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A GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

OSI M.C. GROUP

7 MILES NORTH-NORTH-EAST OF NINA LAKE

OMINECA MINING DIVISION

British Columbia

93N/15W & 94C/2W

MINERAL CLAIM MAP NTS 93N/15W and 94C/2W

Latitude: 56° 00'N

Longitude: 124° 46'W

OSI 1-32

for

SEREM LTD

by

PIERRE F. SONNENDRUCKER, P.Eng.,

Geological Engineer

Field Work: July 7 - August 28, 1974

Report: May 1975

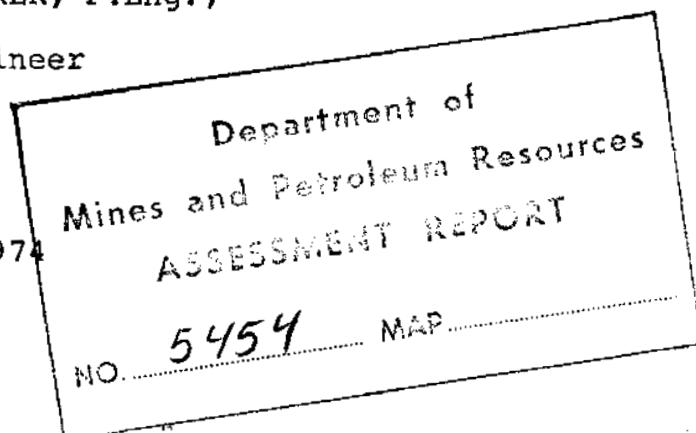


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(168 Rock Samples)

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1. INTRODUCTION

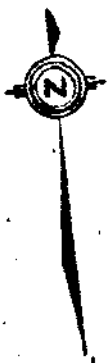
In July-August, 1974, SEREM LTD carried out a detailed geological mapping and rock geochemical sampling on OSI GROUP (OSI M.C. # 1 to 24) and ran a geochemical survey in soils for Pb, Zn and Ag.

A formerly known geochemical anomaly in soils was confirmed and clearly outlined.

At the end of the field survey, a new area of mineralization was discovered and covered by eight additional claims, OSI M.C. # 25 to 32.

A preliminary geological mapping and geochemical survey in soils and rocks was carried out on the new claims. Results add to the possible interest of the property.

This report describes the work done on the OSI GROUP, discusses the results and presents conclusion and recommendation.

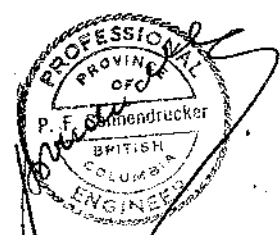


Department of
Mines and Petroleum Resources
ASTE 9111 REPORT
5454 MAP 1

SEREM LTD.

LOCATION MAP

Scale: 1" = 100 miles



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MAP 1

2. PROPERTY AND OWNERSHIP

<u>Mineral Claim</u>	<u>Record No.</u>	<u>Date of Recording</u>
OSI # 1 to 8	125922-929	June 15, 1973
OSI # 9 to 24	127977-992	Sept 5, 1973
OSI # 25 to 32	132072-079	Sept 10, 1974

Certificates of Work No. 1004 to 1027 were issued on May 15, 1974 to SEREM LTD for one year of assessment credit on OSI # 1 to 24 (Assessment Report No. 4955).

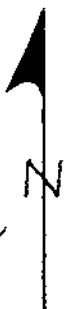
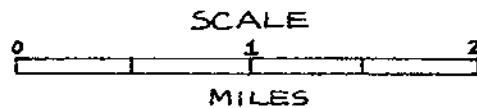
Notice to Group the 8 new mineral claims to the former OSI GROUP has been filed in May, 1975.

The OSI GROUP is owned by SEREM LTD, 505-850 West Hastings Street, Vancouver, British Columbia, in trust with BERGMINEX ASSOCIATES.

SEREM LTD, on behalf of BERGMINEX ASSOCIATES, has been the operator for the work performed in 1974.

FIG. 2

OSI M.C. GROUP
LOCATION MAP



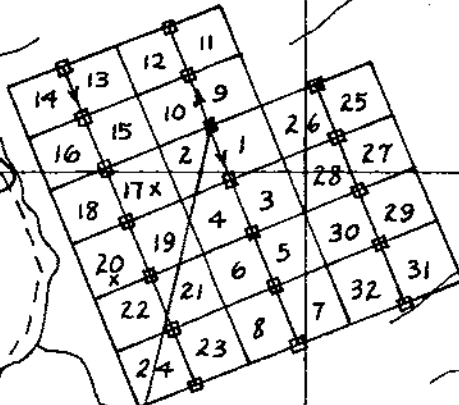
124° 45'

To END LAKE

OSI GROUP

94C/15W
93N/2W

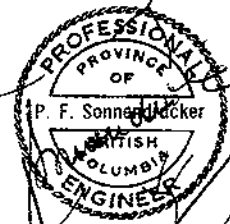
94C/15E Reverse
93N/2E 56°00'



Pb
x

x
Zn
Pb

ECHO
LAKE



7 MILES
TO NINA LAKE

5454
MAP 2

3. LOCATION AND ACCESS

The OSI GROUP is located seven miles North-North-East of the north end of Nina Lake, in the part of the Swannell Range, between Omineca River and Osilinka River, N.T.S. Map Sheet 93N (Manson Creek) and 94C (Aiken Lake).

The property overlaps Mineral Claim Maps 93N/15W and 94C/2W at latitude $56^{\circ} 00'N$ and longitude $124^{\circ} 46'W$ in the Omineca Mining Division (Figure 2).

The property is 2000 feet up hill east of an old pack horse trail following the Nina Lake Valley and leading to the End Lake, Osilinka River. Real access is by helicopter from Germansen Landing. Work was carried out in 1974 from two successive fly camps set up at the outskirts of the property, close to water supply.

4. PHYSIOGRAPHY (Figure 3)

A topographical map at the scale of 1" = 400 feet has been prepared by Pacific Survey Corp. with a view to the detailed geological and geochemical (soil and rock) survey (cf. Figure 10.)

The OSI GROUP covers a massive mountainous ridge at the headwaters of creeks running north and eastwards to the Omineca River. Elevations range from about 3,700 feet at the

old trail (western border of the property) up to 5,843 feet, top of the massive ridge, at 400 feet North of the OSI # 5-6 initial post. The western slope of the ridge is quite steep, with rock slides, talus and cliffs.

The timberline reaches approximately the 5,300 foot-level. Pines are scattered within burnt areas and windfalls. Upper slopes, saddles and ridges are covered by small bushes and mosses. Carbonate rock areas are devoid of any vegetal blanket.

Outcrops are scattered through an extensive overburden composed of loose angular rock fragments.

5. GEOLOGY

5.1. Regional

J. E. Armstrong (1949) had attributed with doubt to the Cache Creek Group of Upper Paleozoic Age, the limestone-slate-greenstone lithological assemblage constituting the Manson Creek Belt.

J. W. Monger (1973, 1974) has shown that the presumed Upper Paleozoic sequence is an assemblage of formations from Late Proterozoic to Mississippian age.

The stratigraphic section, in order of decreasing age, from east to west, consists of the following units:

- Upper Precambrian to Lower Cambrian phyllite, quartzite, brown weathering ferruginous carbonate and minor pods of archeocyathid-bearing limestone (Ingenika Group of Roots, 1954).
- slight angular discordance
- approximately 1,000 feet of dolomite and dolomitic limestone

Algalaminæ textures and algal balls of some horizons indicate shallow water deposition, probably within the intertidal zone. In places, in the upper part of the carbonate are well sorted, well rounded etched, wind blown (?) quartz sand grains. Lower Middle or possible late Lower Devonian fossils (some found and submitted by SEREM's geologists) occur just below the overlying (?) slate in a dolomite horizon that locally contains disseminated galena and sphalerite. This carbonate unit is informally called NINA FORMATION.

- slates of unknown thickness
- thick sequence of altered basalt, locally pillowed and fragmental, with minor ribbon chert, argillite and diabase or microgabbro near the lower contact. Relationship of the volcanogenic sequence to the underlying slate is unknown. The age of these rocks is probably lower Mississippian or younger.

The units appear to form a homoclinal succession, interrupted by longitudinal or transverse faulting and local folding,

dipping westwards from the Wolverine Complex.

Pre-Devonian rocks are more complexly faulted and folded than Devonian or younger ones.

