

LOG NO: 0118	RD.
ACTION:	
FILE NO:	

REPORT ON  
GEOLOGICAL MAPPING  
AND  
GEOCHEMICAL SOIL SAMPLING  
MASTODON ADAIR CLAIM GROUP  
LA FORME CREEK AREA  
REVELSTOKE MINING DIVISION, B.C.

by  
A.I. Betmanis, P. Eng.,

Owner: Teck Corporation  
Operator: Teck Corporation  
NTS: 82M/1E  
Longitude: 118° 05'W  
Latitude: 51° 13½'N

January 12, 1990  
Vancouver, B.C.

FILMED

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,577

## CONTENTS

	Page
Introduction	3
Location and Access	3
Physiography and Climate	3
Claims and Ownership	4
Previous Work	4
General Geology	5
Summary of Work	5
Geology and Mineralization of Adair showings	6
Geochemical Soil Sampling	7
Discussion of Results	8
Recommendations	9
References	10
Statement of Qualifications	11
Appendix 1: Statement of Costs	
Appendix 11: Laboratory Certificates	
Fig. 1 Location Map	following 3
Fig. 2 Claim Map	in pocket
Fig. 3 Grid-Claim Map	following 5
Fig. 4 Eureka Adit-Plan	in pocket
Fig. 5 Eureka Adit-Section	in pocket
Fig. 6 Lead Soil Geochemistry	in pocket
Fig. 7 Zinc Soil Geochemistry	in pocket
Fig. 8 Copper Soil Geochemistry	in pocket
Fig. 9 Gold Soil Geochemistry	in pocket
Fig. 10 Silver Soil Geochemistry	in pocket
Fig. 11 Arsenic Soil Geochemistry	in pocket

## INTRODUCTION

The Mastodon-Adair Group, situated on the north side of La Forme Creek, north of Revelstoke, B.C. consists of located and Reverted Crown Granted claims optioned by Teck Corporation from two prospectors from Revelstoke, and adjoining Crown Granted claims previously belonging to the Mastodon Zinc Mine property and now owned by Teck Corporation. Considerable prospecting work was carried out on the claims over a number of years around 1900, at which time the Lead King lead-zinc showings were located on the Silver Star No. 2 claim, and several gold, silver, lead, zinc, copper, and arsenic sulphide veins were explored by trenching and a 100 metre crosscut adit on the Eureka claim (Adair showings). No significant work on the showings appears to have been done since.

Prospectors Cameron and Jenkins re-discovered the Adair adit site in 1988. Teck Corporation optioned the Cameron and Jenkins claims in 1989 and explored them jointly with the Teck held Lead King grouping of claims.

In 1989 the Adair showings were mapped and sampled in detail, and a geochemical soil survey was completed over most of the property. A strong coincident lead and zinc soil anomaly, apparently unrelated to known showings, was identified.

## LOCATION AND ACCESS

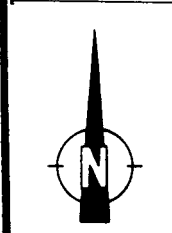
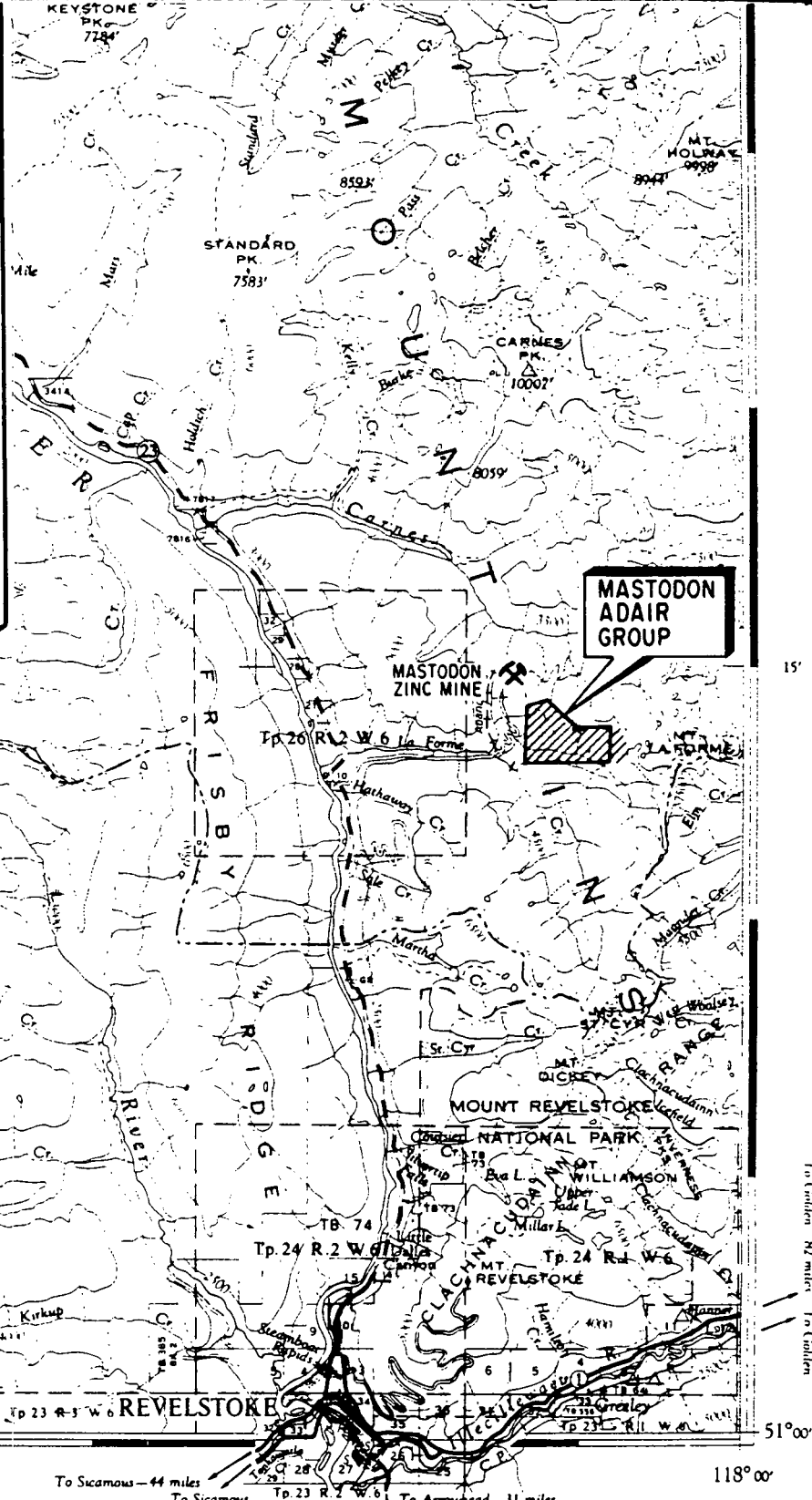
The property is located north of La Forme Creek, approximately 2 kilometres southeast of the old Mastodon Zinc Mine, and 25 kilometres north-northeast of Revelstoke, in the Revelstoke Mining Division, B.C. The property is centred near latitude  $51^{\circ} 13\frac{1}{2}'N$  and longitude  $118^{\circ} 05'W$  (NTS 82M/1E).

Most convenient access to the property is by helicopter from Revelstoke to limited landing sites on the property. An old overgrown trail, difficult to follow, leads from the Mastodon Zinc Mine to the Lead King showings in the northwestern part of the property. An old mine access road following La Forme Creek from Highway 23 is washed out and currently unserviceable.

## PHYSIOGRAPHY AND CLIMATE

Elevations on the property range from 1060 metres at La Forme Creek to 2200 metres at the sharp ridgeline north of La Forme Creek. Slopes often average 40 degrees with frequent cliffs at higher elevations. Due to the steep slopes, campsites not requiring cribbed-up floors are rare. Several small creeks with steep gradients drain southerly on the property into the east fork of La Forme Creek.

The slopes are well forested with cedar, hemlock and spruce to an approximate elevation of 1600 metres. Frequent areas of dense slide alder occur, especially near creeks where snow and mud slides are more common. At higher elevations timber becomes scrubby and open grassy areas are common.



**TECK EXPLORATIONS LIMITED**  
**MASTODON - ADAIR GROUP**  
**LA FORME CREEK AREA, B.C.**



Heavy rainfalls and thunderstorms are frequent in the summer. The winter snowpack usually stays between September and May. Total annual precipitation is around 180 centimetres, and temperatures range from  $-25^{\circ}$  to  $30^{\circ}\text{C}$ .

#### CLAIMS AND OWNERSHIP

The claims held by Teck Corporation which were originally part of the Mastodon Zinc Mine property are listed below.

<u>Claim</u>	<u>Lot No.</u>	<u>Hectares</u>
Eric No. 5	15620	13.41
Eric No. 6	15621	8.27
Eric No. 7 Fr.	15622	12.73
Silver Star No. 1	15629	20.66
Silver Star No. 2	15630	20.90

The above claims were Crown Granted in 1959. They are separated from other Mastodon Zinc Mine claims by claims which reverted to the Crown and are no longer held by Teck.

The claims acquired by Teck through option agreements with Mr. W. Cameron and Mrs. F. Jenkins are listed below.

<u>Claim</u>	<u>Record No.</u>	<u>Lot No.</u>	<u>Hectares</u>	<u>Current Due Date</u>
Morning Star	2510	9123	10.67	11 February 1990
Eureka	2511	9124	20.03	11 February 1990
Eastern Star	2512	9125	20.72	11 February 1990
Grandview	2518	9122	16.11	28 February 1990
Flora Bell	2519	9121	16.90	7 March 1990
Adair No.1(14 units)	2592			28 August 1990
Kidd Fr.	2705			21 June 1990
Adair Fr.	2706			17 June 1990

The reverted Crown Granted claims were issued as Crown Grants in 1910 and reverted to the Crown in 1974. The above claims acquired by option are registered in the name of Teck Corporation.

Optioned and owned claims are contiguous as shown in Figure 2, and are grouped as the Mastodon-Adair Group.

#### PREVIOUS WORK

Prospecting work on the Adair showings commenced some time in the early 1890's. The first direct reference to the claims is mentioned in the Report of Minister of Mines for 1898 (p. 1060) and 1899 (p. 672). A two foot (0.6 metre) chalcopryrite vein was encountered underground. The Adair (or Eureka) Group was

Crown Granted in 1910. The Adair showings subsequently became "lost" due to slides carrying away waste dumps from the workings, the adit portal being partly covered over, and the area being densely overgrown with slide alder. The Adair adit was re-discovered in 1988 by prospectors Cameron and Jenkins after several years of detailed prospecting in the area.

The Lead King showings probably are the same as the Lytle Group showings explored by pitting and trenching at about the same time of the Adair work. GSC Paper 64-32 (Wheeler, 1965) reports the zone to extend for 200 feet (60 metres) with sphalerite and galena in dolomite. The main showing is exposed in a low cliff face over a width of 2.5 metres, and when chip sampled recently assayed 23.30% Pb, 6.32% Zn and 9.9 g/t Ag over that width. Although the Lead King showings were on the Mastodon Zinc Mine claims, no exploration work other than minor trenching appears to have been done during the period of the mine's operation.

In 1975 the Adair group claims and non-contiguous reverted Mastodon Crown Granted claims were acquired by Le Mans Resources Ltd. Limited reconnaissance geochemical work was performed. The Adair showings could not be located, and work apparently was discontinued after 1977.

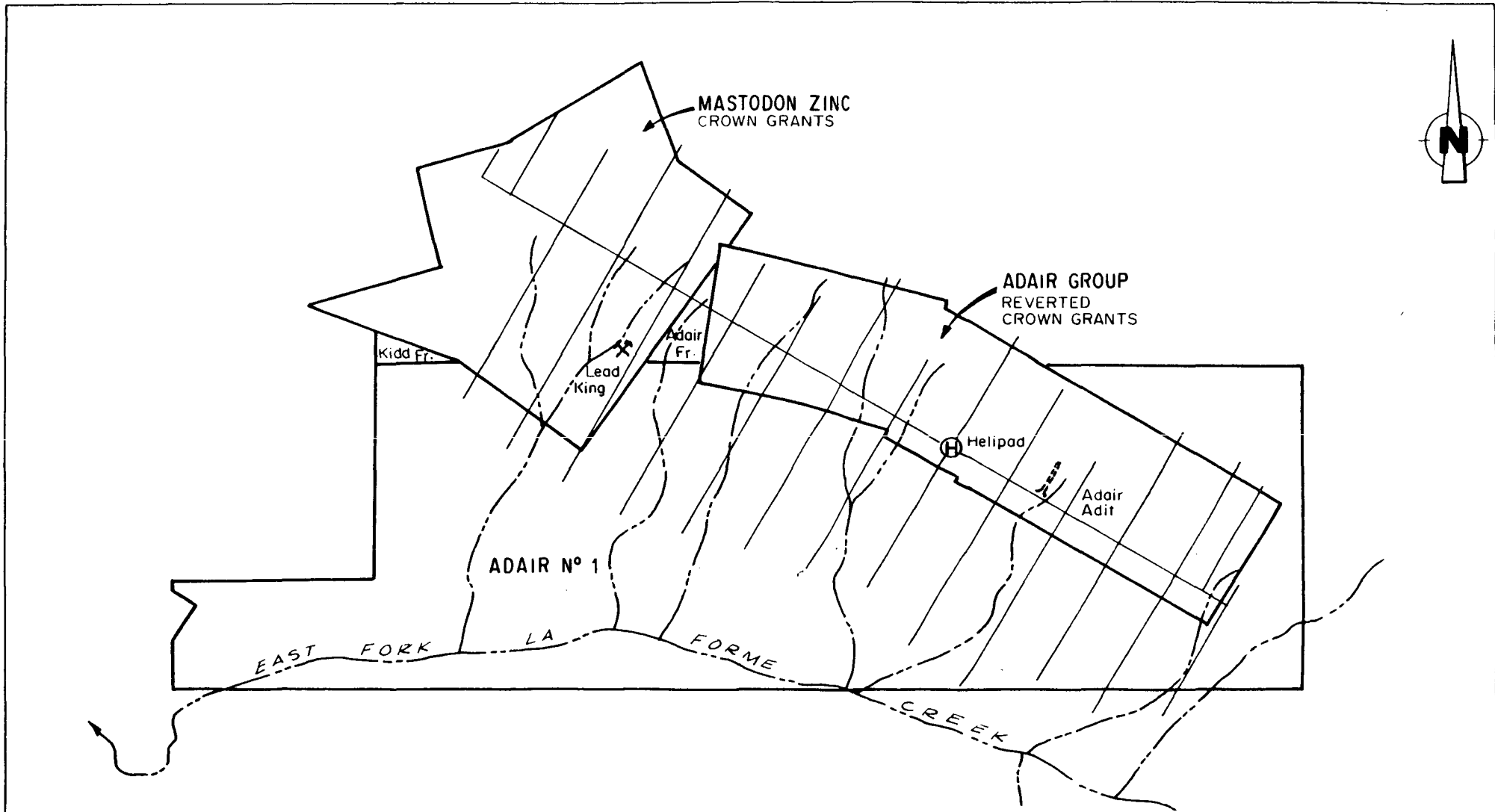
#### **GENERAL GEOLOGY**

The regional geology of the area has been mapped by J.O. Wheeler (GSC Paper 64-32). The area is underlain predominantly by Lower Cambrian Lardeau Group phyllites and schists with included discontinuous lenses and bands of Lower Cambrian Badshot Formation limestones and dolomites. Attitude of bedding is somewhat obscure due to small scale drag folding and an overprinting of foliation and schistosity. Insufficient work has been done to identify larger scale folding or major faulting. At the Adair showings bedding varies from N45°W to N60°W with dips of approximately 45°NE. At the Lead King showing, approximately 1.4 kilometres slightly north of due west from Adair, attitudes are almost east-west with dips 25°N. At the Mastodon Zinc Mine, 2 kilometres further northwest, attitudes are reported as N25°W with dips 35° to 50°E.

