REPORT ON

GEOCHEMICAL SILT SAMPLING

LUCIMIN GROUP

CIMADORO PROPERTY

SKEENA MINING DIVISION

SECURITY COVE AREA, MORESBY ISLAND, B.C.

by

A.I. BETMANIS, P.Eng.

Owner: Doromin Resources Ltd.

Operator: Teck Corporation

Claims:
Lucimin 1 #6855 (20 units)
Lucimin 3 #6857 (18 units)
Lucimin 4 #6858 (18 units)
Lucimin 5 #6853 (1 unit)
Lucimin 6 #6854 (1 unit)

NTS: 103 F/1 E and W

Co-ordinates: 53° 06'N, 132° 14'W

November 7, 1989

Vancouver, B.C.

CONTENTS

INTRODUCTION

The Lucimin Group of mineral claims is part of the Cimadoro property held by Doromin Resources Limited in the northwestern part of Moresby Island, queen Charlotte Islands, B.C. Teck Corporation has the right to earn an interest in the property by funding exploration. Doromin has retained Teck to carry out the exploration programs.

The Cimadoro property was staked in 1988 following the discovery of banded massive sulphide boulders and a massive sulphide-barite showing at the headwaters of Deena Creek, north of Security Cove. Initial sampling of the showing indicated potentially economic grades of gold, silver and lead, and anomalous values of copper and zinc.

Prior to initiating detailed exploration programs of the main showing area and its projected extensions, Teck carried out a stream silt sampling program of the surrounding Doromin held claims, the Lucimin Group, to determine whether other areas of the property also require detailed exploration. To provide quick results, access to difficult locations, and access to areas inaccessible at the time due to active logging, the silt sampling program was helicopter supported out of Sandspit. The sampling program was completed between August 9 and 14, 1989.

LOCATION AND ACCESS

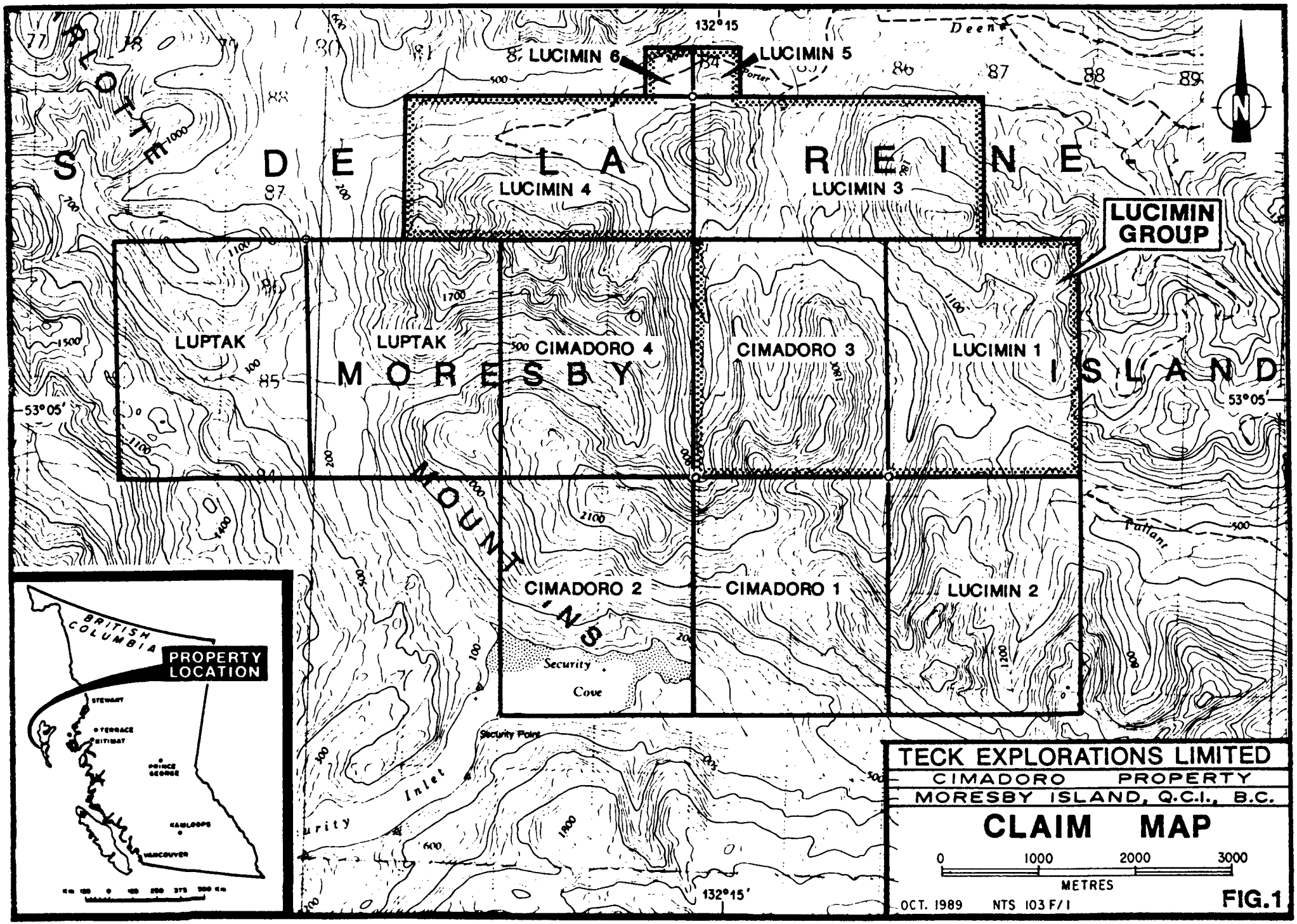
The Cimadoro property is located at the headwaters of Deena Creek, north of Security Cove, northwestern Moresby Island, B.C. (NTS 103 F/1 E and W). The Lucimin Group is centred near latitude 53°06'N and longitude 132°14'W. The property lies within the Skeena Mining Division.

