DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

CONFIDENTIAL REPORT 824
E.L. 806, ENV. 3451
DETAILED INDEX ON LAKE PHILLIPSON COAL DEPOSIT

Compiled by

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CONTENTS

SECTIONS 7 TO 9 RECORD ALL WORK CARRIED OUT FROM 12TH FEBRUARY 1981 ONWARDS

FIGURES

PREFACE

INTRODUCTION

This microfiche series provides a complete record of all reported exploration activities and related studies (with the exception of feasibility studies) carried out by, and prepared for, Utah Development Company on their tenements located at Lake Phillipson and the surrounding region. Preparation of a detailed index was considered essential because of the large amount of material available.

The data are divided into two parts. The first part, sections 1 to 6, records all reported work performed prior to 12th February 1981, the commencement of Exploration Licence 806. The second part, sections 7 to 9, details work after February 1981 when an exploration programme to enable new assessment and to update feasibility studies was carried out and reported.

The index is recorded on microfiche number one.

TENEMENT HISTORY

Utah Development Company has held 8 tenements at Lake Phillipson over the period May 1971 to May 1982. Tenement history is summarized in Table 1 and illustrated in Figures 1 to 3.

The latest Exploration Licence, E.L. 806, expired in May 1982 and no new licence was issued. As of 1st June, 1983 the proposed status of the Lake Phillipson Area was that it be reserved from the operation of parts IV, V, VI, VIA, VII and VIII of the Mining Act, 1971-1981. The deposit is available to any company or organisation subject to negotiation of a suitable exploration committment. The area for reservation is illustrated in Figure 4.

Table 1: Tenement Data - Lake Phillipson Coal Deposit

Tenement Number	Commencement Date	Expiry/ Relinquishment Date	Period Years	Area km^2
S.M.L. 581	27.05.71	26.08.71	0.25	15 302
622	26.08.71	25.08.72	1	11 533
E.L. 14	05.10.72	04.10.73	1	11 208
100	15.10.73	14.01.74	0.25	1 573
125	18.02.74	17.02.76	2	4 521
250	17.06.76	16.06.78	2	4 533
433	23.11.78	22.11.80	2	4 447
806	12.02.81	11.02.82	1	4 447
806		11.05.82	0.25	3 102

INDEX ORGANIZATION

Each page, plan and stratigraphic section submitted by Utah Development Company has been given a unique number. In the index these are referred to as page numbers and are referenced to a microfiche number. The numbering is sequential beginning with number 1 the first page of the preface and is followed by the index and sections 1-9.

Sections 1 and 7

Sections 1 and 7 record geological reports by Utah Development Company, section 1 before February 1981 and section 7 after this date. They are chronologically ordered by the types of report:

1.1 and 7.1 quaterly reports,
1.2 and 7.2 exploration drilling reports and
1.3 and 7.3 other reports and correspondence

Eg Quaterly Report Kingoonya Area from April 5 to July 4, 1973. This was the third quarterly report submitted to S.A.D.M.E. and is indexed as 1.1.3. The text, table and sections of this report are indexed as a, b and c respectively.

Sections 2 and 8

Feasibility/evaluation reports written by Utah Development Company form sections 2 to 8 of the index. The feasibility report in section 8 is not publically available and so is absent from the microfiche series.

Sections 3 and 9

Sections 3 and 9 list work by outside consultants who were commissioned by Utah Development Company and are ordered on the basis of report subject and date. In section 3 there are six subject categories:

3.1 analytical reports,
3.2 hydrological reports,
3.3 power station feasibility reports,
3.4 surveyor's reports,
3.5 computerized data and
3.6 other reports.

Eg AUSTRALIAN GROUNDWATER CONSULTANTS PTY LTD, 1974. Water resources assessment for Lake Phillipson - South Australia prepared for Utah Development Company. *Australian Groundwater Consultants Pty Ltd job 277A* (unpublished).
This is the first hydrological report submitted to S.A.D.M.E. and is indexed as 3.2.1. The text, tables, and plans and figures are indexed as a, b and c respectively.

The S.A.D.M.E. report listed in section 3.6 is not publically available and so is absent from the microfiche series.

