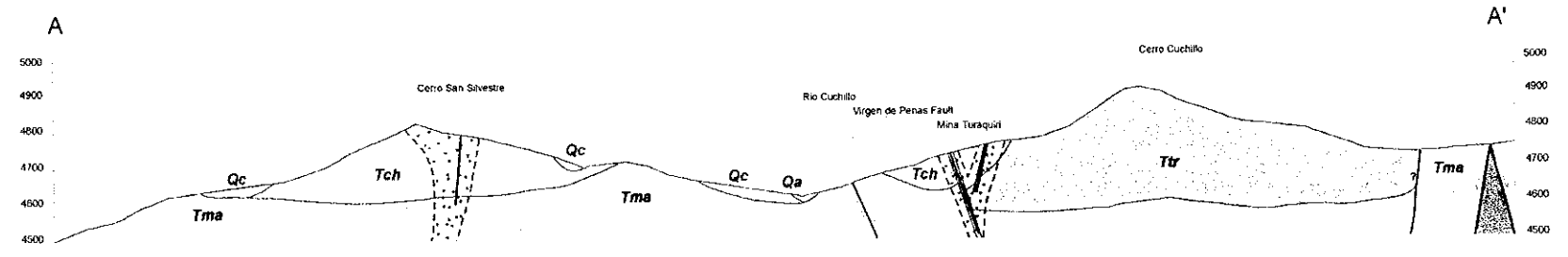


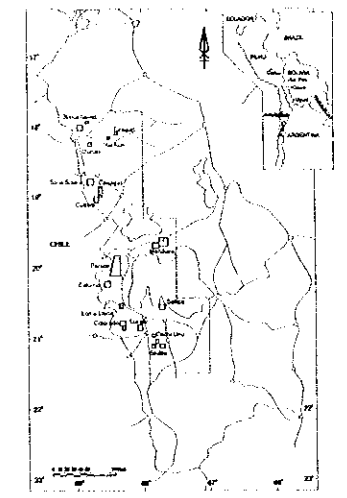
LEGEND

- Qa Alluvial deposit
- Qc Colluvial deposit
- Tch Chingurani lava
- Ttr Turaquiri tuff
- Tma Mouri tuff
- Tar Sandstone
- Fault
- Lineament
- Vein
- Alteration zone

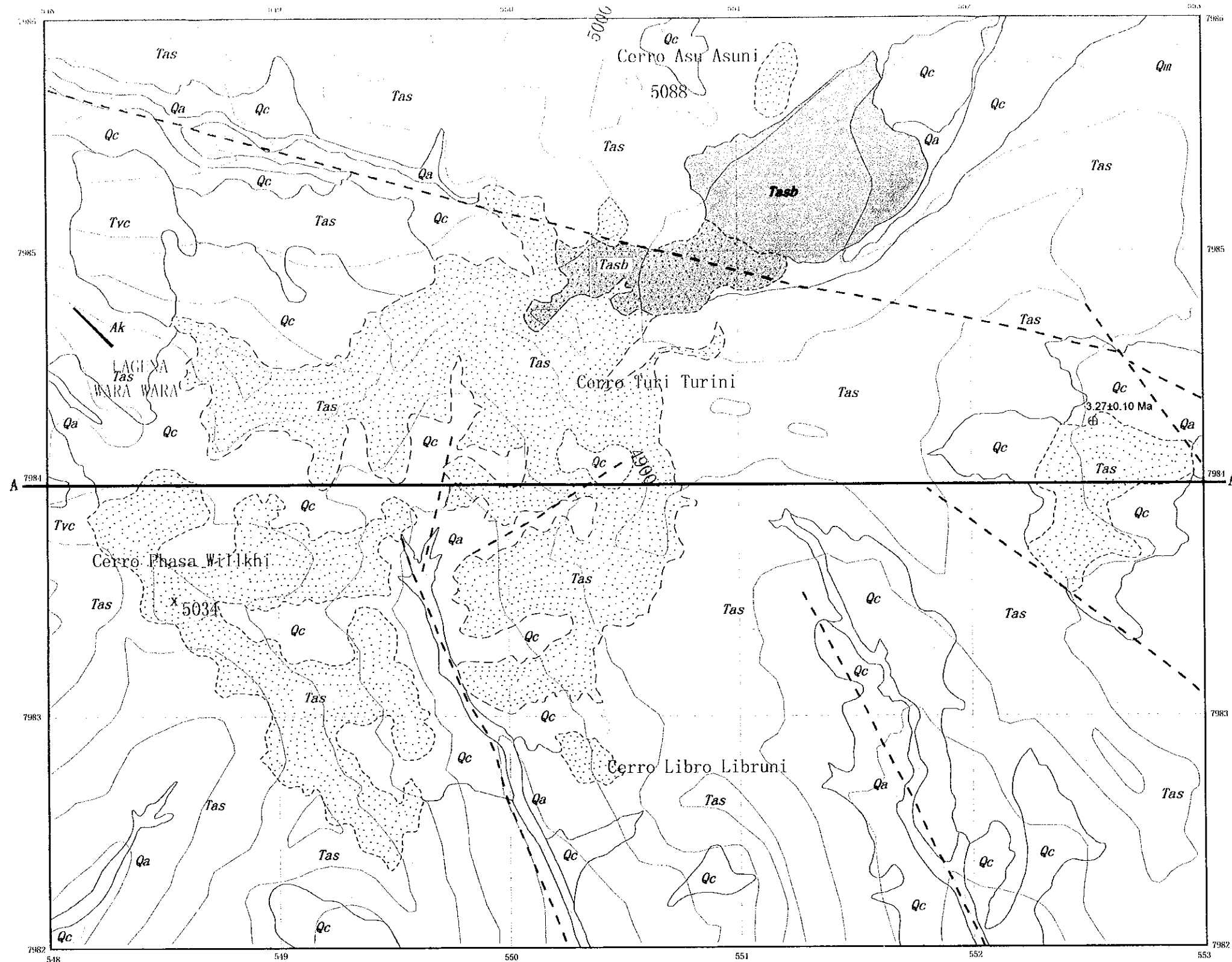


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Asu Asuni District



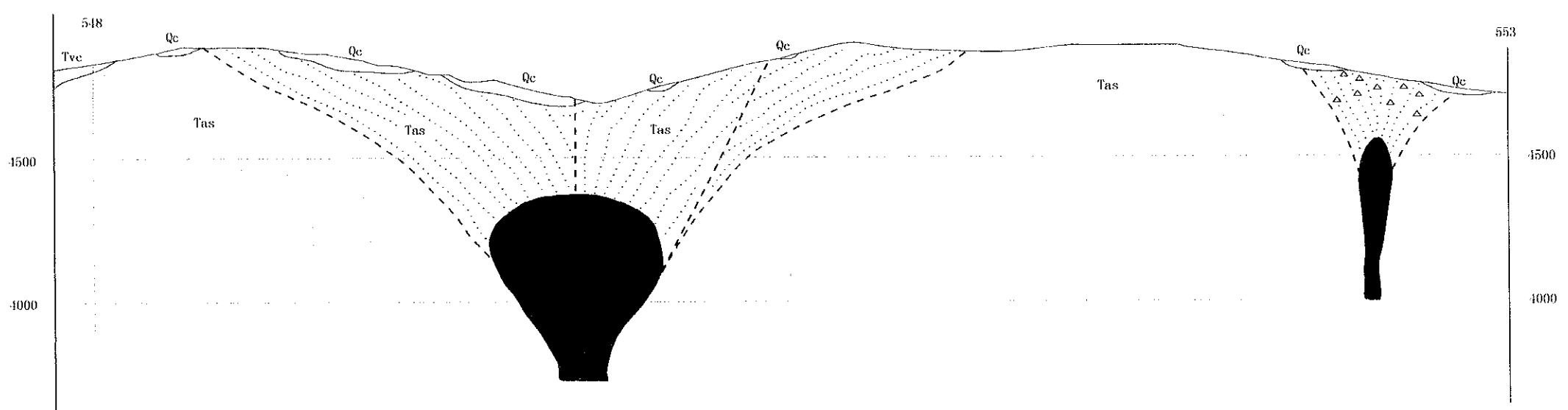
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

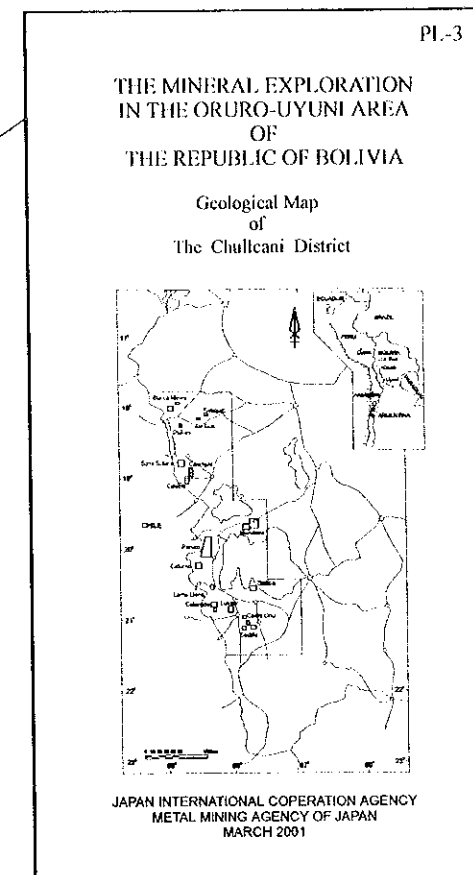
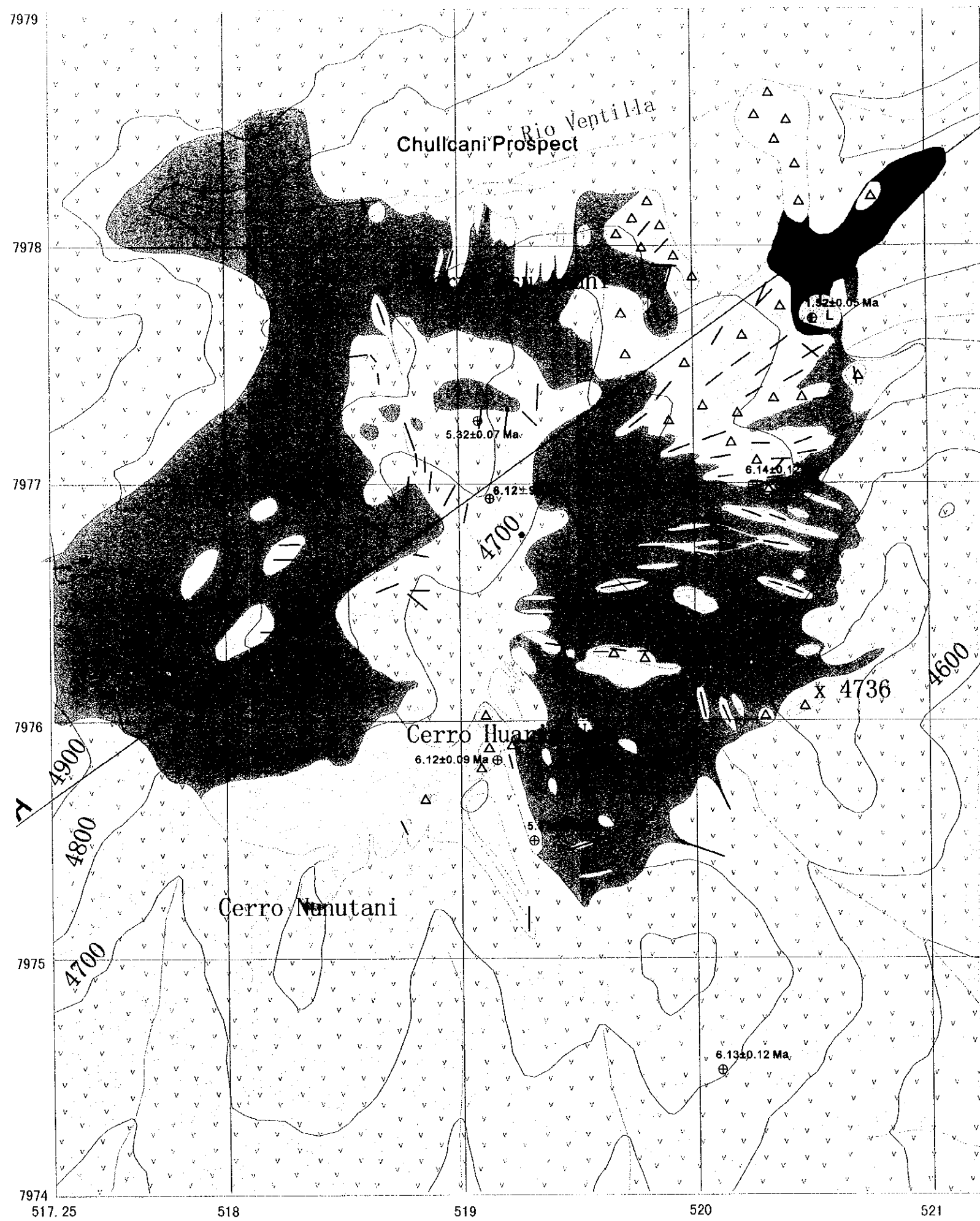


LEGEND

- Qa* Alluvial deposit
- Qc* Colluvial deposit
- Qm* Moraine
- Tvc* Pyroclastic rock
- Tas* Asu Asuni Andestic lava
- Tasb* Asu asuni Volcanic breccia
- Alteration zone
- Lineament

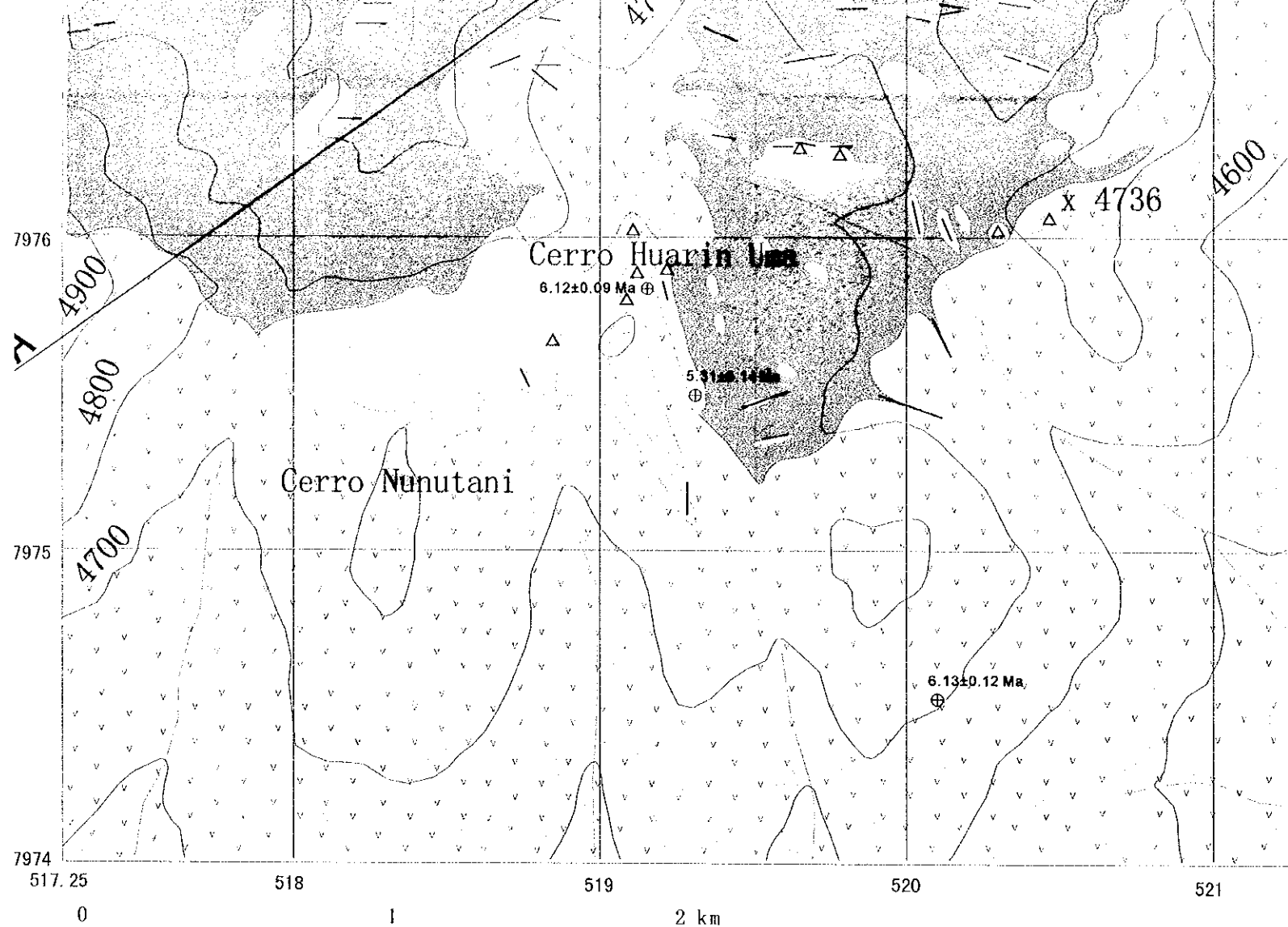
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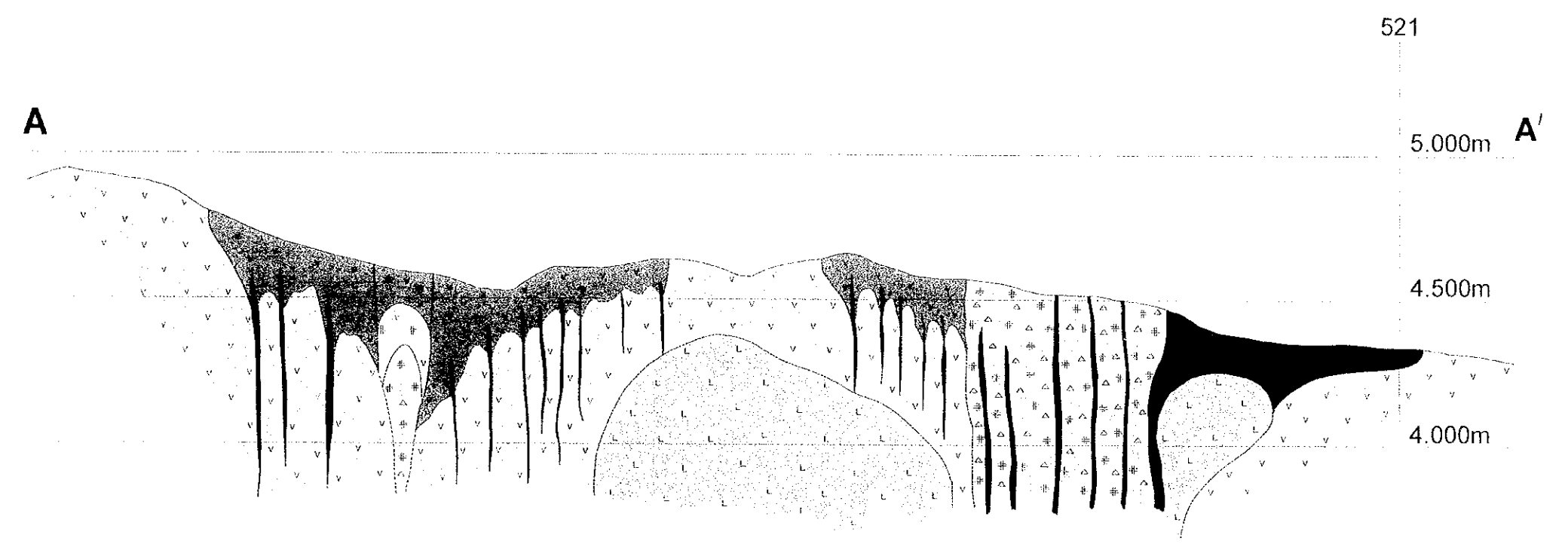


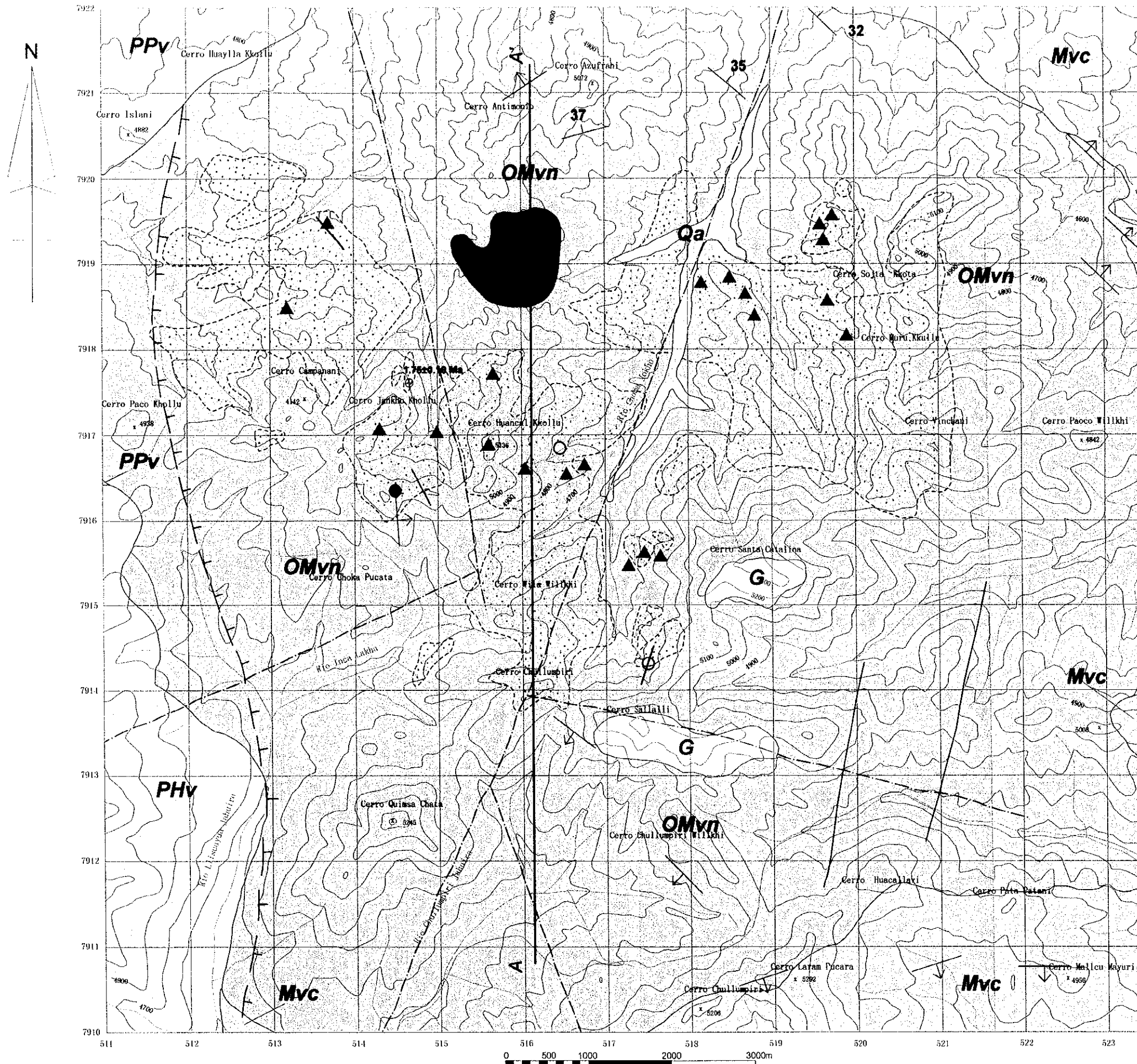
LEGEND

- ∇ andesite
- △ breccia
- L lava dome
- un-altered silicification
- argillization
- limonitization
- silicified vein



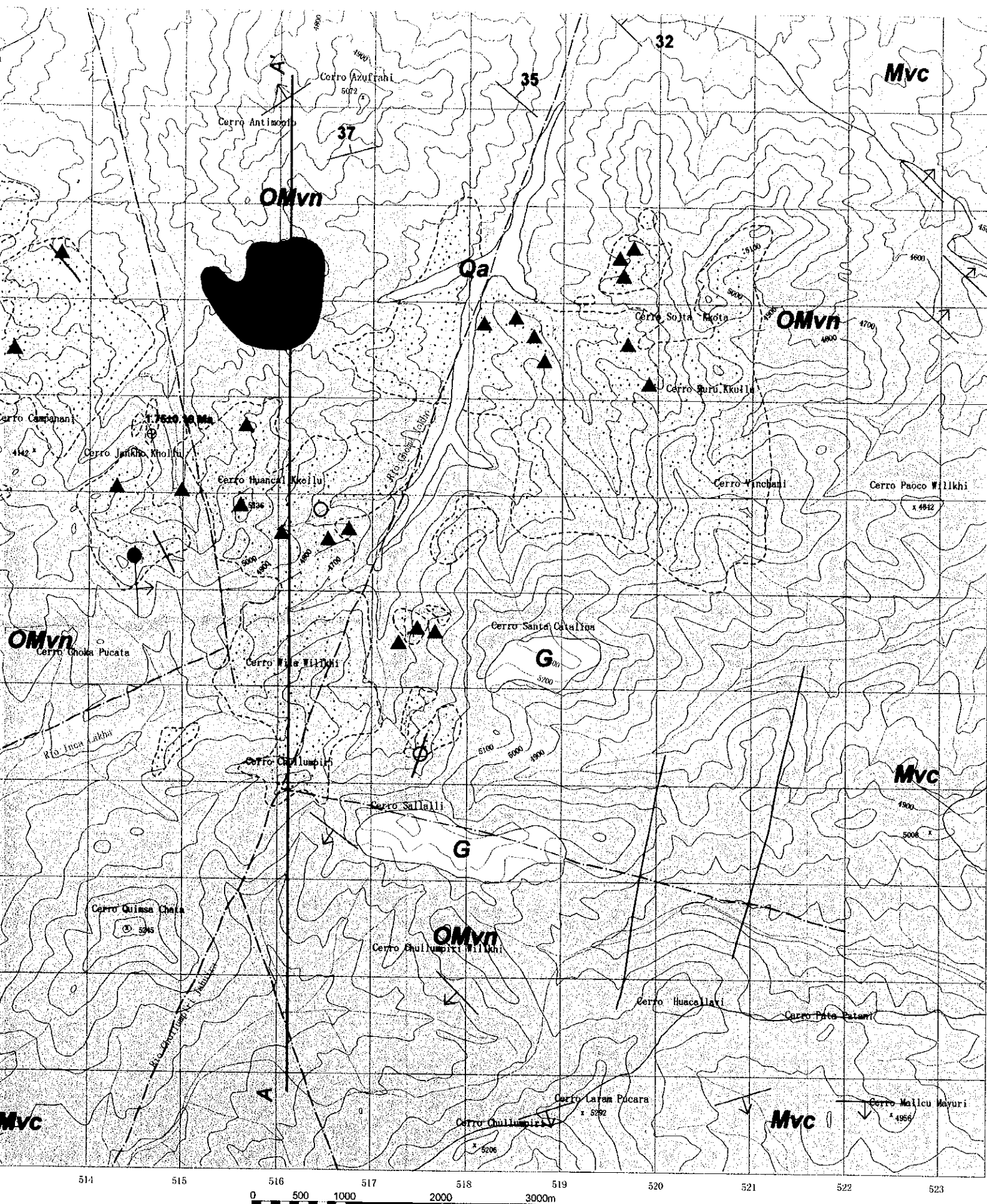
- LEGEND**
- andesite
 - breccia
 - lava dome
 - un-altered silicification
 - argillization
 - limonitization
 - silicified vein





LEGEND

- Qa Alluvial deposit
- PHv Pleistocene to Holocene volcanic rocks
- PPv Pliocene to Pleistocene volcanics (Perez F.)
- Mvs Lower to middle Miocene volcanic rocks (Carandas F.)
- OMvn Upper Oligocene to lower Miocene volcanic rocks (Negrillos F.)
- Lower Miocene volcanic to sub-volcanic rocks (domes, stocks and necks)
- G Gracial
- Fault
- Lineament
- Caldera margin
- Strike and dip of bedding
- Hydrothermal alteration zone
- Pb,Zn
- Pyrite
- Mn, limonite
- Ore vein



LEGEND

- Qa** Alluvial deposit
- PHv** Pleistocene to Holocene volcanic rocks
- PPv** Pliocene to Pleistocene volcanics (Perez F.)
- Mvs** Lower to middle Miocene volcanic rocks (Carandas F.)
- OMvn** Upper Oligocene to lower Miocene volcanic rocks (Negrillos F.)
- [Black Box]** Lower Miocene volcanic to sub-volcanic rocks (domes, stocks and necks).
- G** Gracial

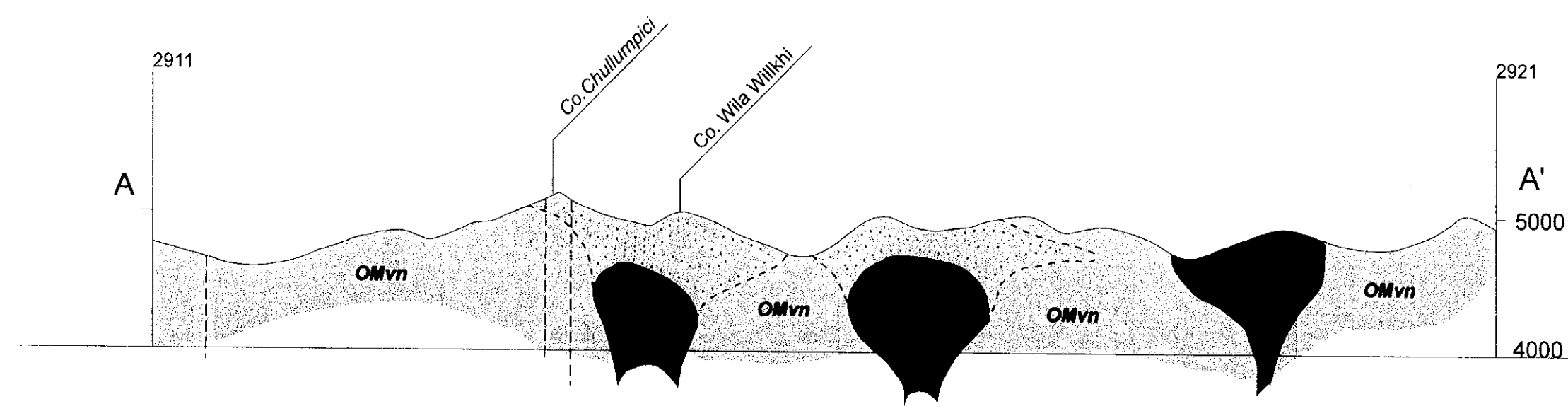
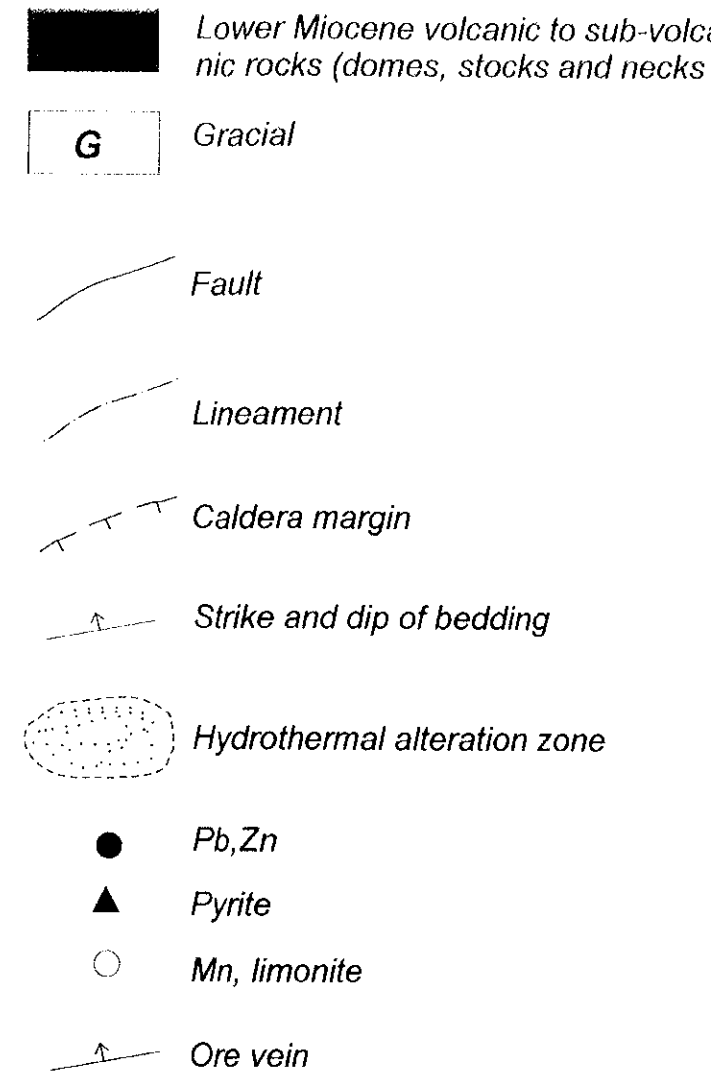
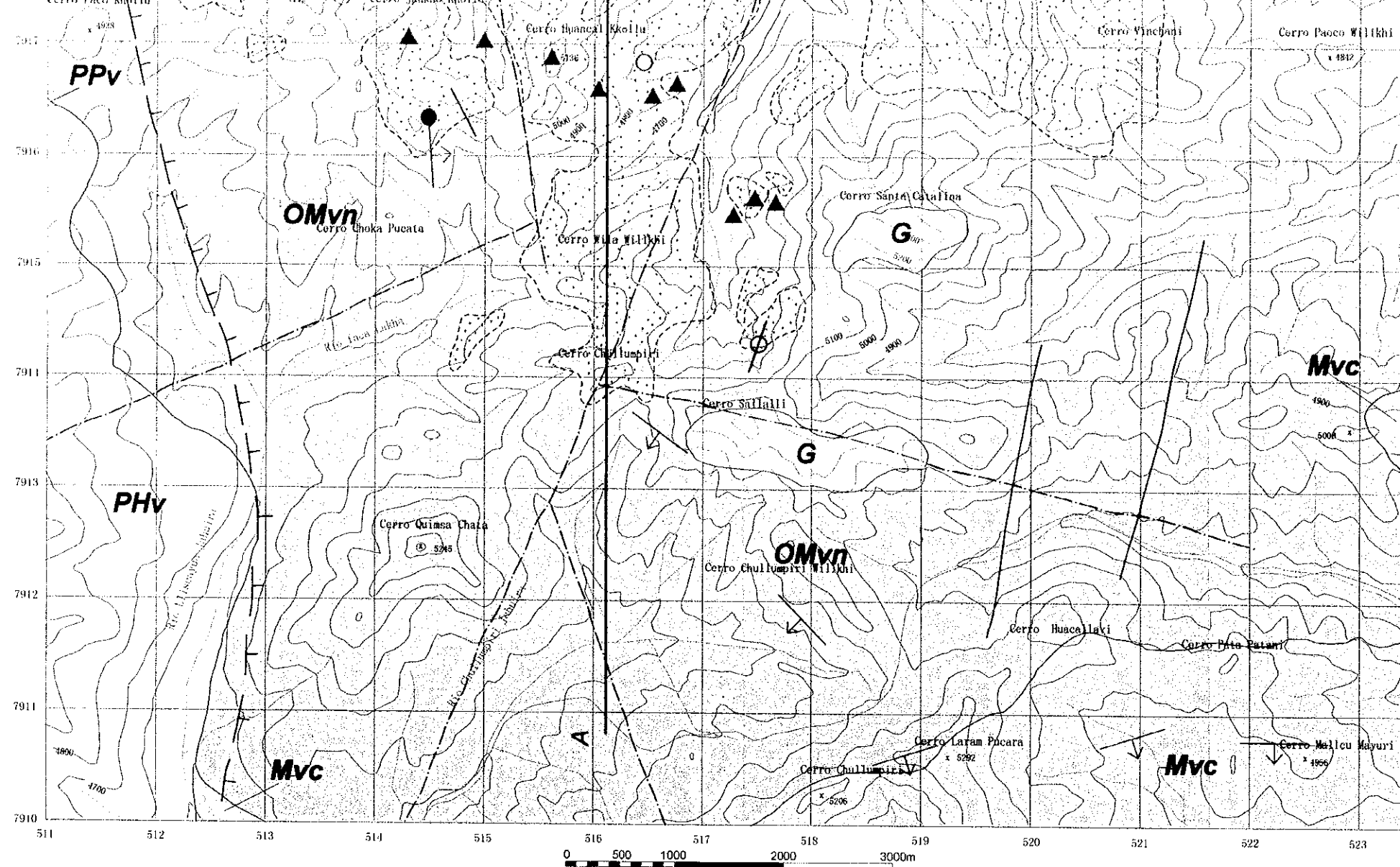
- [Solid Line]** Fault
- [Dashed Line]** Lineament
- [Dashed Line with T's]** Caldera margin
- [Arrow]** Strike and dip of bedding
- [Dotted Area]** Hydrothermal alteration zone
- [Solid Circle]** Pb, Zn
- [Solid Triangle]** Pyrite
- [Open Circle]** Mn, limonite
- [Arrow]** Ore vein

