

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

GREEN RIVER ELECTRIC CORPORATION)
)
) CASE NO. 96-169
)
 ALLEGED VIOLATIONS OF COMMISSION)
 REGULATION 807 KAR 5:041, SECTION 3(1))

O R D E R

Green River Electric Corporation ("Green River"), a Kentucky corporation which engages in the distribution of electricity to the public for compensation of light, heat, power, and other uses, and which was formed under KRS 279.010 to 279.220, is a utility subject to Commission jurisdiction. KRS 278.010; KRS 279.210.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated Commission Regulation 807 KAR 5:041, Section 3, which requires electric utilities to maintain their plant and facilities in accordance with the standards of the National Electrical Safety Code (1990 edition) ("NESC").

Commission Staff has submitted to the Commission an Electrical Utility Accident Investigation Report dated January 23, 1996, appended hereto, which alleges:

1. On November 13, 1995, Michael Barnes, Jerry Langdon, and Eddy Maden were members of a Green River work crew assigned to

clearing utility right-of-way in Daviess County, Kentucky. This crew was equipped with a bucket truck and chipper.

2. On or about 12:15 p.m., Eastern Standard Time, November 13, 1995, Langdon was preparing to remove tree limbs which were within four feet of an energized 7200 volt conductor. He positioned the top of the bucket level within 12 inches of the neutral conductor. While Langdon attempted to attach the truck ground cable to the system neutral, the ground cable became entangled with a side rail on the truck. While Langdon tried to free this cable, it came into contact with the 7200 volt line.

3. At the time of the incident, Barnes was in contact with or in close proximity to the chipper and suffered burns.

4. At the time of the incident, Barnes and Langdon were employees of Green River and acting within the scope of their employment.

5. At the time of the incident, Barnes was in charge of the work crew.

6. When installing the truck ground cable, Langdon failed to consider the effects of his actions on the safety of others. Langdon's failure is a violation of NESC Rule 420C4 which requires employees who work on or in the vicinity of energized lines to consider all of the effects of their actions and to take into account their own safety as well as the safety of other employees on the job site.

7. Barnes failed to see that all safety and operating procedures were observed by those under his direction. His failure is a violation of NESC Rule 421A which requires a person in charge to adopt such precautions as are within his authority to prevent accidents, and to see that all safety rules and operating procedures are observed by those under his direction.

8. Barnes' failure to properly supervise Langdon's installation of the truck ground cable is a violation of NESC Rule 410C1 that requires the person in charge of the operation of equipment and lines to be responsible for their safe operation.

9. As a result of these failures, Green River is in probable violation of Commission Regulation 807 KAR 5:041, Section 3.

Based on its review of the Electrical Utility Accident Investigation Report and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that Green River has failed to comply with Commission Regulation 807 KAR 5:041, Section 3.

The Commission, on its own motion, HEREBY ORDERS that:

1. Green River shall appear before the Commission on August 20, 1996 at 10:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violation of Commission Regulation 807 KAR 5:041, Section 3, and of

showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

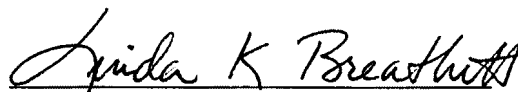
2. Green River shall submit to the Commission within 20 days of the date of this Order a written response to the allegations contained in the Electrical Utility Accident Investigation Report.

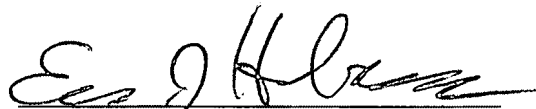
3. The Electrical Utility Accident Investigation Report of January 23, 1996, a copy of which is appended hereto, is made part of the record of this proceeding.

4. Any motion requesting any informal conference with Commission Staff to consider any matter that would aid in the handling or disposition of this proceeding shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 29th day of April, 1996.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:



Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 96-169 DATED APRIL 29, 1996.

**UTILITY ACCIDENT
INVESTIGATION REPORT**

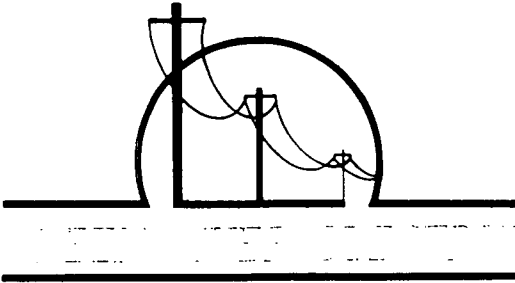
Utility:	Green River Electric Corporation				
Reported By:	Tammy Montgomery				
Dates & Times:					
Accident Occurred:	11/13/95 - 12:15 pm EST				
Utility Notified:	11/13/95 - 12:30 pm EST				
PSC Notified:	11/13/95 - 12:40 pm EST				
Investigated:	11/14/95				
Written Report Rcvd:	11/14/95				
Location of Accident:	5440 Medley Road in Daviess County, Kentucky				
Description of Accident:	<p>The right-of-way crew was in the process of setting up the bucket truck to remove limbs approximately 3-4' from the energized conductor. Mr. Jerry Landgon was attempting to attach the truck ground to the system neutral. The truck ground cable became entangled with a siderail on the truck and in an attempt by Mr. Jerry Langdon to free the cable, the cable made contact with the 7200V phase. Mr. Mike Barnes was standing on the ground next to the wheel of the chipper. He received electrical shock and burns when the ground cable made contact with the 7200V phase.</p>				
Victims:					
Name:	Mr. Michael Barnes	Fatal:	No	Age:	37
Addr./Empl.:	Green River Electric Corporation				
Injuries:	Burns on his back and an exit wound on his right foot.				
Witnesses:	Name	Address/Employment			
	Mr. Jerry Langdon	Green River Electric Corporation			
	Mr. Eddy Maden	Green River Electric Corporation			
Sources of Information:	Name	Address/Employment			
	Mr. Ted Crabtree	Green River Electric Corporation			
	Mr. Richard Payne	Green River Electric Corporation			
	Mr. Eddie Arnold	Green River Electric Corporation			
	Mr. Junie Locher	Green River Electric Corporation			

