

# ASSESSMENT REPORTS

Whitehorse M.D.

MAP No. 105 F 15

TYPE OF WORK:

Geological, Geochemical

REPORT FILED UNDER

Hudson Bay Exploration & Development Company LTD.

DATE PERFORMED

23 June 84 - 22 May 85

DATE FILED: 29 May 1985

LOCATION - LAT.

61°56'N

LONG.

135°34'W

CLAIM Nos.

GRAND 1-48; YA81848 - YA81895

WORK DONE BY

T. Garagan

WORK DONE FOR

Hudson Bay Exploration & Development Company LTD.

REMARKS

*Grand Claims*

**091637**

85 YEX p 151

Rotary and diamond drilling, geological mapping, geochemical soil sampling, linecutting, trenching and rock sampling were done in 1984 and 1985.

Geochemical soil and rock chip sampling was carried out in a reconnaissance manner over the property. Samples were analyzed for Au, Ag, As, Hg, Cu, Pb, Zn and U. Anomalous zones of limited extent, were encountered which analyzed as high as 380 ppb Au and 2700 ppm Cu.

An integrated electromagnetic and magnetic geophysical survey covered 117 line km. The most significant anomalies coincided with the Grew Creek and Danger Creek fault zones.



HUDSON BAY EXPLORATION AND DEVELOPMENT  
COMPANY LIMITED



ASSESSMENT REPORT OF GEOLOGICAL SAMPLING, GEOCHEMICAL  
SAMPLING AND LINE CUTTING ON THE GRAND 1-48 CLAIMS  
AND TRENCHING ON GRAND 1

(GRAND 1-48, YA 81848-895)

WHITEHORSE MINING DISTRICT

105 F 15

61°56'/135°34'

...  
...  
...  
JUNE 23/84-MAY 22/85

091637

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mineral Act and is allowed as  
representation work in the amount  
of \$ 10,800.00.


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

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### 1.0 INTRODUCTION:

The GRAND 1-48 claims were staked by Mr. A. Carlos between May 3rd and 5th, 1984, to cover an area of carbonate altered Tertiary (or Late Cretaceous) acid to felsic volcanic rocks within the Tintina trench. A zone of carbonate altered and fractured rhyolite flows was trenched in June 1984. Some of the fractured and carbonate altered zones were found to be enriched in silver. Subsequently, in December 1984, Hudson Bay Exploration and Development optioned the property from Mr. Carlos and later resampled and remapped the trenches in early to mid May 1985. Geological mapping and soil and rock sampling were carried out at this time and 21.1 line kilometres of grid were cut to be used for later geophysical, geochemical and geological work.

### 2.0 LOCATION AND ACCESS:

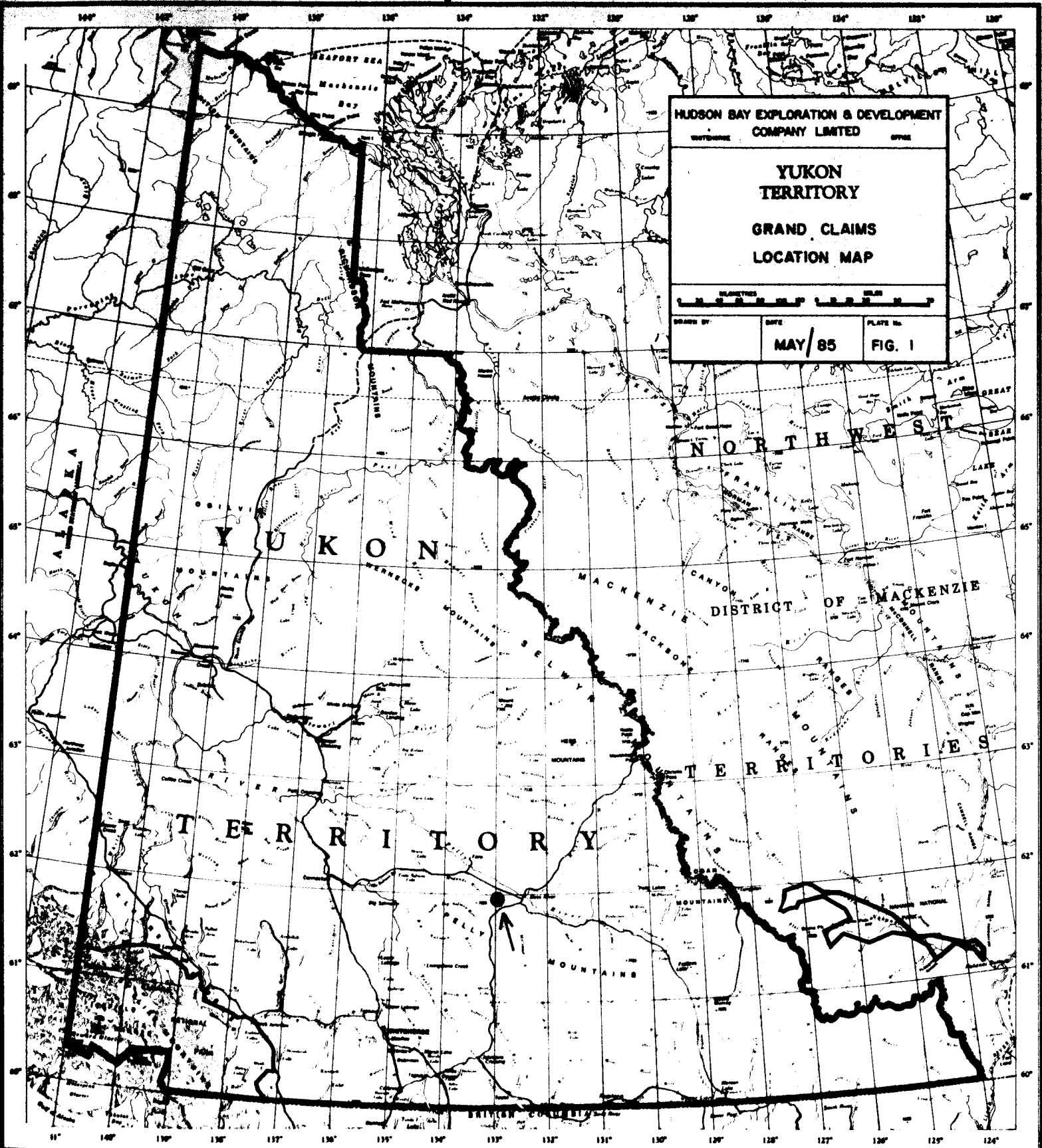
The claim group is centred around the Lapie River, immediately west of the South Canol Road, 9 km. southwest of Ross River (Fig. 1). A 1.7 km cut trail leads from the South Canol road to the east bank of the Lapie River. In addition a poor trail leads to the west bank of the Lapie River from the Robert Campbell Highway.

