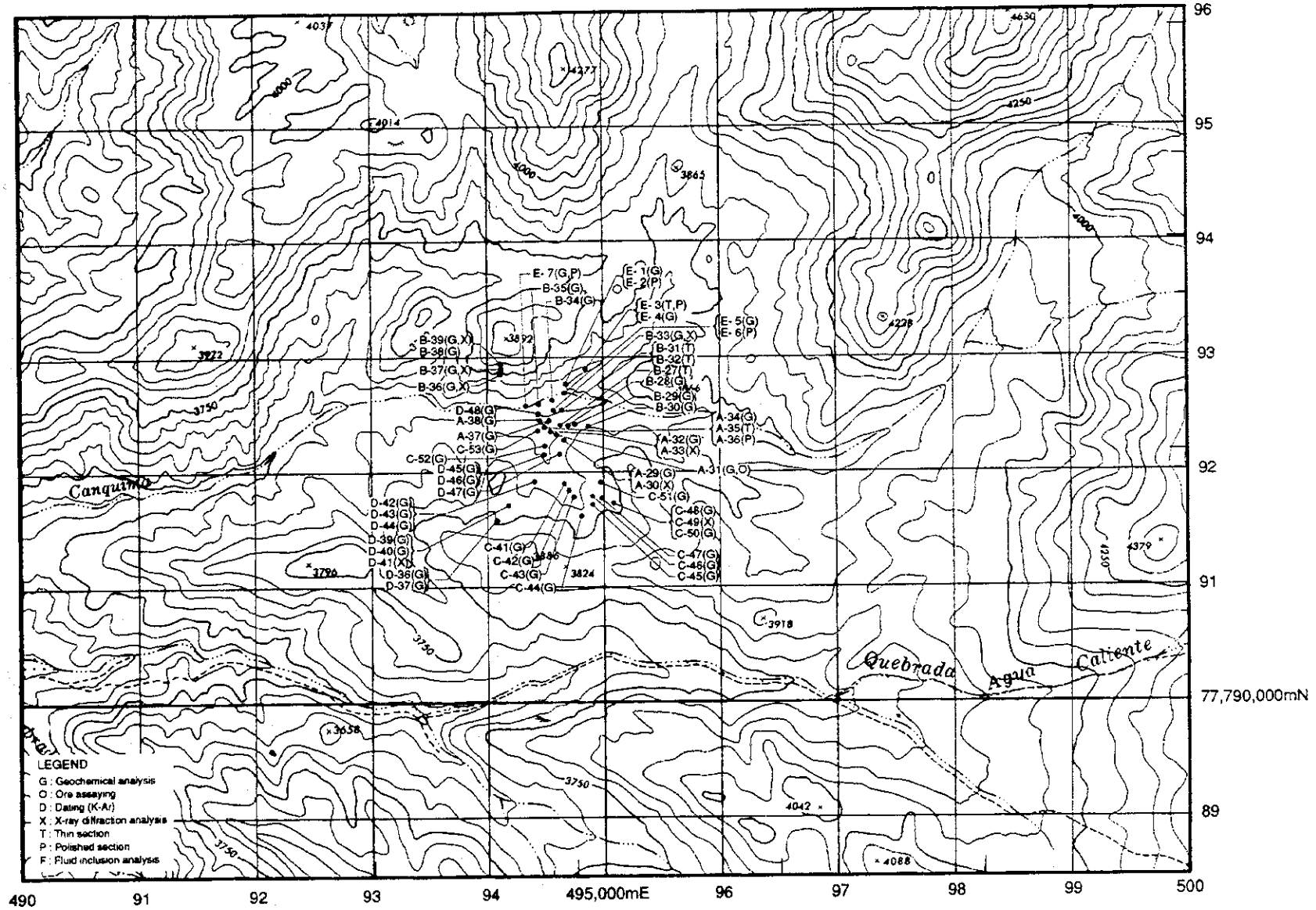


Fig.2-1-13 Sample Location Map of the Diana Area

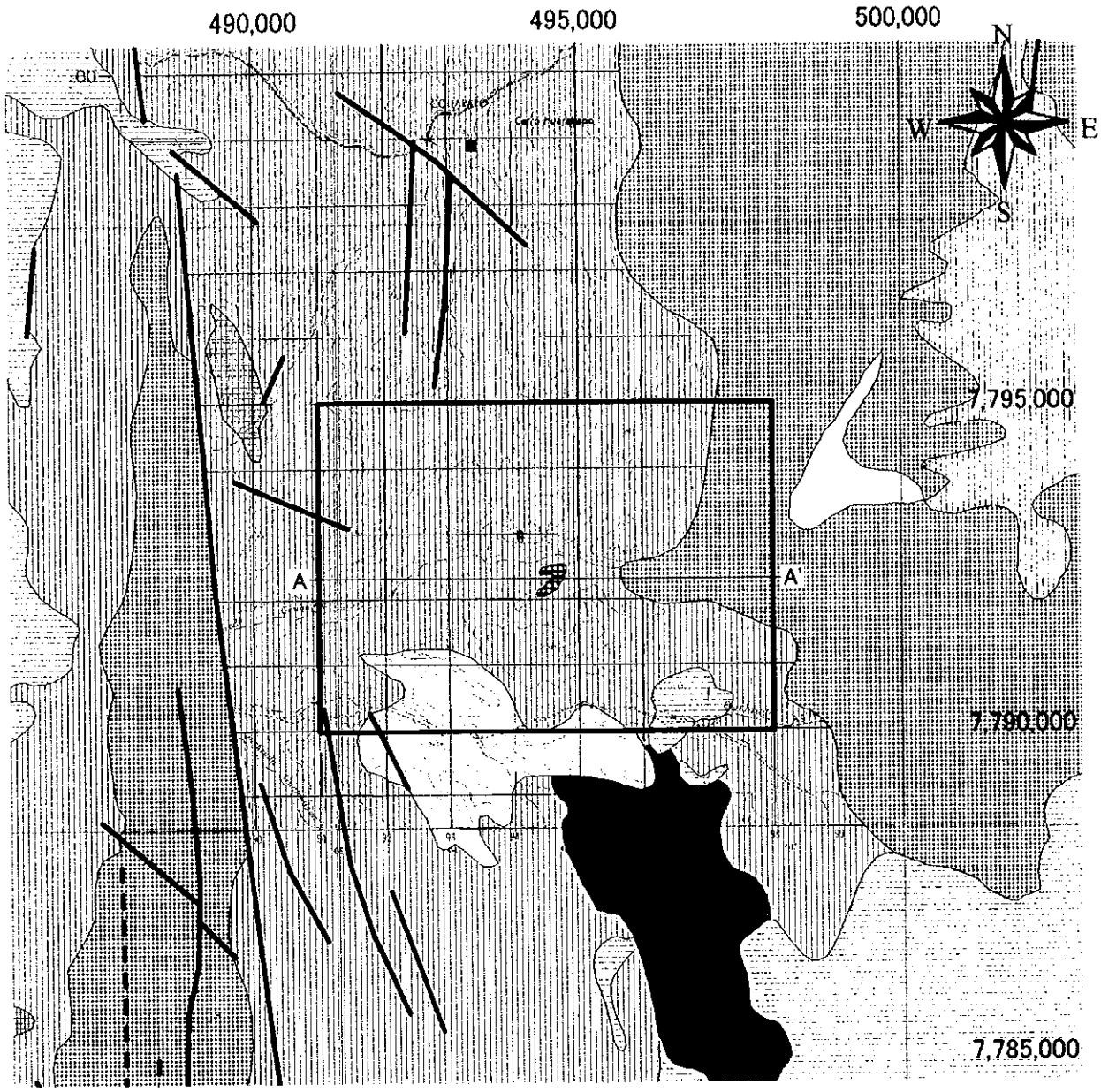
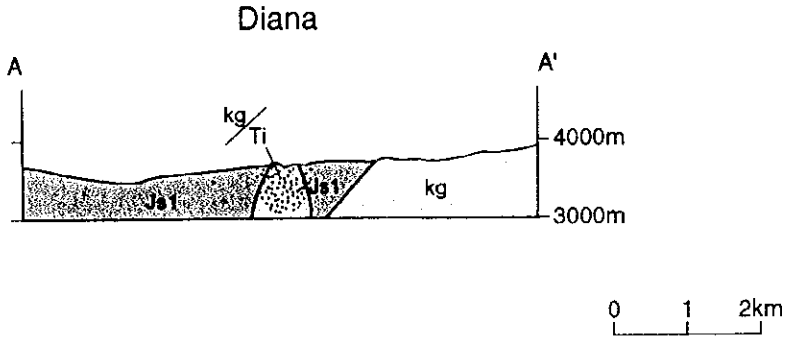


Fig. 2-1-14 Geological Map of the Diana Area



Geologic Time		Columnar Section	Lithology	Intrusives	Mineralization
CENOZOIC	QUATERNARY-LATE TERTIARY	Tv3	Andesitic~ Basaltic flow, pyroclastic rock	Granodiorite, Granite, Porphyry (Kg, Kg/Ti)	Porphyry copper type?
	EARLY TERTIARY				
	CRETACEOUS				
MESOZOIC	JURASSIC	Qs1 Kg Ti Js1 Kg	Meta-basalt, Meta-chert, Andesite, Siltstone and Quartzite		

