REPORT ON THE 1999 EXPLORATION PROGRAM
BY K. B. CAMPBELL
ON THE GOOP PROPERTY
KERRS TWP. & CHESNEY BAY AREA
LARDER LAKE MINING DIVISION, ONTARIO

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INTRODUCTION

Between June 27 and September 26, 1999, an exploration program was completed on the Goop Property of K. B. Campbell in Kerrs Township and Chesney Bay Area, Ontario. This exploration program was made possible by an 1999 OPAP grant.

It appears that the Goop Property is underlain by faulted ultramafic, mafic and felsic metavolcanics of the Stoughton-Roquemaure Assemblage which are intruded by quartz-feldspar porphyry and feldspar porphyry sills and a possible felsic to intermediate intrusive body. The underlying mafic metavolcanic rocks of the Stoughton-Roquemaure Assemblage have been silicified, brecciated, green carbonate altered, cut by Au bearing quartz-carbonate veining and contain localized units of felsic metavolcanics and pyrite veinlets hosting small amounts of Au. The feldspar porphyry has been proven to be Au bearing (drill hole K87-17). In 1985 anomalous to very high Au results were reported in reverse circulation holes that appear be situated along the northwestern boundary of the possible felsic to intermediate intrusive body. There is a good possibility that the Au deposition on the property is controlled by the emplacement of the intrusive body/sills and the faulting, with the Au being located in altered siliceous metavolcanics and felsic sills near the margins of the possible intrusive body and the intersections with the probable deformation zones.

The 1999 exploration program was performed: to discover new mineralization, veining, alteration and geophysical and geochemical anomalous zones which contain or may contain one or more of the following elements, Au, Ag, Cu, Zn, Pb, Pt and Pd; and to extend and further define the limits and extents of the anomalous to very high Au values discovered in the reverse circulation and diamond drill holes. Approximately 1/3 of the property has seen very little ground exploration work and the areas containing Au in the drill holes has seen no work since the drilling in 1985 and 1987, so there is a good chance that new mineralization and anomalies will be discovered using the multi facet 1999 program of exploration.

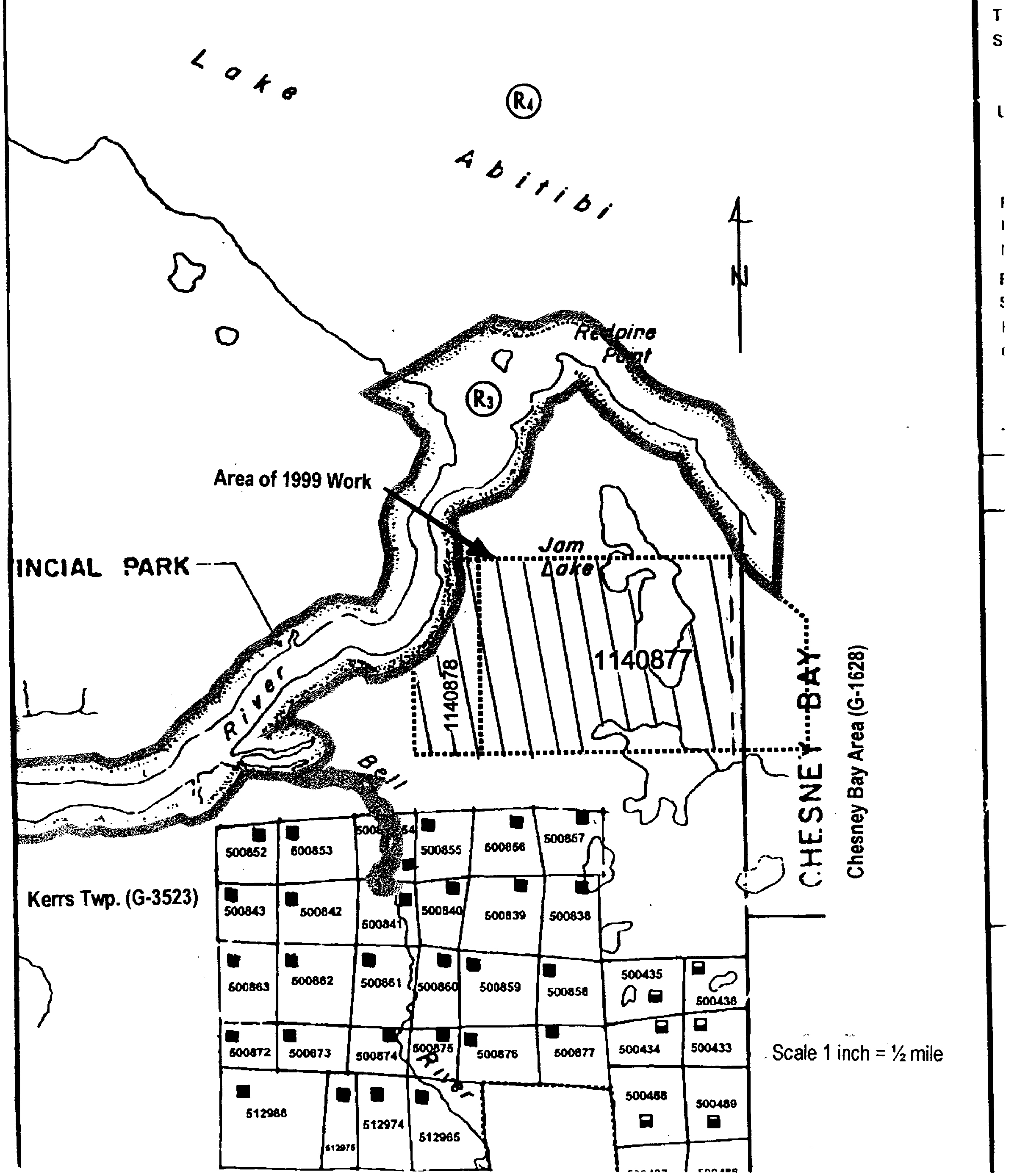
First, two claims were staked over the areas having the best potential to host mineralization. Since there appears to be little or no outcrop on the project and the eastern part of the property is covered with thick layers of sand, the exploration program will concentrate on reconnaissance and detailed prospecting, mapping of boulders, detailed geochemical and magnetic surveying and VLF-EM surveying in the western 80 % of the property. Preliminary prospecting was conducted to provide data which determined the location of the cut grid that was used for detailed control in the other phases of exploration. Detailed prospecting was completed over the area of the grid in order to define outcrops, boulders, drill collars, topography, vegetation and soil conditions. This data was used to help correlate the results of the geological, geophysical and geochemical surveying.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

In June 1999, 2 claims were staked in the eastern part of Kerrs Twp. (G.-3523) and the western part of Chesney Bay Area (G.-1628), Larder Lake Mining Division, Ontario. These two claims, 1140877 (15 units) and 1140878 (3 units), covering 288 hectares, form the Goop Property located in the southern region of NTS Map 42 A/16 at a latitude of 48 degrees and 46 minutes (UTM 5401500 m.N) and a longitude of 80 degrees, 09 minutes and 30 seconds (UTM 562000 m.E). The 2 claims are contiguous, with claim 1140878 lying due west of claim 1140877. The 1999 exploration program was concentrated in the western claim (1140878) and in the western and central regions of claim 1140877 (see figure 1). The 2 claims are registered in the name of Karen Campbell of Nanaimo, B.C. at the Office of the Mining Recorder in Sudbury.

Two lakes are located on the property, Jam Lake in the northern part of claim 1140877 and the smaller Bell Lake, 250 meters south of Jam Lake. The eastern part of claim 1140877 and the area between the two lakes is covered by bedded layers of sand and eskers. A large swamp overlies the southwestern corner of claim 1140878. The remaining areas are forest covered by second growth alder and poplar with minor spruce, birch and balsam. The sand covered areas have been recently logged and small pine and poplar trees grow in these areas. Topographical relief on the property is low, less than 15 meters.

Figure 1 - Recent Claim Map of Kerrs Twp. & Chesney Bay Area with the Work Area Outlined



Scale 1 inch = ½ mile

The Goop Property is located approximately 33 km. east of the town of Matheson, near the southwest shore of Lake Abitibi between Chesney Bay and the mouth of the Abitibi River on Camp Three Bay. Access is best obtained via 26 km. of gravel road and logging road, north from Highway 101, 25 km. east of Matheson, near the boundary between Munro and McCool Townships. The gravel road traverses the western side of McCool Twp. into Milligan Twp. and turns west into Kerrs Township, near the southeast corner of this township. A logging road branches off to the north through Kerrs Twp., 21 km. from the highway. This road crosses the southeast corner of the property, near the eastern boundary of Kerrs Township and continues through the eastern claim in a northward direction, east of Jam Lake. Numerous skidder roads cross the property (see Map PGG).

The claims can also be accessed by boat via Lake Abitibi and the Abitibi River, from the boat ramp at the Ghost River, 25 km. to the east. The property lies 120 meters west of the west side of Chesney Bay and 120 meters east of the Abitibi River.

Supplies and services were obtained in the towns of Matheson and Kirkland Lake.

GEOLOGY AND MINERALIZATION

The Goop Property lies in the world's largest greenstone belt, the Abitibi greenstone belt of the Superior Province. The western 30 % of the belt, that is located in Ontario, has a high output of mineral production, as proved in the 1995 production totals of almost $1 billion, including 550,000 oz of Au, 125,000 tonnes Zn and 90,000 tonnes Cu.

The claims are situated in the northwestern part of the Abitibi greenstone belt, 6.5 km. west-northwest of the southwest edge of the Abitibi Batholith. Recent studies and compilations by the O.G.S., has produced a revised stratigraphical model for the Abitibi Greenstone Belt. A regional map, using this new stratigraphy, is shown in figure 2, a copy of figure 4.1, page 15 of O.G.S. Misc. Paper 169 (1998). An older compilation of the area is also outlined on O.D.M. Geological Compilation Series Map 2205, scale 1 inch equals 4 miles (1972).

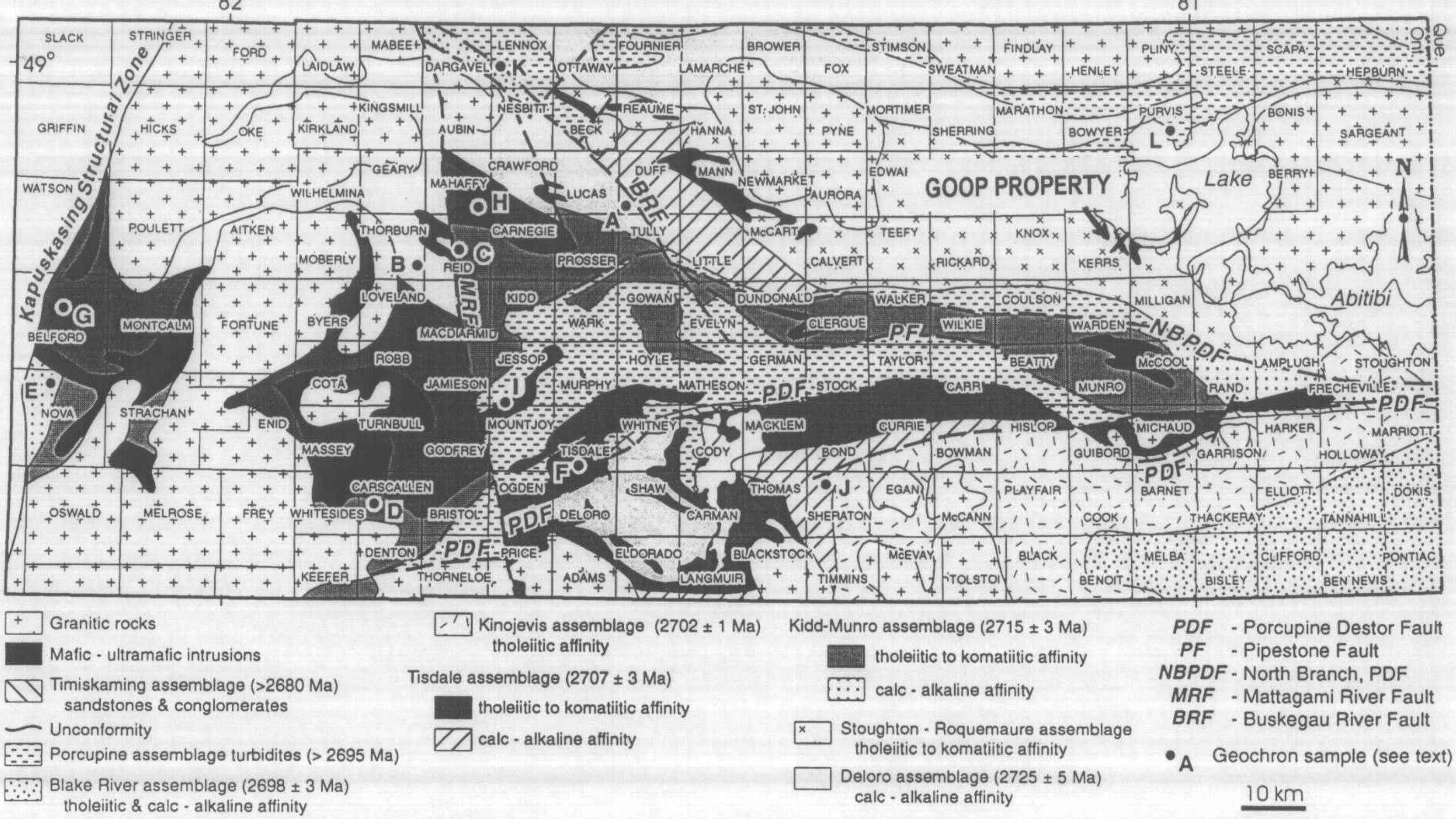


Figure 4.1. Revised stratigraphic subdivisions for the northern part of the Abitibi greenstone belt in Ontario with geochronology sample locations as discussed in the text.

Figure 2 - Regional Geology Map **O.G.S. M. P. 169**

Regional compilation map 2205 shows that the property is underlain by a west trending band of mafic lavas and pyroclastic rocks, lying between a east-northeast diabase dyke, situated north of the northern boundary, and a folded ultramafic intrusive, located near the southeastern corner of the project. A fault trends north, 800 meters west of the program area and a west-northwest striking anticlinal axis lies 1.3 km. south of the southern boundary. The recent stratigraphical studies (see figure 2) indicate that the underlying rocks are thick sequences of Mg and Fe rich tholeiitic basalt with localized komatiites and felsic volcanic units, forming the Stoughton-Roquemaure Assemblage. The ultramafic intrusion is positioned slightly farther north on this recent map than on Map 2205.

Prior to the summer of 1999, when Geological Compilation Map P.3392 was published, there was very little geology presented on O.D.M. and O.G.S. maps. O.D.M. Geology Maps P.201, scale 1 inch = ¼ mile, 1963 and 2073, scale 1 inch = ½ mile, 1965, cover Kerrs Twp. On these maps the only geology shown on the project is the diabase dyke in the north. The folded serpentinized ultramafic intrusion trends northeast, within 400 meters south of southeast corner of the project. The data presented on these maps indicates that boulders, sand, clay and a swamp are found covering the property.

Recent O.G.S. Map P.3392, scale 1:50,000 defines the geology thought to underlie the two claims. The data on this map suggests that the claims are underlain by mafic metavolcanic rocks, between the diabase dyke and the ultramafic intrusive. A smaller ultramafic intrusive is situated along the shore of Chesney Bay, near the northeast corner of the property. The northern edge of an elongated felsic intrusive (granodiorite) lies 1.5 km. south of claim 1140878. An anticlinal axis and a small fault zone trends north-northwest, also 1.5 km. to the south.

The only definite geological data comes from the results of 5 diamond drill holes drilled on claim 1140877 in 1982 and 1987. The three 1987 holes were collared south of Jam Lake and north of Bell Lake, along one section in the south-central part of the project. These drill holes intersected sequences of ultramafic to felsic metavolcanics intruded by numerous zones of feldspar and quartz-feldspar porphyry. In hole K 87-16 intervals of silicified and brecciated volcanics, cut by quartz-carbonate veins and a zone of green carbonate alteration, assayed 0.073 oz/ton over 34 feet. Samples of fine-grained pyrite veinlets in this hole also contained small amounts of Au (0.022 to 0.024 oz/ton). Intersections of feldspar porphyry in hole K 87-17 were also auriferous, assaying up to 0.057 oz/ton Au across 5 feet. J. Garber, in his report on the drilling in 1987, concludes that the Au zone in hole K 87-16 either pinches out, is displaced by faulting or dips away from hole K 87-17 and that the Au deposition may be structurally controlled and associated with the emplacement of the intrusions of the feldspar and quartz-feldspar porphyry. The two 1982 holes are located east and northeast of these 1987 holes, cutting mafic metavolcanics. Drill hole intersections in the folded ultramafic intrusive, 1.5 km. south of the property, contained up to 5.4 and 9.7 g/t Au over widths of 1.1 and 0.2 meters, respectively.

Over the remaining areas of the property, the rock types and structures have been defined by geophysical results, particularly the airborne total intensity magnetic data presented on O.G.S. Map 81254 (1989), scale 1:20,000. The most significant magnetic feature is a wide inverted V shaped low striking northeast across the property and narrowing to the northeast. The shape and size of this low indicate that this anomaly may define the position of an underlying felsic to intermediate intrusive body. The three 1987 diamond drill holes are collared neat the southeast boundary of this low. North of the low, a series of east-northeast striking, narrow highs, define the limits of the diabase dyke north of the property. To the southeast, two highs lie north of a narrow low that trends east across the southeast corner of the project. These highs and low may represent ultramafic, mafic and felsic units of metavolcanic rocks of the Stoughton-Roquemaure Assemblage and sills of quartz-feldspar and feldspar porphyry.. A series of strong highs, with accompanying Input anomalies define the location of the ultramafic intrusive body, 600 meters south of the property. A north trending low overlies the elongated felsic intrusive body, 1.5 km. south of the southwestern boundary. The strikes of the magnetic contours on the project are bent and distorted, suggesting that 2 probable deformation/fault zones cross the area. One zone strikes north-northwest along the eastern shore of Bell Lake in the south, through the section of diamond drill holes, along the western shore of Jam Lake, across the wide magnetic low, then through the northern series of highs. A probable second fault trends east-northeast across the broad low in the central part of the two claims.

