



**REPORT ON THE
GEOLOGY AND GEOCHEMISTRY
OF THE WAL CLAIMS**

WHITEHORSE M.D., YUKON
August 5-September 6, 1986

09 19 12

Claims: Wal 1-65 (YA86025-089)
Wal 66-77fr. (YA93981-992)
Wal 78-79fr. (YA95988-989)
Wal 81-88 fr. (YA95990-997)
Heavy Metal 1-4 (YA86021-024)

Location: 1. 53 km S of Whitehorse, Yukon
2. NTS 105 D/3 and D/6
3. Latitude 60° 15' N
Longitude 135° 12' W

For: **Walhala Exploration Ltd.**
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February 10, 1987

09 19 12

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 9200.00.

DA Emmond

for

Regional Manager, Exploration and
Geological Services is: Commissioner
of Yukon Territory.

SUMMARY

The Wal claims consist of 91 contiguous mineral claims located in the Wheaton River area, Yukon. They are accessible by road from Whitehorse. The claims became an attractive exploration target in 1981 when AGIP Canada Ltd. discovered a high grade gold ore body 16 kilometers to the west.

Granitoid rocks of the Coast Plutonic Complex underlie most of the property. Eocene hypabyssal and volcanic intermediate to felsic rocks intrude and overlie all other lithologies, and this is interpreted as a suitable host for precious metal deposits.

The current work program has consisted of geological mapping, geochemical sampling, and prospecting. Results of the work have identified the following high-priority gold exploration targets: (1) quartz +/- chalcedony +/- sulfide veins in NE trending fault zones at the eastern part of the property which have assayed up to 2.71 opt gold and (2) vein-type gold-quartz mineralization at the west-central part of the property as indicated by stream sediments ranging up to 2000 ppb gold and known quartz veining. Additional follow-up targets are provided by geological and geochemical anomalies on other parts of the ground.

Based on these results, claim surveying, trenching, and additional mapping and sampling are recommended.

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INTRODUCTION

This report was prepared at the request of the directors of Walhala Exploration Ltd. Its purpose is to summarize the economic potential of the Wal 1-79, Wal 81-88 and Heavy Metal 1-4 mineral claims through a description of exploration work carried out during 1986.

The claims are located about 53 kilometers south of Whitehorse, Yukon and are accessible to within 1 kilometer by road.

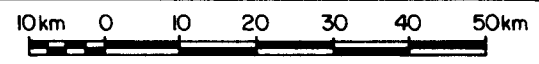
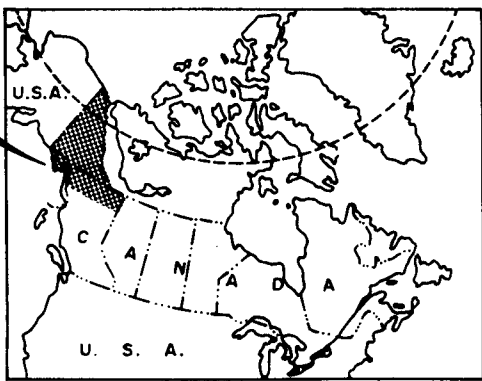
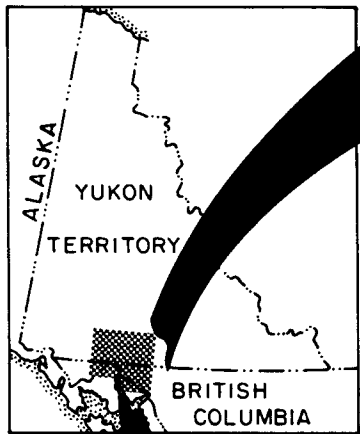
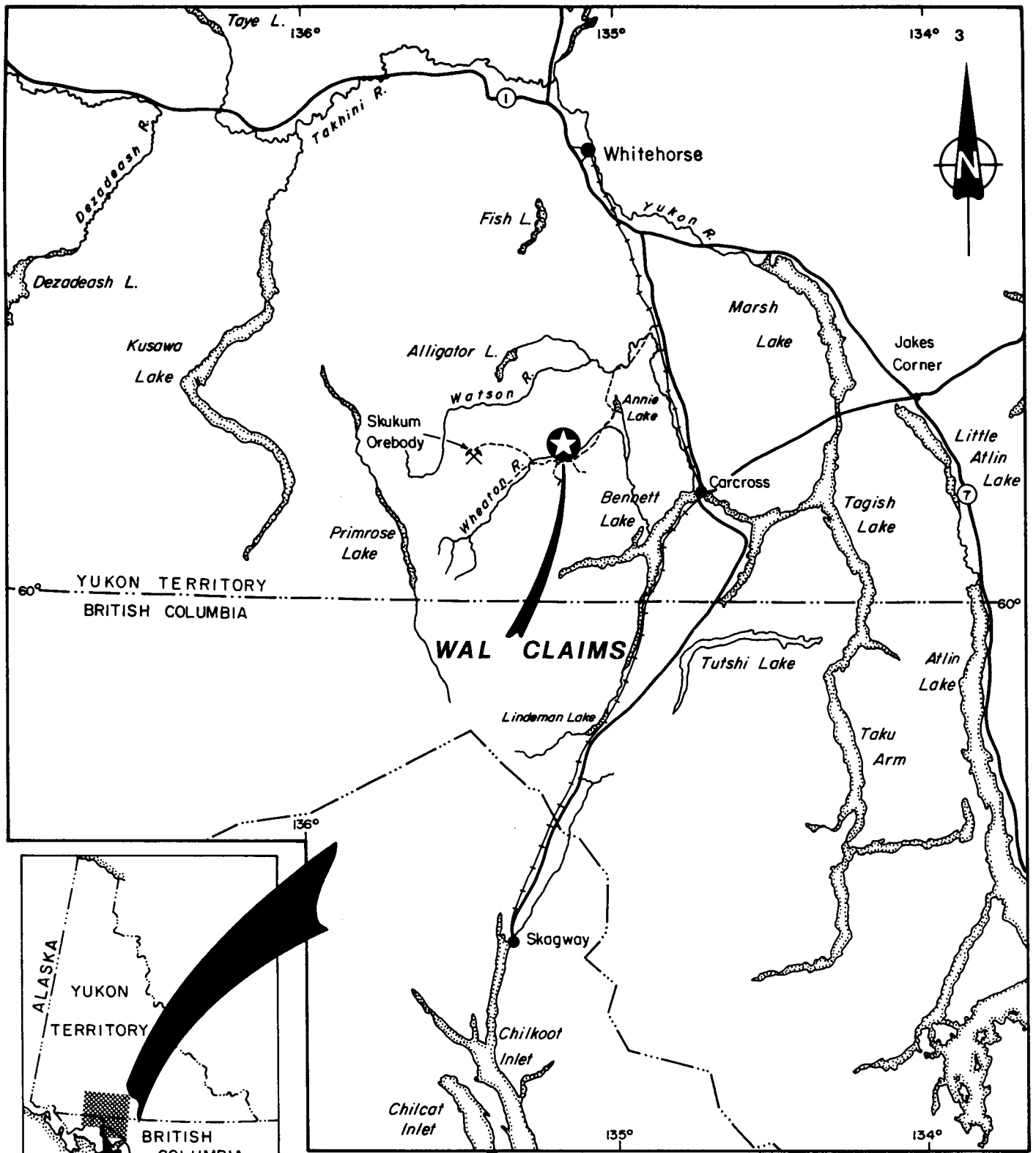
Exploration work completed in 1986 consisted of prospecting, geological mapping, and geochemical sampling by H. Keyser, T. Garagan and P. Garagan of Aurum Geological Consultants Inc. assisted by M. Barker and S. Ridgway of Walhala Exploration Ltd.

