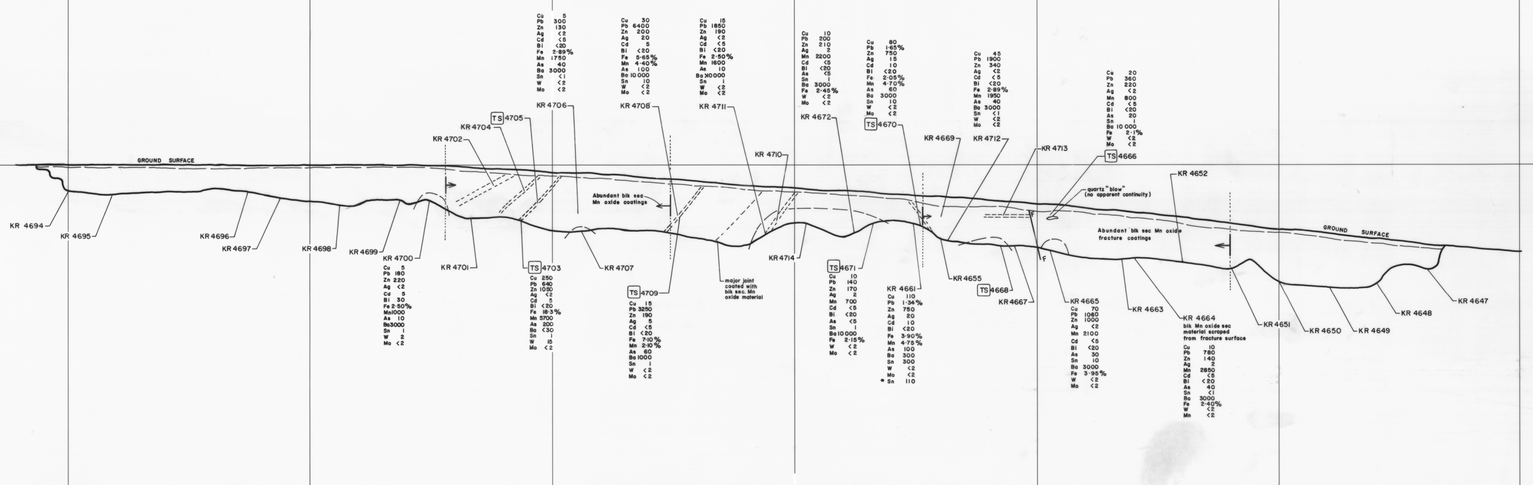
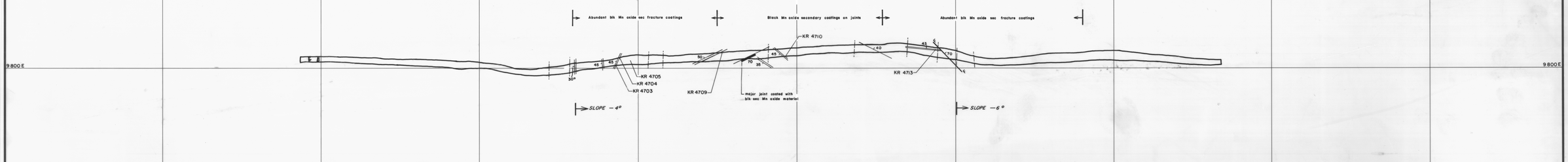
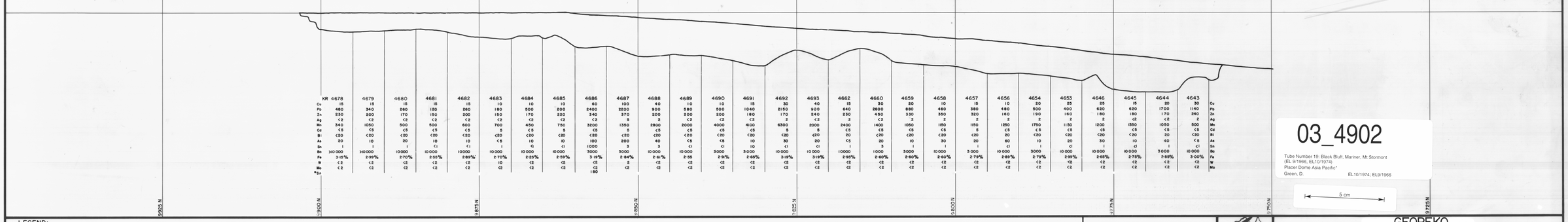
GEOLOGICAL PROFILE



