EL 13/86 COX BIGHT

REPORT ON DIAMOND DRILLING MARCH/APRIL 1990

AMG REFERENCE POINTS ADDED

Roger Poltock Geological for A.C.P.Webb

CONTENTS

SUMMARY AND CONCLUSIONS

Two diamond drill holes totalling 67m were drilled at the Penders Creek magnetic anomaly by Nick Poltock during the period 27th March to 3rd April 1990. The drilling was helicopter supported.

Both the drill holes were collared too far from the magnetic source and failed to intersect any mineralization. Lithologies intersected include unconsolidated recent alluvium, Precambrian quartzites and schists, and a narrow microgranite dyke.

All drill core has been split and assayed for a wide range of elements. Anomalous levels of tin are associated with the microgranite.

The magnetic anomaly has not been tested by the drilling program.

DIAMOND DRILLING

Two holes, DDH1 & 2 were drilled by Nick Poltock using his own rig see Plate.1. For drill hole details see Appendix 1 and Fig 2.

DDH1 was stopped at 39.20m due to the depth limitation of the rig, DDH2 was abandoned at 27.80m due to sand overburden washing into the hole and jamming the casing and rods.

LITHOLOGIES

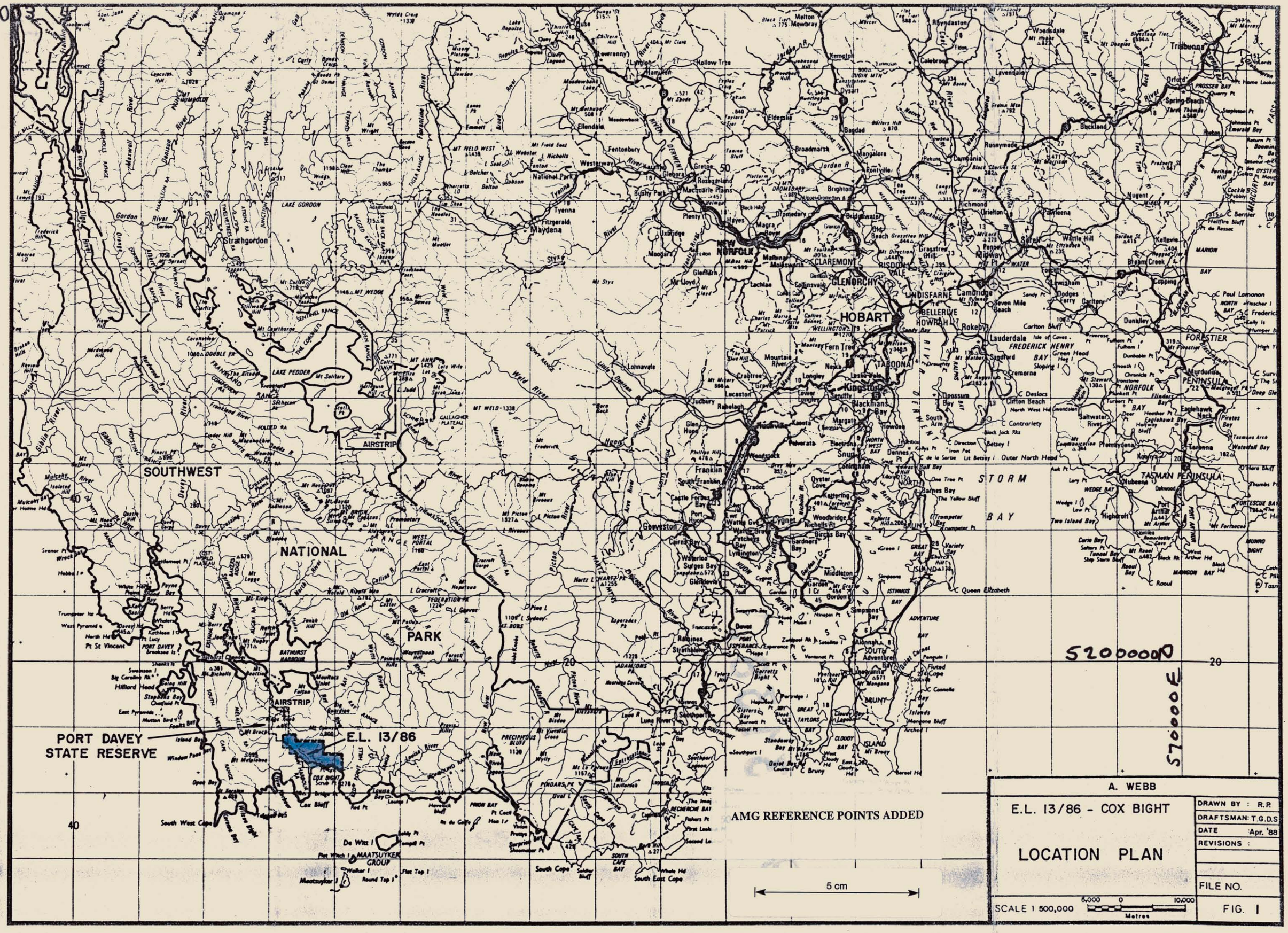
Unconsolidated recent sands upto 21.40m deep blankets the bedrock, a drill sludge sample was collected of this material from DDH2. The sludge comprises approximately 50% pyrite and fine fragments of quartz and schist.