LOCATION AND ACCESS

The claims are located in southwestern Yukon, about 53 kilometers south of Whitehorse (Figure 1). The approximate geographic coordinates of a point approximately in the center of the property are 60° 15' North and 135° 12' West.

Access is by a good quality gravel road leading from the paved Whitehorse-Carcross Highway to the Mount Skukum minesite, a distance of about 75 kilometers from Whitehorse. This road follows the south side of the Wheaton River and comes to within one kilometer of the Wal property. Access onto the claims could easily be made by road construction across the Wheaton River.

Alternatively, helicopters are available for charter at Whitehorse and seasonally at the Wheaton River.



WALHALA EXPLORATION LTD.	
WAL CLAIMS	
LOCATION	
Aurum Geological Consultants Inc.	February, 1987
Drawn by N.H.	Checked by H.K. Scale 1:1,000,000
FIGURE 1	

HISTORY

Considerable prospecting was carried out in the Wheaton River area starting in the early 1900's, culminating in the discovery of numerous gold and silver (and related metals) occurrences. Gold-silver mineralization has been previously located in the vicinity of the Wal claims at Mt. Anderson (5 km south), Gold Hill (5 km northeast), Tally-Ho Mountain (6 km east), and Vesuvius Hill (6 km west).

In 1981 AGIP Canada Ltd. discovered a gold orebody at Mount Skukum, 16 kilometers west of the Wal claims. This deposit is currently producing some 5000 ounces of gold per month since production started in March 1986. Published pre-production proven reserves stand at 235,000 tonnes (259,000 tons) grading 20 g/t (0.58 opt) gold (Doherty 1983).

A second potential gold-silver orebody was discovered by Omni Resources Inc. at Skukum Creek, 7 kilometers southeast of Mount Skukum. Reserves are reported at 380,000 tonnes (418,000 tons) grading 9.3 g/t (0.27 opt) gold and 452 g/t (13.20 opt) silver (Omni 1986 annual report).

Walhala Exploration Ltd. acquired the Wal claims by staking in October 1984. Preliminary soil geochemistry and geological mapping was carried out in late 1985 (Verley 1985). A 1200 x 1600 meter grid was established at the northwestern corner of the property with 228 soil samples taken at 100 x 100 meter centers. This work outlined low-order geochemical soil anomalies and initial lithologic distributions.

