

REPORT ON THE
GEOCHEMICAL PROGRAM
J. AND P. CLAIMS
SIMILKAMEEN M.D.
NORTHWIND MINES LTD.
John R. Poloni, B.Sc., P. Eng.
August 15, 1972

92H/10E

4168

REPORT

ON THE

GEOCHEMICAL PROGRAM

ON THE

J. AND P. CLAIMS

SIMILKAMEEN M. D.

for

NORTHWIND MINES LTD.

by

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>4168</u> MAP
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John R. Poloni, B. Sc., P. Eng.

August 15, 1972

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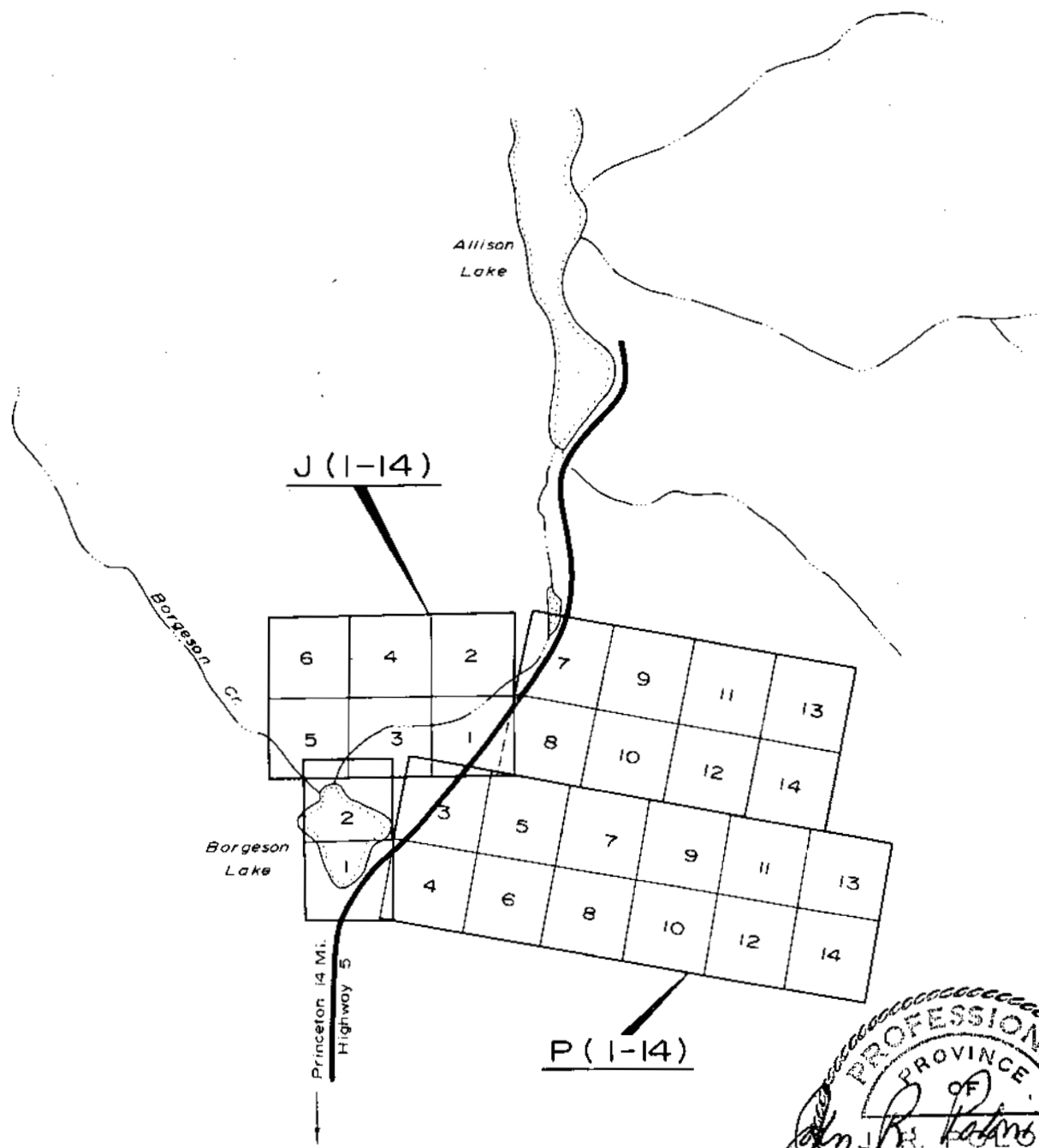
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INTRODUCTION

The 28 mineral claims in the J. (1-14) and P. (1-14) group are located approximately 14 miles north of Princeton B.C. near Borgeson and Allison Lakes. During June 1972 a geochemical soil survey was undertaken over the claims as the initial phase of the exploration program recommended by the author in a report dated March 22, 1972. Limited geological reconnaissance and prospecting was done in conjunction with this survey. The results of this work are summarized in this report.

