

MAP No.

105 D69

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

TYPE OF

WORK: GEOLOGICAL, GEOCHEMICAL

REPORT FILED UNDER	Kerr Addison Mines Ltd.	DOCUMENT NO. 091655
DATE PERFORMED	July 10 - July 23, 1985	DATE FILED: October 21, 1985
LOCATION - LAT.	60°16'N	AREA:
LONG.	135°27'W	
CLAIM NO.	SAID 1-16 YA77877-892	
	THE 1-48 YA77925-972	
VALUE \$		
WORK DONE BY	J. Pautler	
WORK DONE FOR	Kerr Addison Mines Ltd.	
REMARKS	<p>The property is underlain by felsic to intermediate volcanic rocks which overlie plutonic rocks ranging in composition from granodiorite to granite. Quartz-carbonate-chalcedony vein swarms are encountered near extensive fault zones.</p> <p>Analysis of 174 rock, 111 soil/talus and 2 silt samples indicates an abundance of low level anomalous gold values. Follow-up prospecting was done in a reconnaissance manner.</p> <p style="text-align: right;">42 85 p. 107 ✓</p>	

091655



GEOLOGICAL AND GEOCHEMICAL

REPORT

ON THE

SAID AND THE CLAIMS

NTS: 105D/6,3

Latitude 60°16'

Longitude: 135°27'

July 10 - July 23, 1985

(Initial 1985 Program)

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

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

J. Pautler

October, 1985

091655

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 \$ 6400.00 .

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

220104

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SUMMARY AND CONCLUSIONS

The SAID and THE claims were optioned from AGIP Canada Ltd. because of their proximity and geological similarity to the Mt. Skukum Gold Deposit. The initial program during the 1985 season involved mapping at a scale of 1:10,000 and geochemical sampling.

The properties are underlain by three distinct volcanic units of the Tertiary Skukum Complex; a felsic pyroclastic unit, an intermediate volcanic sequence and a felsic spherulitic flow unit, (listed from oldest to youngest). The volcanic complex unconformably overlies a granodiorite intrusion and is intruded by an alaskite pluton and related rhyolite dykes. Major block faults separate the felsic pyroclastic unit from the intermediate volcanic package.

Several northeast trending (and rarely northwest trending), quartz vein zones were found on the properties, the largest having a strike length of 3 km. This main vein zone consists of a swarm of quartz veins, stringers and breccias. A high level of emplacement for these veins is indicated by the following epithermal features: the abundance of chalcedonic quartz and the presence of opaline quartz and silicious sinter deposits.

Although the geochemistry of the main vein zone is low, 59% of the rock samples collected are anomalous, ranging from 25 to 190 ppb Au. A splay off of the main vein contains 510 ppb Au. The low geochemistry is not surprising considering the 'high level' characteristics of the vein zone according to Buchanan's Model. Ore grade mineralization may exist at depth.

The highest Au value on the property, (2500 ppb), came from the northeast trending vein(s) on SAID 9 near the southwestern limit of quartz vein exposure.

A 1700 ppb Au and 27.0 ppm Ag value are hosted by the felsic pyroclastic unit within the hornfelsed margin of the alaskite pluton. Several other low anomalous values are associated with this margin.

Overall, the Ag values are very low to negligible as are the As and Sb values.

The main vein zone, SAID 9 vein(s) and veins along the western edge of the alaskite pluton all appear to be associated with north to northeast faulting which is related to block faulting in the area. Other minor mineralization on the southeastern THE claims also appears to be related to northeast trending shear or fault zones.

Several similarities occur between mineralization on the SAID and THE properties and that on the Mt. Skukum property. These include the presence of bladed calcite and fluorite, proximity to hematite and jasper veins, and the association with faults and rhyolite dyking.

Follow up work was necessary upon the completion of this initial 1985 program and a subsequent detailed program was conducted during August to September, 1985, primarily to investigate the 3 km long quartz vein trend. Any recommendation for further work on the detailed area will depend on results of this program.

However several areas require additional mapping and prospecting based on this initial program. Low anomalous Au and Ag geochemistry was obtained from quartz veining on the western SAID claims and on the east to southeastern THE claims as well as along the margins of the alaskite pluton. Further investigation may reveal better defined mineralized zones in these areas. The numerous quartz breccia trains should also be sampled in more detail.

LOCATION AND ACCESS

The SAID and THE Mineral Claims, (N.T.S. Map Sheets 105D/6 and 3), are located approximately 10 kms northeast of the Mt. Skukum Gold Deposit in the Wheaton River District. Whitehorse lies 56 kms to the north-northeast of the claims. Latitude and longitude of property centre are 60°16'; 135°27'. (Figure 1).

Helicopter access is available from Whitehorse and constitutes a one hour round trip. However, for the majority of the 1985 field season, a temporary Frontier Helicopter base was situated along the Wheaton River at Becker Creek, 13.5 kms southwest of the SAID and THE claims. The base was a 1½ hour drive from Whitehorse via the Alaska Highway, the Carcross Road and the Annie Lake Road.

Legal Description

At the time of this program, the SAID property consisted of a group of 16 claims with record numbers YA77877 to YA77892. The THE claims consisted of three groups as follows:

THE 1 - 16	YA77925-YA77940
THE 17 - 32	YA77941-YA77956
THE 33 - 48	YA77957-YA77972

Joins St. Elias

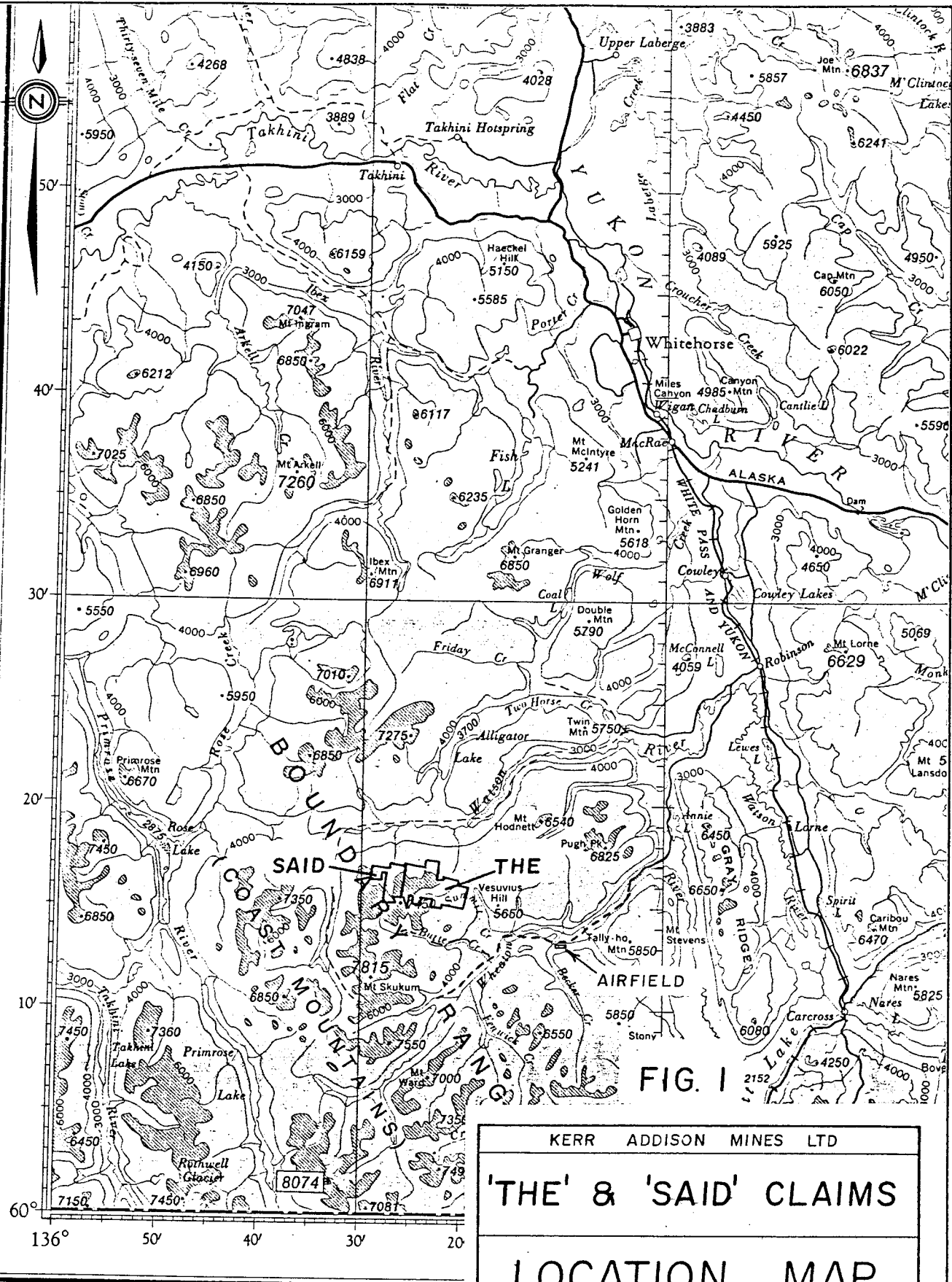
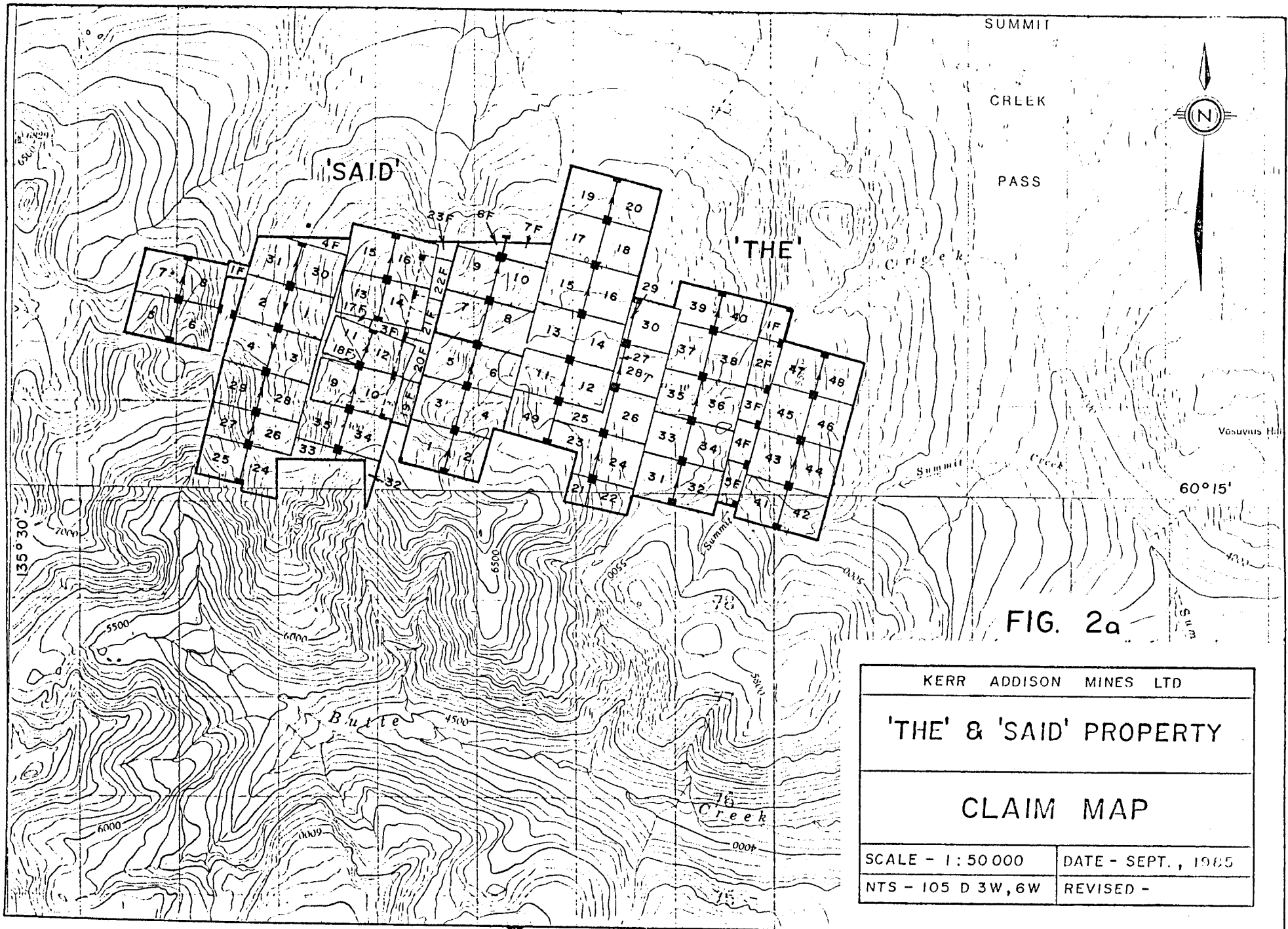


FIG. 1

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



All claims were recorded July 28, 1983 and are located in the Whitehorse Mining Division. (See Figure 2)

The SAID and THE properties are bounded on the south by the KUKU claims, (on which the Mt. Skukum Deposit is located), on the north and west by the BOTWAT claims, (owned by Rockridge Mines), and on the east by the Stone claims, (independent stakers).

The registered owner of the SAID and THE properties is AGIP Canada Limited of Calgary, Alberta. Work undertaken in 1985 was by Kerr Addison Mines Limited, Vancouver, B.C. under option from AGIP.

The expiry date of both properties was July 28, 1985. However, one years work was filed in Whitehorse on July 25, 1985 and the nature of this report is to discuss the work filed.

Topography and Vegetation

The properties lie within the Boundary Ranges or Coast Mountains of the southwestern Yukon. The topography includes steep cirques as well as rounded ridges and plateaus. Elevations range from 4800' in the extreme southeast corner of the THE claims to 7400' on SAID 10. Several permanent icefields occur, primarily on the SAID claims. Only local Alpine glaciation is evident in the area. East to northeasterly flowing Towle Creek divides the THE claims. Drainage on the SAID property is from several cirques which eventually flow northwards into the Watson River.

The SAID and THE claims both lie above treeline with grass and moss at the lower elevations and barren talus covered slopes higher up. Some of the valleys and very low areas are covered with willow and alder bushes.