It is not known whether the Adair, Lead King and Mastodon Zinc mineralized zones occur at the same stratigraphic horizon or are concentrated at different limestone-dolomite beds. Mineralization at all locations is in dolomitized limestone adjacent to phyllites or schists. Minor strikeslip faults or shears may be associated directly with mineralization. At the Mastodon Zinc Mine, which has produced 31,940 tons averaging 0.28% Pb, 9.2% Zn and 0.038% Cd, ore shoots are believed to be related directly to the plunge of small drag folds (MMAR 1959).

#### **SUMMARY OF WORK**

Between June 15 and 22, 1989, the walls of the Adair adit crosscut were washed with a high pressure pump and mapped geologically. The east wall was sampled



TECK EXPLORATIONS LIMITED		
MASTODON - ADAIR GROUP		
LA FORME CREEK AREA, B.C.		
<b>GRID - CLAIM LOCATION</b>		
NOV. 1989	NTS:82M/1E	FIG. 3

staking continuous chip samples every five metres. Each vein was sampled individually. The trenches of the Adair showings were surveyed to the adit portal and sampled. All rock samples containing readily visible sulphides other than pyrite were assayed for silver, copper, lead, zinc and arsenic, as well as for gold by fire assay with AA finish on a one assay ton sample. All other samples were treated as rock geochemical samples using standard procedures except for gold analyses on 1 AT samples with fire assay and AA finish. All assaying and geochemical analyses were performed by Min-En Laboratories of North Vancouver.

On July 10, 1989 a geochemical grid soil sampling program was initiated, but was disrupted by forest fires in the La Forme Creek valley, forcing camp evacuation due to fire hazard and shortage of helicopter support. The sampling and grid survey were completed on October 23, 1989.

A flagged grid was laid out with base line oriented  $N60^{\circ}W$  and cross lines spaced every 200 metres. Stations were marked every 25 metres on the base line and cross lines. Soil samples were collected at each station from the B horizon, generally at a depth of 10 to 15 centimetres, and placed in Kraft wet strength gusset soil bags. The samples were shipped to Min-En Laboratories where they were oven dried and screened to minus 80 mesh. Analyses for Ag, Cu, Pb, Zn, and As were made by atomic absorption, and for Au by fire assay with an atomic absorption finish. The grid location is shown in Fig 3, and the geochemical soil survey results in Figs. 6-11.

#### **GEOLOGY AND MINERALIZATION OF ADAIR SHOWINGS**

Lithologies in the Adair adit are interbedded dolomites, dolomitic limestones, limestones, and phyllites. Insufficient area mapping has been done to determine whether they belong to the Badshot Formation. Contacts often are gradational over one or two metres. Occasional narrow quartzite or metamorphosed fine sandstone interbeds occur in most lithologies but mainly in the phyllites. Several sections contain apparent quartz vein material with boudinage deformation and boudins to 10 centimetres thick. These may be deformed quartzite interbeds.

Attitudes vary from  $N40^{\circ}W$  to  $N63^{\circ}W$  with dips ranging between  $38^{\circ}$  and  $54^{\circ}$  NE. The overall average attitude would be close to  $N60^{\circ}W$ ,  $50^{\circ}$  NE. Where stronger foliation or schistosity occurs, there appears to be a flattening of dip with no other change in attitude. Faulting appears to be restricted to strike slip with minimum gouge. Some contacts may be strike slip faults. Cross fracturing is not common, and is usually slightly east of north with steep westerly dips. Most cross fractures are dry, or have minor white quartz filling. Movement on cross fractures appears to be negligible.

Up to 5% pyrite, and occasionally minor arsenopyrite, dusting is found on bedding or foliation planes, particularly in dolomitic sections. Bondinaged quartz often has some siderite with minor pyrite, arsenopyrite, and rarely sphalerite associated with it. The main mineralization in the adit occurs at 54 metres from the portal in the form of an irregular quartz vein or lens averaging 0.4 metres thick with semi-massive pyrite pyrrhotite, arsenopyrite sphalerite, and possibly



minor tetrahedrite. It resembles somewhat a large version of a boudin. Another quartz vein, more regular and varying in width between 0.4 and 0.7 metres, occurs at 69 metres from the portal. Associated mineralization includes siderite, pyrite, pyrrhotite, and minor pyrite. Both quartz vein sections appear conformable to bedding and foliation.

On surface, apart from one main trench located in a creek bed, most prospect pits and trenches have been partly or completely covered in by slides and slope creep over the last 80 years, and geology is difficult to map without additional trenching. The main trench is in interbedded phyllites, limestones, and dolomite. Mineralization is with an irregular discontinuous quartz vein to 2 metres thick with streaks of arsenopyrite, pyrrhotite, galena, sphalerite, and minor chalcopyrite and magnetite. Laboratory assaying noted possible metallic gold, suggesting that gold associated with the zone may give a strong nugget effect. Streaks of similar mineralization without quartz occur along strike. In section the surface mineralization appears to be displaced slightly to the southwest from the adit mineralization. This may be due partly to downslope slump of lithologies caused by the steel slope.

Surface and underground geology and sampling results are shown in Figures 4 and 5.

#### **GEOCHEMICAL SOIL SAMPLING**

##### (a) Lead-Zinc

Very strong lead and zinc soil values, exceeding 2000 ppm Pb and 4000 ppm Zn, occur in a large anomalous area at the western end of the grid. During sampling the sample lines did not pass close to the Lead King showings, and therefore the exact location of the workings relative to the anomalous zone is not known definitely. The main Lead King showing should be between lines 26+00 and 28+00W south of the baseline. This indicates that the main anomalous area is grid west of the known mineralization and in an area of limited outcrop.

Other smaller lead and zinc linear anomalies occur. One stronger anomaly on lines 16+00 and 18+00W north of the baseline justifies further examination although it may represent a smaller mineralized structure. Weaker anomalies between lines 12+00 and 14+00W south of the baseline are downslope from the Adair adit portal and may be caused by displacement of the adit dump.

##### (b) Gold-Arsenic

Two approximately coincident gold and arsenic anomalies occur on the grid. The main gold with a smaller arsenic anomaly lies between lines 20+00 and 24+00W. It is located east of the Lead King workings and grid easterly from the southern part of the main lead-zinc anomaly. It parallels bedding in the Lead King area, and may indicate a zonation of mineralization along strike.

The other gold-arsenic anomaly, between lines 6+00 and 14+00W corresponds to the surface trace of the Adair mineralization. Arsenic is more extensive than gold in the anomaly, but indicates a gold-arsenopyrite association similar to the Adair workings.

Other small arsenic anomalies do not correlate with gold, but should be examined for sulphide mineralization.

(c) Copper

Several moderate copper anomalies occur on the property which correlate from line to line but do not correlate with other anomalous values. Bedrock geology in these areas should be examined. If the areas are underlain by limestone, then even weak anomalies may be significant.

(d) Silver

A few scattered elevated silver values occur, but appear to be of little significance.

## DISCUSSION OF RESULTS

Geochemical soil sampling on the Mastodon-Adair Group has proved to be an effective exploration method of identifying not only zones of known mineralization but also potential areas of mineralization without previously recorded showings.

The Adair mineralization is well identified by coincident gold and arsenic soil anomalies extending through the Adair showings. The length of the anomaly suggests that the mineralization could extend for a strike length of between 500 and 800 metres. Surface and underground mapping of the Adair area indicates that the mineralization is lenticular, and where intersected in the adit, below ore grade. However, the anomalous zone should be examined more thoroughly along strike.

The Lead King showings lie between a moderate gold soil anomaly to the east and a large highly anomalous lead-zinc zone to the northwest which is still open beyond the extent of the grid. The gold anomaly may be lithologically on strike with the Lead King mineralization, but the lead-zinc anomalous area is difficult to explain if mineralization follows lithology as at Adair and the Mastodon Zinc Mine. Further investigation and detailing of the lead-zinc anomaly should be a first priority for the next stage of exploration.

Other smaller anomalies warrant surface examination and sampling of bedrock if sulphide mineralization is exposed.

The geology of the Mastodon-Adair Group has never been mapped in sufficient detail to determine whether mineralization is associated with structure, lithology, or both. The mineralization at Lead King is quite distinct from the mixed sulphide mineralization at Adair. A detailed mapping of lithologies and

structure may lead to a better understanding of the mineralization on the property.

## RECOMMENDATIONS

The soil sampling grid should be extended to the west to delimit the lead-zinc anomaly. Fill-in lines at 100 metre spacings should be sampled west of line 24+00W to define more accurately higher value zones within the anomaly.

The property east of line 24+00W should be mapped geologically on 200 metre spaced lines, and west of line 24+00W it should be mapped in detail on 100 metre spaced lines.

The Lead King showings should be tied in accurately to the soil grid, and mapped and sampled in detail.

It is doubtful that geophysical methods will be very effective on mineralization consisting essentially of sphalerite and galena. However, due to the very high lead values in the grid west anomalous area, there may be sufficient galena present to be detected by self potential. If mineralization is related to strike slip faulting making structure significant, a VLF-EM survey may assist with interpretation. VLF-EM and S.P. surveys should be tried on at least two grid lines over the main lead-zinc anomaly, and if significant response is obtained, then all 100 metre lines west of 24+00W should be surveyed.

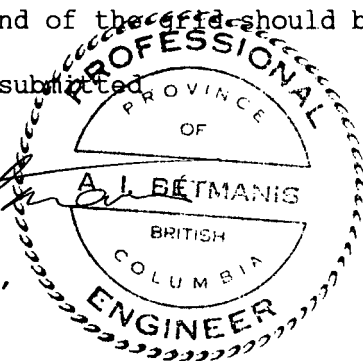
Areas of peak values in the lead-zinc anomaly should be hand trenched with a plugger and blasting to obtain reliable bedrock samples. A minimum of 100 metres of hand trenching is indicated.

The on-strike extensions of the Adair gold-arsenic anomaly, and other stronger geochemical soil anomalies should be examined for sulphide mineralization and sampled if justified.

Most of the Adair claim posts have been eradicated by snow slides, and it may be impossible to tie in the east end of the grid to claim corners. However, sufficient Mastodon Zinc Crown Granted claim corners should be preserved, and the western end of the grid should be tied in accurately to claim corners.

Respectively submitted

A.I. Betmanis,  
P. Eng



January 12, 1990  
Vancouver, B.C.

**REFERENCES**

**Gunning, H.C.** (1929): Geology and Mineral Deposits of Big Bend Map Area, B.C., in GSC Summary Report, 1928, Part A.

**Holcapec, F.** (1975): Report on Exploration Completed, Eureka and Eric Groups of Claims, Revelstoke Mining Division, B.C.; Assessment REport 5724.

**Philp, R.** (1977): Reconnaissance Geochemical Survey on Eureka and Eric Claim Groups, Revelstoke Mining Division, B.C.; Assessment Report 6522.

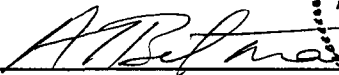
**Wheeler, J.O.** (1964): Big Bend Map Area, B.C.; G.S.C. Paper 64-32.

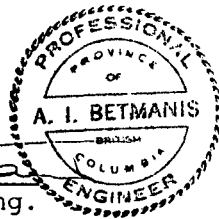
MMAR: 1898, p 1060; 1899 p 672; 1900. p 809; 1917, p 152;  
1959, p 117.

STATEMENT OF QUALIFICATIONS

I, Andris I. Betmanis, do hereby certify that:

1. I am a geologist residing at 2600 Belloc Street, North Vancouver, B.C;
2. I am a graduate of the University of Toronto with a degree of BASc in Applied Geology (1965);
3. I am a registered member of the Association of Professional Engineers of the Province of British Columbia, registration number 8336;
4. I have practised my profession as an exploration geologist continuously for the past 24 years as an employee of Teck Explorations Limited or associated companies in various parts of Eastern and Western Canada, Western U.S.A., and South America;
5. I carried out the geological mapping on the Adair claims and supervised the rock and soil geochemical sampling on the Mastodon-Adair Group as described in this report.

  
A. I. Betmanis, P. Eng.



APPENDIX I  
STATEMENT OF COSTS

## STATEMENT OF COSTS

A. Adair Adit Washing, Mapping, Sampling (June 15-22, 1989)

A.I. Betmanis, geologist, 6 days @ \$225/day	\$1,350.00
D. Nikirk, technician, 8 days @ \$175/day	1,400.00
J. Bacon, assistant, 8 days @ \$170/day	1,360.00
2 man-days meals and accommodation @ \$64.50/day	1,354.50
8 days truck rental @ \$50/day	400.00
10 days pump and hose rental @ \$20/day	200.00
Fuel and transportation costs	108.00
Expendable field supplies, flagging, sample bags	150.00
Canadian Helicopters, 5.2 hrs @ \$640/hr	3,328.00
11 rock assays @ \$47.75 ea.	525.25
30 rock geochem @ \$22.75 ea.	<u>682.50</u>
Total	<u>\$10,866.25</u>

B. Geochemical Soil Sampling (July 10 - Oct 23, 1989)

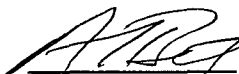
D. Nikirk, technician, 25 days @ \$175/day	\$4,375.00
R. Nikirk, assistant, 25 days @ \$165/day	4,125.00
G. Lovang, technician, 5 days @ \$195/day	975.00
G. May, assistant, 5 days @ \$170/day	850.00
A.I. Betmanis, geologist, supervision 1.5 days @ \$225/day	337.50
20 man-days meals and accommodation @ \$64.50/day	1,290.00
30 days truck rental @ \$50/day	1,500.00
25 days camp rental @ \$20/day	500.00
Fuel and transportation costs	165.00
Camp lumber and supplies	528.67
Camp groceries	692.35
Canadian Helicopters 10.1 hrs @ \$640/hr	6,464.00
Sample shipping	38.25
595 soil sample analyses @ \$19.00 ea.	<u>11,305.00</u>
Total	<u>\$33,145.77</u>

C. Report preparation, drafting	<u>\$800.00</u>
---------------------------------	-----------------

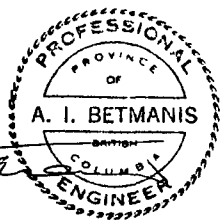
Total Costs	<u>\$44,812.02</u>
-------------	--------------------

For purposes of property agreements, 26.2% of geochemical sampling was done on the Mastodon Zinc Crown Granted claims, and 73.8% on the optioned Adair Group claims. All of the work in and around the Adair Adit was done on the optioned Adair Group. Report preparation is divided proportionally. The total amount expended on the Mastodon Zinc Crown Granted claims is \$8,893.79 and on the optioned Adair Group claims is \$35,918.23.

The above costs represent minimum costs of exploring the Mastodon Adair Group of claims as described in this report, and are applicable towards assessment credits.

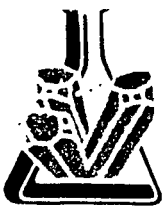


A.I. Betmanis  
P. Eng.