Gold has also been discovered on the property in reverse circulation holes drilled by Noranda Exploration east of the Abitibi River, near the western boundary. Two very high Au values of over 15,000 ppb were reported in holes 315 and 406 and holes 407 and 408 contained 1,300 and 3,655 ppb Au. These four reverse circulation holes lie along the northern edge of the broad low, representing the felsic to intermediate intrusive body and near the zone of distortions and bends delineating the potential east-northeast striking fault zone.

Quartz veins and pods and quartz-carbonate veins have been discovered in areas west of the property. In Kerrs Twp., a 15 cm. quartz-carbonate vein cuts mafic to intermediate lava 5.6 km. to the west and quartz pods have been mapped in andesitic pillow lava, 7.2 km. to the west, along strike of the project. Numerous examples of pyrite and epidote rich quartz-carbonate veining have also been found in Knox, and Rickard Townships, 9 to 20 km. to the west. The property also lies 15 km. east of a Zn occurrence in Know Twp., within a narrow felsic horizon.

The Goop property has been proven to host anomalous to high amounts of Au and the potential exists for the underlying rocks to contain undiscovered Au, Ag, Cu, Zn, Pb and Pt and Pd in the deposit types listed below:

a) Au in siliceous & brecciated metavolcanic rocks with quartz-carbonate veins and green carbonate alteration, as discovered in diamond drill hole K 87-16, collared between Jam and Bell Lakes in the southern part of the project. A drill intersection of 0.073 oz/ton Au across 34 feet was reported.

b) Au +/- Ag in felsic plutonic rocks near the intersections with fault zones. Numerous intersections of feldspar and quartz-feldspar porphyry were delineated in the 1987 diamond drill holes on claim 1140877, with feldspar porphyry in hole K 87- 17 containing 0.057 oz/ton Au across 5 and 2.2 feet and 0.027 oz/ton au over 5 feet. Interpretation of the airborne magnetic results indicates that a large inverted V shaped low represents a possible felsic to intermediate intrusive body, crossing the central part of the property and that 2 potential fault zones cut this body. The 1987 diamond drill holes lie southeast of this magnetic low and are located in the vicinity of the north-northwest trending potential fault. Garber in his report on the drilling suggests that the Au deposition in the feldspar porphyry may be structurally controlled. The Noranda reverse circulation holes, with 1300 to 15,000 ppb Au, lie on the property along the northwestern edge of this airborne magnetic low, near the intersection with a probable east-northeast striking fault.

c) Au +/- Ag in fault/shear/breccia zones cutting the metavolcanic rocks underlying parts of the property. Airborne magnetic interpretation indicates that 2 potential fault zones cross the area, diamond drill hole K87-16 intersected Au bearing brecciated metavolcanic rock and it was concluded that faulting may affect the Au deposition in this hole. In Garrison, Michaud and Hislop Twps., within 30 km. of the 2 claims, numerous Au deposits (Pangea, New Buffonta, Buffonta, Garrcon, Jonpol, Ludgate Lake and Moneta) and the producing Au Glimmer Mine are associated with faulting.

d) Cu, Au +/- Zn & Pb in volcanogenic massive sulphide bearing felsic units, possibly contained within the basaltic sequences of the Stoughton-Roquemaure Assemblage thought to underlie parts of the property. In drill hole K 87-16 pyrite veinlets assayed up to 0.023 oz/ton Au and a Zn occurrence has been discovered in a narrow felsic metavolcanic horizon 15 km to the east.

e) Au, Pt & Pd in ultramafic rocks. Ultramafic rocks were intersected in two of the drill holes collared on the property. The serpentinized ultramafic intrusion lying within 400 meters south of the southeast corner of the property hosts Au (up to 5.4 g/t over 1.1 meters and 9.79 g/t over 0.2 meters) drill intersections 1.5 km to the south.

PREVIOUS WORK

After studying the assessment files in Kirkland Lake, it has been determined that exploration has been performed between 1978 and 1987 on the Goop property. The past assessment work and O.G.S airborne surveying in 1989 are listed below:

1978: Noranda Exploration Co. Ltd. completed ground EM and magnetic surveying over the southern 2/3 of the property.

1980: Noranda Exploration Co. Ltd. performed reverse circulation drilling on the project, concentrating in the southern part of the 2 claims.

1982: Esso Minerals performed airborne magnetic and EM surveying over their Halfway Lake Project, covering the western ½ of the property.

1982: Noranda Exploration Co. Ltd. drilled 2 diamond drill holes in the eastern part of 1140877.

1983: Noranda Exploration Co. Ltd. conducted horizontal loop electromagnetic surveying on the area comprising the property.

1985: Noranda Exploration Co. Ltd. performed reverse circulation drilling in the western and southern regions.

1985: Kerr Addison Mines Ltd. flew airborne magnetic, EM and resistivity surveys over their Abitibi Project, covering a large area including the 2 claims.

1987: Vital Pacific Resources Inc. drilled 3 diamond drill holes along a section between the two lakes in the south-central part of the property.

1989: The O.G.S. had the area flown and airborne EM and magnetic surveys completed (O.G.S. Map 81254).

WORK PERFORMED AND METHODS USED

Grid Establishment

A grid was established over the western 80 % of the property, during 29 days between July 2 and 30, 1999. The grid was positioned in the eastern part of claim 1140878 and in the western and central regions of claim 1140877 (see figure 1) where the geology, geophysics and geochemical signatures were thought to be favourable for mineral deposition that were not water covered. Baseline 0 was cut east in claim 1140877 from the northwest arm of Bell Lake, from line 0 to line 8E and west through both claims to the western boundary of claim 1140878 at 10W. The crosslines from lines 7W to 8E were cut north to the northern boundaries or to the shores of Jam Lake, and from lines 1W to 8E the crosslines were cut to the southern boundary or the shores of Bell Lake. These crosslines were established at 100 meter intervals along the baseline. Tieline N was cut along the northern claim line, except through Jam Lake, from post 1 of claim 1140877 to post 4 of claim 1140878. All lines were chained and picketed at 25 meter intervals. The grid is comprised of 16.36 of line km.

Prospecting Program

On June 27, 28 and 30 and July 1 and between August 1 and 7, 1999, a program of prospecting was completed on the Goop Property by K. Campbell. Approximately 32 line km. were traversed during the 11 days of prospecting. The prospecting traverses were completed along the claim lines, lakeshores, roads, trails and the grid lines.

The prospecting was conducted to locate claim boundaries, claim posts, any outcrop exposures, rubble-boulders, extent and type of overburden cover, drill hole locations and topographical features, such as: roads, trails, lakeshores, ponds, rivers, creeks, hills, tree types and vegetation. The locations of the grid lines and prospecting traverses and the data collected during the program are presented on Map PGG, at a scale of 1:2,500.

Detailed Magnetic Survey

A detailed total field magnetometer survey was completed along the 13.44 km of crosslines, on August 9, 14 and 15 and between August 17 and 19, 1999 (6 days), using a Gem Systems GSM 8 proton precession magnetometer. Approximately 1100 readings were taken by K. Campbell at 12.5 meter intervals along the crosslines of the grid. The purpose of the detailed magnetic surveying was to obtain data which will help define contacts between narrow rock units and intrusive bodies of varying magnetic susceptibilities, to delineate the locations of potential fault/shear zones on the claims and to better explain the airborne total intensity magnetic contour pattern.

The GSM 8 magnetometer measures the total field intensity of the earth's magnetic field in gammas. The instrument has a sensitivity and repeatability of one gamma or better. Base stations were established on the baseline at line 1W and on line 5E at 0+50N (see Map TF). The results collected at these base stations were used to determine the magnetic diurnal variations and to correct the raw data. The total field readings (in gammas), corrected for diurnal variations and minus a base value of 57,000 gammas, were plotted on Map TF at a scale of 1:2,500. The magnetic values were then contoured at 25 gamma intervals.

VLF-Electromagnetic Survey

The very low frequency-electromagnetic survey was conducted using a Geonics EM-16 unit. Approximately 550 readings were collected at 25 meter stations along the 13.44 km. of crosslines. K. Campbell spent 4 days performing the survey on August 8, 10, 11 and 12, 1999.

The VLF-EM survey uses powerful radio transmitters located in different parts of the world which were established for military communications. Relative to the frequencies generally used in geophysical exploration, the frequencies used in VLF-EM surveying are considered to be high. These powerful radio waves induce electrical currents in conductive bodies thousands of miles away. The induced currents produce secondary magnetic fields which are detected at surface through deviations of the normal VLF field. This secondary field from the conductor is added to the primary field vector, so that the resultant field is tilted up on one side of the field vector and down on the other side. The VLF receiver measures the field tilt, with the in-phase and quadrature components of the vertical magnetic field as a percentage of the horizontal primary field, i.e. the tangent of the tilt angle and elipticity. The Geonics EM-16 unit has a repeatability and sensitivity of 1 %.

Interpretation of the results is quite simple, the conductor is located at the point marked at the crossover from positive tilt (vertical in-phase) to negative tilt. The main advantage of the VLF method is that it responds well to poor conductors and has been proven to be a reliable tool in helping to map faults-shear zones, mineralization, conductive horizons and rock contacts. The major disadvantage is that because of the high frequency of the transmitted wave, a multitude of anomalies from unwanted sources, such as swamp edges, lakeshores, creeks and changes in topographical and bedrock relief, may be delineated. So some amount of care must be taken in interpreting the results collected in areas displaying the above-mentioned topographical features.

To get the best positioning with respect to the line direction, underlying geology and direction to the transmitting station, the station transmitting from Cutler, Maine (NAA) at a frequency of 24.0 kHz. was used. The readings were collected with the EM-16 unit facing 012 degrees.

The VLF in phase and quadrature readings (in percent) are plotted on Map EM at a scale of 1:2,500. These readings were then profiled at a scale of 1 cm. equals 10 percent. The conductor axes were determined and labelled, A, B, C, etc. No priority was attached to the labelling system.

Detailed Geochemical Soil Surveying

K. Campbell spent 11 days, between August 20 and 31, 1999, performing detailed geochemical soil surveying on the Goop Property. A total of 204 soil samples (GP01 to GP204) were collected at 25 meter intervals on lines 3W to 2E. Past diamond drill hole and reverse circulation drilling results indicate that the overburden cover on the claims is relatively thick, 30 to 75 meters thick. There are three main types of near surface overburden cover: fine to medium-grained sand with rounded to semi-angular boulders on small hills and eskers located near the lakeshores, between the two lakes and east of Jam Lake; poorly developed horizons of organics in swamps in the southwest, west-central and southeast areas; and thick and well developed Ao horizons below thin layers of organics in the central part of the grid, west of Jam Lake. A spade was used to collect the soil samples at depths of 15 to 40 cm.

Of the 204 soil samples collected, 174 were clays of the Ao horizon and 32 were sand and sand - clay mixtures of the B horizon which lie in areas of thick sand cover, mainly near Bell Lake, that appear to have been transported long distances. The soil sampling was concentrated in the areas of well developed A and Ao horizons, where there was little swamp and sand cover, between anomalous to high Au results in the reverse circulation holes and diamond drill holes.

The geochemical samples were dried and taken to XRAL laboratories (a division of SGS Canada Inc.) where they were sieved to 80 mesh. These samples were then analysed for: Au using the XRF-7 method; and an additional 31 elements (Be, Na, Mg, Al, P, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Sr, Y, Zr, Mo, Ag, Cd, Sn, Sb, Ba, La, W, Pb and Bi) by the ICP 70 method with aqua regia digestion. The certificates of analyses are presented in Appendix 1 and the locations of the samples, with the Au (ppb), Ag, Cu, Zn and Pb (ppm) analytical results are plotted on Map PGG at a scale of 1:2,500. Anomalous analytical results for these 5 elements are also highlighted on this map. The units of concentration and detection limits are also shown in Appendix 1.

Geological Mapping and Rock Sampling Program

No outcrop exposures were found on the property but all large boulders found on the area of exploration were mapped and any alteration, mineralization and quartz veins/stringers were sampled. The mapping and sampling was completed on Sept. 25 and 26, 1999 by geologist G.N. Henriksen. Two grab samples (61514 and 61515) of boulders were collected during that period. The samples were transported to the XRAL Laboratories in Rouyn-Noranda and the fire assay method of Au determination was used on both samples. The assay certificates are shown in Appendix 1 and the sample descriptions plus assay results are presented in Appendix 2 . The data compiled by the mapping and sampling program and the assay results are drafted on Map PGG at a scale of 1:2,500.

SURVEY RESULTS AND INTERPRETATION

Detailed Magnetic Survey

The readings collected during the detailed magnetic surveying, at 12.5 meter intervals along the crosslines, range from 57,239 to 58,507 gammas. Over 90 % of the area surveyed the magnetic relief is low, less than 400 gammas, with local relief in the west and north in the range of 100 to 200 gammas. Generally the magnetic contours trend east-northeast, but there is an area of distortion in the central region where the contours strike north to north-northeast.

The strongest magnetic responses are situated in the southeast corner of the grid, near the holes drilled in 1987. These series of magnetic highs, 58,183 to 58,507 gammas, form a linear zone trending 060 degrees from line 6E to 8E, between Jam and Bell Lakes to west of Jam Lake. The magnetic strength and linear shape of these highs indicates that ultramafic rocks underlie these areas, either an ultramafic intrusive dyke/sill or a unit of ultramafic metavolcanics. Diamond drill holes K87-16 and K87-18 intersected ultramafic metavolcanic rocks across these highs.

North and south of the highs, representing the ultramafic rocks, and in the southern part of lines 0 and 1W are narrow sets of magnetic lows striking parallel to the ultramafic unit. The low magnetic readings in these areas suggest that felsic rocks or altered deformation zones, containing little or no magnetic minerals underlie these areas. The northern low, the narrower low, has a strike length of 1.1 km. across the grid and drill hole data indicates that feldspar porphyry sills underlie this low near Jam Lake. The southern low is wider and is situated on line 7E at 0+50s to 2S and line 8E at 0+50N to 1S. Altered feldspar and quartz-feldspar porphyry, siliceous and brecciated metavolcanics and white quartz-green carbonate altered metavolcanics, exhibiting low magnetic susceptibilities were intersected below the lows in drill holes K87-16 and K87-18. The significant Au intersection of 0.73 oz/ton over 34 feet lies between lines 7 and 8E between 0+50S to 0+75S in the middle of this low. The low trends west-southwest into Bell Lake and east-northeast into an area of flooded swamp east of the road.

A linear set of weak highs lies in contact with the northern edge of the northern low, that strikes east-northeast between lines 1E and 5E into the southwest bay of Jam Lake. Underlying mafic metavolcanics containing narrow interbanded units of ultramafic metavolcanics could cause these highs.

In the central part of the grid, west of Jam Lake, weak magnetic highs (57,600 to 57,750 gammas) form a wide zone 300 to 350 meters wide which is surrounded by wide areas of low magnetic values and very low relief. The strengths, sizes and shapes of the magnetic readings and contours indicate the western, central and northeastern areas explored appear to be underlain by intermediate to felsic intrusive rocks and xenoliths and large blocks of mafic to intermediate metavolcanics. This intrusive body strikes northeast and may be related to the elongated felsic intrusive located 1.6 km. south of the southwest corner of the property and the porphyry sills in the southeast. The broad weak highs in the central part of the grid could represent a block or combination of zones of mafic to intermediate metavolcanic rocks within the intrusive, striking east to northeast towards the bay of Jam Lake that is located on lines 2E and 3E. The reverse circulation holes are thought to be situated between lines 6 and 7W near a small high which lies along strike due west of the broad highs.

The breaks and distortions in the airborne magnetic contour pattern, delineating the position of probable fault/deformation zones, are better defined by the data collected in the detailed ground magnetic surveying. The north-northwest striking probable fault as interpreted from the airborne data follows breaks and distortions in the contours and magnetic lows. This zone trends north-northwest from line 8W at 1+50S through the Au intersected in the diamond drill holes and northwest west of Jam Lake to the northern boundary between lines 2W and 3W. The second probable fault, trending east-northeast, interpreted from the airborne results wasn't delineated in the ground magnetic surveying. One very prominent linear feature stands out on Map TF. It is defined by a 0.65 km. long low in the south and a series of breaks and distortions in the north that delineate a probable fault trending 010 degrees across the grid, in the vicinity of line 0. This zone cuts the quartz-feldspar porphyry sill on line 1W, near the south edge of the grid, then lies at the west end of the mafic metavolcanic band and extends through the possible felsic to intermediate intrusive body and mafic to intermediate metavolcanics in the central and northern regions, between lines 0 and 1E. The 2 probable faults intersect each other near line 0 at 5N.

VLF-Electromagnetic Survey

The axes of 11 conductive zones and 8 individual conductors were defined from the 41 crossovers produced during the very low frequency-electromagnetic surveying. Descriptions and possible causes for each conductive zone are presented below.

