

63 E. 9

**J. R. MOWAT & ASSOCIATES**

*Exploration Consultants*

721-56 Sparks Street

Ottawa 4, Canada

J. R. MOWAT, P.ENG.,  
GEOLOGIST  
11 BEAVERTON AVENUE  
OTTAWA 8

TEL. 232-7295  
722-0774



41P15NE8274 63E.9 POWELL

010

Report on Results of  
GEOCHEMICAL SOIL SURVEY  
for  
COPIER AND MOLYBDENUM  
on  
PAX INTERNATIONAL MINES LTD.  
North Claim Group, Powell Twp., Ont.

## INTRODUCTION

Control grid work was begun September 17th and completed November 9, 1965. A total of 121 mandays were involved in line cutting and chaining.

Field Sampling was conducted between the following dates:  
September 22 to October 5 by 1 sampler.  
October 11 to October 22 by 2 samplers.

Soil samples were analysed to close tolerances at the Laboratory of Exploration Services, Ottawa by standard semi-quantitative methods for copper and molybdenum. A description of analytical procedures is included further on in this report.

In the assessment of these results, reference is made to criteria sampling over known showings of molybdenum on the main Pax property immediately south of subject grid.

The assessment is also facilitated by a detailed geological survey completed over the same grid. Latter survey is the subject of a separate report.

During the course of the field work several old trenches were noted at widely separated points on the grid. These have been located on both geochemical and geological plots. The condition of the trenches suggests they were excavated in gold exploration.

A few of the anomalies are indirectly associated with these old workings.

## SUMMARY & CONCLUSIONS

A total of 1751 soil samples were obtained from 39.03 miles of controlled grid line. This figure included 1% sample checks.

Criteria Sampling over known deposits on the main group yielded maximum values in excess of 1000 ppm in both copper and molybdenum immediate to trenches and over tailings areas containing visible copper-molybdenite. These values however grade sharply downward in undisturbed soil areas indicating a high degree of residual contamination in some areas. Values over subject grid as expected were considerably lower and not subject to any degree of contamination.

The anomalies resulting from the surveys indicate the source mineralization to occur as localized or lineal concentrations within the Keswatin-Algomau Series.

Localized disseminations of copper are suggested but the magnitude of the anomalous conditions, coupled with topographic characteristics favoring dispersed halos precludes any great concentration of the metal in one place.

Similarly, the molybdenum halos are quite restricted and indicative of localized shear zone type occurrences.

The topography and soil type of the grid favored a geochemical assessment. A fair B-soil horizon has been developed and outcrop frequency in all areas is good. No great depth of glacial material was encountered at any point.

By statistical plot it is noted that the copper background in the soil is average, in the order of 20 p.p.m. The molybdenum background is low in the order of 0.5 to 3 ppm. Moly halo development is suspected to be restricted as a result of a basic soil environment. Values of 15-20 ppm in these soils, depending on zonal characteristics, may be considered anomalous.

## RECOMMENDATIONS

In writer's opinion, the nature and extent of the anomaly halos do not indicate that a mineralized body of ore extent occurs on the property.

The major anomaly systems are described under RESULTS, and recommendations with respect to these may be summarized as follows:

1. Claims MR 37468 and 69

A cross sectional test of the anomaly area on Line 600W between 400N and 1600N by trench sampling or limited drilling as overburden conditions indicate.

2. Claim MR 37481

A cross sectional trench on Line 8600W between 1800N and 2000N should be excavated, mapped and bulk sampled.

Other old trenches in the area, associated with ancillary anomalies may be rehabilitated, mapped and sampled.

3. Claims MR 37464, 37467 and 37474

Stripping, mapping and trench sampling as follows:

Trench at Baseline and 800W to investigate Mo buildup.

Trench on Line 4600W, 100 to 300N.

Trench on Line 3400W, 500 to 700N.

PROPERTY: LOCATION: ACCESS: TOPOGRAPHY

The property is wholly owned by Pax International Mines Ltd.,  
1725 Bank Street, Ottawa, Ontario.

It is comprised of a single group of 18 contiguous, unpatented  
mining claims numbered MR 37464 to MR 37481 inclusive having an  
approximate area of 720 acres.

The group is currently under extension, 60 mandays work on each  
claim being due February, 1966.

It is located in the central part of Powell Township, Montreal  
River Mining Division, as noted by locational inlays on accompanying  
plans.

The eastern part of the group is traversed by Ontario Hwy. 566,  
some 6 miles north from the village of Matachewan. A telephone line  
parallels the highway on these claims.

Topography is high, rolling to cliffy. Outcrops are plentiful and  
the soil cover is relatively shallow over all the group.

Brush is mixed conifer and deciduous. Many windfalls and overcut  
areas of slash locally make travel difficult.

## SCOPE & PERFORMANCE

### Field

The soil sampling program was controlled by a chained, picket line grid with a line interval of 200 feet oriented astronomic north-south.

Sample traverses were conducted along line and samples taken every 100 feet. Sample locations are designated in the field by yellow ribbon flags having sample number noted thereon.

Sampling was accomplished by standard sampling augers 3 and 8 feet in length from the B - soil horizon where this horizon was present. Where no B - horizon was noted, a sample was procured below the humus level, and detrimental condition so noted. All sampled soils are described in notes and on plans appended.

A check sample was taken for every one-hundredth sample. A total of 1751 samples were so procured.

### Laboratory

Molybdenum (VI) in acid solution when treated with stannous chloride is converted into molybdenum (V), which forms a complex with thiocyanate ion (amber colored). The latter may be extracted with an appropriate organic solvent.

The dried soil sample, minus 80 mesh, is digested in a hot water bath using a mixture of concentrated sulfuric and nitric acids. An appropriate aliquot is taken and treated with concentrated citric acid to inhibit the effects of the two digestion acids and to prevent the interference of tungsten and vanadium. The aliquot is further treated with a thiocyanate solution to form the amber-colored molybdenum thiocyanate complex  $\text{Mo}(\text{SCN})_5$ .

Stannous chloride is added to reduce the iron and other interfering elements. The molybdenum complex is removed by shaking with isopropyl ether and the intensity of the color compared to known standards.

In soils molybdenum is usually present in the hexivalent state and hot sulfuric acid digestion is capable of removing most of the extractable metal. However, if flakes of molybdenite are present nitric acid is added to bring about the digestion of this mineral. Iron, tungsten, vanadium and rhenium interfere in this method, but stannous chloride and citric acid are used to prevent this interference; the former metals in their lower valence states do not form colored complexes with thiocyanate.

The method can be used on soil containing from 2 ppm molybdenum upward. The upper limit of detection can be extended by taking a smaller aliquot of test solution and/or smaller weight of sample. Results are reported with a precision, ability to reproduce, of plus or minus one-third.

Copper is determined by the standard hot acid leach, dithizone method employed by the Geological Survey of Canada.

#### Presentation

Picket line traverses are plotted on accompanying 200 scale plans as they occur in the field.

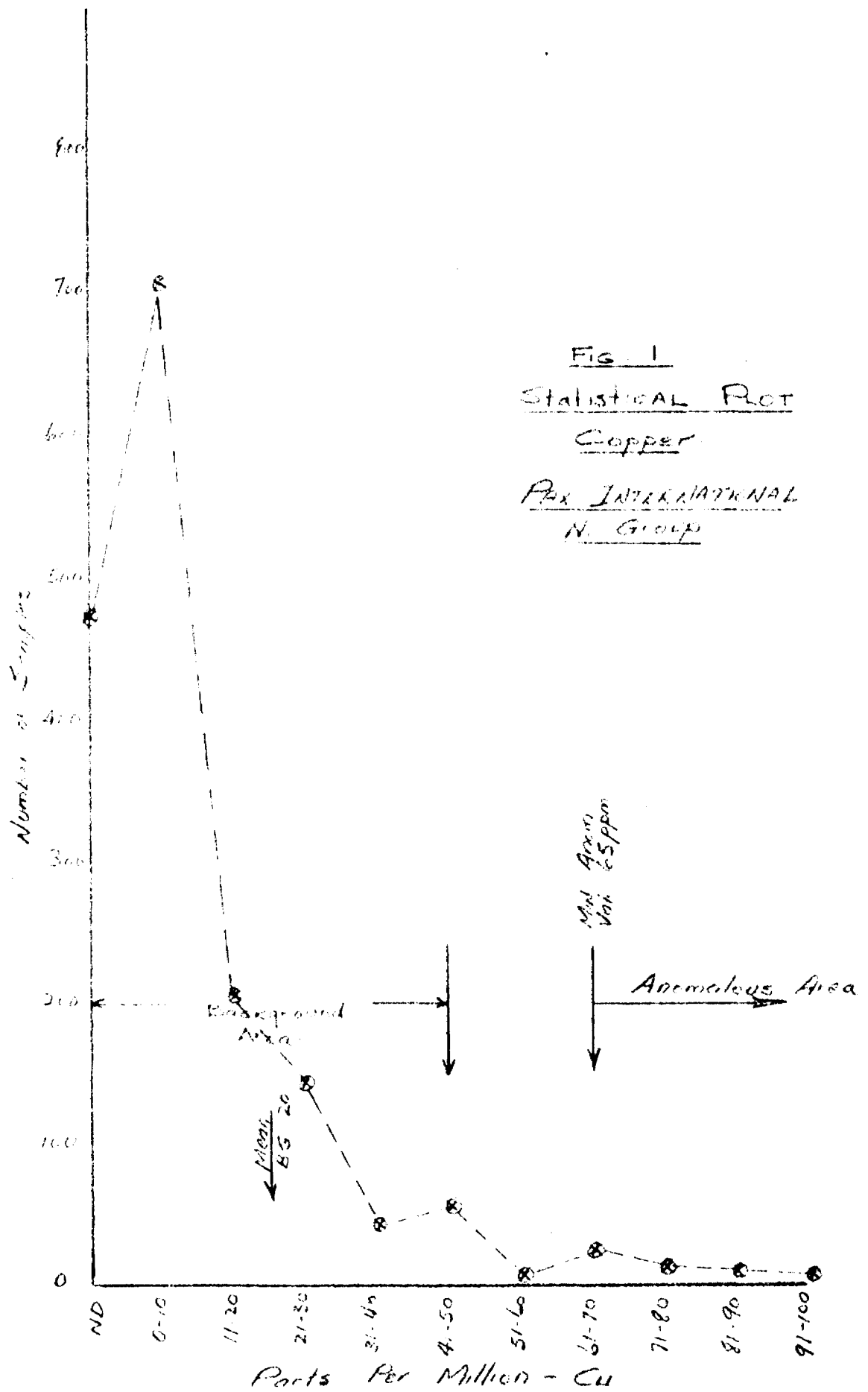
Such features as the copper-molybdenum value in ppm, vegetation type, soil type, streams, swamp and slope direction are also noted. Outcrop locations normally noted, have been plotted on a separate geological plan, to which reference has been made.