**APPENDIX II**  
**LABORATORY CERTIFICATES**



**MIN  
EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 887  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Assay Certificate

9V-0553-RA1

Company: **TECK EXPLORATIONS LTD.**  
Project: **1373 ADAIR**  
Attn: **W. MEYER/A. BETMANIS**

Date: **JUL-02-89**  
Copy 1. **TECK EXPL., VANCOUVER, B.C.**

*We hereby certify* the following Assay of 11 **ROCK** samples submitted JUN-23-89 by **A. BETMANIS**.

Sample Number	*AU	AU	AG	AG	CU	PB	ZN	AS	
	G/TONNE	OZ/TON	G/TONNE	OZ/TON	%	%	%	%	
83	.24	.007	12.3	.36	.072	.82	1.50	.18	
84	3.59	.113	19.8	.58	.140	.30	.96	8.97	
90	.59	.017	1.8	.05	.011	.02	.02	1.42	
91	** .94	.027	4.2	.12	.015	.02	.04	.16	
92	.73	.021	78.0	2.26	.030	4.12	10.60	3.19	
93	LEAD KING 2.5 M	.02	.001	9.9	.29	.002	23.30	6.32	.04
271		.02	.001	1.6	.05	.037	.80	.21	.02
272		.19	.006	2.1	.06	.072	.06	.02	.01
273		.60	.018	4.3	.13	.015	.10	.94	1.03
275		.61	.018	7.6	.22	.013	.21	1.90	2.45
276		.86	.025	5.9	.17	.076	.13	1.61	3.05

*ADAIR TRENCHES*

*ADAIR ADIT VEINS*

\*AU - 1 ASSAY TON.  
\*\*SAMPLE MAY CONTAIN METALLIC GOLD.

Certified by   
MIN-EN LABORATORIES



# MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

## Geochemical Analysis Certificate

9V-0553-RG1

Company: TECK EXPLORATIONS LTD.  
Project: 1373 ADAIR  
Attn: W. MEYER/A. BETMANIS

Date: JUL-02-89  
Copy 1. TECK EXPL., VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted JUN-23-89 by A. BETMANIS.

Sample Number	*AU-FIRE PFB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
85	28	1.5	320	74	280	650
86	344	1.2	64	104	78	5850
87	154	1.4	50	58	67	675
88	12	0.4	48	12	69	150
89	11	0.7	37	40	48	225
<hr/>						
94 LEAD KING 1 M HANGING WALL	4	0.7	20	3800	14500	4
95 LEAD KING 1 M FOOTWALL	2	1.9	11	1800	1950	5
<hr/>						
251	1	1.8	13	46	93	175
252	2	2.4	12	40	62	2
253	1	2.8	10	76	141	15
<hr/>						
254	5	2.4	16	100	360	675
255	2	2.9	8	90	73	6
256	11	1.3	52	34	345	850
257	74	4.2	60	427	750	275
258	3	0.8	48	25	54	51
<hr/>						
259	1	0.5	80	16	81	12
260	2	0.9	28	42	53	175
261	103	4.1	94	342	3650	4350
262	2	1.0	17	18	82	28
263	1	0.9	27	18	50	39
<hr/>						
264	2	0.6	94	20	61	18
265	6	1.0	30	24	58	15
266	4	3.1	36	324	200	325
267	1	0.7	24	18	37	11
268	1	0.6	28	24	55	23
<hr/>						
269	3	0.9	18	108	132	24
270	1	1.6	42	76	235	34
274	88	1.4	58	67	96	8150

ADAIR TRENCHES

ADAIR ADIT EAST WALL

\*AU - 1 ASSAY TON.

Certified by 

MIN-EN LABORATORIES



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0739-SG1**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W.MEYER/A.BETMANIS**

**Date: JUL-26-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-24-89 by D.NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
B/L 0+00 575W	1	1.0	48	61	106	13
B/L 0+00 600W	1	0.4	54	54	100	40
B/L 0+00 625W	2	0.4	48	39	92	15
B/L 0+00 650W	41	3.6	1190	680	403	475
B/L 0+00 675W	1	1.1	42	132	660	16
B/L 0+00 700W	31	0.4	56	45	108	23
B/L 0+00 725W	2	0.5	43	60	188	22
B/L 0+00 750W	77	1.7	404	570	1100	62
B/L 0+00 775W	1	0.5	48	62	126	9
B/L 0+00 800W	6	0.6	58	98	140	41
B/L 0+00 825W	2	1.4	48	257	640	19
B/L 0+00 850W	5	0.5	46	144	202	100
B/L 0+00 875W	24	1.0	50	182	540	175
B/L 0+00 900W	62	0.6	34	61	112	150
B/L 0+00 925W	10	0.4	31	28	68	25
B/L 0+00 950W	5	1.0	50	80	108	98
B/L 0+00 975W	1	0.5	36	40	70	77
B/L 0+00 1000W	2	0.8	41	320	340	80
B/L 0+00 1025W	10	1.2	34	500	160	34
B/L 0+00 1050W	18	0.6	40	168	240	200
B/L 0+00 1075W	1	0.4	40	105	242	65
B/L 0+00 1100W	1	0.4	22	60	138	56
B/L 0+00 1125W	3	0.7	39	178	340	64
B/L 0+00 1150W	1	0.6	23	36	86	30
B/L 0+00 1175W	2	0.8	90	45	120	19
B/L 0+00 1200W	1	0.6	48	31	90	22
B/L 0+00 1225W	3	1.0	46	43	100	41
B/L 0+00 1250W	94	1.4	106	445	1000	1400
B/L 0+00 1275W	3	0.3	36	104	185	150
B/L 0+00 1300W	1	0.4	31	45	128	25

Certified by

**MIN-EN LABORATORIES**



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**9V-0739-SG2**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: JUL-26-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-24-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
B/L 0+00 1325W	4	0.5	34	64	75	14
B/L 0+00 1350W	2	0.7	28	40	88	29
B/L 0+00 1375W	1	1.0	40	170	160	57
B/L 0+00 1400W	3	0.8	39	55	135	18
B/L 0+00 1425W	1	0.7	29	37	80	19
-----						
B/L 0+00 1450W	1	1.0	24	56	90	21
B/L 0+00 1475W	3	1.0	32	54	94	24
B/L 0+00 1500W	2	0.9	26	82	130	37
B/L 0+00 1525W	1	0.5	26	60	103	18
B/L 0+00 1550W	3	0.7	31	140	118	16
-----						
B/L 0+00 1575W	1	0.2	18	23	77	21
B/L 0+00 1600W	3	0.2	20	22	58	17
B/L 0+00 1625W	1	0.3	21	14	44	14
B/L 0+00 1650W	1	0.5	28	140	120	21
B/L 0+00 1675W	1	0.7	32	88	130	15
-----						
B/L 0+00 1700W	2	0.8	27	104	90	13
B/L 0+00 1725W	4	0.4	20	59	112	20
B/L 0+00 1750W	2	0.8	26	218	182	14
B/L 0+00 1775W	2	0.5	22	200	140	16
B/L 0+00 1800W	1	0.5	28	56	70	17
-----						
B/L 0+00 1825W	1	0.4	25	38	60	11
B/L 0+00 1850W	2	0.5	26	57	90	29
B/L 0+00 1875W	1	0.6	40	64	105	53
B/L 0+00 1900W	1	0.4	38	130	114	22
B/L 0+00 1925W	2	0.3	21	30	64	12
-----						
B/L 0+00 1950W	2	0.4	18	48	75	9
B/L 0+00 1975W	3	0.4	26	54	72	12
B/L 0+00 2000W	1	0.2	20	17	49	8
B/L 0+00 2025W	2	0.4	18	32	48	8
B/L 0+00 2050W	1	0.4	14	26	75	7

**Certified by**

**MIN-EN LABORATORIES**



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0739-SG3**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: JUL-27-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-24-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
B/L 0+00 2075W	3	0.6	20	22	57	15
B/L 0+00 2100W	1	0.4	15	31	66	16
B/L 0+00 2125W	1	0.5	16	27	61	14
L 600W 25N	2	0.6	50	26	80	19
L 600W 50N	3	0.7	82	15	98	9
L 600W 75N	1	0.6	60	25	74	13
L 600W 25S	4	0.6	41	132	170	19
L 600W 50S	3	0.8	98	40	86	17
L 600W 75S	5	0.7	137	197	580	100
L 600W 100S	1	0.4	39	38	97	26
L 600W 125S	4	0.5	44	62	98	51
L 600W 150S	2	0.4	32	68	72	31
L 600W 175S	1	0.3	20	29	54	15
L 600W 200S	1	0.6	44	19	43	14
L 600W 225S	1	0.5	33	59	80	17
L 600W 250S	2	0.3	20	10	38	13
L 600W 275S	5	0.6	28	34	56	18
L 600W 300S	2	0.5	25	59	75	14
L 600W 325S	1	0.4	38	90	90	16
L 600W 350S	3	0.6	48	92	114	12
L 600W 375S	2	0.4	50	76	121	15
L 600W 390S	1	0.6	52	68	116	14
L 700W 25N	1	0.6	70	39	100	44
L 700W 50N	3	0.6	31	20	68	2
L 700W 75N	1	0.4	40	34	78	10
L 700W 100N	3	0.4	56	168	142	24
L 700W 125N	2	0.6	60	118	82	10
L 700W 150N	1	0.7	61	32	104	5
L 700W 175N	1	0.8	108	20	113	3
L 700W 200N	2	0.6	67	24	90	12

Certified by

**MIN-EN LABORATORIES**



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**9V-0739-SG4**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: JUL-27-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-24-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L 700W 225N	2	0.5	28	23	65	11
L 700W 250N	1	0.4	30	31	67	18
L 700W 275N	1	0.4	29	26	72	18
L 700W 300N	3	0.6	29	116	112	11
L 700W 325N	2	0.6	40	154	124	20
L 700W 350N	1	0.9	37	140	116	36
L 700W 365N	1	0.7	31	132	126	16
L 800W 25N	1	0.6	43	80	120	26
L 800W 50N	1	0.8	58	30	94	11
L 800W 75N	4	0.5	36	46	86	23
L 800W 100N	1	0.6	32	61	76	20
L 800W 125N	2	0.4	29	22	60	52
L 800W 150N	3	0.4	39	26	80	15
L 800W 175N	1	0.5	32	14	91	16
L 800W 200N	1	0.4	37	16	97	52
L 800W 225N	1	0.4	34	22	72	11
L 800W 250N	3	0.5	34	32	71	17
L 800W 275N	1	0.4	29	21	75	7
L 800W 300N	1	0.4	24	22	74	10
L 800W 325N	2	0.4	37	36	98	20
L 800W 350N	1	0.5	76	49	100	16
L 800W 375N	3	0.5	52	80	145	35
L 800W 400N	1	0.6	30	16	76	13
L 1600W 25N	3	0.4	20	32	60	36
L 1600W 50N	1	0.4	26	48	74	27
L 1600W 75N	1	0.4	27	116	96	27
L 1600W 100N	1	0.7	18	41	70	18
L 1600W 125N	2	0.6	28	239	171	24
L 1600W 150N	1	0.6	28	1080	1200	44
L 1600W 175N	2	0.6	48	35	76	21

**Certified by**

**MIN-EN LABORATORIES**



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0739-SG5**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: JUL-26-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 9 SOIL samples submitted JUL-24-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L 1600W 200N	1	0.5	14	18	48	11
L 1600W 225N	2	0.4	17	17	5	17
L 1600W 250N	1	0.4	19	24	60	14
L 1600W 275N	1	0.4	18	26	59	11
L 1600W 300N	1	0.6	30	70	96	17
-----						
L 1600W 325N	2	0.5	2	32	82	15
L 1600W 350N	1	0.8	34	33	88	16
L 1600W 375N	1	0.4	33	32	95	22
L 1600W 400N	1	0.4	28	30	118	100
-----						
-----						
-----						
-----						
-----						
-----						
-----						
-----						

**Certified by** *[Signature]*

**MIN-EN LABORATORIES**





**MIN-EN LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate** 9V-0782-SG1

Company: **TECK EXPLORATIONS**  
Project: **1373**  
Attn: **A. BETMANIS/B. MEYER**

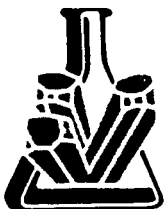
Date: **AUG-01-89**  
Copy 1. **TECK EXPLORATIONS, VANCOUVER, B.C.**

*We hereby certify* the following Geochemical Analysis of 30 SOILS samples submitted JUL-28-89 by D.NIKIRK.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
BL000 2150W	1	0.5	90	27	85	8
BL000 2175W	2	0.6	98	29	97	7
BL000 2200W	2	0.6	36	71	165	16
BL000 2225W	1	0.4	17	33	123	11
BL000 2250W	2	0.6	20	275	318	13
BL000 2275W	1	0.5	15	26	89	4
BL000 2300W	1	0.7	31	69	173	50
BL000 2325W	1	0.4	92	23	94	8
BL000 2350W	1	0.6	93	58	89	15
BL000 2375W	1	0.4	77	30	59	15
BL000 2400W	1	0.4	69	33	65	13
BL000 2425W	1	0.4	70	29	67	4
BL000 2450W	1	0.8	74	34	86	10
BL000 2475W	2	0.4	72	43	72	23
BL000 2500W	1	0.8	92	79	139	30
BL000 2525W	1	0.4	78	53	136	15
BL000 2550W	1	0.5	84	56	128	11
BL000 2575W	2	0.4	80	47	117	12
BL000 2600W	3	0.6	75	69	129	14
BL000 2625W	1	0.4	71	42	118	9
BL000 2650W	1	0.5	83	63	106	5
BL000 2675W	1	0.7	92	41	215	10
BL000 2700W	1	0.6	84	92	331	12
BL000 2725W	2	0.6	94	87	260	8
BL000 2750W	1	0.4	81	67	134	7
BL000 2775W	1	0.6	72	164	625	11
BL000 2800W	2	0.6	83	110	184	19
BL000 2825W	1	0.5	80	62	131	6
BL000 2850W	1	0.4	85	67	106	3
BL000 2875W	1	0.4	74	38	85	3

Certified by *B. Meyers*

**MIN-EN LABORATORIES**



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

9V-0782-SG2

**Company:** TECK EXPLORATIONS  
**Project:** 1373  
**Attn:** A. BETMANIS/B. MEYER

**Date:** AUG-01-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

*We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-28-89 by D. NIKIRK.*

Sample Number	AU-FIRE PFB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
BL000 2900W	1	0.4	17	130	165	4
BL000 2925W	1	1.2	17	1450	7250	10
BL000 2950W	1	0.4	21	425	650	8
BL000 2975W	2	0.9	80	545	2500	11
BL000 3000W	1	0.9	16	600	7000	15
BL000 3025W	2	0.6	12	510	2200	19
BL000 3050W	1	1.2	19	920	2100	13
BL000 3075W	1	1.0	18	625	2450	21
BL000 3100W	4	1.0	16	615	2800	18
L33W 25N	1	1.4	22	590	860	20
L33W 50N	3	1.2	19	1470	920	19
L33W 75N	2	0.8	18	640	1250	23
L33W 100N	2	1.0	15	575	1340	24
L800W 25S	1	0.9	40	154	198	24
L800W 50S	2	0.8	159	440	42	
L800W 75S	4	0.4	33	157	253	70
L800W 100S	1	0.5	37	66	106	26
L800W 125S	3	0.6	51	67	122	28
L800W 175S	2	0.4	22	30	94	14
L800W 200S	1	0.4	47	34	64	11
L800W 225S	1	0.4	20	34	66	17
L800W 250S	1	0.3	28	83	169	14
L800W 275S	2	0.4	33	53	131	16
L800W 300S	1	0.4	34	36	121	15
L800W 325S	1	0.4	31	42	107	14
L800W 350S	3	1.1	61	71	166	20
L800W 375S	2	0.4	37	38	106	17
L800W 400S	1	0.5	32	55	109	18
L800W 425S	1	0.5	31	51	106	20
L800W 450S	2	0.5	44	87	275	22

