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No. 1053

PEL 3 **Murray Basin**

Associated Australian Oilfields N.L. Sunset Seismic Surveys – Progress Reports.

Submitted by
Associated Australian Oilfields

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101 Grenfell Street, Adelaide 5000

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Facsimile: (08) 8204 1880



Government of South Australia
Primary Industries and Resources SA

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Bendix

0003

**United Geophysical
Corporation**

A SUBSIDIARY OF THE BENDIX CORPORATION

BRISBANE : MELBOURNE : ADELAIDE : PERTH : ALICE SPRINGS : PORT MORESBY

P.O. Box
Renmark,
May 16, 1969

Exploration Manager,
Mines Administration Pty. Ltd.,
G.P.O. Box 880,
Brisbane 4001, Qld.

SUNSET SEISMIC SURVEYReport For Period May 1 - May 15, 1969.

GENERAL: Party 136 moved from Roma, Queensland to Morkulla, South Australia arriving at the campsite May 4th. Drilling started May 7th and Recording May 8th, the delay being due misplacement of urgently needed spare parts for the drills by the airline concerned. The weather has been cold with some rain, but field and camp conditions are generally good.

SURVEYING: Horizontal and vertical control on Lines MDA 1A and RMK 3A has not presented any problem as the area is fairly well surveyed by various governmental and semi-governmental bodies. The location of the proposed Line MDA 4A may have to be altered as the leaseholder is unwilling to have any line clearing done on the property. An alternate track (already cleared) is available for at least a portion of this line but eventually some bulldozing will be required on this property.

DRILLING: On MDA 1A/RMK 3A the hole logs show on the average 15 feet of sand followed by up to 65 feet of wet sticky clay. This would not present any problems for water drilling, but as it is desired to drill with air, keeping the holes in a dry condition for loading the ammonium nitrate mixture, drilling has been slowed. The problem has been partially overcome by giving the drillers options on hole depths and charge sizes; i.e. a difficult hole can be loaded with a reduced charge at a shallower depth.

SHOOTING: Initial charge sizes were 1 detonator, 5 pounds of Geophex and 40 pounds of Nitropril on the "end on" shots and 3 (average) detonators, 15 pounds (average) Geophex and 240 pounds Nitropril on the offset shots. This appeared to be more explosive than was required and the Nitropril content was reduced to 27 pounds and 160 pounds respectively. Red ochre colouring material was added to the fuel oil at the start to provide visual proof of adequate mixing.

RECORDING: Fairly heavy traffic on the Sturt Highway caused minor recording delays, but up to 3 spreads (7½ miles) have been shot in one day. To the west radio communication between the recorder and shooters broke down, probably due to greater topographical relief and the radio antennas had to be raised.

Record quality has been fair to good and picks can be made by either the


0004

first arrival, first trough or intercept methods in good agreement. The range of amplifier gain settings is slightly inadequate to cover the "end on" shot (spread distances from about 100 feet to 2½ miles) and the near end tends to be over-shot. However, the breaks are clear and pickable. Filters are open on the low side and a double cut 78 on the high side (double cut 37 near power lines).

INTERPRETATION: Preliminary plots show basement depth ranging from 1900 feet at the eastern end of Line MDA 1A to 3000 feet near the S.A./Vic. Border. A clear sedimentary section/basement break is present on all spreads to date.

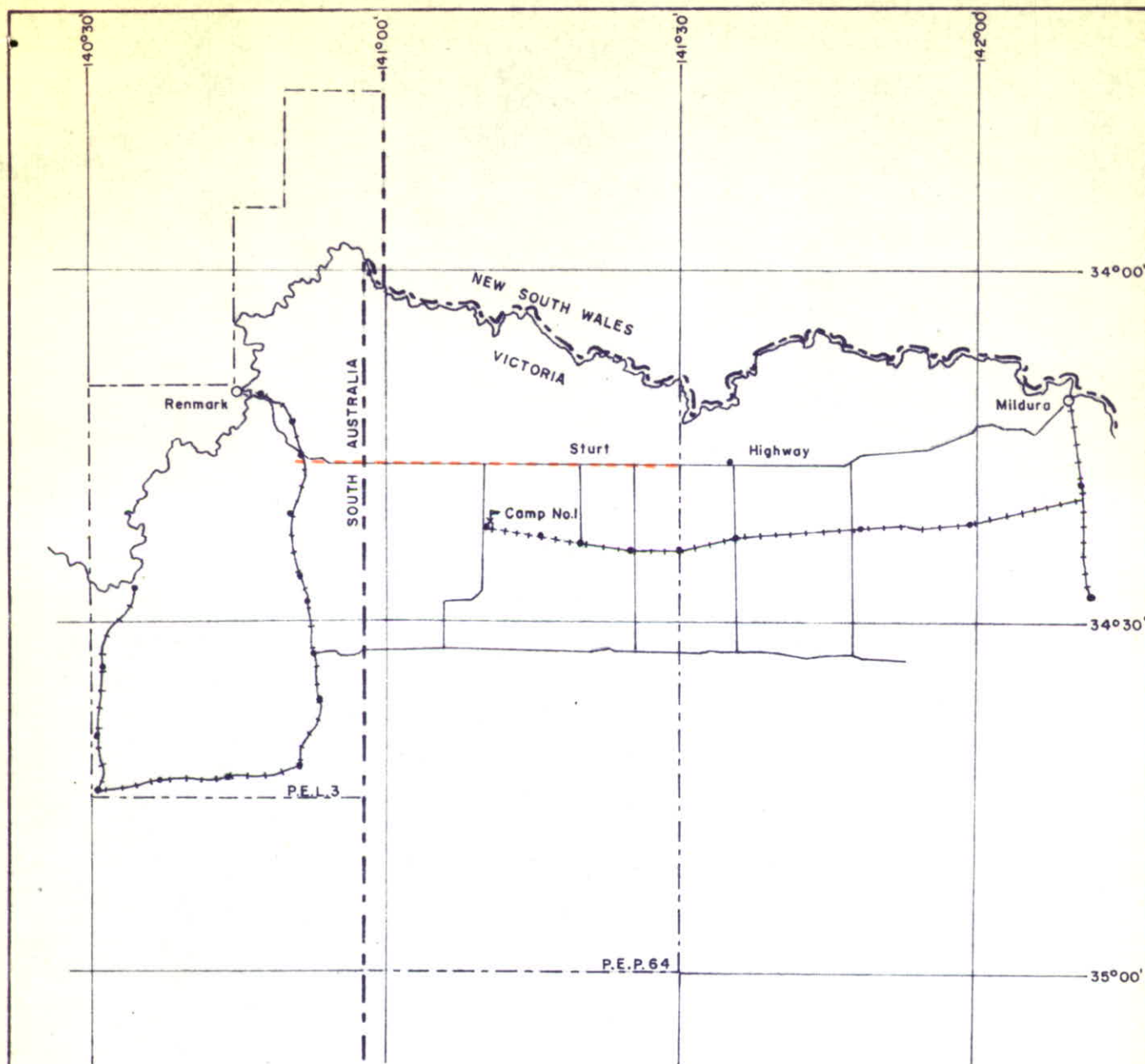
FUTURE PROGRAM: A second east-west refraction line has been started south of the present line.

Respectfully submitted,

H.D. Gray, 
Party Chief.

cc Minad (4), ✓
Brisbane.

enc. Progress Map,
Statistical Report.



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.

Petroleum Exploration Licence No. 3 (Sth. Aust.)
Petroleum Exploration Permit No. 64 (Victoria)

SUNSET SEISMIC SURVEY

PROGRESS MAP

PERIOD: MAY 8, 1969

to

MAY 15, 1969

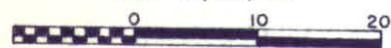
by

UNITED GEOPHYSICAL CORP., PARTY 136

Previous shooting this survey: -----

Shot this period: -----

Scale 1:1,000,000



Miles

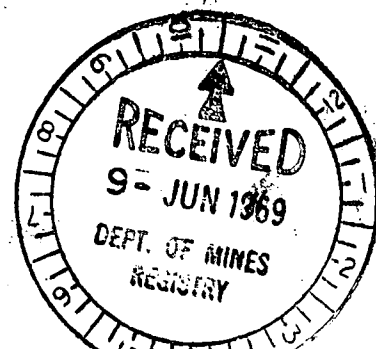


Kilometres

Bendix**United Geophysical
Corporation**

A SUBSIDIARY OF THE BENDIX CORPORATION

BRISBANE : MELBOURNE : ADELAIDE : PERTH : ALICE SPRINGS : PORT MORESBY

P.O. Box 23,
Renmark, S.A.,
May 31, 1969.Exploration Manager,
Mines Administration Pty. Ltd.,
G.P.O. Box 880,
Brisbane 4001, Qld.**SUNSET SEISMIC SURVEY****Report For Period May 16 - May 31, 1969**

GENERAL: Operations continued on the refraction phase of the program until May 30 th. Reflection shooting May 31st and the crew departed on break June 1st. The weather could politely be described as typical of Victoria at this time of year, otherwise field and camp conditions O.K.

SURVEYING: Main survey problem has been carrying vertical control from one line to another due to the great distances involved. As of May 31st all lines satisfactorily tied to each other by the crew surveyors.

DRILLING: No change. Two days lost due to rain and impassable roads.

RECORDING: Record quality fair to good - radio problems solved - some cable problems, breakage and leakage; a spare section of cable will be purchased over the break if available.