Background values as noted are respectively 20 ppm and 1.5 ppm for copper and molybdenum. Minimum anomalous values are respectively 65 and 10 parts per million. Anomalous values have been contoured in increments



of 25 ppm copper and 10 ppm molybdenum. To simplify the presentation, values over 100 ppm copper and 40 ppm molybdenum are distinctively hatched.

Two plates showing graphic background and minimum anomalous plots are included overleaf.



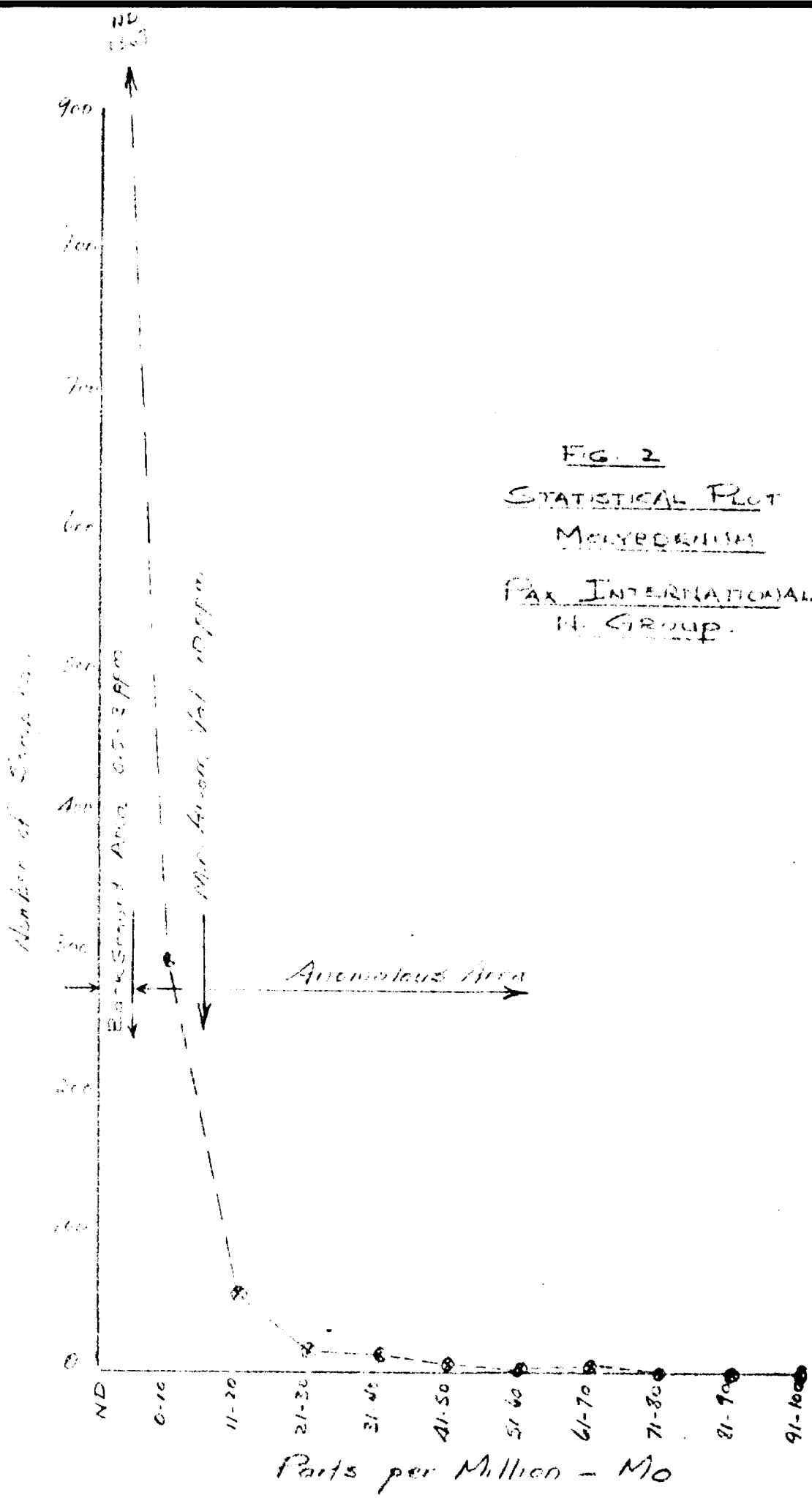


FIG. 2  
 STATISTICAL PLOT  
 MOLYBDENUM  
 IAX INTERNATIONAL  
 H. GROUP.

## THEORY OF GEOCHEMISTRY

There are many different soil groups and subgroups based on the origin of soil, its environment, chemical composition, maturity, texture, etc. Each soil has a profile based on layering, or horizons, each of which has its own chemical and textural composition. A certain horizon may vary in thickness, or in some cases be completely absent.

Soil groups are formed as a result of bedrock weathering and biologic activity over extremely long time periods. Depending on time elements, soils can be classified firstly as mature or immature.

Mature soils have well developed zones or horizons and are called Zonal soils. Less mature soils and those of maturity with some horizons missing, or not well developed, may be classed as Intrazonal. Youngest immature soils, such as found in mountains, are known as Azonal soils.

In Zonal soils there are two main groups, those which are calcium-rich, and those which are rich in aluminum-iron. Former group, appears to be most pertinent to subject survey. Zonal soils are made up of Podsoils associated with conifer tree cover, but to a greater extent in subject area, the grey-brown soils associated with mixed or deciduous bush. In both of these soils, the "A" horizon has been highly leached with consequent enrichment of the "B" horizon with metals and organics from above.

Intrazonal soils are located in poorly drained areas such as swamp, and low water table areas. This soil has been subjected to alternate reduction and oxidation processes due to seasonal water table fluctuations. They tend to have very thick accumulated organic layers; viz, north central area of claims around lake.

Azonal soils show little or no differentiation of the parent soil-forming material. They are formed where erosion, caused by topographic relief, is active, so that the soil has no time to become mature. Horizons are consequently thin, indistinct, and mixed with rock fragments.

In soil formation the "A" horizon is first to appear, being developed from the parent rock or "C" horizon. In youthful soils the "A" may be the only distinct horizon.

The "C" horizon, or zone of weathering, is not a true soil, but has been developed from the underlying bedrock by weathering processes.

The "B" horizon is developed during the maturing process and is a zone of accumulation of minerals through capillarity from below and some organic material leached from above layers. The formation of a good "B" zone then, is dependent on the factors of time, (lengthy), climate, relief (good drainage, though not excessive erosion), parent material and biological activity, in roughly this order of importance. The "B" horizon, due to its accumulation of minerals, is the horizon to sample.

The occurrence of molybdenum in soils is normally in the range of 1 to 4 ppm. It may be higher in tundra areas, and 20 to 30 ppm is normal in porphyry-copper areas of the southwestern U.S.A. Usually 20 ppm in soils is considered high. Molybdenum is more soluble than copper and is highly mobile. Molyhalos may be extensive and show up well against a low background in an acid soil environment. Its sensitivity is high (1-5 ppm), and therefore lends itself ideally to reconnaissance sampling on a wide grid under these conditions.

Where the soil tends to be basic however, solubility and migration of molybdenum ions is restricted and any halo is usually close to source mineralization. Under these circumstances the copper halo is the more extensive.

## GEOLOGY

The following table of formations is represented on grid area surveyed:

<u>Matachewan</u>	<u>Approx. Areal Extent</u>
Diabase dykes	35%
<u>Algoman</u>	
Syenite, syenite porphyry plugs	5%
<u>Timiskaming</u>	
Quartzite, chert and argillite	3%
<u>Keewatin</u>	
Meta-diorite	10%
Basalt	15%
Andesite	30%
Dacite	5%
Rhyolite	2%

The geology of the grid area was compiled from a separate survey and is the subject of a supplementary report to follow. The subject is treated here in summary form, in so far as it is relevant to the geochemical survey.

The chief feature of the grid area is the extensive areal representation of Matachewan Diabase dykes. These are youthful intrusions making up an estimated 35% of the areal coverage. The dykes are present as eight parallel systems striking from north to N15E across the grid. They are usually crystalline from medium to fine, unaltered, and show a considerable magnetite content.

Their effect on the survey may be noted in the discontinuous character of many of the anomalies which terminate at the dyke contacts. In one or two instances however, the anomaly continues across the dyke suggestive of possible mineral remobilization along reopened fractures in the Keewatin by post-dyke movement.

Of considerable economic significance are several small plugs and/or bosses of Algonian syenite and syenite porphyry. These range from basic syenite to feldspar porphyry and appear to host, and possibly be genetically related to, the mineralization. It is significant that geochemical buildups show a direct relationship to these structures as well as to the meta-volcanic rocks in their environs.

The Timiskaming sediments comprise a relatively minor areal resemble recrystallized acid volcanics. Their occurrence is restricted to the central grid area, claims MR 37465 and 66.

A large mass of meta-diorite occurs south of the lake on claims MR 37472 and 73. It is a finely crystalline, highly chloritized and epidotized rock which could also be classified as a coarse basic flow. The formation does not appear to be a receptive mineralizer.

The basic to intermediate volcanics form the major areal grid extent. The basalts which occupy a large part of the western grid are fine grained, dense rocks often exhibiting concoidal fracture. They are frequently brecciated and feldspathized.

The basalts grade into intermediate andesites which are the dominant rocks from the viewpoint of distribution, and a major host rock underlying the anomaly systems. They are also the most intensely altered; usually quite chloritic, feldspathic and carbonated. Copper-moly mineralization is frequently noted in the feldspathic, quartz injected facies. The andesites are usually well fractured and generally show some late stage silicification. Along diabase contacts they are usually highly baked.

Dacites and rhyolites are minor types and apart from brecciation and quartz-feldspathic injections of fracture planes, are relatively unaltered.



## RESULTS

Examination of accompanying plans indicates that most anomalous systems are of moderate to weak intensity and that the anomaly halos are restricted in both strike extent and breadth dimension. The geology of the grid indicates that strike limitations are probably due to truncating dykes of Matachewan diabase which have in many cases terminated mineral continuity. The lineal aspect of the anomalies suggests the presence of narrow mineralized fractures or shear zones.

The major anomalous systems are described hereafter by claim location. These hold most promise of a reasonable degree of continuous mineralization and some followup exploration is locally suggested.

These systems are generally associated with andesite-syenite contact areas, or within volcanic corridors between cross-cutting diabase dykes. Significantly, in all cases where elements of the Algonian series outcrop, the areas show an ionic buildup in the soil cover immediately over the Algonian and/or bordering volcanics.

A prominent system of disconnected copper anomalies extend from claim MR 37469 westward  $1\frac{1}{4}$  miles to claim MR 37475. The trend of the system is N80°E suggestive of a mineralized fracture zone conformable with the original trend of the Keewatin volcanics. As above suggested, the discontinuous nature of the anomaly pattern is probably due to interruption by repetitive north-south diabase dykes. The fracture system is not prominently outlined on the molybdenum plot; molybdenum buildups are localized to the Algonian syenite intrusion area on claims MR 37468 and 49.

On the westerly claims of the grid, a suggested northwesterly trend is developed. These may be subsidiary fracture systems paralleling a strong

photo lineament striking northwesterly through the lake on claim MR 37472.

