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ALLSTATE EXPLORATIONS NL

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LEFROY EL 1/95

ANNUAL & RELINQUISHMENT REPORT

1999 - 2000



Drill site for hole L3 twelve months after rehabilitation.

00_4452

P.B. Hills
April 2000

Annual & Relinquishment Report - Lefroy EL1/95

Allstate Explorations NL*
Hills, P.B.

EL1/95

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**LEFROY JOINT VENTURE
EL 1/95
ANNUAL & RELINQUISHMENT REPORT 1999 - 2000**

TABLE OF CONTENTS

		Page No.
1.	SUMMARY	2
2.	INTRODUCTION	3
3.	LAND TENURE	4
4.	GEOLOGY	5
5.	RESULTS OF 1999 - 2000 WORK	6
6.	RELINQUISHMENT	7
7.	CONCLUSIONS	8
9.	EXPENDITURE	9
	9.1 1997 - 98 EXPENDITURE	9
	9.2 1998 - 99 EXPENDITURE	9
	9.3 EXPENDITURE HISTORY	9
10.	REFERENCES	10

LIST OF FIGURES

Figure 1	Locality and Tenement Plan	1: 100,000
Figure 2	Geology Plan, Lefroy Area	1: 25,000
Figure 3	Drainage Sampling	1: 25,000

1. SUMMARY

EL 1/95 covering 80 skm at Lefroy in Northern Tasmania covers the historical Lefroy and Back Creek Goldfields. The licence is held by Lefroy Gold Mines P/L and is operated by Allstate Explorations NL which is currently earning 60% through sole funding of exploration under the terms of the Lefroy Joint Venture Agreement.

As out in the previous Annual Report (Purvis, 1999) expenditure to May 1999 had exceeded the statutory commitment for the current year. As a consequence of this and the pre-occupation with development of the Beaconsfield Gold Mine by Allstate Explorations NL during the reporting period, no work was completed at Lefroy during 1999 – 2000.

EL 1/95 was granted until 19th May 2005. In its current form, EL 1/95 resulted from the amalgamation of the original EL 1/95 with neighbouring EL's 21/94 and 22/94 which was ratified in January 1998. Significant relinquishment of ground in 1997 has negated the requirement for compulsory relinquishment at this time. However, the Joint Venturers have elected to relinquish a portion of the tenement in any case. Areas to be relinquished include the Den Ranges southeast of the main area of historical mining activity and along the Curries River to the west.

Areas for retention include the historical mining fields at Lefroy and Back Creek where the principal target remains extensions to known mineralisation and along Blanket Creek to the north of the Lefroy township where the potential exists for discovering deep lead style mineralisation beneath Tertiary basalt.

Where relevant, this report reiterates the earlier work of Keele (1996), Purvis (1997; 1998; 1999) and Purvis and Hills (1997a) verbatim.

2. INTRODUCTION

Lefroy lies 12 km east of George Town near the north coast of Tasmania. The goldfield was one of the earliest discovered in Tasmania (1869) and has recorded production, mostly pre-1904, of 187,000 oz of gold (Keele, 1996). This gold came from auriferous quartz reefs within the Early Ordovician to Early Devonian Mathinna Beds, a monotonous sandstone-siltstone-shale sequence.

The goldfield and surrounding area is covered by EL 1/95 (Lefroy) of 80 skm, which is the amalgamated remnant of three licences totalling 451 skm. The EL is held by Lefroy Gold Mines Pty Ltd, a 100% subsidiary of Central Kalgoorlie Gold Mines NL. In July 1997 Allstate Explorations NL entered into a joint venture with Lefroy Gold Mines to earn 60% equity in the EL through the expenditure of \$700,000 over four years.