Probable Violations:	807 KAR 5:041, Section 3(1), National Electrical Safety Code, 1990 Edition				
Section 420C.4:	Mr. Langdon should not have attempted to free the cable by jerking it upwards while he was in close proximity to an energized line. Mr. Barnes should not have been in contact or close proximity to the vehicle until after it had been properly grounded.				
Section 410C.1 Section 421A.2:	Mr. Barnes should have been closely observing the actions of Mr. Langdon.				
Line Clearances At Point of Accident:	Measured	Minimum Allowed by NESC	Applicable NESC Edition¹ (1990)	Volt.	Constr. Date
Communic. conductor:	15' - 5"	9' - 6"	Table 232-1	N/A	1978
Phase conductor:	*18' - 8"	12' - 0"	Table 232-1	120 V	1978
	24' - 2"	14' - 6"	Table 232-1	7200 V	1978
Neutral Conductor:	20' - 3"	9' - 6"	Table 232-1	N/A	1978
Clearance between Comm. and Phase:	8' - 9"	6' - 0"	Table 232-1	7200 V	1978
Date of Measurement:	11/14/95				
Approximate Temp.:	35 F				
Measurements Made By:	Robert Ueltschi, PSC and Junie Lochner, GREC				
Investigated By:	Robert Ueltschi				
Signed:					

*Security light supply cable.

- Attachments:
- A. Green River's Accident Investigation
 - B. Green River's Accident Investigation Form
 - C. Michael Barnes Electrical Contact Report
 - D. Site of Accident
 - E. Photographs of Accident

¹ Current edition adopted by the Commission. If clearances are not in compliance with the current edition, then the edition in effect when the facilities were last constructed or modified would apply.



Corporation • P. O. Box 1389 • 3111 Fairview Dr., Owensboro, Ky. 42302-1389

December 20, 1995

Mr. Robert Ueltschi
Public Service Commission
PO Box 615
Frankfort, KY 40602

RE: Michael Barnes Electrical Contact

Dear Mr. Ueltschi:

Please find enclosed our final report on the referenced accident. If you have any questions, please feel free to call.

Yours very truly,

Ted Crabtree
Director of Operations

tm

Enclosure

December 5, 1995

TO: DEAN STANLEY, PRESIDENT & GENERAL MANAGER

FROM: TED CRABTREE *Ted*

RE: MIKE BARNES ACCIDENT INVESTIGATION

At the time of the accident, Mike was classified as a Right-of-Way Crew Leader and was in charge of a three-man crew equipped with a bucket truck and chipper. On the day of the accident, the sky was cloudy and the temperature was near 50° F. The crew had been hand cutting small trees and was setting up the truck to remove limbs approximately 3-4' from the energized conductor.

Jerry Langdon working as a Laborer had been assigned to the Right-of-Way Section in May 1995. Prior to being assigned to the Right-of-Way Section, Jerry worked in materials and was assigned standby duties with a qualified lineman. Jerry was alone in the bucket and was attempting to attach the truck ground to the system neutral at a point approximately 60' from the dead end pole. The truck ground cable became entangled with a side rail on the truck and in an attempt to free the cable he made contact with an energized conductor.

Eddy Maden, the other member of the crew was near the dead end pole chemically treating stumps of trees which had been cut earlier.

Mike was on the ground on the passenger side of the vehicle near the wheel of the chipper. He received burns on his back and an exit wound on his right foot. Mike fell to the ground and shortly thereafter was up and walking around.

The Safety Committee reviewed the accident and has filed the attached report. The Committee's report and the Operations Supervisors' review of the accident basically agree on the cause of the accident. First, they determined that the bucket was positioned too high, and secondly, the worker was not being directly supervised. The bucket had been positioned with the top of the bucket level with the neutral conductor and within 12" of the conductor. Jerry was using an 8' hotstick to attach the cable. He was attempting to free the cable from the rail by jerking it in an upward motion when contact was made. It was determined that the bucket should have been positioned approximately 6' below the neutral and in an area where contact could not be made.

The absence of direct supervision by Mike has been determined as the primary cause of the accident. Had Mike been closely observing the work in progress, he would not

Mike Barnes Accident Investigation
Page two

have been in contact with equipment and could have stopped the job prior to the bucket being positioned so high.

It was felt that Jerry's inexperience did play a part in the accident; however, with proper supervision, inexperience would not have been a contributing factor.

In conclusion, we place the majority of the blame on Mike. However, Jerry did a foolish thing and must share in the blame because of the seriousness of the accident and the fact that safety rules were not fully complied with.

