

86-280-14771

COMINCO LTD.

EXPLORATION  
NTS: 92G/9W/16W

WESTERN DISTRICT

ASSESSMENT REPORT

1985 GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

SLO 1 AND 2 MINERAL CLAIMS

SLOQUET CREEK AREA - NEW WESTMINSTER MINING DIVISION

BRITISH COLUMBIA

LATITUDE: 49°45'N

LONGITUDE: 122°21'W

OWNER AND OPERATOR

COMINCO LTD.

PERIOD OF FIELD WORK: SEPTEMBER 30 - OCTOBER 2, 1985

FILMED

APRIL 1986

A.C. FREEZE

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

14-771

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ASSESSMENT REPORT

1985 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE SLO 1 AND 2 MINERAL CLAIMS  
SLOQUET CREEK AREA - NEW WESTMINSTER MINING DIVISION - BRITISH COLUMBIA

SUMMARY

In 1985 work on the Slo property comprised a detailed examination of the gossan zone exposed in a cliff face above a strong copper lead zinc geochemical soil anomaly located in 1980.

The program involved mapping and chip sampling traverses across the gossan zone - down a cliff face to the soil anomaly. Gossaneous outcrops in steep gullies were chip sampled in detail. Mineralized float samples were also collected. In total, 35 rock samples were analysed for copper lead zinc silver gold antimony arsenic mercury and barium.

INTRODUCTION

The Slo property is located in rugged mountainous terrain 95 km northeast of Vancouver and 15 km west of the northern end of Harrison Lake (Plate 1). The claims are situated in the New Westminister Mining Division at 49°45' north latitude and 122°21' west longitude; NTS 92/G/16W, and lie immediately east of Garibaldi Park. Good logging road access terminates at a bridge washout near hot springs, 3.0 km east of the property. From the washout, the property is best accessed by helicopter; either from Aggasiz, or Pemberton.

The Slo 1 (20 units) and Slo 2 (20 units) claims are 100 percent owned by Cominco Ltd. and were recorded October 25, 1979 (Plate 2).

HISTORY OF WORK IN THE AREA:

In the summer of 1944 Cominco prospectors panned traces of gold mineralization in Simpson Creek. Followup prospecting lead to the discovery of an extensive gossan zone on a cliff face south of Simpson Creek. Further sampling revealed the association of gold with galena and sphalerite. The Spring claims were staked but were allowed to lapse in 1945.

In 1979 Cominco personnel conducted a silt sampling-prospecting program in the Simpson Creek Valley. The Slo claims were staked to cover large gossan zones within a felsic volcanic pile anomalous in copper lead and zinc.

2.

In 1980, a contour soil sampling program resulted in delineation of a number of copper, lead, zinc anomalies.

Work in 1981 comprised fill in contour soil sampling, rock sampling, prospecting and mapping. This program led to the discovery of a new showing of silicified cherty rhyolite tuffite in North Sloquet valley. A sample of this material yielded 2.0 percent zinc, 0.35 percent lead and 0.5 percent copper across 1.0 metre.

Between September 30 and October 2, 1985, two temporary geologists; Guy Della Valle and Tom Fitzmaurice worked on the claims. The primary objective of the program was to prospect the gossanous cliff zone south of Simpson Creek and trace mineralized float to an outcrop source.

Traverses were restricted to steep walled creek gullies cutting the gossan zone. Only traces of base metals were discovered in outcrop.

#### REGIONAL GEOLOGICAL SETTING

According to Roddick (1966) the claim area is underlain by a volcano-sedimentary pendant within the Coast Range Complex, belonging to the Fire Lake Group. Age of the rocks is believed to be Jurassic-Cretaceous, possibly correlative with rocks of the Harrison Lake Formation to the southwest and the Britannia pendant to the northwest.

The metamorphic grade of the rocks on the claims is lower to middle greenschist except near the contacts with intrusive rocks where migmatization occurs.

#### DETAILED GEOLOGY AND MINERALIZATION

The property is underlain by a sequence of shallow dipping felsic fragmentals which interfinger with andesitic flows. A horizon of rhyolite cherty tuffite lies near the top of the sequence and is capped by a well bedded sequence of argillaceous volcanics. To the north and south of the claims the volcanics and sediments are cut by intrusions of dioritic composition.

A facies change is suggested in the volcanics varying from dominantly felsic to the south of andesitic with progression north. Rock types from oldest to youngest are described as follows:

1. Andesitic Flows: The andesites are medium grained, green, feldspar crystal-rich (3-4 mm) and often contain felsic lapilli clasts.

North of Simpson Creek there is a distinct buildup of andesitic flows (Sharp 1981) but south of the creek the andesites thin and become fine grained amygdaloidal and medium grained crystal rich flows. Pyrite content generally varies between one and ten percent.

3.

2. Felsic Lapilli Tuff: A build up of felsic pyroclastic fragmental rock in excess of 400 metres is indicated north of Sloquet Creek. Above the strong soil geochemical anomaly south of Simpson Creek, several lenses of massive, rusty weathering pyritic felsic lapilli tuff outcrop. These lenses occur at various stratigraphic levels and appear to pinch and swell as they are difficult to correlate between creek cuts. Typically these rocks are massive structureless lapilli tuffs locally building to coarse breccias.

