AGIP CANADA LTD.

091056

ASSESSMENT REPORT

GEOLOGICAL MAPPING AND GEOCHEMICAL SAMPLING

BRICK CLAIMS

BRICK 1-12 (YA 62945 - 62956)

MAYO MINING DISTRICT

NTS 105 0/7

LATITUDE : 63°18'N

LONGITUDE: 131°00'W

JULY 3rd to AUGUST 17th, 1981

By. T. Garagan

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 $ 6,000.00.

P Watson

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

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1. INTRODUCTION

1.1 General Statement

This report describes the work carried out by AGIP Canada Ltd. on the BRICK claims (BRICK 1-12, YA 62945-62956) in July and August, 1981. This work program consisted of geological mapping, prospecting and geochemical sampling. Field work was carried out using helicopter setouts from a base camp at Emerald Lake.

A Hughes 500D helicopter, contracted from Liftair International, Calgary, was based at Emerald lake for much of the program and was used to setout crews. A Bell 206 helicopter, operated by Northern Mountain Helicopters from a base at MacMillan Pass was also used on casual charter to support the program.

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.

2. GEOLOGY

The BRICK claims are situated on the western part of an east-west trending turbidite-filled graben which developed in Devonian time (Abbott, 1981). The graben may have been active into the Mississippian and possibly the Permian. The turbidite sediments were derived by the uplift and erosion of Lower Proterozoic to Silurian shales, siltstones and cherts. The major sedimentary unit in the graben is the Canol Formation (or "Devonian Clastic Unit, Abbott, 1981) which consists of siliceous shales and coarse chert-pebble conglomerate. The Tom and Jason lead-zinc-silver deposits and several barite deposits also occur within this unit. Overlying Mississippian shales and sandstones may represent the last period of turbidite deposition in the graben. These units are overlain by Permian limestones, shales and cherts which represent more stable depositional environments.

Deformation includes isoclinal to open folds and thrusts which developed during the Cretaceous Period (Gabrielse et al, 1980); at this time the sedimentary rocks were intruded by stocks ranging in composition from quartz monzonite to syenite.

Within the BRICK claim group highly altered Cretaceous (?) quartz-feldspar porphyry sills and dykes and unaltered biotite-quartz monzonite intrude shales of the Canol Formation.

The porphyry consists of a highly altered igneous rock now consisting largely of quartz, muscovite and clay minerals. Less altered rocks contain up to 10% biotite. Porphyry sills and dykes average 2-5 meters in width and can be traced for up to 100 meters in outcrop and subcrop, but true lengths may be greater. Most porphyry units are parallel to bedding but occasionally cut across bedding and minor folds. An outcrop of fresh biotite-quartz monzonite occurs in the west-central part of the claim block. The geology of the claim area is shown in Figures 2 and 3..

Sedimentary units strike 090° to 130° and are overturned and steeply dipping towards the south in the northern part of the area. Two east-west trending faults occur north and south of the sills. The southern fault caused uplift of the northern block and

may be related to emplacement of the sills. The northern fault may have formed after the emplacement of the sills and caused downfaulting to the north (Figure 3).

Hornfelsed shales occur near the contact with porphyry dykes and sills and fine-grained porphyroblasts of andalusite (?) are developed. No other metamorphic effects have been noted in the area.

3. WORK PROGRAM

3.1 General Statement

Twenty-eight additional claims were staked in November, 1981. Work described in this report was carried out on the original twelve claims only.

3.2 Mapping and Prospecting: Mineralization and Alteration

Two mineralized outcrops are present on the property; one is the original showing and the second was revealed by digging a pit along strike and downslope from the original showing.

The original showing occurs on the crest of a hill near the center of the claim block and consists of several veinlets of quartz, realgar and orpiment (with minor stibnite) cutting altered quartz feldspar porphyry. A few fragments of veined shale found in talus below the showing indicates that veining is not restricted to the sills. Veinlets trend 025° and dip vertically. Individual veinlets vary in width from 2 mm to 2 cm and are from 10-50 cm apart. The zone of veining is approximately 10 m wide, but vertical extent of the veins is unknown.

To determine if there was any extent to the veins, a small pit was dug approximately 35 m along strike and approximately 20 m vertically below the original showing

(on a 30° slope, Figure 2). Veins in the pit are from 2 mm to 5 cm in width and 10 cm to 50 cm apart in altered porphyry. The veins contain quartz, stibnite, realgar, and orpiment. Veins exposed here are slightly wider and more abundant than in the original showing and contain more stibnite. The trend is approximately the same at 025° to 030°.