Section 4

Lithological logs and geophysical downhole logs of drillholes which were drilled before 1981 and submitted to S.A.D.M.E. form section 4. The section does not represent all drillholes since some have no available logs. Drillholes are divided into four categories based on their locations. These are:

4.1 Main Basin,
4.2 West Basin,
4.3 Wallira Trough and
4.4 Scout exploration drillholes which fall outside areas listed in 1 to 3.

The computer generated logs presented in section 3.5a are a repeat of the handwritten lithological logs forming section 4.2. Computer generated logs are only included in section 4.2 where the handwritten original was absent.

All drillholes have unique numbers and with the exception of 4.4 they are ordered by traverse and drillhole number. Drillholes in 4.4 are recognized by the absence of any traverse number, for example S20. Main Basin drillholes which are located along a traverse are distinguished from those in 4.2 and 4.3 by the absence of any traverse prefix, for example drillhole number 3 on traverse 030 has the unique number 030-03. Main Basin drillholes which are not located on a traverse are prefixed with M, for example M-62. Drillholes beginning with P are located in the West Basin and those with W in the Wallira Trough, respective examples are P360-01 and W2-08.

Most lithological logs were submitted independently to reports. Logs which were attached to a report have been presented in sequential order with the other logs which form section 4.

Sections 5 and 6

The contents pages provided in sections 5 and 6 are a cross referencing index between pre 1981 plans/stratigraphic sections and reports. Section 5 index distinguishes between plans showing drillhole locations, 5.1, and those showing coal seam limits, 5.2. They are arranged in chronological order. In section 6 there are 4 categories in the index as follows:

6.1 Longitudinal sections along axis of Main or West Basin,
6.2 cross sections perpendicular to 6.1,
6.3 sections other than those in 6.1 and 6.2; they may be in the Main Basin, West Basin or Wallira Trough and
6.4 block diagrams and fence diagrams.

Except for 6.4 sections are ordered by traverse. Traverses with no prefix are in the Main Basin, those beginning with P in the West Basin and those with W in the Wallira Trough. Due to ongoing exploration activities many sections were updated. Where there is more than one version of the same section they are ordered chronologically. Some plans and stratigraphic sections were submitted separately to reports but now all plans and sections are presented as part of an appropriate report indexed in sections 1 to 3.

Eg You wish to obtain the latest version of a stratigraphic cross section of traverse 060.
Section 6.2.1 lists cross sections in the Main Basin.

	Page No.	Micro-fiche No.
Drill Traverse 060 Sheets 1 & 2 Original Scale H:V = 5 000:500 Ref. 1.1.3.c	102-103	8-9
Drill Traverse 060 Sheet 1 & 2 Original Scale H:V 2 400:2 400 Ref. Sheet 1 1.1.5.c Ref. Sheet 2 1.1.5.c, 1.2.2.f	146-147 346	19-20 48
Drill Traverse 060 Generated 08.11.76 Original Scale H:V = 5 000:500 Ref. 3.5.1.b	1580	91

The highest page number is usually the most recent version of a traverse. In this example it is page number 1580 on microfiche 91.

DATA SELECTION

This microfiche series has been designed to allow extraction of varying categories of material as indicated below.

1. Complete series, sections 1 to 9.

2. Individual sections, for example,
   (i) reports by Utah Development Company, sections 1, 2 and 7 and
   (ii) reports by outside groups, sections 3 and 9.

3. Parts of a section, for example,
   (i) Quarterly Report for April 5 to July 4 1973, section 1.1.3 and
   (ii) all lithological descriptions, section 4.1.

4. Copies of all plans indexed in section 5.

5. Copies of all stratigraphic sections indexed in section 6.

In sections 5 and 6 the order of plans and sections received will be the same as the order presented in index sections 1 and 3.5 where they are listed with their appropriate reports.

When requesting data the microfiche numbers are sufficient.

	Page No.	Micro-fiche No.
Drill Traverse P460 Generated 07.06.76	1617	98
Drill Traverse P462 Generated 27.07.76	1618	98
Drill Traverse P466 Generated 27.07.76	1619	99
Drill Traverse P470 Generated 07.06.76	1620	99

3.6 OTHER

3.6.1 WIGGLESWORTH, K.F. AND AUSTIN, P.M., 1979. Brief review of Utah's performance at Lake Phillipson. *S. Aust. Dept. Mines and Energy confidential report* (unpublished).

Not available.

