Semi_detailed_survey_area
Geological Section Lines
Ore deposits and Prospects
- Porphyry-Cu
- Porphyry-Cu, Mo
- Porphyry-Cu, Au
- Vein and Irregular-Cu
- Vein-Mo
- Vein-Au
- Vein-Ag, Pb, Zn
- Vein-Sb
- Vein and Irregular-Fe
- Vein and Irregular-Mn
- Unknown-Cu
- Unknown-Au
- Unknown-Ag, Pb, Zn

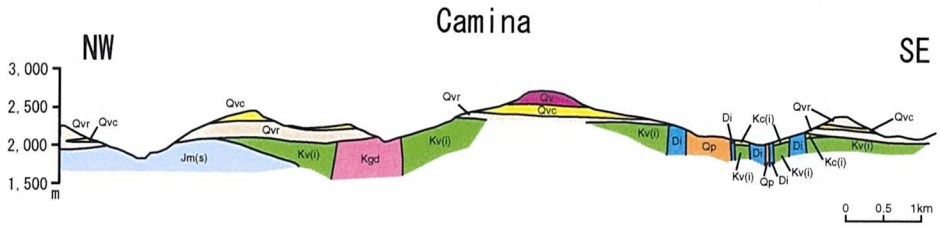
Medium wavelength high anomaly
Medium wavelength low anomaly
Short wavelength high anomaly
Short wavelength low anomaly
Intermediate RTP (24,475-24,525 nT)

Geomap_Camina
- Ql (Recent landslide deposit)
- Qal (Recent sediments)
- Qv (Quaternary-Tertiary volcanics)
- Qvc (Quaternary-Tertiary sediments)
- Qvr (Quaternary-Tertiary ignimbrite)
- Kc(i) (Cretaceous sediments)
- Kv(i) (Cretaceous volcanics)
- Jm(s) (Jurassic Malm sediments)

Intrusive rocks
- Qp (Quartz porphyry)
- Di (Diorite)
- Kgd (Cretaceous granodiorite)

440,000 450,000 460,000
7,870,000
7,860,000
N W E S
Camina
Quistagama
Llama
MOQUELLA
0 2 4 6 km

