upper west corner of the north wall at the ceiling. This crack measures 1 and $1 / 2$ inches. (Photo 42-84)

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At the area between the living room and the dining room, up on the ceiling, there is an east-west crack in the ceiling that has been plastered over. This arack is 23 and $1 / 2$ inches long. It L's at the end 15 and $1 / 2$ inches. (Photos 42-85 and 42-86)

Hall
At the east end of the hall there are cracks in the ceiling connecting the upper corners of the hall walls.

The diagonal off the northwest corner measures 21 and $1 / 2$ inches. (Photo 42-87)

The horizontal across the ceiling measures 43 inches. (Photo 42-88)
And the crack connecting back to the southwest corner measures 17 and 1/2 inches. (photo 42-89)

Above the upper right corner of the entrance into the bathroom, there is a hairline vertical crack. This measures 5 inches. (Photo 42-90)

Moving on westward down the hall still looking at the north wall. At the upper right corner of the door into the bedroom there are two parallel bulges in the wall.

The westernmost bulge is 3 and $1 / 4$ inches. The easternmost is 5 and $1 / 4$ inches. (Photo 42-91)

At the upper left corner of this same door, there is a diagonal hairline crack. This crack has a length of 5 and $1 / 2$ inches. (Photo 42-92)

Nothing noted on the west end of the hallway.
Now looking at the south side.
There is a bulge above the upper left corner of the entrance into the southwest bedroom. This bulge extends to the ceiling and is 13 inches long. (Photo 42-93)

Looking at the upper left corner of the entrance into the small study room, there is a hairline crack. This crack measures 6 and $3 / 4$ inches. (Photo 42-94)

Back around the west wall of the living room, right at the corner, there is a vertical crack in the wall near the floor. This crack measures 10 and $l / 2$ inches. It is $1 / 16$ of an inch wide to a hairline. (Photo 42-95)

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ID photograph down the hall from the east end. (Photo 42-96)

## Bathroom

Vinyl floor.
Tiled lower walls.
Sheetrock upper walls.
Plaster ceiling.
Looking on the north wall, at the upper left corner above the window, there is a diagonal crack. This crack measures 7 inches. (Photo 42-97)

There is a separation in the northwest corner above the tiling. This measures 27 inches. (Photo 42-98)

ID photograph into the bathroom from the south entrance. (Photo 42-99)
Now moving into the bedroom at the northwest corner of the residence.
Northwest Bedroom
Carpeted floor.
Sheetrock walls.
Plaster ceiling.
Looking at the east wall. At the upper left corner of the closet there is a vertical hairline crack in the wall. It measures 12 and $1 / 2$ inches. (Photo 42-100)

ID photograph of the east wall. (Photo 42-101)
Now looking at the north wall.
At the lower right corner of the window, there is a horizontal crack that has been plastered over. This crack measures 19 inches. (Photo 42-102)

There is a diagonal hairline crack at the upper left corner of this window. It measures 8 and $3 / 4$ inches. (Photo 42-103)

ID photograph of the north wall. (Photo 42-104)
Looking at the west wall, at the lower right corner of the window, there is a hairline crack that measures $1 / 4$ to $1 / 2$ inch. (Photo 42-105)

At the upper left corner of this same window, there is a diagonal hairline crack. It measures 2 inches. (Photo 42-106)

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ID photograph of the west wall. (Photo 42-107)

Now looking at the south wall.
There is a diagonal crack at the upper right corner of the door. This crack measures 10 inches. (Photo 42-108)

To the left of this, there is a vertical hairline crack that extends to the ceiling. It measures 13 inches. (Photo 42-109)

ID photograph of the south wall. (Photo 42-110)
Now at the southwest corner of the residence in another bedroom.

## Southwest Bedroom

Carpeted floor.
Sheetrock walls.
Plaster ceiling.

Starting on the north wall at the upper left corner of the door to the hall. There is a diagonal and vertical hairline crack in the wall. The diagonal measures about 9 inches. The vertical hairline crack measures 3 and $3 / 4$ inches. (Photos $42-111$ and 42-112)

At the upper right corner of the closet door there is a diagonal crack. It measures 5 and $1 / 2$ inches. (Photo 42-113)

There is a vertical crack above the upper left of the door. This crack is 13 inches long. (Photo 42-114)

ID photograph of the north wall. (Photo 42-115)
Now looking at the west wall.
There is a diagonal crack at the lower right corner of the window. This crack measures 4 and $1 / 2$ inches. (Photo 42-116)

ID photograph of the west wall. (Photo 42-117)
Now looking at the south wall.

There are a pair of diagonal cracks at the upper right corner of the window on the south wall. The smaller of the two is 3 and $1 / 2$ inches and the larger of the two is 5 and $1 / 2$ inches. (Photo 42-118)

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At the lower left corner of the window there is a diagonal crack. This crack measures 21 inches. It has been plastered over. This crack is $1 / 16$ of an inch in width to a hairline. (Photo 42-119)

ID photograph of the south wall. (Photo 42-120)
ID photograph of the east wall. (Photo 42-121)
Now moving into the small study.
Study
This is between the living room and the southwest bedroom. It is on the south side of the residence.

Carpeted floor.
Paneled walls.
Plaster ceiling.
There is nothing notable in this room. ID photograph back into the room. (Photo 42-122)

At the south side of the living room there is an enclosed porch.
Enclosed Porch
Green carpeted floor.
Paneled walls.
Board ceiling.
We can see the joints in the ceiling panels but other than that there is nothing noted.

ID photographs back to the west and then back to the east. (Photos 42-123 and 42-124)

ID photographs of the south side of the residence. (Photos 42-125 and 42-126)

## General Comments

The Elvis Steele residence is at an elevation of about 845 feet above sea level. The general slope of the land is to the northwest. The drainage should be good to the north. However, the drainage on the south side is not sufficient to direct water away from the foundation. Also note that there is no guttering on the south side. This probably contributes to the greater amount of mortar and block cracks on the south side.

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The interior cracks noted above doors and windows may be expected to widen with time. In some cases, cracks of these types may open and close seasonally.

Adverse hydraulic effects may be expected to continue to occur to the foundation unless proper steps are taken to improve the drainage.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 126 Photographs

## 1- SUMMARY FORM

2- SKETCH OF STRUCTURE

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Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164

January 29, 1987
Report No. 87056-42

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Subject: Supplemental Inspection of the Elvis Steele Residence Route 1 Amoret, Missouri 64722 January 27, 1987
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
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Transcribed and edited from taped field notes.

Barn and Shed

This barn and shed are located northwest of the residence.
ID photograph of the front, east side. (Photo 42-127)
ID photograph of the south end. (Photo 42-128)
ID photograph of the south side of an open shed located west of the barn. (Photo 42-129)

ID photograph of the west side of the barn. (Photo 42-130)

Now inside the shed.
There is a concrete rail supporting the posts along the north side. Series of photographs of this concrete rail. (Photos 42-131 thru 42-133 and 42-135 and 42-136)

There is a vertical crack located at the middle of the rail It is about 11 inches long and $1 / 16$ of an inch wide. (Photo 42-134)

There is a concrete livestock waterer that is mostly covered with mud and manure located inside this shed. ID photographs. It appears to be $d r y$ at this time. (Photos 42-137 and 42-138)

A photograph looking westward into this shed. (Photo 42-139)

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Several of the roof decking and rafters are water damaged. (Photos 42-140 thru 42-143)

ID photographs of the west end of this shed. (Photos 42-144 and 42-145)
The west side has a gutter that drains into a pond to the west. (Photo 42-146)

There is a small well house at the southwest corner of the shed.
At the south end of the shed, there is a concret slab that is mostly covered with dirt and manure. The middle part of the slab is heaved. (Photo 42-147)

Now back to the barn. ID photographs of the interior walls. (Photos 42-148 and 42-149)

ID photographs of the north ends of the barn and shed. (Photos 42-150 and 42-151)

Back inside the barn, it has a concrete rail on the north and east sides, supporting the framing posts.

ID photographs of the north rail. (Photos 42-152 and 42-153)
ID photographs of the east rail. (Photos 42-154 and 42-155)
There is a concrete sidewalk in front of the barn that is mostly covered with mud and manure. (Photo 42-156)

## General Comments

The barn lacks a gutter system and the metal siding is deteriorating at the lower ends.

The shed has a gutter that drains into a pond to the west. It has water damaged rafters and roof decking.

That completes the supplemental inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


CDL/mp
Christopher D. Landoll
Technical Associate
Enclosure: 30 Photographs






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42-127
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$42-125$

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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: John H. Steele
2. Date: November 9, 1986 Tine: 12:30PM
3. Address:_Box 340, Amoret, Missouri 64722
4. Location: 4/10 miles west of Amoret On Highway 52
5. Telephone Number: (816) 925-3318
6. Dates of occupancy by current resident: Since 1950
7. Dates of any temporary or permanent abandoment: None
II. Information Concerning Buildings
(repeat for addicional buildings)
8. Date of original construction:

Around 1900
2. Date(s) of major remodeling or additions:
(a) Remodeling continuously since 1950
(b) Added onto in late 1250's
(c) Bathroom 1975
3. Construction of building: $2 \times 12$ 2x6 2x6
(b) interior walls:Sheetrock
(c) roof: Composition Shingles
(d) footings; foundations:

Concrete Block
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, chickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: no
III. Enviromental Information

1. Approximate elevation of area:

850 feet:
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: Not known
4. Water wells utilized (indicate depth and use):
Several wells, $40^{\prime}$ east of house used livestock and irrigation
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Hand dug by chicken house, don't use $30^{\prime}$ deep
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features: Some
8. Description of general grading or landscaping fn vicinity: Generally flat
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, windo'ss see survey
3. Noticeable settlement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings See survey
VI. Elevation views or photographs of walls
8. North See survey
2.e South See survey
9. East See survey
10. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, starus of deterioration, may exhibit an unusual response to normal blasting activities.

See survey

White- Industrial Seismology, Inc.
2431 RANGELINE SUITE A-B
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
November 14, 1986
Report No. 87056-65
Subject: Inspection of the John Steele Residence
P. O. Box 340
Amoret, Missouri ..... 64722
November 9 and 15, 1986 and Januar y 27, ..... 1987
To: The Pittsburg and Midway Coal Mining CompanyP. O. Box 8
Amsterdam, Missouri ..... 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.
HOUSE
Interior Inspection
Back Porch
Particleboard walls and ceiling.
Tile floor.
Windows on the north and east walls. Entrance on the east; door tooffice on the south.
Photograph of the east wall. (Photo 65-1)
Photograph of the west wall. (Photo 65-2)
Photographs of the south wall. (Photos 65-3 and 65-4)
Photographs of the north wall. (Photos 65-5 and 65-6)
There is a window on the south wall that has deteriorated caulk. (Photo65-7)
Office
Vinyl floor.
Sheetrock walls and ceiling.
Window on the east wall.

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Door to a bathroom on the west wall.
Door to the kitchen on the south wall.
Photographs of the west wall. (Photos 65-8 and 65-9)
Photograph of the north wall. (Photo 65-10)
Photograph of the east wall. (Photo 65-11)
Photographs of the south wall. (Photos 65-12 and 65-13)
There is a slight crack in the ceiling, trending from the upper right corner of the east window. It is about 9 inches long and about a hairline in width.

Above the upper right of the bathroon entrance, there is a vertical bulge at a tape joint. It is about 6 inches long. (Photo 65-14)

There is a horizontal crack at the upper left corner that is about 2 inches long and a hairline wide. (Photo 65-15)

## Bathroom

Vinyl floor.
White painted sheetrock walls and ceiling.
The lower walls appear to be linoleum covered and have been painted over.

Window to the back porch on the north wall.
There is a slight vertical crack above the upper left corner of the window that runs to the ceiling. It is about a hairline wide. (Photo 65-16)

Above the upper left of the doorway, there is a diagonal bulge, about 4 and $1 / 2$ inches long. (Photo 65-17)

Above the upper right corner of the doorway, there is a diagonal bulge. It is about 3 and $1 / 4$ inches long. (Photo 65-18)

Above the upper right of the window, the vertical seam is visible. It is about 10 and $1 / 2$ inches long. (Photo 65-19)

A photograph looking westward into the bathroom. (Photo 65-20)

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## Kitchen

Vinyl floor.
Paneled lower walls.
Papered upper walls.
Tile ceiling.
Door on the south to the living room.

Windows on the east above the sink.

Door on the west to the dining room.
Photographs of the west wall. (Photos 65-21 and 65-22)
Photograph of the south wall. (Photo 65-23)
Photographs of the east wall. (Photos 65-24 and 65-25)
Photographs of the north wall. (Photos 65-26 and 65-27)
There are three paper tears above the upper left corner of the south doorway. (Photo 65-28)

Above the upper right: corner of the south doorway, there is a bulge that runs to the ceiling. (Photo 65-29)

The wallpaper is folded in the southwest corner above the cabinets. (Photo 65-30)

The north and east counter area walls are tile.
Some of the grout has separated to the lower right and left of the window on the east. (Photos 65-31 and 65-32)

Living Room
Carpeted floor.
Textured plaster ceil.ing.
White painted sheetrock walls.
Windows on the south and east walls.
Front door on the east wall.

Photographs of the north wall. (Photos 65-33 and 65-39)
Photographs of the west wall. (Photos 65-34 and 65-35)

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Photograph of the south wall. (Photo 65-36)
Photographs of the east wall. (Photos 65-37 and 65-38)
Above the upper right corner of the east door, there are several very faint cracks, probably in the paint, along this tape joint. The longest is about 6 and $1 / 8$ inches long. (Photos $65-40$ and 65-41)

Above the upper left corner, there are two separate, very slight, vertical cracks. One measures about 2 inches and the other is about 6 and $3 / 4$ inches long. (Photos $65-42$ and 65-43)

There is a vertical hairline crack at a tape joint below the lower right corner of the east window that runs down to the base molding. This window has a cracked pane at its lower right corner. (Photos 65-44 and 65-45)

Below the left end of this window, there is a vertical bulge that runs down to the base molding. (Photo 65-46)

There is a horizontal bulge from the lower left corner that is about 10 inches long. (Photo 65-47)

There is a nail pop above the upper left corner of the window. (Photo 65-48)

There appears to be a vertical row of nail pops developing to the left of the east window. They are very slight at this time and are very hard to see. (Photo 65-49)

Now on the north wall.
There is a slight diagonal crack above the upper left corner of the heater. It is about 2 inches long and is barely visible. (Photo 65-50)

There are two roughly horizontal hairline cracks above the heater. The upper one is about 8 and $1 / 2$ inches long and the lower one is about 7 inches long. (Photos 65-51 and 65-52)

There is a nail pop near the ceiling above the heater.
There is about a 2 and $1 / 4$ inch long horizontal crack from the upper right of the doorway on the north wall. (Photo 65-52)

Above the upper right corner of the west doorway, there is a hairline vertical crack about 7 inches long. (Photos 65-53 and 65-54)

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Above the upper left corner, there is about a 1 and $3 / 4$ inch long hairline crack that is barely visible and a diagonal bulge. (Photo 65-55)

There is a vertical hairline crack along the southwest corner which is probably in the paint. (Photos 65-56 and 65-57)

There is a diagonal crack near the upper right corner of the south window. It is about 16 and $1 / 2$ inches long and appears to have been painted or patched over, making it very hard to see. (Photo 65-58)

There are two slight vertical cracks below the lower left corner of the window, and it appears that this area has been patched. Both cracks run to the base molding. (Photo 65-59)

There is a slight vertical bulge below the receptacle, to the lower right of the window. (Photo 65-60)

There is a hairline crack in the corner of the ceiling and south wall to the upper left of the window. It is about 2 and 5/8 inches long. (Photos 65-61 and 65-62)

## Bedroom

Carpeted floor.
Sheetrock walls and ceiling.
Windows on the south and west walls.
Door to a bathroom on the south wall.

Door to the dining room on the north wall.
Photograph of the west wall. (Photo 65-43)
Photographs of the south wall. (Photos 65-64 and 65-65)
Photographs of the east wall. (Photos 65-66 and 65-67)
Photograph of the north wall. (Photo 65-68)
Below the lower left corner of the west window, there is a vertical seam crack that runs to the base molding. It is about 20 and $1 / 2$ inches long and about a hairline wide. (Photo 65-69)

Above the upper right corner, a vertical crack at a tape seam runs to the ceiling. (Photo 65-70)

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At the lower right corner, a horizontal seam crack runs to the north wall about 6 and $1 / 2$ inches. It is about a hairline wide. (Photo 65-71)

Above the upper right corner of the bathroom entrance, there is a diagonal bulge that appears to have been painted over. It is about 13 inches long. (Photo 65-72)

There is a vertical bulge along a seam on the south wall to the west of the door. It runs across the ceiling and canes down above the closet door on the north wall as a bulge. (Photos 65-73 and 65-74)

The east facing wall of the closet enclosure has a roughly horizontal bulge. (Photo 65-75)

Above the upper right corner of the dining room entrance, there is a slight vertical crack at a tape joint. It is about 12 and $3 / 4$ inches long and appears to be filled with paint. (Photos 65-76 and 65-77)

The ceiling has a painted over crack at a seam from the outer corner of the closet enclosure. It is about 6 inches long. (Photo 65-78)

There is a bulge above the upper left corner of the door to the living room on the east wall. (Photo 65-79)

Bathroom
Carpeted floor.
Paneled walls.
White painted sheetrock ceiling.
Small window on the south wall.
Tiled shower stall w'alls.
A photograph looking southward into the bathroom. (Photo 65-80)
Dining Room
Carpeted floor.
Wooden lower walls.
Green painted sheetrock upper walls.
Textured plaster ceiling.
Two windows on the north wall and one on the west wall.
Door to the stairway on the south wall.

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Door to the kitchen on the east wall.

Photographs of the north wall. (Photos 65-81 and 65-82)
Photographs of the west wall. (Photos 65-82 and 65-83)
Photographs of the south wall. (Photos 65-83, 65-84, and 65-86)
Photographs of the east wall. (Photos 65-85 and 65-86)
Above each upper corner of the west window on the north wall, there is a slight vertical seam crack. Each is about 11 and $1 / 4$ inches long. (Photos 65-87 and 65-88)

Above the middle of the window, there is a slight crack that comes down from the ceiling. It is about 1 and $1 / 8$ inches long. (photos 65-89 and 65-90)

Above the upper left of the door to the kitchen, there is a vertical seam crack that runs to the ceiling about 13 inches. (Photo 65-91)

Above the upper right corner, a seam crack runs to the ceiling. It also runs about 1 and $1 / 2$ inches onto the ceiling. (Photo 65-92)

Above the upper right corner of the south door to the bedroom, there is a slight vertical crack at a seam that runs to the ceiling. (Photo 65-93)

Also, above the left end, there is a slight vertical crack that is barely visible. It is about 5 and $1 / 4$ inches long. (Photo 65-94)

There is an extremely fine east-west trending crack in the southwest part of the ceiling above the stairway door. It is probably at a seam and is a hairline crack, about 19 inches long.

A seam is visible above the upper left end of the stairway door. (Photo 65-95)

Now moving upstairs.
Stairway
Paneled walls.
Wooden stairs with carpet.

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Hallway
Now into the hallway at the top of the stairs.
wooden floor.
Paneled walls and ceiling.
The hallway has doors on the south, east, and north walls.
Southwest Bedroom
Blue carpeted floor.
Paneled walls.
Styrofoam tile ceiling.
One window on the west and two windows on the south.
Photograph of the west wall. (Photo 65-96)
Photograph of the south wall. (Photo 65-97)
Photograph of the north wall. (Photo 65-98)
Photograph of the east wall. (Photo 65-99)
Closet enclosure in the southeast corner.
Northeast Bedroom
Carpeted floor.
Paneled walls.
Styrofoam tile ceiling.
Two windows on the east wall; one window on the north wall.
Door on the south to a storage room.
Closet enclosure in the northwest corner.
Storage Room
Unfinished walls and ceiling.
Wooden floor.
Windows on the south wall.
This room also has windows on the east and west walls which have been covered up.

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There are also two windows on the north that were originally exterior windows.

Mrs. Steele indicated that rom was probably built in the 1920 's or 1930's as a sleeping porch.

Photographs of the south wall. (Photos 65-100 and 65-101)
Photographs of the east wall. (Photos 65-102 and 65-103)
Photographs of the north wall. (Photos 65-104 thru 65-107)
Now back into the northeast bedroam.

Northeast Bedroon - Continued
Photograph of the east wall. (Photo 65-108)
Photographs of the north wall. (Photos 65-109 and 65-110)
Photograph of the west wall. (Photo 65-111)
Photograph of the south wall. (Photo 65-112)
Hall
Now back into the hall. A view of the hallway looking westward. (Photo 65-113)

Now into the northwest upstairs bedroom.
Northwest Bedroom

Carpeted floor. Paneled walls.
Tile ceiling.
Two windows on the north wall.
Photograph of the west wall. (Photo 65-114)
Photographs of the south wall. (Photos 65-115 and 65-116)
Photograph of the east wall. (Photo 65-117)
Photograph of the north wall. (Photo 65-118)
That completes the interior inspection.

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Several interior photographs were retaken on January 27, 1987.
Exterior Inspection
House
ID photographs of the front, south side of the house. (Photo 65-119)
The house has a concrete block foundation.
A downspout empties off the front of the house and a section of the downspout is disconnected and is in a bush. The front addition lacks a gutter. (Photo 65-120)

Now inspecting the foundation. There is a stairstepping mortar crack below the east front window. It is about 14 inches long, measured on the diagonal, and ranges from about $1 / 8$ of an inch at the bottan to about $1 / 16$ of an inch wide. (Photo 65-121)

There is also a slight stairstepping crack to the upper left of the previous crack. It measures about 9 and $1 / 2$ inches on the diagonal and is about $1 / 16$ of an inch wide. (photo 65-122)

There is a slight separation in the corner of the bathroam and living roon foundations. It is about $1 / 16$ of an inch wide and measures 11 and $1 / 4$ inches to the ground. (Photo 65-123)
'There is a slightly cracked mortar joint on the south facing foundation to the right of the crawl space entrance. It is L-shaped and is about 6 and $3 / 4$ inches long measured diagonally and is from about $1 / 16$ of an inch to a hairline wide. (Photos 65-124 and 65-125)

To the upper left of the door to the crawl space, there is about a 6 and $1 / 2$ inch, measured on the diagonal, L-shaped mortar crack. It is fram $1 / 16$ of an inch to a hairline wide. (Photo 65-126)

To the lower left of this bathrom window, the top horizontal mortar joint is slightly cracked. (Photo 65-127)

Near the corner, there are two other cracks in the horizontal mortar joint. (Photo 65-128)

Just to the west, there is another crack in the horizontal mortar joint. (Photo 65-129)
'iwo photographs of the west end of the south side of the house. (Photos 65-130 and 65-131)

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Now on a west facing foundation of the bathroom addition.
There are a couple of slight cracks in the horizontal mortar joint at the south part of the addition. (Photos 65-132 and 65-133)

North of the vent, there is a slight mortar crack. (Photo 65-134)
There is a slight separation where the block foundation of the bathroom addition meets the older block foundation. (Photo 65-135)

The south facing foundation, west end, has several mortar separations. The largest is at the west end, and a block has shifted outward about $7 / 8$ of an inch. Separations in this area range from about $1 / 2$ to $1 / 8$ of an inch wide. (Photos 65-136 thru 65-139)

ID photographs of the west side of the house. The west side lacks a gutter. (Photos 65-140 thru 65-142)

Now on the west side of the foundation.
There is a cracked block at the southwest corner. The crack ranges from about $1 / 2$ to $1 / 4$ of an inch wide. (Photos $65-143$ and 65-144)

Just to the north, there is a vertical mortar separation which stairsteps down to the north. It measures about 14 inches on the diagonal and is fram about $1 / 8$ of an inch to a hairline wide. (Photo 65-145)

The north side of that same lower vertical joint is slightly separated. It is about 4 and $1 / 4$ inches long and about $1 / 32$ of an inch wide. (Photo 65-146)

To the north, the upper vertical joint is cracked. It ranges from about $1 / 16$ of an inch to a hairline wide, and is about 8 inches long. (Photo 65-147)

The next lower vertical joint to the north has about a 5 inch long hairline crack. (Photo 65-148)

The next joint to the north has a slight L-shaped mortar crack. It measures about 8 inches on the diagonal and is about $1 / 32$ of an inch wide. (Photo 65-149)

The next upper joint to the north has about a 7 inch long crack that is about $1 / 32$ of an inch wide. (Photo 65-150)

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Now below the south window. There is about a 7 and $1 / 4$ inch long vertical mortar separation at the upper joint. It is about $1 / 16$ of an inch wide. (Photo 65-151)

The next lower vertical joint to the north has about a 5 and $1 / 4$ inch long separation that is about $1 / 16$ of an inch wide. (photo 65-152)

There is about a 7 and $1 / 4$ inch long vertical separation below this window. It ranges from about $1 / 8$ to $1 / 16$ of an inch wide. This vertical joint also has a slight crack. (Photo 65-153)

The next vertical joint to the north, in the bottom course, is slightly separated. It is about 6 inches long and $1 / 16$ of an inch wide. This is just south of the patio. (Photo 65-154)

The next upper vertical joint to the north is slightly separated. (Photo 65-155)

The next upper joint to the north is separated along its length. (Photo 65-156)

Skipped a joint which looked good.
The next joint to the north is very slightly separated. (Photo 65-157)
Skipped a joint.
The next upper joint, which is directly below the window, is slightly separated on each side. (Photo 65-158)

Tb the lower left of the window, there is a slight mortar separation and a slight crack. (Photos 65-159 and 65-160)

A piece of siding is broken in this area. (photo 65-161)
The top part of the next mortar joint is missing. (Photo 65-162)
There is a separation at the next joint to the north. It is 8 and $1 / 2$ inches long and ranges from about $3 / 16$ to $1 / 16$ of an inch wide. (Photo 65-162)

The next vertical joint to the north, in the bottom course, has about a 1/2 inch gap. (Photo 65-163)

The next upper mortar joint to the north is slightly separated. (Photo 65-164)

The next lower joint has about a $3 / 4$ inch gap. (Photo 65-165)

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The next upper joint to the north is separated by about $1 / 8$ of an inch. (Photo 65-166)

Now at the northwest corner. There is about a $1 / 2$ inch separation at the horizontal joint and about a $1 / 8$ inch separation at the vertical joint. (photos 65-167 thru 65-169)

ID photograph of the north side of the house. The porch lacks a gutter. (Photo 65-170)

Now on the north foundation, west end. There are several mortar separations in this area. (Photos 65-171 thru 65-173)

There is another cracked mortar joint, just east of the telephone line. It is about $1 / 8$ of an inch wide. (Photo 65-174)

There is a stairstepping crack below the window just west of the porch. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 65-175)

An upper vertical mortar joint is separated near where the house and porch foundations meet. It is about $1 / 8$ of an inch wide. (Photo 65-176)

The mortar cracks and separations on the north side of the block foundation range fram about $1 / 4$ to $1 / 32$ of an inch wide.

Where the foundations of the porch and house meet, there is separation ranging from about 1 and $1 / 4$ inches to $3 / 8$ of an inch wide. (Photo 65-177)

The north downspout empties in this corner close to the foundation. The ground in this area slopes toward the foundation, not allowing water to drain away from the foundation. (Photo 65-178)

At the west step of the porch, the top slab is separated from the foundation from about $3 / 4$ to $1 / 8$ of an inch. The step is also separated from the foundation by about 3/4 of an inch. (Photos 65-179 and 65-180)

The sidewalk is separated from this step by about $1 / 4$ of an inch. (Photo 65-181)

The west edge of the top slab has several slight cracks. (Photo 65-182)
The step foundation is separated from the house by about 1 and $1 / 8$ inches on the north side. (Photo 65-183)

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There is a deteriorated mortar joint on the north side where the step meets the foundation. (Photo 65-184)

Now on the north foundation of the back porch.
ID photographs of the north side of the porch foundation. There is a roughly horizontal flaw at the upper part. (Photos 65-185 and 65-187)

There are two cracks above a hole and about a 6 inch horizontal crack west of the hole at the west part of the porch foundation. (Photo 65-188)

ID photographs of the north and east sides of the house. The east side of the house lacks a gutter. (Photos 65-189 thru 65-193)

Now on the east side foundation, starting at the north end. There is a slight crack and a spalled area at a piec of rebar. The crack is about 4 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 65-194)

ID photograph from the north of the east steps to the porch. The steps are separated from the house foundation by about $1 / 2$ an inch. (Photo 65-195)

ID photograph of the east end of the steps. (Photo 65-196)
Now at the south side of the steps. There are mortar separations in the foundation. The larger one is about $5 / 16$ of an inch wide and the other is about $1 / 8$ of an inch. There is about a $1 / 2$ inch separation between the step and the foundation of the house. (Photos 65-197 and 65-198)

Where the porch and house foundations meet, there is a separation that ranges from about $1 / 2$ an inch to about a hairline wide. (Photo 65-199)

Now on the concrete block foundation of the house. There are several mortar separations in this part of the foundation.

There is a mortar separation to the lower right of the office window, near the gas line. (Photo 65-200)

There are three mortar separations below this window.
There are four cracked or separated joints from the north end of the block foundation to the crawl space door. They range from about $1 / 4$ of an inch to a hairline wide. (Photos 65-200 thru 65-203)

There is a slight mortar separation about 7 inches long and $1 / 16$ of an inch wide below the $T$ in the gas line. This is behind the larger evergreeen. (Photo 65-204)

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The next joint to the south is separated. It is about 8 inches long and about $1 / 8$ of an inch wide. (Photo 65-205)

The next joint to the south looks good.
The next joint to the south is separated. It stairsteps 11 and $1 / 2$ inches on the diagonal and is about $1 / 16$ of an inch wide. (Photo 65-206)

Now at the corner where the newer foundation attaches to the older part of the house. There is sme cracking mortar in this corner. The width is about $1 / 8$ of an inch. (Photo 65-207)

ID photograph of the sidewalk located east of the house. It has grass growing up between the expansion joints. It has a heaved section near the tree at the east end. (Photo 65-208)

Now back to the east side of the house. The south steps are separated from the foundation by about $1 / 8$ of an inch. (Photo 65-209)

Now moving to the south sidewalk. ID photographs of this sidewalk. (Photos 65-210 and 65-211)

This sidewalk is apparently no longer used. There is a crack in a slab just north of the bushes. It is about 26 inches long and $1 / 4$ of an inch wide. (Photo 65-211)

Part of the sidewalk is being overgrown with grass.
There is another slab that is cracked at its northeast corner. The crack is about 20 inches long and about $3 / 4$ of an inch wide. (Photo 65-212)

Now back to the west side of the house to the patio.
This patio consists of two different sections. The north part was poured in 1976 and the south part was poured in 1985.

The south slab has a north-south trending crack across the length. It ranges from about $1 / 16$ of an inch to a hairline wide. (photos 65-213 thru 65-215)

There is slight cracking where the two slabs meet, ranging from about $1 / 8$ of an inch to a hairline in width. (Photo 65-216)

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Where the south slab of the patio meets the house foundation, there is from about a $1 / 8$ to $1 / 16$ of an inch separation. (Photos 65-217 and 65-218)

Now at the north patio slab.
A crack trends froin the northwest corner of the house about 10 feet 2 inches to the north end of the slab. The average width of this crack is about $1 / 16$ of an inch. It has spalls that range up to about $3 / 8$ of an inch. (Photos 65-219 thru 65-221)

It has a branch near the northwest corner of the house that is about 23 inches long and from about $1 / 16$ of an inch to a hairline wide. (Photo 65-222)

There is a separation where the north part of the patio meets the house foundation. It ranges from about $1 / 4$ to $1 / 8$ of an inch on the west side. On the north side, the separation is about $1 / 2$ an inch. (Photo 65-223)

Another sidewalk runs north of the house to the barnyard. This sidewalk was constructed in 1982. (Photo 65-224)

It appears to be a continuous slab of concrete. It is cracked just north of the house accoss the width. The crack width is fram about $1 / 8$ to $1 / 32$ of an inch. (Photo 65-225)

A few feet to the north, there is another crack. It is a faint crack across the width and is about $1 / 32$ of an inch wide. (Photo 65-226)

There is another crack about another 5 feet to the north across the width. It is from about $1 / 8$ to $1 / 32$ of an inch wide. (Photo 65-227)

Continuing north about another 5 feet, there is a crack across the width. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 65-228)

There is another crack across the width near the gate. It is fran about $3 / 8$ to $1 / 8$ of an inch wide. (photo 65-229)

Playhouse
This is located at the west end of the patio.
ID photograph from the northwest. (Photo 65-230)
ID photograph from the southwest. (Photo 65-231)
At this time it is used as a doghouse.

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It is on skids and has unfinished interior walls and ceiling.
cellar
This is located just northeast of the house.

ID photographs of the cellar from the west. (Photos 65-232 and 65-233)
Series of photographs from north to south of the west side. The mortar separations range from about 1 and $1 / 4$ inches to $1 / 16$ of an inch wide. (Photos 65-234 thru 65-238 and 65-254 thru 65-256)

ID photographs of the cellar from the south. (Photos 65-238 thru 65-240 and 65-248)

The east side of the cellar exterior has extensive mortar cracks and separations ranging from a heaving of about 4 inches on the south end to about $1 / 16$ of an inch wide.

Series of photographs of the east side from south to north. (Photos 65-241 thru 65-247, 65-252 and 65-253)

A sidewalk runs from the house to the cellar and then to the garage. Grass grows through same of the expansion joints. There is a crack in the sidewalk at the southeast corner of the cellar entrance. The crack is about 12 inches long and $1 / 16$ of an inch wide. (Photos 65-249 thru 65-251)

ID photograph of the north end of the cellar. (Photo 65-257)
Series of photographs of the north end from west to east. Cracks and separations range from about $1 / 4$ of an inch to a hairline. (Photos 65-258 thru 65-260)

Cellar - Interior Inspection
There is a vertical crack above the doorway. It runs above the door, under a piece of plywood and disappears. It averages about $1 / 16$ of an inch wide and is at least 24 inches long. (Photo 65-261)

Photographs looking down the cellar stairway. (Photos 65-262 and 65-263)

Concrete stairs and stairway walls.
Now inside, it is a vaulted roon with a concrete floor and walls.

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There is extensive cracking in the walls and ceiling.
Photograph of the north wall. (Photo 65-264)
Photographs of the east wall. (Photos 65-265, 65-266, and 65-268)
Photograph of the west wall. (Photo 65-267)
Photograph of the south wall. (Photo 65-269)
This cellar was constructed in 1911.
Photographs of the ceiling. (Photos 65-270 thru 65-272)
It appears that water can enter through the vent at the north end of the ceiling since that area is moist.

There is some efflorescence on the walls.
There is a crack above the doorway that runs up to and along the ceiling. It is about: 20 and $1 / 2$ inches long measured from about the door and then northward along the ceiling. It is from about $1 / 32$ of an inch to a hairline wide. (Photos 65-273 and 65-274)

Now inspecting the floor. From the north wall, two cracks come together to form a Y-shaped crack. The crack trends all the way to the south wall, just west of the door. (Photos 65-275 thru 65-277)

This main north-south trending crack has a branch located about 5 feet north of the door which runs roughly east and then Y's north and southward. The main crack has another branch just inside the doorway which diagonals to the southeast. The widest crack is in the southeast corner and is about 3/16 of an inch to a hairline in width. (Photos 65-278 thru 65-280)

Garage - Exterior Inspection
This garage was built in 1956.
ID photograph of the west side. (Photo 65-281)
ID photograph of the south side. (Photo 65-282)
ID photograph of the east side. (Photo 65-283)
ID photograph of the north side. (Photo 65-284)

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The garage has a gutter and downspout system that drains into an old cistern located at the northwest corner of the garage. This cistern is no longer used.

The garage has white hardboard siding with a lot of paint peeling on the east side.

It has a concrete foundation.
ID photograph of the north side of the cistern. (Photo 65-285)
A photograph looking down into the cistern. (Photo 65-286)
ID photographs of the west side of the cistern. It has deteriorated mortar and sane slight mortar cracks. (Photos 65-287 and 65-288)

ID photograph of the south side. (Photo 65-289)
There is a vertical crack in the garage foundation, below the lower right corner of the west window. It is about $1 / 8$ of an inch wide and 6 inches long visible. (Photo 65-290)

There is also a vertical crack in the foundation below the lower left corner of the west door. It varies in width from about $1 / 8$ to $1 / 32$ of an inch and is about 6 and $1 / 2$ inches long. (Photo 65-291)

There is a diagonal crack in the front foundation between the southwest corner and the door. It is from about $3 / 16$ to $1 / 16$ of an inch in width and about 8 inches long. (Photo 65-292)

Now on the east side. There is a slight crack in the foundation near the gatepost. It is about $1 / 32$ of an inch wide and 6 and $3 / 4$ inches long. (photo 65-293)

Below the lower left of the east window, there is a larger vertical foundation crack that is about 8 and $1 / 2$ inches long and fran about $1 / 4$ to $1 / 16$ of an inch wide. (Photo 65-294)

Now on the north side. There is a vertical crack in the foundation near the northeast corner. It is about 6 and $3 / 4$ inches long and up to $1 / 4$ of an inch wide. (Ehoto 65-295)

Most of the north foundation is hidden by clumps of fescue grass.
Garage - Interior Inspection
Concrete floor.
Unfinished walls and ceiling.

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Photograph of the east wall. (Photo 65-296)
Photograph of the north wall. (Photo 65-297)
Photograph of the west wall. (Photo 65-298)
The garage is constructed of two by four hardwood studs and rafters. Some of the rafters are two by sixes.

There are three cracks in the apron. They range fron $1 / 16$ to $1 / 32$ of an inch wide. (Photo 6.5-299)

There is a crack in the garage floor that runs north from the left side of the sliding door and intersects another crack. Measured on a straight diagonal, it is 13 feet 10 inches long and runs roughly northeast from the door. It ranges fran about $1 / 8$ of an inch to a hairline, but has several spalled areas that are wider. Just south of the east window, it becames smaller and turns toward the east wall. (Photos 65-300 thru 65-303)

It has a bcanch that runs west to a spalled area of the floor. This west branch is about 37 inches long. (Photos 65-304 and 65-305)

There are spalled areas in the southwest part of the floor. (Photo 65-306)

ID photographs of the east part of the floor. (Photos 65-307 and 65-308)

A smoke room is in the southwest corner of the garage and a kiln room is in the northwest corner.

ID photograph of the smoke room floor. (Photo 65-309)
The north part of the garage floor has a roughly east-west trending crack that runs from the east wall westward under the kiln enclosure.

It has a branch near this china cabinet that runs to the north wall from a spalled area. This branch is about 52 inches long and from about $1 / 8$ of an inch to a hairline wide. (Photos 65-310 and 65-311)

Measured on a straight line, the east-west trending crack is about 11 feet 4 inches long. It is about a hairline wide at the east end and enlarges to about $1 / 8$ of an inch with wider spalls. (Photos 65-312 thru 65-315)

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There are spalled areas in the floor near the china cabinet. (Photos 65-310 and 65-311)

A floor crack that measures about 9 feet 4 inches, trends from the south end of the west door to near the kiln room door. It is about $1 / 8$ of an inch wide and goes through some spalled areas where it is hard to see. (Photos 65-316 thru 55-318)

A vertical crack below the lower right corner of the west door is about 1/16 of an inch wide and 7 and 1/4 inches long. (Photo 65-319)

ID photograph of the kiln room floor. (Photo 65-320)
The kiln is an octagonal ceramic structure. It has a slight crack at about the middle of the northeast part. (Photo 65-321)

Back into the garage.
At the east wall, about 3 feet from the south end, there is a vertical crack in the foundation. It is about 8 and $1 / 2$ inches long and from about $1 / 16$ to $1 / 32$ of an inch long. (Photo 65-322)

That completes the inspection of the garage.

The inspection was suspended due to darkness, and the following was inspected on November 15, 1986.

There is a well located in the yard just east of the house.
It has a concrete slab cover and is about 40 feet deep. (Photo 65-323)
Looking into the well, water is visible a few feet below the ground surface.

Now moving to an old chicken house located northeast of the house.
East Chicken House - Exterior Inspection
This was built in 1958.
It has gutter along the south and most of the north side with two downspouts at the west end of the building.

ID photographs of the south side. (Photos 65-324 and 65-325)
ID photograph of the east end. (Photo 65-326)
ID photograph of the north side. (Photo 65-327)

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Starting at the west part of the north side at the fence.
There is a vertical crack in the foundation behind the fence. It measures about 15 inches on the vertical and is about $1 / 8$ of an inch wide. (Photo 65-328)

Now moving eastward along the north side to another vertical foundation crack. It ranges in width fram about $1 / 2$ to $1 / 8$ of an inch and trends the height of the foumdation. (Photo 65-329)

Below the second window from the east, there is a vertical crack in the foundation along the height. About 11 and $1 / 4$ inches are visible and it is about $1 / 16$ of an inch wide. (Photo 65-330)

About 3 feet eastward, there is another vertical foundation crack. It is visible for about 12 inches and about $1 / 8$ of an inch wide. (Photo 65-331)

Further eastward, there is another vertical foundation crack. About 14 inches are visible and it is about $1 / 8$ of an inch wide. (Photo 65-332)

Nothing noted on the east side of the building.
Now on the south side. There is a vertical crack in the foundation near the southeast corner. About 14 inches are visible and it ranges from about $1 / 8$ to $1 / 16$ of an inch in width. (Photo 65-333)

There is a vertical foundation crack below the lower left corner of the east door on the south side. About 12 and $1 / 2$ inches are visible and it is about $1 / 16$ of an inch average width. (Photo 65-334)

Now moving westward near this concrete area. There is a vertical crack in the foundation. About 9 inches are visible and it is about $3 / 16$ of an inch average width. (Photo 65-335)

Below the middle door, there is a vertical foundation crack. About 7 inches are visible and it is about $1 / 16$ of an inch wide. (Photo 65-336)

To the lower left of the west door on the south side, there is a vertical crack in the foundation. It averages about $1 / 8$ of an inch in width and is about 5 and $1 / 2$ inches long. (Photo 65-337)

There is a crack in the foundation to the lower left of the west window. This is about 6 feet from the west end of the south side. It is about 6 and $1 / 2$ inches long and about $1 / 18$ of an inch average width. (Photo 65-338)

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ID photograph of the west end of the building. (Photo 65-339)
Just north of the door on the west end, there is a vertical crack in the - foundation. It is about $1 / 16$ of an inch average width and about 2 and $1 / 2$ inches are visible. (Photo 65-340)

The north part of the west foundation has three vertical cracks; each are about 5 inches long and one is about $1 / 16$ of an inch wide and the other two are about $1 . / 8$ of an inch wide. (Photos 65-341 and 65-342)

ID photograph of the north side of the building from the northwest. (Photo 65-343)

The northwest downspout empties into a bucket and the southwest downspout enters the ground.

Now at the west end of the north foundation. To the lower left of the window, there is a slight vertical crack in the foundation. About 6 and $1 / 2$ inches are visible and it is about $1 / 32$ of an inch wide. (Photo 65-344)

Just northwest of this building, there is a large slab of concrete covering an old cistern. (Photos 65-345 and 65-346)

Looking into the cistern, at this time water is visible at a level about 2 feet below the ground surface. It is concrete block lined.

East Chicken House - Interior Inspection

## West Rooin

Most of the floor is covered with dirt.
Starting on the south wall, west end. There is a vertical crack below the lower right of the door. It is visible for about 5 and $1 / 2$ inches and is about $1 / 16$ of an inch wide. (Photo 65-347)

Moving eastward. There is another vertical foundation crack, about 10 and $1 / 2$ inches are visible. It is about $1 / 8$ of an inch wide average. (Photo 65-348)

To the east, there is another vertical foundation crack. It is about 17 and $1 / 2$ inches long and fran about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 65-349)

Photograph of the west wall. (Photo 65-350)
Photograph of the north wall. (Photo 65-351)

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Photograph of the east wall. (Photo 65-352)
Now on the east wall. The foundation has a vertical crack that is about $1 / 8$ of an inch wide and 10 and $1 / 2$ inches are visible in length. (Photos 65-353 and 65-354)

A view of the ceiling. (Photo 65-355)
Middle Room
Photograph of the east wall. (Photo 65-356)
Photograph of the west wall. (Photo 65-357)
There is a vertical crack in the foundation below the north window. It is about 7 and $1 / 2$ inches long and $1 / 16$ of an inch wide. I believe this crack was shown from outside also. (Photo 65-358)

There is also a crack in the west foundation. I believe this crack was also shown from the other side. It goes through the visible portion of the foundation vertically and is about 12 and $1 / 2$ inches long and from about $1 / 8$ to $1 / 16$ of an inch in width. (Photo 65-359)

At the south foundation wall, there is about a 5 inch visible vertical crack about $1 / 16$ of an inch wide. (Photo 65-360)

The east room is full. of hay.
Ihere is an old tile block garage located just west of this building.
Tile Block Garage - Exterior Inspection
This was built in the early 1930 's.
ID photograph of the front, south side. (Photo 65-361)
ID photograph of the east side. (Photo 65-362)
ID photograph of the north side. (Photo 65-363)
ID photograph of the west side. (Photo 65-364)
This garage lacks a gutter system.
Mr. Elvis Steele indicated that this building has been struck by lightning in the past.

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The front apron is cracked. (Photos 65-365 and 65-366)
Starting on the south side, east end.
There is a slight horizontal and vertical crack in the foundation to the lower right of the door. The horizontal crack is about 12 and $1 / 2$ inches long. (Photo 65-367)

Many of the tile blocks have slight hairline cracks. (Photos 65-368 and 65-369)

Now at the west end of the front. Several of these tile blocks are slightly cracked and one is broken. (Photos 65-370 and 65-371)

The cracks in this area range from about $1 / 16$ of an inch to a hairline in width.

Series of photographs of the west side from south to north. (Photos 65-372 thru 65-377)

A crack in a block to the left of the south window, is about $1 / 4$ of an inch wide. (Photo 65-374)

There are mortar separations above the south window. (Photo 65-378)
There is a stairstepping crack below the lower right corner of the south window. (Photo 65-379)

The separations on the west side range from about $1 / 4$ to $1 / 16$ of an inch wide.

Now inspecting the west foundation. There are several slight cracks at the south end. There is a larger crack in the foundation to the lower right of the south window. It is actually a couple of connecting cracks. Widths range fram about $1 / 16$ of an inch to a hairline in that area. (Photos 65-380 thru 65-387)

There is a vertical foundation crack on the west side below the lower right of the north window that is about $1 / 8$ of an inch wide. (Photo 65-388)

A photograph of the west foundation between the north window and the stock tank. (Photo 55-389)

There are several damaged blocks and cracks in the foundation at the northwest corner. Separations at this corner range fran about $1 / 4$ to 1/16 of an inch wide. (Photos 65-390 thru 65-392)

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Now on the north side of the building. The north side has extensive mortar cracks.

There is a crack in the north foundation that is about 10 inches in length and from $3 / 16$ to $1 / 16$ of an inch in width. (Photo 65-393)

Series of photographs of the north side of the garage. (Photos 65-394 thru 65-396)

There are several cracked blocks and mortar cracks on the north side. Series of photographs of the east side. (Photos 65-397 thru 65-400)

The foundation has a major crack at the north end of the east side. It is about $3 / 4$ of an inch wide and part of it has been patched. (Photo 65-401)

Mortar separations on the east side range up to about $3 / 16$ of an inch wide.

There is another foundation crack to the lower right of the northeast window. It is about 5 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 65-402)

There is another vertical foundation crack between the two east windows. It is about: 11 inches long and fram about $1 / 4$ to $1 / 16$ of an inch in width. (Phot:o 65-403)

The cracks in the blocks range from about a hairline to $1 / 16$ of an inch wide on the east side of the garage.

A slight crack at the southeast corner of the foundation is V -shaped. It is about $1 / 16$ of an inch wide. (Photo 65-404)

Interior Inspection
Photographs of the north, east, and west walls respectively. (Photos 65-405 thru 65-407)

Numerous mortar cracks are evident inside.
Series of photographs of the west wall starting with the area above the south window. (Photos 65-408 thru 65-414)

Mortar cracks and separations on the west wall range from about $1 / 16$ of an inch to a hairline wide.

Now photographs of the north wall. (Photos 65-415 and 65-416)

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Mortar cracks and separations on the north wall range from about $3 / 16$ of an inch to about a hairline wide.

Series of photographs of the east wall. (Photos 65-417 thru 65-422)
Now moving this sliding door and revealing a stairstepping crack below the lower left of the south window on the east wall. The window has three missing panes. Light can be seen through separations to the lower left of the window which are about $3 / 16$ of an inch wide. (Photo 65-422)

The north window on the east wall has a piece of galvanized steel over the lower right pane.

We cannot open the door more than hal fway to inspect the rest of the east wall from the inside.

The east foundation has a crack at about the middle that runs all the way through vertically. It measures about $3 / 16$ of an inch wide. (Photo 65-423)

The west wall has a crack in the foundation below the lower left of the north window. It is visible for about 3 and $1 / 2$ inches $1 / 18$ of an inch wide. (Photo 65-424)

At the north end of the garage, there is an area of concrete on the floor, and there is a crack at about the middle. The crack is visible along the south edge and measures about 4 and $3 / 4$ inches long and about $1 / 8$ of an inch wide. (Photo 65-425)

Now moving to the outhouse located north of this garage.
Outhouse
Wooden floor.
Unfinished walls and ceiling.
ID photograph from the southwest. (Photo 65-426)
ID photographs of the north and east sides. (Photos 65-427 and 65-428)
It rests on a concrete foundation that is visible from the outside on the north side.

Part of the foundation is also visible on the west side.
The outhouse has some deteriorating wood trim and paint.

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Now moving to a barn located to the north.
Barn - Exterior Inspection
This barn was built in the early 1900 's.
ID photograph of the front, south side. (Photo 65-429)
East of this barn, there is a hog pen.
ID photograph of the east side. (Photo 65-430)
ID photograph of the west side. (Photo 65-431)
Note the roof on the west side is sagging. (Photo 65-432)
ID photograph of the north side. (Photo 65-433)
This barn lacks a gutter system.
Starting on the front south side, taking a series of photographs of the foundation fron east to west. (Photos 65-434 thru 65-439)

The foundation appears to be sandstone with mortar that has fallen out and separated in numerous places.

Now on the west side of the barn, taking a series of photographs of the foundation from south to north. (Photos 65-440 thru 65-446)

The west side has numerous mortar gaps and separations.
Now on the north side, taking a series of photographs of the foundation from west to east. The north side has numerous mortar separations and gaps. (Photos 65-447 thru 65-453)

Now on the east side of the barn. Photographs of the foundation. It has a lot of mortar falling out. (Photos 65-454 and 65-455)

Barn - Interior Inspection
Now looking inside this barn. The west door on the south wall leads to a storage roan.

Storage Room
Concrete floor.
Wooden walls.
Unfinished ceiling.

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Now entering the middle door on the south side of the barn.
This room is like a long hallway.
Hallway
Wooden floor and walls.
Wooden unfinished ceiling.
There is hay stored in the northeast part of this barn.
There is a pen with dirt on the floor in the middle compartment on the east side. The southeast area is a feed storage. It has a concrete floor.

Feed Storage Area
Now in the grain storage area at the southeast part of the barn. The concrete floor has a diagonal crack just inside the doorway. The crack runs about 51 inches to the north and intersects an east-west trending crack. It is about $1 / 8$ of an inch wide and is filled with dirt. (Photo 65-456)

This other crack runs westward from the east wall, and about 63 inches of this crack are visible. It is about $1 / 8$ of an inch wide and is mostly full of dirt. (Photos 65-457 and 65-458)

That comletes this barn.
Now moving to the farrowing barn to the north.
Tin Farrowing Barn
This barn was built in 1968. It has a gutter along the north side.
ID photographs of this south side. (Photos 65-459, 65-461, and 65-462)
ID photograph of the west end. (Photo 65-460)
ID photographs of the north side. (Photos 65-463 and 65-464)
ID photographs of the east end. (Photos 65-465 and 65-466)
There is a slab of concrete at the east end of this barn that is mostly covered with mud and manure.

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Looking inside this barn, it has a concrete floor mostly covered with straw, mud, and manure. It has wooden walls and windows on the west and south walls.

