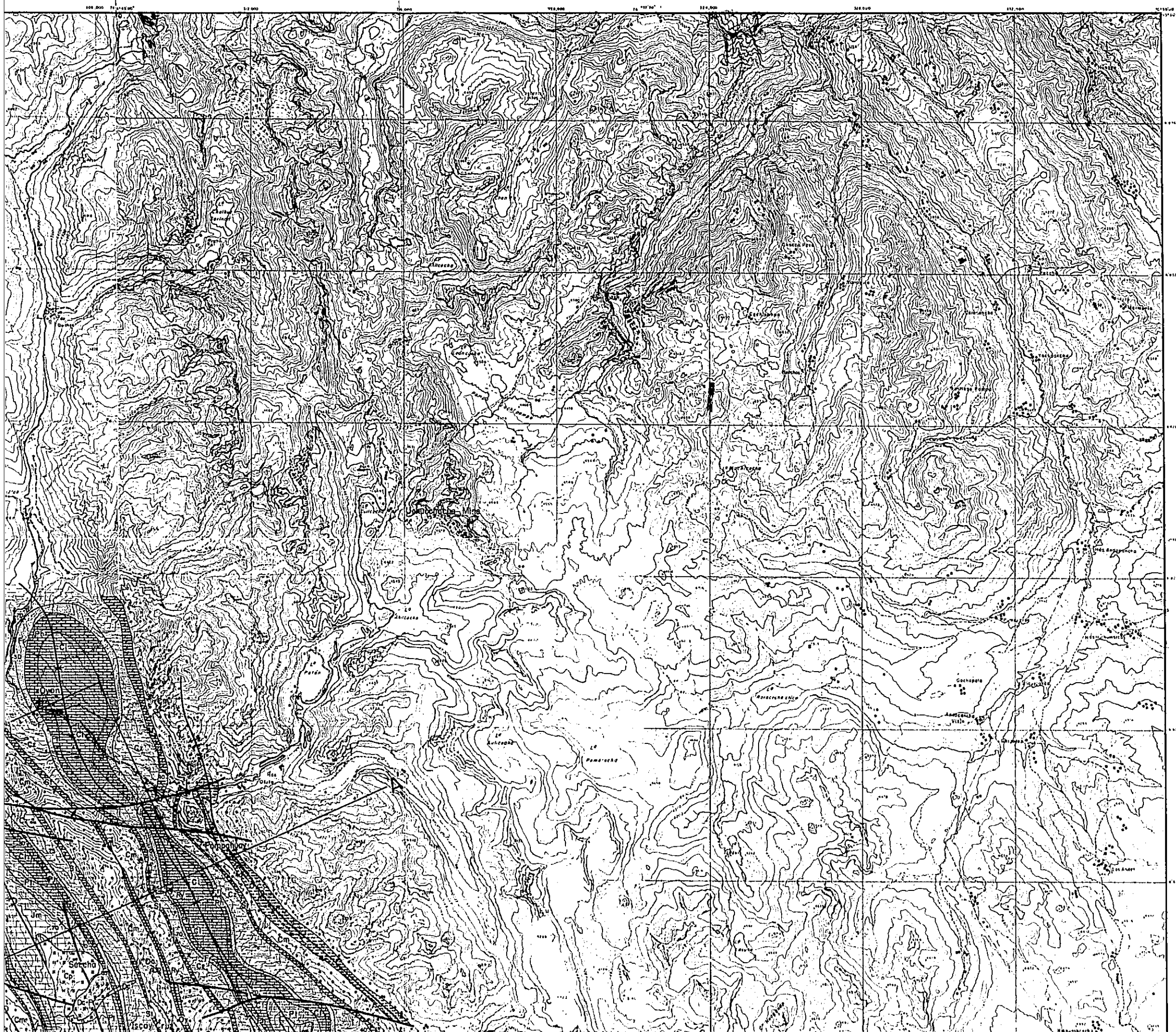
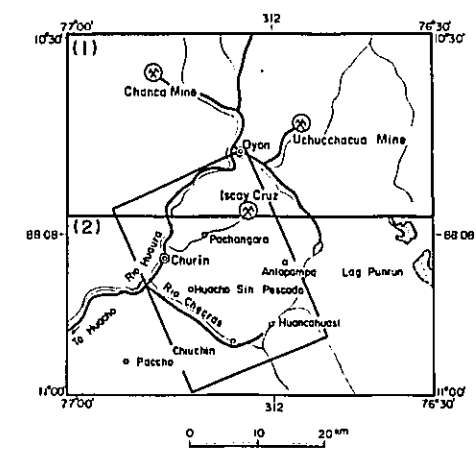


OYON 1:25,000



PL. 1-1
 GEOLOGICAL SURVEY
 OF
 THE OYON AREA, PERU
 08451
 GEOLOGICAL MAP
 OF
 THE SURVEYED AREA
 (NORTHERN PART)



METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1980
 prepared by MESCO, Inc.

Scale 1 : 50,000



LEGEND

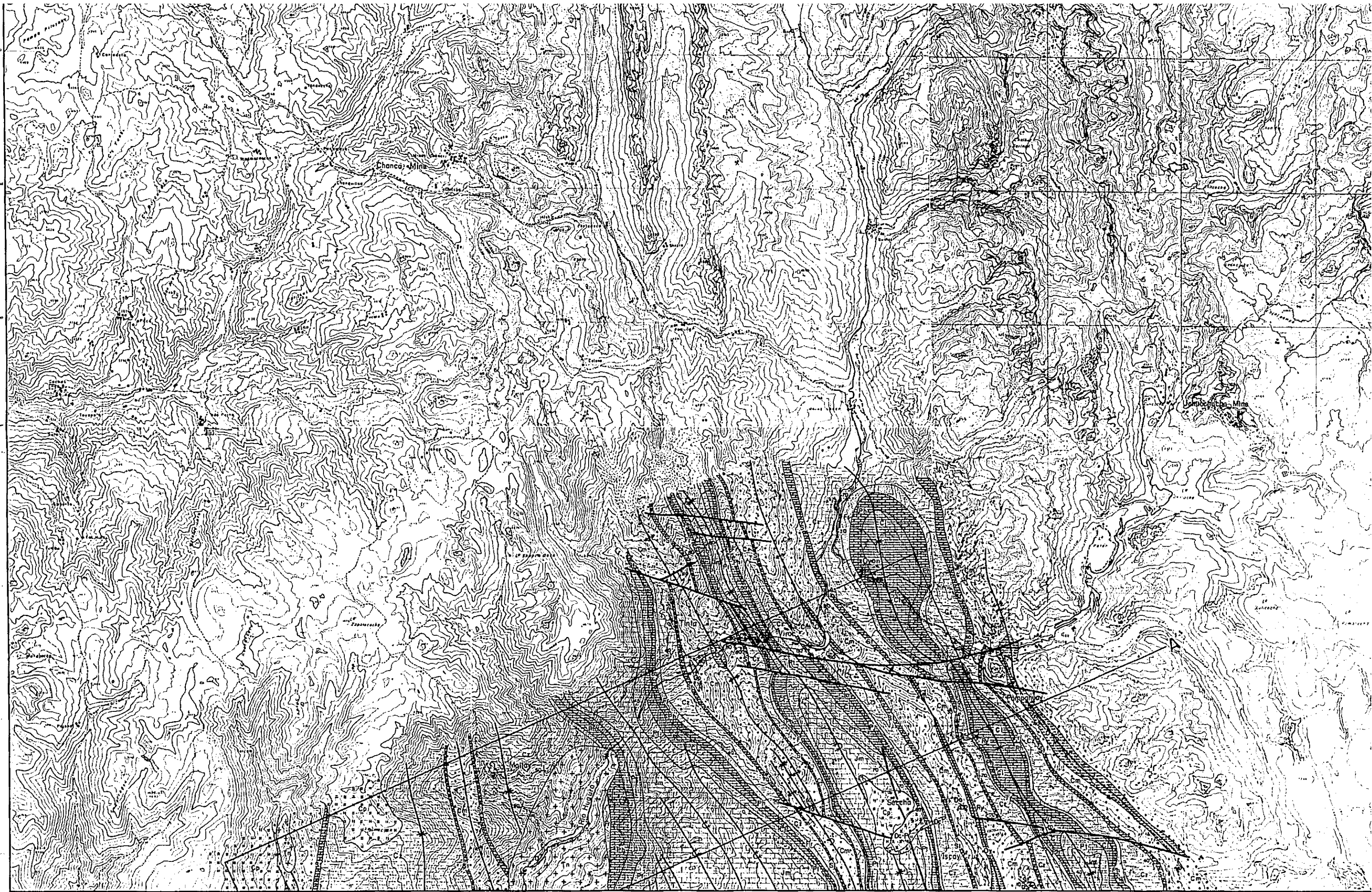
SEDIMENTARY ROCK

- | | | |
|------------|--|-----------------------|
| Quaternary | | Alluvium |
| | | Jumasha formation |
| | | Pariatambo formation |
| | | Chulec formation |
| | | Pariahuanca formation |
| Cretaceous | | Farrat formation |
| | | Carhuaz formation |
| | | Santa formation |
| | | Chimu formation |
| | | Oyon formation |

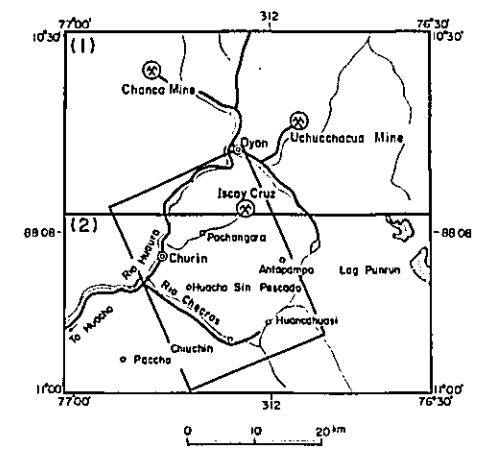
IGNEOUS ROCK

- | | |
|--|-----------------------------|
| | Dacite & porphyrite |
| | Dacite porphyry |
| | Rhyolite & granite porphyry |
| | Tonalite |
| | Callipuy volcanics |

- | | |
|--|-------------------------|
| | Bedding plane |
| | Anticlinal folding axis |
| | Synclinal folding axis |
| | Overturned folding axis |



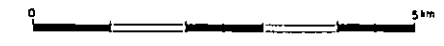
**GEOLOGICAL MAP
OF
THE SURVEYED AREA
(NORTHERN PART)**



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

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Scale 1 : 50,000



LEGEND

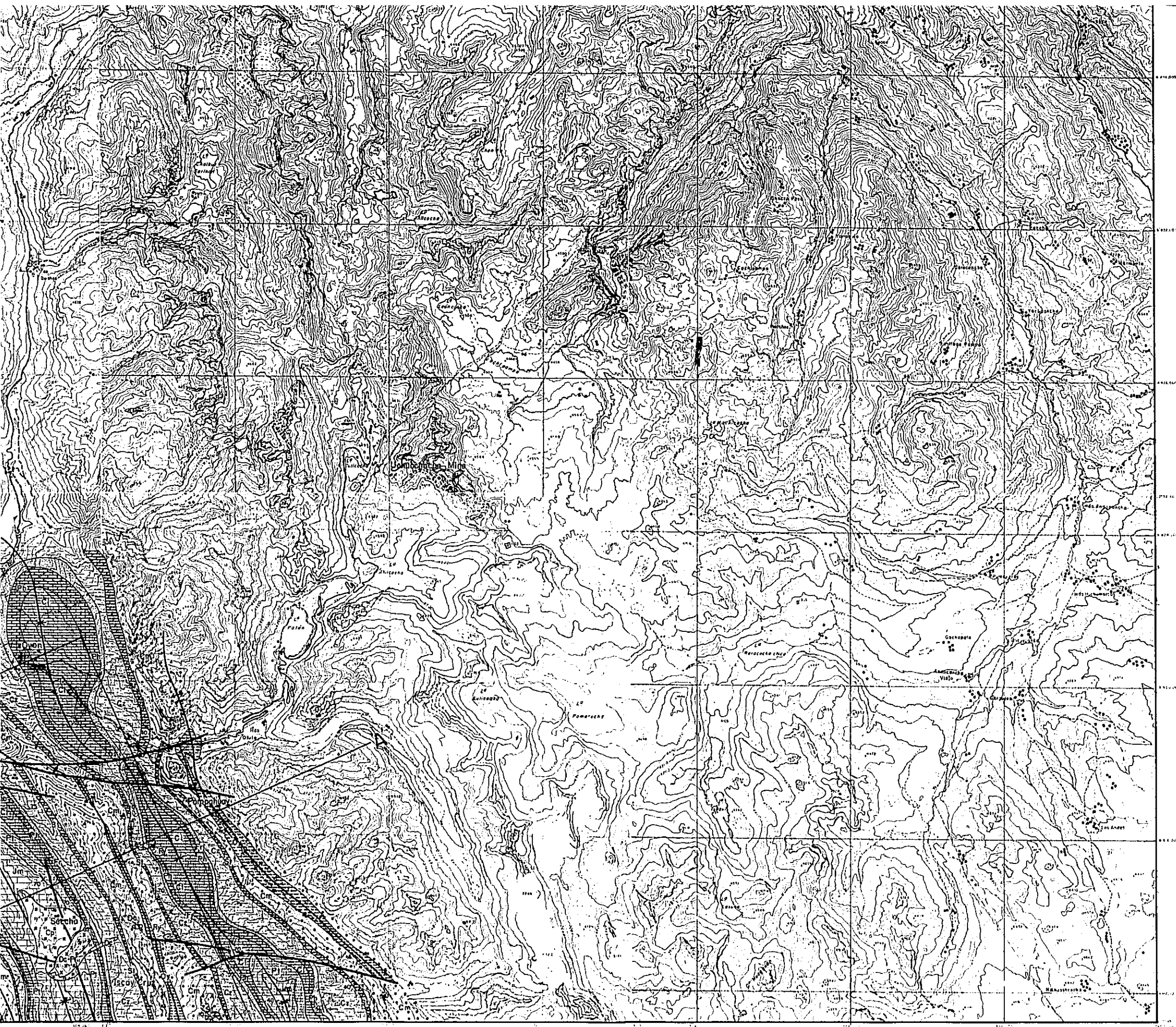
SEDIMENTARY ROCK

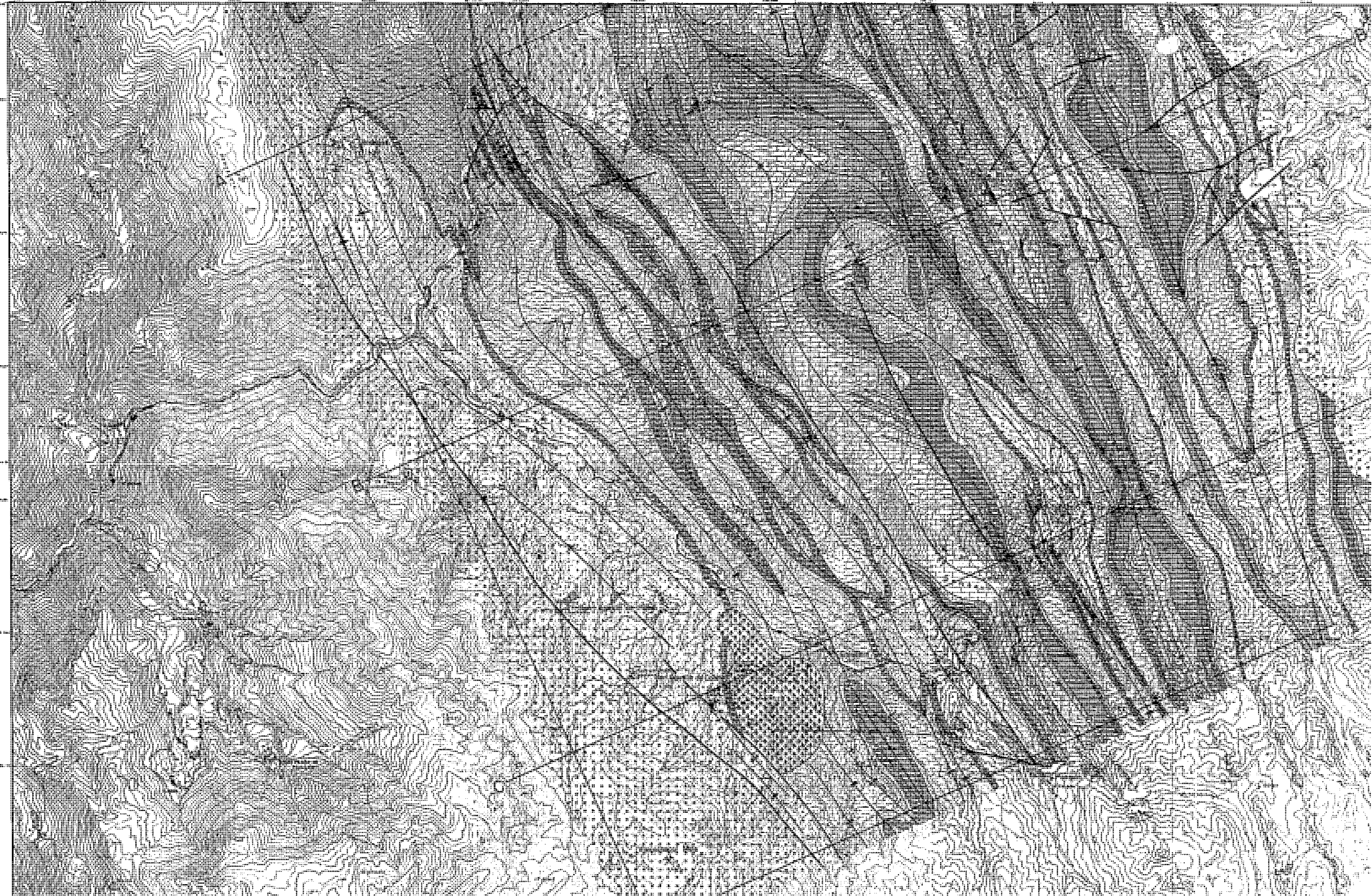
- | | | |
|------------|--|-----------------------|
| Quaternary | | Alluvium |
| | | Jumasha formation |
| | | Pariatambo formation |
| | | Chulec formation |
| | | Pariahuanca formation |
| Cretaceous | | Farral formation |
| | | Carhuaz formation |
| | | Santa formation |
| | | Chimu formation |
| | | Oyon formation |

IGNEOUS ROCK

- | | |
|--|-----------------------------|
| | Dacite & porphyrite |
| | Dacite porphyry |
| | Rhyolite & granite porphyry |
| | Tonalite |
| | Callpuy volcanics |

- | | |
|--|-------------------------|
| | Bedding plane |
| | Anticlinal folding axis |
| | Synclinal folding axis |
| | Overturned folding axis |
| | Fault |





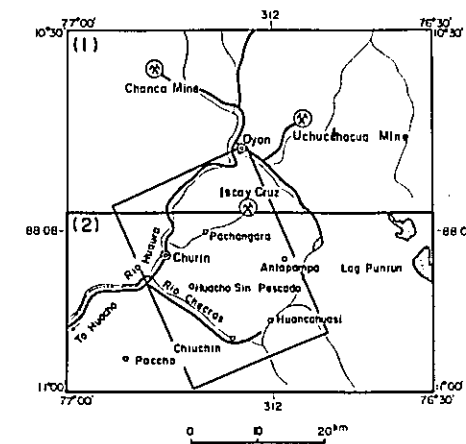
OYON 1:25,000

PL. 1-2

GEOLOGICAL SURVEY
OF
THE OYON AREA, PERU

08151

GEOLOGICAL MAP OF THE SURVEYED AREA (SOUTHERN PART)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

prepared by MESCO, Inc.

