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Aberfoyle Resources Limited

EXPLORATION DIVISION

A.C.N. 004 664 108

EXPLORATION LICENCE 47/83

LYNCHFORD

TASMANIA

Progress Report for the

Eight month period to

10 February, 1991

91-3228

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Distribution

- Aberfoyle - Burnie (1/4)
- Aberfoyle - Hawthorn (2/4)
- Dept. Resources & Energy (3/4)
- Exploration - Canberra (4/4)

91-3228

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1. SUMMARY

- I Regional mapping has identified shale horizons within Central Volcanic Complex lavas and volcaniclastics south of the King River. These horizons are potential hosts to massive sulphides of the Rosebery type.
- II Mapping and sampling of exposures within the King River Power Tunnel between the surge tunnel and the licence boundary was completed. No significant mineralisation was encountered.

2. INTRODUCTION

The Lynchford E.L. 47/83 covers an area of approximately 15.3 sq. km. and is located to the south of Queenstown (Plate Lyn 24).

The E.L. has been explored by Aberfoyle since 28 April, 1988, under the terms of the Mount Read Volcanics joint venture with the tenement holder, CRA Exploration Pty. Ltd..

This report describes work undertaken by Aberfoyle on the E.L. since June 1990. An area of 0.75 sq km covered by ML 27/82 is excluded from the licence.

3. PREVIOUS EXPLORATION

Previous exploration comprises turn of the century prospecting and modern systematic exploration conducted over most of the licence since 1966. A detailed summary of previous exploration on the Lynchford EL 47/83 is included in Progress Report for the year ended 30 April, 1989 (Noonan, 1989).

4. EXPLORATION ACTIVITY LYNCHFORD E.L. 47/83 1990/91

4.1 Regional Programme

4.1.1 Introduction

The object of the regional programme has been to assess the potential for VMS style, base metal mineralisation within the licence. This has been achieved through stream sediment sampling, regional mapping and rock chip sampling.

4.1.2 Geology

The regional geology is summarised on Plate Lyn 38 compiled with the aid of mapping by Aberfoyle Resources and the Department of Resources and Energy (1:50000 Mount Lyell sheet, 1987 and 1:25000 Queenstown sheet, 1989). Plate Lyn 38 was updated further following recent mapping to the south of the King River.

The regional geology of the Lynchford E.L. 47/83 is described in detail within the Progress Report for the year ended 20 June, 1990 (Noonan, 1990).

Petrology

Two samples were submitted for petrographic description. Sample P564863 was described as a coarse volcanic sandstone and sample P564856 was described as a silica ± haematite altered felsic lava. Full descriptions and locations are attached as Appendix II.

4.1.3 Regional Rock Chip Geochemistry

At the time of reporting, eight rock chip samples had been collected during the regional mapping programme. Results and sample locations are detailed in Appendix III and on Plate Lyn 20.

Sample 482144, a highly silicified siltstone was elevated in Zn (810 ppm) but no other significant base metal values were reported.

4.2 King River Power Tunnel

4.2.1 Introduction

The mapping and sampling of the main Headrace Tunnel between the Surge Tunnel and the E.L. boundary has been completed. No significantly anomalous zones have been located.

4.2.2 Geology

A detailed description of the tunnel geology is recorded on HEC geological plans. A summary of the tunnel geology is as follows:

6848-6805 mW	Variably, weakly altered dacitic lava.
6805-6465 mW	Variably altered lapilli volcanoclastics.
6465-6244 mW	Dacitic lava.
6244-6199 mW	Intensely white quartz veined black shale in faulted contact with dacitic lava. A minor fault wedge of dacite occurs from 6222-6217 mW.
6199-5658 mW	Variably weakly altered quartz phyric rhyolitic lava.
5658-5628 mW	Andesitic lava with associated black shale beds, in places tending to a polymict andesitic ash-lapilli volcanoclastic with black shale fragments and minor chert.
5628-5592 mW	Dominantly dacitic lava breccia with minor associated chert, black shale and greywacke bands.
5592-5560 mW	A rhyolitic lapilli volcanoclastic with minor associated breccia volcanoclastic and rhyolitic lava.
5560-5200 mW	Weakly altered rhyolitic lava.
5200-4770 mW	Feldspar phyric, lesser quartz phyric lapilli volcanoclastic in places with pervasive silica, sericite alteration with calcite after feldspar.
4770-4717 mW	Variably chlorite and lesser pyrite altered quartz phyric rhyolitic lava interval.

Mineralisation

No significant mineralisation was observed within the tunnel section. As described previously the minor galena, sphalerite, chalcopryrite mineralisation associated with white quartz veins (482122) within the black shale at 6215 mW is considered to be Devonian vein style mineralisation (Noonan, 1990).

Minor disseminated pyrite was observed sporadically throughout the tunnel section commonly associated with sericite and lesser silica alteration.

4.2.3 Geochemistry

A preliminary grab sampling programme was undertaken during June, 1990 (51 samples) to highlight possible anomalous zones and areas in which channel sampling should be concentrated. Results of the sampling are tabulated in Appendix IV and locations displayed on Plates Lyn 17A and 17B.

A Zn spike was noted at 5690 mW (1000 ppm) and Pb spike at 5570 mW (340 ppm) these are probably attributable to Devonian style vein mineralisation.

In general results were not encouraging and no follow up channel sampling has been undertaken.

5. CONCLUSIONS AND RECOMMENDATIONS

The licence should be retained to allow a geophysical survey to be undertaken over the felsic volcanics to the south of the King River.

Exploration to date within the E.L. has been concentrated at three levels:

- i) To assess the potential of the mafic-intermediate volcanics covered by the Specimen Creek grid.
- ii) To examine the prospectivity of the felsic volcanic suite to the south of the King River.
- iii) To complete a regional programme aimed at highlighting other prospective areas within the E.L.

I Regional Programme

The regional programme to date has involved mapping and the compilation of a 1:10000 scale map sheet for the E.L. The aim of the mapping has been to highlight areas considered prospective for hosting VMS base metal deposits of the Rosebery type.

Examination of creeks and HEC lines immediately to the south of the King River highlighted several prospective shale, siltstone host horizons within the suite of felsic lavas and volcanoclastics. The most prospective horizon is the laminated siltstone and associated hangingwall altered andesitic lava exposed in a creek at 5332038 mN and 379909 mE.

A UTEM survey is recommended to assess the base metal potential of the area of outcropping felsic volcanics and associated shales.

II King River Power Tunnel

The work to date within the power tunnel has revealed sporadically distributed zones of mild to strong calcite-sericite-pyrite alteration and lesser chlorite-sericite-calcite alteration.

