03-4899

Tasmanian Mineral Exploration Company Report

Title: Tube number 8: Mariner 1977-82. (EL 10/74)
Company: PlacerDome

Plans from archive store in Zeehan

Compiled by David Green 4 June 2003.

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

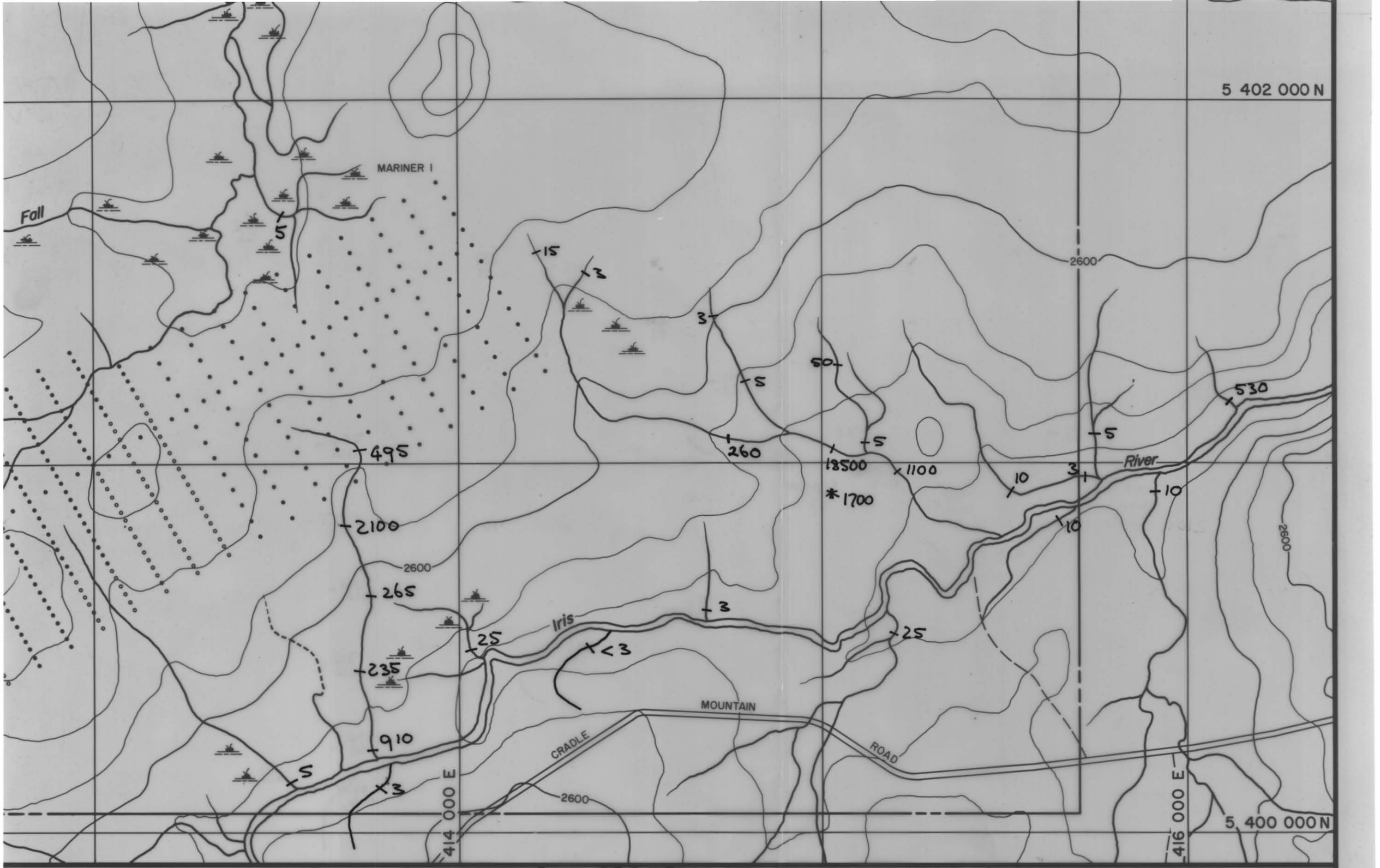
Placer Dome Asia Pacific*
Green, D. EL10/1974

Tube 8

SHEET	EL Nº	SCALE	REMARKS	DATE
			MARINER 5 WINDOW SMALL PLANS	
BLACK BLUFF. TAS.	10/74	1:500	MARINER 3. D.D.H. E.L10/74-M3-1	APRIL '79
"	10/74	1:2500	MARINER 4. MASTER GRID.	2.2.82
"	10/74	1:2500	MARINER 4. GEOLOGY PLAN	2.2.82
"	10/74	1:2500	MARINER 4. SAMPLE LOCATIONS	FEB. 82
"	10/74	1:2500	MARINER 4. GEOCHEMICAL RESULTS Cu Pb Zn	2.2.82.
"	10/74		MARINER 4. Cu Pb Zn.	
"	10/74	1:10000	MARINER 3/5 KT10/74-3	
"	10/77	1:10 000	MARINER 5. CONTOURS OF BUOGUER GRAVITY ANOMALY	23.8.82
"	10/74		MARINER 5. EFFECT OF LOCAL IRREGULARITIES OF CONTACT ON COMPUTED GRAVITY	NOV. 82.
"	10/74		MARINER 5. PROFILE A-B FIELD & COMPUTED. GRAVITY PROFILE	NOV. 82.
"	10/74	1:1000	MARINER 6. GEOLOGY	NOV. 81
"	10/74		MARINER 6. MAGNETIC INTENSITY PROFILES. SHT. 1.	NOV. 82
	10/74		MARINER 6. MAGNETIC INTENSITY PROFILES SHT. 2.	NOV. 82.
	10/74	1:100	MARINER 6. GEOCHEMICAL VALUE.	SEPT. 81
."	10/74	1:100	MARINER 6. SOIL SAMPLE LOCATION MAP	SEPT. 81
"	10/74	1:100	MARINER 6. GEOLOGY	NOV. 81
"	10/74	1:500	MARINER 6. DDH 1 GEOLOGICAL PROFILE	JULY 82
"	10/74	1:1000	MARINER 6. INTERPRETATION DIAGRAM.	NOV. 82.
"	10/74	HOR: 1cm=25m VERT: 1cm=20mv	MARINER 6. PROFILES OF SELF POTENTIAL.	NOV. 82.
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS.	JAN '82

SHEET	EL Nº	SCALE	REMARKS	DATE
BLACK BLUFF TAS	10/74	1:2500	MARINER 7. GEOLOGY	25·1·82
"	10/74	1:2500	MARINER 7. SOIL SAMPLE LOCATIONS	25·1·82.
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS Fe, Mn, Ag.	26·1·82.
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS Cu, Pb, Zn.	22·1·82.
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS Cu, Pb, Zn.	22·1·82.
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS. Cu, Pb, Zn.	22·1·82.
	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS. Fe, Mn, Ag.	26·1·82
"	10/74	1:2500	MARINER 7. GEOLOGY	25·1·82
"	10/74	1:2500	MARINER 7. GEOCHEMISTRY RESULTS. Fe Mn Ag	26·1·82
"	10/74	HOR: 1cm = 50m VERT: 1cm. = 1%	MARINER 1. GRADIENT ARRAY I.P. PROFILES.	JAN. 77
"	10/74	1:5000	MARINER 1 & MARINER 2. BASE MAP	DEC. 76
"	10/74	1:5000	MARINER 1 & MARINER 2. EXTENDED GRID.	DEC. 76.
"	10/74	1:5000	MARINER 1, 2 & 3. INTERPRETATION GEOLOGICAL MAP WITH ROCK SAMPLE LOCATIONS.	AUG. 78.
	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS. COPPER.	AUG. 78
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - ZINC.	AUG. 78.
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - LEAD.	AUG. 78
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - SILVER.	AUG. '79
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - MANGANESE	AUG. 79.
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - TIN.	AUG. 79.
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - ARSENIC	AUG. '79

SHEET	EL Nº	SCALE	REMARKS	DATE
BLACK BLUFF. TAS	10/74	1:5000	MARINER 1 & MARINER 2 GEOCHEMICAL RESULTS. CADMIUM	SEPT. 77
"	10/74	1:5000	MARINER 1, 2 & 3. SOIL SAMPLE LOCATION MAP.	AUG. 79.
"	10/74	1:5000	MARINER 1, 2 & 3. AUGER HOLE DEPTHS	SEPT. 77
"	10/74	1:5000	MARINER 1, 2 & 3. GEOCHEMICAL RESULTS - IRON.	AUG. 79
"	10/74	1:5000	MARINER 1, 2 & 3. GEOLOGICAL INTERPRETATION. AUGER HOLE ROCK CHIPS.	AUG. 78
"	10/74	1:5000	MARINER 1 & 3. DIAGRAMMATIC INTERPRETATION SUMMARY GEOPHYSICAL SURVEYS.	JUNE '78
"	10/74	HOR: 1cm = 50m VERT: 1cm = 400nT	MARINER 1. GEOMAGNETIC TOTAL FORCE PROFILES: GEOPHYSICAL SURVEYS.	JAN. 77
"	10/74	HOR: 1cm = 50m VERT: 1cm = 5%.	MARINER 1. VLF EM PROFILES GEOPHYSICAL SURVEYS.	JAN. 77
"	10/74	1:5000	MARINER 1. VLF. EM PROFILES GEOPHYSICAL SURVEYS.	JAN. 77
"		HOR: 1:5000 VERT: 1cm = 5%	MARINER 1. VLF. EM PROFILES GEOPHYSICAL SURVEYS.	JAN. 77
"		HOR: 1:5000 VERT: 1cm = 10μVA⁻¹	MARINER 3. TEM PROFILES GEOPHYSICAL SURVEYS.	JUNE '78
"	10/74	HOR: 1:5000 VERT: 200nT	MARINER 1. GEOMAGNETIC TOTAL FORCE PROFILES - SHT. 1. GEOPHYSICAL SURVEYS.	DEC. 77
	10/74	HOR: 1cm = 50m VERT: 200nT	MARINER 1. GEOMAGNETIC TOTAL FORCE PROFILES - SHT 3. GEOPHYSICAL SURVEYS.	DEC. 77
"	10/74	HOR: 1cm = 50m.	MARINER 1. GEOMAGNETIC TOTAL FORCE CONTOURS	DEC. 77
"	10/74	HOR: 1cm = 50m VERT: 200nT	MARINER 1. GEOMAGNETIC TOTAL FORCE PROFILES - SHT. 2. GEOPHYSICAL SURVEYS.	DEC. 77
"	10/74	HOR: 1cm = 50m VERT: 200nT	MARINER 3 & 5. GEOMAGNETIC TOTAL FORCE PROFILES SHT. 3. GEOPHYSICAL SURVEYS.	DEC. 77
"	10/74	HOR: 1cm = 50m	MARINER 1, 3 & 5 GEOMAGNETIC TOTAL FORCE CONTOURS. GEOPHYSICAL SURVEYS.	DEC. 77



03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

DATE: December 1976

GEOLOGIST:

DRAWN: L.G.

CHECKED: M.C.R.

GEOPEKO LIMITED

KING ISLAND GROUP

SCALE: 1:10,000

No. KT10/74-3

E.L. 10/74
BLACK BLUFF, TASMANIA

PANNED CONCENTRATE
STREAM SEDIMENTS.
GOLD ppb.

KT10/74-1
KT10/74-2
KT10/74-3

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

Sn ppm
W ppm.

* Panned con. of surface gravels over sub outcrop of qfp and quartz veins.

5 402 000 N

MARINER I

310
20

135
10

210
10

165
10

765
20

35
<10

485
<10

8500
330

5000
280

230
<10

3.55%
240

*1.02%
60

15
<10

River

10
10

30
<10

40
<10

10
<10

40
<10

3300
50

2600

215
<10

215
<10

200
<10

Iris

490
10

20
<10

20
<10

490
20

15
<10

10
<10

MOUNTAIN

CRADLE

ROAD

414 000 E

416 000 E

5 400 000 N

DATE: December 1976
July 1979.

GEOLOGIST: RRL.

DRAWN: L.G.

CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:10,000

No. KT10/74-3

E.L. 10/74
BLACK BLUFF, TASMANIA

PANNED CONCENTRATE
STREAM SEDIMENTS.
TIN, TUNGSTEN.

KT10/74-1	
KT10/74-2	KT10/74-3

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

Sn ppm
W ppm.

5 402 000 N

MARINER I

Fall

10 <10

10 <10

5 <10

5 <10

15 <10

<5 <10

45 <10

145 10

95 10

235 10

<5 <10

5 <10

<5 <10

<5 <10

<5 <10

130 <10

90 <10

50 <10

20 <10

55 <10

95 <10

5 10

5 10

5 <10

<5 <10

10 <10

2600

2600

2600

Iris

River

MOUNTAIN

CRADLE

ROAD

414 000 E

416 000 E

5 400 000 N

DATE: December 1976

GEOLOGIST: RM

DRAWN: L.G.

CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1 : 10,000

No. KT10/74-3

E.L. 10/74
BLACK BLUFF, TASMANIA

-80# STREAM SEDIMENTS
TIN, TUNGSTEN.
Resampling July 1979

KT10/74-1
KT10/74-2
KT10/74-3

03_4899

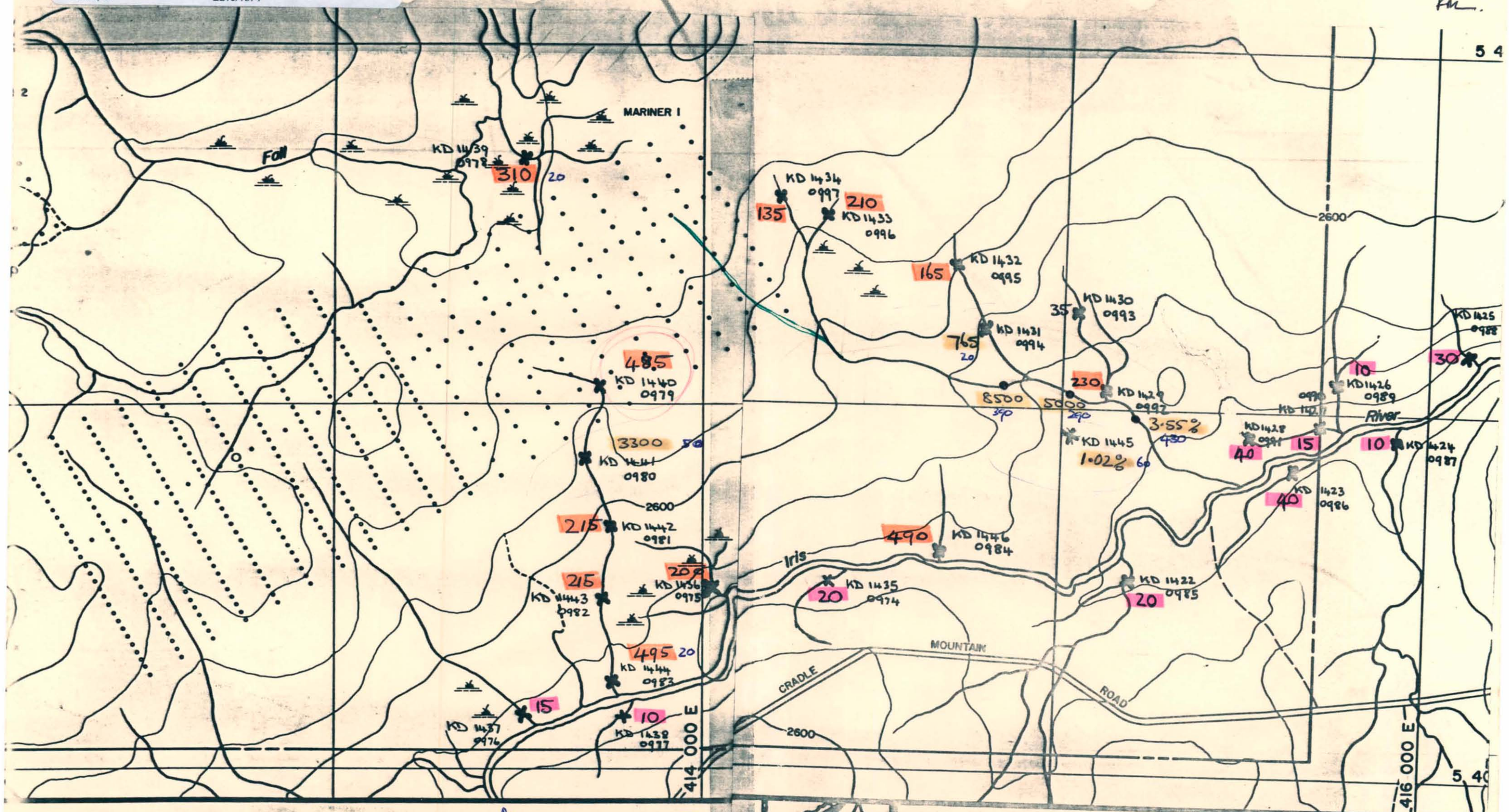
Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

MARINER 3

Panned Concentrate tin Results,
23/7/79
FM.



