REPORT ON THE 1995 GEOLOGICAL AND GEOPHYSICAL EXPLORATION WORK ON THE JACK PROPERTY

Whitehorse Mining District, Yukon

YMIP GRANT NO. 95-070

Claims: JACK 1-64 (YB26512-26575) JACK 101-110 (YB27909-27918)

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- Location: 1. 45 km SW of Faro, Yukon
 - 2. NTS Sheet 105 L/1
 - 3. Latitude 62°02' Longitude 134°05'
- For: GREATER LENORA RESOURCES CORP. Suite 309 6 Tweedsmuir Road P.O. Box 546 Kirkland Lake, Ontario P2N 3J5
- By: R. Allan Doherty, P.Geo. Aurum Geological Consultants Inc. 205-100 Main Street P.O. Box 4367 Whitehorse, Yukon Y1A 3T5

February 20, 1996

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SUMMARY

Greater Lenora Resources Corp.'s Jack Property consists of 74 contiguous mineral claims in the Whitehorse Mining District, Yukon. The claims are accessible by helicopter from Whitehorse or Carmacks, and are located approximately 15 km south of the Robert Campbell Highway and 45 km southwest of Faro, Yukon.

The Jack claims were staked after a 1989 GSC regional geochemical release reported anomalous zinc, lead, silver, and cadmium in the upper tributaries of Solitary Creek.

Lower Cambrian Harvey Group (?) schists, gneiss, and marble underlie most of the property. They are passive continental margin sediments of the Cassiar terrane. Harvey Group rocks are in fault contact to the west with Carboniferous to Permian basic volcanics, chert and tuff of the Slide Mountain Terrain. The Harvey Group is intruded by Cretaceous granites.

Skarn mineralization developed in Harvey Group marble locally contain high grade lead, zinc and silver values. The geological setting and mineralization found on the Jack property is similar to that of the Mt. Hundere deposit, now the Sa Dena Hes mine owned by Cominco Ltd.

Skarn mineralization consists of sphalerite, galena, chalcopyrite, pyrite, and pyrrhotite in a variable diopside-actinolite-magnetite-quartz-calcite assemblage. A weighted average from trench 90-1, over the President Occurrence, returned 18% zinc, 13% lead, and 8.9 ounces per tonne silver over 3.0 meters (Doherty and Hulstein, 1991). Mineralization is controlled by marble-granite (or dyke) contacts and possibly by faults.

Results of exploration to date has identified six areas that host skarn mineralization on the Jack Property; the President, Glenn, Hobo, Geoff, Interlake, and Camp occurrences. Additional occurrences are suspected from anomalous geochemistry data (stream sediment and soil samples) and the Camp and Interlake occurrences are poorly exposed and under explored.

Work completed in 1995 consisted of mapping, prospecting, 6.4 km of cut, picketed and slope corrected grid, 37 rock geochemical samples, 3.25 km of HLEM (horizontal loop electromagnetic) survey, and 1.9 km of IP survey. Work was concentrated on the President and Camp grids. Three new showings, the Interlake, Fox, and 783 showing were located. Anomalous geochemistry, favourable geology combined with poor exposure and recessive gullies lead to a decision to complete an IP survey over the Camp grid which produced a number of anomalies.

Based on these results, continued exploration consisting trenching, prospecting, geological mapping, and geochemistry are warranted and recommended.

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Aurum Geological Consultants Inc.

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INTRODUCTION

This report was prepared at the request of Mr. R. J. Kasner, President of Greater Lenora Resources Corp. It describes the 1995 exploration program, carried out between June 28-July 7, August 7-12, and September 8-15,1995 on the Jack property.

The Jack 1-64 & 101-110 Claims are located 15 km south of the Robert Campbell Highway and 20 km from the southeast end of Little Salmon lake.

The purpose of the 1995 program was to follow up on encouraging results obtained in 1990 and 1991 that included the discovery of a high grade Zn-Pb-Ag mineralized skarn at the President occurrence. The geological setting and mineralization resembles that found at the Mt. Hundere Deposit (Sa Dena Hes Mine). The initial 1990 work was following up on two Geological Survey of Canada regional stream geochemical samples sites that were anomalous in lead, zinc, silver, copper, and cadmium. Work carried out in the 1990 and 1991 field seasons are summarized in reports by Doherty, 1990, and Doherty and Hulstein, 1991, to whom the reader is referred to for background information.

In 1995, a work program consisting of gridding and line cutting, rock sampling, geological mapping, prospecting, and geophysical surveys was carried out from a helicopter supported fly camp. Field work was completed by personal of Aurum Geological Consultants Inc., and the geophysical surveys were completed by Amerok Geosciences Ltd.

