

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

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

Compiled by

J. HIBBURT

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12TH FEBRUARY 1981 ONWARDS

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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 commitment. 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.

1. GEOLOGICAL REPORTS BY UTAH DEVELOPMENT COMPANY

1.1 QUARTERLY REPORTS

1.1.1	<i>S.M.L. 622 Period Ending No. 26, 1971.</i>	61-62	2
1.1.2	<i>E.L. 14 Kingoonya Area from Oct. 5, 1972 to April 4, 1973.</i>	63-91	3-6
a.	Text		
	Summary	64	3
	Introduction	64-65	3
	Physiography and Access	65-66	3
	Previous Investigations	66	3
	The 1972 Drilling Programme	66-67	3
	Geology	67-69	3
	Structure	69	3
	Limit of Oxidation	69	3
	Coal Seams	69-70	3
	Analyses	70-72	3
	Conclusions	73	3
	Contents	74	3
	Expenditure	75-76	3
b.	Table A		
	Chemical Analyses	72	3
c.	Appendix A		
	Lithology Logs for Drillholes 1-63 (1-60 are located on Traverses 1-10) Listed and presented in Section 4.1 Lithological Descriptions	1621-2209	100-17
d.	Plans		
	Original scales are listed Both transparency and print copies of plans 78-80 were provided.		
	Relinquishment Area Plan Scale H 1:100 000	77	4
	Locality Map Coal Exploration Area Scale 1:5 000 000 Fig. 1	78	4
	Drillhole Location Plan Scale 1:126 720 Plate 1	79	4
	Limits of Main Coal Seams Scale 1:126 720 Plate 2	80	4
e.	Sections		
	Both transparency and print copies of each section were provided.		
	Depth of F Seam Original Scale H:V = 63 360:7 620 Plate 3	81	5
	The following sections were presented at the scale H:V = 31 680:1 200		
	Drill Traverse 1	82	5
	Drill Traverse 2	83	5

		Page No.	Micro fiche No.
	Drill Traverse 3	84	5
	Drill Traverse 4	85	5
	Drill Traverse 5	86	5
	Drill Traverse 6	87	6
	Drill Traverse 7	88	6
	Drill Traverse 8	89	6
	Drill Traverse 9	90	6
	Drill Traverse 10	91	6
1.1.3	<i>E.L. 14 Kingoonya Area from April 5 to July 4, 1973.</i>	92-127	7-15
a.	Text		
	Programme	94	7
	Results	95-98	7
	Expenditure	99	7
b.	Table 1		
	Chemical Analyses	98	7
c.	Sections		
	Both transparency and print copies of each section were provided		
	The following sections were presented at the scale H:V = 2 400:2 400 and each consists of sheets 1 & 2		
	Drill Traverse 050	100-101	8
	Drill Traverse 060	102-103	8-9
	Drill Traverse 070	104-105	9
	Drill Traverse 080	106-107	10
	Drill Traverse 090	108-109	10-11
	Drill Traverse 100	110-111	11
	Drill Traverse 110	112-113	12
	Drill Traverse 130	114-115	12-13
	Drill Traverse 150	116-117	13
	The following sections were presented at the scale H:V = 31 680:1 200		
	Drill Traverse P1	118	14
	Drill Traverse P2	119	14
	Drill Traverse P3	120	14
	Drill Traverse P4	121	14
	Drill Traverse P5	122	14
	Drill Traverse P370	123	14
	Drill Traverse P380	124	15
	Drill Traverse P400	125	15
	Drill Traverse P470	126	15
	Drill Traverse P480	127	15
1.1.4	<i>E.L. 14 Kingoonya Area from July 5 to October 4, 1973.</i>	128-137	16
a.	Text		
	Introduction	129	16
	Results (includes chemical analyses)	129-133	16
	Expenditure	134	16
b.	Tables		
	Chemical Analyses Tables A,B & C	135-137	16

		Page No.	Micro- fiche No.
1.1.5	<i>E.L. Kingoonya Area from October 5, 1973 to January 4, 1974.</i>	138-182	17-28
a.	Text	139-140	17
b.	Plans		
	Drillhole Location Plan		
	Original Scale 1:126 720 Plate 1	141	18
	Transparency and print copy provided		
c.	Sections		
	Both transparency and print copies of each section were provided		
	The following sections were presented at the scale H:V = 24 000:1 200		
	Drill Traverse Profile Baseline - Main Basin Sheets 1 & 2	142-143	19
	Drill Traverse Profile Baseline - West Basin Sheets 1 & 2	144-145	19
	The following sections were presented at the scale H:V = 2 400:2 400 and each consists of sheets 1 & 2		
	Drill Traverse 060	146-147	19-20
	Drill Traverse 070	148-149	20
	Drill Traverse 080	150-151	21
	Drill Traverse 090	152-153	21-22
	Drill Traverse 100	154-155	22
	Drill Traverse 110	156-157	23
	Drill Traverse 130	158-159	23-24
	Drill Traverse 150	160-161	24
	The following sections were presented at the scale H:V = 12 000:1 200		
	Drill Traverse 190	162	25
	Drill Traverse 210	163	25
	Drill Traverse 220	164	25
	Drill Traverse 230	165	25
	Drill Traverse 250	166	25
	Drill Traverse 270	167	25
	The following sections were presented at the scale H:V = 31 680:1 200		
	Drill Traverse P370	168	26
	Drill Traverse P380	169	26
	Drill Traverse P400	170	26
	The following sections were presented at the scale H:V = 12 000:1 200		
	Drill Traverse P410	171	26
	Drill Traverse P420	172	26
	Drill Traverse P430	173	26
	Drill Traverse P440	174	27
	Drill Traverse P450	175	27
	Drill Traverse P460	176	27
	Drill Traverse P470	177	27
	Drill Traverse P480	178	27
	Drill Traverse P490	179	27
	Drill Traverse P500	180	28
	Drill Traverse P510	181	28
	Drill Traverse P520	182	28

1.1.6	<i>E.L. 100 Completion Report Lake Woorong Area from October 15, 1973 January 15, 1974.</i>		
	Listed and presented as Section 1.2.1 Exploration Drilling Reports	271-279	38-40
1.1.7	<i>E.L. 125 Lake Phillipson Area February 17 - May 17, 1974.</i>	183-195	29
a.	Text	184-185	29
b.	Appendix	186-195	29
	PROUDFOOT, B., 1974. Analysis and testing report. A.C.I.R.L. Ltd report No. 4571 (unpublished).	186-195	29
1.1.8	<i>E.L. 125 Lake Phillipson Area Quarter Ending 17th August 1974.</i>	196-223	30-35
a.	Text		
	Programme	197	30
	Results	197-200	30
	Expenditure	201	30
b.	Appended Report		
	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).		
	Listed and presented in Section 3.2.1, Hydrological Reports.	624-688	67-68
c.	Plan		
	Phillipson and Wallira Trough Coal Measures Drillhole Location Plan Original Scale 1:126 720 Print & Transparency Plan 1	202	31
d.	Sections		
	The following sections were presented at the Scale H:V = 12 000:1 200. Both transparency and print copies of each section were provided. P & F indicates that preliminary and final editions were provided.		
	Drill Traverse 250	203	32
	Drill Traverse 360 P & F	204-205	32
	Drill Traverse 370 P & F	206-207	32
	Drill Traverse 380 P & F	208-209	32-33
	Drill Traverse P520	210	33
	Drill Traverse P550 P & F	211-212	33
	Drill Traverse P560 P & F	213-214	33
	Drill Traverse P570 P & F	215-216	34
	Drill Traverse P580 P & F	217-218	34
	Drill Traverse W620 P & F	219-220	34
	Drill Traverse W650 P & F	221-222	35
	Drill Traverse W1	223	35

