GEOLOGICAL MAPPING AND GEOCHEMICAL SAMPLING on the LORRIE CLAIMS

DAWSON MINING DISTRICT

August 8-11, 1989

Claims:

LORRIE 1-4 (YB17448-451) LORRIE 5-8 (YB17909-912) LORRIE 9-16 (YB05584-591) LORRIE 17-23 (YB17913-919) LORRIE 24-56 (YB23265-297) LORRIE 80-81 (YB23299-300) JAMMIE 1-4 (YB17905-908)

Location:

1. 77 km northeast of Dawson City

 NTS 116 A/4,5
 Latitude 64° 16' Longitude 137° 53'

For:

WALHALA EXPORTATIONS LTD.

EIP 89-032

5 Teak Avenue Whitehorse, Yukon

Y1A 4W4

By:

R. Allan Doherty, B.Sc.,

AURUM GEOLÓGICAL CONSULTANTS INC.

P.O. Box 5179 Whitehorse, Yukon

Y1A 4S3

February 20, 1990

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INTRODUCTION

This report was prepared at the request of Mr. Simon Ridgway of Walhala Explorations Ltd. It describes exploration work carried out during the period August 8-11, 1989 on the LORRIE and JAMMIE Claims, located in the Dawson Mining District. The work program consisted of geological mapping and geochemical sampling in the area surrounding Mike Lake (NTS 116 A/5).

Location and Access

The LORRIE and JAMMIE claims are located within the Dawson Mining District within map areas 116 A/4 & 5, (Figure 1). More specifically the claim block covers an area of the Ogilvie Mountains at the head of a westerly draining tributary of Brewery Creek. The centre of the property is at approximately 64° 16' north longitude and 137° 53' west latitude.

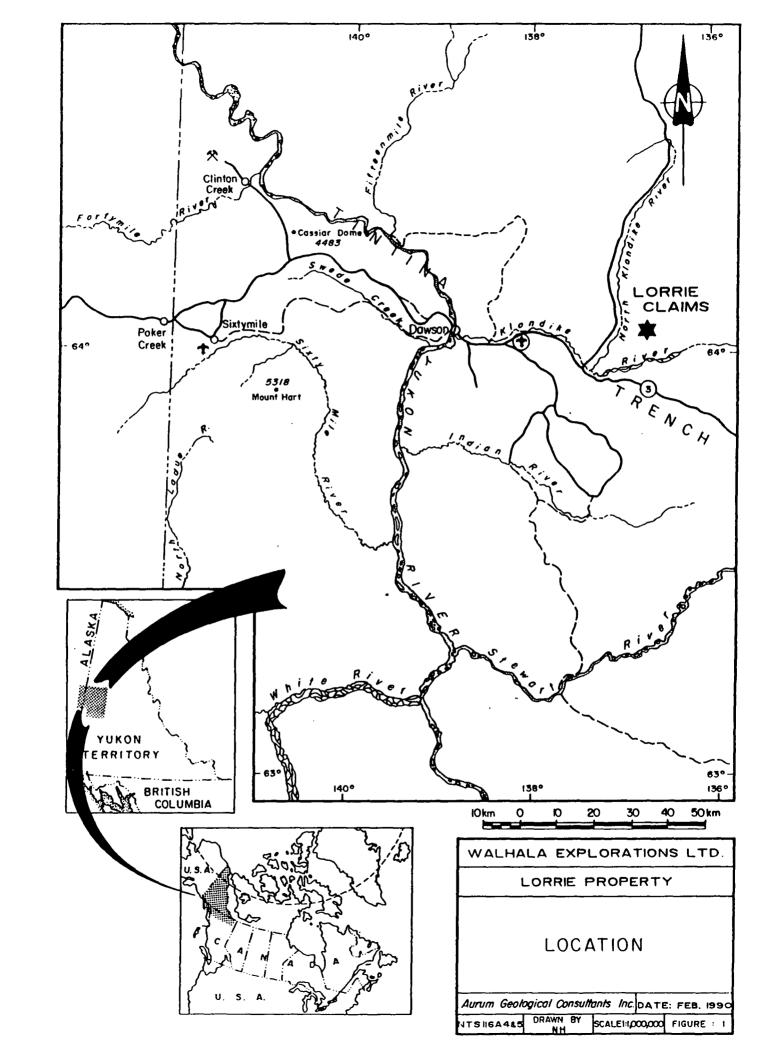
Access to the property is by helicopter from the Dempster highway 25 km to the east, but more practically from that point where the Dempster highway leaves the Klondike highway approximately 50 km southwest of the property.