Fig. 2-2-62 Geological Map of the Camina Area



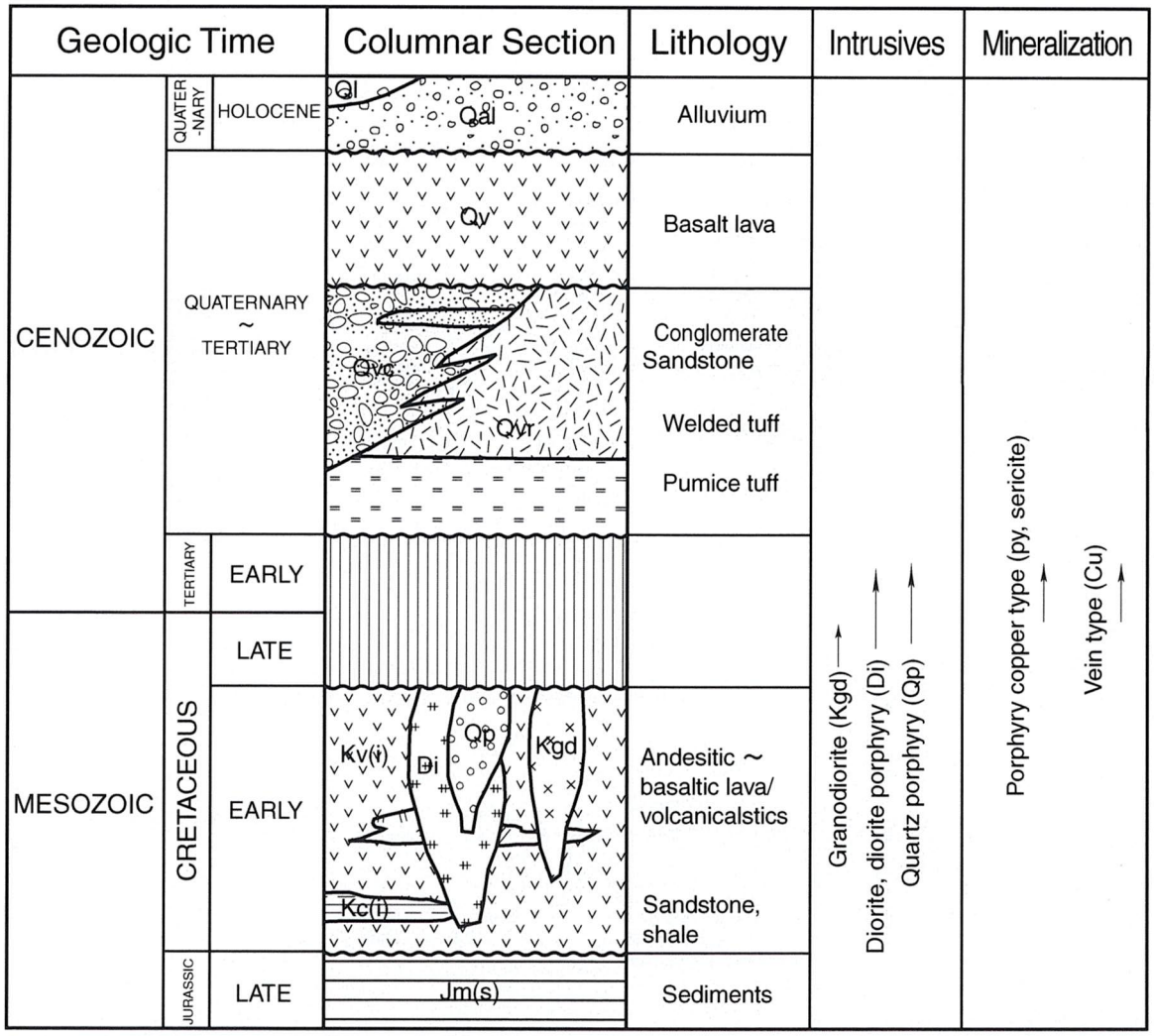


Fig.2-2-63 Schematic Stratigraphic Columns and Profiles of the Camina Area

Mineralization
- Pyritization
- Cu-oxide
- Cu-sulfide
- Molybdenite
- Oxidation
- Native sulfur
- Barite-limonite vein
- none
- Semi_detailed_survey_area
- Geological Section Lines

Ore deposits and Prospects
- Porphyry-Cu
- Porphyry-Cu, Mo
- Porphyry-Cu, Au
- Vein and Irregular-Cu
- Vein-Mo
- Vein-Au
- Vein-Ag, Pb, Zn
- Vein-Sb
- Vein and Irregular-Fe
- Vein and Irregular-Mn
- Unknown-Cu
- Unknown-Au
- Unknown-Ag, Pb, Zn

Geomap_Camina
- Ql (Recent landslide deposit)
- Qal (Recent sediments)
- Qv (Quaternary-Tertiary volcanics)
- Qvc (Quaternary-Tertiary sediments)
- Qvr (Quaternary-Tertiary ignimbrite)
- Kc(i) (Cretaceous sediments)
- Kv(i) (Cretaceous volcanics)
- Jm(s) (Jurassic Malm sediments)

Intrusive rocks
- Qp (Quartz porphyry)
- Di (Diorite)
- Kgd (Cretaceous granodiorite)

440,000 450,000 460,000

7,870,000

7,860,000

N W E S

Camina

Nama

Quistagama

0 2 4 6 km

Fig. 2-2-64 Mineralization Map of the Camina Area

Alteration
- Silicification
- Acid alteration
- Sericitization
- Propylitization
- Potassic alteration
- Tourmalinization
- none
- Semi_detailed_survey_area

Geomap_Camina
- Ql (Recent landslide deposit)
- Qal (Recent sediments)
- Qv (Quaternary-Tertiary volcanics)
- Qvc (Quaternary-Tertiary sediments)
- Qvr (Quaternary-Tertiary ignimbrite)
- Kc(i) (Cretaceous sediments)
- Kv(i) (Cretaceous volcanics)
- Jm(s) (Jurassic Malm sediments)

Intrusive rocks
- Qp (Quartz porphyry)
- Di (Diorite)
- Kgd (Cretaceous granodiorite)