Minor pyrite and pyrrhotite are locally present in the hydrothermally altered intrusive rocks.

3.3 Geochemical Sampling

Geochemical sampling reported here is the initial stage of a program to locate additional mineralized zones. Two hundred soil samples and 3 grab samples were collected in the claim block.

A base line was laid out by hipchain and compass at a 125° trend in the central part of the claim block. Soil samples (talus fines) were collected along a contour line around the hill where the sills outcrop. A small grid was laid out and sampled across the saddle east of the original showing. All sample lines were tied into the base line. Samples were collected at 10 meter intervals and analysed for gold, silver, arsenic and antimony (analytical results are shown in Appendix B and sample locations are shown in Figure 4).

Two zones with coincident anomalies in gold, silver, arsenic and antimony were found. The first zone is located in the area of the small grid ("Saddle Zone").

The zone contains several samples with in excess of 100 ppb gold, 5 ppm silver and 500 ppm antimony.

The second anomalous zone is located west of the showings and too far across slope to be caused by an extension along strike of the known mineralization. This zone also contains several samples with anomalous gold, silver and antimony.

Three grab samples were collected from mineralized and unmineralized rock from the pit. Results are shown in Appendix B. The samples appear to be greatly enriched in silver, antimony and arsenic and slightly enriched in gold.

4. DISCUSSION

The distribution of geochemical anomalies suggests there may be at least three separate zones of mineralization on the BRICK claims. The two anomalies are in areas of poor outcrop and cannot be explained by the showings uncovered to date. The similarity of the geochemical associations indicates that the same type of near surface mineralization is responsible for both these anomalies (i.e. zones of quartz veinlets carrying realgar, orpiment and stibnite).

Further work is required in 1982 to determine the extent of mineralization and to determine the precious metal potential.

5. REFERENCES

Abbott, G.,

1981: "Geological Setting of Stratiform Shale-Hosted Pb-Zn-Ba Deposits, MacMillan Pass Area, Eastern Yukon": Unpublished paper presented at Yukon Geoscience Forum, Calgary, Alberta, November, 1981.

Gabrielse, H., Tempelman-Kluit, D.J., Blusson, S.L., and Campbell, R.B.

1980: MacMillan River, Yukon, Sheet 105, 115, G.S.C. Map 1398A.

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APPENDIX A

CLAIM NAMES AND GRANT NUMBERS

BRICK	TAG NO.
1	YA 62945
2	YA 62946
3	YA 62947
4	YA 62948
5	YA 62949
6	YA 62950
7	YA 62951
8	YA 62952
9	YA 62953
10	YA 62954
11	YA 62955
12	YA 62956

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APPENDIX B

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4093	50	1.1	78	38
4094	10	0.6	55	20
4095	5	0.2	23	18
4096	5	0.6	102	20
4097	5	7.0	96	41
4098	5	2.4	13	5
4099	10	0.8	10	<1
4100	20	0.7	32	<1
4101	50	1.9	41	<1
4102	25	0.6	252	23
4103	<5	0.6	235	17
4104	100	3.3	852	64
4105	<5	0.2	235	3
4106	80	1.0	1162	35
4107	<5	0.6	270	12
4108	270	2.0	1030	147
4109	<5	0.4	151	15
4110	70	1.6	1266	57
4111	225	3.4	1965	141
4112	175	2.3	651	193
4113	25	2.8	357	66
4114	140	3.4	1786	270
4115	145	6.0	1348	330
4116	190	4.4	248	100

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4117	245	6.2	248	132
4118	95	3.8	320	187
4119	100	1.8	255	97
4120	815	5.4	1006	288
4121	50	0.8	116	20
4122	65	1.6	193	41
4123	115	4.8	437	144
4124	130	4.0	226	83
4125	45	1.1	82	22
4126	10	1.8	106	30
4127	10	5.2	64	50
4128	10	7.7	80	30
4129	5	2.2	19	5
4130	15	1.4	14	<1
4131	30	0.9	422	36
4132	20	2.4	306	205
4133	<5	1.0	320	64
4134	65	4.3	781	118
4135	690	5.4	630	1842
4136	235	1.6	539	184
4137	265	4.9	917	282
4138	250	4.0	953	2173
4139	490	4.6	325	253
4140	390	6.2	99	204
4141	350	7.0	482	270
4142	70	1.7	140	32

