DEPARTMENT OF MINERALS AND ENERGY

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GEORGETOWN 1:100 000 GEOLOGICAL SHEET

PRELIMINARY COMPILATION AND DATA SHEETS

by

J.H.C.BAIN, B.S.OVERSBY and I.W.WITHNALL

BMR Record 1975/28 c.4

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GEORGETOWN 1:100 000 GEOLOGICAL SHEET: Preliminary compilation and data sheets

The following geological maps reproduced here at approximately 1:100 000 scale are preliminary unchecked field compilations prepared at 1:25 000 scale by the BMR-GSQ Georgetown Geological Party during the June-September 1974 field season.

Petrographic and other laboratory studies are in progress, and may result in changes to these maps; such changes will be incorporated in the preliminary edition 1:100 000 scale map scheduled for printing in late 1975.

Notification of errors or omissions and the provision of additional information for incorporation in the preliminary map would be appreciated.

Copies of these maps and observation point overlays at 1:25 000 scale can be obtained from the Copy Service, Australian Government Printer (Production), P.O. Box 84, Canberra, 2600.

GEORGETOWN 1:100 000 GEOLOGICAL MAP

REFERENCE TO ACCOMPANY PHOTOSCALE COMPILATION SHEETS (1:26 000 APPROX)

CAINOZOIC	QUATERNARY		Qg	River gravel & sand
			Qa	Alluvium (includes some Qg)
			Czs	Colluvium
	TERTIARY – QUATERNARY	McBride Basalt	TQm	Vesicular olivine basalt
MESOZOIC		Gilbert River Formation	M	Buff quartzose conglomerate, sandstone & siltstone
PALAEOZOIC	PERMIAN	"Dambo Granodiorite"	Pd	Dark grey hornblende biotite granodiorite; grey-pink biotite leucoadamellite, pink aplite
	CARBONIFEROUS	Newcastle Range Volcanics (main Newcastle Range)	Cn_{VIII}	Grey purple, medium-coarse porphyritic (quartz-feldspar) rhyolite
			Cn_{VII}	Grey purple fine porphyritic (quartz feldspar) rhyolite; buff-red m porph (feldspar) rhyolite
			Cn_{VI}	Buff-purple coarse porphyritic (quartz-feldspar) rhyolite
			Cn_{V}	Buff purple f-m porphyritic (quartz-feldspar) rhyolite commonly flow banded, crystal lithic tuff, agglomerate
			Cn_{IV}	Dark green porphyritic & aphanitic andesite
			Cn_{III}	Grey f-m porphyritic (feldspar) rhyolite, commonly flow-banded, crystal lithic tuff, agglomerate
			Cn_{II}	Buff, purple, grey medium-coarse porphyritic (quartz feldspar) rhyolite
			Cn_{I}	Not present on Georgetown sheet
		Newcastle Range Volcanics (eastern Newcastle Range)	Cn_{6}	Grey coarse porphyritic (quartz-feldspar) hornblende rhyolite
			Cn_{5}	Purple medium porphyritic (quartz-feldspar) rhyolite
			Cn_{4}	Buff-purple medium coarse porphyritic (quartz feldspar) rhyolite
			Cn_{3}	Buff grey aphanitic rhyolite
			Cn_{2}	Buff, purple, grey medium porphyritic & slightly porphyritic (quartz feldspar) rhyolite
			Cn_{1}	Buff-purple medium coarse porphyritic (quartz feldspar) rhyolite
			ad	Porphyritic, amygdaloidal & aphanitic andesites in unassigned units
			Cns	Lithofeldspathic & volcaniclastic siltstone, sandstone, conglomerate (I-IV in main range, I + in eastern range)
		"Cumbana Volcanics"	Cc_{II}	Grey-pink coarse crystal-lithic tuff
			Cc_{I}	Grey-purple fine medium porphyritic (quartz-feldspar) rhyolite; agglomerate
			Ccs	Volcaniclastic sandstone
		Upper Palaeozoic hypabyssal rocks	rh	Buff-red fine-medium porphyritic & slightly porphyritic (quartz-felspar) rhyolite, Locally flow-banded and brecciated.
			ad	Dark green-grey porphyritic – aphinitic andesite & basalt (?)
			mg_1	Red coarse porphyritic (quartz-feldspar) microgranite
			mg_2	Buff coarse slightly porphyritic (quartz feldspar) microgranite.
			mg_3	Buff-red coarse porphyritic (feldspar) microgranite with groundmass chlorite
			mg_4	White-buff non porphyritic microgranite & granophyre
		Elizabeth Creek Granite	Cgz	Medium even grained biotite leucoadamellite, porphyritic biotite microgranite, pink aplite, greisen
PROTEROZOIC	MIDDLE PROTEROZOIC	"Georgetown Granite Complex" (about 1,500–1,200 m.y.): "Digger Creek Granite"	Pmd	Grey-pink, buff muscovite & biotite-muscovite leucogranite, aplite & pegmatite (± garnet & sillimanite)
		"White Springs Granodiorite"	Pmw_1	Grey, fine-medium even grained biotite granodiorite.
			Pmw_2	Grey porphyroblastic biotite-muscovite leucoadamellite
		Forsayth Granite	Pmf	Grey, leucocratic to melanocratic coarsly porphyroblastic foliated biotite granite & adamellite
			Pmf_1	Grey porphyroblastic muscovite-biotite leucogranite.
				Various unassigned leucogranites
		"Lighthouse Leucogranite"	Pml	White, foliated very leucocratic muscovite (biotite) granite
		"Mistletoe Granite"	Pmm	Dark grey, foliated biotite schlieren granite
		"Cobboid Metadolerite"	Pmc	Metadolerite, amphibolite
		"Etheridge Metamorphic Complex" (1,700?–1,500 m.y.): Robertson river Metamorphics	Pmr	Schist, quartzite, gneiss (plus small unmapped bodies of Pmc & various granites)
			Pmr_1	Quartzite, schist (plus small unmapped bodies of Pmc & various granites)
		Einasleigh Metamorphics	Pme	Gneiss, migmatite, schist, quartzite (plus small unmapped bodies of a & various granites)
			a	Amphibolite

alt	altered
am	amphibolite
an,ad,and	andesite
adum	adamellite
agg	agglomerate
apl	aplite
aph	aphanitic
bndd	banded
bi	biotite
bf	buff
brec	breccia
cg,cgl	conglomerate
c	with
col,colluv	colluvium
crys	crystal
calc	calcareous
do,dol	dolerite
dac,da	dacite
f.e.g.	fine even grained
fel, fs	feldspar
f m e.g	fine medium even grained
fol	foliated
gr	granite
gy	grey
gd	granodiorite
gn	green
gns	gneiss
ga	garnet
gn/ic	gneiss/ic
gfels	grandfels
gsn	gossanous, gossan
hfels	hornfels
gre	greisen
hbl,hb	hornblende
intr	intrusive
leuco,leu	leucocratic
lith	lithic, lithology
mu	muscovite
mi	mica
m	medium
mig	migmatite
no/o/c	no outcrop
m e g	medium even grained
mela	melanocratic
mup	muscovite pegmatite
num	numerous
po,por,porphs,phyry	porphyritic, porphyry
pu	purple
p	pegmatite
py	pyritic
pa	position approximate
pk	pink
peg	pegmatite
q	quartz
qt,qtz	quartzite
rh	rhyolite
rd	red
sl	slightly
sil,sill	sillimanite
ss	sandstone
sist	siltstone
schln	schlieren
ser	sericite
sch	schist
volcs	volcanics
v.c.g	very coarse grained
v.w	very weathered
w,wthd,wthrd	weathered
xens	xenoliths

Geological boundary

Fault showing relative horizontal movement

Where location of boundaries and faults is approximate, line is broken, where inferred, boundaries, folds and faults are queried, where concealed, faults are shown by short dashes

60 Plunge of drag-fold

Shear zone

50 Strike and dip of strata

Prevailing strike and dip of strata

Strike and dip of strata, dip not measured

Dip < 15°

Dip 15°–45°

Dip > 45°

Horizontal

Trend line

Lineament

Joint pattern

} air photo interpretation

Direction of plunge

55 Strike and dip of joints

Strike and dip of joints – dip not measured

Vertical joints

Horizontal joints

40 Strike and dip of foliation

Strike and dip of foliation – dip not measured

Vertical foliation

Horizontal foliation

86 Strike and dip of second generation foliation

46 45 Foliation with plunge of lineation (crenulation)

31 46 Foliation with plunge of lineation (mineral elongation)

Platy flow – inclined

dyke or vein – q quartz, rh rhyolite, gr granite, da dacite ad, an, and andesite, ds basalt.

Cu Minor mineral occurrence

Prospect minor, abd

Mine, abd

Alluvial workings, abd

Battery or smelter, abd

Costean

Au	Gold
Ch	Chalcopyrite
Cu	Copper
Fl	Fluorite
Mo	Molybdenum
Nb	Niobium (columbium)
Pb	Lead
Sn	Tin
U	Uranium
Zn	Zinc

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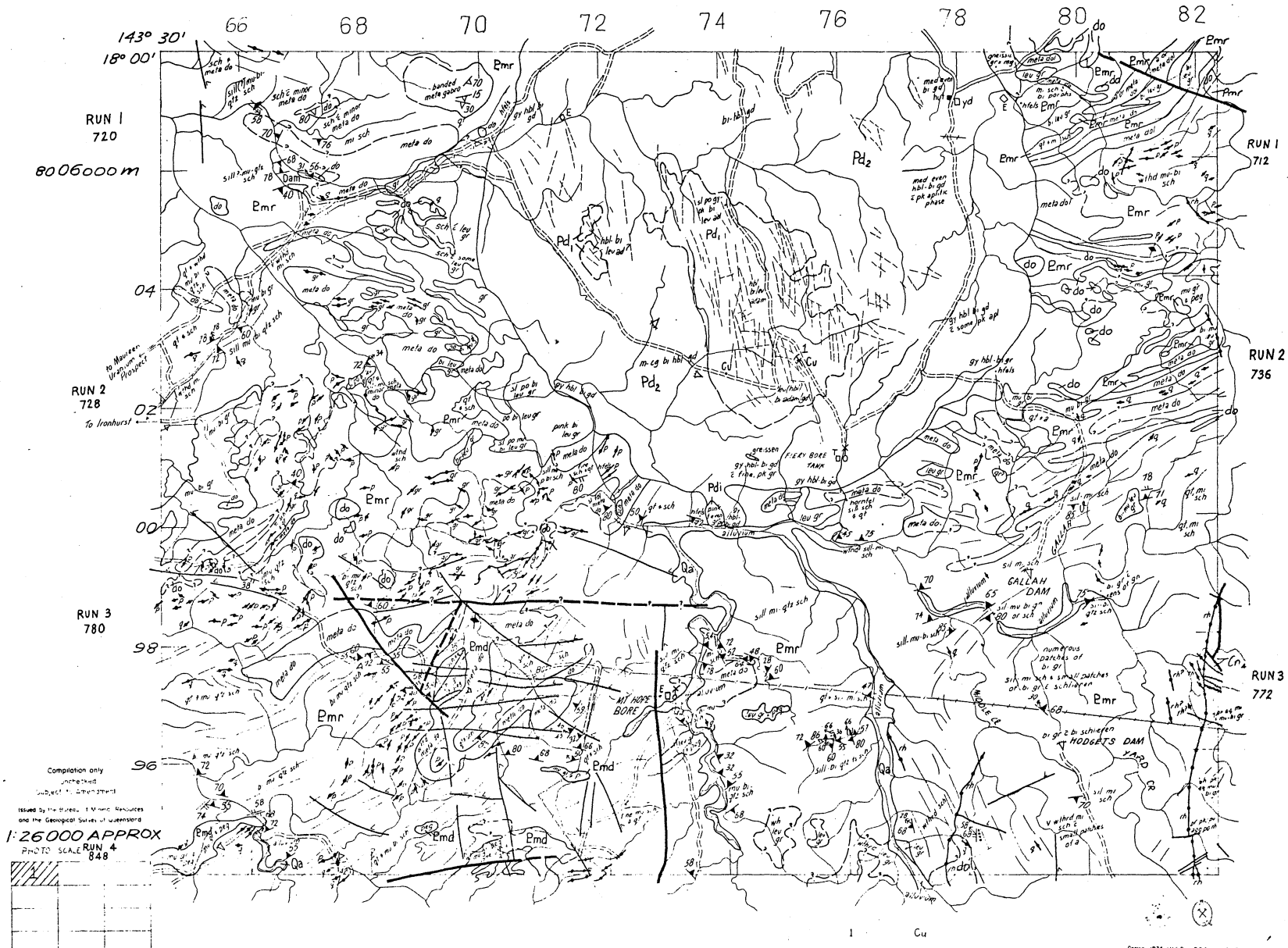
143° 30'
18° 00'
66
68
70
72
74
76
78
80
82
RUN 1
720
8006000 m
RUN 1
712
RUN 2
728
RUN 2
736
RUN 3
780
RUN 3
772
RUN 4
848
04
02
00
98
96
to Maureen Uranium Prospect
To Ironhurst
FIERY BORE TANK
GALLAH DAM
HODGETS DAM
MT HOPE BORE
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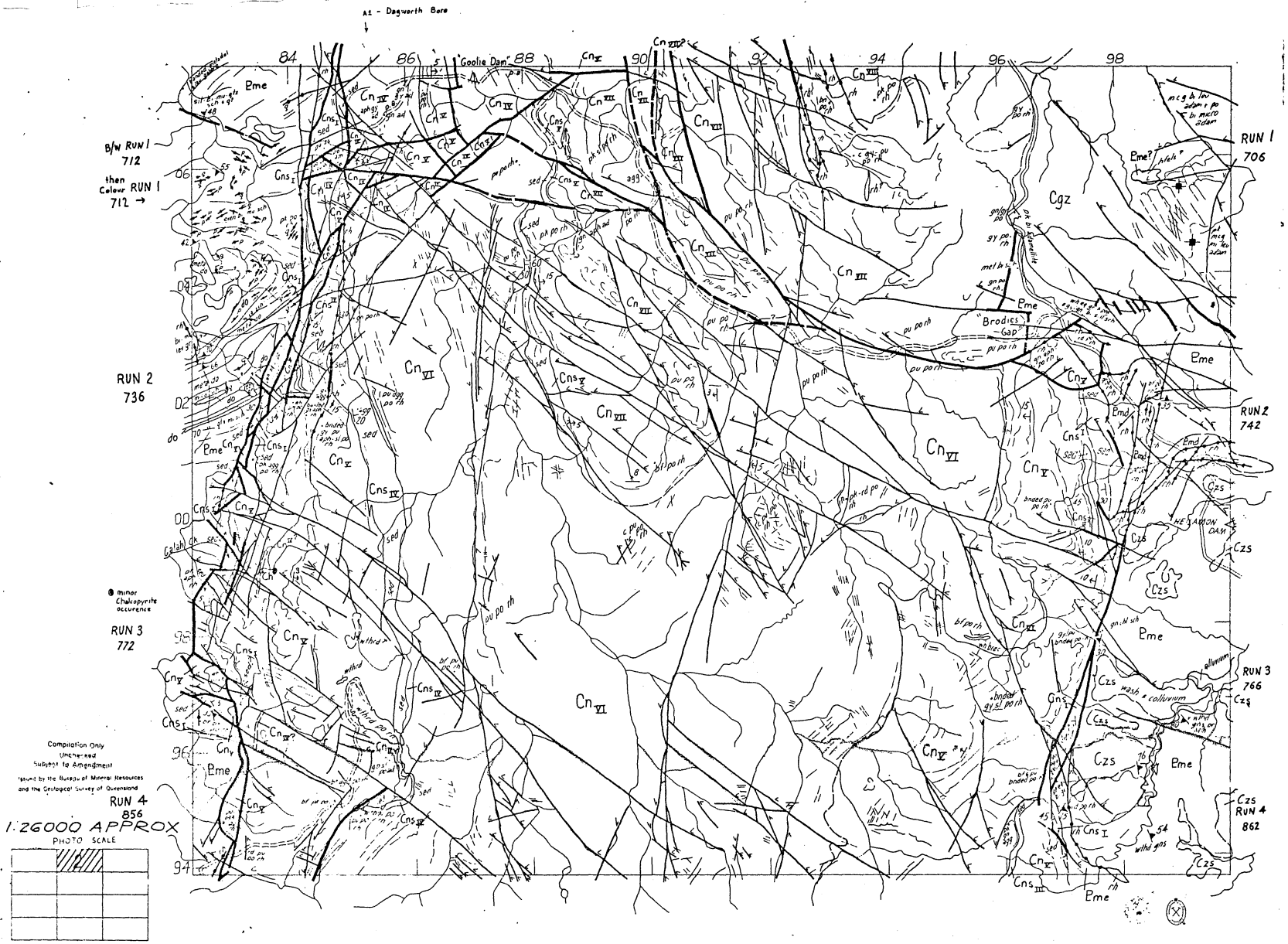
GEORGETOWN


