

Open File Envelope

No. 1041

SML 244

LAKE FROME [SOUTH]

**PROGRESS REPORTS TO LICENCE EXPIRY/RENEWAL,
FOR THE PERIOD 8/10/1968 TO 7/10/1970**

Submitted by
Petromin NL
1970

© 21/10/1982

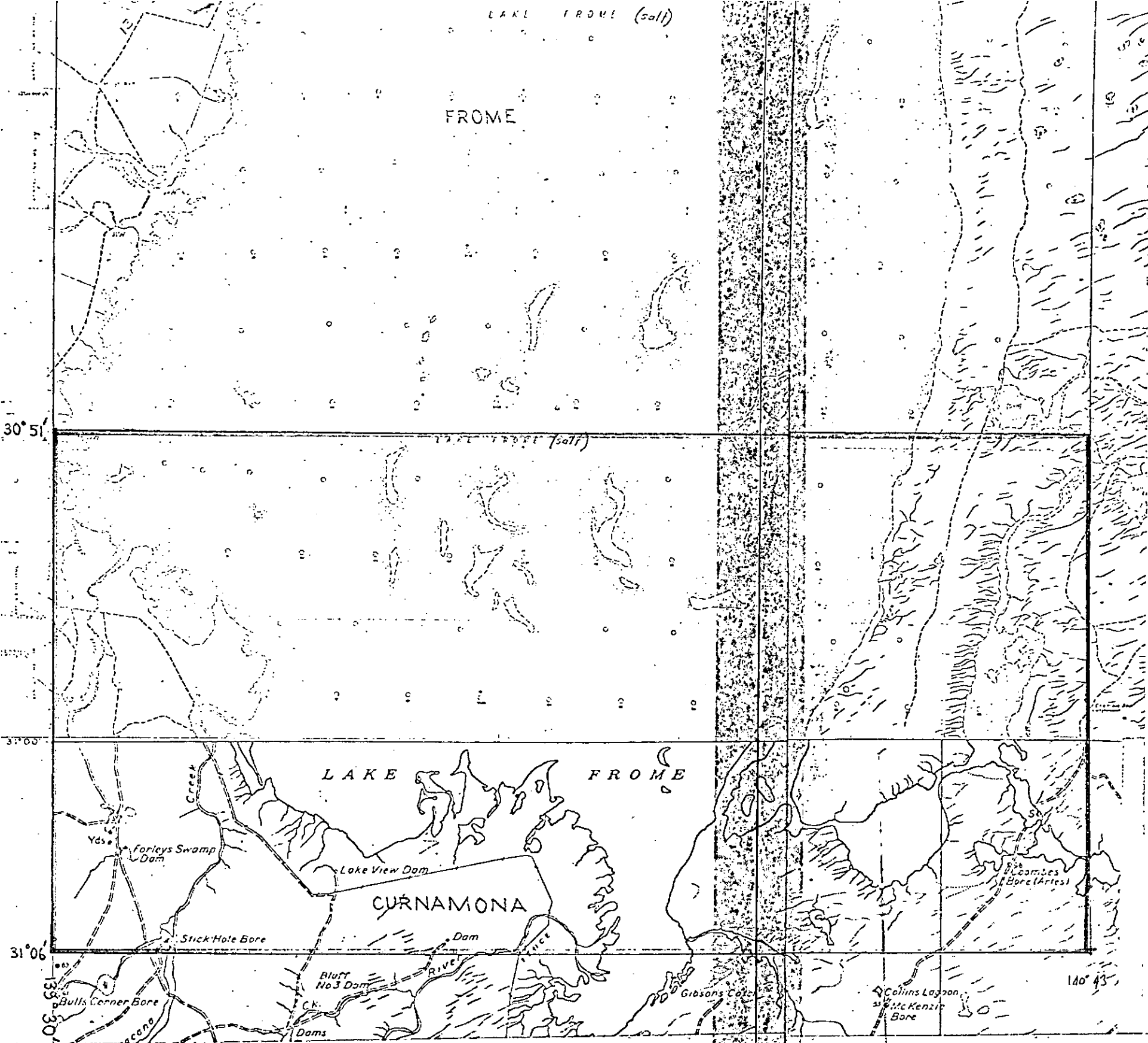
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Minerals and Energy Resources
7th Floor
101 Grenfell Street, Adelaide 5000

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Facsimile: (08) 8204 1880



Government of South Australia
Primary Industries and Resources SA



EXOIL N.L., TRANSOIL N.L. & Petroleum N.L.
~~KREWITT INVESTMENTS PTY. LTD.~~

SCALE: 1" = 4 MILES

Frome, Curnamona

L. Frome South.

Exp. 7.10.70

580 sq. m.

S.M.L. 244

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ENV 104

PETROMIN NO LIABILITY

0003

Telephones 27 9664/5

Telegraphic Address:

"Petromin" Sydney

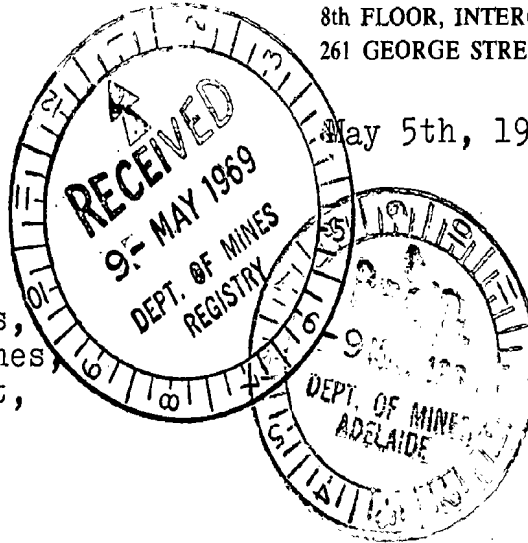
Technical Office:

8th FLOOR, INTEROCEAN HOUSE

261 GEORGE STREET, SYDNEY 2000

May 5th, 1969

Mr. T.A. Barnes,
Director of Mines,
Department of Mines,
169 Rundle Street,
ADELAIDE. 5000
S.A.



