091389

ASSESSMENT REPORT
TRENCHING
BRICK CLAIMS
BRICK 4 (YA 62948)

MAYO MINING DISTRICT

NTS 105 0/7

LATITUDE: 63°18'N
LONGITUDE: 131°00'W

By: T. Garagan

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1. INTRODUCTION

1.1 General Statement

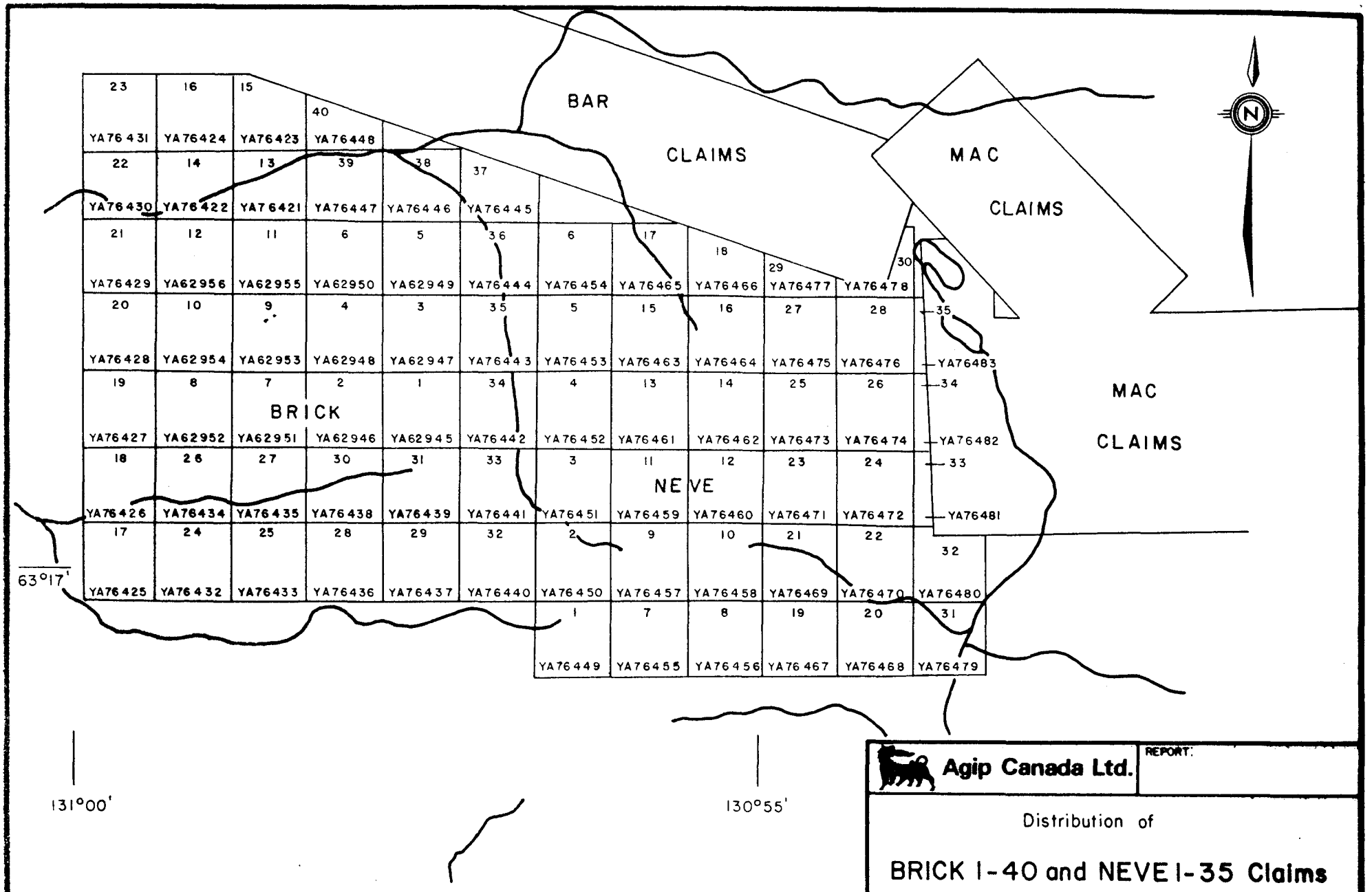
This report describes work carried out on the BRICK 13-40 claims (YA 76421-76448) from July 13 to August 3, 1982. The work consisted of digging a trench (on BRICK 4), followed by mapping and sampling of the excavated area. The work was done by using helicopter setouts from a base camp at Emerald Lake. The helicopter was a Hughes 500 D which was on contract from Canwest Aviation, Okotoks, Alberta. A Terr-air Hughes 500 D was used for 2 days when the Canwest machine was down for repairs.

