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GEOLOGICAL REPORT

ON THE

AFTOM 9 CLAIM

SKEENA MINING DIVISION

NTS 104B/9W

LONGITUDE 130° 24' LATITUDE 56° 38'

**SUB-RECORDER
RECEIVED**

CCT 28 1991

M.R. # \$.....
VANCOUVER, B.C.

FOR

WATERFORD RESOURCES LIMITED

By

GARNET L. DAWSON and DON J. HARRISON

**CAMBRIA GEOLOGICAL LTD
1531 West Pender Street
Vancouver, B.C. V6G 2T1
NOVEMBER 10, 1990**

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
Page 1 of 2
21,792

PART 1 OF 2: TO ACCOMPANY GEOPHYSICAL REPORT, PART 2 OF 2

SUMMARY

The Aftom 9 claim lies 1300 m east of the Eskay Creek gold-silver deposit. Line-cutting, UTEM geophysical surveys, and geological mapping were conducted on the Aftom 9 claim in October and November of 1990.

Geological mapping at 1:5,000 scale extended over most of the claim area. Due to snow cover, detailed work and geophysical surveys were confined to the areas of low elevation lying north of the Unuk River.

Geological mapping indicates the property is underlain by clastic sediments of the Lower to Middle Jurassic Salmon River formation and the Middle Jurassic Bowser Lake Group and that the strata have been folded into a major N/NE trending syncline.

The Salmon River formation underlies the basal polymictic conglomerate of the Bowser Lake Group. It is comprised of pyritic, carbonaceous, and locally fossiliferous finely laminated argillite and siltstone.

The Bowser Lake Group is comprised of interlaminated siltstone and argillite that coarsen down-section into a conglomerate unit consisting of sandstone, wacke, grit, and polymictic conglomerate. The conglomerate

contains pebble size clasts of argillite, siltstone, chert, quartz, and felsic volcanics.

The above units are folded into a major syncline that plunges approximately 12° in the direction of Azimuth 021° . The axial plane parallels the Unuk River and is overturned to the west. Faults with large displacements were not identified.

Mapping indicates the Salmon River Formation crops out in a 900 m wide band on the southeast corner of the Aftom 9 claim, south of the Unuk River. The Mt. Dilworth Formation contact lies just east of the claim boundary. These formations host stratiform and epithermal gold-silver mineralization on the adjoining Eskay Creek property. These formations were located during the mapping but could not be prospected or surveyed due to the snow cover. No significant showings were found within the Bowser Lake Group rocks.

The UTEM geophysics were conducted over an area of Bowser Lake Group rocks, and did not discover any well-defined anomalies. A number of weak conductors are attributed to shear/fault structures and lithologic contacts.

Future geological and geophysical work should concentrate along the ridge between the Unuk River and Storie Creek to better delineate the Salmon River formation. This area was under considerable snow cover during this mapping program. Work on the remainder of the property is not recommended at the present time.

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A. INTRODUCTION

A.1 Preface

This geological report was commissioned by Waterford Resources Limited and is based on geological mapping on the Aftom 9 claim by the authors during the period October 23 to October 31, 1990.

Weather conditions during this time were seasonable with approximately 0.5 metres of snow above the 750 metre contour and temperatures near the freezing point. Below the 750 metre contour the snow pack diminished quickly with virtually no snow in the creek bottoms at 500 metres elevation.

A compassed and picketed grid with a line spacing of 100 metres was utilized for geological control in the area between Ketchum Creek and the Unuk River. Air photo coverage at 1:15,000 scale provided control outside the grid area. Geological data was transferred and compiled on a 1:5,000 scale metric contour map.

This area is the focus of intense exploration activity as a result of recent base and precious metal discoveries at Eskay Creek, approximately 3 km to the northwest. Recent geological mapping by the B.C. Geological Survey Branch (Alldrick et al. 1989, Britton et al. 1989, 1990) and the

Geological Survey of Canada (Anderson 1989, Anderson and Thorkelson 1990) provides a geological framework for more detailed property work.

A.2 Location and Access

The property is situated approximately 950 km northwest of Vancouver and 80 km northwest of Stewart (Figure 1).

The area is most easily accessed by helicopter from Bob Quinn Lake along the Stewart - Cassiar highway, 30 km northeast of the property (Figure 2). Regular scheduled fixed wing service from Smithers and Terrace connect with a newly constructed air strip at Bob Quinn Lake.

The B.C. Provincial Government has recently completed an access road study from the Stewart-Cassiar highway into the Eskay Creek and Johnny Mountain properties. Proposed routes would pass within 20 km of the property (Britton et al. 1990)

A.3 History

Placer miners first came to the Unuk River valley in search of gold in the 1880's. Copper-lead-zinc-silver-gold showings near Eskay Creek were discovered and staked in 1932. Subsequent exploration activity concentrated on precious metal showings on the central and southern