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4143	85	2.4	157	58
4144	155	2.8	229	86
4145	100	2.4	116	59
4146	20	1.0	80	29
4147	20	0.5	42	14
4148	5	5.6	37	16
4149	5	4.7	57	20
4150	250	3.4	621	130
4151	205	1.6	416	93
4152	232	5.6	441	110
4153	175	5.5	416	128
4154	165	7.2	863	66
4155	210	4.1	449	68
4156	160	4.0	352	55
4157	70	16.5	232	85
4158	<5	13.5	298	232
4159	215	3.8	254	55
4160	55	1.6	167	37
4161	45	1.6	179	37
4162	5	1.8	181	36
4163	30	1.8	244	73
4164	140	5.4	326	163
4165	15	0.6	20	2
4165A	265	0.4	79	52
4166	85	2.4	128	71
4167	25	0.8	64	22

APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4168	20	0.6	103	15
4169	<5	0.3	21	2
4170	<5	1.6	24	8
4171	<5	6.2	39	20
4172	<5	3.2	20	7
4173	15	0.6	12	1
4174	15	0.6	35	<1
4175	<5	0.8	31	<1
4176	10	0.6	65	8
4177	<5	0.3	229	7
4178	10	0.4	129	6
4179	15	<0.1	53	8
4180	285	16.0	330	150
4181	55	10.0	218	40
4182	90	7.0	239	57
4183	60	8.5	363	52
4184	NR	7.0	NR	NR
4185	50	2.0	437	128
4186	30	1.8	306	102
4187	15	6.5	559	66
4188	20	1.7	630	127
4189	10	1.0	335	38
4190	10	0.5	47	8
4191	255	10.2	240	206
4192	285	10.5	380	280
4193	60	1.4	111	50

NR = No Result

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4194	335	3.8	131	114
4195	35	1.0	65	38
4196	25	0.6	41	20
4197	15	0.5	54	16
4198	<5	0.2	7	<1
4199	15	3.8	49	33
4200	15	10.0	63	23
4201	15	3.5	29	13
4202	10	1.1	12	<1
4203	20	0.8	17	<1
4204	60	1.2	113	13
4205	20	1.6	279	25
4206	20	1.4	271	23
4207	20	1.3	91	13
4208	25	1.7	568	60
4209	20	0.5	210	19
4210	135	6.7	360	272
4211	585	12.0	556	628
4212	320	8.2	1080	746
4213	295	7.2	317	142
4214	110	2.7	147	61
4215	30	0.3	79	33
4216	10	0.3	50	14
4217	<5	0.4	15	1
4218	<5	0.1	10	<1

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4219	<5	4.7	44	55
4220	10	5.8	48	21
4221	15	3.2	24	<1
4222	15	0.4	16	<1
4223	20	0.6	11	<1
4224	105	1.2	>2000	24
4225	60	1.1	410	27
4226	210	1.0	1654	39
4227	205	1.5	1993	50
4228	870	1.7	>2000	43
4229	80	3.3	470	55
4230	300	4.5	1241	60
4231	210	5.0	461	59
4232	220	1.7	846	26
4233	360	2.3	959	43
4234	400	6.0	808	64
4235	45	0.8	639	19
4236	30	0.7	404	7
4237	60	1.2	>2000	8
4238	125	2.4	>2000	20
4239	20	1.1	959	10
4240	30	1.0	1730	23
4241	20	1.5	799	16
4242	25	0.6	978	27
4243	20	0.7	564	20
4244	60	1.3	791	12

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Analytical Results

SOILS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4245	120	0.8	498	20
4246	60	0.8	1203	26
4247	70	0.7	517	IS
4248	640	1.8	>2000	55
4249	230	2.4	>2000	50
4250	210	4.0	1880	116
4251	430	1.7	1692	54
4252	5	2.9	1993	136
4253	80	4.8	526	90
4254	130	2.9	827	155
4255	70	1.5	367	53
4256	355	2.4	>2000	132
4257	25	1.5	10	19
4300	15	<0.1	<2	4
4301	5	<0.1	4	1
4302	5	<0.1	2	2
4303	5	<0.1	<2	<1
4304	5	<0.1	<2	<1
4305	15	<0.1	<2	<1
4306	10	<0.1	2	1
4307	10	<0.1	<2	1
4308	60	0.1	<2	11
4309	5	<0.1	11	17
4310	15	0.3	4	34
4311	60	0.2	16	17