Scale 1 : 50,000



LEGEND

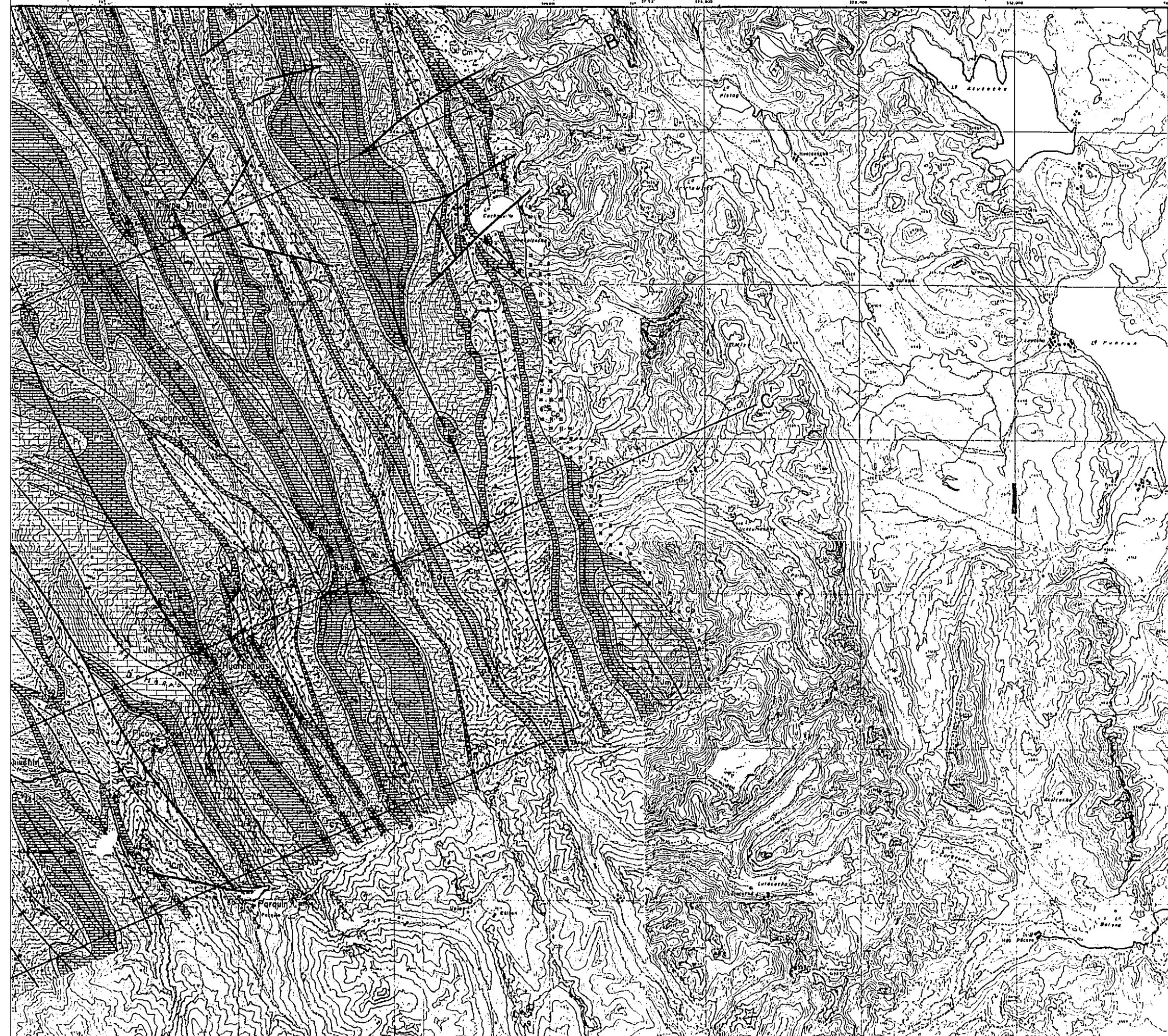
SEDIMENTARY ROCK

Quaternary		Alluvium
		Jumsha formation
		Pariatambo formation
		Chulec formation
		Parahuanca formation
Cretaceous		Farral formation
		Carhuaz formation
		Santa formation
		Chimu formation
		Oyon formation

IGNEOUS ROCK

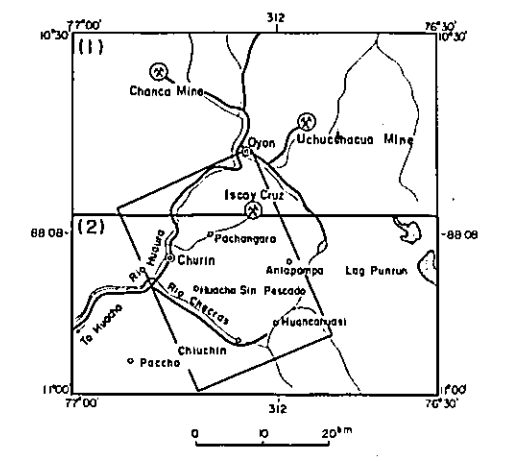
	Dacite & porphyrite
	Tonalite porphyry
	Tonalite
	Callpuy volcanics

	Bedding plane
	Anticlinal folding axis
	Synclinal folding axis





GEOLOGICAL MAP
OF
THE SURVEYED AREA
(SOUTHERN PART)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

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Scale 1 : 50,000



LEGEND

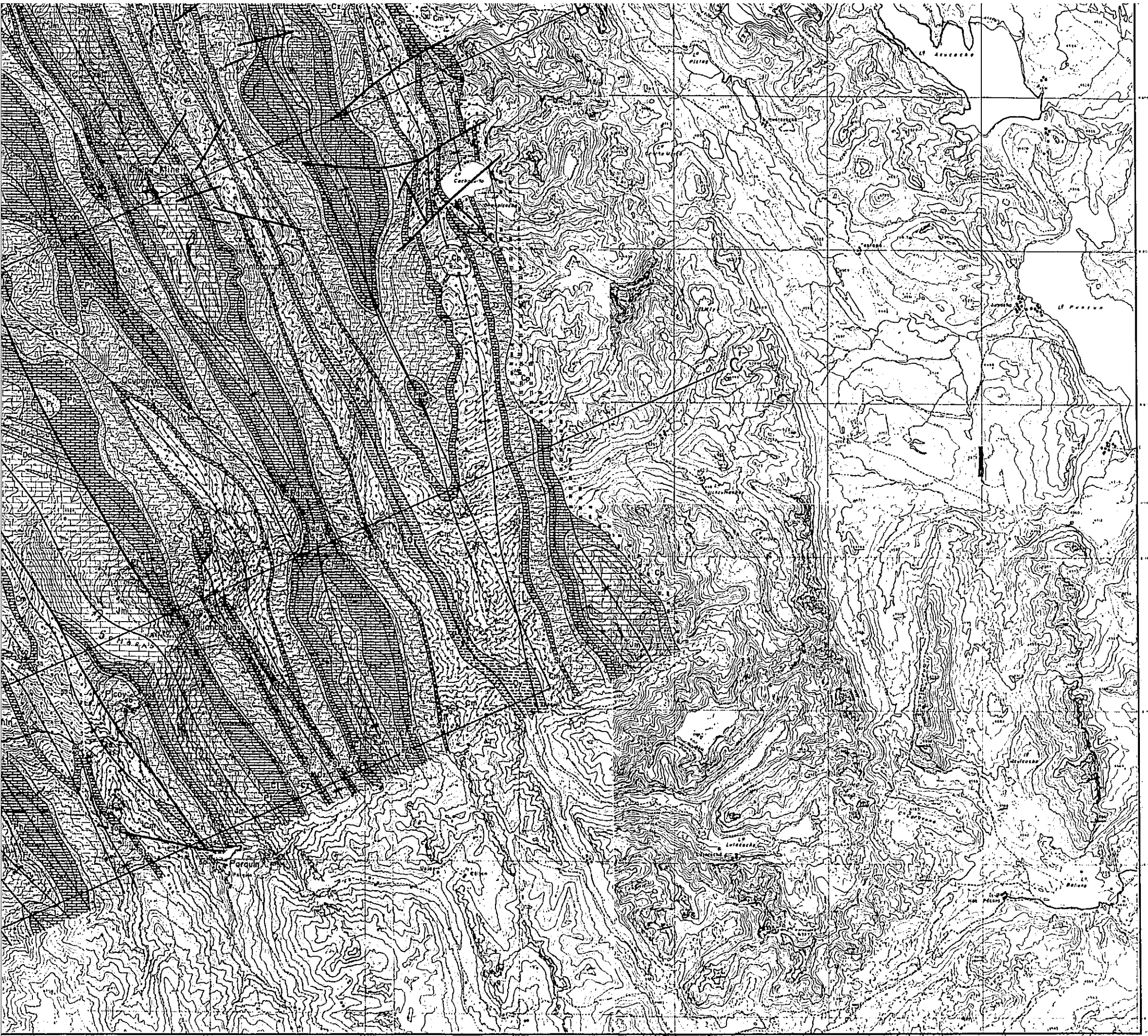
SEDIMENTARY ROCK

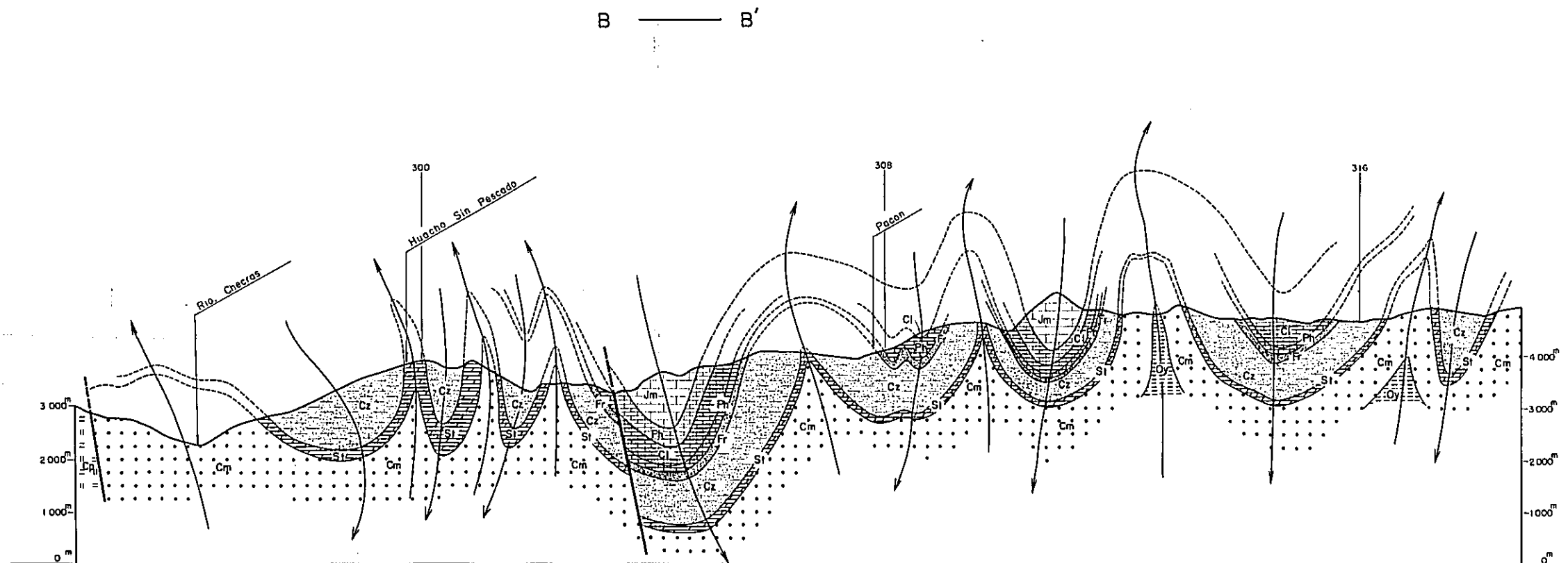
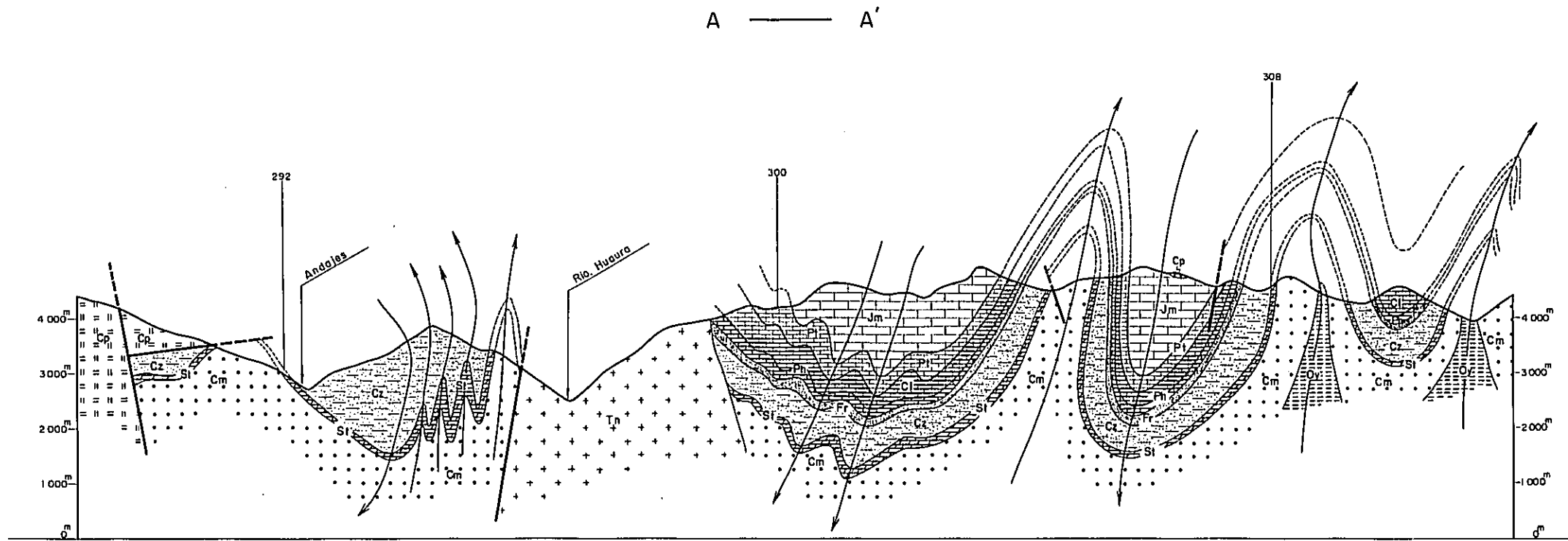
Quaternary	Q	Alluvium
	JmL	Jumasha formation
	Ph	Pariatambo formation
	Cl	Chulec formation
	Phc	Pariahuanca formation
Cretaceous	Fr	Ferrat formation
	Cz	Carhuoz formation
	Si	Santa formation
	Cm	Chimu formation
	Ov	Oyon formation

IGNEOUS ROCK

De	Dacite & porphyrite
Tn-p	Tonalite porphyry
Tn	Tonalite
Cp	Colipuy volcanics

- Bedding plane
- Anticlinal folding axis
- Synclinal folding axis
- Overturned folding axis
- Fault

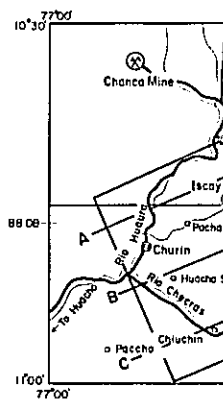




C — C'

GEOLOGICAL
THE OYON A

GEOLOGIC
O
THE SUR'



METAL MINING
JAPAN INTERNATIONAL
GOVERNMENT
FEBRU
prepared by MI

Scale



LEG

SEDIMEN

[Symbol]	Jm	Juras
[Symbol]	Pt	Pariat
[Symbol]	Cl	Chule
[Symbol]	Fr	Farral
[Symbol]	Cz	Carhu
[Symbol]	St	Sant
[Symbol]	Cm	Cham
[Symbol]	Oy	Oyon

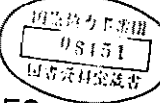
Cretaceous

IGNEOUS

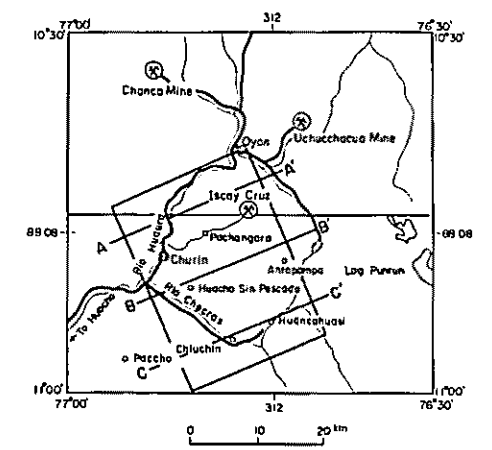
[Symbol]	Tn-p	Tonal
[Symbol]	Tn+	Tonal
[Symbol]	Cp	Coll

- [Symbol] Fault
- [Symbol] Anticl
- [Symbol] Sync
- [Symbol] Geolc

GEOLOGICAL SURVEY
OF
THE OYON AREA, PERU



GEOLOGICAL PROFILES
OF
THE SURVEYED AREA



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

prepared by MESCO, Inc.