CLAIMS MR 37468 and 69

Two hook-shaped anomalies show a buildup in copper. A lineal molybdenum anomaly extends for 1200 feet and is relateable to the copper system.

The anomalies appear to be part of strong, late fracture system cutting all formations. The values not only occur along the syenite-volcanic contact, but extend westerly over a diabase dyke which, at this point, has an apparent width of 800 feet. The maximum anomaly values are 300 ppm copper and 25 ppm molybdenum.

This zone holds the most promise for followup work and should be tested by trenching and/or drilling along Line 600W between 400N and 1600N.

CLAIM MR 37464

Two lineal copper systems are developed on the claim. These have weak, indirect molybdenum associations and are believed to be due to narrow, mineralized fractures. They lie within the volcanic horizon close to a small plug of Algonian syenite.

On baseline at 800W, a restricted moly buildup is associated with the volcanics in an outcrop area. This may be investigated by stripping.

CLAIMS MR 37467 and 74

To the north and west of a small lake, moderate copper anomalies of restricted strike length appear to be part of the mineralized fracture system earlier described.

These lie within narrow volcanic corridors in close contact with syenite and diabase intrusions. Prominent north and northwesterly photo lineaments in the immediate buildup area are suggestive of mineralized cross fracture zones. Zoning of soil values is fair in a north-south direction and magnitude range to 650 ppm. Moly association, however, is weak to negligible.

The zones could probably be tested by stripping in the outcrop areas of Line 4600W at 200N and Line 3400W at 500N.

CLAIM MR 37475

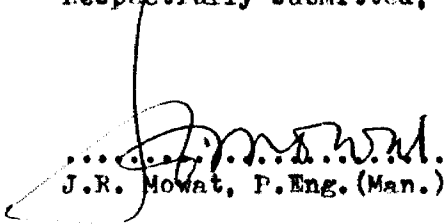
A narrow corridor of andestic to basaltic lava supports a limited copper buildup for a strike length of 400 feet. There is no evident moly association with this zone. Maximum copper value is 338ppm.

CLAIMS MR 77477 and 81

A northwesterly copper anomaly some 300 feet in length on claim MR 37477 is associated with a small syenite plug. There is evidence of residual contamination from a large outcrop of the formation which appears to be cut by copper-bearing fractures. A similar but non-conformable molybdenum anomaly extends northeasterly from the syenite contact to a point immediately south of an old trench. The trench area itself is weakly anomalous in copper with no molybdenum.

On claim MR 37481, a weak, lineal copper system extends outside the grid. A localized copper anomaly 200 feet south of this condition is relateable to a well defined molybdenum halo to 60 ppm which is possibly related to both systems, and is roughly conformable to the northwest trending andesite-basalt contact. The condition should be investigated by trenching along Line 8600W between 1800 and 2000N.

Respectfully submitted,

  
J.R. Mowat, P.Eng. (Man.)

Ottawa, Ontario  
December 6, 1965.



# JEAN ALIX COMPANY LTD.

LINE CUTTING & STAKING CONTRACTOR  
 HEAD OFFICE - VAL D'OR, P. QUE.  
 TEL. 824-3817

Nº 735

PROPERTY: Matatchewan Area

TWP:

PROV: Ontario

CHARGE To: J. R. Mowat  
 ADDRESS: 11, Beaverton Ave.,  
 Ottawa 5, Ontario.

DATE: October 26, 1965.

Transit Line: Miles at \$ Total \$ Grand Total :  
 Pickets Lines: 36.6 Miles at \$ 65.00 Total \$ 2,379.00

LINE No.	LENGTH NORTH	LENGTH SOUTH	BASE LINE	NORTH TIE LINE	SOUTH TIE LINE	TOTAL IN FEET PICKET LINE	TOTAL IN FEET TRANSIT LINE
000	2,191	1,280	9,850	9,805			
L 2 E	1,660						
L 2 W	2,685	1,345					
L 4 W	2,545	1,410					
L 6 W	2,625	1,490					
L 8 W	2,710	1,560					
L 10 W	2,625	1,650					
L 12 W	2,190	1,720					
L 14 W	1,915	1,708					
L 16 W	2,230	1,705					
L 18 W	2,438	1,721					
L 20 W	2,434	1,715					
L 22 W	2,380	1,708					
L 24 W	2,407	1,708					
L 26 W	2,413	1,703					
L 28 W	2,470	1,716					
L 30 W	2,158	1,724					
L 32 W	2,183	1,732					
L 34 W	2,206	1,745					
L 36 W	1,350	1,758					
L 38 W	1,365	1,771					
L 40 W	1,385	1,785					
L 42 W	1,220	1,866					
L 44 W	1,400	1,968					
L 46 W	1,460	2,075					
L 48 W	1,470	2,190					
L 50 W	1,480	2,276					
L 52 W	1,335	2,368					
L 54 W	1,504	2,360					
L 56 W	1,523	2,350					
L 58 W	1,543	2,285					
L 60 W	1,552	2,221					
L 62 W	1,562	2,177					
L 64 W	1,525	2,133					
L 66 W	1,588	2,096					
L 68 W	1,598	1,717					
L 70 W	1,608	1,340					
L 72 W	1,618	1,129					
L 74 W	1,628	1,137					
L 76 W	1,641	1,320					
L 78 W	1,654	1,269					
L 80 W	1,670	1,109					
L 82 W	1,687	850					
L 84 W	1,703	780					
L 86 W	1,720	1,610					
L 88 W	1,749	1,499					
L 90 W	1,778	1,575					
L 92 W	920	1,720					
L 94 W	300	2,020					
L 96 W		1,720					
L 98 W		680					
	89,001	84,494	9,850	9,805		193,150	

*May 11/66  
 Certified Correct + Paid.  
 J. Mowat*



# JEAN ALIX COMPANY LTD.

LINE CUTTING & STAKING CONTRACTOR

HEAD OFFICE - VAL D'OR, P. QUE.

TEL. 824-8817

Nº 740

PROPERTY: Matatchewan Area (Extension)

TWP:

PROV: Ontario.

CHARGE To: Mr. J. R. Mowat,  
11 Beaverton Ave.,

DATE: November 10, 1965.

ADDRESS: Ottawa 5, Ont.

Transit Line: Miles at \$ Total \$ Grand Total:  
Pickets Lines: 2.5 Miles at \$ 65.00 Total \$ 162.50

LINE NO.	LENGTH NORTH	LENGTH SOUTH	BASE LINE	NORTH TIE LINE	SOUTH TIE LINE	TOTAL IN FEET PICKET LINE	TOTAL IN FEET TRANSIT LINE
Extension of Line cutting job:							
L 54 W	706	1,504 N to	2,210 N				
L 56 W	687	1,523 N to	2,210 N				
L 58 W	697	1,543 N to	2,240 N				
L 60 W	858	1,552 N to	2,410 N				
L 62 W	768	1,562 N to	2,330 N				
L 64 W	773	1,575 N to	2,348 N				
L 66 W	744	1,588 N to	2,332 N				
L 68 W	637	1,598 N to	2,235 N				
L 70 W	562	1,608 N to	2,170 N				
L 72 W	562	1,618 N to	2,180 N				
L 74 W	602	1,628 N to	2,230 N				
L 76 W	706	1,641 N to	2,347 N				
L 78 W	600	1,654 N to	2,254 N				
L 80 W	572	1,670 N to	2,242 N				
L 82 W	463	1,687 N to	2,150 N				
L 84 W	352	1,702 N to	2,054 N				
L 86 W	300	1,720 N to	2,020 N				
L 88 W	296	1,749 N to	2,045 N				
L 90 W	222	1,778 N to	2,000 N				
L 36 W	930	1,350 N to	2,280 N				
L 38 W	960	1,365 N to	2,325 N				
	12,997					12,997	

*May 14/66  
Certified correct & paid  
J. Mowat*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT # R40-65

Type Samples Soil  
From J. R. Mowat  
Date November 3, 1965

Extraction Bisulphate fusion - HCl leach  
Fraction Used -80 mesh  
Analyst W.F.B. & M.G.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NPX-1 ✓	8	10	NPX-76 ✓	38	10	
2	50	ND	77	10	5	
3	ND	10	78	3	ND	
4	ND	ND	79	28	ND	
5	3	ND	80	10	ND	
6	55	5	81	8	ND	
7	25	8	82	63	13	
8	5	1	83	28	15	
9	230	13	84	70	15	
10	38	ND	85	10	ND	
11	10	10	86	45	18	
12	8	ND	87	175	65	
13	13	1	88	3	ND	
14	50	1	89	3	ND	
15	20	1	90	43	10	
16	138	1	91	53	20	
17	63	13	92	38	5	
18	ND	ND	93	3	ND	
19	3	ND	94	ND	23	
20	88	13	95	ND	ND	
21	18	ND	96	ND	ND	
22	38	1	97	ND	ND	
23	28	ND	98	18	10	
24	8	ND	99	140	5	
25	5	ND	100	75	8	
26	20	ND	101	80	8	
27	8	ND	102	5	5	
28	5	ND	103	3	ND	
29	8	ND	104	63	1	
30	10	ND	105	45	ND	
31	8	ND	106	3	ND	
32	3	ND	107	5	1	
33	10	ND	108	30	3	
34	138	ND	109	130	10	
35	3	ND	110	3	8	
36	8	1	111	10	ND	
37	ND	ND	112	8	1	
38	ND	ND	113	35	ND	
39	ND	ND	114	40	10	
40	28	ND	115	28	5	
41	160	ND	116	25	1	
42	10	ND	117	300	15	
43	5	ND	118	63	ND	
44 ✓	ND	ND	119	95	15	
57	3	1	120	140	3	
58	5	13	121	35	ND	
59	8	20	122	10	1	
60	5	13	123	45	ND	
61	18	3	124	50	3	
62	ND	ND	125	175	25	
63	5	ND	126	28	3	
64	8	ND	127	33	ND	
65 ✓	13	ND	128 ✓	113	ND	
66	80	ND	129	23	ND	
67	95	ND	146	3	ND	
68	175	10	147	20	1	
69	30	10	148	8	1	
70	50	8	149 ✓	3	ND	
71	15	ND	150	88	3	
72	38	3	151	160	3	
73	3	ND	152	70	3	
74	5	ND	153	38	ND	
75	3	ND	154	50	20	

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
*W.F.B. M.G.*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT# R40-65 Cont'd.

Type Samples Soil

Extraction Bisulphate fusion-HCl leach

From J. R. Mowat

Fraction Used -80 mesh

Date November 3, 1965

Analyst W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo						REMARKS
NPX-155 ✓	45	10						
156	50	18						
157	63	13						
158	45	25						
159	30	8						
160	170	10						
161	50	3						
162	28	5						
163	40	3						
164	35	15						
165	38	50						
166	33	20						
167	40	20						
168	38	ND						
169	8	ND						
170	53	ND						
171	13	ND						
172	338	65						
173	45	ND						
174	30	1						
175	30	1						
176	8	ND						
177	28	ND						
178	48	13						
179	30	15						
180	23	18						
181	15	15						
190	5	ND						
191	38	ND						
192	ND	ND						
193	8	ND						
194	48	13						
195	28	18						
196 ✓	33	10						

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

Per *W.F.B.*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT

Type Samples.....Soil.....

