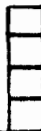


MAP No.

ASSESSMENT REPORT  
N. M. E. A. P.  
CONFIDENTIAL  
OPEN FILE



TYPE OF

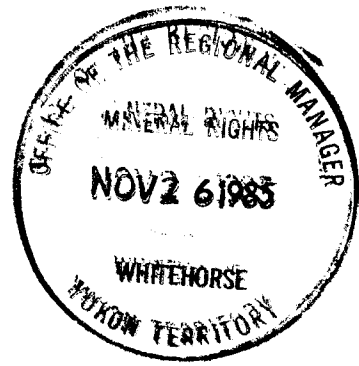
WORK: GEOLOGICAL, GEOCHEMICAL

105 D 3

REPORT FILED UNDER	Kerr Addison Mines Ltd.	DOCUMENT NO.	091667
DATE PERFORMED	August 3-13, 1985	DATE FILED:	November 12, 1985
LOCATION -	LAT.	60°03'N	
	LONG.	135°17'W	
CLAIM NO.	GLENLIVET 1-46 YA75077-YA75122		
VALUE \$			
WORK DONE BY	J. Pautler		
WORK DONE FOR	Kerr Addison Mines Ltd.		
REMARKS	<p>In 1985, 1:10 000 scale geologic mapping and geochemical sampling were done. A total of 120 rock and 9 soil samples were collected. Quartz veins and breccias occur in north-northwesterly trending fault zones. Low grade gold and silver mineralization occurs within the veins associated with galena, pyrite, malachite and jarosite.</p> <p style="text-align: right;">85 YEX p. 97 ✓</p>		

091667

(ASSESSMENT AND IN HOUSE REPORT)  
GEOLOGICAL AND GEOCHEMICAL REPORT  
ON THE  
GLENLIVET CLAIMS



NTS: 105D/3

Latitude: 60°03'

Longitude: 135°17'

AUGUST 3-13, 1985

*[Faint, illegible text]*



OWNER: AGIP Canada Ltd.,  
3000, 350-7th Ave. S.W.,  
Calgary, Alberta T2P 3N9

OPERATOR: Kerr Addison Mines Ltd.,  
703-1112 W. Pender St.,  
Vancouver, B.C. V6E 2S1

091667

By: J. Pautler  
October, 1985

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 .

*D. A. Edmond*

*for* Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

500100

## TABLE OF CONTENTS

	<u>Page</u>
SUMMARY AND CONCLUSIONS	1
LOCATION AND ACCESS	4
LEGAL DESCRIPTION	4
TOPOGRAPHY AND VEGETATION	5
HISTORY	5
1985 PROGRAM	6
GEOLOGY	
Regional	6
Property	7
Structure	12
Mineralization and Alteration	12
GEOCHEMISTRY	
Procedure	15
Results	15
CONCLUSIONS AND RECOMMENDATIONS	18
APPENDICES:	
I Selected References	
II Statement of Expenses	
III Statement of Qualifications	
FIGURES:	Following Page
Figure 1 Location Map 1:500,000	3
Figure 2 Claim Map 1:50,000	5
Figure 3 Geology and Geochemistry Highlights 1:25,000	11
Figure 4 Property Geology 1:10,000	Pocket
	"
Figure 6 Geochemistry 1:10,000	"
PHOTOS:	Following Page
Photo 1 Andesite dykes cutting granodiorite, northern GLENLIVET Claims	10
Photo 2 Conglomerate, northern GLENLIVET Claims	10
Photo 3 Ring dyke north of Crozier Creek	11
Photo 4 View of After Eight Zone fault and Scarlet Zone from north	12
Photo 5 View of Scarlet Zone from southeast	12
Photo 6 View of O'Hara Zone from northeast	14
Photo 7 View of Reunion Zone from southwest	14

## SUMMARY AND RECOMMENDATIONS

The GLENLIVET Claims were optioned from AGIP Canada Ltd. because the location has similar lithologies, structure and alteration to those present at the Mt. Skukum Gold deposit, 20 km to the northwest.

The property is primarily hosted by very explosive felsic to intermediate volcanic rocks of the northern part of the Tertiary Bennett Lake Cauldron Subsidence Complex. These overlie a Cretaceous (?) granodiorite intrusion of the Coast Plutonic Complex and Yukon Group metamorphic rocks.

Investigation during the 1985 season included geological mapping at a 1:10,000 scale and geochemical sampling. Three zones of interest, (the After Eight, Scarlet and Reunion zones), had been delineated during previous work by AGIP. These were investigated in more detail in 1985 and a fourth zone, (the O'Hara) was discovered.

The After Eight Zone consists of a northerly trending fault with associated strong argillic alteration, pyrite, kaolinite, jarosite as well as quartz stringers with minor galena, fluorite, calcite and malachite. Ag values of 63.0 ppm, 15.0 ppm and 5.2 ppm were obtained from selected samples of the galena bearing sections. AGIP had obtained similar Ag values and Au values of 70 ppb in rock as well as 200 ppb in soil.

The above mineralization extends for 150 to 200 m but the host fault, with local associated alteration, can be traced for almost one km. Regionally, the fault trends towards the Ridge (Shaw) Au-Ag occurrence 4 kms to the south which contains values up to 1192 oz/t Ag, 1.42 oz/t Au with similar mineralization to that of the After Eight Zone.

Similarities include:

1. association with quartz veining and silicification.
2. association with, in each case, a northerly trending fault, (these two faults being colinear).
3. association with galena.
4. presence of pyrite, fluorite, malachite and jarosite.
5. discontinuous nature.

The Scarlet Zone is a prominent red and orange gossan coating a pyritized, clay and sericite altered, fractured and locally silicified and brecciated spherulitic rhyolite unit. The gossan constitutes a weak As-Sb-Hg anomaly with minor Au, which ranges up to 330 ppb in soil and 60 ppb in rock.

The O'Hara Zone is similar to the Scarlet though much less extensive. It may be related to a subparallel fault or splay to the After Eight Zone fault. However, no anomalous Au-Ag values were obtained.

The numerous quartz and chalcedony veins and quartz breccias with associated calcite and fluorite in and north to northeast of the Reunion Zone yielded only two anomalous values; 70 ppb and 35 ppb Au. Quartz veining in this zone appears to be related to northwest trending faults. In fact all of the mineralization, silicification and other alteration on the GLENLIVET is apparently related to north to northwest trending and rarely northeast trending faults.

The strong alteration, intense faulting, pyritization and the presence of chalcedonic quartz, calcite and fluorite in veins on the property are features of an epithermal environment.

Despite the low precious metal values, the above features and the proximity and similarities of the After Eight Zone to the Ridge Au-Ag occurrence give the area some potential.

A \$10,000 follow-up program is recommended for the 1986 season which would involve hand trenching across the After Eight Zone and detailed prospecting and soil/talus sampling in the Scarlet Zone as well as further detailed prospecting both on and around the claims. The work on the Scarlet Zone constitutes the highest priority of the above.