Fig.2-1-15 Schematic Stratigraphic Columns and Profiles of the Diana Area

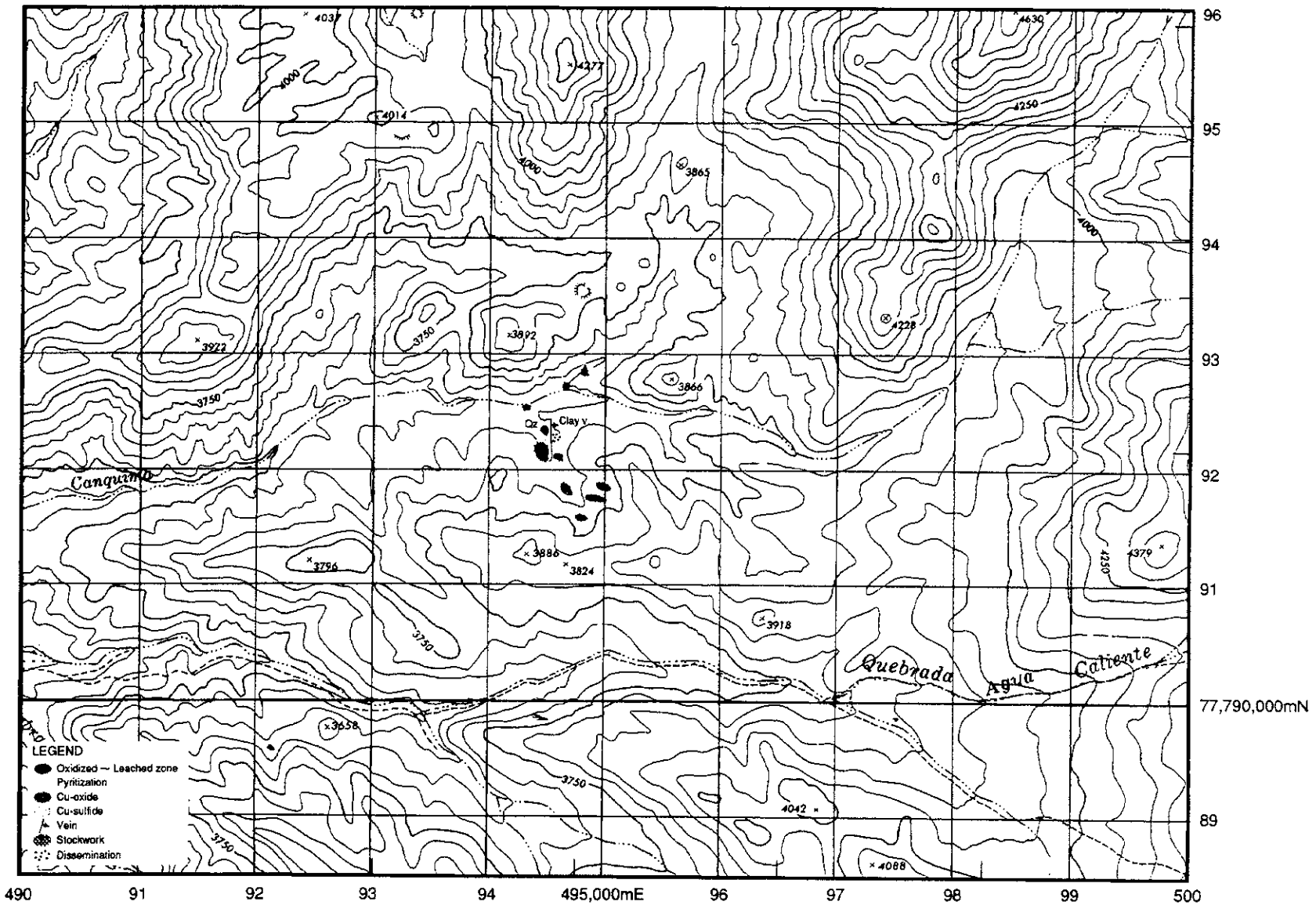


Fig.2-1-16 Mineralization Map of the Diana Area

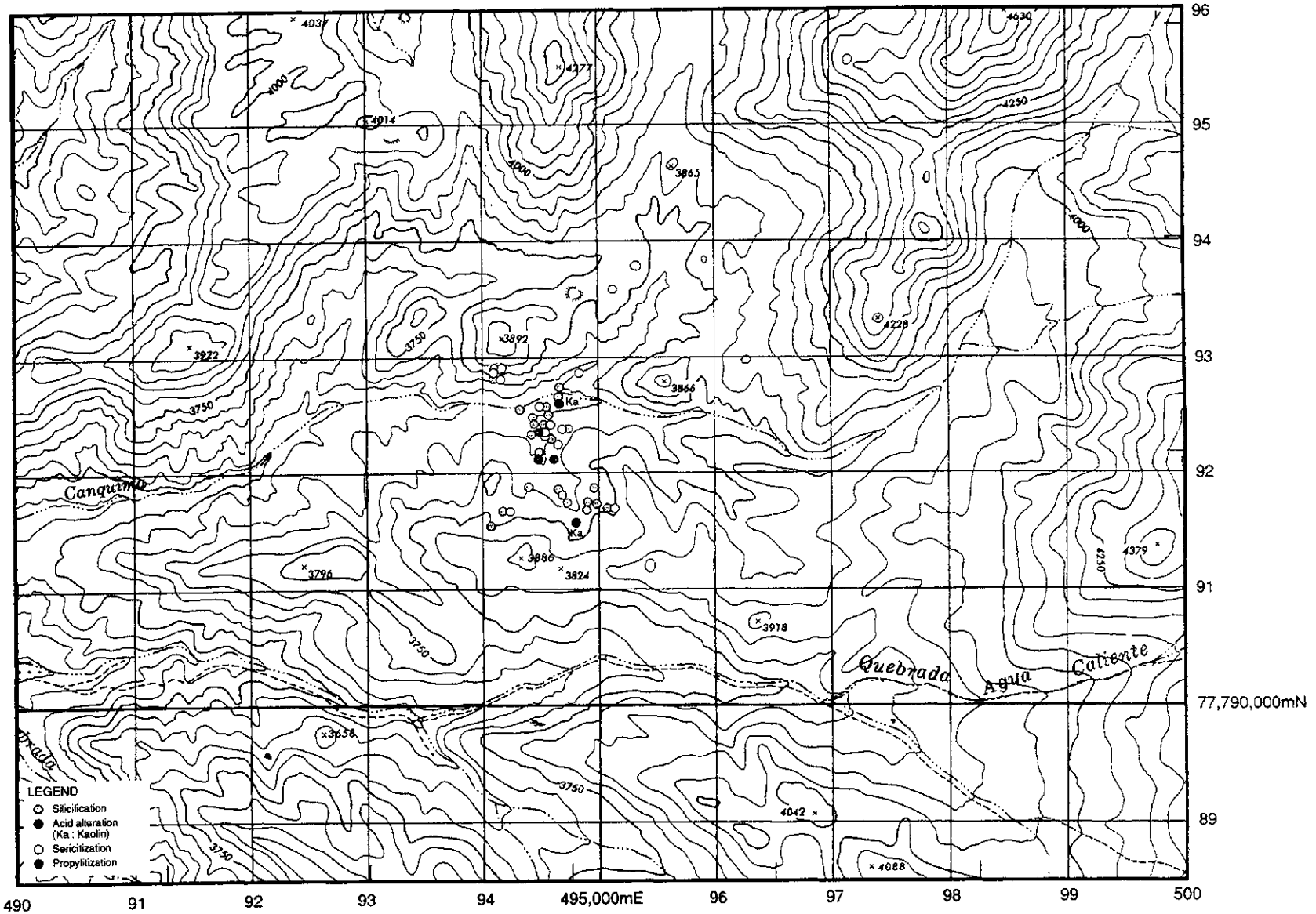


Fig.2-1-17 Distribution Map of Alteration Minerals the Diana Area

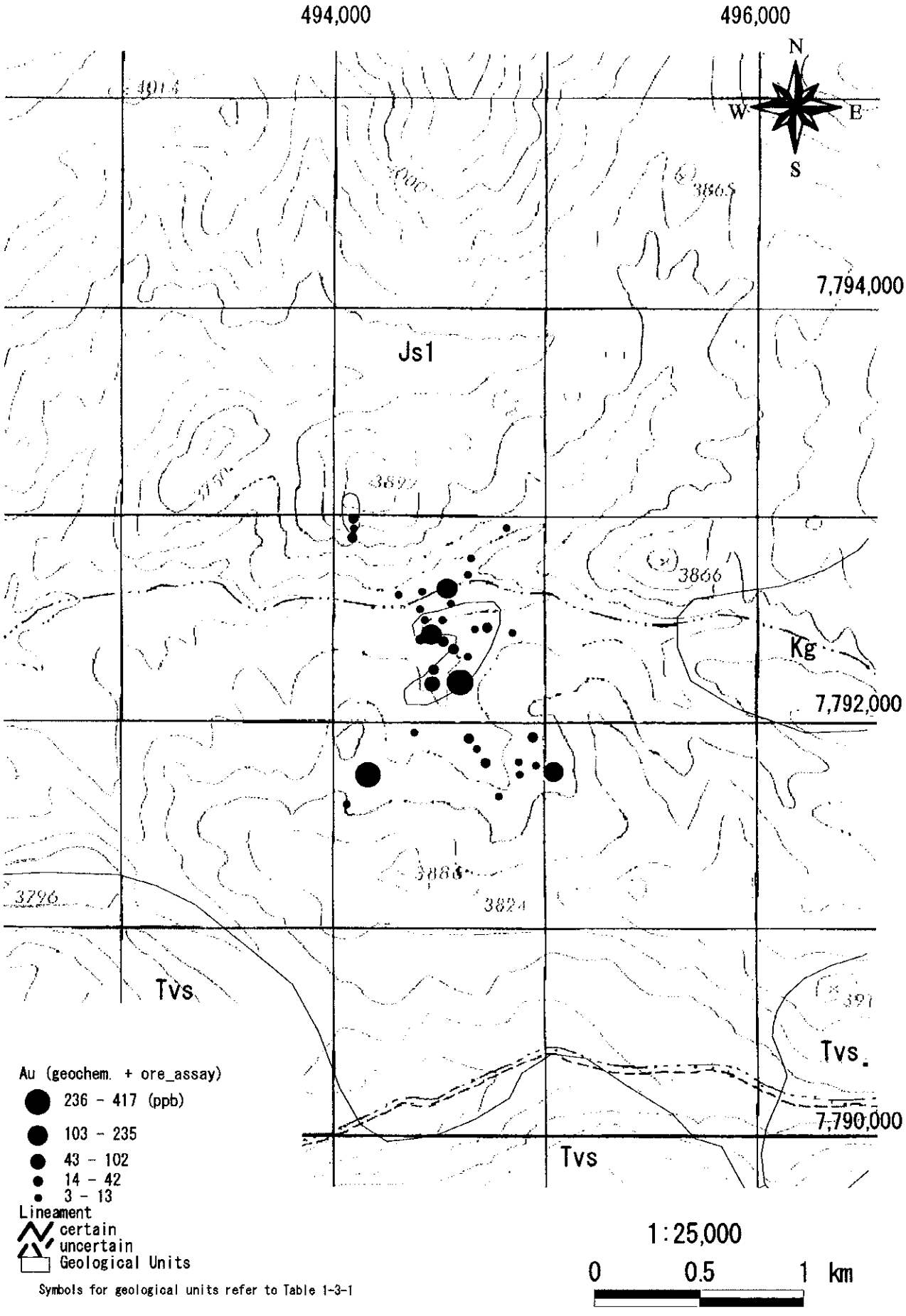


Fig. 2-1-18 (1) Geochemical Anomaly Map in the Diana Area (Au)

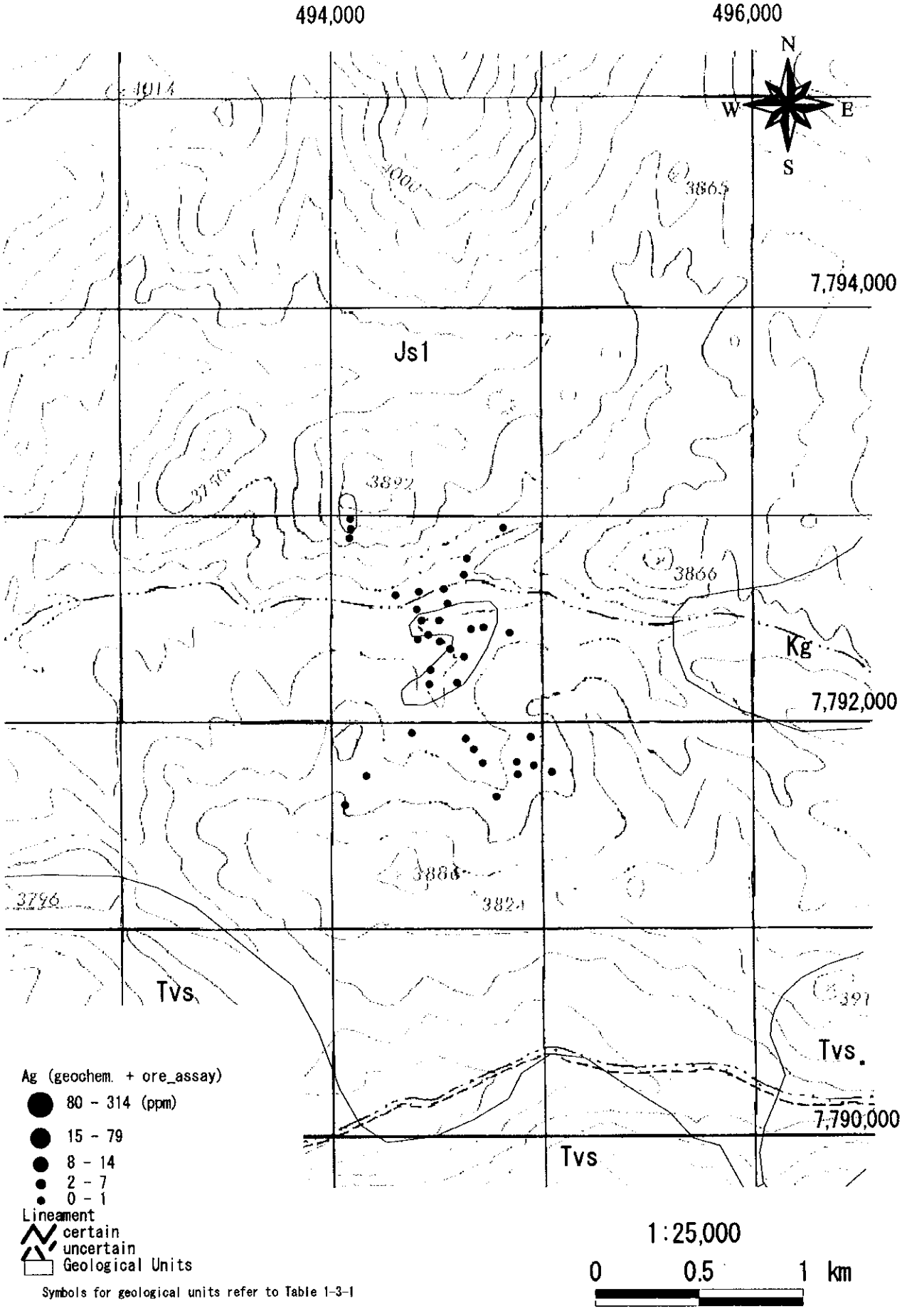


Fig. 2-1-18 (2) Geochemical Anomaly Map in the Diana Area (Ag)

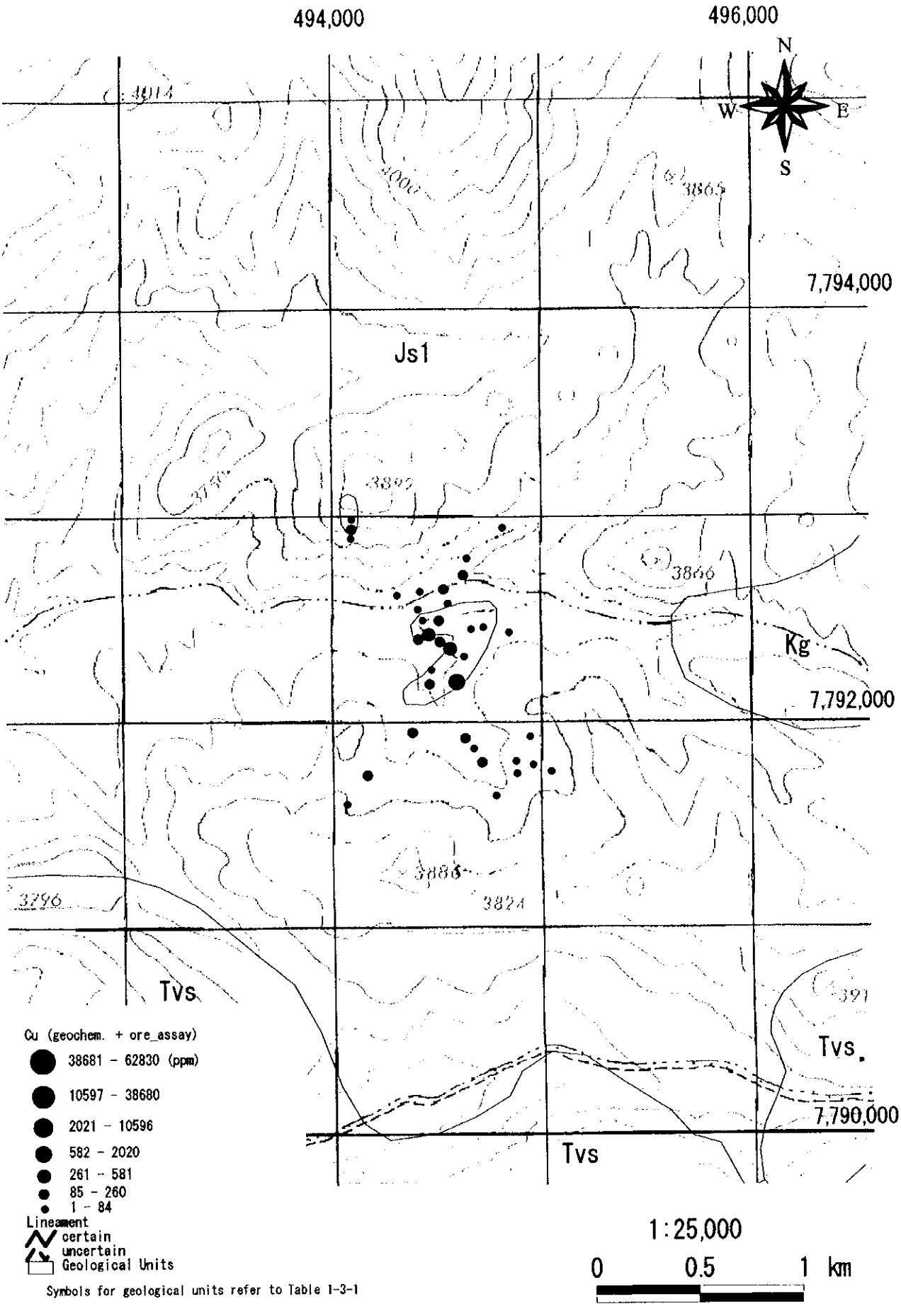


Fig. 2-1-18 (3) Geochemical Anomaly Map in the Diana Area (Cu)

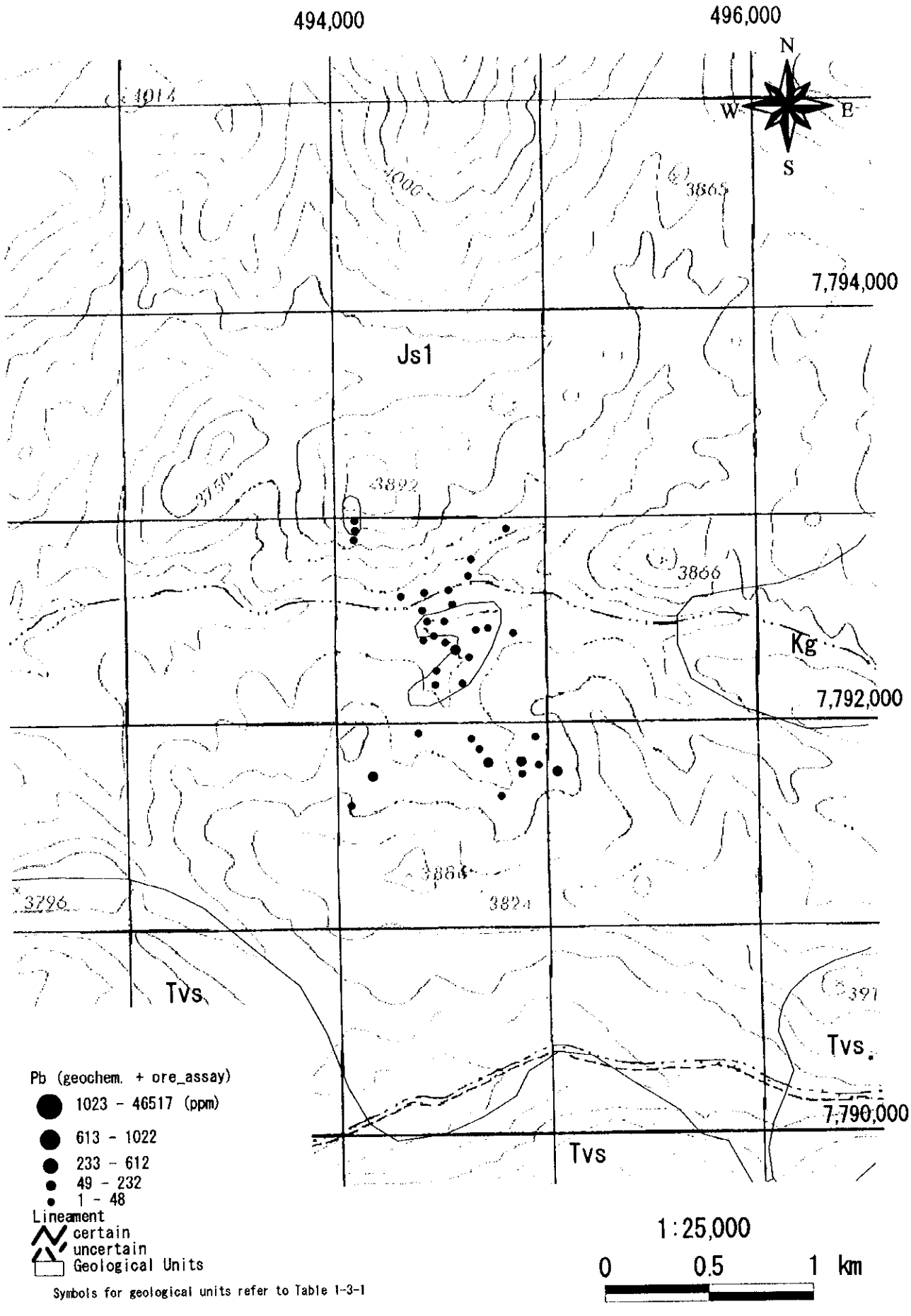


Fig. 2-1-18 (4) Geochemical Anomaly Map in the Diana Area (Pb)

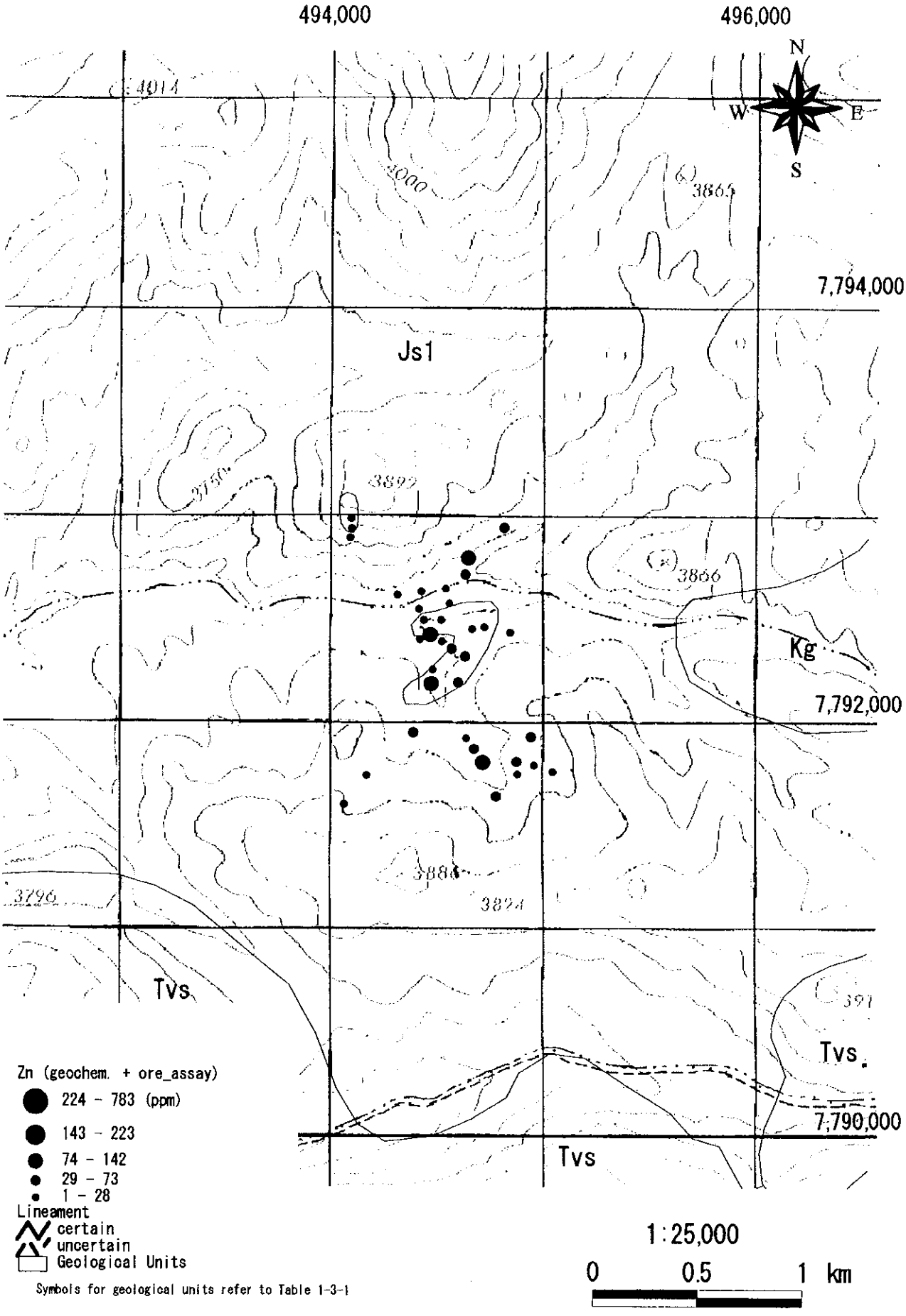


Fig. 2-1-18 (5) Geochemical Anomaly Map in the Diana Area (Zn)