There is some insulation in the ceiling and some areas of the ceiling are hanging down. Series of photographs of the ceiling from the east. (Photos 65-467 thru 65-471)

There is an X-shaped crack in the east end of the floor. It is about $1 / 32$ of an inch wide and is only partially visible. (Photos 65-472 and 65-473)

Now on the north side of the barn. There is a concrete sidewalk along the north side. It is a rough, unfinished continuous slab.

Now inspecting the sidewalk from east to west. There is a crack near the east end, trending north-south through the slab. It measures about 36 inches along the top and edge and ranges from $1 / 16$ to $1 / 8$ of an inch wide. It has a very slight crack next to it on the north edge of the walk.

There is another crack a few feet to the west across this slab. It is about 36 and $1 / 2$ inches long and from about $3 / 16$ to $1 / 16$ of an inch wide. (Photo 65-474)

A few feet to the west, there is a faint crack on the top side of this slab. It is about 23 and $1 / 2$ inches long and just wider than a hairline. (Photo 65-475)

Just to the east, there is a joint where different pourings were placed. (Photo 65-476)

Moving west, to about the middle of this side, there is a crack in the sidewalk. It is about 32 inches long and fran about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 65-477)

There is a larger slab of concrete at the west end of the north side. (Photo 65-478)

The west end of this larger slab has a diagonal crack and a north-south trending crack. The diagonal crack is about 95 inches long and ranges from about $3 / 8$ to $1 / 4$ of an inch in width. The crack that runs to the north is 65 inches long with an average width of about $1 / 8$ of an inch. (Photos 65-479 thru 65-481)

There is a crack at the corner where the sidewalk meets the large slab. It is about 18 and $1 / 2$ inches long and fram about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 65-482)

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At the west end of the north side, there are a couple of cracks above two posts which are set in the concrete. Both cracks are from about $1 / 8$ of an inch to a hairline wide and both run across the sidewalk. (Photo 65-483)

Now on the west side of this barn.

There is a concrete and steel water trough located west of the barn. Inside, the water is frozen. (Photo 65-484)

There is a concrete slab covering an old well located just west of this building. (Photo 65-485)

The original brick lining of the wall is severely deteriorating. (Photos 65-485 thru 55-488)

Looking inside the well, water is visible about 3 feet below ground level. It is brick lined with a concrete cover. A lot of the covering has fallen off. The water appears dirty.

Now inspecting the concrete sidewalk along the west end of the building.
There is a broken piece of concrete in front of the west door of the building. (Photo 65-489)

There are two cracks in this concrete near the southwest corner. The north crack is about 25 inches long and $1 / 4$ of an inch wide. It goes all the way through the slab. The crack at the corner is about 26 inches long and ranges from about $3 / 16$ of an inch to a hairline wide. There is also some spalling at this corner. (Photo 65-490)

Now on the south side of the barn. there is a concrete sidewalk along the south side also. There is a crack in the concrete to the lower right of the west window. It is about 34 and $1 / 2$ inches long and from about $3 / 16$ to $1 / 8$ of an inch wide. (Photo 65-491)

There is a crack in the concrete between the feed bin and the barn. About 19 and $1 / 2$ inches are visible and it is about $1 / 8$ of an inch wide. (Photo 65-492.)

This south sidewalk is rough and unfinished with no visible expansion joints.

There is a crack in this sidewalk to the lower left of the fifth window from the east. It is about 28 inches long and about $1 / 16$ of an inch wide. (Photo 65-493)

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Continuing to the east:, there is another north-south trending sidewalk crack between the fourth and fifth windows from the east. It is about 29 inches long and $1 / 8$ of an inch wide. (Photo 65-494)

Now at the fourth window from the east. There is another north-south trending sidewalk crack. It is about 26 inches long and $1 / 16$ of an inch wide. (Photo 65-495)

To the lower left of the third window from the east, there is another sidewalk crack. It is about 23 inches long and $1 / 16$ of an inch wide. (Photo 65-496)

To the lower right of this window, there are two sidewalk cracks. Both are about 30 inches long and from $1 / 16$ to $1 / 8$ of an inch wide. (Photo 65-497)

There is a crack in the sidewalk below the east window. It is about 29 inches long and from $1 / 16$ to $1 / 8$ of an inch wide. (Photo 65-498)

There is another sidewalk crack near the southeast corner of the barn. It is about 17 inches long and from $3 / 16$ to $1 / 8$ of an inch wide. (Photo 65-499)

There is a stock waterer, or well, at the southeast corner of the building. It is frozen over and nothing much can be seen. (Photo 65-500)

Now back inside this farrowing barn. The west end of the ceiling has some tin and the rest has insulation. A photograph looking eastward. (Photo 65-501)

Photographs 65-460 thru 65-473 were retaken on January 27, 1987.
Bin
Now inspecting the circular bin located south of this building.
The concrete foundation is spalled and has a crack near the telephone pole at the east end. The crack is about 3 inches long and $1 / 16$ of an inch wide. (Photo 65-502)

At the south end, there is a vertical crack in the concrete base. This crack is about 5 inches long and $1 / 16$ of an inch wide. (Photo 65-503)

Below the southwest facing door, there is a crack in the base with grass growing up through it. It is about 2 and $1 / 2$ inches wide at the edge. (Photo 65-504)

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Moving clockwise a few feet, there is another crack which measures about 5 inches along the top and edge and about $1 / 16$ of an inch wide. (Photo 65-505)

ID photograph of the bin from the southeast. (Photo 65-506)
ID photograph of the bin from the west. (Photo 65-507)
Now moving to the northwest barn.
Northwest Barn
This barn was built in the late $1920^{\prime} \mathrm{s}$. It has an imcomplete gutter system.

ID photograph of the south side. (Photo 65-508)
ID photograph of the east side. (Photo 65-509)
ID photograph of the north side. (Photo 65-510)
ID photograph of the west side. (Photo 65-511)
This barn has a concrete foundation.
This barn is mostly full of hay at this time.
There are some sagging floor joists on the south side. (Photo 65-512)
The downspout at the southwest corner drains into a concrete structure. (Photo 65-513)

The gutter has no downspout at about the middle of the south side and it empties to the ground.

Now on the east side of the barn.
At the north door on the east side, there is a crack in the foundation at the right end. Actually it is a system of cracks ranging fran about $3 / 16$ of an inch to a hairline wide. (Photos 65-514 and 65-515)

There is a crack in the foundation at about the middle of this doorway. It is about 2 inches at the widest. (Photo 65-516)

Some of the floor joists sag in this area also. (Photo 65-517)

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At the northeast corner, there are two foundation cracks. Both are about $1 / 8$ of an inch wide and about 10 inches are visible. (Photo 65-518)

There is a large separation in the foundation just to the north of this doorway. It is about 2 and $1 / 2$ inches wide. (Photo 65-519)

Now on the north side of the barn. A few feet from the east end, there is a major crack in the foundation. It is about $3 / 4$ of an inch on average width with spalling up to 2 inches wide. It runs the vertical height of the foundation. (Photo 65-520)

About 4 feet to the west, there is another vertical crack in the foundation. Twelve and $1 / 2$ inches are visible and it is about $3 / 8$ of an inch wide. The spalling at the bottan is about 5 inches wide. (Photo 65-521)

A few feet to the west, there is another vertical foundation crack. About 14 inches are visible and it is about $3 / 8$ of an inch wide. (Photo 65-522)

About 8 feet to the west, there is a flaw in the foundation with cracks above and below. The flaw is about 39 inches long on the diagonal. The top crack is about 5 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 65-523)

About 8 feet to the west, there is another vertical crack in the foundation. About 16 inches are visible and it is from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 65-524)

About 8 feet to the west, there is another vertical crack in the foundation. This is a rough stairstepping crack that has about 16 inches visible and ranges from about $3 / 16$ to $1 / 16$ of an inch wide. (Photo 65-525)

About 8 feet to the west, there is another foundation crack that is roughly vertical. It is about 17 inches measured vertically and about $1 / 8$ of an inch average width. (Photo 65-526)

About a foot from the northwest corner, there is a slight diagonal crack. It is about $1 / 16$ of an inch wide and about 9 and $1 / 2$ inches long. (Photo 65-527)

ID photograph of the west side of this barn from the northwest. (Photo 65-528)

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The west side has a crack in the foundation located about 3 feet from the north end. It is about 7 and $1 / 2$ inches long and about $1 / 4$ of an inch wide with a spall of about 3 inches wide. (Photo 65-529)

About 3 feet to the south, there is a vertical crack in the foundation. About 7 and $1 / 2$ inches are visible and it is about $1 / 4$ of an inch wide with a spall at the top which is about 3 inches wide. (Photos 65-530 and 65-532)

Moving south, the foundation becomes harder to see due to weeds. There is a crack in the foundation a couple of feet south of the white panel on the west side. About 5 inches are visible and it is from about 3/16 of an inch to a hairline wide. (Photo 65-531)

About 3 or 4 feet to the south, there is another crack in the foundation. It is about 8 inches long vertically and about $1 / 4$ of an inch wide with a spall at the bottom, which is about 4 inches wide. (Photo 65-533)

About 3 feet to the south, there is another crack in the foundation. This has been patchecl and it has recracked. It has about 7 inches visible and ranges from about $5 / 8$ to $1 / 4$ of an inch wide. (Photo 65-534)

There is another hog barn located just southwest of this hay barn.
Hog Feeding Barn
This barn has an incomplete gutter system.
ID photograph of the east end. (Photo 65-535)
ID photograph of the north side. (Photo 65-536)
The foundation is stone with mortar.
There is a concrete slab located at the east end of the barn that is covered with mud.

ID photograph of the south side. (Photo 65-537)
ID photograph of the west end. (Photo 65-538)
The northwest downspout is used to drain water into a pond to the north. (Photo 65-539)

There is also a snall concrete slab at the west end of the barn that is covered with dirt.

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At the north side, east end, some of the dirt has washed out or been rooted out by hogs from underneath the foundation. (Photo 65-540)

The water trough at the northeast corner of the building is frozen over. (Photo 65-541)

The foundation on this building is mostly covered with dirt, making it hard to see the mortar joints.

The building appears to have a concrete floor, mostly covered with dirt and waste feed.

Now inside the south half of the building. It has a dividing foundation of stone.

This foundation, below the east door, has mortar separations that range from about $1 / 2$ to $1 / 8$ of an inch wide. (Photo 65-542)

In the north half of the building, the floor is mostly covered with dirt and feed.

Now back out to the west side of this barn. Just south of the middle, there is a mortar separation that is about 12 inches long and from about $1 / 4$ to $1 / 8$ of an inch wide. (Photo 65-543)

Now moving to the granary located east of this barn.
Granary - Exterior Inspection
This was built in the 1940 's and it lacks a gutter system.
ID photographs of the west side. (Photos 65-544 and 65-545)
It has a concrete and concrete block foundation.
ID photograph of the north end. (Photo 65-546)
ID photographs of the south end. (Photos 65-547 thru 65-549)
ID photographs of the east side. (Photos 65-550 and 65-551)
ID photograph of the north end from the northeast. (Photo 65-552)
Starting on the north end. It has a concrete block foundation over a concrete slab. There is extensive mortar cracking and deterioration in the block part. There are also sane cracked blocks.

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There is a cracked block and several mortar separations at the east end of the north foundation. These cracks and separations range fram about $1 / 8$ to $1 / 16$ of an inch. (Photo 65-553)

Now at the west part of the north foundation. Series of photographs of this part of the foundation showing deteriorating mortar, mortar cracks, and a cracked block. Cracks and separations in this area range from about $1 / 8$ to $1 / 32$ of an inch wide. (Photos 65-554 thru 65-558)

West of the fence, there is a separation to the lower left of the door. (Photo 65-556)

Now on the west side of the building. There are several mortar separations and cracks in the foundation. The major crack is at the north end of the west side. The separation is about $3 / 4$ of an inch wide at the top and the crack is about $1 / 2$ an inch wide. (Photo 65-559)

Series of photographs of the west foundation from north to south. (Photos 65-559 thru 65-569)

The semi-circular concrete feed trough is broken at the south and north ends, and at the middle. The south crack is about 4 and $1 / 4$ inches wide at the top. The middle crack is about 2 and $1 / 4$ inches wide at the top. The north crack is about 2 and $1 / 2$ inches wide at the top. Each is broken all the way through. (Photos 65-561 thru 65-563)

There is a large concrete slab at the south end of the building. Some of the soil has washed out from underneath on the west side. (Photos $65-570$ and 65-571)

The concrete slab appears to be cracked at the south end, but it is covered with dirt and it is hard to see. (Photo 65-572)

Now inspecting the east foundation.
Series of photographs of the east foundation from north to south. There are several cracked blocks and mortar separations, mainly at the north part of the east foundation. They range from about $1 / 4$ to $1 / 32$ of an inch wide. (Photos 65-573 thru 65-583)

There is a crack at the east end of the south foundation. It is about 8 and $1 / 2$ inches long and fran about $1 / 8$ of an inch to a hairline wide. (Photo 65-584)

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Granary - Interior Inspection
Now looking inside the granary. The middle hall area has a concrete floor mostly covered with dirt and grain. The east wall has about five different bins that are full of grain.

The west wall also has a couple of doors to bins.
The walls are wooden and the ceiling is unfinished.
The inner walls have a block foundation. The northwest bin is empty and has a concrete floor partially covered with oats.

A crack in the floor of this bin runs from the east wall to the west wall and is fron about $1 / 16$ of an inch to a hairline wide. (Photo 65-585)

There are separations and cracks in the concrete block foundation of this bin. The separation in the northwest corner ranges fram about $1 / 2$ to $1 / 4$ of an inch wide. (Photos 65-586 and 65-587)

Now back into the main hall. At the south end of the east and west walls, there is a concrete block and each side has a mortar crack. The west side crack is about 17 inches measured on the diagonal and from about $1 / 16$ of an inch to a hairline wide. (Photo 65-588)

The east wall crack is about 10 and $1 / 2$ inches measured diagonally and from about $1 / 16$ of an inch to a hairline wide. (Photo 65-589)

The west part of the granary is a leanto pig shed with a dirt covered floor.

Exterior Inspection - Continued
ID photograph of the windmill located southeast of the granary. (Photo 65-590)

The concrete at the base of the windmill is extensively cracked and overgrown with grass. (Photos 65-591 and 65-592)

There is a concrete water trough near the windmill. The inscribed date of construction reads 1948. ID photographs fran the southeast and northwest. (Photos 65-593 and 65-594)

Grain Bins
These two bins were built in the 1930 's and are located southeast of the granary. ID photograph of both bins from the north. (Photo 65-595)

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ID photograph of both bins from the southwest. (Photo 65-596)
ID photograph of the east side of the east bin. (Photo 65-597)
ID photograph of the east side of the west bin. (Photo 65-598)
The east bin is full of corn at this time.
The concrete foundation of the east bin is extensively cracked and appears to be settling towards the center. Series of photographs of the foundation from the north end going counterclockwise. Cracks range from about $1 / 2$ an inch to a hairline in width. (Photos 65-599 thru 65-604)

The west bins' foundation looks like it has been repaired with additional concrete poured around it. Series of photographs from the east door around counterclockwise. The foundation is extensively cracked. Cracks range fran about $1 / 4$ of an inch to a hairline wide. (Photos 65-605 thru 65-612)

A tile block hog barn is located to the west of these bins.
Tile Block Hog Barn
This barn was built in 1932. It lacks a gutter system.
ID photograph of the east end. (Photo 65-613)
The east side has extensive mortar cracks. Series of photographs of the east side fran south to north. (Photos 65-614 thru 65-617)

There is a stairstepping mortar crack at the north end of the east side.
There are cracks below the window on the east side, south end.
There is a small slab of concrete at the south end of the east side.
There is a concrete area running northeast from the east side of this barn. It is covered with dirt and feed and not much can be seen.

ID photographs of the south side of the barn from the southeast. (Photos 65-618 and 65-619)

ID photograph of the north side. (Photo 65-620)
ID photograph of the west end of the barn. (Photo 65-621)

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The west end has several patched mortar joints and unpatched mortar separations.

Series of photographs of the west end from south to north. (Photos 65-622 thru 65-624)

There are five visible vertical cracks in the foundation on the west end.

There are numerous patched joints and cracks at the north end of the west side and this acea appears to have shifted northward some what. These cracks and separations range from about 1 and $3 / 16$ of an inch to a hairline in width. (Photo 65-624)

The lower right pane of the south window on the west side has been replaced with galvanized steel, and the area below and south of this window has patched areas and separations. These cracks and separations range from about 1 and $3 / 16$ of an inch to a hairline in width.

The widths of these mortar separations and cracks to the upper right of the south window range up to about $1 / 4$ of an inch. Cracks in the foundation are about $1 / 16$ of an inch wide.

Now on the north side. Series of photographs of the north side from west to east. (Photos 65-625 thru 65-633)

At the west end, there are several patched mortar joints and two large cracks in the foundation.

The east end of the north side also has a lot of cracked mortar, some patched joints, and stairstepping mortar cracks.

The foundation has several superficial looking cracks or flaws.
Cracks on the north side range from about $1 / 4$ of an inch to a hairline in width. The largest is at the northwest corner.

Now on the south side of this barn taking a series of photographs from west to east. (Photos 65-634 thru 65-642)

There is a crack in the foundation below the west window, and there are numerous patched and cracked mortar joints at the west end.

There are stairstepping mortar cracks at the east end of the south side. All along the south side, there are mortar separations.

There is a foundation crack below the east window.

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The upper, middle, east pane of the east window appears to have an impact hole. The next window to the west has a cracked upper left pane. (Photo 65-643)

The upper right pane of the first window, west of the chimney, is taped over.

ID photographs of the west side of the chimney. (Photos 65-644 and 65-645)

ID photographs of the south and east sides of the chimney. (Photos 65-646 and 65-647)

The upper windows on the south side have no glass panes.
There is a slab of concrete on the south side of the barn. It is unfinished with apparently no expansion joints.

There is a concrete water trough at the west end of the concrete slab. ID photographs of the east and west sides of the trough. (Photos 65-648 thru 65-650)

There are several sli.ght cracks in the trough that range fron about 3/16 of an inch to a hairline in width. This trough is dry at this time.

The cracks and separations in the south wall of the tile hog barn range fran about $1 / 4$ of an inch to a hairline wide.

Now looking inside this barn.
From the inside, most of the cracks are visible that were seen from the outside. The floor is concrete, mostly covered with mud. The ceiling is unfinished.

Now moving to a tin sided machinery building with a concrete foundation. It is located south of this building.

## Hog and Machiner y Bar.n

This building is believed to have been built in 1962.
It has a concrete foundation and lacks a gutter system.
ID photograph of the north side. (Photo 65-651)
ID photograph of the west end. (Photo 65-652)

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There is a crack in the foundation near the northwest corner on the north side. It is about 4 inches long and about $1 / 32$ of an inch wide. (Photo 65-653)

Moving east along the north foundation. Between the two west windows, there is a vertical crack in the foundation. Sixteen and $1 / 2$ inches are visible and it is from about $1 / 16$ of an inch to a hairline wide. (Photo 65-654)

Continuing east to the lower right of the middle window, there is a vertical crack in the foundation. Eigth inches are visible and it is about $1 / 8$ of an inch wide. (Photo 65-655)

To the lower right of the second window from the east, there is a vertical crack in the foundation. Unable to measure. It looks to be about $1 / 18$ of an inch wide. (Photo 65-656)

ID photographs of the east end of the barn, including a small shed. (Photos 65-657 and 65-658)

The northeast part of this building is open to the hogs.
There is a crack in the concrete foundation below the east door. It is visible for about 4 and $1 / 2$ inches and from $1 / 16$ of an inch to a hairline wide. (Phot.o 65-659)

There is another crack at the left end of the doorway. It is visible for about 2 inches and is about $1 / 16$ of an inch wide. (Photo 65-660)

The barn has a dirt flloor and unfinished wooden walls. The ceiling has woven wire with feed sacks.

A view looking westward into this barn. (Photo 65-661)
ID photographs of the south side of the building. (Photos 65-662 and 65-663)

There is an area of concrete at the east of the building. It is extensively cracked with many weeds and grass growing through cracks. Cracks in this slab range fron about 1 inch to $1 / 4$ of an inch wide. (Photos 65-664 and 65-665)

The east side foundation cannot be seen.
Grain Bins
These three grain bins were built in 1972, 1974, and 1978.

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These grain bins are located west of the shop. ID photograph fron the southwest of the two north bins. (Photo 65-666)

ID photograph of the two north grain bins from the northeast. (Photo 65-667)

Now inspecting the east bin's circular concrete foundation.
Just west of the blower, there is a slight crack in the slab. About 12 and $1 / 2$ inches are visible along the top and edge and it is about $1 / 32$ of an inch wide. Much of the foundation cannot be seen due to grass and other materials. (Fhoto 65-668)

There grain bins are full or mostly full of grain at this time.
Now inspecting the circular foundation of the west bin. There is about a 10 and $1 / 2$ inch long crack at the west end of the slab. It is a slight crack that is about a hairline wide. Much of the slab cannot be seen due to the high grass. (Photo 65-669)

Another grain bin is located south of the two north bins. ID photograph of the south bin from the northwest. This bin is smaller than the other two. (Photo 65-670)

Inspecting the circular concrete foundation. There is a vertical crack just north of the west end. It is a hairline crack that measures about 15 and $1 / 2$ inches on the front edge and across the top. (Photo 65-671)

There is a crack in the slab near the auger at the northwest point. It runs vertically down behind some plywood. Eight and $1 / 2$ inches are visible on the top and it is about $1 / 32$ of an inch wide. (Photo 65-672)

Now on the east side. Just south of the east point, there is a hairline vertical crack on the outside and top edges. It measures about 16 and 1/2 inches combined. (Photo 65-673)

A few feet to the south, there is another slight crack. It measures about 10 inches along the top and edge and ranges fron about $1 / 32$ of an inch to a hairline wide. (Photo 65-674)

At the south end, there is another hairline crack that is about 6 and $1 / 2$ inches long and barely visible on the top edge. (Photo 65-675)

Now moving to a machine shed at the southwest part of the property. Maching Shed

This was built in 1975.

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ID photograph of the east side. (Photo 65-676)
Galvanized steel siding, open on the east end.

It is framed with steel I-beams and has a concrete foundation with a dirt floor.

Starting the inspection with the inside foundation.
Starting on the north wall, east end. A few feet from the east end, there is a slight hairline vertical crack in the foundation. It is about 4 and $1 / 2$ inches long. (Photo 65-677)

Below the switch box, on the north wall, there is a hairline vertical crack in the foundation. It is about 6 inches long. (Photo 65-678)

Below the next stud to the west, there is another vertical hairline crack that runs down to the fin just above the ground. It is about 7 and $3 / 4$ inches long. (Photo 65-679)

Just west of the middle, there is another vertical hairline crack in the foundation. It is about 9 and $1 / 4$ inches long. (Photo 65-680)

Near the west end of the north wall, there is a larger vertical crack that is about 12 inches long and $1 / 32$ of an inch wide. (Photo 65-681)

Sane of the west foundation is hidden by machinery.
There is a faint crack in the west foundation near the middle. It is hairline and is about. 15 inches long measured vertically and across the top edge. (Photo 65-682)

Moving south, there is a larger crack in the foundation at about the middle of the west side. It is visible for about 14 inches and is from about $1 / 16$ of an inch to a hairline in width. (Photo 65-683)

There is another crack in the foundation to the south, behind the round baler. About 10 inches are visible and it is about $1 / 32$ of an inch wide. (Photo 65-684)

Now on the south wall.
At about the middle, there is a hairline vertical crack. About 9 and 1/4 inches are visible along the top and side. (Photo 65-685)

About 5 feet to the east, there is another hairline vertical crack that is about 6 inches long. (Photo 65-686)

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Now back outside.
There is a hand pump well with a concrete cover located east of this shed. (Photo 65-687)

Looking inside this well. It is rock lined up to the top were it has sane brick lining. Water is visible about 2 or 3 feet below ground level.

ID photograph of the north side of the machine shed. (Photo 65-688)
There is a sidewalk along the north side. It is rough concrete without any expansion joints. It has a crack near the east end that measures about 36 and $1 / 2$ inches long and is fran about $3 / 16$ to $1 / 8$ of an inch in width. (Photo 65-689)

About 4 feet to the west, there is another crack. It is about 36 inches long and ranges fran about $3 / 16$ to $1 / 16$ of an inch wide. (Photo 65-690)

About 10 feet west, there is another crack. It is about 45 inches long and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 65-691)

About 10 feet to the west, there is another crack. It is about 27 and $1 / 2$ inches long and from $3 / 16$ to $1 / 8$ of an inch wide. (Photo 65-692)

There is a vertical crack in the foundation just west of that sidewalk crack. It is about 11 inches long and $1 / 16$ of an inch wide. (Photo 65-693)

At about the middle of the north side, there is a vertical foundation crack that is about 5 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 65-694)

A few feet to the west, there is another slight foundation crack that is about 6 inches long and $1 / 32$ of an inch wide. (Photo 65-695)

There is a crack near the northwest corner of the foundation. It is about 15 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 65-696)

The sidewalk is cracked at the northwest corner of the building. It is about 29 inches long and is cracked all the way through. It is about $5 / 8$ of an inch wide. (Photo 65-697)

ID photograph of the west side of the building. (Photo 65-698)
The north sidewalk has separated from the north side of the foundation by about an inch. (Photos 65-699 and 65-702)

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Now on the west side.
There is a crack in the sidewalk located about 8 feet from the north end and another one about 4 feet to the south. Both cracks go all the way through the slab. The widths are about $1 / 8$ of an inch average for the north one and 3/16 of an inch average for the south one. (Photo 65-700)

The sidewalk has also separated fron the west foundation from about 3/4 to $1 / 4$ of an inch. (Photo 65-701)

There is a slight crack in the west foundation located about 10 feet from the north end of the building. It is a vertical crack that is about 7 and $1 / 2$ inches long and $1 / 32$ of an inch wide. (Photo 65-703)

There is another foundation crack located about 2 feet north of the fence. It is about 8 inches long and $1 / 32$ of an inch wide. (Photo 65-704)

The gutter at the north end of the west side does not have any downspouts. There is a gutter lower on the west side, south of the fence.

There are several patched areas on the foundation below the gutter.
There is a vertical crack in the foundation at about the middle of this part, south of the fence. It is visible for about 14 inches behind the gutter, and is from about $1 / 32$ of an inch to a hairline in width. (Photo 65-705)

About 10 feet from the south end, there is a hairline vertical crack in the foundation. About 14 inches are visible. (Photo 65-706)

ID photograph of the south end of the building. (Photo 65-707)
Most of the south side foundation cannot be seen due to vegetation growth.

At the southwest corner of the building, the gutter empties into a downspout which is disconnected. The ground is very saturated here. (Photos 65-708 and 65-709)

Now moving to the new shop.
Shop - Exterior Inspection
This was built in 1986.

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ID photograph of the south side. (Photo 65-710)
ID photograph of the west side. (photo 65-711)
A downspout empties next to the foundatin on the west side. (Photo 65-712)

ID photograph of the north side from the northwest. (Photo 65-713)
Just north of the shop, there is an old machinery barn.
There is an area of concrete between the two buildings. (Photo 65-714)
ID photograph of the east side of the shop. (Photo 65-715)
A downspout empties to a concrete slab on the east side of the shop. Mrs. Steele indicated that they plan to put a water tank here shortly. (Photo 65-716)

Northwest of the shop, the concrete area has about three slight cracks that range from $1 / 16$ to $1 / 32$ of an inch wide. The north crack measures approximately 28 inches. The middle crack measures approximately 20 inches. The south crack measures approximately 20 and $1 / 2$ inches. (Photo 65-717)

On the west side of the shop, about 4 feet from the north end, there is a crack in the concrete. It is about 1/32 of an inch wide. (Photo 65-718)

Shop - Interior Inspection
Unfinished walls and ceiling.
Photograph of the south wall. (Photo 65-719)
Photograph of the north wall. (Photo 65-720)
Photograph of the east wall. (Photo 65-721)
Photograph of the west wall. (Photo 65-722)
The concrete floor has a joint that runs north-south at the west end of the floor. The east end of the floor has an inscription giving 1986 as the year of construction.

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There is a crack, trending east-west at about the middle of the east part of the floor. It measures about 8 feet 2 inches to the shelves on the east as far as we can see it. The width is from about $1 / 8$ of an inch to a hairline. (Photos 65-723 and 65-724)

At the south end of the floor, near the middle of the doorway, there is a north-south crack that runs about 25 inches to a joint. (Photo 65-725)

The shop floor appears to have been poured in four different sections. Along the joints there are slight cracks that are about $1 / 32$ of an inch wide.

Storage Barn
This was built in the 1930 's and is located just north of the shop.
ID photograph of the east side. (Photo 65-726)
ID photograph of the west side. (Photo 65-727)
ID photograph of the south side. (Photo 65-728)
ID photograph of the north side. (Photo 65-729)
This barn lacks a gutter system.
A couple of views int:o this barn. (Photos 65-730 and 65-731)
The barn has unfinished interior walls and ceiling and a dirt floor.
The area of concrete between this barn and the shop to the south has slight cracks near the north shop door. The cracks measure about 33 and 1/2 inches total length. (Photo 65-732)

Photographs 65-550 thru 65-707 are dated $11 / 14 / 86$, this date is incorrect and should be 11/15/86.

General Comments
This house was built around 1900 and has been added onto in the late 1950's and in 1975. It has been remodeled continuously since 1950.

The interior has several cracks, mainly at seams of the sheetrock walls and ceilings.

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Page 49

The foundation has numerous mortar cracks and separations as would be expected for a house of its age. The house has an incanplete gutter systen and the two downspouts empty close to the foundation.

There are several outbuildings on this property and each was found to have some degree of existing damage, mainly to the foundations and concrete floors. Dates of construction of the outbuildings are listed as given by Mr. and Mrs. Steele.

That completes the irspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 732 Photagraphs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE




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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic Information

1. Name of Resident: Herschel Vail
2. Date: October 20, 1986 Time: $1: 30 \mathrm{PM}$
3. Address: Box 1.66, Amoret, Missouri 64722
4. Location: On 52 Highway 700 feet west of Y Highway
5. Telephone Number: (816) 925-3257
6. Dates of occupancy by current resident: Since August 1977
7. Dates of any temporary or permanent abandonment: None
II. Information Concerning Buildings
(repeat for addic:ional buildings)
8. Date of original construction: 1977
9. Date(s) of major remodeling or additions:
(a) Put on canopy 1984
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Owner did not know.
(b) Interfor walls: Paneled.
(c) roof: Metal
(d) footings; foundarions: Setting on concrete blocks and tied to poured concrete pillars at ends.
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(f) basemenc Eloor (keyways, thickness): Not applicable
(g) name of person(s) who constructed building: Not applicable
(h) size and direction of any large windows: None
III. Enviromental Infomation
11. Approximate elevation of area: 840' feet at trailer.
12. Type of soll in area: silty clay loam
13. Type of subgrade drainage at base of foundation: None
14. Water wells utilized (Indicate depth*and use): None
15. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). None
16. Source of water, if not included above: City water
17. Eve troughs or any other exterior drainage features: None
18. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey
19. Cracks in interior walls:
20. Receding of doors, windors:
21. Noticeable settlement:
22. Foundation cracks:
23. Exterior wall cracks (brick veneer):
24. Sidewalks, steps, driveway pavement:
25. Basement leaks: Not applicable
V. Plan view of residence, well, outbuildings

Sketch attached.
VI. Elevation views or photographs of walls see photo survey

1. North
2. South
3. East
4. West
VII. Comments or supplementary drawings

Sketch attached
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of detertoration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to nomal blasting activities.

See summary narrative.

October 21, 1986
Report No. 87056-45
P\&M Map Photo No. 74

Subject: | Inspection of the Herschel Vail Residence |
| :--- |
| Box 166 |
| Amoret, Missouri 64722 |
| October 20, 1986 |

To: $\quad$| The Pittsburg and Midway Coal Mining Company |
| :--- |
| P. O. Box 8 |
| Amsterdam, Missouri 64723 |

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

The Herschel Vail property contains a trailer on the south end. Toward the northwest corner of the trailer, there is a garage and another building just to the north of that.

ID photograph of the south side of the trailer. (Photo 45-1)
According to Mr. Vail the trailer sits on concrete blocks. The ends are tied to concrete pillars.

The framing around the south side window closest to the porch has pulled away. (Photo 45-2)

There is a porch setting on a concrete slab. The porch is supported on the sides and center by wood beams. The wood beam on the west end is bowed. (Photo 45-3)

ID photograph of the porch. (Photo 45-4)
There is a north-south diagonalling crack across the porch. This crack has a length of 14 feet 8 inches with widths ranging from about 3 and $1 / 2$ inches down to $1 / 4$ of an inch. (Photos 45-5 thru 45-7)

The porch roof is composed primarily of two by sixes. There are nine four by four column supports. There is also no center column support on the east end.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
Report No. 87056-45
October 20, 1986
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The steps into the front entrance consist of plywood boards sitting on concrete blocks. (Photo 45-8)

ID photograph of the east side. (Photo 45-9)
ID photograph of the north side. (Photo 45-10)
There is a wooden porch on the north side. It is tilting to the north. The ground also slopes to the north. (Photo 45-11)

There is an area of patched deterioration above the door. Probably where water leakage was occurring. (Photo 45-12)

ID photograph of the west side. (Photo 45-13)
INTERIOR INSPECTION
Entered the trailer through the south entrance. Looking toward the living room which is at the east end.

Living Room
Carpeted floor.
Paneled walls.
Ceiling panels.
There is a cracked panel trim above the upper right of the window on the south wall. This measures 8 inches. (Photo 45-14)

There are warped pariels under the lower right corner of the window. (Photo 45-15)

This warping of the paneling occurs all the way to the floor.
There is discolored paneling under the window. It is also loose from the wall. (Photo 45-16)

In the southeast corner of the ceiling, there is a water stain. (Photo 45-17)

There is a small ce:iling stain at the east wall. (Photo 45-18)
There is a vertical section of paneling missing at the right side of the north window. This measured 18 and $1 / 2$ inches. (Photo 45-19)

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The Pittsburg and Midway Coal Mining Company
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Page 3

To the left of the window, still looking at the north wall, there is a large area of missing paneling. There is chipping and peeling off the wall. A measurement yields 4 and $1 / 2$ to 12 and $1 / 2$ inch widths. (Photo 45-20)

There is a ceiling stain above the area leading into the dining room. This is on the north wall. (Photo 45-21)

## Dining Room

The dining room is located to the west of the living room.
Vinyl floor.
Kitchen also has a vinyl floor with a lay down carpet. The floor in the kitchen sets at a slightly higher level than the dining room.

ID photograph back toward the east end of the trailer. (Photo 45-22)
ID photographs toward the west end. (Photos 45-23 and 45-24)
There is a hole in the kitchen ceiling with some old wiring visible. (Photo 45-25)

Looking at the west side of the kitchen.
The upper wall has pulled away from the cabinets and is bowing. (Photo 45-26)

Looking at the south wall.
The wall is stained and the ceiling is heavily bowed and stained over the sink. (Photos 4.5-27 and 45-28)

Now moving westward down a hall.
Hall
It has a throw down carpet. Paneled walls.
Ceiling panels.
The first room on the south side is a small bedroom.
Now moving into this small bedroom.

White Industrial Seismology, Inc.

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The Pittsburg and Midway Coal Mining Company
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Page 4
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## Bedroom

Carpeted floor.
Paneled walls and ceiling.
Looking at the south wall, there is a large area of missing paneling under the window. (Photo 45-29)

There is also an area of the wall that is not paneled at the northeast corner. (Photos 45-30 thru 45-32)

There is a large area of water damage on the ceiling, and the ceiling is bowed. (Photo 45-33)

The water damage extends to the light bulb. It measures 21 inches eastwest and 20 inches north-south to the light bulb.

Next room on the south side is a bathroom.

## Bathroom

Carpeted floor.
Paneled walls except around the west and south walls.
The west wall has some wallpaper on it.
ID photograph in from the door. (Photo 45-34)
The ceiling bows, and there is water stainage above the bathtub. (Photo 45-35)

There is water stainage in the ceiling above a partition between the toilet and the sink. (Photo 45-36)

ID photographs of the condition of the tub and shower area. (Photos 45-37 and 45-38)

There is a bedroom at the far west end.
Bedroom
Carpeted floor.
Paneled walls.
Paneling type ceiling.
Looking at the ceiling, there are ceiling stains and a crack in a panel, and the panel is bowing. This is toward the southeast corner of the room. (Photo 45-39)

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White Industrial Seismology, Inc.
The Pittsburg and Miclway Coal Mining Company
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The ceiling stain measures 23 inches at maximum width and 8 inches from east to west.

ID photograph toward the southwest corner. (Photo 45-40)
ID photograph back toward the southeast corner. (Photo 45-41)
ID photograph toward the northeast corner. (Photo 45-42)
There is a hole in the north wall where the door handle has impacted the wall. (Photo 45-43)

This measures 4 and $L / 2$ by 3 and $3 / 4$ inches.

Back into the hall again. There is a large hole in the bathroom door. This measures 17 inches. (Photo 45-44)

There is also another hole in the paneling to the right of the doorway into the bathroom. It measures $3 / 4$ of an inch by 1 and $1 / 4$ inch. (Photo 45-45)

At the upper left corner of the doorway to the outside, there is some missing trim and broken paneling. This measures about 9 and $1 / 2$ inches in length. (Photo 45-46)

There is also chipped and missing paneling at the right side of the door. It extends all the way down to the floor. It ranges from a width of $3 / 4$ of an inch toward the ceiling to 4 inches toward the floor. (Photos 45-47 and 45-48)

We will now be starting on the garage.
Garage
ID photograph of the south wall. (Photo 45-49)
There is a walk that extends from underneath the porch to the entrance into this garage.

The south window is heavily cracked. (Photo 45-50)
ID photograph of the east side. (Photo 45-51)
At the southeast corner, there is a separation between the framing. The width of this separation is $1 / 4$ of an inch. (Photo 45-52)

There is a square opening in the east side. This opening measures 8 and $1 / 2$ inches high by $\&$ inches across. (Photo 45-53)

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The Pittsburg and Midway Coal Mining Company
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There are two windows on this side. The northernmost of these is heavily cracked and there is a horizontal crack across the southern one. (Photos 45-54 and 45-55)

The concrete block foundation is visible toward the northeast corner.
There is a diagonal hairline crack in the foundation 9 and $1 / 2$ inches long. (Photo 45-56)

Now looking at the north side. (Photo 45-57)
There is a diagonal crack in the foundation approximately 9 feet from the east corner of the north side. This crack widens toward the top of the foundation. It is 6 and $1 / 4$ inches long and $1 / 4$ of an inch to $1 / 16$ of an inch in width. (Photo 45-58)

There are a pair of parallel cracks toward the western third of the wall. These are 4 inches long with widths of $1 / 4$ an inch and $1 / 8$ of an inch. (Photo 45-59)

Still on the north side at the west end.
There is a vertical crack in the foundation. The crack size is 7 and $1 / 2$ inches long. The width is $1 / 8$ to $3 / 8$ of an inch. (Photo 45-60)

ID photograph of the west side. (Photo 45-61)
There is a driveway in front of the entrance to the garage.
There is a north-south crack with extensions. It has a maximum width of $1 / 2$ inch and a length of about 8 feet. (Photo 45-62)

There is also heavy cracking at the west end of the driveway. (Photo 45-63)

There are three major cracks inside the garage on the floor. These intersect about the center of the floor.

One of these cracks extends from about the middle of the east wall to about the center of the floor. Length of 14 feet 3 inches and the width ranges from $1 / 2$ inch to $l$ and $l / 2$ inches. (Photo 45-64)

Extending off from this major crack is a north-south crack that extends over to the north wall. It measures 7 feet 6 inches in length. (Photo 45-65)

There is a finer crack off this to the south. It is 5 feet in length. Maximum width of $5 / 8$ of an inch. (Photo 45-66)

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The Pittsburg and Midway Coal Mining Company
Report No. 87056-45
October 20, 1986
Page 7

Another major crack in the floor extends from the center over to the north wall. This measures 10 feet 2 inches in length and has a width of 1 and $1 / 4$ to about $1 / 2$ inch. (Photo 45-67)

The third major floor crack extends from the center of the floor over toward the southwest corner. Before it gets there it Y's off in the west direction and in the south direction. First we will measure from the center of the floor to the first break. This length is 6 feet. The width is 3 inches at the widest point to a width of $1 / 2$ inch to $5 / 8$ of an inch. (Photo 45-68)

The crack that veers off to the south from the $Y$ measures 6 feet long with widths ranging from $l$ and $l / 2$ to $1 / 8$ of inch. (Photo 45-69)

The crack that vears off to the west has a length of 8 feet with widths ranging from 1 and 1,2 to 1 and $3 / 4$ inches down to about $1 / 2$ an inch. (Photo 45-70)

There is deterioration of the concrete toward the west end. (Photo 45-71)

There is an east-west crack across the entrance to the garage with a length of 17 inches and a width of $5 / 8$ of an inch. (Photo 45-72)

General views of the inside of the garage. (Photos 45-73 thru 45-75)
Small Garage
The third structure is a small garage with an attached room at the north end.

ID of the west side. (Photo 45-76)
ID photograph of the south side. (Photo 45-77)
ID photograph of the east side. (Photo 45-78)
ID of the north side. (Photo 45-79)
The foundation can be seen on the north side of the garage. (Photo 45-80)

There is a diagonal hairline crack in the foundation. It has a length of 9 and $1 / 2$ inches. (Photo 45-81)

The interior of the garage has a dirt floor with wood walls. (Photos 45-82 and 45-83)

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The attached room has a layed down carpet on the floor.
Looking at the north wall, there is a horizontal hairline crack at the upper left corner of the window. It measures about 17 inches long. (Photo 45-84)

There is a horizontal wall separation at the right side of the window. It measures 21 inches in length. (Photo 45-85)

ID photograph of the north wall. (Photo 45-86)
ID photograph back toward the east wall. (Photo 45-87)
ID photograph of the south wall. (Photo 45-88)
ID photograph of the west wall. (Photo 45-89)
General Comments
The land around the Vail trailer generally slopes to the northwest. There are no drainage structures around the trailer. The wood porch on the south side may be expected to increasingly deteriorate with time. The west center support is severely bowed and there is no east center support. In time these conditions could force the porch roof to lean to the southeast. The wood porch on the north side has also deteriorated and is leaning to the north.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

## RMW/mp

Enclosure: 89 Photographs

PH. (41'7) 624-0164

November 7, 1986
Report No. 87056-45
P \& M Map Photo No. 74

Subject: \begin{tabular}{l}
Supplement to Inspection of the Herschel Vail Residence <br>
Box l66 <br>
Amoret, Missouri 64722 <br>
November 4,1986

 To: $\quad$

The Pittsburg and Midway Coal Mining Company <br>
<br>
<br>
<br>
<br>
A. O. Box 8
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Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.
General Comments
We were able to remove the skirting on the south and north sides of the trailer. According to Mr. Vail, the steel runners are supported by concrete blocks. It. was difficult to see under the trailer because of the amount of dirt and debris. However, we were able to take photographs of the area behind the south skirting access panel (Photos 45-90S thru 45-92S) and the area behind the north skirting aces panel. (Photos $45-93 S$ thru $45-97 \mathrm{~S}$ ) It appears from these photographs that some of the concrete block supports may be missing in areas.

Referring to page 6 of the initial report, the statement for photo 45-57 should read, "Now looking at the north side. There is a cracked window pane. (Photo 45-57)."

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

## RMW/mp

Enclosure: 8 Photographs

SKETCH OF STRUCTURE AND
SUMMARY FORM



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## $45-51$



## $45-49$







PRE-BLAST SURVEY, RESIDENTIAL
I. Basic Information

1. Name of Resident: Amoret Presbyterian Church
2. Date: October 25, 1986_Tine:_ 9:30AM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: 315 feet west of Broadway 980 feet south of 52 Highway
5. Telephone Number: None
6. Dates of occupancy by current resident:Not applicable
7. Dates of any temporary or permanent abandonnent:_None
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: 1880's
9. Date(s) of major remodeling or addicions:
(a) ceiling panels in 1950's
(b) side rocms by Pulpit in 1950 's
(c)
10. Construction of building:
(a) Eraning (joists, rafters, and stud walls): 2 "x6" stud walls
(b) interfor walls :sheetrock

2"x4" rafters, floor joists 2"x6"
(c) roof: Gable type, shingled
(d) footings; Eoundacions: Concrete block foundation
(e) basement walls (indicate how keyed to footing of floor): Could not see
(f) basement floor (keyways, thickness): Could not see
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: Stained glass
III. Envirommental Information

1. Approximate elevation of area:

865 feet at structure
2. Type of soll in area: silty clay loam
3. Type of subgrade drainage at base of foundatlon: None
4. Water wells utilized (Indicate depth"and use): None
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None
6. Source of water, if not included above: None
7. Eve troughs or any other exterior drainage features: None
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of coors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
9. South
10. East
11. West
VII. Comments or supplementary drawings

See sketch
VIII. Discussion or specific comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

## White- Industrial Seismology, Inc. <br> 2431 RANGELINE SUITE A-B <br> P.O. BOX 1256 <br> JOPLIN, MO 64802-1256 <br> PH. (417) 624-0164

October 28, 1986
Report No. 87056-10
P \& M Map Photo No. 14

Subject: Inspection of the Amoret Presbyterian Church Route 1
Amoret, Missouri 64722
October 25, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdara, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edi.ted from taped field notes.

INTERIOR INSPECTION
Entrance
Wood floor.
Sheetrock walls.
Wood ceiling.
On the west wall of the entrance, the paint is scarred and chipped, especially in the corners.

ID photographs of the west wall of the entrance. (Photos $10-1$ thru 10-5)

ID photographs of the rest of this area. (Photos 10-6 thru 10-11)
Sanctuary
ID photographs. (Photos 10-12 thru 10-19)
Start the inspection on the west wall.
There is a vertical crack behind a noteboard. This crack extends from the trim of the ceiling to the trim at the lower quarter of the wall. The distance from the ceiling trim to the lower floor trim is nine feet eight inches. This crack has a maximum width of $1 / 32$ of an inch. (Photos 10-20 thru 10-22)

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There is a horizontal hairline crack about four feet from the ceiling. It extends from the northwest corner across the wall and intersects two parallel and vertical cracks above the right corner of the door.
(Photos 10-23 thru 10-26)
At the upper right corner of the double doors, there are three parallel hairline cracks. The far right one extends to the ceiling. The middle one extends to the ceiling, and the one on the left extends 29 inches. (Photos 10-27 thru 10-29)

There is a hairline crack in the wall that extends from the ceiling down close to the top of the door. (Photo 10-30)

Looking to the left of the door, there is a horizontal hairline crack in the wall from the upper left of the door to the right side of the northernmost windo'w. This measures 7 feet 8 inches long. (Photo 10-31)

There is a vertical crack in the wall that extends down, turns horizontally for a couple of feet, and then extends back down vertically and diagonals over to the right side of the northernmost window.
(Photos 10-32 and 10-33)
There is a cracked pane in the lower left corner of the window. (Photo 10-34)

There is a slight tape seam separation at the upper right corner of the southernmost window. (Photo 10-35)

There is a vertical trending hairline crack above this window. (Photo 10-36)

To the left of this window, about 29 inches, there is a vertical hairline crack from the ceiling to the lower trim. (Photos 10-37 and 10-38)

Toward the southwest corner, there is a small curved crack in the wall. (Photo 10-39)

Now looking at the south wall.
There is a horizontal seam separation from the southwest corner to the southeast corner. (Photos 10-40 thru 10-43)

There are three adjacent windows on this wall. There is a vertical crack at the upper right corner of the westernmost window. (Photo 10-44)

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There is a crack in an upper pane of the easternmost window. (Photo 10-45)

There is a vertical hairline crack at the upper left of this window. (Photo 10-46)

The lower trim is separated at the southeast corner. This separation has a maximum width of $1 / 8$ of an inch. (Photo 10-47)

Now looking at the east wall, there is a horizontal hairline crack at the upper right corner of the door into the southeast room. (Photo 10-48)

The door trim is also separated at the two upper corners. (Photos 10-49 and $10-50$ )

To the left of the door there are a couple of minor wall seam separations. (Photos 10-51 and 10-52)

Also note at this point that the door sits unevenly with the floor. The floor slopes to the northeast. The door will not shut. (Photo 10-53)

We are now in the pulpit area looking at the south wall.
There are some tape seams visible. (Photo 10-54)
The east wall of the pulpit has a large number of craze cracks in the wall. (Photos 10-55 thru 10-69)

Now looking at the north wall. Toward the east side there is a vertical crack in the wall from the lower trim to the ceiling. The width is $1 / 4$ of an inch maximum. (Photos $10-70$ thru 10-72)

There is a horizontal tape seam separation from the east end to the west end. (Photos 10-73 thru 10-75)

There are three adjacent windows on the north wall.
There is a vertical hairline crack from the top of the easternmost window to the ceiling. (Photo 10-76)

There is a vertical hairline crack at the top of the westernmost window. (Photo 10-77)

There is also a diagonal-vertical crack at the upper left side. (Photo 10-78)

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There is a horizontal crack at the left side of the westernmost window extending to a vertical crack in the wall. This measures 45 inches. (Photo 10-79)

There is a cracked pane in the center window and two cracked panes in the westernmost window. (Photos 10-80 and 10-81)

Photographs of a vertical hairline crack in the wall 44 inches to the left of the westernmost window. (Photos 10-82 thru 10-84)

There is also a vertical hairline crack in the wall toward the northwest corner. It extends behind a bookcase. (Photos 10-85 and 10-86)

Now looking at the ceiling.
There are two ceiling panels loose at the northwest corner. (Photo 10-87)

Just out from the west wall, there are a couple of ceiling panels that are slightly loose. (Photo 10-88)

There is an area of water stainage toward the pulpit. (Photo 10-89)
Looking toward the northeast corner, there is water stainage evident and loose ceiling panels. (Photos $10-90$ and 10-91)

Also note that the north door on the east wall is not level with the floor. The floor slopes to the southwest. (Photo 10-92)

There is a ceiling stain at the east end of the pulpit. (Photos 10-93 and 10-94)

There is ceiling staining and ceiling damage at the southeast corner. (Photo 10-95)

It appears that the pulpit area has settled to the center causing the doors on either side to jam.

Southeast Room
There is wall and ceiling damage at the southwest corner. (Photos 10-96 thru 10-100)

There are three adjacent windows on the south wall.
There is a vertical crack above the center window. (Photo 10-101)
There are also three ceiling panels that are loose. (Photo 10-102)

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The wall area to the left of the window is heavly cracked with extremely fine craze cracks. These are too fine to document with photographs.

There is a separation between the frame and the window at the westernmost window. (Photo 10-103)

There is also a crack in one of the lower panes. (Photo 10-104)
ID photographs of the south wall. (Photos 10-105 thru 10-107)
Now looking at the east wall. It is cracked with many extremely fine crisscrossing hairline cracks. We will attempt some photographs of these. (Photos 10-108 thru 10-123)

Photograph of a small ceiling stain above the east wall. (Photo 10-124)
Now looking at the north wall. (Photos 10-125 thru 10-127)
There are some tape seams that look like they have been painted over at the door.

There are a couple of loose ceiling panels. (Photo 10-128)
Now looking at the west wall.
ID photographs of the west wall area. (Photos 10-129 thru 10-131)
The floor slopes to the north toward the pulpit.
Northeast Room
The floor slopes toward the pulpit which is to the south.
We have noticed that the walls that have the fine hairline cracks throughout, are walls that are opposite to the slope of the floor. The interior walls to the slope do not exhibit the same cracking nature.

ID photographs of the south wall. (Photos 10-132 and 10-133)
There are loose and water damaged ceiling tiles at the southwest corner. (Photo 10-134)

Now looking at the east wall. There are two adjacent windows. There is a stairstepping crack at the top of the northernmost window that extends to the ceiling. (Photo 10-135)

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The wall area to the left of the windows is heavily cracked with very fine hairline craze cracks. These are generally vertical and horizontal intersecting cracks. These are very difficult to photograph because they are fine and the wall is a dull color. (Photos 10-136 thru 10-148)

Same type of cracking is evident on the north wall. The wall is covered with extremely fine hairline vertical and horizontal craze cracks. (Photos 10-149 thru 10-165)

ID photographs of the west wall. There are a couple of noticeable tape seams above the corner of the doors and one tape seam across the wall toward the southwest corner. (Photos 10-166 and 10-167)

Looking back on the north wall, there is a crack in a pane of the easternmost window. (Photo 10-168)

Stairway and Basement
There is a stairway that leads down into the basement. (Photos 10-169 and 10-170)

There is a separation in the east wall. This measures 22 inches in total length. The width of the missing wall covering is 4 inches. (Photo 10-171)

Under the window, there is a large deformation of the wall. This measured 22 inches long and 3 inches wide at the widest separation. (Photo 10-172)

Now looking at the south wall of the stairway.
It is heavily chipped and cracked. (Photos 10-173 thru 10-175)
Now entered into the first room off the stairway.
The east wall has a wood covering.
There is a diagonal separation of the covering. (Photo 10-176)
ID photograph of the east wall. (Photo 10-177)
ID photograph of the north wall. (Photo 10-178)
North wall is heavily cracked and chipped. This can be seen from the ID photograph.

