



Fig. 2-1 US 97 - Burnet to Liverpool -  
Road on the Nuttaling Creek.

## 3. FAIRBANKS TO CHENA HOT SPRINGS

### Location

This project is a section of the proposed highway from Fairbanks to Chena Hot Springs. The west end of the road terminates at an intersection with the Steese Highway approximately 4 miles north of the city of Fairbanks and it is planned to continue to Chena Hot Springs at the east end. The section constructed this season begins at a point approximately 16 miles east of the intersection with the Steese Highway, thence easterly along the general route of the Chena River to a point approximately 23 miles east of the intersection with the Steese Highway. This indicates a distance of 7 miles constructed this season. However, this is somewhat misleading due to time spent on the rebuilding of fill sections due to settlement in low areas of sections previously constructed.

### Physical Data

The roadbed width is 34 feet shoulder to shoulder, and 60 feet width cleared and stripped.

The estimated depth of maximum cut and fill is approximately 10 feet at centerline. The estimated average depth of fill is approximately 4 feet. The estimated maximum gradient is about 10% in the quarry area. However, it appeared that additional work was planned in this area and this grade will probably be cut down to 7 or 8%.

The earthwork on this project does not appear to have been balanced by the adjustment of grade lines. The fills are constructed with material from ditch borrow except in marshy areas where the fill appeared to be built with material obtained from quarries located at mile 21.3 and mile 11.3 from the intersection with the Steese Highway.

The topography traversed by this project is hilly. The road follows the general route of the Chena River but is on much higher ground than the valley floor.

The country rock, Birch Creek schist, is the principal building material on the project. However, an alluvial deposit of river gravel located at the east end of the project has been used to surface approximately 2 miles of the project (as of September 20). The gravel surfacing was thin (approximately 2 inches) and 24 feet in width.

Drainage structures on this section consist of corrugated metal pipe culverts. However, a through-truss bridge has been used to span the Little Chena River at mile 12 from the intersection with the Steese. The date this bridge was installed is unknown.

#### Statistics

The major pieces of equipment on the project were:

- 11 - Dump trucks
- 3 - Euclid bottom dumps
- 3 - International TD-24
- 3 - Scrapers
- 3 - Caterpillar 712 motor patrols
- 1 - Caterpillar D-4
- 2 - Caterpillar D-3
- 1 - Grapple with 1½-cubic yard bucket
- 1 - Buckeye shovel with 3/4-cubic yard bucket

Construction on this project was reported to have been started in April. The equipment was originally from the Fairbanks depot, but much of it was located on other projects during the summer. There were approximately 24 men working on the project at the time of the writer's visit (September 22).

Design standards on this project are the same as those described in section I of this report.

There are numerous construction contractors located in the Fairbanks area. This project is accessible via the Steese Highway from Fairbanks, a distance of approximately 20 miles.

## CHENA HOT SPRINGS ROAD



Fig. 3-A Chena Hot Springs Road -  
Intersection at Steese Highway.



Fig. 3-B Chena Hot Springs Road - bridge  
crossing the Little Chena River.



FIG. 3-2 Chena Hot Springs road - re-building fill in low marshy area in previously constructed section.



Fig. 3-11. Chama Hot Springs Road -  
Mall between dump.



