

120078

GEOLOGICAL AND GEOCHEMICAL
REPORT
on the

(P9657) Big M Claims



Dawson Mining District, Yukon

NTS: 1150/10

Lat. $63^{\circ}36'$ N; Long. $138^{\circ}43'$ W

H. Copland
Geologist

July 4-6, 1986

120078

This report has been examined by
the Geological Evaluation Unit under
Section 41 Yukon Placer Mining Act
and is recommended as allowable
representation work in the amount
of \$ 200.00

DA Emond / S.R. Morrison

for Chief Geologist, Exploration and
Geological Services Division, Northern
Assessment Program for Commissioner of
Yukon Territory.

SUMMARY

The Carglidor and Big M placer claims lie on the south bench of the Indian R. just west of Wounded Moose Creek. Work consisting of geo-chemical sampling was carried out on the claims during the period July 4-6, 1986. Results were disappointing with most samples showing only background or detection limits. Gold bearing horizons may lay at depth. Activity in the area is minimal and prospects of good grade placer deposits on the claims are low.

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Geological and Geochemical Report on the Carglidor and Big M Claims
Dawson Mining District, Yukon

INTRODUCTION

The Carglidor (P9658) and Big M (P9657) placer bench claims lie approximately 60 km. (85 road Km.) southeast of Dawson City. The claims are on the south side of the Indian River, one drainage west of Wounded Moose Creek. The claims are accessible directly, via the Hunker-Sulphur-Eureka Creek roads(see Figs. 1&2). P9658 is owned by L. Sylvester of San Francisco, Calif. and P9657 by T.W. Patch of Anchorage, Ak..

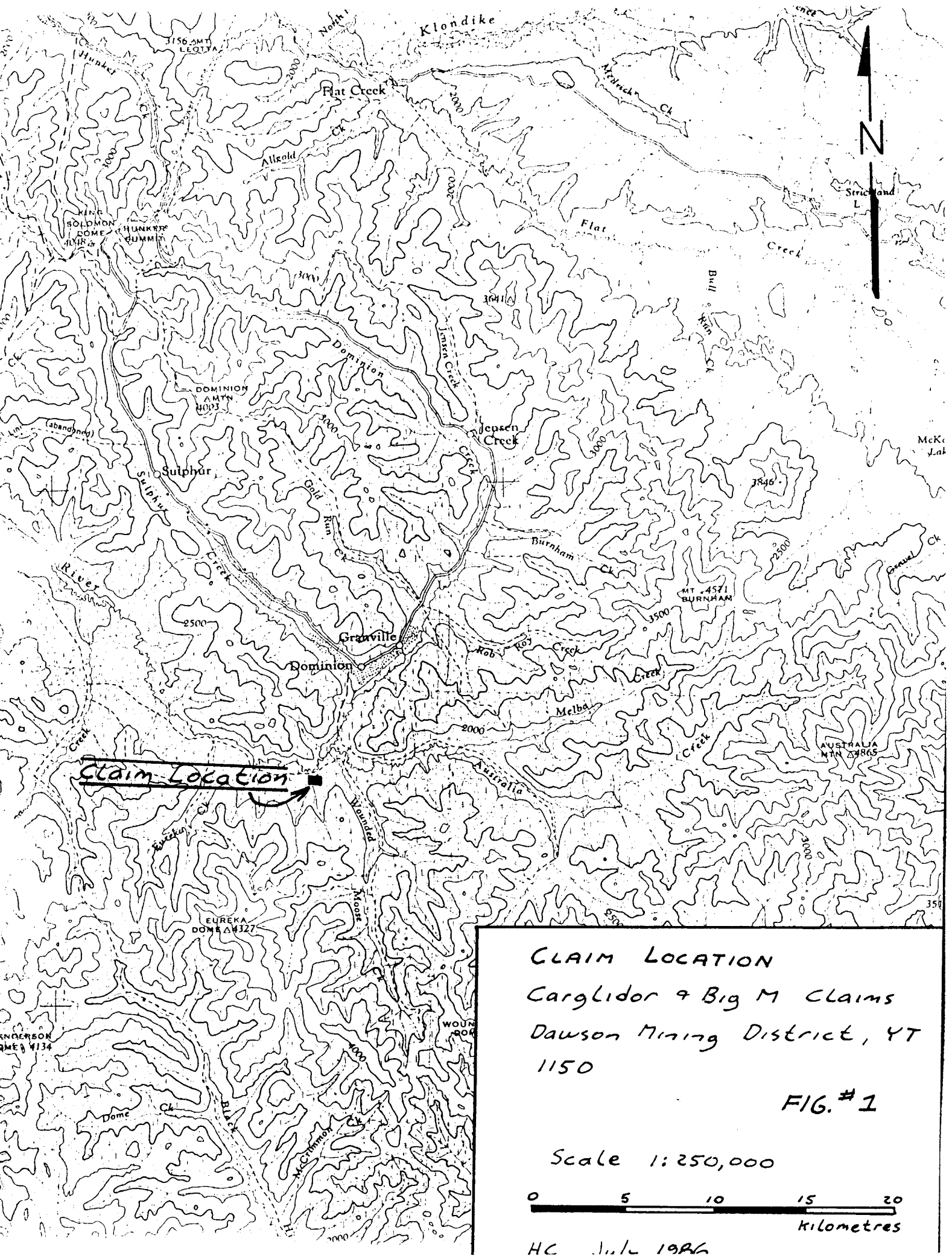
Work consisting of a geological examination and geochemical sampling was carried out on the claims during the period July 4-6, 1986.