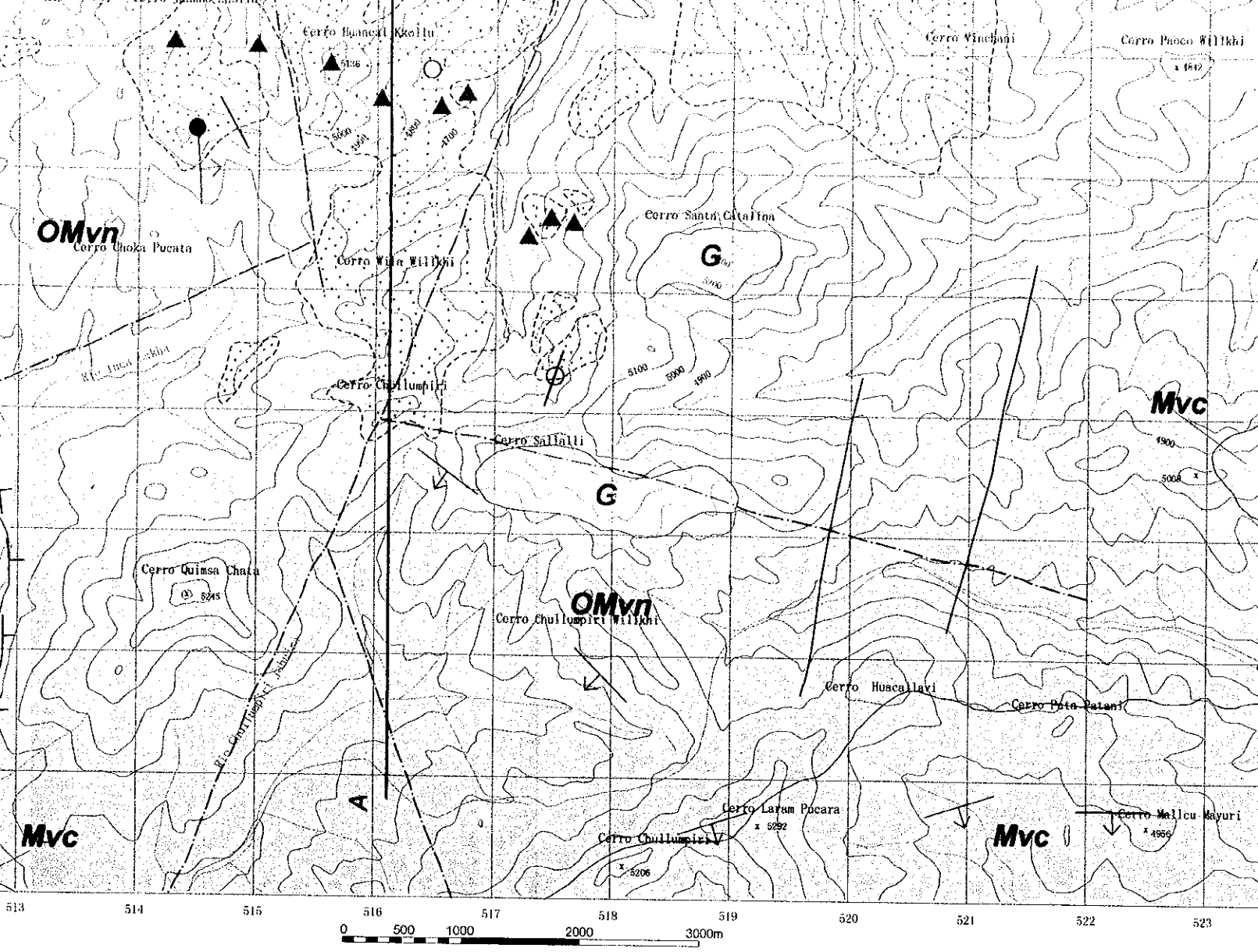
Pl.-4





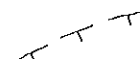
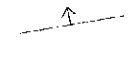





THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

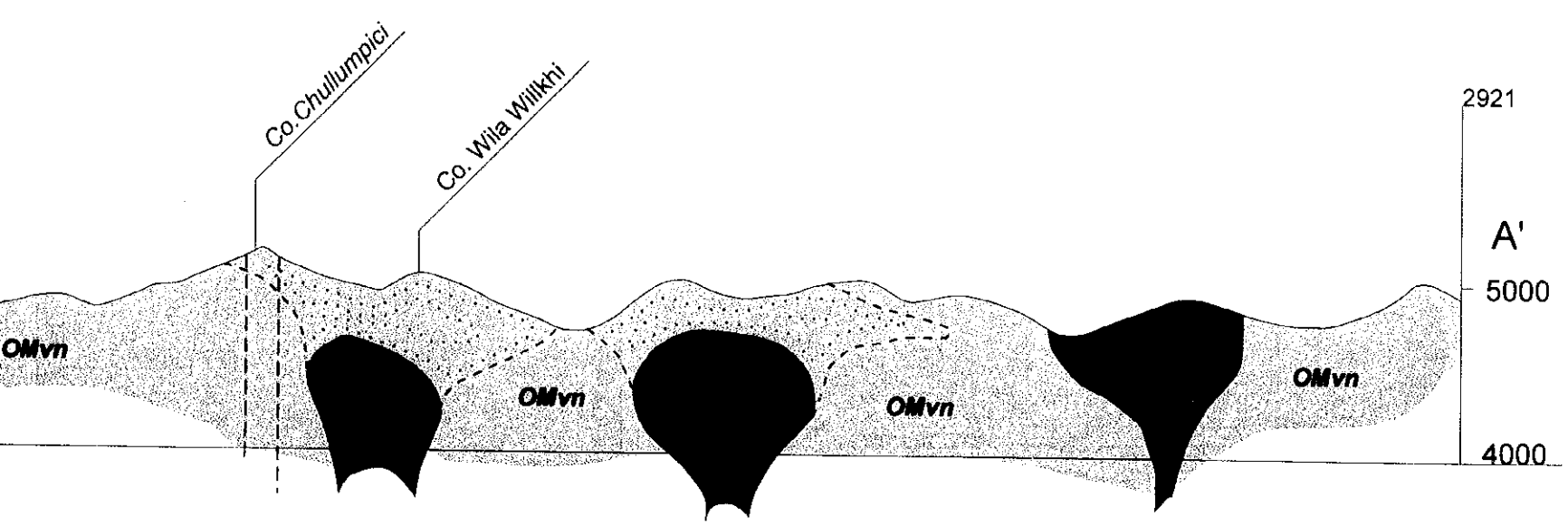
Geological Map
of
The Sonia-Susana District

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



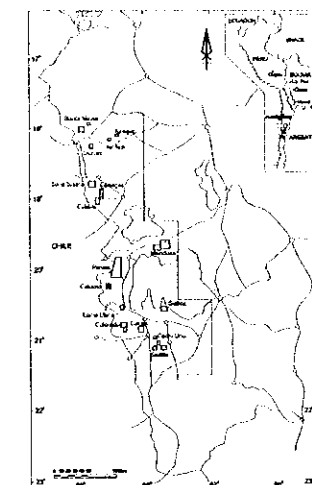


-  Lower Miocene volcanic to sub-volcanic rocks (domes, stocks and necks).
-  Gracial
-  Fault
-  Lineament
-  Caldera margin
-  Strike and dip of bedding
-  Hydrothermal alteration zone
-  Pb,Zn
-  Pyrite
-  Mn, limonite
-  Ore vein

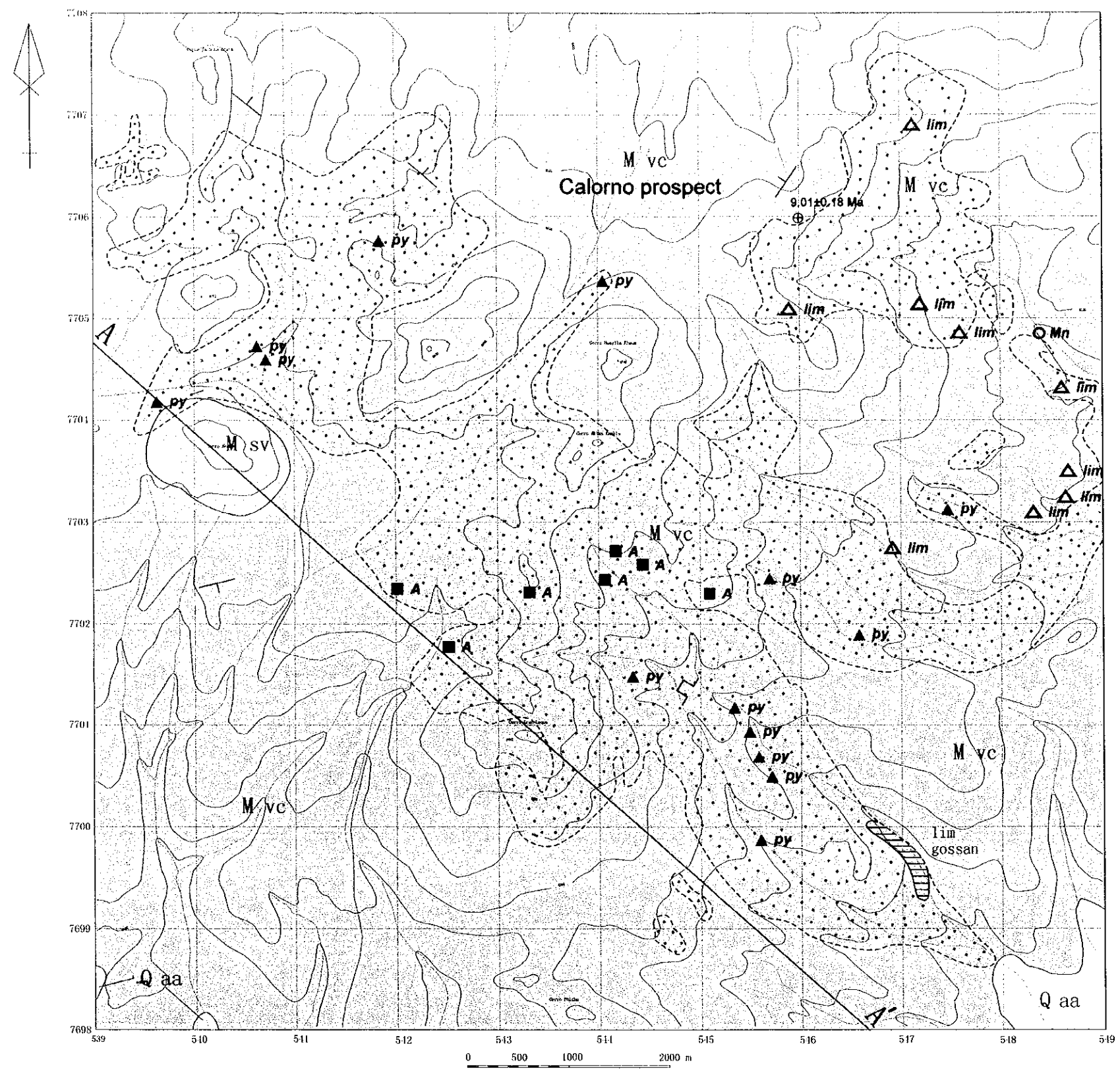


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Calorno District

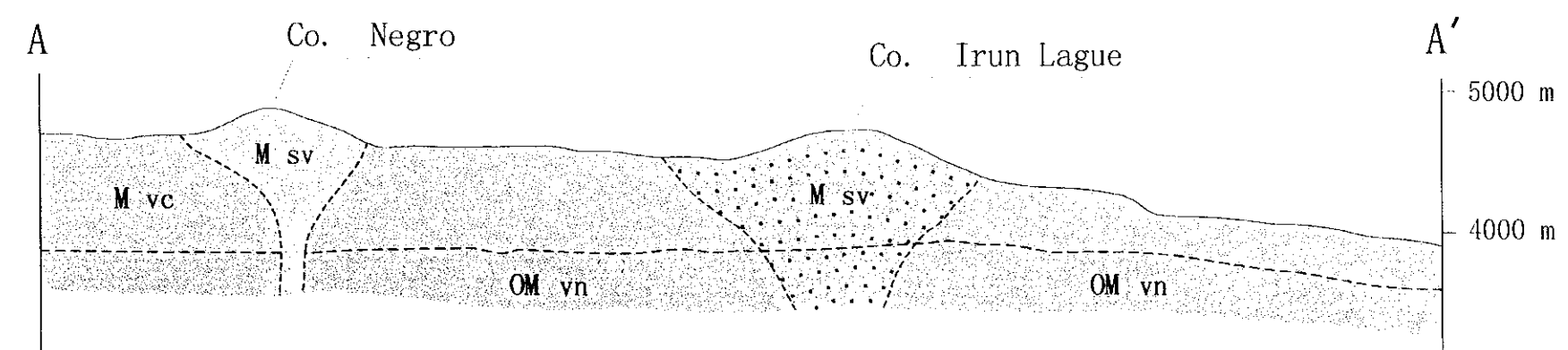


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



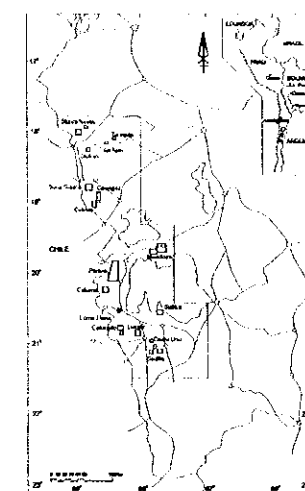
L E G E N D

- Q aa Alluvialfan deposit.
- M vc Lower to Middle Miocene
Volcanic rocks (Carangas F.)
- OM vn Upper Oligocene to lower Miocene
volcanic rock (Negrillos.)
- M sv Miocen sub-volcanic rock
(dikes, sills, stocks.)
- ↙ Dip of lava flow.
- ⊙ Hydro thermal
Alteration zone.
- ▲ py pyrite
- A yellow Alunite
- △ lim Limonite
- ⋈ tunnel
- Mn

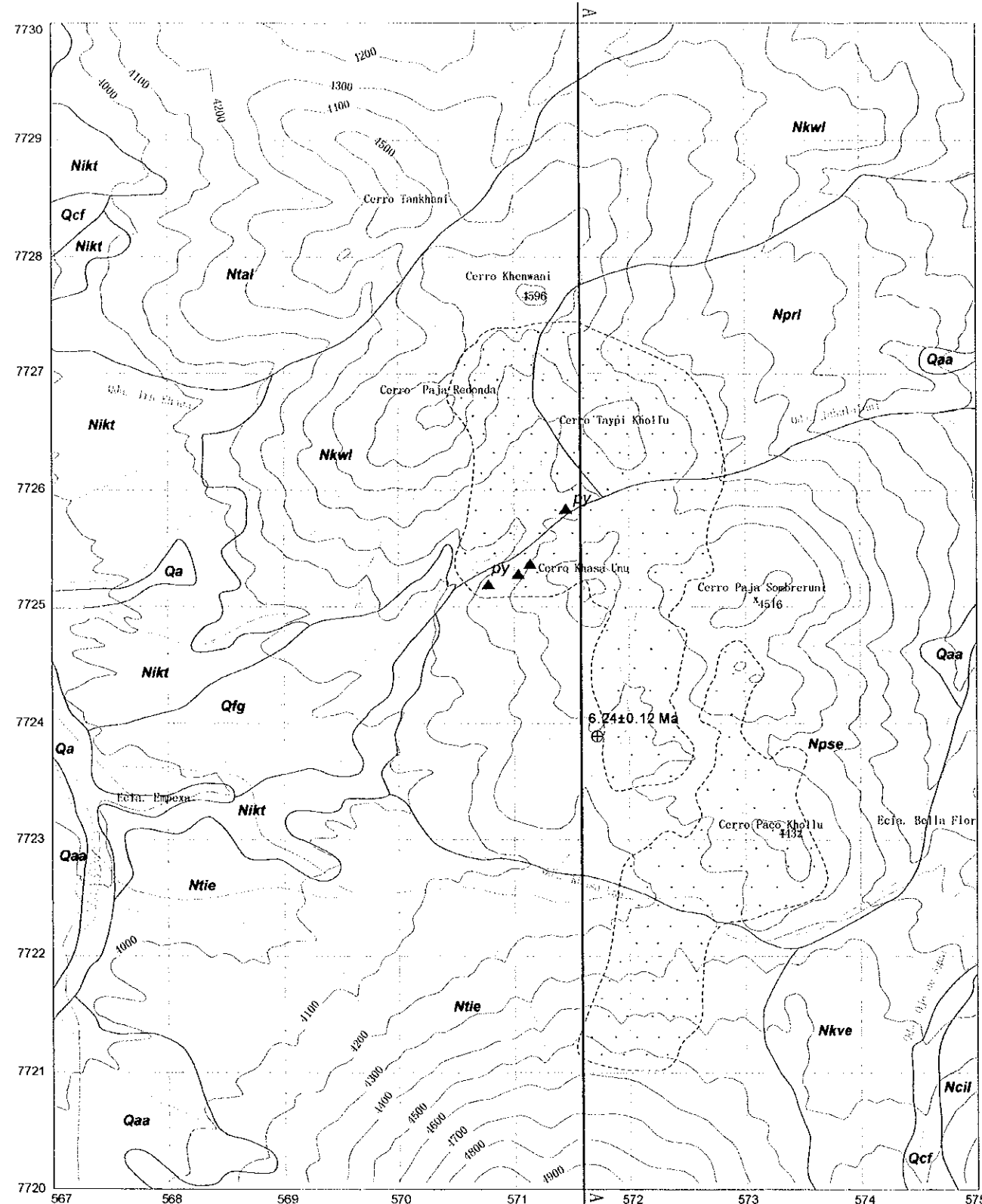
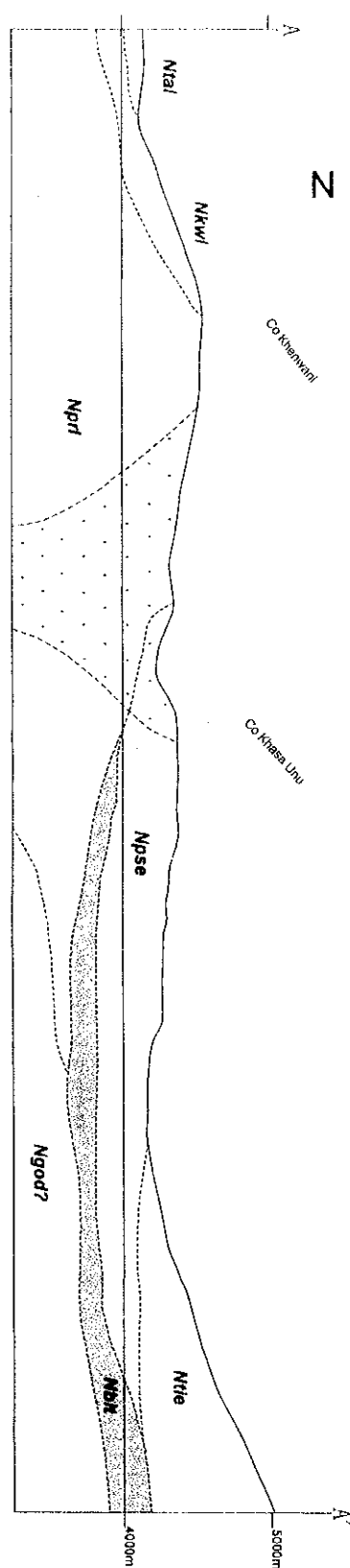


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Loma Llana District



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

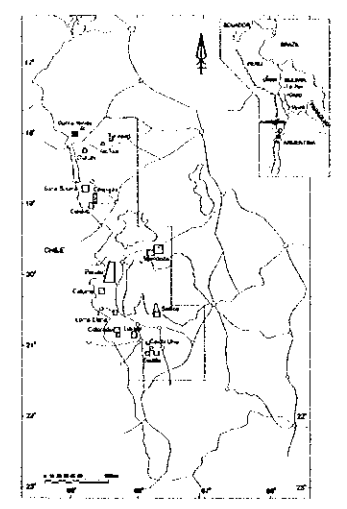


Legend

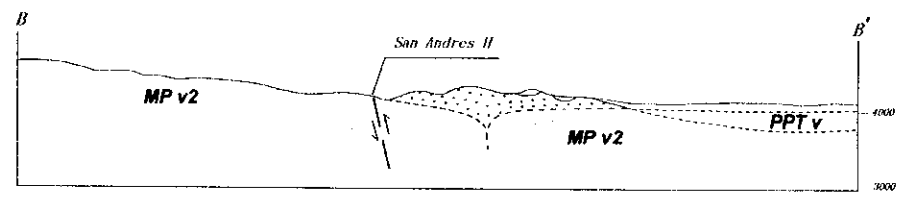
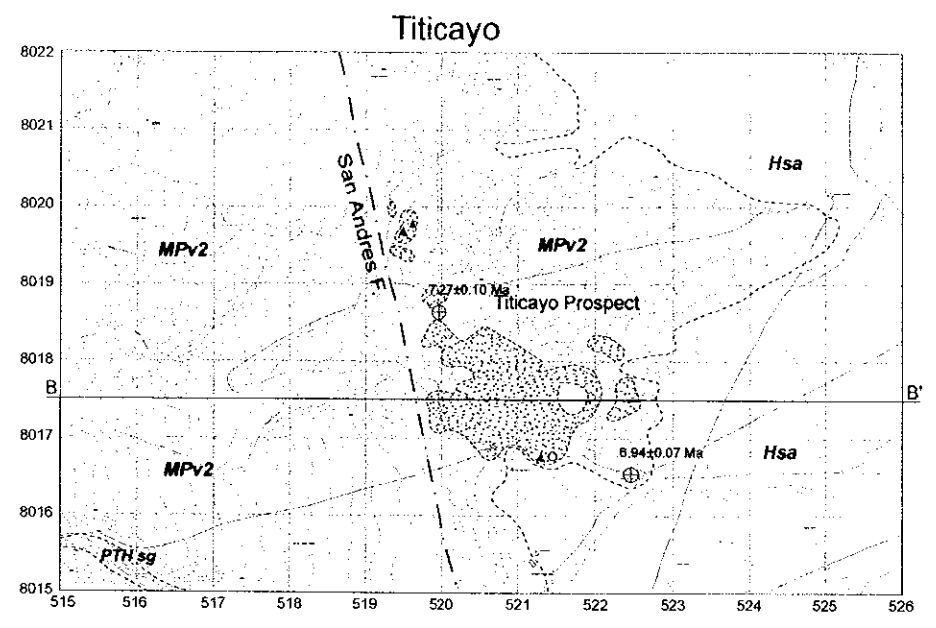
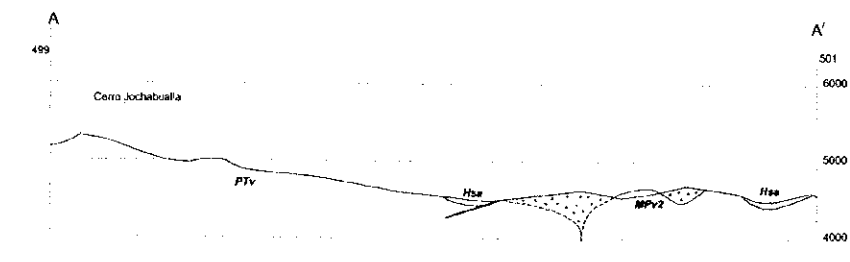
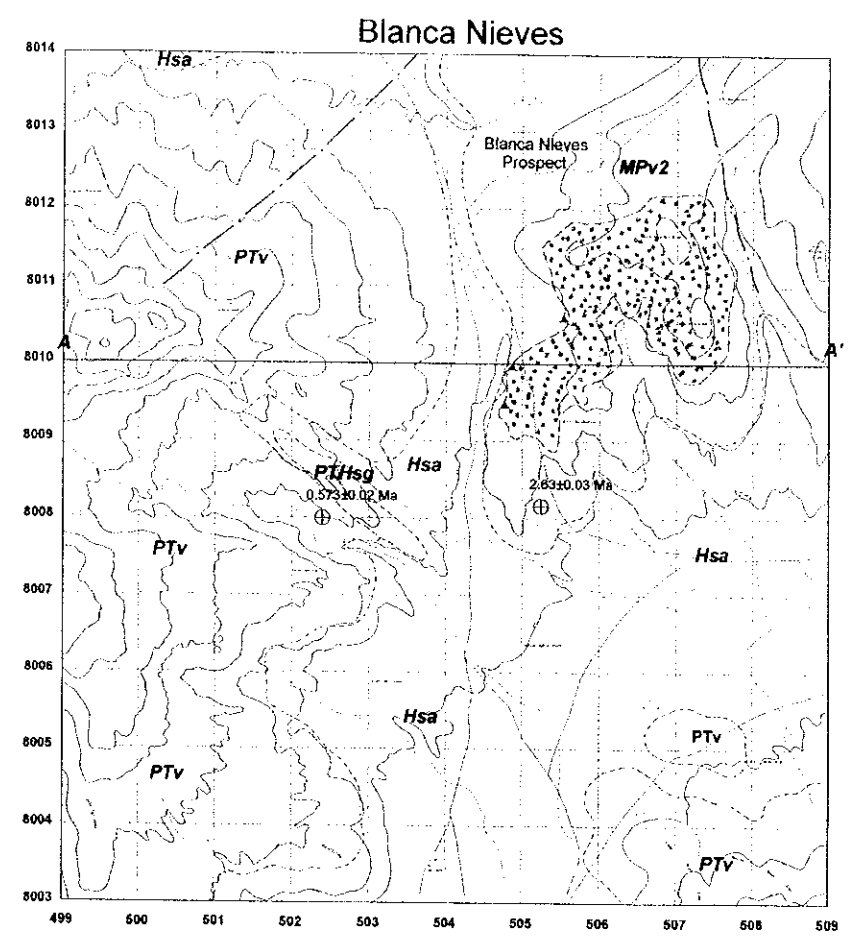
- Qa Alluvial deposit
- Qaa Alluvial deposit
- Qcf Colluvial-fluvial deposit
- Qfg Fluvio-glacial deposit
- Caltema-Tirani mountains range
- Nkve Upper Pliocene volcanic rocks
- Ntie Upper Pliocene volcanic rocks
- Nkt Lower Pliocene volcanic rocks
- Ntal Lower Pliocene volcanic rocks
- Npse Lower Pliocene volcanic rocks
- Nkt Lower Pliocene volcanic rocks
- NkwI Upper Miocene volcanic rocks
- Npri Upper Miocene volcanic rocks
- Nkil Upper Miocene volcanic rocks
- Ngod Upper Miocene volcanic rocks
- Hydrothermal alteration zone
- Fault
- py Pyrite

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Blanca Nieves District



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

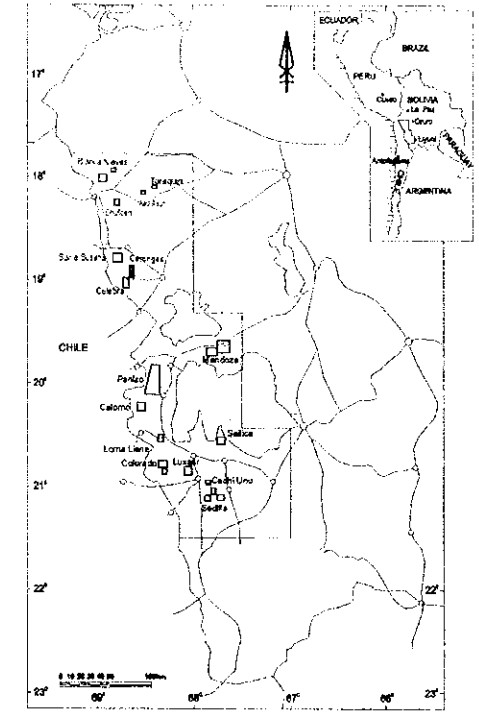


- Legend**
- Hsa Holocene alluvial and colluvial sedimentary deposits
 - PTHsg Pleistocene to Holocene glacial sedimentary deposits
 - PTv Pleistocene volcanic rocks
 - MPv2 Upper Miocene to Pliocene volcanic rocks and/or andesitic rhyolitic lava flow
 - Lineament/fault
 - Hydrothermal alteration zone
 - ▲ Pyrite
 - Mn limonite

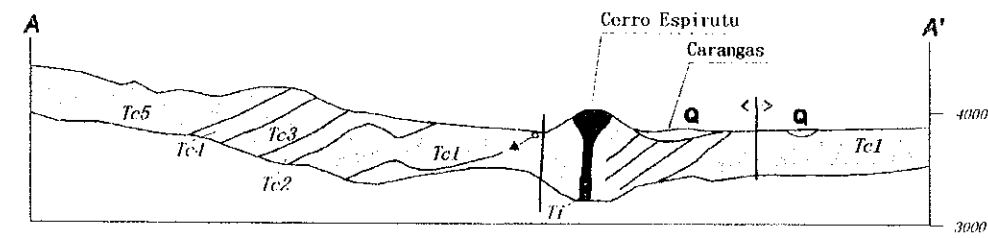
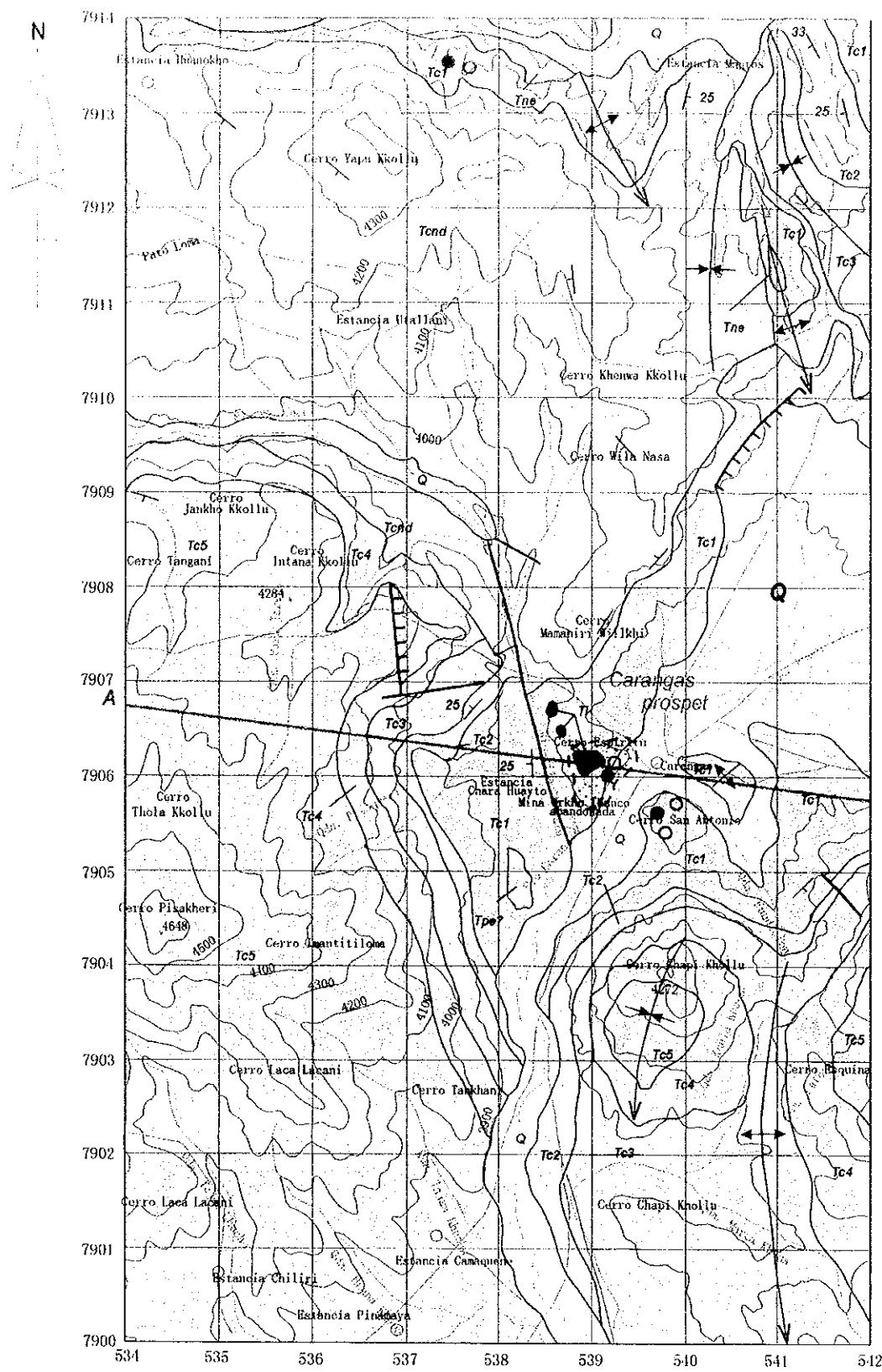
N

