

City of Dickson

TN DEPT OF ENVIRONMENT
AND CONSERVATION

DWS/L&C

water department

JUN 3 9 50 AM '96

202 South Main Street
Dickson, Tennessee 37055
(615) 441-9502

DIVISION
OF WATER SUPPLY

May 30, 1996

Mr. Tom Moss
Tennessee Department of Environment & Conservation
Division of Water Pollution Control
6th Floor L & C Tower, 401 Church Street
Nashville, TN. 37243-1549

Dear Mr. Moss:

Enclosed is the required submittal for the City of Dickson's Well Head Protection Plan for your review. If you have any questions or comments, please call me at (615) 441-9502.

Sincerely,

Mike Shelton

Mike Shelton
Pretreatment Coordinator

MS/mbd

Cc: Larry Gardner, Superintendent

Louis Burnett, Nashville Field Office

Enclosures: 1

DWS/LC

WELLHEAD PROTECTION PLAN

CITY OF DICKSON WATER & SEWER DEPARTMENT DICKSON, DICKSON COUNTY, TENNESSEE

THE CITY OF DICKSON WATER & WASTEWATER DEPARTMENT HAS DEVELOPED THE FOLLOWING WRITTEN POLICY IN PROTECTING ITS WELLHEAD PROTECTION AREAS:

- 1) THE DICKSON WATER DEPARTMENT WILL NOT STORE CHEMICALS OTHER THAN THOSE USED FOR DRINKING WATER TREATMENT WITHIN THE WELLHOUSE OR ADJACENT TO THE WELL.
- 2) THE DICKSON WATER DEPARTMENT WILL NOT ALLOW CHEMICALS TO BE APPLIED ADJACENT TO THE WELL (MINIMUM OF 100 FEET). A SIGN WILL BE POSTED AT EACH WELL WHICH READS "WELLHEAD PROTECTION AREA - NO CHEMICALS TO BE APPLIED TO THE LAND WITHIN 50 FEET OF THE WELLS".
- 3) THE DICKSON WATER DEPARTMENT HAS IDENTIFIED THE WELLHEAD PROTECTION AREAS TO THE COUNTY PLANNING COMMISSION AND COUNTY GOVERNMENT AND ASKED TO BE ALLOWED TO REVIEW AND COMMENT ON ACTIONS THAT FALL WITHIN THE WELLHEAD PROTECTION AREAS.
- 4) THE DICKSON WATER DEPARTMENT WILL ACTIVELY OBSERVE THE ACTIVITIES WITHIN THE DESIGNATED WELLHEAD PROTECTION AREAS AND REPORT PERTINENT INFORMATION TO THE DIVISION OF WATER SUPPLY. THE DICKSON WATER DEPARTMENT WILL UPDATE THE POTENTIAL CONTAMINANT SOURCE INVENTORY WHEN SIGNIFICANT CHANGES OCCUR WITHIN THE WELLHEAD PROTECTION AREAS. THE DICKSON WATER DEPARTMENT WILL UPDATE THE WELLHEAD PROTECTION PLAN EVERY THREE YEARS BY REVIEWING THE WELLHEAD PROTECTION AREAS AT LEAST ANNUALLY FOR ANY NEW POTENTIAL CONTAMINANT SOURCES.
- 5) THE DICKSON WATER DEPARTMENT WILL INSERT IN THE LOCAL DICKSON HERALD NEWSPAPER THE REQUIRED INFORMATION ABOUT WELLHEAD PROTECTION UPON APPROVAL OF THE WELLHEAD PROTECTION PLAN AND WILL CONTINUE TO DO SO AT 6 MONTH INTERVALS.
- 6) CONTINGENCY PLANNING - IN THE CASE OF AN EMERGENCY SPILL WHICH COULD IMPACT THE WATER SOURCE WITHIN THE WELLHEAD PROTECTION AREA, THE DICKSON WATER DEPARTMENT WILL CONTACT:

TENNESSEE EMERGENCY MANAGEMENT AGENCY
AT 1-800-262-3300
WITHIN 24 HOURS

DICKSON COUNTY SHERIFF'S OFFICE
AT 446-8041
WITHIN 24 HOURS

TENNESSEE DIVISION OF WATER SUPPLY
AT (615) 532-0191
WITHIN 72 HOURS

CONTINGENCY PLAN

TO FULFILL THE CONTINGENCY PLANNING PORTION OF THE WELLHEAD PROTECTION REGULATIONS, THE DICKSON WATER DEPARTMENT HAS PROVIDED INFORMATION ON THE FOLLOWING:

- A. A LISTING OF ALL SOURCES OF DRINKING WATER CURRENTLY AVAILABLE TO THE PUBLIC WATER SUPPLY;
 - 1) PINEY RIVER INTAKE 2MGD
 - 2) CITY LAKE 80MG TOTAL STORAGE - WITHDRAWL 1MGD
 - 3) WELL DK-21 300GPM
 - 4) TURNBULL UTILITY DISTRICT- .250MGD
- B. AN ESTIMATE OF THE QUANTITY OF WATER CURRENTLY AVAILABLE FROM CURRENTLY CONNECTED SOURCES, SEE LIST ABOVE
- C. IDENTIFICATION OF ADDITIONAL WATER SUPPLIES THAT WILL MEET FUTURE NEEDS, NOT YET IDENTIFIED
- D. IDENTIFICATION OF ANY ACTIONS THAT HAVE BEEN TAKEN BY LOCAL GOVERNMENTS TO PROTECT DESIGNATED FUTURE WATER SUPPLIES.
- E. REFERENCES TO THE WELLHEAD PROTECTION PLAN THAT DETAIL PROTECTION PLANS FOR DESIGNATED FUTURE WATER SUPPLIES.
- F. A SCHEDULE FOR INCORPORATION OF DESIGNATED FUTURE WATER SUPPLIES INTO THE WATER SYSTEM;
- G. AN ESTIMATION OF THE RESOURCES (AUTHORITY,CONSULTING EXPENSE, CAPITAL EXPENSES) NECESSARY TO INCORPORATE DESIGNATED FUTURE WATER SUPPLIES INTO THE SYSTEM BY THE SCHEDULE DETAILED IN ITEM F;
- H. IDENTIFICATION OF THE FINANCIAL RESOURCES AVAILABLE TO INCORPORATE DESIGNATED FUTURE WATER SUPPLIES INTO THE WATER SYSTEM.