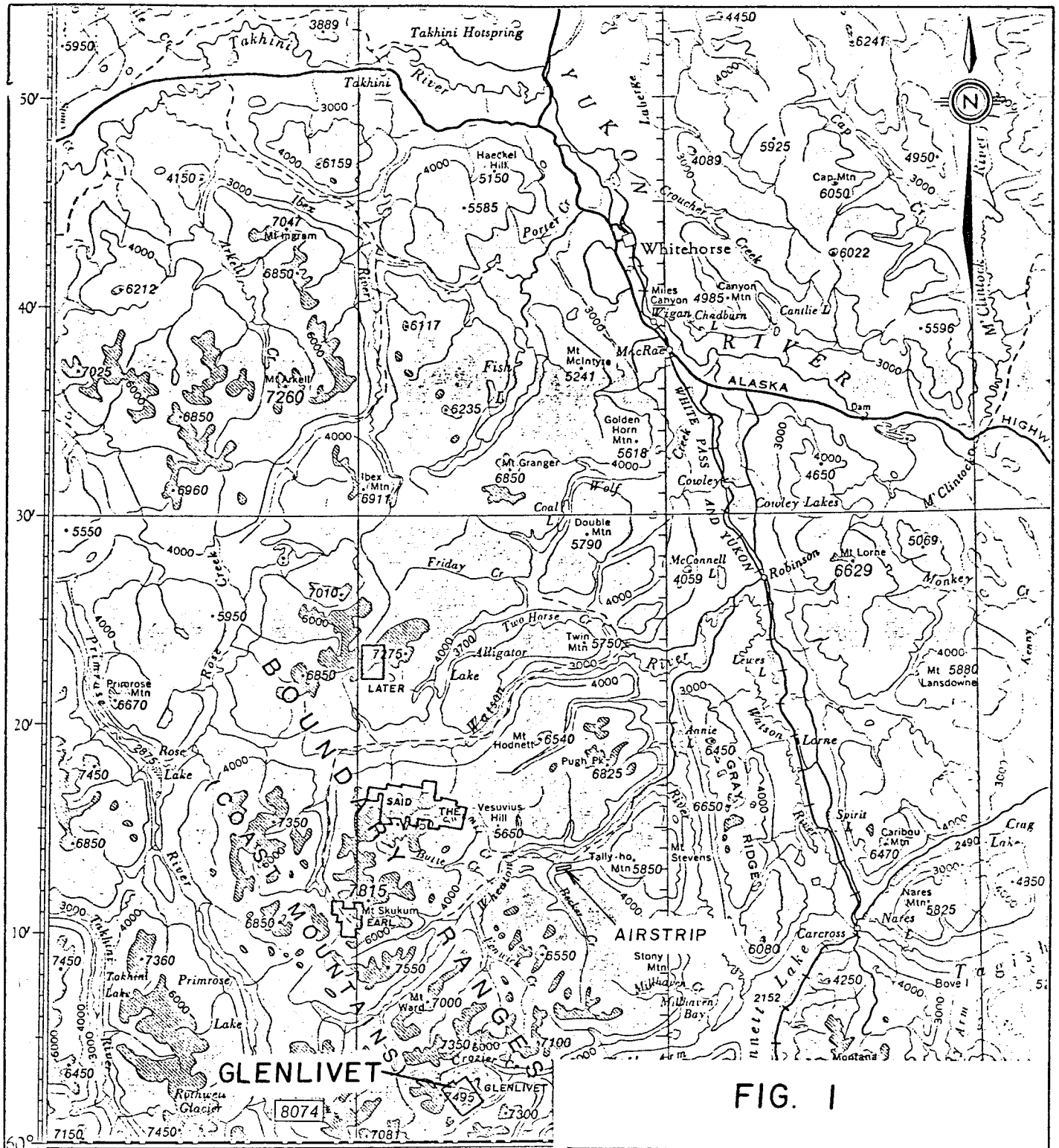


FIG. 1

KERR ADDISON MINES LTD	
GLENLIVET CLAIMS	
LOCATION MAP	
SCALE - 1 : 500 000	DATE - OCT. , 1985
DRAWN BY: P.H.	DATA - J.P. , L.G.
NTS - 105 D	REVISED -

LOCATION AND ACCESS

The GLENLIVET Mineral Claims, (N.T.S. Map Sheet 105D/3), are located in southwestern Yukon approximately 75 kms south of Whitehorse and 20 kms southeast of the Mt. Skukum Gold deposit. (Fig. 1).

Helicopter access is available from Whitehorse and constitutes a 1.4 hour round trip. However, during the 1985 field season a temporary Frontier Helicopter base was situated on the Wheaton River at Becker Creek, 20 kms northeast of the property. The base was located 1½ hours from Whitehorse via the Alaska Highway, the Carcross and the Annie Lake roads.

LEGAL DESCRIPTION

The GLENLIVET property consists of a block of 46 contiguous claims with record numbers YA75077 to YA75122 (Fig. 2). They were grouped on August 14, 1985 into 3 groups as follows:

- 1) GLENLIVET 1-4, 17-22, 33-38
- 2) GLENLIVET 5-10, 23-26, 39-42
- 3) GLENLIVET 11-16, 27-32, 43-46

All claims were recorded on September 10, 1982 and are located in the Whitehorse Mining Division.

The south corner of the GLENLIVET property is bounded by the GOAT claims, owned by Kennco Explorations Ltd. The RIDGE claims, (Aadastral Mining Corp.), lie within the Goat property and host the Shaw Au-Ag occurrence.

The registered owner of the GLENLIVET property is AGIP Canada Limited of Calgary, Alberta. Work undertaken in 1985 was by Kerr Addison Mines Limited, Vancouver, B.C. pursuant to an option agreement with AGIP.

The expiry date of the property was September 10, 1985. However, two years work was filed on all claims in Whitehorse on August 14, 1985 and the nature of this report is to discuss that work.