LOCATION MAP

Fig. #1



Department of
Mines and Geoscience Resources
ASSESSMENT REPORT
NO. 4168 MAP # 1

NORTHWIND MINES LTD.
CLAIM LOCATION MAP
SIMILKAMEEN M.D.
JOHN R. POLONI B. Sc., P. Eng.
SCALE 1" = 3000'
MARCH 22, 1972

PROPERTY

The property consists of 28 mineral claims called the J. (1-14) and the P. (1-14) located at Latitude $49^{\circ} 41'$ N. and Longitude $120^{\circ} 37'$ W. Mr. D. Gallen located the J. (1-14) claims on March 20, 1972, and the P. (1-14) claims were located by Mr. E. Peters on March 21, 1972.

Field examination was made by the author on the J. 1, 2, (7-14) and the P. (1-14) on the dates of location, respectively, and the regulations of the Mineral Act were observed in the staking.

LOCATION AND ACCESS

The claim group straddles highway #5, 14 miles north of Princeton B.C. Access to the claims, located to the east of highway #5, is provided via logging road as shown in Fig. #2. Most of the claims can be traversed on foot with little difficulty except near the headwater of the westerly flowing creek crossing the property.

CLIMATE, PHYSIOGRAPHY AND GLACIATION

Glaciation has greatly modified the terrain. Glacial detritus ranging from 2 to 10 feet thick covers most of the claims. Valley slopes on the main stream flowing westerly across the claims, are generally moderate, although several steep sections exist.

Fir, alder, and poplar are generously distributed on the property but, as is typical of this Interior Plateau region of Central British Columbia, are sufficiently wide spaced to make traversing fairly easy.

Long, arid summers, moderate winters as are characteristic of the Interior Plateau region, occur in the Princeton area. Sufficient precipitation occurs annually to provide the area with an ample water supply for all exploration and mining needs.

HISTORY, GEOLOGY AND STRUCTURE

For data pertaining to the history of the area and general geology, the reader is referred to the report by the author dated March 22, 1972.

GEOCHEMICAL PROGRAM

A total of 701 soil samples were taken of B-horizon material, at stations spaced at 200 foot intervals along lines spaced 400 feet apart.

The sample material was dried and sieved to separate the minus 80 mesh portion for assay, using Atomic Absorption as the analytical and $\text{HClPO}_4 + \text{HNO}_3$ as the digestion methods, respectively.

The geochemical results were examined and calculated to have a:

mean	-	22 p.p.m. copper
threshold	-	44 p.p.m.
Possibly Anomalous	>	66 p.p.m.
Probably Anomalous	>	88 p.p.m.

This data is plotted in Fig. #3 in the pocket of the report.

Twenty-six soil samples were taken at 100 foot intervals along N. - S. lines 200 feet apart near a showing of copper mineralization found near highway #5 and line 40+00S. Figure #5 is a plot of the results of this detail work.

DISCUSSION OF GEOCHEMICAL RESULTS

Fifteen areas gave anomalous results of greater than 66 p.p.m. in copper. Nine of these are single value anomalies, three are two value anomalies, one is a three value anomaly, one a five value anomaly and one a six value anomaly.

The highest copper value obtained in the survey was 205 p.p.m. located at 144+00S, 58+00E in the three value anomaly. This zone is considered to be one of the most interesting obtained. While the results indicate only a weak geochemical zone, it is felt that further work is necessary.

A large anomaly on line 0+00, west of the base line indicated a zone of copper interest, across at least 800 feet, and open to the north. As this is on a south facing slope it is possible that the mineralized area is immediately north of the line. Minor chalcopyrite in association with magnetite in a coarse grey granodiorite was seen in an outcrop examined along the line near station 8+00W. Further detailed work is necessary in this area.

Immediately south of Borgeson Lake a large U-shaped anomaly, open to the south west, occurs on the flat valley floor. This anomaly is possibly caused by ion accumulation in an topographic depression. Limited detail work should be done here.

The two station anomaly occurring on lines 24+00S and 28+00S @ 33+00E requires detailed examination. Stations 34+00E and 36+00E on line 24+00S were not sampled because of a steep creek slope. Follow up

work should be undertaken as it is felt that the overburden here may be rather shallow permitting geological examination of the underlying bed rock.

Generally, a detailed program of close spaced geochemical soil sampling, of geological mapping, and a magnetometer survey are recommended to thoroughly examine the geochemical anomalies described above. Other one station anomalies should be examined only if success is met in the detailed work recommended above.

CONCLUSIONS AND RECOMMENDATIONS

Three areas of geochemical interest, obtained in the soil geochemical survey, numbered A, B and C, Fig. #3 are considered to require immediate follow up exploration. While these areas give only moderate geochemical response they are all considered to be "Probably Anomalous" in examination of the statistical data.

It is recommended that detailed soil sampling be undertaken to better delineate these areas. Intermediate survey lines are recommended at 200 foot intervals with the sample interval being decreased from 200 feet to 100 feet.

Geological mapping, and a magnetometer survey are to be included in this program.