TOPOGRAPHY AND VEGETATION

The claims lie at an elevation of 530 metres (1750 ft.) on a gentle north facing slope approximately 300 metres from the Indian River. The region between the river and the claims has been stripped of the top layer of soil a few years ago and has since revegetated with grass and low bushes.

Low density stands of poplar and minor spruce grow on the higher well drained margins of the claims. Dense alder with poplar and spruce grow in a belt along the creek. Adjacent to this belt wet and frozen ground supports typical muskeg vegetation especially on the east side of the creek.

The claims are drained by a small, gently meandering creek, varying in width from 0.5-1.5 metres, and dividing into several small channels in some areas. At the time of the visit flowrate was estimated at 0.1 cu. m/sec (200 cu. ft/sec). The creek enters the Indian River just east of the bridge to Eureka Ck.



Claim Location →

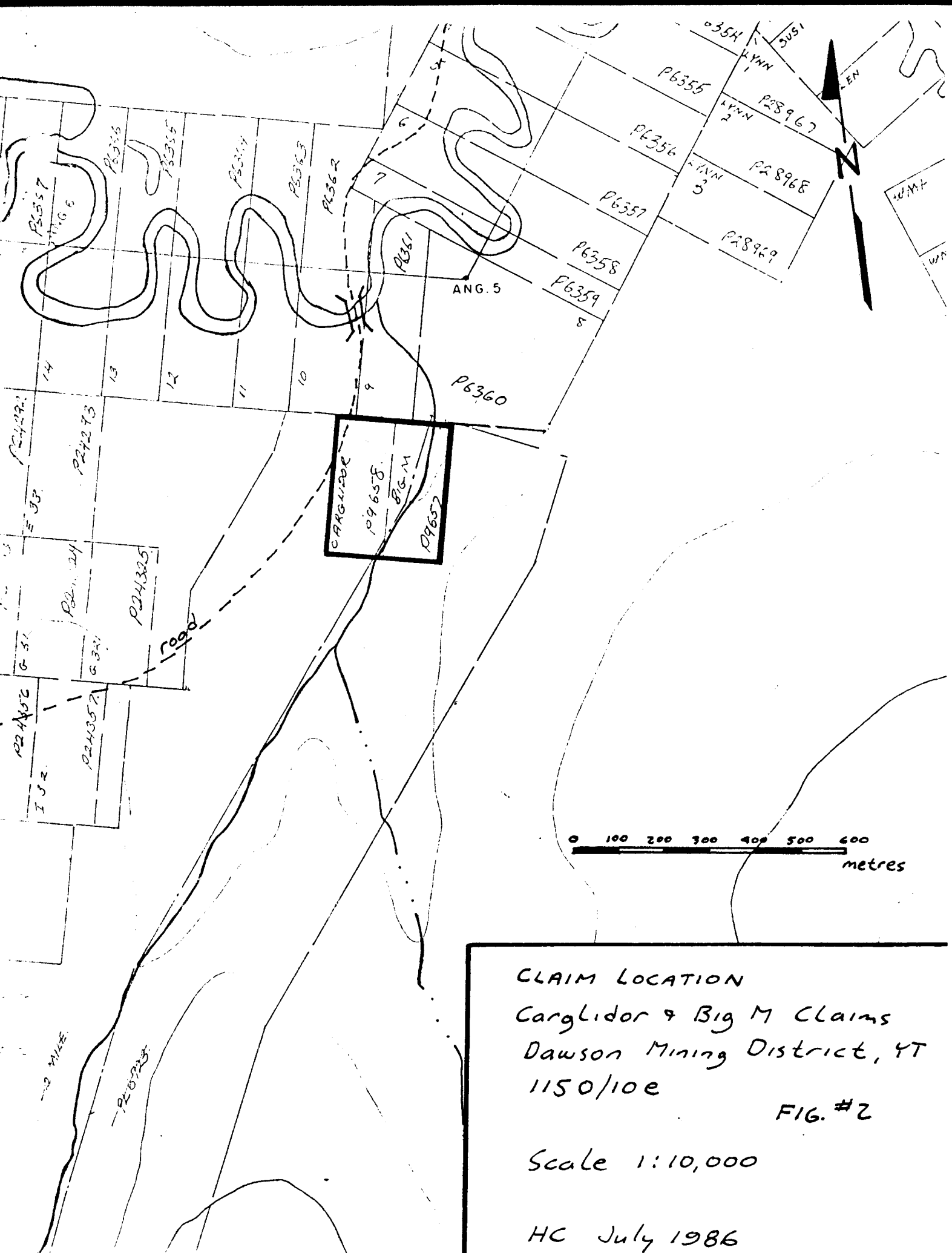
CLAIM LOCATION
 Carglidor & Big M Claims
 Dawson Mining District, YT
 1150

FIG. # 1

Scale 1:250,000

0 5 10 15 20
 kilometres

HC 11/1 1986



CLAIM LOCATION
 Carglidor & Big M Claims
 Dawson Mining District, YT
 1150/10e
 FIG. #2
 Scale 1:10,000
 HC July 1986

HISTORY

Old posts found adjacent to the present posts indicate the area was once covered by claim numbers P7298 and P7299. The present claims were located in 1981. A shallow (20-50 cm.) bulldozer trench 75 m. long was found on the far west side of the Carglidor. Whether this is an exploratory trench or short road through the trees is unclear. Evidence in the form of a rusting 2" pipe and intake screen indicates the creek was once used as a water source.

Placer leases PL6643 and PL6723 once covered the upstream western tributary of the stream, but have since lapsed. No signs or records of production in the immediate area were found. The nearest present production occurs on Eureka Ck. and the lower portion of Dominion Ck. just below Sulphur Ck.