ID photographs of the west wall. (Photos 10-179 and 10-180)

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ID photograph of the south wall. (Photo 10-181)
The poured concrete floor is jointed. There is water on the floor. The sump pump is operating and in various sections of the basement there is quite a lot of water on the floor.

The walls are extensively chipped and scarred as can be noted in the ID photographs of this room.

The wood at the lower part of the wall is heavily cracked at the southwest corner. We can see the underlying brick. (Photos 10-182 and 10-183)

We have now moved westward out of this room into a large room. This is at the west side of the basement.

There is water standing in the floor between these two rooms. (Photo 10-184)

ID photograph showing the sump pump in the southwest corner. (Photo 10-185)

ID photographs showing the general condition of the walls. (Photos 10-186 thru 10-191)

These walls are extremely scarred and chipped as can be seen from the ID photographs. unce again, there is water standing in this room at this time.

ID photographs showing the floor condition. (Photos 10-192 thru 10-199)
Nearly all the doors are warped.
The ceiling has modern ceiling light fixtures and panels. There are a couple of spots on the ceiling where the fixtures are bent or missing. (Photos 10-200 and 10-201)

Detailed photographs of the west wall. (Photos 10-202 thru 10-205)
Detailed photographs of the south wall. (Photos 10-206 thru 10-208)
Detailed photographs of the east wall. (Photos 10-209 thru 10-214)
Detailed photographs of the north wall. (Photos 10-215 thru 10-217)
The walls and wall covering are cracked and spalled in many areas.
We will now move to the room at the southeast corner of the basement.

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This room has a slight southeast slope. All of the water in the floor is concentrated in the south and east areas.

ID photographs showing the amount of water standing in the room.
(Photos 10-218 and 10-219)
ID photographs of the room. (Photos 10-220 thru 10-231)
The lower section of the door on the west wall has water damage. (Photo 10-232)

At the northwest corner of the basement, there are a set of stairs to the outside. There is some concrete block visible in this area. The ceiling is in poor condition. (Photos 10-233 thru 10-238)

EXTERIOR INSPECTION
ID photograph of the west side. (Photo 10-239)
Photographs of the steps and walk which are heavily cracked. (Photos 10-240 thru 10-242)

Looking at the front steps at the south side. There is a large area of missing concrete in the corner. (Photos 10-243 and 10-244)

Also took a shot showing the north side of the steps. There are a couple of large mortar separations measuring about $1 / 2$ inch in width. (Photos 10-245 and 10-246)

Additional photographs of the walk. (Photos 10-247 thru 10-249)
Photograph of the entrance steps. (Photo 10-250)
Now starting on the foundation at the west side of the church. Looking on the south side of the entrance. The width of the corner separation is $5 / 8$ of an inch. (Photos 10-251 and 10-252)

To the right of the northernmost boarded up window, there is a stairstepping mortar crack. This crack has a vertical length of 30 inches. The width of this crack ranges from $1 / 8$ of an inch to a hairline. (Photo 10-253)

There is also a stairstepping mortar crack at the right side of the center boarded up window. The length of this crack is 26 inches. This crack has a width of $1 / 16$ of an inch to a hairline. (Photo 10-254)

ID photographs of the west foundation. (Photos 10-255 and 10-256)

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ID photographs of the bell tower. (Photos 10-257 thru 10-259)
At the southwest corner of the church, there is an outbuilding. (Photo 10-260)

ID photograph of the interior. (Photo 10-261)
ID photographs of the south side of the church. (Photos 10-262 and 10-263)

ID photographs of the chimney. (Photos 10-264 and 10-265)
The chimney appears to be in fair condition. The transverse bracing was probably attached to help prevent responsive movement.

The ground is heavily saturated in this area. It has been raining quite heavily. The ground on this side slopes to the southeast.

The sump pump is draining at this time. The drainage from the sump pump is to the southeast. (Photos 10-266, 10-271 and 10-272)

Now starting on the foundation inspection.
There is a stairstepping mortar and block crack at the west end of the south foundation. Measures 32 inches long and has a width ranging from $1 / 4$ of an inch to a hairline. (Photo 10-267)

There is a north-south crack in the concrete ledge at the second window from the south side. Measures 7 and $1 / 2$ inches along the ledge. The width of this crack is $1 / 4$ of an inch. (Photo $10-268$ )

There is a roughly vertical mortar and block crack to the right of the second window from the west end. The length is 39 inches. The width of this crack including the spalling ranges from $1 / 4$ of an inch to a hairline. (Photo 10-269)

There is also a vertical mortar and block crack a few feet on east. This crack has a length of 39 inches and a width of $1 / 4$ of an inch. There is a large amount of spalling at the lower section. (Photo 10-270)

There is a hairline mortar crack about 3 blocks to the west of the easternmost window. It has a length of 20 inches. (Photo 10-273)

To the right of the easternmost window, there is a stairstepping mortar separation and a vertical crack in the foundation. This measures 39 inches in vertical length. (Photo 10-274)

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The width of the mortar separation ranges from $5 / 8$ of an inch to a hairline.

There is a hairline stairstepping mortar crack at the east end of the south wall. It has a vertical length of 39 inches. (Photo 10-275)

ID photograph of the east side. (Photo 10-276)
There is a hairline mortar crack to the left of the third window from the south end. The vertical length of this crack is 15 inches. (Photo 10-277)

There is a hairline mortar crack stairstepping through a block to the right of this window. Has a vertical measure of 23 inches. (Photo 10-278)

There is foundation cracking at the north end of the east side. It measures a vertical distance of 33 inches. The width of the crack is $1 / 8$ of an inch. The width of the spalled area is 2 and $1 / 2$ inches. (Photo 10-279)

There are areas along this side where the siding is chipped. (Photos 10-280 thru 10-283)

ID photograph of the north side. (Photo 10-284)
At the east end, there are a pair of parallel stairstepping mortar cracks. They measure 33 inches in length vertically. The widths range from possibly $1 / 16$ of an inch down to a hairline. (Photo 10-285)

Between the first and second window from the east end, there is a vertical foundation crack. Measures 33 inches in length. (Photo 10-286)

Just to the right of this there is a larger foundation crack. It measures 40 inches in length. Has a width of $1 / 8$ of an inch to $1 / 4$ of an inch. (Photo 10-287)

There is a large mortar separation toward the west end. Measures 8 inches long and has a width of $3 / 4$ of an inch. (Photo 10-288)

To the right of this there is another foundation crack. It measures 30 inches in length. Has a width of $1 / 16$ of an inch. (Photo l0-289)

Also noticeable on this side, some of the interior trim on the windows is slightly separated. (Photos 10-290 and 10-291)

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Another photograph of the bell tower. (Photo 10-292)
General Comments
The Amoret Presbyterian church is located in the southwest section of Amoret at an approximate elevation of 865 feet. The water drainage around the building is extremely poor. The church is probably over 100 years old and the foundation is in bad condition. The basement was heavily water damaged and there was water on the floor, possibly 1 to 2 inches deep near the northeast corner of the basement.

The ceilings of the sanctuary and side rooms were also water damaged. It appeared that the pulpit area had settled somewhat since the side room doors would not shut completely. Also there were craze cracks on the south and east walls of the southeast room, the east wall of the pulpit area and the north and east walls of the northeast room. The interior walls exhibited strain cracks over nearly all the doors and windows.

Continued water damage to the basement and foundtion can be expected to occur unless proper measures are taken to drain water away from the foundation and extensive foundation repair is undertaken. Continued damage to the foundation by hydraulic and settlement effects will in turn enhance cracks in the interior walls.

That completes the inspection of this property.


RMW/mp
Enclosure: 292 Photographs

1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 14

2- SUMMARY FORM
3- SKETCH OF STRUCTURE



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T. Bastc Infomation

1. Hame of Resldent: Mr. and Mrs. Truman Bitner
2. Date: May 6, 1987 TLue: 10:00AM
3. Adcress: Route I, Amoret, Missouri 64722
4. Locacion: Nortliwest of Amoret
5. Telephone Number: (816) 225-3443
6. Dates of occupancy by current resldent: 1966-Present
7. Dates of any bempotaty or permanent abandomment: $\qquad$
II. Information Concernlug Bulidiags
(repeat Eor adultional bulluligs)
8. Date of orighal coustruction: Unknown
9. Date(s) of major remodeling or addltions:
(a) Bathroom 1956
(b) Enclosed Porch 1982
(c) Patio and RDof 1982
10. Construction of building:
(a) Eraming (Jolsts, rafters, and stud walls): Stud walls: 2"x4" Joists: 2"xl0"
(b) Luterlor walls: Plaster. Rafters: 2"x4"
(c) roof: Shingled.
(d) Eootings; Eoundations: Concrete block foundation.
(e) basement walls (Lndicate how keyed to Eooting of floor): None.
(E) basement Eloor (keyways, chickness): None.
(g) name of persen(s) who constructed building: Unknown.
(h) size and direction of any large windows: None.

ITI, Enviromuental InEomation

1. Approximate elevation ol area:

870 feet approximately.
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation: None.
4. Water wells utillzed (Lndicate depth"and use): 15 - 16 feet deep. Main water supply.
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volume). None.
6. Source of water, Lf not Lncluded above:
7. Eve troughs or any other exterfor dralmage Eeatures: None.
8. Description of general grading or landscaplag La vicinity: Generally level.
IV. Any notable exlsting deterioration or damage See photo survey.

1. Cracks in interlor walls:
2. Recedlng of doors " WLadu'vs:
3. Noticeable settlenant:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch.
VI. Elevation views or photographs of walls see photo survey.
8. Narch
2.0. South
9. East
10. West
VII. Comments or supplementary drawlags See sketch
VIII. Discugsion or specific counents concerning any unusual Eearures, construction techaques, or status of deterforation, that, because of the nature of ched.r construction, materials of which they are constructed, status of deterioration, may extibit an unusual response co nommal blasting activities.

## SUBJECT: INSPECTION OF THE 'IRUMAN BITNER RESIDENCE ROUTE 1 AMORET, MISSOURI 64722 MAY 6, 1987

TO: THE PITTSBURG AND MIDWAY COAL MINING COMPANY P. O. BOX 8 AMSTERDAM, MISSOURI 64723

## Attention: Mr. Mark Premo

BY: WHITE INDUSTRIAL SEISMOLOGY, INC. 2431 RANGELINE ROAD, SUITE A/B
P. O. BOX 1256

JOPLIN, MISSOURI 64801

# White Industrial Seismology, Inc. 

May 7, 1987
Report No. 87056-107

Subject: Inspection of the Truman Bitner Residence Route 1
Amoret, Missouri 64722
May 6, 1987
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION

ID photograph of the north side of the residence. The exterior siding is missing around the living room window. (Photo 107-1)

The structure rests on a concrete block foundation.
The west porch is concrete.
There is spalling on the north side of the porch. (Photo 107-2)
There are minor separations in the concrete block mortar throughout the north foundation. (Photos 107-3 thru 107-9)

The width of the mortar separation to the west of the telephone lines is about $1 / 8$ of an inch. (Photo 107-6)

There is a significant stairstepping mortar separation at the east end of the north foundation. This separation has a maximum width of about $3 / 16$ of an inch. (Photo 107-9)

The blocks are shifited to the north about $1 / 4$ of an inch. (Photo 107-10)

Looking at the east set of four pane windows, there is a vertical crack along the west side of the upper west pane. (Photo 107-11)

Looking at the windows on the north side of the porch, there is a diagonal crack in the upper left pane. (Photo 107-12)

The Pittsburg and Midway Coal Mining Company
Report No. 87056-107
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Page 2

There is old concrete on the north that may have been part of a porch or set of steps into the residence. It is heavily deteriorated. (Photo 107-13)

ID photograph of the east side of the residence. There is no guttering on this side. (Photo 107-14)

The stairstepping separation at the east end of the north side continues on the north end of the east side. Once again, the blocks are shifted about $1 / 4$ of an inch. (Photo 107-15)

There are many hairline and slightly larger separations throughout the concrete block mortar on the east foundation. (Photos 107-16 thru 107-22)

There is a significant stairstepping mortar separation to the south of the southernmost crawl space entrance. It is $1 / 16$ of an inch in width. (Photo 107-21)

There are two very snall crawl space entrances on the east side.
The dirt and gravel floor appears to be wet. We can see water standing on the ground.

There is loose siding underneath the southernmost window on the east side. (Photo 107-23)

ID photograph of the south side of the residence. There is no guttering on the porch. (Photo 107-24)

The south porch is supported by railroad ties. There is one center support on the east side, five supports on the south side, and no support on the west side.

The steps have settled and are heavily spalled. (Photo 107-25)
We note minor hairline mortar separations in the south block foundation. Some of the foundation is obscured by materials underneath the porch. (Photos 107-26 thru 107-29)

The width of the stairstepping mortar separation toward the west end of the south side is about $1 / 8$ to $1 / 16$ of an inch. (Photo 107-29)

The ground is very soft underneath the porch and around the supports.
The trim is missing under the second window from the east end. There is clothing material packed into the gap. (Photo 107-30)

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There is a well at the east end of the south side. Mr. and Mrs. Bitner stated that they do not use this well and the pump does not operate. (Photos 107-31 and 107-32)

There is a tin storage structure at the southeast corner of the residence. This structure is partially rusted on the roof and around the sides. (Photos 107-33 thru 107-35)

While changing film rolls the camera dater inadvertently became set on $5 / 12 / 87$. The correct date is $5 / 6 / 87$.

The interior of the metal structure is filled with various materials. (Photo 107-36)

A small storage room at the north end of the structure has a concrete floor that is spalled and cracked. (Photos 107-37 and 107-38)

This small roon contains many materials. (Photo 107-39)
ID photograph of the west side of the residence. There is no guttering on this side. (Photo 107-40)

There is a small rock step at the south end of the porch. (Photos $107-41$ and 107-42)

The porch roof is supported by four metal column supports and framing around the porch steps on the north end.

There appear to be three expansion joints in the slab. There is a separation in the joint mortar between the southernmost slabs. (Photos 107-43 thru 107-45)

There is also a separation along the next joint to the north. This is about $1 / 8$ of an inch in width. (Photos 107-46 thru 107-48)

There is also a separation along the north joint. (Photos 107-49 thru 107-51)

There is a diagonal crack off this joint through an adjacent slab. (Photo 107-50)

There is cracking of the concrete in front of the steps. The cracking measures about $1 / 16$ to $1 / 8$ of an inch in width. (Photo 107-52)

There is a separation between the concrete walk and the large porch slab. This is about $1 / 8$ of an inch average in width. (Photos 107-53 and 107-54)

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Part of the residence foundation is obscured by boards and other materials along the side of the house. (Photos 107-55 and 107-56)

There is a minor separation between the concrete porch base and the residence foundatiors of about $1 / 8$ of an inch.

INTERIOR INSPECTION

## Living Room

The north wall of this area is paneled. (Photos 107-57 and 107-58)
The interior walls are plaster.
Some of the wall material is wallpaper. In places it is scarred and missing.

Mr. and Mrs. Bitner stated that they are going to panel the living room walls. Sane of the walls are wallpapered. They are also going to install ceiling tiles.

The floor is carpeted.
There are area rugs at the north end.
The trim is missing around the north window.
Now looking at the east wall.
There is a vertically trending hairline crack at the upper left corner of the entrance into the hall. This is about 7 and $1 / 4$ inches in length. (Photo 107-59)

There is also a hairline vertical crack at the upper right corner of the hall entrance. It is about 8 and $1 / 2$ inches in length. (Photo 107-60)

At the upper left corner of some shelving, there is a vertically trending paper crack. This measured about 11 and $1 / 4$ inches in length. ( Photo 107-61)

About a foot to the right, there is bulging in the wall paper. (Photo 107-62)

There is a hairline paper crack in the border, near the upper right corner of the shelving. The border is 2 inches wide. (Photo 107-63)

Now looking at the south wall.

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There is a diagonally trending crack at the upper left corner of the entrance into the dining roam. This extends to the ceiling. (Photo 107-64)

There are hairline cracks in the paper border to the left. (Photo 107-65)

There are roughly parallel diagonal cracks near the upper right corner of the dining room entrance. A small amount of the wallpaper is missing here.

The crack above the door extends about 15 inches. The one to the right of the door extends about 13 and $1 / 2$ inches. (Photos 107-66 and 107-67)

Now looking at the west wall. Toward the south end, there is a large area of paper stains. (Photos 107-68 thru 107-70)

At the upper left corner of the window, there is a hairline vertical crack extending from the window trim to the ceiling. (Photo 107-71)

There is a hairline crack to the north of this, a couple of feet. It also extends from the ceiling to the window trim. (Photo 107-72)

There ace parallel stains above the window. (Photo 107-73)
There is a vertical hairline crack in the wall about a foot to the right of these stains. (Photo 107-74)

There is a separation of the paper border about a foot more to the right. (Photo 107-75)

There are paper stains at the upper right corner of the window. (Photo 107-76)

There is also a diagonal crack and numerous fine cracks at the upper right corner of this window. (Photo 107-76)

There is a hairline diagonal crack from the lower right corner of the window extending upward behind a painting over to the north edge of the door. (Photos 107-77 thru 107-79)

There is also a diagonal hairline crack at the lower left corner of this window. (Photo 107-80)

ID photographs of the living room. (Photos 107-81 thru 107-85)

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There are numerous hairline cracks in the painted plaster ceiling. These cracks generally run east-west. (Photos 107-86 thru 107-103)

## Dining Room

Carpeted floor.
Paneled walls.
Decorative tiles on the ceiling.
ID photographs. (photos 107-104 thru 107-106)
Nothing noted.
Kitchen
Vinyl floor.
Papered walls.
Tile ceiling.
Looking at the south wall, there is a small crack in the wall paper and same bulging of the paper. This is just behind the small microwave oven on the counter. (Photo 107-107)

Looking at the north wall, at the upper left corner of the hanging measuring cups, there is a bulge in the paper. (Photo 107-108)

Enclosed Porch
There is an enclosed porch off the south side of the dining room. This is the porch that was noted from the exterior supported by the railroad ties.

Particleboard floor.
Wood framed walls and ceiling.
There are numerous materials stored in here.
ID photographs. (Photos 107-109 thru 107-113)
Now moving to the east through the door off the living room into the hall.

Hall
Carpeted floor. Paneled walls. Plaster ceiling.

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White Industrial Seismology, Inc.
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The plaster is missing off the ceiling in places revealing the wood framing above. Mr. Bitner stated that he broke a lot of the plaster when he was putting the attic fan in this hall. (Photos 107-114 and 107-115)

There is a bedroom at the northeast corner of the residence.

## Bedroom

Carpeted floor.
Paneled walls.
Ceiling tiles.
Some of the trim is missing in the southwest corner. (Photo 107-116)
Mrs. Bitner stated that part of this room hasn't been finished with regard to the paneling work they are currently engaged in.

The closet area isn't finished and same of the ceiling trim is missing.
There is another bedroom to the north of the kitchen.

Bedroom
The walls in this room are to be paneled this summer.
The walls are stained, especially along the paper seams. The ceiling is also stained along the seams.

There are very fine hairline paper cracks in the ceiling and walls.
Looking at the south wall to the east of the closet. Part of the wall is obscured by paneling boards, a bed, and other materials. There are fine hairline cracks and stains on this wall. (Photos 107-117 thru 107-128)

Descriptive photographs of the east wall, which is stained and has fine cracks. (Photos 107-129 thru 107-136)

There is a larger diagonal crack at the upper left corner of the window. It extends to the ceiling. (Photo 107-134)

The west wall is mostly closet space which is obscured by clothes and other materials.

The north wall is also cracked and stained. (Photos 107-137 thru 107-147)

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The ceiling is also cracked and stained. (Photos 107-148 thru 107-157)
The vinyl floor is scarred and cracked in places. (Photos 107-158 thru 107-160)

There is a small bathroom between the two bedrooms.
Bathroom
Carpeted floor.
Paneled walls.
Painted plaster ceiling.
Mrs. Bitner stated that they will be remodeling the ceiling in this roan.

Descriptive photographs to show the very fine hairline cracking in the plaster ceiling. (Photos 107-161 thru 107-167)

Also note that the sink counter is chipped and scarred. (Photos 107-168 and 107-169)

Descriptive photographs of the rock base around the wood stove in the living room. No obvious or significant problems can be seen in the rock or rock mortar at this time. (Photos 107-170 thru 107-177)

Descriptive photographs of the cellar on the west side of the residence. It is filled with a lot of materials. The concrete is heavily cracked and separated. (Photos 107-178 thru 107-185)

General Comments
The Truman Bitner residence is a single story frame structure on a concrete block foundation. There is a significant stairstepping mortar separation at the northeast corner of the foundation. The south porch is supported only by railroad ties. There is no roof guttering around the residence.

The interior walls and ceilings are plaster. Mr. and Mrs. Bitner stated numerous times that they plan to remodel most of the interior with wall paneling and ceiling tiles. Walls that were not remodeled were generally wallpapered. The wallpaper exhibited nunerous cracks and stains.

White Industrial Seismology, Inc.

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That completes the inspection of this pcoperty.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services
$\mathrm{RMW} / \mathrm{mp}$
Enclosure: 185 Photographs

# White Industrial Seismology, Inc. 

1206 SCHIFFERDECKER
P.O. BOX 1256

JOPLIN, MO 64802-1256
PH. (417) 624-0164
June 18, 1987
Report No. 87056-107 (Addendum)

## Subject: Inspection of the Truman Bitner Pump House Amoret, Missouri 64722 June 16، 1987

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.
Photographs will be taken to show the condition of the pump house and cover.

Photographs of the south side. (Photos 107-186 thru 107-189)
The lower south wall is submerged in water.
Photographs of the west side. (Photos 107-190 thru 107-193)
Photographs of the north side. (Photos 107-194 and 107-195)
Photograph of the east side. (Photo 107-196)
These photographs will show the rough mortar edges.
Photograph of the north wall. (Photo 107-197)
Photograph of the east wall. (Photo 107-198)
Photograph of the south wall. (Photo 107-199)
Photograph of the west wall. (Photo 107-200)
Photographs looking down into the well. (Photos 107-201 and 107-202)
The bottom half of the air tank is submerged in water.


HDT/mp
Enclosure: 17 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE










## PRE゙-BLAS" SURVEY, RESIDENLINL

## I. Basle Luformation

1. Name of Resldent: Mr. and Mrs. Emery Bowers
2. Date: November 25, 1986 TLue: 8:30AM
3. Address: Box 193, Amoret, Missouri 64722
4. Location: $\qquad$
5. Telephone Number: (816) 925-3333
6. Dates of occupancy by current resldent: 1969 - Present
7. Daces of any temporary or pennanent abandorment: $\qquad$
II. InEormation ConcernLng Bulldings
(repeat Eor addlelonal buildings)
8. Date of orighal construction:_Unknown
9. Date(s) of major remodeling or additions:
(a)_West_ and East_Rooms_ - 1970
(b) $\qquad$
(c) $\qquad$
10. Construction of building:
(a) framLng (Jolsts, rafters, and stud walls): $2^{\prime \prime} \times 4^{\prime \prime}$ stud walls.
(b) Lnterlor walls: Plaster and sheetrock.
(c) roof:
(d) Eootings; Eoundatlous: Concrete foundation.
(e) basenent walls (Indicate how keyed to Eoocing of floor):

Not applicable.
(E) basement Eloor (keyways, chlckness):

Not applicable.
(g) nane of person(s) who constructed bullding: Unknown.
(h) size and direction of any large windows: None.

IIT. Enviromantal Information

1. Approximate elevacion of area:
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of foundation: None.
4. Water wells utilized (lndicate depth*and use): None.
5. Cisterns or surface water storage utilized: (Indicate purpose and approximate volune). None.
6. Source of warer, Lf not Lncluded above: City water.
7. Eve troughs or any other exterior dralnage features: See photo survey.
8. Description of general grading or landscaplug in vicinity: See photo survey.
IV. any notable expsting deterioration or damage see photo survey.
9. Cracks in incerlor walls:
10. Recedling of doors, whadu'ns:
11. Nutlceable settlement:
12. Foundation cracks:
13. Exterior wall cracks (brick veneer):
14. Sidewalks, steps, driveway pavement:
15. Basement leaks:
V. Plan view of residence, well, oucbuildings see sketch.
VI. Elevation views or photographs of walls see photo survey.
16. North
17. South
18. East
19. West

VIL. Comments or supplementary drawliggs See sketch.
VIII. Discussion or specific coments concerning any unusual features, construction cechniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative.

November 26, 1986
Report No. 87056-6
P \& M Map Photo No. 91

Subject: | Inspection of the Emery Bowers Residence |
| :--- |
| Box 193 |
|  |
| Amoret, Missouri 64722 |
|  |
| November 25, 1986 |

TO: The Pittsburg and Midway Coal Mining Company

P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

INTERIOR INSPECTION
We entered through the south door into the living room.
Living Room
Poured concrete floor.
Paneled walls.
Modern ceiling panels.
The poured concrete floor is jointed. The joints appear to be 2 and $1 / 2$ to 3 feet wide. There are approximately 6 joints in the floor.

Some of the floor is doscured by an area carpet.
There are areas where cracks are noticeable in the floor.
There is a floor crack a few feet north of the main door. It appears to extend from wall to wall. (Photos 6-1 thru 6-5)

The width of this crack ranges from $1 / 8$ of an inch to a hairline.
There is another floor crack toward the north side. There are also many fine cracks in the floor. (Photos 6-6 thru 6-10)

The spalled section near the west end is about 5 inches wide.
The ceiling vent is bowed and slightly discolored. (Photo 6-11)

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The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 91
November 25, 1986
Page 2

ID photographs. (Photos 6-12 thru 6-15)
Kitchen/Dining Room
Tile floor.
Paneled walls.
Modern paneled ceiling.
The floor covering i.s discolored and broken. (Photos 6-16 thru 6-19)
Photographs of the ceiling condition. It has discolored areas. (Photos 6-20 thru 6-23)

The west wall of the laundry area is in the process of being remodeled. (Photos 6-24 and 6-25)

ID photographs of this room. (Photos 6-26 thru 6-28)
There is a bathroom at the northwest corner of the kitchen and dining room.

## Bathroall

The tub and shower are at the southeast corner.
There is a vertical hairline crack above the upper left of the door on the south wall. This measures 9 inches in length. (Photo 6-29)

ID photographs of the discolored ceiling panels. (Photos 6-30 thru 6-32)

ID photographs of this room. (Photos 6-33 thru 6-38)
There is a bedroan at the east side of the living roan.
Bedroom
poured concrete floor.
The walls in some areas are paneled and in others they are unfinished.
Part of the concrete floor is obscured by a bed, a couple of dressers, and an area carpet.

There are not any evident cracks in the visible areas of the floor.
ID photographs of this roan. (Photos 6-39 thru 6-47)

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The Pittsburg and Midway Col Mining Company
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## Storage Room

Poured concrete floor.
Particleboard walls and ceiling.
There are ceiling stains at the joints.
There is an east-west crack across the poured concrete floor a few feet from the south door. The maximum width is about $1 / 16$ of an inch. (Photos 6-48 thru 6-50)

Much of the floor is obscured by materials. (Photo 6-51)
ID photographs. (Photos 6-52 thru 6-59)
There is another roon at the north side of the living room.
Room
Poured concrete floor.
There is a diagonal floor crack at the east side of the heater. This crack extends in a roughly northwest to southeasterly direction across the floor. Its maximum width is about $1 / 4$ of an inch not including a spalled area. The spalled area has a width of almost 2 inches. (Photos 6-60 thru 6-63)

Looking at the east wall.
There is a vertical crack above an opening in the wall. The wall is scarred and chipped at the lower section. This crack is about $1 / 8$ of an inch in width maximum. (Photos 6-64 and 6-65)

Looking at the north wall, there is a vertical crack at the upper left of the door. It is from a hairline in width to about $1 / 16$ of an inch. (Photo 6-66)

There is also a horizontal crack at the left side of the door. There is also a vertical crack below that. The width of these cracks is roughly $1 / 32$ of an inch maximum. (Photos 6-67 and 6-68)

The flue and area around the flue are heavily cracked and chipped.
(photos 6-69 thru 6-72)
Moving on to the west along the north wall.
There is a vertical crack at the upper right corner of the large doorway. (Photo 6-73)

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There is a vertical crack near the center of the door. It has a maximum width of about $1 / 16$ of an inch. (Photos 6-74 and 6-75)

The junction box is uncovered. (Photo 6-76)
There is chipping and flaking of the plaster around the flue on this side. (Photos 6-77 and 6-78)

Now 100 king at the west wall.
There is a separation in the northwest corner. It measures about $5 / 16$ of an inch in width. (Photos 6-79 and 6-80)

There is a vertical crack at the upper left corner of the door. It measures about $1 / 16$ of an inch in width. (Photo 6-81)

There is a diagonal crack following the angled wall at the stairs. It appears to have a width of less than $1 / 16$ of an inch. (Photos 6-82 thru 6-84)

There appear to be very faint craze cracks toward the south end of the west wall. (Photos 6-85 thru 6-88)

ID photographs of the ceiling condition. The ceiling is cracked in places. (Photos 6-89 thru 6-92)

ID photographs of this room. (Photos 6-93 thru 6-98)
There is a small area off the northwest corner of the storage room.
This area is underneath the stairs to the second floor.
Small Area
Poured concrete floor. Plaster walls.

There is cracking in this area. The largest width is about $3 / 8$ of an inch. (Photos 6-99 thru 6-110)

There are additional rooms to the north of this area. However, Mrs. Bowers said the floor is weak and rotted. She stated it would not be safe to enter these roans.

ID photographs of this area from the door. (Photos 6-111 thru 6-115)

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## Stairs

Along the stairs, the plaster walls are chipped and cracked. (Photos 6-116 thru 6-124)

Now at the top of the stairs in the hall.
There are numerous cracks and damages in the walls and ceiling. (Photos 6-125 thru 6-136)

First room on the east side of the hall.
Room
Contains numerous materials.
The paint has deteriorated on the ceiling and the walls are heavily cracked and chipped. (Photos 6-137 thru 6-155)

There is a small closet on the south side of the hall. (Photos 6-156 and 6-157)

Now moving to a bedroom at the southwest corner.
Bedroom
There are hairline horizontal cracks at the right side of the southernmost window. (Photos 6-158 and 6-159)

There is a hairline horizontal crack at the upper right corner of this window. It intersects a vertically trending hairline crack. (Photos 6-160 and 6-161)

There is a hairline vertical crack above the window near the upper right corner. (Photo 6-162)

There is a diagonal hairline crack at the lower left corner of the window. It intersects a vertical crack in the wall. (Photo 6-163)

The œiling is peeling along this wall. (Photos 6-164 thru 6-166)
There is a horizontal separation at the left side of the window that extends to the southeast corner. (Photo 6-167)

The east wall appears to have numerous fine hairline craze cracks. (Photos 6-168 thru 6-171)

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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The ceiling is cracked and there are visible tape seams. (Photos 6-172 thru 6-177)

ID photographs of this room. (Photos 6-178 thru 6-183)
Now moving into a bedroom at the southeast corner.

## Bedroom

We are looking at the south wall.
There is a fine vertically trending hairline crack in the wall. It appears to extend from the ceiling to the floor. (Photos 6-184 thru 6-188)

This is toward the west end of the wall near the closet. The lower part of this crack is obscured by a dresser.

There is also a horizontal hairline crack that intersects this vertical trending crack. (Photos 6-189 and 6-190)

There is an area of cracking at the southeast corner near the ceiling. (Photos 6-191 thru 6-193)

At the east wall there is a separation and a vertically trending crack in the wall that extends behind a storage shelf. (Photo 6-194)

There is a vertical hairline crack at the upper right corner of the southernmost window. It measures about 15 inches in length. (Photo 6-195)

There is another vertical hairline crack above the center of this window. (Photo 6-196)

There is a vertical trending hairline crack at the upper left corner of this window. (Photo 6-197)

There is a vertical hairline crack in the wall a foot or two to the left of the southernmost window. This extends from the ceiling to the floor. (Photos 6-198 and 6-199)

There is a vertical crack in the wall to the right of the northernmost window. This extends the height of the wall. (Photos 6-200 and 6-201)

There is a hairline vertical crack at the upper right corner of the northernmost window. (Photo 6-202)

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There is a hairline vertical crack near the upper center of the window. (Photo 6-203)

There is also a hairline vertical crack at the upper left corner. (Photo 6-204)

There is a vertically trending hairline crack near the northeast corner that extends from the ceiling to the floor. (Photos 6-205 and 6-206)

There is a large diagonal crack in the east wall near the lower northeast corner. It extends behind a small dresser and has a width of about $1 / 8$ to $1 / 16$ of an inch. (Photo 6-207)

We are now looking at the north wall.
There is a diagonally trending hairline crack near the east side of the north wall. (Photos 6-208 and 6-209)

There is a diagonal crack at the lower right corner of a mirror hanging on the wall. (Photo 6-210)

The ceiling has numerous visible tape seams. (Photos 6-2ll thru 6-213)
ID photographs of this roan. (Photos 6-214 thru 6-219)
Additional photographs of the ceiling and wall conditions in the hall. (Photos 6-220 thru 6-225)

EXTERIOR INSPECTION
ID photograph of the east side of the residence. (Photo 6-226)
There is a chimney stack near the back of the upstairs. It is leaning toward the south. (Photo 6-227)

Start the inspection at the south end of the east side.
They are starting to put stucco over a wire mesh and the stucco is cracking. There is craze cracking all along the stucco. (Photos 6-228 thru 6-232)

Much of this area could not be seen from the interior because the Bowers said the floor was unstable.

There is a small area where we can view part of the interior of the residence that could not be seen due to the unstable floor.

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The windows are broken and we can see that the concrete floor is heavily cracked. (Photos 6-233 thru 6-235)

There is a separation in the concrete foundation in this area. (Photo 6-236)

There is a larger foundation separation to the south. It measures about 2 and $1 / 2$ inches in width. (Photo 6-237)

Much of the foundation is obscured by grass and weeds.
The paint is deteriorating in this area. There is a cracked window on the south facing wall. (Photo 6-238)

The wall is stucco covered toward the north end. There are numerous hairline cracks in the stucco. (Photos 6-239 thru 6-244)

The window trims are rusted and cracked and are in very poor condition.
There are two vertical cracks below the lower left corner of the southernmost window on this wall. (Photo 6-245)

There is another hairline crack at the lower right corner. (Photo 6-246)

There is a hairline diagonal crack at the upper left corner of the northernmost window. (Photo 6-247)

There is also a vertical hairline crack at the lower left corner. (Photo 6-248)

There is also a hairline crack at the upper right corner. (Photo 6-249)
The stucco is separated and broken at the northeast corner. (Photo 6-250)

We are now on the north side of the residence. (Photo 6-251)
As before, there are numerous hairline stucco cracks in the walls. (Photos 6-252 thru 6-263)

Small concrete patio. (Photo 6-264)
The well is covered by concrete blocks and bricks. (Photo 6-265)
Detailed photographs around the westernmost window. There are numerous hairline stucco cracks around this window. (Photos 6-266 thru 6-270)

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ID photograph of the west side of the residence. (Photo 6-271)
Another photograph of the chimney stack. It is deteriorating. (Photo 6-272)

ID photograph of the north section of the west side. (Photo 6-273)
It is covered with a wire mesh.
The doors and windows are deteriorating.
Now looking at the north facing stucco wall. Once again, there are numerous hairline stucco cracks. (Photos 6-274 thru 6-287)

There is a crack in the foundation in the L-shaped area. This crack is 10 inches long and has a width of $1 / 16$ to $3 / 16$ of an inch. (Photo 6-288)

Now looking at the west facing stucco wall. There are numerous cracks in this wall. (Photos 6-289 thru 6-306)

ID photograph of the south side of the residence. (Photo 6-307)
Additional photograph of the chimney stack. (Photo 6-308)
once again, the stucco section is cracked around the doors and windows. (Photos 6-309 thru 6-322)

Now moved to the front part of what used to be the store that is now the residence. It has a concrete foundation.

There are cracks and spalling in the foundation.
There is a spalled area at the southwest corner. (Photo 6-323)
There is a foundaticn crack about 3 feet on east. It measures 7 inches long and about $1 / 16$ of an inch in width. (Photo 6-324)

There is a diagonal foundation separation to the east. It ranges from $3 / 4$ of an inch to about $1 / 2$ an inch in width. (Photo 6-325)

There is a hairline vertical crack in the foundation below the left corner of the door. (Photo 6-326)

There is another vertical crack below the center of the door. (Photo 6-327)

There is a vertical foundation crack a couple of feet to the east of the door. (Photo 6-328)

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There is another vertical foundation crack about 1 and $1 / 2$ feet to the east. (Photo 6-329)

There are two parallel vertical foundation cracks near the east corner of this area. (Photo 6-330)

There is a cracked windowpane at the east end. (Photo 6-331)
There is a small walk near the southeast corner. The walk is separated from the foundation slab. (Photo 6-332)

ID photograph showirg the poor sidewalk condition on the south side. (Photos 6-333 thru 6-335)

General Comments
The Emery Bowers residence is located on the north side of 52 Highway. It is a wood frame structure on a poured concrete slab foundation. There was no observable roof guttering around the residence.

The exterior of the structure is mainly stucco covered and is in the process of being remodeled. The existing stucco has numerous fine cracks and separations.

Much of the interior of the residence is unfinished and is being remodeled. There are numerous cracks and water stains in the walls and ceilings. We did not inspect the north section of the interior. Mrs. Bowers stated that the floors were unstable and unsafe in this area.

That completes the inspection of this property.


Randall M. Wheeler Manager of Technical Services

RNW/mp
Enclosure: 325 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 91
2- SUMMARY FORM
3- SKETCH OF STRUCTURE




(1)

### 6.307


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## I. Basic Information

1. Name of Restdent: Clara G. Castle
2. Date: October 21, 1986 Time:_12:30pM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: 450 feet east of $Y$ Highway, 215 feet north of 52 Highway
5. Telephone Number: (816) 925-3461
6. Dates of occupancy by current resident: 1962-Present
7. Dates of any temporary or permanent abandonment: $\qquad$
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Dace(s) of major remodeling or additions:
(a)Kitchen, porch, and bathroom 1953-1954
(b)
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls) :Stud walls: 2"x4"
(b) interfor walls: Sheetrock
(c) roof: Composition shingles, gable type
(d) footings; foundations: Concrete block
(e) basement walls (indicate how keyed to footing of floor): Not applicable.
(f) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Environmental Information

1. Approximate elevation of area: 845 feet at residence
2. Type of soil in area: silty clay loam
3. Type of subgrade drafnage at base of foundation: None
4. Water wells utilized (indicate depth and use): Not used
5. Cisterns or surface water storage utilized: (indicate purpose and approxinate volume). None
6. Source of water, if not included above: City water
7. Eve troughs or any other exterior drainage features:

See photo survey
8. Description of general grading or landscaping in vicinity: See survey
IV. Any notable existing deterioration or damage See photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable setclement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls See photo survey
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comnents concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

October 24, 1986
Report No. 87056-9
P \& M Map Photo No. 115

Subject: Inspection of the Clara Castle Residence
Route 1
Amoret, Missouri 64722
October 2l, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the west side. (Photo 9-1)
This is a wood frame structure and has a concrete block foundation.
Photographs of the brick chimney. The chimney appears to be in fair condition overall. There is some minor mortar deformation evident and a missing piece of brick at the southwest corner. (Photos 9-2, 9-12, 9-14, and 9-35))

Looking at the northernmost slab, it is separated both from the foundation and from the center slab.

The separation from the center slab measures $1 / 2$ inch. The separation from the foundation is $5 / 8$ of an inch maximum. (Photos 9-3 and 9-4)

The southernmost slab is also separated from the foundation. (Photos 9-5 thru 9-7)

There is also a large crack in the corner of the center slab. Crack length is 9 inches. About $7 / 8$ of an inch wide. (Photo 9-5)

The separation from the foundation is $1 / 4$ of an inch maximum.
The block foundation has a mortar separation toward the south end of the west wall. This is 5 and $1 / 2$ inches in length and has a width of $1 / 4$ of an inch. (Photo 9-8)

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The wood siding and trim is in poor condition toward the south end. (Photo 9-9)

The boards are heavily warped at the lower part of the wall toward the foundation. Also the concrete blocks have separated. (Photos 9-10 and 9-13)

ID photograph of the south side of the residence. (Photo 9-11)
We are now on the east side of the structure. (Photo 9-15)
The back porch slab is heavily cracked.
The cracks in this porch slab have a width of $3 / 8$ of an inch to a hairline. (Photos 9-16 thru 9-20)

ID photograph of the north side. (Photo 9-21)
The flower box at the west end on the north side has a few mortar separations. These separations are about $1 / 2$ inch wide. (Photos 9-23 thru 9-25)

Drainage from the downspouts goes onto the ground.
There is no vent cover over the crawl space opening. (Photo 9-26)
There are separations and cracks in the mortar between the concrete blocks. The height of these separations and cracks from ground level is approximately 3 to 3 and $1 / 2$ inches. The width of these separations is from a hairline up to $1 / 2$ inch. (Photos 9-27 thru 9-33)

The wood siding at the northwest corner, on the north side, has pulled away from the foundation. (Photo 9-34)

Much of the paint is chipping and cracking in places around the wall.
INTERIOR INSPECTION

We entered through the west entrance into the living room.

## Living Room

Carpeted floor.
Paneled walls.
Acoustic tile ceiling.
Living room is at the northwest corner of the residence.

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There is a ceiling stain above the vertical heater. This is at the south wall. (Photo 9-36)

ID photograph of the west wall. (Photo 9-37)
ID photograph of the south wall. (Photo 9-38)
ID photograph of the east wall. (Photo 9-39)
ID photograph of the north wall. (Photo 9-40)
Now moving southward into the bedroom.
Bedroom
Carpeted floor.
Papered walls.
Acoustical tile ceiling.
ID photographs of the north wall. (Photos 9-41 and 9-42)
There is a horizontal paper separation at the upper right corner of the entrance into the living room. This separation L's vertically to the ceiling. It is 4 inches horizontally and 15 and $1 / 4$ inches vertically. (Photos 9-43 and 9-44)

There is a vertical crack above the upper third of the entrance into the living room on the left side. Measures 7 and $3 / 4$ inches. (Photo 9-45)

There is a separation at the corner of a small closet. Maximum width of the separation is about $1 / 8$ of an inch. (Photo 9-46)

ID photograph of the west wall. (Photo 9-47)
There is a diagonal crack at the upper right corner of the window. Measures about 6 and $1 / 4$ inches. Also some deformation of the wood. Crack is a hairline. (Photo 9-48)

There is a hairline crack emanating from a tape seam near the upper left corner of the window. Measures about 2 and $3 / 4$ inches. (Photo 9-49)

There is some deformation of the wall at the upper left corner of the window. (Photo 9-50)

The window is separated from the wall at the left side. (Photo 9-51)
ID photograph of the south wall. (Photo 9-52)

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There is a hairline crack at the upper right corner of the window. Measures 8 inches in length. (Photo 9-53)

Hairline crack along the right side of the window parallel to a tape seam. Measures 5 and 3/4 inches. (Photo 9-54)

There is a small crack parallel to the tape seam at the lower right corner. Measures 2 inches in length. (Photo 9-55)

Small crack at the lower left corner of the window. Measures 2 and 3/4 inches. (Photo 9-56)

The ceiling trim is loose near the center of the wall. (Photo 9-57)
There is paper peeling and cracking in the southwest corner. (Photo 9-58)

Same kind of paper peeling and cracking in the southeast corner. (Photo 9-59)

There is also a small. crack in the south wall about halfway between the east wall and the window. Measures 3 and $3 / 4$ inches in length. (Photo 9-60)

Now looking at the east wall, there is a diagonal crack at the upper right corner of the door that goes into the bathroom. This crack measures 17 inches. (Photo 9-61)

At the upper left corner and around the center there are heavy amounts of paper peeling. (Photos 9-62 and 9-64)

Very fine diagonal crack at the left side of the door. Measures 1 and 3/4 inches. (Photo 9-63)

Now moving eastward out of this bedroom into the bathroom.

## Bathroom

Vinyl floor.
Tile lower walls.
Painted sheetrock upper walls.
Acoustical tile ceiling.
Starting on the south wall.
There is a diagonal hairline crack at the upper right corner of the window. Measures 8 and l/4 inches in length. (Photo 9-65)

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There is a caulk separation in the tile under the window. It measures 7
inches. Width of about $1 / 16$ of an inch. (Photo 9-66)
Looking at the east wall, there is a hole in one of the acoustical tiles. Measures about 1 and 7/8 inches. (Photo 9-67)

Looking at the west wall.
There is a horizontal crack at the upper right corner of the door.
Measures approximately 11 and $1 / 4$ inches in length. (Photo 9-68)
Also at the upper left of the door, there are vertical water stains. (Photo 9-69)

There is also a crack extending from the ceiling to the upper left corner of the door. (Photo 9-70)

Some of the acoustical tiles at the west wall are bowing. It looks like there might have been an area of water damage. It extends for about 4 and $1 / 2$ tiles. (Photo 9-71)

Looking at the floor.
There are cracks in the floor just off the doorway. These range in width from about $3 / 8$ of an inch to a hairline. (Photo 9-72)

ID photographs of the bathroom. (Photos 9-73 and 9-74)
Now moving from the living room into the kitchen/dining room.

## Kitchen/Dining Room

Carpeted floor.
Paneled walls.
Acoustical tile ceiling.
ID photographs of the kitchen and dining room. (Photos 9-75 thru 9-77)
There is a ceiling stain above the north wall. This stain measures 8 and $1 / 2$ inches east-west. (Photo 9-78)

Also a large ceiling stain toward the northwest corner. It measures 24 inches east-west, 8 inches north-south. (Photo 9-79)

Now moving eastward into the storage room.
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Storage Room
Carpeted floor.
Paneled walls.
Acoustical tile ceiling.
ID photographs. (Photos 9-80 and 9-81)
There are ceiling stains close to the north end of the room. (Photos9-82 and 9-83)
The paneling is stained under the electrical outlet toward the south endof the west wall. (Photo 9-84)
Now moved back outside for the garage inspection.
Garage
The driveway to the garage is heavily cracked. (Photos 9-85 thru 9-87)
Large separation at the entrance to the garage. The maximum width
including the spalling is 3 inches. (Photo 9-88)
Single slab poured concrete floor.
Wood walls.
Visual inspection of this floor shows no cracking.
ID photographs. (Photos 9-89 thru 9-94)
Garage sits on a concrete block foundation.
There is a slight deformation of some mortar on the north side towardthe east end. (Photo 9-95)
ID photographs of the garage foundation. (Photos 9-96 thru 9-99)
ID photograph of the garage. (Photo 9-100)
There is a small storage shed at the east end of the garage.
Storage Shed
There is mortar cracking at the northeast corner. (Photos 9-101 and9-102)
The separation of the angled step into the shed from the foundation isabout 1/2 inch. (Photos 9-103 and 9-104)

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ID photograph. (Phot: 9-105)
General Comments
The Clara Castle residence is located at an approximate elevation of 845
feet above sea level. The ground is fairly flat around the residence
with a gentle northwest slope. The drainage around the house is poor.
We also noted quite a few ceiling stains indicative of roof leaks.
The foundation showed evidence of hydraulic and settlement effects. Continued foundation deterioration from hydraulic effects can be expected unless proper measures are taken to improve the drainage of water away from the foundation.
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RMW/mp
Enclosure: 105 Photographs

1- COPY FROM $P \& M^{\prime}$ 's TOWN OF AMORET MAP LOCATION NO. 115

2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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I. Baslc InEotmation

1. Name of ResIdent:Jerry Lewis (William Cole, Owner)
2. Dace: November 21, 1986 Tine: 10:00AM
3. Address: Route l, Amoret, Missouri 64722
4. Location: Mile south and mile east of Amoret
5. Telephone Nunber: (816) 925-3237
6. Dates of occupancy by current resldent: About 1 year
7. Dates of any temporary or pernanent abandonnent: $\qquad$
LI. Information Conceralng Bulidings
(repeat Eor addicional bulldlugs)
8. Date of origlnal construction: 1960
9. Date(s) oE major remodeling or addltions:
(a) Back porch 1976
(b) $\qquad$
(c) $\qquad$
10. Construction of building:

(b) Luterlor walls: Sheetrock
(c) rook: Composition shingles
(d) Eootlngs; EoundatLons: Concrete footing and foundation.
(e) basement walls (Indicate how keyed to footing of floor):

Rebar
(E) basemenc Eloor (keyways, thlckness):

24"
(g) name of person(s) who constructed buliding: Roy MoCoy Carpentar (Deceased) Pre-fab house
(h) size and direction of any large windows:
III. Enviromantal Infomation

1. Approximate elevation of area:

810 feet
2. Type of soll in areasilty clay loam.
3. Type of subgrade drainage at base of foundation: Yes, tile.
4. Water wells utilized (Indicate depth"and use): No.
5. Cisterns or surface water storage utillzed: (ladicate purpose and approximate volume). No.
6. Source of water, le not Lncluded above: Rural water.
7. Eve troughs or any other exterior dralnage feacures: Yes.
8. Descripelon of general grading or Landscaplug Lu vicinity: Generally flat.
IV. Any notable existing leterioration or danage

1. Cracks in interlor walls: See survey.
2. Receding of dours, whindurs: See survey.
3. Noticeable settlenent: See survey.
4. Foundacion cracks: See survey.
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, sceps, driveway pavement: See survey.
7. Basement leaks: See survey.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls See survey.
8. North See survey.

2•• South See survey,
3. East See survey.
4. West See survey.
VII. Comments or supplementary drawligs See survey.
VIII. Discussion or specific couments concerning any unusual features, construction techniques, or stacus of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response co normal blasting acttivities.

See survey.

December 2, 1986
Report No. 87056-12
Subject: Inspection of the William Cole Rental House
Route 1
Amoret, Missouri 64722
November 2l, 1986

Tb: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Porch
Carpeted floor. Exterior siding on the north wall. Wooden other walls.
Unfinished ceiling.
Photograph of the east wall. (Photo 12-1)
Photographs of the south wall. (Photos 12-2 and 12-3)
Photograph of the west wall. (Photo 12-4)

Photographs of the north wall. (Photos 12-5 and 12-6)
The middle storm window, west of the south doorway is loose.
Door to the kitchen on the north wall.
Kitchen
Vinyl floor.
Papered walls.
Textured plaster ceiling.
Door on the east wall to the dinette.