Pyrite mineralization is ubiquitous and varies between 3 and 40 percent as disseminations and stringers in variously silicified and sericitized rock.

Only scattered grains of galena were observed in outcrop; however many well mineralized float boulders with disseminations and stringers of pyrite, sphalerite and galena were located beneath the gossan zones.

3. Rhyolite Cherty Tuffite: Finely bedded rusty weathering, pyritic cherty tuffites of rhyolitic composition cap the lapilli tuffs and andesites. Traces of copper lead and zinc occur with pyrite but sample S-85-28 (Table 1) of this material was not anomalous in precious metals.

4. Argillaceous Sediments and Dacitic Tuffs: A succession of well bedded argillaceous sediments with siltstone cap the entire sequence and mark the transition to the end of the volcanic cycle. Beds of dacite tuff, 1-2 metres thick occur as intercalations.

The rocks are fine-grained and carry 1-2 percent pyrite.

5. Diorite: Intrusives cut the volcanic-sedimentary package to the south and north of the property. Composition varies from quartz monzonite to diorite to granodiorite.

#### STRUCTURAL GEOLOGY (From Sharp 1981)

The volcano-sedimentary package generally strikes north-south with dips varying between 20 and 40 degrees to the east.

A fault is postulated to occur along the Simpson Creek valley accounting for lithologic variation across the creek.

#### ROCK GEOCHEMICAL SURVEY

Thirty-five rock samples were collected and analyzed for Cu, Pb, Zn, Ag, Au, Sb, As, Hg, and Ba in an attempt to define areas of significant mineralization in the steep walled creek gullies cutting the gossan zones. Sampling was restricted to areas where terrain conditions permitted. Sample locations are outlined on Plates 4, 5, 6.

More detailed chip sample lines were completed in areas denoted Gossan A and Gossan B (Plates 5, 6).

4.

Sample results are listed in Table 1 and sample descriptions are listed in Table 2.

As the number of samples collected was small, there has been no attempt to utilize statistics although it is apparent that silver is anomalous more consistently; than Cu, Pb, Zn, Au. Isolated gold highs are best correlated with silver and there is a definite correlation between anomalous base and precious metal values.

Antimony, arsenic, mercury and barium values are erratic but at times correlate with better base-precious metal results.

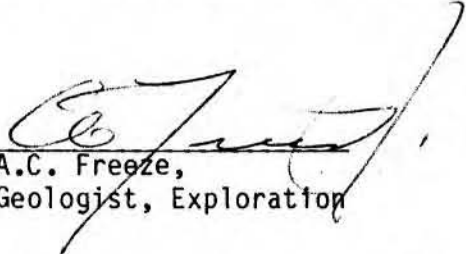
#### INTERPRETATION

The mapping and chip sampling program along the cliff area of the Slo claim group was marginally successful in locating base-precious metal mineralization in a complex altered suite of volcanics and sediments.


Mineralization located to date appears to occur mainly as stockworks thus suggesting an epigenetic origin.

Precious metal values are best correlated with lead and to a lesser extent zinc.

Report by:

  
A.C. Freeze,  
Geologist, Exploration

Approved for  
Release by:

  
W.J. Wolfe,  
Manager, Exploration -  
Western Canada

ACF/pm  
7 April 1986

APPENDIX "A"

STATEMENT OF EXPENDITURES

SLO PROPERTY

SEPTEMBER 1, 1985 - APRIL 15, 1986

Salaries: Permanent & Temporary	\$ 3,975
Expense Accounts	330
Geochemistry	945
Transportation	
(a) Helicopter: Casual Charter	1,400
(b) Truck: Rental	250
Domicile	500
Drafting Preparation	<u>600</u>
	\$ 8,000

Signed: \_\_\_\_\_

A.C. FREEZE  
Geologist

APPENDIX "B"

SPECIFIC COSTS FOR SLO PROPERTY

1. Salaries, Field Work

G. Della Valle	5 days @ \$255/day =	\$ 1,125
T. Fitzmaurice	5 days @ \$135/day =	675

2. Salaries, Office

G. Della Valle	2 days @ \$225/day =	\$ 450
A. Freeze	5 days @ \$210/day =	1,050
T. Fitzmaurice	5 days @ \$135/day =	675

3. Expense Accounts (Field) 330

4. Geochemistry: 35 samples x \$27/sample 945

5. Transportation

Helicopter (Highland)	1,400
Truck (Redhawk)	250

6. Domicile (misc. camp supplies) 500

7. Drafting Preparation 600

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Grand Total: \$ 8,000




APPENDIX "C"

STATEMENT OF QUALIFICATIONS

I, ARTHUR C. FREEZE of the City of Vancouver, in the Province of British Columbia, hereby certify:

1. THAT I am a geologist residing at 2891 West 14th Avenue, Vancouver, British Columbia with a business address at 409 Granville Street, Vancouver, British Columbia.
2. That I graduated with a B.Sc. in geology from the University of New Brunswick in 1971.
3. THAT I have practised geology with Cominco Ltd. from 1973 to 1986.
4. THAT the program was carried out under my supervision.

Signed:

  
A.C. FREEZE  
Geologist,  
Cominco Ltd.