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Carangas District



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

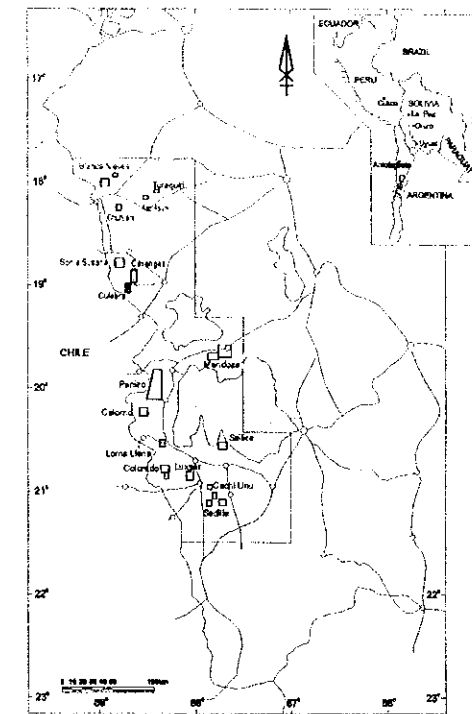


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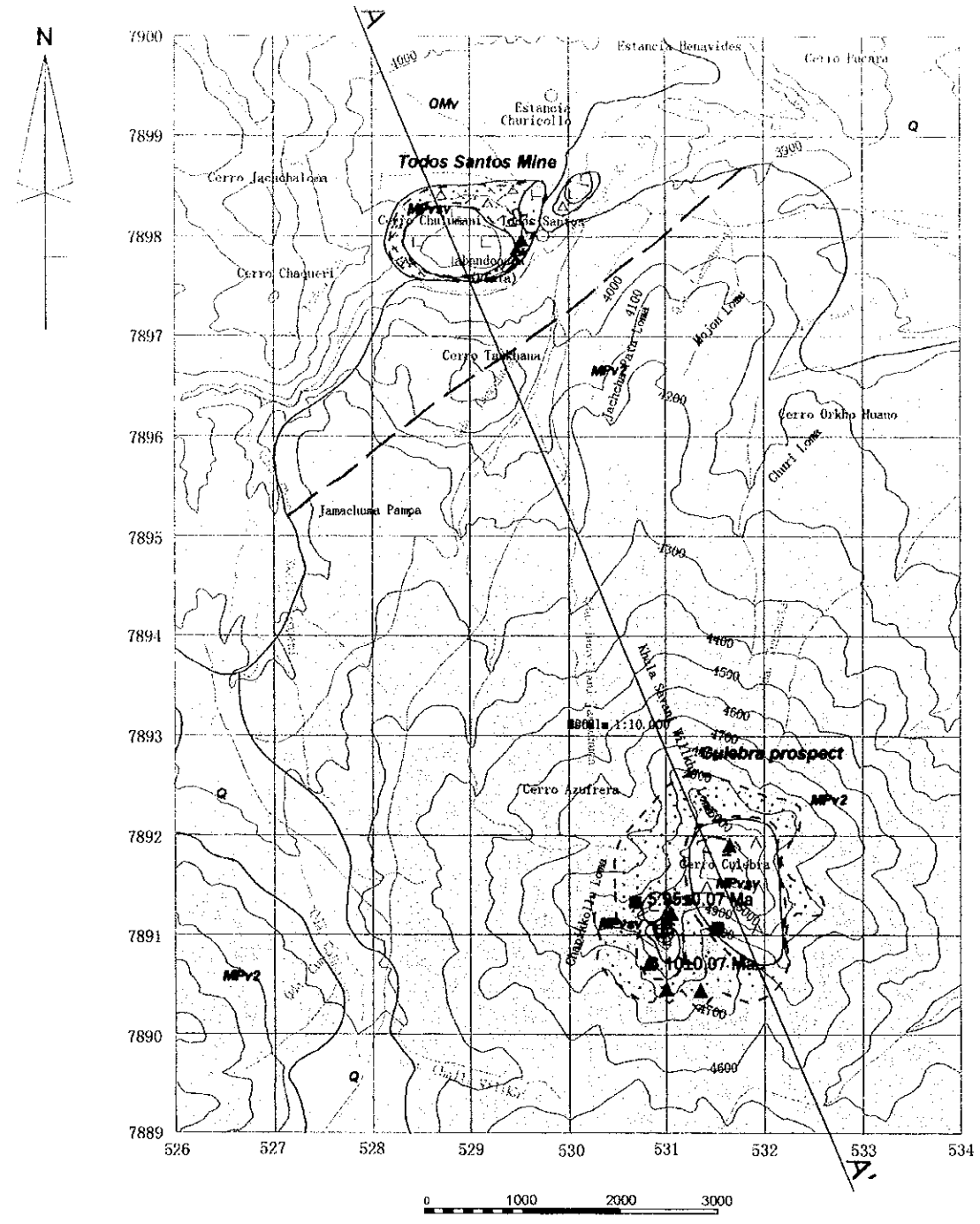
- Q** Quaternary deposits
- Tpe?** Perez formation
- Tc5** Basalt
- Tc4** Andestic-dacitic
- Tc3** Rhyolitic tuff
- Tc2** Andestic lava
- Tc1** Rhyolitic volcanic breccia
- Tne** Negrillos formation
- Tcnd** 4 Carangas formation
- Tertiary intrusion
- Syncline
- Anticline
- Strike and dip of bedding
- Fault
- Hydrothermal alteration zone
- Pb, Zn
- Mn

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Culebra District

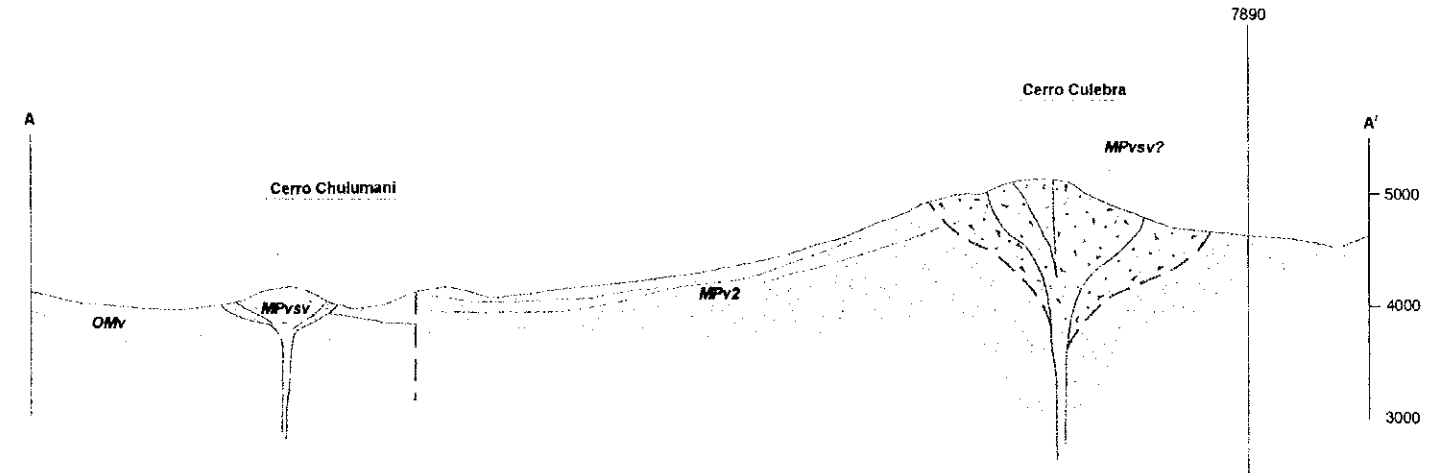


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



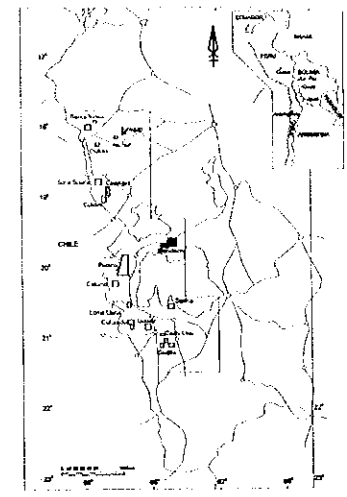
LEGEND

- Q** Quaternary deposits
- MPY2** Miocene to Pliocene volcanic rocks (Andesitic to rhyolitic lava)
- MPYsv** Miocene to Pliocene volcanic rocks (Dacitic to rhyolitic Domes)
- OMv** Upper Oligocene to Lower Miocene volcanic rocks (Andesitic to rhyolitic lava)
- Fault
- stippled Hydrothermal alteration zone
- ▲ Pyrite
- yellow alunite
- - - Tunnel

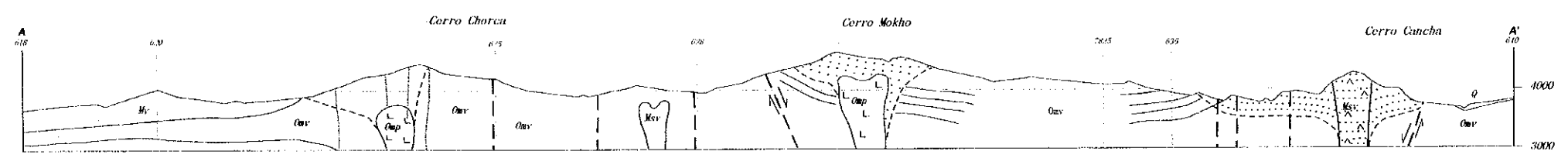
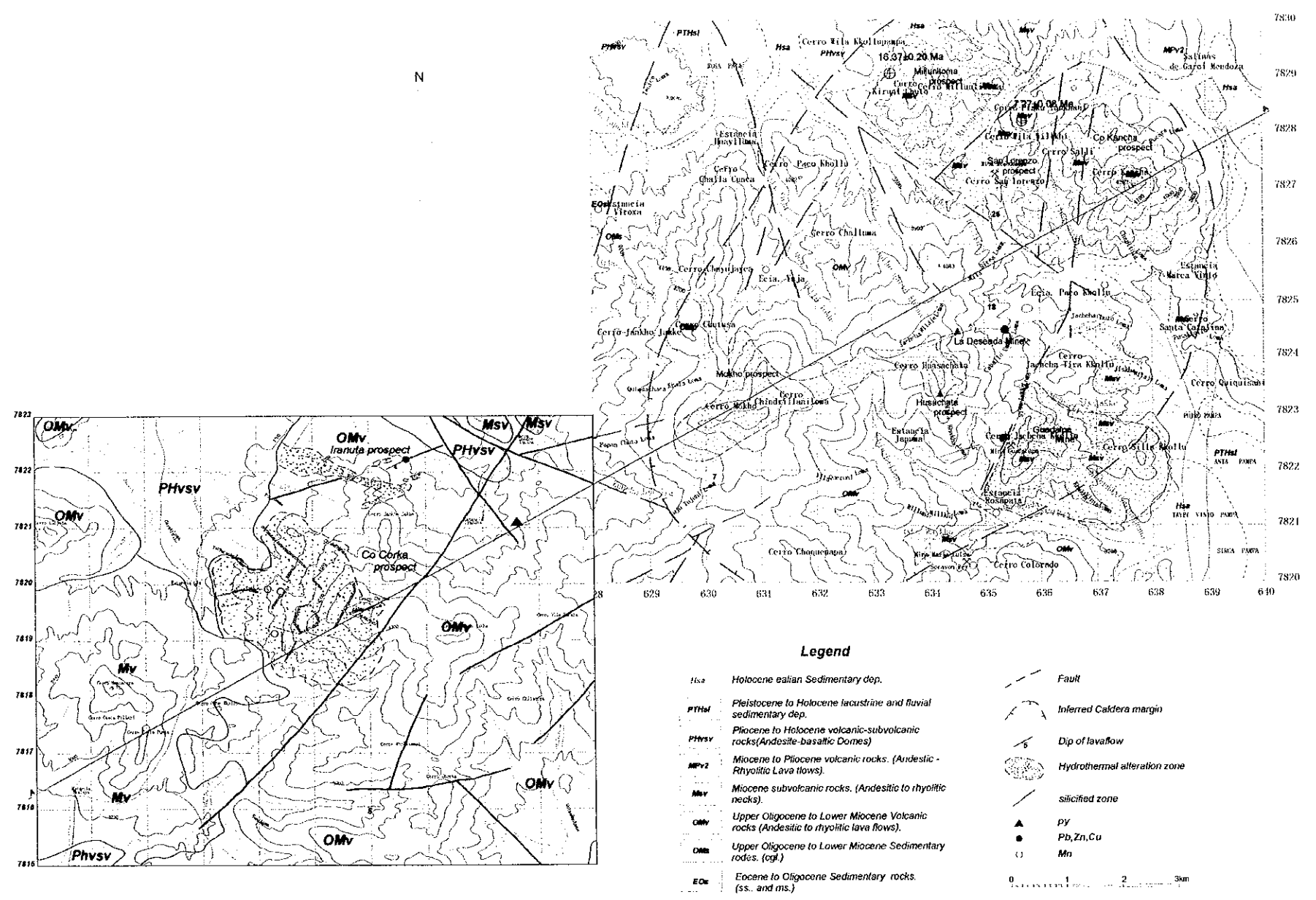


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Mendoza District

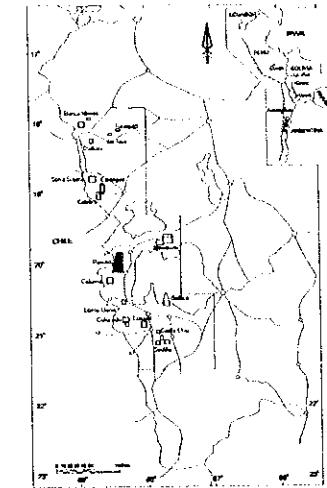


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

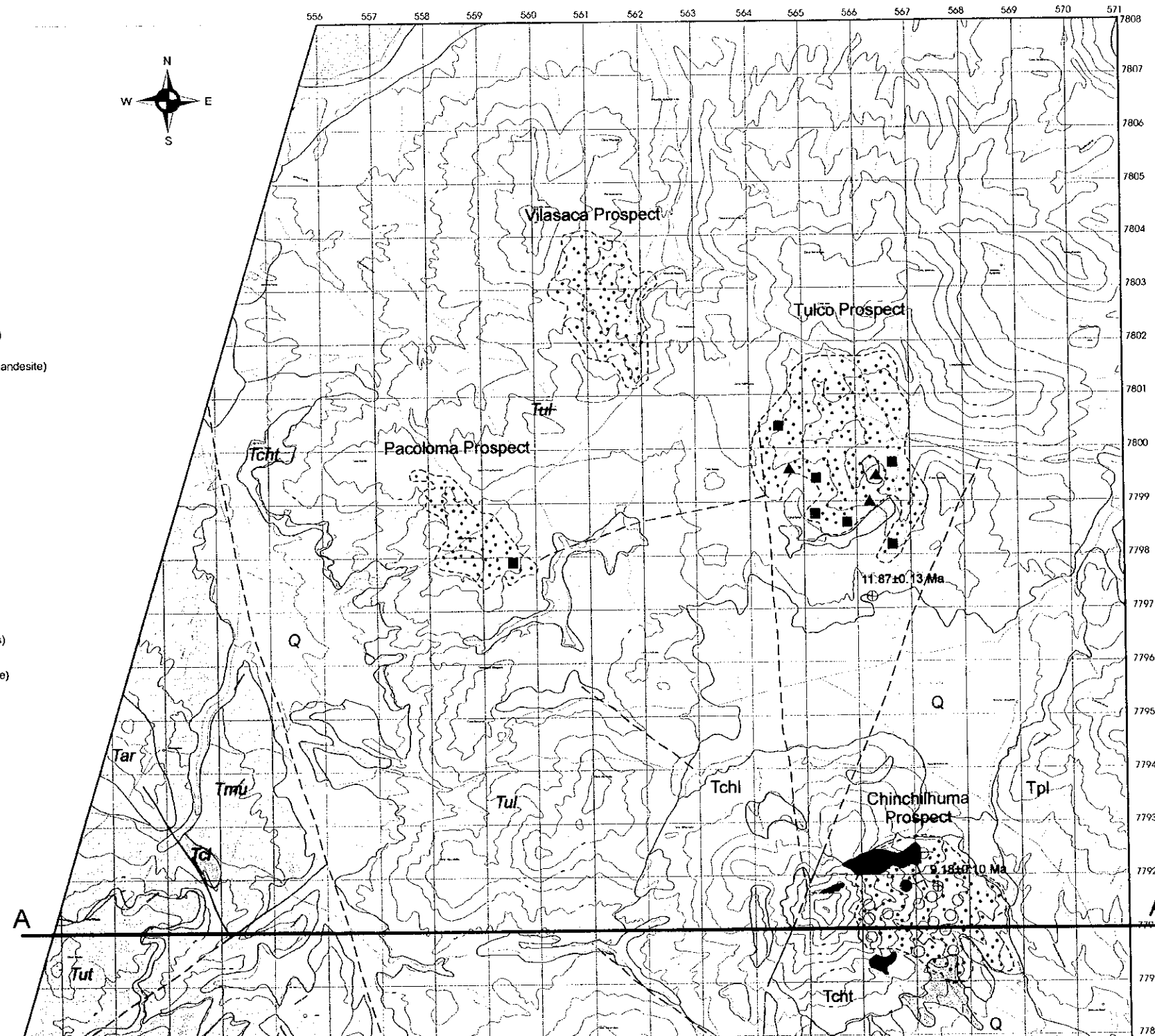
Geological Map
of
The Panizo District
















JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

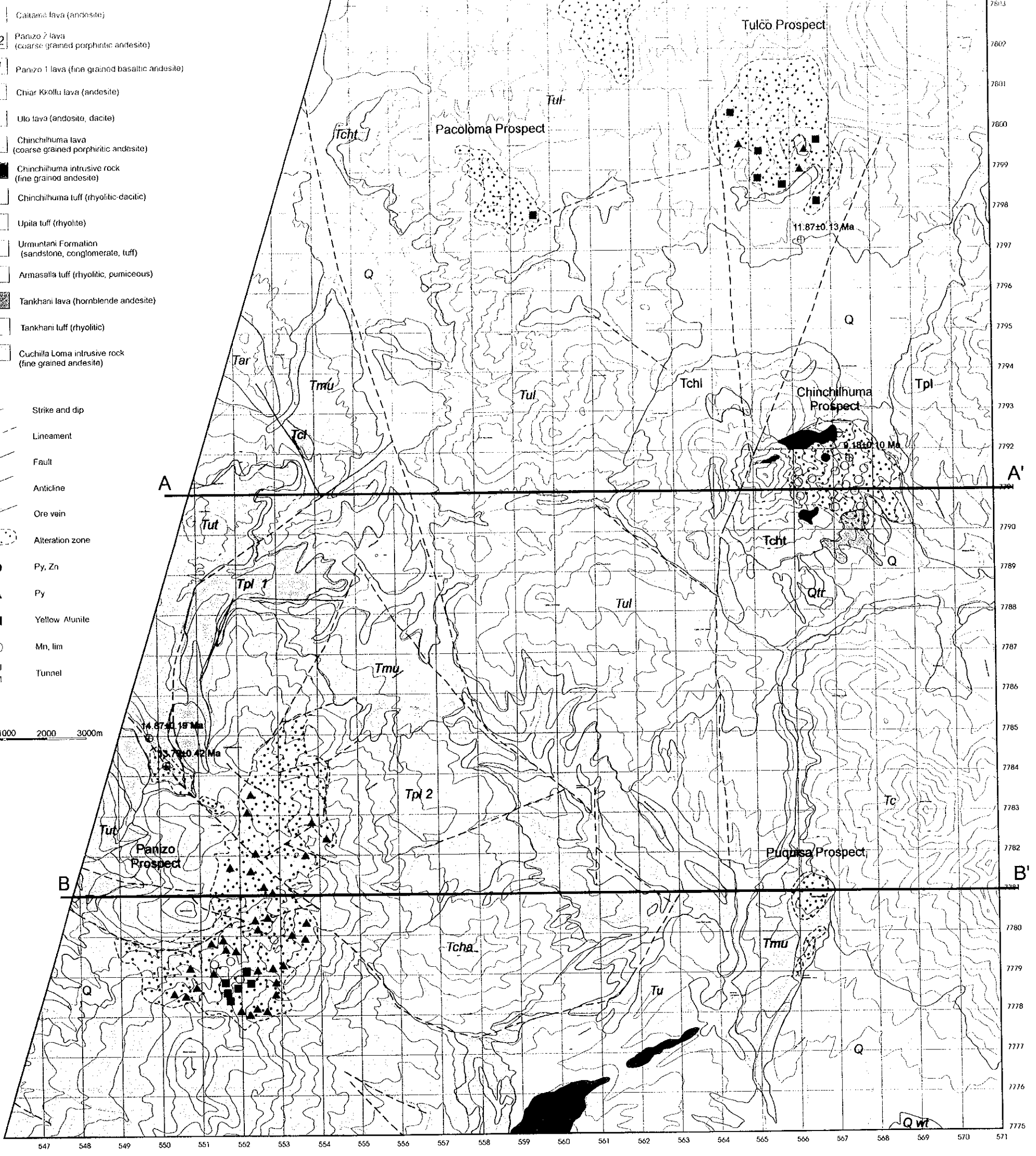
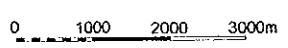
- LEGEND**
- Q Quaternary deposits
 - Q tr Travertine
 - Q wt Willacollu lava
 - Tpl Picacho lava (andesite)
 - Tc Callama lava (andesite)
 - Tpl 2 Panizo 2 lava (coarse grained porphyritic andesite)
 - Tpl 1 Panizo 1 lava (fine grained basaltic andesite)
 - Tcha Chiar Kkollu lava (andesite)
 - Tul Ulo lava (andesite, dacite)
 - Tch Chinchiluma lava (coarse grained porphyritic andesite)
 - Chinchiluma intrusive rock (fine grained andesite)
 - Tcht Chinchiluma tuff (rhyolitic-dacitic)
 - Tut Uplila tuff (rhyolite)
 - Tmu Urmuntani Formation (sandstone, conglomerate, tuff)
 - Tar Armasalla tuff (rhyolitic, pumiceous)
 - Tankhani lava (hornblende andesite)
 - Tu Tankhani tuff (rhyolitic)
 - Tcl Cuchilla Loma intrusive rock (fine grained andesite)

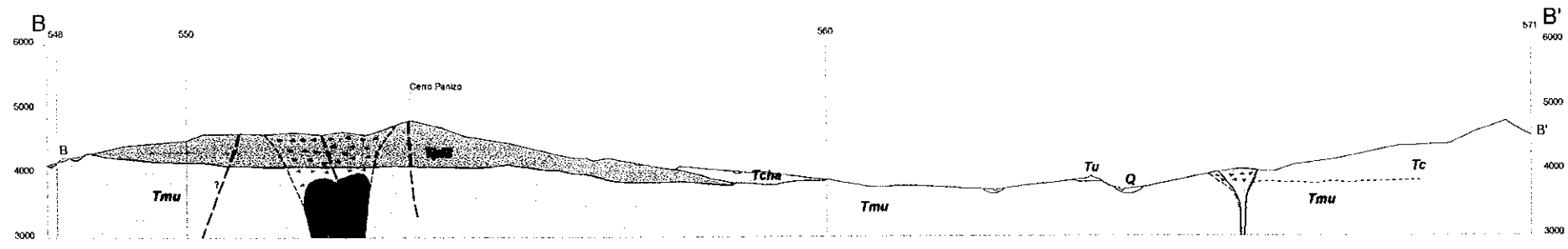
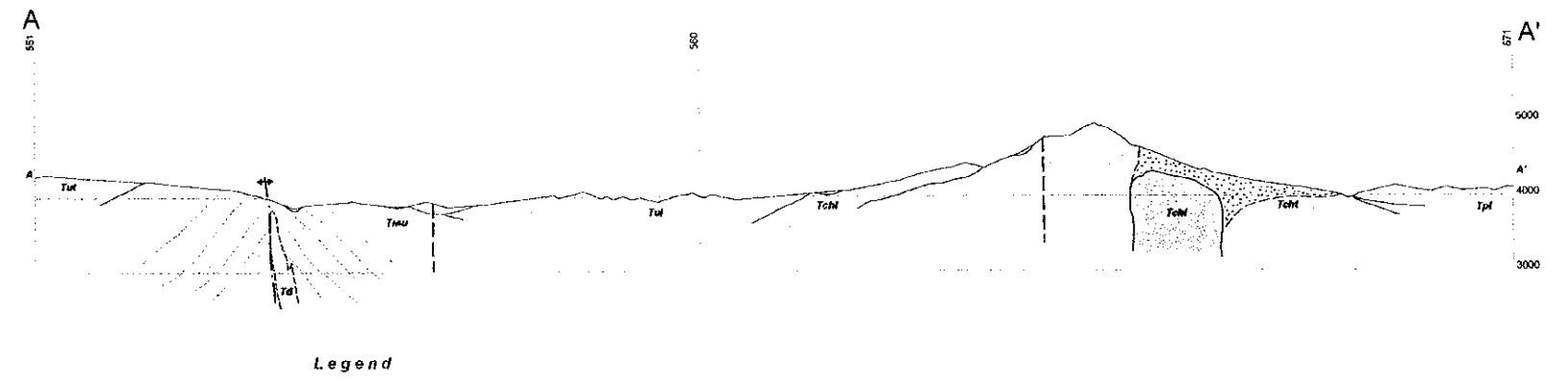
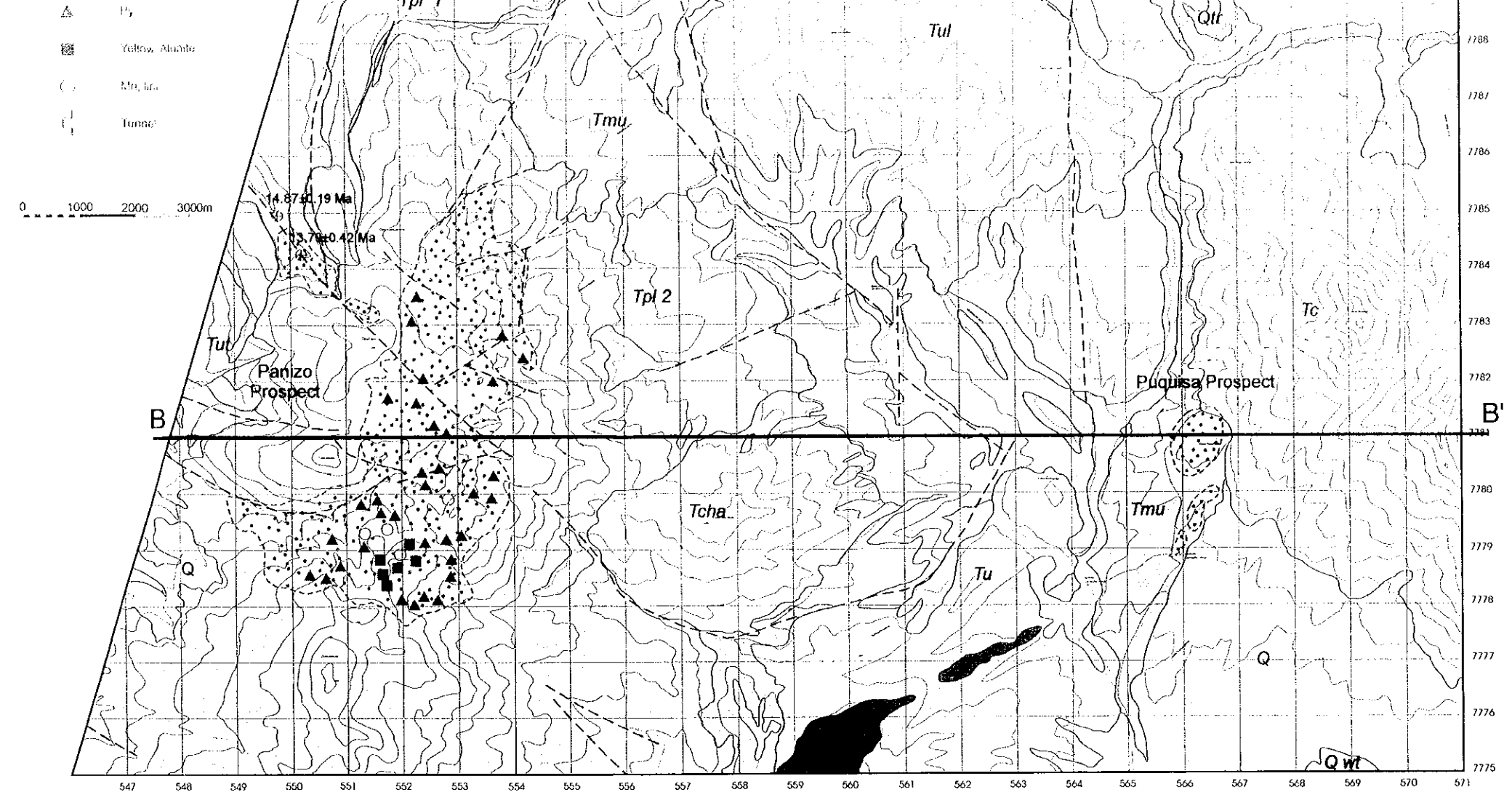
- Strike and dip
- Lineament
- Fault
- Anticline
- Ore vein
- Alteration zone
- Py, Zn



- Tc** Caitana lava (andesite)
- Tpl 2** Panizo 2 lava (coarse grained porphyritic andesite)
- Tpl 1** Panizo 1 lava (fine grained basaltic andesite)
- Tcha** Chiar Krollu lava (andesite)
- Tul** Ulo lava (andesite, dacite)
- Tchl** Chinchihuma lava (coarse grained porphyritic andesite)
-  Chinchihuma intrusive rock (fine grained andesite)
- Tcht** Chinchihuma tuff (rhyolitic-dacitic)
- Tut** Uputa tuff (rhyolite)
- Tmu** Urmuntani Formation (sandstone, conglomerate, tuff)
- Tar** Armasalla tuff (rhyolitic, pumiceous)
-  Tankhani lava (hornblende andesite)
- Tu** Tankhani tuff (rhyolitic)
- Tcl** Cuchilla Loma intrusive rock (fine grained andesite)

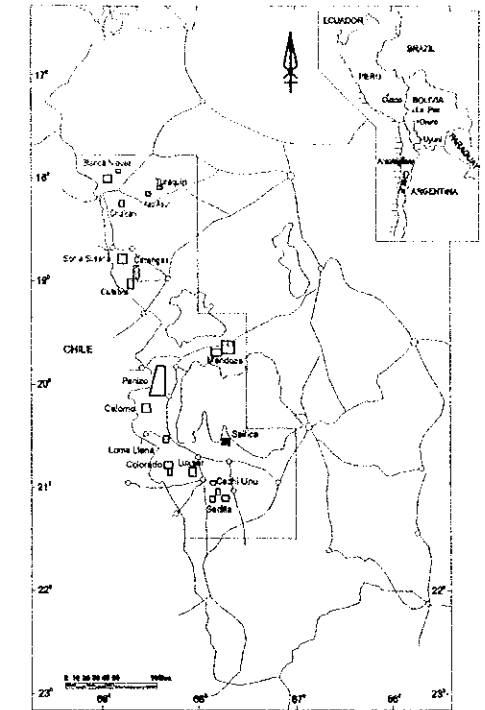
-  Strike and dip
-  Lineament
-  Fault
-  Anticline
-  Ore vein
-  Alteration zone
-  Py, Zn
-  Py
-  Yellow Atunite
-  Mn, lim
-  Tunnel



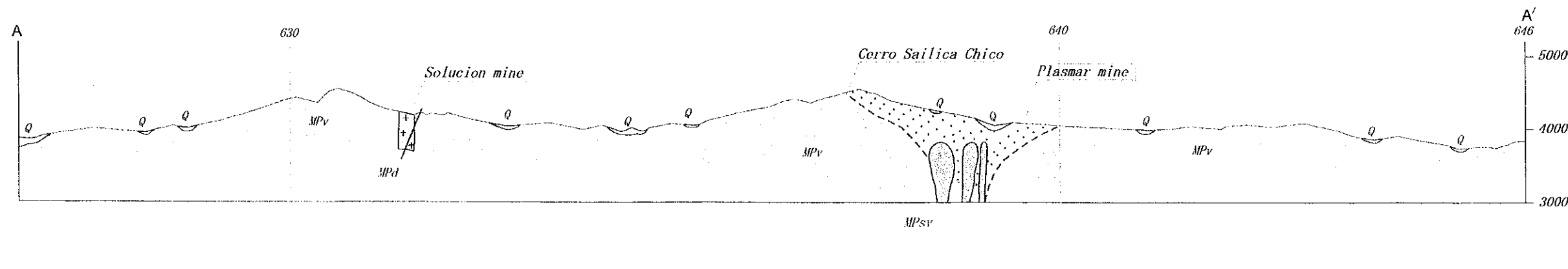
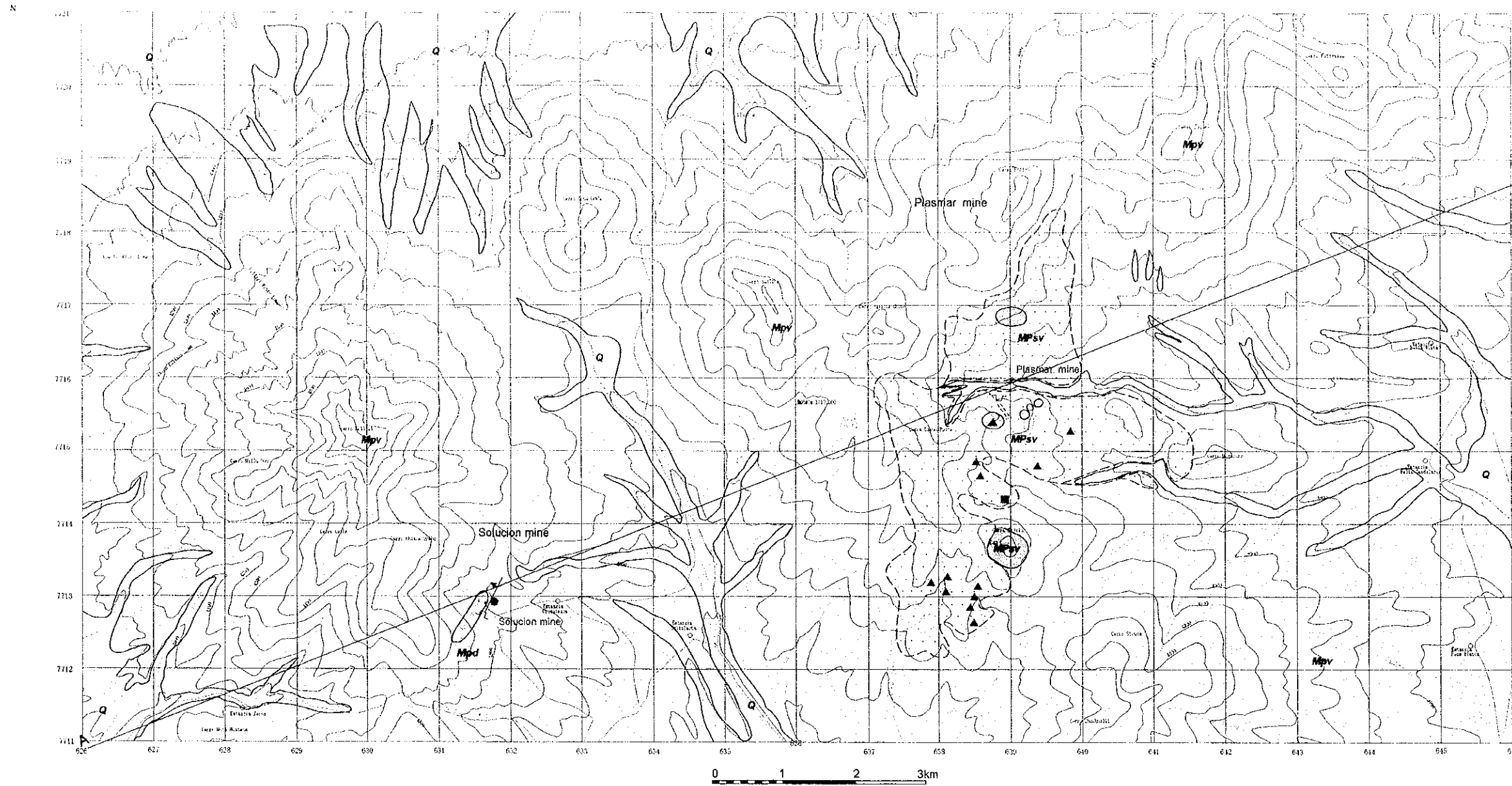