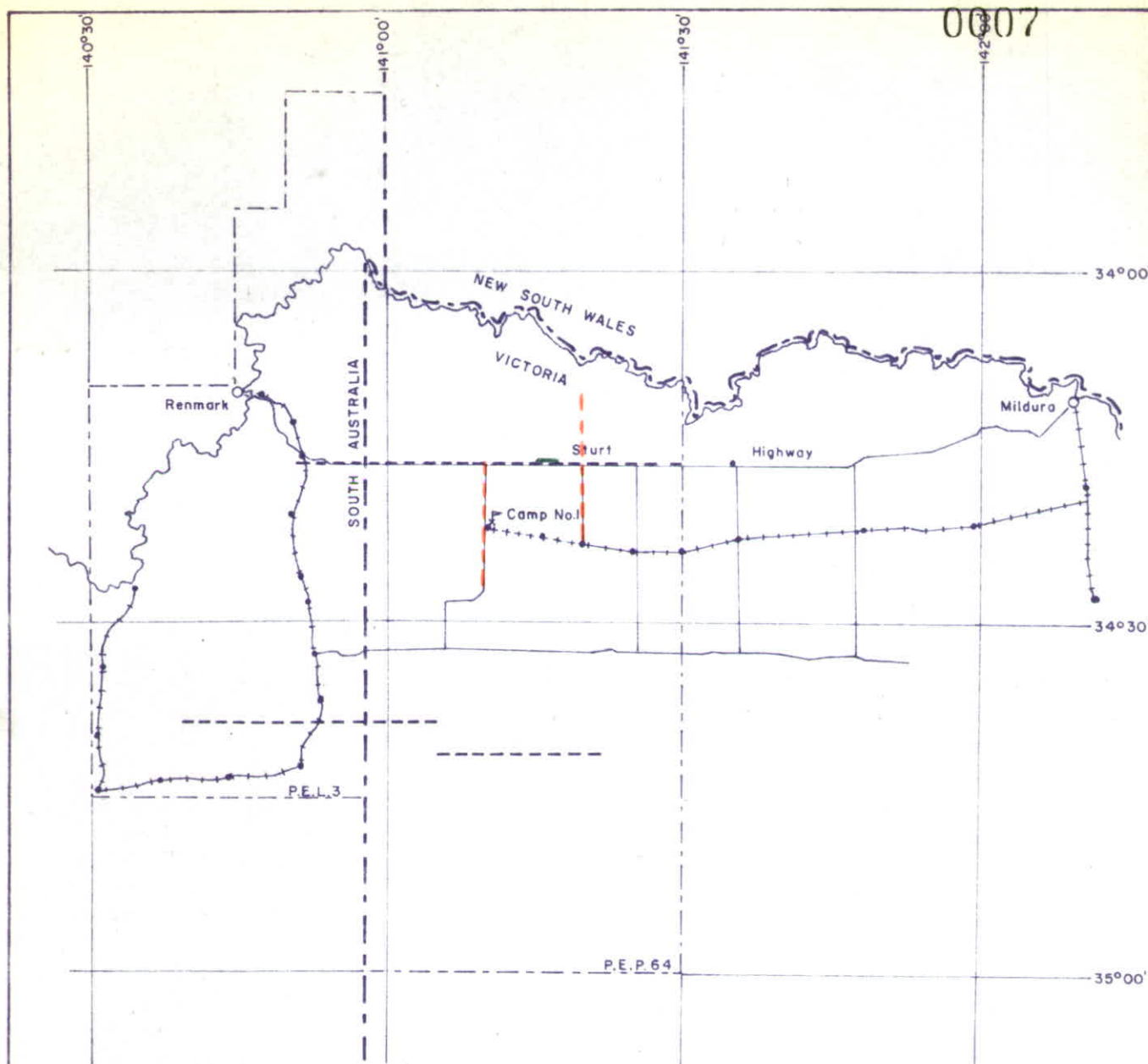
INTERPRETATION: Near surface correction procedures are being applied more or less on an empirical basis as it is not desired at the moment to use field time obtaining the needed velocity information. Such velocity control can be obtained later over the areas of interest, possibly in conjunction with the reflection shooting. However the net effect is that Lines MDA 1A/RMK 3A and Lines RMK 6A/MDA 4A are probably about 70 feet too deep (as shown on the enclosed Progress Map) in relation to the other lines. This slight variation has not been allowed for in the contouring.

On the basement structure map the relatively large distances between the lines allows for several interpretations. A northeast - southwest strike is indicated by the strong northwest dip and the two high features could parallel this trend. It would appear that the area between the east west lines in the vicinity of the Victorian/South Australian Border merits further attention and at least one additional line has been programmed for this area.

FUTURE PROGRAM: A third drill is being added to speed production. A refraction line has been shot north of Meringur and, as mentioned above a refraction line is programmed in the border area.

Respectfully submitted,

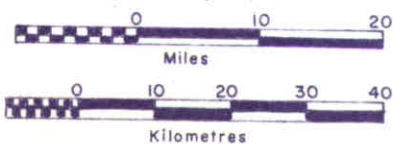
cc Minad (4),
Brisbane.H.D. Gray,
Party Chief.



Reflection.
 Previous shooting this survey: ———
 Shot this period: ———

Refraction.
 Previous shooting this survey: - - - - -
 Shot this period: - - - - -

Scale 1:1,000,000



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
 PEXA OIL N.L.

Petroleum Exploration Licence No. 3 (Sth. Aust.)
 Petroleum Exploration Permit No. 64 (Victoria)

SUNSET SEISMIC SURVEY

PROGRESS MAP

PERIOD: 24. May 1969

to

31. May 1969

by

UNITED GEOPHYSICAL CORP., PARTY 136

ENV 1053

0008

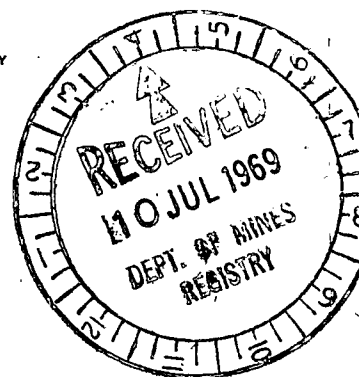


UNITED GEOPHYSICAL CORPORATION

Exploration Manager,
Mines Administration Pty. Ltd.,
G.P.O. Box 880,
Brisbane 4001, Qld.

BRISBANE : SYDNEY : ADELAIDE : PERTH : PORT MORESBY

Party 136,
P.O. Box 23,
Renmark 5341, S.A.,
June 30, 1969.



SUNSET SEISMIC SURVEY

Report For Period June 16 - June 30, 1969.

GENERAL: Operations resumed June 18th after crew break. Weather somewhat better, still cold but less wind and virtually no rain. Surface coverage this period was 62½ miles of refraction and 4½ miles of reflection shooting.

SURVEYING: The survey crews started two days before the recording crew but are steadily losing ground, and will probably be 2 or 3 days behind the recording crew by the time the refraction phase of the program is completed. They should catch up rapidly once the crew starts shooting reflection. All loops to date are satisfactorily tied.

BULLDOZING: An HD-11 Allis Chalmers was hired from a local farmer to clear Line MDA 4C. About 13 miles, ranging from very light scrub to heavy timber (non-commercial) were dozed. Prior approval had been obtained from the Forestry Department, the Soils Conservation Department and the Lands Department. Mr. Hoffman was advised that clearing was about to start but as yet has not been heard from.

DRILLING: The 3rd drill started June 30th.

RECORDING: About 1½ days lost due to malfunctioning of the tape transport. A spare cable was made up over the break to replace the section giving trouble. Data quality fair to excellent.

INTERPRETATION: The near surface correction procedure used on the later lines appears to be adequate and the basement values for the first two lines (MDA 1A/RMK 3A and RMK 6A/MDA 4A) have been altered to conform with the other lines. The maps presented incorporate this change.

At least two prominent structural high have been outlined, both at approximately the depth at which a pinch-out of the Basal Cretaceous Sand could be expected. The area to the southeast has been shown as too shallow to be of interest, while several areas to the north and west are attractive by virtue of the basement depth. These require further control (shooting now in progress) to prove structure, if any present.

The short reflection line (SP's. 458 to 586 on Line MDA 1A) has two significant features. The overlying section pinches out on basement to the west at about SP. 462. In addition the post basement sediments show fairly strong west dip. In particular this west dip is present between SP's. 472 and 460

where basement dip is to the east.

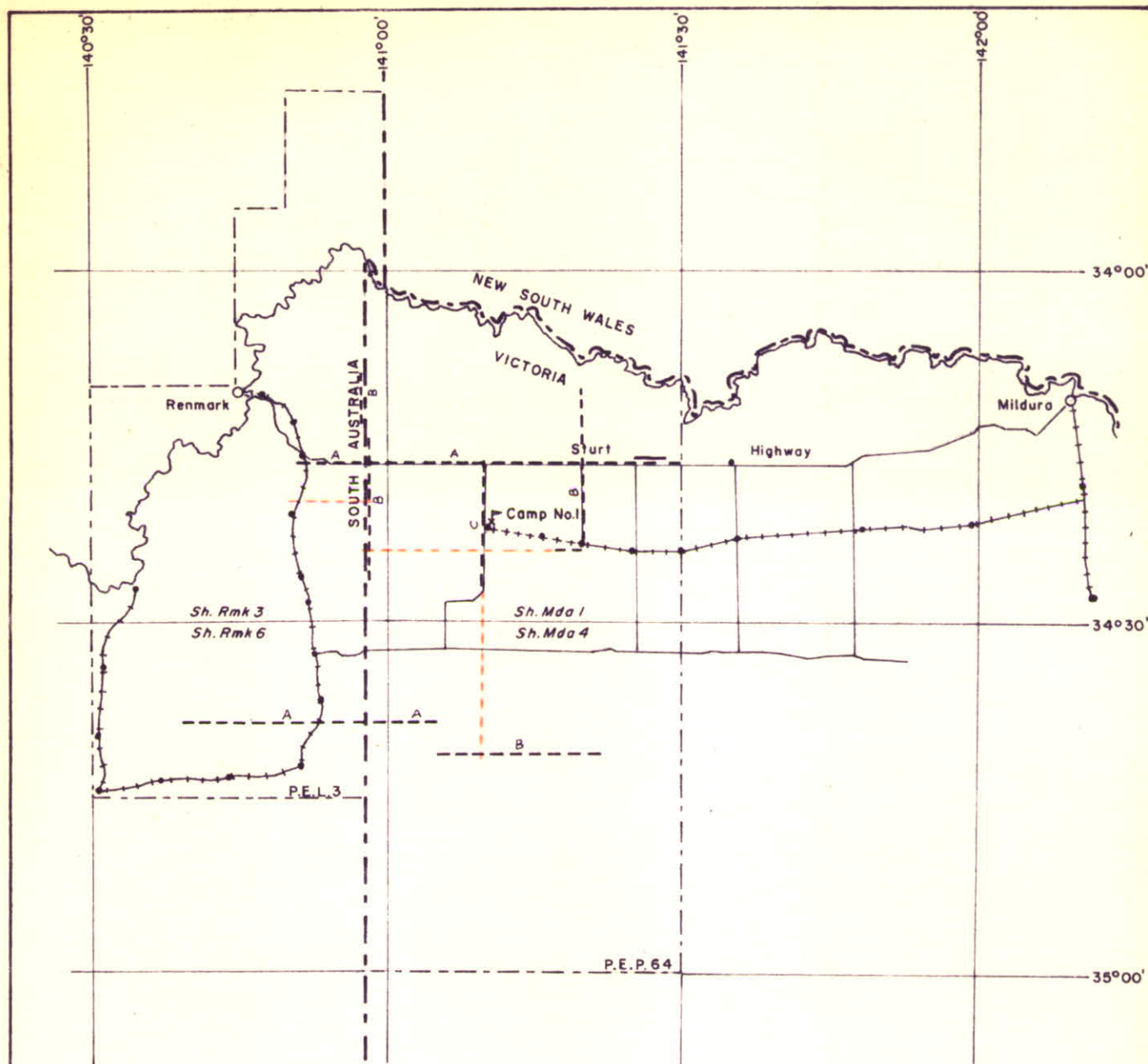
FUTURE PROGRAM: Two east-west lines have been shot which give almost continuous coverage from Meringur to the vicinity of Berri. A further east-west line is being shot in the north, just south of the River. A further refraction line is planned extending east from Loxton. Detailed reflection shooting will then be conducted over the areas of interest delineated by these and other refraction lines.

Respectfully submitted,

H.D. Gray,
Party Chief. *Z*

HGG/dg

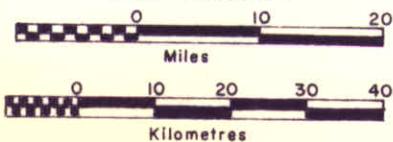
cc Minad (4),
Brisbane,
File.



Reflection.
Previous shooting this survey ———
Shot this period:

Refraction.
Previous shooting this survey: - - - - -
Shot this period: - - - - -

Scale 1:1,000,000



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.

