

| Depth | Observation | Alteration | | | | | Mineralization | | | | | Assay | | | | | |
|-------|----------------------|------------|-----|-----|----|----|----------------|-----|----|-----|-----|-------|----|----|----|----|----|
| | | Sil | Arg | Chl | Py | Ep | Py | Chl | Sp | Qtz | oth | Au | Ag | Cu | Pb | Zn | Mo |
| 10 | weathering (soil) | | | | | | | | | | | | | | | | |
| 20 | weathering limo II | | | | | | | | | | | | | | | | |
| 30 | weathering limo I-II | | | | | | | | | | | | | | | | |
| 40 | drusy limo I-II | | | | | | | | | | | | | | | | |
| 45 | limo drusy 0.5cm | | | | | | | | | | | | | | | | |
| 50 | wk chl Arg I-II | | | | | | | | | | | | | | | | |
| 55 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 60 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 65 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 70 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 75 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 80 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 85 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 90 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 95 | limo Arg I-II | | | | | | | | | | | | | | | | |
| 100 | limo Arg I-II | | | | | | | | | | | | | | | | |

| Depth | Observation | Alteration | | | | | Mineralization | | | | | Assay | | | | | |
|-------|------------------------|------------|-----|-----|----|----|----------------|-----|----|-----|-----|-------|----|----|----|----|----|
| | | Sil | Arg | Chl | Py | Ep | Py | Chl | Sp | Qtz | oth | Au | Ag | Cu | Pb | Zn | Mo |
| 110 | Sil wk Arg wk chl I-II | | | | | | | | | | | | | | | | |
| 120 | Sil Arg II | | | | | | | | | | | | | | | | |
| 130 | Sil wk Arg wk chl I-II | | | | | | | | | | | | | | | | |
| 140 | Sil wk Arg wk chl I-II | | | | | | | | | | | | | | | | |
| 150 | Sil Arg II | | | | | | | | | | | | | | | | |
| 160 | Sil Arg II | | | | | | | | | | | | | | | | |
| 170 | Sil Arg II | | | | | | | | | | | | | | | | |
| 180 | Sil Arg II | | | | | | | | | | | | | | | | |
| 190 | Sil Arg II | | | | | | | | | | | | | | | | |
| 200 | Sil Arg II | | | | | | | | | | | | | | | | |

| Depth | Observation | Alteration | | | | | Mineralization | | | | | Assay | | | | | |
|-------|------------------------|------------|-----|-----|----|----|----------------|-----|----|-----|-----|-------|----|----|----|----|----|
| | | Sil | Arg | Chl | Py | Ep | Py | Chl | Sp | Qtz | oth | Au | Ag | Cu | Pb | Zn | Mo |
| 210 | Sil wk Arg wk chl I-II | | | | | | | | | | | | | | | | |
| 220 | Sil Arg II | | | | | | | | | | | | | | | | |
| 230 | Sil Arg II | | | | | | | | | | | | | | | | |
| 240 | Sil Arg II | | | | | | | | | | | | | | | | |
| 250 | Sil Arg II | | | | | | | | | | | | | | | | |
| 260 | Sil Arg II | | | | | | | | | | | | | | | | |
| 270 | Sil Arg II | | | | | | | | | | | | | | | | |
| 280 | Sil Arg II | | | | | | | | | | | | | | | | |
| 290 | Sil Arg II | | | | | | | | | | | | | | | | |
| 300 | Sil Arg II | | | | | | | | | | | | | | | | |

THE MINERAL EXPLORATION IN THE PACHAPIRIANA AREA, REPUBLIC OF PERU (PHASE II) CORE LOG in the JEHUAMA MJPJ - 2

JAPAN INTERNATIONAL COOPERATION METAL MINING AGENCY OF FEBRUARY 1990 Prepared by MINDECO

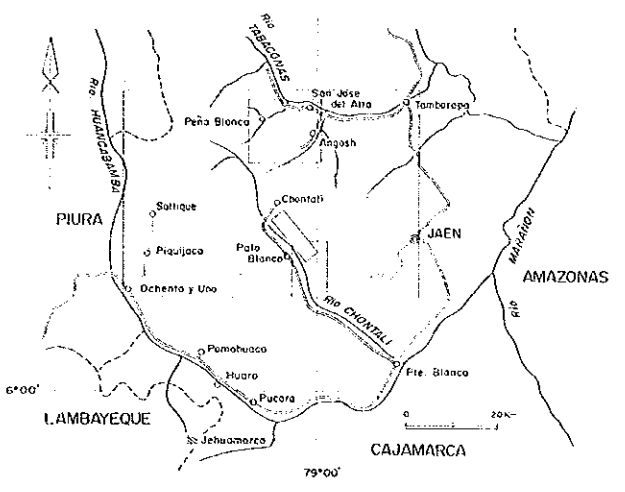
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 Elevation : 3229.39m
 Direction : 135° Inclin : 0°

LEGEND

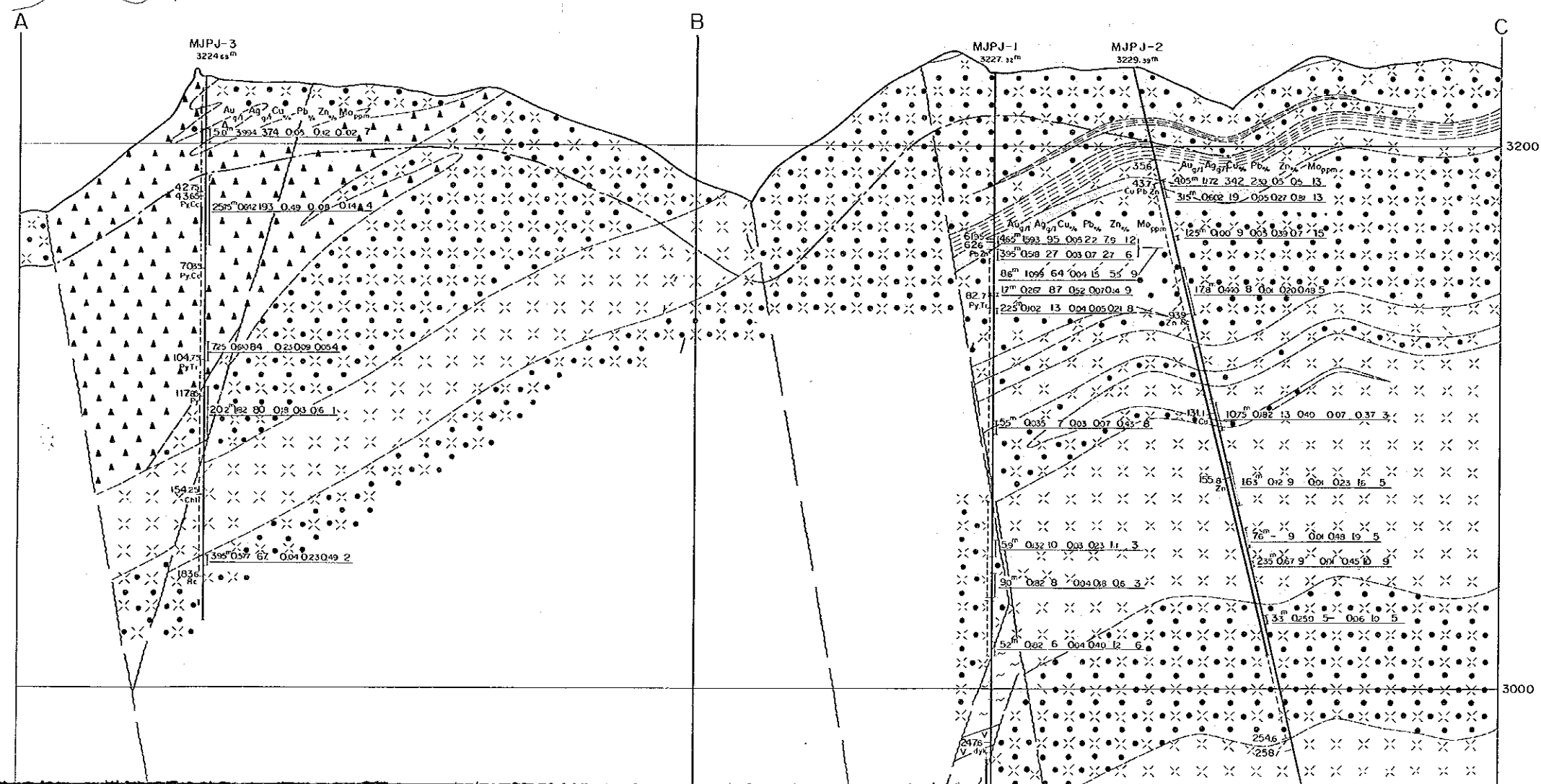
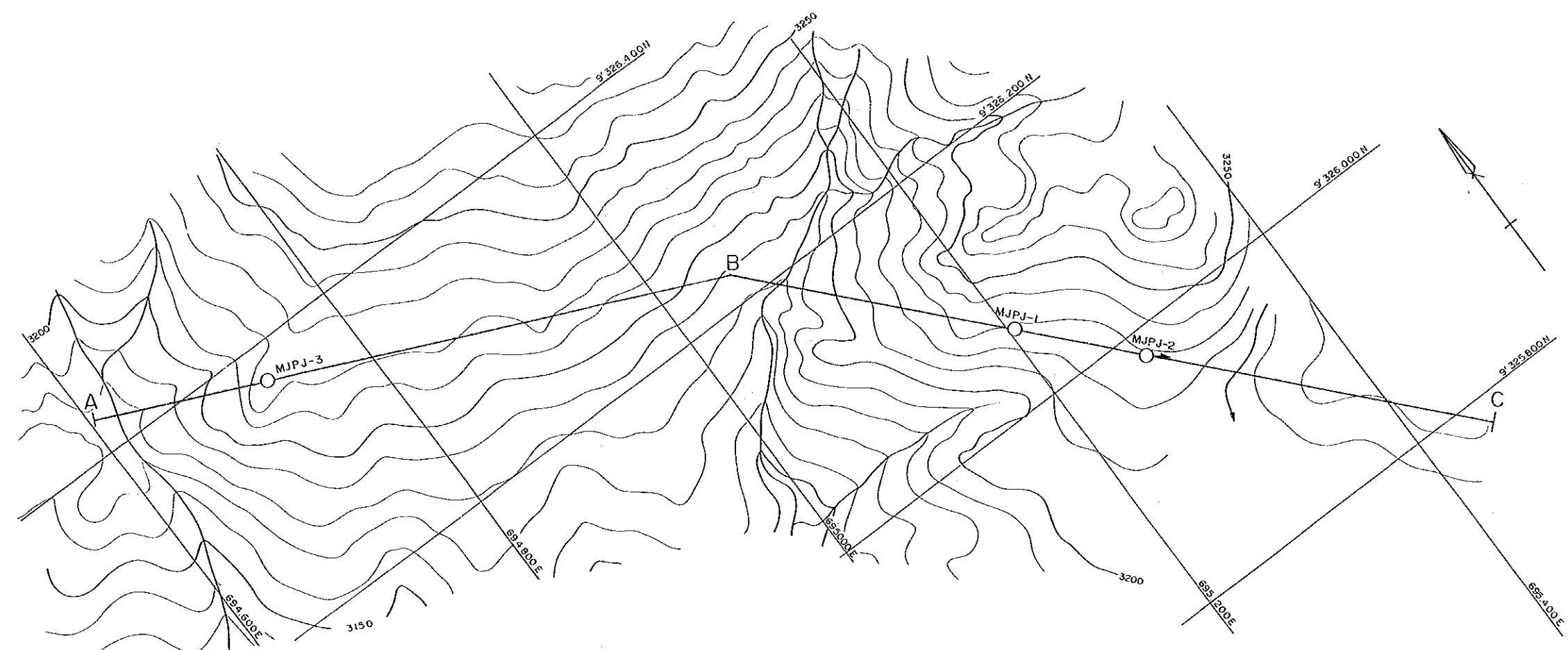
| | | | |
|--------|------------------------------------|------|--------------|
| Symbol | shale | py | pyrite |
| Symbol | tuff | Cp | chlorite |
| Symbol | lapilli tuff | Trh | tetrahedrite |
| Symbol | tuff breccia | Sp | sphalerite |
| Symbol | andesite | Gn | galena |
| Symbol | brecciated rock | cc | calcite |
| Symbol | fault breccia | Bn | bornite |
| Symbol | sheared zone | limo | limonite |
| Symbol | quartz zone | Hm | hematite |
| Symbol | missing zone | Hb | hornblende |
| Symbol | intersected angle of vein | Qtz | quartz |
| Symbol | intersected angle of bedding plane | dr | druse |
| Symbol | | v | vein |

sh shale
 tuff or tuffaceous
 lapilli tuff
 tuff breccia
 andesite
 brecciated rock
 fault breccia
 sheared zone
 quartz zone
 missing zone
 intersected angle of vein
 intersected angle of bedding plane
 py pyrite
 Cp chlorite
 Trh tetrahedrite
 Sp sphalerite
 Gn galena
 cc calcite
 Bn bornite
 limo limonite
 Hm hematite
 Hb hornblende
 Qtz quartz
 dr druse
 v vein