The Robert Campbell Highway is open year round with access to both Watson Lake to the south and via the Klondike Highway to Whitehorse to the west. The South Canol Road is open seasonally. Ross River is located 200 km. northeast of Whitehorse and contains a short dirt airstrip which is open all year.

The area is below treeline and has fairly flat topography.

### 3.0 CLAIM OWNERSHIP:

The GRAND 1-48 claims consist of 48 quartz claims (YA 81848-95) within the GRAND 1-162 claim group (Figure 2). The claims are in the Whitehorse Mining District on claim sheet 105 F/15 and are wholly owned by Hudson Bay Exploration and Development Company Limited of 100-10 Burns Road, Whitehorse, Yukon Territory.



HUDSON BAY EXPLORATION & DEVELOPMENT  
 COMPANY LIMITED

**YUKON  
 TERRITORY**

**GRAND CLAIMS  
 LOCATION MAP**

SCALE: 1:50,000

DRAWN BY: DATE: MAY/85 PLATE No. FIG. 1

#### 4.0 PERSONNEL:

The following personnel were employed by Hudson Bay Exploration and Development Company Limited on the GRAND 1-48 Claims:

R. Stroshein	Senior Geologist
T. Garagan	Project Geologist
K. Galambos	Geologist
P. Allen	Geologist
S. Tufford	Prospector
V. Celuszak	Prospector
A. Carlos	Prospector

#### 5.0 GEOLOGY:

##### 5.1 Regional Geology:

The GRAND claims lie within the Tintina trench; a large ( 1000 km long, 2-12 km wide) transcurrent fault system developed between Early Triassic and Tertiary time. Right lateral movement along the fault ranges between 400 and 450 km. (Tempelman-Kluit, 1972; Hughes and Long, 1980). Block faulting similar to the step block faulting within the East African Rift system occurs in the area. According to Tempelman-Kluit (op-cit), up to 1500 m of dip slip movement occurs along the block faults. At least 4 major faults are present in the claim area and these are called from south to north respectively; the Buttle Creek, Grew Creek, Danger Creek and Lapie River faults. Permian limestones and basalts are faulted against Hadrynian to Silurian metasediments and minor metavolcanics in the outer faults. Late Cretaceous and Early Tertiary basic to acid (predominantly felsic to acid) volcanics and fine to coarse clastic rocks are preserved within the central faults (Grew Creek and Danger Creek). Gold mineralization found to date is located within the volcanic package.

##### 5.2 Geology of the Claim Block:

GRAND 1-48 claims are situated between the Grew and Danger Creek faults and are underlain by late Cretaceous to Tertiary volcanics and sedimentary rocks (Figure 4). The volcanics, located south of the sediments, consist of predominantly quartz-feldspar porphyritic



rhyolites which are interlayered with dacite flows, felsic to acid tuffs and boulder to lapilli lithic tuffs. The fragments in the lithic tuffs are predominately rhyolite and flow banded rhyolite, although andesite, dacite and tuff fragments are also common. The volcanics are faulted against clastic sediments consisting of carbonaceous shale, siltstone, coal and conglomerate. Hughes and Long (op-cit) consider the sediments to be younger than the volcanics. The lack of volcanic dykes (feeders) of any sort appear to agree with this, although no volcanic fragments have been found within the conglomerates. The coal bearing strata has been given an Early to Middle Eocene age. The sediments are steeply dipping adjacent to the fault and dip gently to the south away from the fault. The structures of the volcanics is difficult to determine near the fault but they appear to be gently dipping to flat lying away from the fault. The volcanics and sediments are unconformably overlain by 10 to 70 m (average 30-50 m) of glacial till in the area.

### 5.3 Mineralization and Alteration:

Very little veining and mineralization has been found to date. Minor thin (1-2 cm) calcite-ankerite veins have been found within the rhyolite flows locally. Thin opal veinlets (0.5-2 cm) have been found near the north end of the volcanic sequence on the west side of the Lapie River. The extent of the opal veining is not known. A small poorly developed chalcedony stockwork zone has been found in a 3 m thick andesite dyke on the eastside of the Lapie River (Figure 4), but is not gold bearing.

The rhyolite flows appear to be ubiquitously altered to carbonate (ankerite?). The alteration is usually moderate and consists of carbonate replacement of feldspar and local minor pervasive carbonate alteration of the rhyolite adjacent to and within some fracture zones. Minor local bleaching of rhyolites may be due to weakly developed clay alteration of the matrix and phenocrysts. This is rare and seldom very extensive.

## 6.0 EXPLORATION:

### 6.1 Introduction:

A total of 32 rock samples and 30 soil samples were taken on the GRAND claims. A 1.7 km long access road was cut from the South Canal Road to the east side of the Lapie River and a small trench was excavated near the end of the road. Sixteen rock samples were collected from the trench. A 31.1 line kilometer grid has been just cut and will be used for later geophysical and geochemical surveys (Figure 3).