Scale 1 : 50,000



LEGEND

SEDIMENTARY ROCK

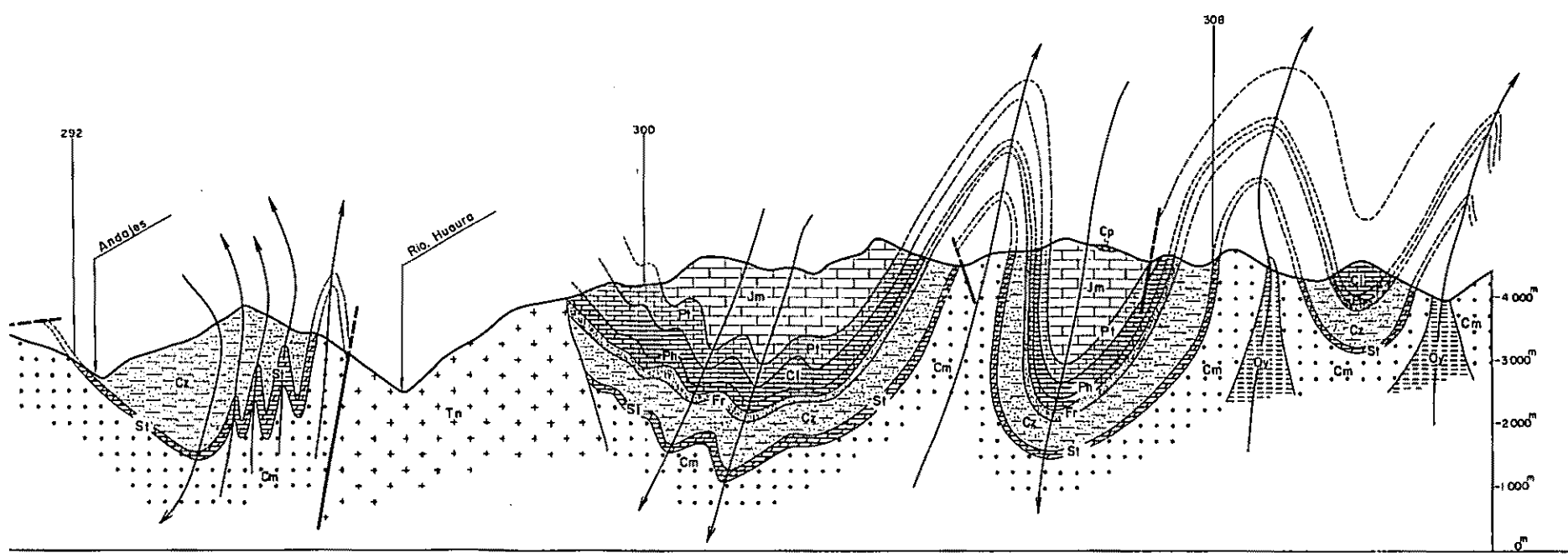
- | | |
|--|-----------------------|
| | Jumsha formation |
| | Parlatamba formation |
| | Chulec formation |
| | Parlahuanca formation |
| | Farra formation |
| | Carhuaz formation |
| | Santa formation |
| | Chimu formation |
| | Oyon formation |

IGNEOUS ROCK

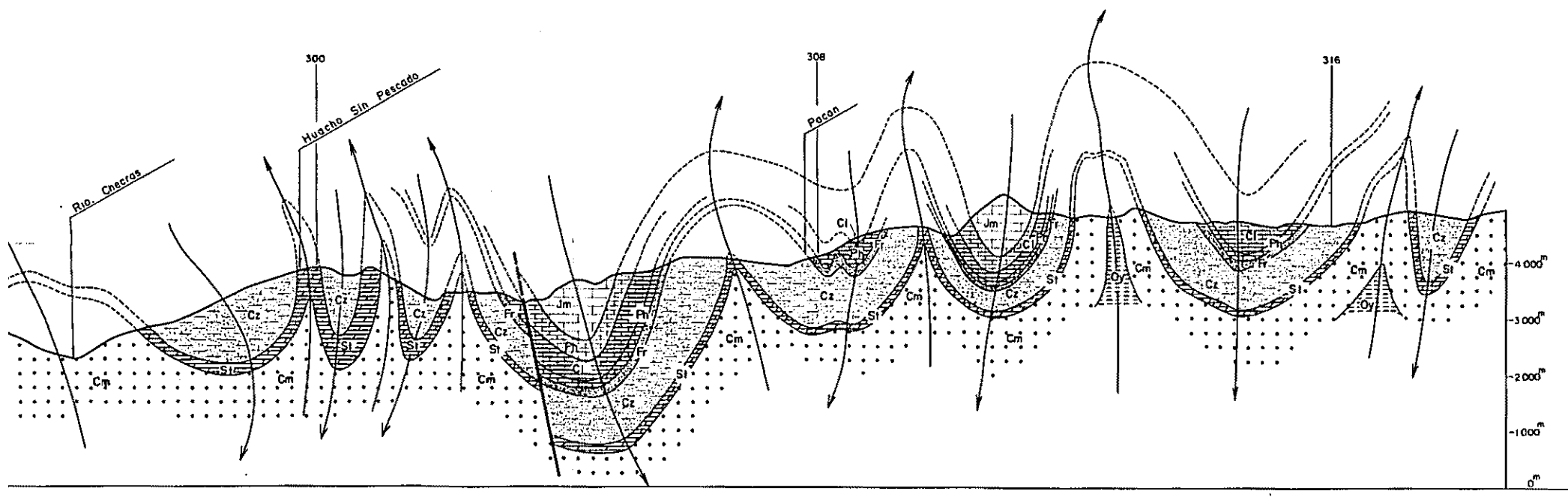
- | | |
|--|-------------------|
| | Tonalite porphyry |
| | Tonalite |
| | Callpuy volcanics |

- | | |
|--|-------------------------|
| | Fault |
| | Anticlinal folding axis |
| | Synclinal folding axis |
| | Geological section line |

A — A'



B — B'

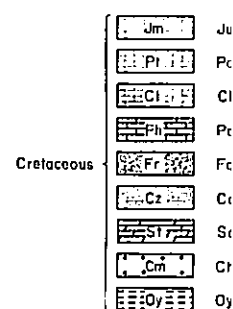


C — C'

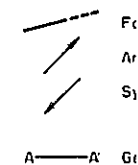
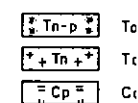


L E

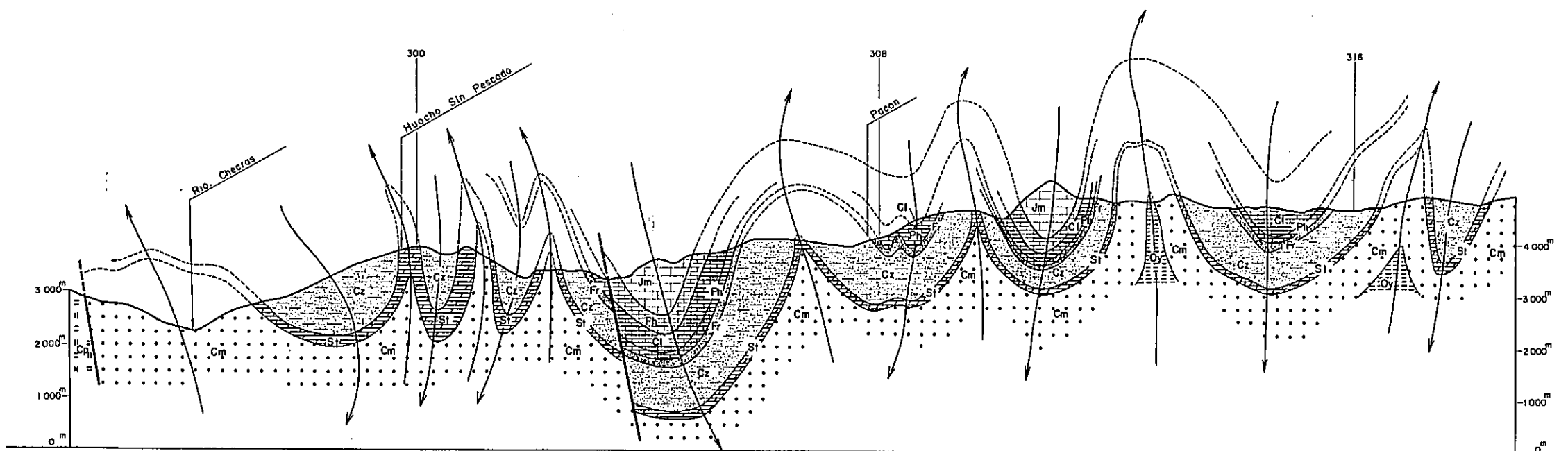
SEDIM



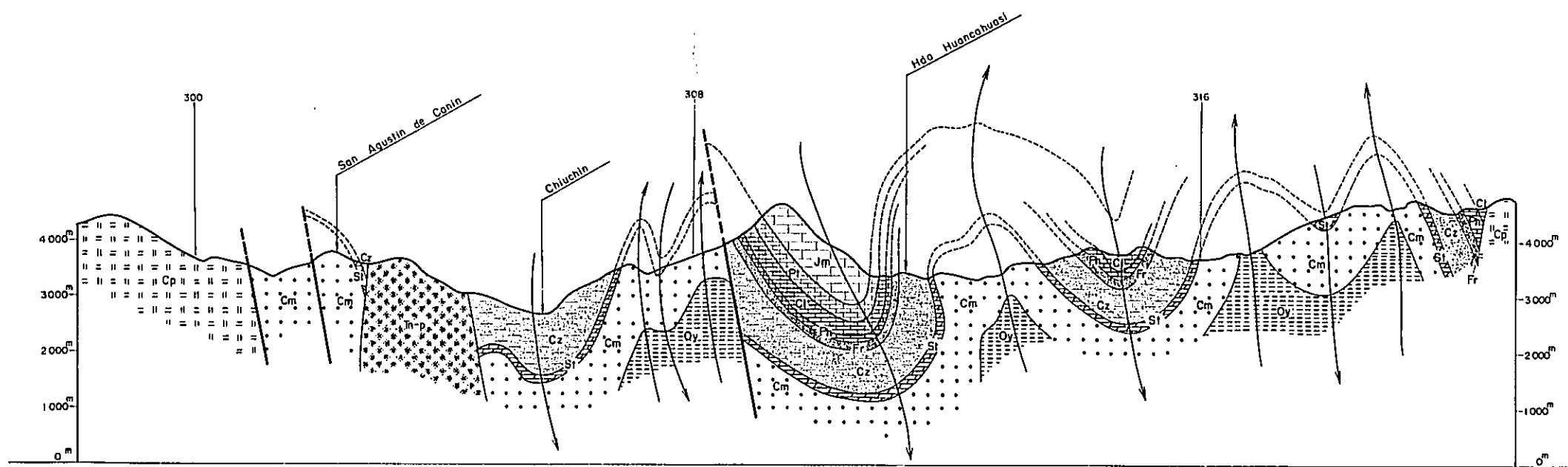
IGNEC



B — B'



C — C'





LEGEND

SEDIMENTARY ROCK

- | | |
|--|-----------------------|
| | Jumasha formation |
| | Parlatambo formation |
| | Chulec formation |
| | Parichuanca formation |
| | Farral formation |
| | Carhuaz formation |
| | Santa formation |
| | Chimu formation |
| | Oyon formation |
- Cretaceous

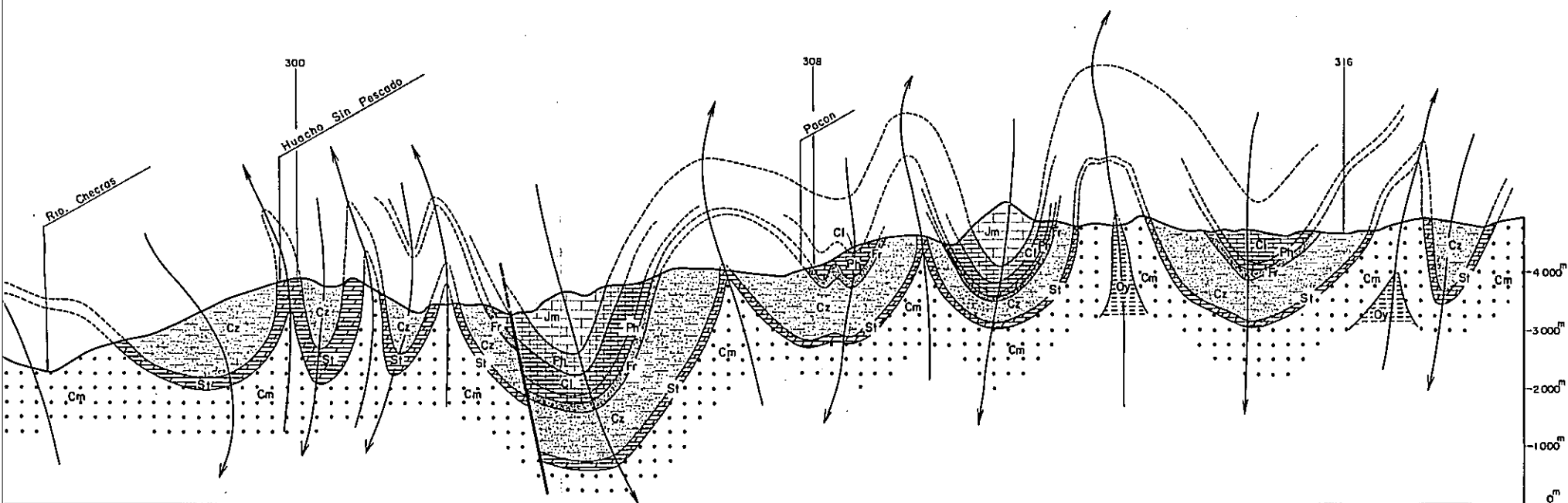
IGNEOUS ROCK

- | | |
|--|--------------------|
| | Tonalite porphyry |
| | Tonalite |
| | Callipuy volcanics |

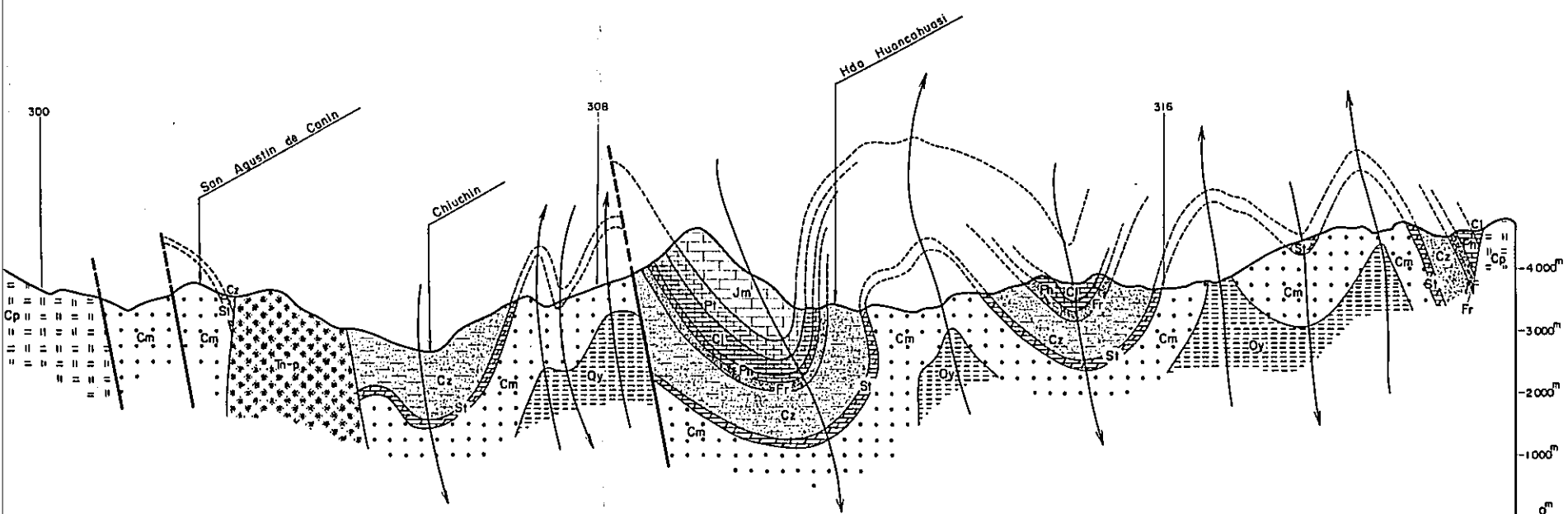
- | | |
|--|----------------------------|
| | Fault |
| | Anticlinaxial folding axis |
| | Synclinal folding axis |