Certified by

MIN-EN LABORATORIES



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

9V-0782-SG3

**Company:** TECK EXPLORATIONS  
**Project:** 1373  
**Attn:** A. BETMANIS/B. MEYER

**Date:** AUG-02-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

*We hereby certify* the following Geochemical Analysis of 30 SOIL samples submitted JUL-28-89 by D. NIKIRK.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L800W 475S	10	0.9	52	103	218	24
L800W 500S	2	0.8	54	104	340	22
L1000W 25S	1	0.5	53	89	209	13
L1000W 50S	2	0.7	45	163	144	21
L1000W 75S	1	0.6	40	78	109	14
L1000W 100S	2	0.6	44	100	133	12
L1000W 125S	2	0.5	34	57	89	10
L1000W 150S	4	0.6	42	93	108	13
L1000W 175S	1	0.7	38	112	227	12
L1000W 200S	1	0.6	38	79	168	15
L1000W 225S	2	0.6	40	290	144	12
L1000W 250S	1	1.0	47	76	112	11
L1000W 275S	1	0.9	31	58	104	300
L1000W 300S	1	0.7	37	70	116	13
L1000W 325S	1	0.9	50	75	158	12
L1000W 350S	3	0.7	51	67	119	10
L1000W 375S	1	0.6	36	46	90	11
L1000W 400S	1	0.3	32	28	57	11
L1000W 425S	3	0.2	37	23	45	8
L1000W 450S	1	0.2	31	25	58	8
L1000W 475S	2	0.4	32	31	65	9
L1000W 500S	2	0.2	31	43	73	16
L1000W 25N	20	1.4	68	190	278	225
L1000W 50N	9	0.4	42	65	103	9
L1000W 75N	1	0.6	41	205	203	20
L1000W 100N	1	0.8	69	41	105	8
L1000W 125N	2	0.7	54	43	100	5
L1000W 150N	9	1.0	120	63	142	8
L1000W 175N	2	0.8	72	29	151	3
L1000W 200N	1	0.7	53	42	127	5

Certified by

MIN-EN LABORATORIES



**MIN-EN LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

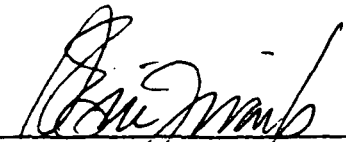
9V-0782-SG4

Company: **TECK EXPLORATIONS**  
Project: 1373  
Attn: A. BETMANIS/B. MEYER

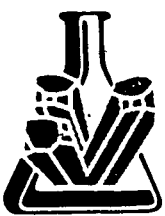
Date: **AUG-01-89**  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted JUL-28-89 by D. NIKIRK.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L1000W 225N	3	1.0	141	29	104	8
L1000W 250N	1	0.6	58	27	96	7
L1000W 275N	1	0.6	34	29	74	7
L1000W 300N	1	0.4	30	29	68	8
L1000W 325N	1	0.5	38	36	83	9
L1000W 350N	1	0.6	30	33	79	7
L1000W 375N	2	0.8	24	30	90	6
L1000W 400N	1	0.4	50	33	87	7
L1600W 25S	1	0.6	34	104	129	16
L1600W 50S	2	0.4	19	102	127	10
L1600W 75S	3	0.2	20	83	130	11
L1600W 100S	1	0.2	12	68	165	5
L1600W 125S	1	0.4	16	53	180	5
L1600W 150S	2	1.0	9	375	960	4
L1600W 175S	1	0.4	16	97	244	3
L1600W 200S	2	0.6	58	143	473	16
L1600W 225S	1	0.6	47	96	193	23
L1600W 250S	1	0.6	68	105	116	10
L1600W 275S	1	0.7	64	123	188	13
L1600W 300S	2	0.8	86	51	123	10
L1600W 325S	4	1.0	85	62	119	11
L1600W 350S	1	0.8	78	68	152	13
L1600W 375S	1	0.9	84	63	219	32
L1600W 400S	3	0.7	79	85	195	16
L1600W 425S	1	0.7	58	66	132	17
L1600W 450S	1	0.8	72	42	70	12
L1600W 475S	1	0.4	76	31	54	11
L1600W 500S	1	0.3	44	34	72	11
L2000W 25S	2	0.4	28	56	77	13
L2000W 50S	1	0.8	16	49	63	5

Certified by 

**MIN-EN LABORATORIES**



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0782-SG5

Company: **TECK EXPLORATIONS**  
Project: 1373  
Attn: **A. BETMANIS/B. MEYER**

Date: **AUG-02-89**  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

*We hereby certify* the following Geochemical Analysis of 30 SOIL samples submitted JUL-28-89 by D. NIKIRK.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L2000W 75S	3	0.8	20	45	72	5
L2000W 100S	51	0.6	30	39	133	10
L2000W 125S	82	0.4	14	23	53	8
L2000W 150S	70	0.6	13	33	63	10
L2000W 175S	41	0.4	12	20	52	7
L2000W 200S	7	0.3	22	23	77	13
L2000W 225S	10	0.4	13	17	56	5
L2000W 250S	1	0.3	18	34	196	10
L2000W 275S	3	0.6	34	58	299	16
L2000W 300S	3	0.6	60	53	180	8
L2000W 325S	2	0.5	58	41	159	10
L2000W 350S	2	0.8	50	34	139	7
L2000W 375S	1	0.6	29	24	187	5
L2000W 400S	1	0.8	57	40	168	7
L2000W 425S	1	1.0	48	39	129	8
L2000W 450S	3	0.6	42	33	100	9
L2000W 475S	3	1.0	47	34	106	9
L2000W 500S	2	0.7	45	33	96	11
L2000W 525S	1	0.6	51	41	107	17
L2000W 550S	1	0.7	49	40	130	13
L2000W 575S	1	0.6	37	42	138	10
L2000W 600S	1	0.8	41	38	122	12
L2000W 25N	2	0.6	47	69	152	16
L2000W 50N	1	5.8	37	142	160	13
L2000W 75N	1	1.0	43	172	255	14
L2000W 100N	2	0.6	35	38	92	8
L2000W 125N	1	0.4	44	42	126	62
L2000W 150N	2	0.4	31	49	112	15
L2000W 175N	1	0.8	63	117	379	24
L2000W 200N	2	0.5	88	87	342	15

Certified by \_\_\_\_\_

MIN-EN LABORATORIES



**MIN  
EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

9V-0782-SG6

Company: **TECK EXPLORATIONS**

Project: 1373

Attn: **A. BETMANIS/B. MEYER**

Date: **AUG-01-89**

Copy 1. **TECK EXPLORATIONS, VANCOUVER, B.C.**

*We hereby certify* the following Geochemical Analysis of 18 SOIL samples submitted JUL-28-89 by D. NIKIRK.

Sample Number	AU-FIRE PFB	AG PPM	CU PPM	PB PPM	ZN PPM	AS PPM
L2000W 225N	1	0.8	89	149	940	21
L2000W 250N	2	0.7	58	90	100	18
L2000W 275N	1	0.9	16	260	258	7
L2000W 300N	1	0.4	18	35	72	14
L2000W 325N	1	0.6	50	47	107	31
-----						
L2000W 340N	2	0.4	28	45	82	33
L3200W 25N	1	0.6	16	610	1300	30
L3200W 50N	1	0.9	20	1320	1740	25
L3200W 75N	2	1.0	21	950	1920	19
L3200W 100N	1	1.0	12	565	412	13
-----						
L3200W 125N	1	0.8	14	845	1760	20
L3200W 150N	2	1.2	10	440	420	6
L3200W 175N	3	0.6	14	350	1200	10
L3200W 200N	1	0.4	14	680	1000	7
L3200W 225N	1	0.6	14	485	495	9
-----						
L3200W 250N	1	0.4	12	510	1010	10
L3200W 275N	1	1.3	16	1420	1490	10
L3200W 300N	2	0.8	14	790	3500	9
-----						
-----						
-----						
-----						

Certified by \_\_\_\_\_

**MIN-EN LABORATORIES**



**MIN-EN LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**9V-0827-SG1**

**Company:** TECK EXPLORATIONS LTD.  
**Project:** 1373 *MASTODON-ADAR*  
**Attn:** W. MEYER/A. BETMANIS

**Date:** AUG-11-89  
Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L3000W 25N	1	1.7	13	17	2100	8050
L3000W 50N	1	1.3	15	19	1280	3650
L3000W 75N	1	1.4	16	18	1970	4850
L3000W 100N	3	1.9	49	23	4050	6150
L3000W 125N	2	0.3	7	13	64	96
L3000W 150N	1	0.4	26	33	45	140
L3000W 175N	1	0.4	8	49	33	94
L3000W 200N	1	0.3	9	24	56	86
L3000W 225N	1	0.6	9	22	94	11
L3000W 250N	2	0.5	8	16	61	145
L3000W 275N	1	0.5	12	19	43	160
L3000W 25S	1	1.3	8	13	320	840
L3000W 50S	1	0.7	19	23	600	2200
L3000W 75S	1	1.4	18	20	670	2000
L3000W 100S	2	2.0	15	16	2100	4800
L3000W 125S	4	4.9	18	16	4300	7900
L3000W 150S	2	2.9	20	20	590	1850
L3000W 175S	2	1.1	29	24	650	2450
L3000W 200S	1	1.0	36	30	310	1900
L3000W 225S	1	1.1	30	27	515	2650
L3000W 250S	1	1.4	16	17	375	755
L3000W 275S	2	0.7	47	31	435	1850
L3000W 300S	2	0.8	21	40	250	825
L3000W 325S	1	1.0	35	22	320	1300
L3000W 350S	13	0.8	14	41	83	365
L3000W 375S	2	0.9	17	38	102	395
L3000W 400S	1	0.7	6	32	53	180
L3000W 425S	4	0.4	12	25	51	200
L3000W 450S	1	0.7	35	76	255	594
L3000W 475S	2	0.8	103	30	157	360

Certified by

**MIN-EN LABORATORIES**



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0827-SG2**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: AUG-11-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L3000W 500S	2	1.7	27	23	225	515
L3000W 525S	1	1.3	16	33	74	205
L3000W 550S	1	1.3	19	30	79	195
L3000W 575S	1	1.5	22	38	125	385
L3000W 600S	1	1.7	20	168	76	480
-----						
L3000W 625S	1	1.3	12	39	42	160
L2800W 25N	2	0.9	14	21	111	295
L2800W 50N	1	0.7	6	18	31	85
L2800W 75N	1	0.5	4	20	38	98
L2800W 100N	1	0.6	7	14	43	125
-----						
L2800W 125N	1	0.6	5	31	39	88
L2800W 150N	2	0.9	26	19	260	570
L2800W 175N	1	0.8	35	16	390	1150
L2800W 200N	1	0.5	29	12	49	79
L2800W 225N	1	0.3	16	11	23	62
-----						
L2800W 250N	3	1.3	19	16	26	59
L2800W 275N	1	0.5	27	13	29	73
L2800W 300N	1	0.9	68	25	31	865
L2800W 325N	1	0.7	175	23	47	90
L2800W 350N	1	0.8	40	14	34	91
-----						
L2800W 375N	1	1.1	19	16	30	84
L2800W 400N	2	0.9	11	15	34	99
L2800W 25S	1	0.4	6	15	53	78
L2800W 50S	2	2.8	8	16	1600	6050
L2800W 75S	1	2.1	19	10	1689	3700
-----						
L2800W 100S	3	1.3	17	14	2340	6150
L2800W 125S	2	1.7	19	13	2900	6550
L2800W 150S	1	0.8	18	19	1770	4950
L2800W 175S	1	1.3	19	17	2650	6550
L2800W 200S	2	0.7	13	28	41	165

Certified by

**MIN-EN LABORATORIES**





**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0827-SG3**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: AUG-11-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L2800W 225S	2	2.4	61	29	385	265
L2800W 250S	1	0.8	21	20	167	800
L2800W 275S	2	0.9	15	19	165	475
L2800W 300S	1	1.0	19	25	230	700
L2800W 325S	1	1.4	22	73	128	550
-----						
L2800W 350S	3	1.4	27	35	157	740
L2800W 375S	2	1.3	10	85	240	1350
L2800W 400S	1	1.5	13	89	72	245
L2800W 425S	1	1.8	7	68	51	180
L2800W 450S	1	1.2	19	146	59	365
-----						
L2800W 475S	1	1.3	12	76	38	165
L2800W 500S	2	1.5	13	50	37	82
L2800W 525S	1	1.7	15	64	78	185
L2800W 550S	1	1.1	21	70	390	2250
L2800W 575S	2	1.6	22	50	660	910
-----						
L2800W 600S	1	1.1	24	56	365	1450
L2800W 625S	1	1.1	15	85	156	540
L2800W 650S	1	1.2	13	51	68	150
L2800W 675S	2	1.0	12	62	112	255
L2800W 700S	1	1.1	11	50	250	330
-----						
L2600W 25N	1	0.6	17	20	49	145
L2600W 50N	4	0.5	11	12	37	76
L2600W 75N	2	0.7	30	14	60	375
L2600W 100N	3	0.5	13	17	48	69
L2600W 125N	2	0.7	6	11	36	58
-----						
L2600W 150N	1	0.8	12	20	33	78
L2600W 175N	1	1.0	9	48	26	81
L2600W 200N	2	1.2	16	167	31	102
L2600W 225N	1	0.6	15	70	19	49
L2600W 250N	2	0.7	17	17	41	84

Certified by   
**MIN-EN LABORATORIES**



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0827-SG4**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: AUG-11-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L2600W 275N	1	0.4	33	17	36	93
L2600W 300N	1	0.8	40	22	49	10
L2600W 325N	1	0.8	49	20	47	120
L2600W 350N	2	0.9	300	43	120	135
L2600W 25S	1	0.7	7	15	51	130
-----						
L2600W 50S	2	0.6	19	9	32	89
L2600W 75S	1	0.7	4	15	31	125
L2600W 100S	1	0.7	5	25	47	130
L2600W 125S	1	0.8	7	8	315	285
L2600W 150S	1	0.8	21	20	255	2500
-----						
L2600W 175S	18	0.6	9	5	52	245
L2600W 200S	2	0.8	16	13	124	585
L2600W 225S	1	0.7	15	10	53	205
L2600W 250S	36	0.6	43	13	38	145
L2600W 275S	5	1.2	21	36	71	660
-----						
L2600W 300S	2	0.8	18	29	126	365
L2600W 325S	1	0.9	8	65	44	170
L2600W 350S	6	0.7	4	73	47	160
L2600W 375S	3	1.1	4	72	48	160
L2600W 400S	1	0.6	7	48	38	140
-----						
L2600W 425S	1	0.7	10	102	79	165
L2600W 450S	1	0.5	14	67	43	170
L2600W 475S	2	0.7	16	72	37	135
L2600W 500S	1	0.9	12	61	54	135
L2600W 525S	1	1.3	11	63	63	200
-----						
L2600W 550S	2	0.9	7	49	42	115
L2600W 575S	1	0.7	7	60	32	98
L2600W 600S	1	0.8	9	66	48	98
L2600W 625S	3	0.7	5	48	30	90
L2600W 650S	1	1.1	6	49	31	85