A1 - Dagworth Bore
'Goolie Dam'
Brodies Gap
HEYSHON DAM
B/W RUN 1
712
then Colour RUN 1
712 →
RUN 1
706
RUN 2
736
RUN 2
742
RUN 3
772
RUN 3
766
RUN 4
856
RUN 4
862
minor Chalcopyrite occurence
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I e Wilmar, GSQ
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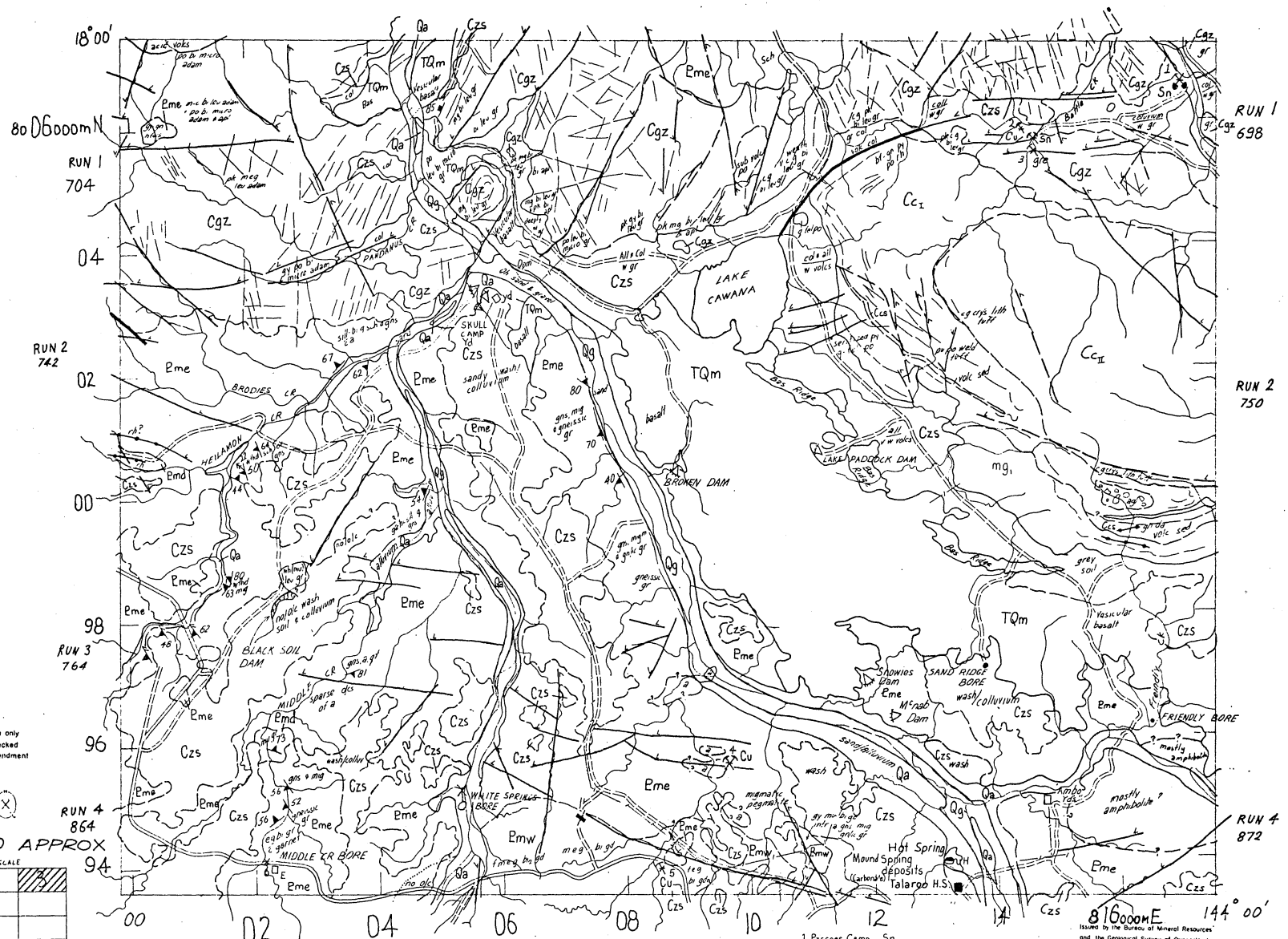
18°00'
8006000mN
RUN 1
704
04
RUN 2
742
02
00
98
RUN 3
764
96
RUN 4
864
94
00
02
04
06
08
10
12
14
816000mE
144° 00'
RUN 1
698
RUN 2
750
RUN 4
872
LAKE CAWANA
SKULL CAMP
PANDANUS
BRODIES CR
HEILAMON
BLACK SOIL DAM
MIDDLE CR BORE
WHITE SPRINGS BORE
BROKEN DAM
LAKE PADDOCK DAM
SAND RIDGE BORE
FRIENDLY BORE
Showies Dam
M'nab Dam
Hot Spring Mound Spring deposits (Carbonate)
Talaroo H.S.
Cc I
Cc II
mg1
TQm
Cgz
Czs
Qa
Qg
Eme
Emd
Emw
Sn
Cu
basalt
vesicular basalt
mostly amphibolite
grey soil
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1 Pascoes Camp Sn
2 Cu.
3 Ruby Sn
4 Electoral Cu
5 Cu.
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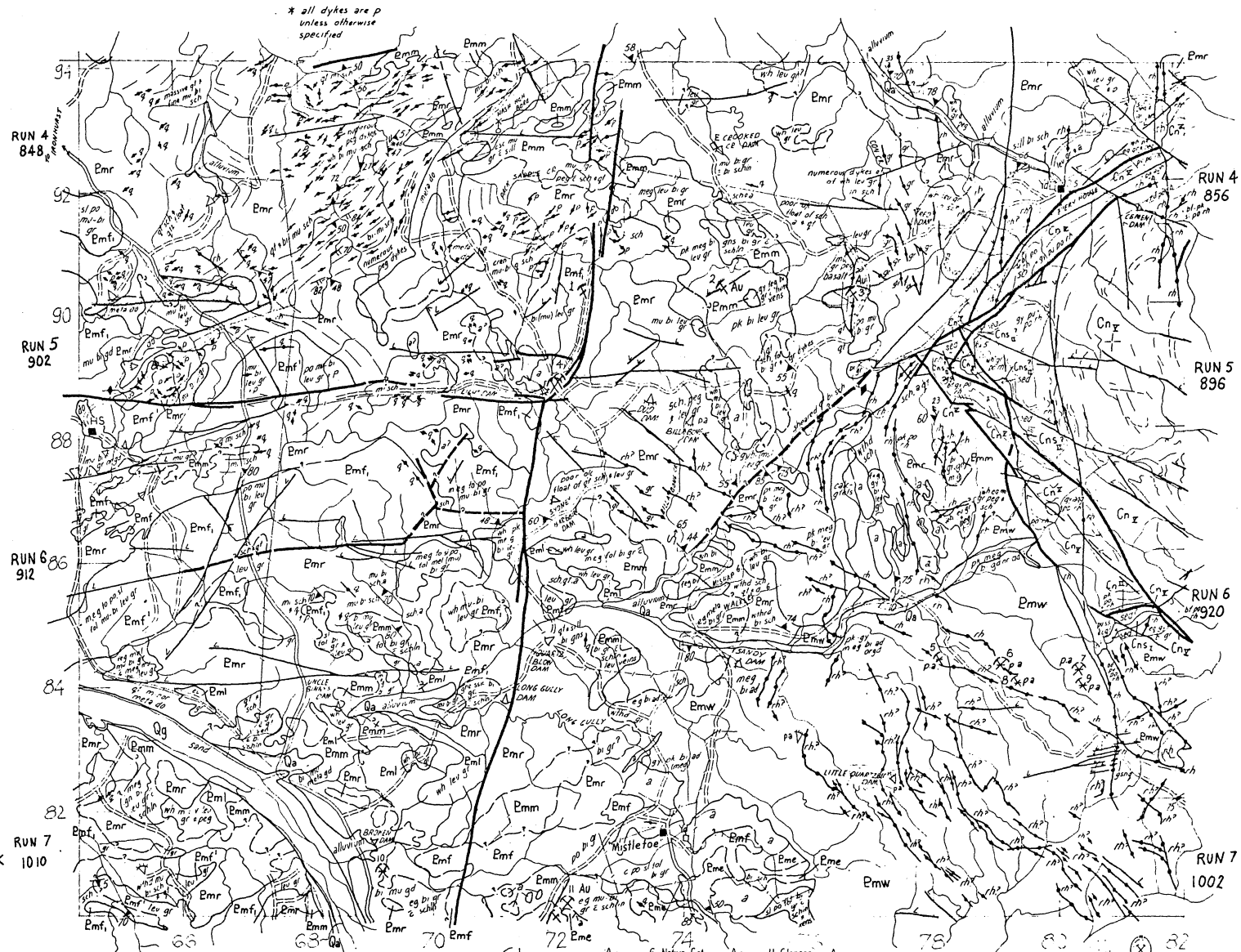

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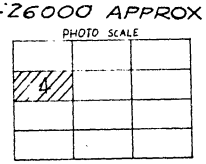