REFERENCE WHICH HAS BEEN MADE TO THE DICKSON WATER DEPARTMENT'S APPROVED EMERGENCY PLAN WILL BE SUFFICIENT FOR THOSE ITEMS WHICH ARE ADDRESSED IN THE EMERGENCY PLAN.

PUBLIC NOTICE

THE CITY OF DICKSON WATER & WASTEWATER DEPARTMENT HAS DEVELOPED A WELLHEAD PROTECTION PLAN FOR THE PURPOSE OF PROTECTING THE AREA AROUND THE CITY'S PUBLIC WELLS. THIS PLAN INCLUDES PROVISIONS TO PROHIBIT OR RESTRICT THE USE OF HERBICIDES & PESTICIDES WITHIN 100 FEET OF THE WELLS WHICH INCLUDES THE POSTING OF SIGNS AT EACH LOCATION WHICH READ "WELLHEAD PROTECTION AREA - NO CHEMICALS TO BE APPLIED TO THE LAND WITHIN 50 FEET OF THIS WELL". A RECORD WILL BE KEPT OF ANY HERBICIDES OR PESTICIDES APPLIED WITHIN 100 FEET OF THE WELLS. THE PLAN ALSO INCLUDES A CONTINGENCY PLAN OF PROCEDURES TO BE IMPLEMENTED IN THE EVENT OF AN EMERGENCY SPILL WHICH COULD IMPACT THE WELLHEAD PROTECTION AREA. IN ADDITION, THE DEPARTMENT WILL ACTIVELY OBSERVE ACTIVITIES WITHIN THE WELLHEAD PROTECTION AREAS AND REPORT PERTINENT INFORMATION TO THE STATE OF TENNESSEE DIVISION OF WATER SUPPLY.

THE WELLS ARE LOCATED AS FOLLOWS:

DK-21 LOCATED OFF ROBINSON ROAD NEAR THE CITY'S ROBINSON TANK
DK-17 LOCATED ON GLENDALE DRIVE
DK-1 LOCATED AT THE DICKSON WATER FILTRATION PLANT.

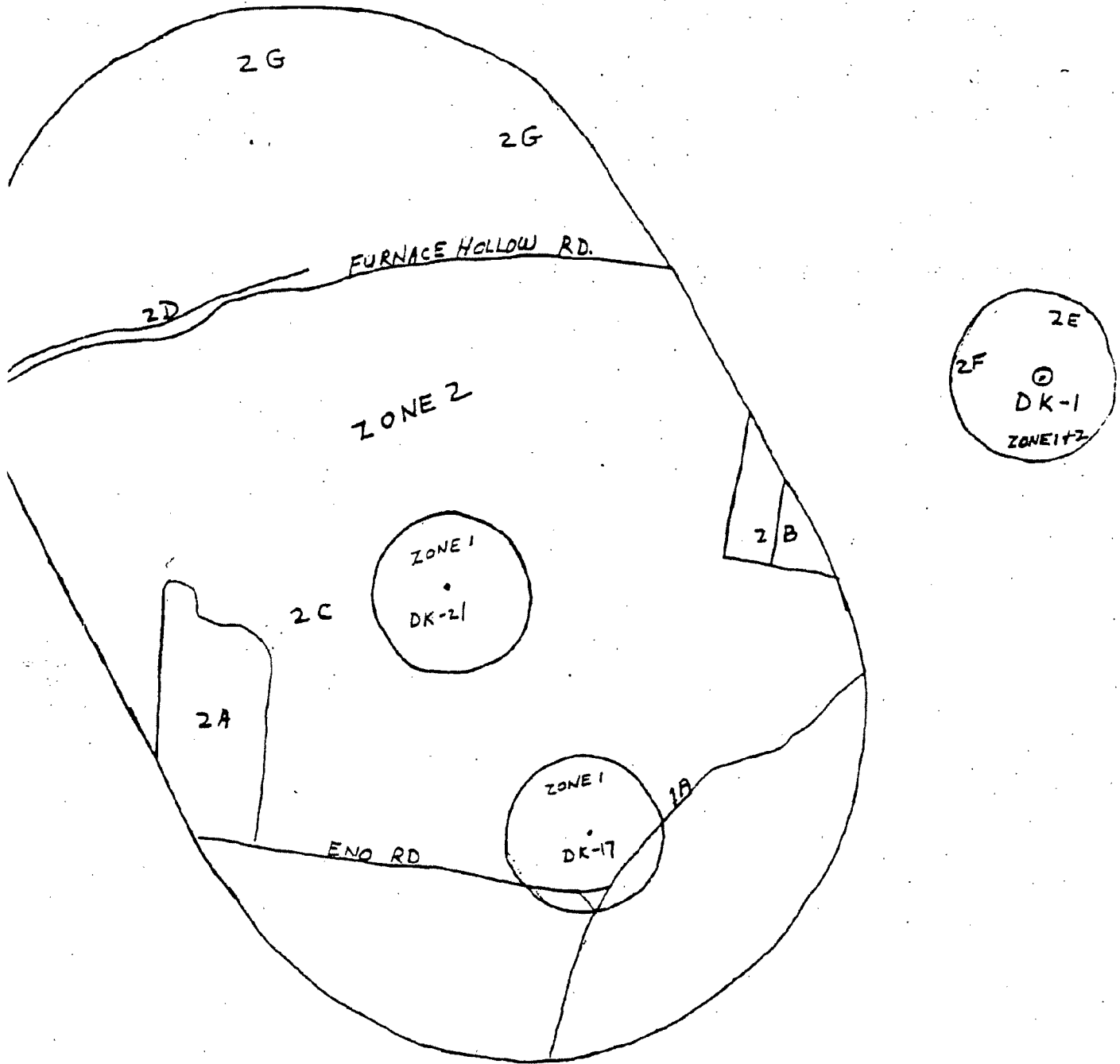
THE POTENTIAL SOURCES OF CONTAMINATION IN THESE AREAS ARE THE COUNTY LANDFILL, SEPTIC TANK DISCHARGES, AND AGRICULTURAL RUNOFF. SIGNS HAVE BEEN POSTED AT EACH WELL AS REFERENCED ABOVE. THE PUBLIC IS REQUESTED TO REPORT ANY ACTIVITIES THAT MIGHT RESULT IN GROUND WATER CONTAMINATION TO THE CITY OF DICKSON WATER DEPARTMENT.