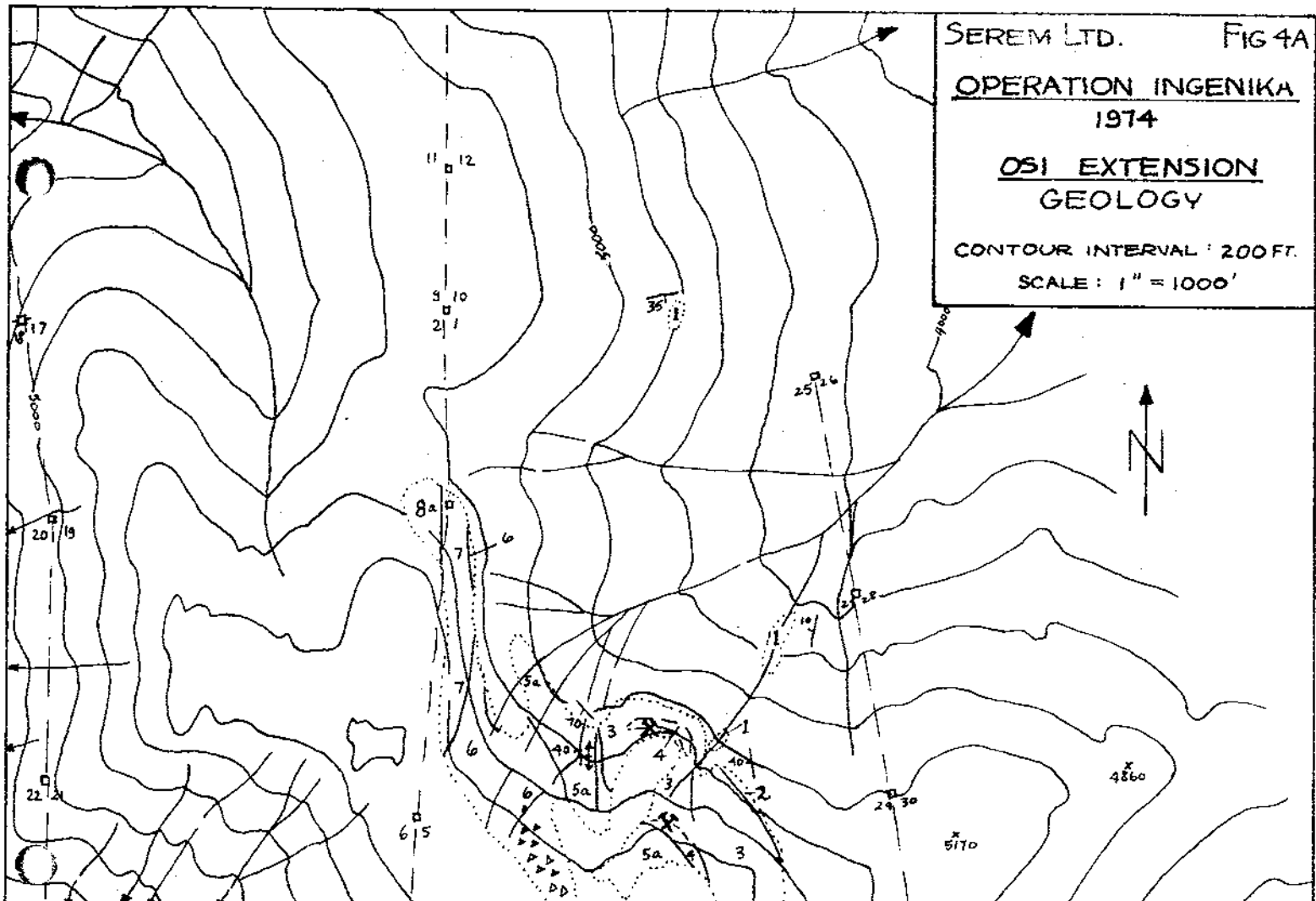
5.2 Local (Figure 4 and 4A)

A careful geological mapping was carried out in 1974 through the carbonaceous mass forming the "horseshoe-shaped backbone" of the OSI GROUP.

Several varieties of carbonate rocks have been distinguished in the informal NINA FORMATION by physical features (texture, setting, colour, weathering):

- a) The main unit (probably in the upper part of the local lithological sequence) is a generally massive, aphanitic, light-grey to grey limestone with light grey weathering. This massive unit shows only a rough bedding to the southwest.
- b) A black aphanitic limestone, thinly bedded (1-2" thick beds) occurs in the lower part of the massive limestone unit and forms a consistent marker bed. Bedding is continuously southwest.
- c) Partings of sideritic (iron oxides stained) limestone are encountered by places in the massive limestone unit.
- d) Several elongated zones of fine-grained, massive grey dolomite cut (or replace) the massive limestone along a direction trending NE-SW (parallel to the main direction

SEREM LTD. FIG 4A
 OPERATION INGENIKA
 1974
 OSI EXTENSION
 GEOLOGY
 CONTOUR INTERVAL: 200 FT.
 SCALE: 1" = 1000'



- OSI M.C. GROUP**
- 8. a) THIN BEDDED DARK GREY LIMESTONE
 b) BLACK LIMESTONE, OCC. BRECCIA TEXTURES.
 - 7. MASSIVE LIGHT GREY TO GREY LIMESTONE.
 - 6. COARSE WHITE DOLOMITE SHOWING OCCASIONAL BRECCIA TEXTURES.
 - 5. a) THIN INTERBEDDED BLACK LIMESTONE AND GREY ARGILLITE WITH A BASAL ARGILLITE UNIT.
 b) ARGILLITE.
 c) DARK TO LIGHT GREY BROWN WEATHERING LIMESTONE.
 - 4. COARSE TO MEDIUM GRAINED WHITE DOLOMITE.
 - 3. LIGHT GREY TO GREY MASSIVE LIMESTONE
 - 2. THIN BEDDED DARK AND LIGHT GREY LIMESTONE.
 - 1. GREEN-GREY ARGILLITE WEATHERING BROWN.
- CONTACT
 FAULT
 OUTCROP X SHOWING
 LOCAL BRECCIA
 BEDDING
 ANTICLINAL AXIS WITH PLUNGE



5454
 MAP 3

of the mineralized stockwork). In the southern part of the OSI GROUP, the setting of the dolomitized zones is more confusing.

- e) A mass of coarse white dolomite with occasional breccia textures and some particular siliceous structures occurs along the cliff and the ridge, east of the summit. It seems that this coarse dolomite body is underlying the massive grey limestone and is overlying, probably along an unconformity, the clastic formations of the INGENIKA GROUP.

The INGENIKA GROUP (argillites, phyllites, quartzites, interbedded limestones and argillites) occurs along the lower eastern ridge of the carbonate belt.

On the OSI EXTENSION (Figure 4A), the geological mapping is still preliminary and the structure is not yet known. The map unit 3 (light grey to grey massive limestone) could be equivalent to the main grey limestone of the NINA FORMATION. However, another possibility is that this map unit 3 could be part of the INGENIKA GROUP.

5.3 Mineralization

Two types of occurrences have been recognized:

- A stockwork of iron-bearing minerals (siderite, hematite), veinlets with disseminated coarse galena and brown sphalerite. Exposures are strongly altered and a trench failed to give a good understanding of the stockwork setting. The occurrence is located on the western side of the "horseshoe" (OSI M.C. # 17).

It seems that the occurrence found on OSI EXTENSION presents the same type. Only floats and altered outcrops with rusty zones (blebs of galena and very rare sphalerite still recognizable) have been yet located. Some rock samples have been analysed and indicate a fairly high Zn content, probably upgraded by alteration products.

- Another type of occurrence is a set of siliceous veins, $\frac{1}{2}$ foot thick, filled with massive galena, cutting a white coarse dolomite zone on OSI M.C. # 20.

A small occurrence of galena has been found in a fault plane on OSI M.C. # 13.

6. GEOCHEMICAL SURVEY IN SOILS (Figures 5, 6 and 7)

6.1 Survey method

A 8300 foot long base line was tied up along the 1973 geochemical survey 0+00 line, with crosslines on 400 foot intervals and 200 foot intervals between +00 and +20W. Stations were marked at 200 foot intervals over 5600 feet along cross line, except in the detailed zone in which stations were spaced at 50 foot intervals over 1200 feet.

Surveying was carried out with Silva Ranger Compass and Topofil. Elevations were noted with a Thommen Altimeter.

A total of 16.2 miles of line has been flagged.

6.2 Sampling method

A total of 867 soil samples have been collected, at different spacings over a surface of 18 mineral claims.

- 272 samples over 2000' x 1200' at 200' x 50' spacing
- 375 samples over 5600' x 4000' at 400' x 100 spacing
- 220 samples over 5600' x 2800' at 400' x 200' spacing

Soil samples were taken, where possible, under the organic horizon. The poorly developed thin soil covering ridges and slopes has been considered to have residual nature. Soils are very generally "sandy" and limy.

6.3 Assay method

Assays were run for Pb, Zn and Ag by Vancouver Geochemical Laboratories (Assay reports # 74-79-014,022 and 029).

Samples were dried in a hot air dryer, then sifted to -80 mesh 0.50 g. portions of the -80 mesh fraction were weighted with a torsion balance.

Extraction was by hot $HClO_4$ and HNO_3 digestion and detection by using a Techtron AAS (Atomic Absorption Spectrophotometer).

6.4 Results and interpretation

The range of Pb, Zn and Ag values for the 867 soil samples is as follows:

Pb 12-6900 ppm (9,000-10,000 ppm)
 Zn 16-6700 ppm (47,000 ppm)
 Ag 0.3-7.6 ppm

Because of the unhomogeneity of the sampling, a selection of values was done by screening samples at a fictitious grid of 400' x 400'.