April 1986

TABLE 1  
SLO PROPERTY

GEOCHEMICAL RESULTS

Sample No.	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Wt Au Gram	Sb ppm	As ppm	Hg ppb	Ba ppm
S-85-1	45	133	250	7.4	<10	5	< 4	50	1100	873
S-85-2	70	179	353	2.6	<10	5	47	1740	1550	1442
S-85-3	155	12800	8440	162.0	392	5	159	1440	30500	2088
S-85-4	69	72	235	0.7	<10	5	< 4	13	50	1119
S-85-5	18	80	102	12.3	20	5	12	292	310	2160
S-85-6	22	15	32	8.9	<10	5	< 4	150	300	496
S-85-7	244	1186	578	17.6	856	5	< 4	442	200	2749
S-85-8	36	27	35	2.9	<10	5	7	147	390	686
S-85-9	48	19	53	6.7	<10	5	11	451	400	693
S-85-10	55	67	187	10.0	40	5	< 4	102	50	2663
S-85-11	29	9	26	0.9	<10	5	9	345	1000	4660
S-85-12	55	4	79	< .4	<10	5	< 4	72	48	1858
S-85-13	44	22	36	1.0	<10	5	13	191	1360	4896
S-85-14	173	15	69	2.3	34	5	< 4	274	900	1527
S-85-15	138	24	91	1.4	<10	5	< 4	205	39000	2595
S-85-16	11	< 4	90	< .4	<10	5	< 4	8	68	89
S-85-17	18	5	19	2.1	<10	5	39	498	850	2813
S-85-18	46	21	545	12.2	62	5	10	247	340	2055
S-85-19	37	49	68	13.4	68	5	< 4	191	320	1342
S-85-20	41	165	150	38.5	180	5	22	720	190	1172
S-85-21	37	26	52	11.1	102	5	8	436	3300	1554
S-85-22	29	< 4	24	< .4	<10	5	< 4	210	618	676
S-85-23	41	< 4	35	3.1	<10	5	11	165	570	671
S-85-24	39	< 4	24	< .4	<10	5	< 4	181	360	1096
S-85-25	17	< 4	26	0.7	<10	5	< 4	259	355	1449
S-85-26	21	13	73	5.5	72	5	9	233	800	1213
S-85-27	46	13	64	2.2	24	5	7	255	380	1231
S-85-28	234	< 4	4170	1.1	<10	5	< 4	17	22	360
S-85-29	32	20	68	3.7	<10	5	16	397	1000	2174
S-85-30	80	4	93	0.8	<10	5	< 4	117	530	1083
S-85-31	590	4	67	7.0	<10	5	< 4	13000	80	191
S-85-32	33	59	88	8.8	<10	5	< 4	147	74	1498
S-85-33	39	22	55	5.2	<10	5	7	567	380	1290
S-85-34	22	10	49	8.9	<10	5	16	363	1000	3300
S-85-35	41	392	140	24.2	200	5	12	211	319	2325