Extraction pyrosulphate fusion, HCl leach

From J. R. Mowat, 56 Sparks Street.....

Fraction Used.....-80 mesh.....

Date.....November 5.....19 65.....

Analyst.....W. F. B. & M. C.....

SAMPLE NO.	Cu	Mo	sample number	Cu	Mo	REMARKS
NPx-197 ✓	10	7	NPx-269 ✓	ND	ND	all values are given in ppm
198	5	1	270	3	ND	
199	3	ND	271	3	ND	
200	8	ND	272	3	ND	the value ND indicates that the element was not detected
201	5	ND	273	ND	ND	
202	10	2	274	ND	ND	
203	50	1	275	8	ND	
204	3	ND	276	83	13	
205	8	ND	277	10	ND	
206	5	1	278	38	5	
207	8	ND	279	13	ND	
208	15	13	280	45	2	
209	23	7	281	10	ND	
210	10	1	282	5	ND	
211	105	1	283	250	ND	
212	25	ND	284	8	ND	
213	30	ND	285	ND	ND	
214	3	ND	286	ND	ND	
215	ND	ND	287	ND	ND	
216	8	ND	288	ND	ND	
217	30	ND	289	3	ND	
218	3	1	290	ND	ND	
219	ND	1	291	ND	ND	
220	5	1	292	88	8	
221	3	ND	293	ND	ND	
222	3	15	294	3	1	
223	20	10	295	3	ND	
224	8	ND	296	3	ND	
225	3	ND	297	5	25	
226	ND	10	298	93	7	
227	ND	ND	299	8	ND	
228	3	ND	300	10	ND	
229	3	1	301	8	ND	
230	ND	1	302	3	ND	
231	10	1	303	10	ND	
232	15	ND	304	5	ND	
233	8	ND	305	3	ND	
234	23	ND	306	10	ND	
235	ND	ND	307	13	ND	
236	10	ND	308	5	ND	
237	63	1	309	8	ND	
238	ND	ND	310	3	ND	
239	8	ND	311	8	ND	
240	3	ND	312	3	ND	
241	10	ND	313	25	2	
242	18	2	314	3	ND	
243	3	ND	315	10	ND	
244	5	1	316	45	4	
245	ND	ND	317	8	ND	
246	5	ND	318	8	ND	
247	8	ND	319	ND	ND	
248	50	7	320	ND	ND	
249	130	ND	321	25	ND	
250	5	8	322	3	ND	
251	8	1	323	5	ND	
252	ND	ND	324	8	ND	
253	225	25	325	3	ND	
254	3	10	326	ND	ND	
255	10	ND	327	ND	ND	
256	30	1	328	3	ND	
257	10	1	329	8	ND	
258	8	ND	330	10	5	
259	ND	ND	331	75	5	
260 ✓	ND	ND	332	5	1	

EXPLORATION SERVICES  
GEOCHEMICAL SEM - QUANTITATIVE CHEMICAL ANALYSIS  
Per: *W.F.B.*



# EXPLORATION SERVICES

## GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu	Mo	sample number	Cu	Mo	REMARKS
NPx-333 ✓	3	ND	NPx-415	15	ND	
334	30	ND	416	10	ND	
345	3	ND	417	15	1	
346	7	ND	418	13	ND	
347	5	ND	419	10	1	
348	ND	ND	420	8	ND	
349	ND	ND	421 ✓	10	ND	
350	3	ND	422	10	ND	
351	ND	ND	423	8	ND	
352	5	ND	424	8	ND	
353	3	ND	425	3	ND	
354	ND	ND	426	5	ND	
355	5	ND	427	45	ND	
356	8	ND	428	23	ND	
357	3	ND	429	5	ND	
358	3	ND	430	13	ND	
359	5	ND	431	190	ND	
360	3	ND	432	8	ND	
361	ND	ND	433	3	ND	
362	38	4	434	3	ND	
363	ND	ND	435	ND	ND	
364	ND	ND	436	25	ND	
365	63	ND	437	3	ND	
366	3	ND	438	3	ND	
367	100	2	439	ND	ND	
368	8	ND	440	8	ND	
369	8	ND	441	10	ND	
370	13	1	442	5	ND	
371	50	ND	443	ND	ND	
372	5	ND	444	5	ND	
373	10	ND	445	10	ND	
374	18	ND	446	25	ND	
375 ✓	8	ND	447	5	ND	
376	3	ND	448	3	ND	
377	8	5	449	50	ND	
378	13	2	450	5	ND	
379	5	3	451	20	2	
380	15	5	452	25	1	
381	13	ND	453	18	ND	
382	ND 10	ND	454	20	ND	
383	ND	ND	455	263	2	
384	3	ND	456	13	ND	
385	15	1	457	18	ND	
386	5	ND	458	15	ND	
387	8	ND	459	45	ND	
388	13	ND	460	18	ND	
389	10	ND	461	13	ND	
390	15	ND	462	8	ND	
391	15	ND	463	10	ND	
392	20	ND	464	15	ND	
393	10	ND	465	10	ND	
394	10	ND	466	5	ND	
395	75	ND	467	50	ND	
396	18	ND	468	13	ND	
397 ✓	10	ND	469	5	ND	
398	5	ND	470	275	ND	
399	10	ND	471	15	ND	
400	3	ND	472	13	ND	
401	10	ND	473	10	ND	
402	13	ND	474 ✓	28	ND	
403	10	ND	505	18	ND	
404	5	ND	506	13	ND	
405	8	ND	507	120	8	
406	18	ND	508	35	6	
407	10	ND	509	15	6	
408	10	ND	510	30	7	
409	75	8	511	13	6	
410	13	ND	512	15	13	
411	13	ND	513	10	ND	
412	10	ND	514	5	2	
413	10	ND	515 ✓	3	ND	
414	18	ND	516 ✓	5	ND	

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
 By: *W. F. Smith*

# EXPLORATION SERVICES

## GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu	Mo						REMARKS
NPx-517	5	ND						
518	3	ND						
519	3	ND						
520	5	ND						
521	10	ND						
522	63	5						
523	8	ND						
524	ND	ND						
525	5	ND						
526	8	ND						
527	263	ND						
528	38	ND						
529	20	ND						
530	25	ND						
531	10	ND						
532 ✓	5	ND						
<del>532</del> 533	30	ND						
534	10	ND						
475	8	ND						
476	15	ND						
477	25	1						
478	30	ND						
479	3	ND						
480	10	1						
481	5	ND						
482	15	ND						
483	3	ND						
484	10	ND						
- 485 ✓	8	1						
486	ND	ND						
487	5	13						
488	88	5						
489	10	ND						
490	ND	ND						
491	ND	ND						
492	ND	ND						
493	30	ND						
494	50	ND						
495	ND	ND						
496	3	ND						
497	3	ND						
498	ND	ND						
499	3	ND						
500	8	ND						
501	3	ND						
502	10	ND						
503	93	1						
504 ✓	13	ND						

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

Per: *W. B. Baker*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT #R40-2-65

Type Samples Soil  
From J. R. Mowat  
Date November 8, 1965

Extraction Bisulphate fusion - HCl leach  
Fraction Used -80 mesh  
Analyst W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-535	13	ND ✓	NP-598 ✓	10	ND	
536	5	ND	599	5	ND	
537	8	ND	600	ND	ND	
538	3	ND	601	ND	ND	
539	30	ND	602	8	ND	
540	5	ND	603	8	1	
541	160	7	604	3	ND	
542	338	11	605	18	ND	
543	23	ND	606	10	ND	
544	140	ND	607	20	ND	
545	ND	ND	608	8	ND	
546	ND	ND	609	13	ND	
547	160	9	610	5	ND	
548	8	ND	611	25	ND	
549	ND	ND	612	18	ND	
550	10	5	613	30	ND	
551	10	1	614	53	ND	
552	10	ND	615	50	ND	
553	3	1	616	ND	ND	
554	30	25	617	ND	ND	
555	5	ND	618	3	ND	
556	25	1	619	ND	ND	
557	8	ND	620 ✓	10	ND	
558	ND	ND	621 ✓	8	ND	
559	80	ND	622	100	ND	
560	5	ND	623	8	ND	
561	20	ND	624	10	ND	
562	10	ND	625	5	ND	
563	8	ND	626	10	ND	
564	8	ND	627	8	ND	
565	13	ND	628	ND	ND	
566	30	ND	629	10	ND	
567	8	ND	630	3	ND	
568	13	ND	631	13	ND	
569	5	ND	632	10	ND	
570	10	ND	633	ND	ND	
571	38	ND	634	5	ND	
572	8	ND ✓	635	50	8	
573	10	ND	636	40	38	
574	28	ND	637	23	10	
575	15	ND	638	10	2	
576	113	ND	639	8	5	
577	10	ND	640	8	ND	
578	10	ND	641	3	ND	
579	23	ND	642	5	ND	
580	8	ND	643	8	ND	
581	8	ND	644 ✓	10	2	
582	10	ND	645 ✓	8	ND	
583	8	ND	646	5	ND	
584	5	ND	647	10	ND	
585	3	ND	648	10	13	
586	ND	ND	649	ND	1	
587	3	ND	650	25	1	
588	3	ND	651	13	ND	
589	10	13	652	18	ND	
590	ND	ND	653	88	ND	
591	ND	ND	654	38	ND	
592	3	10	655	33	30	
593	5	ND	656	68	8	
594	ND	ND	657	70	ND	
595	3	1 ✓	658	3	ND	
596	23	23	659	3	ND	
597	3	ND	660	ND	ND	

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
*W.F.B. Bowden*

# EXPLORATION SERVICES

**GEOCHEMICAL LAB REPORT #R40-2-65**

SAMPLE NO.	ppm Cu	ppm Mo						REMARKS
NP-661	18	ND						
662	28	ND						
663	ND	ND						
664	ND	ND						
665	5	ND						
666	20	ND						
667	65	ND						
668 ✓	10	ND						
669	3	ND						
670	10	ND						
671	30	ND						
672	10	ND						
673	5	ND						
674	3	ND						
675	15	ND						
676	10	ND						
677	30	ND						
678	15	ND						
679	ND	ND						
680	48	1						
681	50	ND						
682	25	ND						
683	3	ND						
684	ND	ND						
685	10	ND						
686	45	1						
687	# 43	ND						
688	48	1						
689	15	1						
690	ND	ND						
691	3	ND						
692	15	ND						
693	ND	ND						
694 ✓	20	ND						

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
 Per..... *C.F. Boudier*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT # R40-3-65