GEORGETOWN

Index to mines

1	Au	6 Native Cat	Au	11 Glencoe	Au
2	Au	7 Bowler	Au		
3	Au	8 Mistletoe	Au		
4 Electric Light	Au	9 Pride of the hills	Au		
5 Brown Snake	Au	10 City of Dunedin	Au		

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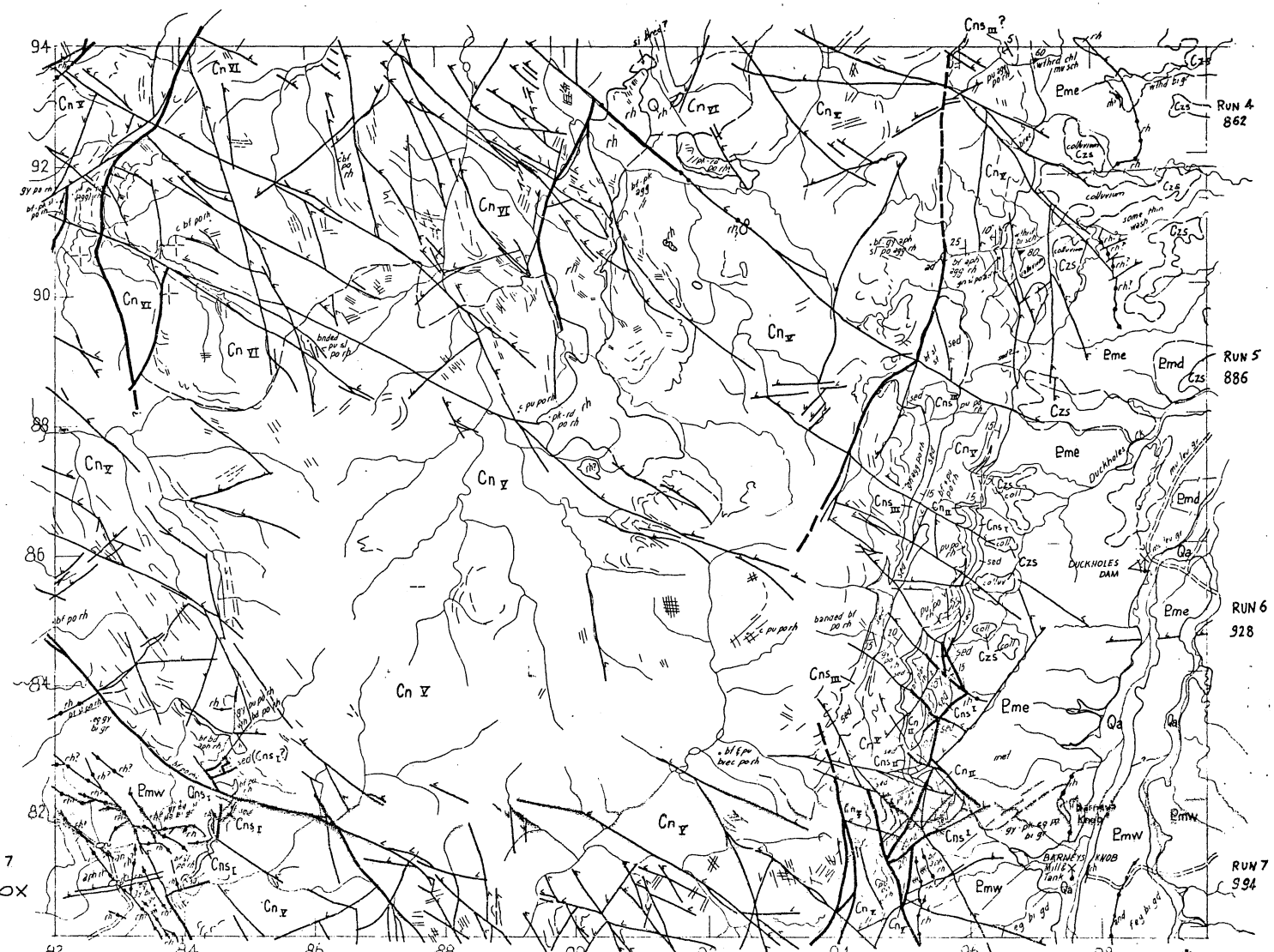

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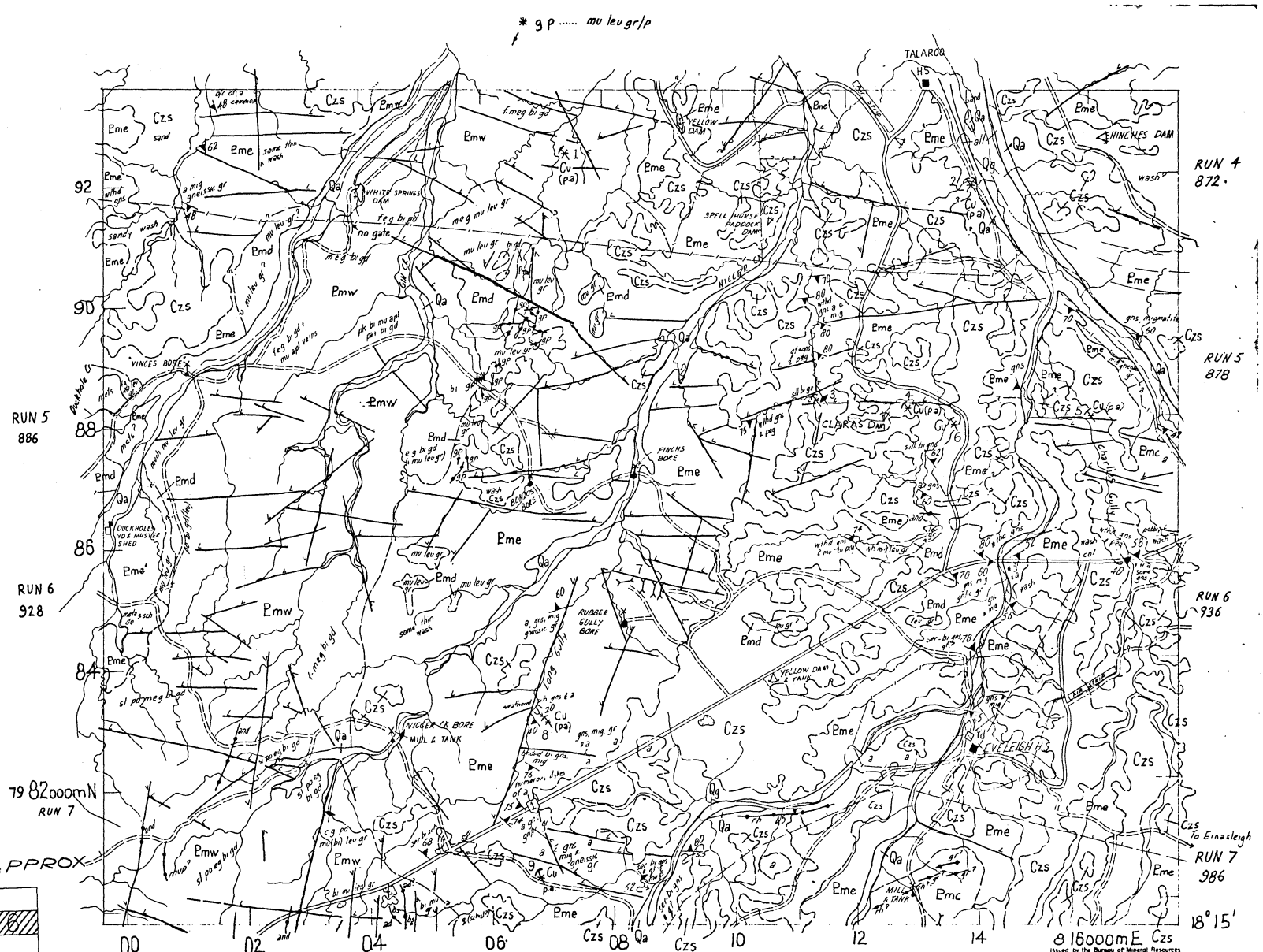
* g p ..... mu leu gr/p
TALAROO
HINCHES DAM
WHITE SPRINGS DAM
YELLOW DAM
SPELL PADDOCK DAM
VINCES BORE
CLARAS DAM
FINCHS BORE
RUBBER GULLY BORE
WIGGER CK BORE
MILL & TANK
YELLOW DAM TANK
CLEIGH
To Ernacleigh
RUN 4 872
RUN 5 878
RUN 5 886
RUN 6 928
RUN 6 936
RUN 7 986
92
90
88
86
84
79 82000mN
RUN 7
00
02
04
06
08
10
12
14
8 160000mE
18°15'
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PHOTO SCALE
GEORGETOWN
Index to Mines
1 Ambo (or Hamilton) Cu
2 Talaroo Cu
3
4 Cu
5 Cu
6 Cu
7 Cu
8 Cu
9 Cu
costean
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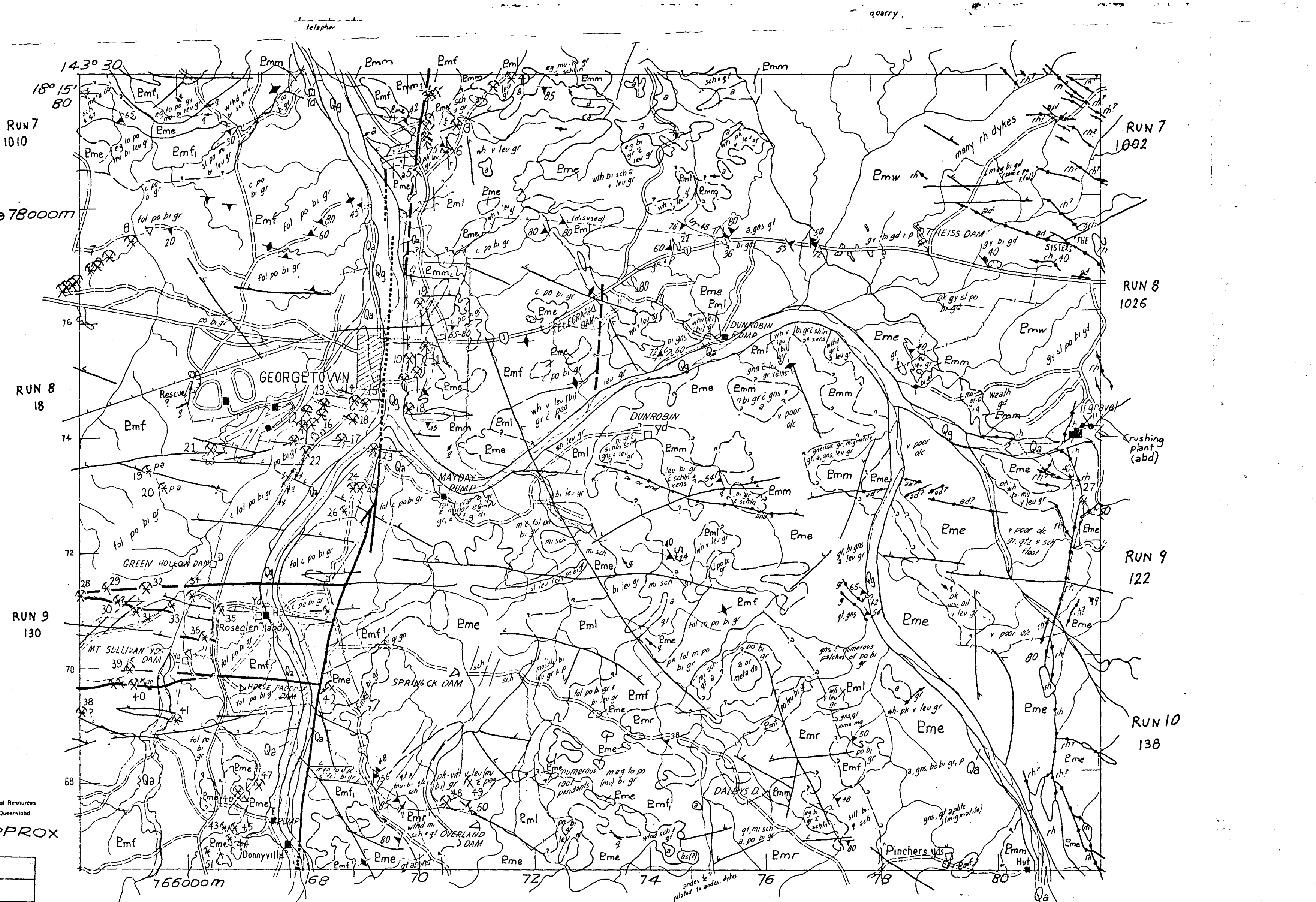

