ARIS SUMMARY SHEET

District Geologist, Victoria   Off Confidential: 89.05.27

ASSESSMENT REPORT 17441   MINING DIVISION: Alberni

PROPERTY: Otter
LOCATION: LAT 49 13 00   LONG 124 55 30
UTM 10 5453106 359811
NTS 092F02W
CLAIM(S): Alder 1-2,Otter,Sproat,Arbutus
OPERATOR(S): Veto Res.
AUTHOR(S): Laanela, H.
REPORT YEAR: 1987, 131 Pages
COMMODITIES
SEARCHED FOR: Gold,Silver,Copper,Lead,Zinc
GEOLOGICAL
SUMMARY: Triassic and Jurassic andesites, limestones and argillites are intruded by Jurassic granodiorites of the Island Intrussions. Skarn type mineralization has formed within a north trending limestone near the contact with underlying andesites. Sulphide minerals include chalcopyrite, bornite, pyrite, pyrrhotite, sphalerite.

WORK
DONE: Geological,Geochemical,Geophysical
GEOL 1500.0 ha
Map(s) - 1; Scale(s) - 1:10 000
MAGG 17.3 km
Map(s) - 1; Scale(s) - 1:5000
ROCK 48 sample(s) ;AU,ME
Map(s) - 1; Scale(s) - 1:10 000
SOIL 778 sample(s) ;AU,ME
Map(s) - 5; Scale(s) - 1:5000

RELATED
REPORTS: 16918
MINFILE: 092F

Report on the
Geological, Geochemical and Magnetic Surveys
on
OTTER CLAIM GROUP
in
Alberni Mining Division, B.C.
for
VETO RESOURCES LTD.
1540 – 800 West Pender Street
Vancouver, B.C., V6C 2V6

By

ASHWORTH EXPLORATIONS LIMITED
Mezzanine Floor – 744 West Hastings Street
Vancouver, B.C., V6C 1A5

Location: NTS 92F/2/NW
49° 12.5' North/124° 56' West
6-11 km WSW of Port Alberni
Vancouver Island, British Columbia

Subject: Results of June – July, 1987 Field Program and Recommendations for Additional Exploration

Prepared By: Hugo Laanela, F.G.A.C.
Consulting Geologist
3657 Ross Road
Nanaimo, B.C., V9T 2S3

August 31, 1987

SUMMARY

Geological mapping, prospecting, soil sampling and magnetic surveying was carried out on the Otter Claim Group on behalf of Veto Resources Ltd., Vancouver, B.C., by Ashworth Explorations Limited during the summer of 1987.

The 5 contiguous claims, totalling 85 units, are located 6 - 11 km WSW of Port Alberni, in Alberni Mining Divison, Vancouver Island, B.C. They were staked in 1985 to cover a geologically favourable area which contained a number of skarn type mineralized pods and massive sulphide lenses, collectively known in the past as the Cous Creek showings. No economically viable mineral deposits are presently known in the claim group nor in the adjacent area.

Geologically, the claims are underlain by volcanics and sedimentary rocks of Mesozoic age, which are intruded, on east part of the property, by Jurassic Island Intrusions, and also by dykes of probably Tertiary age. The skarn type mineralization (mainly Cu) occurs in a belt of limestone, while the massive sulphide (mainly pyrrhotite) lenses occur in the volcanics, near the intrusive contact and later dykes.

The geochemical soil survey, which covers less than half of the claims, has outlined a number of gold, silver, base metal (mainly Cu), and associated element (As, Sb, Mn, Ba) anomalies. Although some of the geochemical anomalies are in the area of the known mineralized occurrences, other significant anomalies indicate new areas of interest, eg:

- An about 1.2 km long gold anomaly in soil, "open" both to north and soil, with values up to 290 ppb Au. A rock sample here assayed 1645 ppb Au. There are no mineral showings known to be in this anomalous area.
- A silver, in soil, anomaly, covering about 0.3 by 0.5 km and "open" toward east, containing values up to 50.4 ppm Ag, and associated with other anomalous elements. There are no mineral showings known to be in this largely overburden and bush covered anomalous area.
- Several other Au, Ag and Cu anomalies (with up to 1462 ppm Cu, and up to 400 ppb Au) occur in the areas of no known showings.
- The ground magnetometer survey has outlined a strong positive magnetic anomaly near a limestone contact which may indicate a presence of skarn type deposit.

It is concluded that more work is warranted on Otter Claim Group, first, to complete the survey over the remainder of the claims area, second, to carry out a more detailed "follow-up" program over the already known anomalous areas.

A 3-Phase exploration program, with a total budget of $267,000, is proposed. This budget includes a tentative Phase III drilling program for $121,000, contingent upon favourable Phase I and Phase II results.

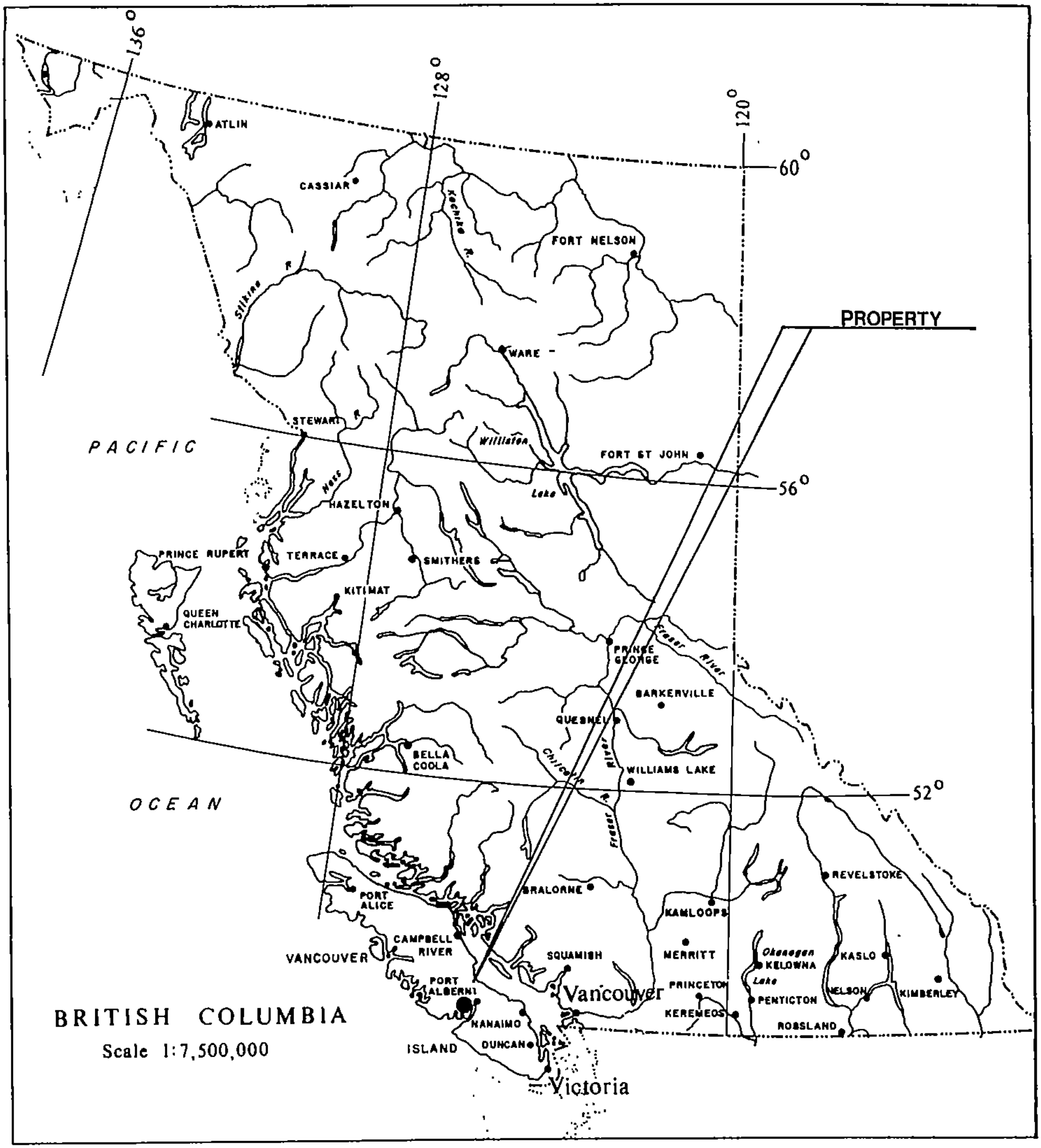
CONTENTS

MAPS AND FIGURES

FIGURES (in text)

MAPS (in pocket)

APPENDICES



VETO RESOURCES LTD	
GENERAL LOCATION MAP OTTER CLAIM GROUP	
Scale: 1 : 7 500 000	By:
Date:	Figure 1
Ashworth Explorations Ltd.	

1. INTRODUCTION

This report was prepared at the request of Veto Resources Ltd., #540 - 800 West Pender Street, Vancouver, B.C. V6C 2V6, to evaluate and describe the results of a reconnaissance type geological-geochemical-magnetometer survey carried out during June 12 - July 24, 1987, on the Otter Claim Group, WSW of Port Alberni, Vancouver Island, B.C. The field work was done by Ashworth Explorations Limited, Vancouver, B.C. The report also briefly describes the regional geology and the past exploration activities in the area, and outlines a further exploration program.

The 5 contiguous claims of Otter Group were staked in May, 1985. Another claim, the Skarn Claim, occupies an area within this group, but is not part of the Otter Group and is hence excluded in this report (see Claim Map).

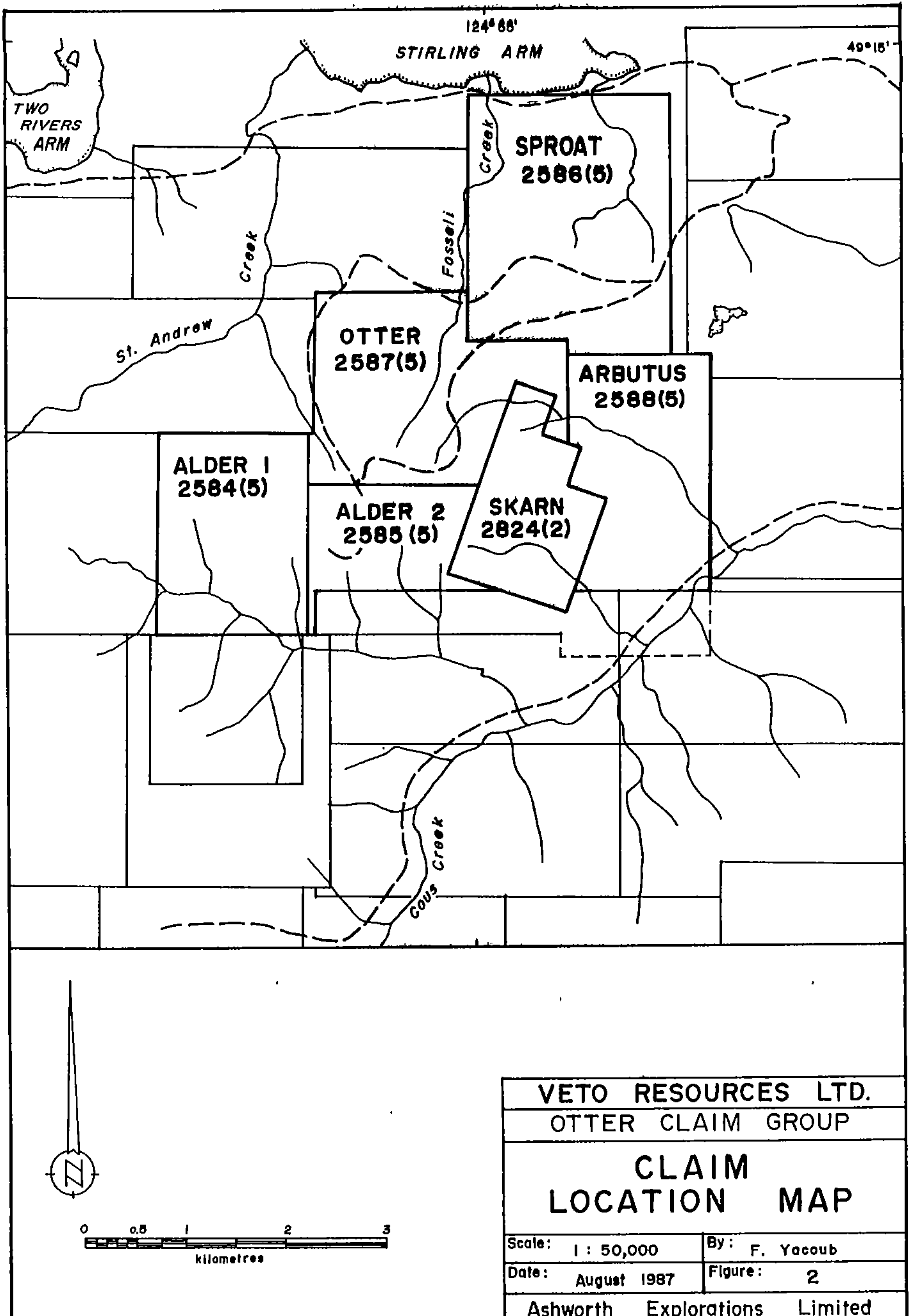
2. PROPERTY

The Otter Claim Group consists of 5 contiguous claims, as follows:

Name	Record #	Units	Record Date	Owner
Alder 1	2584 (5)	12	May 29, 1985	Robert W. Shaw
Alder 2	2585 (5)	15	May 29, 1985	526 - 736 Granville
Sproat	2586 (5)	20	May 29, 1985	Vancouver, B.C.
Otter	2587 (5)	20	May 29, 1985	
Arbutus	2588 (5)	18	May 29, 1985	

The total area is 85 units (=2,125 hectares = 21.25 km^2). However, the actual area is reduced, due to:

a) presence of Skarn Claim [Record # 2824 (2)] occupying a 15 unit area almost entirely surrounded by Otter Group,



124°55'
49°15'
STIRLING ARM
TWO RIVERS ARM
Creek
Fosseli
Creek
St. Andrew
Cous Creek
SPROAT 2586(5)
OTTER 2587(5)
ARBUTUS 2588(5)
ALDER 1 2584(5)
ALDER 2 2585(5)
SKARN 2824(2)
0 0.5 1 2 3
kilometres
VETO RESOURCES LTD.
OTTER CLAIM GROUP
CLAIM LOCATION MAP
Scale: 1 : 50,000
By: F. Yacoub
Date: August 1987
Figure: 2
Ashworth Explorations Limited

b) overlap of Otter Claim by Sproat Claim by about 2 units, and,

c) overstaking by approximately 8 units by Alder 2 and Arbutus claims of the adjoining Angie claims toward south.

Hence the effective area covered by the Otter Claim Group is approximately 60 units or 15 km^2 (see Claim Map).

The Alder 1 and 2 claims were staked by Mr. Pat Crook of #815 - 850 West Hastings Street, Vancouver, B.C. on May 7 - 8, 1985, and the Sproat, Otter and Arbutus claims were staked by Mr. Guy A. Royer, of same address, during May 8 - 11, 1985. On the day of registration, May 29, 1985, all 5 claims were transferred to Mr. Robert W. Shaw.

The claims are within Alberni Mining Division of Vancouver Island.

3. LOCATION, TERRAIN AND ACCESS

The area covered by Otter Group claims is situated between Cous Creek and Sproat Lake, west of Alberni Inlet, within 6 - 11 km WSW of the town of Port Alberni, on Vancouver Island, B.C. Map Sheet reference is NTS 92 F/2/NW quadrant.

The elevations on the property range from several hills over 800 metres high on Alder 1 claim to less than 150 metres above m.s.l. in the Cous Creek valley in the SE corner of Arbutus claim, and 28 metre level of the Sproat Lake at Stirling Arm. Total relief is therefore about 0.8 km or over 2,600 feet. However most of the property is in the 300 - 400 metre elevation range. The higher central part, where most of the known mineralized occurrences are located, is characterized by rolling hills interspersed by several small lakes or ponds and low, swampy valleys; headwaters of numerous streams radiate in all directions from this area.

The area has been largely logged over, some parts several tens of years ago, others more recently. Vegetation cover is generally thick, consisting of dense second growth Douglas fir, hemlock, cedar, and low underbrush of mostly salal and alder, including lots of dead-fall and logging slash. Only the most recently logged off areas can be traversed easily; outcrops tend to be well covered in older second growth areas which makes prospecting difficult.

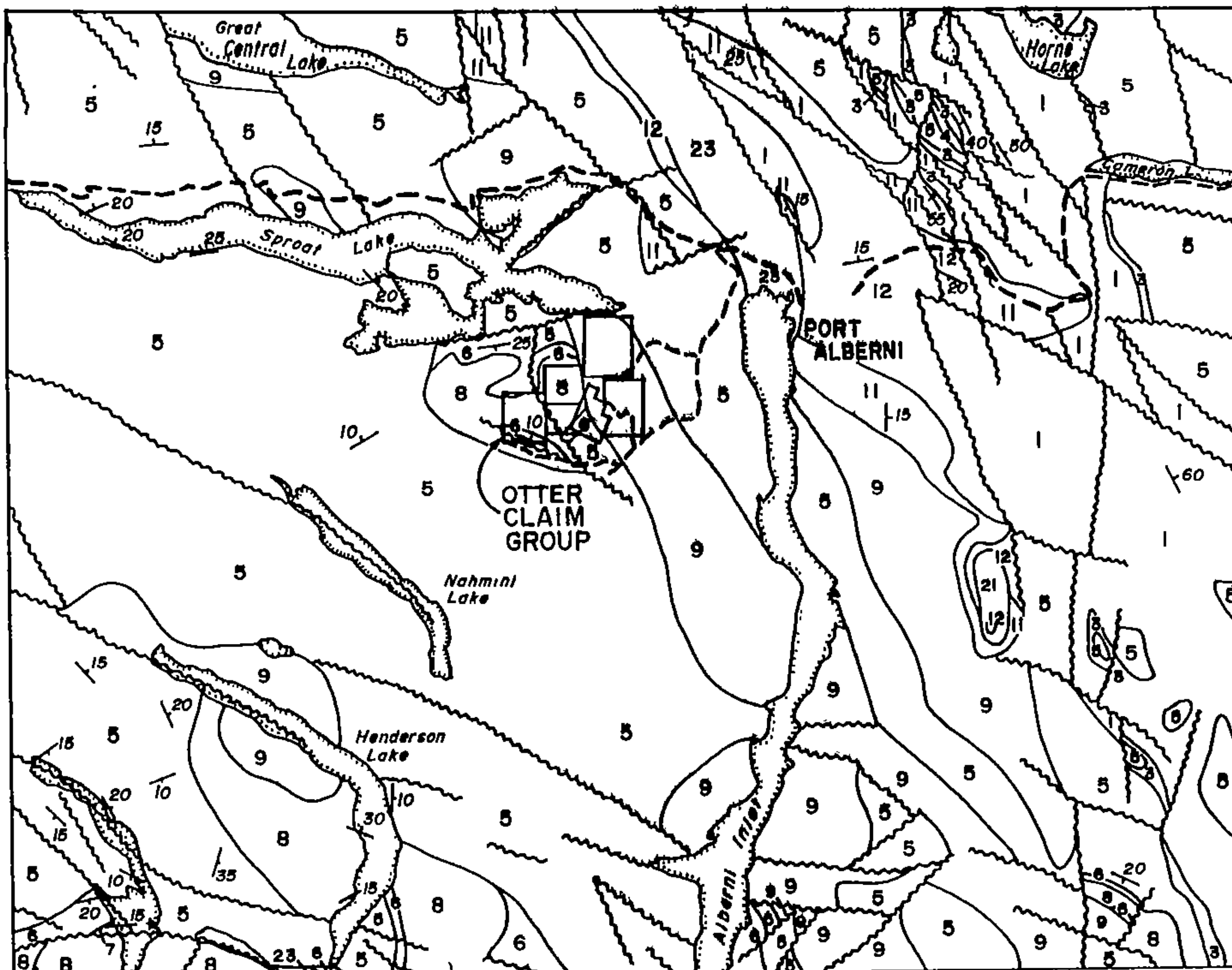
Chief access route is by a main logging road across the Somass River NW of Port Alberni, then cutting through the south part of Sproat claim and branching into numerous secondary logging roads. There is a network of old logging roads and logging railway grades throughout the property; most of these tend to be overgrown and are not shown on maps. Hence vehicular access is quite good, although the use of 4-W-D vehicles is recommended to negotiate deeper grades and washouts.

4. REGIONAL GEOLOGY

The Otter Claim Group area is underlain by a sequence of Mesozoic volcanic, sedimentary and intrusive rocks, which have a NNW regional strike and dip westward.

The oldest rocks, found in the central part of the claims and striking NNW, are the upper Triassic or older Karmutsen Formation volcanics of the Vancouver Group. They consist of massive basaltic flows, pillow basalt and breccia, and minor tuff volcanic breccia.

Toward west, these volcanics are overlain by a belt of Quatsino Formation, mainly massive to thick bedded limestone, which, in turn, is succeeded by Parsons



PLEISTOCENE and RECENT

23	Glacial and alluvial deposits

UPPER CRETACEOUS

12	Haslam Formation: shale, siltstone, fine sandstone
11	Comox Formation: sandstone, conglomerate, shale, coal

MIDDLE to UPPER JURASSIC

9	Island Intrusions: biotite-hornblende granodiorite, quartz diorite

LOWER JURASSIC (?) Vancouver Group (5-8)
Bonanza Subgroup (7,8)

8	Volcanic Division: andesitic to latitic breccia, tuff and lava; greywacke, argillite and siltstone

UPPER TRIASSIC

6	Quatsino Formation: limestone, mainly massive to thick bedded, minor thin bedded limestone

UPPER TRIASSIC and OLDER

5	Karmutsen Formation: pillow-basalt and pillow-breccia, massive basalt flows; minor tuff volcanic breccia. Jasperoid tuff, breccia and conglomerate at base

PENNSYLVANIAN and OLDER

1	Volcanic breccia, tuff, argillite; greenstone, greenschist; dykes and sills of andesite-porphyry

4 2 0 1 2 4 6 8
kilometres

VETO RESOURCES LTD.	
OTTER CLAIM GROUP	
REGIONAL GEOLOGY	
Scale: 1 : 125,000	By: F. Yacoub
Date: August 1987	Figure: 3
Ashworth Explorations Limited	

Bay Formation shale and argillite. These two formations are Upper Triassic in age and form the uppermost part of the Vancouver Group.

Farther toward west, the Vancouver Group rocks are disconformably overlain by Lower Jurassic Bonanza Group, consisting of andesitic to dacitic volcanic rocks, including breccia, porphyry and tuffs, and minor intercalated beds of argillite and graywacke.

Toward east, the Vancouver Group rocks, mainly the Karmutsen Formation here, are intruded by batholithic Island Intrusions of Jurassic age, ranging from granite to granodiorite to quartz diorite. Where limestone is present such as on the property, calc-silicate "skarn" rocks have been formed by the intrusives introducing large amounts of Si, Al, Mg and Fe into the limestone. Often these skarn deposits contain ore grade amounts of copper, along with iron deposits (magnetite) and minor other metals; they also tend to be erratic, irregular and hence hard to follow. Some mineralized skarn occurrences are found on the Alder 2 and Otter Claims.

The Sicker Group rocks, oldest on the island, are not known to occur in the property area, although they are quite common east of the Alberni Inlet.

The youngest rocks in the area are the dacitic "feldspar porphyry" dykes, intruding any of the older rocks. These "later intrusives" are generally taken to be as Tertiary in age (related to Sooke and/or Catface intrusions elsewhere on the island).

The main structural feature is a series of major NW to NNW trending faults or fault zones affecting mainly the Vancouver Group rocks here. These faults were probably formed during the Late Triassic time.

The Vancouver Group rocks, particularly the Karmutsen volcanics, are known to host several mineralized occurrences in the Alberni Inlet area. Aside from the mineralized skarn occurrences on the property, already mentioned above, the following showings have been reported in the Cous Creek-Alberni Inlet area:

1. Cous Creek Showings, on the present "Skarn" Claim (formerly "A" claim), which is surrounded by the Otter Group Claims, are closest to the property. Massive sulphide lenses and pods occur in volcanics near the diorite contact; later dykes are also present in the area (B.C.A.R. # 6956, 1977, and # 6393, 1977, et al).
2. Kola Showing, about 1 km south and outside of Alder 1 claim: 1985 exploration discovered mineralization consisting of massive pods and lenses of pyrite chalcopyrite associated with andesites of Karmutsen Formation; also, siliceous shear zones and sulphides associated with dacites were evident. Assays were reported to range up to 0.328 opt Au, 4.71 opt Ag and 29.2% Cu (Sookochoff, 1985; B.C.A.R. # 101288, 1982, and # 9313, 1981.)
3. Rex Showing, at headwaters of Cous Creek, about 4 km SSE of Kola showing. Cu and Mo is reported (B.C.A.R. 1591, 1968; B.C.M.M., 1967, p. 77, et. al).
4. Raven Prospect, near west shore of Alberni Inlet, opposite the town of Port Alberni and about 4 km east of Otter claims: Mineralization (Cu, Au) occurs in a 4 foot wide vein with a 6 - 8 inch width of solid chalcopyrite (B.C.M.M., 1989, 1901).
5. Dauntless Prospect, (Crown Grant 258G), west side of Alberni Inlet near Stamp Narrows, about 4 km east of Otter Claims: Sparse chalcopyrite occurs within one of the two series of shear zones 200 feet apart. The mineralized shear contains a 6 feet wide strongly pyritic quartz vein, along with a 2

feet wide body of massive pyrrhotite and chalcopyrite. (Laanela, 1965; B.C.A.R. 447, 1962; B.C.M.M. 1927, p. C341, and 1928, p. 366, etc).

6. B and K Prospect, (Crown Grant 136G), about 4 km ESE of Otter Claims: A N-trending steeply dipping, 5 feet wide shear contains Cu mineralization with the reported estimated grade of 1%. This showing is also known as the Cous Creek Copper Showing (Laanela, et al, 1966).

7. Hayes Mine, a number of Crown Grants some 18 km south of Otter Claims, west side of Alberni Inlet. Historically, it was the most productive property in the area. An intraformational limestone horizon hosts skarn-type mineralized zones up to 28 feet wide which contain magnetite, pyrite and chalcopyrite. There are no intrusive outcrops related to the skarn mineralization. It is also known as the Nahmint Mine (B.C.M.M., 1898, pp. 1131; 1901, p. 1095; 1906, p. H 193).

5. HISTORY AND PREVIOUS WORK

According to old B.C. Minister of Mines (B.C.M.M.) reports dating back to late 1800's much mining exploration and shipping of small amounts of ore has been carried out in the Alberni Inlet area since 1898. Some of the highlights, concerning the properties already mentioned in the previous chapter, are:

- The Hayes (Nahmint) Mine, some 18 km to south, reportedly shipped 2180 tons of ore during 1898 - 1902, yielding 328,245 lbs of Cu, 62 ozs Au and 2917 ozs Ag. It was closed in 1902.
- The Dauntless, 4 km to east, was explored between 1918 - 1929 by numerous open cuts, several short adits (up to 100 feet long) and at least one shaft

27 feet deep.

- The Raven, also 4 km to east of Otter Property and north of Dauntless, was worked around the turn of the century; a 50' adit was completed in 1901.

- The original Cous Creek property, then known as the "A" claim, and now as the "Skarn" claim within the area of Otter Group of claims, was discovered in 1972 and explored by Craigmont Mines in 1976 and Bethlehem Copper in 1977.

Some of the skarn type showings that were originally part of the known mineralized area covered by these A claims, occur now on the Otter and Alder 1 claim of the property (see Map 1).

As for the present Otter Claim Group area, several previous surveys by various mining and exploration companies in the area have also covered parts of the property. Some examples are:

1) The writer, while employed by Gunnex Limited in mid-1960's to carry out regional geological mapping and property examinations on the E & N Railway Land Grant area to the east of here, also mapped the NE part of the present Otter Group property. A small skarn-type copper occurrence was noted on the present Otter claim, at the headwaters of Fosselli Creek, along with some magnetite, near a limestone-diorite contact. A regional geochemical survey carried out by Gunnex Limited at that time also indicated a Total Heavy Metal (THM) anomaly extending southward from the upper Fosselli Creek area, toward Cous Creek, more or less coinciding with the limestone belt. However, no follow-up work was done here by Gunnex (Laanela, 1965 - 66).

2) Apparently more prospecting took place in the area resulting in the original four "A" claims, in the centre of the present property area, being staked in 1972. Additional claims were added in 1974. These claims were owned by Mr. Lawrence Wezina of Victoria. During 1976, Craigmont Mines carried out a program of geochemical sampling and magnetic surveys on these claims that yielded limited results. The correlation between magnetic and geochemical anomalies then prompted Bethlehem Copper Corporation, in 1977, to take an option on these claims and to carry out a program of geological mapping and VLF-EM surveying (Anderson, 1977). The results of this program were sufficiently encouraging to warrant planning additional work by Bethlehem, including a pulse electromagnetic survey by Glen E. White and a percussion drilling program during September, 1977. At that time the property (A Claim) was owned by Cous Creek Copper Mines Ltd., and it covered the area now occupied by the present Skarn claim and eastern parts of the Otter and Alder 2 claims.

   Bethlehem's option agreement with Cous Creek Copper Mines Limited was terminated in September, 1977, apparently because of lack of significant mineralization in two percussion drill holes (Nethery, 1977).

3) An airborne geophysical survey (VLF-EM and magnetometer) was flown by Columbia Geophysical Services on behalf of Pacific Seadrift Resources Ltd over their Kola Creek Group of claims during the winter of 1980 - 81. Aside from a number of anomalies located on the adjacent Kola claims south of the Otter Group property, this survey also covered all of the Otter Group area. A number of airborne EM conductors and magnetic anomalies were

also found on the Otter Claim Group (see Map in report by W.G. Timmins Exploration and Development Limited, June 30, 1981/B.C.A.R. # 9313). There is no information that any of these airborne anomalies occurrring on the property have been "followed-up".

4) Aside from the above airborne survey on the Kola property, a geochemical and geological exploration program was carried out over Kola claims during August, 1981. A strong anomalous area was depicted near the "Kola vein", on Kola 3 (Larry 1) claim, about a km south of present Alder 1 claim (Wing and Timmins, 1982/B.C.A.R. #10,288).

Obviously, other exploration and development activity has taken place on the property and in the immediate adjoining area of which the writer has no information, eg. the trenching of several skarn and massive sulphide showings. The present Otter Group Claims were staked on behalf of Mr. R.W. Shaw in May, 1985.

6. SUMMER 1987 PROGRAM

6.1 SCOPE AND PURPOSE

During June - July, 1987, a crew consisting of up to seven geotechnicians and a geologist carried out a reconnaissance type geological-geochemical-ground magnetometer survey over the Otter Group claims area. The purpose of this program was twofold:

a) A "grassroots" type geological mapping/prospecting over most of the property area where no previous groundwork apparently had been done. This was accompanied by laying out a control grid for soil sampling and mag survey to locate anomalies, if any, for further follow up work, particularly in the areas of main geological contacts with which the known showings on the property are associated.

b) Sampling, examination and detail mapping of a number of already known showings on the east part of Otter and Alder 2 claims, and detail prospecting of areas adjoing these.

Limited time and budget did not permit the exploration of the entire claim group area. Hence the work was restricted toward the central and most accessible area which also contained the known mineralized occurrences.

6.2 METHODS AND PROCEDURES

Geological mapping, on the 1:10,000 reconnaissance scale, covered about 3/4 of the property area, using the numerous logging roads for control; outcrops were usually best exposed in roadcuts. Chain and compass were used to map the individual showings. Mineralized outcrops and old workings were sampled for assay. A total of 48 rock samples were taken for assay. Initially, all rock samples were assayed geochemically by the ICP method, similar to soil samples (see below), with additional fire assays for gold (and some platinum). Field mapping and collecting of samples was carried out by Mr. Fayz Yacoub, project geologist.

For the control grid, a Base Line was run at 330 degree azimuth, starting from a small pond near the SW corner boundary of the Skarn claim. From the base line flagged crosslines were run at 100 metre intervals 1000 metres both NE and SW. Six alternating SW crosslines, at 200 metre intervals, were extended farther SW, some up to 2.5 km from baseline. Total line grid thus laid out was 32.4 line-kms.

The above grid was soil sampled at 50 metre spacings (690 samples). Additional 88 closely spaced soil samples were taken later in four "detail areas" where high gold values in soil were encountered. Total number of soil samples taken was 778. All soil samples were taken with a grubhoe from the B-horizon and sample sites were marked with numbered flagging. Samples were placed into marked Kraft-paper bags, field dried, and shipped to Vangeochem Lab Limited, 1521 Pemberton Avenue, North Vancouver, B.C., for processing and multielement geochemical analysis. Here the soil samples were dried and sieved to -80 mesh, then analysed by Induced Coupled Plasma (ICP) method for a "package" of 28 elements. The elements included Au, Ag, most of common base metals (eg. Cu, Pb, Zn, etc.), various rock-forming elements, and a number of trace and "pathfinder" elements (see lab data sheets in Appendix I for additional details). Rock samples, after crushing, were analyzed similarly.

Both soil and rock samples were then re-analyzed for Gold by using the Fire Assay/Atomic Absorption Spectrometry (FA/AAS) method which has a detection limit of 5 parts per billion. (This method is described in some detail in a letter at the end of Appendix I).

The lab results for 10 of the elements (Au, Ag, Cu, Mo, Pb, Zn, As, Sb, Mn and Ba) were plotted on five 1:5,000 scale base maps and the anomalous values were contoured (see Maps 2 to 6). To evaluate any geochemical anomalies present, frequency distribution histograms/graphs, based on lab data, were prepared for each of the elements. Statistical parameters to indicate background, threshold and various anomalous categories were also calculated for these elements and are shown on the graphs (see Appendix II). The statistical "package" done by the lab for 5 elements (in Appendix I) was found to be unsuitable due to indiscriminate inclusion of some very high "erratic" values which biased the statistical analysis.

The mag survey was run with a base station instrument taking readings for continuous diurnal corrections of data. Total survey run was 17.3 line-kms, which covered the limestone and skarn belt on east half of the grid. The readings were taken at 25 ..m x 100 m grid intervals, except for a small strongly anomalous area in the SE part of the grid, where the 25 x 25 metre interval was used. The instrument used was EDA Omni-IV Magnetometer (SR-255009) which measured the total magnetic field with an 1 gamma resolution. The field data was computer processed and plotted as a contour map on the 1:5,000 scale base map by Mr. R.F. Sheldrake, geophysicist with Apex Airborne Surveys Ltd., in Vancouver, B.C. (Map 7).

7. RESULTS

7.1 GEOLOGICAL MAPPING AND PROSPECTING

The following is based mainly on the geological mapping and field report by Mr. Fayz Yacoub, B.Sc., with some additional observations made by the author.

7.1.1 Property Geology

(See Map 1)

The geology of the Otter Claim Group was mapped at scale of 1:10,000. This scale was suitable for rapid "grassroots" type coverage, given the limits of time and budget, for outlining most of the major rock units on the property.

Starting from the oldest, these units are described below:

Vancouver Group (Upper to Middle Triassic)

Karmutsen Formation

The Karmutsen volcanic rocks are the oldest rock unit on the property. They are dark green to gray, dark brown or black. These rocks are generally massive and in some localities they have undergone slight metamorphism but are not converted to any extent to greenschist. However, partial albitization of plagioclase and the fairly common occurrence of anygdales with quartz, carbonate and chlorite indicates the sub-greenschist facies of metamorphism. True greenstones are volumetrically quite rare in the area of the claims.

In some localities the volcanic rocks are porphyritic while adjacent rock is aphanitic. There is quite a variation in texture and colour according to the degree of alteration. Most of the volcanic rocks in the area have undergone some kind of alteration. The more heavily altered volcanic rock is light brown to yellow coloured with lots of secondary minerals (eg. epidote, chlorite, sericite and iron oxides).

In some places the volcanic rock is heavily disseminated with sulphides, mainly pyrite, especially along the faults and the shear zones.

The Karmutsen volcanic rocks are intruded by diorite; the contact between volcanic and intrusive rocks is gradational. The dioritic intrusion is considered to be one of the major facts of the alteration of volcanics, particularly along the contact zones.

Quatsino Formation

The limestone, which overlies the Karmutsen volcanics, is mainly massive and fine-grained to microcrystalline in texture. Color is black to dark grey on fresh surface which weathers bluish grey. It is often intruded by numerous on fresh surface which weathers bluish grey. It is often intruded by numerous calcite veinlets.

In many places the limestone is cut by narrow dykes or sills of medium green hornblende plagioclase porphyry of andesitic to dacitic composition, thought to be of Tertiary age.

The abundance of limestone and intruding plutonic rock is a favourable environment for the occurrence of contact-metasomatic "skarn" deposits. However skarn and all massive sulphide showings in the area occur at the limestone contact with volcanic rocks or in volcanic rock respectively. The recent fieldwork by Ashworth Explorations found no direct or observable contact between limestone and plutonic rocks.

Near its contacts with volcanics, the limestone is converted to coarsely crystalline rock (marble) and in some localities into skarn with pyrrhotite, pyrite, bornite, chalcopyrite and malachite. The contact between Quatsino limestone, and Karmutsen volcanic rocks is not exposed in the area of the claim group.

Parsons Bay Formation

These rocks are the highest in sequence of the Vancouver Group, overlying the Quatsino Formation, and consist of shale and argillite. In the map area they occur as isolated outcrops, possibly as lenses (?), often rusty, and associated with the limestone belt contact with the Bonanza Group volcanics.

They are generally shale and argillites, not quite as widespread as the limestone in the area, occurring only in small patches among the volcanics. Outcrops are well banded with a slaty cleavage, friable with a yellowish colour when it is weathered.

It is possible that some of the argillaceous rocks here may actually be part of the overlying Bonanza Group.

Bonanza Group (Early Jurassic)

These rocks generally consist of light coloured tuff and breccia of andesitic composition, occupying the area west of the Vancouver Group. Outcrops are massive and light coloured rocks that show tuffaceous banding or breccia fragments on some weathered surfaces. Hand speciments were light green to light brown, finely granular or aphanitic, and in some places, phenocrysts of plagioclase and hornblende are visible.

Breccias and tuffs in several localities in the claims area are distinguished by chocolate brown and light purple colours and are associated with coarsely amygdaloidal lavas. These rocks are generally much altered and owe their red colour to hematite and siderite. Some of the flow rocks contain large amygdales, filled with carbonate and chlorite that commonly have weathered out to form open vesicles on the surface, giving the weathered surface a pitted appearance.

Bonanza volcanic rocks are the most abundant rock unit on the property. In places the contact between volcanic and intrusive rock is sharp.

Island Intrusions (Jurassic)

Dioritic to granodioritic intrusions are exposed in the north and east part of the map area. About 80% of the rocks here are altered and hybridic; the original texture and mineralogical composition of the rock is not easy to identify. The intrusive rock carries a high percentage of mafic minerals, generally hornblende, with a lesser amount of biotite.

Contacts with Karmutsen and Bonanza volcanics are generally sharp and well defined. Intrusive contacts with Quatsino limestone lead to skarn type mineralization locally.

Along the shear zones the diorite is heavily altered and contains secondary minerals such as epidote and chlorite, and in places the rock is highly disseminated with pyrite.

Later Intrusions (Tertiary ? dykes and sills)

The intrusion of Quatsino limestone, et al, by these dykes and/or sills was already mentioned above. Their age here is by no means certain, but based on their similarity with dyke or sill-like intrusions elsewhere (for example in Mount McQuillan and Mount Spencer areas, and also in Nanaimo Lakes area where they intrude the Upper Cretaceous Nanaimo Group sedimentary rocks), they are thought to be Tertiary in age. They are equated with Sooke and Catface Intrusions of the west coast of the island. In some areas, such as on Mount McQuillan, and Mount Spencer, south of Port Alberni, these later dykes often are mineralized, or appear to occur in close proximity to mineralized zones of base and precious metals. In China Creek headwaters area particularly, these dykes appear to be closely associated with gold bearing veins (eg. "Golden Eagle" and other prospects). Hence the presence of such later intrusions here is of some interest.

7.1.2 Mineralization on the Property

Mineralization on the property consists of the following types of occurrences:

a) Massive pods and lenses of pyrite, chalcopyrite and bornite occur within a sheared zone of andesitic volcanic rocks of Vancouver Group, in Trench 3 (Figure 6).

b) Chalcopyrite, pyrite, magnetite and superficial malachite and azurite occur as skarn mineralization in Trenches 1 and 2 (Figures 4 and 5) along the contact between Bonanza volcanics and Quatsino limestone.

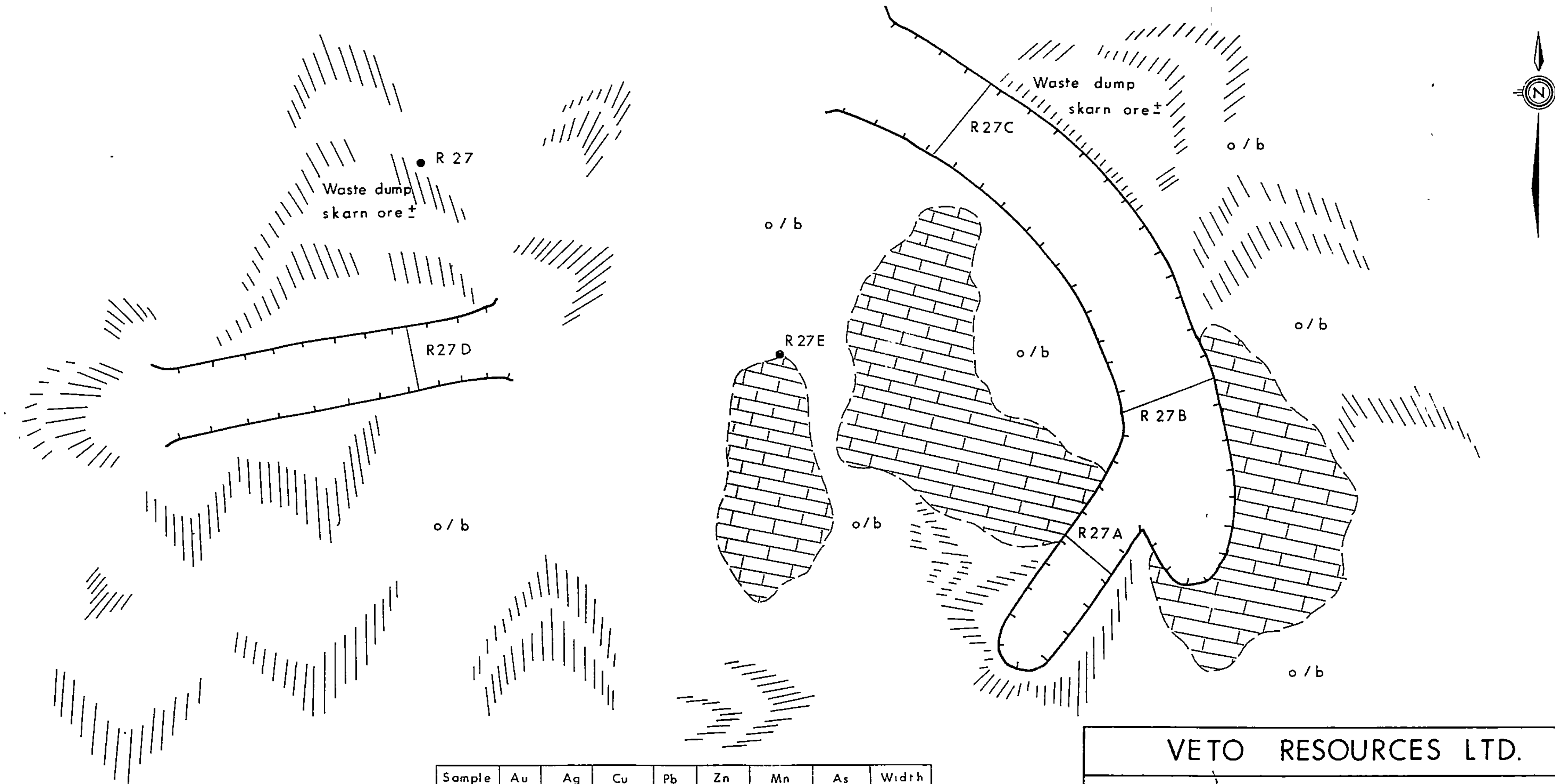
c) Low grade skarn was also seen at the contact between andesitic volcanics and limestone which was partly altered to skarn. Pockets and disseminations of pyrite and chalcopyrite occur in both skarn and limestone at their mutual contact.

c) Pyrite, chalcopyrite and other copper mineralization occurs also in narrow fractures and as amygdule fillings in volcanic rocks in some localities.

Typically, the ore minerals present in the skarn deposits here are pyrite, chalcopyrite, bornite, malachite and azurite. The original calcite in the limestone may be replaced entirely.

The skarn-type mineralization in the area refers to mineralogical and structural changes in the host-rock (here usually limestone) that result from thermal effects caused by the intrusions of large igneous masses. This, combined with the metasomatic replacement of limestone with silica, iron, other metals and ore minerals (eg. Cu) leads to the formation of sometimes massive sulphide deposits. Here these deposits usually occur in the vicinity of the late dacitic porphyry dykes, hence their intrusion may have played a vital part of ore genesis here. The significance of these dykes elsewhere has been already discussed above.

In general, skarn type ore deposits tend to be "pockety", irregular and



LEGEND

Limestone outcrop

Mineralized limestone (skarn) in trench

Dump rocks (skarn)

o / b Overburden

Grid coordinates L3S, 3+07E

Sample No	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mn ppm	As ppm	Width cm
R 27	60	11·1	86452	32	224	3851	21	
R 27A	90	16·8	>10 %	2	147	3255	28	90
R 27B	ND	0·1	374	29	107	2791	8	150
R 27C	ND	0·1	117	28	50	2625	9	150
R 27D	10	0·1	9484	29	44	2684	41	150
R 27E	ND	1·2	13282	29	38	2412	41	

0 1 2 3 metres

VETO RESOURCES LTD.