Type Samples..... Soil

Extraction..... Bisulphate fusion-HCl leach

From..... J. R. Mowat

Fraction Used..... -80 mesh

Date..... November 9, 1965

Analyst..... W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-695	8	ND	NP-758	10	2	
696	5	5	759	38	2	
697	3	1	760	18	ND	
698	25	6	761	3	ND	
699	38	30	762	5	ND	
700	3	ND	763	20	1	
701	5	ND	764	5	ND	
702	ND	ND	765	8	ND	
703	8	ND	766	8	ND	
704	3	ND	767	5	9	
705	10	ND	768	3	2	
706	5	ND	769	5	1	
707	ND	ND	770	ND	ND	
708	3	ND	771	ND	ND	
709	5	ND	772	73	6	
710	ND	ND	773	3	ND	
711	ND	ND	774	30	ND	
712	ND	ND	775	10	ND	
713	ND	ND	776	5	ND	
714	3	ND	777	3	ND	
715	ND	ND	778	ND	ND	
716	ND	ND	779	ND	ND	
717	ND	ND	780	3	ND	
718	25	ND	781	5	ND	
719	5	ND	782	ND	ND	
720	3	ND	783	3	ND	
721	ND	ND	784	ND	ND	
722	10	ND	785	3	ND	
723	ND	ND	786	3	ND	
724	3	ND	787	ND	ND	
725	ND	ND	788	ND	ND	
726	ND	ND	789	ND	ND	
727	ND	ND	790	3	ND	
728	13	ND	791	ND	ND	
729	ND	ND	792	ND	ND	
730	ND	ND	793	ND	ND	
731	15	ND	794	25	ND	
732	3	ND	795	ND	ND	
733	18	ND	796	3	ND	✓
734	5	ND	797	ND	ND	
735	3	ND	798	3	ND	
736	ND	ND	799	63	ND	
737	ND	ND	800	38	ND	
738	ND	ND	801	28	ND	
739	ND	ND	802	5	ND	
740	ND	ND	803	13	ND	
741	ND	ND	804	3	ND	
742	5	ND	805	3	ND	
743	3	ND	806	5	ND	
744	ND	ND	807	ND	ND	
745	5	ND	808	5	ND	
746	10	ND	809	3	ND	
747	3	ND	810	30	1	
748	ND	ND	811	8	ND	
749	ND	ND	812	18	1	
750	15	ND	813	48	ND	
751	13	ND	814	3	ND	
752	15	9				
753	45	2				
754	45	11				
755	8	8				
756	5	1				
757	13	20				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

Per..... *W.F. Borden*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT # R40-4-65

Type Samples..... Soil

Extraction..... Pyrosulphate fusion-HCl leach

From..... J. R. Mowat

Fraction Used..... -80 mesh

Date..... November 11, 19 65

Analyst..... W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-815 ✓	55	36	NP-1550	ND	ND	
816 ✓	3	ND	1551	3	ND	
817	50	7	1552	8	ND	
818	ND	ND	1553	10	ND	
819	38	7	1554	13	ND	
820	ND	ND	1555	50	ND	✓
821	113	13	1556	8	ND	
822	23	2	1557	5	ND	
823	3	1	1558	15	ND	
824	23	2	1559	3	ND	
825	3	ND	1560	ND	ND	
826	13	ND	1561	ND	ND	
827	18	ND	1562	ND	ND	
828	10	ND	1563	ND	ND	
829	10	ND	1564	3	ND	
830	5	ND	1565	225	ND	
831	5	ND	1566	30	ND	
1500	10	ND	1567	8	ND	
1501	13	ND	1568	38	ND	
1503	13	ND	1569	ND	ND	
1504	38	ND	1570	ND	ND	
1505	5	ND	1571	15	ND	
1506	8	ND	1572	20	ND	
1507	5	ND	1573	28	ND	
1508	25	ND	1574	ND	ND	
1511	45	8	1575	3	ND	
1512	75	ND	1576	ND	ND	
1513	15	1	1577	5	ND	
1514	3	ND	1578	13	ND	
1515	3	5	1579	10	ND	
1516	5	ND	1580 ✓	10	ND	
1517	ND	ND	1581	5	ND	
1518	ND	ND	1582	3	ND	
1519	3	1	1583	63	13	
1520	80	ND	1584	23	ND	
1521	3	ND	1585	45	7	
1522	8	ND	1586	10	ND	
1523	50	ND	1587	3	ND	
1524	10	ND	1588	ND	ND	
1525	ND	ND	1589	ND	ND	
1526	5	ND	1590	ND	ND	
1527	3	ND	1591	ND	ND	
1528	10	ND	1592	8	ND	
1529	23	ND	1593	ND	ND	
1530	25	ND	1594	ND	ND	
1531	20	ND	1595	3	ND	
1532	30	ND	1596	13	ND	
1533	28	7	1597	15	ND	
1534	23	ND	1598	13	6	
1536	15	1	1599	25	ND	
1537	5	ND	1600	ND	ND	
1538	ND	ND	1601	105	10	
1539	20	ND	1602	5	ND	
1540	55	ND	1603	23	ND	
1541	28	ND	1604	18	ND	
1542	33	9	1605	ND	ND	
1543	10	ND	1606	20	ND	
1544	3	ND	1607	45	ND	
1545	ND	ND	1608	8	ND	
1546	13	ND	1609	110	13	
1547	ND	ND	1610	23	ND	
1548	15	ND	1611	ND	ND	
1549	15	ND	1612	25	ND	

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT

Type Samples.....Soil.....

Extraction pyrosulphate fusion, HCl leach

From J. R. Mowat, 56 Sparks Street.....

Fraction Used.....80 mesh.....

Date.....November 12.....19.65.....

Analyst.....W. F. B. & M. C.....

SAMPLE NO.	Cu	Mo	sample number	Cu	Mo	REMARKS
NPx-1688 ✓	ND	ND	NPX-1782	ND	ND	all values are given in ppm
1689	ND	ND	1783	ND	ND	
1690	ND	ND	1784	ND	ND	
1691	15	ND	1785	ND	ND	
1692	13	ND	1786	13	ND	
1693	5	ND	1787	10	ND	the value ND indicates that the element was not detected
1694	ND	1	1788	ND	ND	
1695	38	1	1789	ND	ND	
1696	25	1	1790	ND	ND	
1697	3	ND	1791	ND	ND	
1698	15	ND	1800	5	ND	
1699	10	ND	1801	3	ND	
1700	10	ND	1802	ND	ND	
1701	10	ND	1803	10	8	
1702	10	ND	1804	45	2	
1703	8	ND	1805	68	15	
1704	8	ND	1806	18	6	
1705	75	2	1807	18	1	
1737	13	ND	1808	13	ND	
1738	5	ND	1809	18	ND	
1739	278	8	1810	8	11	
1740	263	14	1811	23	4	
1741	25	ND	1812	63	47	
1742	25	ND	1813	55	11	
1743	3	ND	1814	50	1	
1744	8	ND	1815	13	ND	
1745	8	ND	1816	53	ND	
1746	3	ND	1817	8	ND	
1747	5	ND	1818	5	ND	
1748	75	ND	1819	18	9	
1749	15	ND	1820	3	ND	
1750	10	ND	1821	13	ND	
1751	ND	ND	1822	28	8	
1752	3	ND	1823	3	ND	
1753	35	5	1824	5	ND	
1754	13	8	1825	125	43	
1755	ND	ND	1826	ND	ND	
1756	5	ND	1827	5	1	
1757	30	6	1828	5	4	
1758	ND	1	1827	ND	ND	
1759	13	ND	1838	8	ND	
1760	10	ND	1839	10	ND	
1761	8	ND	1840	10	ND	
1762	8	ND	1841	13	ND	
1763	25	ND	1842	8	ND	
1764	25	ND	1843	ND	ND	
1765	3	ND	1844	3	ND	
1766	3	ND	1845	ND	ND	
1767	13	ND	1848	ND	ND	
1768	18	ND	1849	ND	ND	
1769	28	ND	1850	ND	ND	
1770	8	ND	1851	ND	ND	
1771	3	ND	1852	200	ND	
1772	10	ND	1853	630	ND	
1773	5	1	1854	110	ND	
1774	45	6	1855	95	ND	
1775	8	ND	1856	5	ND	
1776	ND	ND	1857	3	ND	
1777	20	ND	1858	ND	ND	
1778	5	ND	1859	20	ND	
1779	18	ND	1860	ND	ND	
1780	70	2	1861	5	ND	
1781	3	ND	1862	8	ND	

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
 Per *W.F.B. & M.C.*

# EXPLORATION SERVICES

## GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu	Mo						REMARKS
NPx-1863	ND	ND						
1864	10	ND						
1865	25	ND						
1866	ND	ND						
1867	ND	ND						
1868	5	ND						
1869	ND	ND						
1870	ND	ND						
1871	3	ND						
1872	3	ND						
1873	18	ND						
1874	10	ND						
1875	5	ND						
1876	ND	ND						
1877	15	ND						
1878	18	ND						
1879	8	ND						
1880	ND	ND						
1881	125	ND						
1882	23	ND						
1883	25	ND						
1884	650	6						
1885	350	2						
1886	550	1						
1887	3	ND						
1888	15	ND						
1889	18	ND						
1890	63	ND						
1891	15	ND						
1892	18	ND						
1893	3	ND						
1894	ND	ND						
1895	23	ND						
1896	20	ND						

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

*C.F. Bunch*

By .....



# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT # R42-2-65

Type Samples Soil

Extraction Pyrosulphate fusion-HCl leach

From J. R. Mowat

Fraction Used -80 mesh

Date November 16, 1965

Analyst W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-944	10	1	NP-1007	3	1	
945	8	ND	1008	ND	ND	
946	5	1	1009	25	ND	
947	10	ND	1010	ND	1	
948	25	14	1011	5	ND	
949	45	27	1012	ND	ND	
950	38	ND	1013	3	ND	
951	8	ND	1014	23	ND	
952	25	ND	1015	5	ND	
953	45	11	1016	ND	ND	
954	10	10	1017	ND	ND	
955	30	9	1018	ND	36	
956	88	ND	1019	ND	ND	
957	25	ND	1020	ND	ND	
958	30	ND	1021	5	8	
959	23	ND	1022	ND	5	
960	95	133	1023	ND	7	
961	8	ND	1024	63	47	
962	10	ND	1025	3	ND	
963	140	8	1026	5	1	
964	10	ND	1027	ND	ND	
965	3	ND	1028	95	10	
966	35	6	1029	ND	1	
967	ND	ND	1030	5	4	
968	23	25	1031	ND	ND	
969	23	13	1032	ND	ND	
970	8	16	1033	ND	ND	
971	30	1	1034	3	1	
972	3	ND	1035	ND	2	
973	ND	ND	1036	ND	ND	
974	3	ND	1037	ND	1	
975	5	2	1038	25	ND	
976	ND	ND	1039	10	8	
977	3	ND	1040	28	40	
978	5	1	1041	1250+	33	
979	18	4	1042	88	ND	
980	190	1	1043	13	9	
981	10	ND	1044	25	4	
982	ND	ND	1045	ND	1	
983	25	ND	1046	3	1	
984	3	ND	1047	ND	ND	
985	8	3	1048	5	ND	
986	23	4	1049	15	ND	
987	5	ND	1050	25	42	
988	25	2	1051	3	1	
989	ND	ND	1052	140	ND	
990	10	ND	1053	3	ND	
991	ND	2	1054	18	ND	
992	13	10	1055	38	1	
993	23	1	1056	3	10	
994	25	1	1057	63	27	
995	5	1	1058	30	30	
996	10	ND	1059	ND	ND	
997	8	ND	1060	8	ND	
998	175	131	1061	ND	ND	
999	3	ND	1062	3	ND	
1000	ND	ND	1063	135	2	
1001	ND	ND	1064	ND	ND	
1002	ND	35	1065	ND	ND	
1003	45	ND	1066	48	13	
1004	25	9	1067	105	5	
1005	45	10	1068	3	2	
1006	3	ND	1069	10	10	