### 6.2 Geochemistry:

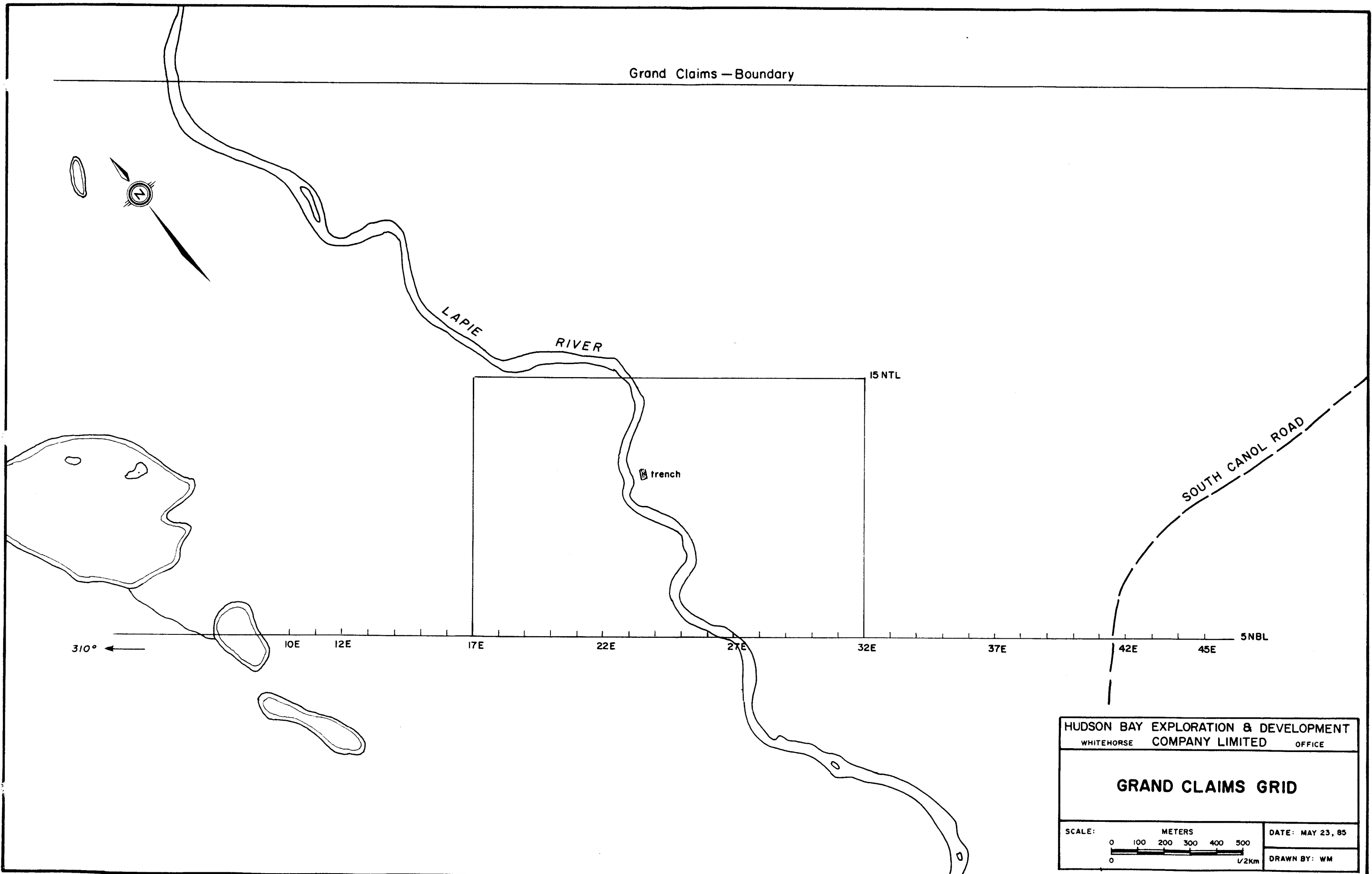
Soil samples (Talus fines) were collected at 50 m intervals below outcrops of volcanic rocks along the Lapie River. Rock chip and grab samples of bleached, carbonate altered and fractured volcanic rock were collected along the Lapie River and below the trench. All samples were analysed for gold, silver, arsenic and mercury. The results are shown in Appendix B and the sample locations are shown in figures 4 and 5. Not all the results have been received and an ammended section 6.0 will be written after all the results have returned.

The initial results indicate silver enrichment associated with carbonate altered and fractured rhyolites near the trench. Samples contain up to 41 ppm silver across 1.5 m. These have been resampled to check the silver results.

### 6.3 Trenching:

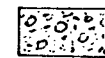
Fifty five cubic yards ( $42\text{m}^3$ ) of rock and overburden were excavated with aid of a plugger and dynamite across a zone of carbonate altered and fractured rhyolite and dacite flows. Sixteen chip and grab samples were collected from the fractured and altered rhyolite and dacite flows. The samples were analysed for gold, silver and arsenic and mercury. These samples were also analysed for Cu, Pb, Zn, Ba and Sb. The sample locations and the geology are shown in figure 6 and the results are shown in Appendix C. Silver values in the trench are up to 15 ppm across 1.6 m of altered and fractured rhyolite. The results of the later sampling has not returned and will be discussed in the amended section 6.

Grand Claims — Boundary





# LEGEND



Overburden



1 Light grey to orange-white, highly fractured, coarse grained porphyritic rhyolite phenocrysts: feldspar (highly altered), quartz eyes



2 Medium grey, massive, coarse grained porphyritic dacite dyke. phenocrysts: feldspar (mildly altered), quartz eyes



3 Medium-dark orange-brown weathered medium grey coarse grained porphyritic rhyodacite flow phenocrysts: feldspar (mildly altered) quartz eyes.



4 Light grey to orange brown, massive, coarse grained porphyritic rhyolite. phenocrysts: feldspar (highly altered), quartz eyes