Lefroy Gold Mines were initially attracted to Lefroy by the near-total lack of systematic exploration, particularly drilling, in the modern era. Potential for further high-grade quartz vein-hosted gold deposits and bulk low-grade open-cut resources was recognised, but only the latter target type was tested by Lefroy Gold Mines. Work by Allstate Explorations has focussed on former target by attempting to locate previously unknown extensions to known reef systems. In this endeavour Allstate Explorations has completed a single diamond drill hole to test the adjacent Pinafore and Chum reef systems 1 km north of the Lefroy township. It has also completed three diamond drill holes with two daughter holes to test the Volunteer reef system 1.5 km south of the township. Diamond drilling to date has totalled 1,510 m (Purvis, 1998; 1999).

No work was completed in the past 12 months. During this period, Allstate Explorations, which at present is sole funding exploration, was pre-occupied with the final stages of redevelopment of the nearby Beaconsfield Gold Mine. This redevelopment, more-so than a perception of the prospectivity of the Lefroy field dictated the need for a hiatus in activity. The statutory commitment for expenditure was met by accelerated expenditure during the previous reporting period.

The current report serves to update statutory obligations and provide a vehicle for partial relinquishment of the tenement.

3. LAND TENURE

EL 1/95 (Lefroy) currently covers 80 skm however it is intended that this be reduced to 40 skm at the current anniversary. The remaining tenement is due to expire on 19 May 2005.

The EL is held by Lefroy Gold Mines Pty Limited, a 100% owned subsidiary of Central Kalgoorlie Gold Mines NL.

In October 1994 Lefroy Gold Mines was granted two EL's surrounding Lefroy: EL 21/94 (Bell Bay) of 219 skm and EL 22/94 (Pipers River) of 202 skm. The contiguous EL 1/95 (Lefroy) covering 30 skm over the main goldfield area was granted to Lefroy Gold Mines in May 1995. All licences carried tenure periods of 10 years.

In October 1996, EL 21/94 (Bell Bay) and EL 22/94 (Pipers River) were reduced to 77 skm and 67 skm respectively. In July 1997 Allstate Explorations NL entered into a joint venture agreement with Lefroy Gold Mines on all three EL's whereby Allstate was required to spend at least \$200,000 by 31 July 1999, and a further \$500,000 by 31 July 2001 to earn 60% equity. The first expenditure threshold was met and the future of the joint venture is currently being negotiated.

In October 1997, 90 skm was relinquished from the Bell Bay and Pipers River licences. Immediately following the reduction the remaining ground in all three tenements was amalgamated into the current single consolidated EL 1/95 (Lefroy), comprising two areas totalling 80 skm. The amalgamation was ratified by the Director of Mines on 14 January 1998 with tenure to 19th May 2005.