I am recommending that disciplinary action be taken. More specifically, I recommend Jerry receive a two day suspension without pay and Mike receive a three day suspension without pay. I do not recommend probation for either employee.

c: Personnel Files: Mike Barnes
Jerry Langdon
Eddy Maden

GREEN RIVER ELECTRIC CORPORATION
ACCIDENT INVESTIGATION FORM
EMPLOYEE INJURY, PUBLIC CONTACT, AUTO ACCIDENTS

ATTACHMENT B

Date of Investigation November 13, 1995 Completed By Tammy Montgomery
Accident Reported By Eddie Arnold Time & Date Reported 11:30 a.m., 11-13-95
Time of Accident 11:15 a.m. Date of Accident November 13, 1995
Person(s) Assisting in the Investigation (i.e., Sheriff, State Police, etc.) _____

Accident Location/Address Medley Road - Daviess County

Name of Victim 1. Michael Barnes Title Right-of-Way Crew Leader
Sex M Age 37 Date of Birth [REDACTED]
Years Experience at Present Job _____
Extent of Injury Electrical contact to the back near shoulder blades.

Was First Aid Administered? no Was a physician seen? yes
If so, William Jansing, MD 1102 Triplett Street

Name of physician Owensboro Address KY 42303

City State Zip Code

Did employee sustain loss of motion? X Yes _____ No _____

Name of Victim 2. _____ Title _____
Sex _____ Age _____ Date of Birth _____
Years Experience at Present Job _____
Extent of Injury _____

Was First Aid Administered? _____ Was a physician seen? _____
If so, _____

Name of physician _____ Address _____

City State Zip Code

Did employee sustain loss of motion? _____ Yes _____ No _____

Name of Victim 3. _____ Title _____
Sex _____ Age _____ Date of Birth _____
Years Experience at Present Job _____
Extent of Injury _____

Was First Aid Administered? _____ Was a physician seen? _____
If so, _____

Name of physician _____ Address _____

City State Zip Code

Did employee sustain loss of motion? _____ Yes _____ No _____

Page Two
 Accident Investigation Form

<u>Time Reported</u>	<u>Date Reported</u>	<u>Contact Person</u>	<u>By Whom</u>	
11:40 am	11-13-95	Richelle	Tammy Montgomery	PSC (502) 564-4309 or 564-2305 OSHA (502) 564-7360 KAEC 1-800-366-4887 or (502) 737-5928
2:15 pm	11-13-95	Jon Kohler	Betty Maddox	Insurance Company

NOTE: Employee deaths must be reported to OSHA within (8) hours. Public and employee contacts must be reported to PSC within (2) hours after discovery. Serious accidents and substantial property damage must be reported to the PSC within (2) hours.

Witnesses (Please include addresses & phone numbers) Jerry Langdon, Eddy Maden

Were Photos Taken? Yes No By Morris Locher Date 11-13-95

Describe how the accident occurred. See attached memorandum.

Type of Accident: (circle one)

~~OSHA reportable~~ **OSHA reportable:** lost time, first aid, property damage, equipment damage, near miss accident, electric contact, automobile.

If auto accident, complete the Federated Rural Electric "Accident Report Form" located in vehicle glove compartment.

Weather Conditions Cloudy and rainy

Temperature 43 F Wind Speed 5 mph Wind Direction ENE

Line Clearances at Lowest Point or at Point of Contact
 Ground (grd) to neutral 20' 3" grd. to phase 1 24' 2" 3 _____ S/L 18' 8"
 grd. to CATV _____ grd. to telephone 15' 5"

What equipment was involved? Chipper, bucket truck

Was safety equipment being used? Yes No (List equipment not being used)