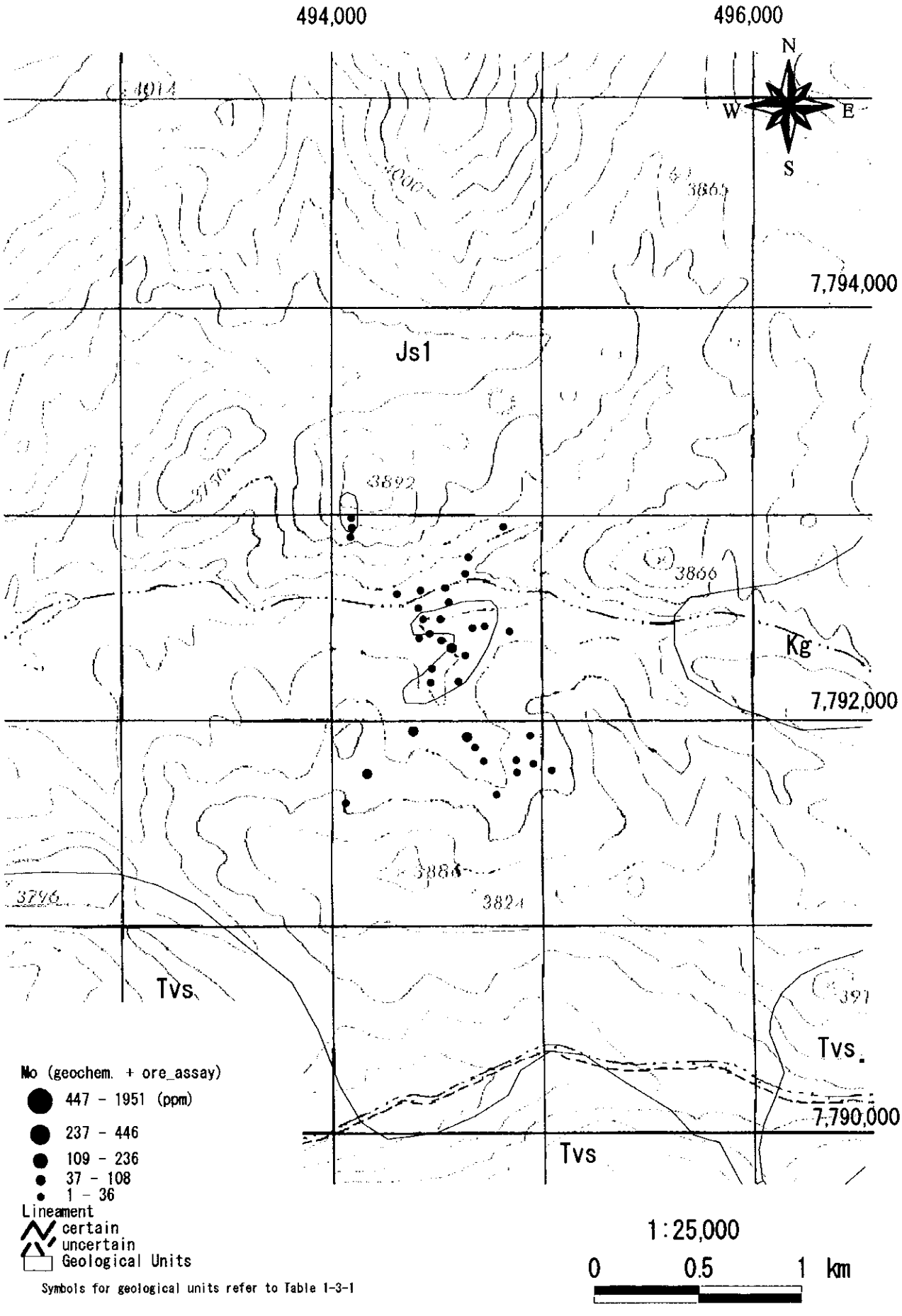


Fig. 2-1-18 (6) Geochemical Anomaly Map in the Diana Area (Mo)

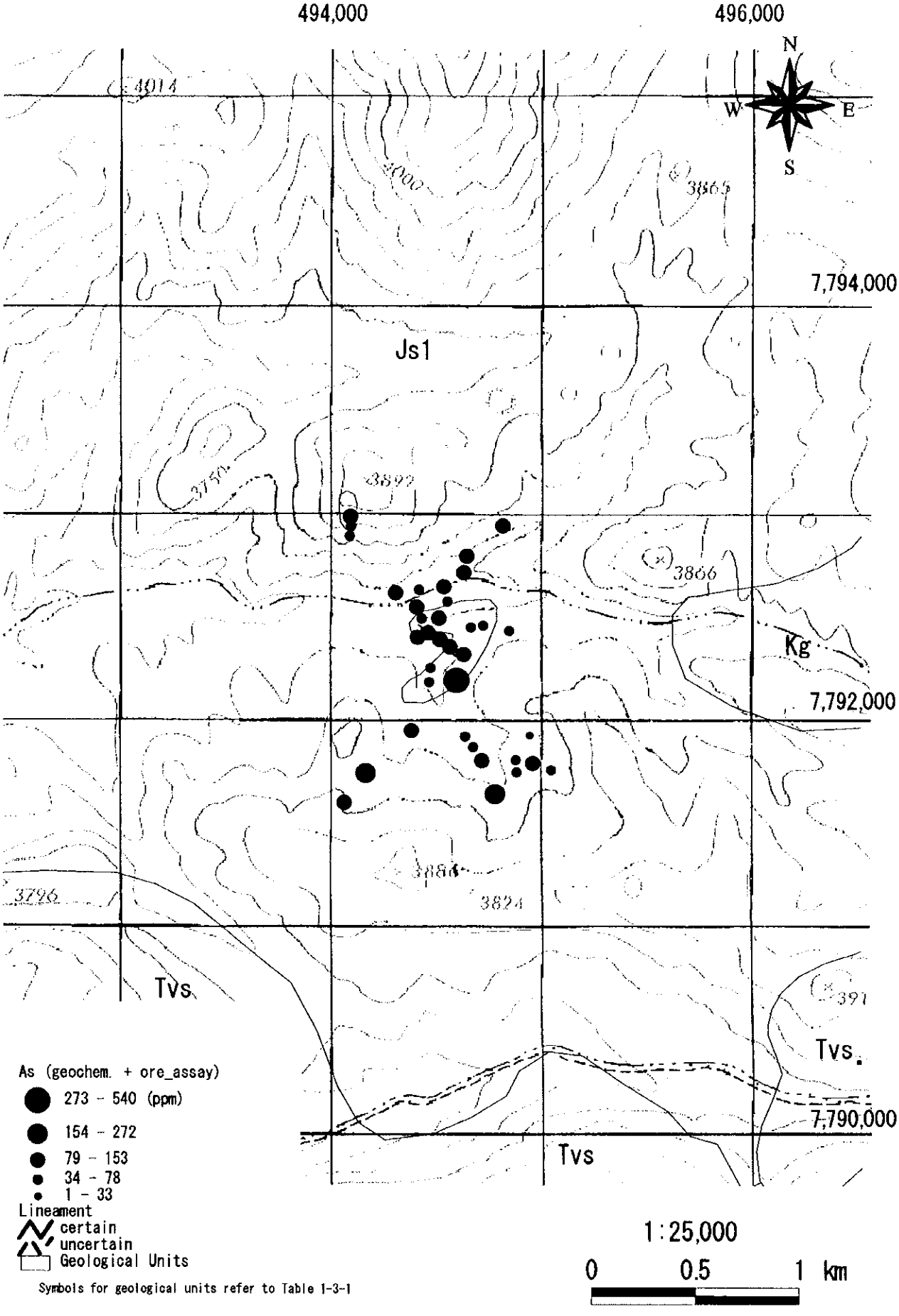


Fig. 2-1-18 (7) Geochemical Anomaly Map in the Diana Area (As)

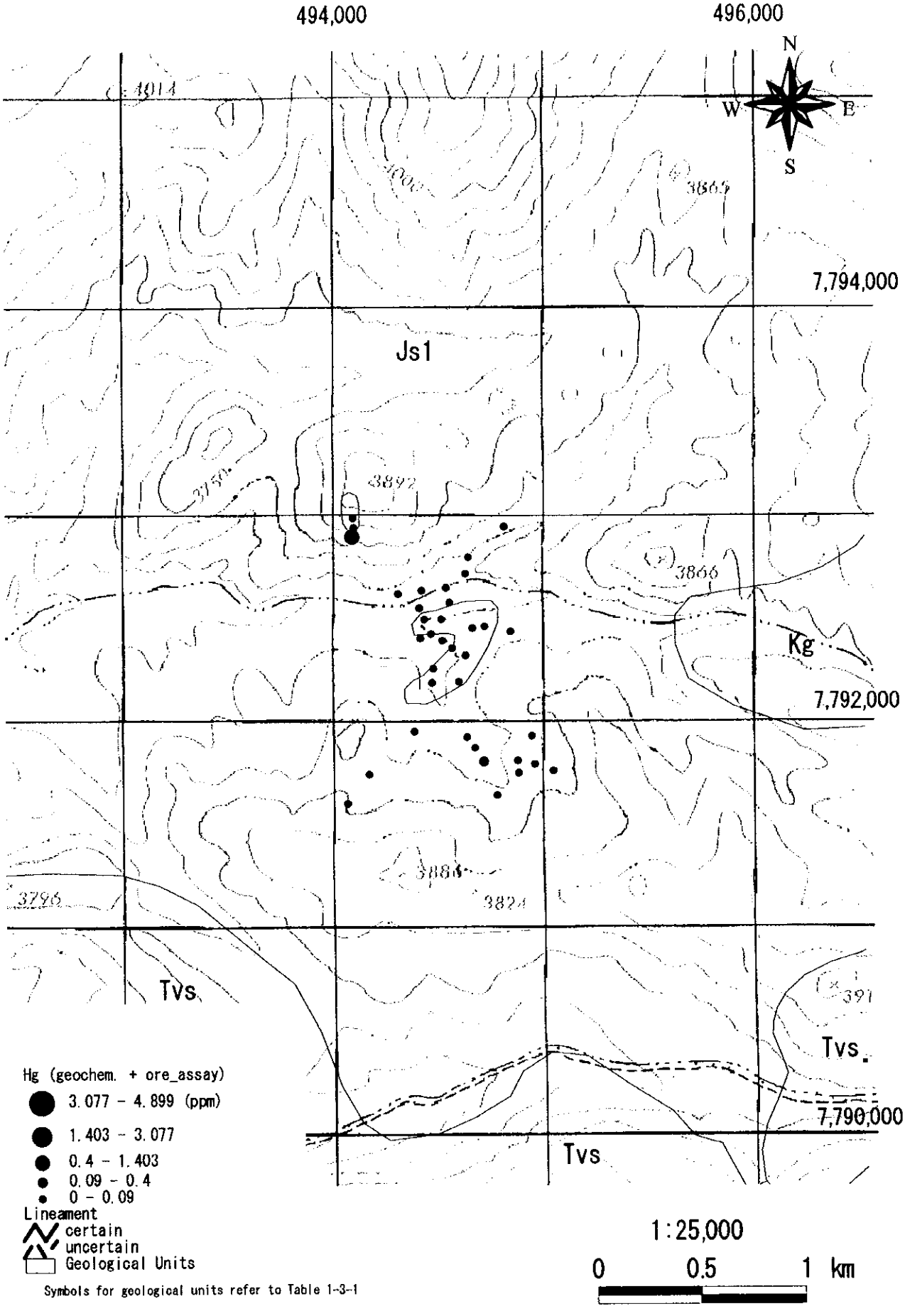


Fig. 2-1-18 (8) Geochemical Anomaly Map in the Diana Area (Hg)

Upper Tertiary-Quaternary Systems are composed of Pliocene-Pleistocene andesitic to basaltic lava and pyroclastic rocks.

Intrusive bodies consisting of fine-grained granite, granodiorite, and dacitic porphyry occur in small scales in the central part of this area. Silicified, sericitized, propylitized, and kaolinized zones are developed in and near the above intrusive bodies. Chalcopyrite and oxidized copper dissemination is observed in small quartz veinlet groups on the granodiorite bodies, and oxidized zone consisting of limonite and hematite is developed in the vicinity.

Notable rock geochemical anomaly of this area is high Au-Cu-As anomaly.

1-1-4 La Planada district

For this district, sampling sites are shown in Figure 2-1-19, geological map in Figure 2-1-20, schematic geological column in Figure 2-1-21, location of mineral showings in Figure 2-1-22, distribution of alteration minerals in Figure 2-1-23, and rock geochemical anomaly distribution in Figure 2-1-24.

The geology of this district consists of Jurassic, Cretaceous, Upper Tertiary, and Quaternary Systems.

The Jurassic System is composed of andesitic~trachytic pyroclastic rocks.

The Cretaceous System consists of andesitic~trachytic lava・pyroclastic rocks, conglomerate、sandstone and contact metamorphic rocks. Jurassic and Cretaceous Systems are intruded by Cretaceous and Tertiary intrusive bodies. The intrusive rocks are, in order of the age of activity, granodiorite-tonalite, granite, diorite, and quartz porphyry. The intrusive age of the granodiorite-tonalite and granite is considered to be Cretaceous in accordance with published geological maps, and that of diorite is inferred to be middle-late Eocene from the age of biotitization which will be mentioned later. Jurassic and Cretaceous Systems and the intrusive bodies are overlain unconformably by Upper Tertiary System.

The Upper Tertiary System is composed of Miocene-Pliocene rhyolitic ignimbrite.

The Quaternary System consists of alluvium and talus deposits.