For the 235 screened soil samples, the Pb, Zn and Ag distributions are as follows:

ppm	10	20	40	80	160	320	640	1280	2560	5120	
Pb	-	1	21	70	67	60	11	12	1	2	-
Zn	-	-	3	13	37	78	72	24	8	1	-

ppm	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	2.0	2.4	2.8	
Ag	-	1	2	10	22	38	44	32	33	29	22	5	4

SEREM LTD.

FIG 9

OPERATION INGENIKA
1974

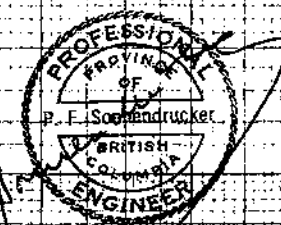
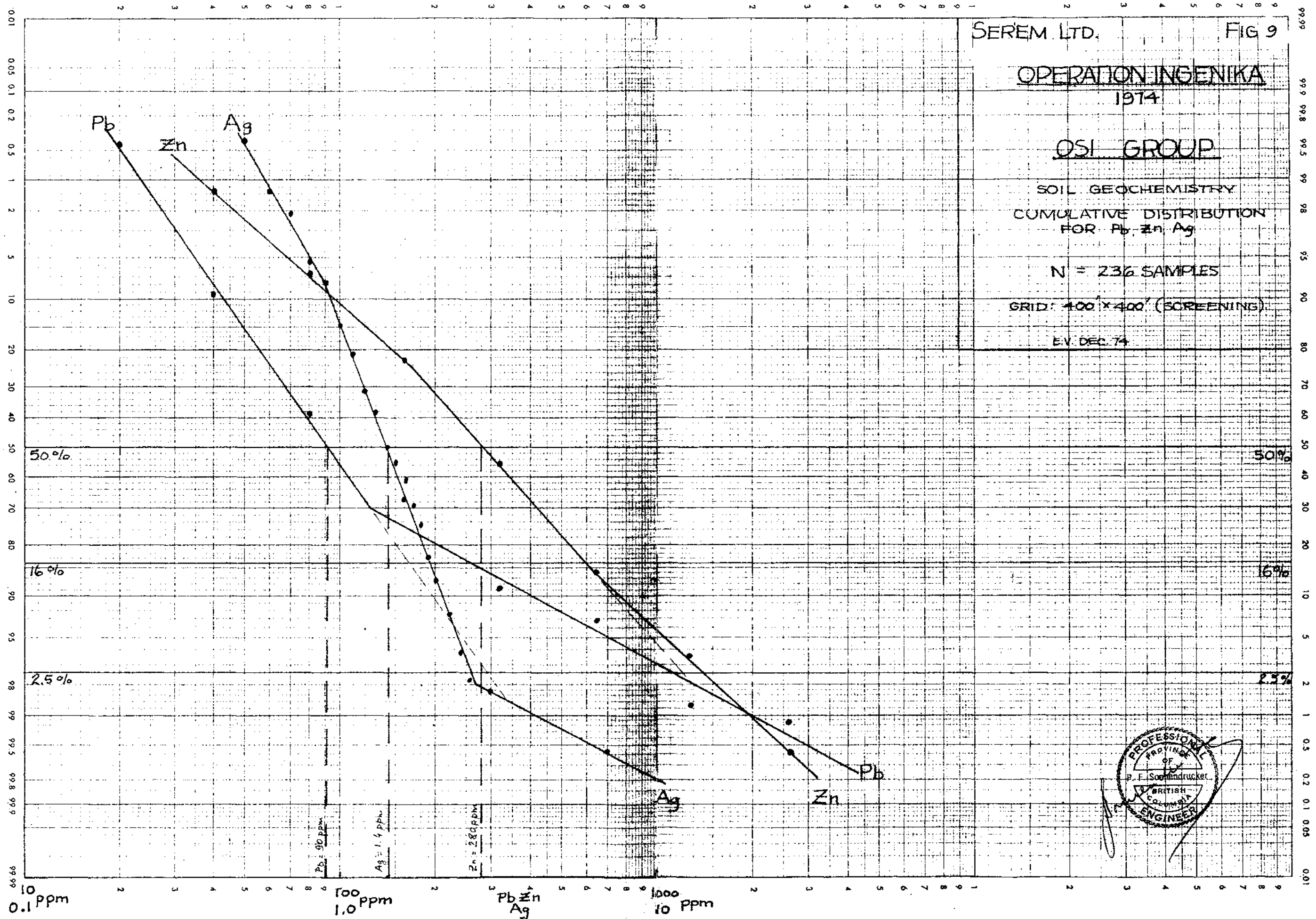
OSI GROUP

SOIL GEOCHEMISTRY
CUMULATIVE DISTRIBUTION
FOR Pb, Zn, Ag

N = 236 SAMPLES

GRID: 400' x 400' (SCREENING)

E.V. DEC. 74



OPERATION INGENIKA 1973-74
 OSI M.C. Group
 Geochemical Survey in Soils
 Pb-Zn Correlation Diagram

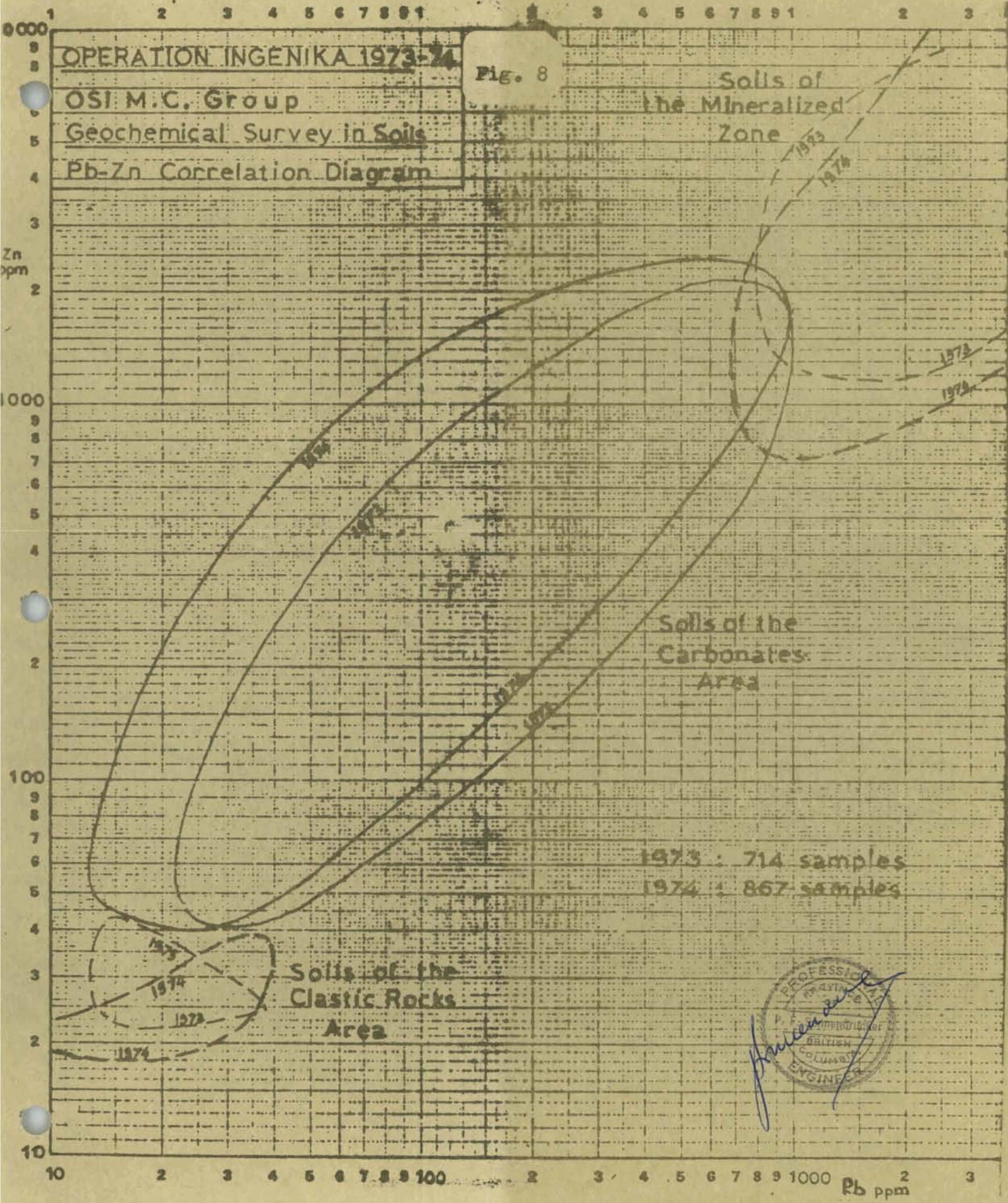
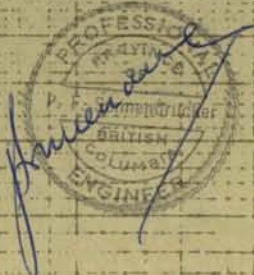
Fig. 8

Soils of the Mineralized Zone

Soils of the Carbonates Area

Soils of the Clastic Rocks Area

1973 : 714 samples
 1974 : 867 samples



The Pb distribution shows a tendency to bimodality. The skewness is positive. The Zn distribution has a slight positive skewness. The Ag is normally distributed with a tendency to bimodality.