IS = Insufficient sample for analysis

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APPENDIX B, CON'T

ANALYTICAL RESULTS AND METHODS

Sample Number	Au	Ag	As	Sb
	(all values in ppm, except Au in ppb)			
4312	40	0.4	11	14
4313	55	1.7	12	18
4314	35	2.6	5	44
4315	5	3.2	9	27
4316	10	1.8	2	17
4317	5	0.7	2	10
4318	10	<0.1	<2	8
4319	90	<0.1	<2	6
4320	10	0.1	<2	13
4321	10	0.1	6	8
4322	<5	0.2	5	2
4323	15	<0.1	3	<1
4324	30	0.3	4	19
4325	280	0.6	3	42
4326	150	1.3	23	34
4327	200	8.5	25	111
4328	15	0.5	11	18
4329	170	7.1	14	160
4330	110	6.1	2	178
4331	50	2.1	5	76
4332	35	3.1	29	41
4333	60	3.7	17	38
ROCK SAMPLES				
22-T-1	275	0.8	343	48
22-T-2	1065	117.0*	>2000	4.32%*
22-T-3	605	13.5	>2000	14,700

*Assay Results

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Analytical Methods

Soil samples are dried and sieved to minus 80 mesh. Rock chip samples are pulverised and a split of the minus 200 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 analyses 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.

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APPENDIX C
AGIP PERSONNEL

R.C.R. Robertson	Area Geologist	Program Supervision.
T. Garagan	Project Geologist	Project supervision, mapping, prospecting, geochemical sampling, map and report preparation.
R. Hulstein	Senior Assistant	Mapping, sampling.
D. Charron	Senior Assistant	Mapping, sampling.
L. Lalonde	Intermediate Assistant	Sampling,prospecting.
S. Seto	Intermediate Assistant	Sampling,prospecting.
S. Wood	Cook	

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APPENDIX D
STATEMENT OF COSTS

1. SURFACE WORK

Analytical Costs

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

BRICK 1-12

199 soil samples @ $14.25	$2835.75
1 soil samples @ $2.35	2.35
3 rock samples @ $16.15	48.45
1 silver assay @ $8.00	8.00
1 antimony assay @ $9.50	9.50
	$2904.05

Total analytical costs for BRICK 1-12 = $2904.05.

2. HELICOPTER COSTS

a) July 31st, August 4th, August 5th - Hughes 500D on contract from Liftair International, Calgary.

	0.5 hours	
	1.9 hours	
	0.8 hours	
TOTAL	3.2 hours at $379 per hour	$1212.80
plus fuel at 25 gallons/hour and $1.98 per gallon		158.40

b) August 17th - Bell 206 on casual charter from Northern Mountain Helicopters, MacMillan Pass

1.8 hours at $460 per hour	828.00
plus 41 gallons of fuel at $3.50 per gallon	143.50

Total helicopter costs $2342.70

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3. LABOUR COSTS

R. Robertson 1/2 day @ $140/day	70.00
T. Garagan 3 days @ $90/day	270.00
R. Hulstein 2 days @ $80/day	160.00
D. Charron 2 days @ $80/day	160.00
L. Lalonde 3 days @ $68/day	204.00
S. Seto 1 day @ $68/day	68.00
S. Wood 4 days @ $80/day	320.00
Total Labour Costs	$1252.00

4. FOOD COSTS

Estimated at $20.00 per manday.

BRICK 1-12 - 15.5 mandays	$ 310.00

Total Costs of surface work for assessment purposes

	$2904.05
	2342.70
	1252.00
	310.00
	$6808.75

AGIP CANADA LTD.

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 five and a half years of which two and a half years 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 25th day of May A.D., 1982.