Certified by \_\_\_\_\_

**MIN-EN LABORATORIES**



**MIN-EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

***Geochemical Analysis Certificate***

**9V-0827-SG5**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

**Date: AUG-11-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 30 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L2600W 675S	1	0.7	7	51	38	91
L2600W 700S	1	0.6	5	50	50	101
L2400W 25N	1	0.2	3	10	13	52
L2400W 50N	2	0.6	18	17	24	69
L2400W 75N	3	0.9	300	115	28	135
-----						
L2400W 100N	2	1.2	27	39	29	85
L2400W 125N	1	0.6	18	35	31	83
L2400W 150N	2	0.4	5	10	25	57
L2400W 175N	1	0.3	8	14	24	69
L2400W 200N	1	0.4	23	15	42	49
-----						
L2400W 25S	2	0.4	5	16	56	54
L2400W 50S	2	0.5	6	18	30	145
L2400W 75S	6	0.4	4	31	154	310
L2400W 100S	57	0.4	4	29	31	180
L2400W 125S	7	0.6	13	50	28	155
-----						
L2400W 150S	15	0.4	96	21	29	160
L2400W 175S	19	0.4	59	17	18	82
L2400W 200S	3	0.5	22	22	94	455
L2400W 225S	1	0.4	20	51	163	365
L2400W 250S	1	0.8	16	76	158	530
-----						
L2400W 275S	2	0.6	37	46	97	280
L2400W 300S	1	0.4	35	42	68	175
L2400W 325S	1	4.8	28	141	117	410
L2400W 350S	2	1.0	12	103	48	175
L2400W 375S	1	6.0	9	59	74	185
-----						
L2400W 400S	1	0.8	14	87	65	190
L2400W 425S	1	0.6	11	69	79	175
L2400W 450S	2	0.6	6	41	51	86
L2400W 475S	1	1.0	5	46	66	85
L2400W 500S	1	0.8	10	53	49	260

Certified by \_\_\_\_\_

**MIN-EN LABORATORIES**



**MIN  
• EN  
LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENTS**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-9996

**Geochemical Analysis Certificate**

**9V-0827-SG6**

**Company: TECK EXPLORATIONS LTD.**  
**Project: 1373**  
**Attn: W. MEYER/A. BETMANIS**

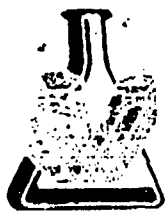
**Date: AUG-11-89**  
**Copy 1. TECK EXPLORATIONS LTD., VANCOUVER, B.C.**

**We hereby certify the following Geochemical Analysis of 23 SOIL samples submitted AUG-04-89 by D. NIKIRK.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L2400W 525S	1	1.2	18	87	51	230
L2400W 550S	1	1.0	11	50	58	235
L2400W 575S	2	0.7	11	49	52	235
L2400W 600S	12	0.5	8	41	43	225
L2400W 625S	1	0.8	10	43	42	145
-----						
L2400W 650S	2	0.6	11	37	37	165
L2400W 675S	1	0.8	15	41	46	245
L2400W 700S	1	0.7	11	53	42	190
L1200W 25N	9	1.2	18	99	60	225
L1200W 50N	10	1.0	400	61	99	185
-----						
L1200W 75N	71	0.8	400	98	158	235
L1200W 100N	3	0.6	92	40	131	195
L1200W 125N	5	1.1	31	198	152	175
L1200W 150N	2	0.7	11	42	38	82
L1200W 175N	1	0.8	3	14	39	150
-----						
B/L0+00 3125W	3	1.0	7	11	295	700
B/L0+00 3150W	1	0.6	23	18	680	2100
B/L0+00 3175W	2	0.6	32	17	625	1550
B/L0+00 3200W	1	0.6	16	16	370	1250
B/L0+00 3225W	2	1.0	20	25	760	2150
-----						
B/L0+00 3250W	1	1.0	15	23	650	1450
B/L0+00 3275W	3	1.2	22	21	1430	2150
B/L0+00 3300W	1	1.2	10	16	660	695

Certified by

**MIN-EN LABORATORIES**



# MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 938-4524  
TELEX: VIA U.S.A. 7601067 • FAX (604) 930-8821

TIMMINS OFFICE:  
33 EAST IPOQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 1G7  
TELEPHONE: (705) 264-9996

## Geochemical Analysis Certificate

9V-1397-SG1

Company: TECK EXPLORATIONS  
Project: 1373  
Attn: B. MEYER/A. BETMANIS/A. LOVANG

Date: OCT-30-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 29 SOILS samples submitted OCT-23-89 by B. LOVANG.

Sample Number	AU-FIRE PPB	AG PPM	AS FPM	CU PPM	PB PPM	ZN PPM
L12+00W 0+25S	2	1.4	40	41	74	100
L12+00W 0+50S	4	0.6	48	30	64	98
L12+00W 0+75S	2	0.4	36	25	109	156
L12+00W 1+00S	1	0.5	50	50	46	165
L12+00W 1+25S	1	0.8	20	20	174	270
L12+00W 1+50S	3	0.6	45	34	89	104
L12+00W 1+75S	15	0.8	42	39	62	162
L12+00W 2+00S	7	0.7	41	57	64	127
L12+00W 2+25S	13	0.9	28	50	74	123
L12+00W 2+50S	38	1.0	54	25	94	156
L12+00W 2+75S	1	0.8	44	33	78	101
L12+00W 3+00S	3	1.0	38	31	73	100
L12+00W 3+25S	2	0.8	49	29	75	122
L12+00W 3+50S	2	0.8	59	30	100	152
L12+00W 3+75S	15	0.7	57	30	150	330
L12+00W 4+00S	1	0.9	42	31	96	118
L12+00W 4+25S	3	0.8	63	26	150	363
L12+00W 4+50S	1	1.0	47	32	115	159
L12+00W 4+75S	2	0.8	48	28	76	112
L12+00W 5+00S	1	0.7	60	35	108	265
L12+00W 5+25S	2	0.7	38	24	51	92
L12+00W 5+50S	2	0.8	40	30	88	125
L12+00W 5+75S	4	0.9	42	20	83	109
L12+00W 6+00S	3	1.0	50	32	115	162
L12+00W 6+25S	1	0.8	42	31	83	110
L14+00W 3+50N	NO	SAMPLE				
L14+00W 3+25N	1	0.5	26	22	37	83
L14+00W 3+00N	2	0.9	27	30	90	137
L14+00W 2+75N	4	0.7	38	31	126	246
L14+00W 2+50N	2	1.0	30	38	155	317

Certified by *B. Lovang*  
MIN-EN LABORATORIES



# MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7R 1A7  
TELEPHONE (604) 980-5814 OR (604) 980-5815  
TELEX: VIA U.S.A. 7601067 • FAX: 980-5814

TIMMINS OFFICE:  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 254-9996

## Geochemical Analysis Certificate

9V-1397-SG2

Company: TECK EXPLORATIONS  
Project: 1373  
Attn: B. MEYER/A. BETMANIS/A. LOVANG

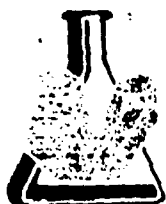
Date: OCT-30-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 30 SOILS samples submitted OCT-23-89 by B. LOVANG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L14+00W 2+25N	1	0.7	32	32	79	91
L14+00W 2+00N	2	0.6	23	34	60	76
L14+00W 1+75N	6	0.8	15	38	72	104
L14+00W 1+50N	3	0.6	19	30	118	116
L14+00W 1+25N	1	1.0	55	38	110	142
-----						
L14+00W 1+00N	12	1.4	32	45	179	175
L14+00W 0+75N	47	4.2	100	123	1710	1460
L14+00W 0+50N	4	1.0	52	34	137	164
L14+00W 0+25N	2	0.8	27	32	64	95
L14+00W B/L	1	0.8	23	44	50	130
-----						
L14+00W 0+25S	2	0.8	18	38	85	96
L14+00W 0+50S	1	0.5	18	25	88	295
L14+00W 0+75S	3	1.0	29	34	248	825
L14+00W 1+00S	12	0.8	31	23	229	770
L14+00W 1+25S	4	1.0	30	37	260	720
-----						
L14+00W 1+50S	12	0.9	18	25	95	200
L14+00W 1+75S	1	0.6	15	19	60	202
L14+00W 2+00S	2	0.9	48	23	520	1585
L14+00W 2+25S	7	1.0	29	68	107	265
L14+00W 2+50S	1	0.8	14	47	122	315
-----						
L14+00W 2+75S	1	0.9	8	45	84	163
L14+00W 3+00S	3	0.9	11	65	55	165
L14+00W 3+25S	2	1.0	11	64	45	162
L14+00W 3+50S	2	1.0	19	102	62	345
L14+00W 3+75S	1	0.9	16	65	59	172
-----						
L14+00W 4+00S	4	0.6	20	56	73	244
L14+00W 4+25S	2	0.4	16	29	25	116
L14+00W 4+50S	1	0.9	21	32	580	270
L14+00W 4+75S	3	0.6	12	24	87	240
L14+00W 5+00S	1	0.7	17	25	122	235

Certified by 

MIN-EN LABORATORIES



# MIN-EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • AGGAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA  
TELEPHONE (604) 280-5614 OR (F)  
TELEX: VIA U.S.A. 7601067 • FAX:

TIMMINS OFFICE:  
32 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 264-8922

## Geochemical Analysis Certificate

9V-1397-SG3

Company: TECK EXPLORATIONS  
Project: 1373  
Attn: B. MEYER/A. BETMANIS/A. LOVANG

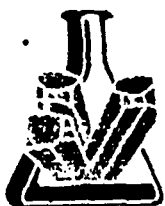
Date: OCT-30-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 29 SOILS samples submitted OCT-23-89 by B. LOVANG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L14+00W 5+25S	2	1.0	12	25	76	208
L14+00W 5+50S	3	0.8	9	26	94	233
L14+00W 5+75S	1	1.2	15	40	160	405
L14+00W 6+00S	1	0.5	16	14	46	94
L18+00W 2+00N	2	0.9	14	37	88	203
-----						
L18+00W 1+75N	1	0.7	13	33	20	75
L18+00W 1+50N	1	0.6	12	24	42	110
L18+00W 1+25N	2	0.8	10	36	25	105
L18+00W 1+00N	1	0.9	27	27	540	1040
L18+00W 0+75N	3	0.9	17	43	152	214
-----						
L18+00W 0+50N	1	1.0	18	32	63	115
L18+00W 0+25N	2	0.7	16	38	65	89
L18+00W 0+00N	NO	SAMPLE				
L18+00W 0+25S	2	0.6	13	28	23	55
L18+00W 0+50S	1	0.7	11	24	24	56
-----						
L18+00W 0+75S	1	0.6	15	29	58	68
L18+00W 1+00S	2	0.4	11	27	40	69
L18+00W 1+25S	1	0.6	17	31	48	58
L18+00W 1+50S	21	0.8	18	30	69	91
L18+00W 1+75S	2	0.6	12	32	46	72
-----						
L18+00W 2+00S	2	0.6	38	44	65	97
L18+00W 2+25S	5	0.9	11	56	35	179
L18+00W 2+50S	1	0.7	10	50	34	93
L18+00W 2+75S	2	0.8	10	51	40	73
L18+00W 3+00S	3	0.8	18	67	39	75
-----						
L18+00W 3+25S	2	0.9	9	68	35	90
L18+00W 3+50S	2	0.8	13	69	36	97
L18+00W 3+75S	1	1.2	12	142	42	115
L18+00W 4+00S	2	1.3	8	64	35	70
L18+00W 4+25S	1	1.2	7	70	32	71

Certified by

MIN-EN LABORATORIES



**MIN-EN**

**LABORATORIES**

**SPECIALISTS IN MINERAL ENVIRONMENT'S**  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

**VANCOUVER OFFICE:**  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (804) 389-4524  
TELEX VIA U.S.A. 7601087 • FAX (604) 380-9821

**TIMMINS OFFICE:**  
33 EAST IROQUOIS ROAD  
P.O. BOX 867  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE (705) 264-9996

**Geochemical Analysis Certificate**

**9V-1397-SG4**

**Company:** TECK EXPLORATIONS  
**Project:** 1373  
**Attn:** B. MEYER/A. BETMANIS/A. LOVANG

**Date:** OCT-30-89  
**Copy 1.** TECK EXPLORATIONS, VANCOUVER, B.C.

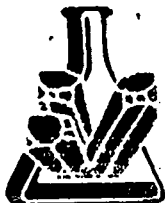
**We hereby certify the following Geochemical Analysis of 29 SOILS samples submitted OCT-23-89 by B. LOVANG.**

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L18+00W 4+50S	1	1.7	18	104	62	98
L18+00W 4+75S	1	1.2	26	142	101	175
L18+00W 5+00S	1	1.3	10	71	65	169
L18+00W 5+25S	2	0.9	12	45	34	62
L18+00W 5+50S	4	0.6	12	53	23	63
-----						
L22+00W 2+00N	1	0.7	37	34	54	98
L22+00W 1+75N	1	0.7	34	33	102	150
L22+00W 1+50N	3	0.8	44	34	100	118
L22+00W 1+25N	1	0.8	43	32	80	138
L22+00W 1+00N	2	0.7	45	44	69	121
-----						
L22+00W 0+75N	2	1.0	52	42	71	130
L22+00W 0+50N	2	0.6	48	34	65	132
L22+00W 0+25N	8	0.6	57	37	75	135
L22+00W 0+00N	ND	SAMPLE				
L22+00W 0+25S	2000	1.0	100	94	45	246
-----						
L22+00W 0+50S	104	0.8	73	33	38	137
L22+00W 0+75S	3	1.2	26	52	56	97
L22+00W 1+00S	5	0.8	30	20	23	92
L22+00W 1+25S	1	0.8	42	15	34	143
L22+00W 1+50S	2	0.7	41	15	46	105
-----						
L22+00W 1+75S	1	0.7	30	11	28	64
L22+00W 2+00S	1	0.6	34	17	103	233
L22+00W 2+25S	1	0.8	25	10	480	1300
L22+00W 2+50S	39	1.2	13	31	157	950
L22+00W 2+75S	30	0.8	10	53	87	337
-----						
L22+00W 3+00S	3	0.8	13	56	43	140
L22+00W 3+25S	27	0.7	12	32	33	116
L22+00W 3+50S	20	1.0	10	41	35	152
L22+00W 3+75S	2	1.1	21	50	67	183
L22+00W 4+00S	1	0.6	30	62	47	154

Certified by

**MIN-EN LABORATORIES**





**MIN-EN LABORATORIES**

SPECIALISTS IN MINERAL ENVIRONMENTS  
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:  
705 WEST 15TH STREET  
NORTH VANCOUVER, B.C. CANADA V7M 1T2  
TELEPHONE (604) 980-5814 OR (604) 988-4324  
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-8821

TIMMINS OFFICE:  
33 EAST IRROQUOIS ROAD  
P.O. BOX 267  
TIMMINS, ONTARIO CANADA P4N 7G7  
TELEPHONE: (705) 261-9996

**Geochemical Analysis Certificate**

9V-1397-SG5

Company: TECK EXPLORATIONS  
Project: 1373  
Attn: B.MEYER/A.BETMANIS/A.LOVANG

Date: OCT-30-89  
Copy 1. TECK EXPLORATIONS, VANCOUVER, B.C.