1.2 Location, Access and Physiography

The BRICK claims are located in the Mayo Mining District (claim sheet 105 0/7, latitude 63°18'N and longitude 131°00'W) approximately 35 kilometers south of Emerald Lake and 50 kilometers west of MacMillan Pass. The location of the claims with respect to local topography is shown in Figure 1.

Access to the claim block is by helicopter from Emerald Lake which in turn can be serviced by float plane from Ross River or Whitehorse. Supplies can also be trucked along the North Canol Road or flown from Whitehorse or Ross River to MacMillan Pass. A tote road leads from the North Canol Road to the Plata airstrip passing approximately 10 kilometers southwest of the claim group; the present condition of this road is not known.

The relief in the area is moderate with rounded mountains covered by talus, felsenmeer and sparse vegetation. Most of the BRICK claim group lies just above the local treeline. Talus slopes are steep in part of the interest area.



Agip Canada Ltd.

REPORT:

Distribution of

BRICK 1-40 and NEVE 1-35 Claims

Mayo Mining District

NTS-105-O-7

SCALE:	AUTHOR:	DATE:	FIGURE:
1:31,680		NOV. 82	1

2. WORK PROGRAM

2.1 General Statement

During the 1982 field season, reconnaissance soil sampling within the BRICK claims was carried out to attempt to locate the source of anomalous precious metal values in stream sediment samples. This soil sampling outlined a number of anomalous areas. In the 1982 field season, five shallow pits (each 50 cm deep) were dug and sampled in the area of one of the anomalies. Subsequently, Trench #1 was hand dug across the same zone, using only shovels and a wheelbarrow. The trench was mapped and sampled.

2.2 Geology and Trench Dimensions

Trench #1 is located in the BRICK 4 claim and is 35 meters long with an average width of 1.5 meters and an average depth of 1.5 meters; the trench volume is thus 78.75 cubic meters (103.0 cubic yards).

The trench has exposed 3 main units. The upper part of the trench consists of soil and rock fragments of both shale and quartz-feldspar porphyry. This is underlain by weathered outcrop of quartz-feldspar porphyry. This unit is interpreted as being in situ because quartz veins present in the underlying outcrop can be traced through this unit, but not through the top unit. Outcrop is also exposed in the east 1/2 of the trench at the bottom. The rock here consists of altered quartz-feldspar porphyry intrusion with varying degrees of muscovite and clay alteration. The muscovite appears to be replacing feldspar and possibly some biotite. The clays replace the feldspar, the porphyry matrix (predominantly feldspar) and muscovite or biotite (?). The clay alteration appears to be more intense in the area of veining. Most of the veining is found on the western most part of these outcrops. Veins consist of quartz with minor stibnite, orpiment and realgar. Vein widths vary between 1 mm and 2 cm.

In the area of most intense veining, the veins are between a few cm and 50 cm apart. The average spacing is 10-15 cm. Disseminated pyrite is found in the less altered intrusive rocks.

2.3 Geochemistry

Soil samples were collected within the 5 pits and within all the different levels within the trench. The pit spacing is 5-10 meters and the soil sample spacing within the trench is 2 meters. Chip samples were collected across 2 meter intervals in the unveined intrusion and across 1 meter intervals in areas of veining. Several grab samples of vein material were also collected. Soil samples were analysed for gold, silver, antimony and mercury. Rock samples were analysed for gold, silver, antimony and arsenic. All but 5 of the rock samples were also analysed for mercury. Samples locations and analytical data are shown on Figure 2.