		Page No.	Micro- fiche No.
1.1.26	E.L. 433 Lake Phillipson Area for Period 27/5/80 to 26/8/80.	267-268	37
1.1.27	E.L. 433 Lake Phillipson Area for Period 27/8/80 to 26/11/80.	268-270	37
1.2	EXPLORATION DRILLING REPORTS		
1.2.1	UTAH DEVELOPMENT COMPANY 1974. Completion report - E.L. 100 - Lake Woorong Area from October 15, 1973 - January 15, 1974. <i>Utah Development Company report</i> (unpublished).	271-279	38-40
a.	Text		
	Introduction	272	38
	Physiography and Access	272	38
	Drilling Programme	273	38
	Geology	273	38
	Conclusion	275	38
	Expenditure	276	38
b.	Lithological Logs		
	Drillholes W1-01 to W1-07, W2-08 to W2-11 Listed and presented in Section 4.1, Lithological Descriptions.	1621-2209	100-178
c.	Plan		
	Drilling Programme Wallira Trough Original Scale 1:126 720 Plate 1	277	39
d.	Sections	278	40
	The following sections were presented at the scale H:V = 12 000:1 200		
	Drill Traverse W1 Fig. 1	278	40
	Drill Traverse W2 Fig. 2	279	40
1.2.2	ISLAM, N., 1974. Report on the 1973 drilling programme on Exploration Licence 14 and 100. Phillipson and Wallira Trough South Australia. <i>Utah Development Company report 250</i> (unpublished).	280-374	41-54
a.	Text		
	Summary	288	41
	Introduction	289	41
	The 1973 Programme	290-292	41
	Geology	293-297	41
	The Coal Seams	298-308	41
	Conclusions	309	41
b.	Tables		
	Sequence of Rocks Obtained From Drilling Results Table A	294	41
	Analyses of Major Coal Seams- Phillipson Trough Table B	299-301	41
	Reserves By Seams Table C	308	41

c.	<p>Appendices</p> <p>List of Holes Radiometrically Logged By Utah Development Company & South Australian Department of Mines in 1973 Appendix 1</p>	311-312	41
	<p>Drill Traverse Profiles Appendix 2 Listed and presented in section 1.2.2.f, Plans and Sections</p>	326-374	45-54
d.	<p>Photos</p> <p>Scale Model of Phillipson Main Basin Photo 1</p> <p>Scale Model of Phillipson West Basin Photo 2</p>	310 310	41 41
e.	<p>Expanded Coal Lithocolumns of Cored Drillholes The following lithocolumns were presented at the scale 1:24</p> <p>Main Basin</p> <p>060-02; 070-02, 09, 11, 15; 080-02 Fig. I</p> <p>080-09, 18, 18A; 090-02 Fig. II</p> <p>090-15, 20; 100-09, 10, 14; 110-10 Fig. III</p> <p>110-11, 18; 130-08, 09; 150-11, 12, 230-11 Fig. IV</p> <p>230-09; 250-10; 270-09, 12 Fig. V</p> <p>030-06; 040-09, 12; 050-05, 09, 10 Fig. VI</p> <p>050-11; 060-09; 080-15; 090-09; 110-05 Fig. VII</p> <p>110-13; 130-06; 150-05; 230-09 Fig. VIII</p> <p>050-09, 10, 11; 110-05; 150-06 Fig. IX</p> <p>West Basin</p> <p>P1-22A; P2-19A; P469-07, 09; P500-109 Fig. X</p> <p>P1-22A; P440-08; P460-09; P490-07 Fig. XI</p> <p>P1-5A; P1-22A; P2-19A; P3025A; P400-01 Fig. XII</p> <p>P5-59A; P400-01; P440-08 Fig. XIII</p>	313 314 315 316 317 318 319 320 321 322 323 324 325	42 42 42 42 42 42 43 43 43 43 43 43 44

f.

Plans and Sections

Original scales are listed

Drillhole Location Plan

Scale 1:126 720 Plate 1

326

45

Wallira Trough Coal Measures Showing

Probable Connection With Phillipson

Trough West Basin

Scale 1:126 720 Plate 2

327

45

Main Basin Block Diagram

Scale H:V = 3 000:845 Plate 3

328

45

West Basin Block Diagram

Scale H:V = 63 360:2 400 Plate 4

329

45

Drill Traverse Profile Baseline- Main

Basin Sheets 1 & 2

Scale H:V = 24000: 1 200 Plate 5

330-331

45

The following plans were presented
at the scale 1:31 680 unless
stated otherwise

Main Basin "F" Seam

Sheet 1 & 2 Plate 6

332-333

46

Main Basin "A2" & "A1" Seams

Plate 7

334

46

Main Basin "I" Seam Plate 8

335

46

Drill Traverse Profile Baseline -

West Basin Sheets 1 & 2

Original Scale H:V 24 000:1 200

Plate 9

336-337

46

Area of Seams "O" to "U" Within

Subcrop & 250 ft Isopach Plate 10

338

47

West Basin "O" & "P" Seams

Plate 11

339

47

West Basin "Q" Seam Plate 12

340

47

West Basin "R" Seam Plate 13

341

47

West Basin "S" Seam Plate 14

342

47

West Basin "T" & "U" Seams Plate 15

343

47

Drill Traverse Profile W2 .

Original Scale H:V = 24 000:2 400

Plate 16

344

48

Analysis Results For Main Seams

Original Scale 1:126 720 Plate 17

345

48

The following sections were presented
at the scale H:V = 2 400:2 400

Drill Traverse 060 Sheet 2 Appendix II-1	346	48
Drill Traverse 070 Sheet 2 Appendix II-2	347	48
Drill Traverse 080 Sheet 2 Appendix II-3	348	49
Drill Traverse 090 Sheet 2 Appendix II-4	349	49
Drill Traverse 100 Sheet 2 Appendix II-5	350	49
Drill Traverse 110 Sheet 2 Appendix II-6	351	50
Drill Traverse 130 Sheet 2 Appendix II-7	352	50
Drill Traverse 150 Sheet 2 Appendix II-8	353	50

The following sections were presented
at the scale H:V = 12000:1 200

Drill Traverse 190 Appendix II-9	354	51
Drill Traverse 210 Appendix II-10	355	51
Drill Traverse 220 Appendix II-11	356	51
Drill Traverse 230 Appendix II-12	357	51
Drill Traverse 250 Appendix II-13	358	51
Drill Traverse 270 Appendix II-14	359	51

The following sections were presented
at the scale H:V = 31 680:200

Drill Traverse P370 Appendix II-15	360	52
Drill Traverse P380 Appendix II-16	361	52
Drill Traverse P400 Appendix II-17	362	52

The following sections were presented
at the scale H:V = 12 000:1 200

Drill Traverse P410 Appendix II-18	363	52
Drill Traverse P420 Appendix II-19	364	52
Drill Traverse P430 Appendix II-20	365	52
Drill Traverse P440 Appendix II-21	366	53
Drill Traverse P450 Appendix II-22	367	53
Drill Traverse P460 Appendix II-23	368	53
Drill Traverse P470 Appendix II-24	369	53
Drill Traverse P480 Appendix II-25	370	53
Drill Traverse P490 Appendix II-26	371	53
Drill Traverse P500 Appendix II-27	372	54
Drill Traverse P510 Appendix II-28	373	54
Drill Traverse P520 Appendix II-29	374	54

1.3 OTHER REPORTS AND CORRESPONDENCE

1.3.1	<i>Relinquishment Report - E.L. 100 - Lake Woorong Area. Relinquished January 15, 1974.</i>	375-381	55-57
a.	Text		
	Introduction	376	55
	Physiography and Access	376	55
	Drilling Programme	376	55
	Stratigraphy	377-379	55
	Geology	379	55
	Conclusion	379	55
b.	Lithology Logs		
	Drillholes W2-08 to 11		
	Listed and presented in Section 4.1, Lithological Descriptions.	1621-2209	100-178
c.	Plan		
	Drilling Programme Wallira Trough Original Scale 1:126 720 Plate 1	380	56

d.	Section		
	Drill Traverse W2		
	Original Scale H:V = 24 000:2 400		
	Plate 2	381	57
1.3.2	Letter 5th October 1971.	382-383	58
1.3.3	Letter 8th September 1973.	384-387	58
1.3.4	Chip sample details from 1975 to 1977 programmes.	388-392	58

2. FEASIBILITY/EVALUATION BY UTAH DEVELOPMENT COMPANY

2.1 UTAH DEVELOPMENT COMPANY, 1976.

Report on preliminary feasibility study of use and mining of coal from deposits in an area near Lake Phillipson South Australia, March 1976. *Utah Development Company report* (unpublished).