GEOLOGICAL FLOOR PLAN



BEDROCK GRAB SAMPLE GEOCHEMISTRY



	KR 4678	4679	4680	4681	4682	4683	4684	4685	4686	4687	4688	4689	4690	4691	4692	4693	4662	4660	4659	4658	4657	4656	4654	4653	4646	4645	4644	4643
Cu	5	15	15	15	15	10	10	10	60	100	40	10	10	15	30	40	15	30	20	10	15	10	20	25	25	15	20	30
Pb	480	340	260	120	260	180	500	200	2400	2200	900	580	500	1040	2150	900	640	2600	880	460	380	480	500	400	620	620	1700	1140
Zn	230	200	170	150	200	150	170	220	340	370	200	200	200	180	170	240	230	450	330	350	320	160	190	160	180	180	170	240
Ag	<2	<2	<2	<2	<2	<2	<2	<2	<2	5	2	<2	<2	<2	2	<2	2	<2	2	2	2	2	2	2	5	<2	<2	2
Mn	340	1050	500	500	600	700	490	750	3200	1350	2800	2000	4000	4100	6300	2000	2400	1400	1050	1150	1150	1250	1750	1150	1200	1350	1050	500
Cd	<5	<5	<5	<5	<5	5	<5	5	<5	5	<5	<5	<5	<5	5	5	<5	<5	<5	<5	5	<5	<5	<5	<5	<5	<5	<5
Bi	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	20	<20	<20	<20	<20	20	<20	<20	<20	<20	20	<20
As	20	10	20	10	10	<5	10	10	100	200	40	<5	<5	10	30	20	<5	20	10	30	20	60	10	20	30	10	40	<5
Sn	1	1	1	<1	<1	1	<1	<1	1000	3	3	<1	<1	10	1	<1	1	3	1	1	1	<1	1	<1	1	<1	1	<1
Be	>10 000	>10 000	10 000	10 000	10 000	10 000	10 000	10 000	3000	3000	10 000	10 000	3000	3 000	10 000	10 000	10000	1000	3000	10 000	3 000	10 000	3000	10 000	10 000	10 000	3 000	10 000
Fe	3·15%	3·99%	2·70%	3·55%	2·69%	2·70%	2·25%	2·59%	3·19%	2·84%	2·41%	2·55	2·9%	3·65%	3·19%	3·19%	2·95%	2·40%	2·60%	2·60%	2·79%	2·85%	2·79%	2·99%	2·65%	2·75%	2·85%	3·00%
W	<2	<2	<2	<2	<2	10	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
*Sn									180																			

03_4902

Tube Number 19: Black Bluff, Mariner, Mt Stormont (EL 9/1966, EL10/1974)
Placer Dome Asia Pacific*
Green, D.
EL10/1974; EL9/1966

5 cm

LEGEND:

ANALYTICAL METHODS:
Cu, Pb, Zn, Bi, Ag, Mn, Cd and Fe by A.A.S. following hot conc. HCL leach and HCL/HNO3 leach in latter stages of 0·25g sample.
Sn and Ba by Emission Spectrography Schemes E.S. 2 and 3.
As by modified Gutzjet method following Potassium Pyrosulphate fusion of 0·25g sample.
W and Mo by Colorimetry.
*Sn by XRF
Analytical results in ppm, except Fe%.

SYMBOLS:

Igneous:
A acid igneous unclassified
M basic igneous unclassified

Textural:
p porphyritic
fb flow banding
vn vein
i intrusive
shd sheared

Silicate Mineralogy:
q quartz
f K feldspar
b biotite
c chlorite
s sericite

Grain Size:
fg fine grained (<1mm)
mg medium grained (5mm — 1mm)
cg coarse grained (5mm — 1cm)

Colours
pk pink
grn green
blk black
crm cream
rd red
ple pale
dk dark

Structural
joint
primary foliation
minor fault
approximate contact
approximate position of transitional contact

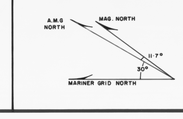
Miscellaneous
KR 4694 rock sample number
TS 4709 thin section and rock number

comments: Width of costean tapers to 0·65m at base.
Bedrock grab samples for geochemistry were taken at 0·5m intervals across the 5m sampling width.

scales: Vertical - 1:100
Horizontal: 1:250

GEOLOGICAL INTERPRETATION

Pencil No.			
19-53		HOLOCENE	AL soil horizon :- blk peat, residual quartz phenocrysts.
19-41	G		Strongly foliated porphyry :- wte/dk grn cg pAsqc ?fb
19-41	G		Altered porphyry :- wte/dk grn cg pAsqc
19-12	G		Moderately weathered porphyry :- wte - pk - grn/pk cg pAfqc
19-19	G		Unweathered porphyry :- wte - grn - crm/rd - pk cg pAfqb
19-7	G		Porphyry dyke :- ple grn fg pAqs
19-68	G		Basic dyke :- dk grn fg iMc



DATE: FEB. 1979
GEOLOGIST: G.L.B.
DRAWN: J.P.M.
CHECKED: [illegible]

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD, DEVONPORT BASE

SCALE: 1:250 (Horiz) 1:100 (Vert)

No. KT 10/74-M-15

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1
COSTEAN 1