Fig. 3 - \*same site during 1950's  
\*same slope same side different year

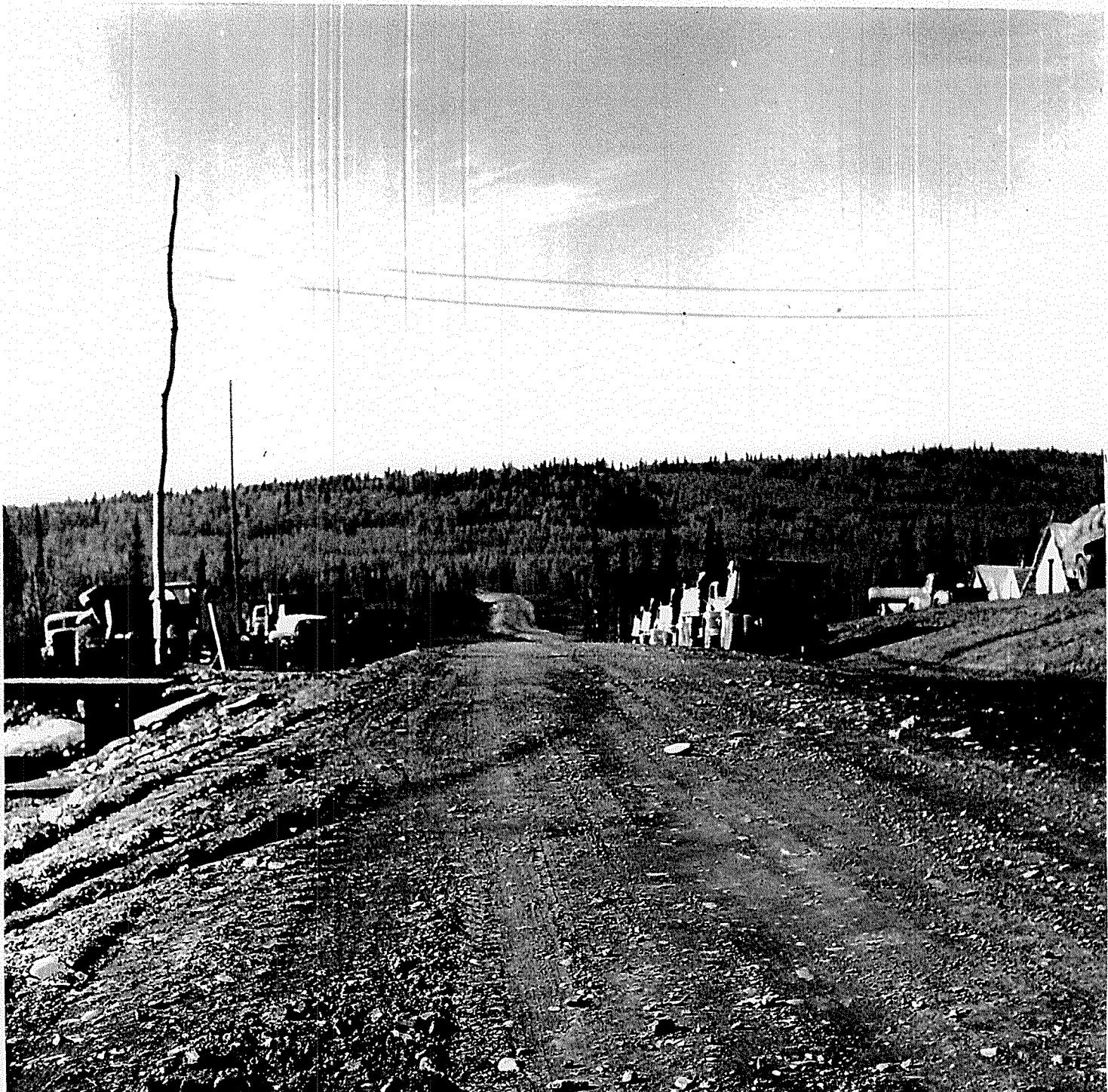


Fig. 3-F

China Hot Springs road  
Equipment parked at Bureau of  
Public Roads camp. Pictures  
were taken on Sunday, thus  
equipment was not working.