5. PLANS SHOWING DRILLHOLE LOCATIONS AND/OR COALS SEAM LIMITS

All plans are tabulated and referenced to reports.
They are located with the reports.
Original scales are listed

Page No. | Micro-fiche No.

8 FEASIBILITY REPORT BY UTAH DEVELOPMENT COMPANY

8.1 YOUL, M.J., 1982. Lake Phillipson Mine preliminary feasibility study January 1982. *Utah Development Company, Technical Services & Exploration Departments report* (unpublished).

Text

Not Available

Muddy Tank 1.
- 29. 605000
134. 756110.
Between Pelmain. 45 & 123.7m P.

ARKEETA 1.
- 29. 581817 31.9'
134. 606410. 36.38'
Bete 1317 – 1345. m. Malgaldij Cycles. Ap

Comm. Railways 14
- 29. 722500
134. 702900.
Alm. 2.5 & 9m. Malgaldij Cycles. Ap

Comm. Railways 6
- 29. 374464
134. 587880.
No Bearch. – stopped at 67.5m. still in Pelmain.

Comm Railway 13
- 29. 574014
134. 555160
Pelm at. 29m. – TD

No. 6869. - 29. 403225
134. 991420
Alm – 50-56m. Malgaldij Cycles.

MPW 1. -29. 835314
134. 649090.
Alm 20 - 22m. Malgaldij Cycles.