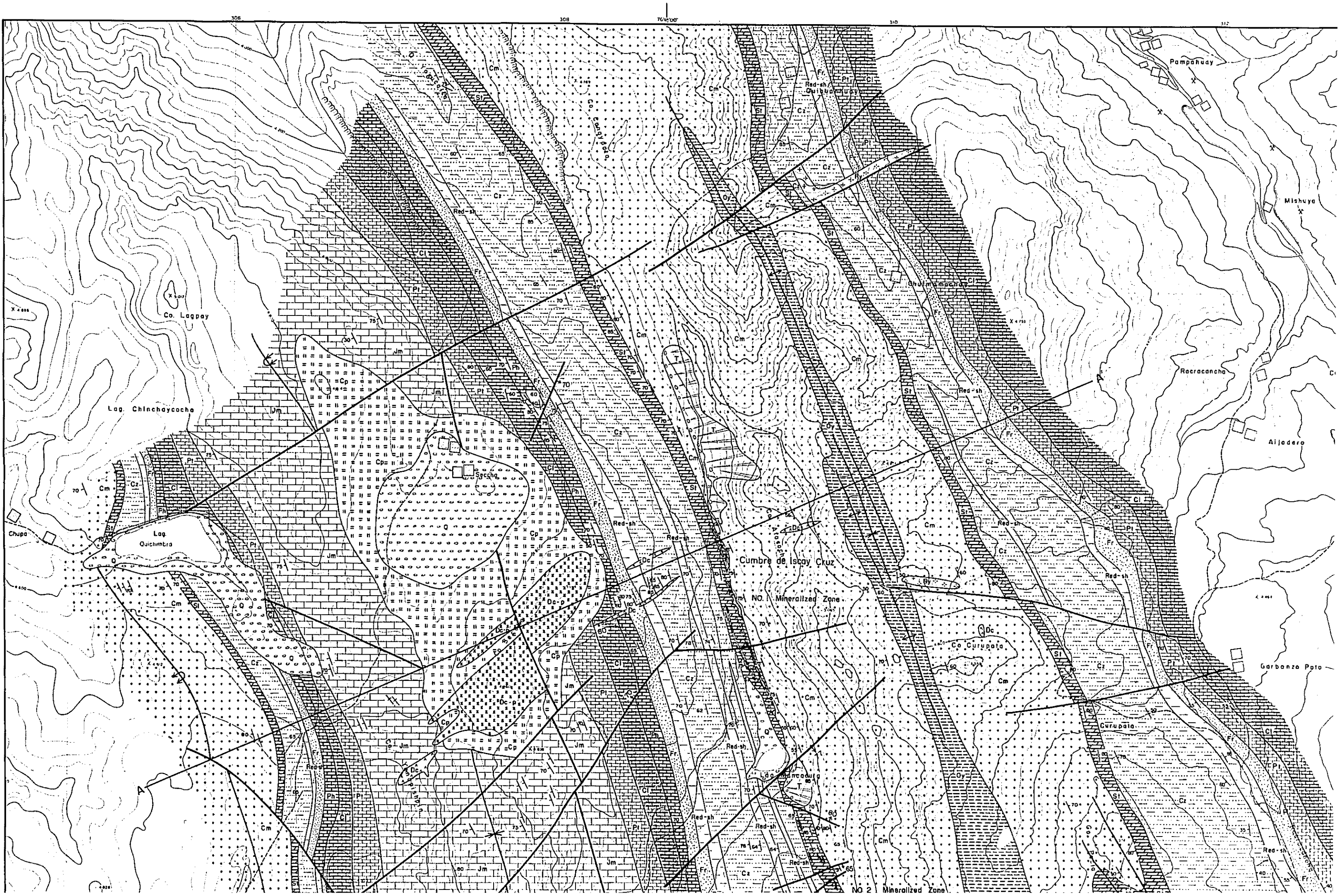
A—A' Geological section line

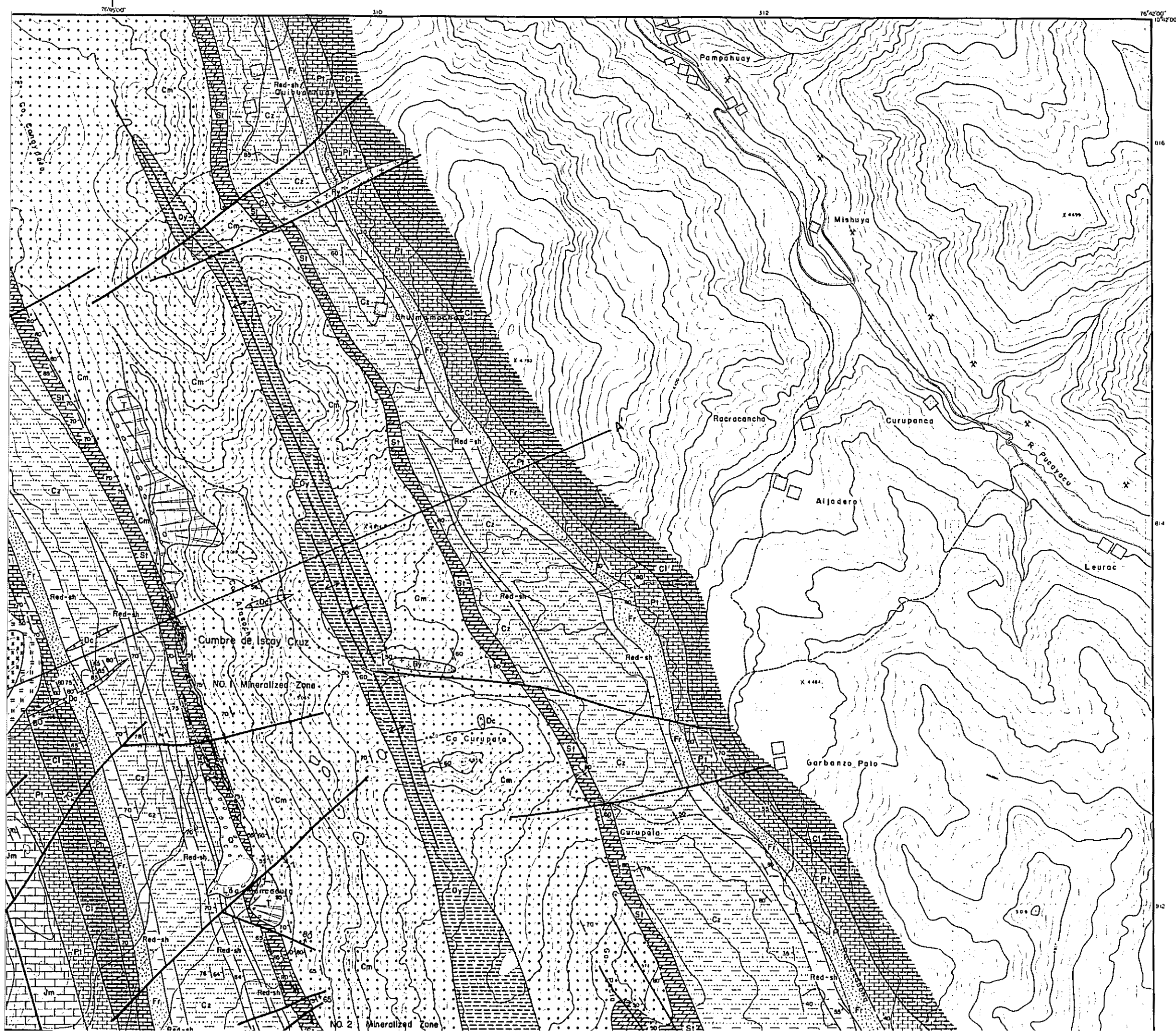
B — B'



C — C'







PL 3-1

GEOLOGICAL SURVEY
OF
THE OYÓN AREA, PERU

GEOLOGICAL MAP
OF
THE DETAILED SURVEY AREA
(NORTHERN PART)

08151
 08151

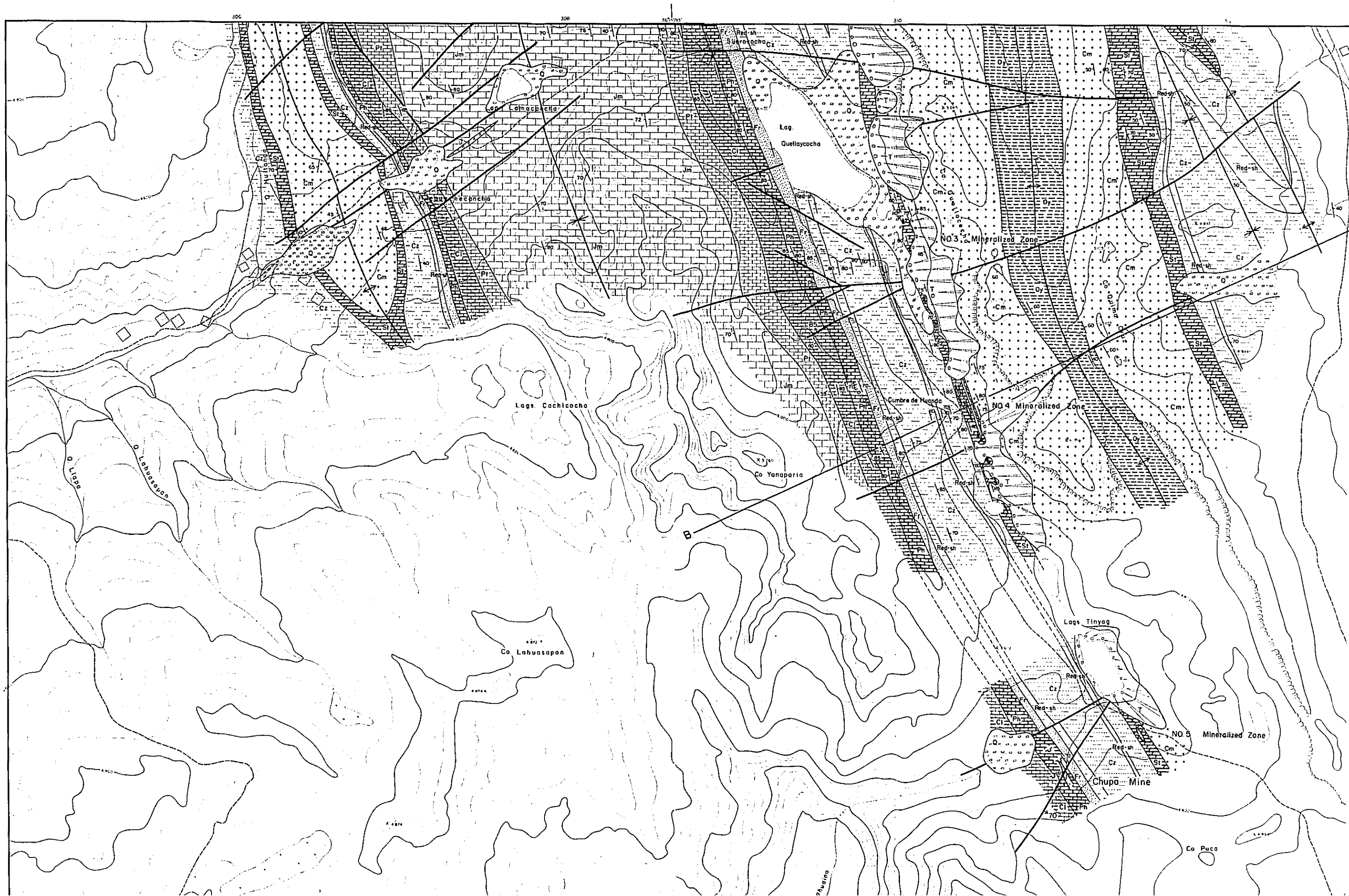
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

prepared by MESCO, Inc.



- LEGEND**
- SEDIMENTARY ROCK**
- | | | | |
|------------|------------------|-----------------------|--|
| Quaternary | Talus | Alluvium | |
| | Jumsha formation | Pariatambo formation | |
| | Chulec formation | Pariahuanca formation | |
| Cretaceous | Farrat formation | Carhuaz formation | |
| | Santa formation | Chimu formation | |
| | Oyón formation | | |
- IGNEOUS ROCK**
- | | | | |
|---------------------|-----------------|----------|--|
| Dacite B porphyrite | Dacite porphyry | Rhyolite | |
| Volcanics | | | |
- Mineralized zone
- Bedding plane
- Anticlinal folding axis
- Synclinal folding axis
- Overturned folding axis







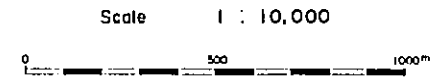
PL. 3-2
 国土地力研究所
 08151
 国土地力研究所

GEOLOGICAL SURVEY
 OF
 THE OYON AREA, PERU

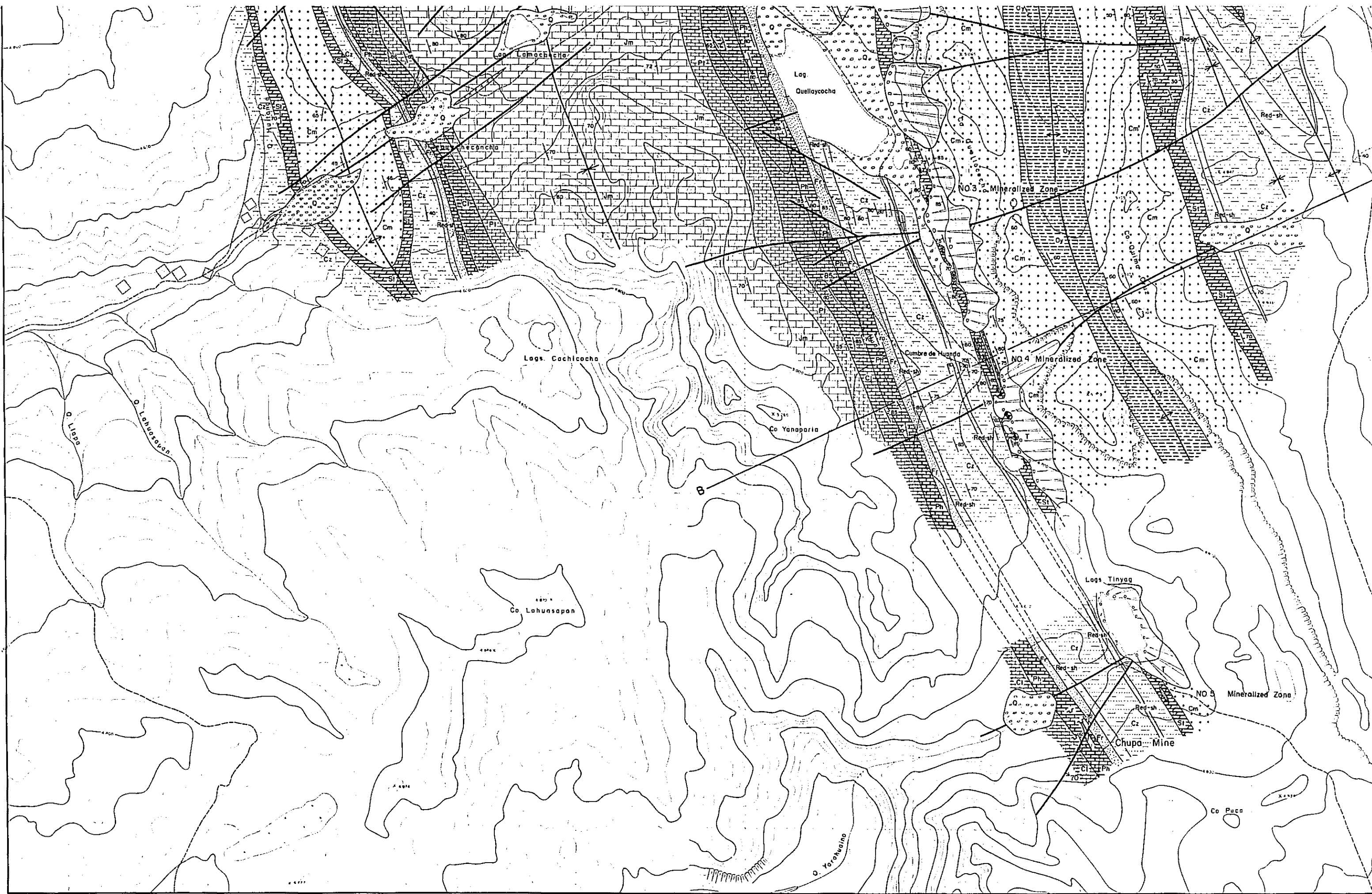
GEOLOGICAL MAP
 OF
 THE DETAILED SURVEY AREA
 (SOUTHERN PART)

METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1980

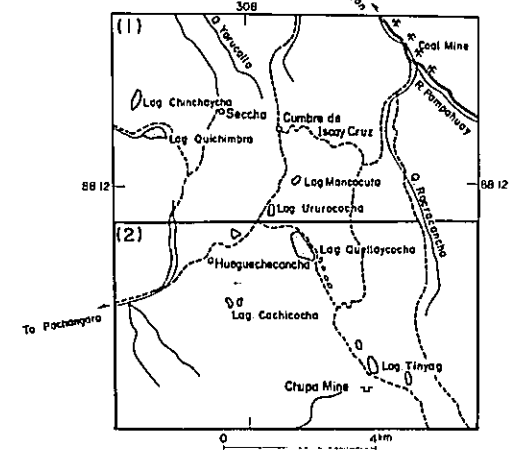
prepared by MESCO, Inc.



- LEGEND**
- SEDIMENTARY ROCK**
- | | | |
|------------|--|-----------------------|
| Quaternary | | Talus |
| | | Alluvium |
| Cretaceous | | Jumasha formation |
| | | Pariatamba formation |
| | | Chulec formation |
| | | Parlahuanca formation |
| | | Farrat formation |
| | | Carhuaz formation |
| | | Santa formation |
| | | Chimu formation |
| | | Oyon formation |
- IGNEOUS ROCK**
- | | |
|--|---------------------|
| | Dacite & porphyrite |
| | Dacite porphyry |
| | Volcanics |
-
- Mineralized zone
-
- Bedding plane
-
- Anticlinal folding axis
-
- Synclinal folding axis
-
- Overturned folding axis



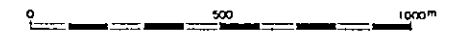
**GEOLOGICAL MAP
OF
THE DETAILED SURVEY AREA
(SOUTHERN PART)**



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980

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Scale 1 : 10,000



LEGEND

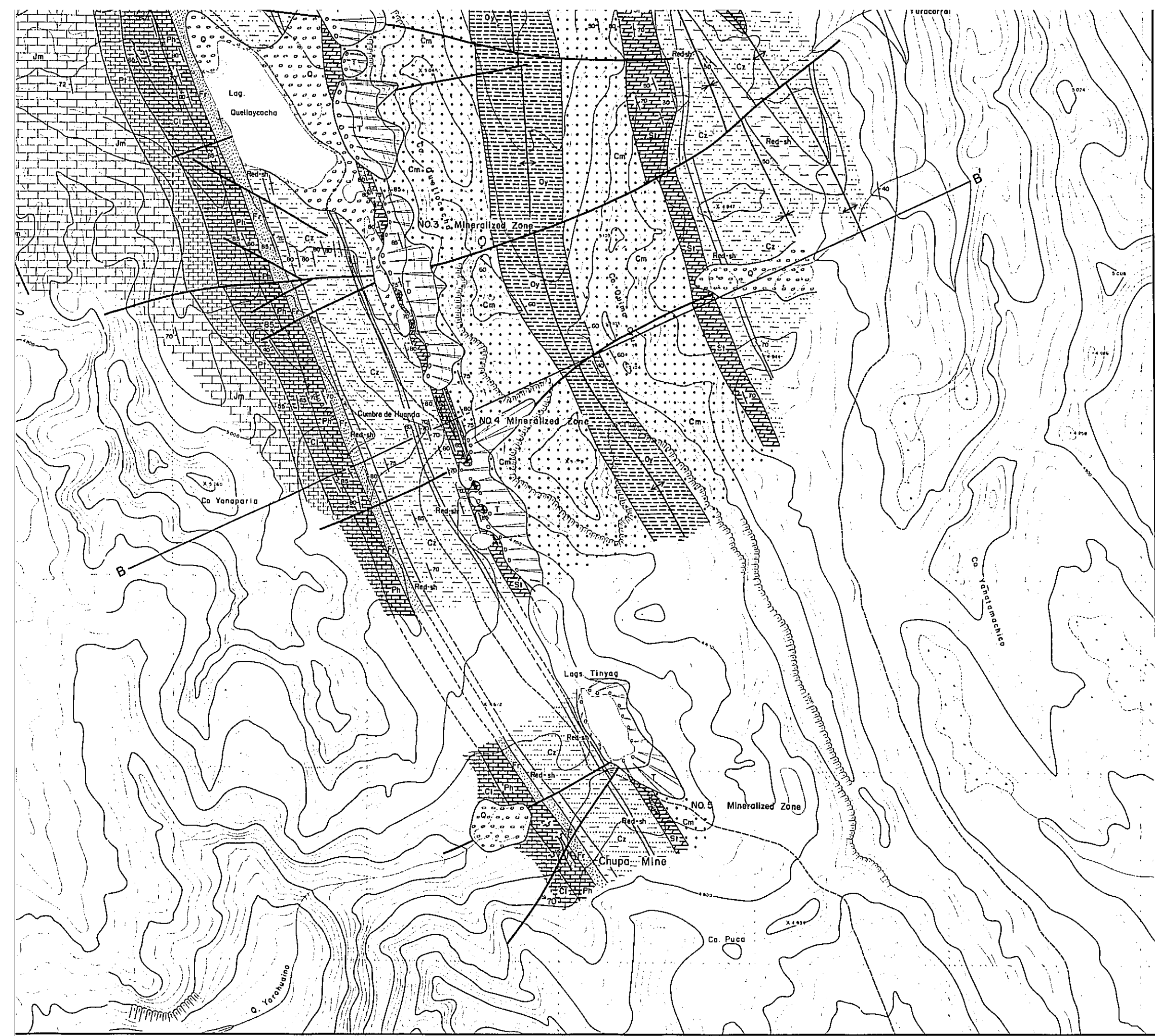
SEDIMENTARY ROCK

- | | | |
|------------|--|-----------------------|
| Quaternary | | Talus |
| | | Alluvium |
| Cretaceous | | Jumasha formation |
| | | Pariatambo formation |
| | | Chulec formation |
| | | Parlahuancu formation |
| | | Farrat formation |
| | | Carhuaz formation |
| | | Santa formation |
| | | Chimu formation |
| | | Oyon formation |