GEOLOGY

Regional

The area is underlain by rocks of the Klondike schist series. Primarily by sericite, chlorite, and graphitic schists. Related gneissic granite outcrops can be found in the Indian R. lower Dominion Ck. area. The rocks are all highly fractured with a strong northwest trending foliation. Most of the schists weather a moderate to intense orangy gossan, whereas the gneiss is generally grey on exposed surfaces.

Near the claims a sericite schist crops out along the north side of the Indian R. A steep abrupt slope rising from the river suggests a fault running down this valley. Another prominent knoll of gossanous schist is exposed at the fork of the creek just above the claims.

Property (see Figs. 3&4)

Bedrock was not observed on the claims. The organic "A" horizon

averaged 10 cm. in depth over the claims. A maximum of 30 cm. occurs over the frozen areas of the Big M claim thinning to 1-2 cm. in some areas near the creek. Beneath the organics, a light brown silty sand covers the upper treed sections of the area. This horizon contains minor amounts of a medium grained sand with granules of subrounded schist and minor quartz. Depth of this horizon is probably substantial as indicated by stripping on nearby claims. The horizon most likely represents a normal soil development in a semi-arid environment.

Nearer the creek the silt and clay fraction increases, the colour darkens, and the soil becomes saturated forming a grey-black sludge. Small streaks and pods of decayed organic material occur throughout this horizon. A medium to coarse grained sand fraction is still present, comprising approximately 10% of the soil. The sludge is typical of that observed in frozen poorly drained, low lying areas in the region.

Immediately adjacent to the creek, on the west side, an area of well drained granule to pebble sized gravel occurs with a coarse orange sand matrix. This overlies a wet grey silty clay with minor thin interbeds of coarse reddish sand. The thickness of the gravel horizon varies from 10 - 90 cm. observed in the pits dug. This horizon is largely clast supported with an imbricated fabric. The clasts are mainly subrounded, planar, light brown sericite schists; grey-green chlorite schists; and grey granitic gneiss. Size averages 2 cm. with the largest observed up to 8cm. Small sub-angular white glassy quartz fragments less than 1 cm. in size comprise a very minor portion of the gravels. The proximity to the creek and the imbricated nature suggests that this is an old creek bed.

GEOCHEMISTRY

Procedure

A total of 11 pan concentrate, 9 silt, and 4 soil samples were collected from the Big M; and 11 pan, 7 silt, and 7 soils from the

Post #1 P9657

Post #2 P9657

To Indian R.



x P-10 (.001)

x P-9 (.001)

P-1 (.011)
T-1 (2)

claim outline

x Pan concentrate sample location

• Silt/soil sample location

- pan results total Au in (mg)

- soil results Au in (ppb)

- silt results Au in (ppb)

Sand & dry silty clay

P-2 (.001)
T-2 (2)

T-3 (40)

permafrost zone

creek
T-4 (2)

T-5 (3)

old channel see detail 1

x P-15,16
T-6 (1)

x P-17
T-7 (1)

x P-11,13,14
T-8 (6)

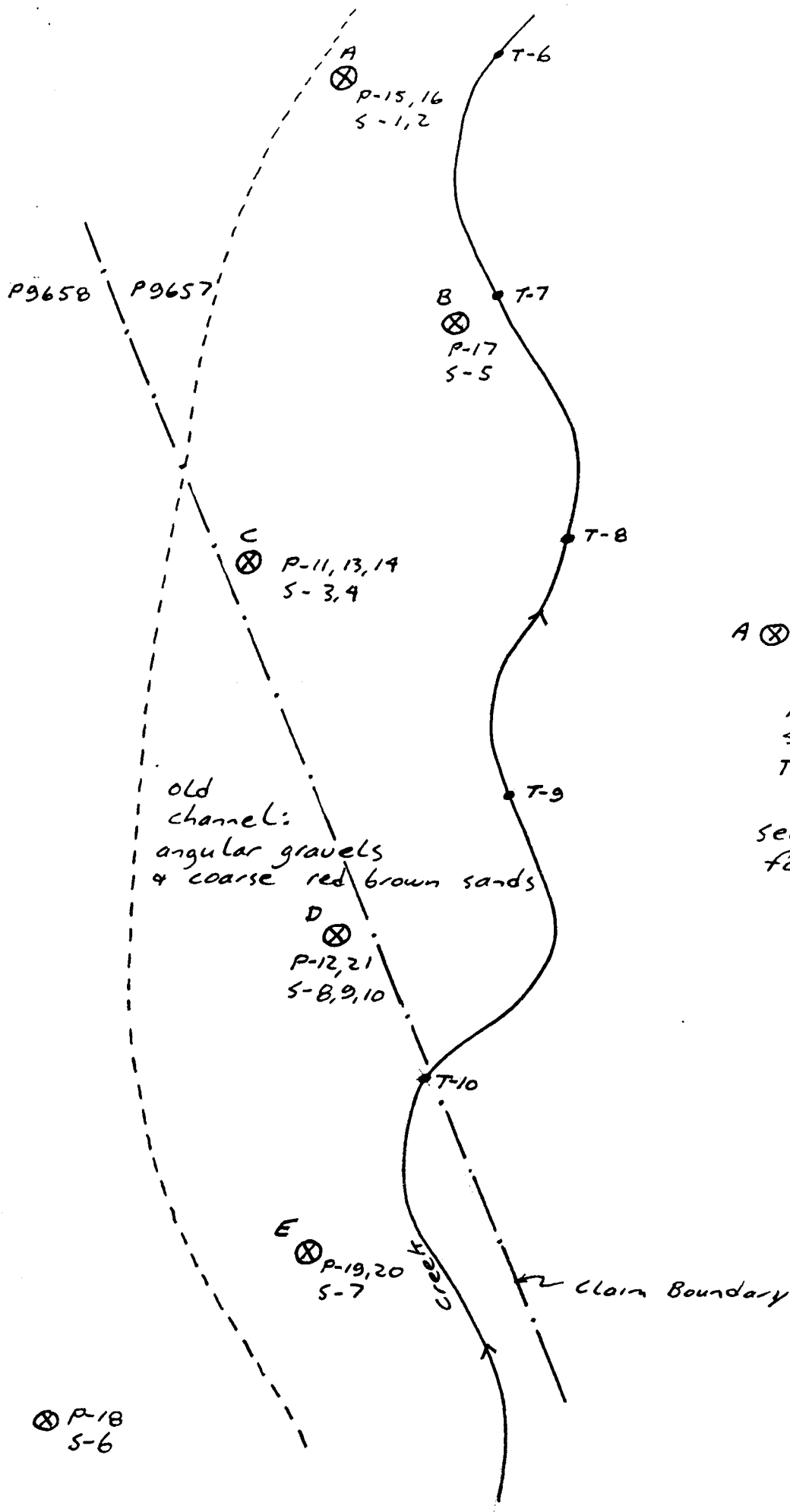
T-9 (1)