The Pb-Zn correlation diagram (Figure 8) is about exactly the replica of the 1973 diagram (see Assessment Report # 4955).

The cumulative frequency curves are plotted on Figure 9.

The geochemical maps show the relationships between anomalous areas and showings. Isolated high Pb values are scattered in the southern part of the claim group (Figure 5.)

The Pb showing located on the western steep slope of the "horseshoe" (OSI M.C. # 20-22) gives only a local Pb and Zn anomaly without Ag-high content.

7. ROCK GEOCHEMISTRY (Figure 10)

168 rock chip samples have been collected and analysed for Pb, Zn and Ag (V.G.C. Report No 74-79-024 and 031)

The Pb-Zn correlation diagram (Figure 11) shows that the representative points follow the trend noticed last year by our preliminary study. (Assessment Report #4955).

The high Zn representative points have been plotted on the geological map, Figure 4. They are generally located in the vicinity of the known showings. Few scattered points could indicate mineralized zones not yet recognized.

The "normal" specimens (corresponding to the # III and IV rock zones of the 1973 survey) have been grouped by lithological types:

Rock Type	Number Samples	Pb ppm	Zn ppm
Grey limestone	60 (7)	35-57 (37-45)	7-50 (7-14)
Black limestone	18 (4)	42-67 (54-80)	16-64 (43-87)
Grey dolomite	48 (5)	26-70 (35-42)	7-50 (9-25)
White dolomite	20 (8)	35-50 (32-40)	9-22 (7-25)

(in brackets - 1973 data for comparison)

No geochemical distinction appears between the grey limestone and the grey dolomite.

The black limestone (marker bed) has generally a Pb and Zn content higher than the other rock types, whereas the coarse white dolomite shows a lower Pb and Zn content. Certificates of Geochemical Analyses by V.G.C are enclosed for information.

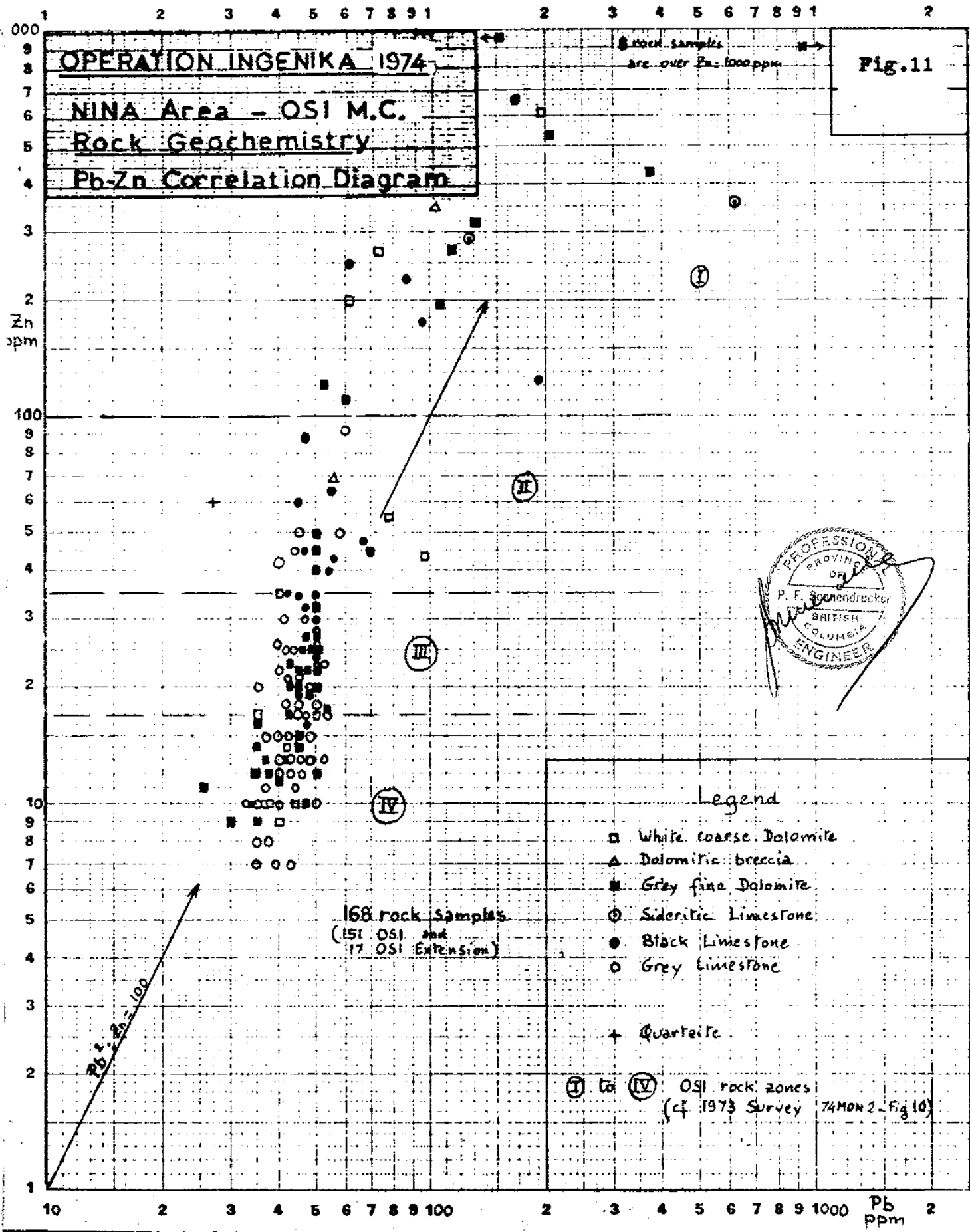


Fig. 11

OPERATION INGENIKA 1974
 NINA Area - OSI M.C.
 Rock Geochemistry
 Pb-Zn Correlation Diagram

Rock samples
 are over 200 ppm

Zn ppm
 1000
 9
 8
 7
 6
 5
 4
 3
 2
 100
 9
 8
 7
 6
 5
 4
 3
 2
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

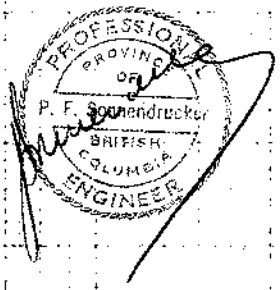
10 2 3 4 5 6 7 8 9 100 2 3 4 5 6 7 8 9 1000 Pb ppm 2

168 rock samples
 (151 OSI and
 17 OSI Extension)

Legend

- White coarse Dolomite
- △ Dolomitic breccia
- Grey fine Dolomite
- ⊙ Sideritic Limestone
- Black Limestone
- Grey Limestone
- + Quartzite

Ⓡ to Ⓢ OSI rock zones
 (cf. 1973 Survey 74MON 2 - Fig 10)



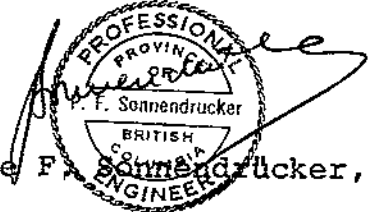
Pb:Zn = 100

8. CONCLUSION AND RECOMMENDATION

The detailed geochemical survey in soils on OSI GROUP has delineated the extension of the anomalous zone related to the stockwork showing.

A new showing, covered by eight additional claims, has been prospected and rock geochemistry has indicated some high Zn values in floats coming from this area.

For the time being, it is proposed only a small scale detailed work on the OSI GROUP: geochemical survey in soils restricted to the new showing area at 200' x 50' grid and hand trenching on the best spots located by geochemistry in the stockwork showing area and the new showing area.


Pierre F. Sonnendrucker, P.Eng.,

ANNEXE I

STATEMENT OF EXPENDITURES

The following is a breakdown of expenses incurred in carrying out the work on the OSI GROUP in July-August, 1974.