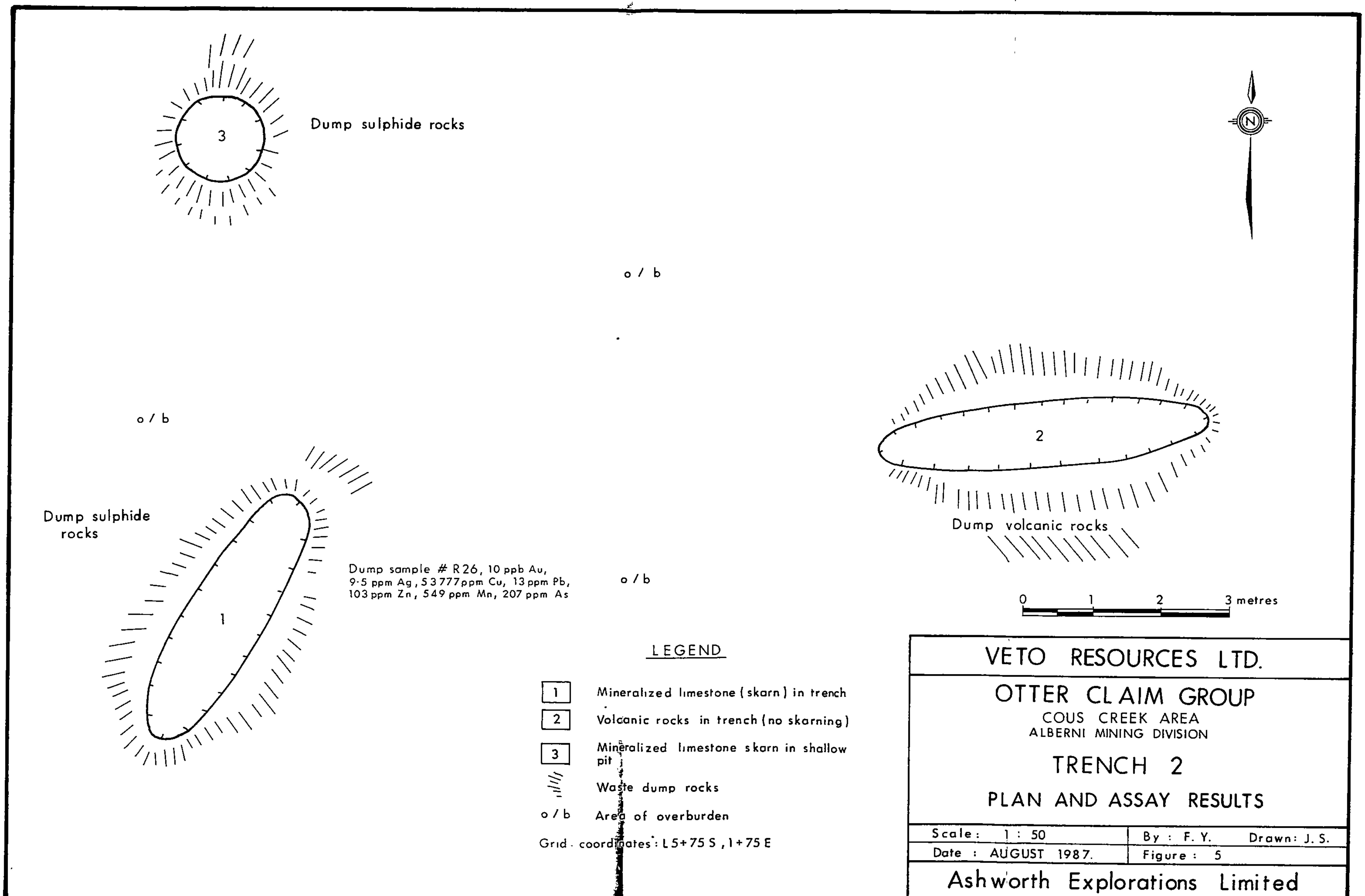
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION

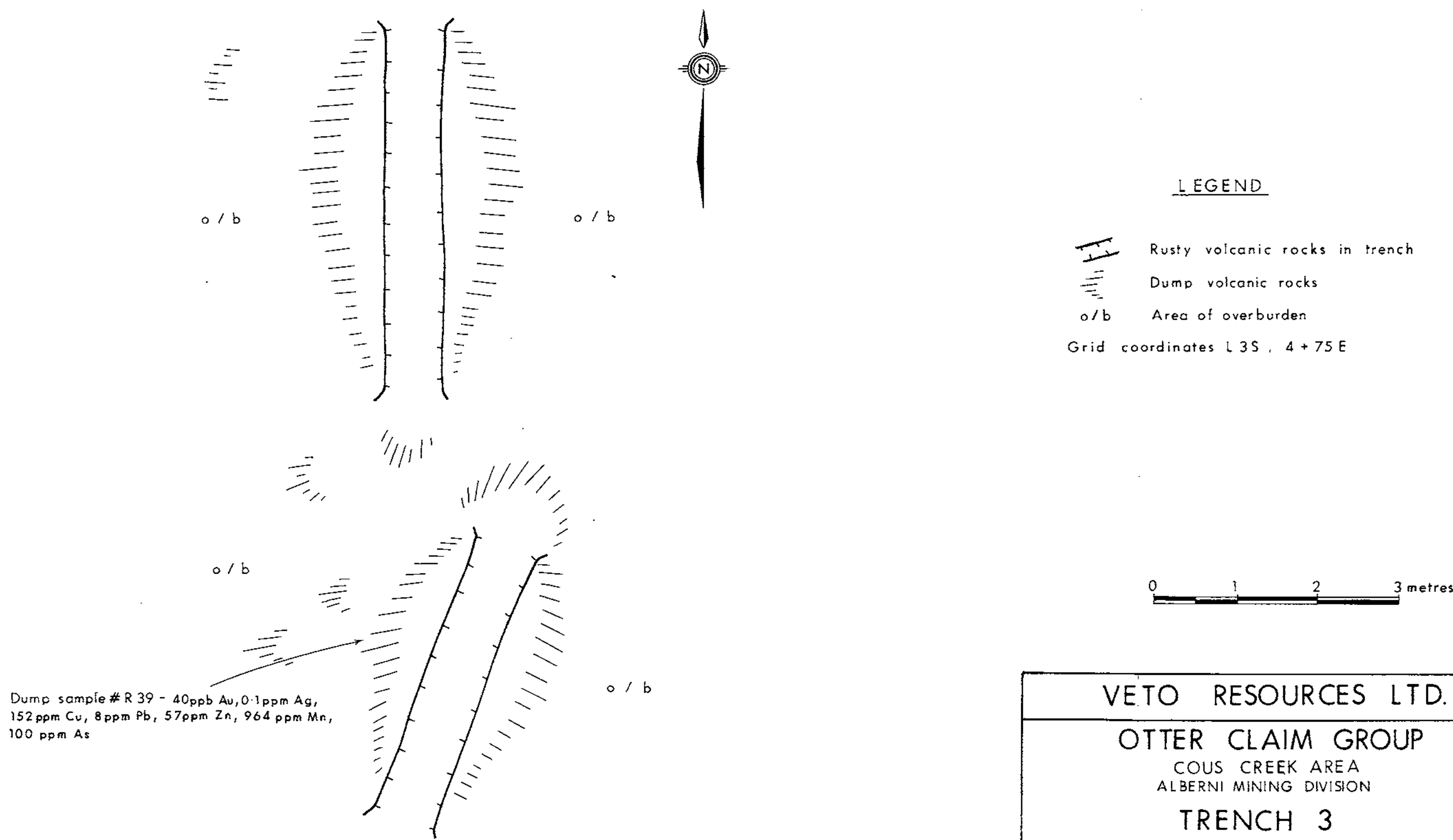
TRENCH 1

PLAN AND ASSAY RESULTS

Scale. 1:50	By: F. Y. Drawn: J S.
Date. AUGUST 1987	Figure: 4

Ashworth Explorations Limited


Dump sulphide rocks
3
o / b
o / b
2
Dump sulphide rocks
Dump volcanic rocks
Dump sample # R26, 10 ppb Au, 9·5 ppm Ag, 53777ppm Cu, 13 ppm Pb, 103 ppm Zn, 549 ppm Mn, 207 ppm As
o / b
1
0 1 2 3 metres
N
LEGEND
1 Mineralized limestone (skarn) in trench
2 Volcanic rocks in trench (no skarning)
3 Mineralized limestone skarn in shallow pit
Waste dump rocks
o / b Area of overburden
Grid - coordinates: L5+75 S, 1+75 E
VETO RESOURCES LTD.
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION
TRENCH 2
PLAN AND ASSAY RESULTS
Scale: 1 : 50
By : F. Y.
Drawn: J. S.
Date : AUGUST 1987.
Figure : 5
Ashworth Explorations Limited



VETO RESOURCES LTD.

OTTER CLAIM GROUP

COUS CREEK AREA

ALBERNI MINING DIVISION

TRENCH 3

PLAN AND ASSAY RESULTS

Scale : 1 : 50	By : F. Y. Drawn: J.S.
Date : AUGUST 1987.	Figure : 6

Ashworth Explorations Limited

VANGEOCHEM LAB LIMITED

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870627 SA ASHWORTH EXPLORATION 87/08/05

Statistical Analysis for Silver (soil) Project: Cous Creek

Number of samples in analyses: 690 x̄ = 0.3
Mean value: 0.307 ppm
variance: 3.825 ppm^2 x̄+2σ = 4.2

σ = 1.956

Samples below range: 0

```
Upper      %                       % OF TOTAL
Limit     of   0         20          40         60         80
(ppm)   total  |----|----|----|----|----|----|----|----|----|-
  0.1   75.36> |####|####|####|####|####|####|####|###
  0.2    4.93> |###
  0.3    3.48> |##          <- x̄
  0.4    2.90> |#
  0.5    2.90> |#
  0.6    3.48> |##
  0.7    0.87> |
  0.8    1.74> |#
  0.9    0.29> |
  1.0    0.00> |
  1.1    1.16> |#
  1.2    0.00> |
  1.3    0.43> |
  1.4    0.14> |
  1.5    0.29> |
  1.6    0.29> |
  1.7    0.72> |
  1.8    0.14> |
  1.9    0.29> |            <- x̄+σ
  2.0    0.00> |
Upper      %   |----|----|----|----|----|----|----|----|----|-
Limit     of   0         20          40         60         80
(ppm)   total                     % OF TOTAL
```

Samples above range: 4

Samples with the highest and lowest concentrations of Silver

Rank	Maximum Ag ppm	Sample	Minimum Ag ppm	Sample
1:	50.4	CC87L5N 5+50E	0.1	L 8N 10+00E
2:	7.8	CC-87 LO18+00N	0.1	L 8N 9+50E
3:	3.1	CC87L4N 8+50E	0.1	L 8N 9+00E
4:	2.1	CC-87L2N 2+00WA	0.1	L 8N 8+50E
5:	1.9	CC87L6N 8+50W	0.1	L 8N 8+00E
6:	1.9	CC87L3S 4+00W	0.1	L 8N 7+50E
7:	1.8	CC87L6N 9+00W	0.1	L 8N 7+00E
8:	1.7	L 7N 5+00E	0.1	L 8N 6+50E
9:	1.7	L 1S 7+50E	0.1	L 8N 6+00E
10:	1.7	CC87L4S 9+50E	0.1	L 8N 5+50E

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870627 SA ASHWORTH EXPLORATION 87/08/05

Statistical Analysis for Molybdenum (soil) Project: Cous Creek

Number of samples in analyses: 690 *$\bar{x} \cong 2.3$*
Mean value: 2.310 ppm
variance: 5.744 ppm^2 *$\bar{x}+2\sigma = 7.1$ ok*
$\sigma = 2.397$

Samples below range: 0

```
  Upper        %                        % OF TOTAL
  Limit       of     0         10        20        30        40
  (ppm)      total   |----|----|----|----|----|----|----|----|----|-
      1      42.32>  |####|####|####|####|####|####|####|####|###  |
x̄ -> 2      17.10>  |####|####|####|##  |    |    |    |    |    |
      3      17.25>  |####|####|####|###  |   |    |    |    |    |
      4      10.29>  |####|####|    |    |    |    |    |    |    |
x̄+σ -> 5     6.67>  |####|##  |    |    |    |    |    |    |    |
      6       2.17>  |##  |    |    |    |    |    |    |    |    |
x̄+2σ -> 7    1.30>  |#   |    |    |    |    |    |    |    |    |
      8       0.87>  |#   |    |    |    |    |    |    |    |    |
      9       0.72>  |#   |    |    |    |    |    |    |    |    |
     10       0.29>  |    |    |    |    |    |    |    |    |    |
     11       0.29>  |    |    |    |    |    |    |    |    |    |
     12       0.00>  |    |    |    |    |    |    |    |    |    |
     13       0.00>  |    |    |    |    |    |    |    |    |    |
     14       0.43>  |    |    |    |    |    |    |    |    |    |
     15       0.14>  |    |    |    |    |    |    |    |    |    |
     16       0.00>  |    |    |    |    |    |    |    |    |    |
     17       0.00>  |    |    |    |    |    |    |    |    |    |
     18       0.00>  |    |    |    |    |    |    |    |    |    |
     19       0.00>  |    |    |    |    |    |    |    |    |    |
     20       0.00>  |    |    |    |    |    |    |    |    |    |
  Upper        %     |----|----|----|----|----|----|----|----|----|-
  Limit       of     0         10        20        30        40
  (ppm)      total                      % OF TOTAL
```

Samples above range: 1

Samples with the highest and lowest concentrations of Molybdenum

Rank	Maximum Mo ppm	Sample	Minimum Mo ppm	Sample
1:	26	L 7N 5+00E	0	L 1S 4+50W
2:	15	CC87L4S 16+50W	0	CC87L8N 10+00W
3:	14	CC87L4S 17+00W	0	CC87L8N 8+50W
4:	14	CC87L4N 20+50W	0	CC87L8N 6+50W
5:	14	CC-87 L09+00N	0	CC87L8N 6+00W
6:	11	CC87L6N 9+00E	0	CC87L8N 5+50W
7:	11	CC87L6N 5+50E	0	CC87L8N 2+50W
8:	10	CC87L4N 5+00W	0	CC87L7N 0+50W
9:	10	CC-87 L1N 2+50W	0	CC87L6S 3+00W
10:	9	CC87L7S 0+50E	0	CC87L6S 2+50W

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870627 SA   ASHWORTH EXPLORATION   87/08/05

Statistical Analysis for Copper (soil)   Project: Cous Creek

Number of samples in analyses: 690   x̄ ≅ 67
Mean value: 66.993 ppm
variance: 11091.400 ppm^2   x̄ + 2σ = 278
σ = 105.316

Samples below range: 0

Upper Limit (ppm)	% of total
10	2.90>
20	10.58>
30	11.45>
40	15.80>
50	13.48>
60	10.87>
x̄ → 70	7.68>
80	5.80>
90	4.49>
100	3.33>
110	2.32>
120	2.90>
130	1.16>
140	1.01>
150	0.72>
160	0.87>
x̄ + σ → 170	1.01>
180	0.43>
190	0.29>
200	0.29>

% OF TOTAL (scale 0, 5, 10, 15, 20)

Samples above range: 18

Samples with the highest and lowest concentrations of Copper

Rank	Maximum Cu ppm	Sample	Minimum Cu ppm	Sample
1:	1462	CC-87 L1N 4+50E	0	CC87L4S 13+00W
2:	1317	CC-87 L1S 3+50E	1	CC-87 L00+50N
3:	1262	L 8N 6+00E	4	CC87L4S 12+00W
4:	744	CC87L5S 4+00E	5	CC87L4S 14+50W
5:	708	CC87L5S 3+00E	6	CC87L4S 3+00W
6:	538	CC-87 L1N 4+00E	6	CC87L5N 3+50E
7:	496	CC87L5S 2+00E	6	CC87L2S 8+50W
8:	406	CC87L6S 2+50E	7	L 8N 8+00E
9:	390	L 1N 8+50E	7	CC87L6N 3+50E
10:	291	CC87L5S 2+50E	7	CC87L5N 1+00E

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870627 SA ASHWORTH EXPLORATION 87/08/05

Statistical Analysis for Lead (soil) Project: Cous Creek

Number of samples in analyses: 690 $\bar{x} \cong 10$
Mean value: 9.991 ppm
variance: 68.516 ppm^2 $\bar{x}+2\sigma = 26.5$
$\sigma = 8.278$

Samples below range: 41

```
Upper      %                        % OF TOTAL
Limit      of     0         5         10        15        20
(ppm)     total   |----|----|----|----|----|----|----|----|----|----|-
   1      1.45>   |###
   2      3.91>   |####|###
   3      5.22>   |####|####|#
   4      6.23>   |####|####|###
   5      8.12>   |####|####|####|##
   6     10.14>   |####|####|####|####|#
   7      7.68>   |####|####|####|#
   8      6.96>   |####|####|####
   9      8.41>   |####|####|####|##
x̄ -> 10   6.23>   |####|####|###
  11      5.65>   |####|####|##
  12      4.78>   |####|####|
  13      4.20>   |####|####
  14      3.04>   |####|#
  15      2.90>   |####|#
  16      1.59>   |###
  17      1.01>   |##
x̄+σ -> 18 0.58>   |#
  19      0.72>   |#
  20      0.14>   |
Upper      %      |----|----|----|----|----|----|----|----|----|----|-
Limit      of     0         5         10        15        20
(ppm)     total                     % OF TOTAL
```

Samples above range: 35

Samples with the highest and lowest concentrations of Lead

Rank	Maximum Pb ppm	Sample	Minimum Pb ppm	Sample
1:	97	CC87L5S 2+50E	0	CC87L8N 0+00BL
2:	93	CC87L4S 16+50W	0	CC87L6S 2+50E
3:	63	CC87L5S 3+00E	0	CC87L5N 3+50E
4:	55	CC-87L2N 3+50WB	0	CC87L5N 2+50E
5:	51	CC87L4S 17+00W	0	CC87L4S 13+00W
6:	43	CC87L4N 23+50W	0	CC87L4N 22+50W
7:	41	CC87L4N 13+00W	0	CC87L4N 22+00W
8:	38	CC87L4S 4+00E	0	CC87L4N 21+50W
9:	38	CC87L4N 8+50W	0	CC87L4N 21+00W
10:	38	CC-87 LO18+00N	0	CC87L4N 20+50W

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870627 SA ASHWORTH EXPLORATION 87/08/05

Statistical Analysis for Zinc (soil) Project: Cous Creek

Number of samples in analyses: 690 x̄ = 82
Mean value: 82.328 ppm
variance: 2839.544 ppm^2 x̄+2σ=189

Samples below range: 24 σ=53.287

```
Upper       %                           % OF TOTAL
Limit      of     0         5         10        15        20
(ppm)     total   |----|----|----|----|----|----|----|----|----|-
   10     6.09>   |#####|#####|##  |    |    |    |    |    |    |
   20     7.25>   |#####|#####|#####|   |    |    |    |    |    |
   30    11.74>   |#####|#####|#####|#####|#####|  |    |    |    |
   40    12.90>   |#####|#####|#####|#####|#####|# |    |    |    |
   50    15.80>   |#####|#####|#####|#####|#####|#####|## |  |    |
   60    11.74>   |#####|#####|#####|#####|#####|  |    |    |    |
   70     8.26>   |#####|#####|#####|###  |    |    |    |    |    |
x̄→ 80     5.51>   |#####|#####|#  |    |    |    |    |    |    |
   90     6.09>   |#####|#####|## |    |    |    |    |    |    |
  100     3.77>   |#####|###  |    |    |    |    |    |    |    |
  110     1.88>   |####|    |    |    |    |    |    |    |    |
  120     1.45>   |###  |    |    |    |    |    |    |    |    |
x̄+σ → 130 0.87>   |##   |    |    |    |    |    |    |    |    |
  140     0.43>   |#    |    |    |    |    |    |    |    |    |
  150     0.29>   |#    |    |    |    |    |    |    |    |    |
  160     0.87>   |##   |    |    |    |    |    |    |    |    |
  170     0.29>   |#    |    |    |    |    |    |    |    |    |
  180     0.00>   |     |    |    |    |    |    |    |    |    |
x̄+2σ → 190 0.14>  |     |    |    |    |    |    |    |    |    |
  200     0.14>   |     |    |    |    |    |    |    |    |    |
Upper       %     |----|----|----|----|----|----|----|----|----|-
Limit      of     0         5         10        15        20
(ppm)     total                         % OF TOTAL
```

Samples above range: 7

Samples with the highest and lowest concentrations of Zinc

Rank	Maximum Zn ppm	Sample	Minimum Zn ppm	Sample
1:	888	CC87L2S 2+50E	2	CC-87 L03+50N
2:	487	CC87L5S 2+50E	7	CC-87 L06+50N
3:	429	CC-87 L018+00N	7	CC-87 L00+50N
4:	406	L 7N 5+00E	16	CC87L4S 13+00W
5:	372	CC87L4N 23+50W	16	CC87L4N 8+50E
6:	319	CC87L6S 3+00E	17	L 1S 8+00E
7:	275	CC87L4S 16+50W	17	CC87L4S 10+00E
8:	225	CC87L6N 2+50W	18	CC87L4N 9+50E
9:	213	CC87L4S 16+00W	20	CC87L6N 10+00E
10:	196	CC87L4N 19+00W	21	CC-87 L02+50E

OT... — 91 ...

VANGEOCHEM LAB LIMITED

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GEOCHEMICAL ANALYTICAL REPORT

CLIENT: **ASHWORTH EXPLORATION LTD.**
ADDRESS: Mez. Flr. 744 W. Hastings
: Vancouver, B.C.
: V6C 1A5

DATE: July 27 1987

REPORT#: 870732 GA
JOB#: 870732

PROJECT#: COUS CREEK (NO. 130)
SAMPLES ARRIVED: July 15 1987
REPORT COMPLETED: July 27 1987
ANALYSED FOR: Au ICP

INVOICE#: 870732 NA
TOTAL SAMPLES: 91
SAMPLE TYPE: 91 SOIL
REJECTS: DISCARDED

SAMPLES FROM: ASHWORTH EXPLORATION LTD.
COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR: FAYZ YACOUB

ANALYSED BY: VGC Staff

SIGNED: ____________

GENERAL REMARK: None

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

9ϕ Samples

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: ASHWORTH EXPL. LTD.
ATTENTION:
PROJECT: COUS CREEK 130

REPORT#: PA
JOB#: 870732
INVOICE#: NA

DATE RECEIVED: 87/07/15
DATE COMPLETED: 87/08/02
COPY SENT TO:

ANALYST

Soils

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L1N 5+00E	.1	1.62	15	ND	18	ND	.09	.1	5	10	30	4.09	.01	.24	244	2	.07	9	.04	9	ND	ND	ND	ND	4	4	4	42
L1N 5+50E	.1	2.07	15	ND	26	ND	.11	.1	6	10	35	4.48	.01	.28	240	2	.08	8	.05	8	ND	ND	ND	ND	6	ND	ND	50
L1N 6+00E	.1	3.06	11	ND	16	ND	.11	.1	4	20	36	5.03	.01	.25	148	2	.09	7	.05	9	ND	ND	ND	ND	5	ND	ND	38
L1N 6+50E	.1	6.22	23	ND	31	ND	.37	.1	25	77	149	7.56	.01	1.08	517	5	.16	71	.07	18	ND	ND	ND	ND	11	ND	ND	114
L1N 7+00E	.1	8.43	23	ND	29	3	.32	.1	20	59	126	6.42	.01	.94	486	6	.12	41	.10	15	ND	ND	ND	ND	10	ND	ND	74
L1N 7+50E	.1	4.22	18	ND	21	ND	.19	.1	12	38	63	5.86	.01	.45	342	3	.10	20	.05	12	ND	ND	ND	1	9	ND	ND	58
L1N 8+00E	.1	5.87	21	ND	33	ND	.29	.1	21	45	116	7.73	.01	.93	528	7	.15	30	.14	11	ND	ND	ND	ND	12	ND	ND	83
L1N 8+50E	.1	5.97	25	ND	30	ND	.23	.1	16	35	390	7.76	.01	.57	345	5	.14	24	.15	10	ND	ND	ND	ND	15	ND	ND	73
L1N 9+00E	.1	7.36	24	ND	30	ND	.32	.1	11	31	211	6.30	.01	.65	302	5	.12	17	.18	14	ND	ND	ND	ND	15	ND	ND	78
L1N 9+50E	.3	1.93	5	ND	11	5	.19	.1	10	24	42	4.89	.01	.27	187	2	.08	8	.05	10	ND	ND	ND	7	9	ND	5	29
L1N 10+00E	.1	4.29	9	ND	16	ND	.19	.1	10	37	69	5.83	.01	.45	205	3	.10	11	.07	12	ND	ND	ND	ND	9	ND	ND	43
L1N 5+50W	.1	1.94	ND	ND	20	ND	.10	.1	10	35	19	7.80	.01	.56	367	1	.13	6	.03	11	ND	ND	ND	ND	12	ND	ND	35
L1N 6+00W	.1	3.37	ND	ND	33	ND	.08	.1	9	9	17	5.27	.01	.60	500	2	.10	6	.04	13	ND	ND	ND	ND	3	ND	ND	57
L1N 6+50W	.1	4.16	10	ND	37	4	.46	.1	27	27	38	7.10	.01	2.01	1462	3	.16	24	.13	13	ND	ND	ND	ND	19	ND	ND	113
L1N 7+00W	.1	4.04	9	ND	30	ND	.21	.1	17	14	39	7.39	.01	.52	1832	3	.13	6	.28	18	ND	ND	ND	ND	12	ND	ND	77
L1N 7+50W	.1	4.01	ND	ND	35	ND	.19	.1	17	9	34	9.81	.01	.56	604	3	.17	1	.10	17	ND	ND	ND	6	14	ND	ND	89
L1N 8+00W	.1	4.67	7	ND	36	ND	.25	.1	16	24	67	7.38	.01	.82	779	3	.13	16	.11	16	ND	ND	ND	1	14	ND	ND	70
L1N 8+50W	.1	4.92	3	ND	49	4	.26	.1	16	12	43	7.28	.01	.86	736	3	.14	6	.10	17	ND	ND	ND	2	17	ND	ND	80
L1N 9+00W	.1	5.51	4	ND	28	ND	.17	.1	16	18	44	7.88	.01	.86	572	3	.15	10	.11	16	ND	ND	ND	ND	10	ND	ND	75
L1N 9+50W	.1	6.56	17	ND	50	ND	.33	.1	22	19	95	6.47	.01	1.11	1129	4	.13	19	.13	15	ND	ND	4	ND	15	ND	ND	97
L1N 10+00W	.1	4.57	9	ND	35	ND	.14	.1	9	27	51	7.79	.01	.63	281	4	.15	18	.15	13	ND	ND	ND	ND	6	ND	ND	77
L1S 5+50E	.1	5.07	14	ND	30	ND	.30	.1	16	54	106	6.10	.01	.80	327	4	.12	38	.11	12	ND	ND	ND	ND	9	ND	ND	68
L1S 6+00E	.1	1.66	16	ND	9	4	.13	.2	4	7	10	1.84	.01	.30	146	1	.03	5	.02	6	ND	ND	ND	ND	9	9	9	25
L1S 6+50E	.1	3.66	9	ND	21	ND	.26	.1	13	31	62	5.23	.01	.41	398	3	.09	20	.05	12	ND	ND	ND	1	11	ND	ND	50
L1S 7+00E	.2	3.38	ND	ND	16	3	.20	.1	10	30	51	6.09	.02	.32	244	3	.10	11	.07	11	ND	ND	ND	2	9	6	ND	42
L1S 7+50E	1.7	.94	ND	ND	5	10	.24	.1	12	17	21	4.57	.01	.16	145	1	.06	8	.03	11	ND	ND	ND	14	14	8	ND	23
L1S 8+00E	.8	1.21	3	ND	8	4	.32	.1	10	14	24	3.35	.01	.72	140	1	.04	9	.03	9	ND	ND	ND	9	20	6	ND	17
L1S 8+50E	.1	5.02	18	ND	28	ND	.27	.1	23	40	123	6.42	.01	.76	443	3	.12	36	.06	12	ND	ND	ND	ND	12	ND	ND	71
L1S 9+00E	.1	4.96	26	ND	27	ND	.34	.1	19	31	147	5.22	.01	.58	538	4	.10	24	.07	11	ND	ND	ND	1	12	ND	ND	68
L1S 4+50W	.1	1.09	ND	ND	123	ND	1.24	.1	8	2	16	1.90	.01	.29	865	ND	.06	4	.06	3	ND	ND	ND	ND	36	ND	3	115
L1S 5+00W	.1	3.29	4	ND	29	ND	.15	.1	9	16	48	5.61	.01	.63	428	2	.11	10	.06	9	ND	ND	ND	ND	9	ND	ND	62
L1S 5+50W	.1	3.95	ND	ND	44	ND	.15	.1	12	21	24	6.77	.01	.96	488	3	.13	8	.05	10	ND	ND	ND	ND	9	ND	ND	51
L1S 6+00W	.1	1.11	ND	ND	17	ND	.13	.1	6	11	19	4.57	.01	.14	360	1	.08	4	.03	7	ND	ND	ND	4	15	ND	ND	47
L1S 6+50W	.1	4.62	4	ND	58	ND	.32	.1	21	36	60	5.99	.01	1.63	1319	3	.13	21	.07	11	ND	ND	ND	ND	11	ND	ND	86
L1S 7+00W	.1	4.38	5	ND	61	ND	.71	.1	26	25	73	6.81	.01	1.71	1249	3	.14	24	.10	9	ND	ND	ND	ND	29	ND	ND	94
L1S 7+50W	.1	4.10	ND	ND	27	7	.21	.1	17	17	45	7.45	.01	.86	558	3	.14	12	.09	14	ND	ND	ND	ND	15	ND	ND	70
L1S 8+00W	.1	4.62	ND	ND	46	6	.23	.1	17	15	55	7.33	.01	.87	759	3	.14	12	.13	16	ND	ND	ND	ND	13	ND	ND	85
L1S 8+50W	.1	5.56	ND	ND	65	3	.41	.1	18	12	50	6.58	.01	1.05	852	3	.13	8	.13	18	ND	ND	ND	ND	21	ND	ND	84
L1S 9+00W	.1	3.76	3	ND	32	ND	.14	.1	12	10	36	6.76	.01	.58	432	2	.12	5	.06	12	ND	ND	ND	ND	9	ND	ND	71

CLIENT: ASHWORTH EXPL. LTD. JOB#: 870732 PROJECT: COUS CREEK 130 REPORT: PA DATE: 87/08/02

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L1S 9+50W	.1	4.40	7	ND	35	ND	.15	.1	16	18	59	6.92	.01	.90	469	3	.14	8	.07	9	ND	ND	ND	ND	9	ND	ND	76
L1S 10+00W	.1	2.26	ND	ND	11	ND	.19	.1	9	24	26	7.27	.01	.43	405	2	.12	8	.07	7	ND	ND	ND	1	6	ND	ND	41
L3N 5+50E	.1	1.89	4	ND	110	ND	.21	.1	28	6	69	6.94	.04	.50	1435	3	.10	9	.10	4	ND	ND	ND	ND	9	ND	ND	70
L3N 6+00E	.1	4.35	13	ND	23	ND	.17	.1	7	33	47	5.81	.01	.36	242	3	.11	11	.11	10	ND	ND	ND	ND	9	ND	ND	63
L3N 6+50E	.1	5.95	13	ND	29	ND	.30	.1	17	50	136	5.66	.01	1.03	429	4	.12	31	.07	10	ND	ND	ND	ND	11	ND	ND	79
L3N 7+00E	.1	3.28	9	ND	29	ND	.29	.1	20	46	80	6.06	.01	1.12	667	3	.12	52	.06	10	ND	ND	ND	ND	10	ND	ND	78
L3N 7+50E	.1	3.57	4	ND	58	ND	.42	.1	30	29	61	5.09	.01	.78	589	4	.10	29	.05	8	ND	ND	ND	2	15	ND	ND	79
L3N 8+00E	.1	2.84	ND	ND	127	ND	.92	.1	24	25	35	3.65	.01	.78	2383	2	.08	29	.05	7	ND	ND	ND	ND	32	ND	ND	82
L3N 8+50E	.1	5.18	6	ND	33	4	.34	.1	30	57	70	6.06	.01	1.50	452	4	.12	76	.04	8	ND	ND	ND	ND	14	ND	ND	57
L3N 9+00E	.1	4.86	8	ND	31	ND	.30	.1	28	55	66	5.80	.01	1.41	408	4	.12	70	.04	8	ND	ND	ND	ND	12	ND	ND	57
L3N 9+50E	.1	5.34	17	ND	36	ND	.42	.1	21	36	101	4.79	.01	.73	573	5	.08	25	.08	8	ND	ND	ND	ND	15	ND	ND	44
L3N 10+00E	.1	5.51	13	ND	19	ND	.08	.1	10	22	36	6.31	.01	.80	329	5	.12	9	.18	9	ND	ND	ND	ND	5	ND	ND	67
L7N 0+50E	.1	4.50	16	ND	27	ND	.19	.1	10	32	70	5.21	.01	.56	288	3	.10	13	.08	12	ND	ND	ND	ND	8	ND	ND	68
L7N 1+00E	.1	3.66	7	ND	23	ND	.22	.1	10	24	39	5.47	.01	.47	511	2	.10	12	.10	13	ND	ND	ND	ND	15	ND	ND	64
L7N 1+50E	.1	3.98	7	ND	43	ND	.26	.1	12	27	63	5.77	.01	.80	1817	3	.13	17	.20	14	ND	ND	ND	ND	10	ND	ND	102
L7N 2+00E	.1	1.32	ND	ND	58	ND	.21	.1	4	9	18	2.83	.01	.24	246	1	.06	5	.04	7	ND	ND	ND	ND	11	ND	3	64
L7N 2+50E	.1	1.52	6	ND	22	ND	.15	.1	7	9	25	3.93	.07	.23	700	1	.08	7	.08	14	ND	ND	ND	ND	7	10	ND	77
L7N 3+00E	.1	2.92	22	ND	44	ND	.23	.1	12	27	50	5.50	.03	.55	1104	4	.11	18	.09	14	ND	ND	ND	ND	10	6	ND	99
L7N 3+50E	.3	.19	17	ND	11	ND	.09	.1	2	9	9	1.13	.04	.02	63	2	.02	7	.02	1	ND	ND	ND	ND	3	15	9	47
L7N 4+00E	.1	2.88	21	ND	77	ND	.82	.7	11	36	50	4.71	.02	.58	1469	3	.10	21	.11	11	ND	ND	ND	ND	24	4	ND	129
L7N 4+50E	.1	1.32	134	ND	11	ND	.09	.1	8	21	51	2.87	.05	.14	130	6	.07	32	.08	26	ND	ND	ND	ND	3	14	4	136
L7N 5+00E	1.7	3.12	240	ND	18	ND	.08	1.3	8	156	102	4.73	.03	.42	332	26	.18	75	.14	22	ND	ND	9	ND	3	9	ND	406
L7N 5+50E	.1	4.63	28	ND	29	ND	.30	.1	16	44	102	5.66	.04	.73	1048	5	.11	32	.11	18	ND	ND	ND	ND	9	4	ND	84
L7N 6+00E	.1	3.97	20	ND	15	ND	.24	.1	8	34	61	5.79	.04	.44	220	4	.10	12	.06	12	ND	ND	ND	ND	9	7	ND	53
L7N 6+50E	.1	3.02	17	ND	24	ND	.28	.1	11	34	40	4.62	.03	.46	396	2	.08	15	.06	13	ND	ND	ND	2	12	6	ND	51
L7N 7+00E	.1	2.91	14	ND	21	ND	.33	.1	9	39	42	6.26	.03	.36	364	3	.11	11	.07	13	ND	ND	ND	4	11	ND	ND	66
L7N 7+50E	.1	3.63	11	ND	39	ND	.26	.1	16	50	58	5.97	.01	.97	288	5	.12	55	.03	10	ND	ND	ND	ND	13	ND	ND	59
L7N 8+00E	.9	1.35	8	ND	11	3	.09	.1	7	24	31	4.44	.05	.10	137	2	.07	6	.03	10	ND	ND	ND	3	6	12	ND	33
L7N 8+50E	.7	1.35	5	ND	11	5	.09	.1	7	25	31	4.45	.05	.10	137	2	.07	7	.03	11	ND	ND	ND	4	6	12	6	33
L7N 9+00E	.1	4.33	21	ND	56	6	.71	.1	26	40	96	5.87	.01	1.60	900	4	.13	49	.07	9	ND	ND	ND	ND	29	ND	ND	78
L7N 9+50E	.1	2.03	12	ND	29	ND	.27	.1	10	15	46	2.93	.02	.50	778	2	.07	11	.08	14	ND	ND	ND	ND	15	6	ND	88
L7N 10+00E	.3	3.77	14	ND	25	5	.27	.1	12	30	67	5.13	.01	.48	269	3	.09	13	.11	13	ND	ND	ND	3	16	3	ND	61
L8N 0+50E	.1	4.22	17	ND	77	ND	.24	.1	17	25	77	5.87	.01	1.01	742	3	.14	26	.08	11	ND	ND	ND	ND	9	ND	ND	120
L8N 1+00E	.1	5.37	15	ND	38	ND	.18	.1	13	34	50	6.74	.01	.64	357	4	.14	15	.12	14	ND	ND	ND	ND	9	ND	ND	104
L8N 1+50E	.1	2.51	8	ND	140	ND	.41	.1	5	8	12	2.67	.05	.28	6277	1	.06	6	.07	10	ND	ND	ND	ND	13	4	ND	106
L8N 2+00E	.1	2.34	5	ND	33	ND	.13	.1	5	17	14	4.99	.03	.27	326	2	.09	6	.06	10	ND	ND	ND	ND	7	4	ND	51
L8N 2+50E	.1	3.94	12	ND	50	ND	.21	.1	9	26	46	5.68	.01	.42	537	3	.11	10	.09	13	ND	ND	ND	ND	9	ND	ND	77
L8N 3+00E	.1	2.35	17	ND	21	ND	.14	.1	6	15	33	5.07	.01	.40	323	2	.10	8	.09	12	ND	ND	ND	ND	5	ND	ND	52
L8N 3+50E	.1	2.37	21	ND	21	ND	.19	.3	8	32	35	4.55	.01	.26	365	3	.09	15	.10	14	ND	ND	ND	ND	8	ND	ND	61
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L8N 4+00E	.1	2.29	18	ND	20	ND	.18	.1	5	13	20	4.08	.01	.31	612	2	.10	6	.10	7	ND	ND	ND	ND	7	ND	ND	86
L8N 4+50E	.1	4.04	75	ND	50	ND	.18	.3	16	44	127	5.42	.01	.61	614	6	.14	59	.17	18	ND	ND	3	ND	6	ND	ND	181
L8N 5+00E	.1	5.14	34	ND	21	ND	.14	.1	9	35	58	5.86	.01	.38	269	5	.12	12	.12	14	ND	ND	ND	ND	6	ND	ND	81
L8N 5+50E	.1	3.96	21	ND	17	ND	.18	.1	9	39	52	6.27	.01	.35	224	4	.12	11	.07	16	ND	ND	ND	ND	8	ND	ND	57
L8N 6+00E	.1	3.80	105	ND	6	ND	6.44	.1	23	19	1262	17.90	.01	.48	1785	4	.34	19	.09	4	ND	ND	ND	ND	1	ND	ND	37
L8N 6+50E	.1	5.29	147	ND	41	6	.32	.1	19	56	156	5.88	.01	.93	452	5	.13	52	.05	11	ND	ND	ND	ND	10	ND	ND	76
L8N 7+00E	.1	3.42	27	ND	28	ND	.23	.1	12	46	73	5.27	.01	.52	291	8	.10	27	.05	10	ND	ND	ND	ND	9	ND	ND	57
L8N 7+50E	.1	3.32	26	ND	73	ND	.30	.1	6	18	46	3.93	.01	.49	244	4	.09	14	.04	6	ND	ND	ND	ND	13	ND	ND	72
L8N 8+00E	.1	2.26	8	ND	66	ND	.28	.1	3	12	7	2.07	.01	.22	342	2	.04	8	.02	6	ND	ND	ND	ND	12	ND	5	40
L8N 8+50E	.1	4.76	19	ND	30	4	.30	.1	18	44	110	5.58	.01	.92	395	3	.11	31	.04	12	ND	ND	ND	1	10	ND	ND	60
L8N 9+00E	.1	3.06	13	ND	29	ND	.24	.1	9	24	52	4.07	.03	.48	453	3	.07	17	.05	10	ND	ND	ND	ND	9	ND	ND	44
L8N 9+50E	.1	3.63	16	ND	34	3	.33	.1	16	34	88	5.11	.01	.61	367	4	.10	24	.07	13	ND	ND	ND	1	10	ND	ND	61
L8N 10+00E	.1	3.78	15	ND	28	ND	.20	.1	14	30	67	5.72	.02	.64	366	4	.11	19	.07	12	ND	ND	ND	ND	8	ND	ND	57
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870732 GA JOB NUMBER: 870732 AINSWORTH EXPLORATION LTD.

OTTER-

SAMPLE #	Au ppb
L 1N 5+00E	10
L 1N 5+50E	5
L 1N 6+00E	5
L 1N 6+50E	5
L 1N 7+00E	10
L 1N 7+50E	5
L 1N 8+00E	5
L 1N 8+50E	5
L 1N 9+00E	10
L 1N 9+50E	10
L 1N 10+00E	10
L 1N 5+50W	35
L 1N 6+00W	180
L 1N 6+50W	10
L 1N 7+00W	10
L 1N 7+50W	10
L 1N 8+00W	5
L 1N 8+50W	10
L 1N 9+00W	5
L 1N 9+50W	5
L 1N 10+00W	5
L 1S 5+50E	5
L 1S 6+00E	nd
L 1S 6+50E	10
L 1S 7+00E	10
L 1S 7+50E	nd
L 1S 8+00E	10
L 1S 8+50E	10
L 1S 9+00E	10
L 1S 4+50W	10
L 1S 5+00W	20
L 1S 5+50W	25
L 1S 6+00W	nd
L 1S 6+50W	nd
L 1S 7+00W	10
L 1S 7+50W	nd
L 1S 8+00W	nd
L 1S 8+50W	nd
L 1S 9+00W	nd
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
L 1S 9+50W	10
L 1S 10+00W	10
L 3N 5+50E	5
L 3N 6+00E	5
L 3N 6+50E	5
L 3N 7+00E	5
L 3N 7+50E	5
L 3N 8+00E	nd
L 3N 8+50E	nd
L 3N 9+00E	15
L 3N 9+50E	10
L 3N 10+00E	10
L 7N 0+50E	10
L 7N 1+00E	10
L 7N 1+50E	15
L 7N 2+00E	5
L 7N 2+50E	5
L 7N 3+00E	nd
L 7N 3+50E	nd
L 7N 4+00E	10
L 7N 4+50E	nd
L 7N 5+00E	10
L 7N 5+50E	nd
L 7N 6+00E	nd
L 7N 6+50E	nd
L 7N 7+00E	nd
L 7N 7+50E	nd
L 7N 8+00E	nd
L 7N 8+50E	10
L 7N 9+00E	10
L 7N 9+50E	nd
L 7N 10+00E	15
L 8N 0+50E	10
L 8N 1+00E	20
L 8N 1+50E	nd
L 8N 2+00E	nd
L 8N 2+50E	nd
L 8N 3+00E	nd
L 8N 3+50E	nd
DETECTION LIMIT	5

nd = none detected   -- = not analysed   is = insufficient sample

VANGEOCHEM LAB LIMITED

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BRANCH OFFICE
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VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
L 8N 4+00E	5
L 8N 4+50E	10
L 8N 5+00E	nd
L 8N 5+50E	nd
L 8N 6+00E	nd
L 8N 6+50E	10
L 8N 7+00E	10
L 8N 7+50E	15
L 8N 8+00E	5
L 8N 8+50E	10
L 8N 9+00E	5
L 8N 9+50E	5
L 8N 10+00E	5

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

OTTER - 10 Rock

VANGEOCHEM LAB LIMITED

VGC

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

[redacted]

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: ASHWORTH EXPLORATION LTD.
ADDRESS: Mez. Flr. 744 W. Hastings
: Vancouver, B.C.
: V6C 1A5

DATE: July 21 1987

REPORT#: 870735 GA
JOB#: 870735

PROJECT#: COUS CREEK
SAMPLES ARRIVED: July 16 1987
REPORT COMPLETED: July 21 1987
ANALYSED FOR: Au (FA/AAS) ICP

INVOICE#: 870735 NA
TOTAL SAMPLES: 10
SAMPLE TYPE: 10 ROCK
REJECTS: SAVED

SAMPLES FROM: ASHWORTH EXPLORATION LTD.
COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR: FAYZ YACOUB

ANALYSED BY: VGC Staff

SIGNED: ______________________

GENERAL REMARK: None

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870735 GA JOB NUMBER: 870735 ASHWORTH EXPLORATION LTD.