The rock chip sampling programme has failed to identify any significantly anomalous zones, with only several Pb and Zn spikes attributable to Devonian vein style mineralisation identified.

No further work is recommended within the tunnel.

III Specimen Creek Grid

No major work programme is recommended pending the tenement developments on EL 11/85 Yolande. This E.L. covers the northern part of the Lynch Creek basalts and the interpreted antiformal closure. The intense baryte mineralisation in this area is considered encouraging.

A comparative study should be made between the silica/haematite breccia volcanoclastic unit outcropping to the west of the Specimen Creek alteration zone and similar outcrops within the Mount Lyell mine leases.

Consideration should be given to developing a geological model for a deep drill test (below the limits of effective UTEM coverage) of the silica/haematite zone and the Specimen Creek alteration zone. Especially in light of recent views on the association of silica, haematite, baryte alteration to the Mount Lyell orebodies by Berry, 1990 and Newnham, 1990 (Pers. Comm.).

6. REFERENCES

- Berry, R. F., 1990, Structure of the Queenstown Area and its relation to Mineralisation. Interim Report Amira Project P 291, September 1990. (Confidential to Sponsors).
- Calver, C. R., Baillie, P. W., Everard, J. L., Seymour, D. B., Williams, P. R., Forsyth, S. M., Turner, N. J., Williams, E., 1987. Lyell 1:50000 Scale. Regional Mapping Programme. Department of Resources and Energy, Tasmania.
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APPENDIX I

TABLE OF GEOLOGICAL ABBREVIATIONS

GEOLOGICAL ABBREVIATIONS

Abundant	abn	Fluorite	Fl	Rhyolite	R
Adularia	Adl	Foliated	fo	Ripple marks	rmk
Agglomerate	agg	Fragments	fr	Round	rnd
Albite	Ab	Fuchsite	Fu	Rubble	rb
Alkali feldspar	Afd	Gabbro	Gb	Sandstone	Ss
Altered	alt	Galena	Gn	Schist	Sch
Amphibolitic	amb	Glass	Gl	Schistose	sch
Amphibole	Amb	Glassy	gl	Sediment	sed
Amygdales	amg	Gossan	Gos	Selected fragments	sfr
Andalusite	An	Granite	Gr	Sericite	Se
Andesite	A	Granodiorite	Gd	Serpentine	Srp
Angular	ang	Granular	glr	Shale	Sh
Ankerite	An	Graphite	Gt	Sheared	shd
Aplite	Ap	Graphitic	gt	Sheeted	sht
Approximate	apx	Green	gn	Siderite	Sid
Arcuate	ar	Grey	gy	Silica	Si
Arenaceous	arn	Greywacke	Gw	Siliceous	sil
Argillaceous	arg	Groundmass	gm	Siltstone	Silt
Argillite	Arg	Haematite	Hmt	Slickenside	sik
Arkose	Ak	Hornblende	Hb	Sphalerite	Sp
Arkosic	ak	Ignimbrite	Ig	Spotted	spt
Arsenopyrite	Ap	Illite	Ill	Spotty	spot
Ash volcanoclastic	av	Interbedded	ibd	Stockwork	stw
Autobrecciated	aub	Intercalated	icl	Stratabound	stb
Average	ave	Intrusive	int	Strong	str
Banded	bnd	Jurassic	Ju	Structure controlled	stc
Barite	Ba	K-Feldspar	Kfd	Syngenetic	syn
Basalt	B	Khaki	kh	Talc	Tc
Bedded	bd	Laminated	lm	Tertiary	T
Biotite	Bio	Lapilli volcanoclastic	lv	Tourmaline	Tm
Black	bk	Lava	l	Trace	tr
Black shale	Bsh	Lava breccia	lb	Trachyte	Tr
Blue	bl	Leached	lch	Tuff	Tf
Boulder	blb	Leucite	Lct	Tuffaceous	tf
Breccia	b	Leucitite	Ltt	Variable	var
Breccia volcanoclastic	bv	Limonic	Lim	Variolitic	vr
Bright	brt	Light	lgt	Vein	vn
Brown	br	Limestone	Lst	Vein concordant to bedd	cv
Calcareous	cc	Lithic	lh	Vein discordant to bedd	dV
Calcite	Cc	Magnetite	Mt	Very	v
Carbonaceous	carb	Manganese	Mn	Vesicular	ves
Carbonate	Co	Marl	Ml	Vitric	vtr
Cassiterite	Cass	Massive	mas	Volcanic	vlc
Cavernous	cav	Matrix	mtx	Volcanoclastic	vcl
Cemented	cem	Matrix dominated	md	Weak	wk
Chalcocopyrite	Cp	Medium	med	Weathered	wth
Chert	Ch	Medium grained	mg	White	wh
Chlorite	Cl	Metamorphosed	meta	Yellow	yw
Chromite	Cr	Mica	Mic		
Chromitiferous	cr	Micaceous	mic		
Clay	cy	Mineralised	min		
Coarse	c	Minor	mnr		
Coarse grained	cg	Mixed	mx		
Colloform	coll	Mottled	mtl		
Colour	col	Mudstone	Mst		
Common	com	Nodule	nd		
Conglomerate	Cg	Off white	ow		
Conglomeratic	cg	Olivine	Ol		
Crimson	cm	Oolitic	oo		
Crystal	x	Orange	or		
Crystal volcanoclastic	xv	Ordovician	O		
Dacite	D	Oxidised	ox		
Dark	dk	Pale	pl		
Dense	dns	Patchy	pat		
Devitrification	dv	Peperitic	pep		
Diorite	Di	Perlitic	prl		
Disseminated	dis	Pervasive	per		
Dolerite	Dol	Phenocrysts	phn		
Dolomite	Dm	Phyllite	phy		
Dyke	dy	Phyric	p		
Elongated	el	Picrite	Pic		
Emphasised	emp	Pillow lava	pl		
Epiclastic (noun)	E	Pink	pk		
Epidote	Ep	Polymict	y		
Euhedral	euh	Porphyritic	por		
Eutaxitic	eux	Predominantly	pred		
Fabric	fab	Pumice	Pu		
Fault	F	Pumiceous	pu		
Fault zone	FZ	Purple	pp		
Feldspar	Fd	Pyrite	Py		
Feldspathoid	Fdd	Pyritic	py		
Feldspar phyric	fp	Pyroxene	Px		
Feldspathic	fel	Pyrrhotite	Po		
Ferruginous	fer	Quartz	Q		
Fibrous	fb	Quartzite	Qtz		
Fine	f	Quellite	Qll		
Fine grained	fg	Questionable	?		
Fissile	fis	Recrystallised	rx		
Flowbanded	fbn	Red	rd		
		Rehealed	rhd		
		Reworked	rw		
		Rhyodacite	RD		

APPENDIX II

PETROGRAPHIC DESCRIPTIONS AND LOCATIONS

014

398015

PETROGRAPHIC REPORT
Further Samples from Lynchford EL

For Aberfoyle Resources

Attn. Danny Noonan

by

Anthony J. Crawford
Geology Department
University of Tasmania
17/6/90

SAMPLE NUMBER: 564853

LOCATION: LYNCHFORD EL: 380551.0E 53 29931.0N

SUMMARY:

This is coarse sandy epiclastic sediment composed of quartz-phyric felsic lava and crystal tuff fragments and quartz crystal detritus. It has been silicified to some extent, and has minor pyrite associated with the silica alteration.