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GEORGETOWN

Index of Mines

No.	Mine		No.	Mine		No.	Mine		No.	Mine		No.	Mine		No.	Mine	
1	Diamond Jubilee	Au	11	Overland Telegraph	Au	21	Lady Marie ?	Au	31	Black Blow	Au	41	Lingers Die	Au	51		Au
2	Wexford	Au	12	Spero Meliora ?	Au	22	Harp of Erin	Au	32	Big Wonder	Au	42		Au			
3	Coolgardie	Au	13	City of Sydney ?	Au	23	Chance	Au	33		Au	43		Au			
4	Melbourne Exhibition	Au	14	North Star ?	Au	24	Gladstone	Au	34		Au	44		Au			
5	Ancient Briton	Au	15	Better Luck ?	Au	25	Owens	Au	35		Au	45		Au			
6		Au	16	Victoria ?	Au	26		Au	36		Au	46	Who'd a thought?	Au			
7	Lord Byron	Au	17	Paxo ?	Au	27		Au	37		Au	47	Home Rule	Au			
8		Au	18		Au	28	Comstock (Big Ben)	Au	38		Au	48		Au			
9	Papa	Au	19		Au	29		Au	39		Au	49		Au			
10	St George	Au	20		Au	30		Au	40	Golden Bar	Au	50		Au			

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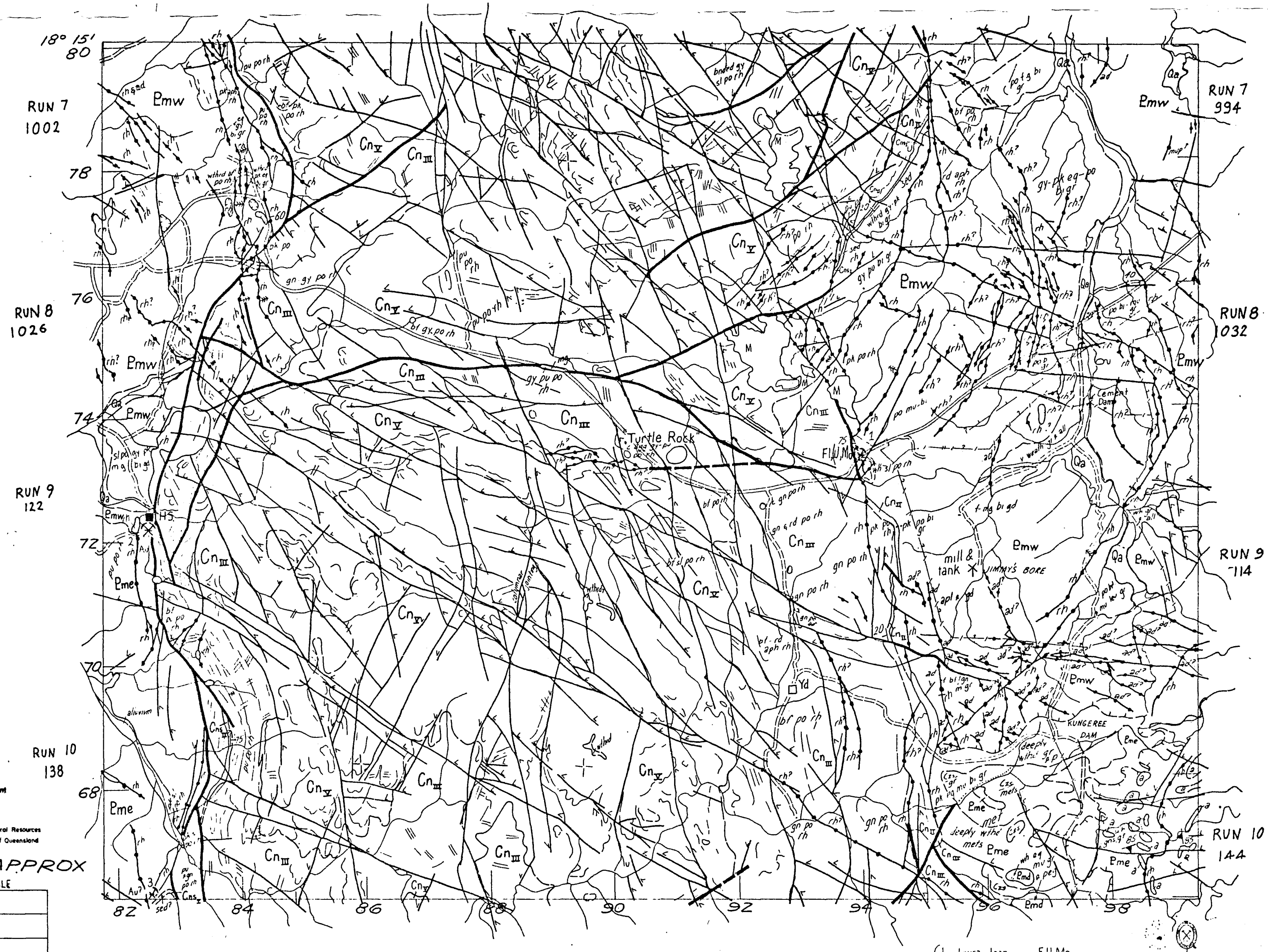

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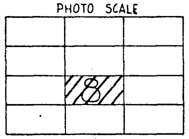

GEORGETOWN

Index of Mines
1 Laura Jean F,U,Mo
2 Kilchens Reef Au
3 Au

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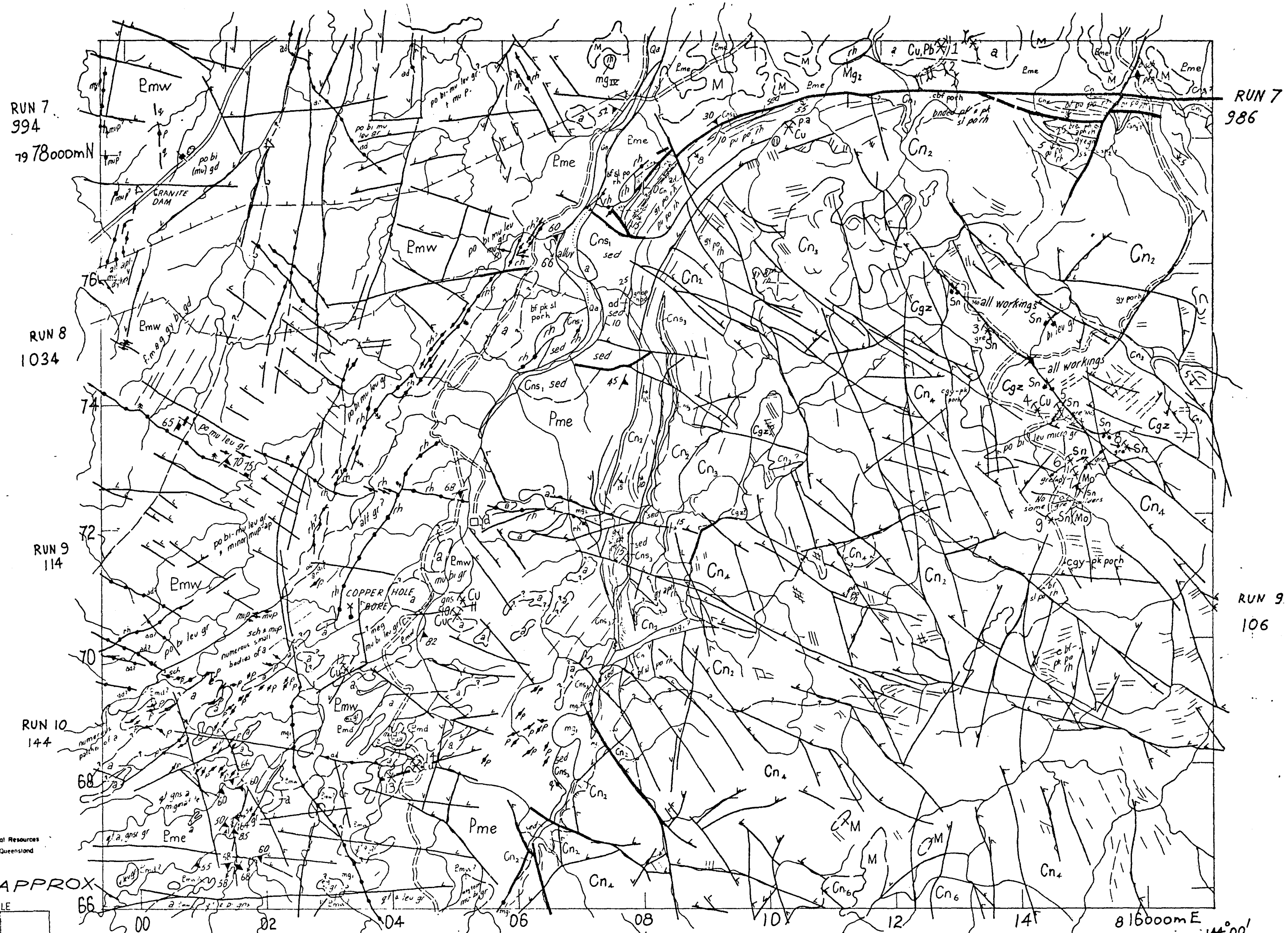

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Index of Mines

1	Eveleigh	Pb Cu	6		Sn Mo	11	Mountain King (Flying Fox)	Cu
2		Zn	7	Hammer-Mary	Sn(Mo)	12	Enterprise	Cu
3	Della	Sn	8	International	Sn(Mo)	13	Little Billy	Cu
4	Furbers	Cu	9	Road top	Sn (Mo)	14	Quest end	Cu
5		Sn Mo	10	Dorothy	Cu			

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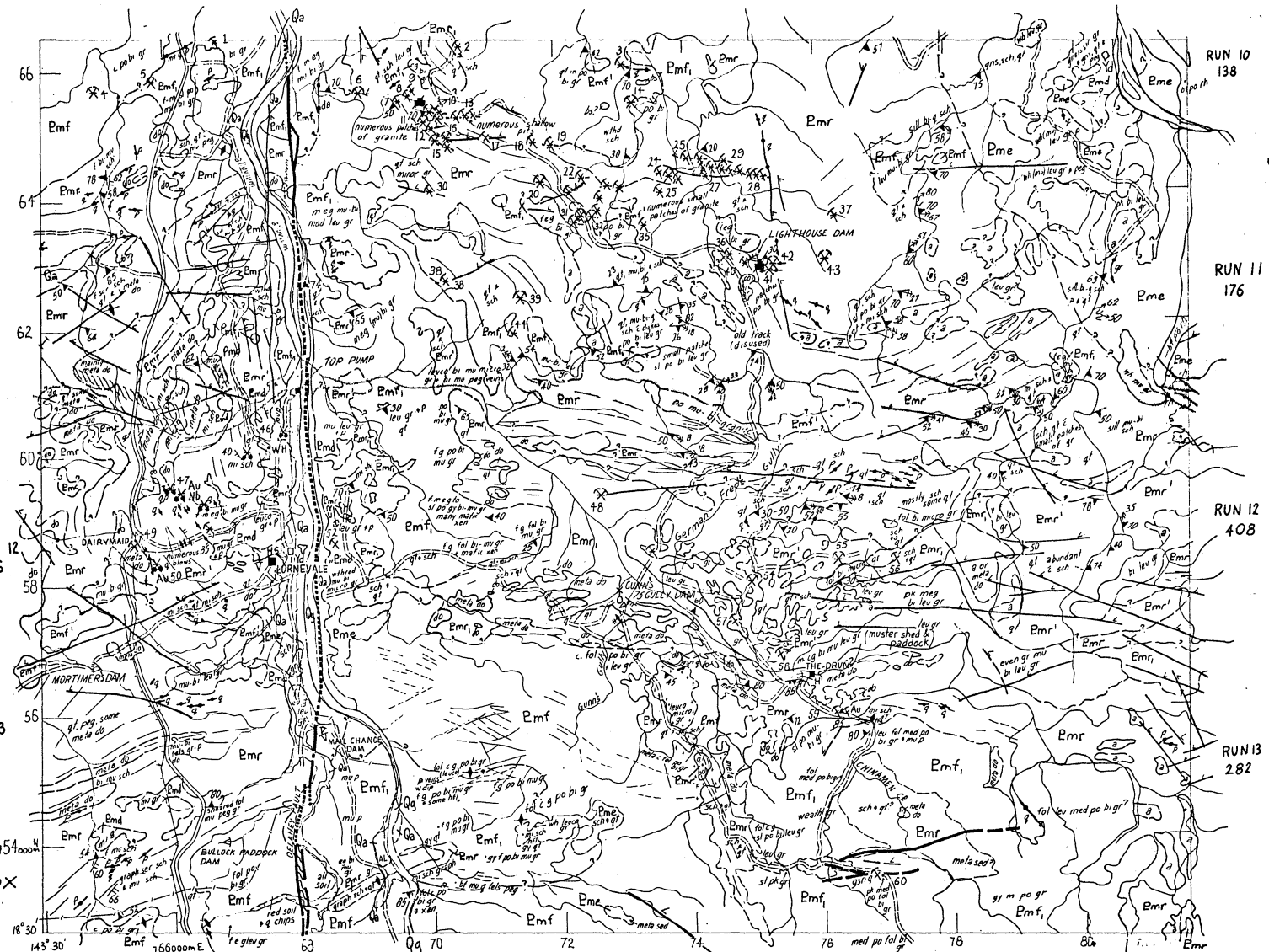