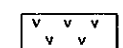
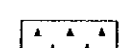
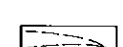
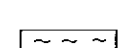
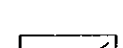
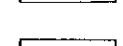
THE MINERAL EXPLORATION
IN
THE PACHAPIRIANA AREA, REPUBLIC OF PERU
(PHASE II)
GEOLOGICAL PROFILE OF THE DRILLINGS

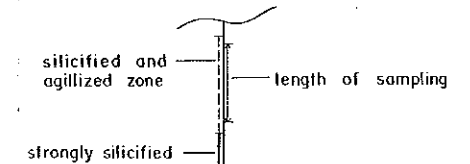


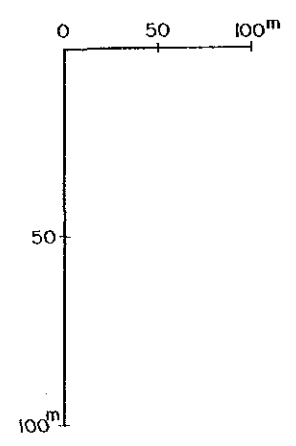
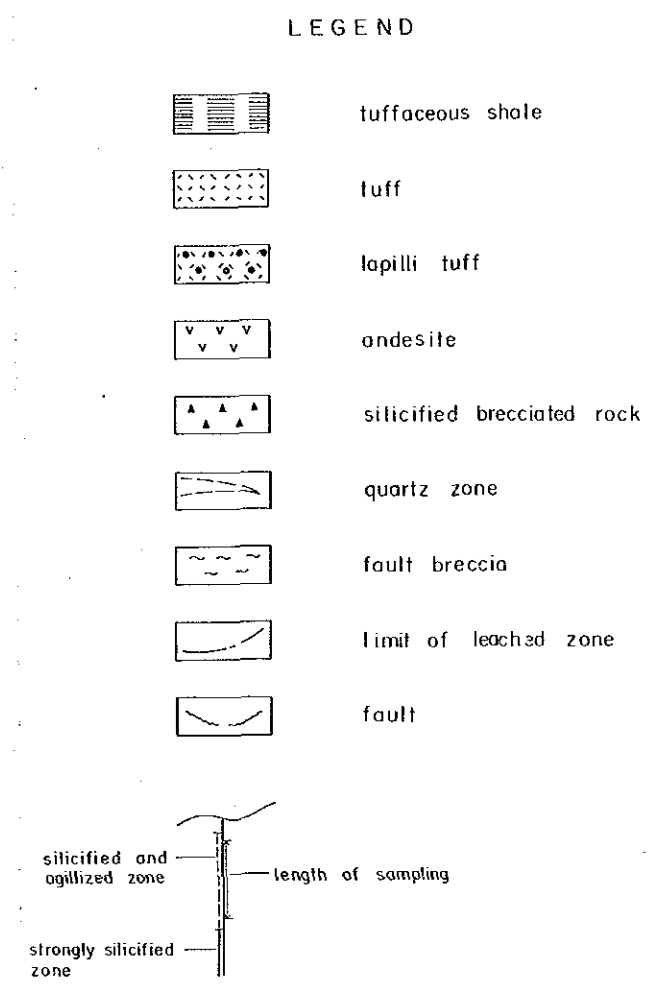
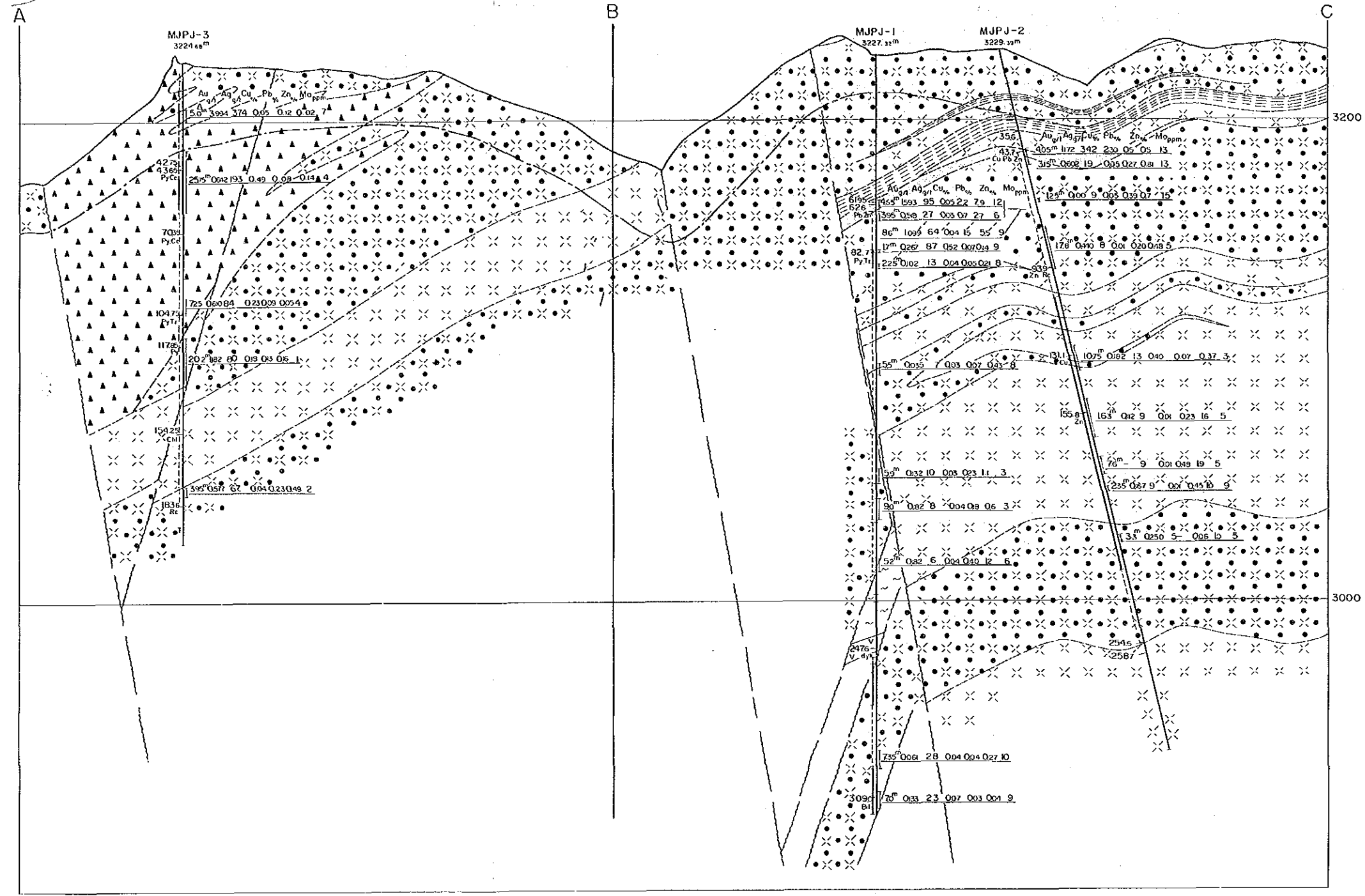
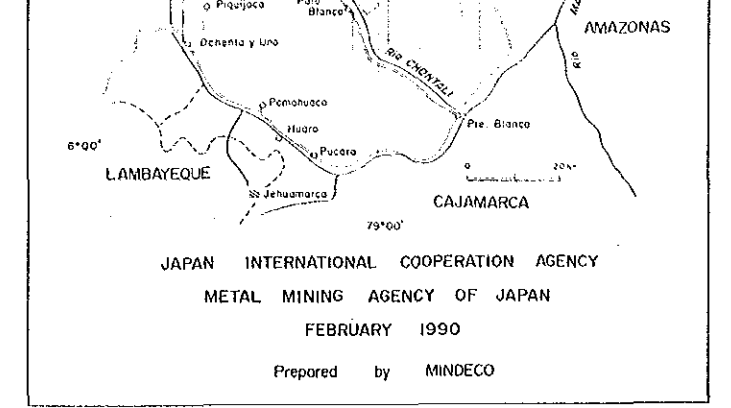
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1990
Prepared by MINDECO



LEGEND

-  tuffaceous shale
-  tuff
-  lapilli tuff
-  andesite
-  silicified brecciated rock
-  quartz zone
-  fault breccia
-  limit of leached zone
-  fault