Physiography, Climate, and Vegetation

This area is part of the east trending Southern Ogilvie Ranges that lie north of the Yukon and Klondike rivers on the northeast side of the Tintina trench. The entire property is above treeline and steep razor backed ridges and granite faces with steep talus aprons are common. Small alpine glaciers and permanent snow fields remain in north facing cirques. Valleys are narrow and display U-shaped profiles from alpine glaciation.

The climate in this area of the Yukon is marked by long cold winters and warm summers. Precipitation during the summer averages less than 2.5 inches per month.

Vegetation is limited to alpine shrubs and grasses. Treeline in the area is at approximately 4000 feet.



PROPERTY

The property consists of 61 contiguous unsurveyed two post quartz claims covering approximately 1275 hectares, staked in accordance with the Yukon Quartz Mining Act (Figure 2). The LORRIE Claims share a common northern boundary with the AINE 1-24 Claims (YA55689-712) which are up for renewal on July 7, 1990 and are currently owned by Gunner Gold Mining Corp. The LORRIE Claims were staked by Walhala Explorations Ltd in July and August 1988. Claim data is as follows:

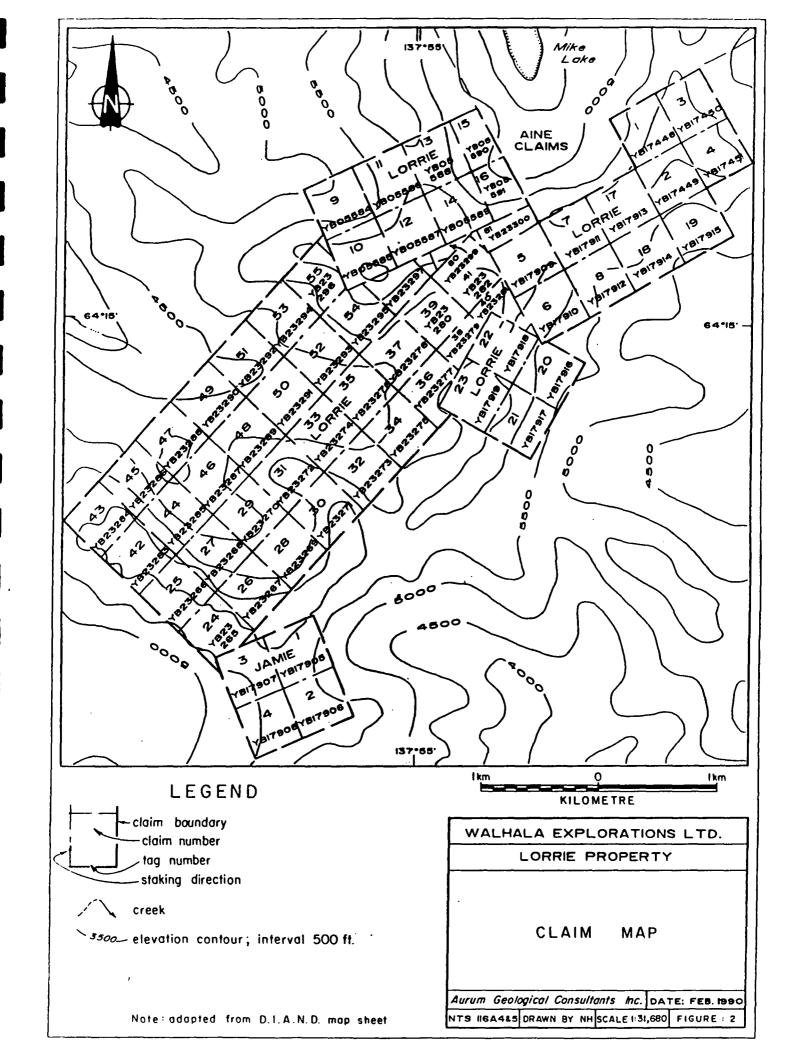
CLAIM NAME	_GRANT #'s	EXPIRY DATE
LORRIE 1-4	YB17448-451	OCT 18/90
LORRIE 5-8	YB17909-912	SEP 12/90
LORRIE 9-16	YB05584-591	OCT 18/90
LORRIE 17-23	YB17913-919	SEP 12/90
LORRIE 24-56	YB23265-297	OCT 18/90
LORRIE 80-81	YB23299-300	OCT 18/90
JAMMIE 1-4	YB17905-908	SEP 12/90