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Sailica District



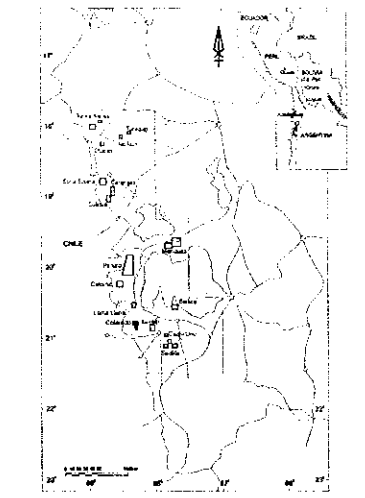
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



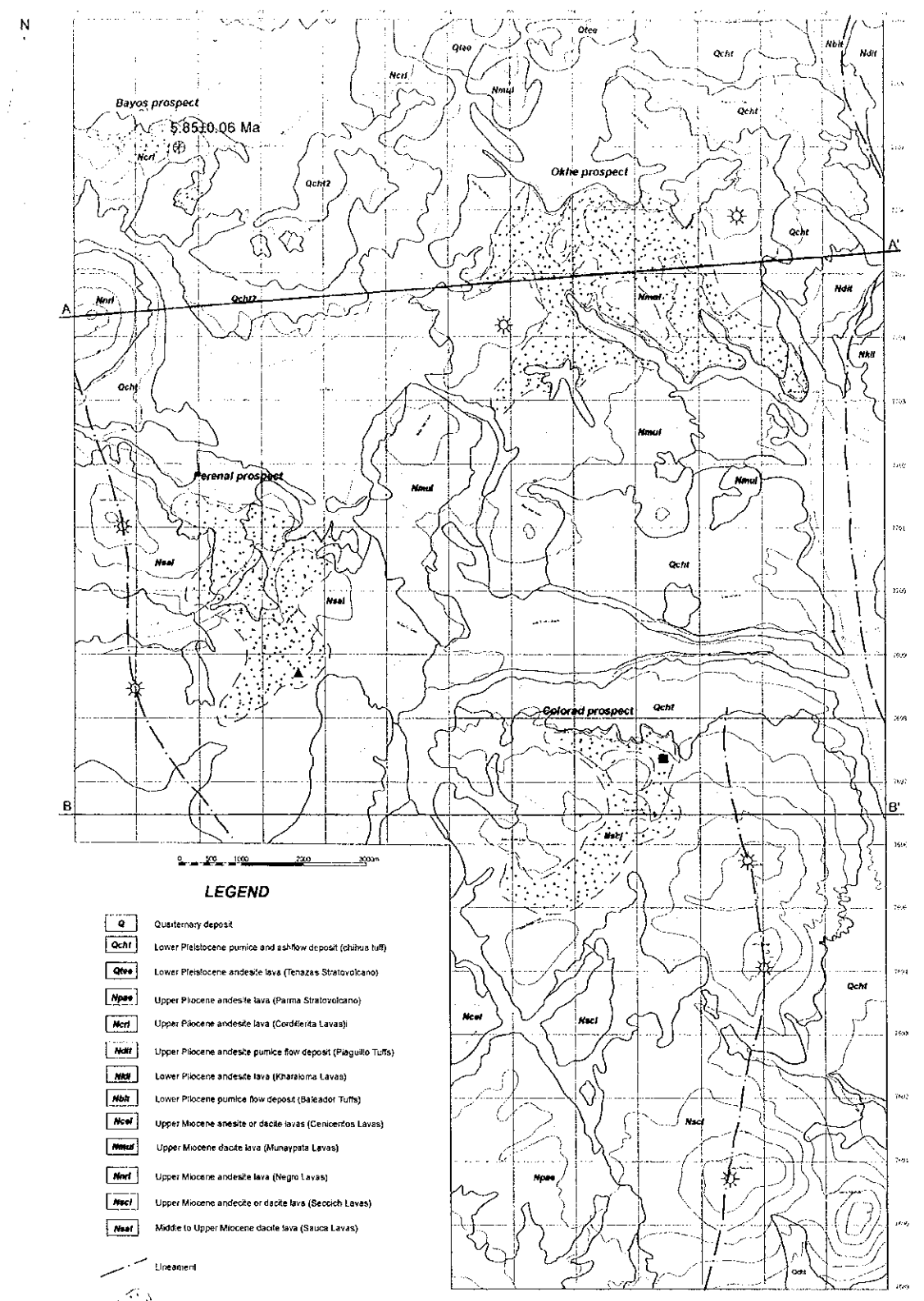
Legend

- Q Quaternary deposits
- MPv Miocene to Pliocene volcanic rock
- MPsv Miocene to Pliocene sub volcanic rock
- MPd Miocene to Pliocene dioritic rock
- Hydro thermal alteration zone
- Pb, Zn
- yellow Alunite
- Pyrite
- Tunnel

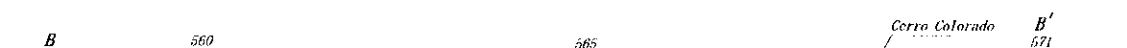
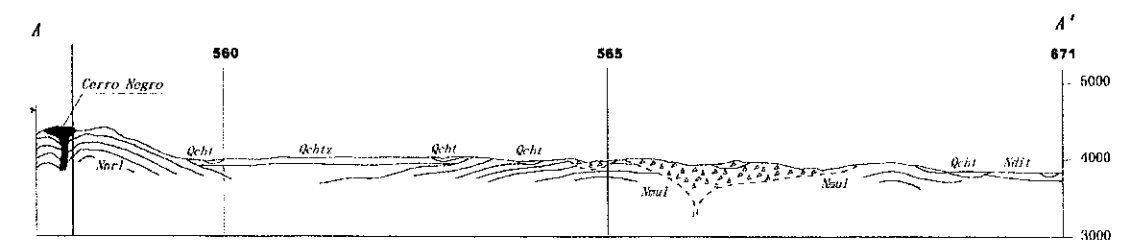
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA
Geological Map
of
The Colorado District

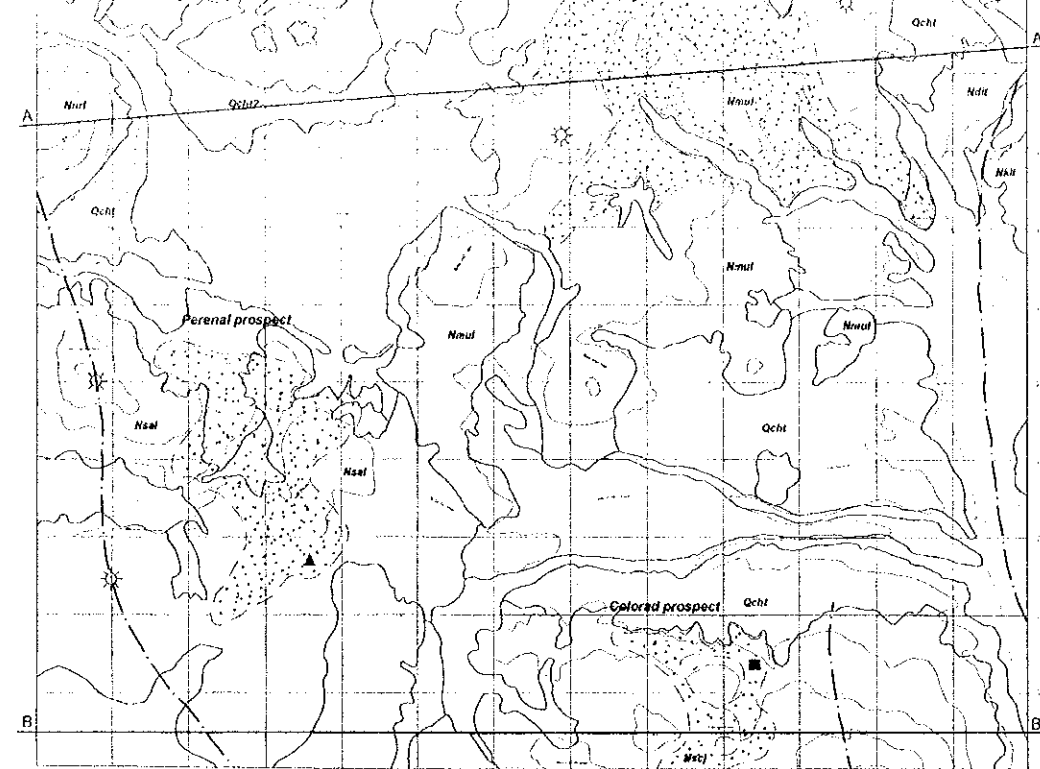


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



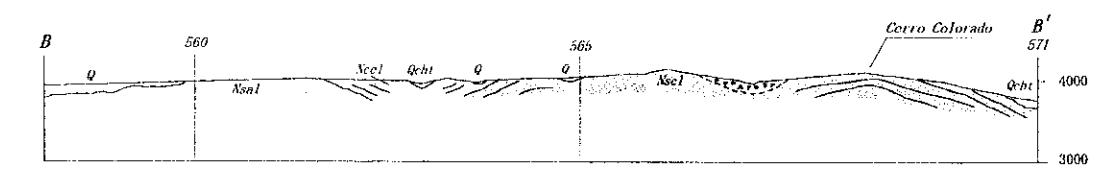
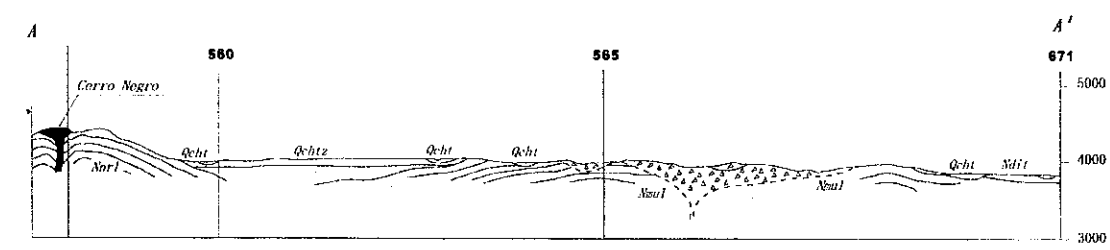
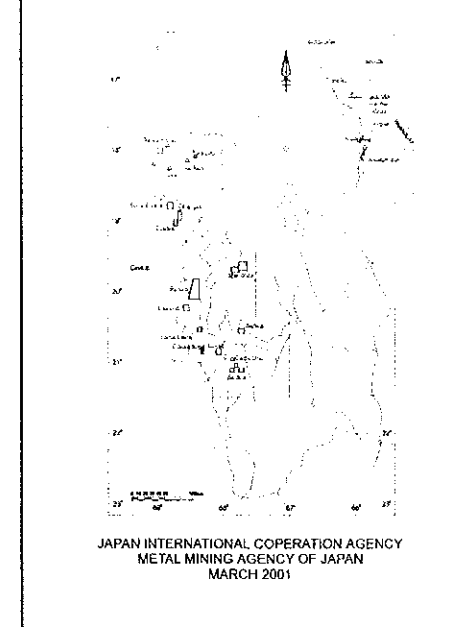
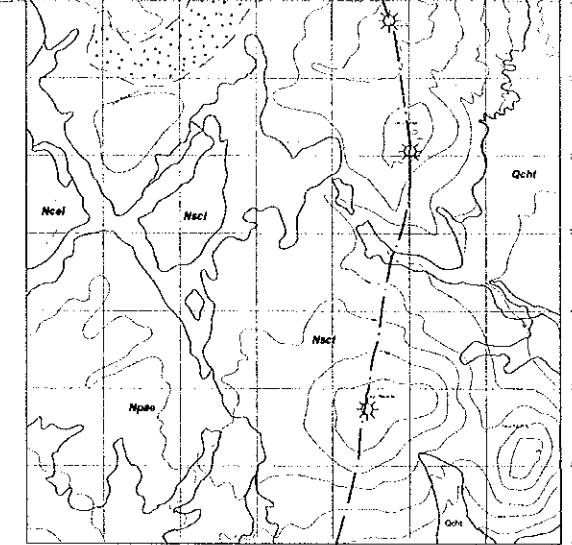
- LEGEND**
- Q Quaternary deposit
 - Qch1 Lower Pleistocene pumice and ash flow deposit (Chigua tufts)
 - Qlva Lower Pleistocene andesite lava (Tenzas Stratovolcano)
 - Npaa Upper Pliocene andesite lava (Parma Stratovolcano)
 - Ncr1 Upper Pliocene andesite lava (Cordillera Lavas)
 - Nht1 Upper Pliocene andesite pumice flow deposit (Paguillo Tufts)
 - Nhl1 Lower Pliocene andesite lava (Kharaloma Lavas)
 - Nbh1 Lower Pliocene pumice flow deposit (Baleador Tufts)
 - Nca1 Upper Miocene andesite or dacite lavas (Ceniceros Lavas)
 - Nmu1 Upper Miocene dacite lava (Munaypata Lavas)
 - Nnc1 Upper Miocene andesite lava (Negro Lavas)
 - Nsc1 Upper Miocene andesite or dacite lava (Secoch Lavas)
 - Nsa1 Middle to Upper Miocene dacite lava (Saucos Lavas)
 - Lineament
 - Hydrothermal alteration zone
 - ▲ Pyrite
 - Yello alunite





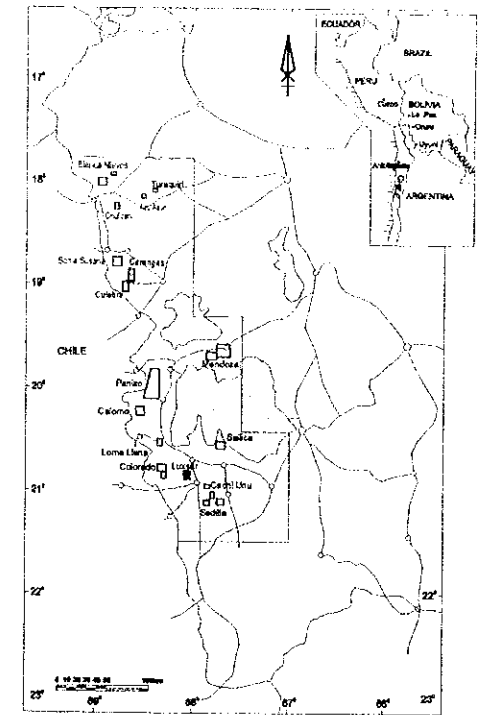
LEGEND

- Q Quaternary deposit
- Qch Lower Pleistocene pumice and ashflow deposit (Chilca Tuft)
- Qcha Lower Pleistocene andesite lava (Tenazas Stratovolcano)
- Qpas Upper Pleistocene andesite lava (Parma Stratovolcano)
- Nca Upper Pliocene andesite lava (Cordillera Lavas)
- Nca Upper Pliocene andesite pumice flow deposit (Pargullo Tufts)
- Nca Lower Pliocene andesite lava (Qhazalora Lavas)
- Nca Lower Pliocene pumice flow deposit (Baleador Tufts)
- Nca Upper Miocene andesite or dacite lavas (Cenicientos Lavas)
- Nca Upper Miocene dacite lava (Munaypata Lavas)
- Nca Upper Miocene andesite lava (Negro Lavas)
- Nca Upper Miocene andesite or dacite lava (Secochi Lavas)
- Nca Middle to Upper Miocene dacite lava (Sanca Lavas)
- Lineament
- Hydrothermal alteration zone
- Pyrite
- Yellow alunite



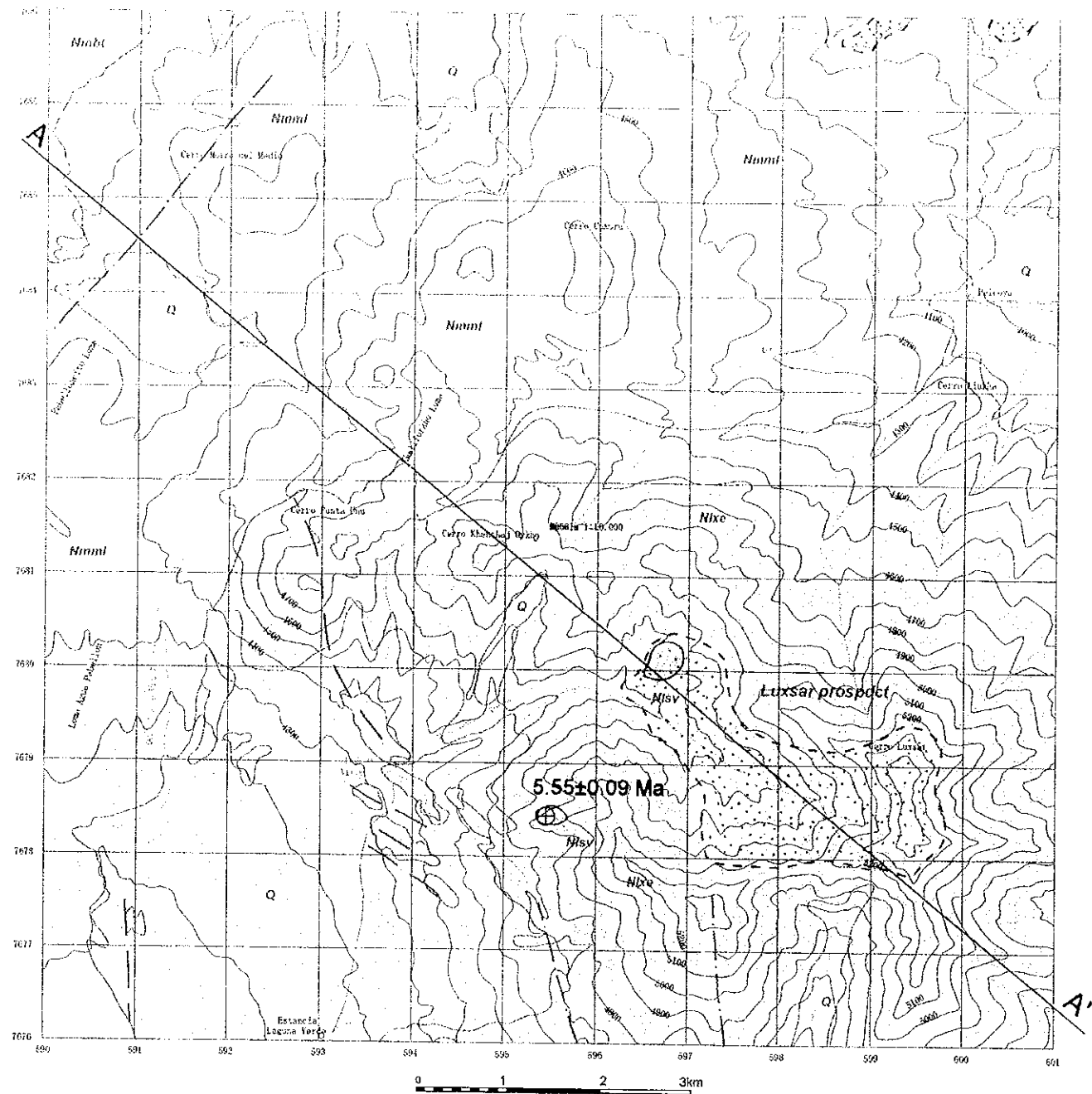
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Map
of
The Luxsar District



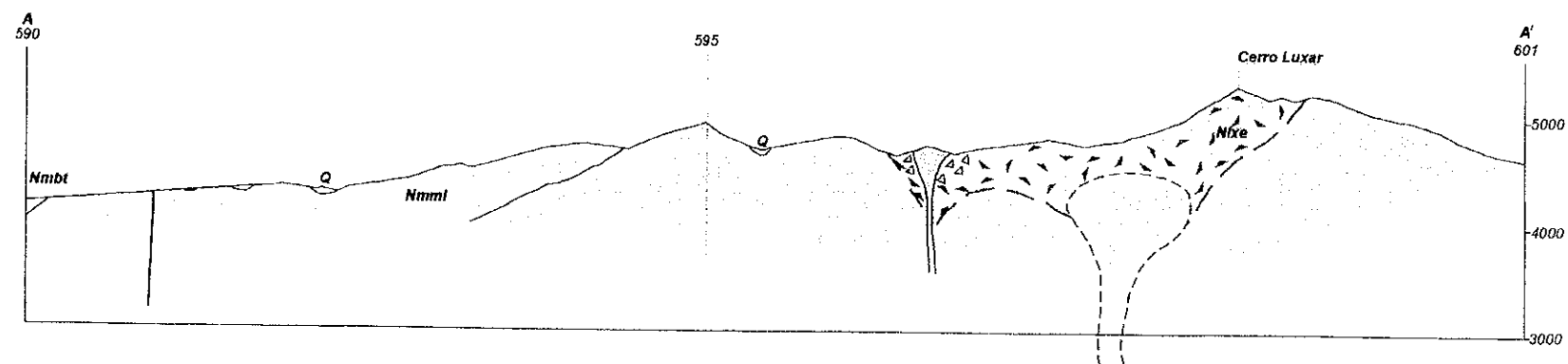
JAPAN INTERNATIONAL COOPERATION AGENCY
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MARCH 2001

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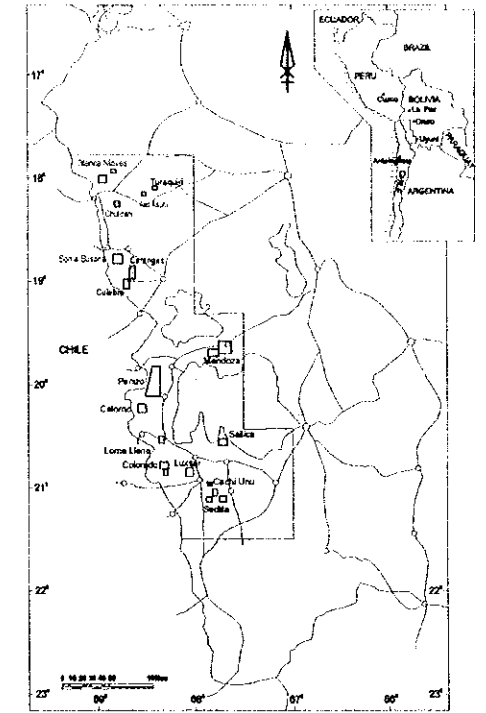
LEGEND

- Q Quaternary
- Nmbl Miocene basalts and basaltic andesites
- Nmml Miocene basaltic andesites and andesites
- Nlxc Miocene basaltic andesites and andesites
- Nlsv Miocene basaltic andesites
- Fault
- River
- ▲ Pyrite

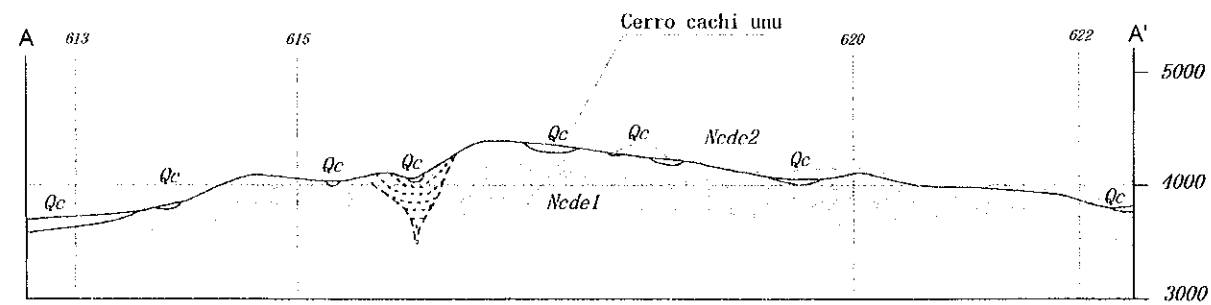
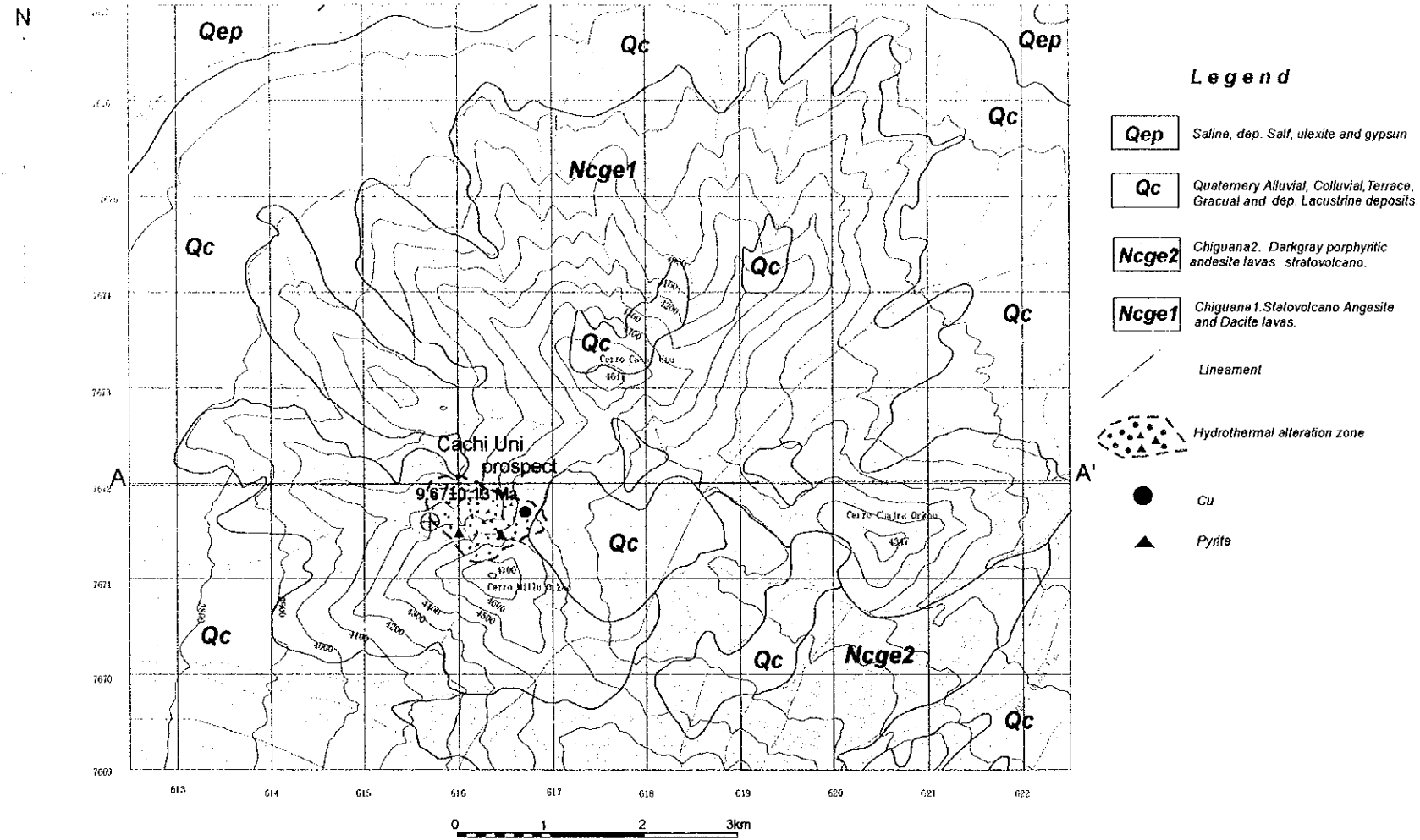


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

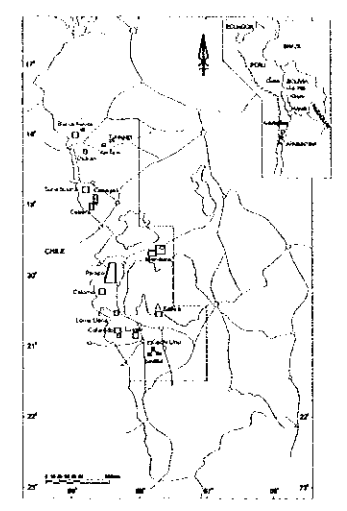
Geological Map
of
The Cachi Unu District



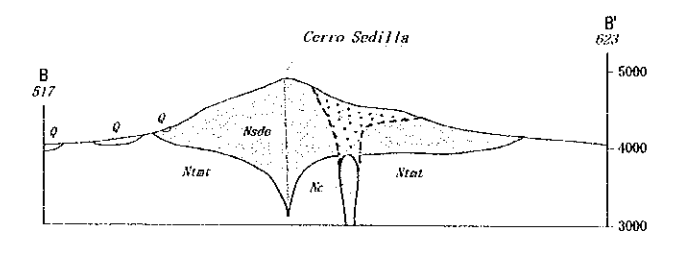
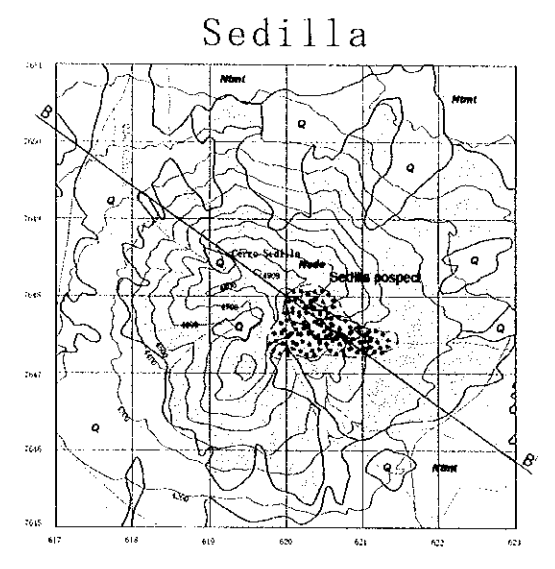
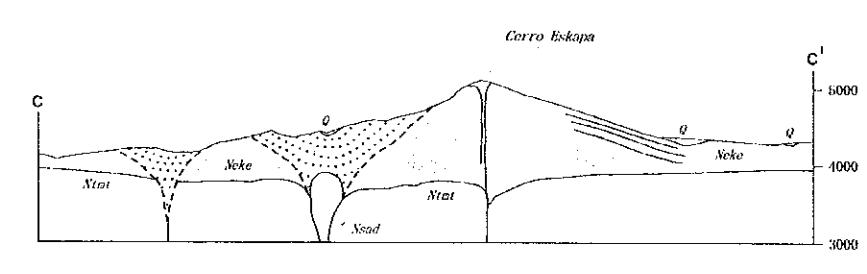
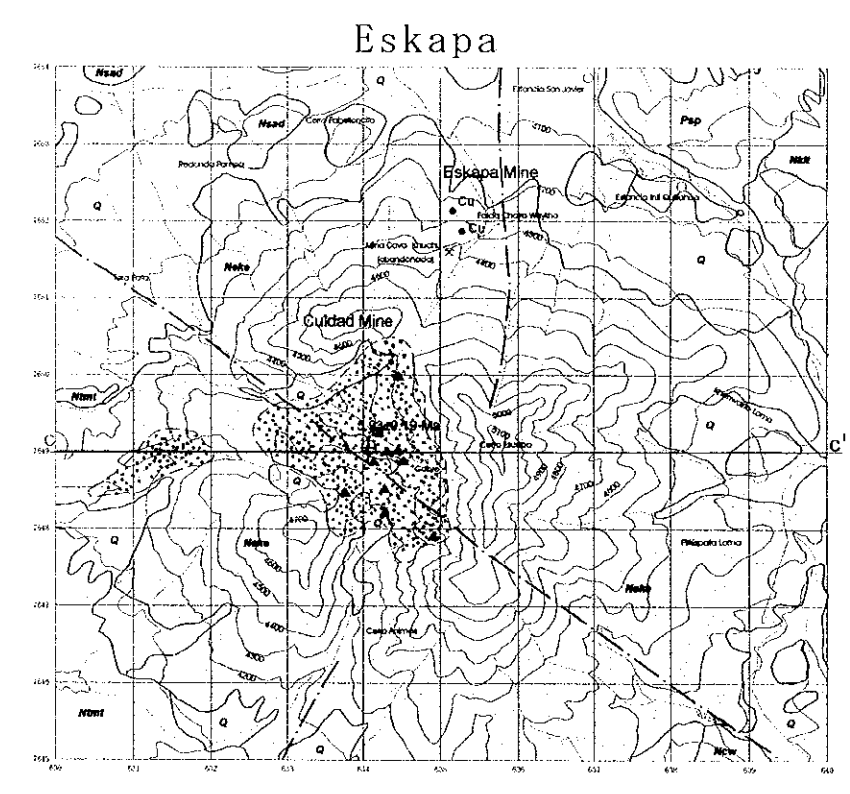
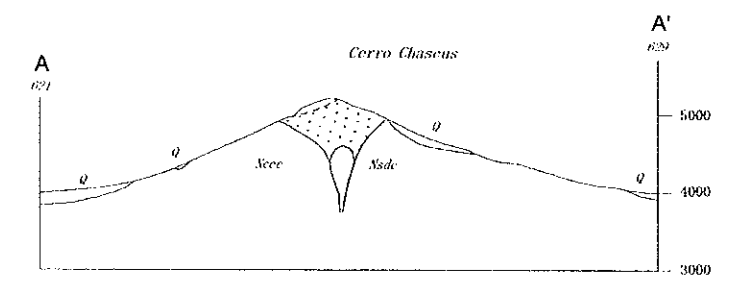
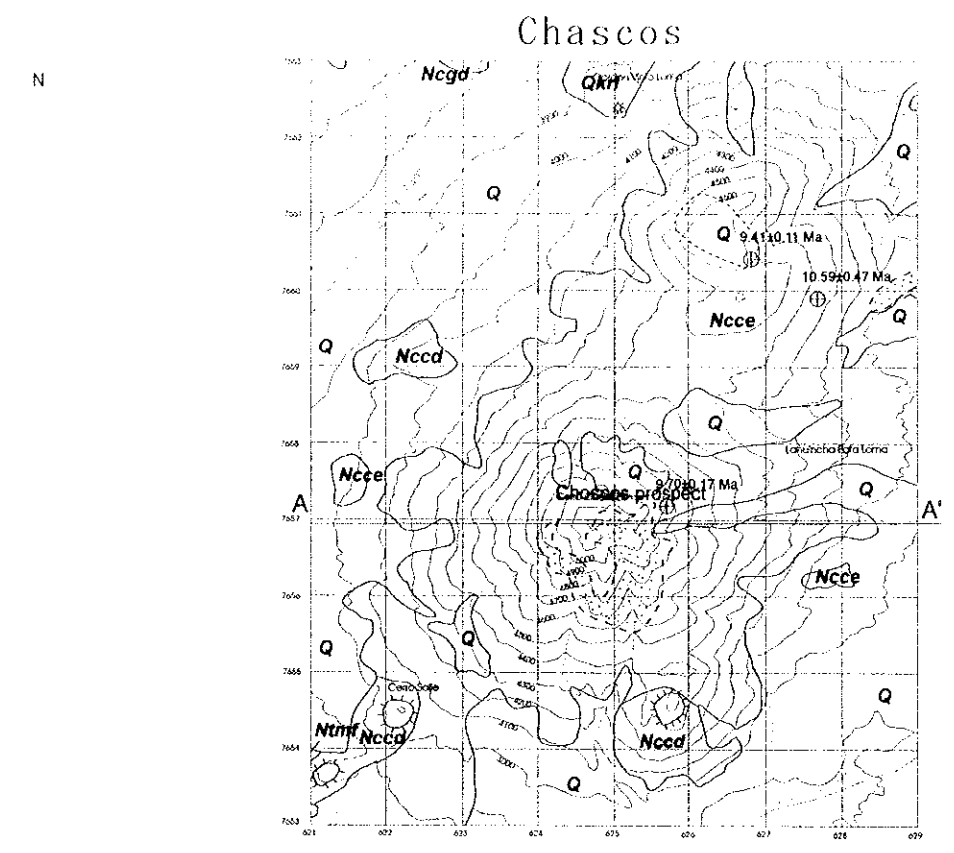
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METAL MINING AGENCY OF JAPAN
MARCH 2001



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA
Geological Map
of
The Sedilla District

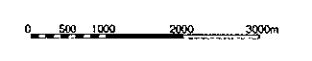


JAPAN INTERNATIONAL COOPERATION
METAL MINING AGENCY OF JAPAN
MARCH 2001



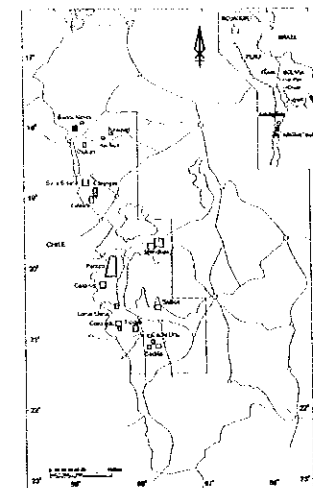
LEGEND

- Q** Quaternary deposits.
- Qkri** Kalerini lavas. Basaltic andesite.
- Nccd** Chascos domes. Gray porphyritic dacite lavas.
- Ncgg** Chiguana domes. Porphyritic dacite lavas.
- Ncce** Chascos stratovolcanoes. Basaltic andesite lavas.
- Ntmf** Tomasani tuff. White pumice and ashflow deposits.
- Volcanic dome.
- Hydrothermal alteration zone.