708

712

716

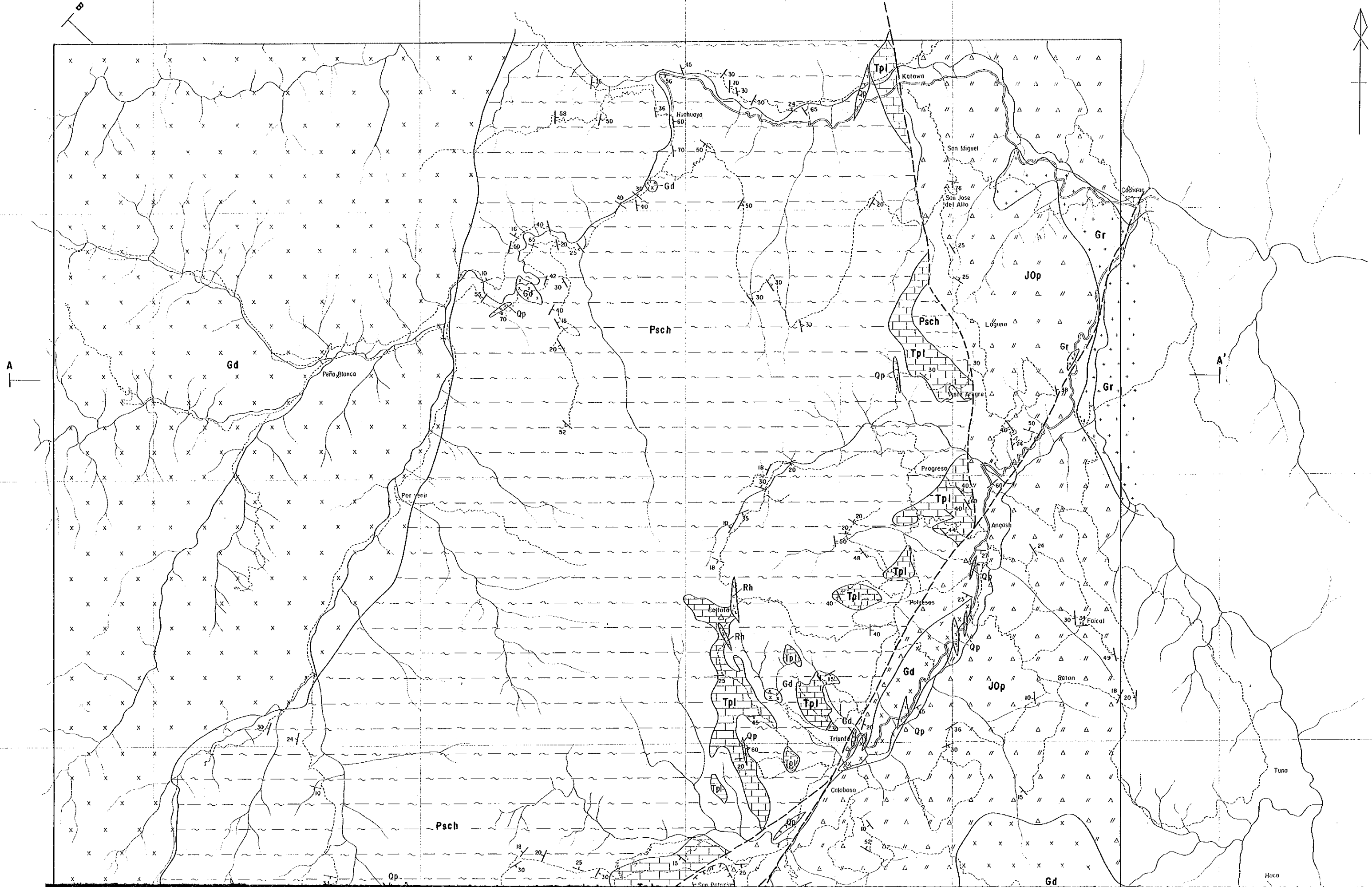
720

724

9,396

9,392

9,388

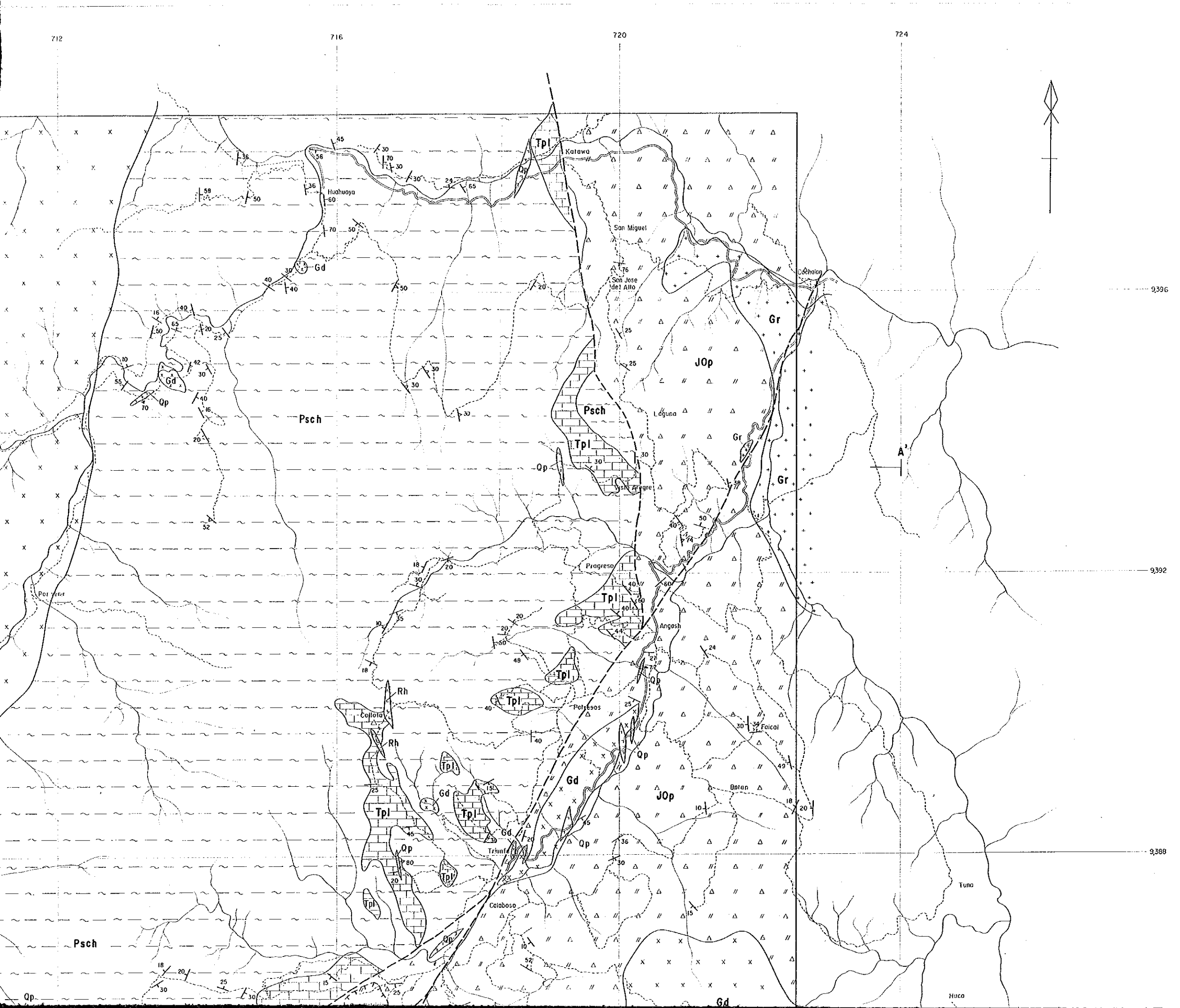


A

A'

Tuna

Huco



PL.- 14 (1)

THE MINERAL EXPLORATION
IN
THE PACHAPIRIANA AREA, REPUBLIC OF PERU
(PHASE II)

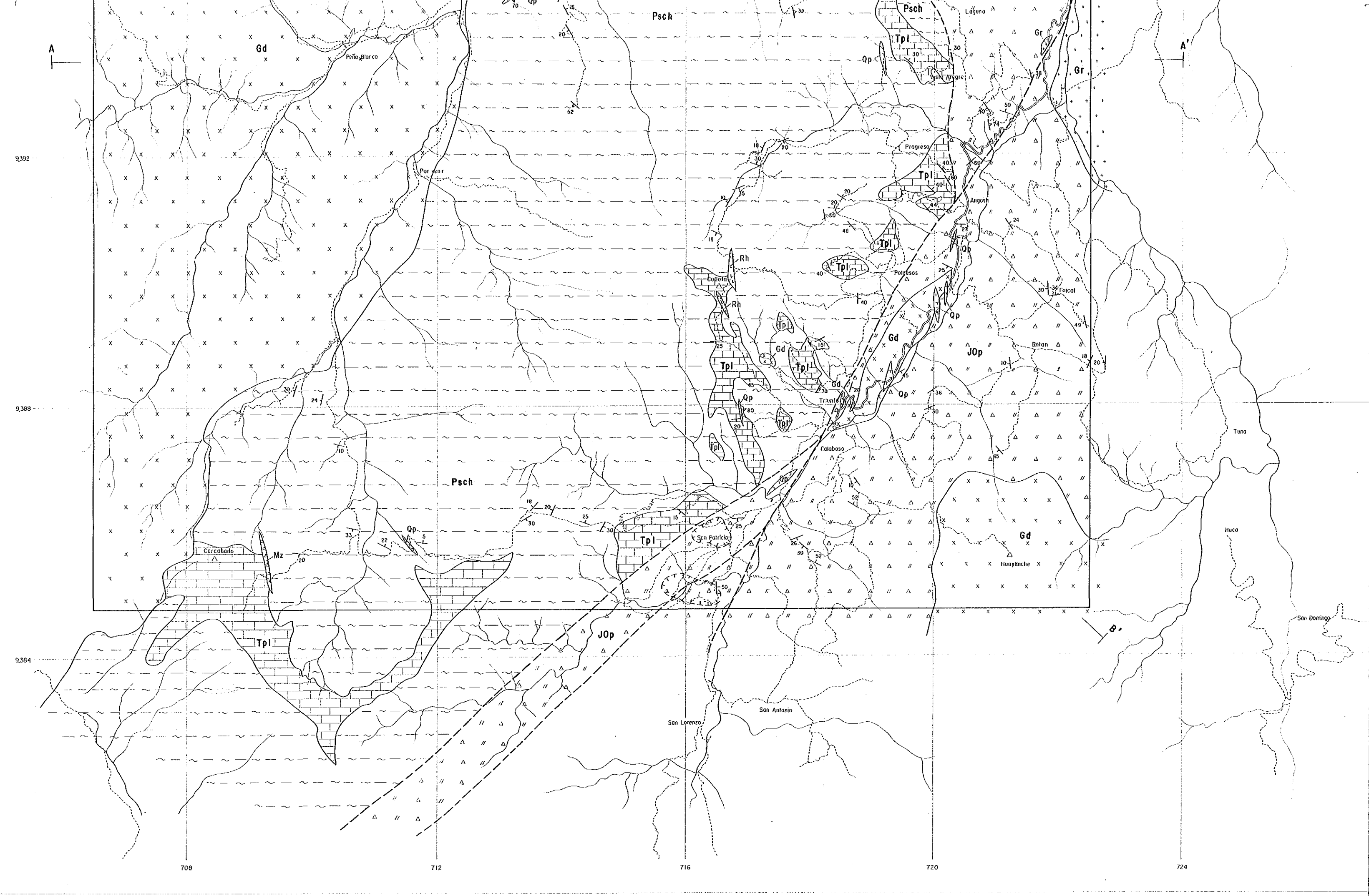
GEOLOGICAL MAP OF THE PEÑA BLANCA AREA

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1990
Prepared by MINDECO



LEGEND

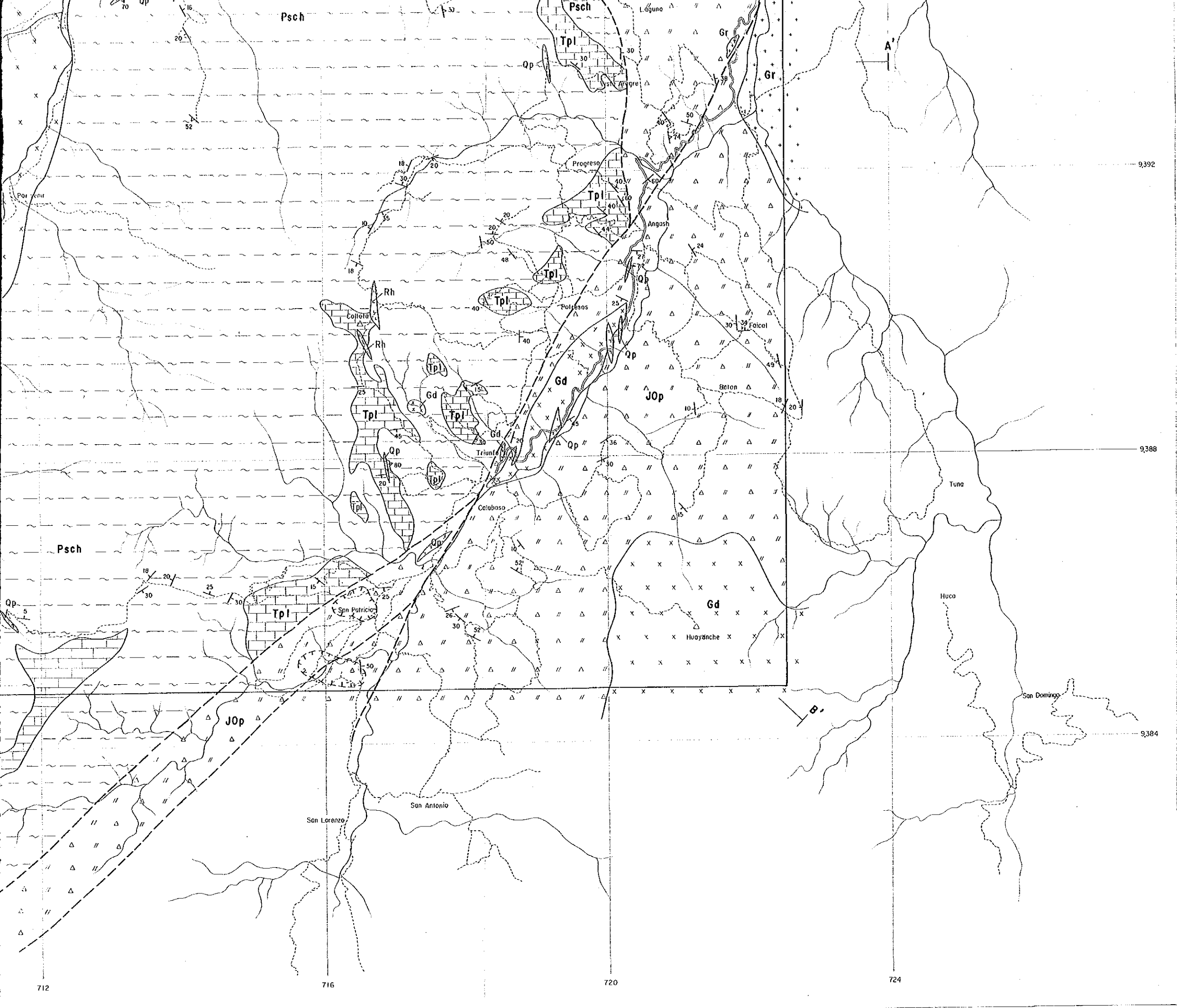
| | | | | |
|-----------------------------|------------|--|------|----------------------------------------------------|
| Jurassic § Triassic | Oyotun Vol | | JOp | Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt |
| Triassic | Leche F | | Tpl | Limestone, Marble |
| Silurian § Ordovician | Salas Gp | | Psch | Shale, Phyllite, Sandstone, Slate |
| Intrusives | | | Rh | Rhyolite |
| | | | Qp | Quartz Porphyry |
| | | | Mz | Monzonite |
| | | | Gd | Granodiorite |
| | | | Gr | |
| Others | | | | Ore Deposit |
| | | | | Bedding |
| | | | | Schistosity |
| | | | | Fault |
| Alteration | | | | Silicified Zone |