393-459

59-60

Letter of transmittal

396-398

59

a. Text

Summary

405-408

59

Objectives

409-410

59

Location of Deposits and Reserves

411-415

59

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Power Generation

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- 2.2 ASPINALL, T.O., 1978. Preliminary
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3.1.1	PROUDFOOT, B., 1972-74. Coal analyses and analyses and testing reports. A.C.I.R.L. Ltd reports 4734-5, 4770, 4784-5, 4862, 4889, 4938, 4956, 4960, 4984-5 and 5984 (unpublished).	484-529	63
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	(Sections state that they are for the drilling programme up to 04.10.73 however some include 1975 drillholes).		
	All sections were presented at the scale H:V = 5 000:500 unless stated otherwise. Only transparency copies were provided.		
	Main Basin		
	Drill Traverse 020		
	Generated 08.11.76	1576	90
	Drill Traverse 030		
	Generated 08.11.76	1577	90

Drill Traverse 040 Generated 08.11.76	1578	90
Drill Traverse 050 Generated 08.11.76	1579	90
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Drill Traverse 070 Generated 08.11.76	1581	91
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Drill Traverse P390 Generated 10.12.76 Coal seams named	1596	95

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Generated 27.07.76

1597	95
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Drill Traverse P400
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1598	95
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Drill Traverse P400
Generated 27.07.76

1599	95
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Drill Traverse P404
Generated 27.07.76

1600	95
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Drill Traverse P406
Generated 27.07.76

1601	96
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Drill Traverse P410
Generated 07.06.76

1602	96
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Drill Traverse P410
Generated 27.07.76

1603	96
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Drill Traverse P414
Generated 27.07.76

1604	96
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Drill Traverse P417
Generated 27.07.76

1605	96
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Drill Traverse P420
Generated 07.06.76

1606	96
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Drill Traverse P420
Generated 27.07.76

1607	97
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Drill Traverse P424
Generated 27.07.76

1608	97
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Drill Traverse P427
Generated 27.07.76

1609	97
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Drill Traverse P430
Generated 07.06.76

1610	97
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Drill Traverse P430
Generated 27.07.76

1611	97
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Drill Traverse P436
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1612	97
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Drill Traverse P440
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1613	98
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Drill Traverse P446
Generated 27.07.76

1614	98
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Drill Traverse P450
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1615	98
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Drill Traverse P456
Generated 27.07.76

1616	98
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Drill Traverse P466 Generated 27.07.76	1619	99
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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.

4. DRILLHOLE LOGS

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	Drillholes are listed in traverse order and are prefixed with traverse number.		
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	2 - 10 to 13, 30 to 35	1634-1645	100
	3 - 15 to 19	1646-1659	100
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	5 - 36 to 38B, 59 to 60	1688-1699	101
	6 - 42 to 45	1700-1703	101
	7 - 46 to 48	1704-1706	101
	8 - 49 to 50	1707-1712	101
	9 - 14, 51 to 55	1713-1724	101
	10 - 56 to 58	1725-1733	101
	020 - 01 to 05	1734-1738	102
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	P4 - 08, 10 to 12	2003-2009	147-148

	P5 - 38, 49 to 50, 52 to 53, 56, 58 to 59A, 61, 1S, 1D, 4S, 4D	2010-2034	149-151
	P360 - 01 to 01C	2035-2039	151
	P370 - 01 to 04	2040-2044	152
	P380 - 01 to 06	2045-2051	152-153
	P390 - 03 to 03C, 2S, 2D, 3S, 3D, P01, P02	2052-2071	154
	P400 - 01 to 07	2072-2082	154-156
	P410 - 01 to 04	2083-2086	156
	P420 - 01 to 05	2087-2091	157
	P430 - 01 to 05	2092-2096	157-158
	P440 - 01 to 09	2097-2105	158-160
	P450 - 01 to 07, 09 to 11	2106-2116	160-161
	P460 - 01 to 10	2117-2127	162-163
	P470 - 01 to 09	2128-2137	163-165
	P480 - 01 to 09	2138-2146	165-166
	P490 - 01 to 07	2147-2154	167-168
	P500 - 01 to 10	2155-2165	168-170
	P510 - 01 to 04	2166-2171	170-171
	P520 - 01 to 06	2172-2177	171-172
	P530 - 01	2178	172
	P-61, 61A No traverse number, located 12.9 miles/20.7 km west of drillhole 4-22.	2179-2184	172-173
4.1.3	Wallira Trough Drillholes are listed in traverse order and are prefixed by traverse number	2185-2196	174-175
	W1 - 01 to 07	2186-2192	174-175
	W2 - 08 to 11	2193-2196	175
4.1.4	Scout Exploration	2197-2209	176-178
	S1 to 5 No traverse number, located in an area near Robins Rise.	2198-2202	176
	S11 to 15, 19 to 20 No traverse number, located in an area southeast of traverse 7.	2203-2209	177-178
4.2	RADIOMETRIC LOGS	2210-2284	179-180
	Main Basin		
	1 - 03, 05, 07, 39, 40		
	2 - 10, 11, 13, 33A, 35		
	3 - 15		
	5 - 36, 37, 38B		
	6 - 42		
	8 - 49, 50		
	9 - 51, 53		
	10 - 56		
	150 - 02	2211-2266	179
	West Basin		
	P1 - 2, 4 to 5, 21		
	P4 - 8, 12		
	P5 - 1S, 1D, 4S, 4D		
	P390 - 2S, 2D, 3S, 3D, P01, P02		
	P-61	2267-2284	179-180

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

5.1 DRILLHOLE LOCATIONS

Drillhole Location Plan

Scale 1:126 720

Ref. 1.1.2.d

79

4

Drillhole Location Plan

Scale 1:126 720

Ref. 1.1.5.b

141

18

Phillipson & Wallira Trough Coal

Measures Drillhole Location

Plan. Scale 1:126 720

Ref. 1.1.8.c

202

31

Drillhole Location Plan

Scale 1:126 720

Ref. 1.2.2.f

326

45

Drilling Programme Wallira Trough

Scale 1:126 720

Ref. 1.3.1.c

380

56

Plan of Drillholes

Scale 1:250 000

Ref. 2.2.c

483

62

West Basin Survey Stations

Scale 1:25 000

Ref. 3.4.2.b

1367

85

5.2 COAL SEAM LIMITS

Limits of Main Coal Seams

Scale 1:126 720

Ref. 1.1.2.d

80

4

Wallira Trough Coal Measures

Showing Probable Connection With

Phillipson Trough West Basin

Scale 1:126 720

Ref. 1.2.2.f

327

45

Analysis Results for Main Seams

Scale 1:126 720

Ref. 1.2.2.f

345

48

Main Basin "A2" & "A1" Seams

Scale 1:31 680

Ref. 1.2.2.f

334

46

Main Basin "F" Seam

Sheets 1 & 2 Scale 1:31 680

Ref. 1.2.2.f

332-333

46

Main Basin "I" Seam
Scale 1:31 680
Ref. 1.2.2.f

335

46

West Basin "O" & "P" Seams
Scale 1:31 680
Ref. 1.2.2.f

339

47

Area of Seams "O" to "U" Within
Subcrop of 250 ft Isopach.
Scale 1:31 680
Ref. 1.2.2.f

338

47

West Basin "Q" Seam
Scale 1:31 680
Ref 1.2.2.f

340

47

West Basin "R" Seam
Scale 1:31 680
Ref. 1.2.2.f

341

47

West Basin "S" Seam
Scale 1:31 680
Ref. 1.2.2.f

342

47

West Basin "T" & "U" Seams
Scale 1:31 680
Ref. 1.2.2.f

343

47

6 STRATIGRAPHIC SECTIONS

All sections are tabulated and referenced to reports. They are located with the reports.

