

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

on the

CLIFF, CLIFF 1 TO 4, MAX 1 TO 4, DAVE 1 AND 2 CLAIMS

and

GREAT EASTERN (LOT 3437) AND COPPER KING (LOT 3065s) REV CG's

Hedley-Olalla Area
Osoyoos Mining Division

82E-4W, 5W

(49° 16' N. Lat., 119° 51' W. Long.)

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for

GOLDCLIFF RESOURCE CORPORATION
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

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SUMMARY AND RECOMMENDATIONS

The Cliff Property is located five kilometers north of Keremeos at Olalla, B.C.. Goldcliff Resource Corporation holds five modified grid and six two post mineral claims, and two reverted Crown Grants covering a total of 104 units. The property is located in the Osoyoos Mining Division.

The area has been the scene of exploration for base and precious metals since the late 1800's. A large number of properties have been explored in the area including the Sunrise, Something Good, Bullion, Golconda, Copper King and Dolphin. Approximately 20 kilometers northwest of the property at Hedley, Mascot Gold Mines Limited resumed production in the spring of 1987 at the Nickel Plate Mine.

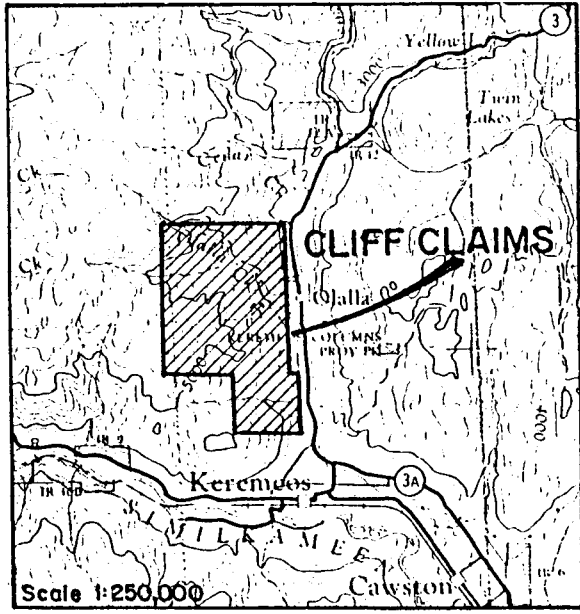
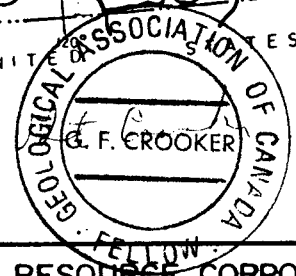
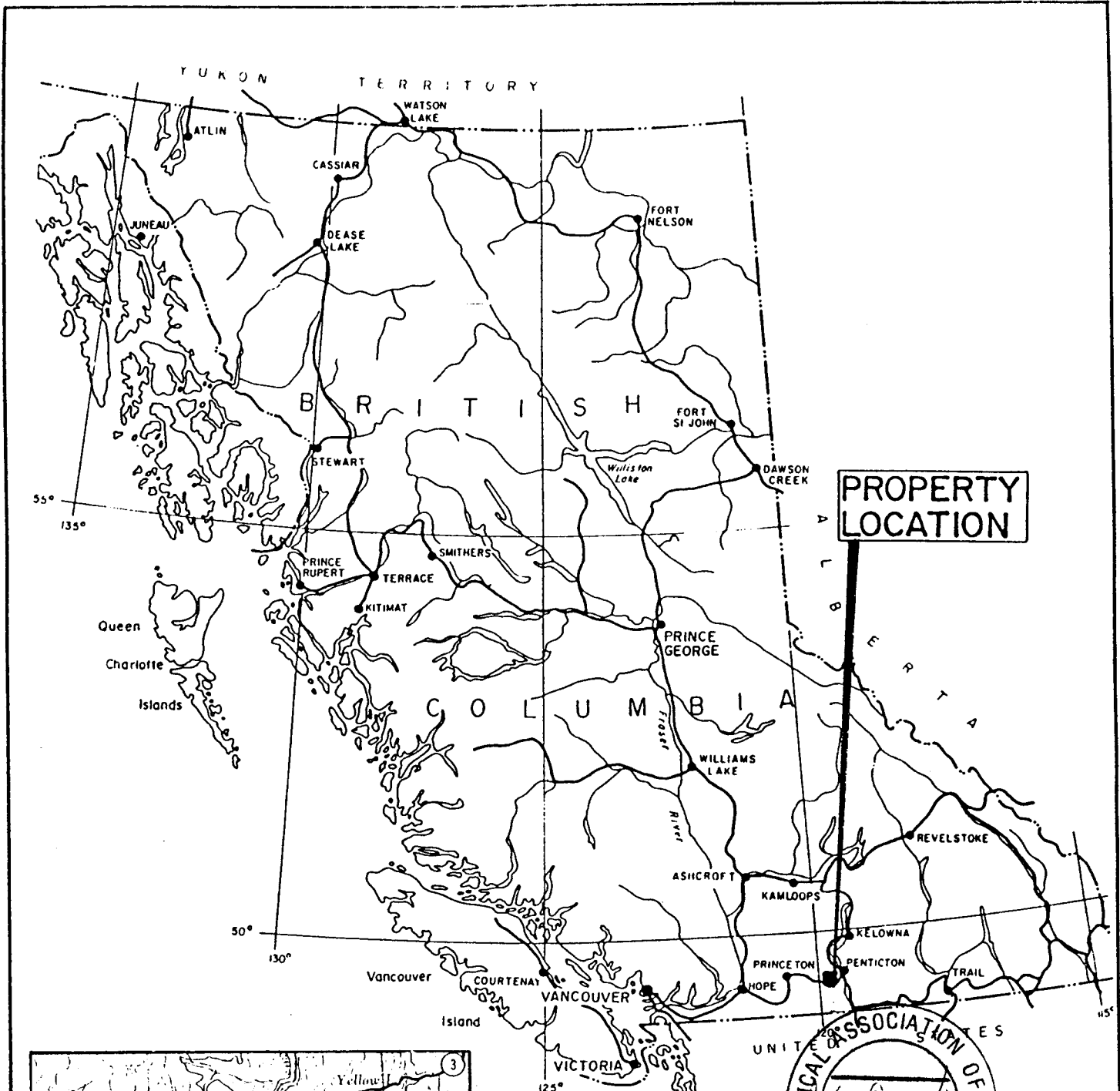
The Golconda and Copper King properties are within the claim group presently controlled by Goldcliff. Several extensive workings exist on the Golconda and a small mill has operated on the property several times in the past. Several other areas of the Cliff claim have been explored by other operators. A number of old hand trenches have exposed gold mineralization along the Cliff Zone (figure 3). Soil sampling in the area also delineated gold geochemical anomalies.

Goldcliff has been exploring the property since 1986 and a number of VLF-EM conductors, gold and multi-element soil geochemical anomalies and favourable geological structures have been outlined. The main zones of interest (figure 3) include the Cliff, Frank, Valley and Lee Zones. The program outlined by this report is an extension of previous work.

During 1990 Goldcliff acquired the Golconda Property (Max 1 to 4, Dave 1 and 2 claims) and the Copper King Reverted Crown Grant. These acquisitions give Goldcliff control of almost all of the area west of Highway 3A at Olalla.

The 1990 program concentrated on the Lee Zone and the Copper King. Work included establishing additional grid lines, soil sampling, VLF-EM and magnetometer surveying and prospecting.

On the Lee Zone, six additional lines of soil geochemical sampling closed out the large gold geochemical anomaly (Au-1). The anomaly (figure 12) trends north northeasterly-south southwesterly and is approximately 500 meters long by 200 meters wide. Several smaller copper (Cu-1, 2) and molybdenum (Mo-1, 2) anomalies occur coincidentally with the gold anomaly. Prospecting located an area of bleached, altered intrusive with fracturing and up to 10% pyrite occurring both along fractures and as disseminations. Assaying of this material gave up to 974 ppb gold and 742 ppm copper.



GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT

LOCATION MAP

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 200 400 KM.

SCALE : AS SHOWN	DATE : JAN. 1991
DRAWN BY : G.F.C.	FIGURE NO. 1

Several smaller gold and copper soil geochemical anomalies were also outlined, along with a number of VLF-EM conductors. No causes are known for these features at this time.

On the Copper King, four lines of soil sampling were carried out. This soil geochemical sampling outlined a copper anomaly (Cu-4) approximately 200 meters long by 150 meters wide. A small gold anomaly (Au-3) occurs coincidentally with the copper along the eastern portion of the anomaly.

Prospecting located a massive magnetite, pyrite skarn body centered at approximately 9850N & 9700E. This skarn contains minor amounts of chalcopyrite and malachite and appears to be the cause of at least some of anomaly Cu-4. A number of rock samples were taken from the skarn and these returned very low gold values. One sample gave a copper value of 10845 ppm and a number of samples gave between 2380 and 4058 ppm copper.

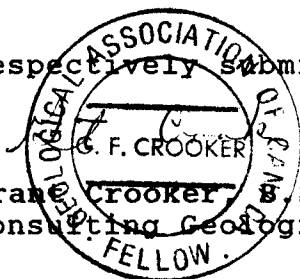
Conductor III is subparallel to the Golconda Shear Zone and may represent an extension of that zone.

Recommendations are as follows:

- 1) Prospecting, geological mapping and sampling should be carried out over the geochemical anomalies outlined on the Lee Zone. Emphasis should be placed on the area which gave the anomalous gold value of 974 ppb.
- 2) Prospecting, geological mapping and sampling should be carried out over the geochemical anomaly Cu-4 and the skarn zone on the Copper King.
- 3) The other target areas outlined by previous programs should also have continued exploration by geochemical sampling, prospecting, trenching and drilling if required.

Respectively submitted,

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1.0 INTRODUCTION

1.1 GENERAL

Field work was carried out on the Cliff Property from May 2 to November 20, 1990, by Grant Crooker, Geologist, and Lee Mollison, Field Assistant.

The program was carried out on the Copper King and Lee Zones and consisted of establishing grid lines, soil sampling, VLF-EM and magnetometer surveying and prospecting.

1.2 LOCATION AND ACCESS

The property (Figure 1) is located 5 kilometers north of Keremeos, near Olalla in southern British Columbia. The property lies between 49°13'15" and 49°17'15" north latitude and 119°49'30" and 119°53'15" west longitude (NTS 82E-4W, 5W).

Access to the property is via Highway 3A, then turning west at Olalla onto the two wheel drive Olalla Creek Road. This road along Olalla Creek gives access to the Dave 1 and 2 claims and portions of the Max 1 to 4, Cliff and Cliff 2 and 3 claims. An old four wheel drive mining road turning south from the main Olalla Creek Road gives access to the Great Eastern and Copper King claims, higher elevations of the Max 1 to 4 claims and eastern portions of the Cliff claim. Another four wheel drive road turning off the main Olalla Creek Road higher up the creek leads to the Manganese Zone at the western boundary of the Cliff 3 claim.

A man made trail leads to the western section of the Cliff claim and the Cliff 4 claim.

1.3 PHYSIOGRAPHY

The property is located in the Okanagan Highlands of southern British Columbia. Elevation varies from 550 to 1830 meters above sea level. Topography is steep with few level spots and precipitous cliffs occur at many locations on the property.

Olalla and Shuttle Creeks flow through the property and have water all year long. Several springs also occur on the property.

Vegetation varies from open range land to a forest cover of pine and fir trees. Some sections have heavy deadfall and thicker brush. Rattle snakes are also found in abundance on the lower elevations of the property.

1.4 PROPERTY AND CLAIM STATUS

During 1990 the Copper King, Max 1 to 4 and Dave 1 and 2 claims were added to the property.

The Cliff, Cliff 1 to 4, Copper King and Great Eastern claims (Figure 2) are owned by Grant Crooker of Keremeos, B.C., and are under option to and operated by Goldcliff Resources Corporation, 1505-409 Granville Street, Vancouver, B.C., V6C 1T2. The Max 1 to 4 and Dave 1 and 2 claims are owned outright by Goldcliff.

The property is located in the Osoyoos Mining Division and consists of five modified grid claims, six two post claims and two reverted Crown Grants covering 104 units.

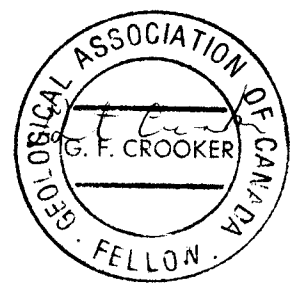
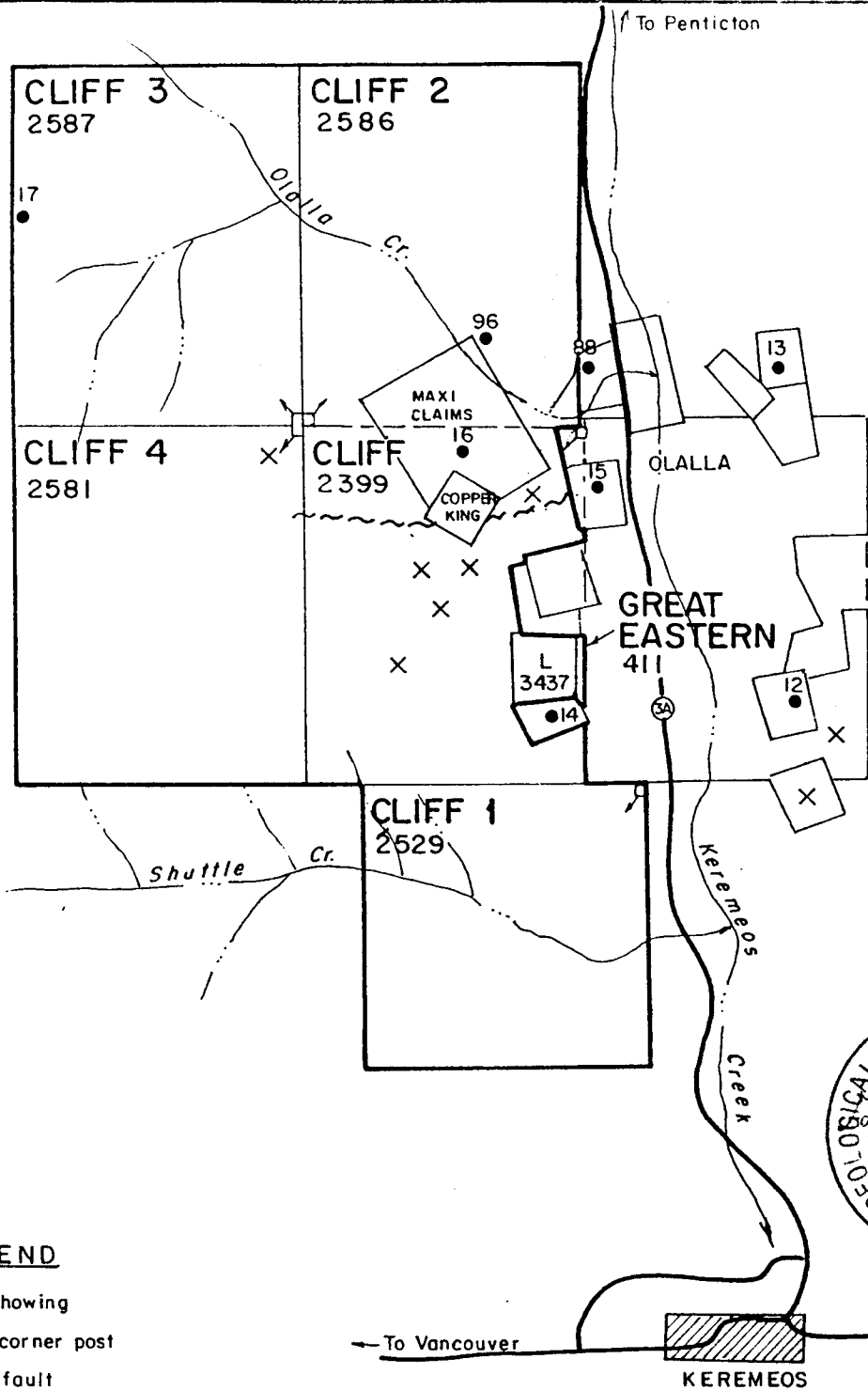
Claim	Units	Mining Division	Record No.	Record Date	Expiry Date
Cliff	20	Osoyoos	2399(4)	01/04/86	01/04/97
Cliff 1	16	Osoyoos	2529(10)	30/10/86	30/10/97
Cliff 2	20	Osoyoos	2586(3)	30/03/87	30/03/94*
Cliff 3	20	Osoyoos	2587(3)	30/03/87	30/03/94*
Cliff 4	20	Osoyoos	2581(3)	30/03/87	30/03/95*
Copper King	1	Osoyoos	3354(3)	15/03/90	15/03/98*
Great Eastern	1	Osoyoos	411(6)	01/06/78	01/06/97
Max 1	1	Osoyoos	31150	12/09/74	12/09/94
Max 2	1	Osoyoos	31151	12/09/74	12/09/94
Max 3	1	Osoyoos	31152	12/09/74	12/09/94
Max 4	1	Osoyoos	31153	12/09/74	12/09/94
Dave 1	1	Osoyoos	31002	09/07/74	09/07/94
Dave 2	1	Osoyoos	31218	22/10/74	22/07/94

* Upon acceptance of this report.

1.5 AREA AND PROPERTY HISTORY

The Goldcliff Property is located in the Olalla-Hedley Gold Camp in southern British Columbia. Mining activity has been carried out in this area since the 1880's. The property is located 20 kilometers southeast of Hedley, where Mascot Gold Mines Limited resumed production by open pit methods at the Nickel Plate Mine in the spring of 1987. Mascot recently announced (February 1991) that ore reserves are sufficient to enable production to continue until the end of 1993.

A number of mining properties have been explored in the Olalla area since the 1880's. These include the Bullion, Dolphin, Golconda, Something Good and Shepard-Sunrise. Exploration has been oriented towards copper, molybdenum, silver and gold.



LEGEND

- X Gold showing
- Legal corner post
- ~ Valley fault

Min. File No.	Property name	Product
82E-5W-12	Dolphin	Cu, Ag
-13	Bullion	Au, Cu
-14	Something Good	Au
-15	Sunrise	Au
-16	Golconda	Cu, Mo, Au
-17	Dief	Mn, Fe
-88	Homestead	Cu
-96	Olalla	Ag, Au

GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT

CLAIM MAP

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 1 2 3 KM.

SCALE : 1:50,000	DATE : JAN. 1991
DRAWN BY : G.F.C.	FIGURE NO. 2

On the Something Good Property (Lot 1451, Minfile 82E-SW-014, figure 2) immediately east of the Cliff claim, a carbonate shear and breccia zone occurs in argillaceous and cherty sediments near the contact of a large pyroxenite body. Calcite, quartz, and pyrite occur within the zone.

Three adits were driven on the zone in 1936-1937. The No. 1 adit (2541 feet ASL) was driven for 350 feet, and followed the footwall of the shear zone. The first 110 feet of the adit followed a well defined breccia zone. Samples taken by the resident geologist for the B.C. Department of Mines in 1937 (M.S. Hedley) ranged from 0.05 ounces per ton gold over 11 inches. Beyond this point the graphitic shear contained negligible gold values. The No. 3 adit (2342 feet ASL) was driven for 385 feet in the pyroxenite. Negligible gold values were encountered in the adit. Limited diamond drilling was also carried out, and some values were reported.

The Shepard-Sunrise Property (Lot 18s, Minfile 82E-SW-015) located along the eastern boundary of the Cliff claim appears to have the most economically significant mineralization in the Olalla Camp. Several mineralized quartz veins on the property have been explored by trenching, diamond drilling and several adits.

The diamond drilling was carried out in two phases, the first between 1946 and 1948 by Hedley-Monarch Mines Ltd., and the second during 1961 and 1962 by Friday Mines Ltd. The work has indicated ore reserves of 2177.28 tonnes of 0.99 ounces per ton gold and 2.50 ounces per ton silver. It has been reported that 300 tons of ore averaging 0.53 ounces per ton gold and 0.45 ounces per ton silver were shipped during the 1946-1948 period.

The mineralization appears to be related to the east-west striking Valley Fault. During drilling on the quartz veins, a gold bearing pyritic-silicious breccia zone was discovered. This breccia zone also appears to be related to the Valley Fault, and reported drill hole intersections are as follows:

D.H. No.	Intersection	Width	Oz Au	Oz Ag	Location
H-5	315.6'-354.7'	39.1'	0.056	0.14	Shepard-Sunrise
H-8	383.0'-391.1'	8.1'	0.330	1.08	Shepard-Sunrise
H-8	365.2'-400.7'	35.5'	0.110	0.35	Shepard-Sunrise
H-10	354.9'-360.1'	5.2'	0.063	0.25	Shepard-Sunrise
H-10	403.8'-411.7'	7.9'	0.139	0.53	Shepard-Sunrise

These drill intersections are along the western edge of L 18s and appear to be within 100 meters of the Cliff claim. The exact drill hole locations have been lost, and the western boundary of L 18s is not known exactly.