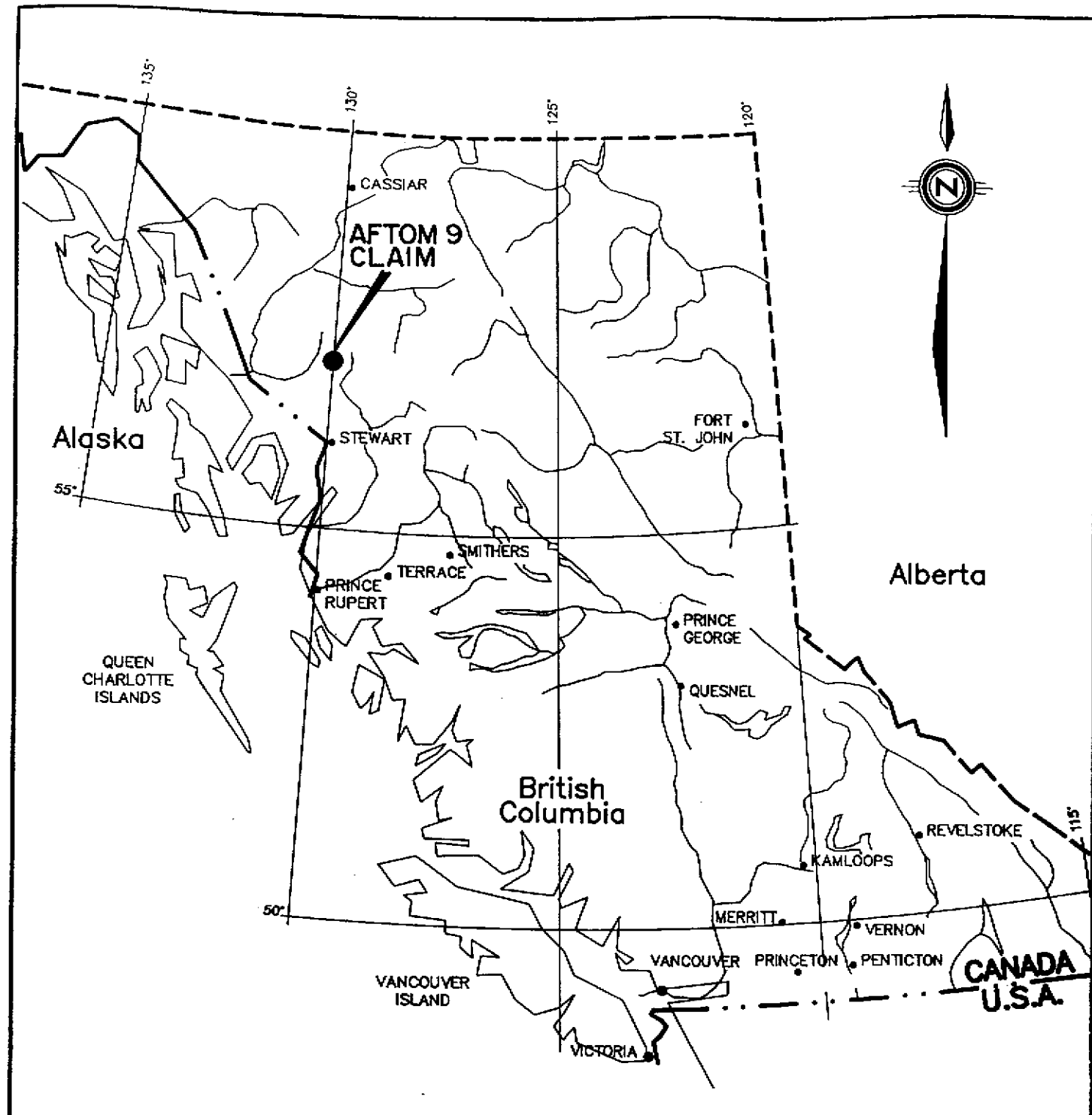
portion of the property. Prior to 1988 exploration work consisted of underground development on the "Mackay" and #22 zones, trenching, and drilling of 84 drill holes totalling 3 950 metres by 11 companies. In November, 1988, Calpine Resources Incorporated (now Prime Explorations Limited) announced the discovery of high grade precious and base metal mineralization in the #21A Zone. Mineralization consisted of massive sulphides including stibnite and realgar at the contact between rhyolite and overlying andesite and sediment. Additional drilling resulted in the delineation of the #21A zone and the discovery of the #21B and #21C Zones further to the north.

An in-house compilation of reserves by Prime Resources in September 1990 indicated probable geological reserves in the 21A and 21B zones as follows: at a cut-off grade of 0.25 oz/ton Au, 2,164,000 tons averaging 1.41 oz/ton Au and 51.9 oz/ton Ag; or, at a cut-off grade of 0.10 oz/ton, 5,018,000 tons averaging 0.70 oz/ton Au and 25.3 oz/ton Ag.

On the Aftom 9 claim, 1.3 km to the southeast of the Eskay Creek deposit there has been no previous exploration activity.

A.4 Land Status

The Aftom 9 claim is wholly owned by Tagish Resources Ltd. and consists of one 4-post (modified grid system) claim comprising 20 units



TAGISH RESOURCES LTD.

Report by:
GD/DH

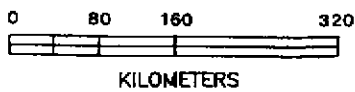
Date:
Nov. 1990

**AFTOM 9 CLAIM
B.C. Location Map**

NTS:
1048 /0W

Mining Division
Skeena

FIG. 1



(Figure 2). The claim is centred on longitude: $130^{\circ} 24'$, Latitude: $56^{\circ} 38'$.

Prior to the filing of this work the status of the claim was as follows:

Claim name	Record number	Units	Recording date	Expiry date
Aftom 9	7940	20	Sept 15/89	Sept 15/91

B. REGIONAL GEOLOGY - UNUK RIVER AREA

B.1 Introduction

The Unuk River area lies within Stikinia in the Intermontane Belt of the Canadian Cordillera (Wheeler et al. 1988). Anderson (1989) has divided this part of Stikinia into four tectonostratigraphic assemblages bounded by unconformities. These assemblages are:

- Paleozoic Stikine assemblage
- Triassic to Jurassic volcanic-plutonic arc complexes
- Middle and Upper Jurassic Bowser overlap assemblage
- Tertiary Coast Plutonic complex.