Petroleum Exploration Licence No. 3 (Sth. Aust.)
Petroleum Exploration Permit No. 64 (Victoria)

SUNSET SEISMIC SURVEY PROGRESS MAP

PERIOD: 24 June 1969
to
30 June 1969
by

UNITED GEOPHYSICAL CORP., PARTY 136

ENV 1053.



UNITED GEOPHYSICAL
CORPORATION

BRISBANE : SYDNEY : ADELAIDE : PERTH : PORT MORESBY

0011



Party 136,
P.O. Box 23,
Renmark, S.A. 5341,
July 21, 1969.

Exploration Manager,
Mines Administration Pty. Ltd.,
Box 880, G.P.O.,
Brisbane 4001.

SUNSET SEISMIC SURVEY

Report For Period July 1 - July 16, 1969.

GENERAL: Weather and other field conditions generally good, but wind and rain storms causing sudden program changes. No actual lost time but efficiency impaired somewhat; overall production, however, maintained at a high level.

SURVEYING: Surveyors "holding their own". All loops to date have good ties.

BULLDOZING: No dozing required this period. SP. 234 on line RMK. 3F was apparently drilled into some sort of cavity. When fired in the normal manner the area around the hole collapsed leaving a cylindrical hole with vertical walls about 10 feet across and 15 feet deep. There appeared to be a horizontal passage extending to the east from the bottom of the hole. Arrangements were made with the Loxton District Council to fill the hole and this has been completed as of to-day.

DRILLING: Fine white sand (common to the general area at various depths) was encountered on the reflection line RMK. 6A, in some cases shallower than 20 feet. Unable to drill single holes to the required depth and in some cases had to substitute pattern holes.

RECORDING: Refraction data fair to good; power lines, wind and rain giving trouble at times, but this can be overcome by a properly filtered playback. Reflection data poor on Line RMK. 6A on the pattern holes.

INTERPRETATION: This report has been delayed slightly to include all refraction work prior to the 15th and a Basement Contour Map is attached.

Most of the permit(s) area(s) has now been covered by the reconnaissance refraction lines. A sub-basin or sub-trough has been delineated southeast of the Renmark Trough. Within this sub-trough the basement surface is irregular and numerous closed anticlines have been outlined. Reflection shooting to locate the pinch-outs of the Basal Cretaceous Sand is now in progress. Pinch-out has been proven on Lines RMK. 6A and MDA 1A.

FUTURE PROGRAM: Additional refraction and reflection lines have been programmed over areas of interest. It is expected that field operations will cease about July 28th.

0012

Respectfully submitted,

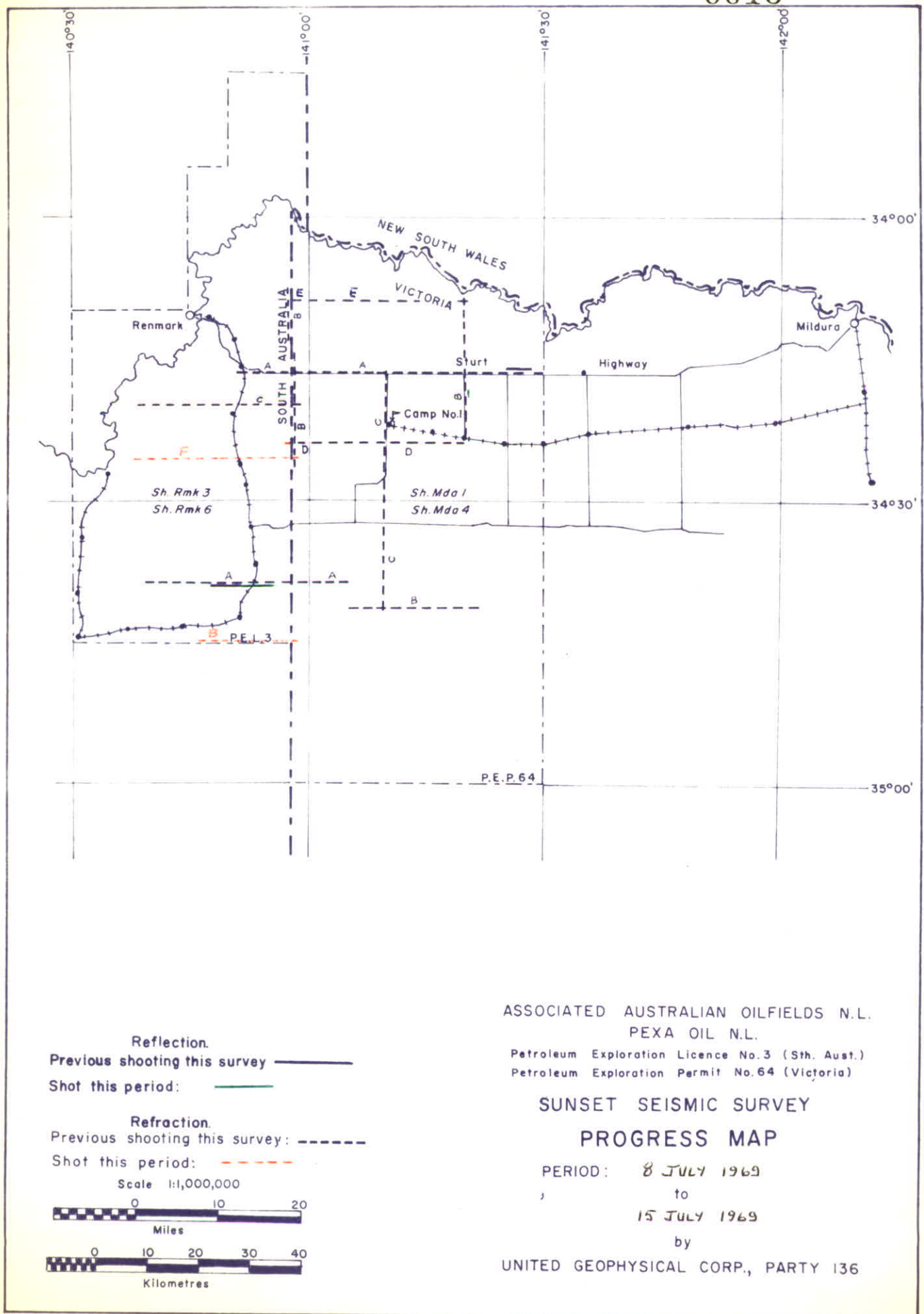
H.D. Gray,
Party Chief.

[Handwritten signature]

HDG/dg

cc Minad (4),
Brisbane.

enc. Statistical Report,
Basement Contour Maps



Bendix

**United Geophysical
Corporation**

A SUBSIDIARY OF THE BENDIX CORPORATION

BRISBANE : MELBOURNE : ADELAIDE : PERTH : ALICE SPRINGS : PORT MORESBY

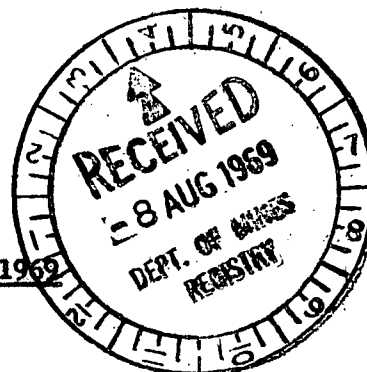
ENV 1053

0014

Party 136,
210 Henley Beach Road,
Torrensville, S.A., 5031,
August 3, 1969.

SUNSET SEISMIC SURVEY

Exploration Manager,
Mines Administration Pty. Ltd.,
G.P.O. Box 880,
Brisbane, 4001, Qld.



Report For Period July 16 - July 31, 1969

GENERAL: Field work finished on July 28th.

BULLDOZING: The north extension of refraction Line MDA 1C and the reflection Line MDA 1H had to be cleared.

DRILLING: The fine white sand was again encountered at relatively shallow depths while drilling Refraction Line RMK 6C. This sand presents a very definite drilling problem. If future exploration is planned for this area (approximately Remark 6 Map) it should be noted that shot holes can be drilled to depth only with great difficulty and expense.

RECORDING: Refraction data good except Line RMK 6C; here a combination of wind, rain, power lines, heavier than normal traffic and a charge that appeared to only partially detonate resulted in some sub-standard data. Reflection quality was "spotty" changing from very good to poor in adjacent areas without apparent reason.

INTERPRETATION: Data from the final 3 refraction lines has been added to the enclosed Basement Contour Map. The most noticeable change is the extension to the southeast of the high zone in MDA 1 just east of the S.A./Victoria border.

As mentioned above the reflection data was not as good as had been hoped for and preliminary picking of the wiggle trace records has been rather inconclusive as far as delineating the pinchouts. However it is felt that a more detailed study of the playback sections, when returned, will yield the required information.

CONCLUSION: Surface coverage for the survey was 318 miles, about 20% more than had been estimated. The aims of the survey would appear to have been achieved, with the possible exception referred to in the previous section.

The writer would like to thank the staff of Mines Administration, and in particular Mr. Les Denham for his valuable contributions such as advance planning, guidance and prior knowledge of the area.