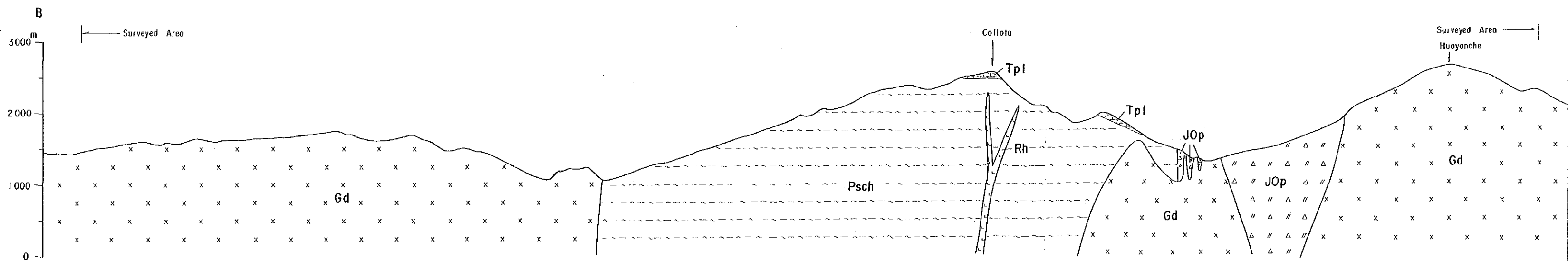
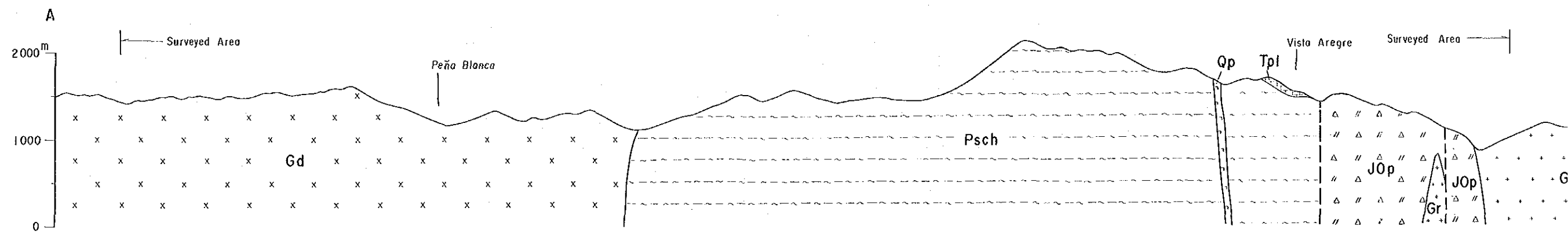




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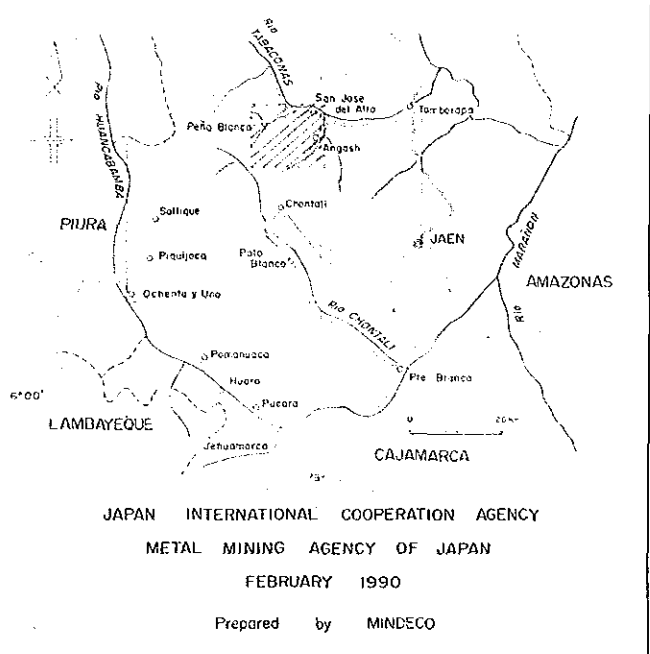
| | | | | |
|-----------------------|------------|--|------|----------------------------------------------------|
| Jurassic & Triassic | Oyotun Vol | | JOp | Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt |
| Triassic | Leche F | | Tpl | Limestone, Marble |
| Silurian & Ordovician | Salas Gp | | Psch | Shale, Phyllite, Sandstone, Slate |
| Intrusives | | | Rh | Rhyolite |
| | | | Qp | Quartz Porphyry |
| | | | Mz | Monzonite |
| | | | Gd | Granodiorite |
| | | | Gr | |
| Others | | | | Ore Deposit |
| | | | | Bedding |
| | | | | Schistosity |
| | | | | Fault |
| Alteration | | | | Silicified Zone |



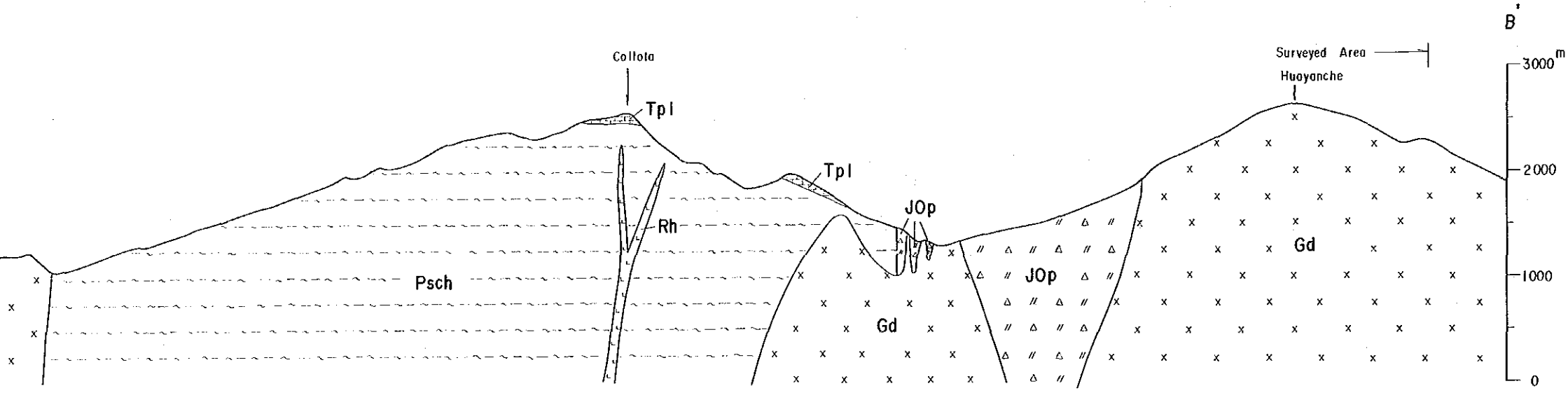
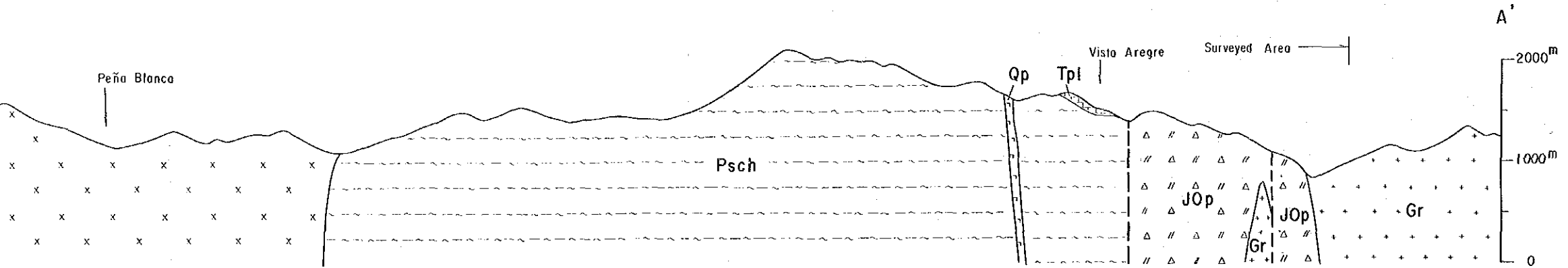


PL.-14 (2)

THE MINERAL EXPLORATION
IN
THE PACHAPIRIANA AREA, REPUBLIC OF PERU
(PHASE II)
GEOLOGICAL PROFILES OF THE PEÑA BLANCA AREA