Access to the property is by paved highway from Sandspit to the Alliford Bay ferry terminal, then by good gravelled logging roads to the South Bay log dump, followed by the Deena West Main logging road to the junction of Deena and Porter Creeks at the north edge of the property. Road distance from Sandspit is 40 kilometres. There is active logging in Porter Creek and private traffic is not permitted. An abandoned logging road, Spur 121, extending for a few kilometres south alongside Deena Creek is in poor condition and locally blocked by landslides. Travel on logging roads is radio controlled and requires permission from Fletcher Challenge. Several good helicopter landing sites exist along the ridgeline north of Security Cove.

PHYSIOGRAPHY AND CLIMATE

Elevations on the property vary from sea level at Security Cove, or 100 metres in the Deena Creek valley to 825 metres at the ridgeline north of Security Cove. Except for valley floors, topography is steep to rugged. The headwaters of Deena Creek, referred to as Cimadoro Creek for the west fork and Lucimin Creek for the east for in this report for convenience, end in north facing pseudo-cirques and cliffs. Rockfalls and slides in the cirque areas are frequent, especially during heavy rains.

Apart from logged areas in the Deena and Porter Creek valleys, vegitation is


LUCIMIN 6
LUCIMIN 5
LUCIMIN 4
LUCIMIN 3
LUCIMIN GROUP
LUPTAK
LUPTAK
CIMADORO 4
CIMADORO 3
LUCIMIN 1
CIMADORO 2
CIMADORO 1
LUCIMIN 2
SLOTH
DE LA REINE
MORESBY
MOUNTAINS
ISLAND
132°15
53°05'
Security Cove
Security Point
Inlet
Deena
Patlani
BRITISH COLUMBIA
PROPERTY LOCATION
STEWART
TERRACE
PRINCE GEORGE
KAMLOOPS
VANCOUVER
TECK EXPLORATIONS LIMITED
CIMADORO PROPERTY
MORESBY ISLAND, Q.C.I., B.C.
CLAIM MAP
0 1000 2000 3000
METRES
OCT. 1989
NTS 103 F/1
FIG.1

mature spruce, hemlock and cedar, with some trees on the property estimated to be over 800 years old. Undergrowth is light due to poor penetration of sunlight in heavily forested areas. The northwesterly trending ridgeline north of Security Cove above an elevation of approximately 550 metres varies from barren to stunted cedar due to a combination of the tree line and frequent battering by gales channelled easterly along Security Inlet.