Dear Sir,

Ref: S.M.L. 244 - Lake Frome Area, S.A.

Six monthly report for the period ending
April 8th, 1969

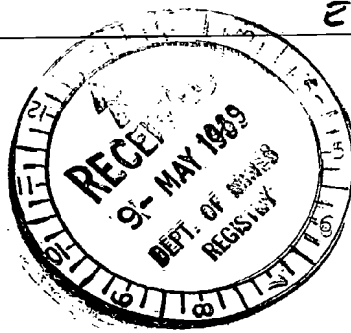
No field work has been carried out in this S.M.L. during the report period.

The onshore areas will be drilled on completion of the drilling programme for the northern S.M.L.

As most of the area enclosed by S.M.L. 244 is occupied by Lake Frome we are currently investigating vehicles capable of traversing the Lake with a drilling rig and equipment.

Yours faithfully,


B.F. Fitzpatrick
Operations Manager
Petromin N.L.



0004

Lat. $30^{\circ} 51'$
Long. $139^{\circ} 30'$

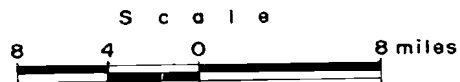
Lat. $30^{\circ} 51'$
Long. $140^{\circ} 05'$

SML 244

Lat. $31^{\circ} 06'$
Long. $139^{\circ} 30'$

Lat. $31^{\circ} 06'$
Long. $140^{\circ} 05'$

MT. PAINTER AREA
SML 244



C
O
P
Y

ENV 1041

M E M O R A N D U M

TO: B. FITZPATRICK

COMPANY: Petrolia

FROM: G. RAVELEIGH

DATE: 30th June 1969



SUBJECT: SML's 186, 221, 245, 243 & 244

Progress Report to 24th June 1969

The final hole to be drilled by Exoil N.L. was 221-5. This hole was drilled to 630 feet T.D. and gamma-logged to 630 feet inside the drill stem by Down Under Well Services. A scintillation probe was used.

A kick of 5.3 times background was reported at 536 feet and had a width of approximately 1 foot. Samples indicate that the peak occurred in the tip of the grey shale which has been considered basement up till now.

An iridescent yellow flaky mineral coating sand and clay grains has been encountered in the samples from nearly all the holes from 221-2 to 221-5. These have been recorded on the sample descriptions. Some of the zones showing these coatings show a weak kick on the gammalog. Some samples of these have been sent to AMDEL for assay for U_3O_8 and determination of the yellow mineral.

Float/sink separations were done on samples showing 1% total small black grains. Intervals were combined for the separation. These "heavies" less the magnetic fraction (usually about 10% of the heavies) were sent to AMDEL for assay for U_3O_8 .

Flagging along John Brown's Wash has been completed. 31 holes have been flagged; to be drilled by the new contractors, of which 11 have already had surface casing set.

I will forward a complete report at the earliest convenience.

G.R.

1st October, 1969.

The Director of Mines,
Department of Mines,
P.O. Box 38,
Rundle Street,
ADELAIDE. S.A. 5000



SPECIAL MINING LEASE NO. 244

Report for the period ending October 8th 1969

SUMMARY:

During the report period, a geological reconnaissance of the area was carried out by E.R. Hillwood of Minoil Services Pty. Ltd.

He selected a series of drill sites which were identified on air photos. These locations are shown on the accompanying plan.

A series of nine (9) holes were drilled for a total of 4,705 feet. Of this total 4,541 feet were logged with a gamma-ray probe.

The holes drilled are listed below.

<u>Hole No.</u>	<u>Depth logged</u>	<u>Depth drilled</u>
244-1	502'	545'
244-2	510'	510'
244-3	498'	510'
244-4	560'	575'
244-5	496'	510'
244-6	505'	525'
244-7	484'	510'
244-8	492'	510'
244-9	494'	510'
	<u>4,541'</u>	<u>4,705'</u>

GEOLOGY:

A monotonous sequence of vari-coloured clays was encountered. Some carbonaceous material was reported but the absence of porous and permeable beds detracts from the section investigated. The age of the sediments has not been proved, but is probably Tertiary.

RADIO-ACTIVITY:

No radio-activity was recorded in any of the holes drilled.

DRILLING:

Drilling conditions were found to be reasonable, the 4,705 feet being drilled in about 18 days. The holes stood up well, as can be seen from the total depth logged.

The drilling was carried out by H.C. Thompson Pty. Ltd. and the logging by Down Under Well Services Pty. Ltd.

CONCLUSION:

There is little encouragement in the section investigated though there is insufficient information available at this date to form any real appraisal of the S.M.L.

Further drilling is needed down drainage channels to the east of the present line of holes.

Copies of lithologic and gamma-ray logs are appended to this report, together with a plan showing the location of the holes drilled.

EXPENDITURE:

A copy of the Expenditure Schedule will be forwarded as soon as it becomes available.


B.F. Fitzpatrick
Exploration Manager

Encl.

10th April, 1970.

0008

SPECIAL MINING LEASE NO.244

PROGRESS REPORT FOR SIX MONTHS - PERIOD ENDING 8TH APRIL, 1970

SUMMARY:

Activity of SML.244 for the Period has comprised surface appraisal and investigation. An aerial inspection was carried out.

INTRODUCTION:

Special Mining Lease Number 244 covers an area of approximately 580 square miles on the western part of Lake Frome in South Australia.

Operations on the Lease are primarily directed towards evaluating the potential of the area for deposits of radio-active ores and the location of such deposits.