In the Unuk River area, Permian and older arc and shelf sequences of the Stikine assemblage are overlain by a thick (5 000 metres) succession of

volcano-sedimentary rocks comprised of the Upper Triassic Stuhini Group and the Middle Jurassic Hazelton Group (Figure 3, Britton et al. 1990). These in turn are overlain by marine basin sediments of the Middle to Upper Jurassic Bowser Lake Group. These rocks were deformed and weakly metamorphosed mainly during Cretaceous time. Intrusive rocks range in composition from diorite to granite and represent at least four intrusive episodes from Triassic to Tertiary time. Pleistocene and Recent basaltic eruptions are locally preserved.

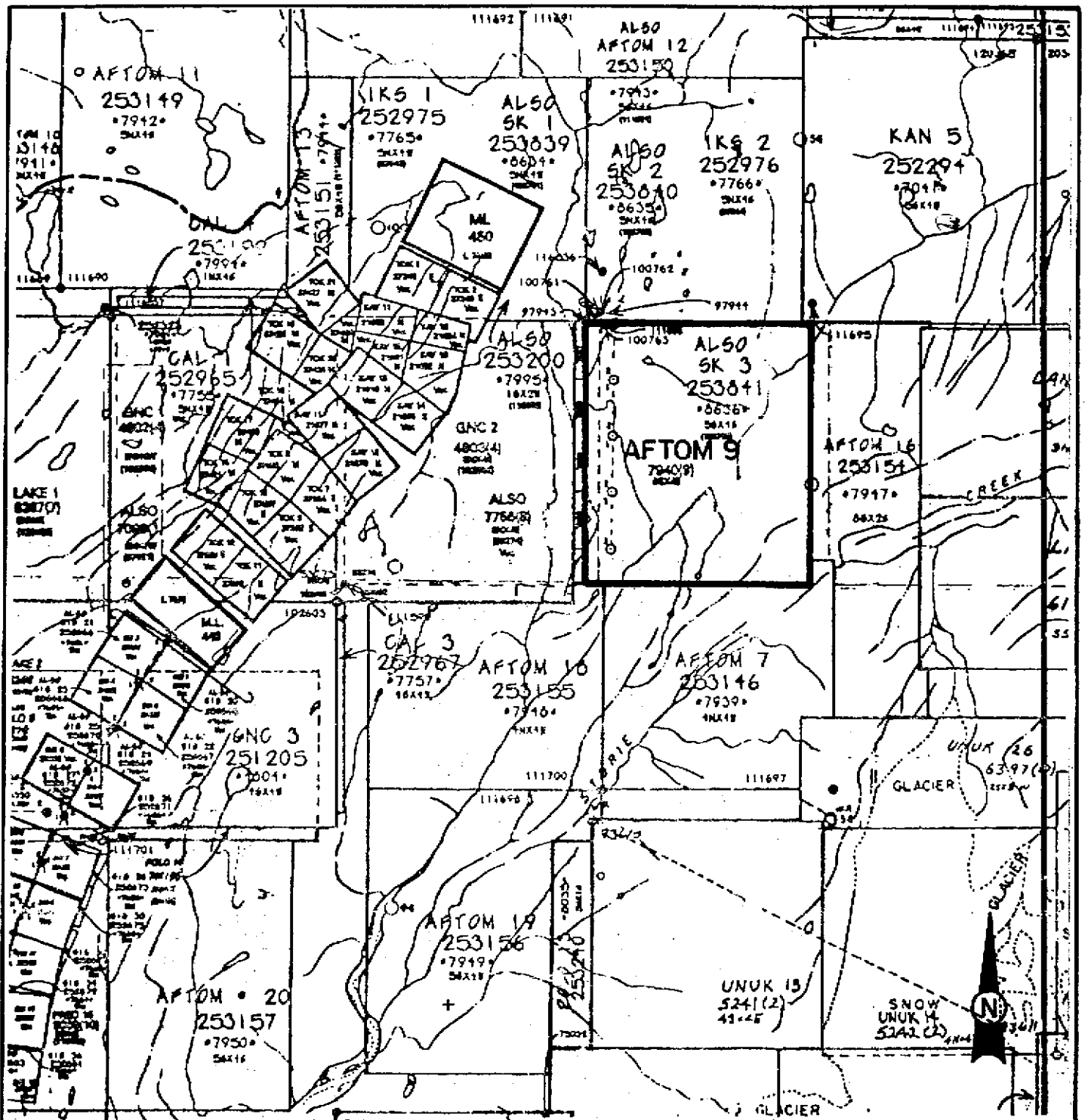
B.2 STRATIGRAPHY

B.2.a Paleozoic Stikine Assemblage

The Stikine assemblage consists of phyllite, siliceous siltstone, ribbon chert, tuffaceous wacke, foliated plagioclase porphyry, thick limestones, felsic tuffs, and basaltic pillow lavas (Britton et al. 1990). These rocks do not outcrop in the area but are presumed to be basement on which the overlying Mesozoic arc assemblages developed.