Subject to acceptance of this assessment report.

HISTORY

The first claims located near Mike Lake were the Gold Claims staked by Hart River Mines Ltd in the mid 1960's. Limited trenching and sampling were conducted and the claims were allowed to lapse. The area was restaked in the mid 1970's by Canalta resources as the Mike 1-24 claims. Trenching and diamond drilling were completed in 1975 with encouraging results as reported by Holcapeck (1975).

Three of four diamond drill holes intersected a mineralized quartz-arsenopyrite-tourmaline vein hosted within the syenite intrusion at the south end of Mike Lake (See Figure 3). Drill hole DDH75-1 intersected 4'6" of 0.128 oz/ton Au, and DDH75-3 intersected 4'2" of 0.715 oz/ton Au.



The Mike claims were allowed to lapse and were restaked in 1980 as the AINE 1-24 Claims by a local prospector Seamus Young. A report was prepared on the property by D.P. Taylor P. Eng. (Assessment report # 091446) and the ground was optioned to Gallagher Explorations Ltd, a VSE listed company. Gallagher Exploration Ltd. conducted geological and geochemical work which was filed as assessment report #062204 in 1985. Gallagher Explorations Ltd was taken over by Gunner Gold Mining Corp in 1987. The property has been inactive since the option to Gunner Gold Mining Corp and the claims are due to expire on July 7, 1990.

The Lorrie and Jammie Claims were tied on to the Aine 1-24 claims by Walhala Exploration Ltd in 1988. Work carried out by Walhala Exploration is reported here.

GEOLOGY

Regional Geology

The Regional Geology of the Southern Ogilvie Ranges was reported on by Green (1972) as part of Operation Ogilvie. This area east of the Tintina Trench is part of Ancestral North America (Wheeler and McFeely 1987) which is comprised of stabilized craton overlain by passive and displaced passive continental margin sediments. The sediments range in age from Proterozoic to Devonian and Jurassic. Lithologies are dominantly fine grained clastics and minor limestone and chert.

A suite of granite to syenite intrusive igneous rocks forming large discreet bodies and small stocks intrudes the Proterozoic sediments along a northwest-southeast trending belt that extends for over 80 km from Alder creek northwest of Tombstone Mountain to Hamilton Creek which is just southeast of the Lorrie claims.

Two significant north verging regional thrust faults; the Robert Service and Dawson thrust faults displace the Proterozoic passive continental sediments over younger Devonian and Jurassic sediments.

Property Geology

The Lorrie claims are located over a syenite intrusion that has cut Proterozoic "Grit Unit" consisting of fine grained quartzites, argillite and cherts. A number of east west structures host auriferous quartz and arsenopyrite veins which are the primary exploration target on the property. The sediments are hornfelsed at the intrusive contact and are commonly gossanous due to the formation of pyrite and pyrrhotite in the metamorphic aureole.