EXPLORATION:

No exploratory drilling was carried out for sedimentary uranium or other radio-active materials during the Period under review. The absence of activity resulted from the deployment of all available drilling rigs to the northern leases where results indicated the need for intensive, immediate exploration.

Distances involved in travel for the gamma-ray logging unit would necessitate long and costly waiting time for the drilling crews if activity was being carried out simultaneously on the northern and southern (SML.244) Leases.

It is the intention of this Company to make a concerted effort on SML.244 in the next six month period. To this end ground and aerial reconnaissance inspections have been carried out during the Period under review.

RESULTS:

Inspection of the Lease indicates that great difficulty will be experienced in getting drilling rigs onto the lake surface which constitutes the largest part of the Lease. It is possible that a special vehicle will need to be constructed for drilling this section of SML.244.

CONCLUSION:

A concentrated effort in the evaluation of SML.244 would be more effective and considerably less costly than a fragmented programme. It is proposed to undertake such an effort in the next period.

0009



SPECIAL MINING LEASE NO 244

PROGRESS REPORT FOR SIX MONTHS -

PERIOD ENDING 8/10/70

SUMMARY:

Activity on SML No. 244 during the period has included the drilling and gamma-ray logging of 26 non-coring bore holes.

Surface mapping was carried out in the period.

No significant radioactivity was recorded in any of the holes drilled.

INTRODUCTION

Special Mining Lease Number 244 covers an area of approximately 580 square miles on the western part of Lake Frome in South Australia.

Operations on the Lease are primarily directed towards evaluating the potential of the area for deposits of radio-active ores and the location of such deposits.

EXPLORATION

Exploratory drilling for uranium and other radio-active materials was undertaken during the period under review. A total of 12,147 feet of drilling and 12,066 feet of gamma-ray logging was carried out.

Copies of the lithologic and gamma-ray logs of the twentysix (26) holes drilled in the period accompany this Report.

The lithologic logs are of cuttings and were compiled by a contract well-site geologist. The gamma-ray logs were obtained using a slim hole probe run inside the drill rods by an employee of Petromin, N.L.

DRILLING RESULTS

No problems were encountered with the open-hole drilling. Penetration was at a fast rate and drilling of an average of one 500 foot hole per day, per rig, was achieved.

Bore holes 244-14, 244-34 and 244-35 all flowed water at the surface at rates of 1400, 2000 and 3000 gallons per hour respectively. Holes 35 and 36 had aquifers in Cretaceous (?) sands interbedded with shales

at about 200' depth and hole 14 from an aquifer in Eocene (?) sands at a depth of 365'.

It would appear that the cover of Tertiary and Recent sediments is much thinner in the southern Lake Frome area than elsewhere in the area.

The quality of the water was not determined although it was reported by the drillers to be "a little salty".

GAMMA RAY RESULTS

There was no significant gamma-ray activity that could be considered to indicate economic deposits of uranium located in the period.

Minor activity of about twice background was generally present in the top 200 feet of hole. The Cretaceous (?) sections were everywhere close to zero activity.

SUB-SURFACE GEOLOGY

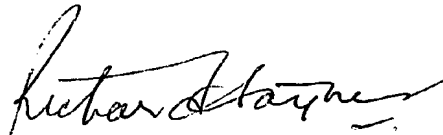
Unconsolidated sediments of probable Tertiary and Recent age were found to overlie Cretaceous clays, shales and sands.

The Cainozoic sediments consist of mainly clays with silt and some sandy horizons. They occur from surface to about 450' in the western portion of the Lease and to less than 200' in the most easterly holes.

It appears likely that the topographic "low" of Lake Frome coincides with a structural "high" in Cretaceous sediments. The presence of artesian water existing at such shallow depths suggests that the "mound springs" reported to occur on Lake Frome are due to the Cretaceous (?) aquifers cropping out, at or near the lake surface.

CONCLUSIONS

Based on the absence of significant gamma-ray activity it is considered unlikely that the areas so far investigated on SML 244 contain any economic deposits of uranium.



R.W. Haynes
Exploration Manager.

Gamma-ray logs and lithologic logs
to accompany this Report are as
follows:

SML 244-10

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Wellsite Geologist
E. R. Hillwood
Minoil Services

ENV 1041
Driller R. Thompson
PETROMIN
H. C. Thompson Pty. Ltd.

244-1

Well No.

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Surface casing set.
20'-40'	Clay	95	Red brown silty clay with rounded
	Gravel	5	pebbles of grey and chocolate shale
40'-170'	Clay	98	Red brown stiff clay with specks of
	Gravel	2	lignite throughout. Calcareous in places.
			Sparse angular - rounded gravel.
130'-160'	Clay	100	Red brown, grey, yellow stiff mottled
			clays.
160'-200'	Clay	100	Yellow, grey and red brown firm - stiff
			clay with sparse bright & red clay pieces
200'-240'	Clay	100	Pale grey stiff clay with some red and dark
			grey mottling intermixed with off-white
			calcareous clay.
240'-250'	Clay	100	Pale grey and yellow brown clays with
			specks of red clay.

Wellsite Geologist
E. R. Hillwood
Minoil Services

EXOIL — PETROMIN Driller R. Thompson
H.C. Thompson Pty. Ltd.

WELL LOG

0013 Well No. 244-1

INTERVAL	LITHOLOGY	%	DESCRIPTION
250'-290'	Clay	100	Grey, yellow and dark grey stiff clay
			white soft off-white calcareous clay
			and fragments of red ferruginous clay.
290'-310'	Clay	100	Yellow soft clay and off-white
			calcareous clay mixed with red
			ferruginous clay fragments and grey stiff
			clay.
310'-400'	Clay	100	Yellow brown clay intermixed with
			grey and dark grey stiff clay with
			red ferruginous clay fragments throughout
			Probable top of cretaceous clays
400'-440'	Clay	100	Grey stiff clay intermixed with yellow
			brown and dark grey clay.
440'-545'	Clay	100	As above with dark brown carbonaceous clay
			fragments (approx. 5%)
			End of Hole 545'.