Best regards,

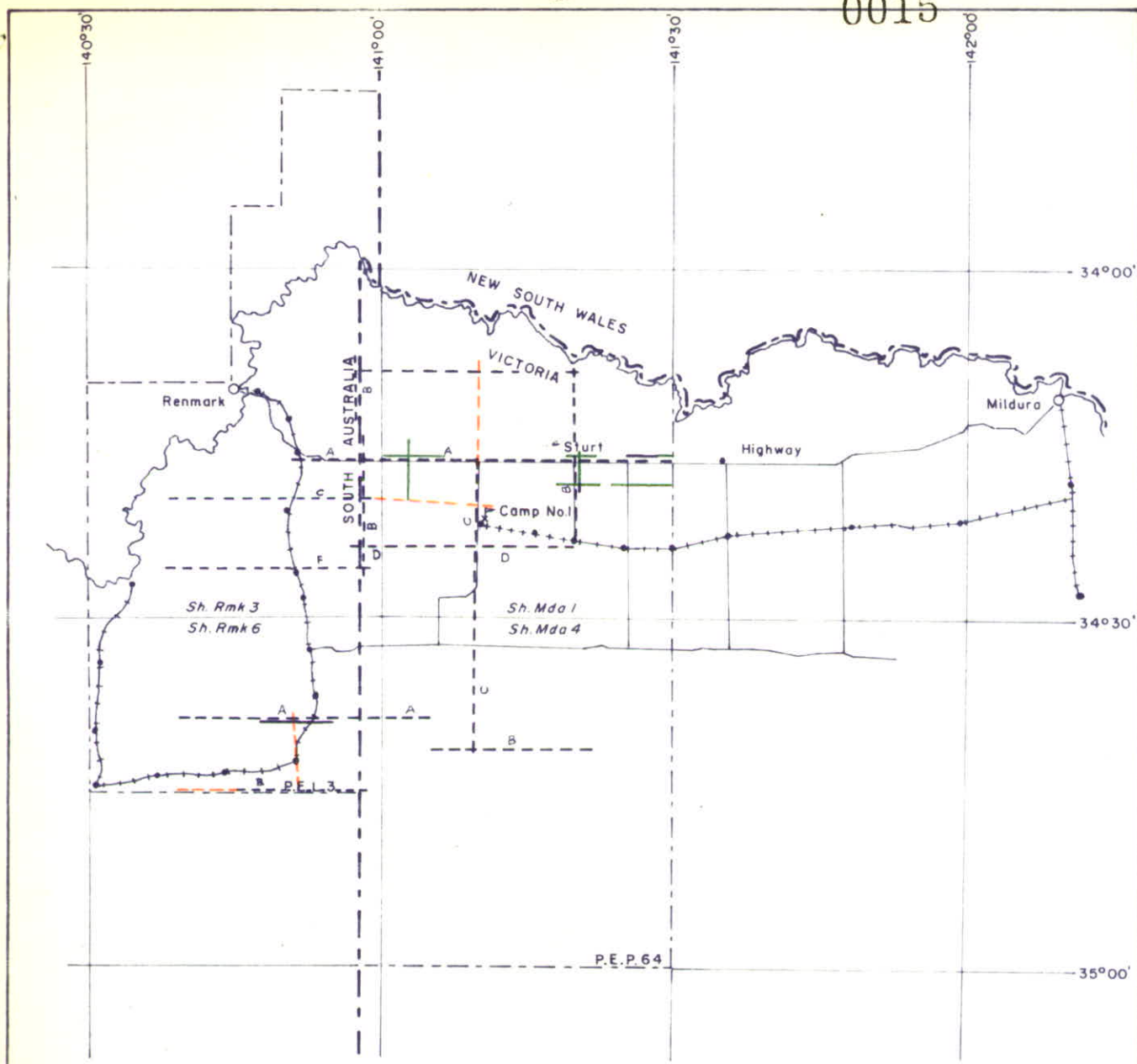
HGG/ag

cc Minad (4),
Brisbane.

H.D. Gray,
Supervisor.

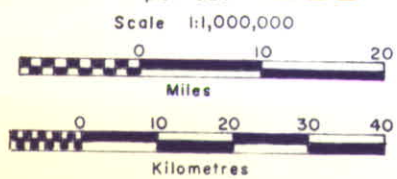
ENV 1053

0015



Reflection.
Previous shooting this survey: ———
Shot this period: ———

Refraction.
Previous shooting this survey: - - - - -
Shot this period: - - - - -



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Licence No. 3 (Sth. Aust.)
Petroleum Exploration Permit No. 64 (Victoria)

SUNSET SEISMIC SURVEY
PROGRESS MAP

PERIOD: 16 JUL 1969
to
31 JUL 1969
by

UNITED GEOPHYSICAL CORP., PARTY 136

MONTHLY SEISMIC PRODUCTION REPORT

FOR MINAD OFFICE USE ONLY																															
REPORT PERIOD																															
RECORDER																															
DRILL																															
EXPLOSIVES																															
BITS																															
MUD																															
SURVEY																															
LINE CLEARING																															
BRAN																															
REMARKS																															

MONTHLY SEISMIC PRODUCTION REPORT

FOR MINAD OFFICE USE ONLY																																
Basic Party Costs																																
Extra Personnel																																
Shooting Consumables																																
Drilling Consumables																																
Extra Drilling																																
Extra Vehicles																																
Miscellaneous																																
TOTAL SEISMIC COST																																
Ave. Profiles/10 Hour Day																																
Ave. Feet Drilled/10 Hour Day																																
Ave. Seismic Cost/Profile																																
Camp Cost/Allowances																																
Line Clearing Costs																																
TOTAL COST																																
Ave. Total Cost/Profile																																
REPORT PERIOD																																
1 2 3 4 Total for Month																																
No. of Profiles, Type Refraction																																
No. of Profiles, Type Reflection																																
No. of Profiles, Type																																
TOTAL PROFILES																																
Profiles for Month to Date																																
Surface Coverage Miles																																
Length of Spread Miles																																
No. of Tapes used																																
Hours Travel Time																																
Actual Field Hours																																
TOTAL HOURS PER DAY																																
Cumulative Hours																																
HOLES DRILLED																																
FOOTAGE DRILLED																																
Hours Travel Time																																
Hours Actual Drill Time																																
TOTAL HOURS PER DAY																																
Cumulative Hours																																
HOLES DRILLED																																
FOOTAGE DRILLED																																
Hours Travel Time																																
Hours Actual Drill Time																																
TOTAL HOURS PER DAY																																
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HOLES DRILLED																																
FOOTAGE DRILLED																																
Hours Travel Time																																
Hours Actual Drill Time																																
TOTAL HOURS PER DAY																																
Cumulative Hours																																
TOTAL HOLES DRILLED																																
TOTAL FOOTAGE DRILLED																																
Dynamite Received																																
Dynamite Loaded																																
Dynamite Fired																																
Dynamite Left Preloaded																																
Dynamite on Hand																																
Ammonium Nitrate Received																																
Ammonium Nitrate Used																																
Ammonium Nitrate on Hand																																
Caps Received																																
Caps Loaded																																
Caps Fired																																
Caps Left Preloaded																																
Caps on Hand																																
Ammonium Nitrate Loaded																																
" " Left Preloaded																																
Received																																
Used																																
On Hand																																
Received																																
Used																																
On Hand																																
Survey Team Hours (1)																																
(2)																																
Hours																																
Miles																																
Hours																																
Miles																																

REMARKS																																
Hi-Line wind and tractors in area.																																
Completed RMK 3C.																																
Recording on Line RMK 3E. Rough track.																																
Line rough and slow - hard to plant																																
Geophones - swampy.																																
Heavy rain - switched to Reflection-Line																																
because of wet conditions on Line MDA 1E.																																
Bad drilling conditions - long water hauls.																																
One drill hung up in hole overnight.																																
Returned to Refraction because of drill																																
troubles on Reflection-Line.																																
Vehicles bogged.																																
Completed Line MDA 1E. Boggy conditions.																																
Connections to Caps and Powder Usage on 6.87.																																
Some shallow patterns due to bad																																
drilling conditions - record quality																																
fair to very poor.																																
Drills finish RMK 6B																																
Drills start RMK 3F																																
Recorder broke differential returning																																
to camp. Strong wind and Hi-Line																																
Bursing Phones to 18 inches																																
Drill 1815 broken transfer case																																
Recorder towed by shooting truck to																																
RMK 3F. Drill 1471 down 5 1/2 hrs tyre trouble																																
Drill target 100ft. plus for Reflection																																
Shooting. Cavity at S.P. 234 RMK 3F																																
will require filling 10 diam. 20 DEEP																																
Recorder repaired finished RMK 3F																																
Drill 1815 down with compressor trouble.																																
Cavity at S.P. 124 RMK 3F 12 diam 20 DEEP																																
Grader working beside line																																
Completed Line RMK 6B move																																
to Line MDA 1B																																

RECEIVED
- 1 AUG 1969
DEPT. OF MINES
BRISBANE


SUNSET
SEISMIC SURVEY
for
MINES ADMINISTRATION PTY. LIMITED
25 Charlotte Street, Brisbane
G.P.O. Box 880
Brisbane, 4001
Phone: 21 2366

CONTRACTOR United Geophysical Corporation
PARTY No 136 MONTH JULY 1969
Log all information daily. Fill in totals at end of each report period.
Seis. Fm 1

P/C
or
P/M
Signature
Sheet of

ENV 1053-2

RECEIVED
-1 AUG 1969
DEPT. OF MINES
MINES ADMINISTRATION
25 OCT 1969


 SUNSET
 NATIONAL SEISMIC SURVEY
 for
 MINES ADMINISTRATION PTY. LIMITED
 125 Charlotte Street, Brisbane
 G.P.O. Box 880
 Brisbane, 4001
 Phone: 21 2366

CONTRACTOR United Geophysical Corporation
 PARTY No 136 MONTH JULY 1969
 Log all information daily. Fill in totals at end of each report period.
 Seis. Fm 1
 Sheet

MONTHLY SEISMIC PRODUCTION REPORT

PROFILES		MONTHLY SEISMIC PRODUCTION REPORT																															FOR MINAD OFFICE USE ONLY														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31															
																			MDA 1A	MDA 1A	RMK 3B	RMK 3B	RMK 3B	MDA 1D											MDA 1D	MDA 1D	MDA 1D	MDA 1C	MDA 4C	RMK 3C	Basic Party Costs						
																			472	482	579-556	535-512	491-468	601-578											579-556	557-534	469-446	491-468	425-402	301-278	Extra Personnel						
																			474	484	578	534	490	600											578	556	468	490	424	300	Shooting Consumables						
																			476	486	556	556	468	578											556	534	446	468	402	278	Drilling Consumables						
																			478	488	600	512	512	622											600	578	490	512	446	322	Extra Drilling						
																			480		534	490	446	556											534	512	424	446	380	256	Extra Vehicles						
																																			535-512	447-424	469-446	403-380	279-256	Miscellaneous							
																																			534	446	446	402	278	TOTAL SEISMIC COST							
																																			512	424	490	380	256	Ave. Profiles/10 Hour Day							
																																			556	468	424	424	300	Ave. Feet Drilled/10 Hour Day							
																																	490	402	468	358	234	Ave. Seismic Cost/Profile									
																																	447-424					Camp Cost/Allowances									
																																	446					Line Clearing Costs									
																																	446					TOTAL COST									
																																	446					Ave. Total Cost/Profile									
																																	REPORT PERIOD														
																																	No. of Profiles, Type Refraction														
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MONTHLY SEISMIC PRODUCTION REPORT

[illegible]

SUNSET SEISMIC SURVEY

MINES ADMINISTRATION PTY. LIMITED
25-33 Charlotte Street, Brisbane
G.P.O. Box 880
Brisbane, 4001
Phone: 21 2366

CONTRACTOR United Geophysical Corporation P/C
PARTY No. 136 MONTH MAY, 19 69 or P/M
Signature _____
Log all information daily. Fill in totals at end of each report period.
Seis. Fm. 1 Sheet 1

ENV 1053.-4

MONTHLY SEISMIC PRODUCTION REPORT

PROFILES

STATISTICS

REMARKS

FOR MINAD OFFICE USE ONLY

SUNSET SEISMIC SURVEY

RECEIVED 9 JUN 1969

DEPT. OF MINES

MINES ADMINISTRATION PTY. LTD.