sand & silty clay

x P-8 (.001)

Big M Claim
P9657
1150/10e
Scale approx.
1 cm = 10 m
H. Copland
July 1986

FIGURE 3



A ⊗ Test Pit
 Locations
 P: Pan samples
 S: Soil "
 T: silt "
 see detail 2
 for profiles

Detail 1
 Big M P9657
 Carlgidor P9658
 Claims
 1150/10e
 Scale approx.
 1 cm = 5 m
 H. Copland
 July 1986

FIGURE 4

Carglidor were taken(see Figs. 3&4 for locations). For each pan sample approximately 10 kg. of material was panned down to an average of 50 g. of concentrate for analysis.

The creek was pan sampled where possible at 20 m. intervals. When suitable material was not available for panning a silt was collected from active stream sediments. A silt was also collected from each pan location for comparision purposes. Several pan samples were also collected from different horizons in hand dug pits on the property (see Fig. 5). Some soil samples were also collected from the pits to check correlation with the panned samples.

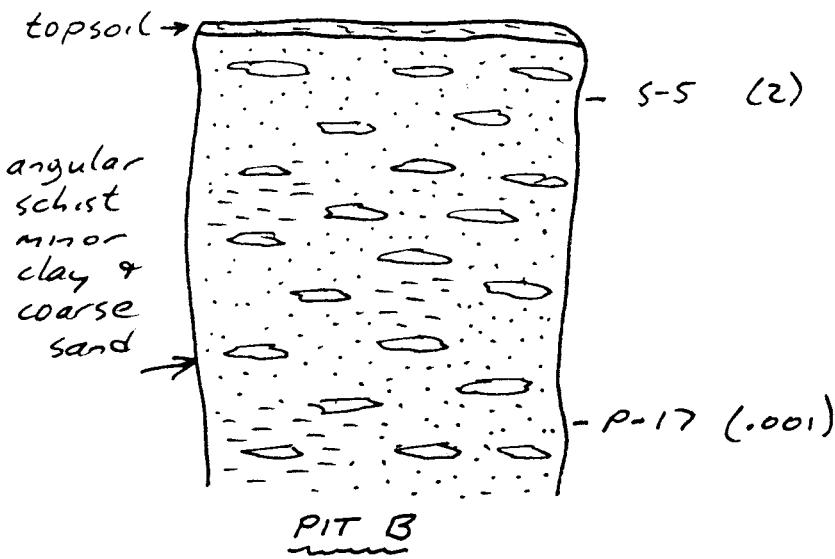
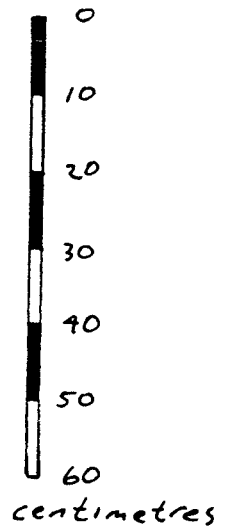
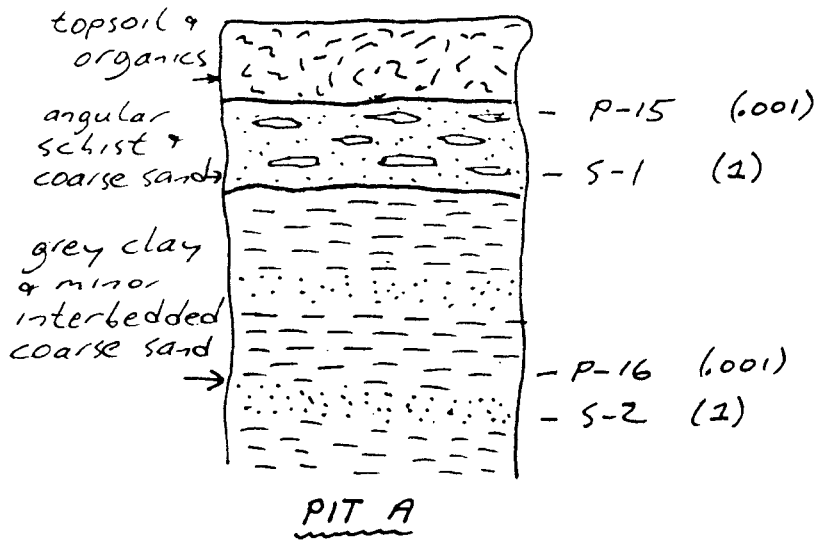
All samples were shipped to Acme Labs of Vancouver, BC for preparation and analysis. Soil and silt samples were dried and sieved to -80 mesh. Pan samples were pulverised to -100 mesh. All samples were analysed for gold using fire assay preconcentration and atomic absorption.