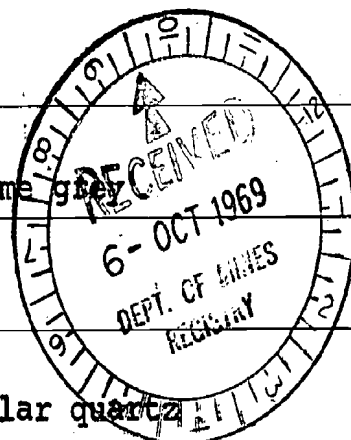
Wellsite Geologist
E. R. Hillwood
Minoil Services

ENV 104
EXOIL — PETROMIN Driller R. Thompson
H. C. Thompson Pty. Ltd.
WELL LOG

0014

Well No. 244-2

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing run to 20'
20'-110'	Clay	100	Red brown stiff clay with some grey mottling. Specks of gypsum
110'-120'	Clay	80	Red brown clay with sub-angular quartz
	Grit	20	grit. Specks of gypsum
120'-160'	Clay	100	Red brown stiff clay with some yellow and grey mottling. Abundant gypsum flakes.
160'-170'	Clay	100	Yellow brown clay with lime and gypsum
170'-190'	Clay	100	Reddish brown, yellow and grey mottled stiff clay
190'-200'	Clay	100	Reddish brown and yellow clay and off- white calcareous clay
200'-210'	Clay	100	Yellow and grey mottled stiff clay



Well No. **244-2**

[illegible]

ENV 1041

Well Site Geologist
E. R. Hillwood
Minoil Services

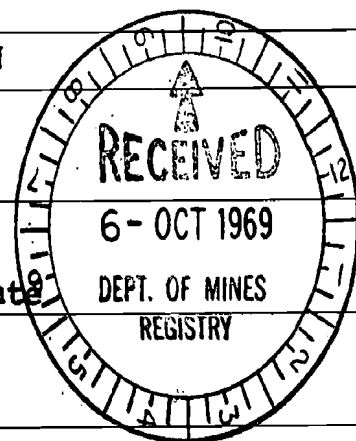
EXOIL — PETROMIN
H.C. Thompson Pty. Ltd.

Driller R. Thompson
8016
H.C. Thompson Pty. Ltd.

WELL LOG

Well No. 244-3

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-50'	Clay	95	Red brown clay with rounded slate
	Gravel	5	gravel. Specks of gypsum
50'-120'	Clay	100	Red brown clay with abundant gypsum
			flakes throughout.
120'-160'	Clay	100	Yellow brown with some reddish brown
			and grey mottling clay
160'-200'	Clay	100	Yellow, yellow brown and grey
			stiff mottled clays
200'-210'	Clay	100	As above intermixed with off-white
			calcareous clay
210'-220'	Clay	100	Off-white and grey clay
220'-230'	Clay	100	Yellow brown and white mottled clay
230'-270'	Clay	100	Off-white soft clay intermixed with
			grey stiff clay



EXOIL — PETROMIN Driller R. Thompson
H. C. Thompson Pty. Ltd.

0017

Well No. **244-3**

[illegible]

Wellsite Geologist
E. R. Hillwood
Minoil Services

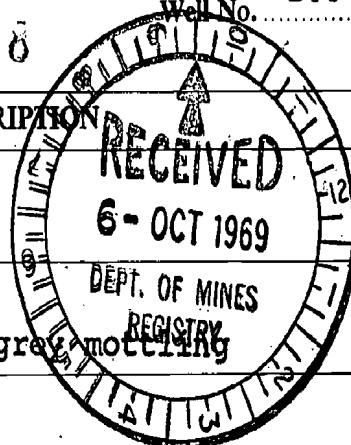
ENV 1041

EXOIL — PETROMIN Driller R. Thompson
H. C. Thompson Pty. Ltd.

WELL LOG

0018

Well No. 244-4



INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-80'	Clay	100	Red brown clay with some grey mottling
			Calcareous in part
80'-140'	Clay	100	Reddish brown with some grey and
			yellow brown mottling clay. Abundant
			gypsum flakes 80'-100'
140'-210'	Clay	100	Yellow brown and yellow clay with
			gypsum flakes throughout.
210'-290'	Clay	100	Off white clay with some grey clay
			and nodules of red brown clay
290'-575'	Clay	100	Grey stiff clay with yellow and yellow
			brown fragments intermixed with soft
			grey clay. Uniform throughout.
			END OF HOLE

Well site geologist
E. H. Hallwood
MinOil Services

ENV 1041

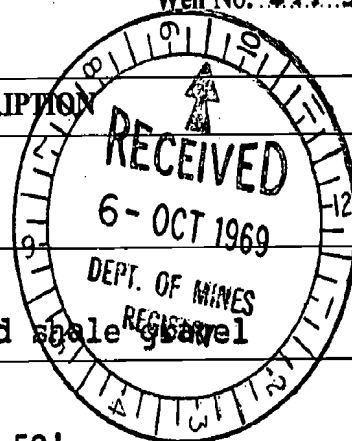
EXOIL — PETROMIN

Driller R. Thompson 0019

H. C. Thompson Pty. Ltd.

WELL LOG

Well No. 244-5.....



INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-50'	Clay	95	Red brown clay with rounded shale gravel
	Gravel	5	Abundant gypsum flakes 40'-50'
50'-120'	Clay	100	Red brown clay with some grey and yellow brown mottling. Gypsum flakes throughout
120'-140'	Clay	100	Yellow brown and red brown clay with abundant gypsum
140'-150'	Clay	95	Yellow and yellow brown mottled clay
	Gravel	5	with rounded slate and shale gravel
150'-200'	Clay	100	Yellow brown clay with some grey and yellow mottling. Abundant gypsum flakes throughout.
200'-230'	Clay	100	As above with increasing amount of off white clay.
230'-270'	Clay	100	Off white grey and red brown mottled clays.

