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REPORT No. 28



COLONY AND PROTECTORATE OF KENYA

GEOLOGICAL SURVEY OF KENYA

GEOLOGY OF THE KAKAMEGA DISTRICT

DEGREE SHEET 33, S.E. QUADRANT
(with coloured map)

by

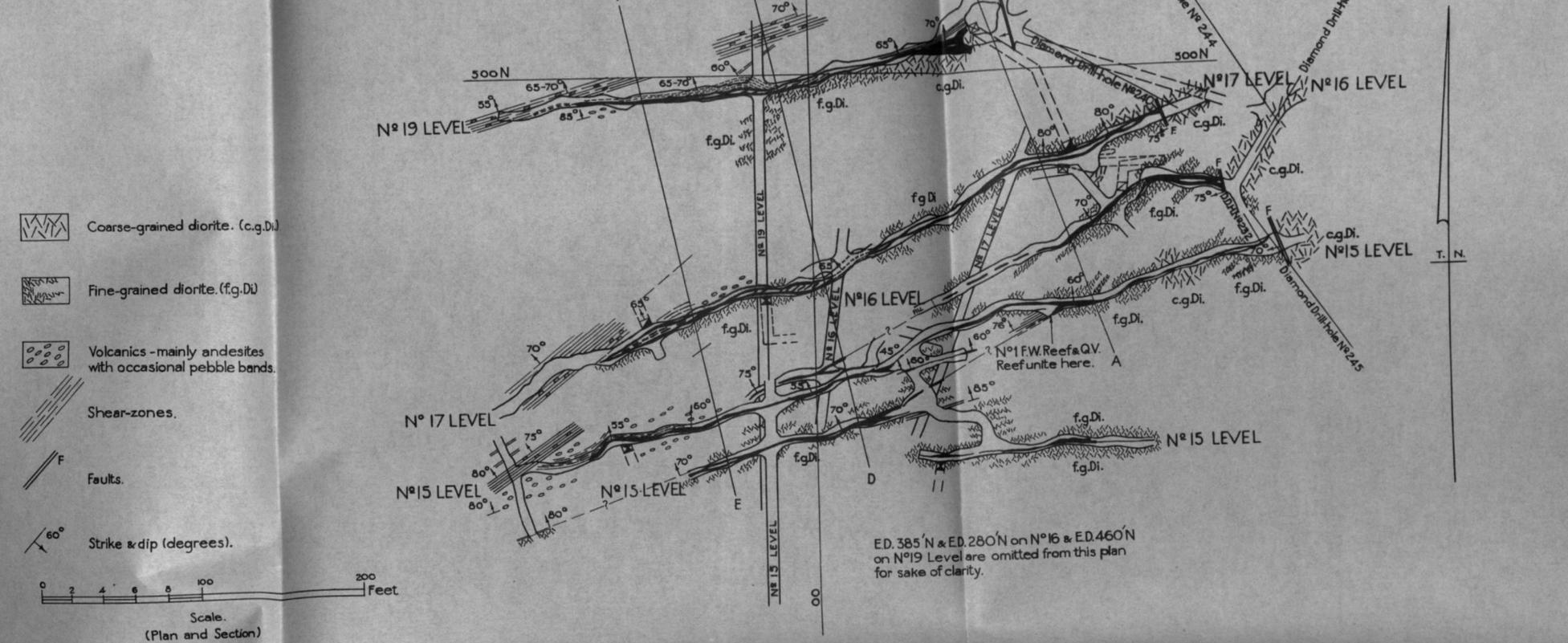
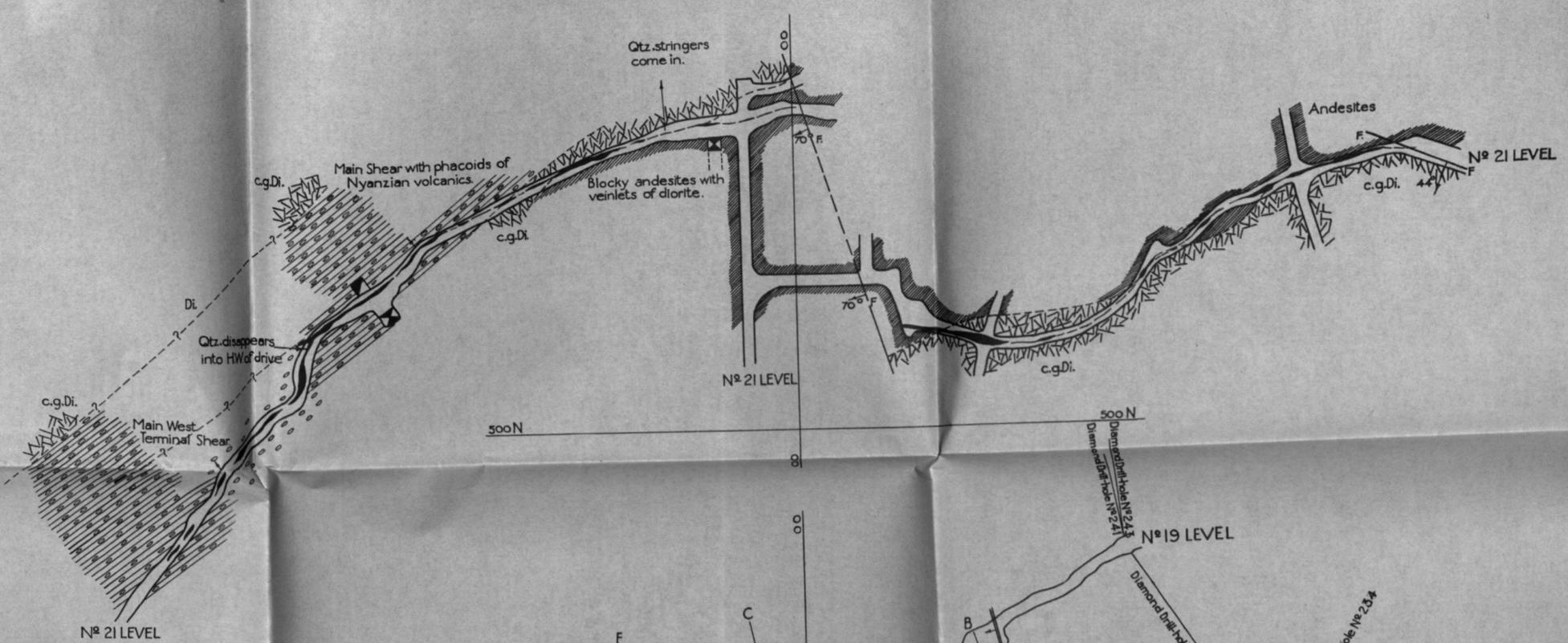
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Geologist