History

The proximity and similar geology of the SAID and THE areas to the Mt. Skukum Gold Deposit probably led to the staking of the claims on July 18, 1983 by AGIP Canada Limited. AGIP had undertaken reconnaissance work in the area during 1980 and 1981 which consisted of stream sediment, soil and heavy mineral concentrate sampling and very minor rock geochemistry.

In late 1984, Kerr Addison Mines Limited of Vancouver, B.C. optioned several Mt. Skukum area properties from AGIP which included the SAID and THE.

1985 Program

In the initial 1985 program, 12 man days were spent on the SAID and 29 man days on the THE claims all between July 10 and July 23. The program involved geological mapping at a scale of 1:10,000 using compass, hipchain and altimeter for control. Rock, soil and very minor silt geochemical sampling was also conducted.

GEOLOGY

Regional:

The SAID and THE properties lie within the northern part of the fault bounded Tertiary Mt. Skukum Volcanic Complex. The complex overlies a Cretaceous(?) granitic intrusion and metamorphic rocks of the Yukon Group Basement Complex. A younger alaskite pluton cuts the volcanic package. For a more thorough description of the regional geology refer to Wheeler, 1961.

The Mt. Skukum Volcanic Complex has been mapped at a scale of 1:25,000 by Pride (1985 a) and will be referred to under Property Geology.

Property:

The SAID and THE claims are primarily underlain by two distinct volcanic units of the Tertiary Skukum Complex, an intermediate and a felsic pyroclastic sequence. This distinction corresponds to Fm 3 and Fm 2 of Pride, 1985a.

The intermediate package consists of medium to dark green andesite ¹ to dacite, commonly porphyritic, tuffs, lapilli tuffs and agglomerates with interbedded porphyritic flows and related volcanoclastics. Minor rhyodacitic pyroclastics and beds of siltstone, sandstone and chert also occur within this unit. The above sequence outcrops along the west and southwest sections of the SAID claims, on the THE claims north of the alaskite pluton and on a 5500' hill on THE 47. It appears to correlate with the intermediate flows and epiclastic rocks of Fm 3 as mapped by Pride.

The felsic sequence (Fm 2 of Pride) consists of rhyolitic to rhyodacitic and rarely dacitic pyroclastic rocks and related epiclastics. The felsic unit is commonly dark to medium green and maroon in colour, and contains a welded tuff and a crowded tuff unit. The felsic package underlies the northeastern SAID claims continuing across to northern THE and along the northeastern and southwestern margins of the alaskite pluton.

The relationship between the above two volcanic sequences was not clearly evident in the field except that intermediate feldspar porphyry dykes cut the felsic unit. However, stratigraphic sections by Pride indicate that the intermediate unit is the younger of the two.

1 identified in thin section as trachyandesite

A third volcanic unit is exposed on the southeastern THE claims. It consists of a light maroon, flow banded, brecciated and typically weakly clay altered spherulitic unit. It is primarily rhyodacitic to rhyolitic in composition with very minor dacite(?). This is equivalent to Fm 4 of Pride.

The volcanic complex unconformably overlies a biotite hornblende granodiorite to quartz monzonite intrusion which is primarily exposed on the northwest part of the SAID property. One small occurrence is exposed on the north-central THE claims. The intrusion is equigranular and varies from medium to coarse grained. The hornblende content ranges from 10-20% and biotite from 2-10%. Andesite dykes cut the intrusion and a few granitized andesite fragments lie within it. The age of the intrusion appears to be Cretaceous to Tertiary based on similarities to intrusions of that age in the southwestern Yukon.

A conglomerate with a medium green gritty andesitic matrix and pebble sized clasts of quartz monzonite occurs on the western SAID claims. One outcrop was observed near the andesite - older intrusive contact. It may represent an erosional surface between the andesites and the granodiorite.

The volcanic sequence on the THE property is intruded by an alaskite pluton which appears to be related, (i.e. the source), of the abundant rhyolite quartz feldspar porphyry dykes. The dykes cut all of the aforementioned units including the alaskite itself. This latter relationship suggests that the dykes occurred as a late stage phase of the intrusion of the alaskite. The genetic relationship is indicated by the quartz and feldspar porphyritic nature of both and the gradation of the alaskite to a very fine grained variety which borders on rhyolitic.

The rhyolite dykes are aphanitic, light buff to light grey in colour and weather a light buff to white. They commonly contain 5-20% white feldspar and clear quartz phenocrysts. Weak pervasive clay alteration is common.

The alaskite varies from very fine grained to medium grained and rarely coarse grained. It grades from equigranular to quartz feldspar porphyritic. The feldspars commonly exhibit clay and sericite alteration. Mafic minerals are generally absent but rarely 1-2% biotite is present. One to two percent fine magnetite is common.

A general table of lithological units is given below:

Youngest

- Rdy. : rhyolite to rhyolite quartz feldspar porphyry dykes.
- Al. : alaskite to alaskite quartz feldspar porphyry
- Rfl. : rhyolite to rhyodacite, rare dacite(?), spherulitic, flow banded (Fm. 4 of Pride)
- Ivs. : intermediate porphyritic pyroclastics (tuffs to agglomerates), and feldspar porphyries. (Fm. 3 of Pride)
- Rt. : rhyolite to rhyodacite rare dacite(?) volcanic pyroclastics (tuffs to volcanic breccias). (Fm. 2 of Pride).
- Cgl. : Conglomerate (Fm. 1 of Pride)
- GDi-QM : granodiorite to quartz monzonite (unit D of Pride)

Oldest

A generalized map divided into the above units is shown in Figure 3. A detailed outcrop map at a scale of 1:10,000 is plotted on Figure 5 in the back pocket. The legend is contained in Figure 4.

Structural:

Major block faulting is evident which predates intrusion of the alaskite: contacts do not show major offsets across the faults.

One such block consists of downdropped intermediate volcanic rocks within the felsic pyroclastic sequence. The northern boundary of the block is formed by a major northeast trending, (060°), fault that occurs along the main vein structure. The fault is marked by clay and sericite alteration as well as vein emplacement. Minor shear zones and a few slickensided surfaces are evident along its extent.

The sides of the block are delineated by two northerly trending faults which are primarily indicated by a change in lithology. The western boundary fault exhibits some quartz veining with associated clay and sericite alteration and is marked by a change in slope along the ridge top. A parallel fault to the above occurs about 200 m to the east and may be related to it. It is doubtful that this latter fault marks the block boundary since no major vertical displacement occurs along it. This fault is marked by a 2 m wide shear zone with quartz vein material and clay alteration. It extends at least slightly into the alaskite pluton.

A second downdropped fault block consists of the felsic, flow banded and spherulitic unit overlying the intermediate volcanic unit. The block is bordered by the felsic pyroclastic unit. The boundary faults are inferred due to the lithological and chronological changes across them.