SAMPLE # Rock	Au ppb
R 23	nd
R 24	nd
R 27A	90
R 27B	nd
R 27C	nd
R 27D	10
R 27E	nd
R 39	40
R 40	20
R 41	nd

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: ASHWORTH
ATTENTION:
PROJECT: COUS CREEK

REPORT#: PA
JOB#: 870735
INVOICE#: NA

DATE RECEIVED: 87/07/16
DATE COMPLETED: 87/07/23
COPY SENT TO:

ANALYST *D Kiewes*

Rock

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %
R23	.1	.50	5	ND	5	ND	.40	.1	40	20	21	4.72	.07	.17
R24	.1	.39	ND	ND	5	ND	6.66	.1	40	78	12	7.55	.06	3.30
R27A	16.8	.43	28	ND	3	ND	2.59	2.2	109	29	>10%	15.51	.10	.44
R27B	.1	4.02	8	5	2	ND	5.74	.1	23	5	374	15.44	.12	4.09
R27C	.1	1.98	9	4	3	ND	11.03	.1	10	22	117	12.16	.02	1.48
R27D	.1	1.16	41	3	1	ND	11.91	.1	23	27	9484	10.00	.01	.89
R27E	1.2	.17	41	3	ND	ND	20.38	.1	38	32	13282	7.78	.01	.19
R39	.1	.60	100	ND	4	ND	6.54	.1	25	113	152	4.44	.05	3.39
R40	1.1	1.43	7	ND	10	ND	.44	.1	14	69	2180	3.55	.07	1.11
R41	.1	1.86	ND	ND	10	ND	1.06	.1	18	64	36	3.62	.06	1.29
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01

SAMPLE NAME	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
R23	703	1	.13	17	.04	11	ND	ND	ND	ND	3	8	ND	46
R24	797	1	.28	112	.01	13	ND	ND	ND	ND	97	ND	ND	42
R27A	3255	8	.75	37	.01	2	ND	ND	ND	ND	4	ND	ND	147
R27B	2791	2	.54	13	.07	29	ND	ND	ND	ND	54	ND	ND	107
R27C	2625	3	.36	8	.05	28	ND	ND	ND	ND	65	ND	ND	50
R27D	2684	5	.30	5	.05	29	ND	ND	ND	ND	141	ND	ND	44
R27E	2412	3	.26	17	.01	29	ND	ND	ND	ND	249	ND	ND	38
R39	964	2	.20	135	.03	8	ND	ND	13	1	127	ND	ND	57
R40	543	2	.11	4	.04	28	ND	ND	ND	ND	20	7	ND	36
R41	501	3	.12	6	.03	9	ND	ND	ND	3	137	5	ND	39
DETECTION LIMIT	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CT+F : - 22 ... detail)

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: ASHWORTH EXPLORATION LTD. DATE: Aug 17 1987
ADDRESS: Mez. Flr. 744 W. Hastings
: Vancouver, B.C. REPORT#: 870879 GA
: V6C 1A5 JOB#: 870879

Otter Group – detail soils
PROJECT#: COUS CREEK INVOICE#: 870879 NA
SAMPLES ARRIVED: July 29 1987 TOTAL SAMPLES: 88
REPORT COMPLETED: Aug 17 1987 SAMPLE TYPE: 88 SOIL
ANALYSED FOR: Au ICP REJECTS: DISCARDED

SAMPLES FROM: ASHWORTH EXPLORATION LTD.
COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR: MR. FAYZ YACOUB

ANALYSED BY: VGC Staff

SIGNED: ____________

GENERAL REMARK: None

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: ASHWORTH
ATTENTION:
PROJECT:

REPORT#: PA
JOB#: 870879
INVOICE#: NA

DATE RECEIVED: 87/08/04
DATE COMPLETED: 87/08/16
COPY SENT TO:

ANALYST

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L 2N 550W	.1	3.57	16	ND	22	4	.15	.1	9	27	46	5.81	.01	.56	295	2	.12	10	.08	10	ND	ND	ND	ND	7	ND	ND	54
L 2N 575W	.1	3.36	14	ND	28	4	.05	.1	11	18	40	4.44	.01	.73	339	2	.09	10	.04	8	ND	ND	ND	ND	3	ND	ND	49
L 2N 594W	.1	5.41	16	ND	43	ND	.10	.1	13	14	50	6.00	.01	.91	506	3	.14	13	.08	11	ND	ND	3	ND	4	ND	ND	115
L 2N 597W	.1	3.36	9	ND	30	ND	.07	.1	7	6	15	4.35	.01	.59	333	1	.09	3	.04	7	ND	ND	ND	ND	4	ND	ND	47
L 2N 600W	.1	5.77	15	ND	36	ND	.04	.1	12	6	57	6.36	.01	.83	440	3	.14	3	.09	5	ND	ND	3	ND	3	ND	ND	87
L 2N 604W	.1	3.37	14	ND	43	ND	.44	.1	9	6	25	4.49	.01	.52	721	1	.10	5	.08	8	ND	ND	ND	ND	11	ND	ND	61
L 2N 607W	.1	3.73	16	ND	31	ND	.17	.1	9	15	39	5.52	.01	.42	394	2	.11	8	.12	8	ND	ND	ND	ND	7	ND	ND	74
L 2N 625W	.1	3.86	10	ND	17	ND	.06	.1	4	12	28	6.36	.01	.27	200	2	.12	5	.07	9	ND	ND	ND	ND	4	ND	ND	47
L 2N 650W	.1	1.78	14	ND	16	4	.05	.1	3	6	8	4.38	.01	.11	169	1	.07	1	.04	8	ND	ND	ND	ND	4	4	ND	23
L 2S 100W	.1	1.45	10	ND	15	ND	.02	.1	4	3	17	4.11	.02	.08	263	1	.07	3	.05	5	ND	ND	ND	ND	2	6	ND	43
L 2S 125W	.1	3.59	22	ND	42	ND	.07	.1	9	7	29	4.21	.01	.39	712	3	.09	2	.09	7	ND	ND	ND	ND	2	ND	ND	59
L 2S 144W	.1	1.23	11	ND	12	ND	.02	.1	2	1	6	2.59	.03	.05	231	2	.04	1	.03	5	ND	ND	ND	ND	1	8	3	35
L 2S 147W	.1	2.01	11	ND	15	ND	.08	.1	6	11	12	4.81	.02	.24	552	ND	.09	4	.07	7	ND	ND	ND	ND	3	3	ND	55
L 2S 150W	.1	2.74	12	ND	26	ND	.08	.1	11	16	33	5.44	.01	.40	679	2	.12	12	.06	9	ND	ND	ND	ND	4	ND	ND	98
L 2S 153W	.1	2.23	8	ND	17	5	.03	.1	7	11	14	4.20	.01	.29	400	1	.08	7	.06	9	ND	ND	ND	ND	2	4	ND	45
L 2S 156W	.1	2.59	10	ND	19	ND	.04	.1	8	13	18	4.82	.01	.40	430	1	.09	5	.06	6	ND	ND	ND	ND	2	ND	ND	47
L 2S 170W	.1	3.59	13	ND	34	ND	.01	.1	13	17	31	4.48	.02	.83	459	2	.10	12	.05	10	ND	ND	3	ND	1	ND	ND	69
L 2S 200W	.1	4.32	9	ND	39	ND	.12	.1	10	22	39	5.03	.02	.57	333	2	.11	14	.06	6	ND	ND	ND	ND	5	ND	ND	76
L 2S 450W	.1	3.00	14	ND	15	ND	.04	.1	12	9	20	5.30	.03	.57	493	2	.10	7	.05	10	ND	ND	ND	ND	2	6	ND	38
L 2S 475W	.1	5.65	14	ND	20	ND	.10	.1	8	22	62	6.41	.02	.45	237	4	.13	7	.18	15	ND	ND	4	ND	5	ND	ND	66
L 2S 494W	.1	4.00	20	ND	31	ND	[illegible]	.1	10	23	51	5.48	.01	.66	403	3	.11	14	.09	14	ND	ND	3	ND	6	ND	ND	58
L 2S 497W	.1	3.13	9	ND	21	ND	.10	.1	10	21	25	6.55	.02	.68	377	2	.12	10	.06	9	ND	ND	ND	ND	5	ND	ND	43
L 2S 500W	.1	3.94	12	ND	22	ND	.09	.1	9	21	31	6.44	.02	.66	280	2	.12	10	.07	10	ND	ND	ND	ND	5	ND	ND	48
L 2S 503W	.1	2.33	3	ND	35	4	.12	.1	9	17	15	4.79	.03	.58	484	1	.09	8	.04	11	ND	ND	ND	ND	5	ND	ND	41
L 2S 506W	.1	3.79	7	ND	25	ND	.11	.1	10	20	25	5.33	.01	.78	458	2	.11	8	.06	10	ND	ND	ND	ND	5	ND	ND	56
L 2S 525W	.1	2.77	9	ND	28	3	.16	.1	8	17	35	5.08	.01	.58	270	2	.10	9	.05	13	ND	ND	ND	ND	7	ND	ND	55
L 4N 550W	.1	4.27	13	ND	93	ND	.16	.1	11	23	69	5.86	.01	.61	298	3	.12	17	.07	10	ND	ND	ND	ND	7	ND	ND	73
L175N 550N	.1	4.31	16	ND	21	ND	.11	.1	11	26	69	6.64	.01	.74	333	2	.13	14	.08	9	ND	ND	ND	ND	5	ND	ND	56
L175N 575N	.1	1.65	7	ND	12	ND	.03	.1	9	13	23	4.87	.02	.37	294	1	.09	5	.03	13	ND	ND	ND	ND	2	ND	ND	42
L175N 600N	.1	2.71	ND	ND	31	ND	.03	.1	7	4	23	5.08	.02	.44	432	1	.09	3	.04	7	ND	ND	ND	ND	4	ND	ND	39
L175N 625N	.1	4.28	11	ND	32	ND	.07	.1	7	12	31	6.09	.01	.52	379	2	.12	6	.09	6	ND	ND	ND	ND	4	ND	ND	60
L175N 650N	.1	2.28	ND	ND	89	ND	.20	.1	10	25	22	6.75	.03	.28	459	1	.13	7	.04	11	ND	ND	ND	ND	12	ND	ND	61
L175S 100W	.1	4.11	15	ND	37	ND	.08	.1	9	12	40	5.13	.03	.45	648	2	.10	7	.12	8	ND	ND	ND	ND	4	ND	ND	73
L175S 125W	.1	1.23	8	ND	12	ND	.04	.1	4	4	8	3.89	.03	.10	227	1	.07	4	.04	4	ND	ND	ND	ND	2	3	ND	35
L175S 150W	.1	1.83	14	ND	16	ND	.03	.1	8	6	28	6.06	.04	.14	380	1	.11	4	.09	12	ND	ND	ND	ND	1	6	ND	53
L175S 175W	.1	1.89	20	ND	21	ND	.03	.1	12	6	35	6.45	.03	.12	474	1	.13	5	.09	6	ND	ND	7	ND	1	ND	ND	107
L175S 200W	.1	4.61	34	ND	48	ND	.22	.1	15	28	87	5.31	.01	.85	406	2	.12	26	.08	4	ND	ND	ND	ND	8	ND	ND	88
L194S 600W	.1	3.16	10	ND	23	ND	.05	.1	8	5	13	5.30	.02	.58	334	1	.11	3	.05	8	ND	ND	ND	ND	3	ND	ND	48
L194S 150W	.1	1.38	9	ND	10	ND	.02	.1	8	7	15	5.04	.02	.10	552	1	.10	5	.07	8	ND	ND	ND	ND	1	ND	ND	69
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L197N 600W	.1	5.09	17	ND	59	ND	.12	.1	14	12	62	5.66	.01	.76	774	3	.13	13	.08	11	ND	ND	3	ND	5	ND	ND	80
L197S 150W	.1	2.73	16	ND	19	ND	.05	.1	9	8	37	4.26	.01	.35	495	1	.09	6	.05	4	ND	ND	ND	ND	2	ND	ND	52
L203N 600W	.1	4.52	14	ND	34	ND	.09	.1	10	8	42	5.63	.01	.79	366	2	.13	7	.06	13	ND	ND	ND	ND	5	ND	ND	62
L203S 150W	.1	2.07	19	ND	16	ND	.04	.1	12	11	20	6.99	.02	.17	575	1	.15	7	.09	4	ND	ND	4	ND	2	ND	ND	103
L206N 600W	.1	4.14	13	ND	43	ND	.11	.1	9	3	16	4.91	.01	.62	472	2	.11	3	.06	3	ND	ND	ND	ND	7	ND	ND	52
L206S 150W	.1	3.45	14	ND	25	ND	.02	.1	10	9	37	5.10	.04	.41	550	3	.11	5	.05	2	ND	ND	3	ND	1	ND	ND	68
L225N 350W	.1	5.56	17	ND	33	ND	.18	.1	12	39	82	6.83	.02	.75	342	3	.15	18	.12	6	ND	ND	4	ND	9	ND	ND	65
L225N 575W	.1	3.79	13	ND	28	ND	.16	.1	10	21	46	4.99	.03	.68	329	2	.11	14	.04	5	ND	ND	ND	ND	7	ND	ND	55
L225N 600W	.1	2.73	14	ND	29	ND	.10	.1	5	6	12	4.18	.02	.37	210	1	.09	4	.05	4	ND	ND	ND	ND	4	ND	ND	40
L225N 625W	.1	3.80	14	ND	20	ND	.13	.1	7	19	33	5.84	.01	.35	311	2	.13	8	.10	9	ND	ND	ND	ND	6	ND	ND	55
L225N 650W	.1	3.84	23	ND	28	ND	.09	.1	6	17	40	6.15	.01	.38	238	2	.14	9	.10	8	ND	ND	ND	ND	5	ND	ND	58
L225S 150W	.1	2.24	11	ND	29	ND	.08	.1	6	10	20	3.69	.03	.26	358	1	.08	1	.05	2	ND	ND	ND	ND	4	ND	ND	38
L225S 175W	.1	2.79	9	ND	26	ND	.06	.1	6	9	21	3.91	.03	.35	366	ND	.09	4	.06	1	ND	ND	ND	ND	3	ND	ND	51
L225S 200W	.1	3.26	8	ND	45	ND	.07	.1	6	8	21	3.76	.03	.25	232	2	.10	4	.05	3	ND	ND	ND	ND	4	ND	ND	70
L375N 450W	.1	5.59	21	ND	34	ND	.20	.1	13	30	115	5.23	.04	.71	371	3	.13	18	.16	5	ND	ND	4	ND	9	ND	ND	62
L375N 475W	.1	4.53	14	ND	47	ND	.13	.1	16	24	27	6.14	.03	1.13	637	2	.16	13	.08	13	ND	ND	3	ND	7	ND	ND	79
L375N 500W	.1	6.43	16	ND	59	ND	.15	.1	14	28	[illegible]	[illegible]	.02	.95	459	3	.17	18	.12	12	ND	ND	3	ND	7	ND	ND	100
L375N 525W	.1	6.37	13	ND	51	ND	.06	.1	16	20	21	5.55	.04	1.15	465	3	.16	12	.07	9	ND	ND	3	ND	4	ND	ND	99
L375N 550W	.1	3.33	12	ND	30	ND	.13	.1	8	21	47	5.03	.03	.45	229	1	.13	13	.09	8	ND	ND	ND	ND	7	ND	ND	67
L375S 400E	.6	2.57	11	ND	9	ND	.14	.1	8	28	42	4.28	.05	.27	141	1	.09	10	.04	6	ND	ND	ND	ND	5	ND	ND	26
L375S 425E	.1	5.95	26	ND	22	ND	.41	.1	17	53	184	5.90	.02	1.07	424	4	.16	43	.06	5	ND	ND	5	ND	12	ND	ND	57
L375S 450E	.4	2.70	16	ND	15	ND	.24	.1	9	26	58	4.97	.03	.39	673	1	.11	12	.06	6	ND	ND	ND	ND	11	ND	ND	33
L375S 475E	.4	2.38	7	ND	13	ND	.19	.1	5	16	34	3.01	.04	.12	153	1	.06	8	.07	11	ND	ND	ND	ND	9	ND	ND	27
L375S 500E	.7	1.63	9	ND	8	ND	.41	.1	7	26	27	5.49	.04	.19	154	ND	.12	8	.03	7	ND	ND	ND	2	11	ND	3	26
L394N 500W	.1	3.85	11	ND	26	ND	.14	.1	10	21	37	5.53	.04	.74	372	1	.15	12	.08	10	ND	ND	ND	ND	7	ND	ND	57
L394S 450E	.1	8.30	15	ND	25	ND	.22	.1	20	54	141	7.49	.04	.73	307	5	.20	35	.09	6	ND	ND	4	ND	10	ND	ND	63
L397S 450S	.5	3.22	15	ND	12	ND	.28	.1	9	34	52	5.47	.03	.38	202	1	.13	14	.06	8	ND	ND	ND	ND	9	ND	ND	34
L397N 500W	.1	4.64	10	ND	29	ND	.12	.1	13	25	73	5.15	.03	1.01	468	2	.16	12	.07	5	ND	ND	ND	ND	5	ND	ND	75
L400S 400E	.1	6.08	21	ND	20	ND	.22	.1	13	62	88	6.24	.02	.71	260	3	.16	30	.04	8	ND	ND	ND	ND	7	ND	ND	42
L400S 425E	.1	3.49	12	ND	28	ND	.38	.1	27	33	72	4.54	.03	.57	1212	2	.12	25	.06	9	ND	ND	ND	ND	12	ND	ND	55
L400S 444E	.3	3.73	20	ND	24	ND	.37	.1	13	36	86	5.15	.03	.59	520	1	.14	24	.06	9	ND	ND	ND	ND	13	ND	ND	44
L400S 447E	.4	3.12	16	ND	18	3	.64	.1	10	25	74	4.85	.04	.38	259	2	.12	16	.05	11	ND	ND	ND	ND	11	ND	ND	35
L400S 450E	1.0	4.34	21	4	17	ND	.80	.1	13	45	90	8.98	.07	.50	312	4	.22	15	.12	14	ND	ND	3	ND	10	ND	ND	42
L400S 453E	1.9	1.44	13	3	8	5	.37	.1	10	19	27	3.53	.08	.33	238	ND	.06	11	.07	15	ND	ND	ND	3	12	ND	5	30
L400S 456E	2.0	1.58	7	3	14	3	.22	.1	8	25	43	4.41	.08	.17	256	ND	.08	9	.04	16	ND	ND	ND	ND	10	ND	ND	28
L400S [illegible]	2.1	1.57	9	3	11	4	.30	.1	10	19	34	4.15	.09	.29	245	ND	.07	11	.03	12	ND	ND	ND	4	19	3	ND	25
L400S 500E	1.5	4.52	17	3	18	ND	.27	.1	14	44	89	5.97	.08	.58	318	3	.14	22	.06	14	ND	ND	8	ND	10	ND	ND	45
L400N 500W	.5	5.21	15	3	27	ND	.12	.1	11	25	45	6.46	.07	.79	363	3	.18	15	.09	10	ND	ND	5	ND	5	ND	ND	65
L403N 450E	1.3	3.34	10	3	20	ND	.34	.1	13	28	86	4.42	.07	.51	556	1	.10	20	.08	11	ND	ND	ND	ND	11	ND	ND	44
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
L406N 500W	.1	2.47	5	ND	20	ND	.10	.1	8	17	19	4.87	.05	.45	294	1	.12	8	.05	8	ND	ND	ND	ND	5	ND	3	32
L406S 450E	.6	4.23	9	ND	21	ND	.22	.1	10	23	130	3.75	.06	.35	215	2	.08	16	.15	12	ND	ND	ND	ND	11	ND	ND	39
L425S 400E	.2	3.09	3	ND	22	7	.30	.1	21	107	7	4.54	.05	2.16	464	1	.16	123	.03	10	ND	ND	ND	ND	20	ND	ND	54
L425S 425E	1.1	1.79	8	ND	16	ND	.22	.4	10	28	32	4.05	.07	.43	195	1	.08	18	.03	13	ND	ND	3	ND	9	ND	ND	31
L425S 450E	.3	6.75	17	ND	19	ND	.24	.1	15	60	162	6.91	.06	.75	282	4	.17	30	.07	8	ND	ND	8	ND	8	ND	ND	51
L425N 450W	.8	1.98	3	ND	19	ND	.13	.1	9	18	23	5.62	.08	.46	282	1	.13	10	.06	15	ND	ND	3	ND	5	ND	ND	34
L425N 475W	.2	4.39	9	ND	28	3	.17	.1	13	25	66	5.72	.07	.76	480	2	.16	17	.07	13	ND	ND	3	ND	7	ND	ND	59
L425N 500W	.1	4.65	4	ND	58	ND	.13	.1	16	25	25	5.99	.07	1.31	544	2	.17	15	.05	11	ND	ND	5	ND	7	ND	ND	78
L425N 525W	.1	4.76	10	ND	52	ND	.22	.1	14	26	64	5.79	.07	.70	549	2	.17	19	.17	14	ND	ND	5	ND	8	ND	ND	96
L425N 550W	.5	2.95	5	ND	21	ND	.10	.1	7	14	43	6.44	.07	.45	198	1	.16	6	.08	6	ND	ND	4	ND	5	ND	ND	43
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

VANGEOCHEM LAB LIMITED
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(604) 986-5211 TELEX: 04-352578
BRANCH OFFICE
1630 PANDORA ST
VANCOUVER, B C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870879 GA JOB NUMBER: 870879 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
L 2N 550W	30
L 2N 575W	105
L 2N 594W	110
L 2N 597W	100
L 2N 600W	90
L 2N 604W	100
L 2N 607W	30
L 2N 625W	25
L 2N 650W	15
L 2S 100W	10
L 2S 125W	10
L 2S 144W	10
L 2S 147W	30
L 2S 150W	270
L 2S 153W	10
L 2S 156W	10
L 2S 175W	15
L 2S 200W	15
L 4N 450W	15
L 4N 475W	30
L 4N 494W	20
L 4N 497W	60
L 4N 500W	65
L 4N 503W	50
L 4N 506W	240
L 4N 525W	50
L 4N 550W	40
L175N 550W	100
L175N 575W	30
L175N 600W	170
L175N 625W	30
L175N 650W	15
L175S 100W	15
L175S 125W	10
L175S 150W	15
L175S 175W	30
L175S 200W	30
L194N 600W	60
L194S 150W	115

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

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REPORT NUMBER: 870879 GA JOB NUMBER: 870879 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb	Ag ppm	
L197N 600W	290		
L197S 150W	10		2
L203N 600W	120		
L203S 150W	20		2
L206N 600W	65		3
L206S 150W	55		2
L225N 350W	20		
L225N 575W	10		
L225N 600W	40		Area 3
L225N 625W	10		
L225N 650W	10		
L225S 150W	10		
L225S 175W	10		Area 2
L225S 200W	2		
L375N 450W	20		
L375N 475W	25		Area 1
L375N 500W	20		
L375N 525W	15		
L375N 550W	15		
L375S 400E	10	2.6	
L375S 425E	10		Area 1
L375S 450E	10	[illegible]	
L375S 475E	10	[illegible]	
L375S 500E	10	5.7	
L394N 500W	30		Area 4
L394S 450E	20		"
L397S 450S	20	0.5	"
L397N 500W	50		"
L400S 400E	10		
L400S 425E	30		
L400S 444E	30	[illegible]	
L400S 447E	nd	[illegible]	[illegible]
L400S 450E	40	[illegible]	
L400S 453E	nd	[illegible]	
L400S 456E	nd	[illegible]	
L400S 475E	nd	[illegible]	
L400S 500E	15	[illegible]	
L403N 500W	10	0.5	Area 4
L403S 450E	20	[illegible]	"

DETECTION LIMIT 5

nd = none detected -- = not analysed is = insufficient sample

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SAMPLE #	Au ppb
L406N 500W	90
L406S 450E	15
L425S 400E	nd
L425S 425E	5
L425S 450E	20
L425N 450W	20
L425N 475W	5
L425N 500W	20
L425N 525W	5
L425N 550W	20

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

0T-E 1' - 2:20cl

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(604) 251-5656

REPORT NUMBER: 870880 GA JOB NUMBER: 870880 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
CC87 R42	1645
CC87 R43	10

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

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August 13, 1987

TO: Fayz Yacoub
ASHWORTH EXPLORATION
Mezz Flr - 744 Hastings Street
Vancouver, British Columbia V6C 1A5

FROM: Vangeochem Lab Limited
1521 Pemberton Avenue
North Vancouver, British Columbia
V7P 2S3

SUBJECT: Analytical procedure used to determine gold by fire assay method and detect by atomic absorption spectrophotometry in geological samples.

1. <u>Method of Sample Preparation</u>

(a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.

(b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.

(c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. <u>Method of Extraction</u>

(a) 20.0 to 30.0 grams of the pulp samples were used. Samples were weighed out using a top-loading balance and deposited into individual fusion pots.

(b) A flux of litharge, soda ash, silica, borax, and, either flour or potassium nitrite is added. The samples are then fused at 1900 degrees Farenhiet to form a lead "button".

(c) The gold is extracted by cupellation and parted with diluted nitric acid.

(d) The gold bead is retained for subsequent measurement.

3. Method of Detection

(a) The gold bead is dissolved by boiling with sodium cyanide, hydrogen peroxide and ammonium hydroxide.

(b) The detection of gold was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values, in parts per billion, were calculated by comparing them with a set of known gold standards.

4. Analysts

The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu and his laboratory staff.

David Chiu
VANGEOCHEM LAB LIMITED

APPENDIX II

Calculations of Statistical Parameters

and Histograms/Graphs

for

Au, Ag, Cu, Mo, Pb, Zn, As, Sb, Mn and Ba

Distribution in Soil

(Graphs 1 - 10, by H. Laanela)

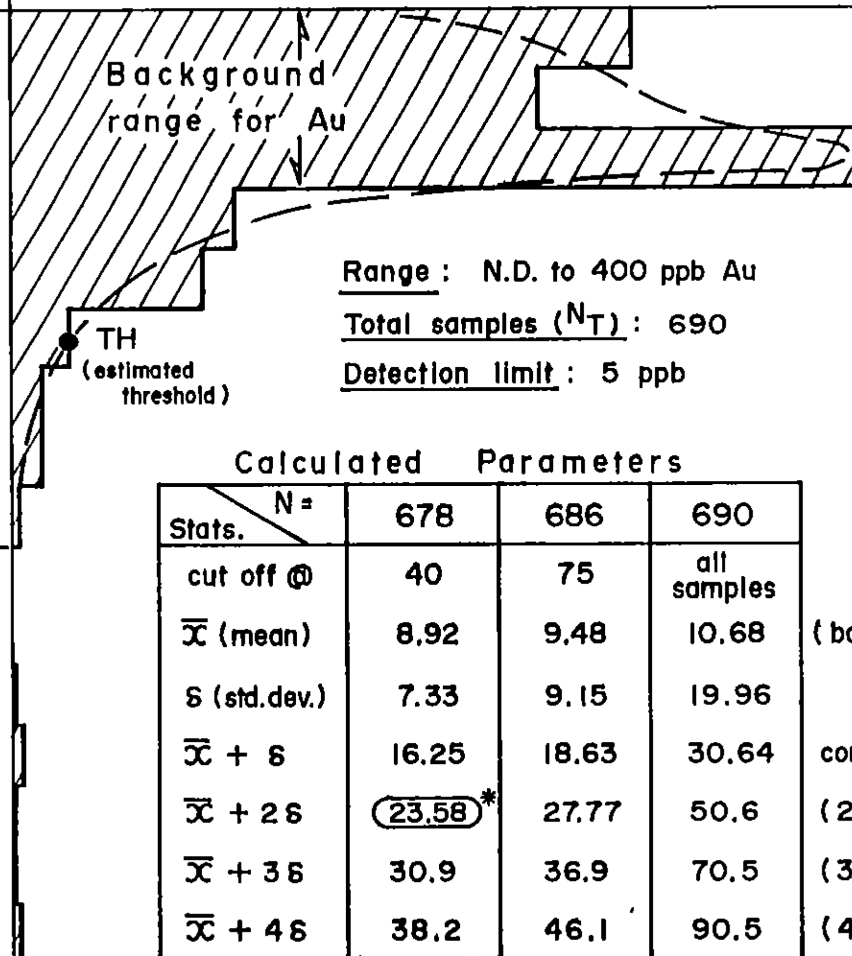
OTTER CLAIM GROUP — Graph I

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Gold in Soil (1987)

Au *ppb*	Freq.
N.D.	166
5	141
10	226
15	60
20	51
25	16
30	8
35	8
40	2
45	–
50	–
55	1
60	3
65	1
70	1
75	2
80 - 125	–
130 - 175	2
180 - 400	2
400	–
$N_{Tot.}$ =	690

Histogram / Graph



Range : N.D. to 400 ppb Au

Total samples (N_T) : 690

Detection limit : 5 ppb

Calculated Parameters

Stats. \ N =	678	686	690	
cut off @	40	75	all samples	
$\bar{x}$ (mean)	8.92	9.48	10.68	(background)
s (std.dev.)	7.33	9.15	19.96	
$\bar{x}$ + s	16.25	18.63	30.64	contour;
$\bar{x}$ + 2s	23.58*	27.77	50.6	(25)
$\bar{x}$ + 3s	30.9	36.9	70.5	(30)
$\bar{x}$ + 4s	38.2	46.1	90.5	(40)

* Consider values 25 ppb Au and higher as anomalous for the area.

(compiled by H.L., August 1987)

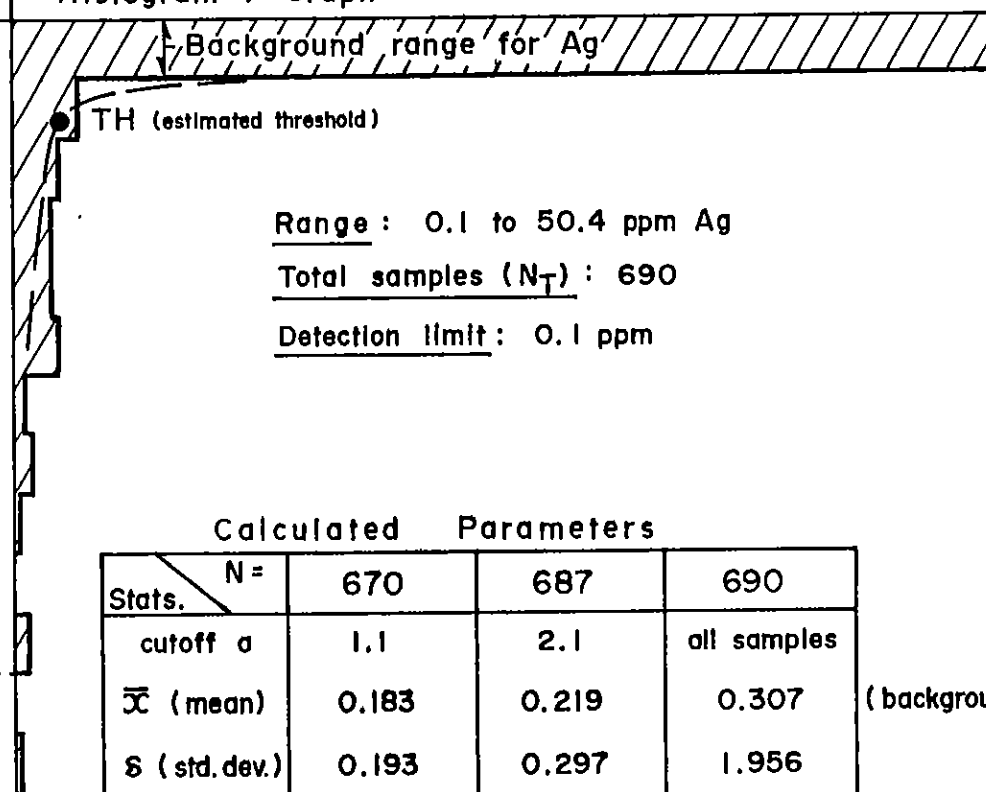
OTTER CLAIM GROUP

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Silver in Soil (1987)

Ag *ppm*	Freq.
0.1	520
0.2	34
0.3	24
0.4	20
0.5	20
0.6	24
0.7	6
0.8	12
0.9	2
1.0	—
1.1	8
1.2	—
1.3	3
1.4	1
1.5	2
1.6	2
1.7	5
1.8	1
1.9	2
2.0	—
2.1	1
2.2-3.0	—
> 3	3
$N_{Tot.}$ =	690

Histogram / Graph



Range: 0.1 to 50.4 ppm Ag

Total samples (N_T): 690

Detection limit: 0.1 ppm

Calculated Parameters

Stats. \ N =	670	687	690	
cutoff a	1.1	2.1	all samples	
$\bar{x}$ (mean)	0.183	0.219	0.307	(background)
s (std. dev.)	0.193	0.297	1.956	
$\bar{x}$ + s	0.376	0.516	2.263	contour:
$\bar{x}$ + 2 s	(0.569)*	0.813	4.219	(0.6)
$\bar{x}$ + 3 s	0.762	1.110	6.175	(0.8)
$\bar{x}$ + 4 s	0.955	1.407	8.131	(1.0)

* Consider values 0.6 ppm Ag and higher as anomalous for the area.

(compiled by H.L., August 1987)

OTTER CLAIM GROUP

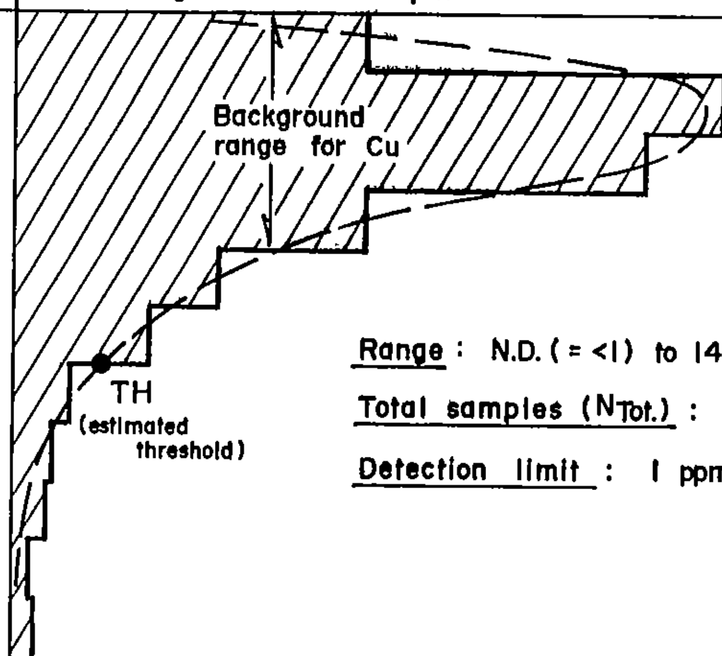
Graph 3

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Copper in Soil (1987)

Cu ppm	Freq.
N.D.-20	93
21 - 40	188
41 - 60	168
61 - 80	93
81 - 100	54
101 - 120	36
121 - 140	15
141 - 160	11
161 - 180	10
181 - 200	4
201 - 220	N=677 5
221 - 220	1
241 - 260	1
261 - 280	1
281 - 300	N=681 1
301 - 400	1
401 - 500	2
501 - 600	1
601 - 700	–
701 - 800	2
801 - 900	–
901 - 1000	–
1000 +	3
$N_{Tot.}$ =	690

Histogram / Graph



Range : N.D. (= <1) to 1462 ppm Cu

Total samples ($N_{Tot.}$) : 690

Detection limit : 1 ppm

Calculated Parameters

Stats. \ N =	677	681	690	
cutoff @	220	300	all samples	
$\bar{x}$ (mean)	55.6	56.8	66.5	(background)
s (std. dev.)	38.3	41.3	104.9	
$\bar{x}$ + s	93.9	98.1	171.4	contour :
$\bar{x}$ + 2s	(132.2) *	139.4	276.3	(132)
$\bar{x}$ + 3s	170.5	180.6	381.2	(170)
$\bar{x}$ + 4s	208.7	221.9	486.1	(209)

* Consider values 132 ppm Cu and higher as anomalous for the area.

(compiled by H.L., August 1987)

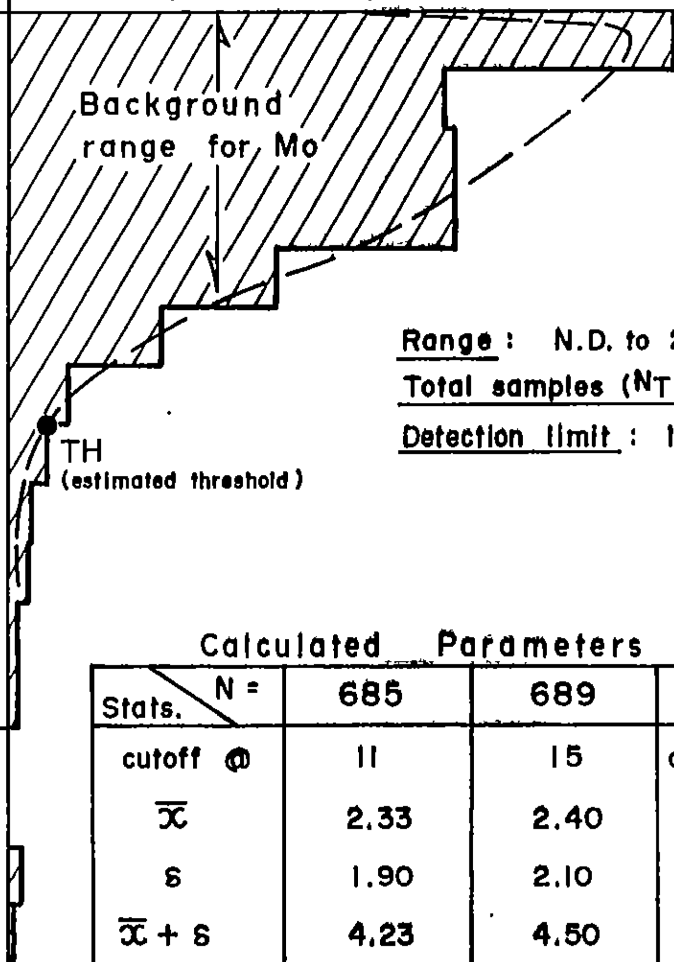
OTTER CLAIM GROUP — Graph 4

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Molybdenum in Soil (1987)

Mo *ppm*	Freq.
N.D.	176
1	116
2	118
3	119
4	71
5	46
6	15
7	9
8	6
9	5
10	2
11	2
12	—
13	—
14	3
15	1
16-25	—
26	1
27+	—
N_{Tot} =	690

Histogram / Graph



Range: N.D. to 26 ppm Mo

Total samples (N_T): 690

Detection limit: 1 ppm

Calculated Parameters

Stats. \ N =	685	689	690	
cutoff @	11	15	all samples	
$\bar{x}$	2.33	2.40	2.44	(background)
s	1.90	2.10	2.28	
$\bar{x}$ + s	4.23	4.50	4.72	contours:
$\bar{x}$ + 2s	(6.13) *	6.60	7.00	(6)
$\bar{x}$ + 3s	8.03	8.70	9.28	(8)
$\bar{x}$ + 4s	9.93	10.80	11.56	(10)

* Consider values 6 ppm Mo dnd higher as anomalous for area.

(compiled by H.L., August 1987)

OTTER CLAIM GROUP

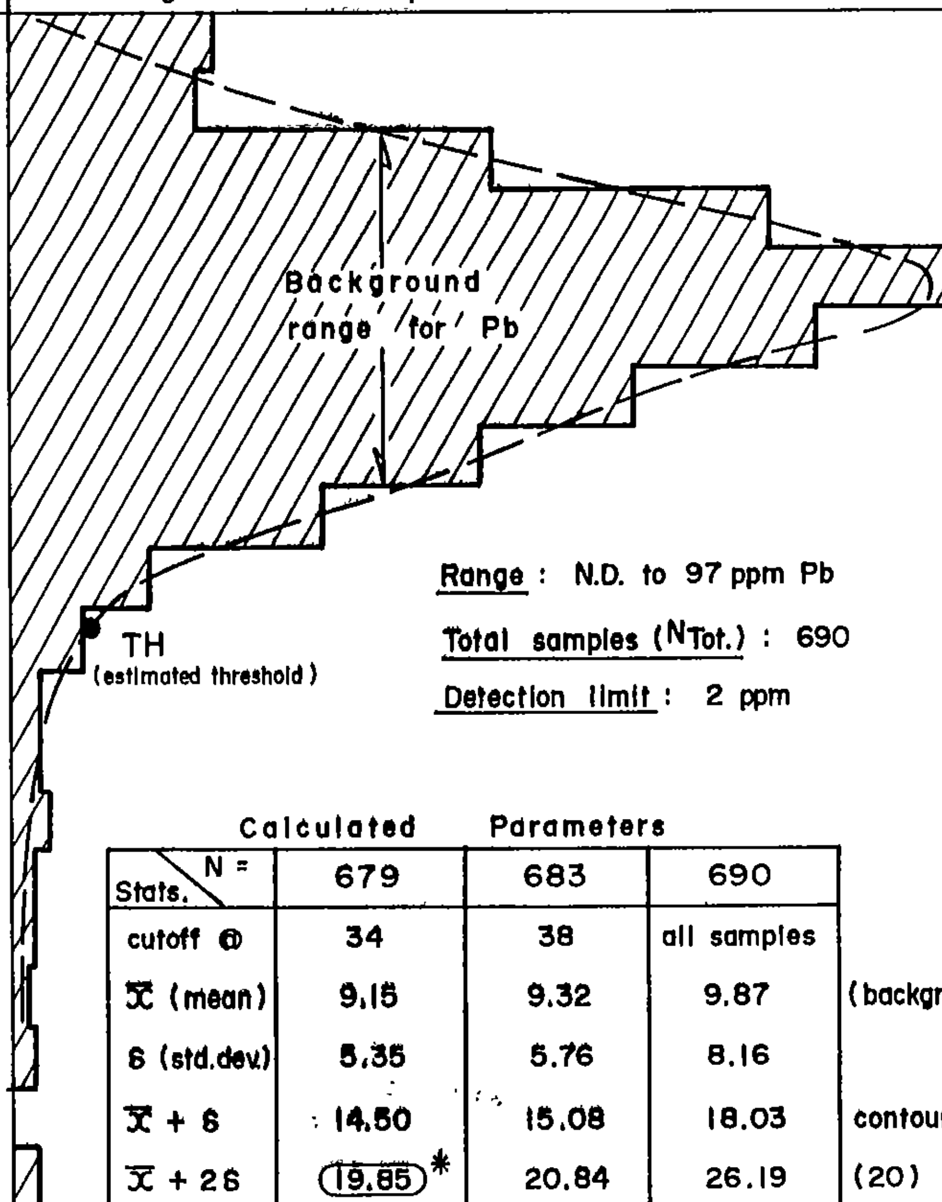
Graph 5

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Lead in Soil (1987)

Pb ppm	Freq.
N.D.	26
1 - 2	24
3 - 4	63
5 - 6	100
7 - 8	124
9 - 10	106
11 - 12	82
13 - 14	62
15 - 16	41
17 - 18	18
19-20	9
21-22	4
23-24	4
25-26	5
27-28	3
29-30	3
31-32	2
33-34	3 (N=679)
35-36	–
37-38	4
39-40	– (N=683)
41-50	2
51-60	2
61-100	3
101+	–
$N_{Tot.}$ =	690

Histogram / Graph



Range: N.D. to 97 ppm Pb

Total samples ($N_{Tot.}$) : 690

Detection limit: 2 ppm

Calculated Parameters

Stats. \ N =	679	683	690	
cutoff @	34	38	all samples	
$\bar{x}$ (mean)	9.15	9.32	9.87	(background)
s (std.dev)	5.35	5.76	8.16	
$\bar{x} + s$	14.50	15.08	18.03	contours:
$\bar{x} + 2s$	(19.85)*	20.84	26.19	(20)
$\bar{x} + 3s$	25.20	26.60	34.35	(25)
$\bar{x} + 4s$	30.55	32.36	42.51	(31)

* Consider values 20 ppm Pb and higher as anomalous for the area.

(compiled by H.L., August 1987)

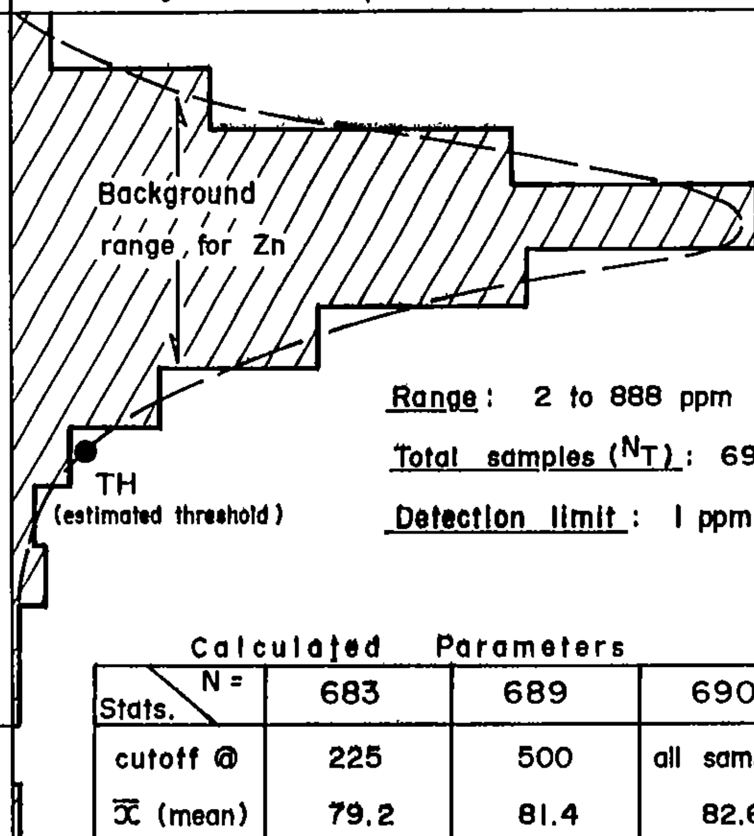
OTTER CLAIM GROUP — Graph 6

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Zinc in Soil (1987)

Zn ppm	Freq.
1 - 20	10
21 - 40	52
41 - 60	133
61 - 80	198
81 - 100	138
101-120	82
121-140	39
141-160	16
161-180	5
181-200	8
201-220	1
221-240	1
241-260	–
261-280	1
281-300	– (N = 684)
301-400	2
401-500	3
501-900	1
900+	–
N_{Tot} =	690

Histogram / Graph



Range: 2 to 888 ppm Zn

Total samples (N_T): 690

Detection limit: 1 ppm

Calculated Parameters

Stats. \ N =	683	689	690	
cutoff @	225	500	all samples	
$\bar{x}$ (mean)	79.2	81.4	82.6	(background)
s (std.dev.)	33.2	43.0	52.8	
$\bar{x} + s$	112.4	124.4	135.4	contours:
$\bar{x} + 2s$	(145.6) *	167.4	188.2	(146)
$\bar{x} + 3s$	178.8	210.4	241.0	(179)
$\bar{x} + 4s$	212.0	253.4	294.0	(212)

* Consider values 146 ppm Zn and higher as anomalous for the area.

(compiled by H.L., August 1987)

OTTER CLAIM GROUP

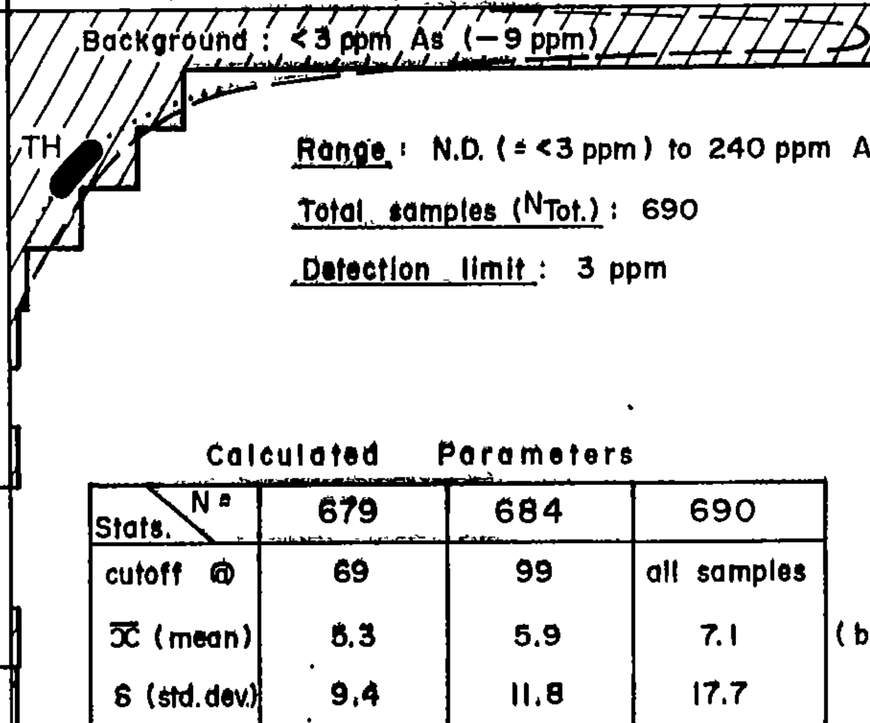
Graph 7

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Arsenic in Soil (1987)

As ppm	Freq.
N.D.	464
3-9	95
10-19	71
20-29	29
30-39	10
40-49	5
50-59	1
60-69	4 (N=679)
70-79	1
80-89	1
90-99	3 (N=684)
100-109	2
110-119	1
120-129	–
130-139	1
140-149	1
150-239	–
240 +	1
$N_{Tot.}$ =	690

Histogram / Graph



Range : N.D. (= <3 ppm) to 240 ppm As

Total samples ($N_{Tot.}$) : 690

Detection limit : 3 ppm

Calculated Parameters

Stats. \ N =	679	684	690	
cutoff @	69	99	all samples	
$\bar{x}$ (mean)	5.3	5.9	7.1	(background)
s (std.dev.)	9.4	11.8	17.7	
$\bar{x}$ + s	14.7	17.7	24.8	contour:
$\bar{x}$ + 2 s	(24.1) *	29.5	42.5	(24)
$\bar{x}$ + 3 s	33.5	41.3	60.2	(34)
$\bar{x}$ + 4 s	42.9	53.1	78.0	(43)

* Consider values 24 ppm As and higher as anomalous for the area.

(compiled by H.L., August 1987)

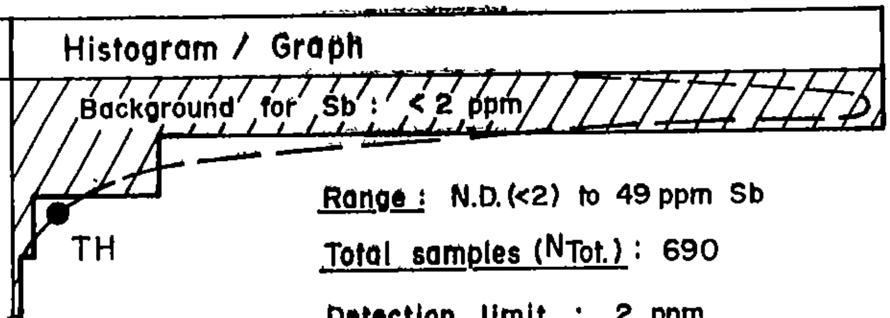
OTTER CLAIM GROUP

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Antimony in Soil (1987)

Sb ppm	Freq.
N.D.	577
2-9	97
10-19	13
20-29	2
30-39	–
40-49	1
50+	–
$N_{Tot.}$ =	690

Histogram / Graph



Range : N.D. (<2) to 49 ppm Sb

Total samples ($N_{Tot.}$) : 690

Detection limit : 2 ppm

Calculated Parameters

Stats. \ N=	689	690	
cutoff @	27	all samples	
$\bar{x}$ (mean)	1.7	1.75	(background)
s (std.dev.)	2.7	3.3	
$\bar{x}+s$	4.4	5.0	contour :
$\bar{x}+2s$	(7.1) *	8.3	(7)
$\bar{x}+3s$	9.8	11.6	(10)
$\bar{x}+4s$	12.5	15.0	(13)

* Consider values 7 ppm Sb and higher as anomalous for the area.