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Door on the north to a hallway.
Photograph of the east wall. (Photo 12-7)
Photographs of the south wall. (Photos 12-8 and 12-9)
Photograph of the west wall. (Photo 12-10)
Photograph of the north wall. (Photo 12-11)
There is an L-shaped hairline crack in the ceiling, near the light fixture. This crack measures about 24 inches from end to end and is probably at a seam. (Photo 12-12)

Another hairline ceil.ing crack runs east of the light fixture along a seam to the east wall. (Photo 12-13)

There is a D-shaped crack with an L-shaped crack at its north end, located in the southwest corner of the ceiling. These are hairline cracks. The D-shaped crack measured 40 inches east-west. The L-shaped crack measures, fran end to end, about 18 inches. (Photo 12-14)

Another slight ceiling crack trends east-west at the southeast part of the ceiling and has a branch that runs to the south wall. The east-west crack measures about 47 and $1 / 2$ inches long. (Photo 12-15)

Dinette/Living Room
Carpeted floor.
White painted sheetrock walls.
Textured sheetrock ceiling.
Photographs of the south wall. (Photos 12-16 and 12-17)
Photographs of the east wall. (Photos 12-18 and 12-19)
Photographs of the north wall. (Photos 12-20 and 12-21)
Photographs of the west wall. (Photos 12-22 and 12-23)
The entrance to the hallway is on the west wall.
Starting on the south wall of the dinette area.
There is a crack along the juncture of the ceiling and south wall. This is a rough tearing crack that is about $1 / 32$ of an inch wide. (Photos $12-24$ and 12-25)

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There is a crack to the lower left of the south window. It measures about 6 and $1 / 2$ inches long and about a hairline wide. (Photo 12-26)

There is also a crack along the east wall-œiling juncture. Series of photographs from south to north of the separation. It is a tearing type separation and is about 1/32 of an inch wide. (Photos 12-27 thru 12-32)

The east wall has a seam crack that runs down about 69 inches from the ceiling. It ranges from about $1 / 16$ of an inch to a hairline in width. (Photos 12-33 and 12-34)

There is a split in the northeast corner that runs vertically from the floor about 57 inches. (Photos 12-35 and 12-36)

Now on the north wall. There is a crack below the lower right corner of the window. It runs 4 and $1 / 2$ inches to the outlet. Below the lower right corner of the outlet, another crack runs about 10 and $1 / 2$ inches. These cracks range fram about $1 / 32$ of an inch to a hairline in width. (Photos 12-37 and 12-38)

Above the window, there is a vertical crack at a joint. It measures 12 and $3 / 4$ inches to the ceiling and is about $1 / 32$ of an inch wide. (Photo 12-39)

To the upper left of the window, there is a vertical crack at a tape joint. It is about 20 inches long and about $1 / 32$ of an inch wide. (Photo 12-40)

There are a couple of very slight diagonal cracks to the upper left of the window. (Photo 12-41)

To the lower left of the window, there is a slight crack at a joint. It is about 21 and $1 / 8$ inches long and is barely visible. (Photo 12-42)

There is a patched area above the upper right of the front door. It measures about 12 and $3 / 4$ inches vertically and about 6 and $1 / 2$ inches at the widest. (Photo 12-43)

There is another patched area to the upper left of the door. It measures about 4 and $1 / 2$ inches on the vertical and about 5 inches wide. (Photo 12-44)

There is also a crack along the north wall-ceiling intersection. Series of photographs fram west to east. It is cracked all the way across the wall except at an area of about 37 inches between the window and the east wall. (Photos 12-45 thru 12-49)

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Now at the west wall. The upper north end of this wall has a slight crack near the ceiling. It is about 5 and $1 / 4$ inches long and about $1 / 32$ of an inch wide. (Photo 12-50)

The enclosure on the west wall has a closet door that faces north. To the upper left, there is a horizontal crack, probably at a tape joint. It is about a hairline wide and 9 and $1 / 4$ inches long. (Photo 12-51)

There is a slight crack at the ceiling and wall intersection to the upper left of this door. This crack measures about 12 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. (Photo 12-52)

There is also a barely visible crack to the upper right of the door at the juncture of the ceiling and wall. It is about 9 inches long. (Photo 12-53)

Now on the west wall at the enclosure. This wall has a slight crack at the juncture with the ceiling almost all the way across. Part of it has been painted over or patched. There are also three or four nail pops near the ceiling in this area. (Photos 12-54 thru 12-56)

Now at the south wall. This is the outer wall of the kitchen enclosure. There is a slight crack along the wall-ceiling juncture. (Photos 12-57 and 12-58)

Now at the west wall of the dinette. At the upper north end of the kitchen enclosure, there is a branching crack with a total length of about 4 and $1 / 4$ inches. It is from about $1 / 16$ to $1 / 32$ of an inch in width. (Photo 12-59)

There is a crack along the wall and ceiling juncture. (Photos 12-60 and 12-61)

There is a patched crack above the upper left corner of the kitchen door. It is about 11 inhces long. (Photo 12-62)

Above the upper right corner of the door, there is a bulging diagonal crack that is about 16 inches long. (Photo 12-63)

Now inspecting the ceiling.
Starting in the southwest corner of the dinette near the kitchen door. There is a stairstepping crack running from the south wall to the west wall. It measures about 68 inches from end to end. At its west end, it has a faint branch which runs eastward toward the light fixture approximately 27 inches. (Photos 12-64 thru 12-66)

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Another ceiling crack runs from the south end of the east wall, westward toward the stairstepping crack. It is a very faint, barely visible, crack. It connects with the stairstepping crack which makes its length about 6 feet 9 inches. (Photos 12-67 and 12-68)

Another ciling crack runs from the east wall, westward about 10 feet 8 inches. It ranges from a hairline at the west end to about $1 / 16$ of an inch at is widest point near the east wall. (Photos 12-69 and 12-70)

Another ceiling crack runs eastward from the kitchen enclosure. It L's to the south at its east end. It is about 57 inches measured from end to end and fram a hairline to slightly wider. (Photos 12-71 and 12-72)

There is an east-west trending tape joint across the north part of the ceiling. The tape is peeling scme what in a few areas. (Photos 12-73 thru 12-75)

Another ceiling crack runs south from the north wall above the upper right of the window. It is an L-shaped crack ranging from barely visible to about a hairline in width. It measures about 21 inches from end to end. (Photo 12-76)

Another ceiling crack runs south from the upper left corner of the north window. It measures about 9 inches long and fram a hairline to slightly wider. (Photo 12-77)

Between the window and the door, a ceiling crack runs southward from the north wall. It measures about 17 and $1 / 2$ inches long and from a hairline to slightly wider. (Photo 12-78)

There is a stairstepping crack in the southwest part of the living roam ceiling, near the kitchen entrance and the closet enclosure. It measures about 66 inches from end to end and ranges fram a hairline to about $1 / 32$ of an inch wide. It also has an 8 and $1 / 2$ inch long branch that runs to the corner of the closet enclosure. (Photos 12-79 thru 12-81)

Now in the hallway to the west.
Hallway
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.
Entrance to the kitc:hen on the south wall.

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There is a slight, barely visible, 3 inch long crack running northward from the south wall above the kitchen door. (Photos 12-58 and 12-82)

There is a vertical seam crack above the upper left corner of the kitchen door that is 12 and $3 / 8$ inches long. There is also a diagonal ridge above the upper left corner that is partially cracked. The crack is about 2 inches long. (Photos 12-58, 12-83 and 12-84)

Above the upper right corner, there is a crack at the tape joint. It is about 12 and $1 / 4$ inches long. (Photo 12-85)

The entrance to the basement stairway is on the north wall.
There is a slight crack at the upper right corner of the stairway door. It is about $3 / 4$ of an inch long. (Photo 12-86)

There is a hairline horizontal crack that is about 5 and $1 / 2$ inches long to the upper left of the stairway door. (Photo 12-87)

A bulging vertical seam runs down about 17 and $1 / 8$ inches from the ciling to the upper left of the stairway door. (Photo 12-87)

Now moving up the steps to the bedroom hallway.
A photograph into the hallway looking westward. (Photo 12-88)
At the south wall-ceiling intersection, there is a slight crack almost all the way across. It appears to have been repaired at the east and west ends. (Photos 12-89 and 12-90)

There is a door to a bathroom on the south wall.
To the west, the hallway turns to the north.
There are two doors to bedrooms on the west wall and one bedroom door on the north wall.

The textured ceiling has several cracks.
The north wall of the stairway is separating from the ceiling. It has been partially patched at the east end. (Photos 12-91 and 12-92)

The east wall, above the stairs, is also separating from the ceiling and it appears to have been patched. (Photo 12-93)

The east wall of the hall, near the north door, al so has separation with the ceiling. (Photo 12-94)

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There is a partial separation at the ceiling and wall above the north bedroam door. It appears to have been patched. (Photo 12-95)

The west wall is also separated from the ceiling. (photos 12-96 and 12-97)

There is a slight crack at the upper northwest corner of the hallway. It is about 5 and $3 / 4$ inches long and a hairline wide. (Photo 12-98)

Above the upper left end of the north door on the west wall, there is a bulging joint that is slightly cracked in about three areas. The top crack measures about 3 inches long. To the lower left of the top crack, there is about a 2 inch long crack and just above the doorway, there is about a $1 / 2$ inch long crack. (Photo 12-99)

The bathroam door on the south has bulging tape joints above each upper corner. The upper left has a slight crack that is about 3 and $3 / 8$ inches long. (Photo 12-100)

Now inspecting the ceiling. Starting at the east end.
There is a nearly circular crack in the ceiling above the stairway. It measures about 4 inches by 2 and $1 / 2$ inches.

There is a north-south trending, hairline crack above the bathroam door that runs from the north to the south wall.

There is another nearly circular crack near the bathroom door that measures about 3 inches by 2 inches.

Continuing west, there is a slight crack that runs across the ceiling near the light fixture. It ranges from barely visible to about a hairline wide at the north end.

There is a slight 24 inch long crack running from the south wall, just west of the light fixture. It is a barely visible crack. (Photo 12-101)

In the southwest corner of the ceiling, there is an east-west trending, very slight crack. It measures about 14 and $5 / 8$ inches long. (Photo 12-102)

There is a hairline crack at the north end of the ceiling running south from the north wall about 27 and $1 / 2$ inches.

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Bathroom

Carpeted floor.
Papered walls.
Sheetrock ceiling.
Window on the south wall. Closet door on the west wall.
A photograph 100 king southward into the bathroam. (Photo 12-103)
There is an attic fan in the ceiling that is taped over at this time.
There is a hairline crack running south from the southeast corner of the attic fan about 6 inches. There is also a hairline crack running north from the light fixture about 1 and $1 / 2$ inches. (Photo 12-104)

Southwest Bedroom
Carpeted floor.
Bl ue painted sheetrock walls. Lightly textured sheetrock ceiling.

Windows on the south and west walls. Closet doors on the east and north walls. Entrance to a restroan on the east wall.

Photograph of the west wall. (Photo 12-105)
Photographs of the south wall. (Photos 12-106 and 12-107)
Photographs of the east wall. (Photos 12-107 and 12-108)
Photographs of the north wall. (Photos 12-109 and 12-110)
At the north wall-ceiling intersection, there is a slight crack that is about $1 / 32$ of an inch wide. (Photos 12-111 and 12-112)

The west wall-ceiling intersection has the same condition. (Photos 12-113 and 12-114)

The south wall-ceiling intersection has the same condition. (Photos 12-115 thru 12-117)

The east wall-ceiling intersection has the same condition except that it does not appear to be cracked at about the middle area. (Photos 12-118 thru 12-120)

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Above the upper right corner of the entry door, there is a slight vertical crack. It is about 3 and $1 / 4$ inches long and has been painted over. (Photo 12-121)

Above the upper left corner of the east closet door, there is a hairline vertical crack. It is about 10 and 3/4 inches long. (Photo 12-122)

Above the upper left corner of the restroom door, there is a diagonal crack. It is about 8 and 3/4 inches long. (Photo 12-123)

There is a hairline crack along the southwest corner. (Photos 12-124 and 12-125)

Above the upper left end of the west window, there is a vertical seam crack that runs to the ceiling. It measures about 13 inches long and 1/16 of an inch wide. (Photo 12-126)

Above the upper left corner of the closet door on the north wall, there are a couple of hairline cracks. The total length is about 10 inches. The upper is about 7 and $1 / 4$ inches long and the lower is about 4 and $1 / 2$ inches long. (Photo 12-127)

Above the upper right corner, there are a couple of slight vertical cracks. About 6 and 3/4 inches is the total length. (Photo 12-128)

The ceiling has a slight crack running west from the east wall, above the upper left end of the bathroam door. It measures about 4 and $1 / 4$ inches long and about a hairline wide. (Photo 12-129)

Restroom
Tile floor and lower walls. Blue painted sheetrock upper walls. White painted sheetrock ceiling.

Window on the south wall.
A photograph looking eastward into the room. (Photo 12-130)
There are three tiles missing on the west wall. Eight missing on the north wall. Two missing on the east wall. (Photos 12-131 and 12-132)

There is a bulging vertical crack above the upper right corner of the doorway. It runs to the ceiling about 14 inches. (photo 12-133)

There is a stain in the northeast corner of the ceiling and a slight crack at the stain. The crack is about 6 inches long. (Photo 12-134)

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There is a diagonal crack below the lower right corner of the window. It is about 8 inches long and is a bulging, painted over hairline crack. (Photo 12-135)

There is a diagonal crack above the upper left corner of the window. (Photo 12-136)

Northwest Bedroom
Hardwood floor.
Yellow painted sheetrock walls.
Lightly textured cejiling.
Windows on the north and west walls. Closet enclosure in the southwest part of the roam.

Photograph of the north wall. (Photo 12-137)
Photographs of the west wall. (Photos 12-138 and 12-139)
Photographs of the south wall. (Photos 12-140 and 12-141)
Photographs of the east wall. (Photos 12-142 and 12-143)
There is a hairline crack along the northeast corner with a couple of wider areas near the middle. (Photos 12-144 and 12-145)

There is a slight crack along the intersection of the ceiling and the north wall. (Photos 12-146 and 12-147)

The west wall-ceiling intersection has the same condition. (Photos 12-148 and 12-149)

The walls of the closet enclosure also have separation with the ceiling. (Photos 12-150 thru 12-152)

The rest of the south wall-ceiling intersection has the same condition.
The east wall-ceiling intersection also has the same condition.
Starting on the west: wall at the window. There is a very slight vertical crack at a seam, above the upper right part of the window. It runs to the ceiling about 13 inches.

There is a slight ccack along the lower northwest corner. (Photo 12-153)

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Now at the north window. There are paint cracks below the left part of the window in an area about 10 inches by 3 and $1 / 2$ inches. (Photo 12-154)

There is also a vertical crack at a seam below the window that runs to the floor about 21 inches. It ranges fram a hairline to about $1 / 32$ of an inch wide. (Photo 12-155)

There are a couple of cracks at a seam below the lower right of the window that range fram a hairline to about $1 / 32$ of an inch wide. (Photo 12-156)

There is a slight diagonal crack below the lower right corner. It is about 3 and 1/2 inches long. (Photo 12-157)

Above the upper left corner of the closet door on the south, there are two hairline diagonal cracks. The total length is about 6 and $1 / 2$ inches. (Photo 12-158)

There is a hairline crack in the upper southwest corner to the upper right of the closet door. It runs down to the floor along the right side of the door casing.

Above the upper left end of the entry door, there are two slight vertical cracks at the tape joint. The total length is about 7 inches. (Photo 12-159)

A ceiling crack runs northward from the south wall above the upper left of the closet door toward the light fixture. This crack measures about 54 inches long and is from barely visible to about a hairline wide.

There is a slight ceiling crack in the northwest corner that measures about 2 and $3 / 4$ inches long and is just wider than a hairline.

Northeast Bedroom
Hardwood floor.
Yellow sheetrock walls.
Textured plaster ceiling.
Window on the north wall. Closet door on the south wall.
Photograph of the east wall. (Photo 12-160)
Photographs of the south wall. (Photos 12-161 and 12-162)
Photograph of the west wall. (Photo 12-163)

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Photographs of the north wall. (Photos 12-164 and 12-165)
There is a slight separation between the ceiling and west wall. (Photos 12-166 and 12-167)

The ceiling and the north wall intersection also has a very slight separation. (Photos 12-168 and 12-169)

The ceiling and east wall have the same condition. (Photos 12-170 and 12-171)

The ceiling and the south wall have the same condition. (Photos 12-172 and 12-173)

There is a vertical crack at a tape joint above the upper left of the north window. It measures 13 inches long and about $1 / 32$ of an inch wide. (Photo 12-164:)

Below the lower left corner, there is a patched crack at a joint. It measures 21 inches long and about $1 / 32$ of an inch wide. (Photo 12-174)

There is a crack in the northeast corner. It starts about 18 inches below the ceiling and runs to the floor. The widest point is about 5 feet 6 inches above the floor. (Photos 12-175 and 12-176)

There is a very slight crack above the upper left corner of the closet door. It is about 8 inches long.

There are two barely visible, horizontal cracks between the closet door and the entrance. Ihe total length is about 8 and $1 / 2$ inches. (Photo 12-177)

There is a slight horizontal crack, from the upper right of the entrance, that runs to the west wall about 1 and $1 / 4$ inches. There is also a hairline vertical crack in the southwest corner. (Photo 12-178)

A hairline crack in the ceiling runs from the south wall to the north wall. It runs 22 and $1 / 2$ inches from the north wall, then 15 inches eastward and then sruthward to the south wall.

## Basement Stairway

Carpeted stairs.
Green painted sheetrock walls and ceiling.
There is a north-south trending crack across the ceiling at a joint. It is about $1 / 8$ of an inch wide. (Photos 12-179 and 12-180)

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There is a crack on the south wall, to the upper right of the door, that connects with the cejling crack. It ranges fram a hairline to about $1 / 16$ of an inch in wi.dth and runs down about 20 and $1 / 2$ inches from the ceiling. (Photo 12-].80)

At the north wall, there is an L-shaped separation in the sheetrock. It is about 14 inches long fram end to end and fram a hairline to about $1 / 8$ of an inch wide. (Photo 12-181)

Basement
Concrete floor and lower walls.
Sheetrock upper walls and ceiling.
Two windows on the west wall. Two windows on the north wall. One window and a door on the south wall.

Photographs of the west wall. (Photos 12-182 and 12-183)
Photographs of the north wall. (Photos 12-184 and 12-185)
Photographs of the east wall. (Photos 12-186 and 12-187)
Photographs of the south wall. (Photos 12-188 and 12-189)
At the west window on the north wall, there is a seam crack above and below each corner. The upper left runs to the ceiling, 7 inches. The lower left is 8 and $1 / 2$ inches long. The lower right is 8 and $1 / 4$ inches long. The upper right is 7 and $1 / 4$ inches long. Each is about $1 / 32$ of an inch wide. (Photos 12-190 thru 12-193)

Now at the east window on the north wall. There is a vertical seam crack to the left of the window that measures about 15 inches at the bottom and 9 and 3/4 inches at the top. (Photos 12-194 and 12-195)

There is a vertical crack near the east end of the north wall that runs the height of the concrete lower wall. It is about $1 / 16$ of an inch wide. There is some apparent water damage in the lower northeast corner of the sheetrock walls. (Photo 12-196)

A vertical crack below the east window runs the height of the concrete lower wall. It is about 1/32 of an inch wide. (Photo 12-197)

The concrete lower walls have numerous crazing cracks.
There is another vertical crack trending the height of the north concrete wall to the lower right of the west window. This crack is from about $1 / 16$ of an inch to a hairline wide. (Photo 12-198)

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The west end of the north wall is slightly separated from the ceiling. (Photo 12-199)

There is a slight crack in the upper northeast corner. (Photo 12-200)
Now on the west wall. Below the girder, there are a couple of cracks at a joint. The south crack measures about 6 inches long and the north crack is about 8 inches long. (Photo 12-201)

There is a large crack in the concrete wall below the girder that runs the height of the wall. It measures about 44 inches long and ranges in width from about $3 / 16$ to $1 / 32$ of an inch. (Photos 12-202 and 12-203)

There is a crack below the north window in the lower concrete wall. It runs down to the floor behind a table. (Photos 12-204 thru 12-206)

Above the upper left corner of the south window on the west wall, there are two vertical cracks at a joint. The length is about 7 inches total. The lower crack is about 1 and $1 / 2$ inches long. The upper crack is about 5 and 1/2 inches long. (Photo 12-207)

There is a separation in the upper southwest corner. (Photo 12-208)
There is a small area of water on the floor in this corner. (Photo 12-209)

Now on the south wall. There is a vertical crack at a tape joint behind the dryer. It runs 41 inches, the total height of the sheetrock wall. (Photo 12-210)

There is a crack in the concrete wall to the lower left of this window. It measures about $1 / 32$ of an inch wide and runs from the top of the wall to the floor. (Photo 12-211)

Now on the east wall.
To the lower left of the service panel, there is a crack in the concrete wall that runs to the floor. It measures about 20 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 12-212)

There is an area of water on the floor behind the water heater. One of the pipes is corroded. (Photo 12-213)

Now inspecting the floor. It has a joint running east-west across the floor.

The south part of the floor has intersecting cracks.

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The main crack is roughly north-south trending from the south wall near the drain to the joint. It measures about 140 inches long. (Photos 12-214 thru 12-216)

This main crack has a couple of branches. One runs eastward to the east wall and measures about 141 inches long. (Photos 12-217 thru 12-219)

There is apparent water seepage at the base of the east wall. (Photo 12-219)

This east branch has a branch that runs northeastward to the joint about 86 inches. It is about $1 / 32$ of an inch wide. (Photos $12-220$ and
12-221)
The east branch has another branch that trends southward underneath the washing machine. Thirty-four inches are visible of this crack and it is very faint. (Photo 12-222)

The main crack has another branch that runs to the west. It measures about 80 inches to a point at the west end of the roan where it y's. (Photos 12-223 and 12-224)

One branch of the $Y$ runs south to the door about 56 inches. It is about $1 / 16$ of an inch in width. The other branch runs northwest to the west wall about 85 inches. It is about $1 / 32$ of an inch wide. (Photos 12-228 thru 12-230)

Just east of the $Y$, there are two other branches. One runs southeast about 40 inches and is barely visible. The other branch runs to the northwest and branches. One branch runs 29 inches and connects with the northwest branch of the first $Y$. The other branch runs west to the joint about 68 inches. (Photos 12-225 thru 12-227)

Now at the north half of the floor. There is a crack at the east part trending north from the joint and intersects another crack below the ping-Pong table. It ranges fram about $1 / 32$ of an inch wide down to barely visible. (Photos 12-231 and 12-232)

There is another crack in the northeast part of the floor. The visible portion of this crack can be seen from the southwest corner of the freezer trending northwest and then turning westward. It disappears under the ping-Pong table about 103 inches measured on a straight line from the freezer. The crack is barely visible to about $1 / 32$ of an inch wide. It branches near the northeast corner of the ping-Pong table. (Photos 12-233 thru 12-235)

The ceiling has a few cracks at tape joints. One is to the upper left of the northeast window. It runs about 27 and $1 / 2$ inches from the north wall.

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Between the two windows on the north wall and above the Ping-Pong table, there are a couple of slight separations in the ceiling. The south one measures about 27 inches long and the north one about 40 and $1 / 4$ inches long.

At the south facing wall of the stairway enclosure, there is about a 1 and $1 / 2$ inch long hairline crack in the ceiling, running south of the corner of the stairway enclosure.

The bottom of the slanted stairway enclosure has a bulging type hairline crack measuring about 24 inches long. (Photo 12-236)

Just south of the stairway enclosure, there is a slight crack that runs from the east wall about 4 and $1 / 2$ inches. It is a hairline crack at a seam.

There is also a slightly cracked seam in the ceiling south of the pole. It measures 16 and $1 / 4$ inches long and is about a hairline wide.

Back to the south wall. There is about a 10 inch long, roughly horizontal crack to the upper left of the switch box door. (Photo 12-237)

That completes the interior inspection.

## EXTERIOR INSPECTION

ID photograph of the front, north side of the house. (Photo 12-238)
Starting at the west end of the front. There is a crack in the foundation to the lower left of the west basement window. It is about 3 and 3/4 inches long and about $1 / 8$ of an inch wide. (Photo 12-239)

There is a crack in the foundation below the east basement window. It measures about 3 and $1 / 2$ inches vertically and about $1 / 16$ of an inch wide. (Photo 12-240)

There is another foundation crack located about a foot west of the front porch. It measures about 3 and $1 / 2$ inches vertically and about $1 / 16$ of an inch in width. (Photo 12-241)

The front sidewalk, north of the house, has grass growing through almost every expansion joint.

The fifth slab, south of the gate, has a crack at its south end. The crack is about 10 inches long and 3/16 of an inch wide. (Photo 12-242)

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There is a crack and a spall in the next slab to the south. Twelve inches of the crack are visible and it is about $1 / 4$ of an inch wide. (Photo 12-243)

The eighth slab from the gate has a crack running north-south that has grass growing through it. The crack is about 54 inches long and $1 / 4$ of an inch wide. (Photo 12-244)

The ninth slab is extremely overgrown with grass. The tenth slab has same cracks that range in width from $1 / 4$ of an inch to a hairline. (Photo 12-245)

ID photograph of the sidewalk looking north. (Photo 12-246)
There is a spall at the north edge of the front porch east of the sidewalk. (Photo 12-247)

ID photograph of the east side of the house. (Photo 12-248)
There is a crack in the foundation at the north end of the east side. It is about 10 and $1 / 4$ inches long and about $1 / 16$ of an inch wide. (Photo 12-249)

The north window on the east side has deteriorated caulk. (Photo 12-250)

There is a vertical crack in the foundation near the antenna mast. It is about 13 inches long and about $1 / 16$ of an inch wide. (Photo 12-251)

The south window on the east side also has deteriorating caulk. (Photo 12-252)

The porch foundation is separated from the house foundation by about $1 / 4$ of an inch. (Photo 1.2-253)

The southeast downspout lacks a curved tip and empties close to the foundation. (Photo 1.2-254)

ID photograph of the south side of the house. (Photo 12-255)
The south side of the porch foundation has a vertical crack located just east of the steps. It measures about 19 and $3 / 4$ inches from the top and does not quite make it to the ground. It ranges from about $1 / 16$ of an inch wide to a hairline. (Photo 12-256)

The handrail is loose at the porch steps.

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West of the step, there is a foundation crack with a branch. It measures 18 inches for the vertical part and about 9 and $1 / 2$ inches for the branch that runs eastward. (Photos 12-257 and 12-258)

The downspout at the southwest corner of the porch empties close to the foundation. It has no curved tip or splash block. (Photo 12-259)

The house foundation, just west of the porch, has a vertical crack. It measures about 8 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. (Photo 12-260)

To the lower right of the basement window, there is a vertical crack in the foundation. It measures about 7 inches long and about $1 / 16$ of an inch wide. (Photo 12-261)

Now at the basement entrance. There is a concrete sidewalk that has a crack running east-west across the width. The crack width varies and is full of dirt. (Photos 12-262 and 12-267)

The east retaining wall of the entrance to the basement is separated from the house by about $1 / 2$ an inch. (photo 12-263)

The west retaining wall is separated from the house by about $3 / 8$ of an inch. (Photo 12-264)

There is a system of cracks at the west end of this walkway. One crack runs south about 78 inches from the door. It has a couple of branches. These are hairline cracks, barely visible. (Photos 12-265 and 12-266)

The west retaining wall has a vertical crack at its south end. It is about 11 inches long and a hairline wide. (Photo 12-268)

The steps to the back. porch appear to have settled northward. There is also a separation between the steps and the house. The separation is about 1 and $1 / 4$ inches at the bottom and narrower at the top. (Photo 12-269)

The south basement window has a missing sill and deteriorating paint. (Photo 12-270)

The upper west window on the south side has deteriorating caulk. (Photo 12-271)

The two small upper south windows also have deteriorating caulk. (photo 12-272)

ID photographs of the west side of the house. (Photos 12-273 and 12-274)

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At about the middle of the west foundation, there is a large vertical crack. This was visible from inside the basement. It measures about 13 inches vertically and about $3 / 16$ of an inch wide. (Photo 12-275)

The two upper west windows have deteriorating caulk. (Photos 12-276 and 12-277)

There is another sidewalk that leads west from the front of the house.
ID photograph of the west sidewalk. (Photo 12-278)
This sidewalk was apparently poured with no expansion joints.
Northwest of the house, there is a crack across the sidewalk slab. The width is about 3/16 of an inch. (Photo 12-279)

There is another sidewalk crack located about 5 feet to the east. It is about $1 / 16$ of an inch wide and runs across the slab. (Photo 12-280)

There is another sidewalk crack across from the area between the two front basement windows. This crack runs across the slab and has grass growing through it. The width is fram about $3 / 8$ to $1 / 8$ of an inch. (Photo 12-281)

This west sidewalk is partially separated from the front porch by about 1/8 of an inch. (Photo 12-282)

The front west handrail is very loose and there are no bolts holding it onto the house.

The two west front windows have deteriorating caulk. (Photos $12-283$ and 12-284)

The front picture window also has deteriorating caulk joints. (Photos 12-285 thru 12-288)

There are several outbuildings on this farm. Mr. Cole requested that we not inspect them.

However, we will take a few general photographs of the buildings.
Outbuildings
There is a garage and a concrete block barn located southeast of the house. ID photograph from the west. (Photo 12-289)

There is a tin sided hay barn located directly south of the house. ID photograph from the northeast. (Photo 12-290)

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There are three grain bins located west of the house. ID photograph from the southeast. (Photo 12-291)

There is a concrete klock structure, probably an old dairy barn, located northwest of house. It has numerous cracks and several broken windows. ID photograph from the southeast. (Photo 12-292)

There is a large slab of concrete located south of the barn that has extensive cracks. (Fhotos 12-293 and 12-294)

ID photograph of the concrete block dairy barn from the northeast. (Photo 12-295)

ID photograph from the northwest. (Photo 12-296)
There is a slab over a water trough, or a well, located west of the dairy barn. Water is flowing out of the trough at this time. (Photo 12-297)

Across the road, to the north of the house, there is a pole barn. ID photograph from the : Buthwest. (Photo 12-298)

Mr. Cole also owns the farmhouse and outbuildings located northwest of this rental house which his son, Donald Cole lives in. Mr. Cole requested that we not inspect this house.

He indicated that the interior walls are paneled over old cracked plaster and that he has no concern for it or the outbuildings.

ID photographs of the Donald Cole farmstead from the southeast. (Photos 12-299 and 12-300)

ID photograph of the house from the southwest. (Photo 12-301)
ID photograph of the farmstead from the west. (Photo 12-302)

## General Comments

The house was constructed in 1960. Several cracks were found in the concrete foundation and basement walls. The basement floor al so has several cracks.

The interior sheetrock walls and ceilings have numerous cracks and separations. Many of which have oocurred at tape joints.

The house has a gutter system, but some downspouts empty close to the foundation.

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That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL / mp

Enclosure: 302 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE


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## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Restdent: Aaron Howard Keeton
2. Date: October 20, 1986 Time: 3.00pm
3. Address:__Box 94, Amoret, Missouri_ 64722
4. Location: 325 feet west of $Y$ Highway and 220 feet south of 52 Highway
5. Telephone Number: (816) 925-3490
6. Dates of occupancy by current resident: 1982-Present
7. Dates of any temporary or permanent abandonment:Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or additions: None
(a) $\qquad$
(b) $\qquad$
(c)
10. Construction of building:
(a) framing (joists, rafters, and stud walls): Stud walls: 2 " $x 4$ "
(b) interior walls: Paneled or wallboard
(c) roof: Gable type, shingled
(d) footings; foundations: Concrete block foundation
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement floor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Roy Rymer $^{\text {( }}$
(h) size and direction of any large windows: None
III. Environnental Information

1. Approximate elevation of area: 850 feet at residence
2. Type of soll in area: silty clay laom
3. Type of subgrade drainage at base of foundat lon: None
4. Water wells u:ilized (Indicate depth"and use):16 feet. Good water supply
5. Cisterns or surface water storage utilized: (indicate purpose andapproximate volume). None
6. Source of water, if not included above:
7. Eve troughs or any other exterior drainage features: Guttering, downspouts, and splashblocks around house.
8. Description of general grading or landscaping in vicinity: level area with a northwest slope.
IV. Any notable existing deterioration or damage See photo survey
9. Cracks in interior walls:
10. Receding of doors, windows:
11. Noticeable settlement:
12. Foundation cracks:
13. Exterior wall. cracks (brick veneer):
14. Sidewalks, steps, driveway pavement:
15. Basement leaks:
V. Plan view of residence, well, outbuildings see sketch
VI. Elevation views or photographs of walls see photo survey
16. North
17. South
18. East
19. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features,construction techniques, or status of deterioration, that, becauseof the nature of their construction, materials of which they areconstructed, status of deterioration, may exhibit an unusual responseto normal blasting activities.
See survey narrative.

October 22, 1986
Report No. 87056-29
P \& M Map Photo No. 24

Subject: Inspection of the Aaron Howard Keeton Residence Box 94
Amoret, Missouri 64722 October 20, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION

We will start on the west side of the residence.
ID photograph of the west wall. (Photo 29-1)

Also zoomed in on the small chimney. (Photo 29-2)
Start at the northwest corner and work counterclockwise.

The downspout at this corner falls directly into a splashblock.
There are mortar separations and cracks all along this foundation.

The height of the blocks is 7 and $1 / 2$ inches and their length is 15 to 16 inches.

These separations in the mortar range from a hairline to as wide as $5 / 8$ of an inch where almost no mortar is present. (Photos 29-3 thru 29-10)

Also note that the ground is very soft in places.
ID photograph of the west step. (Photo 29-11)
There is a $5 / 8$ inch separation between the porch and the foundation at the north side. (Photo 29-12)

On the south side the separation is $1 / 2$ inch wide. (Photos 29-13 and 29-14)

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The Pittsburg and Midway Coal Mining Company
Report No. 87056-29
October 20, 1986
Page 2

There is no downspout on the southwest corner.
The roof is shingled and the shingles are uneven and wavy. Also, the guttering is bent. (Photos 29-15 and 29-16)

The paint around the windows and doors is heavily chipped and scarred.
ID photograph of the south side. (Photo 29-17)
There is a large mortar separation at the southwest corner. The width of this separation is $1 / 2$ inch. The length of the separation is 4 and 1/2 inches. (Photo 29-18)

There is also a smaller mortar separation about a block to the east. It has a width of $1 / 8$ of an inch, length of 4 and $1 / 2$ inches. (Photo 29-19)

There is no screen to the crawl space underneath the house.
There is another mortar separation with a width of $1 / 16$ of an inch and a length of 5 and $1 / 2$ inches. (Photo 29-20)

The step to the south entrance into the residence is cracked. This separation has a maximum width of close to 3 inches. (Photos 29-21 and 29-22)

There is missing side shingling under the door. (Photo 29-23)
There is a vertical mortar crack to the right of the porch. This crack varies in width from a hairline to $1 / 8$ of an inch. Length of 7 and $1 / 2$ inches. (Photo 29-24)

There are vertical mortar separations between blocks from here to the end of the foundation. These all measure from a hairline to $1 / 8$ an inch in width and 7 and $1 / 2$ inches in height. (Photos 29-25 thru 29-28)

The downspout at the southeast corner drops directly into a splashblock.
The paint around the windows and on the guttering is heavily cracked and chipped.

An ID photograph of the east wall. (Photo 29-29)
Took a zoom photograph of the chimney. (Photo 29-30)
There is a mortar separation near the southeast corner with a width of 1/8 of an inch. (Photo 29-31)

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At the next block there is also a mortar separation measuring $3 / 8$ of an inch. (Photo 29-32.)

There are many hairline separations in the mortar. These all have hairline widths except for the blocks where there is mortar missing between the blocks. These separations measure from $3 / 8$ to $5 / 8$ of an inch. (Photos 29-33 thru 29-36)

There is an area about the center of the east wall where mortar is missing from the blocks and the blocks are moved inward and out of position. (Photo 29-37)

Now at the northeast corner.
The downspout drops directly into a splashblock.
Stairstepping mortar separation about the center of the north wall with a width of $1 / 8$ of an inch. (Photo 29-38)

Coming toward the west end of the north wall.
A small L shaped area.
There are many hairline mortar cracks and a couple of larger mortar separations. The hairline mortar cracks have widths less than $1 / 32$ of an inch. The larger mortar separations have widths of up to $5 / 8$ of an inch. (Photos 29-39 thru 29-43)

The westernmost window on this side has a large piece of glass missing. (Photo 29-44)

ID photograph of the north side. (Photo 29-45)
Also took another picture of the chimney. (Photo 29-46)
INTERIOR INSPECTION
Entered through the south entrance to a small patio.
Patio
Vinyl floor.
Wallboard type wall.
Wallboard ceiling.
Starting at the solithwest corner, above the upper right of the window there are a pair of paralleling diagonal cracks.

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The larger one has a length of 14 inches. The smaller one has a length of 3 inches. (Photo 29-47)

In the corner there is paint chipping and falling off the ceiling. (Photo 29-48)

At both the upper left and lower left corners of this window, there are horizontal cracks occuring to the right side of the door. The one at the upper corner measures 10 inches. The one at the lower corner measures 10 inches also. (Photos 29-49 thru 29-51)

There is a horizontal crack at the upper right corner of the door extending to the upper left corner of the three windows. It measures 15 and $1 / 2$ inches. (Photo 29-52)

There is also a horizontal crack at the lower right corner of this window measuring 15 and $1 / 2$ inches. (Photo 29-53)

There is also a crack in the ceiling that extends down the wall 8 and $1 / 2$ inches. It extends across the ceiling 29 inches. (Photos 29-54 and 29-55)

At the upper right corner of the three windows, there is a hairline vertical crack that measures 13 and $1 / 2$ inches. (Photo 29-56)

All of the cracks in this patio have been hairlines.
There is a horizontal paint crack at the upper left corner of the windows. The length of this crack is 17 inches. (Photo 29-57)

This crack continues on around the corner and connects to the upper right of the next window.

At the lower left corner of the three windows on the south wall, there is a horizontal crack measuring 17 inches. (Photo 29-58)

ID photograph of the east wall. (Photo 29-59)
There is a horizontal crack at the lower right corner of the window. This connects to a horizontal crack at the north window. The length of this crack is 8 and $1 / 4$ inches. (Photo 29-60)

There is also a horizontal crack at the upper right corner measuring 8 and 1/4 inches. (Fhoto 29-61)

There is a diagonal crack at the upper left corner of the window. This measures 14 and $1 / 2$ inches. (Photo 29-62)

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There is a small diagonal crack at the lower left corner of this window but it is obscured by a storage cabinet. I cannot get a photograph and we cannot get in to measure.

Now looking on the north wall.
There is a separation between the wall and the door. There is also a vertical crack at the upper right corner. It measures 12 and $1 / 2$ inches. There is also a diagonaling crack that extends off this crack that measures 6 and $l / 4$ inches. The separation between the door and the wall is $1 / 8$ th of an inch. (Photos 29-63 thru 29-65)

There is a vertical crack and paint chipping at the upper left corner of the door It measures 12 and $3 / 4$ inches. (Photo 29-66)

This is the easternmost door.
Now at the westernmost door. Still on the north wall.
There is a minor separation between the door and the wall. There is also a vertical crack at the upper right corner measuring 12 inches. (Photo 29-67)

There is a large area of paint chips and cracks above the center of the door. (Photo 29-68)

There is a large area of paint chipping and cracking above the left of the door and all the way to the west wall. (Photo 29-69)

ID photograph of the west wall. (Photo 29-70)
There is a large area of paint chipping at the northwest corner. (Photo 29-71)

There is a diagonal crack at the upper right corner of the window. This crack measures 14 and $3 / 4$ inches. (Photo 29-72)

There is paint cracking and chipping in the wall at the upper left corner of the window. (Photo 29-73)

There is a large area of the ceiling near this west wall where the paint has been removed. Mr. Keeton says it leaks quit heavily and there are 5 water buckets here to catch water from the leaks. (Photos 29-74 thru 29-76)

At the lower right corner of this window, on the west wall, there is a vertical crack. Its length is 18 inches. (Photo 29-77)

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Now moving northward into the kitchen/dining room area.
Kitchen/Dining Room
Vinyl floor.
Paneled walls.
Painted over paper covering ceiling.
ID photograph of the north wall. (Photo 29-78)
There is an area of ceiling staining toward the north wall about the center. (Photo 29-79)

ID photograph of the west wall. (Photo 29-80)
It appears that the west wall may bow slightly toward the center of the room at the ceiling.

ID photographs of the south wall. (Photos 29-81 and 29-82)
There is a tape seam separation at the ceiling. (Photos 29-83 and 29-84)

ID photograph of the east wall. (Photo 29-85)
Now moving into the living room.

## Living Room

This is at the southwest corner of the residence.
Hardwood floor covered by some vinyl. Paneled walls.
Acoustical tile ceiling.
ID photograph of the north wall. (Photo 29-86)
ID photograph of the west wall. (Photo 29-87)
ID photograph of the south wall. (Photo 29-88)
ID photograph of the east wall. (Photo 29-89)
Now moving into the room located at the northwest corner of the residence.

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## Northwest Room

Vinyl floor.
Paneled walls.
White painted paper covered ceiling.
ID photograph of the west wall. (Photo 29-90)
ID photograph of the south wall. (Photo 29-91)
ID photograph of the east wall. (Photo 29-92)
And of the north wall. (Photo 29-93)
There is an area of ceiling staining and damage on the east wall about the center. (Photo 29-94)

There is another bedroom.
Bedroom
This is at the northeast corner of the residence.

Vinyl floor.
Papered walls and ceiling.
ID photograph of the east wall. (Photo 29-95)
ID photograph of the north wall. (Photo 29-96)
ID photograph of the west wall. (Photo 29-97)
ID photographs of the south wall. (Photos 29-98 and 29-99)
The south wall is stained next to the light switch and over the bed. (Photos 29-98 and 29-99)

Garage/Shop
ID photograph from the southwest. (Photo 29-100)
Concrete block foundation underneath the garage and shop.
There are mortar separations in the blocks.
The block heights are 6 and $1 / 4$ inches from ground level.

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Most of the separations are hairline in width. There is one toward the southwest corner that has a width of $1 / 4$ of an inch. (Photo 29-101)

There is a diagonal block crack toward the southeast corner, 7 and $1 / 4$ inches in length. To the right of that there is a mortar separation 6 and $1 / 2$ inches in length. The width of these are $1 / 8$ of an inch or less. (Photos 29-102 and 29-103)

ID photograph of the east side of the garage. (Photo 29-104)

There are two mortar separations on the east side toward the south end. These are 6 and $1 / 2$ inches in length and have a width of $3 / 8$ of an inch. (Photo 29-105)

There is a hairline mortar separation to the left of the garage door. (Photo 29-106)

There is also a diagonal separation to the right. The length of the diagonal is 6 inches. (Photo 29-106)

There is a mortar separation toward the northeast corner. Separation is $3 / 8$ of an inch wide and 7 inches long. (Photo 29-107)

There is a very old driveway that is heavily cracked and separated. (Photos 29-108 and 29-109)

ID photograph of the north side. (Photo 29-110)
The concrete blocks are 8 and $1 / 2$ inches high and 16 inches in length. The separations in the mortar are generally from $1 / 4$ of an inch to a hairline. (Photos 29-111 thru 29-119)

Photographs of the west foundation. There are minor mortar separations from 3/16 to a hairline. (Photos 29-120 and 29-121)

Entered through the west doorway into the shop.

## Shop

Poured concrete flcor.
Wallboard walls ancl ceiling.
There is a large floor separation at the door from north-south. Its width at the door is $3 / 4$ of an inch. (Photo 29-122)

ID photograph into the shop from the west wall. (Photo 29-123)

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Garage
There is a separation between the slab floor and the foundation on the west side. It is difficult to see because of all the material on the floor. Separation between the two measures at $1 / 2$ an inch in width. (Photo 29-124)

I see no noticeable cracks in the garage floor.
ID photograph toward the east end. (Photo 29-125)
ID photographs back toward the west. (Photos 29-126 and 29-127)
ID photographs of the garage floor. (Photos 29-128 and 29-129)
Storage Shed
ID photograph from the southwest. (Photo 29-130)
ID photograph of the east side. (Photo 29-131)
It has a poured concrete floor.
There are a lot of materials on the floor.
What floor can be seen shows no evidence of cracking.
ID photographs. (Photos 29-132 thru 29-134)
Cellar
There is a lot of water in the cellar.
Mr. Keeton says there is a pipe underneath the ground where the water comes into the cellar.

I can see no evidence of cracking in the wall.
ID photographs. (Photos 29-135 thru 29-138)
ID photograph of the south side. (Photo 29-139)
General Comments
Even though there are splashblocks under the downspouts, the exterior drainage away from the foundation of the house is poor. There were cracks in the foundation indicative of hydraulic action and loading strain. Also, the ground was saturated around the foundation.

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The Pittsburg and Midway Coal Mining Company
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The roof shingles were sagging and there was evidence of a sagging ceiling in the kitchen and dining room. There were many expansion cracks in the patio room. These types of cracks are probably present throughout the residence but are hidden in paneling.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/mp
Enclosure: 139 Photographs

2431 RANGELINE SUITE ABB
POO. BOX 1256
JOPLIN, MO 64802-1256
PH. (417) 624-0164

November 7, 1986
Report No. 87056-29
P \& M Map Photo No. 24

Subject: Supplement to Inspection of the Aaron Howard Keeton Residence Box 94
Amoret, Missouri 64722
November 4, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. James A. Borders
Transcribed and edited from taped field notes.

## General Comments

A supplemental visual inspection of the east chimney stack shows some possible thermal expansion cracks near the top of the stack. These appear to be very minor in nature.

An additional inspection of the cellar once again reveals no cracks in the walls or ceiling. What may appear to be a crack in the ceiling in photos 29-137 and 29-138 is an uneven line in the pour. A floor inspection cannot be done due to the amount of water on the floor.

Once again we would note that the foundation of the residence shows evidence of cracking brought about by hydraulic and settlement effects. In particular, hydraulic related foundation problems may be expected to continue to occur unless proper steps are taken to give adequate drainage of water away from the foundation.

Referring to page 4 of the initial report, the statement for photo 29-52 should read "There is a horizontal crack at the upper left corner of the door extending to the upper right corner of the windows. It measures 15 and $1 / 2$ inches. (Photo 29-52)"

WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler
Manager of Technical Services

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## atch of Oitbuildings : $29-11+h r u 29-119$

## con Howard Keeton House $\downarrow, ~ v \quad v$




## $29-131$




$29-45$

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## PBE゙-BLAS'L SURVEY, RESIDENTIAL

I. Baslc Infonmation

1. Name of Resident: Caleen Mocamon Cowned_by F\& M._John Steele will take over soon)
2. Date: April 17, 1987_IL__12:40pm
3. Address: Route_1,_Box 336,_Amoret,_Missouri 64722
4. Location: I mile north and I milewest_of Amoret
5. Telephone Number:_(816) 925-3247
6. Dates of occupancy by current resident: Last 20 years
7. Daces of any temporary or permanent abandomant: $\qquad$ None

If. Lnformation Concerning BuLIdAngs
(repear Eor addational bulldiugs)

1. Date of ocighal construction: 1967
2. Dace(s) of major remodeliag or addletons:
(a) Added porch - date not known.
(b) Built in stove 14 years agg.
(c)
3. Construction $u$ E bulliding:
(a) Eranligg (Jolsts; rafters, and stud walls):
$2^{\prime \prime} \times 8^{\prime \prime}$ or $2^{\prime} \times 10^{\prime \prime}, 2^{\prime \prime} \times 6^{\prime \prime}, 2^{\prime \prime} x 4$ ".
(b) Laterlor walls: Sheetrock.
(c) rook: Composition shingles.
(d) Eootings; Eoundatluns: Concrete foundation and floor. Concrete footing.
(e) basemenc walls (indtcate how keyed to Eooting of Eloor):

Not applicable.
(i) basement Eloor (keyways, chlckness):

Not applicable, who constructed building: Mr. and Mrs. McCammon.
(h) size and direction of any large windows: None.
-II, Enviromnental Information

1. Approximate elevation of area:

857 feet.
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of Eoundation: Not known.
4. Water wells utillzed (indicate deptrand use): 40' deep.
5. Cisterns or surface water storage utilized: (Lndicace purpose and approximate volume). Used as septic tank.
6. Soutce of water, if not Lncluded above: Well.
7. Eve troughs or any other exterfor dralnage Eatures: No.
8. Descripeion of general grading or landscaplug in vicinfty;

Large mound northeast of house, yard slopes southward.
IV. Any notable exlsting detertoration or damage

1. Cracks in interlor walls: See survey.
2. RecedLig of doors "wLidu'ds: See survey.
3. Noticeable settlenemt: See survey.
4. Foundation cracks: See survey:
5. Exterior wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls see survey.
8. North See survey.
9. South See survey.
10. East See survey.
11. West See survey.
VII. Comments or supplementary drawings See survey.
VIII. Discussion or speciEic comments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which chey are constructed, status of deterioration, may exhlbit an unusual response to nomal blasting activities.

See survey

## White Industrial Seismology, Inc. <br> 1206 SCHIFFERDECKER <br> P.O. BOX 1256 <br> JOPLIN, MO 64802-1256

PH. (417) 624-0164

April 21, 1987
Report No. 87056-105

Subject: Inspection of the Caleen McCammon Residence
Route 1, Elox 336
Amoret, Missouri 64722
April 17, 1987
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
According to Mrs. McCarmon, this house was originally a garage and has been remodeled.

Living Room
Concrete floor covered with vinyl and brown carpet. Blue painted sheetrock walls. Lightly textured sheetrock ceiling.

Two doors on the south wall to the bedrooms. Door on the north to the kitchen.

Photographs of the south wall. (Photos 105-1 and 105-2)
Photograph of the west wall. (Photo 105-3)
Photographs of the north wall. (Photos 105-4 and 105-5)
Photograph of the east wall. (Photo 105-6)
Starting on the west wall at the window. There is a visible crack at a seam on the west waill, to the left of the window, that runs from the ceiling to the floor. It is from a hairline to slightly wider.

This window on the west wall has an air conditioner, and there is an area of apparent water damage below the left end.

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April 17, 1987
Page 2

In the northwest corner, the tape seam is spliting at about mid-height. It measures about 22 inches in length at this time.

In the southwest corner, there is also a crack in the tape joint.
(Photos 105-7 and 105-8)
At the west end of the south wall, there is a slightly split tape joint below a picture. (Photo 105-9)

Above the upper right of the west bedroom entrance, there is a split tape joint that is about 3 and $1 / 2$ inches long. Ib the right, there is another slight crack. (Photos 105-10 and 105-11)

Now at the east bedroom entrance. There is a slightly split tape joint near the ceiling above the upper right end. (Photo 105-12)

The tape joint above the upper left end is bulged at this time. (Photo 105-13)

Now at the front door on the east wall. There is a slight crack above the upper right end that is about 3 inches long. (Photo 105-14)

To the upper right of the door, in the southeast corner, the tape joint appears to be slightly bulged. (Photo 105-15)

Now on the north wall. At the east end, the tape joint at the intersection with the ceiling is split. (Photos 105-16 and 105-17)

Now at the kitchen entrance on the north wall. Above the upper right end, there is a slight vertical crack. It is about 10 and $1 / 2$ inches long. (Photo 105-18)

To the upper right of the kitchen door, there is a roughly L-shaped crack connecting with a split at the ceiling intersection. It is about 11 and $1 / 2$ inches long measured on the diagonal. (Photo 105-19)

Now at the flue on the north wall. There is a slight separation between the upper east side of the flue and the ceiling. (Photo 105-20)

The upper west side of the flue has the same condition. (Photo 105-21)
Below the flue pipe, there is a slight crack in a patched area of the flue that runs all the way across horizontally. (Photo 105-22)

Just west of the flue, on the north wall, there is a slight crack behind an electrical wire. This crack is about 3 inches long. (Photo 105-23)

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Now inspecting the ceiling. It has numerous paint cracks and patched areas. Photographs of the ceiling starting with the east half. (Photos 105-24 and 105-25)

At the west end, a ceiling crack connects with a cracked seam on the west wall. (Photo 105-26)

Near the flue, there are areas of peeling texture in the ceiling. (Photo 105-27)

Just southeast of the flue, and near the center of the ceiling, there are a couple areas of peeling texture. (Photo 105-28)

The ceiling has visible seams in the sheetrock, east of the kitchen door, at the previous location of the attic entrance. (Photo 105-29)

Mrs. McCammon stated that she plans to remove the texture and repaint the ceiling.

There is a seam to the south of the attic entrance that is split in a few areas. (photos 105-30 thru 105-32)

West Bedroom
Carpeted floor.
Red painted sheetrock walls. Lightly textured sheetrock ceiling.

Windows on the south and west walls. Closet enclosure in the southeast corner.