The climate in summer months is moderate with frequent light drizzle and rain. The winter months are cool and wet with frequent torrential downpours and high westerly winds. In winter the snowpack rarely persists below 300 metres.

CLAIMS, OWNERSHIP AND PROPERTY STATUS

The claims comprising the Lucimin Group are held by Doromin Resources Limited, and are listed below:

Claim	Units	Record Number	Expiry Date *
Lucimin 1	20	6855	15 Aug. 1990
Lucimin 3	18	6857	15 Aug. 1990
Lucimin 4	18	6858	15 Aug. 1990
Lucimin 5	1	6853	15 Aug. 1990
Lucimin 6	1	6854	15 Aug. 1990
Cimadoro 3	20	6837	4 Aug. 1990

* Upon acceptance of recorded work.

The claims were grouped as the Lucimin Group on August 15, 1989.

Teck Corporation entered into an agreement with Doromin Resources Limited by which Teck can earn a 60% interest in the property by funding a certain amount on exploration on the property. Doromin has retained Teck to perform the work.

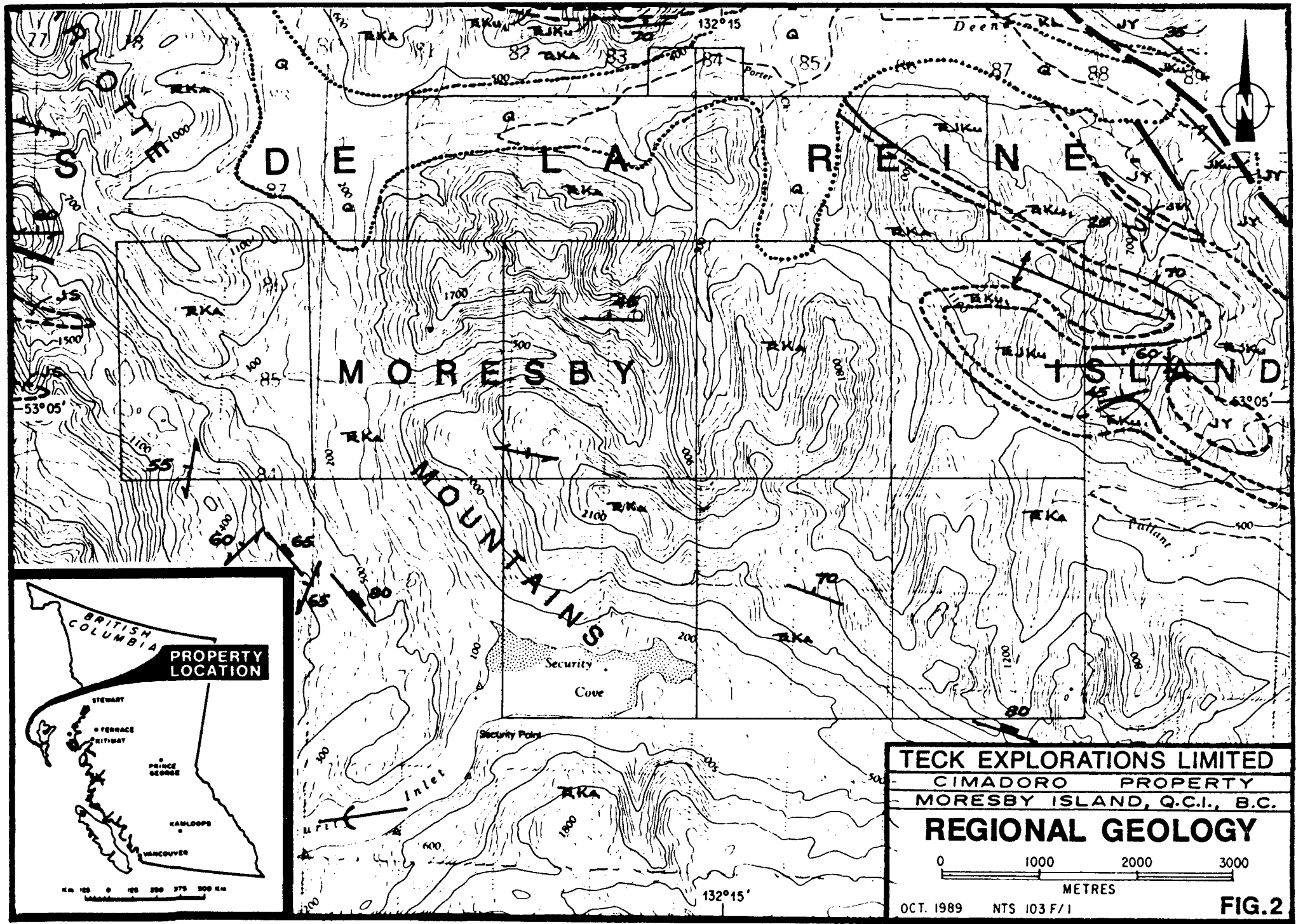
PREVIOUS WORK

The Cimadoro property claims (Cimadoro, Lucimin, and Luptak) are the first known mineral claims staked in the immediate area. The area was prospected by Efrem Specogna in 1971 for porphyry copper mineralization. Silt samples collected at that time were analysed for copper and molybdenum. Moderately anomalous copper values were obtained from Cimadoro Creek and possibly anomalous copper at the headwaters of Lucimin Creek. Molybdenum was not anomalous, and following brief prospecting of the drainages, no further work was done.

In 1988 Specogna re-visited Cimadoro Creek, and with more thorough prospecting, located semi-massive banded mixed sulphide boulders near the headwaters. An oxidized sulphide lens with high gold, silver, lead and barite values, and elevated copper and zinc values (the Main Showing) was located in outcrop, and led to the staking of the Cimadoro property.

GENERAL GEOLOGY

The Queen Charlotte Islands, including the area of the Cimadoro property, was


S O T I T
D E L A R E I N E
M O R E S B Y I S L A N D
M O U N T A I N S