TABLE 2

FLOAT, GRAB AND CHIP SAMPLE DESCRIPTIONS

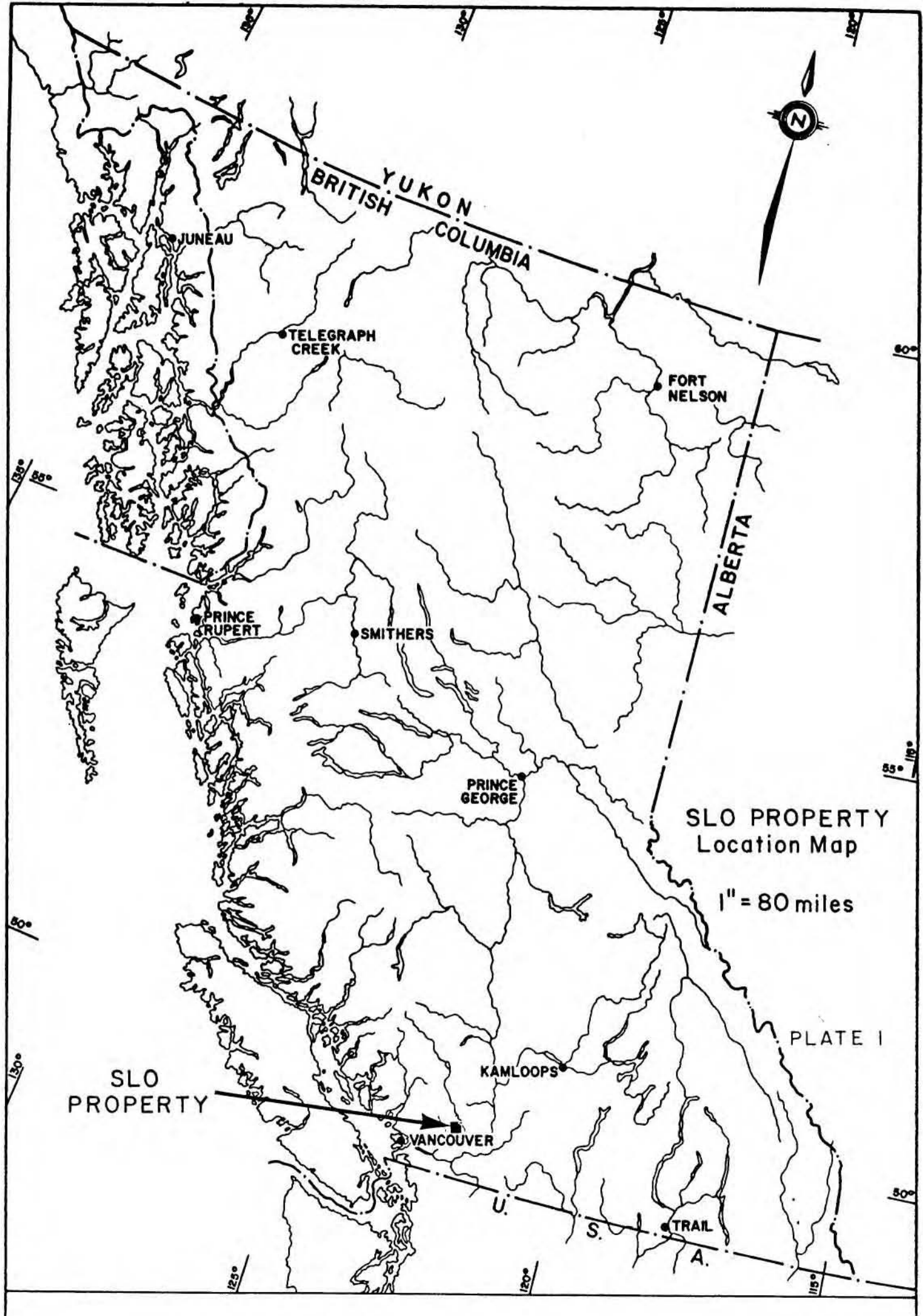
- S-85-1 - CHIP, 5 x 7 metres
  - foliated pyritized, sericitized felsic lapilli tuff
- S-85-2 - GRAB, FLOAT
  - delicate, fine grained pyrite stringers in a felsic fragmental
- S-85-3 - GRAB, FLOAT
  - small stringers and disseminated blebs of sphalerite, galena and pyrite in a chlorite altered felsic fragmental
- S-85-4 - CHIP, 10 metres
  - sample across basal 10 metres of a well bedded pyritic felsic tuff-tuffite
- S-85-5 - GRAB, OUTCROP
  - trace galena in a pyritic siliceous felsic lapilli tuff
- S-85-6 - CHIP, 2 x 2 metres
  - pyritized and sericitized foliated felsic lapilli tuff
- S-85-7 - GRAB, FLOAT
  - blebs of galena in a pyritized felsic tuff
- S-85-8 - CHIP, 1 x 1 metre
  - pyritized massive to blocky jointed highly siliceous ash flow tuff
- S-85-9 - CHIP, 7 metres
  - siliceous ash flow tuff, sheared with limonite and boxwork
- S-85-10- CHIP 5 x 10 metres
  - siliceous ash flow tuff
- S-85-11- GRAB, FLOAT
  - pyritic sericite schist
- S-85-12- GRAB, FLOAT
  - andesitic tuff with disseminated pyrite
- S-85-13- GRAB, FLOAT
  - andesitic tuff with pyrite stringers
- S-85-14- GRAB, FLOAT
  - chlorite altered andesite with pyrite band 3 centimetres thick

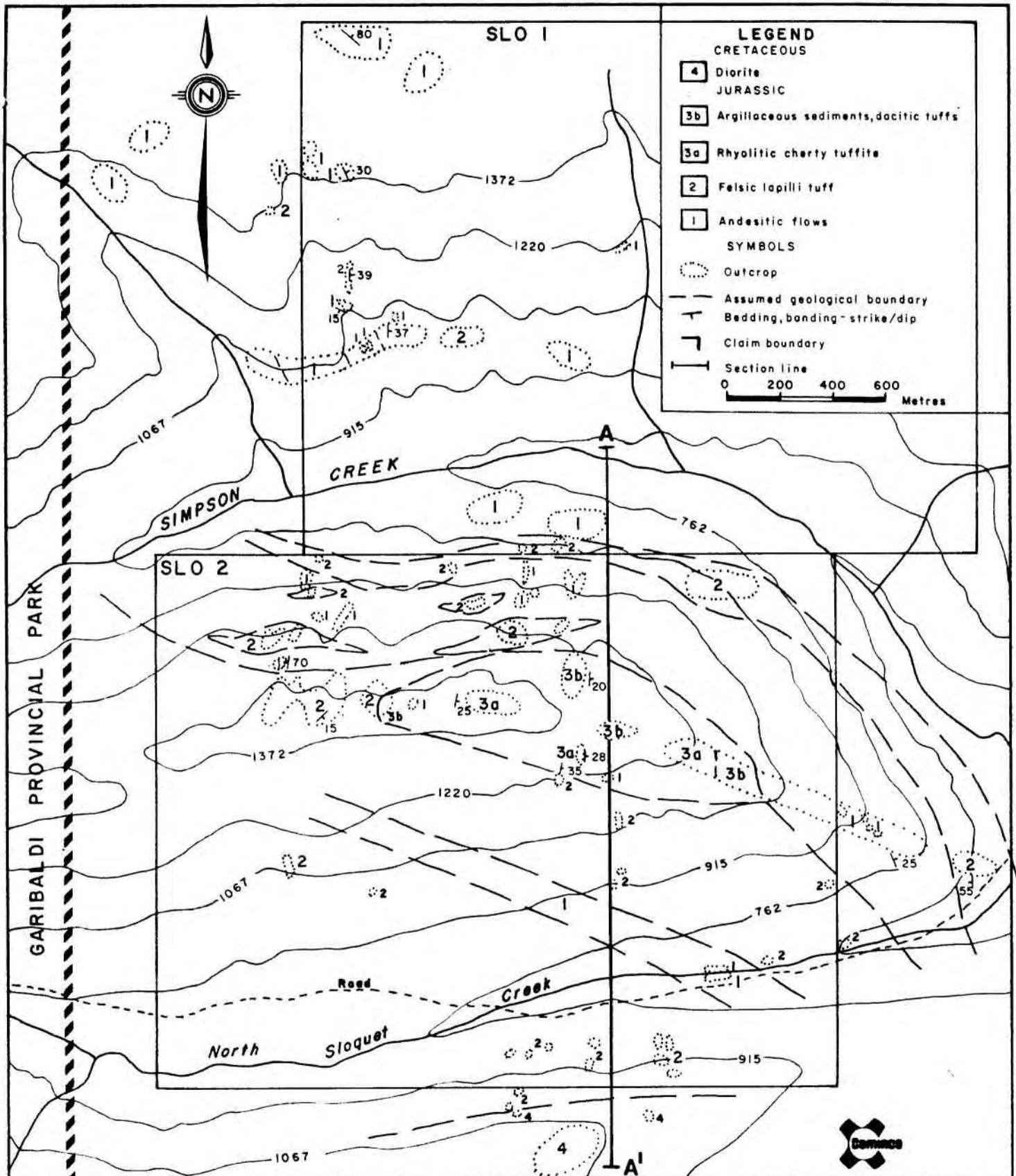
2.