Photograph of the west wall. (Photo 105-33)
Photograph of the south wall. (Photo 105-34)
Photographs of the east wall. (Photos 105-35 and 105-36)
Photographs of the north wall. (Photos 105-37 and 105-38)
Starting on the west wall. There is a split in the tape joint in the southwest corner. The lower part of the corner cannot be seen, but the split can be seen running upward from this table almost to the ceiling. (Photos 105-39 and 105-40)

The tape joint is cracked below the lower right end of the west window along its entire length. (Photo 105-41)

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Above the upper left end of the entry door, there is a slight bulge in the tape joint. There is a joint above about the middle of the door that has a slight ridge. (Photo 105-42)

Now at the south wall window. The tape joint below the lower right of the window, is cracked all the way down to the floor. Most of these tape joint cracks are from about a hairline to $1 / 32$ of an inch wide. (Photo 105-43)

In the ceiling, the tape joints are visible as bulges. There is a slight separation between the ceiling and the north wall at the west end. The length of this separation is about 13 inches. (Photo 105-44)

There is also a slight separation between the crown molding on the east wall and the ceiling. (Photos 105-45 and 105-46)

Photographs of the ceiling. First looking west and then looking east. (Photos 105-47 thru 105-50)

East Bedroom
Carpeted floor.
Lavender painted sheetrock walls.
White painted sheetrock ceiling.
Windows on the east and south walls.
Photographs of the south wall. (Photos 105-51 and 105-52)
Photographs of the east wall. (Photos 105-53 and 105-54)
Photographs of the west wall. (Photos 105-55 and 105-56)
Photographs of the north wall. (Photos 105-57 and 105-58)
Starting on the east wall. There are a couple of hairline cracks below the lower right end of the window. One measures about 9 inches long and the other about 1 and $1 / 2$ inches. (Photo 105-59)

Below the lower left corner, there is also a slightly cracked joint. It is a couple of inches long. (Photo 105-60)

To the left of the window, there are two nail pops. (Photo 105-61)
Now at the south wall window. Below the lower left end, there are two seam cracks. One runs to the floor and the other is about 6 inches long. (Photos 105-62 and 105-63)

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There is a hairline crack above the upper left. It is about 5 and $1 / 2$ inches long. (Photo 105-64)

In the southwest corner, there is a slight crack in the tape joint. It runs up to about the level of the clock on the wall. (Photos 105-65 and 105-66)

There are two bulged joints visible on the north wall.
There is a separation in the upper northwest corner between the molding and ceiling. (Photo 105-67)

Now on the north wall. There is a split below the molding to the upper right of the door. (Photo 105-63)

There is also a slight split in the upper northeast corner. It is an intermittent crack that runs down a couple of feet from the ceiling. (Photo 105-69)

The tape joints are visible in the ceiling and there are a couple of blisters and stained areas in the ceiling near the south window. (Photos 105-70 and 105-71)

Back to the south window. Below the middle, there is another hairline crack. It is about 2 and $3 / 4$ inches long. (Photo 105-72)

There is a slightly cracked tape joint in the ceiling above the upper right part of the door. (Photo 105-73)

## Kitchen

Vinyl tile floor.
Papered upper walls.
Paneling and brick pattern vinyl lower walls.
Textured sheetrock ceiling.
Mrs. McCammon indicated that she has been scraping off some of the textured ceiling and there are several areas of missing texture and blistering. There are also several seam cracks in the ceiling.

Photograph of the east wall. (Photo 105-74)
Photographs of the north wall. (Photos 105-75 and 105-76)
Photographs of the south wall. (Photos 105-77 and 105-78)
Photograph of the west wall. (Photo 105-79)

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Above the upper right of the entrance to the living room, there is a paper crack. It is about 11 and $3 / 4$ inches long. (Photo 105-80)

To the right of the doorway and above the fruit, there is a branching type crack in the paper. (Photo 105-81)

The next seam of wall paper to the west is separating. (Photo 105-82)
Now on the north wall at the stove. Below the lower right corner of the cabinet, there is a split in the formica. (Photo 105-83)

Above the upper left of the light switch, there is another crack in the formica. (Photo 105-84)

There is a vertical bulge to the upper right of the door to the porch on the north wall and there are also a couple of cracks in the paper. (Photo 105-85)

Above the door, there is a horizontal tear in the paper. It is about 19 and $1 / 2$ inches long. This door has a cracked pane. (Photos 105-86 and 105-87)

The bathroom entrance is on the east wall.
Now inspecting the ceiling. It is in the process of having the texture removed. Starting with the east end, taking a series of photographs. (Photos 105-88 thru .105-97)

A ceiling seam runs from the north wall to the south wall above the cabinets at the east part of the ceiling and has intermittent cracks along both sides of the tape.

A large area of the texture has been removed in the northwest part of the ceiling. There is a cracked seam running north-south at the light fixture.

Bathroom
Vinyl tile floor.
Formica covered lower walls.
Papered upper walls.
Textured sheetrock ceiling.
Window on the east wall. Bathtub-shower at the north end of the bathroan.

A photograph looking eastward into the bathroom. (Photo 105-98)

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Photograph of the south wall. (Photo 105-99)
The tape seams are visible in the ceiling. (Photo 105-100)
The wallpaper in the upper southwest corner is slightly loose and wrinkled at the top. (Photo 105-101)

There is a tear in the paper to the upper left of the doorway. (Photo 105-102)

The caulk seal is separated below the spout of the bathtub. The caulk is deteriorating also. (Photo 105-103)

To the upper right of the window, there is loose wall paper. (Photo 105-104)

## Back Porch

There are cracked tiles in the kitchen floor at the entrance to the porch. Mrs. McCammon indicated that the kitchen floor al so has some cracked tiles in the southwest corner under the buffet. (Photo 105-105)

Concrete floor.
sheetrock south wall. Unfinished other walls and ceiling. Some paneling on the west wall.

Windows on the north and east walls. Door on the west wall to the outside.

There are some stains in the plank decking of the ceiling and walls.
Photographs of the west wall. (Photos 105-106 and 105-107)
Photographs of the north wall. (Photos 105-108 and 105-109)
Photograph of the east wall. (Photo 105-110)
Photographs of the south wall. (Photos 105-111 and 105-112)
Photographs of the ceiling showing water stains. (Photos 105-113 and 105-114)

A photograph of the visible area of the floor. (Photo 105-115)
That completes the interior inspection.

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## EXTERIOR INSPECTION

ID photographs of the front, east side of the house. (Photos 105-116 and 105-117)

The house lacks a gutter system.
Starting at the south end of the front side. There is warping and separation of the fascia at the corner. The siding at the south end is warped also. (Photos 105-118 and 105-119)

The third batten from the south is split. (Photo 105-120)
The south window has deteriorating paint and caulk. (Photos 105-121 and 105-122)

The siding is deteriorating at the lower ends. (Photos 105-123 and 105-124)

The front porch roof has deteriorating paint. (Photo 105-125)
ID photograph of the front brick porch. (Photo 105-126)
At the south window, there is separation along the sides of the outer trim. (Photos 105-127 and 105-128)

At the front door, the casing has been replaced. It does not match up correctly. (Photo 105-129)

North of the front door, the lower siding is deteriorating. (Photos 105-130 thru 105-132)

The bathroom window has deteriorating caulk and paint. (Photos 105-133 and 105-134)

A view of the front porch roof from the north. It appears to be separating from the fascia. (Photo 105-135)

ID photograph of the north side of the house. (Photo 105-136)
The siding is deteriorating at the lower ends on the north side of the house.

There is a hairline crack in the foundation at the northeast corner. It is about 5 and $1 / 2$ inches long. (Photo 105-137)

The north facing kitchen window has deteriorating caulk. (Photo 105-138)

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The east facing porch window has deteriorating caulk and paint. (Photo 105-139)

There is about a 6 inch long vertical foundation crack below the third batten from the east on the north side. (Photo 105-140)

Now at the back porch addition. It has a crack in the east facing foundation at the north end. It is about 2 and $1 / 2$ inches long. (Photo 105-141)

The north porch window has deteriorating paint and caulk. (Photo 105-142)

ID photographs of the west side of the house. (Photos 105-143 and 105-144)

There is an area of honeycombing in the foundation at the north end of the west side.

The trim is deteriorating at the northwest corner of the porch. (Photo 105-145)

The west kitchen window has deteriorating caulk and paint. (Photo 105-146)

There is a hairline vertical crack in the foundation to the lower right of this kitchen window. It is about 15 and $1 / 4$ inches long. (Photo 105-147)

The living room window, with the air conditioner, has deteriorating caulk and paint. (Photo 105-148)

There is a large vertical crack at about the middle of the west foundation. It is about 18 inches long and from $1 / 8$ to $1 / 16$ of an inch wide. (Photo 105-149)

Between that crack and the next window to the south, there is another vertical crack in the foundation. It is about 22 and I/2 inches long and about $1 / 32$ of an inch wide. There is also some honeycombing in the foundation to the lower left of the window. (Photo 105-150)

To the lower right of the south window on the west side, there is a crack in the foundation. It is about 23 and $1 / 2$ inches long and about 1/32 of an inch wide. (Photo 105-151)

The bedroom window on the west side of the house has severely deteriorating paint and caulk. (Photo 105-152)

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ID photographs of the north, west, and south sides of the chimney. It has deteriorating mortar and a cracked brick. (Photos 105-153 and 105-154)

ID photograph of the south side of the house. (Photo 105-155)
The lower ends of the siding are deteriorating on the south side of the house.

There is an area of honeycombing in the foundation at the southwest corner. (Photo 105-156)

There is a hairline vertical crack in the foundation just to the right of the telephone line at the west end of the south side. It measures about 16 and 1/4 inches vertically. (Photo 105-157)

To the lower right of the east window, there is a long vertical crack in the foundation. It is about 18 inches long and about $1 / 16$ of an inch wide. (Photo 105-158)

There is a diagonal filaw in the foundation at the southeast corner. (Photo 105-159)

There is another vertical crack in the foundation at the southeast corner. It is about 17 inches long and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 105-160)

The south side windows have deteriorating paint and caulk. (Photos 105-161 and 105-162)

Just southeast of the house, there is a concrete slab covering an old cistern. This servess as the septic tank for most of the waste water of the house. (Photos $105-163$ and 105-164)

ID photograph of the front of the house from the southeast. (Photo 105-165)

Outbuildings
There are several outbuilding located north of the house. General views of the area looking northward from the driveway. (Photos 105-166 and 105-167)

Starting with the insulated fruit shed located just north of the propane tank.

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Fruit Shed
Concrete block foundation.
Concrete floor.
Plywood ceiling.
Insulation on the walls.
A couple of photographs looking into this shed. (Photos 105-168 and 105-169)

The wooden shelving is deteriorating. (Photo 105-170)
ID photographs of this shed from the southwest and northwest. (Photos 105-171 and 105-172)

ID photograph of the east end. (Photo 105-173)
This shed has deteriorating paint on the trim and fascia.
It lacks a gutter system.
There is another shecl located directly north of the fruit shed.
Old Dog Shed
It has tin siding and roofing.
ID photograph of the south side of the shed. (Photo 105-174)
ID photograph of the front, west side of this shed. (Photo 105-175)
ID photograph of the north side. (Photo 105-176)
This shed rests on b.lock piers for a foundation.
ID photograph of the east side. (Photo 105-177)
It has sane rusting siding and no gutters. The interior walls and ceiling are unfinished and it has a wooden floor.

A view looking into this shed. (Photo 105-178)
There is a small, homemade, wooden camper shell to the north of the dog shed. (Photo 105-179)

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Barn

To the north, there is an old corral and a very old looking barn that is in extremely poor condition, according to Mrs. McCammon. This barn is in a severely deteriorated condition. ID photographs from the south. (Photos 105-180 and 105-181)

ID photograph of the north and west sides. (Photo 105-182)
This barn lacks a gutter system.
Well House
Northwest of the barn is the well house. This is just north of the small pond. It is a amall concrete block structure. Views of the south, east, north, and west sides of the block structure. There are some slight cracks in some mortar joints. (Photos 105-183 thru 105-186)

Shed
There is another old shed located just south of the small pond. It is in a severely deteriorated condition. Views of the north and east sides. (Photos 105-187 and 105-188)

There are numerous vines and trees growing along the east side.
ID photograph of the south side. (Photo 105-189)
This shed has a concrete foundation on the east side that is severely cracked. (Photo 105-190)

This shed lacks a gutter system.

## Large Grain Bin

To the west, there is an old grain bin and a small milking shed.
ID photograph of the grain bin from the east. (Photo 105-191)
ID photograph from the south. (Photo 105-192)
The bin rests on a concrete slab foundation. There is a crack at the west side of the foundation. (Photo 105-193)

There is a crack in the concrete on the east side of the bin, and near the door, there is another crack. Just to the right of the door, which is the north point, there is another crack in the concrete. (Photos 105-194 thru 105-196)

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Milk House
This is a tin sided and roofed, frame structure. It lacks a gutter system.

ID photograph from the northeast. (Photo 105-197)
ID photograph from the southwest. (Photo 105-198)
Farrowing Shed
There is another old shed, tin roofed and sided, in a fenced area to the northwest. ID photograph from the southeast. (Photo 105-199)

ID photograph from the northwest. This shed lacks a gutter system. (Photo 105-200)

Loafing Shed
North of the northwest shed, there is a snall loafing shed. It is tin sided and roofed and open on the south side. This shed appears to be in a dilapidated condition. ID photograph from the south. This shed lacks a gutter system. (Photo 105-201)

There is a small grain bin located east of the farrowing house.
Small Grain Bin
It has a concrete flcor that is covered with seed. ID photograph of this bin from the west. (Photo 105-202)

Garage
This is a yellow metal and wooden structure located just north of the house. It has tin and composition roofing. ID photograph of the west side. (Photo 105-203)

ID photographs of the south side. (Photos 105-204 and 105-205)
ID photographs of the east and north sides. (Photos 105-205 and 105-206)

The garage has a gravel and concrete floor, unfinished walls and ceiling.

The concrete part of the floor has a crack running roughly north-south. It appears to run across this slab at about the middle. This crack is mostly full of dirt. (Photo 105-207)

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Now into the shed at the south end of the garage.
The garage and shed lack gutters.
Shed
It has severely deteriorating exterior paint. Inside, it has a concrete floor. There is a crack running roughly east-west just inside the doorway. The edge of the floor is deteriorating below the doorway. (Photos 105-208 and 105-209)

Most of the floor is covered and connot be seen well. Unfinished walls and ceiling.

The north end of this shed is an outhouse. (Photos 105-210 and 105-211)
A view of the inside of the shed. (Photo 105-212)
Now back inside. Two photographs looking northward from the garage.
(Photos 105-213 and 105-214)
General Comments
This house was originally a garage and was remodeled by the McCammons.
The interior has sheetrock walls and ceiling, and several cracks have developed, mainly at tape seams. Mrs. McCarmon indicated she is in the process of redoing some of the ceilings.

The house has a concrete foundation that has several cracks. The house lacks a gutter system and the siding is deteriorating, especially at the lower ends.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## $\mathrm{CDL} / \mathrm{mp}$

Enclosure: 214 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE


## $105-206$



## $105-205$



## $105-203$








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| :---: | :---: | :---: |









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## 

$105-116$

> COMMERCIAL
> PRE-BLAST SURVEY, XXXXNXXKXXXXX
I. Bashc InEotmation

1. Name of ResLdent: Metz Grain of Amoret
2. Dace:

February 12, 1987 TLue: 10:35AM
3. Address: Amoret, Missouri 64722
4. Location: Just west of railroad tracks
5. Telephone Number: (816) 925-3217
6. Dates of occupancy by current resldent: 2 or 3 years
7. Dates of any temporary or perinanent abandonnent: During recent bankrupcy
II. Lnformarion Conceralng BuLidings
(repate for addltional bulldings)

1. Dace of orlginal construction: Not known
2. Date(s) of major remodeling or addltions:
(a) $\qquad$
(b) $\qquad$
(c)
3. Construction of building:
(a) Eranding (Jolsts, rafters, and stud walls):
(b) Lutertor walls:

Buildings and elevator are wood framed. No concrete except foundations.
(c) root:
(d) Eootings; EOundatLons: Concrete
(e) basement walls (Indicate how keyed to Eooting of Eloor): Not applicable.
(E) basement Eloor (keyways, thlekness):

Not applicable.
(g) nane of persori(s) who consrructed builiding: Not known
(h) size and direction of any large windows: Not applicable
III. Enviromental InEomation

1. Approximate elevation of area:

830 feet
2. Type of soll in area: Silty clay loam.
3. Type of subgrade daadnage at base of Eoundation:

Not known.
4. Water wells utilized (Indicate deptreand use):

Old well, north end of property.
5. Cisterns or surface water scorage utilized: (Indictacepeditpose and approximate volume). None.
6. Source of water, if not Lnciuded above: City water.
7. Eve troughs or any other exterlor dralnage Eatures: Some.
8. Description of general grading or landscaphag in vicinity: Generally flat.
IV. any notable expsting deterioracion or danage see survey.

1. Cracks in interlor walls: See survey.
2. Receding of doors, whadu's: See survey.
3. Noticeable settlemeat: See survey.
4. Foundation cracks: See survey.
5. Exterlor wall cracks (brick veneer): Not applicable.
6. Sidewalks, steps, driveway pavement:

See survey.
7. Basement leaks: Not applicable.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls See survey.

1. Norch See survey.
2.v South See survey.
2. East See survey.
3. West See survey.
VII. Comments or supplementary drawings See survey.
VIII. Discussion or speciEic comments concerning any unusual features, construction technlques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to normal blasting activities.

See survey.

February 19, 1987
Report No. 87056-103
P \& M Map Photo No. 70

Subject: Inspection of the Metz Grain of Amoret Property Amoret, Missouri 64722
Febr uary 1.2, 1987
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
Main Building
Starting at the south end of the building with ID photographs. (Photos 103-1 and 103-2)

South of the building, there are two old concrete pier foundations.
Series of photographs of the south pier. (Photos 103-3 thru 103-5 and 103-7)

The north side is spalling and has a crack at the west end. The crack is about 16 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 103-6)

Series of photographs of the north pier. This north pier has numerous cracks and is spalling severely. Most of these cracks are from $1 / 16$ of an inch to a hairline wide. (Photos 103-8 thru 103-11)

There is a concrete slab at the south end of the building. It has two sections. The west section is deteriorating severely. (Photos 103-12, 103-16, and 103-17)

The east edge of the slab is spalling. (Photos 103-13 thru 103-15)
Now inspecting the building.

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Starting at the west end of the south side foundation. There is a crack at the corner that ranges from about $1 / 4$ of an inch to about a hairline wide. (Photo 103-18)

An area of the foundation is spalling below the door and also just above the ground. (Photo 103-19)

Just to the east, there are two horizontal cracks. The total length is about 66 inches. They are from about $1 / 16$ of an inch to a hairline wide. (Photo 103-20)
'Io the east, there is a construction joint and some spalling in the foundation. (Photos 103-21 and 103-22)

Continuing to the east, there is a vertical crack in the floor slab. It is about 3 and $1 / 2$ inches long and about $1 / 8$ of an inch wide. (Photo 103-23)

The foundation has a vertical crack to the east. It is about 26 and $1 / 2$ inches long and ranges fram about $1 / 8$ to $1 / 16$ of an inch in width. There is also a separation between the floor slab and the foundation. It averages about $3 / 8$ of an inch wide. (Photos 103-24 thru 103-26)

To the east, there is a faint vertical crack in the foundation. It is about 34 inches long and barely visible. (Photo 103-27)

To the east, there is a horizontal crack in the foundation. It runs almost to the east end of the foundation. The total length is about 93 inches. It ranges from hairline to about $1 / 8$ of an inch wide. (Photos 103-28 thru 103-30)

There is a diagonal crack in the floor slab near the east end. It is about 8 inches long and $1 / 8$ of an inch wide. (Photo 103-31)

There is a very slight crack at the southeast corner of the foundation, just below the floor slab. It is about 3 inches long and a hairline wide. (Photo 103-32)

Note that the south side of the building has unpainted fascia and sections of the corrugated siding are missing.

Now on the east side of the building. Series of $I D$ photographs. (Photos 103-33 thru 103-35)

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Note the damage to the roof at the south part of the building. There are stained areas and the roof appears to sag in some areas. Many of the shingles are deteriorating. There is a hanging piece of iron below the eaves at the south part of the building. (Photos 103-36 thru 103-38)

There is an area of rusted siding on the south wall of the north part of the building where the roof of the south part of the building attaches. (Photos 103-38 and 103-59)

Starting at the south end of the east side, inspecting the concrete foundation. Series of photographs of the foundation. (Photos 103-39 thru 103-47)

There is a foundation crack at the upper south end that is about 11 inches long and barely visible. (Photo 103-39)

To the north, there is a roughly horizontal crack that is about 14 inches long and ranges from about $1 / 16$ of an inch to a hairline wide. (Photo 103-40)

Just to the north, there is another horizontal crack near the top of the foundation. It is about 41 inches long and from $1 / 16$ of an inch to a hairline wide. (Photo 103-41)

There is a vertical crack to the north that runs the height of the foundation. It ranges from about $1 / 16$ to $1 / 4$ of an inch wide. (Photo 103-43)

There are several spalls or pops in the foundation to the north. (Photos 103-44 and 103-45)

There is another foundation crack just south of the tin sided area. It is roughly vertical, about 36 inches long and ranges fram about $1 / 16$ of an inch to a hairline wide. (Photos 103-46 and 103-47)

This corrugated siding has several broken areas, mainly at the bottam. There are hairline cracks around most of the nail heads. Series of photographs from the tin sided area to the south end. (Photos 103-48 thru 103-54)

Now at the tin sidec area. This apparently was a loading area at one time. (Photo 103-55)

Now a series of photographs of the foundation north of the tin siding. There is a horizontal flaw, apparently where successive pourings of concrete were placed. (Photos 103-56 and 103-57)

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Now at the south end of the north part of the building. There is a rusted area of tin at this corner where the south part of the building attaches. (Photo 103-58)

Now a series of photographs of the rest of the corrugated siding of the south part of the building. (Photos 103-60 thru 103-62)

Series of photographs of the foundation of the north part of the building. There are several flaws in this part of the foundation. (Photos 103-63 thru 103-68)

There is a vertical crack in the foundation to the lower left of the sliding door. It has several branches. The total vertical length is about 31 inches. Cracks range from about $1 / 16$ of an inch to a hairline wide. (Photo 103-65)

There is a slight vertical foundation crack to the lower right of the north window. It is about 12 and $1 / 2$ inches long and a hairline wide. (Photo 103-69)

The south window, just north of the sliding door, has deteriorating paint.

The north window has deteriorating caulk and paint. (Photos 103-70 and 103-71)

ID photograph of the north end of the building from the northeast. (Photo 103-72)

ID photograph of the east side of the building from the northeast. (Photo 103-73)

To the upper right of the north window, on the east side, there is a cut in the tin siding. (Photo 103-74)

Now a photograph of the east end of the north foundation. (Photo 103-75)

At the east end of the north wall, there is a small window opening containing an air conditioner. The caulk seal is separating some what at the top. (Photo 103-76)

ID photographs of the north end of the building. (Photos 103-77 thru 103-79)

The downspout empties behind the ammonia tank, close to the foundation. (Photo 103-79)

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There is a vertical crack in the foundation, just west of the tank. It is about 15 inches long and from a hairline to slightly wider. (Photo 103-80)

At the sealed north door, the concrete floor is spalling, especially at the east end. The major spall at the east end is about 26 inches long. (Photos 103-81 and 103-82)

The window of the sealed door has deteriorating paint and caulk. (Photos 103-83 and 103-84)

The caulk is also deteriorating around the sealed doorway. (Photos 103-85 thru 103-89)

ID photographs of the wooden walkway at the north end of the building. Note that the supports lean to the north and that paint is missing in areas of the walkway. (Photos 103-90 and 103-91)

ID photographs of the foundation below the sealed doorway and wooden walkway. (Photos 103-92 thru 103-94)

ID photographs of the west side of the building from the northwest. (Photos 103-95 and 103-96)

ID photographs of the concrete scales. (Photos 103-97 and 103-98)
At the north end of the west side, there is a concrete sidewalk. It has a flaw and a crack at the bottom of the west side, near the northwest corner of this building. The flaw is about 25 inches long and about 5 inches tall, and the crack is about $1 / 2$ an inch wide. (Photo l03-99)

There is a horizontal crack on the west side at the north end, above the top step. It is about 20 inches long and a hairline wide. (Photo 103-100)

ID photograph of the sidewalk. The north end is separated from the building. (Photo 103-101)

The north window on the west side has deteriorating paint. (Photo 103-102)

The door to the office has paint peeling from the trim.
The window, south of the door, has deteriorating paint and caulk. (Photo 103-103)

The gutters on the west side have rusted sections, mainly at joints.

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There is a diagonal crack in the foundation, south of the scales and to the right of this black vent pipe. It is about 17 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 103-104)

ID photographs of the west foundation of the north part of the building. Note the downspout lacks a splash block and empties close to the foundation. (Photos 103-105 thru 103-107)

There is a vertical crack in the foundation near the south end of this small slab of concrete. It is about 31 inches long and fram $1 / 16$ of an inch to a hairline wide. (Photo 103-108)

This slab of concrete is broken at its southwest corner. (Photo 103-109)

Just north of the woden dock, there is a vertical crack in the foundation. It is about 24 inches long and from a hairline to about 1/16 of an inch wide. (Photo 103-110)

Below the wooden dock, there is another foundation crack. It runs the height of the foundation, about 36 and $1 / 2$ inches and is from a hairline to about $1 / 16$ of an inch wide. (Photos 103-111 and 103-112)

There is another slight vertical crack, near the corner of the foundation. It is about 17 inches long and fram about $1 / 32$ of an inch to a hairline wide. (Photo 103-113)

The wooden loading dock has deteriorating paint and has broken members at its south end. (Photo 103-114)

The tin siding is rusting where the south part of the building attaches. (Photos 103-115 and 103-116)

Now on the south pact of the building. The corrugated siding has a crack at the second panel from the north. It is about 17 inches long. (Photo 103-117)

Series of photographs of the west foundation of the south part of the building. (Photos 103-118 thru 103-126)

There is some broken siding near the north sliding door and at the south end of the building.

There is a slight crack where the floor slab meets the foundation at the north end of this part of the building. It is about a 13 inch long, roughly horizontal, hairline crack. (Photo l03-127)

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Just south of the guy wire for the electric pole, there is a spall at the top of the foundation and a vertical crack in the floor slab. It is about a 3 and $1 / 2$ inch long crack. (Photo 103-128)

The north sliding door has deteriorating paint and same loose boards. (Photo 103-129)

A few feet south of the ladder and door, there is a vertical crack running the height of the foundation and floor. It is about 36 inches long and from $1 / 16$ of an inch to a hairline wide. (Photo 103-130)

Near the south sliding door, there is a crack in the foundation, just below the floor slab. It is about 4 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 103-131)

A few feet to the south, there is another vertical crack through the floor and foundation. It is about 36 inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 103-132)

Below the current position of the south door, there are sane slight cracks near the north end of the door. Note the deteriorating condition of this door. There is a hole in the roof and a piece of fascia hanging above this door. (Photos 103-133 and 103-134)

Just north of the door, there is about a 14 inch long, horizontal, hairline crack in the upper foundation. (Photo 103-135)

There is a long horizontal crack below this door. It is about 116 inches long and is intersected by a hairline vertical crack that runs through the foundation. Both cracks appear to have same efflorescence. The vertical crack is about 36 inches long. (Photos 103-136 thru 103-139)

South of this door, the floor slab has a roughly horizontal crack. It is about 31 inches long and about a hairline wide. (Photos 103-140 and 103-141)

The south part of the floor slab has a vertical crack and a horizontal crack. The horizontal is about 55 inches long and the vertical is about 7 inches long. Both are about $1 / 32$ of an inch wide. (Photos 103-142 and 103-143)

There is also a hairline vertical crack in the foundation, just north of the previous two cracks. It is about 10 and $1 / 2$ inches long. (Photo 103-144)

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There is another vertical crack just north of these gray plastic pipes. It runs the height of the foundation, about 31 inches, and is about a hairline wide. (Photos 103-145 and 103-146)

At the upper southwest corner of the foundation, there is sane exposed aggregate and a diagonal hairline crack that is about 6 inches long. (Photo 103-147)

The corrugated siding is cracked in several places. (Photos 103-148 thru 103-150)

The south end of the building has deteriorating and cupping shingles. (Photos 103-151 and 103-152)

Still on the west side, just north of the downspout, there is a vertical crack through the foundation. It is about 28 and $1 / 2$ inches long and from a hairline to about $1 / 32$ of an inch wide. (Photo l03-153)

Below this Purina Health Products sign, just south of the downspout, there is another slight vertical foundation crack. It is about 8 and 1/2 inches long and is very faint. (Photo 103-154)

## Boxcars

North of the main building, there are a couple of boxcars and a trailer. Starting on the west side with ID photographs. These structures are on concrete pier foundations. (Photos 103-155 thru 103-157)

The wooden walkway, along the west side, has peeling paint and has broken members at its north end. (Photo 103-158)

Starting with the trailer, located just north of the main building. This trailer has three concrete foundation piers. ID photograph of the west side of the west pier. (Photo 103-159)

Now at the south pier of the south boxcar. It has some slight cracking at the west end of the block at the top of the pier. (Photo 103-160)

ID photograph of the north side of this pier. There is sane honeycombing in the concrete. (Photo l03-161)

Now at the north pier of this structure. It al so has honeycambing concrete. ID photographs of the south and north sides. (Photos 103-162 and 103-163)

Now at the north boxcar. ID photographs of the south pier. (Photos 103-164 thru 103-166)

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ID photographs of the south side of the north concrete pier. (Photos 103-167 and 103-168)

The shed at the north end has a concrete foundation.
ID photograph of the north end of the shed and boxcar structure. (Photo 103-169)

The tin roof of the shed is deteriorating. (Photo 103-170)
The north side of the shed foundation has honeycambing concrete. (Photo 103-171)

The east side foundation of the shed also has some honeycombing. (Photos 103-172 and 103-173)

ID photograph of the north side of the north pier of the north boxcar. (Photo 103-174)

ID photographs of east side of these boxcar structures. (Photos 103-175
thru 103-179)
Note the roof of the south boxcar is sagging. (Photos 103-180 and 103-181)

The small south trailer has concrete blocks for its foundation at its east end. It al so has concrete piers. ID photograph of the east face of the east concrete pier. (Photo 103-182)

Now at the boxcar to the north. It has some honeycombing at the east end of the south pier. There is a small piece of concrete above the pier that has slight cracks and is cracked in two. The crack is about 3 inches long and fron about $1 / 4$ to $1 / 16$ of an inch wide. (Photos 103-183 thru 103-185)

The north side of this pier has honeycombing. (Photos 103-186 and 103-188)

This pier also has a spall at the upper part located about 5 feet from the east end. (Photo 103-187)

This boxcar has some deteriorating, rusting siding at the south end of the east side.

The north foundation pier also has honeycombing. ID photographs of the south side. (Photos 103-189 and 103-190)

ID photograph of the north side. (Photo 103-191)

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ID photographs of the south side of the south pier of the north boxcar. (Photos 103-192 and 103-193)

ID photograph of the north side. (Photo 103-194)
ID photographs of the south side of the north pier. It has same spalling at the east end. (Photos 103-195 and 103-1.96)

The north boxcar has sane dented and wrinkled siding.
To the north of these structures is the main elevator.

## Elevator

Starting with ID photographs of the south and east sides from the southeast. (Photos 103-197 thru 103-200)

ID photographs of the east side. The east window lacks two panes. (Photos 103-201 thru 103-203)

ID photographs of the north side. (Photos 103-204 thru 103-206 and 103-210 thru 103-212)

ID photographs of the south and west sides from the southwest. (Photos 103-207 thru 103-209)

ID photographs of the grain bins, located west of the elevator from the north. (Photos 103-213 and 103-214)

ID photograph of the upper west side of the elevator. (Photo 103-215)
ID photographs of these bins from the south. (Photos 103-216 and 103-217)

ID photographs of the ramp at the south side of the elevator. (Photos 103-218, 103-220, and 103-221)

The east side of the south ramp has a vertical crack near the middle. It is about 18 inches long and about $1 / 16$ of an inch wide. (Photo 103-219)

Now at the south side of the elevator, inspecting the foundation. ID photograph of the south foundation. (Photo 103-222)

There are two sidewalk cracks at the southeast corner of the building. The south one has 20 inches visible and about $3 / 4$ of an inch wide. The east crack has about 24 inches visible and about $1 / 16$ of an inch wide. (Photos 103-223 and 103-224)

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Now on the east side of the building. There are several flaws in the concrete foundation. (Photos 103-224 thru 103-227)

There is a vertical crack, probably at a construction joint, to the lower left of the east door near this fan. It is about 35 inches long and about $1 / 32$ of an inch wide. (Photo 103-228)

There is another cracked joint to the lower right of the door, that is about 35 inches long and from $1 / 32$ of an inch to a hairline wide. (Photo 103-229)

Now on the north end of the building. ID photographs of the foundation. (Photos 103-230 and 103-231)

Now at the north part of the east facing foundation. ID photographs. (Photos 103-232 and 103-233)

There is a ramp, at the north end of the building, that has a vertical crack through the east side, south end. It is about 17 inches long and 1/8 of an inch wide. (Photo 103-234)

A few feet to the north, there is another crack in the east wall of the ramp. It is about 15 and $1 / 2$ inches long and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 103-235)

A few more feet north, there is another crack in the ramp below this post. It is about 13 inches long and about $1 / 16$ of an inch wide. (Photo 103-236)

About 3 feet to the north, there is a faint vertical crack in the ramp. It is about 10 and $1 / 2$ inches long and just wider than a hairline. (Photo 103-237)

Now on the west side of the north ramp. At the north end, there is a slight crack that is roughly $X$-shaped. It is about 5 and $1 / 2$ inches long horizontally and about a hairline wide. (Photo 103-238)

A few feet south, there is a slight vertical crack that is about 10 inches long. (Photo 103-239)

A few more feet to the south, there is another barely visible crack. It is about 9 and $1 / 2$ inches long. (Photo l03-240)

Now at a construction joint. The joint is slightly broken and the crack is visible for about 19 inches on the west side and top edge. It ranges from about $1 / 16$ of en inch to a hairline wide. (Photo 103-241)

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A few feet to the south, there is a diagonal crack that is about 36 inches long and about $1 / 4$ of an inch in width. (Photo 103-242)

Near the south end, there is another diagonal crack with a branch. The larger crack is about 42 inches long and about $1 / 4$ of an inch wide. The wall has shifted outward about $1 / 2$ an inch at the crack. It has a diagonal branch that runs down and to the north. It is about 35 inches long and from a hairline to about $1 / 8$ of an inch wide. (Photos 103-243 and 103-244)

At the south end, there is a diagonal flaw that runs onto the elevator foundation. It is 53 inches in total length and is apparently beginning to spall. (Photo 103-245)

Series of photographs of the west foundation of the elevator from south to north. (Photos 103-246 thru 103-251)

Now at the south ramp. The west side has a vertical crack located about 10 feet from the south end. It runs about 27 inches along the side and top and ranges from about $1 / 16$ of an inch to a hairline wide. (Photo 103-252)

Interior Inspection - Elevator
Unloading Area
Concrete floor.
Wooden walls.
Unfinished ceiling.
Three ID photographs looking northward. (Photos 103-253 thru 103-255)
Three ID photographs looking southward. (Photos 103-256 thru 103-258)
ID photographs of the ceiling. (Photos 103-259 thru 103-261)
There is a small room to the east. A view looking eastward into the room. (Photo 103-262)

The small east room has wooden walls, floor, and ceiling. There is an opening in the floor for the stairway down into the elevator. A photograph looking down the stairs. (Photo 103-263)

There are a few broken studs, just north of the door on the west wall of the unloading area. (Photos 103-264 and 103-265)

The east wall, north end, has several broken studs. (Photo 103-266)

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Note the condition of the north doors, they appear to be bent. One of the ceiling joists is broken and both door jambs are split in a couple of places. (Photos 103-267 thru 103-271)

That completes the elevator inspection.

Exterior Inspection - Continued
Grain Bins
West of the elevator, there are grain bins and a concrete floor area. series of photographs of the concrete from the north end of the elevator. Most of the concrete is covered with grain. (photos 103-272 thru 103-275)

ID photographs from the west of these large bins located west of the elevator. (Photos 103-276 thru 103-278)

ID photographs from the south. (Photos 103-279 and 103-280)
The concrete, north of the bins, has several cracks. Some of this concrete is deteriorating and spalling. (Photos 103-281 thru 103-285)

The small ditch to the west has several cracks and is partially full of water at this time There is deteriorating concrete in this area. (Photo 103-286)

Now inspecting the concrete base of the northwest bin. Starting just west of the auger on the south end. There is a crack at the southwest part of the base. It is a vertical crack through the visible portion of the concrete and is from about a hairline to $1 / 32$ of an inch wide. (Photo 103-287)

At the west end, there is a hairline crack in the base. It is about 13 inches long. (Photo 103-288)

There is another vertical crack in the base on the west side that is about 8 inches long and a hairline wide. (Photo 103-289)

Now on the east side of the northwest bin. There is a crack in the concrete slab. About 25 inches of the crack are visible and it ranges from about $1 / 4$ to $1 / 16$ of an inch wide. (Photo 103-290)

Now inspecting the concrete base of the south bin. Most of the foundation cannot be seen. Both of these bins are full of grain at this time.

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Some concrete can be seen on the west side. A crack is visible at about the west point. It is about 8 and $1 / 2$ inches long and a hairline wide.
(Photo 103-291)
There are two other grain bins located directly north of the elevator. ID photograph of these bins from the west. (Photo 103-292)

There are three snaller grain bins to the north. ID photograph from the west. (Photo 103-293)

Now inspecting the foundation of the south large bin located just north of the elevator. There is a vertical crack, located south of the auger, on the west side. It is about 7 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 103-294)

There is another crack just to the north of this auger. It is about 5 inches long and from 1/32 of an inch to a hairline wide. (Photo 103-295)

This bin is rusting and the paint is deteriorating.
The south side of this bin has a vertical crack in the base. It is about 15 inches long measured along the top and edge, and $1 / 32$ of an inch wide. (Photo 103-296)

The east part of the south side is hidden behind a pile of material. There is a vertical crack on the south part of the base that is about 14 inches long and about $1 / 4$ of an inch wide. (Photo 103-297)

At about the east end, there is a vertical crack in the base. It is about 23 inches long and $1 / 16$ of an inch wide. (Photo 103-298)

Now inspecting the base of the north large bin, starting on the east side. There is a vertical crack in the foundation just south of the east point. This is a Y-shaped crack, 18 inches on the vertical. It is from about $1 / 8$ of an inch to a hairline wide. (Photo 103-299)

There are two roughly vertical cracks in the foundation located just north of east. The total length is about 19 inches and the widths range fram about $1 / 16$ of an inch to a hairline. (Photo 103-300)

This foundation has several flaws that resemble cracks. Several of these are on the west side, north of west. (Photos 103-301 thru 103-304)

There is a crack just south of the auger on the west side. It is about 8 inches long and $1 / 32$ of an inch wide. (Photo 103-305)

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There is a vertical crack in the foundation below a bolt on the west side. It is about 18 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 103-306)

ID photographs of these two large bins from the north and east. (Photos 103-307 thru 103-311)

ID photographs from the east and north of the three small grain bins to the north. (Photos 103-312 thru 103-315)

The two southern smaller bins have concrete block foundations with dry joints. Starting with the south bin. A series of photographs showing the foundation from the north around clockwise. It appears that the foundation is settling toward the center. (Photos 103-316 thru 103-320)

Now at the middle bin. This bin is not entirely full of grain, but grain covers most of the concrete floor. Series of photographs of the foundation from the west clockwise. The foundation blocks seem to tilt inward toward the center. (Photos 103-321 thru 103-324)

The north bin has a concrete slab foundation. This bin is empty at this time. The base of the bin is rusting and daylight can be seen through the bottom of the bin. (Photos 103-325 and 103-326)

North of these three small bins, there are five steel tanks and an old trailer. The trailer and four of the tanks are severely rusted. ID photographs from the southeast and northeast. (Photos 103-327 and 103-328)

ID photographs of the trailer and tanks fron the west and southwest. (Photos 103-329 thru 103-331)

Due west of these tanks, there is a concrete vehicle ramp. ID photographs looking north and south. (Photos 103-332 and 103-333)

At about the northern third of the ramp, a crack runs through both parts. This crack ranges from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 103-334 and 103-335)

There is a concrete slab at the north end of this ramp. It has a crack at the northeast part that measures about 74 inches on the diagonal and about $1 / 16$ of an inch wide. It has a branch that runs west about 37 inches west to a larger north-south crack. (Photos 103-336 thru 103-338)

The northwest corner of this slab is spalling. (Photo 103-339)

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To the north, there are four other concrete foundation structures. (Photo 103-340)

The second one from the south is spalling at its top. (Photo 103-341)
The north one has the northwest corner broken off and there is spalling on the top. (Photo 103-342)

To the north, there are two grain hoppers. ID photograph from the south. (Photo 103-343)

ID photographs of the north side. (Photos 103-344 and 103-345)
ID photographs of the west side. (Photos 103-346 and 103-347)
ID photographs of the east side. (Photos 103-348 and 103-349)
There is a concrete slab below these two hoppers.
Starting at the roughly circular slab below the south hopper.
At the east end, there is an east-west trending crack that runs westward and intersects a north-south trending crack. It is about 57 inches long and a hairline wide. (Photos 103-350 and 103-351)

The north-south crack runs from the south end, roughly north, and Y's at its north end. It is about 14 feet long on a straight diagonal to its branching point. The length of the north branch is 26 and $1 / 4$ inches. The other branch runs to the west about 31 inches to a spall. It is about $1 / 32$ of an inch wide. (Photos 103-352 thru 103-357)

This west branch has a branch that runs south to the auger. It is about 58 and $3 / 4$ inches long and about 1/32 of an inch wide. (Photos 103-358 and 103-359)

Now inspecting the concrete base of the north hopper. There is a square slab between the two hoppers that has two cracks at about the middle of the west end. Both are about 9 inches long and about $1 / 32$ of an inch wide. (Photos 103-360 and 103-361)

The north circular slab has numerous cracks. One crack runs south of the auger and then turns east. It has three branches. It is about 88 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. It runs vertically down through the slab. (Photos 103-362 thru 103-364)

The west branch runs south to a spalled area. It is barely visible and is about 23 and $1 / 4$ inches long. Another branch runs from the spall to the first crack, about 16 inches. It is about $1 / 32$ of an inch wide. (Photos 103-365 and 103-366)

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This spall has a crack at the northeast corner of the square slab. It is about 4 inches long and $1 / 32$ of an inch wide. (Photo 103-367)

The first crack has a branch that runs northeast to the end of the slab and vertically through. It is about 69 and $1 / 2$ inches long and $1 / 32$ of an inch wide. It is about 3 and $1 / 2$ inches long vertically. (Photos 103-368 thru 103-370)

Just east of the north end of the slab, there is a hairline crack. It runs vertically through the slab. The length is about 17 inches and about 3 and 1/2 inches vertically. (Photo 103-371)

At the north end, there is another hairline crack. It is about 12 and 1/2 inches long measured on the edge and across the top. (Photo 103-372)

There is a faint crack under a pile of dirt and weeds. It is about 26 and $1 / 4$ inches long. (Photos 103-373 and 103-374)

It intersects a crack that runs from the northwest part of the auger to the northwest part of the slab. This crack is about 10 feet 8 inches long and runs vertically through the slab. It is from about $1 / 16$ to $1 / 32$ of an inch wide. (Photos 103-375 thru 103-378)

Now inspecting the unloading area. Much of this area is covered with dirt and soybeans at this time. There is a 32 inch long crack and about a 6 inch long crack at the northeast corner of the grate. Both are about 1/32 of an inch wide. (Photo 103-379)

Just northwest of this area, there is a concrete covered well. It is mostly covered with material and the concrete is spalling severely. Water is visible a few feet from the surface. (Photos 103-380 thru 103-382)

There is some apparently discarded material and an old rusty hopper at the north end of the property. (Photo 103-383)

INTERIOR INSPECIION
Main Building
Scale Room
This is the northwest room of the main building.
Vinyl covered floor.
Paneled walls and ceiling.

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There are two windows and a door on the west wall. There are two windows the north wall. Door to an office and a window on the east wall. Door on the south to the storage area.

Photographs of the south wall. (Photos 103-384 and 103-385)
photograph of the west wall. (Photo 103-386)
Photographs of the north wall. (Photos 103-387 and 103-388)
Photograph of the east wall. (Photo 103-389)
West Office
Paneled walls and ceiling.
Vinyl floor.
Photograph of the east wall. (Photo 103-390)
Photograph of the west wall. (Photo 103-391)
Photograph of the north wall. (Photo 103-392)
Photograph of the south wall. (Photo 103-393)
This office has closet doors on the south wall and a door to the east office on the east wall.

East Office
Paneled walls and ceiling.
Vinyl floor.
Window on the east wall. Air conditioner on the north wall.
Photograph of the east wall. (Photo 103-394)
Photograph of the north wall. (Photo 103-395)
Photograph of the south wall. (Photo 103-396)
Photograph of the west wall. (Photo 103-397)
The plastic cover is broken at the ceiling light. (Photo 103-398)
There is a door on the south wall to a large office.

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South Office
Carpeted floor.
Paneled walls.
Drop panel ceiling.
Photograph of the south wall. (Photo 103-399)
Photographs of the west wall. (Photos 103-400 and 103-401)
Photograph of the north wall. (Photo 103-402)
Photographs of the east wall. (Photos 103-403 and 103-404)
The east wall has a window.
Several of the ceiling panels are water stained and some are sagging at the north end of the roon.

A stain runs north-south at about the middle of the ceiling. There is also a stain around the vent.

Series of photographs of the ceiling. (Photos 103-405 thru 103-413)
Near the southeast light, there is a dark stain in the ceiling and there is a stain in the northwest corner of the ceiling.

The manager indicated that the damage to the north end of the ceiling was done by the telephone company when their personnel removed the phone lines.

This room has a door on the west wall to the storage area.

## Storage Area

Unfinished walls.
Unfinished ceiling.
Concrete floor.
Photographs of the south wall. (Photos 103-414 and 103-415)
Photograph of the ceiling. (Photo 103-416)
Photographs of the east wall. (Photos 103-417 and 103-418)
Photographs of the north wall. (Photos 103-419 and 103-420)
Photographs of the west wall. (Photos 103-421 and 103-422)

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The northwest corner of this room has a restroom enclosure.
Photograph looking westward down the hall leading to the restroom. (Photo 103-423)

## Restroom

Vinyl covered floor.
Paneled walls and ceiling.
A photograph looking southward into the restroom. (Photo 103-424)
The toilet lid is cracked and taped in two places. (Photo 103-425)
The south door of the enclosure is a storage closet.
Storage Closet
Paneled ceiling.
Unfinished sheetrock walls.
Concrete floor.
Two photographs looking into the storage closet. (Photos 103-426 and 103-427)

Storage Area - Continued
Now inspecting the floor.
The east end of the storage area floor has a crack that runs north-south from wall to wall. It is a rough irregular crack and is fran about $1 / 2$ an inch wide at its north end to about $1 / 16$ of an inch. (Photos 103-428 thru 103-431)

There is a large wet area of the floor at about the middle of the south wall. (Photo 103-432)

The floor has another crack that runs northward from the south wall about 14 feet. The maximum width is about $3 / 16$ of an inch. (Photos 103-433 thru 103-435)

Now into the south part of the building, the feed storage area.
Feed Storage Area
Concrete floor, mostly covered with waste feed.
Unfinished walls and ceiling.

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A photograph looking southward. (Photo 103-436)
This room has a series of bins along the east side.
Starting with the south bin. Two photographs looking eastward. The plywood walls are apparently moisture damaged. (Photos 103-437 and 103-438)

The second bin from the south also has damaged walls. (Photo 103-439)
The third bin from the south has a large pile of waste feed in it. (Photo 103-440)

The fourth bin from the south has damaged walls and the switch boxes are rusty. (Photo 103-441)

Photograph of the fifth bin from the south. The lower walls are damaged. (Photo 103-442)

Photograph of the north bin. The walls are damaged. (Photo 103-443)
Series of photographs of the east half of the ceiling from north to south. It has several areas that are water damaged. (Photos 103-444 thru 103-450)

Series of photographs of the west part of the ceiling from south to north. It has areas of severe damage. (Photos 103-451 thru 103-455)

Photographs of the north wall. (Photos 103-456 thru 103-459)
Photographs of the west wall. (Photos 103-460 thru 103-462)
Photographs of the south wall. (Photos 103-463 thru 103-465)
Now inspecting the concrete floor, starting in the south bin. There are intersecting cracks. One is a north-south trending crack that runs the width of the bin floor. It has a branch that runs to the east wall. The east trending crack is about $1 / 16$ of an inch wide. The north-south trending crack is about $3 / 16$ of an inch wide. (Photos 103-466 thru 103-470)

There is a diagonal crack in the southeast corner of the south bin. It is about 23 inches long and about $1 / 16$ of an inch wide. (Photo 103-471)

At about the middle of the north-south crack, there is an X-shaped hairline crack. It measures 26 inches east-west. (Photos 103-472 and 103-473)

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The edge of the floor is spalling at the south sliding door on the west wall. (Photos 103-474 and 103-475)

The floor at the south door is spalling severely. (Photos 103-476 thru 103-478)

From the east end of the south door, a floor crack runs diagonally to the northwest. It ranges fram a hairline to about $1 / 32$ of an inch wide and about 62 inches are visible. (Photos 103-479 and 103-480)

Now inside the second bin from the south. There are two parallel north-south trending cracks in the east part of the floor. The east crack runs fram wall to wall. The west crack runs from the south wall to a joint almost to the north wall. The east crack is about $1 / 4$ of an inch wide. The west crack is mostly full of dust and it is about $1 / 8$ of an inch wide. (Photos 103-481 and 103-482)

Much of the floor of this bin is covered.
The floor of the third bin from the south is mostly covered. This bin has a loose piece of pl ywood on the south wall.

Now inside the fourth bin from the south. Part of the roof has apparently caved in as evidenced by the material on the floor. This area of the roof has been replaced. (Photos 103-483 and 103-484)

There is a vertical crack that is about 28 inches long and from about $3 / 16$ to $1 / 16$ of an inch wide located at the east end of the south foundation wall of this bin. (Photo 103-485)

A photograph of the floor of this bin looking westward. (Photo 103-486)
The rectangular opening in the floor has numerous slight cracks and is spalling. (Photos 103-487 and 103-488)

Now inside the fifth bin from the south. This is the narrow dark bin, and most of the floor is covered with waste feed. There is a visible crack, north-south trending, at the east edge of the floor. At its south end, it turns to the southwest. It is from about $3 / 16$ to $1 / 16$ of an inch wide and it runs from wall to wall. (Photos 103-489 thru 103-491)

The floor of the north bin is mostly covered with waste feed.
The second bin from the north has deteriorating walls, especially the south wall. (Photo 103-492)

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The floor is spalling at the north door on the west wall. (Photos 103-493 and 103-494)

Note the condition of the rusty switch boxes on the west wall. (Photo 103-495)

Now back outside for one last photograph of a hopper located southwest of the elevator. (Photo 103-496)

General Comments
The original dates of construction of these structures is not known, but most appear to be fairly old.

The main building has an incomplete gutter system, and both downspouts empty close to the foundation. The elevator lacks a gutter system.

The main building has a concrete floor and foundation that have numerous cracks. The roof of the south part of the building is deteriorating and the siding has numerous cracks.

The interior of the feed storage area has extensive moisture damage to the walls and roof.

The elevator is wood framed with no concrete except the foundation. The concrete foundation and ramps have several cracks.

The concrete bases of the grain bins and hoppers were all found to have same degree of cracking.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll
Technical Associate

CDL/mp
Enclosure: 496 Photographs
1- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 70
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


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## $103-330$



## $103-329$


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## $103203$



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## $103-177$





## $103-95$




## $103-35$



PRE゙-BLAS'I SURVEY, RESCUENIIAL
I. Baslc Infonmation

1. Wame of Resldent: Ewing Mullies
2. Date: November 10,1986 P'une: 10:30AM
3. Address: Box 17 , Route 1 , Hume, Missouri

4. Telephone Number: (816) 447-8444
5. Dates of occupancy by current resident: Since 1941
6. Dates of any Lempotaty or permanent abandomant None

IL. Informathon ConcernLig BuildLugs
(repeat Eor addlelonal bullulugs)

1. Date of orfglaal construction: 1941
2. Date(s) of major remodeling or addltions:
(a) Built utility room about 15 years ago.
(b) Remodeled ceilings about 20 years ago.
(c) New wallpaper about 3 years ago.
3. Construceion of building:
(a) Eraming (Jolsts, rafters, and stud walls): Concrete pre-jiab, $2^{\prime \prime} \times 6$ ". Concrete block walls.
(b) Luterlor walls: Papered or paneled over plaster on blocks.
(c) rook: wooden and composition shingles.
(d) Eootings; Eoundatlons: Concrete block foundation. About $2^{\prime} x 2^{\prime}$ concrete footings on limestone bedrock.
(e) basemenc walls (indicate how keyed to EOOting of Eloor): Concrete block.
(£) basement Eloor (keyways, tillckness):
6" concrete
(g) nane of person(s) who constructed building: Ewing Mullies and contractors.
(h) size and direction of any large windows: Dining Room.