Security Cove
Security Point
Inlet
Porter
Deena
Puffant
132°15
132°15'
53°05'
53°05'
BRITISH COLUMBIA
PROPERTY LOCATION
STEWART
TERRACE
PRINCE GEORGE
KAMLOOPS
VANCOUVER
TECK EXPLORATIONS LIMITED
CIMADORO PROPERTY
MORESBY ISLAND, Q.C.I., B.C.
REGIONAL GEOLOGY
0 1000 2000 3000
METRES
OCT. 1989 NTS 103 F/1
FIG.2

QUATERNAY

Q — Recent alluvium.

Vancouver Group (Triassic-Jurassic)

JURASSIC

JY — Yakoum Formation: porphyritic andesite, agglomerate and flows, calcareous scoriaceous lapilli tuff, volcanic sandstone and conglomerate.

JM — Maude Formation: grey blocky argillite and shale, grey green lithic sandstone.

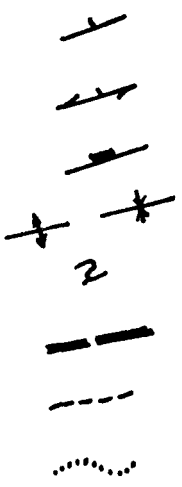
JURASSIC-TRIASSIC

TRJKu — Kunga Formation: massive grey limestone, flaggy black argillite-undivided

TRKu1 — Massive grey limestone member.

TRIASSIC

TRKA — Karmutsen Formation: basalt massive flows, pillow lavas, pillow breccia and tuff, related sills, minor interlava limestone.



Bedding

Secondary foliation, schistosity

Joints

Fold axes

Dragfold with plunge on anticline

Fault

Geological contact

Edge extensive alluvium.

Fig. 2(a): Regional Geology Legend

mapped by A. Sutherland Brown between 1958 and 1965 (BCDM Bul.54). The quality and detail of mapping is excellent considering the large area covered and limited access. Sutherland Brown's geology in the property area is reproduced at a scale of 1:50,000 in Fig. 2.

The entire property is mapped as being within the Triassic to Jurassic Vancouver Group of volcanics and sediments. Most of the claims are underlain by Triassic Karmutsen Formation basic submarine extruded lavas striking west-northwest with a steep north dip near Security Cove and changing attitude to east-west with a moderate north dip further to the north. Vertical schistosity and steep north dipping jointing follow the strike of bedding. The northeast corner of the property is underlain by tightly folded Triassic and Jurassic limestones of predominantly the Kunga Formation, and Jurassic sediments of the Yakoun and Manche Formations.