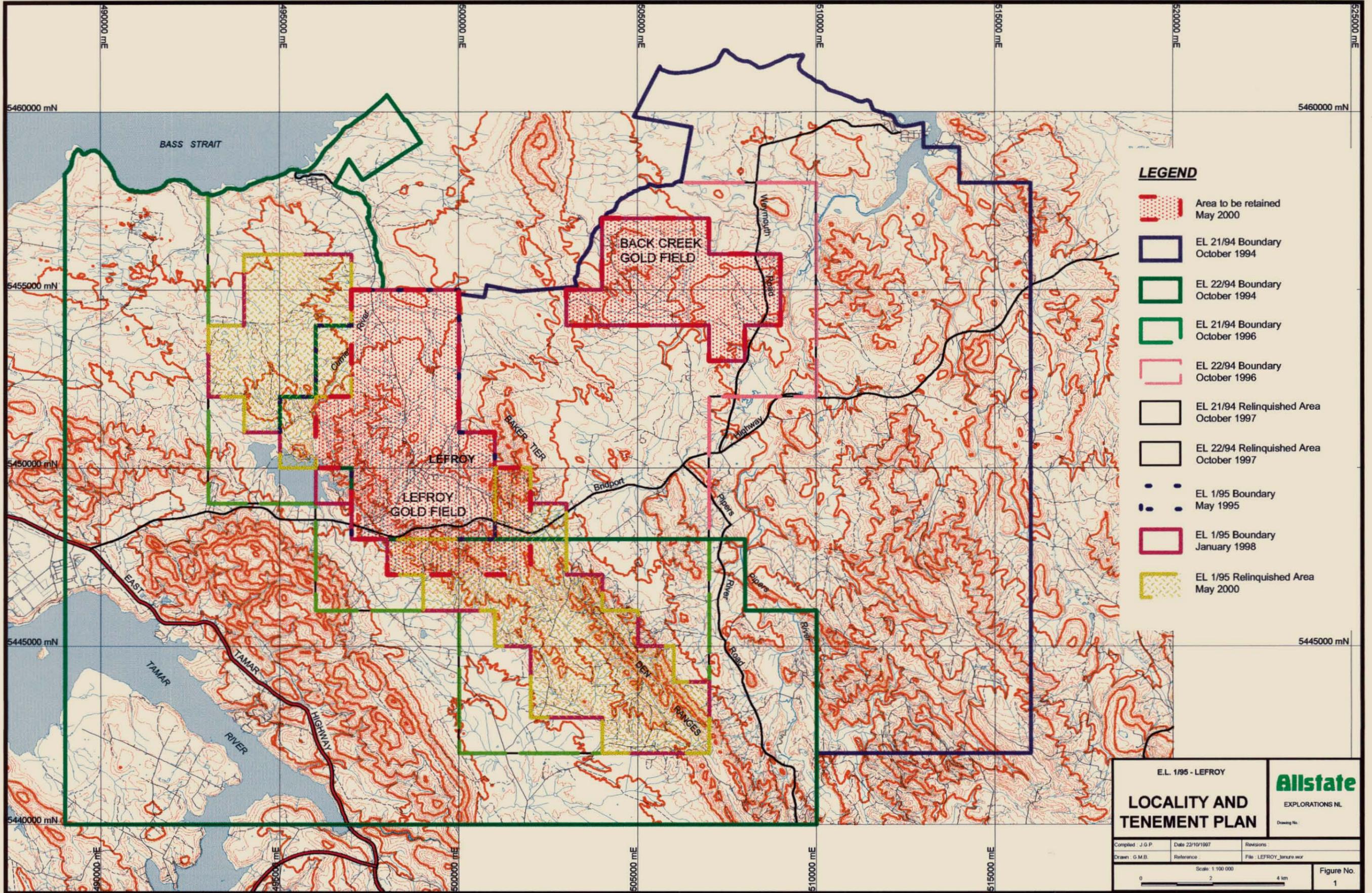
It is the intention of the joint venturers to further reduce the size of the tenement by relinquishment of a total of 40 skm in the Den Ranges and Curries River areas from 19th May 2000. This represents a 90% reduction to date in the original tenement granted.

EL 1/95 comprises Crown Land, State Forest-Multiple Use Forest Land, part of the Lefroy RAP and private property.

Within the licence area but excluded from it are:

- a small area of Crown Reserves
- 664 ha of Mining Leases (mainly in the Back Creek area).

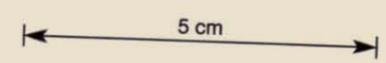
The history of the tenure and the retained tenement are illustrated in figure 1.



LEGEND

-  Area to be retained May 2000
-  EL 21/94 Boundary October 1994
-  EL 22/94 Boundary October 1994
-  EL 21/94 Boundary October 1996
-  EL 22/94 Boundary October 1996
-  EL 21/94 Relinquished Area October 1997
-  EL 22/94 Relinquished Area October 1997
-  EL 1/95 Boundary May 1995
-  EL 1/95 Boundary January 1998
-  EL 1/95 Relinquished Area May 2000

E.L. 1/95 - LEFROY		Allstate EXPLORATIONS NL
LOCALITY AND TENEMENT PLAN		
Completed: J.G.P.	Date: 22/10/1997	Revisions:
Drawn: G.M.B.	Reference:	File: LEFROY_tenure.wor
Scale: 1:100 000		Figure No. 1



4. GEOLOGY

The following description of the geology of the Lefroy district is taken from Purvis (1998) verbatim.