The Golconda Property (Max 1 to 4, Dave 1 and 2, Minfile 82E-SW-016) was acquired by Goldcliff during 1990. It is located along the northern boundary of the Cliff claim and consists of a shear zone up to five feet wide made up of one or more slickensided and gouge filled fault planes cutting pyroxenite. A number of quartz lenses between 30 and 60 feet long and 12 to 50 inches wide occur within the shear zone. These zones appear to occur at changes in attitude in the structure. The quartz is crudely banded and contains pyrite, chalcopyrite, molybdenum, and minor galena. Values in gold and silver also occur within the structure.

Several adits follow the shear zone, which strikes south 56° east. Limited production has come from the property, and a small mill has operated several times.

On the area covered by the Cliff claim, hand trenching, cat trenching, airborne VLF-EM and magnetometer surveying, ground VLF-EM surveying, geochemical soil sampling and diamond drilling have been carried out in the past. Freedom Resources Ltd. carried out the last significant exploration on the claim area during the 1981 through 1983 period. The airborne VLF-EM survey (1981) indicated two strong conductors, one associated with the Valley Fault, and a second in the area of hand trenching at approximately 9100N+9400E. The airborne magnetometer survey delineated the pyroxenite stock. Follow-up soil sampling and ground VLF-EM surveying were carried out over a small portion of the area. A significant gold geochemical anomaly with coincidental VLF-EM conductors was delineated at approximately 9000N to 9700N, and 9300E to 9800E. No follow-up work was carried out in this area.

Along the Valley Fault at approximately 9900N and 10050E, cat trenching and diamond drilling has been carried out. The trenching exposed a north-south striking quartz vein, as well as a section of silicified and carbonatized syenite. This zone is described as being the westward extension of the pyritic-silicious breccia zone on L 18s. During 1961 two diamond drill holes were drilled by Friday Mines Ltd. to test the zone. Drill hole C-1 returned the best intersection, 0.03 oz/ton Au, 0.087 oz/ton Ag, 0.026 % Cu, with a trace of molybdenum from 100.8-115.05 feet. A number of other intersections of "weakly mineralized" syenite were reported, with only trace values in Au and Ag.

Freedom Resources Ltd. drilled five holes along the Valley Fault structure. Drill hole 81-1 was drilled north across the fault and into the syenite. Drill holes 83-2 and 83-3 were drilled in a northerly direction in an attempt to intersect the quartz vein north of the silicified and carbonatized zone. Two other holes, 83-1 and 83-1a were drilled along the structure further east. It is believed none of the drill holes encountered significant gold mineralization, although all of the records are lost.

D.H. No.	Grid Co-ord.	Azmuth	Angle	Depth
C-1	9936N+10056E	180°	-50°	442 feet
C-2	9875N+10038E	000°	-50°	740 feet
81-1	9805N+10208E	000°	-45°	500 feet
83-1a	10132N+10520E	175°	-45°	497 feet
83-2	9922N+10076E	000°	-45°	351 feet
83-3	9892N+10074E	000°	-45°	505 feet
83-1	9996N+10550E	180°	-45°	500 feet

The Copper King reverted Crown Grant was acquired by Goldcliff during 1990. Some trenching and several short adits were driven on the Copper King by previous owners. This work exposed a large skarn zone containing massive magnetite and pyrite with lesser chalcopyrite, hematite and malachite. Actual assay results from the zone are not known.

During 1986, 1987, 1988 and 1989 a number of exploration programs were carried out on the property by Goldcliff Resource Corporation. This work included establishing a grid on the Cliff claim and carrying out geological, geochemical and geophysical surveys. Most of the work to date has been on the Cliff claim with only minor work on the rest of the property.

Favourable results were obtained from these surveys. A number of VLF-EM conductors, gold and multi-element soil geochemical anomalies and favourable geological structures were outlined on the property. Several poorly exposed quartz stockwork and breccia zones gave values up to 1850 ppb gold in place, and up to 3400 ppb in float.

Four significant zones have been delineated by the exploration programs including the Frank, Valley, Lee and Cliff (north, central and south) zones (figure 3).

2.0 EXPLORATION PROCEDURE

During the 1986 exploration program a point at the northeast corner of Lot 3065 (Copper King) was chosen as 10,000N and 10,000E on the property. The main baseline was then picketed north and south from this point and tielines and grid lines established over most of the Cliff and Great Eastern claims. A secondary baseline was established in 1989 along 10,500N to establish control on the western portions of the property (Cliff 2, 3, and 4 claims).

GRID PARAMETERS

- main baseline direction N-S along 10,000E
- secondary baselines E-W, along 10,500N
- tieline N-S along 6,700E, E-W along 13,000N
- survey lines perpendicular to baselines
- survey line separation 100 meters
- survey station spacing 25 meters, slope corrected
- lines 9800N through 10100N, Copper King
- lines 8100E, 8200E, south of 10500N, Lee Zone
- lines 8300E through 8600E, north of 10500N, Lee Zone
- survey total - 7.625 kilometers

GEOCHEMICAL SURVEY PARAMETERS

- survey line spacing 100 meters
- survey sample spacing 25 meters
- survey totals - 7.625 kilometers
 - 302 soil samples analyzed
 - 24 rock samples analyzed
- 302 soil samples analyzed by 31 element ICP and AU
- 9 rock samples analyzed by 30 element ICP and Au
- 15 rock samples analyzed by 30 element ICP and Au, Pt, Pd
- soil sample depth 5 to 15 centimeters
- soil sample taken from brown B horizon where possible, some samples from C horizon

All rock samples were sent to ACME Analytical Laboratories Ltd., 852 E. Hastings Street, Vancouver, B.C. for geochemical analysis. Laboratory techniques for geochemical analysis consists of preparing samples by drying at 60° C, and grinding to minus 100 mesh. A 30 element ICP analysis and Au (acid leach/AA finish) or Au, Pt, Pd (fire assay) were then carried out on the rock samples.

The rock sample locations were plotted on figures 12 (Lee Zone) and 13 (Copper King) at a scale of 1:2500.

All soil samples were sent to Min-En Laboratories Ltd., 705 West 15th Street, North Vancouver, B.C. for geochemical analysis. Laboratory techniques for geochemical analysis consists of preparing samples by drying at 95° C and seiving to minus 80 mesh. A 31 element ICP analysis and Au (aqua-regia digestion, atomic adsorption finish) were then carried out on the samples.

Gold, arsenic, silver and copper were plotted on figures 4 (Lee Zone) and 6 (Copper King). Lead, zinc, molybdenum and nickel were plotted on figures 5 (Lee Zone) and 7 (Copper King). All figures are at a scale of 1:2500.

GEOPHYSICAL SURVEY PARAMETERS

TOTAL FIELD MAGNETIC SURVEY

- survey line separation 100 meters
- survey station spacing 25 meters
- survey totals 5.25 kilometers
- measured total magnetic field in nanoteslas (gammas)
- instrument accuracy ± 1 nanotesla

Readings were taken along the baseline to obtain standard readings for all baseline stations. All loops ran off the baseline were then corrected to these standard values by the straight line method.

The total field magnetic contours were plotted on figures 8 (Lee Zone) and 9 (Copper King) at a scale of 1:2500.

VLF-EM SURVEY

- survey line separation 100 meters
- survey station spacing 25 meters
- survey total 7.0 kilometers
- transmitting station - Cutler - 24.0 KHz
- direction faced - southerly
- instrument - Geonics EM-16
- in phase (dip angle) and out-of-phase (quadrature) components measured in percent at each station

The VLF-EM profiles were plotted on figures 10 (Lee Zone) and 11 (Copper King) while the VLF-EM conductors were plotted on figures 12 (Lee Zone) and 13 (Copper King). All maps are at a scale of 1:2500.

For the Lee Zone, grid lines, soil sampling results and geophysical surveys completed in previous years were shown on the 1990 maps to give a complete picture of the zone.

3.0 GEOLOGY AND MINERALIZATION

3.1 REGIONAL GEOLOGY

The Cliff Property (figure 3) is located within the Intermontane Belt of British Columbia. Most of the property is underlain by marine sedimentary and volcanic rocks. An ultramafic to alkalic stock has intruded the eastern margin of the Cliff claim, the southern portion of the Cliff 2 claim, and most of the Great Eastern, Copper King, Max 1 to 4 and Dave 1 and 2 claims.

Early work in the area by Bostock and others described the marine sedimentary and volcanic sequence as belonging to the Old Tom, Shoemaker, Bradshaw, and Independence Formations. However as these formations do not form distinct, mappable units, Milford (1984) referred to the sequence as the Apex Mountain Group.

The Apex Mountain Group consists of five major lithofacies: massive and bedded chert, greenstone, chert breccia, argillite and limestone. Together they form a broadly folded, east dipping sequence that has an overall increase in age towards structurally higher rocks in the area. The maximum and minimum ages based on faunal ages in limestones and chert are Early Carboniferous and Middle to Late Triassic respectively.

The depositional environment of the Apex Mountain Group is interpreted to be generally deep, open-ocean basin. Shallow water deposition occurred locally. The group is interpreted to represent at least part of an ancient subduction complex that formed by eastward directed underthrusting and accretion of successively younger slices of oceanic sedimentary and volcanic rocks.

Other assemblages possibly temporally correlative with the Apex Mountain Group include the Kobau, Chapperon, Harper Ranch, and Cache Creek Groups.

The ultramafic to alkalic stock occupies approximately six square miles and is of late Mesozoic age. The stock grades from a peripheral zone of pyroxenite, high in mafics and magnetite, to a magnetite deficient granitic core. Faulting with associated veining, brecciation and mineralization occurred as contemporaneous or post consolidation features.

3.2 CLAIM GEOLOGY

A number of areas of the property have been geologically mapped in previous years. No geological mapping was carried out in 1990, and the units described below are not shown on any 1990 maps.

Most of the property is underlain by marine sedimentary and volcanic rocks of the Apex Mountain Group. Units 1 through 3 are members of this unit.

Unit 1 consists of mainly chert, with minor tuff and quartzite. The chert is predominantly massive, although some sections show distinct bedding. The chert varies in colour from black and green to blue. Bedding appears to be northeasterly with moderate dips to the northwest and small scale folding was noted in a few locations. Near the contact of the Olalla Stock and the Apex Mountain Group, the unit becomes more characteristic of a quartzite rather than a chert. Numerous tiny white quartz veinlets were observed in many locations.

Thin section interpretation of several rocks from this unit indicates a fine quartz matrix with a network of quartz veinlets cutting the fine quartz. There is a suggestion the unit may be a silicified tuff.

Unit 1a usually occurs within unit 1, and consists of poorly sorted, angular to subangular black or blue chert clasts within a microcrystalline matrix. The unit is usually no more than a few tens of meters thick, and occurs within the massive chert unit, often pinching out along strike.

Unit 1b consists of moderate to intense shearing with subrounded chert clasts. The unit often occurs near the emplacement of feldspar porphyry dykes and sills, and may be related to the emplacement of the dykes and sills.

Unit 2 is a greenstone unit which occurs within the chert, possibly due to the local extrusion of lava in shallow water. The rocks are generally greenish, massive and finely crystalline. They are likely of basaltic or andesitic composition.

Thin section interpretation of one rock from this unit indicated it to be of gabbroic composition.

Unit 3 is a finely crystalline, light blue-grey limestone. The unit varies from a few centimeters to perhaps 10 meters in thickness, and occurs rarely on the property.

Units 4 through 8 all appear to be derivatives of the Olalla Stock.

Unit 4 is a fine to medium grained equigranular rock, consisting mainly of dark green augite pyroxene. Generally 5 to 10 % magnetite occurs within the pyroxenite.

Unit 5 is a syenite which has two modes of occurrence. Unit 5a is a coarse grained massive syenite, greyish-orange in colour which occurs as narrow "veins" or as small bodies. Orthoclase is the main constituent, with 5% biotite and 2 to 5% magnetite. Unit 5b is a fine grained, light grey to buff to pink syenite occurring within the central portion of the stock. The main constituent is orthoclase, with augite being the main ferromagnesium mineral. The syenite is believed to be of metasomatic origin.

Unit 6 consists of feldspar porphyry dykes and sills. The dykes vary from less than 1 meter, up to 100 meters or more in width in the northwest corner of the claim. They are generally fine to medium grained with plagioclase phenocrysts in a plagioclase or K-spar groundmass. Hornblende, epidote and chlorite occur in varying concentrations within the unit. Bulk composition varies from latite to diorite.

Unit 7 is a massive hornblende dyke which occurs in only a few locations on the property.

Unit 8 is a dark grey, fine grained monzonite with a colour index of approximately 60%. It contains from 25 to 40% augite which gives the rock its characteristic dark colour. Orthoclase and plagioclase feldspars, with local olivine and hornblende form the remaining major constituents of the rock.

The Lee Zone is underlain by cherts (unit 1) and greenstones (unit 2) of the Apex Mountain Group which have been intruded by a number of dykes, sills and small intrusive bodies of a feldspar porphyry (unit 6). The dykes and sills generally have a north northeasterly trend and vary from a few centimeters to 50 meters or more in width. The northern portion of the zone appears to be underlain by a small intrusive body of the feldspar porphyry.

The Copper King is also underlain by cherts (Unit 1) and greenstones (Unit 2) of the Apex Mountain Group. They have been intruded by dark green pyroxenite (Unit 4) of the Olalla Stock.

3.3 MINERALIZATION

Lee Zone

Prospecting and sampling were carried out over the broad gold soil geochemical anomaly (Au-1) outlined by the 1990 and previous years work programs. Samples 90G-20 through 90G-34 were taken from the Lee Zone.

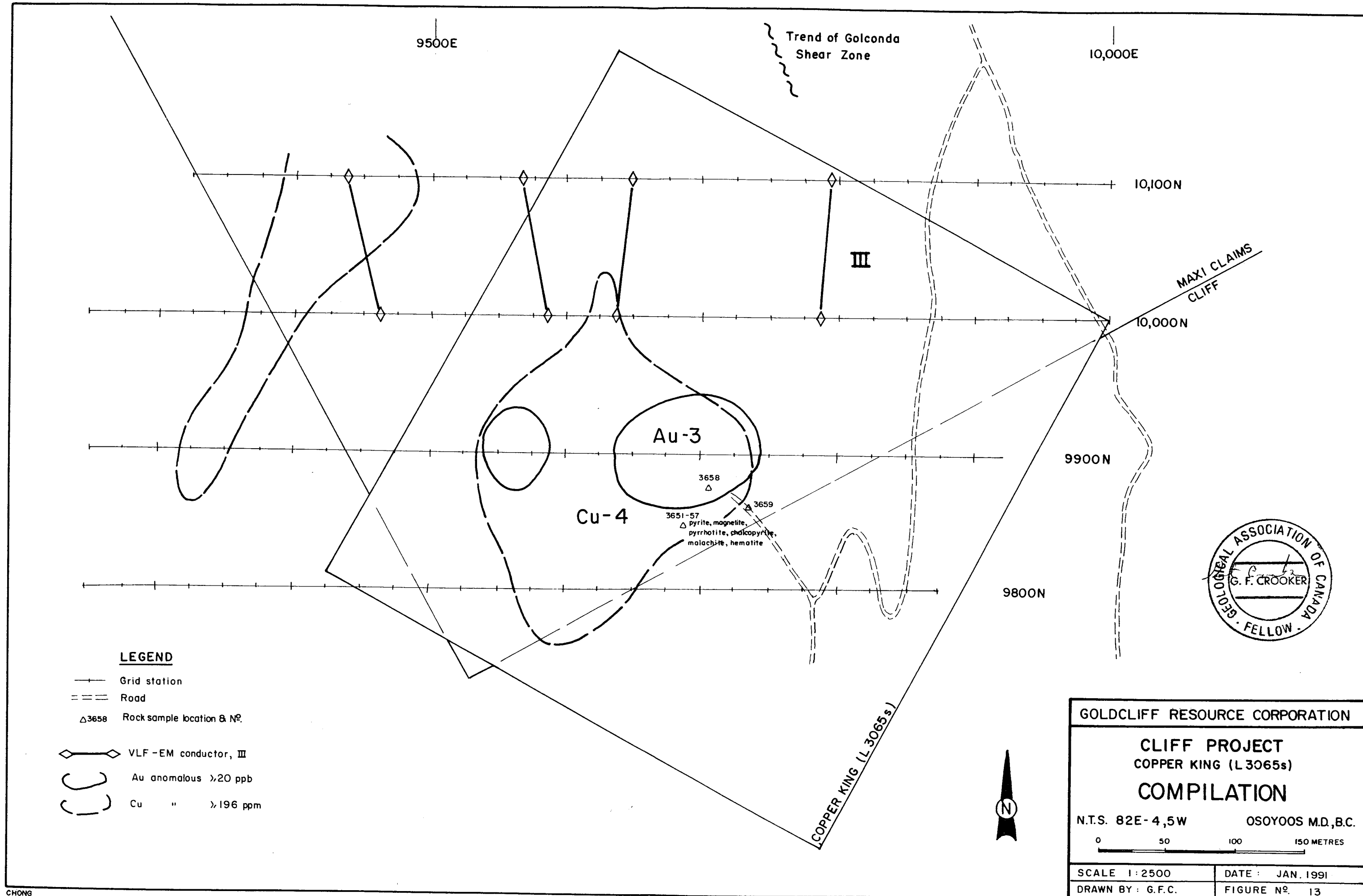
A number of samples (90G-20-23, 25, 29-32, 34) were taken of rusty, grey, green and black cherts and quartzites containing up to 15% pyrite. The samples were taken from outcrop as well as float and showed varying amounts of fracturing. The assay results were very low with the highest gold value 50 ppb and highest copper value 240 ppm.

A number of samples (90G-24, 26-28, 33) were also taken from a bleached, altered intrusive. This hornblende diorite showed up to 10% pyrite occurring both along fractures and as disseminations. Two directions of fracturing were noted at 8355E & 10415N, 232° dip 45°N and 220° vertical. The assay results from samples 90G-26-28 gave weakly anomalous gold and copper values. The highest values were 974 ppb gold and 742 ppm copper from sample 90G-26. This fracturing appears to at least in part be the cause of the broad geochemical anomaly. The dimensions of the mineralized zone are not known at this time.

Copper King

Prospecting and sampling were carried out over a massive magnetite, pyrite skarn located at approximately 9850N & 9700E. Nine samples were taken from the zone and all gave low gold values with the highest being 14 ppb. However some of the samples gave higher copper values, with P 3653 returning 10845 ppm and four others returning between 2380 and 4058 ppm.

The samples generally showed 10-30% magnetite and pyrite, with lesser amounts of chalcopyrite, hematite and chalcopyrite.



LEGEND

- +— Grid station
- == Road
- △3658 Rock sample location & No.
- ◇—◇ VLF-EM conductor, III
- ⌒ Au anomalous >20 ppb
- ⌒ Cu " >196 ppm

Au-3

Cu-4

3658
△

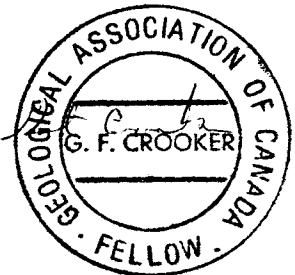
3651-57
△ pyrite, magnetite,
pyrrhotite, chalcopyrite,
malachite, hematite

3659
△

Trend of Golconda
Shear Zone

MAXI CLAIMS
CLIFF

COPPER KING (L3065s)



GOLDCLIFF RESOURCE CORPORATION

**CLIFF PROJECT
COPPER KING (L3065s)
COMPILATION**

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.



SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE No. 13

4.0 GEOCHEMISTRY

4.1 SOIL SAMPLING

Three hundred and two soil samples were sent for analysis from the Lee Zone and Copper King. Background and anomalous values calculated for previous soil geochemical surveys were also used for this survey with the exception of molybdenum. Significant differences in the background values exist between 1986 and all other years. Thus for the 1986 program 12 ppm molybdenum was anomalous, while 3 ppm was anomalous for the years 1987-1990.

