LOG NO: 0417 RD.
ACTION:
FILE NO:

GEOLOGICAL & TRENCHING REPORT

on the

ROO CLAIM GROUP

Consisting of

ROO 1 - 3 CLAIMS

Located in the East Kootenay District

Fort Steele Mining Division

NTS 82 G / 2W, 3E

49° 01' N Latitude

115° 00' W Longitude

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VANCOUVER, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,888

By: G. Thomson

of

Teck Explorations Ltd.,
960-175 Second Ave.,
Kamloops, B.C.
V2C 5W1

March 1990

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1.0 Summary

The 1989 trenching program on the Roo claims totalled 250m in 8 trenches. The program was carried out in an area of previous trenching by Cominco Ltd. (1967).

The purpose was to better evaluate sediment hosted copper-silver-cobalt showings occurring along the base of a stromatolitic dolomite horizon.

Results are encouraging and future diamond drilling will be carried out to investigate the economic potential at the Roo property.

2.0 Introduction

Teck Explorations Ltd. carried out a reconnaissance geological mapping and backhoe trenching program on the Roo property over the period Sept. 1-18, 1989.

The focus of this work was an area of copper mineralization in the central part of the Roo 1 claim, worked by Cominco Ltd. in 1967.

The Teck program consisted of 8 individual backhoe trenches for a total length of 250m.

Other work carried out in the 1989 program consisted of:

1. Geological mapping and sampling traverses in the area of known mineral occurrences.
2. Soil sampling to bracket the assumed east and west extensions of mineralization in the 1989 trenching area.
3. Rehabilitation of main access roads on the Roo property.

3.0 List of Claims

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims (Figure 2),are currently being held in trust, by Teck Corporation Ltd.



ROO 1-3 CLAIMS

PROPERTY LOCATION MAP

FORT STEELE MINING DIVISION, B.C.

0 100 200 300 KILOMETRES

0 100 200 MILES

Teck Explorations Ltd.

Drawn	NTS	Date	FIG No
J W	82 G/2W,3E	June, 1989	1

Claim Name	Record Number	No of Units	Record Date	Expiry Date
Roo 1	3393	20	Apr. 26, 1989	Apr. 26, 1990
Roo 2	3394	20	Apr. 26, 1989	Apr. 26, 1990
Roo 3	3395	20	Apr. 16, 1989	Apr. 26, 1990
		60		

The location of the legal corner posts for the Roo 1-3 claims has been verified by the author.

4.0 Location, Access, Geography

The Roo claim group is located at Phillipps Creek in the Galton Range of the Rocky Mountains, approximately five kilometres northeast of the Roosville border post and seventy kilometres southeast of Cranbrook, in the East Kootenay district of southeastern British Columbia (Figure 1). It lies within the Fort Steele Mining Division, centred at 49°01' north latitude and 115°00' west longitude.

Highway 93, which connects Cranbrook and Fernie to northwestern Montana passes less than one kilometre to the west of the Roo 1 claim. A good logging road climbs from the highway up the drainage of Phillipps Creek, passing through the Roo 1 and Roo 3 claims. Spur roads, which provide access to most of the Roo 1 and Roo 3 claims, including the known copper showings, have been rehabilitated and are currently passable.

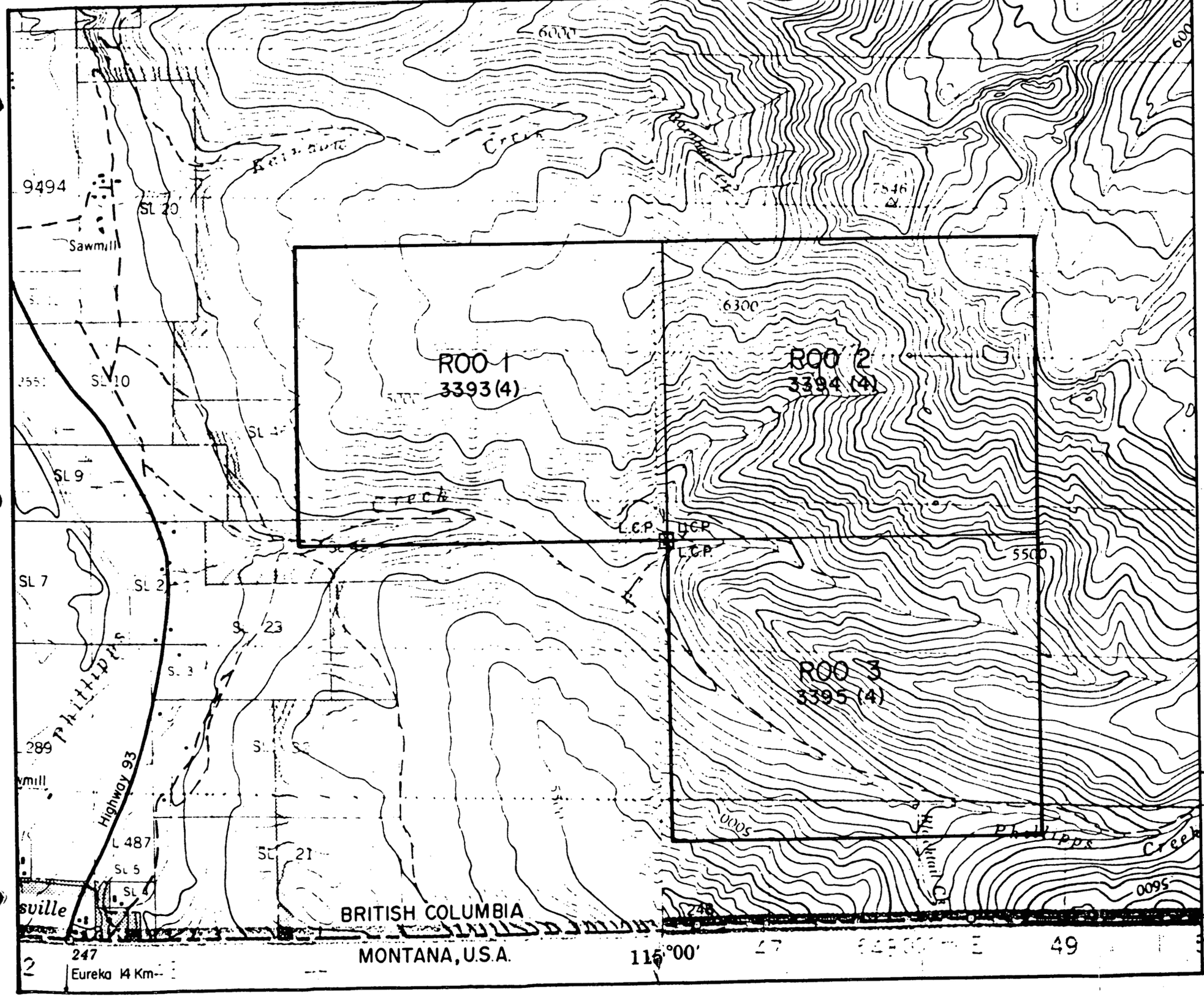
The Roo 1-3 claims lie almost entirely within the Phillipps Creek drainage, confined mainly to the northwestern part of the watershed (Figure 2). Topography is moderately steep, with elevations ranging from less than 1000 metres on Phillipps Creek to over 2280 metres on the ridge which separates the Phillipps Creek drainage from the Wigwam River drainage on the Roo 2 claim.

The property is covered by open forest composed of lodgepole pine, Douglas fir, ponderosa pine and alder, with little undergrowth. Summers are hot and dry, but winters are cold, with several metres of snow commonly falling at higher elevations.

5.0 Previous Work

The first reported work on the Roo property dates from 1902, with four claims

> "on a lead which can be traced for miles along the mountain side. The ore is a rich sulphide of copper with


6000
Bull River
Creek
9494
SL 20
Sawmill
7546
6300
ROO 1
3393 (4)
ROO 2
3394 (4)
5000
Creek
L.C.P.
U.C.P.
L.C.P.
5500
SL 9
SL 10
SL 7
SL 2
S. 23
ROO 3
3395 (4)
Phillipps
Highway 93
289
L 487
SL 5
SL 4
SL 21
0005
Phillipps Creek
0095
BRITISH COLUMBIA
MONTANA, U.S.A.
115°00'
247
Eureka 14 Km
49
SCALE 1:25,000
m 0
500
1000
1500 m
ROO 1-3 CLAIMS
CLAIM MAP
FORT STEELE MINING DIVISION, B.C.
TECK EXPLORATIONS LTD.
Drawn. J.W.
N.T.S. 82G/2W, 3E
Date. June, 1989
FIG. No. 2

> much black oxide, and lies between syenite and porphyry walls. The work for this year consists of: Georgia, shaft continued 10 feet; Copper Giant, 12 feet of shaft; Montana, 50 feet of tunnel, and Belle Vue, shaft continued to a depth of 50 feet" (BCDM, 1902).

These workings were apparently directed at quartz-chalcopyrite-chalcocite-barite veins. No further work is documented until 1967, but Wolfhard (1967) reports a total of four short shafts, four adits up to 30 meters in length and six open cuts completed before 1940, with shipment of one carload of barite in the 1920's or 1930's.

In 1967, Cominco re-evaluated the copper occurrences for their porphyry potential with geological mapping, soil sampling and five bulldozer trenches. They concluded that the veins were economically uninteresting, but recognized significant stratabound disseminated mineralization associated with the contact between quartzite and stromatolitic dolomite (Wolfhard, 1967). However, Cominco believed the mineralization to be due to syenitic dyking and allowed their claims to lapse.

6.0 Regional Geology

The Belt/Purcell Supergroup comprises up to 15,000 metres of Proterozoic clastic and carbonate sediments, which extend over the East Kootenay area of south-eastern British Columbia, northern Idaho and northwestern Montana. They were deposited in an intracratonic basin, which may have been related to rifting. In the Galton range of the East Kootenays, on the eastern margin of the Rocky Mountain Trench, this sequence consists of Helikian sandstones, argillites and dolomites (Figure 3).

The Siyeh Formation (Unit 7) is composed predominantly of fine-crystalline dolomite and limestone, with thin upper and lower members of green argillite. Overlying the Siyeh Formation are up to 180 metres of andesitic flows (Unit 5b) termed the "Purcell Lavas" by Price (1961) and the "Nicol creek Formation" by Hoy and Carter (1988). This unit includes pillowed, vesicular or amygdaloidal flows ranging from andesite to basalt in composition.

The Sheppard Formation (Unit 8), termed the "lower member of the Gateway Formation" by Leech (1960), unconformably overlies the Nicol Creek Formation with a total thickness of approximately 50 metres. It consists of a basal conglomerate overlain by "light-coloured, dolomitic and quartzitic, fine-or medium-grained quartz sandstone, dolomite and oolitic dolomite. The upper part comprises light-coloured very fine crystalline dolomite, sandy and silty

dolomite, and stromatolitic dolomite with minor amounts of dolomitic sandstone" (Price, 1961).

The Gateway Formation upper member (Unit 8) is composed of about 300 metres of greenish grey and grey argillaceous siltstones in thin beds with partings of red argillite. Salt casts, mud-cracks, ripple marks and intraformational conglomerates are common.

The Phillipps Formation (Unit 9) consists of 200 metres of red and purplish red quartz sandstone and siltstone, with partings of argillite and micaceous argillite. These are gradational into the overlying Roosville Formation (Unit 10), which consists of over 1000 metres of green and grey argillite, siltstone and sandstone with lesser argillaceous and stromatolitic dolomite.

7.0 Property Geology

Several geological traverses were made over the Roo property during the period of investigation.

These traverses were carried out to confirm previous geological mapping by Wolfhard (1967) and to evaluate mineral showings on the Roo property.

Geological mapping by Teck Explorations is shown on Fig. 5 at the back of this report.

The following excerpt from the summary report by Equity Engineering Ltd. (Awmack 1989) gives a synopsis of the geology on the Roo property.

7.1 Geology

Wolfhard (1967) recognized three Proterozoic volcanic and sedimentary rock units on the Roo property (Figure 3). The oldest is the basaltic Nicol Creek Formation (Unit 5b), which is composed of

> "a lower pillowed unit 80 feet thick, overlain by green amygdaloidal volcanics and purple massive and amygdaloidal volcanics. The abundance of purple rocks increases up section. The upper 50 feet occasionally contains lenticular beds of angular to sub-rounded volcanic detritus of coarse sand size."

The Nicol Creek basalts are unconformably overlain by Sheppard Formation clastic sediments and dolomites, subdivided by Wolfhard (1967) into two units.

LEGEND

PALAEOZOIC

CAMBRIAN AND ORDOVICIAN
UPPER CAMBRIAN AND LOWER ORDOVICIAN

19 — GLENOGLE FORMATION: graptolitic shale and fine-grained siltstone, generally limy, shaly limestone. WONAH FORMATION: quartzite, sandstone

18 — Mc KAY GROUP: limestone, shale, intraformational limestone conglomerate

CAMBRIAN
MIDDLE AND/OR UPPER CAMBRIAN

17 — JUBILEE AND ELKO FORMATIONS: dolomite

MIDDLE CAMBRIAN

16 — BURTON FORMATION: shale, limestone; sandstone, conglomerate at base

LOWER AND (?) MIDDLE CAMBRIAN

15 — CRANBROOK FORMATION: quartzite, grit, conglomerate, sandstone; EAGER FORMATION: shale, limestone, siltstone, sandstone

WINDERMERE OR LATER

14 — Conglomerate

WINDERMERE

13 — TOBY FORMATION: conglomerate, argillite, sandstone

PURCELL

12 — MOUNT NELSON FORMATION: argillite, dolomite, quartzite

10 — ROOSVILLE FORMATION: laminated green argillite and siltstone, dolomitic in part; laminated black and grey argillite, grey quartzite, orange-weathering grey dolomite and grey-weathering limestone, both commonly stromatolitic and oolitic

9 — PHILLIPS FORMATION: red quartzite, siltstone, and argillite

8 — GATEWAY FORMATION: grey and green argillite and siltstone, partly dolomitic, grey quartzite, buff and orange weathering dolomite, commonly stromatolitic and in part oolitic, conglomerate; 8a, lower contact may be above base of rest of Gateway formation

11 — DUTCH CREEK FORMATION: equivalent to units 8, 9, and 10

5 — 5a, green, grey, and purple siltstone, argillite, and quartzite; 5b, chiefly andesitic lava, breccia, and tuff except in Purcell Mountains south of latitude 49°30' where accompanied by green and grey argillite and siltstone, dolomitic in part, and quartzite

6 7 — 6. Comprises units 4 and 5 undivided
7. SIYEH FORMATION: red-weathering grey dolomite and argillaceous dolomite, grey dolomitic argillite and siltstone; quartzite, green argillite, grey-weathering grey limestone. Equivalent to 5a and part (most ?) of 4

4 — KITCHENER FORMATION: grey and green argillite and dolomitic argillite, grey dolomite, sandy in part (dolomitic rocks weather buff to brown), quartzite, grey limestone

3 — CRESTON FORMATION: grey and green argillite and siltstone, grey, green, white, and purple quartzite

2 — ALDRIDGE FORMATION: grey quartzite and siltstone, commonly massive, interbeds, partings, and bed-tops of dark argillite; thinly laminated platy dark argillites and siltstones dominant in upper part, mostly rusty weathering; 2a, dark grey to black laminated argillite grey siltstone and quartzite, rusty weathering. May be equivalent to only upper part of 2

1 — FORT STEELE FORMATION: white siliceous quartzite, grey argillaceous quartzite, dark argillite, grey and black dolomitic and calcareous argillite, dolomite. May be equivalent to lower part of 2

ROO 1-3 CLAIMS

REGIONAL GEOLOGY

Teck Explorations Ltd.

Drawn	N.T.S.	Date	FIG No.
J.W.	82G/2W, 3E	June, 1989	3

ROO 1-3 CLAIMS

Unmapped · Wigwam River · Unmapped · GALTON RANGE · COUGAR MTN · Bighorn · Wigwam · Fenster · OUTLIER RIDGE · HIGHWAY · Wigwam River · Cabin Pass · Boundary · Grasmere · Lindstaer · Newgate · Creek · Roosville Customs Port · Note C · CANADA · UNITED STATES · WIGWAM PASS · Robb · Fisher

115°00'

45'

PUBLISHED, 1962
COPIES OF THIS MAP MAY BE OBTAINED FROM THE DIRECTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA

PRINTED BY THE SURVEYS AND MAPPING BRANCH

Geology after Leech (1960) and Price (1961)
SCALE 1:126,720

ROO 1

ROO 2

ROO 3

1989 TRENCHING AREA

No.172034 13.17 %Cu, 4.6 ppm Ag, 596 ppm Co

No.172035 1.44 %Cu, 889 ppm Co, 848 ppm Ni

9494

Phillips

Highway 93

Eureka 14 Km

BRITISH COLUMBIA

MONTANA, U.S.A.

115°00'

LEGEND

PROTEROZOIC

- 8b — Sheppard Formation (Upper unit) Stromatolitic dolomite, quartz sandstone, siltstone
- 8a — Sheppard Formation (Lower unit) Conglomerate, sandstone, siltstone
- 5b — Nicol Creek Formation Massive and amygdaloidal basalt
- ⊗ — Copper occurrence

Geology after Wolfhard (1967)

SCALE 1:25,000

0 500 1000 1500 m

ROO 1-3 CLAIMS

GEOLOGY AND MINERALIZATION

FORT STEELE MINING DIVISION, B.C.

TECK EXPLORATIONS LTD.

Drawn	N.T.S.	Date	FIG. No.
J.W.	82G/2W, 3E	June, 1989	4

"The lower unit (Unit 8a) varies from 15 feet to 300 feet in thickness. In the thicker parts, the section includes a basal conglomerate, overlain by purple siltstones and sandstones, probably composed mainly of volcanic detritus, weathered very little chemically before deposition. Higher up section, sediments grade to arkose, feldspathic sandstone, quartz sandstone, and sub greywacke. Medium to thick bedded, cross-bedded and current ripple marked, quartzitic and dolomitic sandstones usually complete the upper 10 to 30 feet of the section...

The upper Sheppard (8b) begins at the base of the first stromatolitic dolomite above the top of the Purcell lavas. Above this 5 to 15 foot member, the unit includes 20 to 40 feet of medium bedded grey quartzite with minor argillite and siltstone. Cross bedding and ripple marks are fairly common. The quartzite is overlain by a second 5 to 15 foot stromatolitic dolomite, followed by 10+ feet of red siltstone and dolomitic sandstone. The top is not exposed."

Wolfhard (1967) interpreted a very shallow anticline in the Nicol Creek Formation, with an amplitude of 160 metres and wave length of approximately two kilometres. The Sheppard Formation is gently warped, with dips up to 15° to the east.

7.2 Mineralization

Several modes of mineralization occur on the Roo property:

1. disseminated chalcocite, chalcopyrite with accompanying high values in silver, cobalt and barium in sandstones below a stromatolitic dolomite horizon.
   (See assay values for 1989 trenching area - trenches 1 through 7 and samples 24100, 23801, 24063 and 24064.)

2. quartz barite veins containing scattered patches of primary chalcocite and chalcopyrite (±specularite)
   (See trench # 8 assay values and sample 24097.)

3. weak disseminated chalcopyrite ± chalcocite within lowermost one metre of stromatolitic dolomite at base of Sheppard Formation - upper unit
   (See samples 24057 - 24062.)

4. one occurrence of fine grain syenite dyke with quartz-barite veinlets carrying disseminated chalcopyrite - possibly related to # 2 above. (See Sample 24098.)

The mode of copper-silver-cobalt mineralization within feldspathic sandstones, below a stromatolitic dolomite horizon, appears to be the most economically promising on the Roo property.

This type of occurrence has the highest and most consistent assay values of over economic widths. Anomalous values in barium and nickel are also associated with economic copper-silver-cobalt mineralization.

To date, this type of occurrence is known in two separate areas; the first being the 1989 trenching area and the second located approximately 1 km southeast of the trenched area. This second area is adjacent to the trench area access road and is obscured by overburden except for about 5 metres of locally mineralized sandstones. This second area is significant in that copper-silver-cobalt mineralization occurs in similar sandstones as the trenched area giving a favourable horizon over at least a one kilometre strike length. Two samples (24100, 23801) gave respective assay values of 0.47% and 0.70% copper over 1.0m and 0.5m intervals with high accompanying values in silver and cobalt.