The iron rich contact metamorphic aureoles have a strong magnetic signature and all intrusives along the belt are contained within areas of high magnetic relief. The larger intrusions have a low magnetic signature surrounded by the high magnetic relief related to the contact metamorphic halo.

Structures hosting the quartz-arsenopyrite veins commonly trend 100° and dip steeply to the southwest. The main structure drilled in 1975 can be traced for approximately 300 m before it disappears under glacial moraine on both its western and eastern ends. Other veins on the property are exposed on ridge tops and disappear under talus cover off the ridges.

GEOCHEMISTRY

A total of six soil and 19 rock samples were collected during the work reported here. Samples were analyzed by Bondar Clegg and Company for Au, Ag, Cu, Mo, Pb, Zn, As, Ba, Sb, W, and Hg.

Seven of the samples were collected just outside the claim boundary. Sample locations are plotted on the property map (Figure 3) and the geochemical results are listed in Appendix C. Rock sample descriptions and selected geochemical results are listed in Appendix D.

The quartz-arsenopyrite veins contain ore grade material which returned values for gold up to 1.2 oz/ton, silver up to 1.53 oz/ton, copper up to 2.99%, and highly anomalous values for arsenic (>30000 ppm), barium (5000 ppm), antimony (11200 ppm), and to a lesser extent for tungsten (6840 ppm) and mercury (2950 ppb).

Six grab samples collected in 1988 from hornfelsed and gossanous sedimentary rocks on the Lorrie 10 claim returned anomalous values for gold, arsenic, copper and zinc. One sample (62859) assayed 6.2% zinc.

Anomalous results were obtained from samples collected in both quartzarsenopyrite veins hosted within the syenite intrusion and from samples of the sedimentary rocks in the contact metamorphic aureole.

CONCLUSIONS & RECOMMENDATIONS

The LORRIE Property hosts gold bearing quartz-arsenopyrite veins spatially and temporally related to mid Cretaceous syenite intrusions which cut Proterozoic and Cambrian sedimentary rocks of the "Grit Unit". Anomalous gold values also occur in fine grained quartzites within the metamorphic aureole surronding the syenite stock.

The mineral occurences contain anomalous Au, Ag, Cu, As, Ba, Sb, and locally anomalous Zn, Hg, and W.

The property warrants further work to locate and define areas of mineralization both within the intrusion as veins or disseminations and in the surrounding contact metamorphic aureole. Work on the property should consist of further soil and rock gechemistry, prospecting and trenching.

REFERENCES

- **Green, L. H.,** 1972: Geology of Nash Creek, Larsen Creek, and Dawson Map-Areas, Yukon Territory; GSC Mem. 364
- Holcapek, F., 1975: Assessment report on Mike lake Area, Yukon for Canalta Resources Ass. Rept # 090124
- Taylor, D.P., 1982: Mike Lake Area Yukon, Assessment Report for Mr. Seamus Young; Ass. Rept # 091446
- Wheeler, J.O., and McFeely, P., 1987: Tectonic Assemblage map of the Canadian Cordillera and parts of the united states of America; GSC O.F. 1565

APPENDIX A

Statement of Costs

STATEMENT OF COSTS

1. Field Work	
R. Allan Doherty 4 Days @ \$300 S. Ridgway 5 days @ \$250	1200.00 1250.00
2. Transportation	
Airfare Whitehorse to Dawson Truck rental Helicopter Charter	108.00 300.00 1358.00
3. Camp supplies	
propane \$ 36.00 groceries \$ 106.47 gasoline 240.31 meals 8.78 camp supplies 28.70 Total camp suplies	420.26
4.Analytical costs	
25 analyses "Gold + 10" 8 gold, 1 copper,1 gold/silver assay	552.85 97.50
5. Report writing & Reprographics	
R. A. Doherty 1.5 days @ \$300 S. Ridgway 1 day @ \$200.00 Drafting 15 hrs @ \$25/hr Reprographics Maps	450.00 200.00 375.00 300.00 _5.50
Total 1989 Assessment Value on Lorrie Claims	\$6,617.11