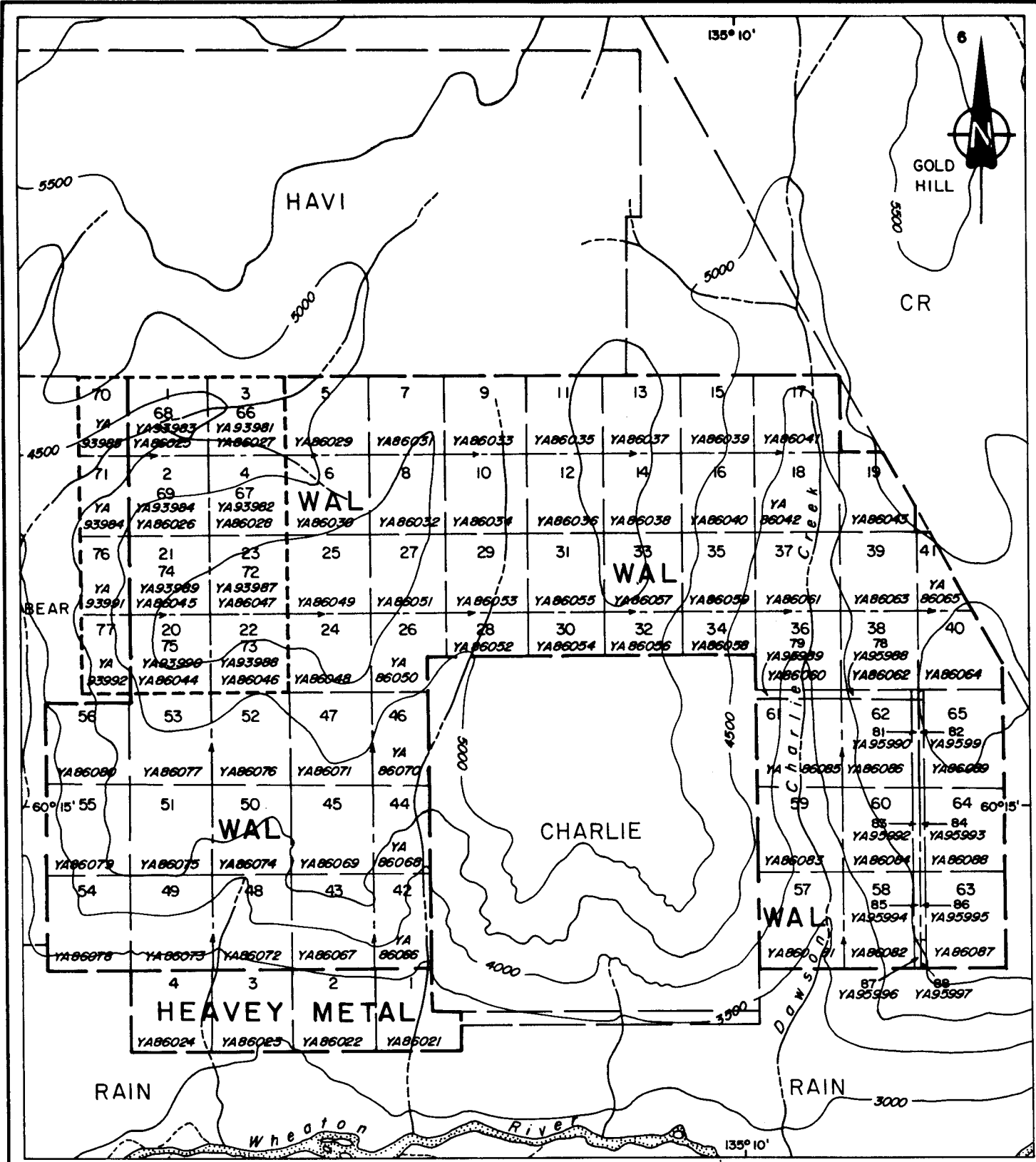
PROPERTY

The property consists of 69 two-post unsurveyed mineral claims and 22 fractional claims staked under the Yukon Quartz Mining Act totalling approximately 1500 hectares (3700 acres). Claim data is as follows:

<u>Claim Name</u>	<u>Grant No.'s</u>	<u>Recording Date</u>	<u>Expiry Date</u> *
Wal 1-65	YA86025-089	Oct. 20/84	Oct. 25/87
Wal 66-77 fr.	YA93981-992	Nov. 6/85	Nov. 6/87
Wal 78-79 fr.	YA95988-989	Aug. 27/86	Aug. 27/87
Wal 81-88 fr.	YA95990-997	Aug. 27/86	Aug. 27/87
Heavey Metal 1-4	YA86021-024	Oct. 20/84	Oct. 25/87

* pending approval of assessment work described herein.

The claims are owned 100% by Walhala Exploration Ltd. They are shown on Yukon Quartz and Placer Sheets 105 D-3 and 105 D-6 and are known collectively as the Wal Claims.



LEGEND

- claim boundary
- claim number
- tag number
- creeks, streams
- elevation contours; interval 500 ft.



WALHALA EXPLORATION LTD.	
WAL CLAIMS	
CLAIM MAP	
Aurum Geological Consultants Inc.	January, 1987
NTS105D-386	Drawn by N.H. Scale 1:31,680
FIGURE 2	

CLIMATE, TOPOGRAPHY AND VEGETATION

The climate in the area of the Wal claims is variable with hot summers and long cold winters. Precipitation is light, averaging about 40 cm (15.7") annually, with heavy snowfalls occurring during the winter months.

The property is situated at the eastern flank of the Coast Mountains and topography is rugged. Elevations range from 915 m (3000 ft) to 1750 m (5740 ft) above sea level. The area has been greatly modified by Pleistocene glaciation, and such glacial features as U-shaped valleys, aretes and cirques are common.

Vegetation consists mainly of alpine shrubs and grasses with some stunted spruce and poplar occurring in lower valleys. Ridge tops are typically covered with felsenmeer.

GEOLOGY

Regional Geology

The Wal claims are situated at the eastern flank of the Coast Plutonic Belt. Wheeler (1961) has adequately described the regional geology.

The Coast Plutonic Belt is composed of foliated and non-foliated granitoid rocks of Cretaceous (?) age flanked by older metamorphosed and unmetamorphosed sedimentary and volcanic strata. Granodiorite, granite and quartz diorite are characteristic of the composite plutons. Gabbro and syenite are rare. Irregular belts of lower Mesozoic to Paleozoic (and possibly Precambrian) metasedimentary and metavolcanic rocks occur as roof pendants.

Of particular interest is the location of the Wal claims on the northeastern margin of the Mt. Skukum volcanic complex, in part an Eocene (Pride and Clark 1985) cauldron.

Faulting, lithologic attitudes and other regional trends are generally northwest, with some younger northeast structures.

Geology of the Wal Claims

Property geology (Figure 3) is much more complex than can be shown on the previously described regional mapping. Rock outcrops are restricted to ridge flanks, and probably constitute less than 20% of the total property area.

Yukon Group foliated quartz-felspar-biotite gneisses (map unit **HCs**) of Hadrynian to Cambrian age are the oldest exposed lithology on the Wal claims. They have only been found as a single roof pendant in granodiorite near the southeast corner of the property.

Leucocratic medium grained equigranular to porphyritic granitoid rocks (map unit **Kgd**) have intruded the older metamorphic rocks. Based on an overall mineralogy of feldspar (% plagioclase > % orthoclase), 60%; quartz, 25%; and mafic minerals, 15%, they can be classified as granodiorite. Hornblende usually predominates over biotite, and both are variably chloritized. This unit is by far the most commonly exposed lithology on the Wal claims.

Andesitic rocks have been mapped as dikes and hypabyssal plug-like structures over most of the property. They are typically porphyritic and are variably propylitized.