Beneath the overburden a sequence of foliated, schistose and folded Precambrian quartzite, quartz muscovite schist and siliceous hornfels ? were intersected. A microgranite dyke 0.70m wide is seen to intrude these metasediments in DDH2.

MINERALIZATION

Pyrite and possibly minor pyrrhotite occurs as fine disseminations and in quartz veins, and is the only mineralization visible in the core. This observation is supported by the assay results which are generaly low. A tin value of 1100 ppm being the only exception, this mineralization is associated with the microgranite.

003



A. WEBB

E.L. 13/86 - COX BIGHT

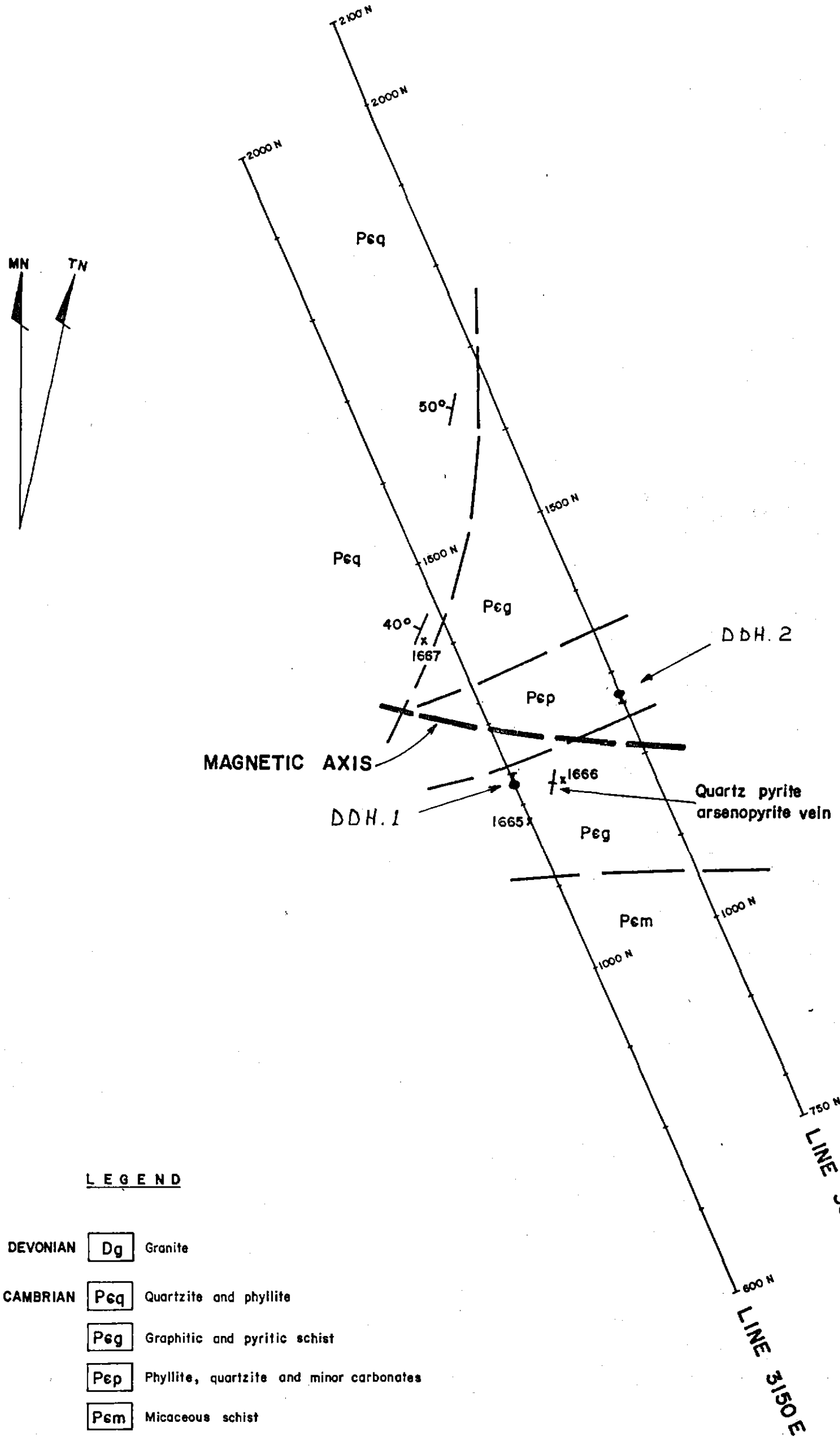
LOCATION PLAN

DRAWN BY : R.P.
DRAFTSMAN: T.G.D.S.
DATE : Apr. '88
REVISIONS :

FILE NO.

FIG. 1

SCALE 1 500,000



LEGEND

DEVONIAN	Dg	Granite
PRE CAMBRIAN	Pcq	Quartzite and phyllite
	Pcg	Graphitic and pyritic schist
	Pcp	Phyllite, quartzite and minor carbonates
	Pcm	Micaceous schist

Interpreted Geological Contact

50° Dip and Strike

Magnetic Anomaly Axis

x 1666 Rock Sample