Panned Concentrate KD 1422 – 1446 – (25)

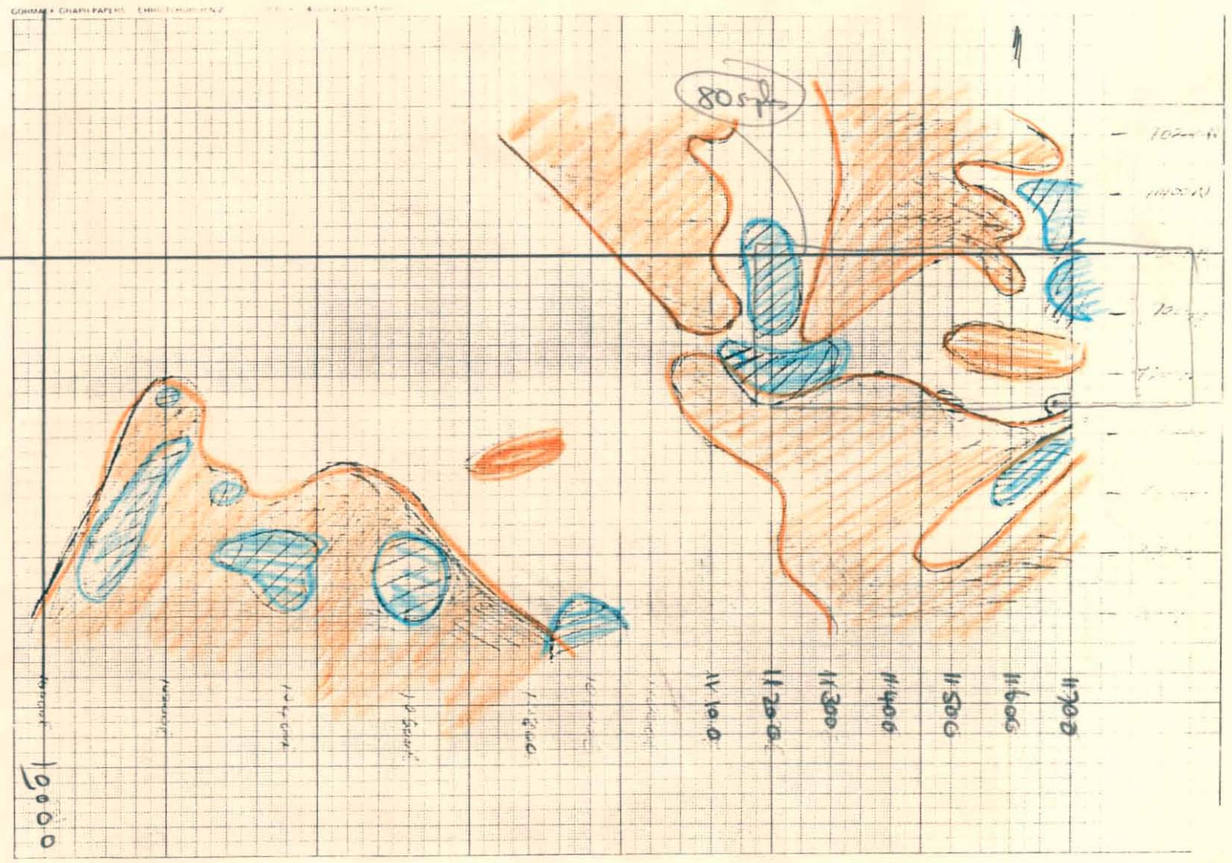
mesh Drainage samples KD 0974 – 0997 – (24)

PANNED CONCENTRATE Sn ppm

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:10,000

No. KT10/74-



1:10,000 Scale

Magnetics - Mariner 3

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GORMACK GRAPH PAPERS : CHRISTCHURCH N.Z. C102X 40 cm x 28 cm x 1 mm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm



Fall

Plain

5 402 000 N

MARINER 2

MARINER 1

TS 2507 pk pArd bfq Fall

Cu Zone

Zn Zone

Pb Zone

Sn TARGET AREA.

pAr bqfc TS 2764

cgl or volc brec Arqc TS 2739

pk pArd bfq

lxt Ia fq maf s" TS 2721

pArqf TS 2740

pArq f maf

lxt Arfq maf

0·85% Sn 390ppm W

0·50% Sn 290ppm W

3·55% Sn 430ppm W

River

Iris

Proposed grid extensions

MOUNTAIN

CRADLE

ROAD

EL Boundary.

2600

2800

414 000 E

416 000 E

5 400 000 N

Lithic vitric tuff - lava (fb lvt - lava Idb; intercalated with pArdpq)

Porphyritic plagioclase - quartz rhyolite (fb pAr qp)

Fine grained quartzose volcaniclastic sediment (fg S volcaniclastic sed. q.s")

Lithic quartz crystal vitric tuff (lxt Arqf)

Lithic quartz crystal tuff (lxtIa qf maf s")

Quartz crystal vitric tuff - lava (xvt - lava Arq)

Biotite feldspar quartz porphyritic lava (pArd bfq, pAr bfq)

CAMBRIAN

MASSIVE FELDSPAR - QUARTZ PORPHYRY.

TERTIARY BASALT.

position of altered ash tuffs with anomalous geochemistry.

5 cm

GN MN 11·7°

DATE: APRIL '78

GEOLOGIST: R.B.

DRAWN: L.G. & J.M.

CHECKED: M.C.R.

GEOPEKO LIMITED

KING ISLAND GROUP

SCALE: 1:10,000

No. KT10/74-3A

03-4894

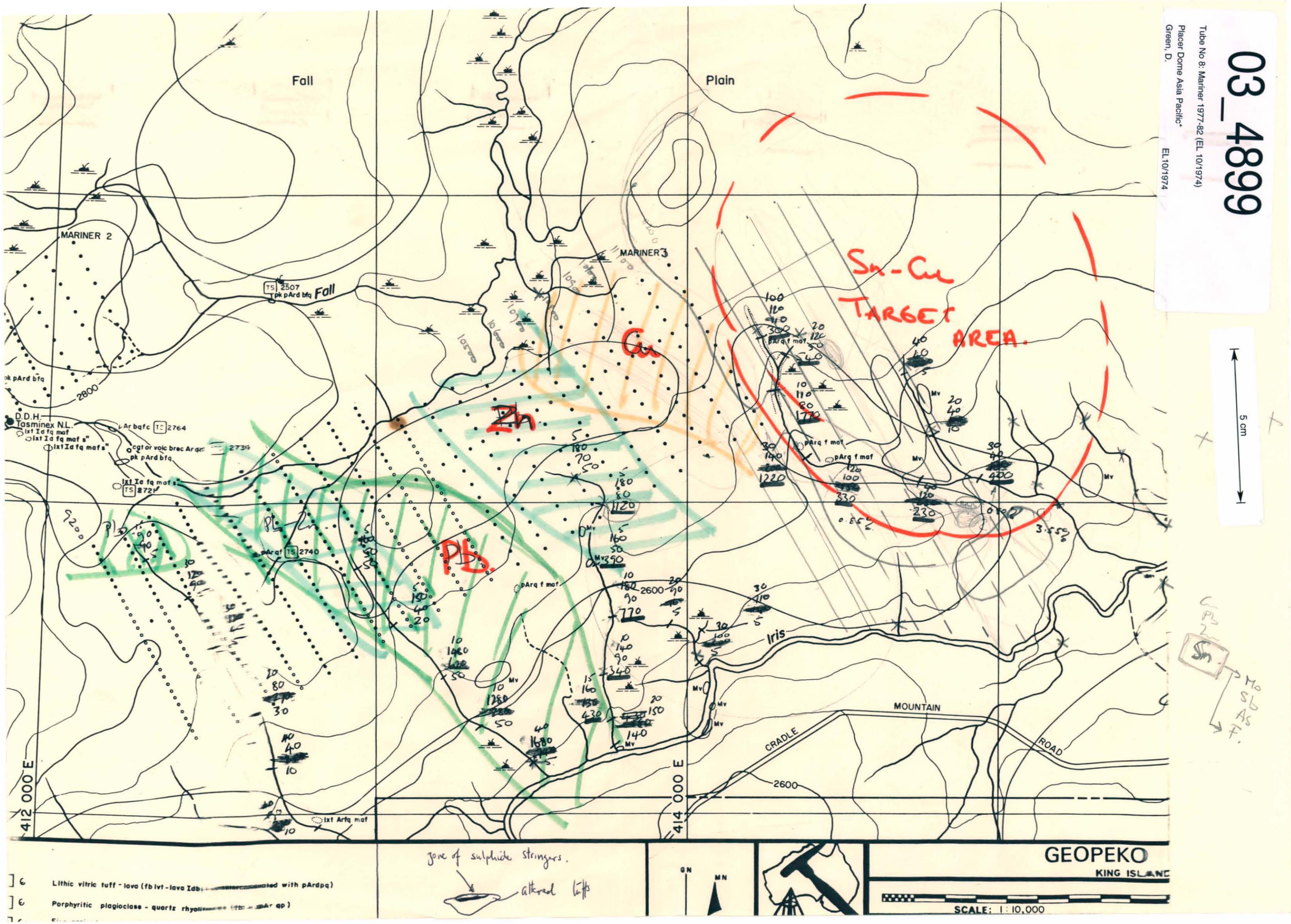
E.L. 10/74

BLACK BLUFF, TASMANIA

GEOLOGICAL MAP

KT10/74-1

KT10/74-2 KT10/74-3


03_4899
Tube No 8: Mariner 1977-82 (EL 10/1974)
Placer Dome Asia Pacific*
Green, D.
EL10/1974
Fall
Plain
MARINER 2
MARINER 3
Fall
Sn-Cu
TARGET
AREA.
Cu
Zn
Pb
Iris
MOUNTAIN
CRADLE
ROAD
D.D.H.
Tasminex N.L.
412 000 E
414 000 E
2800
2600
5 cm
Lithic vitric tuff - lava (fb lvt - lava Idb
Porphyritic plagioclase - quartz rhyolite
zone of sulphide stringers.
altered tuffs
GN
MN
GEOPEKO
KING ISLAND
SCALE: 1:10,000

RINER 2

MARINER I

Fall

KD 1439
0978

KD 1440
0979

KD 1441
0980

KD 1442
0981

KD 1443
0982

KD 1444
0983

KD 1437
0976

KD 1438
0977

KD 1434
0997

KD 1433
0996

KD 1432
0995

KD 1430
0993

KD 1431
0994

KD 1429
0992

KD 1445

KD 1425
0988

KD 1426
0989

KD 1427
0990

KD 1428
0991

KD 1424
0987

KD 1423
0986

KD 1446
0984

KD 1422
0985

KD 1435
0974

Iris

River

MOUNTAIN

CRADLE

ROAD

2800

2600

414 000 E

416 000 E

5 cm

Panned Concentrate KD 1422 – 1446 – (25)

-80 mesh drainage samples KD 0974 – 0997 – (24)

03-4899

GEOPEKO LIMITED

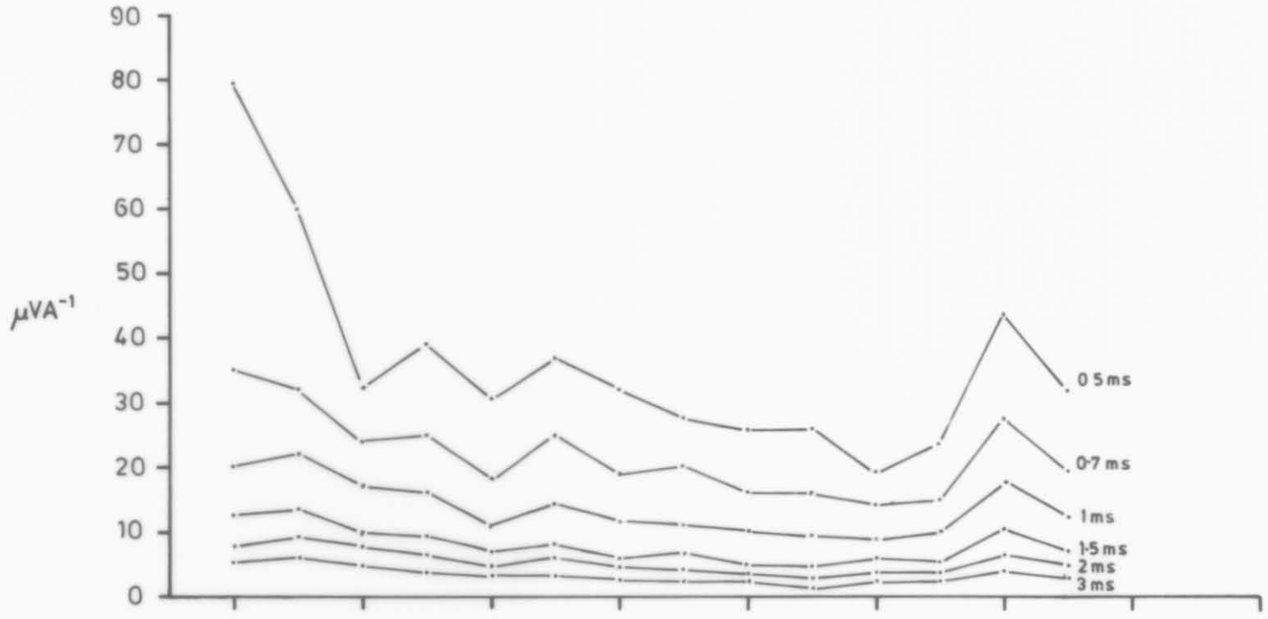
KING ISLAND GROUP

SCALE: 1:10,000

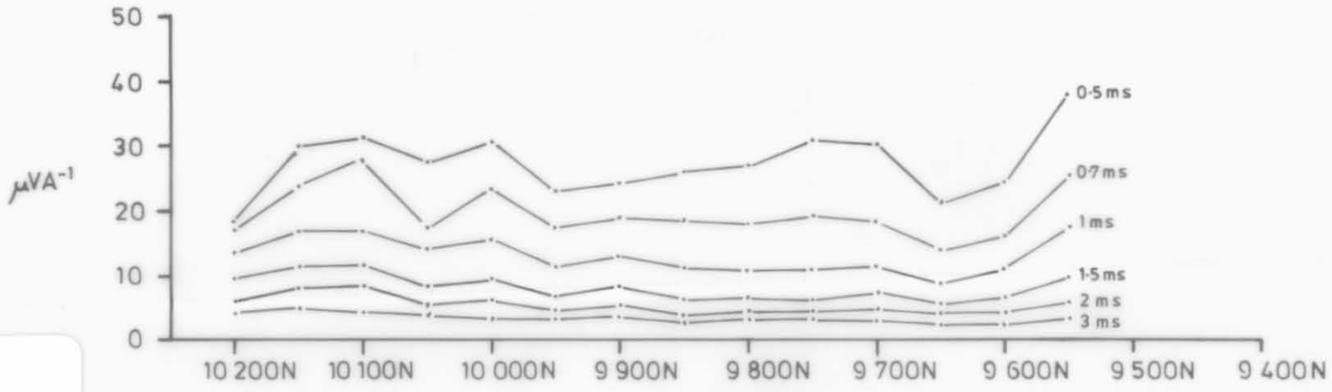
No. KT10/74

T.E.M. PROFILES.

3854



LINE 10 850E



LINE 10 750E

Note:-Single 100m Square Loops

03_4899

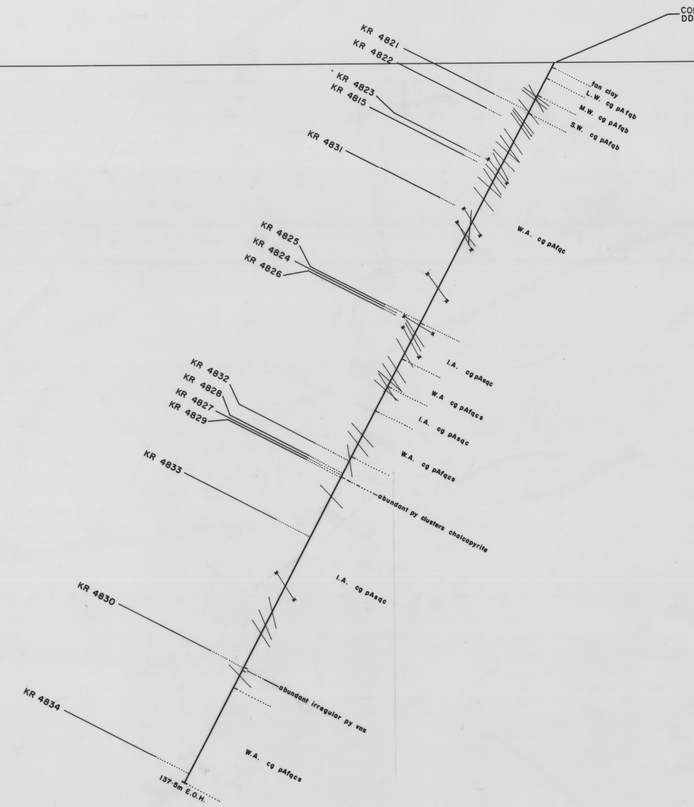
Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LTD. Geophysical Surveys	Instrument	LAR MK1	Datum		Hor Scale	1:5 000	AREA	Black Bluff-Tasmania
	Observer	S Mudge	Base Peg		Vert. Scale	1cm=10 μVA⁻¹	PROSPECT	MARINER 3
Plan No. 3854 S/A	Scale Fact		Date	June 1978	Cont. Int		PLAN SHOWS	TEM Profiles

5 cm

(MARINER 3. DDH. EL. 10/74-M3-1.



KR No.	DEPTH INTERVAL (m)	GEOLOGY	Cu ppm	Cu %	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Cd ppm	Bi ppm	Fe %	W ppm	Ba ppm	Sn ppm	*Sn ppm	Mo ppm	As ppm	Au ppb	Sb ppm	Co ppm	Ni ppm
4821	9·63 - 9·73	py - qtz vn	>10000	2·40	560	330	25	140	<5	570	23·00	5	<30	100		<2	100	10			
2	12·28 - 12·36	py - qtz vn	>10000	2·95	180	350	55	290	5	150	14·50	10	30	300	270	<2	80	500			
3	20·05 - 20·19	py - qtz vn	5750		120	200	10	340	<5	<20	14·00	2	30	100		<2	100	55			
4	50·39 - 50·49	py - chalco - qtz vn	>10000	8·45	6750	3250	325	300	40	5000	8·90	5	30	750	600	<2	200	>500			
5	49·89 - 50·39	cg pAsqc (mod. alt)	200		80	210	5	1450	<5	<20	5·20	5	3000	30		<2	20	50			
6	50·49 - 50·99	cg pAsqc (int. alt)	520		100	170	<2	1150	<5	20	3·90	10	3000	10		<2	<5	10			
7	78·94 - 79·36	py - chalco - qtz vn	8250		580	3750	35	140	10	190	5·85	5	100	10		2	80	90			
8	78·44 - 78·94	cg pAsqc (int. alt.)	260		100	290	<2	1500	5	<20	6·70	2	3000	500	600	<2	30	35			
9	79·36 - 79·86	cg pAsqc (int. alt.)	340		60	6060	<2	1300	10	<20	5·00	2	3000	30		<2	30	25			
30	115·22 - 115·75	py vn - py clusters	25		30	110	<2	1150	<5	<20	6·00	<2	3000	100		<2	20	35			
1	29·35 - 29·50	cg pAfqcs (weakly alt)	130		40	70	<2	450	<5	<20	2·25	<2	10000	<1		<2	<5	85			
2	76·08 - 76·18	cg pAsqc (int alt)	40		50	180	<2	3000	<5	<20	6·80	<2	10000	300	350	<2	<5	65			
3	90·50 - 90·60	cg pAsqc (int alt)	750		60	170	<2	2000	<5	<20	4·65	2	3000	500	440	<2	<5	45			
4834	135·83 - 135·93	cg pAfqcs (weakly alt)	20		40	50	<2	650	5	<20	2·65	<2	10000	<1		<2	<5	<10			
4815	20·78 - 20·86	py - chalco - qtz vn	>10000	1·40	950	1500	125	1100	5	5000	17·00	150			410	<2	150		70	100	150
repeat and check 4827			8200		520	3250	30	120	5	200	5·30	5				2	80				

LEGEND:

ANALYTICAL METHODS:
Cu, Pb, Zn, Bi, Fe, Cd, Ag, Mn, Sb, Co, Ni by AAS
W, Mo, As by colorimetry
Sn, Be by E.S schemes 2 and 3
*Sn by X.R.F.
Au by CRA/AAS.