Copper mineralization associated with quartz barite veining (±specularite) occurs in several locations throughout the northwest portion of the Roo claims. Mineralization of this type is present at the upper end of trench #8 and in dump material from an old shaft located approximately 175 m east of the trenched area. The quartz barite veining with accompanying copper mineralization probably represents remobilization of primary mineralization from sandstone horizons. The heat source for the remobilization process is likely from a deeper seated syenitic intrusive body. The probable source of the copper mineralization is the Nicol Creek basalts. One float sample of basalt contained fine grained chalcopyrite within pore spaces.

The suggested sequence of events resulting in mineralization on the Roo property is as follows:

1. Emplacement of Nicol Creek basalts containing high copper content.

2. Deposition of lower unit of Sheppard Formation (conglomerate, sandstone, siltstone)

3. Diagenetic subsurface brines extracted copper from Nicol Creek basalts, transported it through oxidized beds, and precipitated it by reduction in anoxic sediments.

4. Later stage remobilization process caused by syenite intrusive with scavenging of copper from surrounding sediments by quartz-barite veins.

8.0 Trenching Program

Backhoe trenching was carried out on the Roo 1 mineral claim over the period Sept 7th - 17th, 1989. A total of 4 individual and 4 interconnected trenches were dug for a total length of 250m. Trenches were dug to an average depth of 2m and approximately 1.5m in width. Overburden is generally thin (less than 3m).

The trenching program was carried out to extend the area of known copper mineralization as determined by Cominco Ltd. in 1967. The trenched area was considered to be the most economically promising, based on examinations of other mineral occurrences on the Roo property.

At the end of the trenching program, 2 days were devoted to backfilling all trenches and seeding of disturbed area. Please refer to Fig 6 (Trench Sampling Plan) and Figs 7 to 14 (Trench Mapping).

9.0 Soil Geochemistry

A total of 114 soil samples were taken at 10m intervals from 5 surveyed lines located on the east and west side of the trenched area.

The soil lines were run to intercept possible east-west trending copper mineralization as occurs in the trenched area. The lines were run from the base of the prominent stromatolitic dolomite bed and downslope for approximately 200-250m.

All soil samples were tested by 32 element I.C.P. analysis. Geochemical values for copper and barium were plotted and are shown on figures 15 & 16. Geochemical values for silver and cobalt were non-conclusive and therefore not plotted.

A clearly coincident copper-barium anomaly occurs at the northern end of lines 0+50S and 1+00S through the west to line 1+00N, station 0+50W (93 ppm Cu, 1310 ppm Ba).

All soil samples were taken with a mattock from the B-soil horizon.

10.0 Discussion (Awmack, 1989)

Wolfhard (1967) believed that the copper mineralization on the Roo property was genetically related to the syenite dikes which are associated with some of the quartz veining. In fact, this mode of vein mineralization is consistent with other red-bed deposits, where sulphides are remobilized from pre-existing stratabound mineralization. At the Spar Lake deposit in Montana,

> "veins of quartz, many with a little carbonate, also carry sulphides where they intersect mineralized beds. The sulphide in the vein is almost invariably the same sulphide as that which occurs in the adjacent wall rock" (Garlick, 1988).

In this respect, it is interesting to note that the quartz veins on the Roo property are mineralized mainly where they cut the mineralized strata around the lowest stromatolite horizon, and that the chalcocite-chalcopyrite assemblage in the veins mirrors that of the disseminated stratabound mineralization. It appears that the syenite dyking is insufficient to account for the Roo copper occurrences, but may have generated the quartz veins which remobilized copper from the mineralized strata.

The stratabound, red-bed nature of the Roo copper occurrences has never been recognized, and exploration to date on the property has not been directed towards that type of target. The excellent tonnage and grade possibilities for red-bed copper deposits make them very exciting targets at current copper prices. The recent exploration successes elsewhere in the Belt-Purcell Proterozoic basin demonstrates the viability of this exploration model.

11.0 Recommendations

It is recommended that a diamond drilling program be carried out on the Roo property to test the sedimentary horizons occurring between the lowermost dolomite horizon of the Upper Sheppard Formation and the top of the Nicol Creek basalts.

The drilling should be prioritized in the following areas;

1. The area of copper-silver-cobalt mineralized feldspathic sandstones trenched by Teck Explorations Ltd. in 1989.

2. The area of copper mineralized feldspathic sandstones occurring approximately 1 km east of trenched area. Lithologies at area #1 and #2 are very similar.

3. Drill one or two holes to test the stratigraphy between areas 1 and 2.

Backhoe trenching is not seen as a viable future method of exploration on the Roo property. Backhoe work is made difficult, beyond the presently trenched area, by steep slopes.

12.0 **Expenses: Roo Project - 1989**

Salaries

G. Thomson (Geologist) 20 days @ 250.25	$ 5,005.00
T. Delaney (Geologist) 20 days @ 207.35	4,147.00
B. Yamamura (Consulting Geologist) 18.5 days @ 300.55	5,560.17
C. Lormand (Geologist) 6 days @ 207.35	1,244.10
T. Archibald (Prospector) 6 days @ 207./35	1,244,10
F. Daley (Supervision) 1 day @ 255.15	255.15
	$17,455.52

Meals and Accommodation

71.5 man days @ 50.00/day	$ 3,575.00

Transportation

20 days @ $100/day (2 rental 4 x 4 trucks + gas)	$ 2,000.00

Contractors

Cat work - 2 days @ 637.45/day (Dixon trucking)	$ 1,274.90
Backhoe - 10 days @ 667.71/day (Starlight Holdings)	$ 6,667.10

Roo 1989 expenses cont'd

Assaying (Chemex Labs Ltd.)

76 rock samples (32 element I.C.P.) @ 11.55/sample	$ 877.80
75 rock samples (copper assay + 32 element I.C.P.) @ 18.70/sample	1,402.50
114 soil samples (32 element I.C.P.) @ 8.52/sample	971.85
	$ 3,252.15

Report Preparation

8 days @ 250/day	$ 2,002.00
Drafting 30 hrs @ 20/hr	600.00
Miscellaneous costs (telephone, typing, shipping, supplies)	1,783.63
Total	38,610.30

13.0 Bibliography

Awmack, H.J. (1989): Summary Report on the Roo 1-3 claims for Equity Engineering Ltd.

Garlick, W.G. (1988): Algal Mats, Load Structures, and Synsedimentary Sulphides in Revett Quartzites of Montana and Idaho; Economic Geology, vol. 83, pp. 1259-1278.

Gustafson, L.B. and N. Williams (1981): Sediment-Hosted Stratiform Deposits of Copper, Lead and Zinc; Economic Geology, 75th Anniversary Volume, pp. 139-178.

Hayes, T.S. and M.T. Einaudi (1986): Genesis of the Spar Lake Strata-Bound Copper-Silver Deposit, Montana: Part I. Controls Inherited from Sedimentation and Preore Diagenesis; Economic Geology, vol. 81, pp. 1899-1931.

Hoy, T. and G. Carter (1988): Geology of the Fernie West Half Map Sheet, BCMEMPR Open File 1988-14.

Leech, G.B. (1958): Fernie Map-Area, West Half; GSC Paper 58-10, 40 pp.

Leech, G.B. (1960): Fernie, West Half; GSC Map 11-1960.

Noranda (1989): 1988 Annual Report.

Price, R.A. (1961): Fernie Map-Area, East Half; GSC Paper 61-24, 65 pp.

Renfro, A.R. (1974): Genesis of Evaporite-Associated Stratiform Metalliferous Deposits - A Sabkha Process; Economic Geology, vol. 69, pp. 33-45.

Wolfhard, M.R. (1967): Report of Geological and Geochemical Surveys of the Phil #2 Group; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report # 1,023.

APPENDIX A

CERTIFICATE OF AUTHOR

STATEMENT OF QUALIFICATIONS

I, Gregory R. Thomson, hereby certify that:

1. I am currently employed as a geologist by Teck Explorations Ltd. with offices at #960-175 Second Ave., Kamloops, B.C.

2. I graduated from the University of British Columbia in 1970 with a major in Geology.

3. I have worked continuously as a geologist in British Columbia.

4. The work described herein was done under my direct supervision.



G. R. Thomson

APPENDIX B

METHODS OF ANALYSIS
Chemex Labs. Ltd.

APPENDIX C

ROCK SAMPLE DESCRIPTIONS AND ANALYSES

Mineralization Sampling Summary:

Sample No.	Description
24057	Minor disseminated chalcopyrite with associated malachite stain in dolomite road float - along road adjoining southerly tributary of Phillipps Creek.
24058	1560m elev., south facing slope above southerly tributary of Phillipps Creek; malachite stain in dolomites at quartzite contact.
24059	Same location as sample # 24058 - fine disseminated chalcopyrite in quartzite at contact with dolomite.
24060	South facing cliff above main channel of Phillipps creek at 5000' elev.; minor sulphides and malachite stain (weak) at base of white stromatolitic dolomite bed (0.75m wide)
24061	75m west of sample 24060, near nose of ridge - slightly higher sulphide contact than sample 24060 - malachite stain, (same 0.75m dolomite bed)
24062	Same dolomite bed as samples 24060, 24061 at 50m east of sample 24060.
24063	Trench # 1 - grab sample (same location as sample 172034 - Fig. 4) - consists of malachite and chalcocite coatings in feldspathic sandstone occurring over a 2m thickness.
24064	Float sample, new trench #1; similar to sample 24063.
24097	Grab from shaft dump east of trenched area quartz-barite with erratic chalcopyrite blebs, malachite stain.
24098	Pink syenite dyke (across 2.4m) with minor quartz veinlets with disseminated chalcopyrite and malachite-azurite stain.
24099	Fractured sandstones adjoining east side of syenite dyke (across 3.0m)
24100	Isolated malachite stain in feldspathic sandstones on road leading to trenching area. (Station R-132A) (1m sample)- same location as sample 172035 - Fig. 4
23801	Same location as sample 24100 (R-132-B) (0.5m sample).

Sample No.	Cu %	Ag(ppm)	Ba(ppm)	Co(ppm)	Ni
24057	0.20	6.6	65	25	
24058	0.07	1.2	35	12	
24059	0.05	.6	60	6	
24060	0.04	.4	160	7	
24061	0.33	.8	1000	5	
24062	0.05	.2	155	7	
24063	3.51	1.8	730	709	
24064	0.47	4.2	75	315	
24097	0.24	0.6	3200	4	
24098	0.19	2.0	770	314	420
24099	< 0.01	0.4	350	32	
24100	0.47	4.8	320	148	
23801	0.70	3.8	170	161	

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Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

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Page Number : 1-A
Total Pages : 3
Invoice Date: 11-OCT-89
Invoice No. : I-8926568
P.O. Number :

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
ROO 0+50S 0+00E	201	238	1.78	0.6	< 5	610	< 0.5	< 2	0.37	< 0.5	16	14	87	3.68	< 10	< 1	0.34	40	0.52	455	< 1
ROO 0+50S 0+10E	201	238	1.30	0.4	5	460	< 0.5	< 2	0.27	< 0.5	15	10	42	2.81	< 10	< 1	0.22	30	0.38	725	< 1
ROO 0+50S 0+20E	201	238	2.07	0.4	< 5	500	< 0.5	< 2	0.37	< 0.5	9	13	19	2.81	< 10	< 1	0.25	30	0.50	430	< 1
ROO 0+50S 0+30E	201	238	2.65	< 0.2	5	1300	< 0.5	< 2	0.79	< 0.5	10	14	20	2.86	< 10	< 1	0.39	20	0.41	1260	< 1
ROO 0+50S 0+40E	201	238	2.06	0.2	20	710	< 0.5	< 2	0.41	< 0.5	11	14	28	3.30	< 10	< 1	0.38	30	0.59	560	< 1
ROO 0+50S 0+50E	201	238	2.71	0.2	15	1090	< 0.5	< 2	0.84	< 0.5	10	14	16	3.73	< 10	< 1	0.34	20	0.54	925	< 1
ROO 0+50S 0+60E	201	238	2.17	< 0.2	10	1120	< 0.5	< 2	0.80	< 0.5	11	13	24	2.52	< 10	< 1	0.27	20	0.41	1195	< 1
ROO 0+50S 0+10W	201	238	2.26	0.2	< 5	730	< 0.5	< 2	0.40	< 0.5	17	12	45	3.20	< 10	< 1	0.29	30	0.35	825	< 1
ROO 0+50S 0+20W	201	238	1.65	0.4	< 5	410	< 0.5	< 2	0.32	< 0.5	12	14	73	3.66	< 10	< 1	0.23	40	0.43	255	< 1
ROO 0+50S 0+30W	201	238	1.96	0.6	5	630	< 0.5	< 2	0.34	< 0.5	13	16	40	4.15	< 10	< 1	0.31	40	0.59	575	< 1
ROO 0+50S 0+40W	201	238	1.82	0.4	< 5	500	< 0.5	< 2	0.36	< 0.5	11	16	27	3.48	< 10	< 1	0.25	30	0.46	525	< 1
ROO 0+50S 0+50W	201	238	2.24	0.4	< 5	530	< 0.5	< 2	0.38	< 0.5	10	14	49	4.40	< 10	< 1	0.26	40	0.46	410	1
ROO 0+50S 0+60W	201	238	2.08	0.4	< 5	450	< 0.5	< 2	0.33	< 0.5	9	11	50	3.62	< 10	< 1	0.24	20	0.39	395	< 1
ROO 0+50S 0+70W	201	238	2.05	0.2	< 5	670	< 0.5	< 2	0.45	< 0.5	8	11	32	3.73	< 10	< 1	0.24	30	0.35	535	< 1
ROO 0+50S 0+80W	201	238	2.24	0.2	< 5	930	< 0.5	< 2	0.44	< 0.5	11	9	41	2.97	< 10	< 1	0.26	20	0.31	900	< 1
ROO 0+50S 0+90W	201	238	1.85	0.2	< 5	520	< 0.5	< 2	0.22	< 0.5	12	11	37	3.35	< 10	< 1	0.15	20	0.49	310	< 1
ROO 0+50S 1+00W	201	238	3.22	0.4	< 5	900	< 0.5	< 2	0.43	< 0.5	9	8	35	2.76	< 10	< 1	0.21	20	0.32	245	< 1
ROO 0+50S 1+10W	201	238	2.77	< 0.2	< 5	990	< 0.5	< 2	0.35	< 0.5	10	10	18	2.50	< 10	< 1	0.23	20	0.31	1565	< 1
ROO 0+50S 1+20W	201	238	2.94	0.2	5	1010	< 0.5	< 2	0.52	< 0.5	20	12	17	3.87	< 10	< 1	0.37	30	0.44	1245	< 1
ROO 0+50S 1+30W	201	238	2.75	0.2	< 5	1260	< 0.5	< 2	0.63	0.5	13	9	13	2.67	< 10	< 1	0.28	20	0.30	400	< 1
ROO 0+50S 1+40W	201	238	2.19	< 0.2	< 5	1000	< 0.5	2	0.74	< 0.5	9	9	14	2.13	< 10	< 1	0.23	10	0.35	515	< 1
ROO 0+50S 1+50W	201	238	3.16	0.2	< 5	900	< 0.5	< 2	0.58	< 0.5	17	9	14	2.91	< 10	< 1	0.21	20	0.38	230	< 1
ROO 1+00W 0+00E	201	238	2.21	0.2	< 5	650	< 0.5	< 2	0.34	< 0.5	5	8	20	1.94	< 10	< 1	0.11	10	0.31	140	< 1
ROO 1+00W 0+10E	201	238	2.98	< 0.2	< 5	1040	< 0.5	2	0.46	< 0.5	8	10	16	2.44	< 10	< 1	0.28	10	0.35	1075	< 1
ROO 1+00W 0+20E	201	238	2.62	< 0.2	10	1220	< 0.5	< 2	0.78	< 0.5	11	12	20	2.67	< 10	< 1	0.32	20	0.43	1780	< 1
ROO 1+00W 0+30E	201	238	2.82	< 0.2	5	970	< 0.5	2	0.48	< 0.5	10	13	18	2.90	< 10	< 1	0.37	20	0.37	1160	< 1
ROO 1+00W 0+40E	201	238	2.65	0.2	< 5	730	< 0.5	< 2	0.38	< 0.5	9	12	18	2.53	< 10	< 1	0.23	20	0.35	560	< 1
ROO 1+00W 0+50E	201	238	2.19	0.2	< 5	610	< 0.5	< 2	0.33	< 0.5	11	12	23	2.72	< 10	< 1	0.21	30	0.39	330	< 1
ROO 1+00W 0+10W	201	238	1.97	< 0.2	< 5	600	< 0.5	2	0.33	< 0.5	9	12	15	2.81	< 10	< 1	0.33	30	0.45	1045	< 1
ROO 1+00W 0+20W	201	238	2.06	< 0.2	5	550	< 0.5	< 2	0.34	< 0.5	8	10	12	2.46	< 10	< 1	0.30	20	0.39	1045	< 1
ROO 1+00W 0+30W	201	238	2.35	0.2	10	1310	< 0.5	< 2	0.48	< 0.5	6	11	12	2.99	< 10	< 1	0.36	10	0.37	850	< 1
ROO 1+00W 0+40W	201	238	2.18	0.2	10	580	< 0.5	< 2	0.35	< 0.5	13	9	29	2.87	< 10	< 1	0.29	20	0.39	550	< 1
ROO 1+00W 0+50W	201	238	1.92	0.4	30	670	< 0.5	4	0.38	< 0.5	16	9	93	3.14	< 10	< 1	0.20	30	0.45	340	< 1
ROO 1+00W 0+60W	201	238	1.75	< 0.2	< 5	970	< 0.5	2	0.50	< 0.5	11	10	19	2.58	< 10	< 1	0.29	20	0.35	1800	< 1
ROO 1+00W 0+70W	201	238	2.86	0.2	< 5	780	< 0.5	< 2	0.50	< 0.5	10	10	24	2.81	< 10	< 1	0.28	20	0.39	255	< 1
ROO 1+00W 0+80W	201	238	1.62	0.2	< 5	420	< 0.5	< 2	0.27	< 0.5	11	12	21	2.99	< 10	< 1	0.16	30	0.53	255	< 1
ROO 1+00W 0+90W	201	238	1.51	0.2	< 5	390	< 0.5	< 2	0.30	< 0.5	10	12	20	3.07	< 10	< 1	0.23	30	0.50	345	< 1
ROO 1+00W 1+00W	201	238	1.72	0.4	< 5	420	< 0.5	< 2	0.32	< 0.5	12	12	44	3.21	< 10	< 1	0.25	30	0.50	270	< 1
ROO 1+00W 1+10W	201	238	1.50	0.2	< 5	380	< 0.5	2	0.24	< 0.5	11	11	25	2.76	< 10	< 1	0.25	30	0.47	505	< 1
ROO 1+00W 1+20W	201	238	1.41	0.2	10	350	< 0.5	< 2	0.24	< 0.5	9	11	20	2.81	< 10	< 1	0.26	30	0.52	340	< 1

CERTIFICATION : B. Caufield

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

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Page Number: 1-B
Total Pages: 3
Invoice Date: 11-OCT-89
Invoice No.: I-8926568
P.O. Number:

Project: 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Mo %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
800 0+50S 0+00E	201	238	0.01	14	460	10	< 5	7	9	0.05	< 10	< 10	22	< 10	46
800 0+50S 0+10E	201	238	0.01	9	450	10	< 5	4	8	0.05	< 10	< 10	20	< 10	44
800 0+50S 0+20E	201	238	0.01	12	320	4	< 5	4	11	0.07	< 10	< 10	23	< 10	56
800 0+50S 0+30E	201	238	0.02	10	940	10	< 5	5	21	0.09	< 10	< 10	20	< 10	106
800 0+50S 0+40E	201	238	0.01	13	490	6	< 5	6	11	0.05	< 10	< 10	24	< 10	50
800 0+50S 0+50E	201	238	0.02	11	680	10	< 5	6	16	0.08	< 10	< 10	23	< 10	56
800 0+50S 0+60E	201	238	0.02	11	570	6	< 5	5	19	0.07	< 10	< 10	21	< 10	76
800 0+50S 0+10W	201	238	0.01	15	540	2	< 5	6	14	0.07	< 10	< 10	21	< 10	74
800 0+50S 0+20W	201	238	0.01	14	650	2	< 5	5	10	0.05	< 10	< 10	22	< 10	72
800 0+50S 0+30W	201	238	0.01	14	490	4	< 5	6	12	0.07	< 10	< 10	29	< 10	124
800 0+50S 0+40W	201	238	0.01	12	460	10	< 5	5	13	0.06	< 10	< 10	24	< 10	82
800 0+50S 0+50W	201	238	0.01	14	500	6	< 5	7	15	0.07	< 10	< 10	25	< 10	98
800 0+50S 0+60W	201	238	0.01	11	400	2	< 5	6	13	0.06	< 10	< 10	19	< 10	86
800 0+50S 0+70W	201	238	0.01	9	650	2	< 5	6	17	0.06	< 10	< 10	18	< 10	104
800 0+50S 0+80W	201	238	0.02	10	780	2	< 5	5	18	0.06	< 10	< 10	16	< 10	84
800 0+50S 0+90W	201	238	0.01	13	490	10	< 5	4	9	0.06	< 10	< 10	22	< 10	68
800 0+50S 1+00W	201	238	0.03	10	880	4	< 5	5	22	0.10	< 10	< 10	18	< 10	64
800 0+50S 1+10W	201	238	0.03	10	560	8	< 5	5	19	0.09	< 10	< 10	20	< 10	102
800 0+50S 1+20W	201	238	0.02	11	970	10	< 5	9	23	0.10	< 10	< 10	26	< 10	92
800 0+50S 1+30W	201	238	0.05	11	1790	10	< 5	7	29	0.10	< 10	< 10	21	< 10	80
800 0+50S 1+40W	201	238	0.02	8	2200	4	< 5	4	26	0.07	< 10	< 10	19	< 10	102
800 0+50S 1+50W	201	238	0.04	10	930	8	< 5	6	23	0.10	< 10	< 10	21	< 10	64
800 1+00W 0+00E	201	238	0.06	9	160	6	< 5	4	19	0.08	< 10	< 10	18	< 10	34
800 1+00W 0+10E	201	238	0.03	12	450	20	< 5	5	15	0.10	< 10	< 10	21	< 10	48
800 1+00W 0+20E	201	238	0.02	12	1280	12	< 5	5	20	0.08	< 10	< 10	23	< 10	62
800 1+00W 0+30E	201	238	0.02	15	310	12	< 5	6	15	0.08	< 10	< 10	23	< 10	46
800 1+00W 0+40E	201	238	0.02	15	170	8	< 5	5	15	0.08	< 10	< 10	21	< 10	36
800 1+00W 0+50E	201	238	0.01	15	180	4	< 5	5	11	0.07	< 10	< 10	23	< 10	38
800 1+00W 0+10W	201	238	0.01	9	230	4	< 5	4	11	0.07	< 10	< 10	24	< 10	46
800 1+00W 0+20W	201	238	0.01	9	270	4	< 5	4	11	0.07	< 10	< 10	19	< 10	58
800 1+00W 0+30W	201	238	0.02	8	320	6	< 5	5	18	0.08	< 10	< 10	19	< 10	62
800 1+00W 0+40W	201	238	0.01	12	320	10	< 5	5	11	0.07	< 10	< 10	19	< 10	46
800 1+00W 0+50W	201	238	0.01	13	310	8	< 5	6	12	0.05	< 10	< 10	18	< 10	36
800 1+00W 0+60W	201	238	0.01	9	310	6	< 5	4	12	0.05	< 10	< 10	17	< 10	64
800 1+00W 0+70W	201	238	0.02	9	820	4	< 5	5	16	0.09	< 10	< 10	16	< 10	60
800 1+00W 0+80W	201	238	0.01	10	160	6	< 5	4	8	0.04	< 10	< 10	24	< 10	44
800 1+00W 0+90W	201	238	0.01	9	300	12	< 5	4	8	0.05	< 10	< 10	25	< 10	44
800 1+00W 1+00W	201	238	0.01	10	290	< 2	< 5	5	9	0.05	< 10	< 10	23	< 10	46
800 1+00W 1+10W	201	238	0.01	8	250	8	< 5	4	7	0.05	< 10	< 10	21	< 10	40
800 1+00W 1+20W	201	238	< 0.01	9	230	8	< 5	4	6	0.04	< 10	< 10	22	< 10	40

CERTIFICATION: B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

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CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
ROO 1+00N 1+30W	201	238	1.38	0.4	< 5	350	< 0.5	< 2	0.23	< 0.5	11	11	27	2.80	< 10	< 1	0.18	30	0.86	210	< 1
ROO 1+00N 1+40W	201	238	1.65	0.2	< 5	540	< 0.5	< 2	0.34	< 0.5	12	13	38	3.19	< 10	< 1	0.28	30	0.62	270	< 1
ROO 1+00N 1+50W	201	238	1.47	0.6	10	390	< 0.5	< 2	0.26	< 0.5	13	11	30	2.89	< 10	< 1	0.22	30	0.50	335	< 1
ROO 1+00S 0+10E	201	238	1.22	0.4	10	620	< 0.5	2	0.50	< 0.5	17	10	61	3.17	< 10	< 1	0.19	30	0.56	610	< 1
ROO 1+00S 0+20E	201	238	3.07	0.4	< 5	1190	< 0.5	2	0.51	< 0.5	8	9	16	2.68	< 10	< 1	0.17	10	0.34	515	< 1
ROO 1+00S 0+30E	201	238	2.61	0.4	5	600	< 0.5	4	0.32	< 0.5	11	11	18	2.79	< 10	< 1	0.27	20	0.41	560	< 1
ROO 1+00S 0+00W	201	238	2.56	< 0.2	5	730	< 0.5	2	0.40	< 0.5	6	8	14	1.82	< 10	< 1	0.20	10	0.26	325	< 1
ROO 1+00S 0+10W	201	238	2.23	0.4	15	460	< 0.5	4	0.29	< 0.5	13	12	25	3.16	< 10	< 1	0.20	30	0.50	340	< 1
ROO 1+00S 0+20W	201	238	1.79	0.4	20	490	< 0.5	2	0.28	< 0.5	13	11	25	2.88	< 10	< 1	0.19	30	0.44	410	< 1
ROO 1+00S 0+30W	201	238	1.39	0.4	< 5	280	< 0.5	2	0.18	0.5	11	11	19	2.79	< 10	< 1	0.15	30	0.49	200	< 1
ROO 1+00S 0+40W	201	238	1.59	0.2	25	1630	< 0.5	2	0.69	< 0.5	13	12	15	3.78	< 10	< 1	0.19	20	0.52	1365	< 1
ROO 1+00S 0+50W	201	238	2.57	0.2	5	1260	< 0.5	4	0.84	< 0.5	14	11	41	2.55	< 10	< 1	0.28	20	0.42	1005	< 1
ROO 1+00S 0+60W	201	238	2.59	0.2	< 5	680	< 0.5	4	0.44	< 0.5	9	9	15	2.56	< 10	< 1	0.32	10	0.34	825	< 1
ROO 1+00S 0+70W	201	238	1.44	0.2	30	380	< 0.5	2	0.27	< 0.5	6	8	14	2.46	< 10	< 1	0.21	20	0.32	540	< 1
ROO 1+00S 0+80W	201	238	2.24	0.4	20	360	< 0.5	2	0.31	< 0.5	13	11	30	3.01	< 10	< 1	0.27	30	0.44	340	< 1
ROO 1+00S 0+90W	201	238	1.79	0.2	< 5	460	< 0.5	< 2	0.30	< 0.5	11	11	17	2.44	< 10	< 1	0.21	20	0.38	440	< 1
ROO 1+00S 1+00W	201	238	1.94	0.2	20	640	< 0.5	< 2	0.38	< 0.5	15	10	27	3.03	< 10	< 1	0.24	30	0.41	805	< 1
ROO 1+00S 1+10W	201	238	2.15	0.2	< 5	730	< 0.5	< 2	0.42	< 0.5	12	10	20	2.79	< 10	< 1	0.25	20	0.37	915	< 1
ROO 1+00S 1+20W	201	238	2.68	0.2	5	920	< 0.5	6	0.38	< 0.5	11	12	21	3.00	< 10	< 1	0.35	20	0.36	865	< 1
ROO 1+00S 1+30W	201	238	2.30	< 0.2	35	1410	< 0.5	< 2	0.79	< 0.5	14	12	29	2.98	< 10	< 1	0.36	20	0.39	1310	< 1
ROO 1+00S 1+40W	201	238	2.48	0.6	< 5	870	< 0.5	4	0.46	< 0.5	11	16	21	3.15	< 10	< 1	0.37	20	0.45	550	< 1
ROO 1+00S 1+50W	201	238	3.00	0.4	< 5	920	< 0.5	2	0.52	< 0.5	10	15	21	2.86	< 10	< 1	0.37	20	0.40	855	< 1
ROO 1+00S 1+60W	201	238	1.67	0.4	< 5	450	< 0.5	< 2	0.29	< 0.5	12	13	40	3.21	< 10	< 1	0.30	30	0.44	310	< 1
ROO 1+00S 1+70W	201	238	1.90	0.6	5	490	< 0.5	2	0.35	< 0.5	13	15	29	3.23	< 10	< 1	0.27	30	0.47	220	< 1
ROO 1+00S 1+80W	201	238	2.33	0.4	< 5	840	< 0.5	2	0.43	< 0.5	16	13	31	3.48	< 10	< 1	0.31	30	0.49	890	< 1
ROO 1+00S 1+90W	201	238	2.08	0.4	< 5	670	< 0.5	2	0.34	< 0.5	14	15	25	3.21	< 10	< 1	0.28	30	0.47	775	< 1
ROO 1+00S 2+00W	201	238	1.92	0.6	20	430	< 0.5	< 2	0.35	< 0.5	11	14	24	3.13	< 10	< 1	0.25	30	0.51	335	< 1
ROO 1+50N 0+00E	201	238	2.05	0.4	< 5	520	< 0.5	4	0.43	< 0.5	11	15	26	3.18	< 10	< 1	0.26	30	0.55	335	< 1
ROO 1+50N 0+10E	201	238	1.27	0.4	5	410	< 0.5	4	0.21	< 0.5	11	12	23	2.37	< 10	< 1	0.13	20	0.41	295	< 1
ROO 1+50N 0+20E	201	238	2.12	0.4	< 5	720	< 0.5	2	0.32	< 0.5	9	13	24	2.69	< 10	< 1	0.19	20	0.42	370	< 1
ROO 1+50N 0+30E	201	238	1.87	< 0.2	< 5	570	< 0.5	< 2	0.24	< 0.5	10	12	18	2.56	< 10	< 1	0.27	20	0.34	420	< 1
ROO 1+50N 0+40E	201	238	1.65	0.2	< 5	490	< 0.5	2	0.28	< 0.5	12	13	25	2.59	< 10	< 1	0.25	20	0.37	370	1
ROO 1+50N 0+50E	201	238	3.05	0.2	25	1100	< 0.5	< 2	0.49	< 0.5	9	13	17	2.70	< 10	< 1	0.26	10	0.38	370	< 1
ROO 1+50N 0+10W	201	238	2.30	0.2	5	580	< 0.5	< 2	0.49	< 0.5	8	14	11	2.67	< 10	< 1	0.29	20	0.46	600	< 1
ROO 1+50N 0+20W	201	238	1.72	< 0.2	25	540	< 0.5	< 2	0.27	< 0.5	10	11	12	2.53	< 10	< 1	0.34	20	0.45	485	< 1
ROO 1+50N 0+30W	201	238	2.25	< 0.2	< 5	900	< 0.5	< 2	0.45	< 0.5	11	15	24	2.14	< 10	< 1	0.23	10	0.32	645	< 1
ROO 1+50N 0+40W	201	238	1.53	0.2	20	360	< 0.5	< 2	0.22	< 0.5	8	17	12	2.47	< 10	< 1	0.19	20	0.46	300	< 1
ROO 1+50N 0+50W	201	238	1.81	0.2	15	370	< 0.5	2	0.27	< 0.5	6	11	10	2.33	< 10	< 1	0.22	20	0.40	190	< 1
ROO 1+50N 0+60W	201	238	1.53	0.2	10	430	< 0.5	2	0.25	< 0.5	9	12	16	2.51	< 10	< 1	0.22	20	0.43	635	< 1
ROO 1+50N 0+70W	201	238	2.84	0.2	< 5	570	< 0.5	4	0.44	< 0.5	6	9	11	2.02	< 10	< 1	0.24	10	0.32	300	< 1

CERTIFICATION : B. Campbell

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Invoice Date: 11-OCT-89
Invoice No. : I-8926568
P.O. Number :

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
ROO 1+00N 1+30W	201	238	< 0.01	11	220	2	< 5	4	6	0.04	< 10	< 10	21	< 10	38
ROO 1+00N 1+40W	201	238	0.01	12	210	6	< 5	5	7	0.04	< 10	< 10	22	< 10	44
ROO 1+00N 1+50W	201	238	0.01	11	260	12	< 5	5	7	0.04	< 10	< 10	20	< 10	40
ROO 1+00S 0+10E	201	238	0.01	13	450	8	< 5	5	9	0.03	< 10	< 10	18	< 10	36
ROO 1+00S 0+20E	201	238	0.04	11	350	4	< 5	5	19	0.10	< 10	< 10	16	10	50
ROO 1+00S 0+30E	201	238	0.02	11	310	12	< 5	5	12	0.09	< 10	< 10	20	< 10	42
ROO 1+00S 0+00W	201	238	0.04	11	630	12	< 5	3	17	0.09	< 10	< 10	17	< 10	42
ROO 1+00S 0+10W	201	238	0.02	12	340	8	< 5	5	11	0.07	< 10	< 10	27	< 10	42
ROO 1+00S 0+20W	201	238	0.01	12	230	18	< 5	4	10	0.06	< 10	< 10	23	< 10	36
ROO 1+00S 0+30W	201	238	0.01	10	180	10	< 5	3	6	0.05	< 10	< 10	23	< 10	34
ROO 1+00S 0+40W	201	238	0.01	11	900	24	< 5	6	21	0.05	< 10	< 10	24	10	116
ROO 1+00S 0+50W	201	238	0.03	13	590	18	< 5	5	25	0.09	< 10	< 10	22	< 10	106
ROO 1+00S 0+60W	201	238	0.02	9	500	8	< 5	4	15	0.09	< 10	< 10	15	< 10	100
ROO 1+00S 0+70W	201	238	0.01	7	380	2	< 5	3	9	0.05	< 10	< 10	16	< 10	54
ROO 1+00S 0+80W	201	238	0.02	14	330	16	< 5	5	13	0.08	< 10	< 10	22	10	56
ROO 1+00S 0+90W	201	238	0.01	9	240	4	< 5	4	11	0.06	< 10	< 10	18	< 10	52
ROO 1+00S 1+00W	201	238	0.01	13	470	8	< 5	4	13	0.07	< 10	< 10	22	< 10	66
ROO 1+00S 1+10W	201	238	0.01	13	560	12	< 5	4	14	0.07	< 10	< 10	19	< 10	70
ROO 1+00S 1+20W	201	238	0.02	14	680	16	< 5	6	15	0.09	< 10	< 10	19	< 10	82
ROO 1+00S 1+30W	201	238	0.02	11	1510	6	< 5	5	23	0.07	< 10	< 10	20	< 10	130
ROO 1+00S 1+40W	201	238	0.02	11	560	18	< 5	6	17	0.09	< 10	< 10	21	< 10	88
ROO 1+00S 1+50W	201	238	0.03	13	600	10	< 5	5	21	0.10	< 10	< 10	17	< 10	86
ROO 1+00S 1+60W	201	238	0.01	10	510	14	< 5	5	9	0.05	< 10	< 10	19	< 10	54
ROO 1+00S 1+70W	201	238	0.01	11	430	10	< 5	5	11	0.06	< 10	< 10	21	< 10	74
ROO 1+00S 1+80W	201	238	0.01	13	540	10	< 5	6	14	0.08	< 10	< 10	20	< 10	98
ROO 1+00S 1+90W	201	238	0.01	12	600	8	< 5	5	12	0.07	< 10	< 10	21	< 10	84
ROO 1+00S 2+00W	201	238	0.01	11	530	8	< 5	4	12	0.07	< 10	< 10	23	< 10	80
ROO 1+50N 0+00E	201	238	0.01	13	240	14	< 5	6	9	0.05	< 10	< 10	22	< 10	42
ROO 1+50N 0+10E	201	238	0.01	11	160	10	< 5	3	7	0.03	< 10	< 10	17	< 10	32
ROO 1+50N 0+20E	201	238	0.02	12	310	14	< 5	6	11	0.06	< 10	< 10	19	< 10	46
ROO 1+50N 0+30E	201	238	0.01	12	290	6	< 5	4	9	0.07	< 10	< 10	22	< 10	36
ROO 1+50N 0+40E	201	238	0.01	14	200	12	< 5	4	8	0.06	< 10	< 10	22	< 10	34
ROO 1+50N 0+50E	201	238	0.02	16	430	4	< 5	4	16	0.08	< 10	< 10	23	< 10	54
ROO 1+50N 0+10W	201	238	0.01	12	300	10	< 5	5	13	0.07	< 10	< 10	19	< 10	42
ROO 1+50N 0+20W	201	238	0.01	13	260	10	< 5	4	8	0.05	< 10	< 10	19	< 10	44
ROO 1+50N 0+30W	201	238	0.03	17	1080	10	< 5	3	14	0.07	< 10	< 10	17	< 10	88
ROO 1+50N 0+40W	201	238	0.01	14	230	6	< 5	3	7	0.05	< 10	< 10	19	< 10	42
ROO 1+50N 0+50W	201	238	0.01	12	220	12	< 5	4	9	0.06	< 10	< 10	19	< 10	44
ROO 1+50N 0+60W	201	238	0.01	11	310	16	< 5	3	9	0.06	< 10	< 10	20	< 10	40
ROO 1+50N 0+70W	201	238	0.04	13	790	6	< 5	4	17	0.10	< 10	< 10	17	< 10	58

CERTIFICATION : B Cargl

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

Invoice Date: 11-OCT-89
Invoice No. : I-8926568
P.O. Number :

CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
800 1+50N 0+80W	201	238	1.76	< 0.2	5	490	< 0.5	< 2	0.38	< 0.5	9	12	10	2.43	< 10	< 1	0.27	20	0.41	980	< 1
800 1+50N 0+90W	201	238	1.53	0.2	< 5	290	< 0.5	< 2	0.27	< 0.5	8	11	9	2.50	< 10	< 1	0.33	20	0.43	415	< 1
800 1+50N 1+00W	201	238	1.54	0.2	15	340	< 0.5	2	0.26	< 0.5	9	11	12	2.72	< 10	< 1	0.25	20	0.49	435	< 1
800 1+50N 1+10W	201	238	1.49	0.4	5	300	< 0.5	< 2	0.26	< 0.5	10	11	16	2.75	< 10	< 1	0.24	20	0.48	415	< 1
800 1+50N 1+20W	201	238	1.70	< 0.2	15	780	< 0.5	4	0.44	< 0.5	10	16	14	2.70	< 10	< 1	0.30	20	0.43	1450	< 1
800 1+50N 1+30W	201	238	1.57	0.2	10	310	< 0.5	< 2	0.25	< 0.5	11	13	18	2.72	< 10	< 1	0.28	20	0.47	410	< 1
800 1+50N 1+40W	201	238	1.33	0.2	10	450	< 0.5	< 2	0.33	< 0.5	14	11	22	2.94	< 10	< 1	0.22	20	0.51	535	< 1
800 1+50N 1+50W	201	238	1.90	< 0.2	< 5	700	< 0.5	< 2	0.45	< 0.5	13	11	36	2.01	< 10	< 1	0.27	10	0.29	765	< 1
800 2N 0+00E	201	238	2.50	0.2	10	880	< 0.5	2	0.35	< 0.5	6	14	9	1.80	< 10	< 1	0.20	10	0.29	380	< 1
800 2N 0+10E	201	238	2.07	0.4	< 5	1150	< 0.5	2	0.37	< 0.5	6	12	11	1.70	< 10	< 1	0.22	10	0.26	265	< 1
800 2N 0+20E	201	238	1.77	< 0.2	< 5	1810	< 0.5	< 2	0.69	< 0.5	9	13	15	2.10	< 10	< 1	0.26	10	0.31	1445	< 1
800 2N 0+30E	201	238	2.39	0.4	5	1740	< 0.5	2	0.77	< 0.5	11	14	18	3.38	< 10	< 1	0.33	20	0.48	1310	< 1
800 2N 0+40E	201	238	2.31	0.4	15	940	< 0.5	< 2	0.51	< 0.5	9	15	21	3.44	< 10	< 1	0.36	20	0.48	790	< 1
800 2N 0+50E	201	238	2.34	0.6	< 5	1230	< 0.5	4	0.68	< 0.5	14	15	35	3.72	< 10	< 1	0.27	20	0.61	715	< 1
800 2N 0+10W	201	238	2.01	0.2	< 5	460	< 0.5	2	0.27	< 0.5	6	12	7	1.60	< 10	< 1	0.21	20	0.22	380	< 1
800 2N 0+20W	201	238	2.54	0.4	10	780	< 0.5	2	0.39	< 0.5	8	11	32	2.12	< 10	< 1	0.30	10	0.30	415	< 1
800 2N 0+30W	201	238	1.63	0.4	10	370	< 0.5	< 2	0.27	< 0.5	6	12	11	2.28	< 10	< 1	0.20	20	0.41	350	< 1
800 2N 0+40W	201	238	2.44	0.2	15	600	< 0.5	2	0.40	< 0.5	6	12	9	2.01	< 10	< 1	0.29	20	0.30	870	< 1
800 2N 0+50W	201	238	2.32	< 0.2	< 5	950	< 0.5	< 2	0.52	< 0.5	8	13	13	1.84	< 10	< 1	0.25	10	0.31	1005	< 1
800 2N 0+60W	201	238	3.43	0.4	< 5	990	< 0.5	2	0.30	< 0.5	9	12	13	2.19	< 10	< 1	0.22	10	0.32	325	< 1
800 2N 0+70W	201	238	2.45	0.4	< 5	460	< 0.5	4	0.31	< 0.5	11	12	24	2.47	< 10	< 1	0.19	20	0.37	265	< 1
800 2N 0+80W	201	238	3.07	0.4	< 5	820	< 0.5	2	0.34	< 0.5	11	12	15	2.34	< 10	< 1	0.26	20	0.34	365	< 1
800 2N 0+90W	201	238	2.72	0.2	15	860	< 0.5	4	0.49	< 0.5	10	13	18	2.17	< 10	< 1	0.23	20	0.30	740	< 1
800 2N 1+00W	201	238	2.19	0.4	10	630	< 0.5	2	0.36	< 0.5	9	11	16	2.32	< 10	< 1	0.23	20	0.37	510	< 1
800 2N 1+10W	201	238	1.36	0.4	< 5	310	< 0.5	2	0.18	< 0.5	8	12	11	2.54	< 10	< 1	0.20	30	0.47	260	< 1
800 2N 1+20W	201	238	1.31	0.6	< 5	290	< 0.5	< 2	0.20	< 0.5	11	13	21	3.14	< 10	< 1	0.24	30	0.54	290	< 1
800 2N 1+30W	201	238	2.00	0.4	10	530	< 0.5	2	0.36	< 0.5	10	11	24	2.78	< 10	< 1	0.33	20	0.45	845	< 1
800 2N 1+40W	201	238	1.55	0.6	< 5	340	< 0.5	2	0.20	< 0.5	14	12	26	3.16	< 10	< 1	0.25	30	0.48	310	< 1
800 2N 1+50W	201	238	1.74	0.4	< 5	300	< 0.5	2	0.25	< 0.5	11	12	16	2.68	< 10	< 1	0.28	30	0.45	265	< 1
800 A2N 0+10W	201	238	2.67	< 0.2	< 5	1760	< 0.5	2	0.67	< 0.5	10	13	18	2.13	< 10	< 1	0.21	20	0.33	1780	< 1
800 A2N 0+20W	201	238	2.42	< 0.2	< 5	950	< 0.5	< 2	0.43	< 0.5	5	11	9	1.80	< 10	< 1	0.26	10	0.32	600	< 1
800 A2N 0+30W	201	238	2.49	0.2	< 5	940	< 0.5	< 2	0.46	< 0.5	5	12	9	2.14	< 10	< 1	0.26	10	0.33	915	< 1
800 A2N 0+40W	201	238	1.68	0.4	< 5	440	< 0.5	2	0.36	< 0.5	8	12	14	2.64	< 10	< 1	0.25	20	0.43	645	< 1
800 A2N 0+50W	201	238	2.18	0.2	< 5	740	< 0.5	4	0.61	< 0.5	8	11	11	2.35	< 10	< 1	0.22	20	0.37	1020	< 1

CERTIFICATION : B. Caufield

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

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Page Number : 3-B
Total Pages : 3
Invoice Date: 11-OCT-89
Invoice No. : I-8926568
P.O. Number :

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926568

SAMPLE DESCRIPTION	PREP CODE		Mo %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
800 1+50N 0+80W	201	238	0.02	8	360	8	< 5	4	11	0.06	< 10	< 10	18	< 10	58
800 1+50N 0+90W	201	238	0.01	9	300	4	< 5	4	8	0.05	< 10	< 10	17	< 10	40
800 1+50N 1+00W	201	238	0.01	9	280	8	< 5	4	7	0.05	< 10	< 10	19	< 10	48
800 1+50N 1+10W	201	238	0.01	12	350	8	< 5	4	7	0.05	< 10	< 10	20	< 10	42
800 1+50N 1+20W	201	238	0.01	11	440	8	< 5	4	11	0.05	< 10	< 10	16	< 10	58
800 1+50N 1+30W	201	238	0.01	12	350	10	< 5	4	8	0.05	< 10	< 10	18	< 10	46
800 1+50N 1+40W	201	238	< 0.01	11	790	6	< 5	4	8	0.04	< 10	< 10	19	< 10	52
800 1+50N 1+50W	201	238	0.02	10	760	8	< 5	3	15	0.06	< 10	< 10	14	< 10	62
800 2N 0+00E	201	238	0.03	11	750	6	< 5	3	15	0.08	< 10	< 10	18	< 10	86
800 2N 0+10E	201	238	0.05	13	1460	< 2	< 5	3	22	0.08	< 10	< 10	16	< 10	64
800 2N 0+20E	201	238	0.02	9	1450	8	< 5	4	21	0.07	< 10	< 10	19	< 10	92
800 2N 0+30E	201	238	0.02	15	1170	6	< 5	6	21	0.07	< 10	< 10	20	< 10	64
800 2N 0+40E	201	238	0.01	14	540	10	< 5	6	15	0.07	< 10	< 10	19	< 10	46
800 2N 0+50E	201	238	0.01	14	600	6	< 5	7	15	0.06	< 10	< 10	21	< 10	42
800 2N 0+10W	201	238	0.03	10	520	2	< 5	2	13	0.06	< 10	< 10	14	< 10	46
800 2N 0+20W	201	238	0.04	17	1210	< 2	< 5	4	19	0.09	< 10	< 10	17	< 10	56
800 2N 0+30W	201	238	0.01	12	420	2	< 5	3	10	0.05	< 10	< 10	19	< 10	42
800 2N 0+40W	201	238	0.02	9	490	10	< 5	3	14	0.09	< 10	< 10	16	< 10	70
800 2N 0+50W	201	238	0.03	14	2570	< 2	< 5	3	22	0.08	< 10	< 10	20	< 10	110
800 2N 0+60W	201	238	0.04	17	1240	12	< 5	4	18	0.11	< 10	< 10	19	< 10	62
800 2N 0+70W	201	238	0.03	15	450	8	< 5	5	16	0.08	< 10	< 10	20	< 10	48
800 2N 0+80W	201	238	0.04	17	940	8	< 5	3	17	0.09	< 10	< 10	21	< 10	52
800 2N 0+90W	201	238	0.03	13	990	6	< 5	4	18	0.09	< 10	< 10	18	< 10	68
800 2N 1+00W	201	238	0.02	12	390	6	< 5	4	13	0.08	< 10	< 10	17	< 10	52
800 2N 1+10W	201	238	0.01	10	320	2	< 5	3	7	0.04	< 10	< 10	18	< 10	34
800 2N 1+20W	201	238	0.01	13	360	2	< 5	4	6	0.04	< 10	< 10	22	< 10	42
800 2N 1+30W	201	238	0.01	12	420	< 2	< 5	5	11	0.07	< 10	< 10	20	< 10	52
800 2N 1+40W	201	238	0.01	10	360	6	< 5	4	8	0.06	< 10	< 10	24	< 10	42
800 2N 1+50W	201	238	0.01	10	250	8	< 5	4	10	0.06	< 10	< 10	21	< 10	42
800 A2N 0+10W	201	238	0.03	14	3090	< 2	< 5	5	28	0.10	< 10	< 10	22	< 10	198
800 A2N 0+20W	201	238	0.03	13	1190	2	< 5	3	19	0.09	< 10	< 10	20	< 10	168
800 A2N 0+30W	201	238	0.03	14	910	6	< 5	4	17	0.09	< 10	< 10	19	< 10	96
800 A2N 0+40W	201	238	0.01	12	360	2	< 5	5	12	0.05	< 10	< 10	21	< 10	46
800 A2N 0+50W	201	238	0.02	11	360	< 2	< 5	4	18	0.07	< 10	< 10	18	< 10	62

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

TECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Page Number : 1-A
Total Pages : 2
Invoice Date: 11-OCT-89
Invoice No. : I-8926569
P.O. Number : NONE

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926569

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
20301	205	238	0.35	< 0.2	< 5	440	< 0.5	< 2	8.45	< 0.5	10	8	29	2.40	< 10	< 1	0.32	< 10	2.26	980	< 1
20302	205	238	0.44	0.4	< 5	200	< 0.5	2	3.67	< 0.5	13	11	4	8.97	< 10	< 1	0.39	< 10	0.83	590	< 1
20303	205	238	0.45	0.6	< 5	500	< 0.5	4	2.44	< 0.5	22	14	42	8.39	< 10	< 1	0.40	< 10	0.52	475	< 1
20304	205	238	0.40	< 0.2	10	350	< 0.5	< 2	5.33	< 0.5	8	46	8	1.62	< 10	< 1	0.33	< 10	1.07	795	1
20305	205	238	0.36	< 0.2	< 5	950	< 0.5	2	6.98	< 0.5	25	26	203	1.72	< 10	< 1	0.30	< 10	1.33	1110	2
20306	205	238	0.20	< 0.2	< 5	1160	< 0.5	< 2	3.85	< 0.5	22	24	104	2.26	< 10	< 1	0.19	< 10	0.77	490	2
20307	205	238	0.18	< 0.2	< 5	310	< 0.5	< 2	14.60	< 0.5	11	30	8	2.05	< 10	< 1	0.14	< 10	6.40	1475	< 1
20308	205	238	0.41	< 0.2	10	480	< 0.5	< 2	8.13	< 0.5	21	14	72	4.64	< 10	< 1	0.37	< 10	0.60	1035	2
20309	205	238	0.28	< 0.2	< 5	260	< 0.5	< 2	3.94	< 0.5	15	8	5	6.18	< 10	< 1	0.23	< 10	0.53	640	< 1
20310	205	238	0.35	< 0.2	< 5	190	< 0.5	< 2	5.11	< 0.5	15	11	4	7.50	< 10	< 1	0.36	< 10	1.46	800	< 1
20311	205	238	0.40	< 0.2	< 5	2990	< 0.5	< 2	5.08	< 0.5	15	12	10	6.48	< 10	< 1	0.37	< 10	1.26	910	< 1
20312	205	238	0.29	0.4	< 5	660	< 0.5	< 2	2.90	< 0.5	8	16	29	8.16	< 10	< 1	0.24	< 10	0.52	470	< 1
20313	205	238	0.43	< 0.2	20	2710	< 0.5	2	6.23	< 0.5	16	12	43	7.77	< 10	< 1	0.39	< 10	0.38	1565	6
20314	205	238	0.38	< 0.2	< 5	1010	< 0.5	< 2	7.59	< 0.5	12	13	30	6.66	< 10	< 1	0.35	< 10	3.26	1420	< 1
20315	205	238	0.19	< 0.2	20	370	< 0.5	< 2	6.42	< 0.5	11	16	15	3.30	< 10	< 1	0.17	< 10	2.94	1320	< 1
20316	205	238	0.23	< 0.2	< 5	1600	< 0.5	< 2	2.07	< 0.5	3	51	8	1.29	< 10	< 1	0.20	< 10	0.61	425	< 1
20328	205	238	0.13	< 0.2	< 5	280	< 0.5	< 2	>15.00	< 0.5	6	5	3	1.65	< 10	< 1	0.11	< 10	7.72	1370	< 1
20329	205	238	0.15	< 0.2	< 5	190	< 0.5	< 2	2.36	< 0.5	< 1	12	2	1.24	< 10	< 1	0.15	10	0.73	300	< 1
20330	205	238	0.13	< 0.2	< 5	150	< 0.5	< 2	13.30	< 0.5	6	11	1	1.59	< 10	< 1	0.14	< 10	7.17	1270	< 1
20331	205	238	0.14	< 0.2	< 5	1400	< 0.5	< 2	13.30	0.5	13	10	97	1.69	< 10	< 1	0.15	< 10	6.93	1440	< 1
20332	205	238	0.23	< 0.2	10	790	< 0.5	< 2	4.61	< 0.5	32	9	23	5.95	< 10	< 1	0.20	< 10	1.07	1085	1
20333	205	238	0.33	< 0.2	5	440	< 0.5	< 2	5.51	< 0.5	18	9	4	7.15	< 10	< 1	0.33	< 10	1.07	945	1
20334	205	238	0.55	0.8	< 5	420	< 0.5	2	1.87	< 0.5	26	16	5	8.88	< 10	< 1	0.50	10	0.45	525	< 1
20335	205	238	0.20	< 0.2	< 5	260	< 0.5	< 2	8.32	< 0.5	12	13	2	3.32	< 10	< 1	0.17	< 10	3.15	1635	< 1
20343	205	238	0.45	< 0.2	< 5	350	< 0.5	< 2	3.64	< 0.5	15	8	3	2.99	< 10	< 1	0.37	30	0.67	915	< 1
20344	205	238	0.45	< 0.2	< 5	460	< 0.5	< 2	4.53	< 0.5	14	11	25	3.02	< 10	< 1	0.35	20	0.27	790	< 1
20345	205	238	0.20	< 0.2	5	1100	< 0.5	< 2	5.78	< 0.5	25	8	93	3.82	< 10	< 1	0.20	< 10	1.00	925	2
20346	205	238	0.32	< 0.2	5	830	< 0.5	< 2	5.11	< 0.5	15	10	45	7.60	< 10	< 1	0.34	< 10	0.81	640	2
20347	205	238	0.30	< 0.2	< 5	370	< 0.5	4	5.17	< 0.5	13	9	4	7.00	< 10	< 1	0.31	< 10	1.13	640	2
20348	205	238	0.61	0.2	15	430	< 0.5	4	2.81	< 0.5	10	17	35	7.04	< 10	< 1	0.59	< 10	0.67	515	1
20349	205	238	0.38	< 0.2	< 5	910	< 0.5	< 2	10.70	< 0.5	16	11	2	3.35	< 10	< 1	0.37	< 10	5.61	2270	< 1
20357	205	238	0.57	< 0.2	< 5	380	< 0.5	< 2	4.23	< 0.5	10	10	36	3.54	< 10	< 1	0.41	30	0.20	755	< 1
20358	205	238	0.38	< 0.2	< 5	300	< 0.5	< 2	3.42	< 0.5	8	11	20	3.21	< 10	< 1	0.28	40	0.13	640	< 1
20359	205	238	0.51	0.2	< 5	510	< 0.5	< 2	2.94	< 0.5	22	9	24	4.96	10	< 1	0.46	60	0.16	965	< 1
20360	205	238	0.62	< 0.2	< 5	3390	< 0.5	< 2	4.81	< 0.5	33	21	425	7.28	< 10	< 1	0.54	< 10	0.61	750	< 1
20361	205	238	0.31	< 0.2	< 5	600	< 0.5	< 2	5.47	< 0.5	9	28	26	1.91	< 10	< 1	0.31	< 10	0.84	625	1
20362	205	238	0.37	< 0.2	10	1630	< 0.5	< 2	4.59	< 0.5	6	77	12	1.61	< 10	< 1	0.31	< 10	0.19	485	< 1
20363	205	238	0.34	< 0.2	< 5	250	< 0.5	< 2	8.44	< 0.5	13	25	15	2.06	< 10	< 1	0.32	< 10	2.14	1370	1
20370	205	238	0.18	< 0.2	5	400	< 0.5	< 2	5.65	< 0.5	8	18	6	1.72	< 10	< 1	0.18	< 10	1.08	855	< 1
20401	205	238	0.34	< 0.2	< 5	1370	< 0.5	2	5.84	< 0.5	15	12	10	6.52	< 10	< 1	0.35	< 10	0.98	905	< 1

CERTIFICATION : B. Caplin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

TECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

Invoice Date: 11-OCT-89
Invoice No. : I-8926569
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926569

SAMPLE DESCRIPTION	PREP CODE		Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
20301	205	238	0.01	5	1190	< 2	< 5	7	41	0.01	< 10	< 10	14	< 10	16
20302	205	238	0.01	11	1270	2	< 5	8	29	0.09	< 10	< 10	32	< 10	18
20303	205	238	< 0.01	14	1500	8	< 5	7	25	0.09	< 10	< 10	39	< 10	16
20304	205	238	0.01	5	520	< 2	< 5	3	26	< 0.01	< 10	< 10	6	< 10	8
20305	205	238	0.01	9	650	< 2	< 5	5	25	< 0.01	< 10	< 10	6	< 10	10
20306	205	238	< 0.01	7	490	2	< 5	3	33	0.01	< 10	< 10	8	< 10	6
20307	205	238	0.01	7	310	< 2	< 5	3	75	< 0.01	< 10	< 10	7	< 10	10
20308	205	238	< 0.01	9	1320	2	< 5	9	47	0.02	< 10	< 10	22	< 10	14
20309	205	238	< 0.01	9	1290	2	< 5	7	22	0.06	< 10	< 10	22	< 10	14
20310	205	238	0.01	9	1230	8	< 5	9	47	0.07	< 10	< 10	27	< 10	16
20311	205	238	0.01	7	1230	< 2	< 5	8	94	0.06	< 10	< 10	27	< 10	14
20312	205	238	< 0.01	5	1440	10	< 5	7	47	0.10	< 10	< 10	38	< 10	12
20313	205	238	< 0.01	9	1340	16	< 5	8	100	0.08	< 10	< 10	33	< 10	14
20314	205	238	0.01	4	1050	8	< 5	6	65	0.04	< 10	< 10	21	< 10	10
20315	205	238	0.01	3	640	6	< 5	4	42	0.02	< 10	< 10	12	< 10	10
20316	205	238	< 0.01	1	350	< 2	< 5	1	65	< 0.01	< 10	< 10	7	< 10	4
20328	205	238	0.01	2	210	< 2	< 5	2	71	< 0.01	< 10	< 10	5	< 10	6
20329	205	238	< 0.01	< 1	660	4	< 5	2	14	< 0.01	< 10	< 10	3	< 10	2
20330	205	238	0.01	2	210	< 2	< 5	2	96	< 0.01	< 10	< 10	4	< 10	6
20331	205	238	0.01	2	410	< 2	< 5	3	133	< 0.01	< 10	< 10	6	< 10	6
20332	205	238	< 0.01	15	1310	6	< 5	8	53	0.05	< 10	< 10	21	< 10	14
20333	205	238	< 0.01	11	1160	8	< 5	8	40	0.06	< 10	< 10	24	< 10	16
20334	205	238	< 0.01	20	1320	8	< 5	7	22	0.08	< 10	< 10	36	< 10	18
20335	205	238	0.01	4	620	4	< 5	5	39	0.01	< 10	< 10	8	< 10	12
20343	205	238	0.01	< 1	1170	4	< 5	8	40	0.01	< 10	< 10	< 1	< 10	10
20344	205	238	< 0.01	4	1180	8	< 5	6	19	0.01	< 10	< 10	1	< 10	12
20345	205	238	< 0.01	5	1290	8	< 5	8	57	0.02	< 10	< 10	14	< 10	10
20346	205	238	< 0.01	8	1210	6	< 5	8	46	0.07	< 10	< 10	27	< 10	14
20347	205	238	0.01	9	1160	8	< 5	8	63	0.07	< 10	< 10	24	< 10	16
20348	205	238	< 0.01	8	1410	14	< 5	7	33	0.06	< 10	< 10	36	< 10	12
20349	205	238	0.01	4	530	< 2	< 5	6	104	0.01	< 10	< 10	8	< 10	14
20357	205	238	0.01	2	1280	4	< 5	7	20	0.01	< 10	< 10	< 1	< 10	12
20358	205	238	< 0.01	1	1120	< 2	< 5	7	15	0.01	< 10	< 10	< 1	< 10	10
20359	205	238	< 0.01	4	1260	4	< 5	6	12	< 0.01	< 10	< 10	< 1	< 10	22
20360	205	238	0.01	12	1380	10	< 5	8	86	0.07	< 10	< 10	45	< 10	14
20361	205	238	< 0.01	2	600	4	< 5	3	31	0.01	< 10	< 10	9	< 10	4
20362	205	238	< 0.01	2	350	4	< 5	2	57	< 0.01	< 10	< 10	8	< 10	4
20363	205	238	0.01	3	520	< 2	< 5	6	39	< 0.01	< 10	< 10	7	< 10	8
20370	205	238	< 0.01	2	560	< 2	< 5	4	30	< 0.01	< 10	< 10	7	< 10	4
20401	205	238	0.01	9	1210	12	< 5	9	58	0.06	< 10	< 10	24	< 10	12