Diamond Drill hole

5 cm

A. WEBB

E.L. 13/86 - COX BIGHT
PENDERS CREEK
MAGNETIC ANOMALY

INTERPRETED GEOLOGY

DRAWN BY : R P
DRAFTSMAN: T D G S
DATE : Apr '88
REVISIONS :

FILE NO.

SCALE 1:5000 50 0 50 100 Metres

FIG. 2

478005

APPENDIX 1

DRILL LOGS AND CORE RECOVERIES

ROGER POLTOCK
GEOLOGICAL PTY. LTD.

478007

drill log cover sheet

Project EL 13/86 Prospect PENDERS CK Hole DDH 1

Co-ordinates 1225 mN 3150 mE Logged by R Poltock

AMG reference	440 670 E 5184300N
County	
Parish	
Portion	
Elevation	
Declination	-70°
Direction	G M 335°T
Commenced	MARCH 1990
Completed	
Total depth	39.20 m
Drilling company	NICK POLTOCK
Rig type	POLTOCK PORTABLE
Drilling type	DIAMOND
Hole size	
Core size	35mm diametr
Depth of casing	
Assay sample type	
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.
NIL											

* HOLE STOPPED AT 39.20m - LIMIT OF DRILL CAPACITY.

COX BIGHT

DDH 1

00 -11.00m

Unconsolidated sediments - no core recovery.

11.00-11.30m

Brecciated quartz vein with a matrix of pyrrhotite / pyrite, core very broken.