IT IS CRITICAL TO ESTABLISH A WELLHEAD PROTECTION PROGRAM. THE SUCCESS WILL DEPEND TO A GREAT DEAL ON PUBLIC SUPPORT FOR THE PROGRAM. IT IS IMPORTANT TO MAINTAIN OUR PUBLIC DRINKING WATER SOURCE FOR FUTURE GENERATIONS.

THIS NOTICE WILL BE PUBLISHED AT SET INTERVALS OF 6 MONTHS IN THE DICKSON HERALD NEWSPAPER.

MAP OF WELLHEAD PROTECTION AREAS

POTENTIAL CONTAMINANT SOURCE INVENTORY MAP



KEY

- | | |
|----------------------------|-----------------------------|
| 1A TENN. HWY 48 S | 2D WORLEY FURNACE BRANCH |
| 2A DICKSON COUNTY LANDFILL | 2E RETAIL / COMMERCIAL AREA |
| 2B BRANNON TRAILER PARK | 2F URBAN RESIDENTIAL |
| 2C SLUDGE SPREADING SITE | 2G SUBURBAN DEVELOPING |

**APPENDIX 9
POTENTIAL CONTAMINANT SOURCE INVENTORY
PRELIMINARY CHECKLIST**

Public Water System: CITY OF DICKSON WATER DEPT.
PWSID# 0000191
County DICKSON
Well or Spring Name/# DK-1, DK-17, DK-21
USGS Quad Sheet(s) DICKSON QUADRANGLE 48-SW

POTENTIAL POLLUTION SOURCES

(Assign Number to correspond to map)

TRANSPORTATION

Major Highway 1A TENN. HWY 48S

Railyard/Railroad _____

Airport _____

Interstate Trucking Operation _____

Dept of Transportation (County Garage) Facility _____

Other _____

AGRICULTURE*

Fruit & Vegetable _____

Nursery _____

Hog or Cattle Feedlots _____

Lagoons _____

Cotton or Tobacco _____

Other _____

**APPENDIX 9
POTENTIAL CONTAMINANT SOURCE INVENTORY
PRELIMINARY CHECKLIST**

Continued

INDUSTRIES**

Industrial Park _____

Chemical/Pesticide Mfg _____

Textile Mfg _____

Electronics Mfg _____

Petroleum Refining
& Storage _____

Asphalt Plant _____

Metal Treating/Plating _____

Metal Fabricating _____

Drum Cleaning/Reclaiming _____

Junkyards/Recycling
Operations _____

Hazardous Waste
Treatment or Storage
Facilities _____

Gas Stations _____

Landfills/Dumps 2 A _____

Wood Treatment _____

DISCHARGES

High Density of
Septic Systems 2 B _____

Underground Injection/
Return Flow _____

Major Sewer Lines _____

Sewer Plants _____

Sewer Uplift Stations _____

**APPENDIX 9
POTENTIAL CONTAMINANT SOURCE INVENTORY
PRELIMINARY CHECKLIST**

Continued

Lagoons (Industrial
or Municipal) _____

Sludge Spreading 2C _____

GEOLOGIC SETTING

Floodplain _____

Sinkholes _____

 Open _____

 Streams in bottom _____

Disappearing Streams _____

Dry Streams _____

Bluff Edge/Plateau _____

Rivers or Streams 2D _____

Ridge/Hilltop or Side _____

INDUSTRIES, GENERAL

Small or Large Drum
Storage Areas _____

Small or Large
Above Ground Tanks _____

Small or Large
Underground Tanks _____

Small or Large
Material or Waste
Piles _____

COMMERCIAL/RESIDENTIAL

Laundry or Car Wash _____

Dry Cleaning _____

Retail/Commercial Area 2E _____

Urban Residential 2F _____

APPENDIX 9
POTENTIAL CONTAMINANT SOURCE INVENTORY
PRELIMINARY CHECKLIST

Continued

Suburban and/or
Developing

2 G

Rural
(evidence of pit privy)