B.2.b Upper Triassic Stuhini Group

The Stuhini Group consists of clastic sediments, limestone, and intermediate to mafic volcanoclastic rocks and flows. The volcanic rocks are often pyroxene phyric (augite) that form useful marker horizons east of the Unuk valley (Britton et al. 1990). The unit shows both gradational and unconformable contacts with the overlying Hazelton Group.



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Report by:
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Date:
Nov.1990

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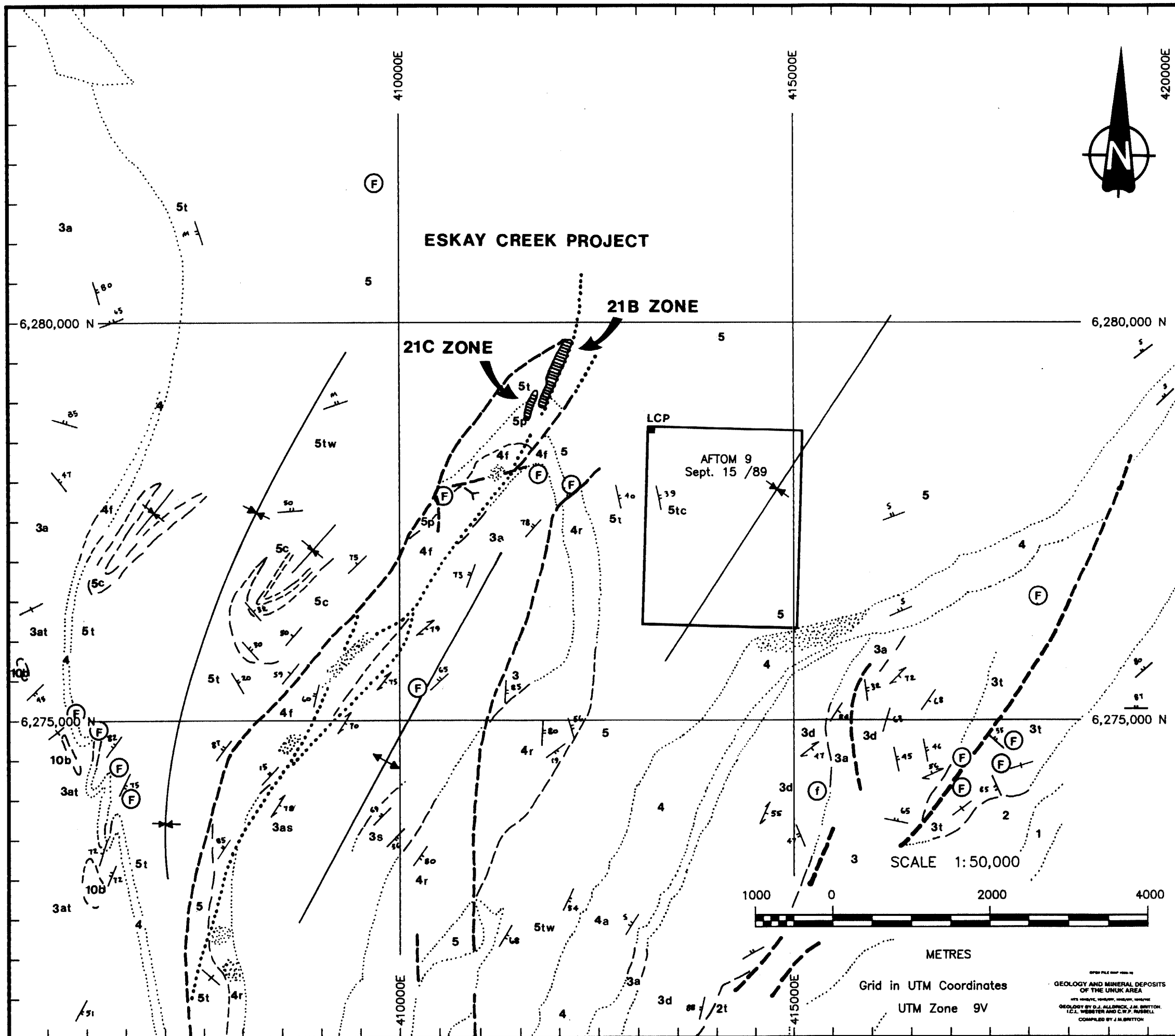
Mining Division
Skeena

**AFTOM 9 CLAIM
Claim Map**

Scale 1:50,000

0 2 KM

FIG.2



LEGEND

VOLCANIC AND SEDIMENTARY ROCKS

TRIASSIC TO JURASSIC
HASELTON GROUP

MIDDLE JURASSIC (TOARCIAN TO RAJOCIAN)

5 SILTSTONE SEQUENCE (Salmon River Formation):
 5c Chert pebble conglomerate and arenite
 5t Metachannel bedded siltstone and shale (turbidite)
 5s Thinly bedded wackes
 5p Andesitic pillow lavas and pillow breccias with minor siltstone interbeds

LOWER JURASSIC (TOARCIAN)

4 FELSIC VOLCANIC SEQUENCE (Mount Dilworth Formation):
 4a Variably bedded airfall tuffs
 4f Massive felsic tuff
 4r Black and white, carbonaceous felsic volcanics; locally flow banded and autobrecciated

LOWER JURASSIC (FLIENSBACHIAN TO TOARCIAN)

3 PYROCLASTIC EPICLASTIC SEQUENCE (Betty Creek Formation):
 3a Green and grey, massive to poorly bedded andesite
 3d Grey, green and purple dacitic tuff, lapilli tuff, crystal and lithic, massive to well bedded; feldspar phytic
 3t Black, thinly bedded siltstone, shale and argillite (turbidite)