The Lefroy Goldfield is hosted by sediments of the Early Ordovician to Early Devonian Mathinna Group, a thick deep-water turbiditic sediment sequence. Exposure is poor as the rocks weather readily. The Palaeozoic sequence is extensively covered by Tertiary basalt and Tertiary-Quaternary gravels and sands. See Figure 2.

The Mathinna Beds at Lefroy comprise a folded and cleaved sequence of interbedded quartz-mica sandstones, siltstones and grey-black shales, striking NW and generally dipping at moderate angles to the SW. These rocks have been described by Powell and Baillie (1992) as being in the transitional contact zone between the basal unit of the Mathinna Group, the Stonyhead Sandstone, and the overlying unit to the NE, the Turquoise Bluff Slate. Although natural outcrop tends to be dominated by sandstone, roadcuts, drillholes, mine exposures and dumps show that the finer-grained rocks are equally represented.

At Lefroy the sediments are affected by conspicuous chlorite-sericite alteration strong enough to cause a regional-scale magnetic depletion centred on the goldfield. Within this magnetically depleted area there are extensive local magnetic lows, some of which appear directly associated with mined gold shoots (eg: at the Volunteer and Reward reefs). However, widespread shallow drilling of alteration anomalies in 1997 found they were unmineralised (Purvis, 1997). It is believed the alteration had an important precursor role in the location of the goldfield, probably by reducing the competency of the host rocks so that they later became a locus for the mineralised structures.

The Lefroy auriferous quartz reefs are hosted by large east-west faults dipping steeply north or south. Some of these structures, eg: the Chum, Pinafore and the Volunteer, are 1-2km long with crush zones 10-20m wide. At least 30 parallel reefs are known, arranged like rungs of a ladder over a distance of 4.5km along the NW strike of the sediments. About 165,000 oz of gold (90% of Lefroy's total production) has come from just four of these reefs: the Chum, Pinafore, New Native Youth and Volunteer.

Within the reefs the gold occurs in high-grade shoots. Historically, mined grades were of the order of 30g/t Au. Almost all the known (now mined out) shoots were less than 130m deep and only traces of gold were found below 150m from surface, although in two cases (the Pinafore and Volunteer) the reefs were tested by underground development to depths of 370-400m. The only notable associate of the gold mineralisation is arsenopyrite.

5. RESULTS OF 1999 - 2000 WORK

Due to the pre-occupation of the sole-funding joint venture partner Allstate Explorations NL with construction of the Beaconsfield Gold Mine during the reporting period, no work was carried out at Lefroy during 1999 – 2000.

Earlier accelerated expenditure by Allstate Explorations NL negated the requirement for expenditure to satisfy the statutory commitment for the current reporting year.

6. RELINQUISHMENT

It is the intention of the joint venture partners to relinquish half the current tenement at the current anniversary. This is the third occasion on which the area of the Lefroy tenement has been reduced and reflects an increasing desire by the Joint Venture Partners to focus exploration on only those areas deemed to have the highest prospectivity. The areas to be relinquished include approximately 22 skm along the Den Range southeast of Lefroy and 18 skm along Curries River west and northwest of Lefroy.

To date, no work has been completed in the areas to be relinquished aside from that reported by Purvis and Hills (1997a) in respect of the previous relinquishment. Those activities included

- Reconnaissance BLEG drainage survey (Duncan, 1995).
- Further processing and interpretation of the NETGOLD aeromagnetics (Keele, 1995).
- Processing and interpretation of Landsat data (Keele, 1995; 1996).
- Follow-up -80 mesh stream sediment sampling (Purvis, 1996).
- Re-imaging and interpretation of NETGOLD radiometrics (Purvis, 1997; Purvis and Hills, 1997b).