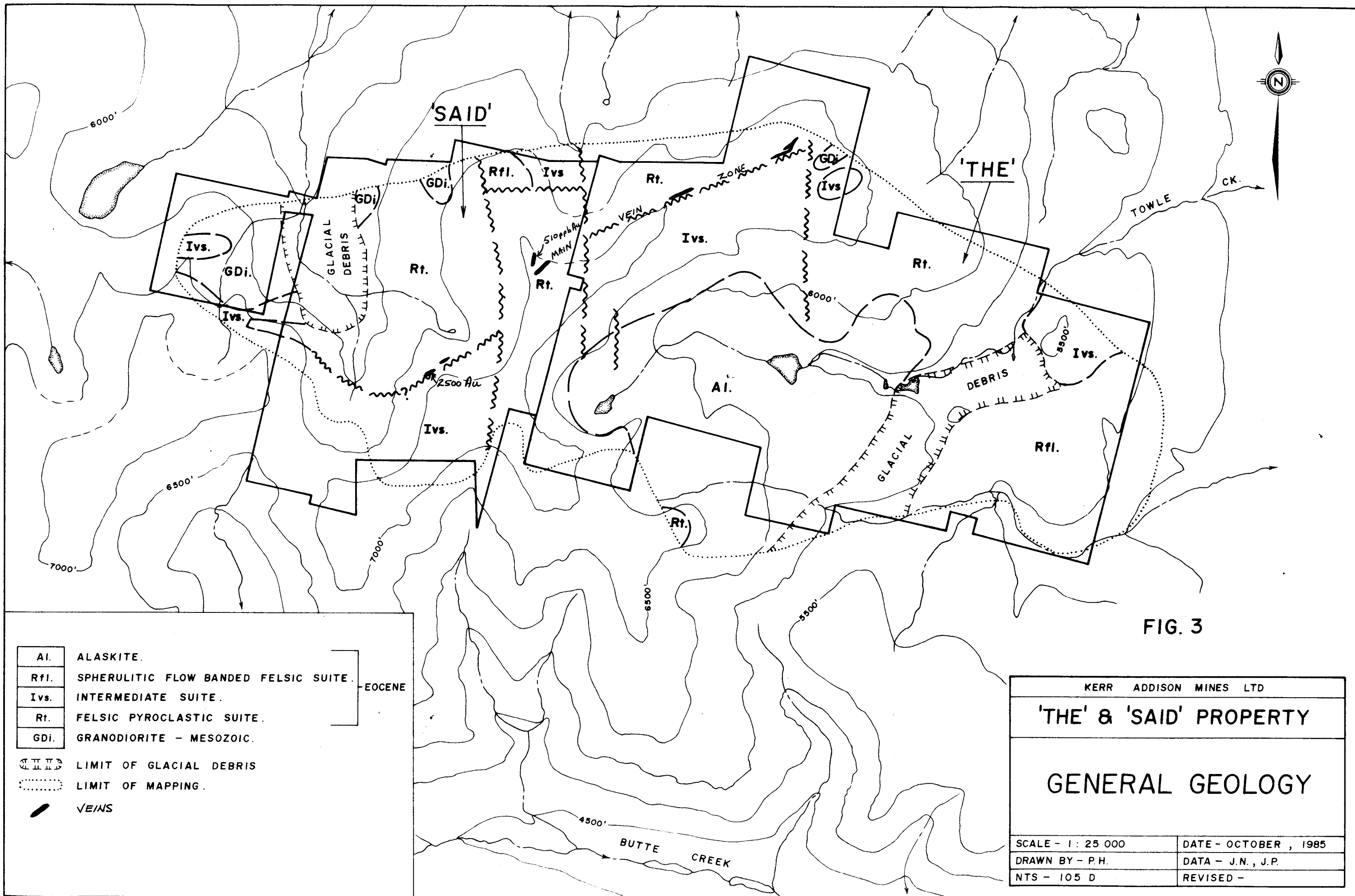


FIG. 3

Al.	ALASKITE.	Eocene
Rfl.	SPHERULITIC FLOW BANDED FELSIC SUITE.	
Ivs.	INTERMEDIATE SUITE.	
Rt.	FELSIC PYROCLASTIC SUITE.	
GDi.	GRANODIORITE - MESOZOIC.	
()	LIMIT OF GLACIAL DEBRIS	
(.....)	LIMIT OF MAPPING.	
—	VEINS	

KERR ADDISON MINES LTD	
'THE' & 'SAID' PROPERTY	
GENERAL GEOLOGY	
SCALE - 1 : 25 000	DATE - OCTOBER , 1985
DRAWN BY - P.H.	DATA - J.N., J.P.
NTS - 105 D	REVISED -

LEGEND

Lithology:

A.	andesite
D.	dacite
R.	rhyolite
T.	trachyte
Cgl.	conglomerate
Sts.	siltstone
Di.	diorite
Al.	alaskite
GDi	granodiorite
QM	quartz monzonite

Textures, Structures:

p.	porphyry
t.	tuff
lap. t.	lapilli tuff
agg.	agglomerate
bv.	volcanic breccia
fl.	flow
bx.	tectonic breccia
cr.	crowded
sph.	spherulitic
r.	rusty
gl.	glacial
sh.	sheared
dy.	dyke
vn.	vein
str.	stringers

Minerals and Alteration:

qtz.	quartz
f.	feldspar
bio.	biotite
hb.	hornblende
ep.	epidote
tm.	tourmaline
cal.	calcite
fluor.	fluorite
chl.	chlorite
cl.	clay
sil.	silicification
carb.	carbonate
prop.	propylitic
ser.	sericite
a.	alteration

Symbols:

=== (25)	veins (cm)
○	outcrop or subcrop
⊙	felsenmeer or talus
△	float
⊙	alteration zone
— — —	contact (approx, inferred)
~~~~~	fault, shear (definite, interpreted)
—/—	bedding, flow banding
— —	fracture, joint
x	silt sample
○△	rock sample (outcrop, float)
•	soil sample
△—△	composite sample
—→—	traverse line
—>—	trench
□	claim post
▲	campsite

In the southeast corner of the THE, the felsic spherulitic unit is extensively sheared. Fracturing appears to occur primarily in a northeasterly direction.

#### Mineralization:

The most interesting occurrence on the two properties is a large zone of quartz veining which trends about 060°/SE and extends from the eastern SAID claims across an icefield and through the northwestern THE claims. The overall strike length of the zone appears to be 3 km and the width varies from 10-20 m. Several splays occur off of the main trend that are equally impressive. A similar quartz vein zone also occurs on SAID 9 and may extend for 200 m.

The veins exhibit typical characteristics of epithermal type mineralization and the vein exposure on the THE property appears to be indicative of the highest level in the system. Opaline quartz and silicious sinter deposits (G26-27R) are evident especially along the eastern extent of the vein zone. Minor cryptocrystalline amethyst also occurs here. Although fluorite was not directly observed in this area it is indicated by weathered out cubes within the opaline quartz and fluorite is evident elsewhere on the property.

The predominant vein material is chalcedony and it occurs as discontinuous veins, stringers and breccias. Vein widths range from 2 cm up to 60 cm. The quartz breccia occurs as boulders up to one m in width and contains silicified and sericitized fragments of the volcanic host rock. Minor drusy quartz is present.

On the SAID claims the main vein zone appears to be exposed at a slightly lower level of emplacement than on the THE property. Drusy quartz veining and coatings are common and although much of the quartz is chalcedonic, no opaline quartz is present.

On SAID 13, a major splay to the main vein is exposed. It trends 036° and displays quartz replacement of bladed calcite, (J31R). The occurrence of bladed calcite is a characteristic feature of the gold-bearing sections of the Mt. Skukum vein, (Mr. E. Stewart, personal communication).

The vein or veins on the SAID 9 claim consist of quartz (J3-6R) and quartz-calcite (J7R) breccias. The vein zone width on the north end is 50 m but little is known about the south end since only float from the above snow covered slopes was observed.

Numerous other quartz breccia trains have been located on the eastern SAID claims and sporadically over the THE claims. Trends of the boulder trains vary from predominantly northeast to northwest. Fluorite is occasionally present.

On the west side of the SAID claims minor quartz veining is hosted by or apparently related to rhyolite dykes, (G30-33R). The veins are sporadic and have little extent. Abundant rhyolite dyking is also noted proximal to and along the 3 km long vein zone.

Narrow, (up to 10 cm), drusy quartz, (J41R), quartz-calcite ± fluorite (J42-43R) and quartz-sericite (J40R) veins are exposed on the far west side of the SAID claims. Their extent is very limited.

The presence of hematite throughout the volcanic rocks ± specularite and veins and irregular patches of jasper was noted in proximity to many of the quartz vein occurrences. This is also a feature of the Mt. Skukum veins. (Pride, 1985b)

Furthermore, it is interesting to note that no pyrite or other sulfides were found within vein material on the two properties. This is fairly typical of "Mt. Skukum type" mineralization although trace pyrite is evident in the case of the latter. (Pride, 1985b).

In synopsis, several features of the mineralization on the THE and SAID properties are similar to those on the Mt. Skukum property. These include the following:

- (1) presence of bladed calcite
- (2) presence of fluorite
- (3) proximity to hematite and jasper veins
- (4) association with faults
- (5) association with rhyolite dyking

(Pride, 1985b)

#### Alteration:

The host rocks of the major veins display clay and sericite alteration as well as silicification. The clay and sericite alteration appears to be most common within the felsic volcanic host rocks. Epidote alteration and the occurrence of hematite (as specularite and jasper) is evident within both the felsic and intermediate volcanic rocks. Chlorite alteration also occurs within the intermediate unit.

The clay and sericite alteration forms haloes around the main vein, the most intense alteration occurring within a 10-20 m wide zone surrounding the main vein on the northern THE claims. A 100 m wide weakly clay altered zone straddles the vein zone on the eastern SAID claims. The zone of sericitization is much narrower

and silicification appears to be restricted to the vein zone itself.

Clay ± sericite ± silicification are also associated with other quartz veins on the two properties but are not as intense as along the main vein.

Clay-sericite alteration of the feldspars within the alaskite is common and appears to be associated with quartz veining and the presence of fine quartz stringers.

These alteration haloes are considerably more extensive than those of the Mt. Skukum deposit where propylitization is the predominant alteration type, (Pride, 1985b, Mr. Arscott, personal communication).