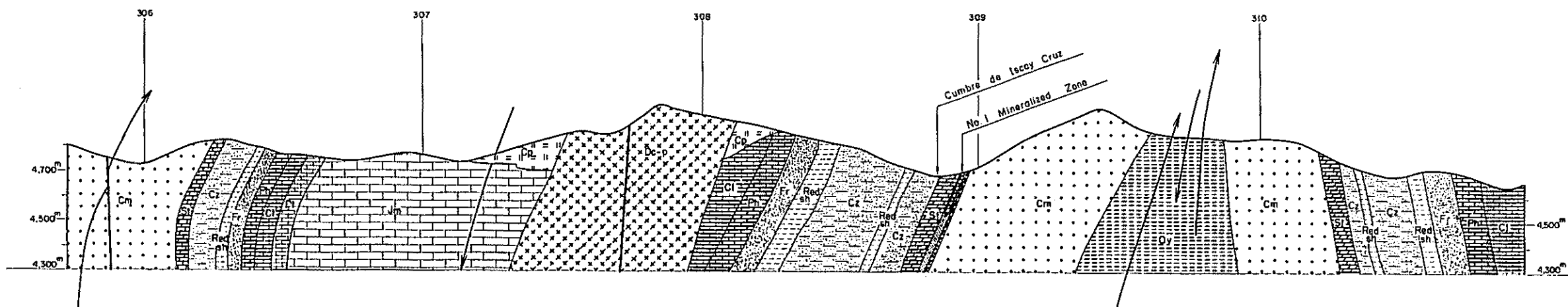
IGNEOUS ROCK

- | | |
|--|---------------------|
| | Dacite & porphyrite |
| | Dacite porphyry |
| | Volcanics |

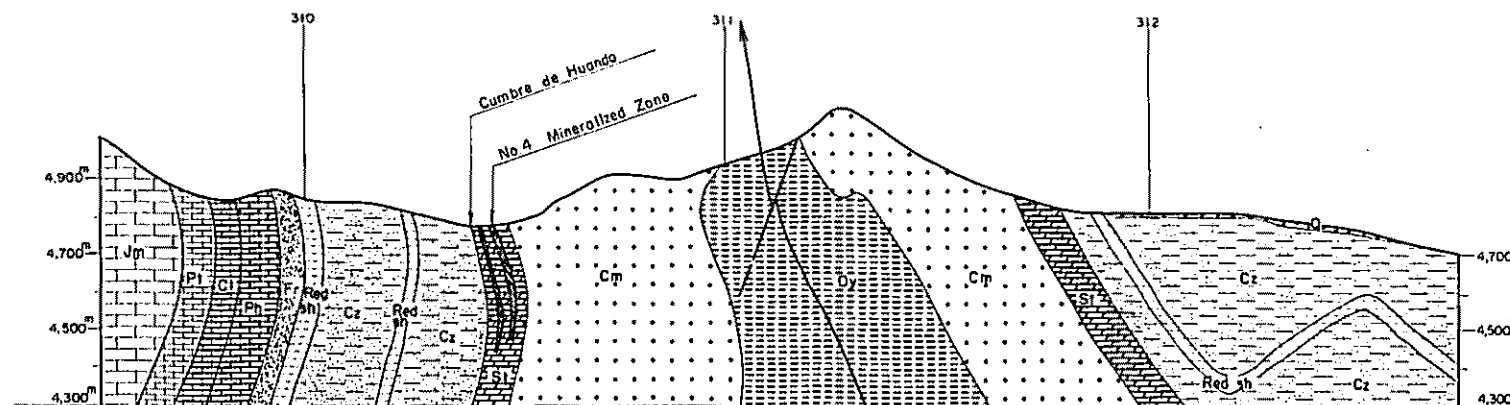
- | | |
|--|-------------------------|
| | Mineralized zone |
| | Bedding plane |
| | Anticlinal folding axis |
| | Synclinal folding axis |
| | Overturned folding axis |
| | Fault |



A ——— A'



B ——— B'

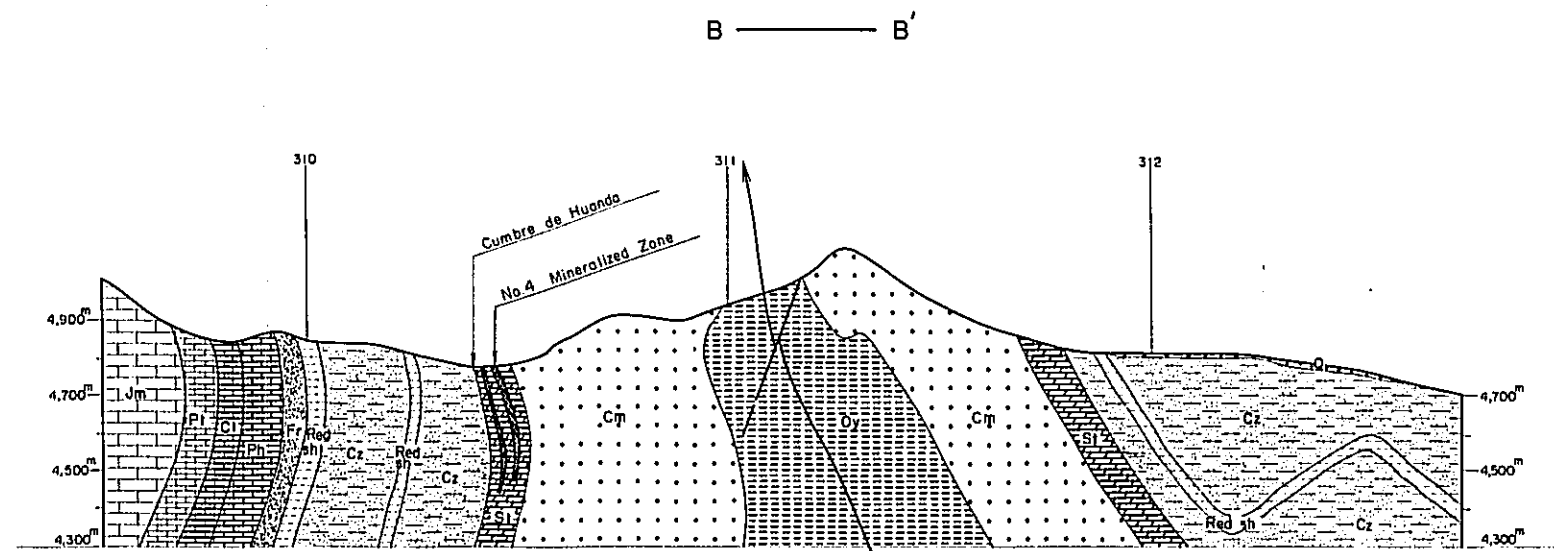
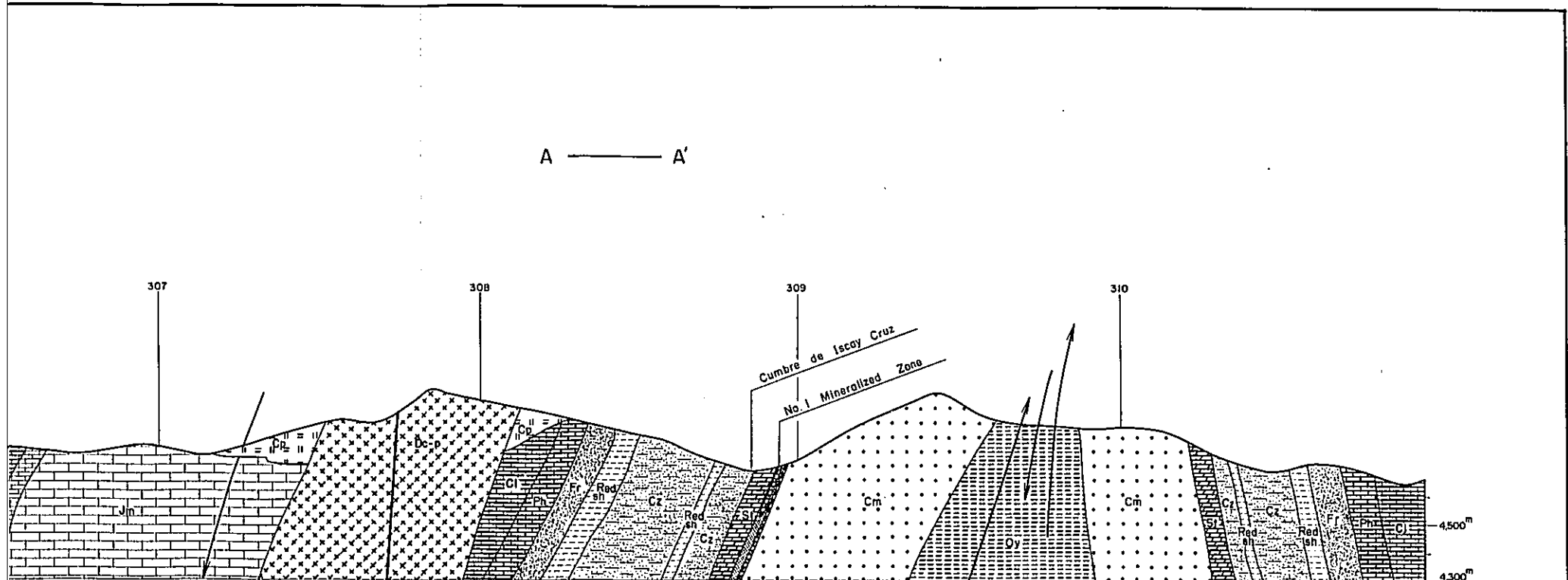


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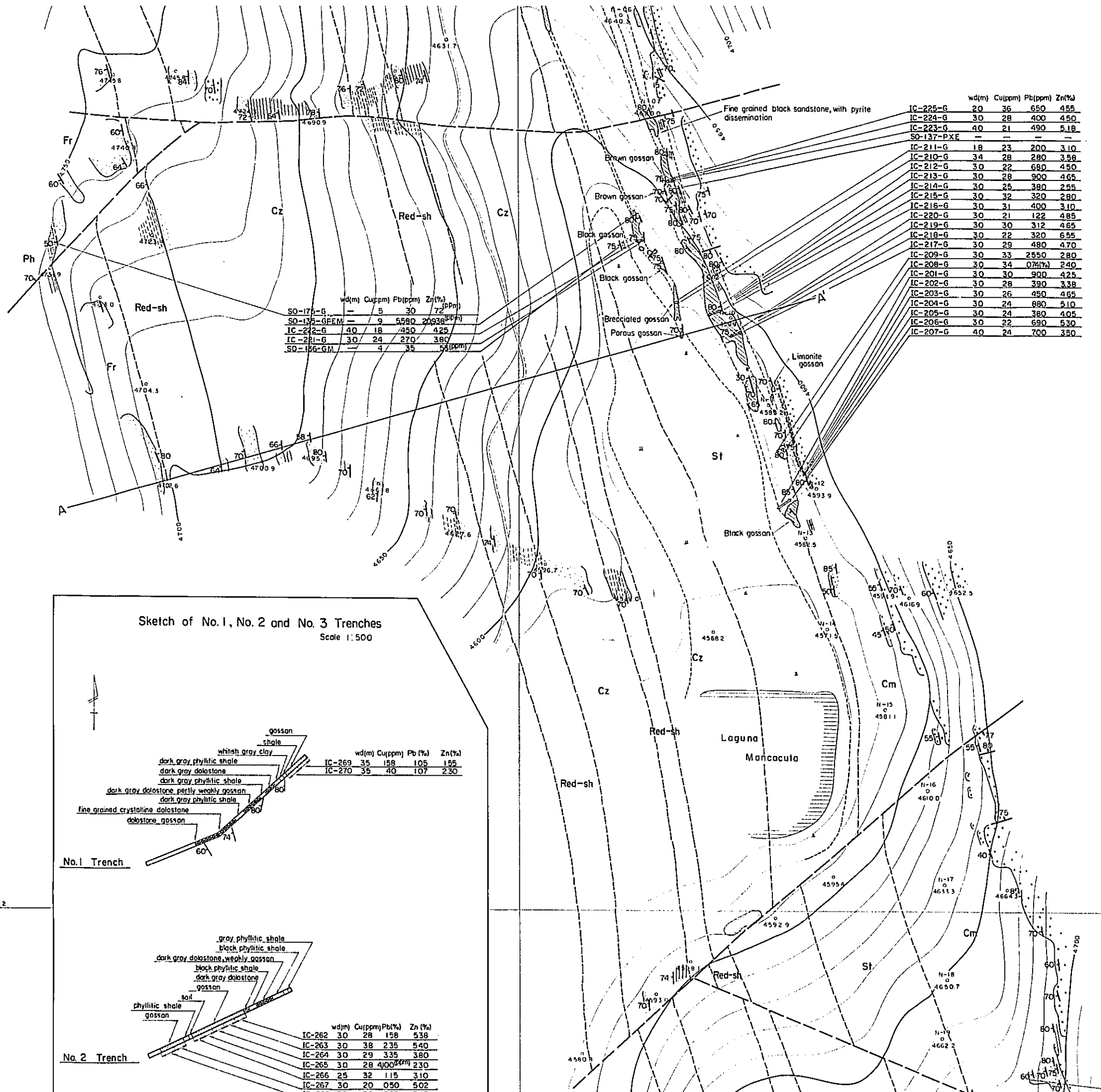
PL. 4
 GEOLOGICAL SURVEY
 OF
 THE OYON AREA, PERU
 08451
 08451
 08451

GEOLOGICAL PROFILES OF THE DETAILED SURVEY AREA

METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1980
 prepared by MESCO, Inc.

Scale 1 : 10,000

- #### LEGEND
- SEDIMENTARY ROCK
- | | | |
|------------|--|----------------------|
| Quaternary | | Alluvium |
| | | Jumasha formation |
| | | Pariatamba formation |
| | | Chulec formation |
| | | Parahuanca formation |
| Cretaceous | | Farrat formation |
| | | Carhuaz formation |
| | | Santa formation |
| | | Chimu formation |
| | | Oyon formation |
- IGNEOUS ROCK
- | | | |
|--|--|-----------------|
| | | Dacite porphyry |
| | | Volcanics |
- Other Symbols:
- Mineralized zone
 - Fault
 - Anticlinal folding axis
 - Synclinal folding axis
 - Geological section line



- Dacite
- Bedding plane
- Fault, confirmed
- Fault, estimated
- Trench
- Adit
- Locality of channel sampling

- STRATIGRAPHY
- Parahuanca formation
 - Farrat formation
 - Carhuaz formation
 - Santa formation
 - Chimu formation

	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)
IC-225-G	20	36	650	455
IC-224-G	30	28	400	450
IC-223-G	40	21	490	518
SO-137-PXE				
IC-211-G	18	23	200	310
IC-210-G	34	28	280	358
IC-212-G	30	22	680	450
IC-213-G	30	28	900	465
IC-214-G	30	25	380	255
IC-215-G	30	32	320	280
IC-216-G	30	31	400	310
IC-220-G	30	21	122	485
IC-219-G	30	30	312	485
IC-218-G	30	22	320	655
IC-217-G	30	29	480	470
IC-209-G	30	33	2550	280
IC-208-G	30	34	074(%)	240
IC-201-G	30	30	900	425
IC-202-G	30	28	390	338
IC-203-G	30	26	450	465
IC-204-G	30	24	690	510
IC-205-G	30	24	380	405
IC-206-G	30	22	690	530
IC-207-G	40	24	700	350

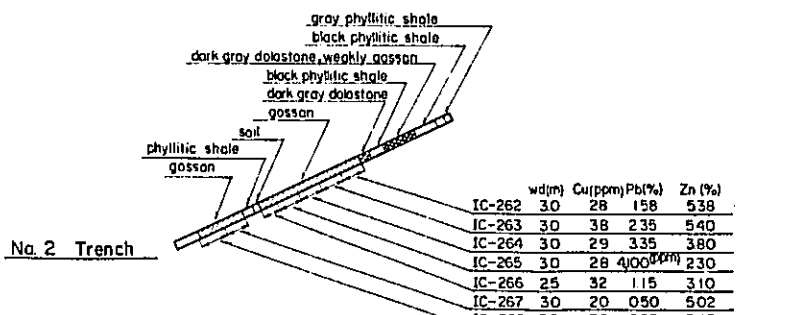
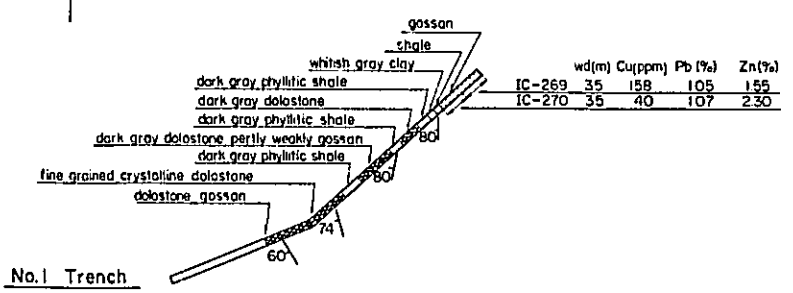
	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)
SO-175-G	5	30	72	100
SO-132-GFEM	9	5580	2032	100
IC-242-G	40	18	450	425
IC-241-G	30	24	270	380
SO-186-GM	4	35	55	100

	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)
IC-101-G	25	25	1200	505

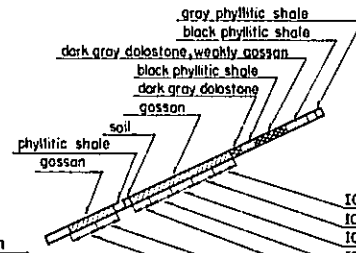
Sampling location and assay results

- AO-102-T Sample for thin section
- AO-103-P Sample for polished section
- AO-104-X Sample for X-ray diffraction test
- AO-105-E Sample for EPMA (Electron probe microanalysis)
- AO-106-O Sample for chemical analysis
- AO-107-F Sample for fossil identification
- AO-108-M Sample for minor element analysis