HAND SPECIMEN:

This is a strongly altered felsic lava breccia (polymict) that is silicified and slightly sheared.

THIN SECTION:

This is clearly an epiclastic sediment, in which several half cm bands of sandy material are set in coarser grained grit composed of diverse rhyolitic lava fragments. Most lava fragments are from 5mm to at least several cm long, and are formerly felsic glassy lavas. Some were quartz-phyric glassy rhyolites, with around 2-10 modal% of quite large (to 2mm across) partially resorbed subhedral quartz phenocrysts; in these the glass has variably recrystallized to mosaic intergrowths of quartz and subordinate albite streaked with a meshwork of pale sericite. A few albite phenocrysts, strongly sericite-altered, were noted in several lava fragments. Other fragments contain considerably more quartz phenocrysts, often broken and angular, also in a devitrified and recrystallized formerly glassy matrix; these were almost certainly crystal vitric tuffs derived from rhyolitic explosive eruptions.

A striking feature microscopically is the range in texture and grainsize of the formerly glassy groundmasses of the lava and tuff fragments; this is clear evidence of a polymict lava breccia or epiclastic sediment origin for this sample. The latter is further supported by the occurrence of the sandy bands mentioned above, in which discrete quartz phenocrysts and sand-sized lava fragments are concentrated with little intergrain matrix. Chlorite is more abundant interstitially in these bands than in the remainder of the sample, and patchy development of Fe oxide (hematite?) in the matrix of the sandy bands is occasionally present. Sericite is quite abundant in the sample, defining a very weak foliation, and occasionally occurring as boudin-shaped patches between fragments. Small euhedral pyrite crystals occur in minor amounts disseminated through the recrystallized groundmass of many fragments, and intergrown with quartz in inter-fragment areas; it is probably associated with the silica alteration.

This sample was clearly an epiclastic sediment derived from a local

felsic volcanic source. The abundance of quartz phenocrysts is more reminiscent of Tyndall Group lavas and epiclastics, but a notable quartz phenocryst-rich epiclastic unit is present in the Central Volcanic Complex section above the Rosebery deposit. The silicification noted in hand specimen is much less obvious in thin section, a common feature in rocks with recrystallized formerly glassy groundmasses.

SAMPLE NUMBER: 564856

LOCATION: LYNCHFORD EL: 380071.4E 53 30549.4N

SUMMARY:

This is strongly silica-sericite (\pm hematite)-altered formerly highly glassy felsic lava or tuff/ver fine-grained epiclastic.

HAND SPECIMEN:

This is a strongly altered blotchy reddish, oxidized meta-felsic volcanic with a weak foliation and disseminated granular hematite.

THIN SECTION:

This is a very difficult sample to diagnose, mainly due to the effects of pervasive silicification and sericite alteration. The rock was either an exceptionally aphyric obsidian lava, or an extremely fine-grained epiclastic sediment composed of felsic ash that devitrified and recrystallized to quartz and albite, obliterating any former sign of glassy shard material. Occasional patches of least-altered rock have shadowy relic textures suggestive of welded vitric tuff and glass shard material, but this is certainly not a positive assignment. In the whole section, only two small albite phenocrysts were noted, and this is unusual for any lava from the Mount Read Volcanics. The glass, that originally constituted 99.9% of this sample, clearly devitrified but has been replaced by extremely fine-grained silica, in which clearer, patchy irregular small areas and veinlets of coarser-grained silica are abundant. The sample has a microbrecciated texture in places, imposed by small networks of quartz veinlets. Dense brownish sericite forms an open mesh through the sample and splays out to form angular patches that make up around 40-50 modal% of the sample. Many patches of sericite are full of fine-grained hematite as wispy concentrations that are not obviously replacing former sulphide. A few euhedral crystals of hematitized pyrite are also present, typically with cores of quartz and rims of hematite.

This difficult sample is a thoroughly silica-sericite-altered formerly glassy felsic lava, vitric tuff or epiclastic sediment. Outcrop information might prove more diagnostic for the origin of this sample.

APPENDIX III

REGIONAL ROCK CHIP ASSAY RESULTS

018

398019

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

52 Murray Road, Welshpool, W.A. 6106

Phone (09) 458 7999

Telex AA92560

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23.3.08.07062

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Aberfoyle Resources Limited
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11

PRE-TREATMENT

ANALYSIS

SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS		
	DRY	CRUSH	SPLIT	PUL- VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
Various	RC	Prep: Q16						Cu,Pb,Zn,Ag/101		
Various	RC							Au,AuChk/309		
Various	RC							Ba,As,Cr,Zr,Ti/401		
<482,142/145,<564,853/858	RC							K2O,MgO,CaO,Na2O/104		
Various	RC	Prep: Q16						Cu,Zn/104		

RESULTS

TO

R. de Bomford
Aberfoyle Resources Limited
Exploration Division
P.O. Box 952
Burnie Tasmania 7320

RESULTS

TO

REMARKS

L.Y.N.

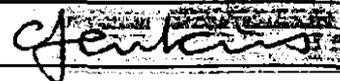
STATE OF SAMPLES

ANALYSIS — PREPARATION

ANALYSIS — METHOD

core	WC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS
core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF
ing	CU	nitric acid	A3	other mixed acids	Ma	spectrophotometry	SPEC
	Ro	aqua regia	A4	alkaline attack	AA	colorimetry	COL
	SO	nitric-perchloric	A5	volatilization	VO	chromatography	CHR
	PU	HF mixture	A6	ignition	IG	titration	TTN
	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemical means	CHEM
ue	TI	fusion	A8	glass fusion (XRF)	GF	miscellaneous	MISC
eam sediment	SS					fluorescence	FLUOR
mineral	HM					inductively coupled plasma	ICP