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINERURIAN)

2 ANDESITE SEQUENCE (Box River Formation):
 2a Grey and green, plagioclase + hornblende porphyritic andesite; massive to poorly bedded
 2s Grey, brown and green thinly bedded, tuffaceous siltstone and fine grained wackes
 2t Black, thinly laminated siltstone (turbidite); shale argillite

TRIASSIC
STURUMI GROUP

UPPER TRIASSIC (CANNIAN TO NORIAN)

1 LOWER VOLCANOSEDIMENTARY SEQUENCE
 1v Brown and grey, fine grained tuffaceous wackes; minor siltstone or conglomerate
 1a Grey, fine-grained, andesitic ash tuff; feldspar and hornblende phytic
 1p Grey and green, andesitic breccia with augite-hornblende-plagioclase clasts and augite-rich matrix

INTRUSIVE ROCKS

10 SYN TO POST-VOLCANIC INTRUSIONS:
 10b Barb Lake Dyke: fine to medium-grained hornblende diorite

SYMBOLS

Geological boundary (defined, approximate, assumed)

Bedding, tops known (horizontal, inclined, vertical, overturned)

Bedding, tops unknown (horizontal, inclined, vertical)

Bedding, estimated dip (gentle, moderate, steep)

Compositional layering in metamorphosed rocks: foliation (inclined, vertical)

Regional anticline; syncline

Antiform, synform (normal, overturned)

Fault (defined, assumed; D=downthrown side)

Air photo lineament

Fossil locality

Flame

Adit

Disseminated pyrite in felsic volcanics

TAGISH RESOURCES LTD.

Report by: GD/DH	<h2 style="margin: 0;">AFTOM 9 CLAIM</h2> <h3 style="margin: 0;">Regional Geology Map</h3>
Date: Nov. 1990	
NTS: 104B /9W	
Mining Division Skeena	Fig. 3.

SCALE 1:50,000

1000 0 2000 4000

METRES

Grid in UTM Coordinates
UTM Zone 9V

GEOLOGY AND MINERAL DEPOSITS OF THE UNIK AREA
 BY D. J. ALLDRICK, J. M. BRITTON, I. C. L. WEBSTER AND C. W. P. RUSSELL
 COMPILED BY J. M. BRITTON

B.2.c Lower to Middle Jurassic Hazelton Group

Lower Jurassic Unuk River Formation

The Unuk River formation is characterized by a monotonous sequence of massive fine grain feldspar-hornblende phyric intermediate pyroclastic rocks and minor flows. Interbeds of finely laminated tuffaceous siltstone, wacke, and conglomerate occur locally, but are not laterally extensive. A distinct potassium feldspar porphyritic andesite (Premier porphyry) occurs within this unit and is spatially and temporally associated with precious metal veins in the Sulphurets-Stewart area.

Lower Jurassic Betty Creek Formation

The Betty Creek formation is comprised of varicoloured intermediate volcanoclastic rocks and minor flows. Air-fall pyroclastic textures and marine fossils - pillow lavas indicate both subaerial and subaqueous deposition (Britton et al. 1990). The unit conformably overlies the Unuk River formation and is distinguished by its epiclastic nature, maroon colour, and abundant ferruginous quartz veins.

Lower Jurassic Mt. Dilworth Formation

The Mt. Dilworth formation is a thin, but widespread marker unit of intermediate to felsic pyroclastic rocks that overlies the Betty Creek formation. It can be traced from the Kitsault valley north to the Eskay Creek

area. The unit is comprised of pale green to white, dacitic to rhyolitic dust to lapilli tuff that may be welded or non-welded. Aphyric, spherulitic, flowbanded, and autobrecciated welded ash flows and/or rhyolite flows are common in the Unuk River area.

Lower to Middle Jurassic Salmon River formation

The Salmon River formation is comprised of turbiditic argillite, siltstone, sandstone and minor limestone that interfinger with and overlie thick pillow lava and pillow lava breccia in the Eskay Creek area (Britton et al. 1990). A lower basal pyritiferous wacke often contains belemnites and pelecypods (Weyla) that confine this unit to the lower to middle Toarcian. The basal wacke is typically less than 2 metres thick. The unit conformably overlies the Mt. Dilworth formation and hosts the precious and base metal mineralization at the #21 Zone in the Eskay Creek deposit. The unit is interpreted to represent the transition between arc volcanism and the onset of entirely marine sedimentation represented by the Middle Jurassic Bowser Lake Group (Britton et al. 1990).

B.2.d Middle and Upper Jurassic Bowser Lake Group

The Bowser Lake Group comprises a basal conglomerate unit that is overlain by a thinly bedded sequence of turbiditic argillite, siltstone, and sandstone. The resistive basal conglomerate unit contains pebble size clasts

of argillite, siltstone, chert, quartz and felsic volcanics that overlies the Salmon River formation in structural conformity (Anderson and Thorkelson 1990). The basal conglomerate unit is correlated with the widespread Ashman Formation of Tipper and Richards (1976) further to the south.

B.2.e Pleistocene and Recent

Basaltic flows and tephra are mainly preserved in valley bottoms west of the Harrymel-Unuk River drainage and in the Iskut valley (Britton et al. 1990). They consist of feldspar and olivine phyric basalt.