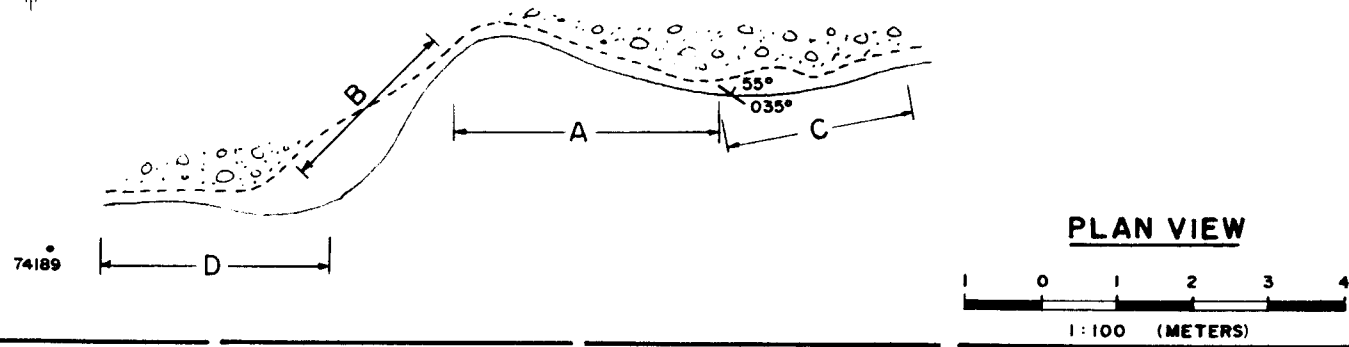
Geological contact



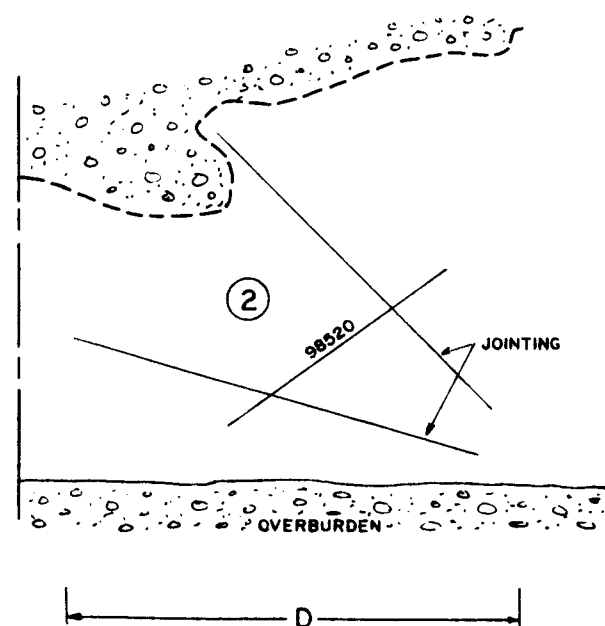
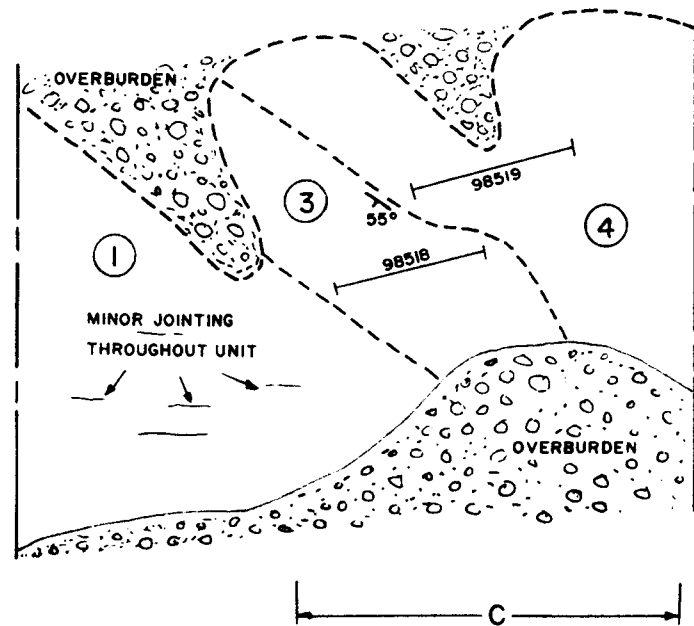
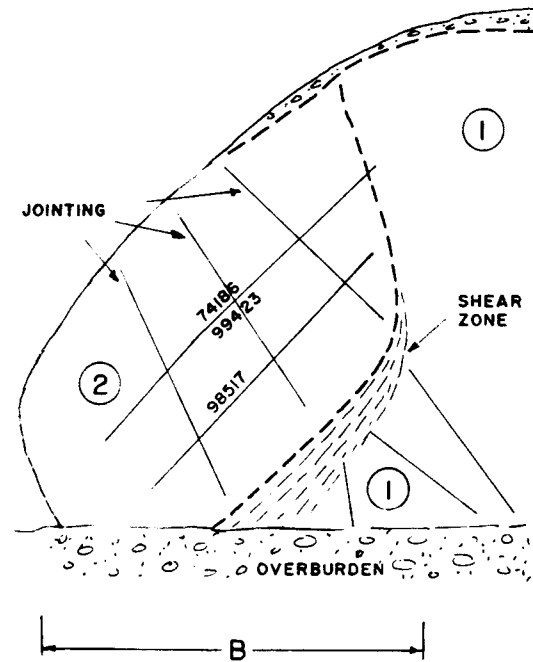
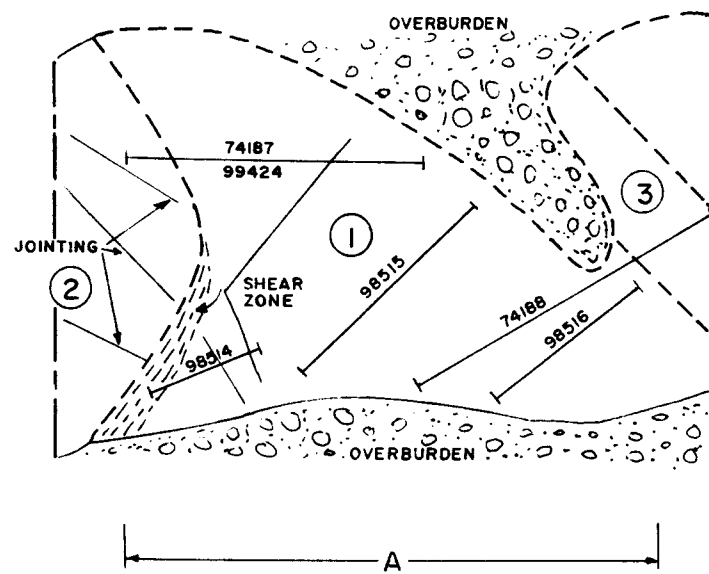
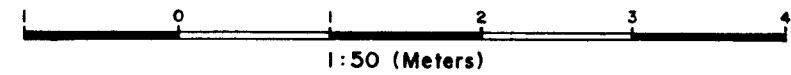
Bedding