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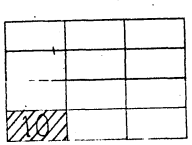

GEORGETOWN

Index of Mines

1		Au	11	Ironclad	Au	21		Au	31		Au	41	Drednaught	Au	51		Au
2	Overland Roule	Au	12		Au	22		Au	32	Comet	Au	42	Nelson	Au	52		Au
3		Au	13		Au	23		Au	33		Au	43	Lallah Rooka	Au	53		Au
4	Kerry Lass	Au	14		Au	24		Au	34		Au	44		Au	54	Deceitful Susan	Au
5	Black Wall	Au	15	Marchioness	Au	25		Au	35		Au	45		Au	55	Merry Monarch	Au
6	Brandy Smash	Au	16	Poverly	Au	26		Au	36		Au	46		Au	56	Butcher Bird	Au
7		Au	17		Au	27		Au	37		Au	47	Roundwater hole gully	AuNb	57		Au
8		Au	18		Au	28	North Star	Au	38		Au	48	Stockman pa	Au	58		Au
9		Au	19	Eclipse ?	Au	29		Au	39	Larrikan	Au	49	Dairymaid	Au	59		Au
10	Glasgow (City of)	Au	20	Black Diamond pa	Au	30		Au	40	Tivoli	Au	50		Au	60		Au

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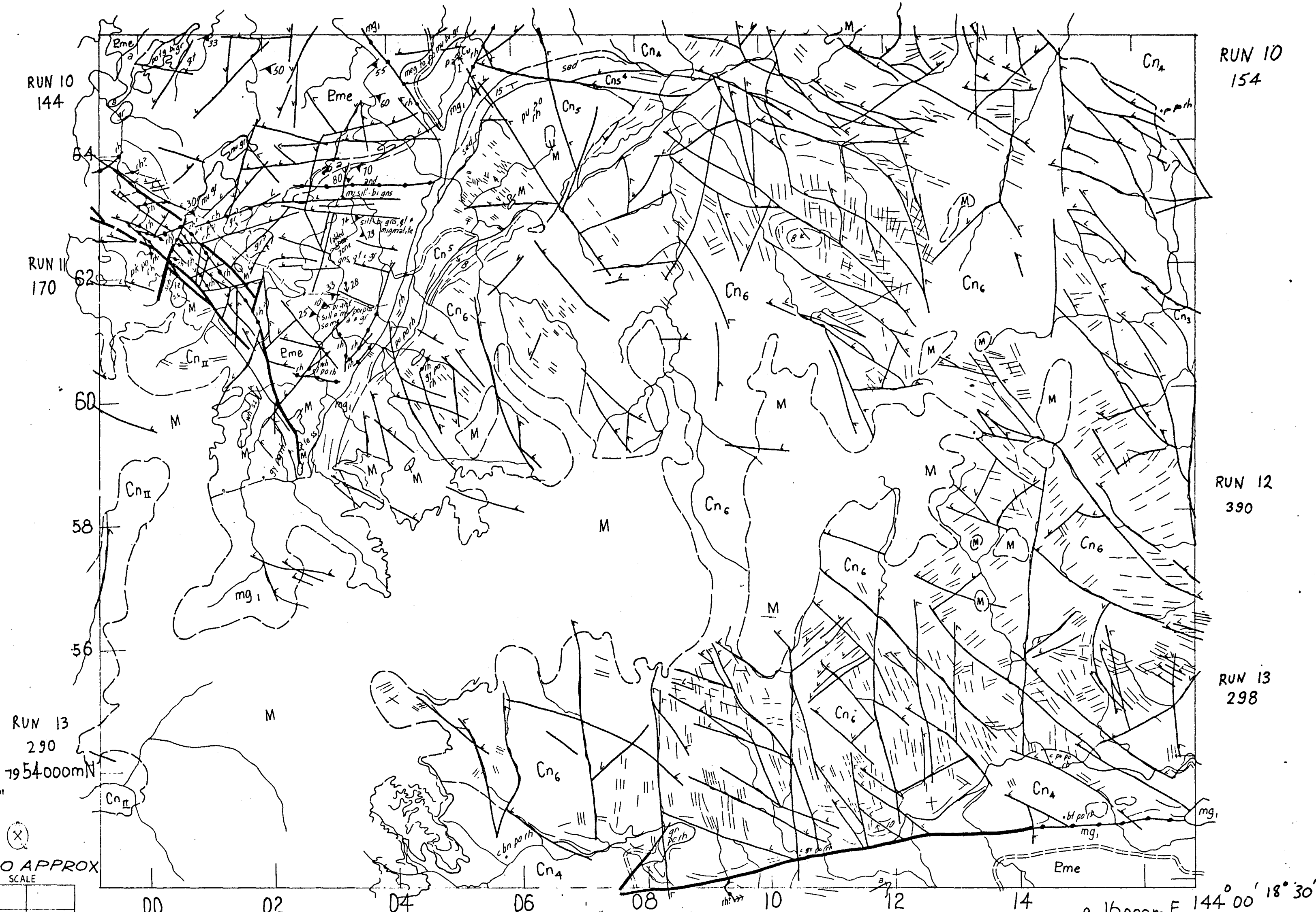

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GEORGETOWN

Index to Mines
1 Avalon (Cu)

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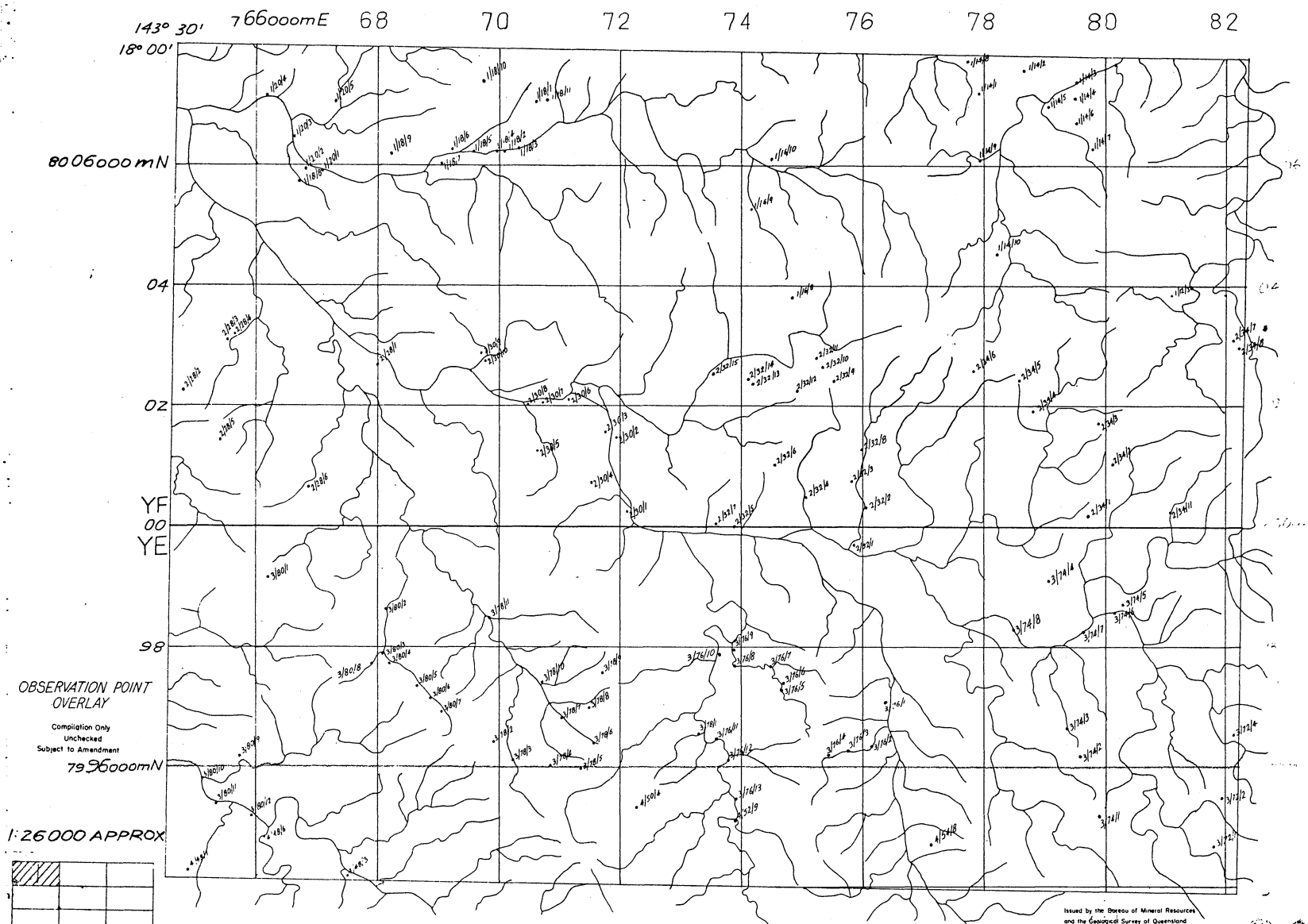

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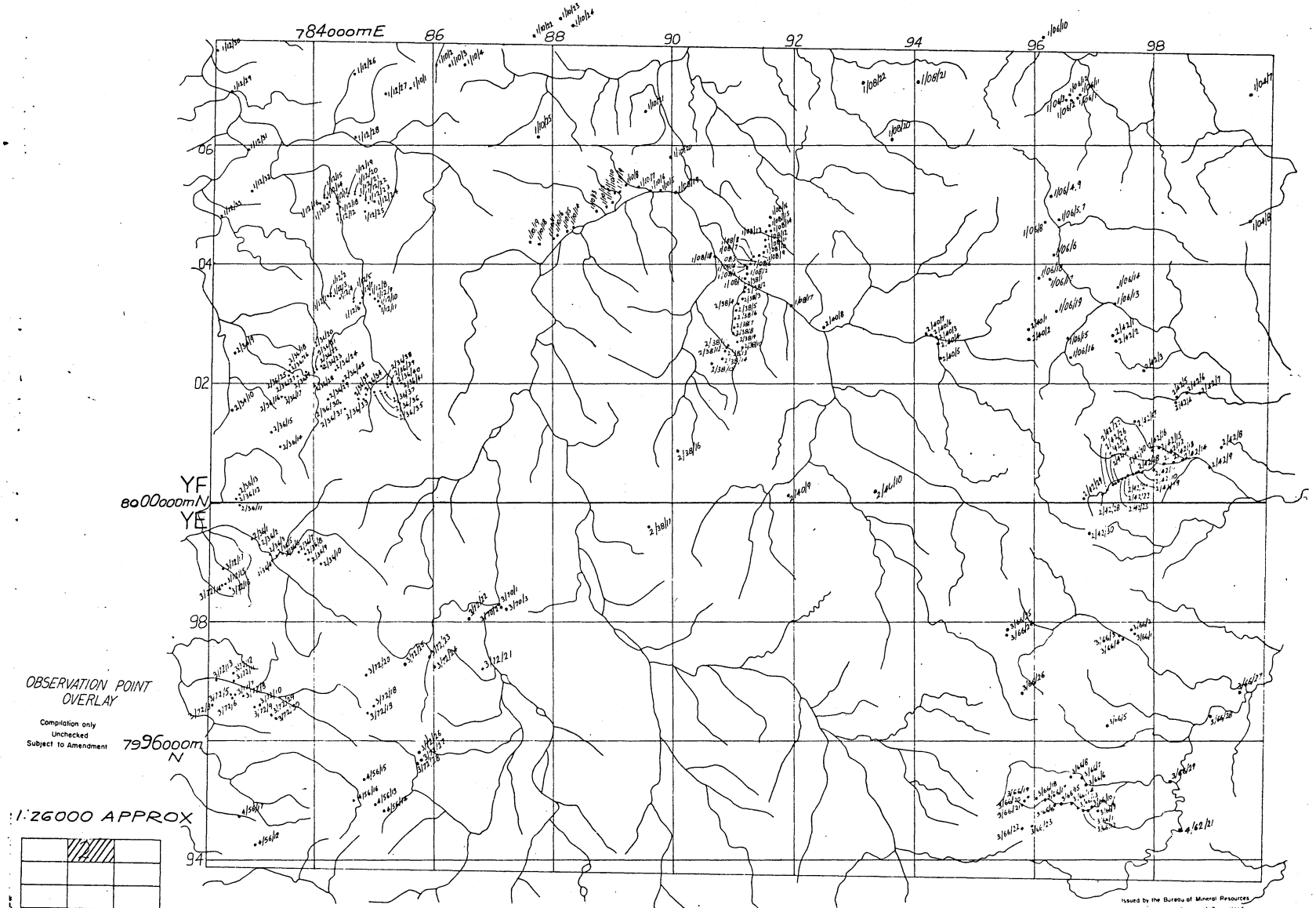