EXPLORATION SERVICES  
 GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
 Per: *W.F.B.*

# EXPLORATION SERVICES

GEOCHEMICAL LAB REPORT # RL2-2-65

SAMPLE NO.	ppm Cu	ppm Mo						REMARKS
NP-1070	190	13						
1071	75	4						
1072	ND	4						
1073	ND	1						
1074	3	1						
1075	5	2						
1076	38	ND						
1077	3	10						
1078	ND	ND						
1079	3	1						
1080	13	ND						
1081	ND	ND						
1082	ND	ND						
1083	ND	ND						
1084	10	ND						
1085	38	2						
1086	ND	ND						
1087	8	ND						
1088	13	ND						
1089	ND	ND						
1090	ND	ND						
1091	ND	ND						
1092	ND	ND						
1093	25	2						
1094	ND	ND						
1095	ND	ND						
1096	ND	ND						
1097	ND	ND						
1098	ND	9						
1099	25	6						
1100	13	8						
1101	3	6						
1102	13	2						
1103	ND	ND						

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

Per..... *[Signature]*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

*Complete*

## GEOCHEMICAL LAB REPORT# R42-4-65

Type Samples..... Soil  
From..... J. R. Mowat  
Date..... November 18, 1965

Extraction Pyrosulphate fusion-HCl leach  
Fraction Used..... -80 mesh  
Analyst..... W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-1431	ND	ND	NP-1494	25	ND	
1432	ND	ND	1495	3	ND	
1433	ND	ND	1496	13	ND	
1434	ND	ND	1497	ND	ND	
1435	ND	ND	1498	ND	ND	
1436	ND	ND	1499	10	ND	
1437	8	ND				
1438	ND	ND				
1439	23	ND				
1440	10	ND				
1441	5	ND				
1442	10	ND				
1443	ND	ND				
1444	ND	ND				
1445	ND	ND				
1446	8	ND				
1447	3	ND				
1448	ND	ND				
1449	ND	ND				
1450	ND	ND				
1451	ND	ND				
1452	ND	ND				
1453	ND	ND				
1454	ND	ND				
<del>1455</del> 1455	5	ND				
<del>1456</del> 1456	3	ND				
1457	3	ND				
1458	ND	ND				
1459	ND	ND				
1460	3	ND				
1461	3	ND				
1462	ND	ND				
1463	ND	ND				
1464	ND	ND				
1465	ND	ND				
1466	3	ND				
1467	ND	ND				
1468	ND	ND				
1469	ND	ND				
1470	ND	ND				
1471	ND	ND				
1472	ND	ND				
1473	3	ND				
1474	20	1				
1475	10	ND				
1476	ND	ND				
1477	3	1				
1478	ND	ND				
1479	ND	ND				
1480	ND	ND				
1481	10	ND				
1482	ND	ND				
1483	ND	ND				
1484	ND	ND				
1485	18	ND				
1486	15	ND				
1487	10	ND				
1488	5	ND				
1489	ND	ND				
1490	15	ND				
1491	5	ND				
1492	5	ND				
1493	20	ND				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS  
Per *W.F. Boucher*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT# R42-3-65

Type Samples Soil

Extraction Pyrosulphate fusion-HCl leach

From J. R. Mowat

Fraction Used -80 mesh

Date November 17, 1965 19  

Analyst W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-1104	ND ✓	2	NP-1374	15	ND	
1105	ND	1	1375	ND	ND	
1106	5	6	1376	ND	ND	
1107	3	ND	1377	3	ND	
1108	ND	ND	1378	ND	ND	
1109	ND	ND	1379	8	ND	
1110	3	ND	1380	5	ND	
1111	5	1	1381	5	ND	
1112	3	9	1382	8	ND	
1113	ND	ND	1383	8	ND	
1114	5	ND	1384	3	ND	
1115	113	10	1385	ND	ND	
1116	ND	ND	1386	10	ND	
1117	ND	ND	1387	3	ND	
1118	25	1	1388	ND	ND	
1119	ND	ND	1389	1	ND	
1120	375	13	1390	ND	ND	
1121	45	10	1391	ND	ND	
1122	13	4	1392	10	ND	
1123	8	ND	1393	ND	ND	
1124	3	ND	1394	ND	ND	
1125	ND	ND	1395	5	ND	
1126	ND	ND	1396	ND	ND	
1127	ND ✓	ND	1397	ND	ND	
1128	ND	ND	1398	3	ND	
1129	3	ND	1399	3	ND	
1130	ND	ND	1400	8	ND	
1131	3	ND	1401	10	ND	
1132	10	5	1402	ND	ND	
1133	8	ND	1403	3	ND	
1134	3	ND	1404	15	ND	
1135	ND	1	1405	3	ND	
1136	ND ✓	2	1406	5	ND	
1344	ND	ND	1407	ND	ND	
1345	ND	ND	1408	ND	ND	
1346	ND	ND	1409	3	ND	
1347	ND	ND	1410	ND	ND	
1348	18	ND	1411	ND	ND	
1349	3	ND	1412	ND	ND	
1350	ND	ND	1413	3	ND	
1351	ND	ND	1414	5	ND	
1352	ND	ND	1415	3	ND	
1353	ND	ND	1416	ND	ND	
1354	8	ND	1417	ND	ND	
1355	ND	ND	1418	ND	ND	
1356	ND	ND	1419	ND	ND	
1357	ND	ND	1420	ND	ND	
1358	ND	ND	1421	ND	ND	
1359	ND	ND	1422	38	ND	
1360	ND	ND	1423	ND	ND	
1361	15	ND	1424	ND	ND	
1362	ND	ND	1425	23	ND	
1363	3	ND	1426	ND	ND	
1364	ND	ND	1427	20	ND	
1365	ND	ND	1428	ND	ND	
1366	ND	ND	1429	3	ND	
1367	ND	ND	1430	18	ND	
1368	3	ND				
1369	ND	ND				
1370	ND	ND				
1371	ND	ND				
1372	ND	ND				
1373	ND	ND				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

Per W.F.B. & M.C.

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT #R40-6-65

Type Samples..... Soil

Extraction.....Pyrosulphate fusion-HCl leach

From..... J. R. Mowat

Fraction Used..... -80 mesh

Date..... November 15, 1965

Analyst..... W.F.E. & . M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-1896	15	ND	NP-1959	3	ND	
1897	3	ND	1960	10	ND	
1898	ND	ND	1961	3	ND	
1899	ND	ND	1962	3	ND	
1900	ND	ND	1963	8	ND	
1901	ND	ND	1964	5	ND	
1902	ND	ND	1965	5	ND	
1903	ND	ND	1966	10	ND	
1904	ND	ND	1967	3	ND	
1905	ND	ND	1968	5	ND	
1906	ND	ND	1969	5	ND	
1907	20	ND	1970	5	ND	
1908	23	ND	1971	3	ND	
1909	3	ND	1972	5	ND	
1910	375	ND	1973	ND	ND	
1911	25	ND	1974	8	ND	
1912	5	ND	1975	8	ND	
1913	10	ND	1976	15	ND	
1914	15	ND	1977	5	ND	
1915	8	ND	1978	8	ND	
1916	23	ND	1979	3	ND	
1917	15	ND	1980	10	ND	
1918	10	ND	1981	45	5	
1919	13	ND	1982	18	ND	
1920	13	ND	1983	3	ND	
1921	20	ND	1984	3	ND	
1922	15	ND	1985	ND	ND	
1923	10	ND	1986	ND	ND	
1924	8	ND	1987	ND	ND	
1925	13	ND	1988	ND	ND	
1926	3	ND	1989	8	ND	
1927	3	ND	1990	ND	ND	
1928	13	ND	1991	ND	ND	
1929	13	ND	1992	8	ND	
1930	8	ND	1993	28	ND	
1931	13	ND	1994	5	ND	
1932	13	ND	1995	15	ND	
1933	13	ND	1996	5	ND	
1934	10	ND	1997	5	ND	
1935	13	ND	1998	8	ND	
1936	13	ND	1999	ND	ND	
1937	3	ND	2000	5	ND	
1938	48	ND	2001	10	ND	
1939	10	16				
1940	33	ND				
1941	5	9				
1942	13	35				
1943	13	9				
1944	10	ND				
1945	8	ND				
1946	20	ND				
1947	5	ND				
1948	5	ND				
1949	3	ND				
1950	3	ND				
1951	13	ND				
1952	8	ND				
1953	20	5				
1954	15	ND				
1955	3	ND				
1956	5	9				
1957	5	ND				
1958	20	38				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

*W. F. E. & M. C.*

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

## GEOCHEMICAL LAB REPORT #R42-1-65

Type Samples Soil

Extraction Pyrosulphate fusion-HCl leach

From J. R. Mowat

Fraction Used -80 mesh

Date November 15, 1965

Analyst W.F.B. & M.C.

SAMPLE NO.	ppm Cu	ppm Mo	Sample No.	ppm Cu	ppm Mo	REMARKS
NP-832	13	ND	NP-917	ND	ND	
833	25	ND	918	10	ND	
834	13	ND	919	8	33	
835	15	ND	920	8	ND	
836	23	ND	921	ND	ND	
837	23	ND	922	10	ND	
838	25	ND	923	3	ND	
839	30	ND	924	ND	ND	
840	25	ND	925	ND	ND	
841	190	ND	926	ND	ND	
842	23	ND	927	8	ND	
843	45	1	928	ND	ND	
844	15	ND	929	25	ND	
845	50	ND	930	ND	ND	
846	25	ND	931	ND	ND	
847	8	ND	932	5	ND	
848	23	ND	933	13	ND	
849	20	ND	934	5	ND	
850	23	ND	935	10	ND	
851	13	ND	936	8	ND	
852	8	ND	937	10	ND	
853	10	1	938	3	ND	
854	10	ND	939	10	1	
855	50	ND	940	210	10	
856	20	1	941	18	ND	
857	10	1	942	13	ND	
858	13	ND	943	10	ND	
859	18	ND				
860	25	ND				
861	25	ND				
862	25	ND				
863	8	ND				
864	13	ND				
865	10	ND				
866	3	ND				
867	10	ND				
868	160	1				
869	180	48				
870	13	ND				
871	ND	ND				
872	23	ND				
873	5	ND				
874	ND	ND				
897	13	ND				
898	8	ND				
899	10	ND				
900	13	ND				
901	13	ND				
902	5	ND				
903	3	ND				
904	10	ND				
905	5	5				
906	10	ND				
907	45	5				
908	3	ND				
909	10	ND				
910	25	ND				
911	63	13				
912	15	13				
913	18	2				
914	25	5				
915	48	ND				
916	3	ND				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS

*W.F.B.*

Per

# EXPLORATION SERVICES

P.O. BOX 3382, POSTAL STATION "C"  
OTTAWA 3, ONTARIO

(12)

## GEOCHEMICAL LAB REPORT R43-65

Type Samples Soil Extraction pyrosulphate fusion- HCL leach  
 From J. R. Mowat Fraction Used -80 mesh  
 Date November 19 1965 Analyst W.F.B. & M.C.