NOTES:
1. KR 4821 and 4822 were 1/2 NQ core samples
KR 4823 was a 1/2 BQ core sample while the remainder were 1/4 BQ core samples.
2. Collar co-ordinates Mariner 3 grid 9795 N 10970E.
3. Inclination: −62° 45'
4. Bearing: 253°12' Mariner 3 grid 211°30' magnetic
5. Core sizes: NQ 3·0m; NQ 14·3m; BQ 137·5;
6. A further 12 narrow py-qtz veinlets have not been plotted owing to drawing congestion problems.
7. This is a profile of a DDH along the hole bearing (253°12') Mariner 3 grid direction
8. Refer to map no. M-15 for geological abbreviations.

SYMBOLS:
Weathering...
S.W.....slightly weathered.
M.W.....moderately weathered.
I. W.....intensely weathered.
Alteration...
W.A.....weakly altered.
I. A.....intensely altered
The type and the degree of the alteration mineralogy is denoted by the geological abbreviation and in the geological log.

Sulphide veins...
L.A.O.C.
denotes a py-qtz vn
denotes a py-chalco vn
denotes angle w.r.t. the L.A.O.C.

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
SCALE: 1:500
No. KT 10/74-M-20
E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 3
D.D.H. E.L. 10/74 - M3 - 1
DATE: APRIL '79
GEOLOGIST: G.L.B.
DRAWN: J.P.M
CHECKED:

03_4899
Tube No 8: Mariner 1977-82 (EL 10/1974)
Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

TS 10/74-M4-1
BLACK BLUFF
MASTER GRID

9 600mE | 9 700mE | 9 800mE | 9 900mE | 10 000mE | 10 100mE | 10 200mE | 10 300mE | 10 400mE | 10 500mE | 10 600mE | 10 700mE | 10 800mE

12 800mN
12 700mN
12 600mN
12 500mN
12 400mN
12 300mN
12 200mN
12 100mN
12 000mN
11 900mN
11 800mN
11 700mN
11 600mN
11 500mN
11 400mN
11 300mN
11 200mN
11 100mN
11 000mN

5 405 000mN A.M.G

414 000mE A.M.G

LEGEND:

o Hand auger

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
58°

DATE 2/2/82
GEOLOGIST J.P
DRAWN R.Tog.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2 500

No. TS10/74-M4-1

E.L.10/74 BLACK BLUFF
MARINER 4

TS 10/74-M4-2
BLACK BLUFF
GEOLOGY

12 600mN
12 500mN
414 000mE A.M.G
12 400mN
12 300mN
12 200mN
12 100mN
12 000mN
11 900mN
11 800mN
11 700mN
11 600mN
11 500mN
11 400mN
5 405 000mN A.M.G
11 300mN
11 200mN
11 100mN
11 000mN
9 600mE
9 700mE
9 800mE
9 900mE
10 000mE
10 100mE
10 200mE
10 300mE
10 400mE
10 500mE
10 600mE
10 700mE
10 800mE
414 000mE A.M.G.

LEA RIVER
Ordovician scree qtz / cong
m.g. qbp
chl m.g. qfbp
sil m.g. qb
q vein
chl m.g. qfbp
m.g.qfbp
chl m.g qp
KR 9769
KR 9771
q.vein
sil m.g. qp
Tb float
chl qfbp
q vein
KR 9770
chl m.g. qbp
hm vein
m.g. qfbp
drive
q vein
m.g. qfbp/q vein
q vein
sil qp
±10% corundum
KR 9773
q vein
drive 7m
m.g chl qf pyxtlp
m.g. chl qf py xtlp
Ordovician scree qtz/cong.
KR 9772
q vein
chl m.g. qb plxt
m.g. chl qbp
KR9771
m.g. chl q p
sil qp
sil qp
Tb
KR9851 m-c.g. qxt mnr. spec. hm
m-c.g. qxlt (rhy frag)
±10% diss. sp. hm
m-c.g. chl qbp
m.g. qp
sil qp
sil qp rhy frag/bands
m-c.g. qp diss. sp. hm
py in qfbp
py in q vein
m-c.g. qfp (chl)
sil qfp(chl)
Ordovician scree qtz/cong.
m.g. sil qp - mnr. corundum
m.g. qfxt diss. sp. hm

LEGEND:
- strike of vertical foliation
- outcrop
- float
- mate auger hole
- drainage channel
- geological boundary
- KR 9851 assay sample locality
- fault

03_4899

5 cm

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
58

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500
No. TS10/74-M4-2

DATE 2/2/82
GEOLOGIST J.P
DRAWN R.Tog.
CHECKED

E.L.10/74 BLACK BLUFF
MARINER 4
GEOLOGICAL PLAN

TS 10/74-M4-3
MARINER 4
SAMPLE LOCATION

9600mE 9700mE 9800mE 9900mE 10000mE 10100mE 10200mE 10300mE 10400mE 10500mE 10600mE 10700mE 10800mE 10900mE

12900mN 12800mN 12700mN 12600mN 12500mN 12400mN 12300mN 12200mN 12100mN 12000mN 11900mN 11800mN 11700mN 11600mN 11500mN 11400mN 11300mN 11200mN 11100mN

5405000mE A.M.G.

414000mE A.M.G.

5405000mN A.M.G.

414000mE A.M.G.

13236 13235 13234 13233 13232 13231 13230 13229 13228 13227 13226 13225 13224 13223 13222 13221 13220 13219 13218 13217 13216 13215 13214 13213 13212 13211 13210 13209 13208 13207 13206 13205 13204 13203 13202 13201

13237 13238 13239 13241 13240 13242 13243 13244 13245 13246 13247 13248 13249 13251 13250 13252 13253 13254 13255 13256 13257 13258 13259 13261 13260 13262 13263 13264 13265 13266 13267 13268 13269 13271 13270 13272 13273

13274 13275 13276 13277 13278 13279 13281 13280 13282 13283 13284 13285 13286 13287 13286 13289 13291 13290 13292 13293 13294 13295 13296 13297 13298 13299 13301 13300 13302 13303 13304 13305 13306 13307 13308 13309

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
58°

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

No. TS 10/74-M4-3

DATE FEB. 1982
GEOLOGIST J.P.
DRAWN M.vdS.
CHECKED

E.L.10/74 BLACK BLUFF
MARINER 4
SAMPLE LOCATION

TS 10/74 M4-4
MARINER 4
GEOCHEM. RESULTS

9 600mE | 9 700mE | 9 800mE | 9 900mE | 10 000mE | 10 100mE | 10 200mE | 10 300mE | 10 400mE | 5 405 000mN A.M.G | 10 500mE | 10 600 mE | 10 700 mE | 10 800 mE

12 800mN
12 700mN
12 600mN
12 500mN
414 000mE A.M.G
12 400mN
12 300mN
12 200mN
12 100 mN
12 000mN
11 900mN
11 800mN
11 700mN
11 600 mN
11 500mN
11 400mN
5 405 000mN A.M.G
11 300mN
11 200mN
11 100mN
11 000mN

414 000mE A.M.G

LEGEND:

o Hand auger

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
56°

DATE 2/2/82
GEOLOGIST J.P
DRAWN
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500
No. TS10/74-M4-4

E.L.10/74 BLACK BLUFF
MARINER 4
GEOCHEMICAL RESULTS Cu Pb Zn

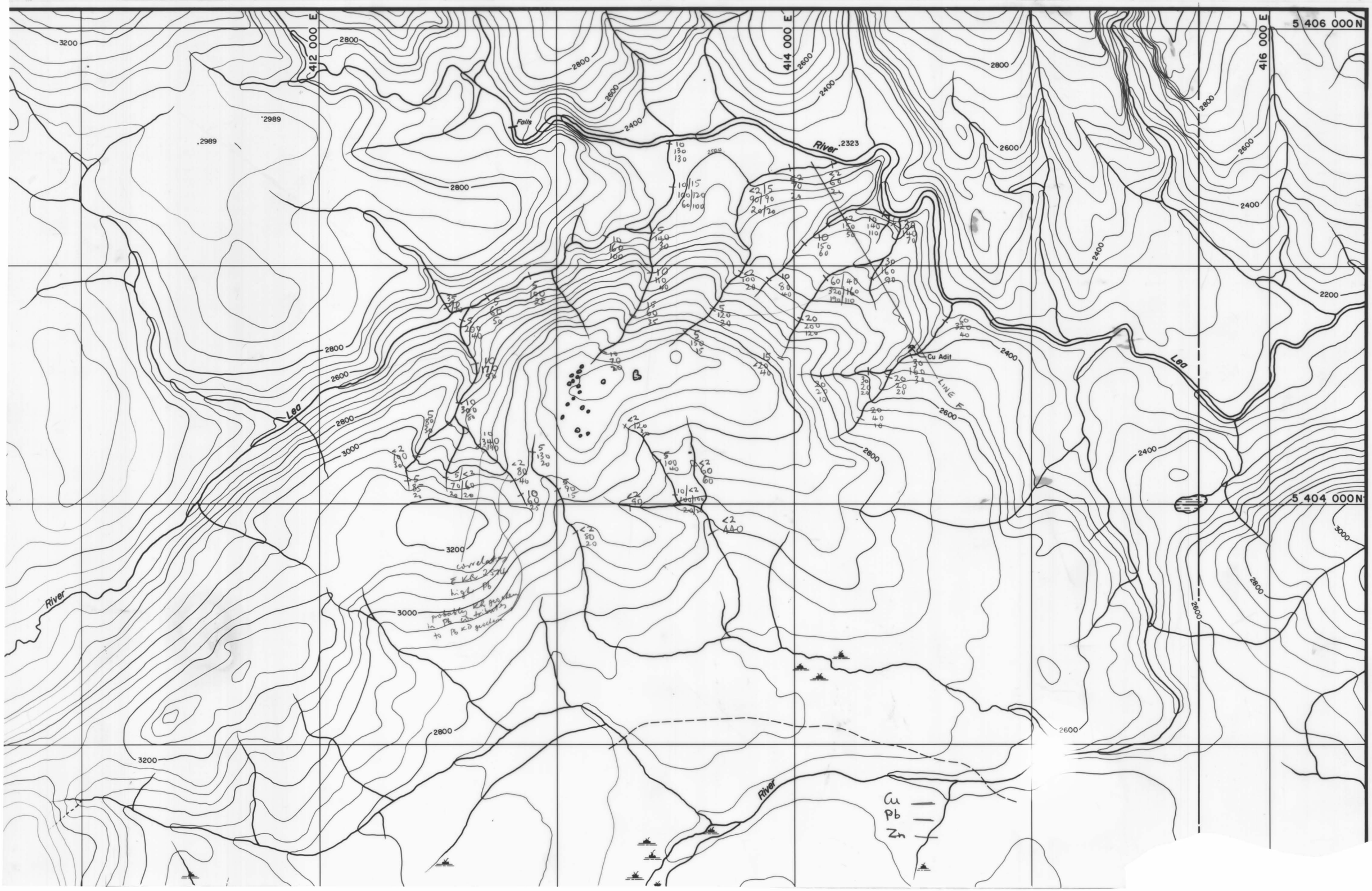
03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

MARINER
4
Cu
Pb
Zn

5 cm



Plan 1
Grid Plan
M3/5
Geophys sect.

412 000 E
414 000 E
416 000 E
5 406 000N
5 404 000N
5 402 000 N
5, 400 000N

River
Falls
Lea
Cu Adit
Fall
Plain
MARINER 2
MARINER 1
Bond Peak
Alluvial Gold Mine
Remnants of Water Race
D.D.H. Tasminex N.L.
1920m N of Base Lat
10 750 N
10000N
9 300N
12 200E
12 500E
11800E
11400E
11000E
Iris
MOUNTAIN
CRADLE
ROAD
BOUNDARY
BASE LATITUDE (41° 32·83') 41·55°

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE:
GEOLOGIST:
DRAWN:
CHECKED:

GEOPEKO
A DIVISION OF PEKO- WALLSEND OPERATIONS LTD

SCALE: 1 : 10,000

No. KT10/74-3

E.L. 10/74
BLACK BLUFF, TASMANIA
MARINER 3/5 GRID PLAN

KT10/74-1
KT10/74-2 | KT10/74-3

PLAN 1

5 cm

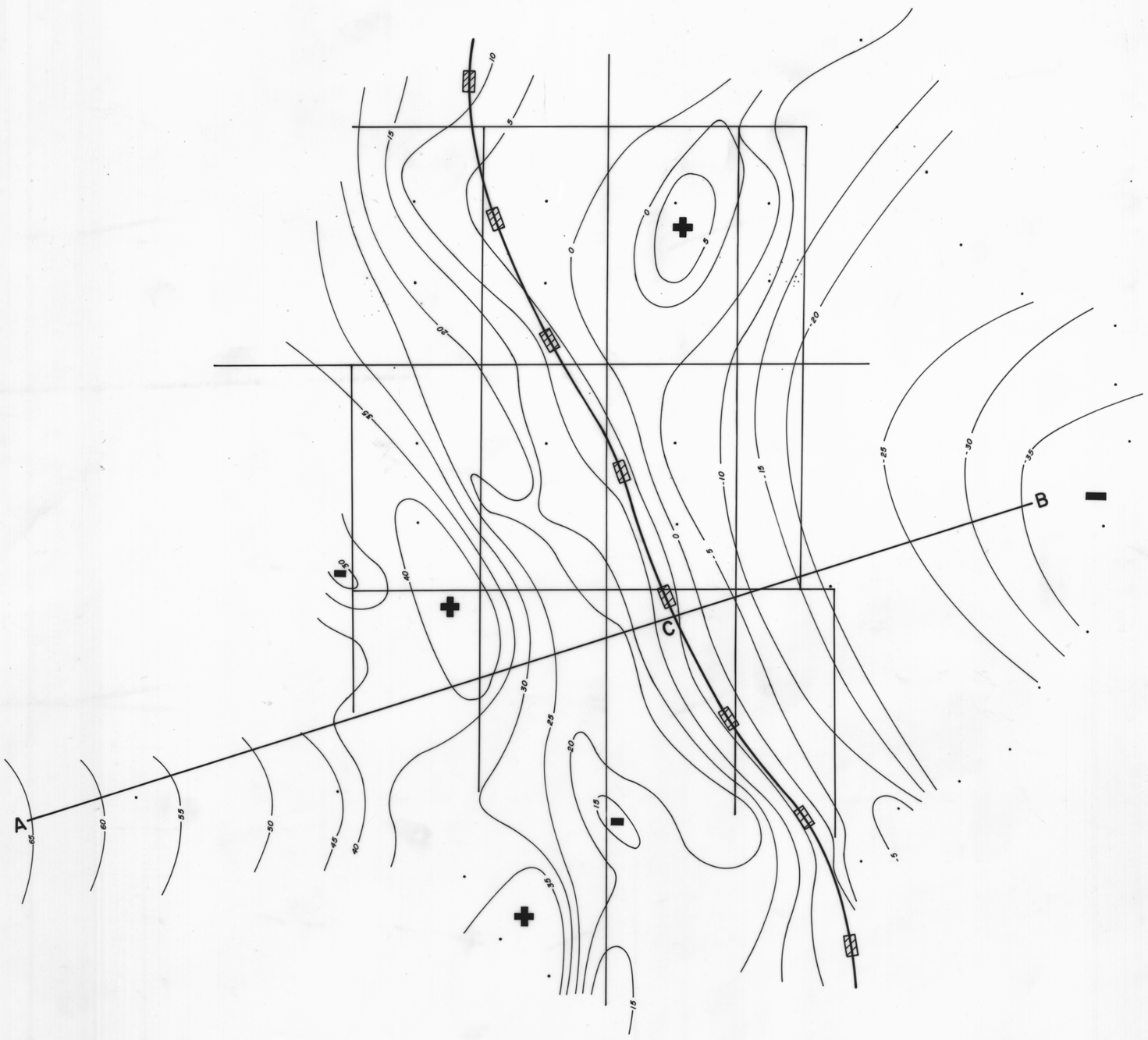
10 000 mE | 11 000 mE | 12 000 mE | 13 000 mE

11 000 mN

10 000 mN

9 000 mN

8 000 mN



10 000 mE | 11 000 mE | 12 000 mE | 13 000 mE

INSTRUMENTS - Worden No. 61
Worden No 592
OBSERVERS - J.D.H.S
R.C.J
BASE PEG - 11 800 E / 10 000 N
CONT. INT. - 5 μm sec^{-2}
BOUGUER DENSITY - 2 670 kg m^{3}

Profile data manually smoothed before contouring.
Not Terrain corrected.