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- Coarse-grained diorite. (c.g.Di.)
- Fine-grained diorite. (f.g.Di.)
- Volcanics - mainly andesites with occasional pebble bands.
- Shear-zones.
- Faults.
- Strike & dip (degrees).

Note
The 21st LEVEL is offset to avoid confusion with higher levels. The origin of the coordinate is at the Main Shaft.

From a drawing by C.S. Hitchen, 1945;
21st Level added by A. Huddleston, 1951.

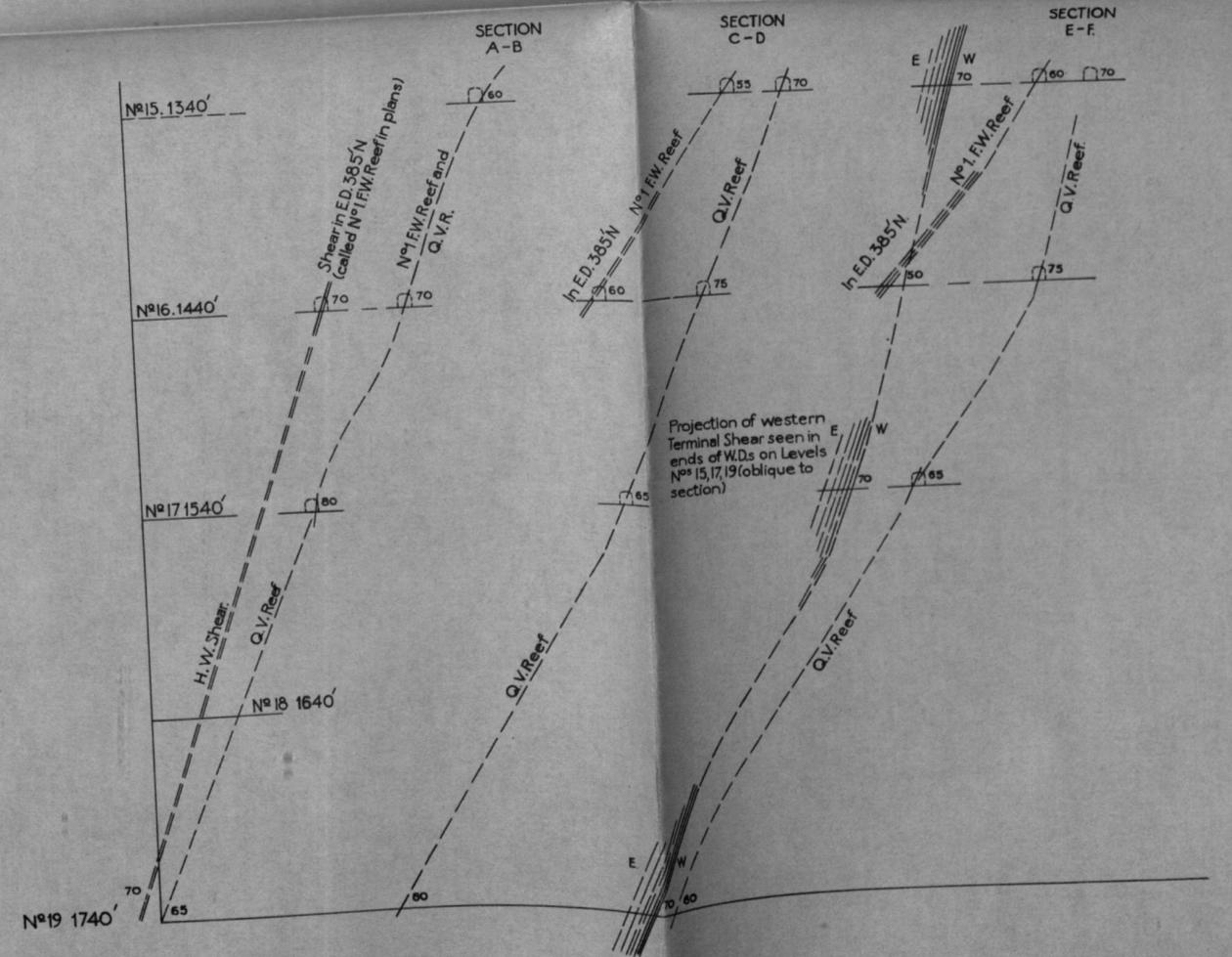


Fig. 14.—No. 1 Footwall and Quartz Vein Reefs, Rosterman Mine

N.W.

S.E.

NX164E

ED. 234 N

N°4 LEVEL 642 FT.

KAVIRONDIAN SYSTEM



Felspathic grits.



Felspathic grits with many intercalated slaty mudstone bands.

NYANZIAN SYSTEM



Andesitic & basaltic lavas.



Volcanic tuffs, some quartzose resembling the grits.



Minor Intrusives, porphyrite type.



Dolerite & epidiorite.



Shear-zone.