Chip sample, rock sample

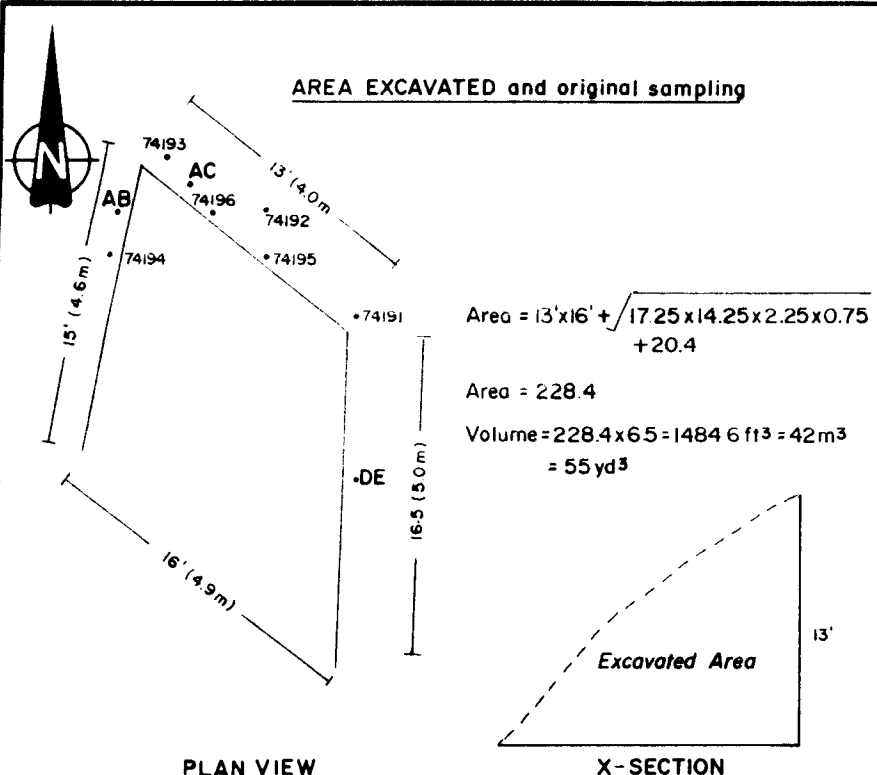


## SECTIONS



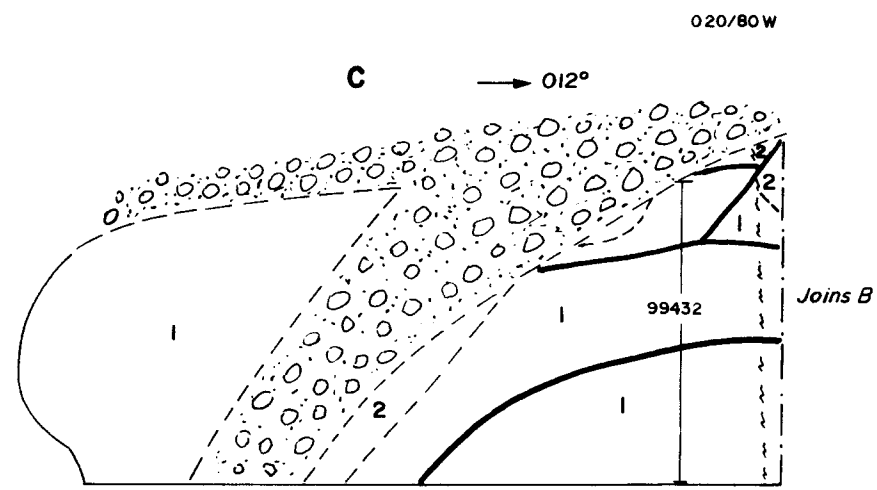
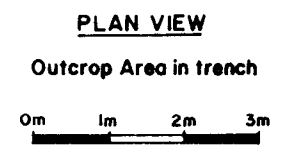
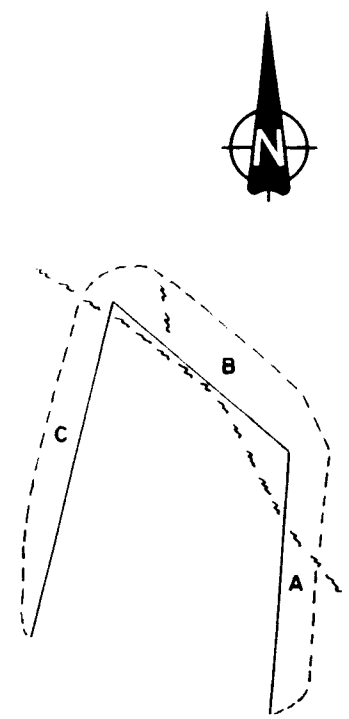
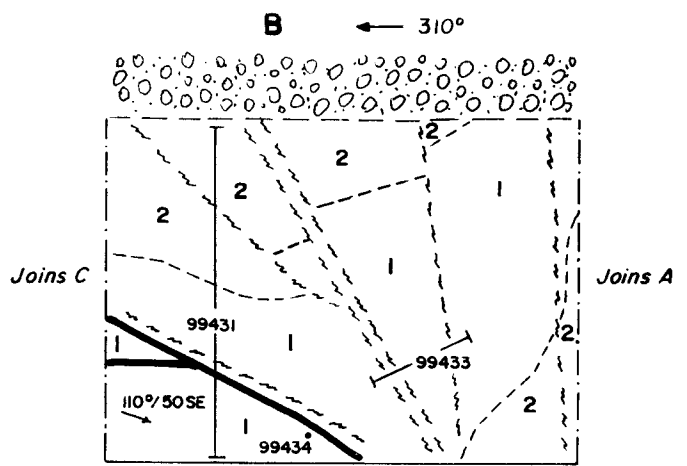
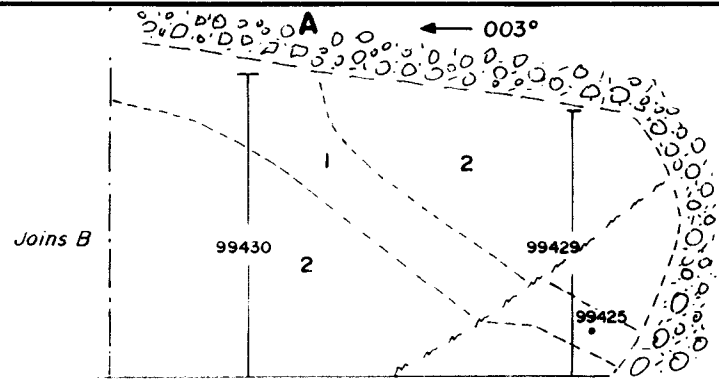
HUDSON BAY EXPLORATION & DEVELOPMENT WHITEHORSE COMPANY LIMITED OFFICE	
<b>DETAILED SAMPLING</b> LAPIE RIVER AREA	
SCALE: AS SHOWN	DATE: MAY 23, 85
FIELD WORK BY:	DRAWN BY: W.M.

FIG.5



**LEGEND**

- Overburden
- 1 Light grey to orange white highly fractured coarse grained (phenocrysts) feldspar-quartz eye porphyritic rhyolite
- 2 Medium grey to grey green blocky weathering fine grained (phenocrysts) feldspar-quartz eye porphyritic dacite flow and flow breccia
- Geological contact
- Fault
- 1 to 5 cm thick clay gouge zones
- 110°50SE Slickensides
- Chip sample, grab sample



**FIG.6**

**GRAND I TRENCH DIAGRAM**

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED

SCALE: AS SHOWN  
FIELD WORK BY: T.G.

DATE: MAY 1985  
DRAWN BY: WM

#### 6.4 Linecutting:

A 21.1 line grid has been cut. The base line starts at the South Canal Road and ends at a small lake west of the Lapie River on a trend of  $310^{\circ}$ . Sixteen 1 kilometer long wing lines have been cut at 100 m intervals between 32 E and 17E. The grid is shown on figure 3. No work has been done on the grid yet.

#### 7.0 CONCLUSION AND RECOMMENDATIONS:

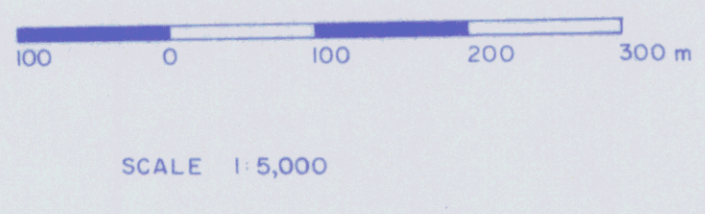
There appears to be some silver enrichment associated with carbonate altered fracture zones. Some of the later sampling is across the same zones and or in the same area and will be discussed when the results have been received. Other anomalous samples will be discussed at this time in an ammended section 7.

Further exploration in this area should include follow up sampling (rock and soil) to define the zones of silver enrichment. In addition VLF, and magnetometer surveys will be carried out on the grid to locate any structural or alteration features which may be associated with precious metal alteration.