——— Data collected on profiles
• Other stations
Station spacing 100 m
Inferred Gravity Contact

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: 23/8/82
GEOLOGIST:
DRAWN: R.Tog
CHECKED:

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE	No.	REP. No.
1:10 000	TS 1/77-M5-1	2

E.L.10/77 BLACK BLUFF
MARINER 5
CONTOURS OF BOUGUER GRAVITY ANOMALY

10/74 M5-3
M-5
Effect of Local
Irregularities on Gravity

Ⓐ

BOUGUER GRAVITY SCALE = 10·000gu/cm

Ⓑ

FROM CASE B
FROM CASE A

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

DATE NOV'82	DWN J.P.M.
GEOPH. J.S.	CHKD

5 cm

File No E.L./10/74 M5-3

E.L.10/74 BLACK BLUFF
MARINER 5
EFFECT OF LOCAL IRREGULARITIES OF CONTACT ON COMPUTED GRAVITY

FIG. 4

10/74 M5-3
M-5
Gravity Profile A-B
Field and Computed

BOUGUER GRAVITY SCALE = 10·000gu/cm

A

FIELD CURVE

MODEL CURVE

12 000E 9200N

B

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

DATE NOV 82 | DWN J. P. M.
GEOPH. J. S. | CHKD

100 0 100 200 300m

5 cm

File No. E.L.10/74 M6-2

E.L. 10/74 BLACK BLUFF
MARINER 5
PROFILE A-B
FIELD AND COMPUTED
GRAVITY PROFILE

FIG. 3

TS 10/74 M6-2
MARINER 6
GEOLOGY

9 850mE | 9 900mE | 9 950mE | 10 000mE BASE LINE | 10 050mE | 10 100mE | 10 150mE | 10 200mE

10 150mN | 10 100mN | 10 050mN | 10 000mN | 9 950mN | 9 900mN | 9 850mN | 9 800mN | 9 750mN | 9 700mN

5 405 400mN AMG

414 900mE AMG

KAURI FAULT

DDH 1

WATER RACE

bo sst | bo sst scree | T Lim congl | T Lim congl grit + clay | hm qtz | hm qtz/congl | congl | cong. | oil bx qvz congl | Tb

LEGEND:

- bioturbated sandstone
- hematitic quartzite
- conglomerate
- laminated quartz and conglomerate

OWEN CONGLOMERATE ORDOVICIAN

- Tb — Tertiary basalt (Tertiary hematitic conglomerate, grit and clays)

STRUCTUAL:

- layering
- jointing
- vertical jointing
- cliff
- 0·5m trench (with depths)
- 4 m shaft (with depths)
- minor anticline
- outcrop
- contact
- fault
- major fault
- water way

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN TN 18°00'

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:1000

No. TS 10/74 M6-2

E.L. 10/74 BLACK BLUFF
MARINER 6
GEOLOGY

DATE: NOV. 81.
GEOL: J.P
DRAWN: R.T., M.vdS
CHKD:

10/74 M6-6
M-6
Mag. Intens. Profiles

62 000 nT

LINE 10 200 N

61 500 nT

62 000 nT

LINE 10 150 N

61 500 nT

62 000 nT

LINE 10 100 N

61 500 nT

62 000 nT

LINE 10 050 N

61 500 nT

62 000 nT

LINE 10 000 N

9 800 N

10 000 N

10 200 N

LINE 10 000 E (Base line)

10 200 N

10 000 N

9 800 N

62 500 nT

62 000 nT

61 500 nT

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE NOV 82
GEOPH. J.S.
DRAWN J.P.M.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE | No. TS 10/74-M6-6 | PLAN No. 5

E.L. 10/74 BLACK BLUFF
MARINER 6

MAGNETIC INTENSITY PROFILES

Sheet 1

10/74 M6-7
M-6
Magnetic Profiles

-9900E
-10000E
-10200E

62 000 nT
LINE 9950 N

61 500 nT
62 000 nT
LINE 9900 N

61 500 nT
62 000 nT
LINE 9850 N

61 500 nT
62 000 nT
LINE 9800 N

61 500nT
62 000 nT
LINE 9750 N

61 500 nT
62 000 nT
LINE 9700N

61 500 nT
9900 E
10000 E
10200 E

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: NOV 82
GEOPH. J.S
DRAWN J.P.M.
CHECKED

GEOPEKO
A DIVISION OF PERC. A. ALLSEN OPERATIONS LTD.

SCALE | No TS 10/74 M6 - 7 | PLAN No. 6

E.L. 10/74 BLACK BLUFF
MARINER 6
MAGNETIC INTENSITY PROFILES
Sheet 2

TS 10/74 M6-4
MARINER 6
GEOCHEMICAL VALUES

9 800mE | 9 850mE | 9 900mE | 9 950mE | BASE LINE 10 000mE | 10 050mE | 10 100mE | 10 150mE | 10 200mE | 10 250mE | 10 300mE

10 250mN

10 200mN

10 150mN

5 405 400mN AMG

10 100mN

10 050mN

10 000mN

9 950mN

9 900mN

9 850mN

9 800mN

9 750mN

9 700mN

9 650mN

414 900mE AMG

LEGEND:

o Hand auger

3 —— SAMPLE
⊙ —— SAMPLE POSITION
10 —— DUPLICATE SAMPLE

⊙ 35 —— SAMPLE TAKEN ON EXTENDED GRID

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN TN
18°00'

DATE: SEPT. 1981
GEOL: J. PEMBERTON
DRAWN: R. TOGNONI
CHKD:

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
SCALE 1:1000
No. TS10/74 M6- 4a

E.L.10/74 BLACK BLUFF
MARINER 6

Soil Sam Loc. MARMER 6 M6-3

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

LEGEND:

o Hand auger

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:1000

No. TS10/74 M6- 3

E.L.10/74 BLACK BLUFF
MARINER 6

SOIL SAMPLE LOCATION MAP

DATE: SEPT. 1981
GEOL: J. PEMBERTON
J.P.M.
CHKD:

GN TN 18°00'

5 405 400mN AMG

414 900mE AMG

M6

E.L. 10/74 BLACK BLUFF
MARINER 6
GEOLOGY

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:1000

No. TS 10/74 M6-2

DATE: NOV. 81.
GEOL: J.P
DRAWN: R.T., M.vdS
CHKD:

GN TN
18°00'

9 850mE 9 900mE 9 950mE BASE LINE 10 000mE 10 050mE 10 100mE 10 150mE 10 200mE

10 150mN 10 100mN 10 050mN 10 000mN 9 950mN 9 900mN 9 850mN 9 800mN 9 750mN 9 700mN

5 405 400mN AMG

4/4 900mE AMG

KAURI FAULT

DDH 1

WATER RACE

T Lim congl

T Lim congl grit clay

hm qtz

hm qtz/congl

hm qtz congl

congl

bo sst

bo sst scree

Tb

F

LEGEND:

4 bioturbated sandstone
3 hematitic quartzite
2 conglomerate
1 laminated quartz and conglomerate
OWEN CONGLOMERATE ORDOVICIAN
5 ~~Tb~~ 6 Tertiary basalt (Tertiary hematitic conglomerate, grit and clays)

STRUCTUAL:

layering
jointing
vertical jointing
cliff
0·5m trench (with depths)
4m shaft (with depths)
minor anticline
outcrop
contact
fault
major fault
water way

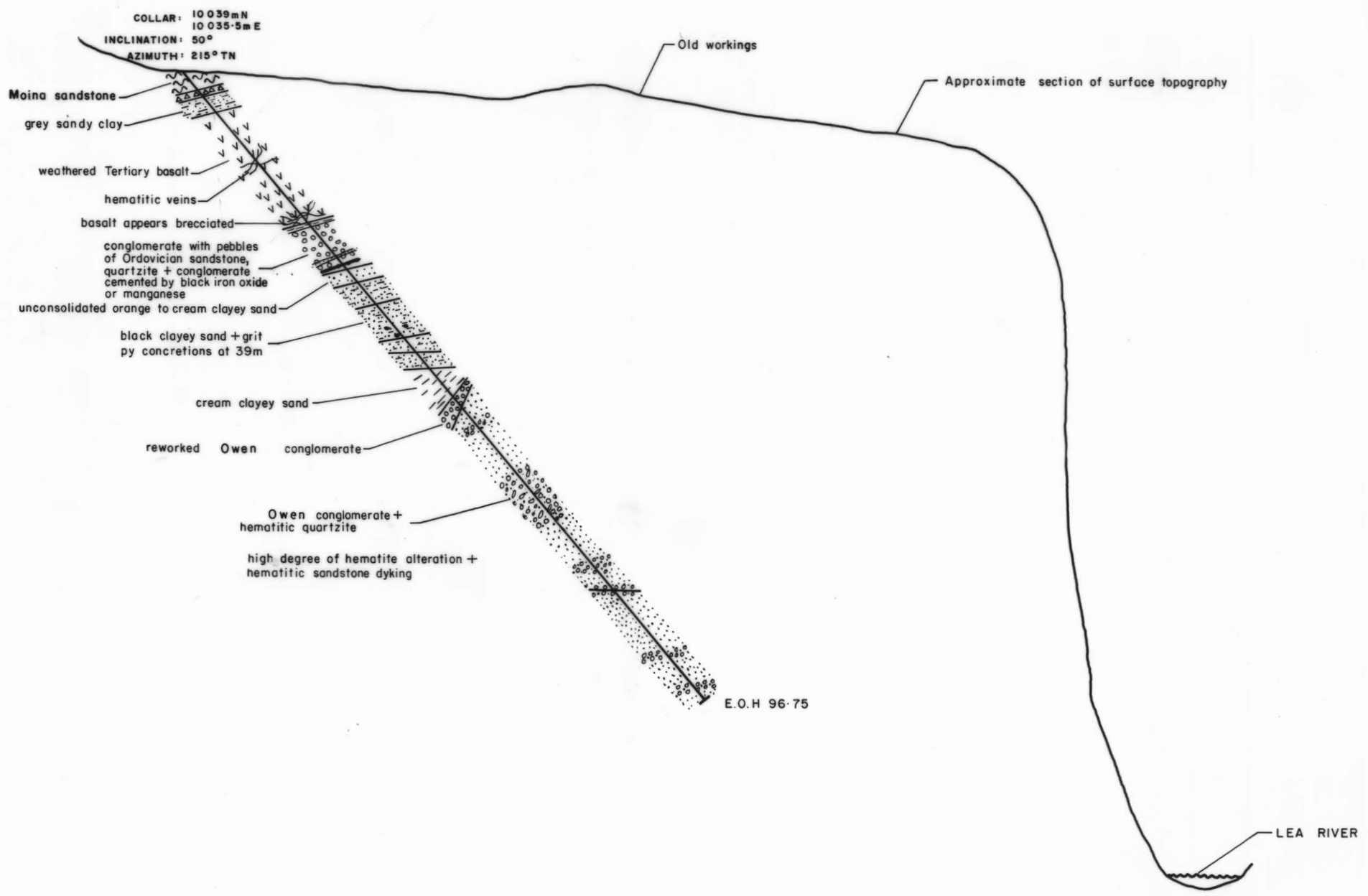
5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

BLACK BLUFF
M6-5
DDH-1



5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: JULY '82
GEOLOGIST: J.P.
DRAWN: J.P.M.
CHECKED:

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS

SCALE	No.	REP. No.
1: 500	TS 10/74-M6-5	

E.L. 10/74 BLACK BLUFF
MARINER 6 DDH 1
GEOLOGICAL PROFILE

10/74 M-6-9
M-6
Interp Diag.



GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

DATE NOV'82	DWN J. P. M.	1:1000
GEOPHJ. S	CHKD	

5 cm

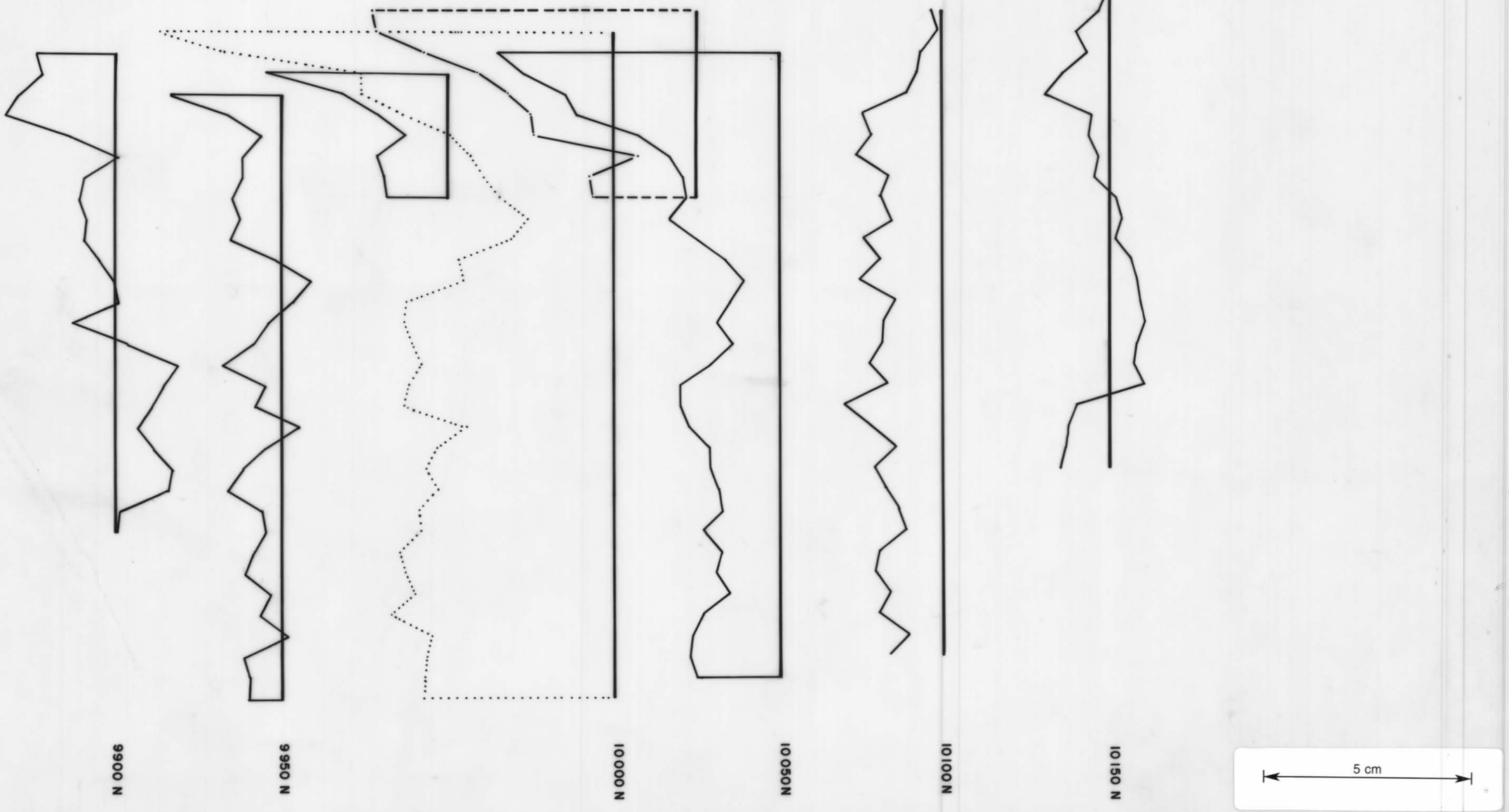
E. L. 10/74 BLACK BLUFF
MARINER 6
INTERPRETATION DIAGRAM

FIG. 8

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

TS 10/74 MB-10
M - 6
Profiles S.P



GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

DATE NOV'82	DWN J.P.M.	
GEOPH. J.S	CHKD	

HORIZ. SCALE : 1cm / 25m
VERT SCALE : 1cm / 20 mv

03_4899
Tube No 8: Mariner 1977-82 (EL 10/1974)

E.L.10/74 BLACK BLUFF
MARINER 6
PROFILES OF SELF POTENTIAL
FIG. 9

MASTER
MARINER 7
Grid Master

9 100 E | 9 200 E | 9 300 E | 9 400 E | 9 500 E | 9 600 E | 9 700 E | 9 800E | 9 900E | 10 000 E | 10 100 E | 10 200 E | 10 300 E

11 400 N
11 300 N
11 200 N
11 100 N
11 000 N
10 900 N
10 800 N
10 700 N
10 600 N
10 500 N
10 400 N
10 300 N
10 200 N
10 100 N
10 000 N
9 900 N
9 800 N
9 700 N
9 600 N

412 000 mE A.M.G.

5 402 000mN A.M.G.

LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

SAMPLE POSITION — 20 / 15 / 10 / 15 / 15 / 10 — DUPLICATE SAMPLE

NS NO SAMPLE
x BELOW LEVEL OF DETECTION

CONTOUR INTERVAL ppm

Pencil No.	
19-6	
19-10	
19-15	
19-22	

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
56°

DATE JAN '82
GEOLOGIST J.P.
DRAWN M.vdS.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
SCALE 1:2500
No. TS 10/74 M7-

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS

5 cm

TS 10/74 M7-2
MARINER 7
GEOLOGY

9 100mE | 9 200mE | 9 300mE | 9 400mE | 9 500mE | 9 600mE | 9 700mE | 9 800mE | 9 900mE | 10 000mE | 10 100mE | 10 200mE | 10 300mE | 10 400mE

11 300mE — 11 300m N
11 200mE — 11 200m N
11 100mE — 11 100m N
11000mN — 11 000m N
10 900mN — 10 900m N
10 800mN — 10 800m N
10 700mN — 10 700m N
10 600mN — 10 600m N
10 500mN — 10 500m N
10 400mN — 10 400m N
10 300mN — 10 300m N
10 200mN — 10 200m N
10 100mN — 10 100m N
10 000mN — 10 000m N
9 900mN — 9 900m N
9 800mN — 9 800m N
9 700mN — 9 700m N
9 600mN — 9 600m N

412 000mE A.M.G.
5 404 000mN A.M.G.