OTHER

Superfund Sites

Quarries

Gravel Pits

Cemeteries

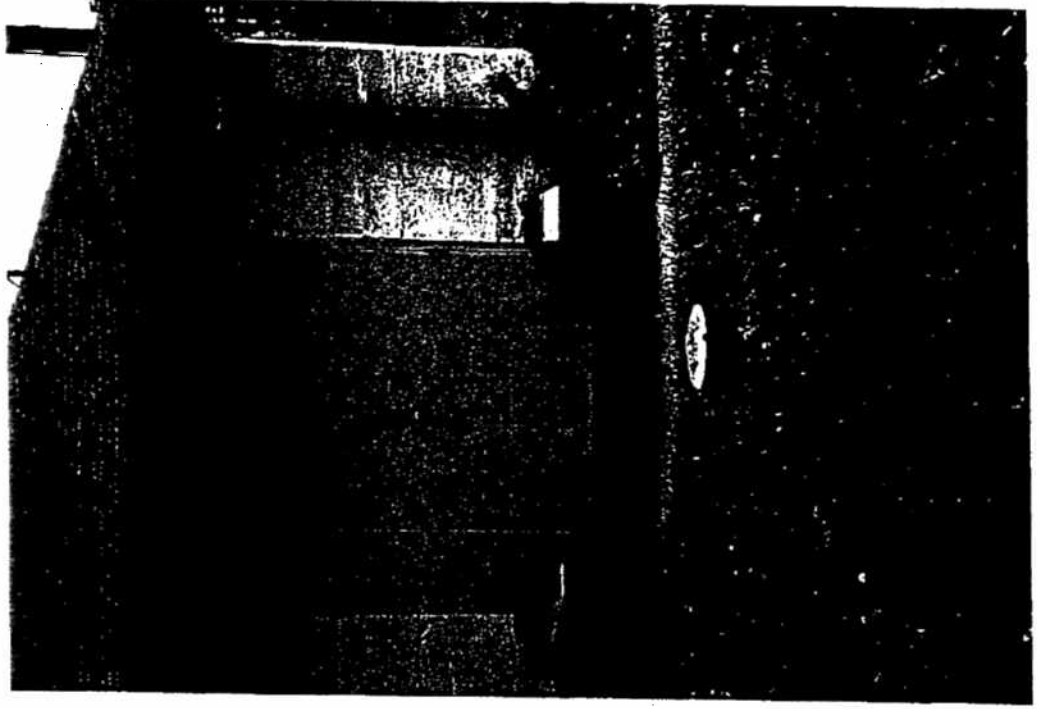
Abandoned Wells

Old Dump Sites

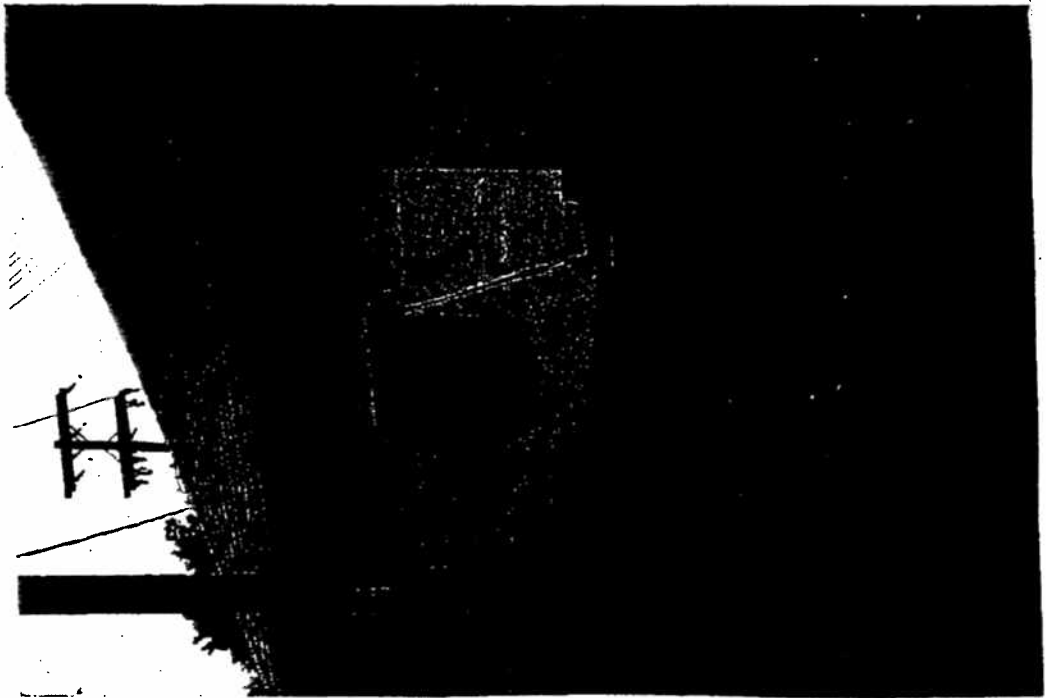
- * In Addition Contact County Agriculture Extension Agent and Soil Conservation Service for pesticide use in Wellhead Protection Area (Zones 1 & 2)
- ** In Addition Contact Local Fire Department for Community Right-to-Know Information for chemical use in Wellhead Protection Area (Zones 1 & 2)

OTHER COMMENTS

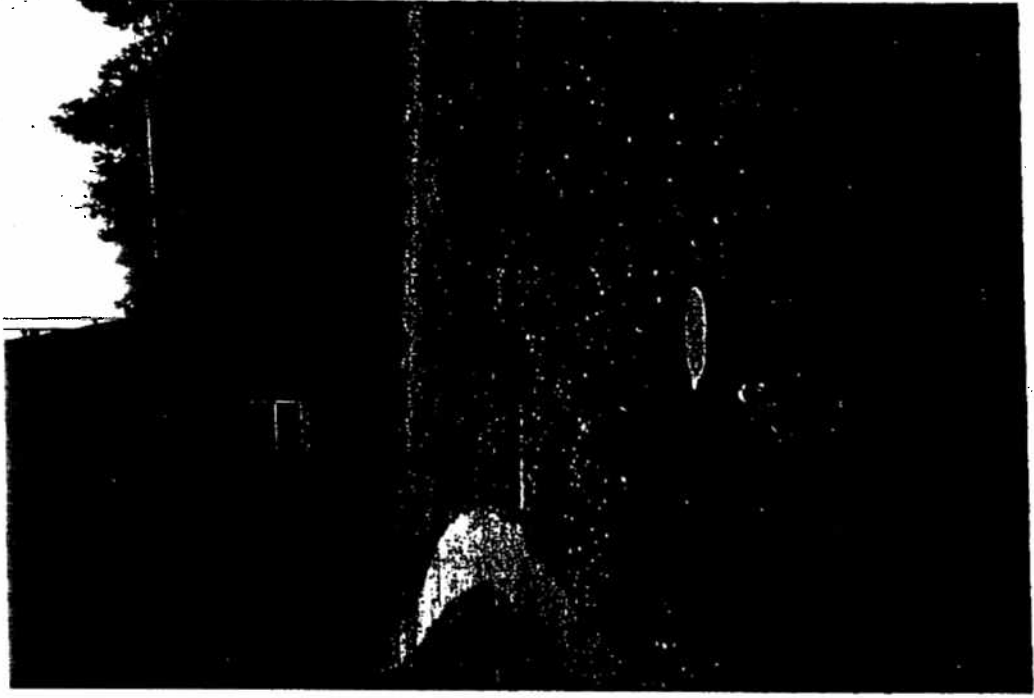
IN EARLY OCTOBER OF 1994 THE DICKSON
WATER DEPARTMENT WAS NOTIFIED BY
MR. JIM LUNN OF DICKSON COUNTY SOLID
WASTE THAT TRICHLOROETHYLENE HAD
BEEN DETECTED IN A SAMPLE FROM A SPRING
ON FURNACE HOLLOW ROAD. WE IMMEDIATELY
HAD WELL DK-21 TESTED FOR VOC'S.
THE RESULTS SHOWED ALL PARAMETERS < .0005 mg/L.