All the above-mentioned reports with the exception of Keele (1996) refer to the area previously covered by EL 21/94 and EL 22/94. Although a small portion of both these original EL's has been retained, particularly at Back Creek, the reports are no longer considered to be of a confidential nature and are considered to be available to the reader. Consequently, it is not the intention of the author to reiterate the results of all these studies. The results were previously summarised in their entirety by Purvis and Hills (1997a). However, the results of the drainage and stream sediment surveys, representing the only hard geological data gathered as part of the work programme are re-presented in figure 3.

Since the 1997 relinquishment, all activity has been confined that portion of the tenement being retained.

7. CONCLUSIONS

In relinquishing a sizeable portion of the tenement, the Joint Venture Partners recognise that all activity over the remaining period of the EL will be focussed on or near known targets which encompass the historical mining field. With few exceptions, all the past producers and known prospects at Lefroy occur within the immediate environs of the historical Lefroy and Back Creek workings.

The potential for deep-lead style mineralisation beneath Tertiary basalt flows now obscured by Recent gravel deposits along Blanket Creek to the north of the Lefroy township is seen as the most likely area for green-fields success. Similarities between this area and the eastern portion of the Back Creek goldfield provide the model for exploration.

In the short term, ongoing systematic drilling for extensions to known reef structures is seen as the most likely route to exploration success.

9. EXPENDITURE

9.1 1999 - 2000 EXPENDITURE

There was no exploration expenditure on EL 1/95 in the period May 1999 to April 2000. Total expenditure on the Lefroy tenements remains at \$806,308 as illustrated in the table below. The expenditure to date is sufficient to satisfy statutory requirements.

9.2 2000 - 2001 EXPENDITURE

No work programme has been decided for the coming year. A commitment to expenditure of \$80,000 in respect of the reduced tenement is acknowledged and will be met through the vehicle of a small drilling programme to commence early in 2001.

9.3 EXPENDITURE HISTORY

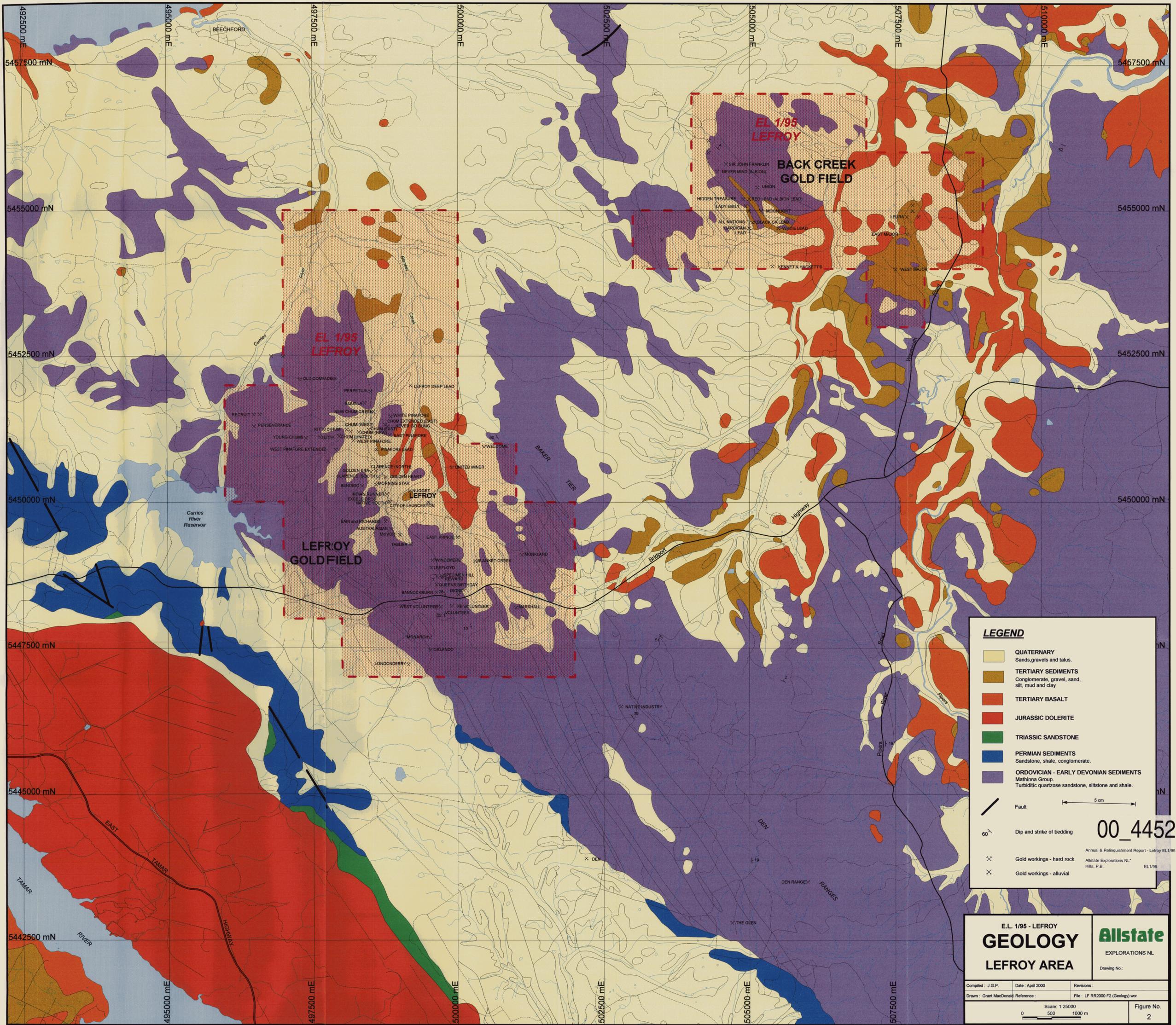
The following table illustrates expenditure by Lefroy Gold Mines P/L and the Lefroy Joint Venture since the granting of the original licences Bell Bay EL 21/94 and Pipers River EL 22/94 in October 1994.