B.3 STRUCTURE

Regional folds interpreted from the outcrop trace of the Mount Dilworth formation and overlying sediments of the Salmon River formation indicate a series of northeast trending anticline - syncline pairs that plunge gently to the north. This outcrop trace has not been followed around the nose of the anticline at Eskay Creek or the keel of the synclinal in the Unuk River (Britton et al. 1990). Low angle thrust faults may be associated with this folding event.

A second period of folding related to north-south compression has resulted in open, upright, east-west trending folds. Associated with this

folding event are northwest trending strike-slip faults that dip to the northeast.

B.4 SETTING OF THE ESKAY CREEK BASE AND PRECIOUS METAL DEPOSIT

The #21 Zone base and precious metal deposits within the Eskay Creek area are currently being explored by Prime Explorations Limited and Stikine Resources Limited of Vancouver. The discovery area lies within a well-known belt of base and precious metal showings that has been explored intermittently since the 1930s. These prospects are contained in felsic volcanic rocks near the top of the Lower to Middle Jurassic Hazelton Group. Host rock stratigraphy is: a lower sequence of interbedded dacitic tuffs and wackes; a middle sequence of rhyolitic tuffs and breccias and flows, intercalated with mudstones.

Drilling has traced exceptionally high-grade gold and silver-bearing sulphide mineralization more than 1400 metres along strike and 250 metres down dip.

Two deposits, the 21A and 21B, have so far been delineated. Both comprise stratabound massive sulphide lenses within a tuffaceous mudstone unit at the rhyolite-andesite contact. Disseminated and stockwork

mineralization is also present in immediately underlying rhyolite. The northern part of the 21B deposit has two massive sulphide lenses within interflow mudstones of the upper sequence. The deposits have distinctly different mineralogies. The 21A is rich in stibnite and realgar with only minor pyrite and base metal sulphides. The 21B lacks stibnite and realgar but contains abundant sphalerite, tetrahedrite, boulangerite, galena and pyrite (Britton et al, 1989).

C. PROPERTY GEOLOGY - AFTOM 9 CLAIM

C.1 Introduction

The Aftom 9 claim is underlain by clastic sediments of the Lower to Middle Jurassic Salmon River formation and the Middle Jurassic Bowser Lake Group (Map 1). Felsic volcanics of the Lower Jurassic Mt. Dilworth formation outcrop just outside the claim block along the eastern and western claim boundaries. The above formations have been folded into a northeast trending syncline that plunges 12 degrees to the north.

C.2 Stratigraphy

C.2.a Lower Jurassic Mount Dilworth Formation

The Mount Dilworth formation was mapped in contact with the Salmon River formation along Storie Creek just outside the southeast corner of the claim block. At this locality, the Mount Dilworth formation consists of

1 to greater than 3 metre thick welded ash flows or rhyolite flows. The rocks are dark grey in colour, aphanitic, and often flow banded. Along Storie Creek, large boulders of Mount Dilworth felsic volcanic varied from ignimbrite, autobreccia, to pyroclastic rocks. Boulders of welded ash flow or rhyolite flow containing round 1 to 2 centimetre diameter lithophysae or spherulites are known locally as the "fisheye sandstone". The above features are diagnostic of a vent or proximal volcanic facies.

C.2.b Middle to Lower Jurassic Salmon River Formation

The Salmon River formation outcrops along the ridge between the Unuk River and Storie Creek. It is comprised of finely laminated black siltstone and argillite with minor buff to brown beds of sandstone. The unit is locally carbonaceous, pyritic, and often contains belemnite casts along its lower contact. The unit has a maximum thickness of 1 000 metres.

In Storie Creek, the Salmon River formation conformably overlies the Mt. Dilworth formation and locally contains felsic volcanic bombs of the underlying Mt Dilworth formation. The finely laminated sediment exhibits sag structures around the bombs which suggests that sedimentation and volcanism were contemporaneous. Way-up structures such as graded beds, channel scours, and flame structures indicate the rocks are overturned, with tops facing westward.

C.2.c Middle and Upper Jurassic Bowser Lake Group

The Bowser Lake Group underlies the majority of the Afton 9 claim. It is comprised of a basal conglomerate unit that is overlain by finely laminated argillite and siltstone.

The basal conglomerate unit is comprised of weakly foliated polymictic pebble conglomerate and grit interbedded with moderately to strongly foliated thinly laminated wacke, sandstone, siltstone and argillite. Conglomerate beds range from less than one metre to tens of metres in thickness. They are often clast supported and contain subangular to rounded pebble size clasts of argillite and siltstone (Salmon River formation ?), felsic volcanics (Mt. Dilworth formation ?), quartz (veins ?), and chert (Cache Creek Group ?). The basal unit outcrops to form resistive ridges east of the Unuk River and west of Ketchum Creek (Figure 3). It has a maximum thickness of 300 metres. The lower contact with the underlying Salmon River formation was observed in the southeast corner of the property but appears to be gradational. This unit is interpreted to represent shoreline or river channel facies (Britton et al. 1990).

The basal conglomerate unit is overlain by a thick section of foliated, laminated to bedded argillite, siltstone, and sandstone. The rocks outcrop

between the Unuk River and Ketchum Creek and have a minimum thickness of 300 metres.

C.3 Structure

Rocks underlying the Aftom 9 claim are folded into a major syncline that plunges 12° to the northeast (Maps 1). Fold limbs represented by the basal conglomerate unit of the Bowser Lake Group outcrop west of Ketchum Creek and east of the Unuk River. The outcrop trace of the Mt. Dilworth formation closes 8 km southwest of the property boundary along the Unuk River.