#### 8.0 REFERENCES:

- Huges, J. D. and Long, D. G. F. 1980: Geology and Coal Resource Potential of Early Tertiary Strata along Tintina Trench, Yukon Territory; G. S. C. Paper 79-32
- Tempelman-Kluit, D. J. 1972: Geology and Origin of the Faro, Vangorda and Swim concordant zinc-lead deposits, Central Yukon Territory. G. S. C. Bulletin 208.

A handwritten signature or set of initials, possibly 'JG', written in dark ink.



- LEGEND**
- TERTIARY  
PALEOCENE - EOCENE (?)
- 3 - sandstone, shale, conglomerate, coal
- CRETACEOUS OR TERTIARY
- 2 - dacite and rhyolite a) andesite dyke
- UPPER CAMBRIAN (?) and ORDOVICIAN (?)
- 1 - shale, limestone, phyllite, quartzite
- bedding      foliation
- ~ fault
- x - sample location: talus fines, chip or grab sample

**091637**

<b>HUDSON BAY EXPLORATION &amp; DEVELOPMENT COMPANY LIMITED</b>		
WHITEHORSE	OFFICE	
<b>GRAND CLAIMS GEOLOGY &amp; GEOCHEMISTRY</b>		
DRAWN BY: KDG	DATE: MAY 1985	FIGURE 4

## APPENDIX A

### ANALYTICAL METHODS

Soil and stream sediment samples are dried and sieved to minus 80 mesh. Rock samples are pulverized and a split of the minus 100 mesh fraction is analysed.

Copper, lead, zinc and silver are analysed by atomic absorption techniques; the sample is dissolved in hot aqua regia. Silver analyses require a correction for background; values greater than 4.0 ppm are checked using a nitric acid digestion.

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

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

Antimony and barium are analysed by x-ray fluorescence using a pressed pellet of pulverized rock.

Gold analyses are by fire assay techniques using a 20 g sample, but after preparation of the lead bead, the bead is dissolved in acid and the gold content determined by atomic absorption spectrophotometry.

Gold assays are carried out using the classical fire assay method with gravimetric finish and a one assay ton sample weight.

APPENDIX B

GEOCHEMICAL ANALYSES GRAND CLAIMS

<u>SAMPLE NUMBER</u>	<u>SAMPLE TYPE</u>	<u>Au</u>	<u>Ag</u>	<u>As</u>	<u>Hg</u>
74186	Chip 1.5 m	< 5	41.0	10	35
74187	Chip 2.0 m	< 5	17.0	5	25
74188	Chip 1.5 m	< 5	7.6	3	15
74189	Grab	< 5	12.0	6	20
74190	Chip 1.0 m	< 5	3.6	5	10
99418	Grab	< 5	< 0.2	4	< 5
99419	Chip 1.4 m	< 5	< 0.2	3	< 5
99420	Grab	< 5	< 0.2	2	< 5
99421	Chip 1.0 m	< 5	< 0.2	2	< 5
99422	Chip 1.0 m	10	< 0.2	2	< 5
99423	Chip 1.5 m	< 5	< 0.2	3	< 5
99424	Chip 1.5 m	< 5	< 0.2	3	< 5
98501	Chip 1.0 m				
98502	Chip 8.0 m				
98503	Chip 1.0 m				
98504	Chip 5.0 m				
98505	Chip 1.0 m				
98506	Chip 2.0 m				
98507	Chip 5.0 m				
98508	Chip 2.0 m				
98509	Chip 1.0 m				
98510	Chip 2.0 m				
98511	Grab				
98512	Chip 4.0 m				
98513	Chip 1.0 m				
98514	Chip 1.0 m				
98515	Chip 1.5 m				
98516	Chip 1.4 m				
98517	Chip 2.0 m				
98518	Chip 1.0 m				
98519	Chip 1.0 m				
98520	Chip 1.5 m				
105 F 15002	Soil	< 5	0.6	10	25
15003	Soil	< 5	0.2	10	20
15004	Soil	< 5	0.3	9	20

SAMPLE NUMBER	SAMPLE TYPE	Au	Ag	As	Hg
105 F 15005	Soil	< 5	0.2	4	10
15006	Soil	< 5	< 0.2	3	< 5
15200	Talus fines				
15201	Talus fines				
15202	Talus fines				
15203	Talus fines				
15204	Talus fines				
15205	Talus fines				
15206	Talus fines				
15207	Talus fines				
15208	Talus fines				
15209	Talus fines				
15210	Talus fines				
15211	Talus fines				
15212	Talus fines				
15105	Talus fines				
15106	Talus fines				
15107	Talus fines				
15108	Talus fines				
15109	Talus fines				
15110	Talus fines				
15111	Talus fines				
15112	Talus fines				
15113	Talus fines				
15114	Talus fines				
15115	Talus fines				
15116	Talus fines				
15117	Talus fines				

APPENDIX C

TRENCH GEOCHEMISTRY

SAMPLE #	SAMPLE TYPE	Au	Ag	As	Hg	Cu	Pb	Zn	Ba	Sb
74191	Chip: 1.6 m	< 5	15.0	3	35					
74192	Chip: 1.7 m	10	2.4	2	5					
74193	Chip: 2.0 m	< 5	2.2	2	20					
74194	Chip: 1.2 m	< 5	0.8	2	10					
74195	Chip: 1.0 m	< 5	1.4	< 2	10					
74196	Chip: 1.0 m	< 5	0.4	2	15					
AB	Chip: 1.8 m	< 5	0.4	2	25	5	74	123	470	< 2
AC	Chip: 1.8 m	< 5	0.5	2	35	4	72	155	480	< 2
DE	Chip: 3.1 m	< 5	3.3	2	25	5	400	126	50	< 2
99429	Chip: 1.8 m									
99430	Chip: 2.2 m									
99431	Chip: 2.2 m									
99432	Chip: 2.0 m									
99433	Chip: 0.7 m									
99434	Grab									
99425	Grab	< 5	< 0.2	4	30					