11.30-28.35m

Muscovite quartz schist, grey to dark grey, occasionally graphitic with soft sandy bands at 17.40m, 23.70-24.00m. These sand horizons are interpreted to be weathered carbonates.

Foliation is well developed at 45 to CA*, bedding is in some cases coincident with the foliation but varies between 0 and 45 to CA indicating tight folding. Jointing is at 0 to 10 to CA and occasionally hosts veining.

Mineralization is confined to narrow quartz pyrite veins developed on foliation and joint planes. Veins occuring at 11.50-13.50m, 17.50-17.80m. A trace of fine pyrite occurs throughout the interval.

28.35-39.20m EOH

Muscovite quartz schist with fine grained silicified interbeds. The schist is similar to the above unit, the silicified interbeds are a few cm thick and occur throughout the interval. These silicified beds are interpreted to be hornfels.

Bedding ranges from 10-50 to CA, again indicating tight folding.

A trace of pyrite as fine disseminations and joint coatings occurs throughout.

* Core axis

478009

CORE RECOVERY — COX BIGHT DDH.1

FROM	TO	INTERVAL	RECOVERY	% RECOVERY
0	11.00	11.00	0	0
11.00	11.50	0.50	0.40	80.00
11.50	13.30	1.80	0.30	16.70
13.30	14.40	1.10	0.50	45.50
14.40	15.00	0.60	0.30	50.00
15.00	16.35	1.35	0.45	39.00
16.35	17.50	1.15	0.65	56.00
17.50	19.75	2.25	1.40	62.00
19.75	21.00	1.25	1.10	88.00
21.00	24.00	3.00	0.90	30.00
24.00	25.50	1.50	0.30	20.00
25.50	27.40	1.90	1.80	94.00
27.40	28.35	0.95	1.00	95.00
28.35	30.80	2.45	1.80	74.00
30.80	33.40	2.60	2.80	107.00
33.40	34.75	1.35	1.20	88.00
34.75	37.10	2.35	2.50	106.00
37.10	39.20	2.10	2.00	95.20

AVERAGE RECOVERY FOR INTERVAL

11.00 – 39.20 m = 67.4 %

drill log cover sheet

Project EL 13/86 Prospect PENDERS CREEK Hole DDH.2

Co-ordinates 1275 mN 3300 mE Logged by R. Poltock

AMG reference	440780E 5184410N
County	
Parish	
Portion	
Elevation	
Declination	-70°
Direction	G. M 155°T
Commenced	MARCH 1990
Completed	1-4-90
Total depth	27.80m
Drilling company	NICK POLTOCK
Rig type	POLTOCK PORTABLE
Drilling type	DIAMOND
Hole size	
Core size	35mm diamtr
Depth of casing	
Assay sample type	
Water table depth	
Water yields	

Bore Hole Survey Type

Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.	Depth	Dip	Brg.
NIL											

* HOLE ABANDONED AT 27.80m DUE TO SAND OVERBURDEN COLLAPSING AND JAMMING CASING.

COX BIGHT

DDH 2

00 -21.40m

Unconsolidated sediments - no core recovery. A sludge sample was collected from the interval, consisting of 50% pyrite and fine fragments of quartz vein and mica schist.

21.40-25.50m

Muscovite quartz schist, dark grey with very fine siliceous hornfels bands at 23.60m.

Bedding ranges from 0-70 to CA* indicating tight folding. Foliation varies between 0-10 CA.

A trace of pyrite occurs on joints in the siliceous hornfels.

25.50-25.70m

Microgranite, pink, muscovite rich. Clay alteration and hornfelsing occurs on the contact with the schist.

25.70-27.80m EOH

Muscovite quartz schist as above.

*** Core axis**

478012

CORE RECOVERY COX BIGHT DDH .2

FROM	TO	INTERVAL	RECOVERY	% RECOVERY
0	21.40	21.40	SLUDGE SAMPLE	—
21.40	23.80	2.40	0.70	29.00
23.80	25.70	1.90	1.40	73.68
25.70	27.80	2.10	1.30	61.90

AVERAGE RECOVERY FOR INTERVAL

21.40 – 27.80 = 55%

APPENDIX 2

SAMPLE RECORD AND ANALYTICAL DATA SHEETS

ROGER POLTOCK GEOLOGICAL PTY. LTD.