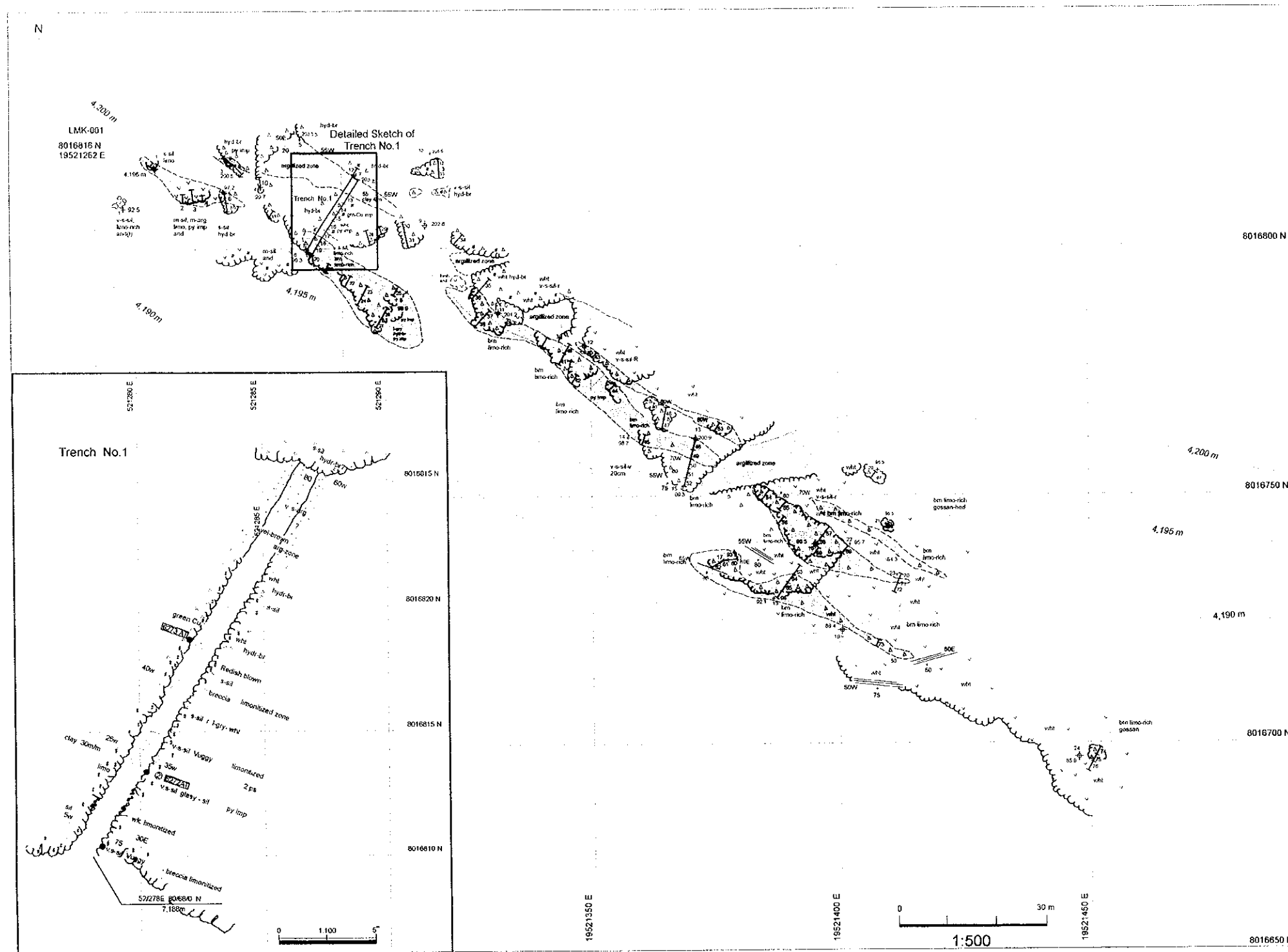


THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Blanca Nieves District (Titicayo)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

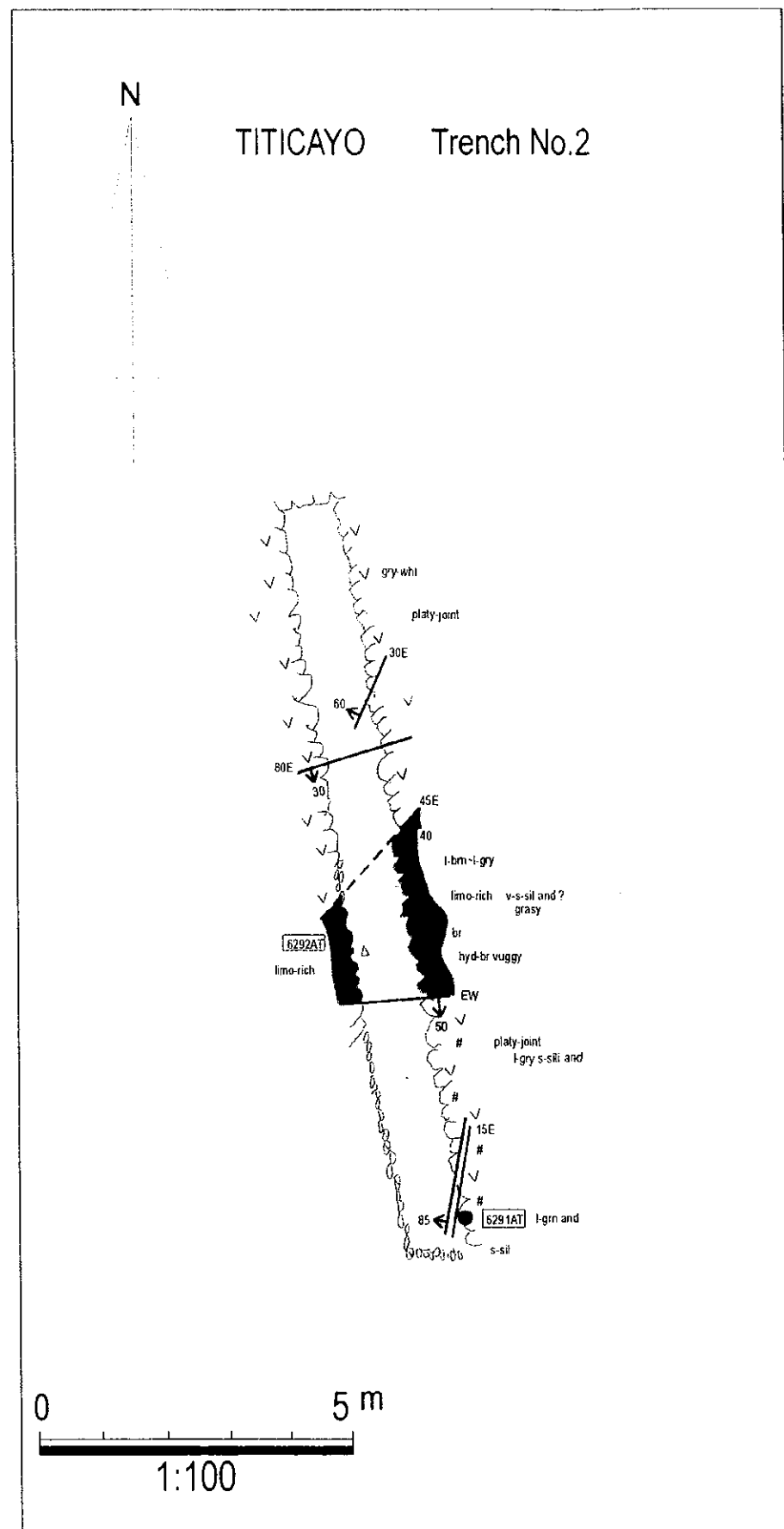


Legend

- andesite
- hydrothermal breccia
- argillized zone
- limonitized zone
- joint fissure fracture
- sampling point

Assay Result of Ore Samples

Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Bi	Sn
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12301 MH	<2	0.6	20	1867	17	24	0	<1	5	2100	<5
12302 MH	<2	2.2	17	1175	19	21	6	<1	1	1192	<5
12303 MH	<2	8.7	40	2628	58	67	<5	<1	5	1187	<5
12304 MH	<2	7.7	38	5060	73	74	6	<1	4	681	<5
12305 MH	2	14.8	20	9875	41	44	5	<1	3	62	<5
12306 MH	<2	0.6	41	13262	78	40	7	<1	5	107	<5
12307 MH	2	11.2	52	7721	57	55	0	<1	4	1260	<5
12308 MH	2	15.2	44	6366	36	125	<5	<1	4	177	10
12309 MH	3	3.1	19	1885	21	16	7	<1	4	2023	<5
12310 MH	<2	2.0	25	6675	136	40	<5	<1	4	215	<5
12311 MH	<2	4.5	5	5665	250	30	<5	<1	7	225	<5
12312 MH	<2	8.9	30	305	24	12	0	<1	6	1121	8
12313 MH	<2	4.5	4	3755	151	11	<5	<1	2	600	<5
12314 MH	<2	1.8	4	4618	30	10	<5	<1	4	1520	<5
12315 MH	<2	4.5	8	2552	41	18	<5	<1	4	454	<5
12316 MH	<2	3.5	16	2545	33	44	<5	<1	3	1112	<5
12317 MH	<2	56.6	16	1348	17	12	<5	<1	6	708	<5
12318 MH	<2	164	31	3094	24	163	10	<1	5	1283	14
12319 MH	<2	221	23	3281	28	117	<5	<1	5	1248	16
12320 MH	<2	143	34	2798	23	821	22	<1	10	1707	7
12321 MH	<2	207	25	6762	29	418	15	1.3	5	1742	6
12322 MH	<2	66.4	36	3928	29	488	9	<1	16	1616	6
12323 MH	<2	65.1	27	5444	30	582	6	1.4	5	1904	11
12324 MH	<2	116	21	1430	17	203	<5	<1	13	2324	<5
12325 MH	<2	4.2	26	6139	52	678	11	<1	1	266	12
12326 MH	<2	73.3	26	1990	25	224	6	1.1	10	1753	7
12327 MH	<2	20.1	19	1532	52	207	6	<1	3	2040	7
12328 MH	<2	31.7	24	3541	31	381	14	<1	5	1564	<5
12329 MH	<2	13.6	30	8836	33	720	9	<1	2	262	10
12330 MH	<2	10.7	17	987	42	41	<5	<1	2	1597	10
12331 MH	<2	15.2	9	468	20	41	6	1.3	2	1245	16
12332 MH	<2	0.8	15	4178	78	51	<5	<1	<1	1325	<5
12333 MH	<2	0.8	23	1355	71	17	<5	<1	<1	2953	<5
12334 MH	2	1.7	13	1477	38	61	<5	<1	<1	1337	<5
12335 MH	<2	5.8	9	1340	25	46	<5	<1	<1	745	<5
12336 MH	<2	50.0	27	810	40	453	<5	<1	4	2161	10
12337 MH	<2	27.8	31	5753	51	900	16	<1	5	595	5
12338 MH	<2	16.3	51	4235	29	1271	19	<1	4	1025	11
12339 MH	<2	21.9	27	2933	70	274	<5	<1	3	1534	<5
12340 MH	<2	0.9	58	1785	80	340	<5	1.3	5	1150	12
12341 MH	<2	21.3	85	2570	49	308	<5	<1	6	2214	22
12342 MH	<2	12.0	50	1888	54	75	<5	1.3	5	1411	12
12343 MH	<2	21.5	62	517	63	196	10	<1	8	2814	4
12344 MH	<2	10.8	47	364	42	138	<5	<1	3	1124	16
12345 MH	<2	20.9	30	1570	30	88	9	<1	7	1856	<5
12346 MH	<2	6.5	20	667	35	190	7	<1	2	553	<5
12347 MH	<2	4.1	16	715	19	101	<5	<1	3	541	<5
12348 MH	<2	0.3	18	1082	10	88	6	<1	2	314	<5
12349 MH	<2	66.5	24	973	19	41	8	<1	4	634	25
12350 MH	<2	130	38	1176	43	135	16	<1	4	738	13



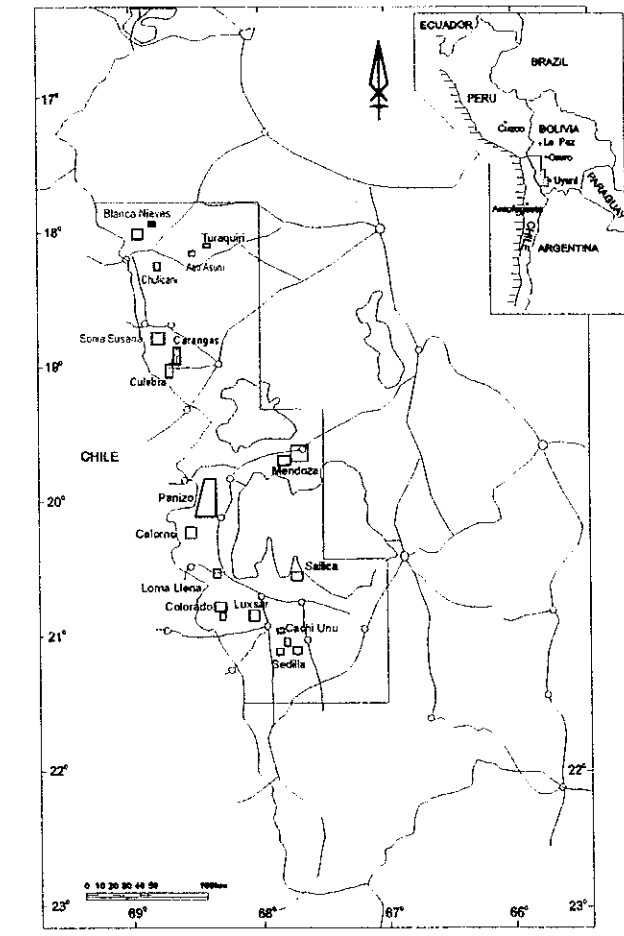
- Legend
- andesite
 - hydrothermal breccia
 - silicified zone
 - limonitized zone
 - fracture, joint

Assay Result of Ore Samples

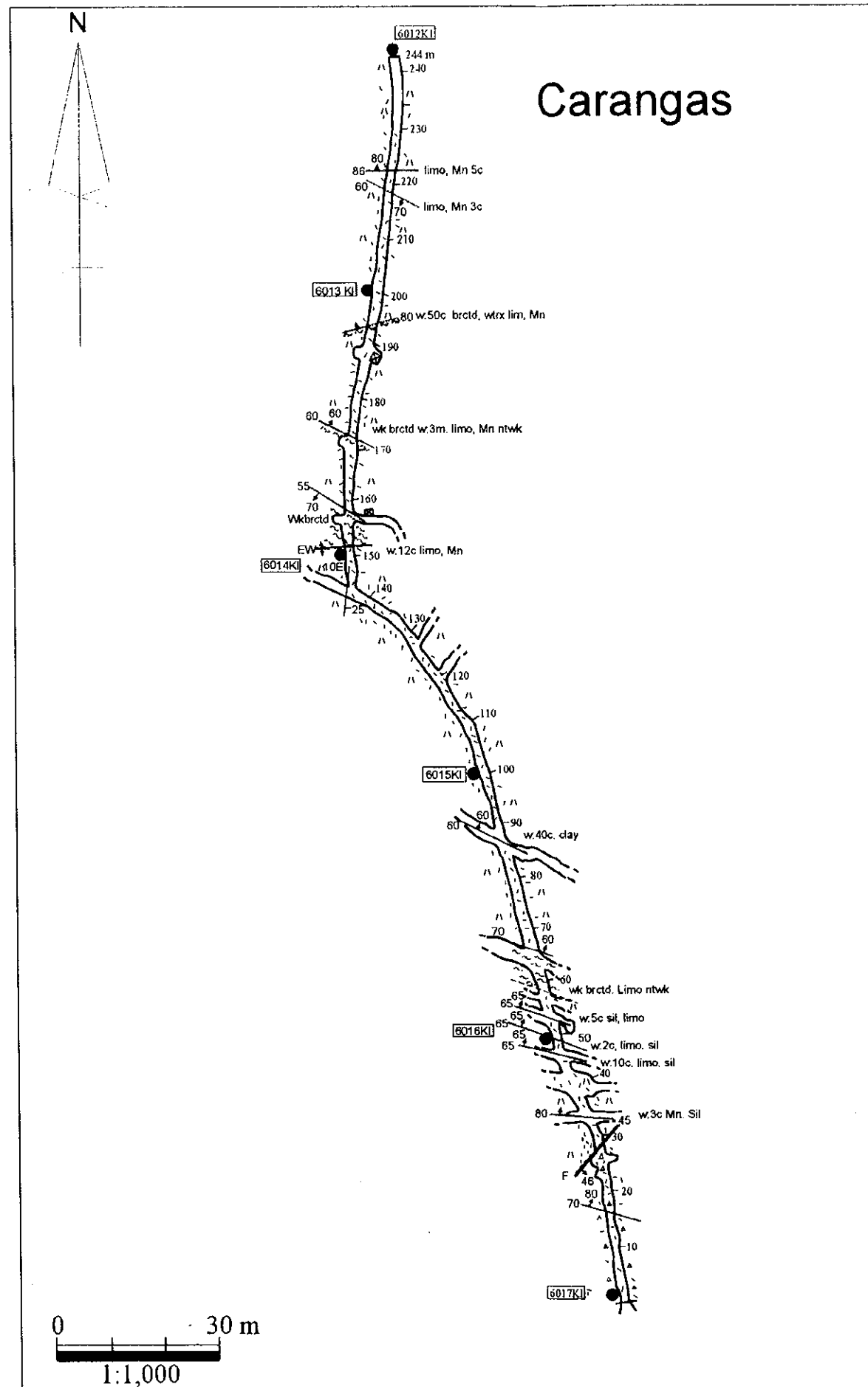
Serial No.	Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
9	6291 AT	<2	229	27	452	25	12	6	<1	7	2114	<5
10	6292 AT	<2	55.5	31	96	13	7	<5	<1	8	3645	<5

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Blanca Nieves District (Titicayo)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



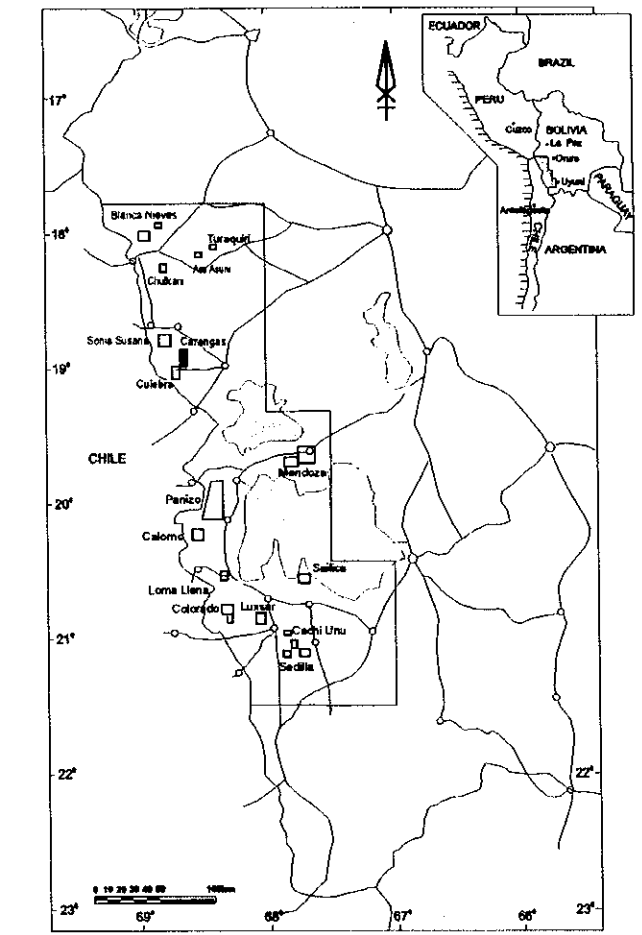
- Legend
- tuff breccia
 - tuff
 - shear zone
 - vein, fracture
 - fault

Assay Result of Ore Samples

Serial No.	Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Ba	Sn
		ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
95	6012 K1	<2	2	15	241	554	22	24	<1	<1	670	<5
96	6013 K1	<2	112	73	3964	1343	31	20	<1	<1	1419	<5
97	6014 K1	<2	17.6	65	686	1054	21	14	<1	<1	1070	<5
98	6015 K1	<2	47.4	76	3061	6532	22	17	<1	<1	600	<5
99	6016 K1	<2	45.7	67	1960	2742	21	12	<1	<1	842	<5
100	6017 K1	<2	15.3	16	1907	351	72	11	<1	<1	1208	<5

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

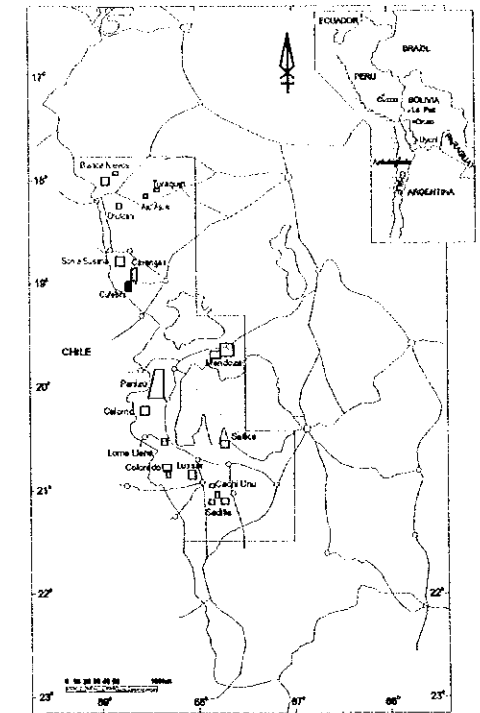
Geological Sketch
in
The Carangas District (Mina Carangas)



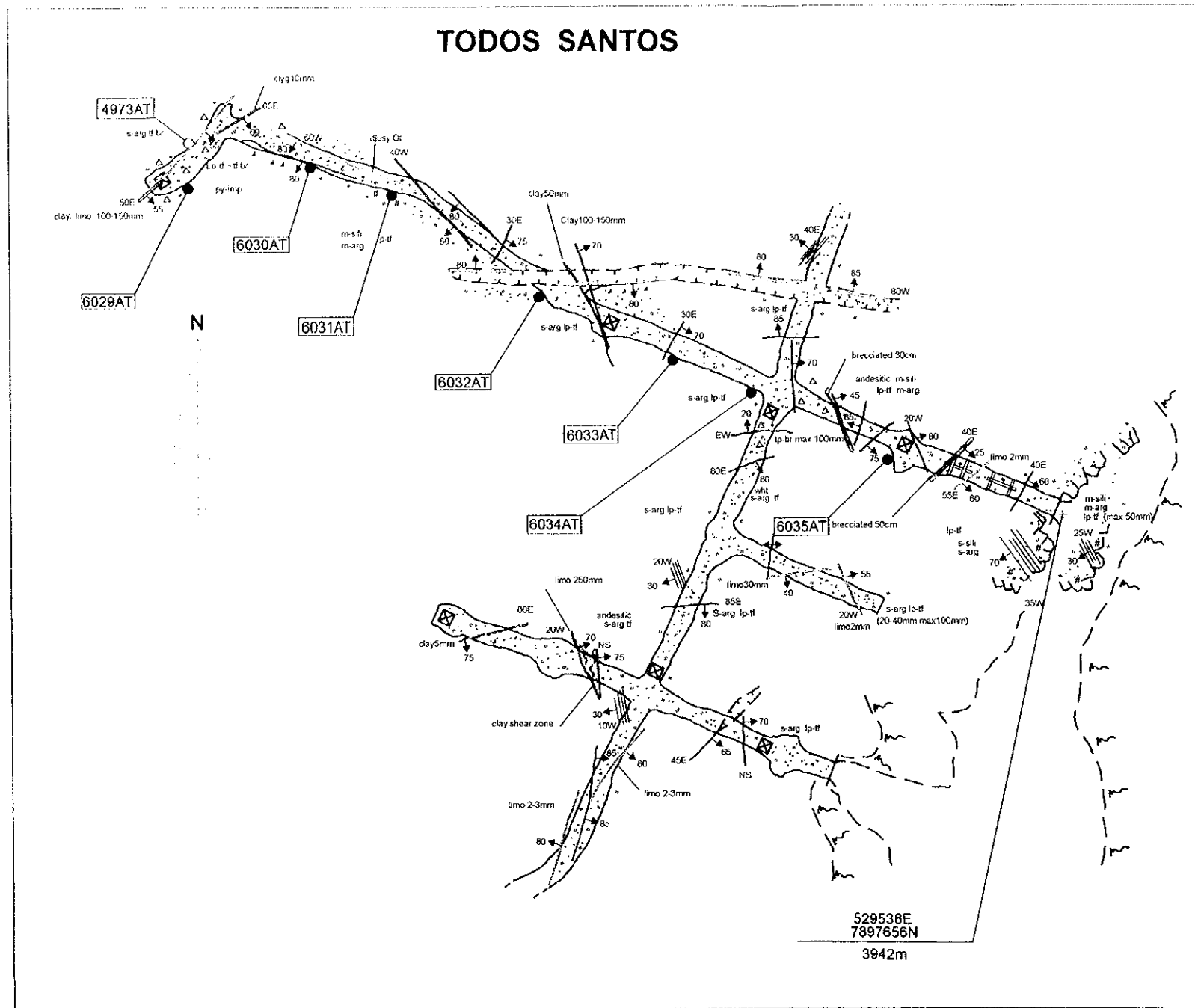
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METAL MINING AGENCY OF JAPAN
MARCH 2001

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

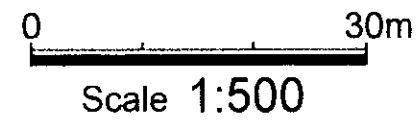
Geological Sketch
in
The Culebra District (Mina Todos Santos)



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METAL MINING AGENCY OF JAPAN
MARCH 2001



- Legend
- lapilli tuff
 - tuff breccia
 - silicification
 - argillization
 - limo Mn vein
 - clay vein
 - quartz vein

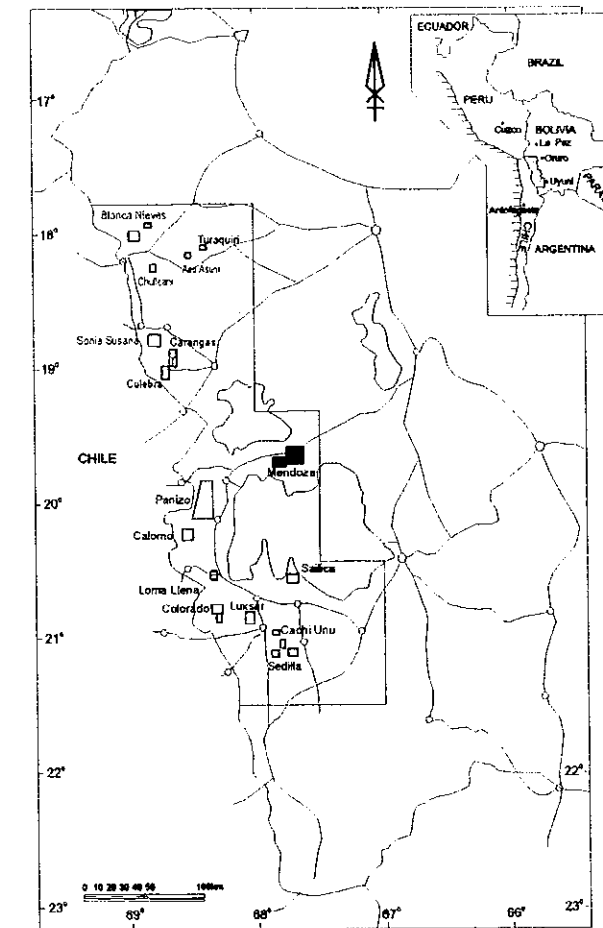


Assay Result of Ore Samples

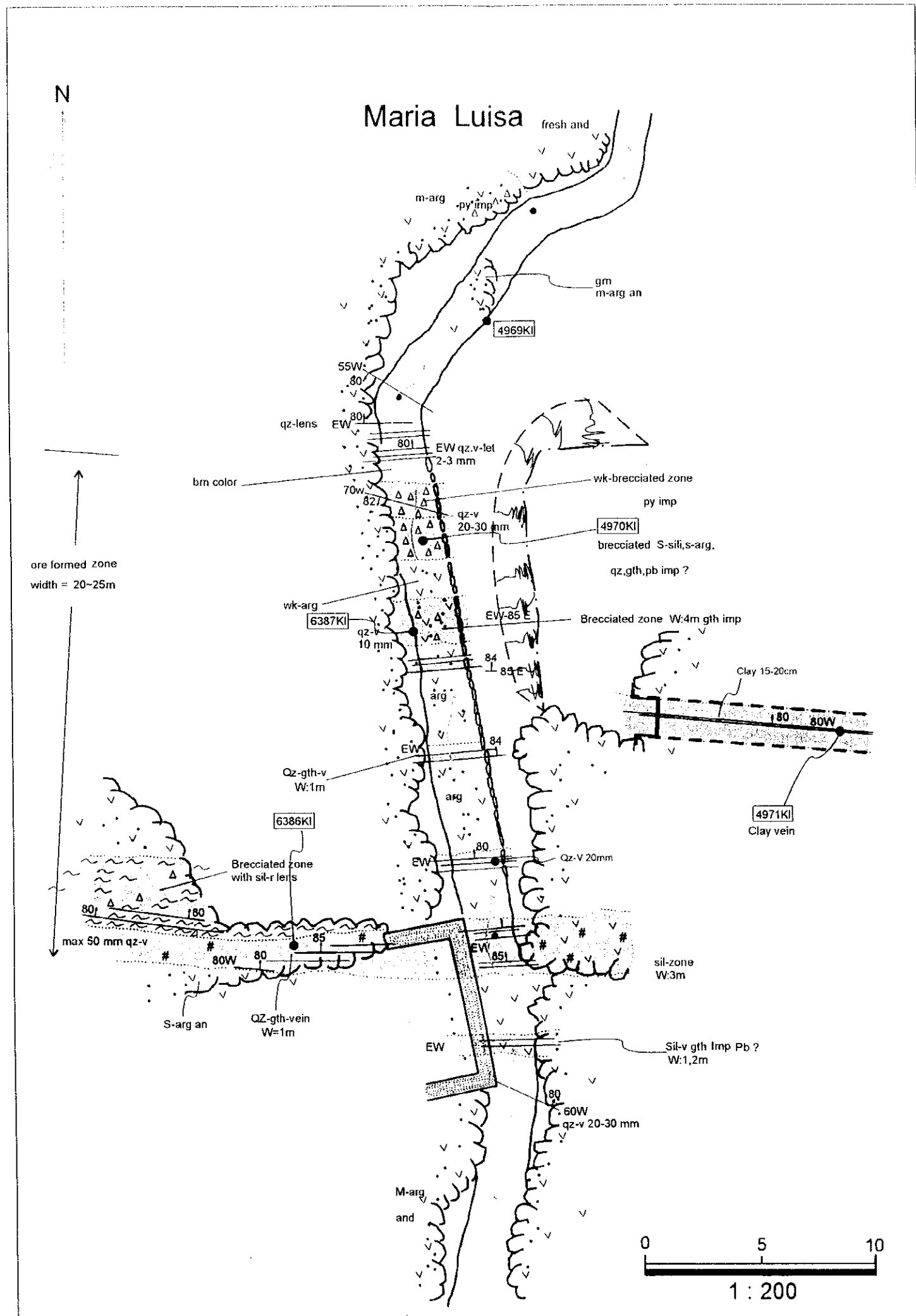
Serial No.	Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
103	6029 AT	<2	45.4	64	8200	5888	83	20	<1	3	931	<5
104	6030 AT	<2	33	94	2642	63799	170	9	<1	<1	106	<5
105	6031 AT	<2	19.3	56	2659	16523	123	10	<1	<1	616	<5
106	6032 AT	<2	83.2	110	5159	19604	140	17	<1	<1	1015	<5
107	6033 AT	<2	32.8	5	1988	5928	112	12	<1	<1	881	<5
108	6034 AT	<2	35	18	3173	16434	102	11	<1	<1	820	<5
109	6035 AT	<2	240	63	19500	680	74	17	<1	<1	1250	<5

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Mendoza District (Mina Maria Luisa)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