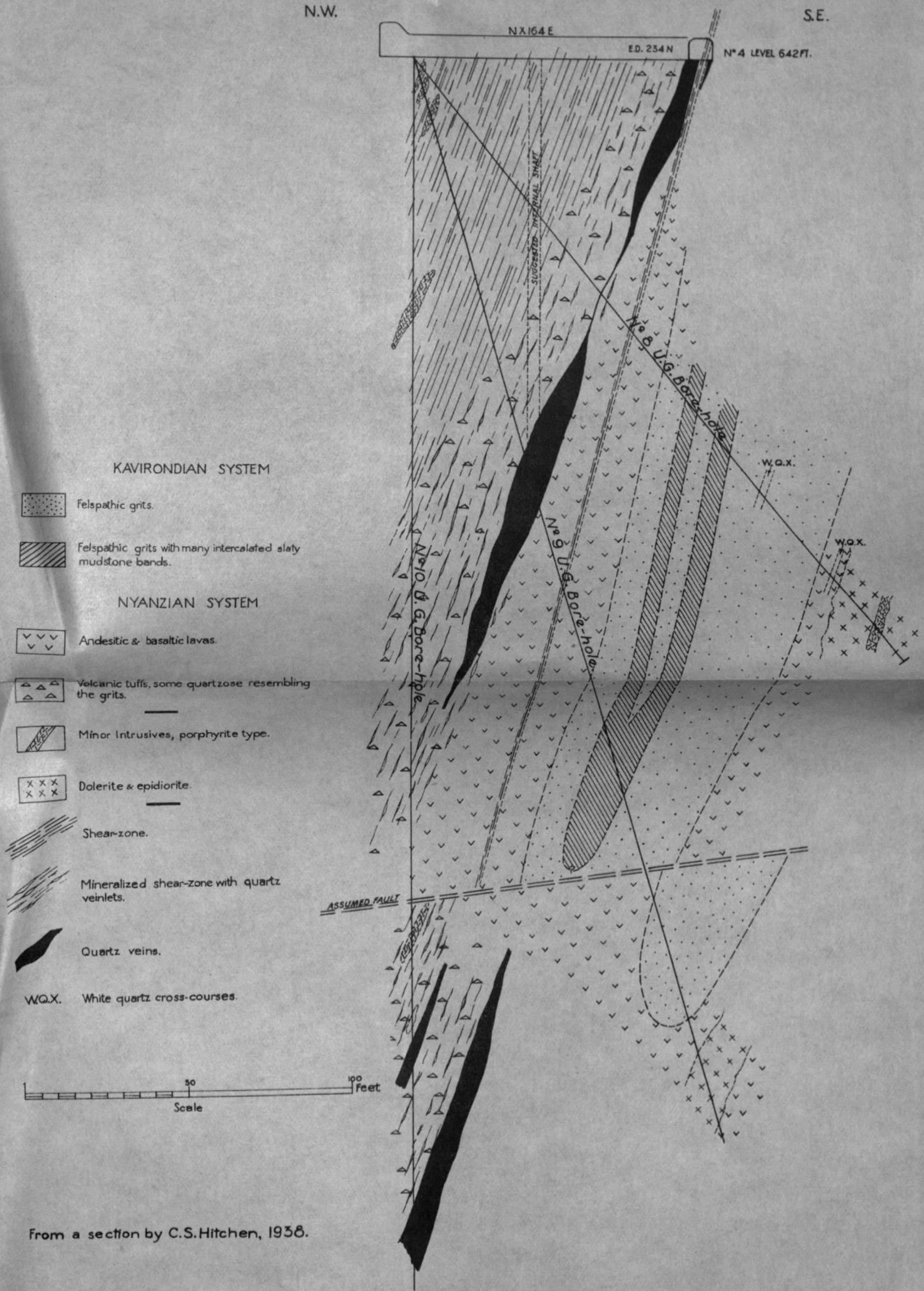
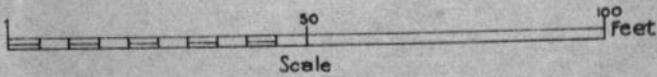


Mineralized shear-zone with quartz veinlets.



Quartz veins.

W.Q.X. White quartz cross-courses.



From a section by C.S.Hitchen, 1938.