An estimate of the expected cost follows:

RECORD OF COST AND PERSONNEL

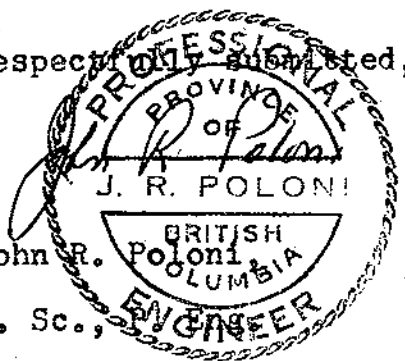
Geochemical Survey

A. Raven	Period
2nd Avenue, Vancouver	June (1-15) 1972
T. Raven	Period
Bowser, B.C.	June (1-15) 1972
J. Poloni	Period
5502 - 8B Ave., Delta	June (1-3) 1972
Total Cost (28 line miles) \$2,355.00	

Geological Reconnaissance

J. Poloni	June (25-30)	\$ 500.00
Total Cost		\$2,855.00

Respectfully submitted,

A circular professional seal for J. R. Poloni, a Professional Engineer in the Province of British Columbia. The seal features the text "PROFESSIONAL ENGINEER" around the perimeter, "PROVINCE OF BRITISH COLUMBIA" in the center, and "J. R. POLONI" in the middle. A signature is written across the seal.

J. R. POLONI
John R. Poloni
B. Sc.,

APPENDIX A

WRITER'S CERTIFICATE

CERTIFICATE

I, John R. Poloni, of 5502 - 8B Avenue, in Delta,
in the Province of British Columbia


DO HEREBY CERTIFY that:

1. I am a Consulting Geologist.
2. I am a graduate of McGill University of Montreal, Quebec, where I obtained a B. Sc. degree in Geology in 1964.
3. I am a registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia.
4. I have practiced my profession since 1964.
5. I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
6. I am a member of the Association of Geologists of Quebec.
7. I have visited the J. 1, 2, (7-14) and the P. (1-14) mineral claims, and they are staked in accordance with the regulations of the British Columbia Department of Mines and Petroleum Resources.

CERTIFICATE con't.

8. I have no direct interest in any of the Properties or Securities of Northwind Mines Ltd., nor do I expect to receive or acquire any.

Dated this 15th Day of August

A circular professional seal for a Professional Engineer in the Province of British Columbia. The seal features a signature in the center, the name "J.R. POLONI", and the text "PROFESSIONAL ENGINEER" around the perimeter. The seal is partially overlapping the text "Dated this 15th Day of August".

John R. Poloni, B.Sc., P. Eng.

June 19, 1972

Iso Exploration Ltd.,
700 - 1177 West Hastings Street,
Vancouver, B.C.

cc Mr. J. Poloni

Lab 821 G

Geochemical analysis for copper

Mesh Size: - 80
Analytical Method: Atomic Absorption
Digestion Method: $\text{HClO}_4 + \text{HNO}_3$

Sample Marked:	Copper ppm	Sample Marked:	Copper ppm	Sample Marked:	Copper ppm
C 1	18	C 26	44	C 51	14
2	16	27	22	52	20
3	15	28	18	53	136
4	17	29	17	54	10
5	25	30	18	55	12
6	158	31	18	56	21
7	16	32	18	57	12
8	23	33	30	58	10
9	24	34	21	59	11
10	16	35	24	60	10
11	22	36	26	61	11
12	20	37	75	62	13
13	12	38	16	63	15
14	15	39	14	64	15
15	18	40	16	65	19
16	15	41	21	66	9
17	17	42	12	67	13
18	18	43	12	68	10
19	29	44	13	69	10
20	18	45	16	70	12
21	22	46	17	71	40
22	14	47	18	72	13
23	17	48	12	73	30
24	20	49	12	74	24
C 25	21	C 50	20	C 75	19

Iso Exploration Ltd.
Lab 821G

Sample Marked:	Copper ppm	Sample Marked:	Copper ppm	Sample Marked:	Copper ppm
C 76	16	C 114	26	C 155	24
77	14	115	9	156	11
78	14	116	19	157	15
79	16	117	20	158	60
80	31	118	20	159	18
81	16	119	27	160	12
82	12	120	16	161	30
83	18	121	13	162	16
84	8	122	15	163	26
85	13	123	10	164	23
86	24	124	14	165	41
87	40	128	140	169	15
88	94	129	169	171	10
89	18	130	78	172	8
90	18	131	186	173	10
91	14	132	128	174	12
92	21	133	10	175	18
93	22	134	32	176	14
94	20	135	30	177	13
95	14	136	16	178	10
96	15	137	27	179	6
97	13	138	36	180	6
98	30	139	28	181	8
99	19	140	48	182	8
100	20	141	16	183	15
101	20	142	18	185	8
102	18	143	28	186	15
103	17	144	24	187	59
104	13	145	16	188	12
105	17	146	22	189	12
106	14	147	31	190	5
107	23	148	20	191	9
108	20	149	22	192	11
109	16	150	20	193	18
110	13	151	84	194	18
111	22	152	81	195	18
112	18	153	64	196	33
113	17	154	27	197	14