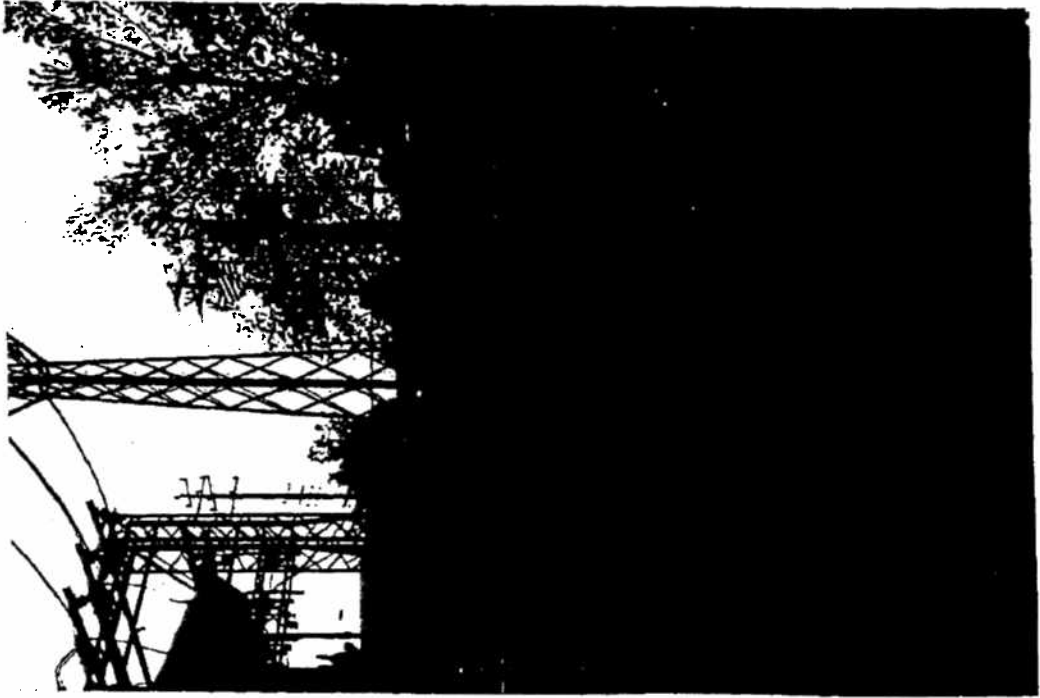
NORTH EAST FROM DK-1



NORTH FROM DK-1



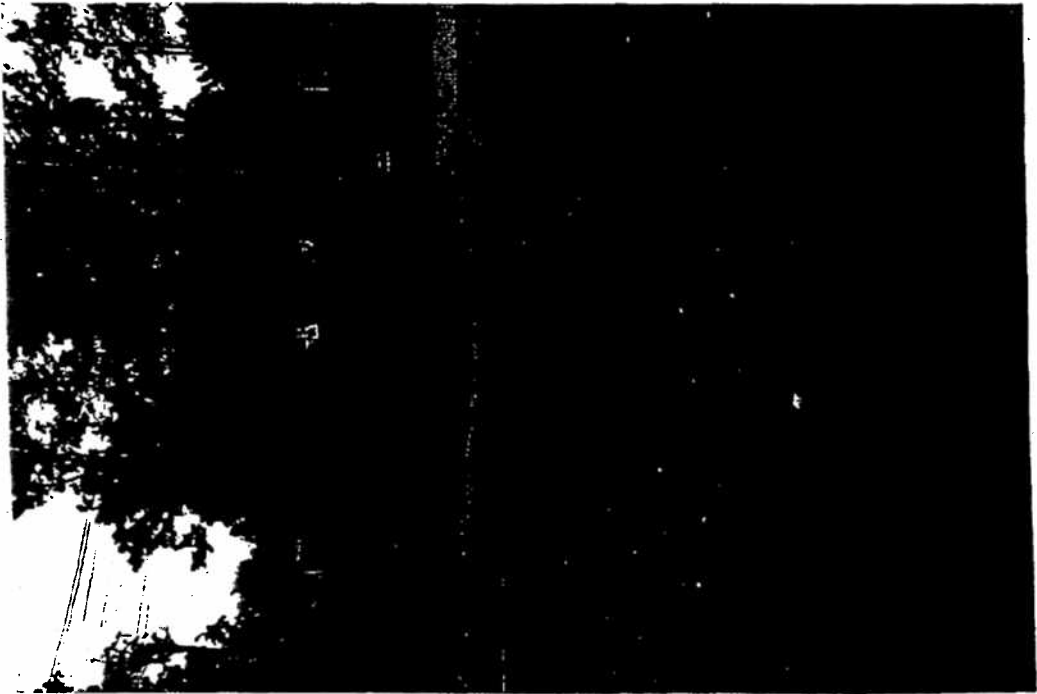
SOUTHEAST FROM DK-1



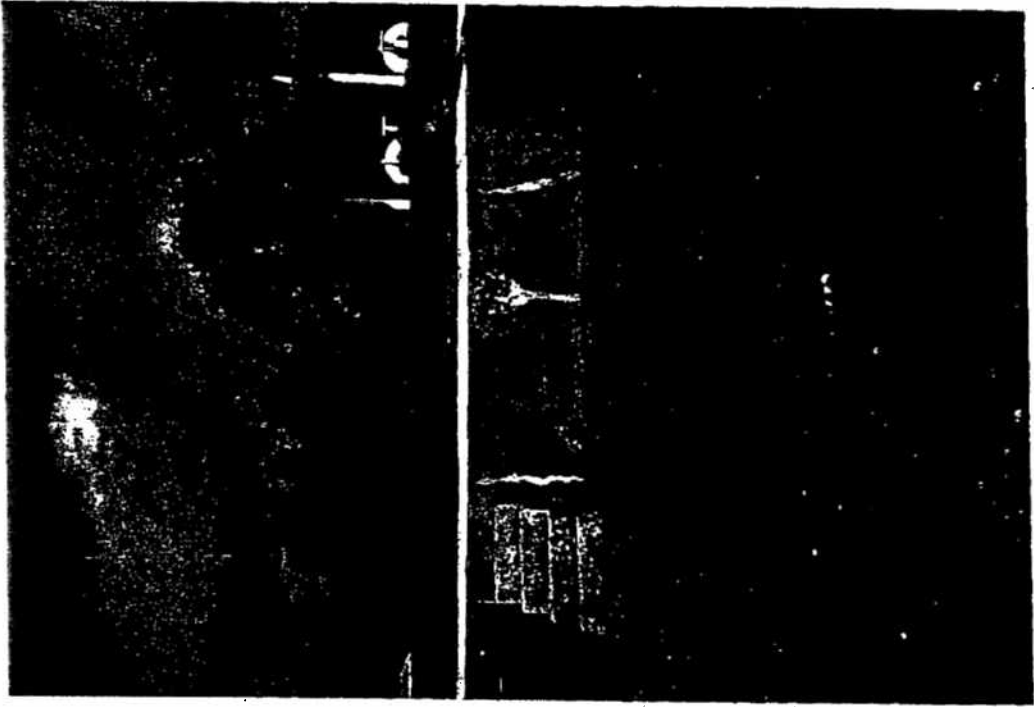
EAST FROM DK-1



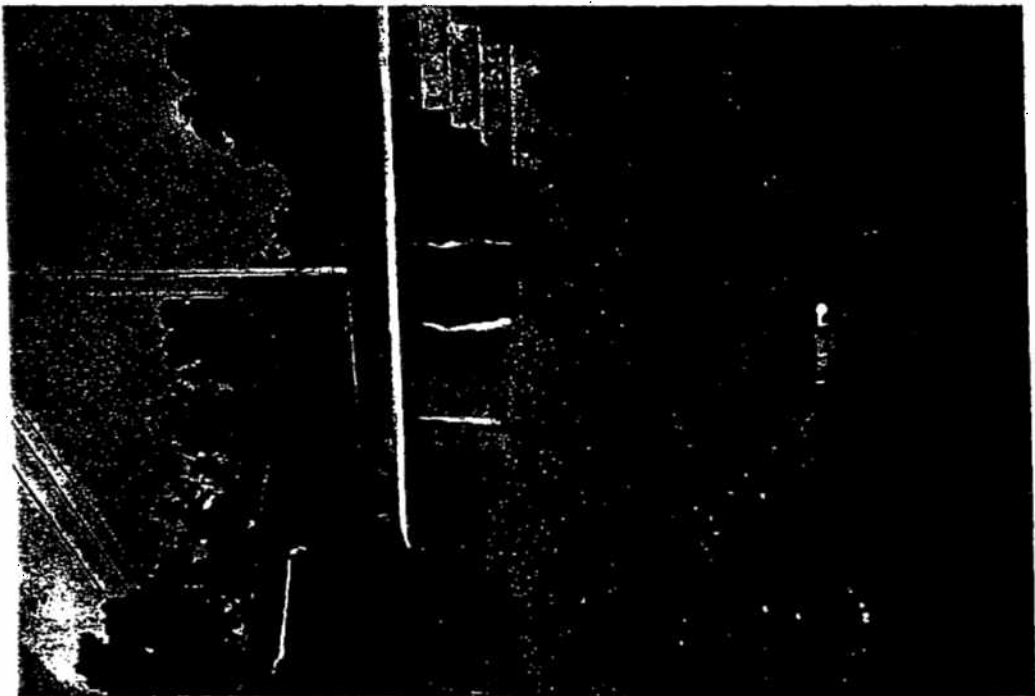