ELEMENT	BACKGROUND	ANOMALOUS
Ag ppm	0.85	≥ 1.5
As ppm	9.10	≥ 18.0
Cu ppm	98.10	≥ 196.0
Pb ppm	25.24	≥ 50.0
Zn ppm	92.99	≥ 186.0
Mo ppm 1986	6.0	≥ 12.0
Mo ppm 1990	1.5	≥ 3.0
Au ppb	11.13	≥ 20.0

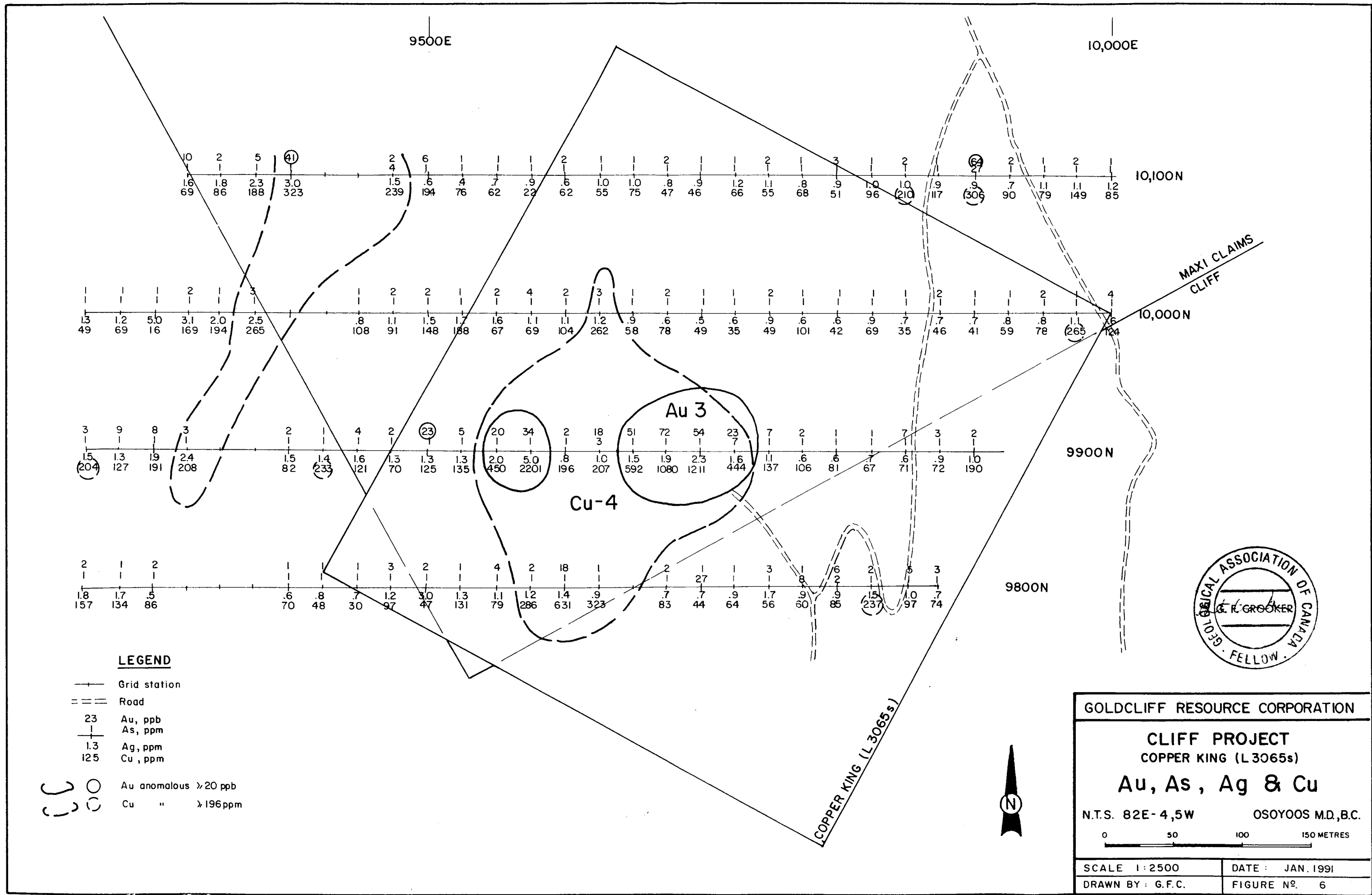
Lee Zone

Soil samples were collected on lines 8100E and 8200E south of baseline 10500N and on lines 8300E through 8600E north of baseline 10500N. One hundred and ninety-one soil samples were sent for analysis.

Gold

Gold values ranged from 1 to 174 ppb. Previous work on the Zone outlined a broad geochemical anomaly (Au-1) extending from line 8400E & 10075N to 8700E & 10500N. The 1990 soil sampling closed the anomaly to the north, south and west. The anomaly trends north northeast-south southwest and is approximately 500 meters long and 200 meters wide.

A northeast-southwest trending copper anomaly (Cu-1) occurs in the central part of the gold anomaly along with 2 small molybdenum anomalies (Mo-1, 2). Anomalous arsenic values also occur within the broader gold anomaly. The 1990 prospecting program located a bleached, altered intrusive with fracturing and pyrite at 10500N & 8350E. Samples returned up to 974 ppb Au and 742 ppm Cu (90G-26). This mineralization is at least in part causing the coincidental gold-copper anomaly.



LEGEND

- +— Grid station
- == Road
- 23 Au, ppb
- +— As, ppm
- 1.3 Ag, ppm
- 125 Cu, ppm
- Au anomalous >20 ppb
- Cu " >196ppm

GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT	
COPPER KING (L 3065s)	
Au, As, Ag & Cu	
N.T.S. 82E-4,5W	OSOYOOS M.D., B.C.
SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE NO. 6

A smaller gold anomaly (Au-2) was also outlined by previous work. The 1990 program closed this anomaly to the west. It is an east-west trending anomaly 200 meters long and 75 meters wide. A small molybdenum anomaly (Mo-3) occurs coincidentally with the gold anomaly, as do scattered copper values.

Copper

Copper values ranged from 14 to 736 ppm and three small copper anomalies were outlined.

Anomaly Cu-1 is a small northeast-southwest trending anomaly within the broader gold anomaly Au-1. It ranges from 50 to 100 meters wide and is 200 meters long. The 1990 program closed the anomaly to the west.

Anomaly Cu-2 is a linear east-west trending anomaly 50 meters wide and 400 meters long. It occurs immediately north of and up hill from gold anomaly Au-1. This copper anomaly is open to the west.

Copper anomaly Cu-3 is a small anomaly occurring at the northern portion of the grid. A few anomalous molybdenum values occur within the broader copper anomaly. The 1990 program closed this anomaly to the west.

Molybdenum

Molybdenum values ranged from 1 to 6 ppm and three small geochemical anomalies were outlined.

Anomalies Mo-1 and Mo-2 occur coincidentally with the broader gold anomaly Au-1 and copper anomaly Cu-1. Both anomalies are very small, being only four station anomalies.

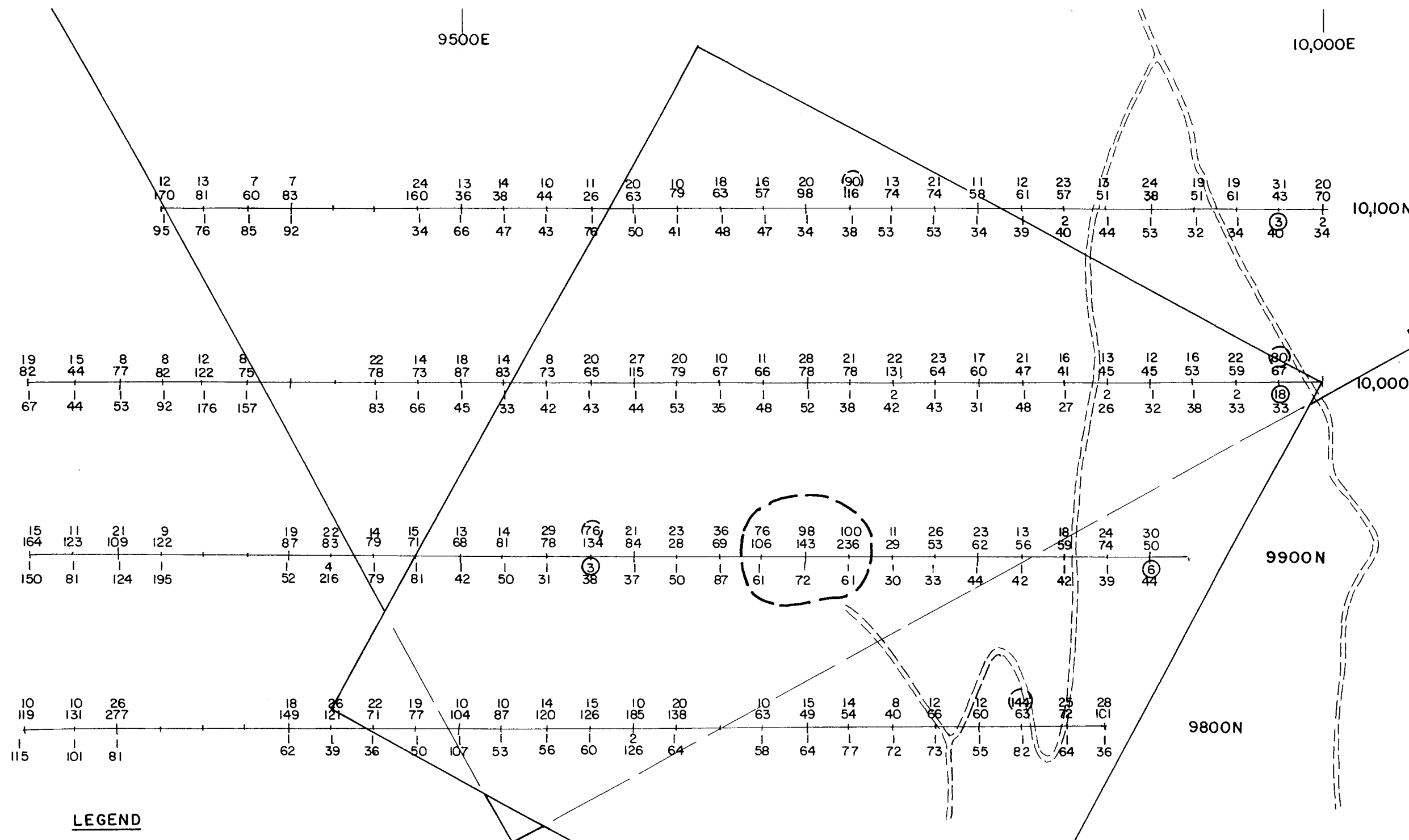
Anomaly Mo-3 is also a small anomaly and it occurs coincidentally with gold anomaly Au-2.

Copper King

Soil samples were collected on lines 9800N through 10100N and one hundred and eleven samples were sent for analysis.

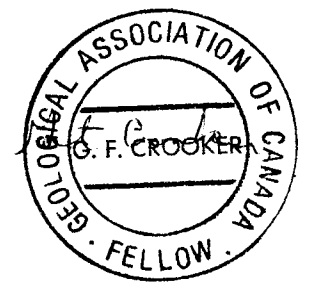
Gold

Gold values ranged from 1 to 84 ppb and one small, four station gold anomaly (Au-3) was outlined by the survey. It occurs within a broader copper anomaly and appears to be associated with a massive, magnetite, pyrite skarn.



LEGEND

- +— Grid station
- == Road
- 22 Pb, ppm
- 83 Zn, "
- 4 Mo, "
- 416 Ni, "
- Mo anomalous >3 ppm
- Pb " >50 ppm



GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT
COPPER KING (L 3065s)

Pb, Zn, Mo and Ni

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE NO. 7

Copper

Copper values ranged from 1 to 2201 ppm and one anomaly (Cu-4) was outlined. The eastern portion of the anomaly is associated with a massive, magnetite, pyrite skarn with chalcopyrite. Gold anomaly Au-3 occurs within the broader copper anomaly.

5.0 GEOPHYSICS

5.1 MAGNETOMETER SURVEY

Lee Zone

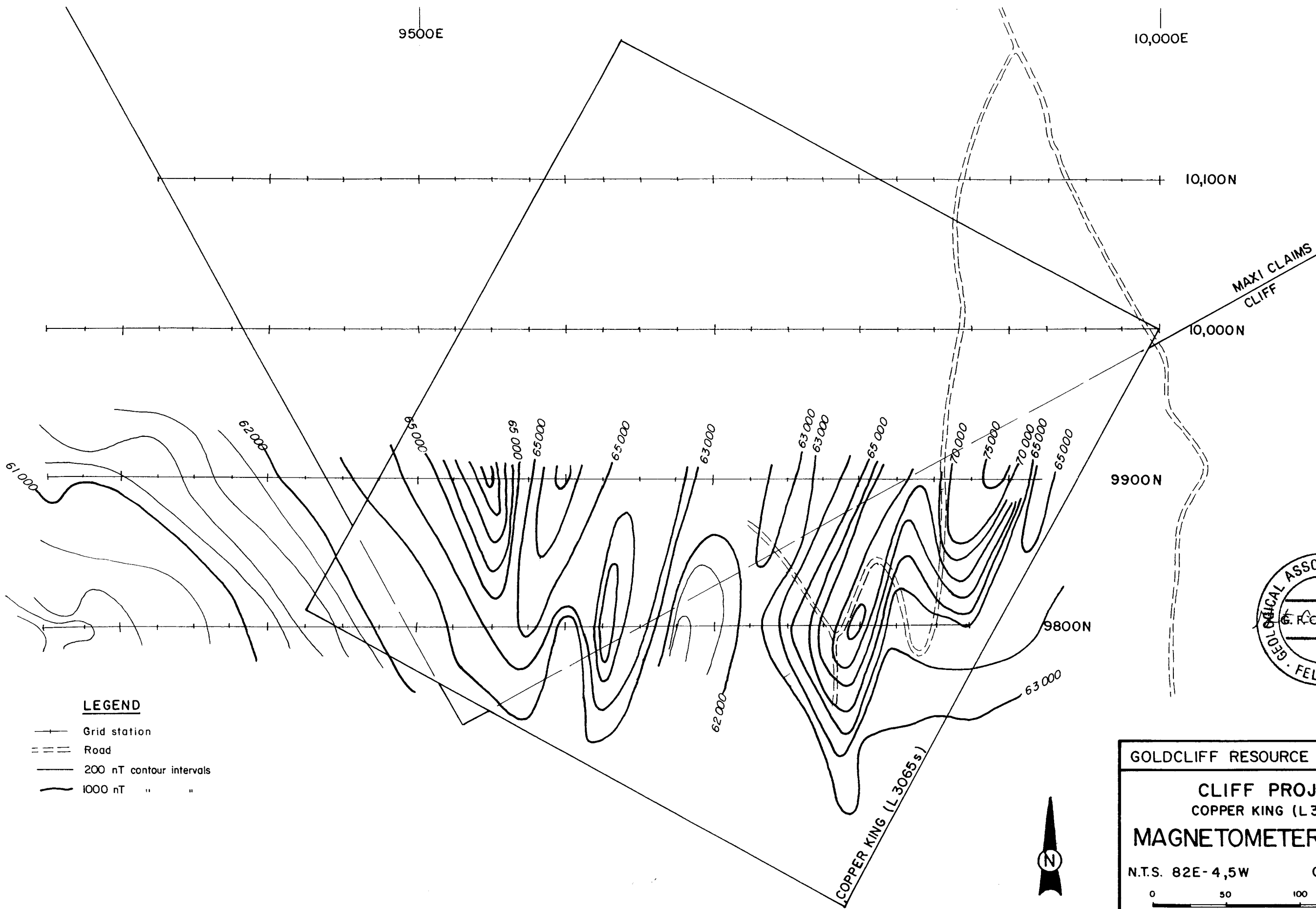
A total field magnetic survey was carried out on lines 8500E through 8800E, north of baseline 10500N on the Lee Zone. The magnetic response was very active with total field magnetic values ranging from 57528 to 64961 nT. The areas of higher magnetism are generally on the eastern portion of the grid with areas of lower magnetism on the western portion of the grid. The areas of higher magnetism appear to be caused by the more highly magnetic Jurassic pyroxenite while the areas of lower magnetism are underlain by Triassic sedimentary and volcanic rocks.

A magnetic high extending as far as 11350N on line 8600E is the only distinct linear magnetic feature. This probably represents a dyke like feature extending from the main pyroxenite body. However, in view of the skarn bodies which are known to exist along the margins of the stock at other locations, the feature could be related to a skarn body.

Copper King

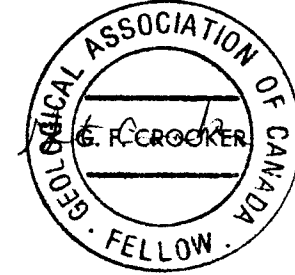
A total field magnetic survey was carried out on lines 9800N and 9900N on the Copper King. The magnetic response was very active with total field magnetic values ranging from 60229 to 75884 nT. This zone of high magnetism indicates the Copper King is mainly underlain by the highly magnetic Jurassic pyroxenite.

A massive magnetite, pyrite skarn body is known to lie between lines 9800N and 9900N at approximately 9700E. The magnetic response in this area varies between 62000 and 63000 nT. The high concentrations of magnetite within the pyroxenite in effect mask the magnetic response of the skarn and it is not possible to differentiate between skarn bodies and the pyroxenite.



LEGEND

- +— Grid station
- == Road
- 200 nT contour intervals
- 1000 nT " "



GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT COPPER KING (L 3065s)	
MAGNETOMETER SURVEY	
N.T.S. 82E-4,5W	OSOYOOS M.D., B.C.
SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE NO. 9

5.2 VLF-EM SURVEY

Lee Zone

The VLF-EM survey was carried out on all of lines 8300E and 8400E, and 8500E and 8600E north of baseline 10500N. The VLF-EM data have in many cases been influenced by topography in the form of a positive bias when the operator faced up hill and a negative bias when the operator faced down hill. The anomalies generally exhibit long wavelengths and in-phase anomaly amplitude ranged from strong through moderate to weak. Since most of the survey area is on a slope and because significant amounts of outcrop are present, shallow and/or resistive overburden conditions are believed to exist. This allows a reasonable interpretation of weak anomalies even with topographic bias.

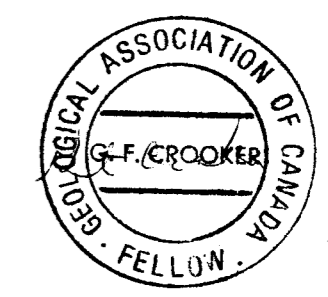
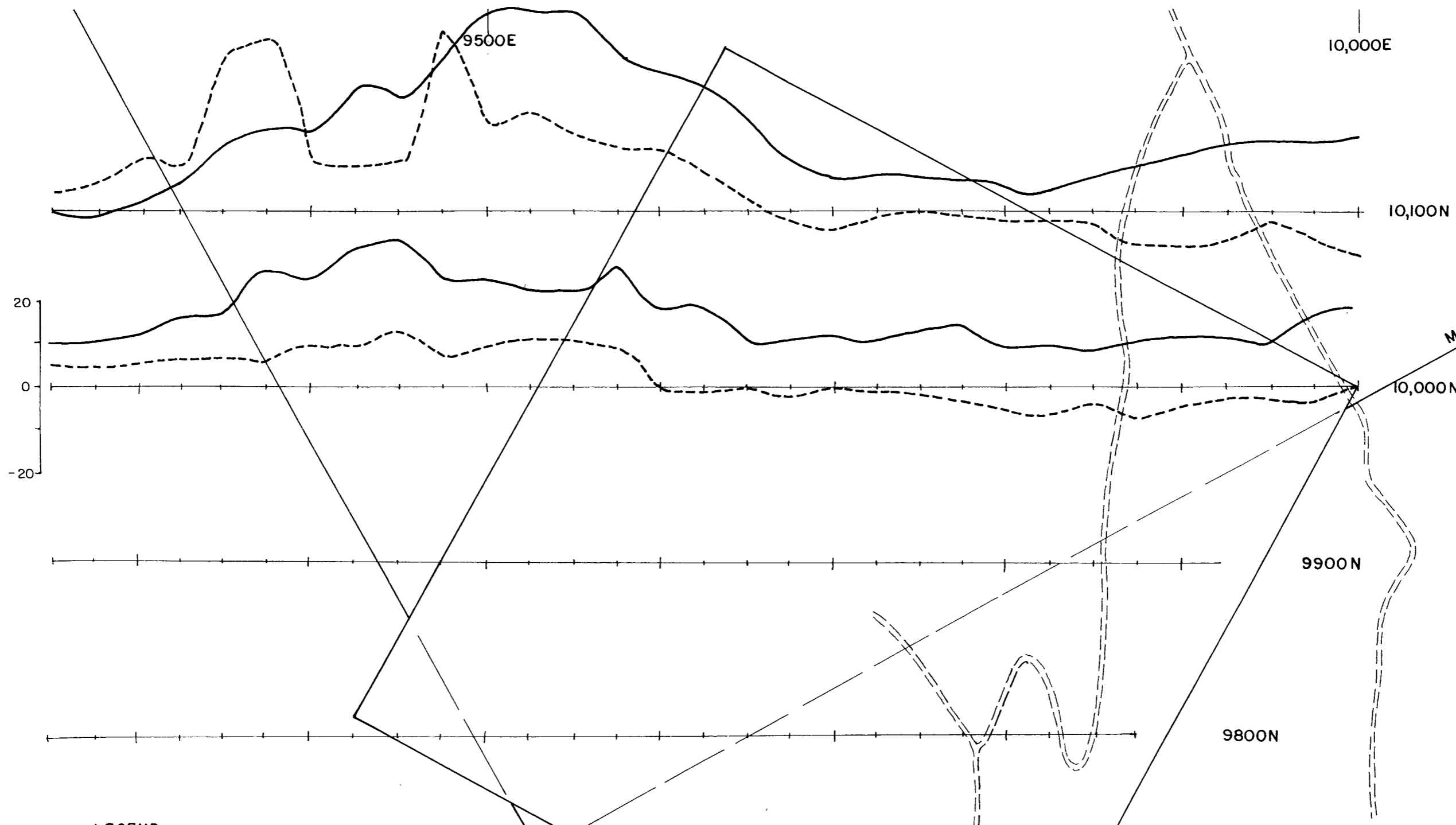
A number of weak to moderate southwesterly through northwesterly trending conductors were delineated by the survey. Conductors I and II coincide with two prominent gullies and probably represent structural features such as faults. These two structural features may have some significance as they transect coincidental gold-copper soil geochemical anomalies.