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

TECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Page Number : 2-A
Total Pages : 2
Invoice Date: 11-OCT-89
Invoice No. : I-8926569
P.O. Number : NONE

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926569

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
20402	205	238	0.58	< 0.2	5	360	< 0.5	< 2	3.44	< 0.5	13	19	8	6.71	< 10	< 1	0.50	< 10	0.64	470	< 1
20403	205	238	0.46	< 0.2	25	1010	< 0.5	< 2	8.69	< 0.5	13	9	15	7.98	< 10	< 1	0.34	< 10	0.53	835	1
20410	205	238	0.56	< 0.2	20	3350	< 0.5	< 2	4.29	< 0.5	23	9	27	7.42	< 10	< 1	0.45	< 10	1.14	745	< 1
20411	205	238	0.52	< 0.2	15	670	< 0.5	< 2	2.78	< 0.5	12	27	47	4.44	< 10	< 1	0.45	10	0.47	435	< 1
20412	205	238	0.32	< 0.2	5	220	< 0.5	2	4.89	< 0.5	7	16	5	2.04	< 10	< 1	0.28	< 10	2.03	975	< 1
20413	205	238	0.54	< 0.2	< 5	440	< 0.5	< 2	3.14	< 0.5	7	29	24	4.30	< 10	< 1	0.46	< 10	0.40	360	< 1
20414	205	238	0.35	< 0.2	< 5	870	< 0.5	6	6.85	< 0.5	8	26	8	1.90	< 10	< 1	0.33	< 10	1.98	1080	< 1

CERTIFICATION : B. Caplin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
WestEnd Industrial Park, Pasadena,
Newfoundland, Canada A0I 1K0
PHONE: 709-686-2119

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Page Number : 2-B
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Invoice Date: 11-OCT-89
Invoice No. : I-8926569
P.O. Number : NONE

Project : 1375
Comments: ATTN: FRED DALEY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926569

SAMPLE DESCRIPTION	PREP CODE		Ma %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
20402	205	238	< 0.01	8	1190	10	5	7	26	0.07	< 10	< 10	27	< 10	10
20403	205	238	< 0.01	7	980	6	< 5	8	53	0.08	< 10	< 10	27	< 10	12
20410	205	238	0.01	11	1260	12	< 5	9	111	0.08	< 10	< 10	26	< 10	10
20411	205	238	< 0.01	5	960	6	< 5	5	30	0.04	< 10	< 10	20	< 10	6
20412	205	238	0.01	3	550	< 2	< 5	4	27	0.01	< 10	< 10	7	< 10	4
20413	205	238	< 0.01	5	900	8	< 5	5	25	0.04	< 10	< 10	21	< 10	6
20414	205	238	0.01	2	510	< 2	< 5	4	43	< 0.01	< 10	< 10	5	< 10	4

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE. NORTH VANCOUVER.
BRITISH COLUMBIA. CANADA V7J-2C1

PHONE (604) 984-0221

To: TECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1175
Comments: ATTN: FRED IMLEY CC: BRIAN YAMAMURA

Page No. : 1-A
Tot. Pages: 2
Date : 11-OCT-89
Invoice # : I-8926570
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926570

SAMPLE DESCRIPTION	PREP CODE	Cu %	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
20317	208 238	< 0.01	0.86	< 0.2	< 5	350	< 0.5	< 2	2.79	< 0.5	11	73	20	2.25	< 10	< 1	0.70	20	0.90	590
20318	208 238	< 0.01	0.73	< 0.2	5	430	< 0.5	< 2	7.15	< 0.5	23	40	36	2.06	< 10	1	0.64	< 10	2.73	1515
20319	208 238	< 0.01	0.81	< 0.2	65	1690	< 0.5	< 2	3.02	< 0.5	65	78	43	2.58	< 10	< 1	0.64	20	0.54	885
20320	208 238	< 0.01	0.57	< 0.2	85	2140	< 0.5	< 2	3.05	< 0.5	130	22	99	2.36	< 10	< 1	0.52	30	0.52	645
20321	208 238	1.51	0.78	2.8	95	3290	< 0.5	< 2	0.59	< 0.5	221	57	>10000	2.42	< 10	1	0.70	70	0.10	430
20322	208 238	3.71	0.51	6.0	70	1330	< 0.5	< 2	0.45	< 0.5	496	100	>10000	2.87	< 10	< 1	0.39	70	0.06	485
20323	208 238	1.22	0.64	3.8	90	1020	< 0.5	< 2	0.36	< 0.5	377	72	>10000	3.01	< 10	< 1	0.52	90	0.07	585
20324	208 238	0.37	0.95	< 0.2	15	990	< 0.5	< 2	4.70	< 0.5	257	13	4400	2.45	< 10	< 1	0.73	60	0.32	1200
20325	208 238	0.04	0.76	< 0.2	30	560	< 0.5	< 2	4.99	< 0.5	31	20	547	2.79	< 10	1	0.56	30	0.41	1075
20326	208 238	0.05	0.82	< 0.2	15	1050	< 0.5	< 2	2.86	< 0.5	70	30	659	4.44	< 10	< 1	0.70	60	0.20	1285
20327	208 238	0.05	0.77	< 0.2	35	4240	< 0.5	< 2	4.53	< 0.5	69	26	637	4.08	< 10	2	0.63	50	0.16	1375
20336	208 238	< 0.01	0.65	< 0.2	10	340	< 0.5	4	5.24	< 0.5	14	38	49	2.38	< 10	< 1	0.60	< 10	1.08	1015
20337	208 238	< 0.01	0.50	< 0.2	< 5	300	< 0.5	< 2	3.65	< 0.5	11	70	48	2.44	< 10	< 1	0.42	10	0.32	625
20338	208 238	< 0.01	0.43	< 0.2	10	330	< 0.5	< 2	7.16	< 0.5	24	26	61	2.61	< 10	< 1	0.41	< 10	1.63	1385
20339	208 238	0.30	0.50	0.6	60	1410	< 0.5	6	3.86	< 0.5	129	32	3290	3.16	< 10	< 1	0.47	40	1.26	1150
20340	208 238	< 0.01	0.83	0.8	35	540	< 0.5	< 2	1.80	< 0.5	50	19	135	3.12	< 10	1	0.73	80	0.15	700
20341	208 238	< 0.01	0.65	< 0.2	10	350	< 0.5	< 2	4.06	< 0.5	10	12	57	3.15	< 10	< 1	0.50	50	0.16	895
20342	208 238	< 0.01	0.66	< 0.2	45	370	< 0.5	< 2	4.26	< 0.5	10	14	23	4.00	< 10	< 1	0.51	40	0.16	940
20350	208 238	< 0.01	0.59	< 0.2	< 5	200	< 0.5	2	1.99	< 0.5	14	34	7	1.78	< 10	< 1	0.56	30	0.56	405
20351	208 238	< 0.01	0.47	< 0.2	25	690	< 0.5	< 2	5.97	< 0.5	10	25	3	1.91	< 10	< 1	0.42	< 10	2.18	1250
20352	208 238	0.12	0.39	< 0.2	15	320	< 0.5	< 2	4.41	< 0.5	38	25	1295	2.02	< 10	< 1	0.40	10	0.69	940
20353	208 238	0.05	0.45	< 0.2	10	390	< 0.5	< 2	4.07	< 0.5	33	8	534	2.53	< 10	< 1	0.42	40	0.19	820
20354	208 238	< 0.01	0.42	< 0.2	15	380	< 0.5	< 2	4.92	< 0.5	8	3	46	2.44	< 10	1	0.38	30	0.17	900
20355	208 238	< 0.01	0.35	< 0.2	< 5	300	< 0.5	< 2	4.28	< 0.5	9	5	69	2.22	< 10	< 1	0.32	40	0.16	790
20356	208 238	< 0.01	0.48	< 0.2	20	280	< 0.5	< 2	2.76	< 0.5	18	4	73	4.35	< 10	< 1	0.43	60	0.12	720
20364	208 238	0.03	0.45	< 0.2	30	1010	< 0.5	< 2	6.22	< 0.5	91	42	365	2.46	< 10	< 1	0.42	< 10	0.30	600
20365	208 238	1.05	0.42	3.8	80	2520	< 0.5	< 2	2.99	< 0.5	563	65	>10000	3.36	< 10	1	0.35	40	0.08	610
20366	208 238	0.36	0.42	2.4	100	2540	< 0.5	2	2.19	< 0.5	1605	101	4090	2.34	< 10	< 1	0.33	50	0.07	490
20367	208 238	0.04	0.63	0.2	5	970	< 0.5	< 2	3.39	< 0.5	116	24	451	2.83	< 10	< 1	0.58	90	0.11	660
20368	208 238	0.02	0.60	< 0.2	30	690	< 0.5	< 2	4.28	< 0.5	36	18	240	3.32	< 10	2	0.54	40	0.11	760
20369	208 238	0.04	0.60	< 0.2	30	590	< 0.5	< 2	4.69	< 0.5	84	14	525	3.60	< 10	< 1	0.51	40	0.13	915
20371	208 238	< 0.01	0.36	< 0.2	25	380	< 0.5	< 2	7.91	< 0.5	19	22	55	1.51	< 10	< 1	0.36	< 10	1.70	1400
20372	208 238	< 0.01	0.47	< 0.2	25	320	< 0.5	< 2	1.60	< 0.5	71	21	76	1.40	< 10	< 1	0.47	50	0.10	210
20373	208 238	0.04	0.52	< 0.2	60	1040	< 0.5	< 2	8.01	< 0.5	184	63	443	3.26	< 10	< 1	0.43	< 10	0.17	1370
20374	208 238	0.25	0.41	0.6	65	2730	< 0.5	< 2	3.31	< 0.5	307	99	3040	2.07	< 10	< 1	0.37	50	0.09	785
20375	208 238	0.16	0.46	0.6	35	770	< 0.5	< 2	3.17	< 0.5	286	79	1725	2.07	< 10	< 1	0.41	60	0.10	750
20376	208 238	0.17	0.34	0.2	10	620	< 0.5	< 2	4.61	< 0.5	212	73	1800	2.00	< 10	< 1	0.30	40	0.09	640
20377	208 238	0.79	0.46	3.6	30	510	< 0.5	4	0.60	< 0.5	273	113	8760	1.89	< 10	< 1	0.38	60	0.05	250
20378	208 238	0.58	0.43	2.4	15	420	< 0.5	< 2	1.75	< 0.5	614	120	6430	2.94	< 10	< 1	0.31	40	0.07	920
20379	208 238	0.07	0.65	< 0.2	20	1700	< 0.5	< 2	4.42	< 0.5	164	15	842	2.30	< 10	1	0.57	70	0.12	490

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: [redacted]ECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1375

Comments: ATTN: FRED IMLEY CC: BRIAN YAMAMURA

Page No. : 1-B
Tot. Pa[redacted]2
Date : 11-OCT-89
Invoice # : I-8926570
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8926570

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
20317	208	238	< 1	0.01	4	500	16	< 5	3	15	0.02	< 10	< 10	16	< 10	16
20318	208	238	< 1	0.01	6	490	4	< 5	7	41	< 0.01	< 10	< 10	10	< 10	10
20319	208	238	1	0.01	32	850	8	< 5	5	20	< 0.01	< 10	< 10	12	< 10	12
20320	208	238	< 1	0.01	76	900	8	< 5	4	31	< 0.01	< 10	< 10	6	< 10	8
20321	208	238	2	0.01	82	1140	12	< 5	4	26	< 0.01	< 10	< 10	10	< 10	36
20322	208	238	7	< 0.01	63	360	10	< 5	3	13	< 0.01	< 10	< 10	4	30	76
20323	208	238	9	< 0.01	122	1020	12	< 5	6	12	< 0.01	< 10	< 10	2	< 10	34
20324	208	238	< 1	0.01	81	1500	4	< 5	12	19	< 0.01	< 10	< 10	< 1	< 10	20
20325	208	238	< 1	0.01	20	1360	< 2	< 5	9	20	< 0.01	< 10	< 10	< 1	< 10	12
20326	208	238	< 1	0.01	23	1380	< 2	< 5	9	17	< 0.01	< 10	< 10	< 1	< 10	20
20327	208	238	< 1	0.01	17	1450	4	< 5	10	75	< 0.01	< 10	< 10	< 1	< 10	18
20336	208	238	< 1	0.01	4	590	2	< 5	4	29	0.01	< 10	< 10	9	< 10	6
20337	208	238	3	< 0.01	2	540	< 2	< 5	3	17	0.01	< 10	< 10	11	< 10	6
20338	208	238	5	0.01	5	620	2	< 5	7	28	< 0.01	< 10	< 10	6	< 10	8
20339	208	238	6	0.01	18	780	< 2	5	5	39	< 0.01	< 10	< 10	3	< 10	14
20340	208	238	2	0.01	7	1440	4	< 5	7	20	< 0.01	< 10	< 10	< 1	< 10	10
20341	208	238	< 1	0.01	1	1320	2	< 5	9	23	0.02	< 10	< 10	< 1	< 10	6
20342	208	238	< 1	0.01	2	1230	4	5	9	21	0.03	< 10	< 10	< 1	< 10	8
20350	208	238	< 1	< 0.01	3	690	2	< 5	2	14	< 0.01	< 10	< 10	9	< 10	4
20351	208	238	< 1	< 0.01	3	580	< 2	< 5	4	61	< 0.01	< 10	< 10	6	< 10	4
20352	208	238	< 1	< 0.01	9	780	4	< 5	5	21	< 0.01	< 10	< 10	3	< 10	10
20353	208	238	< 1	0.01	7	1290	4	5	8	22	< 0.01	< 10	< 10	< 1	< 10	8
20354	208	238	< 1	0.01	2	1310	4	5	8	19	< 0.01	< 10	< 10	< 1	< 10	6
20355	208	238	< 1	< 0.01	2	1320	2	< 5	7	18	< 0.01	< 10	< 10	< 1	< 10	6
20356	208	238	< 1	< 0.01	3	1330	6	< 5	6	14	< 0.01	< 10	< 10	< 1	< 10	14
20364	208	238	6	< 0.01	17	1040	10	< 5	6	43	< 0.01	< 10	< 10	13	< 10	8
20365	208	238	6	< 0.01	70	790	10	5	5	60	< 0.01	< 10	< 10	14	< 10	34
20366	208	238	4	< 0.01	111	420	16	< 5	4	48	< 0.01	< 10	< 10	9	< 10	14
20367	208	238	4	< 0.01	20	1220	2	< 5	7	23	< 0.01	< 10	< 10	< 1	< 10	10
20368	208	238	4	< 0.01	14	1350	6	5	8	24	< 0.01	< 10	< 10	< 1	< 10	12
20369	208	238	3	0.01	22	1380	< 2	< 5	9	23	< 0.01	< 10	< 10	< 1	< 10	14
20371	208	238	< 1	0.01	4	600	2	< 5	5	32	< 0.01	< 10	< 10	3	< 10	6
20372	208	238	2	< 0.01	8	1090	4	< 5	2	15	< 0.01	< 10	< 10	4	< 10	4
20373	208	238	4	< 0.01	56	1440	14	5	10	47	< 0.01	< 10	< 10	23	< 10	8
20374	208	238	1	< 0.01	34	570	10	< 5	6	19	< 0.01	< 10	< 10	14	< 10	10
20375	208	238	1	< 0.01	36	940	8	< 5	6	18	< 0.01	< 10	< 10	17	< 10	10
20376	208	238	5	< 0.01	21	480	8	< 5	6	25	< 0.01	< 10	< 10	16	< 10	8
20377	208	238	3	< 0.01	22	400	4	< 5	3	8	< 0.01	< 10	< 10	8	< 10	18
20378	208	238	4	< 0.01	34	380	2	< 5	4	10	< 0.01	< 10	< 10	9	< 10	24
20379	208	238	4	< 0.01	16	1430	2	< 5	7	31	< 0.01	< 10	< 10	< 1	< 10	8

CERTIFICATION : [signature]

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

To: TECK EXPLORATION LTD.
[redacted]60 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1
Project : 1175
Comments: ATTN: PHILIP MALBY CC: BRIAN YAMAMURA

CERTIFICATE OF ANALYSIS A8926570

SAMPLE DESCRIPTION	PREP CODE		Cu %	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
20380	208	238	0.02	0.50	< 0.2	25	840	< 0.5	< 2	6.36	< 0.5	48	24	317	2.94	< 10	< 1	0.43	< 10	0.14	445
20381	208	238	0.02	0.39	< 0.2	5	380	< 0.5	< 2	5.90	< 0.5	38	72	226	1.79	< 10	< 1	0.30	< 10	0.15	350
20404	208	238	0.48	0.54	1.2	30	2030	< 0.5	< 2	0.68	< 0.5	680	37	5010	4.19	< 10	< 1	0.44	60	0.08	685
20405	208	238	2.44	0.56	9.4	95	2760	< 0.5	< 2	0.42	< 0.5	1820	84	>10000	3.32	< 10	< 1	0.44	80	0.06	200
20406	208	238	1.58	0.57	5.0	95	3340	< 0.5	< 2	0.38	< 0.5	929	118	>10000	3.44	< 10	< 1	0.41	50	0.06	295
20407	208	238	1.01	0.47	2.4	55	2870	< 0.5	< 2	0.42	< 0.5	1310	42	>10000	3.35	< 10	< 1	0.40	70	0.06	590
20408	208	238	1.74	0.50	6.4	60	2690	< 0.5	< 2	0.29	< 0.5	1680	65	>10000	2.97	< 10	< 1	0.40	70	0.05	340
20409	208	238	2.22	0.76	3.4	40	4300	< 0.5	< 2	0.79	< 0.5	1440	48	>10000	4.10	< 10	< 1	0.59	80	0.10	885
20415	208	238	2.15	0.91	2.0	50	1410	< 0.5	< 2	3.56	< 0.5	707	74	>10000	2.43	< 10	< 1	0.50	30	1.12	1155
20416	208	238	4.22	0.10	< 0.2	5	1820	< 0.5	< 2	>15.00	< 0.5	< 1	9	1485	1.69	< 10	< 1	0.06	< 10	10.40	1420
20417	208	238	0.44	0.78	1.0	10	1220	< 0.5	< 2	1.94	< 0.5	360	39	9260	2.27	< 10	< 1	0.65	80	0.14	675
20418	208	238	2.19	0.47	9.0	115	680	< 0.5	< 2	0.92	< 0.5	138	120	4790	4.04	< 10	< 1	0.28	50	0.53	100
20419	208	238	1.69	0.71	2.6	50	1030	< 0.5	< 2	0.46	< 0.5	1735	28	>10000	4.37	< 10	< 1	0.50	60	0.12	1360
20420	208	238	0.87	0.71	1.8	< 5	1100	< 0.5	< 2	1.05	< 0.5	677	48	>10000	2.93	< 10	< 1	0.51	60	0.10	915
20421	208	238	0.13	0.55	< 0.2	20	410	< 0.5	< 2	4.06	< 0.5	36	30	269	4.18	< 10	1	0.44	40	0.14	1110
20422	208	238	< 0.01	0.64	< 0.2	50	1140	< 0.5	< 2	4.19	< 0.5	11	36	115	2.25	< 10	< 1	0.37	< 10	1.80	490
20423	208	238	0.14	0.65	10.8	90	1460	< 0.5	< 2	0.21	< 0.5	731	83	>10000	4.10	< 10	< 1	0.35	60	0.07	625
20424	208	238	0.16	0.36	1.4	15	320	< 0.5	< 2	0.70	< 0.5	137	147	1855	2.30	< 10	< 1	0.30	10	0.24	480