Legend

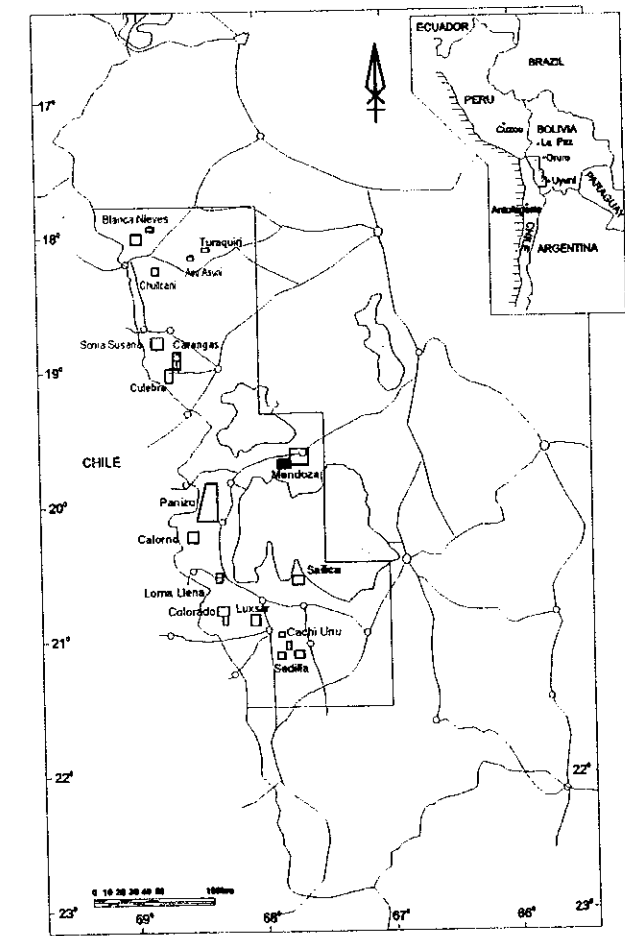
- andesite
- silicified zone
- argillized zone
- brecciated zone
- shear zone
- pyrite impregnation
- quartz vein
- clay vein

Assay Result of Ore Samples

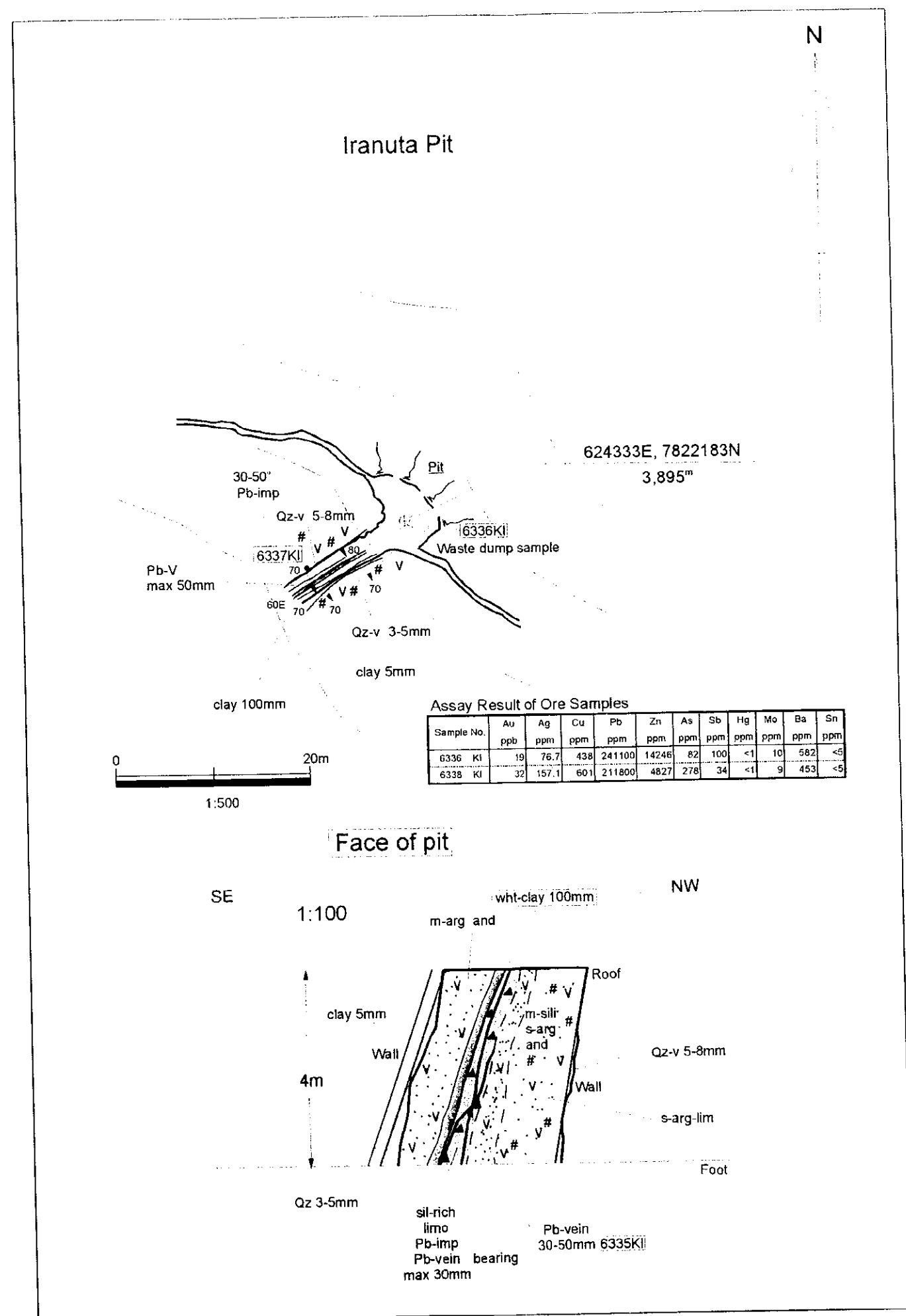
Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
6386 KI	460	1108	1175	30600	7319	58	48	<1	19	749	<5
6387 KI	25	51	33	7385	3827	40	30	6.6	6	375	<5

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Mendoza District (Iranuta)



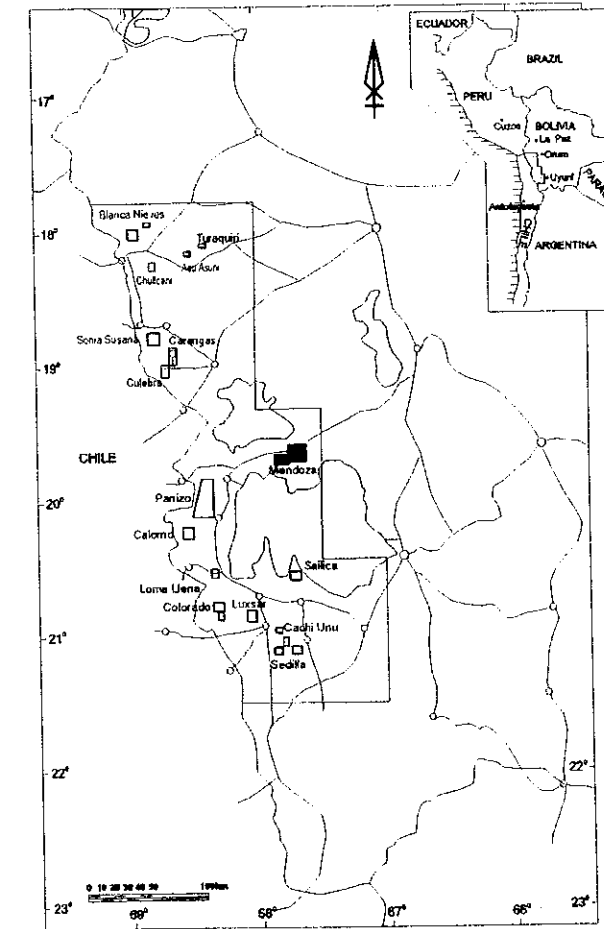
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METAL MINING AGENCY OF JAPAN
MARCH 2001



- Legend
- andesite
 - silicified zone
 - argillized zone
 - ore vein
 - quartz vein, siliceous vein
 - clay vein

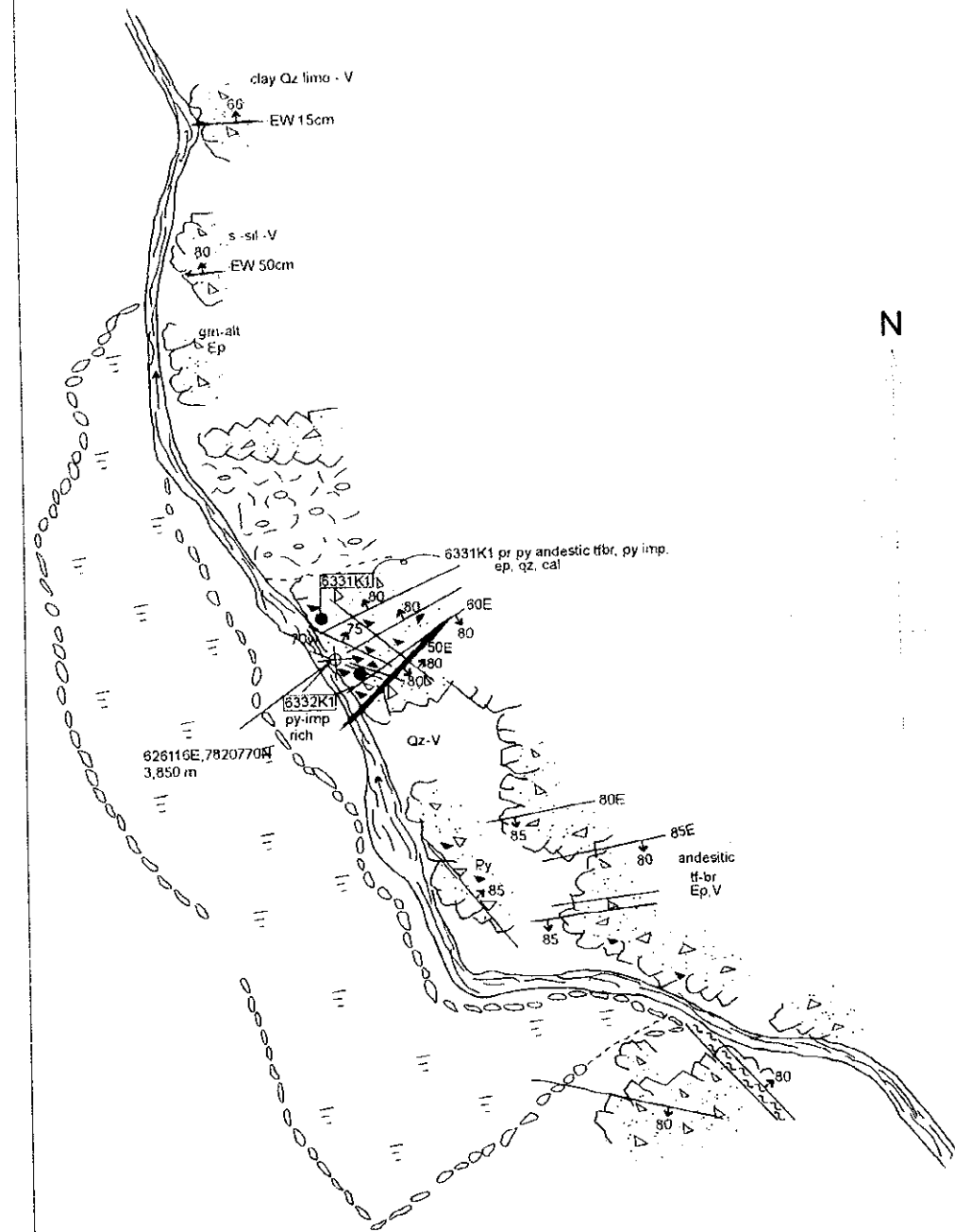
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Mendoza District (Iranuta)



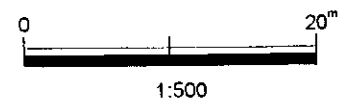
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METAL MINING AGENCY OF JAPAN
MARCH 2001

Iranuta



Assay Result of Ore Samples

Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
6031 AT	<2	19.3	56	2659	16523	123	10	<1	<1	618	<5
6032 AT	<2	83.2	110	5159	19604	140	17	<1	<1	1015	<5

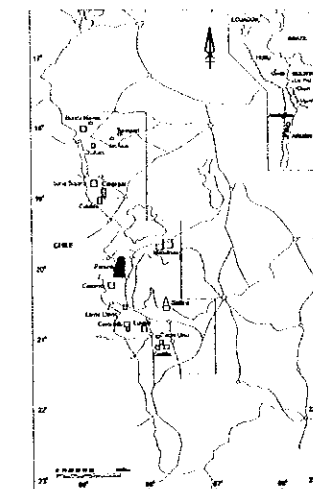


Legend

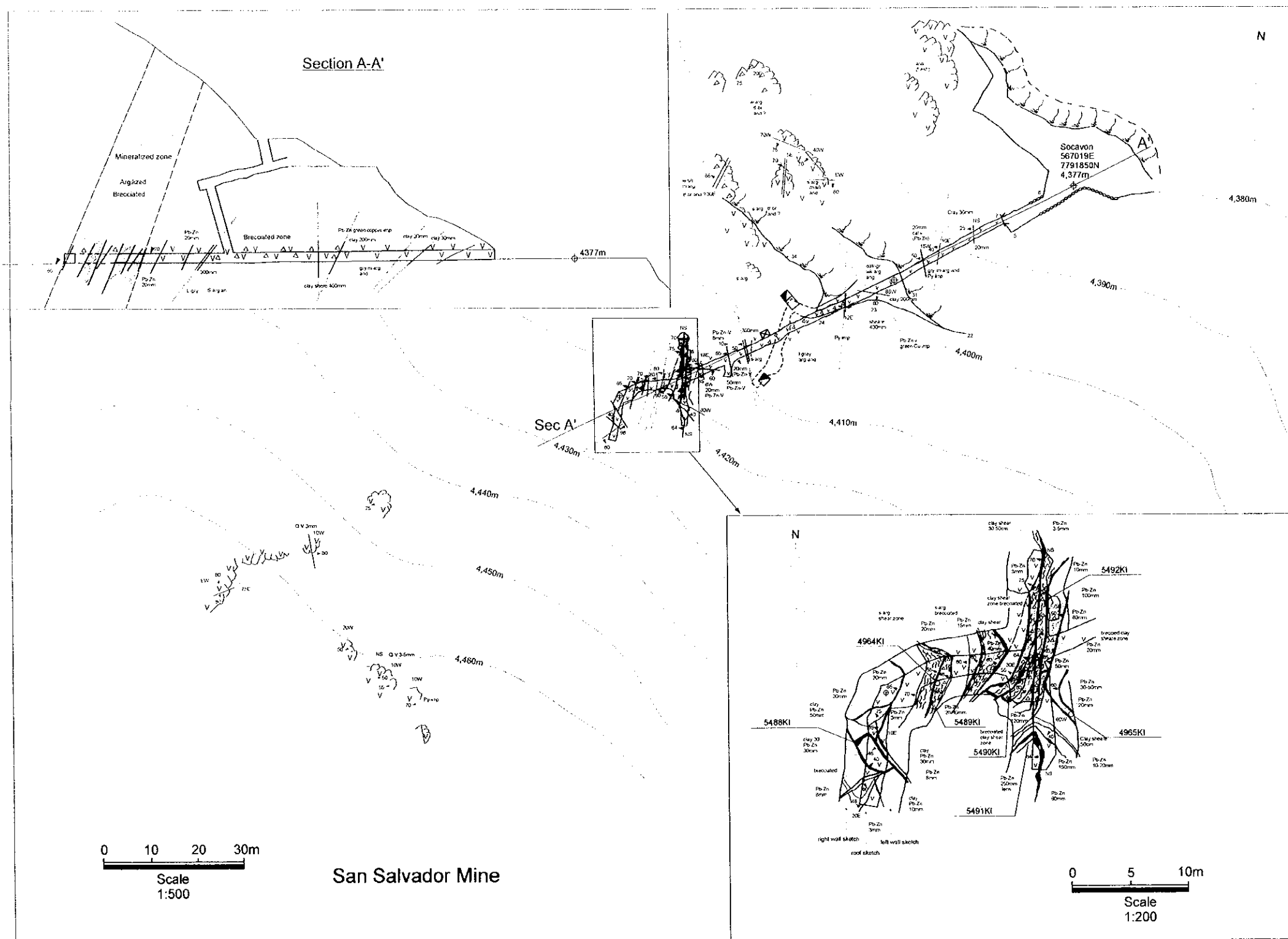
- tuff breccia
- argillized zone
- pyrite impregnation
- shear zone
- quartz vein
- fracture, fissure joint

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Panizo District (Chinchilluma)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



Legend

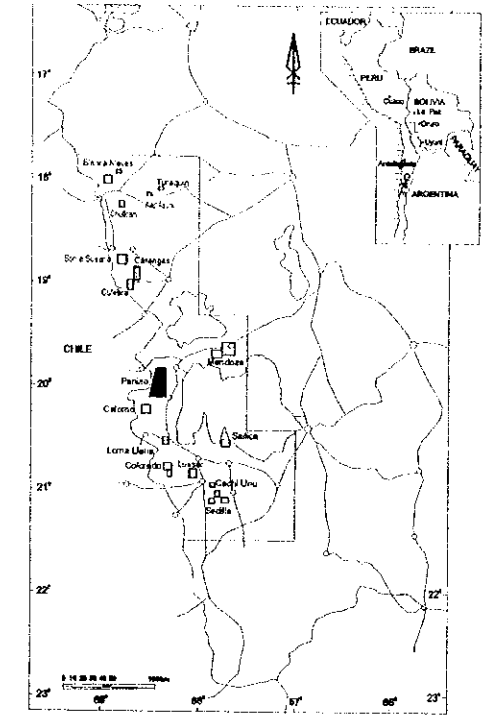
- andesite
- brecciated zone
- argillized zone
- shear zone
- ore vein
- quartz vein
- clay vein
- joint fracture

Assay Result of Ore Samples

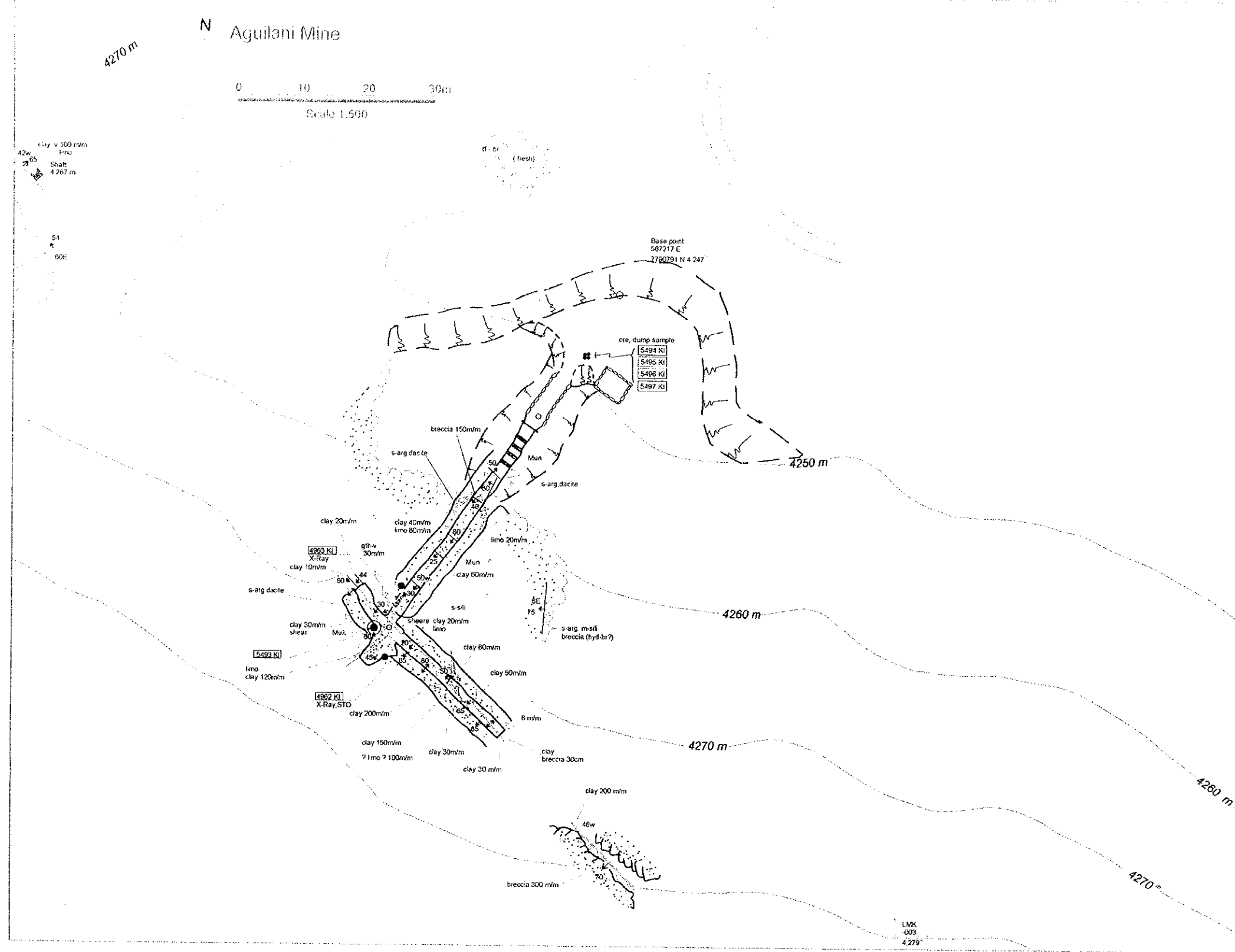
Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Ba	Sn
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
5488 KI	1305	79.8	361	59000	40275	1949	51	<1	107	72	<5
5489 KI	348	83.8	1358	37700	279384	274	58	<1	1	189	<5
5490 KI	284	171.1	4097	89500	228006	553	350	<1	18	85	<5
5491 KI	225	209.5	5051	116800	354923	549	387	<1	33	89	<5
5492 KI	460	982	5402	82600	292821	1125	388	<1	53	203	<5

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Panizo District (Chinchiluma)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



Legend

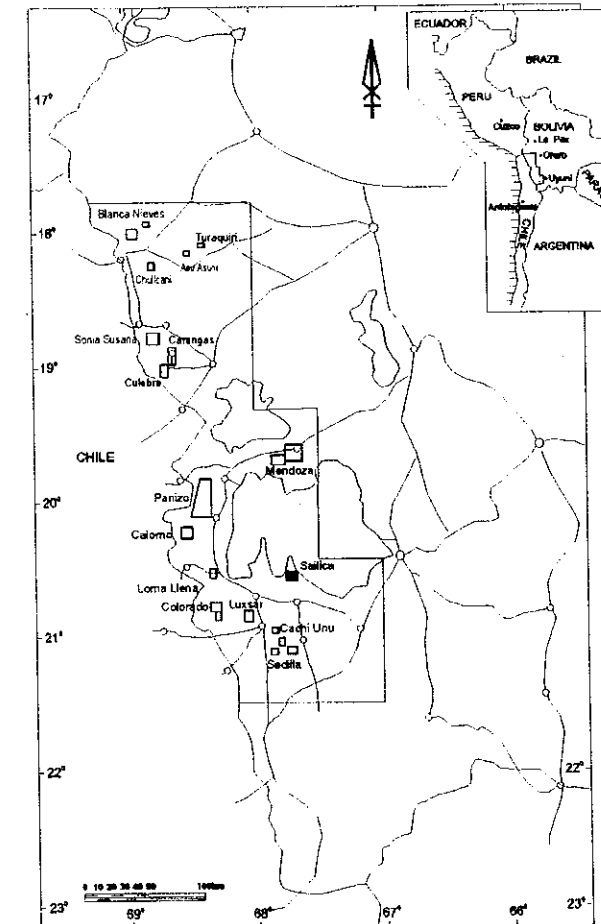
- dolite
- tuff breccia
- silicified zone
- argillization
- shear zone
- clay vein

Assay Result of Ore Samples

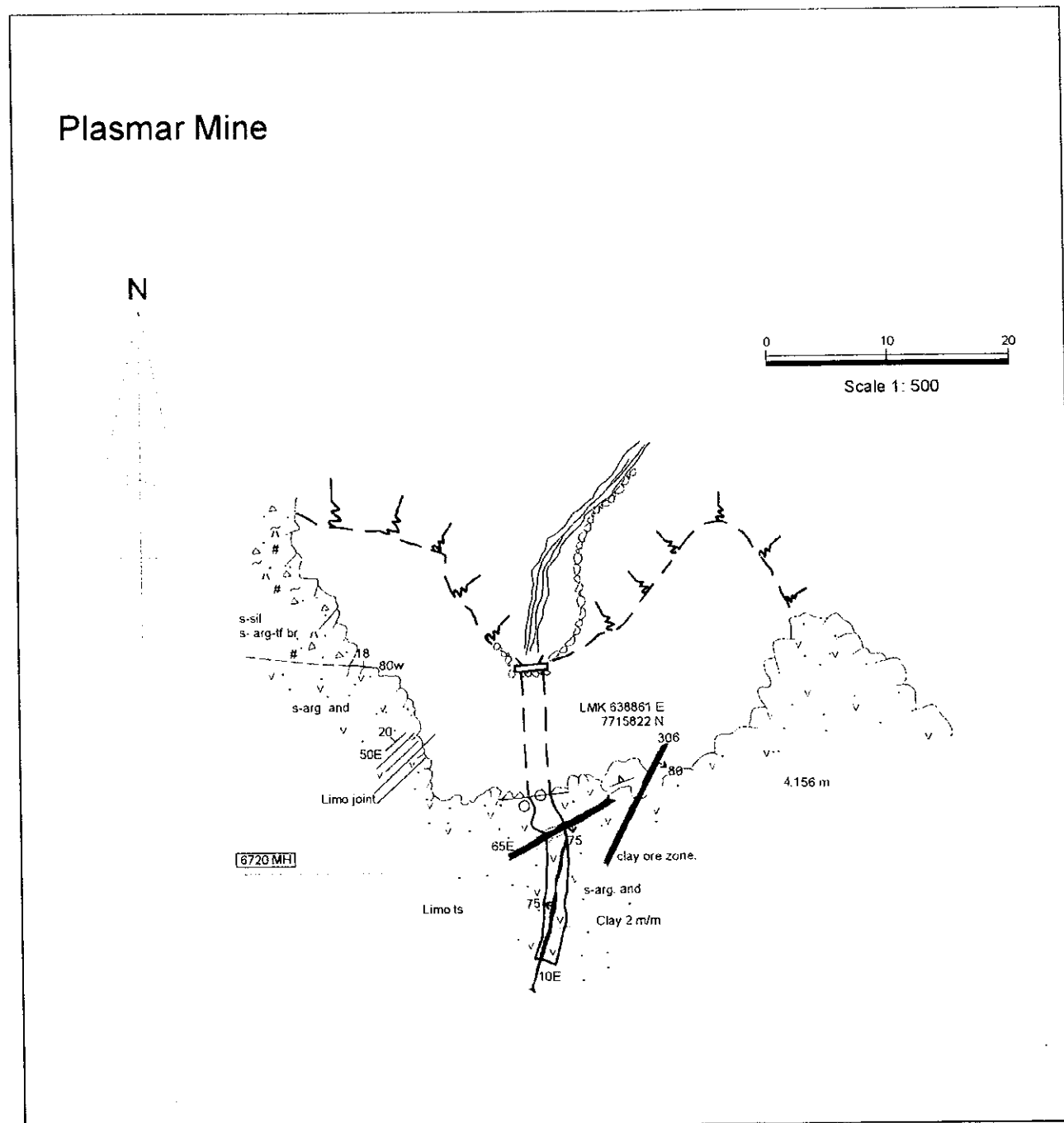
Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
5493 KI	349	100	1308	58700	24445	494	76	4.1	49	16	<5
5494 KI	29	29.8	132	1394	5484	46	7	<1	11	784	<5
5495 KI	549	338	26705	5613	65781	510	93	<1	10	39	31
5496 KI	1197	678	47279	1688	35657	888	446	<1	15	<2	83
5497 KI	660	470	23476	29500	107054	1271	193	<1	15	25	39

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Panizo District (Plasmar Mine)



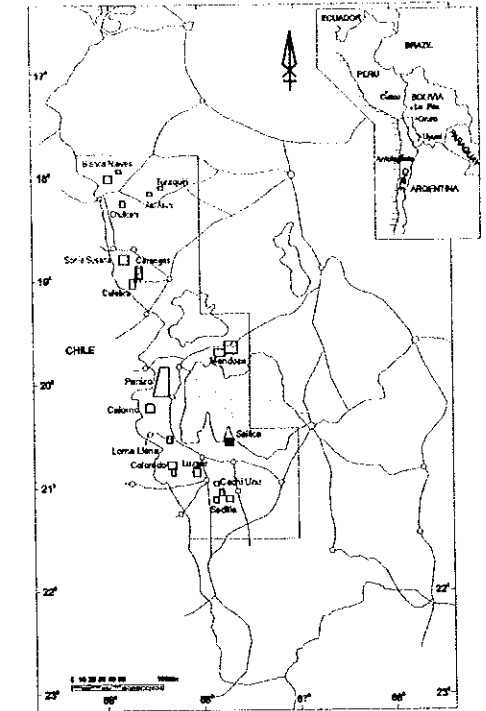
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



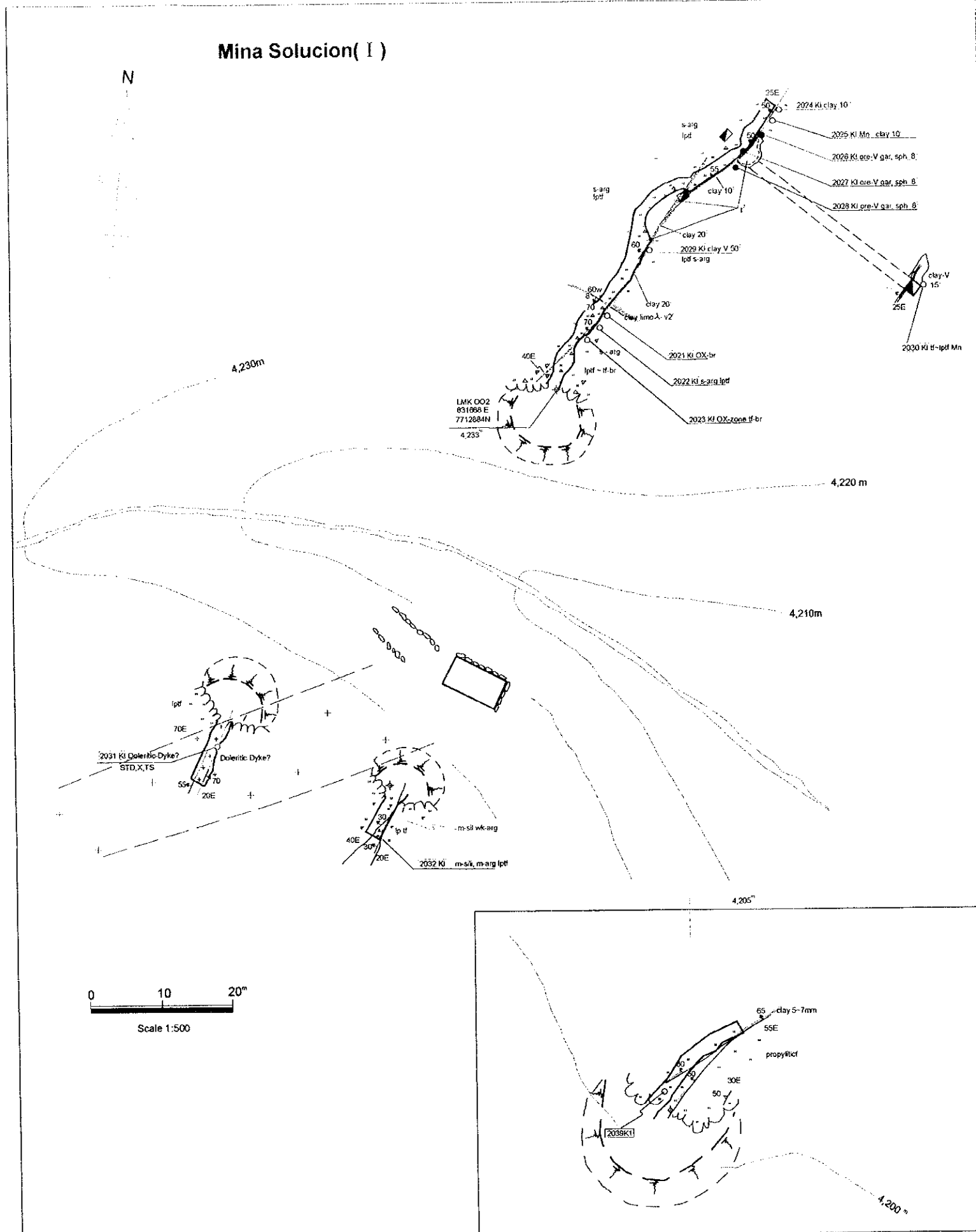
- Legend
- andesite
 - tuff breccia
 - silicified zone
 - argillized zone
 - clay vein
 - joint

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Sailica District (Mina Solucion)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



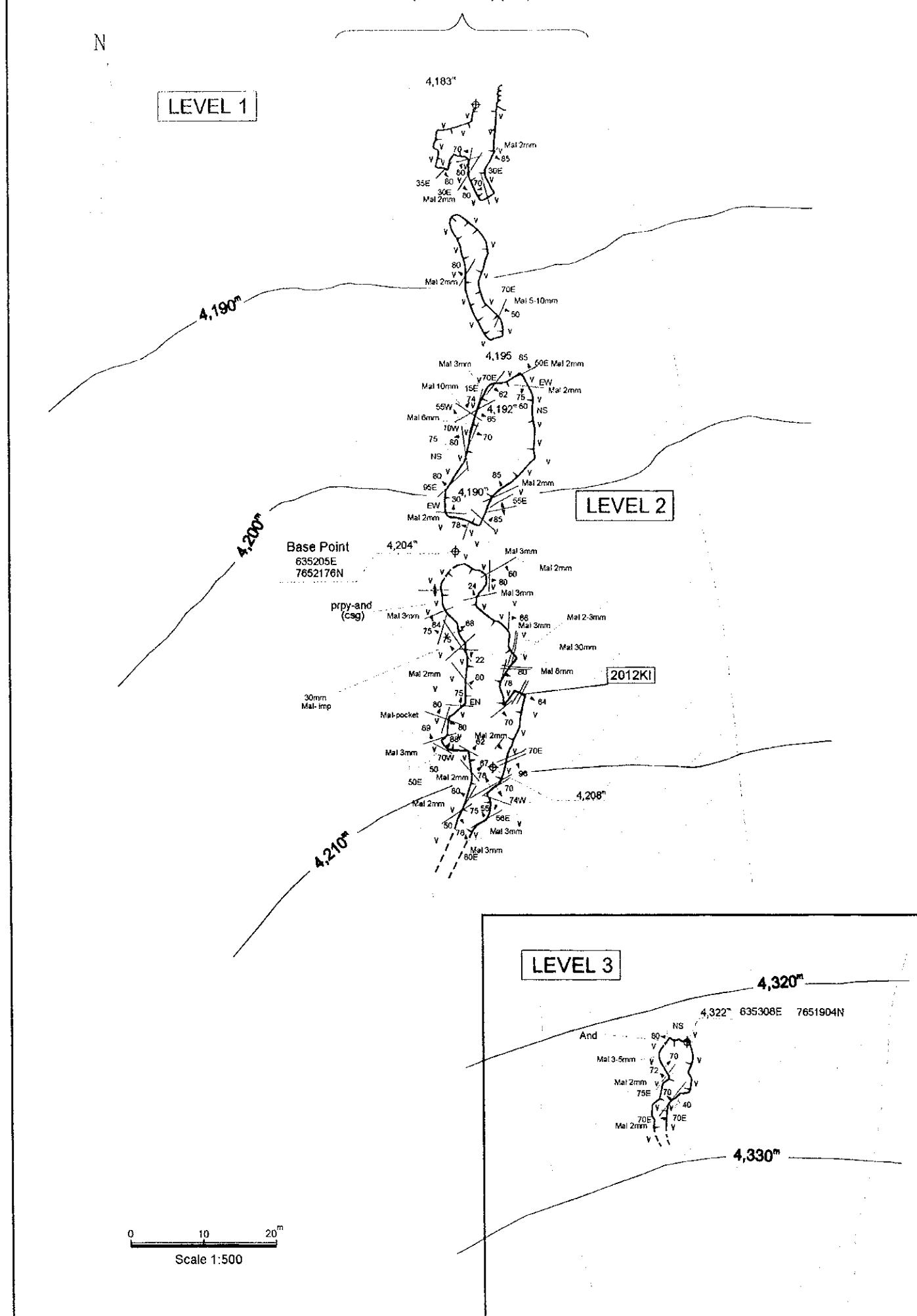
- Legend
- tuff breccia
 - tuff
 - doleritic dyke
 - clay vein
 - ore vein