(compiled by H.L., August 1987)

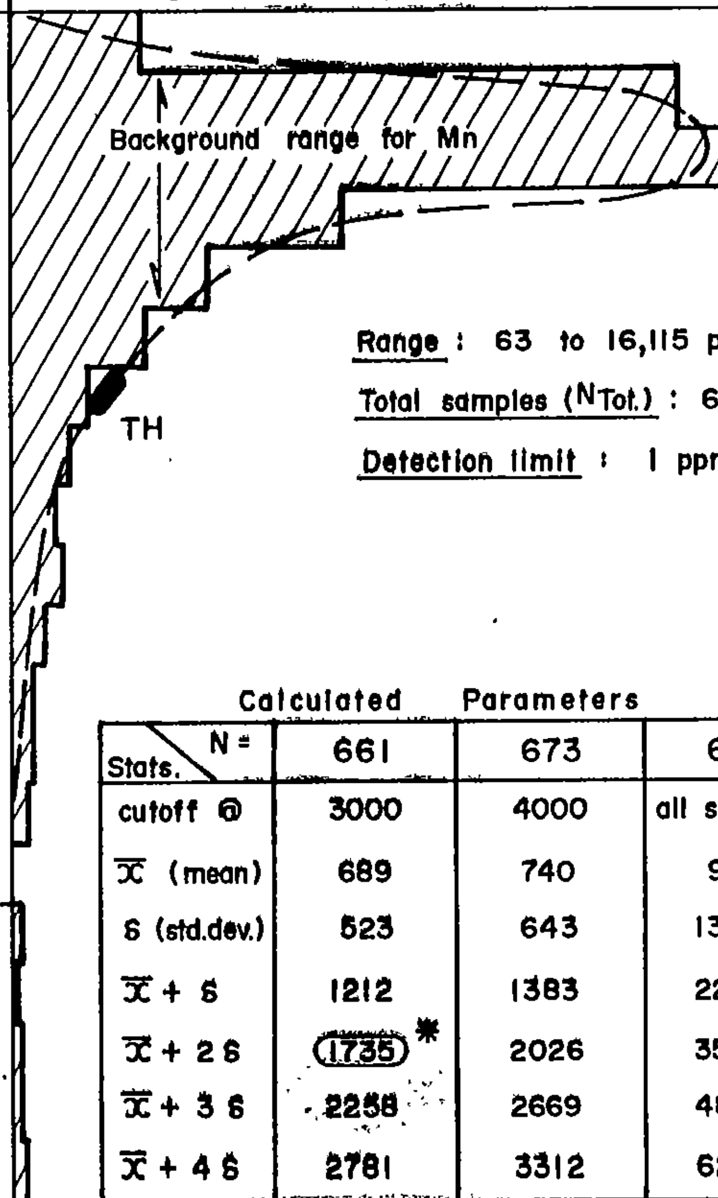
OTTER CLAIM GROUP — Graph 9

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Manganese in Soil (1987)

Mn ppm	Freq.
0 - 199	34
200 - 399	177
400 - 599	187
600 - 799	88
800 - 999	52
1000 - 1199	36
1200 - 1399	20
1400 - 1599	15
1600 - 1799	12
1800 - 1999	13
2000 - 2199	9
2200 - 2399	6
2400 - 2599	6
2600 - 2799	5
2800 - 2999	1
3000 - 3199	3
3200 - 3399	1
3400 - 3599	2
3600 - 3799	2
3800 - 3999	4
4000 - 4999	4
5000 - 5999	2
6000 - 9999	9
10,000 +	2
N Tot. =	690

Histogram / Graph



Range : 63 to 16,115 ppm Mn

Total samples ($N_{Tot.}$) : 690

Detection limit : 1 ppm

Calculated Parameters

Stats. \ N =	661	673	690	
cutoff @	3000	4000	all samples	
$\overline{x}$ (mean)	689	740	906	back-ground
s (std.dev.)	523	643	1325	
$\overline{x} + s$	1212	1383	2231	contours:
$\overline{x} + 2s$	(1735) *	2026	3556	(1750)
$\overline{x} + 3s$	2258	2669	4881	(2300)
$\overline{x} + 4s$	2781	3312	6206	(2800)

* Consider values 1735 ppm Mn and higher as anomalous for the area.

(compiled by H.L., August 1987)

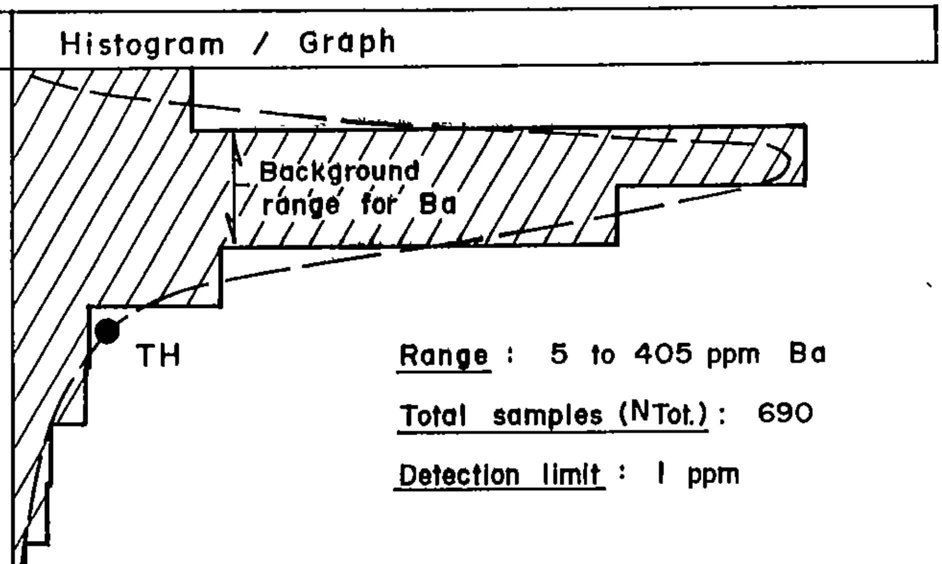
OTTER CLAIM GROUP

Graph 10

Cous Creek Area, Vancouver Island

Calculation of Statistical Parameters of Barium in Soil (1987)

Ba ppm	Freq.
0 - 19	59
20 - 39	262
40 - 59	201
60 - 79	69
80 - 99	26
100 - 119	25
120 - 139	12
140 - 159	11
160 - 179	3
180 - 199	3
200 - 219	2
220 - 239	4
240 - 259	2
260 - 279	2
280 - 299	1
300 - 319	2
320 - 339	1
340 - 359	1
360 - 399	2
400 - 409	2
410 +	–
$N_{Tot.}$ =	690



<u>Range</u> : 5 to 405 ppm Ba

<u>Total samples ($N_{Tot.}$)</u> : 690

<u>Detection limit</u> : 1 ppm

Calculated Parameters

Stats. \ N =	681	686	690	
cutoff @	279	359	all samples	
$\overline{x}$ (mean)	51.5	53.5	55.5	(background)
s (std.dev)	38.4	44.5	51.5	
$\overline{x} + s$	90	98	107	contours
$\overline{x} + 2s$	(129) *	143	159	(130)
$\overline{x} + 3s$	168	187	210	(170)
$\overline{x} + 4s$	205	232	262	(205)

* Consider values 129 ppm Ba and higher as anomalous for the area.

(compiled by H.L., August 1987)

APPENDIX III

ROCK SAMPLE DESCRIPTIONS

(by F. Yacoub)

APPENDIX III

ROCK SAMPLE DESCRIPTIONS

OTTER CLAIM GROUP - COUS CREEK AREA, VANCOUVER ISLAND, B.C.

Sample No.	Width of Area Exposed	Location & Assay *
R-1	2 metres	

A chip sample over 2 metres of disseminated volcanic andesite with pyrite, iron oxides. The rock is rusty on surface. 240 opt Au.

R-2 2 metres

A chip sample over 2 metres of disseminated volcanic rock, 5% pyrite.

R-3 2 metres

A chip sample taken from highly weathered and altered volcanic outcrop disseminated with pyrite. The sample was taken over 2 metres.

R-4 1 metre

Sample taken over one metre of altered, yellowish coloured rock with dioritic texture with some mineralogical changes, no obvious sulphides, a lot of iron oxides.

R-5 1 metre

Another chip sample was collected from the same altered diorite at the same location but from different outcrop.

R-6 Grab

A grab sample taken from mineralized carbonate float (limestone) with pyrite and a little chalcopyrite from a major creek; no outcrop.

R-7 Grab

Another grab sample taken from a big float boulder of mineralized limestone disseminated with pyrite and some chalcopyrite; no outcrop.

R-8 1 metre

A chip sample over one metre of rusty zone of carbonate rock; the sample is highly altered and silicified; no obvious sulphides, a lot of iron oxides.

R-9 1 metre

Another chip sample collected from a rusty zone of limestone; highly altered, silicified with no metallic minerals.

Sample No.	Width of Area Exposed	Location & Assay *

R-10 1 metre

Mineralized zone of shale with copper staining, the rock is altered but no metallic minerals; sample R-10 was taken as a chip sample. 3.2 ppm Ag and 5752 ppm Cu.

R-11 1 metre

Another Cu mineralization was found at 200 metres west of sample No. 10 in limestone outcrop; a chip sample over one metre was collected; no sulphides.

R-12 1 metre

Rock chip sample taken from a highly altered zone in carbonate rock with a lot of epidote; no skarning.

R-13 Grab

A grab sample taken from a float of carbonate rock with copper staining; the rock sample is extremely altered, but no sulphides, no skarning. 2.7 ppm Ag and 3936 ppm Cu.

R-14 Grab

Another grab sample from the same location; carbonate rock with a lot of epidote and some metallic minerals.

R-15 30 cm

Sample across 30 cm of quartz vein intruded in shale rock; no obvious sulphides.

R-16 1 metre

A chip sample taken over one metre of altered zone of yellowish, rusty rocks with 10% pyrite and 5-101 epidote; the zone strikes 150° and dips 70°W.

R-17 1 metre

A chip sample over one metre of altered dioritic rock disseminated with pyrite.

R-18 1 metre

A chip sample taken over one metre of basic volcanic rock with metallic minerals, and minor Cu staining.

R-19 1 metre

A chip sample of altered, rusty zone intruding into the diorite; the zone is silicified, yellowish, no sulphides.

R-20 2 metres

Yellowish, rusty zone of altered diorite, no obvious mineralization.

Sample No.	Width of Area Exposed	Location & Assay *

R-21 1 metre

Another chip sample taken from a yellowish rusty zone intruded in dioritic rocks; much of iron oxide, no sulphides.

R-22 2 metres

A chip sample taken over two metres of altered volcanic rock; the rocks are rusty with a lot of iron oxides.

R-23 20 metres

A chip sample over 20 metres of rusty, shear zone with no mineralization, the rocks are foliated in the direction of 250° and almost vertical.

R-24 0.3 metres

Another rusty zone at 50 metres away from R-23, a chip sample was taken over 30 cm of rusty volcanic rocks disseminated with pyrite.

R-25 Grab

The dump sample collected from a small shallow pit, the dump rocks are volcanic porphyry slightly disseminated with pyrite.

R-26 5 metres

A chip sample taken from the dump ore of a trench five metres long and one metre wide, the dump rock is mainly massive to disseminated volcanic rock with all the skarn minerals (pyrite, chalcopyrite, arsenopyrite, bornite, and malachite). 9.5 ppm Ag and 53,777 ppm Cu.

R-27

A chip sample taken from a trench of mineralized limestone with all skarn minerals such as pyrite, chalcopyrite, arsenopyrite, bornite and a lot of malachite. 60 ppb Au, 11.1 ppm Ag and 86,425 ppm Cu.

R-27A 1 metre

A channel sample taken over 1 metre of mineralized limestone with a high percentage of pyrite, chalcopyrite, bornite and some malachite; the sample was taken from a little trench (A). 90 ppb Au.

R-27B 1 metre

A channel sample taken from the main trench across 1 metre of mineralized limestone with all kinds of skarn minerals.

Sample No.	Width of Area Exposed	Location & Assay *

R-27C 1 metre

A channel sample over 1 metre of mineralized limestone from the main trench. The mineralization in this part of the trench is not as strongly disseminated with skarn minerals as R-27A or R-27B

R-27D 1 metre

A channel sample over one metre across trench (D); limestone disseminated with chalcopyrite, pyrite, bornite and a little malachite. 10 ppb Au.

R-27E 1 metre

A chip sample over one metre of highly mineralized outcrop of limestone with chalcopyrite, pyrite, bornite, and malachite near by (trench B).

R-28 Grab

This sample is a grab sample from a big boulder of mineralized limestone with a lot of chalcopyrite, pyrite and malachite. 17.7 ppm Ag and 71,504 ppm Cu.

R-29 1 metre

A chip sample over one metre of mineralized limestone of pyrite, chalcopyrite and malachite; there is not too much outcrop in this locality. 80 ppb Au.

R-30

A grab sample from a float of limestone; the rock is charged with 10 - 15% of disseminated skarn minerals. 40 ppb Au.

R-31 1 metre

A small outcrop of low grade skarn found recently; sample R-31 was taken as a chip sample over one metre; the rocks are mainly disseminated with sulphides.

R-32

Another small outcrop of low grade skarn was found at 25 metres away from R-31. A chip sample was taken from limestone disseminated with pyrite, chalcopyrite and malachite.

R-33 Grab

A float sample taken from an area of limestone float. The float rocks are extremely disseminated with skarn minerals and are located 200 metres away from the main road.

R-34 1 metre

A chip sample was taken from a small outcrop of limestone south of sample R-33; the limestone is mineralized with pyrite, chalcopyrite and copper. 40 ppb Au, 9.8 ppm Ag and 44,407 ppm Cu.

Sample No.	Width of Area Exposed	Location & Assay *

R-35 Grab

A dump sample taken from a trench 8 metres long and 1 metre wide. The dump rocks around the trench are volcanic porphyry, slightly disseminated with pyrite. 40 ppm Au and 0.6 ppm Ag.

R-36 1.5 metres

A chip sample over 1.5 metres was taken from a rusty zone of acidic volcanic rock (dacite) Fosselli Creek. The rock is yellow to light brown in colour with a rusty appearance; no obvious mineralization.

R-37 Grab

A float sample collected from a volcanic boulder at the east boundary of the area; the rocks are disseminated with metallic minerals.

R-38 Grab

A float sample taken from a big limestone boulder, disseminated with sulphide minerals, some malachite.

R-39
(No data) 40 ppb Au.

R-40 1 metre

A chip sample was taken at a contact zone between diorite and volcanics; the rocks at the contact are silicified and disseminated with metallic minerals, mainly pyrite, and a lot of copper staining; sampled over 1 metre. 20 ppb Au, 1.1 ppm Ag and 2180 ppm Cu.

R-41 3 metres

A chip sample over three metres of sheared and altered diorite with a lot of epidote, iron oxides; no obvious sulphides.

R-42 0.4 metres

This sample was taken from a silicified volcanic rock near Line 4N/5+50W; the rock is lightly altered and cut by quartz veinlets; sampled over 40 centimetres of silicified material, no obvious sulphides. 1645 ppb Au.

R-43 0.5 metres

This sample was taken 50 metres away from sample R-42, above, from rusty yellowish volcanic rocks; no obvious mineralization, the rock is highly altered and sheared. 10 ppb Au.

(sampled by F. Yacoub, June - July, 1987)

* Only the more significant Au-Ag-Cu assays are shown in this table.

discontinuous, hence difficult to follow, develop and mine. This also appears to be the case here.

Three known mineralized occurrences have been trenched in the past here (Trenches No. 1, 2, and 3; see Figures 4 - 6 in text).

Trench #1, the largest, is on a skarn deposit (Figure 4), with much copper mineralization present. Copper assays range up to and over 10% Cu, but other metal assays (Au, Ag, Pb, Zn) are insignificant; skarn deposits do not generally carry precious metals.

Trench #2 is south of Trench #1, with less extensive excavations. Both trenches occur near the western contact of limestone with Bonanza volcanics (see Map 1). A dump sample here assayed about 5% Cu, with insignificant Au, Ag, Pb, and Zn values (see Figure 5).

Trench #3 is in the Karmutsen volcanics, NE of the other two trenches. Assays for precious and base metals were insignificant (see Figure 6).

A number of other mineralized pits and trenches occur just east of the above workings, on the adjoining Bonanza claim. Together, all these showings were originally part of the Cous Creek Mines Ltd "A" claim (see "References", by Eastwood, Anderson, Nethery, et al).

7.2 GEOCHEMICAL SOIL SURVEY

(Maps 2, 3, 4, 5 and 6)

7.2.1 Gold (Map 2)

Au values in soil samples range from "not detected", i.e. "less than 5 ppb" to 400 ppb, with the "background" in the "less than 5 ppb" to 10 ppb range. The value of 25 ppb Au is taken as "threshold", above which the values can be considered as anomalous (see Graph 1 in Appendix II).

Contouring of the 25 ppb value on Map 2 reveals a number of small anomalies consisting of single value "spot highs" to clusters of 2 or 3. Some of these may be significant and should be checked further.

However, a well defined trend of anomalous gold values occurs across the entire 1.2 km width of the grid, crossing all lines west of the base line.

This anomaly, on most lines, is only 1 - 2 sample widths wide (i.e. 50 - 100 metres), except at north end where it seems to branch or widen. The anomalous values range here up to 290 ppb Au, if including the two detail sampling areas shown on the bottom of the map (Detail Areas # 3 and 4).

A rock sample taken for assay, No. R-42 (see Appendix III, and location on Map 1), assayed 1645 ppb (= 0.05 oz/ton) gold. It was taken on Line 4N near the edge of the above soil anomaly; it was also the highest gold assay sample from the property.

The anomaly occurs in the area underlain by the Bonanza Group volcanics, and has a somewhat erratic northerly strike.

The "Detail Area #1", on east end of Line 4S, was laid out to test or follow-up the 400 ppb Au soil anomaly, - the highest Au value in the initial sampling program. The follow-up survey failed to confirm this initial high Au value, with the highest follow-up sample being only 40 ppb at the original site, and low or "not detectable" values surrounding it. (The 40 ppb Au is still significantly anomalous.)

The "Detail Area #2", on Line 2S, west of Base Line was designed to test a 150 ppb Au value, part of a small N-S anomalous trend across 3 lines. The follow-up sampling confirmed this anomaly with a 270 ppb Au at the same site as the original "high". Hence this, about 200 metres long narrow north trending anomaly also warrants further attention.

A 1981 airborne geophysical survey by Columbia Geophysical Services Ltd. (Timmins & Rolston, 1981/B.C.A.R. # 9313) indicates several NNW trending VLF-EM conductive anomalies in the immediate area, - some of which appear to be very close to the above Au anomaly or may even coincide with parts of it. There appears to be no correlation with other metals' anomalies.

7.2.2 **Silver** (Map 2)

Silver has a 0.1 to 50.4 ppm range in soil samples, with a low "background" of only 0.1 ppm. "Threshold", estimated from the graph (see Graph 2, Appendix II) is only 0.2 ppm, although the calculated value, by including a large number of relatively high values, is higher. Values of 0.6 or higher are therefore considered to be anomalous and were countoured on the map.

Contrary to gold, the best silver anomalies tend to occur along the east edge of the grid, in the area underlain mainly by Vancouver Group volcanics. The largest anomalous area for silver occurs on Lines 4N to 7N, just east of the headwaters of Fosselli Creek, an area measuring about 300 m by at least 500 m (anomaly is "open" toward east). It contains the highest value of 50.4 ppm Ag, on Line 5N, near the creek.

The "second best" Ag anomaly occurs near the claim boundary on Lines 1S and 2S; it is open toward SE and appears to continue onto the Skarn Claim ground. Several "high" values here are in the 1.5 to 1.7 ppm Ag range.

There are a number of smaller anomalies throughout the grid area; most are "spot highs" or 2 - 3 sample clusters of anomalous values, confined to single survey lines. Very few of these anomalies are associated with Au "highs"; where this occurs, however, the anomalies may warrant further follow-up. Some examples are:

a) 60 ppb Au/1.7 ppm/538 ppm Cu @ L1N - 4E; high Cu anomaly is nearby;
b) 65 ppb Au/0.8 ppm Ag @ L2S - 2+500E;
c) 30 ppb Au/1.1ppm Ag @ L1S - 0+50 E.

7.2.3 Copper (Map 3)

Copper values in soil range from "not detected" (or "less than 1 ppm") to 1462 ppm Cu, with the wide background range of about 20 - 60 ppm. Values above 130 ppm are taken as anomalous and are contoured on the map.

Copper anomalies are almost exclusively restricted to the east part of the grid, particularly to the Vancouver limestone and volcanic belts and intrusive contact zone in the SE quadrant of the grid. The southernmost copper anomalies are obviously related to the skarn type showings near the Skarn Claim boundary; others, farther north, may well indicate hidden skarn-type mineralization, eg. along the main access roads between Lines 1N and 1S. This anomaly, near the road, also contains two of the highest Cu values encountered here, i.e. 1462 and 1317 ppm Cu, on the above two lines respectively. A third large Cu anomaly occurs near or at the intrusive contact along the east ends of Lines 2N to 2S, being open toward east and extending into the NW corner of the Skarn Claim.

Copper anomalies occur largely independent of gold and silver anomalies, with the following exceptions:

a) The coincident Au-Ag-Cu anomaly already mentioned in 7.2.2 under

"Silver', at Line 1N - 4E. The highest Cu value of 1462 ppm is 50 metres east of it.

b) 210 ppm Cu/50.4 ppm Ag (the highest Ag value encountered) at Line 5N - 5+75E; associated with a large silver anomaly near Fosselli Creek.

c) 199 and 198 ppm Cu/60 and 60 ppb Au @ Line 2N - 9+50E and 10+00E, respectively.

d) Series of Cu "highs", associated with a 400 ppb Au "high" in "Detail Area #1", east end of Line 4S.

7.2.4 Molybdenum (Map 3)

The total range for Mo is from "N.D." (below the 1 ppm detection limit) to 26 ppm; background ranges from "less than 1 ppm" to about 4 ppm. Values higher than 6 ppm Mo can be considered as anomalous.

Molybdenum anomalies tend to be rather scattered, either weak and irregular in outline, or small and "spotty" 1 - 3 sample anomalies. Relationship with other metals, eg. Cu, seems to be weak or coincidental.

The strongest value, 26 ppm Mo, associated with the two 6 ppm Mo values, forms the best defined Mo anomaly, centered on Line 7 N - 5E, near the Vancouver Group limestone-volcanic contact.

Molybdenum, which has a high geochemical mobility, is considered to be a good regional scale "pathfinder" for copper and other base metal deposits; it is generally associated with granitic rocks.

7.2.5 Lead and Zinc (Map 4)

The total ranges for lead and zinc in soil are "not detected" (below 2 ppm

Pb) to 97 ppm Pb, and 2 to 888 ppm Zn. Their respective backgrounds are about 3 - 16 ppm Pb and 20 - 100 ppm Zn. The values above 20 ppm Pb and 146 ppm Zn are taken as anomalous.

A number of small scattered Pb and Zn anomalies occur throughout the grid area. The more significant anomalies are those of Pb and Zn together, and/or associated with other metals. Some of these are:

a) The Pb-Zn anomalies east of Base line, on Lines 2S to 5S, in the area of limestone and skarn type showings; a copper anomaly and some elevated Au-Ag values occur in the same area.

b) An Pb-Zn-As anomaly on Lines 6N - 8N, about 5+00E, west of Fosselli Creek; it is associated with an Mo anomaly (described above) and a 1.7 ppm Ag anomaly, and is located near the contact of Vancouver limestone and volcanics.

c) A so far still poorly defined Pb-Zn anomaly appears to be indicated at the westernmost part of the grid; this anomaly, from Lines 6N to 4S appers to be directly associated with the limestone belt there, located on the slope of the Cous Creek valley near the southern boundary of Alder 1 and 2 claims. This anomaly is coinciding with a strong combined arsenic - manganese - barium anomaly. All the combined anomalies are "open" toward SW (i.e. toward the area of large limestone exposures shown on Map 1).

7.2.6 Arsenic and Antimony (Map 5)

The total ranges for Arsenic and Antimony in soil are "N.D." ("not detectable", i.e. "less than 3 ppm") to 240 ppm As and "N.D." (less than 2 ppm) to 49 ppm Sb. Their respective backgrounds are in the "less than 3 ppm" to about 10 ppm As, and "less than 2 ppm" to about 5 ppm Sb ranges. The values above 24 ppm As and 7 ppm Sb are taken as anomalous.

Both elements are often closely associated here; both can be used as indicators or "pathfinders" for low temperature and complex sulphide deposits in particular, and for hydrothermal sulphide ores (Cu-Pb-Zn-Co-Ni-Mo-Ag-Au) in general. Arsenic has medium geochemical mobility and is considered to be a good pathfinder for vein type Au-Ag deposits. Antimony has low geochemical mobility under most conditions.

A number of small "spot" As-Sb anomalies, either as separate elements, or together, are found throughout the grid area. However, the more significant anomalies occur in the "limestone belts" on the east half of the grid and also on the westernmost ends of the Lines 7N to 4S (already discussed under "Lead and Zinc").

The As-Sb anomalies on the eastern part of the grid are usually closely associated, if not coincident, with a number of small base metal and Au-Ag anomalies there (described above).

Only one "spot" As-Sb anomaly, in "Detail Area #4", is associated with the 1.2 km long gold anomaly west of the Base Line.

The largest and best defined arsenic anomaly (with only minor Sb) occurs on Lines 4N to 8N, centered at about 5E, in the headwaters of Fosselli Creek. It is associated with a large silver anomaly just east of it, and also with Pb, Zn, Co, Mo and Mn "highs".

The As anomaly along the western edge of the grid, although poorly defined, appears to be possibly at least a km long, in E-W direction and is "open" toward south.

7.2.7 Manganese and Barium (Map 6)

The total range for Mn in soil is 63 to 16,115 ppm, with the background of about 100 - 900 ppm. Distribution is strongly skewed positively, i.e. probably logarithmic, indicative of very strong anomalous components. The values of above 1750 ppm Mn are taken as anomalous. Manganese anomalies are of interest, because Mn tends to form extensive geochemical haloes around and beyond ore bodies, hence, Mn is useful as a "pathfinder" for mineral deposits. Geochemically speaking Mn is also a "scavenger", i.e. it tends to "pick up" and accumulate other elements, such as Cu, beyond their normal concentrations in the sampling medium.

Barium has a range of 5 to 405 ppm in the soil here, with a background of 20 - 70 ppm Ba. Values of 130 ppm or higher are considered to be anomalous. Barium is often found with Pb-Zn-Cd type base metal deposits, as barite in gangue; more generally, it tends to be enriched in early formed potassium minerals, hence it is usually associated with granites.

Mn and Ba have a low to very low mobility, i.e. they do not tend to "travel" far from their source.

On the property, manganese anomalies, often associated with Ba, occur throughout the grid area. Mn anomalies are more prevalent than Ba. Both occur in all rock types, with a predilection, perhaps, for Mn to occur within Vancouver Group, particularly near the contact zones of limestone belts. There is no significant association between Au-Ag at one hand, and Mn-Ba at the other hand, on the property.

There is some locally good correlation between Cu and Mn anomalies along the main access road, on lines 1N to 1S on east part of the grid. There is also local correlation with Pb and Zn in the skarn mineralization area on the SE part of the grid, in the limestone belt area along the end of the grid.

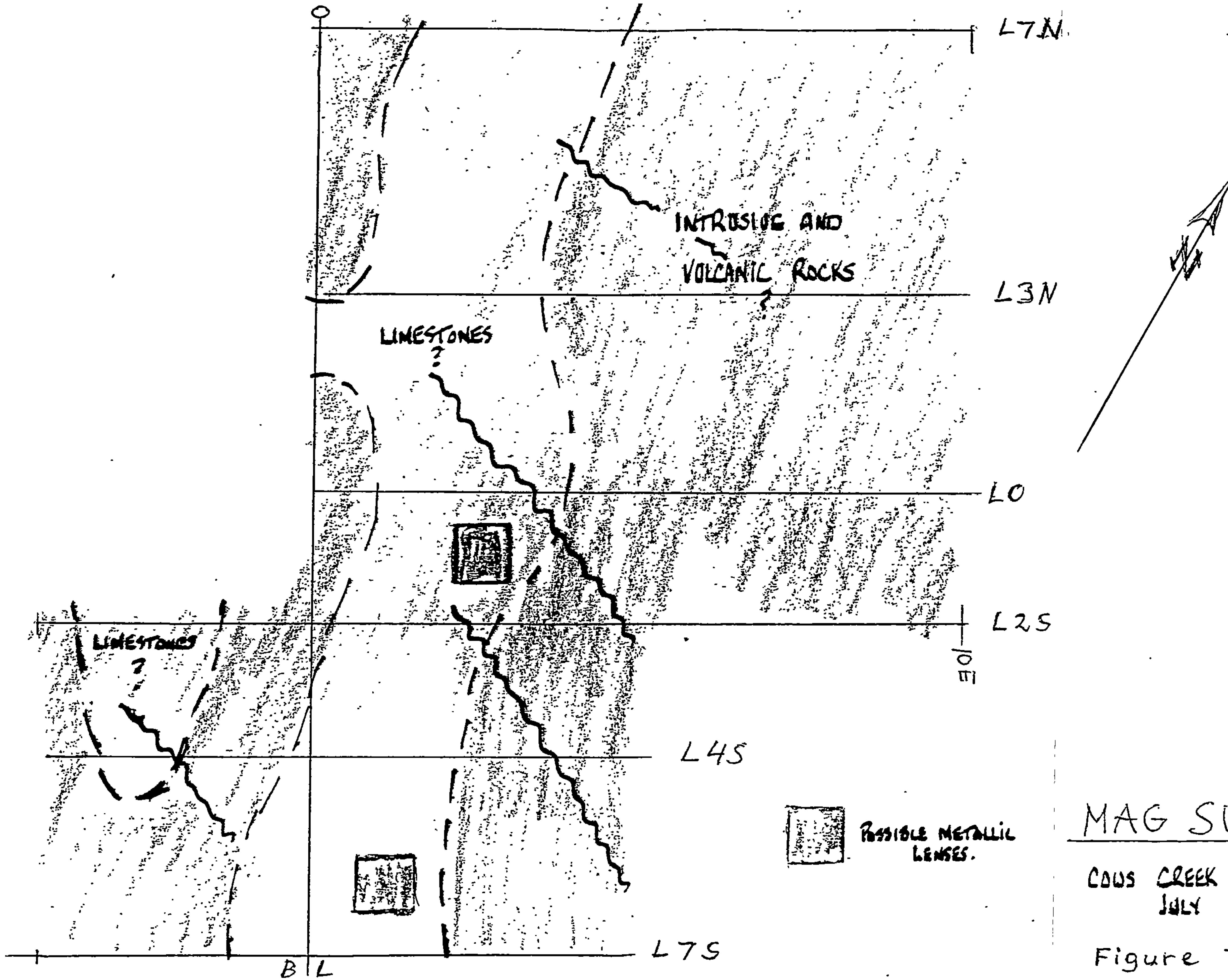
The significance of the Mn and Ba anomalies has yet to be determined.

7.3 GROUND MAGNETOMETER SURVEY
(See Map 7)

The Map 7 shows computer plotted, diurnally corrected total magnetic field contours for the east half of the grid area, with a small area added to west side of the grid (from Lines 3S to 7S). A geophysical interpretation of the mag map by R.F. Sheldrake, geophysicist, is given in Figure 7, following. It should be noted that this magnetic survey covers only about 1.5 km^2 (or 7%) of the total estimated claim group area.

In comparing the magnetic map with the known geology, it appears that:

- the magnetically "low", flat area east of the base line coincides, more-or-less, with the Quatsino limestone belt;
- the strong positive north trending anomalies across Lines 4S to 1S, and then diminishing toward north, appear to be in Vancouver Group volcanics, near its contact with limestone, and may be related to massive sulphide (pyrrhotite) deposits in that area;
- several other, less intensive anomalies toward west may be related to skarn type, magnetite bearing mineralized occurrences;



MAG SURVEY

COWS CREEK INTERPRETATION.
JULY 1987

Figure 7

- possibly 3 or more NW trending fault zones are indicated by offset magnetic anomalies (see Figure 7); this needs to be confirmed by geological mapping;
- Bonanza Group volcanics appear to be less positively anomalous (i.e. more negative) than Vancouver Group (Karmutsen) volcanics.

7.4 DISCUSSION OF RESULTS

Only a part of the property has been geochemically surveyed so far. This, and the fact that several of the more significant geochemical anomalies are "open", i.e. apparently extending outside the presently surveyed grid area, indicates that more geochemical coverage is needed to fully outline the geochemical "targets" before the property's potential can be tested. Also, additional useful information can be obtained from the remaining un-utilized geochemical data, i.e. using the elements that were not plotted up or studied due to time and budgetary limits. Maps containing several associated elements would be useful for outlining areas for further follow-up work; the correlation matrix of all elements that were analyzed would be useful to determine these associations more precisely. Mapping of the lab results of such elements as Co-Ni-Cr would be useful when checking the area for platinum group minerals (PGM). For example, a soil sample from L2N - 17 + 50W has a palladium (Pd) content of 3 ppm (= 3,000 ppb), rather anomalous for soil samples! Notice that respective lab detection limits for platinum and palladium are 5 ppm Pt and 3 ppm Pd by the ICP method used here, which is much too high for the "grassroots" soil surveys used to locate anomalous areas or zones on a large piece of ground.

The area covered by the magnetic survey is even smaller, about 1/14 of total property. This, combined with 1:10,000 scale reconnaissance type geological mapping, makes the correlation of magnetics and geology somewhat difficult at this stage. However, it appears that the magnetic surveys would be useful for delineating rock types under overburden and certain magnetic mineralized deposits that are not exposed at surface; possibly major faults could also be detected.

Although a VLF-EM survey was originally recommended, it was not run due to time and budget limits. A previous airborne geophysical survey has indicated the presence of several EM conductors on the property (B.C.A.R. # 9313) which need to be confirmed and pinpointed by ground EM methods.

Geological mapping so far has indicated only generally the areas of major geological formations. Their contacts, particularly on the southern parts of the claims, are yet to be defined with any accuracy. The key issue here appears to be the accurate tracing out of the Quatsino limestone belt, possibly with the help of magnetic surveys, which would then also define the contacts of the two volcanic formations. Study of airphotos and geophysical maps (EM, mag), along with detail mapping, is needed to trace out the fault zones and other structures.

8. CONCLUSIONS

1) Both skarn and massive sulphide type base metal mineralization occurs along or near the limestone contact on Otter Claim Group. These occurrences, as presently known, are uneconomic in size and grade, and no ore has been produced from these.

2) This mineralization is probably related to the batholithic Jurassic intrusions and also to later (Tertiary?) dyke-like intrusions.

3) Magnetic and soil surveys have outlined anomalies in the area of these showings which indicate that subsurface extensions or similar additional deposits may exist.

4) Several new areas of interest have been outlined by soil geochemistry which warrant further exploration. The most significant of these geochemical anomalies are:

   a) A gold-in-soil anomaly, trending N-S for at least 1.2 km and "open" both to north and south, in Bonanza volcanics about ½ km west of Base Line.

   b) A silver anomaly on Lines 4N to 7N, east of Fosselli Creek, associated with Vancouver Group volcanics and limestone.

   c) The limestone belt at the west end of the grid, in the south half of Alder 2 claim, which appears to be anomalous in Zn, Pb, As, Mn and Ba; this anomalous zone is wide open toward south. (A number of other geochemical anomalies have been listed under "Results", above, which also need checking.)

5) The geochemical-geophysical-geological survey of the claim group area is not yet complete to permit the proper evaluation of the entire property.

6) It is therefore concluded that more work is warranted to:

   a) complete the surveys started in 1987; and

   b) carry out detailed "follow-up" work on the several anomalous areas already outlined.

9. RECOMMENDATIONS

A two-stage exploration program is recommended, - one to complete the program started in 1987, - the other to "follow-up" various anomalies.

9.1 COMPLETION OF PHASE I (PHASE I-B)

This part of the program calls for the continuation of the surveys carried out during the summer 1987, to cover the remainder of the property. In particular, it is recommended that:

1) Extend the present grid-lines to cover all of the Alder 1, Alder 2, and Otter Claim areas. Initially, lines should be run at 200 metre intervals, say every "even-numbered" line; 100 metre interval lines should be added where warranted, eg. in areas of limestone belts, skarn zones, along intrusive contacts, and along projected extensions of already known major anomalies.
2) Run another Base Line and line grid, similar to existing one, on Arbutus and Sproat claims. Initially, it may be sufficient to run the crosslines here at 200 or even 400 metre line intervals, with more detail added locally if and where warranted.
3) Soil sample all the new grid lines at 50 metre intervals; take mag and VLF-EM readings at 25 metre intervals.
4) Complete the mag survey and do the VLF-EM surveys on the present grid,
5) Run fill-in geochemical-geophysical surveys at 50 metre line intervals over some of the most anomalous zones. (Most of this work should be done during Phase II.)
6) Map (and prospect) the property on 1:5,000 scale, using grid control, with

emphasis on the anomalous areas. The already known anomalous zones or areas should be mapped in some detail (say on 1:2,000 or 1:2,500 scale).

7) Plot geochemical and geophysical survey results, including the 1987 results, on 1:5,000 scale maps. More detailed maps of 1:2,000 or 1:2,500 scale may have to be used for areas of particular interest (similar to geological mapping).

8) Use airphotos and geophysical survey data to assist in mapping geological structures, such as faults.

9) After plotting and interpreting all data, outline a number of anomalous zones, or "target areas" that warrant a more detailed "follow-up" program (Phase II). These areas should be assigned an order of priority.

9.2 PHASE II

This phase is contingent upon the results of the completion of Phase I and is hence subject to further revisions. However, it is assumed that several anomalous, or "target" areas have been outlined, which warrant, on priority basis, more work (see item 9, in "Phase I-B", above). The work should then consist of the following:

1) Detail grids, at 25 or 50 metre line intervals. These should be soil sampled at 25 metre or closer spacing. Mag and EM surveys should be run on these lines at least at 25 metres, preferably on 10 or 12.5 metre spacings.

2) Detail mapping and prospecting, including rock sampling for assay and petrographic study. Geophysical data should be used to assist in mapping of areas of limited or no outcrop.

3) Trenching by bulldozer, or preferably, backhoe, of known or suspected mineralized zones, particularly where overburden is present, followed by channel sampling for assay and detail mapping of exposed bedrock.

4) Plotting, revision and interpretation of all data collected so far to select drill targets, if and where warranted (Phase III).

9.3 PHASE III

This phase would be contingent on the positive results from all previous work. Essentially, if and where warranted, it would consist of diamond drilling, with possibly some additional trenching and geophysics preceeding the drilling to assist to lay out the drill holes.

A provisional allowance is made in the budget (following) for a 1000 metre diamond drilling program.

10. PROPOSED BUDGET

10.1 PHASE I-B

(Estimated 6 persons x 20 days in field; about 60 line-km of lines to be added to grid, surveyed and sampled.)

Project Geologist @ $300 x 20 Days	$ 6,000	
Field Geologist @ $250 x 20 days	5,000	
4 Geotechnicians @ $200/each x 20 days	16,000	
		$ 27,000
Two 4-W-D Truck Rentals @ $100/each x 20 days	$ 4,000	
Room & Board @ $60 x 120 man - days	7,200	
Communications @ $20 x 20 days	400	
VLF-EM and Mag Rental @ $120 x 20 days	2,400	
Field Supplies	1,000	
Mob/Demob	1,000	
		16,000
Geochemical Analyses @ Assays, say 1,200 samples @ $15/each	$ 18,000	
		18,000
Administration & Management @ $400 x 4 days	$ 1,600	
Consulting & Supervision @ $400 x 4 days	1,600	
Reporting & Data Compilation @ $300 x 12 days	3,600	
Drafting & Maps	1,500	
Typing, copying, printing, etc.	1,000	
		9,300
	Sub-Total	$ 70,300
	Contingency & Miscellaneous (15% of above)	10,545
	TOTAL FOR PHASE I-B	$ 80,845
		(Say $ 81,000)

10.2 PHASE II

(Estimated 6 persons x 12 days in field; budget and scheduling are contingent on results of Phase I program, hence subject to revision.)

Project Geologist @ $300 x 12 days	$ 3,600	
Field Geologist @ $250 x 12 days	3,000	
4 Geotechnicians @ $200/each x 12 days	9,600	
		$ 16,200
Two 4-W-D Truck Rentals @ $100/each x 12 days	$ 2,400	
Room & Board @ $60 x 72 man/days	4,320	
Communications @ $20 x 12 days	240	
VLF-EM & Mag Rental @ $120 x 12 days	1,440	
Field Supplies	800	
Mob/Demob	800	
		10,000
Geochemical Analyses & Assays say, 1,000 samples @ $15/each	$ 15,000	
Backhoe @ $150/hr x 6 days/8 hrs (contractor)	7,200	
Backhoe Mob/Demob	1,000	
		23,200
Administration & Management @ $400 x 3 days	$ 1,200	
Consulting & Supervision @ $00 x 4 days	1,600	
Reporting & Data Compilation @ $300 x 8 days	2,400	
Drafting & Maps	1,200	
Typing, copying, printing, etc.	800	
		7,200
	Sub-Total	$ 56,600
	Contingency & Miscellaneous (15% of above)	8,490
	TOTAL FOR PHASE II	$ 65,090
		(Say $ 65,000)

10.3 PHASE III

(Estimated 1000 metres of diamond drilling/2 weeks.) This budget is fully contingent on the results of completion of Phase I and II and hence subject to revision.)

Project Geologist @ $300 x 14 days	$ 4,200	
Geotechnician @ $200 x 14 days	2,800	
		$ 7,000
4-W-D Truck Rental @ $100 x 14 days	$ 1,400	
Room & Board @ $60 x 30 man-days	1,800	
Communications @ $20 x 14 days	280	
Field Supplies	500	
Mob/Demob	400	
		4,380
Diamond Drilling @ $80/metre x 1000 metres	$ 80,000	
Drill Mob/Demob	2,000	
		82,000
Core Assays		
say, 200 samples @ $20	$ 4,000	
		4,000
Administration & Management @ $400 x 4 days	$ 1,600	
Consulting & Supervision @ $400 x 5 days	2,000	
Reporting & Data Compilation @ $300 x 8 days	2,400	
Drafting & Maps	1,200	
Typing, copying, printing, etc.	800	
		8,000
	Sub-Total	$ 105,380
	Contingency & Miscellaneous (15% of above)	15,807
	TOTAL FOR PHASE II	$ 121,187

(Say $ 121,000)

10.4 TOTAL PROPOSED BUDGET

Phase I-B	$ 81,000
Phase II	65,000
Phase III	121,000
TOTAL	$ 267,000

Respectfully submitted by:
ASHWORTH EXPLORATIONS LIMITED

Hugo Laanela, F.G.A.C.,
Consulting Geologist

August 31, 1987
Vancouver, B.C.

PERSONNEL

The following persons were engaged in field work on Otter Claim Group during June - July, 1987.

Name	**Position**	**From/To** (inclusive)
Fayz Yacoub, B.Sc.	Project Geologist/ Party Chief	June 12 - 22, and July 23 - 24
Frank Renaudat	Geotechnician/ Geophysical Operator	June 18 - 22, June 25 - July 2, and July 23 - 24
Robert Paeseler	Geotechnician	June 12 - 22
Brian Chore	Geotechnician	June 12 - 16
Dominic Spooner	Geotechnician	June 12 - 22, and June 25 - 28
Steve Jackson	Geotechnician	June 12 - 22
Charlie Foster	Geotechnician	June 25 - 27
Hugh Grenfal	Geotechnician	June 30 - July 2
Hugo Laanela, F.G.A.C.	Consulting Geologist	June 17, and July 8

REFERENCES

Anderson, R.E., P. Eng., 1977: Geological and Geophysical Report on the A5 - 8 and C-7 Mineral Claims, Cous Creek Area, Alberni, M.D., by Bethlehem Copper Corporation. (Assessment Report #6393; includes "Examination of the Cous Creek Property", by C.E. Armstrong, P.Eng., July 22, 1977. Covers the area of the present Skarn Claim plus parts of surrounding Otter Claim Group.)

Carson, D.J.T., 1973: The Plutonic Rocks of Vancouver Island, B.C.; G.S.C. Paper 72 - 44.

Eastwood, G.E.P., 1975: A Claim (92 F/2W), in BCMM & PR report "Geology in British Columbia", pp. G44-G46. (Description of former A5-8 claims located about 1 km SE of the head of Fosselli Creek, with map of showings.)

Eastwood, G.E.P., 1976: A Claim (92 F/2W), in BCMM & PR report "Geology in British Columbia", pp 43 - 44 (with more updated map of showings.)

Laanela, H., 1965/1966: Mineral Occurrences on E & N Land Grant, Vancouver Island; internal company reports for Gunnex Limited (summarized 1964 - 66). (Ref. M.O. # 51 - Upper Fosselli Creek.)

Laanela, H., 1966: Geological Maps of E & N Land Grant between 40°00' - 49°20' latitudes, 1": ½mile; for Gunnex Limited, 1964 - 1966.

Muller, J.E., 1977: The Geology of Vancouver Island, B.C.; Geol. Survey of Canada Open File 463; map and marginal notes (3 sheets).

Nethery, R.J., P.Eng., 1977: Geophysical and Percussion Drilling Report on the A5-8 Mineral Claims, Cous Creek Area, Alberni M.D., by Bethlehem Copper Corporation. (Assessment Report #6956; covers the area of present Skarn Claim plus parts of surrounding Otter Claim Group.)

Sookochoff, L., P.Eng., 1985: Geological Evaluation Report on the Otter Claim Group, Cous Creek Area, Alberni, M.D.

Timmins, W.G., and Rolston, T., 1981: Airborne Geophysical Report on the Kola Creek Group, Port Alberni Area, B.C., for Pacific Seadrift Resources Ltd. (Assessment Report #9313; the A/B VLF-EM and Mag Survey covers all of Otter Claim Group plus adjacent areas.)

Vollo, N.B., P. Eng., 1976: Geophysical Report on the 92 F/2 Fosselli Creek Group of Cous Creek Copper Mines Ltd. at Port Alberni, B.C. (Assessment Report # 5981; ground mag. survey covers the area of present Skarn Claim and parts of adjacent Otter Group claims.)

Wing, B.J. and Timmins, W.G., 1982: Geological and Geochemical Report on the Kola Claim Group, Alberni M.D., for Pacific Seadrift Resources Ltd. (Assessment Report #10,288; covers area south of the Otter Group, with some overlap of Alder Claims.)

Aeromagnetic Map of Alberni Inlet, Vancouver Island, B.C., 1967: G.S.C. Map 5323G, 1":1 mile, N.T.S. Sheet 92F/2 and part of 92F/7 (based on 1962 helicopter-borne survey by Hunting Survey Corp. Ltd. for C.P.O.G.).

G.S.C. Open File 1272, Sheet 7/10, Geology of Alberni Area, B.C., 1:50,000 (Lithoprobe I Mapping by Sutherland-Brown, Yorath, Anderson & Dom).