AUTHORISED OFFICER



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REPORT DATE

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23.3.08.07062

17/05/90

9827

1 OF 1

TUBE No.	SAMPLE No.	Cu	Cu	Pb	Zn	Zn	Ag	Au	AuChk	Ba
1	482122 <i>POWER TUNNEL</i>	>10000	2.43	745	>10000	2.76	5.5	0.437	0.443	280
2	482142	140	-	5	95	-	<0.5	<0.008	-	210
3	482143	25	-	70	200	-	<0.5	<0.008	-	850
4	482144	20	-	20	810	-	0.5	<0.008	-	1000
5	482145	5	-	40	170	-	<0.5	<0.008	-	1100
6	564853	5	-	5	30	-	<0.5	<0.008	-	940
7	564856	<5	-	5	15	-	0.5	<0.008	-	320
8	564857	<5	-	5	10	-	<0.5	<0.008	-	320
9	564858	<5	-	10	35	-	<0.5	<0.008	-	320
10										
11	<i>RENUMBERED</i>									
12	<i>TO 888026</i>									
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	0.05	5	5	0.05	0.5	0.008	0.008	10
24	UNITS	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
25	METHOD	101	104	101	101	104	101	309	309	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

Jenkins



ANALABS

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

Analabs - A Division of Incharge Inspection & Testing Services

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Fax No. (004) 31 8890

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SAMPLE NUMBERS

SAMPLE DESCRIPTION

ELEMENT/METHOD

552.564553.564587

RC Prep: BP005.BP009.BP016

Cu,Pb,Zn,Ag/GA101

552.564553.564587

RC

Ba,As/GX401

552.564553

RC

Ag,Au(R),Au(S)/BB309,Au/RAW,Au/Wt

557

RC

Cr,Zr,Ti/GX401

557

RC

Ti,Zr/99825

RESULTS

TO

Mr R. de Bonford
Aberfoyle Resources Limited
Exploration Division
P.O. Box 952
Burnie Tasmania 7320

REMARKS

REGIONAL ROCK CHIPS.

RESULTS

TO

RESULTS

TO

22/10/90

APPENDIX IV

KING RIVER POWER TUNNEL ASSAY RESULTS

ANALABS

Phone (09) 458 7999

52 Murray Road Welshpool W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 23.3.08.07242

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TE S LES	REFER FLOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
			DRY	CRUSH	SPLIT	PUL- VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
		Various	RC	Prep: 016							Cu,Pb,Zn,Ag/101		
		Various	RC	Prep: 016							Cu,Pb,Zn,Ag/101		
		Various	RC								Ba,As,Cr,Zr,Ti/401		
		Various	RC								Ba,As,Cr,Zr,Ti/401		
		Various	RC								Ti:Zr/9825		

REMARKS

RESULTS

TO

R. de Bomford
 Aberfoyle Resources Limited
 Exploration Division
 P.O. Box 952
 Burnie Tasmania 7320

POWER TUNNEL

RESULTS

TO

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core	WC perchloric acid A1 cold acid CA	atomic absorption AAS
split core	SC hydrochloric acid A2 specific sulphide SS	ray fluorescence XRF
cutting	CL nitric acid A3 other mixed acids MA	spectrophotometry SPEC
rock	RO aqua regia A4 alkaline attack AA	colorimetry CO
fill	FI nitric perchloric A5 volatilization VO	chromatography CH
lip	LI HF mixtures A6 ion chromatography IC	titration TI
water	WA HF and perchloric A7 pressed powder (XRF) PP	other chemical methods CM
issue	IS fusion A8 glass fusion (XRF) GF	miscellaneous MISG
ream sediment	RS	fluorescence FL
heavy mineral	HM	inductively coupled plasma mass spectrometry ICP-MS

AUTHORISED OFFICER

[Signature]

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

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TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Ba	As	Cr	Zr	Ti	
1	482680	20	5	35	<0.5	670	<2	29	161	902	
2	482683	25	75	60	<0.5	831	<2	8	269	1542	
3	482686	15	10	50	<0.5	858	<2	24	221	1120	
4	564208	10	105	30	0.5	764	<2	<5	189	1305	
5	564211	10	5	35	<0.5	611	<2	<5	266	1877	
6	564214	15	<5	25	<0.5	988	<2	24	159	1111	
7	564217	10	<5	30	<0.5	1550	<2	<5	145	1010	
8	564220	10	25	50	<0.5	999	10	9	180	1282	
9	564223	10	<5	35	<0.5	782	2	13	192	1326	
10	564226	10	<5	35	<0.5	1324	2	21	164	1238	
11	564229	10	<5	30	<0.5	860	<2	<5	179	1252	
12	564232	10	20	60	<0.5	891	<2	<5	182	1212	
13	564235	5	<5	35	<0.5	1098	<2	<5	195	1423	
14	564238	10	100	1000	0.5	1015	<2	12	223	1552	
15	564241	30	55	165	<0.5	517	9	7	244	4592	
16	564244	25	<5	125	<0.5	1296	2	8	275	3765	
17	564247	25	<5	105	<0.5	1147	<2	9	196	3022	
18	564250	10	310	35	0.5	690	<2	<5	277	2790	
19	564253	20	20	125	<0.5	833	4	29	229	1367	
20	564256	15	<5	50	<0.5	752	3	<5	259	1521	
21	564259	15	<5	40	<0.5	737	<2	19	251	1464	
22	564262	10	<5	30	<0.5	847	<2	<5	273	1576	
23	564265	15	<5	25	<0.5	1025	<2	<5	246	1470	
24	564268	10	<5	30	<0.5	914	<2	16	258	1510	
25	564271	10	<5	30	<0.5	650	<2	<5	235	1430	

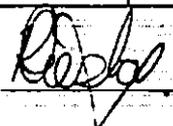
Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

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- = element not determined

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ANALYTICAL DATA

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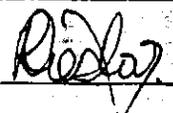
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1	564274	20	<5	50	<0.5	963	<2	17	275	1644
2	564277	15	<5	80	<0.5	829	3	<5	292	1755
3	564280	15	<5	25	0.5	1158	3	17	251	1496
4	564283	15	<5	15	<0.5	691	4	21	257	1804
5	564286	10	<5	25	<0.5	473	2	<5	273	1750
6	564289	15	<5	30	<0.5	408	<2	<5	205	1211
7	564292	10	<5	75	<0.5	1006	<2	<5	386	2045
8	564295	10	<5	60	<0.5	1040	<2	<5	303	1628
9	564298	10	5	65	<0.5	796	<2	16	263	1522
10	564855 ↑	5	20	75	<0.5	547	<2	7	236	1593
11	564858 *	10	<5	75	<0.5	586	<2	<5	282	2402
12	564861	10	<5	80	<0.5	644	<2	12	216	1444
13	564864	15	<5	40	<0.5	363	<2	8	188	1197
14	564867	10	<5	40	<0.5	706	3	21	209	1362
15	564870	5	<5	65	<0.5	1910	4	<5	328	1763
16	564873	5	<5	25	<0.5	251	<2	<5	195	1205
17	564876	10	<5	30	<0.5	275	<2	23	166	1102
18	564879	5	<5	40	<0.5	630	<2	<5	236	1127
19	564882	5	<5	30	<0.5	610	<2	10	260	1340
20	564885	10	10	85	<0.5	568	<2	<5	259	1468
21	564888	5	<5	50	<0.5	606	<2	12	220	1194
22	564891	5	<5	35	<0.5	635	<2	<5	341	1937
23	564894	10	<5	45	<0.5	502	3	16	193	1179
24	564897	5	<5	30	<0.5	738	3	<5	254	1615
25	564950	5	<5	15	<0.5	921	5	35	177	1740