Light colored, sometimes rusty weathering, rhyolite (map unit **Tr**) unconformably overlies all pre-Tertiary rocks at the western part of the property. Characterized by flat lying flows and pyroclastics, it is associated with collapse of the Mt. Skukum Caldera complex. The rhyolite is underlain at one location by lapilli tuff. Steeply dipping dikes of a similar composition have been mapped over the entire property.

Fault-scarp deposits (map unit **Te**) consisting of angular granodiorite clasts up to 50 cm in diameter in a clast-supported breccia have been found near

the western property boundary. They are resistive weathering and are underlain and overlain by rhyolite tuff, indicating synvolcanic deposition.

Dikes, faults, and air photo lineaments mapped to date on the Wal claims follow a prominent northwest trend at the the western part of the claims, but change to a northeast trend to the east side.

Immediately west of Dawson Charlie Creek a major north trending fault has been located. It has been traced for over 2 km and is marked by granodiorite breccias and intense clay alteration with variable hematite staining. Chalcedonic veinlets have been identified near its southern mapped extension, and discontinuous rhyolite dikes at the north.

At the west-central part of the property, a large zone of microfractured granodiorite with hematite staining has been located. Its limits and significance are yet to be defined.

A tabulated geological history of the property and area is given as Table 1.

TABLE 1. *Table of Formations; Wal Claims.*

<u>Unit</u>	<u>Age *</u>	<u>Event/Lithology</u>
Qs	Quaternary	Unconsolidated surficial debris.
---	Pleistocene	Glacial erosion; unconformity.
Tr, Te, Ta	Eocene	Skukum Group: Intermediate to felsic flows, breccias and tuffs related to Mt. Skukum cauldron complex. Faulting, dike emplacement, and mineralization.
---	Paleogene ?	Unconformity.
Kgd	Cretaceous	Coast Plutonic Belt: Granitoid intrusions, folding, faulting, metamorphism, erosion.
---	Lower Cretaceous ?	Unconformity.
HCs	Hadrynian to Cambrian	Yukon Group: gneiss, schist.

* modified after Wheeler 1961, and Pride and Clark 1985.

MINERALIZATION

There is no record of mineral discoveries on the Wal claims prior to the 1986 exploration program. Metallic minerals recognized so far include pyrite, galena, sphalerite, chalcopyrite, and their supergene equivalents.

East Zone

The most significant mineralization identified and exposed to date on the Wal claims occurs at the southeastern corner of the property and has been called the *East Zone* (Figure 4). Three northeast-trending subparallel quartz veins are hosted in granodiorite with a close rhyolite and andesite dike association. Two of the veins are prominent lineaments readily identifiable on air photographs. Topography in this area is rugged to precipitous.

The northwestern vein is exposed at three small locations within a much larger recessive weathering gully. The vein is characterized by quartz-chalcedony breccia with a crustiform texture. Rock samples have returned up to 95 ppb gold and 140 ppm silver. Detailed soil samples taken in the 10 meter wide gully have returned up to 90 ppb gold and 34 ppm silver with low-order anomalies in barium and mercury. Sulfide minerals have not been recognized. Based on the attitude of the gully and of bordering granodiorite surfaces, the entire structure appears to dip steeply to the southeast.

A second parallel recessive weathering gully has been found 50 meters to the southeast. Although there are no vein exposures, a train of crustiform quartz-chalcedony breccia boulders has been identified and is interpreted as coming from a vein of similar mineralogy and structure under scree and soil in the gully. A single sample of this material has returned 65 ppb gold.

The southeastern vein at the *East Zone* is parallel in strike but dips moderately to the southeast. It ranges from 10 to 40 cm in width and is typified by quartz-pyrite-galena-chalcopyrite mineralogy, with minor carbonate, sphalerite, and malachite. The footwall is bounded by andesite and discontinuous spherulitic rhyolite dikes along its entire exposed length of 60 m, with discontinuous andesite on the hanging wall. Strike projections are limited on both ends by large scree-filled gullies. Granodiorite encloses the dikes. A sample of galena-bearing vein material (#866406) assayed 93.05 g/t (2.71 opt) gold, 83.5 g/t (2.44 opt) silver, and 0.14% lead. A sample of pyrite-bearing quartz float found below the vein (#866405) assayed 1.90 g/t (0.055 opt) gold and 0.15 g/t (0.004 opt) silver.

Other Mineralization

Hematite and manganese-stained vuggy quartz float (#866416) found at the west-central part of the Wal claims returned 540 ppb gold. Although its origin has not been located, its source area is granodiorite with extensive microfracturing and hematite staining. At least one quartz vein has been located here, but it remains to be sampled.

Chalcopyrite-bearing quartz veins have been identified at the northeast corner of the property. Chalcedonic veinlets have been found within a major fault west of Dawson Charlie Creek. Although they are both potential gold-bearing

structures, sampling carried out to date has not returned any anomalous precious metal values.

GEOCHEMISTRY

A total of 23 rock and 116 soil, talus fine, and stream sediment samples were taken during the 1986 exploration program on the Wal claims. All of these samples were analyzed for total gold and silver content by CDN Resource Laboratories Ltd. of Delta, B.C. or Acme Analytical Laboratories Ltd. of Vancouver, B.C. Selected samples were also analyzed for lead, barium, mercury, arsenic and antimony. Results are shown on Figures 3 and 4.

Rock samples were taken of altered, veined and/or mineralized material. Soil and talus fine samples were taken on a reconnaissance basis from geologically favorable zones such as faulted, altered, diked, or mineralized areas. Stream sediments were taken conventionally from as many creeks and tributaries as time would allow.

Statistical analyses were made for gold, silver, and lead, as shown in Table 2. Values below the detection limit were entered at the detection limit.

Rock Samples

Gold appears to be the main element of economic interest, with anomalous values found at the *East Zone* and in float at the west-central part of the property. All high gold values found to date have been in quartz vein-type material. Variable amounts of silver and lead, and possibly other elements, are associated with the gold mineralization.

Soil and Talus Fine Samples

Gold values in soil range up to 5400 ppb from a contour sample taken directly below high grade gold mineralization at the *East Zone*, demonstrating the effectiveness of the sampling technique. The highest silver (37 ppm) and lead (1580 ppm) values are also from this location. Other high gold, silver, and lead values are found north and east of the *East Zone* where mineralization is not yet known.