Assessment Report # 5650: Prospecting covering Summit 1, 2 and Cas 7,8 claims, 1974 and 1975, at head of Fosselli Creek, 3 km south of Stirling Arm.

B.C.D.M. Open File (Report by G.E.P. Eastwood, 1974.)

CERTIFICATE

I, FAYZ F. YACOUB, currently residing at #201 - 733 W. 14th Avenue, Vancouver, British Columbia, do hereby declare:

1) That I am a graduate in geology and chemistry from Assuit University, Egypt (B.Sc. 1967), and Mining Exploration Geology of the International Institute for Aerial Survey and Earth Sciences (I.T.C.), Holland (Diploma 1978).

2) That I have practised the geological profession for the past fourteen years.

3) That the information, opinions and recommendations in the attached report are based on personal observations on the Otter claim group during the period June 11 to June 22, 1987 and from general reference material.

4) That I own no interest in the shares or securities of Veto Resources Ltd or the subject property, nor do I expect to receive any such interest.

Respectfully submitted,

Fayz F. Yacoub

Dated at Vancouver, British Columbia
August 24 1987

CERTIFICATE

I, Hugo Laanela, of 3657 Ross Road, Nanaimo, B.C. V9T 2S3, do hereby declare that:

1. I am a geologist, graduate of the University of British Columbia, Vancouver, B.C., in 1961 with a B.A. degree in Geology.

2. I am a Fellow of the Geological Association of Canada, and a full member of the Association of Exploration Geochemists, The Canadian Institute of Mining and Metallurgy, and the Australasian Institute of Mining and Metallurgy.

3. I have practiced my profession as a mining exploration geologist since 1961 to 1966 and 1973 to present across Canada, and during 1966 to 1972 as a senior/regional exploration geologist in Australia.

4. During 1964 - 1966 I carried out regional geological mapping and numerous property evaluations on Vancouver Island, including Cous Creek area discussed in this report. I also revisited the area and examined the Otter property on June 17 and July 8, 1987.

5. The information, opinions and recommendations in this report are based on the field work carried out by myself or under my supervision during 1964 - 1966 and 1987, and my study of various survey data on the property.

6. I have no interest in any of the claims of the property, nor have I any shares of the company.

Dated at Vancouver, British Columbia, this 31st day of August, 1987.

GEOLOGICAL ASSOCIATION OF CANADA
H. LAANELA
FELLOW

Hugo Laanela, F.G.A.C.

OTTER CLAIM GROUP

ITEMIZED COST STATEMENT

Project Preparation		$ 1,300.00
Mob/Demob (includes transportation, freight, and wages)		$ 5,500.00
Field Crew:		
Consultant $450/day x 3 days	$ 1,350.00	
Project Geologist $325/day x 10days June 15-17; June 12-19; July 23-24	3,250.00	
Party Chief $250/day x 8 days, June 12-19	2,000.00	
5 Geotechnicians $210/day x 32 mandays June 12-19; June 27-28; July 1-3; July 23-24	6,720.00	
Geophysical Operator $250/day x 4 days June 27-30	1,000.00	
		$ 14,320.00
Field Costs:		
Food and Accommodation $70/day x 57 mandays	$ 3,990.00	
Communications	375.00	
Geophysical Instrument Rental $125/day x 4 days	500.00	
Supplies	1,500.00	
4x4 Truck $110/day x 19 days	2,090.00	
4x4 Trucks $110/day x 9 days	990.00	
		$ 9,445.00
Lab Analysis:		
778 soil samples @ $14.35/sample Fire assay/AA for Au, multi-ICP	$11,164.30	
48 rock samples @ $16.50/sample Fire Assay/AA for Au, multi-ICP	792.00	
		$ 11,956.30
Supervision and Report:		
Supervision $450/day x 6 days	$ 2,700.00	
Report Writing	5,000.00	
Map plotting and Drafting	1,800.00	
Word Processing, Copying, Binding	900.00	
		$ 10,400.00
Sub-total		$ 52,921.30
Administration 15%		7,938.20
Total		$ 60,859.50

APPENDIX I

GEOCHEMICAL ANALYTICAL REPORTS

by

VANGEOCHEM LAB LIMITED

Report # 870625 - GA/PA (36 rock samples)

870627 - GA/PA (599 soil samples)

870627 - SA (Statistical Analysis: Ag, Cu, Mo, Pb & Zn)

870632 - GA/PA (91 soil samples)

870635 - GA/PA (10 rock samples)

870879 - GA/PA (88 soil samples)

870880 - GA (2 rock samples)

Description of Analytical Procedures (letter August 13, 1987).

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: ASHWORTH EXPLORATION LTD.
ADDRESS: Mez. Flr. 744 W. Hastings
: Vancouver, B.C.
: V6C 1A5

DATE: July 3 1987

REPORT#: 870625 GA
JOB#: 870625

PROJECT#: COUS CREEK AREA
SAMPLES ARRIVED: June 25 1987
REPORT COMPLETED: July 3 1987
ANALYSED FOR: Au (FA/AAS) Pt Hg ICP

INVOICE#: 870625 NA
TOTAL SAMPLES: 36
SAMPLE TYPE: 36 ROCKS
REJECTS: SAVED

SAMPLES FROM: ASHWORTH EXPLORATION LTD.
COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR: ASHWORTH EXPLORATION LTD.

ANALYSED BY: VGC Staff

SIGNED: ______________________

GENERAL REMARK: None

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
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BRANCH OFFICE
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VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870625 GA JOB NUMBER: 870625 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au	Pt	Hg
	ppb	ppm	ppb
OT-87-R1	240	--	--
OT-87-R2	nd	--	--
OT-87-R3	nd	--	--
OT-87-R4	nd	--	--
OT-87-R5	nd	--	--
OT-87-R6	nd	--	--
OT-87-R7	nd	--	--
OT-87-R8	nd	--	--
OT-87-R9	15	--	--
OT-87-R10	nd	--	--
OT-87-R11	nd	--	--
OT-87-R12	nd	--	--
OT-87-R13	nd	--	--
OT-87-R14	nd	--	--
OT-87-R15	nd	--	--
OT-87-R16	nd	--	--
OT-87-R17	nd	--	--
OT-87-R18	nd	--	--
OT-87-R19	nd	--	--
OT-87-R20	nd	--	--
OT-87-R21	nd	--	--
OT-87-R22	nd	--	--
OT-87-R25	nd	--	--
OT-87-R26	10	--	--
OT-87-R27	60	--	--
OT-87-R28	nd	--	--
OT-87-R29	80	nd	nd
OT-87-R30	40	--	--
OT-87-R31	nd	--	--
OT-87-R32	nd	--	--
OT-87-R33	nd	--	--
OT-87-R34	40	nd	nd
OT-87-R35	40	--	--
OT-87-R36	nd	--	--
OT-87-R37	nd	--	--
OT-87-R38	nd	--	--
DETECTION LIMIT	5	3	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: ASHWORTH EXPOLRATIONS
ATTENTION:
PROJECT: COUS CREEK AREA

REPORT#: PA
JOB#: 870625
INVOICE#: NA

DATE RECEIVED: 87/06/25
DATE COMPLETED: 87/06/28
COPY SENT TO: VANCOUVER OFFICE

ANALYST ___

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
OT-87-R1	.1	.64	20	ND	37	ND	1.12	.1	6	25	9	1.35	.08	.07	712	3	.01	2	.05	7	ND	ND	4	ND	9	17	ND	24
OT-87-R2	.1	.48	ND	ND	42	8	5.59	.1	34	32	33	6.50	.01	2.49	1312	ND	.01	81	.01	4	ND	ND	ND	ND	102	ND	ND	90
OT-87-R3	.1	3.52	ND	ND	150	9	1.91	.1	26	29	29	6.55	.01	2.42	2053	1	.01	18	.15	11	ND	ND	ND	ND	21	ND	ND	146
OT-87-R4	.1	.75	4	ND	62	ND	.38	.1	12	46	13	3.50	.02	.14	678	4	.01	4	.04	10	ND	ND	6	ND	7	16	ND	43
OT-87-R5	.1	.51	31	ND	252	3	4.82	.1	8	30	11	3.87	.01	1.02	819	2	.01	1	.04	5	ND	ND	ND	ND	55	ND	ND	45
OT-87-R6	.1	2.31	ND	ND	17	5	5.59	.1	29	79	209	7.28	.01	2.12	1187	ND	.01	57	.07	11	ND	ND	ND	ND	83	ND	ND	98
OT-87-R8	.1	.34	90	ND	7	5	15.83	.1	11	26	121	6.32	.01	2.25	1204	ND	.01	32	.03	20	ND	ND	5	ND	128	ND	ND	58
OT-87-R9	.1	.96	72	ND	20	15	.34	.1	47	41	272	16.07	.01	.22	301	4	.01	84	.13	21	ND	ND	10	ND	9	ND	ND	96
OT-87-R10	3.2	2.79	ND	ND	322	18	.14	.1	30	11	5752	4.00	.01	1.62	307	2	.01	14	.03	9	ND	ND	7	ND	18	6	6	82
OT-87-R11	.1	4.55	ND	ND	70	12	2.29	.1	33	133	1465	7.48	.01	4.82	984	ND	.01	81	.06	8	ND	ND	ND	ND	33	ND	ND	125
OT-87-R12	.8	1.43	ND	ND	7	10	1.41	.1	12	81	317	1.97	.01	.48	384	5	.01	13	.02	9	ND	ND	ND	8	93	6	ND	21
OT-87-R13	2.7	2.75	ND	ND	12	25	1.37	.8	32	78	3936	4.66	.01	2.16	799	3	.01	48	.05	13	ND	ND	3	8	174	ND	5	55
OT-87-R14	.2	2.70	ND	ND	12	14	1.70	.2	32	29	577	4.12	.01	1.67	686	ND	.01	35	.05	10	ND	ND	ND	3	26	ND	ND	65
OT-87-R15	.1	3.89	ND	ND	22	10	7.13	.1	22	81	230	5.33	.01	3.24	1429	ND	.01	40	.04	9	ND	ND	ND	ND	50	ND	ND	75
OT-87-R16	.1	2.12	ND	ND	45	13	.91	.1	11	26	40	8.89	.01	1.18	296	5	.01	4	.05	10	ND	ND	3	8	148	ND	ND	12
OT-87-R17	.1	3.12	ND	ND	37	7	1.12	.1	16	14	39	4.58	.01	1.10	347	4	.01	1	.06	9	ND	ND	5	ND	51	ND	ND	10
OT-87-R18	.1	5.41	ND	ND	32	ND	2.70	.1	22	96	152	4.01	.01	.83	327	1	.01	41	.04	14	ND	ND	4	ND	96	ND	ND	22
OT-87-R19	.1	.32	42	ND	25	ND	.08	.1	15	137	36	3.25	.05	.05	559	19	.01	7	.02	5	ND	ND	8	ND	3	19	ND	43
OT-87-R20	.1	.52	4	ND	40	ND	.79	.1	8	41	5	2.67	.10	.06	771	4	.01	3	.04	7	ND	ND	ND	ND	4	17	ND	33
OT-87-R21	.1	2.29	ND	ND	50	10	.34	.1	13	15	4	4.12	.01	1.43	986	2	.01	5	.05	19	ND	ND	4	ND	3	3	ND	69
OT-87-R22	.1	.40	47	ND	155	5	3.84	.1	11	27	68	4.33	.01	1.45	1164	ND	.01	22	.02	1	ND	ND	25	ND	54	ND	ND	58
OT-87-R25	.1	2.06	156	ND	422	6	8.00	.1	22	127	972	4.05	.01	4.25	1147	ND	.01	134	.01	8	ND	ND	5	ND	149	ND	ND	30
OT-87-R26	9.5	1.56	207	ND	12	33	2.25	2.1	98	66	53777	7.33	.01	1.67	549	9	.01	377	.03	13	ND	ND	ND	ND	88	ND	4	103
OT-87-R27	11.1	.24	21	ND	7	10	5.89	2.1	88	41	86452	15.88	.01	.29	3851	6	.01	27	.02	32	ND	ND	ND	ND	15	ND	ND	224
OT-87-R28	17.7	.34	21	ND	2	24	9.80	1.2	99	29	71504	12.91	.01	.27	3065	5	.01	37	.02	23	ND	ND	ND	ND	52	ND	ND	107
OT-87-R29	.1	.19	109	ND	5	11	4.47	.1	43	24	212	36.65	.01	.17	1754	ND	.01	15	.01	13	ND	ND	ND	ND	3	ND	ND	20
OT-87-R30	.1	.32	ND	ND	12	15	9.28	.1	11	50	337	13.30	.01	.24	3175	2	.01	7	.02	13	ND	ND	ND	ND	1	ND	ND	3
OT-87-R31	.1	.30	ND	ND	2	6	9.57	.1	3	28	114	11.33	.01	.17	1816	4	.01	7	.03	14	ND	ND	ND	ND	1	ND	ND	2
OT-87-R32	.1	1.79	ND	ND	5	5	8.07	.1	17	46	93	9.88	.01	.97	2312	9	.01	13	.14	12	ND	ND	3	ND	4	ND	ND	24
OT-87-R33	.1	2.36	ND	ND	17	15	5.19	.1	30	65	10702	5.08	.01	2.72	1140	7	.01	156	.03	6	ND	ND	ND	ND	134	ND	ND	35
OT-87-R34	9.8	.34	8	ND	2	26	9.16	.5	48	39	44407	16.85	.01	.24	2072	3	.01	21	.01	23	ND	ND	5	ND	4	ND	ND	73
OT-87-R35	.6	4.44	239	ND	5	25	.24	.1	55	102	869	12.32	.01	3.45	1420	4	.01	107	.02	70	ND	ND	4	ND	1	ND	ND	124
OT-87-R36	.1	.51	11	ND	50	ND	6.58	.1	7	13	231	3.94	.01	2.16	1300	ND	.01	5	.04	8	ND	ND	6	ND	128	ND	ND	89
OT-87-R37	.1	3.59	ND	ND	7	15	4.37	.1	30	27	102	5.57	.01	2.02	742	ND	.01	43	.05	11	ND	ND	ND	3	18	ND	ND	40
OT-87-R38	.1	.68	ND	ND	75	4	10.35	.1	26	93	130	4.44	.01	1.79	1338	ND	.01	82	.01	10	ND	ND	ND	ND	120	ND	ND	7
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

VGC

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: ASHWORTH EXPLORATION LTD.
ADDRESS: Mez. Flr. 744 W. Hastings
: Vancouver, B.C.
: V6C 1A5

DATE: July 08 1987

REPORT#: 870627 GA
JOB#: 870627

PROJECT#: COUS CREEK PROJECT
SAMPLES ARRIVED: June 25 1987
REPORT COMPLETED: July 08 1987
ANALYSED FOR: Au ICP

INVOICE#: 870627 NA
TOTAL SAMPLES: 599
SAMPLE TYPE: 599 SOIL
REJECTS: DISCARDED

SAMPLES FROM: ASHWORTH EXPLORATION LTD.
COPY SENT TO: ASHWORTH EXPLORATION LTD.

PREPARED FOR: ASHWORTH EXPLORATION LTD.

ANALYSED BY: VGC Staff

SIGNED: ______________________

GENERAL REMARK: None

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH:(604)986-5211 TELEX:04-352578
BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH:(604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM.
IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: ASHWORTH
ATTENTION:
PROJECT: Cous creek area

REPORT#: PA
JOB#: 870627
INVOICE#: NA

DATE RECEIVED: 87/06/25
DATE COMPLETED: 87/07/11
COPY SENT TO:

ANALYST ____

Soils

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC-87 L00+00BL	.1	6.83	ND	ND	61	ND	.19	.1	23	31	83	6.71	.02	.81	1205	2	.22	26	.15	11	ND	ND	ND	1	7	ND	ND	189
CC-87 L00+50E	.1	6.71	ND	ND	51	ND	.22	.1	15	48	84	6.59	.02	.96	579	2	.19	28	.10	10	ND	ND	ND	1	10	ND	ND	96
CC-87 L01+00E	.1	4.58	ND	ND	76	ND	.22	.1	21	30	79	7.66	.03	1.06	1673	ND	.22	20	.11	8	ND	ND	ND	ND	9	ND	5	102
CC-87 L01+50E	.1	7.74	ND	ND	94	ND	.15	.1	24	34	43	7.54	.02	1.77	1000	1	.24	23	.08	8	ND	ND	ND	3	7	ND	ND	135
CC-87 L02+00E	.1	3.54	ND	ND	34	ND	.16	.1	9	33	29	5.05	.01	.63	404	ND	.13	14	.08	6	ND	ND	ND	ND	8	ND	ND	35
CC-87 L02+50E	.2	4.07	ND	ND	31	ND	.16	.1	10	48	78	5.82	.03	.66	378	4	.14	19	.06	15	ND	ND	ND	ND	8	ND	ND	21
CC-87 L03+00E	.1	5.15	ND	ND	50	ND	.19	.1	10	46	51	6.40	.03	.60	337	2	.16	16	.08	10	ND	ND	ND	ND	9	ND	ND	48
CC-87 L03+50E	.1	5.15	ND	ND	63	ND	.41	.1	22	52	62	5.84	.08	.93	3535	3	.16	30	.08	11	ND	ND	ND	ND	13	ND	5	96
CC-87 L04+00E	.5	3.37	ND	ND	34	ND	.64	.1	20	73	155	6.19	.06	.85	988	3	.16	26	.07	12	ND	ND	ND	ND	25	ND	ND	23
CC-87 L04+50E	.2	5.41	ND	ND	107	ND	.88	.1	18	60	116	6.51	.07	.70	543	3	.17	36	.07	9	ND	ND	ND	ND	29	ND	ND	87
CC-87 L05+00E	.1	3.37	11	ND	33	ND	.22	.1	12	76	104	6.76	.04	.60	399	1	.17	24	.07	10	ND	ND	13	ND	8	ND	ND	34
CC-87 L05+50E	.1	7.24	ND	ND	44	ND	.20	.1	13	81	120	7.80	.04	.63	363	3	.20	40	.06	11	ND	ND	ND	1	9	ND	ND	64
CC-87 L06+00E	.1	6.26	ND	ND	54	ND	.20	.1	22	122	162	8.60	.04	1.25	417	1	.22	71	.07	9	ND	ND	ND	1	9	ND	ND	33
CC-87 L06+50E	.1	8.30	ND	ND	40	ND	.30	.1	23	105	150	7.05	.05	1.13	425	2	.20	59	.14	10	ND	ND	ND	2	11	ND	ND	73
CC-87 L07+00E	.1	4.62	ND	ND	77	ND	.64	.1	16	62	235	7.05	.07	.64	474	1	.17	36	.07	7	ND	ND	ND	ND	18	ND	ND	32
CC-87 L07+50E	.5	6.75	ND	ND	40	ND	.32	.1	19	74	124	6.50	.04	.85	395	1	.17	35	.07	9	ND	ND	ND	ND	13	ND	ND	41
CC-87 L08+00E	.4	7.50	ND	ND	30	ND	.27	.1	16	73	115	7.05	.05	.66	341	2	.17	25	.10	9	ND	ND	ND	1	12	ND	ND	26
CC-87 L08+50E	.1	8.66	ND	ND	66	ND	.25	.1	32	85	201	8.26	.05	1.16	708	3	.24	63	.08	10	ND	ND	ND	3	12	ND	ND	150
CC-87 L09+00E	.4	3.50	ND	ND	38	ND	.30	.1	13	40	41	5.48	.04	.48	326	1	.14	18	.05	9	ND	ND	ND	ND	17	ND	ND	40
CC-87 L09+50E	.6	6.19	ND	ND	41	ND	.34	.1	23	77	108	6.32	.05	.88	449	2	.17	38	.05	10	ND	ND	ND	ND	14	ND	ND	54
CC-87 L010+00E	.8	5.32	ND	ND	86	3	.98	.1	38	51	205	5.29	.10	1.26	1030	4	.14	92	.08	7	ND	ND	ND	ND	29	ND	ND	61
CC-87 L010+50E	.8	3.77	ND	ND	49	ND	.56	.1	20	39	121	5.54	.06	.91	489	2	.15	40	.05	7	ND	ND	ND	ND	23	ND	ND	60
CC-87 L011+00E	1.1	4.67	ND	ND	50	5	.36	.1	20	55	113	6.94	.07	.63	493	3	.19	24	.06	10	ND	ND	ND	ND	18	ND	ND	169
CC-87 L00+50N	.1	3.04	ND	ND	71	ND	.05	.1	7	9	1	5.72	.05	.51	242	ND	.14	10	.02	2	ND	ND	ND	ND	6	3	ND	7
CC-87 L01+00N	.1	4.50	ND	ND	53	ND	.16	.1	13	37	32	6.24	.05	.93	453	ND	.17	15	.05	9	ND	ND	ND	ND	10	ND	ND	36
CC-87 L01+50N	.1	3.95	ND	ND	48	ND	.19	.1	12	28	38	5.16	.04	.73	863	ND	.14	13	.08	5	ND	ND	ND	ND	9	ND	ND	39
CC-87 L02+00N	.1	2.91	ND	ND	38	ND	.03	.1	12	7	14	8.42	.04	.81	427	ND	.22	7	.02	6	ND	ND	ND	ND	4	ND	ND	32
CC-87 L02+50N	.1	3.70	ND	ND	148	ND	.64	.1	20	20	13	4.27	.06	.78	1244	ND	.13	15	.05	4	ND	ND	ND	ND	23	ND	ND	106
CC-87 L03+50N	.1	2.95	ND	ND	31	ND	.22	.1	10	24	7	5.19	.04	.80	388	ND	.14	11	.03	5	ND	ND	ND	ND	10	ND	ND	2
CC-87 L04+00N	.1	8.67	ND	ND	61	ND	.10	.1	20	33	37	5.69	.08	.51	2149	2	.16	13	.29	8	ND	ND	ND	5	6	ND	ND	126
CC-87 L04+50N	.1	5.05	ND	ND	59	ND	.25	.1	30	26	60	5.33	.05	.81	3930	ND	.16	12	.13	3	ND	ND	ND	ND	12	ND	ND	77
CC-87 L05+00N	.4	4.52	ND	ND	32	ND	.25	.1	18	37	64	6.74	.04	.93	828	ND	.19	13	.12	7	ND	ND	(12)	ND	37	ND	ND	68
CC-87 L05+50N	.1	5.49	ND	ND	52	ND	.26	.1	15	42	121	6.30	.05	.89	803	ND	.19	20	.22	3	ND	ND	ND	1	10	ND	ND	113
CC-87 L06+00N	.1	5.25	ND	ND	38	ND	.19	.1	12	35	88	6.70	.03	.80	446	ND	.20	13	.12	6	ND	ND	ND	1	9	ND	ND	75
CC-87 L06+50N	.1	3.45	ND	ND	27	ND	.15	.1	8	27	27	7.09	.04	.51	379	ND	.19	8	.08	6	ND	ND	ND	ND	12	ND	ND	7
CC-87 L07+00N	.3	6.75	ND	ND	52	ND	.19	.1	22	31	88	6.98	.05	1.18	685	1	.20	18	.10	8	ND	ND	ND	1	12	ND	ND	124
CC-87 L07+50N	.6	5.07	ND	ND	38	ND	.19	.1	17	20	49	7.59	.06	.61	493	ND	.20	8	.19	9	ND	ND	ND	ND	15	ND	ND	52
CC-87 L08+00N	.6	4.55	ND	ND	45	ND	.25	.1	19	25	45	7.10	.05	.88	579	ND	.20	11	.11	7	ND	ND	ND	ND	14	ND	ND	87
CC-87 L08+50N	1.1	1.89	ND	ND	24	ND	.19	.1	12	6	12	8.99	.07	.38	426	ND	.24	2	.04	14	ND	ND	3	ND	29	ND	ND	168
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC-87 L09+00N	.1	6.71	14	ND	48	ND	.16	.3	15	32	69	8.66	.01	1.06	502	14	.24	14	.22	22	ND	ND	ND	ND	8	ND	19	96
CC-87 L09+50N	.1	3.60	ND	ND	151	3	.40	.2	16	34	38	6.00	.03	.70	891	1	.16	13	.08	9	ND	ND	ND	ND	16	ND	ND	81
CC-87 L010+00N	.1	3.99	ND	ND	35	ND	.08	.2	3	10	14	5.83	.03	.41	208	1	.15	ND	.08	7	ND	ND	ND	1	4	ND	ND	55
CC-87 L010+50N	.1	3.30	ND	ND	55	ND	.15	.4	9	16	32	5.2[illegible]	.03	.50	1343	ND	.14	1	.11	12	ND	ND	ND	ND	6	ND	ND	84
CC-87 L011+00N	.1	3.52	ND	ND	24	ND	.11	.1	6	29	31	5.85	.03	.30	519	1	.15	ND	.20	12	ND	ND	ND	ND	5	ND	ND	71
CC-87 L011+50N	.1	3.34	7	ND	36	3	.12	.1	7	16	38	4.76	.04	.55	474	ND	.13	1	.17	9	ND	ND	ND	ND	6	3	ND	65
CC-87 L012+00N	.1	4.59	ND	ND	50	ND	.10	.1	10	24	33	5.80	.05	.44	327	4	.15	4	.10	12	ND	ND	ND	ND	6	3	5	85
CC-87 L012+50N	.3	3.37	ND	ND	31	3	.08	.1	10	10	28	5.10	.02	.51	476	ND	.13	ND	.07	10	ND	ND	ND	ND	5	ND	ND	55
CC-87 L013+00N	.1	5.40	3	ND	42	ND	.16	.2	18	17	45	5.44	.04	1.02	1274	6	.15	2	.15	16	ND	ND	ND	ND	5	ND	9	89
CC-87 L013+50N	.4	4.59	ND	ND	42	7	.25	.2	19	16	42	6.37	.03	1.25	687	3	.17	3	.13	8	ND	ND	ND	ND	7	ND	5	70
CC-87 L014+00N	.6	3.80	ND	ND	51	ND	.17	.3	15	7	26	5.30	.02	.91	702	1	.14	ND	.10	14	ND	ND	ND	ND	8	ND	ND	70
CC-87 L014+50N	.1	2.12	27	ND	25	ND	.04	.4	10	4	61	9.32	.04	.30	456	ND	.25	ND	.07	1	ND	ND	4	ND	2	ND	ND	117
CC-87 L015+00N	.1	4.58	ND	ND	57	ND	.04	.5	10	3	32	5.07	.02	.93	464	4	.15	ND	.08	7	ND	ND	ND	1	3	ND	ND	72
CC-87 L015+50N	.1	3.99	ND	ND	39	ND	.04	.1	6	13	20	5.80	.04	.45	239	1	.15	ND	.06	5	ND	ND	ND	ND	3	4	ND	67
CC-87 L016+00N	.1	3.79	ND	ND	47	ND	.13	.2	11	31	39	5.80	.02	.68	430	1	.16	4	.08	7	ND	ND	ND	ND	6	ND	ND	79
CC-87 L016+50N	.1	4.65	9	ND	58	ND	.08	.1	13	28	53	6.20	.03	1.01	813	5	.17	3	.08	11	ND	ND	ND	1	5	ND	3	108
CC-87 L017+00N	.1	3.91	5	ND	31	3	.04	.3	7	11	26	3.52	.01	1.10	673	1	.11	ND	.06	4	ND	ND	ND	ND	4	3	ND	67
CC-87 L017+50N	.1	3.47	13	ND	51	ND	.10	.3	8	12	32	4.76	.03	.53	582	4	.14	ND	.08	7	ND	ND	ND	ND	5	ND	ND	93
CC-87 L018+00N	7.8	5.12	136	ND	38	ND	.10	1.2	11	72	48	4.55	.05	.44	3469	9	.24	13	.38	38	ND	ND	ND	1	2	3	8	429
CC-87 L1N 0+00BL	.1	5.10	ND	ND	44	ND	.30	.1	12	38	49	5.95	.03	.68	416	5	.16	4	.10	10	ND	ND	ND	ND	11	ND	10	84
CC-87 L1N 0+50E	.1	3.04	ND	ND	61	ND	.26	.1	10	12	38	4.08	.03	.81	603	ND	.12	39	.05	6	ND	ND	ND	ND	9	3	ND	64
CC-87 L1N 1+00E	.2	2.37	ND	ND	58	ND	.17	.1	3	9	20	1.29	.01	.17	377	ND	.03	13	.08	6	ND	ND	ND	ND	8	6	ND	34
CC-87 L1N 1+50N	1.1	2.02	14	ND	24	3	.11	.1	5	12	11	2.99	.03	.30	281	ND	.07	6	.03	14	ND	ND	9	ND	5	6	ND	35
CC-87 L1N 2+00N	.1	3.08	ND	ND	69	ND	.64	.2	24	25	57	5.91	.08	1.82	1959	ND	.17	15	.11	6	ND	ND	ND	ND	17	ND	3	114
CC-87 L1N 2+50E	.1	3.40	ND	ND	120	ND	.72	.2	25	33	67	5.72	.08	1.62	3951	ND	.17	19	.10	8	ND	ND	ND	ND	24	ND	10	106
CC-87 L1N 3+00E	.2	2.58	37	ND	38	ND	.22	.1	19	24	171	5.67	.04	.45	1363	2	.15	5	.08	5	ND	ND	19	ND	9	3	ND	101
CC-87 L1N 3+50E	.4	2.06	10	ND	23	3	.13	.3	7	35	33	3.77	.02	.45	504	ND	.10	8	.08	10	ND	ND	ND	ND	7	4	ND	61
CC-87 L1N 4+00E	1.7	2.37	101	ND	18	ND	3.11	.1	14	24	538	10.57	.12	.30	771	ND	.26	3	.08	ND	ND	ND	19	ND	8	ND	ND	60
CC-87 L1N 4+50E	.1	2.61	13	ND	54	ND	.50	.6	20	22	1462	4.60	.06	.28	5061	ND	.11	5	.11	4	ND	ND	ND	ND	9	4	ND	74
CC-87 L1N 5+00E	.1	2.67	8	ND	49	ND	1.70	.4	23	40	166	6.29	.08	1.29	1426	ND	.17	29	.06	ND	ND	ND	ND	ND	24	ND	ND	78
CC-87 L1N 0+50W	.1	3.45	ND	ND	50	ND	.25	.1	11	33	54	5.80	.02	.76	566	ND	.16	4	.08	5	ND	ND	ND	ND	11	ND	4	70
CC-87 L1N 1+00W	.1	2.99	ND	ND	39	ND	.19	.1	8	31	42	5.73	.04	.50	365	ND	.14	2	.07	1	ND	ND	ND	ND	11	4	ND	60
CC-87 L1N 1+50W	.1	3.34	ND	ND	51	ND	.36	.2	22	44	95	6.19	.05	1.37	1206	ND	.17	20	.07	ND	ND	ND	ND	ND	13	ND	ND	92
CC-87 L1N 2+00W	.1	2.93	ND	ND	31	ND	.17	.1	10	29	41	5.39	.02	.56	504	ND	.14	5	.06	2	ND	ND	ND	ND	9	ND	ND	56
CC-87 L1N 2+50W	.1	5.67	16	ND	44	ND	.26	.2	19	63	113	6.26	.03	1.14	601	10	.17	20	.16	13	ND	ND	ND	ND	11	ND	18	97
CC-87 L1N 3+00W	.1	3.82	ND	ND	36	ND	.19	.4	14	42	88	6.25	.02	.81	457	ND	.17	9	.04	3	ND	ND	ND	ND	10	ND	7	69
CC-87 L1N 3+50W	.1	4.05	ND	ND	33	ND	.20	.2	10	42	55	6.98	.04	.45	300	2	.17	6	.08	5	ND	ND	ND	ND	8	ND	ND	73
CC-87 L1N 4+00W	.1	3.00	ND	ND	45	ND	.15	.1	9	33	43	5.45	.03	.39	317	ND	.13	5	.04	4	ND	ND	ND	ND	9	ND	ND	57
CC-87 L1N 4+50W	.1	4.73	ND	ND	39	ND	.22	.6	14	50	79	6.75	.02	.86	471	5	.17	12	.11	8	ND	ND	ND	ND	9	ND	13	74
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC-87 L1N 5+00N	.1	5.01	ND	ND	39	ND	.20	.3	14	63	81	7.18	.01	.79	407	7	.19	12	.15	12	ND	ND	ND	ND	9	ND	13	73
CC-87 L1S 0+00BL	.1	3.59	ND	ND	65	ND	.10	.4	13	27	49	6.53	.02	.51	598	5	.17	7	.08	8	ND	ND	ND	ND	6	ND	ND	107
CC-87 L1S 0+50E	1.1	3.00	20	ND	53	ND	.08	.1	10	15	48	4.89	.03	.46	522	1	.13	1	.08	7	ND	ND	ND	ND	4	ND	ND	78
CC-87 L1S 1+00E	.1	2.33	ND	ND	33	ND	.13	.3	5	23	28	4.58	.03	.30	239	ND	.11	ND	.06	7	ND	ND	ND	ND	7	3	ND	49
CC-87 L1S 1+50E	.1	3.39	ND	ND	47	ND	.20	.5	12	39	57	5.34	.01	.76	476	1	.15	5	.12	8	ND	ND	ND	ND	9	ND	ND	89
CC-87 L1S 2+00E	.1	2.86	ND	ND	58	ND	.86	.1	28	48	94	5.45	.05	1.73	1371	ND	.17	46	.08	6	ND	ND	ND	ND	31	ND	ND	92
CC-87 L1S 2+50E	.1	2.66	19	ND	76	ND	.76	.5	17	39	72	4.52	.05	.89	1427	ND	.13	20	.07	7	ND	ND	ND	ND	24	ND	ND	83
CC-87 L1S 3+00E	.1	2.97	13	ND	98	ND	1.03	.3	25	29	82	5.58	.08	1.20	1574	ND	.15	19	.08	1	ND	ND	ND	ND	44	ND	ND	72
CC-87 L1S 3+50E	.1	2.61	31	ND	63	ND	.20	.5	69	28	1317	5.25	.08	.56	3662	ND	.13	16	.12	7	ND	ND	ND	ND	9	ND	ND	86
CC-87 L1S 4+00E	.1	3.11	6	ND	26	ND	.44	.1	17	57	157	6.80	.04	.45	474	1	.17	15	.07	6	ND	ND	3	ND	9	ND	ND	81
CC-87 L1S 4+50E	.1	3.42	ND	ND	37	ND	.55	.3	19	55	91	6.43	.05	.86	666	3	.17	26	.08	6	ND	ND	ND	ND	14	ND	ND	99
CC-87 L1S 5+00E	.4	2.08	ND	ND	15	ND	.15	.1	11	104	39	5.34	.02	.51	357	ND	.13	15	.03	5	ND	ND	3	ND	7	ND	ND	37
CC-87 L1S 0+50W	.1	3.70	ND	ND	68	ND	.10	.1	13	27	54	6.71	.03	.51	625	4	.19	6	.08	6	ND	ND	ND	1	6	ND	6	115
CC-87 L1S 1+00W	.1	1.92	ND	ND	30	ND	.07	.3	6	10	24	4.30	.02	.20	505	ND	.11	ND	.06	7	ND	ND	6	ND	4	4	ND	62
CC-87 L1S 1+50W	.1	4.05	ND	ND	107	ND	.22	.1	18	34	83	5.41	.04	.70	611	2	.16	23	.07	34	ND	ND	ND	1	8	ND	ND	125
CC-87 L1S 2+00W	.1	3.15	ND	ND	53	ND	.22	.6	12	34	64	5.59	.03	.75	425	ND	.15	11	.08	7	ND	ND	ND	ND	9	ND	ND	78
CC-87 L1S 3+00W	.1	2.65	ND	ND	15	ND	.04	.3	9	18	23	5.40	.03	.56	277	ND	.13	ND	.05	3	ND	ND	ND	ND	2	ND	ND	39
CC-87 L1S 3+50W	.1	3.47	ND	ND	24	ND	.15	.2	10	39	34	7.84	.03	[illegible]	[illegible]	ND	.20	ND	.12	11	ND	ND	ND	ND	15	ND	4	59
CC-87 L1S 4+00W	.1	3.77	ND	ND	133	ND	.45	.6	18	35	65	4.45	.06	.80	3114	ND	.12	15	.10	6	ND	ND	ND	ND	15	ND	ND	110
CC-87 L2N 0+50E	.1	4.04	ND	ND	308	ND	1.03	.5	18	34	37	4.76	.07	.66	4904	1	.15	5	.10	7	ND	ND	ND	ND	33	ND	3	147
CC-87 L2N 1+00E	.1	2.77	ND	ND	112	ND	.78	.5	20	34	59	4.89	.06	1.13	3194	ND	.15	29	.08	10	ND	ND	ND	ND	25	ND	ND	113
CC-87 L2N 1+50E	.1	3.70	ND	ND	37	ND	.22	.2	9	47	54	5.54	.03	.56	560	1	.15	15	.15	10	ND	ND	ND	ND	10	ND	ND	72
CC-87 L2N 2+00E	.1	4.41	ND	ND	40	ND	.14	.3	16	36	55	6.04	.01	.88	1068	3	.17	12	.24	11	ND	ND	ND	ND	7	ND	4	85
CC-87 L2N 2+50E	.1	4.08	ND	ND	40	ND	.20	.5	12	39	74	5.75	.03	.76	629	6	.16	17	.17	8	ND	ND	ND	ND	8	ND	ND	88
CC-87 L2N 3+00E	.1	2.22	ND	ND	33	ND	.24	.1	6	15	21	4.00	.03	.39	394	ND	.10	1	.06	5	ND	ND	ND	ND	9	ND	ND	52
CC-87 L2N 3+50E	.1	2.67	ND	ND	35	ND	.10	.2	11	17	43	5.29	.01	.26	448	1	.14	4	.08	4	ND	ND	3	ND	4	ND	ND	83
CC-87 L2N 4+00E	.1	.81	12	ND	15	ND	.03	.1	2	3	8	2.58	.01	.03	110	ND	.05	ND	.02	5	ND	ND	9	ND	2	ND	ND	30
CC-87 L2N 4+50E	.1	2.74	ND	ND	52	ND	.01	.1	4	1	12	3.37	.01	.15	124	ND	.08	ND	.03	4	ND	ND	ND	ND	2	ND	ND	36
CC-87 L2N 5+00E	.1	3.37	ND	ND	30	ND	.19	.3	9	37	87	5.24	.01	.46	306	ND	.13	6	.07	4	ND	ND	ND	ND	7	ND	ND	55
CC-87 L2N 5+50E	.1	1.86	ND	ND	18	ND	.12	.4	7	18	32	4.95	.02	.28	306	ND	.12	ND	.05	5	ND	ND	4	ND	4	ND	ND	38
CC-87 L2N 6+00E	.1	1.85	ND	ND	20	ND	.03	.1	13	3	43	4.47	.02	.50	265	ND	.11	ND	.04	2	ND	ND	4	ND	2	3	ND	40
CC-87 L2N 6+50E	.1	2.08	ND	ND	14	ND	.08	.1	4	21	30	4.76	.01	.24	197	ND	.11	ND	.05	3	ND	ND	3	ND	4	ND	ND	32
CC-87 L2N 7+00E	.1	2.82	ND	ND	37	ND	.34	.1	11	40	54	5.07	.03	.76	558	ND	.13	12	.08	8	ND	ND	ND	ND	14	ND	ND	56
CC-87 L2N 7+50E	.1	2.97	ND	ND	44	ND	.07	.3	8	14	58	6.12	.03	.48	335	ND	.15	2	.06	4	ND	ND	ND	ND	5	ND	ND	69
CC-87 L2N 8+00E	.2	4.92	ND	ND	40	5	.26	.4	15	58	81	4.55	.01	.88	376	7	.12	27	.08	12	ND	ND	ND	ND	11	ND	12	52
CC-87 L2N 8+50E	.2	3.22	ND	ND	16	6	.20	.2	11	50	36	4.84	.01	.61	242	ND	.12	15	.07	7	ND	ND	ND	ND	12	ND	ND	42
CC-87 L2N 9+00E	.4	5.45	ND	ND	26	4	.27	.5	18	93	73	[illegible]	.01	1.01	384	8	.15	33	.06	10	ND	ND	ND	ND	11	ND	14	59
CC-87 L2N 9+50E	.2	3.22	67	ND	31	ND	.17	.4	15	44	199	6.53	.02	.64	313	1	.17	17	.04	5	ND	ND	25	ND	11	ND	ND	60
CC-87 L2N 10+00E	.3	3.00	66	ND	27	ND	.17	.1	15	42	198	6.41	.01	.65	317	1	.17	13	.03	6	ND	ND	27	ND	10	ND	ND	54
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

CLIENT: ASHWORTH JOB#: 870627 PROJECT: REPORT: DATE: 87/07/11

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	F %
CC-87L2N 0+00BLA	.1	4.07	ND	ND	86	ND	.50	.6	11	40	44	5.99	.03
CC-87L2N 0+00BLB	.1	4.19	ND	ND	129	ND	.73	.5	13	42	52	6.58	.04
CC-87L2N 0+50WA	.1	4.05	ND	ND	115	ND	.30	.5	14	38	36	5.42	.05
CC-87L2N 0+50WB	.1	4.02	ND	ND	109	ND	.29	.6	15	38	39	5.58	.05
CC-87L2N 1+00WA	.1	3.54	ND	ND	63	ND	.36	.4	22	39	72	6.25	.05
CC-87L2N 1+00WB	.1	3.83	ND	ND	76	ND	.52	.4	20	41	69	6.37	.07
CC-87L2N 1+50WA	.1	2.50	ND	ND	65	ND	.16	.3	7	39	13	5.57	.04
CC-87L2N 1+50WB	.1	3.66	ND	ND	89	ND	.46	.6	25	53	77	6.80	.07
CC-87L2N 2+00WA	2.1	3.70	ND	ND	96	ND	.30	.5	18	42	36	4.37	.06
CC-87L2N 2+00WB	.1	3.24	ND	ND	96	ND	.63	.2	12	26	33	3.11	.07
CC-87L2N 2+50WA	.1	3.84	ND	ND	55	ND	.20	.1	17	33	44	5.91	.02
CC-87L2N 2+50WB	.1	3.35	ND	ND	50	ND	.12	.1	21	23	15	5.99	.04
CC-87L2N 3+00WA	.1	4.89	ND	ND	46	ND	.24	.3	19	50	94	5.83	.04
CC-87L2N 3+00WB	.1	2.66	ND	ND	30	ND	.11	.2	7	26	14	5.00	.03
CC-87L2N 3+50WA	.1	.68	12	ND	106	ND	1.77	.3	4	6	12	.60	.04
CC-87L2N 3+50WB	.1	2.66	ND	ND	51	ND	.27	.8	10	15	23	7.90	.02
CC-87L2N 4+00WA	.1	3.84	ND	ND	153	ND	[illegible]	.4	17	38	50	3.00	.11
CC-87L2N 4+00WB	.1	4.10	ND	ND	85	ND	.43	.4	22	42	65	6.15	.04
CC-87L2N 4+50WA	.1	3.69	ND	ND	39	ND	.24	.3	13	41	45	5.80	.02
CC-87L2N 4+50WB	.4	3.87	ND	ND	144	ND	.17	.3	23	42	16	7.30	.04
CC-87L2N 5+00WA	.1	3.72	ND	ND	38	ND	.27	.6	17	45	58	6.55	.03
CC-87L2N 5+00WB	.1	3.97	ND	ND	41	ND	.24	.1	13	48	60	6.75	.03
CC-87L2N 5+50WA	.8	4.99	ND	ND	40	ND	.12	.2	14	37	98	7.26	.01
CC-87L2N 5+50WB	.6	2.58	ND	ND	24	3	.20	.4	14	20	21	8.14	.03
CC-87L2N 6+00WA	.1	3.79	ND	ND	53	ND	.17	.5	12	9	35	5.33	.02
CC-87L2N 6+00WB	.1	2.50	ND	ND	33	ND	.14	.3	13	40	18	6.75	.04
CC-87L2N 6+50WA	.1	2.63	ND	ND	30	ND	.05	.1	7	10	24	6.37	.05
CC-87L2N 6+50WB	.1	4.12	ND	ND	55	ND	.16	.1	14	22	81	6.65	.04
CC-87L2N 7+00WA	.1	4.75	ND	ND	60	ND	.17	.3	18	35	84	6.61	.04
CC-87L2N 7+00WB	.1	3.37	ND	ND	54	ND	.17	.1	14	36	47	6.63	.04
CC-87L2N 7+50WA	.1	2.54	ND	ND	54	ND	.04	.2	14	7	21	6.84	.03
CC-87L2N 7+50WB	.1	3.33	ND	ND	405	ND	.50	.2	15	27	38	5.87	.06
CC-87L2N 8+00WA	.1	3.52	ND	ND	50	ND	.14	.2	12	31	35	6.83	.02
CC-87L2N 8+00WB	.1	2.41	ND	ND	64	ND	.16	.4	11	31	25	6.85	.03
CC-87L2N 8+50WA	.1	3.94	ND	ND	57	ND	.17	.3	14	33	61	7.24	.04
CC-87L2N 8+50WB	.1	3.11	ND	ND	32	ND	.06	.2	9	23	24	7.19	.04
CC-87L2N 9+00WA	.2	5.16	ND	ND	35	ND	.20	.5	13	66	68	7.38	.02
CC-87L2N 9+00WB	.1	3.75	ND	ND	56	ND	.17	.5	16	38	57	6.88	.03
CC-87L2N 9+50WA	.3	3.13	ND	ND	23	ND	.14	.4	7	50	39	7.00	.03
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01