Zone	Topo	Strength/Description	the Magnetic Signature	Possible Cause & Geology
A	edge of sand	1 conductor - 0.3 km. weak: line 3E moderate: line 4E	lies along the contact between a linear high to the north and a low to the south.	shear along a contact between mafic to ultramafic metavolcanic and a feldspar of quartz-feldspar porphyry sill to the south. possibly mineralized on line 4E at the intersection with the probable NNW to NW trending fault, on this fault along strike from the Au drill intersections.
B	swamp	1 conductor - 0.25 km. weak	along the north side of a weak low.	conductive overburden.
C		5 conductors - 0.9 km. weak	the western 3 conductors are along the contact between the wide high to the north and a weak low to the south. the eastern 2 conductors cross the north striking low.	shear/fault in the intermediate to felsic intrusive body, near a contact with mafic metavolcanics, offset by the N trending probable fault between lines 0 and 1W. on line 2E the conductor lies at the intersection with the NNW to NW striking probable fault.
D		2 conductors - 0.4 km. moderate: lines 2 & 3E weak: line 0	line 0 - crosses a low. lines 2 & 3E - along a contact between a weak low to the north and a weak high to the south.	Line 0 - N trending fault. lines 2 & 3 E - shear/contact between metavolcanics and the intrusive body - possibly mineralized. the zone is cut and the strike is distorted by the probable NNW to NW trending fault.
E		2 conductors - 0.45 km.	lines 1W & 0 - crossing north	lines 1W & 0 - probable N trend-

Zone	Topo	Strength/Description	the Magnetic Signature	Possible Cause & Geology
		weak: lines 1W & 2E moderate: lines 0 & 2E	striking low. lines 1E & 2E in a weak broad high.	ing fault, possibly mineralized on line 0. lines 1 & 2E - shear in mafic metavolcanics, possibly mineralized on line 2E. the 2 conductors are offset between lines 0 &1E at the intersection of the 2 probable faults.
F	near the shore - line 1E	2 conductors - 0.3 km. weak: line 0 moderate: line 1E	along NNE trending contours with a low to the west & a weak high to the north.	line 0 - probable N trending fault. line 1E - possible mineralized shear in felsic to intermediate intrusive body.
G		1 conductor - 0.15 km. weak	in a weak low.	shear in the northern feldspar porphyry sill.
H		1 conductor - 0.2 km. weak	in a broad weak low.	shear in mafic to intermediate metavolcanic rocks.
I	swamp line 4W	2 conductors - 0.45 km. weak: lines 4W & 2W moderate: lines 1 & 3W	western conductor is in the west edge of a low. the eastern conductor is in the broad and weak high.	western conductor - crosscutting shear in the felsic-intermedite intrusive body. eastern conductor - shear in mafic metavolcanics. possibly mineralized on lines 1W & 3W.
J		1 conductor - 0.15 km. weak: line 0 moderate: line 1E	in the north part of the broad, weak high & cutoff in the west by the north trending low.	shear in mafic metavolcanics. possibly mineralized on line 1E.
K	swamp line 4W	2 conductors - 0.35 km. weak: lines 2W & 4W moderate: line 3W	within and crossing a weak low.	shear in felsic to intermediate intrusive body. possibly mineralized on line 3W.

Detailed Geochemical Soil Surveying

Generally the analytical results obtained during the detailed geochemical soil surveying were low. The results of the precious and base metals, Cu and As will be discussed in this section with the remaining analytical values for the other 26 elements analysed are defined in Appendix 1. The arsenic analyses contained less than the detection limit of 3 ppm in every sample, so these values were not shown on Map PGG.

The Au analytical data indicates that there is very little Au in the Ao and B soil horizons. Of the 204 samples collected, 96 contained < 1 ppb Au, the detection limit, with Au in the remaining samples varying from 2 to 7 ppb. Only 12 samples with over 5 ppb Au were considered to be slightly anomalous, see Map PGG. The highest Au result of 7 ppb (GP39) was collected on line 2W at 1N. All 12 anomalous samples are located in areas thought to be underlain by the felsic to intermediate body and the enclosed mafic to intermediate metavolcanic xenoliths. Generally the positions of the anomalous values are scattered, but there appears to be 1 linear anomalous Au zone striking northwest from line 2E at 6N to line 2W at 8+25N. If this zone were to be extended along strike to the southeast it would cross the wide Au intersection in drill hole K87-16, 0.7 km. to the southeast. This anomalous Au zone lies along the northern northwestern striking part of the probable fault defined in the interpretation of the detailed magnetic surveying. The locations of the slightly anomalous Au values don't correspond to the positions of any of the VLF-EM conductor axes, but the northwest trending Au anomalous zone and probable fault lie along a linear area where the axes of the VLF-EM conductive zones are terminated and/or offset.

The Ag values in the soils range from < 0.2 to 1.1 ppm, with the majority of the samples containing < 0.5 ppm Ag. Five samples were considered anomalous (> 0.5 ppm) and are highlighted on Map PGG. The highest Ag result (1.1 ppm) in sample GP108 is situated on line 0 at 5N, 25 meters north of a second anomalous result of 0.9 ppm Ag (sample Gp109). These 2 samples lie at the intersections of the 2 probable faults delineated during the magnetic surveying and along the south edge of the northeast trending Au anomalous zone. VLF-EM conductive zone E at 4+75 N lies near these Ag samples. VLF-EM conductive zone H, on line 3W also is coincident with sample GP21, containing 0.9 ppm Ag.

There are 10 soil samples that exhibit anomalous Zn values of over 130 ppm. The Zn geochemistry results vary from 4.6 to 152 ppm (sample GP109), with 67 samples containing > 100 ppm Zn. High Zn samples GP108 (149 ppm) and GP109 (152 ppm) also exhibit anomalous Ag values of 1.1 and 0.9 ppm. There also appears to be good correlation between the positions of the northwest striking Au anomalous zone, the probable NW trending fault zone and 8 of the 10 anomalous Zn samples. The anomalous Zn samples are situated along or in close proximity to the sides of the Au anomalous zone and fault zones. Five of the anomalous Zn samples, GP90, 98, 101, 108 and 109, also lie along the probable north trending fault and 6 samples overlie VLF-EM conductive zones: samples GP108, 109 and 131 on zone E at lines 0 and 1E; GP144 at the south end of zone F on line 0; GP33 over zone K on line 2W: and GP43 over zone C.

The Cu analyses vary from 0.7 to 44.6 ppm (sample GP138), with 12 of these samples containing anomalous Cu values of over 20 ppm. Samples GP108 and 172 with 38.8 and 32.4 ppm Cu also contain anomalous amounts of Ag/Zn and Au, respectively and 4 samples (Gp108, 138, 159 and 172) with anomalous amounts of Zn also lying near the northwest trending anomalous Au zone and probable fault zone. The locations of coincident VLF-EM conductive zones and anomalous Zn values were also outlined; zone I - sample GP10; zone B - samples GP40 and 41; and zone E and sample Gp108.

There are 6 anomalous Pb values (> 20 ppm) highlighted on Map PGG. Most of the Pb analytical results fall in the range of 10 to 20 ppm, with a low of 3 and a high of 43 ppm (sample GP45). Four samples with anomalous Pb values also contain anomalous amounts of Ag, Zn and Cu, sample GP31 with Ag, samples GP43 and 162 with Zn and sample GP45 with Cu. Only 1 VLF-EM conductive zone (zone C) lies at the same location as an anomalous Pb result (23ppm), in sample GP43.

Prospecting, Geological Mapping and Rock Sampling Programs

Most of claim 1140878 and the western 85 % of claim 1140877 were prospected in detail. All the claim posts along the boundaries of claim 1140878 were found and the positions of 13 posts of claim 1140877 were noted. Two-thirds of the property is covered by second growth poplar and alder, while the sand covered areas between the 2 lakes and east of Jam Lake, that have been recently logged, contain new growth small pine and poplar. Larger pine and spruce forests still exist within 50 meters of the shorelines. In the southwest region a large alder-spruce swamp was traversed with difficulty. The road east of the lakes is accessible by pickup truck and the skidder roads are well defined on the ground in the bush. The collars of the diamond drill holes located between Jam and Bell Lakes were not found due to removal of the casings and the recent logging of this area. It is thought that these holes were positioned between lines 3 and 4W near 2+50N, near line 5E at 1N and near line 6E in the vicinity of 0+30N. The locations of the reverse circulation holes appear to be situated along the skidder roads crossing the property, with holes 315 and 406 containing the high Au values lying between lines 6 and 7W in the vicinity of 3+50N.

No outcrop exposure was found during the detailed prospecting on the property and boulders were confined to the sand covered areas between the 2 lakes and east of Jam Lake. The boulders mapped were rounded to semi-angular, varying in size from 0.15 to 2 meters in diameter. The majority of the boulders were fine to medium-grained granitic float. These were mainly granular and unaltered granites containing no sulphide mineralization/magnetite and exhibiting no structural deformation.

Metavolcanic boulders were less exposed, and were generally less than 1 meter in diameter. Unaltered mafic to intermediate metavolcanics (fine-grained basaltic and andesitic lavas) were found between the 2 lakes. A large, 2 meter diameter, andesite semi-angular boulder was mapped near the road in the northeast corner of the property. This large boulder contained small quartz stringers and epidote alteration. No lineation and little sulphide content was observed in the other mafic to intermediate metavolcanic boulders. East of Jam Lake in the north part of the property, intermediate to felsic metavolcanic boulders were found while prospecting. A boulder of fine-grained, unmineralized dacitic lava lies in the northern part of line 7E and a small boulder of rhyolite tuff was exposed on the road east of line 8E.

Only 2 of the boulders containing more than trace amounts of sulphide mineralization were found on the Goop Property. A 0.5 meter diameter rounded black, grey and white quartz boulder situated on the baseline was sampled (sample 61514). This boulder exhibited minor carbonate alteration and iron staining and contained 1 to 2 % pyrite and 6 ppb Au. A second sample (61515) of the rhyolite boulder located on the road in the northern part of the property was also collected. This siliceous boulder was well mineralized with 5 to 8 % disseminated pyrite, but no alteration was observed in the float. A low Au assay of 5 ppb was obtained from this sample.

CONCLUSIONS AND RECOMMENDATIONS

The interpretation of the results of the 1999 exploration program, correlated with the data collected in past exploration, indicates that the Goop Property is underlain by sequences of ultramafic to felsic metavolcanics of the Stoughton-Roquemaure Assemblage, intruded by sills of quartz-feldspar porphyry and feldspar porphyry, and a felsic to intermediate intrusive body to the north and west, containing xenoliths and large blocks of mafic to intermediate metavolcanics. These rocks appear to be faulted, altered and mineralized and are covered by thick layers of organics, clay and sand. Since there are no outcrop exposures on the property the underlying geology and structures are defined from the drill hole intersections and inferred from the results of geophysical surveying.

Parallel units of northeast to east-northeast striking ultramafic, mafic, intermediate and altered/brecciated felsic metavolcanic rocks, intruded by sills of quartz-feldspar porphyry and feldspar porphyry, underlie the southeast part of the eastern claim. A northeast trending felsic to intermediate intrusive body with xenoliths and large blocks of mafic to intermediate is thought to underlie the western 2/3 of the property.

The underlying rocks appear to be deformed with 2 probable fault zones striking north and north-northwest to northwest, cutting the rocks in the central and eastern regions, and 10 conductive zones defining the positions of possible shears. The fault in the central part of the grid, trends 010 degrees, crosscutting the sill of feldspar porphyry, unit of mafic metavolcanics and the felsic to intermediate intrusive body. Three conductive zones, D (line 0), F and E overlie this fault. The eastern fault zone, crosses all rock types thought to underlie the property, striking north-northwest from the southeast corner of the grid, east of Bell Lake, then northwest west of Jam Lake, till the north-central boundary. These two probable faults intersect near line 0 at 5N.

Even though the precious metals, base metals, Cu and As geochemical values in the soils were low, there appears to be a definite northwest trending zone of low anomalous Au, with minor Ag and Zn correspondence, lying along the northern part of the north-northwest to northwest striking fault. Five anomalous Zn values also lie along the north trending probable fault. At the location of the intersection of the 2 probable fault zones anomalous Ag and Zn values were returned. The is no correlation between the positions of anomalous Au in soils and the VLF-EM conductors, but there is some coincidence between the conductor axes and the locations of anomalous amounts of Ag, Zn, Cu and Pb in soils.

Au has been found within drill holes in 3 different environments on the property: in a wide intersection (0.073 oz/ton over 34 feet) within siliceous (felsic ?) and brecciated metavolcanics containing quartz-carbonate veining and green carbonate alteration, in lesser amounts and smaller widths in feldspar porphyry sills and near mafic metavolcanics in the west at the reverse circulation Au values. The wide drill intersection, just east of the north end of Bell Lake, lies in magnetic low at the location of the intersection of the southern end of the probable north-northwest to northwest trending fault, along strike southeast of the anomalous geochemical zone in soil samples. The narrow and lesser amounts of Au within feldspar porphyry is situated in an area overlain by a magnetic low crossing the eastern claim, striking 060 degrees near the south end of Jam Lake. High amounts of Au (over 15,000 ppb) have also been reported in the reverse circulation holes positioned in the west-central region in an area thought to be underlain by mafic to intermediate metavolcanics within the felsic to intermediate intrusive body. The axes of 6 conductive zones could also represent mineralization: in mafic to intermediate metavolcanics; in the felsic to intermediate intrusive body; in sills of quartz-feldspar porphyry and feldspar porphyry; in the north trending probable fault zone; and along contacts between metavolcanics and the felsic to intermediate intrusive rocks.

It appears that the deposition of Au within the altered and brecciated quartz-carbonate rich zone of siliceous metavolcanics in drill hole K87-16 and within feldspar porphyry of holes K87-16 and K87-17, is controlled by the emplacement of the felsic to intermediate intrusive body to the north and west and the felsic sills in the southeast and is related to the north-northwest to northwest and north striking faults cutting these rocks.

The rocks underlying the Goop property contain and have the potential to host Au in the fault, breccia and shear zones within altered felsic to ultramafic metavolcanics, in quartz-feldspar porphyry and feldspar porphyry sills and in the felsic to intermediate intrusive body. Base metals and Cu could also be found within the altered and brecciated siliceous horizon intersected in drill hole K87-16. In winter the grid should be extended east of the lakes and established over the 2 lakes. Detailed magnetic and VLF-EM surveying should be completed over these lines. Anomalous areas should then be detailed by a program of induced polarization, including:

- the lines between Jam and Bell Lakes, lines 7E and 8E south of the baseline and east of Bell Lake, and lines 3E, 2E and 1E which overlie the Au zones in drill intersections, the north-northwest to northwest trending fault with anomalous Au, Ag and Zn values in soil samples, the intersection of the two fault zones near line 0 at 5N and the VLF-EM conductive zones (D-lines 1E, 2E and 3E, IE- line 2E and J -line 1E);

- lines 6W and 7W between 0 and 6N, near the high Au in the reverse circulation holes;
- and lines 1W and 0 in the areas containing the north trending fault, conductive zones D, E and F, the five anomalous Zn values in soils along the fault and possible mineralized conductive zones E (lines 0 and 1W) and I (line 1W).

After compiling the newly obtained geophysical data and the results of the 1999 exploration program and the data obtained from the assessment files, the best targets should be tested by a program of diamond drilling.

Respectively submitted,

November 18, 1999

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APPENDIX 1

ASSAY/ANALYTICAL CERTIFICATES

XRAL

LES LABORATOIRES XRAL LABORATORIES
UNE DIVISION DE / A DIVISION OF SGS CANADA INC.
129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9
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CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16871

Nom de la Compagnie/Company: Karen Campbell
Bon de Commande No/ P.O. No:
Projet/ Project No :
Date Soumis/ Submitted : Oct 08, 1999 Oct 14, 1999
Attention : Karen Campbell

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
61514	6	6
61515	5	

Certifie par / Certified by :

XRAL

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UNE DIVISION DE / A DIVISION OF SGS CANADA INC.
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CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16870

Nom de la Compagnie/Company: Karen Campbell
Bon de Commande No/ P.O. No:
Projet/ Project No :
Date Soumis/ Submitted : Oct 08, 1999 Oct 27, 1999
Attention : Karen Campbell

No. D'Echantillon Sample No.	AU PPB
GP1	<1
GP2	2
GP3	6
GP4	<1
GP5	<1
GP6	<1
GP7	3
GP8	4
GP9	2
GP10	1
GP11	<1
GP12	<1
GP13	<1
GP14	<1
GP15	<1
GP16	2
GP17	1
GP18	4
GP19	6
GP20	3
GP21	<1
GP22	1
GP23	2
GP24	<1
GP25	5
GP26	6
GP27	<1
GP28	<1
GP29	<1
GP30	<1
GP31	2
GP32	1
GP33	<1
GP34	<1
GP35	1
GP36	3
GP37	<1
GP38	4
GP39	7

Certifie par / Certified by :

XRAL

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No. D'Echantillon Sample No.	AU PPB
GP40	2
GP41	<1
GP42	<1
GP43	<1
GP44	3
GP45	<1
GP46	2
GP47	<1
GP48	<1
GP49	<1
GP50	3
GP51	<1
GP52	5
GP53	4
GP54	3
GP55	2
GP56	<1
GP57	3
GP58	<1
GP59	<1
GP60	<1
GP61	2
GP62	1
GP63	<1
GP64	<1
GP65	2
GP66	1
GP67	<1
GP68	5
GP69	6
GP70	<1
GP71	4
GP72	3
GP73	<1
GP74	<1
GP75	<1
GP76	1
GP77	<1
GP78	<1

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No. D'Echantillon Sample No.	AU PPB
GP79	1
GP80	2
GP81	<1
GP82	6
GP83	4
GP84	2
GP85	<1
GP86	5
GP87	4
GP88	<1
GP89	2
GP90	<1
GP91	<1
GP92	3
GP93	4
GP94	<1
GP95	2
GP96	6
GP97	<1
GP98	<1
GP99	<1
GP100	4
GP101	<1
GP102	3
GP103	2
GP104	<1
GP105	6
GP106	<1
GP107	2
GP108	5
GP109	<1
GP110	<1
GP111	1
GP112	3
GP113	<1
GP114	<1
GP115	<1
GP116	1
GP117	1

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No. D'Echantillon Sample No.	AU PPB
GP118	1
GP119	<1
GP120	1
GP121	2
GP122	4
GP123	2
GP124	3
GP125	3
GP126	<1
GP127	<1
GP128	<1
GP129	1
GP130	<1
GP131	<1
GP132	3
GP133	4
GP134	<1
GP135	6
GP136	<1
GP137	3
GP138	<1
GP139	<1
GP140	<1
GP141	1
GP142	2
GP143	3
GP144	<1
GP145	<1
GP146	<1
GP147	1
GP148	5
GP149	4
GP150	<1
GP151	2
GP152	<1
GP153	<1
GP154	1
GP155	<1
GP156	3