Iso Exploration Ltd.,
Lab 821G

Sample Marked:	Copper ppm	Sample Marked:	Copper ppm	Sample Marked:	Copper ppm
C 198	14	C 236	72	C 279	20
199	12	237	27	280	20
200	16	238	29	281	18
201	12	239	20	282	18
202	18	240	47	283	50
203	20	241	42	284	35
204	15	242	60	285	16
205	16	243	20	286	12
206	12	244	148	287	18
207	15	245	40	288	11
208	14	246	32	289	13
209	12	247	41	290	10
210	17	248	24	291	8
211	15	249	36	292	16
212	24	250	16	293	10
213	34	251	23	294	112
214	19	252	20	297	9
215	7	253	30	298	6
216	4	254	12	299	9
217	22	255	26	300	18
218	4	256	26	301	24
219	6	257	33	302	24
220	3	258	26	303	22
221	4	259	106	304	19
222	27	260	52	305	16
223	14	261	32	306	18
224	10	262	38	307	15
225	11	263	28	308	25
226	8	264	20	309	44
227	6	265	26	310	24
228	8	266	26	311	12
229	10	267	32	312	8
230	6	268	40	313	6
231	9	269	52	314	6
232	8	270	37	315	11
233	8	271	42	316	12
234	12	272	28	317	20
C 235	75	273	40	318	32
		274	25	319	10
		275	23		
		276	23		

Iso Exploration Ltd.,
Lab 821G

Sample Marked:	Copper ppm	Sample Marked:	Copper ppm	Sample Marked:	Copper ppm
C 320	110	C 359	15	C 397	24
321	6	360	13	398	16
322	5	361	13	399	24
323	8	362	9	400	18
324	10	363	10	401	18
325	18	364	14	402	35
326	21	365	16	403	48
327	6	366	24	404	22
328	8	367	31	405	16
329	4	368	23	406	73
330	5	369	11	407	23
331	11	371	14	408	21
332	14	372	14	409	19
333	14	373	30	410	12
334	10	374	10	411	13
335	61	375	13	412	20
336	13	376	12	413	15
337	39	377	10	414	22
338	25	378	14	415	14
339	30	379	10	416	18
340	54	380	11	417	18
341	14	381	18	418	17
342	31	382	11	419	11
343	23	383	11	420	18
344	21	384	40	421	12
345	42	385	14	422	8
348	49	386	13	423	14
349	52	387	8	424	10
350	54	388	6	425	12
351	43	389	12	426	16
352	38	390	12	427	13
353	25	391	14	428	23
354	19	392	12	429	8
355	12	393	24	430	14
356	20	394	13	431	20
357	22	395	14	432	18
C 358	24	C 396	18	C 433	16

ref ↗

370

347

Iso Exploration Ltd.,
Lab 821G

Sample Marked: Copper
 Pct

C	434	22
	435	29
	436	14
	437	26
	438	19
	439	12
	440	10
	441	18
	442	14
	443	9
	444	16
	445	10
C	446	18

76
 244
 876
 3680
 2504

439
 = 439

Yours truly,
 CREST LABORATORIES (B.C.) LTD.,

F. C. Burgess

F. C. Burgess
 Chief Assayer

36

22.21
 26.7
 25
 24.4
 22.2
 21.0

715

June 22, 1972

Isco Exploration Ltd.,
70 - 1177 West Hastings Street,
Vancouver, B.C.

cc Mr. John Poloni

Lab 824C

Geochemical analysis for copper

Mesh Size: - 80
Analytical Method: Atomic Absorption
Digestion Method: $\text{HClO}_4 + \text{HNO}_3$

Sample Marked:	Copper ppm	Sample Marked:	Copper ppm	Sample Marked:	Copper ppm
C 447	20	C 474	73	C 502	12
450	20	475	42	503	14
451	29	476	94	504	16
452	44	477	56	505	16
453	34	478	41	506	13
454	16	479	60	507	13
455	21	480	77	508	16
456	16	484	68	509	9
457	16	485	41	510	10
457 A	15	486	15	511	8
458	17	487	16	512	8
459	16	488	18	513	10
460	11	489	22	514	11
461	13	490	19	515	10
462	20	491	43	516	7
463	25	492	14	517	10
464	20	493	14	518	8
465	20	494	14	519	11
466	19	495	21	520	10
467	28	496	15	521	16
468	45	497	16	522	18
470	77	498	14	523	22
471	100	499	16	524	205
472	57	500	13	525	102
C 473	87	C 501	13	C 526	17

786

850

592

(75)

Isco Exploration Ltd.,
Lab 824G

Sample Marked:	Copper	Sample Marked:	Copper	Sample Marked:	Copper
C 527	8	C 565	20	C 612	14
528	17	566	10	613	12
529	19	567	27	614	12
530	40	568	12	615	14
531	24	569	18	616	22
532	114	570	23	617	12
533	52	571	20	618	14
534	47	572	81	619	16
535	16	573	38	620	18
536	16	575	64	621	22
537	14	576	56	622	20
538	16	584	74	623	14
539	22	586	18	624	12
540	14	587	18	625	16
541	16	588	24	626	14
542	8	589	34	627	10
543	12	590	16	628	12
544	26	591	14	629	14
545	10	592	14	630	8
546	13	593	18	631	8
547	12	594	10	632	10
548	8	595	10	633	12
549	12	596	10	634	8
550	12	597	14	635	16
551	8	598	10	636	24
552	9	599	10	637	8
553	10	600	6	638	20
554	12	601	12	639	16
555	10	602	8	640	10
556	15	603	10	641	14
557	15	604	10	642	18
558	13	605	24	643	14
559	14	606	100	644	10
560	15	607	10	645	12
561	28	608	30	646	26
562	13	609	6	648	10
563	12	610	16	649	14
C 564	44	C 611	10	C 650	40