Sketch of No. 1, No. 2 and No. 3 Trenches
Scale 1:500

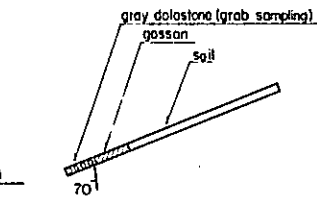


No.1 Trench

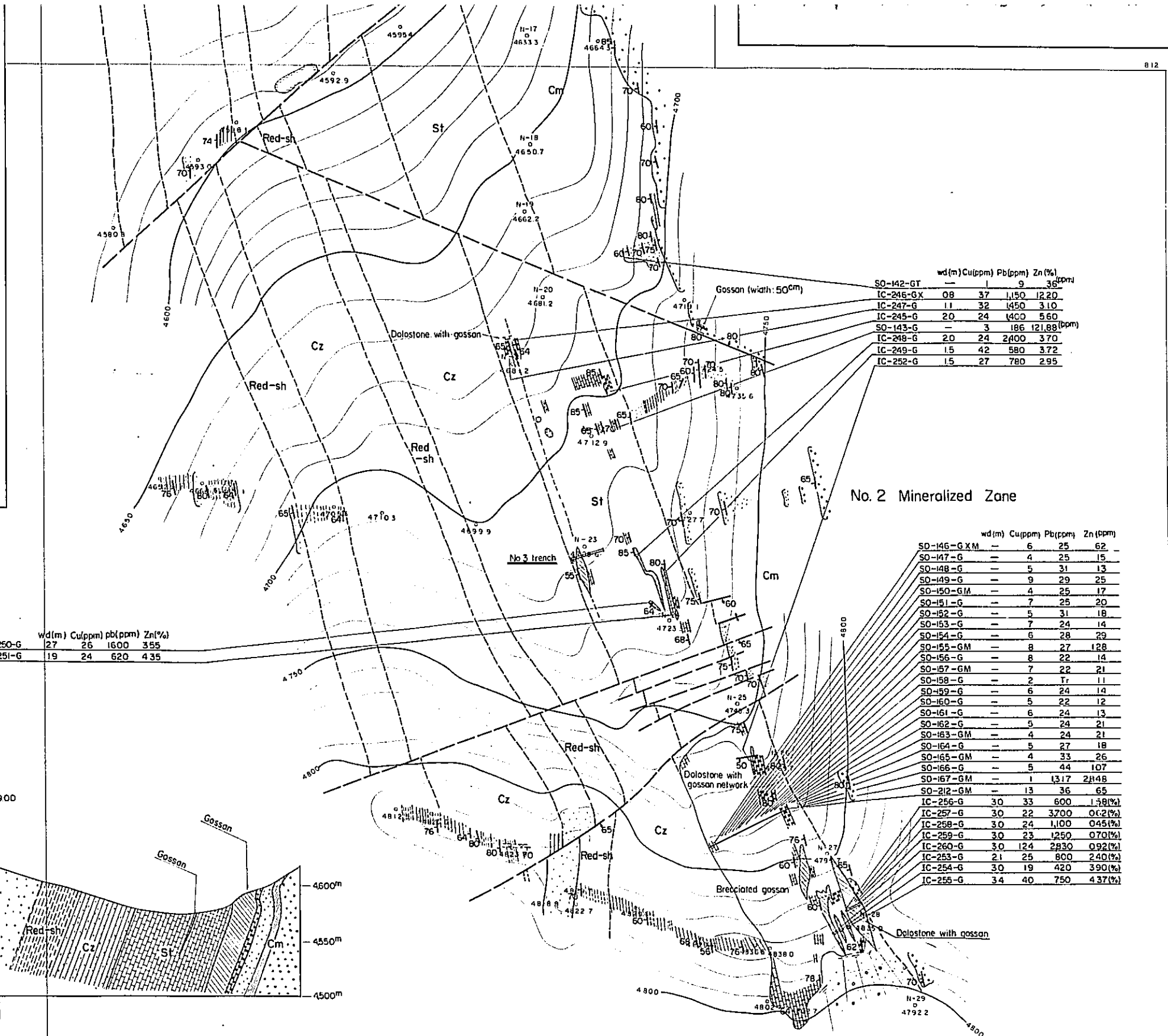
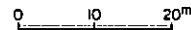


	wd(m)	Cu(ppm)	Pb(%)	Zn(%)
IC-262	30	29	159	538
IC-263	30	38	235	540
IC-264	30	29	335	380
IC-265	30	28	400	230
IC-266	25	32	115	310
IC-267	30	20	050	502
IC-268	35	36	062	345

No.2 Trench



No.3 Trench



	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)
IC-250-G	27	26	1600	355
IC-251-G	19	24	620	435

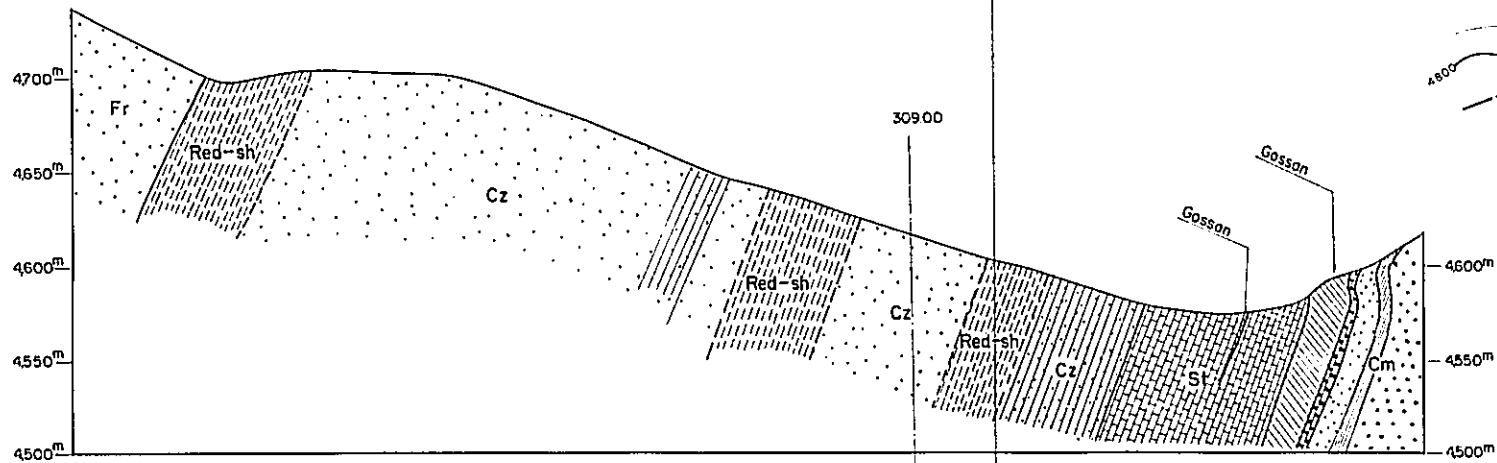
	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)
SO-142-GT	1	9	36	
IC-246-GX	08	37	1,150	12,20
IC-247-G	11	32	450	3,10
IC-245-G	20	24	400	5,60
SO-143-G	—	3	186	121,88
IC-248-G	20	24	2400	3,70
IC-249-G	15	42	580	3,72
IC-252-G	15	27	780	2,95

No.2 Mineralized Zone

	wd(m)	Cu(ppm)	Pb(ppm)	Zn(ppm)
SO-146-GXM	—	6	25	62
SO-147-G	—	4	25	15
SO-148-G	—	5	31	13
SO-149-G	—	9	29	25
SO-150-GM	—	4	25	17
SO-151-G	—	7	25	20
SO-152-G	—	5	31	18
SO-153-G	—	7	24	14
SO-154-G	—	6	28	29
SO-155-GM	—	8	27	128
SO-156-G	—	8	22	14
SO-157-GM	—	7	22	21
SO-158-G	—	2	17	11
SO-159-G	—	6	24	14
SO-160-G	—	5	22	12
SO-161-G	—	6	24	13
SO-162-G	—	5	24	21
SO-163-GM	—	4	24	21
SO-164-G	—	5	27	18
SO-165-GM	—	4	33	26
SO-166-G	—	5	44	107
SO-167-GM	—	1	13,17	2,148
SO-212-GM	—	13	36	65
IC-256-G	30	33	600	1,58(%)
IC-257-G	30	22	3,700	0,2(%)
IC-258-G	30	24	1,100	0,45(%)
IC-259-G	30	23	1,250	0,70(%)
IC-260-G	30	124	2,830	0,92(%)
IC-253-G	21	25	800	2,40(%)
IC-254-G	30	19	420	3,90(%)
IC-255-G	34	40	750	4,37(%)

Section

A - A'



Siderite gossan

IC-327-G	1.0	68	0.88(%)	4.90	—
IC-328-G	2.0	22	0.74(%)	2.25	—
IC-329-G	1.0	Tr	49.25(%)	0.75	28.40



Laguna

Pyrite and galena massive ore and dolomite gossan

- Limestone
- Dolomitic limestone
- Dolostone
- Gossan
- Dacite
- Bedding plane
- Fault, confirmed
- Trench
- Locality of channel sampling

STRATIGRAPHY

- Parahuanca formation
- Farrat formation
- Carhuaz formation
- Santa formation
- Chimu formation

IC-101-G	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)	Ag(%)
	2.5	25	1200	50.5	12.0

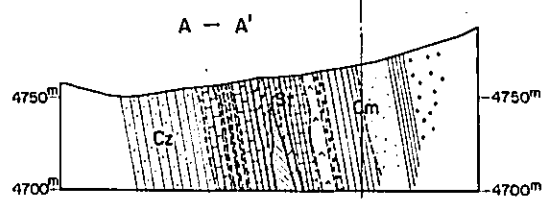
Sampling location and assay results

- AO-102-T Sample for thin section
- AO-103-P Sample for polished section
- AO-104-X Sample for X-ray diffraction test
- AO-105-E Sample for EPMA (Electron probe microanalysis)
- AO-106-O Sample for chemical analysis
- AO-107-M Sample for minor element analysis

IC-319-G	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)	Ag(%)
	2.0	1070	200	100	—
IC-320-G	2.0	55	280	160	—
IC-321-G	2.0	5.40	200	260	—
IC-314-G	2.0	0.12(%)	0.05(%)	0.21	—
IC-315-G	2.0	0.01(%)	0.44(%)	1.10	—
IC-316-G	2.0	75	100	0.60	—
IC-317-G	2.0	466	350	2.08	—
IC-318-TPOM	Tr	2.18(%)	1.00	1.98	—
IC-350-X	—	—	—	—	—
IC-301-TPXO	Tr	0.02(%)	2.00	0.05	—
IC-349-X	—	—	—	—	—

IC-323-G	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)	Ag(%)
	—	25	260	200	—
IC-324-GP	—	42	950	390	—
IC-308-G	—	30	680	450	—
IC-322-G	—	27	300	710	—
IC-313-TP	—	—	—	—	—
IC-312-G	2.0	0.64(%)	0.02(%)	0.30	—
IC-311-G	2.0	425	150	1.72	—
IC-310-G	2.0	615	150	4.45	—
IC-309-G	2.0	2,175	250	5.60	—
IC-325-TPX	—	—	—	—	—
IC-307-G	2.0	303	600	0.90	—
IC-306-G	2.0	34	550	0.03	—
IC-305-G	2.0	298	2,150	1.15	—
IC-304-G	2.0	495	320	3.95	—
IC-303-G	2.0	70	1,550	1.66	—
IC-302-G	2.0	128	330	4.60	—

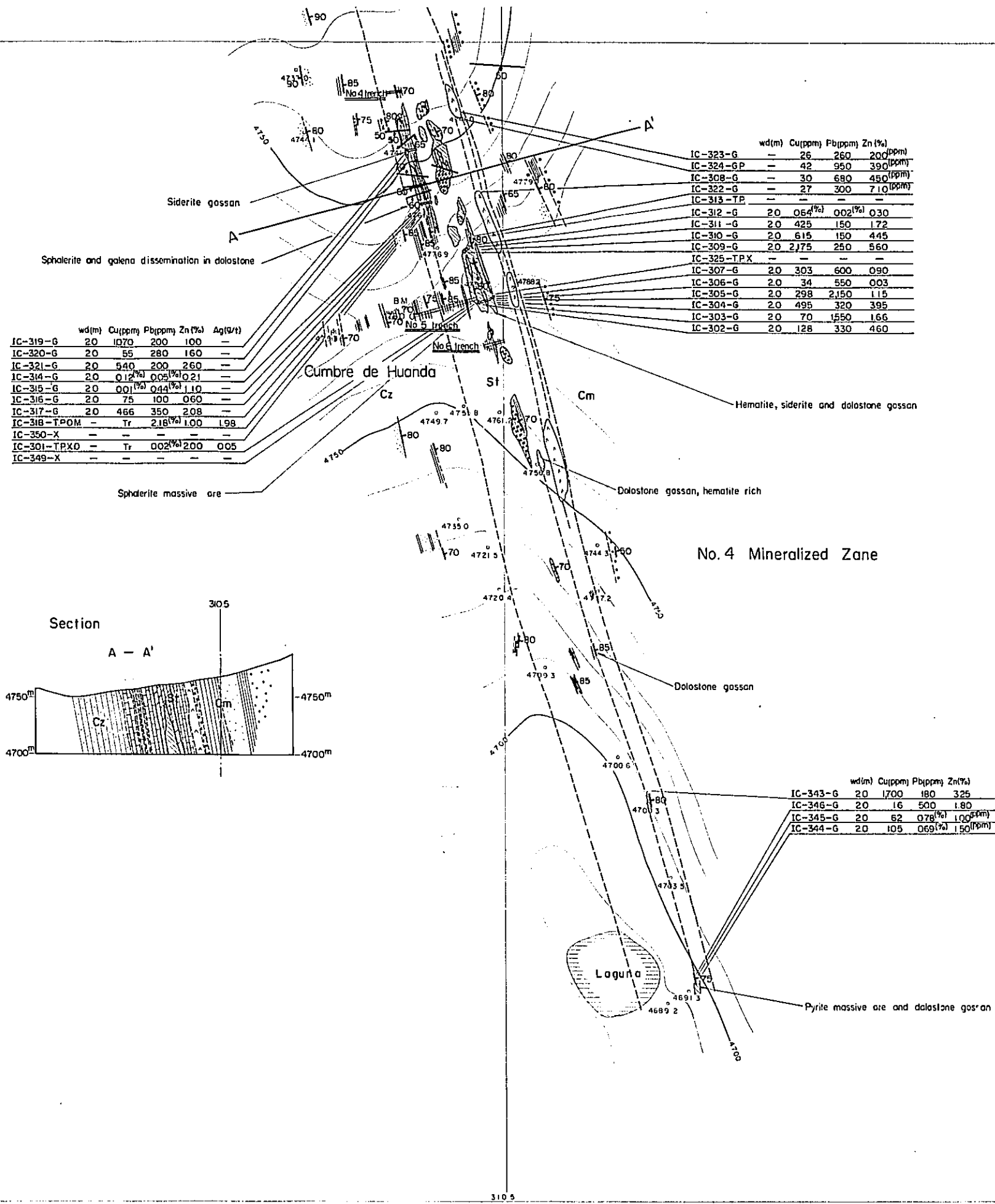
Section



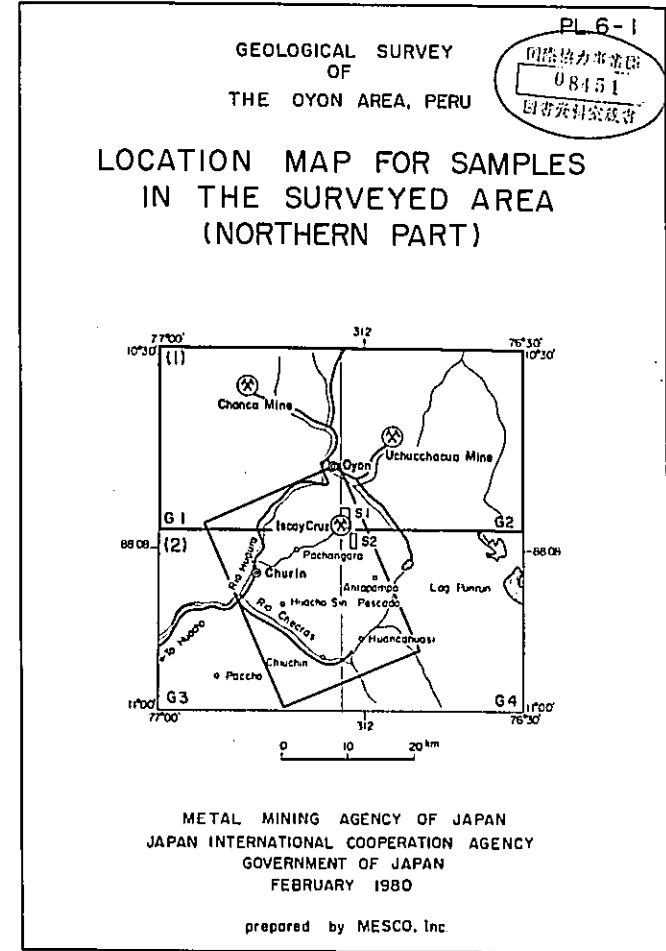
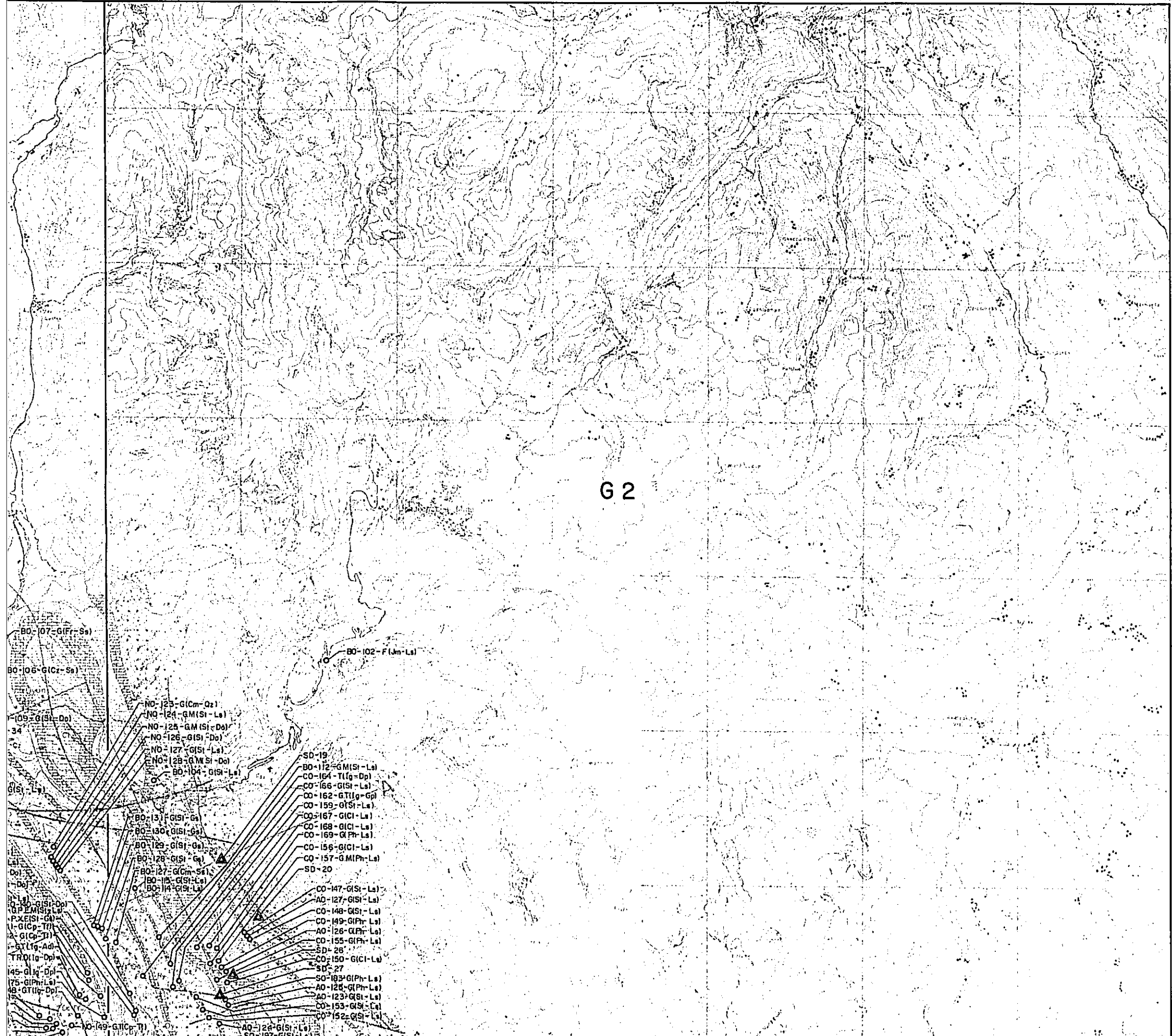
Cumbre de Huanda