Fig. 22.—Inferred geological section, Kimingini Mine

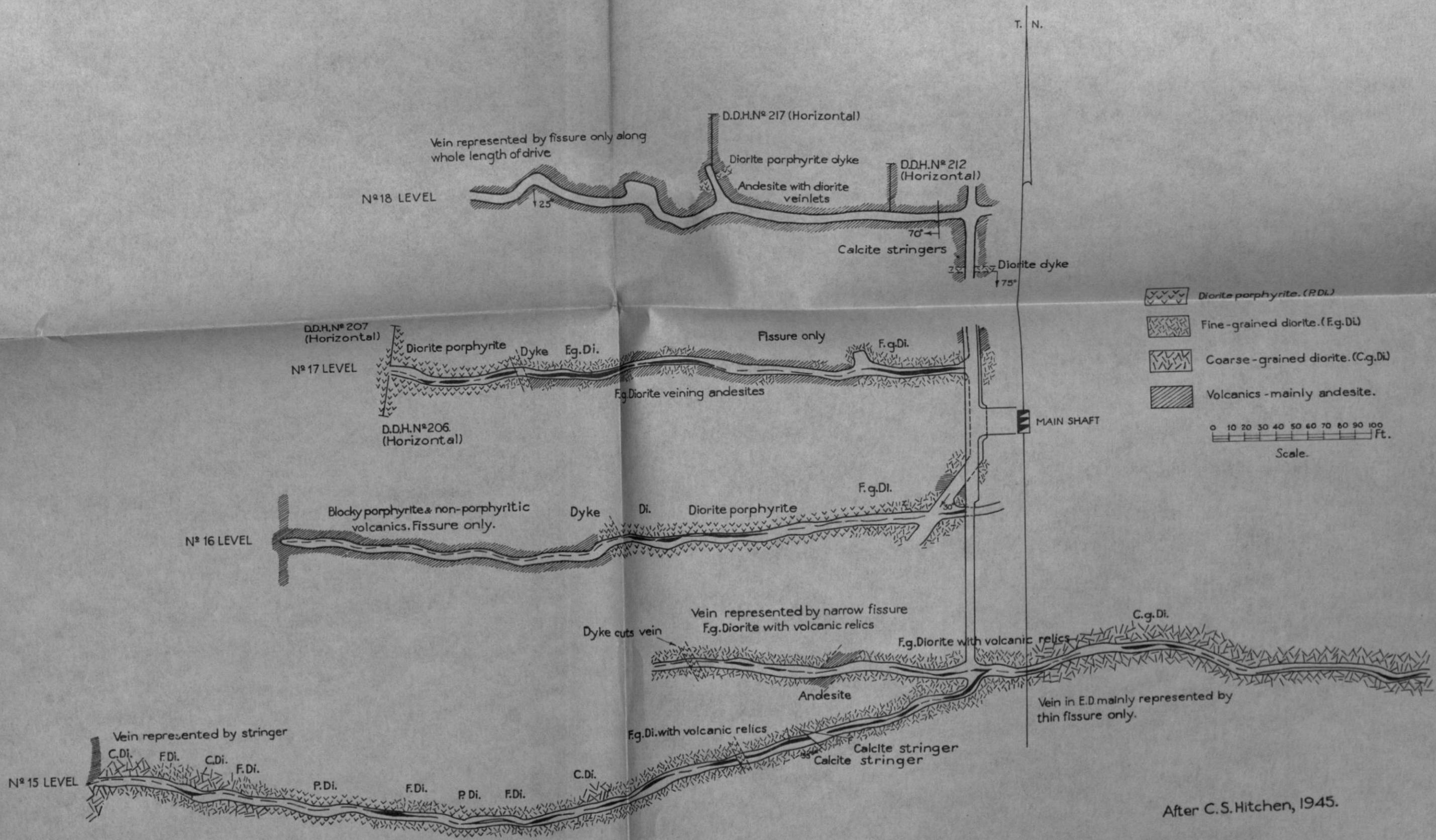
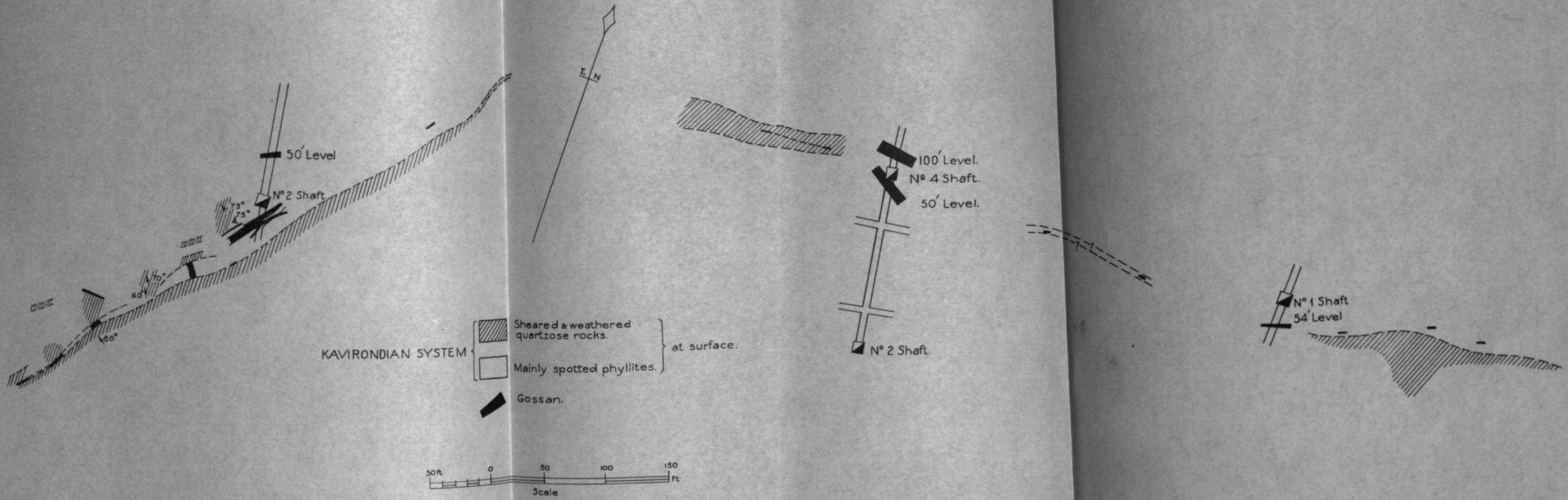


Fig. 15.—No. 3 Footwall Reef, Rosterman Mine, 15th to 18th levels
11th to 15th levels

After C. S. Hitchen, 1945.



Compiled from plans by W. Pulfrey, 1934.