SOUTH WEST FROM DK-1



SOUTH FROM DK-1



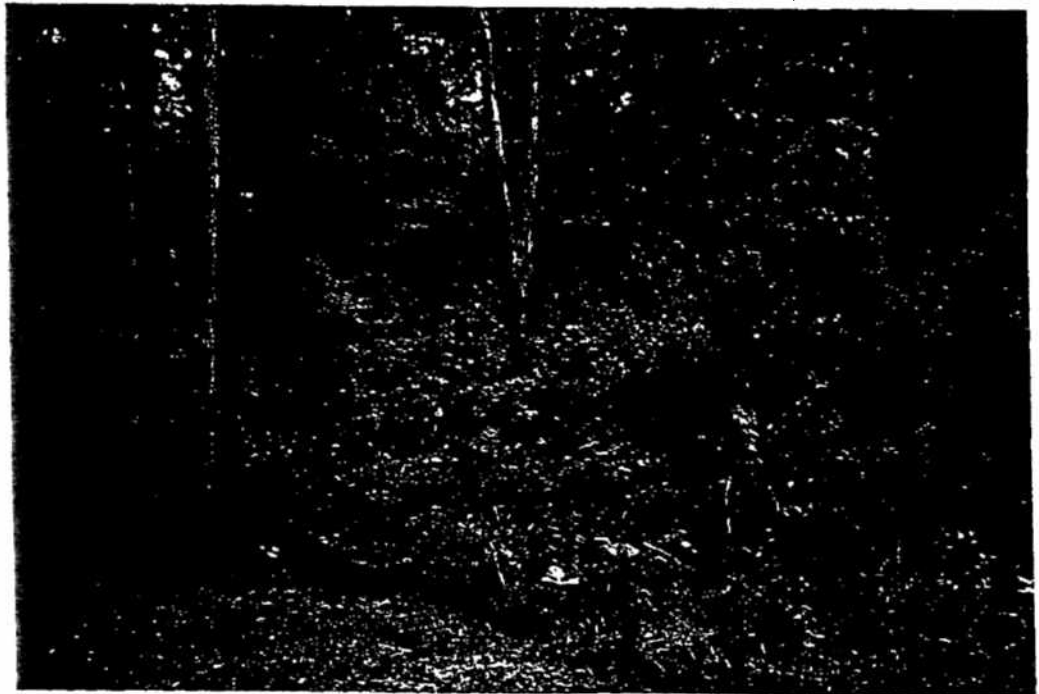
NORTH WEST FROM DK-1



WEST FROM DK-1



NORTH FROM DK-21,



NORTHEAST FROM DK-21



EAST FROM DK-21



SOUTHEAST FROM DK-21