Several other conductors are associated with gold and/or copper soil geochemical anomalies but the significance of the conductors, if any, is not known. Other conductors occur within the zone but no causes are known for them.

Copper King

The VLF-EM survey was carried out on lines 10000N and 10100N. The general comments made on the VLF-EM survey for the Lee Zone also apply to the Copper King.

Four weak to moderate northerly trending conductors were delineated by the survey. Conductor III is subparallel to the Golconda Shear Zone and may represent an extension of the shear. No cause is apparent for the other conductors although two of them do trend toward a copper soil geochemical anomaly. Unfortunately the VLF-EM survey was not completed over lines 9800N and 9900N which pass on either side of a known skarn body at 9700E.



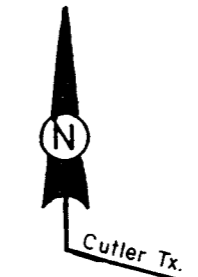
LEGEND

—+— Grid station
 = = = Road

In-phase
 Quadrature 1cm = 10%

CUTLER 24.0 KHz

Anomalous inflection
 (In phase)



GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT COPPER KING (L3065s) VLF-EM PROFILES (CUTLER)	
N.T.S. 82E-4,5W	OSOYOOS M.D., B.C.
SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE No. 11

6.0 CONCLUSIONS AND RECOMMENDATIONS

The 1990 program concentrated on the Lee Zone and the Copper King. Work included establishing additional grid lines, soil sampling, VLF-EM and magnetometer surveying and prospecting.

On the Lee Zone, six additional lines of soil geochemical sampling closed out the large gold geochemical anomaly (Au-1). The anomaly (figure 12) trends north northeasterly-south southwesterly and is approximately 500 meters long by 200 meters wide. Several smaller copper (Cu-1, 2) and molybdenum (Mo-1, 2) anomalies occur coincidentally with the gold anomaly. Prospecting located an area of bleached, altered intrusive with fracturing and up to 10% pyrite occurring both along fractures and as disseminations. Assaying of this material gave up to 974 ppb gold and 742 ppm copper.

Several smaller gold and copper soil geochemical anomalies were also outlined, along with a number of VLF-EM conductors. No causes are known for these features at this time.

On the Copper King, four lines of soil sampling were carried out. This soil geochemical sampling outlined a copper anomaly (Cu-4) approximately 200 meters long by 150 meters wide. A small gold anomaly (Au-3) occurs coincidentally with the copper along the eastern portion of the anomaly.

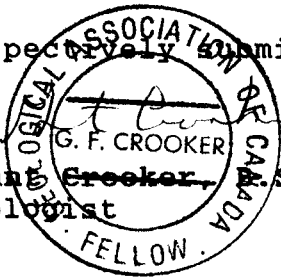
Prospecting located a massive magnetite, pyrite skarn body centered at approximately 9850N & 9700E. This skarn contains minor amounts of chalcopyrite and malachite and appears to be the cause of at least some of anomaly Cu-4. A number of rock samples were taken from the skarn and these returned very low gold values. One sample gave a copper value of 10845 ppm and a number of samples gave between 2380 and 4058 ppm copper.

Conductor III is subparallel to the Golconda Shear Zone and may represent an extension of that zone.

Recommendations are as follows:

- 1) Prospecting, geological mapping and sampling should be carried out over the geochemical anomalies outlined on the Lee Zone. Emphasis should be placed on the area which gave the anomalous gold value of 974 ppb.
- 2) Prospecting, geological mapping and sampling should be carried out over the geochemical anomaly Cu-4 and the skarn zone on the Copper King.
- 3) The other target areas outlined by previous programs should also have continued exploration by geochemical sampling, prospecting, trenching and drilling if required.

Respectively submitted,


G. F. CROOKER
Geologist

Geologist, P. Sc., F.G.A.C.

7.0 REFERENCES

B.C.M.M., Annual Reports for 1937, 1946.

B.C.M.M., Minfile; 82E-SW-014, 82E-SW-015, 82E-SW-016, 82E-SW-017

Bostock, H.S. (1927): Geological Survey of Canada, map 628A, Olalla.

Bostock, H.S. (1930): Geological Survey of Canada, map 341A, Keremeos.

Chapman, Wood and Griswold Ltd. (Aug. 1, 1961 to March 7, 1962): Progress Reports Friday Mines Ltd. (NPL) Olalla, B.C. Mining Properties, No. 1 to No. 6.

Christopher, P.A. (1987): Report on the Cliff Property, Cliff, Cliff #1 and Great Eastern Claims, Hedley-Olalla area, Osoyoos Mining Division, B.C.

Crooker, G.F. (1981): Geological report on the Bell Claim, Olalla Area, Osoyoos Mining Division, B.C.

Crooker, G.F. (1981): Geological report on the FFH Claim, Olalla Area, Osoyoos Mining Division, B.C.

Crooker, G.F. and Rockel, E.R. (1987): Geological, Geochemical and Geophysical Report on the Cliff, Cliff #1 and Great Eastern Claims, for Goldcliff Resource Corporation.

Crooker, G.F., (1988): Geological, Geochemical and Geophysical Report on the Cliff, Cliff 1 to 4 and Great Eastern Claims, for Goldcliff Resource Corporation.

Crooker, G.F., (1989): Geochemical Report on the Cliff, Cliff 1 to 4 and Great Eastern Claims, for Goldcliff Resource Corporation.

Crooker, G.F., (1990): Geological and Geochemical Report on the Cliff, Cliff 1 to 4 and Great Eastern Claims for Goldcliff Resource Corporation.

Dodd, E.A. (1981): Geophysical Survey-Combined Airborne VLF and Magnetometer on the Joan and FFH Mineral Claims (40 units) for Freedom Resources Ltd., Vancouver, B.C., by Columbia Geophysical Services Ltd.

Little, H.W. (1961): Geology Kettle River (West Half), B.C., Geological Survey of Canada Map 15-1961.

Milford, J.C. (1984): Geology of the Apex Mountain Group, North and East of the Similkameen River, South Central B.C., M.Sc. Thesis, University of British Columbia.

Phendler, R.W. (1981): Report on the FFH Gold Prospect, Osoyoos Mining Division, B.C. for Freedom Resources Ltd.

Ray, G.E., and Dawson, G.L. (1987): Geology and Mineral Occurrences in the Hedley Gold Camp, Southern British Columbia (92H/8E), Open File Map 1987-10a.

Rice, H.M.A. (1947): Geology and Mineral deposits of the Princeton Map-Area, B.C., Geological Survey of Canada, Memoir 243.

Rolston, T., and Timmins, W. (1981): Geophysical (and Geochemical) Report on the FFH Claim Group, Osoyoos Mining Division, for Freedom Resources Inc., Map Sheet 82E-4,5.

Sturdevant, J.A. (1963): Petrography of the Olalla Stock, Okanagan Mountains, British Columbia, unpublished M.Sc. Thesis, University of New Mexico.

8.0 CERTIFICATE OF QUALIFICATIONS

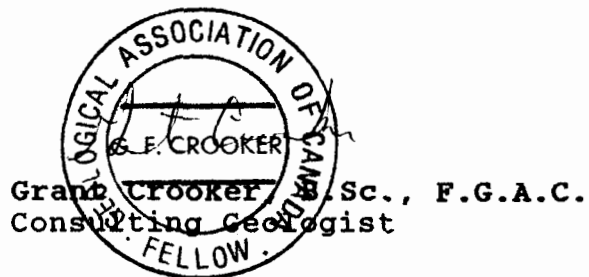
I, Grant F. Crooker, of Upper Bench Road, Keremeos, in the Province of British Columbia, hereby certify as follows:

1. That I graduated from the University of British Columbia in 1972 with a Bachelor of Science Degree in Geology.
2. That I have prospected and actively pursued geology prior to my graduation and have practised my profession since 1972.
3. That I am a member of the Canadian Institute of Mining and Metallurgy.
4. That I am a Fellow of the Geological Association of Canada.
5. That I am the owner of the Cliff, Cliff 1 to 4, Copper KING and Great Eastern Claims.

Dated this 25th day of Feb

, 1991, at Keremeos, in the

Province of British Columbia.



Appendix I

CERTIFICATES OF ANALYSIS

GEOCHEMICAL ANALYSIS CERTIFICATE

Goldcliff Resources Corp.

File # 90-1304

1505 - 409 Granville St., Vancouver BC V6C 1T2

Submitted by: GRANT CROOKER

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
P 3651	2	3079	190	134	3.7	88	297	1177	31.91	20	5	ND	3	47	2.5	4	2	15	2.36	.001	5	4	.17	11	.01	2	.21	.01	.03	4	11
P 3652	5	82	2	52	.1	18	11	1975	2.88	8	5	ND	5	94	.3	2	2	41	11.49	.019	4	17	.47	30	.10	2	.82	.01	.01	1	13
P 3653	1	10845	11	245	6.7	25	71	1870	16.19	24	6	ND	6	11	2.1	2	2	130	10.47	.001	17	3	.10	43	.01	2	.36	.01	.02	18	14
P 3654	2	2829	2	76	2.0	14	353	759	35.67	14	5	ND	2	30	2.7	11	2	9	1.60	.001	3	5	.03	11	.01	6	.10	.01	.01	6	14
P 3655	1	4058	2	167	3.1	14	130	878	48.58	12	5	ND	3	17	2.0	8	2	14	1.22	.001	2	3	.04	20	.01	34	.14	.02	.02	3	7
P 3656	1	674	15	29	.6	6	51	2078	12.83	15	5	ND	5	66	1.0	2	2	27	8.64	.003	8	5	.15	19	.02	2	.25	.01	.01	15	2
P 3657	1	681	10	111	.5	7	56	1976	20.85	6	5	ND	4	93	1.5	2	2	18	6.97	.001	5	1	.11	18	.01	2	.14	.01	.01	20	3
P 3658	1	2380	2	83	.1	37	13	1467	2.96	8	5	ND	1	177	.9	2	3	25	21.32	.023	8	9	.28	24	.05	59	.50	.01	.01	8	4
P 3659	35	316	9	13	.6	10	4	209	2.91	9	6	ND	2	20	.2	2	2	46	.75	.007	3	13	.02	158	.01	2	.05	.01	.18	3	2
P 3660	5	126	46	126	1.6	38	14	177	3.11	3	8	ND	1	24	.5	2	7	5	.91	.043	6	12	.03	54	.01	2	.09	.01	.04	1	18
P 3661	19	285	7	40	.2	46	113	911	15.84	28	5	ND	1	10	.2	2	2	39	1.60	.008	2	52	.76	19	.09	2	1.68	.02	.08	275	3
P 3662	21	232	2	55	.4	104	38	952	6.45	5	7	ND	1	21	.2	2	3	46	2.76	.013	2	123	1.08	60	.15	2	2.21	.12	.61	12	3
P 3663	2	412	79	458	.4	20	18	433	4.06	16	5	ND	1	5	2.8	2	3	145	.79	.017	2	29	1.44	135	.18	2	2.87	.12	.96	3	1
STANDARD C/AU-R	18	58	39	134	7.2	67	31	1063	3.99	43	19	6	39	50	18.2	16	22	60	.51	.095	39	53	.93	180	.08	39	1.95	.06	.13	11	510

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Rock AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 16 1990

DATE REPORT MAILED: May 22/90.

SIGNED BY..... D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

✓ ASSAY RECOMMENDED

GEOCHEMICAL ANALYSIS CERTIFICATE

Goldcliff Resources Corp. File # 90-6193
 6976 Laburnum St., Vancouver BC V6P 5M9 Submitted by: GRANT CROOKER

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**	Pt**	Pd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	ppb	ppb
90G-20	.8	52	18	37	.8	17	1	255	2.64	48	5	ND	1	4	1.0	2	2	23	.03	.014	2	66	.13	16	.01	4	.31	.01	.02	2	28	1	2
90G-21	4	18	6	15	.1	18	1	388	.62	7	5	ND	1	4	.2	2	2	2	.02	.006	2	11	.01	24	.01	4	.07	.01	.04	1	1	1	2
90G-22	5	46	7	15	.4	15	1	121	.81	4	5	ND	1	6	.2	2	2	10	.05	.018	2	16	.21	48	.02	3	.22	.01	.03	1	10	1	2
90G-23	13	151	3	20	.9	24	9	114	1.71	10	5	ND	1	6	.3	2	2	34	.04	.017	2	62	.49	90	.05	3	.46	.01	.05	1	20	1	2
90G-24	3	432	5	29	.5	15	13	224	4.68	4	5	ND	1	40	.7	2	2	71	.67	.104	2	22	1.02	50	.11	4	1.48	.05	.10	1	34	5	2
90G-25	3	339	13	28	.5	10	13	265	5.33	2	5	ND	1	77	.2	3	2	86	.67	.125	2	8	1.13	47	.11	6	2.10	.13	.45	2	15	1	2
90G-26	22	742	33	25	2.4	20	22	360	9.96	69	5	ND	1	149	.2	2	9	112	.20	.150	6	32	.18	237	.17	6	.48	.06	.22	1	974	1	4
90G-27	6	72	27	14	.7	9	4	240	6.62	18	5	ND	1	150	.2	2	4	81	.26	.070	2	76	.31	153	.15	3	.48	.05	.17	1	354	3	3
90G-28	6	100	12	26	.5	21	12	519	7.51	30	5	ND	1	58	.6	2	9	124	.33	.109	2	57	.89	57	.25	3	1.37	.03	.19	4	299	8	6
90G-29	5	70	8	7	.2	26	6	100	1.48	2	5	ND	1	34	.4	2	2	35	.18	.040	4	33	.29	107	.09	5	.36	.01	.07	1	22	1	4
90G-30	4	33	3	3	.1	16	1	54	1.31	4	5	ND	2	8	.3	2	2	10	.02	.013	4	17	.17	147	.04	3	.32	.01	.17	1	16	1	2
90G-31	4	240	8	27	.3	60	16	317	4.63	4	5	ND	1	32	.2	3	2	52	.69	.125	7	111	.95	133	.21	3	1.74	.09	.55	1	14	1	2
90G-32	35	73	3	22	.2	30	7	174	1.60	3	5	ND	1	7	.4	2	2	26	.18	.009	2	71	.11	27	.05	4	.22	.02	.03	1	50	1	2
90G-33	3	33	7	31	.1	12	6	365	2.20	2	5	ND	1	43	.2	2	2	48	.95	.098	2	15	.55	75	.07	5	.98	.06	.06	1	11	1	3
90G-34	5	41	4	2	.1	13	3	76	.57	12	5	ND	1	2	.2	2	2	2	.02	.010	2	11	.01	12	.01	5	.06	.01	.04	1	12	1	2
STANDARD C/FA-10R	21	62	40	134	7.6	73	32	1049	3.98	41	15	7	36	53	18.6	15	19	61	.49	.096	37	61	.86	179	.08	38	1.90	.06	.13	13	504	499	518

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCK AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ICP FROM 10 GM SAMPLE.

DATE RECEIVED: DEC 3 1990 DATE REPORT MAILED: Dec 5/90 SIGNED BY: *D. Toye* ...D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