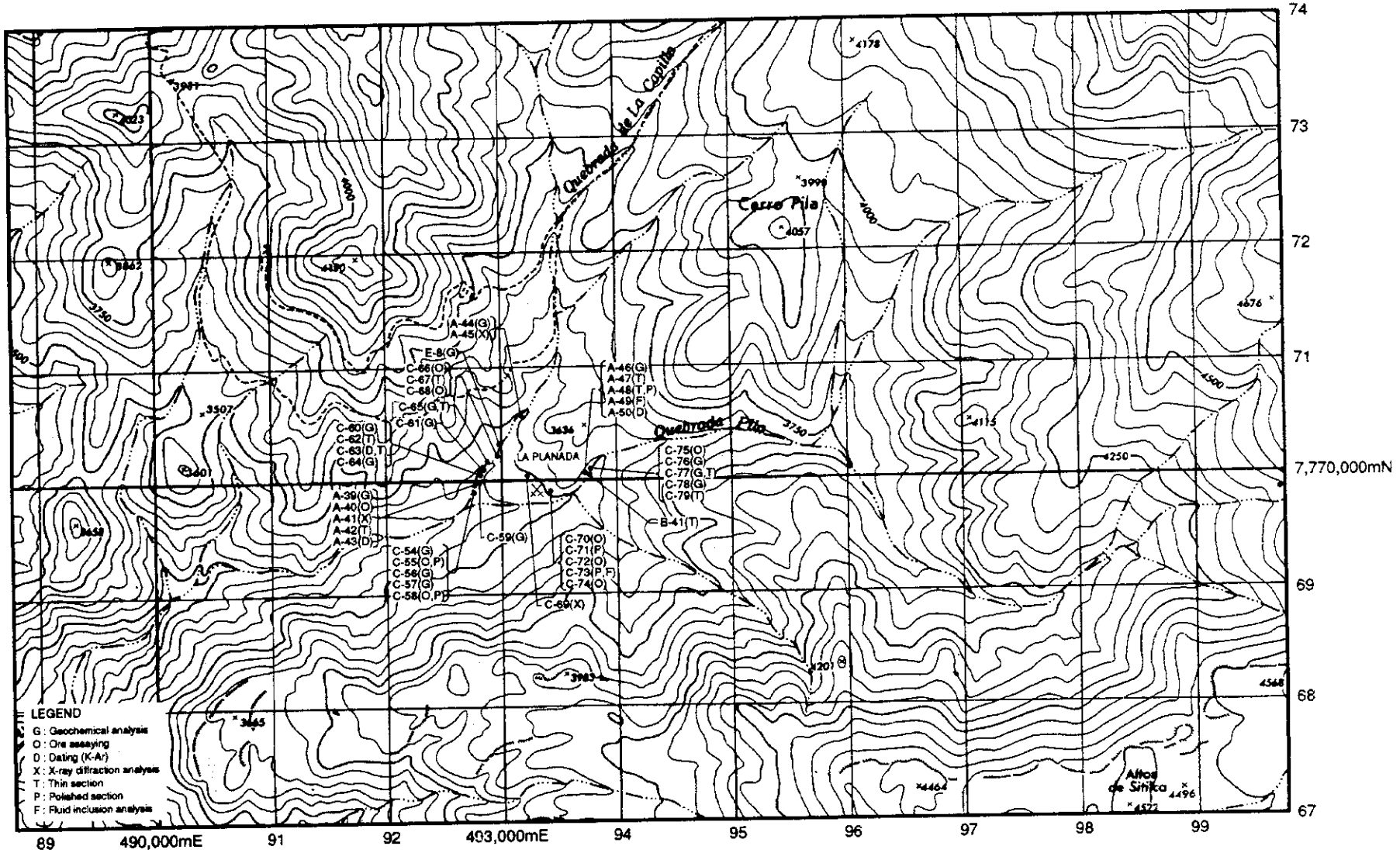


Fig.2-1-19 Sample Location Map of the La Planada Area

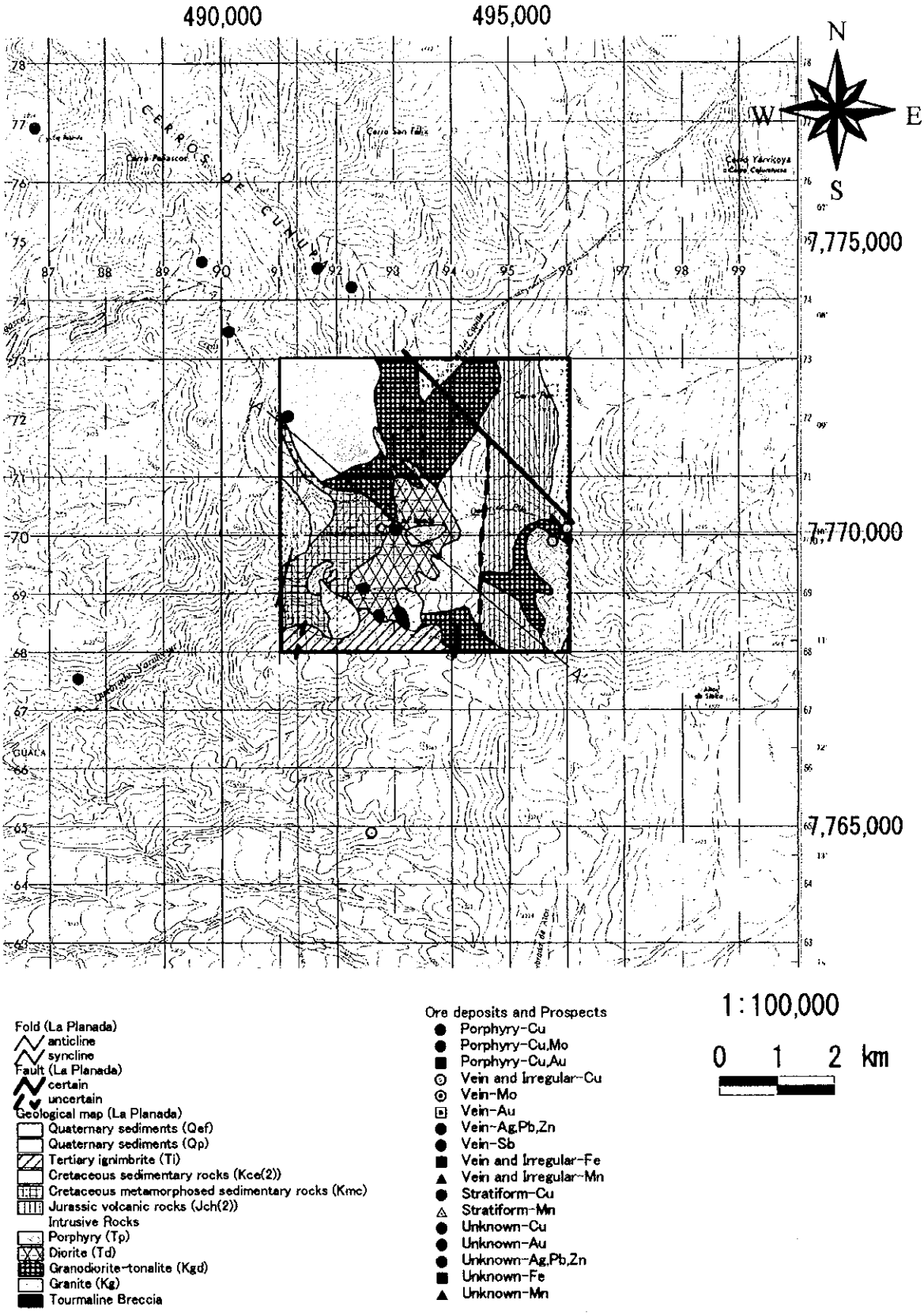
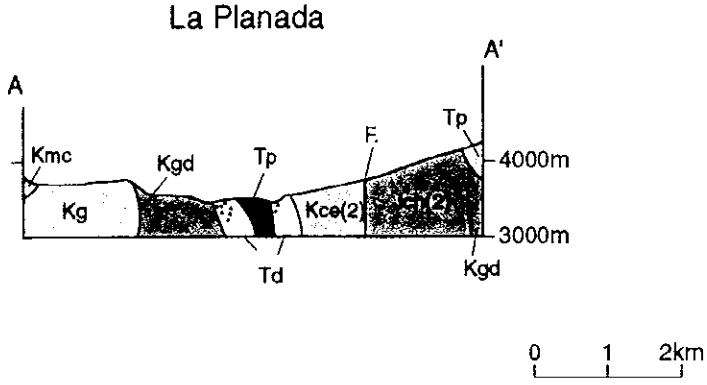


Fig. 2-1-20 Geological Map of the La Planada Area



Geologic Time		Columnar Section	Lithology	Intrusives	Mineralization
CENOZOIC	QUATERNARY	Qet	Alluial, Talus	Granodiorite-tonalite(kgd),Granite(kg) ⟶ Diorite(Td),Porphyry(Tp) ↑	Porphyry copper type ↑
	LATE TERTIARY	Ti	Rhyolitic ignimbrite		
	EARLY TERTIARY				
MESOZOIC	CRETACEOUS	Kmc, Kg, Kgd, Td, Tp, Kce(2)	Conglomerate, Sandstone, Andesitic~Trachytic lava/tuff, Contact metamorphic rock(kmc)		
	JURASSIC	Jcb(2)	Andesitic ~trachytic volcaniclastics		

Fig.2-1-21 Schematic Stratigraphic Columns and Profiles of the La Planada Area

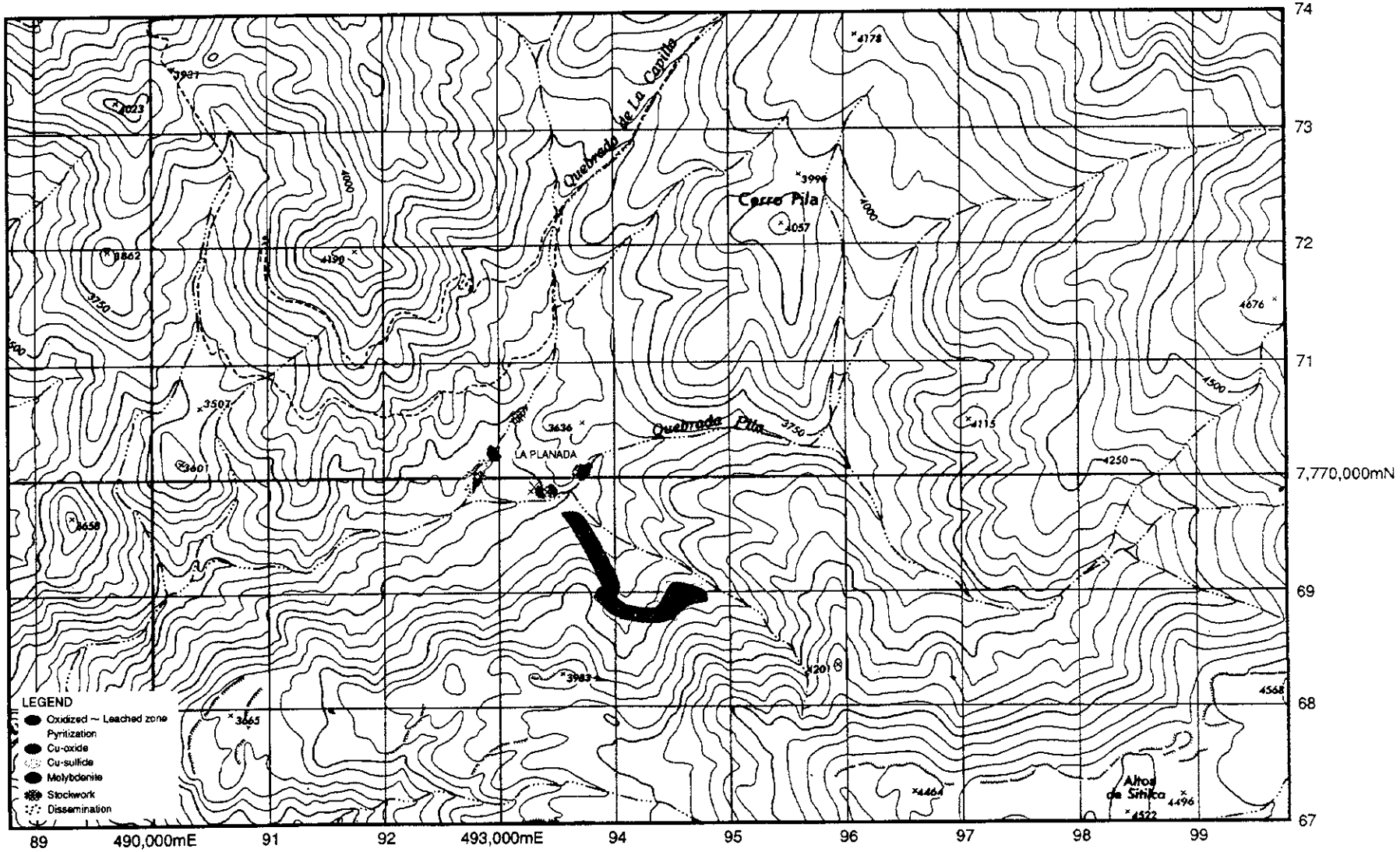


Fig.2-1-22 Mineralization Map of the La Planada Area

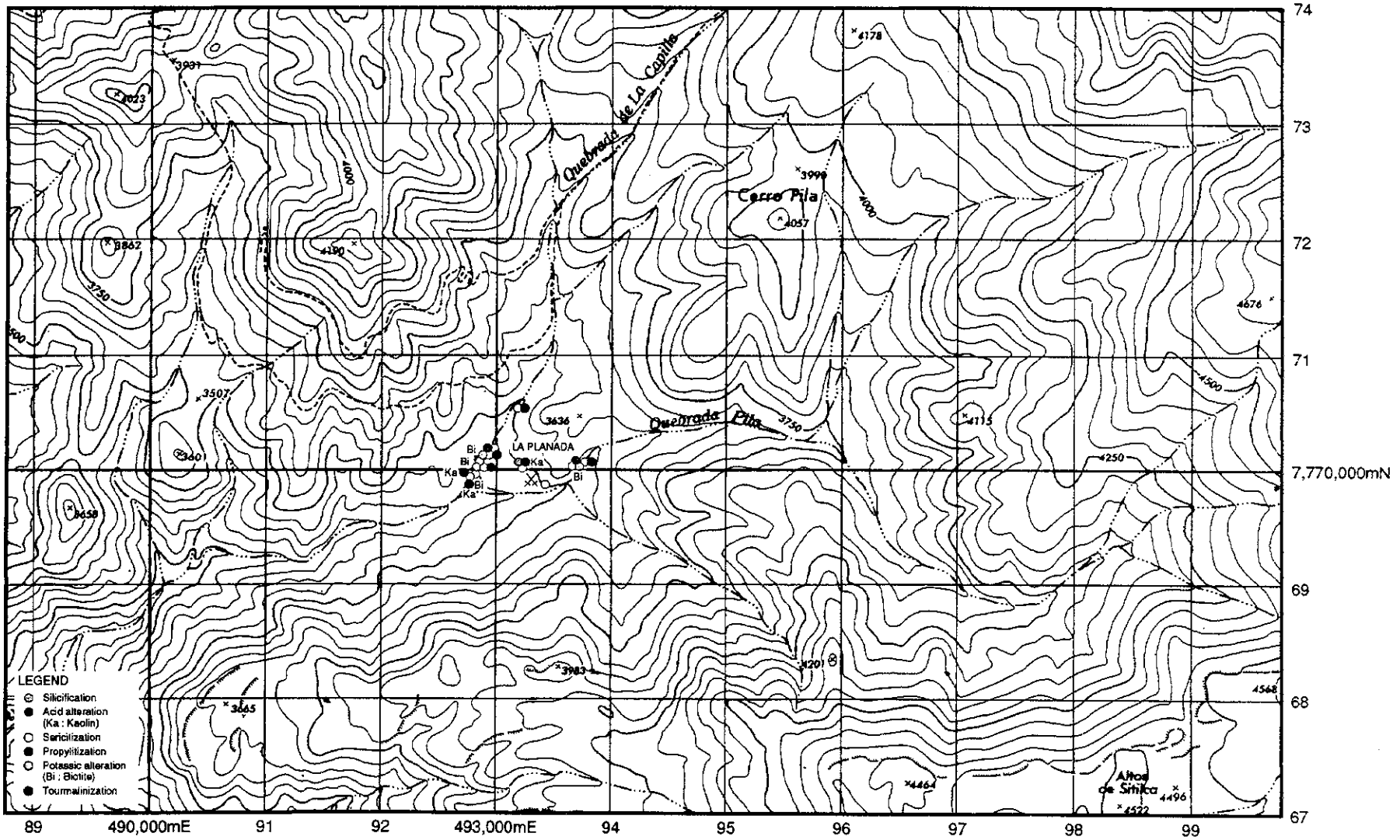


Fig.2-1-23 Distribution Map of Alteration Minerals the La Planada Area

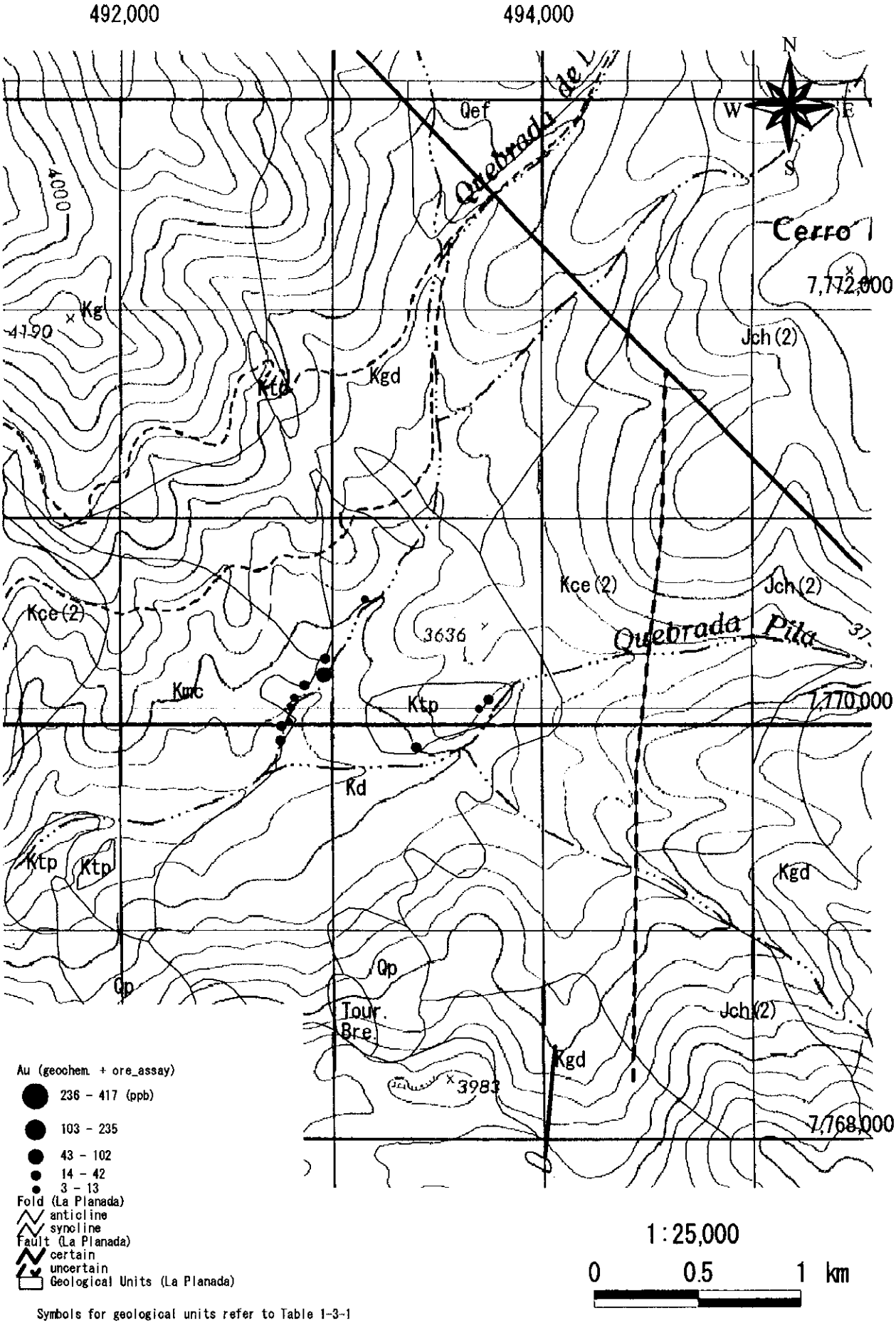


Fig. 2-1-24 (1) Geochemical Anomaly Map in the La Planada Area (Au)