SAMPLE NAME	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC-87L2N 0+00BLA	.66	953	2	.16	15	.06	10	ND	ND	ND	ND	16	ND	ND	86
CC-87L2N 0+00BLB	.86	1167	2	.19	15	.07	10	ND	ND	ND	ND	22	ND	5	119
CC-87L2N 0+50WA	.78	1382	2	.14	11	.07	11	ND	ND	ND	ND	12	ND	3	92
CC-87L2N 0+50WB	.85	1861	2	.15	16	.08	15	ND	ND	ND	ND	11	ND	ND	98
CC-87L2N 1+00WA	1.48	2054	2	.17	20	.11	9	ND	ND	ND	ND	13	ND	5	95
CC-87L2N 1+00WB	1.50	1759	2	.19	19	.12	11	ND	ND	ND	ND	16	ND	ND	108
CC-87L2N 1+50WA	.48	416	1	.13	7	.05	5	ND	ND	3	ND	6	4	ND	44
CC-87L2N 1+50WB	1.37	2306	2	.20	20	.11	15	ND	ND	ND	ND	16	ND	5	115
CC-87L2N 2+00WA	.55	4057	1	.12	18	.08	14	ND	ND	ND	ND	11	6	ND	111
CC-87L2N 2+00WB	.44	5337	1	.10	12	.08	10	ND	ND	ND	ND	16	4	ND	119
CC-87L2N 2+50WA	.86	2124	2	.17	9	.11	10	ND	ND	ND	ND	8	ND	ND	89
CC-87L2N 2+50WB	.78	2028	1	.16	7	.11	10	ND	ND	ND	ND	7	ND	ND	70
CC-87L2N 3+00WA	1.06	727	4	.17	19	.08	17	ND	ND	ND	ND	10	ND	13	84
CC-87L2N 3+00WB	.41	323	ND	.12	3	.06	9	ND	ND	ND	ND	7	3	ND	57
CC-87L2N 3+50WA	.15	631	ND	.02	1	.11	9	ND	ND	7	ND	40	ND	ND	39
CC-87L2N 3+50WB	.65	520	1	.20	4	.02	55	ND	ND	ND	ND	11	ND	ND	70
CC-87L2N 4+00WA	.48	7951	3	.07	12	.11	17	ND	ND	ND	ND	18	5	ND	75
CC-87L2N 4+00WB	1.29	2129	3	.17	16	.10	12	ND	ND	ND	ND	15	ND	3	106
CC-87L2N 4+50WA	.77	537	2	.16	10	.06	11	ND	ND	ND	ND	12	ND	ND	75
CC-87L2N 4+50WB	2.17	1848	2	.22	14	.13	13	ND	ND	ND	ND	9	ND	13	96
CC-87L2N 5+00WA	.91	975	3	.17	36	.13	15	ND	ND	ND	ND	13	ND	5	65
CC-87L2N 5+00WB	.81	796	3	.17	23	.11	12	ND	ND	ND	ND	12	ND	7	67
CC-87L2N 5+50WA	1.13	499	4	.20	17	.08	13	ND	ND	ND	1	7	ND	ND	72
CC-87L2N 5+50WB	.60	538	1	.19	4	.06	11	ND	ND	3	ND	38	ND	ND	63
CC-87L2N 6+00WA	.72	843	2	.15	5	.08	11	ND	ND	ND	ND	7	ND	ND	77
CC-87L2N 6+00WB	.75	547	1	.17	7	.03	9	ND	ND	3	ND	10	ND	ND	52
CC-87L2N 6+50WA	.36	387	1	.15	1	.08	10	ND	ND	ND	ND	4	ND	ND	56
CC-87L2N 6+50WB	.88	911	3	.17	7	.14	14	ND	ND	ND	1	8	ND	3	98
CC-87L2N 7+00WA	.93	527	4	.19	15	.17	14	ND	ND	ND	ND	9	ND	5	100
CC-87L2N 7+00WB	.64	792	2	.17	7	.11	13	ND	ND	3	ND	9	ND	ND	84
CC-87L2N 7+50WA	.89	625	1	.17	4	.04	5	ND	ND	3	ND	6	ND	ND	67
CC-87L2N 7+50WB	.50	626	1	.15	6	.06	6	ND	ND	ND	ND	18	ND	ND	106
CC-87L2N 8+00WA	.66	442	2	.17	5	.13	7	ND	ND	ND	ND	8	ND	ND	72
CC-87L2N 8+00WB	.72	475	1	.17	5	.05	6	ND	ND	3	ND	11	ND	ND	61
CC-87L2N 8+50WA	.93	451	3	.20	5	.08	10	ND	ND	ND	ND	9	ND	4	79
CC-87L2N 8+50WB	.70	267	2	.17	[illegible]	.02	7	ND	ND	ND	ND	5	ND	ND	51
CC-87L2N 9+00WA	.71	303	5	.19	16	.20	20	ND	ND	ND	ND	8	ND	15	75
CC-87L2N 9+00WB	1.08	686	2	.19	13	.11	7	ND	ND	ND	ND	9	ND	7	75
CC-87L2N 9+50WA	.39	184	2	.17	5	.11	7	ND	ND	ND	ND	6	ND	ND	49
DETECTION LIMIT	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L2N 9+50WB	.1	2.47	ND	ND	15	ND	.06	.4	7	18	28	6.10	.01	.60	257	ND	.16	5	.06	ND	ND	ND	ND	ND	3	ND	ND	54
CC87L2N 10+00WA	.1	3.08	ND	ND	17	ND	.07	.5	8	21	26	7.04	.03	.68	287	1	.17	8	.07	5	ND	ND	ND	ND	4	ND	ND	60
CC87L2N 10+00WB	.1	2.87	ND	ND	97	ND	.34	.8	10	11	25	4.30	.06	.80	1535	1	.12	7	.08	8	ND	ND	ND	ND	10	5	ND	81
CC87L2N 10+50WA	.1	3.54	ND	ND	34	ND	.12	.6	4	16	18	5.52	.04	.34	298	2	.14	5	.12	9	ND	ND	ND	1	5	ND	ND	66
CC87L2N 10+50WB	.1	4.00	ND	ND	151	ND	.39	.6	16	23	45	5.17	.07	.91	3531	3	.15	11	.11	14	ND	ND	ND	4	14	3	ND	118
CC87L2N 11+00WA	.1	3.13	ND	ND	55	ND	.20	1.1	5	17	22	4.55	.03	.40	299	1	.12	2	.08	7	ND	ND	ND	ND	8	ND	ND	69
CC87L2N 11+00WB	.3	6.26	ND	ND	55	ND	.22	.6	24	48	119	6.44	.04	.91	700	5	.20	27	.12	18	ND	ND	ND	ND	9	ND	14	143
CC87L2N 11+50WA	.1	4.16	ND	ND	53	ND	.12	.6	11	71	48	5.64	.03	.64	636	2	.16	9	.08	12	ND	ND	ND	1	6	ND	ND	91
CC87L2N 11+00WB	.1	4.16	ND	ND	39	ND	.11	.8	7	22	34	4.69	.01	.54	438	3	.14	9	.08	13	ND	ND	ND	2	5	ND	ND	111
CC87L2N 12+00WA	.1	3.50	ND	ND	47	ND	.17	.3	12	22	37	4.85	.03	.56	1129	1	.13	8	.11	6	ND	ND	ND	ND	7	ND	ND	78
CC87L2N 12+00WB	.1	3.37	ND	ND	25	ND	.08	.4	8	21	33	6.30	.03	.46	598	1	.16	4	.08	4	ND	ND	ND	ND	5	ND	ND	63
CC87L2N 12+50WA	.1	4.49	ND	ND	53	ND	.14	.8	14	19	52	5.79	.06	.88	1069	3	.16	10	.17	9	ND	ND	ND	2	5	3	3	89
CC87L2N 12+50WB	.1	5.35	ND	ND	35	ND	.12	.6	11	20	47	6.35	.04	.59	600	4	.16	7	.12	14	ND	ND	ND	ND	5	4	3	73
CC87L2N 13+00WA	.1	3.16	ND	ND	23	ND	.05	.5	5	6	12	4.08	.01	.32	334	ND	.10	ND	.06	4	ND	ND	ND	ND	4	ND	ND	35
CC87L2N 13+00WB	.1	5.49	ND	ND	60	ND	.10	.6	9	13	34	4.57	.01	.32	1123	4	.13	3	.29	11	ND	ND	ND	ND	8	ND	ND	82
CC87L2N 13+50WA	.1	6.84	ND	ND	36	ND	.15	.6	17	24	60	7.56	.02	1.22	982	7	.22	9	.25	18	ND	ND	ND	ND	6	ND	23	90
CC87L2N 13+50WB	.1	3.22	ND	ND	33	ND	.16	.4	9	16	28	5.45	.01	.64	808	1	.15	6	.10	6	ND	ND	ND	ND	8	ND	ND	59
CC87L2N 14+00WA	.1	4.49	ND	ND	35	ND	.14	.6	10	22	36	7.75	.01	.61	509	3	.20	5	.29	8	ND	ND	ND	ND	7	ND	3	74
CC87L2N 14+00WB	.6	1.98	ND	ND	15	ND	.08	.5	7	11	15	5.67	.01	.25	189	ND	.13	1	.07	7	ND	ND	4	ND	4	ND	ND	34
CC87L2N 14+50WA	.1	4.32	ND	ND	29	ND	.15	.4	7	28	49	6.55	.02	.41	319	3	.17	5	.11	8	ND	ND	ND	ND	7	ND	ND	59
CC87L2N 14+50WB	.1	3.65	ND	ND	50	ND	.12	.4	9	5	25	5.65	.01	.68	419	2	.15	21	.07	4	ND	ND	ND	ND	6	ND	ND	71
CC87L2N 15+00WA	.1	3.60	ND	ND	40	ND	.13	.6	9	15	34	5.10	.01	.68	901	2	.15	12	.10	4	ND	ND	ND	ND	6	ND	ND	74
CC87L2N 15+00WB	.1	4.69	ND	ND	38	ND	.05	.6	10	8	34	6.88	.01	1.12	745	3	.20	5	.12	ND	ND	ND	ND	1	3	ND	ND	88
CC87L2N 15+50WA	.1	3.16	ND	ND	22	ND	.05	.5	7	16	36	5.33	.01	.56	364	1	.15	6	.08	ND	ND	ND	ND	ND	4	ND	ND	58
CC87L2N 15+50WB	.1	4.82	ND	ND	60	ND	.17	.6	15	57	72	6.40	.01	.93	661	4	.19	25	.08	10	ND	ND	ND	ND	7	ND	5	106
CC87L2N 16+00WA	.1	1.97	ND	ND	24	ND	.06	.4	3	5	10	3.59	.01	.22	225	ND	.08	ND	.07	1	ND	ND	3	ND	3	4	ND	48
CC87L2N 16+50WA	.1	5.30	ND	ND	36	ND	.12	.6	13	30	83	5.76	.01	.01	344	5	.17	15	.20	7	ND	ND	ND	ND	5	ND	9	111
CC87L2N 16+50WB	.2	5.05	ND	ND	46	ND	.13	.6	13	19	115	7.75	.02	.63	521	4	.20	5	.19	12	ND	ND	ND	ND	7	ND	7	97
CC87L2N 16+50WC	.1	6.07	ND	ND	40	ND	.13	.1	17	50	94	6.90	.01	1.27	438	5	.20	23	.19	10	ND	ND	ND	ND	5	ND	16	114
CC87L2N 17+00WA	.2	5.16	ND	ND	54	ND	.22	.4	24	61	98	5.66	.01	1.46	528	4	.17	38	.10	9	ND	ND	ND	ND	8	ND	10	105
CC87L2N 17+00WB	.1	2.59	ND	ND	23	ND	.12	.5	8	41	36	6.91	.01	.55	269	1	.17	8	.11	6	ND	ND	ND	ND	5	ND	ND	54
CC87L2N 17+50WA	.1	3.70	ND	ND	103	ND	.17	.8	24	54	44	5.16	.01	.81	2698	2	.14	11	.08	4	ND	ND	ND	ND	8	ND	ND	79
CC87L2N 17+50WB	.6	3.52	ND	ND	45	5	.26	.6	21	39	55	6.30	.01	1.11	1261	1	.17	14	.11	8	3	ND	ND	ND	15	ND	ND	90
CC87L2N 18+00W	.6	3.70	ND	ND	41	4	.16	.3	19	68	56	6.88	.01	1.18	595	1	.17	18	.08	3	ND	ND	ND	ND	8	ND	ND	74
CC87L2N 18+50W	.2	5.25	ND	ND	61	ND	.19	.6	25	50	86	7.40	.01	1.18	885	4	.20	13	.17	10	ND	ND	ND	ND	12	ND	12	94
CC87L2N 19+00W	.1	2.67	ND	ND	68	ND	.11	.2	9	27	27	4.80	.01	.51	560	ND	.13	6	.04	1	ND	ND	ND	ND	9	ND	ND	59
CC87L2N 19+50W	.1	4.27	ND	ND	35	ND	.10	.5	12	45	66	6.08	.01	.63	557	2	.17	8	.15	6	ND	ND	ND	ND	6	ND	6	102
CC87L2N 20+00W	.1	2.83	ND	ND	24	ND	.06	.6	5	49	19	5.15	.01	.50	216	3	.14	8	.22	5	ND	ND	ND	ND	4	ND	ND	75
CC87L2N 0+00BL	.1	2.37	ND	ND	39	ND	.20	.4	12	25	20	5.01	.01	.88	556	1	.15	10	.08	3	ND	ND	3	ND	11	ND	ND	78
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L2S 0+50E	.1	2.62	6	ND	20	ND	.08	.4	13	10	12	3.95	.01	.60	645	3	.10	11	.07	3	ND	ND	ND	3	3	ND	ND	50
CC87L2S 1+00E	.1	3.37	ND	ND	141	ND	.43	1.1	13	26	47	4.90	.02	.93	2561	3	.16	13	.08	10	ND	ND	ND	2	15	ND	1	163
CC87L2S 1+50E	.1	2.52	6	ND	149	ND	1.63	1.8	15	27	64	3.75	.06	.83	3828	3	.12	24	.12	13	ND	ND	49	2	46	ND	ND	128
CC87L2S 2+00E	.1	1.61	10	ND	127	ND	2.34	1.1	6	15	37	1.93	.03	.35	2311	2	.06	10	.14	5	ND	ND	ND	ND.	65	ND	ND	119
CC87L2S 2+50E	.8	5.57	3	ND	23	ND	4.05	2.5	11	204	81	3.44	.02	.46	399	8	.34	57	.08	12	ND	ND	ND	2	17	ND	16	888
CC87L2S 3+00E	.2	3.35	17	ND	20	ND	3.62	.6	17	66	76	5.22	.06	.40	676	7	.13	79	.12	4	ND	ND	ND	ND	51	ND	ND	114
CC87L2S 3+50E	.1	2.95	ND	ND	8	ND	3.20	.3	16	101	102	9.05	.03	.93	775	2	.22	67	.07	ND	ND	ND	ND	1	34	ND	5	42
CC87L2S 4+00E	.1	4.00	6	ND	38	ND	.93	.6	18	56	119	6.39	.01	.78	542	3	.17	30	.05	3	ND	ND	ND	2	11	ND	ND	86
CC87L2S 4+50E	.2	2.17	ND	ND	21	8	1.02	.5	21	69	21	5.51	.01	1.25	1201	ND	.12	38	.05	3	ND	ND	ND	ND	20	ND	ND	42
CC87L2S 5+00E	.1	4.49	ND	ND	33	ND	.56	.6	14	67	99	6.26	.01	.71	507	4	.17	27	.07	5	ND	ND	ND	2	10	ND	1	95
CC87L2S 5+50E	.3	5.23	ND	ND	44	ND	.41	.6	21	97	98	7.85	.01	.98	468	5	.20	34	.08	6	ND	ND	ND	1	15	ND	7	84
CC87L2S 6+00E	.1	3.04	ND	ND	27	ND	.28	.6	11	54	53	5.59	.01	.44	472	2	.13	12	.05	6	ND	ND	ND	ND	12	ND	3	56
CC87L2S 6+50E	.1	3.20	ND	ND	26	ND	.24	.4	9	43	43	5.98	.01	.34	305	1	.14	8	.07	5	ND	ND	ND	1	10	ND	ND	55
CC87L2S 7+00E	1.5	4.91	ND	ND	21	8	.32	.5	19	65	162	6.64	.01	.81	449	4	.16	18	.13	9	ND	ND	ND	ND	15	ND	2	61
CC87L2S 7+50E	.5	3.67	60	ND	27	ND	.32	.6	16	34	164	4.97	.01	.53	448	3	.12	13	.13	6	ND	ND	ND	ND	14	ND	3	60
CC87L2S 8+00E	1.7	3.59	ND	ND	42	8	1.52	.6	44	41	187	8.44	.04	2.16	1299	2	.22	37	.08	1	ND	ND	ND	ND	34	ND	1	94
CC87L2S 8+50E	1.1	2.77	ND	ND	21	6	.44	.8	16	32	69	6.16	.01	.56	392	1	.14	10	.08	3	ND	ND	ND	ND	23	ND	ND	47
CC87L2S 9+00E	.1	1.95	3	ND	31	ND	.30	.6	12	17	23	4.25	.01	.40	1171	1	.11	10	.07	15	ND	ND	ND	ND	16	ND	ND	70
CC87L2S 9+50E	.4	4.29	ND	ND	37	6	.35	.6	16	49	114	5.92	.01	.54	820	3	.15	10	.08	5	ND	ND	ND	ND	16	ND	10	78
CC87L2S 10+00E	.6	4.15	ND	ND	28	4	.25	.6	35	49	201	5.55	.01	.27	540	6	.16	18	.05	7	ND	ND	ND	ND	11	ND	ND	163
CC87L2S 10+50E	.1	1.52	4	ND	81	ND	.48	.6	18	14	36	5.48	.11	.44	1351	3	.11	27	.06	ND	ND	ND	ND	1	12	4	ND	75
CC87L2S 0+50W	.1	3.22	ND	ND	113	ND	.24	.1	23	9	68	5.30	.03	1.54	8155	1	.19	13	.12	ND	ND	ND	ND	4	13	ND	7	115
CC87L2S 1+00W	.1	1.31	4	ND	25	ND	.06	.1	3	ND	15	2.59	.01	.10	461	ND	.06	3	.03	ND	ND	ND	ND	ND	3	3	ND	40
CC87L2S 1+50W	.1	2.31	ND	ND	40	ND	.15	.6	14	23	37	6.08	.01	.52	1696	1	.17	10	.08	4	ND	ND	ND	2	7	ND	3	115
CC87L2S 2+00W	.1	1.70	ND	ND	38	ND	.19	.5	5	15	13	3.12	.01	.28	292	ND	.08	3	.04	ND	ND	ND	ND	ND	9	ND	ND	49
CC87L2S 2+50W	.1	2.74	ND	ND	46	ND	.16	.3	9	26	22	5.98	.01	.45	455	1	.15	5	.06	1	ND	ND	ND	3	8	ND	ND	68
CC87L2S 3+00W	.1	3.16	ND	ND	35	ND	.12	.3	13	22	58	5.83	.01	.83	753	1	.16	7	.10	1	ND	ND	ND	3	6	ND	ND	80
CC87L2S 3+50W	.1	.81	12	ND	37	ND	.19	.4	4	5	9	1.87	.01	.19	305	ND	.05	ND	.07	4	ND	ND	3	ND	10	ND	ND	51
CC87L2S 4+00W	.1	3.33	ND	ND	278	ND	1.70	.8	15	5	32	1.43	.07	.16	14866	1	.03	12	.17	1	ND	ND	ND	3	55	ND	ND	119
CC87L2S 4+50W	.1	1.73	ND	ND	31	ND	.15	.6	7	20	12	5.05	.01	.41	660	ND	.12	2	.05	ND	ND	ND	ND	1	9	ND	ND	42
CC87L2S 5+00W	.1	4.62	ND	ND	48	ND	.19	.6	14	36	53	6.80	.01	.93	844	3	.19	13	.12	5	ND	ND	ND	3	10	ND	3	97
CC87L2S 5+50W	.1	1.54	ND	ND	25	ND	.14	.4	7	14	16	4.84	.01	.36	422	ND	.12	ND	.05	ND	ND	ND	ND	ND	8	ND	ND	43
CC87L2S 6+00W	.1	4.30	ND	ND	46	ND	.12	.5	13	34	61	6.65	.01	.96	658	3	.17	6	.11	3	ND	ND	ND	3	9	ND	9	86
CC87L2S 6+50W	.1	4.72	ND	ND	91	ND	.27	.6	20	49	179	6.23	.01	1.10	2694	4	.17	22	.19	9	ND	ND	ND	4	11	ND	6	104
CC87L2S 7+00W	.1	3.12	ND	ND	73	ND	.12	.4	14	9	25	8.78	.02	.60	619	2	.20	3	.04	6	ND	ND	ND	1	10	ND	ND	78
CC87L2S 7+50W	.1	2.42	ND	ND	28	ND	.10	.3	7	17	20	6.05	.01	.46	432	1	.14	3	.05	ND	ND	ND	ND	2	7	ND	ND	51
CC87L2S 8+00W	.3	4.08	ND	ND	61	5	.38	.5	21	20	66	6.60	.01	1.10	866	3	.17	7	.14	4	ND	ND	ND	1	21	ND	9	89
CC87L2S 8+50W	.1	.25	19	ND	62	ND	.53	.2	ND	ND	6	.38	.01	.08	147	ND	.03	ND	.07	6	ND	ND	4	ND	20	ND	ND	75
CC87L2S 9+00W	.2	4.16	ND	ND	58	ND	.29	.4	18	24	63	6.78	.01	.94	654	3	.17	7	.12	4	ND	ND	ND	ND	15	ND	9	81
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L2S 9+50W	.2	4.05	ND	ND	71	ND	.34	.5	19	44	74	6.26	.02	1.14	1010	4	.19	26	.11	32	ND	ND	ND	ND	11	ND	ND	97
CC87L2S 10+00W	.1	.28	20	ND	28	ND	.27	.1	ND	1	17	.32	.01	.13	369	ND	.05	2	.04	7	ND	ND	ND	ND	19	ND	ND	125
CC87L2S 10+50W	.1	4.48	ND	ND	52	ND	.25	.5	13	33	51	7.76	.03	.86	939	3	.20	11	.14	20	ND	ND	ND	1	10	ND	ND	83
CC87L2S 11+00W	.1	4.35	ND	ND	50	ND	.14	.2	10	23	38	6.05	.01	.68	469	4	.17	9	.11	12	ND	ND	ND	1	7	ND	ND	87
CC87L2S 11+50W	.1	5.00	ND	ND	65	ND	.19	.2	14	37	54	5.83	.03	.86	984	5	.17	16	.17	16	ND	ND	ND	1	8	ND	ND	100
CC87L2S 12+00W	.1	3.85	ND	ND	34	ND	.08	.3	6	6	11	4.01	.01	.64	297	3	.12	1	.06	5	ND	ND	ND	1	6	ND	ND	68
CC87L2S 12+50W	.1	2.75	ND	ND	41	ND	.28	.2	8	8	45	4.19	.01	.48	945	1	.12	1	.10	6	ND	ND	ND	ND	9	ND	ND	66
CC87L2S 13+00W	.1	3.17	ND	ND	60	ND	.45	.4	18	22	55	5.40	.04	1.60	1032	2	.16	10	.07	5	ND	ND	ND	ND	17	ND	ND	81
CC87L3N 0+00BL	.1	3.40	ND	ND	40	ND	.07	.5	6	22	19	6.04	.02	.54	318	2	.16	2	.05	5	ND	ND	ND	1	5	ND	ND	53
CC87L3N 0+50E	.1	2.79	ND	ND	59	ND	.19	.2	9	21	22	4.87	.04	.48	442	1	.14	4	.04	6	ND	ND	ND	ND	10	ND	ND	101
CC87L3N 1+00E	.1	3.79	ND	ND	201	ND	.88	.6	16	22	22	5.10	.06	.69	1996	2	.16	6	.08	8	ND	ND	ND	1	24	ND	ND	138
CC87L3N 1+50E	.1	5.77	ND	ND	78	ND	.10	.4	10	26	50	6.81	.03	.88	446	6	.19	6	.07	12	ND	ND	ND	2	13	ND	8	87
CC87L3N 2+00E	.1	1.98	ND	ND	34	ND	.08	.2	5	19	13	4.45	.02	.20	170	1	.10	1	.02	4	ND	ND	ND	ND	7	ND	ND	33
CC87L3N 2+50E	.1	3.75	ND	ND	79	ND	.38	.5	21	16	43	5.80	.05	2.11	2902	3	.20	7	.07	7	ND	ND	ND	1	13	ND	4	121
CC87L3N 3+00E	.1	5.58	ND	ND	68	ND	.04	.3	8	28	63	6.83	.04	.81	608	7	.17	1	.16	11	ND	ND	ND	2	3	ND	10	75
CC87L3N 3+50E	.1	1.87	ND	ND	15	ND	.17	.4	5	18	12	4.79	.03	.17	203	1	.11	ND	.05	5	ND	ND	ND	ND	7	ND	ND	28
CC87L3N 4+00E	.1	4.14	ND	ND	41	ND	.28	.5	8	28	34	4.37	.01	.60	505	4	.12	9	.14	10	ND	ND	ND	1	16	ND	ND	58
CC87L3N 4+50E	.1	4.24	ND	ND	43	ND	.59	.4	27	75	131	6.89	.03	2.52	1110	6	.22	73	.08	1	ND	ND	ND	ND	26	ND	7	66
CC87L3N 5+00W	.1	3.80	ND	ND	30	ND	1.01	.2	13	35	117	9.92	.08	.40	794	4	.25	9	.12	4	ND	ND	ND	1	6	ND	ND	88
CC87L3N 0+50W	.1	3.65	ND	ND	41	ND	.19	.3	12	36	45	5.69	.03	.88	622	3	.16	9	.08	6	ND	ND	ND	1	8	ND	ND	72
CC87L3N 1+00W	.2	1.37	ND	ND	33	ND	.44	.4	4	23	9	4.69	.06	.12	131	1	.11	14	.02	6	ND	ND	ND	ND	10	ND	ND	26
CC87L3N 1+50W	.1	5.04	ND	ND	54	ND	.17	.3	16	40	57	5.17	.04	.75	690	5	.15	22	.16	11	ND	ND	ND	1	8	ND	7	88
CC87L3N 2+00W	.2	3.25	ND	ND	33	ND	.19	.3	11	40	38	5.60	.03	.55	360	2	.14	10	.06	5	ND	ND	ND	ND	10	ND	ND	59
CC87L3N 2+50W	.1	3.02	ND	ND	48	ND	.20	.3	10	27	27	5.34	.03	.68	752	2	.15	7	.05	5	ND	ND	ND	1	10	ND	ND	63
CC87L3N 3+00W	.1	3.62	ND	ND	87	ND	.46	.5	22	37	77	6.23	.06	1.45	2213	3	.19	16	.12	8	ND	ND	ND	1	18	ND	ND	100
CC87L3N 3+50W	.1	2.95	ND	ND	71	ND	.16	.2	16	35	28	6.93	.03	1.12	997	2	.20	11	.05	7	ND	ND	ND	1	12	ND	ND	87
CC87L3N 4+00W	.1	3.08	ND	ND	26	ND	.19	.2	10	26	24	6.59	.03	.63	473	2	.17	4	.07	7	ND	ND	ND	ND	22	ND	ND	52
CC87L3N 4+50W	.1	1.12	ND	ND	160	ND	1.31	.1	2	3	11	.61	.04	.11	113	ND	.02	4	.17	ND	ND	ND	ND	ND	31	ND	ND	54
CC87L3N 5+00W	.1	3.45	ND	ND	39	ND	.17	.3	11	21	79	4.92	.02	.53	580	2	.13	8	.16	7	ND	ND	ND	ND	11	ND	ND	62
CC87L3S 0+50E	.1	2.45	ND	ND	139	ND	.63	.4	14	14	27	4.26	.06	.53	1082	1	.13	3	.08	7	ND	ND	ND	ND	17	ND	ND	129
CC87L3S 1+00E	.1	2.50	ND	ND	28	ND	.15	.4	6	23	26	4.90	.04	.30	319	3	.12	3	.07	8	ND	ND	ND	ND	6	ND	ND	49
CC87L3S 1+50E	.2	2.59	ND	ND	55	ND	1.08	.6	5	34	42	4.33	.05	.70	775	3	.12	3	.08	3	ND	ND	ND	1	19	ND	ND	60
CC87L3S 2+00E	.1	2.37	28	ND	20	ND	.05	.5	6	50	32	3.79	.02	.45	198	6	.11	14	.06	7	ND	ND	3	ND	2	ND	ND	73
CC87L3S 2+50E	.4	2.62	17	ND	30	ND	.44	.6	12	32	22	3.54	.01	1.97	1597	2	.15	12	.07	6	ND	ND	ND	ND	18	ND	ND	126
CC87L3S 3+00E	.1	4.67	5	ND	26	ND	.32	.3	18	72	136	5.75	.03	.83	388	5	.16	33	.13	12	ND	ND	ND	ND	9	ND	3	64
CC87L3S 3+50E	.1	3.33	ND	ND	26	ND	.30	.1	9	48	57	5.33	.03	[illegible]	339	3	.13	10	.06	3	ND	ND	ND	ND	11	ND	ND	42
CC87L3S 4+00E	.1	2.87	ND	ND	36	ND	.52	.5	18	69	73	4.52	.03	1.12	589	2	.14	47	.06	5	ND	ND	ND	ND	15	ND	ND	68
CC87L3S 4+50E	.1	3.29	ND	ND	33	ND	.50	.3	18	55	99	5.25	.04	.78	674	3	.15	33	.04	3	ND	ND	ND	ND	12	ND	ND	64
CC87L3S 5+00E	.3	4.79	ND	ND	51	ND	.34	.3	28	70	152	5.80	.04	.77	548	8	.17	53	.06	9	ND	ND	ND	ND	11	ND	6	114
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L3S 0+00W	.1	3.47	ND	ND	125	ND	.56	.6	12	21	34	4.14	.09	.51	1084	3	.12	16	.08	7	ND	ND	ND	ND	14	ND	ND	110
CC87L3S 0+50W	.1	1.82	ND	ND	50	ND	.14	.4	4	4	23	2.24	.06	.22	395	ND	.05	5	.06	7	ND	ND	ND	ND	5	ND	ND	44
CC87L3S 1+00W	.1	3.40	5	ND	48	ND	.13	.5	9	11	25	3.84	.07	.51	822	3	.10	7	.07	3	ND	ND	ND	ND	5	ND	ND	64
CC87L3S 1+50W	.1	3.99	4	ND	47	ND	.13	.5	10	21	33	4.49	.09	.52	827	4	.12	7	.09	7	ND	ND	ND	ND	6	ND	ND	70
CC87L3S 2+00W	.1	4.01	5	ND	59	ND	.32	.3	15	26	54	5.52	.10	.81	1966	4	.16	12	.14	7	ND	ND	ND	2	10	ND	ND	103
CC87L3S 2+50W	.1	2.40	ND	ND	48	ND	.17	.3	8	18	28	4.39	.10	.35	429	ND	.11	5	.05	7	ND	ND	ND	ND	11	ND	ND	53
CC87L3S 3+00W	.1	3.40	9	ND	51	ND	.12	.4	13	23	51	6.02	.10	.51	800	2	.17	9	.08	7	ND	ND	ND	ND	6	ND	ND	91
CC87L3S 3+50W	.1	3.52	ND	ND	52	ND	.13	.4	15	36	26	6.15	.10	.91	698	3	.17	11	.04	7	ND	ND	ND	ND	8	ND	ND	75
CC87L3S 4+00W	1.9	3.87	8	ND	38	ND	.17	.6	13	29	40	5.02	.08	.86	940	3	.15	10	.11	8	ND	ND	ND	1	8	ND	ND	87
CC87L4N 0+00BL	.1	4.70	12	ND	59	ND	.08	.6	10	23	30	4.95	.07	.89	455	5	.15	8	.07	6	ND	ND	3	1	6	ND	8	89
CC87L4N 0+50E	.1	5.05	17	ND	35	ND	.15	.6	15	38	55	5.91	.10	.68	610	7	.17	14	.23	10	ND	ND	8	5	8	ND	3	97
CC87L4N 1+00E	.1	5.25	20	ND	101	ND	.30	.4	18	40	50	7.00	.11	.91	863	7	.21	11	.11	8	ND	ND	7	6	13	ND	11	130
CC87L4N 1+50E	.1	4.37	11	ND	106	ND	.34	.5	14	31	35	5.46	.13	.62	483	5	.16	13	.10	13	ND	ND	4	1	14	3	ND	128
CC87L4N 2+00E	.1	3.90	4	ND	48	ND	.10	.2	7	18	17	6.27	.12	.47	301	4	.16	3	.06	7	ND	ND	3	ND	5	3	ND	69
CC87L4N 2+50E	.1	5.62	25	ND	191	ND	.68	.2	19	44	55	5.96	.16	1.02	855	8	.18	22	.06	12	ND	ND	10	4	22	3	18	131
CC87L4N 3+00E	.1	3.02	ND	ND	162	ND	1.04	.6	9	26	41	4.37	.12	.49	1017	2	.11	9	.07	7	ND	ND	ND	ND	29	ND	ND	83
CC87L4N 3+50E	.1	5.33	30	ND	63	ND	.20	.8	13	52	60	5.99	.10	.61	593	9	.17	13	.10	15	ND	ND	10	4	9	ND	7	103
CC87L4N 4+00E	.2	4.08	17	ND	59	ND	1.22	.8	17	56	105	6.45	.13	.73	585	5	.20	24	.06	6	ND	ND	3	3	11	ND	ND	129
CC87L4N 4+50E	.5	1.95	ND	ND	87	ND	1.29	.8	11	26	39	5.04	.13	.25	890	1	.13	13	.07	8	ND	ND	ND	1	32	3	ND	99
CC87L4N 5+00E	.1	3.64	63	ND	32	ND	.17	.6	11	100	81	8.87	.11	.41	490	4	.26	44	.07	8	ND	ND	16	ND	7	ND	ND	148
CC87L4N 5+50E	.2	2.95	6	ND	102	ND	.22	.8	9	31	44	5.31	.11	.33	263	3	.13	33	.07	9	ND	ND	5	ND	9	3	ND	77
CC87L4N 6+00E	.6	3.90	16	ND	40	ND	.28	.6	13	65	72	6.32	.12	.67	402	5	.17	30	.06	12	ND	ND	6	5	11	3	ND	72
CC87L4N 6+50E	1.1	3.22	27	ND	30	ND	.32	.5	10	57	51	6.01	.11	.33	307	5	.14	14	.06	10	ND	ND	18	5	13	3	ND	52
CC87L4N 7+00E	.5	3.79	13	ND	45	4	.60	.6	23	64	87	5.95	.12	1.56	847	5	.18	51	.07	11	ND	ND	ND	4	24	ND	7	71
CC87L4N 7+50E	.6	3.12	3	ND	54	ND	.34	.8	105	40	35	4.57	.10	.89	4225	6	.14	61	.10	12	ND	ND	ND	4	19	ND	ND	121
CC87L4N 8+00E	.7	3.75	7	ND	33	3	.43	.6	25	129	62	6.46	.09	1.37	501	4	.18	67	.03	6	ND	ND	ND	6	18	ND	7	62
CC87L4N 8+50E	3.1	.73	ND	ND	7	14	.32	.6	18	34	19	2.36	.09	.19	177	ND	.01	8	.03	16	ND	ND	ND	19	18	5	ND	16
CC87L4N 9+00E	1.1	3.65	10	ND	18	ND	.20	.8	13	58	34	5.47	.08	.36	273	4	.12	13	.08	13	ND	ND	3	7	11	ND	ND	39
CC87L4N 9+50E	1.3	.79	ND	ND	6	6	.10	.6	8	14	7	1.22	.09	.14	87	ND	.01	3	.01	11	ND	ND	ND	6	4	4	ND	18
CC87L4N 10+00E	1.6	2.65	ND	ND	20	3	.26	.5	12	38	92	4.83	.10	.45	197	2	.11	12	.03	9	ND	ND	ND	5	18	ND	ND	35
CC87L4N 0+50W	.1	3.67	4	ND	153	ND	.60	.6	12	21	31	4.01	.09	.93	[illegible]	4	.14	10	.07	8	ND	ND	ND	ND	18	ND	ND	95
CC87L4N 1+00W	.1	2.88	ND	ND	45	ND	.20	.5	11	30	35	4.32	.08	.66	827	2	.13	11	.06	7	ND	ND	ND	ND	10	ND	ND	71
CC87L4N 1+50W	.1	3.20	ND	ND	26	ND	.12	.5	13	36	29	6.91	.08	.97	523	3	.20	10	.06	9	ND	ND	ND	ND	7	ND	ND	71
CC87L4N 2+00W	.1	4.39	11	ND	231	ND	.81	.6	16	40	44	5.07	.12	.81	6793	6	.15	13	.09	10	ND	ND	ND	ND	24	ND	4	113
CC87L4N 2+50W	.2	3.87	3	ND	59	ND	.27	.5	14	52	46	6.54	.09	1.01	979	5	.19	15	.12	11	ND	ND	ND	1	17	ND	ND	82
CC87L4N 3+00W	.1	5.52	30	ND	66	ND	.22	.5	18	58	117	7.45	.09	1.19	741	9	.24	21	.13	14	ND	ND	12	1	12	ND	21	109
CC87L4N 3+50W	.2	3.74	8	ND	46	ND	.22	.6	16	38	55	6.27	.09	.90	936	5	.19	11	.09	11	ND	ND	3	ND	16	ND	ND	83
CC87L4N 4+00W	.6	2.16	ND	ND	18	ND	.40	.6	9	25	15	4.72	.09	.38	436	1	.11	6	.04	12	ND	ND	ND	1	53	ND	ND	39
CC87L4N 4+50W	.1	3.22	ND	ND	44	ND	.06	.4	15	19	26	5.77	.09	.80	618	3	.17	8	.06	12	ND	ND	ND	ND	5	ND	ND	61
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L4N 5+00W	.1	8.01	31	ND	43	ND	.15	.4	16	46	92	6.45	.02	.73	420	10	.17	20	.29	31	ND	ND	(19)	ND	6	ND	48	99
CC87L4N 5+50W	.1	4.84	8	ND	106	4	.22	.4	18	36	74	6.65	.03	.80	538	2	.20	25	.12	11	ND	ND	ND	4	10	ND	24	155
CC87L4N 6+00W	.1	5.37	9	ND	32	ND	.22	.4	15	59	66	9.46	.04	.94	444	3	.25	20	.16	13	ND	ND	3	2	9	ND	28	93
CC87L4N 6+50W	.6	5.65	8	ND	32	ND	.24	.5	15	51	68	8.58	.06	.76	387	4	.22	15	.16	16	ND	ND	6	ND	13	ND	31	84
CC87L4N 7+00W	.3	3.80	ND	ND	234	ND	.55	.3	18	42	41	7.44	.08	.73	1159	ND	.20	16	.08	7	ND	ND	ND	ND	22	ND	13	120
CC87L4N 7+50W	.5	4.67	ND	ND	37	4	.34	.2	20	37	58	8.00	.01	.93	506	2	.20	7	.08	11	ND	ND	ND	ND	29	ND	18	77
CC87L4N 8+00W	.1	5.32	6	ND	50	ND	.17	..	17	46	85	7.58	.01	.94	440	3	.20	17	.10	10	ND	ND	ND	ND	10	ND	27	87
CC87L4N 8+50W	.1	4.25	ND	ND	28	ND	.22	.1	14	43	40	9.25	.01	1.04	424	1	.24	12	.10	38	ND	ND	ND	ND	12	ND	15	67
CC87L4N 9+00W	.1	4.08	ND	ND	37	ND	.22	.2	10	54	48	6.58	.01	.53	429	ND	.17	11	.10	16	ND	ND	3	ND	10	ND	11	61
CC87L4N 9+50W	.1	5.40	8	ND	49	ND	.12	.4	10	36	51	6.00	.01	.78	337	4	.16	10	.13	8	ND	ND	3	2	6	ND	20	71
CC87L4N 10+00W	.1	6.08	7	ND	48	ND	.20	.2	11	42	40	6.55	.01	.61	364	5	.20	10	.15	7	ND	ND	3	1	7	ND	27	156
CC87L4N 10+50W	.1	3.83	ND	ND	36	ND	.14	.2	8	24	33	5.41	.01	.56	536	ND	.15	7	.10	11	ND	ND	ND	2	7	ND	14	72
CC87L4N 11+00W	.1	3.29	3	ND	33	ND	.17	.1	9	42	42	5.66	.01	.51	387	ND	.15	11	.08	5	ND	ND	ND	ND	9	ND	12	71
CC87L4N 11+50W	.1	5.29	ND	ND	47	ND	.14	.1	12	31	65	6.59	.01	.51	494	3	.19	10	.12	5	ND	ND	3	3	7	ND	24	113
CC87L4N 12+00W	.1	5.57	ND	ND	82	ND	.25	.2	22	50	85	5.92	.01	1.01	672	4	.17	30	.08	8	ND	ND	5	ND	9	ND	27	118
CC87L4N 12+50W	.1	5.45	3	ND	53	ND	.25	.1	17	49	80	7.23	.01	1.02	635	4	.20	23	.07	7	ND	ND	ND	ND	10	ND	27	105
CC87L4N 13+00W	.1	5.73	15	ND	53	ND	.17	.3	17	50	77	7.73	.01	.93	723	5	.20	24	.11	41	ND	ND	4	ND	8	ND	31	103
CC87L4N 13+50W	.1	5.89	13	ND	54	ND	.20	.2	17	51	81	7.68	.03	.98	745	5	.20	25	.13	10	ND	ND	6	ND	10	ND	40	109
CC87L4N 14+00W	.1	4.90	ND	ND	31	ND	.11	.1	8	35	41	9.55	.01	.68	317	4	.24	9	.20	5	ND	ND	ND	1	6	ND	23	63
CC87L4N 14+50W	.1	5.19	3	ND	64	ND	.07	.1	10	10	43	6.37	.01	.83	719	3	.17	2	.13	3	ND	ND	4	3	5	ND	23	80
CC87L4N 15+00W	.1	4.44	ND	ND	46	ND	.14	.1	12	40	45	6.34	.02	.63	568	3	.17	35	.12	6	ND	ND	ND	3	6	ND	15	92
CC87L4N 15+50W	.1	3.94	ND	ND	54	ND	.13	.3	8	24	47	5.48	.01	.56	533	1	.14	13	.15	ND	ND	ND	ND	ND	7	ND	15	75
CC87L4N 16+00W	.1	2.97	ND	ND	30	ND	.12	.1	5	11	30	5.05	.01	.25	691	ND	.12	4	.15	7	ND	ND	ND	ND	7	ND	9	55
CC87L4N 16+50W	.1	4.16	ND	ND	25	ND	.07	.2	6	36	30	6.66	.01	.54	233	3	.17	10	.10	1	ND	ND	3	3	4	ND	16	62
CC87L4N 17+00W	.1	4.37	ND	ND	38	3	.15	.4	15	48	59	6.58	.01	1.02	609	2	.17	15	.13	10	ND	ND	ND	ND	7	ND	20	85
CC87L4N 17+50W	.1	5.33	ND	ND	38	ND	.19	.1	15	50	55	8.07	.01	.88	402	4	.20	[illegible]	.14	9	ND	ND	4	ND	8	ND	32	93
CC87L4N 18+00W	.8	3.66	ND	ND	45	7	.24	.3	21	31	56	8.24	.01	.79	723	ND	.20	5	.07	8	ND	ND	3	ND	13	ND	22	98
CC87L4N 18+50W	.8	4.69	ND	ND	47	11	.27	.4	25	71	77	7.40	.01	1.45	645	3	.20	20	.13	8	ND	ND	ND	ND	13	ND	31	95
CC87L4N 19+00W	.1	5.54	13	ND	103	ND	.13	.5	42	53	125	9.30	.02	.89	1904	5	.26	32	.22	4	ND	ND	3	ND	9	ND	37	196
CC87L4N 19+50W	.1	4.00	ND	ND	56	4	.16	.3	18	48	54	6.19	.01	.88	1709	ND	.17	10	.16	3	ND	ND	ND	ND	9	ND	19	80
CC87L4N 20+00W	.2	3.22	ND	ND	30	3	.08	.2	8	46	23	7.08	.01	.46	352	ND	.17	6	.30	5	ND	ND	ND	ND	5	ND	18	72
CC87L4N 20+50W	.1	4.16	ND	ND	51	ND	.06	.6	21	68	117	7.63	.01	2.22	1053	14	.25	58	.27	ND	ND	ND	ND	3	7	ND	39	178
CC87L4N 21+00W	.1	3.33	ND	ND	76	ND	.54	1.1	17	48	76	4.95	.01	1.47	1092	5	.17	45	.17	ND	ND	ND	ND	2	20	ND	21	154
CC87L4N 21+50W	.1	2.42	3	ND	147	3	.71	1.1	13	38	63	4.00	.01	1.11	1044	2	.14	42	.17	ND	ND	ND	ND	1	25	ND	8	158
CC87L4N 22+00W	.1	4.42	7	ND	83	3	.13	.4	20	129	50	6.41	.01	1.95	738	2	.20	43	.11	ND	ND	ND	ND	ND	10	ND	31	127
CC87L4N 22+50W	.1	2.52	ND	ND	109	6	.36	.6	28	68	50	4.41	.01	1.92	1873	ND	.15	48	.11	ND	ND	ND	ND	ND	26	ND	19	76
CC87L4N 23+00W	.1	2.97	41	ND	53	ND	.20	.8	10	65	99	6.05	.01	.66	327	5	.17	25	.06	12	ND	ND	3	ND	11	ND	16	136
CC87L4N 23+50W	.4	3.24	83	ND	93	ND	1.33	2.2	9	34	102	5.10	.05	.50	8067	3	.20	37	.15	43	ND	ND	ND	2	34	ND	7	372
CC87L4N 24+00W	.2	5.51	32	ND	40	ND	.24	.1	21	128	92	7.21	.01	1.31	686	5	.20	51	.27	8	ND	ND	4	ND	15	ND	39	101
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L4N 24+50W	.1	6.20	13	ND	79	ND	.08	.4	7	15	22	4.66	.03	1.75	379	2	.15	18	.07	23	ND	ND	ND	1	8	ND	5	45
CC87L4N 25+00W	.1	4.59	24	ND	43	ND	.52	.4	21	56	36	4.76	.05	1.47	1567	2	.17	46	.11	23	ND	ND	ND	ND	27	ND	ND	114
CC87L4S 0+50E	.1	3.44	ND	ND	45	ND	.13	.1	11	30	40	5.07	.05	.59	1429	ND	.14	10	.11	13	ND	ND	ND	1	7	ND	ND	77
CC87L4S 1+00E	.1	2.32	4	ND	24	ND	.10	.1	6	32	14	4.80	.04	.34	369	ND	.12	6	.06	6	ND	ND	ND	ND	6	ND	ND	44
CC87L4S 1+50E	.1	3.33	5	ND	34	ND	.22	.1	13	36	55	6.05	.05	.64	582	ND	.17	15	.07	17	ND	ND	ND	ND	11	ND	ND	95
CC87L4S 2+00E	.6	2.54	20	ND	21	ND	.76	.6	8	85	32	3.54	.05	.86	258	ND	.14	32	.24	26	ND	ND	ND	ND	19	ND	ND	189
CC87L4S 2+50E	.1	5.48	15	ND	29	ND	.26	.1	11	66	62	6.66	.04	.64	425	3	.17	13	.17	25	ND	ND	ND	ND	10	ND	ND	65
CC87L4S 3+00E	.6	4.39	19	ND	34	ND	.65	.1	15	60	140	6.09	.07	.55	506	1	.17	20	.06	19	ND	ND	7	ND	15	ND	ND	98
CC87L4S 3+50E	.5	6.37	19	ND	36	ND	.34	.1	19	96	149	6.24	.06	1.06	444	3	.17	35	.07	29	ND	ND	5	ND	14	ND	7	73
CC87L4S 4+00E	.5	6.99	27	ND	31	ND	.27	.1	17	106	118	5.91	.05	.93	375	5	.16	29	.05	38	ND	ND	7	ND	12	ND	10	72
CC87L4S 4+50E	.4	5.22	44	ND	35	ND	3.60	.1	19	67	243	8.58	.13	.97	707	1	.22	29	.05	15	ND	ND	ND	ND	10	ND	ND	63
CC87L4S 5+00E	[illegible]	2.31	ND	ND	13	ND	.36	.1	9	45	37	5.30	.05	.32	211	ND	.12	6	.04	9	ND	ND	ND	ND	11	ND	ND	26
CC87L4S 0+00W	.1	2.43	ND	ND	16	ND	.11	.1	6	11	10	4.51	.03	.46	295	ND	.11	ND	.04	7	ND	ND	ND	ND	7	ND	ND	39
CC87L4S 0+50W	.1	3.72	ND	ND	58	ND	.08	.1	14	32	72	6.41	.05	.77	875	ND	.17	6	.08	10	ND	ND	ND	1	6	ND	ND	100
CC87L4S 1+00W	.1	1.28	3	ND	55	ND	.08	.1	12	2	12	6.58	.08	.12	1999	ND	.17	ND	.08	4	ND	ND	3	ND	4	3	ND	130
CC87L4S 1+50W	.1	2.37	ND	ND	27	ND	.06	.1	8	22	16	5.01	.04	.32	542	ND	.13	ND	.06	4	ND	ND	ND	1	3	ND	ND	66
CC87L4S 2+00W	.1	1.87	ND	ND	28	ND	.08	.1	6	17	12	3.97	.05	.32	279	ND	.08	ND	.02	3	ND	ND	ND	ND	5	5	ND	38
CC87L4S 2+50W	.1	2.54	ND	ND	36	ND	.05	.1	9	19	14	5.05	.05	.45	394	ND	.13	ND	.04	5	ND	ND	ND	1	4	3	ND	60
CC87L4S 3+00W	.1	2.91	ND	ND	37	ND	.11	.1	13	34	26	5.35	.07	.63	1029	ND	.14	5	.06	10	ND	ND	ND	ND	6	3	ND	56
CC87L4S 3+50W	.1	3.47	ND	ND	80	ND	.41	.2	18	22	33	5.00	.08	.64	1670	ND	.13	4	.07	13	ND	ND	ND	ND	17	4	ND	78
CC87L4S 4+00W	.1	4.76	8	ND	63	ND	.17	.1	19	40	137	5.54	.03	1.18	718	2	.17	[illegible]	.06	22	ND	ND	ND	ND	7	ND	ND	95
CC87L4S 4+50W	.1	3.89	ND	ND	165	ND	.98	.1	23	24	39	4.69	.07	.85	1667	ND	.15	14	.08	11	ND	ND	ND	1	30	ND	ND	145
CC87L4S 5+00W	.1	4.14	ND	ND	45	ND	.19	.3	15	37	65	7.10	.05	1.06	714	ND	.20	10	.10	15	ND	ND	ND	ND	8	ND	ND	95
CC87L4S 5+50W	.2	2.41	ND	ND	32	ND	.11	.1	8	19	11	4.40	.04	.53	384	ND	.11	3	.06	13	ND	ND	ND	ND	6	ND	ND	49
CC87L4S 6+00W	.1	3.64	ND	ND	33	ND	.08	.3	8	21	24	5.45	.04	.55	447	ND	.14	3	.12	12	ND	ND	ND	ND	4	ND	ND	57
CC87L4S 6+50W	.1	3.02	ND	ND	29	ND	.08	.2	8	20	32	5.50	.04	.56	443	ND	.14	3	.07	9	ND	ND	ND	ND	6	ND	ND	54
CC87L4S 7+00W	.1	4.17	ND	ND	50	ND	.38	.3	15	20	50	5.70	.06	.97	866	ND	.16	6	.08	13	ND	ND	ND	ND	16	ND	ND	79
CC87L4S 7+50W	.3	2.04	ND	ND	44	ND	.12	.1	7	10	14	5.52	.04	.29	317	ND	.13	ND	.06	7	ND	ND	ND	ND	11	ND	ND	52
CC87L4S 8+00W	.2	3.65	ND	ND	44	ND	.17	.1	14	22	48	5.55	.03	.77	885	ND	.15	7	.12	13	ND	ND	ND	ND	10	ND	ND	84
CC87L4S 8+50W	.1	4.30	6	ND	97	ND	.10	.4	17	16	68	6.14	.04	.77	508	ND	.17	5	.07	14	ND	ND	ND	ND	7	ND	ND	102
CC87L4S 9+00W	.1	3.29	ND	ND	33	ND	.12	.2	11	23	35	6.17	.03	.68	528	ND	.15	4	.07	13	ND	ND	ND	ND	7	ND	ND	55
CC87L4S 9+50W	.1	4.25	ND	ND	44	ND	.14	.2	15	38	45	5.99	.03	1.06	786	ND	.17	6	.16	15	ND	ND	ND	ND	8	ND	ND	79
CC87L4S 10+00W	.1	3.97	ND	ND	31	ND	.20	.1	18	48	75	5.69	.03	.61	625	1	.15	13	.15	14	ND	ND	ND	ND	9	ND	ND	78
CC87L4S 10+50W	.5	1.67	ND	ND	30	ND	.08	.1	7	16	16	5.12	.02	.20	153	ND	.11	ND	.03	8	ND	ND	ND	ND	4	3	ND	33
CC87L4S 11+00W	.1	2.41	ND	ND	37	ND	.12	.1	8	20	15	5.19	.02	.60	1011	ND	.14	1	.05	27	ND	ND	ND	ND	6	ND	ND	50
CC87L4S 11+50W	.1	2.47	ND	ND	49	ND	.08	.1	6	15	22	3.91	.02	.40	201	ND	.11	1	.07	2	ND	ND	ND	ND	7	ND	ND	58
CC87L4S 12+00W	.1	1.76	6	ND	15	ND	.10	.2	4	18	4	2.92	.02	.29	152	ND	.07	ND	.08	3	ND	ND	ND	ND	6	3	ND	34
CC87L4S 12+50W	.1	5.00	11	ND	62	ND	.20	.1	19	50	99	5.37	.02	1.26	688	1	.16	23	.08	16	ND	ND	ND	ND	8	ND	ND	95
CC87L4S 13+00W	.1	1.33	9	ND	12	ND	.06	.1	2	13	ND	2.29	.01	.14	158	ND	.05	ND	.04	ND	ND	ND	ND	ND	3	ND	ND	16
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L4S 13+50W	.1	3.59	ND	ND	20	ND	.14	.4	6	27	27	5.05	.02	.36	467	2	.13	12	.07	7	ND	ND	ND	ND	6	ND	ND	45
CC87L4S 14+00W	.1	2.62	ND	ND	17	ND	.12	.4	4	16	14	4.41	.03	.32	387	ND	.11	7	.11	4	ND	ND	ND	ND	5	ND	ND	45
CC87L4S 14+50W	.2	1.27	3	ND	14	ND	.05	.3	3	6	5	2.70	.01	.16	356	ND	.06	1	.07	4	ND	ND	ND	ND	3	ND	ND	25
CC87L4S 15+00W	.1	3.79	10	ND	25	ND	.06	.5	7	19	24	4.54	.01	1.75	1247	2	.16	4	.17	7	ND	ND	ND	ND	4	ND	ND	78
CC87L4S 15+50W	.1	2.92	7	ND	89	ND	.93	1.2	7	81	18	3.02	.08	.63	2070	1	.08	23	.08	8	ND	ND	ND	ND	18	6	ND	64
CC87L4S 16+00W	.1	3.25	40	ND	66	ND	.52	1.3	10	48	54	4.82	.06	1.18	1458	6	.19	21	.15	26	ND	ND	ND	ND	19	ND	ND	213
CC87L4S 16+50W	1.3	2.06	95	ND	50	ND	1.35	4.1	12	35	85	4.32	.12	.56	2025	15	.17	51	.17	93	ND	ND	3	ND	36	5	ND	275
CC87L4S 17+00W	1.6	4.45	58	ND	34	ND	.14	.5	17	47	69	5.70	.04	.59	799	14	.17	50	.19	51	ND	ND	ND	ND	5	ND	ND	129
CC87L4S 17+50W	.3	2.87	32	ND	57	ND	.78	1.2	20	48	85	5.00	.08	1.13	1774	4	.15	46	.13	27	ND	ND	ND	ND	33	ND	3	114
CC87L5N 0+00BL	.1	2.47	ND	ND	47	ND	.19	.4	7	14	13	4.75	.05	.28	717	ND	.11	1	.03	10	ND	ND	ND	ND	9	ND	ND	38
CC87L5N 0+50E	.1	2.75	ND	ND	86	ND	.46	.4	10	20	26	4.16	.01	.64	576	ND	.13	5	.06	4	ND	ND	ND	ND	14	ND	ND	98
CC87L5N 1+00E	.1	.96	4	ND	19	ND	.04	.1	7	5	7	5.73	.03	.12	346	ND	.14	ND	.07	2	ND	ND	5	ND	3	ND	ND	70
CC87L5N 1+50E	.1	4.32	ND	ND	57	ND	.08	.1	9	32	165	5.42	.04	.65	327	3	.16	9	.08	10	ND	ND	ND	ND	5	ND	ND	83
CC87L5N 2+00E	.1	3.08	ND	ND	37	ND	.01	.2	5	6	9	4.62	.02	.54	317	ND	.12	ND	.05	3	ND	ND	ND	ND	5	ND	ND	50
CC87L5N 2+50E	.1	.76	6	ND	14	ND	.01	.2	7	1	27	5.55	.03	.08	320	ND	.15	ND	.06	ND	ND	ND	12	ND	1	ND	ND	81
CC87L5N 3+00E	.2	4.52	14	ND	75	ND	.16	.6	16	42	79	6.50	.04	.81	467	4	.19	17	.08	10	ND	ND	ND	ND	7	ND	9	116
CC87L5N 3+50E	.1	1.62	ND	ND	14	ND	.03	.3	3	26	6	2.88	.02	.22	141	ND	.06	ND	.02	ND	ND	ND	ND	ND	3	3	ND	24
CC87L5N 4+00E	.1	2.95	ND	ND	38	ND	.14	.3	8	33	32	4.33	.03	.34	483	1	.11	7	.06	6	ND	ND	ND	ND	6	ND	ND	59
CC87L5N 4+50E	.2	3.15	ND	ND	40	ND	.34	.5	11	43	57	4.34	.03	.60	312	1	.12	13	.03	7	ND	ND	ND	ND	11	ND	ND	63
CC87L5N 5+00E	.3	3.84	26	ND	53	ND	.40	.6	24	69	179	5.77	.06	.68	881	4	.16	41	.07	9	ND	ND	ND	ND	14	ND	3	102
CC87L5N 5+50E	50.4	3.30	4	ND	29	ND	.28	.3	8	49	61	5.33	.03	.32	192	3	.13	29	.05	12	ND	ND	ND	ND	9	ND	ND	47
CC87L5S 5+75E	1.5	2.77	9	ND	116	ND	.93	.5	27	51	210	6.54	.08	1.10	1559	2	.19	48	.07	5	ND	ND	ND	ND	32	ND	ND	113
CC87L6S 6+00E	.6	4.32	3	ND	46	ND	.27	.6	16	63	90	5.09	.03	.61	321	4	.14	27	.06	9	ND	ND	ND	ND	9	ND	ND	80
CC87L5S 6+50E	.5	4.25	7	ND	49	ND	.22	.1	15	69	72	6.89	.03	.75	343	5	.19	23	.08	9	ND	ND	ND	ND	9	ND	ND	84
CC87L5S 7+00E	.5	3.54	ND	ND	30	ND	.22	.4	9	44	39	5.64	.04	.44	197	3	.13	10	.06	6	ND	ND	ND	ND	10	ND	ND	39
CC87L5S 7+50E	.8	3.64	ND	ND	39	3	.30	.6	17	63	75	5.47	.04	.83	434	2	.14	26	.06	8	ND	ND	ND	ND	11	ND	6	56
CC87L5S 8+00E	.5	3.25	5	ND	50	ND	.68	.5	20	48	68	4.94	.05	1.45	892	2	.15	33	.06	11	ND	ND	ND	ND	29	ND	7	63
CC87L5S 8+50E	.2	2.66	ND	ND	21	ND	.22	.3	8	37	41	4.66	.03	.45	242	1	.11	11	.04	33	ND	ND	ND	ND	12	ND	ND	35
CC87L5S 9+00E	.5	2.87	ND	ND	30	5	.28	.1	16	40	55	4.79	.01	.56	344	1	.12	12	.06	7	ND	ND	ND	ND	14	ND	ND	49
CC87L5S 9+50E	1.7	2.02	ND	ND	16	7	.20	.1	14	47	38	5.19	.03	.41	203	ND	.11	7	.04	6	ND	ND	ND	ND	11	ND	ND	28
CC87L5S 10+00E	1.3	1.12	ND	ND	7	5	.22	.4	10	31	17	4.70	.02	.15	160	ND	.08	2	.04	6	ND	ND	4	ND	11	ND	ND	17
CC87L5S 3+00W	.3	2.09	ND	ND	36	ND	.07	.1	8	15	6	4.48	.03	.30	238	ND	.11	ND	.03	4	ND	ND	ND	ND	4	ND	ND	31
CC87L5S 3+50W	.1	4.04	ND	ND	32	ND	.12	.3	11	34	59	6.37	.04	.53	385	3	.16	5	.07	7	ND	ND	ND	ND	8	ND	ND	50
CC87L5S 4+00W	.1	3.90	ND	ND	54	ND	.16	.2	13	35	89	6.00	.02	1.05	544	3	.17	7	.08	6	ND	ND	ND	ND	8	ND	10	77
CC87L5S 4+50W	.2	2.50	ND	ND	42	ND	.22	.4	13	26	19	5.58	.01	.88	384	ND	.15	5	.05	4	ND	ND	ND	ND	40	ND	ND	50
CC87L5S 5+00W	.1	2.27	ND	ND	18	ND	.12	.5	8	23	13	5.02	.02	.56	371	ND	.13	3	.05	1	ND	ND	ND	ND	7	ND	ND	41
CC87L5S 5+50W	.1	2.65	ND	ND	54	ND	.08	.1	10	16	13	5.79	.02	.56	396	ND	.15	2	.05	3	ND	ND	ND	ND	7	ND	ND	49
CC87L5S 6+00W	.1	3.39	ND	ND	56	ND	.17	.2	19	23	70	6.12	.06	.93	1743	2	.16	7	.08	3	ND	ND	ND	ND	8	ND	ND	77
CC87L5S 6+50W	.1	4.45	11	ND	43	ND	.19	.4	15	50	82	6.89	.04	.81	428	4	.20	14	.14	14	ND	ND	ND	ND	8	ND	10	132
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