6.1 LONGITUDINAL SECTIONS (AXIS OF BASIN)

6.1.1 Main Basin

The following sections were presented at the scale H:V = 24 000:1 200

Drill Traverse Profile Baseline-Main
Basin Sheets 1 & 2
Ref. 1.1.5.c

142-143

19

Drill Traverse Profile Baseline -
Main Basin Sheets 1 & 2
Ref. 1.2.2.f

330-331

45

6.1.2 West Basin

Original scales are listed

Drill Traverse P5
Scale H:V = 31 680:1 200
Ref. 1.1.3.c

122

14

Drill Traverse Profile Baseline
West Basin Sheets 1 & 2
Scale H:V = 24 000:1 200
Ref. 1.1.5.c

144-145

19

Drill Traverse Profile Baseline
West Basin Sheets 1 & 2
Scale H:V = 24 000:1 200
Ref. 1.2.2.f

336-337

46

Geological Longitudinal
Section through Wellfield
Drill Traverse P5
Scale H:V = 1 250:1 250
Ref. 3.2.2.d(i)

795

70

West Basin Longitudinal
Section. Generated 05.01.77
Sheets NW & SE
Scale H:V = 10 000:500
Ref. 3.5.1.b

1586-1587

93

6.2 CROSS SECTIONS (PERPENDICULAR TO BASIN AXIS)

6.2.1 Main Basin

Original scales are listed

Drill Traverse 020
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1576

90

Drill Traverse 030
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1577

90

Drill Traverse 040
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b.

1578	90
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Drill Traverse 050
Sheets 1 & 2
Scale H:V = 2 400:2 400
Ref. 1.1.3.c

100-101	8
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Drill Traverse 050
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1579	90
------	----

Drill Traverse 060
Sheets 1 & 2
Scale H:V = 5 000:500
Ref. 1.1.3.c

102-103	8-9
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Drill Traverse 060
Sheets 1 & 2
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	19-20
346	48

Drill Traverse 060
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1580	91
------	----

Drill Traverse 070
Sheets 1 & 2
Scale H:V = 2 400:2 400
Ref. 1.1.3.c

104-105	9
---------	---

Drill Traverse 070
Sheets 1 & 2
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

148-149	20
347	48

Drill Traverse 070
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1581	91
------	----

Drill Tarverse 080
Sheets 1 & 2
Scale H:V = 2 400:2 400
Ref. 1.1.3.c

106-107	10
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Drill Traverse 080
Sheets H:V = 2 400:2 400
Ref. Sheet 1 1.1.5.c
Ref. Sheet 2 1.1.5.c, 1.2.2.f

150-151	21
348	49

Drill Traverse 080
Generated 08.11.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1582	91
------	----

Drill Traverse 090
 Sheets 1 & 2
 Scale H:V = 2 400:2 400
 Ref. 1.1.3.c

108-109	10-11
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Drill Traverse 090
 Sheets 1 & 2
 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

152-153 349	21-22 49
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Drill Traverse 090
 Generated 08.11.76
 Scale H:V = 5 000:500 1:500
 Ref. 3.5.1.b

1583	92
------	----

Drill Traverse 100
 Sheets 1 & 2
 Scale H:V = 2 400:2 400
 Ref. 1.1.3.c

110-111	11
---------	----

Drill Traverse 100
 Sheets 1 & 2
 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

154-155 350	22 49
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Drill Traverse 100
 Generated 08.11.76
 Scale H:V = 5 000:500
 Ref. 3.5.1.b

1584	92
------	----

Drill Traverse 110
 Sheets 1 & 2
 Scale H:V = 2 400:2 400
 Ref. 1.1.3.c

112-113	12
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Drill Traverse 110
 Sheets 1 & 2
 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

156-157 351	23 50
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Drill Traverse 110
 Generated 08.11.76
 Scale H:V = 5 000:500
 Ref. 3.5.1.b

1585	92
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Drill Traverse 130
 Sheets 1 & 2
 Scale H:V = 2 400:2 400
 Ref. 1.1.3.c

114-115	12-13
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Drill Travesse 130
 Sheets 1 & 2
 Scale H:V = 2 400:2 400
 Ref. Sheet 1 1.1.5.b
 Ref. Sheet 2 1.1.5.b, 1.2.2.f

158-159 352	23-24 50
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Drill Traverse 150	160-161	24
Sheets 1 & 2	353	50
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		

The following sections were presented at the scale H:V = 12 000:1 200

Drill Traverse 190	162	25
Ref. 1.1.5.c, 1.2.2.f	354	51

Drill Traverse 210	163	25
Ref. 1.1.5.c, 1.2.2.f	355	51

Drill Traverse 220	164	25
Ref. 1.1.5.c, 1.2.2.f	356	51

Drill Traverse 230	165	25
Ref. 1.1.5.c, 1.2.2.f	357	51

Drill Traverse 250	166	25
Ref. 1.1.5.c, 1.2.2.f	358	51

Drill Traverse 250	203	32
Ref. 1.1.8.d		

Drill Traverse 270	167	25
Ref. 1.1.5.c, 1.2.2.f	359	51

Drill Traverse 360	204-205	32
Preliminary & Final Editions		
Ref. 1.1.8.d		

Drill Traverse 370	206-207	32
Preliminary & Final Editions		
Ref. 1.1.8.d		

Drill Traverse 380	208-209	32-33
Preliminary & Final Editions		
Ref. 1.1.8.d		

6.2.2

West Basin

Original scales are listed	1588	93
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Drill Traverse P360		
Generated 27.07.76		
Scale H:V = 5 000:500		
Ref. 3.5.1.b		

Drill Traverse P360	1589	93
Generated 10.12.76		
Scale H:V = 5 000:500		
Ref. 3.5.1.b		

Drill Traverse P360	1590	94
Generated 10.12.76		
Coal Seam Named		
Scale H:V = 5 000:500		
Ref. 3.5.1.b		

	Page No.	Micro- fiche No.
Drill Traverse P370 Scale H:V = 31 680:1 200 Ref. 1.1.3.c	124	14
Drill Traverse P370 Scale H:V = 31 680: 1 200 Ref. 1.1.5.c, 1.2.2.f	168 360	26 52
Drill Traverse P370 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1591	94
Drill Traverse P375 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1592	94
Drill Traverse P380 Scale H:V = 31 680:1 200 Ref. 1.1.3.c	124	15
Drill Traverse P380 Scale H:V = 31 680: 1 200 Ref. 1.1.5.c, 1.2.2.f	169 361	26 52
Drill Traverse P380 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1593	94
Drill Traverse P380 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1594	94
Geological Cross Section Through Wellfield-Drill Traverse between P380 & P390 Scale H:V = 1 250:1 250 Ref. 3.2.2.d(i)	794	70
Drill Traverse P390 Generated 10.12.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1595	95
Drill Traverse P390 Generated 10.12.76 Coal Seams Named Scale H:V = 5 000:500 Ref. 3.5.1.b	1596	95
Drill Traverse P394 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1597	95