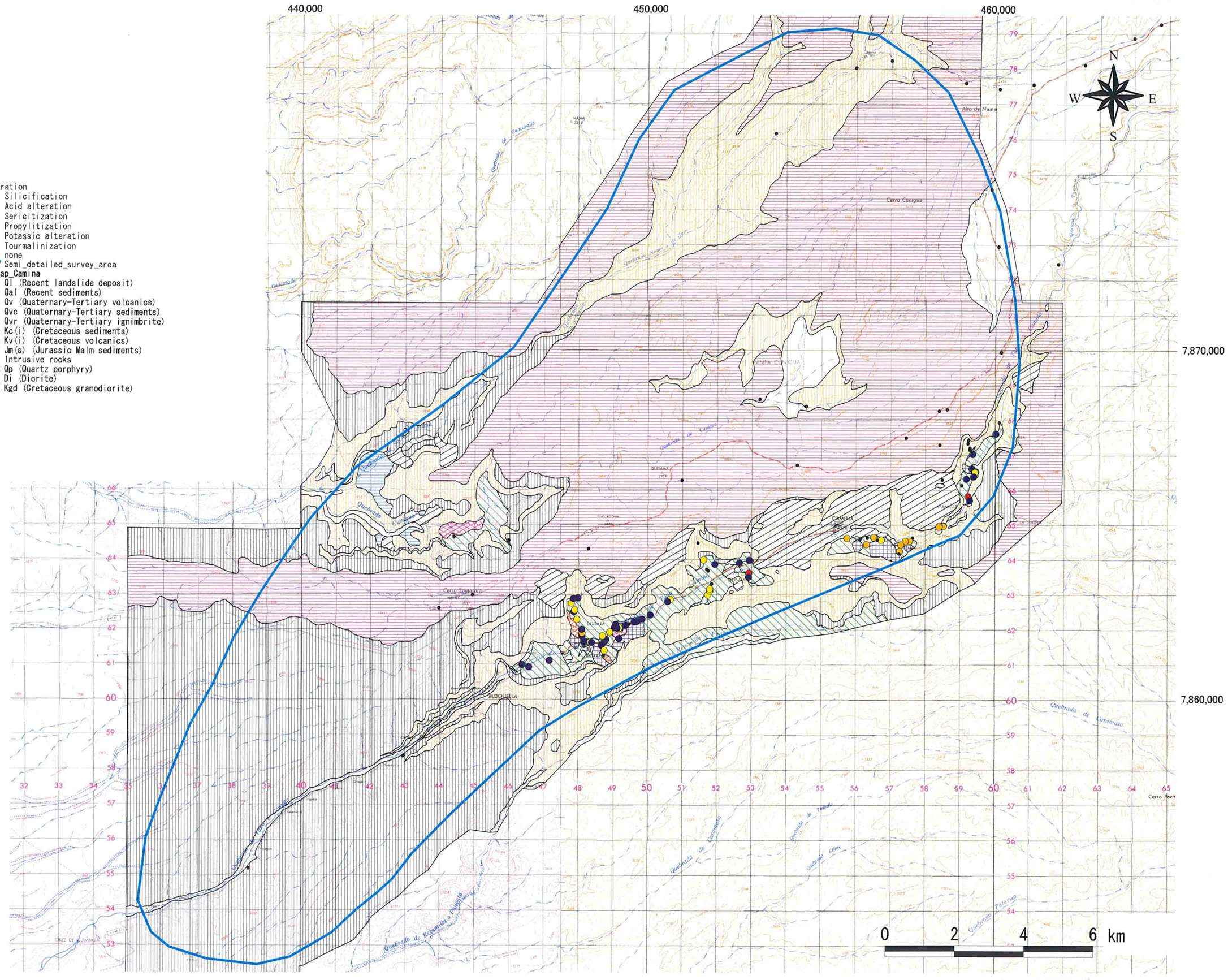


Fig. 2-2-65 Distribution Map of Alteration Minerals at the Camina Area

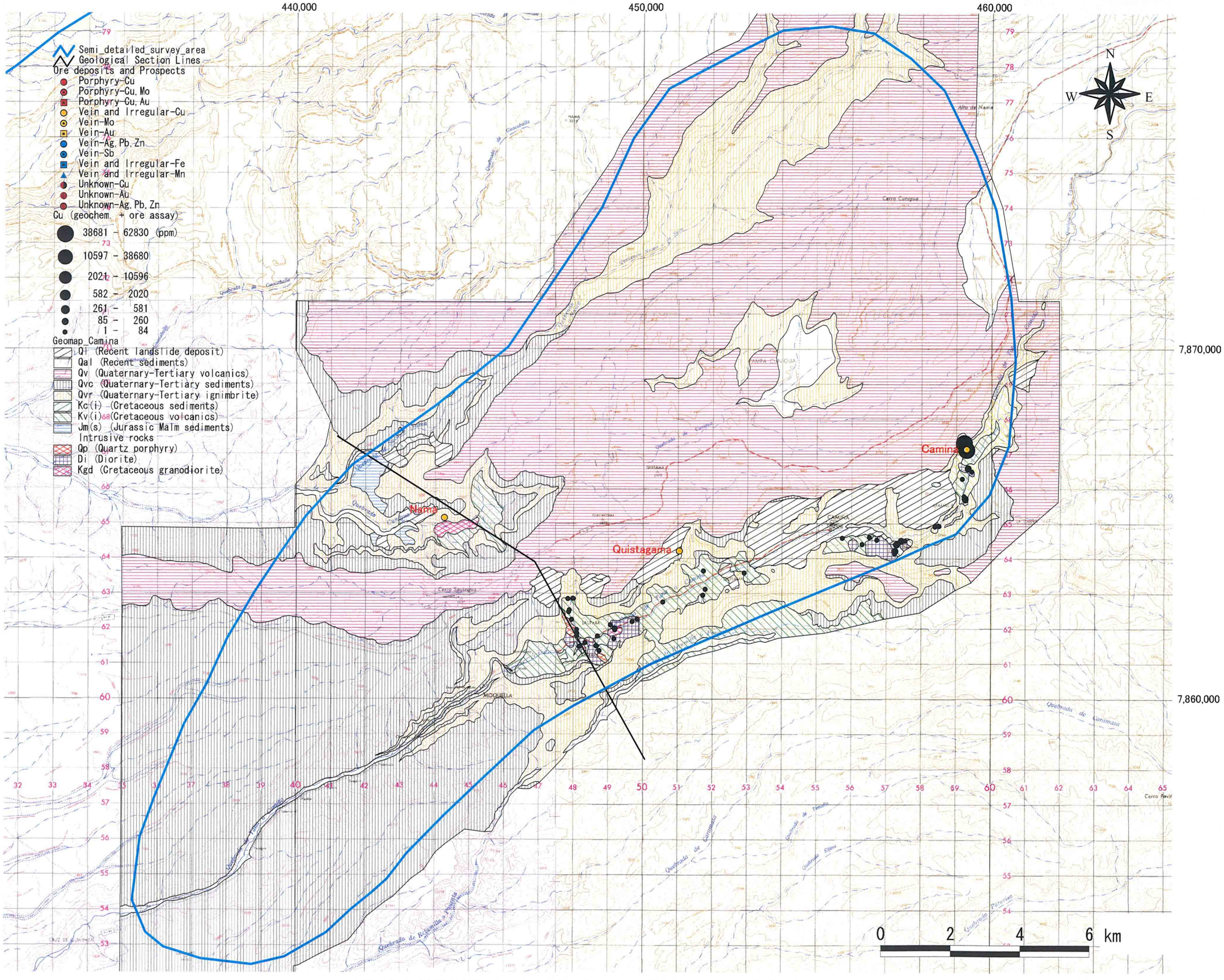