Stream Sediment Samples

Geochemical stream sediment values range up to 2000 ppb gold, 15.3 ppm silver, and 660 ppm lead. Coincident highly anomalous samples are found in east-flowing tributaries to a main creek draining the west-central part of the Wal claims. No bedrock mineralization has been located in this area so far.

TABLE 2. Statistical Analyses of Geochemical Results.

For all rock samples:

Criteria	Au, ppb	Ag, ppm	Pb, ppm
Number:	23	23	14
Average:	5023.086	10.97826	130.8571
Maximum:	113000	140	1450
Minimum:	1	0.1	4
Variance:	5.3E+08	1176.568	136498.8
Std. Devn.:	23021.45	34.30114	369.4574
Background <:	5023.086	10.97826	130.8571
Poss. Anom. <:	28044.53	45.27940	500.3146
Prob. Anom. <:	33067.62	56.25766	631.1717
Defy. Anom. >:	33067.62	56.25766	631.1717

For all soil and sediment samples:

Criteria	Au, ppb	Ag, ppm	Pb, ppm
Number:	117	117	117
Average:	131.1965	1.944444	45.26495
Maximum:	5400	37	1580
Minimum:	5	0.1	7
Variance:	310284.8	40.41546	25142.62
Std. Devn>:	557.0322	6.357315	158.5642
Background <:	131.1965	1.944444	45.26495
Poss. Anom. <:	688.2288	8.301759	203.8292
Prob. Anom. <:	819.4253	10.24620	249.0941
Defy. Anom. >:	819.4253	10.24620	249.0941

For rock samples; highest values removed:

Criteria	Au, ppb	Ag, ppm	Pb, ppm
Number:	22	22	13
Average:	115.0454	6.886363	29.38461
Maximum:	760	140	212
Minimum:	1	0.1	4
Variance:	33580.22	844.9457	2845.313
Std. Devn.:	183.2490	29.06795	53.34148
Background <:	115.0454	6.886363	29.38461
Poss. Anom. <:	298.2945	35.95431	82.72609
Prob. Anom. <:	413.3399	42.84067	112.1107
Defy. Anom. >:	413.3399	42.84067	112.1107

For soil and sediment samples;
highest values removed:

Criteria	Au, ppb	Ag, ppm	Pb, ppm
Number:	116	116	116
Average:	85.77586	1.642241	32.03448
Maximum:	2000	34	660
Minimum:	5	0.1	7
Variance:	71583.88	30.07864	4879.050
Std. Devn>:	267.5516	5.484400	69.85020
Background <:	85.77586	1.642241	32.03448
Poss. Anom. <:	353.3275	7.126641	101.8846
Prob. Anom. <:	439.1033	8.768883	133.9191
Defy. Anom. >:	439.1033	8.768883	133.9191

CONCLUSIONS AND RECOMMENDATIONS

The Wal claims are underlain by Cretaceous granodiorite which has been intruded and overlain by Eocene felsic to intermediate volcanic and hypabyssal rocks related to the Mt. Skukum caldera complex. Steeply dipping block (?) faults cut all lithologies on the ground.

Known gold-silver and base metal vein-type mineralization in the Wheaton River area is structurally controlled by faults related to collapse of the Mt. Skukum caldera complex. Significant mineral deposits are controlled by pre-existing fault zones occupied by rhyolite and andesite dikes. Fault-controlled andesitic and rhyolitic dikes on the Wal claims therefore provide a setting that is highly permissive for the development of precious metal deposits.

The property is an epithermal gold-silver prospect. Although a large part of the ground remains unexplored, geological mapping and prospecting carried out as part of this report has resulted in the discovery of a new mineralized zone on the Wal claims, referred to as the *East Zone*. Mineralization consists of quartz +/- chalcedony +/- sulfides in three subparallel vein-type structures closely associated with dikes. The veins trend northeast, which is the trend of most significant gold-silver deposits in the area.

The north and central veins are characterized by recessive-weathering quartz-chalcedony breccia in granodiorite-hosted shear zones averaging 10 meters wide. Rock samples from these two zones have returned up to 95 ppb (0.003 opt) gold and 140 ppm (4.09 opt) silver. Soil samples have returned anomalous values in gold, silver, and barium.

The southeastern vein at the *East Zone* is 10-40 cm wide and is typified by a quartz-sulfide mineralogy. It is distinctly parallel with andesite and irregular spherulitic rhyolite dikes along its exposed length of 60 meters. Samples of this vein have assayed up to 93.05 g/t (2.71 opt) gold and 83.5 g/t (2.44 opt) silver. Given the known high grade gold mineralization with nearby 10 meter wide vein-type structures, economic potential is indicated.

Gold and silver in the known veins can be resolved by contour soil geochemistry. Other anomalous soil values in the immediate area indicate additional gold-silver mineralization.

Stream sediment geochemistry carried out at the south-central part of the property has returned highly anomalous values. Consecutive samples W-86-302 to W-86-305 returned 2000, 870, 30 and 1700 ppb gold respectively with coincident anomalous silver and lead. Quartz float returning 540 ppb (0.016 opt) gold has been found in a large microfractured hematite-stained granodiorite source area of some 600 x 1000 meters. As yet undiscovered gold-bearing quartz veins are therefore indicated by the anomalous sediment and rock samples.

Additional soil and sediment geochemical anomalies are indicated on other parts of the property, especially north and east of the *East Zone*. These may also reflect bedrock gold-silver mineralization.

Based on results of surface exploration work carried out on the Wal claims in 1986, further work is warranted. The following work is recommended as preparation for a potential drill program:

1. Establish claim boundaries by legal surveying.
2. Construct a road to the *East Zone* along the east side of Dawson Charlie Creek. This would be followed by trenching of known veins and anomalous soil with combined mapping and sampling.
3. Attempt to locate the source of anomalous gold in the area of samples W-86-302 to 305 by geological mapping, prospecting, detailed sampling, and possible trenching.
4. Carry out more detailed mapping and sampling at known geologically and geochemically anomalous areas, along with reconnaissance exploration in unexplored areas.