Observations made during the silt sampling program basically substantiate Sutherland Brown's geology, but indicate that appreciably more mapping of lithologies and structure is required to explain better the mineralization and occurrence of cherts and argillites which are not known to occur in Karmutsen volcanics.

SUMMARY OF WORK

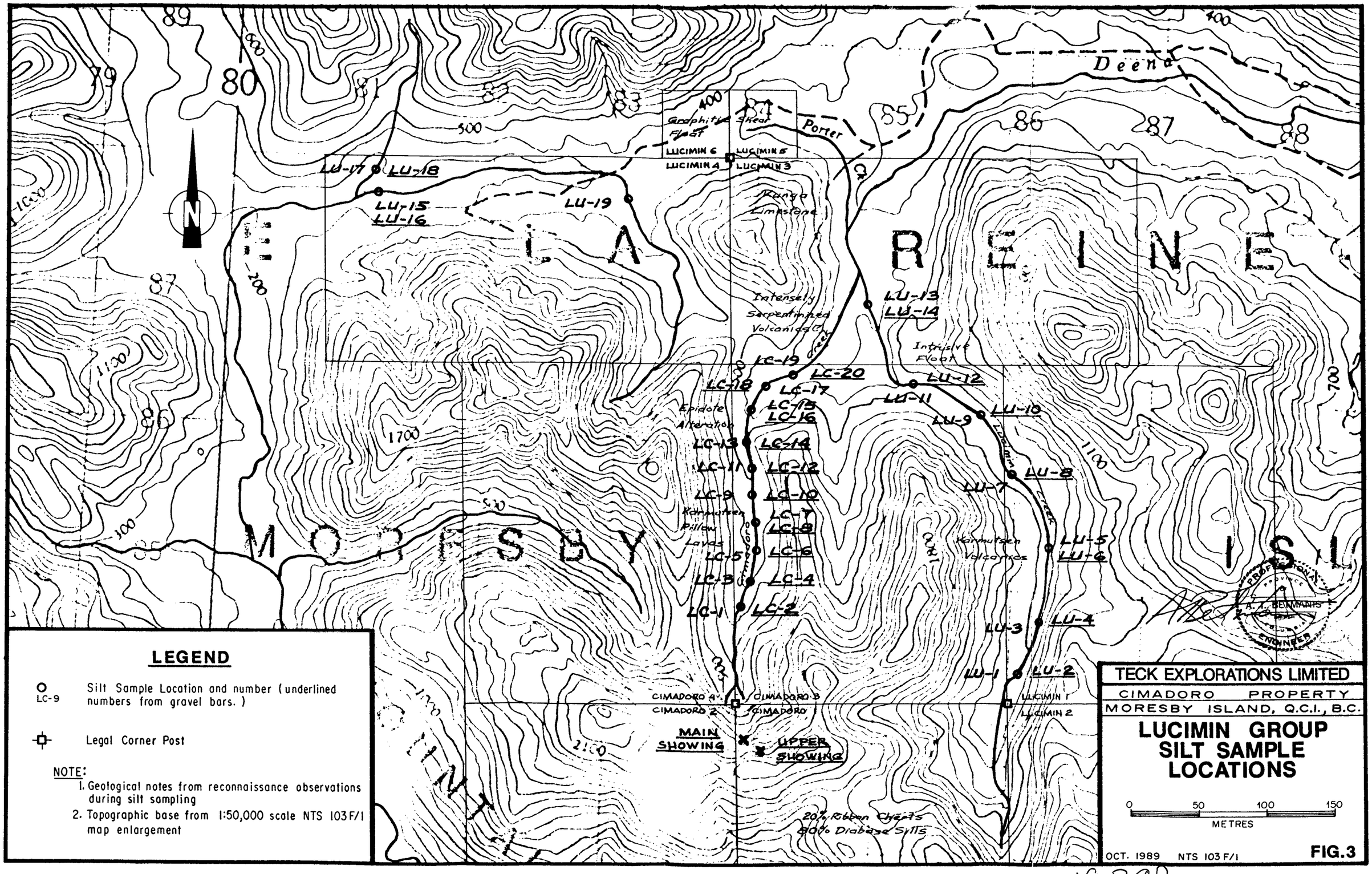
Stream silt samples were collected on the Cimadoro 3 and Lucimin 1 and 3-6 claims. The Cimadoro and Lucimin Creeks were topographically most favourable for geochemical detection of mineralization by silt sampling, and therefore the majority of silt samples were collected from these two creeks. Since the Main Showing is largely oxidized and may contain free gold which would be transported in streams as placer gold, two samples were taken at each location on all creeks wherever possible. One silt sample was collected from below active stream flow at various points over about a 20 metre stream length, and the other sample from exposed gravel bars at various points over about a 10 metre stream length. The active stream samples were taken at a depth of between 5 and 15 centimetres below the stream bed; the gravel bar samples were taken at a depth of between 10 and 20 centimetres.