CLIENT A.C WEBB
PROJECT EL 13/86
PROSPECT PENDERS CREEK MAGNETIC ANOMALY

SAMPLE RECORD AND ANALYTICAL DATA SHEET

LABORATORY ANALABS
SAMPLE TYPE 1/2 CORE

COLLECTED BY:
DATE DISPATCHED: 12-4-80
DATE RECEIVED:

A 28305

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES IN PPM.										
				Ni	Co	Ti	Cu	Pb	Zn	Ag	Au	Sn	W	Pt	Pd
1694	DDH 2	SLUDGE SAMPLE	0 – 21.40m	50	30	2700	125	1%	235	<0.5	0.03	50	<20	<.008	<.008
1695	"	1/2 CORE	21.40 – 23.80m	15	5	2600	25	10	80	<0.5	<.008	70	<20	<.008	<.008
1696	"	"	23.80 – 25.70m	15	5	1850	50	30	95	<0.5	<.008	1100	75	<.008	<.008
1697	"	"	25.70 – 27.80m	15	5	2950	65	80	125	<0.5	<.008	32	<20	<.008	<.008

A1801414

ROGER POLTOCK GEOLOGICAL PTY. LTD.

CLIENT A.C. WEBB
PROJECT EL 13/86
PROSPECT PENDERS MAG' ANOMALY

SAMPLE RECORD AND ANALYTICAL DATA SHEET

LABORATORY ANALABS
SAMPLE TYPE 1/2 CORE

COLLECTED BY:
DATE DISPATCHED: 12 - 4 - 90.
DATE RECEIVED:

A 28305

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES IN PPM. Ni	Co	Ti	Cu	Pb	Zn	Ag	Au	Sn	W	Pt	Pd
1680	DDH1	11.00 - 13.30 m	15	10	2100	20	20	325	<0.5	0.023	90	30	<.008	<.008
1681	"	13.30 - 15.00 m	25	10	3250	40	10	135	<0.5	<.008	40	<20	<.008	<.008
1682	"	15.00 - 17.00 m	20	5	3400	50	5	65	<0.5	<.008	25	<20	<.008	<.008
1683	"	17.00 - 19.00 m	20	10	3450	50	10	85	<0.5	<.008	25	<20	<.008	<.008
1684	"	19.00 - 21.00 m	20	10	3200	35	10	85	<0.5	<.008	15	<20	<.008	<.008
1685	"	21.00 - 24.00 m	30	10	3900	35	10	100	<0.5	<.008	45	<20	<.008	<.008
1686	"	24.00 - 26.00 m	25	10	3650	45	15	100	<0.5	<.008	30	40	<.008	<.008
1687	"	26.00 - 28.00 m	15	10	3400	50	10	110	<0.5	<.008	25	<20	<.008	<.008
1688	"	28.00 - 30.00 m	10	5	2550	30	35	180	<0.5	<.008	100	<20	<.008	<.008
1689	"	30.00 - 32.00 m	15	10	2050	40	15	90	<0.5	<.008	85	<20	<.008	<.008
1690	"	32.00 - 34.00 m	15	5	2400	20	10	65	<0.5	<.008	30	<20	<.008	<.008
1691	"	34.00 - 36.00 m	20	10	2500	30	10	100	<0.5	<.008	20	<20	<.008	<.008
1692	"	36.00 - 38.00 m	20	10	2800	60	10	110	<0.5	<.008	65	<20	<.008	<.008
1693	"	38.00 - 39.20 m	15	10	2650	40	10	75	<0.5	<.008	85	<20	<.008	<.008

4780115

APPENDIX 3

ANALYTICAL DATA SHEETS - ANALABS

- BECQUEREL LABORATORIES

NEUTRON ACTIVATION ANALYSIS

016

478017

NEUTRON ACTIVATION ANALYSIS REPORT

Date: 18-05-90

A. WEBB
BECQUEREL JOB # 967
NOTE: - A NEGATIVE SIGN INDICATES "LESS THAN".
- RESULTS ARE IN PARTS PER MILLION (ppm) UNLESS OTHERWISE INDICATED.
- ELEVATED D.L. FOR SOME ELEMENTS IN SAMPLE 1694, DUE TO HIGH As.