- S-85-15 - GRAB, FLOAT
  - chloritized pyritic andesite with a 5 centimeter thick pyrite band
- S-85-16 - GRAB, FLOAT
  - massive magnetite in skarn with calcite and hornblende crystals
- S-85-17 - GRAB, FLOAT
  - light grey felsic tuff with 50 percent pyrite
- S-85-18 - CHIP, 0-15 metres
  - light grey pyritic lapilli tuff with 10 percent pyrite and weak sericite and chlorite alteration
- S-85-19 - CHIP, 15-30 metres
  - pyritized felsic lapilli tuff
- S-85-20 - CHIP, 30-45 metres
  - pyritized felsic lapilli tuff with weakly disseminated galena mineralization
- S-85-21 - CHIP, 45-60 metres
  - 15-40% pyrite in a chloritic, sericitic felsic fragmental
- S-85-22 - CHIP, 60-75 metres
  - pyritized and sericitized lapilli tuff
- S-85-23 - CHIP, 75-90 metres
  - pyritized and sericitized felsic tuff
- S-85-24 - CHIP, 90-105 metres
  - pyritized and sericitized felsic lapilli tuff.
- S-85-25 - CHIP, 105-120 metres
  - pyritized and sericitized felsic lapilli tuff
- S-85-26 - GRAB, FLOAT
  - felsic lapilli tuff with grey fragments and disseminated pyrite
- S-85-27 - CHIP, 10 metres
  - 10 metres up rusty tributary to east of main gully
  - felsic tuffite with 5-10 percent pyrite.
- S-85-28 - GRAB, FLOAT
  - disseminated chalcopyrite, sphalerite, pyrite and pyrrhotite in dark banded chert.
- S-85-29 - CHIP, 0-20 metres
  - pyritic felsic tuff
- S-85-30 - CHIP, 20-40 metres
  - pyritic felsic tuff

3.

- S-85-31 - GRAB, FLOAT
  - pyrite and arsenopyrite in altered epidote and garnet rock
- S-85-32 - CHIP, 15 metres
  - siliceous, sericitized, pyritized, sheared felsic tuff
- S-85-33 - CHIP, 15 metres
  - sheared, foliated pyritic sericite schist
- S-85-34 - CHIP, 12 metres
  - pyritized and sericitized felsic tuff
- S-85-35 - CHIP, 11.5 metres
  - sericitized and pyritized felsic tuff