THOMAS GARAGAN

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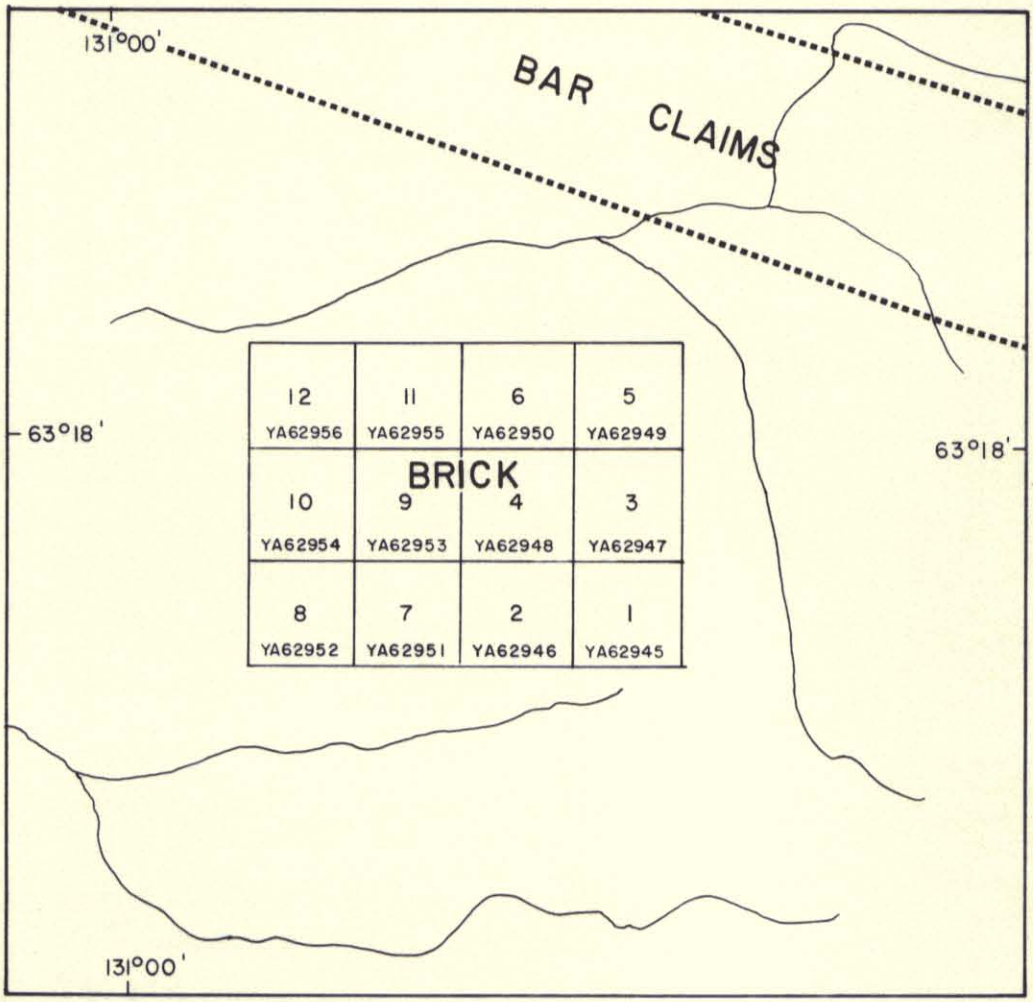
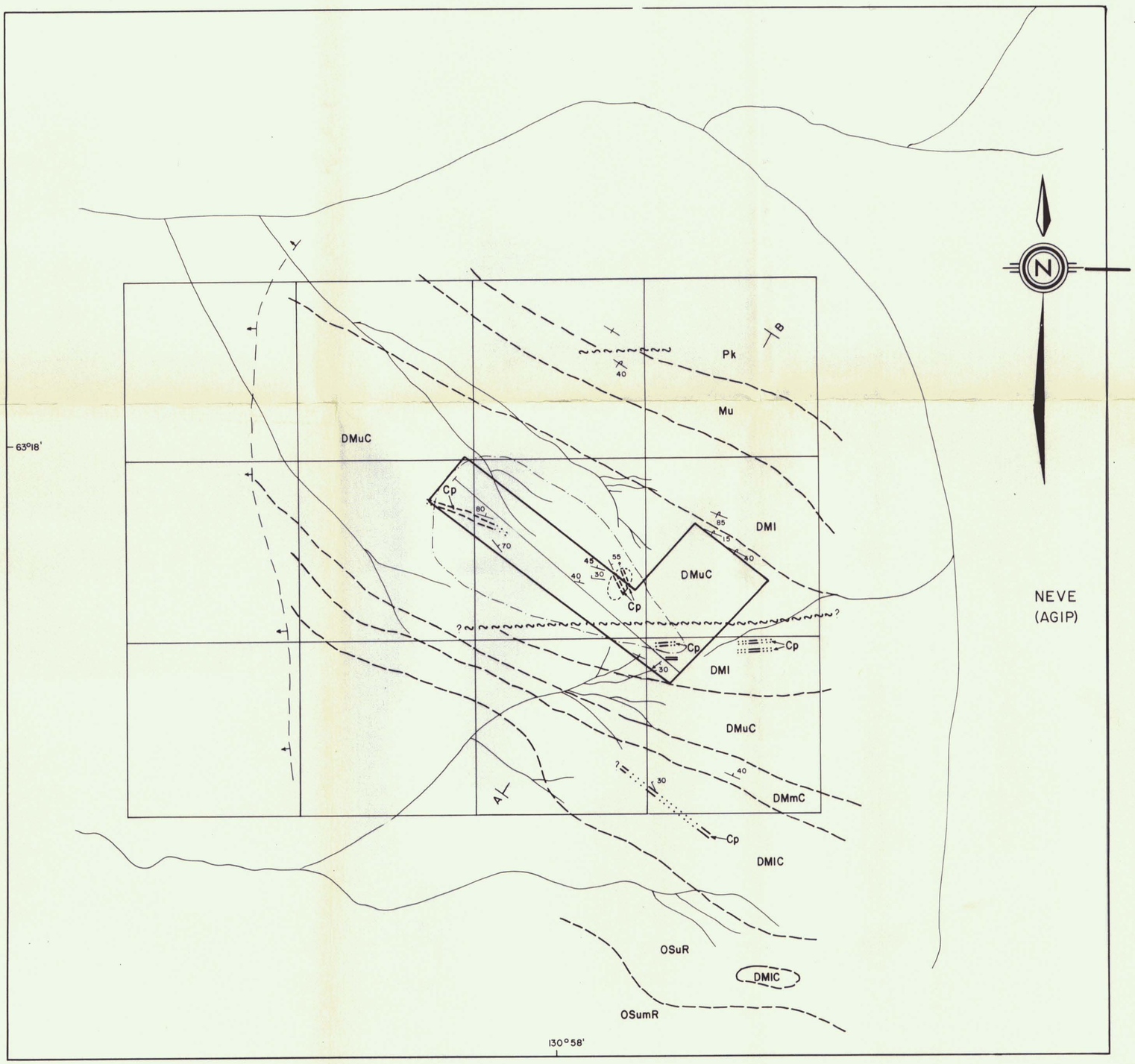