OBSERVATION POINT OVERLAY

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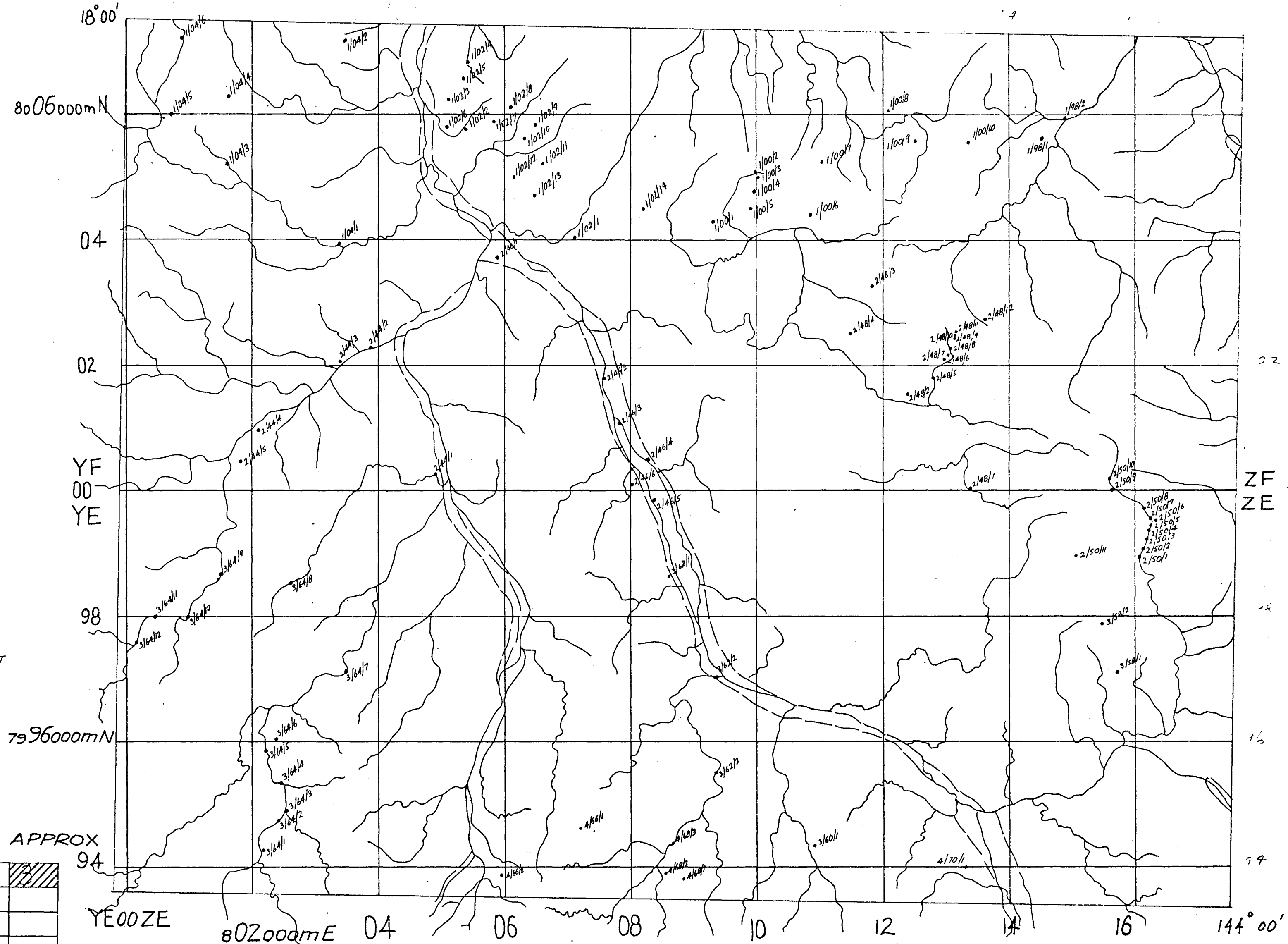

OBSERVATION POINT OVERLAY

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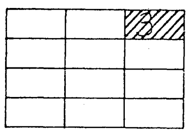

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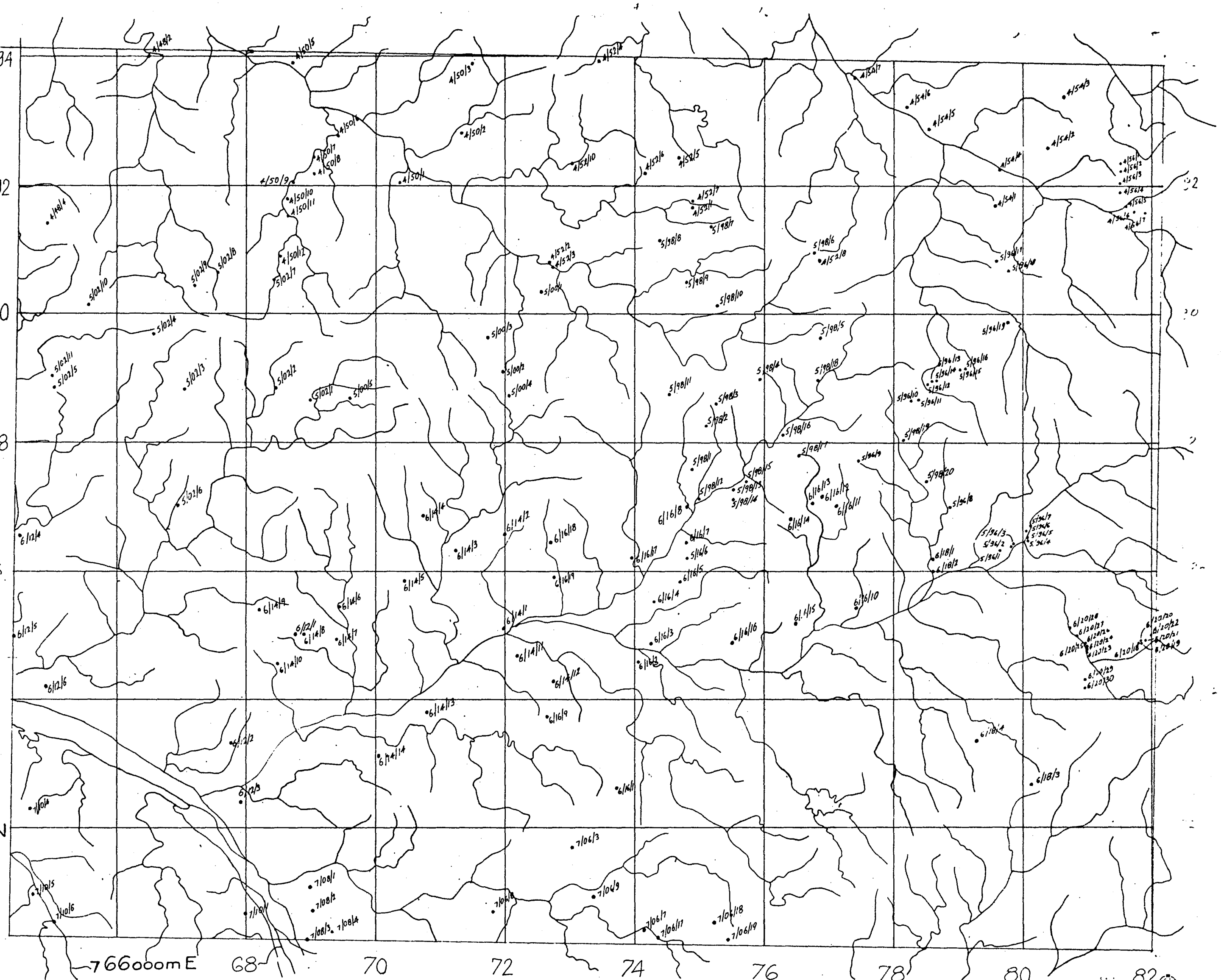

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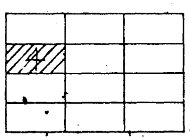

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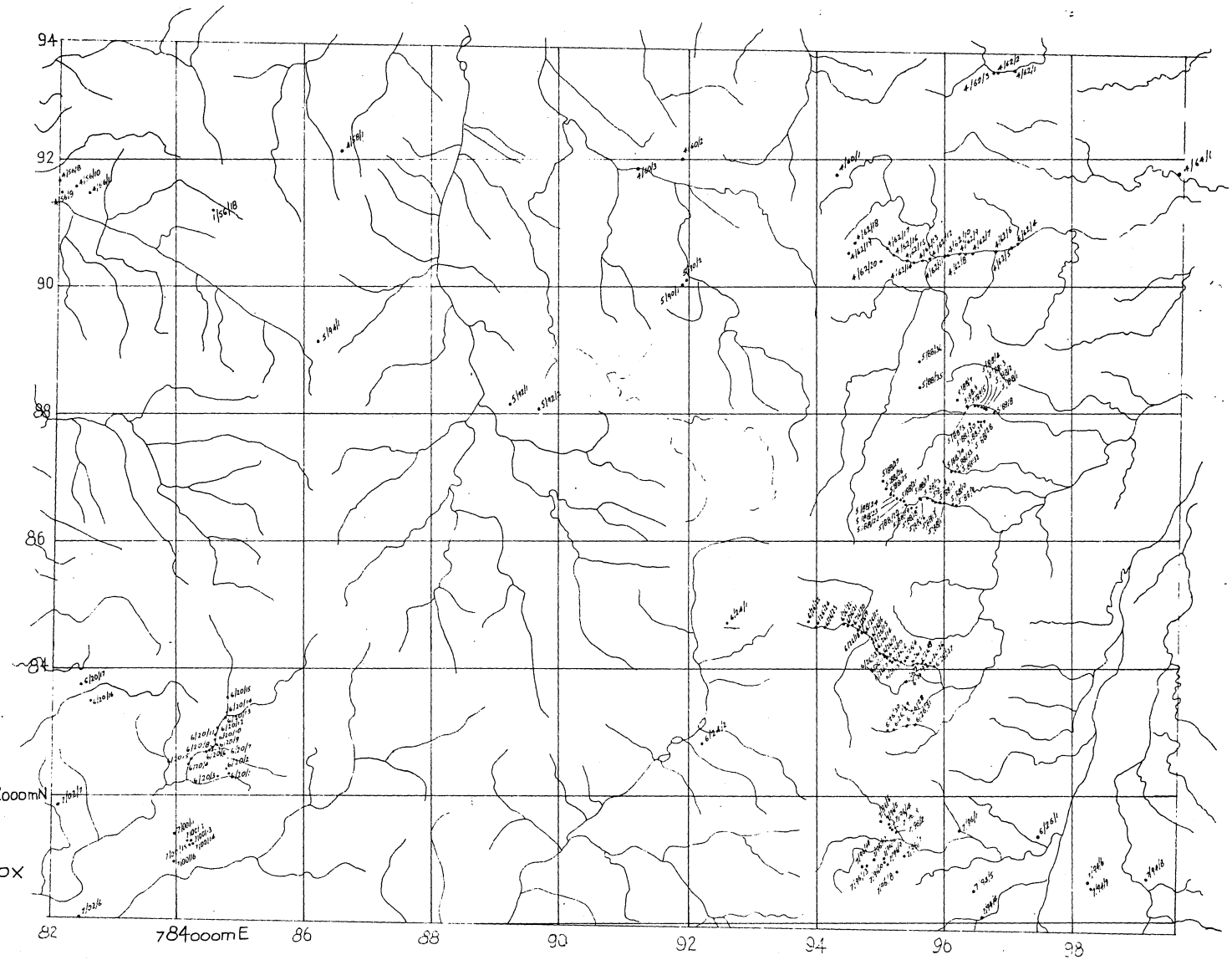
Geology 1974 J H C Bain, B S Oversby, BMR, I W Withnall, GSQ
Compiled 1974 P Blythe



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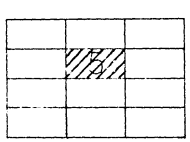