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

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ANALYTICAL DATA

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TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Ba	As	Cr	Zr	Ti
1	564953	5	<5	30	<0.5	585	<2	<5	179	1314
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	0.5	10	2	5	5	50
24	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
25	METHOD	101	101	101	101	401	401	401	401	401

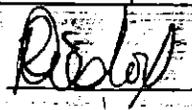
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TUBE No.	SAMPLE No.	Ti:Zr							
1	482680	5.60							
2	482683	5.73							
3	482686	5.07							
4	564208	6.90							
5	564211	7.06							
6	564214	6.99							
7	564217	6.96							
8	564220	7.12							
9	564223	6.92							
10	564226	7.50							
11	564229	6.99							
12	564232	6.66							
13	564235	7.30							
14	564238	6.96							
15	564241	18.82							
16	564244	13.69							
17	564247	15.42							
18	564250	10.07							
19	564253	5.97							
20	564256	5.87							
21	564259	5.83							
22	564262	5.76							
23	564265	5.97							
24	564268	5.85							
25	564271	5.65							

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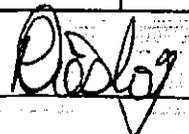
10032

5 OF 6

TUBE No.	SAMPLE No.	Ti:Zr							
1	564274	5.98							
2	564277	6.01							
3	564280	5.96							
4	564283	7.02							
5	564286	6.41							
6	564289	5.91							
7	564292	5.30							
8	564295	5.37							
9	564298	5.79							
10	564855	6.75							
11	564858	8.52							
12	564861	6.68							
13	564864	6.37							
14	564867	6.52							
15	564870	5.67							
16	564873	6.18							
17	564876	6.64							
18	564879	4.77							
19	564882	5.15							
20	564885	5.67							
21	564888	5.43							
22	564891	5.68							
23	564894	6.11							
24	564897	6.36							
25	564950	9.38 9.53							

Results in ppm unless otherwise specified
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TUBE No.	SAMPLE No.	Ti:Zr							
1	564953	7.34							
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	0.01							
24	UNITS	%							
25	METHOD	9825							

Results in ppm unless otherwise specified.
 T = element present; but concentration too low to measure
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 -- = element not determined