Soil samples collected from the pits are all enriched in gold, silver, antimony and mercury with the best gold and silver values being 1800 ppb Au and 10.5 ppm Ag in the easternmost pit. These high values may be in part due to proximity of this pit to outcrop as compared to the other pits. All of the soil samples and rock samples contain greater than 5 ppm mercury. The actual source of the mercury within the rock units is not known.

All of the soil samples within the trench are enriched in gold, silver, and antimony. The best values appear to be from samples taken from units derived by the weathering of intrusive material. The highest gold values (2080 ppb, 1600 ppb) and the highest silver values (33.0 ppm) are from soil samples taken within the in situ weathered porphyry outcrop.

The best rock sample data comes from the samples taken at or across quartz vein material. The best gold values (2095 ppb) and best silver values (6.56 oz/ton) come form grab samples of quartz-stibnite-realgar vein material. There also appears to be some precious metal enrichment in the intrusive rocks as shown by chip samples taken across unveined intrusives.

3. DISCUSSION

A trench was dug across a precious metal anomaly on the BRICK claims. The anomaly can be explained by enrichment in veins cutting a highly altered quartz-feldspar porphyry sill or dyke. Some enrichment is probably due to low grade precious metal content disseminated within the intrusives.

APPENDIX A

CLAIM NAMES AND GRANT NUMBERS

NAME	TAG NUMBER
BRICK 4	YA 62948

APPENDIX B

Analytical Methods

Soil samples are dried and sieved to minus 80 mesh. Rock chip samples are pulverised and a split of the minus 20 mesh fraction is analysed.

Silver analyses: the sample is dissolved in hot aqua regia and analysed by atomic absorption spectrophotometry. Silver analyses require a correction for background.

Arsenic analyses are by perchloric-nitric acid digestion and colorimetric determination.

Gold analysis are by fire assay techniques, but after preparation of the bead, the bead is dissolved in acid and the gold content determined by atomic absorption spectrophotometry.

Antimony analyses are by x-ray diffraction using a pressed pellet of pulverized rock.

Mercury analysis is by flameless atomic absorption spectrophotometry after sample digestion.

APPENDIX C

STATEMENT OF COSTS

1. Analytical Costs

Analyses by Bondar-Clegg and Co. Ltd., Whitehorse

Trench #1 and Pits 5-9

36 soil samples @ 19.10	$ 687.60
5 rock samples @ 17.65	88.25
13 rock samples @ 18.40	239.20
1 rock sample @ 12.40	12.40
	$ 1,027.45

Total analytical costs for Trench #1 and Pits 5-9 = $1,027.45

2. Helicopter Costs

a) July 13, 14, 15, 18, 19, 20, 22, 23, 24, 25, 27, 29
Hughes 500 D on contract from Canwest Aviation, Okotoks, Alberta

16.4 hours @ $450 per hour	= $ 7,380.00
plus fuel at 25 gallons/hour @ 2.77/hour	= $ 1,135.70

b) August 2 and 3 - Hughes 500 D on casual charter from Terr-air Rotary Helicopters, Ross River

1.5 hours @ $500 per hour	= $ 750.00
plus fuel at 25 gallons/hour @ 2.77/hour	= $ 103.87
Total helicopter costs	$ 9,369.57

3. Fixed Wing Costs

August 4 - Pilatus Porter from Nahanni Air in Ross River $ 312.00

4. Labour Costs

R. Robertson, Senior Geologist, 1 day @ $170/day	$ 170.00
T. Garagan, Project Geologist, 3 days @ $110/day	330.00
C. Evert, Intermediate Assistant, 11.5 days @ 80/day	920.00
K. Coswan, Surveyor and Trencher, 2 days @ 100/day	200.00
K. Dieckmann, Intermediate Assistant, 2 days @ 75/day	150.00
S. Corden, Intermediate Assistant, 7 days @ 75/day	525.00
G. Brown, Junior Assistant, 5 days @ 58/day	290.00
Total Labour Costs	$ 2,585.00