The proposed 1995 work program was to include diamond drilling on the President zone but after a field visit to the site it was decided that the targets on the President Grid were not of sufficient size to recommend drilling. Further work however indicated that the area south of the camp could have thickened limestone in fold closures that could host economic skarn mineralization.

LOCATION and ACCESS

The Jack 1-64 & 101-110 Claims are located 20 km southeast of Little Salmon Lake and 45 km southwest of Faro, Yukon. Carmacks is 110 km west of the property and Ross River is 85 km east. A point at the centre of the claim block is at 62°03'North latitude and 134°05'West longitude, within NTS map area 105L/1, (Figure 1).

Year round access to the Jack claims is via helicopter from Whitehorse, 150 km south of the property. There are seasonal helicopter bases in Carmacks and Ross River during the summer months. The Robert Campbell Highway is 15 km north of the property. Road access could be constructed to the property with a bridge over the Magundy River.

CLIMATE, TOPOGRAPHY AND VEGETATION

The Jack claims are located in an area of moderate topography. Elevations vary between 3700' to 5100'. Treeline is at 4500' or lower. Sub-alpine to alpine vegetation on the property consists of stunted white spruce, willows and grasses. The claims cover the north part of Solitary Creek and its tributaries. The topography is rolling and hummocky and numerous small alpine tarns dot the area.

The property has been extensively glaciated resulting in barren uplands and glacial debris filled valleys. Glacial stria, where observed, are from a northeast to northwest direction.



PROPERTY

The Jack property consists of 74 unsurveyed contiguous quartz mineral claims within NTS map area 105L/1, located in the Whitehorse Mining District (Figure 2). The claims are 100% owned by Greater Lenora Resources Corp. The Jack 1-64 claims were staked on August 3, 1989 to cover two anomalous stream sediment samples reported in the GSC regional geochemical survey Open File 1961. The Jack 65-138 claims were added in September 1990 after high grade Zn-Pb-Ag mineralization, the President occurrence, was discovered in outcrop on the eastern boundary of the Jack 1-64 claims. Claim data and expiry dates are listed below. The Jack 65-100 & 111-138 claims were allowed to lapse in September 1993. The current claim status is shown in the Table I below.

TABLE I CLAIM STATUS

CLAIM NAME	GRANT NUMBER	RECORDING DATE	EXPIRY DATE *
Jack 1-64	YB26512-26575	August 17, 1989	August 17, 1997
Jack 101-110	YB27909-27918	Sept. 19, 1990	Sept. 19, 1997

* subject to approval of 1995 assessment work



HISTORY

The decision to stake the Jack 1-64 claims was made by R. A. Doherty and L. Walton of Aurum Geological Consultants Inc. after reviewing the geochemical release and deciding the two coincident anomalies at the southeast side of Little Salmon lake could indicate bedrock mineralization. The geological formations underlying the area were also thought to be favourable host rocks for Pb-Zn mineralization.

The Jack 1-64 & 101-110 claims are the only claims in the area and now cover the Lokken mineral occurrence. Regarding the Lokken Zn-skarn occurrence the Yukon Minfile # 105I-1 (INAC, 1990), states that: "Minor amounts of sphalerite, chalcopyrite and galena occur in weak diopside garnet skarn, which has developed in lower Cambrian carbonates near an intrusive contact and a fault."

Claim forms, for the expired Chopper 1-6 claims, filed by Asbestos Corporation in 1957 indicate that the Lokken occurrences and Chopper 1-6 claims lie just north of the current claim group (Figure 4). Old claim posts, aviation oil cans and mineralization were discovered in 1991 in this area located between 1.3 and 2.5 kilometres north of the President occurrence.

The Lokken occurrence was named after nearby Lokken Creek and Mount Lokken. H.O.Lokken was a long-time Yukon pioneer, outfitter and prospector from gold rush days, (Coutts, 1980).

In 1990 a two man crew spent four days carrying out reconnaissance sampling, mapping and prospecting over the original Jack 1-64 claims (Doherty, 1990). This work resulted in the discovery of the President Occurrence, a high grade Pb-Zn-Ag bearing skarn and a number of unexplained soil and stream sediment sample anomalies. These encouraging results lead to the staking of the Jack 65-138 claims.

A follow-up program in 1991 located the President, Glenn, and Hobo occurrences. A weighted average of samples over Trench 90-1 returned 18% zinc, 13% lead, and 8.9 opt silver over 3.0 m.