Approximately 1.5 kg. samples were collected in fine woven cotton sample bags. Coarse pebbles were discarded. The samples were submitted to Chemex Labs Ltd. in North Vancouver for gold analyses by fire assay and AA finish on 10 gram samples, copper, lead and zinc analyses by AA after nitric-aqua regia digestion, and barium by AA after perchloric-nitric-hydrofluoric acid digestion. A minus 80 mesh fraction analysis was requested, but due to insufficient fines a minus 35 mesh fraction, or in one instance a plus 35 mesh sample, had to be analysed after pulverizing to minus 150 mesh. Sample preparations required for individual samples are shown with laboratory reports in Appendix II.

No geological mapping was attempted during silt sampling, but lithological notes of areas traversed were taken. These are shown in Fig. 3.

DISCUSSION OF RESULTS

The frequent lack of a fine fraction in the large samples taken indicates that



LEGEND

- ○ LC-9 — Silt Sample Location and number (underlined numbers from gravel bars.)
- ⊕ — Legal Corner Post

NOTE:

1. Geological notes from reconnaissance observations during silt sampling
2. Topographic base from 1:50,000 scale NTS 103F/1 map enlargement

TECK EXPLORATIONS LIMITED

CIMADORO PROPERTY

MORESBY ISLAND, Q.C.I., B.C.

LUCIMIN GROUP SILT SAMPLE LOCATIONS

0 50 100 150

METRES

OCT. 1989 NTS 103 F/1 **FIG.3**

A. J. BEMMANS PROFESSIONAL ENGINEER

19283

the sediments have been re-worked with the fines being washed to deeper levels. Consequently, to obtain suitable silts, sampling should be done at greater depths, or at a time of year when stream sediment transport is most active.

Creeks sampled on the Lucimin 4 claim were not anomalous in any of the elements analysed. The creeks flow sluggishly over thick alluvium accumulation, and it is probable that if heavy minerals did enter the drainage basins, they would be re-worked deeper into the alluvium. Further sampling of the creeks on Lucimin 4 was discontinued due to a poor environment.

Lucimin Creek, where sampled, has a very gentle gradient although the upper sample is less than 2 kilometres from the headwaters. An attempt to sample small tributaries was not successful due to stream flow disappearing under talus at the break of slope. As with the Lucimin 4 creeks, but to a lesser extent, the sampled material probably was re-worked at the end of the winter heavy run-off. Copper, lead and zinc values were not anomalous. Gold and barium were slightly elevated and higher than would be expected from Karmutsen volcanics. A less than 5% chert fraction in creek float suggests that the barium and gold may be derived from the headwater area of Lucimin Creek and accumulated as placer where creek flow slackens. The lack of difference between gravel bar and active stream silts suggests that the active sediments are a re-working of the gravel bars.

Cimadoro Creek can be considered anomalous in gold, copper, lead, and barite, weakly anomalous in zinc, and slightly elevated in silver compared to Lucimin Creek. Copper, lead, barium and gold show a slightly weakening train downstream, whereas zinc shows no definite variation. Considering the abundance of massive sulphide boulders in the creek bed near the headwaters of Cimadoro Creek, and the extent of oxidation in the Main Showing, the stream silt values are lower than would be normally expected. There is a year-round active stream flow above the Main Showing and from the LC-1,2 sample site north. Between the Main Showing and LC-1,2 water flow disappears below slide rock, and much of transported mineralization could be filtered out. The lack of difference between active silts and gravel bar silts suggests that the active silts sampled on Cimadoro Creek are a reworking of gravel bars.