25-33 Charlotte Street, Brisbane

G.P.O. Box 880 Brisbane, 4001

CONTRACTOR United Geophysical Corporation

PARTY No 136 MONTH MAY 1969

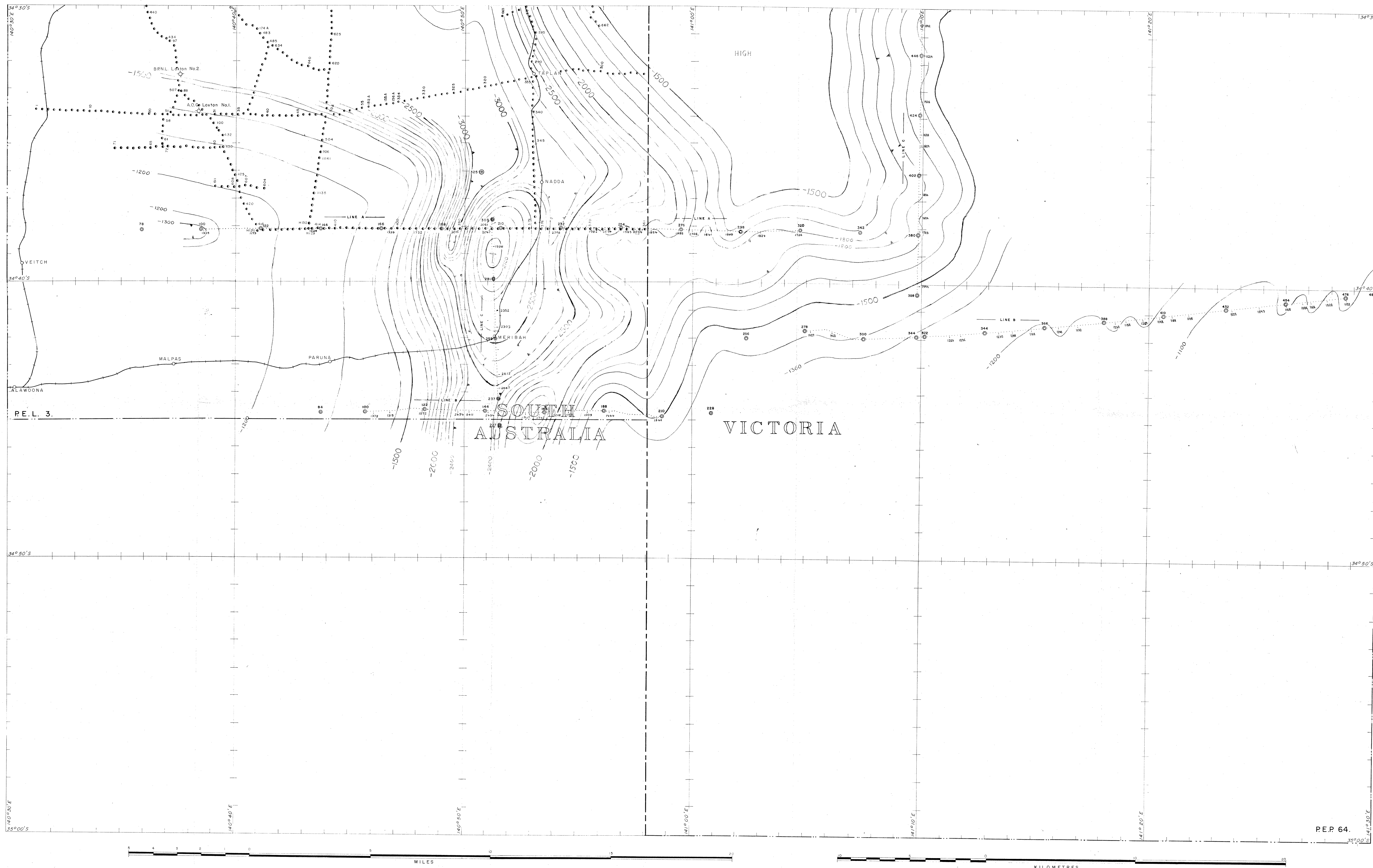
Log all information daily Fill in totals at end of each report period.

Seis. Frm. 1

Signature

Sheet 1 of 1

ENV 1053-5



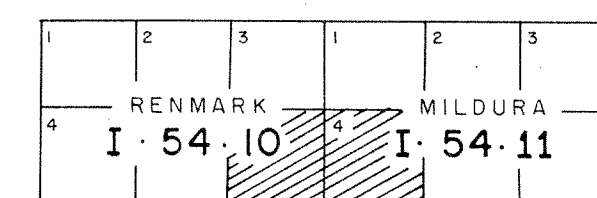
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DATE	DETAILS	INITIAL	DATE	DETAILS	INITIAL

LEGEND

- ◇ Dry Well.
- Seismic Reflection Shotpoint (Beach Petroleum N.L., recorded on tape)
- Seismic Reflection Shotpoint (Beach Petroleum N.L., not on tape)
- Seismic Reflection Shotpoint (Sunset Survey)
- ⊙ Seismic Refraction Shotpoint and Geophone Stations (Sunset Survey)

- +—+— Railway, with station.
- +—+— Railway.
- ▨ Town.
- State Boundary.
- Permit or Licence Boundary.

LOCATION

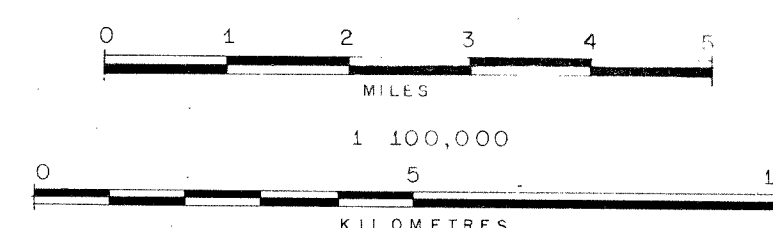


DIAGRAM

ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No. 64 (Victoria)
Petroleum Exploration Licence No. 3. (South Australia)

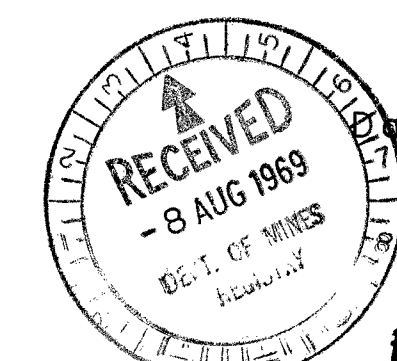
SUNSET SEISMIC SURVEY

BASEMENT
STRUCTURE



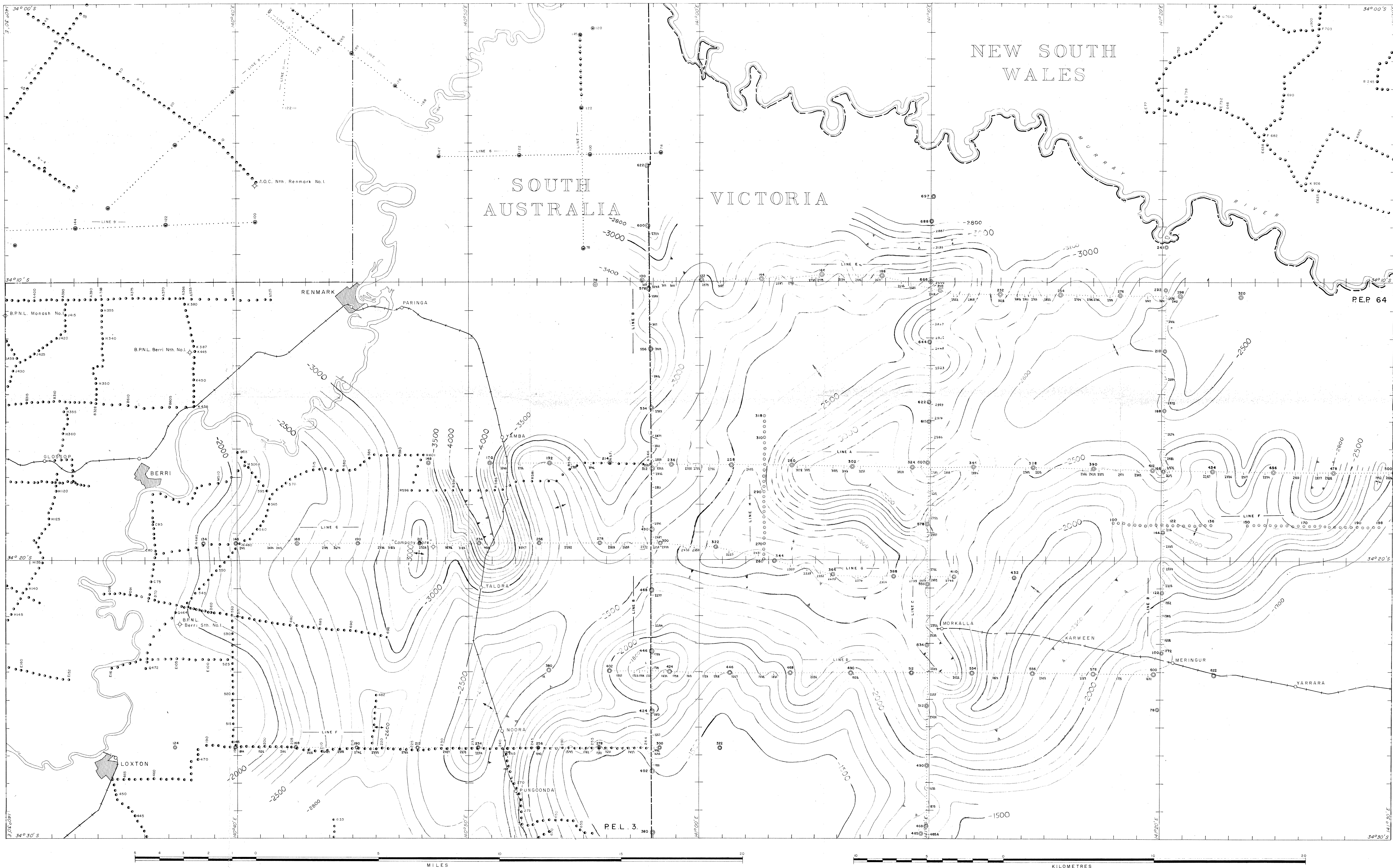
TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID
Datum: Sea Level
Contour Interval: 100 ft
Author : H.D. Gray

No. 12759 BASE
DATA File 015 BASE
DATA



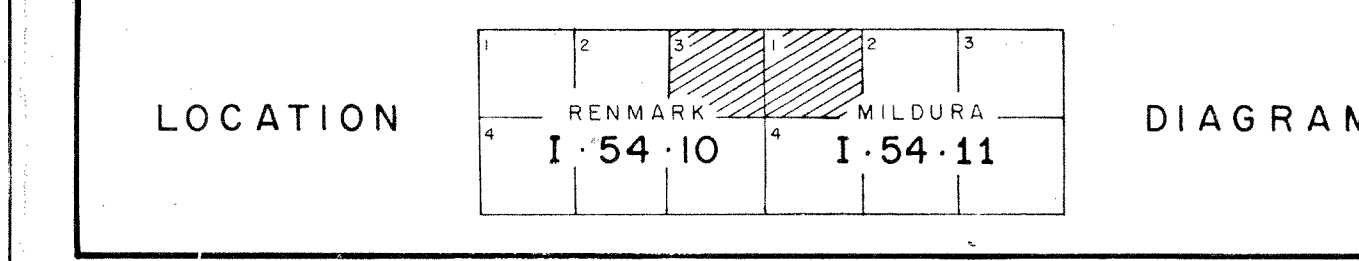
Date: July 1969

ENV 1053-6



BASE		REVISIONS		DATA	
DATE	DETAILS	INITIAL	DATE	DETAILS	INITIAL

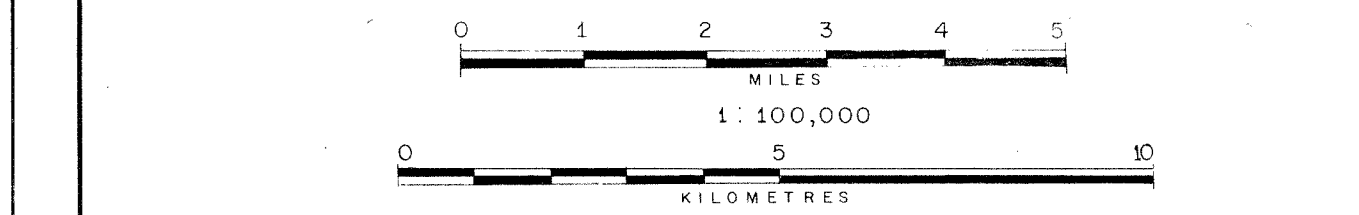
- LEGEND
- Seismic Reflection Shotpoint (Beach Petroleum N.L., recorded on tape)
 - Seismic Reflection Shotpoint (Beach Petroleum N.L., not on tape)
 - Seismic Reflection Shotpoint (A.O.G.)
 - Seismic Reflection Shotpoint (Renmark Survey)
 - Seismic Reflection Shotpoint (Hamley Survey)
 - Seismic Refraction Shotpoint and Geophone Stations (Hamley Survey)
 - Seismic Reflection Shotpoint (Sunset Survey)
 - Seismic Refraction Shotpoint and Geophone Stations (Sunset Survey)
- Railway, with station.
- Railway, abandoned.
- Town.
- State Boundary.
- Permit or Licence Boundary.