TII. Enviromnental Infomatanon

1. Approximate elevathon of area:

800 feet.
2. Type of soll in area: Silty clay loam.
3. Type of subgrade dratnage at base of Eoundationtrile pipes.4. Water wells utilized (indicate depth*and use): Well by barn, approx. $10^{\prime}$ deep.5. Cisterns or surface water storage utilized: (Indicately arposering Not in use.approximate volume). Yes, don't use.
6. Source of water, le not Lncluded above: Rural water.
7. Eve troughs or any other exterior dralnage Eeatures: Yes.
8. Description of general grading or Landscaphag lin vicindey: Generally flat.
IV. Any notable expsidig deterioration or damage

1. Cracks in interlor walls: See survey.
2. Recedhng of doors, whiduws: See survey.
3. Noticeable settlement: See survey.
4. Foundation cracks: See survey.
5. Exterior wall cracks (brick veneer): See survey.
6. Sidewalks, steps, driveway pavement: See survey.
7. Basement leaks: See survey.
V. Plan view of residence, well, outbuildings see survey.
VI. Elevation views or photographs of walls see survey.
8. North See survey.
2.6 South See survey.
9. Easc See survey.
10. West see survey.
VII. Comments or supplementary drawings See survey.
VIII. Discussion or specific comments concerning any unusual features, construction tecimiques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhlbit an unusual response to nozmal blasting activities.
See survey.
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SUBJECT:; INSPECTION OF THE EWING MULLIES FARMSTEAD
ROUTE 1, BOX 17
HUME, MISSOURI 64752
NOVEMBER 10 AND 14, 1986
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| TO: | THE PITTSBURG AND MIDWAY COAL MINING COMPANY |
| ---: | :--- |
|  | P. O. BOX 8 |
|  | AMSTERDAM, MISSOURI 64723 |
|  | Attention: Mr. Mark Premo |

BY: WHITE INDUSTRIAL SEISMOLOGY, INC. 2431 RANGELINE ROAD, SUITE A/B P. O. BOX 1256 JOPLIN, MISSOURI 64801

November 10, 1986
Report No. 87056-74

Subject: Inspection of the Ewing Mullies Farmstead Route 1, Box 17 Hume, Missouri 64752 November 10 and 14, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

INTERIOR INSPECTION
Living Room
This is the southwest room of the house.
Carpeted floor.
Fabric wall paper.
Tile ceiling.
Front entrance on the west wall.
Starting with a photograph of the south wall. (Photo 74-1)
Photographs of the west wall. (Photos 74-2 and 74-3)
Photograph of the north wall. (Photo 74-4)
Photographs of the east wall. (Photos 74-5 and 74-6)
This room has windows on the south and west walls.
ID photographs of the fireplace. (Photos 74-7 thru 74-9)
There is a crack through a brick and mortar above the vent at the upper north end of the fireplace. It is about 4 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 74-10)

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There is a mortar separation above the upper left corner of the lower north vent. It is just over $1 / 16$ of an inch wide. (Photo 74-11)

There are a couple of areas of mortar missing to the left of the vent.
On the front of the fireplace, to the upper right of the doors, there is a diagonal crack through the corner of a brick and the mortar. It is about 6 and $3 / 4$ inches long and from about $1 / 16$ of an inch to a hairline in width. (Photo 74-12)

Above the upper left part of the fireplace doors, there is a stairstepping mortar crack. It is about 29 and $1 / 2$ inches long measured on the diagonal and from about $1 / 32$ of an inch to a hairline wide. (Photos 74-13 and 74-14)

There is a slight crack in the hearth in front of the fireplace doors. It runs east-west through a couple of bricks and mortar. (Photo 74-15)

Now on the east wall. To the left of the bedroom doorway, an edge of the fabric wallpaper is slightly loose. (Photo 74-16)

There is a slightly broken ceiling tile in the southeast corner. (Photo 74-17)

Arched entrance on the north wall to the dining room.

## Dining Room

Carpeted floor.
Fabric wall paper.
Textured plaster ceiling.
Window on the west wall. Door to the kitchen on the north wall. Door to the bedroom hallway on the east wall.

Starting with photographs of the north wall. (Photos 74-18 and 74-19)
Photograph of the east wall. (Photo 74-20)
Photographs of the south wall. (Photos 74-21 and 74-22)
Photograph of the west wall. (Photo 74-23)

## Kitchen

Vinyl floor.
Papered north and south walls.
Formica covering on the west wall above the counter.
Concrete east wall.
tile ceiling.

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Starting with a photograph of the east wall. (Photo 74-24)
Photograph of the west wall. (Photo 74-25)
Photographs of the north wall. (Photos 74-26 and 74-27)
Photograph of the south wall. (Photo 74-28)
The kitchen has a window on the west wall above the sink, and an entrance on the north wall to the utility rocm.

Utility Room
This room is an addition to the house.
Vinyl floor.
Paneled walls.
Tile ceiling.
Windows on the north and west walls.
Photograph of the north wall. (Photo 74-29)
Photographs of the east wall. (Photos 74-30 and 74-31)
Photographs of the south wall. (Photos 74-32 thru 74-33)
photographs of the west wall. (Photos 74-33 and 74-34)
Evidence of settlement of this addition is visible in the upper southeast corner, where the east wall has separated from the south wall. The separation is about $1 / 2$ an inch wide at the top. (Photo 74-35)

The paneling has water stains below the north window. (Photo 74-36)
Now back into the dining room and moving into the bedroom hallway.
Hallway
Carpeted floor.
Fabric wall paper.
White wall papered ceiling.
This hallway has an entrance on the south wall to a bedroom, an entrance on the east wall to the bathroom, and an entrance on the north wall to a bedroom. There is a closet door on the north wall and a closet door on the east wall.

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Photographs of the hallway looking south and then north. (Photos 74-37 and 74-38)

North Bedroom

Carpeted floor.
Papered walls and ceil.ing.
Windows on the east and north walls.

Closet door on the south wall.

Photograph of the north wall. (Photo 74-39)
Photograph of the east wall. (Photo 74-40)
Photograph of the soul=h wall. (Photo 74-41)
Photographs of the west wall. (Photos 74-42 and 74-43)

## Storage Closet

This is the north closet in the hallway.
Plaster walls and ceiling.
A photograph looking at the attic entrance in the ceiling. (Photo 74-44)

Bathroom
Vinyl floor.
Papered upper walls.
Tile lower walls.
White painted plaster ceiling.
Window on the east wall.

Photograph of the east wall. (Photo 74-45)
Photograph of the north wall. (Photo 74-46)
Photographs of the scuth wall. (Photos 74-47 and 74-48)
Shower enclosure in the southeast corner.

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There is a north-south trending ceiling crack that runs from the north wall and disappears above the shower head. It is roughly 6 feet 2 inches long. (Photos 74-49 thru 74-52)

A slight ceiling crack runs from the corner of the shower enclosure to the large crack. (Photo 74-52)

Near the light fixture, a ceiling crack runs from the north wall to the large crack. It is about 6 and $3 / 4$ inches long and is very slight. (Photo 74-49)

There are two slight cracks, trending roughly west, from the east wall above the window. The south crack is about 7 and $1 / 4$ inches long and the north crack is about 7 and $3 / 8$ inches long.

An area of paint is peeling from the ceiling in the northeast corner above the stool.

These ceiling cracks are slightly wider than hairline.
There is a slight crack along the corner, to the upper right of the shower head. It is about 1 and $1 / 4$ inches long and $1 / 32$ of an inch wide. (Photo 74-53)

Middle Bedroom

Carpeted floor.
Papered walls.
White papered ceiling.
Windows on the east wall.

Closet enclosure in the northeast corner.
Closet door on the north wall.

Starting with a photcgraph of the east wall. (Photo 74-54)
Photographs of the north wall. (Photos 74-55 and 74-56)
Photographs of the west wall. (Photos 74-57 and 74-58)
Photographs of the scuth wall. (Photos 74-59 and 74-60)
There is a paper crack below the lower left corner of the east window. It is about 19 and $1 / 2$ inches long and is a tearing type crack. (Photo 74-61)

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The wall paper is loose below about the middle of the east window. There are also stains below this window. (Photo 74-62)

There is a vertical paper crack to the lower right of the east window. It is about 8 inches long and is a tearing type crack. (Photo 74-63)

There is tearing paper in the ceiling near the closet enclosure. (Photos 74-64 and 74-65)

To the upper right of the north door, there is a slight diagonal bulge in the paper.

To the upper left of the south doorway, there is the same type of diagonal ridge under the paper.

The ceiling has a slight crack that runs from above the left end of the north door to the west: wall. It hits the west wall about 44 and $1 / 2$ inches from the south end of the west wall.

There is a roughly north-south trending bulge in the ceiling. It runs from between the two north doors about 27 inches.

There is a slight crack at the north end of the ceiling near that bulge. It is roughly east-west trending and is about 3 inches long.

South Bedroom
This is no longer used as a bedroom.
Carpeted floor.
Papered walls.
White papered ceiling.
Windows on the south and east walls.
Door to the living roam on the west wall.
Closet enclosure in the northeast corner.
Starting with a photograph of the east wall. (Photo 74-66)
Photographs of the south wall. (Photos 74-67 and 74-68)
Photographs of the west wall. (Photos 74-69 and 74-70)
Photographs of the north wall. (Photos 74-70 and 74-71)

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There is a slight tear in the wall paper near the upper right corner of the east window. It is a very faint paper crack about 9 and $1 / 2$ inches long.

Above the upper right corner of the closet door, there is a slight tear in the wallpaper.

At the upper left corner, there is also a very small tear. There are about three small tears to the left of the east window.

Above the upper right corner of the north door, there is a diagonal bulge underneath the paper. It is about 14 and $1 / 2$ inches long and the paper has very slight cracks at the bulge. (Photo 74-72)

There is a paper crack above the upper right corner of the west door. It is roughly diagonal and measures about 21 and $1 / 2$ inches. (Photo 74-73)

To the upper left of the door, there is a slight paper tear. It measures about 2 and $1 / 2$ inches long.

The ceiling has an east-west trending ridge just south of the light fixture. It measures approximately 64 inches long.

## Basement

Entered the basement from the utility room area.
Northwest Room
Concrete block foundation walls.
Concrete floor.
The ceiling is unfinished and consists of the bottom of the first floor, which has a concrete block deck with a couple of inches of concrete placed on top. The floor joists are concrete.

These concrete floor joists have numerous hairline cracks.
Starting with a photograph of the north wall. (Photo 74-74)
Photographs of the west wall. (Photos 74-75 and 74-76)
Photograph of the south wall. (Photo 74-77)
Photographs of the east wall. (Photos 74-78 and 74-79)

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There is a large entrance on the east wall to the stairway and northeast roan.

A view of the ceiling construction. (Photo 74-80)
There is an opening on the north wall, leading to the crawl space below the addition.

A photograph looking into the crawl space. (Photo 74-81)
Starting at the east end of the north wall.
The north wall has numerous mortar cracks.
There is a mortar crack below the nail at the upper east end of the north wall. Below the sixth course of blocks, there is a horizontal mortar crack that runis from near the east wall, westward, to below the window. These are hairline cracks. Series of photographs of the north wall. (Photos 74-82 thru 74-91)

There is a crack above the upper right corner of the window on the north wall. The crack runs through a block and mortar and is about $1 / 16$ of an inch wide. (Photo 74-88)

There is a vertical coack through block and mortar below the middle of the north window. (Photo 74-88)

There are several cracks at the west end of the north wall, through block and mortar. They range from hairline to about 1/32 of an inch wide. (Photos 74-89 thru 74-91)

The lower left end of the north wall is wet at this time. (Photo 74-91)
Now on the west wall.
To the upper right of the window, there is a crack below a floor joist. It runs vertically through block and mortar down to the floor. (Photos 74-92 thru 74-95)

The west wall is wate: stained and water damaged below the window and rusty pipe. (Photos 74-94 and 74-95)

There is a vertical crack below the window that runs down to the floor. It stairsteps to the north near the sink. (Photos 74-96 and 74-97)

South of the sink, there are vertical cracks that run down to the floor. Cracks range fram about $1 / 16$ of an inch to a hairline wide. (Photos 74-98 thru 74-100)

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At the corner, cracks range from hairline up to about $3 / 4$ of an inch wide.

At this corner, Mr. Nullies indicated that years ago he had foundation problems and had repair and reinforcement work done using concrete, steel straps, and rock bolts. It is strongly reinforced and he indicated that he has had no foundation trouble since.

The south facing wall, at this corner, has extensive cracks, and the lower wall has silt stains. Cracks range fram about $1 / 2$ to $1 / 16$ of an inch wide. (Photos 74-101 and 74-102)

The south part of the west wall, near the tool bench, has several cracked blocks and mortar cracks, mainly at the south end. Cracks in this area range from about $1 / 8$ of an inch to a hairline wide. (Photos 74-103 thru 74-108)

Now on the south wall.
Below the heating duct, the south wall has a vertical mortar separation that is about $1 / 16$ of: an inch wide. It is visible running down about 5 blocks. (Photo 74-109)

There is a door on the south wall to the southwest room.
Now on the east wall. Series of photographs of the east wall. (Photos 74-110 thru 74-112)

There is a floor crack in the northwest corner of this room. About 25 and $1 / 2$ inches of the crack are visible. (Photo 74-113)

There has been probable water seepage between the floor and the west wall, as evidenced by silt on the floor and the wetness of the lower wall below the window and to the south. (Photo 74-114)

The floor has a slight crack at the entrance on the east wall. It is a north-south trending crack that runs across the entranceway and is very faint and hard to see. (Photo 74-115)

## Southwest Room

This is the furnace room.
Concrete block walls and ceiling. Concrete floor.

Window on the south wall.

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Concrete block walled enclosure in the southwest corner.
Starting with photographs of the south wall. (Photos 74-116 and 74-117)
Series of photographs of the west wall. (Photos 74-118 thru 74-123)
Photographs of the north wall. (Photos 74-124 and 74-125)
Photographs of the east wall. (Photos 74-126 thru 74-128)
There is a stairstepping mortar crack at the upper south end of the east wall. It is about 22 and $1 / 2$ inches measured on the diagonal and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos $74-129$ and $74-130$ )

Now on the west wall, much of it cannot be seen. There is a stairstepping crack thorugh block and mortar at the north end behind the water heater. There are also some other stairstepping separations in this area. (Photos 74-131 and 74-132)

The lower part of the west wall is extensively stained. (Photo 74-133)
There is a horizontal mortar separation on the west wall between the two heating units. It also runs north of the furnace to the north end of the west wall and to the trap door at the south end of the wall. The separation is from about $1 / 16$ to $1 / 8$ of an inch wide.

Now at the outer wall of the enclosure.
Where the outer wall of the enclosure meets the west wall, there is a separation of about $1 / 2$ an inch maximum. (Photo 74-134)

To the upper right of the door, a block has shifted out of line, apparently because the concrete floor joist was in the way. There is also separated mortar in the area. The separation ranges from about 1 inch to $1 / 16$ of an inch wide. (Photo 74-135)

There is a large horizontal mortar separation to the left of the doorway, below the fifth block course. The separation runs along the east wall of the enclosure and stairsteps down at the south end to the end of the wall. It ranges fram about $1 / 4$ to $1 / 16$ of an inch wide. At the south end of the horizontal separation, it dips down through block and mortar about 20 and $1 / 2$ inches. The crack through the block is fram about $1 / 8$ of an inch to a hairline in width. (Photos 74-136 thru 74-139)

There is a 25 and $1 / 2$ inch long diagonal crack through two blocks and mortar, above that horizontal separation on the east facing wall of the enclosure. (Photo 74-138)

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There is a crack in the sill below the south window. It is about 1/32 of an inch wide and 5 inches measured across the top and down the side. (Photo 74-140)

The ceiling joists have numerous hairline cracks.
There are a couple of cracked blocks in the ceiling.
One cracked block in the ceiling is located just north of the seventh floor joist from the south. The crack is about $1 / 32$ of an inch wide.

There is a crack in several blocks just north of the eighth œiling joist from the south. It is a hairline crack that runs westward above the furnace. (Photo 74-141)

Storage Room
Concrete floor.
Concrete block walls and ceiling.
Shelves cover most of the walls and only the upper walls are readily visible.

There is a coal chute on the south wall.
To the upper right of the door, on the northeast facing wall, there is a crack through mortar and block that runs down diagonally to the east wall. It continues diagonally down the east wall to a horizontal mortar joint and runs to the south wall. It ranges from about $1 / 32$ to $1 / 8$ of an inch wide. (Photos 74-142 and 74-143)

To the upper left of the door, the shifted block is visible that was noted outside. The block is shifted inward by about $3 / 4$ of an inch. (Photo 74-144)

There is a crack on the west wall, below the fourth joist from the south. It runs vertically down, but can only be seen in an area behind the shelf about 4 feet below the ceiling. (Photo 74-145)

There is a cracked block at about the center of the ceiling. The crack runs across the width and is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 74-146)

Southwest Room - Continued
Now back into the southwest room. Below the south window, the lower mortar joints appear to be deteriorating, and the botton of the wall is wet. (Photo 74-147)

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Northeast Room
Concrete block walls and ceiling.
Concrete floor.

There is a window on the north wall and two windows on the east wall. Door on the south wall to the southeast rocm.

The stairway is in the northwest part of this room.
Starting with a photograph of the north wall. (Photo 74-148)
Photographs of the east wall. (Photos 74-149 and 74-150)
Photograph of the south wall. (Photo 74-151)
Photographs of the west wall. (Photos 74-152 and 74-153)
Starting on the north wall.
To the lower left of window, there is a vertical crack through block and mortar. It is 16 and $1 / 2$ inches long and a hairline in width. (Photo 74-154)

A stairstepping mortar crack, above the upper left end of the switch box, runs into the northwest corner. It is fram about $1 / 8$ to $1 / 32$ of an inch wide. (Photo 74-155)

There are two cracks in the sill of the north window. Both are about 5 inches long and $1 / 32$ of an inch wide. (Photo 74-156)

There is a vertical crack below the window that is about 17 inches long and from 1/32 of an inch to a hairline wide. (Photo 74-157)

Below the lower right corner of this window, there is a vertical crack through block and mortar. It is about 42 inches long and from $1 / 16$ of an inch to a hairline wide. (Photos 74-158 and 74-159)

A horizontal mortar crack runs from the lower right corner of the north window to the east wall. It has an L-shaped separation below it that is 18 inches measured on the diagonal. Both range fran about $1 / 8$ to $1 / 32$ of an inch wide. (Photos 74-160 and 74-161)

Now on the east wall.
At the north end, there is a crack that stairsteps down and to the south. (Photos 74-162 and 74-163)

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There is a horizontal separation three blocks below the north window, where the sewer pipe exits the house. It is about $1 / 4$ of an inch wide. (Photos 74-164 and 74-165)

A stairstepping crack runs up from the north end of the wall to about four blocks below the window. (Photos 74-163 and 74-164)

Other separations on the east wall range from about $1 / 16$ to $1 / 32$ of an inch wide.

To the lower right of the north window, a crack runs vertically to the sewer pipe. It is about $1 / 16$ of an inch wide. (Photo 74-166)

The lower right corner of the south pane is cracked at the north window on the east wall.

A horizontal mortar separation runs from the lower right of the window southward and connects with a vertical crack located two and half blocks south of the window. The vertical crack runs upward through a block and mortar and is about $1 / 16$ of an inch wide. The horizontal separation continues eastward and disappears about 6 inches to the east. (Photos 74-167 thru 74-169)

There is a horizontal mortar separation below the second block course below the window that runs eastward. It is about $1 / 16$ of an inch wide. (Photos 74-170 and 74-171)

There is also a horizontal mortar separation below the third block course below the wincow. It averages about $1 / 8$ of an inch wide. (Photos 74-170 and 74-171)

Both of those horizontal mortar separations run southward and fade out to hairline widths below the south window. (Photo 74-172)

To the lower left of the south window, there is a very slight mortar crack. It measures about 9 inches long and a hairline wide. (Photo 74-173)

Now on the south wall.
From the upper left of the doorway, a horizontal separation runs eastward, cuts down through two blocks, continues eastward through mortar, and cuts down through another block to the corner. It ranges in width from about $1 / 8$ of an inch to a hairline. (Photos 74-174 and 74-175)

Now on the west wall.

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Below the duct, to the upper left of the entryway, there is a slight mortar crack. It is about 6 inches long and a hairline wide. (Photo 74-176)

Southeast Room
Red painted concrete floor. Concrete block walls and ceiling.

Starting with a photograph of the south wall. Note the stains below the window and on the floor. (Photo 74-177)

Photographs of the east wall. (Photos 74-178 and 74-179)
Photograph of the north wall. (Photo 74-180)
Photographs of the west wall. (Photos 74-181 and 74-182)
Starting on the north wall. A crack from the upper right of the door runs horizontally, cuts down through a block, then continues horizontally behind the shelving to the east wall. This crack was shown from the opposite side of this wall. The visible portion ranges from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 74-183 and 74-184)

Now on the west wall. There is an intermittent hairline crack through block and mortar below the second abutment from the north. It runs down to the floor. (Photo 74-185)

The west wall, below the second abutment from the south, has a hairline vertical crack that runs though block and mortar to the floor. (Photos 74-186 and 74-187)

At the upper south end of the west wall, there is a stairstepping mortar crack. This was visible from the southwest rocm. It measures about 25 inches on the diagonal and about $1 / 16$ of an inch in width. (Photo 74-188)

Now on the south wall. There are a couple of slight cracks through blocks and mortar at the upper west part of the south wall. To the lower right of the window, there is a horizontal mortar crack that is about 35 inches long and from about $1 / 32$ of an inch to a hairline in width. The cracks ir blocks are about $1 / 32$ of an inch wide. There are four cracked blocks in this area. (Photo 74-189)

There is a crack in klocks and mortar to the upper right of the window. It is about 12 inches long and $1 / 32$ of an inch wide. (Photo 74-190)

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There is a vertical crack in the windowsill that continues down through mortar and block. It: is from about $1 / 16$ of an inch to a hairline wide and about 13 inches long. (Photo 74-191)

The southeast part of: the foundation has al so been repaired and reinforced according to Mr. Mullies. This area of the walls is apparently moisture damaged. (Photos 74-192 and 74-193)

A stairstepping mortar crack runs from the lower east end of the south wall, upward toward the south window. It ranges from about $3 / 16$ of an inch to a hairline wide. (Photos 74-192 and 74-193)

There are some cracks at the south end of the east wall through block and mortar. One crack runs vertically down from the top of the wall through block and mortar near the light fixture, to the right of the window. There is a crack and spalling at the south end of the wall at the sixth, seventh, and eighth blocks from the floor. (Photos 74-194 thru 74-196)

A stairstepping mortar separation runs from the lower south end of the east wall, up and to the north.

There are two cracked blocks in the southeast corner of the ceiling.
The south wall window is cracked at its upper left corner. (Photo 74-197)

The south window on the east wall has a cracked pane. (Photo 74-198)
There are two slight cracks in the sill of the south window on the east wall. The south crack runs down through a mortar joint, vertically. It is 12 and $1 / 2$ inches long and about a hairline wide. (Photo 74-199)

The north crack is about 5 inches long and a hairline wide. (Photo 74-200)

There is a slight horizontal mortar separation from the lower right corner of the north window that runs toward the light fixture and disappears underneath it. It is about $1 / 16$ of an inch wide. (Photo 74-201)

Above the north window, there is a block in the ceiling with a hole. The lintel appears to sag slightly and there is cracking in the block above the lintel. (Photo 74-202)

There is a cracked ceiling block near the west wall above the light. The crack is about $1 / 16$ of an inch wide and runs all the way across the block.

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There are two cracked ceiling blocks just north of the fourth ceiling joist from the south. The blocks are cracked all the way across and the crack is about $1 / 16$ of an inch wide.

Stairway
Concrete stairs and walls.
A photograph looking up the stairway. (Photo 74-203)
There is a slight vertical crack at the upper south end of the west wall of the stairway. The crack is about 23 inches long and about $1 / 32$ of an inch wide. (Photo 74-204)

There is a horizontal crack on the east wall of the stairway running from the joist, north to the door. (Photo 74-205)

There is paint cracking above the header going down to the basement. (Photo 74-206)

There is a vertical crack in the corner to the upper right of the door at the top of the basement stairway. It is less than $1 / 16$ of an inch wide. (Photo 74-207)

There is also a slight crack in the corner to the upper left of the doorway. (Photo 74-2:08)

A photograph looking down the stairway. (Photo 74-209)

## Basement Entryway

Now in the room at the top of the stairway. This is part of the addition.

Vinyl floor.
Sheetrock walls and ceiling except the south at the basement entrance, which is brick.

Photograph of the south wall. (Photo 74-210)
Photograph of the nor:th wall. (Photo 74-21l)
At the corner, south of the stairs to the utility room, there is a vertical crack that runs down from the ceiling about 14 and $1 / 4$ inches.

There is also a slight, 4 and $1 / 2$ inch long ceiling crack at this corner.

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The sheetrock walls and ceiling are separated from the brick south wall at the basement door. The separation ranges fram about $3 / 16$ to $1 / 16$ of an inch. (Photos 74-212 thru 74-215)

The concrete block foundation of the west wall has a couple of mortar separations that are about $1 / 16$ of an inch wide. (Photo 74-216)

There is a vertical seam crack that runs to the ceiling above the upper left corner of the north door.

Above the upper right corner of the north door, there is a slight vertical crack at a tape joint. It is 6 and $3 / 4$ inches long and about a hairline wide. (Photo 74-217)

EXTERIOR INSPECTION
House
ID photographs of the front west side of the house. (Photos 74-218 and 74-219)

ID photographs of the south end. (Photos 74-220 and 74-221)
ID photographs of the east side. (Photos 74-222 thru 74-224)
ID photographs of the north end. (Photos 74-225 and 74-226)
Close-up photographs of the chimney starting on the front west side. (Photos 74-227 thru 74-229)

Photographs of the south edge of the chimney. (Photos 74-230 thru
74-233)
Photograph of the east side of the chimney. (Photo 74-234)
Photographs of the north end of the chimney. (Photos 74-235 and 74-236)
Starting on the front side, north end of the house.
The downspout at the northwest corner lacks a splash block. It empties close to the foundation. (Photo 74-237)

There is a hairline crack in the block foundation of the utility room below the window. It is about 6 inches long. (Photo 74-238)

Now at the north end of the original part of the house.

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There is an intermittent mortar crack on this north facing brick wall. (Photos 74-239 and 74-240)

Now suspending the exterior inspection due to rain. The following was inspected on November 14, 1986.

At the north end of the west side of the original house, there are a number of slight mortar cracks at this corner. There are larger cracks in brick and mortar near the ground. (Photos 74-241 thru 74-247)

The mortar separations at the lower wall range fram about $1 / 8$ of an inch to a hairline in widt.h.

There is a slight mortar crack to the upper right of the basement window. It is from $1 / 16$ of an inch to a hairline wide. (Photo 74-248)

Now at the alcove at the north facing wall. There is a large stairstepping crack through brick and mortar. This is the area of the foundation that has been repaired. Separations range from about l inch to $1 / 8$ of an inch wide. (Photos 74-249 and 74-250)

There are also numerous mortar cracks and separations on the west facing edge of this corner. Cracks and separations range fram about $1 / 8$ of an inch to a hairline in width. (Photos 74-251 and 74-252)

There is sone cracked mortar along the left side of the front dining room window. Widths range from about $1 / 8$ of an inch to a hairline. (Photo 74-253)

There are a couple of hairline cracks in the mortar joints near the downspout, just north of the front porch. (Photos 74-254 and 74-255)

At the front steps, the sidewalk is cracked all the way across. The spall is about 7 inches wide at the north end and the crack is about 5/8 of an inch average width. (Photo 74-256)

The fifth sidewalk slab from the west has a crack all the way across. It is about $1 / 16$ of an inch wide. (Photo 74-257)

The third sidewalk slab from the west is also cracked all the way across. It measures 1 and $5 / 8$ inches at the widest area at a spall. The crack itself is about $1 / 32$ of an inch wide. (Photo 74-258)

The second slab from the west is cracked and heaved. The maximum crack width is about 1 and $1 / 2$ inches. The slab is heaved at the south end by about an inch. (Photo 74-259)

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Now at the front door. A section of caulk has fallen out of the joint, at the upper right part of the trim. (Photo 74-260)

The front porch is separated from the house. The separation ranges from about $1 / 8$ to $1 / 16$ of an inch. (Photos 74-261 and 74-262)

There is a roughly horizontal crack that is about 6 and $3 / 4$ inches long on the south face of the front steps. It ranges from $1 / 16$ of an inch to a hairline wide. (Proto 74-263)

Now at the south front window. There is a vertical mortar crack along the left side that is about 10 and $1 / 2$ inches long and from $1 / 8$ of an inch to a hairline wide. (Photo 74-264)

Now on the south side of the house. There is a crack below the vent that is about 10 inches long and about $1 / 8$ of an inch wide. (Photo 74-265)

There are several mortar cracks above the vent that range from about $1 / 16$ of an inch to a hairline in width. (Photo 74-266)

About 4 feet above the ground, at the southwest corner, there are a few mortar cracks. Cracks range fram about $1 / 16$ of an inch to a hairline in width. (Photo 74-267)

There are a few other slight mortar cracks higher on the wall at this corner. (Photos 74-268 and 74-269)

There is a horizontal separation and two slight vertical mortar cracks to the upper right of the coal chute. The horizontal length is 6 inches. The separation is about $1 / 8$ of an inch wide. (Photo 74-270)

The caulk is deteriorating around the west window. (Photos 74-271 and 74-272)

Now at the west basement window. There are a few slight mortar cracks near the upper right corner. Cracks range fram a hairline to about $1 / 32$ of an inch in width. (Photo 74-273)

The caulk seals are deteriorating along both sides of the east window. (Photos 74-274 and 74-275)

There are gaps along the right side of the east basement window. (Photo 74-276)

The west basement window has caulk cracking along the bottom and sides. (Photo 74-277)

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There is a stairstepping mortar crack along the lower east end of the south side. It meastires about 28 inches on the diagonal and about $1 / 32$ of an inch wide. This area of the foundation has been bolted and repaired. (Photo 74-278)

The southeast downspout empties to a cracked splash block. (Photo 74-279)

At the lower southeast corner, there are some slight mortar cracks and separations. (Photo 74-280)

There are also a few slight vertical mortar cracks up higher on the corner. (Photo 74-281)

Now on the back, east. side of the house.
There are several cracks to the left of the south basement window. (Photos 74-282 and 74-283)

There is a diagonal mortar crack above the upper brace of the southeast downspout. It is about 2 inches long and about $1 / 16$ of an inch wide. (Photo 74-284)

There are three slight mortar cracks to the upper left of the south window. (Photo 74-285)

The caulk is deterior:ating around the window. (Photos 74-286 and 74-287)

To the right of this window, there is a stairstepping crack that measures about 13 inches long diagonally. (Photo 74-288)

There is slight separation of caulk along the left side of the south basement window. (Photo 74-289)

There are a few mortar cracks to the right of this basement window. (photo 74-290)

There is a gap along each side of the second basement window from the south. (Photo 74-291)

The second window from the south has deteriorating caulk. (Photos 74-292 and 74-293)

The caulk is deteriorating around the bathroom window. (Photos 74-294 and 74-295)

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The area to the left of the third basement window from the south has a few mortar cracks. (Photo 74-296)

There are a few mortar cracks to the upper right of this basement window. (Photo 74-297)

The north window on the east side of the original house has deteriorating caulk. (Photos 74-298 and 74-299)

There are several cracked and separated mortar joints at the lower northeast corner ranging fran about $3 / 16$ of an inch to a hairline wide. (Photos 74-300 and 74-301)

Higher on this corner, there are some slightly cracked and separated mortar joints. (Photo 74-302)

Now on the north side of the house at the east window. This window has deteriorated caulk. (Photos 74-303 thru 74-305)

There are several slightly cracked mortar joints in the area of this window. (Photos 74-306 thru 74-308)

The patio slab is separated from the house by about $1 / 4$ of an inch on average. (Photo 74-309)

Now on the east side of the north addition of the house.
The foundation of the addition is concrete block.
There is also an area of concrete along the block foundation that has numerous cracks.

Starting at the south end of the foundation, there is a 5 and $1 / 2$ inch long mortar separation at a vertical mortar joint. (Photo 74-310)

There is also a slight separation where the house and the addition foundation meet.

There is a crack in the concrete that is about 5 inches long and about 1/32 of an inch wide. (Photo 74-310)

There are several more cracks in this concrete area to the north. (Photo 74-311)

Now on the north side of the addition.

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There is a vertical crack through block and mortar below the window. It is about 7 and $1 / 4$ inches long and from about $1 / 8$ to $1 / 16$ of an inch in width. (Photo 74-312)

ID photograph of the patio. (Photo 74-313)
The north sidewalk, middle slab, has a crack all the way across. The crack width ranges fran about $1 / 4$ to $1 / 2$ of an inch. (Photo 74-314)

The north part of the patio has a crack, all the way across, trending roughly east-west. It averages about $1 / 4$ of an inch wide. (Photos 74-315 and 74-316)

The patio has another east-west trending crack across it that runs from the northeast corner of the north addition of the house. This crack has been patched and has recracked. It has a branch that trends south and intersects another crack that runs east from the barbecue. This major crack is from about $1 / 8$ to $1 / 32$ of an inch in width. (Photo 74-317)

There is cracking where the sidewalk meets the addition and the downspout empties to the patio. (Photo 74-318)

At the west end, the sidewalk is separated from the addition foundation by about $3 / 16$ of an inch.

The crack running south is about 58 and $1 / 2$ inches long and about $1 / 16$ of an inch average width. (Photo 74-319)

The crack that runs eastward from the barbecue is about 68 inches long and about $1 / 16$ of an inch wide. (Photo 74-320)

A crack runs south to the house from the barbecue. It is about 52 inches long and about: $1 / 32$ of an inch wide. (Photo 74-321)

Another crack runs west from the barbecue to the house. It is about 51 inches long and about: 1/32 of an inch wide. (Photos 74-322 and 74-323)

There is a concrete slab covering a cistern located just east of the house.

Looking inside the ci.stern, it is concrete lined. Water is visible at a level about 6 to 8 feet below the ground surface.

## Brick Garage

Now inspecting the garage located just northeast of the house.
Starting with an ID photograph of the south side. (Photo 74-324)

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The south side has shifted bricks and cracked mortar to the upper left of the door. It measures about 20 inches long on the diagonal and the wall has shifted about 5/8 of an inch. (Photo 74-325)

To the lower left of this door, there is some cracked mortar. The separation is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 74-326)

There is a spall in the patio near the doorway. (Photo 74-327)
To the upper right of this door, there are slight mortar cracks and a gap. (Photo 74-328)

There are several slight mortar cracks on the south side, mainly in the horizontal joints.

There are slight cracks to the upper left of the window, the lower right of the door, and the upper right of the window. (Photos 74-329 thru 74-331)

ID photograph of the east side of the garage. (Photo 74-332)
There is a heavy growth of vines on the east and north sides and part of the south side.

ID photograph of the north side. (Photo 74-333)
There is a large stairstepping mortar crack below the north window. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photos 74-334 thru 74-336)

There is also a stairstepping crack above the window that runs up and to the right. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 74-337)

ID photograph of the west, front side of the garage. (Photo 74-338)
The garage lacks a gutter system.
Brick Garage - Interior Inspection
Concrete block walls.,
Unfinished ceiling.
Photograph of the easst wall. (Photo 74-339)
There is a crack through block and mortar at the south part of the east wall. It is mainly visible from about the fifth block from the top, running down through mortar and block to the floor. It ranges from hairline to about $1 / 16$ of an inch wide. (Photo 74-340)

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There is a larger crack just north of the middle of the east wall. It runs down from the top, and at the third block from the bottom it stairsteps down through mortar, and then vertically through the bottom block. This crack ranges fram about $1 / 8$ of an inch to a hairline wide. (Photos 74-341 and 74-342)

At the lower north part of the east wall, there is another vertical crack through block and mortar that runs upward from the bottom block, through two blocks and mortar joints and ends at the fourth block from the bottom. This crack is about 34 inches long and about $1 / 32$ of an inch wide. (Photo 74-343)

The lower north part of the wall has another crack through block and mortar, part of which is hidden by a piece of plywood. About 18 inches of the crack is visible and it is about $1 / 16$ of an inch wide. (Photo 74-344)

Now photographs of the south wall. (Photos 74-345 thru 74-347)
The south wall has several cracks. Starting at the east end. There is a vertical crack that runs down from the top of the wall through block and mortar and ends just above the third block from the bottam. The total length is about 66 inches. It is from about $1 / 16$ of an inch to a hairline wide. (Photos 74-348 and 74-349)

To the upper left of the south window, there is an L-shaped crack through block and mortar. It is 26 inches long measured on the diagonal and from $1 / 16$ of an jnch to a hairline in width. (Photo 74-350)

To the lower left of the window, there is another crack through block and mortar that runs down to the floor. It Y's at the top and measures about 48 inches long. (Photos 74-351 and 74-352)

To the upper right of the window, there is an L-shaped crack through mortar. It measures about 17 inches long and about a hairline wide. (Photo 74-353)

To the upper right of the door on the south wall, there is a horizontal mortar separation and a vertical mortar separation. The horizontal is about 21 and $1 / 2$ inches long and about $1 / 8$ of an inch wide. The vertical is about 3/16 of an inch wide. (Photos 74-354 and 74-355)

Photograph of the noith wall. (Photo 74-356)
The north wall, west end, has a vertical crack through block and mortar. At its lower end, above the fourth block from the bottom, the crack connects with a horizontal separation. It ends below the second block from the top. It measures about 42 and $1 / 2$ inches vertically and is from about $1 / 16$ of an inch to a hairline in width. (Photo 74-357)

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This horizontal separation stairsteps down into the corner at its west end. It runs 57 and $l / 2$ inches to the east and becomes very small and runs into a vertical crack through block and mortar. At the west end of this crack it is about: $1 / 8$ of an inch wide at the most. It ends at a vertical mortar joint that has a crack which is about 6 and $1 / 4$ inches long and about a hairline wide. (Photos 74-358 thru 74-360)

To the east, there is a crack that runs from the bottom, upward and stairsteps to the east to the top of the wall. The crack is about $1 / 16$ of an inch wide. (Photos 74-361 thru 74-363)

To the upper left of the north window, there is a vertical crack through block and mortar. It is about 25 inches long and ranges from about $1 / 8$ to $1 / 16$ of an inch in width. (Photo 74-364)

Below the north window there are two vertical cracks that run to the floor. The west one is about $1 / 16$ of an inch wide and the east one is about $1 / 8$ of an inch wide. (Photos 74-365 and 74-366)

Below the lower right corner of this window, there is a vertical crack that runs through block and mortar. It runs three blocks below the window and is about 24 and $1 / 2$ inches long and from about $1 / 16$ of an inch to a hairline in width. (Photo 74-367)

To the upper right of the window, there is a diagonal crack that runs through a block and then vertically through mortar and a block. It measures about 31 and $1 / 2$ inches on a diagonal and $1 / 16$ of an inch wide. (Photos 74-368 and 74-369)

The floor has extensive cracks.
First showing floor cracks north of the car. The main crack is north-south trending with a couple of branches. It ranges from about $1 / 4$ to $1 / 16$ of an inch in width. (Photos $74-370$ and 74-371)

Now at the east end of the floor, three cracks are visible, roughly east-west trenđing. These cracks range from $1 / 4$ of an inch to a hairline wide. (Photos 74-372 and 74-373)

There are several cracks at the south and west parts of the floor. (Photos 74-374 thru 74-376)

The floor is heaved under the car. (Photo 74-377)
A photograph of the west wall, north of the overhead door. (Photo 74-378)

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A photograph of the west wall, south of the overhead door. (Photo 74-379)

That completes the gar:age inspection.
There is a stone barbecue grill located east of the garage.
Stone Barbecue Grill
ID photograph of the front, south side. (Photo 74-380)
There are several mortar cracks and separations on the south side.
ID photograph of the west side. (Photo 74-381)
The west side has cranks in the flue pipe.
ID photograph of the back, north side. (Photo 74-382)
ID photograph of the east side. (Photo 74-383)
There are several slabs of stone serving as a patio around the grill. Some of the mortar is cracked and grass grows through the joints. (Photos 74-384 and 74-385)

There is a metal utility shed located to the east.

## Utility Shed

ID photograph of the front, west side. (Photo 74-386)
ID photograph of the south side. (Photo 74-387)
The south side has some dents in the roof and the fascia.
ID photograph of the east side. (Photo 74-388)
ID photograph of the north side. (Photo 74-389)
This shed rests on a concrete slab and it lacks a gutter system.
Utility Shed - Interior Inspection
Concrete floor.
Unfinsihed walls and ceiling.
A photograph looking inside the shed. (Photo 74-390)

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There is a wooden machinery barn located northeast of this small shed.
Machinery Barn
ID photograph of the front, west side. (Photo 74-391)
ID photograph of the south side. (Photo 74-392)
The south foundation leans outward. (Photo 74-393)
ID photograph of the north end. (Photo 74-394)
ID photographs of the back, east side. (Photos 74-395, 74-402, and 74-403)

Now inside inspecting the north foundation.
To the lower left of the ladder, on the north wall, there is a crack in the foundation. The crack is about 1 and $1 / 2$ inches wide and roughly vertical. The foundation has shifted about an inch at the crack. (Photo 74-396)

Most of the east side foundation cannot be seen from the inside because of the stored material.

Now at the south wall of the inside. There is a large crack through the foundation at about the middle. This can al so be seen from the outside. The foundation has shifted about an inch at the crack. The crack is about 3/4 of an inch wide. (Photos 74-397 and 74-398)

Photographs of the iniside of the barn from south to north. (Photos 74-399 thru 74-401)

There is a large crack in the foundation at the southeast corner. It is about 2 and 1/2 inches wide. (Photos 74-404 and 74-405)

Much of the east and north side foundations cannot be seen due to grass and materials. This shed lacks a gutter system.

There is an old chicken house, like barn located south and east of the house.

## Southeast Barn

ID photographs of the north side. (Photos 74-406 thru 74-408)
This building is partly concrete block, tin sided, and wooden.

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ID photographs of the east end. (Photos 74-409 and 74-410)
The east end is open and has a concrete slab floor. Note the severe sag in the roof.

Most of the east concrete floor area is covered with dirt, manure, and hay. There is a long crack, at the east part, running roughly northsouth from end to end. (Photos 74-411 and 74-412)

There is an east-west trending crack across the slab. It is about 1 and $1 / 2$ inches wide. (Photo 74-413)

The slab is heaved at the main north-south trending crack by approximately 1 and $1 / 2$ inches.

The concrete block structure has extensive cracks throughout. Series of photographs of the east wall. There are cracks below the two doors, above the upper right corners of both doors, and vertical cracks at the north end of the wall. Separations range fram about $3 / 4$ to $1 / 4$ of an inch wide. Cracks range from about $1 / 2$ an inch to a hairline wide. (Photos 74-414 thru 74-418)

There is a crack, north-south trending, at the west part of this slab. The slab is heaved along the crack. The east part is elevated relative to the west part. (Photos 74-419 and 74-420)

ID photographs of the south side of the building. (Photos 74-421 thru 74-423)

Now a series of photographs of the south side of the block building from east to west showing numerous cracks. (Photos 74-424 thru 74-435)

There is severe cracking at the southeast corner of the block part.
On the south side of the block building, the cracks range fram about $1 / 8$ to $1 / 16$ of an inch wide. The mortar separations range from about 1 and $1 / 4$ inches to a hairline wide.

There are two concrete slabs that are mostly covered with dirt at the south side of the building.

There is a concrete stock waterer that has a crack at the southeast corner of the base. The crack is about 4 and $1 / 2$ inches long and about 1/4 of an inch wide. (Photo 74-436)

ID photographs of the stock waterer. (Photos 74-437 thru 74-439)

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There is a crack in the east slab, trending west of the waterer to the west edge of the slab. (Photo 74-439)

The west slab has an east-west trending crack that can only be seen at the west edge. It is full of dirt. ID photograph showing the entire slab. (Photo 74-440)

The west end of this structure is an open shed. It is wood sided, tin roofed, with a concrete floor.

The concrete floor has extensive cracks. These cracks range from about 1 and $1 / 4$ inches to $1 / 4$ of an inch wide. The floor is heaved near the middle by about an inch. (Photos 74-441 thru 74-446)

There is a stack of wood at the west end and the floor is cracked and heaved below the wood.

Now on the north side of the building.
Starting at the east end of the north side. There is a vertical crack through the foundation located about 4 feet from the east end. It is about $1 / 16$ of an inch wide and the visible part is about 7 inches long. (Photo 74-447)

About 3 feet to the west, there is about a $1 / 2$ inch wide separation at a joint where different slabs meet. (Photo 74-448)

About three more feet to the west, there is a vertical crack. It is about 6 inches long visible and about $1 / 4$ of an inch wide. (Photo 74-449)

About five feet to the west, there is a diagonal crack in the foundation. It is about an inch wide and the slab has shifted about 1 and $1 / 2$ inches at the crack. (Photo 74-450)

Now at the block portion of the building. Series of photographs of the north block wall from east to west. (Photos 74-451 thru 74-467)

There is a large crack in block and mortar and several smaller cracks at the east end. The major crack ranges from about $7 / 8$ to $3 / 4$ of an inch wide. The other cracks range fram about $3 / 16$ of an inch to a hairline wide. (Photos 74-451 thru 74-454)

There are several other cracks just to the west of this tree. (Photo 74-455)

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At the wooden window, there are stairstepping cracks to the lower left and right, peeling paint, and cracks above and to the upper right. Separations range from about $3 / 16$ to $1 / 8$ of an inch wide. Cracks range from about $1 / 8$ to $1 / 15$ of an inch wide. (Photos 74-455 thru 74-459)

Now at the area near the gas line. There is a stairstepping crack through block and mortar in this area. (Photos 74-458 thru 74-462)

There is extensive cracking throughout the north wall.
Now at the next small window. There are severe cracks below, to the upper right, and above the window. (Photos 74-463 thru 74-465)

There is a slab of concrete at the north side of this building and there are major cracks through the slab and the block perimeter. The north edge has a couple of major cracks. (Photos 74-468 thru 74-470)

At the west edge, there is a separation of about $1 / 2$ an inch between the block and the slab. (Photo 74-471)

This slab is partially covered with leaves and sand.
A crack at the west edge of the slab is fran about 1 inch to $3 / 4$ of an inch in width. (Photos 74-472 and 74-473)

About 30 inches of the crack are visible before it runs under the sand pile. It is visible again north of the sand pile and the slab is heaved there by about 1 and $1 / 2$ inches. (Photo 74-474)

At the northeast part of the slab, the slab is heaved by about $3 / 4$ of an inch at a crack. The crack is about an inch wide. (Photos 74-475 and 74-476)

Now on the west side of the block building. There are a couple of stairstepping mortar cracks, and a crack through at least two blocks. (Photos 74-477 and 74-478)

Now at the west wooden shed, north side. There is some cracking in the foundation between the two windows. These range fran about $3 / 16$ to $1 / 8$ of an inch in width. (Photo 74-479)

To the lower right of the west window, there is a vertical crack in the foundation. It is located about three feet west of the window. It is about 7 inches long and $1 / 8$ of an inch wide. (Photo 74-480)

ID photograph of the north side of the shed. (Photo 74-481)
ID photograph of the west end of the shed. (Photo 74-482)

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This structure lacks a gutter system.
Now inside the block part of the building.
Southeast Barn - Block Part - Interior Inspection
West Room
Concrete floor.
Concrete block walls.
Unfinished ceiling.
Photographs of the north wall. (Photos 74-483 and 74-484)
Photograph of the east wall. (Photo 74-485)
Photographs of the south wall. (Photos 74-486 and 74-487)
Photograph of the west. wall. (Photo 74-488)
The floor is extensively cracked and heaved.
A photograph of several cracks in the southwest part of the floor. Cracks here range from about 1 inch to $1 / 8$ of an inch wide. (Photo 74-489)

There is a crack, roughly north-south trending, in the northwest part of the floor. (Photos 74-490 and 74-491)

It has a branch that runs under these board and connects with cracks in the southwest part of the floor. The floor is heaved by about $3 / 4$ of an inch in the northwest corner. The cracks are from about $1 / 2$ to $1 / 8$ of an inch wide.

Now in the main open part of the floor, at about the middle of the south end. There is a north-south trending crack that runs under an old boat. It is about $1 / 8$ of an inch wide. (Photo 74-492)

The southeast part of the floor has extensive cracks. These range from about $3 / 8$ to $1 / 4$ of an inch wide. (Photos 74-493 and 74-494)

There is extensive cracking in the northeast part of the floor. The major crack is north-south trending and the floor is heaved at the crack by about $3 / 8$ of an inch. Other cracks in this area range from about $1 / 2$ to $1 / 8$ of an inch wide. (Photos 74-495 and 74-496)

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Now at the north wall. There is a separation above and to the west of this window. The separation ranges fran about $3 / 4$ to $1 / 16$ of an inch wide. The wall has shifted by about $3 / 4$ of an inch maximum. (Photos 74-497 and 74-498)

The area west of the window also has shifted. There is a vertical crack behind the hose that ranges fram about $3 / 4$ to $1 / 8$ of an inch wide. The wall has shifted by about $3 / 4$ of an inch. (Photos 74-499 thru 74-501)

Now at the east concrete foundation wall. North of the door, there is a Y-shaped crack in the foundation. It is from about $3 / 8$ to $1 / 4$ of an inch wide. (Photo 74-502)

The ceiling in here is unfinished and the wood decking has extensive water damage and deterioration.

A view of a severely damaged area in the southwest part of the ceiling. (Photo 74-503)

The door on the east wall leads into an old farrowing area.
Farrowing Area
The walls are block except the west which is wooden. The ceiling is unfinished. Most of the floor and much of the walls cannot be seen.

Photographs of the north wall from west to east. (Photos 74-504 thru 74-507)

Photographs of the east wall. (Photos 74-508 and 74-509)
Photographs of the south wall. (Photos 74-510 and 74-511)
Photograph of the west wall. (Photo 74-512)
There is a crack in the southeast part of the floor, just north of the farrowing pen. The floor is heaved by about $3 / 16$ of an inch at the crack, which is about $1 / 2$ an inch wide. (Photo 74-513)

The major cracks are on the north wall. There are several stairstepping mortar cracks, one is sealed with black tar.

The ceiling in here is unfinished, and the wooden decking and joists show extensive deterioration and water damage. (Photos 74-514 and 74-515)

The south wall has extensive mortar cracks and shifting.

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That completes the inspection of this barn. Now moving to the structures located nor:th of the house.

Wooden Garage
This is located north of the brick garage.
ID photographs of the south, west, north, and east sides. (Photos 74-516 thru 74-519)

It has a gravel floor, unfinished walls and ceiling. (Photo 74-520)
There is a crack or separation at the north end of the west foundation. It is about an inch wide. (Photo 74-521)

There is also a separation at the southwest corner that is about 2 and $1 / 2$ inches wide. (Photo 74-522)

There is a crack in the north foundation located about 4 feet from the east end. It is from about 1 inch to $1 / 2$ an inch wide. (Photo 74-523)

This structure lacks a gutter system.
There is a white painted concrete block shop with a tin sided addition to the north of the wooden garage.

Block Shop
ID photograph of the south side. (Photo 74-524)
The south side has extensive cracks through block and mortar. These cracks range from about $1 / 8$ of an inch to a hairline wide.

Series of close up photographs of the south side from west to east. (Photos 74-525 thru 74-532)

There are vertical cracks below the windows.
ID photograph of the east side of the shop. (Photo 74-533)
There is a major crack at the southeast corner. It ranges from 3/4 of an inch wide at the top to a hairline at the bottom.

Series of photographs of the east wall. (Photos 74-534 thru 74-540)
There is a stairstepping crack to the upper left of the south window. There is a hairline vertical crack below the north window. There is a major crack above the upper right and a crack to the lower left. The

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crack to the lower lef:t is about $1 / 8$ of an inch wide, and the crack to the upper right is about $1 / 2$ an inch wide.