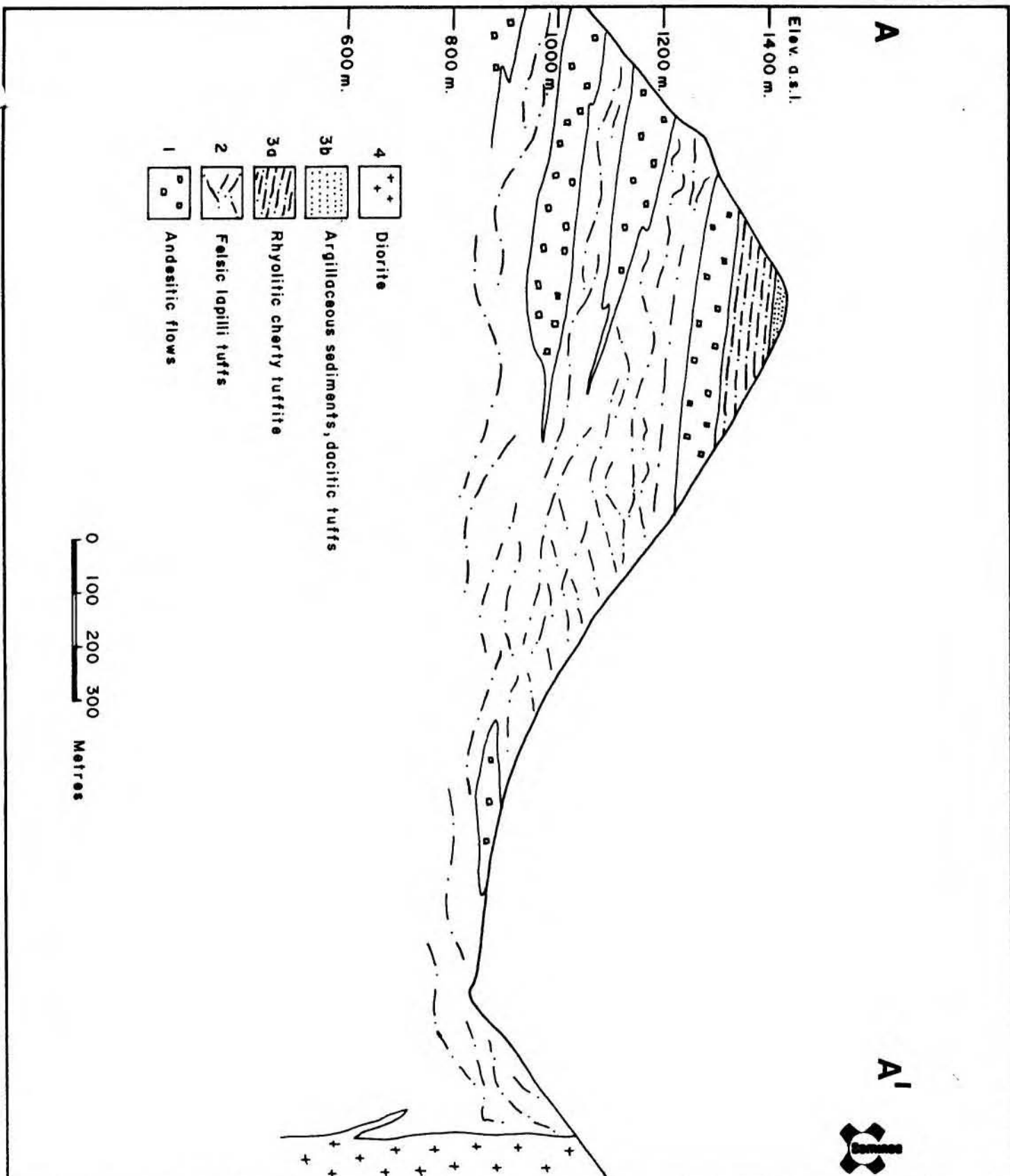


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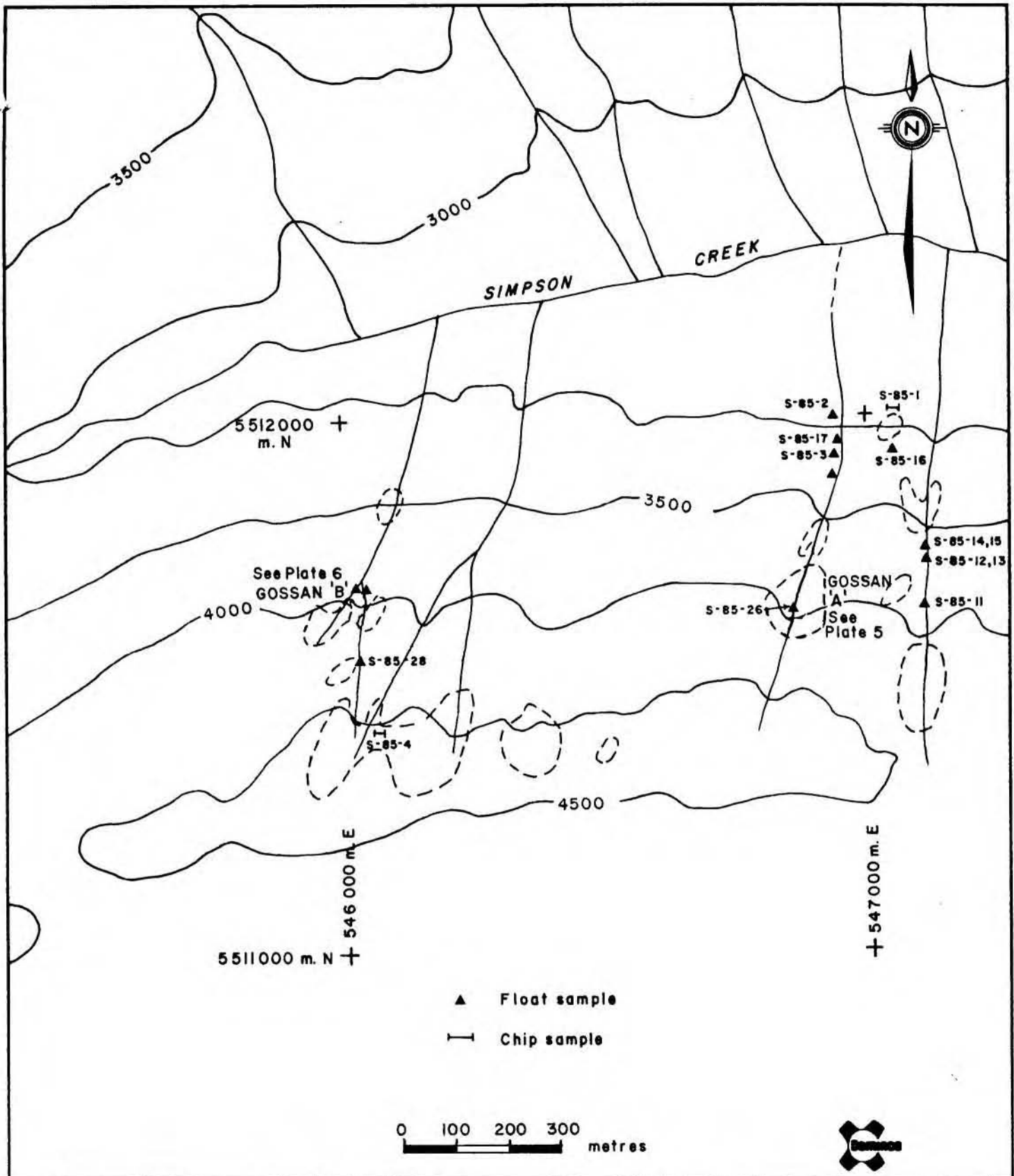
## SLO PROPERTY GEOLOGY AND CLAIM MAP