$\frac{644}{666} \times 16$

$\frac{10 \times 127}{895}$

34
2
114

$\frac{40}{514} \times 14$

Isco Exploration Ltd.,
Lab 824G

Sample Marked:	Copper	Sample Marked:	Copper	Sample Marked:	Copper
C 651	20	C 691	14	C 730	26
652	16	692	88	731	26
654	14	693	48	732	52
655	16	694	28	733	32
656	12	695	38	734	48
657	8	696	18	735	38
658	12	697	8	736	34
659	10	699	14		
660	12	700	16		
661	24	801	10		
662	10	802	24		
663	10	703	14		
664	12	704	30		
665	6	705	20		
666	12	706	10		
667	12	708	16		
668	10	708	22		
669	8	709	26		
670	10	710	20		
671	6	711	66		
672	14	712	34		
673	8	713	10		
674	10	714	12		
675	10	715	16		
676	14	716	16		
677	10	717	26		
678	18	718	16		
679	8	719	24		
680	12	720	14		
681	12	721	12		
682	14	722	14		
683	12	723	10		
684	8	724	10		
686	20	725	20		
687	14	726	16		
688	12	727	12		
689	10	728	24		
C 690	6	C 729	16		

256
3

Yours truly,
CREST LABORATORIES (B.C.) LTD.,

F. C. Burgess

F. C. Burgess
Chief Assayer

*P.C. Co.
Detail*

83

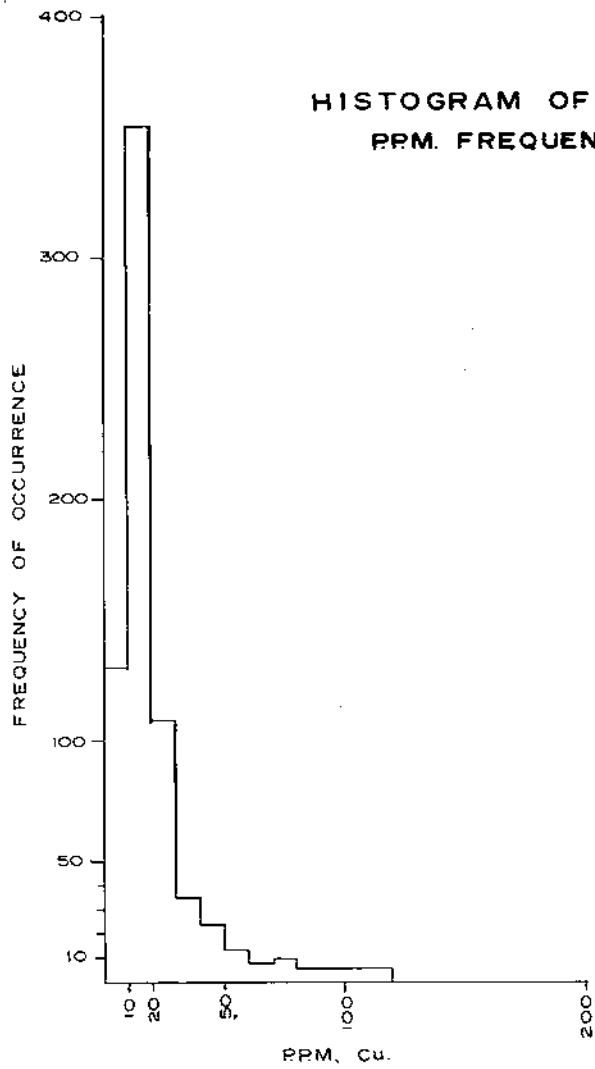
452
6 12

832
15

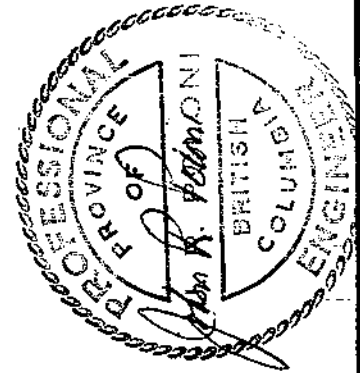
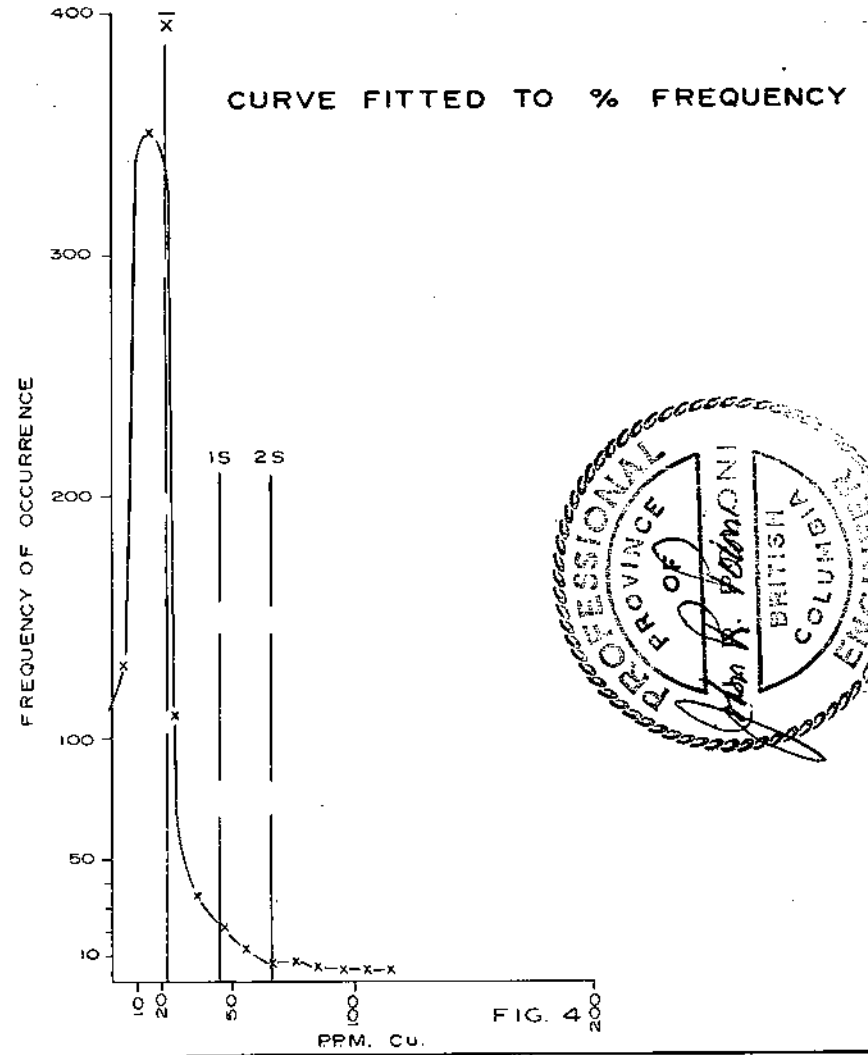
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APPENDIX B - (In Pocket)

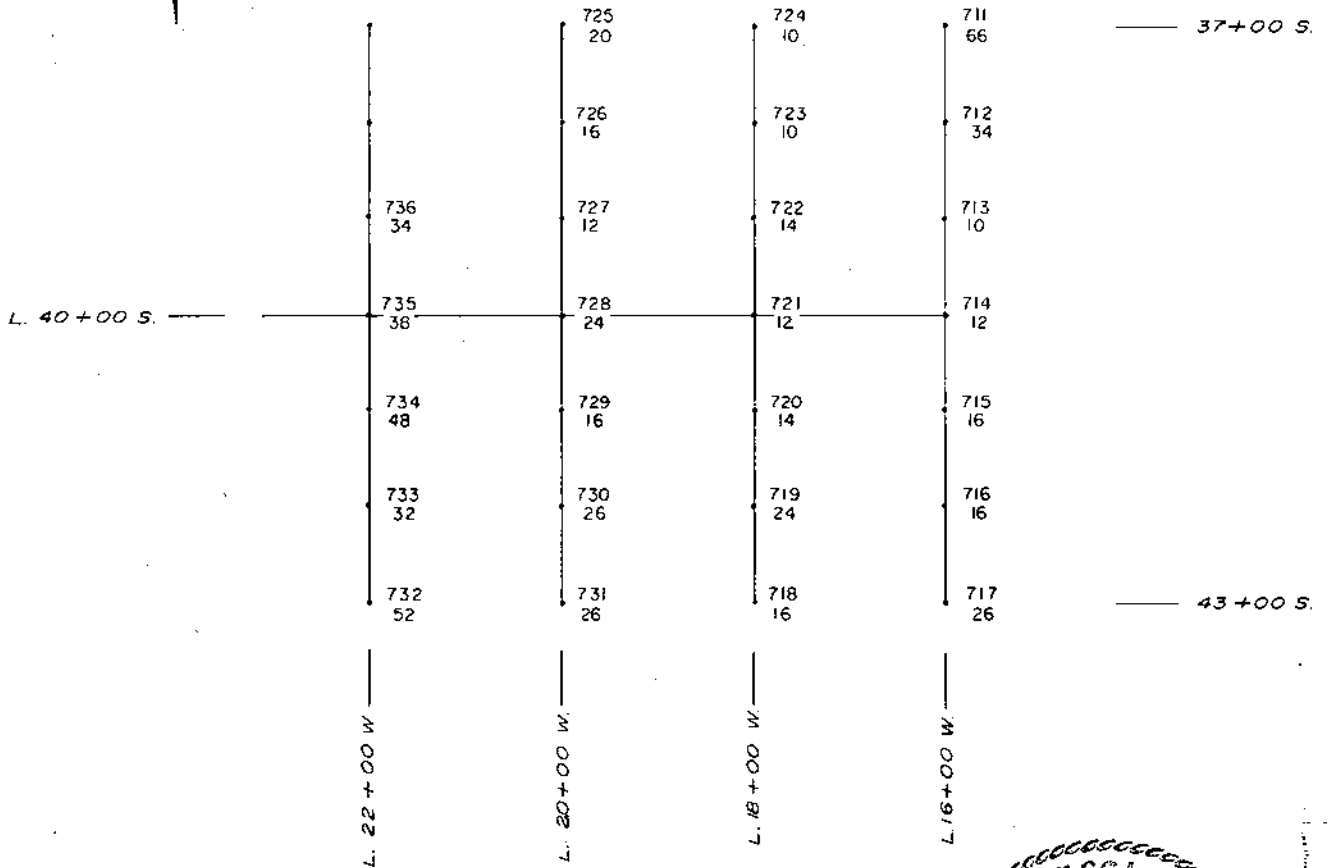
General Compilation	Fig. #2
Geochemical Plan	Fig. #3
Histogram	Fig. #4
Detail Geochemical Survey	Fig. # 5