CERTIFICATION : B. Caughlin

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

To: TECK EXPLORATION LTD.
[redacted]60 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1
Project : 1175
Comments: ATTN: FRED IMLEY CC: BRIAN YAMAMURA

Date [redacted]11-OCT-89
Invoice # :I-8926570
P.O. # :NONE

CERTIFICATE OF ANALYSIS A8926570

SAMPLE DESCRIPTION	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
20380	208	238	5	< 0.01	9	900	4	< 5	7	33	< 0.01	< 10	< 10	< 1	< 10	10
20381	208	238	7	< 0.01	6	360	4	< 5	2	27	< 0.01	< 10	< 10	7	< 10	6
20404	208	238	4	< 0.01	95	1090	6	< 5	7	29	< 0.01	< 10	< 10	< 1	< 10	26
20405	208	238	4	< 0.01	210	770	10	< 5	3	57	< 0.01	< 10	< 10	< 1	< 10	54
20406	208	238	13	< 0.01	76	630	8	< 5	3	16	< 0.01	< 10	< 10	< 1	< 10	38
20407	208	238	2	< 0.01	85	1190	4	< 5	3	19	< 0.01	< 10	< 10	< 1	< 10	32
20408	208	238	4	< 0.01	138	1020	6	< 5	4	19	< 0.01	< 10	< 10	< 1	< 10	44
20409	208	238	5	< 0.01	143	1260	2	< 5	8	23	< 0.01	< 10	< 10	< 1	< 10	64
20415	208	238	< 1	0.01	107	1050	6	< 5	7	27	< 0.01	< 10	< 10	12	10	54
20416	208	238	< 1	0.01	5	< 10	< 2	< 5	1	94	< 0.01	< 10	< 10	2	< 10	8
20417	208	238	< 1	0.01	51	1420	2	< 5	6	14	< 0.01	< 10	< 10	< 1	< 10	26
20418	208	238	7	< 0.01	44	380	8	5	1	10	< 0.01	< 10	< 10	< 1	< 10	14
20419	208	238	4	< 0.01	273	1270	4	< 5	9	11	< 0.01	< 10	< 10	< 1	< 10	66
20420	208	238	< 1	< 0.01	113	1360	< 2	< 5	7	13	< 0.01	< 10	< 10	< 1	< 10	40
20421	208	238	< 1	< 0.01	12	1280	< 2	< 5	9	9	< 0.01	< 10	< 10	< 1	< 10	16
20422	208	238	< 1	0.01	9	650	< 2	5	3	39	0.01	< 10	< 10	9	< 10	12
20423	208	238	17	< 0.01	117	810	6	< 5	5	18	< 0.01	< 10	< 10	7	10	88
20424	208	238	1	< 0.01	20	250	28	< 5	1	9	< 0.01	< 10	< 10	< 1	< 10	8

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1367
Comments: ATTN: FRED DALEY

Invoice Date: 10-OCT-89
Invoice No. : I-8926571
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926571

SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm
24065	205	238	0.45	< 0.2	5	90	< 0.5	< 2	0.44	< 0.5	2	83	3	5.42	10	< 1	0.28	50	0.06	515	1
24066	205	238	0.47	0.2	55	110	< 0.5	< 2	0.39	< 0.5	2	53	7	5.97	10	< 1	0.28	40	0.06	860	< 1
24066A	205	238	0.48	< 0.2	65	200	< 0.5	< 2	0.29	< 0.5	4	67	2	6.84	10	< 1	0.28	50	0.06	950	2
24067	205	238	0.50	< 0.2	40	220	< 0.5	< 2	0.48	< 0.5	1	45	< 1	5.81	10	< 1	0.32	40	0.08	1330	2
24068	205	238	0.56	0.2	40	200	< 0.5	< 2	0.67	< 0.5	< 1	78	< 1	6.62	20	< 1	0.34	50	0.08	1175	2
24069	205	238	0.79	0.6	25	160	< 0.5	< 2	0.34	< 0.5	1	80	2	6.12	20	< 1	0.44	80	0.11	810	2
24070	205	238	0.69	0.4	55	160	< 0.5	< 2	0.42	< 0.5	1	30	1	8.98	30	< 1	0.47	70	0.08	850	< 1
24071	205	238	0.66	0.6	65	210	< 0.5	< 2	0.36	< 0.5	3	40	< 1	6.13	20	< 1	0.48	70	0.09	905	3
24072	205	238	0.46	0.2	30	80	< 0.5	< 2	0.24	< 0.5	5	68	6	5.36	10	< 1	0.25	50	0.05	370	1
24073	205	238	0.78	< 0.2	55	210	< 0.5	< 2	0.33	< 0.5	< 1	56	53	7.99	10	< 1	0.48	60	0.14	1565	< 1
24074	205	238	0.62	< 0.2	60	210	< 0.5	< 2	0.61	< 0.5	< 1	38	19	6.35	10	1	0.34	70	0.15	1435	6
24075	205	238	0.89	< 0.2	15	230	< 0.5	< 2	0.98	< 0.5	< 1	59	17	6.57	20	< 1	0.53	70	0.23	1300	4
24076	205	238	0.76	0.4	45	220	< 0.5	< 2	0.75	< 0.5	2	32	10	6.81	20	< 1	0.44	80	0.18	1170	2
24077	205	238	0.78	< 0.2	45	410	< 0.5	< 2	1.52	< 0.5	6	28	7	5.58	20	1	0.49	60	0.14	1220	3
24078	205	238	0.55	0.2	15	280	< 0.5	< 2	0.37	< 0.5	31	54	355	3.65	10	< 1	0.43	70	0.08	1420	1
24079	205	238	0.24	0.8	5	1320	< 0.5	< 2	0.45	< 0.5	38	28	700	1.72	10	< 1	0.20	50	0.03	1005	2
24080	205	238	0.56	0.4	20	300	< 0.5	< 2	0.83	< 0.5	20	39	262	2.85	10	1	0.42	60	0.07	1040	< 1
24081	205	238	0.54	0.2	55	230	< 0.5	< 2	0.26	< 0.5	30	29	335	5.86	10	1	0.39	60	0.11	1020	1
24082	205	238	0.58	< 0.2	45	180	< 0.5	< 2	0.23	< 0.5	15	28	15	7.76	10	< 1	0.40	70	0.18	1030	< 1
24083	205	238	0.45	0.2	25	130	< 0.5	< 2	0.25	< 0.5	7	18	29	6.50	10	< 1	0.26	60	0.14	675	< 1
24084	205	238	0.53	< 0.2	55	160	< 0.5	< 2	0.25	< 0.5	4	26	21	7.09	10	< 1	0.34	60	0.14	620	< 1
24085	205	238	0.65	< 0.2	15	190	< 0.5	< 2	0.24	< 0.5	5	45	38	7.34	20	< 1	0.45	100	0.15	655	< 1
24086	205	238	0.56	< 0.2	30	140	< 0.5	< 2	0.25	< 0.5	4	38	19	7.56	10	< 1	0.39	70	0.17	655	< 1
24087	205	238	0.69	< 0.2	35	190	< 0.5	< 2	2.21	< 0.5	5	26	34	6.55	10	< 1	0.49	60	0.24	625	< 1
24088	205	238	0.57	< 0.2	55	150	< 0.5	< 2	1.87	< 0.5	8	37	4	7.50	10	< 1	0.42	60	0.20	570	< 1
24089	205	238	0.39	< 0.2	30	100	< 0.5	< 2	0.28	< 0.5	12	27	8	6.51	10	< 1	0.27	60	0.08	525	< 1
24090	205	238	0.56	< 0.2	15	180	< 0.5	< 2	1.26	< 0.5	3	55	12	4.58	10	1	0.44	40	0.08	300	< 1
24091	205	238	0.46	< 0.2	30	190	< 0.5	< 2	2.42	< 0.5	5	53	16	2.90	10	< 1	0.43	50	0.40	490	< 1
24092	205	238	0.80	0.6	15	240	< 0.5	< 2	0.49	< 0.5	14	59	28	3.08	20	1	0.62	70	0.09	490	< 1

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1367
Comments: ATTN: FRED DALEY

Page Number : 1-B
Total Pages : 1
Invoice Date: 10-OCT-89
Invoice No. : I-8926571
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926571

SAMPLE DESCRIPTION	PREP CODE		Ba %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
24065	205	238	0.04	2	1030	< 2	< 5	4	10	0.05	30	< 10	< 1	< 10	18
24066	205	238	0.03	2	1070	4	< 5	7	8	0.04	20	< 10	< 1	< 10	24
24066A	205	238	0.03	1	1000	10	< 5	7	9	0.05	10	< 10	< 1	< 10	28
24067	205	238	0.03	1	1090	8	5	7	9	0.02	10	< 10	< 1	< 10	40
24068	205	238	0.03	1	1030	4	< 5	8	9	0.05	30	< 10	< 1	< 10	40
24069	205	238	0.05	2	1150	6	< 5	6	10	0.03	20	< 10	< 1	< 10	38
24070	205	238	0.02	2	1380	< 2	5	6	13	0.03	40	< 10	< 1	< 10	46
24071	205	238	0.01	4	1280	4	< 5	5	11	0.02	30	< 10	< 1	< 10	48
24072	205	238	0.05	5	970	6	5	4	8	0.03	20	< 10	< 1	< 10	14
24073	205	238	0.05	2	1110	6	5	7	10	< 0.01	30	< 10	< 1	< 10	90
24074	205	238	0.03	2	1190	6	< 5	8	10	< 0.01	20	< 10	< 1	< 10	84
24075	205	238	0.04	3	1250	4	5	8	10	< 0.01	30	< 10	< 1	< 10	96
24076	205	238	0.02	2	1220	< 2	< 5	8	9	< 0.01	30	< 10	< 1	< 10	90
24077	205	238	0.01	2	1140	< 2	< 5	7	9	< 0.01	20	< 10	< 1	< 10	64
24078	205	238	< 0.01	8	1380	8	< 5	6	9	< 0.01	20	< 10	< 1	< 10	40
24079	205	238	< 0.01	9	1410	2	< 5	5	38	< 0.01	< 10	< 10	< 1	< 10	16
24080	205	238	0.01	5	1250	8	< 5	7	9	< 0.01	20	< 10	< 1	< 10	24
24081	205	238	< 0.01	10	1160	2	5	6	7	< 0.01	10	< 10	< 1	< 10	62
24082	205	238	< 0.01	5	1120	< 2	5	6	7	< 0.01	30	< 10	< 1	< 10	90
24083	205	238	< 0.01	1	1130	< 2	< 5	6	6	< 0.01	20	< 10	< 1	< 10	80
24084	205	238	< 0.01	3	1130	< 2	< 5	5	5	< 0.01	20	< 10	< 1	< 10	78
24085	205	238	< 0.01	2	1260	< 2	5	6	6	< 0.01	30	< 10	< 1	< 10	74
24086	205	238	< 0.01	3	1210	2	< 5	6	6	< 0.01	40	< 10	< 1	< 10	82
24087	205	238	< 0.01	1	1170	4	< 5	6	10	< 0.01	30	< 10	< 1	< 10	72
24088	205	238	< 0.01	3	1170	< 2	< 5	6	10	0.01	30	< 10	< 1	< 10	58
24089	205	238	< 0.01	4	1110	< 2	5	5	6	0.02	30	< 10	< 1	< 10	38
24090	205	238	< 0.01	2	1000	< 2	5	4	8	0.04	10	< 10	< 1	< 10	14
24091	205	238	< 0.01	1	1040	< 2	< 5	5	36	0.01	10	< 10	< 1	< 10	12
24092	205	238	< 0.01	2	1240	2	< 5	5	9	0.01	20	< 10	< 1	< 10	14

CERTIFICATION : B Campbell

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.
960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1367
Comments: ATTN: FRED DALEY

Page Num[illegible] 1-A
Total Page[illegible] 1
Invoice Date: 10-OCT-89
Invoice No. : I-8926572
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926572

SAMPLE DESCRIPTION	PREP CODE		Au oz/T	Cu %	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %
23801	208	238	< 0.002	0.70	0.51	3.8	40	170	< 0.5	8	0.48	< 0.5	161	109	6850	2.57	< 10	< 1	0.41	30	0.21
24093	208	238	< 0.002	0.26	0.72	2.8	20	1460	< 0.5	< 2	0.42	< 0.5	35	42	2640	2.17	< 10	< 1	0.58	70	0.07
24094	208	238	< 0.002	0.82	0.54	5.0	20	4070	< 0.5	6	0.21	< 0.5	44	87	8010	2.07	< 10	< 1	0.41	30	0.05
24095	208	238	< 0.002	0.01	0.62	< 0.2	20	1210	< 0.5	< 2	3.73	< 0.5	16	164	269	2.77	< 10	< 1	0.47	20	0.13
24096	208	238	< 0.002	0.79	0.47	6.2	30	2580	< 0.5	< 2	0.17	< 0.5	52	206	7920	3.38	< 10	< 1	0.27	20	0.08
24097	208	238	< 0.002	0.24	0.26	0.6	5	3200	< 0.5	6	0.86	< 0.5	4	273	2540	0.88	< 10	< 1	0.16	10	0.36
24098	208	238	< 0.002	0.19	0.36	2.0	30	770	< 0.5	< 2	1.78	< 0.5	314	53	1875	3.01	< 10	< 1	0.36	60	0.54
24099	208	238	< 0.002	< 0.01	0.75	0.4	30	350	< 0.5	< 2	2.25	< 0.5	32	35	91	3.28	< 10	< 1	0.62	80	0.86
24100	208	238	< 0.002	0.47	0.52	4.8	50	320	< 0.5	2	1.66	< 0.5	148	128	4900	2.95	< 10	< 1	0.39	40	0.72

CERTIFICATION : B. Caughlin

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

TECK EXPLORATION LTD.

960 - 175 2ND AVE.
KAMLOOPS, BC
V2C 5W1

Project : 1367
Comments: ATTN: FRED DALEY

Page Num 1-B
Total Page 1
Invoice Date: 10-OCT-89
Invoice No. : I-8926572
P.O. Number : NONE

CERTIFICATE OF ANALYSIS A8926572

SAMPLE DESCRIPTION	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
23801	208	238	450	32	< 0.01	30	260	78	< 5	2	6	< 0.01	< 10	< 10	1	< 10	20
24093	208	238	350	< 1	< 0.01	7	1270	4	< 5	4	37	< 0.01	< 10	< 10	< 1	< 10	16
24094	208	238	340	22	< 0.01	9	980	< 2	< 5	3	200	< 0.01	< 10	< 10	< 1	< 10	26
24095	208	238	1145	< 1	< 0.01	3	740	< 2	< 5	6	28	< 0.01	< 10	< 10	< 1	< 10	18
24096	208	238	475	15	0.01	16	470	2	5	3	279	< 0.01	< 10	< 10	< 1	< 10	32
24097	208	238	185	< 1	0.01	4	120	< 2	5	1	163	< 0.01	< 10	< 10	2	< 10	8
24098	208	238	415	4	0.01	420	1100	24	< 5	8	41	< 0.01	< 10	< 10	9	< 10	14
24099	208	238	550	< 1	0.01	55	1270	12	< 5	7	35	< 0.01	< 10	< 10	6	< 10	10
24100	208	238	625	4	0.01	52	250	24	< 5	2	18	< 0.01	< 10	< 10	< 1	< 10	14

CERTIFICATION : B. Caughlin

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

SEPTEMBER 13, 1989

CERTIFICATE OF ANALYSIS ETK 89-210

TECK EXPLORATIONS LTD.
960, 175 SECOND AVENUE
KAMLOOPS, B.C.
V2C 5W1

ATTENTION: FRED DALEY

SAMPLE IDENTIFICATION: 11 ROCK samples received September 11, 198
PROJECT: 1367

ET#	Description	CU %
710 - 1	24046	--
710 - 2	24047	--
710 - 3	24048	--
710 - 4	24057	.20
710 - 5	24058	.07
710 - 6	24059	.05
710 - 7	24060	.04
710 - 8	24061	.33
710 - 9	24062	.05
710 - 10	24063	3.51
710 - 11	24064	.47

NOTE: < = less than

ECO-TECH LABORATORIES LTD.
DOUG HOWARD
B.C. Certified Assayer

SCB9/TECK6

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

TECK EXPLORATIONS LTD. - ETK89-710A

560 - 175 SECOND AVENUE
KAMLOOPS, B.C.
V2C 5W1
ATTN: FRED BAILEY

SEPTEMBER 20, 1989

VALUES IN PPM UNLESS OTHERWISE REPORTED


PROJECT:1367
11 ROCK SAMPLES RECEIVED SEPT.11,1989

ETK#	DESCRIPTIONS	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
710 A- 4	24057	6.6	.12	30	<2	65	10	5.73	1	25	62	1677	2.57	.07	10	7.91	2629	5	.05	10	1100	70	30	<20	65	<.01	<10	14	<10	16	110
710 A- 5	24058	1.2	.24	5	<2	25	<5	.20	<1	12	218	607	.69	.19	10	.09	101	14	.04	12	850	10	<5	<20	3	<.01	<10	7	<10	5	15
710 A- 6	24059	.6	.24	<5	<2	60	<5	1.27	<1	6	279	394	.84	.16	10	.53	333	20	.04	9	450	6	5	<20	5	<.01	<10	7	<10	3	13
710 A- 7	24060	.4	.07	<5	<2	160	5	5.30	<1	7	21	321	2.09	.04	10	10.65	2002	6	.05	4	210	16	5	<20	69	<.01	<10	9	<10	9	14
710 A- 8	24061	.8	.18	<5	<2	1000	<5	2.39	<1	5	199	2823	1.26	.11	10	2.39	587	29	.04	7	1500	10	10	<20	57	<.01	<10	6	<10	6	10
710 A- 9	24062	.2	.09	<5	<2	155	5	5.59	<1	7	17	407	1.55	.05	10	10.24	1960	4	.05	3	320	14	20	<20	67	<.01	<10	11	<10	9	11
710 A- 10	24063	1.8	.22	60	<2	720	<5	.22	<1	709	169	>10000	3.62	.12	30	.09	991	21	.04	94	>10000	8	20	<20	6	<.01	<10	8	10	6	46
710 A- 11	24064	4.2	.30	45	<2	75	<5	.30	<1	315	77	4195	2.54	.23	40	.07	108	9	.04	44	2020	18	5	<20	10	<.01	<10	5	<10	3	13