GEOLOGY

Regional Geology

The geology of the Glenlyon area was mapped by Campbell (1967). The area is underlain by three separate geological units belonging to two tectonic terranes; the Cassiar and Slide Mountain terranes (Wheeler and McFeely, 1987). Carboniferous to Permian greenstones and local serpentinite bodies are part of the Slide Mountain terrane and consist of oceanic marginal basin volcanics and sediments. The Cassiar terrane consists of upper Proterozoic clastic continental margin sediments and lower Cambrian age metamorphic rocks originally deposited as rifted and passive continental margin sediments. The terranes are separated by major regional faults, and are intruded by Cretaceous granitic rocks.

The 1:1,000,000 scale Macmillan River Map (from GSC map 1398A) (Figure 3), shows the three units from east to west as: Hadrynian to Cambrian schist and gneiss (HCsn); lower Cambrian Harvey Group quartzites and marble (CHc), which form the Cassiar Terrane; and Carboniferous to Permian basic volcanics, chert and tuff (CPv) forming the Slide mountain terrane. All units are separated by northwest trending faults.

Mineralization found to date on the Jack claims has been located within the rifted and passive continental margin sedimentary rocks of the lower Cambrian Harvey Group.

Property Geology

The geology of the Jack claims is shown on Figure 4. This figure is a compilation of the preliminary geology mapped during the 1990 and 1991 work programs and subsequently revised and augmented with the 1995 fieldwork. Information from the Geological Survey of Canada regional, 1:250,000 scale, map (Campbell, 1967) has also been incorporated.

Two strong northwest trending regional faults bisect the property. The faults juxtapose Lower Cambrian Harvey Group schist, gneiss and marble (Map units CHsn and CHc) on the northeast side of the faults, with Carboniferous and Permian phyllite, shale, marble, limestone and greenstone (Map unit CPv) on the southwest side of the faults. A large body of Cretaceous granite (Map unit Kg)intrudes the Harvey Group schist and gneiss on the northeast side of the fault. The granite body appears to be cut by the northwest trending faults.

Harvey Group (Map unit CHsn) is a high grade metamorphic assemblage of predominantly quartz-rich metasedimentary rocks, metapelite and marbles. Common lithologies include quartz-muscovite and quartz-muscovite-biotite schists, biotite-feldspar schist, garnet-biotite schist, quartzite, marble, and amphibolite.



Carboniferous to Permian rocks (Map unit CPv) are a low grade metamorphic assemblage of shale, greenstone and carbonate, variably sheared and foliated. Sub-units include a light grey phyllite, micaceous shale, marble and limestone, and foliated intermediate greenstone.

Cretaceous granite (Map unit Kg) consists of a light, pale orange, blocky weathering quartz-rich, variably foliated and sheared, biotite and hornblende-biotite alaskite, granite and quartz monzonite. Locally fine grained quartz-feldspar porphyry dykes and sills intrude rocks of the Harvey Group.

Foliations within the map area are more or less parallel to the regional northwest structural trend, particularly within the Carboniferous to Permian metasediments. Near granitic bodies, within the Harvey Group schists and gneiss, foliations are commonly parallel to the intrusive contacts.

Within the Harvey Group, on the northeast side of the northwest trending faults, a number of parallel northeast trending lineaments have been mapped. These are presumed to be faults. Both sets of faults are readily visible on air photos of the area.

MINERALIZATION

Four mineralized skarns, named the; President, Glenn, Geoff and Hobo Occurrences, were discovered prior to the 1995 field season. All occurrences are of skarn type mineralization hosted by limestones/marbles of the Harvey Group (map unit CHc) near or adjacent to felsic intrusive rocks (map unit Kg). Mineralization is controlled by the carbonate-intrusive contact and probably fault zones, visible for the most part as lineaments.

Mineralization commonly consists of disseminated to massive sphalerite and galena in a gangue of diopside, garnet, actinolite, calcite, quartz and a chalky white matrix (altered feldspar or wollastonite). Locally disseminated chalcopyrite may be present along with disseminated to semi-massive pyrite and pyrrhotite. Massive magnetite and epidote-chlorite bearing calc-silicates are frequently found on the edges of mineralized zones. Weathered mineralized outcrops are particularly unspectacular as there is no gossan. The mineralization weathers to a dark chocolate brown colour, and on close inspection azurite and malachite can often be seen. Usually the mineralized skarns are recessive weathering. Manganese coatings and wad are often found near mineralized zones.