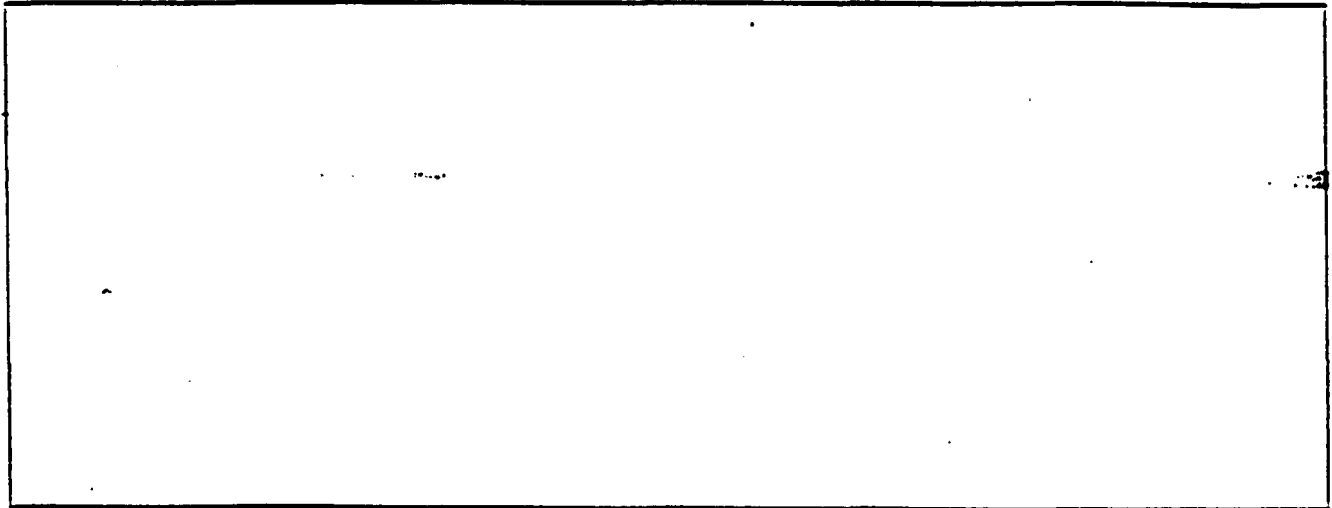
Did an unsafe condition exist? Yes No

If yes, please explain. _____

Was the accident the result of an unsafe act? Yes No

If yes, please explain. _____

Please draw a diagram of Accident Scene



Signature Tammy Montgomery Date 11-13-95

MEMORANDUM

Green River Electric Corporation

November 13, 1995

TO: FILE

FROM: TAMMY MONTGOMERY *J.M.*

RE: MICHAEL BARNES ELECTRICAL CONTACT

On this date, Jerry Langdon, Laborer, was ascending in the bucket to attach the truck ground to the main line neutral so that he could begin clearing trees. Jerry attempted to connect the ground line to the system neutral when he discovered the ground line was restricted by the side rail of the truck. Jerry shook the line to free it from the rail. With no success, he repositioned the hotstick and pulled it with the ground line attached. Momentum of the pull caused ground clamp to come in contact with the phase which caused an arc. Jerry immediately threw the hotstick to the ground and turned to check on crew members and he saw Michael Barnes fall to the ground.

Eddy Maden, ROW Operator/Trimmer, was walking toward the truck from behind the chipper where he had been spraying stumps when he saw Michael fall to the ground. He ran to where Michael was laying and asked him what had happened. Michael said he thought he had been burned. Michael asked Eddy to contact Eddie Arnold.

Eddy contacted Eddie Arnold, ROW Crew Foreman, and he arrived approximately 15 minutes later. At 11:30 a.m., Eddie reported the accident to Ted Crabtree, Director of Operations, by radio. He advised that he was transporting victim to the Owensboro Mercy Health Systems Emergency Room.

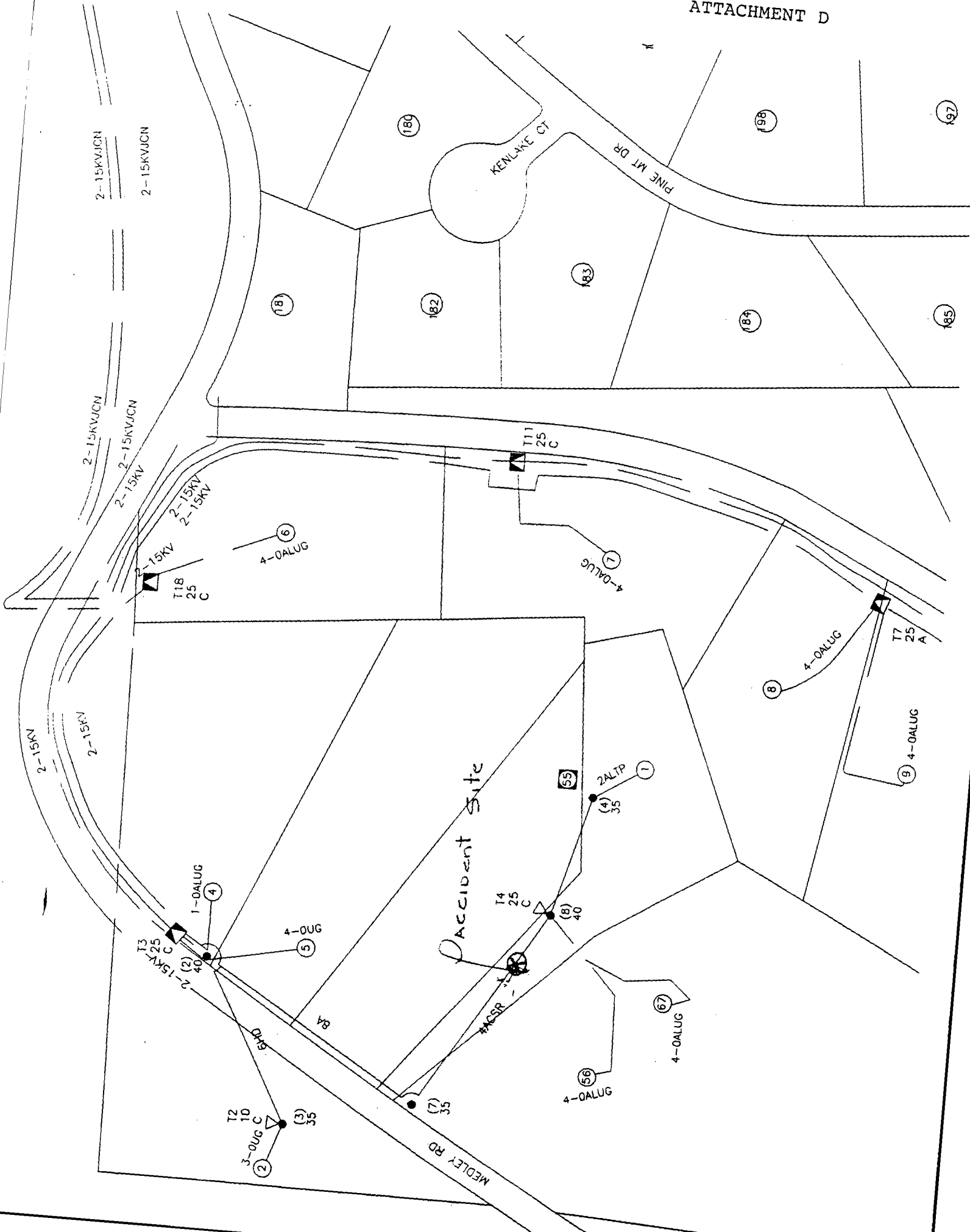
Tammy Montgomery, Department Secretary, reported accident to Richelle at the Kentucky Public Service Commission at 11:40 a.m., and contacted Greg Morgan, BREC Member Systems Safety Coordinator, at 11:45 a.m. Greg arrived at GREC at 2:15 p.m.