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Oct 27, 1999

No. D'Echantillon Sample No.	AU PPB
GP157	<1
GP158	<1
GP159	<1
GP160	4
GP161	4
GP162	5
GP163	1
GP164	<1
GP165	6
GP166	3
GP167	<1
GP168	<1
GP169	<1
GP170	2
GP171	4
GP172	6
GP173	<1
GP174	2
GP175	5
GP176	5
GP177	4
GP178	4
GP179	<1
GP180	3
GP181	2
GP182	<1
GP183	<1
GP184	<1
GP185	<1
GP186	1
GP187	4
GP188	2
GP189	<1
GP190	3
GP191	6
GP192	2
GP193	<1
GP194	2
GP195	<1

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Projet/ Project No :
Date Soumis/ Submitted : Oct 08, 1999 Oct 27, 1999
Attention : Karen Campbell

No. D'Echantillon Sample No.	AU PPB
GP196	3
GP197	<1
GP198	5
GP199	4
GP200	<1
GP201	<1
GP202	<1
GP203	<1
GP204	<1

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Work Order: 057425 **Date:** 04/11/99 **FINAL**

Element.	Be	Na	Mg	Al	P	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01	2	1	2	0.01	1
Units.	ppm	%	%	%	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm
GP01	0.9	0.03	1.04	2.36	0.06	0.38	0.40	4.4	0.12	56	64	867	3.38	18
GP02	1.2	0.03	0.93	3.18	0.09	0.47	0.47	5.7	0.07	56	73	286	4.13	12
GP03	<0.5	0.02	0.16	0.69	0.04	0.08	0.13	1.1	0.02	10	13	38	0.63	2
GP04	<0.5	0.02	0.11	0.45	0.04	0.05	0.12	0.7	0.02	7	9	29	0.45	2
GP05	1.0	0.03	0.88	2.98	0.07	0.48	0.52	5.0	0.06	45	63	231	3.14	11
GP06	0.8	0.03	0.90	1.98	0.04	0.31	0.32	3.7	0.12	56	55	698	3.06	14
GP07	1.4	0.03	0.93	3.82	0.07	0.55	0.43	6.1	0.04	44	74	203	3.58	11
GP08	1.1	0.03	0.63	3.48	0.09	0.48	0.44	5.9	0.04	33	67	138	2.60	8
GP09	1.2	0.03	0.81	3.07	0.06	0.43	0.47	5.3	0.06	45	68	241	3.19	11
GP10	1.3	0.03	0.73	3.17	0.09	0.41	0.52	6.4	0.04	41	66	309	3.16	11
GP11	0.8	0.02	0.54	2.41	0.08	0.32	0.33	3.7	0.04	31	50	145	2.38	7
GP12	<0.5	0.02	0.37	0.83	0.03	0.12	0.17	1.4	0.06	21	24	140	1.16	6
GP13	<0.5	0.03	0.52	1.18	0.04	0.16	0.23	2.2	0.08	30	35	279	1.63	7
GP14	<0.5	0.03	0.69	1.51	0.04	0.23	0.29	3.0	0.11	38	46	343	2.04	9
GP15	0.5	0.04	0.78	1.72	0.04	0.29	0.30	3.5	0.13	45	52	445	2.32	9
GP16	<0.5	0.04	0.82	1.70	0.04	0.30	0.35	3.5	0.14	43	52	368	2.27	10
GP17	0.5	0.04	0.77	1.64	0.05	0.28	0.34	3.4	0.13	42	49	437	2.21	10
GP18	0.6	0.04	0.89	1.85	0.05	0.37	0.38	3.8	0.13	50	55	648	2.69	13
GP19	1.1	0.03	1.10	2.74	0.07	0.48	0.60	4.8	0.10	59	72	628	3.54	13
GP20	1.2	0.04	1.13	3.18	0.07	0.51	0.46	5.4	0.10	58	75	375	3.79	12
GP21	1.2	0.03	1.02	3.23	0.06	0.51	0.40	5.2	0.07	51	71	341	3.49	12
GP22	1.2	0.03	1.01	2.77	0.05	0.45	0.38	5.1	0.08	65	69	495	3.87	15
GP23	0.9	0.03	1.07	2.60	0.04	0.44	0.43	4.3	0.11	58	68	693	3.40	19
GP24	0.8	0.03	0.95	2.41	0.05	0.40	0.35	4.1	0.09	49	63	464	3.04	13
GP25	0.5	0.03	0.66	1.51	0.03	0.24	0.22	2.5	0.09	34	41	309	1.98	9
GP26	0.7	0.03	0.87	2.10	0.03	0.34	0.29	3.5	0.10	47	55	414	2.78	13
GP27	1.1	0.03	1.07	2.68	0.04	0.43	0.43	4.8	0.10	57	68	544	3.53	17
GP28	1.0	0.03	0.99	2.67	0.04	0.39	0.38	4.8	0.11	55	65	340	3.38	12
GP29	<0.5	0.03	0.49	1.05	0.02	0.16	0.20	2.0	0.09	34	32	450	1.77	9
GP30	1.2	0.03	0.88	3.15	0.08	0.45	0.64	6.3	0.06	37	66	217	2.93	10

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Element.	Be	Na	Mg	Al	P	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01	2	1	2	0.01	1
Units.	ppm	%	%	%	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm
GP31	0.8	0.03	1.01	2.32	0.04	0.36	0.47	4.2	0.11	57	63	769	3.37	18
GP32	1.0	0.03	0.83	3.63	0.07	0.50	0.44	5.3	0.05	45	71	183	3.31	11
GP33	<0.5	0.02	0.12	0.34	0.03	0.04	0.11	0.5	0.03	10	8	36	0.42	2
GP34	1.2	0.03	0.81	2.91	0.07	0.40	0.51	6.0	0.07	46	67	344	3.26	12
GP35	1.2	0.04	1.16	2.76	0.05	0.37	0.75	6.2	0.10	61	75	620	3.76	17
GP36	1.3	0.03	0.88	2.85	0.06	0.34	0.95	5.7	0.06	49	65	269	3.80	12
GP37	1.0	0.03	0.87	2.72	0.07	0.31	0.49	5.8	0.08	54	69	499	4.02	14
GP38	0.9	0.04	1.13	2.71	0.03	0.41	0.38	5.3	0.14	60	74	498	3.39	13
GP39	0.8	0.03	0.82	2.15	0.03	0.27	0.32	3.4	0.10	50	53	491	2.94	12
GP40	1.2	0.03	0.71	2.82	0.11	0.33	0.60	5.7	0.05	45	64	261	3.44	12
GP41	1.3	0.03	0.72	2.89	0.10	0.36	0.65	6.7	0.05	41	68	179	2.64	8
GP42	1.4	0.03	0.59	3.49	0.10	0.40	0.47	6.3	0.03	32	65	131	2.60	7
GP43	1.0	0.03	0.98	2.35	0.05	0.36	0.47	4.2	0.10	57	62	1050	3.42	17
GP44	<0.5	0.02	0.08	0.30	0.01	0.05	0.09	<0.5	0.02	8	7	47	0.35	2
GP45	1.1	0.03	0.61	2.89	0.09	0.34	0.44	4.8	0.03	36	60	163	2.74	9
GP46	0.9	0.03	0.88	2.67	0.05	0.41	0.38	4.2	0.07	53	67	454	3.42	13
GP47	0.7	0.02	0.38	1.96	0.08	0.25	0.32	2.9	0.02	26	42	103	1.87	6
GP48	0.9	0.03	0.85	2.40	0.05	0.36	0.39	4.6	0.09	56	64	381	3.68	13
GP49	0.8	0.02	0.65	2.36	0.06	0.33	0.41	4.0	0.05	45	56	231	3.07	8
GP50	1.0	0.03	0.78	2.72	0.07	0.41	0.53	5.0	0.06	42	64	280	3.12	10
GP51	1.2	0.03	0.79	3.01	0.09	0.42	0.42	5.7	0.04	45	64	319	3.23	12
GP52	1.1	0.03	0.96	2.98	0.07	0.41	0.47	5.3	0.07	58	69	410	3.81	14
GP53	1.3	0.03	0.89	3.47	0.13	0.44	0.54	4.9	0.04	41	71	266	3.17	10
GP54	0.9	0.03	0.94	2.56	0.06	0.39	0.43	4.3	0.09	47	64	394	3.04	12
GP55	<0.5	0.02	0.41	0.88	0.03	0.15	0.18	1.5	0.07	23	27	257	1.26	6
GP56	0.5	0.03	0.77	1.75	0.05	0.28	0.36	3.2	0.10	42	51	495	2.31	11
GP57	<0.5	0.02	0.27	0.62	0.02	0.08	0.14	1.1	0.06	19	20	426	0.96	5
GP58	<0.5	0.02	0.14	1.04	0.04	0.04	0.12	0.9	0.04	19	17	45	1.06	3
GP59	<0.5	0.02	0.21	1.05	0.04	0.06	0.13	1.1	0.04	17	21	65	1.18	3
GP60	<0.5	0.02	0.40	1.15	0.03	0.11	0.19	1.9	0.07	23	32	161	1.32	5

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Element.	Be	Na	Mg	Al	P	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01	2	1	2	0.01	1
Units.	ppm	%	%	%	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm
GP61	<0.5	0.02	0.34	1.21	0.03	0.11	0.16	1.6	0.05	19	28	112	1.22	4
GP62	<0.5	0.02	0.16	0.75	0.06	0.05	0.12	0.8	0.05	20	18	78	1.17	5
GP63	<0.5	0.02	0.61	1.68	0.03	0.17	0.22	2.4	0.10	37	43	270	2.19	8
GP64	0.8	0.03	0.91	2.04	0.04	0.35	0.36	3.8	0.11	50	57	482	2.93	13
GP65	1.5	0.03	0.94	3.89	0.10	0.53	0.45	6.3	0.04	44	77	227	3.74	12
GP66	1.1	0.03	1.00	2.68	0.06	0.41	0.58	4.6	0.07	51	67	590	3.33	13
GP67	<0.5	0.02	0.20	1.26	0.05	0.06	0.15	1.2	0.04	17	21	65	1.22	4
GP68	<0.5	0.01	0.07	0.76	0.06	0.03	0.10	0.5	0.03	12	12	36	0.66	2
GP69	<0.5	0.02	0.35	1.32	0.05	0.12	0.10	1.5	0.06	25	29	114	1.67	6
GP70	0.9	0.03	0.98	2.24	0.06	0.36	0.41	4.2	0.10	58	66	616	3.23	13
GP71	0.8	0.02	0.81	1.96	0.05	0.29	0.45	3.4	0.07	42	52	408	2.63	10
GP72	0.5	0.02	0.67	1.31	0.04	0.20	0.27	2.7	0.10	37	40	414	2.08	11
GP73	<0.5	0.01	0.10	1.00	0.06	0.03	0.10	0.6	0.03	16	14	46	0.89	2
GP74	<0.5	0.02	0.12	0.74	0.09	0.03	0.10	0.6	0.05	18	15	62	1.03	2
GP75	<0.5	0.02	0.21	1.00	0.05	0.12	0.13	1.4	0.04	18	27	106	1.13	3
GP76	<0.5	0.02	0.09	0.69	0.03	0.03	0.07	0.6	0.03	14	13	53	0.80	1
GP77	<0.5	0.02	0.18	0.95	0.02	0.04	0.10	0.9	0.04	16	18	171	1.01	4
GP78	<0.5	0.02	0.22	0.97	0.02	0.05	0.09	1.0	0.05	17	20	99	1.08	4
GP79	<0.5	0.02	0.19	1.03	0.04	0.05	0.11	0.9	0.04	15	19	63	1.02	4
GP80	<0.5	0.02	0.29	1.22	0.02	0.06	0.13	1.3	0.05	19	27	114	1.35	6
GP81	<0.5	0.02	0.16	0.68	0.04	0.06	0.11	0.9	0.03	14	16	48	0.78	2
GP82	<0.5	0.03	0.71	1.52	0.04	0.24	0.30	3.0	0.11	39	48	479	2.16	11
GP83	<0.5	0.03	0.69	1.54	0.03	0.23	0.26	2.6	0.11	35	48	219	1.96	7
GP84	0.7	0.03	0.91	2.07	0.05	0.35	0.45	3.8	0.10	46	62	444	2.66	11
GP85	<0.5	0.02	0.61	1.30	0.03	0.20	0.28	2.4	0.11	35	42	337	1.94	9
GP86	0.8	0.03	0.98	2.07	0.05	0.35	0.44	3.9	0.12	57	60	1030	3.20	17
GP87	0.8	0.03	0.95	2.21	0.05	0.36	0.42	4.0	0.11	54	63	622	3.09	15
GP88	0.8	0.03	0.96	2.15	0.05	0.34	0.40	4.1	0.12	54	63	730	3.09	14
GP89	<0.5	0.03	0.64	1.29	0.03	0.23	0.26	2.5	0.10	36	40	409	2.03	9
GP90	1.2	0.03	0.87	3.81	0.14	0.46	0.39	4.7	0.04	51	80	234	4.05	11

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Element. Method. Det.Lim. Units.	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm
GP91	0.6	0.02	0.82	1.78	0.05	0.27	0.36	3.1	0.10	47	50	658	2.79	15
GP92	0.7	0.03	0.92	2.02	0.04	0.30	0.38	3.9	0.12	49	59	553	2.88	13
GP93	0.6	0.03	0.80	1.72	0.04	0.22	0.36	3.2	0.11	43	52	439	2.44	11
GP94	0.6	0.03	0.84	1.81	0.05	0.28	0.38	3.5	0.13	45	57	449	2.51	12
GP95	0.5	0.03	0.69	1.50	0.05	0.20	0.35	3.0	0.10	39	47	612	2.14	11
GP96	<0.5	0.02	0.33	0.74	0.03	0.11	0.19	1.3	0.06	22	23	243	1.12	6
GP97	<0.5	0.02	0.49	1.07	0.04	0.16	0.26	1.8	0.07	25	31	278	1.49	6
GP98	1.0	0.03	1.04	2.31	0.07	0.37	0.46	4.3	0.12	57	64	874	3.47	17
GP99	0.7	0.03	0.99	2.17	0.07	0.38	0.50	4.0	0.13	51	61	720	3.18	15
GP100	0.7	0.03	1.03	2.25	0.06	0.37	0.50	4.1	0.13	53	62	671	3.33	16
GP101	0.9	0.03	1.16	2.62	0.06	0.45	0.48	4.7	0.14	62	71	681	3.85	20
GP102	0.7	0.03	0.97	2.00	0.06	0.32	0.41	3.9	0.13	52	57	607	3.11	16
GP103	0.9	0.03	1.02	2.24	0.05	0.36	0.41	4.1	0.13	65	66	736	3.47	17
GP104	0.9	0.03	0.99	2.11	0.06	0.35	0.41	3.9	0.12	58	62	734	3.36	15
GP105	<0.5	0.02	0.41	1.16	0.03	0.11	0.17	1.7	0.06	25	30	147	1.57	5
GP106	<0.5	0.02	0.17	0.53	0.03	0.04	0.12	0.8	0.03	11	14	50	0.63	3
GP107	<0.5	0.03	0.49	1.08	0.03	0.15	0.23	2.0	0.08	26	34	242	1.50	6
GP108	1.6	0.03	1.22	4.19	0.10	0.59	0.53	6.3	0.05	51	89	333	4.28	14
GP109	1.1	0.03	1.16	3.36	0.09	0.49	0.60	4.9	0.08	53	82	582	3.84	15
GP110	<0.5	0.03	0.77	1.65	0.05	0.25	0.38	3.0	0.11	41	51	499	2.35	10
GP111	<0.5	0.02	0.36	0.81	0.04	0.12	0.20	1.6	0.06	26	26	329	1.25	7
GP112	<0.5	0.03	0.73	1.55	0.04	0.24	0.35	2.9	0.12	41	49	406	2.22	9
GP113	<0.5	0.03	0.72	1.55	0.04	0.22	0.34	2.8	0.11	38	49	452	2.19	10
GP114	<0.5	0.02	0.48	1.05	0.04	0.16	0.28	1.9	0.08	27	34	396	1.53	8
GP115	0.7	0.03	0.95	2.05	0.05	0.34	0.47	3.9	0.13	49	62	466	2.78	12
GP116	0.9	0.03	1.02	2.21	0.06	0.35	0.44	4.3	0.11	56	66	767	3.35	18
GP117	<0.5	0.03	0.63	1.58	0.03	0.14	0.24	2.4	0.10	35	45	215	2.15	9
GP118	<0.5	0.03	0.67	1.51	0.06	0.17	0.29	2.7	0.10	37	46	367	2.08	10
GP119	<0.5	0.02	0.37	0.71	0.02	0.09	0.14	1.2	0.06	19	24	181	1.07	4
GP120	<0.5	0.02	0.29	0.79	0.03	0.10	0.19	1.3	0.03	16	21	107	0.99	4