	Page No.	Micro- fiche No.
Drill Traverse P400 Scale H:V = 31 680:1 200 Ref. 1.1.3.c	125	15
Drill Traverse P400 Scale H:V = 31 680: 1 200 Ref. 1.1.5.c, 1.2.2.f	170 362	26 52
Drill Traverse P400 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1598	95
Drill Traverse P400 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1599	95
Drill Traverse P404 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1600	95
Drill Traverse P406 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1601	96
Drill Traverse P410 Scale H:V = 12 000 :1 200 Ref. 1.1.5.c, 1.2.2.f	171 363	26 52
Drill Traverse P410 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1602	96
Drill Traverse P410 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1603	96
Drill Traverse P414 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1604	96
Drill Traverse P417 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1605	96
Drill Traverse P420 Scale H:V = 12 000:1 200 Ref. 1.1.5.c, 1.2.2.f	172 364	26 52
Drill Traverse P420 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1606	96

Drill Traverse P420
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1607	97
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Drill Traverse P424
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1608	97
------	----

Drill Traverse P427
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1609	97
------	----

Drill Traverse P430
Scale H:V = 12 000:1 200
Ref. 1.1.5.c, 1.2.2.f

173	26
365	52

Drill Traverse P430
Generated 07.06.76
Scale H:V 5 000:500
Ref. 3.5.1.b

1610	97
------	----

Drill Traverse P430
Generated 27.07.76
Ref. 3.5.1b

1611	97
------	----

Drill Traverse P436
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1612	97
------	----

Drill Traverse P440
Scale H:V = 12 000:1 200
Ref. 1.1.5.c, 1.2.2.f

174	27
366	53

Drill Traverse P446
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1614	98
------	----

Drill Traverse P450
Scale H:V = 12 000:1 200
Ref. 1.1.5.c, 1.2.2.f

175	27
367	53

Drill Traverse P450
Generated 07.06.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1615	98
------	----

Drill Traverse P456
Generated 27.07.76
Scale H:V = 5 000:500
Ref. 3.5.1.b

1616	98
------	----

Drill Traverse P460
Scale H:V = 12 000:1 200
Ref. 1.1.5.c, 1.2.2.f

176	27
368	53

	Page No.	Micro- fiche No.
Drill Traverse P460 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1617	98
Drill Traverse P462 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1618	98
Drill Traverse P466 Generated 27.07.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1619	99
Drill Traverse P470 Scale H:V = 31 680:1 200 Ref. 1.1.3.c	126	15
Drill Traverse P470 Generated 07.06.76 Scale H:V = 5 000:500 Ref. 3.5.1.b	1620	99
Drill Traverse P480 Scale H:V = 31 680:1 200 Ref. 1.1.3.c	127	15
• The following sections were all presented at the scale of H:V = 12 000:1 200		
Drill Traverse P480 Ref. 1.1.5.c, 1.2.2.f	178 370	27 53
Drill Traverse P490 Ref. 1.1.5.c, 1.2.2.f	179 371	27 53
Drill Traverse P500 Ref. 1.1.5c, 1.2.2.f	180 372	28 54
Drill Traverse P510 Ref. 1.1.5.c, 1.2.2.f	181 373	28 54
Drill Traverse P520 Ref. 1.1.5.c, 1.2.2.f	182 374	28 54
Drill Traverse P520 Ref. 1.1.8.d	210	33
Drill Traverse P550 Preliminary & Final Editions Ref. 1.1.8.d	211-212	33
Drill Traverse P560 Preliminary & Final Editions Ref. 1.1.8.d	213-214	33
Drill Traverse P570 Preliminary & Final Editions Ref. 1.1.8.d	215-216	34

Drill Traverse P580
Preliminary & Final Editions
Ref. 1.1.8.d

217-218

34

6.3 OTHER SECTIONS

6.3.1 Main Basin

The following sections were presented
at the scale H:V = 31 680:1 200. They all
referenced to Section 1.1.2.e

Drill Traverse 1	82	5
Drill Traverse 2	83	5
Drill Traverse 3	84	5
Drill Traverse 4	85	5
Drill Traverse 5	86	5
Drill Traverse 6	87	6
Drill Traverse 7	88	6
Drill Traverse 8	89	6
Drill Traverse 9	90	6
Drill Traverse 10	91	6

6.3.2 West Basin

The following sections were presented at
the scale H:V = 31 680:1 200. They are all
referenced to Section 1.1.3c.

Drill Traverse P1	118	14
Drill Traverse P2	119	14
Drill Traverse P3	120	14
Drill Traverse P4	121	14

6.3.3 Wallira Trough

The following sections were presented at
the scale H:V = 21 000:1 200 unless
stated otherwise.

Drill Traverse W620 Preliminary & Final Editions Ref. 1.1.8.d	219-220	34
Drill Traverse W650 Preliminary & Final Editions Ref. 1.1.8.d	221-222	35
Drill Traverse W1 Ref. 1.1.8.d, 1.2.1.d	223	35
Drill Traverse W2 Ref. 1.2.1.d	279	40
Drill Traverse W2 Original Scale H:V = 24 000:2 400 Ref. 1.2.2.f, 1.3.1.d	344 81	48 57

6.4 BLOCK DIAGRAMS, FENCE DIAGRAMS
Original scales are listed

- 6.4.1 Main Basin
Depth of "F" Seam
Scale H:V = 63 360:7 620
Ref. 1.1.2.e

Main Basin Block Diagram
Scale H:V = 3 000:845
Ref. 1.2.2.f
- 6.4.2 West Basin
West Basin Block Diagram
Scale H:V = 63 360:2 400
Ref. 1.2.2.f

81

5

328

45

329

45

7 GEOLOGICAL REPORTS BY UTAH DEVELOPMENT COMPANY

7.1 QUARTERLY REPORTS

7.1.1	<i>E.L. 806 Lake Phillipson Area - First Quarterly Report</i>	2285-2286	181
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7.2.1	ROWLANDS, N.J., JARVIS, D.M., CIRCOSTA, G., POINTON, T., WRIGHT, P., BATEMAN, K.W., AND ARNOLD, J.J., 1982. South Australian coal project E.L. 806 - Lake Phillipson. Utah Development Company report 360:1-12 (unpublished).	2399-3447	186-232
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Vertical Profiles 1981 Drill Holes
Appendix 5

Listed and presented in section
7.2f, Vertical Profiles.

3319-3387 203-217

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Appendix 6

Listed and presented in section
7.2g, h & i, Sections.

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Phillipson Fig. 2

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Partial Tenement Surrender EL. 806
Lake Phillipson Fig. 3

2428 186

Study Group Structure EL. 806 Lake
Phillipson Fig. 4

2430 186

Exploration Flow Schedule Fig. 5

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EL. 806 - Aeromagnetic Anomalies
and Features Fig. 6

2456 186

EL 806 - Tectonic Setting Showing
Basement Provinces Fig. 7

2458 186

EL 806 - Downhole Geochemical
Correlation Control Holes
Fig. 8

2466 187

Seam Nomenclature and Lithological
Key Fig. 9

2503 187

e.

Plans

Progress Summary Map, EL. 806 Lake
Phillipson, S.A. Print & Transparency
Plate 1

3315 202

Geological Map - 1:100 000 Exploration
Licence No. 806, Lake Phillipson,
S.A. Print & Transparency Plate 2

3316 202

Minor Control Ground Survey -
1:25 000 EL. 806 Lake Phillipson
S.A.