Estimated costs of this program are:

Claim surveying and fraction staking:	\$ 10,000.00
Road building:	15,000.00
Orthophoto preparation:	5,000.00
Trenching:	15,000.00
Helicopter support:	5,000.00
Geology, prospecting, amd sampling:	10,000.00
Analytical costs:	5,000.00
Report preparation	4,000.00
Contingencies:	<u>6,000.00</u>
Total Estimated Cost:	\$ 75,000.00

Respectfully submitted,

February 10, 1987

Harmen J. Keyser, B.Sc.

REFERENCES

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STATEMENT OF QUALIFICATIONS

I, HARMEN J. KEYSER, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 604-675 West Hastings Street, Vancouver, British Columbia.
2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since then.
3. I am a member of the Geological Association of Canada (A3759).
4. I have no direct or indirect interest in the properties or securities of Walhala Exploration Ltd.
5. I am the author of this report on the Wal claims, Whitehorse M.D., Yukon, which is based on my personal examination of the property on August 5, and September 3, 4 and 6, 1986; and on referenced sources.
6. I consent to the use of this report by Walhala Exploration Ltd. for any purpose they deem necessary, provided that no portion may be used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

February 10, 1987



Harmen J. Keyser, B.Sc.







STATEMENT OF COSTS

1986 Assessment Valuation; Wal 1-79, Wal 81-88, Heavy Metal 1-4 mineral claims, Whitehorse M.D., Yukon.














Harmen Keyser, B.Sc. of Vancouver, B.C. 4 days @ 225.00/day:	\$ 900.00
Tom Garagan, B.Sc. of Calgary, AB. 1 day @ 200.00/day:	200.00
Pat Garagan, B.Sc. of Calgary, AB. 1 day @ 150.00:	150.00
Morley Barker, Surveyor, of Whitehorse, Y.T. 10 days @ 225.00/day:	2250.00
Simon Ridgway, Prospector, of Vancouver, B.C. 10 days @ 225.00:	2250.00
Camp costs:	1040.00
Helicopter Charter:	895.00
Analytical Costs:	1606.95
Report Preparation:	<u>2000.00</u>
TOTAL 1986 EXPENDITURES:	\$ 11, 291.95

LEGEND

LITHOLOGIES

-  scree, grass (Qs)
-  quartz vein
-  prophyritic andesite (Ta)
-  rhyolite (Tr)
-  spherulitic rhyolite (Tr)
-  granodiorite (Kgd)

SYMBOLS

-  attitude of structure
-  lithologic boundary
-  limit of 1986 mapping
-  trace of ridge
-  recessive weathering gully
-  location of quartz float
-  rock chip sample location
-  sample number / gold ppb, silver ppm (not necessarily to scale)
-  rock grab sample location
-  sample number / gold ppb, silver ppm
-  soil sample location
-  sample number / gold ppb, silver ppm
-  helicopter pad

○ W-86-4025/30, <0.1

○ W-86-4024/30, <0.1

○ W-86-4023/850, <0.1

○ W-86-4022/20, 0.3

○ W-86-4021/30, 0.1

○ W-86-320/10, 0.1

○ W-86-4016/70, 0.1

○ W-86-4017/30, 0.3

○ W-86-4018/NS

○ W-86-4019/NS



Note - locations established by pace and compass control

* fire assay: 866405/Au 1.90 g/t, Ag 0.15 g/t
866406/Au 93.05 g/t, Ag 83.5 g/t
(2.71 opt Au, 2.42 opt Ag)

- 1060-1/20, 1.2
- 1060-2/20, 0.1
- 1060-3/30, <0.1
- 1060-4/30, 0.1
- 1060-5/40, 0.1
- 1060-6/90, 0.1
- 1100-1/10, 0.2
- 1100-2/40, 0.2
- 1100-3/10, 0.1
- 1140-1/30, <0.1
- 1140-2/30, <0.1
- 1040-1/30, <0.1
- 1040-2/30, <0.1
- 1040-3/20, <0.1
- 1040-4/80, <0.1
- 1040-5/20, <0.1
- 1000-1/30, 2.4
- 1000-2/30, 0.2
- 1000-3/50, <0.1
- 1000-4/30, <0.1
- 1000-5/30, <0.1

crustiform sulfide-free
chalcedonic-quartz breccia
outcrops

highest point where vein material
was found

bull quartz
vein

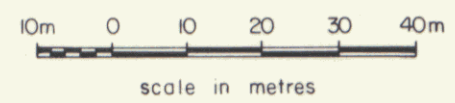
20cm wide quartz vein
with galena, pyrite,
chalcopyrite.

POST 1
Wal 85 fr.

clay altered
rhyolite porphyry

train of crustiform sulfide-free chalcedonic-
quartz breccia boulders

APPROXIMATE CLAIM BOUNDARY ; Wal claims
Wind/Rain claims



WALHALA EXPLORATION LTD.			
WAL CLAIMS			
EAST ZONE			
091912			
Aurum Geological Consultants Inc.			February, 1987
NTS 105D/386	Drawn by H.K./N.H.	Scale 1:1000	FIGURE 4

APPENDIX

AURUM GEOLOGICAL CONSULTANTS INC.

ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: Sept, 1986		Project: Hal NTS: 105 D/386		Area: Wheaton River, Yukon		Samplers: HK & SR		Lab: CDN	
Sample No.	Location	Description	Attitude	Width	Au ppb	Ag ppm	Pb ppm	As ppm	Sb ppm
866401	East Zone	Crustiform drusy quartz-chalcedony breccia. Cavities filled with well developed qtz crystals. Grab sample from outcrop, no sulfides.	060/80S		68	140	N/A		
866402	East Zone	Chip sample of crustiform quartz-chalcedony breccia outcrop.	060/80S	1.1 m	95	0.4	N/A		
866403	East Zone	as 866402. No sulfides.	060/80S	0.9 m	35	0.1	N/A		
866404	East Zone	as 866403	060/80S	1.0 m	85	0.1	N/A		
866405	East Zone	Fractured granodiorite with quartz veinlets up to 1 cm. Traces Pyrite.	Float		760	0.5	11		
866406	East Zone	Grab sample of 20 cm wide quartz vein with disseminated fine grained galena, pyrite, chalcopyrite-malachite.	055/42 SE	20 cm	113000	101	1450		
866407	D-C Cr.	White sugary textured qtz float cut by clear qtz veinlets. Only 1 piece found; 8x8x10 cm. Traces magnetite along selvages.	Float		140	0.2	15		
866408	D-C Cr.	Chip sample of sugary textured white quartz vein with traces irregularly distributed magnetite. Rounded quartz clasts to 2 cm.	010/60 W	1.0 m	85	0.4	30		
866409	D-C Cr.	Brecciated clay altered quartz vein. Drusy. Minor Pyrite and manganese staining.	020/60 W	20 cm	200	0.1	16		
866410	D-C Cr.	Chalcedonic crustiform quartz breccia. Traces Py., rusty fractures. 30x20x20 cm.	Jtg in Kgd: 090/30 S	Float	240	0.1	18		
866411	D-C Cr.	Angular quartz float with minor sericitic inclusions. one piece; 20x20x10 cm.	Float		80	0.1	10		
866412	D-C Cr. Fault.	White bull qtz, no sulfides. 10x7x7 cm.	Float		25	0.1	4		
866413	West Cr.	Quartz breccia. Angular clasts to 3 cm. 80% clasts and 20% rusty clay matrix. 1 piece; 15x5x15 cm	Float		60	0.1	31		

AURUM GEOLOGICAL CONSULTANTS INC.

ROCK SAMPLE LOCATION AND DESCRIPTION RECORD

Date: Sept, 1986		Project: Hal		NTS: 105 D/3&6		Area: Wheaton River, Yukon		Samplers: HK & SR		Lab: CDN	
Sample No.	Location	Description	Attitude	Width	Au ppb	Ag ppm	Pb ppm	As ppm	Sb ppm		
866414	West Cr.	Kgd breccia with quartz-feldspar-clay matrix. 40% rounded Kgd clasts. Abundant.	Float		5	0.1	14				
866415	West Cr.	White bull quartz with brecciated wall rock selvages.	Float		20	1.2	11				
866416	West Cr.	White quartz float with with minor Mn stained vugs. Overall hematite staining on vugs. Flagged as W-5-6.	Float		540	0.1	5				
866417	West Cr.	Purplish fine grained banded quartz float. Flagged as W-5-8.	Float		20	5.2	212				
866418	West Cr.	Crystalline quartz with heavy hematite staining. Some white and pink clays along fractures. Flagged as W-5-9.	Float		50	0.1	5				



Certificate of Analysis

TO Aurum Geological Consultants Inc. /
Walhalla Exploration

REPORT NO. A46-220 Supplement
(reassay)
DATE Aug 13, 1986

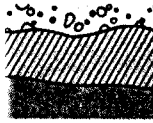
I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton								
	Ag								
866401 (original split)	4.56								
866401 (new split)	9.77								

Note: Inconsistent Ag values between different splits suggests sample inhomogeneity; i.e. small patches of rich mineralization.

BONDAR-CLEGG & COMPANY LTD.

John Pen



136 Industrial Road
Whitehorse, Yukon Territory Y1A 2V1
Tel: (403) 667-6523
Fax: 036-8-460

REPORT: 426-3312 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.

SUBMITTED BY: H KEYSER

PROJECT: WHL

DATE PRINTED: 18-AUG-88

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	AU - GOLD - FIRE ASSAY	1	0.001 OPT		
2	AG - SILVER	1	0.01 OPT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	1	2 -150	1	AS RECEIVED; NO SP	1

REMARKS: WHSE 46-220

REPORT COPIES TO: AURUM GEOLOGICAL CON. INC

INVOICE TO: AURUM GEOLOGICAL CON. INC

AURUM GEOLOGICAL

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667



BONDAR-CLEGG

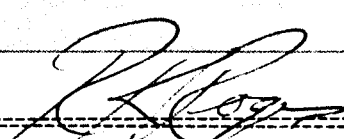
Certificate
of Analysis

REPORT: 426-3312

PROJECT: WAL

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag OPT
R2 866401		0.002	4.09


Registered Assayer, Province of British Columbia

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

GEOCHEMICAL REPORT

To: Aurum Geological Consultants Inc.
1614 - 675 West Hastings Street
Vancouver, B.C.
V6B 4W3

Number: 86-253
Date: August 12, 1986
Proj.: WAL

Attn: Harmen Keyser cc. Walhalla Exploration Ltd.

	Au ppb	Ag ppm	Pb ppm	Ba ppm	Hg ppm	As ppm	Sb ppm
866402	95	0.4		250	<.01		
866403	35	<0.1		250	<.01		
866404	85	<0.1		150	<.01		
1000-1	30	2.4	166	1350	<.01	< 1	3
1000-2	30	0.2	73	1200	<.01	< 1	< 1
1000-3	50	<0.1	33	1350	<.01	< 1	2
1000-4	30	<0.1	22	1500	<.01	< 1	2
1000-5	30	<0.1	23	1200	<.01	< 1	1
1040-1	30	<0.1	19	1250	.01	< 1	< 1
1040-2	30	<0.1	16	1450	<.01	< 1	< 1
1040-3	20	<0.1	22	1300	<.01	< 1	< 1
1040-4	80	<0.1	22	1400	.33	< 1	2
1040-5	20	<0.1	18	1150	<.01	< 1	1
1060-1	20	1.2	82	1100	.01	< 1	4
1060-2	20	0.1	15	1250	<.01	< 1	< 1
1060-3	30	<0.1	16	1100	.01	< 1	< 1
1060-4	30	0.1	13	1350	.02	< 1	< 1
1060-5	40	0.1	13	1150	.01	< 1	< 1
1060-6	90	<0.1	12	1100	.02	< 1	1
1140-1	30	<0.1	10	1150	<.01	< 1	< 1
1140-2	30	<0.1	17	1350	.03	< 1	1
1200-1	40	<0.1	17	1550	.01	< 1	2
1200-2	40	<0.1	15	1100	<.01	< 1	2

Duncan Sawdwa

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

GEOCHEMICAL REPORT

To: Aurum Geological Consultants Inc.
1614 - 675 West Hastings Street
Vancouver, B.C.
V6B 4W3

Number: 86-312
Date: September 23, 1986
Proj.: WAL

Attn: Harmer Keyser cc. Walhalla Exploration Ltd.