0 25 Km



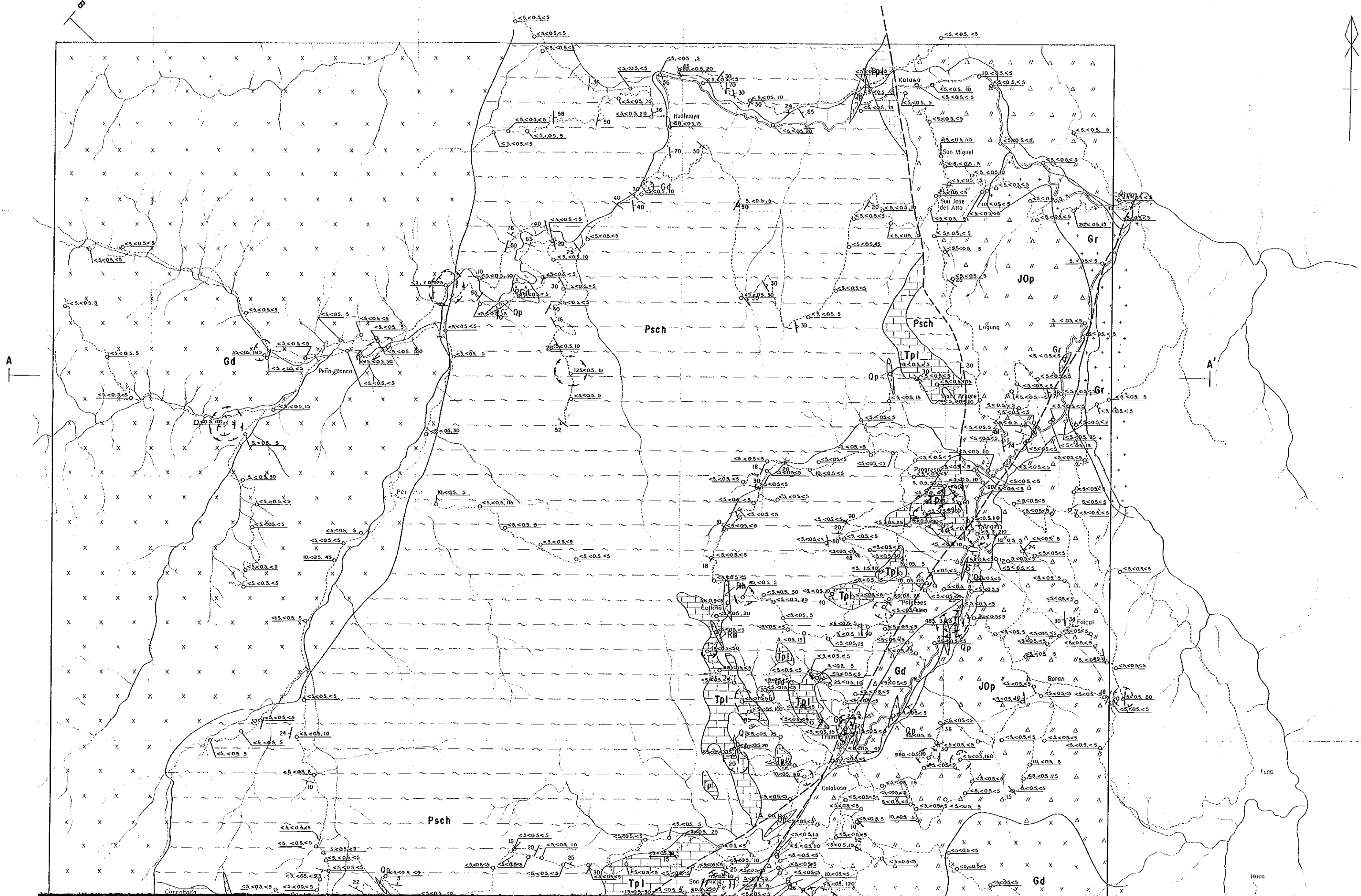
LEGEND

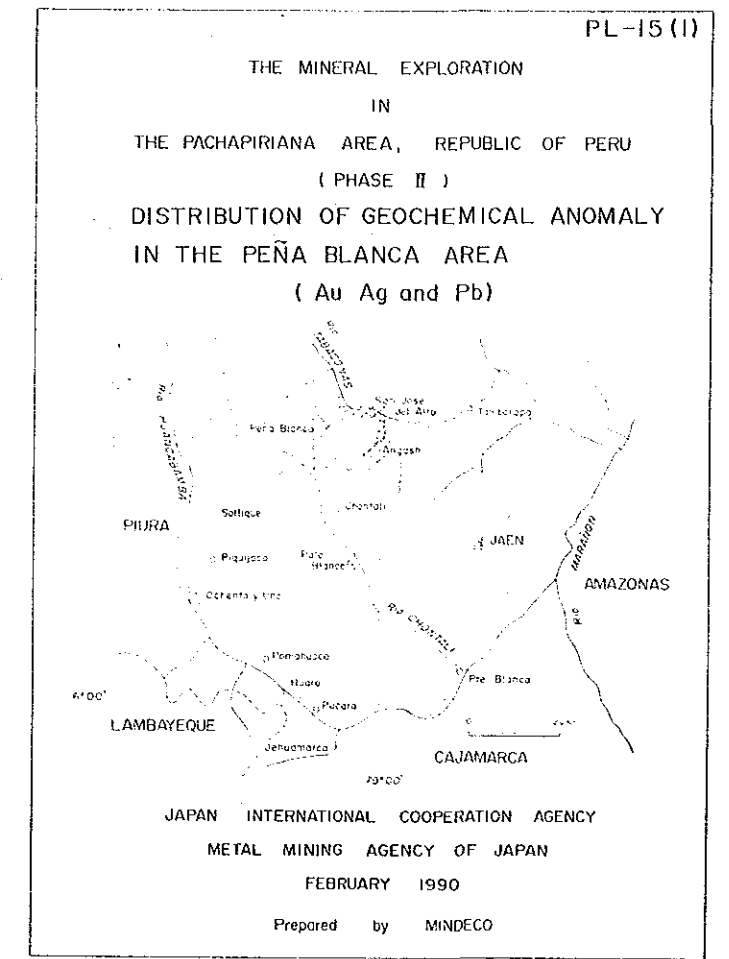
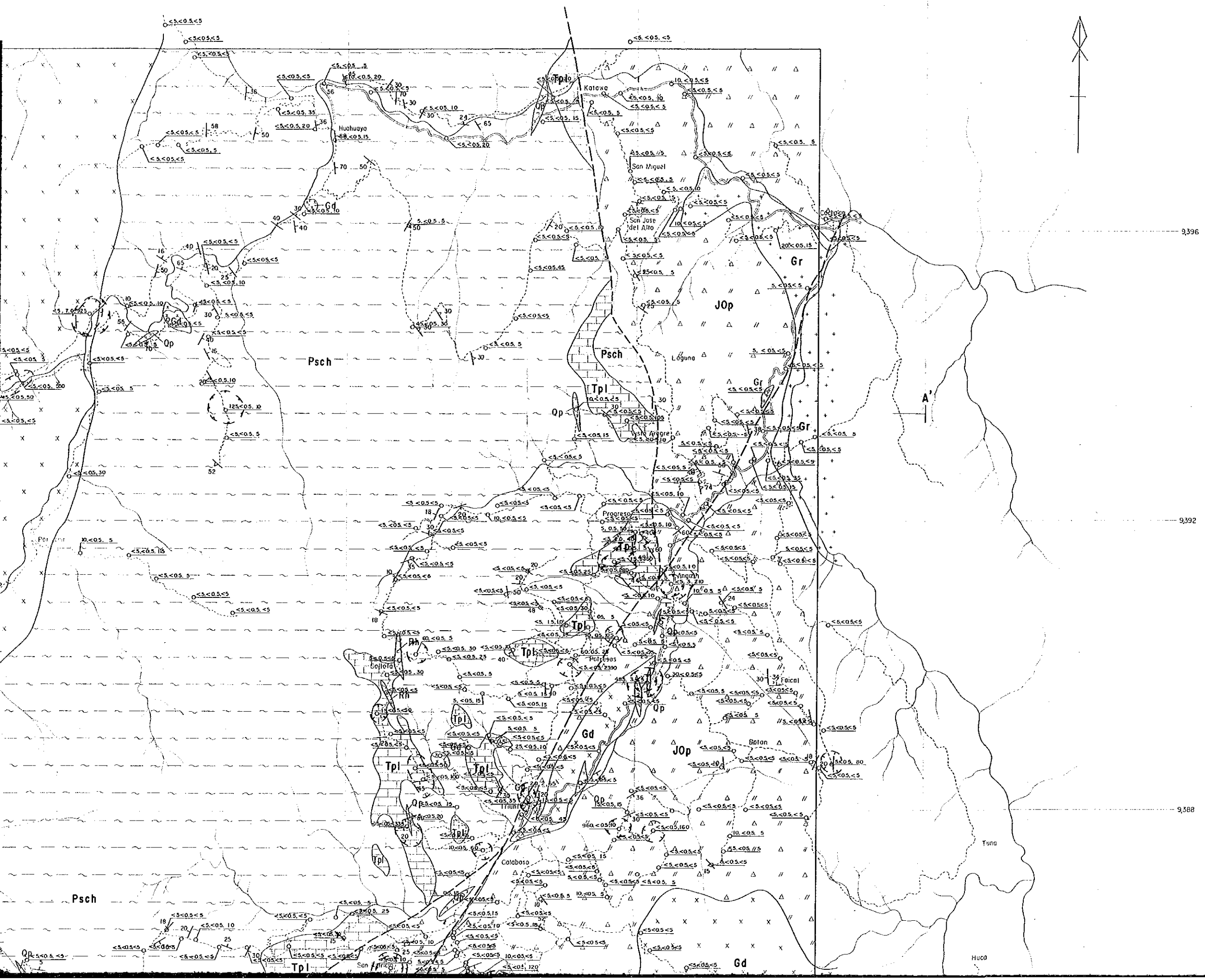
| | | | |
|------------|------------|-----------------|----------------------------------------------------|
| Jurassic | Oyatun Vol | JOp | Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt |
| Triassic | Leche F | Tpl | Limestone, Marble |
| Triassic | Solas Gp | Psch | Shale, Phyllite, Sandstone, Slate |
| Silurian | | | |
| Ordovician | | | |
| Intrusives | | | |
| | Rh | Rhyolite | |
| | Qp | Quartz Porphyry | |
| | Mz | Monzonite | |
| | Gd | Granodiorite | |
| | Gr | | |
| Others | | | |
| | | | Ore Deposit |
| | | | Fault |

9396

9392

9388





LEGEND

- Geochemical Anomaly
- Au \equiv 50 ppb
 - Ag \equiv 0.5 ppm
 - Pb \equiv 50 ppm

- Jurassic
Triassic Oyatun Vol JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt
- Triassic Pucara F Tpl Limestone, Marble
- Silurian
Ordovician Salas Gp Psch Shale, Phyllite, Sandstone, Slate
- Intrusives
 - Rh Rhyolite
 - Qp Quartz Porphyry
 - Mz Monzonite
 - Gd Granodiorite
 - Gr

9392

9398

9394

708

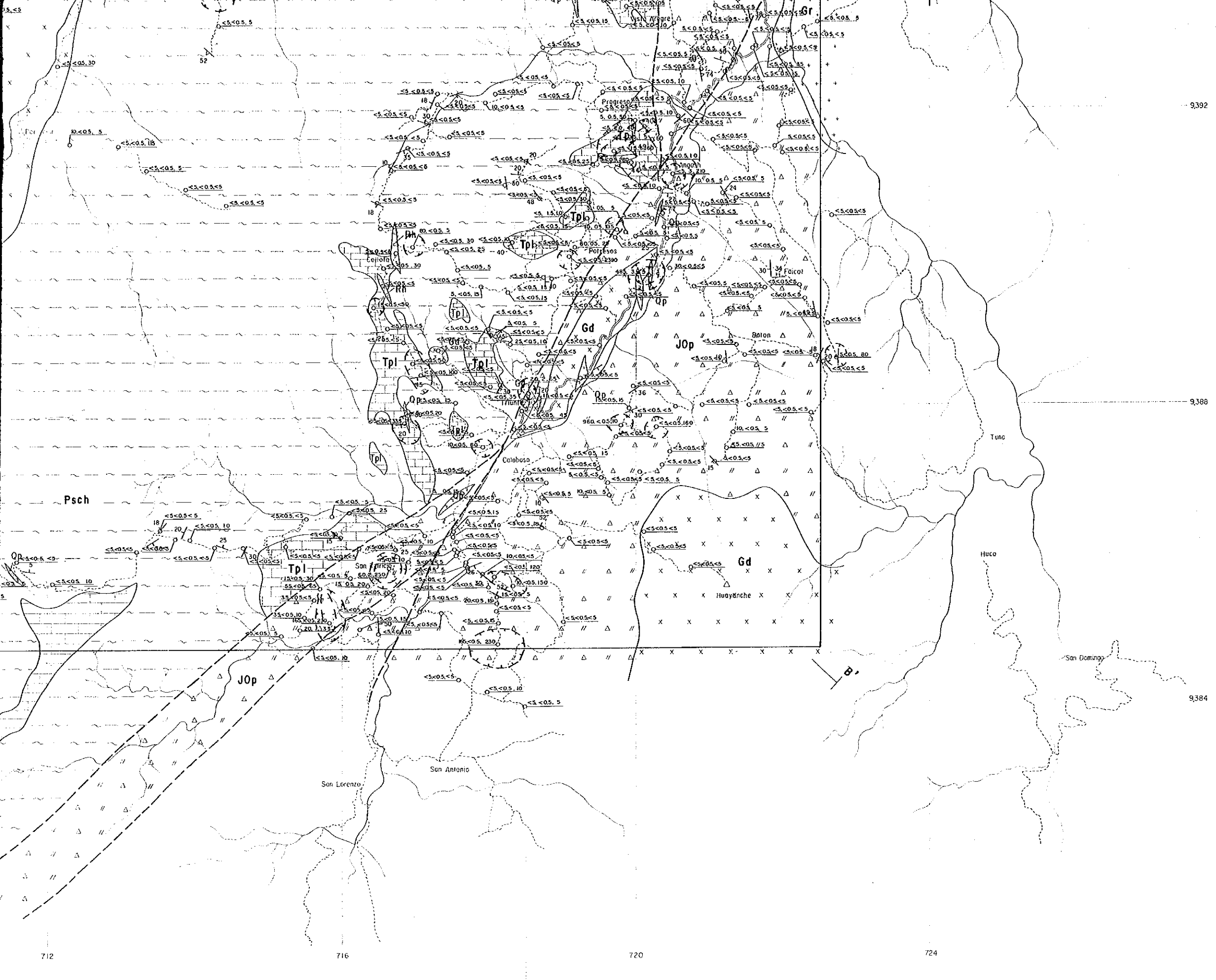
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715