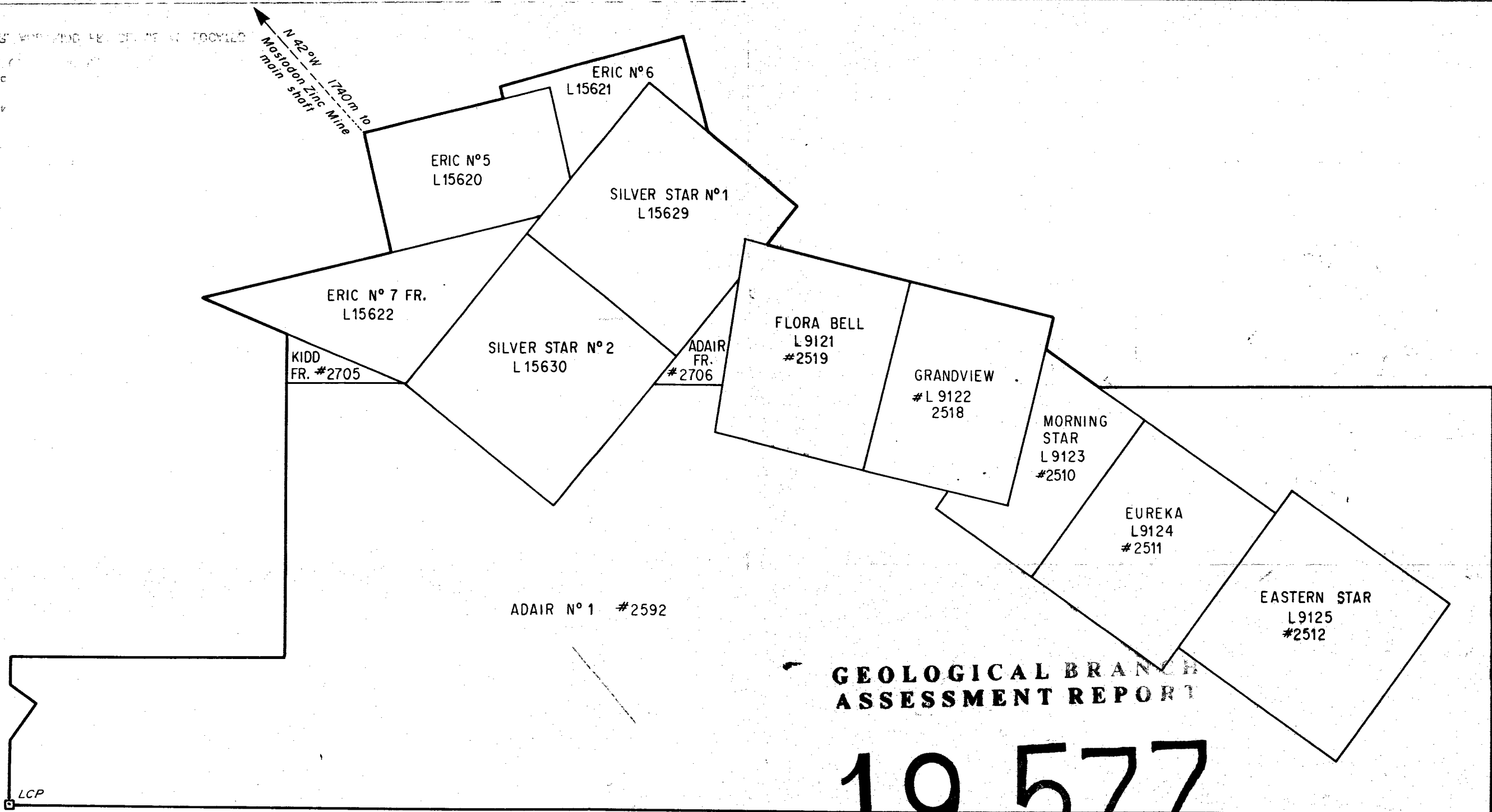
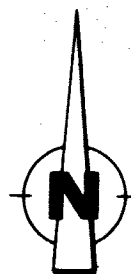
We hereby certify the following Geochemical Analysis of 11 SOILS samples submitted OCT-23-89 by B.LOVANG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
L22+00W 4+25S	4	0.8	29	66	50	174
L22+00W 4+50S	2	1.1	22	92	114	225
L22+00W 4+75S	1	1.0	22	80	127	194
L22+00W 5+00S	1	0.8	23	50	51	130
L22+00W 5+25S	2	0.7	25	51	48	145
L22+00W 5+50S	2	0.7	28	40	43	103
L22+00W 5+75S	1	1.5	20	58	59	178
L22+00W 6+00S	3	1.2	14	46	43	185
L22+00W 6+25S	3	0.8	12	42	41	123
L22+00W 6+50S	2	1.2	21	71	52	193
L32+00W 5+25S	1	0.7	38	22	500	1100

Certified by

MIN-EN LABORATORIES

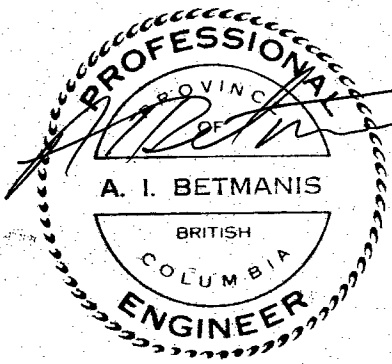
ADMIN. B.S. MAP AND FIELD OF AS. IN FORCE  
 MASTODON ZINC MINE  
 N 42° W 1740m to  
 main shaft



**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

**19,577**

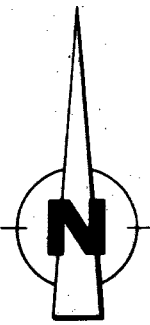
MASTODON ZINC MINES (TECK CORP) CROWN GRANTS  
 BASED ON BCLS LEGAL SURVEYS 1952-1953  
 ADAIR GROUP REVERTED CROWN GRANTS AS SHOWN  
 ON CLAIM MAP ASSESSMENT REPORT G522  
 ADAIR No 1 CLAIM AS SHOWN ON DEPT OF MINES  
 MINERAL CLAIM MAP 82M/1E(M)  
 ADAIR FR. AND KIDD FR. CLAIMS AS LOCATED



**TECK EXPLORATIONS LIMITED**  
**MASTODON-ADAIR GROUP**  
**LA FORME CREEK AREA, B.C.**

**CLAIM MAP**





**LEGEND**

- PHYLITE
- LIMESTONE
- DOLOMITE
- DOLOMITIC LIMESTONE
- SANDSTONE
- VEINING (QUARTZ, QUARTZ-SIDERITE - SULPHIDE)

- SURVEY CONTROL POINT
- ATTITUDE BEDDING
- ATTITUDE FRACTURING
- TRENCH OR PIT
- SAMPLE LOCATION, NUMBER
- CREEK

**GEOCHEMICAL SAMPLES**

SAMPLE	WIDTH (m)	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
85	0.45	28	1.5	320	74	280	650
86	2.0	324	1.2	64	104	78	5850
87	2.8	154	1.4	50	58	67	675
88	2.0	12	0.4	48	12	69	150
89	1.5	11	0.7	37	40	48	225

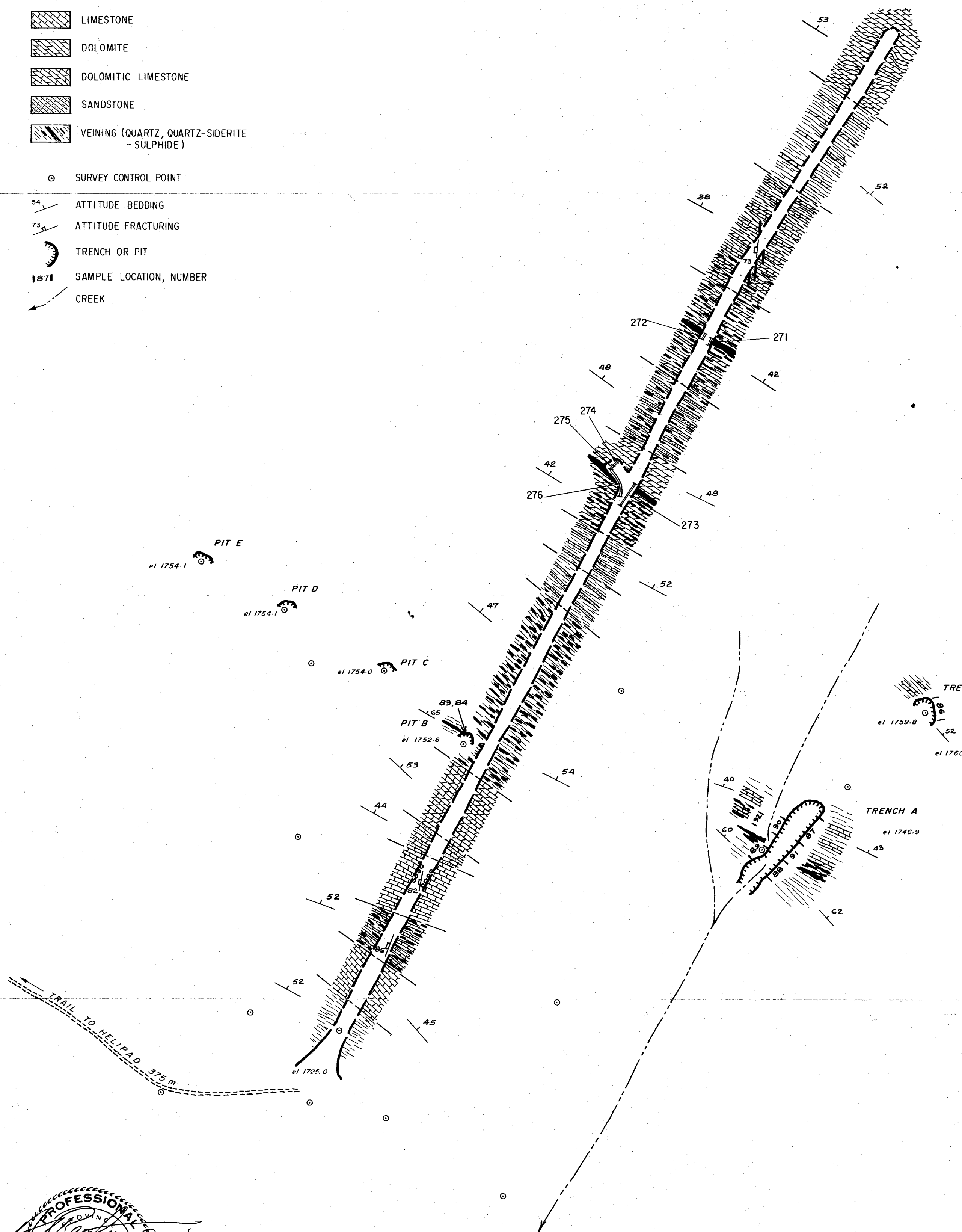
**ASSAY SAMPLES**

SAMPLE	WIDTH (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	As %
83	0.55	0.24	12.3	0.072	0.82	1.50	0.18
84	0.1	3.89	19.8	0.140	0.30	0.96	8.97
90	1.5	0.59	1.8	0.011	0.02	0.02	1.42
91	2.0	0.94	4.2	0.016	0.02	0.04	0.16
92	1.0	0.73	78.0	0.030	4.12	10.60	3.19

**ADIT VEIN SAMPLES**

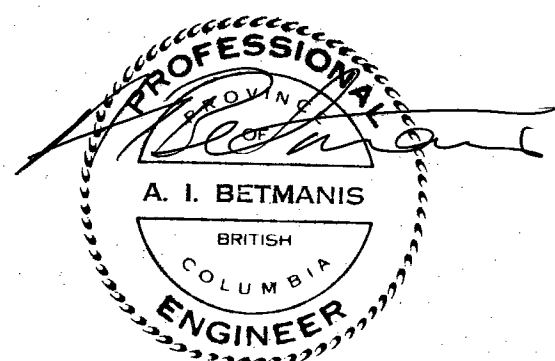
SAMPLE	WIDTH (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	As %
271	0.7	0.02	1.6	0.037	0.80	0.21	0.02
272	0.4	0.19	2.1	0.072	0.06	0.02	0.01
273	2.0	0.60	4.3	0.015	0.10	0.94	1.03
275	0.6	0.61	7.6	0.013	0.21	1.90	2.46
276	2.4	0.86	5.9	0.076	0.13	1.61	3.05
274*	0.7	0.09	1.4	0.006	<0.01	0.01	0.82

\* Wallrock in hanging wall, calculated from rock geochem

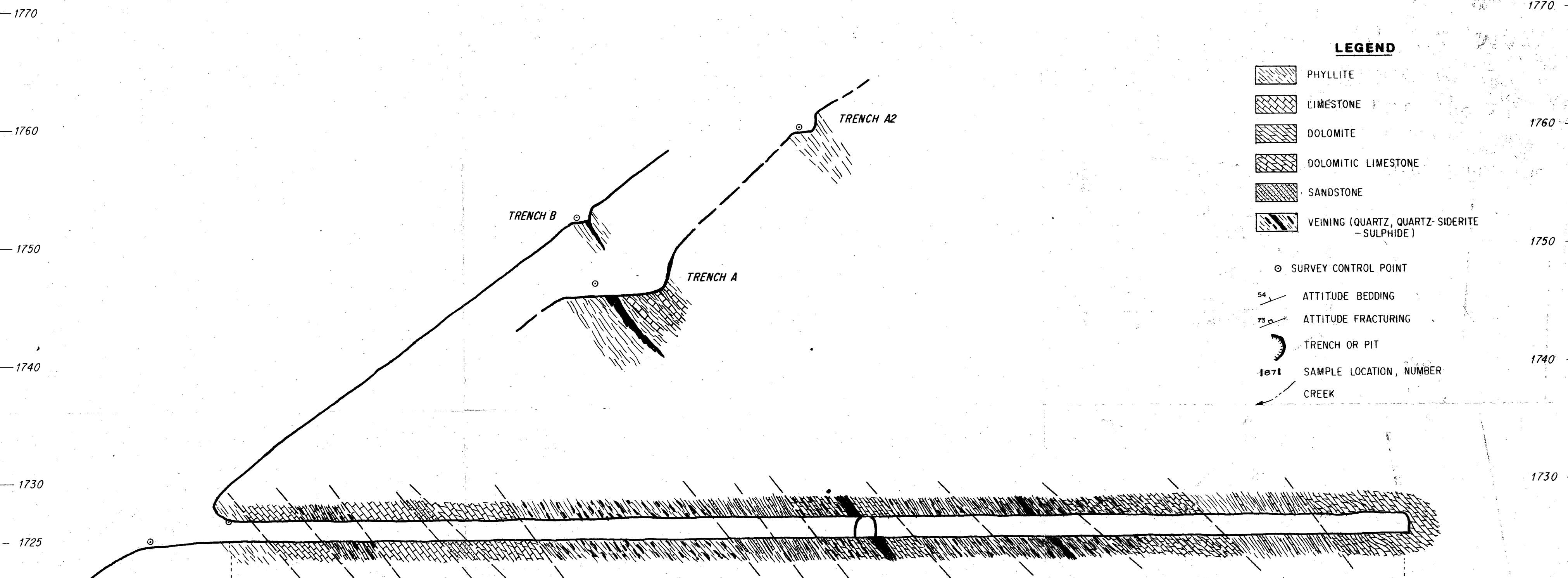


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**19,577**



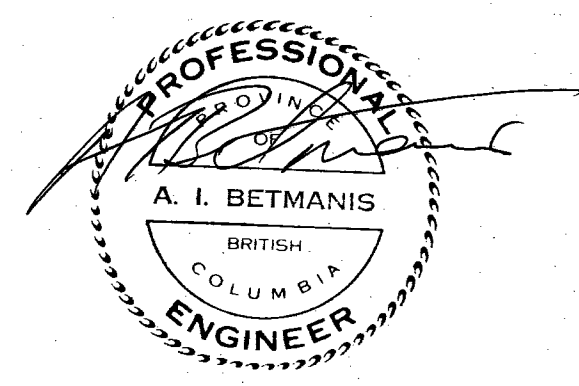
<b>TECK EXPLORATIONS LIMITED</b>	
MASTODON ADAIR GROUP	
LA FORME CREEK	B.C.
<b>GEOLOGY</b>	
EUREKA ADIT	
AND	
SURFACE WORKINGS	
SCALE = 1:250	
NTS 82M/4E	JULY 1989 JOB N° 1373
<b>FIG. 4</b>	