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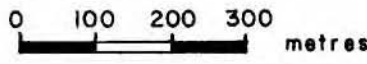


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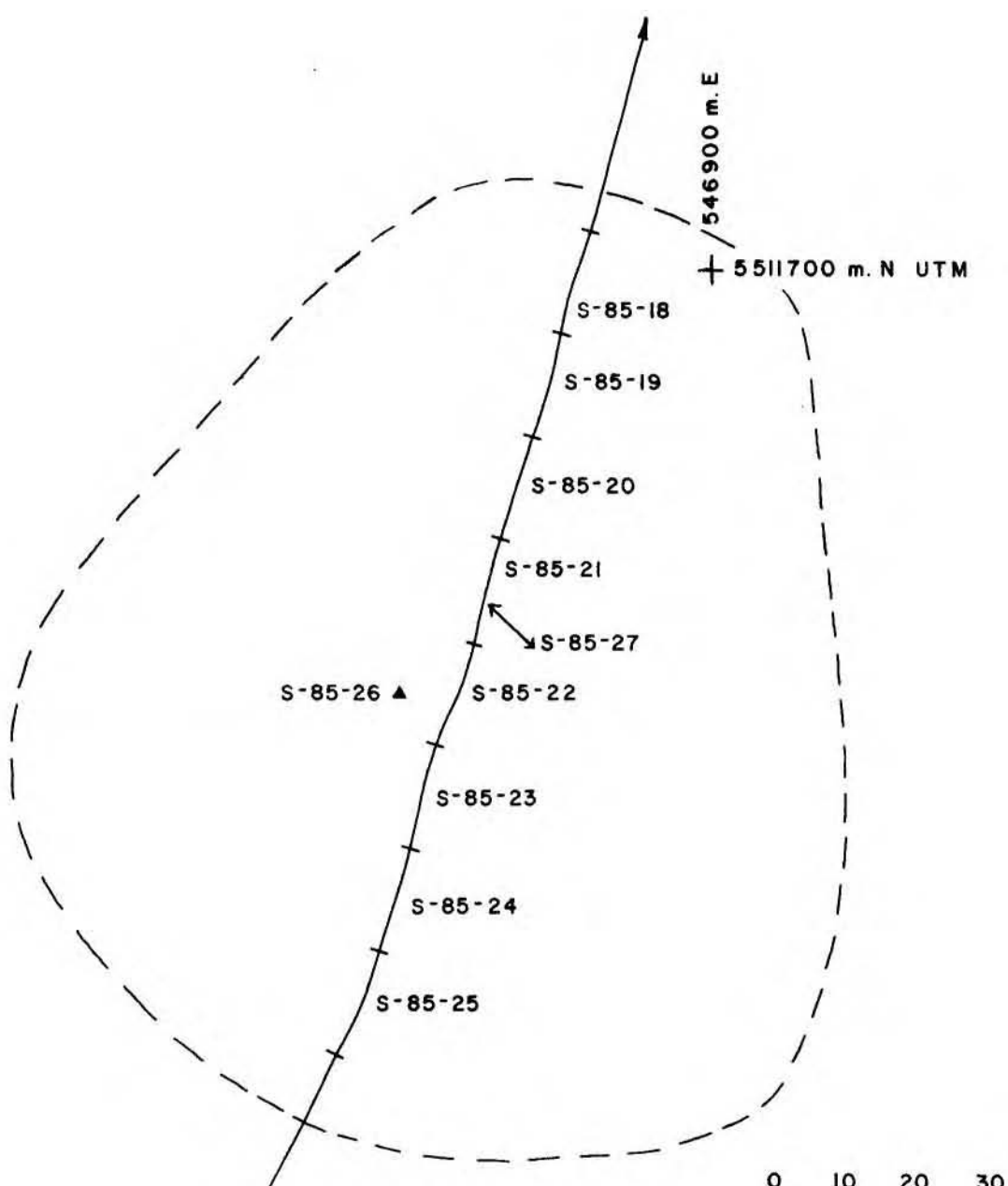
▲ Float sample  
 T Chip sample