Tubicolar Sst
hm qtz
KR9758 mg hmvn qbf(slt)xt
KR9759 fg hm qfxt
Owen Congl
hm qtz
m-cg qxt A/C
t slt/sst +qfxt
chl qf xt A/C
magnetic t slt
Tubicolar Sst
Magnetite in Owen Congl.
LEA RIVER
mg chl qfxt A/C
m-cg qxt A/C
KR9753
mg ser qfxt
mg chl- -qfxt
m-cg chl qfxt
KR9767
KR9768
KR 9848
f-mg chl qxlt
f-mg chl qfxt
KR9849 bx ser qpl
m-cgt slt/sst
KR9850-9751 pebble bearing m-cg chltslt
KR9752 mg chl fe vn qb xlt.
qvn +spec hm.
fgt slt
mg chl qfxt fe/mn vn
m-cg qxt
mg qfxlt fe vns
Tubicolar sst
mgqxt
fg qfxt
KR 9765 mg hm slt qfxlt (micaceous)
KR 9764 mg shd ser hm qfxt-pp
KR9766
fmg qfxlt flm
f-mg hm qxlt
f-mg qxt
KR 9763
KR 9762
mg qpl
KR9761
qtz

LEGEND

- Bioturbated Tubicolar Sandstone (Moina Sst) / Conglomerate + quartzite (Owen Congl). — ORDOVICIAN
- fg tuffaceous siltstone.
- m-cg tuffaceous siltstone + sandstone.
- f-mg chloritic quartz crystal lithic tuff.
- mg quartz porphyritic lava.
- mg chloritic quartz biotite crystal lithic tuff.
- mg chloritic quartz feldspar crystal tuff.
- fg quartz feldspar crystal tuff.
- m-cg quartz crystal-lithic component. — CAMBRIAN

STRUCTURAL

- layering
- jointing
- vertical jointing
- cliff
- trench (with depths)
- shaft (with depths)
- minor anticline
- outcrop
- contact
- fault
- major fault
- water way

5 cm

TN GN 56°

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

No. TS 10/74 M7-2

E.L. 10/74 BLACK BLUFF
MARINER 7
GEOLOGY

DATE 25·1·82
GEOLOGIST J.P.
DRAWN M.vdS.
CHECKED

ORDIVICIAN CONGLOMERATE

QUARTZITE

CAMBRIAN VOLCANICS

LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

Sample No. Prefix : TS

Approximate Ordovician / Cambrian u/c

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
56°

DATE 25/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

25 0 50 100 metres
SCALE 1:2500

No. TS 10/74 M7- 3

E.L 10/74 BLACK BLUFF
MARINER 7
SOIL SAMPLE LOCATIONS

5 cm

TS 10/74-M7-7
BLACK BLUFF
Fe. Mn. Ag CHEOCHEM.

9 100 E | 9 200 E | 9 300 E | 9 400 E | 9 500 E | 9 600 E | 9 700 E | 9 800E | 9 900 E | 10 000 E | 10 100 E | 10 200 E | 10 300 E

11 400 N

11 300 N

11 200 N

11 100 N

11 000 N

10 900 N

10 800 N

5 404 000m N A.M.G.

10 700 N

10 600 N

10 500 N

10 400 N

412 000 m E A.M.G.

10 300 N

10 200 N

10 100 N

10 000 N

9 900 N

9 800 N

9 700 N

9 600 N

9 100 E | 9 200 E | 9 300 E | 9 400 E | 9 500 E | 5 404 000m N A.M.G. | 9 600 E | 9 700 E | 9 800E | 9 900 E | 10 000 E | 10 100 E | 10 200 E | 412 000m E A.M.G. | 10 300 E

LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

0·7 — Fe %
15 — Mn ppm
10 — Ag ppm

0·7 / 15 / 10 — DUPLICATE SAMPLE

NS NO SAMPLE

X BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm
19-6	
19-10	
19-15	
19-22	

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

TN | GN | 56°

DATE 26/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500

No.TS 10/74 M7- 7

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS
Fe , Mn , Ag

TS 10/74-M7-5
BLACK BLUFF
Pb GEOCHEMISTRY

E.L 10/74 BLACK BLUFF MARINER 7 GEOCHEMISTRY RESULTS Cu Pb Zn

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

SCALE 1:2500 (25 0 50 100 metres)

No. TS 10/74 M7-5

DATE 22/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

LEGEND:

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

20 — Cu ppm
15 — Pb ppm
10 — Zn ppm
DUPLICATE SAMPLE

NS NO SAMPLE
X BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm	Pencil No.	ppm
19-6	60 - 99	19-28	800<
19-10	100-199		
19-15	200-399		
19-22	400-799		

5 cm

GN
TN
56°

9 100 E
9 200 E
9 300 E
9 400 E
9 500 E
9 600 E
9 700 E
9 800 E
9 900 E
10 000 E
10 100 E
10 200 E
10 300 E

11 400 N
11 300 N
11 200 N
11 100 N
11 000 N
10 900 N
10 800 N
10 700 N
10 600 N
10 500 N
10 400 N
10 300 N
10 200 N
10 100 N
10 000 N
9 900 N
9 800 N
9 700 N
9 600 N

5 404 000 m N A.M.G.
412 000 m E A.M.G.

TS 10174-M7-6
BLACK BLUFF
Zn GEOCHEM.

9 100 E | 9 200 E | 9 300 E | 9 400 E | 9 500 E | 9 600 E | 9 700 E | 9 800E | 9 900 E | 10 000 E | 10 100 E | 10 200 E | 10 300 E

11 400 N
11 300 N
11 200 N
11 100 N
11 000 N
10 900 N
10 800 N
10 700 N
10 600 N
10 500 N
10 400 N
10 300 N
10 200 N
10 100 N
10 000 N
9 900 N
9 800 N
9 700 N
9 600 N

5 404 000m N A.M.G.

412 000 m E A.M.G.

LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

20 — Cu ppm
15 — Pb ppm
10 — Zn ppm
15 / 15 / 10 — DUPLICATE SAMPLE

NS NO SAMPLE
x BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm
19-6	30 - 59
19-10	60 - 119
19-15	120 <

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

TN
GN
56°

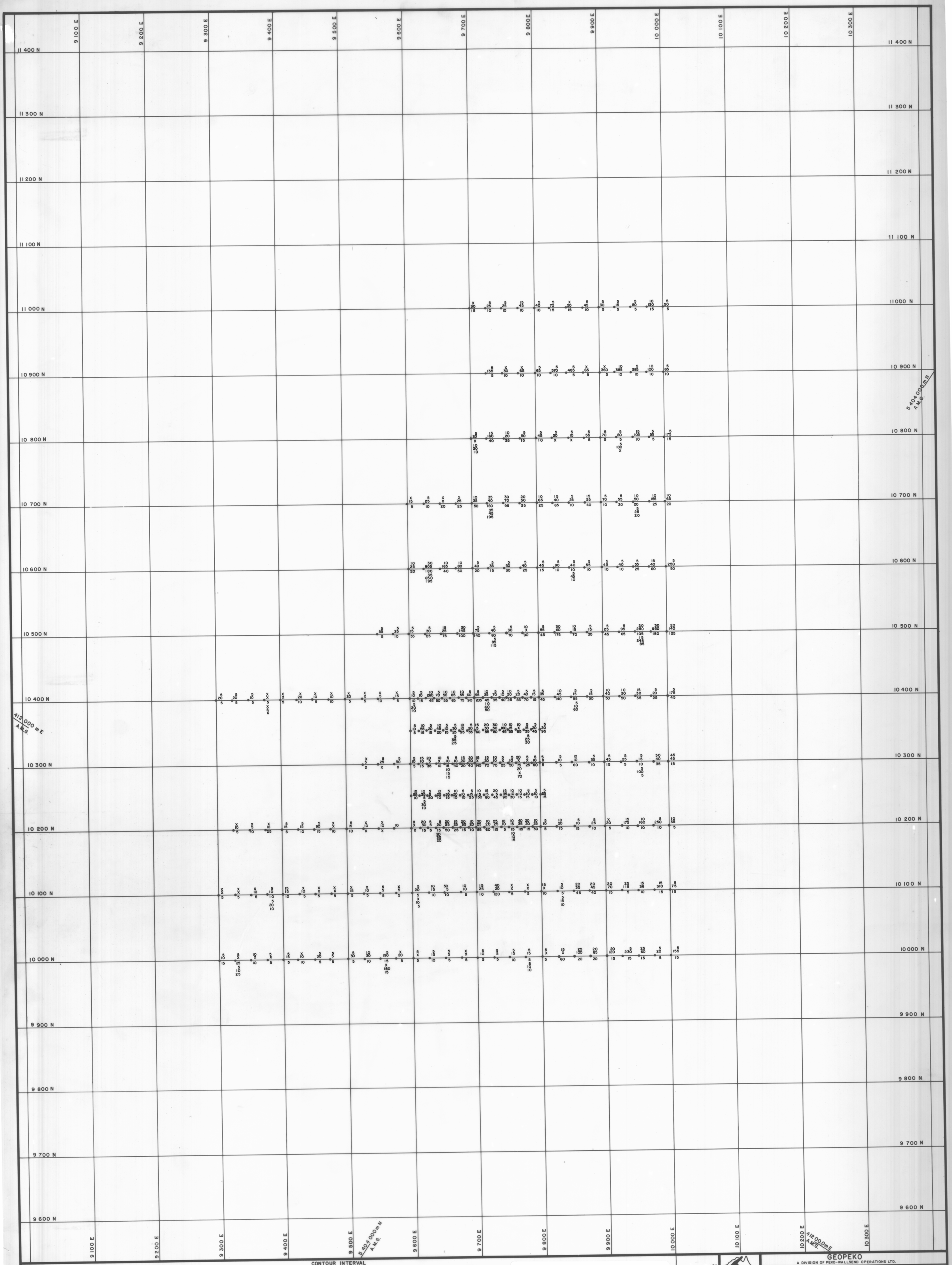
DATE 22/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500

No. TS 10/74 M7- 6

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS
Cu, Pb Zn

TS 10/74-M7-4
BLACK BLUFF
Cu Pb Zn GEOCHEM. M.



LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

20 — Cu ppm
5 — Pb ppm
10 — Zn ppm
15 T
15 D — DUPLICATE SAMPLE
10 J

NS NO SAMPLE
X BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm
19-6	30 - 59
19-10	60 - 119
19-15	120 <

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

TN GN 56°

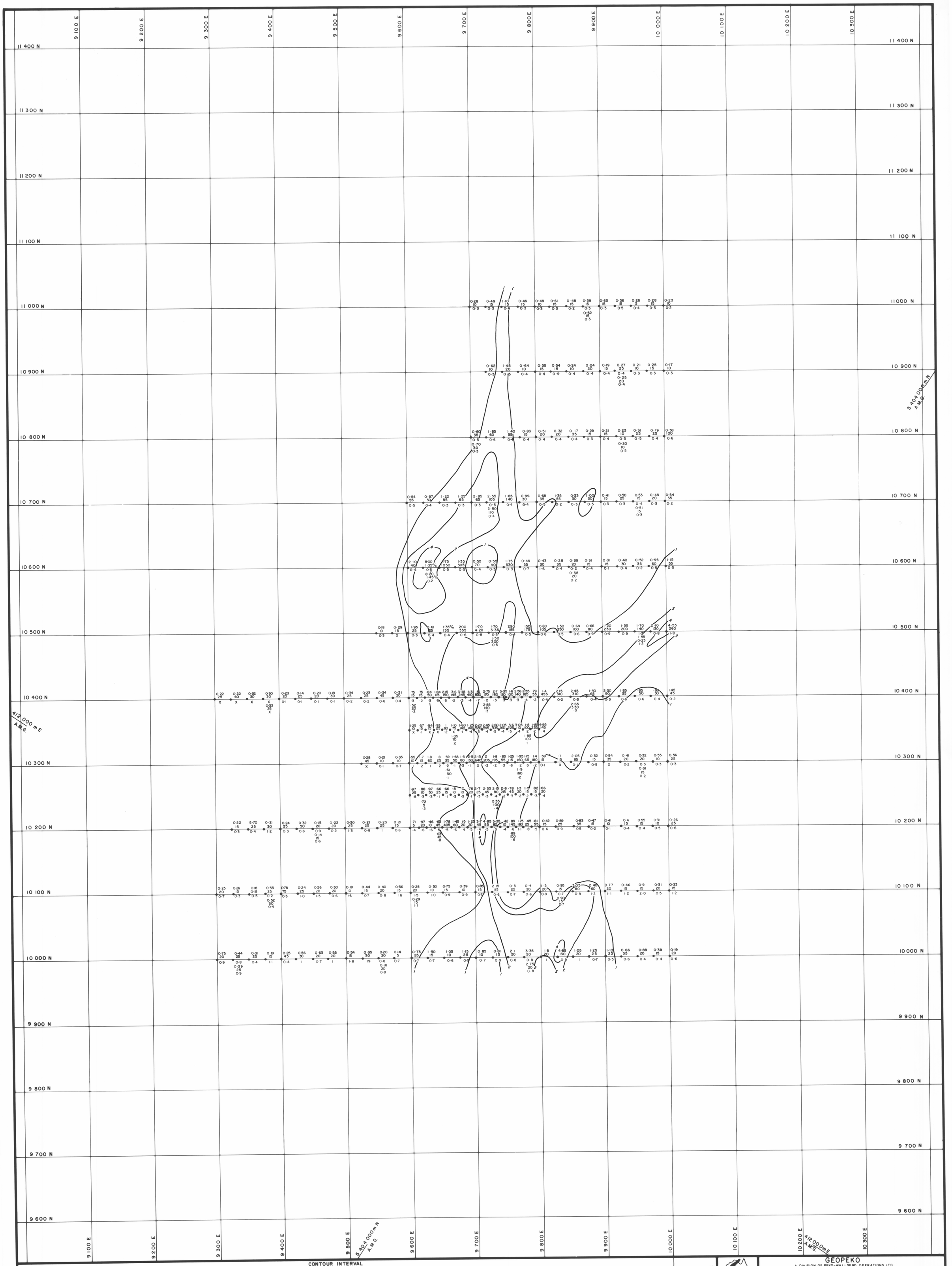
GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500

No. TS 10/74 M7- 4

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS
Cu, Pb, Zn

DATE 22/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

TS 10/74 M7/8
MARINER 7
Fe CONTOURS



LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

0·7 — Fe %
1·5 — Mn ppm
1·0 — Ag ppm
DUPLICATE SAMPLE

NS NO SAMPLE
x BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm
19-6	1%
19-10	2%
19-15	4%
19-22	8%

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
56°

DATE 26/1/82
GEOLOGIST J.P.
DRAWN M.vdS.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
25 0 50 100 metres
SCALE 1:2500

No. TS 10/74 M7- 8

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS
Fe, Mn, Ag

M7

9 100mE | 9 200mE | 9 300mE | 9 400mE | 9 500mE | 9 600mE | 9 700mE | 9 800mE | 9 900mE | 10 000mE | 10 100mE | 10 200mE | 10 300mE | 10 400mE

11 300mE / 11 300mN
11 200mE / 11 200mN
11 100mE / 11 100mN
11000mN / 11 000mN
10 900mN
10 800mN
10 700mN
10 600mN
10 500mN
10 400mN
10 300mN
10 200mN
10 100mN
10 000mN
9 900mN
9 800mN
9 700mN
9 600mN

5 404 000mN A.M.G.
412 000mE A.M.G.

Tubicolar Sst
KR9758 mg hm vn qbf(slt) xlt
KR9759 fg hm qfxt
Owen Congl
hm qtz
m-cg qxt A/C
f slt/sst +qfxt
chl qf xt A/C
magnetic f slt
Tubicolar Sst
Magnetite in Owen Congl.
mg chl qfxt A/C
m-cg qxt A/C
KR9753 mg ser qfxt
mg chl- -qfxt
KR9766
KR9848
f-mg chl qslt
Ut-mg chl qfx
KR9847 bk ser qpl
KR9850-9751 pebble bearing m-cg chltslt
KR9752 mg chl fsm qb xlt
mg chl qfxt fe/mn vn
qvn +spec hm
qtz
fgtslt
m-cg qlxt
mg qf slt fe vns
f-mg hm qxt
f-mg qxt
KR9763
KR9762
KR9765 mg hm qxt
KR9764 mg shd ser hm qfxt-p?
KR9768
mgqxt
fgqfxt
mgqfxt
KR9769
mgqpl
qtz

LEGEND

1	Bioturbated Tubicolar Sandstone (Moina Sst)	ORDOVICIAN
2	Conglomerate + quartzite (Owen Congl)	
3	fg tuffaceous siltstone.	CAMBRIAN
4	m-cg tuffaceous siltstone + sandstone.	
5	f-mg chloritic quartz crystal lithic tuff.	
6	mg quartz porphyritic lava.	
7	mg chloritic quartz biotite crystal lithic tuff.	
8	mg chloritic quartz feldspar crystal tuff.	
9	fg quartz feldspar crystal tuff.	
10	m-cg quartz crystal-lithic component.	

STRUCTURAL

- layering
- jointing
- vertical jointing
- cliff
- 0.6m trench (with depths)
- 4m shaft (with depths)
- minor anticline
- outcrop
- contact
- fault
- major fault
- water way

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
SCALE 1:2500
No. TS 10/74 M7-2

E.L. 10/74 BLACK BLUFF
MARINER 7
GEOLOGY

DATE 25-1-82
GEOLOGIST J.P.
DRAWN M.vdS.
CHECKED

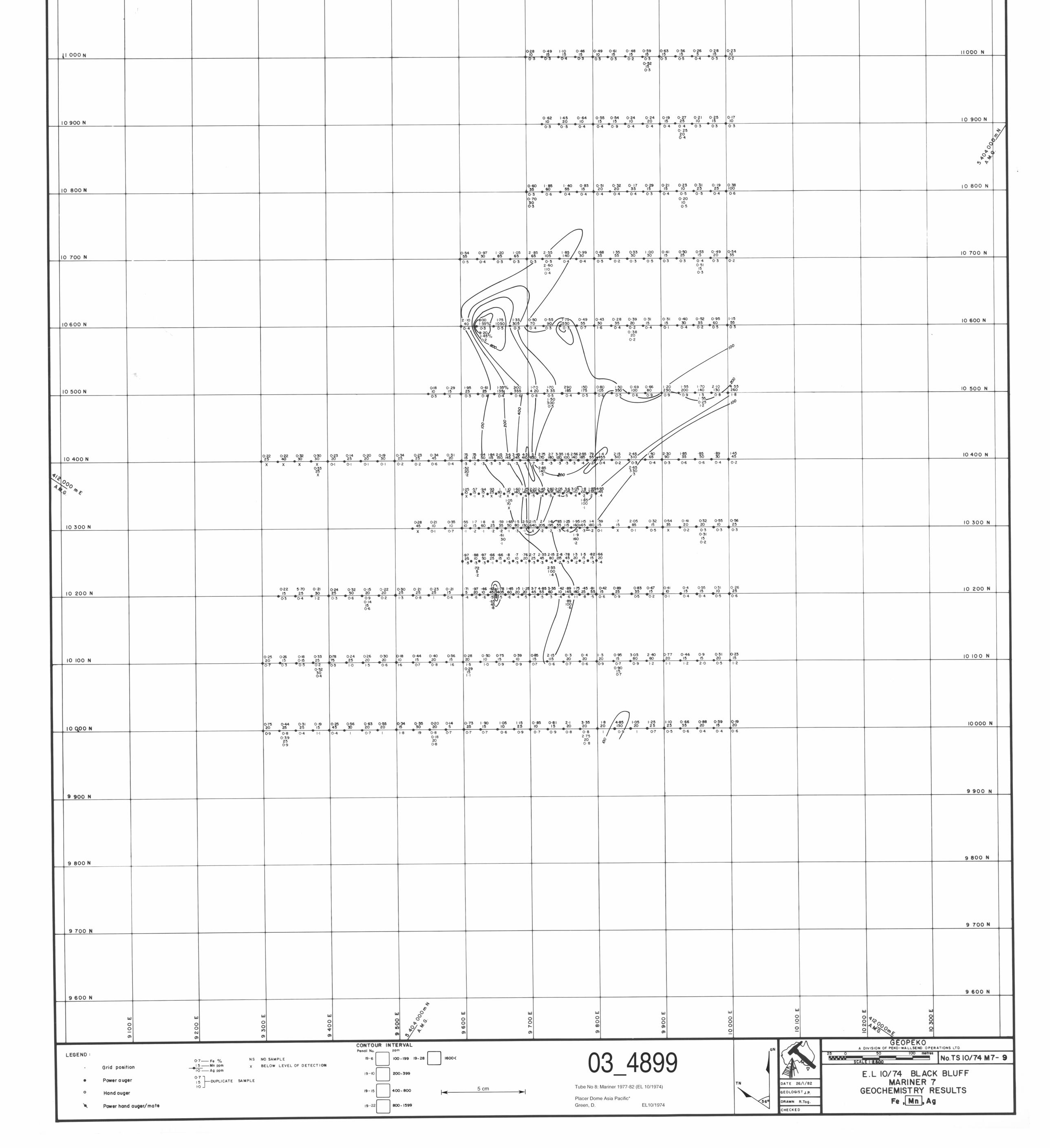
TS 10/74 M7-9
BLACK BLUFF
Mn. GEOCHEM.