The only other alteration is a broad hornfelsing that occurs within the volcanic rocks along the western edge of the alaskite pluton.

#### GEOCHEMISTRY

##### Procedure:

A total of 174 rock, 111 soil/talus and 2 silt samples were collected for geochemical analysis between July 10 and July 23, 1985. All samples were analyzed for Au, Ag, As and Sb. The sample locations and geochemical results are plotted on Figures 6 and 7. Those samples located off of the claims were not included in the cost estimate.

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

All of the samples were sent to Chemex Labs, North Vancouver, B.C. for preparation and analysis using standard procedures. Au was analyzed using fire assay preconcentration with an atomic absorption finish.

Results:

Although anomalous Au results from the main vein zone were low, 59% of the rock samples collected ranged in value from 25 to 190 ppb Au, with an average of 83 ppb. Four of these values were associated with very low anomalous Ag results ranging between 2.4 and 3.9 ppm Ag. All of the anomalous Ag and approximately 30% of the anomalous Au results were associated with grey cryptocrystalline to chalcedonic quartz.

Although the As and Sb geochemistry did not prove to be very useful on the properties, a cluster of anomalous As results (48 ppm, 51 ppm and 100 ppm As) occurs near the northeast extent of the main vein. The only similarity between the samples is that they consist of white drusy and cryptocrystalline quartz stringers with hematite or limonite and all are anomalous in Au. However, all similar samples do not contain anomalous As. The 100 ppm As value was also associated with 8.0 ppm Sb. A description of the rock samples collected from the main vein with their geochemical results are listed in Table 1.

Soil sampling of the main vein was less encouraging with only two anomalous samples of 75 and 70 ppb Au.

The low anomalous nature of the main vein samples is not surprising because of the 'high level' characteristics of the vein according to Buchanan's model.

TABLE 1: DESCRIPTION AND GEOCHEMISTRY OF THE MAIN VEIN SAMPLES

<u>Sample Number</u>	<u>Description</u>	<u>Results (Ag, As, Sb, Au)</u>
(YT-5) C12R	-grey-brown chalcedonic quartz alternating with white-grey fine cryptocrystalline quartz	1.0, 3, 1.5, <5
C13R	-quartz breccia; typical ribbon textured quartz around silicified volcanic clasts; fine to coarse grained outwards from clasts	0.7, 11, 0.3, 20
C14R	- opaline quartz vein to white, cryptocrystalline opaque	1.2, 10, 0.1, 150
C15R	- quartz breccia; coarse quartz around rock fragments grading to cryptocrystalline	0.6, 2, 0.1, 25
C16R	- ribbon-comb textured quartz	0.2, 3, 0.1, 60
C17R	-As C15R	0.2, 1, 0.1, 15
C18R	-quartz breccia (asC15R) and cryptocrystalline to opaline quartz	0.1, 1, 0.6, 50
C19R	-limonitic to hematitic, vuggy quartz breccia; cryptocrystalline to drusy, ribbon texture around and between clasts	0.1, 1, 0.1, 25
C23R	dark quartz (fracture filling) and sericite	0.7, 1, 0.2, <5
C24R	-silicified andesite? with sericite and clay alteration	0.5, 1, 0.2, <5
G18R	-quartz vein breccia, drusy and laminated grey-white quartz; max 35-40 cm wide bld.	2.2, 4, 0.6, 85
G19R	-quartz stringers and intensely silicified host, mainly grey cryptocrystalline quartz, weak, hematite & limonite, max. 30 cm wide bld.	0.6, 17, 1.2, 20
G20R	-quartz vein, drusy, chalcedonic white-grey	3.0, 6, 0.7, 70
G21R	-quartz vein drusy, chalcedonic white-grey quartz, max. 10-15 cm bld.	2.4, 5, 0.4, 190
G22R	-drusy and cryptocrystalline quartz stringers in rhyolite dyke; finely brecciated with clay altered fragments	0.8, 1, 0.1, <5
G23R	-As G21R	3.9, 10, 0.6, 190
G24R	-white drusy and cryptocrystalline quartz stringers - host rhyolite porphyry?, clay altered, rusty	0.6, 48, 1.6, 40
G25R	-similar to G24R but hematite, not limonite	0.8, 100, 8.0, 130
G26R	-white-grey chalcedonic to opaline quartz vein, max. 50 cm wide	0.9, 9, 1.0, 35
G27R	-drusy and opaline white quartz stringers - host rhyolite?, rusty, silicified	0.5, 6, 1.4, 160
G28R	-fine grey quartz stringers and stockwork in andesite porphyritic lapilli tuff; shearing 038°	0.6, 17, 0.2, 5
G29R	-white and grey chalcedonic quartz veins (4 cm) and stringers	0.6, 2, 1.0, <5

Table 1 - cont'd

<u>Sample Number</u>	<u>Description</u>	<u>Results</u> (Ag, As, Sb, Au)
G30R	-drusy quartz breccia, veins and stringers max. 20 cm wide; trend about 056°; limonite	1.3, 3, 0.6, 20
G31R	-white drusy and cryptocrystalline quartz vein breccias and stringers - host andesite lapilli tuff, limonitic, hematitic.	2.8, 51, 2.2, 60
(YS-5) G46R	-cryptocrystalline and drusy quartz string- ers in boulders, clay alteration; over 50 m?	0.3, 1, 0.1, 40
G47R	-cryptocrystalline and drusy quartz stringers and veins taken over 3 m.	0.8, 1, 0.2, 25
J32R	-quartz vein breccia boulders, subcrop, up to 1 m wide and quartz stringers; trend 60°; 20 m wide zone, sericite alteration of host.	0.3, 1, 0.1, 10

Although the main vein appears to be exposed at a slightly lower level of emplacement on the SAID claims (compared to on the THE), higher Au values were not observed except for a 510 ppb Au value, with 3.7 ppm Ag, (J31R), from the 036° trending splay on SAID 13. This sample contained quartz replaced bladed calcite