- LEGEND**
- PHYLLITE
  - LIMESTONE
  - DOLOMITE
  - DOLOMITIC LIMESTONE
  - SANDSTONE
  - VEINING (QUARTZ, QUARTZ-SIDERITE - SULPHIDE)
  - SURVEY CONTROL POINT
  - ATTITUDE BEDDING
  - ATTITUDE FRACTURING
  - TRENCH OR PIT
  - SAMPLE LOCATION, NUMBER
  - CREEK

CONTINUOUS 5m CHIP SAMPLES EAST WALL

Au	1	2	1	5	2	11	74	3	1	2	103	2	1	2	6	4	1	1	3	1	ppb
Ag	1.8	2.4	2.8	2.4	2.9	1.3	4.2	0.8	0.5	0.9	4.1	1.0	0.9	0.6	1.0	3.1	0.7	0.6	0.9	1.6	ppm
Cu	13	12	10	16	8	52	60	48	80	28	94	17	27	94	30	36	24	28	18	42	ppm
Pb	46	40	76	100	90	34	427	25	16	42	324	18	18	20	24	324	18	24	108	76	ppm
Zn	93	62	141	360	73	345	750	54	81	53	3650	82	50	61	58	200	37	55	132	235	ppm
As	175	2	15	675	6	850	275	51	12	175	4350	28	39	18	15	325	11	23	24	34	ppm



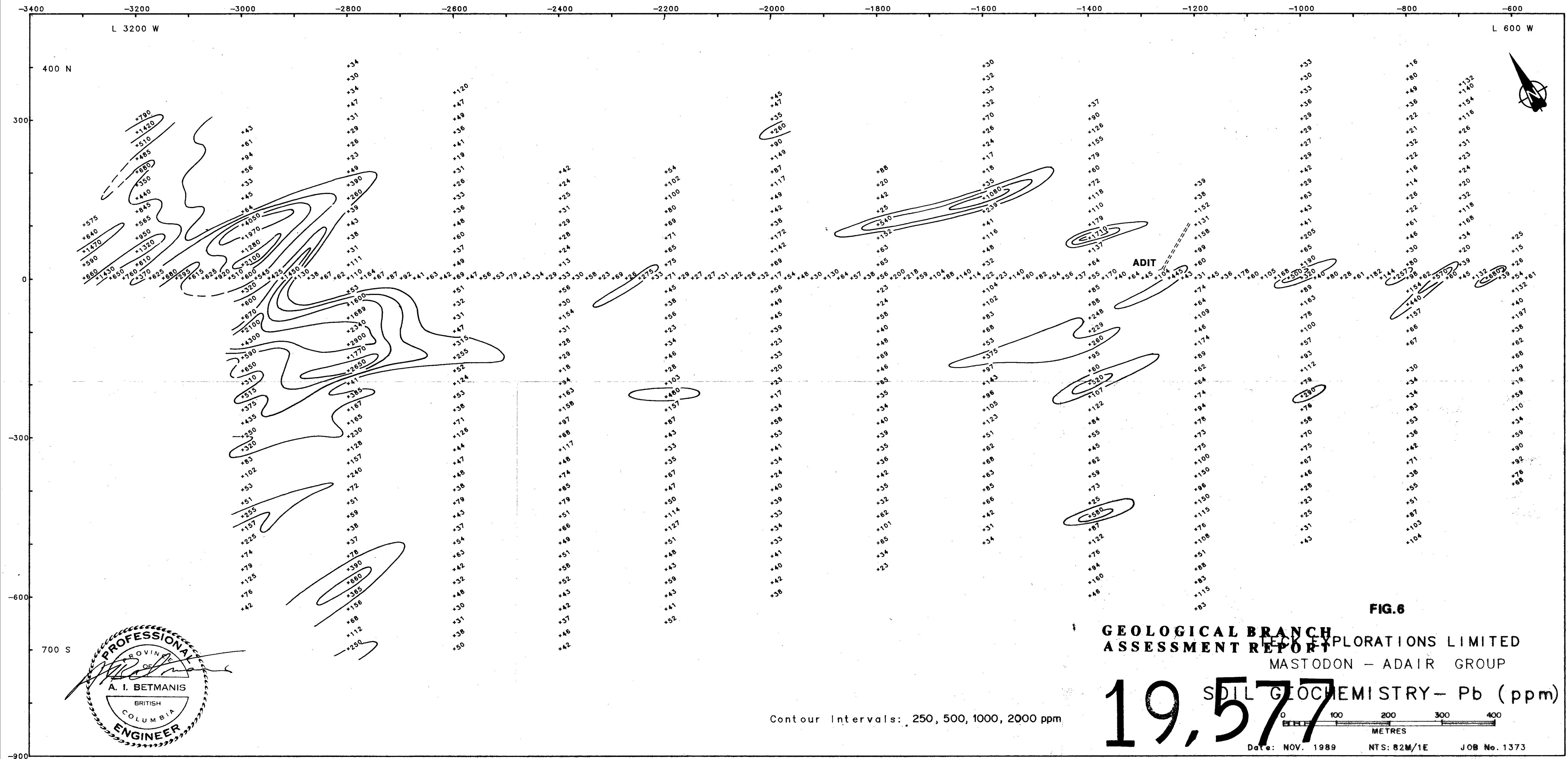
**GEOLOGICAL BRANCH ASSESSMENT REPORT**

**19,577**

**TECK EXPLORATIONS LIMITED**  
**MASTODON ADAIR GROUP**  
 FORTME CREEK B.C.

**EUREKA ADIT**  
 SECTION LOOKING N 60° W  
 SCALE = 1:250

NTS 82M/1E    JULY 1989    JOB N° 1373    **FIG.5**

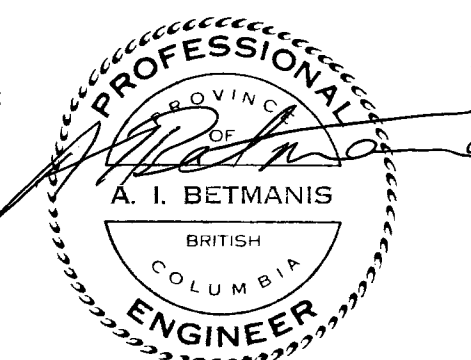
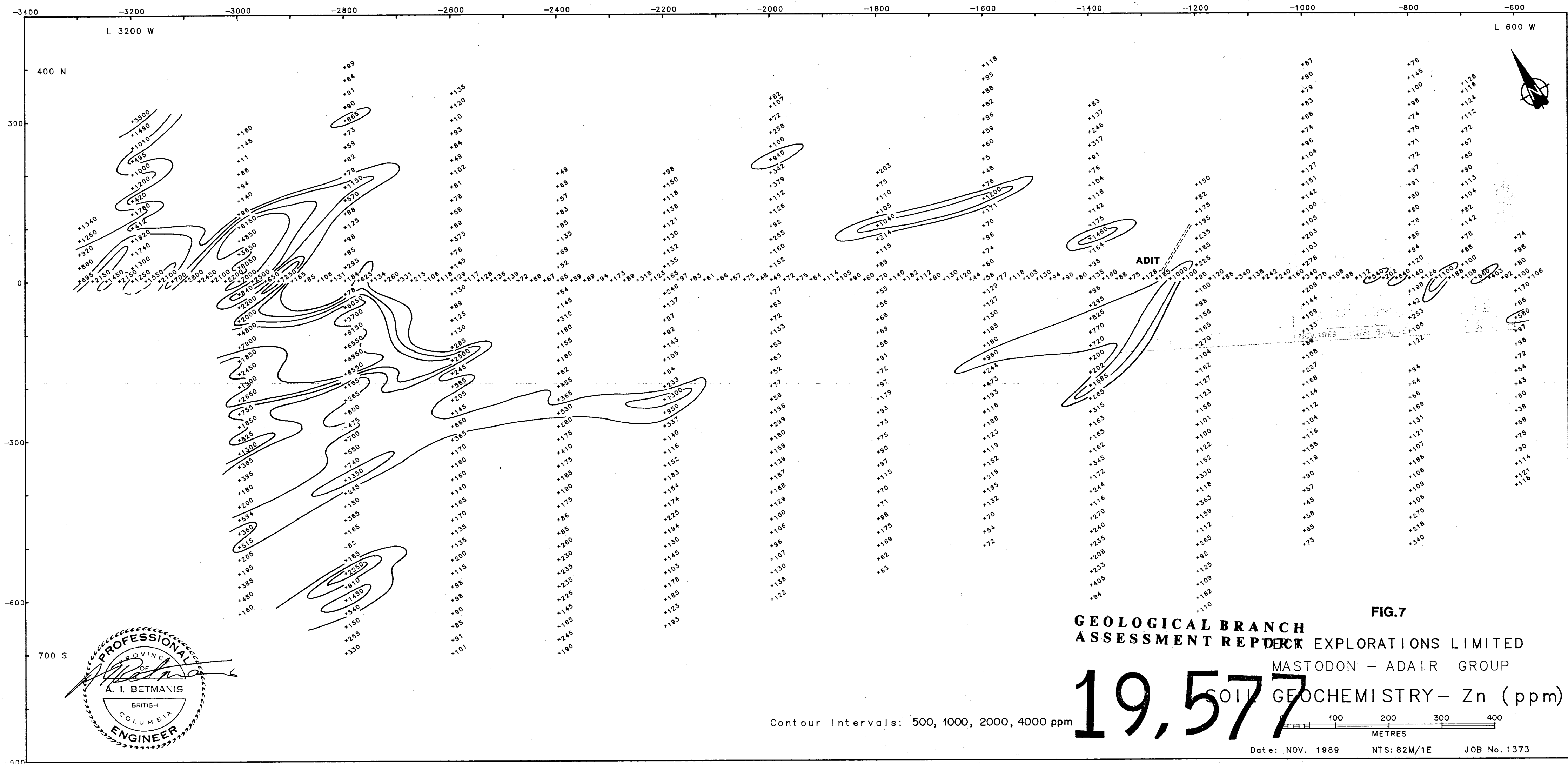


PROFESSIONAL  
 A. I. BETMANIS  
 BRITISH COLUMBIA  
 ENGINEER

**FIG. 6**  
**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
 EXPLORATIONS LIMITED  
 MASTODON - ADAIR GROUP  
**19,577** SOIL GEOCHEMISTRY - Pb (ppm)  
 Date: NOV. 1989 NTS: 82M/1E JOB No. 1373

Contour Intervals: 250, 500, 1000, 2000 ppm

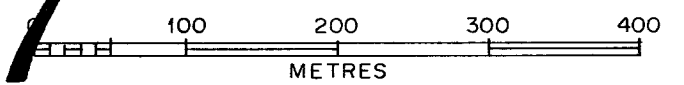




**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT** EXPLORATIONS LIMITED  
 MASTODON - ADAIR GROUP

**19,577** SOIL GEOCHEMISTRY - Zn (ppm)

Contour Intervals: 500, 1000, 2000, 4000 ppm



Date: NOV. 1989 NTS: 82M/1E JOB No. 1373

FIG. 7

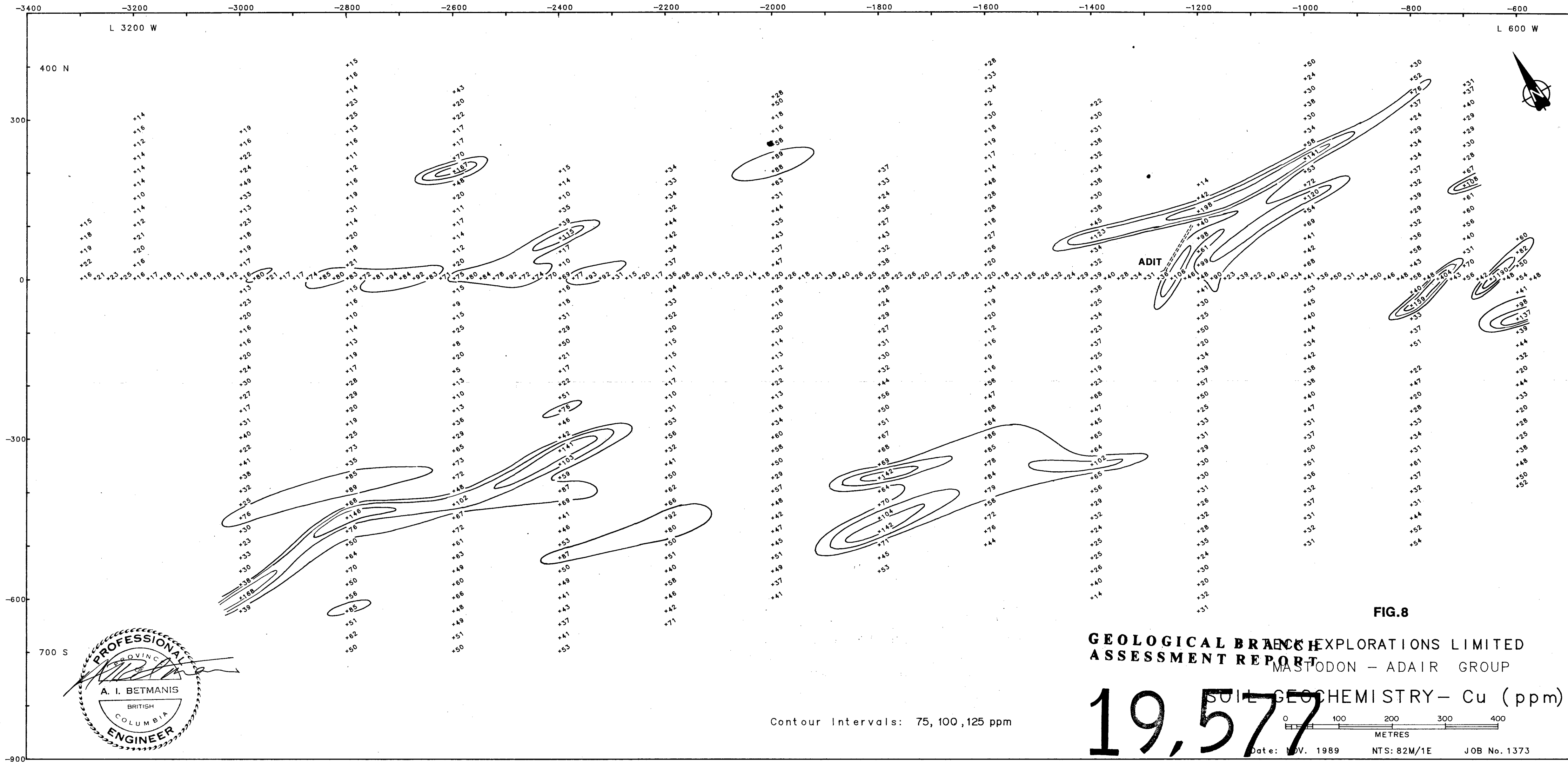
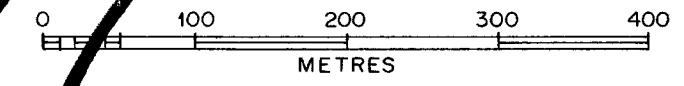