9 100 E | 9 200 E | 9 300 E | 9 400 E | 9 500 E | 9 600 E | 9 700 E | 9 800 E | 9 900 E | 10 000 E | 10 100 E | 10 200 E | 10 300 E

11 400 N
11 300 N
11 200 N
11 100 N
11 000 N
10 900 N
10 800 N
10 700 N
10 600 N
10 500 N
10 400 N
10 300 N
10 200 N
10 100 N
10 000 N
9 900 N
9 800 N
9 700 N
9 600 N

5 404 000m N A.M.G.

412 000m E A.M.G.



LEGEND :

- Grid position
- Power auger
- Hand auger
- Power hand auger/mate

0·7 — Fe %
1·5 — Mn ppm
10 — Ag ppm

0·7 / 1·5 / 10 — DUPLICATE SAMPLE

NS NO SAMPLE
x BELOW LEVEL OF DETECTION

CONTOUR INTERVAL

Pencil No.	ppm		
19-6	100-199	19-28	1600<
19-10	200-399		
19-15	400-800		
19-22	800-1599		

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN
TN
56°

DATE 26/1/82
GEOLOGIST J.P.
DRAWN R.Tog.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
25 0 50 100 metres
SCALE 1:2500

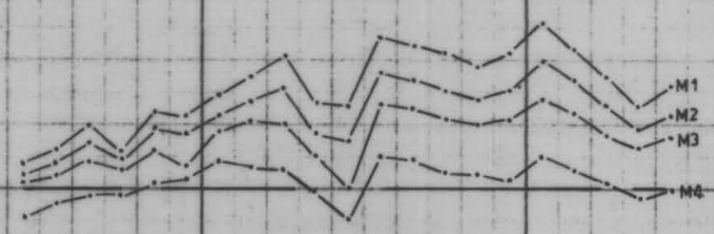
No. TS 10/74 M7- 9

E.L 10/74 BLACK BLUFF
MARINER 7
GEOCHEMISTRY RESULTS
Fe , Mn , Ag

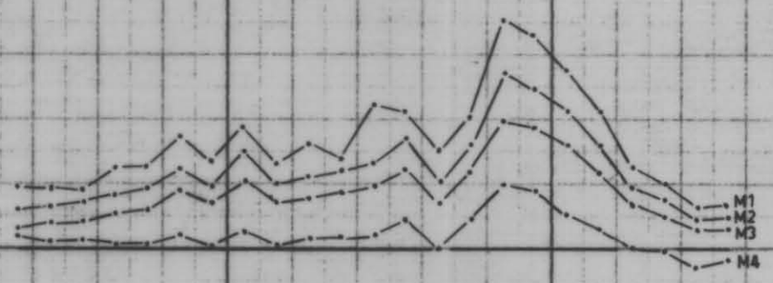
3332

10 500 N | 10 400 N | 10 300 N | 10 200 N | 10 100 N | 10 000 N | 9 900 N | 9 800 N | 9 700 N | 9 600 N

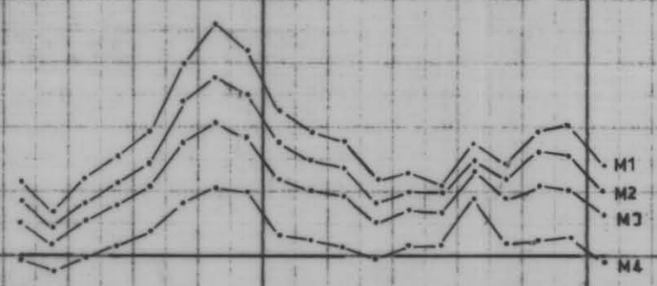
9900 E



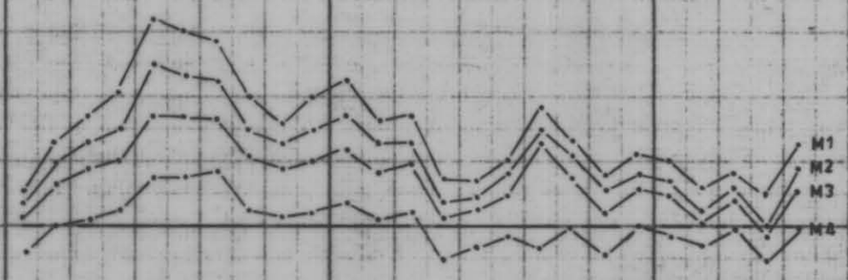
9800 E



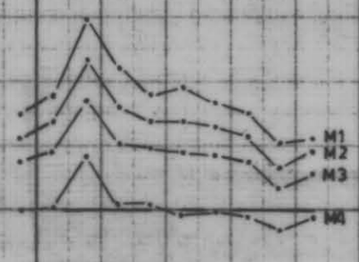
9700 E



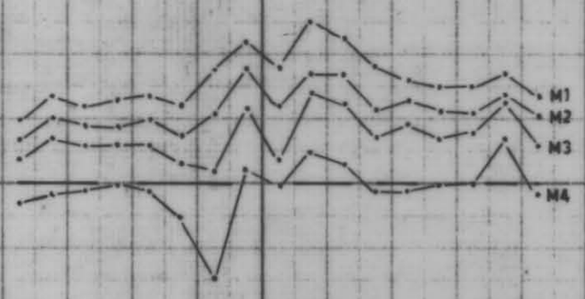
9600 E



9500 E



9400 E



10 500 N | 10 400 N | 10 300 N | 10 200 N | 10 100 N | 10 000 N | 9 900 N | 9 800 N | 9 700 N | 9 600 N

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LTD. Geophysical Surveys.	Instrument	Huntec / Palmer	Datum	——	Hor. Scale	1cm = 50m	AREA.	Black Bluffs EL10/74
	Observer	S. Mudge	Base Peg	9800 E / 10000 N	Vert. Scale	1cm = 1%	PROSPECT.	MARINER 1.
Plan No. 3332	Scale Fact.	——	Date	Jan. 1977	Cont. Int.	——	PLAN SHOWS	Gradient Array I.P. Profiles.

KT10/74-M-1
MARINER 1
MARINER 2
BASE MAP
1:5000

411 000 E
412 000 E
413 000 E
414 000 E

5 402 000 N
5 401 000 N
5 400 000 N

Bond Peak

Fall
Plain

Fall River

Iris River

CRADLE MOUNTAIN ROAD

3400
3200
3000
2800
2600

03_4899

5 cm

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

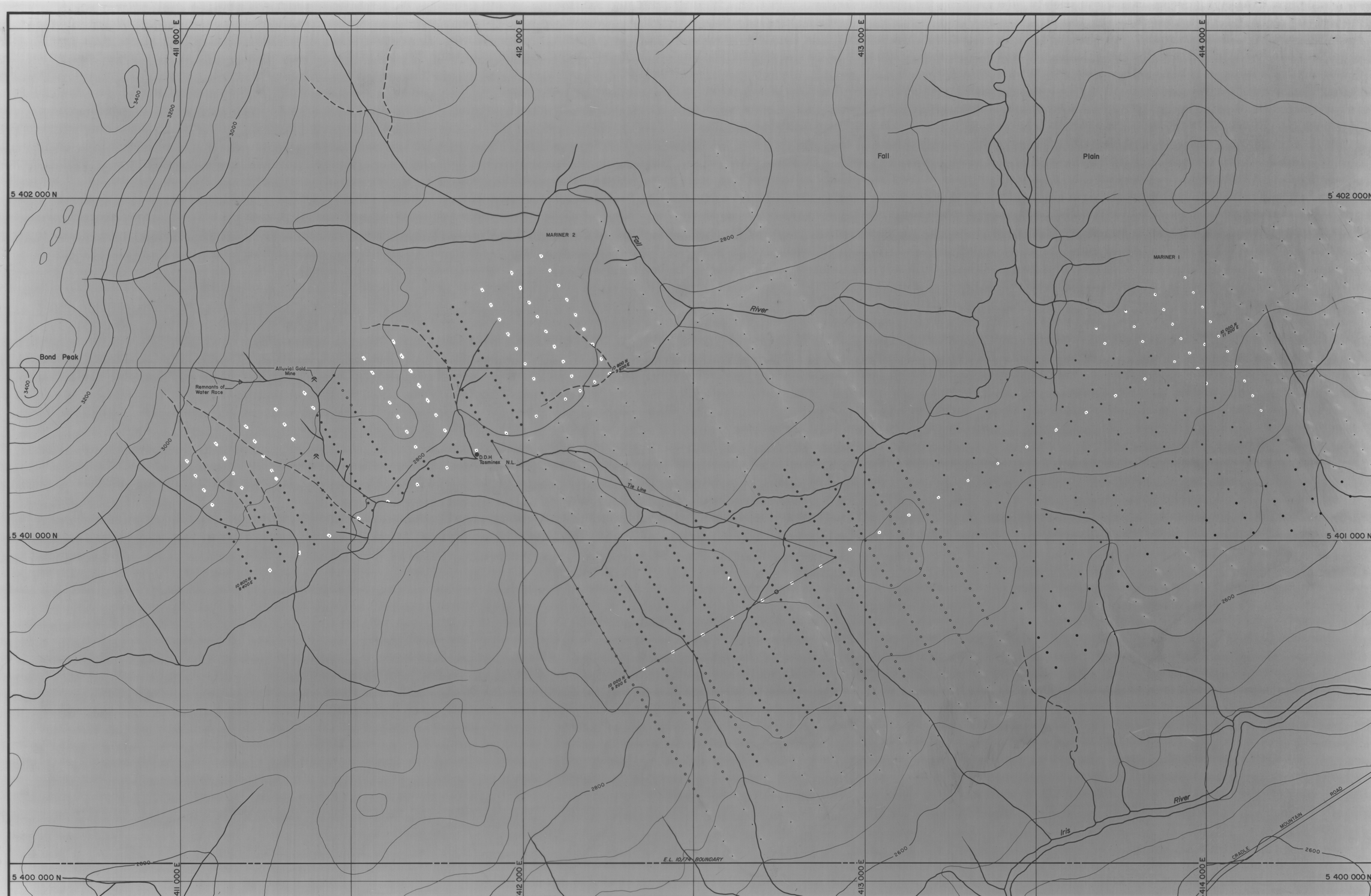
No. KT10/74-M-1

E.L. 10/74

BLACK BLUFF, TASMANIA
MARINER 1 and MARINER 2

DATE: Dec 1976
GEOLOGIST:
DRAWN: L.G.
CHECKED: M.C.R.

KT 10/74
EXTENDED
GRID
1:5,000



03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

5 cm

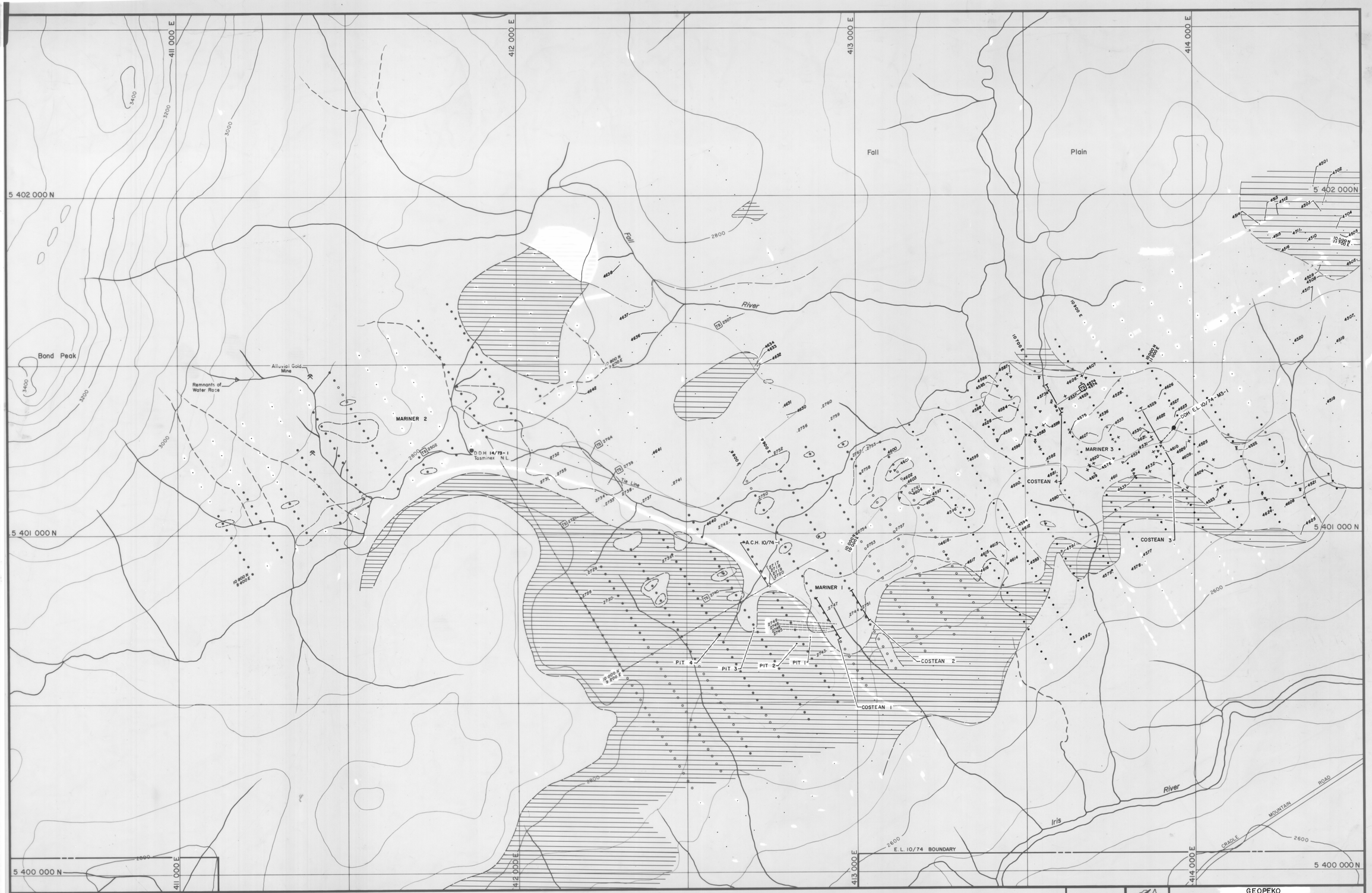
DATE: Dec 1976
GEOLOGIST: R.B.
DRAWN: L.G.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

No. KT10/74-M-2

E.L. 10/74
BLACK BLUFF, TASMANIA
MARINER 1 and MARINER 2



NOTE:

This interpretation is based upon — surface (KT 10/74-M-3B), float (KT 10/74-M-3C), and auger hole rock chip (KT10/74-M-3D) geological data.

SYMBOLS

TS 2739	Thin section and rock number
2742	Rock sample for geochemical analysis,
— — —	Interpreted contact.
●	Power auger hole.
○	Hand auger hole
○	Auger core hole
·	Grid position

GEOLOGICAL INTERPRETATION

Pencil		
		TERT. Olivine basalt (thin)
19-47		TERT. Olivine basalt (thick)
19-20	℄	Biotite feldspar quartz porphyry
19-41	℄	Argillic – chloritic (biotite feldspar) quartz porphyry
19-41	+ ▷ ℄	Argillic – chloritic (biotite feldspar) quartz porphyry intruded by quartz veins with associated pyrite/limonite mineralization(+) and massive (▷) quartz veins. Principally at Mariner 3

AUGER CORE HOLE ROCK GEOCHEMISTRY: (ppm)

KR	Depth Interval (m)	Cu	Pb	Zn	Ag	Cd	Mn	Sn	Ba	Fe %
2717	8·94 – 9·04	120	1760	520	10	5	520	100	500	4·0
2718	11·28 – 11·38	160	7800	290	55	5	7600	100	1000	2·9
2718*	11·28 – 11·38	170	7900	300	60	5	7650	—	—	3·0
2719	16·64 – 16·74	10	310	1010	2	2	1680	50	500	3·6
2720	17·87 – 17·97	5	110	360	<2	5	630	50	1000	1·8

* Denotes repeat and check analysis.

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GN MN 11·7°

DATE: AUGUST '78
GEOLOGIST: G.L.B.
DRAWN: J.P.M.
CHECKED: G.L.B.

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

SCALE 1:5000

No. KT10/74-M-3A

E.L.10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3

INTERPRETATION GEOLOGICAL MAP
with rock sample locations

KT 10/74-M-4
GEOCHEMICAL RESULTS COPPER 1-5000

411 000 E | 412 000 E | 413 000 E | 414 000 E

5 402 000 N | 5 401 000 N | 5 400 000 N

Bond Peak

Alluvial Gold Mine

Remnants of Water Race

MARINER 2

D.D.H Tasminex N.L.