APPENDIX D

GRAND CLAIMS ASSESSMENT COSTS

Access Road:	Two men - June 20-22, 1984 ~1.7 km. 3 days slashing @ \$300.00/day	900.00
Line Cutting:	May 14 to May 22/85. 21.1 line km @ 225.00/line km.	4,747.50
Geochemical Sampling:		
	Five rock samples collected July 13/84 and analysed for Au, Ag, As, Hg 5 samples @ 19.20/sample	96.00
	Twenty-seven rock samples collected May 3,16,17/85 and analysed for Au, Ag, As, Hg 27 samples @ 20.25/sample	546.75
	Thirty soil samples collected May 3,16,17/85 and analysed for Au, Ag, As, Hg 30 samples @ 17.90/sample	<u>537.00</u>
	Total Geochemical costs	1,179.75
Labour:	R. Stroshein, Sr. Geologist: Geochemical sampling 1 day @ \$200.00/day	200.00
	Tom Garagan: Project Geologist - Supervision, Geological Mapping, Geochemical Sampling, Report Writing 3.5 days @ \$160.00/day	560.00
	Ken Galambos: Geologist - Geological Mapping, Geochemical Sampling, Map Preparation 2.5 days @ \$130/day	325.00
	Pat Allen: Geologist - Geological Mapping, Geochemical Sampling, Map Preparation 1.5 days @ \$130/day	195.00
	Steve Tufford: Assistant - Geochemical Sampling 1.0 day @ \$110/day	110.00
	Val Celuszak: Assistant - Geochemical Sampling 1.0 day @ \$110/day	<u>110.00</u>
	Total Labour Costs	1,500.00
Hotel Costs:	2 man nights @ \$45.00/night	90.00
(WelcomeInn, Ross River)	6 man nights @ \$65.00/night per couple Total Hotel Costs	<u>390.00</u> 480.00
Transportation:	May 19, Ross River Service Centre	118.85
and Supplies	May 20, Airport Chevron, Whitehorse Total Gas & Supplies	<u>67.80</u> 186.65
Food Costs:	10.5 man days @ \$25/man day (Welcome Inn, Ross River and Airport Chalet, Whitehorse)	<u>262.50</u>
	Total Costs Applied to Assessment -	\$ 9,256.40

APPENDIX E

GRAND TRENCH COSTS

Excavation of Trench: June 23, 24, 25, 27, 29/1984		
Volume of 1484.6 ft <sup>3</sup> = 55 yd <sup>3</sup> = 42m <sup>3</sup>		
Cost: 55 yd <sup>3</sup> @ \$30.00/yd <sup>3</sup> =		\$ 1,650.00
Geochemical Sampling:		
Three rock samples collected June 29, 1984, and analysed for Au, Ag, As, Hg, Cu, Pb, Zn, Ba, Sb		
3 samples @ 31.70/sample=	95.10	
Six rock samples collected July 1984 and analysed for Au, Ag, As, Hg		
6 samples @ 19.20/sample=	115.20	
Seven rock samples collected May 3, 19, 1985 and analysed for Au, Ag, As, Hg		
7 samples @ 20.25/sample=	<u>141.75</u>	
Total Geochemical costs		352.05
Labour:		
Robert Stroshein: 1 day mapping & sampling @ 200/day	200.00	
Tom Garagan: 1 day mapping & sampling @ 160/day	<u>160.00</u>	360.00
Hotel: 2 man nights @ \$45/night		90.00
Food: 2 man days @ \$25/man day		<u>50.00</u>
		\$ 2,502.05

APPENDIX F

STATEMENT OF QUALIFICATIONS

TOM GARAGAN

EDUCATION: B. Sc. Honours: Geology  
University of Ottawa  
Graduation in 1980

MEMBERSHIPS: Associate Member: Geological Association of Canada  
Member: Mineralogical Association of Canada

EMPLOYMENT: 1980 - Jan. 1984: AGIP Canada Ltd.  
Project Geologist: Supervision of base  
and precious metal exploration programs on  
reconnaissance and property scale in the  
Yukon.

Feb. 1984 - Sept.  
1984: IDRC: Gore-Gambella project  
Geologist: Training Ethiopian geologist in  
geological mapping, geological mapping and  
advising Ethiopian geologists in gold  
exploration camps.

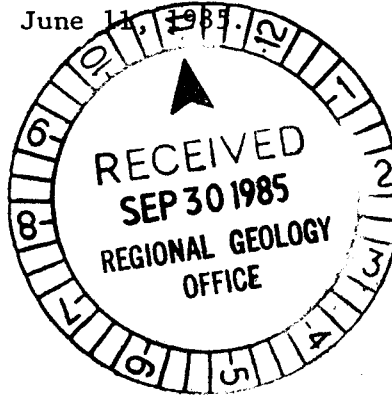
Oct. 1984 - March  
1985: D & S Petroleum Consulting  
Geologist: Oil exploration and field  
evaluations.

April 1985 to  
present: Hudson Bay Exploration & Development Co. Ltd.  
Project Geologist: Supervision of property  
scale gold exploration programs in the  
Yukon.

340-17-6

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June 11, 1985



Mr. M. Fish  
Mining Recorder  
Whitehorse Mining District  
Whitehorse, Y. T.

Dear Mr. Fish:

Please find enclosed two copies of the ammended Sections 6 and 7 for the "Assessment Report of Geological Sampling, Geochemical Sampling and Line Cutting on the GRAND 1-48 Claims and Trenching on GRAND 1" submitted to you on May 24, 1985. These sections are included with the new geochemical results included in the ammended Appendix B. The ammended sections complete the report.

I hope these meet your requirements. Please do not hesitate to call our office (668-4588) should you have any inquiries.

Thank you,

*T. Garagan*

T. Garagan  
Project Geologist

for:

TG/dw

Encl.

*Handwritten initials: TG*

*Handwritten notes: 11/6/85 Geo. Sec. for info!*

## 6.0 EXPLORATION:

### 6.1 Introduction:

A total of 32 rock samples and 30 soil samples were taken on the GRAND claims. A 1.7 km long access road was cut from the South Canal Road to the east side of the Lapie River and a small trench was excavated near the end of the road. Sixteen rock samples were collected from the trench. A 31.1 line kilometer grid has been just cut and will be used for later geophysical and geochemical surveys (Figure 3).

### 6.2 Geochemistry:

Soil samples (Talus fines) were collected at 50 m intervals below outcrops of volcanic rocks along the Lapie River. Rock chip and grab samples of bleached, carbonate altered and fractured volcanic rock were collected along the Lapie River and below the trench. All samples were analysed for gold, silver, arsenic and mercury. The results are shown in Appendix B and the sample locations are shown in figures 4 and 5. Gold, silver, arsenic and mercury values are all at or close to background level in the samples and no further sampling is required.

The initial sampling below the trench indicated silver enrichment associated with carbonate altered and fractured rhyolites (up to 41 ppm across 1.5 m). The areas anomalous in silver were resampled and were found to contain no silver.

### 6.3 Trenching:

Fifty five cubic yards ( $42\text{m}^3$ ) of rock and overburden were excavated with aid of a plugger and dynamite across a zone of carbonate altered and fractured rhyolite and dacite flows. Sixteen chip and grab samples were collected from the fractured and altered rhyolite and dacite flows. The samples were analysed for gold, silver and arsenic and mercury. These samples were also analysed for Cu, Pb, Zn, Ba and Sb. The sample locations and the geology are shown in figure 6 and the results are shown in Appendix C. A chip sample taken, in 1984, across 1.6 m contained 1.6 ppm Ag. The resampling of this sample was not able to reproduce the high silver. All other samples contain background values for all elements.