This shop has a metal sided barn added at the north end.
ID photograph of the east side of the tin sided part of the barn. (Photo 74-540)

ID photograph of the north end of the barn. (Photo 74-541)
The north side of the barn was constructed around two grain bins.
These two grains bins are on circular concrete slab foundations. There are extensive slight cracks visible in the east bins foundation that are filled with white efflorescence.

There is a crack at the northeast part of the east bin's foundation. It is about 4 and $1 / 8$ inches long and $1 / 8$ of an inch wide. (Photo 74-542)

There is another crack just west of the north end. It goes through the slab about 3 inches. Along the top, it is about 2 and $1 / 2$ inches long and about $1 / 8$ of an inch wide. (Photos 74-543 and 74-544)

Now at the west bin. The foundation is cracked near the anchor at the north end. It is about 8 and $1 / 4$ inches long and $1 / 16$ of an inch wide. The spall is about 3 inches wide. (Photo 74-545)

ID photographs of the west side of the barn and shop. (Photos 74-546 and 74-547)

At the west end of the block shop, there are several cracks. Series of photographs. The major cracking is at the south end of the west side. (Photos 74-548 thru 74-551)

To the lower right of the door, there is a spall that is about 3 inches wide. Separations on the west side range fran about $3 / 4$ to $1 / 16$ of an inch wide. Cracks range from about $1 / 8$ of an inch to a hairline wide.

This structure lacks a gutter system.

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Interior Inspection - Shop
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Concrete floor.
Concrete block walls.
Unfinished œiling.
Photograph of the east wall. (Photo 74-552)

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Photographs of the nor:th wall. (Photos 74-553 and 74-554)
Photographs of the south wall. (Photos 74-555 and 74-556)
Photograph of the west: wall. (Photo 74-557)
Starting on the west wall.
There is a vertical crack south of the west door. It is from about $3 / 16$ of an inch to a hairline wide. This was visible from outside. (Photo 74-558)

To the lower left of the door, there is a large crack and light can be seen through it. The lower crack extends upward about six blocks and is from 3/16 of an inch to a hairline wide.

To the upper right of the west door, there is a vertical crack that runs to the top of the wall from the doorway. It is about $3 / 16$ of an inch wide. (Photo 74-559)

Now on the north wall. Most of it is covered by shelves.
To the upper left of the west window, there is a vertical crack. (Photo 74-560)

There is an L-shaped crack that is from about $1 / 8$ of an inch to a hairline wide above the upper right corner of the middle window on the north wall. (Photos 74-561 and 74-562)

Below the window, there is a vertical crack that runs to the floor. It is from about $1 / 16$ of an inch to a hairline wide. (Photos 74-563 and 74-564)

The other window is boarded over. To the upper left, there is a crack through block and mortar. It measures 10 and $1 / 2$ inches visible. (Photo 74-565)

There is a concrete klock incinerator in the northeast corner. There is a stairstepping mortar crack behind the chimney that continues to the upper right of the chimney to the top of the wall. (Photos 74-566 and 74-567)

The incinerator has a slab concrete top that has an east-west trending crack at the west enci. The visible portion is about 13 inches long and from $3 / 16$ to $1 / 16$ of an inch wide. (Photo 74-568)

On the south facing edge, there is a crack. It is about 9 and $3 / 4$ inches long and about $1 / 8$ of an inch wide. (Photo 74-569)

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Now on the east wall.
To the upper left of the north window, there is a vertical crack that runs to the top of the wall. It is about $1 / 2$ an inch wide. This was shown from the outside also. (Photo 74-570)

To the lower right of this window, there is a crack. This was also visible from the outside. (Photo 74-571)

At the lintel of this window, there is a spalled area and a crack. The crack is about 38 inches long. (Photo 74-572)

Now at the south window. It has a crack above the lintel that is about 25 and $1 / 2$ inches long. (Photo 74-573)

Now at the southeast corner.
The upper south end o:E the east wall has a large split that runs down and into the corner. It ranges from about $3 / 4$ to $1 / 8$ of an inch wide. (Photo 74-574)

Now on the south wall. There is a mortar crack to the upper left of the east window. It is an L-shaped crack measuring about 14 inches on the diagonal and from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 74-575)

To the upper right of the window, there is an L-shaped mortar crack. it is about $3 / 16$ of an inch wide. (Photo 74-576)

There is a vertical crack through block and mortar between the window and door. It is about $1 / 8$ of an inch wide. (Photo 74-577)

Now at the west window on the south wall. There is a crack through block and mortar at the upper left corner. (Photo 74-578)

There is a crack below the lower right end of the window that runs down to the floor. It ranges from about $1 / 8$ of an inch to a hairline wide. (Photo 74-579)

The upper west part of the south wall has a stairstepping crack. The vertical part is about $1 / 4$ of an inch wide on average. (Photos 74-580 and 74-581)

The floor is extensively cracked. Series of photographs of the floor, especially at the west end. (Photos 74-582 thru 74-585, 74-591 and 74-592)

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The major crack is north-south trending in the east part of the floor. It is approximately $1 / 4$ of an inch wide and it has a $Y$ at each end and a branch that runs to the east wall.

Other floor cracks range from about $1 / 4$ to $1 / 16$ of an inch wide not including spalled areas.

Now moving into the barn to the north.
Tin Sided Barn
Unfinished walls and ceiling.
The floor is concrete and much of it is covered with dirt and materials.
Photographs of the eaist wall. (Photos 74-593 thru 74-595)
Photographs of the north wall. (Photos 74-596 and 74-597)
Photographs of the south wall. (Photos 74-598 and 74-599)
Photograph of the west wall. (Photo 74-600)
Starting on the south wall.
The west window of the block south wall has one missing and one broken pane.

There is a major stairstepping crack at the east end of the south wall. It ranges fran about $1 / 4$ an inch to a hairline in width. The wall has shifted outward about $5 / 8$ of an inch at the crack. (Photo 74-601)

There are cracks above each corner of the east window. Each is about $1 / 16$ of an inch wide. (Photo 74-602)

There is a vertical crack below the middle window. It is about 14 inches long and about $1 / 32$ of an inch wide. (Photo 74-603)

There is a crack above each corner of the west window. The upper left is about 13 inches long and from $1 / 16$ of an inch to a hairline in width. The upper right measures about 15 inches and from $1 / 16$ of an inch to a hairline in width. (Photos 74-604 and 74-605)

At the upper right part of the south wall, there is a stairstepping crack. The crack in the upper block is about 1 and $1 / 2$ inches wide. (Photo 74-606)

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The mortar cracks on the south block wall range from about $1 / 8$ of an inch to a hairline in width.

There is a pit in the floor for the grain auger. At this time is it almost full of water. (Photo 74-607)

The east grain bin is mostly full of stored material.

The west bin is empty and there is a long crack across the floor running north-south. It ranges from about $1 / 4$ to $1 / 16$ of an inch wide. (Photos 74-608 thru 74-611)

Now back into the barn inspecting the floor.

There is a north-south trending crack at the east end of the floor. It runs from the grain bin southward, about 17 feet 7 inches. It ranges from 3/16 of an inch wide at the north end of a hairline at the south end. (Photos 74-612 thru 74-614)

Much of this floor cannot be seen.

There are sliding doors on the east and west walls.
There is a slight crack, east-west trending, near the west door. It is about 8 feet long and just wider than a hairline. (Photo 74-615)

There is about a 22 inch long crack at the north end of the apron. (Photo 74-616)

That completes the inspection of this structure.
There are three other grain bins located north of this barn.
Grain Bins

ID photograph from the west of all three bins. (Photo 74-617)
ID photograph from the east. (Photo 74-618)
These three bins each rest on a large slab of concrete.
Starting on the west side at the south bin. There is extensive cracking and spalling in this beveled area of concrete. Series of photographs along the west edge between the two south bins. The concrete area between the middle and south bin is deteriorating severely. (Photos 74-619 thru 74-623)

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A photograph of the concrete between the north and middle bin. (Photo 74-624)

The concrete is cracked below the auger at the west side of the north bin. The crack is from 1 inch to $1 / 4$ of an inch wide. (Photo 74-625)

The concrete is separated from the north bins foundation by about 1 inch. (Photo 74-626)

Now on the east side of the bins. A photograph of the concrete area between the north and middle bins. (Photo 74-627)

There is a crack located just east of the north end in the base of the middle bin. (Photo 74-628)

There are extensive fine cracks in the circular slab of the middle bin. (Photo 74-629)

On the east side of this bin, there is a hairline crack in the concrete that is roughly 55 inches long. (Photos 74-630 and 74-631)

Now to the east side of the middle bin. There is a crack in the circular slab that is about 6 inches long and $1 / 6$ of an inch wide. (Photo 74-632)

The concrete area between the south and middle bins is extensively cracked and spalled. (Photos 74-633 and 74-634)

Now on the south part of the south bin. There is a slight crack in the base that is about 5 inches long and runs vertically through the slab. (Photo 74-635)

Now looking inside the south bin. It is empty except for some stored materials. The lower walls of the bin are rusting.

The bin floor has intersecting north-south and east-west trending cracks. (Photos 74-636 thru 74-641)

Now looking inside the middle bin.
The middle bin has a plastic tarp and some fescue seed on the floor, hiding it from view.

The north bin is full of grain at this time.
West of these bins, there is a circular concrete depression for augering grain. (Photo 74-642)

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There is a white metal. sided barn in the corral area to the west.
White Metal Sided Barn
ID photograph of the east side. (Photo 74-643)
The gutter lacks a downspout at the northeast corner. (Photo 74-644)
This barn has a concrete foundation.

ID photograph of the south side of the barn. (Photo 74-645)
ID photograph of the west side of the barn. (Photo 74-646)

There is large concrete area in the corral lot. It is mostly covered with manure, hay, and dirt.

There is a crack in the foundation to the lower left of the north door on the west side. It is about 5 and $1 / 2$ inches long and $1 / 16$ of an inch wide. (Photo 74-647)

There are several cracks at the north end of the west side in the concrete area. They range from about $1 / 2$ to $1 / 16$ of an inch wide. (Photos 74-648 and 74-649)

Series of ID photographs of the concrete area north of the barn. (Photos 74-650 thru 74-655 and 74-657)

The concrete stock tank is frozen over. It has a crack on the north side that has been sealed. The crack ranges from about $3 / 8$ to $1 / 16$ of an inch wide, and the spall is about 2 and $1 / 2$ inches at the widest. (Photos 74-656, 74-658, and 74-659)

ID photograph of north side of the barn. (Photo 74-660)
ID photograph of the concrete slab along the west side of the barn. (Photo 74-661)

ID photographs of the concrete slab, south of the barn. (Photos 74-662 and 74-669 thru 74-671)

There is a concrete water tank in the corral. (Photos 74-663 thru 74-666)

The water tank has numerous very slight cracks on the top edge. (Photos 74-667, 74-668, 74-672 and 74-673)

The inside of this barn has unfinished walls and ceiling.

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The west wall has a window at the south end and the two bottam panes are broken.

The barn has a dirt floor.
A photograph looking southward and a photograph looking northward inside this barn. (Photos 74-674 and 74-675)

The north window on the west wall of the barn has only one pane.
East of the barn, there is a concrete loading chute. It has a vertical crack at about the middle of the south side. The crack is about 20 inches long and $1 / 16$ of an inch wide. (Photo 74-676)

ID photograph of the chute from the northeast. (Photo 74-677)
Well House
There is a small brick well house in the corral area, located north of the barn. ID photograph of the south side. (Photo 74-678)

There are severe cracks on the south side that range from about $3 / 16$ of an inch to a hairline wide.

ID photograph of the east side. (Photo 74-679)
ID photograph of the north side. (Photo 74-680)
ID photograph of the west side. (Photo 74-681)
The inner walls are concrete block and the north wall has a large vertical crack. (Phot.os 74-682 thru 74-685)

This is actually a spring.
Now moving to a pole barn located northwest of the corral.
Pole Barn
ID photograph of the front, south side. (Photo 74-686)
The south gutter is bent and a section is missing.
This building has a dirt floor and is mostly full of hay bales.
ID photograph of the east end. (Photo 74-687)

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ID photograph of the north side. (Photo 74-688)
ID photograph of the west end. (Photo 74-689)
The west sliding door is bent. (Photo 74-690)
There is a concrete slab to the south of this barn that is mostly covered with dirt, manure, and grass. (Photos 74-691 and 74-692)

There is a crack at the west edge of this slab. It is about 3 and $1 / 2$ inches long and about $3 / 16$ of an inch wide. (Photo 74-693)

There are two concrete water troughs in this lot.
ID photographs of the west water trough. (Photos 74-694 and 74-695)
The west trough is ary at this time. There is a crack in the slab west of the trough. It is from 1 inch to $1 / 4$ of an inch wide. It runs from the trough to the west end of the slab. (Photo 74-696)

This trough has numerous hairline cracks.
There is a hairline crack at the slab north of the trough. It is about 3 feet 8 inches long. (Photo 74-697)

ID photograph of the water trough, east side. (Photo 74-698)
Now at the east water trough. ID photographs from the west and south. (Photos 74-699 and 74-700)

This trough also has several hairline cracks. (Photos 74-701 and 74-702)

ID photograph of this water trough from the east. (Photo 74-703)
Now moving to an old hay barn located north of the barn and corral.
Old Barn
This barn lacks a gut.ter system.
ID photograph from the southeast. (Photo 74-704)
ID photograph of the west end. (Photo 74-705)
ID photograph of the north side. (Photo 74-706)
This barn is full of hay at this time.

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There is no concrete at this barn.

## General Comments

This house was built in 1941 by Mr. Mullies and others. It has a concrete block foundation on about a 2 by 2 feet concrete footing resting on limestone bedrock. The exterior brick veneer has numerous cracks. There are al so numerous cracks in the basement walls.

From the basement, the first floor joists are visible and numerous hairline cracks can be seen in the concrete joists, the probable result of shrinkage.

Mr. Mullies indicated that he had foundation problems in the past and that the foundation has been repaired and reinforced in those areas.

The brick veneer garage has extensive cracks, especially the inner, block walls. Much of the exterior is covered with vines.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 706 Photographs

## 1- SUMMARY FORM

2- SKETCH OF STRUCTURE


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$74-689$


$74-688$



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$74-225$

$n 4-224$








$n 4-219$


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PRE-BLAS'S SURVEY, RESIDENTINL
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## I. Basic Infonmation

1. Name of Resident: K. J. Roberts
2. Date: November 21, 1986 I'_Lue: 3:00PM
3. Address: Amoret, Missouri 64722
4. Location: Approx. $24 / 10 \mathrm{mile}$ south of Amoret
5. Telephone Number: Theddore Roberts (816) 531-7082
6. Dates of occupancy by current resident: Not applicable
7. Dates of any cemporary or pemanent abandoment: Not applicable
II. Information Concerming BuLidings
(repeat for addleional bulldlags)
8. Date of origlaal construction: $\qquad$
9. Date(s) of major remodeling or addletons:
(a) $\qquad$
(b) $\qquad$
(c) $\qquad$
10. Construction of building: Not applicable
(a) EramLng (Jolsts, rafters, and stud walls):
(b) Laterlor walls:
(c) rook:
(d) Eootings; EoundatLons:
(e) basement walls (Indicate how keyed to Eooting of floor):
(£) basemenc Eloor (keyways, chlckness):
(g) nane of person(s) who constructed buliding:
(h) size and direction of any large windows:
III. Enviromnental Infomation
11. Approximate elevacion of area:

780 feet
2. Type of soll in area: Silty clay loam.
3. Type of subgrade drainage at base of foundation: Not applicable.
4. Water wells utilized (indicate depth"and use): Not used.
5. Cisterns or surface water storage utilized: (Lndicate purpose and approximate volume). Not applicable.
6. Source of water, lf not Lncluded above: Not applicable.
7. Eve troughs or any other exterior drainage Eatures: Not applicable.
8. Descripcion of general grading or Landscaplug la vicinity: Flat.
IV. Any notable exlsting detertoration or damage Not applicable

1. Cracks in interlor walls:
2. Receding of doors, windurs:
3. Noticeable setthement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbulldlags
VI. Elevation views or photographs of walls
L. North
2.0 South
8. East
9. West
VII. Comments or supplementary drawlogs
VIII. Discussion or specific counents concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of detertoration, may extribic an unusual response to normal blasting activities.

# White- Industrial Seismology, Inc. 

2431 RANGELINE SUITE ARB
PRO. BOX 1256 JOPLIN, MO 64802-1256

PH. (417) 624-0164

December 3, 1986
Report No. 87056-90

Subject: Inspection of the K. J. Roberts Well Amoret, Missouri. 64722 November 21, 1986

To: The Pittsbucg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

This property is located approximately 24 miles south of Amoret.
It consists of an old rock lined, dug well.

There is a concrete slab over the well. ID photograph of the exterior. (Photo 90-1)

Looking down into the well. The water level is probably 15 feet below the ground surface.

The well does not appear to be collapsed.
Two photographs looking down into the well. (Photos 90-2 and 90-3)
The response sheet was signed and sent by Theodore Roberts, 4405 Fairmount, Kansas City, Missouri.

WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

## CDL/mp

Enclosure: 3 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE


$$
90-3
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PRU゙-BLAS": SURVEX, RESIDENTLAL
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I. Baslc Infonmation

1. Name of ResLdent: Roland Sherman
2. Date: November 20, 1986 Thue: 9:20AM
3. Address:_ Roate 1, Amoret, Missouri 64722
4. Location: $\quad 2 / 10 \mathrm{mi}$ south and $2 / 10 \mathrm{mi}$ east of Amoret
5. Telephone Number:_(816) 9253376
6. Dates of occupancy by current resident: Over 10 years
7. Dates of any temporary or permanent abandonnent: No

LL. InCormation Concernligg Bulidligs
(repeat for addltional buildings)

1. Date of orighal construction: Not known
2. Date(s) of major remodeling or addletons:
(a) Dining and living room original (all other rooms are additions) built in last 10 years
(b) $\qquad$
(c)
3. Construction of building:
(a) Eraning (joists, rafters, and stud walls):
$2 \times 62 \times 6$ 2x4
(b) interlor walls: Sheetrock, some paneling
(c) rook: Composition shingles
(d) footings; Eoundacluns: East part has footing, concrete and block foundation
(e) basement walls (indicate how keyed to footing of Eloor):

Concrete, not known how keyed
(E) basement Eloor (keyways, thickness):

Concrete at least $4^{\prime \prime}$ thick
(g) nane of persor(s) who constructed building: Original unknown, additions
(h) size and direction of any large windows:

Bay wirudow, east wall dining room
III, Enviromantal Infomation

1. Approximate elevation of area:

875 feet
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of Eoundation: New part has plastic pipe drain
4. Water wells utilized (Indicate depth and use):

Well located southwest of house, about 80 feet deep, not used
5. Cisterns or surface water storage utilized: (Lndicate purpose and approximate volume). No
6. Source of water, if not Lncluded above: City water
7. Eve troughs or any other exterior dralnage Eeatures: Some yes
8. Descrlption of general grading or landscaping in vicinity: Generally flat
IV. Any notable expsting deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, whadurs: See survey
3. Nuticeable serclement: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): Not applicable
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: See survey
V. Plan view of residence, well, outbulldings see survey
VI. Elevarion views or photographs of walls see survey
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comments or supplementary drawings See survey
VIII. Discussion or specific comments concerning any unusual features, conscruction cechniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of detertoration, may exhibit an unusual response to nomal blasting activities.

See survey

November 25, 1986
Report No. 87056-91

Subject: \begin{tabular}{l}
Inspection of the Roland Sherman Residence <br>
Route 1, Missouri 64722 <br>
Amoret, <br>
November 20, 1986

 $\mathrm{Tb:} \quad$

The Pittsburg and Midway Coal Mining Company <br>
P. O. Box 8 <br>
Ansterdam, Missouri 64723
\end{tabular}

Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the north side of the house. (Photo 91-1)
The downspout at the northwest corner is unattached at its lower end and the splash block is broken. (Photos 91-2 and 91-3)

There is a separation in the foundation at a construction joint, below the fifth window from the east. The width is from about $1 / 2$ to $1 / 8$ of an inch. (Photo 91-4)

There is another separation at a construction joint below the second window from the east. The width ranges from about $3 / 4$ to $3 / 16$ of an inch. (Photo 91-5)

ID photographs of the east, front side of the house. (Photos $91-6$ and 91-7)

Starting at the north end of the east side. The north step is separated from the foundation by about $1 / 8$ of an inch. (Photos 91-8 and 91-9)

The concrete foundation has numerous cracks between the two east side steps. Most are slight hairline cracks, but there are a couple of larger cracks. Series of photographs of this area from north to south. (Photos 91-10 thru 91-17)

The north larger crack measures about 14 inches along the top and down the side. It is fram about $1 / 16$ of an inch to a hairline wide. (Photo 91-12)

White Industrial Seismology, Inc.
The pittsburg and Midway Coal Mining Company
Report No. 87056-91
November 20, 1986
Page 2

The south larger crack is below the bay window. It measured about 14 inches along the top and side and is about $1 / 16$ of an inch wide. (Photo 91-15)

There is a crack in the top edge of mortar, just north of the south step. It is about 2 inches long and about $1 / 16$ of an inch wide. (Photo 91-18)

At the north end of the south steps, there is an area of mortar at the bottom that has two slight vertical cracks. (Photo 91-19)

The caulk seal around this step is separated below the doorway. (Photo 91-20)

This storm door has a torn screen.
The south step is separated slightly from the foundation. (Photo 91-21)
There is a vertical crack in the foundation just south of the step. It runs the height of the foundation and the concrete has spalled at the lower end. The crack is fram about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 91-22)

At the south end of the red sided part of the house, there is another vertical crack in the foundation. It measures about 9 and $1 / 2$ inches long and from about $1 . / 16$ to $1 / 32$ of an inch wide. (Photo 91-23)

The south part of the house is an addition. It has a white pressboard exterior that resembles stucco.

The sidewalk has a diagonal crack near the doorway to this addition. It is about 57 and $1 / 2$ inches long and fram about $1 / 16$ to $1 / 32$ of an inch wide. This door leads to the basement. (Photo 91-24)

At the corner of the red sided part of the house, there is an east-west trending sidewalk crack. It is about 22 inches long and about $1 / 16$ of an inch in width. (Photo 91-25)

ID photograph of the south side of the house. (Photo 91-26)
The southeast corner lacks a downspout and the gutter empties to the sidewalk.

The east end of the south foundation has several superficial cracks or flaws. (Photo 9l-27)

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Report No. 87056-91
November 20, 1986
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At the upper east end, there is a slight vertical crack. It is from a hairline to about $1 / 16$ of an inch wide and approximately 3 and $1 / 2$ inches long. (Photo 91-28)

There is a hairline vertical crack in the foundation below the lower left corner of the sliding glass door and the corner of the concrete sill is broken off. (Photo 91-29)

The screen is torn at the west basement window on this side.

There is another hairline crack in the foundation at the west fin of the south side. It measures about 4 and 1/4 inches long. (Photo 91-30)

ID photograph of the sidewalk along the south side of the house. (Photo 91-31)

ID photographs of the west side of the house. (Photos 91-32 and 91-33)
ID photographs of the south side of the rock chimney. (Photos 91-34 and 91-35)

The chimney has dry joints and has been chinked with small rocks.
A vertical crack is visible at about the middle of the west side of the chimney cap. (Photo 91-36)

There also appears to be a slight vertical crack at the north end of the west edge of the chimney cap. (Photo 91-37)

ID photographs of the west side of the chimney. (Photos 91-38 and 91-39)

ID photographs of the north side. There appears to be a slight vertical crack at the middle of the north edge of the chimney cap. (Photos 91-40 and 91-41)

The chimney appears to lean slightly to the west above the roof line. Mr. Sherman indicated that the chimney has about 5 yards of concrete as its foundation.

There is an areaway just north of the chimney. There are two hairline vertical cracks in the mortar above the areaway. (Photo 91-42)

The north end of the areaway is cracked all the way through where it meets the foundation. The crack is about $1 / 16$ of an inch wide. (Photos 91-43 and 91-44)

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The south end is also cracked all the way through. The crack is about $1 / 16$ of an inch wide. (Photo 91-45)

The horizontal section of the fascia is deteriorating north of the chimney. (Photo 91-45)

The caulk has separated slightly along the joint where the fiberboard area meets the red siding. (Photo 91-46)

The foundation of the west side of the house, north of the addition, and south of the porch is concrete block.

Near the gas pipe, there is a crack through mortar. It measures 11 and $1 / 2$ inches across the top and down the side and averages about $1 / 16$ of an inch in width. (Photo 91-47)

There is a hairline crack just to the south of that in the top mortar layer. It measures about 4 inches. (Photo 91-48)

The block foundation to the north appears to have deteriorating mortar joints. Series of photographs from south to north. (Photos 91-49 thru 91-52)

The north end of the west foundation is concrete. (Photo 91-53)
The south window on the west side has deteriorating caulk and paint. (Photo 91-54)

There is also paint peeling from the trim of the other windows.
Back to the southwest corner of the house. The sidewalk is separated from the house by about $1 / 2$ an inch. (Photo 91-55)

That completes the exterior inspection of the house.
INTERIOR INSPECTION

## Basement

This is part of the addition at the south end of the house.
Concrete floor, walls and ceiling.
Two windows on the south wall.
Photograph of the west wall. (Photo 91-56)
Photographs of the north wall. (Photos 91-57 and 91-58)

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Stairway enclosure in the northeast corner.
Photographs of the east wall. (Photos 91-59 and 91-60)
Photographs of the south wall. (Photos 91-61 thru 91-63)
The metal frames of the south window are rusting.
From the west end of the south wall, a roughly horizontal crack trends eastward to the window. It ranges from a hairline to about $1 / 16$ of an inch in width. It measures about 8 feet 1 inch long from the lower right of the window to the west wall. (Photos 91-64 and 91-65)

It continues along the west wall to the lower left corner of the west window opening. It measures 3 feet 6 inches along the west wall and from about $1 / 16$ of an inch to a hairline wide. (Photo 91-66)

Back to the south wall. There are several water stains on the wall.
There is a hairline ciagonal crack below the right side of the west window that runs to the floor. The crack length is about 62 inches. (Photos 91-67 and 91-68)

There is a hairline horizontal crack below the window that runs eastward about 68 inches to a fin. (Photos 91-69 and 91-70)

The basement walls have a roughly horizontal flaw where different pourings of concrete meet.

Now at the east window on the south wall. A hairline crack runs diagonally from the lower left corner about 34 and $1 / 2$ inches. (Photos 91-71 and 91-72)

There is a hairline crack along this pouring line that runs about 14 inches along the east: end of the south wall to the southeast corner. This crack also runs along the pour line across the east wall to the stairway enclosure. (Photos 91-73 thru 91-75)

There are crazing cracks in a small concrete patch just to the left of the pipes on the east: wall. (Photo 91-76)

Now inspecting the north wall at the stairway enclosure.
The wall has a diagonal pouring that has been patched or covered with concrete.

Now at the north wall, west of the stairway.

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West of the stairway door, there is an opening to the crawl space. There is a vertical crack below the lower left end of this opening. It is about 26 and $1 / 2$ inches long and a hairline wide. (Photo 91-77)

Below this opening, there is another hairline crack below the lower form tie. It is about 15 inches long. (Photo 91-78)

The stairway door has two cracks at the lower left corner of the pane. (Photo 91-79)

Continuing westward along the north wall. There is a vertical hairline crack that has been patched at the upper end. This is just to the east of the electric receptical. It runs down about 63 inches from the ceiling and ranges from about $1 / 32$ of an inch to a hairline in width. (Photos 91-80 and 91-31)

The west part of the north wall has a slight vertical crack located about 5 feet west of the west crawl space window. This is actually two cracks. The upper one is about 17 and $1 / 2$ inches long and the lower is about 22 inches long. (Photos 91-82 and 91-83)

There is a hairline diagonal crack below the lower left corner of the west crawl space window on the north wall. It is about 6 inches long. (Photo 91-84)

The pouring line flaw has a hairline crack at the west end of the north wall. From the west wall it runs eastward about 37 inches. (Photos 91-85 and 91-86)

At the north end of the west wall, the pouring flaw line has a hairline horizontal crack that runs about 63 inches from the north wall. It is very hard to see. (Photos 91-87 and 91-88)

At the west window, paint is peeling from the metal frame and the frame is rusting. The plywood is deteriorating and stained and there are stains below the window. Five bolts tie the chimney footing to the foundation wall and these bolts are rusting, causing stains on the wall. (Photos 91-89 and 91-90)

There is some water on the floor along the west wall. (Photos 91-91 and 91-92)

There is a grease trap in the southwest corner of the floor.
The floor has several areas of silt stains indicating that the basement floods.

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There is a wet and stained area below the seed bed along the south wall. (Photo 9l-93)

There is standing water at the southeast corner of the floor. (Photo 91-94)

There is a crack in the floor that runs from the north wall, just west of the stairway enclosure to the south wall. It ranges from a hairline to about l/l6 of an irich in width. (Photos 91-95 and 91-96)

A photogrpah looking into the east crawl spaœ window on the north wall and then a photograph looking into the west crawl space window. (Photos 91-97 and 91-98)

Now inspecting the concrete ceiling.
There is a roughly north-south trending patch in the west part of the ceiling. It runs from the north wall to the south wall. Parts of the patch are slightly cracking and show signs of efflorescence. (Photos 91-99 and 91-100)

There is another north-so uth trending patched crack near the light fixture in the east part of the roan. It runs all the way across the ceiling and has a hairline crack in the patch. There is a white efflorescence material in this crack. This crack connects with the crack on the north wall near the receptical. (Photos 91-101 and 91-102)

Stairway
Photographs of the north wall, the south wall, and one photograph looking up the stairway. (Photos 91-103 thru 91-105)

## Kitchen

Entered from the east door.
Vinyl floor.
Paneled walls.
Tile ceiling.
Z-brick counter area walls.
There is a window on the south wall.
Arched entry on the north to the dining room.
Photographs of the west wall. (Photos 91-106 and 91-107)
Photograph of the south wall. (Photo 91-108)

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Photograph of the east. wall. (Photo 91-109)
The ceiling has stains around the vent. (Photo 91-110)
There are a couple of bricks missing near the window on the south wall and the glue is scaling.

The arched entry to the dining room has a few missing or partially missing Z-bricks on the recessed face. (Photos 91-111 and 91-112)

Dining Room
Carpeted floor.
Paneled lower north and east walls.
z-brick lower west and south walls.
Paneled upper west and south walls.
Papered upper east and north walls.
Textured plaster ceiling.
Bay window on the east wall. Door to the front porch on the north wall. Entrance to the living roam on the west wall.

Photograph of the east: wall. (Photo 91-113)
Photograph of the north wall. (Photo 91-114)
Photograph of the south wall. (Photo 91-115)
Photographs of the west wall. (Photos 91-116 and 91-117)
The upper right brick of the lower south wall is missing. (Photo 91-118)

Another brick is missing at the upper part of the lower west wall. (Photo 91-119)

The ceiling has a slight stain between the light fixture and a vent. Mr. Sherman indicated that condensation from a heating duct caused this stain and that he has since insulated the duct. (Photo 91-120)

There is a slight water stain in the ceiling near the middle of the west wall. (Photo 91-121)

Living Room
Carpeted floor.
Paneled walls.
Textured plaster ceiling.

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Photograph of the west: wall. (Photo 91-122)
Photographs of the south wall. (Photos 91-123 and 91-124)
Photograph of the east: wall. (Photo 91-125)
Photographs of the nor:th wall. (Photos 91-126 and 91-127)
Bay window on the nort:h wall. Entrance on the south wall to the hallway.

Hallway
Carpeted floor.
Paneled walls.
Tile ceiling.
Door on the east to a bedroom. Door on the west to a bedroom. Door on the west to the bathroan. Door on the south to the family roam.

A photograph of the hallway looking south. (Photo 91-128)
The south end of the ceiling has severe water stains. (Photo 91-129)
Bathroom
Lavatory
Carpeted floor.
Paneled north, east, and west walls.
Sheetrock ceiling.
Ceramic and mirror tile sink area walls.
Door on the west to the shower and stool area.
Door on the north to a closet.

A photograph looking westward into the bathroom. (Photo 91-130)
Shower and Stool Area
Carpeted floor.
Tile shower area walls.
Tile lower west wall.
Papered upper west wall.
Paneled south wall.
Sheetrock ceiling.

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There is a slight separation at the south edge of the west wall of the shower stall. It is about $1 / 8$ of an inch wide on average. A tile is missing at the upper left part of the west shower wall. (Photos 91-131 and 91-132)

A sheet of plastic has been installed in the shower stall to protect the north shower wall.

The shower stall ceiling ia an unfinished piece of sheetrock. (Photos 91-133 and 91-134)

There is a tile missing at the upper right end of the east wall of the shower stall. (Photo 91-134)

Small Hallway
At the entrance to the west bedroom, there is a small hallway. (Photo 91-135)

Carpeted floor.
Paneled walls.
White painted sheetrock ceiling.
The ceiling has a paint crack along the seams. (Photo 91-136)
West Bedroom

Paneled walls.
Tile ceiling. carpeted floor.

Closet door on the south wall. Windows on the west and north walls.
Photograph of the north wall. (Photo 91-137)
Photograph of the west wall. (Photo 91-138)
Photograph of the south wall. (Photo 91-139)
photographs of the east wall. (Photos 91-140 and 91-141)
The ceiling has a large water stain around the vent. (Photo 91-142)
There is a water statin in the ceiling along the west wall above the window. (Photo 91-143)

There are water stajns in the northwest corner of the ceiling. (Photo 91-144)

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East Bedroom
Carpeted floor.
Paneled walls.
Tile ceiling.
Window on the south wall.
A photograph looking eastward into the room. (Photo 91-145)
There are same dark stains in the southwest part of the ceiling and around the vent.

Closet door on the east wall.
Famil y Room
Carpeted floor.
Paneled walls.
Textured plaster ceiling.
Sliding doors and a window to the outside on the south wall. Large rock fireplace on the west wall.

Photograph of the south wall. (Photo 91-146)
Photograph of the east wall. (Photo 91-147)
Photographs of the north wall. (Photos 91-148 and 91-149)
ID photographs of the fireplace. (Photos 91-150 and 91-151)
This fireplace is constructed of limestone, it has dry joints and is chinked with small stones.

The only mortar is below the mantel and at the hearth.
There are a couple of slight vertical mortar cracks below the mantel. One is located above the middle of the vent, and the other above the upper right of the vent. These are hairline mortar cracks. (Photos 91-152 and 91-153)

There is a separation between the right support and the mantel. It is about 1/16 of an inch wide. (Photo 91-154)

The left support also has a slight separation with the wooden mantel. The separation is about $1 / 16$ of an inch. (Photo 91-155)

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There is a slight vertical mortar crack at the upper right part of the top mortar, just below the ceiling. It is about $1 / 32$ of an inch wide.

The door on the east leads to the utility room.

## Utility Room

Carpeted floor.
Paneled and sheetrock walls.
Textured plaster ceiljing.
Windows on the south and east walls.
Window on the north wall to the kitchen. The door on the east wall leads from the basement stairway to the outside.

The north wall has sane cardboard over it.
The northeast corner of the room is part of the basement stairway.
Photographs of the nor:th wall. (Photos 91-156 thru 91-158)
Photographs of the east wall. (Photos 91-159 thru 91-161)
There are some water stains on the sheetrock part of the east wall.
Photographs of the south wall. (Photos 91-162 and 91-163)
Photographs of the west wall. (Photos 91-163 and 91-164)
The window on the north wall has a torn screen at the lower right corner.

## Front Porch

Concrete floor. Plywood west wall. Wooden east wall. Exterior siding on south wall. Plywood ceiling.

Windows along the north wall.
Door on the east wall to the outside.
Photographs looking west and then looking east. (Photos 91-165 and 91-166)

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Photograph of the south wall. (Photo 91-167)
Photograph of the north wall. (Photo 91-168)
The floor has three sections. The middle section is heaved at its southwest corner by about 3 inches. (Photo 91-169)

This section of the floor has an east-west crack all the way across. The width is from about $3 / 16$ to $1 / 4$ of an inch. It has a couple of spalled areas that are wider. One spall is about 2 and $1 / 2$ inches at the widest. (Photo 91-170)

The east part of the floor has an expansion joint. At the expansion joint, there is a very slight crack trending west. This is a hairline crack measuring about 17 and $1 / 4$ inches long. (Photo 91-171)

There is another hairline crack near the door that is about 16 and $1 / 4$ inches long. (Photo 91-172)

Now inspecting the north foundation wall. There is a hairline crack located across from the west end of the bay window. It measures about 6 inches along the top and down the side. (Photo 91-173)

Barn
This barn is located east of the house.
ID photograph of the west side. (Photo 91-174)
The barn has a downspout and gutter system.
ID photographs of the south side. (Photos 91-175 and 91-176)
ID photograph of the rorth side. (Photo 91-177)
The northwest downspout empties to the ground close to the foundation. This downspout appears to be clogged at this time and an area of soil has washed out from under the foundation. (Photos 91-178 and 91-179)

There is a crack in the foundation to the lower right of the west window on the north side of the barn. It measures about 4 inches long and about $1 / 8$ of an inch wide. (Photo 91-180)

There is a spalled area in the foundation to the lower right of the window. (Photo 91-181.)

There is a crack in the foundation to the lower left of the window. It is about 3 and $1 / 4$ inches long and $1 / 16$ of an inch wide. (Photo 91-182)

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There is a crack in the foundation between the two north windows. It is about 8 inches long and from $1 / 8$ to $1 / 16$ of an inch wide. (Photo 91-183)

There is another crack in the foundation at a patch to the lower left of the window with the green panel. It measures about 5 inches long and about $1 / 16$ of an inch wide. (Photo 91-184)

Part of the north foundation cannot be seen.
There is a hairline foundation crack east of the wood pile, at the east end of the north side. It measures about 8 and $1 / 2$ inches long. (Photo 91-185)

ID photograph of the east side of the barn. (Photo 91-186)
There is a shed at the east end of the barn that lack a gutter.
Most of the west and south foundations cannot be seen.
There is a crack in the foundation on the south side of the barn to the lower right of the east window. It is about 5 and $1 / 2$ inches long and about $1 / 16$ of an inch wide. (Photo 91-187)

Behind the barrel, there is a slight vertical foundation crack that is about $1 / 16$ of an inch wide. It is about 6 inches long. (Photo 91-188)

The southeast downspout of the barn empties close to the foundation. (Photo 91-189)

Interior Inspection
Tool Room
The barn is divided into three rooms. This is the middle room.
The concrete floor has several cracks. (Photos 91-190 thru 9l-192)
The main crack runs from the north wall to the south wall. It has a branch that runs to the west wall and a branch that runs to the east wall. A branch at the south end of the floor runs to the east wall and it has a branch that runs to the south end of the floor. These cracks range from about $1 / 4$ to about $1 / 8$ of an inch wide with spalled areas being wider.

The east part of the barn is open to livestock and has a dirt covered concrete floor.

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## East Room

There is a crack in the foundation at the east doorway. The foundation is heaved by about 1 and $1 / 2$ inches at this crack. The width is from about $3 / 8$ to $1 / 8$ of an inch. (Photo 91-193)

At the east end of the barn, there is an open shed.
Shed
There is a roughly vertical crack in the east foundation of the barn. It is about 6 and $1 / 2$ inches long and $1 / 8$ of an inch wide. (Photo 91-194)

A photograph looking into the shed. Note the sagging roof. (photo 91-195)

Now back into the tool room.

## Tool Room - Continued

The west wall has a foundation of concrete block and there is a vertical mortar separation to the lower right of a sealed door. It is from about $1 / 8$ to $1 / 16$ of an inch wide. (Photo 91-196)

West Room
The west end of the barn has a dirt and concrete floor. The concrete part is extensively cracked and mostly covered up. Mr. Sheman indicated that he intends to remove this concrete and put in a new floor. (Photos 91-19? thru 91-199)

There is a well located about a hundred yards southwest of the house.
Well
According to Mr. Sherman, it is a capped well with about an 8 inch pipe. The water leve- is about 10 feet from the surface and the depth of the well is about 80 feet. Nothing can be seen inside.

A photograph looking southwestward from the house toward the well and the Harold Jones residence. (Photo 91-200)

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General Comments
This house has a concrete and concrete block foundation. Several cracks were found in the foundation. The basement addition has concrete walls that have a flaw at the interface of successive placings of concrete. There are several cracks in the basement walls and the basement apparently floods. The front porch floor has severe cracks.

The house has a gutter system except at the west side of the addition. The two drainage points of the gutters, at the northwest corner and the other at the southwest: corner of the house both empty close to the foundation.

The interior ceilings have numerous stains, some of which, according to Mr. Sherman, were caused during construction of the addition when part of the roof was open.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Christopher D. Landoll Technical Associate

CDL/mp
Enclosure: 200 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE







$91-127$


## $91-174$










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PRE-BLAST SURVEY, RESIDENI'LAL
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I. Basic Information

1. Name of Resldent: John Short
2. Date: November 10, 1986 Tine: $12: 15 \mathrm{PM}$
3. Address: Box 314, Amoret, Missouri 64722
4. Location: Solutheast of Amoret
5. Telephone Number: (816) 925-3498
6. Dates of occupancy by current resident: 1985-Present
7. Dates of any tempotary or pernanent abandonnent: None
II. Information Concerning Buildings
(repeat Eor addicional buildings)
8. Date of original construction: Unknown
9. Date(s) of major remodeling or addictons: None
(a) $\qquad$
(b) $\qquad$
(c)
10. Construction of building:
(a) framing (jolsts, rafters, and stud walls): Unknown
(b) Interior walls: Paneled
(c) roof: Shingled
(d) footings: foundations: Steel runners supported by hydraulic jacks
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Enviromnental Infomation

1. Approximate elevation of area:
. 850 feet at residence
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use): Covered, is now septic
5. Cisterns or surface water storage utilized: (Lndicate purpose and approximate volume). None
6. Source of water, if not included above:City water
7. Eve troughs or any other exterior dralnage features: See phota survey
8. Description of general grading or landscaplug in vicinity: See photo survey
IV. Any notable exlsting deterioration or damage See photo survey
9. Cracks in interior walls:
10. Receding of doors, windows:
11. Noticeable settlement:
12. Foundation cracks:
13. Exterior wall cracks (brick veneer):
14. Sidewalks, steps, driveway pavement:
15. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
16. North
2.0. South
17. East
18. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific coments concerning any unusual features, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response ro normal blasting activities.

See survey narrative

PH. (41'7) 624-0164

Noverber 13, 1986
Report No. 87056-77

Subject: Inspection of the John Short Trailer Box 314 Amoret, Missouri 64722 November 10, 1986

To: The Pittsburg and Midway Coal Mining Company P. O. Box 8 Amsterdam, Missouri 64723

Attention: Mr. Mark Premo
Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photograph of the west side of the trailer. (Photo 77-1)

There is a hole and a crack in the second window from the north end. (Photo 77-2)

There are cracks in the three windows to the north of the door. (Photo 77-3)

The door is boarded from the outside. (Photo 77-4)

ID photograph of the south side of the trailer. (Photo 77-5)
The south window has been patched in areas.
ID photograph of the east side of the trailer. (Photo 77-6)
The southernmost window has a strip of tape on it. (Photo 77-6)
ID photograph of the north side of the trailer. (Photo 77-7)
The windows are taped in places. (Photo 77-7)

We can see under the skirting at the north end. It appears that there are steel runners supported by hydraulic jacks called Max-jax. These are sitting on poured concrete slabs. (Photos 77-8 thru 77-12)

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Cellar
There is an old cellar at the south end of the trailer.
ID photographs of the exterior. (Photos 77-13 thru 77-16)
Much of the exterior is doscured by weeds and bushes.
There are large cracks near the north end of the east side. (Photos
$77-15$ and 77-16)
Starting the interior inspection of the cellar
ID photograph of the north wall. (Photo 77-17)
Part of the east and west walls are obscured by canning jars and storage shelves.

There is no cracking noted in the east wall. (Photo 77-18)
There is al so no cracking noted in the west wall. (Photo 77-19)
Also, there are no cracks noted in the ceiling. (Photo 77-22)
There are floor cracks near the door. Much of the floor area is obscured by chicken feathers, blood, etc. (Photos 77-20 and 77-21)

There are mo evident cracks in the side walls of the stairs. (Photos $77-23$ and 77-24)

The interior walls and ceiling of the cellar appear to be in good condition.

Storage Shed
Has a dirt floor and wood walls.
ID photographs of the interior and exterior. (Photos 77-25 thru 77-29)
This shed is in poor condition. The wood is heavily deteriorated.
There is also an old tin barn in the field to the south. This barn is heavily deteriorated. (Photo 77-30)

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INTERIOR INSPECTION
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## Kitchen

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Vinyl floor.
Paneled walls and ceiling.
There are ceiling stains at the west wall above the stove. (Photo 77-31)
ID photograph of the south side of the kitchen. (Photo 77-32)
ID photograph of the west side of the kitchen. (Photo 77-33)
ID photograph of the east side of the kitchen. (Photo 77-34)
At the east side of the kitchen, there is a very small laundry area.
Laundry Area
Vinyl floor.
Paneled walls and ceiling.
There is nothing noted in this area.
Closet
There is a closet at the southeast corner of the kitchen.
It appears that the ceiling is stained. (Photo 77-35)
Entryway
Carpeted floor.
Paneled walls and ceiling.
There is a ceiling stain above the door on the west wall. (Photos 77-36 and 77-37)
Dining Room
Carpeted floor.
Paneled walls and ceiling.
There is a œiling stain above the window on the east wall. (Photo 77-38)
ID photographs of the dining room. (Photos 77-39 thru 77-41)
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## Living Room

Carpeted floor.
Paneled walls and ceiling.
Looking at the west wall.
There is a œiling stain above the southernmost of the three windows.
(Photo 77-42)
There are ceiling stains around the stovepipe. (Photos 77-43 and 77-44)
ID photographs of this room. (Photos 77-45 thru 77-47)
Hall
Carpeted floor.
Paneled walls and ceiling.
There is an area of ceiling stains at the east side of the hall. (Photo 77-48)

Bedroom
There is a ceiling stain at the west wall above the window. (Photo 77-49)

There are two closets on the south wall. The one on the west end has a ceiling stain. (Photo 77-50)

ID photographs of this room. (Photos 77-51 thru 77-54)
Moving on northward down the hall, there is a small ceiling stain on the east wall. (Photo 77-55)

The next roam on the west side is a bathroan.
Bathroom
Carpeted floor.
Paneled walls and ceiling.
There is a hole in the door. (Photo 77-56)
There are ceiling stains above the bathtub on the west wall. (Photos 77-57 and 77-58)

ID photographs. (Photos 77-59 and 77-60)

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Now at the far north end of the trailer in a bedroom.

Bedroom
Carpeted floor.
Paneled walls and ceiling.
There is a ceiling stain at the west wall. (Photo 77-61)
ID photographs. (Photos 77-62 thru 77-65)
The door panel is separated. (Photo 77-66)
General Comments
The John Short residence is located to the southeast of Amoret, Missouri. The residence is a trailer supported by hydraulic jacks under steel runners.

There is no roof guttering around the trailer. The interior ceilings had water stains in many areas.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


Randall M. Wheeler Manager of Technical Services

RMW/mp
Enclosure: 66 Photographs

1- SUMMARY FORM
2- SKETCH OF STRUCTURE


$77-27$






## PRE-BLAST SURVEY, RESIDENTIAL

I. Basic Information

1. Name of Resident: Mr. and Mrs. Sherwin Taylor
2. Date: October 2l, 1986 Time:_ 4:20PM
3. Address:__Box 122, Amoret, Missouri__ 64722
4. Location: 450 feet west of Y Highway, 990 feet south of 52 Highway
5. Telephone Number: (816) 925-3496
6. Dates of occupancy by current resident: 1970-present
7. Dates of any temporary or permanent abandonnent:Unknown
II. Information Concerning Buildings
(repeat for additional buildings)
8. Date of original construction: Early 1900's
9. Date(s) of major remodeling or additions:
(a)closed in porch and bathroom - 1957-58.
(b)Southeast corner room - 1925
(c)
10. Construction of building:
(a) Eraming (joists, rafters, and stud walls): stud walls - $2^{\prime \prime} x 4$ "
(b) interior walls: Sheetrock
(c) roof: Shingled, hip type
(d) footings; foundations: old areas - brick
newer areas - concrete block
(e) basement walls (indicate how keyed to footing of floor):

Not applicable
(f) basement Eloor (keyways, thickness):

Not applicable
(g) name of person(s) who constructed building: Unknown
(h) size and direction of any large windows: None
III. Envirommental Information

1. Approximate elevation of area:

862 feet: at residence
2. Type of soil in area: silty clay loam
3. Type of subgrade drainage at base of foundation: None
4. Water wells utilized (Indicate depth and use): 75' deep, rarely used.
5. Cisterns or surface water storage utilized: (indicate purpose and approximate volume). Not in use, covered.
6. Source of water, if not included above: city water
7. Eve troughs or any other exterior drainage features: See photo survey
8. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage see photo survey

1. Cracks in interior walls:
2. Receding of doors, windows:
3. Noticeable settlement:
4. Foundation cracks:
5. Exterior wall cracks (brick veneer):
6. Sidewalks, steps, driveway pavement:
7. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
8. North
2.0 South
9. East
10. West
VII. Comments or supplementary drawings See sketch
VIII. Discussion or specific comments concerning any unusual features, construction teciniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of decerioracion, may exhibit an unusual response to normal blasting activities.

## See survey narrative

PH. (417) 624-0164
October 25, 1986
Report No. 87056-43
P \& M Map Photo No. 12

Subject: Inspection of the Sherwin Taylor Residence
P. O. Box 122

Amoret, Missouri 64722
October 21, 1986
To: The Pittsburg and Midway Coal Mining Company
P. O. Box 8

Amsterdam, Missouri 64723
Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.

EXTERIOR INSPECTION
ID photograph of the residence from the southeast corner. (Photo 43-1)
ID photograph of the east side. (Photo 43-2)
The foundation is brick under the older areas of the structure and concrete block under the more recently constructed areas.

Looking at the foundation.
At the first block on the south end of the east side, there is a separation in the mortar. Measures 7 and $1 / 2$ inches long and $3 / 16$ of an inch in width, maximum. (Photo 43-3)

There is a piece of concrete missing out of the last concrete block before reaching the brick foundation. This piece measures 4 and $1 / 2$ inches wide. (Photo 43-4)

This is a very old brick foundation and there are many separations in the mortar.

The large separation to the right of the vent measures 1 inch in width. (Photo 43-5)

There are mortar separations and mortar cracks to the north of the porch. There is also a crack through one of the bricks. (Photo 43-6)

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The mortar separations range from 5/16 of an inch to a hairline.
ID photograph of the north side. (Photo 43-7)
There is some corrugated tin lining the foundation. (Photo 43-8)
There is a hairline crack through a brick in the foundation. (Photo 43-9)

The downspouts are extended to drain water away from the foundation.

We are now on the west side.
ID photograph. (Photo 43-10)
ID photograph showing the condition of the concrete sidewalk. (Photo 43-11)

Photographs of the rock circumference of the cellar in a counterclockwise direction starting from the east end. (Photos 43-12 thru 43-23)

The mortar separations measure from 1 to 2 inches. (Photos 43-24 thru 43-26)

ID photograph of the front of the cellar. (Photo 43-27)
Cellar
There is a horizontal crack across the west wall of the cellar. (Photo 43-28)

The cellar walls are water stained and spalled. (Photos 43-29 thru 43-32)

The cellar door does not shut smoothly.
The stairway walls and step down to the cellar are spalled. (Photo 43-33)

Exterior Inspection - Continued
The surface well slab is at the southwest corner of the residence. (Photo 43-34)

There is a crack on the west end. This is 16 and $3 / 4$ inches long. Measures $1 / 4$ inch to a hairline in width. (Photo 43-35)

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This walk is severely cracked at the west end. These cracks have a width of $3 / 8$ of an inch to a hairline. (Photo 43-36)

The large crack at the east end measures 1 inch in width to a hairline. (Photos 43-37 and 43-38)

The crack in front of the steps measures 9 inches long with a width of $1 / 4$ of an inch to $3 / 16$ of an inch. (Photo 43-39)

To the left of the steps, there is a vertical mortar separation. Measures 3 and $1 / 4$ inches long, and the width is about $1 / 8$ of an inch. (Photo 43-40)

The vent opening is not covered. (Photo 43-41)
There is a mortar separation toward the east end. It measures 7 inches long and $1 / 8$ of an inch wide. (Photo 43-42)

INTERIOR INSPECTION
We entered through the east entrance into the living room which is at the northeast corner of the residence.