SOUTH FROM DK-21



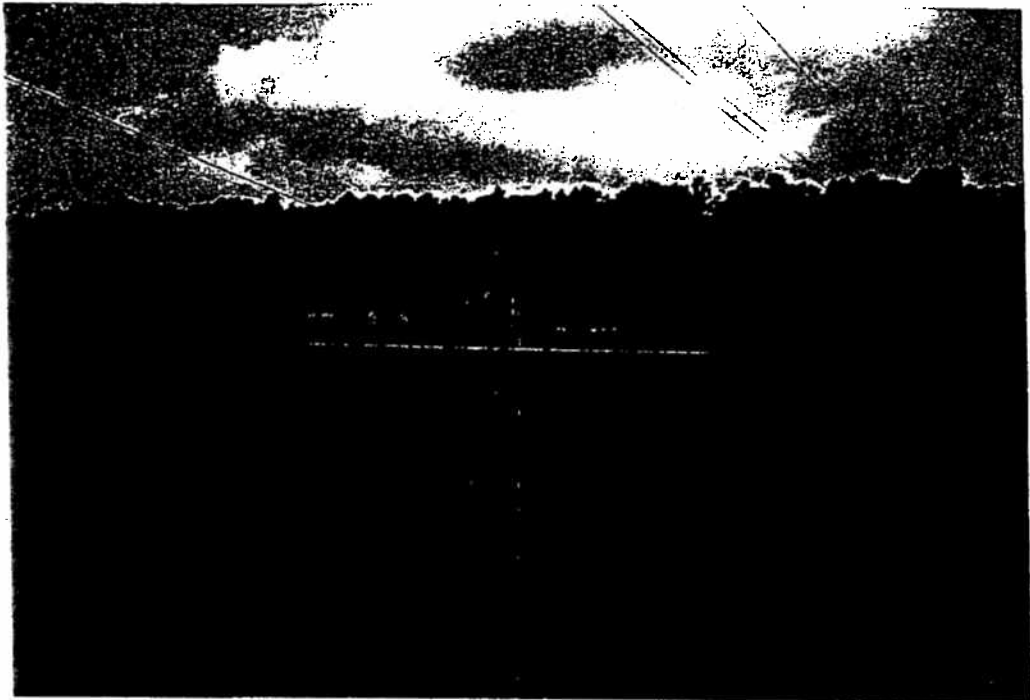
SOUTHWEST FROM DK-21



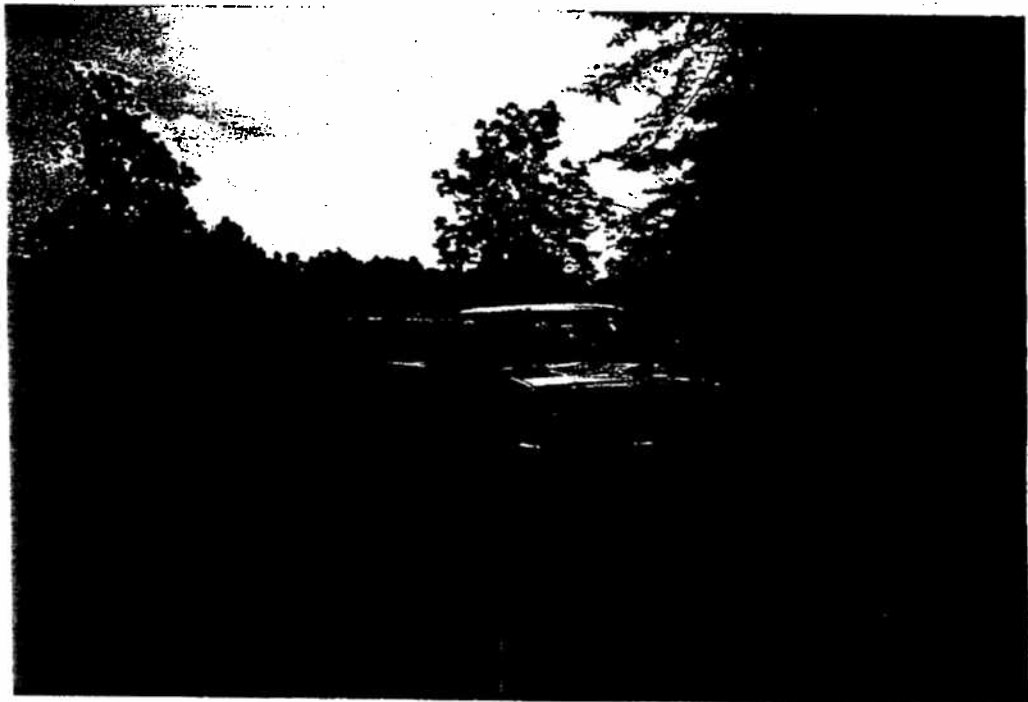
WEST FROM DK-21



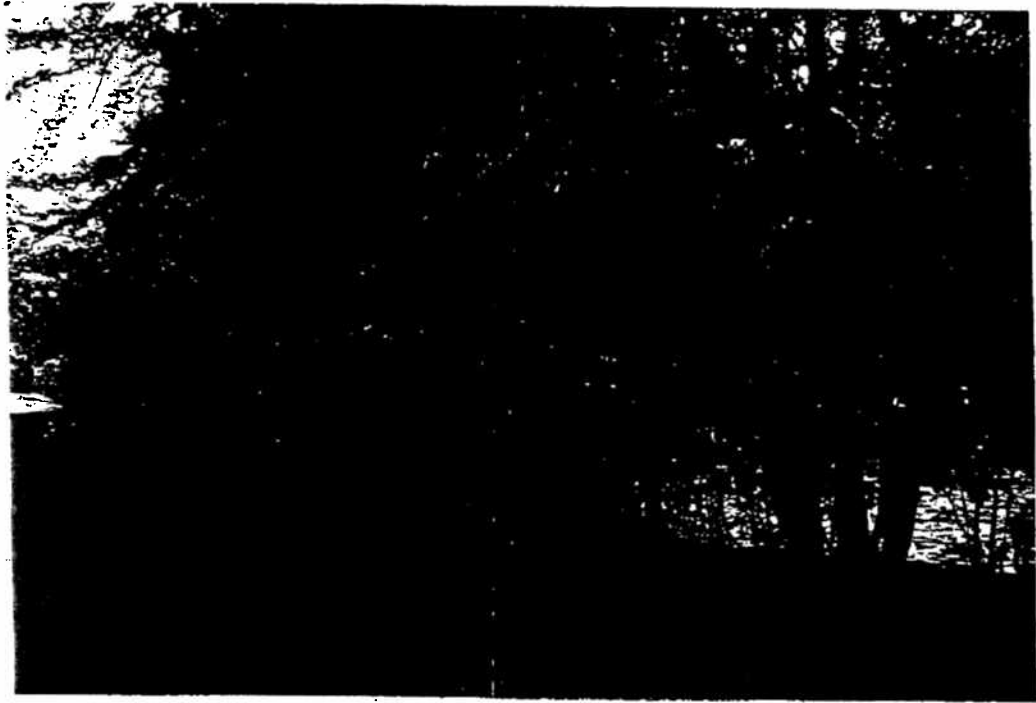
NORTHWEST FROM DK-21



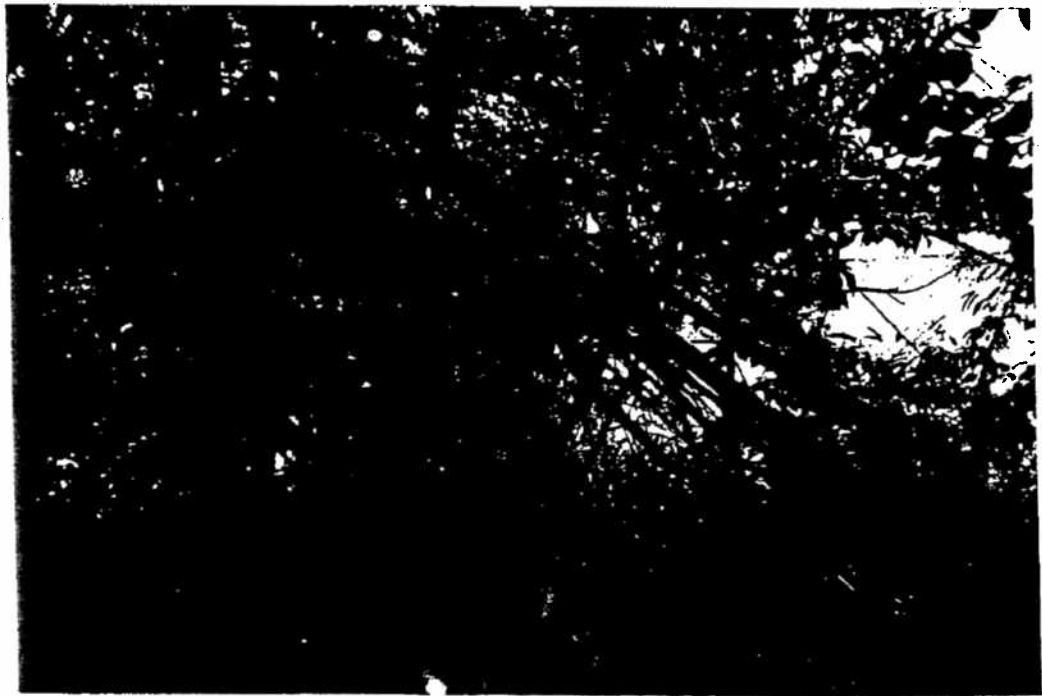