Print & Transparency Plate 3

3317

202

Subcrop of Major Coal Seams EL. 806
Lake Phillipson, S.A.

Print & Transparency Plate 4

3318

204

f.

Vertical Profiles

The following were presented at the scale
1:2 000 and their insets (when present)
at 1:20

Vertical Profiles LP0001 Plate 5	3319	203
LP0002 Plate 6	3320	203
LP0003 Plate 7	3321	203
LP0004 Plate 8	3322	203
LP0005 Plate 9	3323	204
LP0006 Plate 10	3324	204
LP0007 Plate 11	3325	204
LP0008 Plate 12	3326	204
LP0009 Plate 13	3327	204
LP0010 Plate 14	3328	204
LP0011 Plate 15	3329	205
LP0012 Plate 16	3330	205
LP0013 Plate 17	3331	205
LP0014 Plate 18	3332	205
LP0015 Plate 19	3333	205
LP0016 Plate 20	3334	205
LP0017 Plate 21	3335	206
LP0018 Plate 22	3336	206
LP0019 Plate 23	3337	206
LP0020 Plate 24	3338	206
LP0021 Plate 25	3339	206
LP0022 Plate 26	3340	206
LP0023 Plate 27	3341	207
LP0024 Plate 28	3342	207
LP0025 Plate 29	3343	207
LP0026 Plate 30	3344	207
LP0027 Plate 31	3345	208
LP0028 Plate 32	3346	208
LP0029 Plate 33	3347	208
LP0030 Plate 34	3348	208
LP0031 Plate 35	3349	208
LP0032 Plate 36	3350	209
LP0033 Plate 37	3351	209
LP0034 Plate 38	3352	209
LP0035 Plate 39	3353	209
LP0036 Plate 40	3354	209
LP0037 Plate 41	3355	210
LP0038 Plate 42	3356	210
LP0039 Plate 43	3357	210
LP0040 Plate 44	3358	210
LP0041 Plate 45	3359	211
LP0042 Plate 46	3360	211
LP0043 Plate 47	3361	211
LP0044 Plate 48	3362	212
LP0045 Plate 49	3363	212
LP0046 Plate 50	3364	212
LP0047 Plate 51	3365	212

LP0048	Plate 52	3366	213
LP0049	Plate 53	3367	213
LP0050	Plate 54	3368	213
LP0051	Plate 55	3369	213
LP0052	Plate 56	3370	214
LP0053	Plate 57	3371	214
LP0054	Plate 58	3372	214
LP0055	Plate 59	3373	214
LP0056	Plate 60	3374	215
LP0057	Plate 61	3375	215
LP0058	Plate 62	3376	215
LP0059	Plate 63	3377	215
LP0060	Plate 64	3378	215
LP0061	Plate 65	3379	215
LP0062	Plate 66	3380	216
LP0063	Plate 67	3381	216
LP0064	Plate 68	3382	216
LP0065	Plate 69	3383	216
LP0066	Plate 70	3384	216
LP0067	Plate 71	3385	216
LP0068	Plate 72	3386	217
LP0069	Plate 73	3387	217

g.

Cross Sections

The following sections were presented at the
scale H: = 4 000:200

Main Basin

Drill Traverse

030	Plate 74	3388	217
040	Plate 75	3389	217
050	Plate 76	3390	217
060	Plate 77	3391	217
070	Plate 78	3392	218
080	Plate 79	3393	218
090	Plate 80	3394	218
100	Plate 81	3395	219
110	Plate 82	3396	219
130	Plate 83	3397	219
150	Plate 84	3398	220
190	Sheets 1&2		
	Plates 85&86	3399-3400	220
220	Plate 87	3401	220
230	Plate 88	3402	221
250	Plate 89	3403	221
270	Plate 90	3404	221
350	Plate 91	3405	222
390	Plate 92	3406	222

West Basin

Drill Traverse

P310	Plate 93	3407	222
P335	Plate 94	3408	223
P370	Plate 95	3409	223
P375	Plate 96	3410	223
P380	Plate 97	3411	223
P390	Plate 98	3412	223
P400	Plate 99	3413	224
P410	Plate 100	3414	224
P420	Plate 101	3415	224
P430	Plate 102	3416	224
P440	Plate 103	3417	225
P450	Plate 104	3418	225
P460	Plate 105	3419	225

P470	Plate 106	3420	225
P480	Plate 107	3421	225
P490	Plate 108	3422	225
P500	Plate 109	3423	226
P510	Plate 110	3424	226
P520	Plate 111	3425	226
P530	Sheets 1&2		
	Plates 112-3	2426-3427	226-227
P550	Sheets 1&2		
	Plates 114-5	3428-3429	227
P575	Plate 116	3430	228

h. Longitudinal Sections
The following sections were presented at
the scale H:V = 10 000:200

West Basin

Drill Traverse

P310-P360	Plate 117	3431	228
P360-P420	Plate 118	3432	228
P420-P470	Plate 119	3433	228
P470-P530	Plate 120	3434	229

Main Basin

Drill Traverse

030- 080	Plate 121	3435	229
080- 150	Plate 122	3436	229
150- 270	Sheets 1&2	3437-38	229
	Plates 123-4		
330- 370	Sheets 1&2	3439-40	230
	Plates 125-6		
P520- 360	Plate 127	3441	230
P310- 130	Sheets 1&2	3442-43	231
	Plates 128-9		

i. Other Sections
The following section has the
scale H:V = 4 000:200

Main Basin

Drill Traverse

P4	Sheets 1-4	3444-47	231-232
	Plates 130-3		

7.3 OTHER REPORTS AND CORRESPONDENCE

7.3.1	Letter 26th March 1981	3448-3451	233-234
	Letter	3449-3450	233
	Plan		
	Progress Summary Map		
	Scale 1:100 000	3451	234
7.3.2	Letter 10th May 1982	3452-3460	235
	Letter	3453	235
	Table		
	Coal Quality Results - Stage 11	3454-3460	235

7.3.3

*Analytical Data Tables for Drillhole**LP 000 6C*

These are presented as borehole profiles

3461-3467

236-237

Borehole Profile, Grain size Histogram

3462

237

Ash Fusion

3463

237

Ultimate & Sulphur

3464

237

Sample Analysis

3465

237

Ash Analysis

3466

237

Maceral Analysis

3467

237

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

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9.	ANALYTICAL REPORT BY OUTSIDE GROUP		
9.1	CLAYTON, J.M., 1982. Sodium recovery from Lake Phillipson coal. A.M.D.E.L. report 1445 (unpublished).	3468-3531	238-239
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	Experimental Procedure & Results	3475	238
	Discussion	3476-3478	238
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Muddy Tank 1.

- 29. 605000

134. 756110.

Between Palman. 45 to 123.7m

P.

ARKEETA 1.

- 29. 581817 31.9'

134. 606410. 36.38'

betw 1317 - 1345. m.

Malgatty Cplx.

AP

Comm. Railway 14

- 29. 722500

134. 702900.

Alm. 2.5 to 9m.

Malgatty Cplx.

AP

Comm. Railway 6

- 29. 374464

134. 587880.

No Barab. - stopped at 67.5m. still in Palman.

Comm Railway 13

- 29. 574014

134. 555160

Perm at. 29m. - TD

No. 6869. - 29. 403225

134. 991420

Alm - 50 - 56m.