1. Field WorkPersonnel

P. Sonnendrücker	July 19-20	3 days	\$ 240.00	✓
Senior Geologist	August 20 at	\$80.00		
C. Boyle	August 25-28	4 days		
Junior Geologist		\$34.00	136.00	✓
D. Paterson	July 7-28	22 days		
Assistant Geologist		\$24.00	528.00	✓
J. Bilinski	July 7-28	26 days		
Geochemical Sampler	August 25-28	\$18.00		
Helper			468.00	✓
			<u>1,372.00</u>	

Food Expense

(\$8.00/man/day)	55 days	\$ 440.00	✓
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Helicopter Support (Jet Ranger \$250/00 hr + fuel)

Okanagan	(Invoice #40367 July 7 (.5 hr)	150.40	
Helicop-	(Invoice #54992 July 19(.9 hr)	270.85	
ter	(Invoice #54992 July 20(1.1 hr)	331.40	
	(Invoice #56123 July 28(1.0 hr)	300.80	
	(Invoice #59929 Aug 25(.9 hr)	270.85	
	(Invoice #59936 Aug 28(.4 hr)	121.10	
		<u>1,445.40</u>	✓

Geochemistry

Van geochem Lab

Testing Pb, Zn, Ag in soils

Invoice # 2993 - Report 74-79-014 July 30 (238 soils) \$524.00 ✓

Invoice # 3045 - Report 74-79-022 Aug 21 (409 soils) 908.15 ✓

Invoice # 3112 - Report 74-79-029 Sept 17 (220 soils) 473.00 ✓

Testing Pb, Zn, Ag in rocks

Invoice # 3053 - Report 74-79-024 Aug 23 (151 rocks) 437.90 ✓

Invoice # 3126 - Report 74-79-031 Sept 24 (17 rocks) 49.30 ✓

\$2,392.35Topographical mapping

Pacific Survey Corp Invoice # 8561

\$325.00 ✓

Job # 74-33- Apr 22

2. Office WorkPersonnel

P. Sonnendrücker 5 days at \$80.00

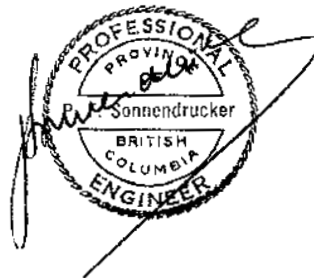
\$400.00 ✓

E. Vipond, Drafting 5 days at \$34

170.00 ✓

\$570.003. Recapitulation

Field work	Personnel	\$1,372.00
	Food Expenses	440.00
	Helicopter	1,445.40
	Geochemistry	2,392.35
	Topographical Mapping	325.00
Office work personnel		570.00

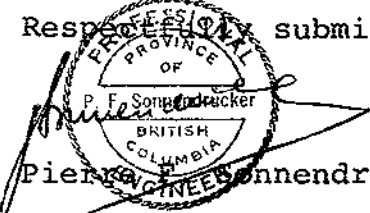
\$6,544.75 ✓

ANNEXE II
STATEMENT OF QUALIFICATIONS

I, PIERRE F. SONNENDRÜCKER, with business address in Vancouver, British Columbia, hereby certify that:

1. I am a registered Professional Engineer in the Province of British Columbia.
2. I am a graduate of the University of NANCY, FRANCE, with the diploma of Geological Engineer of the "Ecole Nationale Supérieure de Géologie Appliquée et de Prospection Minière" (Ingénieur-Géologue ENSG, Promotion 1954);
3. I have practised as a Geologist since 1957 in West Africa (Ivory Coast, Guinea) France and Canada (British Columbia);
4. I am employed by SEREM LTD., 770-2100 Drummond Street, Montreal, 107, Quebec, as a Senior Geologist. My residential address is 5981 Holland Street, Vancouver, British Columbia.
5. I have personally participated in the field work and supervised all the completed work included in this report. I have interpreted the data resulting from this work.

Respectfully submitted,



 P. F. Sonnendrücker
 Pierre F. Sonnendrücker, P.Eng.,



VANGEOCHEM LAB LTD.
1521 PEMBERTON AVE.,
NORTH VANCOUVER, B.C.,
CANADA V7P 2S3

TELEPHONE: 988-2172
AREA CODE: 604

OSI
Rocks

• Specialising in Trace Elements Analyses •

Certificate of Geochemical Analyses

-IN ACCOUNT WITH-

Serem Ltd.,
#505 - 850 W. Hastings St.,
Vancouver, B.C.

Attention:

Report No: 74-79-024 Page 1 of 4
Samples Arrived: Aug. 14, 1974
Report Completed: Aug. 23, 1974
For Project: Mobile, #2
Analyst: F. Lo: L. Lam.
Invoice #3053

Sample Marking	Pb ppm	Zn ppm	Ag ppm		
D.P. OS1 # 1	50	50	1.5		
2	50	40	1.6		
3	50	25	1.4		
4	50	27	1.5		
5	50	17	1.5		
6	47	22	1.6		
7	47	27	1.6		
8	47	16	2.5		
9	45	20	1.5		
10	87	227	2.3		
11	45	60	2.2		
12	42	35	2.3		
13	47	32	2.2		
14	96	177	2.3		
15	50	40	2.1		
16	50	30	2.2		
17	55	65	2.2		
18	45	25	1.7		
19	47	30	2.3		
20	45	21	2.1		
21	27	60	0.5		
22	67	48	2.3		
23	50	22	1.1		
24	57	50	1.9		
25	60	92	2.2		
26	45	50	2.1		
27	1170	3200	3.1		
28	45	35	2.0		
29	42	18	2.1		
30	42	25	2.2		
31	44	25	2.3		
32	46	12	2.3		
33	50	17	2.3		
34	40	12	2.4		
35	47	15	2.2		
36	47	20	2.3		
37	45	17	2.2		
38	42	21	2.1		
D.P. OS1 #39	43	12	2.1		

MASTER PRINTING LTD.

REMARKS:

Signed:

% Mo x 1.6683 = % MoS₂ 1 Troy oz./ton = 34.28 ppm 1 ppm = 0.0001% nd = none detected ppm = parts per million
All values are believed to be correct to the best knowledge of the analyst based on the method and instruments used.



VANGEOCHEM LAB LTD.
 1521 PEMBERTON AVE.,
 NORTH VANCOUVER, B.C.,
 CANADA V7P 2S3

TELEPHONE: 988-2172
 AREA CODE: 604

• Specialising in Trace Elements Analyses •

Certificate of Geochemical Analyses

-IN ACCOUNT WITH-

SeremLtd

Report No: 74-79-024

Page 2 of 4

Samples Arrived:

Report Completed:

For Project:

Analyst:

Attention:

Sample Marking	Pb ppm	Zn ppm	Ag ppm		
D.P., OS1 # 40	620	360	2.3		
41	205	530	1.7		
42	50	26	2.3		
43	115	270	2.0		
44	50	12	1.8		
45	30	9	1.0		
46	50	10	2.3		
47	49	20	1.6		
48	47	16	2.3		
49	47	25	1.7		
50	45	14	1.6		
51	47	45	2.1		
52	50	24	2.3		
53	105	197	2.1		
54	45	25	1.6		
55	50	32	1.7		
56	50	45	1.6		
57	45	15	1.7		
58	40	9	1.5		
59	50	25	1.5		
60	40	12	1.5		
61	70	45	1.5		
62	50	25	2.1		
63	47	19	1.5		
64	125	290	2.3		
65	45	20	1.6		
66	47	22	1.5		
67	42	14	1.5		
68	45	15	1.5		
69	43	10	1.5		
70	44	11	2.2		
71	130	315	2.3		
72	45	15	2.2		
73	55	42	2.3		
74	47	12	2.1		
75	55	67	2.3		
76	47	20	2.2		
77	45	15	1.6		
D.P. OS1 # 78	45	19	2.1		

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REMARKS:

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1 ppm = 0.0001%

nd = none detected

ppm = parts per million

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-IN ACCOUNT WITH-
Serem Ltd.,

Report No: 74-79-024

Page 3 of 4

Samples Arrived:

Report Completed:

For Project:

Analyst:

Attention:

Sample Marking	Pb ppm	Zn ppm	Ag ppm			
D.P. OS1 # 79	43	17	1.5			
80	40	15	2.0			
81	43	13	2.2			
82	40	13	2.2			
83	45	17	2.2			
84	50	17	2.1			
85	45	13	2.2			
86	43	20	1.6			
87	53	23	2.3			
88	40	35	2.3			
89	43	23	1.5			
90	45	18	2.1			
91	47	10	1.5			
92	45	22	1.4			
93	50	23	1.6			
94	55	27	1.6			
95	50	27	2.1			
96	95	43	1.7			
97	77	55	1.6			
98	40	13	2.1			
99	43	13	1.6			
100	47	15	1.8			
101	50	18	2.5			
102	53	13	2.5			
103	47	13	1.8			
104	45	17	2.4			
105	40	42	2.2			
106	37	13	1.5			
107	43	13	2.1			
108	43	13	2.2			
109	45	13	1.7			
110	47	13	2.2			
111	105	355	2.6			
112	47	87	1.6			
113	53	17	1.7			
114	43	7	2.3			
115	43	12	2.1			
116	43	17	1.5			
D.P. OS1 #117	35	17	1.3			

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REMARKS:

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nd = none detected

ppm = parts per million

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TELEPHONE: 988-2172
 AREA CODE: 604

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-IN ACCOUNT WITH-

Serem Ltd.,
 #595 - 850 W. Hastings St.,
 Vancouver, B.C.