Assay Result of Ore Samples

Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Ba ppm	Sn ppm
2024 KI	14	1.1	15	266	1374	29	23	<1	1	1365	<5
2025 KI	345	124.9	1195	14869	20293	136	270	<1	2	661	<5
2026 KI	1422	474	2365	85500	140533	376	789	<1	17	275	37
2027 KI	1944	603	1990	118900	252491	463	886	2.0	26	113	<5
2028 KI	406	166.7	583	43800	65805	219	248	<1	29	337	<5
2029 KI	3	0.6	9	162	1266	12	23	<1	<1	1238	<5
2030 KI	15	4.3	180	1153	4415	130	31	<1	1	420	<5
2032 KI	95	47.3	849	5776	7794	190	120	<1	9	454	<5
2033 KI	<2	<.5	19	16	71	<5	5	<1	<1	227	<5
2035 KI	4	11.3	1186	1285	1315	252	35	<1	35	20	<5

ESKAPA

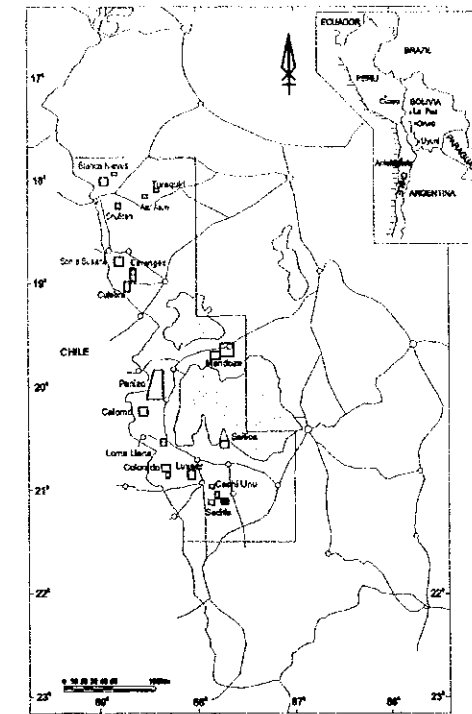
Mineralized zone
(Green copper)



PL-28




THE MINERAL EXPLORATION IN THE ORURO-UYUNI AREA OF THE REPUBLIC OF BOLIVIA

Geological Sketch
in
The Selilla District (Mina Eskapa)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

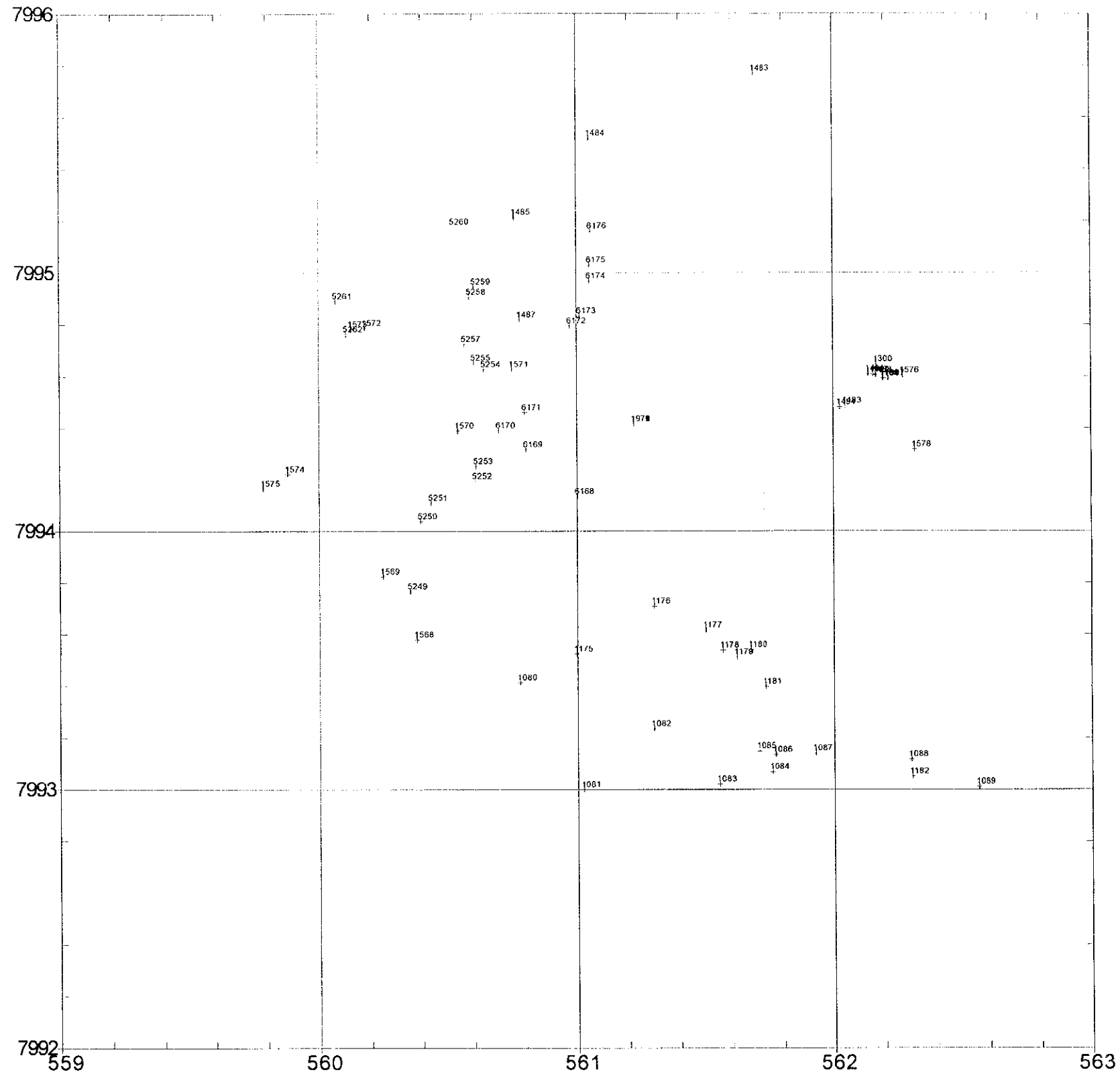
Legend

-  andesite
-  malachite vein
-  fcliation

Assay Result of Ore Samples

Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Ba	Sn
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
2012 KI	<2	15.5	60406	<3	139	<5	<5	<1	1	1453	<5

Turaquiri



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

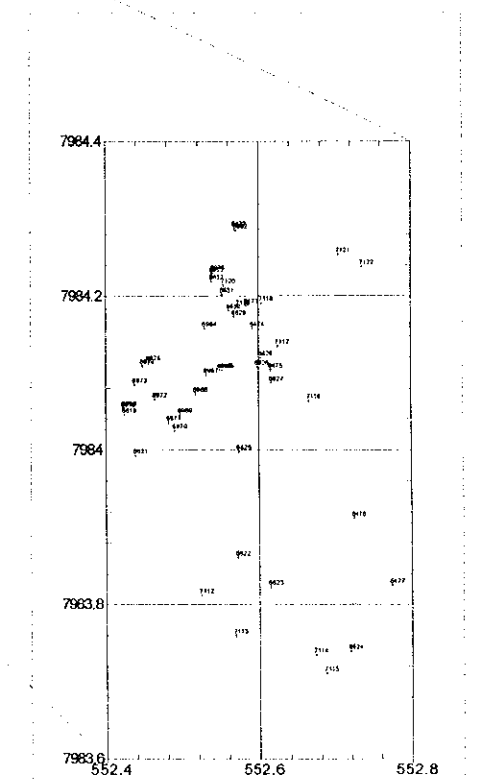
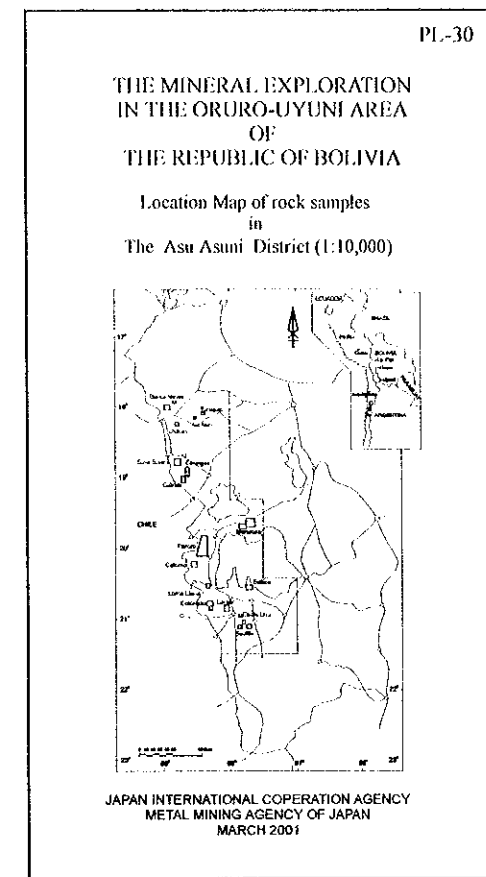
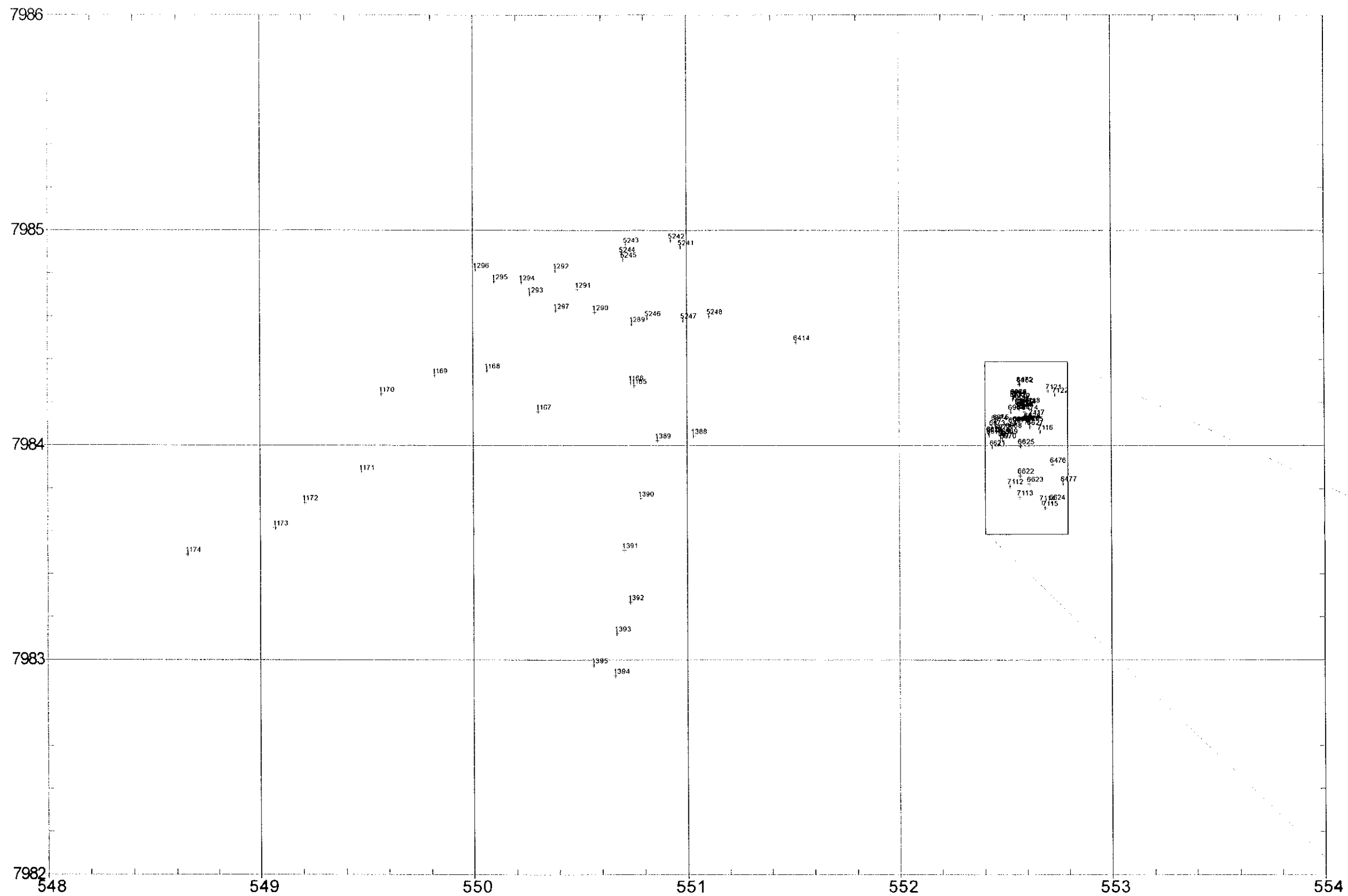
Location Map of rock samples
in
The Turaquiri District (1:10,000)

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Legend

- No. Phase II Survey
- No. Phase I Survey

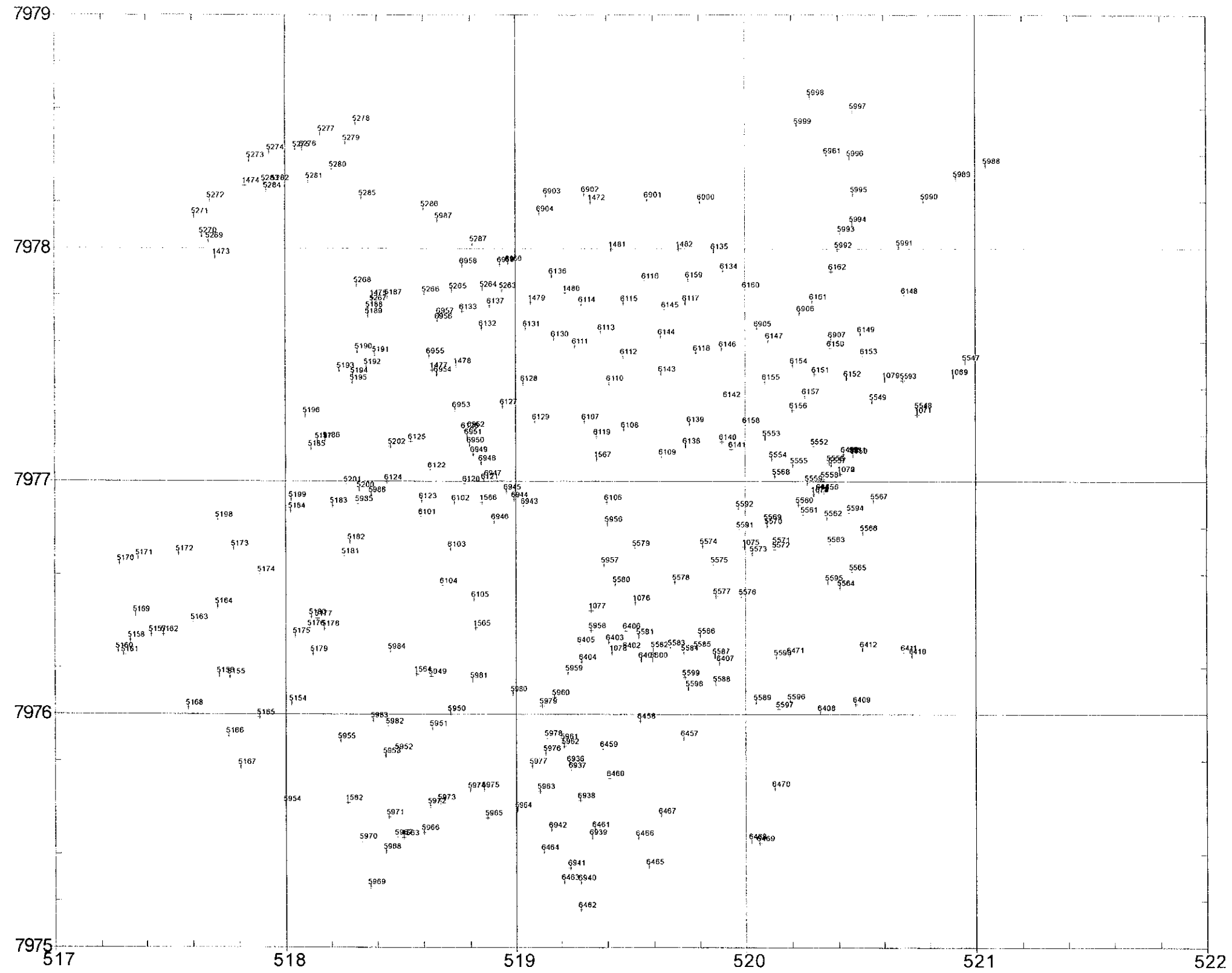
Asu Asuni



Legend

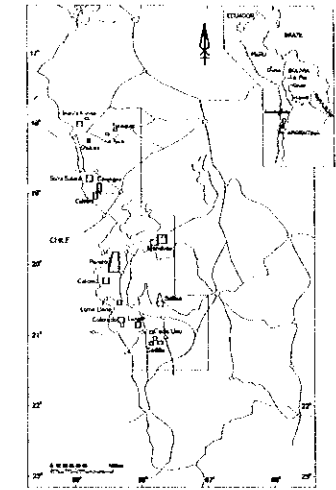
- No. Phase II Survey
- No. Phase I Survey

Chullcani



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Location Map of rock samples
in
The Chullcani District (1:10,000)

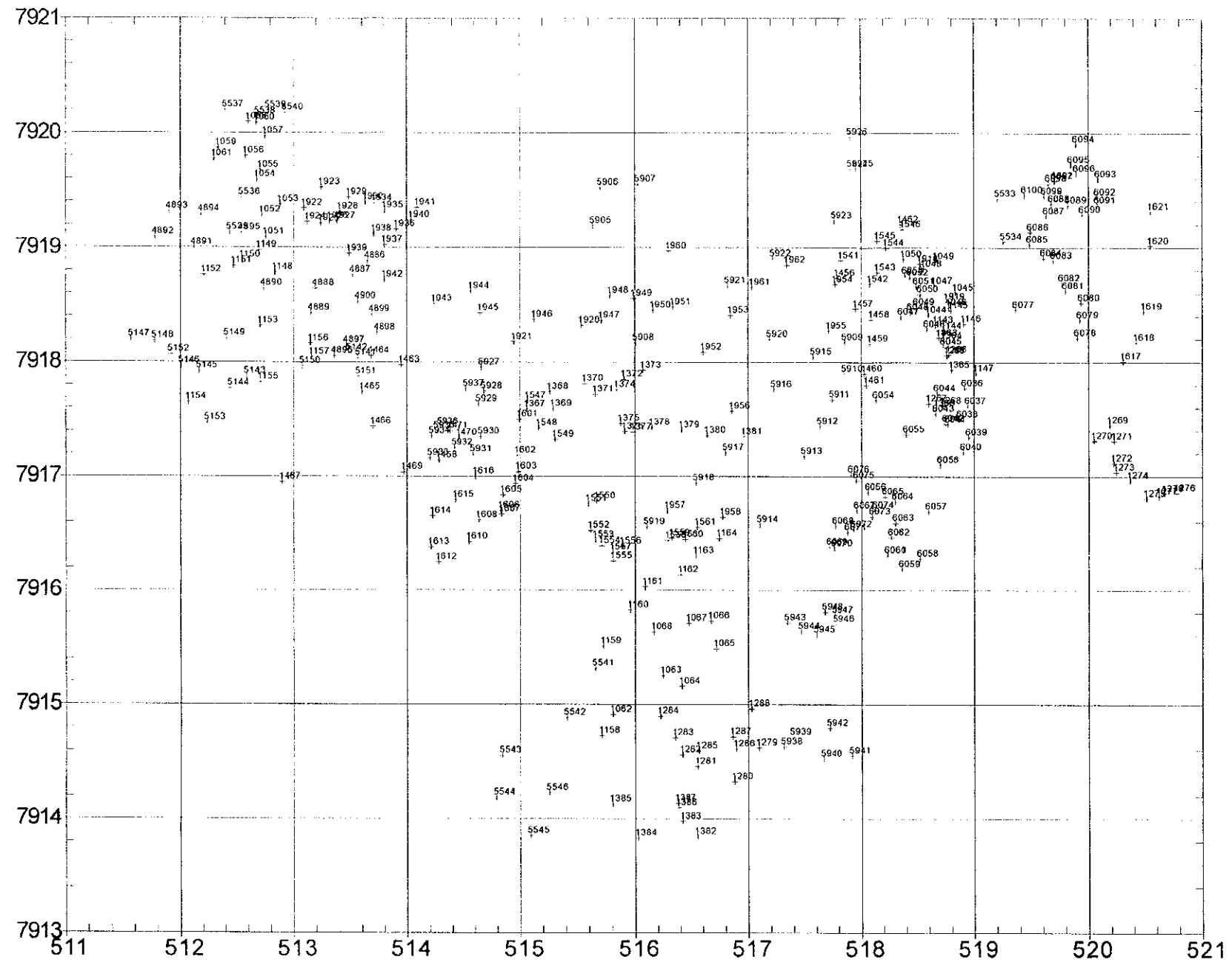


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Legend

- No. Phase II Survey
- No. Phase I Survey

Sonia Susana



PI.-32

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

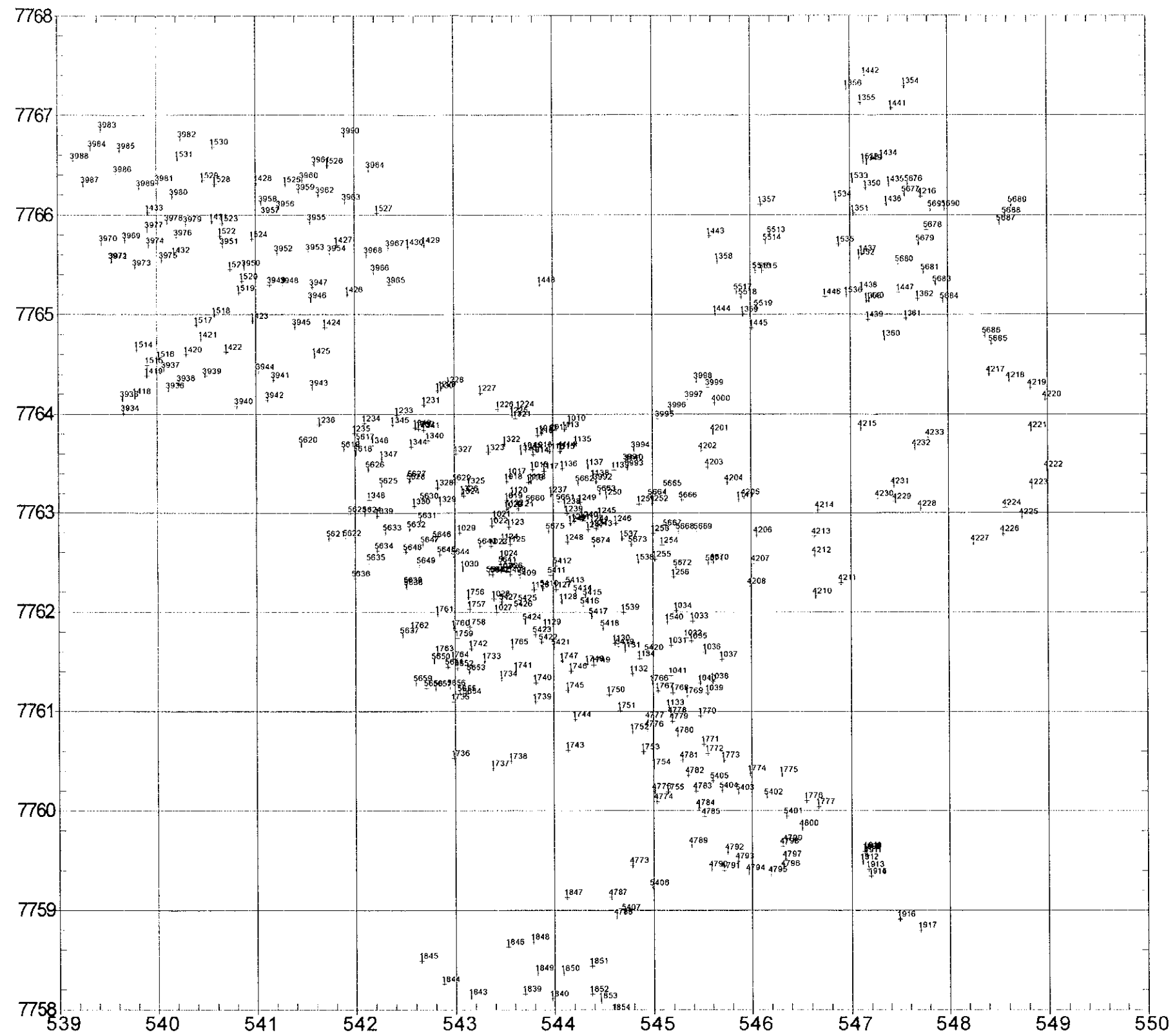
Location Map of rock samples
in
The Sonia Susana District (1:25,000)

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Legend

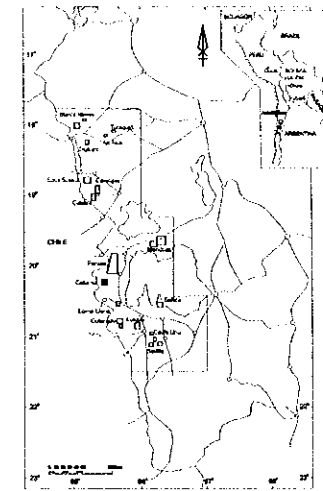
- + No. Phase II Survey
- x No. Phase I Survey

Calorno



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Location Map of rock samples
in
The Calorno District (1:25,000)

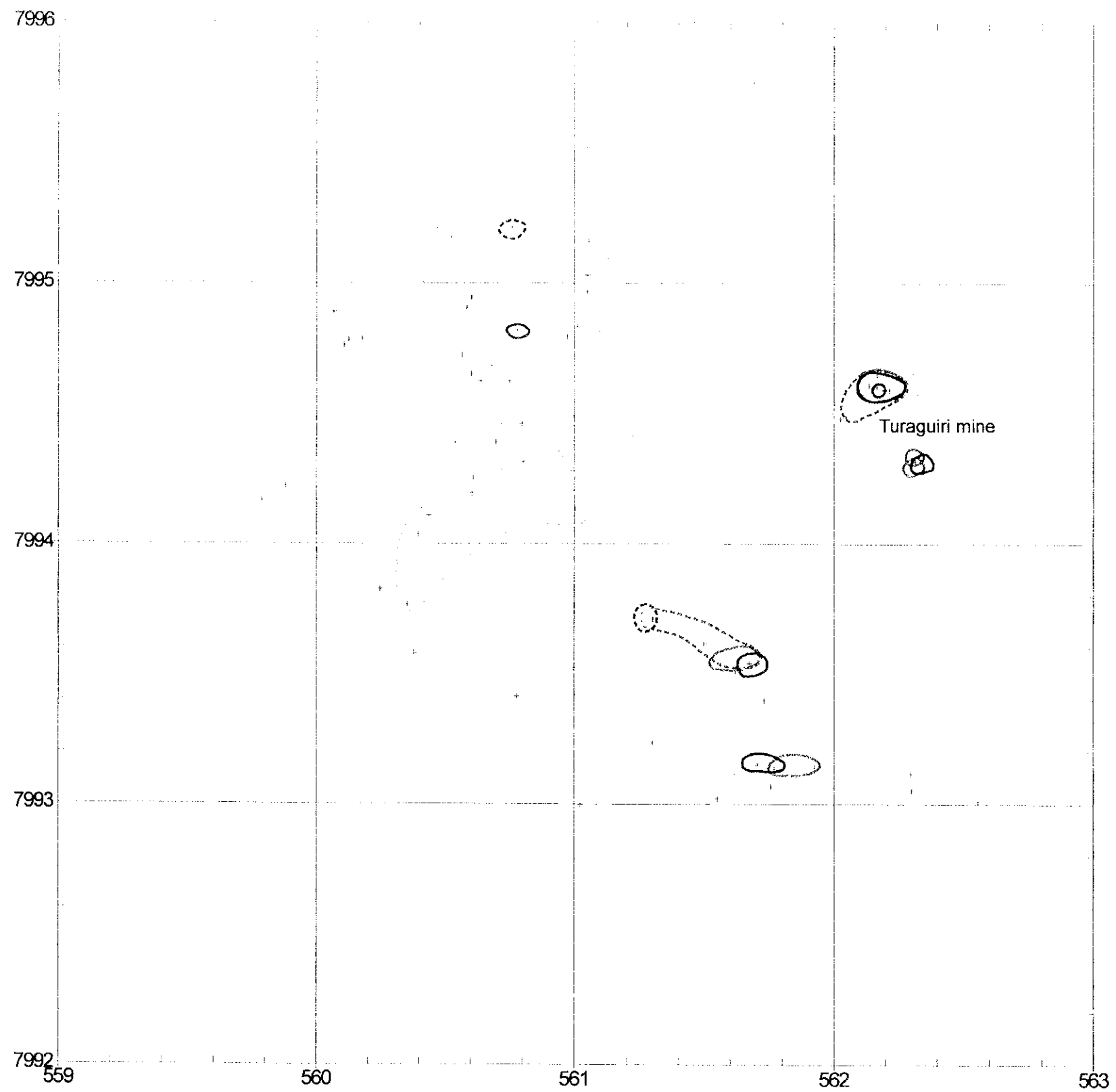


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Legend

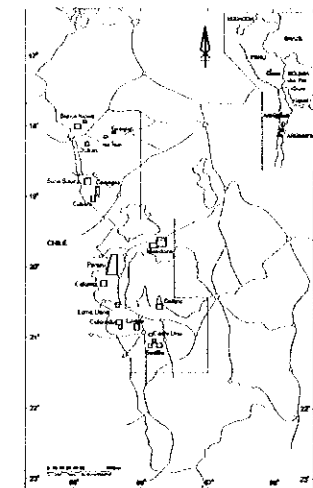
- * No. Phase II Survey
- + No. Phase I Survey

Turaquiri



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geochemical Anomaly Map
of
The Turaquiri District (1:10,000)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Asu Asuni