NORTH FROM DK-17



NORTHEAST FROM DK-17



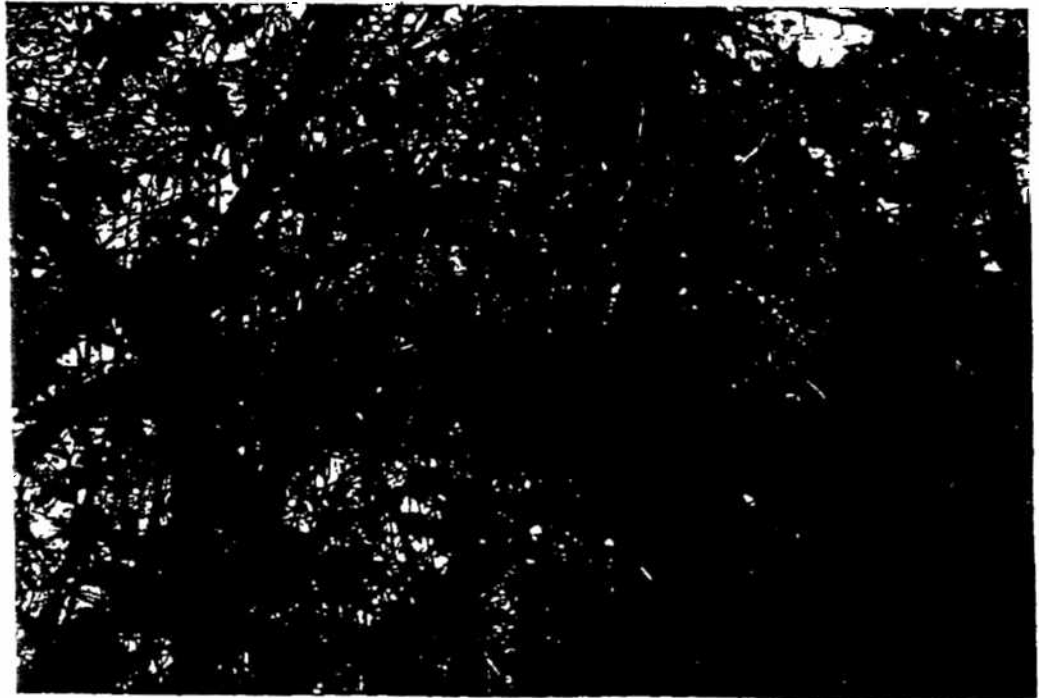
EAST FROM DK-17



SOUTH EAST FROM DK-17



SOUTH FROM DK-17



SOUTHWEST FROM DK-17



WEST FROM DK-17



NORTH WEST FROM DK-17