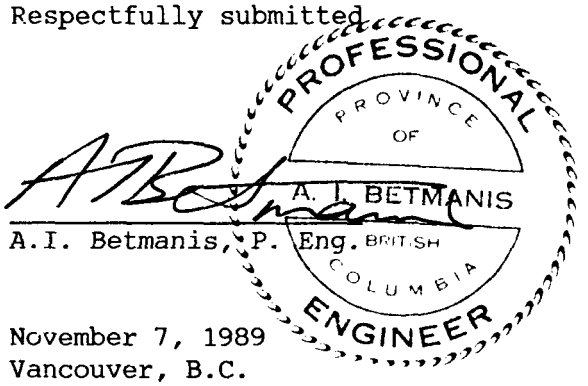
CONCLUSIONS

Stream silt sampling on the Lucimin Group confirmed transportation of mineralization in silts from the Main Showing in Cimadoro Creek, but anomalous values were weaker than expected. There is an indication that anomalous silts are transported mainly during seasonal heavy rains and reworked from gravel bars at other times. The weakly gold and barite anomalous silts in Lucimin Creek may indicate mineralization at the headwaters of the creek, but more definite results could have been obtained if sampling had been done at a time of more active stream silt transport. The Lucimin 4 creeks flow over a thick accumulation of alluvium, and although the silts are not anomalous, the results are not conclusive due to a poor sampling environment.

On the west coast of the Queen Charlotte Islands, and the Cimadoro area in particular, successful sampling of stream silts may be dependent largely on seasonal availability of suitable silts. During winter stream transport is most

active, with transported alluvium being reworked as the heavy rains decrease in spring. Early spring is most likely the optimum time of year for stream silt sampling.

Respectfully submitted



A.I. Betmanis, P. Eng.

November 7, 1989
Vancouver, B.C.

REFERENCES

Specogna, E. (1989): **Geological Report on the Cimadoro Group, Moresby Island, Q.C.T., Skeena Mining Division;** *report* by Doromin Resources Ltd. submitted for assessment, dated October 25, 1989.

Sutherland Brown, A. (1968): **Geology of the Queen Charlotte Islands, British Columbia;** B.C.D.M. Bul. 54.

STATEMENT OF QUALIFICATIONS

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

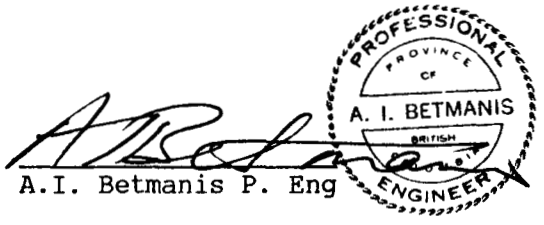
1. I am a geologist residing at 2600 Belloc Street, North Vancouver, B.C.;

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 practiced 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. Between August 9 and 14, 1989 I carried out, and supervised the work of Kevin Chubb, a BCIT graduate in Mining and employee of Teck Explorations Limited, as described in this report.



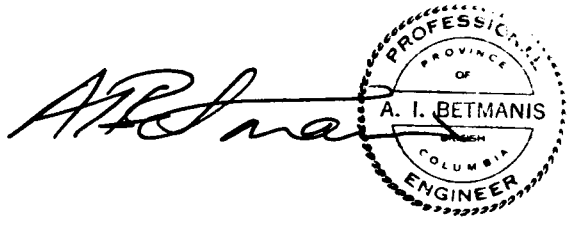
A.I. Betmanis P. Eng

APPENDIX 1

Statement of Costs

STATEMENT OF COSTS

Field Personnel	
A.I. Betmanis, geologist, 4 days @ $230/day	$ 920.00
K. Chubb, technician, 2 days @ $180/day	360.00
Transportation	
Mobilization	905.60
Truck rental, 4 days @ $35/day	140.00
Vancouver Island Helicopters, 4.2 hrs @ $580/hr + fuel	2,586.15
Accommodation and Miscellaneous	
Hotel and meals, 6 man-days @ $85/day average	510.00
Fuel, field supplies, etc.	35.00
Analytical (Chemex Labs Ltd.)	
Sample preparation	87.00
Digestion and analyses	663.00
Report preparation	300.00
Total	$6,506.75