President Occurrence

Discovered in 1990 while prospecting and soil sampling upstream of the anomalous GSC silt sediment sample (#3052) on the east fork of Solitary Creek (Figure 4). Sphalerite and galena bearing talus was traced uphill to an outcrop of folded marbles adjacent to a felsic dyke near the margin of a granite batholith. The main mineralized zone, located near L10+00N/10+00E is in a skarnifed horizon immediately adjacent to a sinuous, steeply dipping quartz porphyry dyke approximately 50 meters north of the exposed marble-granite contact. Any mineralization to the west is covered to by talus and overburden while to the east the mineralization appears to end where the dyke changes in strike from approximately southeast to southwest. Prior results are detailed in reports by Doherty, 1990; Doherty and Hulstein, 1991)

During the 1995 work program two small previously unlocated skarn pods were found on L1200E/1175N on the President grid. The skarn pods measure 1-2 m long by 0.5 -1.0 m thick. Three channel samples collected across the skarn pods returned the following results:

Sample #	Width (m)	Zn %	Pb %	Ag g/mt
9505002	0.50 m	9.89	4.54	470.0
9505003	1.0 m	4.11	3.23	314.0
9505004	1.0 m	5.38	3.59	224.0

Glenn Occurrence

Discovered in 1991 by Mr. Glenn Kasner, the Glenn Occurrence is located approximately 600 meters south of the President Occurrence on a west facing slope (Figure 4). The occurrence is characterized by magnetite-diopside-calc-silicate skarn variably mineralized with disseminated galena, sphalerite, chalcopyrite and pyrite/pyrrhotite. The host rock consists of biotite marble exposed in the centre of trench 91-1. Best results from the trench was 3.2 ppm silver, 2392 ppm copper, <0.1 % lead and 5.41 % zinc within a 8.1 meter interval grading 2.66 % zinc. Both ends of the trench terminate in granite. The area surrounding the trench has been prospected but not mapped although limestone outcrop was noted some distance below the trench.

Hobo Occurrence

The Hobo Occurrence, located approximately 1200 meters north of the President Occurrence, was briefly mapped and sampled in 1991 (Figure 4). Sampling marks left by previous explorationists was noted on mineralized outcrops.

Mineralization is similar to that found at the President Occurrence. Mineralized garnet-actinolite-quartz-calcite and calc-silicate skarns are found near or adjacent to a marble-granite contact. The Hobo occurrence is localized within a thin <1 m thick marble bed that is folded into a broad anticline and because of it's limited thickness does not represent a significant target.

<u>Geoff Occurrence</u>

The Geoff Occurrence, located approximately 1000 meters north northeast of the President Occurrence, is found in an alpine area on a gentle westerly facing slope. Prospecting and geological mapping were briefly carried out in 1991. A sample (#344403) of rusty weathering siliceous marble with 2-3% pyrite blebs and disseminated sphalerite returned the highest values from the area; 4.2 ppm silver, 0.05 % lead, 1.05 % zinc.

Camp Occurrence

An area south of Camp Lake (Figure 4), and along the east side of Solitary Creek, was prospected and three new exposures of marble in contact with granite were mapped and sampled. Skarn pods up to 30 cm wide and 20 m long were sampled and the area returned values up to 4160 ppm Zn, 556 ppm Pb, 812 ppm Cu, 24.6 ppm Ag, and 610 ppb Au (Sample #'s JVR95009-011) plotted on Figure 4. Subsequent to this sampling it was decided that an IP survey should be conducted over the zone to identify potential

drill targets. Several anomalies of interest are indicated on Figure 4.

Interlake Occurrence

The Interlake Occurrence was discovered while prospecting during the June 28-July 4th work program. The showing is located half way between Camp Lake and a small lake to the southwest. The showing is poorly exposed but contains high grade > 10% combined Pb-Zn. One sample collected from the occurrence (#9505005) returned 5.38% zinc, 3.59% lead and 904 g/t silver.

783 Occurrence

This showing was located upslope of a 783 ppm lead in soil anomaly on the west side of the creek that drains into Camp lake (Figure 4). This is a poorly exposed showing and appears to be of fairly low grade.

GEOPHYSICS

Introduction

A horizontal loop electromagnetic (HLEM) survey was conducted on the Hobo Grid, President Grid and Glen Grid between July 3-4, 1995. An IP survey was conducted over the Camp grid on Lines 700E, 550E, and 200E between September 12-15, 1995. All surveys were carried out by Amerok Geosciences Ltd., of Whitehorse. Field reports and plots of the geophysical data are found in Appendix B. All grid lines were cut and picketed by Aurum crews prior to the geophysical crews arriving on the property.

Results

HLEM Survey

The results of the geophysical surveys are outlined in Appendix * in the form of field reports and data plots. The HLEM survey failed to locate any significant conductors with the possible exception of a weak response on L1200E on the President Grid consisting of a negative in-phase and positive quadrature deflections. The area in which this occurs is on the steeply dipping limb of the folded limestone unit and a conformable skarn zone would be expected to produce negative quadrature and in-phase responses. It is unlikely that here is a significant body of sulphide mineralization here.