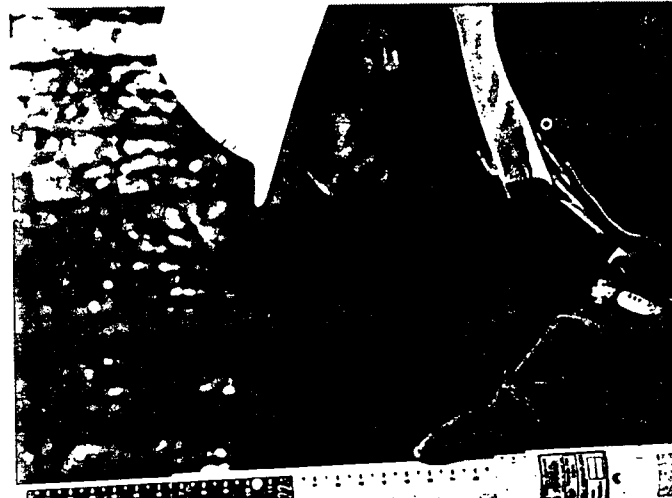
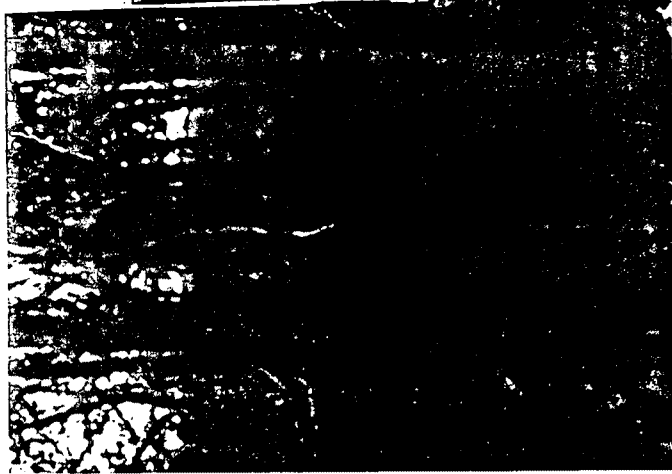
Richard Payne and Morris Locher went to the accident site and measured clearances and took pictures. Clearance measurements are on the accident investigation form.

Ted met Eddie and Michael at the hospital. Hospital contacted Michael's wife, Edna Barnes.

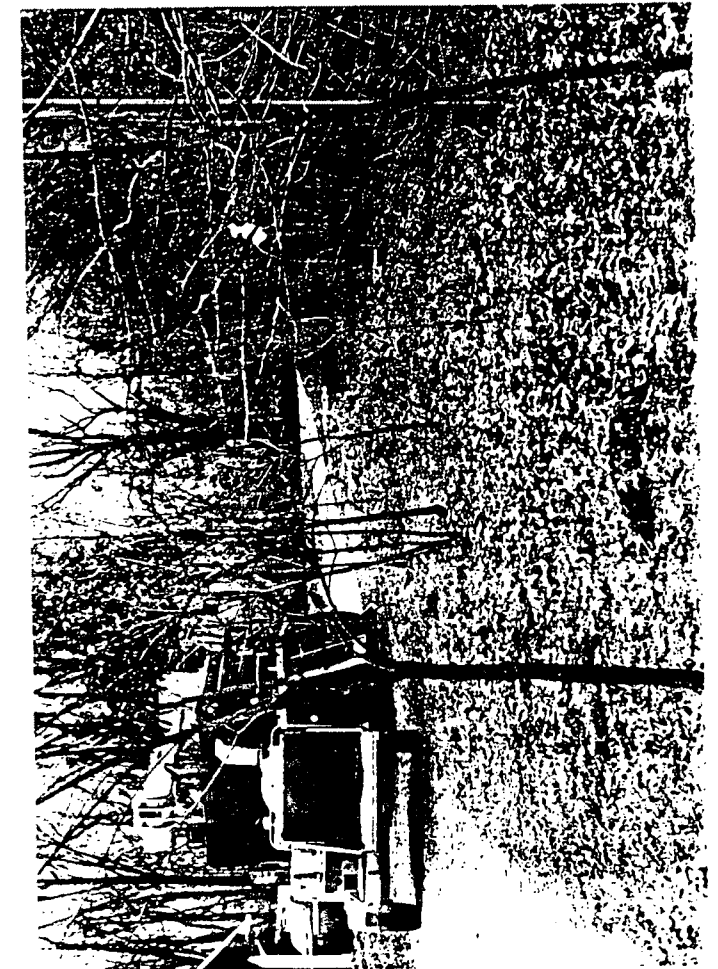
Ted reported additional information to Bob Ueltchie, PSC, at 1:55 p.m. Mr. Ueltchie will be at GREC on Tuesday, November 14, at 9:00 a.m., to conduct an investigation of the accident.