Na. 4 Mineralized Zone

IC-343-G	wd(m)	Cu(ppm)	Pb(ppm)	Zn(%)	Ag(%)
	2.0	1700	180	3.25	—
IC-346-G	2.0	16	500	1.80	—
IC-345-G	2.0	62	0.78(%)	1.00	—
IC-344-G	2.0	105	0.65(%)	1.50	—



- IC-101-G wd(m) Cu(ppm) Pb(ppm) Zn(%) Ag(g/t)
2.5 25 200 505 12.0
Sampling location and assay results
- AO-102-T Sample for thin section
- AO-103-P Sample for polished section
- AO-104-X Sample for X-ray diffraction test
- AO-105-E Sample for EPMA (Electron probe microanalysis)
- AO-106-O Sample for chemical analysis
- AO-107-M Sample for minor element analysis



Scale 1 : 50,000



LEGEND

- Sample location of rock or ore
- ▲ Sample location of stream sediment
- AO-101-G Sample for chemical analysis
- AO-102-T Sample for thin section
- AO-103-P Sample for polished section
- AO-104-X Sample for X-ray diffraction test
- AO-105-E Sample for EPMA (electron probe microanalysis)
- AO-106-O Sample for chemical analysis
- AO-107-R Sample for isotopic age determination
- AO-108-D Sample for chemical analysis
- AO-109-F Sample for fossil identification
- AO-110-M Sample for minor element analysis

ABBREVIATION

- | | |
|-----------------------------|------------------------------------|
| Jm-----Jumasha formation | Do-----Dolostone |
| Pt-----Pariatamba formation | Ls-----Limestone |
| Cl-----Chulec formation | Sh-----Shale |
| Ph-----Parahuana formation | Qz-----Quartzite |
| Fr-----Farrat formation | Ss-----Sandstone |
| Cz-----Carhuaz formation | Mr-----Marl |
| St-----Santa formation | |
| Cm-----Chimu formation | Dc-----Dacite & porphyrite |
| Oy-----Oyon formation | Dp-----Dacite porphyry |
| | Tp-----Tonallite porphyry |
| Cp-----Calipuy volcanics | Gp-----Rhyolite & granite porphyry |
| Ig-----Intrusives | Tn-----Tonallite |
| | Tl-----Tuff & tuff breccia |
| | Ad-----Andesite |



G I

G 2

SD-16

CO-114-GM(Ph)-Ls
CO-125-G(Jm)-Ls
CO-115-G(CI)-Ls
CO-126-G(Jm)-Ls
CO-130-G(PH)-Ls
CO-117-G(PH)-Ls
CO-118-G(PH)-Ls
CO-119-G(CI)-Ls
CO-120-G(PH)-Ls
CO-121-TRD(Ig)-To
CO-135-G(PH)-Ls
CO-134-G(CI)-Ls
CO-122-TRD(Ig)-To

SD-3
SD-29
SD-30
SD-28

SD-35
SD-34
SD-33
SD-32
SD-31
SD-30
SD-29
SD-28
SD-27
SD-26
SD-25
SD-24
SD-23
SD-22
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SD-19
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SD-16
SD-15
SD-14
SD-13
SD-12
SD-11
SD-10
SD-9
SD-8
SD-7
SD-6
SD-5
SD-4
SD-3
SD-2
SD-1

NO-115-G(SI)-Ls
NO-112-G(PH)-Ls
NO-111-G(PH)-Ls
NO-114-G(SI)-Ls
NO-113-G(TI)-Gp
NO-114-G(SI)-Ls
NO-116-G(SI)-Ls
NO-117-G(SI)-Ls
NO-118-G(SI)-Dol
NO-119-G(SI)-Dol
NO-120-G(SI)-Ls
NO-135-G(PH)-GSI-Dol
NO-137-P.XE(SI)-Gp
NO-141-G(Cp)-TI
NO-142-G(Cp)-TI
NO-146-G(TI)-Ad
NO-154-G(SI)-Dol
NO-155-G(SI)-Dol
NO-153-G(Jm)-Ls
NO-152-G(Cp)-TI
NO-151-G(Cp)-Gai
NO-153-G(Jm)-Ls
NO-150-G(Jm)-Ls
NO-138-G(Jm)-Ls
NO-136-G(MSI)-Ls

BO-107-G(Fr)-Sa
BO-106-G(Cz)-Sa
BO-109-G(SI)-Dol
BO-111-G(PH)-Ls
BO-114-G(PH)-Ls
BO-122-G(SI)-Ls
BO-131-G(SI)-Gs
BO-129-G(SI)-Gs
BO-128-G(SI)-Gs
BO-127-G(Cm)-Sa
BO-115-G(SI)-Ls
BO-114-G(SI)-Ls
BO-149-G(TI)-Dol
BO-145-G(Ig)-Dol
BO-175-G(PH)-Ls
BO-148-G(TI)-Dol
BO-152-G(Cp)-TI
BO-133-G(Jm)-Ls
BO-134-G(Ig)-Ls
BO-150-G(Jm)-Ls
BO-138-G(Jm)-Ls
BO-142-G(TI)-Sa
BO-143-G(SI)-Ls
BO-136-G(MSI)-Ls

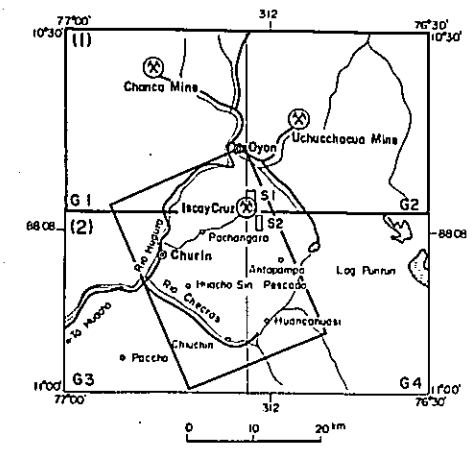
NO-123-G(Cm)-Qz
NO-124-G(MSI)-Ls
NO-125-G(MSI)-Dol
NO-126-G(SI)-Dol
NO-127-G(SI)-Ls
NO-128-G(MSI)-Dol
BO-104-G(SI)-Ls
BO-131-G(SI)-Gs
BO-130-G(SI)-Gs
BO-129-G(SI)-Gs
BO-128-G(SI)-Gs
BO-127-G(Cm)-Sa
BO-115-G(SI)-Ls
BO-114-G(SI)-Ls

SD-19
BO-112-G(MSI)-Ls
CO-164-T(Ig)-Dol
CO-166-G(SI)-Ls
CO-162-G(TI)-Gp
CO-159-G(SI)-Ls
CO-167-G(CI)-Ls
CO-168-G(CI)-Ls
CO-169-G(Ph)-Ls
CO-156-G(CI)-Ls
CO-157-G(MPH)-Ls
SD-20
CO-147-G(SI)-Ls
AD-127-G(SI)-Ls
CO-148-G(SI)-Ls
CO-149-G(PH)-Ls
AD-126-G(PH)-Ls
CO-155-G(PH)-Ls
SD-26
CO-150-G(CI)-Ls
SD-27
SD-183-G(PH)-Ls
AD-125-G(PH)-Ls
AD-123-G(SI)-Ls
CO-153-G(SI)-Ls
CO-152-G(SI)-Ls

AD-124-G(SI)-Ls
SD-197-G(SI)-Ls
SD-184-G(Cz)-Sa
SD-194-G(MSI)-Ls
SD-177-G(SI)-Ls
SD-182-G(Cz)-Sa

SD-194-G(MSI)-Ls
SD-177-G(SI)-Ls
SD-182-G(Cz)-Sa

LOCATION MAP FOR SAMPLES
IN THE SURVEYED AREA
(NORTHERN PART)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980
prepared by MESCO, Inc

Scale 1 : 50,000



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- ▲ Sample location of stream sediment
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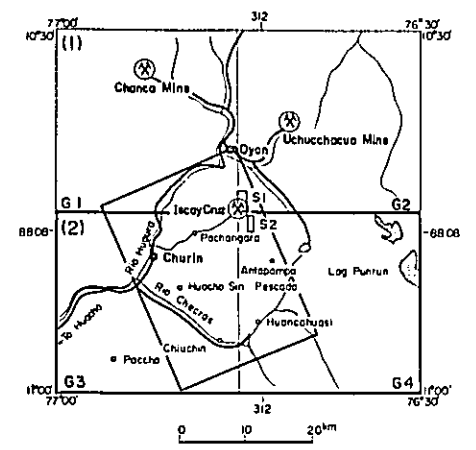
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| | Tp-----Tonalite porphyry |
| Cp-----Calipuy volcanics | Gp-----Rhyolite & granite porphyry |
| Iq-----Intrusives | Tn-----Tonalite |
| | Tt-----Tuff & tuff breccia |
| | Ad-----Andesite |
| | |
| | Or-----Ore |
| | Gs-----Gassan |
| | Gy-----Gypsum |
| | Sk-----Skarn |

G 2

- 0-107-G(Fr-Ss)
- 06-G(Cz-Ss)
- 9-G(Si-Dp)
- NO-123-G(Cm-Oz)
- NO-124-G(M(Si)-Ls)
- NO-125-G(M(Si)-Da)
- NO-126-G(Si-Da)
- NO-127-G(Si-Ls)
- NO-128-G(M(Si)-Da)
- BO-104-G(Si-Ls)
- BO-131-G(Si-Gs)
- BO-130-G(Si-Gs)
- BO-129-G(Si-Gs)
- BO-128-G(Si-Gs)
- BO-127-G(Cm-Ss)
- BO-15-G(Si-Ls)
- BO-14-G(Si-Ls)
- SO-19
- BO-112-G(M(Si)-Ls)
- CO-164-T(Ig-Dp)
- CO-166-G(Si-Ls)
- CO-162-G(TI(g)-Op)
- CO-159-G(Si-Ls)
- CO-167-G(CI-Ls)
- CO-168-G(CI-Ls)
- CO-169-G(Ph-Ls)
- CO-156-G(CI-Ls)
- CO-157-G(M(Ph)-Ls)
- SO-20
- CO-147-G(Si-Ls)
- AO-127-G(Si-Ls)
- CO-148-G(Si-Ls)
- CO-149-G(Ph-Ls)
- AO-126-G(Ph-Ls)
- CO-155-G(Ph-Ls)
- SO-26
- CO-150-G(CI-Ls)
- SO-27
- SO-183-G(Ph-Ls)
- AO-128-G(Ph-Ls)
- AO-123-G(Si-Ls)
- CO-153-G(Si-Cs)
- CO-152-G(Si-Ls)
- SO-142-G(Cm-Ss)
- SO-143-G(Si-Ls)
- SO-136-G(Si-Ls)
- SO-193-G(Si-Ls)
- SO-194-G(M(Si)-Ls)
- SO-185-G(Cz-Sk)
- SO-197-G(Si-Ls)
- SO-184-G(Cz-Sk)
- SO-177-G(Si-Ls)

GEOLOGICAL SURVEY
OF
THE OYON AREA, PERU

LOCATION MAP FOR SAMPLES
IN THE SURVEYED AREA
(SOUTHERN PART)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980
prepared by MESCO, Inc.

Scale 1 : 50,000

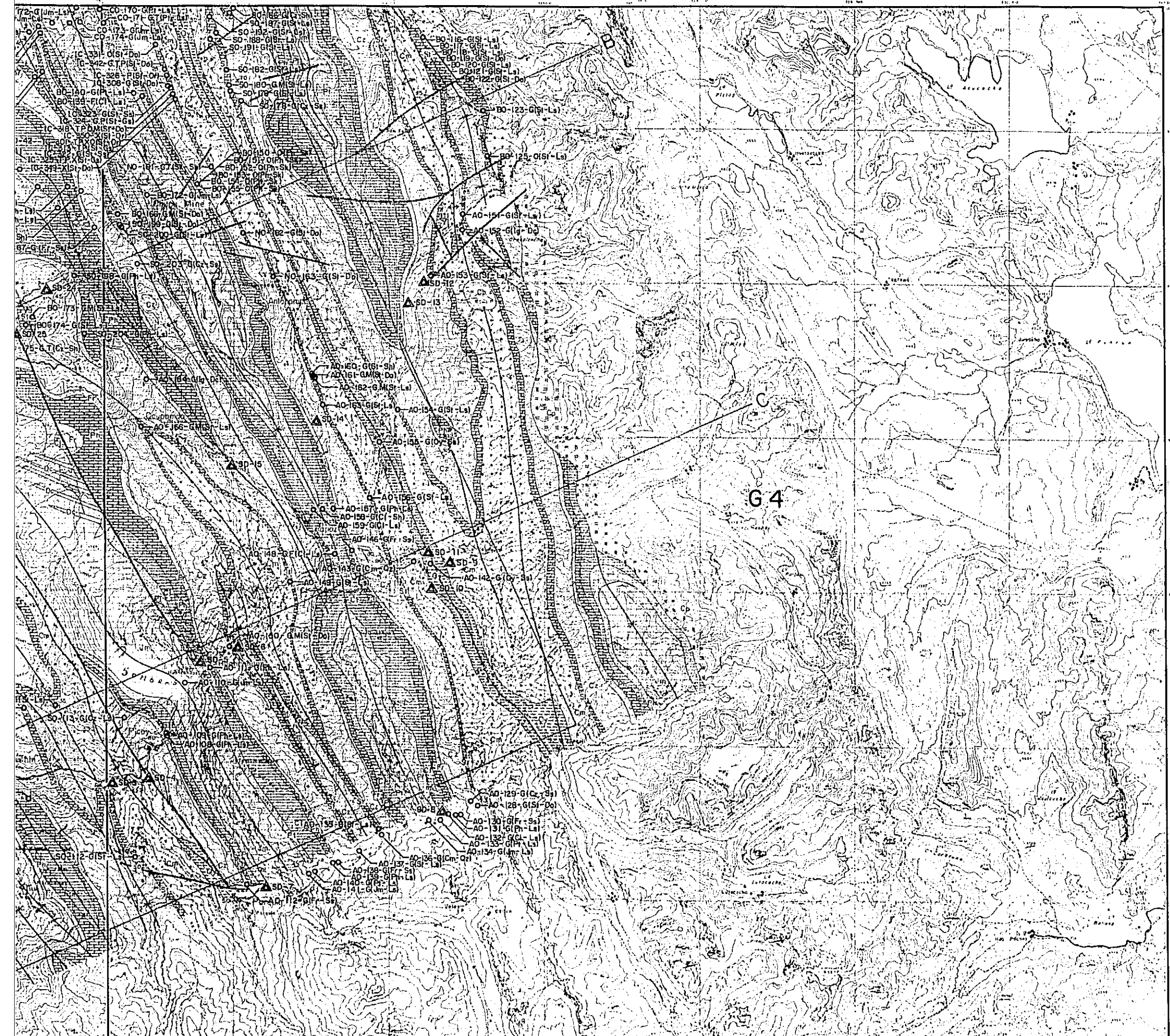


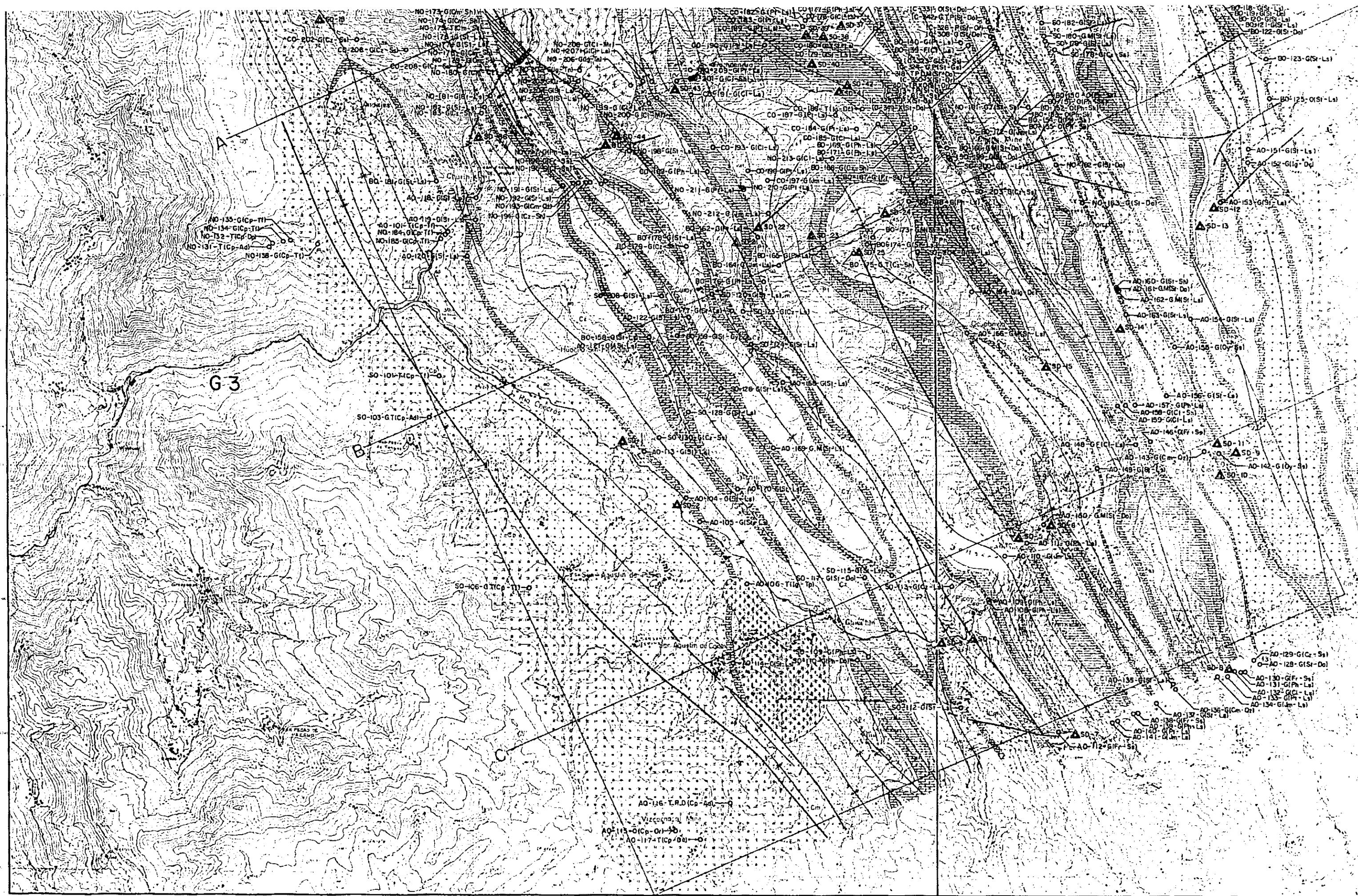
LEGEND

- Sample location of rock or ore
 - ▲ Sample location of stream sediment
- | | |
|----------|--|
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ABBREVIATION