IP Survey

Lines 700E, 550E, and 200E on the Camp grid were surveyed using a dipole-diploe

array. The survey was conducted over an area of Cambrian limestone which hosts Pb-Zn-sulphide showings in the general area. Several areas of interest are indicated on Figure 4, by thick hatched lines beside the grid lines. The lines are dashed where questionable. A field report and sections are found in Appendix B.

CONCLUSIONS AND RECOMMENDATIONS

Galena and sphalerite mineralization are found at the contact of marbles with felsic intrusives. A total of six separate mineral occurrences (President, Glenn, Hobo, and Geoff, Camp and Interlake) have been discovered to date on the Jack property, some with high lead, zinc and silver grades. Known mineralization is readily detected by stream and soil sampling methods. There is a strong correlation between zinc lead and silver. Skarn mineralization is common style of mineralization found on the property.

The potential to locate economic skarn mineralization on the Hobo grid is considered to be low because of the limited thickness of the marble unit. The potential on the President and Glen Grids is considered higher but the lack of any significant HLEM anomalies detracts from the potential. The Camp grid hosts thickened marble with anomalous Pb, Zn, and Ag rock geochemical anomalies which are reinforced by a number of IP anomalies. The Interlake showing is yet another poorly exposed high grade skarn

The potential to find additional skarn bodies is considered to be excellent. Considering the rock types underlying most of the claim block, other types of mineralization may be present as indicated by sample L95004 which returned 610 ppb Au from L550E/350N on the Camp grid.

Maxmin (HLEM) surveys conducted over the Hobo, President, and Glenn grids have failed to produce any significant anomalies. An IP survey over the Camp grid produced a number of anomalies which may represent skarn mineralization.

Trenching on the Camp Grid and Interlake occurrences is recommended to better expose the skarn showings located there. Drilling is not recommended at this time for any of the occurrences.

Respectfully submitted. ESSIO A. DOHERTY BRITISH R. Allan Doblectv. P/Geo. SCIEN

Aurum Geological Consultants Inc. February 20, 1996

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Aurum Geological Consultants Inc.

REFERENCES

- Bremner, T. and Ouellette, D., 1991: Mt. Hundere; in INAC, (1991). Yukon Exploration 1990; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 57,58.
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- Doherty, R.A., and Hulstein, R.W., 1991: Report on the 1991 Geological and Geochemical Exploration work on the Jack Property. Private Company Report for Greater Lenora Resources by Aurum Geological Consultants Inc, December 10, 1991.
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- Wheeler, J.O. and McFeeley, P., 1987: Tectonic Assemblage Map of the Canadian Cordillera and Adjacent Parts of the United States of America, G.S.C. Open File 1565.

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STATEMENT OF QUALIFICATIONS (RAD)

I, R. Allan Doherty, with business address: Aurum Geological Consultants Inc. 205 - 100 Main Street P.O. Box 4367 Whitehorse, Yukon Y1A 3T5

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 205 - 100 Main Street, P.O. Box 4367, Whitehorse, Yukon.

2. I am a graduate of the University of New Brunswick, with a degree in geology (Hons. B.Sc., 1977) and that I attended graduate school at Memorial University of Newfoundland (1978-81). I have been involved in geological mapping and mineral exploration continuously since then.

3. I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 20564, and of the CIMM.

4. I supervised the 1995 work program and the preparation of this report on the Jack property which is based on data collected during property work in 1995 by Aurum Geological Consultants Inc. and on referenced reports. I worked at the Jack property between June 28 - July 3, 1995.

5. I have no direct or indirect interests in the properties or securities of Greater Lenora Resources Corp.

6. I consent to the use of this report by Greater Lenora Resources Corp., provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

PROVINC R. A. DOHER SCIEN R. Allan Doherty, P.Geo.

February 20, 1996

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Total Exploration Expenditures for Jack Claims 1995 YMIP #95-070

A. Fieldwork: June 28-July 7. August 7-12. September 8-15. 1995	
C. Fox, B.A./linecutter, June 28-July 3, 1995	
6 days @ \$350/day:	\$1,650.00
B. Sauer, prospector/linecutter June 28-Sept 15, 1995	
13.5 days @ \$300/day:	\$4,050.00
B. Anderson, Prospector/linecutter Sept 8-15, 1995	
7.5 days @ \$300/day:	\$2,250.00
M. Tetrault, Prospector/linecutter Sept 8-15, 1995	
6 days @ \$300/day:	\$1,800.00
J. Smith, Prospector/linecutter Sept 8-15, 1995	
6 days @ \$250/day:	\$1,500.00
B. Gage, Prospector/linecutter Sept 11-15, 1995	
4 days @ \$250/day:	\$1,000.00
J. vanRanden, B.Sc. Aug 7-12, 1995	
9 days @ \$350/day:	\$3,150.00
L. Levesque, Prospector/linecutter Aug 7-12, 1995	
6 days @ \$300/day:	\$1,800.00
B. Mann, P. Geo June 28- Jul 3, 1995	
6 days @ \$320/day	\$1,920.00
A. Doherty P. Geo June 28-Aug 05, 1995	١
7.5 days @ \$350/day:	\$2,625.00
GST (7% of 21,745.00)	\$1,522.15
B. Support Costs	
Helicopter Charter (Trans North):	\$13.661.88
Gasoline:	\$364.39
Misc. consumables (flagging, pickets etc.):	\$194.07
Camp and Groceries:	\$1,920.00
Truck rental:	\$1.612.26
Sample Shipping:	\$341.36
Analytical Costs:	\$660.50
Amerok Geosciences Ltd.	\$10.999.29
GST (7% of \$29,753.75)	\$2082.72
C. Report & Drafting Costs:	\$5,000.00
Total 1995 Assessment Work Valuation:	\$60,103.62