APPENDIX B

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

- I, R. Allan Doherty, hereby certify that:
- 1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., P.O. Box 5179, 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 Yukon Association of Professional Geoscientists and the CIMM.
- 4. I have no direct or indirect interests in the properties of Walhala Explorations Ltd.
- 5. I supervised the work program and the preparation of this report on the Lorrie property, which is based on data collected during property work and property visits between August 8-11 1989, and on the basis of information supplied by Mr. Simon Ridgway of Walhala Explorations Ltd.

February 20, 1990

R. Allan Doherty, B.S¢

APPENDIX C
Analytical Results

Geochemical Lab Report

RECEIVED OCT 1 0 1980

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REFERENCE INFO:

ANTE CALEMA CERTORICAL COMPRETANTS INC.

SUBMITTED BY: R. DOHERTS
DATE PRINTED: 5-007-89

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ب	SB	ARTIHONY	25	1 PPM	NOT APPLICABLE	INST. NEUTRON ACTIV.
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WALHALLA EXPLORATION LTD.

INVOICE TO: P.O. BOX 5179

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Geochemical Lab Report

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189-15		580	1.7	937	18	55	54	10400	2000	12	34	15	
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Registered Assayer, Province of British Columbia

APPENDIX D
Sample Descriptions

AURUM GEOLOGICAL CONSULTANTS INC. SAMPLERS: RAD/SR AUG 8-11,1989 LORRIE CLAINS NTS: 116A/4,5 WALHALA EXPLORATION LTD

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SAMPLE BUMBER	LOCATION	SAMPLE DESCRIPTION	ATTITUDE	VIDTA	AU PPB(OZ/TON	AG)PPM(oz/ton	CU)PPH (%)
£89-1	LORRIE 15	Dog tooth qtz vn with 30% apy in blebs to 5mm	105/85s	3-8 cm	(0.163) oz/ton		32
L89-2	LORRIE 15	Fine gr. syenite with 5% diss. apy & py			32 -	3.4	73
L89-3	LORRIE 13	fine gr green siliceous sediment. minor sericite			49	1.6	14
L89-4	LORRIE -	siliceous rusty weathering f.g. black & green sediment (skarn) with diss. cpy, minor malachite, azurite, py, apy			46	1.9	3749
L89-5	LORRIE 13	vein of massive apy and gtz in megacrystic syenite, diss. py in syenite	085/90	2-8 cm	(0.321) oz/ton	(1.53)	19020
L89-6	LORRIE 14	Qtz vo with massive Apy, Cpy, py. minor f.g. tourmaline	:		(0.145) oz/ton	12.2	18843
L89-7	LORRIE 14	Vein qtz and Apy, py and minor malachite			(0.604) oz/ton		4798
L89-8	LORRIE 14	Massive apy, tourmaline in qtz vein, mimor cpy			(0.220) oz/ton	1.5	265
L89-9	LORRIE 14	Crumbly limonite stained syenite with patchy Apy, diss. cpy		0.5 m	230	2.3	199
L89-10	LORRIE 14	Qtz vn. with apy bands, heavy scorodite stain, limonite		0.1 m	(0.960) oz/ton	13.3	(2.99%)
L89-11	AINB 9	Qtz wn with patchy Apy	100/805	0.1 n	(1.060) oz/ton	3.6	320
L89-12	,	Boulder of massive Apy	grab		(1.266) oz/ton	6.1	3000
L89-13	LORRIE 9	Otz vein with massive Apy, unidentified fine black metallic mineral	114/85\$	0.4 a	(0.216)	19.1	2284
L89-14	LORRIE 17	Sulphide rich f.g. quartzite 1-2% py		1.5 m	250	0.9	486
L89-15	LORRIB 17	Sulphide rich f.g. quartzite 1-2% py		3.0 m	580	1.7	937