should be Line 5N

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L5N 7+00W	.1	4.55	4	ND	102	ND	.10	1.2	11	ND	38	8.63	.01	1.21	370	3	.22	12	.06	14	ND	ND	ND	ND	7	ND	ND	74
CC87L5N 7+50W	.1	5.00	12	ND	50	ND	.19	1.2	18	17	81	7.09	.01	1.18	707	3	.19	22	.13	14	ND	ND	ND	1	8	ND	ND	71
CC87L5N 8+00W	.1	3.90	4	ND	31	ND	.11	.6	11	15	49	7.53	.01	.75	393	2	.19	11	.07	14	ND	ND	ND	ND	7	ND	ND	70
CC87L5N 8+50W	.4	2.20	ND	ND	28	ND	.12	.3	11	31	31	9.73	.01	.46	368	ND	.22	6	.08	12	ND	ND	ND	ND	7	ND	ND	62
CC87L5N 9+00W	.1	4.83	16	ND	394	ND	.64	1.5	33	15	48	4.44	.08	.75	2780	3	.12	21	.10	34	ND	ND	ND	ND	24	ND	ND	171
CC87L5N 9+50W	.1	3.70	ND	ND	53	ND	.13	.6	8	5	38	5.04	.01	.60	407	1	.13	9	.08	13	ND	ND	ND	ND	6	ND	ND	67
CC87L5N 10+00W	.1	2.75	ND	ND	21	ND	.10	.2	4	2	24	4.64	.01	.34	249	ND	.11	6	.11	9	ND	ND	ND	ND	4	ND	ND	49
CC87L5S 0+50E	.1	3.29	ND	ND	47	ND	.07	.6	9	ND	45	4.70	.03	.53	470	ND	.12	2	.06	14	ND	ND	ND	ND	3	ND	ND	70
CC87L5S 1+00E	.1	4.19	12	ND	51	ND	.12	.7	7	ND	68	4.99	.01	.48	345	2	.13	9	.03	14	ND	ND	ND	ND	5	ND	ND	74
CC87L5S 1+50E	.1	2.47	46	ND	44	ND	.04	.1	11	ND	57	4.92	.02	.15	246	2	.12	4	.05	16	ND	ND	ND	ND	1	ND	ND	81
CC87L5S 2+00E	.1	4.41	30	ND	42	ND	.59	2.1	25	86	496	6.81	.01	1.62	2131	6	.20	65	.07	30	ND	ND	ND	ND	16	ND	ND	151
CC87L5S 2+50E	.1	7.09	42	ND	38	ND	.34	2.5	23	83	291	7.23	.01	1.20	523	7	.32	80	.05	97	ND	ND	ND	2	10	ND	ND	487
CC87L5S 3+00E	.3	5.15	20	ND	43	ND	.45	2.1	26	48	708	6.22	.01	1.12	577	3	.24	64	.06	63	ND	ND	ND	ND	11	ND	ND	319
CC87L5S 3+50E	.3	5.10	20	ND	31	ND	.38	1.4	19	44	139	5.62	.12	1.01	893	3	.14	34	.03	11	ND	ND	ND	ND	11	ND	ND	57
CC87L5S 4+00E	.1	2.58	ND	ND	16	ND	4.94	.2	11	23	744	15.91	.14	.34	887	5	.34	10	.05	4	ND	ND	ND	ND	7	ND	ND	22
CC87L5S 4+50E	.1	5.69	9	ND	18	ND	2.36	1.5	12	22	269	8.30	.17	.51	522	3	.17	13	.04	5	ND	ND	ND	1	11	ND	ND	27
CC87L5S 5+00E	.4	6.70	30	ND	22	ND	.36	2.1	16	32	117	6.58	.06	.60	310	5	.14	19	.07	8	ND	ND	ND	2	13	ND	ND	41
CC87L5S 0+00W	.1	4.00	3	ND	252	ND	.89	1.4	13	24	52	3.90	.14	.66	8349	ND	.10	16	.17	37	ND	ND	ND	ND	27	ND	ND	189
CC87L5S 0+50W	.1	2.42	ND	ND	26	ND	.08	.5	7	8	11	5.49	.11	.64	563	ND	.13	3	.04	13	ND	ND	ND	ND	4	ND	ND	65
CC87L5S 1+00W	.1	4.12	ND	ND	56	ND	.07	.8	19	ND	37	6.22	.01	1.68	1069	ND	.19	13	.03	22	ND	ND	ND	ND	5	ND	ND	112
CC87L5S 1+50W	.1	2.54	ND	ND	49	ND	.14	.2	13	ND	48	5.44	.08	.59	1213	ND	.13	22	.08	15	ND	ND	ND	ND	6	ND	ND	78
CC87L5S 2+00W	.1	1.50	ND	ND	32	ND	.19	.1	5	2	16	3.67	.01	.26	296	ND	.08	5	.04	10	ND	ND	ND	ND	7	ND	ND	51
CC87L5S 2+50W	.1	3.87	ND	ND	45	ND	.10	.7	13	2	50	6.14	.01	.98	635	ND	.17	5	.04	17	ND	ND	ND	ND	5	ND	ND	89
CC87L5S 3+00W	.1	3.02	ND	ND	47	ND	.14	.5	11	ND	38	4.66	.01	.83	1109	ND	.13	6	.04	13	ND	ND	ND	ND	6	ND	ND	69
CC87L5S 3+50W	.1	3.97	ND	ND	106	ND	.56	1.1	20	4	105	6.14	.01	1.18	1438	ND	.17	17	.06	17	ND	ND	ND	ND	16	ND	ND	85
CC87L5S 4+00Q	.1	4.05	ND	ND	338	ND	.75	.5	28	1	81	7.08	.01	1.23	16115	ND	.22	15	.10	29	ND	ND	ND	ND	24	ND	ND	149
CC87L6N 0+50E	.1	3.59	ND	ND	65	ND	.05	.6	7	ND	15	3.70	.01	.58	790	ND	.10	1	.07	11	ND	ND	ND	ND	5	ND	ND	59
CC87L6N 1+00E	.1	3.20	ND	ND	28	ND	.17	.6	7	11	34	6.29	.01	.48	340	ND	.15	6	.08	10	ND	ND	ND	ND	9	ND	ND	52
CC87L6N 1+50E	.1	2.84	ND	ND	44	ND	.08	.5	5	ND	12	4.19	.01	.32	1117	ND	.10	2	.03	7	ND	ND	ND	ND	7	ND	ND	38
CC87L6N 2+00E	.1	2.50	ND	ND	84	ND	.22	.2	8	ND	18	4.35	.06	.36	2479	ND	.10	6	.06	12	ND	ND	ND	ND	10	ND	ND	63
CC87L6N 2+50E	.1	1.00	111	ND	14	ND	.05	.1	8	52	33	6.55	.11	.07	525	6	.16	8	.12	19	ND	ND	15	ND	2	ND	ND	97
CC87L6N 3+00E	.1	3.54	9	ND	115	ND	.20	1.2	12	19	40	5.37	.19	.43	1213	2	.12	14	.06	25	ND	ND	ND	ND	9	ND	ND	127
CC87L6N 3+50E	.5	1.12	15	ND	14	ND	.02	.1	2	12	7	1.93	.17	.03	101	ND	.03	4	.03	6	ND	ND	8	ND	1	11	ND	30
CC87L6N 4+00E	.1	2.99	3	ND	32	ND	.19	.8	8	42	44	5.59	.08	.50	379	ND	.14	16	.05	15	ND	ND	ND	ND	8	ND	ND	75
CC87L6N 4+50E	.5	1.66	ND	ND	15	3	.35	.1	6	20	18	5.04	.05	.22	150	ND	.11	5	.05	6	ND	ND	ND	ND	8	ND	ND	34
CC87L6N 5+00E	.1	2.97	ND	ND	23	ND	.20	.5	6	27	38	5.94	.01	.28	222	1	.15	7	.05	16	ND	ND	ND	ND	6	ND	ND	82
CC87L6N 5+50E	.1	5.05	99	ND	28	ND	.17	1.2	15	67	118	6.34	.01	.58	332	11	.17	74	.08	20	ND	ND	ND	1	6	ND	ND	102
CC87L6N 6+00E	.1	5.33	10	ND	32	ND	.22	1.4	16	60	90	6.26	.01	.81	340	2	.16	32	.04	11	ND	ND	ND	1	8	ND	ND	57
CC87L6N 6+50E	.4	1.32	ND	ND	12	ND	.28	.1	4	16	14	4.03	.04	.17	120	ND	.08	4	.04	5	ND	ND	ND	ND	6	ND	ND	27
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L6N 7+00E	.7	4.63	ND	ND	29	ND	.31	.9	14	69	72	6.42	.04	.52	272	4	.15	27	.04	6	ND	ND	5	ND	12	ND	ND	56
CC87L6N 7+10E	.1	3.75	ND	ND	143	ND	1.59	.5	28	48	133	6.26	.08	1.16	1879	2	.18	37	.09	2	ND	ND	ND	3	47	ND	ND	121
CC87L6N 7+50E	.6	5.55	6	ND	46	3	.50	.3	26	86	160	6.58	.06	1.17	548	5	.18	48	.08	7	ND	ND	5	ND	19	ND	ND	89
CC87L6N 8+00E	.6	4.33	ND	ND	60	ND	.48	.3	20	65	55	6.92	.06	.69	384	3	.18	31	.05	6	ND	ND	ND	ND	22	ND	ND	104
CC87L6N 8+50E	.5	6.30	3	ND	35	ND	.27	.2	16	81	83	6.96	.04	.63	363	5	.18	27	.10	6	ND	ND	7	ND	13	ND	10	103
CC87L6N 9+00E	.6	6.11	35	ND	112	ND	.63	.5	46	67	102	7.16	.12	.86	4070	11	.15	59	.08	11	ND	ND	6	ND	22	ND	7	130
CC87L6N 9+50E	.7	4.26	ND	ND	29	ND	.32	.4	13	44	55	5.75	.03	.44	370	2	.13	10	.10	8	ND	ND	ND	ND	21	ND	ND	47
CC87L6N 10+00E	1.4	1.98	ND	ND	9	5	.41	.1	10	22	30	3.39	.05	.16	223	ND	.06	4	.03	12	ND	ND	3	ND	36	ND	ND	20
CC87L6N 0+00	.1	4.14	ND	ND	31	ND	.18	.4	10	28	28	6.05	.04	.65	634	1	.16	8	.08	6	ND	ND	ND	2	11	ND	ND	70
CC87L6N 0+50W	.1	4.17	ND	ND	79	ND	.16	.3	15	18	34	5.97	.04	.82	1875	1	.17	8	.07	4	ND	ND	ND	3	11	ND	ND	90
CC87L6N 1+00W	.1	4.63	ND	ND	50	ND	.15	.5	13	30	39	5.60	.02	.96	632	2	.17	9	.05	3	ND	ND	ND	4	9	ND	ND	90
CC87L6N 1+50W	.1	3.38	ND	ND	50	ND	.15	.3	11	23	33	6.16	.01	.85	661	ND	.17	8	.04	4	ND	ND	ND	3	14	ND	ND	67
CC87L6N 2+00W	.4	1.93	ND	ND	16	ND	.12	.3	7	16	13	5.24	.07	.20	322	ND	.12	3	.03	12	ND	ND	5	ND	6	ND	ND	36
CC87L6N 2+50W	.1	5.37	ND	ND	/108	ND	.33	.3	13	35	65	4.69	.12	.74	8669	3	.16	16	.36	8	ND	ND	6	4	11	ND	ND	225
CC87L6N 3+00W	.4	2.97	ND	ND	28	ND	.16	.4	9	24	22	5.85	.11	.48	623	ND	.14	5	.07	11	ND	ND	4	3	8	7	ND	65
CC87L6N 3+50W	.1	3.72	ND	ND	119	ND	.47	.1	16	22	39	6.38	.09	.42	874	1	.18	14	.08	8	ND	ND	5	4	13	ND	ND	138
CC87L6N 4+00W	.1	4.07	ND	ND	84	ND	.09	.4	17	31	49	6.96	.08	.80	766	2	.19	12	.09	5	ND	ND	5	4	5	ND	ND	98
CC87L6N 4+50W	.1	.67	11	ND	134	ND	.78	.1	3	7	15	1.68	.01	.17	522	ND	.06	4	.10	23	ND	ND	4	ND	36	ND	ND	75
CC87L6N 5+00W	.9	2.37	ND	ND	26	ND	.32	.5	13	41	29	8.06	.01	.49	283	ND	.20	10	.10	9	ND	ND	ND	ND	13	ND	ND	47
CC87L6N 5+50W	.1	3.77	ND	ND	52	ND	.32	.6	15	31	50	6.54	.01	.79	953	1	.18	7	.12	7	ND	ND	ND	1	14	ND	ND	84
CC87L6N 5+85W	.1	3.98	ND	ND	222	ND	.61	.7	26	38	94	7.57	.11	1.34	2415	2	.22	38	.13	23	ND	ND	3	3	25	ND	ND	142
CC87L6N 6+00W	.6	5.24	ND	ND	65	ND	.28	.6	16	42	61	6.50	.09	.92	618	3	.18	19	.12	19	ND	ND	5	1	12	ND	ND	95
CC87L6N 6+50W	.6	3.24	ND	ND	65	ND	.19	.7	11	19	26	4.71	.08	.67	751	1	.12	9	.06	16	ND	ND	ND	ND	11	ND	ND	67
CC87L6N 7+00W	.1	5.94	ND	ND	78	ND	.16	.6	13	41	60	7.93	.01	1.00	398	4	.24	16	.18	5	ND	ND	ND	3	8	ND	ND	124
CC87L6N 7+50W	.1	3.80	ND	ND	38	ND	.16	.6	15	40	33	8.10	.02	1.07	774	1	.23	11	.10	8	ND	ND	ND	2	10	ND	ND	68
CC87L6N 8+00W	.1	3.07	ND	ND	31	ND	.05	.4	11	28	37	6.45	.05	.88	580	ND	.18	7	.05	7	ND	ND	ND	3	6	ND	ND	67
CC87L6N 8+50W	1.9	2.28	ND	ND	31	6	.19	.3	18	47	35	8.25	.06	.73	435	ND	.19	9	.06	16	ND	ND	ND	ND	9	ND	ND	41
CC87L6N 9+00W	1.8	1.69	ND	ND	20	9	.16	.4	19	21	23	9.48	.07	.81	405	ND	.22	7	.03	19	ND	ND	4	ND	10	ND	ND	56
CC87L6N 9+50W	.6	2.81	ND	ND	31	ND	.17	.6	12	24	23	6.61	.07	.72	951	ND	.17	7	.08	17	ND	ND	3	1	10	ND	ND	67
CC87L6N 10+00WA	.4	3.66	ND	ND	68	ND	.20	.2	18	22	73	5.66	.12	.90	2432	2	.16	14	.13	15	ND	ND	5	3	8	ND	ND	91
CC87L6N 10+00WB	.4	2.93	9	ND	55	ND	.16	.6	8	11	23	4.30	.10	.58	794	1	.11	6	.08	15	ND	ND	4	2	6	3	ND	57
CC87L6N 10+50W	.3	3.43	ND	ND	134	ND	.31	.7	14	23	46	4.85	.12	1.05	2201	2	.15	15	.08	13	ND	ND	3	2	10	ND	ND	106
CC87L6N 11+00W	.3	4.71	ND	ND	72	ND	.15	.4	16	43	60	5.41	.11	1.03	403	3	.17	25	.08	10	ND	ND	6	3	6	ND	ND	113
CC87L6N 11+50W	.5	6.09	ND	ND	66	ND	.16	.4	16	69	93	6.56	.10	1.06	385	6	.21	34	.08	13	ND	ND	12	2	7	ND	8	142
CC87L6N 12+00W	.6	2.85	ND	ND	43	ND	.04	.2	5	5	33	5.28	.12	.23	300	1	.11	1	.04	14	ND	ND	6	2	5	11	ND	38
CC87L6N 12+50W	.7	5.15	ND	ND	33	ND	.07	.6	8	31	48	5.01	.13	.28	159	5	.12	10	.14	17	ND	ND	12	3	4	13	ND	76
CC87L6N 13+00W	.1	3.58	3	ND	27	ND	.06	.5	6	19	34	5.38	.04	.29	218	3	.16	7	.07	10	ND	ND	5	3	3	ND	ND	113
CC87L6N 13+50W	.1	3.87	ND	ND	248	ND	.55	.4	18	34	66	6.05	.08	.60	1147	2	.18	24	.11	5	ND	ND	ND	3	23	ND	ND	120
CC87L6N 14+00W	.1	4.20	ND	ND	346	ND	.72	1.7	15	47	47	4.92	.08	.85	2036	4	.15	26	.09	6	ND	ND	ND	2	27	ND	ND	142
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L6N 14+50W	.1	3.47	7	ND	76	ND	.16	.6	10	28	42	5.82	.01	[illegible]	357	2	.15	20	.12	9	ND	ND	ND	4	6	ND	ND	85
CC87L6N 15+00W	.1	4.58	ND	ND	37	ND	.13	.3	8	40	44	[illegible]	.01	.60	240	4	.13	18	.09	9	ND	ND	ND	5	5	ND	ND	74
CC87E6N 15+50W	.1	4.23	3	ND	34	ND	.14	.5	8	49	42	5.47	.01	.71	317	2	.13	19	.08	6	ND	ND	ND	4	6	ND	ND	67
CC87L6N 16+00W	.1	4.67	ND	ND	41	ND	.17	.7	12	50	51	6.60	.01	.75	539	2	.16	19	.11	6	ND	ND	ND	2	7	ND	ND	82
CC87L6N 16+50W	.1	4.63	ND	ND	39	ND	.12	.3	16	31	58	6.84	.02	.84	1011	1	.17	16	.15	8	ND	ND	ND	4	6	ND	ND	85
CC87L6N 17+00W	.5	7.07	ND	ND	30	ND	.20	.5	18	33	77	5.81	.03	1.06	594	5	.14	13	.29	15	ND	ND	9	ND	6	3	ND	81
CC87L6N 17+50W	.8	3.41	ND	ND	26	ND	.18	.5	16	32	46	8.18	.02	.78	522	1	.18	7	.07	15	ND	ND	ND	ND	7	4	ND	59
CC87L6N 18+00W	.3	5.11	ND	ND	44	ND	.26	.7	20	37	73	6.37	.01	1.34	708	2	.16	18	.24	10	ND	ND	3	ND	9	ND	ND	83
CC87L6N 18+50W	.5	3.61	ND	ND	41	ND	.16	.6	20	28	50	7.74	.01	1.16	513	ND	.19	9	.06	9	ND	ND	ND	ND	8	ND	ND	84
CC87L6N 19+00W	.3	3.62	ND	ND	117	ND	.63	.3	26	27	50	5.41	.02	1.39	3652	ND	.15	11	.18	15	ND	ND	ND	ND	37	ND	ND	86
CC87L6N 19+50W	.4	4.41	ND	ND	133	ND	.44	.6	28	40	85	6.60	.02	1.62	2494	1	.17	15	.18	11	ND	ND	ND	ND	24	ND	ND	87
CC87L6N 20+00W	.1	4.17	ND	ND	223	ND	.66	.7	20	34	48	4.99	.03	.83	6046	1	.13	13	.10	6	ND	ND	ND	4	31	ND	ND	123
CC87L6N 20+50W	.1	4.52	ND	ND	405	ND	1.00	.5	18	56	41	5.17	.08	.88	2250	1	.14	16	.10	6	ND	ND	ND	2	34	ND	ND	124
CC87L6N 21+00W	.1	4.88	ND	ND	186	ND	.85	.6	20	38	62	5.70	.17	.89	1335	1	.13	21	.13	8	ND	ND	ND	ND	44	ND	ND	89
CC87L6N 21+50W	.8	3.93	ND	ND	90	ND	.08	.1	13	27	41	6.50	.03	.55	452	1	.14	6	.06	11	ND	ND	ND	ND	11	3	ND	64
CC87L6N 22+00W	.1	5.65	ND	ND	114	ND	.16	.3	19	57	51	6.65	.07	.96	721	4	.17	18	.11	10	ND	ND	4	1	12	ND	ND	112
CC87L6N 22+50W	.3	5.52	ND	ND	62	ND	.10	.9	16	94	60	9.43	.01	1.11	510	3	.24	18	.11	5	ND	ND	ND	ND	13	ND	ND	114
CC87L6N 23+00W	.6	2.74	ND	ND	62	ND	.18	.5	11	37	27	6.65	.01	.33	412	ND	.15	11	.07	17	ND	ND	ND	ND	12	ND	ND	90
CC87L6N 23+50W	.8	6.01	ND	ND	59	ND	.18	.4	19	80	117	6.03	.01	1.27	446	4	.17	34	.10	9	ND	ND	4	2	13	ND	ND	128
CC87L6N 24+00W	.1	5.25	17	ND	35	ND	.03	.6	6	151	35	5.16	.01	1.94	157	8	.17	25	.18	16	ND	ND	ND	6	2	ND	ND	112
CC87L6N 25+00W	.1	5.95	24	ND	39	ND	.14	.5	19	134	71	7.80	.01	1.41	483	4	.21	59	.12	12	ND	ND	5.	5	8	ND	ND	102
CC87L6N 25+50W	.1	4.07	99	ND	79	ND	1.06	2.3	26	68	91	5.60	.10	1.81	1533	9	.18	81	.16	20	ND	ND	ND	3	57	ND	ND	185
CC87L6N 25+58W	.1	5.17	18	ND	28	ND	.29	.7	23	174	96	7.91	.01	1.37	903	3	.20	54	.17	16	ND	ND	3	3	15	ND	ND	84
CC87L6S 1+50E	.1	2.61	ND	ND	17	ND	.11	.4	5	19	52	5.36	.01	.40	303	ND	.12	5	.09	8	ND	ND	ND	3	5	ND	ND	43
CC87L6S 2+00E	.1	3.78	ND	ND	31	ND	.18	.3	13	22	54	5.34	.01	.73	2442	ND	.14	8	.16	8	ND	ND	ND	4	7	ND	ND	79
CC87L6S 2+50E	.1	6.06	4	ND	57	ND	.12	.7	35	296	406	9.89	.01	3.29	1120	5	.31	150	.05	ND	ND	ND	ND	9	6	ND	9	143
CC87L6S 3+00E	.1	4.98	ND	ND	20	ND	.38	.6	13	75	102	6.34	.01	.67	426	3	.15	20	.11	9	ND	ND	3	1	11	ND	ND	58
CC87L6S 3;50E	.1	4.11	ND	ND	32	ND	.46	.2	29	100	107	5.18	.01	1.49	857	1	.14	52	.05	5	ND	ND	ND	ND	18	ND	ND	73
CC87L6S 4+00E	.3	4.50	ND	ND	39	ND	.37	.4	19	73	165	4.58	.01	1.14	454	2	.12	43	.07	6	ND	ND	ND	ND	15	ND	ND	65
CC87L6S 4+50E	.5	5.48	ND	ND	21	4	.32	.2	18	90	144	6.85	.01	1.17	382	3	.17	35	.07	11	ND	ND	4	ND	15	ND	ND	61
CC87L6S 5+00E	.7	4.17	ND	ND	27	5	.43	.5	17	70	78	5.71	.01	.77	540	1	.13	24	.07	17	ND	ND	3	ND	23	ND	ND	60
CC87L6S 5+50E	1.1	5.78	ND	ND	36	3	.43	.7	30	80	181	7.11	.01	.90	619	4	.17	41	.08	8	ND	ND	4	ND	16	ND	ND	78
CC87L6S 0+00W	.1	3.83	ND	ND	43	ND	.27	.8	17	25	96	5.03	.06	1.03	1842	2	.13	16	.13	10	ND	ND	ND	5	10	3	ND	89
CC87L6S 0+50W	.1	3.50	ND	ND	48	ND	.35	.5	23	42	76	5.74	.01	1.72	1628	1	.17	30	.10	7	ND	ND	ND	5	16	ND	ND	99
CC87L6S 1+00W	.1	2.62	ND	ND	61	ND	.06	.8	8	36	17	3.73	.01	.74	602	ND	.10	12	.08	7	ND	ND	ND	4	6	6	ND	65
CC87L6S 1+50W	.1	4.87	ND	ND	57	ND	.12	.3	17	26	24	6.38	.01	1.76	1134	1	.20	11	.06	4	ND	ND	ND	4	6	ND	ND	116
CC87L6S 2+00W	.1	3.14	ND	ND	33	ND	.21	.1	8	31	49	5.14	.01	.49	333	ND	.13	6	.06	8	ND	ND	ND	4	9	ND	ND	72
CC87L6S 2+50W	.1	3.31	ND	ND	37	ND	.09	.3	10	19	32	4.85	.01	.63	499	ND	.12	5	.05	5	ND	ND	ND	5	5	ND	ND	58
CC87L6S 3+00W	.1	3.46	ND	ND	96	ND	.23	.3	13	17	44	[illegible]	.01	.63	3072	ND	.11	5	.08	9	ND	ND	ND	4	10	ND	ND	88
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L6S 3+50W	.1	3.09	ND	ND	35	ND	.17	.1	8	18	35	4.05	.01	.58	476	2	.11	14	.05	8	ND	ND	ND	2	7	ND	ND	64
CC87L7N 0+00	.1	4.08	ND	ND	71	ND	.30	.1	19	20	39	4.89	.01	.41	7695	2	.14	13	.13	6	ND	ND	ND	2	12	ND	3	127
CC87L7N 0+50W	.1	1.76	ND	ND	38	ND	.28	.1	7	12	17	3.54	.01	.30	964	ND	.08	7	.05	15	ND	ND	ND	ND	21	ND	ND	34
CC87L7N 1+00W	.1	4.30	ND	ND	44	ND	.12	.1	12	17	27	4.64	.01	.41	2645	3	.11	7	.27	14	ND	ND	ND	1	7	ND	ND	47
CC87L7N 1+50W	.1	3.79	ND	ND	36	ND	.19	.6	15	16	39	3.41	.01	.43	1124	3	.08	9	.22	9	ND	ND	ND	1	9	ND	ND	64
CC87L7N 2+00W	.1	2.72	ND	ND	50	ND	.30	.1	19	18	56	5.41	.01	.54	1688	1	.14	12	.10	16	ND	ND	3	2	14	ND	ND	79
CC87L7N 2+50W	.1	3.17	ND	ND	29	ND	.14	.2	9	30	25	5.55	.01	.64	530	1	.14	7	.10	9	ND	ND	ND	1	7	ND	ND	61
CC87L7N 3+00W	.1	4.44	ND	ND	63	ND	.15	.1	14	40	66	5.42	.01	.80	428	4	.15	18	.08	13	ND	ND	ND	2	7	ND	ND	108
CC87L7N 3+50W	.1	4.12	ND	ND	45	ND	.13	.1	13	21	50	4.74	.01	.83	572	3	.13	8	.08	7	ND	ND	ND	2	7	ND	ND	90
CC87L7N 4+00W	.1	3.17	ND	ND	37	ND	.20	.2	9	20	22	4.66	.01	.61	341	1	.12	5	.11	10	ND	ND	ND	1	9	ND	ND	61
CC87L7N 4+50W	.1	2.87	ND	ND	63	ND	.40	.1	9	13	35	4.62	.01	.60	1059	1	.12	6	.08	11	ND	ND	ND	1	13	ND	ND	69
CC87L7N 5+00W	.2	2.52	ND	ND	48	3	.17	.5	12	31	32	7.30	.01	.55	300	1	.16	7	.08	15	ND	ND	ND	ND	9	ND	ND	44
CC87L7N 5+60W	.1	2.92	ND	ND	37	ND	.08	.1	7	22	24	5.02	.01	.55	238	2	.12	7	.03	9	ND	ND	ND	1	5	ND	ND	44
CC87L7N 6+00W	.1	3.30	ND	ND	22	ND	.07	.2	9	30	35	6.19	.01	.64	298	2	.14	5	.05	10	ND	ND	ND	1	6	ND	ND	49
CC87L7N 6+50W	.1	4.20	ND	ND	138	ND	.38	.1	18	39	65	5.84	.01	[illegible]	1122	3	.15	15	.08	8	ND	ND	ND	1	17	ND	ND	90
CC87L7S 0+50E	.1	4.95	7	ND	56	ND	.12	.5	12	35	42	5.19	.01	.55	417	9	.16	14	.15	13	ND	ND	8	2	6	4	6	195
CC87L7S 1+00E	.1	2.70	ND	ND	14	5	.16	.3	20	78	105	4.92	.01	1.23	420	2	.13	42	.04	16	ND	ND	ND	ND	9	ND	ND	50
CC87L7S 1+50E	.1	2.66	ND	ND	14	5	.15	.4	19	80	164	5.12	.01	1.23	465	2	.13	41	.04	20	ND	ND	ND	ND	11	ND	ND	52
CC87L7S 2+00E	.1	4.58	ND	ND	30	ND	.25	.6	15	81	112	6.08	.01	.61	308	5	.15	27	.08	16	ND	ND	6	ND	9	ND	ND	118
CC87L7S 2+50E	.2	4.29	ND	ND	19	10	.30	.4	16	70	112	5.24	.01	.64	347	4	.12	22	.11	15	ND	ND	3	ND	10	ND	ND	56
CC87L7S 3+00E	.1	3.33	ND	ND	22	7	.36	.5	14	69	101	4.54	.01	.81	399	4	.11	39	.06	13	ND	ND	ND	ND	11	ND	ND	59
CC87L7S 3+50E	.1	4.00	9	ND	41	6	.44	.5	26	69	157	5.19	.01	1.06	496	3	.14	52	.03	8	ND	ND	ND	ND	14	ND	ND	87
CC87L7S 4+00E	.1	4.25	15	ND	43	6	.40	.6	22	68	117	5.40	.01	1.03	431	4	.14	43	.04	8	ND	ND	ND	ND	15	ND	5	87
CC87L7S 4+50E	.1	4.30	ND	ND	44	ND	.30	.3	20	70	126	5.48	.01	.83	392	4	.13	37	.05	9	ND	ND	5	ND	16	ND	ND	75
CC87L7S 5+00E	.1	3.07	3	ND	24	5	.30	.8	13	50	92	5.24	.01	.46	316	2	.11	18	.06	21	ND	ND	ND	ND	18	ND	ND	44
CC87L7S 0+50W	.1	3.75	ND	ND	42	ND	.04	.1	14	22	74	7.10	.01	.73	663	2	.19	11	.15	2	ND	ND	ND	2	3	ND	ND	130
CC87L7S 1+00W	.1	3.77	ND	ND	55	ND	.16	.1	17	25	69	5.89	.02	.94	1362	2	.15	11	.14	2	ND	ND	ND	1	10	ND	ND	97
CC87L7S 1+50W	.1	3.18	ND	ND	103	ND	.70	.1	26	33	75	5.32	.04	1.56	3351	1	.15	33	.08	6	ND	ND	ND	1	25	ND	ND	96
CC87L7S 2+00W	.1	4.04	ND	ND	61	ND	.17	.1	15	25	59	5.19	.05	1.08	1157	2	.14	13	.08	5	ND	ND	ND	2	7	ND	4	97
CC87L7S 2+50W	.1	4.14	ND	ND	55	ND	.10	.1	19	21	80	5.37	.08	1.18	886	3	.15	14	.10	7	ND	ND	ND	2	5	ND	ND	103
CC87L7S 3+00W	.1	3.44	ND	ND	44	ND	.05	.1	17	14	43	6.12	.11	.60	637	1	.16	4	.06	3	ND	ND	ND	2	3	ND	ND	132
CC87L7S 3+50W	.1	2.93	ND	ND	30	ND	.03	.3	9	18	52	5.87	.17	.65	496	1	.15	9	.08	3	ND	ND	ND	2	3	ND	ND	94
CC87L8N 0+00BL	.1	3.67	ND	ND	183	ND	.72	.1	12	21	56	6.41	.15	.64	476	2	.17	11	.07	ND	ND	ND	ND	2	19	ND	ND	117
CC87L8N 0+50W	.1	3.85	ND	ND	88	ND	.26	.1	20	40	53	[illegible]	.17	.69	542	2	.15	22	.08	7	ND	ND	ND	1	12	ND	ND	130
CC87L8N 1+00W	.1	2.97	ND	ND	36	ND	.13	.1	10	31	16	5.23	.19	.70	408	1	.12	6	.04	11	ND	ND	ND	1	10	ND	ND	44
CC87L8N 1+50W	.1	3.45	ND	ND	46	ND	.27	.1	12	28	44	5.14	.20	.68	1111	2	.12	11	.13	12	ND	ND	ND	1	20	ND	ND	70
CC87L8N 2+00W	.1	4.15	ND	ND	87	ND	.25	.1	20	22	47	4.62	.20	.89	1620	3	.14	16	.08	14	ND	ND	ND	1	12	ND	ND	143
CC87L8N 2+50W	.1	1.67	ND	ND	29	ND	.15	.2	7	11	11	4.57	.24	.28	283	ND	.10	4	.02	28	ND	ND	ND	ND	15	ND	ND	38
CC87L8N 3+00W	.1	3.16	ND	ND	21	ND	.16	.1	8	31	36	5.66	.30	.60	268	1	.13	10	.06	7	ND	ND	ND	1	7	ND	ND	48
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MN PPM	MO PPM	NA %	NI PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	W PPM	ZN PPM
CC87L8N 3+50W	.1	3.29	ND	ND	52	ND	.21	.6	10	18	18	4.40	.01	.96	481	1	.13	15	.05	2	ND	ND	ND	2	6	ND	ND	66
CC87L8N 4+00W	.1	2.72	ND	ND	47	ND	.16	.5	10	22	23	3.79	.01	.66	543	1	.10	10	.04	6	ND	ND	ND	1	7	ND	ND	55
CC87L8N 4+50W	.1	4.49	ND	ND	64	ND	.20	.3	19	36	65	5.52	.01	.85	940	3	.16	18	.15	4	ND	ND	ND	2	9	ND	ND	124
CC87L8N 5+00W	.1	3.96	ND	ND	48	ND	.15	.5	12	27	74	6.59	.01	.73	461	3	.17	12	.09	16	ND	ND	ND	2	8	ND	ND	92
CC87L8N 5+50W	.1	2.49	ND	ND	208	ND	1.00	.4	8	13	28	2.67	.01	.38	1134	ND	.06	8	.07	8	ND	ND	ND	1	36	ND	ND	64
CC87L8N 6+00W	.1	1.86	ND	ND	48	ND	.29	.4	7	14	23	3.60	.01	.48	318	ND	.10	5	.06	13	ND	ND	ND	ND	16	ND	ND	53
CC87L8N 6+50W	.1	2.59	ND	ND	43	ND	.19	1.1	9	25	27	5.05	.01	.76	323	ND	.13	7	.04	4	ND	ND	ND	1	10	ND	ND	50
CC87L8N 7+00W	.1	3.42	ND	ND	316	ND	1.66	.6	16	25	34	3.93	.01	.50	1274	1	.11	10	.07	2	ND	ND	ND	2	46	ND	ND	91
CC87L8N 7+50W	.1	4.15	ND	ND	388	ND	.64	.6	18	32	49	5.82	.01	.95	812	2	.17	18	.05	1	ND	ND	ND	2	22	ND	ND	115
CC87L8N 8+00W	.1	5.42	ND	ND	290	ND	.28	.6	22	25	27	6.57	.01	1.45	537	4	.19	12	.06	1	ND	ND	ND	2	12	ND	7	112
CC87L8N 8+50W	.1	2.86	ND	ND	53	ND	.13	.7	15	44	34	6.74	.01	.80	545	ND	.17	10	.05	7	ND	ND	ND	1	9	ND	ND	71
CC87L8N 9+00W	.1	3.17	ND	ND	266	ND	.95	.5	14	24	53	4.62	.01	.76	2774	1	.13	7	.13	5	ND	ND	ND	1	31	ND	ND	125
CC87L8N 9 50W	.1	3.45	ND	ND	61	ND	.18	.5	10	19	48	4.32	.01	.67	393	1	.13	9	.10	7	ND	ND	ND	1	8	ND	ND	102
CC87L8N 10+00W	.1	2.09	ND	ND	65	ND	.22	.6	12	20	17	4.71	.01	.93	597	ND	.13	7	.05	10	ND	ND	ND	ND	12	ND	ND	64
DETECTION LIMIT	.1	.01	3	3	1	3	.01	.1	1	1	1	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	1	5	3	1

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870627 GA JOB NUMBER: 870627 ASHWORTH EXPLORATION LTD.