APPENDIX A GEOCHEMICAL ASSAY REPORTS

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Chemex Labs Ltd. Certificate A9529880, A9525926 Northern Analytical Laboratories Ltd. WO#27988 International Plasma Labratory Ltd. 95G2504



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: AURUM GEOLOGICAL CONSULTANTS INC.

ALC: N

P.O. BOX 4367 WHITEHORSE, YT Y1A 3T5

A9529880

Comments: ATTN: AL DOHERTY

i		ANALYTICAL P	ROCEDURES		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	upper Limit
983 2118 2119 2120 2121 2122 2123 2123 2126 2127 2128 2130 2130 2131 2132 2151 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149		Au ppb: Fuse 30 g sample Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock Ba ppm: 32 element, soil & rock Ca %: 32 element, soil & rock Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Fe %: 32 element, soil & rock Hg ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Na %: 32 element, soil & rock Na %: 32 element, soil & rock Ni ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Ti %: 32 element, soil & rock Ti %: 32 element, soil & rock Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Ti %: 32 element, soil & rock Ti ppm: 32 element, soil & rock	PA-AAS ICP-AES	5 0.2 0.01 2 10 0.5 2 0.01 0.5 1 1 0.01 10 0.01 10 2 2 1 1 0.01 10 2 2 1 1 0.01 10 2 2 1 1 0.01 10 2 2 1 10 0.5 1 10 0.5 1 10 0.5 10 0.0 10 0.5 10 0.5 10 0.5 10 0.0 10 0.5 10 0.5 10 0.5 10 0.5 10 0.0 10 0.5 10 0.0 10 0.5 10 0.0 10 0.5 10 0.0 10 0.0 10 0.5 10 0.0 10 0.0 10 0.5 10 0.0 10 0.0 10 0.5 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0 1	$\begin{array}{c} 10000\\ 200\\ 15.00\\ 10000\\ 10000\\ 10000\\ 15.00\\ 1000\\ 10000\\ 1000\\ 1000\\ 10000\\ 10000\\ 10000\\ 10000\\ 10000\\ 10000\\ 10000\\ $

CERTIFICATE

A9529880

(LIS) - AURUM GEOLOGICAL CONSULTANTS INC.

Project: 05 P.O. # :

Samples submitted to our lab in Vancouver, BC. This report was printed on 11-OCT-95.

	SAM	PLE PREPARATION
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205 226 3204 229	6 6 6	Geochem ring to approx 150 mesh 0-3 Kg crush and split Save 1 Kg reject for 90 days ICP - AQ Digestion charge
* ****		

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.



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Project : 05 Comments: ATTN: AL DOHERTY

To: AURUM GEOLOGICAL CONSULTANTS INC.

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SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	ti %	T1 ppm	U PPm	v ppm	W ppm	Zn ppn	
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Assay Certificate

Page 1

Aurum Geological Consultants

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Proj. # 05

Sample #	Ag g/mt	Pb %	Zn %	
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9505004	224 1	3,590	5.380	
9505005	904.0	5,050	3 810	
9505006	2.3	0 0 15	0.012	

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International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3F1 Ph:604/879-7878 Fax:604/879-7898

APPENDIX B Significant Rock Sample Descriptions

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1995 Rock Samples from Jack Claims