The quartz breccia vein or veins on the SAID 9 claim returned very promising results. Each of the four quartz breccia samples collected were at least weakly anomalous in Au. A 2500 ppb Au value, associated with 4.5 ppm Ag came from the south end where exposure of the vein was very limited due to snow cover. Two samples containing 85 and 90 ppb Au were collected across 50 m widths from the north end of the vein zone. Float from the vein exposure above ran 35 ppb Au. A sample of quartz calcite breccia (J7R) from the area was not anomalous.

A few of the quartz breccia trains hosted by the felsic pyroclastic unit were weakly anomalous. A value of 75 ppb Au was obtained from a train of northeast trending drusy quartz boulders, (G4R). Sample J30R consisted of quartz vein breccia boulders collected over 150 m. Although it contained only 20 ppb Au, there may be higher values concentrated within it. Therefore more detailed sampling of the quartz breccia trains is required.

Several anomalous samples occur around the western margin of the alaskite pluton. This area is drained by a creek from which a 95 Au value was obtained by AGIP in 1982. Quartz seams in mixed float from THE 5, (along the north edge of the pluton), ran 1700 ppb Au with 2.9 ppm Ag (D2R), and fractured felsic tuff with malachite(?) ran 27.0 ppm Ag, (D1R). A sample of quartz float 140 m to the east contained 7.6 ppm Sb (D3R) and appears to lie along the western fault boundary of the downdropped intermediate volcanic block. Further to the east another sample of quartz float exposed in a minor subparallel fault ran 90 ppb Au, (D4R).

Near the possible southern extent of the latter fault, (along the southern boundary of the alaskite pluton), a sample of quartz with fluorite ran 50 ppb Au, 6.3 ppm Ag and 3.0 ppm Sb (C9R). In the same area drusy quartz stringers with pyrite and magnetite were found to contain 2.2 ppm Ag (C8R). A 60 ppb Au value (C6R) was obtained from another quartz vein along the felsic pyroclastic/alaskite contact. Approximately 400 m to the east, along the same contact, a sample of a quartz vein ran 210 ppb Au, 5.2 ppm Ag (D7R). In 1982, AGIP obtained values of 230 ppb, 205 ppb, 170 ppb, 100 ppb and 40 ppb Au from soils collected on the ridge above the samples along the southern alaskite contact. All of the aforementioned samples (D1-4R, C6, 8-9R) are hosted by the felsic pyroclastic unit (except for D4R), and all occur within an area of broad hornfelsing around the margin of the alaskite pluton. All but D7R also appear to be related to faulting.

Several samples within the alaskite pluton were anomalous despite the lack of values within alaskite hosted quartz breccia trains. Sample J5R consisted of drusy quartz coatings along 036° trending fractures and contained 46 ppm As. A sample of pyritic alaskite with trace chalcopyrite ran 5.6 ppm Ag, 310 ppm As. A 210 ppb Au value was obtained from drusy quartz stringers within a clay altered zone in the alaskite.

On the far west side of the SAID claims, several samples hosted by andesites, were weakly anomalous. A 10 cm wide, 040° trending, drusy quartz-calcite vein with fluorite ran 70 ppb Au, 15.5 ppm Ag, 83 ppm As, (J43R). In the same vicinity, a drusy quartz vein ran 2.5 ppm Ag (J41R) and local float of quartz-sericite with drusy quartz ran 35 ppb Au (J40R). A sample of quartz breccia (J20R), 500 m to the northeast, contained 11.5 ppm Ag. This vein was hosted either by an altered rhyolite dyke or the older intrusion. A 35 ppb Au value was obtained from a silt draining the above area.

The only other anomalous result related to rhyolite dyking on the western SAID claims was a 101 ppm As value from a 4 cm wide quartz vein along a fracture in a rhyolite dyke.

On THE 46, the felsic spherulitic and flow banded unit hosts drusy and vuggy quartz stringers with values of 10.4 ppm Ag, 3.2 ppm Sb, and 15 ppb Au (J24R) and 3.1 ppm Ag, 3.0 ppm Sb and 30 ppb Au (J25R). The host rock is weakly propylitized, clay altered and silicified. The values may be related to northeast trending fractures in the area.

Similar mineralization was found on THE 40. Sample C3R contains 16.2 ppm Ag and consists of a few quartz stringers with magnetite hosted by weakly propylitized felsic pyroclastics.

Previous work by AGIP on the southeastern THE claims returned a 125 ppb Au value in soil. This sample is proximal to a 60 ppb Au value in a rock sample (J17R), which consisted of rare quartz stringers hosted by clay altered spherulitic and flow banded rhyolite to rhyodacite. One soil/talus sample out of 33 samples collected along the same slope, (just north of Summit Creek), ran low Au (35 ppb).

#### CONCLUSIONS AND RECOMMENDATIONS

Mineralization on the SAID and THE claims appears to be at least partly controlled by major block faulting. It also appears to be related to other minor north to northeast trending shears and faults and to a broad zone of hornfelsing around the alaskite pluton.

The 3 km long trend of quartz veining is a significant structure. Although the Au geochemistry is generally low, the 'high level' characteristics of this vein zone and the high percentage of low anomalous samples contributes to its attractiveness. Potential exists for higher values at a lower level in the epithermal system. The main vein appears to be exposed at a 500 to 600' level above the alaskite pluton, based on the topographic levels of exposure of the vein and alaskite.

A 2500 ppb Au value from a quartz breccia vein near the southwestern extent of vein exposure and a 1700 ppb Au value from quartz float near the western alaskite contact, add to the potential for finding economic Au mineralization on the property.