(Amended section 7.0)

#### 6.4 Linecutting:

A 21.1 line grid has been cut. The base line starts at the South Canal Road and ends at a small lake west of the Lapie River on a trend of  $310^{\circ}$ . Sixteen 1 kilometer long wing lines have been cut at 100 m intervals between 32 E and 17E. The grid is shown on figure 3. No work has been done on the grid yet.

#### 7.0 CONCLUSION AND RECOMMENDATIONS:

Initial sampling on the GRAND claims indicated silver enrichment associated with carbonate altered fracture zones. Resampling in the same areas did not confirm the silver anomalies. All high silver values from the GRAND claims came from the same "batch" of samples analysed by the commercial lab and high results are probably due to contamination in the lab.

Further exploration in this area will consist of VLF and magnetometer surveys on the grid to locate any structural or alteration features which may be associated with precious metal mineralization.

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#### 8.0 REFERENCES:

- Huges, J. D. and Long, D. G. F. 1980: Geology and Coal Resource Potential of Early Tertiary Strata along Tintina Trench, Yukon Territory; G. S. C. Paper 79-32
- Tempelman-Kluit, D. J. 1972: Geology and Origin of the Faro, Vangorda and Swim concordant zinc-lead deposits, Central Yukon Territory. G. S. C. Bulletin 208.

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APPENDIX B (AMMENDED)

GEOCHEMICAL ANALYSES GRAND CLAIMS

<u>SAMPLE NUMBER</u>	<u>SAMPLE TYPE</u>	<u>Au</u>	<u>Ag</u>	<u>As</u>	<u>Hg</u>
74186	Chip 1.5 m	< 5	41.0	10	35
74187	Chip 2.0 m	< 5	17.0	5	25
74188	Chip 1.5 m	< 5	7.6	3	15
74189	Grab	< 5	12.0	6	20
74190	Chip 1.0 m	< 5	3.6	5	10
99418	Grab	< 5	< 0.2	4	< 5
99419	Chip 1.4 m	< 5	< 0.2	3	< 5
99420	Grab	< 5	< 0.2	2	< 5
99421	Chip 1.0 m	< 5	< 0.2	2	< 5
99422	Chip 1.0 m	10	< 0.2	2	< 5
99423	Chip 1.5 m	< 5	< 0.2	3	< 5
99424	Chip 1.5 m	< 5	< 0.2	3	< 5
98501	Chip 1.0 m	55	0.9	12	< 5
98502	Chip 8.0 m	< 5	< 0.2	< 2	< 5
98503	Chip 1.0 m	15	0.4	3	20
98504	Chip 5.0 m	< 5	< 0.2	2	20
98505	Chip 1.0 m	10	< 0.2	3	15
98506	Chip 2.0 m	< 5	< 0.2	3	15
98507	Chip 5.0 m	< 5	< 0.2	6	15
98508	Chip 2.0 m	< 5	< 0.2	2	40
98509	Chip 1.0 m	< 5	< 0.2	< 2	30
98510	Chip 2.0 m	< 5	< 0.2	< 2	< 5
98511	Grab	< 5	< 0.2	3	5
98512	Chip 4.0 m	5	< 0.2	7	5
98513	Chip 1.0 m	< 5	< 0.2	2	20
98514	Chip 1.0 m	< 5	< 0.2	3	10
98515	Chip 1.5 m	< 5	0.4	3	15
98516	Chip 1.4 m	< 5	0.5	< 2	15
98517	Chip 2.0 m	< 5	0.3	3	5
98518	Chip 1.0 m	< 5	< 0.2	4	< 5
98519	Chip 1.0 m	< 5	< 0.2	< 2	< 5
98520	Chip 1.5 m	< 5	< 0.2	3	< 5
105 F 15002	Soil	< 5	0.6	10	25
15003	Soil	< 5	0.2	10	20
15004	Soil	< 5	0.3	9	20

SAMPLE NUMBER	SAMPLE TYPE	Au	Ag	As	Hg
105 F 15005	Soil	< 5	0.2	4	10
15006	Soil	< 5	< 0.2	3	< 5
15200	Talus fines	< 5	< 0.2	2	5
15201	Talus fines	< 5	< 0.2	< 2	20
15202	Talus fines	-	-	-	-
15203	Talus fines	< 5	< 0.2	11	10
15204	Talus fines	< 5	< 0.2	5	30
15205	Talus fines	< 5	< 0.2	3	20
15206	Talus fines	< 5	< 0.2	6	30
15207	Talus fines	< 5	< 0.2	< 2	20
15208	Talus fines	< 5	< 0.2	7	15
15209	Talus fines	< 5	< 0.2	< 2	15
15210	Talus fines	< 5	< 0.2	6	35
15211	Talus fines	< 5	< 0.2	7	45
15212	Talus fines	< 5	< 0.2	6	45
15105	Talus fines	< 5	< 0.2	< 2	< 5
15106	Talus fines	< 5	< 0.2	2	< 5
15107	Talus fines	< 5	< 0.2	< 2	< 5
15108	Talus fines	< 5	< 0.2	< 2	< 5
15109	Talus fines	< 5	< 0.2	2	< 5
15110	Talus fines	< 5	< 0.2	< 2	< 5
15111	Talus fines	< 5	< 0.2	3	< 5
15112	Talus fines	< 5	< 0.2	8	< 5
15113	Talus fines	< 5	< 0.2	6	15
15114	Talus fines	< 5	< 0.2	3	5
15115	Talus fines	< 5	< 0.2	< 2	15
15116	Talus fines	< 5	< 0.2	6	40
15117	Talus fines	< 5	< 0.2	12	15

APPENDIX C (AMMENDED)

TRENCH GEOCHEMISTRY

SAMPLE #	SAMPLE TYPE	Au	Ag	As	Hg	Cu	Pb	Zn	Ba	Sb
74191	Chip: 1.6 m	< 5	15.0	3	35					
74192	Chip: 1.7 m	10	2.4	2	5					
74193	Chip: 2.0 m	< 5	2.2	2	20					
74194	Chip: 1.2 m	< 5	0.8	2	10					
74195	Chip: 1.0 m	< 5	1.4	< 2	10					
74196	Chip: 1.0 m	< 5	0.4	2	15					
AB	Chip: 1.8 m	< 5	0.4	2	25	5	74	123	470	< 2
AC	Chip: 1.8 m	< 5	0.5	2	35	4	72	155	480	< 2
DE	Chip: 3.1 m	< 5	3.3	2	25	5	400	126	50	< 2
99429	Chip: 1.8 m	< 5	0.2	3	5					
99430	Chip: 2.2 m	< 5	< 0.2	2	< 5					
99431	Chip: 2.2 m	< 5	< 0.2	< 2	5					
99432	Chip: 2.0 m	< 5	< 0.2	< 2	< 5					
99433	Chip: 0.7 m	< 5	< 0.2	2	< 5					
99434	Grab	< 5	< 0.2	13	20					
99425	Grab	< 5	< 0.2	4	30					