Well No. 244-5

Wellsite Geologist
E. R. Hillwood
Minoil Services

ENV 104

EXOIL — PETROMIN

Driller R. Thompson

H. C. Thompson Pty. Ltd.

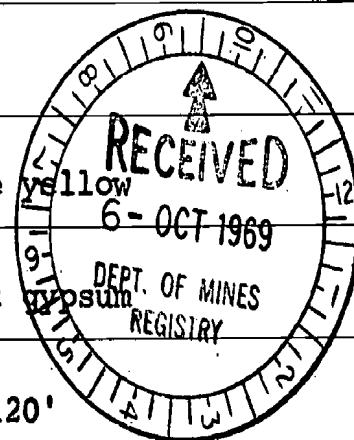
244-6

WELL LOG

Well No.

0021

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-120'	Clay	100	Reddish brown clay with some yellow and grey mottling. Abundant gypsum flakes at 60'-70' and 100'-120'
120'-200'	Clay	100	Yellow brown, grey brown and red brown mottled clay with specks of lime
200'-210'	Clay	100	Grey and grey brown clay with some off white clay
210'-270'	Clay	100	Off white clay with some grey clay
270'-290'	Clay	100	Off white clay intermixed with brown, yellow brown and red brown clay
290'-400'	Clay	100	Grey clay intermixed with dark grey reddish brown, yellow brown and off white clay.
400'-520'			Grey stiff clay with yellow brown and dark grey clay
			END OF HOLE



Wellsite Geologist
E. R. Hillwood
Minoil Services

ENV 104

EX-OIL — PETROMIN Driller R. Thompson
H. C. Thompson Pty. Ltd.

WELL LOG

0022

Well No. 244-7

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-120'	Clay	100	Red brown clay with some grey and yellow brown clay. Abundant gypsum throughout.
120'-180'	Clay	100	Yellow brown clay with some grey and yellow mottling. Abundant gypsum flakes throughout.
180'-200'	Clay	100	Yellow brown clay
200'-280'	Clay	100	Off white and grey clay with some specks of dark brown carbonaceous clay
280'-320'	Clay	100	Grey and yellow brown clay. Very soft and water saturated.
320'-510'	Clay	100	Grey stiff clay intermixed with soft grey and dark grey clay. Some yellow brown clay.
			END OF HOLE

Wellsite Geologist
E. R. Hillwood
Minoil Services

EXOIL — PETROMIN Driller R. Thompson

H. C. Thompson Pty. Ltd.

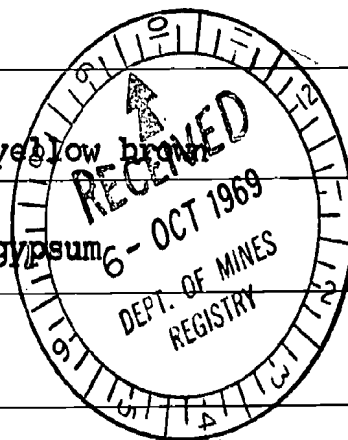
WELL LOG

0023

Well No. 244-8

ENV 1041

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'			Casing set at 20'
20'-120'	Clay	100	Red brown clay with some yellow brown and grey clay. Abundant gypsum throughout.
120'-200'	Clay	100	Yellow brown clay with some grey and yellow mottling. Abundant gypsum flakes throughout.
200'-220'	Clay	100	Yellow brown clay.
220'-290'	Clay	100	Off white and grey clay with some specks of dark brown carbonaceous clay.
290'-320'	Clay	100	Grey and yellow brown clay. Very soft and water saturated.
320'-510'	Clay	100	Grey stiff clay intermixed with soft grey and dark grey clay. Some yellow brown clay.
			end of hole.



0024

A circular stamp from the Department of Mines Registry. The outer ring contains numbers 1 through 12. The center contains the word 'RECEIVED' in a bold, sans-serif font, with a large letter 'A' above it. Below 'RECEIVED' is the date '6-OCT 1969'. At the bottom of the center is the text 'DEPT. OF MINES' and 'REGISTRY'. The stamp is slightly tilted and has a distressed, ink-like appearance.

29/5/70

MINOIL SERVICES

0026

WELL No. 244-11

~~WELL-LOG~~

TOTAL DEPTH

FORM L

[illegible]

WELL LOG
MINOIL SERVICES

GEOLOGIST T. M. Steel

CLIENT..... **Petromin N.L.**

DRILLER.....**P. McKenna (H.C.Thompson)**

WELL No. **244-12**

0024

WELL-LOG

DATE LOGGED 30/5/70

TOTAL DEPTH

FORM L

[illegible]

WELL LOG

T. M. Steel

Petromin N.L.

0028

Thompson (H.C. Thompson)

244-13

WEE-EUG

30/5/70

TOTAL DEPTH

FORM L

[illegible]

MINOIL SERVICES

0029

CLIENT.....Petromin N.L. 00720

WELL No. 244-14

DATE LOGGED 1/6/70

TOTAL DEPTH.....

FORM L

[illegible]

WELL LOG

T. M. Steel

Petromin N.L.