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Element.	Be	Na	Mg	Al	P	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01	2	1	2	0.01	1
Units.	ppm	%	%	%	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm
GP121	<0.5	0.02	0.03	0.13	<0.01	0.03	0.04	<0.5	0.02	11	5	23	0.36	2
GP122	<0.5	0.02	0.32	0.98	0.04	0.09	0.15	1.3	0.06	24	26	134	1.47	4
GP123	0.5	0.03	0.90	2.02	0.05	0.30	0.40	3.6	0.14	48	60	499	2.76	13
GP124	0.7	0.03	1.04	2.25	0.04	0.34	0.40	3.9	0.13	58	63	683	3.42	15
GP125	0.9	0.03	1.19	2.74	0.04	0.41	0.41	5.0	0.13	64	71	620	3.96	17
GP126	0.6	0.03	0.91	1.96	0.05	0.28	0.36	3.5	0.11	47	55	425	2.94	13
GP127	<0.5	0.03	0.66	1.60	0.03	0.20	0.32	2.8	0.10	38	45	392	2.16	10
GP128	0.7	0.03	1.01	2.27	0.04	0.33	0.41	4.0	0.12	52	62	714	3.26	15
GP129	0.9	0.03	1.04	2.37	0.05	0.36	0.43	4.6	0.11	59	64	779	3.54	19
GP130	0.8	0.03	1.08	2.40	0.04	0.39	0.38	4.7	0.13	60	67	632	3.60	16
GP131	0.9	0.03	1.07	2.40	0.05	0.39	0.40	4.8	0.12	59	67	592	3.53	17
GP132	0.8	0.02	1.01	2.30	0.05	0.34	0.42	4.2	0.12	55	63	827	3.40	18
GP133	0.6	0.03	0.91	2.05	0.05	0.31	0.40	3.5	0.12	48	57	456	2.88	13
GP134	0.7	0.03	0.91	1.88	0.06	0.31	0.40	3.6	0.12	48	54	769	2.91	14
GP135	0.9	0.03	1.07	2.51	0.05	0.40	0.49	5.3	0.12	54	66	656	3.47	17
GP136	0.7	0.03	1.04	2.31	0.06	0.35	0.40	4.2	0.14	53	65	544	3.13	14
GP137	0.5	0.03	0.82	1.87	0.05	0.26	0.32	3.3	0.12	43	55	484	2.52	13
GP138	1.2	0.03	1.17	3.80	0.08	0.52	0.36	5.2	0.08	66	94	653	4.77	19
GP139	<0.5	0.03	0.60	1.31	0.04	0.19	0.32	2.5	0.07	30	42	344	1.84	8
GP140	<0.5	0.02	0.17	0.63	0.02	0.05	0.09	0.8	0.03	12	14	45	0.71	3
GP141	<0.5	0.02	0.20	0.57	0.03	0.06	0.11	0.8	0.03	12	15	51	0.69	3
GP142	<0.5	0.02	0.28	0.96	0.04	0.10	0.16	1.3	0.03	14	22	74	1.02	3
GP143	<0.5	0.02	0.16	0.55	0.02	0.05	0.10	0.8	0.03	12	14	43	0.66	3
GP144	<0.5	0.02	0.18	0.67	0.03	0.05	0.11	0.8	0.03	12	16	51	0.68	3
GP145	<0.5	0.02	0.54	1.24	0.03	0.19	0.22	2.0	0.08	31	39	407	1.80	8
GP146	0.6	0.03	0.65	2.04	0.06	0.27	0.31	3.1	0.07	33	51	270	2.22	8
GP147	0.7	0.03	0.83	2.32	0.05	0.32	0.37	4.0	0.09	40	64	294	2.64	9
GP148	<0.5	0.02	0.53	1.24	0.03	0.18	0.27	2.2	0.08	27	38	217	1.55	8
GP149	<0.5	0.03	0.62	1.26	0.03	0.18	0.25	2.3	0.10	34	42	386	1.91	9
GP150	<0.5	0.02	0.18	0.69	0.02	0.06	0.10	0.9	0.03	11	15	46	0.67	3

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Work Order: 057425 **Date:** 04/11/99 **FINAL**

Element. Method. Det.Lim. Units.	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm
GP151	<0.5	0.02	0.39	0.89	0.03	0.11	0.19	1.6	0.07	23	29	189	1.29	5
GP152	<0.5	0.02	0.01	0.06	<0.01	0.02	0.02	<0.5	0.01	5	3	11	0.23	2
GP153	<0.5	0.02	0.42	1.02	0.03	0.12	0.17	1.9	0.07	24	30	196	1.35	7
GP154	<0.5	0.03	0.45	1.16	0.04	0.13	0.21	2.2	0.07	25	35	157	1.53	8
GP155	<0.5	0.02	0.23	0.89	0.03	0.07	0.12	1.0	0.04	17	20	66	1.06	4
GP156	<0.5	0.02	0.34	0.74	0.03	0.10	0.16	1.4	0.06	21	24	228	1.08	6
GP157	<0.5	0.02	0.41	0.81	0.04	0.13	0.25	1.6	0.06	23	26	279	1.28	8
GP158	0.7	0.03	0.94	2.09	0.06	0.37	0.41	3.9	0.12	49	62	524	2.85	14
GP159	1.1	0.03	1.12	2.64	0.05	0.44	0.49	5.5	0.11	60	76	615	3.73	17
GP160	0.9	0.03	1.11	2.45	0.06	0.43	0.43	4.8	0.12	56	66	577	3.53	15
GP161	0.7	0.03	0.84	1.81	0.07	0.33	0.44	3.3	0.10	48	51	924	2.84	15
GP162	0.8	0.03	0.93	1.99	0.06	0.35	0.52	3.7	0.11	50	57	745	3.04	16
GP163	0.8	0.03	0.97	2.15	0.05	0.38	0.43	4.3	0.11	52	63	568	3.08	15
GP164	0.8	0.03	1.08	2.40	0.05	0.38	0.39	4.3	0.12	54	67	559	3.41	15
GP165	0.7	0.03	0.93	1.90	0.06	0.30	0.38	3.5	0.12	48	55	572	2.86	14
GP166	0.5	0.03	0.80	1.68	0.06	0.26	0.30	3.1	0.12	46	53	624	2.49	12
GP167	0.5	0.03	0.82	1.72	0.05	0.26	0.39	3.3	0.12	45	53	835	2.57	14
GP168	0.9	0.03	1.01	2.27	0.05	0.35	0.48	4.1	0.11	60	67	1000	3.46	23
GP169	1.0	0.03	1.14	2.54	0.06	0.40	0.58	5.4	0.10	60	71	825	3.84	21
GP170	<0.5	0.02	0.11	0.31	0.02	0.04	0.08	<0.5	0.02	8	8	35	0.40	3
GP171	<0.5	0.02	0.14	0.71	0.02	0.05	0.08	0.9	0.03	12	14	37	0.83	3
GP172	1.1	0.02	0.85	2.82	0.07	0.39	0.47	4.2	0.04	51	65	380	3.64	11
GP173	1.2	0.03	0.97	3.20	0.07	0.42	0.43	5.0	0.05	52	74	522	3.91	15
GP174	0.6	0.03	0.87	1.91	0.03	0.27	0.31	3.2	0.12	48	55	693	2.81	13
GP175	<0.5	0.02	0.23	1.08	0.04	0.07	0.12	1.0	0.05	18	22	71	1.17	4
GP176	<0.5	0.02	0.07	0.36	0.08	0.02	0.08	<0.5	0.03	10	9	75	0.63	2
GP177	<0.5	0.02	0.10	0.44	0.04	0.03	0.09	<0.5	0.03	11	10	52	0.62	3
GP178	0.6	0.02	0.54	2.17	0.09	0.26	0.31	3.0	0.05	31	50	216	2.17	7
GP179	<0.5	0.03	0.68	1.46	0.05	0.23	0.41	2.6	0.09	38	44	556	2.24	11
GP180	0.9	0.03	0.78	2.50	0.07	0.33	0.46	4.7	0.07	42	67	321	2.84	11

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Work Order: 057425 **Date:** 04/11/99 **FINAL**

Element.	Be	Na	Mg	Al	P	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01	2	1	2	0.01	1
Units.	ppm	%	%	%	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm
GP181	<0.5	0.03	0.72	1.75	0.05	0.28	0.38	3.3	0.10	40	53	559	2.22	12
GP182	0.6	0.03	0.65	1.96	0.06	0.27	0.37	3.0	0.07	38	53	246	2.34	9
GP183	1.0	0.03	0.98	2.84	0.07	0.42	0.50	5.2	0.09	53	76	449	3.51	15
GP184	1.0	0.03	0.92	2.59	0.05	0.36	0.37	4.6	0.09	51	67	330	3.33	12
GP185	1.1	0.02	0.79	3.49	0.09	0.45	0.41	5.2	0.03	39	71	200	3.21	10
GP186	0.6	0.02	0.36	1.32	0.05	0.17	0.22	2.2	0.04	37	33	250	1.86	6
GP187	0.9	0.02	0.92	2.59	0.04	0.36	0.36	4.4	0.07	57	68	307	3.73	11
GP188	0.9	0.03	1.13	2.72	0.05	0.43	0.47	4.5	0.10	59	74	625	3.65	18
GP189	0.9	0.03	0.83	2.46	0.07	0.35	0.46	4.4	0.07	55	66	350	3.63	13
GP190	0.8	0.02	0.78	2.37	0.06	0.33	0.37	3.9	0.06	47	63	236	3.43	10
GP191	0.5	0.02	0.68	1.67	0.03	0.23	0.23	2.6	0.09	43	45	310	2.58	9
GP192	1.0	0.03	0.93	2.63	0.06	0.36	0.40	5.3	0.07	47	69	361	3.44	13
GP193	<0.5	0.02	0.58	1.39	0.03	0.21	0.26	2.4	0.09	32	42	199	1.84	7
GP194	<0.5	0.02	0.22	0.64	0.03	0.08	0.12	0.9	0.03	14	18	83	0.86	4
GP195	<0.5	0.01	0.11	0.33	0.03	0.03	0.10	<0.5	0.02	8	9	33	0.42	1
GP196	<0.5	0.02	0.31	0.65	0.03	0.09	0.17	1.2	0.06	24	22	262	1.09	7
GP197	0.6	0.02	0.54	2.05	0.05	0.23	0.24	2.5	0.06	32	45	156	2.33	7
GP198	0.5	0.02	0.53	1.57	0.06	0.17	0.35	3.1	0.05	31	44	337	2.12	9
GP199	<0.5	0.01	0.09	0.25	0.03	0.03	0.12	<0.5	0.02	7	7	37	0.35	3
GP200	0.7	0.03	0.71	2.17	0.07	0.26	0.47	4.7	0.07	38	63	269	2.72	9
GP201	<0.5	0.02	0.29	0.74	0.01	0.07	0.14	1.4	0.06	19	21	133	0.96	5
GP202	<0.5	0.02	0.56	1.37	0.02	0.15	0.20	2.3	0.09	31	39	219	1.77	7
GP203	<0.5	0.02	0.51	1.23	0.03	0.16	0.22	2.0	0.09	32	38	413	1.73	8
GP204	<0.5	0.02	0.64	1.43	0.04	0.19	0.26	2.7	0.08	32	45	362	1.86	9
*Dup GP01	0.8	0.02	0.98	2.16	0.05	0.35	0.36	3.9	0.10	52	61	838	3.23	17
*Dup GP13	<0.5	0.02	0.52	1.14	0.04	0.15	0.21	2.1	0.08	30	35	282	1.65	6
*Dup GP25	0.5	0.02	0.67	1.50	0.03	0.23	0.22	2.5	0.09	34	41	329	2.04	10
*Dup GP37	1.0	0.03	0.86	2.61	0.07	0.30	0.48	5.7	0.08	54	69	498	4.04	14
*Dup GP49	0.9	0.02	0.68	2.35	0.07	0.35	0.43	4.1	0.05	46	59	237	3.19	8
*Dup GP61	<0.5	0.02	0.36	1.21	0.03	0.12	0.16	1.6	0.05	20	29	114	1.25	5

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Element. Method. Det.Lim. Units.	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm
*Dup GP73	<0.5	0.01	0.10	0.99	0.06	0.03	0.10	0.7	0.04	16	14	46	0.90	2
*Dup GP85	<0.5	0.02	0.65	1.34	0.03	0.22	0.29	2.5	0.12	37	45	353	2.03	8
*Dup GP97	<0.5	0.02	0.53	1.09	0.04	0.18	0.26	2.0	0.07	27	34	296	1.56	7
*Dup GP109	1.2	0.03	1.19	3.28	0.10	0.53	0.59	5.0	0.08	54	82	573	3.81	15
*Dup GP121	<0.5	0.02	0.02	0.13	<0.01	0.03	0.04	<0.5	0.02	11	4	22	0.34	1
*Dup GP133	0.7	0.03	0.98	2.14	0.06	0.36	0.41	3.8	0.12	50	59	469	3.04	12
*Dup GP145	<0.5	0.02	0.58	1.27	0.03	0.21	0.23	2.2	0.09	33	39	430	1.86	8
*Dup GP157	<0.5	0.02	0.44	0.84	0.05	0.15	0.26	1.7	0.07	25	28	290	1.34	6
*Dup GP169	1.2	0.03	1.23	2.66	0.07	0.46	0.60	5.9	0.11	65	75	868	4.06	21
*Dup GP181	0.6	0.03	0.76	1.78	0.06	0.31	0.38	3.5	0.10	41	55	565	2.29	10
*Dup GP193	<0.5	0.03	0.62	1.47	0.03	0.24	0.27	2.6	0.10	34	44	206	1.93	7

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GP01	37	24.1	97.4	<3	16.6	4.2	14.8	<1	0.4	<1	<10	<5	110	14.4
GP02	36	24.7	86.6	<3	20.8	8.5	8.2	<1	0.5	<1	<10	<5	151	30.7
GP03	7	3.7	14.8	<3	5.2	2.4	1.5	<1	0.3	<1	<10	<5	29	8.0
GP04	6	2.1	12.5	<3	4.1	1.8	2.0	<1	<0.2	<1	<10	<5	17	5.5
GP05	34	26.5	85.9	<3	22.0	7.5	10.1	<1	0.7	<1	<10	<5	119	25.2
GP06	31	19.0	94.7	<3	13.9	4.3	8.6	<1	0.5	<1	<10	<5	79	15.6
GP07	36	27.3	85.3	<3	19.6	7.2	11.0	<1	0.9	<1	<10	<5	135	27.1
GP08	28	21.6	65.8	<3	19.8	7.0	7.8	<1	0.7	<1	<10	<5	149	25.1
GP09	31	30.7	85.8	<3	20.1	6.9	9.7	<1	0.4	<1	<10	<5	119	26.3
GP10	32	31.7	76.2	<3	20.4	10.0	7.8	<1	0.3	<1	<10	<5	140	35.8
GP11	22	20.1	61.7	<3	13.9	5.0	5.1	<1	0.6	<1	<10	<5	101	17.7
GP12	12	6.0	32.4	<3	6.8	1.9	3.7	<1	0.3	<1	<10	<5	30	6.2
GP13	19	8.8	49.8	<3	10.5	2.7	4.4	<1	0.3	<1	<10	<5	48	10.3
GP14	23	11.3	68.0	<3	13.6	3.8	6.2	<1	0.4	<1	<10	<5	59	13.0
GP15	26	12.0	62.9	<3	14.8	3.9	8.9	<1	0.5	<1	<10	<5	69	13.3
GP16	26	10.3	67.7	<3	16.3	4.1	8.4	<1	<0.2	<1	<10	<5	69	12.1
GP17	26	10.7	70.4	<3	15.7	4.0	7.8	<1	0.3	<1	<10	<5	68	13.5
GP18	30	15.3	85.8	<3	16.6	4.1	10.8	<1	0.4	<1	<10	<5	82	13.8
GP19	39	29.9	128	<3	25.0	6.5	8.1	<1	0.7	<1	<10	<5	135	22.7
GP20	41	30.0	116	<3	20.9	7.2	10.5	<1	0.6	<1	<10	<5	123	24.2
GP21	39	28.7	104	<3	18.1	6.7	10.5	<1	0.9	<1	<10	<5	122	24.6
GP22	36	23.0	102	<3	16.8	7.5	11.3	<1	0.3	<1	<10	<5	110	25.8
GP23	37	20.1	114	<3	17.4	4.0	14.1	<1	0.2	<1	<10	<5	106	15.4
GP24	35	20.8	112	<3	14.7	4.5	10.8	<1	0.2	<1	<10	<5	101	16.1
GP25	22	9.1	64.5	<3	9.5	2.8	9.0	<1	0.4	<1	<10	<5	57	10.1
GP26	30	14.4	86.0	<3	12.7	3.2	12.2	<1	0.5	<1	<10	<5	81	11.3
GP27	40	28.6	113	<3	17.3	5.3	17.8	<1	0.6	<1	<10	<5	105	19.3
GP28	36	25.2	93.1	<3	15.8	5.5	15.2	<1	0.4	<1	<10	<5	96	18.9
GP29	16	7.9	67.2	<3	8.7	2.7	5.3	<1	0.3	<1	<10	<5	40	10.0
GP30	36	21.5	122	<3	23.5	9.4	10.3	<1	0.4	<1	<10	<5	137	31.1