COMP: GOLDCLIFF RESOURCES
 PROJ: GEOTEC-GOLDCLIFF
 ATTN: L.SALEKEN/G.CROOKER

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 0V-1360-SJ1+2
 DATE: 90/09/18
 * SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
8100E 10150	.8	26180	1	7	117	1.5	4	6300	.1	31	136	47850	3990	31	15670	2305	1	1090	126	940	45	1	13	1	1	84.4	137	1	1	1	82	1
8100E 10175	4.3	31370	1	10	112	.1	14	15330	.1	51	95	72860	3010	45	41590	1777	1	1110	182	1110	12	1	16	1	1	159.2	106	1	1	2	224	7
8100E 10200	3.2	35250	1	10	233	.1	12	13030	.1	53	97	74070	4230	43	26390	2066	1	1370	169	1020	15	1	17	1	1	160.6	134	1	1	2	163	1
8100E 10225	1.8	27520	1	5	224	.7	7	9850	.1	28	59	49940	4230	26	15210	1180	1	1200	68	480	27	1	14	1	1	118.4	116	1	1	1	69	1
8100E 10250	2.0	34510	1	6	230	.1	8	10490	.1	38	57	60230	1990	31	17490	1948	1	1210	93	740	21	1	15	1	1	119.3	155	1	1	1	72	1
8100E 10275	1.2	27960	1	7	376	.3	5	11040	.1	52	83	46750	2580	26	9580	3033	1	1180	83	1090	41	1	19	1	1	102.8	333	1	1	1	35	1
8100E 10300	2.4	30280	1	8	158	.4	9	12050	.1	40	54	63650	1770	31	23280	1189	1	1160	125	980	18	1	14	1	1	109.8	146	1	1	1	102	1
8100E 10325	.4	17330	107	6	327	1.6	4	6760	1.6	22	160	58540	2440	14	3770	2599	2	1020	80	1060	57	3	15	1	1	91.9	343	1	1	1	22	48
8100E 10350	.3	14590	27	4	533	.7	4	13300	3.4	22	92	36070	2330	12	3920	3658	4	1260	69	1560	53	3	19	1	1	57.1	325	1	1	1	8	1
8100E 10400	.8	12340	9	12	342	.1	3	21780	.1	17	69	25110	2120	13	8430	3311	1	1070	39	1260	42	1	20	1	1	50.0	102	1	1	1	23	1
8100E 10425	.1	20610	116	6	283	1.0	4	6270	1.8	44	196	52500	3450	19	6570	5084	2	980	115	1480	76	2	12	1	1	63.7	254	1	1	1	21	101
8100E 10450	.5	24060	5	6	115	1.6	2	3540	.1	31	106	41710	4390	27	14670	1584	3	1260	114	630	38	1	7	1	1	66.0	144	2	1	1	67	1
8100E 10475	.9	33070	1	8	119	1.9	4	5790	.1	33	154	52210	4750	38	20660	2061	1	1070	187	670	25	1	11	1	1	103.4	121	1	1	1	141	1
8100E 10500	4.5	36370	1	10	194	.1	13	17010	.1	55	94	85750	5830	44	40090	2061	1	1260	192	1050	12	1	16	1	1	182.9	123	1	1	2	232	1
8200E 9850N	1.8	27530	1	4	245	.4	7	8270	.1	23	37	43540	2430	25	11740	2813	1	1460	63	260	42	1	11	1	1	89.9	454	1	1	1	59	1
8200E 9875N	1.8	24100	1	4	185	.8	6	7960	.1	27	47	37810	2300	26	9590	1051	1	1470	52	940	34	1	14	1	1	78.6	210	2	1	1	41	1
8200E 9900N	.9	20650	20	5	392	1.0	4	3960	.1	13	37	28720	4090	16	6720	1225	1	1230	31	410	24	1	8	1	1	56.5	132	1	1	1	23	1
8200E 9925N	1.1	19600	1	1	575	.1	4	6990	1.5	14	31	25190	2050	15	4180	2277	1	1610	34	770	33	1	14	1	1	47.1	435	1	1	1	16	1
8200E 9950N	.6	14270	1	1	384	.4	2	7090	.1	9	14	17300	1220	15	2640	1027	1	1670	19	1640	25	1	16	1	1	36.1	235	1	1	1	8	1
8200E 9975N	1.2	23100	1	2	316	.3	5	7330	.1	18	42	34640	1780	20	8400	1207	1	1410	43	760	23	1	10	1	1	76.8	93	1	1	1	28	1
8200E 10000N	1.2	20350	1	3	481	.9	5	9460	.1	22	70	39990	2350	20	10320	1444	1	1210	49	1130	24	1	14	1	1	87.6	108	1	1	1	34	1
8200E 10025N	1.7	26650	1	5	479	.3	7	10180	.1	30	93	46610	4330	25	14360	1483	1	1340	80	1640	26	1	16	1	1	93.6	124	1	1	1	58	59
8200E 10050N	1.9	31090	1	6	267	.2	7	11680	.1	31	99	48210	3240	26	16700	1319	1	1410	95	1690	32	1	15	1	1	96.2	119	1	1	1	68	1
8200E 10100N	2.2	28420	1	7	175	.4	8	13890	.1	34	100	58910	3020	36	21700	1733	1	1240	126	1330	27	1	13	1	1	113.0	110	1	1	1	128	1
8200E 10125N	2.0	23680	1	8	379	.7	8	18300	.1	33	82	51290	3110	27	20600	3206	1	1440	69	2430	31	1	26	1	1	102.1	152	1	1	1	92	1
8200E 10150N	1.8	27560	3	6	264	.7	6	10790	.1	30	119	54830	3540	24	19680	1631	1	1300	76	1050	36	1	11	1	1	120.9	115	1	1	1	97	24
8200E 10175N	3.7	34630	1	10	222	.2	12	16040	.1	52	118	78990	4490	45	39910	2801	1	1480	205	1590	15	1	16	1	1	158.5	120	1	1	2	214	1
8200E 10200N	3.2	34680	1	9	141	.4	12	13650	.1	49	117	79050	3910	44	40820	3006	1	1260	180	1200	12	1	14	1	1	153.4	127	1	1	2	211	1
8200E 10225N	3.3	30570	1	9	141	.7	12	15380	.1	47	118	74390	3940	38	35420	1950	1	1660	168	1030	12	1	14	1	1	171.5	102	1	1	2	200	1
8200E 10250N	1.1	23880	1	6	139	.7	7	13530	.1	38	124	61310	5030	25	23030	2282	1	1160	99	1110	32	1	12	1	1	150.2	97	1	1	1	139	1
8200E 10275N	1.4	27300	1	6	116	.7	6	13790	.1	40	170	67620	4070	25	25130	1810	1	1140	79	690	43	1	11	1	1	195.4	107	1	1	2	146	1
8200E 10300N	.8	32100	1	7	196	1.2	6	7740	.1	32	141	50770	2600	27	12460	2718	1	1330	81	790	38	1	10	1	1	104.5	152	1	1	1	58	1
8200E 10325N	1.0	27390	1	6	235	.6	6	8650	.1	24	52	42840	3430	28	11810	2326	1	1340	72	870	25	1	12	1	1	89.1	184	1	1	1	63	2
8200E 10350N	1.2	33340	1	6	234	.7	7	9690	.1	30	74	48630	3990	27	17930	2079	1	1470	66	560	27	1	10	1	1	112.1	188	1	1	1	71	1
8200E 10375N	1.7	39980	1	7	320	.1	9	10730	.1	35	101	60520	9430	30	26420	1786	1	1410	77	520	12	1	11	1	1	144.4	124	1	1	1	116	1
8200E 10400N	1.1	36700	1	6	109	1.1	6	8810	.1	35	183	64030	1890	47	32540	2352	1	1200	78	630	123	1	10	1	1	185.1	372	1	1	2	156	1
8200E 10425N	.6	31450	1	3	265	1.1	5	8570	.1	37	163	46370	1920	32	14200	2363	1	1220	69	670	26	1	11	1	1	95.6	123	1	1	1	53	1
8200E 10450N	.5	22470	1	6	377	.8	5	15700	.1	33	164	41890	2820	25	11180	3683	1	1250	58	2300	39	1	24	1	1	66.9	162	1	1	1	34	9
8200E 10475N	.2	11810	1	3	499	.1	3	14800	.1	22	84	23420	2350	11	6250	3668	3	1120	65	1540	52	1	17	1	1	38.4	122	1	1	1	32	1
8200E 10500N	.6	19000	1	4	204	.7	4	11760	.1	20	72	37910	3530	20	11510	2190	1	1320	61	1240	37	1	17	1	1	63.5	103	1	1	1	45	1
8300E 10500N	.1	10750	10	3	323	.3	3	13960	.1	17	58	22240	2230	9	6460	3246	1	1150	40	1110	44	1	16	1	1	38.8	102	1	1	1	22	1
8300E 10525N	1.9	29620	1	5	207	.8	6	10520	.1	37	477	61270	6450	23	17990	1283	1	1350	71	1080	12	1	19	1	1	128.0	81	1	1	1	92	1
8300E 10550N	1.4	36560	1	6	190	.8	6	9160	.1	49	736	73170	9470	26	20740	1361	4	1100	80	1150	10	1	21	1	1	162.1	85	1	1	1	105	1
8300E 10625N	1.9	27750	1	5	419	.5	8	12730	.1	40	117	55120	7640	29	19190	3210	1	1190	147	1480	34	1	21	1	1	91.7	232	1	1	1	122	22
8300E 10650N	1.7	33610	1	8	544	.4	8	12670	.1	41	136	57460	6990	36	17470	3058	1	1250	153	2380	36	1	26	1	1	91.7	287	1	1	1	99	13
8300E 10675N	1.7	28170	80	7	233	.9	8	9920	.1	47	291	102730	6260	24	17960	2092	1	1														

COMP: GOLDCLIFF RESOURCES
 PROJ: GEOTEC-GOLDCLIFF
 ATTN: L.SALEKEN/G.CROOKER

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: OV-1360-SJ3+4
 DATE: 90/09/18
 * ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
8300E 11050N	1.0	27460	1	6	376	.9	6	7650	.1	23	65	40750	4640	22	9120	1717	1	580	55	1250	37	1	16	1	1	82.8	116	1	1	1	33	1
8300E 11075N	1.0	30130	1	5	329	.6	6	6630	.1	24	63	43020	4200	21	9410	1640	1	530	53	1280	28	1	15	1	1	89.0	123	1	1	1	33	3
8300E 11100N	1.0	31040	1	5	402	.9	7	6200	.1	26	65	46370	4150	23	10210	2091	1	500	60	1350	33	1	14	1	1	92.6	139	1	1	1	36	1
8300E 11125N	.9	27200	1	5	320	.8	5	6720	.1	23	66	40440	4250	20	9440	1666	1	430	56	1070	32	1	15	1	1	81.7	110	1	1	1	34	1
8300E 11150N	.3	25390	1	8	387	1.2	5	9220	.1	31	79	49280	6240	19	8810	2724	1	600	54	1570	35	1	19	1	1	74.9	116	1	1	1	21	1
8300E 11175N	.7	27920	1	5	372	1.1	6	6330	.1	28	71	46510	4970	21	10320	1907	1	550	56	790	25	1	13	1	1	81.3	105	1	1	1	32	1
8300E 11200N	.8	28450	1	6	461	.8	6	9850	.1	25	70	41790	5260	23	10320	2440	1	590	64	1100	38	1	20	1	1	81.8	132	1	1	1	38	21
8300E 11225N	1.0	29070	1	6	389	.3	6	7220	.1	28	69	46250	5750	23	11430	1876	1	660	58	820	20	1	13	1	1	89.7	120	1	1	1	38	1
8300E 11250N	1.4	29820	1	7	350	.8	6	9480	.1	32	88	54030	5770	25	13810	1742	1	720	63	1340	18	1	15	1	1	105.1	110	1	1	1	50	1
8300E 11275N	1.0	30460	1	5	312	.7	6	7700	.1	27	88	50860	4560	26	11850	1828	1	600	65	1130	21	1	16	1	1	90.1	117	1	1	1	41	28
8300E 11300N	1.2	27420	1	6	472	.4	5	12220	.1	25	72	45190	4780	22	10740	3489	1	610	61	1920	28	1	24	1	1	80.1	150	1	1	1	41	1
8300E 11325N	1.2	36780	1	6	263	1.0	7	7470	.1	29	77	51790	4310	27	12930	2082	1	620	69	1320	24	1	15	1	1	103.3	137	1	1	1	54	1
8400E 10500N	1.0	25250	1	7	955	.2	5	16220	.1	28	152	44410	3820	30	11000	2421	1	690	41	2640	22	1	40	1	1	106.6	109	1	1	1	40	34
8400E 10525N	.1	19950	1	7	285	.8	4	9360	.1	32	136	54720	4410	17	8430	1785	1	490	37	1670	22	1	17	1	1	84.3	71	1	1	1	10	29
8400E 10550N	.7	26120	1	13	143	.7	5	7150	.1	29	193	55040	6120	19	8750	601	1	880	43	990	19	1	12	1	1	81.9	77	1	1	1	13	50
8400E 10600N	.6	17890	46	7	463	1.4	4	12920	.1	24	476	49110	4230	12	6070	4398	2	520	55	1620	34	1	35	1	1	46.0	100	1	1	1	1	115
8400E 10625N	.1	33560	266	7	240	3.2	6	5790	.9	60	485	75780	7340	31	14470	6022	2	540	130	1700	44	1	21	1	1	73.7	158	1	1	1	1	16
8400E 10650N	.4	39220	1	7	263	1.9	7	5790	.1	52	242	69470	10940	27	13700	4160	1	550	70	1590	38	1	16	1	1	107.2	150	1	1	1	42	1
8400E 10700N	2.1	41050	1	7	442	.6	12	14440	.1	70	155	65200	12270	34	25140	4104	1	680	182	1000	19	1	24	1	1	112.7	168	1	1	1	135	22
8400E 10725N	2.9	32580	1	8	307	.1	11	13010	.1	43	121	64050	9230	26	22690	1772	1	960	120	810	10	1	12	1	1	125.1	133	1	1	2	135	1
8400E 10750N	2.4	47590	1	8	347	.5	8	10930	.1	73	345	69990	13150	33	24580	3489	1	770	127	1060	20	1	14	1	1	134.4	339	1	1	2	146	124
8400E 10775N	1.8	37210	1	7	522	.6	9	13150	.1	41	112	54560	8630	26	18040	2608	1	730	108	1760	31	1	28	1	1	107.2	210	1	1	1	104	33
8400E 10800N	2.7	42960	1	8	383	.2	11	14440	.1	49	157	67300	10100	31	24030	3366	1	830	148	1210	16	1	13	1	1	133.9	189	1	1	2	148	1
8400E 10825N	4.2	44860	1	7	436	.1	15	17510	.1	57	115	75910	11970	44	35260	2229	1	1330	210	1040	10	1	12	1	1	148.3	167	1	1	2	235	1
8400E 10850N	3.0	37430	1	7	365	.2	11	12780	.1	36	81	60420	9300	33	22070	1815	1	860	128	880	10	1	12	1	1	119.9	141	1	1	2	137	1
8400E 10875N	2.3	34690	1	8	387	.6	9	13470	.1	42	90	68830	10740	28	23190	2150	1	1020	158	1040	16	1	13	1	1	135.8	160	1	1	2	169	22
8400E 10900N	3.0	35300	1	8	381	.2	12	14850	.1	42	95	61070	11340	31	25900	1996	1	1110	156	1000	18	1	13	1	1	118.7	138	1	1	1	149	1
8400E 10925N	1.1	22630	1	6	333	.4	6	11580	.1	28	68	42530	7850	19	13840	1841	1	1200	79	840	21	1	13	1	1	81.6	144	1	1	1	61	1
8400E 10950N	2.0	26810	1	5	339	.2	10	11780	.1	27	51	48260	9540	28	18470	1518	1	890	36	690	22	1	15	1	1	87.5	239	1	1	1	94	1
8400E 10975N	1.0	27510	1	25	365	1.0	7	9650	.1	26	74	47350	7760	27	14020	2404	1	640	73	1420	32	1	13	1	1	87.9	262	1	1	1	61	1
8400E 11000N	2.0	27120	1	7	400	.8	7	9980	.1	30	89	50740	8190	26	15870	1848	1	590	86	1300	28	1	12	1	1	98.1	117	1	1	1	80	1
8400E 11025N	1.4	30540	1	6	482	1.1	6	8160	.1	28	108	48890	7300	26	12770	1766	1	540	80	970	30	1	17	1	1	102.4	118	1	1	1	51	16
8400E 11050N	1.4	34670	1	6	484	1.1	7	7230	.1	32	96	51880	8610	30	17680	2069	1	580	115	840	25	1	15	1	1	111.2	122	1	1	1	96	1
8400E 11075N	1.3	32630	1	5	734	.4	7	8590	.1	27	88	47230	5680	26	11920	2247	1	570	70	910	30	1	17	1	1	107.1	121	1	1	1	48	1
8400E 11100N	1.0	23450	1	4	1427	.3	5	11390	.1	20	71	34970	5150	19	9230	2610	1	610	42	1110	36	1	20	1	1	71.5	112	1	1	1	33	1
8400E 11125N	2.0	34520	1	5	692	.8	7	10440	.1	34	93	51070	8110	32	21980	2250	1	1100	123	860	26	1	13	1	1	110.7	102	1	3	1	105	1
8400E 11150N	1.4	24250	1	12	497	.1	4	20140	.7	23	80	36720	6540	25	12320	3504	1	720	80	1030	41	1	22	1	1	69.8	206	1	1	1	47	2
8400E 11175N	.9	18340	3	9	218	.4	3	13720	.1	20	64	46260	5200	14	5530	1755	1	670	50	950	24	1	21	1	1	54.8	56	1	1	1	9	3
8400E 11200N	.7	27310	1	4	272	1.3	5	5850	.1	24	102	45890	3940	22	9260	2339	1	510	59	1240	27	1	14	1	1	76.0	112	1	2	1	20	2
8400E 11225N	1.0	31440	1	5	343	1.2	5	6840	.1	26	121	45950	3760	24	9310	2266	1	610	54	1160	25	1	19	1	1	82.9	126	1	1	1	27	18
8400E 11250N	.7	33770	1	5	461	3.0	6	7080	.1	50	151	55770	6680	30	14970	3143	3	540	92	2540	26	1	19	1	1	90.9	179	1	1	1	45	11
8400E 11275N	.9	30520	1	6	599	.3	5	11930	.1	31	103	46690	7660	29	13120	2270	1	600	80	1370	26	1	19	1	1	102.6	114	1	2	1	48	1
8400E 11300N	1.4	43010	1	6	500	.4	8	8280	.1	32	255	70850	8640	28	17000	885	2	660	54	1210	10	1	19	1	1	131.9	84	1	1	1	41	1
8400E 11325N	1.0	29140	1	4	534	.8	7	10020	.1	42	233	74100	7100	30	25660	1785	1	540	86	890	21	1	14	1	1	218.3	121	1	1	2	129	1
8400E 11350N	1.0	31690	1	3	365	1.0	6	5940	.1	26	271	50770	1810	25	11830	1087	1	610	48	430	18	1	15	1	1	126.3	105	1	1	1	48	1
8400E 11375N	.4	12080	1	1	550	.1	2	9770	.1	10	67	16040	2030	9	2590	3042	1	690	16	650												

COMP: GOLDCLIFF RESOURCES
 PROJ: GEOTEC-GOLDCLIFF
 ATTN: L.SALEKEN/G.CROOKER

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: OV-1360-SJ5+6
 DATE: 90/09/18
 * ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
8500E 10725N	2.3	33120	1	4	333	.5	8	10350	.1	33	87	56110	9830	29	21420	1809	1	650	110	890	6	1	10	1	1	100.6	112	1	2	1	108	1
8500E 10750N	1.0	23380	1	9	512	.4	5	15620	.1	26	76	38830	6810	23	11890	3487	1	540	77	1500	28	1	25	1	1	68.4	133	1	1	1	57	1
8500E 10775N	2.2	32090	1	5	396	.3	8	11360	.1	36	95	57230	10250	29	17450	2656	1	510	97	1160	10	1	16	1	1	108.7	132	1	1	1	108	1
8500E 10800N	1.9	33240	1	4	354	.4	7	8000	.1	34	113	56910	9740	29	15550	2830	1	590	89	1060	18	1	14	1	1	102.3	174	1	1	1	74	1
8500E 10825N	1.7	35680	1	5	402	1.0	6	9290	.1	39	115	59030	8200	34	16730	3869	1	560	71	1240	27	1	15	1	1	108.9	180	1	1	1	73	35
8500E 10850N	2.6	30270	1	4	320	.5	7	12910	.1	31	79	49520	7230	30	16380	2381	1	850	78	1280	17	1	23	1	1	90.3	229	1	1	1	86	16
8500E 10875N	1.4	34110	1	7	337	.8	7	9580	.1	38	131	62850	11410	32	18370	3096	1	640	81	1710	30	1	18	1	1	124.7	180	1	2	1	93	2
8500E 10900N	1.7	31920	1	5	350	1.1	8	9910	.1	39	130	61030	10050	30	18890	3153	1	710	87	1060	19	1	17	1	1	124.7	160	1	1	1	99	4
8500E 10925N	2.2	27750	1	5	496	.4	8	11900	.1	33	81	48890	9300	26	16920	2274	1	760	96	1020	21	1	13	1	1	90.3	155	1	1	1	88	3
8500E 10950N	2.7	29520	1	6	496	.5	9	12810	.1	36	112	54910	12200	27	21210	1978	1	680	116	1190	10	1	11	1	1	104.1	132	1	1	1	119	1
8500E 10975N	2.2	29130	1	5	300	.6	7	10180	.1	32	85	50580	8690	25	17850	1306	1	670	91	1000	9	1	10	1	1	100.3	104	1	1	1	88	1
8500E 11000N	2.1	33280	1	4	365	.6	8	9330	.1	36	73	54200	8310	27	18320	1928	1	800	103	1850	10	1	12	1	1	106.4	125	1	1	1	90	1
8500E 11025N	4.8	43530	1	7	376	.1	14	17230	.1	55	68	81320	18460	47	40030	1649	1	1190	183	1810	6	1	12	1	1	152.2	118	1	2	1	154	1
8500E 11050N	2.3	32240	1	5	328	.1	9	10990	.1	37	99	58310	10170	27	21820	1542	1	680	110	1200	9	1	12	1	1	118.5	101	1	2	1	98	1
8500E 11075N	2.3	33450	1	5	401	.2	8	12050	.1	38	103	56700	9490	29	22760	1776	1	820	114	1220	7	1	13	1	1	114.9	102	1	1	1	105	13
8500E 11100N	1.9	33050	1	4	543	.5	6	9930	.1	38	92	53420	8340	29	21840	2133	1	860	118	1370	14	1	13	1	1	105.7	105	1	2	1	102	1
8500E 11125N	2.2	33630	1	5	679	.3	8	11640	.1	39	82	55970	8300	32	23200	2300	1	710	122	1470	16	1	14	1	1	109.2	118	1	1	1	115	1
8500E 11150N	.7	18250	15	5	421	.1	4	12060	.1	18	49	30080	2870	21	5710	5193	1	620	68	1080	30	1	15	1	1	48.8	216	1	1	1	15	1
8500E 11175N	2.7	27730	1	6	302	.4	6	14880	.1	36	80	54470	8120	27	22430	1945	1	1040	167	750	16	1	12	1	1	91.9	84	1	1	1	85	1
8500E 11200N	3.5	31490	1	4	432	.1	10	16030	.1	41	56	60410	13680	25	31150	1745	1	880	127	800	6	1	17	1	1	110.8	90	1	2	1	116	1
8500E 11225N	4.0	36450	1	4	411	.1	12	15150	.1	47	58	66220	12680	27	32690	1513	1	890	163	770	6	1	13	1	1	119.4	86	1	1	1	145	1
8500E 11250N	.7	18910	8	3	524	.8	3	14880	.1	24	98	36100	3080	23	7920	2636	1	530	67	2060	33	1	34	1	1	63.6	121	1	1	1	19	1
8500E 11275N	.4	24400	9	2	559	.2	4	6660	.1	27	111	40990	3870	21	8710	2850	1	510	55	1100	28	1	16	1	1	77.0	124	1	1	1	23	1
8500E 11300N	.8	22790	1	3	649	.3	4	13710	.1	30	116	40620	5570	20	9750	3711	1	580	51	1970	31	1	36	1	1	79.2	133	1	1	1	29	1
8500E 11325N	.6	24380	1	2	323	.8	5	4910	.1	24	93	41630	4950	19	9910	1527	1	430	51	1110	20	1	13	1	1	86.3	91	1	1	1	32	1
8500E 11350N	1.0	31970	1	5	486	.5	5	6820	.1	39	189	60160	9310	27	17400	2009	1	530	90	1400	20	1	17	1	1	163.0	108	1	3	1	65	2
8500E 11375N	.5	19160	1	3	919	.5	4	13330	.1	28	186	46050	4820	17	8780	4362	2	640	87	2000	30	1	38	1	1	90.5	154	1	1	1	24	1
8500E 11400N	1.2	34460	1	3	458	.3	6	6440	.1	29	150	53390	8460	27	16720	1279	1	760	86	560	6	1	17	1	1	128.8	80	1	2	1	55	74
8500E 11425N	2.3	27770	1	3	303	.3	8	11310	.1	36	163	51790	8030	26	21550	1417	1	490	129	880	6	1	14	1	1	101.0	69	1	1	1	114	1
8500E 11450N	1.7	24040	1	2	287	.5	6	9810	.1	33	122	45690	4870	22	18060	1472	1	600	112	660	10	1	11	1	1	88.4	55	1	1	1	72	1
8500E 11475N	3.3	33580	1	4	334	.1	11	14580	.1	48	187	69080	10500	29	32570	1368	1	870	176	640	8	1	12	1	1	130.8	55	1	2	2	156	1
8500E 11500N	3.0	35370	1	5	319	.1	10	12880	.1	50	242	70560	9870	29	30620	1432	1	520	193	750	8	1	16	1	1	133.5	59	1	2	2	166	1
8600E 10500N	.7	21870	1	6	549	.4	5	11950	.1	23	80	38140	3820	21	9050	2745	1	920	45	2280	26	1	24	1	1	71.2	136	1	1	1	31	1
8600E 10550N	1.3	25630	1	5	450	.3	6	9950	.1	35	207	52210	6530	22	13690	2417	1	280	65	1230	21	1	20	1	1	119.2	110	1	1	1	43	1
8600E 10575N	2.2	27560	1	5	337	.2	8	9550	.1	31	112	54040	8680	19	17030	1144	1	380	70	830	8	1	15	1	1	127.2	80	1	1	1	75	7
8600E 10600N	1.2	23770	1	5	308	.1	7	7190	.1	25	67	44740	6420	20	12120	1593	1	280	49	570	18	1	10	1	1	99.8	101	1	1	1	37	1
8600E 10625N	.9	25630	1	7	259	.1	5	7720	.1	23	85	43020	5330	19	9830	1339	1	220	54	800	10	1	12	1	1	83.7	96	1	1	1	30	17
8600E 10650N	1.5	27450	1	8	374	.6	7	9660	.1	38	167	58910	11310	23	18350	1821	1	260	88	1550	23	1	19	1	1	124.0	111	1	1	1	63	174
8600E 10675N	2.4	28880	1	5	378	.4	9	11350	.1	36	149	60930	10060	24	21720	1551	1	630	82	1080	14	1	21	1	1	134.5	104	1	1	1	94	139
8600E 10700N	2.7	26510	1	5	308	.1	8	11230	.1	34	95	56620	9810	23	17960	1424	1	590	74	940	8	1	17	1	1	116.0	102	1	1	1	79	17
8600E 10725N	2.2	32100	1	5	249	.1	7	9710	.1	35	166	59320	8920	25	18270	1274	1	350	77	920	8	1	18	1	1	116.2	97	1	1	1	74	26
8600E 10750N	1.5	30580	1	5	395	.8	7	12850	.1	38	192	59420	7210	30	17050	2737	1	760	116	2010	17	1	33	1	1	120.8	135	1	1	1	58	32
8600E 10775N	2.1	30820	1	6	302	.5	7	9410	.1	32	132	59580	8350	26	17210	1478	1	300	87	1220	12	1	21	1	1	115.0	115	1	1	1	65	1
8600E 10800N	1.9	26700	1	6	427	.4	6	10190	.1	28	93	51010	7020	24	14570	2065	1	300	61	1320	33	1	21	1	1	97.0	124	1	1	1	52	21
8600E 10850N	1.2	29390	1	4	408	.1	6	8310	.1	34	117	55530	7760	30	14330	2908	1	680	80	1200	24	1	16	1	1	104.3	117	2	1	1	56	1
8600E 10875N	1.9	29340	1	3	263	.4	7	9990	.1	46	126	61090	8090	30	16970	2705	1	320	93	1130	13											