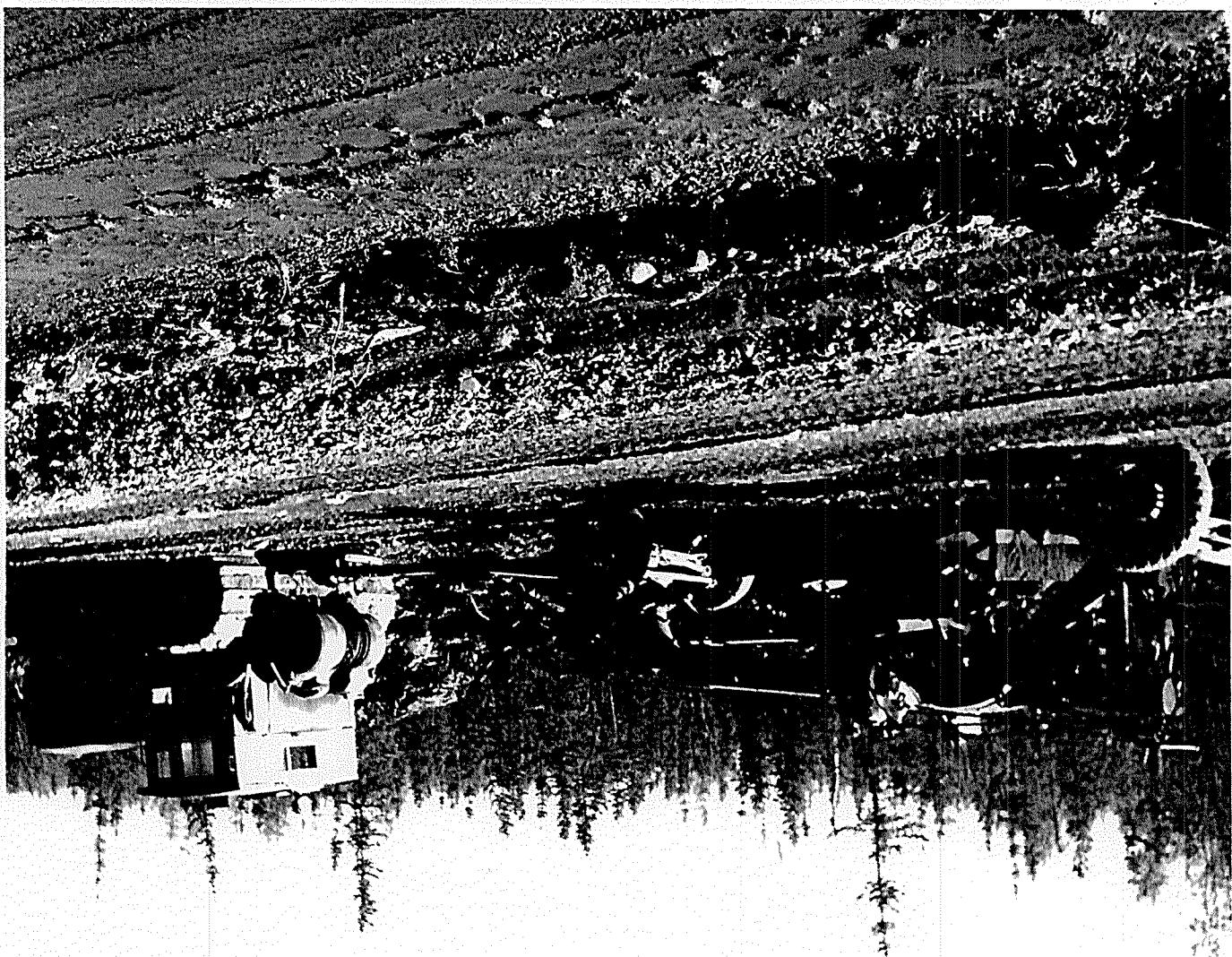
Fig. 3-6

Chena Hot Springs Road  
Schist rock quarry. Estimated  
depth of cut = 30 feet. Location  
21.3 miles from intersection  
with Sterag.