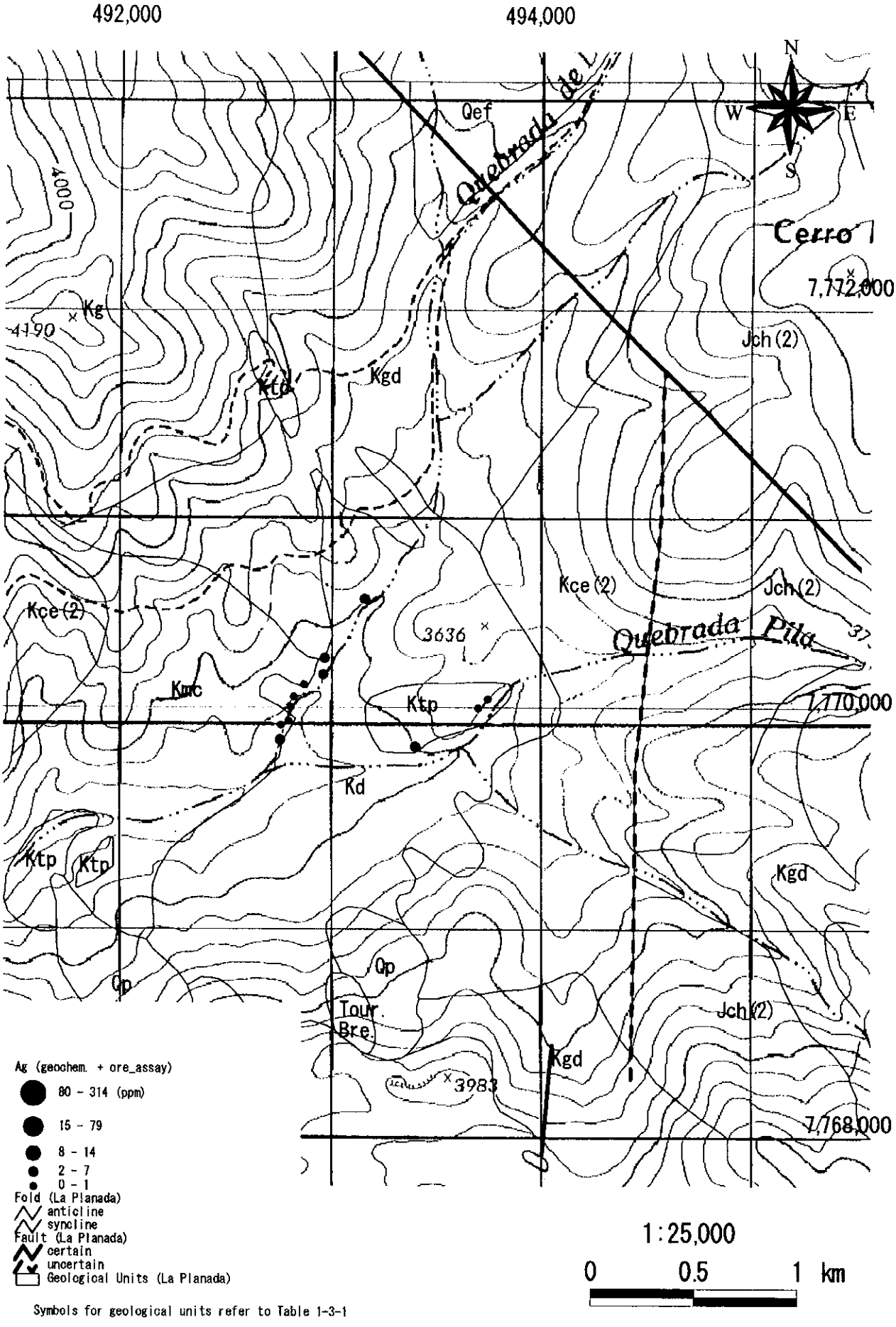


Fig. 2-1-24 (2) Geochemical Anomaly Map in the La Planada Area (Ag)

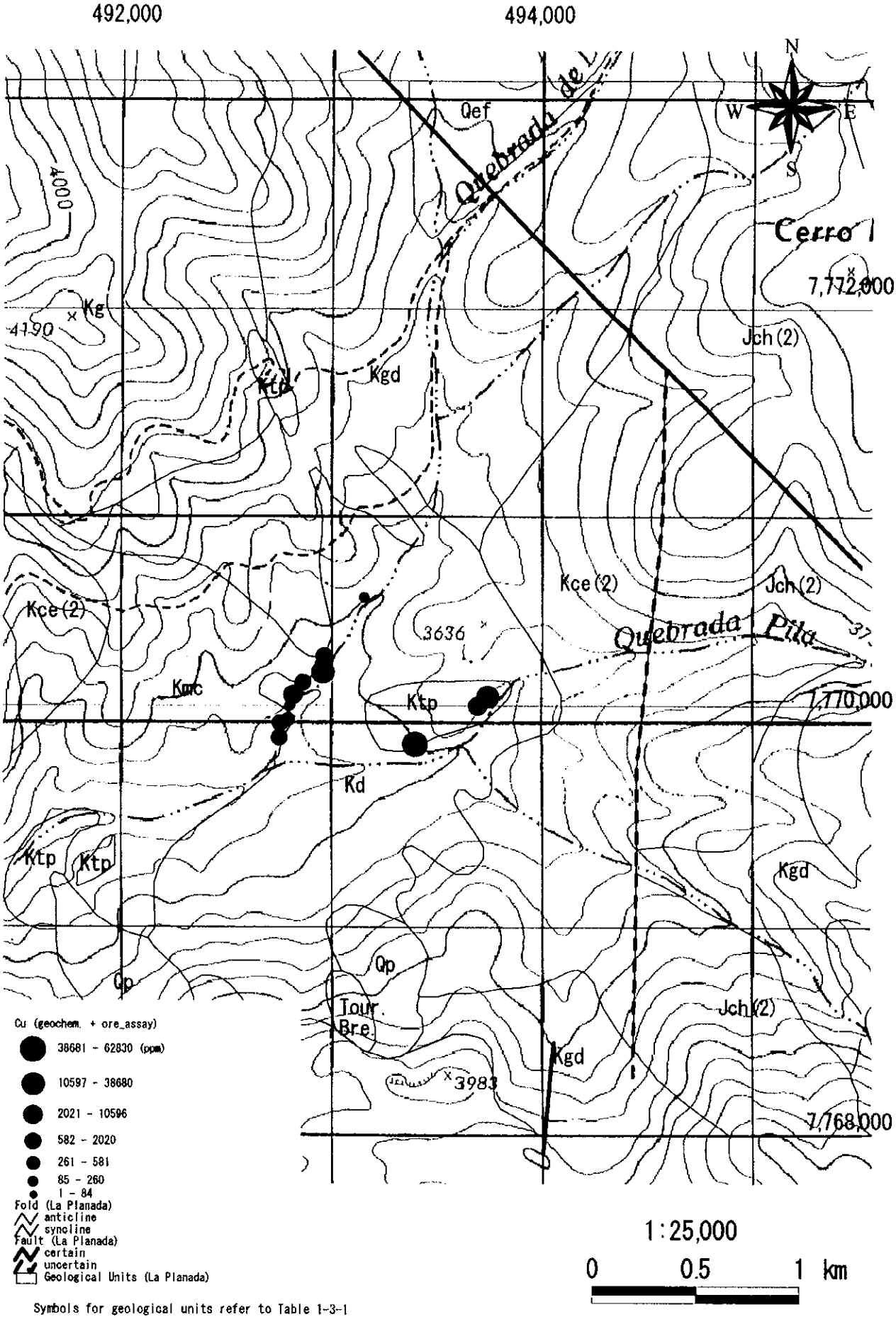


Fig. 2-1-24 (3) Geochemical Anomaly Map in the La Planada Area (Cu)

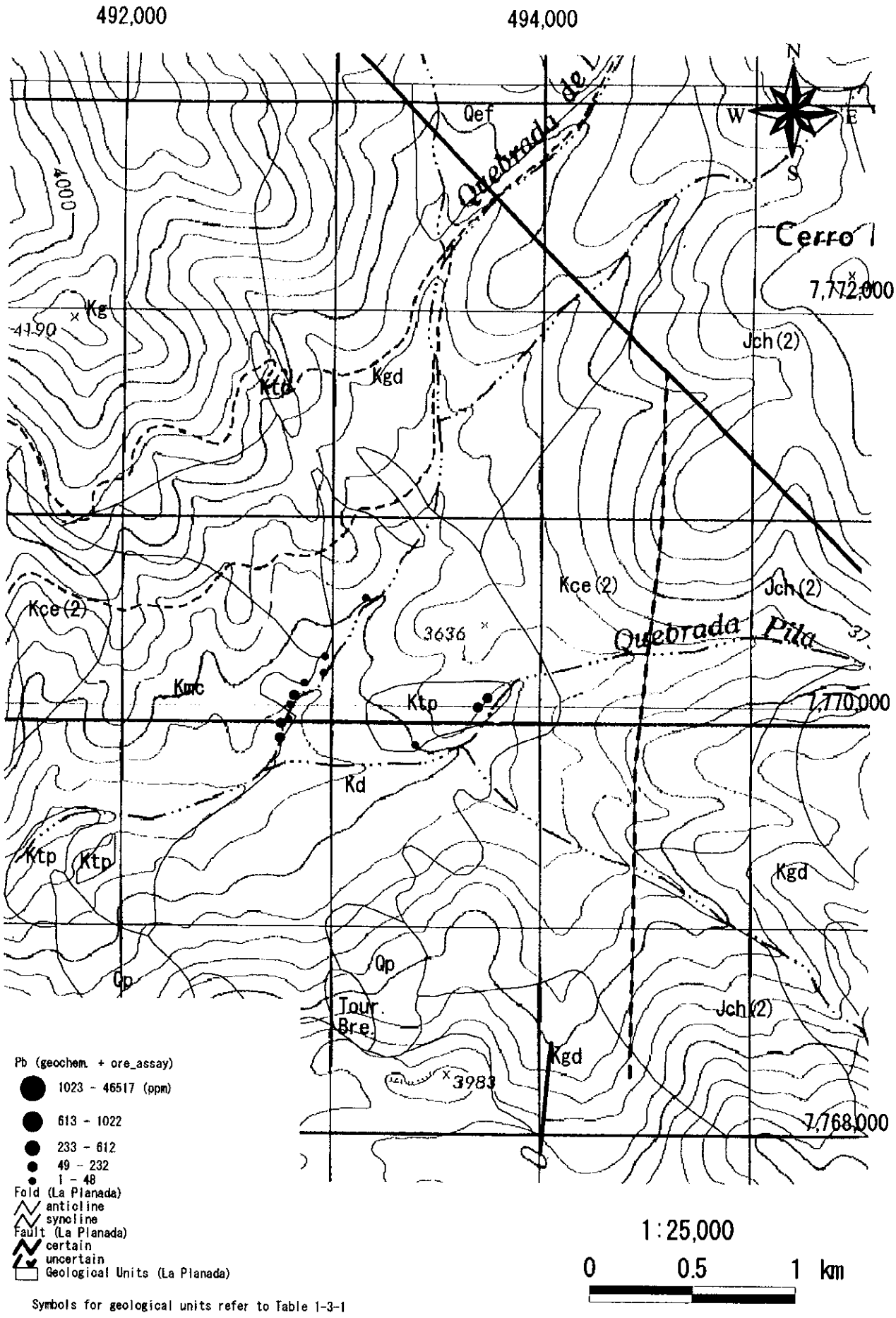


Fig. 2-1-24 (4) Geochemical Anomaly Map in the La Planada Area (Pb)

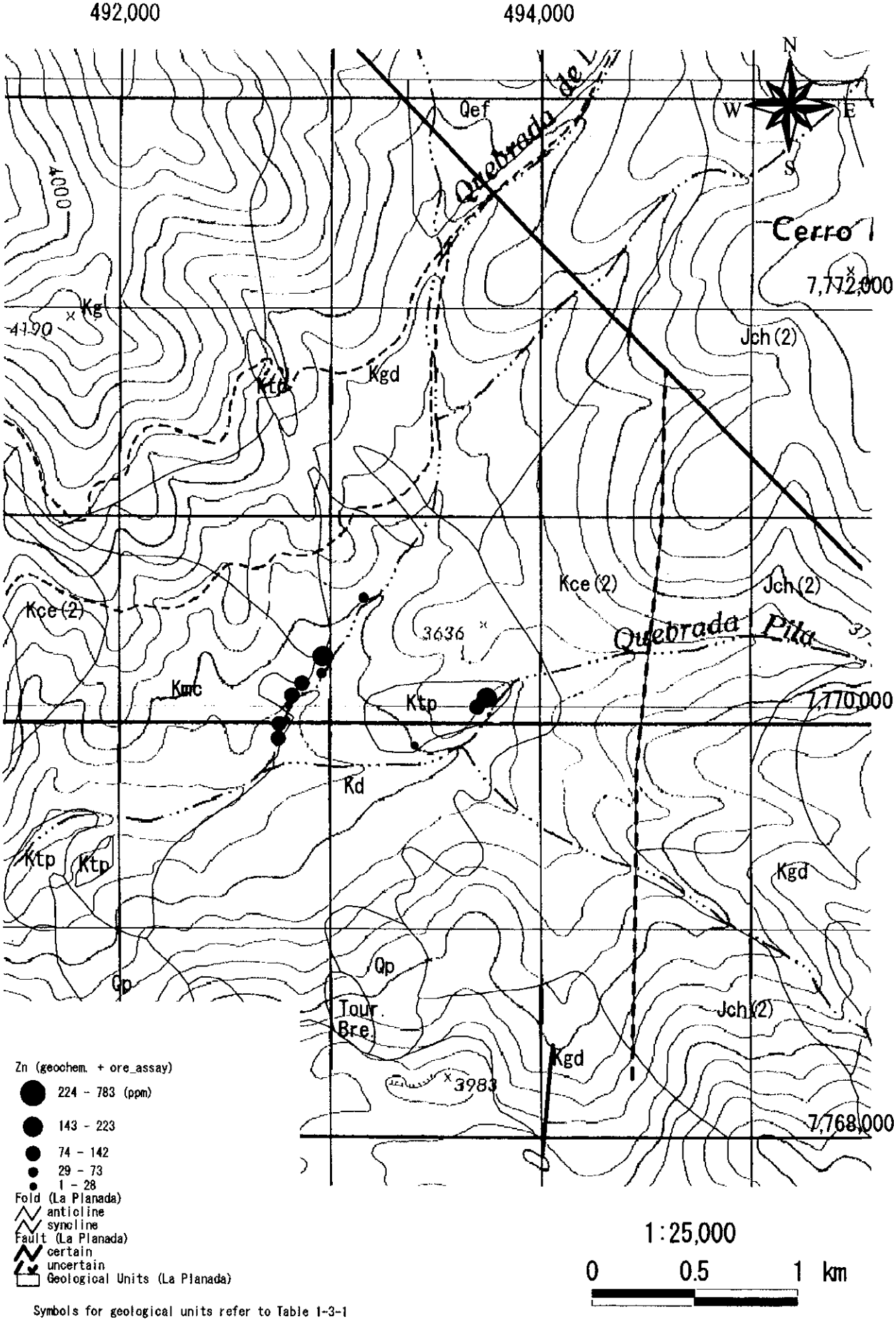


Fig. 2-1-24 (5) Geochemical Anomaly Map in the La Planada Area (Zn)