Fig. 2-2-66 (1) Geochemical Anomaly Map in the Camina Area (Cu)

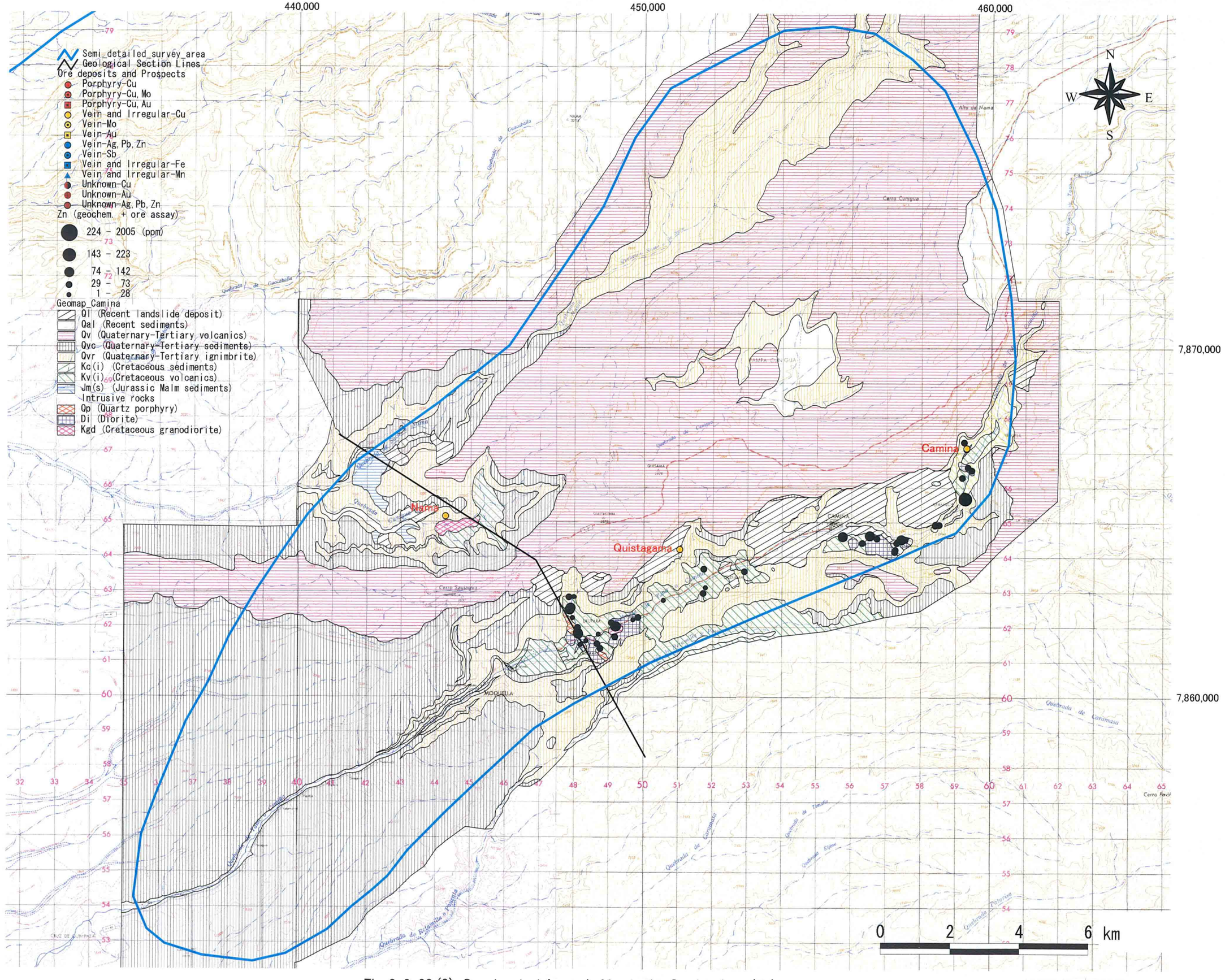


Fig. 2-2-66 (2) Geochemical Anomaly Map in the Camina Area (Zn)