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4168 MAP #4



NORTHWIND MINES LTD.	
J & P CLAIMS	
SIMILKAMEEN M.D.	
JOHN R. POLONI B.Sc., P. Eng	
ALTAIR DRAFTING	JULY 1972



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

No. **4168** M.P. **#5**



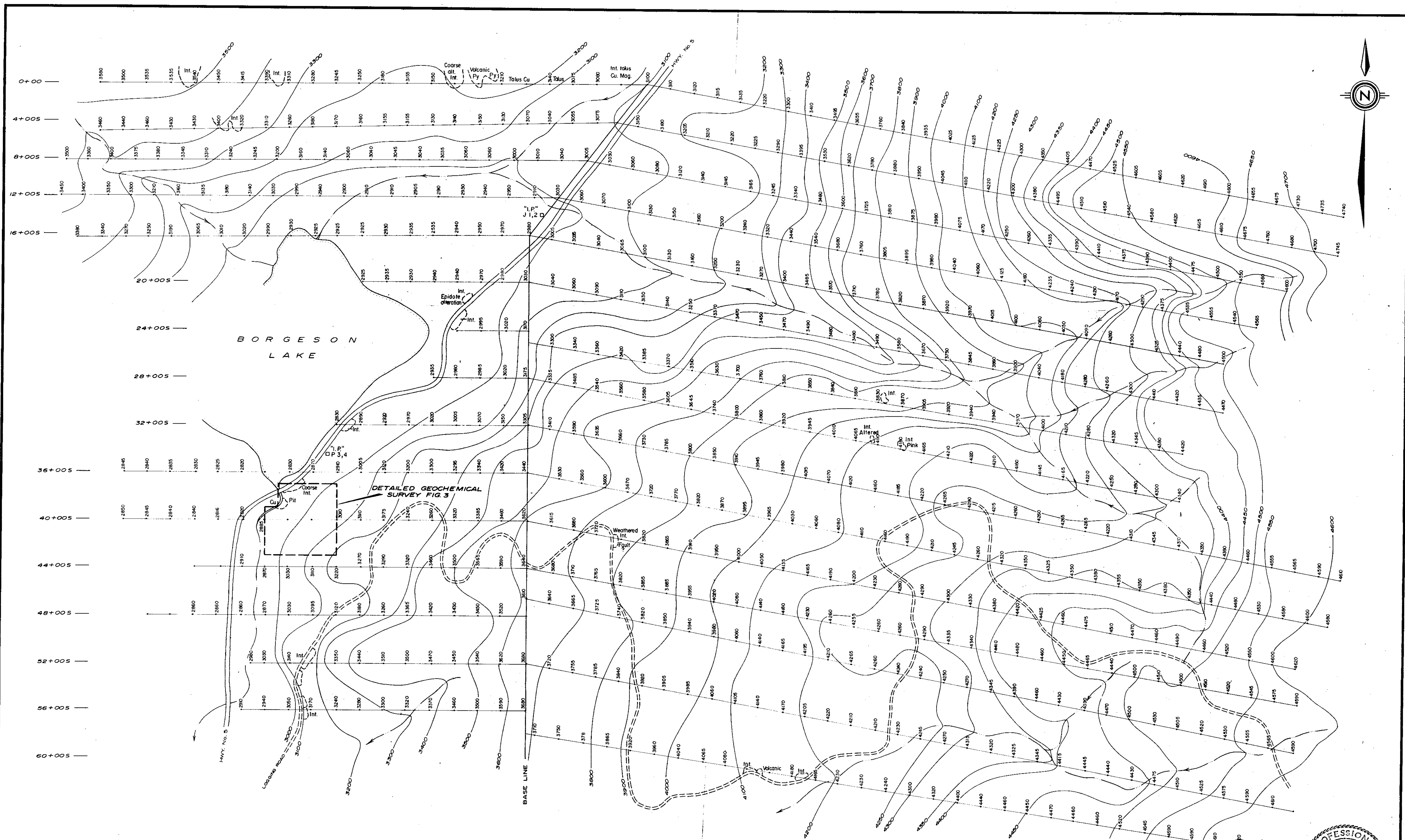
NORTHWIND MINES LTD.

J & P CLAIMS
DETAIL GEOCHEMICAL
SURVEY
SHOWING AREA
SIMILKAMEEN M.D.

JOHN R. POLONI B. Sc., P. Eng.