Sample #	Location	Description	Туре
9505001	7130800N 377880E	Zinc carbonate (Smithsonite) from Hobo grid, above 1991 sample 34469. 48.7 % Zn, 0.182% Pb, 16.9 g/t Ag.	Grab
9505002	President Grid 1210 E 1170 N	Massive Skarn pod "Fox Occurrence". Approx 10 % Sph, actinolite, and diopside, thin bands of galena near top and bottom of pod. Pod measures 1.5 m by 1 m. 9.89% Zn, 4.5% Pb, 470 g/t Ag.	0.50 m chip
9505003	President Grid 1211 E 1170 N	Skarn pod, contains massive sphalerite and galena with diopside and actinolite Weathers a chocolate brown colour. 4.11 % Zn, 3.23% Pb, 314 g/t Ag	0.50 m chip
9505004	President Grid 1209 E 1171 N	Massive skarn pod contains Sphalerite and galena with diopside and actinolite. Similar to 9505002 and 3. Sample assayed 5 3% Zn, 3.59 % Pb and 224 g/t Ag.	0.50 m chip
9505005	Interlake Showing	Poorly exposed massive skarn. Contains sphalerite, galena, diopside and actinolite. Assayed 3.8 % Zn, 5.05% Pb, and 904 g/t Ag.	Grab
9505006	Hobo Grid 100 W 200 N	Rusty zone in gneiss on west side of Hobo grid Mainly oxidized pyrite Assasyed 0 012% Zn, 0.015 % Pb and 2.3 g/tAg.	Grab
RBA 95-1	Camp Grid 2+25E TL 700 N	Quartz rich greenschist Less than 1% Py, trace sph, galena. Analysed 1080 ppm Cu.	Grab
RBA 95-2	Camp Grid 2+25E TL 700	Marble schist contact. Malachite, limonite, no sulphides	' Float
RBA 95-3	Camp Grid 3+00E TL 7+00N	Quartz mica schist with minor sulphides.	Grab
RBA 95-4	Camp Grid 8+00E TL 7+00	Mafic schlieren in schist, minor sulphides including sphalerite and Pyrite Analyses returnes 2340 ppm Zn and 235 ppb Au.	Grab
J950701001	Camp Grid 800 E, 650 N	Limestone with moderate iron staining, minor pyrite Reacts strongly with 10% HCL.	

1995 Rock Samples - Camp Grid

Sample #	Location	Description	Туре
JvR95009	Camp Grid L 400 E 800 N	2m ² outcrop of massive sphalerite & trace galena in a garnet skarn at footwall of marble unit, recessive gullies on either side prohibit sampling along strike: 4160 ppm Zn, trace Pb, 25 ppb Au.	0.35m chip
JvR95011	Camp Grid L 500 E 700 N	450m south of Camp Lake on marble cliff (east side of creek); skarn pod 20cm wide and at least a 20m strike length, black massive sx; sphalerite, chalcopyrite (local azurite and malachite staining), and rare galena: 2070 ppm Zn, 556 ppm Pb, 24 ppm Ag.	grab
JvR95012	Camp Grid L 500 E 695 N	along strike on same structure as JvR95011: 1580 ppm Zn, 272 ppm Pb, 812 ppm Cu.	0.25m chip
JvR95015	Camp Grid L 500 E 687 N	at base of marble cliff, but along strike from JvR95012; massive skarn pod of sphalerite and galena with diopside and actinolite: 1350 ppm Zn, 356 ppm Pb and 35 ppb Au.	0.40m chip
LLR95004	Camp Grid L 550 E 350 N	upper contact of discontiuous skarn pod, sample of silicified green coloured schist, fine grained pyrite & chalcopyrite throughout: 610 ppb Au, 453 ppm Cu, and 578 ppm Bi.	0.30m chip

APPENDIX C Geophysical Field Memos and Plots



July 7, 1995

Mr. Al Doherty Aurum Geological Consultants Inc. Whitehorse Yukon

amerok@yknet.yk.ca

Re: Maxmin survey - Jack Claims

Dear Mr. Doherty,

This letter describes a horizontal loop electromagnetic (HLEM) survey conducted on the Jack Claims south of Little Salmon Lake, Y.T.

a. Personnel and equipment. The survey was conducted by Mike Power and Brian Sauer using an Apex Parametrics Maxmin I-8 with 100 m cables on July 3 and 4, 1995. Data was recorded in an attached digital data recorder (MMC) and downloaded to a laptop computer after the survey. The data was corrected for rough terrain effects following the survey using software provided by Apex Parametrics.

b. Grids. The survey was conducted over three grids: the Hobo, President and Glen grids. Each grid consisted of straight-chained lines turned off a slope corrected base line. Stations were picketed at 25 m intervals along the survey lines. The Hobo grid has a base line oriented at 65° while the baselines of the President and Glen grids are oriented at 130°.