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5332000N

5331600N

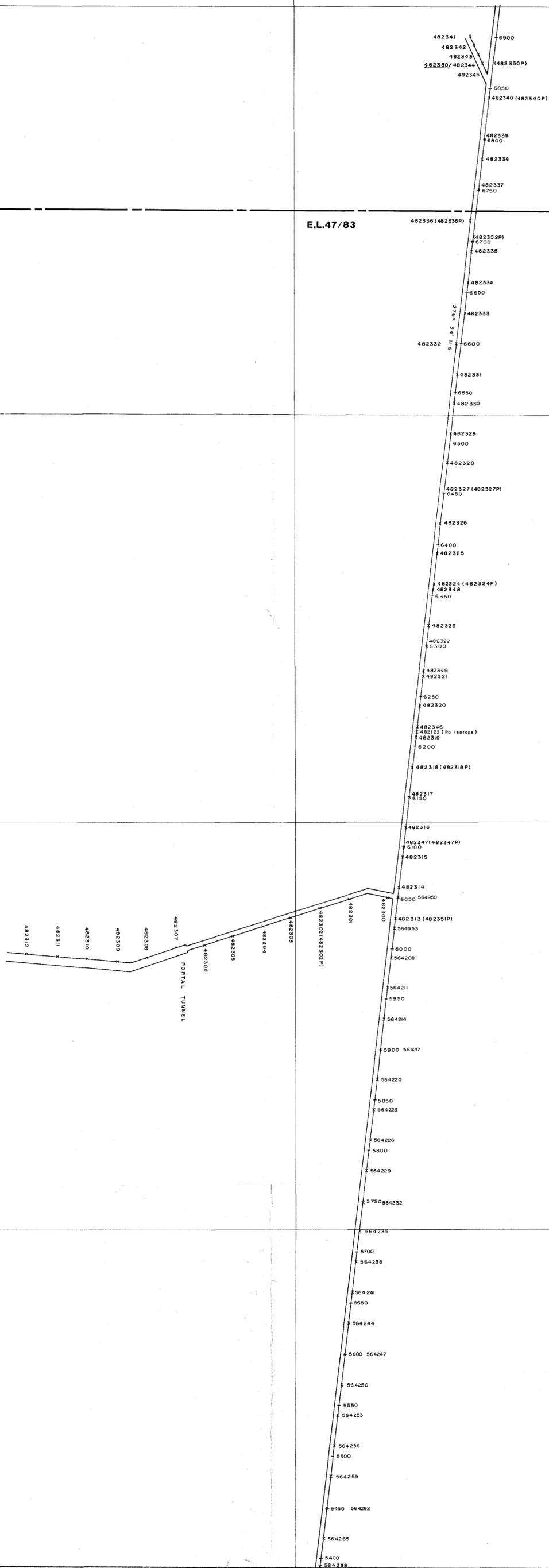
533200N

378 800 E

379 200 E

379 600 E

380 000 E



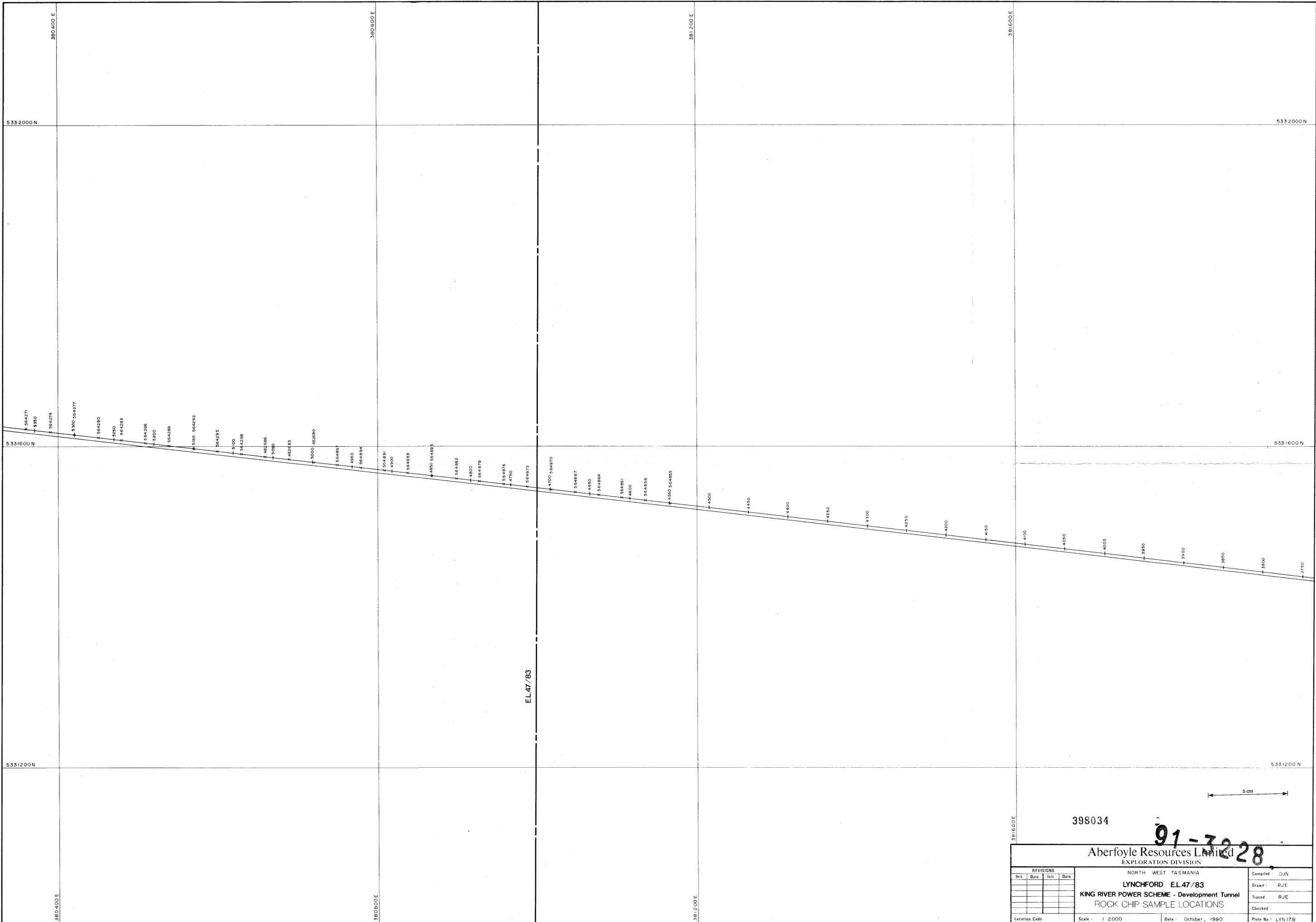
398033

91-3228.



x 482312 Rock Chip
x (482312P) Petrology

Aberfoyle Resources Limited	
EXPLORATION DIVISION	
REV. NO.	DATE
1	1989
NORTH WEST TASMANIA	
LYNCHFORD E.L.47/83	
KING RIVER POWER SCHEME-Development Tunnel	
ROCK CHIP SAMPLE LOCATIONS	
Scale 1:2000	Date - May, 1989
Location Code	Plate No. - LYN 17A
Checked	Drawn - J.L.R.
Issued	Compiled - D.J.N.



5332000 N
 5331600 N
 5331200 N
 380400 E
 380800 E
 381200 E
 381600 E
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 5331200 N

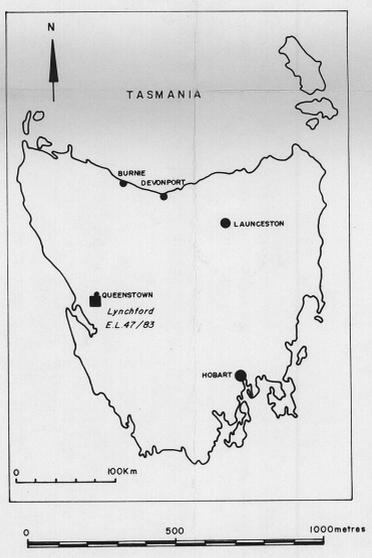
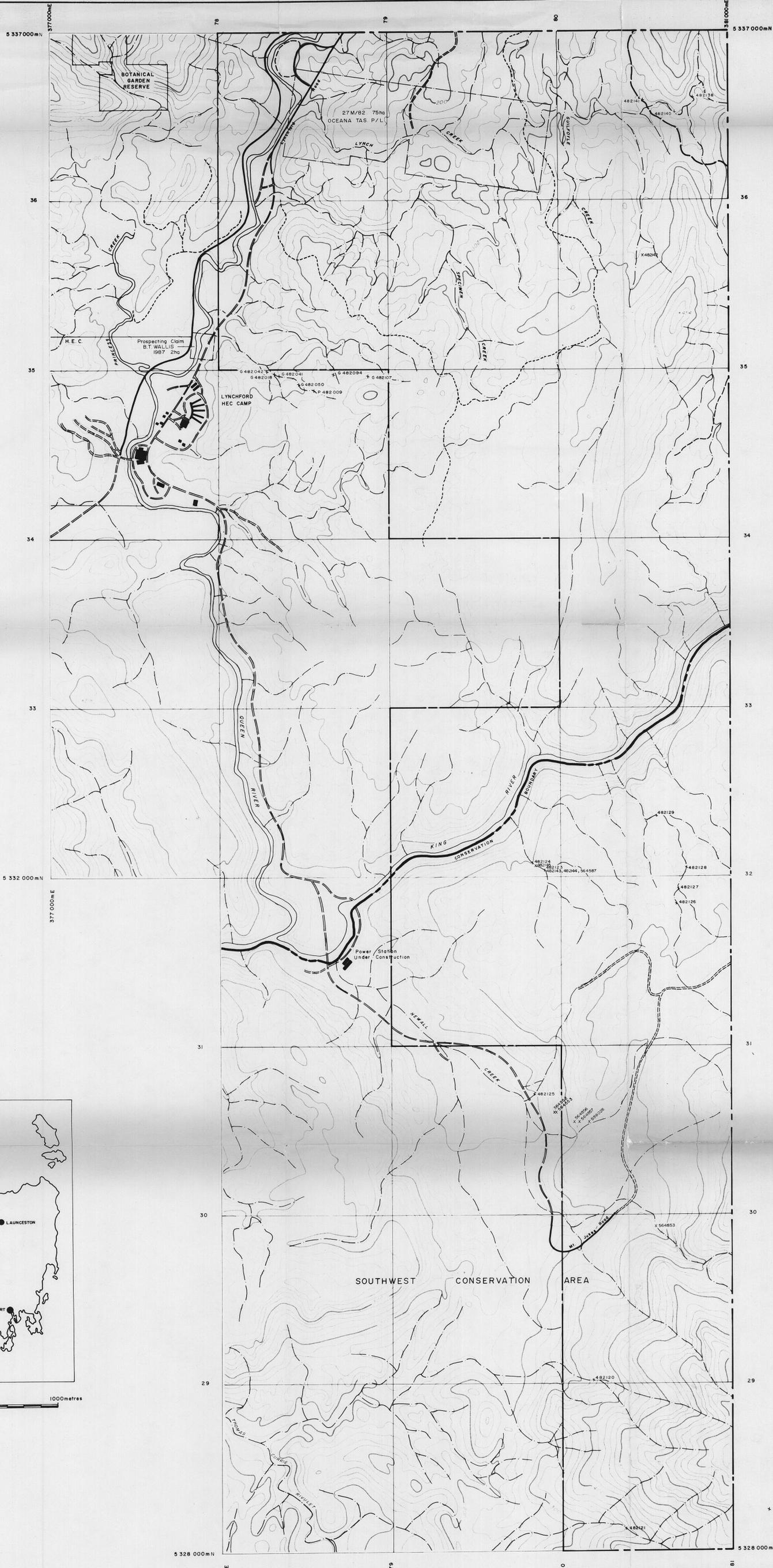
EL. 47/83