SCALE: 1" = 200'

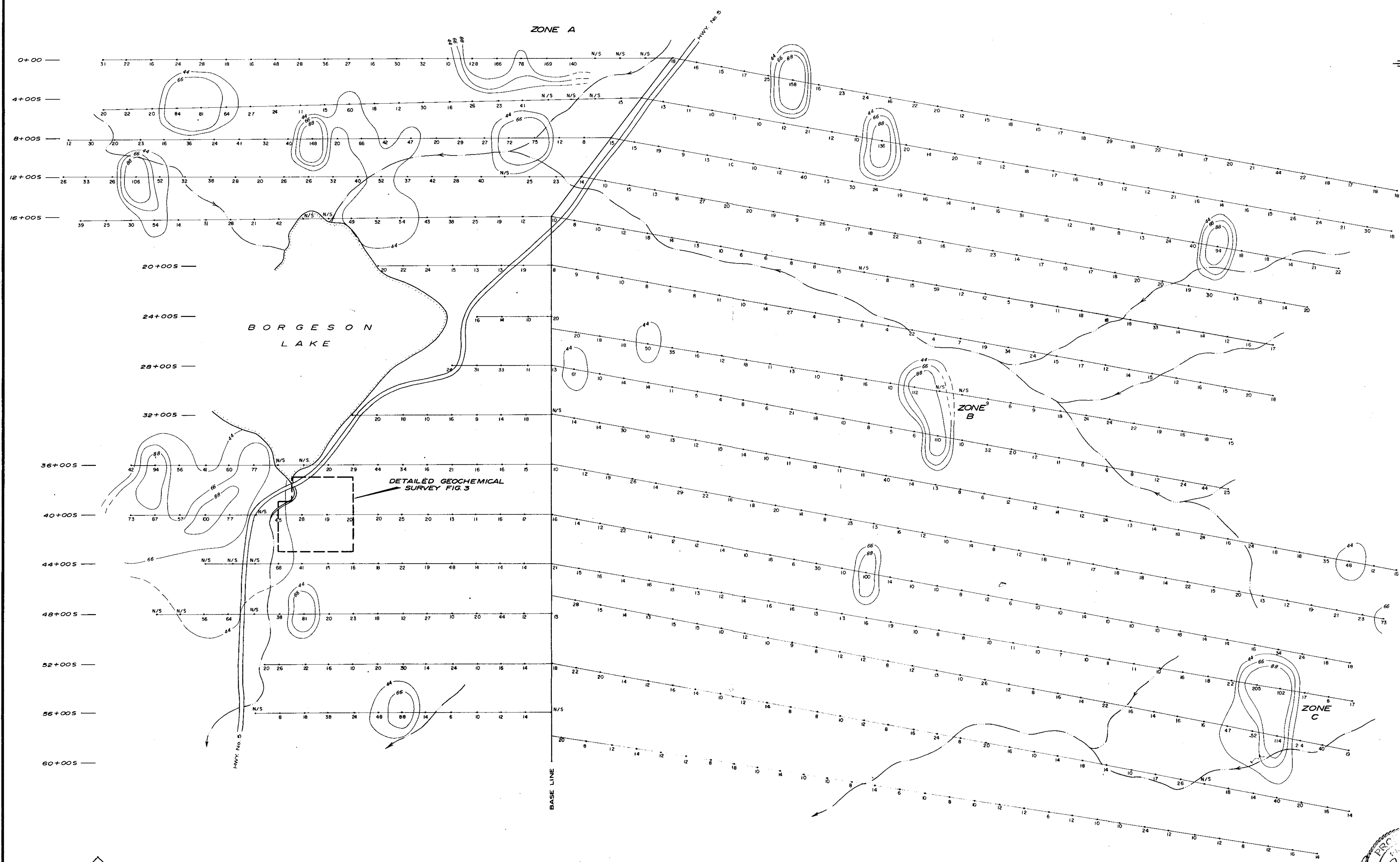
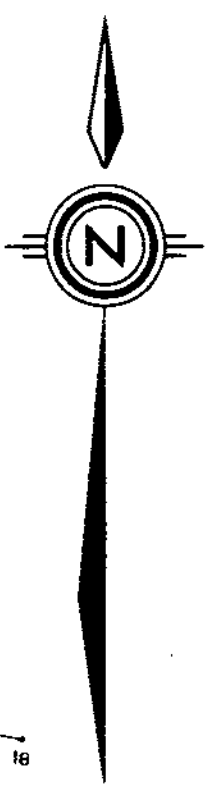
JULY 6, 1972



41168

Department of Mines and Technical Surveys No. 4168	FIG. 2 #2 NORTHWIND MINES LTD.
	J.R.P. CLAIMS SIMILKAMEEN M.D. GENERAL COMPILATION
JOHN R. POLONI B.Sc., P.Eng. SCALE 1"=400' JULY 1, 1972	





Department of
Mines and Technical Resources
No. 4168
M.P. #3
ASSESSMENT REPORT

LEGEND
— BASE LINE
— GEOCHEMICAL SURVEY LINES — STATIONS
GEOCHEMICAL DATA — COPPER
MEAN 22 ppm
THRESHOLD 44 ppm
POSSIBLY ANOMALOUS > 66 ppm
PROBABLY ANOMALOUS > 88 ppm



FIG. 3
NORTHWIND MINES LTD.
J&P CLAIMS
SIMILKAMEEN M.D.
GEOCHEMICAL PLAN
P.P.M. CU.
JOHN R. POLONI B.Sc., P. Eng.
SCALE 1"=400' JULY 1, 1972