	EL 21/94	EL 22/94	EL 1/95	Total
Commitment to Date	(164,600)	(148,800)	(465,000)	(778,400)
Expenditure to Date	87,002	68,708	650,598	806,308
Surplus / (Deficit)	(77,598)	(80,092)	185,598	27,908*
Commitment 2000 - 01	Nil	Nil	(80,000)	(80,000)
Requirement 2000 - 01	Nil	Nil	(80,000)	(80,000)

*It is recognised that this surplus cannot be carried over for a second year.

10. REFERENCES

- Duncan, D.McP., 1995 Results of Stream Sediment Survey, EL's 21/94 and 22/94, Lefroy, Tasmania. Unpublished report to Lefroy Gold Mines P/L, May 1995. (Appendix 1 in Keele (1995) below).
- Keele, R.A., 1995. Annual Report for Gold Exploration over EL 21/94 Bell Bay & EL 22/94 Pipers River, NE Tasmania. Lefroy Gold Mines Pty Ltd Unpublished Closed File Report, September 1995.
- Keele, R.A., 1996. Annual Report for Gold Exploration over EL 1/95 Lefroy, NE Tasmania. Lefroy Gold Mines Pty Ltd Unpublished Closed File Report, April 1996.
- Powell, C.M.A. and Baillic, P.W., 1992. The Tectonic Affinity of the Mathinna Group in the Lachlan Fold Belt. *Tectonophysics*. 214 : 193-209.
- Purvis, J.G., 1996. Bell Bay EL 21/94 & Pipers River EL 22/94. Annual Report October 1995 - September 1996. Lefroy Gold Mines Pty Ltd Unpublished Closed File Report, September 1996.
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- Purvis, J.G. and Hills, P.B., 1997a. Bell Bay EL 21/94 & Pipers River EL 22/94 NE Tasmania - Areas to be Relinquished, October 1997. Allstate Explorations NL. Unpublished.
- Purvis, J.G. and Hills, P.B., 1997b. Bell Bay EL 21/94 & Pipers River EL 22/94. Annual Report 1996-97. Allstate Explorations NL. Unpublished.