#### TOPOGRAPHY AND VEGETATION

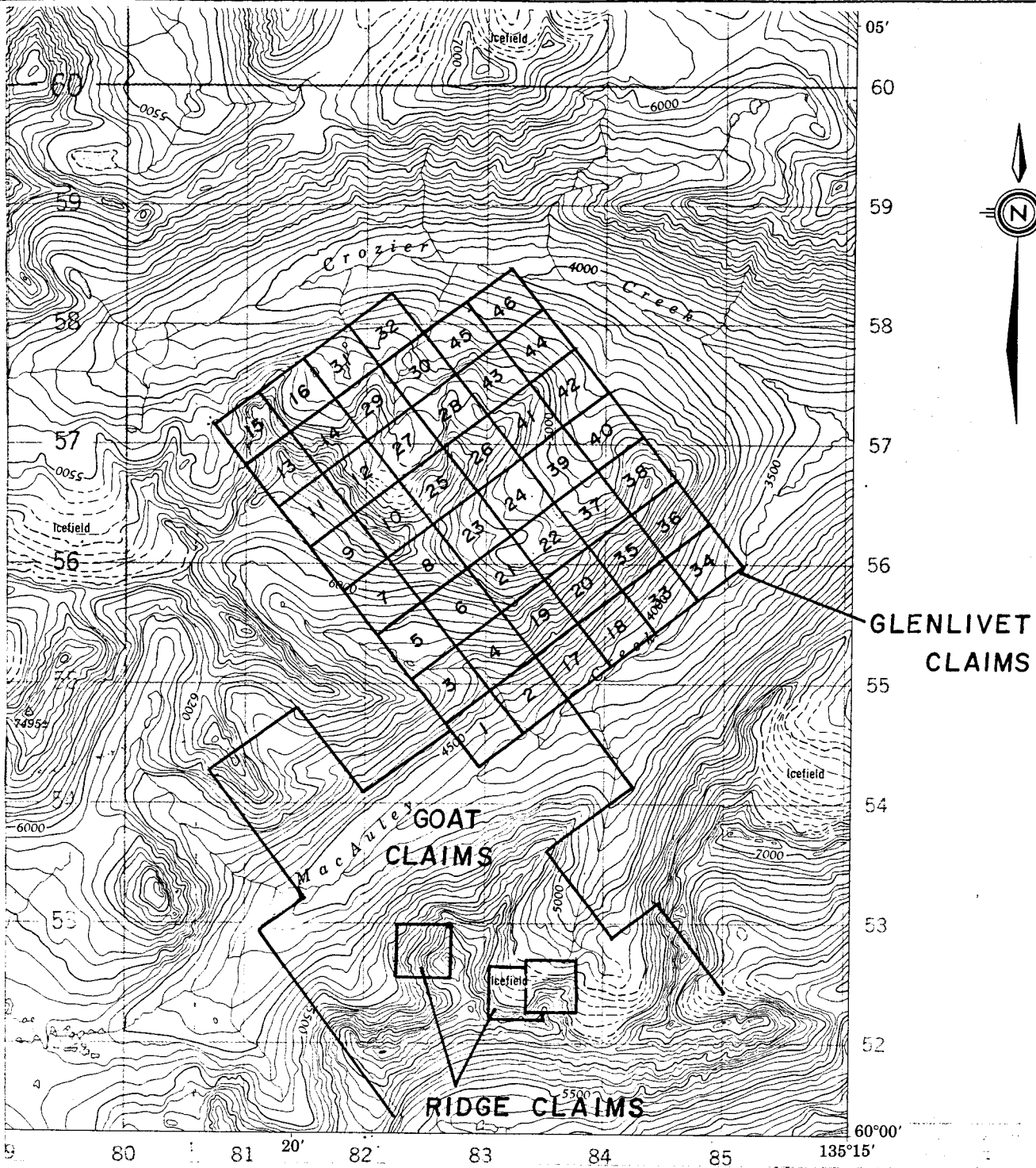
The GLENLIVET lies within the Coast Plutonic Belt in southwestern Yukon. The topography is mountainous with sharp rugged peaks and serrated ridges with glacial cirques and u-shaped valleys. A rock glacier occupies the central cirque on the property. Elevations range from 3600' in the eastern corner of the claims to 6800' on the main northwest trending ridge.

Most of the property lies above treeline and largely consists of outcrop and felsenmeer. Grass and moss cover only the few less rugged slopes. The lower valleys are forested with white spruce and alder.

#### HISTORY

The GLENLIVET claims were staked in September, 1982 by AGIP Canada Limited because the location has similar lithologies, structure and alteration to those present at the Mt. Skukum deposit. A reconnaissance geological and geochemical program conducted on the claims and surrounding area by AGIP in 1982 yielded mildly encouraging results. More detailed mapping and sampling of the claims, undertaken in 1983, outlined three areas of interest (After Eight, Scarlet and Reunion Zones).

In late 1984, Kerr Addison Mines Limited of Vancouver, B.C. optioned several Wheaton River area properties from AGIP which included the GLENLIVET Claims.



**FIG. 2**

KERR ADDISON MINES LTD	
GLENLIVET PROPERTY Y.T.	
CLAIMS MAP	
SCALE - 1:50 000	DATE - OCT., 1985
DRAWN BY: P.H.	DATA - J.P.
NTS - 105 D 3W	REVISED -

1985 PROGRAM

In the 1985 program, 20 person days were spent on the GLENLIVET claims between August 3 and August 13. The program involved geological mapping, with concurrent geochemical sampling, at a scale of 1:10,000, using compass, hipchain and altimeter for control. The three zones previously discovered by AGIP were investigated in more detail.

GEOLOGY

Regional:

The GLENLIVET property lies within the northern portion of the Bennett Lake Cauldron Subsidence Complex which consists of Eocene Skukum Group explosive volcanic rocks. The complex unconformably overlies Cretaceous granitic rocks of the Coast Plutonic Belt and Paleozoic metamorphic rocks of the Yukon Group.

For a more thorough description refer to Wheeler, 1961 and Lambert, 1974.

Regionally, the economic picture is favourable with the Venus Mine located 35 km to the east of the GLENLIVET, the Skukum Gold Deposit 20 km to the northwest and the Shaw Au-Ag occurrence 2 km to the south.

PROPERTY

A detailed outcrop map at a scale of 1:10,000 was produced and is plotted on Figure 4 in the back pocket. A generalized map is shown in Figure 3.

The GLENLIVET property is primarily underlain by five distinct volcanic units of the eastern half of the Crozier sub-area, Bennett Lake Complex, (as defined by Lambert, 1974).

The volcanic sequence unconformably overlies a Cretaceous hornblende to biotite granodiorite intrusion which is exposed along the northern edge and eastern corner of the property. The intrusion is equigranular, fine to medium grained and weathers a light brown colour. The mafic constituents comprise 10-20% of the rock and range from 100% hornblende to 100% biotite. The granodiorite is cut by numerous andesite dykes, (Photo 1), along the northern edge of the claims and is weakly brecciated near the overlying andesite contact in the eastern corner. The dykes appear to be feeders to andesites of the Skukum Group. There are also late andesite dykes which cut the youngest units of the volcanic sequence.

The isolated occurrences of the metamorphic basement complex are exposed on the northern GLENLIVET Claims. The northwestern exposure consists of a metasedimentary breccia composed of structurally brecciated quartzite and gneiss and intruded by a hornblende granodiorite dyke. The second occurrence consists of an isolated outcrop of quartzite surrounded by volcanic rocks. Both occurrences appear as windows of the basement within the volcanic complex. A table of lithological units is given below:

Tertiary-	<i>R.sph</i>	spherulitic rhyolite to rhyodacite and rhyolite dykes and sills (Unit 15 of Lambert, unnamed)
	<i>R-At</i>	rhyolite to andesite tuffs to volcanic breccias, minor rhyolite flow. (Unit 12 of Lambert, Crozier Tuffs and Lavas)
	<i>A br</i>	andesite volcanic breccia with related epiclastics and interbedded andesite tuffs, siltstone, mudstone and chert, minor dacitic tuffs, minor conglomerate (Unit 11 of Lambert, Crozier Breccias)
	<i>Rtw</i>	dark magnetic rhyodacitic, (also andesitic to dacitic), porphyritic welded tuff (Unit 8b of Lambert, Macauley Cr.Fm.)
	<i>At</i>	andesite to dacite tuff, lapilli tuff, agglomerate (Unit 5 of Lambert, Partridge Lk. Fm.)

Mesozoic GDi: hornblende and/or biotite granodiorite  
(Unit 2 of Lambert)

Paleozoic (Msd. bx: metasedimentary breccia  
or (  
Proterozoic(Qte: quartzite  
(Unit 1 of Lambert)

A more detailed description of the volcanic units follows:

At (Partridge Lake Fm.):

This is the oldest volcanic unit exposed on the property. It consists of light greenish grey andesitic to dacitic tuffs, lapilli tuffs and agglomerates and weathers a lighter colour than the dark cliffs of Crozier Breccias. The Partridge Lake Fm. is exposed on the southeast side of the property where it unconformably overlies deeply weathered and weakly brecciated granodiorite and is overlain by the MacCauley Creek Fm.