5. Equipment Costs

1 wheelbarrow @ 69.95 $ 69.95

6. Food Costs

Estimated at $20/man-day for 30 man-days $ 600.00

Total costs of surface work for assessment purposes $ 13,963.97

APPENDIX D

STATEMENT OF QUALIFICATIONS

I, THOMAS GARAGAN, of the City of Calgary, in the Province of Alberta, hereby certify:

That I am a geologist employed by Agip Canada Ltd. and that I caused to be performed the work described in this report.

That I obtained a Bachelor of Science degree with Honours in Geology from the University of Ottawa, Ontario in 1980.

That I have been engaged in mineral exploration and geological survey mapping on a full and part-time basis for six years of which three have been on mineral exploration programs in the Yukon Territory.

That I am an associate member of the Geological Association of Canada and the Mineralogical Association of Canada.

Signed at Calgary, Alberta, this 19th day of November, A.D., 1982.

THOMAS GARAGAN

INDIAN and NORTHERN AFFAIRS

TRANSMITTAL FORM

M.R. File No. _____

S.M.R. File No. _____

Date Fwd. 29/11/82

FROM: Mining Recorder at ..... Mayo .....

TO: Supervising Mining Recorder at Whitehorse, Y.T.

FOR ACTION ARE:

☐ NEW APPL'N for PLACER LEASE to PROSPECT: Name:

☐ RENEWAL APPL'N PLACER LEASE to PROSPECT: Name: Lease No. .....

☐ AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name. Lease No. .....

☐ ASSIGNMENT of PLACER LEASE No. .....
From: To:

☐ GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner:

☑ DIAMOND DRILL ~~LOGS~~ TRENCHING RPT.
Claims: "BRICK" #4 Claim sheet no: 1050-7

☐ QUARTZ ASSESSMENT REPORT:
Claims: Claim sheet no.

Type of report: Submitted by: AGIP CANADA LTD

Cls. work performed on: $ Req. for ren. application

1 TRENCH 103 3
5 PITS

Signature

REPLY ACTION: Date Ret.