AGIP CANADA LTD.		
DISTRIBUTION OF BRICK CLAIMS 1-12 YUKON		
Scale: 1:31,680	NTS: 1050/7	Date: MARCH/82
Author:	Drawn by: J.B	Figure: 1



LEGEND

AGES (G. ABBOTT PERS. COMM.)

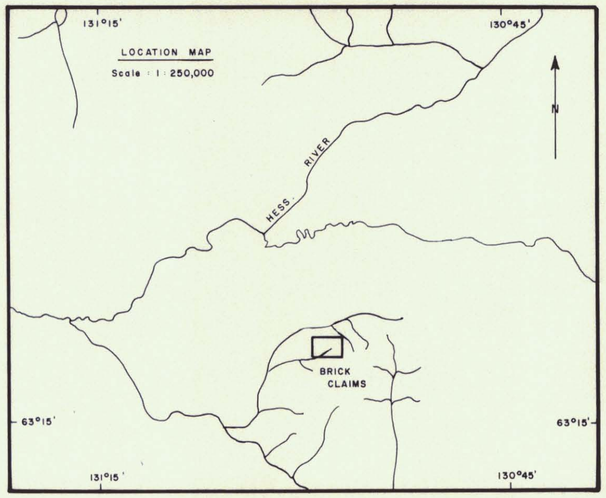
CRETACEOUS	Cp	Quartz – feldspar porphyry sills and dyke
PERMIAN	Pk	Kalzas Equivalent – grey weathering limestone with minor Crinoid fragments and Bryozoans
MISSISSIPPIAN	Mu	Unnamed – grey and black weathering quartzites with shale interbeds near the top
DEVONIAN TO MISSISSIPPIAN	DMI	Imperial Fm. – brown weathering mudstone grading up into brown weathering quartz sandstone with minor chert fragments and barite nodules
	DMuC	U. Canol Fm. – silver weathering siliceous shales
	DMmC	M. Canol Fm. – grey weathering chert pebble conglomerate underlain by brown weathering mudstone.
	DMlC	L. Canol Fm. – silver weathering siliceous shales
ORDOVICIAN TO SILURIAN	OSuR	U. Road River Fm. – tan and black weathering shales with minor pyrite nodules – contains rare Graptolites
	OSumR	U. m. Road River Fm. – brown weathering wispy mudstone

SYMBOLS

- Geological contact (defined, approximate, assumed)
- Fault (defined, approximate)
- Outcrop
- Limit of mapping (arrow indicates unmapped area)
- Strike and dip (inclined, vertical, overturned).
- Jointing (inclined)
- Dip of axial plane of minor fold and plunge of fold axis
- Gossan
- Area covered by figure 4015-4
- Location of base line
- Creek
- Claim boundaries (original 12)

A — — B Cross-section location (figure 3)

091056



GEOLOGY

SCALE: 1 : 8000

PROJECT:

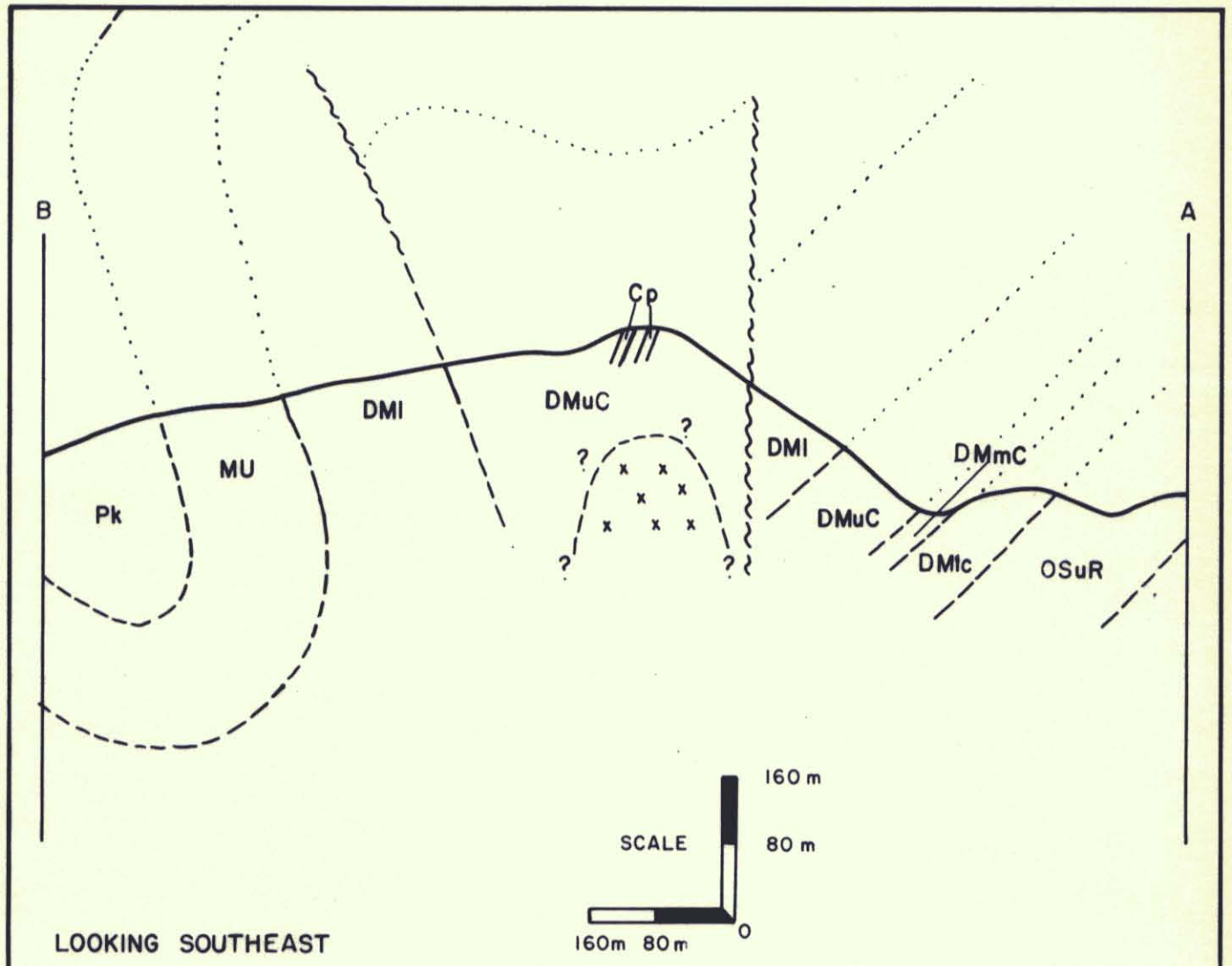
BRICK CLAIMS

YUKON

AGIP CANADA LTD.

PROJECT NO.	4015
SURVEYED BY	T. G.
DRAWN BY	J. B.
DATE	Oct. 1981
APPROVED	
FIGURE	2

091056



LEGEND

Geological contact (defined , approximate , assumed)

Fault (defined , assumed)