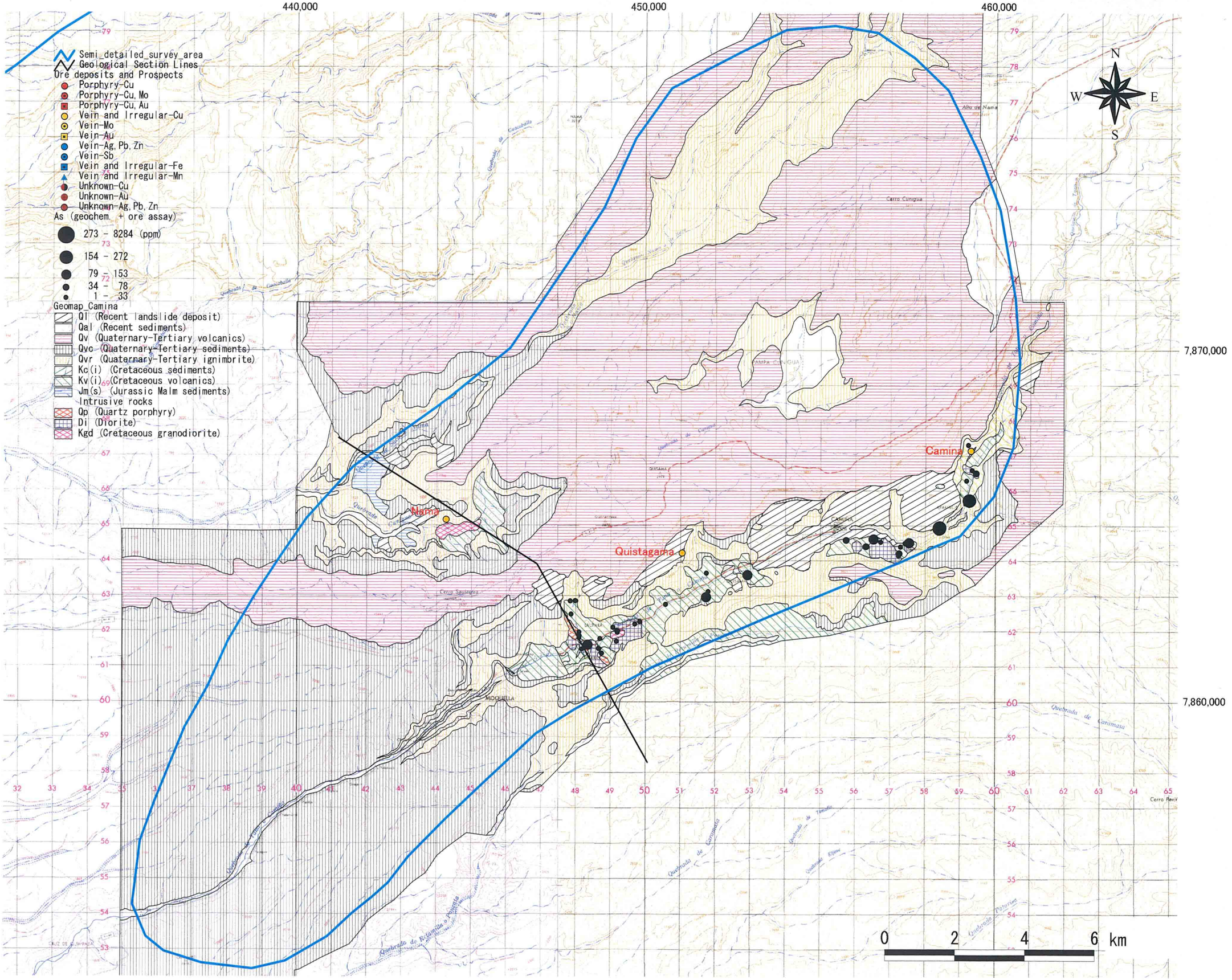


Fig. 2-2-66 (3) Geochemical Anomaly Map in the Camina Area (As)

Alteration zones and mineralized zones occur in the eastern and central parts of this area. Both occur in the granitic intrusive bodies and the vicinity.

The eastern alteration is silicification in the dioritic bodies and in the Cretaceous rocks in the vicinity, and the periphery is propylitized. Several veinlets containing malachite and chrysocolla are developed in the Cretaceous basaltic lava near diorite porphyry body at the eastern end of the area. This mineralized zone corresponds to the known prospect Camiña (Cu).