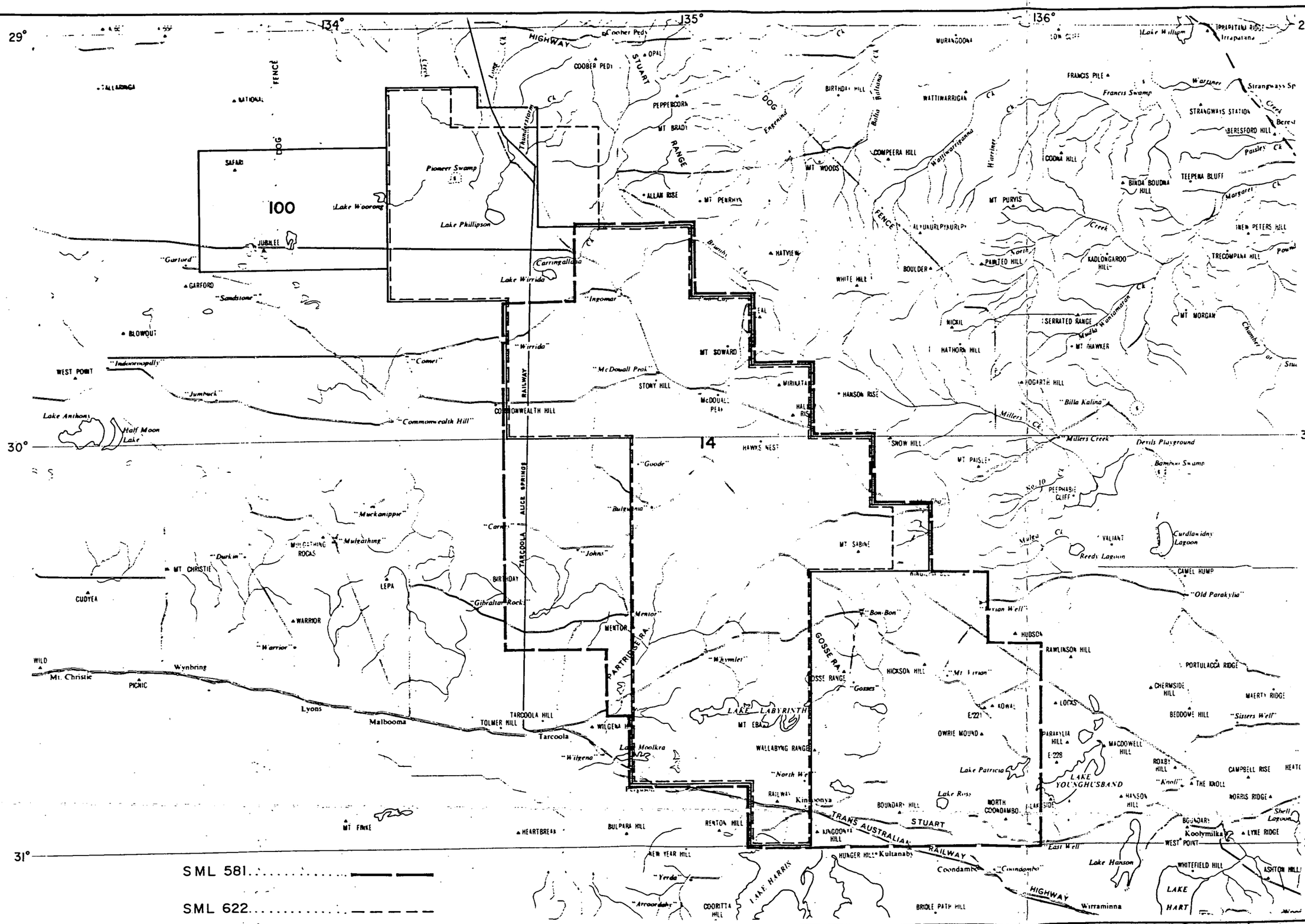


FIG. 1

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

LAKE PHILLIPSON AREA
SPECIAL MINING LEASES AND EXPLORATION LICENCES HELD BY UTAH DEVELOPMENT COMPANY FROM 27-5-71 TO 14-1-74