Fig. 23.—Geological sketch plan, Kaimosi prospect

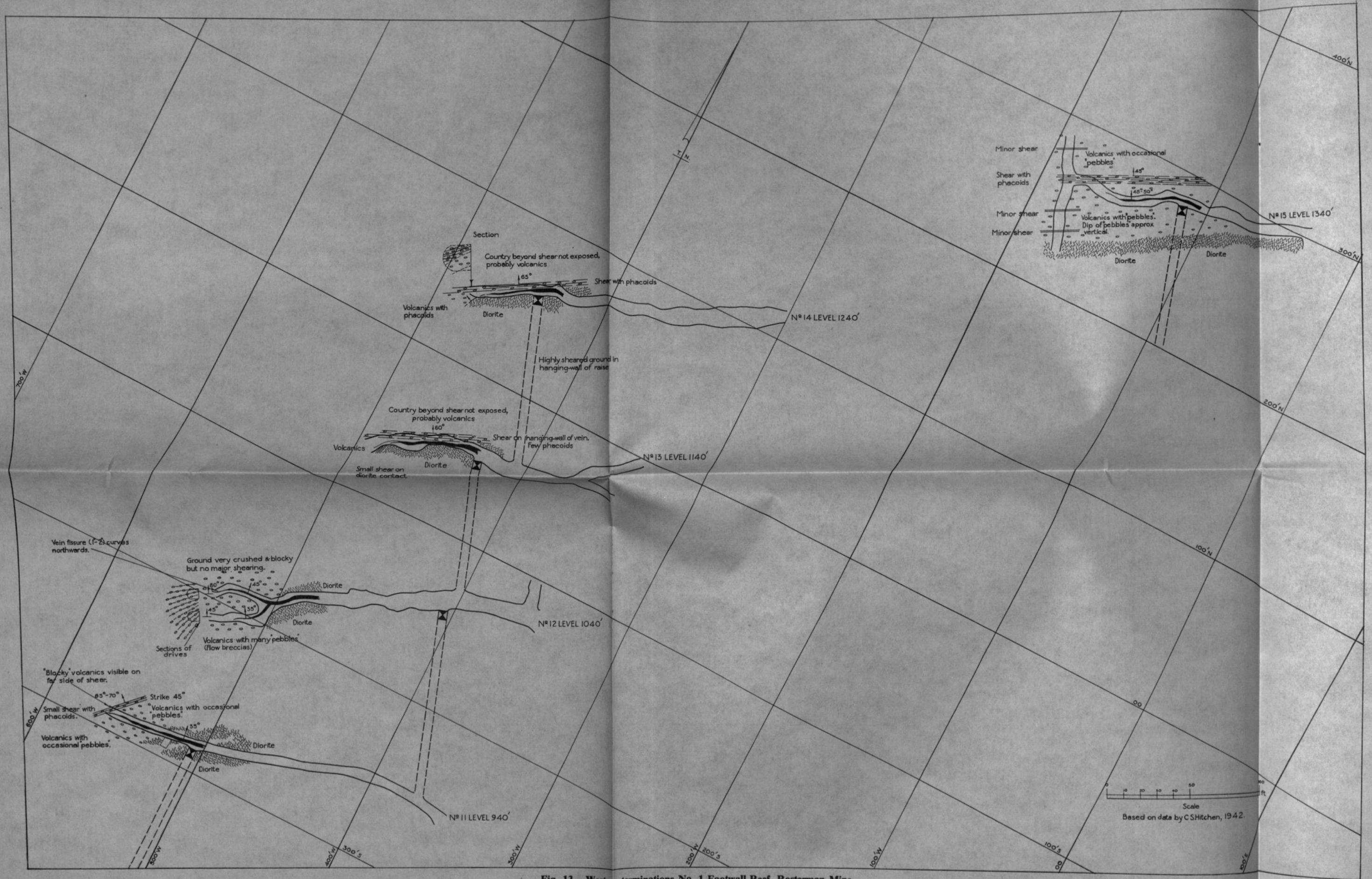


Fig. 13.—Western terminations No. 1 Footwall Reef, Rosterman Mine,

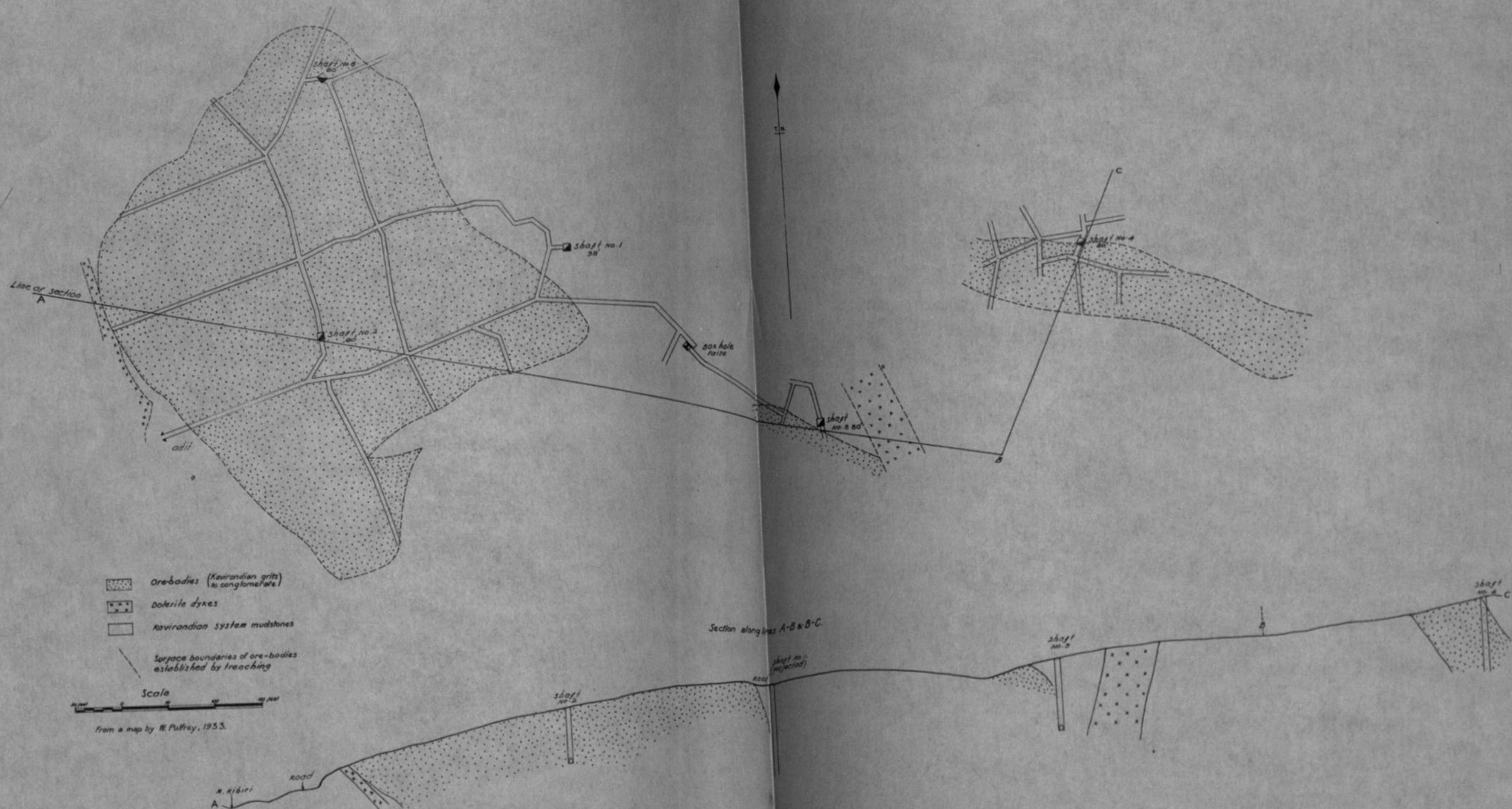


Fig. 10.—Kibiri Mine, sketch plan of surface and adit level

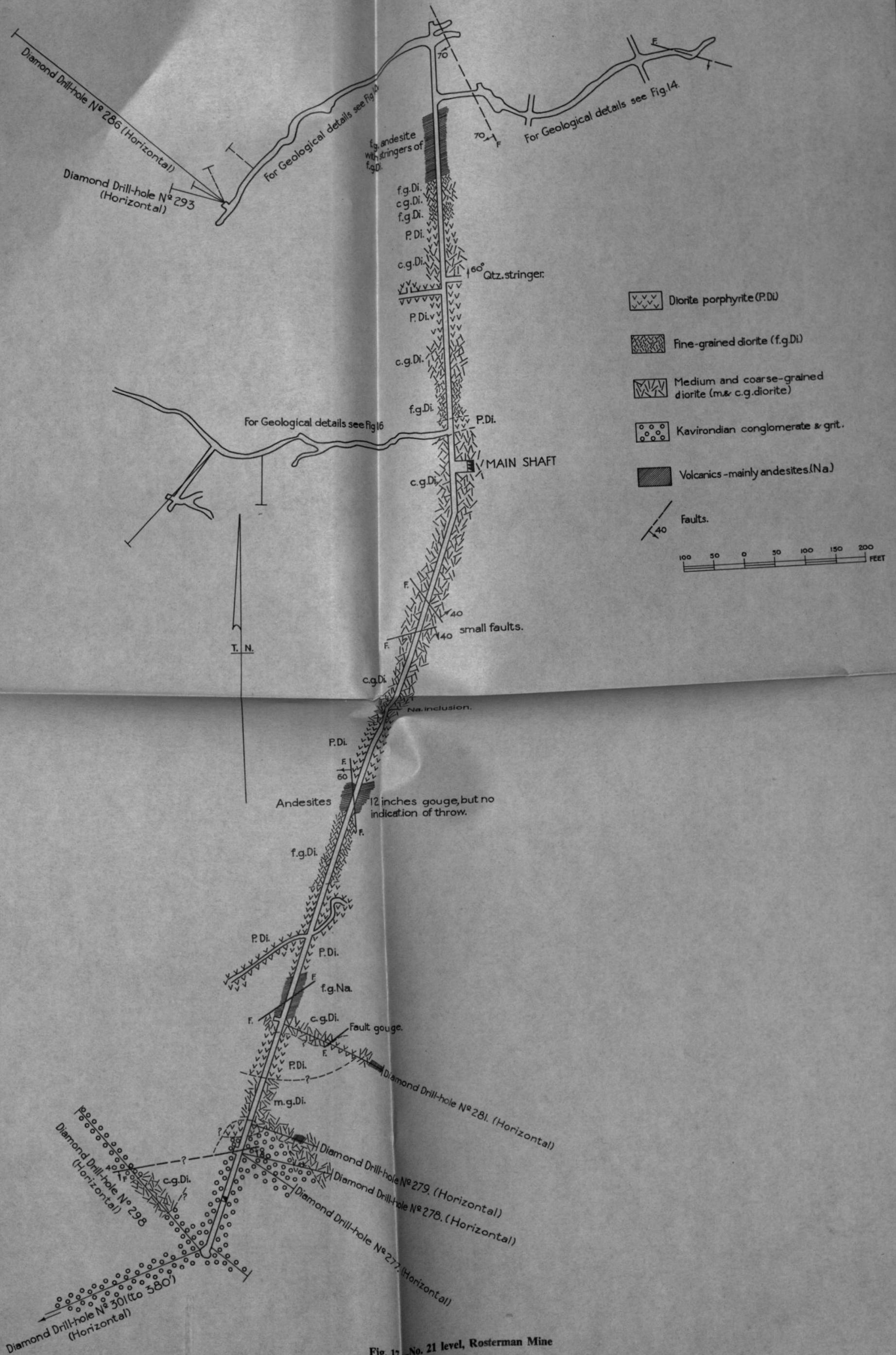