The alteration zone in the central part consists of strong sericitization-pyrite dissemination developed in quartz porphyry bodies arranged parallel in the N40W direction. The known prospect Quistagama (Cu) should be located nearby, but it was not confirmed. The above quartz porphyry body is directly overlain by Tertiary-Quaternary ignimbrite at both banks of Quebrada de Camiña. Linear milky white coarse-grained crystalline quartz veinlets are observed in Cretaceous andesite immediately bellow the ignimbrite on the north bank.

Cu prospect, Nama is reported to occur in granodiorite at 4km northwest of the central alteration zone.

Cu-Zn-As rock geochemical anomalies were detected in the eastern alteration zone.

All of the above alteration zones and mineralized zones are located within or the vicinity of intermediate magnetic intensity zone and medium wavelength and short wavelength anomalies of airborne magnetic survey.

2 - 14 District to the northeast of Camiña

A geological map of this area is shown in Figure 2-2-67, schematic geologic columns in Figure 2-2-68, distribution of altered minerals in Figure 2-2-69, and rock geochemical anomaly distribution in Figure 2-2-70.

The geology of this area consists of Tertiary System, Upper Tertiary-Quaternary System, and Quaternary System.

The Tertiary System is composed of Miocene-Pliocene ignimbrite (rhyolitic welded tuff) ·

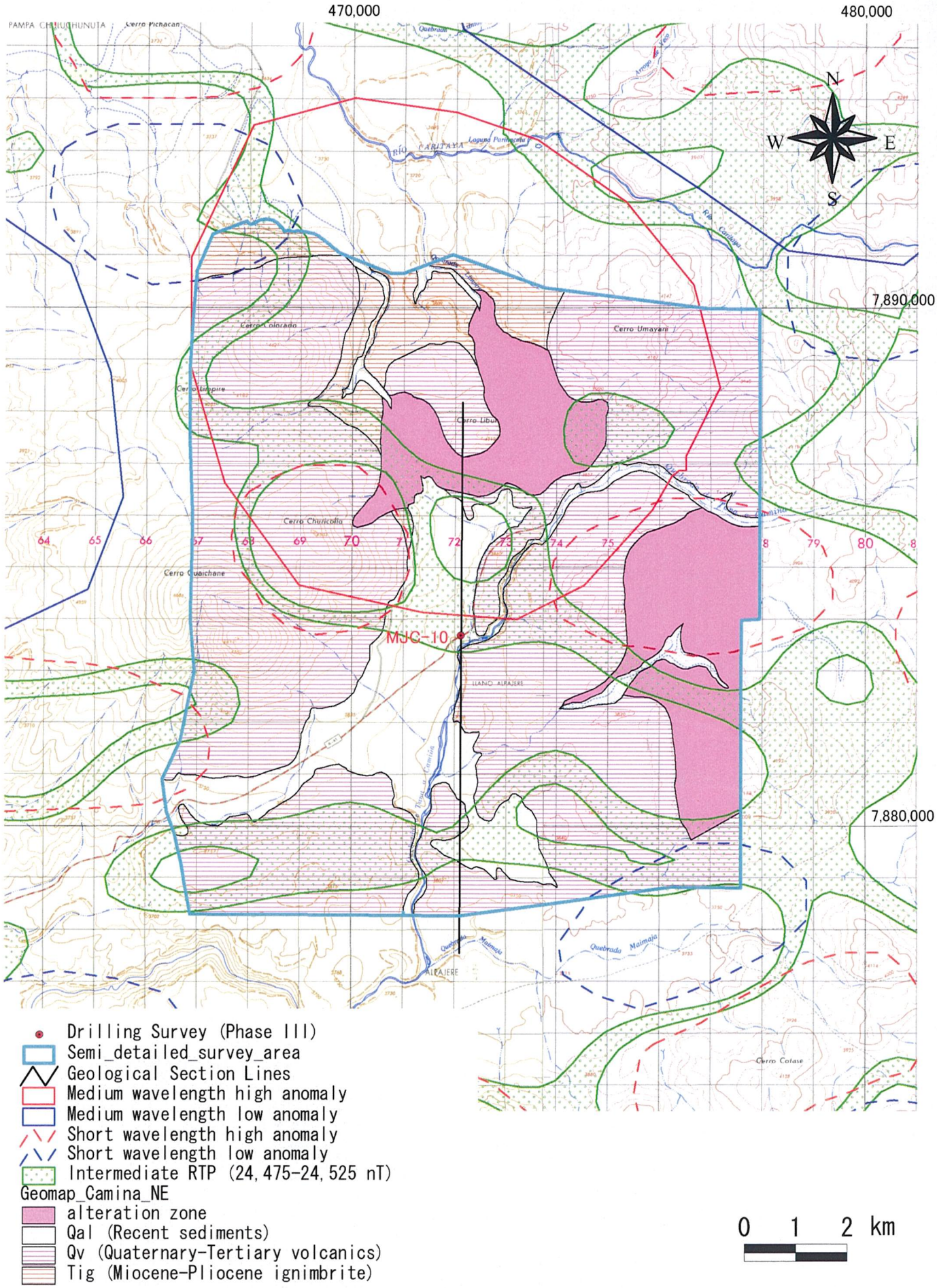
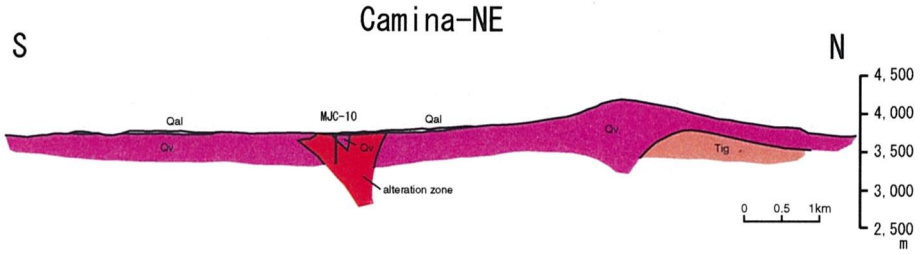