5 cm

398034

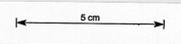
91-3228

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Init.	Date	Init.	Date																			
Location Code:		Scale: 1:2000	Date: October, 1990		Plate No: LYN 17B																	

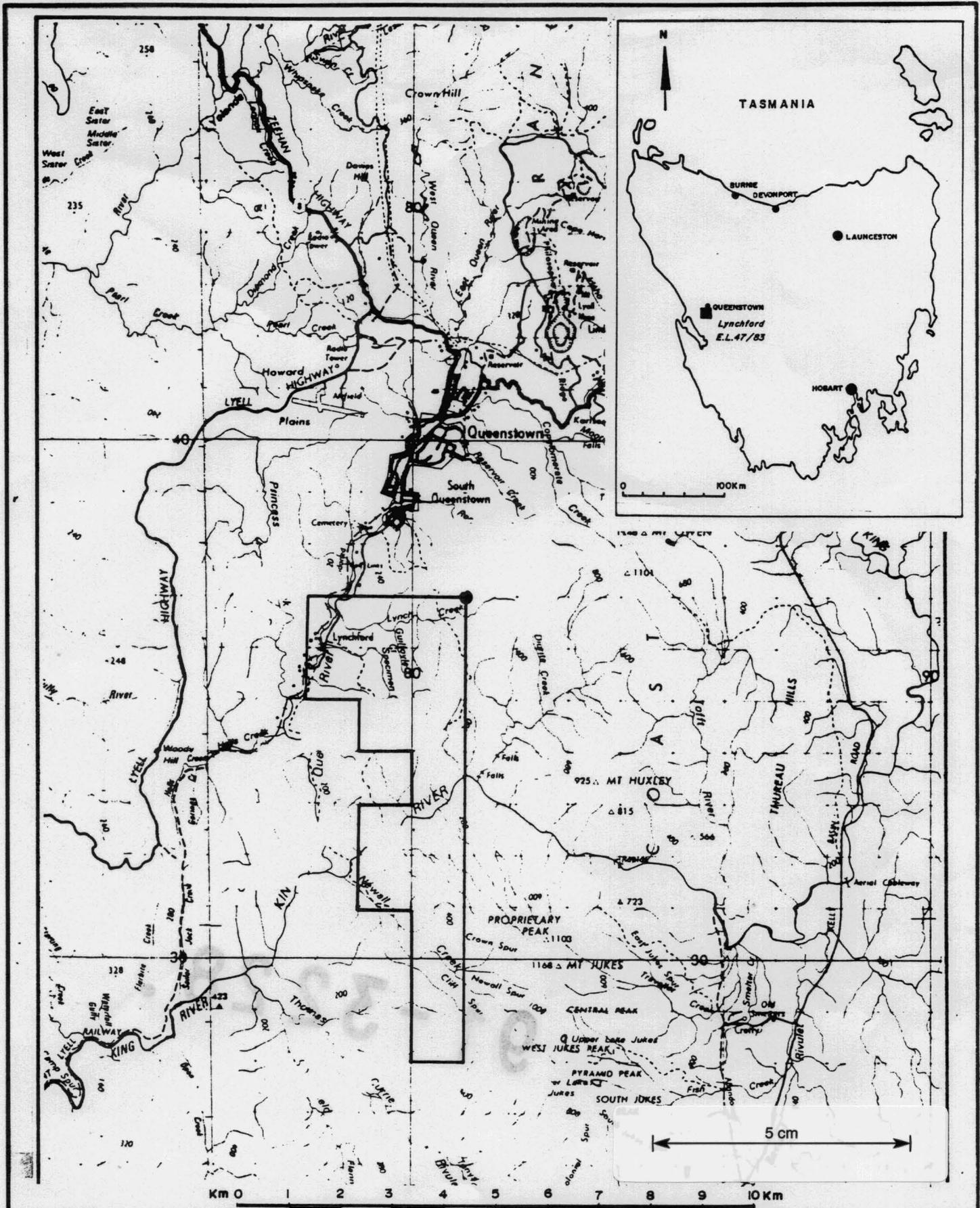


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* ROCK CHIP SAMPLE LOCATION
398035



Aberfoyle Resources Limited EXPLORATION DIVISION NORTH WEST TASMANIA LYNCHFORD E.L. 47/83-CRA J.V. ROCK CHIP SAMPLE LOCATIONS				Compiled: DJN Drawn: JLK Traced: JLR Checked: JLK Plate No: LYN 20																				
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No.	Date	Rev.	Date																					
001	09-2-90																							
002	09-03-90																							
003	11-02-90																							
004	08-12-90																							



398036

Aberfoyle Resources Limited
EXPLORATION DIVISION

NORTH WEST TASMANIA
LYNCHFORD E.L. 47/83
LOCATION PLAN

Compiled : DJN

Drawn :

Traced : JLR

Checked :