Stereonet plots of poles to bedding indicate the syncline plunges 12° in the direction of Azimuth 021° . A plot of poles to a-c joints suggests a similar plunge. This is in agreement with measurements obtained from minor parasitic folds observed in the field.

Axial planar foliation is well developed in the argillites and siltstones of the Salmon River formation and Bowser Lake Group. However, it is poorly developed in the coarser conglomerate unit of the Bowser Lake Group. A plot of poles to foliation indicates the average axial planar foliation strikes Azimuth 021° and dips 84° to the east. Bedding measurements at numerous outcrops were greater than foliation indicating the syncline is overturned to

the west. Axial plane measurements obtained from minor parasitic folds were also overturned to the west.

A younger folding event associated with north-south compression has resulted in gentle, upright, open folds. Foliation associated with this folding event is not well developed. These folds were observed east of the Unuk River and Ketchum Creek junction at the 600 metre elevation. The axial plane strikes Azimuth 107° and dips 85° south.

Major faults displacing stratigraphic units were not observed on the claim block. Small axial planar faults related to the earlier folding event are prevalent in the argillite and siltstone of the Bowser Lake Group. These faults strike northeast and dip steeply to the east or west and may be responsible for the numerous surface linears.

C.4 Rock Sampling

Approximately eight rock samples were collected from the property and submitted to Acme Labs for 30 element ICP analysis. Analytical methods are described in Appendix 1 together with results.

Table 1. Rock Sample Descriptions

Sample Number	Sample Description	Type
88301	Quartz vein	Grab
88302	Polymictic conglomerate	Grab
88303	Quartz vein	Grab
88304	Quartz vein	Grab
88305	Limonitic, black argillite	Grab
88306	Limonitic, pyritic, carbonaceous shale/argillite	Grab
88307	Rhyolite breccia, ~ 2% pyrite in veinlets/diss	Float
88308	Polymictic conglomerate with ~2% disseminated pyrite	Grab

C.5 Exploration Targets

Mapping on the Aftom 9 claim failed to discover significant alteration or mineralization. However, the claim is underlain at depth by similar stratigraphy that hosts base and precious metal mineralization at the nearby Eskay Creek deposit. The favourable Salmon River Formation crops out in a 900 m wide band at the southeast corner of the claim.

D. PROPERTY GEOPHYSICS - AFTOM 9 CLAIM

A UTEM 3 survey was carried out by SJ Geophysics personnel on the Aftom 9 claim on behalf of Canamera Exploration during November of 1990. The purpose of the survey was to search for massive sulphide deposits at depth. No well defined UTEM anomalies were located in the survey area. A number of very weak conductors, likely shear or fault zones and geological contacts were noted. Although the background conductivity is high (low resistivity) there is no indication of highly conductive graphite units in the survey area. The complete geophysical report on the property is contained within the accompanying document by SJ Geophysics and LaMontagne Geophysics Ltd, November 1990. The survey was conducted over Bowser Lake Group rocks and is not likely to have penetrated to the depth of the Salmon River Formation rocks.

E. SUMMARY AND CONCLUSIONS

Geological mapping at 1:5 000 scale was undertaken on the Aftom 9 claim during the period October 23 to October 30, 1990 to outline the property stratigraphy, structure, and extent of any alteration or mineralization. This work indicates the property is underlain by clastic sediments of the Lower to Middle Jurassic Salmon River formation and the Middle Jurassic Bowser Lake Group that have been folded into a major syncline (Maps 1).

The Salmon River formation underlies the basal polymictic conglomerate of the Bowser Lake Group. It is comprised of pyritic, carbonaceous, and locally fossiliferous finely laminated argillite and siltstone.

The Bowser Lake Group is comprised of interlaminated siltstone and argillite that coarsen down section into a conglomerate unit consisting of sandstone, wacke, grit, and polymictic conglomerate. The conglomerate contains pebble size clasts of argillite, siltstone, chert, quartz, and felsic volcanics.

The above units are folded into a major syncline that plunges approximately 12° in the direction of Azimuth 021° . The axial plane parallels

the Unuk River and is overturned to the west. Faults with large displacements were not identified.

UTEM geophysics in the survey area did not discover any well-defined anomalies. A number of very weak conductors are attributed to shear/fault structures and lithologic contacts.

Significant alteration or mineralization was not encountered during mapping. However, the Salmon River formation outcrops between the Unuk River and Storie Creek and just west of the Aftom 9 claim boundary. This same horizon hosts massive sulphide and gold-silver mineralization at the nearby Eskay Creek property and on the Sib claims of Consolidated Silver Butte - American Fibre Corporation. The Salmon River Formation crops out in a 900 m wide band on the property and, due to snow cover, was not prospected or surveyed.

F. RECOMMENDATIONS

The Aftom 9 claim is located favourably with respect to the nearby Eskay Creek deposit, however, the majority of the property is underlain by a thick sequence of Bowser Lake Group cover rocks.

Future geological and geophysical work should concentrate along the ridge between the Unuk River and Storie Creek to better delineate the Salmon River formation. This area was under considerable snow cover during this mapping program. Work on the remainder of the property is not recommended at the present time.