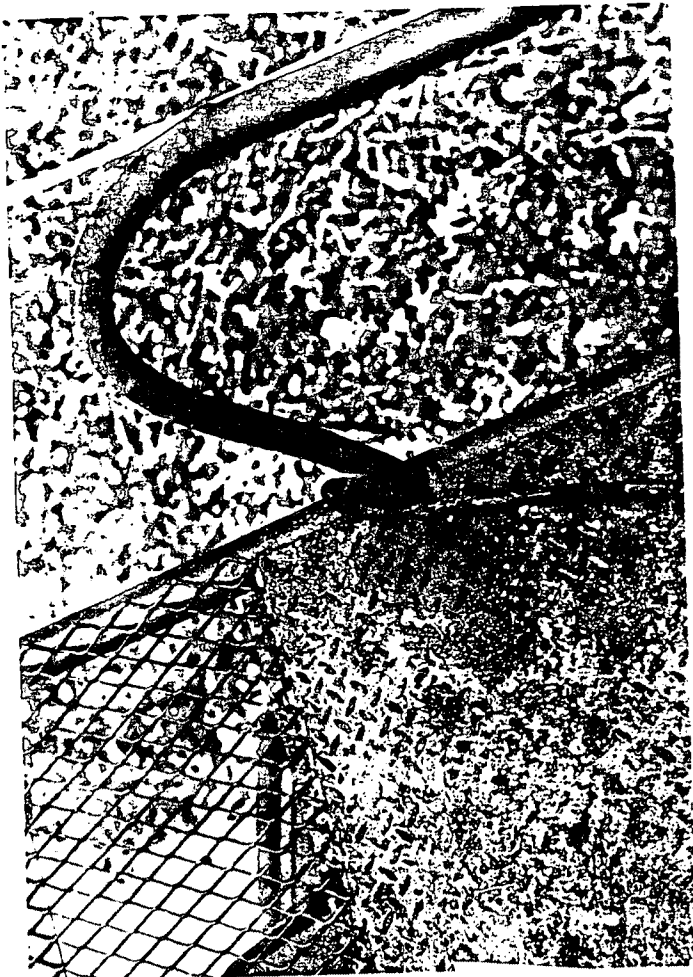




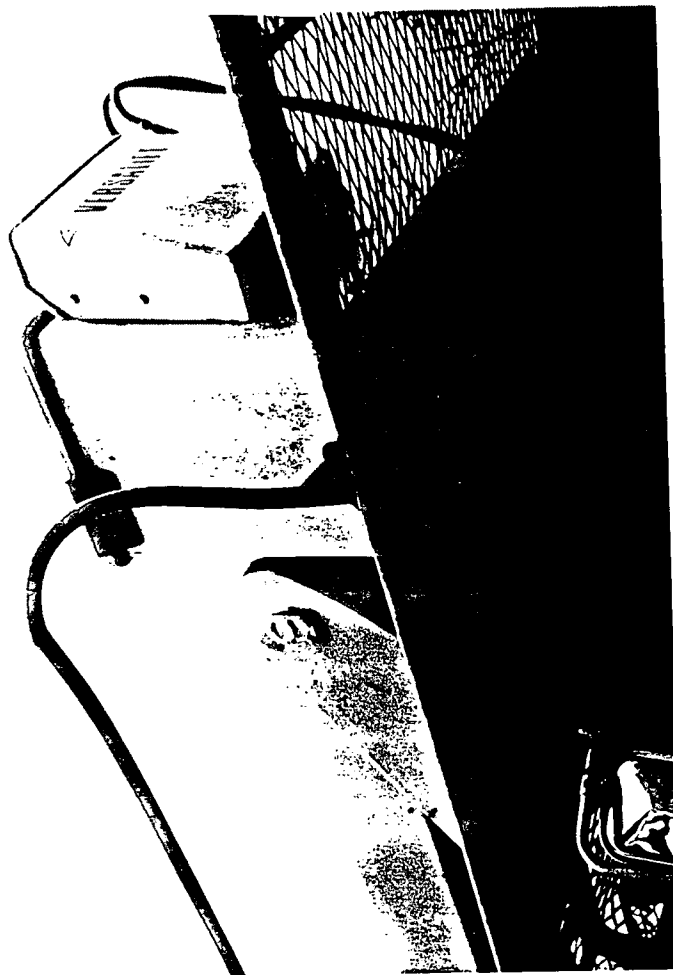
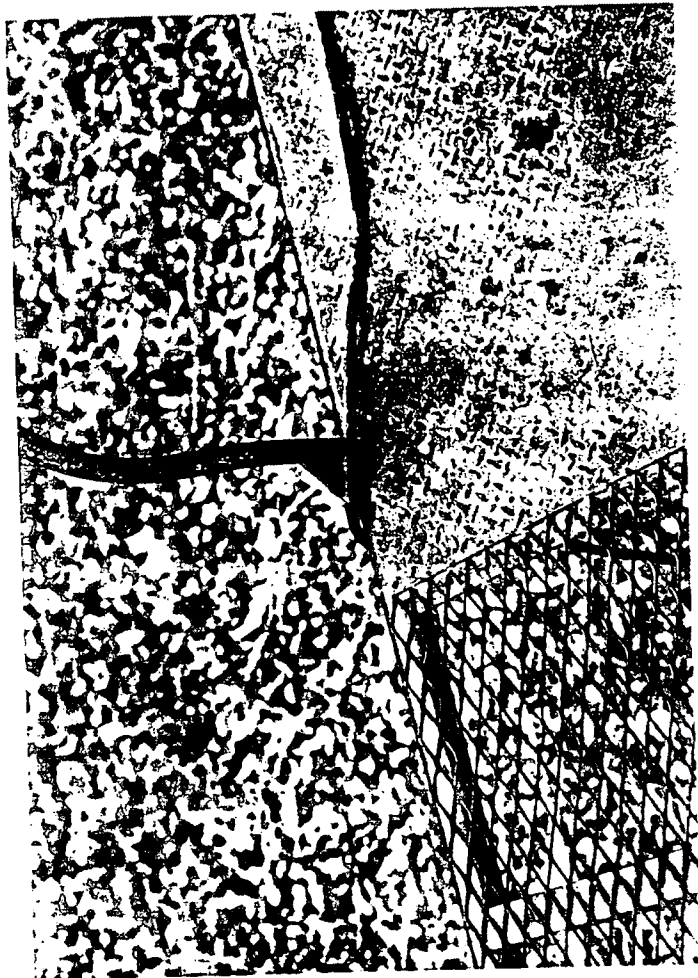