7986

7985

7984

7983

7982
548

549

550

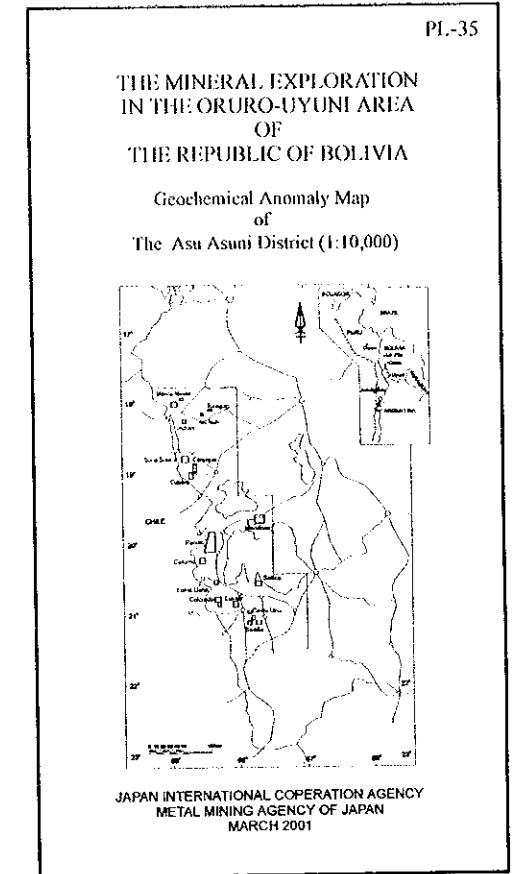
551

552

553

554

- Au
- Ag
- Cu
- Pb
- Zn
- As
- Sb
- Hg
- Mo
- Ba
- Sn



Chullcani

7979

7978

7977

7976

7975
517

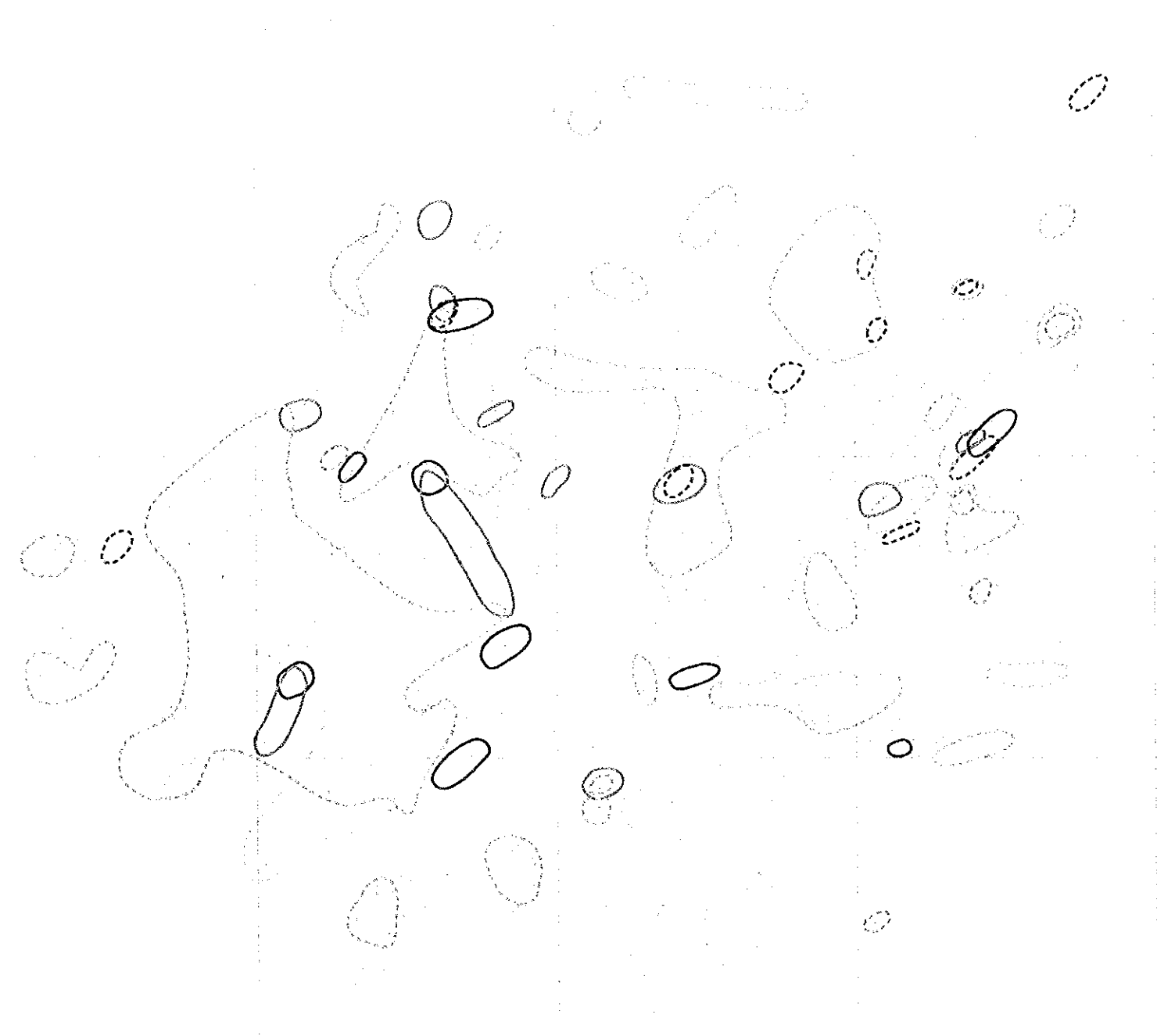
518

519

520

521

522

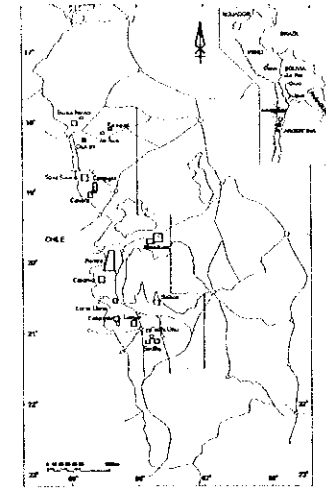


- Au
- Ag
- Cu
- Pb
- Zn
- As
- Sb
- Hg
- Mo
- Ba
- Sn

PL-36

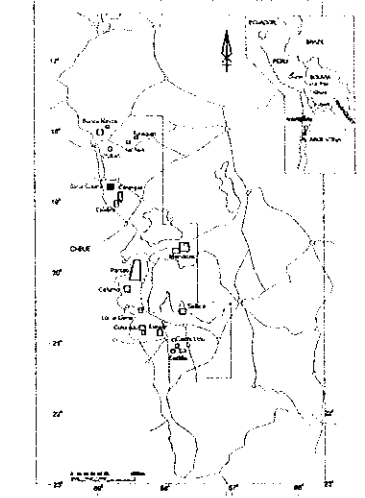
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geochemical Anomaly Map
of
The Chullcani District (1:10,000)



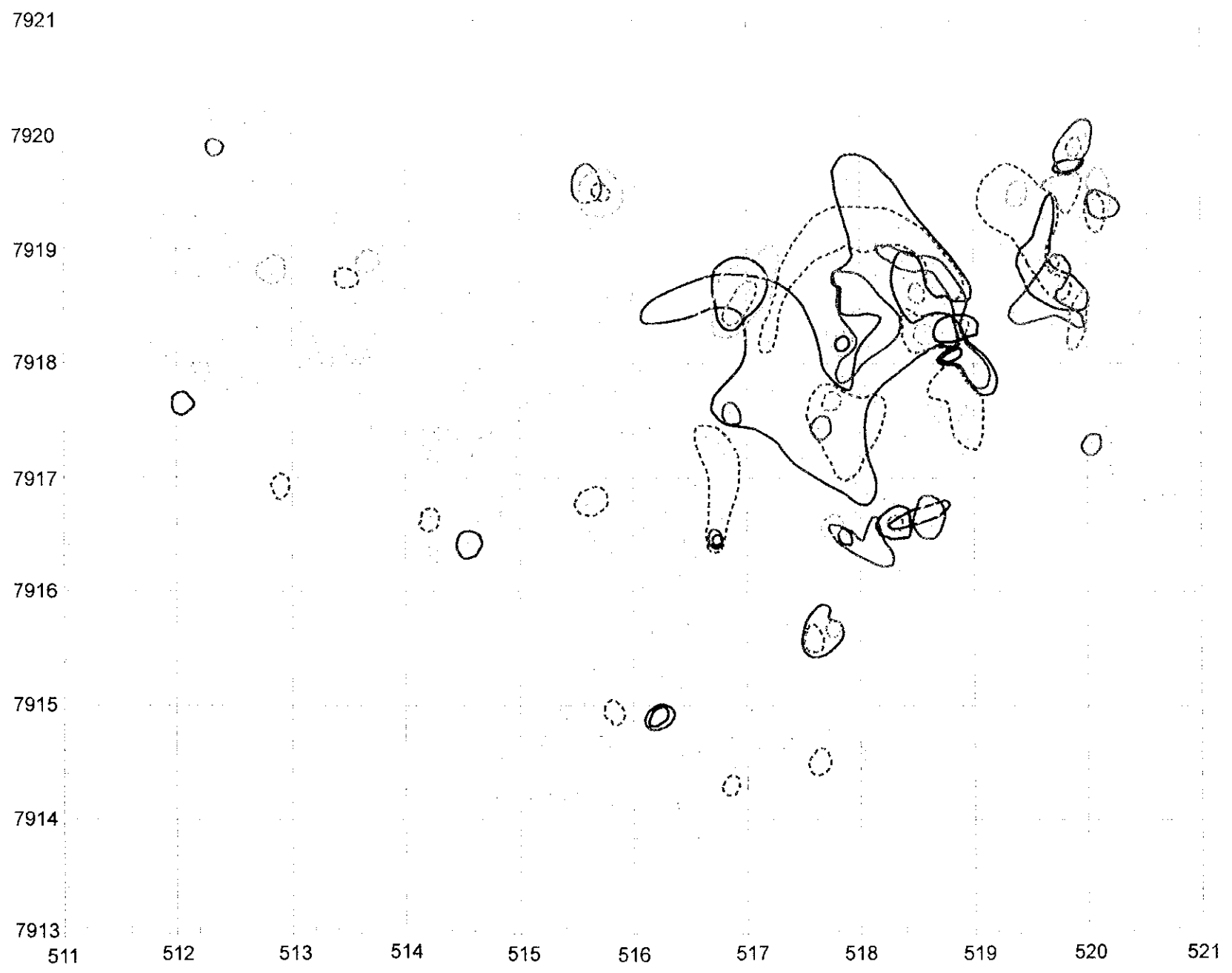
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METAL MINING AGENCY OF JAPAN
MARCH 2001

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA
Geochemical Anomaly Map
of
The Sonia Susana District (1:25,000)



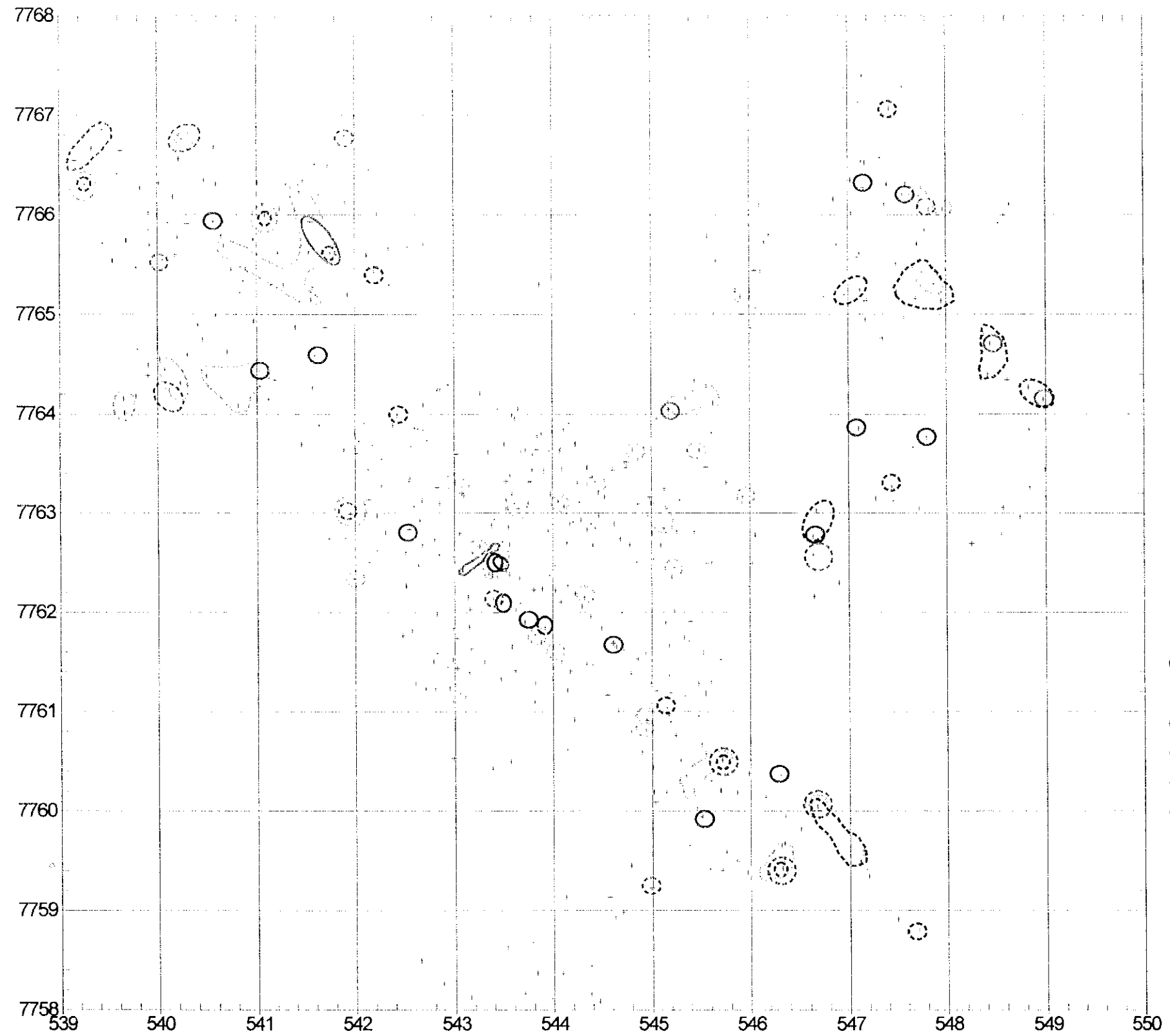
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Sonia Susana



- Au
- Ag
- Cu
- Pb
- Zn
- As
- Sb
- Hg
- Mo
- Ba
- Sn

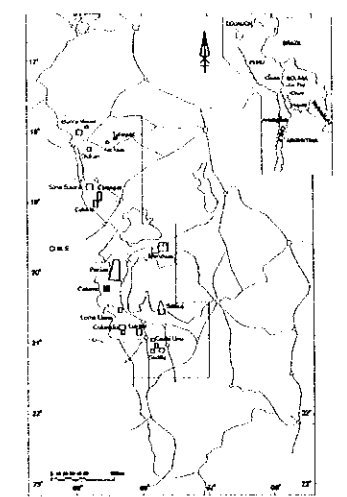
Calorno



- Au
- Ag
- Cu
- Pb
- Zn
- As
- Sb
- Hg
- Mo
- Ba
- Sn

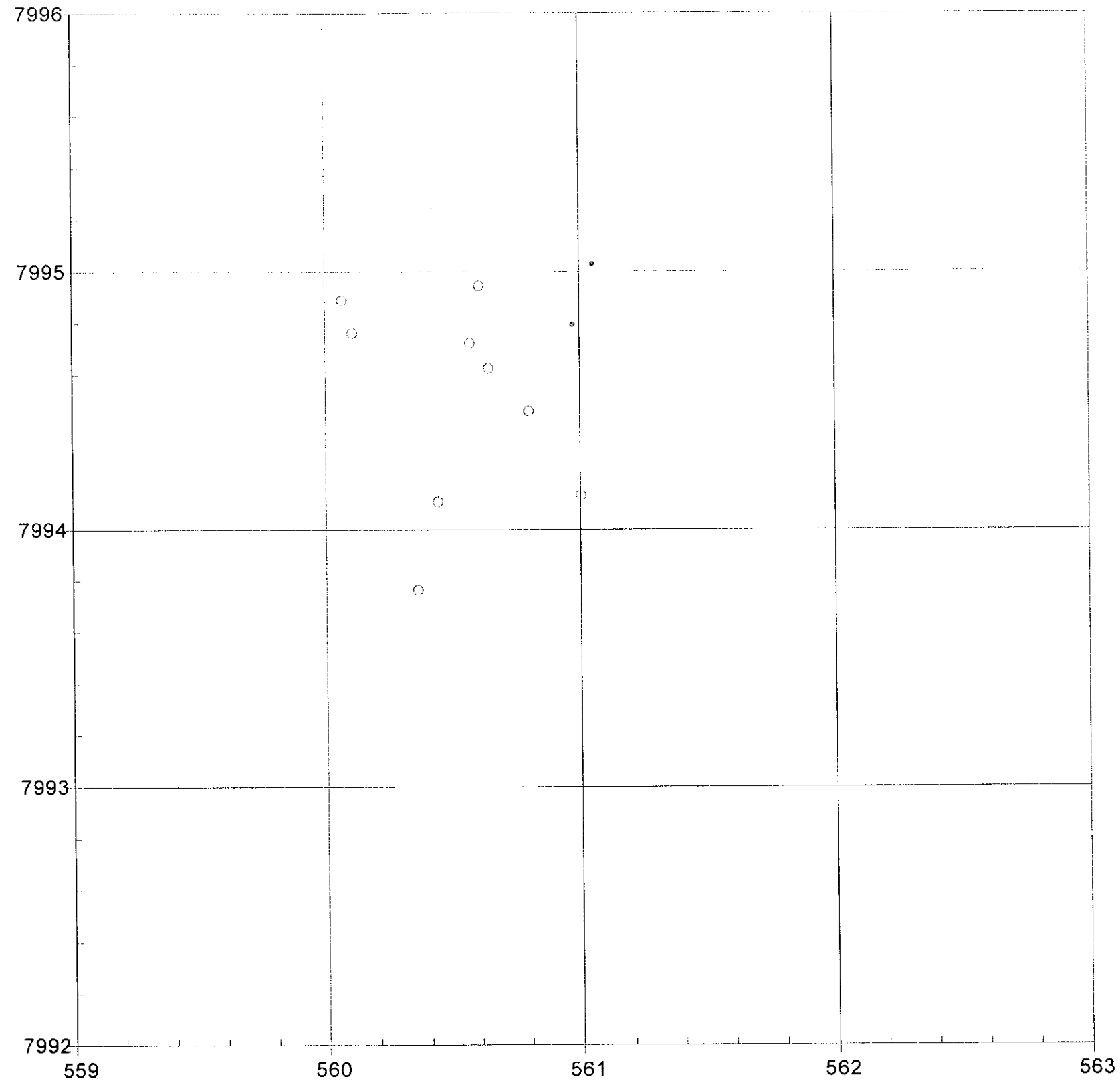
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Geochemical Anomaly Map
of
The Calorno District (1:25,000)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

Turaquiri



PI.-39

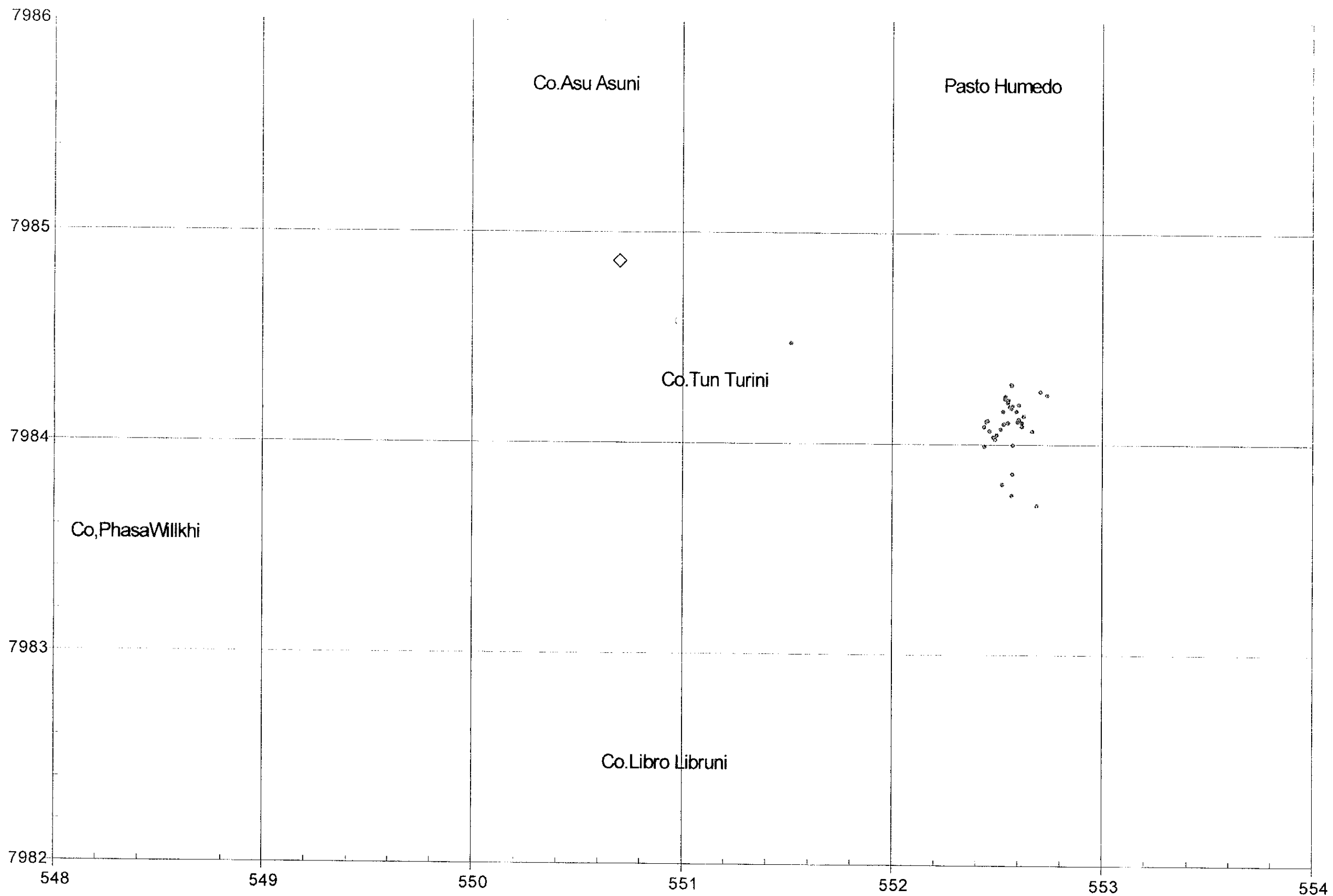
THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Distribution Map of Alteration Minerals
in
The Turaquiri District (1:10,000)

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

- Legend
- strong silicification
 - ◇ sericite
 - smectite
 - alunite
 - kaolinite
 - ☆ pyrophyllite

Asu Asuni



PL-40

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

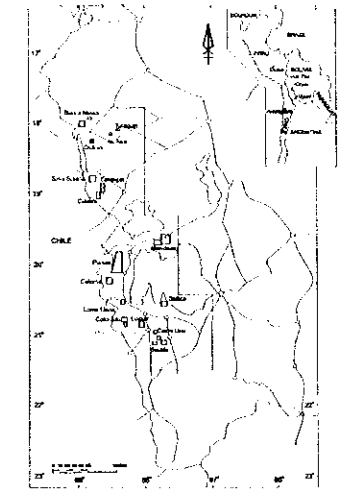
Distribution Map of Alteration Minerals
in
The Asu Asuni District (1:10,000)

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

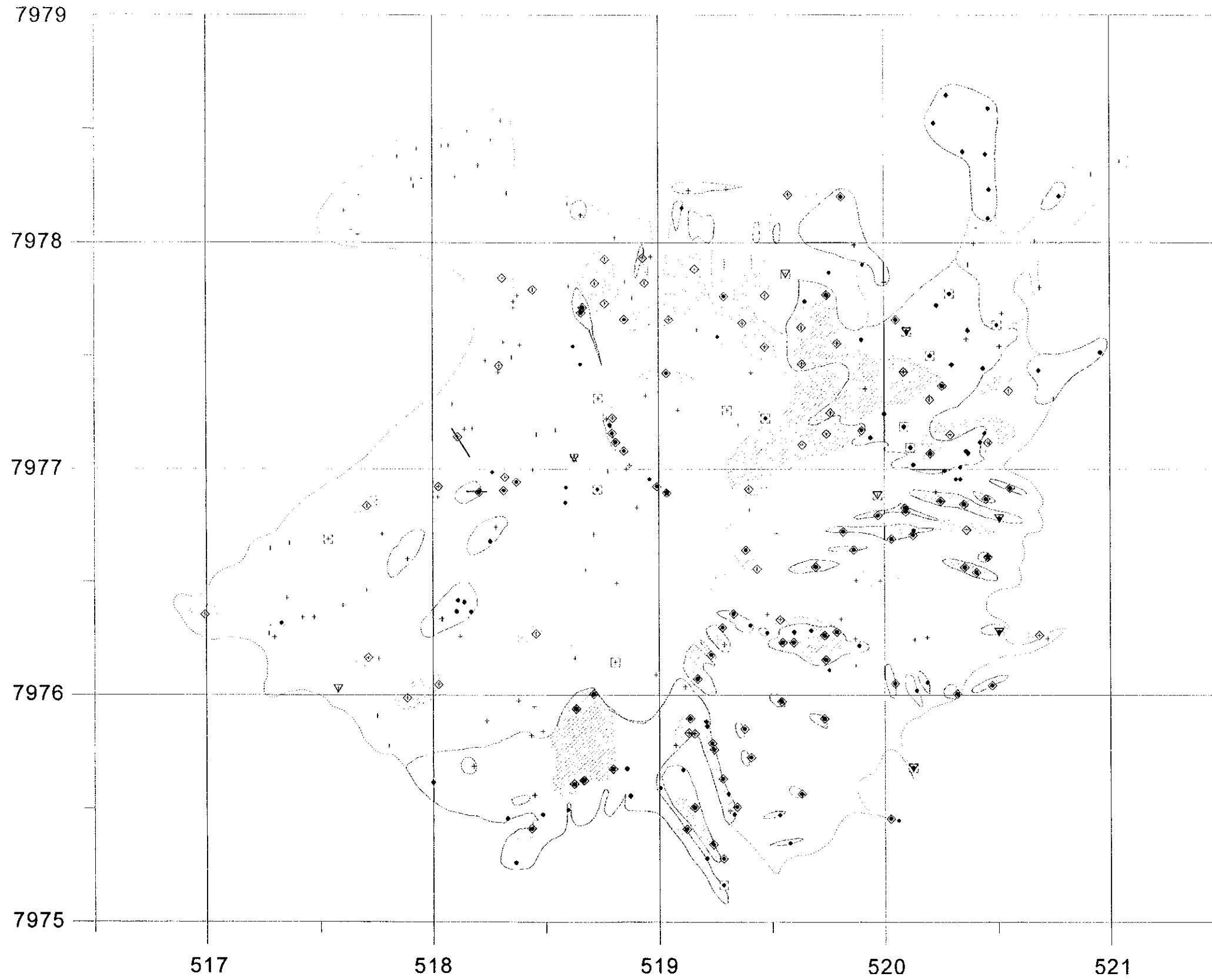
- Legend**
- strong silicification
 - ◇ sericite
 - smectite
 - alunite
 - kaolinite
 - ☆ pyrophyllite

THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

Distribution Map of Alteration Minerals
in
The Chullcani District (1:10,000)



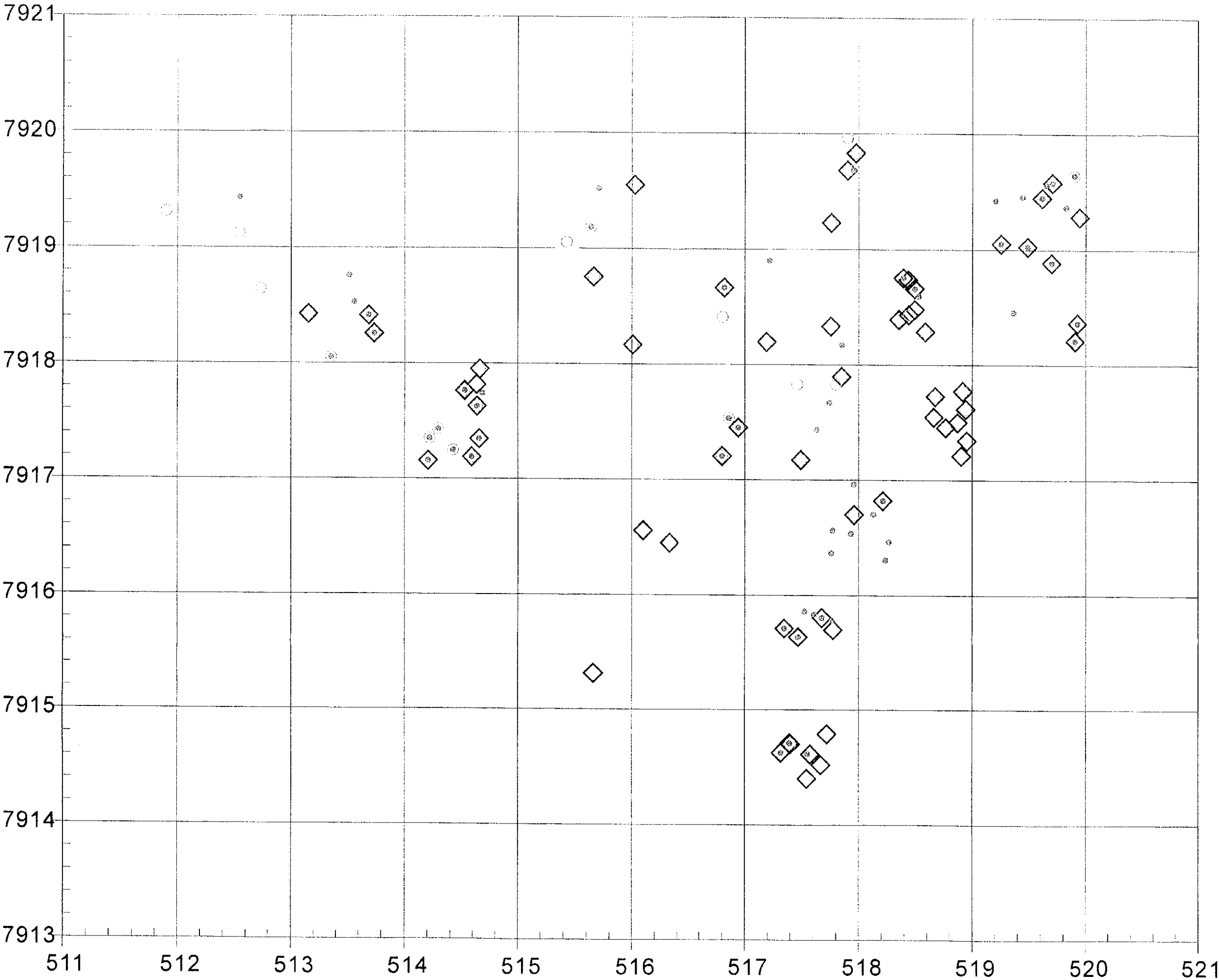
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001



Legend

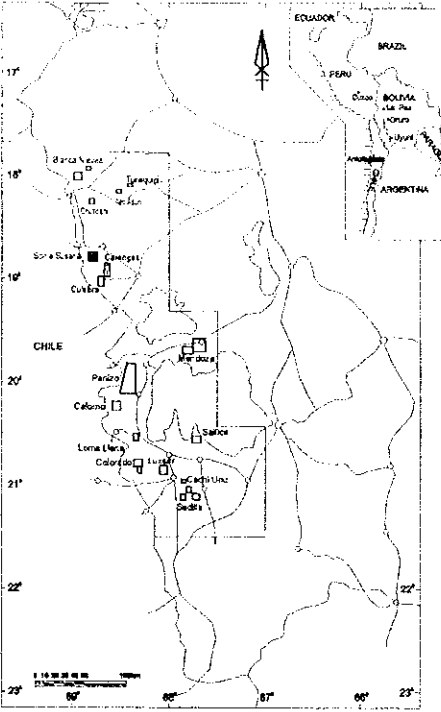
- + sampling point
- strong silicification
- sericite
- ◇ smectite
- ◇ alunite
- ▽ kaolinite
- ☆ pyrophyllite
- silicified zone
- alunitized zone
- alteration zone
- alunite vein

Sonia Susana



THE MINERAL EXPLORATION
IN THE ORURO-UYUNI AREA
OF
THE REPUBLIC OF BOLIVIA

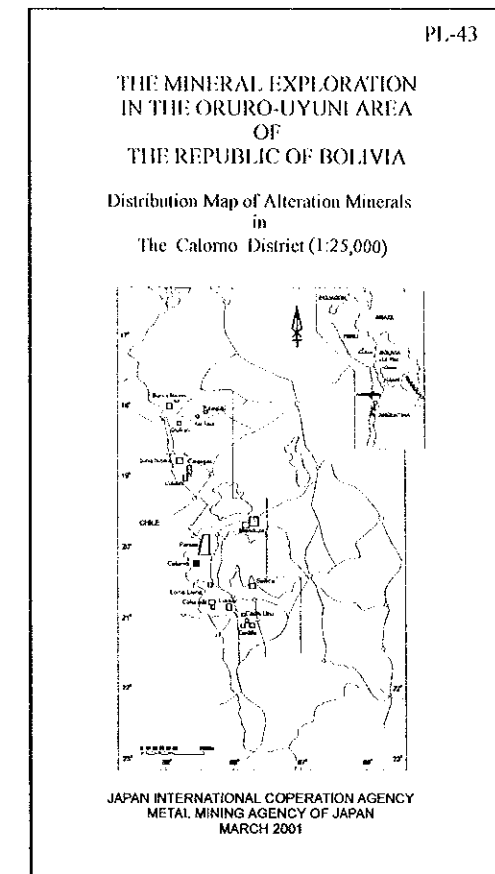
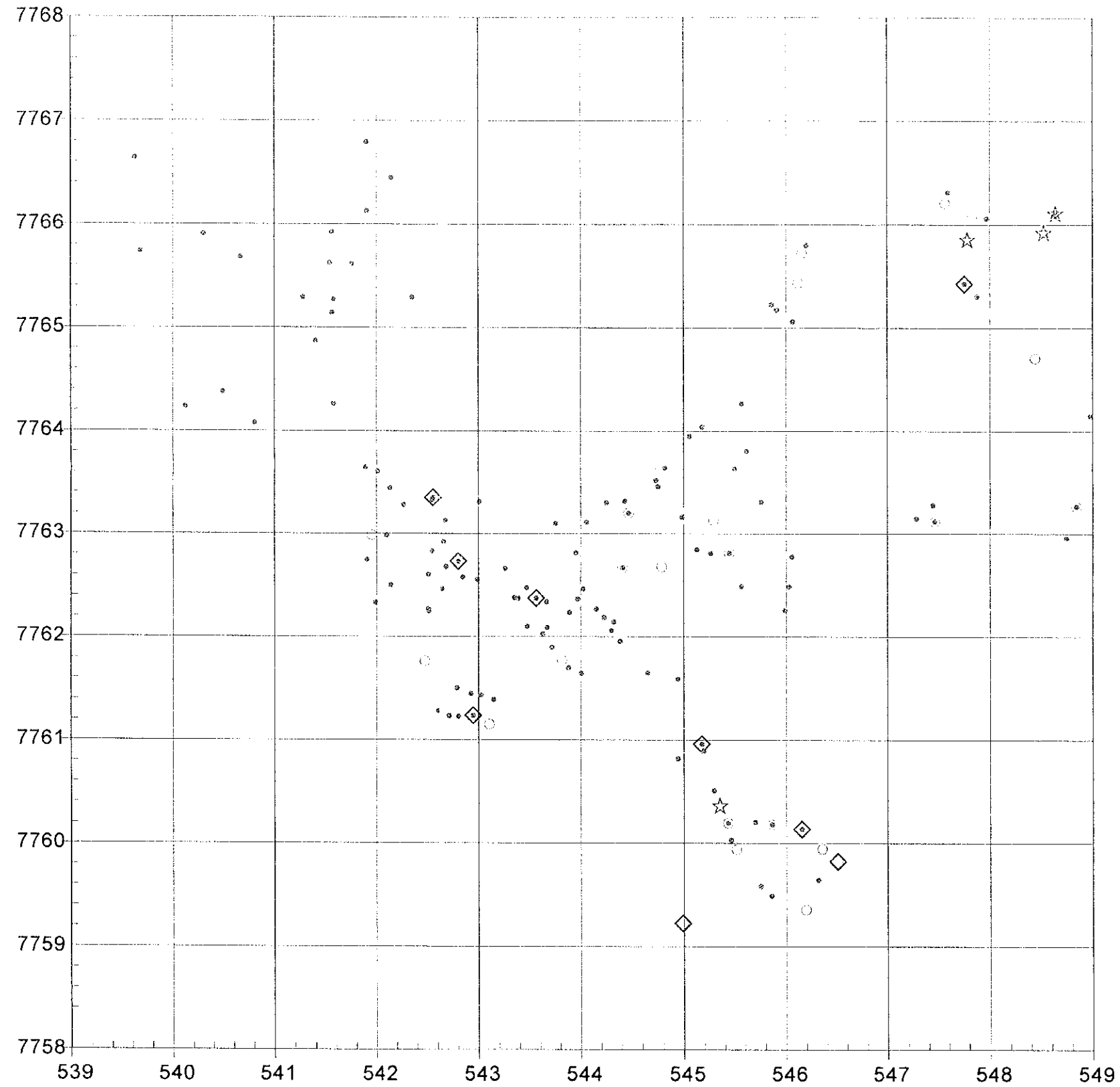
Distribution Map of Alteration Minerals
in
The Sonia Susana District (1:25,000)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
MARCH 2001

- Legend**
- strong silicification
 - ◇ sericite
 - smectite
 - alunite
 - kaolinite
 - ☆ pyrophyllite

Calorno



- Legend**
- strong silicification
 - ◇ sericite
 - smectite
 - alunite
 - kaolinite
 - ☆ pyrophyllite