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No.64 (Victoria)
Petroleum Exploration Licence No.3. (South Australia)

SUNSET SEISMIC SURVEY

BASEMENT STRUCTURE

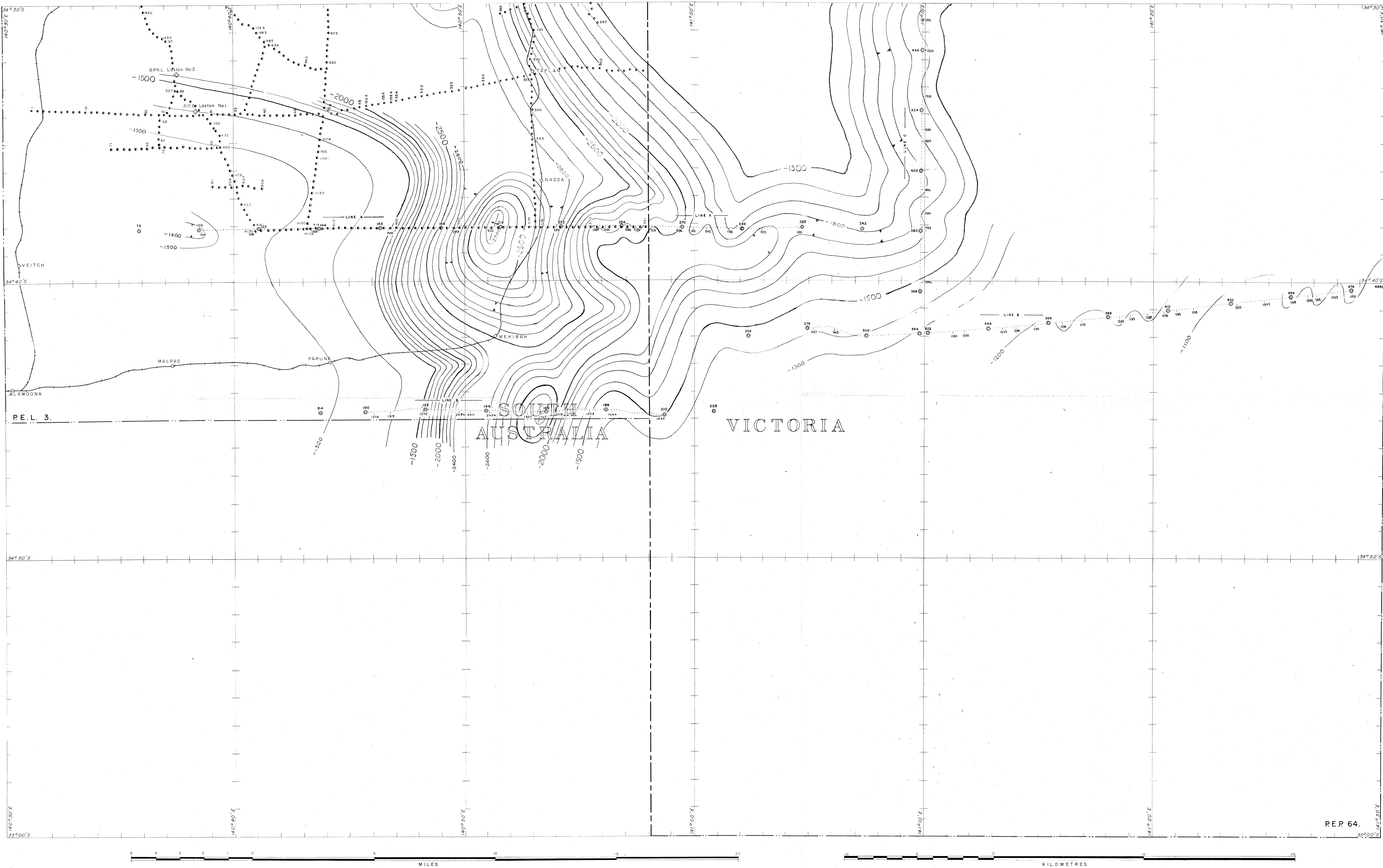


TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID
Datum: Sea Level
Contour Interval: 100ft
Author: H.D.Gray
Date: July 1969

No. 12742 BASE File 015 BASE
DATA DATA

RECEIVED
- 8 AUG 1969
DEPT. OF MINES
REGISTRY

ENV 1053-7



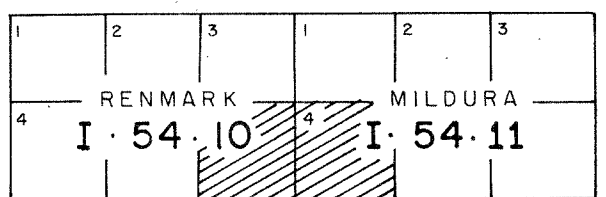
REVISIONS				
BASE		DATA		
DATE	DETAILS	INITIAL DATE	DETAILS	INITIAL

LEGEND

- ◆ Dry Well.
- Seismic Reflection Shotpoint (Beach Petroleum N.L., recorded on tape)
- Seismic Reflection Shotpoint (Beach Petroleum N.L., not on tape)
- Seismic Reflection Shotpoint (Sunset Survey)
- ⊙ Seismic Refraction Shotpoint and Geophone Stations (Sunset Survey)

- +—+— Railway, with station.
- +—+— Railway.
- ▨ Town.
- State Boundary.
- Permit or Licence Boundary.

LOCATION

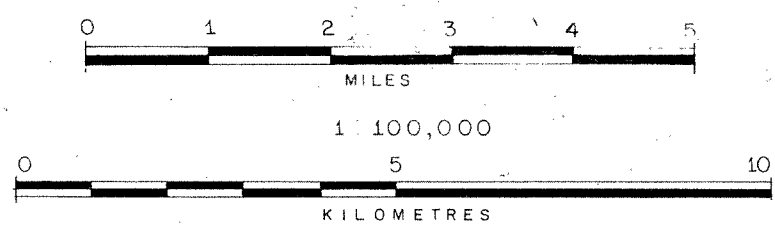


DIAGRAM

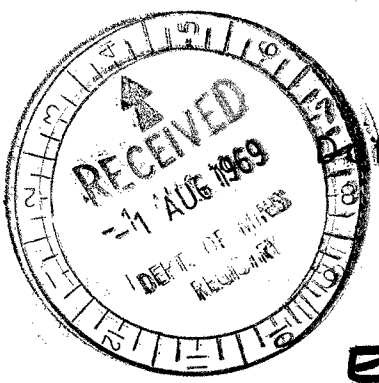
ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No.64 (Victoria)
Petroleum Exploration Licence No.3. (South Australia)

SUNSET SEISMIC SURVEY

BASEMENT
STRUCTURE



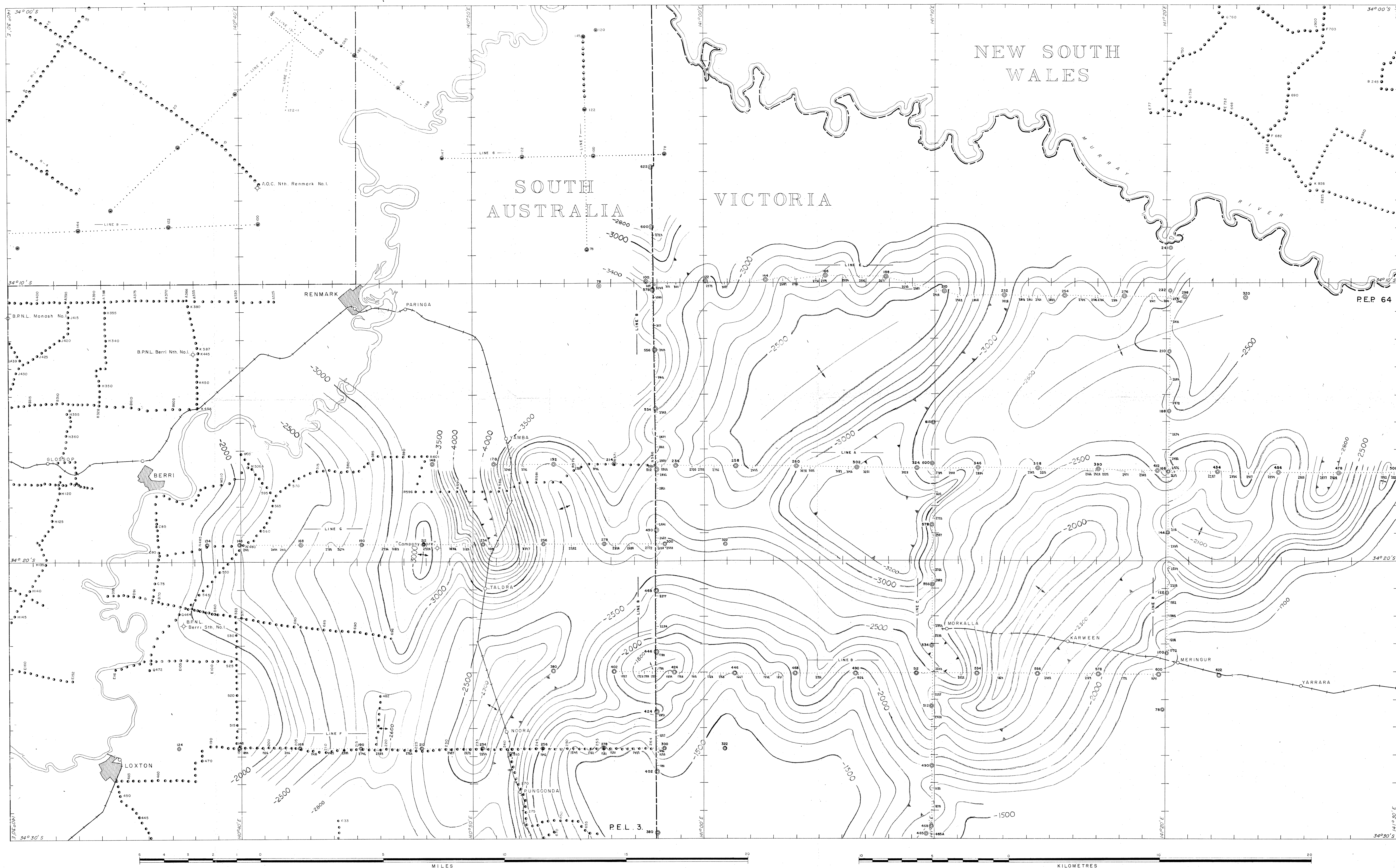
TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID
Datum: Sea Level
Contour Interval: 100 ft
Author: H.D.Gray