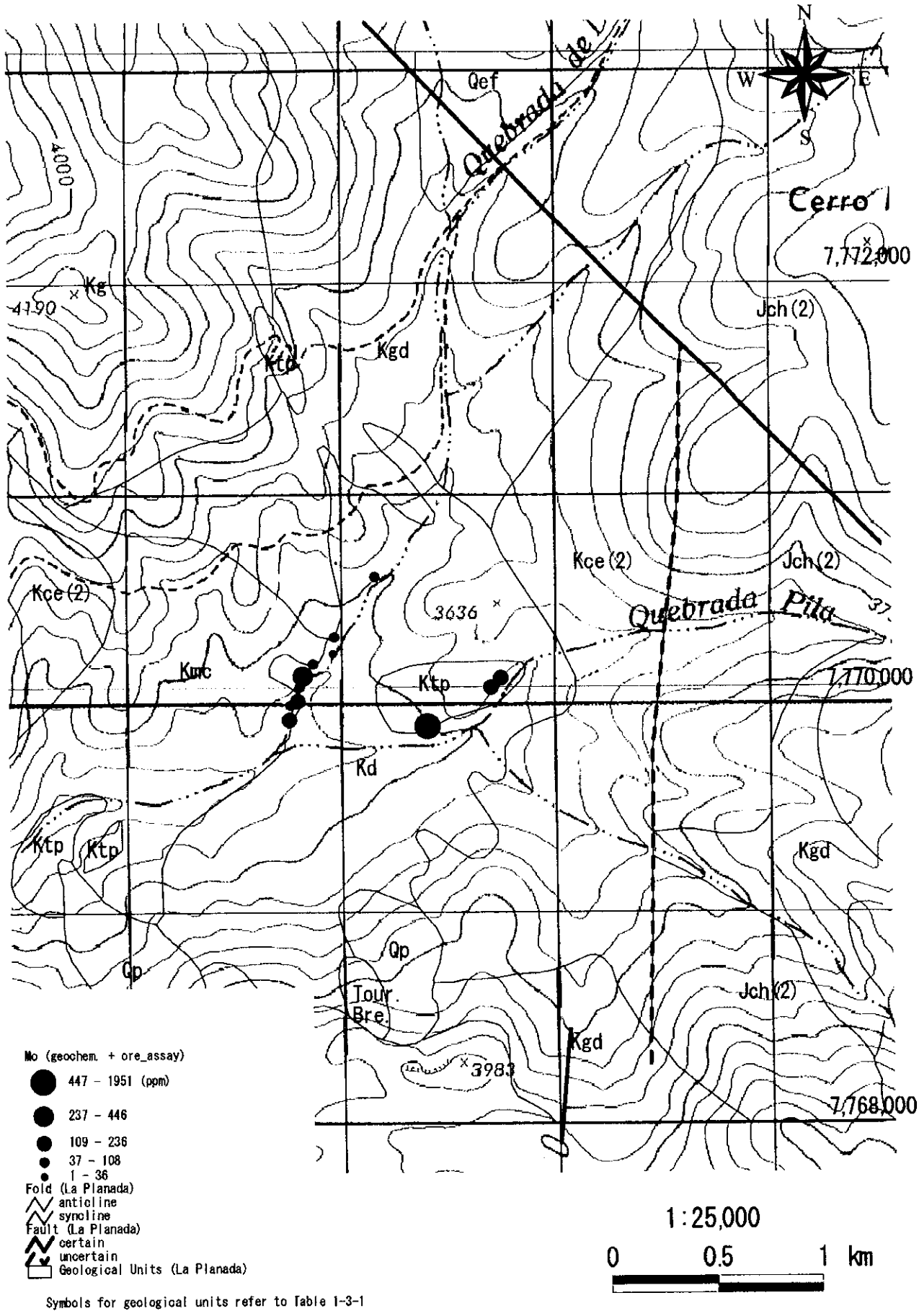


Fig. 2-1-24 (6) Geochemical Anomaly Map in the La Planada Area (Mo)

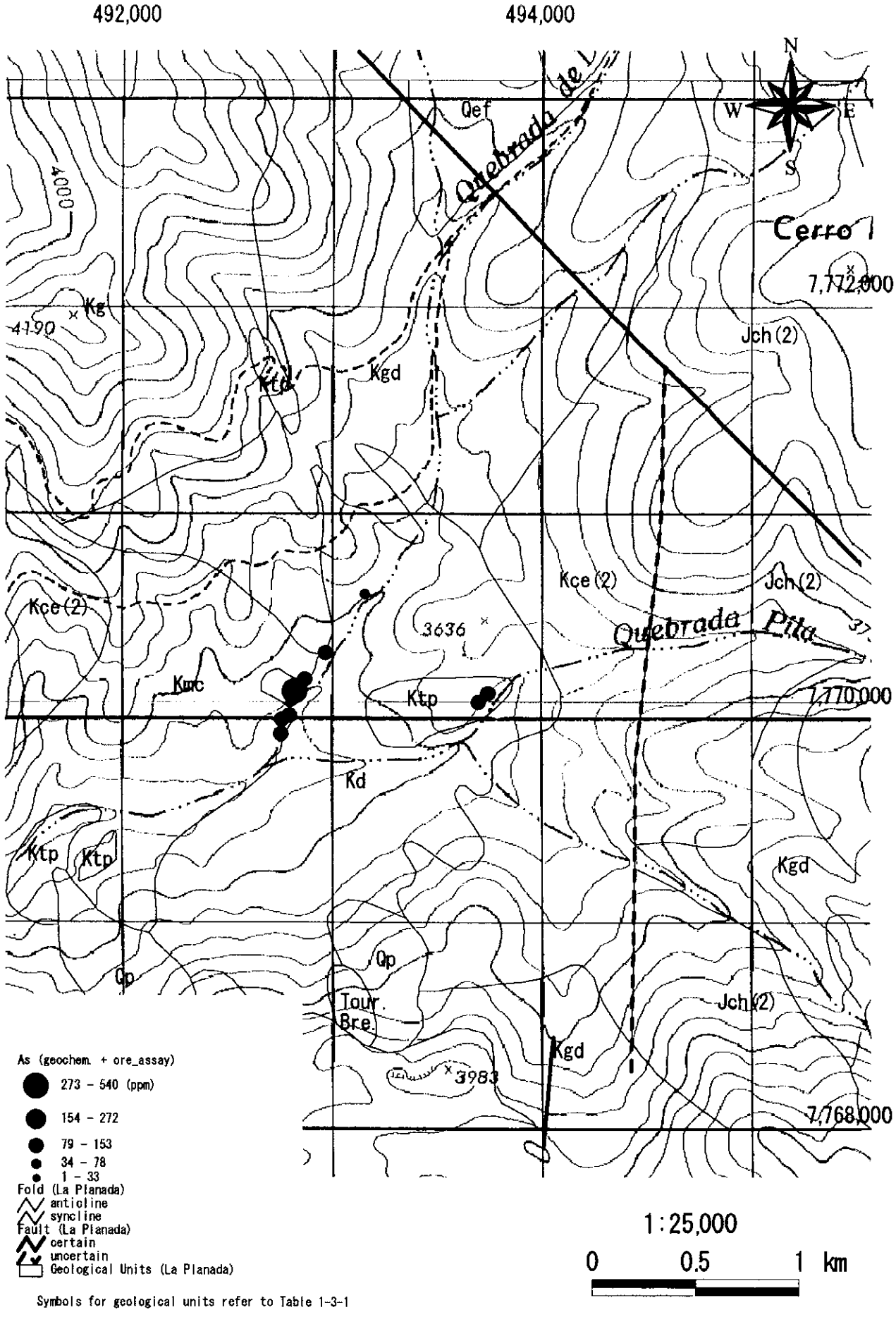


Fig. 2-1-24 (7) Geochemical Anomaly Map in the La Planada Area (As)

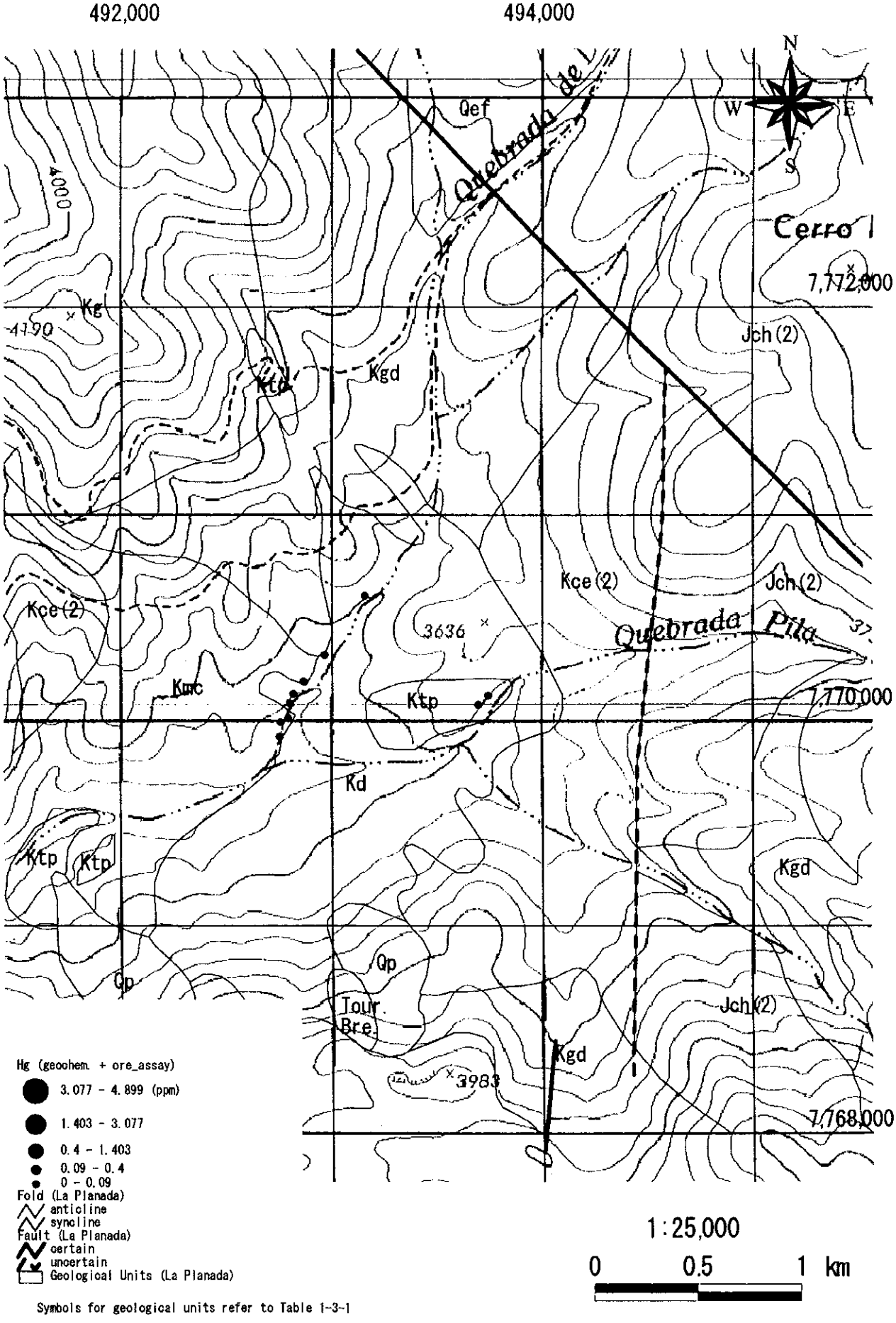


Fig. 2-1-24 (8) Geochemical Anomaly Map in the La Planada Area (Hg)

Biotitized, sericitized, kaolinized, propylitized zones are developed in diorite bodies and the vicinity in this area. In the sericitized zone, a large amount of brecciated tourmaline veins and network quartz veins are developed and are associated with chrysocolla, chalcopyrite, pyrite, and molybdenite dissemination. K-Ar age measurement of biotitization resulted in 38.1±0.9, 38.6±1.3, 39.2±1.7Ma. Fluid inclusions in quartz from network quartz veins consist of gas-liquid two-phase inclusions and poly-phase inclusions containing gas, liquid, and solid. Those containing daughter minerals are considered to be primary inclusions. The daughter minerals are NaCl and opaque minerals. The average NaCl disappearance temperature ranges from 328 to 334℃, and the average salinity (NaCl) is 40.4~40.5wt%. These are typical values for porphyry copper mineralization. Green oxidized copper mineral dissemination occurs along 1km of road cutting in Cretaceous sedimentary rocks in the southeastern part of this area. Also wide distribution of oxidized zone consisting of limonite and hematite occur above (southward) the copper mineral dissemination. There is also a small exotic sedimentary secondary copper orebody consisting of green oxidized copper minerals in river-bed gravel of Quebrada Pila at the eastern margin of the diorite body. The oxidized zone developed in the south was drilled.

Notable rock geochemical anomaly is high Cu-Mo-As anomaly.

1-1-5 Chacarilla district

For this district, sampling sites are shown in Figure 2-1-25, geological map in Figure 2-1-26, schematic geological column in Figure 2-1-27, location of mineral showings in Figure 2-1-28, distribution of alteration minerals in Figure 2-1-29, and rock geochemical anomaly distribution in Figure 2-1-30.

The geology of this district consists of Middle-Upper Jurassic, Upper Jurassic, Lower Cretaceous, Upper Tertiary, and Quaternary Systems.

The Upper Jurassic System is composed of andesitic lava・breccia, limestone, sandstone and conglomerate.

The Lower Cretaceous System is composed of andesitic~rhyolitic lava・pyroclastic rocks and intercalation of sedimentary rocks.

Jurassic and Cretaceous Systems are intruded by Cretaceous and Tertiary intrusive bodies.