LEGEND

- QUATERNARY
Sands, gravels and talus.
- TERTIARY SEDIMENTS
Conglomerate, gravel, sand, silt, mud and clay
- TERTIARY BASALT
- JURASSIC DOLERITE
- TRIASSIC SANDSTONE
- PERMIAN SEDIMENTS
Sandstone, shale, conglomerate.
- ORDOVICIAN - EARLY DEVONIAN SEDIMENTS
Mathinna Group.
Turbiditic quartzose sandstone, siltstone and shale.

Fault
 Dip and strike of bedding
 Gold workings - hard rock
 Gold workings - alluvial

5 cm
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Hills, P.B. EL1/95

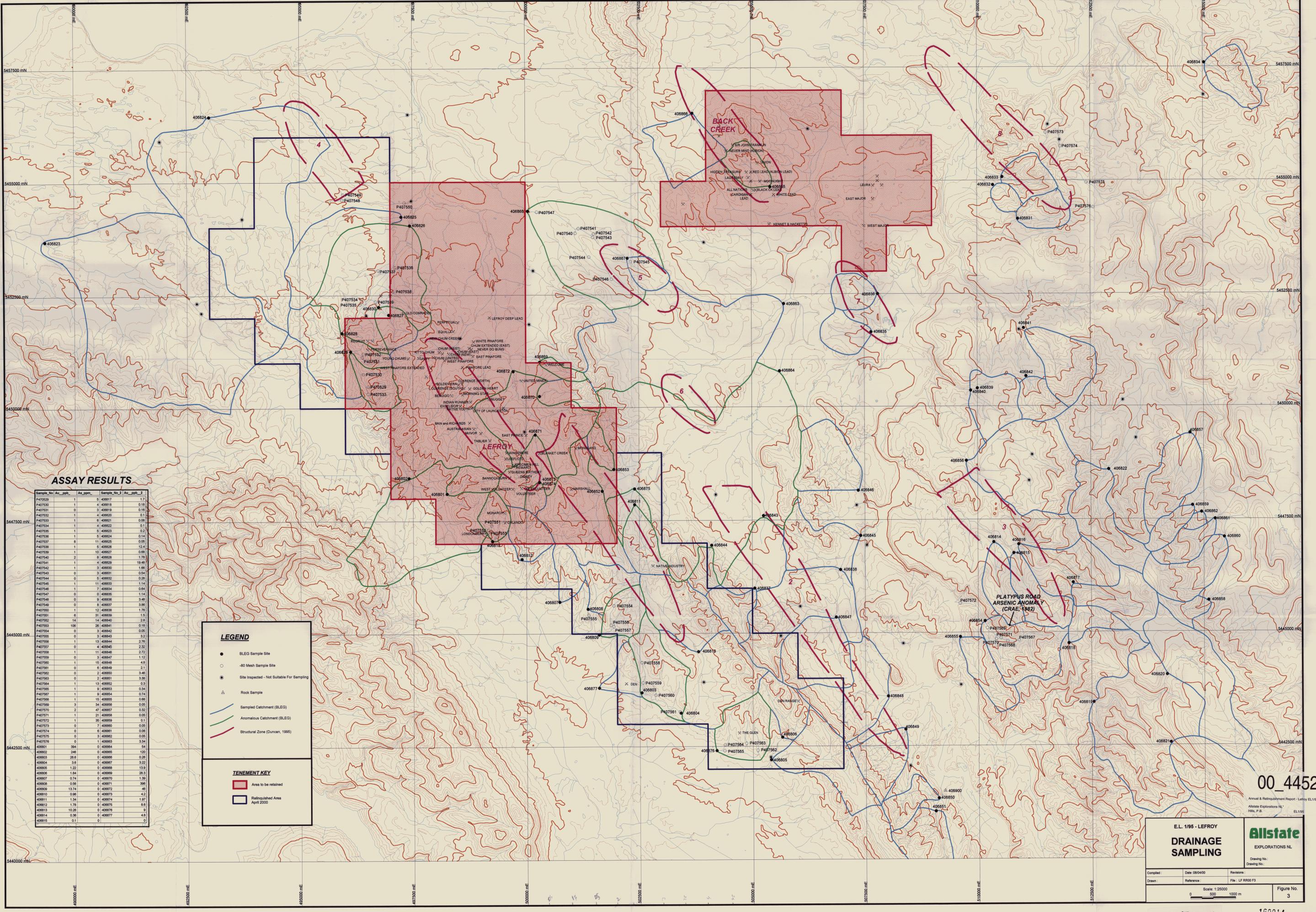
E.L. 1/95 - LEFROY

GEOLOGY

LEFROY AREA

Allstate
EXPLORATIONS NL
Drawing No.:

Compiled : J.G.P.	Date : April 2000	Revisions :
Drawn : Grant MacDonald Reference :	File : LF RR2000 F2 (Geology).wor	
Scale: 1:25000 0 500 1000 m		Figure No. 2



ASSAY RESULTS

Sample No	Au_ppm	Sample No_2	Au_ppm_2
P407501	5	408611	1.7
P407502	1	408612	0.16
P407503	0	408613	0.16
P407504	1	408614	0.09
P407505	1	408615	0.09
P407506	1	408616	0.1
P407507	8	408617	0.2
P407508	1	408618	0.14
P407509	1	408619	0.05
P407510	1	408620	12.4
P407511	1	408621	0.88
P407512	2	408622	1.78
P407513	1	408623	19.48
P407514	1	408624	1.86
P407515	1	408625	0.34
P407516	0	408626	0.26
P407517	1	408627	1.14
P407518	1	408628	0.64
P407519	1	408629	1.14
P407520	0	408630	3.48
P407521	0	408631	3.86
P407522	1	408632	1.76
P407523	6	408633	1.5
P407524	14	408634	2.8
P407525	106	408635	0.18