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GP31	36	25.5	122	<3	17.5	4.3	13.0	<1	0.8	<1	<10	<5	117	14.7
GP32	31	17.3	114	<3	21.2	5.5	10.1	<1	0.5	<1	<10	<5	154	20.5
GP33	4	1.5	11.8	<3	3.2	2.6	2.7	<1	<0.2	<1	<10	<5	10	12.5
GP34	32	29.9	84.4	<3	18.8	10.3	13.1	<1	0.5	<1	<10	<5	133	34.6
GP35	44	38.4	82.0	<3	29.1	12.3	27.6	<1	0.4	<1	<10	<5	146	35.6
GP36	34	35.2	94.2	<3	44.2	10.6	16.8	<1	0.4	<1	<10	<5	156	36.8
GP37	33	28.9	93.1	<3	18.1	8.3	14.1	<1	0.2	<1	<10	<5	131	27.1
GP38	40	20.1	77.9	<3	18.5	5.1	15.8	<1	0.4	<1	<10	<5	121	17.4
GP39	29	15.9	108	<3	13.0	3.8	8.9	<1	0.4	<1	<10	<5	84	13.6
GP40	30	33.9	93.3	<3	21.7	10.9	6.5	<1	0.4	<1	<10	<5	137	37.4
GP41	30	35.0	103	<3	22.1	14.3	7.2	<1	0.4	<1	<10	<5	152	48.7
GP42	27	24.4	76.0	<3	18.2	13.5	6.7	<1	0.2	<1	<10	<5	142	50.3
GP43	38	24.5	133	<3	18.3	6.0	11.0	<1	0.6	1	<10	<5	110	22.0
GP44	2	3.1	15.0	<3	3.8	1.1	1.3	<1	0.2	<1	<10	<5	15	5.9
GP45	30	34.3	75.4	<3	18.2	9.2	5.3	<1	0.4	<1	<10	<5	129	36.8
GP46	33	22.3	112	<3	15.7	5.5	7.6	<1	0.4	<1	<10	<5	103	20.4
GP47	20	20.7	51.3	<3	12.7	5.8	3.0	<1	0.5	<1	<10	<5	90	20.7
GP48	31	21.2	84.2	<3	15.0	6.9	11.1	<1	0.5	<1	<10	<5	96	22.3
GP49	25	17.5	88.1	<3	16.4	5.9	5.3	<1	0.3	<1	<10	<5	104	21.4
GP50	33	26.7	106	<3	20.1	8.5	6.9	<1	0.3	<1	<10	<5	126	30.3
GP51	33	28.6	86.7	<3	17.3	9.1	6.7	<1	0.4	<1	<10	<5	129	34.2
GP52	37	28.6	112	<3	18.7	8.1	9.2	<1	0.4	<1	<10	<5	126	29.5
GP53	36	25.5	123	<3	22.2	8.2	5.5	<1	0.6	<1	<10	<5	135	28.8
GP54	35	21.1	117	<3	18.0	5.9	7.0	<1	0.5	<1	<10	<5	111	20.9
GP55	14	5.9	43.5	<3	7.1	2.0	3.3	<1	0.3	<1	<10	<5	37	7.7
GP56	27	13.6	87.3	<3	16.3	3.9	5.8	<1	0.3	<1	<10	<5	82	13.8
GP57	9	3.8	33.9	<3	8.1	1.5	1.9	<1	0.3	<1	<10	<5	35	8.1
GP58	7	1.8	15.4	<3	5.8	2.3	2.1	<1	0.2	<1	<10	<5	14	7.0
GP59	11	3.1	17.9	<3	5.7	2.4	3.0	<1	<0.2	<1	<10	<5	23	7.6
GP60	15	6.3	35.2	<3	9.7	2.6	3.5	<1	<0.2	<1	<10	<5	47	10.2

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GP61	14	6.9	36.4	<3	9.6	2.1	1.7	<1	0.3	<1	<10	<5	54	9.4
GP62	7	2.2	18.3	<3	5.9	1.9	2.7	<1	0.4	<1	<10	<5	21	7.7
GP63	21	7.6	68.6	<3	13.2	2.1	6.6	<1	<0.2	<1	<10	<5	58	9.1
GP64	31	16.3	99.9	<3	14.7	4.3	9.7	<1	<0.2	<1	<10	<5	84	16.1
GP65	41	31.9	112	<3	19.5	9.0	8.8	<1	1.0	<1	<10	<5	184	35.0
GP66	38	28.6	133	<3	24.5	8.3	8.4	<1	0.7	<1	<10	<5	143	28.0
GP67	11	5.0	18.5	<3	6.5	2.3	4.6	<1	0.2	<1	<10	<5	27	6.8
GP68	3	1.8	19.1	<3	3.7	1.8	1.8	<1	<0.2	<1	<10	<5	10	5.5
GP69	13	5.0	38.8	<3	5.9	1.5	4.3	<1	0.2	<1	<10	<5	45	6.7
GP70	35	21.4	106	<3	17.7	5.4	8.2	<1	0.4	<1	<10	<5	105	19.3
GP71	30	18.5	96.4	<3	17.1	6.3	6.1	<1	0.3	<1	<10	<5	89	21.6
GP72	22	9.8	59.7	<3	11.0	4.4	5.8	<1	0.2	<1	<10	<5	56	14.5
GP73	5	1.7	13.0	<3	3.9	1.8	2.0	<1	0.2	<1	<10	<5	17	6.4
GP74	5	2.0	23.6	<3	4.6	1.4	2.3	<1	0.3	<1	<10	<5	30	4.9
GP75	10	6.4	41.0	<3	7.0	1.7	1.7	<1	0.6	<1	<10	<5	44	9.1
GP76	5	2.2	17.2	<3	3.9	1.3	2.4	<1	0.2	<1	<10	<5	16	5.9
GP77	8	2.7	16.2	<3	7.0	1.5	1.9	<1	<0.2	<1	<10	<5	29	6.0
GP78	10	2.7	22.2	<3	5.3	1.4	2.8	<1	0.2	<1	<10	<5	33	7.2
GP79	10	3.5	14.6	<3	4.1	2.0	2.2	<1	0.5	<1	<10	<5	27	6.3
GP80	12	4.4	23.1	<3	9.0	1.7	3.7	<1	0.4	<1	<10	<5	36	6.8
GP81	7	2.9	14.2	<3	4.2	2.2	2.2	<1	<0.2	<1	<10	<5	22	7.4
GP82	23	11.4	78.8	<3	12.8	3.5	7.7	<1	0.4	<1	<10	<5	63	13.7
GP83	23	9.5	66.3	<3	12.0	2.7	5.2	<1	<0.2	<1	<10	<5	59	11.9
GP84	32	18.6	104	<3	19.1	5.3	6.6	<1	0.4	<1	<10	<5	95	19.5
GP85	20	7.8	84.1	<3	12.3	2.7	4.9	<1	0.2	<1	<10	<5	64	11.9
GP86	35	17.2	130	<3	16.5	4.6	11.9	<1	0.6	<1	<10	<5	97	16.3
GP87	34	19.2	119	<3	17.4	5.5	9.3	<1	0.4	<1	<10	<5	94	19.0
GP88	35	18.1	120	<3	16.9	6.2	7.9	<1	0.3	<1	<10	<5	91	21.4
GP89	22	11.0	76.3	<3	10.9	3.5	7.1	<1	0.3	<1	<10	<5	55	12.8
GP90	38	29.6	132	<3	19.5	5.6	6.8	<1	0.7	<1	<10	<5	173	22.4

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Element. Method. Det.Lim. Units.	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm
GP91	29	15.0	101	<3	13.2	3.8	8.3	<1	0.6	<1	<10	<5	95	14.5
GP92	33	13.9	88.4	<3	14.3	5.0	9.9	<1	0.4	<1	<10	<5	76	16.7
GP93	27	11.0	94.0	<3	13.9	4.8	6.4	<1	0.2	<1	<10	<5	63	16.5
GP94	30	14.9	84.3	<3	14.9	4.4	8.5	<1	0.3	<1	<10	<5	74	16.1
GP95	25	10.8	96.5	<3	14.3	4.3	5.8	<1	0.5	<1	<10	<5	66	15.6
GP96	11	7.2	53.0	<3	7.9	2.7	3.3	<1	0.3	<1	<10	<5	42	10.0
GP97	18	9.2	62.3	<3	9.6	3.8	3.5	<1	0.4	<1	<10	<5	46	13.4
GP98	39	21.8	144	<3	16.3	6.7	10.9	<1	0.5	<1	<10	<5	96	21.4
GP99	37	16.6	114	<3	16.9	4.8	13.6	<1	0.3	<1	<10	<5	97	16.9
GP100	38	17.2	130	<3	16.8	4.9	13.4	<1	0.4	<1	<10	<5	93	17.2
GP101	42	25.6	136	<3	17.1	4.8	20.1	<1	0.5	<1	<10	<5	117	18.1
GP102	34	13.5	112	<3	14.2	5.2	11.7	<1	0.3	<1	<10	<5	83	18.0
GP103	35	16.6	111	<3	15.5	4.8	13.2	<1	0.3	<1	<10	<5	92	17.1
GP104	33	17.5	122	<3	15.3	5.3	11.1	<1	0.5	<1	<10	<5	94	17.6
GP105	15	6.1	33.6	<3	8.9	2.3	4.9	<1	0.3	<1	<10	<5	43	8.7
GP106	7	2.8	12.3	<3	4.4	2.0	3.2	<1	<0.2	<1	<10	<5	15	6.5
GP107	17	6.1	48.9	<3	10.2	2.7	4.3	<1	0.4	<1	<10	<5	42	10.5
GP108	51	38.8	149	<3	23.3	7.3	10.1	<1	1.1	<1	<10	<5	177	28.1
GP109	46	27.9	152	<3	26.5	6.3	9.3	<1	0.9	<1	<10	<5	160	22.1
GP110	27	11.9	115	<3	15.7	3.9	5.8	<1	<0.2	<1	<10	<5	69	13.6
GP111	13	6.4	30.8	<3	7.8	2.8	5.9	<1	<0.2	<1	<10	<5	34	9.0
GP112	25	10.0	80.0	<3	15.0	3.8	6.5	<1	0.3	<1	<10	<5	64	14.1
GP113	25	10.0	106	<3	13.5	3.4	5.5	<1	0.4	<1	<10	<5	67	12.6
GP114	17	11.2	64.5	<3	11.0	2.4	6.1	<1	0.2	<1	<10	<5	59	9.5
GP115	33	15.0	97.1	<3	18.0	4.7	9.9	<1	0.2	<1	<10	<5	84	16.9
GP116	37	23.9	125	<3	15.8	5.7	11.7	<1	<0.2	<1	<10	<5	95	19.9
GP117	23	7.7	58.1	<3	11.9	3.0	7.0	<1	0.4	<1	<10	<5	46	11.1
GP118	24	8.4	91.7	<3	12.1	3.6	7.3	<1	0.3	<1	<10	<5	75	13.3
GP119	12	4.5	38.7	<3	5.2	1.9	3.3	<1	<0.2	<1	<10	<5	26	7.5
GP120	11	6.1	29.5	<3	6.4	2.3	3.6	<1	0.2	<1	<10	<5	35	8.7

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GP121	2	1.2	11.8	<3	2.4	1.2	0.9	<1	<0.2	<1	<10	<5	6	11.4
GP122	12	4.1	31.8	<3	6.6	2.1	3.9	<1	0.3	<1	<10	<5	53	10.2
GP123	31	14.4	88.4	<3	16.0	3.5	12.7	<1	0.5	<1	<10	<5	94	14.2
GP124	36	17.3	125	<3	14.4	4.6	15.8	<1	0.3	<1	<10	<5	89	17.0
GP125	41	21.6	109	<3	15.6	5.1	21.7	<1	0.3	<1	<10	<5	108	18.6
GP126	32	13.8	112	<3	13.0	3.9	12.9	<1	0.4	<1	<10	<5	75	14.4
GP127	25	11.5	70.6	<3	12.3	2.8	9.8	<1	0.2	<1	<10	<5	76	12.0
GP128	37	18.7	112	<3	16.4	4.1	16.2	<1	0.4	<1	<10	<5	107	16.5
GP129	37	19.8	109	<3	16.5	4.9	16.5	<1	0.3	<1	<10	<5	108	18.2
GP130	37	24.0	113	<3	15.5	4.8	18.1	<1	0.5	<1	<10	<5	101	17.7
GP131	38	22.4	137	<3	15.5	4.6	20.2	<1	0.4	<1	<10	<5	104	17.2
GP132	37	19.8	129	<3	15.6	4.1	16.7	<1	0.5	<1	<10	<5	108	16.7
GP133	32	16.4	98.0	<3	15.3	3.7	13.0	<1	0.5	<1	<10	<5	80	13.8
GP134	34	13.5	119	<3	13.9	5.0	11.5	<1	0.4	<1	<10	<5	98	17.2
GP135	40	22.5	84.6	<3	18.5	5.5	25.0	<1	0.5	<1	<10	<5	114	19.2
GP136	37	16.9	88.6	<3	16.5	4.0	14.8	<1	0.5	<1	<10	<5	103	14.3
GP137	29	12.8	70.2	<3	13.7	3.2	10.2	<1	0.2	<1	<10	<5	69	12.9
GP138	50	44.6	130	<3	17.7	4.1	13.5	<1	0.8	<1	<10	<5	182	18.2
GP139	21	14.2	77.6	<3	12.8	4.2	4.2	<1	<0.2	<1	<10	<5	62	15.2
GP140	7	3.3	16.0	<3	3.6	1.6	3.8	<1	0.2	<1	<10	<5	19	5.6
GP141	7	3.1	16.5	<3	3.9	1.6	3.0	<1	0.2	<1	<10	<5	18	5.4
GP142	11	7.2	25.9	<3	6.2	2.3	2.4	<1	<0.2	<1	<10	<5	36	7.8
GP143	6	4.8	15.1	<3	3.8	1.9	2.7	<1	0.3	<1	<10	<5	18	7.2
GP144	8	2.8	16.0	<3	4.1	1.8	2.7	<1	<0.2	<1	<10	<5	18	6.0
GP145	20	8.3	52.7	<3	10.8	2.6	4.5	<1	0.3	<1	<10	<5	54	10.5
GP146	26	13.7	74.2	<3	14.3	3.7	4.2	<1	0.4	<1	<10	<5	92	14.5
GP147	31	18.7	82.9	<3	16.8	4.8	6.9	<1	0.2	<1	<10	<5	104	18.1
GP148	20	8.6	59.0	<3	11.1	2.9	5.0	<1	<0.2	<1	<10	<5	51	12.3
GP149	21	8.9	67.8	<3	10.4	3.1	5.5	<1	0.6	<1	<10	<5	48	12.6
GP150	8	3.2	18.2	<3	4.0	1.7	3.9	<1	0.3	<1	<10	<5	21	6.4

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GP151	15	6.2	38.0	<3	8.1	2.5	4.0	<1	0.3	<1	<10	<5	34	9.8
GP152	1	0.7	4.6	<3	1.4	1.1	<0.5	<1	<0.2	<1	<10	<5	5	6.8
GP153	15	7.8	28.3	<3	8.6	2.8	5.4	<1	0.3	<1	<10	<5	46	10.5
GP154	16	7.9	33.8	<3	9.4	3.1	5.9	<1	0.2	<1	<10	<5	46	11.3
GP155	11	4.2	19.9	<3	5.3	1.8	3.6	<1	0.6	<1	<10	<5	34	5.5
GP156	11	5.4	29.7	<3	6.5	2.4	3.4	<1	<0.2	<1	<10	<5	27	8.4
GP157	15	7.4	39.0	<3	10.1	3.3	3.0	<1	0.2	<1	<10	<5	41	12.7
GP158	34	16.8	86.9	<3	16.6	4.5	14.0	<1	0.3	<1	<10	<5	102	15.8
GP159	42	31.4	117	<3	18.5	7.7	21.8	<1	0.4	<1	<10	<5	122	26.6
GP160	39	21.2	111	<3	15.9	4.7	19.5	<1	0.4	<1	<10	<5	104	16.6
GP161	31	15.7	132	<3	16.3	4.4	8.9	<1	0.3	<1	<10	<5	100	16.5
GP162	35	21.2	143	<3	18.4	4.7	13.3	<1	0.4	<1	<10	<5	104	17.5
GP163	35	19.7	102	<3	16.4	4.8	14.1	<1	0.3	<1	<10	<5	97	17.8
GP164	38	17.6	115	<3	16.3	4.5	11.9	<1	0.2	<1	<10	<5	102	16.6
GP165	32	13.8	116	<3	14.7	4.1	9.0	<1	0.4	<1	<10	<5	81	15.1
GP166	27	11.3	109	<3	13.0	3.4	8.4	<1	0.3	<1	<10	<5	78	13.4
GP167	30	13.2	110	<3	15.9	3.5	9.0	<1	0.2	<1	<10	<5	91	14.9
GP168	38	22.6	115	<3	17.3	6.0	11.7	<1	0.5	<1	<10	<5	102	20.9
GP169	42	29.5	116	<3	19.0	6.6	23.3	<1	0.3	<1	<10	<5	126	22.8
GP170	5	2.0	10.2	<3	2.8	1.6	2.5	<1	<0.2	<1	<10	<5	11	9.2
GP171	6	4.2	18.4	<3	3.2	2.3	4.5	<1	<0.2	<1	<10	<5	18	8.9
GP172	38	32.4	124	<3	19.1	6.0	6.4	<1	0.7	<1	<10	<5	147	23.1
GP173	41	29.0	132	<3	17.5	7.3	7.9	<1	0.6	<1	<10	<5	140	27.6
GP174	31	13.1	91.9	<3	13.9	3.9	7.7	<1	0.3	<1	<10	<5	83	15.5
GP175	11	3.5	19.1	<3	4.3	2.1	4.5	<1	<0.2	<1	<10	<5	27	6.0
GP176	3	1.3	15.0	<3	2.9	1.3	1.5	<1	0.3	<1	<10	<5	22	4.5
GP177	5	2.2	15.4	<3	3.5	1.5	1.8	<1	0.3	<1	<10	<5	14	5.8
GP178	23	13.0	98.8	<3	13.0	5.1	4.4	<1	0.4	<1	<10	<5	101	18.8
GP179	25	14.7	101	<3	13.5	3.0	9.6	<1	0.5	<1	<10	<5	74	11.9
GP180	34	26.1	91.3	<3	18.2	7.8	6.4	<1	0.5	<1	<10	<5	123	29.0