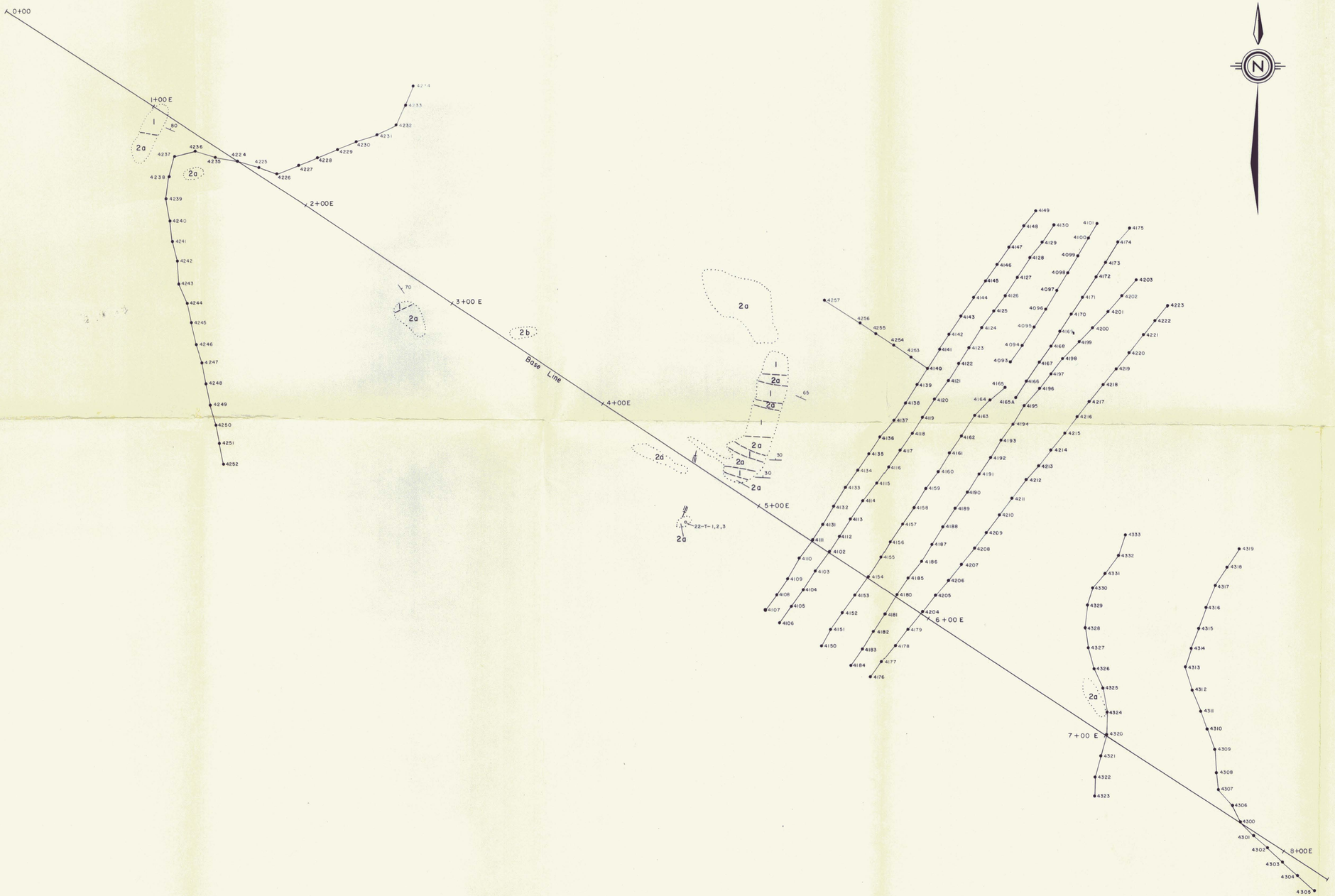
Approximate topography

FOR LOCATION AND GEOLOGICAL LEGEND SEE FIG. 2

AGIP CANADA LTD.

GEOLOGICAL CROSS-SECTION
A-B
BRICK CLAIMS
YUKON

Project No.: 4015	NTS: 105 O 7	Date: JAN./82
Author: T.G.	Drawn by: J.B.	Figure: 3



LEGEND

CRETACEOUS

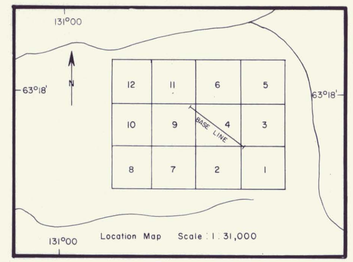
- 2a — Biotite Quartz Monzonite
- 2b — Highly Altered Quartz – Feldspar Porphyry

DEVONIAN AND MISSISSIPPIAN

- 1 — Shale, Hornfelsed

SYMBOLS

- Geological contact (approximate)
- Outcrops
- Bedding
- Vertical veins
- BASE LINE (Chain and Compass)
- Soil line
- Soil sample location
- Grab sample location



0 10 20 30 40 50
METRES

091056

SAMPLE LOCATION MAP

SCALE: 1 : 10,000

PROJECT: *BRICK CLAIMS 1-12*

YUKON NTS 1050 / 7

AGIP CANADA LTD.

PROJECT NO.	
SURVEYED BY	
DRAWN BY	J.B
DATE	March 1982
APPROVED	
FIGURE	4