

EXPLANATION

SEDIMENTARY ROCKS



Alluvium
Stream deposits



Terrace gravel deposits
Clay, sand, and gravel



Sa-dong formation
Interbedded gray and black shale and sandstone, partly metamorphosed to argillite and quartzite, with gray limestone beds in lower part and coal beds in upper part: ruled pattern indicates interbedded shale, sandstone, and limestone; stippled pattern indicates dominantly sandstone and silty shale or argillite; unpatterned areas contain shale and argillite



Hongjom formation
Interbedded red and purple claystone and shale, gray and purple siltstone and sandstone, and gray limestone; partly metamorphosed to argillite, quartzite, and marble

UNCONFORMITY

Sambong-san and Macha-ri formations in the thrust plate above the Macha-ri fault, not differentiated on this map

IGNEOUS ROCKS



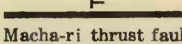
Felsite
Dikes, sills, and irregular intrusive masses

450

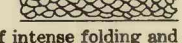
Contact, showing dip
Dashed where approximately located

60

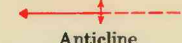
Fault, showing dip
Dashed where approximately located



Macha-ri thrust fault
T, upper plate



Zone of intense folding and faulting
Rocks immediately below the Macha-ri thrust fault are intensely sheared and contorted, but pattern is omitted to avoid confusion



Anticline
Showing trace of axial plane and direction of plunge of axis; short barb shows steeper limb, dashed where approximately located



Syncline
Showing trace of axial plane and direction of plunge of axis; short barb shows steeper limb, dashed where approximately located

60

Strike and dip of beds

70

Strike and dip of overturned beds

90

Strike of vertical beds

30

Strike and dip of undulating beds

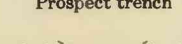
Coal outcrop

Approximate outcrop of middle coal bed or center of coal-bearing zone

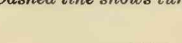
Coal concentration along fault



Mine workings
Generalized from best available mine maps; some workings in Pangyo mine omitted because accurate maps are not available



Open-cut or caved area over mine workings



Prospect trench



Surface haulage line and connecting inclines
Dashed line shows tunnel

2112.1

Control point and elevation

2030

Unchecked spot elevation



Area covered by plate 1



Area covered by plate 2

LOCATION DIAGRAM

7° 19'

MAGNETIC NORTH

TRUE NORTH

APPROXIMATE MEAN DECLINATION 1949
FOR CENTER OF SHEET
ANNUAL MAGNETIC CHANGE 1' WESTERLY

Base map prepared by U. S. Geological Survey by enlargement from 1:20,000 base made by 64th Eng. Base Topog. Bn., U. S. Army (Tokyo). Planimetric corrections based on field observations in 1949. Field control established by Japanese Imperial Land Survey.

Geology by John A. Reinemund.
Surveyed in 1949.
INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D. C.
M R-3605

MAP SHOWING MINE WORKINGS AND DETAILED GEOLOGY OF THE SA-DONG FORMATION, MACHA-RI COALFIELD, KOREA