CC GEOLOGY

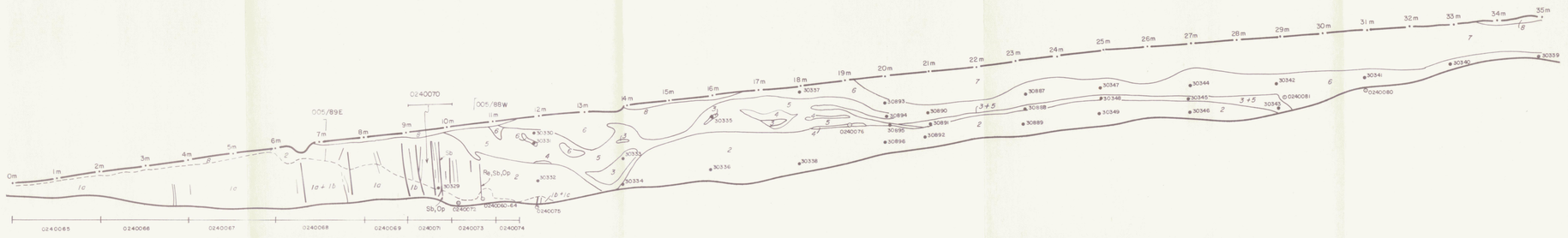
091389

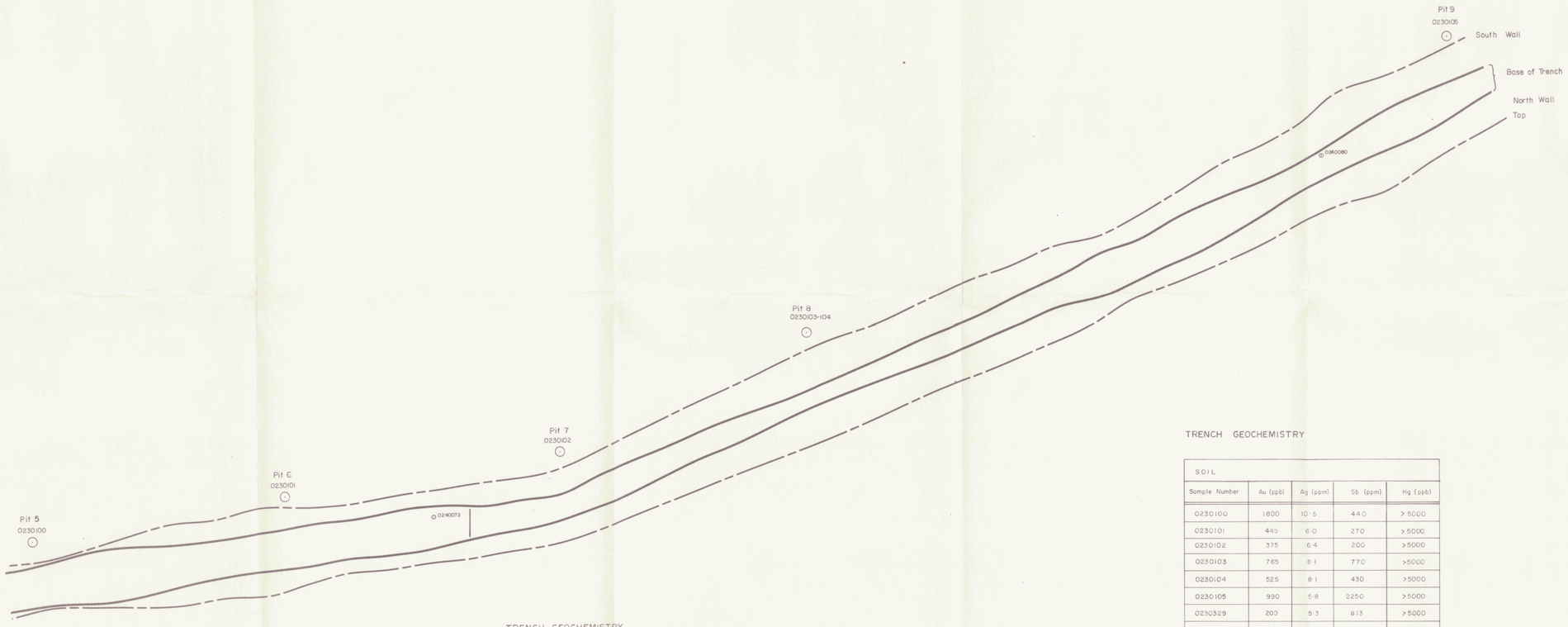
Signature

East

LOOKING SOUTH

West





TRENCH GEOCHEMISTRY

ROCK						
Sample Number	Sample Type	Au (ppb)	Ag (ppm)	Sb (ppm)	As (ppm)	Hg (ppb)
0240060	grab	1150	12·5	190	G 1,000	—
0240061	grab	310	2·2	7800	500	—
0240062	grab	2095	2·8	190	450	—
0240063	grab	1425	3·0	G 10,000	250	—
0240064	grab	1405	17·0	2300	G 1,000	—
0240065	2m. chip	260	2·8	173	—	> 5000
0240066	2m. chip	210	2·0	183	—	> 5000
0240067	2m. chip	85	1·4	121	—	> 5000
0240068	2m. chip	155	1·5	106	—	> 5000
0240069	1m. chip	120	1·8	90	—	> 5000
0240070	1m. chip	150	1·7	61	—	> 5000
0240071	1m. chip	600	3·0	241	—	> 5000
0240072	grab	720	4·0	1096	—	> 5000
0240073	1m. chip	540	2·5	148	—	> 5000
0240074	.75m. chip	415	1·7	251	—	> 5000
0240075	grab	745	6·56 oz/ton	3754	—	> 5000
0240076	grab		2.9	148	—	> 5000
0240080	grab	760	2·0	198	—	> 5000
0240081	grab	50	2·1	88	—	> 5000