COMP: GOLDCLIFF RESOURCES
 PROJ: GEOTEC-GOLDCLIFF
 ATTN: L.SALEKEN/G.CROOKER

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: OV-1360-SJ7+8
 DATE: 90/09/18
 * ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CJ PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM	PB
8600E 11250N	.7	23630	1	2	213	.4	3	6370	.1	32	282	52740	6290	21	12470	1511	3	280	107	650	16	1	11	1	1	90.8	65	1	1	1	56	8		
8600E 11275N	.7	21010	1	2	229	.2	4	7720	.1	30	218	40180	5420	21	11150	1306	2	150	85	760	11	1	12	1	1	75.7	78	1	1	1	45	2		
8600E 11300N	.9	24160	1	4	219	.8	3	7490	.1	32	360	47280	4550	24	9410	2239	6	300	99	440	10	1	13	1	1	90.8	84	1	1	1	29	11		
8600E 11325N	.9	23050	1	6	256	.1	4	8330	.1	26	161	41470	6240	22	10100	1191	1	190	60	450	13	1	15	1	1	87.4	85	1	1	1	35	6		
8600E 11350N	.7	16670	1	1	149	.4	3	5090	.1	13	67	22730	3170	20	4870	844	1	260	30	540	16	1	10	1	1	44.7	74	1	1	1	14	3		
8600E 11375N	1.4	29040	1	3	313	.5	6	7680	.1	31	131	47850	5140	23	14970	1969	1	190	64	1200	14	1	16	1	1	115.2	105	1	1	1	71	10		
8600E 11400N	1.4	28500	1	2	351	.5	5	8810	.1	34	188	50750	4030	22	12350	2253	1	170	56	1190	16	1	17	1	1	105.5	95	1	1	1	41	4		
8600E 11425N	.8	22570	1	1	272	.3	3	4830	.1	23	110	37540	3770	18	8910	1796	1	120	44	1090	19	1	13	1	1	77.2	76	1	1	1	31	9		
8600E 11450N	.7	25750	1	2	572	.5	4	7200	.1	24	115	45370	5050	20	14270	2216	2	110	44	1900	12	1	19	1	1	109.7	96	1	1	1	29	11		
8600E 11475N	.5	18980	1	4	354	.6	3	11550	.1	19	100	35060	4090	23	7160	3634	2	130	45	1790	23	1	24	1	1	60.9	142	1	1	1	12	12		
8600E 11500N	.4	24550	1	1	230	.3	3	5580	.1	22	114	38530	3320	21	8250	2268	3	120	45	740	16	1	14	1	1	74.6	78	1	1	1	25	2		
9800N 9250E	1.8	29040	1	3	625	.3	7	6440	.1	40	157	60830	10830	29	18030	1459	1	220	115	850	10	1	14	1	1	144.4	119	1	1	1	83	2		
9800N 9275E	1.7	29900	1	3	724	.4	6	6720	.1	40	134	58820	12060	32	19690	1743	1	250	101	710	10	1	16	1	1	132.6	131	1	1	1	88	1		
9800N 9300E	.5	16970	1	7	1210	.1	4	15020	1.0	22	86	29520	5050	21	6080	3334	1	270	81	3090	26	1	36	1	1	48.5	277	1	1	1	25	2		
9800N 9400E	.6	19380	1	2	233	.5	3	5180	.1	19	70	31360	2350	20	6030	728	1	340	62	1280	18	1	19	1	1	65.2	149	1	1	1	16	1		
9800N 9425E	.8	24180	1	2	312	.5	4	8330	.1	18	43	34080	2550	22	6110	1915	1	270	39	770	26	1	20	1	1	77.6	121	1	1	1	22	1		
9800N 9450E	.7	21360	1	1	178	.4	3	3780	.1	11	30	20080	1490	16	3520	742	1	400	36	880	22	1	11	1	1	45.0	71	1	1	1	10	1		
9800N 9475E	1.2	26630	1	2	229	.3	4	5680	.1	21	97	48960	2450	19	8080	509	1	220	50	450	19	1	18	1	1	123.8	77	2	1	1	34	3		
9800N 9500E	3.0	36980	1	3	402	.1	9	9970	.1	35	47	54360	6100	30	22050	1460	1	520	107	760	10	1	21	1	1	127.3	104	1	1	1	141	2		
9800N 9525E	1.3	26870	1	1	332	.3	5	6420	.1	28	131	50210	3990	19	12750	1092	1	300	53	660	10	1	13	1	1	130.4	87	1	1	1	59	1		
9800N 9550E	1.1	26850	1	2	393	.4	5	7820	.1	27	79	49300	5080	20	11200	1844	1	200	56	1900	14	1	20	1	1	110.4	120	1	1	1	51	4		
9800N 9575E	1.2	20300	1	3	199	.2	6	10470	.1	41	286	73340	5160	18	21270	2829	1	120	60	1660	15	1	16	1	1	218.6	126	1	2	1	65	2		
9800N 9600E	1.4	22620	1	3	304	.3	5	11020	.1	55	631	76560	5560	21	22140	1513	2	190	126	1530	10	1	18	1	1	334.1	185	1	1	1	59	18		
9800N 9625E	.9	16520	1	3	323	.1	4	12410	.1	43	323	52210	5440	15	14450	1909	1	320	64	2080	20	1	24	1	1	167.4	138	1	1	1	60	1		
9800N 9675E	.7	13060	1	3	106	.1	3	6760	.1	34	83	52570	4270	11	15560	478	1	110	58	270	10	1	10	1	1	109.5	63	1	1	1	105	2		
9800N 9700E	.7	10980	27	2	152	.1	4	6560	.1	29	44	40020	4030	10	16140	656	1	100	64	350	15	1	8	1	1	92.6	49	1	1	2	249	1		
9800N 9725E	.9	12120	1	2	172	.1	3	8160	.1	30	64	41010	3230	13	20180	536	1	110	77	370	14	1	8	1	1	94.3	54	1	1	2	259	1		
9800N 9750E	1.7	8530	1	2	99	.3	2	34790	.1	30	56	33590	2070	28	31170	670	1	130	72	360	8	1	16	1	1	63.7	40	1	2	2	294	3		
9800N 9775E	.9	13200	8	3	160	.3	3	8610	.1	31	60	40850	4720	15	19020	1322	1	180	73	400	12	1	12	1	1	72.2	66	1	1	2	234	1		
9800N 9800E	.9	15040	2	3	168	.5	4	7780	.1	29	85	51040	4220	15	17410	922	1	200	55	270	12	1	15	1	1	107.8	60	1	1	2	196	6		
9800N 9825E	1.5	15190	1	4	241	.1	5	9770	.1	37	237	70320	5190	12	21860	1105	1	210	82	330	144	1	13	1	1	135.1	63	1	2	2	277	2		
9800N 9850E	1.0	13340	1	4	184	.3	3	9700	.1	30	97	46230	4210	15	16890	1302	1	210	64	640	25	1	13	1	1	106.6	72	1	2	2	177	54		
9800N 9875E	.7	13630	1	2	247	.4	2	11780	.1	18	74	24890	3470	12	8210	1487	1	220	36	870	28	1	22	1	1	48.0	101	1	1	1	61	3		
9800N 9900E	.7	14530	1	1	190	.4	2	8350	.1	13	53	23600	2790	11	5640	988	2	250	28	980	28	1	21	1	1	53.1	94	1	1	1	41	1		
9800N 9925E	.6	14560	1	1	193	.3	2	6790	.1	13	47	24680	2850	11	4670	773	3	330	25	1020	29	1	20	1	1	59.8	63	1	1	1	25	3		
9800N 9950E	.7	13250	10	3	206	.5	3	8210	.1	23	80	49210	2970	9	7520	784	1	180	35	940	25	1	19	1	1	145.9	65	1	1	1	64	2		
9800N 9975E	.5	11620	1	2	170	.4	3	6080	.1	27	94	62840	2890	8	7390	670	1	140	38	670	32	1	12	1	1	192.4	50	1	1	1	89	1		
9800N 10000E	.5	13070	1	2	180	.2	3	5930	.1	23	96	48530	3330	10	7100	827	1	210	40	840	19	1	15	1	1	138.2	62	1	1	1	73	5		
9900N 9250E	1.5	32340	1	6	556	.6	6	9290	.1	42	204	61390	9800	34	17580	3289	1	190	150	1470	15	1	22	1	1	145.6	164	1	2	1	80	3		
9900N 9275E	1.3	29530	1	2	360	.5	6	5750	.1	30	127	48980	6720	27	12690	1219	1	210	81	650	11	1	14	1	1	114.5	123	1	1	1	48	9		
9900N 9300E	1.9	29550	1	4	388	.1	7	6580	.1	39	191	56330	11590	28	18030	1899	1	220	124	830	21	1	12	1	1	124.8	109	1	2	1	102	8		
9900N 9325E	2.4	33420	1	4	683	.1	8	11470	.1	55	208	71130	12840	38	25550	2479	1	520	195	1220	9	1	16	1	1	130.1	122	1	2	2	165	3		
9900N 9400E	1.5	22870	1	3	328	.1	5	6310	.1	25	82	51880	5810	20	10880	903	1	240	52	820	19	1	19	1	1	137.8	87	1	1	1	49	2		
9900N 9425E	1.4	26420	1	3	212	.3	6	8880	.1	56	233	62490	5230	22	19640	1611	4	830	216	720	22	1	18	1	1	155.9	83	1	1	2	164	1		
9900N 9450E	1.6	21550	1	2	270	.2	5	7440	.1	28	121	50180	3980	17	11960	987	1	330	79	810	14	1	22	1	1	146.2	79	1	1	1	74	4		
9900N 9475E	1.3	24590	1	1	351	.2	5	10180	.1	24	70	38570	3930	17	11890	1212	1	680	81	480	15	1	17	1	1	101.6	91	1	1	1	97	2		
9900N 9500E	1.3	16690	1	1	292	.5	4	6780	.																									

COMP: GOLDCLIFF RESOURCES
 PROJ: GEOTEC-GOLDCLIFF
 ATTN: L.SALEKEN/G.CROOKER

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: OV-1360-SJ9+10
 DATE: 90/09/18
 * ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPM
9900N 9775E	.6	16420	1	4	236	.7	3	8250	.1	20	106	36940	4170	11	6970	803	1	180	33	570	26	1	14	1	1	97.7	53	1	1	1	41	2
9900N 9800E	.6	17550	1	3	257	.2	3	8090	.1	24	81	40800	4630	13	13090	931	1	180	44	800	23	1	14	1	1	104.0	62	1	1	1	74	1
9900N 9825E	.7	15750	1	3	230	.4	3	8900	.1	22	67	39730	3520	11	9640	820	1	200	42	900	13	1	15	1	1	97.4	56	1	1	1	60	1
9900N 9850E	.6	13670	1	4	206	.1	3	9050	.1	23	71	43080	4110	11	9970	788	1	200	42	950	18	1	19	1	1	108.4	59	1	2	2	62	7
9900N 9875E	.9	19490	1	4	271	.1	4	7440	.1	25	72	46450	4620	14	9050	880	1	240	39	990	24	1	18	1	1	117.8	74	2	1	1	60	3
9900N 9900E	1.0	11690	1	3	158	.1	4	7250	.1	36	190	75910	3510	9	12000	666	6	170	44	620	30	1	13	1	1	236.3	50	1	2	2	42	2
9900N 9925E	1.2	14000	1	4	174	.1	5	6270	.1	40	353	87850	4670	10	11120	753	31	160	35	500	41	1	14	1	1	274.2	55	2	2	2	32	4
9900N 9950E	2.1	13110	1	2	160	.1	4	14850	.1	36	402	67700	3970	10	14970	578	3	190	45	560	51	1	15	1	1	203.0	48	2	1	3	46	84
9900N 9975E	1.2	15280	1	2	235	.7	3	7630	.1	26	258	48080	3800	10	9550	761	8	200	37	800	31	1	20	1	1	134.7	63	1	1	1	41	1
9900N 10000E	1.0	18760	1	3	232	.4	4	6310	.1	25	146	50020	3500	12	8640	833	4	210	35	740	23	1	18	1	1	145.0	61	1	1	2	36	3
10000N 9250	1.3	21600	1	3	371	.5	5	6910	.1	21	49	37010	4930	15	9050	1078	1	250	67	630	19	1	11	1	1	98.8	82	2	1	1	42	1
10000N 9275	1.2	17710	1	1	304	.4	5	6030	.1	22	69	39100	4990	11	8350	809	1	230	44	360	15	1	12	1	1	114.6	44	1	1	1	41	1
10000N 9300	5.0	36600	1	3	448	.1	15	17470	.1	36	16	74380	16600	27	35290	1288	1	330	53	1050	8	1	17	1	1	196.7	77	1	1	1	1	1
10000N 9325	3.1	39120	1	7	2497	.1	9	22580	.1	49	169	79010	12900	33	32960	1780	1	710	92	4500	8	1	52	1	1	207.6	82	1	2	1	49	2
10000N 9350	2.0	28550	1	6	641	.7	7	15510	.1	47	194	57030	9700	23	21930	2442	1	330	176	1740	12	1	28	1	1	129.7	122	1	1	2	94	1
10000N 9375	2.5	33920	1	6	439	.1	9	9680	.1	57	265	73280	17600	24	26170	1401	1	310	157	1680	8	1	25	1	1	144.2	75	1	1	3	106	3
10000N 9450	.8	19770	1	2	553	.1	4	8310	.1	27	108	41470	3590	16	7870	1761	1	300	83	1240	22	1	18	1	1	118.8	78	1	1	1	42	1
10000N 9475	1.1	22140	1	4	253	.3	4	7410	.1	27	91	49080	4430	17	8310	799	1	290	66	620	14	1	15	1	1	131.8	73	1	1	1	45	2
10000N 9500	1.5	23100	1	3	314	.3	5	8490	.1	27	148	48690	5740	20	9690	1232	1	310	45	780	18	1	16	1	1	147.9	87	1	1	1	24	2
10000N 9525	1.7	25100	1	3	290	.1	6	7020	.1	34	188	69320	8100	20	12990	1059	1	220	33	1000	14	1	18	1	1	248.9	83	2	2	3	29	1
10000N 9550	1.6	24480	1	2	432	.1	5	7510	.1	22	67	41120	4290	20	8850	1159	1	240	42	400	8	1	12	1	1	105.7	73	1	1	1	36	2
10000N 9575	1.1	19030	1	2	416	.1	4	8900	.1	24	69	43350	4430	16	9270	1142	1	240	43	760	20	1	14	1	1	123.2	65	1	1	2	53	4
10000N 9600	1.1	17560	1	5	528	.1	4	13160	.1	24	104	41590	4740	15	7860	1810	1	210	44	1770	27	1	26	1	1	121.5	115	1	1	1	26	2
10000N 9625	1.2	21600	1	1	343	.3	4	6980	.1	26	262	45610	3550	17	9370	816	1	280	53	760	20	1	15	1	1	127.9	79	1	1	2	46	3
10000N 9650	.9	20450	1	1	313	.5	4	6400	.1	19	58	33410	3430	15	6410	874	1	260	35	300	10	1	13	1	1	84.6	67	1	1	1	25	1
10000N 9675	.6	13560	1	3	247	.1	4	7380	.1	37	78	67770	4610	10	10590	833	1	150	48	510	11	1	13	1	1	200.0	66	1	1	2	42	2
10000N 9700	.5	14930	1	4	309	.1	4	8480	.1	35	49	66050	4450	11	9770	855	1	150	52	600	28	1	15	1	1	186.5	78	1	1	3	41	1
10000N 9725	.6	13620	1	2	368	.1	4	9610	.1	28	35	49260	3600	10	7730	1228	1	190	38	620	21	1	16	1	1	131.1	78	1	1	1	28	1
10000N 9750	.9	13130	1	5	449	.1	3	9260	.1	21	49	38040	5420	10	8260	1446	2	250	42	1260	22	1	20	1	1	89.9	131	1	1	1	45	2
10000N 9775	.6	13190	1	2	285	.2	4	6730	.1	25	101	53260	4040	9	8090	937	1	160	43	620	23	1	12	1	1	153.5	64	2	1	2	53	1
10000N 9800	.6	14870	1	3	268	.1	3	6480	.1	17	42	30750	3150	10	6450	822	1	220	31	760	17	1	21	1	1	75.9	60	1	1	1	32	1
10000N 9825	.9	16750	1	3	212	.2	4	5400	.1	25	69	51710	2890	10	9140	495	1	200	48	430	21	1	14	1	1	148.3	47	1	1	1	55	1
10000N 9850	.7	12820	1	3	158	.3	3	6150	.1	17	35	35630	3280	8	5920	569	1	160	27	410	16	1	22	1	1	95.4	41	1	1	1	36	1
10000N 9875	.7	12550	1	4	137	.1	3	5990	.1	17	46	35130	3590	9	6060	602	2	200	26	480	13	1	22	1	1	93.8	45	1	1	1	25	2
10000N 9900	.7	16330	1	4	150	.1	3	6920	.1	19	41	39820	3530	12	5750	779	1	200	32	580	12	1	24	1	1	110.7	45	1	1	1	35	1
10000N 9925	.8	14450	1	4	193	.2	3	7340	.1	24	59	47350	4260	10	9350	765	1	200	38	520	16	1	20	1	1	138.7	53	1	1	1	48	1
10000N 9950	.8	15030	1	4	196	.3	3	8660	.1	20	78	35860	4290	10	9100	844	2	200	33	850	22	1	42	1	1	97.7	59	1	1	1	31	2
10000N 9975	1.1	17130	1	3	223	.3	3	6430	.1	25	265	47320	4080	11	8000	807	18	200	33	790	80	1	25	1	1	141.7	67	1	1	1	23	1
10000N 10000E	.8	16130	1	4	212	.4	4	7180	.1	23	121	44250	4240	10	8370	793	2	170	29	1020	24	1	33	1	1	128.5	73	1	1	1	24	1
10100N 9325E	1.6	20580	1	4	678	.1	5	13020	.1	25	69	40210	6040	15	11130	1832	1	260	95	2390	12	1	29	1	1	86.9	170	1	1	1	51	10
10100N 9350E	1.8	24710	1	6	603	.1	6	12800	.1	30	86	49580	8830	17	18620	1810	1	330	76	1390	13	1	20	1	1	101.4	81	1	1	1	87	2
10100N 9375E	2.3	26000	1	2	400	.1	8	6160	.1	36	188	58430	11130	18	17290	1283	1	230	85	740	7	1	14	1	1	143.3	60	1	1	1	80	5
10100N 9400E	3.0	32130	1	5	560	.1	8	7750	.1	38	323	73070	13900	20	19440	1539	1	320	92	1240	7	1	18	1	1	162.0	83	1	1	1	90	41
10100N 9475E	1.5	9160	4	15	352	.1	4	27950	.1	41	239	81320	3150	6	8850	1113	1	120	34	3140	24	1	42	1	1	297.1	160	2	2	1	1	2
10100N 9500E	.6	8710	1	3	121	.1	6	5600	.1	53	194	113360	2710	8	9730	394	1	110	66	260	13	1	14	1	1	451.3	36	1	2	1	1	6
10100N 9525E	.4	10450	1	2	229	.1	4	5690	.1	39	76	87770	2900	7	7760	683	1	120	47	350	14	1	11	1	1	279.8	38	1	2	1	16	1
10100N 9550E	.7	16660	1	1	314	.1	4	7010	.1	30	62	52380	3170	13	8910	743	1	200														