Ag results are generally low and the typical trace element suite of As and Sb are negligible. Consequently, it is inadvisable to use As and Sb as pathfinder elements in subsequent work on the properties.

Similarities also exist between mineralization on the SAID and THE claims and that of the Mt. Skukum Gold Deposit. These include:

- (1) presence of bladed calcite
- (2) presence of fluorite
- (3) proximity to hematite and jasper veins
- (4) association with faults
- (5) association with rhyolite dyking

Further work is necessary along the main vein trend and at the time of this report has been completed. Recommendations will therefore be based on the results of the detailed program which will be discussed in a subsequent report.

Further detailed prospecting & mapping is also recommended on the basis of this initial program. Low anomalous Au and Ag geochemistry was obtained from quartz veining on the western SAID claims and east to southeastern THE claims. Further investigation may reveal better defined mineralized zones in these areas. The margins of the alaskite pluton also warrant further work based on anomalous values along the western borders of the pluton. The numerous quartz breccia trains should also be sampled in more detail.

SELECTED REFERENCES

- Pride, Monica, J., 1985 a; Preliminary geological map of (Mount Skukum Volcanic Complex) 105D 2,3,4,5, ; 1:25,000 scale map : D.I.A.N.D. Open File  
1985 b ; Geology of the Eocene Mt. Skukum Volcanic Complex, southern Yukon: Cordilleran Roundup ; Friday Jan. 25, 1985  
1985 c ; Interlayered sedimentary-volcanic sequence Mt. Skukum Volcanic Complex in Yukon Exploration and Geology 1983: D.I.A.N.D., pp 94-104.
- Wheeler, J.O., 1961; Whitehorse Map-Area, Yukon Territory, 105D; G.S.C. Memoir 312

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## STATEMENT OF EXPENSES

## SAID Claims

Wages:

<u>Name</u>	<u>Address</u>	<u>Dates</u> <u>Worked</u>	<u>Man</u> <u>Days</u>	
J. Pautler	4912-62nd St., Ladner, B.C.	July 10- 15/85	6	
L. Grexton	1761-16th Ave. W., Vancouver, B.C.	July 10- 15/85	6	
Total man days			12	
12 man days @ \$97.50 + 10%/man day:				\$1,287.00

Food:

12 man days @ \$16.00/man day:	192.00
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Equipment:

Radio: 6 days @ \$7.00/day (\$200/mo.)	42.00
Truck: 6 days @ \$33.00/day (\$1,000/mo.)	198.00

Supplies:

Field Supplies: 12 man days @ \$12/man day (flagging, tophfil, rock bags, etc.)	144.00
Camp Supplies: 12 days @ \$15/man day	180.00

Geochemical Analyses:

82 rocks @ \$17.32 ea =	1,420.20	
2 silts @ \$14.90 ea =	29.80	
	<u>1,450.00</u>	
Shipping 82 @ \$1.50 ea.	123.00	1,573.00

Air Charter:

30 min. helicopter @ \$500./hr. + \$60/hr. fuel (Trans North-Whitehorse)	<u>280.00</u>
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TOTAL EXPENDITURE:	\$3,896.00
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## STATEMENT OF EXPENSES

## THE CLAIMS

Wages:

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Man Days</u>
J. Pautler	4912-62nd St., Ladner, B.C.	July 16- July 23	8
L. Grexton	1761-16th Ave., Vancouver, B.C.	July 16, 19, 21-23	7
C. Baldys	9013 Steveston Hwy., Richmond, B.C.	July 16-19 July 21-23	7
H. Johnson	c/o Kerr Addison Mines 703-1112 W. Pender Vancouver, B.C.	July 16-19, July 21-23	<u>7</u>
Total Man Days:			29
29 man days @ \$97.50 + 10%/Man day			\$3,110.00

Food:

29 man days @ \$16./Man day	464.00
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Equipment:

Radio: 7 days @ \$7.00/day (\$200./mo.)	49.00
Truck: 7 days @ \$33.00/day (\$1,000./mo.)	231.00

Supplies:

Field supplies: 29 man days @ \$7/day (\$200/mo.) (flagging, toposil, rock bags, etc.)	348.00
Camp supplies: 29 man days @ \$15./man day	435.00

Geochemical Analyses:

79 rocks @ \$17.32/rock =	\$1,333.64
94 soils @ \$14.60/soil =	1,372.40
Shipping 100 @ \$1.50 each =	150.00
	<u>2,856.00</u>

Air Charter:

76 min. helicopter @ \$500./hr. + \$60./hr. fuel	<u>710.00</u>
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TOTAL EXPENDITURES: \$8,203.00

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 as a geologist in the Canadian Cordillera.

I was actively involved in the 1985 field program on the SAID and THE properties.

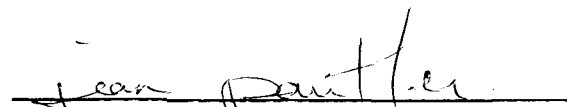
  
JEAN PAUTLER  
Geologist.



FIG. 26  
 0 100 200 400 600 800  
 METRES

KERR ADDISON MINES LTD  
**'THE' & 'SAID' PROPERTY**  
 AGIP 091655  
 YUKON TERRITORY  
**CLAIMS MAP**  
 SCALE - 1 : 10 000  
 DATE - AUGUST, 1985  
 DRAWN BY - P.H., F.C.  
 DATA - AGIP  
 NTS - 105 D  
 REVISED -

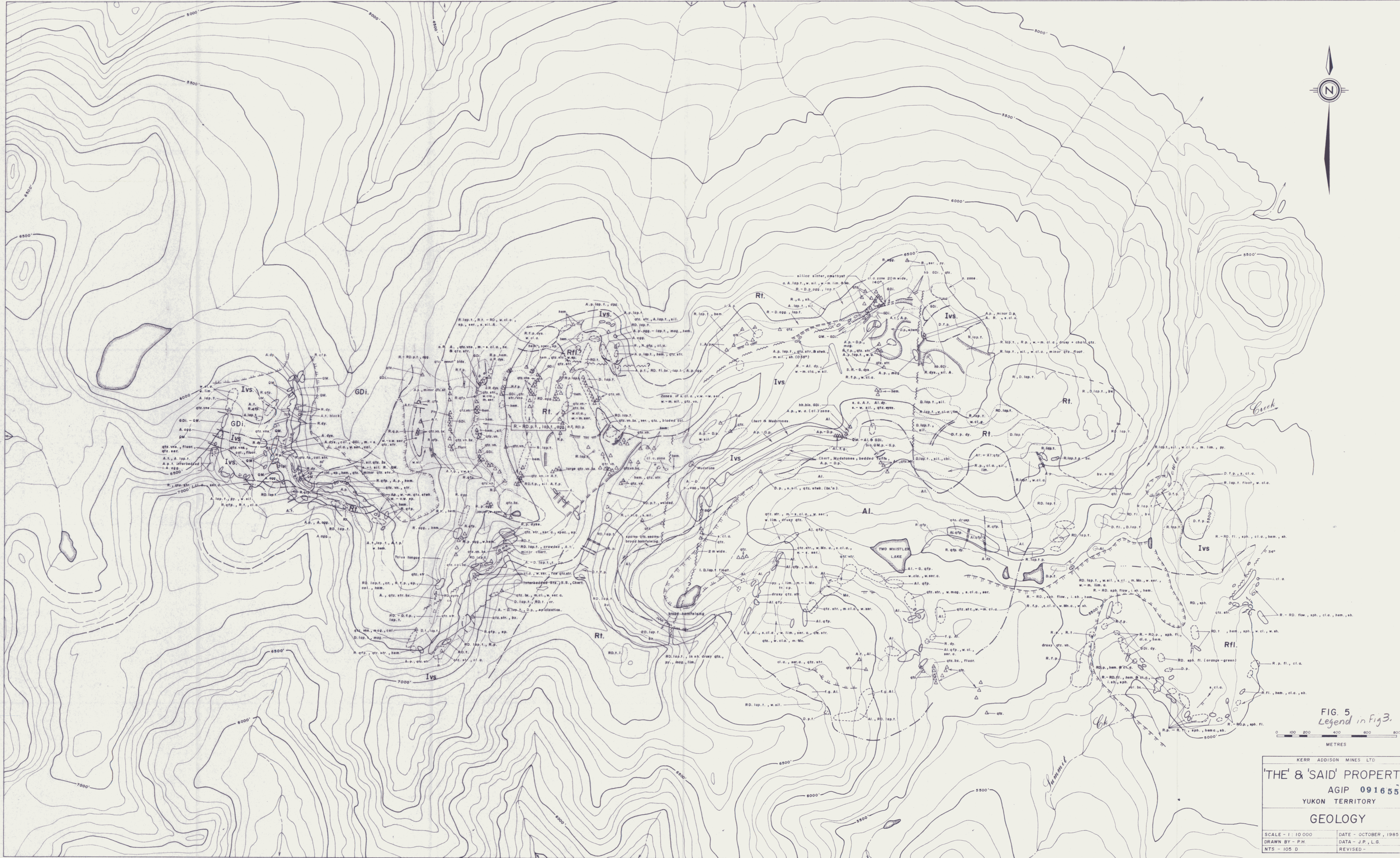


FIG. 5  
Legend in Fig. 3.

0 100 200 400 600 800  
METRES

KERR ADDISON MINES LTD

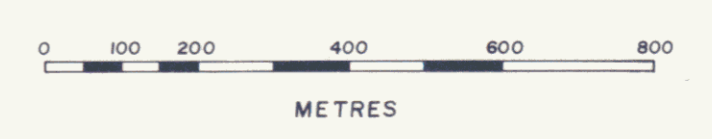
**'THE' & 'SAID' PROPERTY**  
AGIP 091655  
YUKON TERRITORY

**GEOLOGY**

SCALE - 1 : 10 000      DATE - OCTOBER, 1985  
DRAWN BY - P.H.      DATA - J.P., L.G.  
NTS - 105 D      REVISED -



FIG. 6



KERR ADDISON MINES LTD	
<b>'THE' &amp; 'SAID' PROPERTY</b>	
AGIP 091655	
YUKON TERRITORY	
<b>SAMPLE LOCATIONS</b>	
SCALE - 1 : 10 000	DATE - AUGUST, 1985
DRAWN BY - P.H.	DATA -
NTS - 105 D	REVISED -

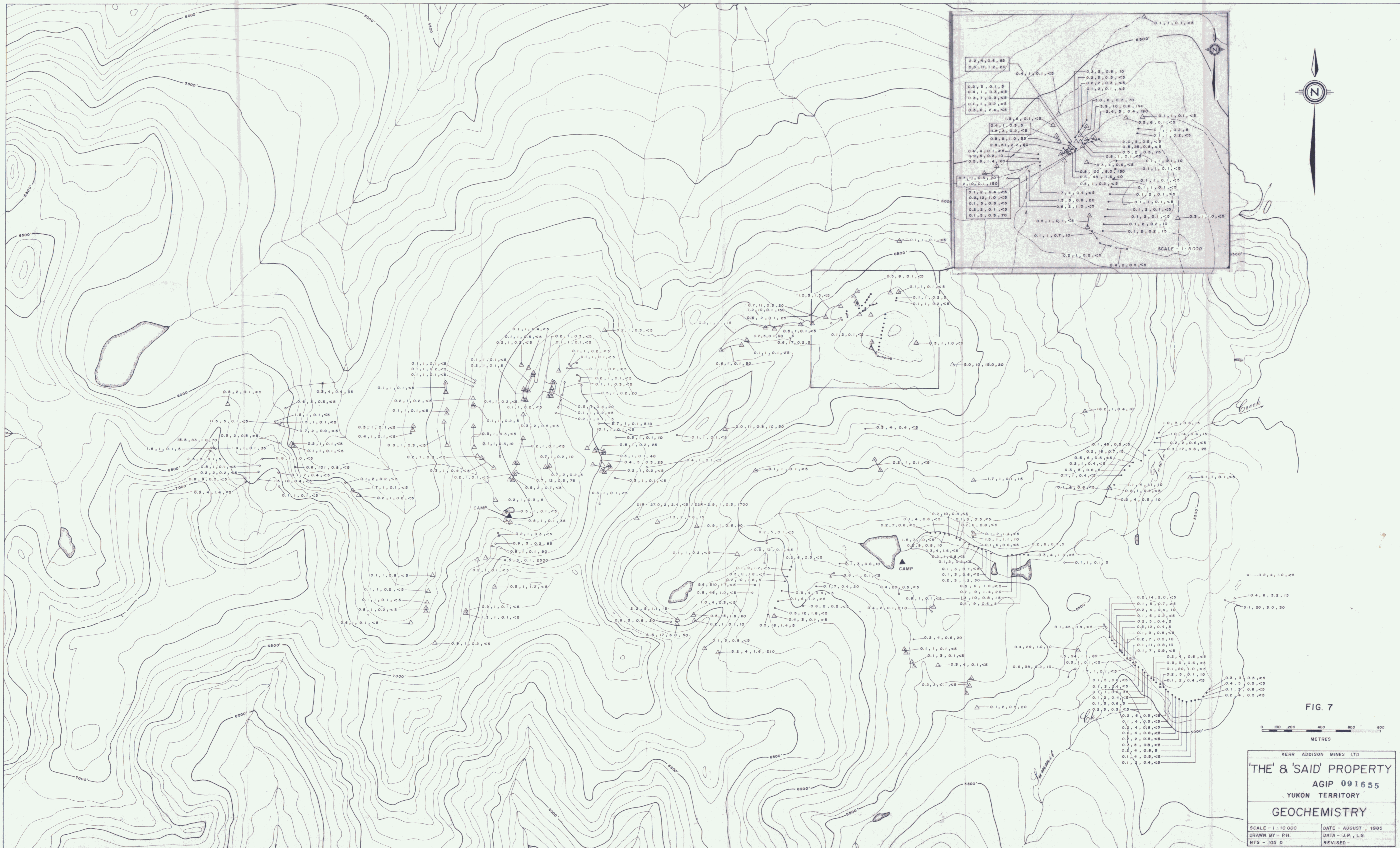


FIG. 7



KERR ADDISON MINES LTD	
<b>'THE' &amp; 'SAID' PROPERTY</b>	
AGIP 091655	
YUKON TERRITORY	
<b>GEOCHEMISTRY</b>	
SCALE - 1:10000	DATE - AUGUST, 1985
DRAWN BY - P.H.	DATA - J.P., L.G.
NTS - 105 D	REVISED -