TRENCH GEOCHEMISTRY

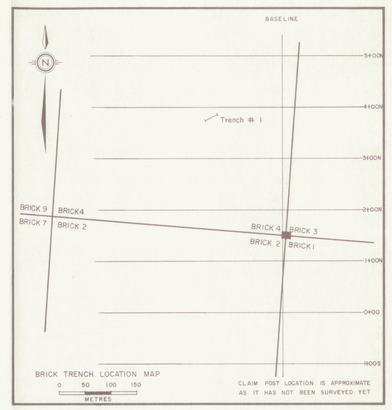
SOIL				
Sample Number	Au (ppb)	Ag (ppm)	Sb (ppm)	Hg (ppb)
0230100	1800	10·5	440	> 5000
0230101	445	6·0	270	> 5000
0230102	375	6·4	200	> 5000
0230103	765	8·1	770	> 5000
0230104	525	8·1	430	> 5000
0230105	990	5·8	2250	> 5000
0230329	200	5·3	813	> 5000
30330	155	8·5	327	> 5000
30331	150	7·0	342	> 5000
30332	470	10·0	1445	> 5000
30333	375	26·0	438	> 5000
30334	1600	8·0	6013	> 5000
30335	240	6·0	189	> 5000
30336	315	8·0	524	> 5000
30337	325	9·2	608	> 5000
30338	400	33·0	389	> 5000
30339	705	11·2	443	> 5000
30340	495	9·0	511	> 5000
30341	520	10·0	336	> 5000
30342	395	11·6	738	> 5000
30343	110	4·5	191	> 5000
30344	495	10·5	550	> 5000
30345	345	8·3	337	> 5000
30346	2080	7·4	2910	> 5000
30347	375	10·2	581	> 5000
30348	465	8·2	374	> 5000
30349	490	8·0	1225	> 5000
30887	290	9·3	296	> 5000
30888	500	5·8	278	> 5000
30889	55	3·2	352	> 5000
30890	540	13·0	367	> 5000
30891	335	5·5	890	> 5000
30892	470	7·2	421	> 5000
30893	475	13·3	1697	> 5000
30894	300	5·3	162	> 5000
30895	550	6·7	478	> 5000
30896		Sample	lost	

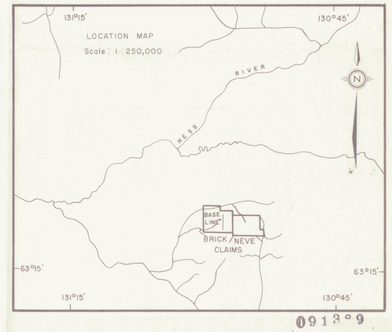
LEGEND

8	Organics and organic soil
7	Talus of angular boulders of quartz feldspar porphyry
6	Upper porphyry soil - light - medium brown soil and clay soil with minor clay altered intrusive pebbles
5	Black shale soil and rock fragments
4	Grey shale and phyllite (altered shale) fragments with a grey shale soil
3	Mixture of clay altered porphyry, porphyry, quartz, shale and phyllite rock fragments within a light brown soil
2	Light grey brown soil and rock fragments of clay altered porphyry (in place) weathered outcrop, locally contains a thin oxidized horizon at top.
1	Outcrop of quartz-feldspar (muscovite) porphyry 1a muscovite with minor limonite alteration 1b clay altered 1c silicified
Sb	Stibnite
Re	Realgar
Op	Orpiment

SYMBOLS

- Trench margin
- Outcrop
- Geological contact
- Quartz veins < 2 mm thick
- Quartz veins 2 mm.-2 cm. thick
- Grab sample
- Soil sample
- Chip sample
- Pit - 40 - 50 cm. deep





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0 1 2 3
metres

TRENCH # 1		PROJECT NO. 400320
SCALE:		SURVEYED BY
PROJECT: BRICK/NEVE		DRAWN BY G T Sz/J.B.
YUKON		DATE SEPT., 1982
AGIP CANADA LTD.		APPROVED
		FIGURE