P. Lademan (H.C. Thompson)

WELL No. 244-15

0030

WELL LOG

31/5/70

TOTAL DEPTH

FORM L

[illegible]

WELL LOG

GEOLOGIST.....**T. M. Steel**

CLIENT..... **Petromin N.L.**

DRILLER P. McKenna (H.C. Thompson)

WELL No. **244-16**

WELL LOG

DATE LOGGED.....2/6/70

TOTAL DEPTH

FORM 1

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'	sand	50	Fawn slightly clayey silty very fine to medium (rare coarse) grained quartz sand - some quartzite and sandstone
	silt	20	
	gravel	15	
	clay	10	gravel to ½" diameter & rare thin lenses of crystalline gypsum
	gypsum	5	
20'-30'	sand	40	Light yellow brown silty and clayey very fine to fine (rare medium to coarse) grained quartz sand
	silt	40	
	clay	20	
30'-45'	sand	40	Brown silty and clayey very fine to fine (rare medium) grained quartz sand
	silt	30	
	clay	30	
45'-215'	clay	80	Brown slightly silty and very fine sandy hard clay - grading in color to pale yellow brown with depth
	silt	10	
	sand	10	
215'-270'	clay	90	Alternating bands of grey very slightly silty and fine sandy stiff clay and white "pipeclay"
	sand & silt	10	
270'-300'	clay	80	Grey very fine to fine sandy stiff clay- rare pockets fine sand.
	sand	20	
300'-305'	clay	60	Grey very fine to fine sandy stiff clay with thin bands and pockets of slightly clayey very fine to fine grained quartz sand
	sand	40	
305'-460'	clay	90	Grey slightly sandy stiff clay - sand is very fine to fine grained quartz.
	sand	10	
460'-530'	clay	70	Alternating bands of grey slightly sandy stiff clayey and light gry clayey very fine to fine grained quartz sand - thin lenses of soft shale.
	sand	30	

WELL LOG
MINOIL SERVICES

GEOLOGIST **T. M. Steel**

CLIENT **Petromin N.L.**

DRILLER **P. Lademan (H.C. Thompson)**

WELL No. **244-17**

0032

WELL LOG

DATE LOGGED **2/6/70**

TOTAL DEPTH

FORM L

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-10'	sand	40	Fawn slightly clayey silty fine to very coarse grained quartz sand and fine to medium grained gravel - mainly subrounded-bands of crystalline gypsum
	gravel	20	
	silt	20	
	clay	10	
	gypsum	10	
10'-15'	clay	40	Brown slightly sandy and gravelly stiff clay with bands of fine to coarse gravel sandy, and bands of crystalline gypsum
	gravel	40	
	sand	10	
	gypsum	10	
15'-20'	sand	40	Fawn slightly silty clayey fine to coarse grained sand and fine to medium grained gravel - lenses of stiff clay
	gravel	20	
	silt	20	
	clay	40	
20'-35'	clay	60	Brown silty and very fine sandy stiff clay
	sand	20	
	silt	20	
35'-140'	clay	80	Brown and yellow brown slightly silty and very fine to fine sandy stiff clay
	silt	10	
	sand	10	
140'-160'	clay	70	Yellow brown slightly silty and very fine sandy stiff clay with pockets and thin lenses of crystalline gypsum
	silt	10	
	sand	10	
	gypsum	10	
160'-170'	clay	80	Yellow brown slightly silty and very fine to fine grained sandy stiff clay
	silt	10	
	sand	10	
170'-185'	clay	80	Similar to above, but yellow brown and light grey mottled
	silt	10	
	sand	10	
185'-200'	clay	90	Grey very stiff clay - rare silt and very fine grained quartz sand
	silt & sand	10	
200'-260'	clay	90	Light grey very stiff clay with coarse bands white "pipeclay" - rare silt and very fine grained quartz sand
	silt & sand	10	
260'-380'	clay	90	Light and dark grey coarsely mottled stiff clay - rare silt and fine grained quartz
	sand & silt	10	

0033

GEOLOGIST..... **T. M. Steel**

CLIENT Petromin N.L.

DRILLER P. Lademan (H.C. Thompson)

WELL No. **244-17**

WELL LOG.....

DATE LOGGED.....2/6/70.....

TOTAL DEPTH.....

[illegible]

WELL LOG
MINOIL SERVICES

0034

GEOLOGIST **T. M. Steel**

CLIENT **Petromin N.L.**

DRILLER **P. McKenna (H.C. Thompson)**

WELL No. **244-18**

WELL LOG

DATE LOGGED **2/6/70**

TOTAL DEPTH

FORM L

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'	sand	40	Light brown silty and clayey very fine to medium (rare coarse) grained quartz sand - some coarse well rounded quartzite gravel
	gravel	10	
	silt	20	
	clay	30	
20'-35'	clay	70	Redbrown silty and very fine to fine sandy hard dry clay
	silt	10	
	sand	20	Brown slightly silty and very fine to medium sandy stiff clay
35'-110'	clay	80	
	sand	10	
	silt	10	
110'-180'	clay	80	Similar to above, but yellow brown
	sand	10	
	silt	10	
180'-210'	clay	90	Grey slightly silty and very fine sandy stiff clay with thin lenses of white "pipeclay"
	silt & sand	10	
210'-260'	clay	90	Mainly white pipeclay with thin lenses grey slightly silty and very fine sandy stiff clay
	silt & sand	10	
260'-305'	clay	80	Grey silty and fine to medium sandy stiff clay with thin lenses clayey fine sand
	sand	10	
	silt	10	
305'-355'	sand	80	Light grey slightly clayey of very fine to fine (rare medium to coarse) grained quartz sand with thin lenses stiff grey clay
	clay	20	
355'-530'	clay	80	Mainly dark grey slightly silty and very fine to fine sandy stiff clay with thin (up to 3") bands of soft to moderately hard shale and rarer thin bands of slightly cemented fine grained quartz sand.
	sand	15	
	silt	5	

0035

CLIENT Petromin N.L.

244-19
WELL No.

WELL No.

TOTAL DEPTH.....