Rtw (MacCauley Creek Fm):

This unit predominantly occurs as dark weathering cliffs in the southeast portion of the claims. It appears to thin out towards the northwest where there is only limited exposure of the unit. It consists of distinct dark coloured, variably welded and commonly porphyritic and magnetic lapilli tuffs with minor flows. The composition is predominantly rhyodacitic with local variations to andesite and dacite. The MacCauley Creek Fm. is conformably overlain by the Crozier Breccias.

Abv (Crozier Breccias):

This unit consists of dark green andesitic volcanic and epiclastic breccias with interbedded andesite to dacite tuffs, mudstone, siltstone and sandstone. It is primarily exposed as dark weathering cliffs on the southeastern GLENLIVET Claims above MacCauley Creek. In this area it contains both granodiorite and volcanic fragments up to several metres in diameter. The unit thins out to the northwest

where it unconformably overlies the granodiorite and thereby contains a predominance of granodiorite fragments. Andesitic conglomerates, (Photo 2), outcrop at the extreme western limit of exposure of this unit. The Crozier Breccias may extend further to the west. However, outcrops of the andesite breccia in this locality have been grouped with the Crozier Tuffs and Lavas because of the limited extent of the breccias, non cliff-forming character and the presence of Crozier Tuffs in the vicinity. The Crozier Tuffs and Lavas conformably overlie the Crozier Breccias.

R-At (Crozier Tuffs and Lavas):

The GLENLIVET Claims are predominantly underlain by the Crozier Tuffs and lavas which comprise a succession of interbedded rhyolite to andesite tuffs, flows and breccias. The andesite breccias and agglomerates are indistinguishable from those of the Crozier Breccias save that they are interlayered with felsic tuffs. The tuffs include a rhyolite to rhyodacite tuff and lapilli tuff, light green dacite to andesite lapilli tuff and a crowded rhyodacitic lapilli tuff. A rhyolite feldspar porphyritic flow is exposed near the property centre. Much of this unit has been so extensively clay altered that the original composition could not be determined. This may be related to the abundant faulting in the area or may, in part, be due to deuteritic alteration. The Crozier Tuffs and Lavas conformably overlie the Crozier Breccias and unconformably overlie the granodiorite on the northwestern GLENLIVET Claims.

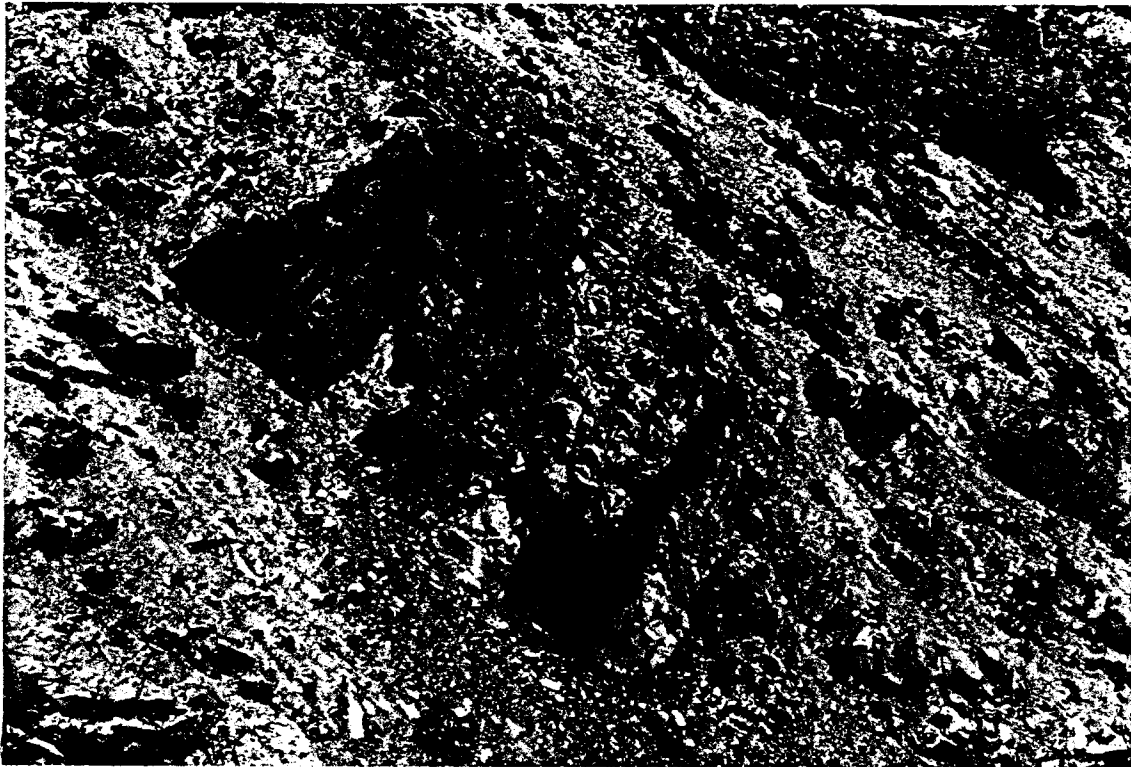


PHOTO 1: Andesite dykes cutting granodiorite, northern GLENLIVET Claims. (Scale: outcrop is 10m wide).



PHOTO 2: Conglomerate, northern GLENLIVET Claims in vicinity of Photo 1.

Rsph:

This unit is primarily composed of a distinct maroon coloured spherulitic rhyolite to rhyodacite, much of which is strongly clay altered. This felsic spherulitic unit which appears to include both tuffs and flows, underlies the Scarlet Zone in the central part of the claims. Altered rhyolitic sills and dykes have been included in this package. This is apparently the youngest unit on the property as indicated by the presence of sills and dykes cutting the Crozier Tuffs and Lavas. The main body of spherulitic rhyolite shows interfingering relationships with the Crozier Tuffs suggesting a contemporaneous to younger age.

Dykes:

There appears to be three distinct ages of dyking on the property. The andesite dykes, cutting the granodiorite in the northern portion of the property, may well be feeders to the Crozier volcanics. Rhyolite dykes, possibly related to the spherulitic unit, cut the Crozier Tuffs and Lavas. The youngest event is characterized by the intrusion of andesite and andesite tuff dykes which cut the spherulitic rhyolite.