Results

Assay and geochemical reports are included in the appendix. The results have also been plotted on Figures 3 & 5. The majority of the results show only background or detection limits. One silt sample (IRT-3, 40 ppb), was above background, but by placer standards it is still low. None of the soil samples collected in conjunction with the pans was anomalous.

Two of the pan samples were above detection limits, (IRP-1, .011 mg; IRP-13, .013 mg). These are far below the value of 2.5 mg for a pan in average grade placer deposits (Debicki 1983, p. 26).

Due to the poor results it is not possible to determine any correlations between soil/silt and pan samples collected at the same sites. For the same reasons no statements can be inferred as to gold content of the various horizons.



P: pan sample
(.001) result in total
Au (in mg.)

S: soil sample
(2) Au in ppb

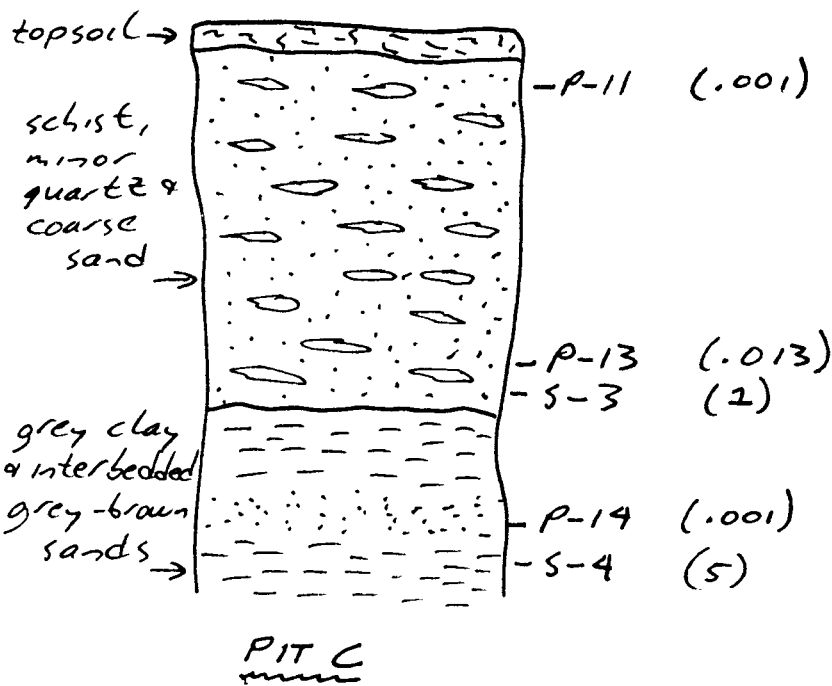


FIGURE 5

PIT PROFILES

Sample Locations &
Results

Claim P9657

H. Copland July 86

CONCLUSIONS AND RECOMMENDATIONS

The lack of any operations in the immediate area of the claims, lapsed claims on the adjacent Wounded Moose Ck., and a lapsed lease on the creek running through the properties reflects the poor results obtained. It is unlikely that this can be considered prime placer ground. It may be that gold bearing horizons occur much deeper. A backhoe would probably be the most economic method of testing to depth in the unfrozen ground immediately west of the creek. Any frozen ground would have to be drilled or progressively stripped as the ground thaws.

COST STATEMENT

1. LABOUR		
i)Field work		
H. Copland (Geologist) 1.5 days @ \$100/day		150.
ii)Office work		
Field and report preparation .5 days@100/day . . .		50.
		<u>200.</u>
		\$ 200.
2. ANALYTICAL COSTS		
i)Soil and silt samples		
preparation \$1.50 x 14 samples		21.00
analysis 5.50 x 14		77.00
ii)Pan samples 15.00 x 11		165.00
		<u>263.00</u>
		\$ 263.00
3. FOOD AND ACCOMMODATION		\$ 23.02
4. TRANSPORTATION		
i)Fuel and oil		61.17
ii)Sample shipment		14.50
		<u>75.67</u>
		\$ 75.67
5. OFFICE SUPPLIES		\$ 5.00
6. FIELD SUPPLIES		\$ 7.50
		<u>TOTAL \$ 574.19</u>

SELECTED BIBLIOGRAPHY

Boyle, R.W.

1979: The Geochemistry of Gold and its Deposits, GSC Bull. 280,
584 p.

Debicki, R.L.

1983: Yukon Placer Mining Industry 1978-1982, DIAND, 203 p.

Green, L.H.

1972: Geology of Nash Ck., Larsen Ck., and Dawson Map-areas, YT,
GSC Mem. 364, 157 p.

CERTIFICATE

I, Hugh Copland, do hereby certify that:

1. I am a geologist residing at Site 20, Box 109, RR1, Whitehorse Yukon Y1A 4Z6.
2. I am a graduate of the University of British Columbia with a B.Sc. in Honours Geology (1982).
3. I have practised my profession over the past six years primarily in the Western Cordillera.
4. This report is based on field work conducted by me during July 1986.
5. I consent to the use of this report for whatever purpose deemed necessary.