Attention:

Report No: 74-79-024 Page 4 of 4
 Samples Arrived: August 14, 1974
 Report Completed: August 22, 1974
 For Project: Mobile # 2
 Analyst: F. Lo, L. Lam
 Invoice # 3053

Sample Marking	Pb ppm	Zn ppm	Ag ppm		
D.P. OS1 # 118	35	10	2.3		
119	37	11	2.3		
120	35	16	1.3		
121	45	12	2.2		
122	37	10	1.5		
123	43	15	2.3		
124	40	22	2.2		
125	40	26	2.2		
126	36	10	1.5		
127	35	8	2.3		
128	37	15	2.2		
129	40	10	2.1		
130	45	45	2.1		
131	35	16	1.5		
132	37	8	2.3		
133	39	7	2.2		
134	37	10	1.3		
135	39	12	1.7		
136	40	15	2.0		
137	61	200	1.5		
138	35	20	2.2		
139	40	10	1.5		
140	35	7	1.5		
141	37	10	1.6		
142	35	12	1.5		
143	35	8	2.2		
144	35	7	2.1		
145	35	14	1.5		
146	34	10	1.4		
147	34	10	1.8		
148	35	16	1.5		
149	26	11	1.2		
150	35	9	1.5		
D.P. OS1# 151	41	30	2.3		

MASTER PRINTING LTD.

REMARKS:

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nd = none detected

ppm = parts per million

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VANGEOCHEM LAB LTD.
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 TELEPHONE: 988-2172
 AREA CODE: 604

• Specialising in Trace Elements Analyses •

Certificate of Geochemical Analyses

-IN ACCOUNT WITH-

Serem Ltd.,
 # 505 - 850 West Hastings Street,
 Vancouver, B. C.
 Attention:

Report No: 74-79-031 Page 1 of 1
 Samples Arrived: Sept. 19, 1974
 Report Completed: Sept. 24, 1974
 For Project: OSI Extension
 Analyst: E. Tang, F. Lo
 Invoice #: 3126

Sample Marking	Pb ppm	Zn ppm	Ag ppm			
A 1	2370	100000	5.4			
2	337	450	2.2			
3	3050	1650	4.2			
4	95	990	2.2			
5	170	670	1.4			
6	3250	5000	10.6			
7	2650	220000	40			
8	194	127	2.1			
9	1300	3500	10.1			
10	570	35000	4.2			
11	3570	900	4.4			
12	52	120	1.1			
13	62	250	1.2			
14	1300	22500	3.2			
15	60	110	1.3			
A 16	197	620	1.7			
PS/74 - 8	72	270	1.6			

REMARKS:

Signed:

% Mo x 1.6683 = % MoS₂ 1 Troy oz./ton = 34.28 ppm 1 ppm = 0.0001% nd = none detected ppm = parts per million
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MASTER PRINTING LTD.

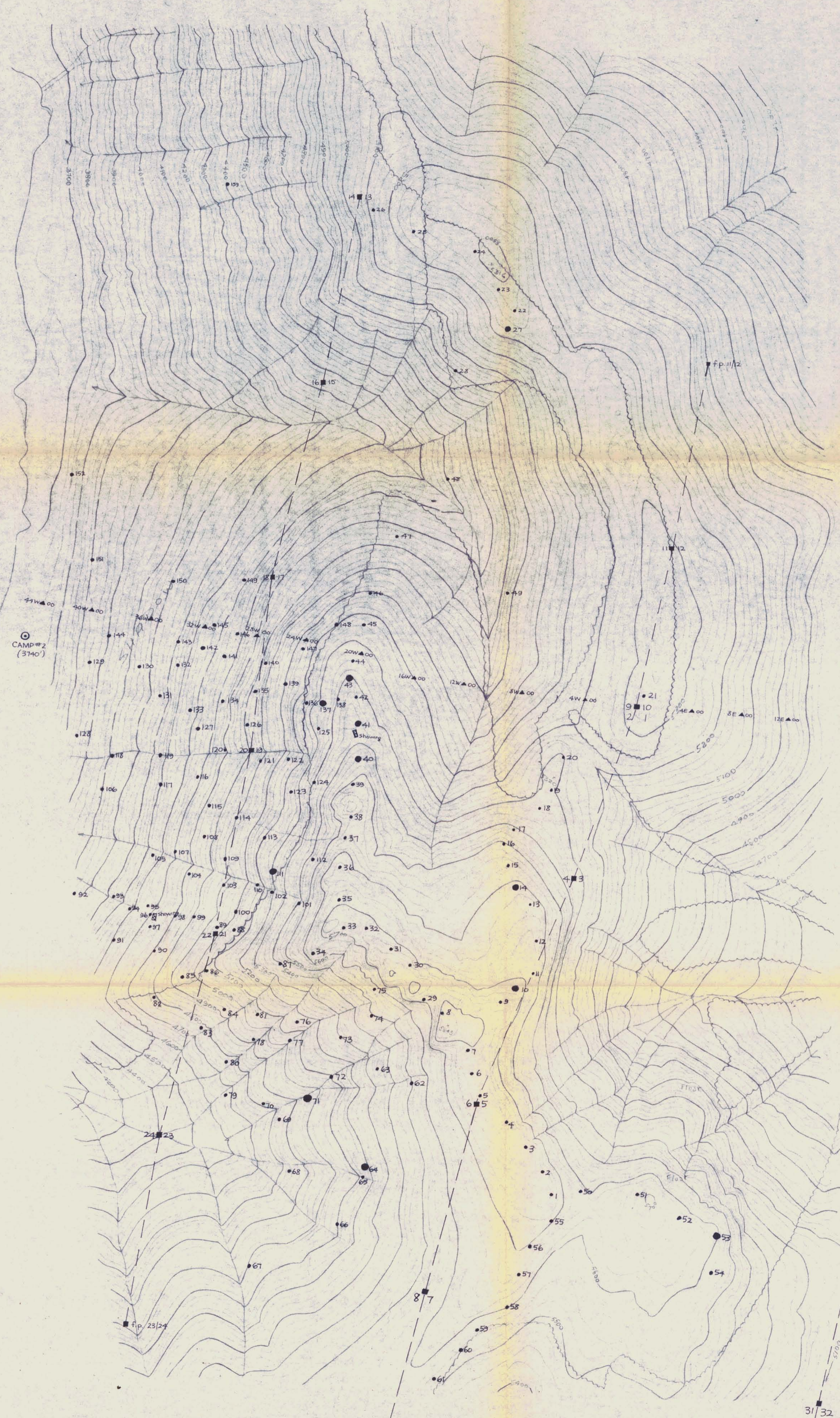
OSI GROUP
ROCK GEOCHEMISTRY

SAMPLE LOCATIONS
and
VALUES

SCALE : 1" = 400'