Appendix II

ROCK SAMPLE DESCRIPTIONS

ROCK SAMPLE DESCRIPTIONS

Sample No.	Grid Coord.	Type	Description
3651	9845N 9685E	grab	-massive skarn, 60% massive py, mag, cpy, mal
3652	9845N 9685E	float	-massive garnet skarn, 2% py, calcite on fractures
3653	9845N 9685E	grab	-massive skarn, garnet, mag, py, 3% cpy, mal on fractures
3654	9845N 9685E	grab	-massive skarn, 60% py, mag, 1% cpy, mal
3655	9845N 9685E	grab	-massive mag, py,
3656	9845N 9685E	grab	-massive mag, py, hem
3657	9845N 9685E	grab	-massive mag, py, hem, calcite,
3658	9875N 9705E	grab	-4 mm calcite veinlet, tr py, mal,
3659	9860N 9735E	float	-chert bx, yellow iron oxides within matrix
90G-20	10405N 8105E	grab	-grey chert, 60 cm wide zone with iron oxides on fractures
90G-21	10325N 8090E	float	-grey quartzite, 2 mm fractures with limonite
90G-22	10310N 8255E	grab	-grey quartzite, rusty fractures, 1/2% py within quartzite
90G-23	10315N 8275E	grab	-grey chert, rusty fractures with py, rusty boxworks with limonite
90G-24	10320N 8290E	float	-sub oc? fg hbl diorite, 7 mm hbl laths up to 10% fg diss py
90G-25	10320N 8305E	float	-grey-green chert, 10-15% diss py

90G-26	10360N 8340E	float	-massive limonite within a bleached, altered intrusive?
90G-27	10400N 8375E	float	-bleached, altered, hbl diorite? rusty fractures, limonite, 10% py
90G-28	10400N 8350E	grab	-rusty, oxidized fracture within hbl diorite, 232° dip 45° N
90G-29	10320N 8290E	float	-rusty grey quartzite, 1/2% py on fractures
90G-30	10300N 8305E	float	-grey, rusty, fractured quartzite,
90G-31	10130N 8305E	float	-rusty grey-black chert, 1% py
90G-32	10190N 8400E	float	-rusty, grey chert, 1/2% py
90G-33	10210N 8400E	grab	-dark grey feldspar porphyry, 1/2% py diss and along fractures
90G-34	10585N 8400E	float	-grey quartzite with rusty fractures

Appendix III

GEOPHYSICAL EQUIPMENT SPECIFICATIONS

SCINTREX
MP-2 PROTON PRECESSION MAGNETOMETER

Resolution: 1 gamma

Total Field Accuracy: \pm gamma over full operating range

Range: 20,000 to 100,000 gammas in 25 overlapping steps.

Internal Measuring Program: A reading appears 1.5 seconds after depression of Operate Switch & remains displayed for 2.2 secs. Recycling feature permits automatic repetitive readings at 3.7 sec. intervals.

External Trigger: External trigger input permits use of sampling intervals longer than 3.7 seconds.

Display: 5 digit LED readout displaying total magnetic field in gammas or normalized battery voltage.

Data Output: Multiplied precession frequency and gate time outputs for base station recording using interfacing optionally available from Scintrex.

Gradient Tolerance: Up to 5,000 gammas/meter.

Power Source: 8 size D cells \approx 25,000 readings at 25° C under reasonable conditions.

Sensor: Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.

Harness: Complete for operation with staff or back pack sensor.

Operating Temperature Range: -35 to +60° C.

Size: Console, 8 x 16 x 25 cm; Sensor, 8 x 15 cm; Staff 30 x 66 cm;

Weights: Console, 1.8 kg; Sensor, 1.3 kg; Staff, 0.6 kg;

Manufacturer: Scintrex
222 Snidercroft Road
Concord, Ontario

GEONICS LIMITED
VLF EM 16

Source of Primary Field VLF transmitting stations

Transmitting Stations Used: Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.

Operating Frequency Range: About 15-25 Hz.

Parameters Measured: 1- The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid).
2- The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).

Method of Reading: In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone

Scale Range: In-phase $\pm 150\%$; quadrature $\pm 40\%$

Readability: $\pm 1\%$

Operating Temperature Range: -40 to 50° C.

Operating Controls: ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature dial $\pm 40\%$, inclinometer $\pm 150\%$

Power Supply: 6 size AA alkaline cells ≈ 200 hrs.

Dimensions: 42 x 14 x 9 cm (16 x 5.5 x 3.5 in)

Weight: 1.6 kg. (3.5 lbs)

Instrument Supplied With: Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional) set of batteries.

Manufacturer: Geonics Limited
1745 Meyerside Drive/Unit 8
Mississauga, Ontario
L5T 1C5

Appendix IV

VLF-EM AND MAGNETIC DATA

Goldcliff Resource Corp. Data Listing

Area: Olalla B.C.

Current File Name: GCNDAT.WRI

Grid: GCN

From File Name: GCN.XWZ

Date: February, 1991

Instrument Type: Scintrex MP-2 Magnetometer and Geonics EM-16

(Line & Station + = Northings and Eastings,
- = Southings and Westings)

DATA TYPE(S):

- #1. Total Field Magnetic Values
- #2. VLF-EM In-Phase Values
- #3. VLF-EM Quadrature

DATA DETAILS:

- Corrected total field mag
- Cutler Transmitter
- Cutler Transmitter

N/S	E/W				
STATION	LINE #	# 1.	# 2.	#3.	
9700	8300		9	-7	
9725	8300		13	-7	
9750	8300		18	-2	
9775	8300		25	3	
9800	8300		30	2	
9825	8300		34	6	
9850	8300		42	3	
9875	8300		44	6	
9900	8300		50	4	
9925	8300		51	8	
9950	8300		52	4	
9975	8300		50	4	
10000	8300		49	1	
10025	8300		46	2	
10050	8300		43	3	
10075	8300		39	10	
10100	8300		30	6	
10125	8300		26	10	
10150	8300		16	2	
10175	8300		10	-3	
10200	8300		5	-7	
10225	8300		-4	-9	
10250	8300		-8	-12	
10275	8300		-8	-9	
10300	8300		-2	-10	
10325	8300		1	-5	
10350	8300		3	-1	
10375	8300		3	4	
10400	8300		3	2	
10425	8300		-2	-1	
10450	8300		-6	2	
10475	8300		-6	-4	
10500	8300		-8	-6	
10525	8300		-25	-9	
10550	8300		-29	-11	
10575	8300		-31	-8	
10600	8300		-33	-10	

10625	8300	-40	-12
10650	8300	-38	-11
10675	8300	-48	-15
10700	8300	-48	-6
10725	8300	-43	-5
10750	8300	-39	-7
10775	8300	-43	-16
10800	8300	-38	-10
10825	8300	-31	0
10850	8300	-23	-1
10875	8300	-17	-3
10900	8300	-15	3
10925	8300	-13	2
10950	8300	-13	4
10975	8300	-8	-2
11000	8300	-8	-4
11025	8300	-9	-16
11050	8300	-10	-32
11075	8300	-10	-26
11100	8300	-2	-38
11125	8300	-2	-26
11150	8300	0	-5
11175	8300	4	-1
11200	8300	7	-2
11225	8300	9	6
11250	8300	16	10
11275	8300	16	8
11300	8300	18	7
11325	8300	16	3
9700	8400	14	-6
9725	8400	19	-2
9750	8400	23	0
9775	8400	27	-2
9800	8400	28	-2
9825	8400	33	-2
9850	8400	38	2
9875	8400	40	3
9900	8400	39	1
9925	8400	34	-2
9950	8400	33	-1
9975	8400	32	-2
10000	8400	40	5
10025	8400	32	1
10050	8400	31	0
10075	8400	35	2
10100	8400	40	8
10125	8400	38	8
10150	8400	35	11
10175	8400	35	10
10200	8400	28	9
10225	8400	24	5
10250	8400	18	-5
10275	8400	12	-3

10300	8400		8	-9
10325	8400		0	-11
10350	8400		0	-10
10375	8400		2	-10
10400	8400		3	-1
10425	8400		3	4
10450	8400		-1	-2
10475	8400		-5	-2
10500	8400		-9	-8
10525	8400		-15	-3
10550	8400		-14	-6
10575	8400		-18	-5
10600	8400		-20	-4
10625	8400		-28	-3
10650	8400		-3	-2
10675	8400		-31	0
10700	8400		-25	-3
10725	8400		-20	-6
10750	8400		-23	-6
10775	8400		-24	-2
10800	8400		-28	0
10825	8400		-34	0
10850	8400		-36	-2
10875	8400		-43	-2
10900	8400		-45	-3
10925	8400		-41	-2
10950	8400		-28	0
10975	8400		-23	-2
11000	8400		-23	-7
11025	8400		-13	2
11050	8400		-10	1
11075	8400		-2	3
11100	8400		0	5
11125	8400		1	4
11150	8400		1	4
11175	8400		5	4
11200	8400		2	1
11225	8400		2	1
11250	8400		4	-2
11275	8400		5	-1
11300	8400		10	3
11325	8400		14	9
11350	8400		23	7
11375	8400		23	8
11400	8400		25	10
11425	8400		23	8
11450	8400		28	7
11475	8400		30	10
11500	8400		32	11
10500	8500	58611	-25	-6
10525	8500	58286	-25	-7
10550	8500	58384	-30	-10
10575	8500	58442	-33	-14

10600	8500	58475	-32	-15
10625	8500	58667	-30	-16
10650	8500	58857	-36	-11
10675	8500	58811	-38	-9
10700	8500	59071	-31	-9
10725	8500	59153	-28	-3
10750	8500	58872	-3	0
10775	8500	58841	-23	1
10800	8500	58797	-21	-2
10825	8500	58783	-25	-1
10850	8500	58765	-29	-2
10875	8500	58780	-35	-4
10900	8500	58804	-47	-8
10925	8500	58809	-48	-8
10950	8500	58827	-38	-8
10975	8500	58845	-26	1
11000	8500	58895	-23	0
11025	8500	58919	-22	-4
11050	8500	58636	-12	2
11075	8500	58851	-6	4
11100	8500	59060	1	7
11125	8500	58978	3	9
11150	8500	58899	6	6
11175	8500	58992	7	5
11200	8500	59151	9	5
11225	8500	59295	9	4
11250	8500	58698	3	2
11275	8500	58661	8	0
11300	8500	58772	5	0
11325	8500	58705	5	-3
11350	8500	58374	2	-3
11375	8500	58291	5	-4
11400	8500	58299	9	0
11425	8500	58361	17	2
11450	8500	58115	20	6
11475	8500	57976	26	8
11500	8500	58335	32	12
10500	8600	59204	-21	-8
10525	8600	59808	-25	-8
10550	8600	59876	-32	-12
10575	8600	59509	-30	-8
10600	8600	59306	-34	-9
10625	8600	59142	-35	-6
10650	8600	59199	-34	-3
10675	8600	59161	-38	-4
10700	8600	59251	-34	-2
10725	8600	59196	-30	-2
10750	8600	59172	-28	-4
10775	8600	59236	-24	-2
10800	8600	59225	-22	-5
10825	8600	59141	-28	-13
10850	8600	59214	-35	-14
10875	8600	59513	-36	-12

10900	8600	59487	-36	-13
10925	8600	59756	-30	-6
10950	8600	59547	-28	-7
10975	8600	59503	-22	-4
11000	8600	59615	-14	1
11025	8600	59645	-10	4
11050	8600	59711	-5	2
11075	8600	59761	-3	4
11100	8600	59853	0	4
11125	8600	59936	2	9
11150	8600	59939	1	7
11175	8600	60192	-1	4
11200	8600	59805	1	2
11225	8600	60378	0	3
11250	8600	60473	2	1
11275	8600	60924	7	-2
11300	8600	61924	9	-4
11325	8600	63284	10	-2
11350	8600	63124	3	-5
11375	8600	61540	4	0
11400	8600	58610	1	2
11425	8600	58207	-1	1
11450	8600	57866	-6	0
11475	8600	58036	-4	1
11500	8600	58402	-1	1

10500	8700	58854
10525	8700	58908
10550	8700	59325
10575	8700	59258
10600	9700	60334
10625	8700	60361
10650	8700	60410
10675	8700	60239
10700	8700	58832
10725	8700	59289
10750	8700	59409
10775	8700	59450
10800	8700	59688
10825	8700	59654
10850	8700	59710
10875	8700	59713
10900	8700	59721
10925	8700	60071
10950	8700	59750
10975	8700	59555
11000	8700	59630
11025	8700	60189
11050	8700	60071
11075	8700	60126
11100	8700	60245
11125	8700	60448
11150	8700	60498
11175	8700	60720

11200	8700	60974
11225	8700	61190
11250	8700	62098
11275	8700	62883
11300	8700	61594
11325	8700	61092
11350	8700	61156
11375	8700	60110
11400	8700	59437
11425	8700	58782
11450	8700	57925
11475	8700	57539
11500	8700	57650

10500	8800	59662
10525	8800	59374
10550	8800	59592
10575	8800	59770
10600	8800	59903
10625	8800	60160
10650	8800	60402
10675	8800	60330
10700	8800	60338
10725	8800	60368
10750	8800	60388
10775	8800	60615
10800	8800	60855
10825	8800	60848
10850	8800	60991
10875	8800	60914
10900	8800	61002
10925	8800	61257
10950	8800	61727
10975	8800	62350
11000	8800	64961
11025	8800	62068
11050	8800	62557
11075	8800	60433
11100	8800	60364
11125	8800	60313
11150	8800	61288
11175	8800	58198
11200	8800	60629
11225	8800	60788
11250	8800	61325
11275	8800	59946
11300	8800	59740
11325	8800	57886
11350	8800	59115
11375	8800	56939
11400	8800	57528
11425	8800	57938
11450	8800	58188
11475	8800	58141

11500	8800	56176			
E/W STATION	N/S LINE #	# 1.	# 2.	#3.	
9250	9800	60229			
9275	9800	60310			
9300	9800	60492			
9325	9800	60681			
9350	9800	60753			
9375	9800	60924			
9400	9800	61122			
9425	9800	61493			
9450	9800	61743			
9475	9800	62059			
9500	9800	62639			
9525	9800	63185			
9550	9800	64042			
9575	9800	65054			
9600	9800	62734			
9625	9800	66982			
9650	9800	64335			
9675	9800	61028			
9700	9800	61669			
9725	9800	62243			
9750	9800	64290			
9775	9800	67460			
9800	9800	70200			
9825	9800	64145			
9850	9800	64722			
9875	9800	65020			
9900	9800	64257			
9925	9800	64149			
9950	9800	62622			
9975	9800	62050			
10000	9800	63524			
9250	9900	60909			
9275	9900	60982			
9300	9900	61070			
9325	9900	61299			
9350	9900	61514			
9375	9900	61650			
9400	9900	61954			
9425	9900	62482			
9450	9900	62918			
9475	9900	63483			
9500	9900	64338			
9525	9900	66431			
9550	9900	69728			
9575	9900	64702			
9600	9900	67004			
9625	9900	65055			
9650	9900	64135			

9675	9900	64300
9700	9900	62324
9725	9900	62238
9750	9900	61798
9775	9900	63179
9800	9900	64252
9825	9900	67217
9850	9900	68280
9875	9900	74909
9900	9900	75884
9925	9900	63871
9950	9900	65485
9975	9900	66016
10000	9900	68512

9250	10000	10	5
9275	10000	10	4
9300	10000	12	5
9325	10000	16	5
9350	10000	17	7
9375	10000	26	4
9400	10000	25	9
9425	10000	31	9
9450	10000	35	12
9475	10000	25	7
9500	10000	25	9
9525	10000	22	10
9550	10000	22	10
9575	10000	26	8
9600	10000	18	-1
9625	10000	18	-1
9650	10000	12	0
9675	10000	10	-2
9700	10000	12	0
9725	10000	10	-1
9750	10000	12	-2
9775	10000	14	-3
9800	10000	9	-5
9825	10000	9	-6
9850	10000	8	-4
9875	10000	10	-7
9900	10000	11	-4
9925	10000	11	-2
9950	10000	10	-3
9975	10000	17	-3
10000	10000	18	0

9250	10100	0	5
9275	10100	-1	6
9300	10100	2	13
9325	10100	8	10
9350	10100	15	36
9375	10100	18	40
9400	10100	18	10

9425	10100	28	10
9450	10100	25	11
9475	10100	38	42
9500	10100	45	19
9525	10100	45	22
9550	10100	45	16
9575	10100	35	14
9600	10100	32	14
9625	10100	28	8
9650	10100	21	2
9675	10100	11	-3
9700	10100	8	-5
9725	10100	8	-1
9750	10100	7	0
9775	10100	7	-1
9800	10100	5	-2
9825	10100	5	-2
9850	10100	8	-2
9875	10100	9	-7
9900	10100	13	-8
9925	10100	16	-6
9950	10100	16	-2
9975	10100	16	-6
10000	10100	18	-11

Appendix V

COST STATEMENT

COST STATEMENT

SALARIES

- Grant Crooker, Geologist
May 2, 12, June 18, Nov. 13, 14, 1990
Jan. 3-5, Feb. 18-20, 1991
11 days @ \$ 350.00/day \$ 3,850.00
- Lee Mollison, Field Assistant
July 2-6, 8, 19-21, 25, 26, Aug. 17, 20-25,
28, 29, Sept. 4-6, Nov. 19, 20, 1990
25 days @ \$ 175.00/day 4,375.00

MEALS AND ACCOMODATION

- Grant Crooker - 5 days @ \$ 60.00/day 300.00
- Lee Mollison - 25 days @ \$ 60.00/day 1,500.00

TRANSPORTATION

- Vehicle Rental (Ford 3/4 ton 4x4)
May 12, June 18, July 2-6, 8, 19-21, 25, 26,
Aug. 17, 20-25, 28, Sept. 4-6, Nov. 13, 14,
19, 20, 1990.
28 days @ \$ 60.00/day 1,680.00
- Gasoline 245.65