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Element. Method. Det.Lim. Units.	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm
GP181	26	13.4	92.1	<3	15.5	3.7	7.2	<1	0.3	<1	<10	<5	88	13.7
GP182	25	12.1	95.2	<3	14.5	4.3	4.9	<1	0.3	<1	<10	<5	86	15.5
GP183	37	28.0	101	<3	19.5	7.7	9.3	<1	0.4	<1	<10	<5	135	28.2
GP184	35	23.5	95.2	<3	14.8	7.2	9.8	<1	0.2	<1	<10	<5	100	25.9
GP185	33	25.4	97.2	<3	17.7	7.2	7.6	<1	0.7	<1	<10	<5	142	27.6
GP186	16	13.4	45.9	<3	8.8	3.8	4.2	<1	<0.2	<1	<10	<5	53	14.2
GP187	34	22.7	110	<3	14.5	6.1	8.2	<1	<0.2	<1	<10	<5	95	23.0
GP188	40	27.2	130	<3	19.2	4.8	11.6	<1	<0.2	<1	<10	<5	110	18.4
GP189	32	22.8	110	<3	17.3	7.3	7.8	<1	<0.2	<1	<10	<5	109	25.2
GP190	29	20.9	98.2	<3	14.5	6.1	4.6	<1	<0.2	<1	<10	<5	91	22.8
GP191	24	10.5	53.8	<3	9.4	3.1	9.3	<1	<0.2	<1	<10	<5	60	11.1
GP192	35	24.2	82.1	<3	16.3	7.6	10.0	<1	0.3	<1	<10	<5	111	27.1
GP193	20	7.6	58.5	<3	10.8	3.0	6.6	<1	0.2	<1	<10	<5	53	11.9
GP194	8	4.6	24.0	<3	4.5	1.8	2.0	<1	<0.2	<1	<10	<5	21	7.0
GP195	5	1.8	8.6	<3	2.8	1.8	1.4	<1	<0.2	<1	<10	<5	7	5.6
GP196	11	4.6	22.3	<3	6.3	2.8	5.3	<1	<0.2	<1	<10	<5	23	10.1
GP197	21	9.7	57.1	<3	11.5	3.0	5.9	<1	<0.2	<1	<10	<5	76	10.7
GP198	21	10.3	74.3	<3	12.2	5.9	4.0	<1	0.3	<1	<10	<5	80	19.2
GP199	5	1.7	9.4	<3	3.4	1.7	1.9	<1	<0.2	<1	<10	<5	9	5.1
GP200	29	22.5	74.5	<3	19.5	8.0	7.6	<1	<0.2	<1	<10	<5	118	29.2
GP201	11	4.2	26.9	<3	7.3	2.3	3.3	<1	<0.2	<1	<10	<5	25	9.2
GP202	20	9.9	49.5	<3	10.0	2.4	7.6	<1	<0.2	<1	<10	<5	48	10.8
GP203	17	8.1	70.9	<3	10.5	2.3	4.7	<1	0.2	<1	<10	<5	45	10.0
GP204	23	11.8	69.4	<3	11.6	3.3	5.1	<1	0.4	<1	<10	<5	60	12.4
*Dup GP01	35	26.3	94.6	<3	15.4	3.9	13.7	<1	0.4	<1	<10	<5	101	14.3
*Dup GP13	18	8.6	44.9	<3	9.3	2.6	4.3	<1	0.5	<1	<10	<5	47	10.8
*Dup GP25	22	8.8	62.0	<3	8.7	2.6	7.5	<1	0.4	<1	<10	<5	56	10.2
*Dup GP37	32	28.6	88.9	<3	17.1	8.3	12.3	<1	0.5	<1	<10	<5	130	27.3
*Dup GP49	25	17.7	86.5	<3	16.6	6.1	6.2	<1	0.5	<1	<10	<5	109	22.5
*Dup GP61	14	6.9	32.9	<3	9.5	2.2	1.9	<1	0.6	<1	<10	<5	57	8.8

XRAL

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Work Order: 057425 Date: 04/11/99 FINAL

Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
*Dup GP73	6	1.5	8.4	<3	3.8	2.0	2.2	<1	0.4	<1	<10	<5	17	6.5
*Dup GP85	21	8.0	83.6	<3	12.1	2.9	4.2	<1	0.4	<1	<10	<5	67	12.8
*Dup GP97	19	8.8	60.6	<3	9.5	3.6	3.5	<1	0.5	<1	<10	<5	48	12.6
*Dup GP109	47	27.4	146	<3	26.4	6.2	7.9	<1	0.9	<1	<10	<5	164	21.3
*Dup GP121	1	0.9	9.9	<3	2.3	0.8	0.5	<1	0.4	<1	<10	<5	5	8.5
*Dup GP133	33	16.1	98.8	<3	15.7	3.6	13.1	<1	0.3	<1	<10	<5	86	14.7
*Dup GP145	22	8.0	50.7	<3	11.2	2.7	4.9	<1	0.4	<1	<10	<5	59	10.3
*Dup GP157	15	7.7	36.5	<3	10.2	3.7	3.5	<1	0.3	<1	<10	<5	43	14.1
*Dup GP169	44	30.5	116	<3	19.9	7.0	23.8	<1	0.5	<1	<10	<5	135	23.7
*Dup GP181	27	13.4	90.6	<3	15.5	3.8	7.1	<1	0.5	<1	<10	<5	93	13.8
*Dup GP193	22	7.6	56.5	<3	11.5	3.2	6.9	<1	0.3	<1	<10	<5	58	11.8

XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 **FINAL**

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP01	<10	18	<5
GP02	<10	17	5
GP03	<10	6	<5
GP04	<10	3	<5
GP05	<10	20	<5
GP06	<10	18	<5
GP07	<10	15	<5
GP08	<10	11	<5
GP09	<10	16	<5
GP10	<10	15	<5
GP11	<10	11	<5
GP12	<10	7	<5
GP13	<10	14	<5
GP14	<10	8	<5
GP15	<10	14	<5
GP16	<10	11	<5
GP17	<10	12	<5
GP18	<10	16	<5
GP19	<10	18	<5
GP20	<10	19	<5
GP21	<10	14	<5
GP22	<10	19	<5
GP23	<10	19	<5
GP24	<10	11	<5
GP25	<10	12	<5
GP26	<10	12	<5
GP27	<10	19	<5
GP28	<10	13	<5
GP29	<10	10	<5
GP30	<10	13	<5

XRAL

XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 **Date:** 04/11/99 **FINAL**

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP31	<10	21	<5
GP32	<10	15	<5
GP33	<10	5	<5
GP34	<10	18	<5
GP35	<10	25	<5
GP36	<10	20	<5
GP37	<10	16	<5
GP38	<10	11	<5
GP39	<10	12	<5
GP40	<10	16	<5
GP41	<10	15	<5
GP42	<10	14	<5
GP43	<10	22	<5
GP44	<10	5	<5
GP45	<10	43	<5
GP46	<10	15	<5
GP47	<10	12	<5
GP48	<10	15	<5
GP49	<10	16	<5
GP50	<10	16	<5
GP51	<10	15	<5
GP52	<10	17	<5
GP53	<10	13	<5
GP54	<10	13	<5
GP55	<10	6	<5
GP56	<10	15	<5
GP57	<10	6	<5
GP58	<10	4	<5
GP59	<10	5	<5
GP60	<10	6	<5

XRAL XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 FINAL

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP61	<10	8	<5
GP62	<10	5	5
GP63	<10	9	<5
GP64	<10	14	<5
GP65	<10	13	<5
GP66	<10	17	<5
GP67	<10	4	<5
GP68	<10	4	<5
GP69	<10	8	<5
GP70	<10	15	<5
GP71	<10	12	<5
GP72	<10	9	<5
GP73	<10	6	<5
GP74	<10	5	<5
GP75	<10	10	<5
GP76	<10	6	<5
GP77	<10	5	<5
GP78	<10	4	<5
GP79	<10	5	<5
GP80	<10	4	<5
GP81	<10	5	<5
GP82	<10	12	<5
GP83	<10	9	<5
GP84	<10	13	<5
GP85	<10	10	<5
GP86	<10	19	<5
GP87	<10	16	<5
GP88	<10	16	<5
GP89	<10	12	<5
GP90	<10	12	<5

XRAL XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 FINAL

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP91	<10	19	<5
GP92	<10	12	<5
GP93	<10	9	<5
GP94	<10	12	<5
GP95	<10	12	<5
GP96	<10	6	<5
GP97	<10	7	<5
GP98	<10	17	<5
GP99	<10	19	<5
GP100	<10	18	<5
GP101	<10	18	<5
GP102	<10	16	<5
GP103	<10	18	<5
GP104	<10	15	<5
GP105	<10	8	<5
GP106	<10	3	<5
GP107	<10	7	<5
GP108	<10	12	<5
GP109	<10	17	<5
GP110	<10	11	<5
GP111	<10	7	<5
GP112	<10	9	<5
GP113	<10	8	<5
GP114	<10	10	<5
GP115	<10	12	<5
GP116	<10	15	<5
GP117	<10	8	<5
GP118	<10	10	<5
GP119	<10	4	<5
GP120	<10	5	<5

XRAL XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 **FINAL**

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP121	<10	3	<5
GP122	<10	7	<5
GP123	<10	14	<5
GP124	<10	17	<5
GP125	<10	17	<5
GP126	<10	13	<5
GP127	<10	12	<5
GP128	<10	17	<5
GP129	<10	18	<5
GP130	<10	16	<5
GP131	<10	15	<5
GP132	<10	21	<5
GP133	<10	14	<5
GP134	<10	18	<5
GP135	<10	16	<5
GP136	<10	12	<5
GP137	<10	11	<5
GP138	<10	16	<5
GP139	<10	7	<5
GP140	<10	5	<5
GP141	<10	4	<5
GP142	<10	5	<5
GP143	<10	3	<5
GP144	<10	5	<5
GP145	<10	8	<5
GP146	<10	9	<5
GP147	<10	9	<5
GP148	<10	9	<5
GP149	<10	7	<5
GP150	<10	4	<5

XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 FINAL

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
GP151	<10	7	<5
GP152	<10	3	<5
GP153	<10	5	<5
GP154	<10	4	<5
GP155	<10	5	<5
GP156	<10	5	<5
GP157	<10	10	<5
GP158	<10	12	<5
GP159	<10	19	<5
GP160	<10	14	<5
GP161	<10	20	<5
GP162	<10	23	<5
GP163	<10	16	6
GP164	<10	13	<5
GP165	<10	12	<5
GP166	<10	13	<5
GP167	<10	17	<5
GP168	<10	22	<5
GP169	<10	20	<5
GP170	<10	3	<5
GP171	<10	3	<5
GP172	<10	14	<5
GP173	<10	16	<5
GP174	<10	12	<5
GP175	<10	4	<5
GP176	<10	4	<5
GP177	<10	5	<5
GP178	<10	10	<5
GP179	<10	16	<5
GP180	<10	13	<5

XRAL XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 FINAL

Element. / Method. / Det.Lim. / Units.	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
GP181	<10	13	<5
GP182	<10	9	<5
GP183	<10	16	<5
GP184	<10	15	<5
GP185	<10	13	<5
GP186	<10	13	<5
GP187	<10	15	<5
GP188	<10	15	<5
GP189	<10	17	<5
GP190	<10	12	<5
GP191	<10	10	<5
GP192	<10	14	<5
GP193	<10	10	<5
GP194	<10	6	<5
GP195	<10	3	<5
GP196	<10	7	<5
GP197	<10	8	<5
GP198	<10	9	<5
GP199	<10	3	<5
GP200	<10	11	<5
GP201	<10	5	<5
GP202	<10	8	<5
GP203	<10	10	<5
GP204	<10	8	<5
*Dup GP01	<10	20	<5
*Dup GP13	<10	12	<5
*Dup GP25	<10	10	<5
*Dup GP37	<10	14	<5
*Dup GP49	<10	14	<5
*Dup GP61	<10	5	<5

XRAL

XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057425 Date: 04/11/99 **FINAL**

Element.	W	Pb	Bi
Method.	ICP70	ICP70	ICP70
Det.Lim.	10	2	5
Units.	ppm	ppm	ppm
*Dup GP73	<10	5	<5
*Dup GP85	<10	8	<5
*Dup GP97	<10	6	<5
*Dup GP109	<10	19	<5
*Dup GP121	<10	<2	<5
*Dup GP133	<10	14	<5
*Dup GP145	<10	7	<5
*Dup GP157	<10	9	<5
*Dup GP169	<10	22	<5
*Dup GP181	<10	11	<5
*Dup GP193	<10	8	<5

APPENDIX 2

ROCK SAMPLE DESCRIPTIONS

Sample No.	Description	Assay Results
61514	Blocky float of a quartz vein material, 0.5 meter in diameter, smoky grey, black and white quartz with minor carbonate, rusty, 1 to 2 % disseminated sulphides.	6 ppb Au
61515	Blocky float of rhyolite tuff, 5 to 8 % disseminated pyrite, medium green with black fragments.	5 ppb Au

Work Report Summary

Transaction No:	W0180.30284	**Status:**	APPROVED
Recording Date:	2001-JUN-12	**Work Done from:**	1999-JUN-27
Approval Date:	2001-AUG-22	**to:**	1999-SEP-26

Client(s):

303972 CAMPBELL, KAREN BERNICE

Survey Type(s):

ASSAY GCHEM GEOL LC
MAG PROSP VLF

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
L 1140877	$19,279	$19,279	$18,156	$18,156	$1,123	1,123	$0	$0	2004-JUN-25
L 1140878	$1,277	$1,277	$2,400	$2,400	$0	0	$0	$0	2003-JUN-25
	$20,556	$20,556	$20,556	$20,556	$1,123	$1,123	$0	$0	

Status of claim is based on information currently on record.

42A16SE2001 2.21575 CHESNEY BAY 900

Date: 2001-AUG-23

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

Tel: (888) 415-9845
Fax:(877) 670-1555

KAREN BERNICE CAMPBELL
413 VICTORIA RD.,
NANAIMO, BRITISH COLUMBIA
V9R 4R2 CANADA

Submission Number: 2.21575
Transaction Number(s): W0180.30284

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact BRUCE GATES by email at bruce.gates@ndm.gov.on.ca or by phone at (705) 670-5856.

Yours Sincerely,

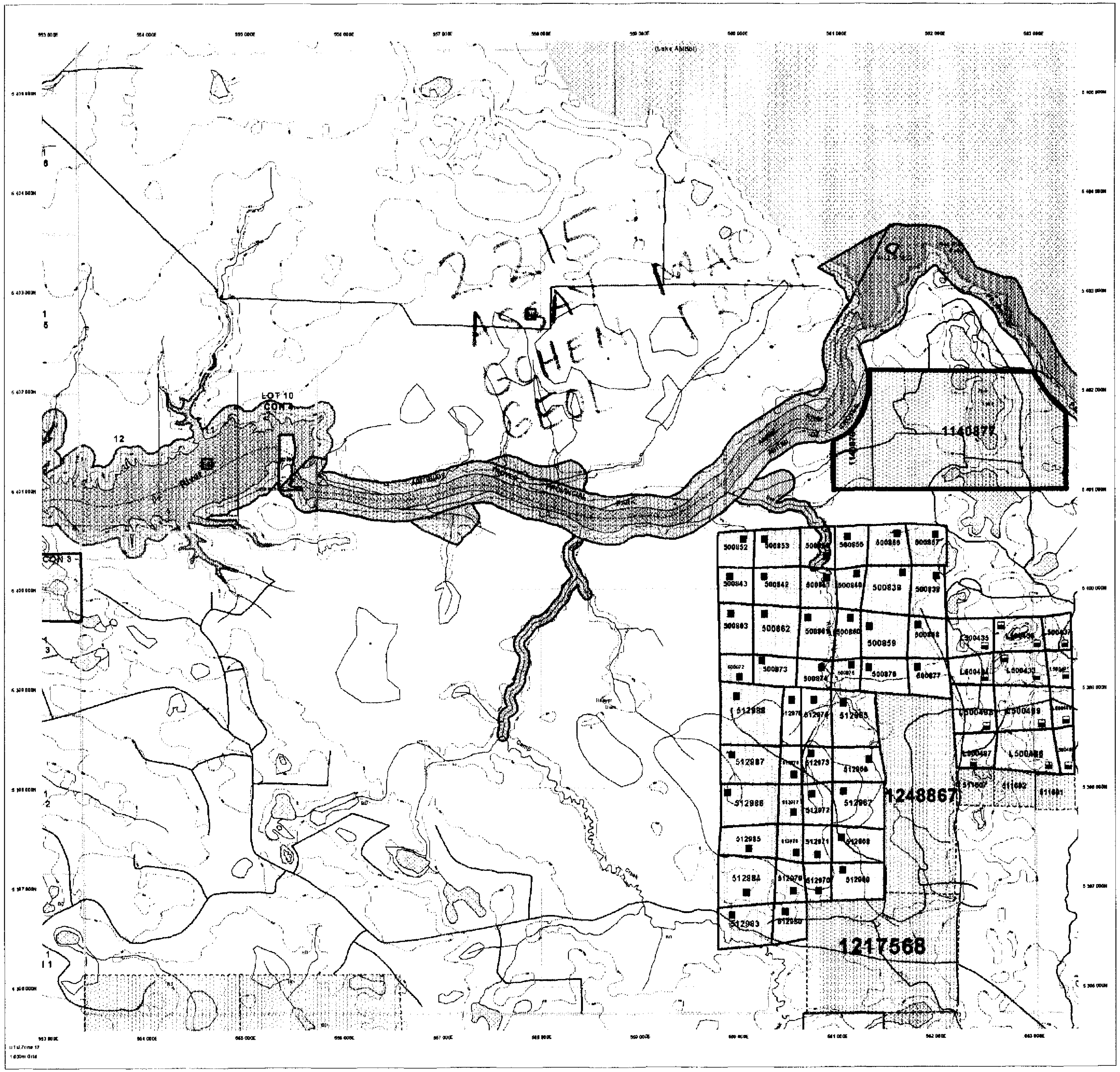
Ron Gashinski
Supervisor, Geoscience Assessment Office

Cc: Resident Geologist

Karen Bernice Campbell
(Claim Holder)

Assessment File Library

Karen Bernice Campbell
(Assessment Office)



MINING LAND TENURE MAP

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
PROVINCIAL MINING RECORDER'S OFFICE

Date / Time of Issue Aug 31 2001 09:44h Eastern

TOWNSHIP / AREA	PLAN
KERRS	G-3523

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division	Larder Lake
Land Titles/Registry Division	COCHRANE
Ministry of Natural Resources District	COCHRANE