- | | | | |
|----|----------------------|----|-----------------------------|
| Jm | Jumasha formation | Da | Dolostone |
| Pt | Parlatambo formation | Ls | Limestone |
| Cl | Chulec formation | Sh | Shale |
| Ph | Parihuanca formation | Oz | Quartzite |
| Fr | Farrat formation | Ss | Sandstone |
| Cz | Carhuaz formation | Mr | Mari |
| St | Santa formation | Dc | Dacite B porphyrite |
| Cm | Chimu formation | Dp | Dacite porphyry |
| Oy | Oyon formation | Tp | Tonalite porphyry |
| Cp | Calipuy volcanics | Gp | Rhyolite B granite porphyry |
| Ig | Intrusives | Tn | Tonalite |
| | | Tf | Tuff B tuff breccia |
| | | Ad | Andesite |





G3

A

B

C

AO-116-T.R.D(Co-Ad)
Viccocha, M.
AO-115-GIC-Or-50
AO-117-TIC-00

AO-129-GIC-Sa
AO-128-GIS-Do
AO-130-GIF-Sa
AO-131-GIF-Ls
AO-132-GIC-Ls
AO-133-GIF-Ls
AO-134-GIF-Ls

AO-142-GIO-Sa
AO-143-GIC-Or
AO-144-GIS-Ls
AO-145-GIF-Sa
AO-146-GIF-Sa

AO-154-GIS-Ls
AO-155-GIO-Sa
AO-156-GIS-Ls
AO-157-GIF-Ls
AO-158-GIC-Sa
AO-159-GIC-Ls

AO-162-GMS-Ls
AO-163-GIS-Ls
AO-164-GIS-Ls
AO-165-GIS-Ls
AO-166-GMS-Ls

AO-178-GIC-Sa
AO-179-GIC-Sa
AO-180-GMS-Ls
AO-181-GIS-Ls
AO-182-GIS-Ls
AO-183-GIC-Sa

AO-184-GIC-TI
AO-185-GIC-TI
AO-186-GIC-TI
AO-187-GIC-TI
AO-188-GIC-TI

AO-191-GIS-Ls
AO-192-GIS-Ls
AO-193-GIC-Or
AO-194-GIC-Sa
AO-195-GIC-Sa

AO-200-GIC-Sa
AO-201-GIC-Sa
AO-202-GIC-Sa
AO-203-GIC-Sa
AO-204-GIC-Sa

AO-206-GIC-TI
AO-207-GIC-Ls
AO-208-GIC-Ls
AO-209-GIC-Ls
AO-210-GIC-Ls

AO-211-GIF-Ls
AO-212-GIF-Ls
AO-213-GIC-Ls
AO-214-GIC-Ls
AO-215-GIC-Ls

AO-216-GIC-Ls
AO-217-GIC-Ls
AO-218-GIC-Ls
AO-219-GIC-Ls
AO-220-GIC-Ls

AO-221-GIC-Ls
AO-222-GIC-Ls
AO-223-GIC-Ls
AO-224-GIC-Ls
AO-225-GIC-Ls

AO-226-GIC-Ls
AO-227-GIC-Ls
AO-228-GIC-Ls
AO-229-GIC-Ls
AO-230-GIC-Ls

AO-231-GIC-Ls
AO-232-GIC-Ls
AO-233-GIC-Ls
AO-234-GIC-Ls
AO-235-GIC-Ls

AO-236-GIC-Ls
AO-237-GIC-Ls
AO-238-GIC-Ls
AO-239-GIC-Ls
AO-240-GIC-Ls

AO-241-GIC-Ls
AO-242-GIC-Ls
AO-243-GIC-Ls
AO-244-GIC-Ls
AO-245-GIC-Ls

AO-246-GIC-Ls
AO-247-GIC-Ls
AO-248-GIC-Ls
AO-249-GIC-Ls
AO-250-GIC-Ls

AO-251-GIC-Ls
AO-252-GIC-Ls
AO-253-GIC-Ls
AO-254-GIC-Ls
AO-255-GIC-Ls

AO-256-GIC-Ls
AO-257-GIC-Ls
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AO-260-GIC-Ls

AO-261-GIC-Ls
AO-262-GIC-Ls
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AO-266-GIC-Ls
AO-267-GIC-Ls
AO-268-GIC-Ls
AO-269-GIC-Ls
AO-270-GIC-Ls

AO-271-GIC-Ls
AO-272-GIC-Ls
AO-273-GIC-Ls
AO-274-GIC-Ls
AO-275-GIC-Ls

AO-276-GIC-Ls
AO-277-GIC-Ls
AO-278-GIC-Ls
AO-279-GIC-Ls
AO-280-GIC-Ls

AO-281-GIC-Ls
AO-282-GIC-Ls
AO-283-GIC-Ls
AO-284-GIC-Ls
AO-285-GIC-Ls

AO-286-GIC-Ls
AO-287-GIC-Ls
AO-288-GIC-Ls
AO-289-GIC-Ls
AO-290-GIC-Ls

AO-291-GIC-Ls
AO-292-GIC-Ls
AO-293-GIC-Ls
AO-294-GIC-Ls
AO-295-GIC-Ls

AO-296-GIC-Ls
AO-297-GIC-Ls
AO-298-GIC-Ls
AO-299-GIC-Ls
AO-300-GIC-Ls

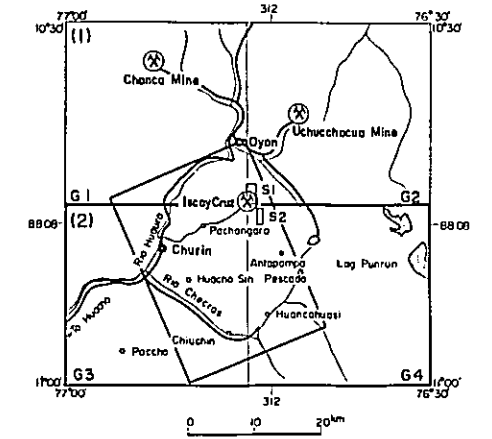
AO-301-GIC-Ls
AO-302-GIC-Ls
AO-303-GIC-Ls
AO-304-GIC-Ls
AO-305-GIC-Ls

AO-306-GIC-Ls
AO-307-GIC-Ls
AO-308-GIC-Ls
AO-309-GIC-Ls
AO-310-GIC-Ls

AO-311-GIC-Ls
AO-312-GIC-Ls
AO-313-GIC-Ls
AO-314-GIC-Ls
AO-315-GIC-Ls

AO-316-GIC-Ls
AO-317-GIC-Ls
AO-318-GIC-Ls
AO-319-GIC-Ls
AO-320-GIC-Ls

LOCATION MAP FOR SAMPLES
IN THE SURVEYED AREA
(SOUTHERN PART)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1980
prepared by MESCO, Inc.

Scale 1 : 50,000

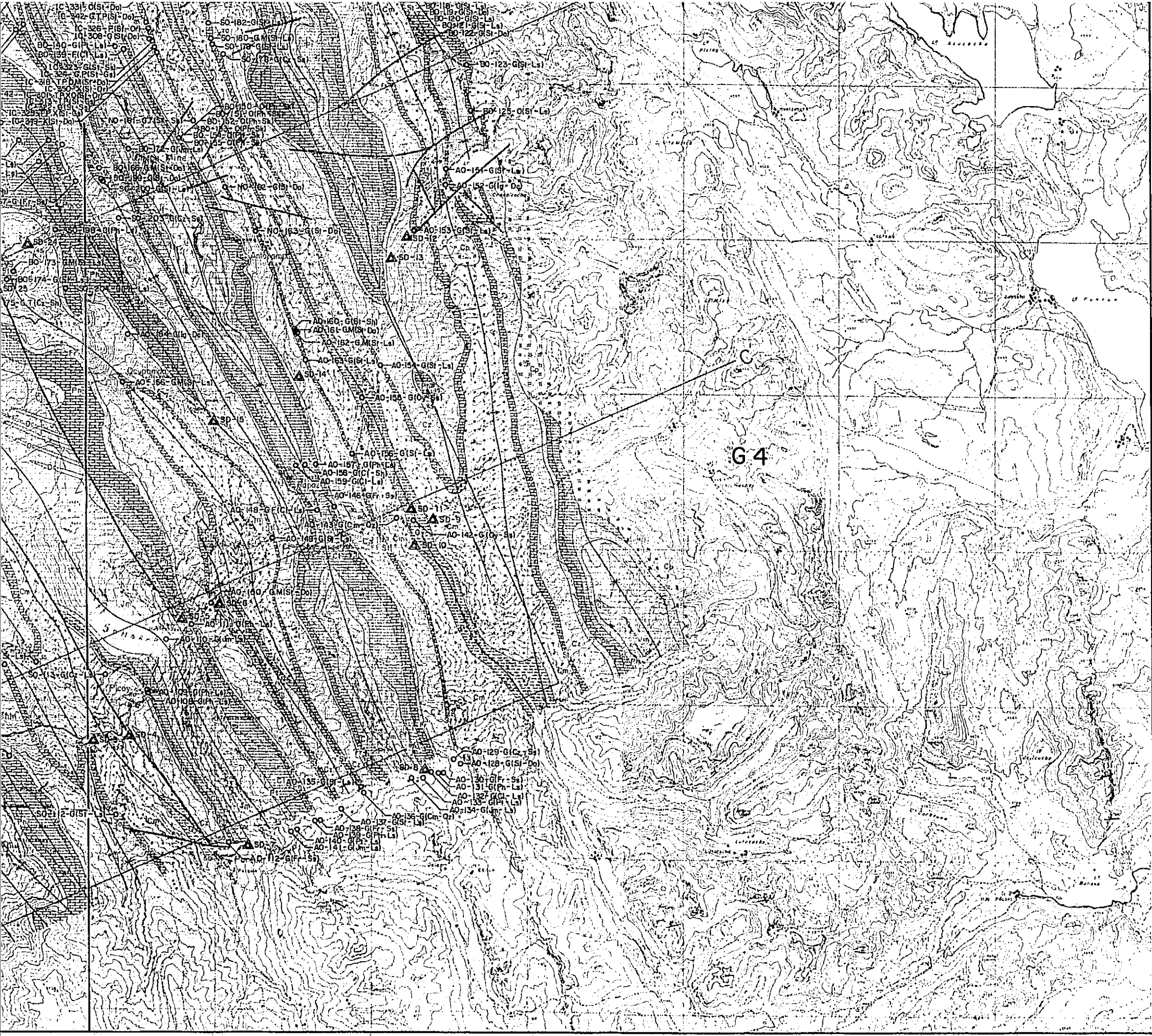


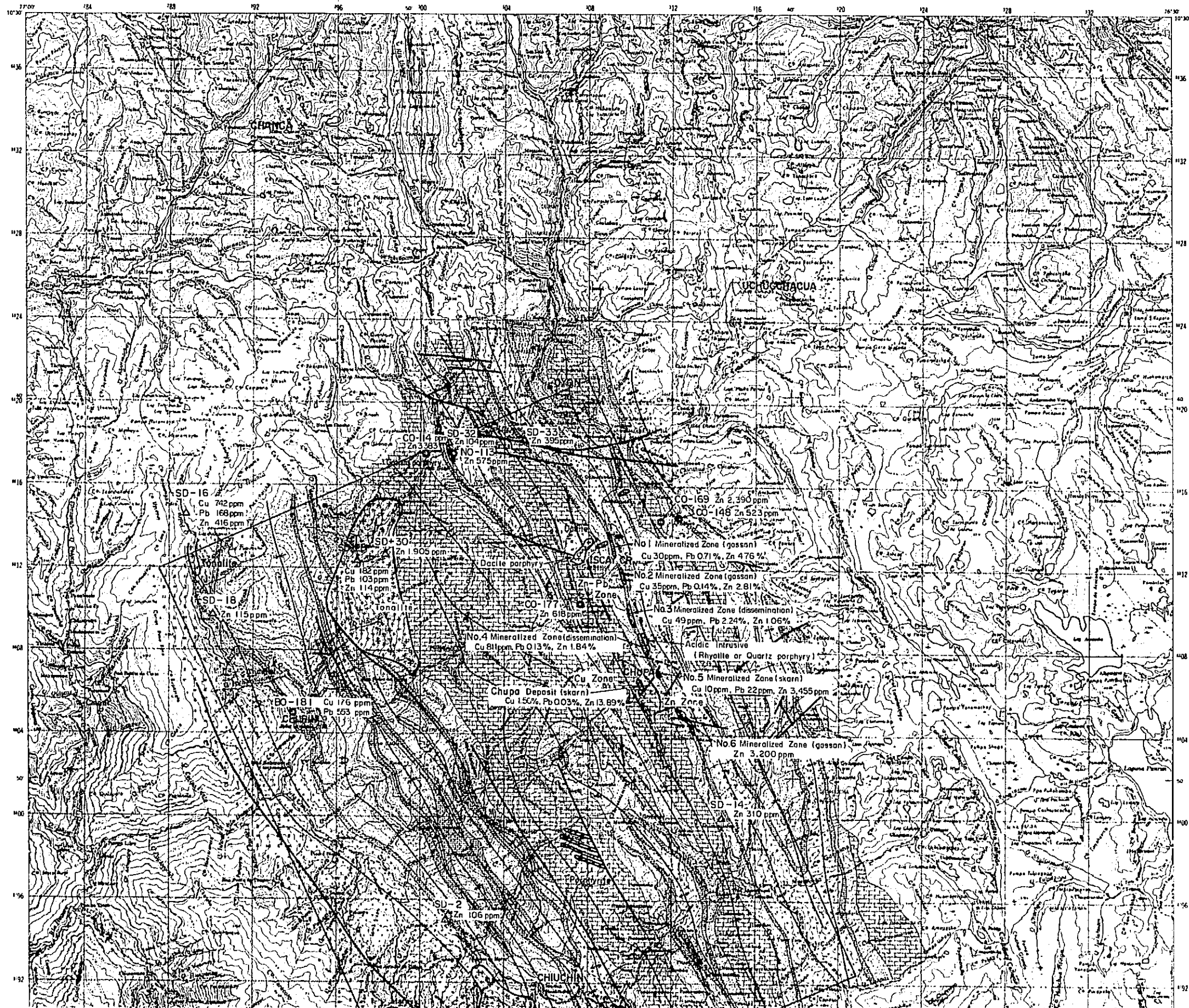
LEGEND

- — Sample location of rock or ore
- △ — Sample location of stream sediment
- AO-101-G Sample for chemical analysis
- AO-102-T Sample for thin section
- AO-103-P Sample for polished section
- AO-104-X Sample for X-ray diffraction test
- AO-105-E Sample for EPMA (electron probe microanalysis)
- AO-106-O Sample for chemical analysis
- AO-107-R Sample for isotopic age determination
- AO-108-D Sample for chemical analysis
- AO-109-F Sample for fossil identification
- AO-110-M Sample for minor element analysis

ABBREVIATION

- | | | | | | |
|----|-------|----------------------|----|-------|-----------------------------|
| Jm | ----- | Jumasha formation | Do | ----- | Dolostone |
| Pl | ----- | Parlatambo formation | Ls | ----- | Limestone |
| Cl | ----- | Chulec formation | Sh | ----- | Shale |
| Ph | ----- | Panahuanca formation | Qz | ----- | Quartzite |
| Fr | ----- | Farral formation | Ss | ----- | Sandstone |
| Cz | ----- | Carhuaz formation | Mr | ----- | Marl |
| Si | ----- | Santa formation | | | |
| Cm | ----- | Chimu formation | Dc | ----- | Dacite & porphyry |
| Oy | ----- | Oyon formation | Dp | ----- | Dacite porphyry |
| | | | Tp | ----- | Tonalite porphyry |
| Cp | ----- | Calipuy volcanics | Gp | ----- | Rhyolite & granite porphyry |
| Ig | ----- | Intrusives | Tn | ----- | Tonalite |
| | | | Tf | ----- | Tuff & tuff breccia |
| | | | Ad | ----- | Andasite |
| | | | Or | ----- | Ore |
| | | | Gs | ----- | Gassan |
| | | | Gy | ----- | Gypsum |
| | | | Sk | ----- | Skarn |





Pl. 7
08151

GEOLOGICAL SURVEY
OF
THE OYÓN AREA, PERU

**CORRELATION MAP OF THE MINERALIZED ZONE,
GEOCHEMICAL ANOMALY, AND GEOLOGICAL
STRUCTURE IN THE SURVEYED AREA**

METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
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FEBRUARY 1980

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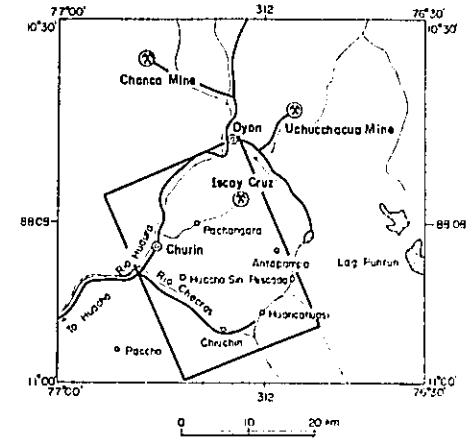
LEGEND

- Jumasha, Parlatambo and Chulec, Parahuancra formation
- Farrat and Carhuaz formation
- Santa formation
- Chimu and Oyón formation
- Callipuy volcanic rock
- Igneous rock
- Fault
- Anticlinal folding axis
- Synclinal folding axis
- Overturned folding axis
- Operating mine
- Abandoned mine
- Detailed survey area

△SD-2 Sample location of stream sediments

○CO-148 Sample location of rock

GEOCHEMICAL ANOMALY, AND GEOLOGICAL STRUCTURE IN THE SURVEYED AREA



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Scale 1 : 100,000



LEGEND

- Jumasha, Pariatambo and Chulec, Parichuanca formation
- Farrat and Carhuaz formation
- Santa formation
- Chimu and Oyón formation
- Callpuy volcanic rock
- Igneous rock
- Fault
- Anticlinal folding axis
- Synclinal folding axis
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- Operating mine
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△SD-2 Sample location of stream sediments

□CO-148 Sample location of rock