FIG.8

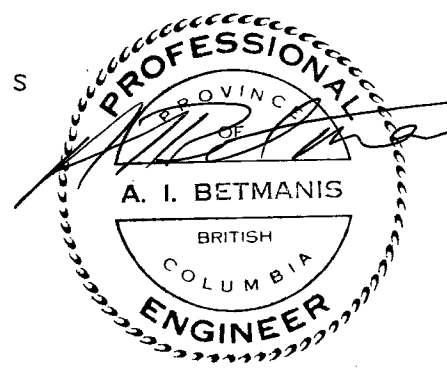
**GEOLOGICAL BRANCH EXPLORATIONS LIMITED**  
**ASSESSMENT REPORT**  
 MASTODON - ADAIR GROUP

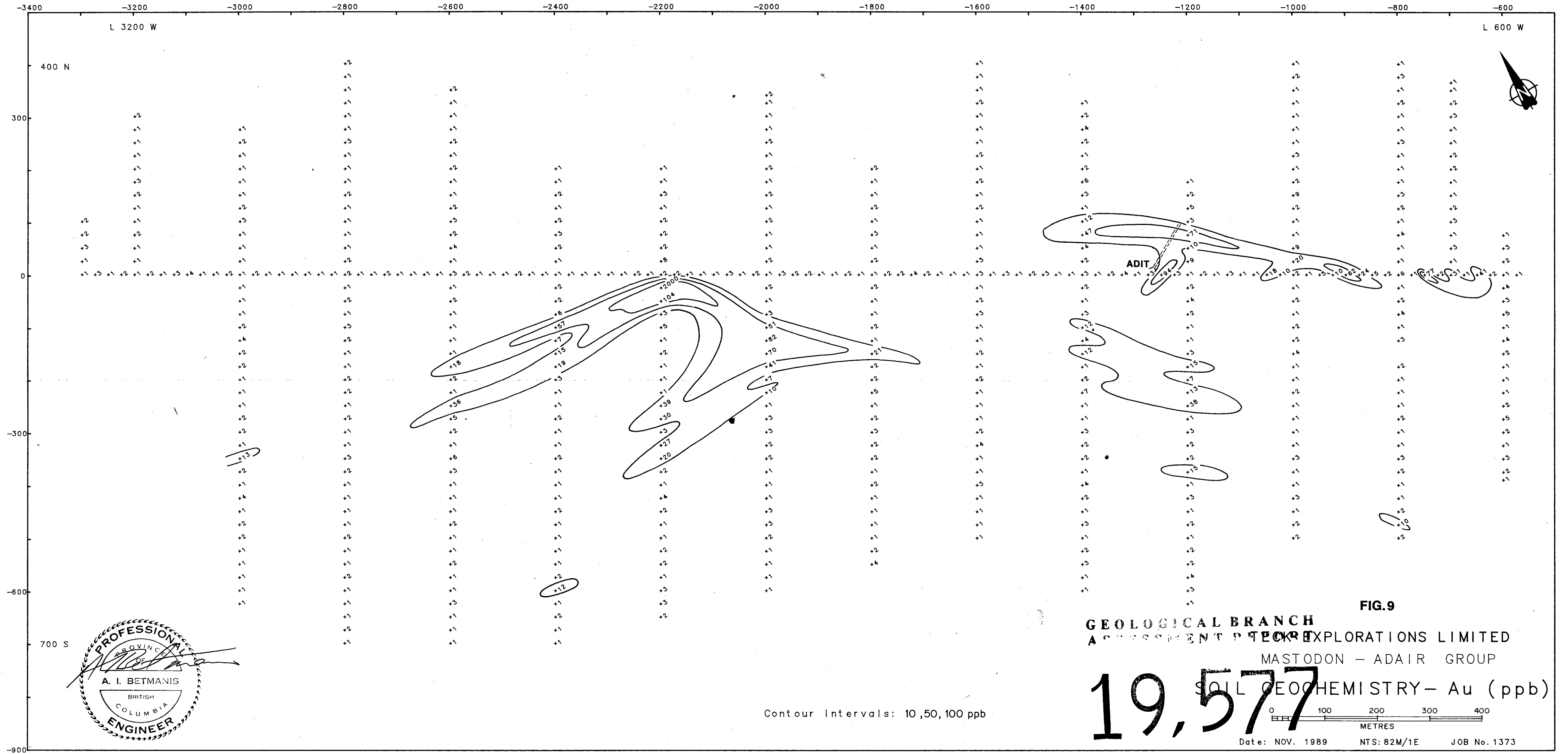
**SOIL GEOCHEMISTRY - Cu (ppm)**  
**19,577**

Contour Intervals: 75, 100, 125 ppm



Date: NOV. 1989 NTS: 82M/1E JOB No. 1373





L 3200 W

L 600 W

400 N

300

0

-300

-600

700 S

-900

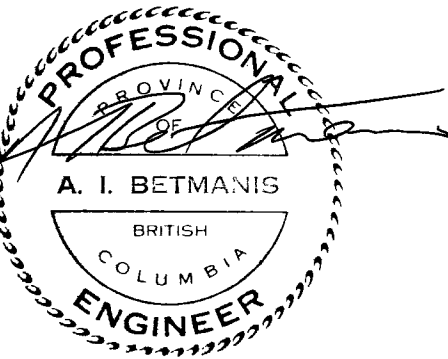
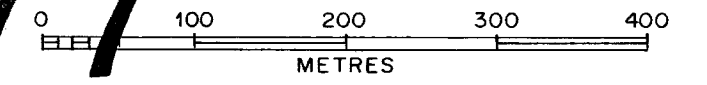


FIG. 9  
 GEOLOGICAL BRANCH  
 ASSESSMENT & EXPLORATIONS LIMITED

MASTODON - ADAIR GROUP

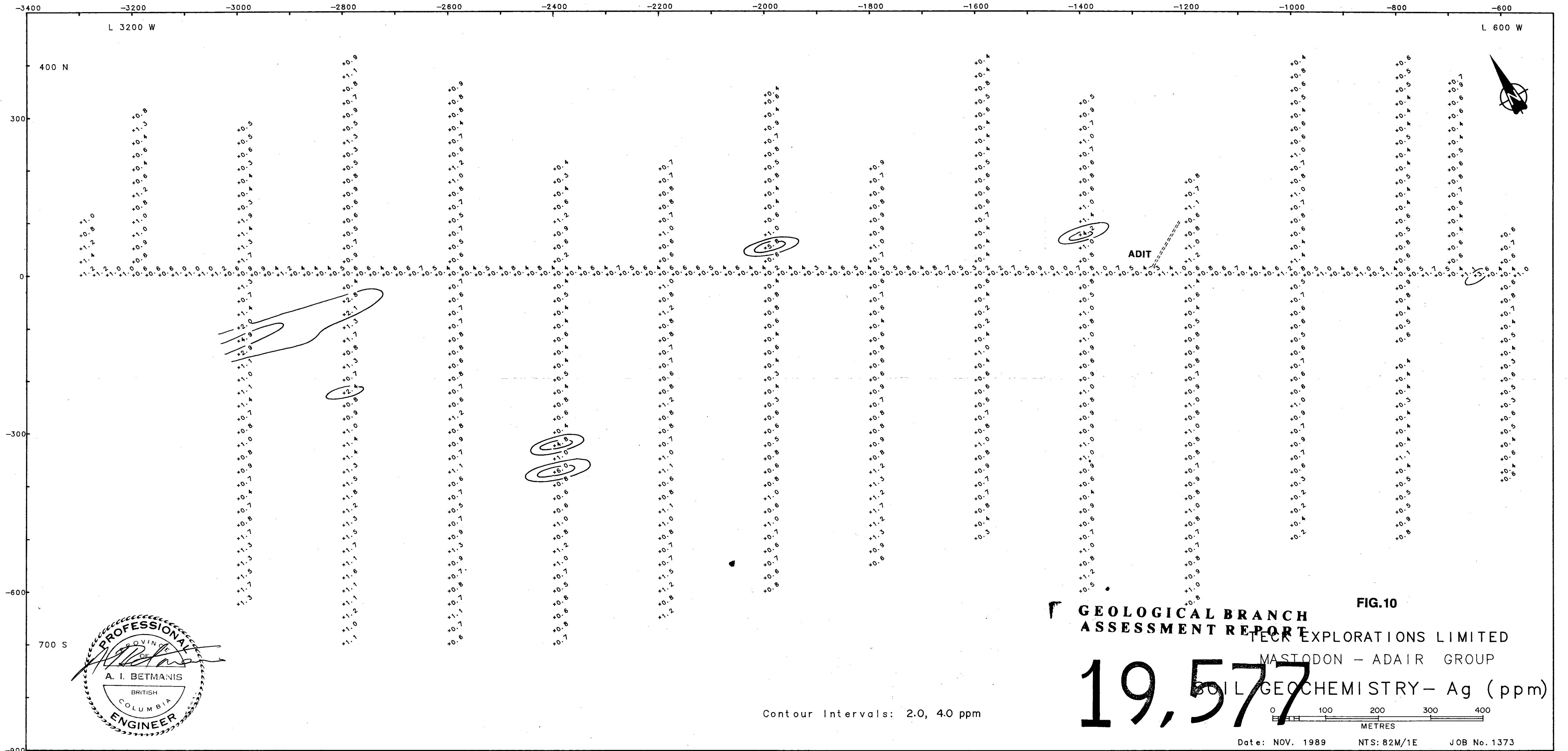
SOIL GEOCHEMISTRY - Au (ppb)  
**19,577**

Contour Intervals: 10, 50, 100 ppb



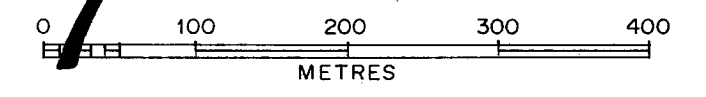
Date: NOV. 1989 NTS: 82M/1E JOB No. 1373



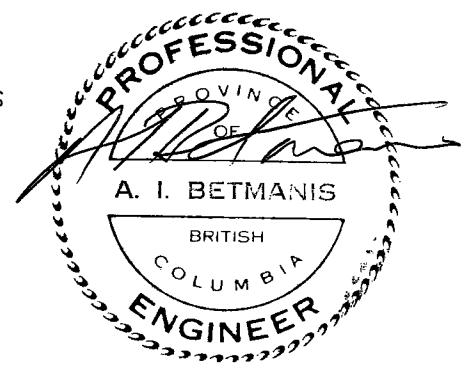


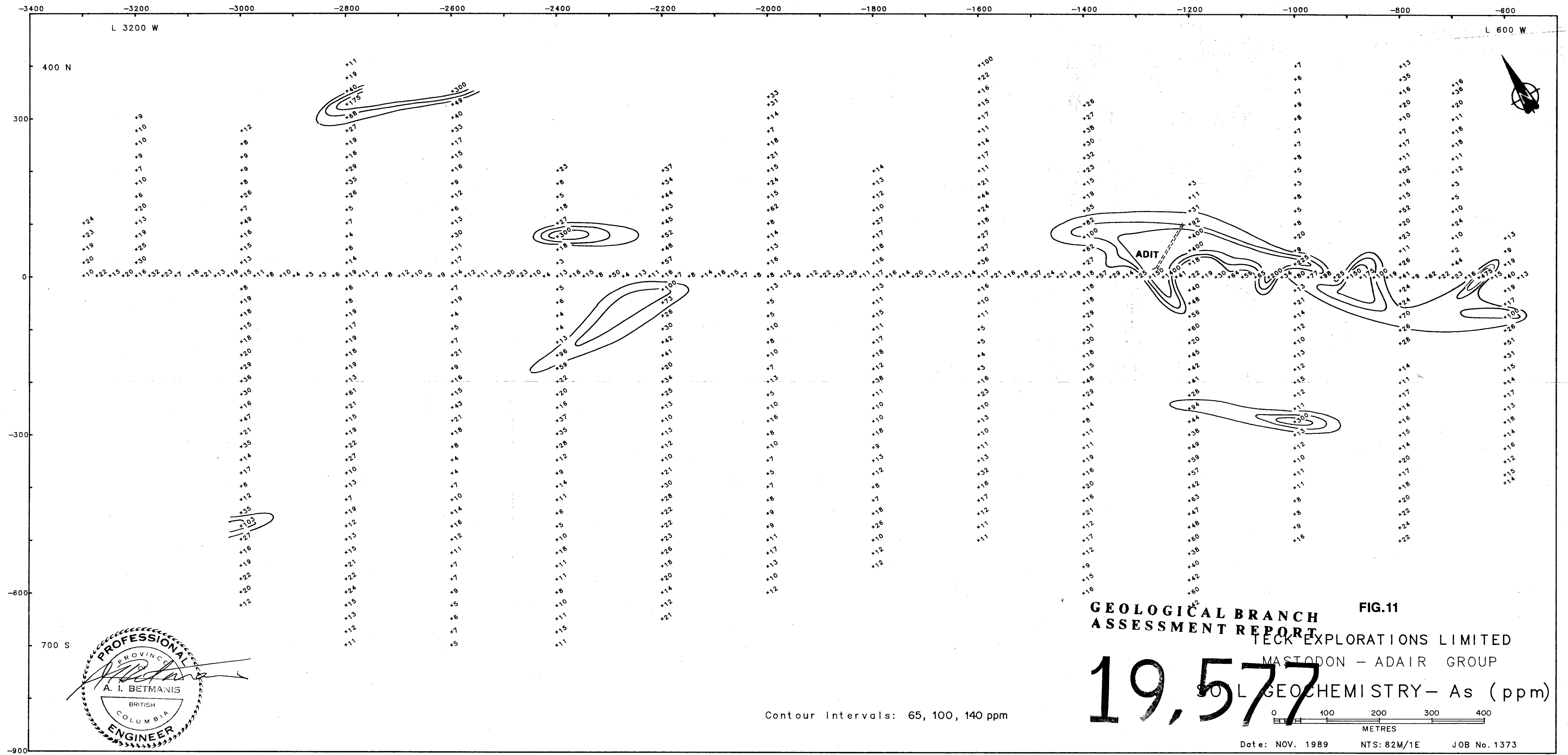
Contour Intervals: 2.0, 4.0 ppm

**FIG.10**  
**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
 TECK EXPLORATIONS LIMITED  
 MASTODON - ADAIR GROUP  
**19,577**  
 SOIL GEOCHEMISTRY - Ag (ppm)



Date: NOV. 1989    NTS: 82M/1E    JOB No. 1373





**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**  
 FIG.11  
 TECK EXPLORATIONS LIMITED  
 MASTODON - ADAIR GROUP  
**19,577**  
 SOIL GEOCHEMISTRY - As (ppm)

Contour Intervals: 65, 100, 140 ppm

Date: NOV. 1989 NTS: 82M/1E JOB No. 1373