720

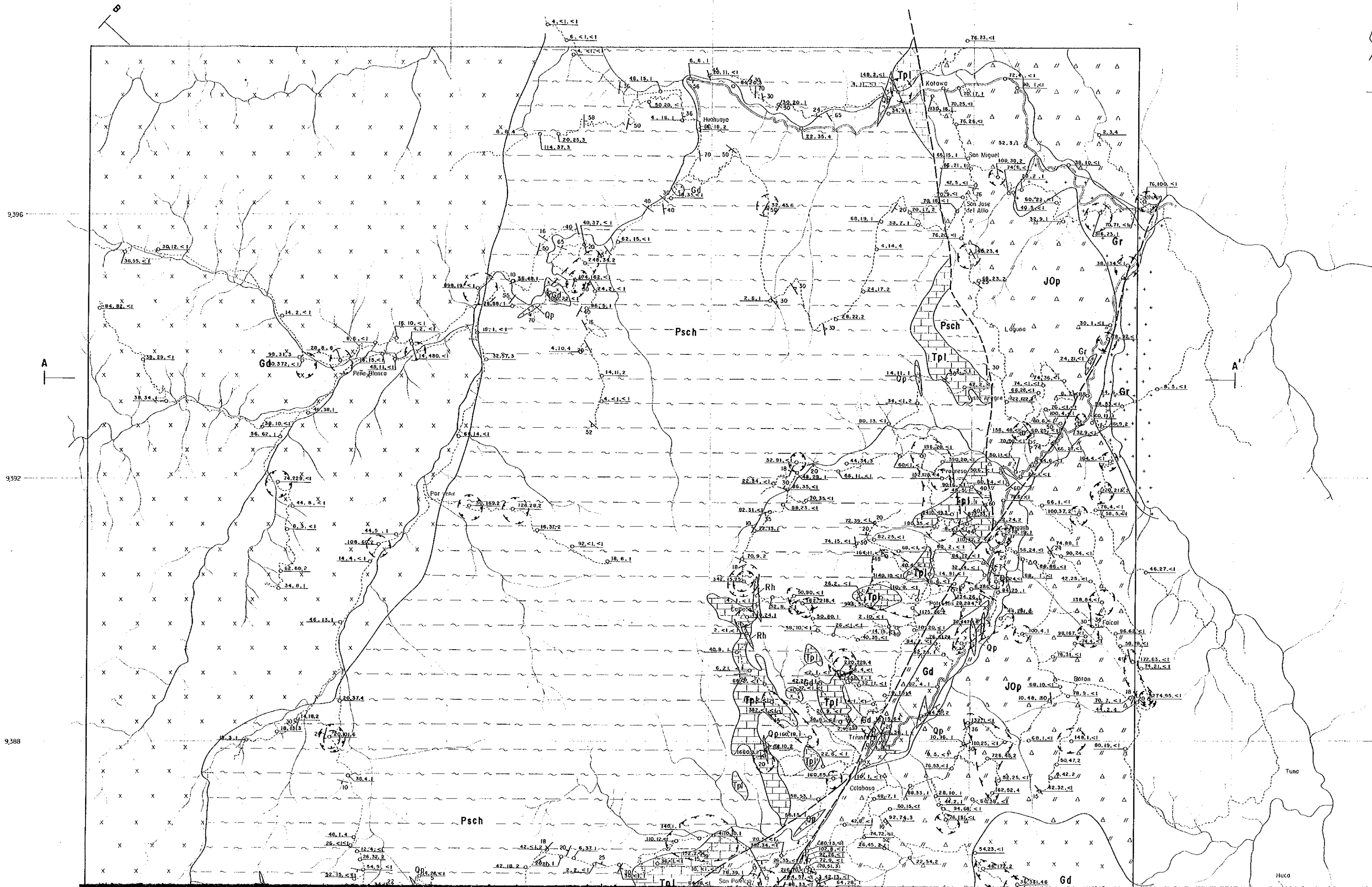
724



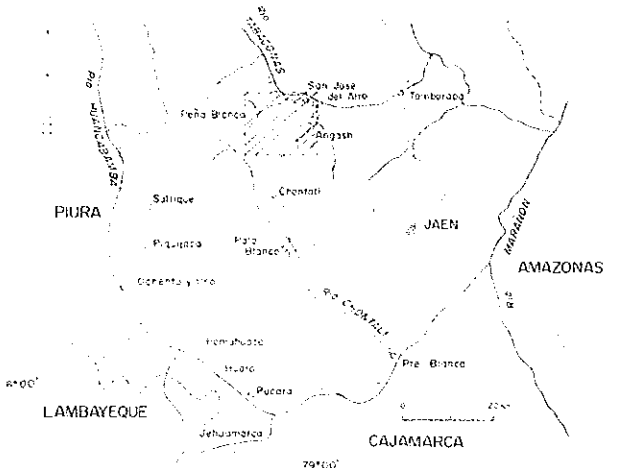


LEGEND

| Geochemical Anomaly | |
|-------------------------|--------------------------------------------------------------------|
| | Au ≡ 50 ppb |
| | Ag ≡ 0.5 ppm |
| | Pb ≡ 50 ppm |
| Geological Units | |
| Jurassic & Triassic | Oyotun Vol JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt |
| Triassic | Pucara F Tpl Limestone, Marble |
| Silurian & Ordovician | Satas Gp Psch Shale, Phyllite, Sandstone, Slate |
| Intrusives | |
| | Rh Rhyolite |
| | Qp Quartz Porphyry |
| | Mz Monzonite |
| | Gd Granodiorite |
| | Gr Monzonite |
| Others | |
| | Ore Deposit |
| | Bedding |
| | Schistosity |
| | Fault |



THE MINERAL EXPLORATION
IN
THE PACHAPIRIANA AREA, REPUBLIC OF PERU
(PHASE II)
DISTRIBUTION OF GEOCHEMICAL ANOMALY
IN THE PEÑA BLANCA AREA
(Zn Cu and Mo)



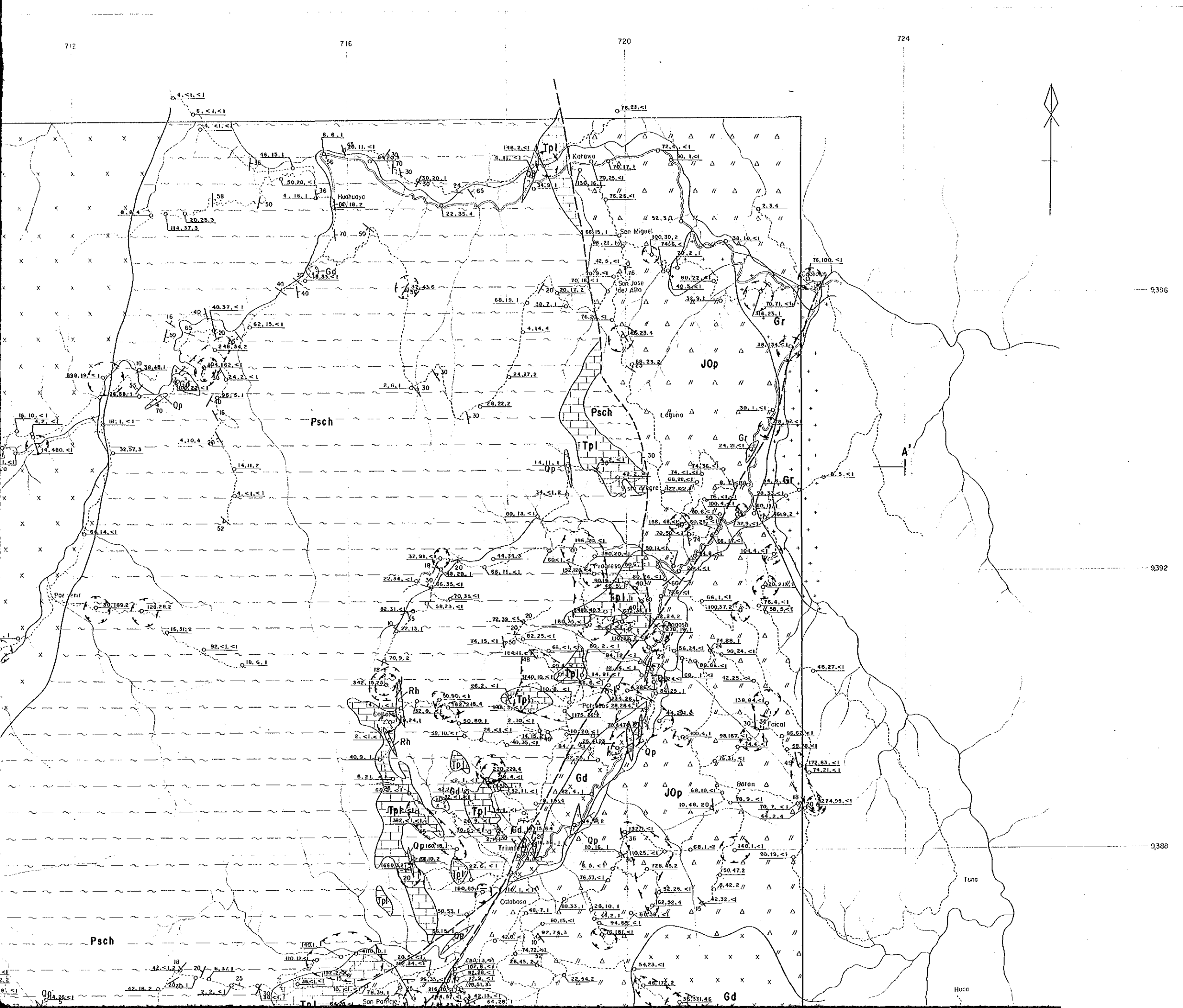
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1990
Prepared by MINDECO



LEGEND

- Geochemical Anomaly
- Zn ≡ 100ppm
 - Cu ≡ 90ppm
 - Mo ≡ 5 ppm

- Jurassic & Triassic
- Oyotun Vol JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt
- Triassic
- Pucara F Tpl Limestone, Marble
- Silurian & Ordovician
- Salos Gp Psch Shale, Phyllite, Sandstone, Slate
- Intrusives
- Rh Rh Rhyolite
 - Qp Qp Quartz Porphyry
 - Mz Mz Monzonite
 - Gd Gd Granodiorite
 - Gr Gr