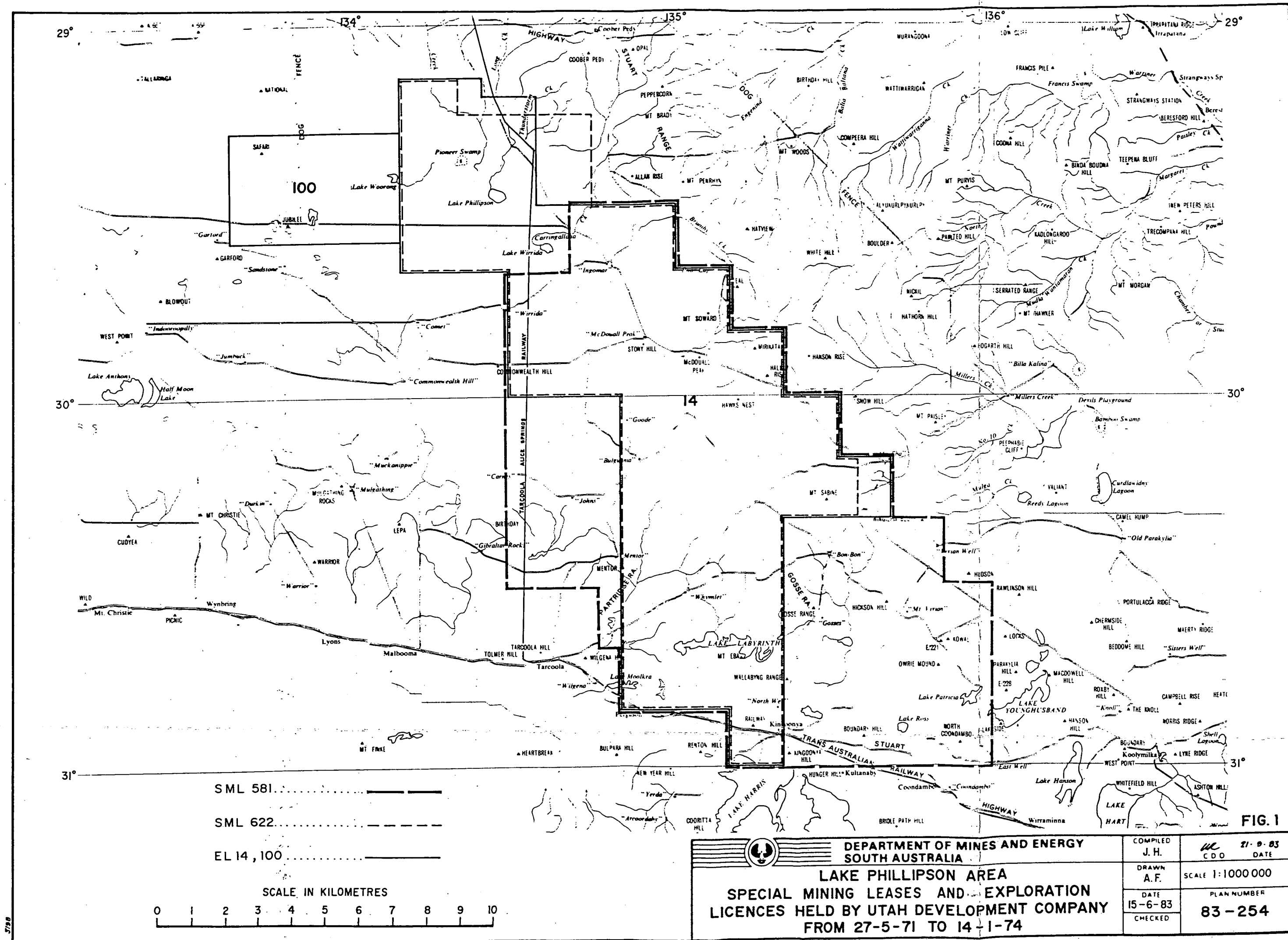
Malgatty Cplx.

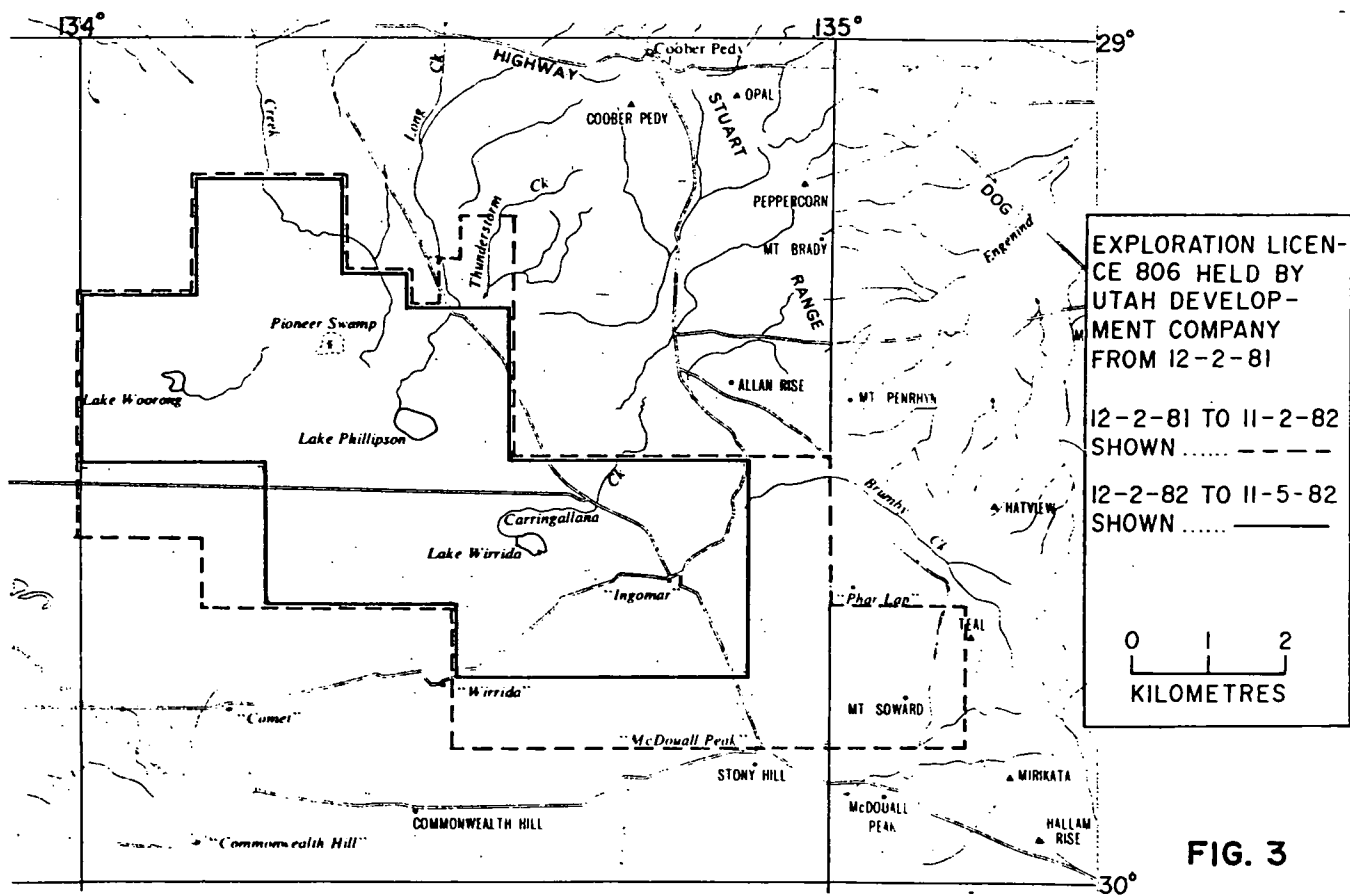
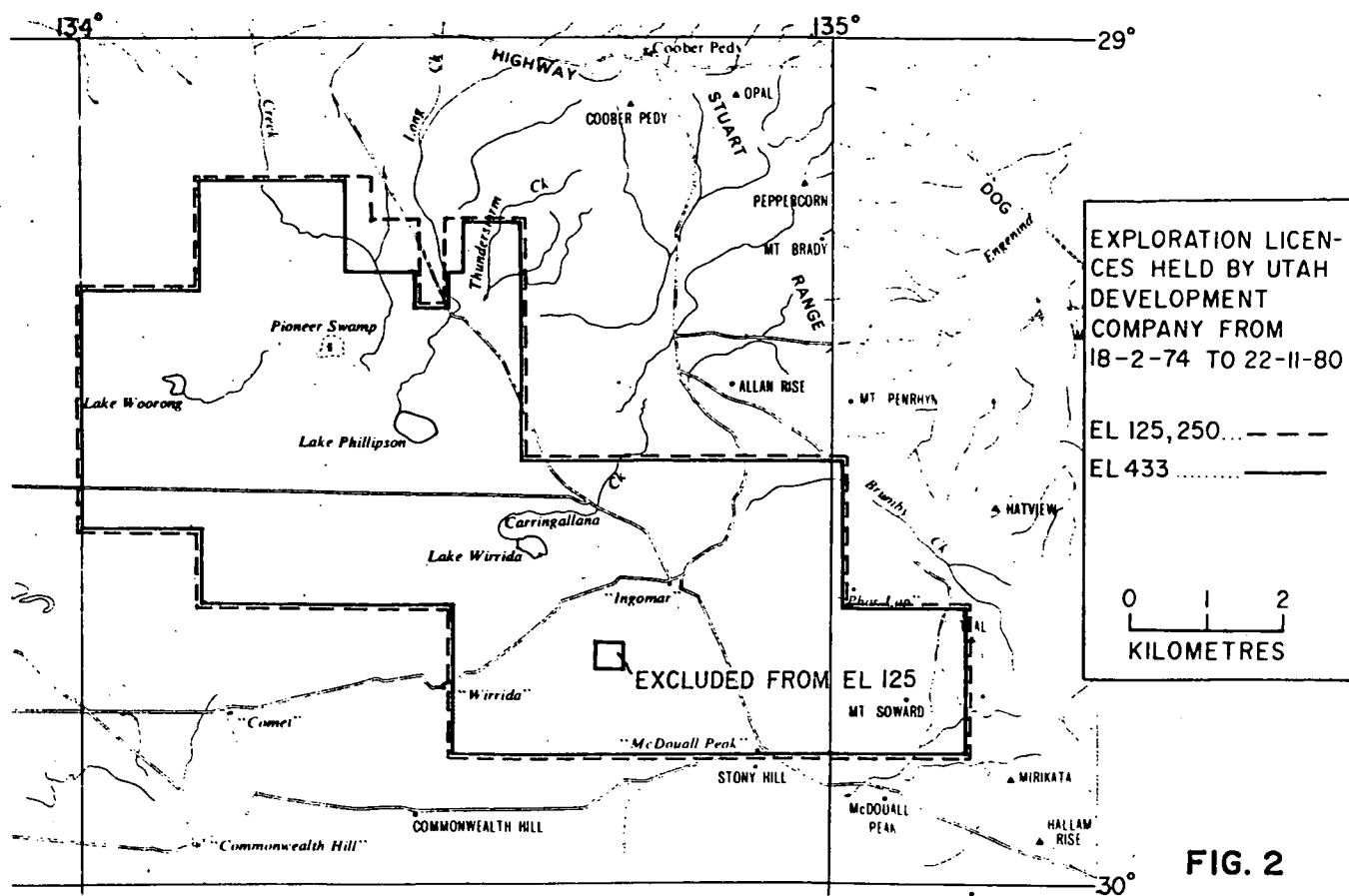
MPW 1. - 29. 835314