## Living Room

Carpeted floor.
Sheetrock walls.
Ceiling panels.
Starting with the east wall, there is a vertical hairline crack at the upper left corner of the door. Measures approximately 7 inches long. (Photo 43-43)

ID photograph of the east wall. (Photo 43-44)
There is a fine hairline crack at the lower left corner of the window on the north wall. It measures 6 and $1 / 2$ inches.

ID photograph of the north wall. (Photo 43-45)
ID photographs of the west wall. (Photos 43-46 and 43-47)
Looking at the south wall, above the upper right of the entrance into the bedroom, there is a horizontal crack across the wall. (Photo 43-48)

ID photograph of the south wall. (Photo 43-49)
Now moving westward into the kitchen and dining room.

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## Kitchen/Dining Room

Carpeted floor.
Sheetrock walls.
Ceiling panels.
ID photograph of the north wall. (Photo 43-50)
ID photographs of the west wall. (Photos 43-51 and 43-52)
ID photograph of the south wall. (Photo 43-53)
And of the east wall. (Photos 43-54 and 43-55)
Nothing noted.
At the southwest corner of the kitchen there is a little bathroom.
Bathroom
Carpeted floor.
Sheetrock walls and ceiling.
A few tape seams are showing that have been painted over. However, there is no evident cracking. ID photograph from the door. (Photo 43-56)

To the east of the bathroom is the utility room.

## Utility Room

Carpet layed down on the floor.
Wood walls and ceiling.
There is some trim separation on the north side. (Photo 43-57)
ID photographs. (Photos 43-58 and 43-59)
Now moving northward out of the kitchen into a small bedroom.
Bedroom
Carpeted floor.
Sheetrock walls.
Paneled ceiling.
ID photograph of the north wall. (Photo 43-60)

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ID photograph of the west wall. (Photo 43-61)
ID photographs of the south wall. (Photos 43-62 and 43-63)
Next to the light switch, there is a diagonal crack at the upper right corner that has been patched. This hairline crack measures about 7 inches. (Photo 43-64)

ID photograph of the east wall. (Photo 43-65)
Now moving southward out of the living room into another bedroom.
Bedroom
Carpeted floor.
Sheetrock walls.
Ceiling panels.
ID photographs of the north wall. (Photos 43-66 and 43-67)
On the north wall, just to the left of the cabinet, there is a separation. Measures about 2 inches long. (Photo 43-68)

ID photograph of the west wall. (Photo 43-69)
ID photographs of the south wall. (Photos 43-70 and 43-71)
There are hairline cracks in the southwest corner toward the ceiling. (Photo 43-72)

ID photograph of the east wall. (Photo 43-73)
Now moving southward into the room at the southeast corner.
Southeast Bedroom

Carpeted floor.
Sheetrock walls and ceiling.
ID photograph of the east wall. (Photo 43-74)
There is a horizontal crack at the lower right corner of the east window that has been painted over. Measures about 8 and $1 / 2$ inches in length. (Photo 43-75)

There is a vertical crack under the window. Measures 21 and $1 / 4$ inches
long. (Photo 43-76)

White Industrial Sei.smology, Inc.

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There is another vertical crack below the center of this window. Measures 21 and $1 / 4$ inches. (Photo 43-77)

There is a slightly diagonal crack underneath the left section of this same window. Measures 21 and $1 / 4$ inches. (Photo 43-78)

A hairline horizontal crack at the lower left corner of the window. Measures 3 and 3/4 inches. (Photo 43-79)

Now looking at the south wall.
There are four windows on this wall.
There is a vertical hairline crack in the wall under the first two windows. It measures about 21 inches. (Photo 43-80)

There is a patched crack in the easternmost window. (Photo 43-81)

There is another vertical hairline wall crack underneath the second and third windows from the east end. Measures 21 and $1 / 2$ inches. (Photo 43-82)

Looking at the south wall at the ceiling. The wall is separated from the ceiling by about: $3 / 16$ of an inch. This separation may range as wide as about 5/8 of an inch. (Photos 43-83 and 43-84)

There is a patched crack in the ceiling from the north to south end. (Photos 43-85 thru 43-88)

Outbuildings
We are looking at the carport and storage area at the southwest corner of the structure.

Dirt floor.
A wood and metal structure.

To the south there is a metal A-frame structure with a concrete floor.
The concrete floor appears to be in good condition. There are no evident cracks in the floor. The floor is partially obscured by various materials.

ID photograph from the east side. (Photo 43-89)
ID photograph of the well house, southwest of the house. (Photo 43-90)

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White Industrial Seismology, Inc.
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Interior photographs of the well house. (Photos 43-91 thru 43-93)
The interior of the well cannot be seen.
The well house has a concrete block foundation.
ID photographs of the foundation. There are mortar separations of $1 / 16$ to 1 inch in width. (Photos 43-94 thru 43-98)

ID photographs of the carport and storage shed. (Photos 43-99 thru 43-102)

General Comments
The Sherwin Taylor residence is located at an approximate elevation of 862 feet above sea level. The surrounding land slopes gently to the northwest.

The present guttering and downspouts provide good roof drainage, however, some water may affect the foundation, especially on the south side. Both the brick and concrete block foundations show evidence of settlement load and hydraulic effects.

The interior of the structure showed strain cracks from settlement and material expansion at doors and windows. Cracks of this type may be expected to increase in size with time.

Continued deterioration of the foundation with age may also be expected from continued load and hydraulic effects.

That completes the inspection of this property.


RMW/mp
Enclosure: 102 Phot:ographs
l- COPY FROM P \& M's TOWN OF AMORET MAP LOCATION NO. 12
2- SUMMARY FORM
3- SKETCH OF STRUCTURE


Sketch of the Main Floor Sherwin Taylor House



Scale: I Division =1 Foot approx

Sketch of Outbuiidings Shervin Taylor House
(storage











I. Basic Information

1. Name of Resident: Gene and Jean Thornton
2. Date: October 21, 1986

Time: 9:10AM
3. Address: Box 106, Amoret, Missouri 64722
4. Location: $450^{\prime}$ east of $Y$ Highway, $350^{\prime}$ north of 52 Highway
5. Telephone Number: (816) 925-3412
6. Dates of occupancy by current resident: 1968-present
7. Dates of any temporary or permanent abandonment: $\qquad$
II. Information Concerning Buildings
(repeat for additional buildings)

1. Date of original construction: approximately 1910
2. Date(s) oE major remodeling or additions:
(a) Built fireplace 1977
(b) Built greenhouse 1984
(c)
3. Construction of building:
(a) framing (joists, rafters, and stud walls): 2"x4" stud walls rafters: 2"x4" Joists: unknown
(b) interior walls: Sheetrock
(c) roof:Composition shingles
(d) footings; foundations: Concrete foundation
(e) basement walls (indicate how keyed to footing of floor): Not applicable
(f) basement Eloor (keyways, thickness): Not applicable
(g) name of person(s) who constructed building: Gil Walker
(h) size and direction of any large windows: West wall
III. Envfrommental Information
4. Approximate elevation of area: $840^{\prime}$ at residence
5. Type of soll in area: silty clay loam
6. Type of subgrade drainage at base of foundat ion: None
7. Water wells atilized (Indicate depth and use): Well used to water plants depth unknown
8. Cisterns or surface water storage utilized: (indicare purpose and approximate volume). None
9. Source of water, if not included above: City water
10. Eve troughs or any other exterior drainage features: See photo.survey
11. Description of general grading or landscaping in vicinity: See photo survey
IV. Any notable existing deterioration or damage See photo survey
12. Cracks in interlor walls:
13. Receding of doors, windurs:
14. Noticeable setclement:
15. Foundation cracks:
16. Exterior wal. 1 cracks (brick veneer):
17. Sidewalks, steps, driveway pavement:
18. Basement leaks:
V. Plan view of residence, well, outbuildings See sketch
VI. Elevation views or photographs of walls see photo survey
19. North
20. South
21. East
22. West
VII. Comments or supplementary drawings See sketch
VIIL. Discussion or spectfic comments concerning any unusual features, construction techniques, or status of deterforation, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an unusual response to normal blasting activities.

See survey narrative

October 23, 1986
Report No. 87056-44 P \& M Map Photo No. 114
Subject: Inspection of the Gene Thornton Residence Box 106
Amoret, Missouri 64722
October 21, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8
Amsterdam, Missouri 64723
Attention: Mr. James A. Borders

Transcribed and edit.ed from taped field notes.

EXTERIOR INSPECTION
Photograph of south side of structure. (Photo 44-1)
There is a porch on the south side.
Pair of "L" shaped flower beds at each corner of the porch.
Segmented concrete walk up to porch in an "L" shape from driveway entrance. (Photos 44-2 and 44-3)

Photograph of the southwest flower box. Some bricks are missing and there are separations in the mortar. There are also mortar cracks at the top of the bricks. (Photo 44-4)

The flower box on the west side has a crack in it measuring 3 and $1 / 2$ inches with a width of $1 / 8$ of an inch near the north end. (Photo 44-5)

There is a hairline crack to the south of this. It measures 3 and $1 / 2$ inches in length. (Photo 44-6)

The next crack in the flower box has a width of $1 / 8$ an inch to a hairline and a length of 3 and $1 / 2$ inches. (Photo 44-7)

Next crack south is 3 and $1 / 2$ inches and is a hairline. (Photo 44-8)
Very fine mortar crack measures 3 and $1 / 2$ inches. (Photo 44-9)

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Next hairline crack to the south measures 3 and $1 / 2$ inches. (Photo 44-10)

Another hairline to the south measures 3 and $1 / 2$ inches in length. (Photo 44-11)

Another hairline measures 3 and $1 / 2$ inches in length. (Photo 44-12)
Next crack to the south is 3 and $1 / 2$ inches in length and $1 / 32$ of an inch in width. (Photo 44-13)

Next crack south is 3 and $1 / 2$ inches in length and a hairline in width. (Photo 44-14)

Very fine hairline 3 and $1 / 2$ inches in length. (Photo 44-15)
Next crack south is 3 and $1 / 2$ inches in length with a width of $1 / 8$ of an inch. (Photo 44-16)

Last crack on west side is a hairline 3 and $1 / 2$ inches in length. (Photo 44-17)

The bricks on this wall are 7 and $1 / 8$ inches long and 2 and $1 / 2$ inches high.

Closer photographs of west side to show missing bricks and cracked mortar. (Photos 44-18 and 44-19)

Moving to south side of the flower box. At the west end, there is a crack that is 3 and $1 / 2$ inches long with a width of $1 / 8$ of an inch. (Photo 44-20)

Next crack east is a 3 and $1 / 2$ inch hairline crack. (Photo 44-21)
Next crack east is a 3 and $1 / 2$ inch hairline crack. (Photo 44-22)
These cracks continue mostly as hairlines 3 and $1 / 2$ inches long. (Photos 44-23 and 44-24)

The larger crack in the last photograph of the south side is $1 / 32$ of an inch wide. (Photo 44-25)

ID photographs of the south side of the southwest flower box. (Photos 44-26 and 44-27)

Detailed photographs of the inside of the flower box. (Photos 44-28 thru 44-39)

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The cracks in the top sections of these flower boxes range from $1 / 8$ of an inch to a hairline in width.

The large separation at the corner has a width of $3 / 8$ of an inch. (Photo 44-31)

The flower box at the southeast corner has a very large area of cracked and chipped mortar at the corner. There is approximately 7 and $1 / 2$ square inches missing around the corner of the flower box. (Photo 44-40)

Most of the top mortar cracks on the south side are hairline in nature. (Photos 44-41 thru 44-52)

There is one crack in the center $1 / 8$ of an inch wide. (Photo 44-42)
The interior of this flower box has hairline cracks. (Photos 44-53 thru 44-62)

The house siding at the porch is an artificial type shaped to look like molded rock.

To the left of the entrance, there is a hairline crack. It measures 2 inches in length. (Photo 44-63)

There is a piece of the siding pulled away at the lower right side of the porch. (Photo 44-64)

There is no downspout at the southwest corner.
Some of the roof shingles on this side are buckled. (Photo 44-65)
There is cracked wall covering under the 3 adjacent windows on the south side. It measures 2 and $1 / 4$ inches long and $1 / 8$ of an inch in width. (Photo 44-66)

There is a crack in the siding below the third window. (Photo 44-67)
Toward the southeast corner, under the two larger windows, there is a horizontal crack. (Photo 44-68)

ID photograph of the east side. (Photo 44-69)
There is no downspout at the southeast corner. The guttering runs parallel to the upper wall and terminates at the southeast corner. (Photo 44-70)

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There is a peice of guttering pipe hanging off at the west end of the attached building. (Photo 44-74)

The crack in the lower chimney is 50 inches long. The width ranges from $1 / 8$ of an inch to $1 / 16$ of an inch. (Photos 44-71 thru 44-73 and 44-75)

While on the roof we will look inside the attic. (Photo 44-76 and 44-77)

There is 2 by 4 bracing in the attic.
Photograph of the north side and rock chimney. (Photos 44-80 and 44-81)
The foundation is partially covered toward the east end.
The center of the north side foundation is not covered and there is a vertical crack toward the west end. It measures 6 and $1 / 2$ inches from the ground and has a width of $1 / 2$ inch. (Photos $44-78$ and 44-79)

There is another foundation crack on the north side. It measures 10 and $1 / 2$ inches with a width of 1 and $1 / 8$ inches to $1 / 8$ of an inch. (Photo 44-82)

The rest of the foundation toward the west end is covered.
Looking on the west side foundation, there is a crack partially obscured by a tarpaper type covering. This crack measures 14 and $1 / 2$ inches and has a width of $3 / 4$ inch to about $1 / 4$ inch. (Photo 44-83)

ID photograph from southwest. (Photo 44-84)
Photograph of the rock chimney. No cracking or deformation is visible. (Photo 44-85)

Looking at the foundation, there is a vertical crack under the larger of the three adjacent windows. It measures 10 inches from the ground and has a width of $1 / 4$ inch. (Photo 44-86)

Also a foundation crack to the north of this behind a stick in the ground. It measures 6 inches and has a width of $1 / 2$ inch to $1 / 4$ inch. (Photo 44-87)

Foundation separation at the southwest corner. It measures 4 inches from the ground with a width of $1 / 2$ inch. (Photo 44-88)

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INTERIOR INSPECTION

## Living Room

At the south wall there is a hairline diagonal crack at the upper right corner of the westernmost window. Measures 13 and l/2 inches. (Photo 44-89)

There is a fine hairline crack at the upper left corner. It measures 13 and $1 / 2$ inches. (Photo 44-90)

There is a hairline vertical crack at the upper right corner of the door. It measures 12 and $1 / 4$ inches. (Photo 44-91)

There is a diagonal crack at the upper left corner of the door. This measures 12 and $1 / 2$ inches in length and $l / 16$ to a hairline in width. (Photo 44-92)

There is a hairline diagonal crack at the upper right corner of the easternmost window. It has a length of 8 inches. (Photo 44-93)

There is a diagonal crack at the lower left corner of the window measuring 18 inches. (Photo 44-94)

There is a horizontal hairline crack at the southwest corner. It measures 11 and $1 / 4$ inches. (Photo 44-95)

This crack extends over to the upper right corner of the entrance to the dining room. (Photo 44-96)

At the upper left corner of the dining room entrance, we are now on the east wall, there is a diagonal separation of the wall. It measures 16 and $1 / 4$ inches to the ceiling. (Photo 44-97)

ID photographs of the south and east walls. (Photos 44-98 and 44-99)
ID photograph of the north wall. (Photo 44-100)
There is a rock fireplace on this wall. (Photo 44-100)
At the northeast corner of the ceiling, there is an "L" shaped crack from the wall to the upper corner of the fireplace. It measures 10 and $1 / 4$ inches north-south and 17 and $1 / 4$ inches east-west. (Photos 44-101 and 44-102)

At the center of the fireplace there is a vertical crack that extends from the ceiling to the opening. (Photos 44-103 thru 44-109)

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This measures 4 feet 5 inches, width of $1 / 32$ of an inch to a hairline.

There are various short hairline cracks in the mortar above the fireplace opening. (Photos 44-110 thru 44-112)

Looking at the west wall.
There is a vertical crack at the lower right corner of the window. This extends to the floor: It has a width of $1 / 16$ inch to a hairline. The length is 11 inches.. (photo 44-113)

There is an "L" shaped crack at the upper right corner of this window. This crack horizontals 7 inches to the wood covering at the top of the window. The height to the the ceiling is 16 and $1 / 2$ inches. (Photos 44-114 and 44-115)

From the south side of the window there is a vertical crack at the upper left corner. It measures about 12 to 12 and $1 / 2$ inches. The maximum width is $1 / 16$ of an inch. (Photo 44-116)

There is a vertical hairline crack at the lower left corner of this window. It measures 10 and $3 / 4$ inches. (Photo 44-117)

ID photograph of the west wall of the living room. (Photo 44-118)
Dining Room/Kitchen
Located at the south end of the residence next to the living room.
Vinyl floor.
Paneled walls.
Plaster ceiling.
ID photographs of the south wall of the kitchen/dining room. (Photos 44-119 and 44-120)

ID photographs of the east wall. (Photos 44-121 and 44-122)
ID photograph of the north wall. (Photo 44-123)
ID photographs of the west wall. (Photos 44-124 and 44-125)
Enclosed Porch
Vinyl floor.
Paneled walls.
Nailed up board ceiling.

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General photographs of the south and the north ends. (Photos 44-126 and 44-127)

Moving north into the laundry room.
Laundry Room
Poured concrete floor.
Wood covered walls except for a small section of the north wall which is concrete block.

We can see the block chimney on the south wall. It is heavily cracked and scared in some places. (Photos 44-128 and 44-129)

ID photographs from the south door. (Photos 44-130 and 44-131)
The entrance to the cellar is on the east side of the laundry room.
Cellar
There are some signs of condensation.
The floor is damp.
Also signs of condensation on the ceiling.
General photographs from the door. (Photos 44-132 thru 44-135)
Back in the laundry room there are cracks in the floor. One crack occurs close to the dryer. It measures 3 feet 9 inches in length and has a width of $1 / 4$ inch. (Photo 44-136)

There is also a crack underneath the throw down vinyl flooring. This crack extends from the corner of the entrance to the cellar to the corner of the entrance into the porch. It has a total length of 6 feet 2 inches and a width of $3 / 8$ of an inch to a hairline at the ends. (Photos 44-137 thru 44-139)

Back into the kitchen moving to the north.
There is a small hall.
Hall
On the east side of the hall there is a small bathroom.

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Bathroom
Vinyl floor.
Paneled walls.
Paper covered ceiling.
The paper ceiling is heavily cracked and chipped. (Photos 44-140 thru 44-142)

Photograph of the bathroom from the doorway. (Photo 44-143)
Moving northward into a bedroom.
Bedroom
Northeast corner of residence.
Carpeted floor.
Paneled walls.
Paper ceiling.
ID photographs. (Fhotos 44-144 and 44-145)
Now moving westward down another hall.
Hall
There is a bathroon on the north side of the hall.
Bathroom
Carpeted floors.
paneled walls.
Paper ceiling.
Nothing noted.
Moving westward into a bedroom.
Bedroom
Northwest corner of residence.
Carpeted floors.
Sheetrock walls..
Paneling on east wall.
ID photograph of the north wall. (Photo 44-146)

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At the north wall, there is a vertical crack at the upper right corner of the window. It measures 11 and $1 / 2$ inches in length and $1 / 32$ of an inch in width. (Photo 44-147)

There is a crack at the lower right corner. It measures 12 inches long and $1 / 16$ of an inch to a hairline in width. (Photo 44-148)

There is a vertical crack at the upper left corner of the window. It is 14 and $1 / 4$ inches long. (Photo 44-149)

There is a horizontal patched area at the upper left corner of the window. It is 3 inches in length. (Photo 44-150)

There are several fine hairline cracks at the lower left corner of the window. They measure about 4 inches in length. (Photo 44-151)

ID photograph of the west wall. (Photo 44-152)
Vertical crack at the upper right corner of the window. Crack measures 13 and 5/8 inches. It is a hairline. (Photo 44-153)

Also a vertical crack at the lower right corner of the window. Has a width of $1 / 16$ of an inch down to a hairline. This crack has a length of 13 inches. (Photo 44-154)

There is also a vertical crack at the upper left corner of the window. This crack measures 13 and $5 / 8$ inches in length with a maximum width of $1 / 32$ of an inch. (Photo 44-155)

There is a hairline crack at the lower left corner of the window. This crack is 5 and 1/4 inches long. (Photo 44-156)

ID photograph of the south wall. (Photo 44-157)
There is a vertical hairline crack at the upper right corner of the window.

This crack measures 12 and $1 / 4$ inches. (Photo 44-158).
Also a vertical hairline crack at the lower right corner of the window. It is 11 inches in length. (Photo 44-159)

There is a diagonal hairline crack at the upper left corner of the window. It measures 15 and $1 / 4$ inches. (Photo 44-160)

Small horizontal hairline crack at the lower left corner of the window. It measures 2 and 3/4 inches. (Photo 44-161)

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There is a vertical hairline crack. It measures 17 and $3 / 4$ inches. (Photo 44-162)

ID photograph of the east wall. (Photo 44-163)
Garage
ID photograph of the west side. (Photo 44-164)
ID photograph of the south side. (Photo 44-165)
ID photographs of the east and north side. (Photos 44-166 and 44-167)
On the west side there is an entrance to a storage and work area.
Storage/Work Area
Poured concrete floor.
Wood walls.
The poured concrete floor has two intersecting cracks. One large northsouth crack and one finer east-west crack.

The east-west crack extends the length of the work area at the north end. The east-west crack is 18 feet 5 inches. The north-south crack that can be seen in this storage area is 11 feet 10 inches. That is the width of the storage area.

The width of the crack in the floor is $1 / 2$ an inch north-south. The east-west crack measures $3 / 8$ of an inch to a hairline in places. (Photos 44-168 thru 44-173)

Now back on the exterior looking at the west end. There are cracks and separations around the driveway and walk surrounding the garage on the west side.

The separations in these areas are about $3 / 4$ an inch down to a hairline. Probably an average separation of $1 / 4$ an inch. (Photos 44-174 thru 44-177)

There is a car in the garage.
The garage has a single slab poured concrete floor.
Wood walls.
The car has been moved out of the garage.

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There is a diagonal crack off the corner. This crack extends from the corner of the slab to the half separation of the driveway, 3 feet 8 and $1 / 2$ inches in length. It has a width of $3 / 8$ of an inch to a hairline. (Photo 44-178)

There is a slight crack in the garage floor toward the north wall. Measures 2 feet 9 inches. Has a width of $1 / 8$ of an inch to a hairline. (Photo 44-179)

There is also cracking along the joint between the two floor slabs, especially toward the east end. The cracks are $1 / 2$ an inch in width. (Photos 44-180 thru 44-182)

ID photographs back into the garage. (Photos 44-183 thru 44-185)
Directly to the east of the garage, there is a small storage shed.
Storage Shed
ID photograph from the southwest corner. (Photo 44-186)
Looking inside the structure.
Dirt floor.
Wood walls.
Nothing notable.
To the north of the garage, there is a goldfish pond. (Photos 44-187 thru 44-189)

There are some rocks missing from the pond.
At the far northeast corner of the property, there is another garage.
ID photograph from the southeast corner. (Photo 44-190)
We can see the concrete foundation on the north side. There does not appear to be any cracks in it. (Photos 44-191 thru 44-193)

ID photograph of the north side from the northeast corner. (Photo 44-194)

There is an open carport on the south end.
The south wall of the garage is concrete block. There is no siding.

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There are some mortar separations above the corners of the entrance into the main garage. These measure 14 and $1 / 2$ inches in length and have widths of $1 / 16$ of an inch. (Photo 44-195)

Moving eastward, there is a vertical crack at the lower right corner of the window. The crack measures 17 inches and has a width of $1 / 16$ of an inch. (Photo 44-196)

There is also a crack at the upper right corner. This crack is 3 and $1 / 2$ inches long and $1 / 4$ of an inch wide. (Photo 44-197)

There is also a 3 and $1 / 2$ inch long crack at the upper left corner. It has a width of $1 / 8$ of an inch. (Photo 44-198)

ID photographs of this concrete block wall. (Photos 44-199 and 44-200)
Now going inside the garage.
There are a lot of materials, engine parts, tools, motors, etc. laying on the floor.

Concrete block walls.

Start on the north wall.
There appears to be a vertical crack at the upper left corner of the easternmost window. This measures 19 and $3 / 4$ inches and has a width of $3 / 16$ of an inch. (Photo 44-201)

Minor mortar crack underneath the storage cabinet. Total vertical length is 16 inches. It is an $L$ shaped crack. (Photo 44-202)

ID photographs of the north wall. (Photos 44-203 and 44-204)
Now looking at the west wall.
There is a hairline vertical crack above the upper left corner of the northernmost window, it is 14 inches long. (Photo 44-205)

There is a hairline stairstepping crack at the upper right corner of the middle window. Roughly 19 inches long. (Photo 44-206)

There is a vertical crack below the lower right corner of the southernmost window. Partially obscured by a tool holding apparatus. This is roughly 9 inches in length. (Photo 44-207)

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At the lower part of the wall, there is a stairstepping crack that extends from the third block up to the floor, roughly 30 inches. (Photo 44-208)

There is a vertical crack at the upper right corner of the window. It measures 18 and $1 / 2$ inches and has a width of $1 / 16$ of an inch. (Photo 44-209)

ID photographs of the west wall. (Photos 44-210 and 44-211)
Now looking at the south wall.
There is a mirror hanging above the door and there is an L-shaped crack that extends behind the mirror. (Photo 44-212)

ID photographs of the south wall. (Photos 44-213 and 44-214)
Floor is heavily scared in some places and there are cracks in it. There are quit a few materials covering the floor. ID photographs of the floor area. (Photos 44-215 thru 44-222)

These cracks have a rough average width of $3 / 16$ to $1 / 4$ of an inch.
There is also a greenhouse at the north side of the residence. (Photos 44-223 and 44-224)

The greenhouse has a dirt floor.

## General Comments

The Thornton residence is located at an approximate elevation of 840 feet above sea level. The land around the residence has a gentle slope to the northwest. Overall, the water drainage around the structure is poor. Although much of the foundation was obscured by a tarpaper type covering, the cracks noted were indictive of hydraulic and load effects.

Strain cracks were evident around doors and windows throughout the interior of the structure where the walls were not covered by paneling or other materials. Expansion cracks were also noted in the floors of the laundry room and garages. Thermal expansion cracks were also noted in the chimney. These cracks may be expected to widen and lengthen, in some cases, from continued environmental and settlement effects.

That completes the inspection of this property.


Enlcosure: 224 Photographs

November 7, 1986
Report No. 87056-44
P \& M Map Photo No. 114

Subject: Supplement to Inspection of the Gene Thornton Residence Box 106
Amoret, Missouri 64722
November 4, 1986
To: The Pittsburg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Missouri 64723

Attention: Mr. James A. Borders

Transcribed and edited from taped field notes.
Rock Fireplace
The fireplace is at the north end of the living room.
Detailed photographs of the fireplace starting in the upper left corner. (Photos 44-225S thru 44-230S)

There is a mortar crack above the top of the west vent. (Photo 44-231S)

There are a pair of vertical mortar cracks under the mantel. (Photo 44-232S)

There is another fine mortar crack near the upper left of the opening. (Photo 44-233S)

Another fine mortar crack between two rocks above the center of the opening. (Photo 44-234S)

There is a fine mortar crack between two rocks near the upper right of the opening. (Photo 44-235S)

There is a mortar crack at the upper left corner of the lower east vent. (Photo 44-236S)

There is a mortar crack at the upper right corner of the lower westernmost vent. (Photo 44-237S)

Now looking at the rock hearth. There is a crack in the mortar near the west end. (Photo 44-238S)

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The Pittsburg and Midway Coal Mining Company
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P \& M Map Photo No. 114
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There is a gas valve at the lower front of the fireplace. There is a vertical mortar crack above this. (Photos 44-239S and 44-240S)

There is also a vertical mortar crack above this. (Photo 44-241S)
Cellar
There are no cracks evident in the walls. The floor is quite muddy and dirty. However, there is no evident cracking in the floor. There is some condensation on the walls and ceiling.

We also examined the side walls of the entrance and can find no evident cracking.

Goldfish Pond
Mrs. Thornton stated that, with regard to the goldfish pond, during winter time the fish are brought inside and put in the aquarium.

Additional photographs of the goldfish pond. At this time the water has been drained. (Photos 44-242S thru 44-248S)

## General Comments

The fireplace contained hairline expansion cracks under the mantle, around the vents and opening and on the hearth. Continued expansion of some of the cracks with time is likely.

A thorough examination of the cellar revealed no cracks in the walls or ceiling. There was no evident cracking in the floor although the floor was somewhat muddy and dirty making a visual inspection more difficult.

The goldfish pond had been drained for winter. The initial inspection showed the pond with water and goldfish in it. Other than some loose rocks at the upper perimeter, the pond is in good condition.

Once again, we would note that the foundation of the residence shows evidence of cracking brought about by hydraulic and settlement load effects. In particular, hydraulic related foundation problems may be expected to continue unless proper steps are taken to give adequate drainage of water away from the foundation.

White Industrial Seismology, Inc.
The Pittsburg and Midway Coal Mining Company
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This completes our supplemental inspection of the Gene Thornton residence.


Randall M. Wheeler Manager of Technical Services
$\mathrm{RMW} / \mathrm{mp}$
Enclosures: 24 Photographs

SKETCH OF STRUCTURE AND SUMMARY FORM


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Sketch of Outbuildings
Gene Thorton House


Scale:-1 Division = 1 Foot
The relative outbuilding
locations are not to scale.

$44-223$



## $44-190$



## 44-186











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PRE-BLAST SURVEY, RESIDENTIAL
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I. Basic InEormation

1. Name of Resident: L. A. Walley
2. Date: November 1, 1986 Tine: 10:55AM
3. Address: Route 1, Amoret, Missouri 64722
4. Location: North of Amoret on Y Highway
5. Telephone Numjer: (816) 925-3383
6. Dates of occupancy by current resident :July 1974 - Present
7. Dates of any temporary or permanent abandonnent: $\qquad$
II. InEormation Concerning Bulldings
(repeat for additional buildings)
8. Date of original construction: July 1974
9. Date(s) of major remodeling or additions:
(a) None
(b)
(c)
10. Construction of building:
floor
(a) franing (joists, rafters, and stud walls):
$2 \times 102 \times 6$. $2 \times 4$
(b) Interior walls:Sheetrock
(c) roof: Composition Shingles
(d) footings; foundations: $2^{\prime} \mathrm{x} 2^{\prime}$ concrete footing, $10^{\prime \prime}$ concrete foundation walls
(e) basement walls (indicate how keyed to footing of floor): Continuous
(f) basement Eloor (keyways, chickness): 6" floor, not keyed
(g) name of person(s) who constructed building: L. A. Walley
(h) size and direction of any large windows: Sliding door, west dining room wall
III. Enviromental Information
11. Approximate elevation of area:

830 feet.
2. Type of soll in area: Silty clay loam
3. Type of subgrade drainage at base of foundation: $2^{\prime \prime}$ rock under basement floor
4. Water wells utilized (Lndicate depth*and use): No
5. Cisterns or surtace water storage utilized: (indicate purpose and approxinate volume). No
6. Source of water, If not included above: City water
7. Eve troughs or any other exterior dratnage features: Yes
8. Description of general grading or landscaping in vicinity: Generally flay
IV. Any notable existing deterioration or damage

1. Cracks in interlor walls: See survey
2. Receding of doors, whindu's: See survey
3. Noticeable setclenent: See survey
4. Foundation cracks: See survey
5. Exterior wall cracks (brick veneer): See survey
6. Sidewalks, steps, driveway pavement: See survey
7. Basement leaks: See survey
V. Plan view of residence, well, outbuildings see survey
VI. Elevation views or photographs of walls
8. North See survey
9. South See survey
10. East See survey
11. West See survey
VII. Comunents or supplementary drawings see survey
VIII. Discussion or specific couments concerning any unusual Eeatures, construction techniques, or status of deterioration, that, because of the nature of their construction, materials of which they are constructed, status of deterioration, may exhibit an umusual response to normal blasting activities.

See survey

PH. (4]7) 624-0164

November 10, 1986
Report No. 87056-46

Subject: Inspection of the L. A. Walley Residence Route 1
Amoret, Missouri 64722
November l., 1986

To: The Pittsourg and Midway Coal Mining Company P. O. Box 8

Amsterdam, Mi ssouri 64723
Attention: Mr. Mark Premo

Transcribed and edited from taped field notes.

## EXTERIOR INSPECTION

ID photographs of the front, east side of the house. (Photos 46-1 and 46-2)

Starting at the south end of the front. There is an intermittent stairstepping mortar crack below the lower right corner at the second window from the sout:h. It is about 3 feet long on the diagonal. (Photos 46-3 and 46-4)

The front sidewalk has an east-west trending crack just north of the doorway. It runs the width of the slab and is about $1 / 16$ of an inch wide with a spall that is about $3 / 16$ of an inch at the widest. (Photos 46-5 and 46-6)

There is a slight mortar crack below the right side of the front doorway. (Photo 46-7)

There is another crack, east-west trending across the width of the sidewalk. This is near the lower left of the third window from the north. It is just wider than a hairline. (Photo 46-8)

There is another crack across the sidewalk, below the bench. This is to the south of the second window from the north. It is about $1 / 32$ of an inch wide with a couple of spalls that are about $1 / 8$ of an inch wide. (Photo 46-9)

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A faint north-south trending crack intersects the previous crack. This crack trends approximately 94 inches south of the north-south trending crack located under the bench and it becomes very faint at the south end and can barley be seen. It is a very slight surface crack. It ends near the middle of the third window from the north. (Photos 46-10 thru 46-13)

It crosses the crack under the bench trending northward and intersects another crack near the north flower box. It runs about 53 and $1 / 2$ inches from the crack under the bench to the other crack. (Photos 46-14 and 46-16)

The other east-west trending crack runs the width of the sidewalk to the flower box and stairsteps at its east end. (Photos 46-17 thru 46-19)

There is another east-west trending crack between the second post from the north and the second window from the north. This crack runs the width of the sidewalk and is about $1 / 32$ of an inch wide. (Photo 46-20)

There is another east-west trending crack across the width of this sidewalk, just north of the flower box. It is about $1 / 32$ of an inch in width. (Photos 46-21 and 46-22)

At the north part of the sidewalk, lower right of the window, there is another east-west trending crack. It is very faint and extends from the east end of the sidewalk westward, about 29 inches. (Photo 46-23)

ID photographs of this front sidewalk area looking north and then
south. (Photos 46-24 and 46-25)
Below the lower right corner of the north, front window, there is a stairstepping crack. It is a hairline crack and measures about 25 inches on the diagonal. (Photo 46-26)

Now at the north wing wall. There is a broken brick at the lower north end and a broken mortar joint at the lower south end. (Photos 46-27 thru 46-29)

ID photograph of the north end of the house. (Photo 46-30)
ID photograph of the driveway. (Photo 46-31)
The driveway has several cracks. The major crack is east-west trending across the slab. It is about $1 / 8$ of an inch wide and has a couple of spalls that are wider. One spall is about $3 / 4$ of an inch wide.

Several north-south trending cracks connect with this crack. These cracks are about hairline wide.

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Series of photographs of the driveway. (Photos 46-32 thru 46-43)
The footing for the north wing wall has a crack at the northwest corner. It is about $1 / 16$ of an inch wide. (Photo 46-43)

ID photograph of the west side of the north wing wall. (Photo 46-44)

There is some slight separation of the caulk seals on this house were different materials meet, for instance at the overhead garage door jambs. (Photos 46-45 and 46-46)

There is a crack in the concrete floor to the lower right of the north doorway. It is about $1 / 32$ of an inch wide. (Photo 46-47)

There is a spall to the lower right of the overhead garage door. (Photo 46-48)

ID photographs of the west side of the house. (Photos 46-49 and 46-50)
There is a faint crack in the horizontal mortar joint to the lower left of the north window on the west wall. It is above the dryer vent.
(Photo 46-51)
There is another faint vertical crack in a horizontal mortar joint, below the lower right corner of this window. (Photo 46-52)

To the lower right of the door, there is another slight mortar crack. (Photo 46-53)

The house has a few cracked bricks.

ID photographs of the north end of the chimney. (Photos 46-54 and 46-55)

The top mortar, at the west side of the chimney, has four or five visible cracks. (Photo 46-56)

ID photograph of the patio slab. (Photo 46-57)
ID photographs of the south side of the chimney. (Photos 46-58 and 46-59)

ID photograph of the south end of house. (Photo 46-60)
There is a slight mortar crack to the lower left of the west window. (Photo 46-61)

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That completes the house exterior inspection.
Sheds
There are two outbuildings loacated northwest of the house. ID photographs of both of these from the southeast. (Photos 46-62 and 46-63)

These shed have steel frames with steel siding and roofing. Each has a gutter along the front.

The east shed has some concrete at the east part of the floor that is extensively cracked. The major crack is east-west trending and is about $l$ and $1 / 2$ inches at the widest. Other cracks range down to about $1 / 4$ of an inch wide and less. (Photos 46-64 thru 46-66)

The west part of the floor has a rough unfinished area of concrete. (Photos 46-67 and 46-68)

The west shed has a concrete slab at the east end. This slab has an east-west split at about the middle that runs the entire width. It is a rough crack that is about $1 / 4$ of an inch wide. (Photos $46-69$ and $46-70$ )

INTERIOR INSPECTION
Garage
This is at the northeast corner of the house.
Paneled walls.
Textured sheetrock ceiling.
Concrete floor.
Photograph of the south wall. (Photo 46-71)
Photographs of the west wall. (Photos 46-72 and 46-73)
Photograph of the north wall. (Photo 46-74)
Photographs of the east wall. (Photos 46-75 and 46-76)
Photographs of the ceiling. (Photos 46-77 and 46-78)
Door to the utility area on the west wall.
The ceiling has a north-south trending split at a tape joint near the overhead door opener. It is about 85 inches long. (Photos 46-79 and 46-81)

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The ceiling has another slight crack, north-south trending from the north wall. It is about 13 inches long. (Photo 46-80)

There is another north-south trending crack at a tape joint at the west end of the ceiling. It runs from the north wall and ends just south of the support for the overhead door. It is about 106 inches long. These are all hairline cracks at ceiling joints. (Photos 46-82 thru 46-84)

Another crack runs from the southeast corner of the ceiling door to the south wall. It is just wider than a hairline. (Photo 46-85)

The floor has a slight spall just east of the north overhead door. (Photos 46-86 and 46-87)

## Utility Room

Vinyl floor.
Paneled and white painted sheetrock walls.
Textured sheetrock ceiling.
Door and a window on the west wall, basement entrance in the southwest corner

Bathroom entrance on the north wall.

Photograph of the south wall. (Photo 46-88)
Photographs of the west wall. (Photos 46-89 and 46-90)
Photograph of the north wall. (Photo 46-91)
Photographs of the east wall. (Photos 46-92 and 46-93)
Photographs of the ceiling. (Photos 46-94 and 46-95)
Bathroom

Vinyl floor.
Sheetrock walls.
Textured sheetrock ceiling.
Photograph looking northward into the bathroom. (Photo 46-96)

Fiberglass shower stall at the west end.
There is some peeling paint on the upper west and north walls above the shower stall. (Photos 46-97 and 46-98)

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There appears to be water damage in the lower northeast corner. (Photo 46-99)

There is a hairline crack in the ceiling trending southward from the north wall. It is about 14 inches long. (Photo 46-100)

There is a slight water stain at the light fixture. (Photo 46-101)
There are two more slight cracks in the ceiling from the south wall trending northward. They are hairline cracks and are about 3 inches long. (Photo 46-102)

There is a row of nail pops at the east wall, south end. (Photos 46-103 and 46-104)

There is a slight separation in the upper northeast corner. (Photo 46-105)

## Kitchen

## Carpeted floor.

Formica cabinet area walls.
Textured sheetrock ceil ing.
The kitchen opens to the dining area and living roam to the south.
Photograph of the west wall. (Photo 46-109)
Photograph of the north wall. (Photo 46-110)
Photograph of the east wall. (Photo 46-111)
Dining/Living Room Area
Carpeted floor.
Paneled walls.
Textured sheetrock ceiling.
Stone fireplace on the west wall.
Sliding doors on the west wall.
Photograph of the south wall. (Photo 46-106)
Photographs of the west wall. (Photos 46-107 and 46-108)
Photographs of the east wall. (Photos 46-112 and 46-113)

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Photograph of the fireplace. (Photo 46-114)
To the east of this living area is the entry hall. At the corner, there is a slight crack in the ceiling. It is east-west trending and is about 3 and $1 / 2$ inches long. (Photo 46-115)

There is another hairline ceiling crack, east-west trending, about 4 and 1/4 inches long. (photo 46-116)

It intersects another slight crack that runs north-south. It is about 21 inches long. (Photos 46-116 and 46-117)

## Entry Hall

Carpeted floor.
Textured sheetrock and paneled walls and ceiling.
Photograph looking eastward into the entry hall. (Photo 46-118)
The bedroom hallway runs to the south. (Photos 46-119 and 46-121)
Photograph looking northward into the entry hall from the bedroom hall. (Photo 46-120)

There is a horizontal tearing type crack to the upper left of the front door. It is about 7 and $1 / 2$ inches long and about a hairline wide. (Photo 46-129)

The entry hall has closet door on the south wall.
Formal Dining Room
Carpeted floor.
Textured sheetrock walls and ceiling.
Photograph of the north wall. (Photo 46-122)
Photographs of the west wall. (Photos 46-123 and 46-124)
Photograph of the south wall. (Photo 46-125)
Photographs of the east wall. (Photos 46-126 and 46-127)
There is about a 3 and $1 / 2$ inch long semi-circular split to the left of the door to the kitchen on the west wall. (Photo 46-128)
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Bedroom Hallway
Paneled lower walls.
Lightly textured sheetrock upper walls.
Textured sheetrock ceiling.
Two doors on the east: and two doors on the west wall.
There is a roughly horizontal crack to the upper left of the north dooron the east wall. It is about $1 / 32$ of an inch wide and 7 inches long.(Photo 46-130)
Bathroom
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.
Two photographs looking westward into the bathroom. (Photos 46-131 and46-132)
There is a slight horizontal crack to the upper right of the shower. Itis about 7 inches long. (Photo 46-154)
Southeast Bedroom
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.
Windows on the east and south walls.
Closet door on the west.
Photograph of the east wall. (Photo 46-133)
Photographs of the south wall. (Photos 46-134 and 46-135)
Photograph of the west wall. (Photo 46-136)
Photograph of the north wall. (Photo 46-137)
Southwest Bedroom
This is the master bedroam.
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.

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Windows on the south and west walls.
Closet door on the east wall.
Photograph of the west wall. (Photo 46-138)
Photograph of the south wall. (Photo 46-139)
Photograph of the east wall. (Photo 46-140)
Photographs of the north wall. (Photos 46-141 and 46-142)
There is a door on the north wall to an attached restroon.
There are four or five slight splits in the northwest corner just below eye level. (Photo 46-143)

There is a diagonal crack above the upper right corner of the restroom door. It is about 9 and $1 / 2$ inches long and from a hairline to slightly wider. (Photo 46-144)

Restroom
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.
A photograph looking northward into the restroom. (Photo 46-145)
Window on the west wall.
There is a slight horizontal crack at the lower right corner of the window. It is about 7 and $1 / 2$ inches long and about a hairline wide. (Photo 46-146)

At the lower left, there are two very slight horizontal cracks. The longest one is about 10 and $3 / 4$ inches and the other is about 2 inches long. (Photo 46-147)

There is a hairline horizontal split across the north wall. This could be a tape joint or just in the paint. (Photos 46-148 and 46-149)

Above the left end of the doorway, there is a tearing vertical crack that is about 6 and $1 / 2$ inches long and about $1 / 32$ of an inch wide. (Photo 46-150)

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Above the upper right part of the door, there is a very faint vertical paint or seam crack. It is about 9 inches long. (Photo 46-151)

There is some peeling on the east wall, north end, near the counter. (Photo 46-152)

The west end of the counter is separated from the wall by about $3 / 16$ of an inch maximum. (Photo 46-153)

East Bedroom
Carpeted floor.
Sheetrock walls.
Textured sheetrock ceiling.
Photograph of the east wall. (Photo 46-155)
Photograph of the north wall. (Photo 46-156)
Photograph of the west wall. (Photo 46-157)
Photographs of the south wall. (Photos 46-158 and 46-159)
Window on the east wall.

Closet door on the north wall.

Basement

Concrete floor with several rugs.
Concrete walls.
Unfinished ceiling.
Photographs of the rorth wall. (Photos 46-160 and 46-161)
Photograph of the east wall. (Photos 46-162 thru 46-166)
Photographs of the south wall. (Photos 46-167 thru 46-169)
Photographs of the west wall. (Photos 46-170 thru 46-174)
There is a brick fireplace on the west wall. (Photo 46-175)

There is a concrete block area above the fireplace. (Photos 46-176 and 46-177)

Now moving north, fir om the chimney along the west wall.

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There is a hairline vertical crack in the wall below the third joist, north of the fireplace. It is a hairline crack that goes down about 23 inches. (Photo 46-178)

Continuing north, at the fourth fin from the fireplace, there is a crack. This crack is from about $1 / 32$ to $1 / 16$ of an inch wide and trends from the top of the wall to the floor. (Photos 46-179 thru 46-181)

Continuing north, to the window. Below the lower corners, there are vertical cracks. The crack below the lower left corner is about 59 inches long and from $1 / 16$ to $1 / 32$ of an inch wide. (Photos 46-182 and 46-183)

Below the lower right corner, there is a roughly diagonal crack. It is about 33 inches long on the diagonal to the step. It is about $1 / 32$ of an inch wide. There are al.so water and silt stains on the wall and steps below this window. (Photos 46-184 and 46-185)

Mr. Walley indicated that water has been coming through the basement windows during the recent heavy rains.

Continuing north, there is a faint vertical crack behind the water heater. It is about 21 inches on the diagonal and it ends at the fin to the north. (Photos 46-186 and 46-187)

There is also a hairline vertical crack just south of the switch box. This is above a storage shelf for canned goods. It runs down about 13 inches and then behind the shelf. (Photo 46-188)

Now at the north wall.
There is a water stain below the plastic sewer pipe on the wall and also a stain on the floor. (Photo 46-189)

Now moving southwarci along the east wall. This is the area below the garage. There is a vertical crack from the top of the wall. It is about $1 / 32$ of an inch wide and about 52 inches can be seen. (photos 46-190 thru 46-193)

Now at the south facing wall below the garage area.
This house has an I-beam girder that runs from the south basement wall to this concrete area below the garage.

At the third fin from the east, on this south facing wall, below the garage, there is a vertical crack that runs from the top of the wall down to the floor. The crack is about $1 / 32$ of an inch wide. (Photos 46-194 thru 46-196)

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Now at the east wall, south of the garage. There is a faint, roughly vertical crack that runs about 30 inches from the top of the wall. (Photos 46-197 and 46-198)

Continuing south to the fourth fin fron the north. There is a vertical crack that runs from the top of the wall down to the floor. It is about $1 / 16$ of an inch wide at the top and becomes very hard to see at the botton of the fin. (Photos 49-199 thru 49-201)

Continuing south to the sixth fin from north, there is another vertical crack that runs from the top of the wall down behind some stored material. The visibje part is about 44 inches long and is about $1 / 16$ of an inch wide. (Photos 46-202 and 46-203)

Now at a corner. There is a roughly diagonal crack at this corner that runs about 33 inches down to a piece of steel. It appears to continue down into the fin, but it is very faint. (Photos 46-204 thru 46-206)

Continuing south along the east wall. There are severe water and silt stains below the east: window. (Photo 46-207)

There is a roughly vertical crack, below the lower left corner of this window. It goes down behind a stud. About 8 and $1 / 2$ inches are visible and it is fran about $1 / 16$ to $1 / 32$ of an inch wide. (Photo 46-208)

There are two cracks from the lower right corner of this window. The north crack is about 15 inches long. The other crack diagonals to the fin and trends to the floor, roughly 60 inches on the vertical. It is about $1 / 32$ of an inch wide. (Photos 46-209 thru 46-211)

There ace water stains and efflorescence in the southeast corner of the basement. (Photos 46-212 thru 46-214)

There is a patched circular area and an area of efflorescence to the lower left of the east window. (Photo 46-215)

Now on the south wall.
At the east window, there is a diagonal crack from the lower left corner. The crack is about 12 inches long. (Photo 46-216)

There are severe stains below this window. (Photo 46-217)
There is a crack, below the lower right corner of this window, that runs down and into the fin. It is about 59 inches long to the floor and about $1 / 32$ of an inch wide. (Photos 46-218 and 46-219)

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There are silt stains on the floor below this corner of the window. (Photo 46-219)

Between the girder and the west window on the south wall, there is a vertical crack that comes down the wall and into this fin and then runs to the floor. It is about $1 / 32$ of an inch wide. (Photos 46-220 and 46-221)

Now at the west window. There is a crack below each of the lower corners and there are water and silt stains on the wall. (Photos 46-222 and 46-223)

A hairline crack, below the lower left corner, runs about 29 and $1 / 2$ inches below the winclow. (Photo 46-224)

The crack below the lower right corner runs diagonally, crosses the fin, and then stops. The crack measures about 18 and $1 / 2$ inches on the diagonal and is from about $1 / 32$ of an inch to a hairline in width. (Photo 46-225)

Now moving north along the west wall. There is a diagonal crack below the lower left corner of the south window. This is an intermittent crack with a total length of about 37 inches on the diagonal. It ranges fran about $1 / 32$ of an inch to a hairline wide. (Photos 46-226 and 46-227)

Below the lower right corner, a crack runs down to the pipe and then down through the fin to the floor. It is about $1 / 32$ of an inch wide. There is also a water stain here. (Photos 46-228 thru 46-230)

Looking out this wincow, there is a spall at the north recessed face. At this time, light can be seen through the spall. (Photos 46-231 thru 46-233)

Now inspecting the floor.
Starting in the southwest part of the floor. It has a slight separation with the wall, probably due to shrinkage.

The floor has crazing surface cracks.
There is a slight surface crack that trends from the heating unit toward the pool table in a southwesterly direction. This crack runs at least 75 inches and then it connects with these crazing cracks. (Photos 46-234 thru 46-236)

That crack also trends under the sill, about 12 inches to the furnace, to the northeast. (Photo 46-237)

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Note the water stains on the wooden sill of the stud walls. (Photo 46-237)

The major floor crack is near the steps in the northwest part of the floor. It is a diagonal crack trending from the corner below the garage area. On a straight diagonal it is about 124 inches long to the west wall. It is from about $1 / 16$ to $1 / 32$ of an inch wide. (Photos $46-238$ thru 46-243)

Mr. Walley indicated that this part of the floor is about 4 inches thich, which is thinner than the rest.

Note the water and silt stains on the floor, near the stairway. (Photo 46-244)

There is another floor crack trending from the other corner in the east part of the floor. This is probably below the front sidewalk. It trends roughly to the southwest under the heating unit, and ends at the drain approximately 1.15 inches on a straight line from that corner. It is about $1 / 32$ of an inch wide. (Photos $46-245$ thru 46-251)

There is a large silt: stained area in the southeast part of the floor. (Photo 46-252)

There is also a silt stain in the southwest part of the floor, near the pool table. (Photos 46-253 and 46-254)

## General Comments

This is a relatively new house with a good gutter system. Only a few cracks were found in the brick veneer. Several cracks were found in the front sidewalk and driveway.

The interior was found to have several minor cracks at seams of the sheetrock, ceilings and walls.

The basement walls and floor have several cracks and water can enter the basement through windows.

That completes the inspection of this property.
WHITE INDUSTRIAL SEISMOLOGY, INC.


CDL/mp
Christopher D. Landoll Technical Associate

1- SUMMARY FORM
2- SKETCH OF STRUCTURE

sketch bf the first flood, L. A. Talley Residence


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[^0]:    Christopher D. Landoll
    Technical Associate