	Au ppb	Ag ppm	Pb ppm
W 86-01	80	<0.1	16
W 86-02	220	<0.1	17
W 86-03	190	0.2	14
W 86-04	100	<0.1	17
W 86-05	60	<0.1	21
W 86-06	70	<0.1	19
W 86-07	180	<0.1	34
W 86-08	170	0.1	18
W 86-09	40	0.1	60
W 86-10	40	<0.1	23
W 86-11	340	<0.1	23
W 86-12	60	0.4	30
W 86-13	60	0.5	27
W 86-14	40	0.6	29
W 86-15	110	0.4	26
W 86-16	40	0.2	21
W 86-17	10	0.3	9
W 86-18	20	0.4	7
W 86-19	20	<0.1	8
W 86-20	40	0.3	13
W 86-21	20	0.2	16
W 86-22	20	0.2	12
W 86-23	10	<0.1	20
W 86-24	10	0.9	18
W 86-25	< 5	0.1	21
W 86-26	< 5	0.3	12
W 86-41	< 5	<0.1	22
W 86-42	10	<0.1	11
W 86-43	< 5	<0.1	14
W 86-44	20	<0.1	9
W 86-45	10	<0.1	14
W 86-46	10	0.8	19
W 86-47	10	0.2	25
W 86-48	10	0.8	26
W 86-49	10	0.1	22
W 86-50	10	0.2	26
W 86-51	10	<0.1	34
W 86-52	10	0.1	14
W 86-53	15	<0.1	14
W 86-54	10	<0.1	10

Duncan Sandus

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

GEOCHEMICAL REPORT

To: Aurum Geological Consultants Inc.
1614 - 675 West Hastings Street
Vancouver, B.C.
V6B 4W3

Number: 86-312
Date: September 23, 1986
Proj.: WAL

Attn: Harmer Keyser cc. Walhalla Exploration Ltd.

	Au ppb	Ag ppm	Pb ppm
W 86-54A	20	0.5	25
W 86-55	10	0.2	22
W 86-56	10	0.1	20
W 86-57	10	0.1	15
W 86-58	10	<0.1	14
W 86-59	< 35	0.2	9
W 86-60	40	0.1	19
W 86-61	10	0.2	8
W 86-62	20	0.1	23
W 86-63	20	0.1	22
W 86-64	10	0.1	12
W 86-65	< 10	<0.1	17
W 86-66	< 15	0.9	22
W 86-67	10	0.3	32
W 86-69	10	<0.1	14
W 86-70	< 5	0.1	11
W 86-71	<100	0.2	14
W 86-72	< 20	0.1	22
W 86-73	20	0.2	20
W 86-74	10	0.1	17
W 86-301	35	0.2	18
W 86-302	2000	15.3	660
W 86-303	870	8.6	270
W 86-304	30	0.1	27
W 86-305	1700	10.5	295
W 86-306	< 5	<0.1	22
W 86-4001	10	0.3	21
W 86-4002	< 5	0.1	21
W 86-4003	< 5	0.3	26
W 86-4004	10	0.1	20
W 86-4005	20	<0.1	25
W 86-4006	10	<0.1	28
W 86-4008	10	0.4	39
W 86-4009	< 5	0.3	28
W 86-4010	10	<0.1	45
W 86-4012	630	0.2	33
W 86-4013	5400	37	1580
W 86-4014	20	0.2	32
W 86-4015	50	0.5	29
W 86-4016	70	0.1	16

Duncan Anderson

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

GEOCHEMICAL REPORT

To: Aurum Geological Consultants Inc.
1614 - 675 West Hastings Street
Vancouver, B.C.
V6B 4W3

Number: 86-312
Date: September 23, 1986
Proj.: WAL

Attn: Harmen Keyser cc. Walhalla Exploration Ltd.

	Au ppb	Ag ppm	Pb ppm
W 86-4017	30	0.3	19
W 86-4020	20	34	14
W 86-4021	30	0.1	9
W 86-4022	20	0.3	13
W 86-4023	850	<0.1	16
W 86-4024	30	<0.1	16
W 86-4025	30	<0.1	13
W 86-4026	40	23	19
W 86-4027	80	18	13
W 86-4028	20	0.2	19
W 86-4029	10	31	12
W 86-4030	15	18	20
W 86-4031	10	0.1	15
W 86-4032	10	0.1	20
W 86-4033	< 5	<0.1	21
W 86-4034	30	<0.1	17
W 86-4035	< 5	8.7	32
866405	760	0.5	11
866406	113,000	101	1450
866407	140	0.2	15
866408	85	0.4	30
866409	200	0.1	16
866410	240	0.1	18
866411	80	0.1	10
866412	25	<0.1	4
866413	60	<0.1	31
866414	5	<0.1	14
866415	20	1.2	11
866416	540	<0.1	5
866417	20	5.2	212
866418	50	<0.1	5

Duncan Sardison

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

*** ASSAY REPORT ***

To: Aurum Geological Consultants Inc.
1614 - 675 West Hastings
Vancouver, B.C.
V6B 4W3

Number: 86312
Date: November 4, 1986
Proj.: WAL

Attn: Harmer Keyser

	Au g/t	Ag g/t
866405	1.90	0.15
866406	93.05	83.5
866416	0.55	<0.05

Duncan Sanderson
Licensed Assayer of British Columbia