Fall River

Tie Line

MARINER 1

MARINER 3

Fall Plain

Iris River

MOUNTAIN ROAD

CRADLE

E.L. 10/74 BOUNDARY

LEGEND:

- 75 - 150 (Cu ppm)
- 150 - 300 (Cu ppm)
- 300 +

- o50 ..... Hand augered sample 50 ppm Cu
- ●110 ..... Power augered sample 110 ppm Cu
- O ..... Auger core hole
- 60 ..... Original sample
- o60 ..... Duplicate sample
- · ..... Grid position
- ——— ..... Basalt contact

ANALYTICAL NOTES:

Analytical Methods: Cu by AAS following hot conc. HCL leach and HCL/HNO_3 leach in latter stages of 0·25g sample.

Size fraction analysed: -80 mesh

Analytical results in ppm.

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE AUG. '78
GEOLOGIST G.L.B.
DRAWN J.P.M.
CHECKED

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
SCALE 1 : 5000 | No. KT10/74-M-4

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
COPPER

KT 10/74-M-6
GEOCHEMICAL RESULTS
ZINC
1:5,000

411 000 E | 412 000 E | 413 000 E | 414 000 E

5 402 000 N | 5 401 000 N | 5 400 000 N

Bond Peak

Alluvial Gold Mine

REMNANTS of WATER RACE

D.D.H. Tasminex N.L.

MARINER 2

MARINER 3

MARINER 1

Tie Line

Fall River

Fall Plain

Iris River

CRADLE MOUNTAIN ROAD

E.L. 10/74 BOUNDARY

LEGEND:

- 200 - 300 (Zn ppm)
- 300 - 400 (Zn ppm)
- 400 - 500 (Zn ppm)
- 500 - 1000 (Zn ppm)
- 1000 +

oH10.....Hand augered sample 110 ppm Zn
eP170.....Power augered sample 170 ppm Zn
O.....Auger core hole
190.....Original sample
o190.....Duplicate sample
Grid position
Basalt contact

ANALYTICAL NOTES:

Analytical Methods: Zn by AAS following hot conc. HCL leach and HCL/HNO_3 leach in latter stages of 0·25g sample.

Size fraction analysed: — 80 mesh

Analytical results in ppm.

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

SCALE 1:5000

No KT10/74-M-6

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
ZINC

DATE AUG 78
GEOLOGIST G.L.B.
DRAWN J.P.M.
CHECKED

KT10/74-M-5
GEOCHEMICAL RESULTS
LEAD
1:5000

411 000 E | 412 000 E | 413 000 E | 414 000 E

5 402 000 N | 5 401 000 N | 5 400 000 N

Bond Peak

Alluvial Gold Mine

Remnants of Water Race

Fall River

Fall

Plain

D.D.H Tasminex N.L.

MARINER 2

MARINER 1

MARINER 3

Tie Line

10 600 E 2 200 N

10 800 E 2 400 E

10 600 E 2 600 E

10 800 E 2 800 E

10 600 E 2 800 E

10 800 E 3 000 E

10 600 E 3 000 E

10 800 E 3 200 E

10 600 E 3 200 E

10 800 E 3 400 E

10 600 E 3 400 E

10 800 E 3 600 E

10 600 E 3 600 E

10 800 E 3 800 E

10 600 E 3 800 E

10 800 E 4 000 E

10 600 E 4 000 E

10 800 E 4 200 E

10 600 E 4 200 E

10 800 E 4 400 E

10 600 E 4 400 E

10 800 E 4 600 E

10 600 E 4 600 E

10 800 E 4 800 E

10 600 E 4 800 E

10 800 E 5 000 E

10 600 E 5 000 E

10 800 E 5 200 E

10 600 E 5 200 E

10 800 E 5 400 E

10 600 E 5 400 E

10 800 E 5 600 E

10 600 E 5 600 E

10 800 E 5 800 E

10 600 E 5 800 E

10 800 E 6 000 E

10 600 E 6 000 E

10 800 E 6 200 E

10 600 E 6 200 E

10 800 E 6 400 E

10 600 E 6 400 E

10 800 E 6 600 E

10 600 E 6 600 E

10 800 E 6 800 E

10 600 E 6 800 E

10 800 E 7 000 E

10 600 E 7 000 E

10 800 E 7 200 E

10 600 E 7 200 E

10 800 E 7 400 E

10 600 E 7 400 E

10 800 E 7 600 E

10 600 E 7 600 E

10 800 E 7 800 E

10 600 E 7 800 E

10 800 E 8 000 E

10 600 E 8 000 E

10 800 E 8 200 E

10 600 E 8 200 E

10 800 E 8 400 E

10 600 E 8 400 E

10 800 E 8 600 E

10 600 E 8 600 E

10 800 E 8 800 E

10 600 E 8 800 E

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10 600 E 111 200 E

10 800 E 111 400 E

10 600 E 111 400 E

10 800 E 111 600 E

10 600 E 111 600 E

10 800 E 111 800 E

10 600 E 111 800 E

10 800 E 112 000 E

10 600 E 112 000 E

10 800 E 112 200 E

10 600 E 112 200 E

10 800 E 112 400 E

10 600 E 112 400 E

10 800 E 112 600 E

10 600 E 112 600 E

10 800 E 112 800 E

10 600 E 112 800 E

10 800 E 113 000 E

10 600 E 113 000 E

10 800 E 113 200 E

10 600 E 113 200 E

10 800 E 113 400 E

10 600 E 113 400 E

10 800 E 113 600 E

10 600 E 113 600 E

10 800 E 113 800 E

10 600 E 113 800 E

10 800 E 114 000 E

10 600 E 114 000 E

10 800 E 114 200 E

10 600 E 114 200 E

10 800 E 114 400 E

10 600 E 114 400 E

10 800 E 114 600 E

10 600 E 114 600 E

10 800 E 114 800 E

10 600 E 114 800 E

10 800 E 115 000 E

10 600 E 115 000 E

10 800 E 115 200 E

10 600 E 115 200 E

10 800 E 115 400 E

10 600 E 115 400 E

10 800 E 115 600 E

10 600 E 115 600 E

10 800 E 115 800 E

10 600 E 115 800 E

10 800 E 116 000 E

10 600 E 116 000 E

10 800 E 116 200 E

10 600 E 116 200 E

10 800 E 116 400 E

10 600 E 116 400 E

10 800 E 116 600 E

10 600 E 116 600 E

10 800 E 116 800 E

10 600 E 116 800 E

10 800 E 117 000 E

10 600 E 117 000 E

10 800 E 117 200 E

10 600 E 117 200 E

10 800 E 117 400 E

10 600 E 117 400 E

10 800 E 117 600 E

10 600 E 117 600 E

10 800 E 117 800 E

10 600 E 117 800 E

10 800 E 118 000 E

10 600 E 118 000 E

10 800 E 118 200 E

10 600 E 118 200 E

10 800 E 118 400 E

10 600 E 118 400 E

10 800 E 118 600 E

10 600 E 118 600 E

10 800 E 118 800 E

10 600 E 118 800 E

10 800 E 119 000 E

10 600 E 119 000 E

10 800 E 119 200 E

10 600 E 119 200 E

10 800 E 119 400 E

10 600 E 119 400 E

10 800 E 119 600 E

10 600 E 119 600 E

10 800 E 119 800 E

10 600 E 119 800 E

10 800 E 120 000 E

10 600 E 120 000 E

10 800 E 120 200 E

10 600 E 120 200 E

10 800 E 120 400 E

10 600 E 120 400 E

10 800 E 120 600 E

10 600 E 120 600 E

10 800 E 120 800 E

10 600 E 120 800 E

10 800 E 121 000 E

10 600 E 121 000 E

10 800 E 121 200 E

10 600 E 121 200 E

10 800 E 121 400 E

10 600 E 121 400 E

10 800 E 121 600 E

10 600 E 121 600 E

10 800 E 121 800 E

10 600 E 121 800 E

10 800 E 122 000 E

10 600 E 122 000 E

10 800 E 122 200 E

10 600 E 122 200 E

10 800 E 122 400 E

10 600 E 122 400 E

10 800 E 122 600 E

10 600 E 122 600 E

10 800 E 122 800 E

10 600 E 122 800 E

10 800 E 123 000 E

10 600 E 123 000 E

10 800 E 123 200 E

10 600 E 123 200 E

10 800 E 123 400 E

10 600 E 123 400 E

10 800 E 123 600 E

10 600 E 123 600 E

10 800 E 123 800 E

10 600 E 123 800 E

10 800 E 124 000 E

10 600 E 124 000 E

10 800 E 124 200 E

10 600 E 124 200 E

10 800 E 124 400 E

10 600 E 124 400 E

10 800 E 124 600 E

10 600 E 124 600 E

10 800 E 124 800 E

10 600 E 124 800 E

10 800 E 125 000 E

10 600 E 125 000 E

10 800 E 125 200 E

10 600 E 125 200 E

10 800 E 125 400 E

10 600 E 125 400 E

10 800 E 125 600 E

10 600 E 125 600 E

10 800 E 125 800 E

10 600 E 125 800 E

10 800 E 126 000 E

10 600 E 126 000 E

10 800 E 126 200 E

10 600 E 126 200 E

10 800 E 126 400 E

10 600 E 126 400 E

10 800 E 126 600 E

10 600 E 126 600 E

10 800 E 126 800 E

10 600 E 126 800 E

10 800 E 127 000 E

10 600 E 127 000 E

10 800 E 127 200 E

10 600 E 127 200 E

10 800 E 127 400 E

10 600 E 127 400 E

10 800 E 127 600 E

10 600 E 127 600 E

10 800 E 127 800 E

10 600 E 127 800 E

10 800 E 128 000 E

10 600 E 128 000 E

10 800 E 128 200 E

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10 600 E 128 600 E

10 800 E 128 800 E

10 600 E 128 800 E

10 800 E 129 000 E

10 600 E 129 000 E

10 800 E 129 200 E

10 600 E 129 200 E

10 800 E 129 400 E

10 600 E 129 400 E

10 800 E 129 600 E

10 600 E 129 600 E

10 800 E 129 800 E

10 600 E 129 800 E

10 800 E 130 000 E

10 600 E 130 000 E

10 800 E 130 200 E

10 600 E 130 200 E

10 800 E 130 400 E

10 600 E 130 400 E

10 800 E 130 600 E

10 600 E 130 600 E

10 800 E 130 800 E

10 600 E 130 800 E

10 800 E 131 000 E

10 600 E 131 000 E

10 800 E 131 200 E

10 600 E 131 200 E

10 800 E 131 400 E

10 600 E 131 400 E

10 800 E 131 600 E

10 600 E 131 600 E

10 800 E 131 800 E

10 600 E 131 800 E

10 800 E 132 000 E

10 600 E 132 000 E

10 800 E 132 200 E

10 600 E 132 200 E

10 800 E 132 400 E

10 600 E 132 400 E

10 800 E 132 600 E

10 600 E 132 600 E

10 800 E 132 800 E

10 600 E 132 800 E

10 800 E 133 000 E

10 600 E 133 000 E

10 800 E 133 200 E

10 600 E 133 200 E

10 800 E 133 400 E

10 600 E 133 400 E

10 800 E 133 600 E

10 600 E 133 600 E

10 800 E 133 800 E

10 600 E 133 800 E

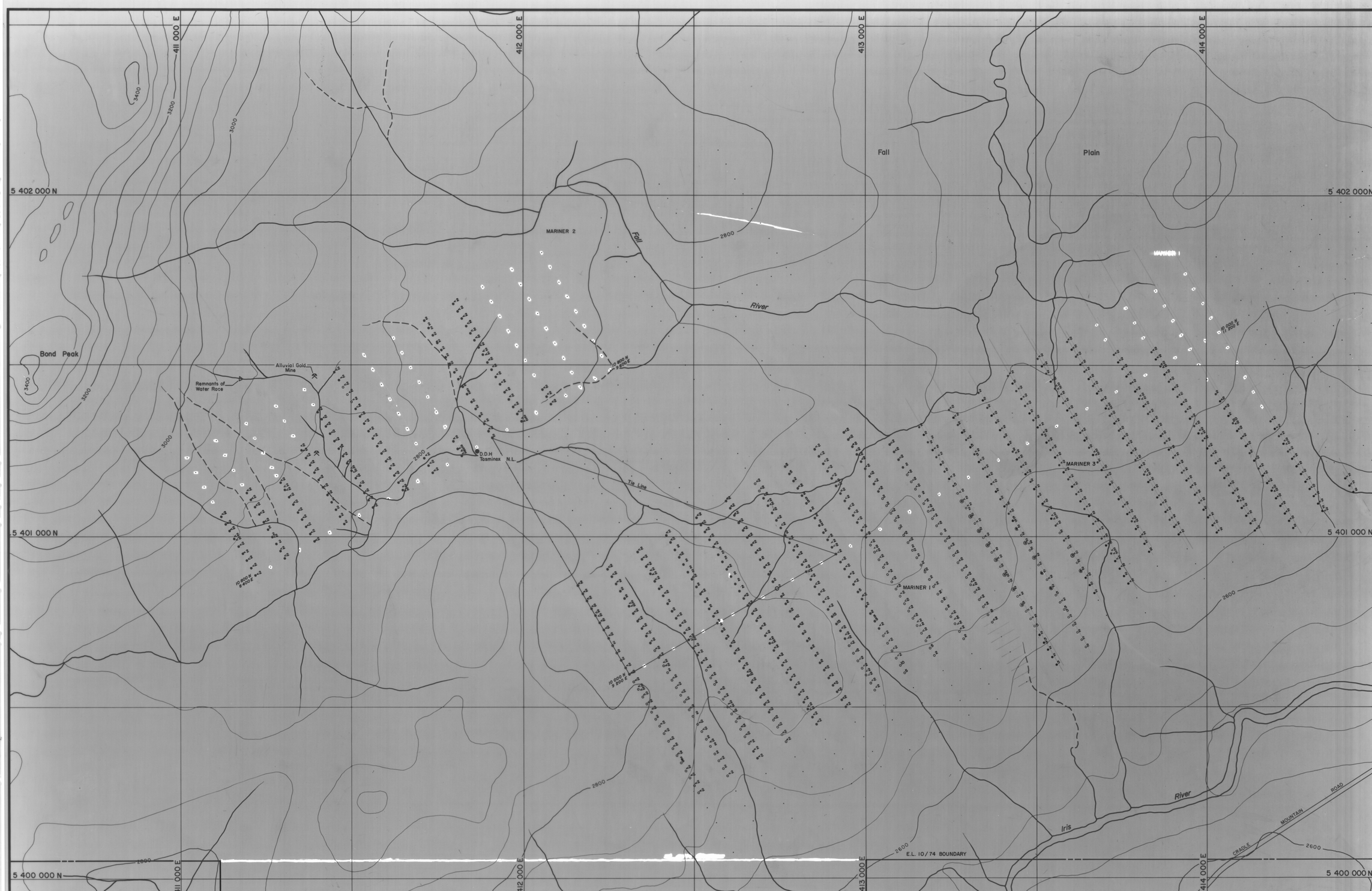
10 800 E 134 000 E

10 600 E 134 000 E

10 800 E 134 200 E

10 600 E 134 200 E

KT 10/74-M-7
GEOCHEMICAL RESULTS
SILVER
1:5000



LEGEND:

ANALYTICAL NOTES:

Analytical Methods: Ag by AAS following hot conc. HCL leach and HCL/HNO_3 leach in latter stages for 1 hour of 0·25g sample.

Size fraction analysed:- 80 mesh

Analytical results in ppm.

o2 ..... Hand augered sample 2ppm Ag
●2 ..... Power augered sample 2ppm Ag
○ ..... Auger core hole
2 ..... Original sample
5 ..... Duplicate sample
• ..... Grid position

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: AUG. 1979
GEOLOGIST: R.B.
DRAWN: L.G.&J.M.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

No. KT10/74-M-7

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
SILVER

KT 10/74-M-8
GEOCHEMICAL RESULTS
MANGANESE
1:5,000



LEGEND:

- 2000 - 5000 (Mn ppm)
- 5000 +

o760.....Hand augered sample 760 ppm Mn
●1000.....Power augered sample 1000 ppm Mn
O.....Auger core hole
820.....Original sample
o680.....Duplicate sample
.....Grid position

ANALYTICAL NOTES:

Analytical Methods: Mn by AAS following hot conc. HCL leach and HCL/HNO_3 leach in latter stages of 0·25g sample.

Size fraction analysed: −80 mesh

Analytical results in ppm.

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: AUG. 1979
GEOLOGIST: R.B.
DRAWN: L.G. & J.M.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

No. KT10/74-M-8

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3

GEOCHEMICAL RESULTS
MANGANESE

KT 10/74-M-10
GEOCHEMICAL RESULTS
TIN
1:5000

411 000 E | 412 000 E | 413 000 E | 414 000 E

5 402 000 N | 5 401 000 N | 5 400 000 N

Bond Peak

Alluvial Gold Mine

Remnants of Water Race

D.D.H Tasminex N.L.

MARINER 2

MARINER 1

MARINER 3

Fall River

Fall Plain

Tie Line

E.L. 10/74 BOUNDARY

Iris River

CRADLE MOUNTAIN ROAD

LEGEND:

ANALYTICAL NOTES:

Analytical Methods- Sn by Emission Spectrography
a Sn by XRF

Size fraction analysed — 80 mesh

Analytical results in ppm.

- ○500 .....Hand augered sample 500 ppm Sn
- ●300 .....Power augered sample 300 ppm Sn
- ○ .....Auger core hole
- 20 .....Original sample
- ○20 .....Duplicate sample
- . .....Grid position
- * <20 ▲ .....XRF result
- ● <20 .....Emission Spectrography result

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1:5000

No. KT10/74-M-10

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
TIN

DATE: AUG. 1979
GEOLOGIST: R.B.
DRAWN: L.G. & J.M.
CHECKED: M.C.R.



LEGEND:

ANALYTICAL NOTES:

Analytical Method: As by modified Gutzeit method.

Size fraction analysed: - 80 mesh.

Analytical results in ppm.