SAMPLE NO.	Cu	Mo	sample number	Cu	Mo	REMARKS
NP-1137	3	ND	NP-1201	18	ND	values are given in ppm  the value ND indicates that the element was not detected.
1138	ND	ND	1202	5	ND	
1139	30	13	1203	3	ND	
1140	ND	ND	1204	15	ND	
1141	38	60	1205	ND	ND	
1142	18	40	1206	ND	ND	
1143	88	33	1207	ND	ND	
1144	ND	ND	1208	5	ND	
1145	ND	ND	1209	3	ND	
1146	83	27	1210	ND	ND	
1147	3	1	1211	ND	ND	
1148	48	35	1212	25	ND	
1149	5	ND	1213	13	ND	
1150	23	10	1214	ND	ND	
1151	3	ND	1215	ND	ND	
1152	20	27	1216	ND	ND	
1153	ND	1	1217	20	ND	
1154	23	ND	1218	8	ND	
1155	ND	ND	1219	ND	ND	
1156	ND	ND	1220	3	ND	
1157	ND	ND	1221	13	ND	
1158	ND	ND	1222	10	ND	
1159	50	63	1223	8	ND	
1160	18	1	1224	3	ND	
1161	ND	ND	1225	5	ND	
1162	3	ND	1226	3	ND	
1163	3	ND	1227	3	ND	
1164	ND	ND	1228	3	ND	
1165	ND	ND	1229	ND	ND	
1166	ND	ND	1230	ND	ND	
1167	45	3	1231	13	ND	
1168	ND	ND	1232	ND	ND	
1169	23	2	1233	ND	ND	
1170	ND	ND	1234	10	ND	
1171	10	ND	1235	13	ND	
1172	ND	ND	1236	ND	ND	
1173	ND	ND	1237	3	ND	
1174	ND	ND	1238	ND	ND	
1175	25	ND	1239	ND	ND	
1176	25	ND	1240	ND	ND	
1177	50	2	1241	ND	ND	
1178	ND	ND	1242	ND	ND	
1179	98	ND	1243	ND	ND	
1180	ND	ND	1244	18	ND	
1181	ND	ND	1245	25	ND	
1182	ND	ND	1246	50	ND	
1183	ND	ND	1247	ND	ND	
1184	15	ND	1248	3	ND	
1185	25	ND	1249	ND	ND	
1186	3	ND	1250	8	ND	
1187	3	ND	1251	ND	ND	
1188	ND	ND	1252	5	ND	
1189	ND	ND	1253	3	ND	
1190	ND	ND	1254	3	ND	
1191	ND	ND	1255	ND	ND	
1192	3	ND	1256	3	ND	
1193	ND	ND	1257	3	ND	
1194	10	ND	1258	3	ND	
1195	ND	ND	1259	5	ND	
1196	ND	ND	1260	20	ND	
1197	ND	ND	1261	8	ND	
1198	ND	ND				
1199	ND	ND				
1200	20	ND				

EXPLORATION SERVICES  
GEOCHEMICAL SEMI-QUANTITATIVE CHEMICAL ANALYSIS



41P15NE8274 63E.9 POWELL

900

ONTARIO  
DEPARTMENT OF MINES.

TO— Dr. M. E. Hurst,  
Director, Geological Branch,  
Department of Mines.

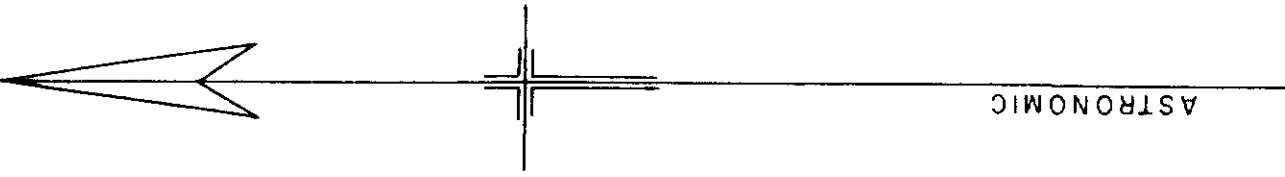
Two types of assessment work credits are requested on the attached file. Firstly, a geological assessment work credit of 40 days is requested for each of mining claims MR 37464 to 37481 inclusive in Powell Township for a geochemical survey. Secondly, an assessment work credit of 8 days is requested for each of the same claims under Section 84 (14) of the Mining Act. These credits are for an expenditure of \$2,233.33 on assays of the geochemical samples.

FWM:srm

R. V. Scott,  
Director.

January 28, 1966.





LOG

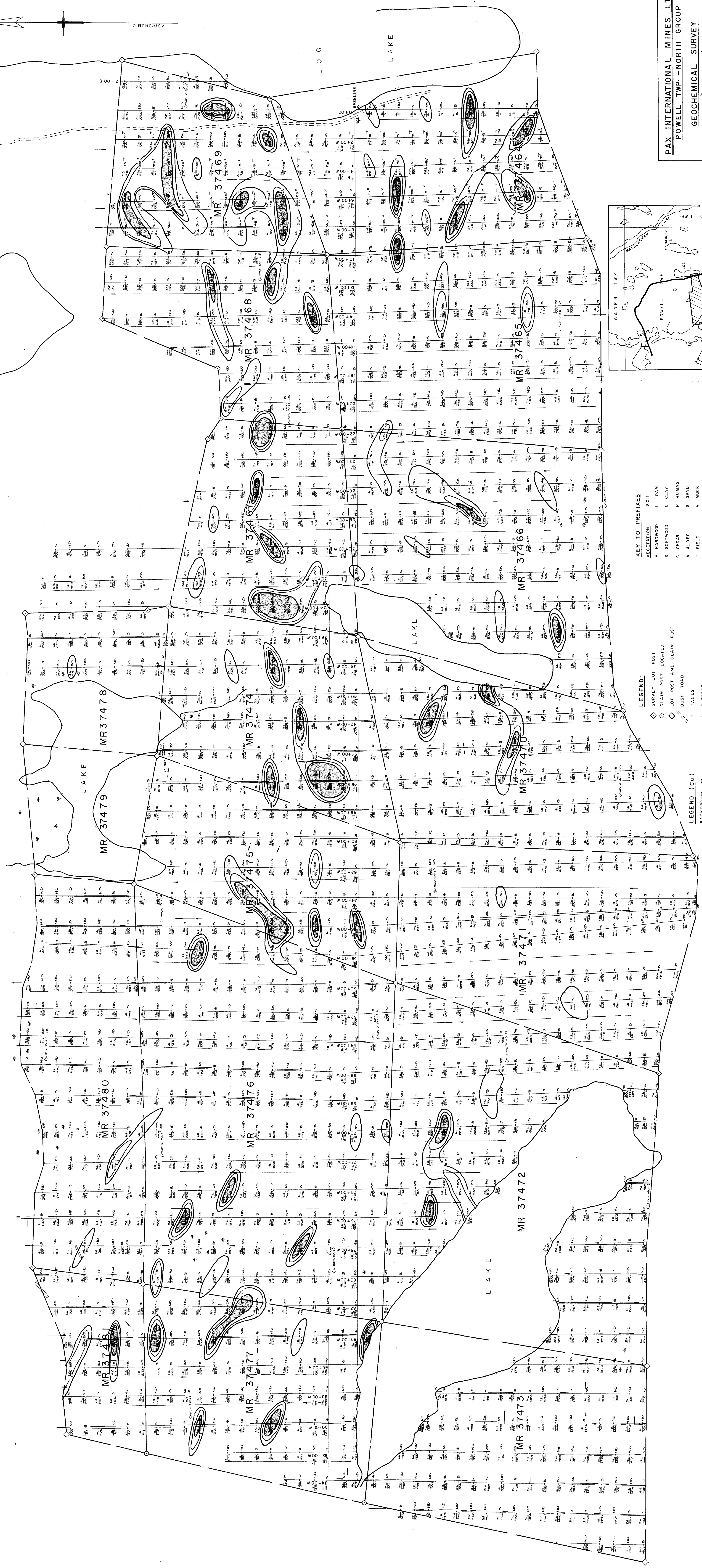
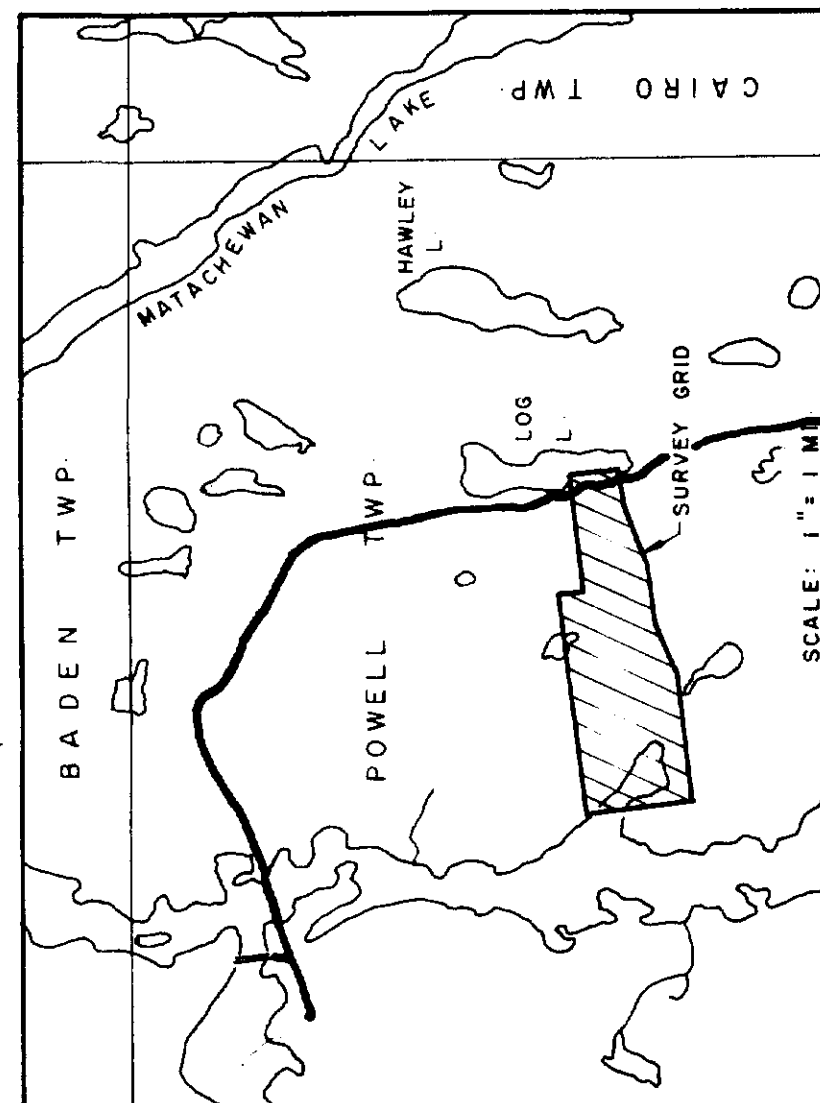
LAKE