H. Copland
Yukon Territory
July 25, 1986

APPENDIX

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED JULY 14 1986

DATE REPORTS MAILED

July 17/86

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : P1-SOILS & SILTS -80 MESH P2 PAN-CONC
AU** - 10GM FIRE ASSAY CONCENTRATION. HNO3 LEACHED.
AQUA REGIA DIGESTION. GRAPHITE FURNACE AA ANALYSIS.
TOTAL AU** BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

H. COPLAND FILE# 86-1464

PAGE# 1

SAMPLE	Au** ppb
IRS-1	1
IRS-2	1
IRS-3	1
IRS-4	5
IRS-5	2
IRS-6	2
IRS-7	6
IRS-8	2
IRS-9	1
IRS-10	6
IRS-11	3
IRT-1	2
IRT-2	2
IRT-3	40
IRT-4	2
IRT-5	3
IRT-6	1
IRT-7	1
IRT-8	6
IRT-9	1
IRT-10	1
IRT-11	1
IRT-12	1
IRT-13	1
IRT-14	1
IRT-15	3
IRT-16	1

SAMPLE	TOTAL Au** mg	SAMPLE Weight gm
IRP-1	.011	40.0
IRP-2	.001	32.7
IRP-3	.001	40.8
IRP-4	.001	50.1
IRP-5	.001	85.8
IRP-6	.001	61.2
IRP-7	.001	73.0
IRP-8	.001	63.5
IRP-9	.001	53.7
IRP-10	.001	52.2
IRP-11	.001	48.5
IRP-12	.001	63.2
IRP-13	.013	68.2
IRP-14	.001	53.1
IRP-15	.001	70.1
IRP-16	.001	54.8
IRP-17	.001	59.8
IRP-18	.001	55.2
IRP-19	.001	64.7
IRP-20	.001	46.5
IRP-21	.001	65.8
IRP-22	.001	56.8

100 mg

25 mg

100 mg

Microfilm please include these sheets.

120078



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

YUKON PLACER MINING ACT

SCHEDULE "B" FORM 2

APPLICATION FOR RENEWAL OF GRANT FOR PLACER MINING



NOTE: This form to be submitted in triplicate to the Mining Recorder for the District in which the claim is recorded, with a sketch of the location.

Mining District DAWSON		Occupation BUSINESSMAN	OFFICE DATE STAMP
I, (name) LARRY SYLVESTER	<i>Hugh Copland Agent for</i>		
Of, (postal address) #132 - 110 PACIFIC AVENUE, SAN FRANCISCO, CA. 94111			

Hereby apply under the Yukon Placer Mining Act for a renewal of a grant to a placer mining claim number(s) BIG M
115 0-10, P 9658

I MAKE OATH AND SAY THAT:-

1. I am the owner of the said placer mining claim and hold a grant (or renewal) for the said claim(s) dated the 7TH
day of JULY 19 81.

2. Work has been done on the said claim(s) to the value of at least \$200.00 dollars in accordance with the
schedule of representation work prepared by the Commissioner of the Yukon Territory, since the
7TH day of JULY 19 85.

The following is a detailed statement of such work:-

Work was carried out on the claim during the period July 4-6, 1986. This work consisted of a geological examination and systematic sampling of the property. The stream running through the claim was pan and silt sampled at 20 metre intervals. Several test pits were dug by hand to determine the nature of, and sample the various horizons. See attached sketches for locations. Pits varied in depth from near surface in frozen ground to over 1 metre on an abandoned stream channel adjacent to the present stream course. A total of 11 samples of approximately 10 kg. each were panned down to an average of 50 g. of concentrate. Analysis will consist of pulverising to -100 mesh and gold analysis by fire assay and atomic absorption. 13 soil and silt samples consisting of approximately 500 g. each were collected and will be sieved to -80 mesh and analysed by fire assay and AA. Sampling and analysis total approx. \$196, and labour 1.5 days at \$15/day, \$23.

Sworn before me at Whitehorse WHITEHORSE, YUKON

in the Yukon Territory,

this _____ day of JULY 10 1986 19 _____

[Signature]
(Notary Public)

[Signature]
Owner or Agent

Post #1 P9657

To Indian R.