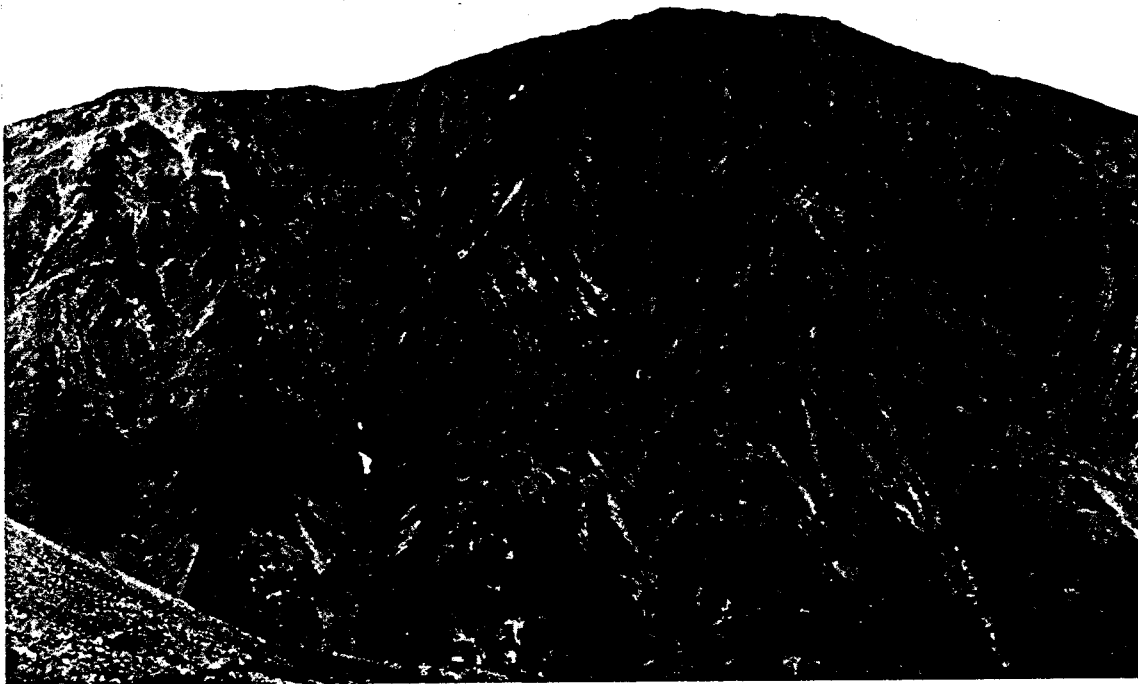
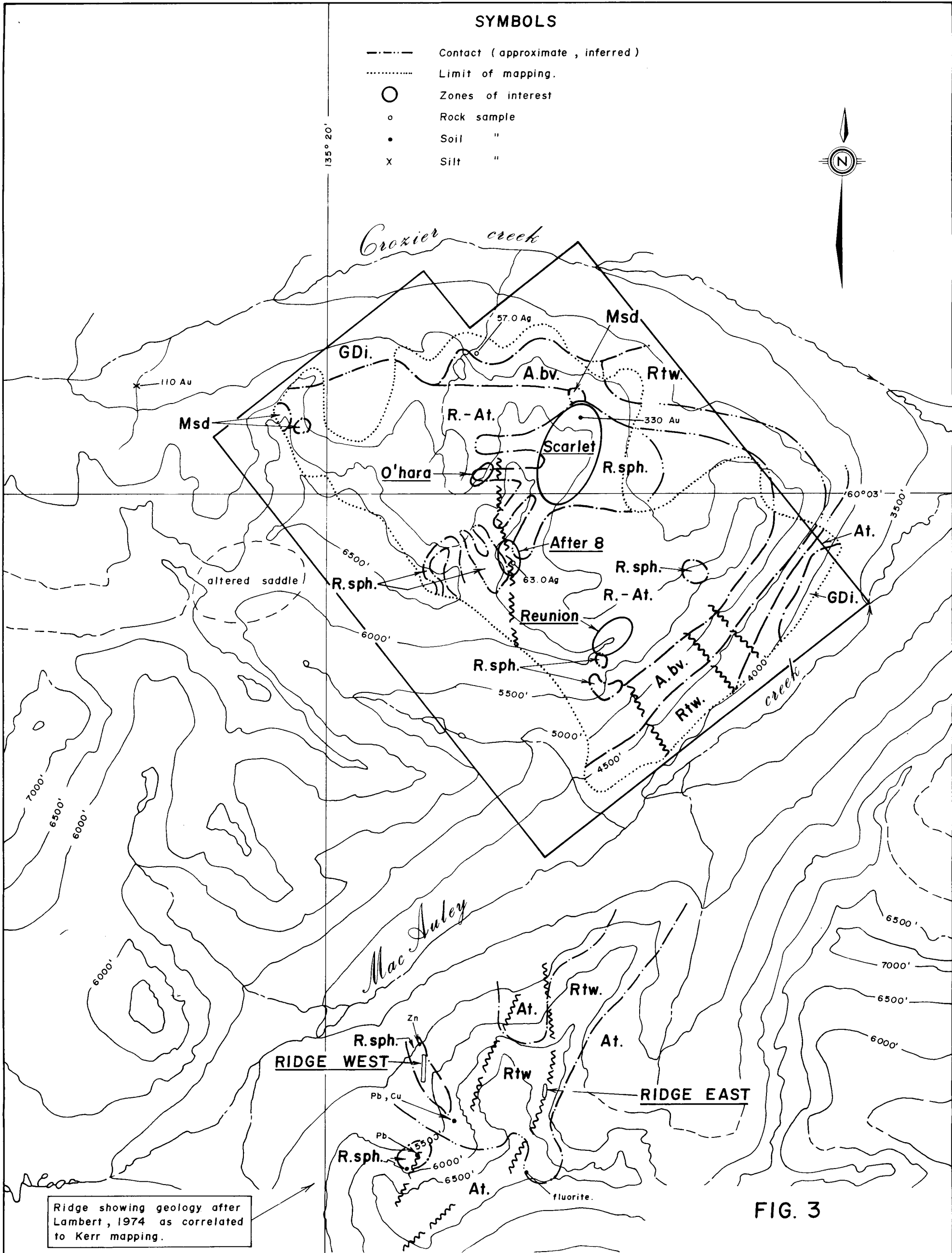


PHOTO 3: Ring dyke north of Crozier Creek  
(Scale: width of ring dyke approximately 400m)

**SYMBOLS**

- Contact ( approximate , inferred )
- ..... Limit of mapping.
- Zones of interest
- Rock sample
- Soil "
- x Silt "



**FIG. 3**

**LEGEND**

R.sph.	Spherulitic Rhyolite & Rhyolite dykes, sills.
R.-At.	Rhyolite to Andesite pyroclastics, minor flows.
A.bv.	Andesite volcanic breccia.
Rtw.	Rhyodacite welded tuff.
At.	Andesite pyroclastics
GDi.	Granodiorite
Msd.	Metasedimentary rocks.

—	TERTIARY
—	MESOZOIC
—	PALEOZOIC OR PROTEROZOIC

KERR ADDISON MINES LTD	
<b>GLENLIVET CLAIMS</b>	
<b>GEOLOGY &amp; GEOCHEMISTRY HIGHLIGHTS</b>	
SCALE - 1 : 25 000	DATE - OCT., 1985
DRAWN BY - P.H., J.P.	DATA - J.P.
NTS - 105 D	REVISED -

## STRUCTURE

Structurally, the GLENLIVET property is located between the margins of two nested calderas. The southeastern edge of the claims actually forms the boundary of the inner cauldron, (Lambert, 1974). The northwest trending faults in this area may be related to this ring fracture system; Crozier Creek forms the inner boundary of the outer ring fracture system (Photo 3). An eruptive centre lies to the west of the property. (Lambert, 1974).

Faulting on the GLENLIVET Claims as well as shearing fracturing and jointing, trends north to northwest and rarely northeast. It appears to be a primary factor in controlling alteration and mineralization.