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## SLO PROPERTY GENERAL SAMPLE LOCATION MAP

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S-85-26 ▲

S-85-18

S-85-19

S-85-20

S-85-21

S-85-27

S-85-22

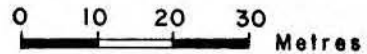
S-85-23

S-85-24

S-85-25

546900 m. E

5511700 m. N UTM



▲ Float sample

┌─┐ Chip sample



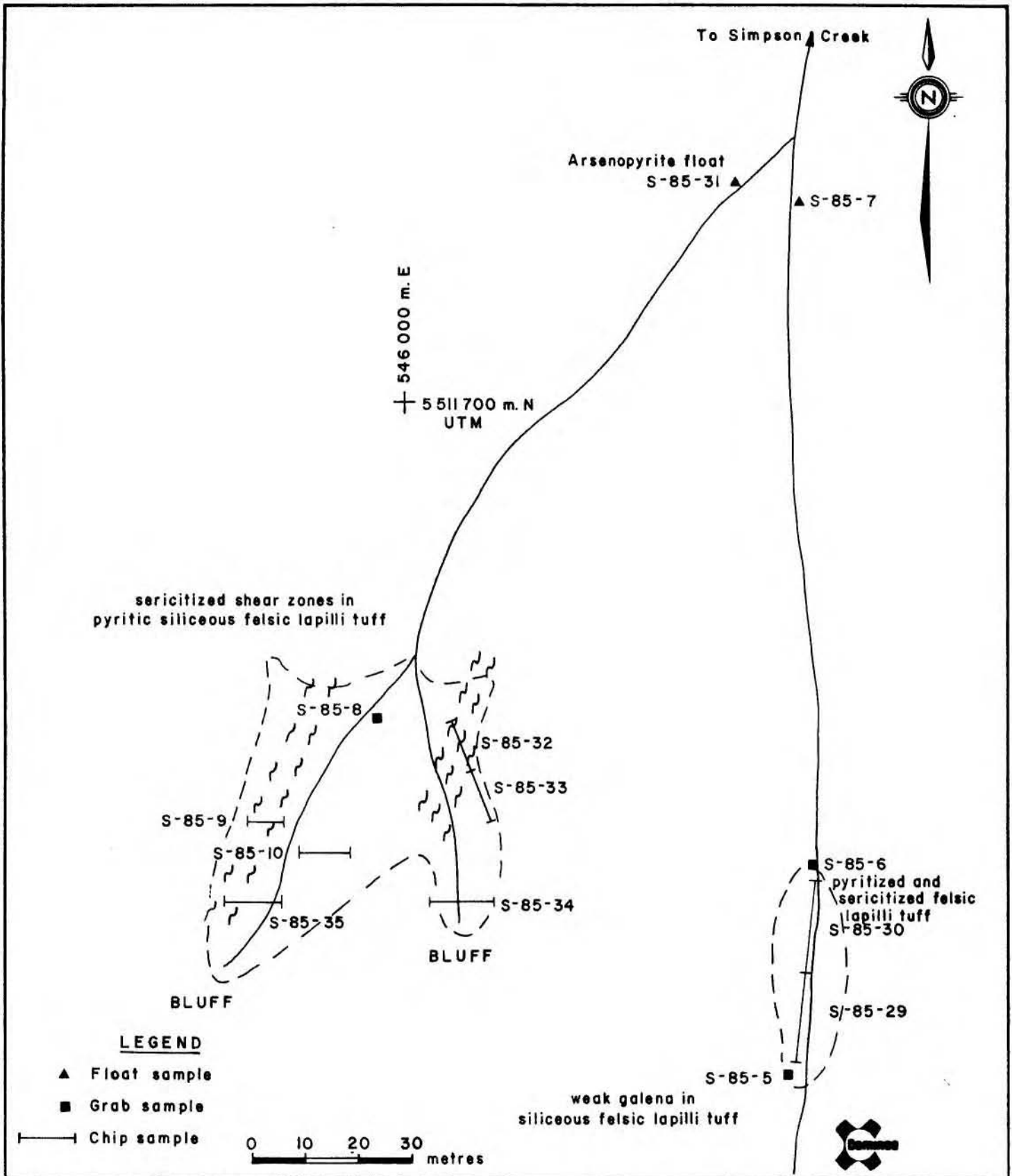
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SLO PROPERTY  
GOSSAN 'A'  
SAMPLE LOCATION MAP

Scale: 1:1000

Date: March, 1986

Plate: 5



Drawn by: TF		Traced by: APR	
Revised by	Date	Revised by	Date

**SLO PROPERTY  
GOSSAN 'B'  
SAMPLE LOCATION MAP**

Scale: 1:1000      Date: March, 1986      Plate: 6