Date: July 1969

No. 12759 BASE
DATA File 015 BASE
DATA

ENV 1053-8



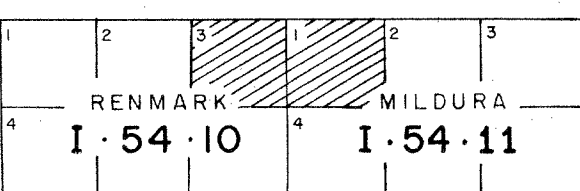
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BASE		DATA		
DATE	DETAILS	INITIAL	DATE	INITIAL

LEGEND

- ◆ Dry Well
- Seismic Reflection Shotpoint (Beech Petroleum N.L., recorded on tape)
- Seismic Reflection Shotpoint (Beech Petroleum N.L., not on tape)
- Seismic Reflection Shotpoint (A.G.G.)
- Seismic Reflection Shotpoint (Renmark Survey)
- Seismic Reflection Shotpoint (Hamley Survey)
- Seismic Refraction Shotpoint and Geophone Stations (Hamley Survey)
- Seismic Reflection Shotpoint (Sunset Survey)
- Seismic Refraction Shotpoint and Geophone Stations (Sunset Survey)

- Railway, with station.
- Railway, abandoned.
- Town.
- State Boundary.
- Permit or Licence Boundary.

LOCATION

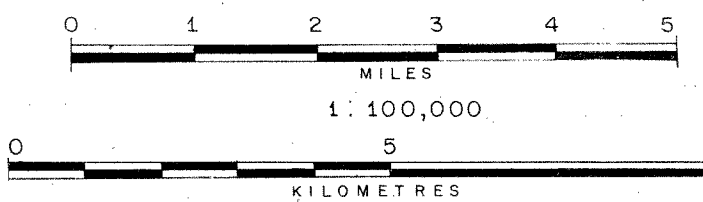


DIAGRAM

ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No.64 (Victoria)
Petroleum Exploration Licence No.3. (South Australia)

SUNSET SEISMIC SURVEY

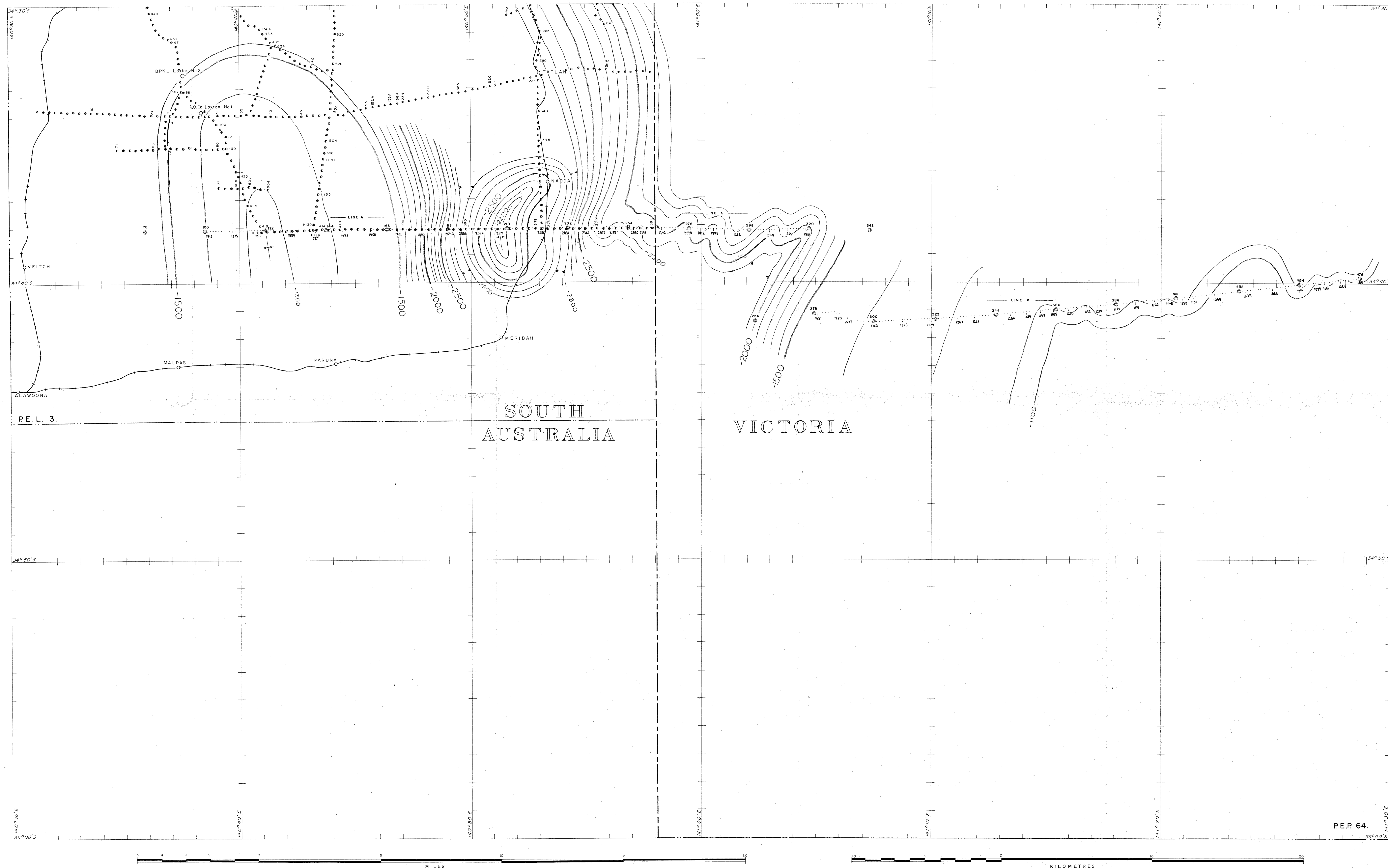
BASEMENT
STRUCTURE








TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES 1958 SPHEROID)
Datum: Sea Level
Contour Interval: 100 ft
Author: H.D.Gray
date: July 1969

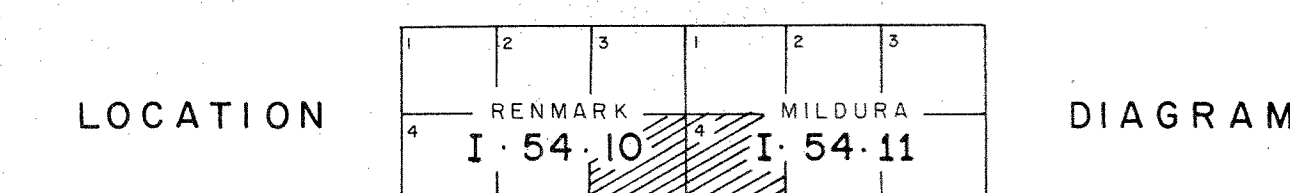
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ENV 6053-9

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LEGEND

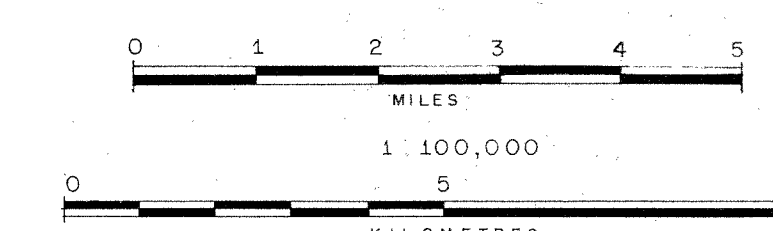
 Railway, with station.
 Railway.
 Town.
 State Boundary.
 Permit or Licence Boundary.



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No.64 (Victoria)
Petroleum Exploration Licence No.3. (South Australia)

SUNSET SEISMIC SURVEY

BASEMENT
STRUCTURE



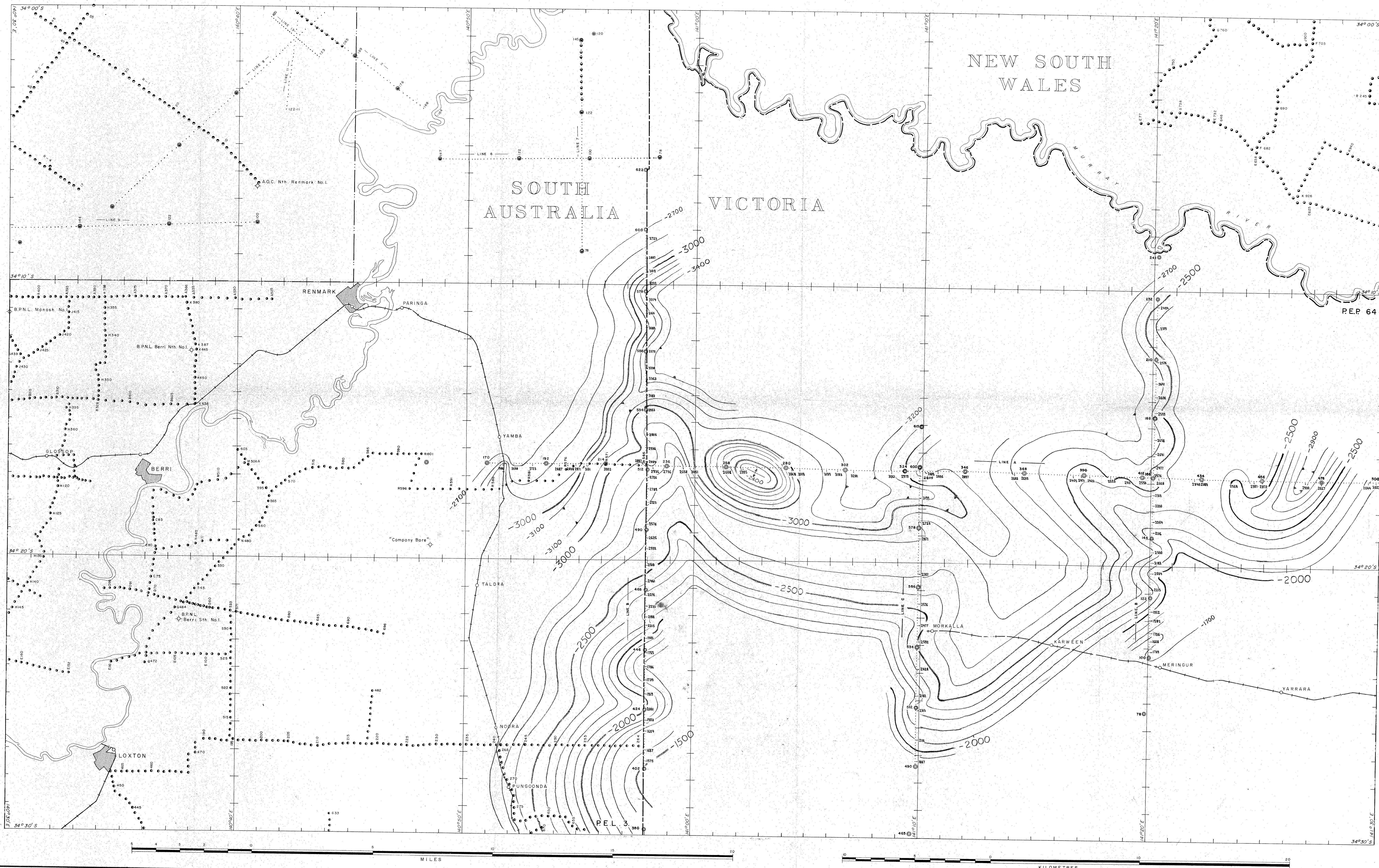
TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID

Datum: Sea Level
Contour Interval: 100 ft
Author : H.D.Gray

Date : June 1969

No.	12759 BASE	File	015 BASE
	DATA		DATA

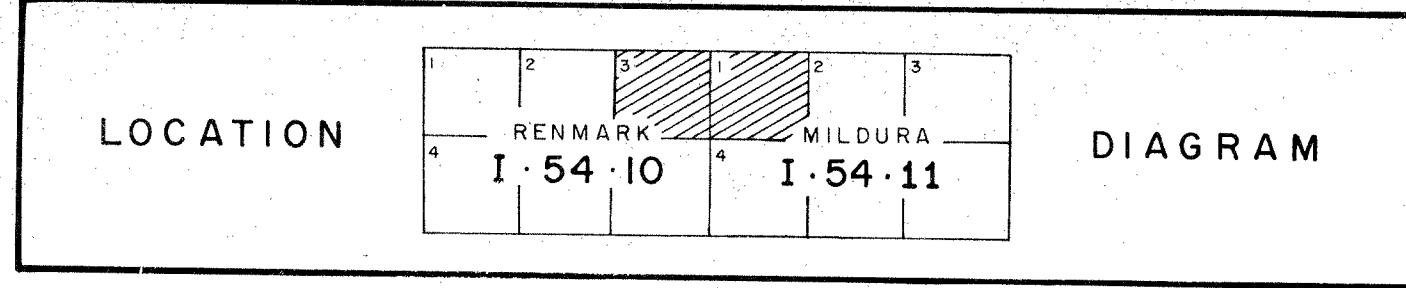
ENV 1053-10



BASE		REVISIONS		DATA	
DATE	DETAILS	INITIAL	DATE	DETAILS	INITIAL

LEGEND

- Seismic Reflection Shotpoint (Beach Petroleum N.L., recorded on tape)
 - Seismic Reflection Shotpoint (Beach Petroleum N.L., not on tape)
 - Seismic Reflection Shotpoint (A.O.G.)
 - Seismic Reflection Shotpoint (Renmark Survey)
 - Seismic Reflection Shotpoint (Hamley Survey)
 - Seismic Refraction Shotpoint and Geophone Stations (Hamley Survey)
 - Seismic Refraction Shotpoint (Sunset Survey)
 - Seismic Refraction Shotpoint and Geophone Stations (Sunset Survey)
- ◇ Dry Well.
- +—+— Railway, with station.
- Railway, abandoned.
- ▭ Town.
- State Boundary.
- Permit or Licence Boundary.



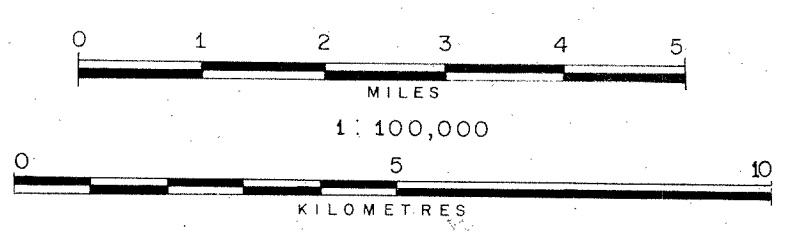
ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No. 64 (Victoria)
Petroleum Exploration Licence No. 3. (South Australia)

SUNSET SEISMIC SURVEY

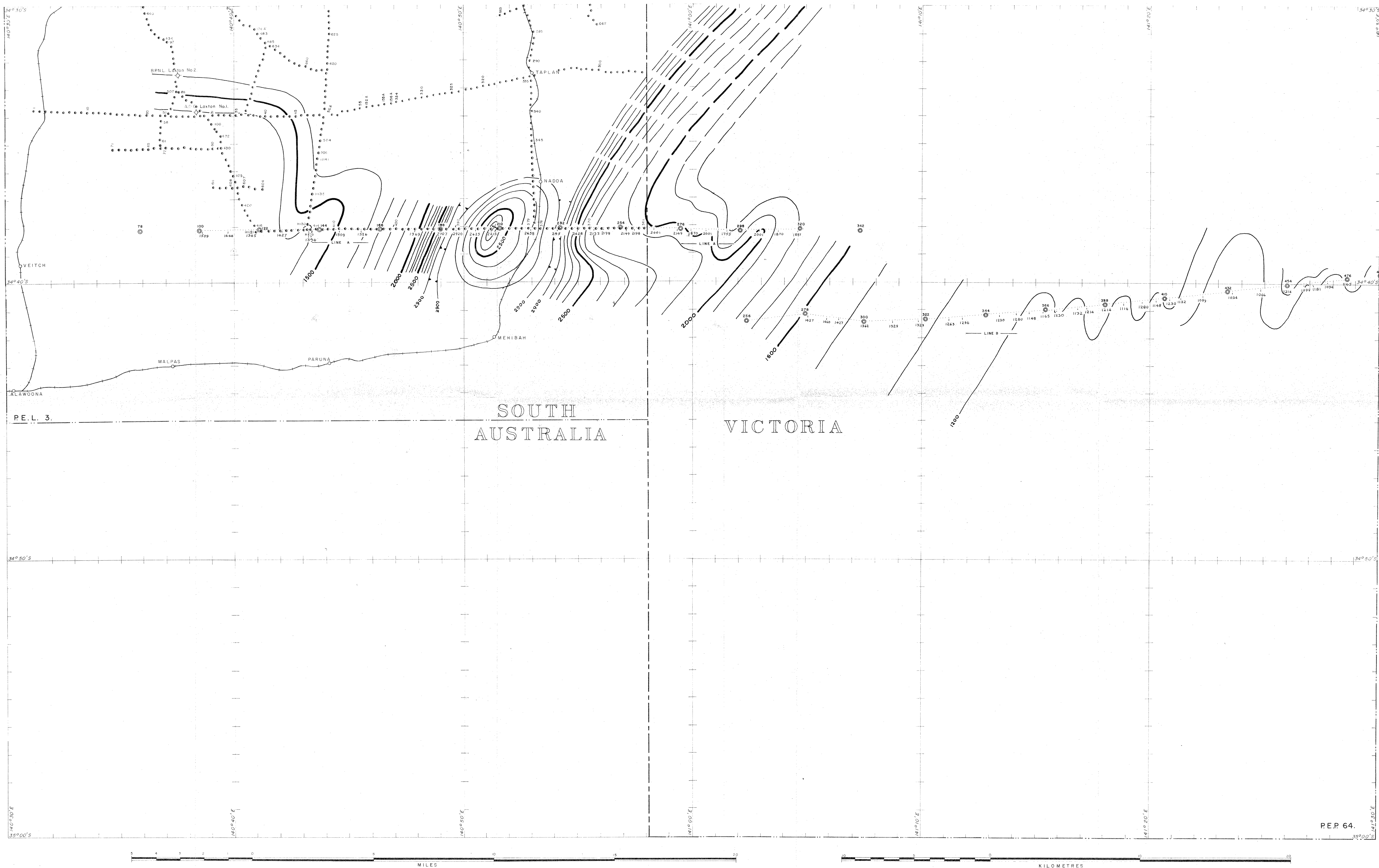
BASEMENT
STRUCTURE



ENV 1053

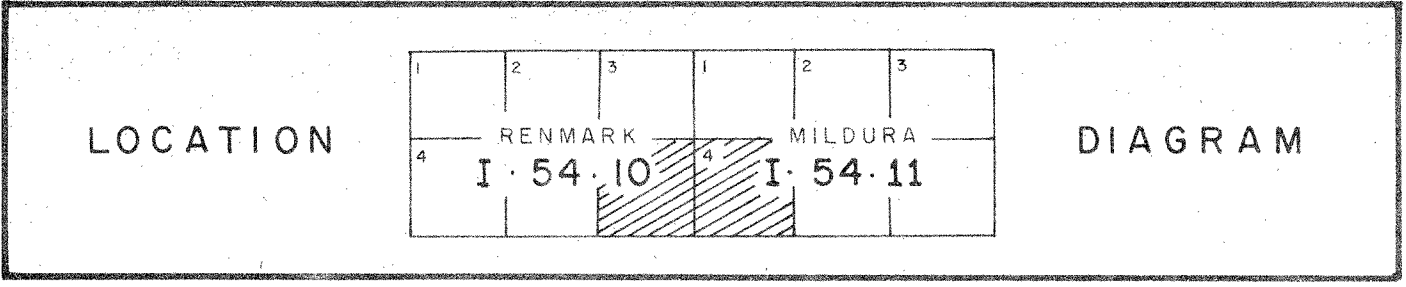


TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID
Datum: Sea Level
Contour Interval: 100 ft
Author: H.D. Gray
Date: June 1969



REVISIONS					
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DATE	DETAILS	INITIAL	DATE	DETAILS	INITIAL

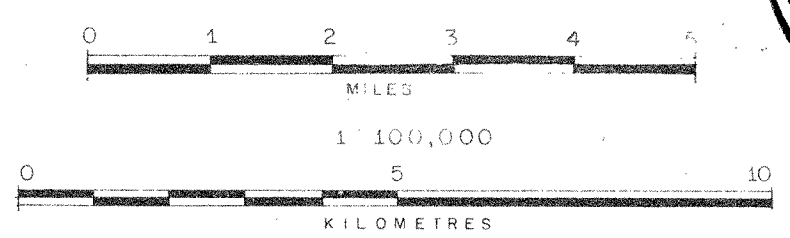
- LEGEND
- ◆ Dry Well.
 - Seismic Reflection Shotpoint (Beach Petroleum N.L., recorded on tape)
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 - +—+— Railway, with station.
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 - ▨ Town
 - State Boundary.
 - Permit or Licence Boundary.



ASSOCIATED AUSTRALIAN OILFIELDS N.L.
PEXA OIL N.L.
Petroleum Exploration Permit No.64 (Victoria)
Petroleum Exploration Licence No.3. (South Australia)

SUNSET SEISMIC SURVEY

BASEMENT
STRUCTURE



TRANSVERSE MERCATOR PROJECTION
ZONE 6 (AUSTRALIA SERIES), CLARKE 1858 SPHEROID

Contour Interval: 100 ft.
Author :H.D.Gray.
Date :May,1969

No.	12753	BASE	File	015	BASE
		DATA			DATA