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5454 MAP 10



25/26

27/28

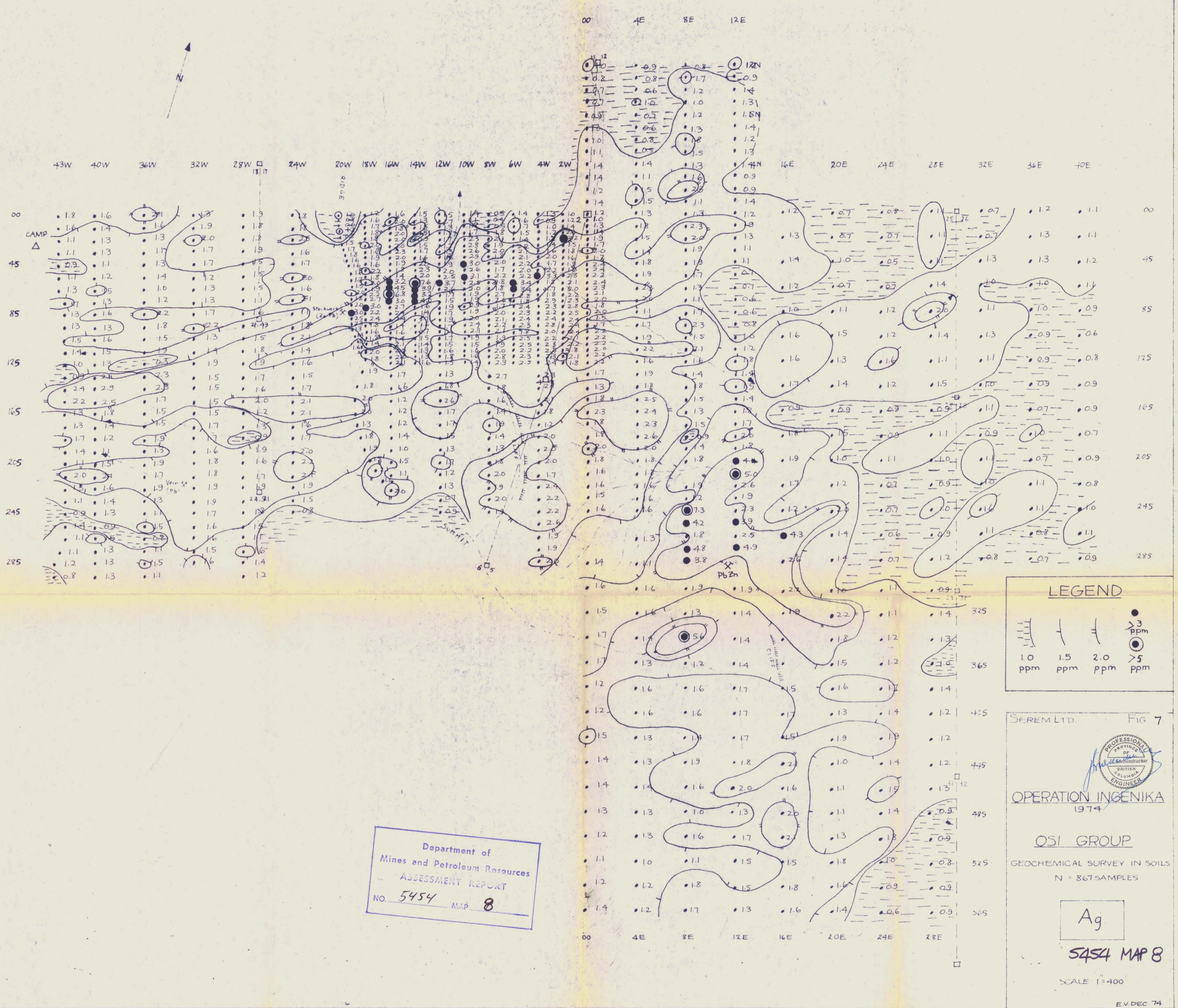
29/30

31/32



5454
MAP 9

SEREM LTD.		
OSI M.C. B.C.		
SCALE: 1" = 400'	CONTOUR INTERVAL: 25'	MAP REFERENCE: 43 N/15 34 C/2
DATE OF PHOTOGRAPHY: FED. GOVT. A22416	19-20	
DATUM: G.S.C. (APPROX.)	SHEET 1 OF 1	
RECONNAISSANCE MAP	PENCIL MANUSCRIPT	
PACIFIC SURVEY CORPORATION 1401 WEST PENDER STREET VANCOUVER, B.C.		74-33