c. Survey parameters. The HLEM survey was conducted at a 100 m coil spacing with readings taken every 25 m using the slope chaining method. This method is applied on lines which are not slope corrected and requires the operators to measure the inter-station slope, hold the coils level and tight-chain using the reference cable. Following the survey, terrain errors introduced by short coils or non-coplanar coils were removed by calculating their effects from the slope records. The Maxmin I-8 records the in-phase and quadrature components of the secondary vertical magnetic field induced in the earth by a vertical magnetic dipole source. These measurements are expressed in percentages of the primary field. The effect of the primary field is removed in the measurements. Frequencies of 440, 1760 and 7040 Hz were used in the survey to provide broad-band coverage for massive to disseminated sulphide targets.

d. Data. Digital data records including dump and XYZ files are appended to this report on disk. All data has been plotted in stacked profile format showing the survey lines with the in-phase (solid lines) and quadrature (dashed lines) superimposed on the grids. In all the plots, positive values fall to the right of the survey lines and negative values to the left of the survey lines; measurements are also printed besides the survey stations. Figures 1 to 3 record the responses over the Hobo grid at 1:1,000 and Figure 4 records the responses over the President and Glen grids at 1:1,500. The coordinates of the Glen grid have been transformed to those of the more extensive President grid and plotted together. Data scales are 1cm=10% H_z (primary) for Figures 1 to 3 and 1cm=15% H_z (primary) for Figure 4.

e. System responses. A steeply-dipping conductor would produce a negative in-phase and quadrature response with smaller flanking positive responses and zero crossovers at 50 m either side of the conductor axis. A flat or shallow dipping conductor would produce a positive in-phase and quadrature response with a peak value over the centre of the conductor. Magnetite produces a frequency-invariant in-phase response. Apparent half-space resistivities can be calculated from the data but these are only valid for non-discrete conductors (ie. for large, extensive conductors). A conductor of interest in this area would be expected to produce a response of at least \pm 10 %.

f. Results. The results over the Hobo grid are characterized by a frequency invariant in-phase response and no quadrature response. Magnetite skarn has been found by the field crews in this area and probably accounts for the observed in-phase deflection. The results over the President and Glen grids are similar. Responses are flat over the grid with the exception of a positive in-phase response on line 1000E attributable to either magnetite or very steep topography. There is a slight response on line 1200E consisting of a negative in-phase and positive quadrature deflections. The area in which this occurs is in the steeply dipping limb of the folded limestone unit and a conformable skarn zone would be expected to produce negative quadrature and in-phase responses. Phase rotation (sign shift) of the quadrature is unlikely since there is little or no overburden. Consequently this weak response does not resemble that of a target in this area. The calculated apparent resistivity in this area is about 250 ohm-m and thus it appears unlikely that there is a significant body of sulphide mineralization here.

g. Conclusions and recommendations. The HLEM survey failed to locate any significant bedrock conductors. The EM measurements reflect the bulk electrical properties of the bedrock and the absence of any strong responses suggest that the observed mineralization is either spotty or, if extensive, is not electrically connected. A significant body of non-conductive mineralization would not be readily detected by EM methods. Sphalerite in particular and galena to a lesser extent are noted for relatively high resistivities, particularly when the minerals are disseminated throughout the host rock. A short induced polarization survey centred on the best showings should conclusively indicate whether there is significant body of disseminated sphalerite or galena in the area.

Thank you for the opportunity to work with you on this interesting project.

Respectfully submitted, AMEROK GEOSCIENCES LTD.

M.A. Power M. Sc. P. Geo. Geophysicist



/encl.













MEMORANDUM

AMEROK GEOSCIENCES LTD.

September 18, 1995 File: 95-24

Site 6, Comp 11 Whitehorse, Yukon Y1A 5V8 (403) 668-7672 (Phone/Fax) amerok@yknet.yk.ca

To: Al Doherty Aurum Geological Consultants Inc.

From: Mike Power

<u>Re:</u> Field Report - Jack Claims IP Survey

This memorandum is a field report describing the technical parameters and preliminary results of an induced polarization / resistivity / SP survey conducted on the Jack Claims on September 12-15, 1995 by Amerok Geosciences Ltd.

a. Survey Parameters. The induced polarization survey covered the following lines on the Loaded Grid:

CAMP

Line 700E: 100N - 1000N Line 550E: 400N - 1000N Line 200E: 600N - 1000N

Survey parameters were as follows:

a. <u>Survey geometry:</u> dipole-dipole survey with an "a" spacing of 25m and readings from separation 1 to 6.

b. <u>Transmitter:</u> Phoenix IPT-1 and MG-2 2.0 KVA motor generator.

c. <u>Receiver:</u> Iris ELREC IP-6 6 channel digital IP receiver. Porous pots were used in the receiver array.

d. <u>Signal and acquisition:</u> Survey was conducted in the time domain with a 0.125 Hz signal, 50% duty cycle (2 s positive, 2 s off, 2 s negative, 2 s off). Receiver signal sampling consisted of 10 channels spaced arithmetically over the off-time interval.











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