Post #2 P9657

x P-10

sand & dry silty clay

x P-9

x P-1
T-1

claim outline

x Pan concentrate sample location

• silt/soil sample location

x P-2
T-2

T-3

permafrost zone

T-4

creek

T-5

old channel see detail 1

x P-15,16

T-6

x P-17

T-7

x P-11,13,19

T-8

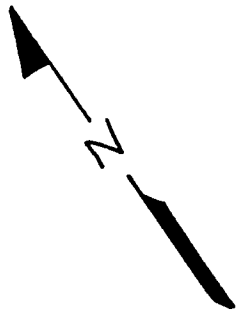
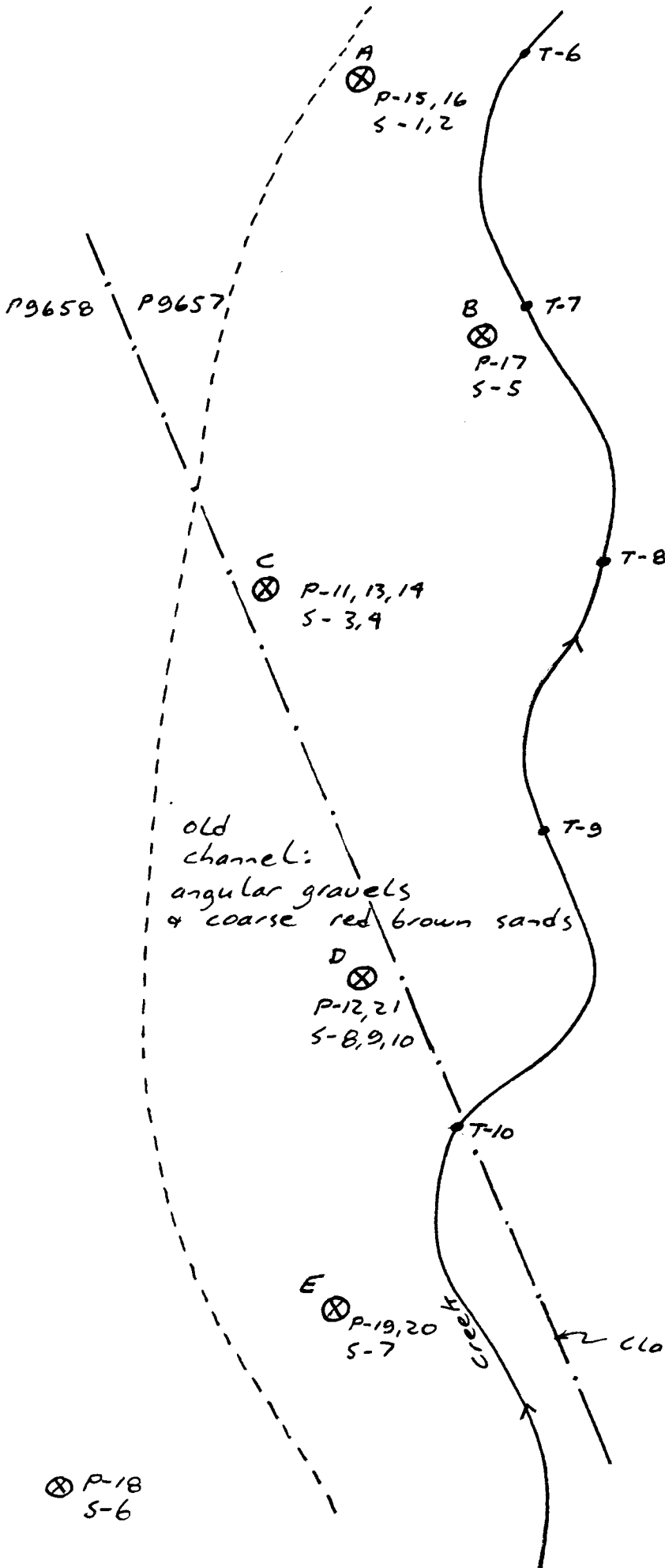
T-9

sand & silty clay

x P-8



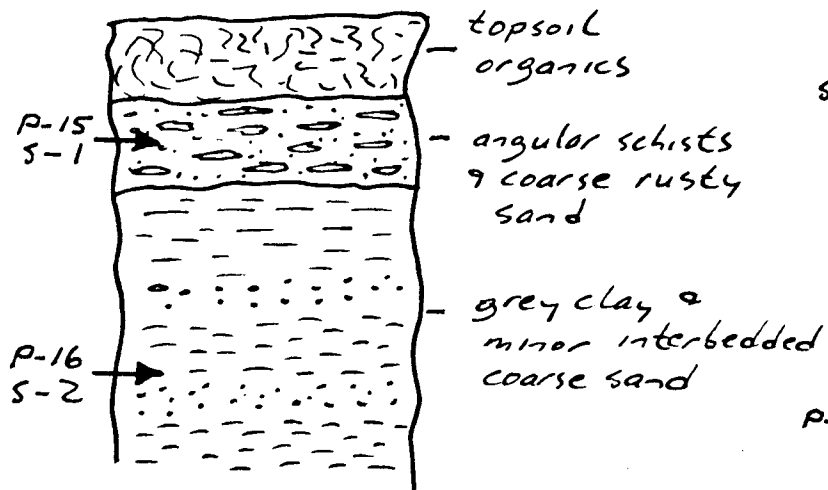
Big M Claim
 P9657
 1150/10e
 Scale approx.
 1 cm = 10 m
 H. Copland
 July 1986



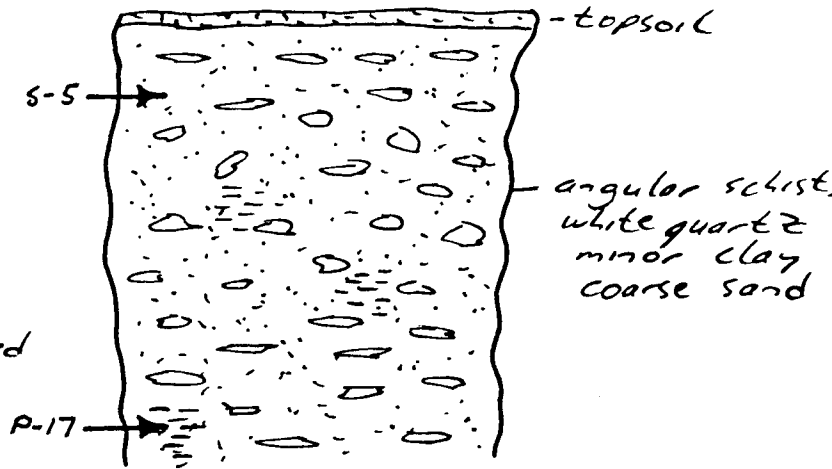
A ⊗ Test Pit
 Locations
 P: pan samples
 S: soil "
 T: silt "