### Mineralization and Alteration:

Four zones of interest have been delineated on the GLENLIVET Claims, (After Eight, Scarlet, Reunion and O'Hara - See Figure 3). Each of these zones contain either anomalous Au or Ag values, quartz veining and/or argillic alteration.

The After Eight Zone, (Photo 4), consists of a north to northwest trending ( $004^{\circ}$ - $350^{\circ}$ ) fault zone associated with strong argillic alteration with local concentrations of pyrite, kaolinite, jarosite, patchy silicification, as well as quartz stringers, (commonly drusy), with minor galena, fluorite, calcite and malachite. The host rock is rhyolite feldspar porphyry with rare quartz phenocrysts and a rhyolitic lapilli tuff. Calcite breccia and slickensided surfaces are evident along the fault.

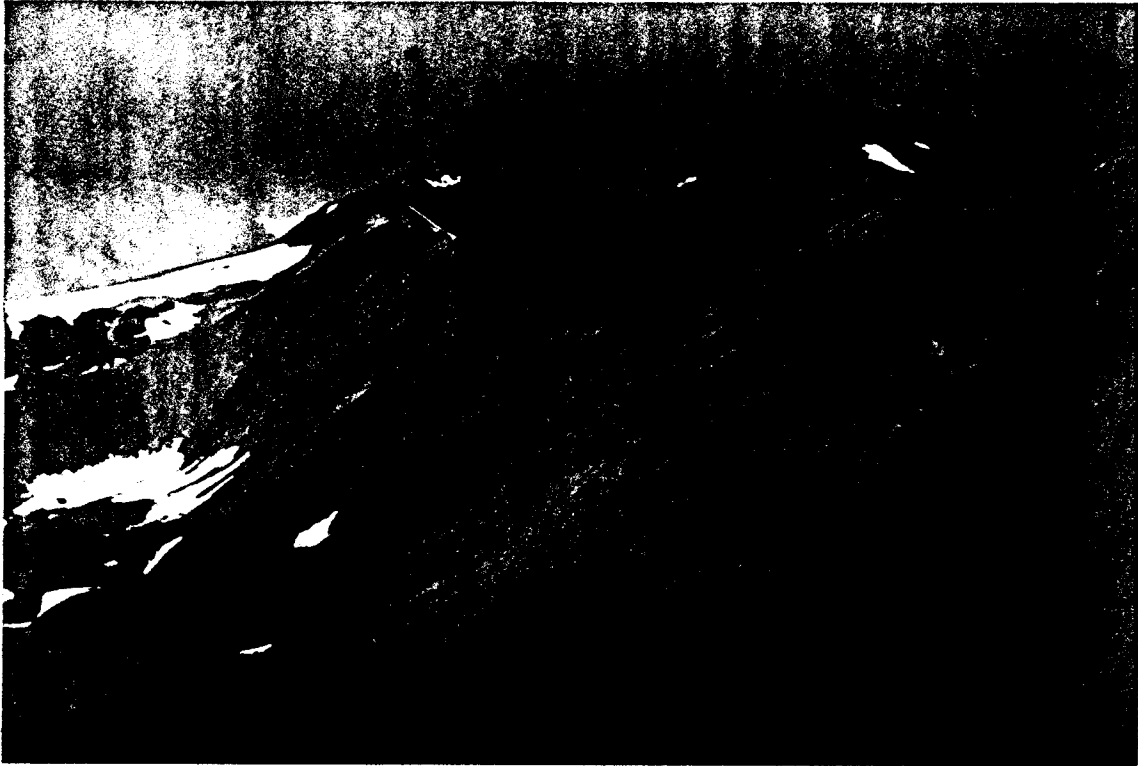


PHOTO 4: View of After Eight Zone fault  
and Scarlet Zone from north.  
(Arrow indicates trace of fault)



PHOTO 5: View of Scarlet Zone from southeast.

Although the above mineralization extends for only 150-200 m the After Eight Zone fault can be traced for almost one km. Approximately 250 m north of the After Eight Zone and along the same fault, rhyolitic tuffs are locally kaolinized, silicified and pyritized and contain some quartz-calcite stringers and jarosite. To the south, the fault cuts weakly bleached, pyritized andesites with minor quartz stringers and epidote. Regionally, the fault trends towards the Ridge (Shaw) Au-Ag occurrence to the south which exhibits the following similarities to mineralization in the After Eight Zone:

1. association with quartz veining and silicification.
2. association with, in each case, a north trending fault (these 2 faults being colinear).
3. presence of pyrite, galena, fluorite, malachite, and jarosite.
4. discontinuous nature of mineralization.

The Scarlet Zone, (Photo's 3,4 and 5), is a prominent red and orange gossan coating a pyritized, clay and sericite altered and locally silicified and brecciated spherulitic rhyolite unit covering an area approximately 600 m in diameter. Drusy and chalcedonic quartz stringers, vuggy quartz and drusy quartz fracture coatings occur less frequently. The mineralization and alteration within this zone appears to be related to numerous north to northwest trending faults, shears and fractures.

The O'Hara Zone, (Photo 6), is similar to the Scarlet though much less extensive, covering a 100m x 50m area. Like the Scarlet Zone, it consists of a red, orange and yellow gossan coating pyritized, clay altered and locally silicified spherulitic rhyolite. It may be related to a subparallel fault or splay to the After Eight Zone fault.

The Reunion Zone (Photo 7), covers a 200m x 300m area of abundant cryptocrystalline to chalcedonic quartz veining and stringers with calcite, limonite, and occasional fluorite. Similar quartz veins occur up to 1400m further to the north and northeast of this zone but are less extensive. Towards the northeast, drusy quartz and quartz breccias, (with drusy quartz coating altered fragments of host rock), are also present. The host rock of all the veins appears to be clay-sericite altered felsic lapilli tuff. Individual veins range up to 15cm in width and occur as groupings of veins within zones up to 60cm wide. Stringer zones are present peripheral to the main vein zones. Vein trends are commonly 4 to 6° and less commonly 350°. Very minor northeasterly and easterly trends were also observed.

Other isolated occurrences of quartz veins and stringers, alteration, silicification and mineralization were sampled across the property.

interbedded Crozier Tuffs and Lavas



← clay  
altered  
Rsph  
unit.

PHOTO 6: View of O'Hara Zone from northwest



PHOTO 7: View of Reunion Zone from southwest.

GEOCHEMISTRY

Procedure:

A total of 120 rock and 9 soil/talus samples were collected from the GLENLIVET property between August 3 and August 13, 1985. All samples were analyzed for Au, Ag, As, Sb and Hg with selected samples being analyzed for Cu and Pb. The sample locations and geochemical results are plotted on Figures 5 and 6 in the back pocket.

The rock samples consisted of grab samples except where chip samples of vein material could be gathered. The soil samples were collected from the B horizon wherever possible and talus samples were gathered from the finest material available on the slopes.

All samples were sent to Chemex Labs, North Vancouver for preparation and analysis using standard atomic absorption procedures, Au being first pre-concentrated by fire assay.