TOPOGRAPHIC

LAND TENURE

LAND TENURE WITHDRAWALS

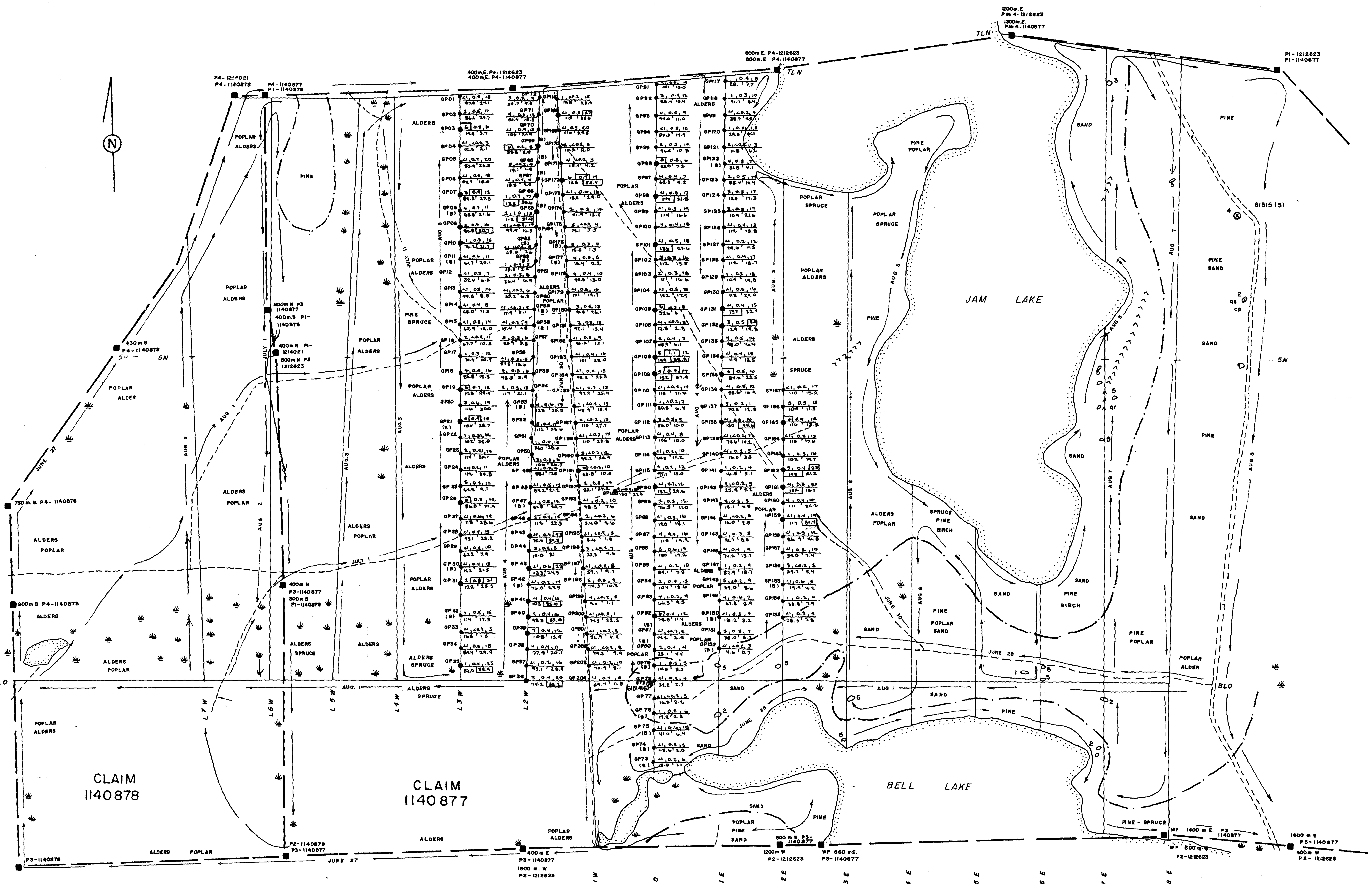
IMPORTANT NOTICES

LAND TENURE WITHDRAWAL DESCRIPTIONS

IMPORTANT NOTICES

General Information and Limitations

42A16SE2001 2.21575 CHESNEY BAY 200



LEGEND

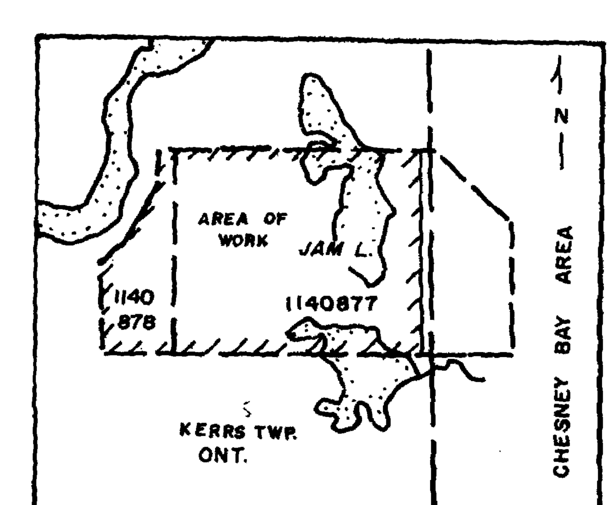
5 FINE TO MEDIUM GRAINED GRANITE
4 RHYOLITE TUFF
3 FINE-GRAINED DACITE LAVA
2 FINE-GRAIN ANDESITE LAVA
1 FINE-GRAINED BASALT LAVA

SYMBOLS

- BOULDER
- q.s. QUARTZ STRINGER
- qtz QUARTZ
- ca CARBONATE
- ep EPIDOTE
- x BOULDER SAMPLE LOCATION
- 61514(6) BOULDER SAMPLE NO. WITH AU ASSAY (ppb)
- SOIL SAMPLE LOCATION (A HORIZON)
- (B) SOIL SAMPLE LOCATION (B HORIZON)
- LOCATION OF ANOMALOUS GEOCHEMICAL RESULT
- GEOCHEMICAL ANALYSES Au (ppb) | Ag (ppm) | Pb (ppm) / Zn (ppm) | Cu (ppm)
- ANOMALOUS GEOCHEMICAL RESULTS Au > 0.5 ppb, Ag > 0.7 ppm, Pb > 20 ppm, Zn > 130 ppm, Cu > 30.0 ppm
- GP01 SOIL SAMPLE NO
- (B) B SOIL HORIZON
- CLAIM POST
- CLAIM LINE
- ROAD
- TRAIL
- CREEK
- SWAMP
- LAKE, POND
- AREA OF RECENT SLASH COVERED BY THICK SAND
- JUNE 27 K. CAMPBELL'S PROSPECTING TRAVERSE WITH DATE.
- ESKER

Gordon M Hinkson
K22210
K B Campbell
K23149

APGGQ GORDON NEIL HINKSON Nº 1075 QUEBEC CANADA

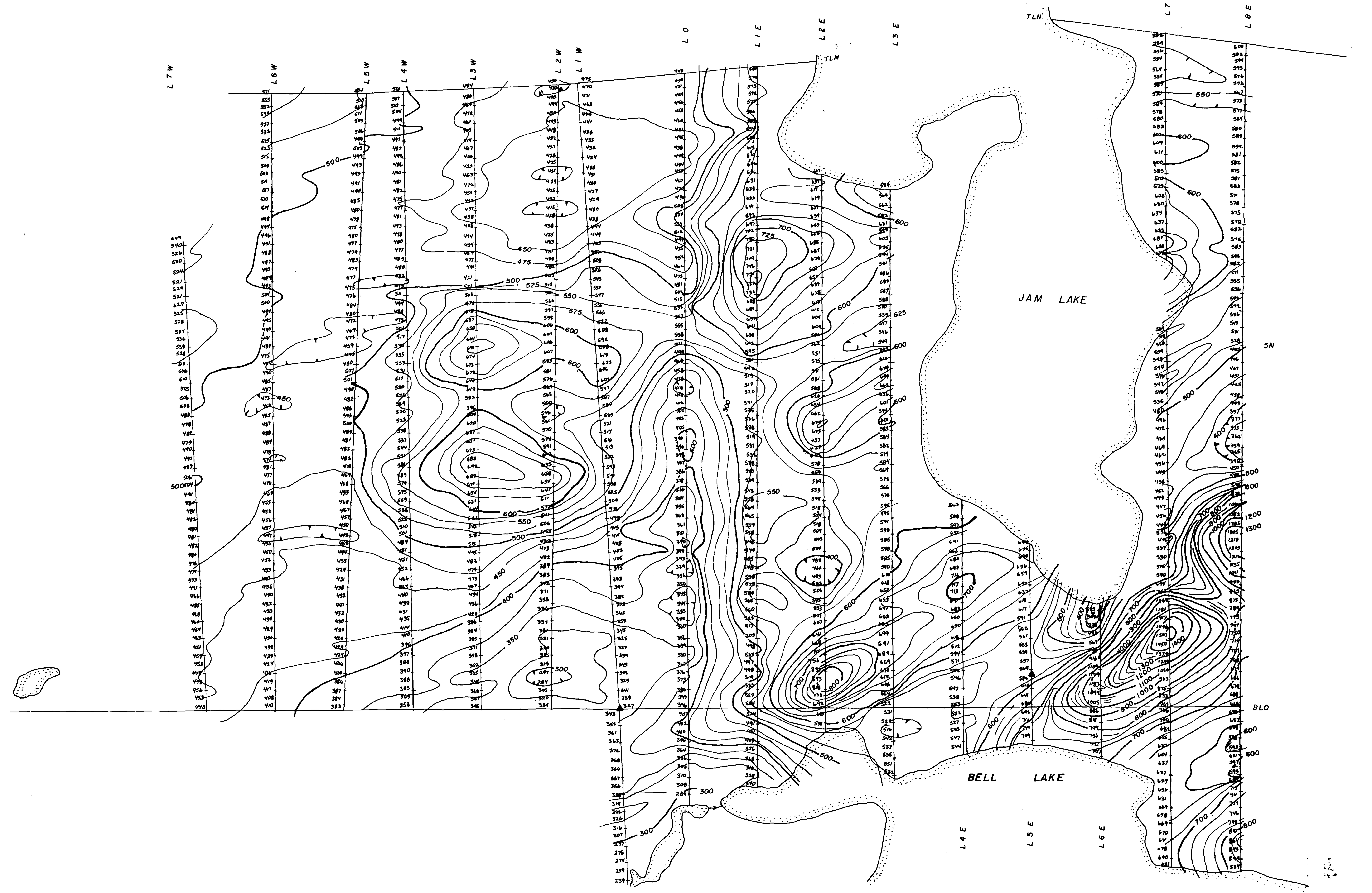


CLAIM MAP

m 100 50 0 50 100m
Scale: 1: 2,500

K.B. CAMPBELL	
GOOP PROJECT	
PROSPECTING, SOIL GEO-CHEMISTRY & GEOLOGY	
KERRS TWP. & CHESNEY BAY AREA	
DATE: NOV, 1999	NTS: 42 A /16
SCALE: 1: 2,500	MAP: PGG

220



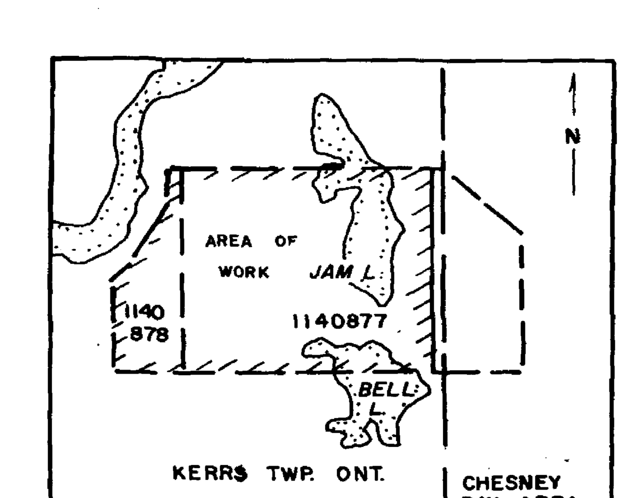
LEGEND

EQUIPMENT USED - GEM SYSTEMS - GSM 8
PROTON PRECESSION MAGNETOMETER
READINGS ARE 57,000 GAMMAS PLUS
PLOTTED VALUES, CORRECTED FOR DIURNAL
VARIATIONS
▲ BASE STATION
MAGNETIC LOW
CONTOUR INTERVAL - 25 GAMMAS

Gordon M Hit

GÉOLOGUE ✦ GEOLOGIST
APGGQ
GORDON NEIL HENRIKSEN
No 1075
QUÉBEC ✦ CANADA

m 100 50 0 50 100m
Scale: 1: 2,500

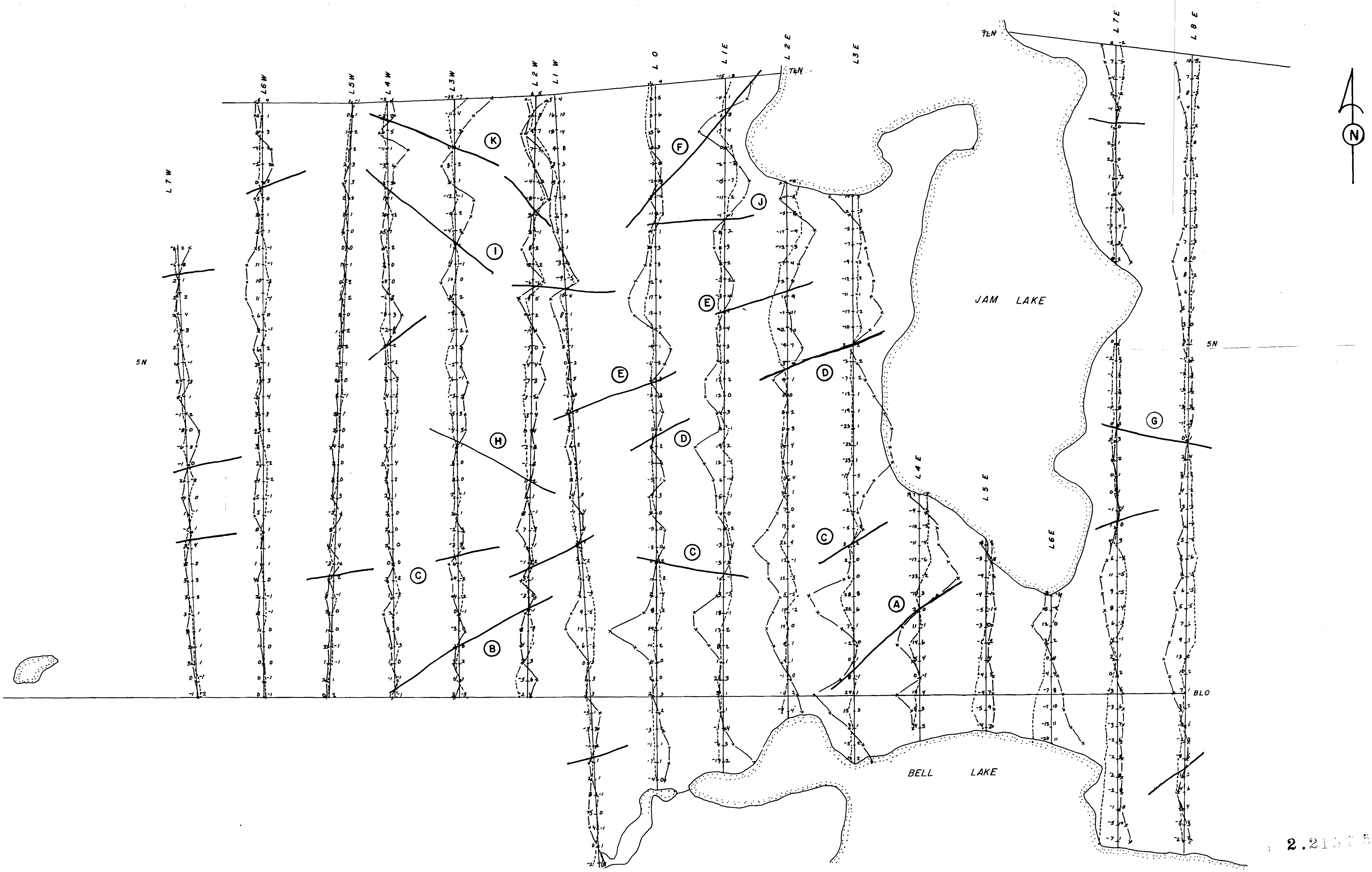


CLAIM MAP

K.B. CAMPBELL
GOOP PROJECT
TOTAL FIELD MAGNETIC SURVEY
KERRS TWP. & CHESNEY BAY AREA

DATE: NOV. 1999	NTS: 42 A/16
SCALE: 1: 2,500	MAP: TF

42A16SE2001 2.21975 CHESNEY BAY 220

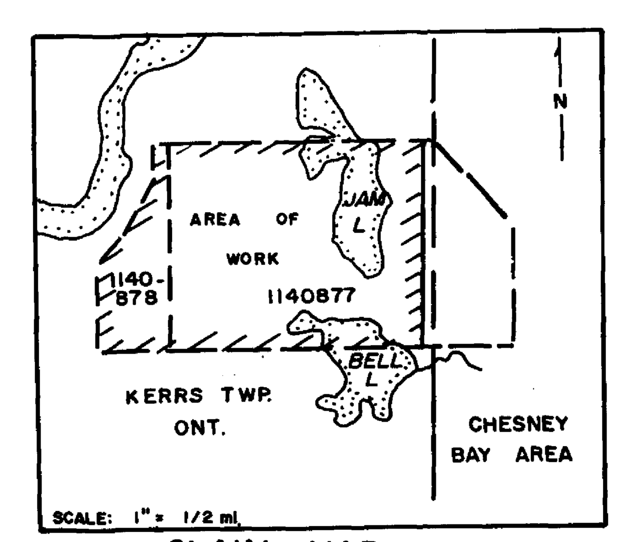


2.21575

LEGEND

x——x IN PHASE
------ QUADRATURE
I.P. QUAD
PROFILE SCALE 1cm = 10 %
(A) CONDUCTOR AXIS, WITH LABEL
STATION USED - CUTLER MAINE NAA, FREQUENCY 24.0 kHz
READING COLLECTED FACING 012°
EQUIPMENT USED : GEONICS - EM -16

m 100 50 0 50 100 m
Scale: 1: 2,500



CLAIM MAP

K.B. CAMPBELL
GOOP PROJECT
VLF ELECTROMAGNETIC SURVEY
KERRS TWP. & CHESNEY BAY AREA

DATE: NOV. 1999	NTS: 42 A/16
SCALE: 1:2,500	MAP : E M