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-10'	sand	40	Fawn to light brown silty and clayey
	clay	30	very fine to medium grained subrounded
	silt	30	quartz sand
10'-35'	clay	60	Mainly brown and redbrown silty and very
	sand	20	fine to fine sandy stiff clay
	silt	20	
35'-40'	sand	50	Brown silty and clayey very fine to fine
	clay	30	(rare medium to coarse) grained sub-
	silt	20	rounded quartz sand
40'-105'	clay	80	Redbrown slightly silty and very fine to
	sand	10	fine sandy stiff clay
	silt	10	
105'-175'	clay	80	As above, but yellow brown in color and
	sand	10	with thin lenses of crystalline gypsum
	silt	10	between 110 and 120 ft
175'-265'	clay	90	Alternate bands of grey slightly silty and
	silt & sand	10	very fine sandy stiff clay and white
			moderately hard "pipeclay"
265'-335'	sand	60	Mainly light grey slightly silty and
	silt	20	clayey very fine to fine (rare medium
	clay	20	to coarse) grained subrounded quartz sand
			with thin lenses fine sandy stiff clay
335'-360'	clay	80	Grey slightly silty and very fine to fine
	sand	15	sandy stiff clay with rare pockets of very
	silt	5	fine sand
360'-365'	sand	60	Light grey slightly clayey and silty very
	clay	30	fine to fine grained quartz sand and grey
	silt	10	silty and fine sandy stiff clay in thin
			alternating bands
360'-500'	clay	90	Mainly grey slightly silty and very fine
	sand & silt	10	to fine sandy stiff clay with thin bands
			of soft to moderately hard shale

GEOLOGIST.....**T. M. Steel**

DRILLER.....R. McKenna (H.C. Thompson)

WELL No. 244-20

WELL LOG.

DATE LOGGED.....4/6/70

TOTAL DEPTH.

[illegible]

GEOLOGIST..... **T. M. Steel**

CLIENT..... **Petromin N.L.**

0037

DRILLER. P Lademan (H.C. Thompson)

WELL No. **244-21**

WELL-LOG

DATE LOGGED.....4/6/70

TOTAL DEPTH

FORM L

[illegible]

104/II
37A

WELL LOG
MINOIL SERVICES PTY. LTD.

GEOLOGIST **T. M. Steel**

CLIENT **Petromin N.L.**

DRILLER **R. McKenna (H.C. Thompson)**

WELL No. **244-25**

WELL LOG

DATE LOGGED

TOTAL DEPTH

FORM L

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-10'	clay	50	Light redbrown and brown silty and fine to medium sandy stiff clay
	sand	30	
	silt	20	
10'-85'	clay	70	Mainly brown slightly sandy silty moderately stiff clay - sand is fine to medium grained subrounded quartz - some pockets grey slightly more sandy clay below 30 ft.
	silt	20	
	sand	10	
85'-110'	clay	80	Light brown and grey mottled slightly silty and fine sandy stiff clay - slightly micaceous
	sand	10	
	silt	10	
110'-130'	clay	80	Clay as above, but brown and redbrown in color with rarer grey mottling
	sand	10	
	silt	10	
130'-145'	clay	80	Brown and redbrown slightly silty and sandy stiff clay with small pockets and thin lenses offwhite "pipeclay"
	sand	10	
	silt	10	
145'-210'	clay	90	Mainly offwhite "pipeclay" with bands of light grey slightly silty and fine grained sandy stiff clay.
	sand & silt	10	
210'-235'	clay	90	Grey to dark grey slightly silty and fine sandy stiff clay
	silt & sand	10	
235'-275'	clay	80	Light to dark grey slightly silty very fine sandy moderately stiff clay with thin bands very clayey fine grained quartz sand
	silt	5	
	sand	15	
275'-340'	sand	75	Mainly light grey slightly silty very fine to fine (rare medium) grained subrounded to rounded quartz sand - thin lenses sandy clay
	silt	10	
	clay	15	
340'-345'	clay	70	Mainly dark grey slightly silty and fine sandy stiff clay with thin lenses fine grained subrounded quartz sand
	silt	10	
	sand	20	
345'-380'	sand	60	Bands of grey and dark grey silty and fine sandy clay alternating with bands of clayey&silty fine grained subrounded quartz sand.
	clay	30	
	silt	10	

MINOIL SERVICES

0038

CLIENT..... **Petromin N.L.** 003

WELL No. **244-26**

WELL LOG.....

TOTAL DEPTH.....

FORM L

[illegible]

0039

CLIENT..... **Petromin N.L.**

WELL No. **244-27**

DATE LOGGED 4/6/70

TOTAL DEPTH.....

FORM L

[illegible]

WELL LOG
MINOIL SERVICES

GEOLOGIST **T. M. Steel**
DRILLER **P. Lademann (H.C. Thompson)**

CLIENT Petromin N.L. 0040

WELL No. 244-28

WELL EOG.....

DATE LOGGED 5/6/70

TOTAL DEPTH.....

FORM L

[illegible]

1041 II

CLIENT Petromin N.L. FOI

244-29
WELL No.

40A

TOTAL DEPTH.....

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-15'	sand	40	Fawn clayey and very silty very fine to medium grained subrounded quartz sand - rare coarse sand and fine to medium gravel.
	silt	30	
	clay	20	
	gravel	10	
15'-25'	clay	50	Brown silty and very sandy moderately stiff clay - sand is very fine to fine grained subrounded quartz,
	silt	20	
	sand	30	
25'-115'	clay	60	Brown silty and very fine to fine sandy stiff clay
	silt	20	
	sand	20	
115'-180'	clay	70	Clay similar to above, but less sand - yellow brown
	silt	20	
	sand	10	
180'-245'	clay	90	Interbedded bands of light grey slightly silty and veryfine to fine sandy stiff clay and offwhite "pipeclay"
	silt & sand	10	
245'-340'	clay	80	Mainly grey slightly silty and very fine sandy stiff clay with thin lenses of clayey very fine to fine grained subrounded quartz sand
	sand	15	
	silt	5	
340'-450'	clay	90	Mainly grey slightly silty and sandy stiff clay with bands of soft to moderately hard shale - rare very thin lenses of very fine to fine grained quartz sand.
	sand & silt	10	

0043

GEOLOGIST **T. M. Steel**

CLIENT Petromin N.L.