Results:

Ag values of 63.0 ppm, 15.0 ppm and 5.2 ppm were obtained from galena bearing sections in the After Eight Zone. The galena occurred only in trace amounts and was hosted by drusy quartz veins and stringers up to 3cm wide, and silicified portions of the rhyolite porphyry and lapilli tuff host. The samples were coated by a dark orange rust and the 63.0 ppm sample contained trace malachite, cerrusite and a black oxidation(?) product in addition to galena. Previously AGIP had obtained Ag values of 29.0 ppm and Au values of 70 ppb in rock and 200 pb in soil from this zone.

The anomalous values occur over a 150 to 200 m long fault hosted zone which appears to be at least 3-5 m wide. The immediate north and south extent of the fault is obscured by overlying talus.

Potential therefore, exists along the strike length of the fault which can be traced for one km. The Ridge Au-Ag occurrence to the south contains values up to 1192 oz/t Ag and 1.42 oz/t Au with the higher values associated with galena rich sections.

The only other anomalous Ag value, comparable to those in the After Eight Zone, is 57.0 ppm from a local 60cm wide malachite bearing pocket within the granodiorite near its contact with the Crozier Breccias.

The red-orange gossan of the Scarlet Zone constitutes a weak As-Sb-Hb anomaly with minor Au. The gold appears to be restricted to the north end of the zone with six soil values ranging between 25 and 330 ppb Au. One rock sample of a pyritic rhyolite porphyry dyke with quartz stringers, at the north edge of the zone yielded 60 ppb Au, 300 ppm As. Otherwise, the As values range up to 260 ppm, Sb up to 14.8 ppm and Hg up to 1900 ppm. Silver values in the Scarlet Zone are not anomalous.

The O'Hara Zone, although similar to the Scarlet was much less impressive. Only two anomalous arsenic values, 150 and 130 ppm, were obtained from rock samples within the zone.

The numerous quartz veins in the Reunion Zone yielded discouraging results. The only anomalous sample, consisted of limonite coated quartz stringers hosted by clay and sericite altered rhyolite and yielded 70 ppb Au.

A value of 35 ppb Au was obtained from a 30 cm wide zone of quartz veins and stringers within dacite lapilli tuff float 700 m northeast of the Reunion Zone. The other quartz veins and breccias sampled to the north and northeast of the Reunion Zone were not anomalous, although AGIP had obtained two soil values of 35 ppb Au, 5.6 ppm Ag and 5.4 ppm Ag approximately one km northeast of the zone.

A sample of rusty quartzite from the metasedimentary breccia on the northwest side of the property yielded anomalous values of 4.0 ppm Ag, 240 ppm As, 6.2 ppm Sb and 25 ppb Au. The sample was collected from one of several rusty and silicified patches, 30-40cm in diameter, within quartzite blocks(?) in the breccia. The patches appear to be related to minor northwest trending faults and fractures. Although, the zones are small and appear to be of limited extent, further prospecting west of this area may be useful as indicated below.

A silt sample collected by AGIP approximately 700m west of the claim boundary returned a Au value of 110 ppb. The area that this creek drains should be investigated as should an altered saddle observed in the vicinity.

CONCLUSIONS AND RECOMMENDATIONS

Alteration and mineralization on the GLENLIVET Claims is primarily controlled by north to northwest and rarely northeast trending faults and fractures.

Significant Ag results (up to 63.0 ppm), have been obtained from the After Eight Zone and similarities exist between mineralization in this zone and that of the Ridge (Shaw) Ag-Au occurrence 4 kms to the south.

A small hand trenching program on the After Eight Zone is proposed for 1986 to expose unaltered rock and to better define the mineralization.

The Scarlet Zone constitutes a weak As-Sb-Hg anomaly with minor Au which ranges up to 330 pb in soil and 60 ppb in rock. Follow-up of these anomalies may outline better concentrations of Au.

The O'Hara and Reunion Zones yielded discouraging results, consequently no further work is proposed here.

The 57.0 ppm Ag in the malachite bearing pod within the granodiorite appears to be of a limited nature and requires no further action.

Detailed prospecting is proposed to the west of the GLENLIVET property in order to investigate an altered saddle and surrounding area west of the property. The latter is drained by a creek that yielded 110 ppb Au. Little work has, as yet, been conducted along the western claim boundary.

The recommended 1986 program for the GLENLIVET is outlined below:

1. 2 trenches on the <u>After Eight Zone</u> 3 days at \$700/day		\$2100.
2. Detailed prospecting and soil sampling northern <u>Scarlet Zone</u> 2 man days; 40 soil, 10 rock samples		1100.
3. Detailed prospecting western edge and west of claims 4 man days; 20 rock samples		1200.
Helicopter, truck access for 2	(1000)	
Helicopter, truck access for 1-3		4000.
Assessment Fees		250.
Pre season preparation	(300)	500.
Report and drafting	(450)	850.
Total Recommended work:		\$10,000.
Minimum program consisting of 2 above		3,000.



**LEGEND**

LITHOLOGY		TEXTURES, STRUCTURES	
A	Andesite	p	Porphyry
D	Dacite	t	Tuff
R	Rhyolite	lap. t.	Lapilli tuff
RD	Rhyodacite	agg.	Agglomerate
Cgl.	Conglomerate	bv.	Volcanic breccia
Sts.	Siltstone	fl.	Flow
ss	Sandstone	bx.	Tectonic breccia
Di.	Diorite	cr.	Crowded
MINERALS & ALTERATIONS		Sph.	Spherulitic
qtz	Quartz	r	Rusty
bio	Biotite	gn	Green
hb	Hornblende	bl.	Black
ep.	Epidote	dy.	Dyke
cal.	Calcite	vn.	Vein
chl.	Chlorite	str.	Stringers
ser.	Sericite		
ka.	Kaolinite	l	Local
cl.	Clay	i	Intense
fluor.	Fluorite	s	Strong
ga.	Galena	m	Medium
py.	Pyrite	w	Weak
malach.	Malachite		
a	Alteration		
sil.	Silicification, silicified		

**GEOLOGY**

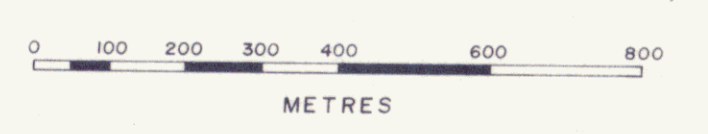
<b>R sph</b>	Spherulitic Rhyolite and related dykes and sills.
<b>R Al</b>	Rhyolite to Andesite pyroclastics and minor flows.
<b>A bv</b>	Andesite volcanic breccia.
<b>R tw</b>	Rhyodacitic welded tuff.
<b>Al</b>	Andesitic pyroclastics.
<b>G Di</b>	Granodiorite
<b>Msd bx</b>	Metasedimentary breccia.
<b>Qte</b>	Quartzite.