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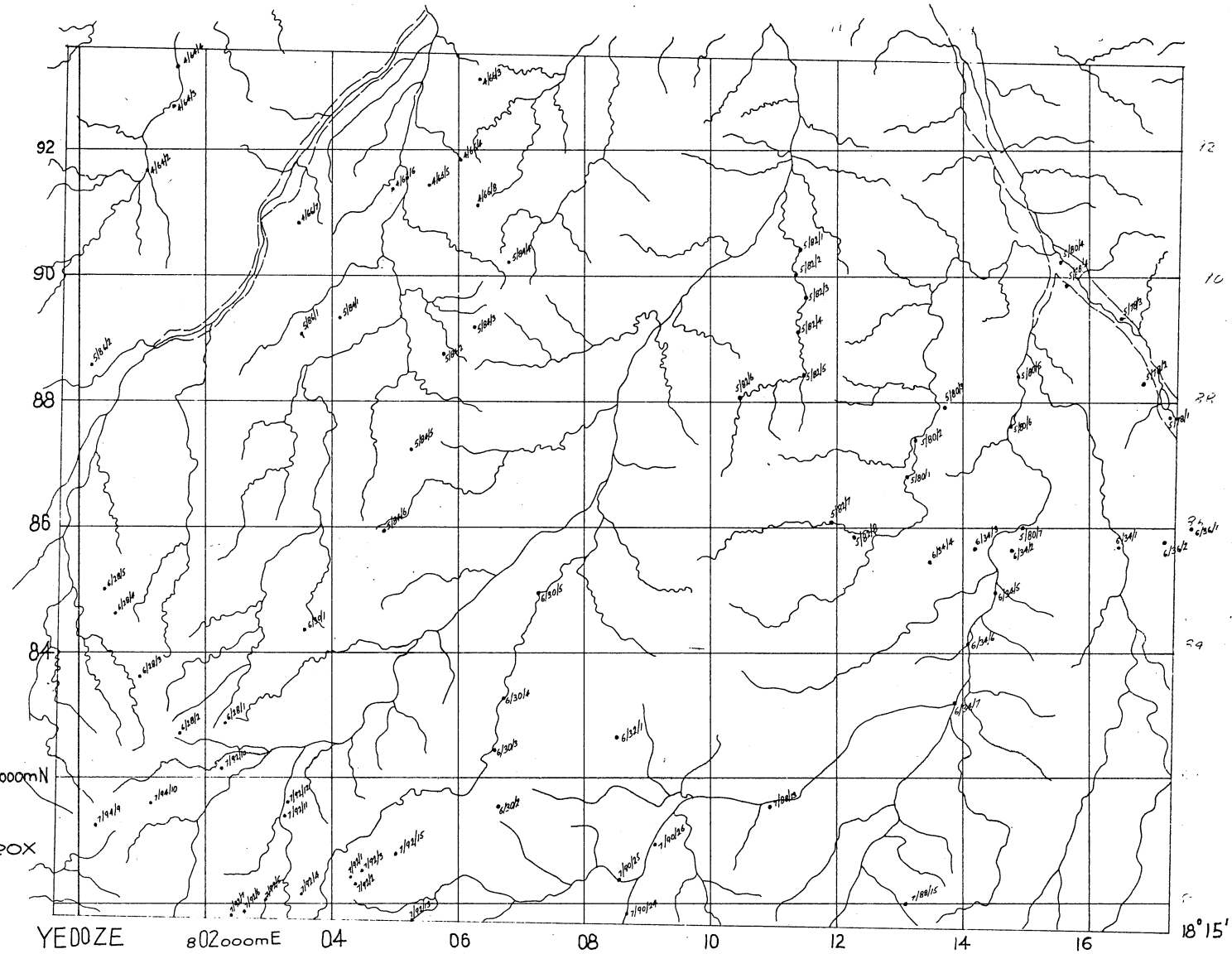

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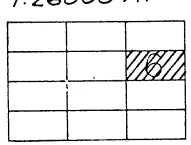

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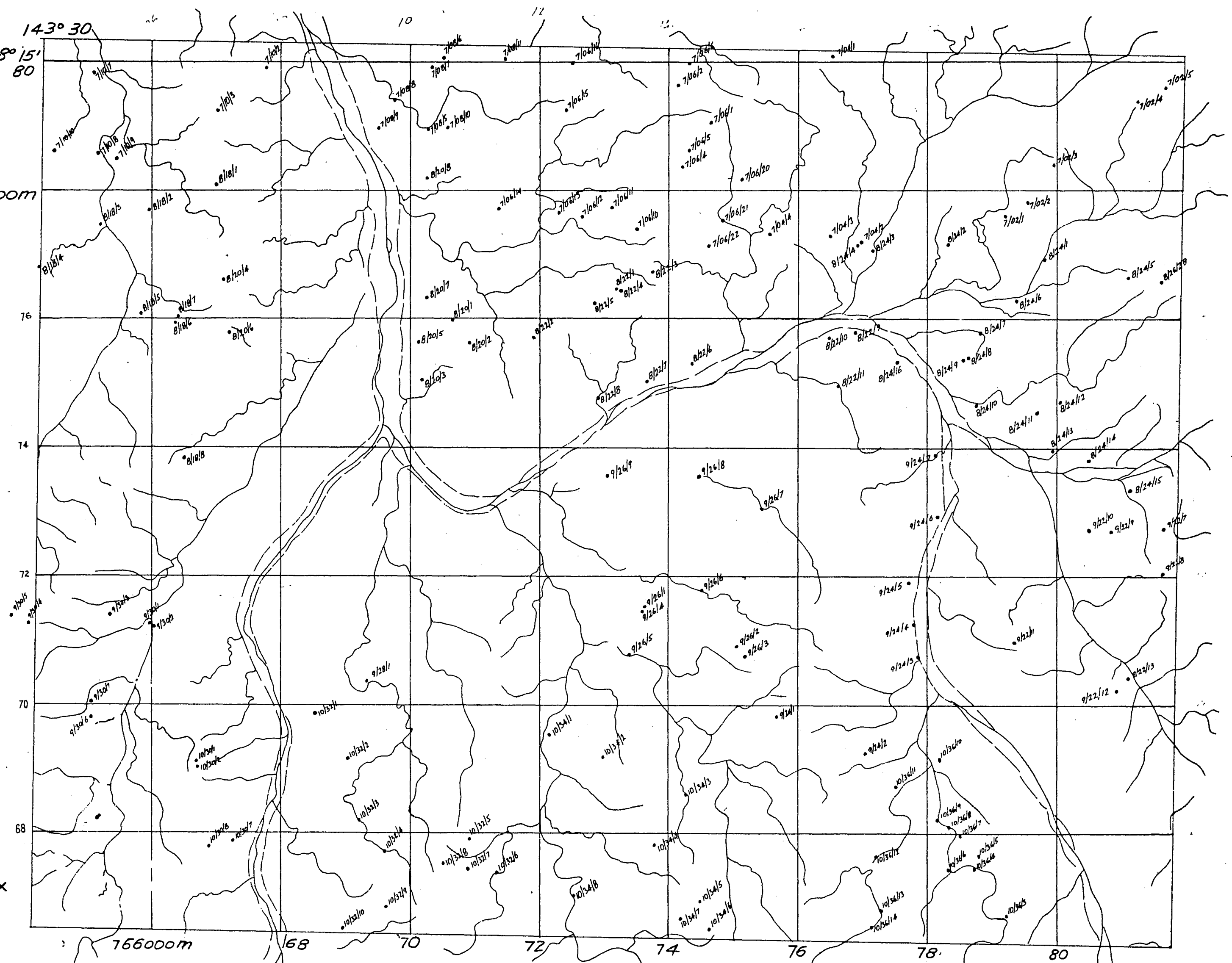

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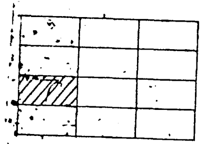

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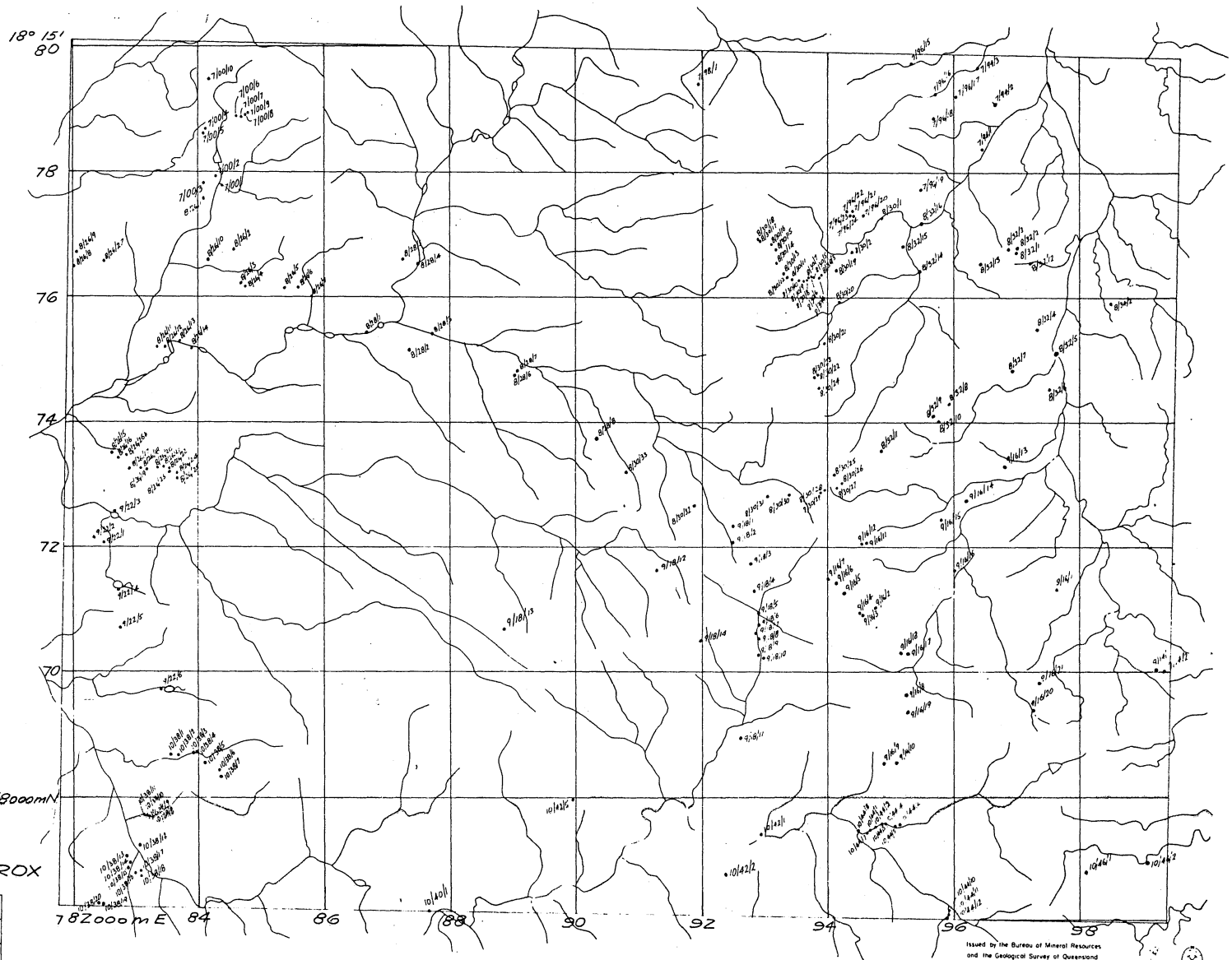

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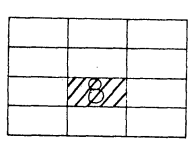

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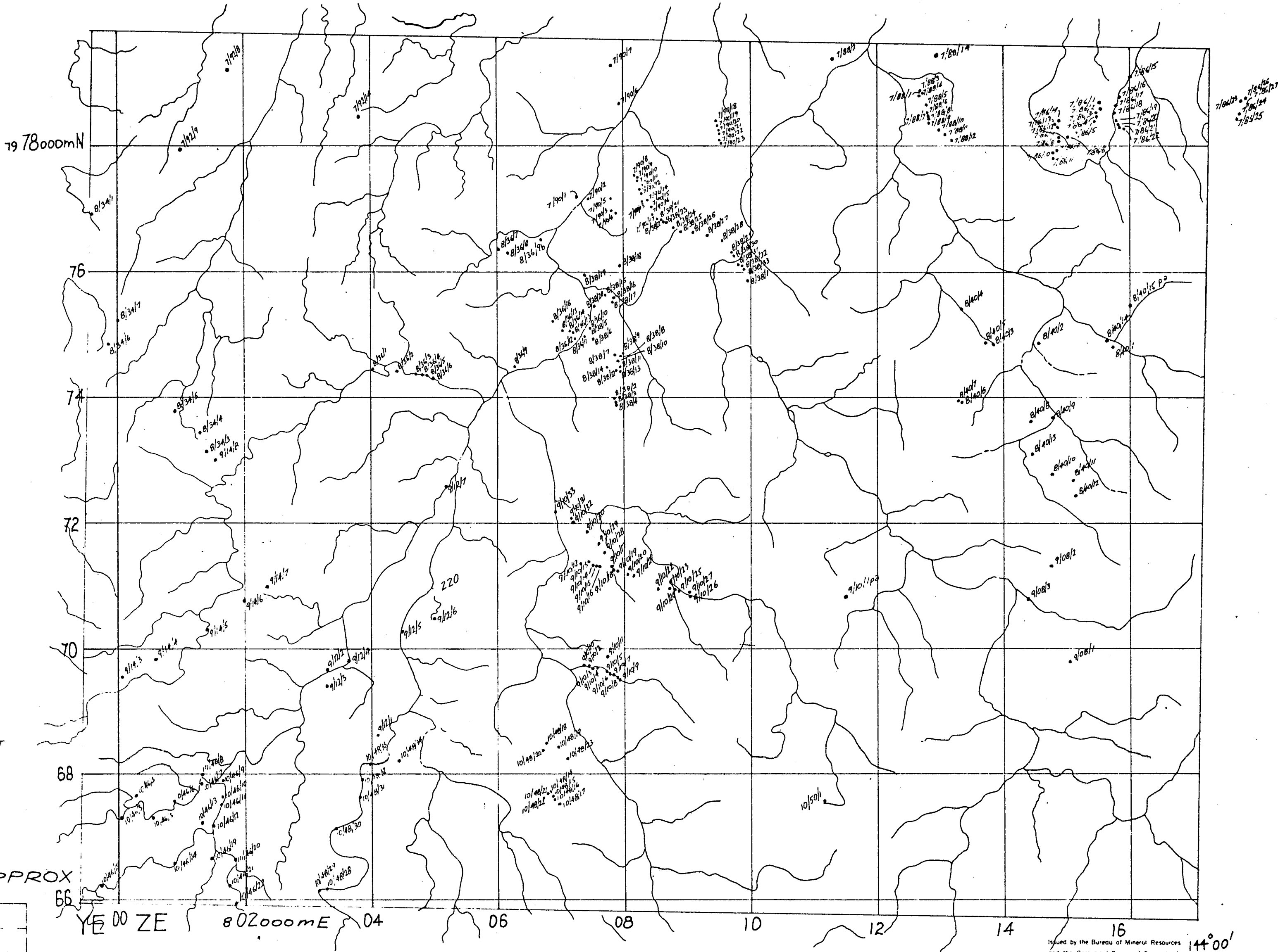