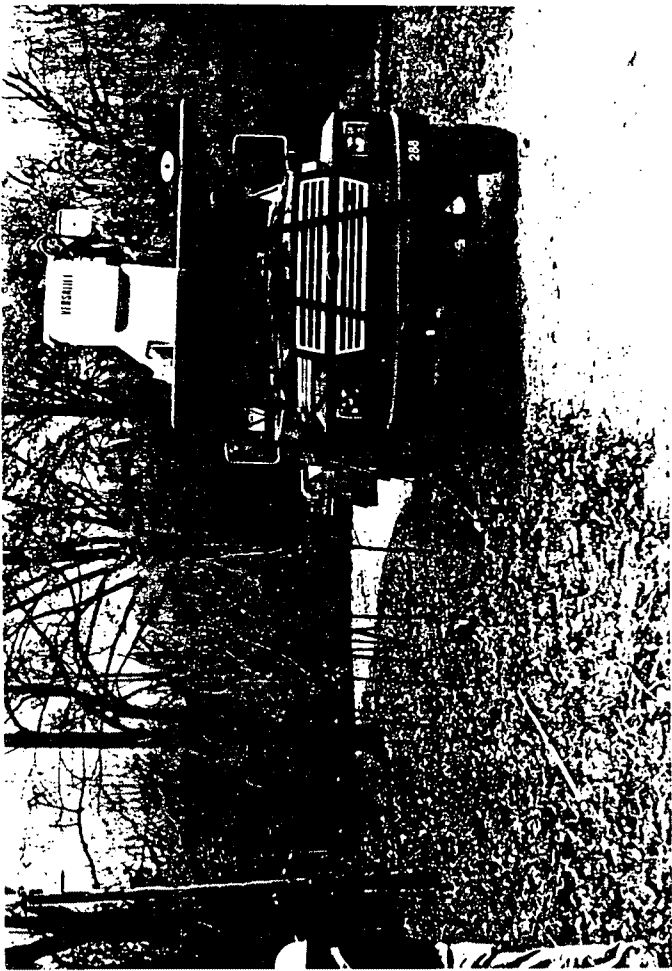
ATTACHMENT E



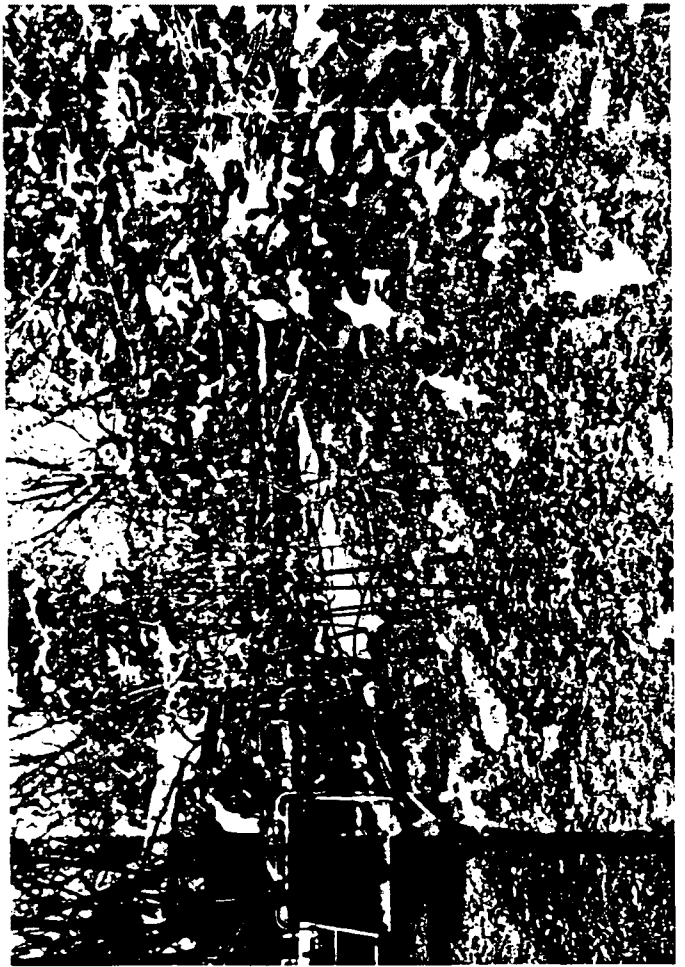
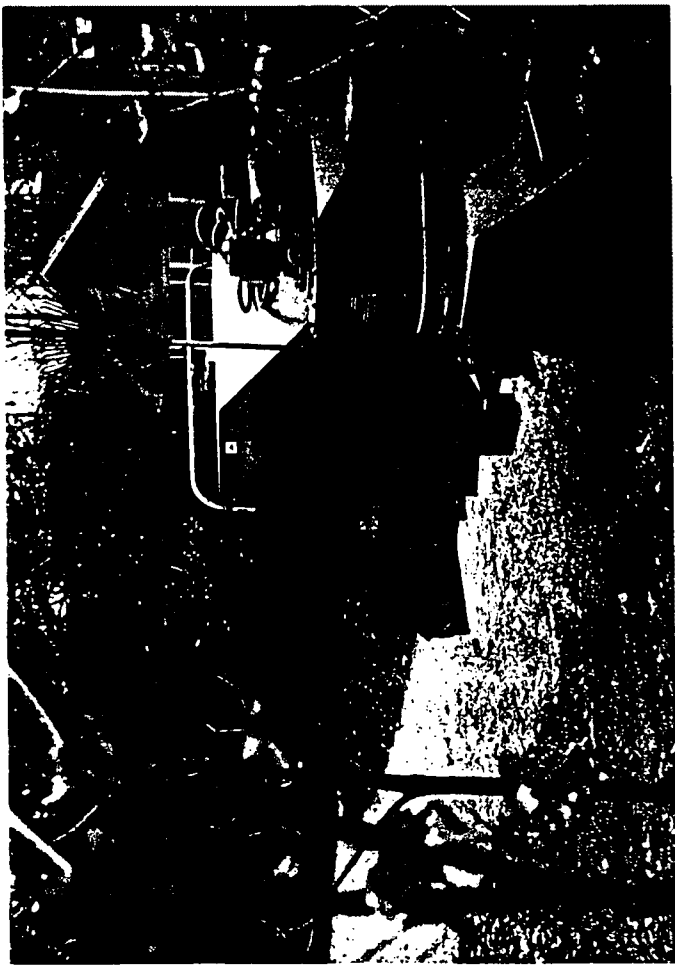