APPENDIX II

Analytical Report

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: TECK EXPLORATIONS LIMITED
11TH FLOOR
1199 W. HASTINGS STREET
VANCOUVER, B.C.
V6E 2K5

Project : 1376
Comments: ATTN: A.L. BETAMANIS CC: W. MEYER

Page No. : 1
Tot. Pages: 1
Date : 29-AUG-89
Invoice # : I-8923698
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8923698

SILT SURVEY - LUCIMIN GROUP

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm Aqua R	Cu ppm Aqua R	Pb ppm Aqua R	Zn ppm Aqua R	Ba ppm H.F.
LC-01	201	--	< 5	0.5	284	23	250	840
LC-02	201	--	20	0.3	280	19	250	820
LC-03	203	--	< 5	< 0.2	234	10	195	660
LC-04	217	--	< 5	0.3	215	12	172	520
LC-05	203	--	10	< 0.2	195	13	180	680
LC-06	201	--	50	0.2	220	23	200	820
LC-07	201	--	15	0.2	220	18	200	740
LC-08	203	--	10	< 0.2	194	17	190	720
LC-09	203	--	40	< 0.2	190	12	200	700
LC-10	203	--	< 5	0.2	194	16	200	720
LC-11	203	--	< 5	< 0.2	205	12	200	600
LC-12	201	--	< 5	< 0.2	220	13	220	540
LC-13	201	--	< 5	< 0.2	200	15	210	600
LC-14	203	--	< 5	< 0.2	180	10	190	540
LC-15	203	--	< 5	< 0.2	180	9	170	340
LC-16	203	--	5	< 0.2	190	9	190	340
LC-17	203	--	< 5	< 0.2	180	9	170	580
LC-18	203	--	< 5	< 0.2	170	11	195	620
LC-19	203	--	< 5	< 0.2	156	9	162	580
LC-20	201	--	< 5	< 0.2	173	6	165	500
LU-01	203	--	10	< 0.2	121	5	117	160
LU-02	203	--	< 5	< 0.2	121	< 2	120	140
LU-03	203	--	< 5	< 0.2	119	< 2	116	160
LU-04	217	--	< 5	< 0.2	108	< 2	100	140
LU-05	203	--	< 5	< 0.2	118	< 2	124	120
LU-06	203	--	< 5	< 0.2	115	< 2	140	140
LU-07	203	--	20	< 0.2	80	< 2	150	260
LU-08	203	--	< 5	< 0.2	79	< 2	160	280
LU-09	203	--	< 5	< 0.2	79	< 2	174	240
LU-10	203	--	10	< 0.2	75	< 2	142	260
LU-11	203	--	5	< 0.2	74	< 2	160	500
LU-12	203	--	15	< 0.2	76	< 2	154	260
LU-13	203	--	< 5	< 0.2	75	< 2	160	260
LU-14	203	--	20	< 0.2	80	< 2	150	260
LU-15	203	--	5	< 0.2	110	< 2	120	180
LU-16	203	--	< 5	< 0.2	113	< 2	120	160
LU-17	203	--	< 5	< 0.2	110	< 2	120	160
LU-18	203	--	< 5	< 0.2	110	< 2	120	160
LU-19	203	--	< 5	< 0.2	204	< 2	110	140

SOIL, HUMUS OR SEDIMENT SAMPLES

201 Dry, sieve through a -80 mesh screen.
202 Dry, sieve through a -80 mesh screen and save the +80 mesh fraction.
203 Dry, sieve through a -35 mesh screen and pulverize to approximately -150 mesh.
217 Dry and pulverize entire sample (up to 200 grams) to approximately -150 mesh.
243 Same as code 203, but using a ceramic (ZrO_2) pulverizer which eliminates Fe and Cr contamination.

CERTIFICATION : David Buchler