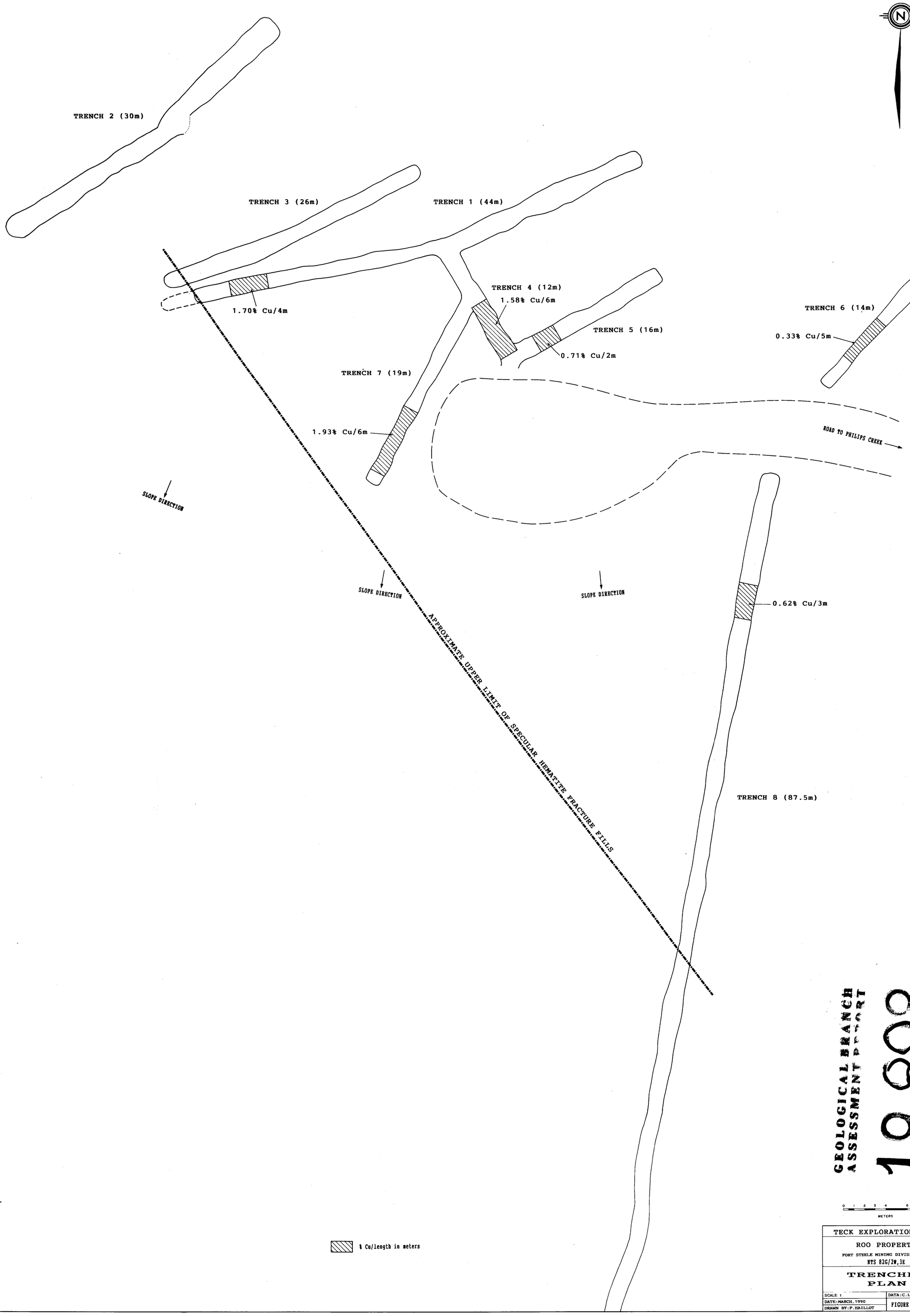
NOTE: < = LESS THAN

CC: GREG THOMPSON
FAX: TECK, KAMLOOPS
SCPS/TECKS

ECO-TECH LABORATORIES LTD.
DOUG HOWARD
B.C. CERTIFIED ASSAYER

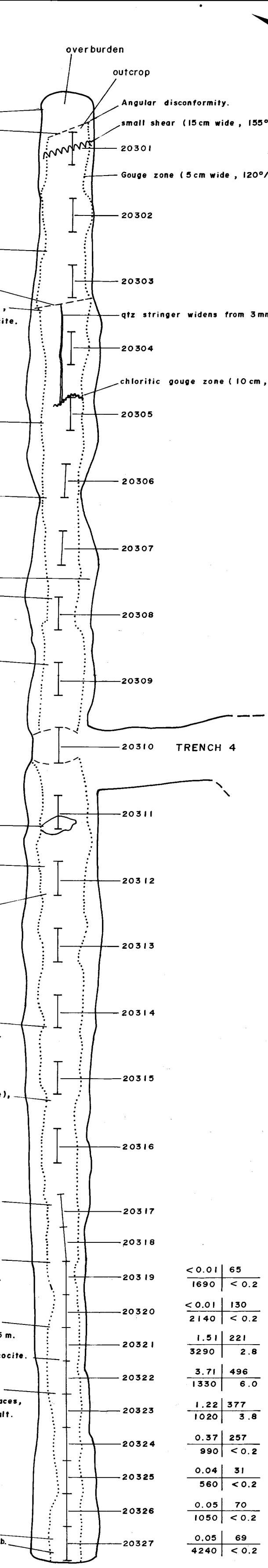


7846
ROO 1
3393(4)
ROO 2
3394(4)
ROO 3
3395(4)
6300
5000
5500
Creek
Phillipps
Blacktail C
SL 46
SL 45
SL 23
SL 32
SL 21
SST Sandstone
fsp Feldspar
qtz Quartz
q.v. Quartz vein
Outcrop
Talus
Trench
Shaft
Sample location
Road
R135 Rock sample
S24101 Assay sample
GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,898
0 50 100 200 300 400
METERS
TECK EXPLORATIONS LTD
ROO PROPERTY
FORT STEELE MINING DIVISION, B.C.
NTS 82G/2W,3E
GEOLOGY
SCALE-1:5000
DATE: MARCH, 1990
GEOLOGY BY: T.M.D., B.Y.
DRAWN BY: P. HAILLOT
FIGURE 5



GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,893

TECK EXPLORATIONS LTD	
ROO PROPERTY FORT STEELE MINING DIVISION, B.C. NTS 82G/2W,3E	
TRENCHES PLAN	
SCALE: 1	DATA: C.L., B.V.
DATE: MARCH, 1990	FIGURE 6
DRAWN BY: P. HAILLOT	



0.0 m

Dolomite stromatolite, Fe carb. alt., flat lying carb. coating.

Interbedded sediments: Siltstone/sandstone, dark grey, Fe carb. veinlet stockwork >1cm wide, 1-2% abundant, zones of hem. & Fe carb., qtz veinlets stockwork in breccia; unit grades to coarser & more feldspathic sandstone with weak red staining.

Gouge material on interface wall of dolomite & sandstone, 10-20 cm thick; dolomite horizon pinches out; gouge zone increases in width.

Facies change to coarser clastic sandstone with sericite alt., weak to medium Fe carb. alt.; possible finely diss. chalcocite. Grading down trench to finer & more Fe carb. alt. sandstone.

10.0 m

SW walls of trench with varying thickness of fault gouge material (10-25 cm thick), zones of weak to moderate staining on sediments

Massive sandstone with cherty carb. alt., weak to moderate red fragments, Fe carb. alt. matrix, carb. qtz flooding.
Locally banding.
Feldspar grains becoming ankeritized (grades to finer grained ankeritized matrix).

Narrow stromatolitic horizon.

Feldspathic sandstone with 1mm Fe carb. veinlets stockwork, weakly foliated, grading to siltstone.
Fe carb., Fe stained vein (2.5cm, 146°/65° SW) with trace to 1% specular hematite.

Fe carb. stockwork - >1cm wide grading to a breccia solution hosted in purple red sandstone. Matrix grades from light grey to dark grey silty sandstone, getting coarser down trench.

20.0 m

Fracture (080°/50° SW)

Purple/dark grey sandstone with Fe carb. veinlets (1cm, 1% abundance), 3m wide shear (150°/60° N), carb. coating on fracture surface.

Shear weakens down trench to 28m., stockwork disappears.

Thinly banded siltstone, alt., with bands of carb. & carb. coating on fracture planes; in some cases mud cracks visible. dark grey to purple grey.

30.0 m

Narrow band of coarser chloritized sandstone (10-15cm wide), phase change to qtz rich sandstone with pebbles ankeritized matrix.

Greywacke/sandstone - grading to qtz rich unit with ankeritized fragments (20% abundance), banding, qtz eye/qtz fragments in trace abundance at margins of coarse layer.

Well developed banding alternating with aphanitic layers, pale green qtz carb. alt. with coarser fraction of Fe carb. alt., weak qtz grain/eye development, pink/purple qtz eye present in trace abundance.
carb. coating (1-2mm thick) on weathered surfaces; aphanitic layer pinches out at 37.0 m; qtz feldspar fraction becoming coarser with more qtz rich, ankeritized, weak malachite at 37.5 m.

Malachite staining, weak to 2-4%, trace cpy, 2-3% chalcocite.

qtz increases in abundance from 38.0 m down trench, localized aphanitic layers; weak limonitic alt. locally on fracture surfaces, pervasive black coating, massive coarse grained pale green alt. in matrix, fracture (90°/50° N).

40.0 m

Some qtz fragments (less qtz).

Finer grained greywacke/sandstone, weak to moderate Fe carb. alt., ankerite coating on fracture surfaces.

45.0 m

<0.01	1690	1.51	3290	3.71	1330	1.22	1020	0.37	990	0.04	560	0.05	1050	0.05	4240					
65	<0.2	221	2.8	496	6.0	377	3.8	257	<0.2	31	<0.2	70	<0.2	69	<0.2					
<0.01	2140																			
130	<0.2																			

1.0m

ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,898

TECK EXPLORATIONS LTD

ROO PROPERTY

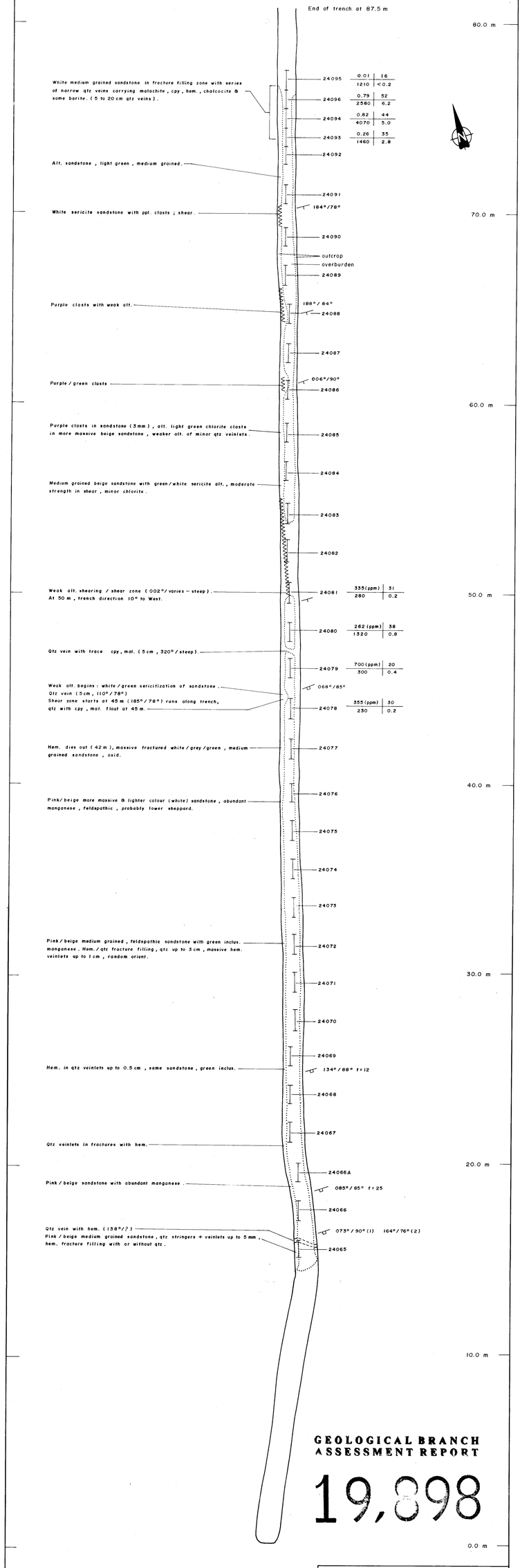
FORT STEELE MINING DIVISION B.C.

NTS 82G/2W,3E

GEOLOGY & GEOCHEMISTRY

TRENCH 1

SCALE - 1:100	DATE:MARCH,1990
GEOLOGY:C.L.,B.Y.	FIGURE 7
DRAWN BY:P.Haillot	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,898

1.0m

ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

TECK EXPLORATIONS LTD

ROO PROPERTY

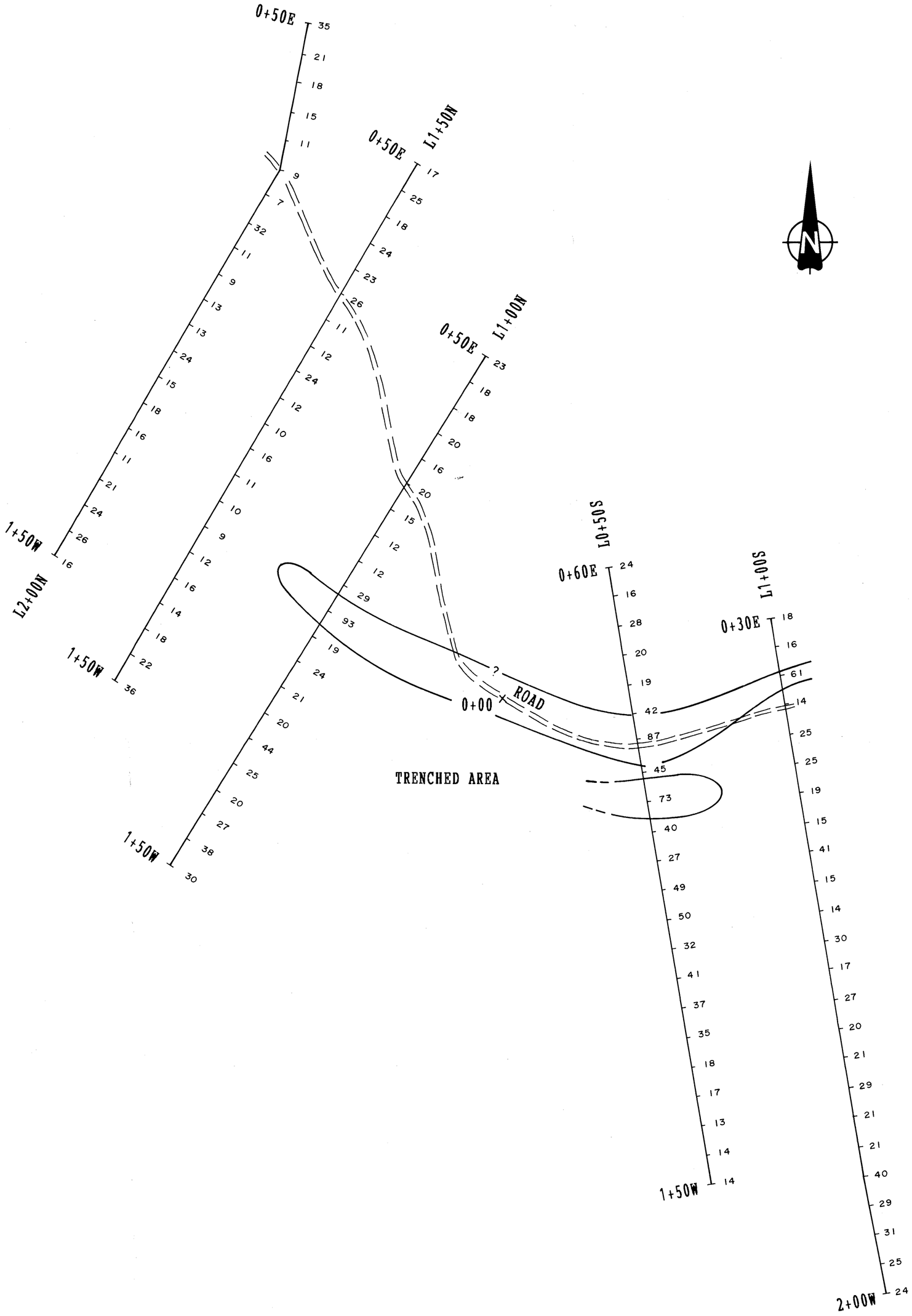
FORT STEELE MINING DIVISION B.C.

NTS 82G/2W,3E

GEOLOGY & GEOCHEMISTRY

TRENCH 8

SCALE - 1:100	DATE: MARCH, 1990
GEOLOGY: C.L., B.Y.	FIGURE 14
DRAWN BY: P. Haillot	



N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,898

0 5 10 20 30 40 60 80
METERS

Contour interval:›50 ppm Cu

TECK EXPLORATIONS LTD

ROO PROPERTY

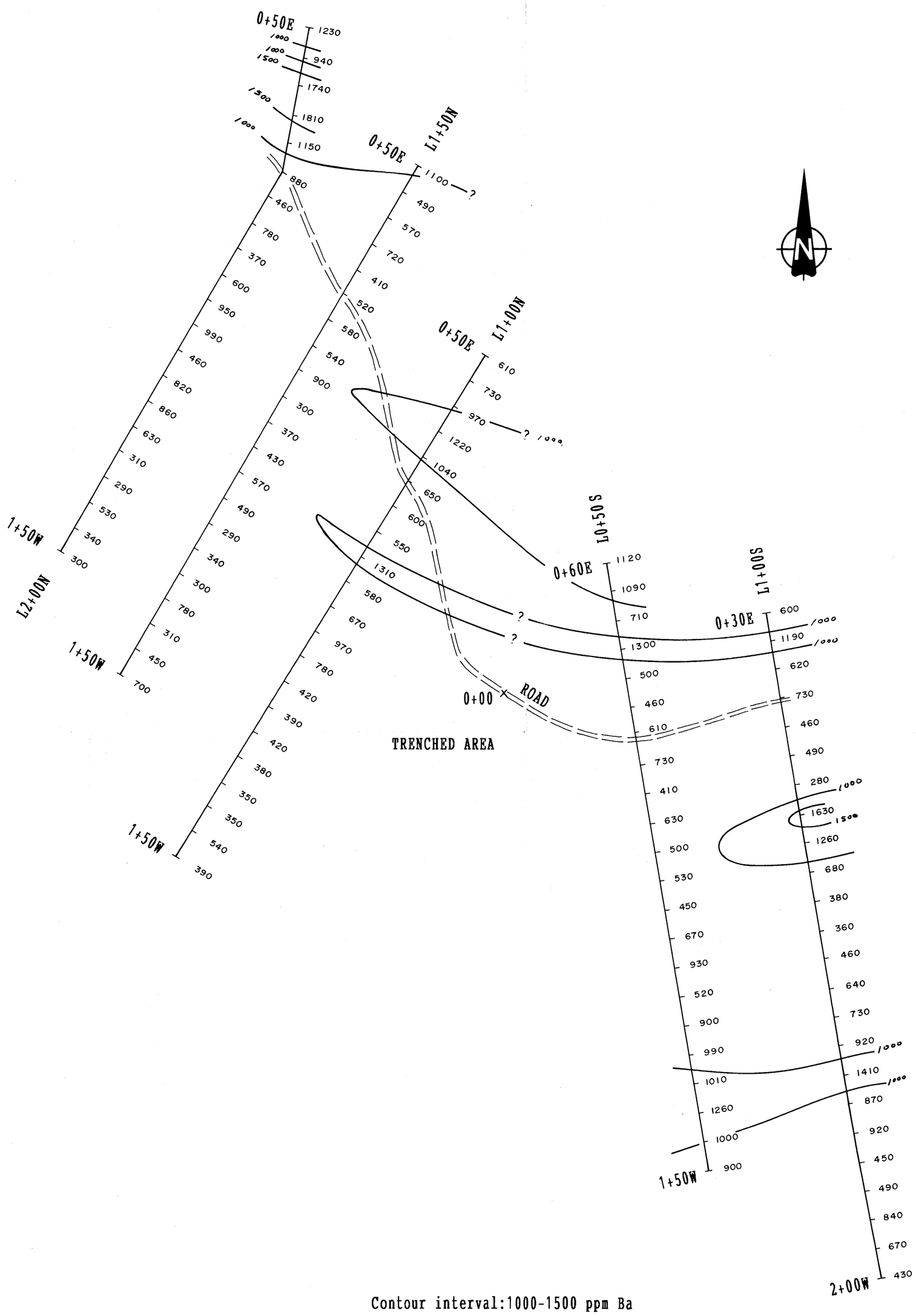
FORT STEELE MINING DIVISION, B.C.

NTS 82G/2W,3E

SOIL GEOCHEMISTRY

COPPER

SCALE - 1:1000	DATE:MARCH, 1990
DATA:C.L., B.Y.	FIGURE 15
DRAWN BY:P.HAILLOT	



Contour interval:1000-1500 ppm Ba

›1500 " "

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,898

0 5 10 20 30 40 60 80
METERS

TECK EXPLORATIONS LTD

ROO PROPERTY

FORT STEELE MINING DIVISION, B.C.