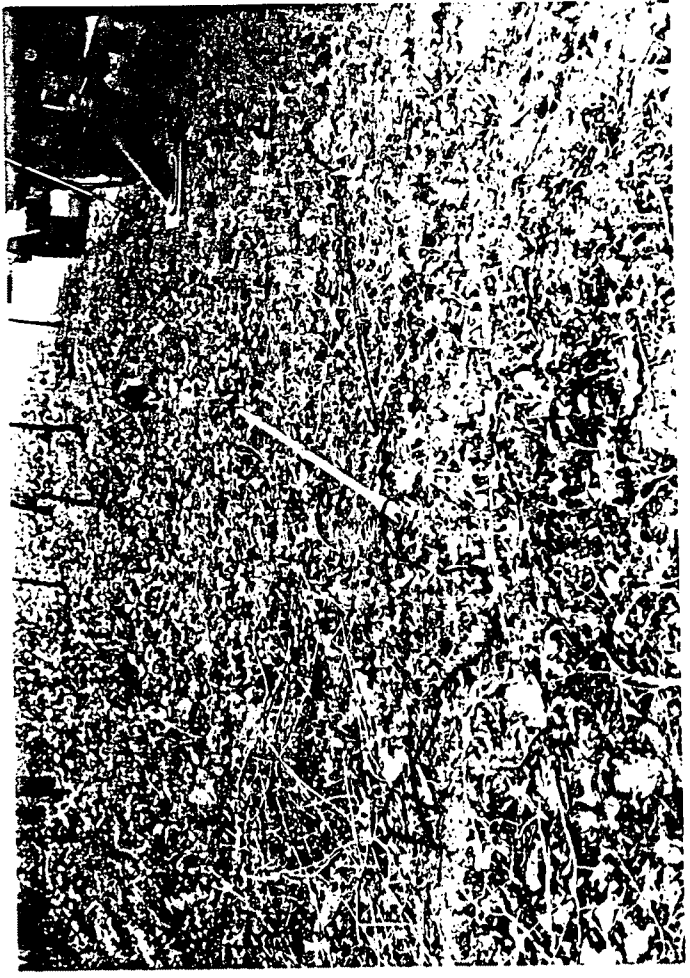
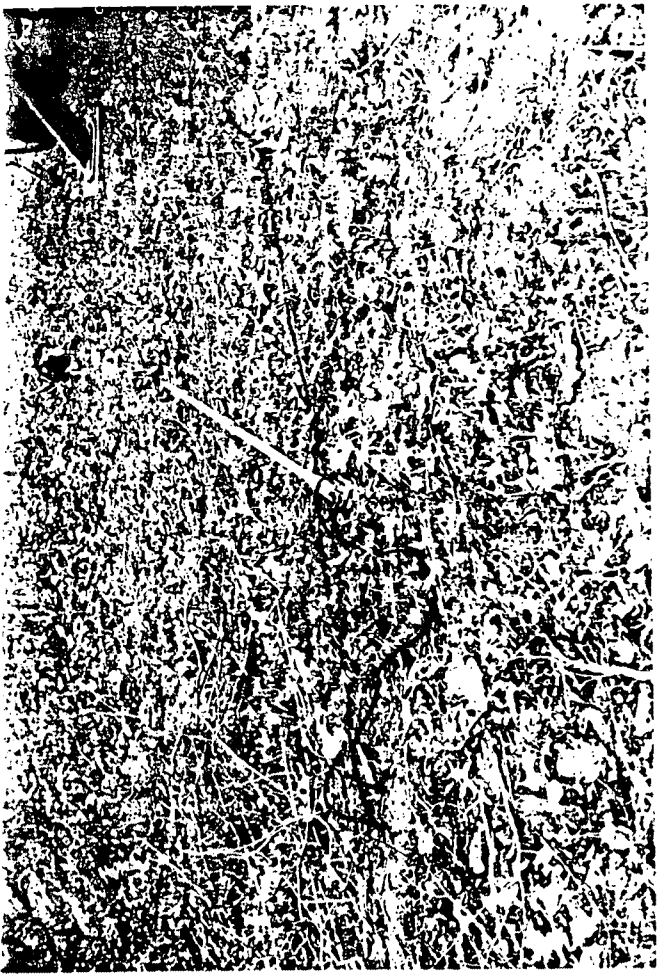
ATTACHMENT E





ATTACHMENT E





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