ELEMENT	DL	# 1688	# 1693	# 1694	# 1695	# 1697
ANTIMONY	.2	.33	-.20	65.50	-.20	.41
ARSENIC	2.0	9.50	8.30	19900.00	5.00	42.00
BARIUM	100.0	1000.0	850.0	-400.0	1200.0	1000.0
BROMINE	2.0	-2.00	-2.00	-30.00	-2.00	-2.00
CERIUM	2.0	120.00	120.00	65.00	130.00	150.00
CAESIUM	1.0	16.00	26.00	8.50	26.00	24.00
CHROMIUM	5.0	86.0	94.0	140.0	81.0	78.0
COBALT	1.0	4.80	10.00	30.00	6.40	7.70
EUROPIUM	.5	1.70	1.50	.71	1.70	1.90
GOLD, ppb	5.0	-5.0	-5.0	-10.0	-5.0	-5.0
HAFNIUM	1.0	6.60	8.40	-1.00	6.90	8.40
IRIDIUM, ppb	20.0	-20.0	-20.0	-50.0	-20.0	-20.0
IRON, %	.05	2.100	2.600	10.300	2.500	2.200
LANTHANUM	.5	59.20	57.60	33.00	62.40	73.50
LUTETIUM	.2	.77	.90	.63	.78	.81
MOLYBDENUM	5.0	-5.0	-5.0	-10.0	-5.0	-5.0
RUBIDIUM	20.0	170.0	190.0	190.0	280.0	200.0
SAMARIUM	.20	10.00	11.00	6.40	11.00	12.00
SCANDIUM	.10	8.80	10.70	5.50	13.50	11.10
SELENIUM	5.0	-5.0	-5.0	-10.0	-5.0	-5.0
SILVER	5.0	-5.00	-5.00	-10.00	-5.00	-5.00
TANTALUM	1.0	2.50	-1.00	-1.00	1.70	2.70
THORIUM	.5	18.00	18.00	8.50	17.00	20.00
TUNGSTEN	2.0	5.40	-2.00	54.00	11.00	16.00
URANIUM	2.0	2.30	3.00	-5.00	-2.00	5.40
YTTERBIUM	.5	3.70	4.80	1.50	3.90	4.40
ZINC	100.0	240.0	160.0	470.0	170.0	230.0

BECQUEREL LABORATORIES
LUCAS HEIGHTS RESEARCH LABORATORIES NEW ILLAWARRA RD. LUCAS HEIGHTS, NSW
Telephone: (02) 543 2644
Facsimile: (02) 543 2655
P.O. BOX 93
MENAI, NSW, 2234

478018

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.
Phone (09) 458 7999 — 52 Murray Road, Welshpool, W.A. 6106 — FAX: 09 31 8890 — Telex AA92560

01

ANALYTICAL REPORT No. 999.20.08.07026

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

A.C.P. Webb
205 William St.
Melbourne
Vic. 3000

ORDER No.	PROJECT
18720	

DATE RECEIVED	RESULTS REQUIRED
18/04/90	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
2	04/05/90	1	18

STATE OF SAMPLES (REFER BELOW)	SAMPLE NUMBERS	PRE-TREATMENT: DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	ANALYSIS: REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	<16,80/97	DC	Prep: 006,010,012,013,016						Cu,Pb,Zn,Ag/101		
	<16,80/97	DC							Au,AuChk,Pt,Pd/314		
	<16,80/97	DC							Sn,W,Ti/401		
	<16,80/97	DC	Prep: 006,010,012,013,016						Ni,Co/101		