9392

9388

9384

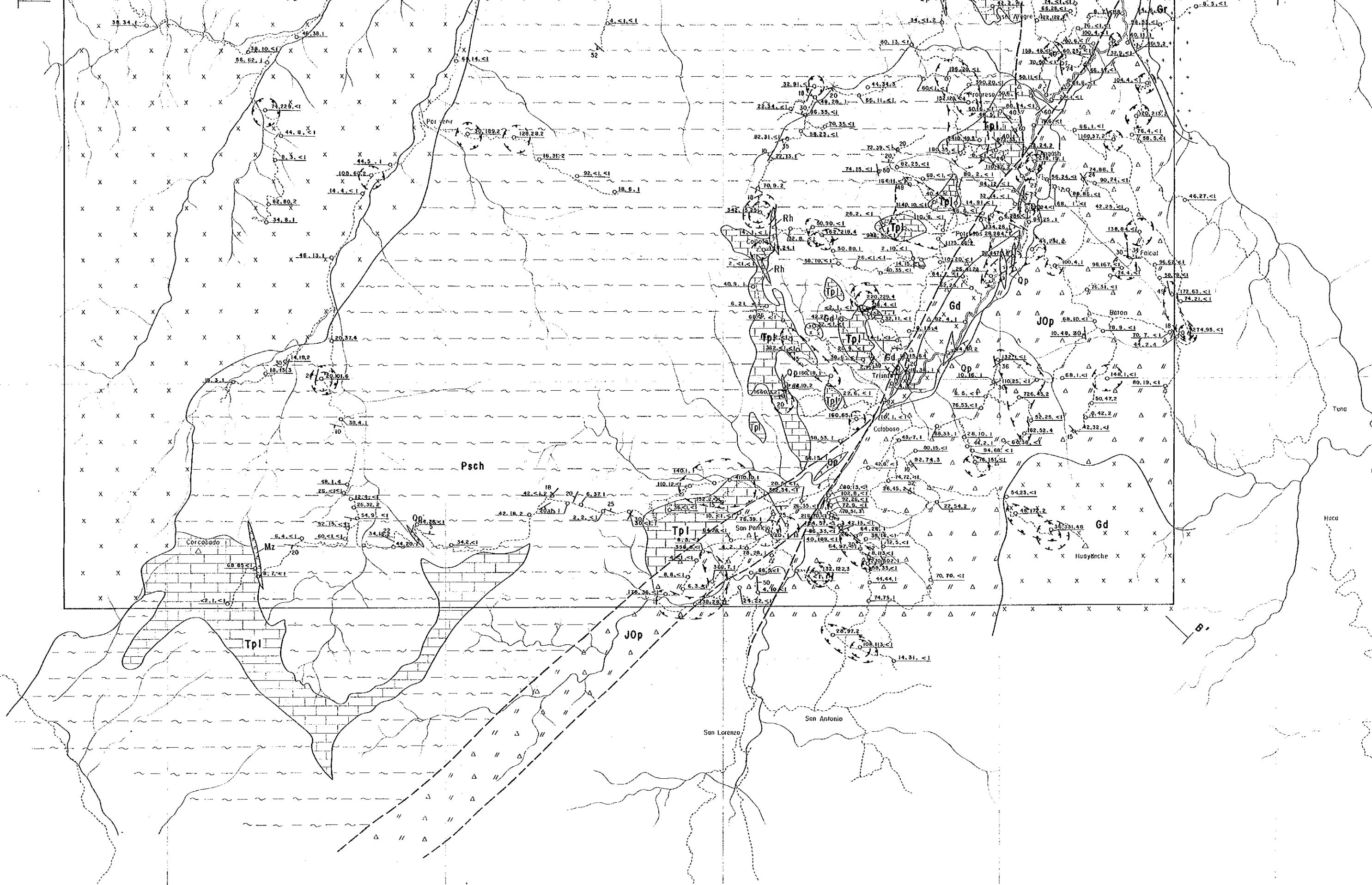
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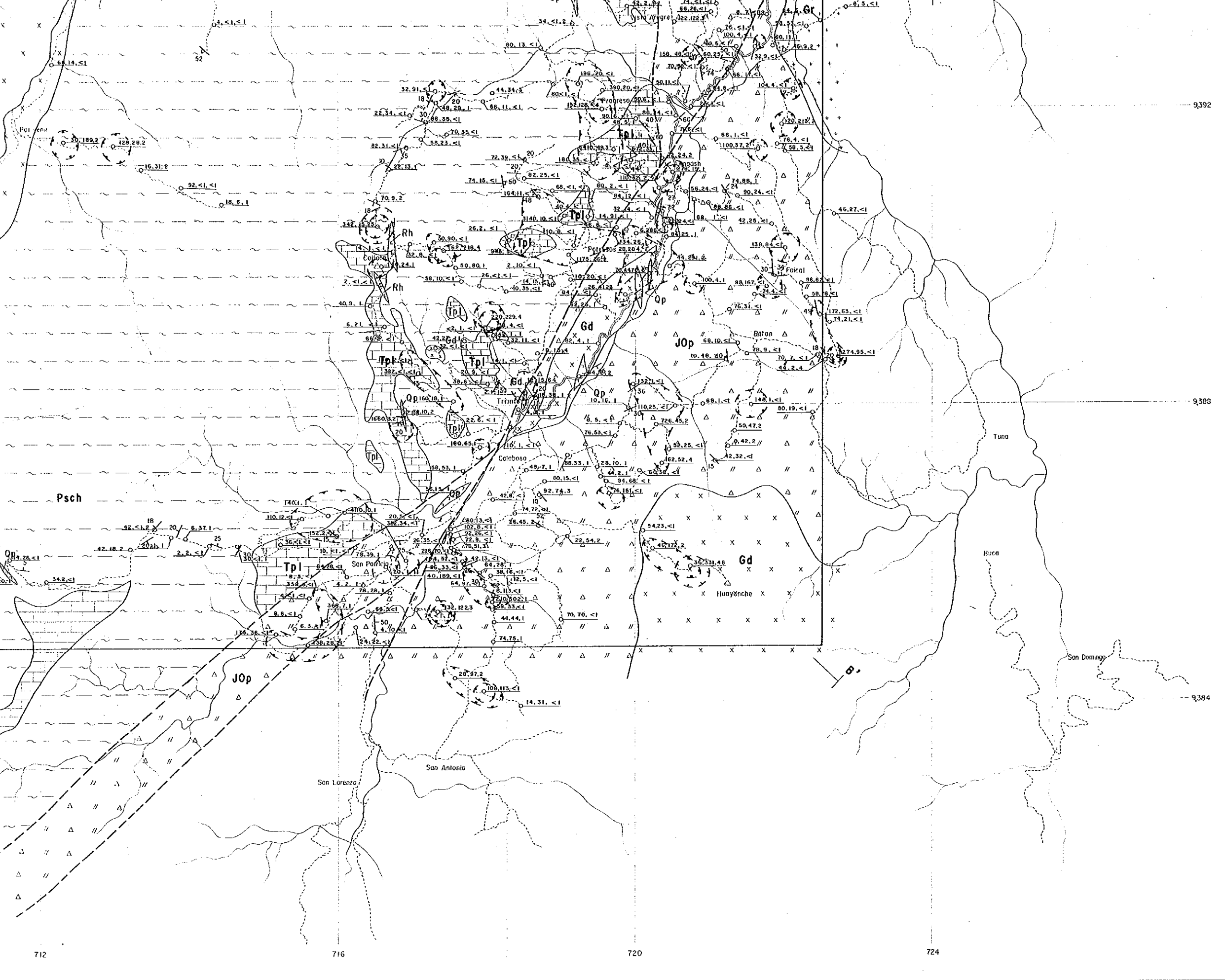
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716

720

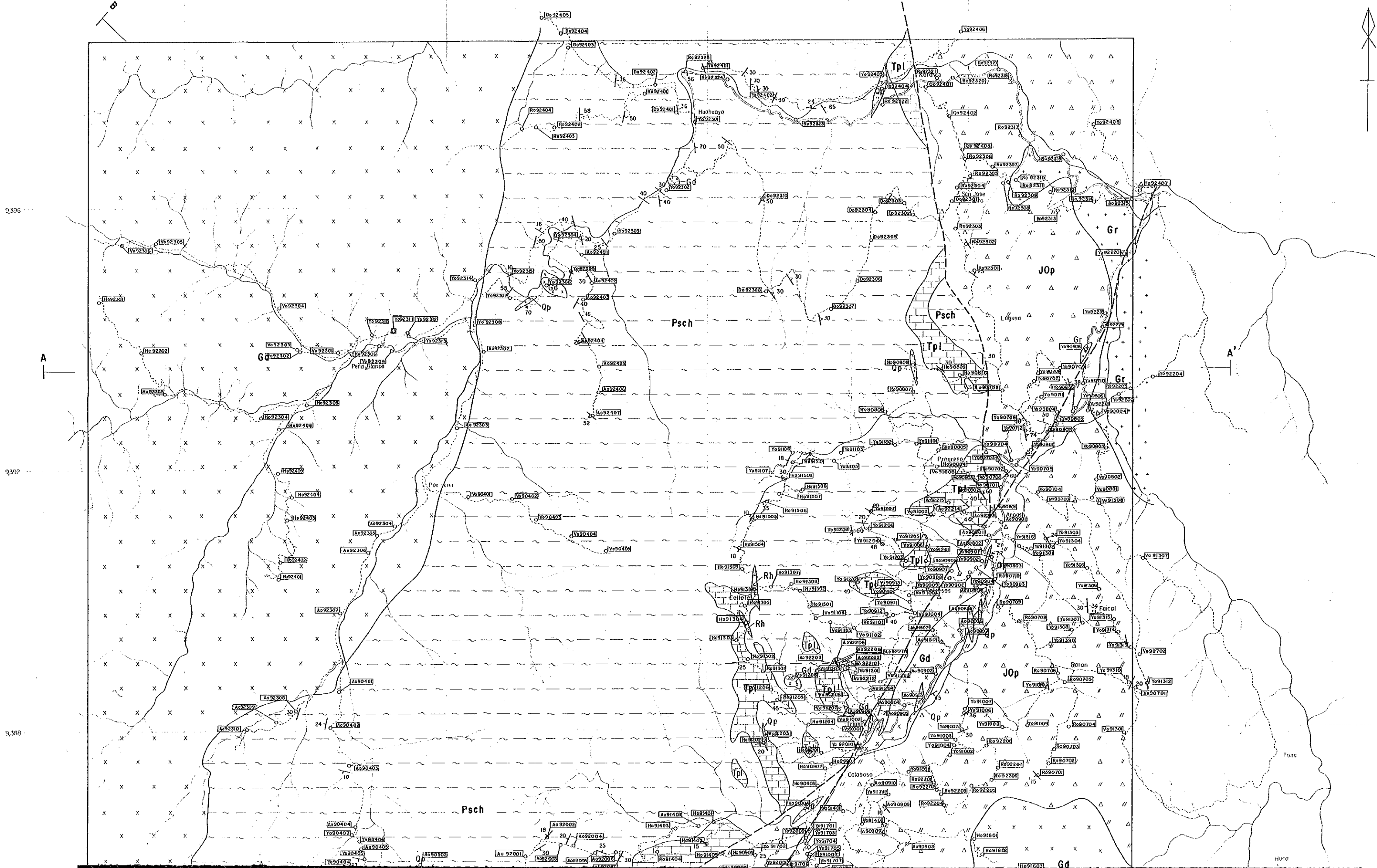
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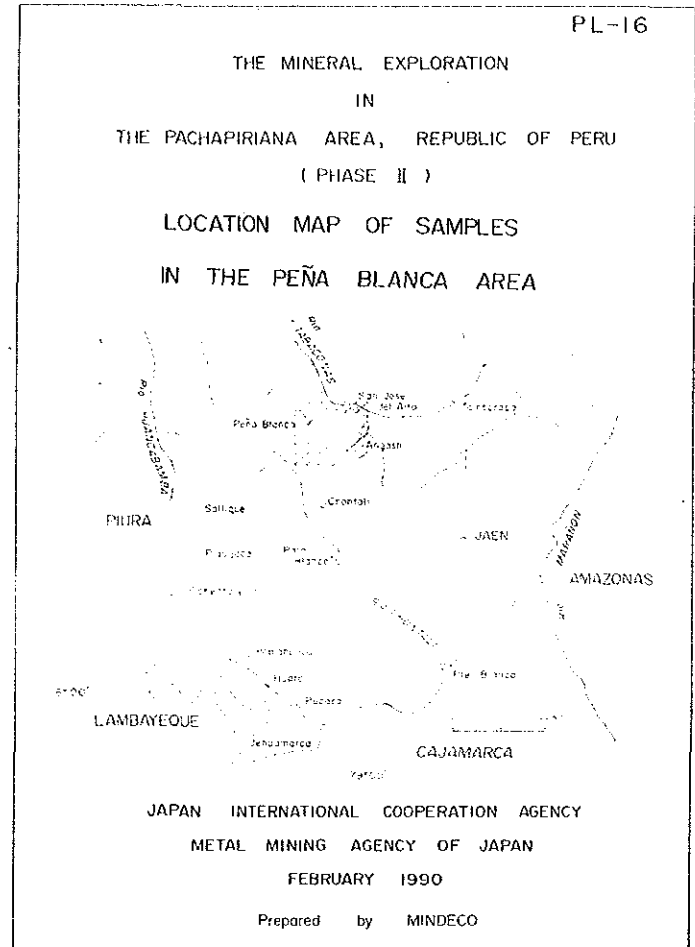
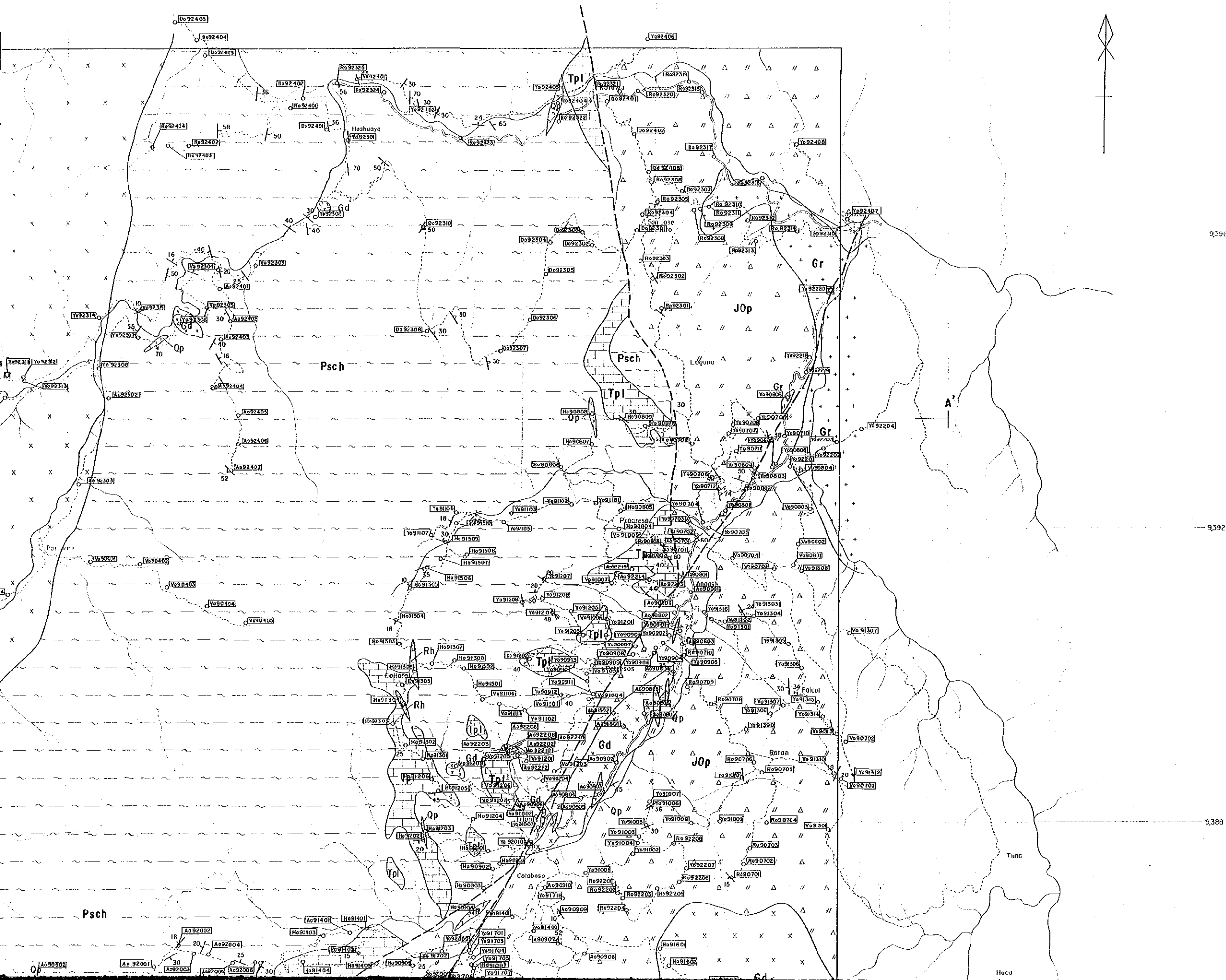