G. REFERENCES

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H. STATEMENT OF QUALIFICATIONS

I, Garnet L. Dawson, of Suite 205-5343 Yew Street, Vancouver, B.C. do hereby certify that:

- I graduated from the University of Manitoba, Winnipeg, with a degree of BSc (Geology) in 1981.
- I am currently enrolled in a Masters Program in geology at the University of British Columbia.
- I have worked with major exploration companies and government geological surveys since graduation.
- I am presently an employee of Cambria Geological Limited.
- I have not received, nor do I expect to receive any interest directly or indirectly in Waterford Resources Ltd.
- This report is based on geological mapping carried out during the period October 23 to 31, 1990 and a review of currently published data.



Garnet L. Dawson
Vancouver, B.C.
November, 1990

STATEMENT OF QUALIFICATIONS

I, Don J. Harrison, of 3685 West 11th Avenue, Vancouver, B.C., do hereby certify that:

- I graduated from the University of British Columbia, with a degree of B.Sc. (Geology) in 1984.
- I have been practicing my profession since graduation.
- I was an employee of Cambria Geological Ltd. at the time of this work.
- I have not received, nor do I expect to receive any interest directly or indirectly in Waterford Resources Ltd.
- This report is based on geological mapping carried out during the period October 23 to 31, 1990 and a review of currently published data.

A handwritten signature in black ink, appearing to read 'Don J. Harrison', is written over a horizontal line.

Don J. Harrison
Vancouver, B.C.
October, 1991

I. STATEMENT OF EXPENDITURES

Geological

Geological Consulting

Senior Geologist,	1 day @ \$450/day	\$ 450.00	
Project Geologist,	11 days @ \$400/day	\$ 4400.00	
Geologist,	11 days @ \$380/day	<u>\$ 4180.00</u>	
		\$ 9030.00	
Miscellaneous disbursements		\$ 191.63	\$ 9221.63

Geophysical

UTEM Survey on Ketchum Creek, Nov 6 - 21, 1990

4 mob/demob days @ \$1200/day	\$ 4800.00	
3 standby days @ \$1200/day	\$ 3600.00	
9 production days @ \$1200/day	\$ 14400.00	
2 travel days for Robert Brown	\$ 360.00	
Air fare and Travel Expenses	\$ 3161.51	
Freight Expenses	\$ 802.49	
Report	<u>\$ 425.00</u>	
		<u>\$ 27549.00</u>
TOTAL AMOUNT		\$ 36770.63

APPENDIX 1

Analytical Results and Methods

**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., Canada V6A 1R6

Telephone: (604) 253-3158 Fax: (604) 253-1716

**Geochemical Methods
Acme Analytical Laboratories Ltd.**

Soil Preparation: Dry soil or silt sample up to 1 Kg at 60 deg.C and sieve to -80 mesh.

Rock Preparation: Rocks or cores are crushed to - 3/16" and 250 gm is split out. This split is pulverized using a ring mill pulverizer to 99% -100 mesh.

ICP Analysis: 0.50 gm sample is digested with 3ml 3-1-2 HCL-HNO₃-H₂O at 95 deg.C for one hour and is diluted to 10ml with water. This leach is partial for Mn, Fe, Sr, Ca, P, La, Cr, Mg, Ba, Ti, B, W and limited for Na, K, Al.

Gold Analysis (Fire Geochem): 10 gm is ignited at 600 deg.C for 4 hours and fused with F.A. flux. The dore bead is dissolved in Aqua Regia and analysed by ICP.

Detection limit for Au 1 ppb
Pt 3 ppb
Pd 3 ppb
Rh 3 ppb

** Larger sample - on special request.

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Cambria Geological Ltd. PROJECT A-9 File # 90-5755
 630 - 1190 W. Pender St., Vancouver BC V6E 2R1 Submitted by: DON J. HARRISON

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
B 88301	1	4	7	34	.1	37	5	312	1.68	4	5	ND	2	54	.2	2	2	16	.29	.111	6	25	.61	44	.01	3	.92	.01	.07	1
B 88302	4	17	12	26	.1	36	4	102	2.16	12	5	ND	3	18	.2	5	2	16	.08	.041	9	18	.41	146	.01	3	.84	.02	.07	1
B 88303	2	7	7	19	.1	17	3	211	.78	2	5	ND	1	11	.2	5	2	4	.04	.019	7	9	.05	38	.01	3	.20	.03	.04	1
B 88304	2	7	7	36	.1	42	4	137	2.41	3	5	ND	1	8	.2	3	2	19	.04	.017	2	23	.82	28	.01	4	1.18	.01	.06	1
B 88305	1	49	10	78	.2	116	11	173	3.89	6	5	ND	2	12	.2	3	2	38	.06	.038	7	72	1.45	119	.01	5	2.12	.02	.11	1
B 88306	48	252	17	165	1.0	53	9	828	13.71	68	11	ND	2	55	3.6	4	2	18	7.60	.086	7	3	.25	20	.01	2	.33	.01	.14	1
B 88307	1	32	2	117	.2	29	27	935	6.55	3	5	ND	1	18	.7	2	2	204	1.41	.040	4	103	3.54	54	.10	2	4.27	.13	.07	1
B 88308	4	11	7	12	.1	18	2	56	1.77	7	5	ND	2	31	.2	5	2	9	.06	.041	10	19	.08	80	.01	4	.26	.03	.08	1

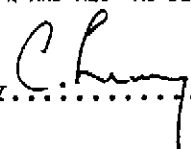
ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCK

DATE RECEIVED: NOV 6 1990

DATE REPORT MAILED:

Nov 7/90

SIGNED BY.....



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