P407526	0	408636	0.06
P407527	0	408637	3.2
P407528	1	408638	2.76
P407529	0	408639	2.32
P407530	1	408640	2.72
P407531	0	408641	1.12
P407532	1	408642	4.8
P407533	0	408643	2.1
P407534	0	408644	3.48
P407535	0	408645	3.38
P407536	1	408646	0.3
P407537	1	408647	0.34
P407538	1	408648	0.74
P407539	1	408649	0.88
P407540	3	408650	0.05
P407541	2	408651	0.32
P407542	1	408652	0.05
P407543	1	408653	0.1
P407544	0	408654	0.06
P407545	0	408655	0.06
P407546	0	408656	3.34
P407547	384	408657	84
P407548	248	408658	120
P407549	26.6	408659	0.26
P407550	3.6	408660	3.32
P407551	1.22	408661	13.6
P407552	1.84	408662	28.3
P407553	0.74	408663	1.39
P407554	3.86	408664	3.86
P407555	13.74	408665	46
P407556	0.96	408666	4.2
P407557	1.34	408667	1.97
P407558	1.78	408668	8.8
P407559	10.26	408669	9
P407560	0.36	408670	4.8
P407561	0.1	408671	0

LEGEND

- BLEG Sample Site
- 80 Mesh Sample Site
- ⊙ Site Inspected - Not Suitable For Sampling
- ▲ Rock Sample
- Sampled Catchment (BLEG)
- Anomalous Catchment (BLEG)
- Structural Zone (Duncan, 1995)

TENEMENT KEY

- ▨ Area to be retained
- ▭ Relinquished Area April 2000

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DRAINAGE SAMPLING

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 EL1/95

Completed: Date 05/04/00 Revisions:
 Drawn: Reference: File: LF RR00 F3
 Scale: 1:25000 Figure No. 3
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