LEGEND

1.0 ppm	1.5 ppm	2.0 ppm	> 3 ppm
			> 5 ppm

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5454 MAP 8

SEREM LTD. FIG 7

OPERATION INGENIKA
1974

OSI GROUP
GEOCHEMICAL SURVEY IN SOILS
N = 867 SAMPLES

Ag

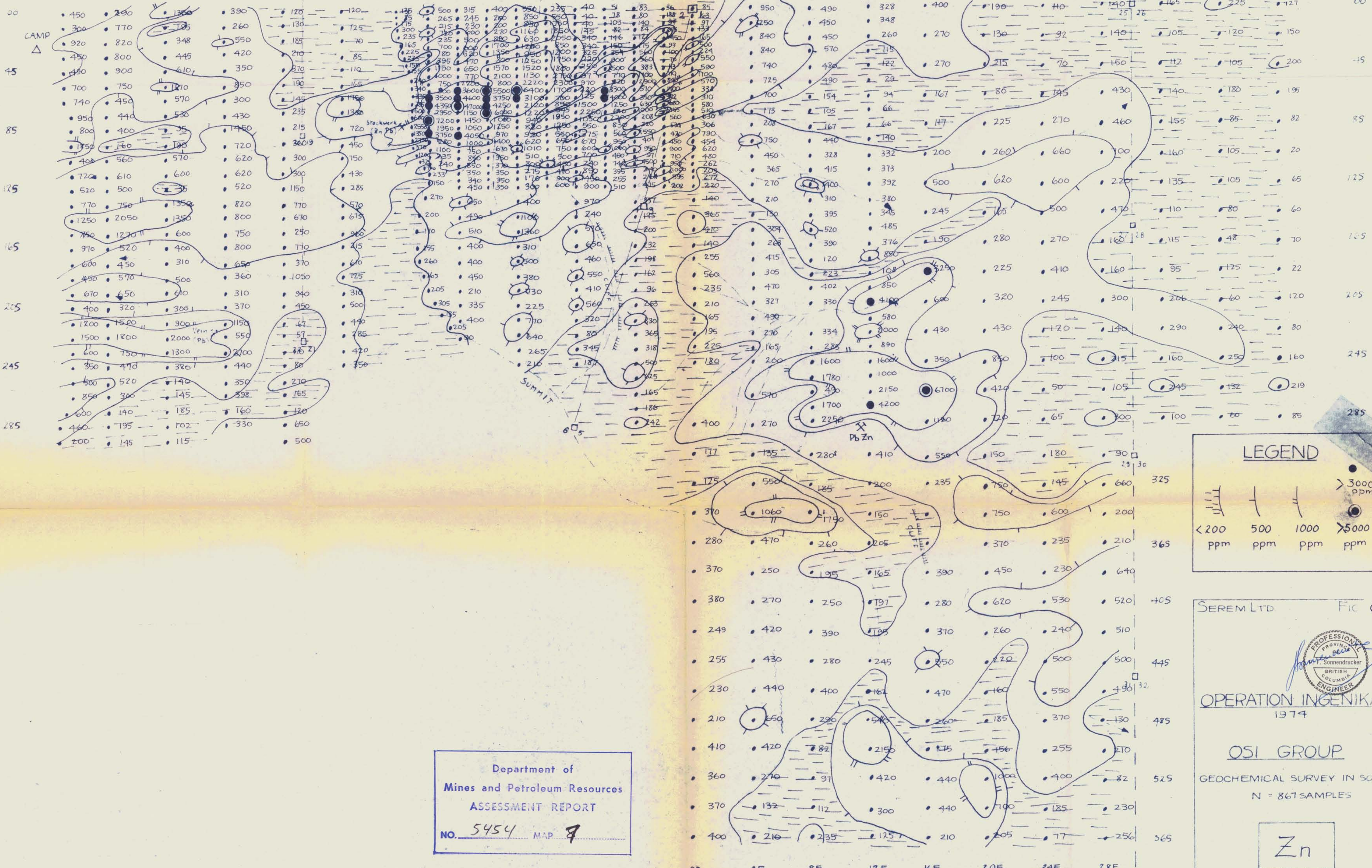
5454 MAP 8

SCALE 1:400

EV. DEC. 74

00 4E 8E 12E

+3W 40W 36W 32W 28W 24W 20W 18W 16W 14W 12W 10W 8W 6W 4W 2W 16E 20E 24E 28E 32E 36E 40E



LEGEND

< 200 ppm	500 ppm	1000 ppm	> 3000 ppm	> 5000 ppm

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5454 MAP 7

SEREM LTD FIG 6

OPERATION INGENIKA
1974

OSI GROUP
GEOCHEMICAL SURVEY IN SOILS
N = 867 SAMPLES

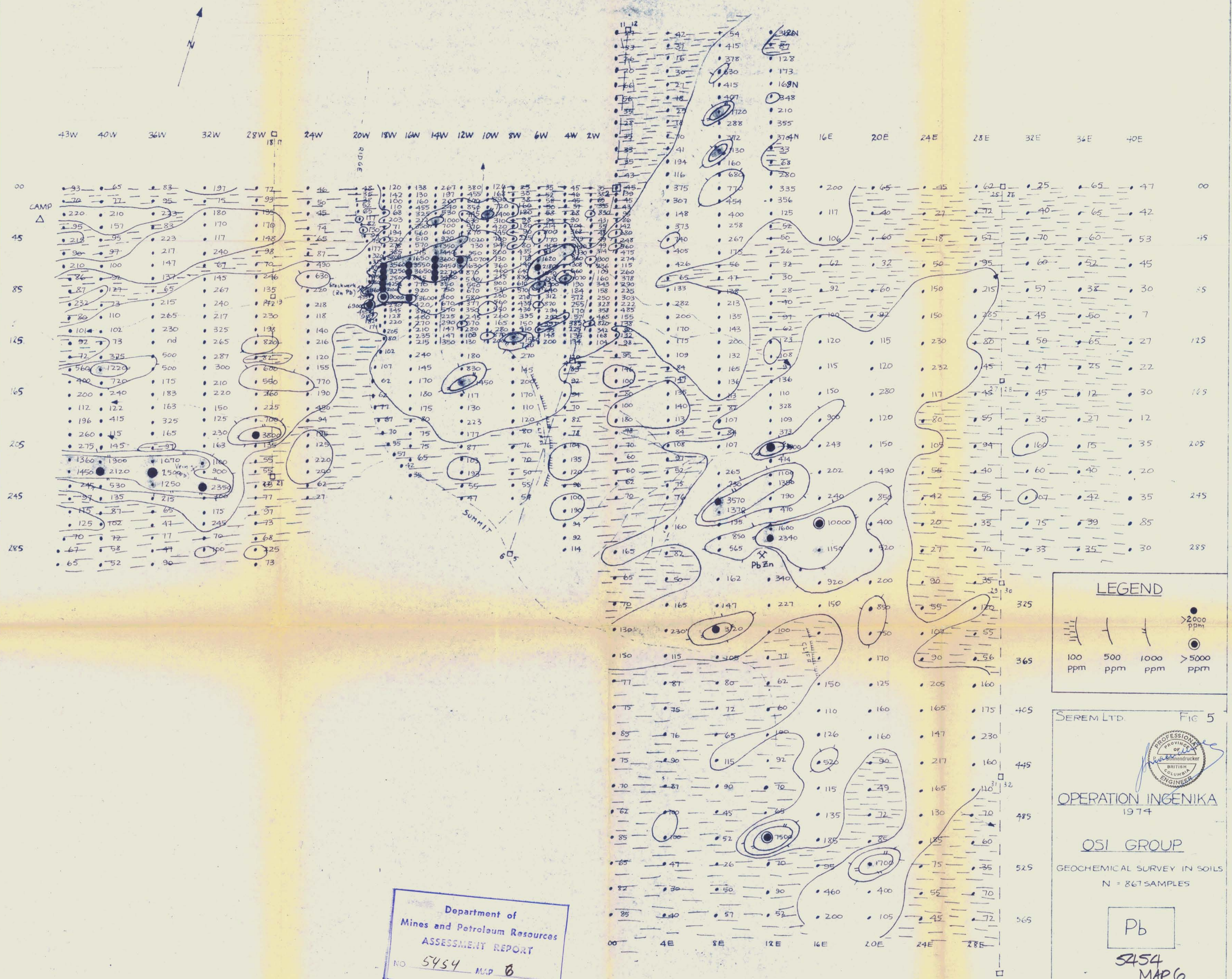
Zn

5454 MAP 7
SCALE 1"=400'

E.V. DEC 74

00 4E 8E 12E

43W 40W 36W 32W 28W 24W 20W 18W 16W 14W 12W 10W 8W 6W 4W 2W



LEGEND

100 ppm	500 ppm	1000 ppm	>2000 ppm
100 ppm	500 ppm	1000 ppm	>5000 ppm

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 5454 MAP 6

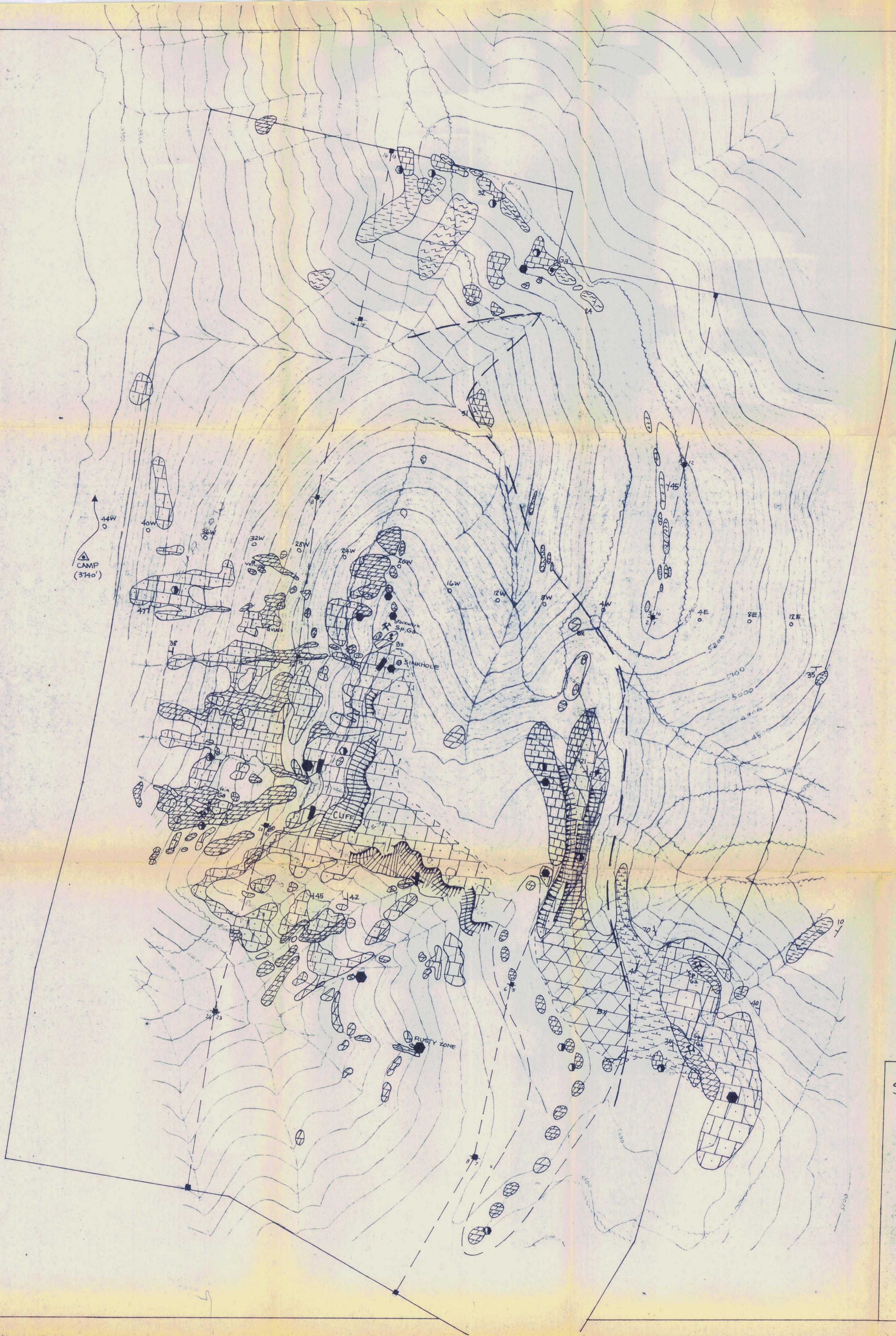
SEREM LTD. FIG 5

OPERATION INGENIKA
1974

OSI GROUP
GEOCHEMICAL SURVEY IN SOILS
N = 867 SAMPLES

Pb

5454
MAP 6
SCALE 1:400



LEGEND

NINA FORMATION

- DOLOMITE, COARSE-GRAINED, MASSIVE, WHITE, WEATHERS WHITE.
- BX BRECCIA
- DOLOMITE, FINE-GRAINED, MASSIVE, LIGHT GREY TO GREY BROWN, WEATHERS LIGHT GREY.
- LIMESTONE, APHANITIC, GENERALLY MASSIVE, LIGHT GREY TO GREY, WEATHERS LIGHTER SHADES OF GREY.
- SIDERITIC LIMESTONE
- LIMESTONE, APHANITIC TO FINE-GRAINED, MASSIVE, BLACK, WEATHERS DARKER SHADES OF GREY.
- LIMESTONE, APHANITIC, BEDS 1-2' THICK, BLACK, WEATHERS GREY BROWN.
- PROBABLE CONTACT BETWEEN INGENIKA GROUP AND NINA FORMATION.

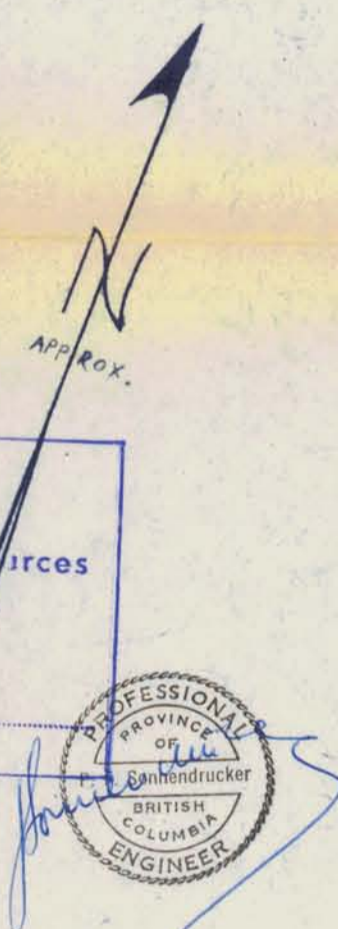
INGENIKA GROUP

- ARGILLITE
- INTERBEDDED BLACK LIMESTONE AND GREY ARGILLITE
- PHYLLITE
- QUARTZITE

Rock Geochemistry

- 35ppm < Zn < 100ppm
- Zn > 100 ppm

Division of
 Minerals and Petroleum Resources
 NO. 5454



SEREM LTD. FIG 4

**OPERATION INGENIKA
 1974**

**OSI GROUP
 GEOLOGY**

SCALE 1" = 400'

DRAWN BY E.V. FOND
 DECEMBER 1974

5454 MAP 5

SEREM LTD.

FIG. 3

OSI GROUP
TOPOGRAPHICAL MAP

SCALE: 1" = 1000'

DRAWN BY EVIPOND
FEBRUARY 1975

TOPOGRAPHICAL BACKGROUND

PACIFIC SURVEY CORPORATION
1409 WEST PENDER STREET
VANCOUVER B.C.
V6G 2S4



N

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5454 MAP 4

5454
MAP 4