200 ..... Hand augered sample 200 ppm As
200 ..... Power augered sample 200 ppm As

O ..... Auger core hole
100 ..... Original sample
200 ..... Duplicate sample

. ..... Grid position

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE AUG. 1979
GEOLOGIST: R.B.
DRAWN: L.G.& J.M.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

No. KT10/74-M-9

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
ARSENIC

KT-10/74-M-11
GEOCHEMICAL RESULTS CADMIUM 1:5000

411 000 E | 412 000 E | 413 000 E | 414 000 E

5 402 000 N | 5 401 000 N | 5 400 000 N

Bond Peak

Fall

Plain

MARINER 2

MARINER 1

Fall River

Alluvial Gold Mine

Remnants of Water Race

D.D.H Tasminex N.L.

Tie Line

10 800 N 9 200 E

10 000 N 9 200 E

10 800 N 11 200 E

River Iris

CRADLE MOUNTAIN ROAD

E.L. 10/74 BOUNDARY

3400 | 3200 | 3000 | 2800 | 2600

LEGEND:

ANALYTICAL NOTES:

Analytical Method:- Cd by AAS following hot conc. HCL leach and HCL/HNO_3 leach in latter stages for 1 hour of 0·25g sample.

Size fraction analysed :- -80 mesh

Analytical results in ppm.

⌀10 ——— Hand augered sample 10 ppm Cd
⌀10 ——— Power augered sample 10 ppm Cd
O ———
10 ——— Original sample
⌀8 ——— Duplicate sample

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: Sept 1977
GEOLOGIST: R.B.
DRAWN: L.G. & J.M.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1 in 5000

No. KT10/74-M-11

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1 and MARINER 2
GEOCHEMICAL RESULTS
CADMIUM

KT 10/74-M-12
SOIL SAMPLE
LOCATION MAP
1:5,000



LEGEND:
- o Hand augered sample
- • Power augered sample
- O Auger core hole

o4903.....Soil sample no. KS 4903
•.....Grid position

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE: AUG. 1979
GEOLOGIST: R.B.
DRAWN: L.G.
CHECKED: M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1:5000

No. KT10/74-M-12

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3

SOIL SAMPLE LOCATION MAP

KET 10/74-M-13
SOIL SAMPLE DETAIL
1:5,000

411 000 E
412 000 E
413 000 E
414 000 E

5 402 000 N
5 401 000 N
5 400 000 N

Bond Peak
3400
3200
3000
2800
2600

MARINER 2
MARINER 1
Fall
Plain
Fall River
Tie Line
Iris River
CRADLE MOUNTAIN ROAD
E.L. 10/74 BOUNDARY

10 000 N
9 800 E

10 000 N
11 200 E

LEGEND:
- o 0·5 ..... Hand augered hole depth 0·5 m
- ● 3·0 ..... Power augered hole depth 3·0 m

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1:5000

No. KTIO/74-M-13

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3

AUGER HOLE DEPTHS

DATE: Sept 1977
GEOLOGIST: R.B.
DRAWN: L.G.
CHECKED: M.C.R.

411 000 E
412 000 E
413 000 E
414 000 E
5 402 000 N
5 401 000 N
5 400 000 N
Fall
Plain
MARINER 2
Fall River
Bond Peak
Alluvial Gold Mine
Remnants of Water Race
D.D.H Tasminex N.L.
Tie Line
MARINER 3
MARINER 1
E.L. 10/74 BOUNDARY
Iris River
CRADLE MOUNTAIN ROAD
3400
3200
3000
2800
2600

o6.7 ..... Hand augered sample
●6.7 ..... Power augered sample
O ..... Auger core hole
●2.10 ..... Original sample
2.15 ..... Duplicate sample
. ..... Grid position

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LIMITED
KING ISLAND GROUP
14

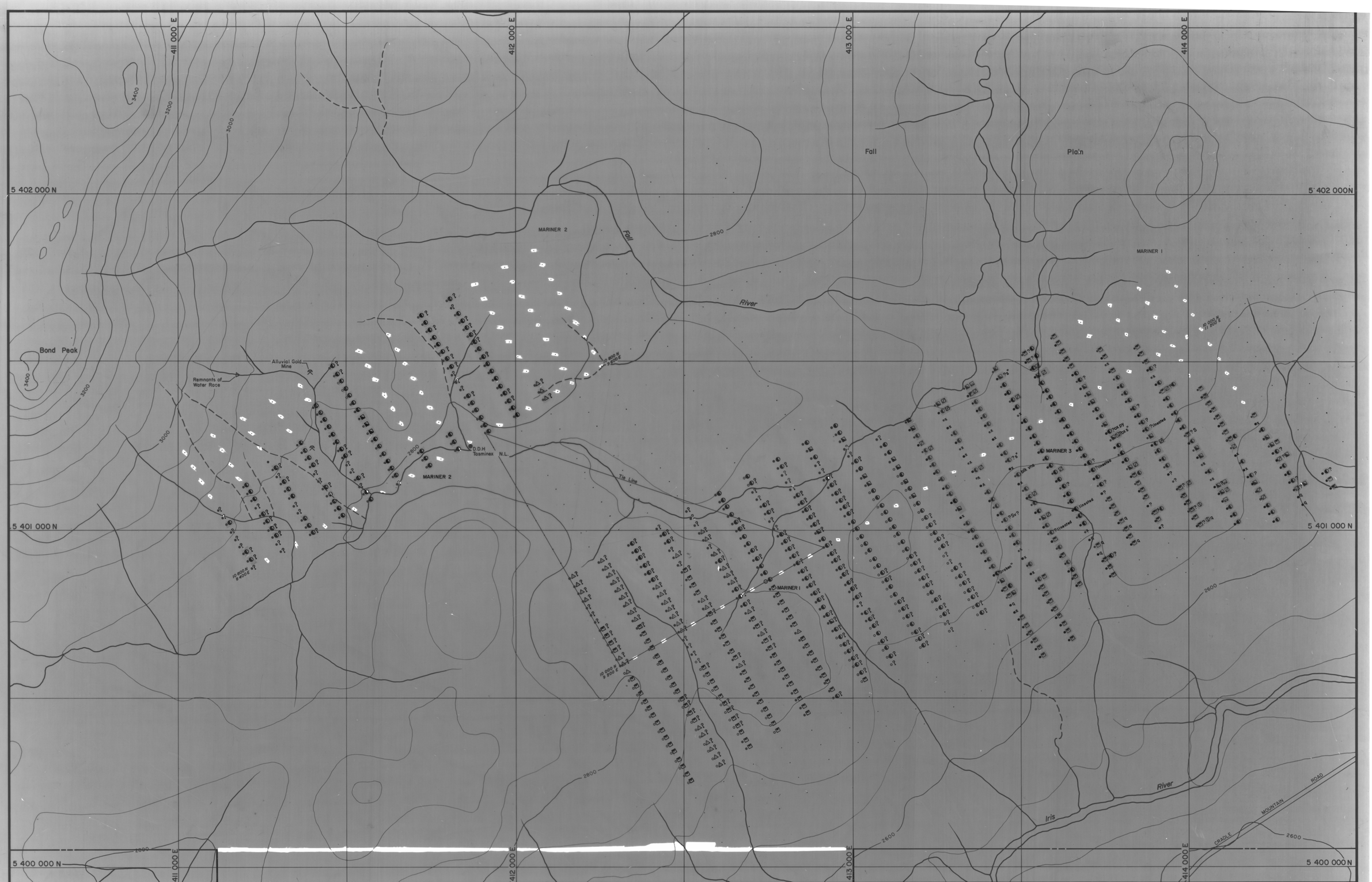
SCALE 1 5000

No KT10/74-M-2

E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOCHEMICAL RESULTS
IRON

DATE AUG. 1979
GEOLOGIST R.B.
DRAWN S.E.S.
CHECKED M.C.R.

KT10/74-M3D
MARINER 1+2
AUGER HOLE
ROCK CHIPS



LEGEND:

1. For details of abbreviations used for the geological interpretation refer to map number KT 10/74-3A
2. ? indicates rock chip identity uncertain

GEOLOGICAL INTERPRETATION

- △ lxt Ia fq maf
- ◐ pArd bfq
- ◪ pArd bfq argd (Volcanic breccia ?)
- ▣ Mv
- ☑ qtz vn material
- ⦶ Md
- x denotes no rock chip sample
- q qtz (? scree)
- ⊠ gossaneous ?

5 cm

03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

DATE AUG. '78
GEOLOGIST G.L.B.
DRAWN J.M.
CHECKED M.C.R.

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1:5000

No. KT10/74-M-3D

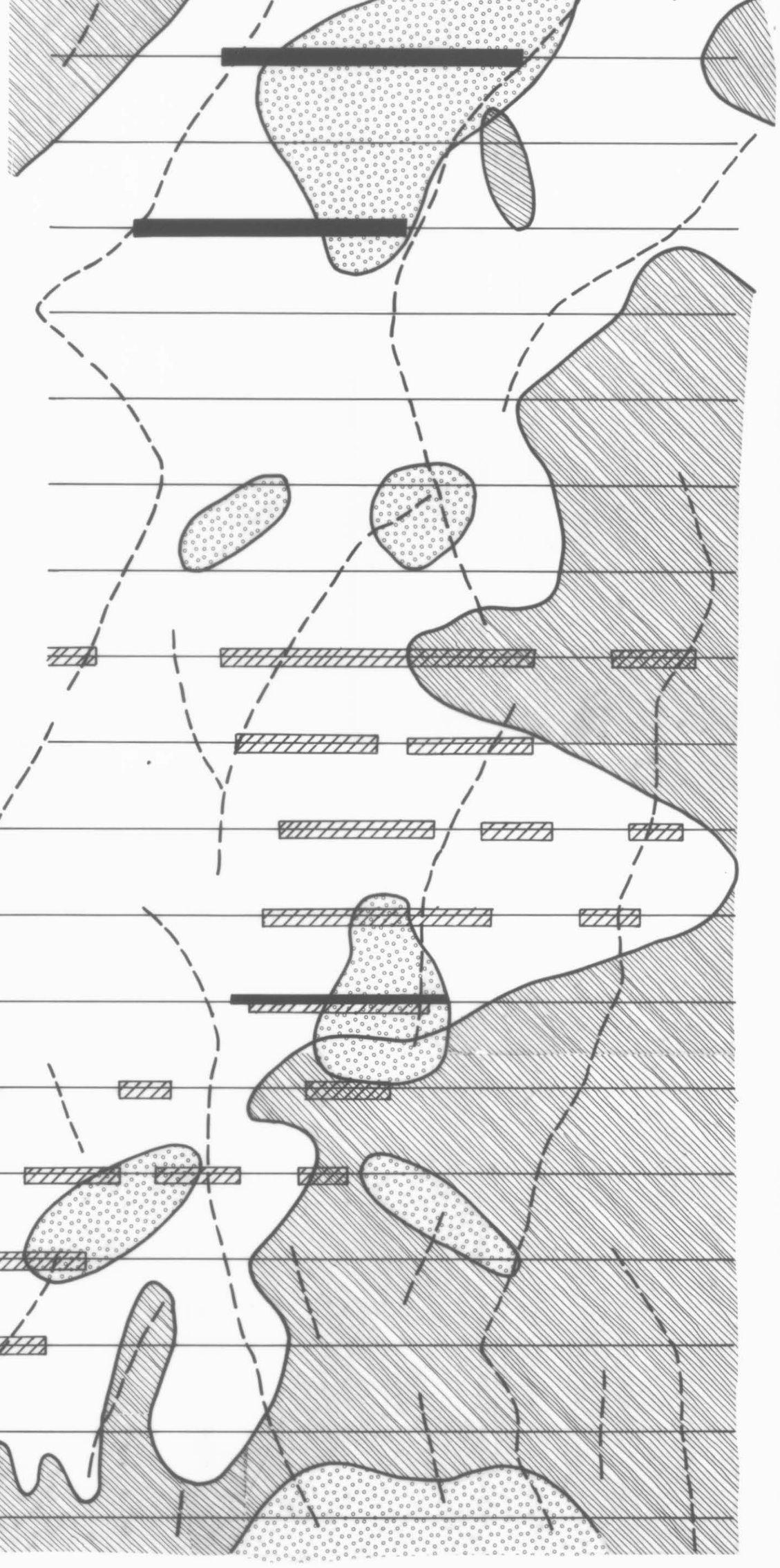
E.L. 10/74 BLACK BLUFF, TASMANIA
MARINER 1, 2 and 3
GEOLOGICAL INTERPRETATION
AUGER HOLE ROCK CHIPS

GEOPHYSICS — SUMMARY
DIA G. MARINER 1+3

3862

10 300N 10 200N 10 100N 10 000N 9 900N 9 800N 9 700N 9 600N 9 500N 9 400N

11 700E
11 600E
11 500E
11 400E
11 300E
11 200E
11 100E
11 000E
10 900E
10 800E
10 700E
10 600E
10 500E
10 400E
10 300E
10 200E
10 100E
10 000E
9 900E
9 800E
9 700E
9 600E
9 500E
9 400E
9 300E
9 200E



10 300N 10 200N 10 100N 10 000N 9 900N 9 800N 9 700N 9 600N 9 500N 9 400N

KEY
Gradient IP- Width at Half Maximum
Dipole-Dipole IP- Zone of Chargeability
VLF-EM- Axis of Contoured In-Phase Component
SP- Area of Greater Then Half Maximum Amplitude
Magnetics- Area of Magnetic Response

5 cm



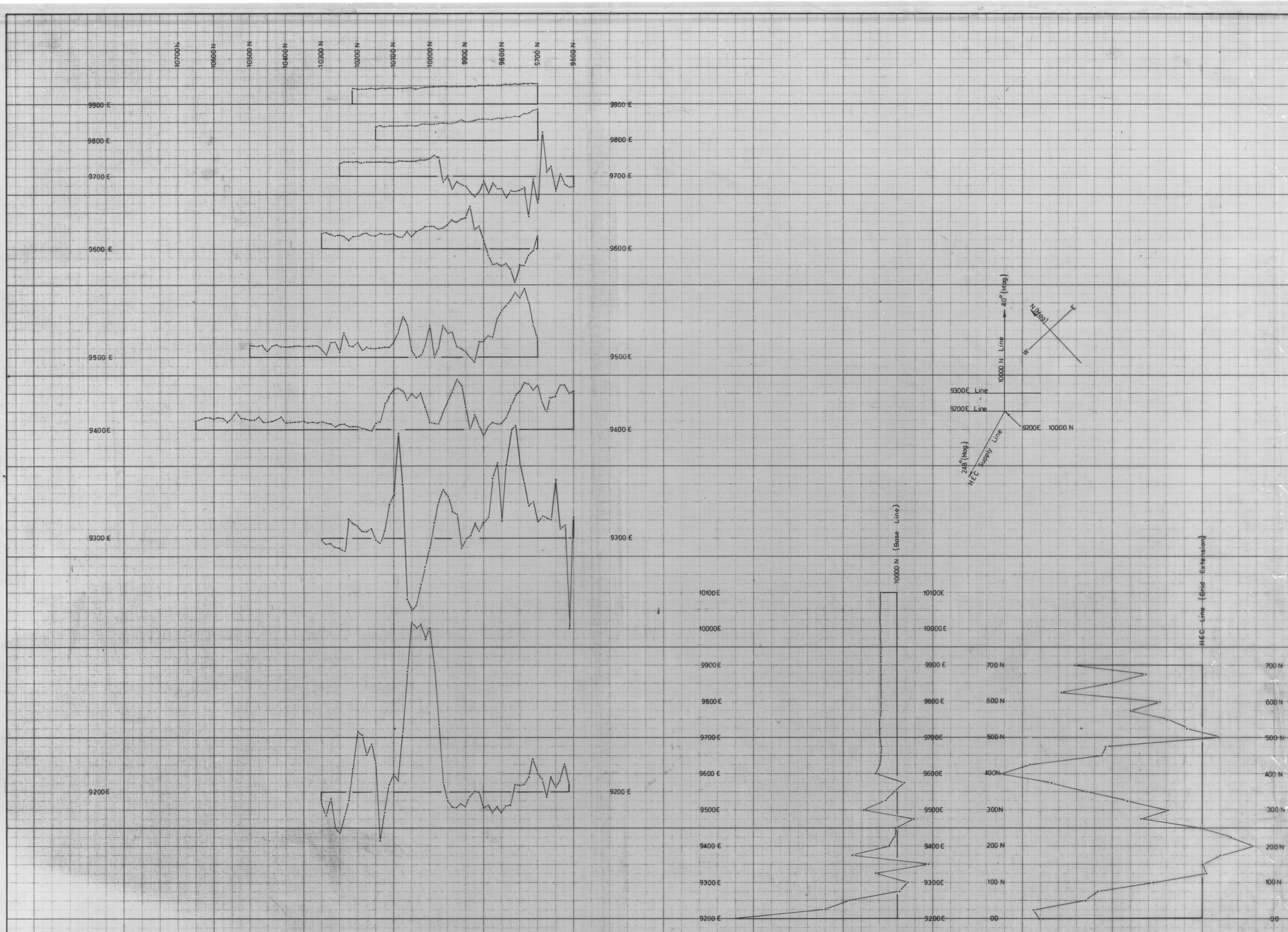
03_4899

Tube No 8: Mariner 1977-82 (EL 10/1974)

Placer Dome Asia Pacific*
Green, D. EL10/1974

GEOPEKO LTD. Geophysical Surveys	Instrument		Datum		Hor Scale	1:5 000	AREA	Black- Bluff-Tasmania
	Observer	S.Mudge	Base Peg		Vert Scale		PROSPECT	MARINER 1&3
Plan No. 3862 S/A	Scale Fact		Date	June 1978	Cont Int		PLAN SHOWS	Diagrammatic Interpretation Summary

3328



Instrument	Geometrics 816	Datum	62,000 nT.	Hor. Scale	1 cm = 50 m	AREA.	Black Bluffs EL 10/74.
Observer	S. Mudge	Base Peg	9800 E / 10000 N	Vert. Scale	1 cm = 400 nT.	PROSPECT	MARINER 1.
Scale Fact.		Date	January 1977	Cont. Int.	———	PLAN SHOWS	Geomagnetic Total Force Profiles.

GEOPEKO LTD.
Geophysical Surveys.
Plan No. 3328

5 cm

03_4899
Tube No 8: Mariner 1977-82 (EL 10/1974)
Placer Dome Asia Pacific*
Green, D. EL10/1974