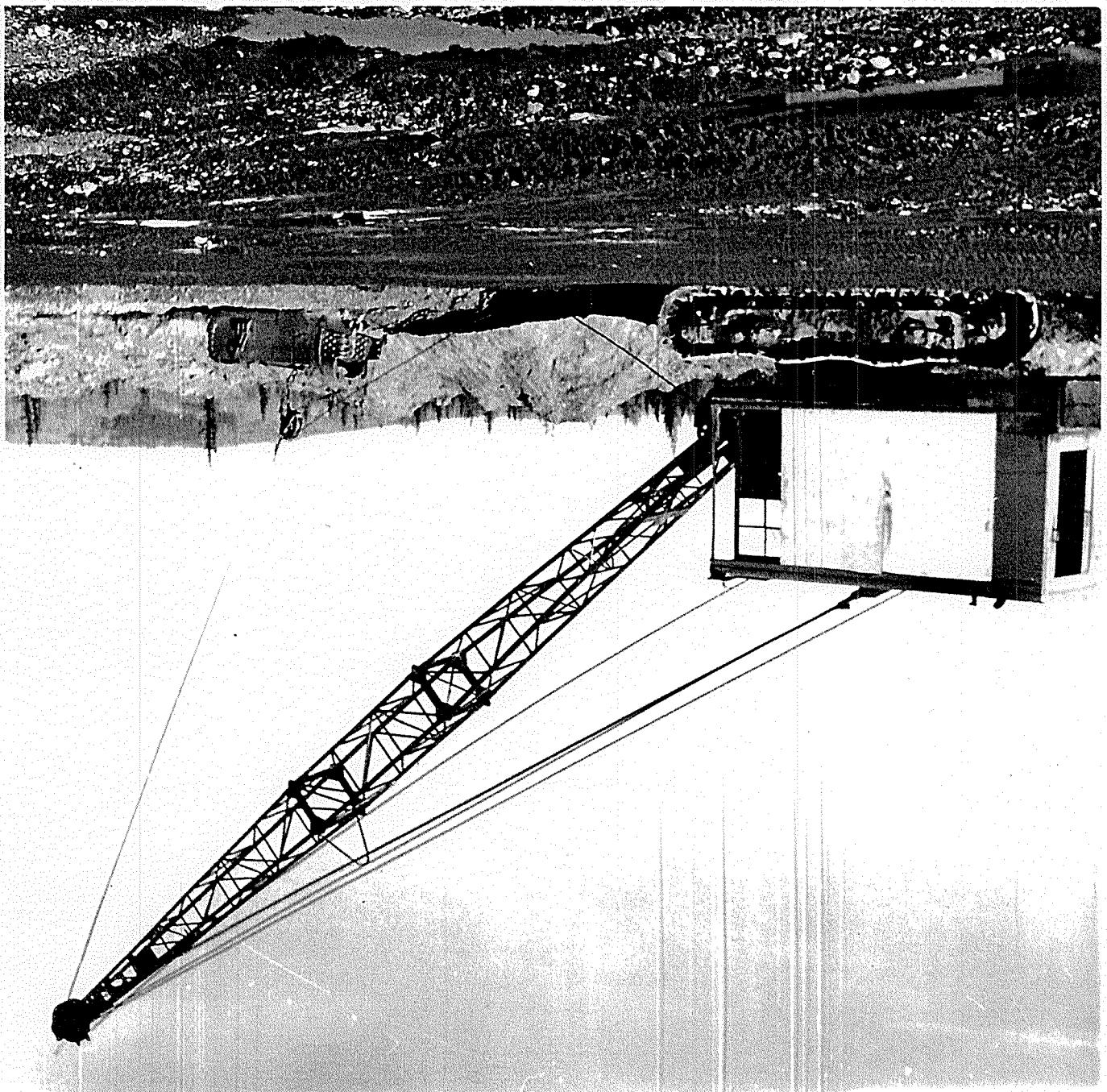


• Using - your - own - tactics  
• Learning - from - your - mistakes  
• Protect - yourself - from - your - mistakes