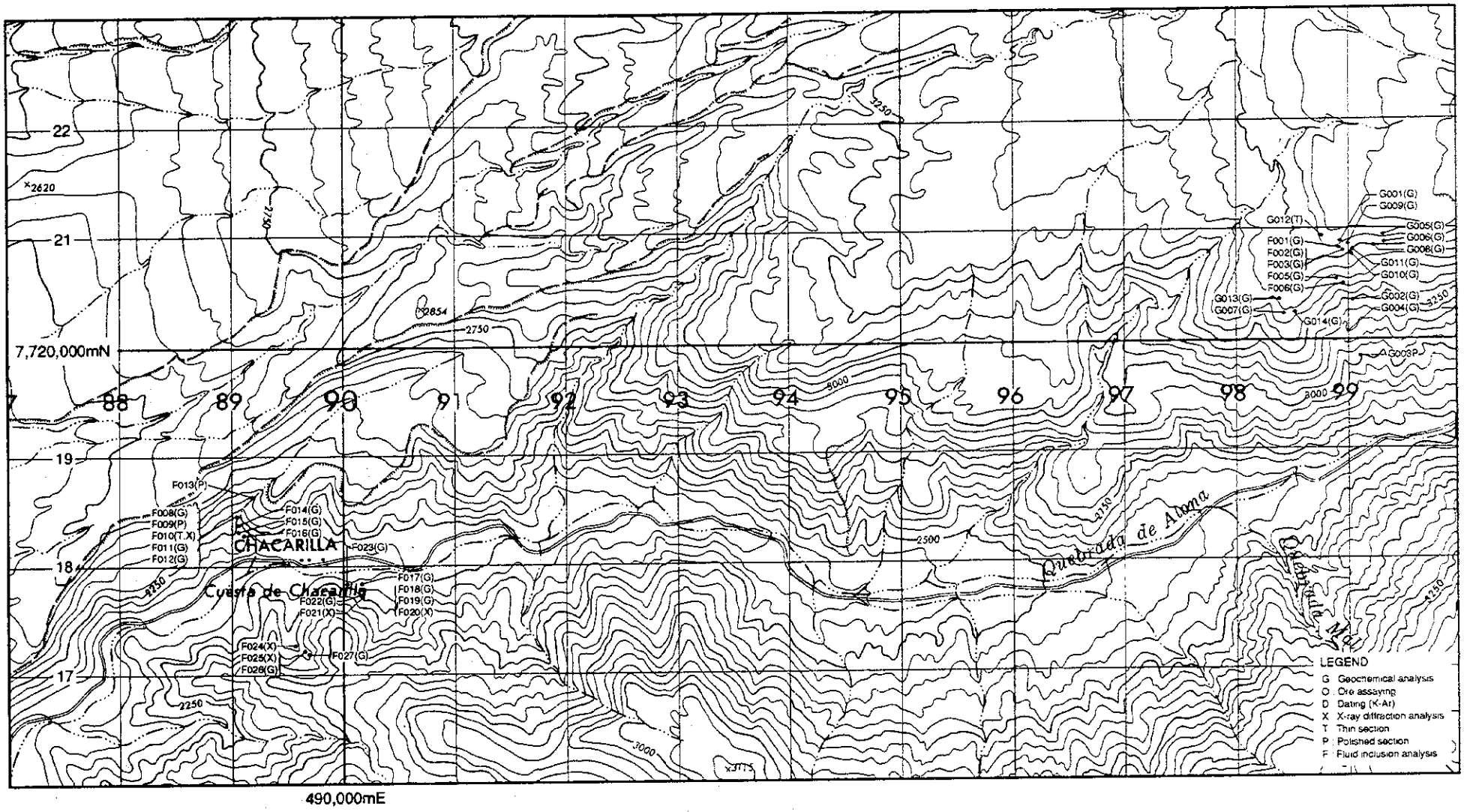


Fig.2-1-25 Sample Location Map of the Chacarilla Area

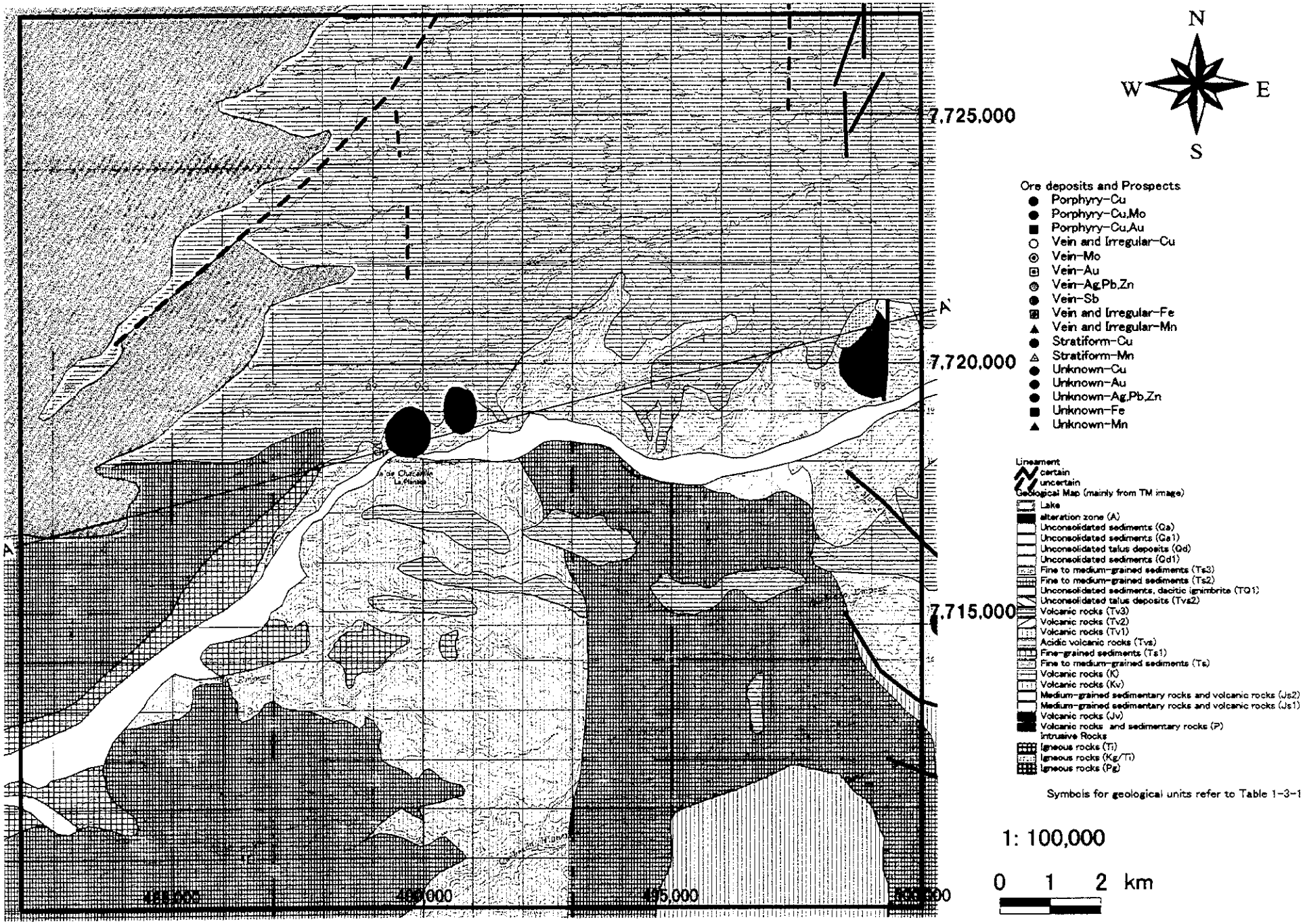
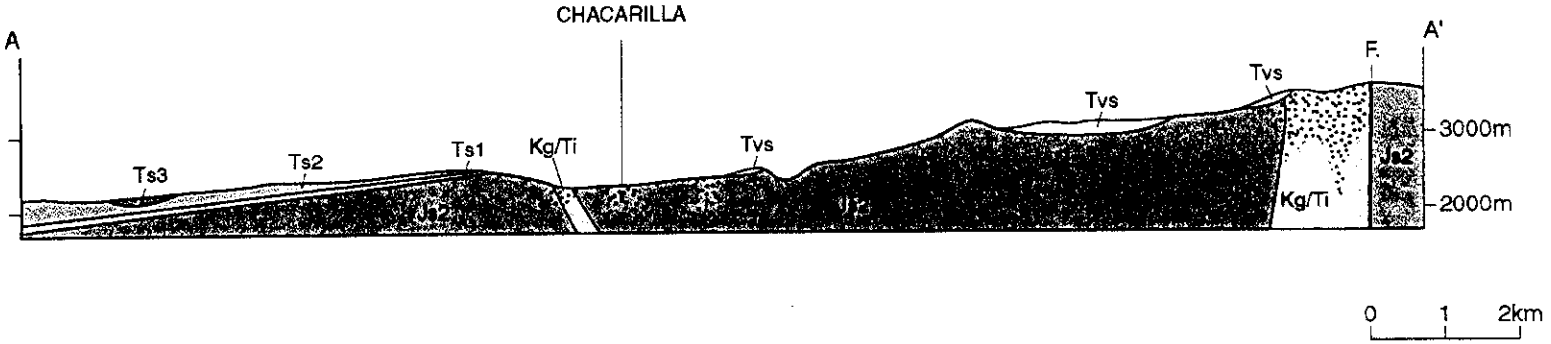


Fig. 2-1-26 Geological Map of the Chacarilla Area



Geologic Time		Columnar Section	Lithology	Intrusives	Mineralization
CENOZOIC	QUATERNARY	Qa Qal Qdt Qcol Ts3 Ts2	Fluvial, Lacustrine, Glucial Acolian Allurial, Colluvial Mud flow,talus	Diorite, Granodiorite porphyry(Kg/Ti)	Epithermal type?
	LATE TERTIARY	Ts1 Tvs	Rhyolitic~ basaltic flow pyroclastic rock,Ignimbrite intercalation of continental sediments		
	EARLY TERTIARY				
MESOZOIC	LATE CRETACEOUS				
	EARLY CRETACEOUS	Kv Kg/Ti	Andesitic~ rhyolitic lava/ volcaniclastics with sediments		
	LATE JURASSIC	Js2	Conglomerate,Sandstone,Shale, Limestone,Andesitic lava/breccia		
	LATE-MIDDLE JURASSIC	Js1	Shale, Sandstone		

Fig.2-1-27 Schematic Stratigraphic Columns and Profiles of the Chacarilla Area

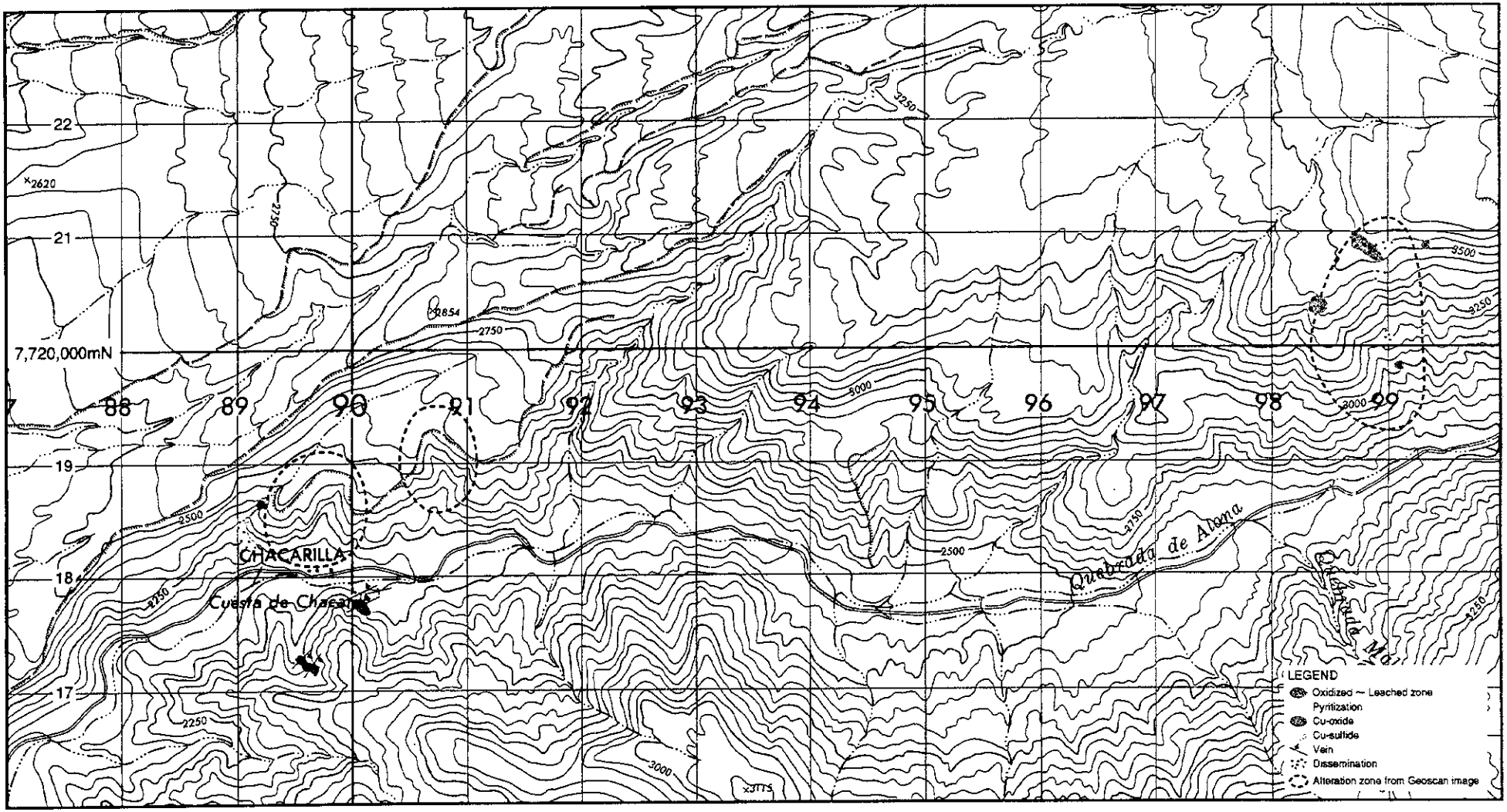


Fig.2-1-28 Mineralization Map of the Chacarilla Area

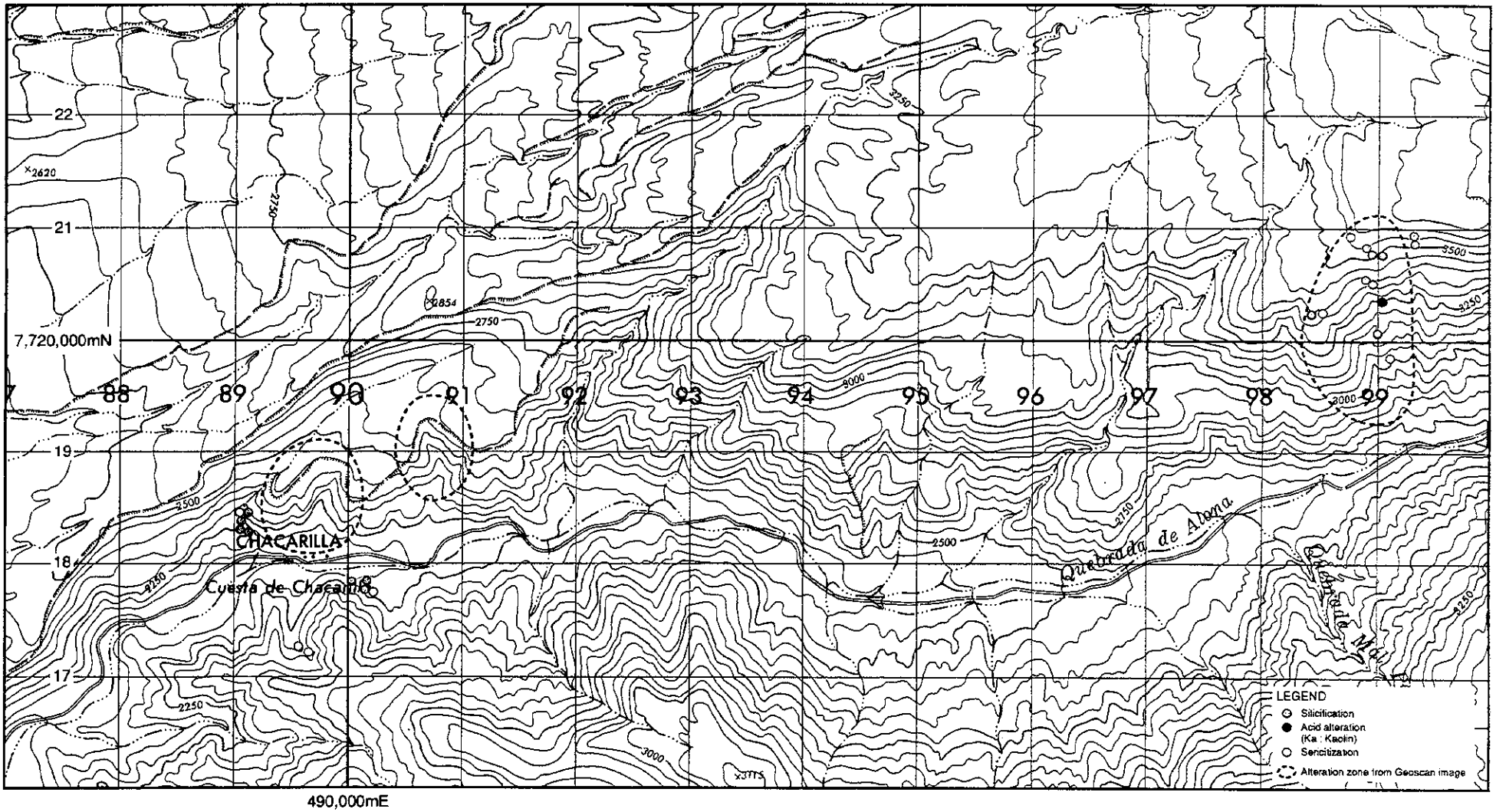


Fig.2-1-29 Distribution Map of Alteration Minerals at the Chacarilla Area

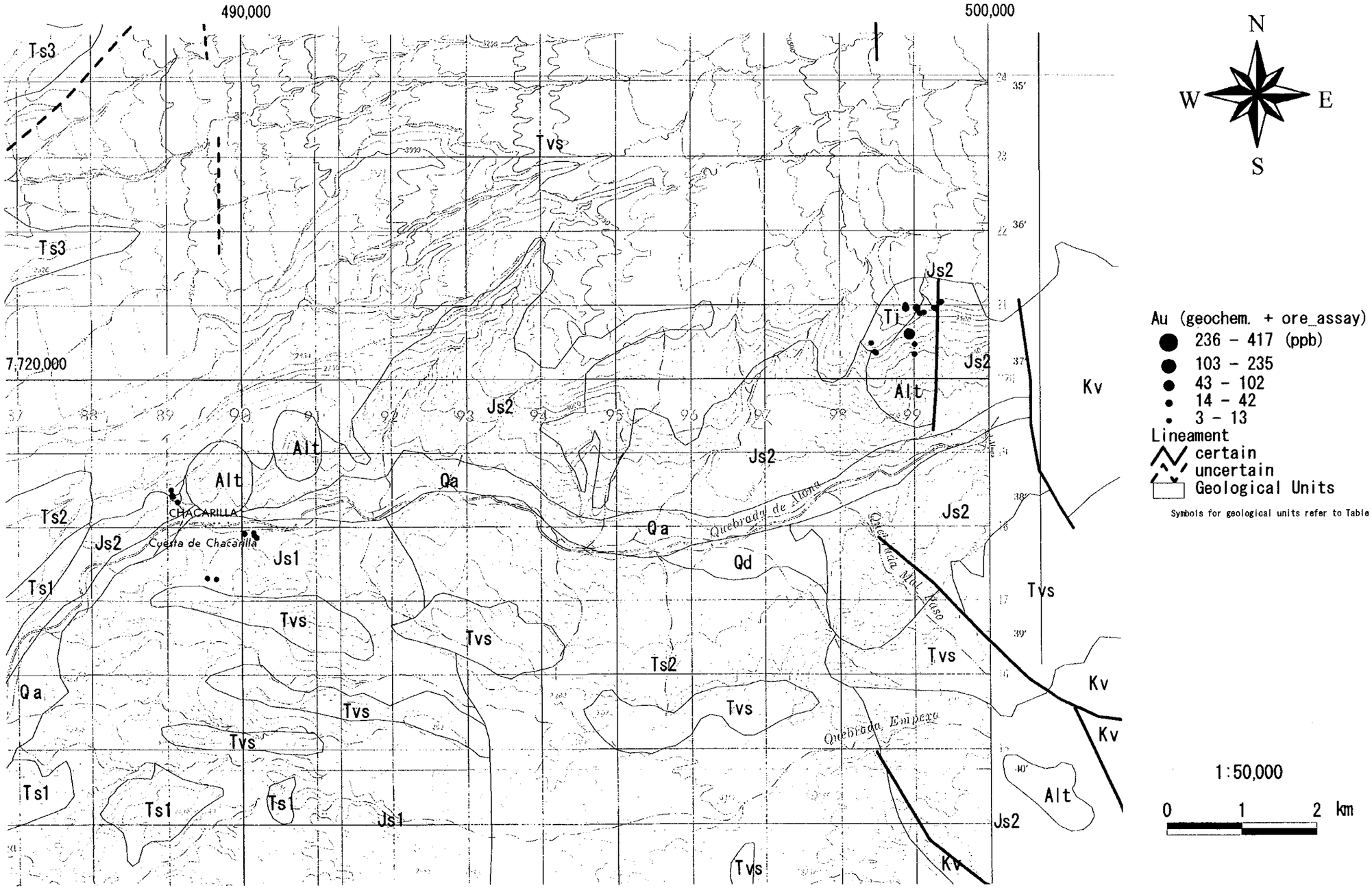


Fig. 2-1-30 (1) Geochemical Anomaly Map in the Chacarilla Area (Au)