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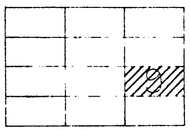

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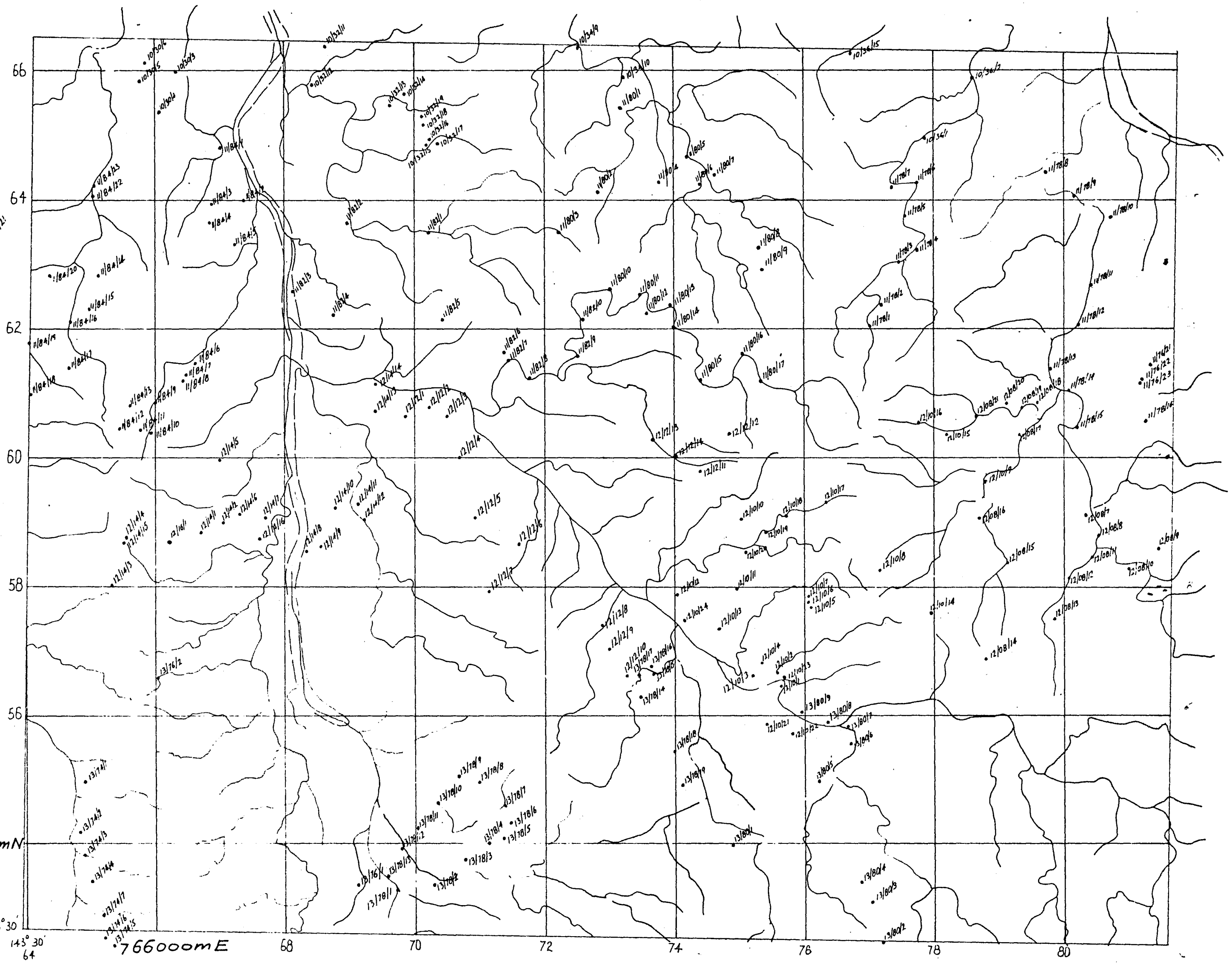

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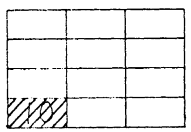

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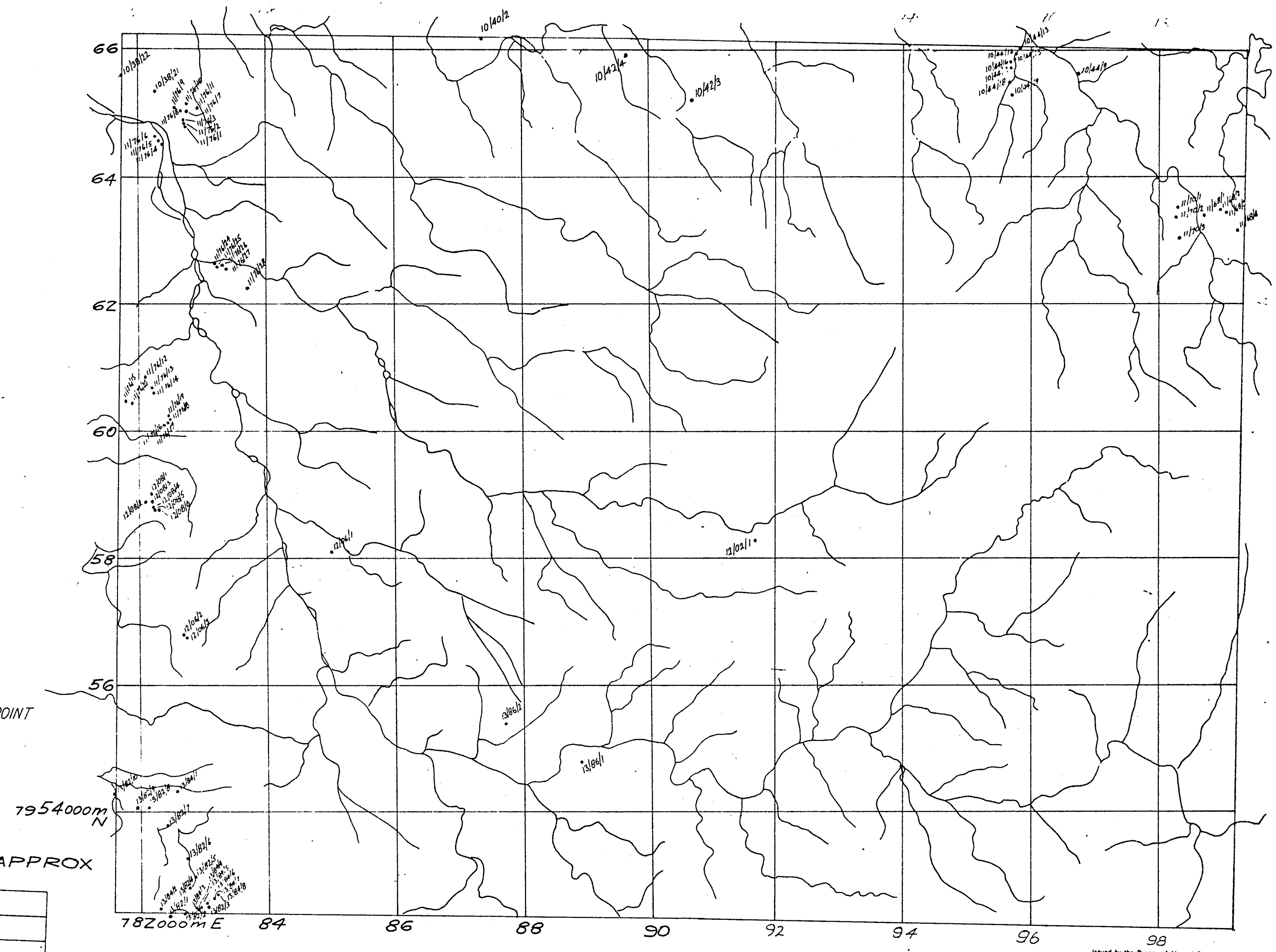

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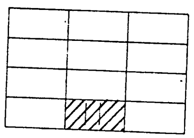

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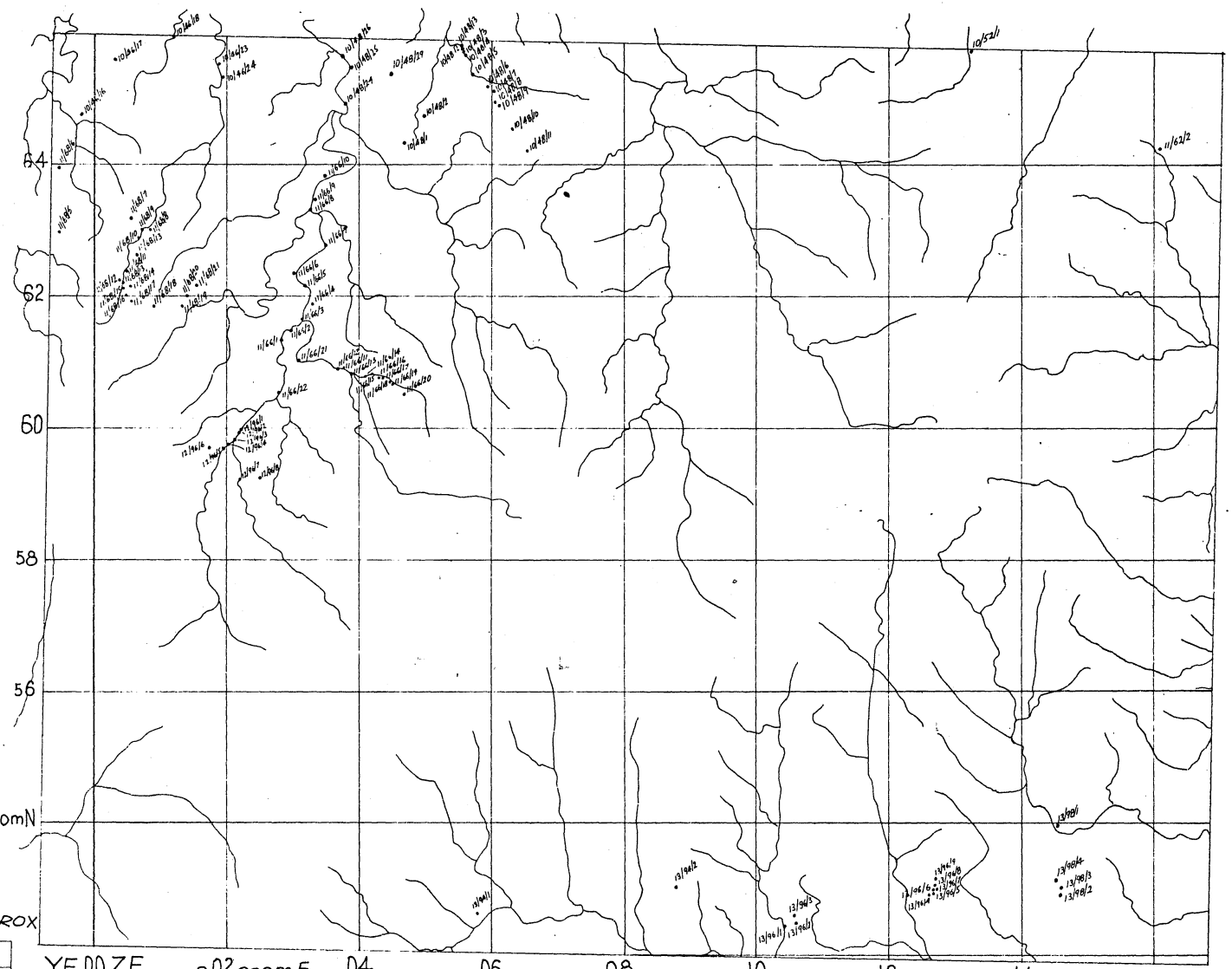

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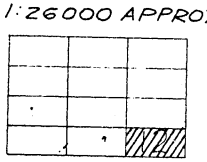

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