134. 649090.

Alm 20 - 22m.

Malgatty Cplx.





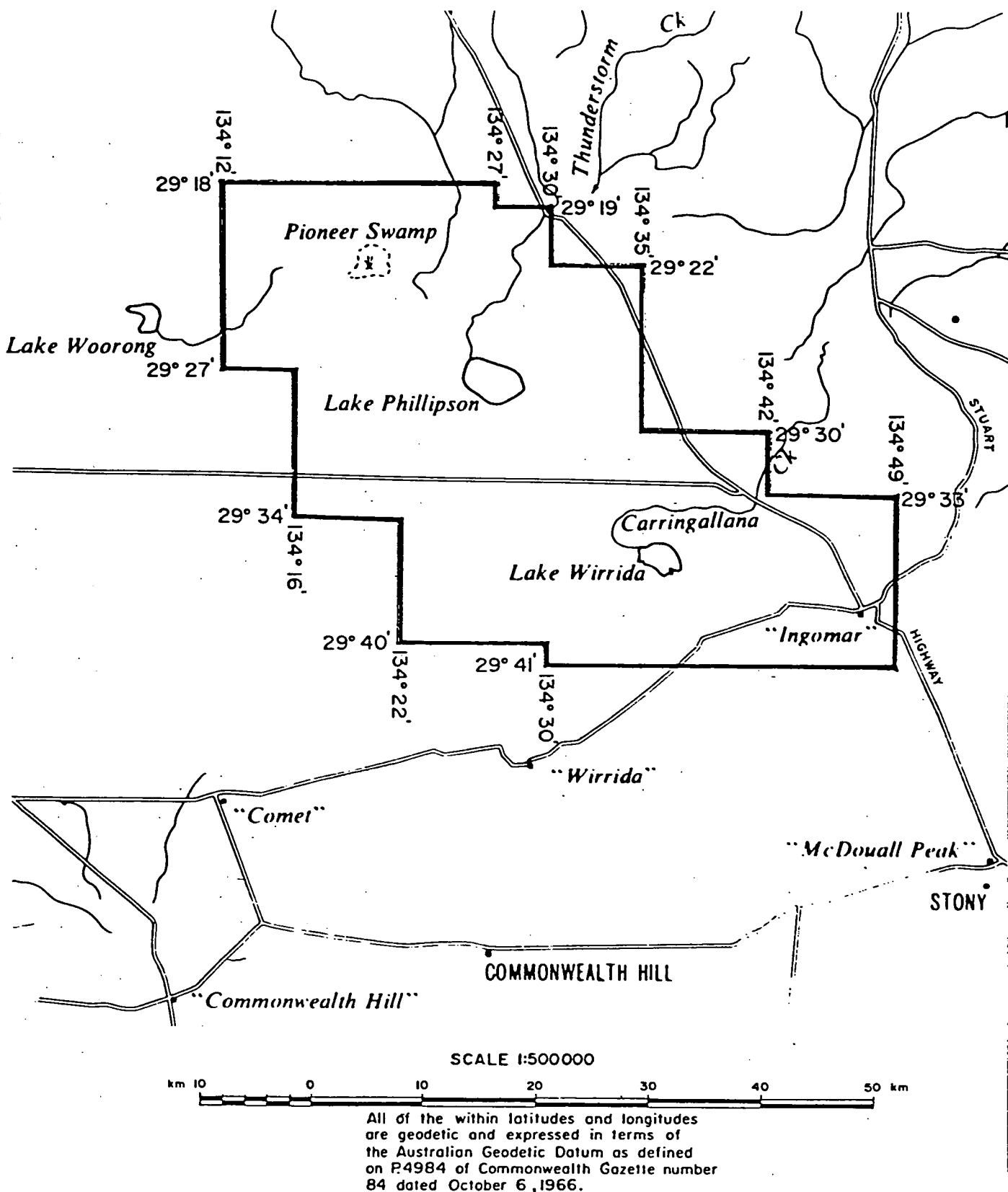



FIG. 4

	DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA		COMPILED J.H.	<i>MR</i> 20.9.85 C.D.O. 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 1:500 000
			DATE 15-6-83	PLAN NUMBER
			CHECKED	S 16771