EQUIPMENT RENTAL

- Magnetometer - Scintrex MP-2
Aug. 19-21, Nov. 19, 20, 1990
5 days @ \$ 25.00/day 125.00
- VLF-EM - Geonics EM-16
Aug. 25, 26, Sept. 19-21, 1990
5 days @ \$ 25.00/day 125.00

FREIGHT 48.77

SUPPLIES

- Hipchain thread, flagging, geochem bags, etc. 75.00

GEOCHEMICAL ANALYSIS

- 302 soil samples, 31 element ICP, Au
@ \$ 14.50/sample 4,379.00
- 9 rocks, 30 element ICP, Au,
@ \$ 10.75/sample 96.75
- 15 rocks, 30 element ICP, Au, Pt, Pd,
@ \$ 13.75/sample 206.25

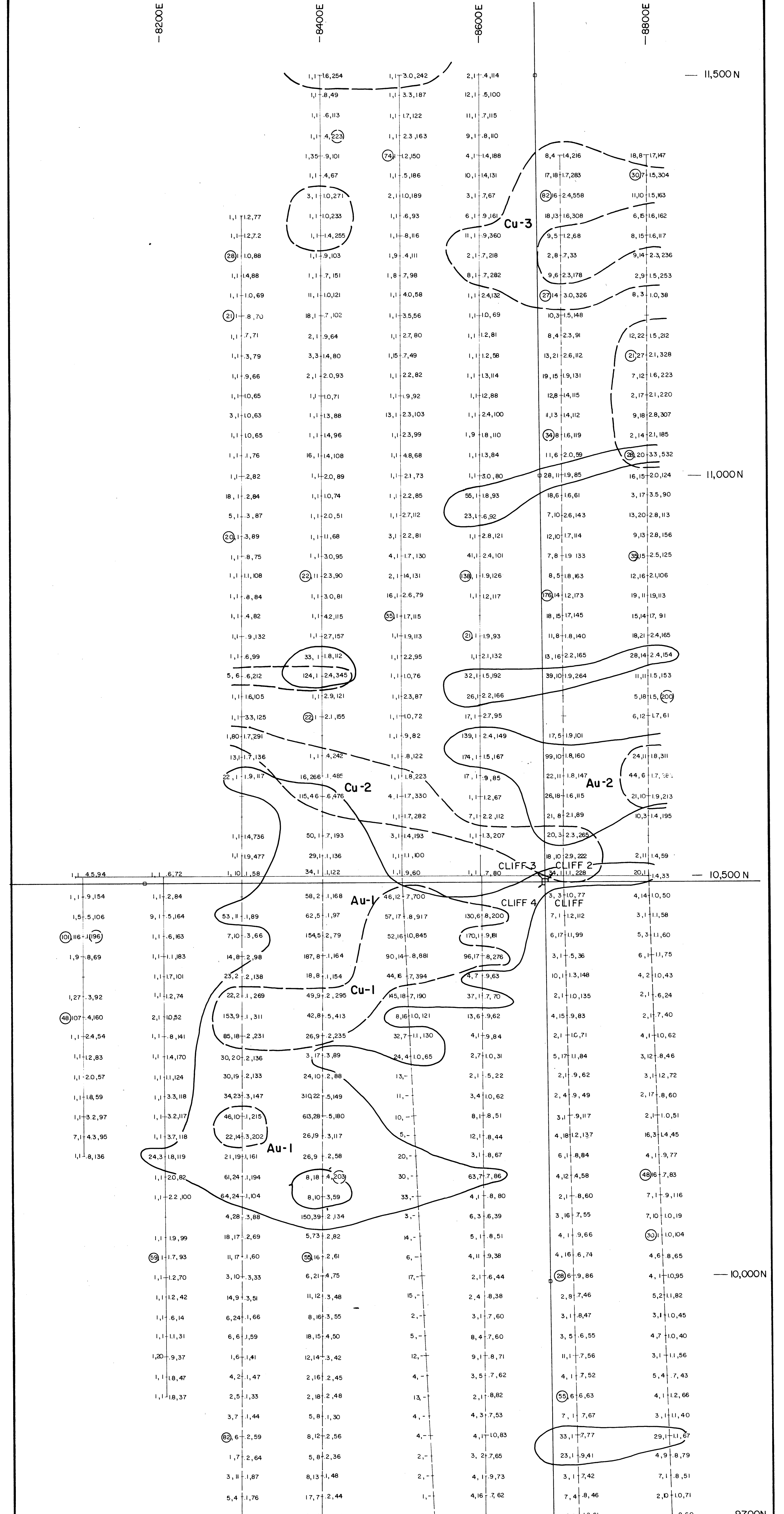
DRAUGHTING

882.95

PREPARATION OF REPORT

- Secretarial, reproduction, telephone,
office overhead etc.

Total \$ 900.00
18,789.37



LEGEND

- ID post
- Legal corner post
- Pre 1990 grid
- 1990 grid
- 82,6 ± 2,59 Au ppb, As ppm, Ag ppm, Cu ppm
- Au anomalous > 20 ppb
- Cu " > 196 ppm

GEOLOGICAL BRANCH ASSESSMENT REPORT
GOLDCLIFF RESOURCE CORPORATION

21,081

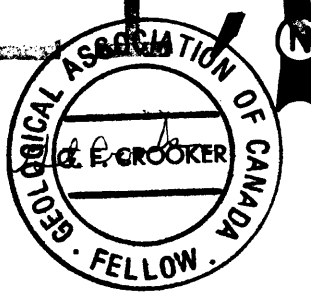
CLIFF PROJECT LEE ZONE

Au, As, Ag and Cu SOIL GEOCHEMISTRY

N.T.S. 82E 4,5W OSOYOOS M.D., B.C.

0 50 100 200 Metres

SCALE 1:2500 DATE JAN. 1991
 DRAWN BY: G.F.C. FIGURE NO.: 4



-8200E

-8400E

-8600E

-8800E

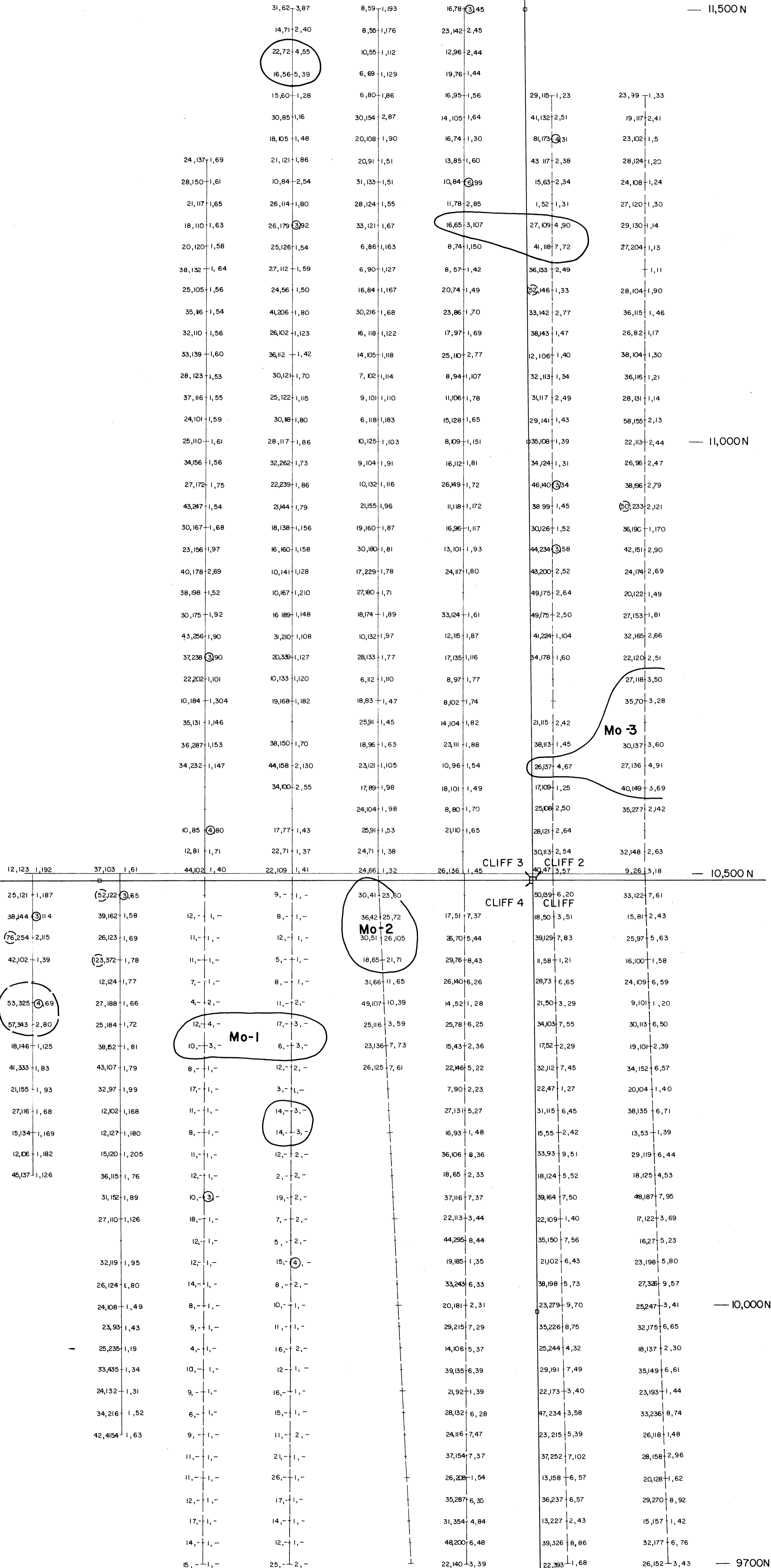
11,500N

11,000N

10,500N

10,000N

9700N



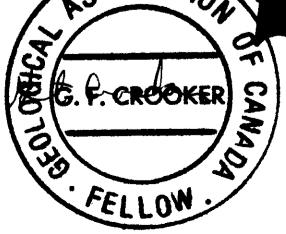
LEGEND

- I.D. post
- Legal corner post
- Pre 1990 grid
- 1990 grid
- Pb, Zn, Mo, Ni - ppm
- Mo anomalous >12 ppm - 1986
- >3 " - 1987-90
- Pb " >50 ppm

GEOLOGICAL BRANCH ASSESSMENT REPORT CLIFF RESOURCE CORPORATION

21081

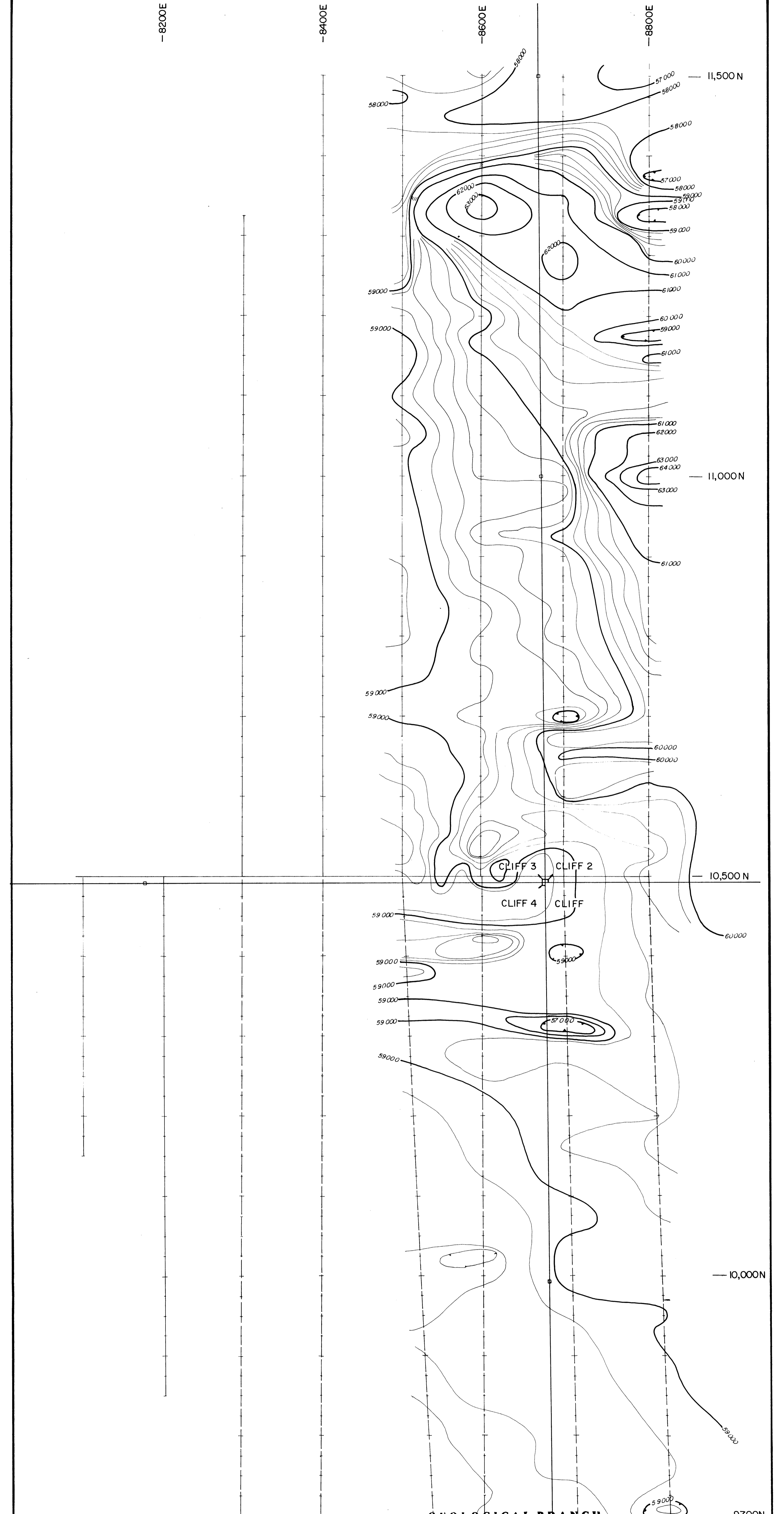
CLIFF PROJECT LEE ZONE Pb, Zn, Mo & Ni SOIL GEOCHEMISTRY



N.T.S. 82E 4,5W OSOYOOS M.D., B.C.

0 50 100 200 Metres

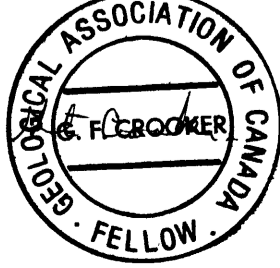
SCALE 1:2500 DATE: JAN. 1991 DRAWN BY: G.F.C. FIGURE NO.: 5



LEGEND
 I.D. post
 Legal corner post
 Pre 1990 grid
 1990 grid
 200 nT contour interval
 1000 nT " "

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

21,081



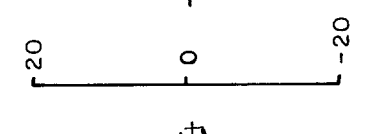
GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT LEE ZONE	
MAGNETOMETER SURVEY	
N.T.S. 82E 4,5W	OSOYOOS M.D., B.C.
0 50 100 200 Metres	
SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE NO.: 8

-8200E

-8400E

-8600E

-8800E



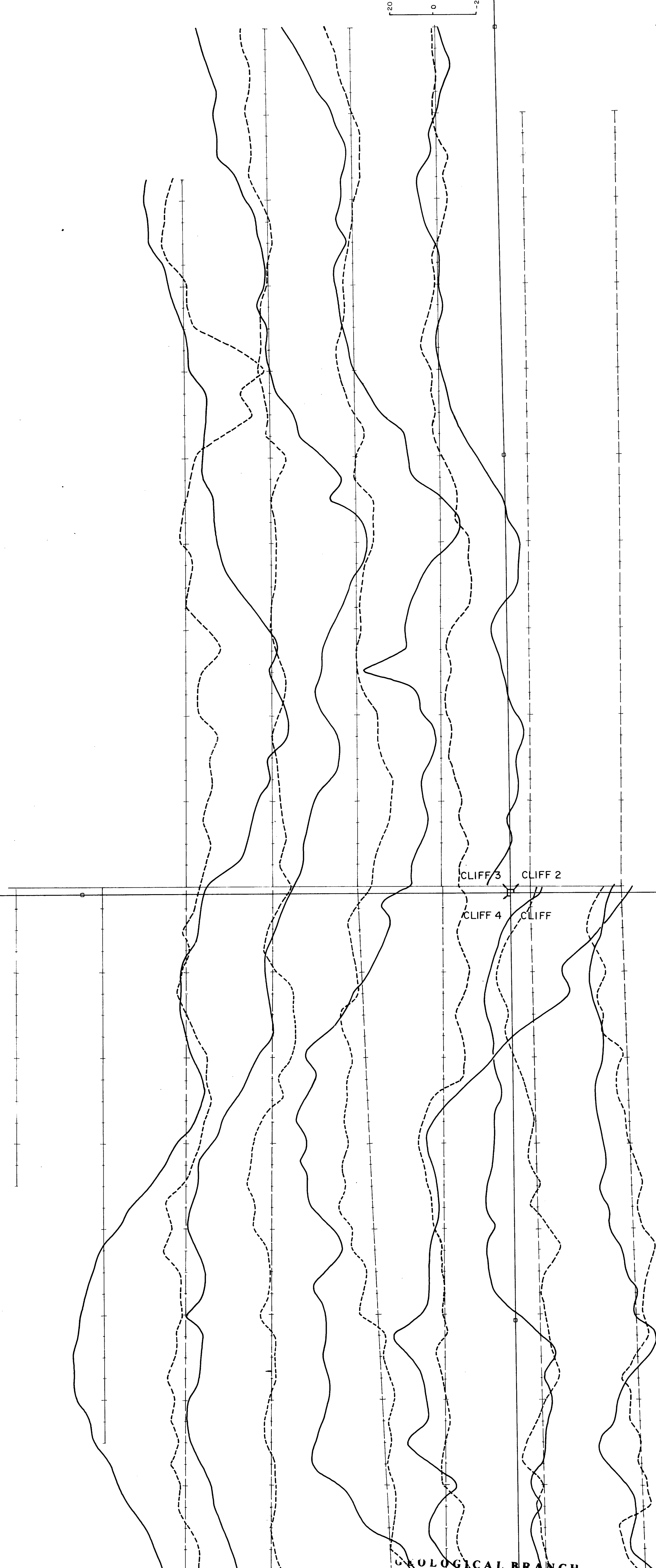
11,500N

11,000N

10,500N

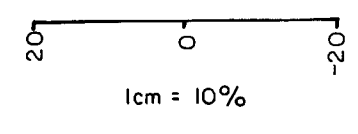
10,000N

9700N

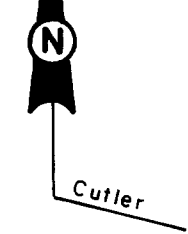
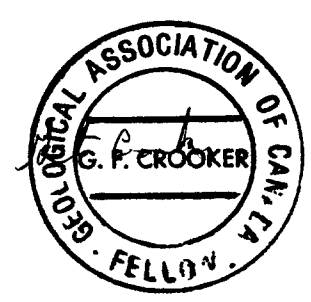


GEOLOGICAL BRANCH
ASSESSMENT REPORT

- LEGEND**
- I.D. post
 - Legal corner post
 - Pre 1990 grid
 - 1990 grid
 - In-phase
 - Quadrature
 - CUTLER** 24.0 KHz
 - Anomalous Inflection (In phase)



21081



GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT LEE ZONE VLF-EM PROFILES (CUTLER)	
N.T.S. 82E 4,5W	OSOYOOS M.D., B.C.
0 50 100 200 Metres	
SCALE 1:2500	DATE: JAN. 1991
DRAWN BY: G.F.C.	FIGURE NO.: 10

-8200E

-8400E

-8600E

-8800E

11,500N

11,000N

10,500N

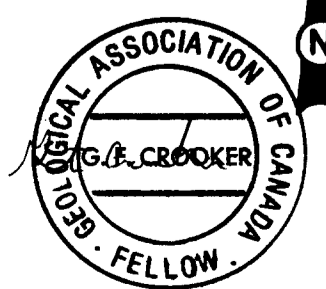
10,000N

9700N

- LEGEND**
- I.D. post
 - Legal corner post
 - Pre 1990 grid
 - 1990 grid
 - Shearing & dip
 - Pyrite
 - Limonite
 - Rock sample location & No.
 - VLF-EM Conductor
 - Au anomalous > 20 ppb
 - Cu > 196 ppm

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,081



CLIFF RESOURCE CORPORATION

**CLIFF PROJECT
LEE ZONE
COMPILATION**

N.T.S. 82E 4,5W

OSOYOOS M.D., B.C.

0 50 100 200 Metres

SCALE 1:2500

DATE: JAN. 1991

DRAWN BY: G.F.C.

FIGURE NO. 12