Fig. 17. - No. 21 level, Rosterman Mine

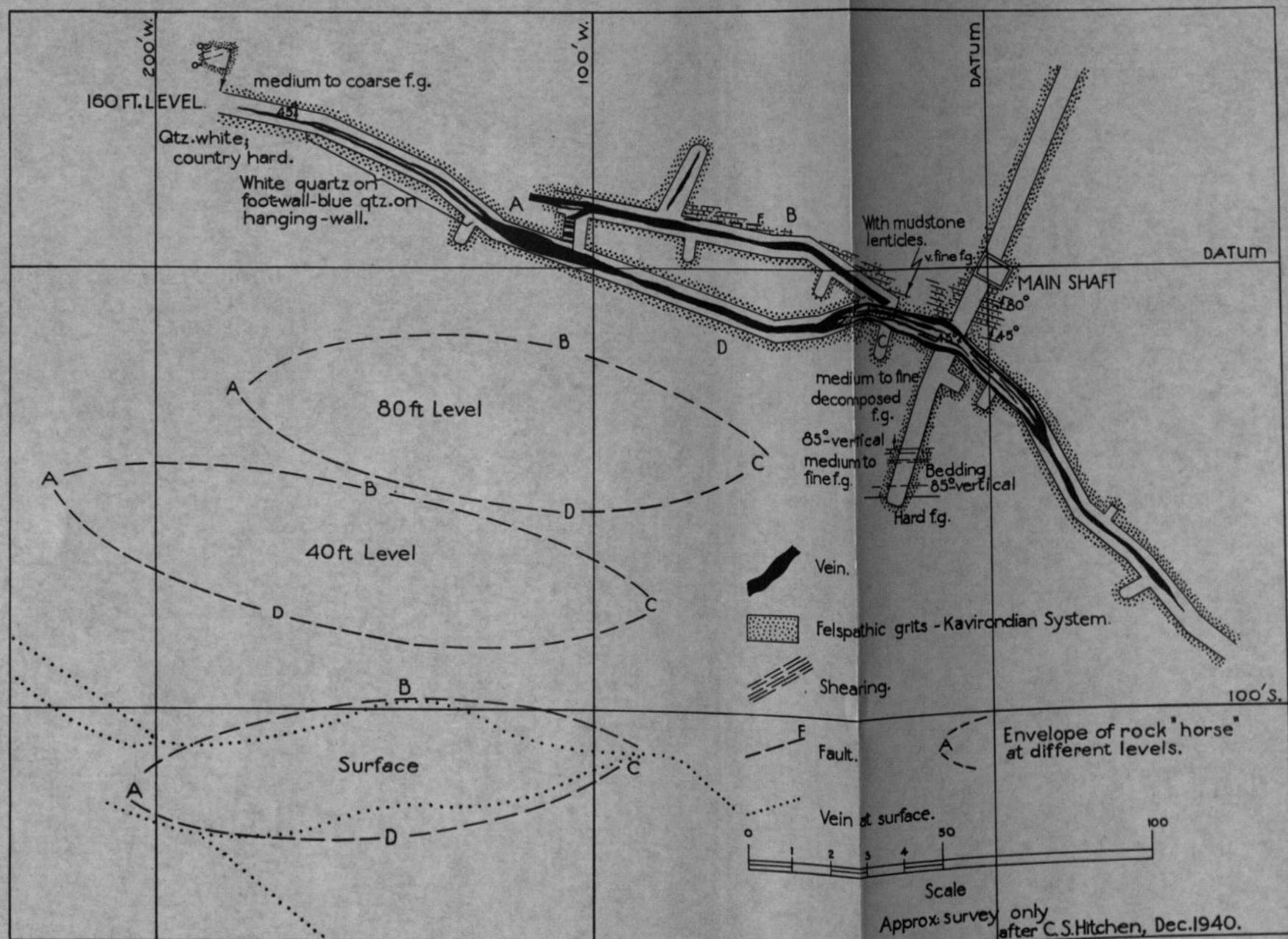


Fig. 19.—No. 2 Vein, Muchang Mine

○ ▽ Shaft to 60ft Level.

N^o 2 VEIN.

○ Old T.C.L. Shaft
(site of)

▽ N^o 2 Main Shaft

Incline

160 FT. LEVEL.

Vein at surface

▽ New inclined shaft

80 FT. LEVEL.

○ Old incline (site of)

○ Old T.C.L. Shaft

40 FT. LEVEL.

○ Round Shaft

Quartz Vein

Belt of mineralized mudstone - (gossanous phyllite)

T. N.

N^o 3 VEIN

□ Ventilation raise.

Kati-Kati

○ N^o 3 East

40 FT. LEVEL.

▽ N^o 3 West

80 FT. LEVEL.

150 FT. LEVEL.

215 FT. LEVEL.

▽ N^o 3 Main Shaft

0 2 4 6 8 100 200 Feet

Scale.

(Approximate survey only)

C.S. Hitchen,
December 1940.