2+00E

PAX INTERNATIONAL MINES LTD.  
 POWELL TWP. - NORTH GROUP  
 GEOCHEMICAL SURVEY  
 (COPPER)

SCALE: 1" = 100'

DATE: OCT/NOV 1985  
 DRAWN BY: WILLIS  
 SURVEY: C. WILSON  
 CHECKED: J. W. MOYAT  
 AND  
 OTTAWA, CANADA



KEY TO PREFIXES

VEGETATION	SOIL
H HARDWOOD	L LOAM
S SOFTWOOD	C CLAY
H HUMAS	S SAND
A ALDER	F FIELD
M MUCK	R RESIDUAL DETRITUS

LEGEND:

◇	SURVEY LOT POST
○	CLAIM POST LOCATED
○	LOT POST AND CLAIM POST
---	BUSH ROAD
T	TALUS
X	OUTCROP
+	UPPERMOUNT
+	DOWN SLOPE DIRECTION
---	TRENCH

LEGEND (CU)

BACKGROUND 20 ppm

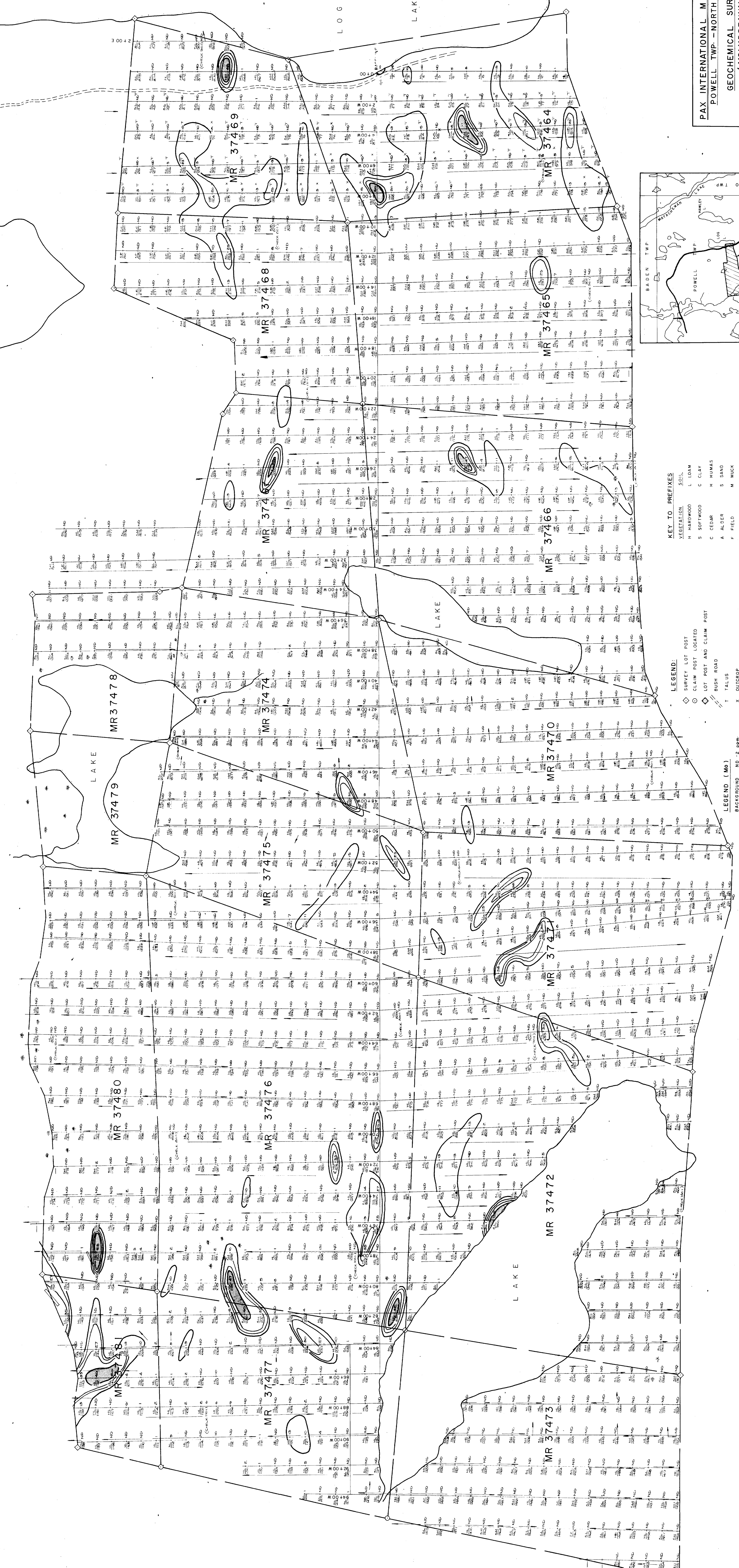
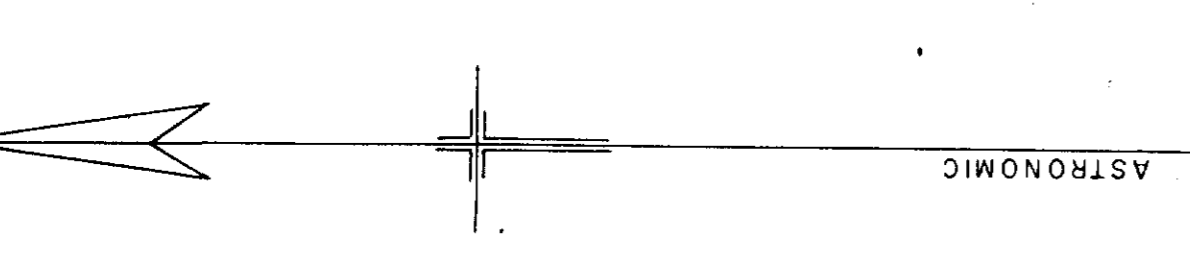
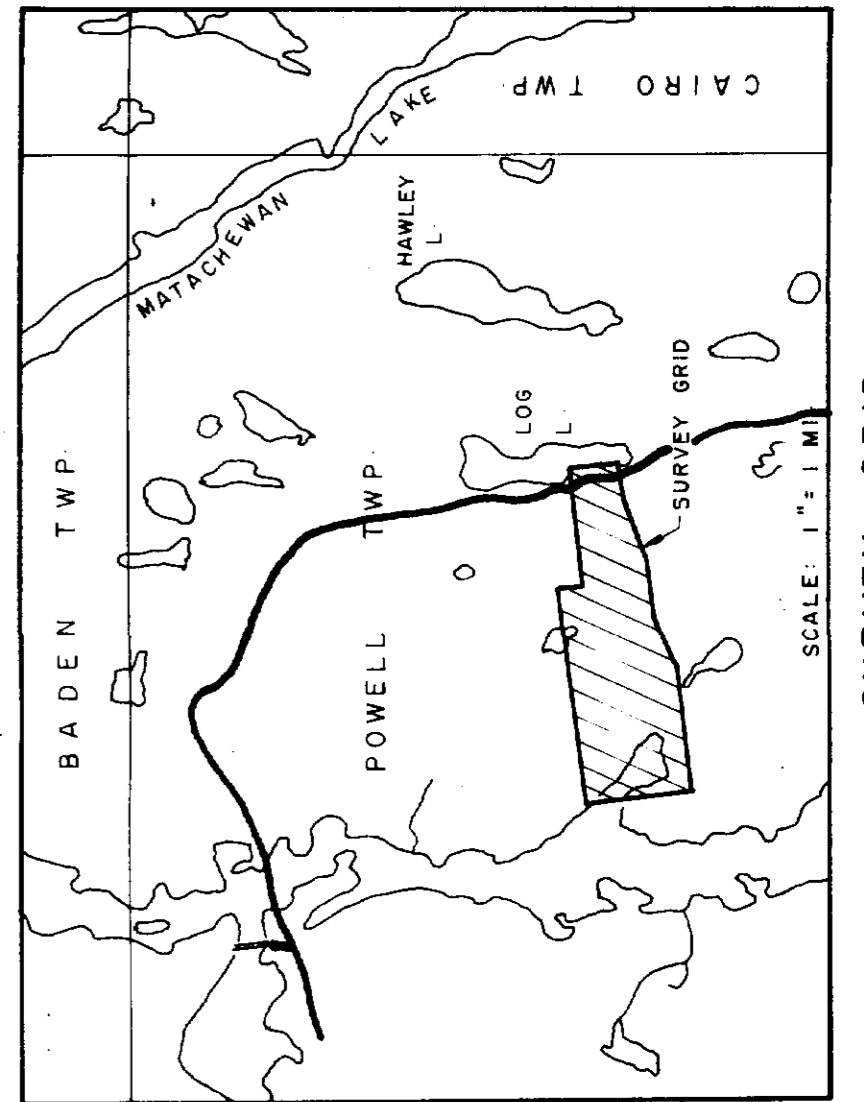
MIN. ANOM. CONTOUR 50 ppm

ANOMALOUS >100 ppm

CONTOUR INTERVAL 25 ppm







- KEY TO PREFIXES**
- |            |                     |
|------------|---------------------|
| VEGETATION | SOIL                |
| N HARDWOOD | L IDAM              |
| S SOFTWOOD | C CLAY              |
| C CEDAR    | H HUMUS             |
| A ALDER    | S SAND              |
| F FIELD    | M MUCK              |
|            | R RESIDUAL DETRITUS |
- 
- LEGEND:**
- |     |                               |
|-----|-------------------------------|
| ◇   | SURVEY LOT POST               |
| ○   | CLAIM POST LOCATED            |
| ◇   | LOT POST AND CLAIM POST       |
| --- | BUSH ROAD                     |
| T   | TALUS                         |
| X   | OUTCROP                       |
| +   | VEGETATION SOIL SAMPLE NUMBER |
| NO  | IN PPM                        |
- 
- LEGEND (MO)**
- |                  |                |
|------------------|----------------|
| BACKGROUND       | NO - 2 PPM     |
| MIN. ANOM.       | CONTOUR 10 PPM |
| ANOMALOUS        | > 10 PPM       |
| CONTOUR INTERVAL | 10 PPM         |
- 
- DOWN SLOPE DIRECTION  
 TRENCH