NTS 82G/2W,3E

SOIL GEOCHEMISTRY

BARIUM

SCALE - 1:1000	DATE:MARCH, 1990
DATA:C.L., B.Y.	FIGURE 16
DRAWN BY:P.HAILLOT	

0.0 m

Dolomite with narrow stromatolitic horizon.

Siltstone – dark grey to purple, graded S 020/50 N

Dolomite – Fe alt., well banded (5 mm bands), some carb. infilling, limonitic coating on fracture surface.

Dolomite – with fragments, weak to moderate sericite alt., pink & green aphanitic (1–3%), abundance varying sizes, abundance carb. coating.

irregular contact – sheared greywacke / sandstone, well foliated, sheared, 1 cm Fe carb. vein crosscut foliation, D 10 cm. long.

10.0 m

weakly foliated red sandstone, limonite on fracture surface, Fe carb. micro-stockworking 2–3% abundance. Feldspar xlls, well developed at contact & weakening down trench, carb. alt., stockworking increases in size. Some pebbles visible Tr. abundance

Purple / grey, dark grey sandstone, pervasive carb. coating

Sericite flakes in matrix, 5% abundance locally.

Fe carb. in veins & fracture surfaces, weak localized pisolitic texture.

Fe carb. alt. in fracture coating & variules 5% abundance Unit grades from red purple to dark grey.

Contact at 110°/38°N, So 110°/38°N

Thinly banded horizon, alternating Fe carb., hem. & sericitized aphanitic layers > 1 cm wide, weak limonite alt.

20.0 m

Coarse quartz–feldspathic horizon grading to less qtz rich. Fe carb. alt. weak to moderate interstithally qtz fraction lessens & unit becomes less coarse at this point, grades to med. coarse with Fe carb. / limonitic alt. on fractures & in matrix. Greywacke / sandstone interbedded, red, purple, dark grey/purple to bottom of trench.

Tr. % coarse fragments.

30.0 m

20328

20329

20330

20331

Trace malachite – localized coating in matrix & fracture surfaces.
S1 = 142°/20°SW

20332

20333

Minor hem. staining locally in veins (2 – 6 mm)

20334

20335

20336

20337

Tr. to 1% cpy, finely disseminated in matrix weak malachite locally.

20338

20339

20340

20341

20342

20343

20344

outcrop

overburden

Rubble

<0.01	14	
340	<0.2	
<0.01	11	
300	<0.2	
<0.01	24	
330	<0.2	
0.30	129	
1410	<0.2	
<0.01	50	
540	<0.2	
<0.01	10	
350	<0.2	
<0.01	10	
370	<0.2	

1.0m

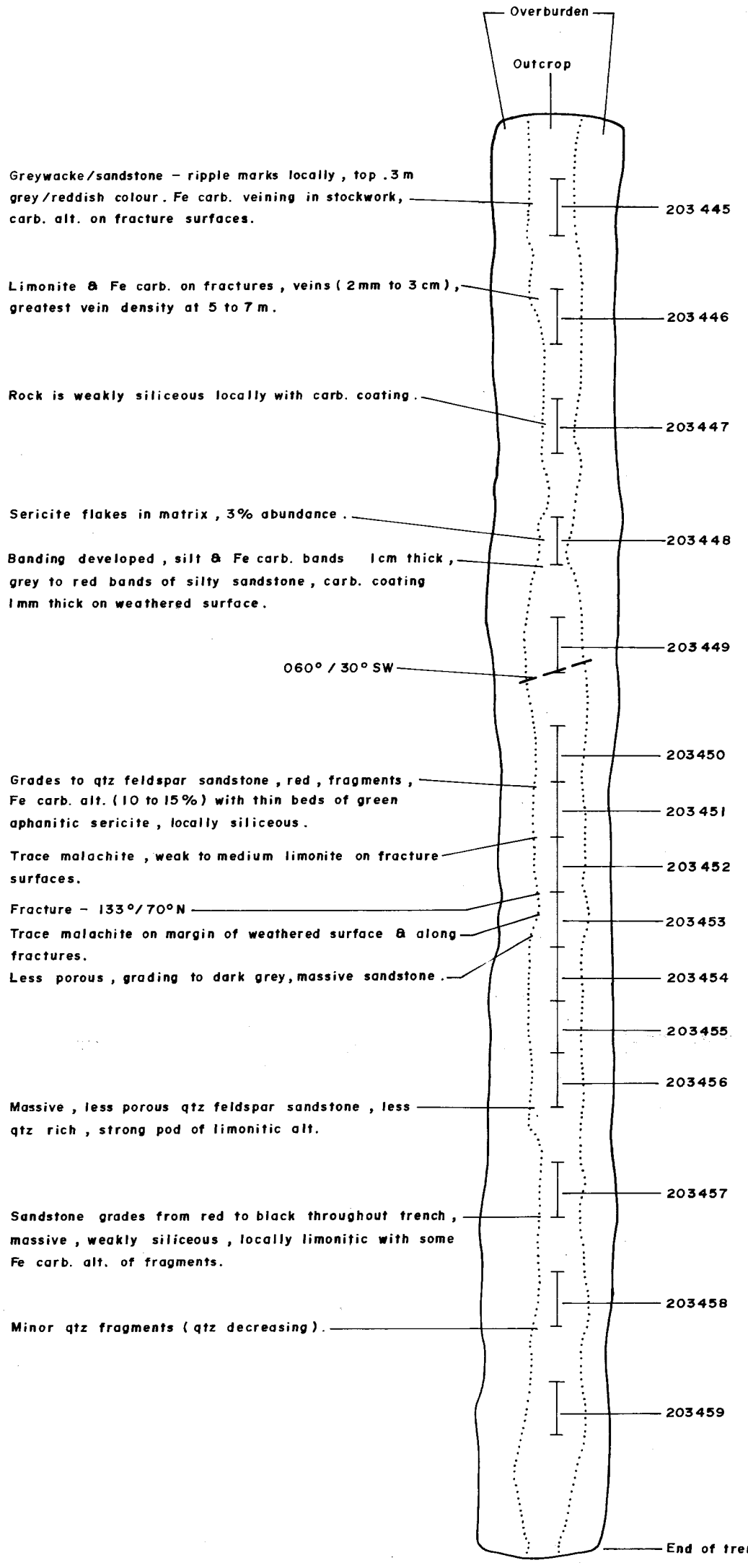
ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

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ROO PROPERTY FORT STEELE MINING DIVISION B.C. NTS 82G/2W,3E	
GEOLOGY & GEOCHEMISTRY TRENCH 2	
SCALE - 1:100	DATE: MARCH, 1990
GEOLOGY: C.L., B.Y. DRAWN BY: P.Haillot	FIGURE 8



< 0.01	14
200	< 0.02
< 0.01	10
690	< 0.02
0.12	38
320	< 0.02
0.05	33
390	< 0.02
< 0.01	8
380	< 0.02
< 0.01	9
300	< 0.02
< 0.01	18
280	< 0.02

1.0m

ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

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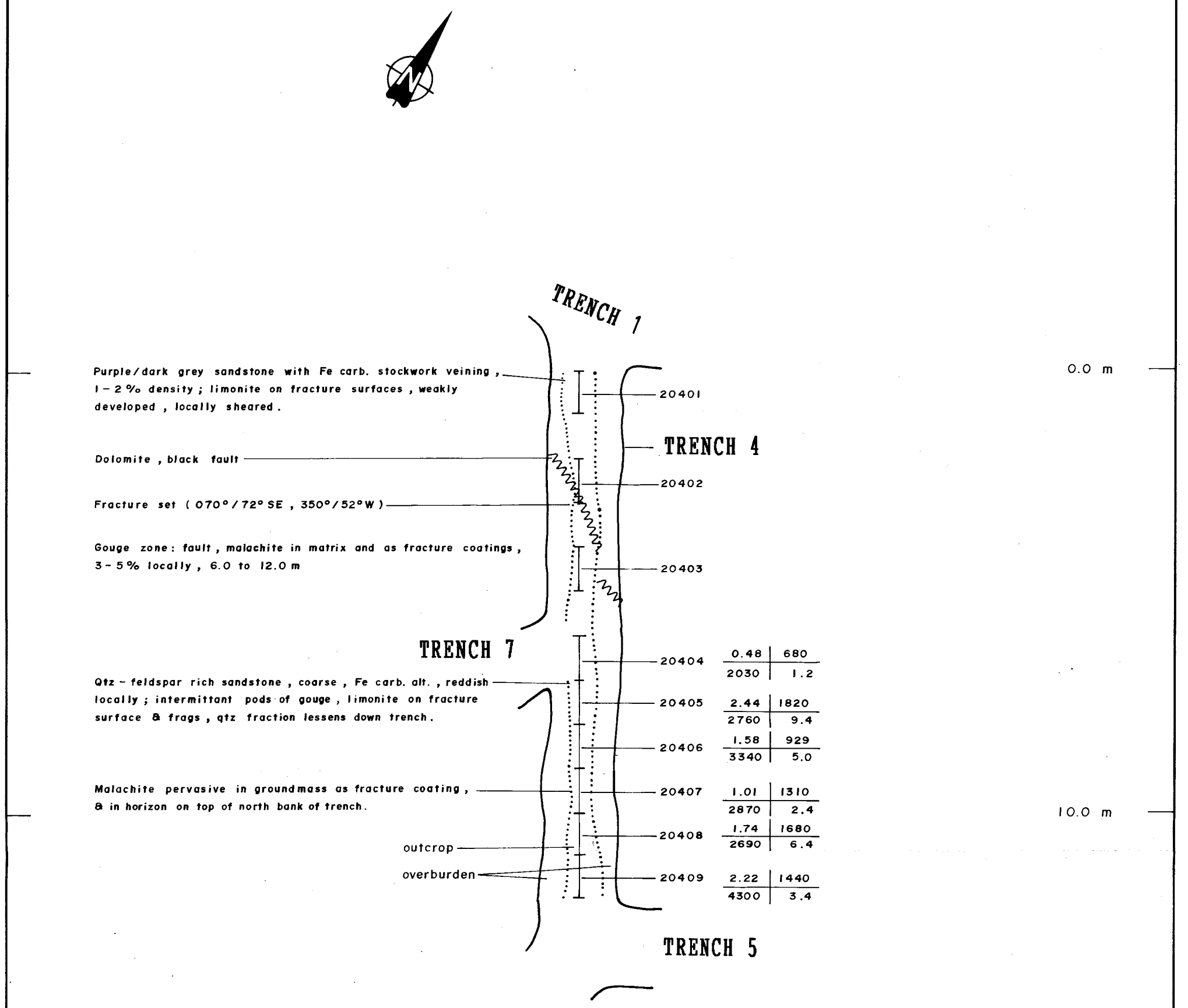
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TRENCH 3

SCALE - 1:100	DATE: MARCH, 1990
GEOLOGY: C.L., B.Y.	FIGURE 9
DRAWN BY: P.Haillot	



1.0 m

ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

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TRENCH 4

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GEOLOGY:C.L.,B.Y.	FIGURE 10
DRAWN BY:P.Haillot	



overburden

outcrop

0.0 m

Purple / dark grey sandstone with Fe carb. stockwork veins (> 1 cm)

20360

Sericite (1 %) , abundant on fracture planes , weak limonite , thin coating of carb.

20361

20362

Red qtz - feldspar sandstone , limonite alt. frags.

20363

Pink/grey banded aphanitic siltstone / argillite , weakly siliceous , limonite coating on fracture planes ; bands > 1 cm ; matrix is pale green/grey , bands alternating with qtz - feldspar sandstone layers. limonite alt. (weak to moderate) on fracture surfaces.

20364	0.3 / 1010	91 / < 0.2
20365	1.05 / 2520	563 / 3.8
20366	0.36 / 2540	1605 / 2.4
20367	0.04 / 970	116 / 0.2
20368	0.02 / 690	36 / < 0.2
20369	0.04 / 590	84 / < 0.2

10.0 m

Shear - gouge (3 - 5 cm)

Malachite (trace to 3%) throughout matrix & on fracture surfaces , chalcocite .

Red qtz - feldspar sandstone , less coarse grained , limonitic frags (trace).

malachite

20.0 m

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1.0 m

ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

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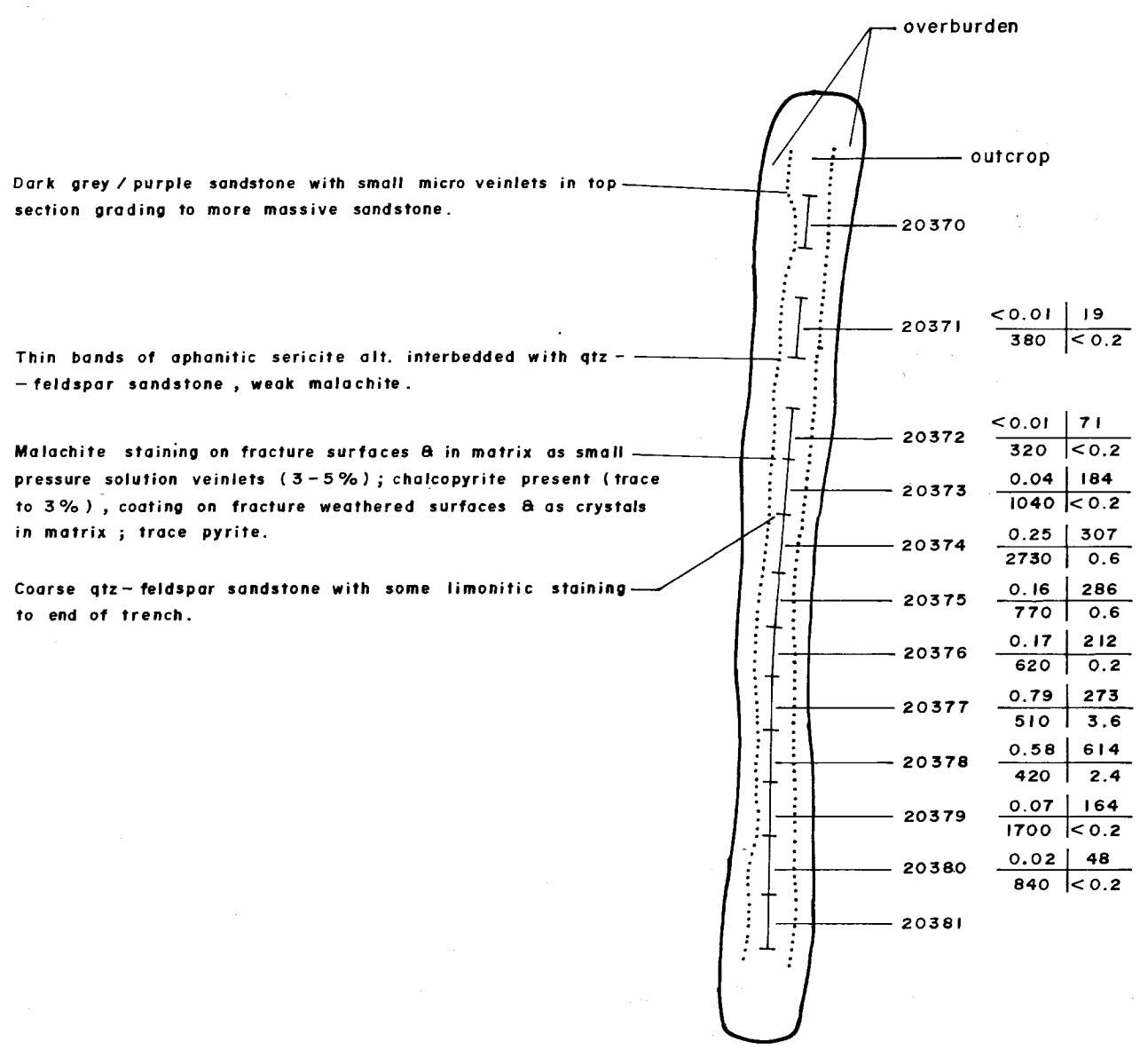
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TRENCH 5

SCALE - 1:100	DATE:MARCH, 1990
GEOLOGY:C.L., B.Y.	FIGURE 11
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1.0 m

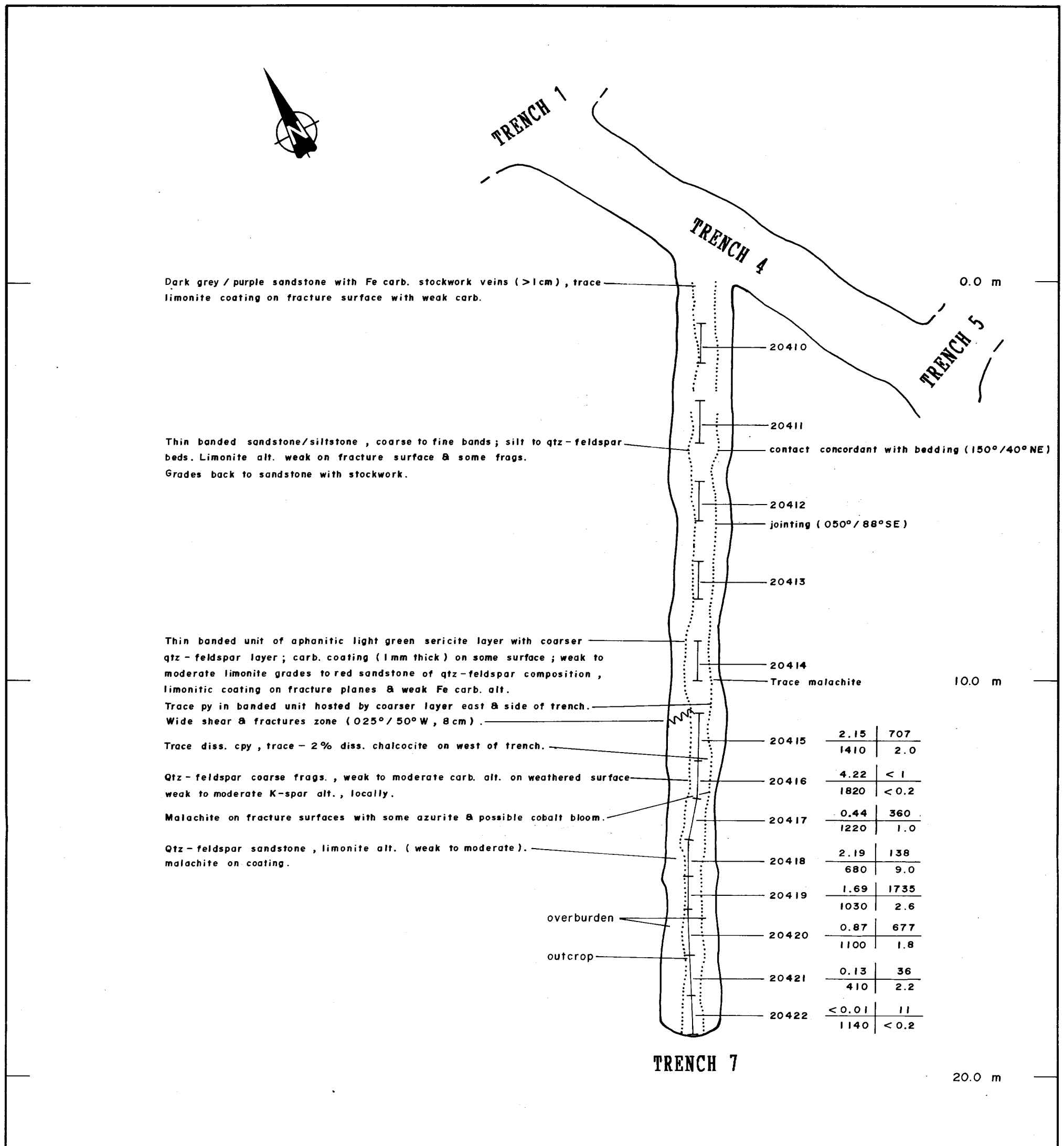
ASSAY VALUE

Cu %	Co ppm
Ba ppm	Ag ppm

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GEOLOGY & GEOCHEMISTRY TRENCH 6	
SCALE - 1:100	DATE:MARCH,1990
GEOLOGY:C.L.,B.Y.	FIGURE 12
DRAWN BY:P.Haillot	



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SCALE - 1:100	DATE:MARCH,1990
GEOLOGY:C.L.,B.Y.	FIGURE 13
DRAWN BY:P.Haillot	