Cous Creek

SAMPLE # (Soils)	Au ppb
CC-87 L 0+00N 0+00BL	5
CC-87 L 0+00N 0+50E	nd
CC-87 L 0+00N 1+00E	nd
CC-87 L 0+00N 1+50E	10
CC-87 L 0+00N 2+00E	nd
CC-87 L 0+00N 2+50E	10
CC-87 L 0+00N 3+00E	nd
CC-87 L 0+00N 3+50E	nd
CC-87 L 0+00N 4+00E	nd
CC-87 L 0+00N 4+50E	10
CC-87 L 0+00N 5+00E	15
CC-87 L 0+00N 5+50E	10
CC-87 L 0+00N 6+00E	nd
CC-87 L 0+00N 6+50E	20
CC-87 L 0+00N 7+00E	nd
CC-87 L 0+00N 7+50E	15
CC-87 L 0+00N 8+00E	10
CC-87 L 0+00N 8+50E	5
CC-87 L 0+00N 9+00E	10
CC-87 L 0+00N 9+50E	5
CC-87 L 0+00N 10+00E	nd
CC-87 L 0+00N 10+50E	10
CC-87 L 0+00N 11+00E	nd
CC-87 L 0+00N 0+50W	5
CC-87 L 0+00N 1+00W	5
CC-87 L 0+00N 1+50W	20
CC-87 L 0+00N 2+00W	10
CC-87 L 0+00N 2+50W	5
CC-87 L 0+00N 3+50W	15
CC-87 L 0+00N 4+00W	10
CC-87 L 0+00N 4+50W	10
CC-87 L 0+00N 5+00W	5
CC-87 L 0+00N 5+50W	25
CC-87 L 0+00N 6+00W	25
CC-87 L 0+00N 6+50W	10
CC-87 L 0+00N 7+00W	10
CC-87 L 0+00N 7+50W	10
CC-87 L 0+00N 8+00W	nd
CC-87 L 0+00N 8+50W	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 0+00N 9+00W	5
CC-87 L 0+00N 9+50W	nd
CC-87 L 0+00N 10+00W	10
CC-87 L 0+00N 10+50W	10
CC-87 L 0+00N 11+00W	10
CC-87 L 0+00N 11+50W	nd
CC-87 L 0+00N 12+00W	10
CC-87 L 0+00N 12+50W	10
CC-87 L 0+00N 13+00W	10
CC-87 L 0+00N 13+50W	20
CC-87 L 0+00N 14+00W	5
CC-87 L 0+00N 14+50W	5
CC-87 L 0+00N 15+00W	20
CC-87 L 0+00N 15+50W	nd
CC-87 L 0+00N 16+00W	5
CC-87 L 0+00N 16+50W	10
CC-87 L 0+00N 17+00W	10
CC-87 L 0+00N 17+50W	10
CC-87 L 0+00N 18+00W	40
CC-87 L 1+00N 0+00BL	5
CC-87 L 1+00N 0+50E	nd
CC-87 L 1+00N 1+00E	5
CC-87 L 1+00N 1+50E	5
CC-87 L 1+00N 2+00E	15
CC-87 L 1+00N 2+50E	5
CC-87 L 1+00N 3+00E	nd
CC-87 L 1+00N 3+50E	10
CC-87 L 1+00N 4+00E	60
CC-87 L 1+00N 4+50E	5
CC-87 L 1+00N 5+00E	15
CC-87 L 1+00N 0+50W	15
CC-87 L 1+00N 1+00W	10
CC-87 L 1+00N 1+50W	30
CC-87 L 1+00N 2+00W	30
CC-87 L 1+00N 2+50W	10
CC-87 L 1+00N 3+00W	20
CC-87 L 1+00N 3+50W	20
CC-87 L 1+00N 4+00W	10
CC-87 L 1+00N 4+50W	20
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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SAMPLE #	Au ppb
CC-87 L 1+00N 5+00W	10
CC-87 L 1+00S 0+00BL	10
CC-87 L 1+00S 0+50E	30
CC-87 L 1+00S 1+00E	10
CC-87 L 1+00S 1+50E	nd
CC-87 L 1+00S 2+00E	nd
CC-87 L 1+00S 2+50E	5
CC-87 L 1+00S 3+00E	10
CC-87 L 1+00S 3+50E	20
CC-87 L 1+00S 4+00E	20
CC-87 L 1+00S 4+50E	5
CC-87 L 1+00S 5+00E	10
CC-87 L 1+00S 0+50W	10
CC-87 L 1+00S 1+00W	nd
CC-87 L 1+00S 1+50W	10
CC-87 L 1+00S 2+00W	10
CC-87 L 1+00S 3+00W	20 -
CC-87 L 1+00S 3+50W	10
CC-87 L 1+00S 4+00W	10
CC-87 L 2+00N 0+50E	15
CC-87 L 2+00N 1+00E	10
CC-87 L 2+00N 1+50E	10
CC-87 L 2+00N 2+00E	10
CC-87 L 2+00N 2+50E	10
CC-87 L 2+00N 3+00E	25 -
CC-87 L 2+00N 3+50E	25
CC-87 L 2+00N 4+00E	10
CC-87 L 2+00N 4+50E	5
CC-87 L 2+00N 5+00E	10
CC-87 L 2+00N 5+50E	20 -
CC-87 L 2+00N 6+00E	15
CC-87 L 2+00N 6+50E	10
CC-87 L 2+00N 7+00E	10
CC-87 L 2+00N 7+50E	10
CC-87 L 2+00N 8+00E	20 -
CC-87 L 2+00N 8+50E	20
CC-87 L 2+00N 9+00E	10
CC-87 L 2+00N 9+50E	60
CC-87 L 2+00N 10+00E	60
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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VANCOUVER, B.C. V5L 1L6
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SAMPLE #	Au ppb
CC-87 L 2+00N 0+00BL A	10
CC-87 L 2+00N 0+00W B	10
CC-87 L 2+00N 0+50W A	5
CC-87 L 2+00N 0+50W B	10
CC-87 L 2+00N 1+00W A	10
CC-87 L 2+00N 1+00W B	20
CC-87 L 2+00N 1+50W A	5
CC-87 L 2+00N 1+50W B	15
CC-87 L 2+00N 2+00W A	10
CC-87 L 2+00N 2+00W B	5
CC-87 L 2+00N 2+50W A	10
CC-87 L 2+00N 2+50W B	15
CC-87 L 2+00N 3+00W A	10
CC-87 L 2+00N 3+00W B	10
CC-87 L 2+00N 3+50W A	5
CC-87 L 2+00N 3+50W B	10
CC-87 L 2+00N 4+00W A	5
CC-87 L 2+00N 4+00W B	10
CC-87 L 2+00N 4+50W A	15
CC-87 L 2+00N 4+50W B	10
CC-87 L 2+00N 5+00W A	5
CC-87 L 2+00N 5+00W B	10
CC-87 L 2+00N 5+50W A	35
CC-87 L 2+00N 5+50W B	10
CC-87 L 2+00N 6+00W A	140
CC-87 L 2+00N 6+00W B	20
CC-87 L 2+00N 6+50W A	10
CC-87 L 2+00N 6+50W B	10
CC-87 L 2+00N 7+00W A	15
CC-87 L 2+00N 7+00W B	20
CC-87 L 2+00N 7+50W A	10
CC-87 L 2+00N 7+50W B	10
CC-87 L 2+00N 8+00W A	5
CC-87 L 2+00N 8+00W B	10
CC-87 L 2+00N 8+50W A	15
CC-87 L 2+00N 8+50W B	15
CC-87 L 2+00N 9+00W A	20
CC-87 L 2+00N 9+00W B	20
CC-87 L 2+00N 9+50W A	20
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 2+00N 9+50W B	10
CC-87 L 2+00N 10+00W A	10
CC-87 L 2+00N 10+00W B	10
CC-87 L 2+00N 10+50W A	5
CC-87 L 2+00N 10+50W B	nd
CC-87 L 2+00N 11+00W A	15 –
CC-87 L 2+00N 11+00W B	10
CC-87 L 2+00N 11+50W A	nd
CC-87 L 2+00N 11+50W B	10
CC-87 L 2+00N 12+00W A	nd
CC-87 L 2+00N 12+00W B	nd
CC-87 L 2+00N 12+50W A	20 –
CC-87 L 2+00N 12+50W B	5
CC-87 L 2+00N 13+00W A	10
CC-87 L 2+00N 13+00W B	nd
CC-87 L 2+00N 13+50W A	nd
CC-87 L 2+00N 13+50W B	5
CC-87 L 2+00N 14+00W A	5
CC-87 L 2+00N 14+00W B	10
CC-87 L 2+00N 14+50W A	5
CC-87 L 2+00N 14+50W B	5
CC-87 L 2+00N 15+00W A	5
CC-87 L 2+00N 15+00W B	5
CC-87 L 2+00N 15+50W A	5
CC-87 L 2+00N 15+50W B	10
CC-87 L 2+00N 16+00W	nd
CC-87 L 2+00N 16+50W A	5
CC-87 L 2+00N 16+50W B	5
CC-87 L 2+00N 16+50W C	nd
CC-87 L 2+00N 17+00W A	5
CC-87 L 2+00N 17+00W B	10
CC-87 L 2+00N 17+50W A	5
CC-87 L 2+00N 17+50W B	5
CC-87 L 2+00N 18+00W	10
CC-87 L 2+00N 18+50W	10
CC-87 L 2+00N 19+00W	5
CC-87 L 2+00N 19+50W	5
CC-87 L 2+00N 20+00W	nd
CC-87 L 2+00S 0+00BL	5
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870627 GA JOB NUMBER: 870627 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
CC-87 L 2+00S 0+50E	10
CC-87 L 2+00S 1+00E	10
CC-87 L 2+00S 1+50E	10
CC-87 L 2+00S 2+00E	nd
CC-87 L 2+00S 2+50E	65
CC-87 L 2+00S 3+00E	10
CC-87 L 2+00S 3+50E	15
CC-87 L 2+00S 4+00E	10
CC-87 L 2+00S 4+50E	20
CC-87 L 2+00S 5+00E	5
CC-87 L 2+00S 5+50E	nd
CC-87 L 2+00S 6+00E	5
CC-87 L 2+00S 6+50E	nd
CC-87 L 2+00S 7+00E	10
CC-87 L 2+00S 7+50E	nd
CC-87 L 2+00S 8+00E	15
CC-87 L 2+00S 8+50E	nd
CC-87 L 2+00S 9+00E	nd
CC-87 L 2+00S 9+50E	20
CC-87 L 2+00S 10+00E	5
CC-87 L 2+00S 10+50E	5
CC-87 L 2+00S 0+50W	10
CC-87 L 2+00S 1+00W	nd
CC-87 L 2+00S 1+50W	150
CC-87 L 2+00S 2+00W	10
CC-87 L 2+00S 2+50W	10
CC-87 L 2+00S 3+00W	15
CC-87 L 2+00S 3+50W	5
CC-87 L 2+00S 4+00W	5
CC-87 L 2+00S 4+50W	35
CC-87 L 2+00S 5+00W	15
CC-87 L 2+00S 5+50W	5
CC-87 L 2+00S 6+00W	5
CC-87 L 2+00S 6+50W	20
CC-87 L 2+00S 7+00W	nd
CC-87 L 2+00S 7+50W	10
CC-87 L 2+00S 8+00W	10
CC-87 L 2+00S 8+50W	5
CC-87 L 2+00S 9+00W	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C V7P 2S3
(604) 986-5211 TELEX 04-352578

BRANCH OFFICE
1630 PANDORA ST
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870627 GA   JOB NUMBER: 870627   ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
CC-87 L 2+00S 9+50W	5
CC-87 L 2+00S 10+00W	nd
CC-87 L 2+00S 10+50W	nd
CC-87 L 2+00S 11+00W	nd
CC-87 L 2+00S 11+50W	10
CC-87 L 2+00S 12+00W	5
CC-87 L 2+00S 12+50W	nd
CC-87 L 2+00S 13+00W	nd
CC-87 L 3+00N 0+00BL	10
CC-87 L 3+00N 0+50E	nd
CC-87 L 3+00N 1+00E	5
CC-87 L 3+00N 1+50E	nd
CC-87 L 3+00N 2+00E	nd
CC-87 L 3+00N 2+50E	10
CC-87 L 3+00N 3+00E	nd
CC-87 L 3+00N 3+50E	nd
CC-87 L 3+00N 4+00E	10
CC-87 L 3+00N 4+50E	15
CC-87 L 3+00N 5+00E	10
CC-87 L 3+00N 0+50W	nd
CC-87 L 3+00N 1+00W	5
CC-87 L 3+00N 1+50W	5
CC-87 L 3+00N 2+00W	5
CC-87 L 3+00N 2+50W	5
CC-87 L 3+00N 3+00W	15
CC-87 L 3+00N 3+50W	5
CC-87 L 3+00N 4+00W	nd
CC-87 L 3+00N 4+50W	nd
CC-87 L 3+00N 5+00W	5
CC-87 L 3+00S 0+50E	20
CC-87 L 3+00S 1+00E	nd
CC-87 L 3+00S 1+50E	5
CC-87 L 3+00S 2+00E	nd
CC-87 L 3+00S 2+50E	10
CC-87 L 3+00S 3+00E	10
CC-87 L 3+00S 3+50E	10
CC-87 L 3+00S 4+00E	5
CC-87 L 3+00S 4+50E	10
CC-87 L 3+00S 5+00E	5
DETECTION LIMIT	5

nd = none detected   -- = not analysed   is = insufficient sample

VGC

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870627 GA JOB NUMBER: 870627 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
CC-87 L 3+00S 0+00W	10
CC-87 L 3+00S 0+50W	10
CC-87 L 3+00S 1+00W	5
CC-87 L 3+00S 1+50W	10
CC-87 L 3+00S 2+00W	5
CC-87 L 3+00S 2+50W	25
CC-87 L 3+00S 3+00W	15
CC-87 L 3+00S 3+50W	15
CC-87 L 3+00S 4+00W	10
CC-87 L 4+00N 0+00BL	10
CC-87 L 4+00N 0+50E	5
CC-87 L 4+00N 1+00E	10
CC-87 L 4+00N 1+50E	nd
CC-87 L 4+00N 2+00E	nd
CC-87 L 4+00N 2+50E	10
CC-87 L 4+00N 3+00E	10
CC-87 L 4+00N 3+50E	10
CC-87 L 4+00N 4+00E	20
CC-87 L 4+00N 4+50E	15
CC-87 L 4+00N 5+00E	25
CC-87 L 4+00N 5+50E	15
CC-87 L 4+00N 6+00E	nd
CC-87 L 4+00N 6+50E	nd
CC-87 L 4+00N 7+00E	10
CC-87 L 4+00N 7+50E	5
CC-87 L 4+00N 8+00E	10
CC-87 L 4+00N 8+50E	20
CC-87 L 4+00N 9+00E	20
CC-87 L 4+00N 9+50E	5
CC-87 L 4+00N 10+00E	10
CC-87 L 4+00N 0+50W	10
CC-87 L 4+00N 1+00W	5
CC-87 L 4+00N 1+50W	nd
CC-87 L 4+00N 2+00W	15
CC-87 L 4+00N 2+50W	35
CC-87 L 4+00N 3+00W	5
CC-87 L 4+00N 3+50W	10
CC-87 L 4+00N 4+00W	10
CC-87 L 4+00N 4+50W	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE
NORTH VANCOUVER, B C V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST
VANCOUVER, B C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 4+00N 5+00W	70
CC-87 L 4+00N 5+50W	25
CC-87 L 4+00N 6+00W	5
CC-87 L 4+00N 6+50W	5
CC-87 L 4+00N 7+00W	5
CC-87 L 4+00N 7+50W	15
CC-87 L 4+00N 8+00W	nd
CC-87 L 4+00N 8+50W	10
CC-87 L 4+00N 9+00W	20
CC-87 L 4+00N 9+50W	5
CC-87 L 4+00N 10+00W	10
CC-87 L 4+00N 10+50W	nd
CC-87 L 4+00N 11+00W	10
CC-87 L 4+00N 11+50W	5
CC-87 L 4+00N 12+00W	15
CC-87 L 4+00N 12+50W	5
CC-87 L 4+00N 13+00W	20
CC-87 L 4+00N 13+50W	10
CC-87 L 4+00N 14+00W	15
CC-87 L 4+00N 14+50W	10
CC-87 L 4+00N 15+00W	15
CC-87 L 4+00N 15+50W	5
CC-87 L 4+00N 16+00W	nd
CC-87 L 4+00N 16+50W	nd
CC-87 L 4+00N 17+00W	20
CC-87 L 4+00N 17+50W	15
CC-87 L 4+00N 18+00W	15
CC-87 L 4+00N 18+50W	15
CC-87 L 4+00N 19+00W	10
CC-87 L 4+00N 19+50W	nd
CC-87 L 4+00N 20+00W	nd
CC-87 L 4+00N 20+50W	15
CC-87 L 4+00N 21+00W	5
CC-87 L 4+00N 21+50W	nd
CC-87 L 4+00N 22+00W	10
CC-87 L 4+00N 22+50W	10
CC-87 L 4+00N 23+00W	15
CC-87 L 4+00N 23+50W	20
CC-87 L 4+00N 24+00W	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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1630 PANDORA ST.
VANCOUVER, B C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 4+00N 24+50W	15
CC-87 L 4+00N 25+00W	5
CC-87 L 4+00S 0+50E	10
CC-87 L 4+00S 1+00E	15
CC-87 L 4+00S 1+50E	25
CC-87 L 4+00S 2+00E	20
CC-87 L 4+00S 2+50E	5
CC-87 L 4+00S 3+00E	35
CC-87 L 4+00S 3+50E	10
CC-87 L 4+00S 4+00E	10
CC-87 L 4+00S 4+50E	400
CC-87 L 4+00S 5+00E	nd
CC-87 L 4+00S 0+00W	25
CC-87 L 4+00S 0+50W	25
CC-87 L 4+00S 1+00W	15
CC-87 L 4+00S 1+50W	5
CC-87 L 4+00S 2+00W	10
CC-87 L 4+00S 2+50W	5
CC-87 L 4+00S 3+00W	30
CC-87 L 4+00S 3+50W	15
CC-87 L 4+00S 4+00W	10
CC-87 L 4+00S 4+50W	25
CC-87 L 4+00S 5+00W	25
CC-87 L 4+00S 5+50W	20
CC-87 L 4+00S 6+00W	10
CC-87 L 4+00S 6+50W	20
CC-87 L 4+00S 7+00W	10
CC-87 L 4+00S 7+50W	15
CC-87 L 4+00S 8+00W	5
CC-87 L 4+00S 8+50W	10
CC-87 L 4+00S 9+00W	5
CC-87 L 4+00S 9+50W	5
CC-87 L 4+00S 10+00W	5
CC-87 L 4+00S 10+50W	5
CC-87 L 4+00S 11+00W	5
CC-87 L 4+00S 11+50W	nd
CC-87 L 4+00S 12+00W	nd
CC-87 L 4+00S 12+50W	15
CC-87 L 4+00S 13+00W	nd
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VGC

VANGEOCHEM LAB LIMITED

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NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 4+00S 13+50W	nd
CC-87 L 4+00S 14+00W	nd
CC-87 L 4+00S 14+50W	15
CC-87 L 4+00S 15+00W	10
CC-87 L 4+00S 15+50W	nd
CC-87 L 4+00S 16+00W	20
CC-87 L 4+00S 16+50W	20
CC-87 L 4+00S 17+00W	20
CC-87 L 4+00S 17+50W	20
CC-87 L 5+00N 0+00BL	10
CC-87 L 5+00N 0+50E	20
CC-87 L 5+00N 1+00E	10
CC-87 L 5+00N 1+50E	10
CC-87 L 5+00N 2+00E	5
CC-87 L 5+00N 2+50E	10
CC-87 L 5+00N 3+00E	20
CC-87 L 5+00N 3+50E	55
CC-87 L 5+00N 4+00E	5
CC-87 L 5+00N 4+50E	10
CC-87 L 5+00N 5+00E	20
CC-87 L 5+00N 5+50E	20
CC-87 L 5+00N 5+75E	15
CC-87 L 5+00N 6+00E	5
CC-87 L 5+00N 6+50E	10
CC-87 L 5+00N 7+00E	10
CC-87 L 5+00N 7+50E	10
CC-87 L 5+00N 8+00E	10
CC-87 L 5+00N 8+50E	10
CC-87 L 5+00N 9+00E	15
CC-87 L 5+00N 9+50E	15
CC-87 L 5+00N 10+00E	10
CC-87 L 5+00N 3+00W	15
CC-87 L 5+00N 3+50W	10
CC-87 L 5+00N 4+00W	10
CC-87 L 5+00N 4+50W	10
CC-87 L 5+00N 5+00W	35
CC-87 L 5+00N 5+50W	10
CC-87 L 5+00N 6+00W	10
CC-87 L 5+00N 6+50W	20
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

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(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 5+00N 7+00W	5
CC-87 L 5+00N 7+50W	nd
CC-87 L 5+00N 8+00W	20
CC-87 L 5+00N 8+50W	10
CC-87 L 5+00N 9+00W	5
CC-87 L 5+00N 9+50W	nd
CC-87 L 5+00N 10+00W	10
CC-87 L 5+00S 0+50E	nd
CC-87 L 5+00S 1+00E	5
CC-87 L 5+00S 1+50E	nd
CC-87 L 5+00S 2+00E	10
CC-87 L 5+00S 2+50E	nd
CC-87 L 5+00S 3+00E	nd
CC-87 L 5+00S 3+50E	nd
CC-87 L 5+00S 4+00E	10
CC-87 L 5+00S 4+50E	nd
CC-87 L 5+00S 5+00E	10
CC-87 L 5+00S 0+00W	nd
CC-87 L 5+00S 0+50W	nd
CC-87 L 5+00S 1+00W	10
CC-87 L 5+00S 1+50W	10
CC-87 L 5+00S 2+00W	nd
CC-87 L 5+00S 2+50W	nd
CC-87 L 5+00S 3+00W	nd
CC-87 L 5+00S 3+50W	nd
CC-87 L 5+50S 3+50W	15
CC-87 L 6+00N 0+50E	10
CC-87 L 6+00N 1+00E	nd
CC-87 L 6+00N 1+50E	nd
CC-87 L 6+00N 2+00E	nd
CC-87 L 6+00N 2+50E	10
CC-87 L 6+00N 3+00E	nd
CC-87 L 6+00N 3+50E	nd
CC-87 L 6+00N 4+00E	nd
CC-87 L 6+00N 4+50E	nd
CC-87 L 6+00N 5+00E	10
CC-87 L 6+00N 5+50E	10
CC-87 L 6+00N 6+00E	nd
CC-87 L 6+00N 6+50E	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

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1521 PEMBERTON AVE
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BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 870627 GA JOB NUMBER: 870627 ASHWORTH EXPLORATION LTD.

SAMPLE #	Au ppb
CC-87 L 6+00N 7+00E	5
CC-87 L 6+00N 7+10E	20
CC-87 L 6+00N 7+50E	10
CC-87 L 6+00N 8+00E	10
CC-87 L 6+00N 8+50E	nd
CC-87 L 6+00N 9+00E	10
CC-87 L 6+00N 9+50E	10
CC-87 L 6+00N 10+00E	nd
CC-87 L 6+00N 0+00W	30
CC-87 L 6+00N 0+50W	15
CC-87 L 6+00N 1+00W	5
CC-87 L 6+00N 1+50W	10
CC-87 L 6+00N 2+00W	30
CC-87 L 6+00N 2+50W	20
CC-87 L 6+00N 3+00W	20
CC-87 L 6+00N 3+50W	25
CC-87 L 6+00N 4+00W	10
CC-87 L 6+00N 4+50W	nd
CC-87 L 6+00N 5+00W	20
CC-87 L 6+00N 5+50W	10
CC-87 L 6+00N 5+85W	nd
CC-87 L 6+00N 6+00W	5
CC-87 L 6+00N 6+50W	nd
CC-87 L 6+00N 7+00W	5
CC-87 L 6+00N 7+50W	15
CC-87 L 6+00N 8+00W	10
CC-87 L 6+00N 8+50W	15
CC-87 L 6+00N 9+00W	5
CC-87 L 6+00N 9+50W	10
CC-87 L 6+00N 10+00W A	20
CC-87 L 6+00N 10+00W B	10
CC-87 L 6+00N 10+50W	10
CC-87 L 6+00N 11+00W	15
CC-87 L 6+00N 11+50W	10
CC-87 L 6+00N 12+00W	10
CC-87 L 6+00N 12+50W	5
CC-87 L 6+00N 13+00W	10
CC-87 L 6+00N 13+50W	10
CC-87 L 6+00N 14+00W	15
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

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VANCOUVER, B C V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 6+00N 14+50W	10
CC-87 L 6+00N 15+00W	15
CC-87 L 6+00N 15+50W	5
CC-87 L 6+00N 16+00W	10
CC-87 L 6+00N 16+50W	10
CC-87 L 6+00N 17+00W	nd
CC-87 L 6+00N 17+50W	nd
CC-87 L 6+00N 18+00W	nd
CC-87 L 6+00N 18+50W	nd
CC-87 L 6+00N 19+00W	nd
CC-87 L 6+00N 19+50W	10
CC-87 L 6+00N 20+00W	nd
CC-87 L 6+00N 20+50W	nd
CC-87 L 6+00N 21+00W	nd
CC-87 L 6+00N 21+50W	10
CC-87 L 6+00N 22+00W	10
CC-87 L 6+00N 22+50W	10
CC-87 L 6+00N 23+00W	nd
CC-87 L 6+00N 23+50W	nd
CC-87 L 6+00N 24+00W	nd
CC-87 L 6+00N 24+50W	30
CC-87 L 6+00N 24+58W	nd
CC-87 L 6+00N 25+00W	nd
CC-87 L 6+00S 0+50E	nd
CC-87 L 6+00S 1+50E	5
CC-87 L 6+00S 2+00E	30
CC-87 L 6+00S 2+50E	nd
CC-87 L 6+00S 3+00E	nd
CC-87 L 6+00S 3+50E	nd
CC-87 L 6+00S 4+00E	nd
CC-87 L 6+00S 4+50E	nd
CC-87 L 6+00S 5+00E	nd
CC-87 L 6+00S 0+00W	nd
CC-87 L 6+00S 0+50W	10
CC-87 L 6+00S 1+00W	nd
CC-87 L 6+00S 1+50W	nd
CC-87 L 6+00S 2+00W	10
CC-87 L 6+00S 2+50W	10
CC-87 L 6+00S 3+00W	nd
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

VGC

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 6+00S 3+50W	nd
CC-87 L 7+00N 0+00W	10
CC-87 L 7+00N 0+50W	10
CC-87 L 7+00N 1+00W	nd
CC-87 L 7+00N 1+50W	nd
CC-87 L 7+00N 2+00W	nd
CC-87 L 7+00N 2+50W	25
CC-87 L 7+00N 3+00W	35
CC-87 L 7+00N 3+50W	75
CC-87 L 7+00N 4+00W	15
CC-87 L 7+00N 4+50W	25
CC-87 L 7+00N 5+00W	5
CC-87 L 7+00N 5+50W	5
CC-87 L 7+00N 6+00W	10
CC-87 L 7+00N 6+50W	5
CC-87 L 7+00S 0+50E	15
CC-87 L 7+00S 1+00E	5
CC-87 L 7+00S 1+50E	15
CC-87 L 7+00S 2+00E	15
CC-87 L 7+00S 2+50E	5
CC-87 L 7+00S 3+00E	nd
CC-87 L 7+00S 3+50E	nd
CC-87 L 7+00S 4+00E	5
CC-87 L 7+00S 4+50E	5
CC-87 L 7+00S 5+00E	nd
CC-87 L 7+00S 0+50W	nd
CC-87 L 7+00S 1+00W	nd
CC-87 L 7+00S 1+50W	10
CC-87 L 7+00S 2+00W	10
CC-87 L 7+00S 2+50W	10
CC-87 L 7+00S 3+00W	35
CC-87 L 7+00S 3+50W	5
CC-87 L 8+00N 0+00BL	5
CC-87 L 8+00N 0+50W	5
CC-87 L 8+00N 1+00W	10
CC-87 L 8+00N 1+50W	5
CC-87 L 8+00N 2+00W	5
CC-87 L 8+00N 2+50W	nd
CC-87 L 8+00N 3+00W	10
DETECTION LIMIT	5

nd = none detected -- = not analysed is = insufficient sample

VANGEOCHEM LAB LIMITED

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1521 PEMBERTON AVE.
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BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

SAMPLE #	Au ppb
CC-87 L 8+00N 3+50W	10
CC-87 L 8+00N 4+00W	75
CC-87 L 8+00N 4+50W	10
CC-87 L 8+00N 5+00W	40
CC-87 L 8+00N 5+50W	nd
CC-87 L 8+00N 6+00W	nd
CC-87 L 8+00N 6+50W	nd
CC-87 L 8+00N 7+00W	5
CC-87 L 8+00N 7+50W	5
CC-87 L 8+00N 8+00W	nd
CC-87 L 8+00N 8+50W	10
CC-87 L 8+00N 9+00W	nd
CC-87 L 8+00N 9+50W	nd
CC-87 L 8+00N 10+00W	nd

DETECTION LIMIT 5
nd = none detected -- = not analysed is = insufficient sample

GEOLOGY

TERTIARY
Later Intrusions
Dacite porphyry dyke

JURASSIC
Island Intrusions
Granodiorite, tonalite, diorite and altered dioritic rocks

EARLY JURASSIC
Bonanza Group
Volcanic rocks including andesite, dacite, volcanic porphyry and tuffs.

TRIASSIC
Vancouver Group
Parson Bay Formation : shale and argillite
Quatzino Formation : massive limestone
Karmutsen Formation : predominantly aphanitic volcanic and greenstone.

SYMBOLS

Geological contact (defined, approximate)
Fault (approximate)
Area of outcrop
Altitude of bedding (strike and dip)
Trench
R20 Rock sample location and number
Flagged grid line (50 m station spacing)
Property boundary
Claim boundary and Legal Corner Post
Logging road
Creek
Swamp or march

ABBREVIATIONS

sil	silicification	cha	chalcopyrite
mal	malacite	hem	hematization
py	pyrite	epi	epidote

ROCK ASSAYS

Sample No.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mn ppm	As ppm	Mo ppm	Sb ppm	Bi ppm
R 1	240	·1	9	7	24	712	20	3	4	ND
2	ND	·1	33	4	90	1312	ND	ND	ND	8
3	ND	·1	29	11	146	2053	ND	1	ND	9
4	ND	·1	13	10	43	678	4	4	6	ND
5	ND	·1	11	5	45	812	31	2	ND	3
6	ND	·1	209	11	98	1187	ND	ND	ND	5
7(N.S.)										
8	ND	·1	121	20	58	1204	90	ND	5	5
9	15	·1	272	21	96	301	72	4	10	15
10	ND	3·2	5752	9	82	307	ND	2	7	18
11	ND	·1	1465	8	125	984	ND	ND	ND	12
12	ND	·8	317	9	21	384	ND	5	ND	10
13	ND	2·7	3936	13	55	799	ND	3	3	25
14	ND	·1	577	10	65	686	ND	ND	ND	14
15	ND	·1	230	9	75	1429	ND	ND	ND	10
16	ND	·1	40	10	12	296	ND	5	3	13
17	ND	·1	39	9	10	347	ND	4	5	7
18	ND	·1	152	14	22	327	ND	1	4	ND
19	ND	·1	36	5	43	559	42	19	8	ND
20	ND	·1	5	7	33	771	4	4	ND	ND
21	ND	·1	4	19	69	986	ND	2	4	10
22	ND	·1	68	1	58	1164	47	ND	25	5
23	ND	·1	21	11	46	703	5	1	ND	ND
24	ND	·1	12	13	42	797	ND	1	ND	ND
25	ND	·1	872	8	30	1147	156	ND	5	6
26	10	9·5	53777	13	103	549	207	9	ND	33
27	60	11·1	86452	32	224	3851	21	6	ND	10
28	ND	17·7	71504	23	107	3065	21	5	ND	24
29	80	·1	212	13	20	1754	109	ND	ND	11
30	40	·1	337	13	3	3175	ND	2	ND	15
31	ND	·1	114	14	2	1816	ND	4	ND	6
32	ND	·1	93	12	24	2312	ND	9	3	5
33	ND	·1	10702	6	35	1140	ND	7	ND	15
34	40	9·8	44407	23	73	2072	8	3	5	27
35	40	·6	869	70	124	1420	239	4	4	25
36	ND	·1	231	8	89	1300	11	ND	6	ND
37	ND	·1	101	11	40	742	ND	ND	ND	15
38	ND	·1	130	10	7	1338	ND	ND	ND	4
39	40	·1	152	8	57	964	100	2	13	ND
40	20	1·1	2180	28	36	543	7	2	ND	ND
41	ND	·1	36	9	39	501	ND	3	ND	ND
42	1645	·1	6	90	63	600	9	13	ND	ND
43	10	·1	36	149	180	2306	5	2	10	ND

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,441

GEOLOGICAL ASSOCIATION OF CANADA
H. LAANELA
FELLOW

0 200 400 600 800 1000 metres

VETO RESOURCES LTD.

OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION

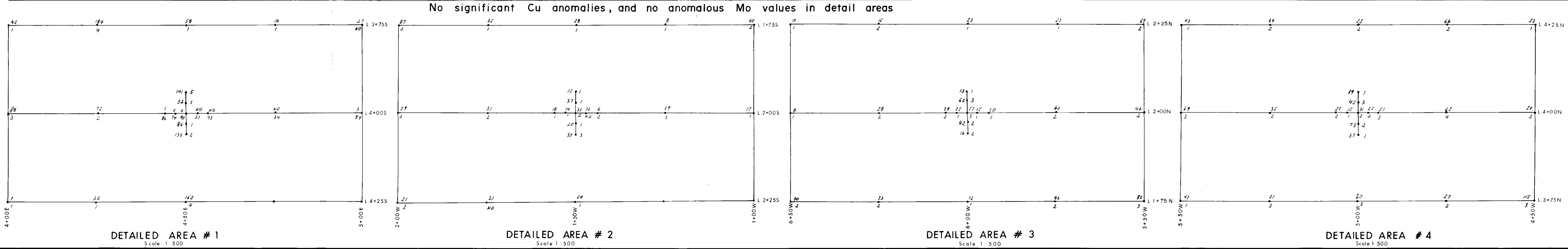
GEOLOGICAL MAP AND SURVEY GRID (1987)

Scale : 1 : 10000		By : F.Y.	Drawn : J.S.
Date : AUGUST 1987		Map : 1	

Ashworth Explorations Limited

OTTER
SPROAT
ALDER 1
ALDER 2
SKARN
ARBUTUS
Branch Road 202
Summit Road
Cous Creek logging road
Cous Creek
GEOLOGICAL BRANCH ASSESSMENT REPORT
17,441
Gold and Silver in detailed areas: > 25 ppb Au and > 0.6 ppm Ag are anomalous (contoured)
DETAILED AREA # 1
Scale 1:500
DETAILED AREA # 2
Scale 1:500
DETAILED AREA # 3
Scale 1:500
DETAILED AREA # 4
Scale 1:500
LEGEND
Grid with soil sample locations
Claim boundary (approximate) with legal corner post
Road
Creek
Swamp
Lake
Trench
GEOCHEMICAL REFERENCE
Gold contours at 25, 30 and 40 ppb
Au (ppb)
Ag (ppm)
Silver contours at 0.6, 0.8 and 1.0 ppm
nd — not detected
ns — no sample
GEOLOGICAL ASSOCIATION OF CANADA · FELLOW
H. LAANELA
0 100 200 300 400 500 metres
VETO RESOURCES LTD.
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION
GOLD and SILVER in SOIL
Scale 1 : 5000
By : F. Y. / H.L. Drawn : J. S.
Date : JULY 1987.
Map : 2
Ashworth Explorations Limited

No significant Cu anomalies, and no anomalous Mo values in detail areas



LEGEND

Grid with soil sample locations
Claim boundary (approximate) with legal corner post
Road
Creek
Swamp
Lake
Trench

GEOCHEMICAL REFERENCE :

Copper : contoured at 132, 170 and 209 ppm
Cu (ppm) / Mo (ppm)
Molybdenum : contoured at 6, 8 and 10 ppm

nd — not detected
ns — no sample

H. LAANELA
GEOLOGICAL ASSOCIATION OF CANADA · FELLOW ·

0 100 200 300 400 500 metres

VETO RESOURCES LTD.

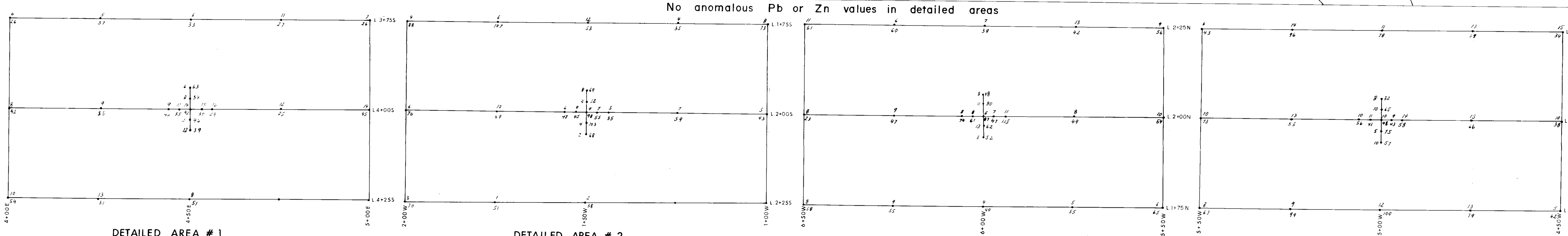
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION

COPPER and MOLYBDENUM in SOIL

Scale	1 : 5000	By : F. Y. / H.L. Drawn : J. S.	
Date :	JULY 1987.	Map :	3

Ashworth Explorations Limited

No anomalous Pb or Zn values in detailed areas



DETAILED AREA # 1
Scale 1:500

DETAILED AREA # 2
Scale 1:500

DETAILED AREA # 3
Scale 1:500

DETAILED AREA # 4
Scale 1:500

LEGEND

- Grid with soil sample locations
- Claim boundary (approximate) with legal corner post
- Road
- Creek
- Swamp
- Lake
- Trench

GEOCHEMICAL REFERENCE

Lead contoured at 20, 25 and 31 ppm

Pb (ppm) / Zn (ppm)

Zinc contoured at 146, 179 and 212 ppm

nd — not detected
ns — no sample

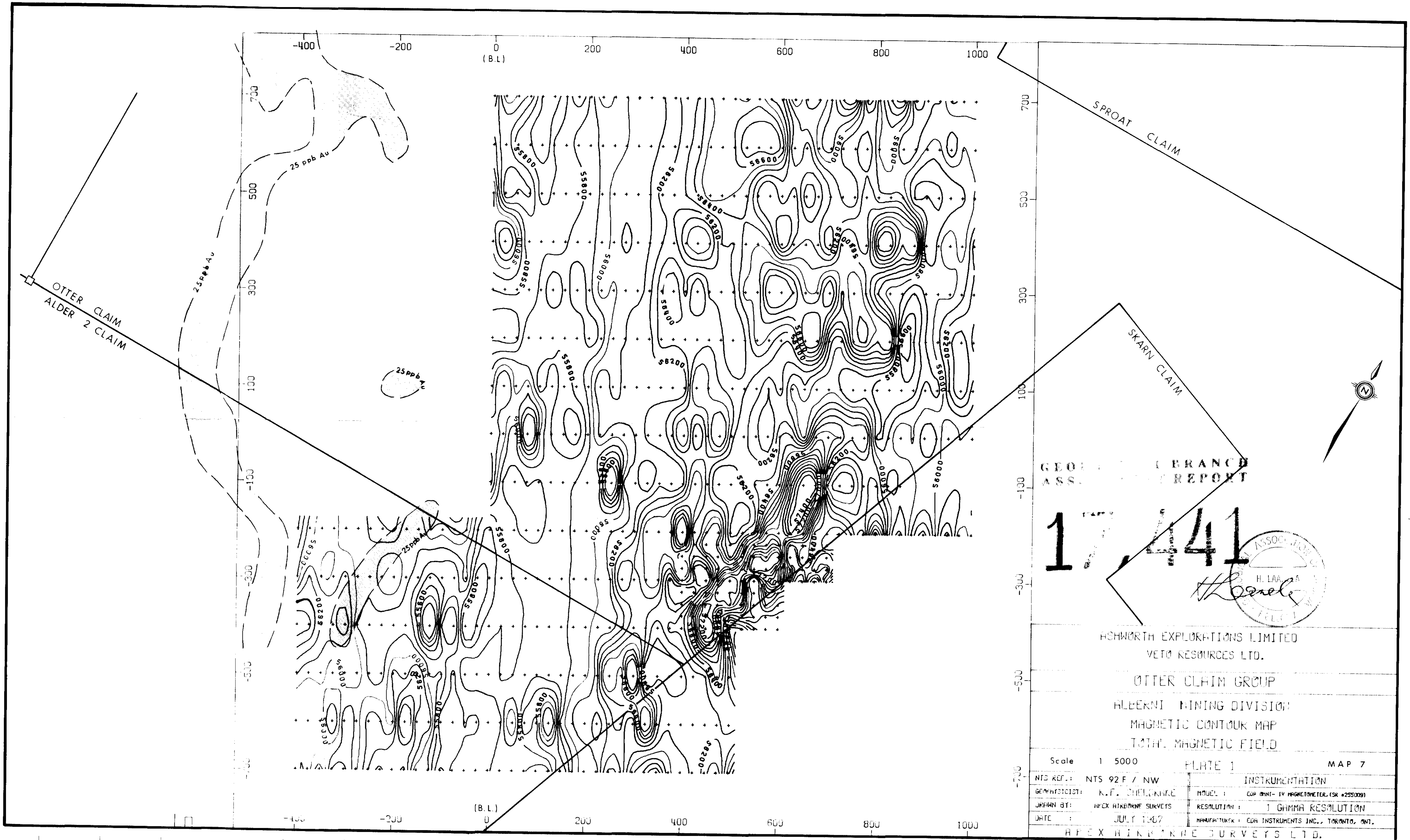
GEOLOGICAL ASSOCIATION OF CANADA · FELLOW · H. LAANELA

0 100 200 300 400 500 metres

VETO RESOURCES LTD.	
OTTER CLAIM GROUP COUS CREEK AREA ALBERNI MINING DIVISION	
LEAD and ZINC in SOIL	
Scale 1 : 5000	By : F.Y./H.L. Drawn : J.S.
Date : JULY 1987.	Map : 4
Ashworth Explorations Limited	


OTTER
SPROAT
ALDER 1
ALDER 2
SKARN
ARBUTUS
Branch Road 202
Summit Road
Cous Creek logging road
Cous Creek
GEOLOGICAL BRANCH ASSESSMENT REPORT
17,441
No significant As and Sb anomalies in detailed areas
DETAILED AREA # 1
DETAILED AREA # 2
DETAILED AREA # 3
DETAILED AREA # 4
LEGEND
Grid with soil sample locations
Claim boundary (approximate) with legal corner post
Road
Creek
Swamp
Lake
Trench
GEOCHEMICAL REFERENCE
Arsenic contours at 24, 34 and 43 ppm
As (ppm)
Sb (ppm)
Antimony contours at 7, 10 and 13 ppm
nd — not detected
ns — no sample
H. LAANELA
GEOLOGICAL ASSOCIATION OF CANADA · FELLOW ·
0 100 200 300 400 500 metres
VETO RESOURCES LTD.
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION
ARSENIC and ANTIMONY in SOIL
Scale 1 : 5000
By : F. Y. / H.L. Drawn : J. S.
Date : JULY 1987.
Map : 5
Ashworth Explorations Limited

OTTER
SPROAT
ALDER 1
ALDER 2
SKARN
ARBUTUS
Branch Road 202
Summit Road
Cous Creek logging road
Cous Creek
GEOLOGICAL BRANCH
ASSESSMENT REPORT
17,441
H. LAANELA
No anomalous Mn or Ba values in detailed areas
DETAILED AREA # 1
DETAILED AREA # 2
DETAILED AREA # 3
DETAILED AREA # 4
LEGEND
Grid with soil sample locations
Claim boundary (approximate) with legal corner post
Road
Creek
Swamp
Lake
Trench
GEOCHEMICAL REFERENCE
Manganese contours at 1750, 2300 and 2800 ppm
Mn (ppm)
Ba (ppm)
Barium contours at 130, 170 and 205 ppm
nd — not detected
ns — no sample
0 100 200 300 400 500 metres
VETO RESOURCES LTD.
OTTER CLAIM GROUP
COUS CREEK AREA
ALBERNI MINING DIVISION
MANGANESE and BARIUM in SOIL
Scale 1 : 5000
By : F. Y. / H.L. Drawn : J. S.
Date : JULY 1987.
Map : 6
Ashworth Explorations Limited



OTTER CLAIM
ALDER 2 CLAIM
SPROAT CLAIM
SKARN CLAIM
25 ppb Au
(B.L.)
-400
-200
0
200
400
600
800
1000
700
500
300
100
-100
-300
-500
-700
55800
56000
56200
56400
56600
57400
17,441
ASHWORTH EXPLORATIONS LIMITED
VETO RESOURCES LTD.
OTTER CLAIM GROUP
ALBERNI MINING DIVISION
MAGNETIC CONTOUR MAP
TOTAL MAGNETIC FIELD
Scale 1 5000
PLATE 1
MAP 7
NTS REF.: NTS 92 F / NW
GEOPHYSICIST: K.F. SHELGRAKE
DRAWN BY: APEX AIRBORNE SURVEYS
DATE : JULY 1987
INSTRUMENTATION
MODEL : EDA OMNI- IV MAGNETOMETER. (SR #255009)
RESOLUTION : 1 GAMMA RESOLUTION
MANUFACTURER : EDA INSTRUMENTS INC., TORONTO, ONT.
APEX AIRBORNE SURVEYS LTD.