Fig. 2-2-67 Geological Map of the Area to the Northeast of Camina



Geologic Time			Columnar Section	Lithology	Intrusives	Mineralization
CENOZOIC	QUATER-NARY	HOLOCENE	Qal	Alluvium		Epithermal type ↑ (kaolin, silica, sericite)
	QUATERNARY ~ TERTIARY		Qv	Basalt~ andesite lava		
	TERTIARY	MIOCENE	Tig	Tuffacious ss. Welded tuff		

Fig.2-2-68 Schematic Stratigraphic Columns and Profiles of the Area to the Northeast of Camina

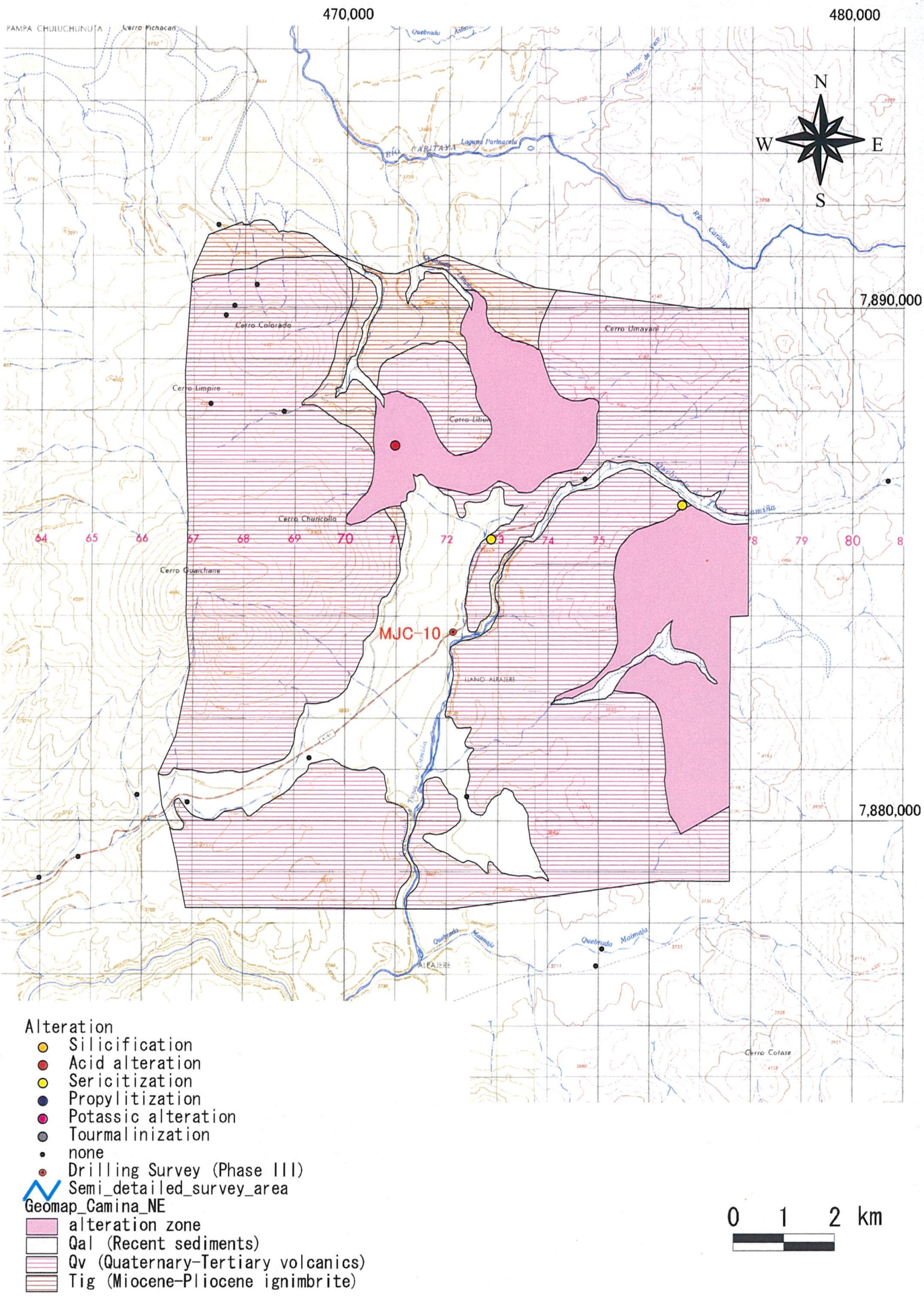


Fig. 2-2-69 Distribution Map of Alteration Minerals at the Area to the Northeast of Camina

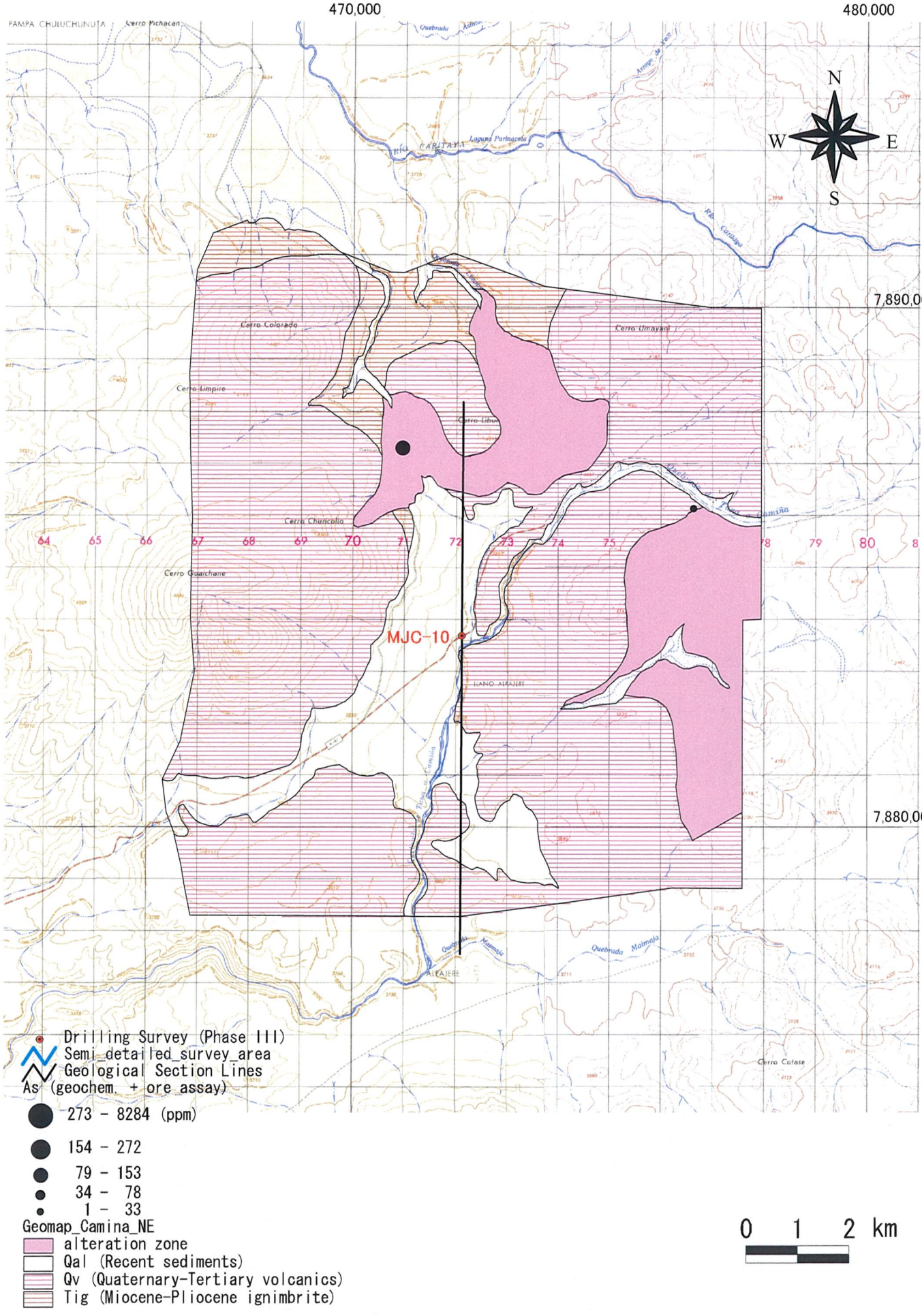


Fig. 2-2-70 (1) Geochemical Anomaly Map in the Area to the Northeast of Camina (As)