LEGEND

- Geochemical Anomaly**
- Zn ≧ 100ppm
 - Cu ≧ 90ppm
 - Mo ≧ 5 ppm
- Jurassic & Triassic**
- Oyotun Vol JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt
- Triassic**
- Pucara F Tpl Limestone, Marble
- Silurian & Ordovician**
- Salas Gp Psch Shale, Phyllite, Sandstone, Slate
- Intrusives**
- Rh Rhyolite
 - Qp Quartz Porphyry
 - Mz Monzonite
 - Gd Granodiorite
 - Gr Gr
- Others**
- Ore Deposit
 - Bedding
 - Schistosity
 - Fault





LEGEND

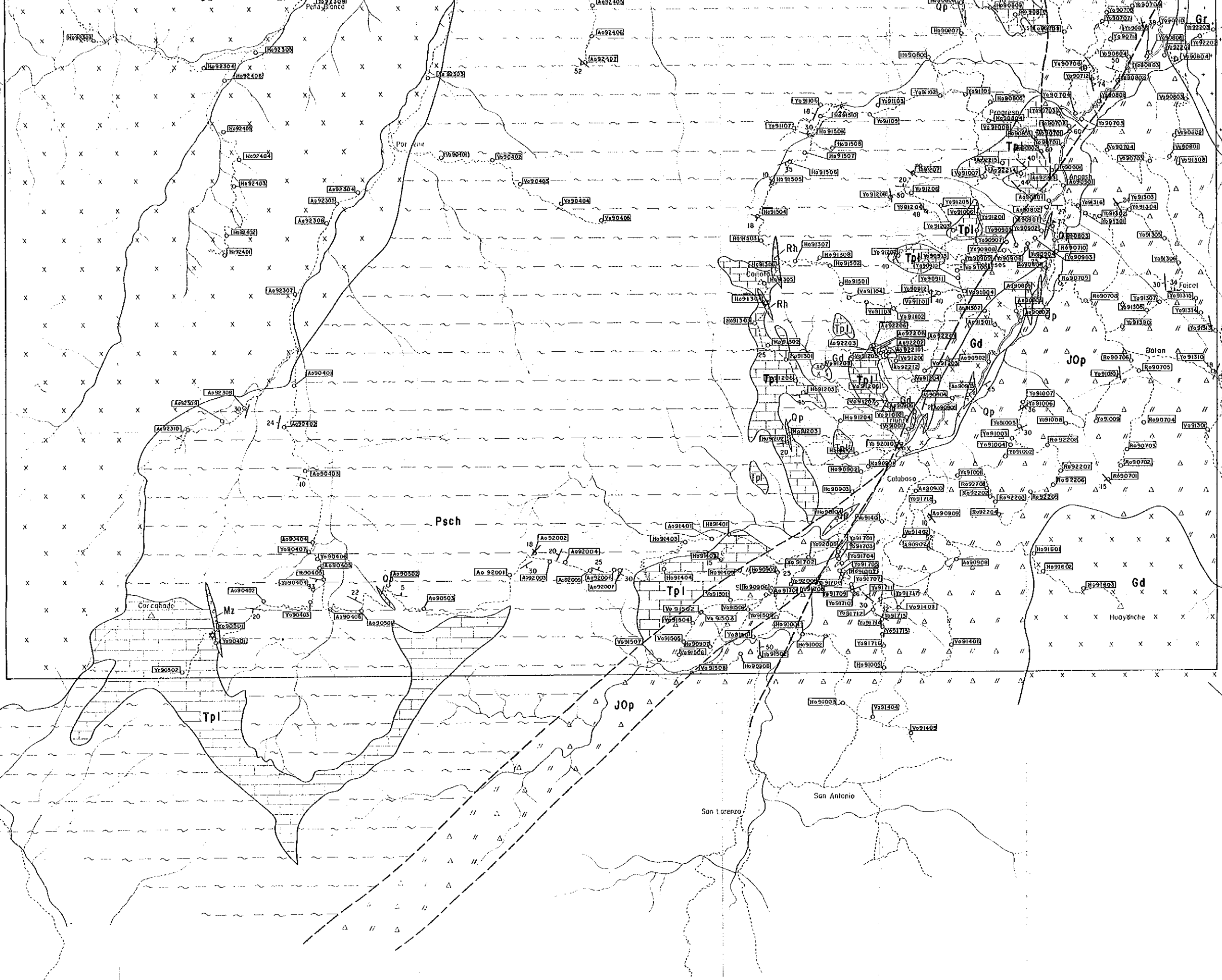
- Geochemical Analysis
- Ore Grade Analysis
- Thin Section
- Polished Section
- X-ray Analysis
- Whole Rock Analysis
- Fluid Inclusion Homogenization Temperature Analysis
- Isotopic Age Determination

- Jurassic & Triassic
 - Oyotun Vo I JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Bosolt
- Triassic
 - Pucara F Tpl Limestone, Marble
- Silurian & Ordovician
 - Solas Gp Psch Shale, Phyllite, Sandstone, Slate
- Intrusives
 - Rh Rhyolite
 - Qp Quartz Porphyry
 - Mz Monzonite
 - Gd Granodiorite

9392

9388

9384



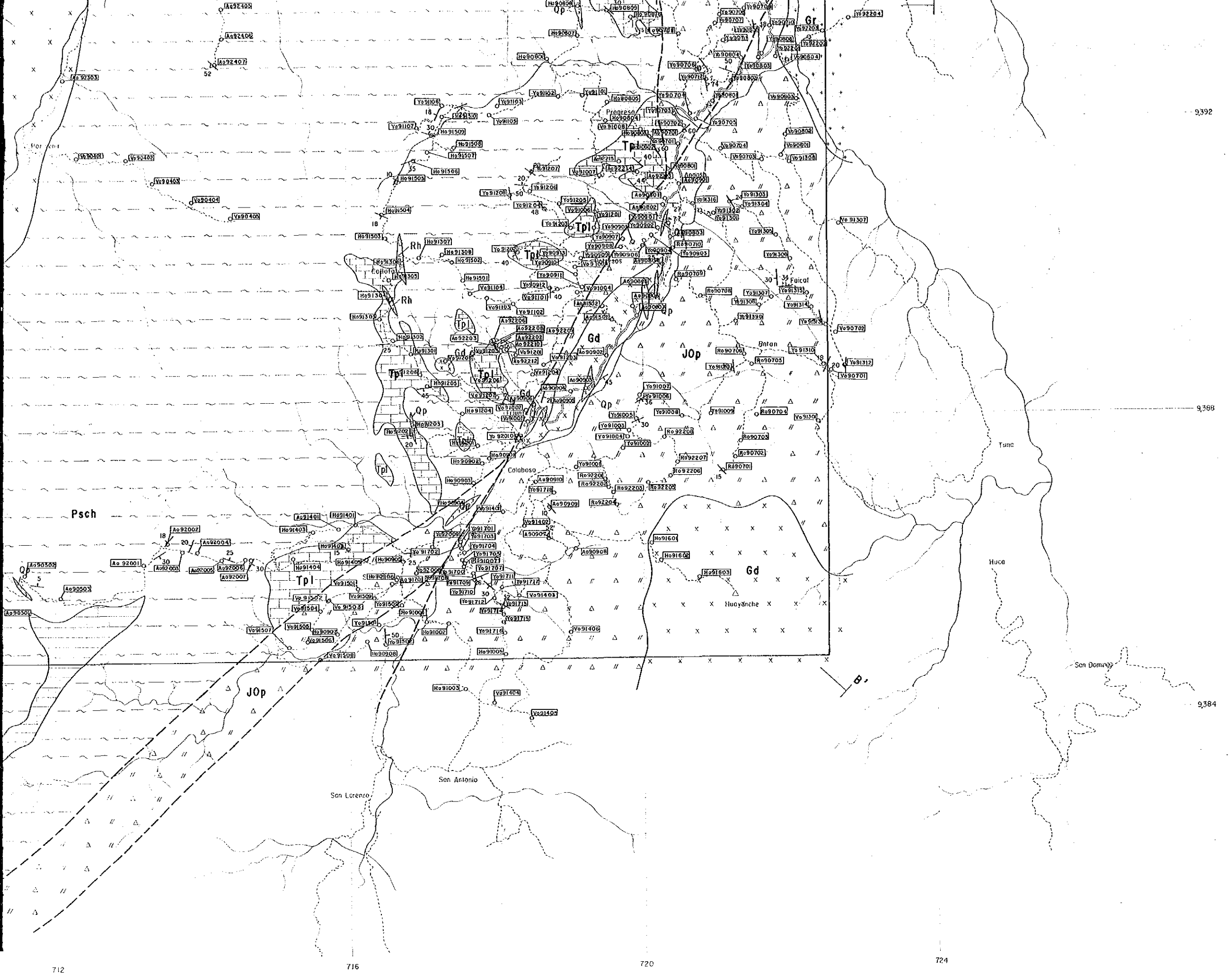
708

712

716

720

724



LEGEND

- Geochemical Analysis
- Ore Grade Analysis
- Thin Section
- Polished Section
- X-ray Analysis
- Whole Rock Analysis
- Fluid Inclusion Homogenization Temperature Analysis
- Isotopic Age Determination

Jurassic
Triassic
Triassic
Silurian
Ordovician

Oyatun Vol JOp Tuff, Lapilli Tuff, Tuff Breccia, Andesite, Basalt

Pucara F Tpl Limestone, Marble

Salas Gp Psch Shale, Phyllite, Sandstone, Slate

Intrusives

- Rh Rhyolite
- Op Quartz Porphyry
- Mz Monzonite
- Gd Granodiorite
- Gr

Others

- Ore Deposit
- Bedding
- Schistosity
- Fault

9,392

9,388

9,384