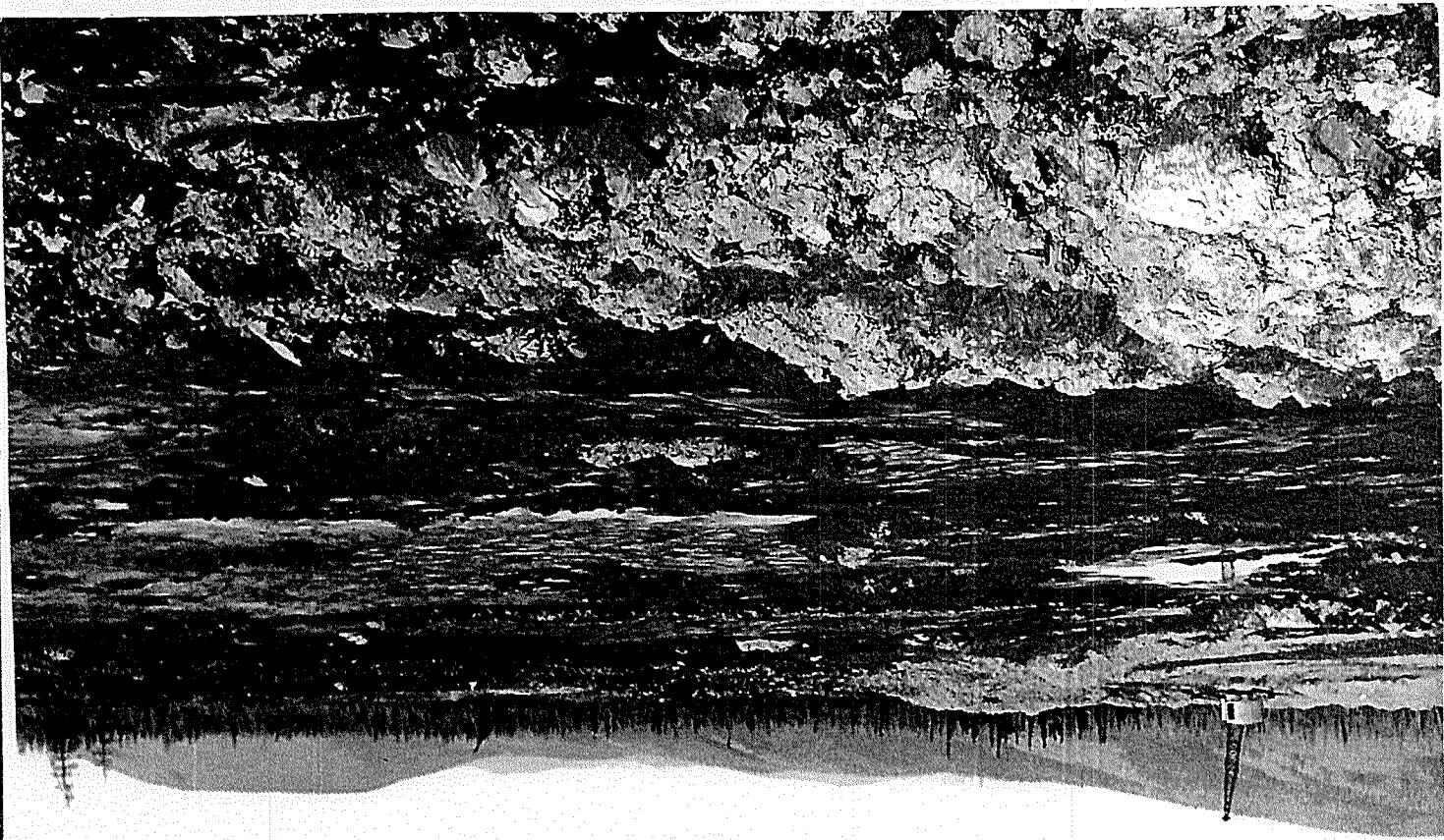
DOVETQ TUD UPA 300 070  
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Chancery Act of 1868  
and the  
Government of India Act of 1858



\*paddy  
rice paddies and terraces  
- soon after 1st sunup



\* Date for locationing materials  
\* Duplicate sets awaiting location  
\* When not required

RECEIVED