REMARKS

RESULTS TO
R. Poltock
C/- Post Office
Wilmot
Tasmania 7310

RESULTS TO
A.C.P. Webb
205 William St.
Melbourne
Vic. 3000

STATE OF SAMPLES		ANALYSIS — PREPARATION				ANALYSIS — METHOD	
whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorbtion	AAS
split core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF
cutting	CU	nitric acid	A3	other mixed acids	Ma	spectrophotometry	SPEC
rock	Ro	aqua regia	A4	alkaline attack	AA	colorimetry	COL
soil	SO	nitric-perchloric	A5	volatilization	VO	chromatography	CHR
pulp	PU	HF mixture	A6	ignition	IG	titration	TTN
water	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemical means	CHEM
tissue	TI	fusion	A8	glass fusion (XRF)	GF	miscellaneous	MISC
stream sediment	SS					fluorescence	FLUOR
heavy mineral	HM					inductively coupled plasma	ICP

AUTHORISED OFFICER [signature]

478019

ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	999.20.90.07026	04/05/90	18720	1 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Au	AuChk	Pt	Pd	Sn
1	1680	20	20	325	<0.5	0.023	0.025	<0.005	<0.005	90
2	1681	40	10	135	<0.5	<0.008	–	<0.008	<0.008	40
3	1682	30	5	65	<0.5	<0.008	–	<0.008	<0.008	25
4	1683	30	10	85	<0.5	<0.008	–	<0.008	<0.008	25
5	1684	35	10	85	<0.5	<0.008	–	<0.008	<0.008	15
6	1685	35	10	100	<0.5	<0.008	–	<0.008	<0.008	45
7	1686	45	15	100	<0.5	<0.008	–	<0.008	<0.008	30
8	1687	50	10	110	<0.5	<0.008	–	<0.008	<0.008	25
9	1688	30	35	130	<0.5	<0.008	–	<0.008	<0.008	100
10	1689	40	15	90	<0.5	<0.008	–	<0.008	<0.008	85
11	1690	20	10	65	<0.5	<0.008	–	<0.008	<0.008	30
12	1691	30	10	100	<0.5	<0.008	–	<0.008	<0.008	20
13	1692	60	10	110	<0.5	<0.008	–	<0.008	<0.008	65
14	1693	40	10	75	<0.5	<0.008	–	<0.008	<0.008	55
15	1694	125	190	235	<0.5	0.030	–	<0.008	<0.008	50
16	1695	25	10	80	<0.5	<0.008	–	<0.008	<0.008	70
17	1696	50	30	95	<0.5	<0.008	–	<0.008	<0.008	1100
18	1697	65	80	125	<0.5	<0.008	–	<0.008	<0.008	32
19										
20										
21										
22										
23	DETECTION	5	5	5	0.5	0.008	0.008	0.008	0.008	3
24	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
25	METHOD	101	101	101	101	314	314	314	314	401

Results in ppm unless otherwise specified
T = element present: but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

478020

.019

ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	999.20.08.07026	04/05/90	19720	2 OF 2

TUBE No.	SAMPLE No.	W	Ti	Ni	Co					
1	1680	30	2100	15	10					
2	1681	<20	3250	25	10					
3	1682	<20	3400	20	5					
4	1683	<20	3450	20	10					
5	1684	<20	3200	20	10					
6	1685	<20	3900	30	10					
7	1686	40	3650	25	10					
8	1687	<20	3400	15	10					
9	1688	<20	2550	10	5					
10	1689	<20	2050	15	10					
11	1690	<20	2800	15	5					
12	1691	<20	2500	20	10					
13	1692	<20	2800	20	10					
14	1693	<20	2650	15	10					
15	1694	<20	2700	50	30					
16	1695	<20	2600	15	5					
17	1696	75	1850	15	5					
18	1697	<20	2950	15	5					
19										
20										
21										
22										
23	DETECTION	20	50	5	5					
24	UNITS	ppm	ppm	ppm	ppm					
25	METHOD	401	401	101	101					

Results in ppm unless otherwise specified
T = element present, but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER Jenkins