Fig. 18.—Plan of veins, Muchang Mine

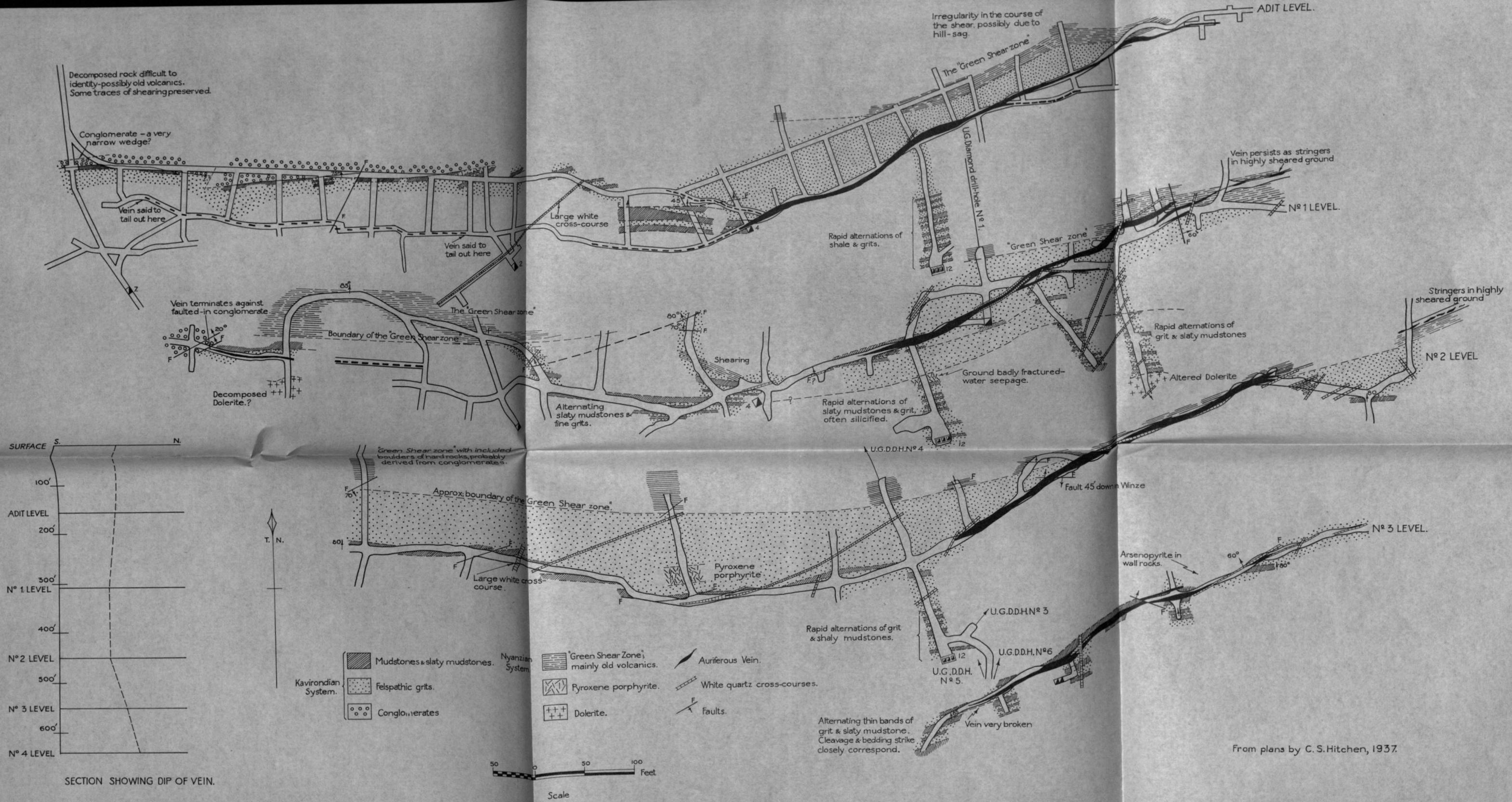


Fig. 21.—Composite geological sketch plan, Kimingini Mine

GEOLOGICAL MAP OF THE KAKAMEGA AREA

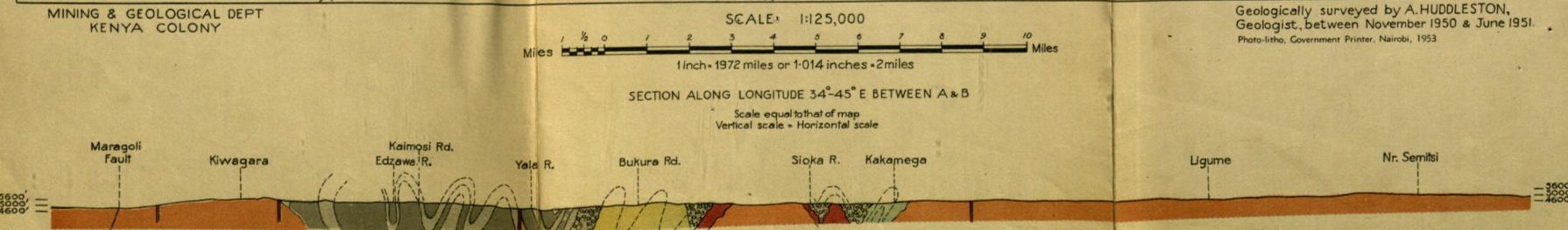
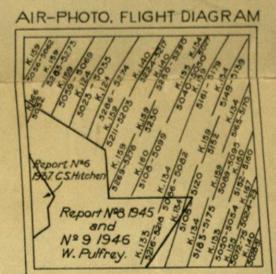
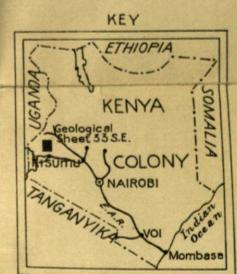
(DEGREE SHEET 33, S.E. QUADRANT.)



EXPLANATION

- RECENT
 - Alluvium
- TERTIARY
 - Phonolites
- KAVIRONDIAN SYSTEM
 - Kavirondian, undifferentiated.
 - Mudstones.
 - Grits.
 - Conglomerates.
- PRE-CAMBRIAN
 - Nyanzian System
 - Basalts.
 - Andestic tuffs.
 - Andesites.
 - Rhyolitic tuffs.
 - Rhyolites.
- ARCHAEAN
 - Basement System
 - Granitoid gneisses *Xn*, augen gneisses *Xna*, mylonites *Xg*, with minor developments of quartz-muscovite schists *Xsm*, and hornblende schists *Xah*.
- POST-KAVIRONDIAN
 - Major Intrusives
 - Leucocratic granites.
 - Mumias & Maragoli granites, contaminated granites, & sheared granites.
 - Adamellites.
 - Syenites, syenodiorites, & diorites.
 - Minor Intrusives & Hybrids
 - Younger quartz & olivine dolerites, dolerites, & lamprophyres.
 - Quartz porphyry, granite porphyry, & diorite porphyrites.
 - Alaskite granites.
 - Syenite, syenodiorite, & diorite hybrids.
 - Epidiorites.
- POST-NYANZIAN
 - Giant white quartz veins.
 - Geological boundaries, approximate.
 - Dip of beds, \times Vertical beds, \nearrow Dip of foliation.
 - Faults, inferred.
 - Structure lines inferred from aerial photos.
- Trigonometrical stations. \triangle 5390 Spot height in feet.
- Form-lines at 200-ft. vertical intervals.
- Main roads \equiv Other roads & tracks motorable at time of survey
- Shafts, ∇ Adits, \times Working mine, \times Mine not working, sm . Saw-mill.
- R.C. Roman Catholic Mission, F.A.M. Friends African Mission.
- Sch. School, Ho. House, P.P. Police Post, Disp. Dispensary.
- Principal points of aerial photographs.

Topography based on Ordnance Map S.A. 36/W, Scale 1:250,000, G.S.G.S. 1916; Kakamega sheet, 1:62500, 1933, & aerial photos. Declination 3°W.



Geologically surveyed by A. HUDDLESTON, Geologist, between November 1950 & June 1951. Photo-litho, Government Printer, Nairobi, 1953