COMPILED J.H.	CDO 21-9-83 DATE
DRAWN A.F.	SCALE 1:1000 000
DATE 15-6-83	PLAN NUMBER 83-254
CHECKED	

5788

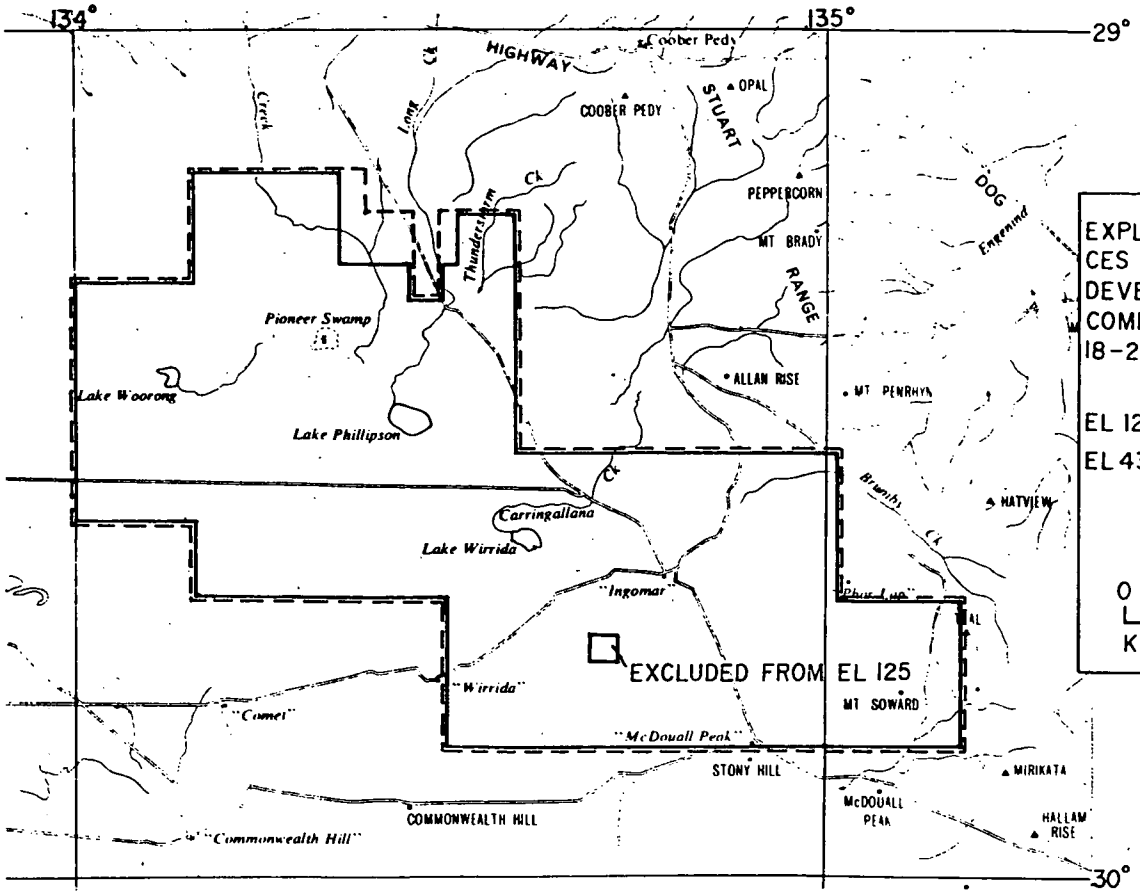


FIG. 2

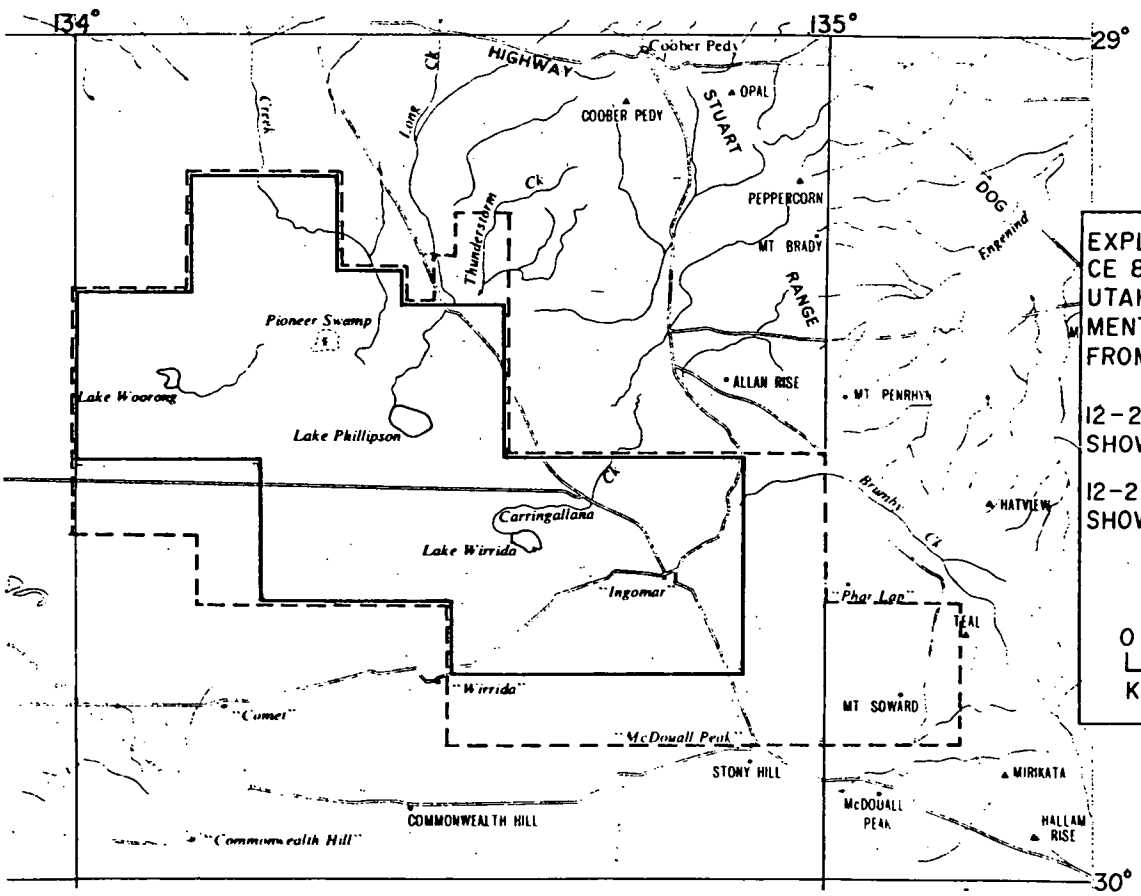
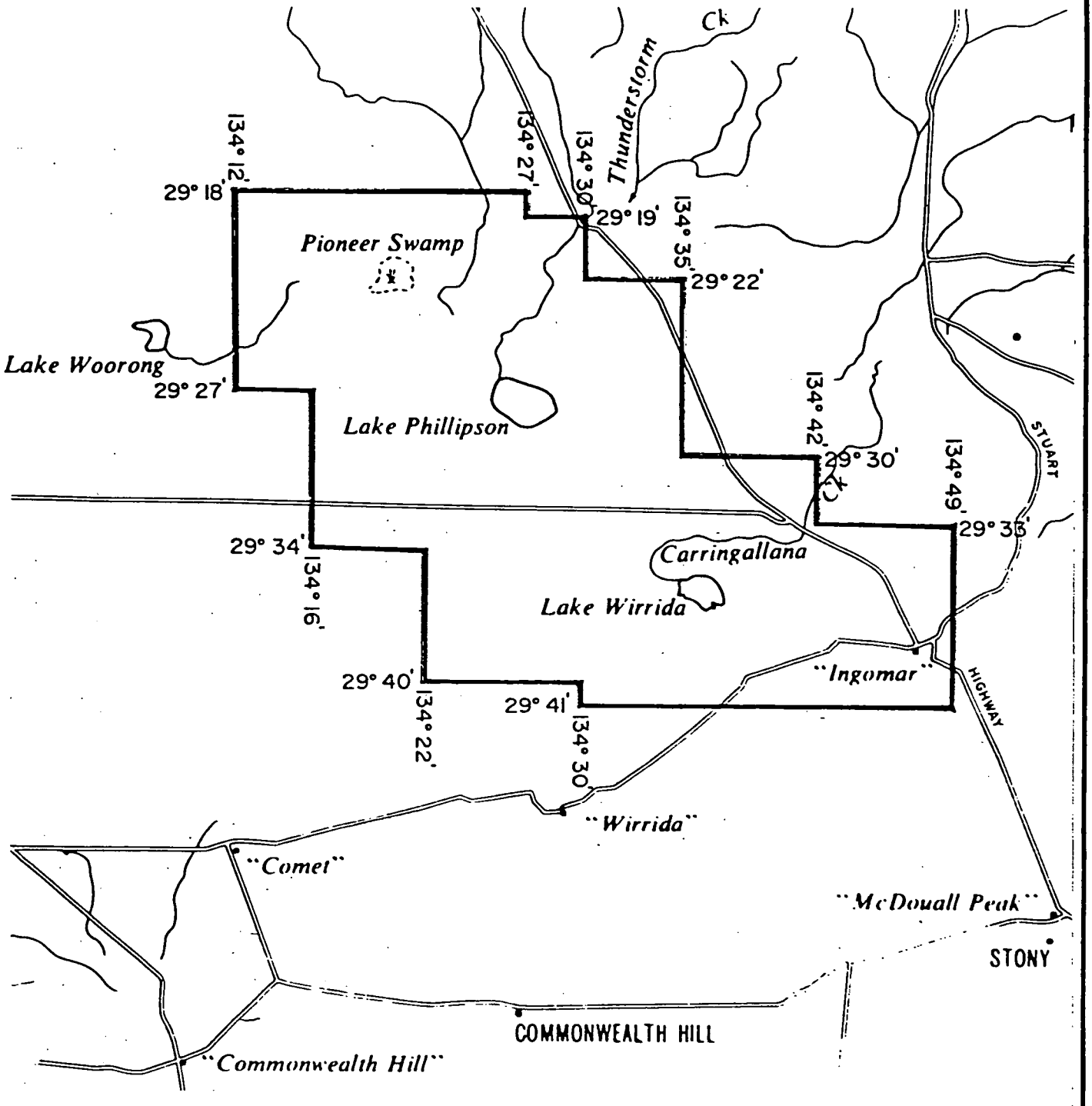


FIG. 3

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA	COMPILED J.H	C.D.O. 21.9.83 DATE
LAKE PHILLIPSON AREA EXPLORATION LICENCES HELD BY UTAH DEVELOPMENT COMPANY FROM 18-2-74 TO 11-5-82	DRAWN A.F.	SCALE 1:1000000
	DATE 15-6-83	PLAN NUMBER S 16770
	CHECKED	

3198



All of the within latitudes and longitudes are geodetic and expressed in terms of the Australian Geodetic Datum as defined on P.4984 of Commonwealth Gazette number 84 dated October 6, 1966.

FIG. 4

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA	COMPILED J.H.	C.D.O. 20.9.85 DATE
PROPOSED STATUS OF LAKE PHILLIPSON AREA ON 1-6-83 RESERVED FROM THE OPERATION OF PARTS IV, V, VI, VIA, VII AND VIII OF THE MINING ACT, 1971-1982 GOV. GAZ. 26-5-83	DRAWN A.F.	SCALE 1:500000
	DATE 15-6-83	PLAN NUMBER S 16771
	CHECKED	

3/98