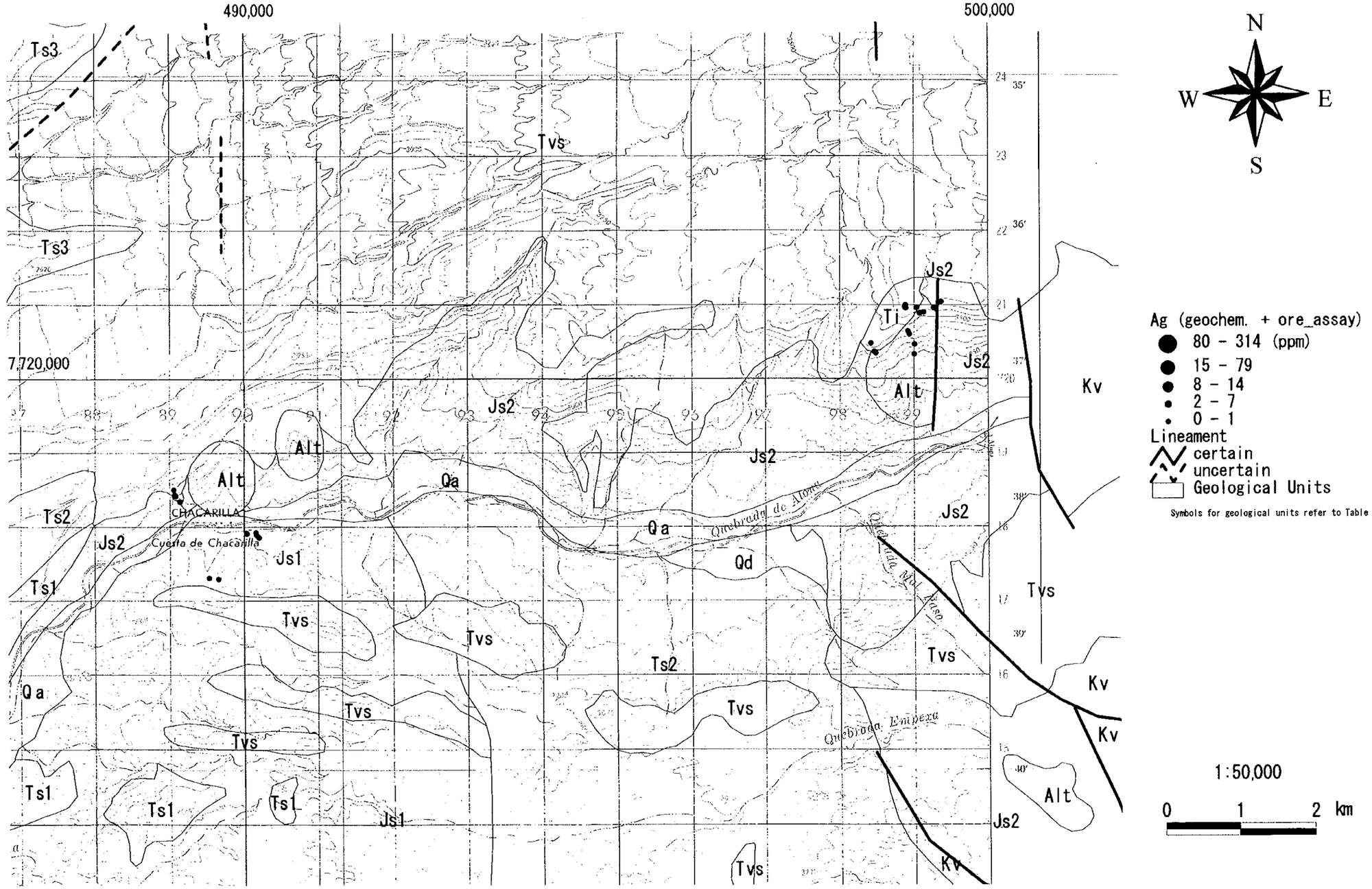


Fig. 2-1-30 (2) Geochemical Anomaly Map in the Chacarilla Area (Ag)

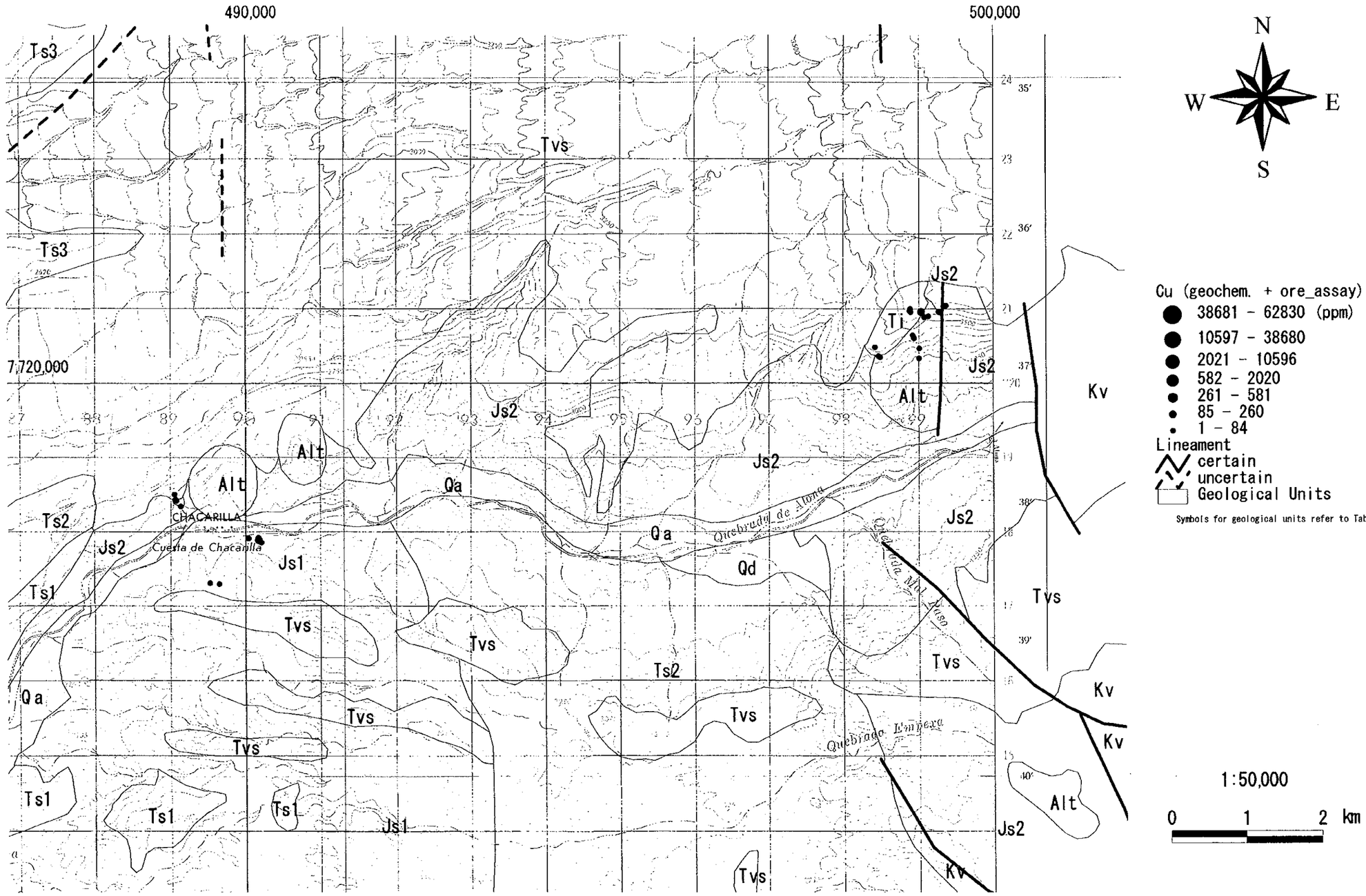


Fig. 2-1-30 (3) Geochemical Anomaly Map in the Chacarilla Area (Cu)

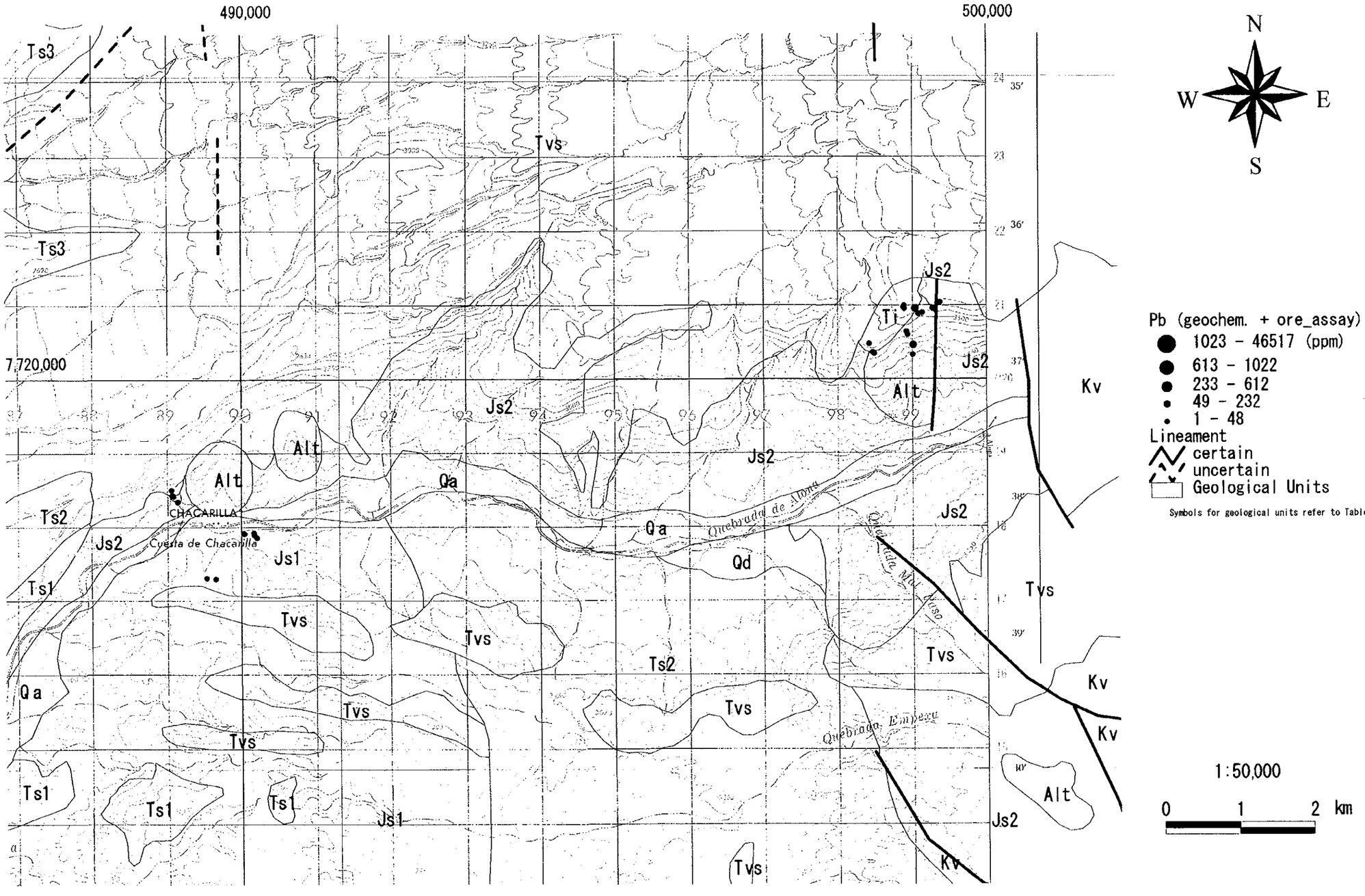


Fig. 2-1-30 (4) Geochemical Anomaly Map in the Chacarilla Area (Pb)

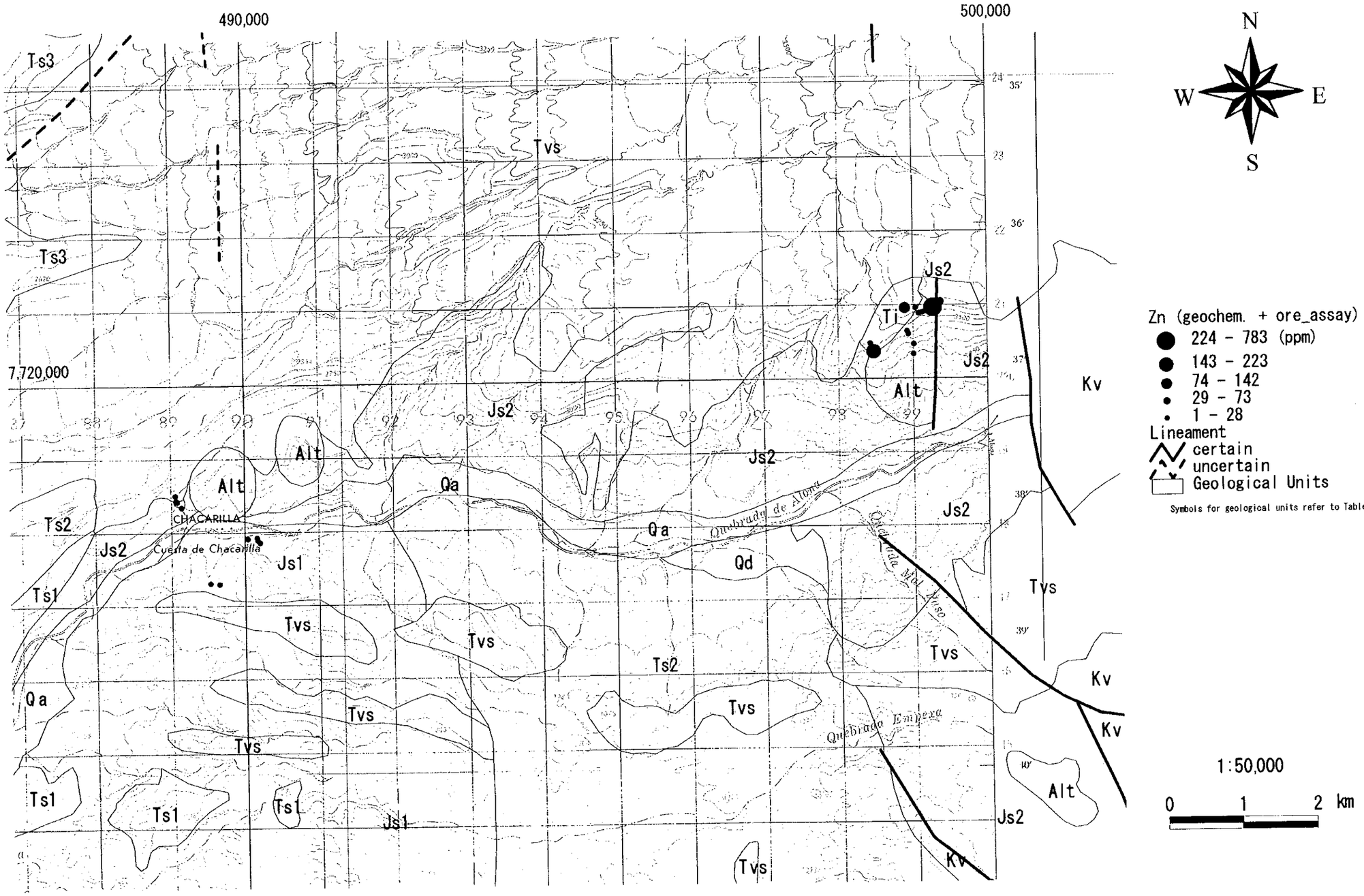


Fig. 2-1-30 (5) Geochemical Anomaly Map in the Chacarilla Area (Zn)