see detail 2
for profiles

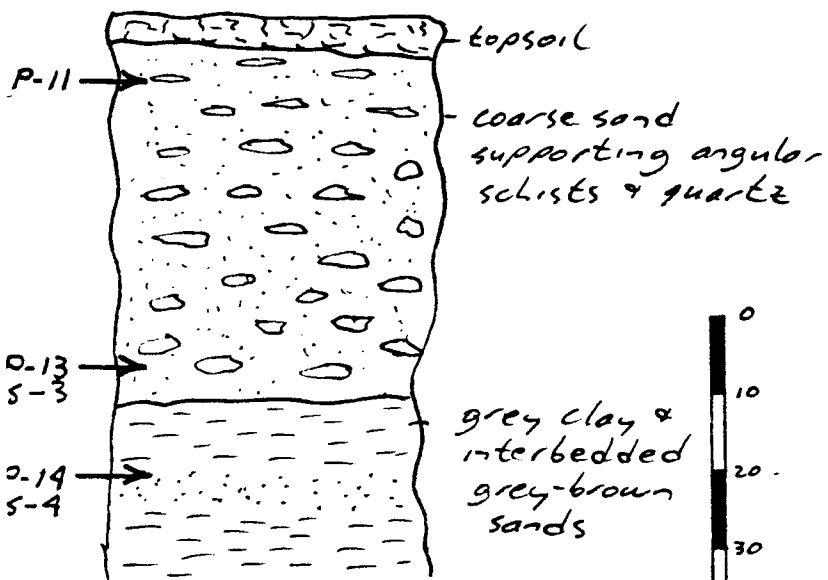
Detail 1
 Big M P9657
 CargLidor P9658
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 1150/10e
 Scale approx.
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 H. Copland
 July 1986



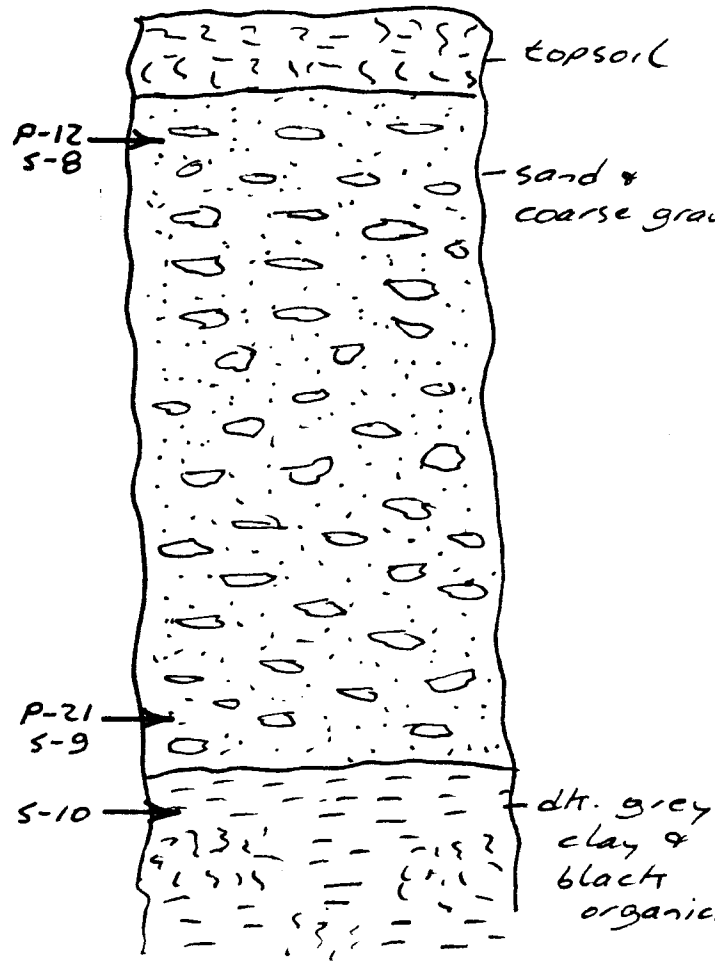
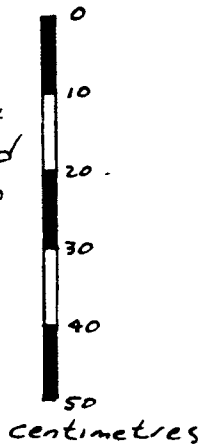
PIT A



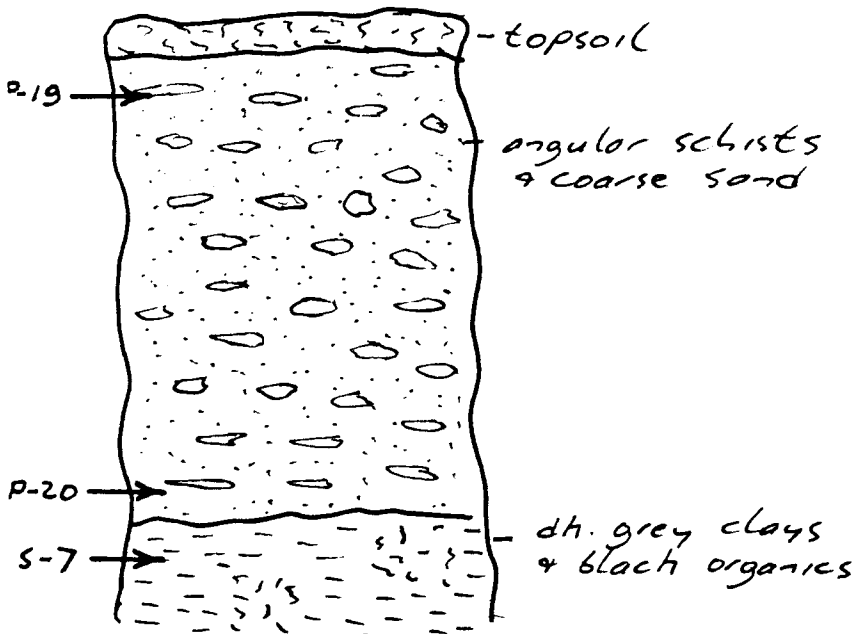
PIT B



PIT C



PIT D



PIT E

DETAIL 2
PIT PROFILES &
Sample Locations
H. Copland
July 1986