**SYMBOLS**

====	Veins
○	Outcrop or subcrop
○	Subcrop or talus
△	Float
---	Major contact (approx., interpreted)
- - -	Minor contact
~~~~	Fault, shear (definite, interpreted)
┌	Bedding, flow banding
┐	Joint.



FIG. 4



KERR ADDISON MINES LTD

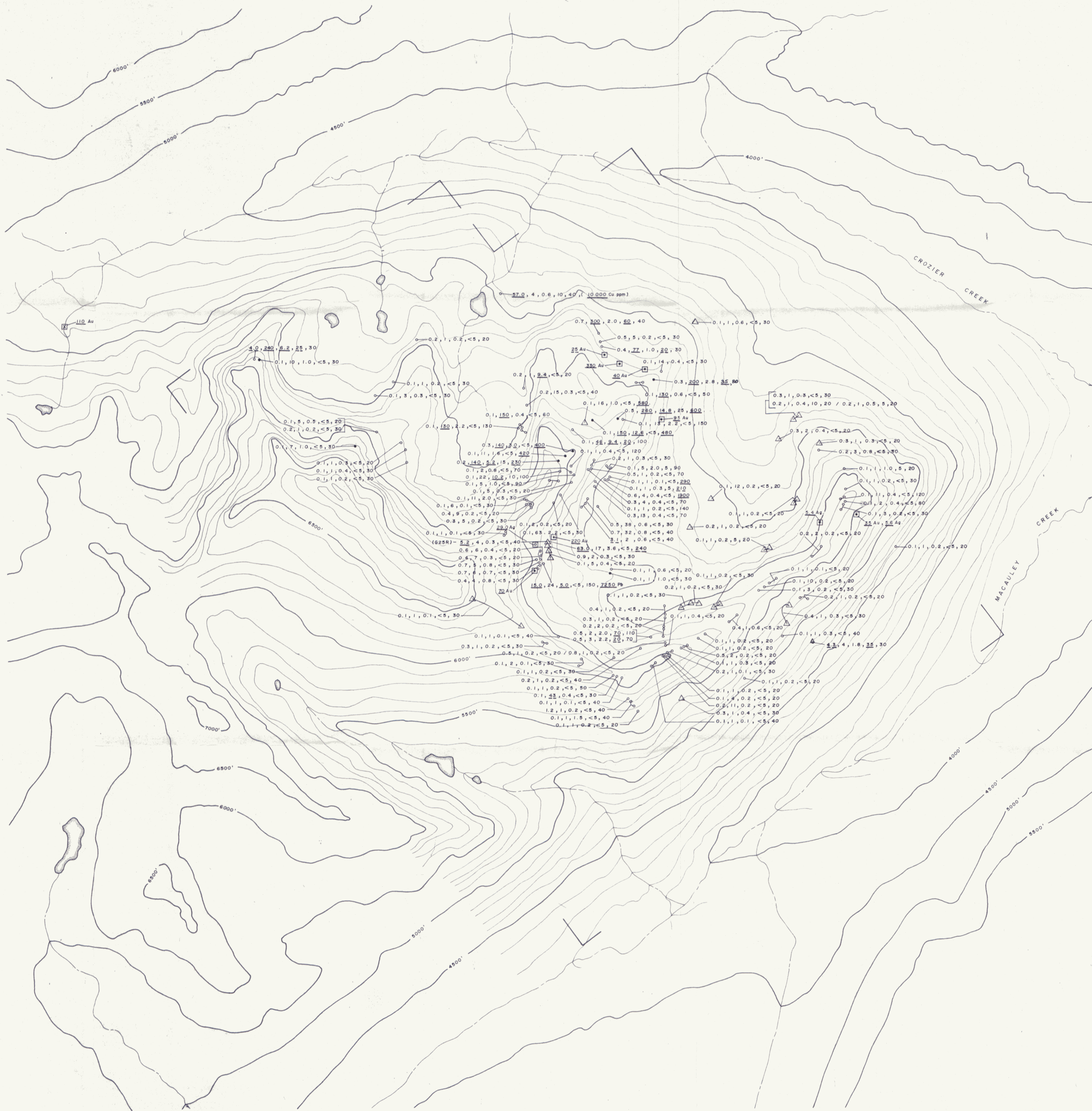
**GLENLIVET PROPERTY**

AGIP

YUKON TERRITORY

**GEOLOGY** 091667

SCALE - 1:10 000	DATE - AUGUST, 1985
DRAWN BY - P.H.	DATA -
NTS - 105 D 3	REVISED -



**LEGEND**

- o, Δ Rock sample (outcrop, float)
- Soil "
- x Silt "
- Composite sample
- , ⊠, ⊞ Anomalous AGIP samples (rock, soil, silt)
- Ag (ppm), As (ppm), Sb (ppm), Au (ppb), Hg (ppb)

FIG. 6



KERR ADDISON MINES LTD	
GLENLIVET PROPERTY	
AGIP	
YUKON TERRITORY	
GEOCHEMISTRY	
091667	
SCALE - 1 : 10 000	DATE - OCTOBER, 1985
DRAWN BY - P.H.	DATA - J.P., L.G.
NTS - 105 D 3	REVISED -

## APPENDIX I

### Selected References:

- AGIP Canada Ltd., 1982; Whitehorse Reconnaissance 1982  
Exploration Activities; Project  
400600, Company Report.
- Hulstein, R., 1983; Glenlivet Project 1983  
Exploration Activities; AGIP  
Company Report.
- Lambert, M.B., 1974; The Bennett Lake Cauldron Subsidence  
Complex, British Columbia  
and Yukon Territory; Geol. Survey  
of Canada, Bulletin 227.
- Wheeler, J.O., 1961; Whitehorse Map area, Yukon  
Territory, 105 D; Geol. Survey  
of Canada.
- Woodcock, J.R., 1973; Geological Report Macauley Creek  
Silver-Gold Prospects (Wheaton  
Project); Ridge Mineral Claims  
#1 to #30;  
In house report, J.R. Woodcock  
Consultants Ltd.,

APPENDIX II

Statement of Expenses

Wages:

Name	Address	Dates Worked In Field	Pre- Field	Field	Travel
J. Pautler	4912 62nd St., Ladner, B.C.	Aug 3-13/85	1	10	2
L. Grexton	1761 -16th Ave, Vancouver, B.C.	Aug 3-13/85	1	10	2
D. Arscott	2275 W. 20th Ave. Vancouver, B.C.	Aug 4/85		1	1

28 man days @ \$97.50 + 10% man / day : \$3003.00

Food:

26 man days @ \$16.00/man day 416.00

Hotel:

August 13, 14 120.00

Equipment:

Radio: 12 days @ \$7/day (\$200/mo) 84.00

Truck: 12 days @ \$33/day (1,000/mo) 396.00

Supplies:

Field supplies: 21 man days @\$12/man day (flagging, tophfil, rock bags, etc) 252.00

Camp supplies: 21 man days @ \$15/man day 215.00

Geochemical Analyses:

130 rocks @ \$31.98 each	\$3837.60
9 soils @ \$27.90 each	251.10
	<u>\$4088.70</u>

Shipping:

125 @ \$1.50 each	187.50	4276.00
	<u>\$4276.20</u>	

Air Charter: Frontier Helicopters

Aug 3, 4, 6, 9, 10, 13: 4.65 hours @\$517/hour 2405.00  
(includes fuel)

TOTAL EXPENDITURES \$11,267.00

APPENDIX III

Statement of Qualifications

I, Jean Marie Pautler, graduated from Laurentian University, Sudbury, Ontario in May, 1980 with an Honours Bachelor of Science Degree in Geology. I have since worked every season as a geologist in the Canadian Cordillera.

I was actively involved in the 1985 field program on the GLENLIVET Property.

*Jean Pautler.*

" Jean Pautler "

Jean Pautler  
Geologist