Plate No. : LYN 24

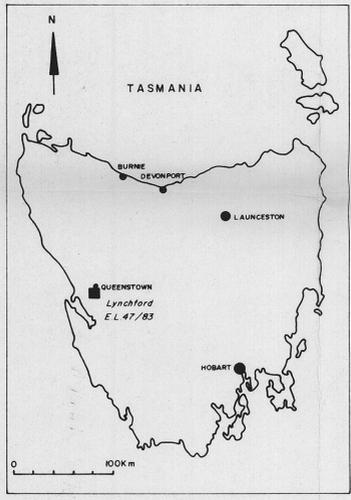
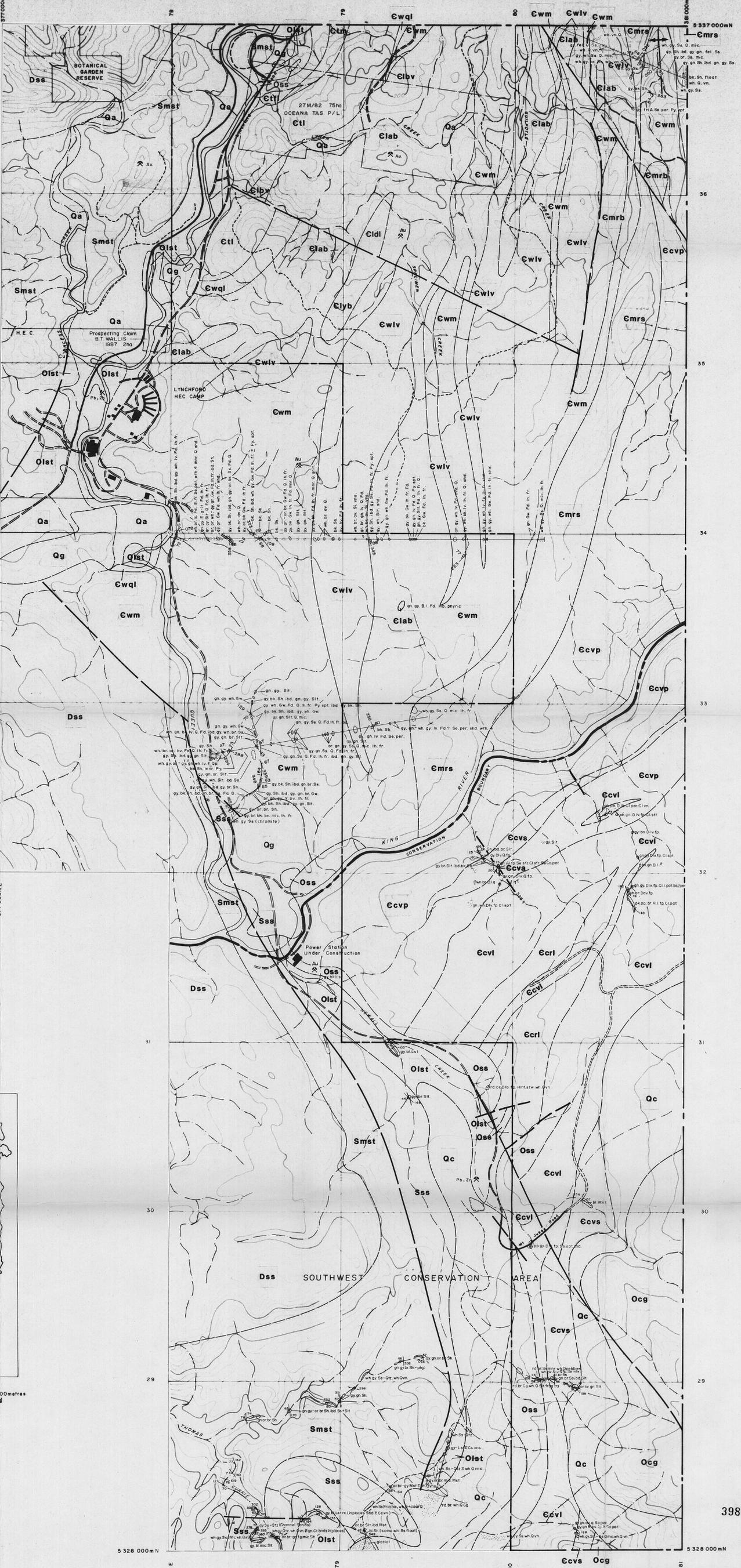
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Init.	Date	Init.	Date
RJE	31-12-90		

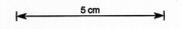
Location Code :

Scale : 1:100 000

Date : May, 1989

- QUATERNARY**
- Qa Recent alluvial Deposits
- Qc Colluvial Scree
- Qg Glacial till and outwash gravels
- DEVONIAN**
- Dss Fine grained quartz rich sandstone and minor interbedded siltstone and mudstone.
- SILURIAN**
- Smsst Mudstone, siltstone and minor sandstone
- Sss White quartz rich chromite bearing sandstone
- ORDOVICIAN**
- Olst Impure limestone and micritic limestone (Gordon Limestone)
- Oss Grey quartz sandstone minor conglomerate and chromite layers (Pioneer Beds)
- Ocg Undifferentiated Conglomerate and sandstones (Owen Conglomerate)
- CAMBRIAN**
- Tyndall Group**
- Etfl Felsic lapilli volcanoclastic
- Etln Sandstone and Mudstone
- Etli Quartz, lithic fragment rich lapilli volcanoclastic
- Elbv Breccia volcanoclastic (Quartz, Hematite rich)
- Elyb Polymict Basaltic lapilli volcanoclastic
- Elab Andesitic - Basaltic lavas & lava breccias and minor dacitic lava indicated.
- Que-Hellyer Equivalents?**
- Ecvt Dominantly Dacitic lapilli volcanoclastic & Dacitic lavas with minor felsic porphyries and odd Andesitic lava (Ecva) indicated.
- Central Volcanic Complex**
- Ecvs Black mudstone, siltstone and micaceous sandstone
- Ecrl Quartz feldspar phyrlic rhyolitic lava
- Ecvp Intrusive and extrusive quartz feldspar porphyry.
- Western Sequence**
- Ecwl Quartz rich lapilli volcanoclastic
- Ewm Dominantly black shale, siltstone, sandstone & lapilli volcanoclastics with some units dominantly lapilli volcanoclastic (Ewlv) indicated.
- Emrs Quartz rich sandstone (Miners Ridge Sandstone)
- Emrb Tholeiitic Basalt (Miners Ridge Basalt)



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Aberfoyle Resources Limited																															
EXPLORATION DIVISION																															
NORTH WEST TASMANIA																															
LYNCHFORD E.L. 47/83-CRA J.V.																															
INTERPRETIVE GEOLOGY																															
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