DRILLER P. Lademan & R. McKenna
(Thompson & Co.)

WELL No. 244-30

WELL LOG

DATE LOGGED.....6/6/70

TOTAL DEPTH

FORM L

[illegible]

0042

CLIENT Petromin N.L.

WELL No. **244-31**

DATE LOGGED 7/6/70 TOTAL DEPTH

[illegible]

MINOIL SERVICES

0043

CLIENT..... **Petromin N.L.**

244-32
WELL No.

WELL LOG.....

TOTAL DEPTH.....

FORM L

[illegible]

0044

CLIENT Petromin N.L. 0044

WELL No. **244-33**

TOTAL DEPTH.....

TOTAL DEPTH.....

[illegible]

44A

CLIENT..... **Pettomin N.E.**

WELL No.

DATE LOGGED.....9/6/70.....

244-34
TOTAL DEPTH.....

FORM L

[illegible]

0045

CLIENT Petromin N.L.

WELL No. **244-35**

DATE LOGGED 9/6/70

TOTAL DEPTH.....

[illegible]

0046

CLIENT..... **Petromin N.L.**

WELL No. **244-36**

DATE LOGGED.....9/6/70

TOTAL DEPTH.

FORM L

[illegible]

WELL LOG

MINOIL SERVICES

GEOLOGIST T. M. Steel

CLIENT Petromin N.L.

0047

DRILLER P. Lademan (H.C.Thompson)

WELL No. 244-37

WELL LOG

DATE LOGGED

TOTAL DEPTH

FORM L

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-20'	sand	40	Light brown silty and very clayey fine
	clay	40	to coarse grained subrounded to rounded
	silt	20	quartz sand
20'-30'	clay	70	Light grey and pale yellow brown mottled
	silt	20	slightly sandy silty stiff clay
	sand	10	
30'-45'	clay	80	Light brown slightly silty and fine to
	sand	10	medium sandy stiff clay - some redbrown
	silt	10	and grey mottling
45'-110'	clay	90	alternating bands of offwhite "pipeclay"
	sand & silt	10	and thin bands of grey slightly silty and
			fine sandy stiff clay
110'-160'	clay	80	Grey to dark grey slightly silty and
	sand	10	fine to medium sandy stiff clay with
	silt	10	very thin lenses fine to medium grained
			sand.
160'-175'	sand	80	Pale yellow brown slightly silty and
	clay	10	clayey fine to medium grained quartz
	silt	10	sand - grains mainly subrounded to rounded
175'-180'	clay	80	Dark grey slightly silty and fine sandy
	silt	10	stiff clay with thin lenses very fine to
	sand	10	fine grained quartz sand
180'-190'	clay	60	Alternating bands of grey sandy stiff clay
	sand	40	and slightly clayey fine grained quartz
			sand - unconsolidated
190'-195'	sand	90	Light grey slightly clayey and silty very
	silt & clay	10	fine to fine grained subrounded to rounded
			quartz sand
195'-230'	sand	40	Alternating bands of grey silty and fine t
	clay	50	medium stiff clay and bands of clayey very
	silt	10	fine to fine grained quartz sand
230'-305'	clay	80	Grey and dark grey slightly silty and
	sand	15	fine sandy stiff clay with bands soft to
	silt	5	moderately hard shale - thin lenses
			moderately cemented fine grained quartz
			sandstone.

MINOIL SERVICES

GEOLOGIST **B. Rebuli**CLIENT **Petromin N.L.**DRILLER **R. McKenna (Thompson)**WELL No. **244-38**

WELL LOG

DATE LOGGED **11/6/70**

TOTAL DEPTH

FORM L

INTERVAL	LITHOLOGY	%	DESCRIPTION
0'-30'	clay	50	Light brown silty clay and fine to
	sand	30	coarse sand - occasional very fine
	silt	20	gravel
30'-75'	clay	80	Light brown-yellow silty clay and light
	silt	20	grey silty clay with small lenses of dark
			grey silty clay in first 10' interval
75'-110'	clay	90	Off-white gypseous clay (80%) and light
	silt	10	grey and yellow silty clay
110'-185'	clay	40	Light grey - grey silty and fine sandy
	silt	20	clay
	sand	40	— Km
185'-305'	clay	70	Grey and dark grey silty clay and
	silt	20	fine sand - grades to dark grey stiff clay
	sand	10	↓
305'-350'	sand	100	↑ Fine to medium quartz sand - unconsolidate
			- light grey
350'-440'	sand	60	Grey clayey and silty sand of quartz/
	clay	30	quartzite - sand is fine to medium
	silt	10	— Km or (K-V) Parakuru Sandstone
440'-530'	clay	10	Brown-black slightly silty and clayey
	silt	20	sand and gravel. Sand is rare fine to
	sand	50	coarse to very fine gravel - angular to
	gravel	20	↓ subrounded.

DOWN UNDER WELL SERVICES Pty. Ltd.

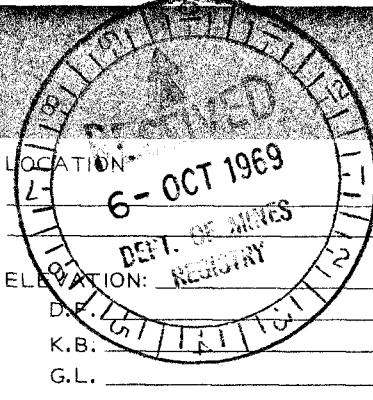
Gamma Ray Log

COMPANY Petromin N.L.

AREA Bendieuta Creek

WELL 244-1

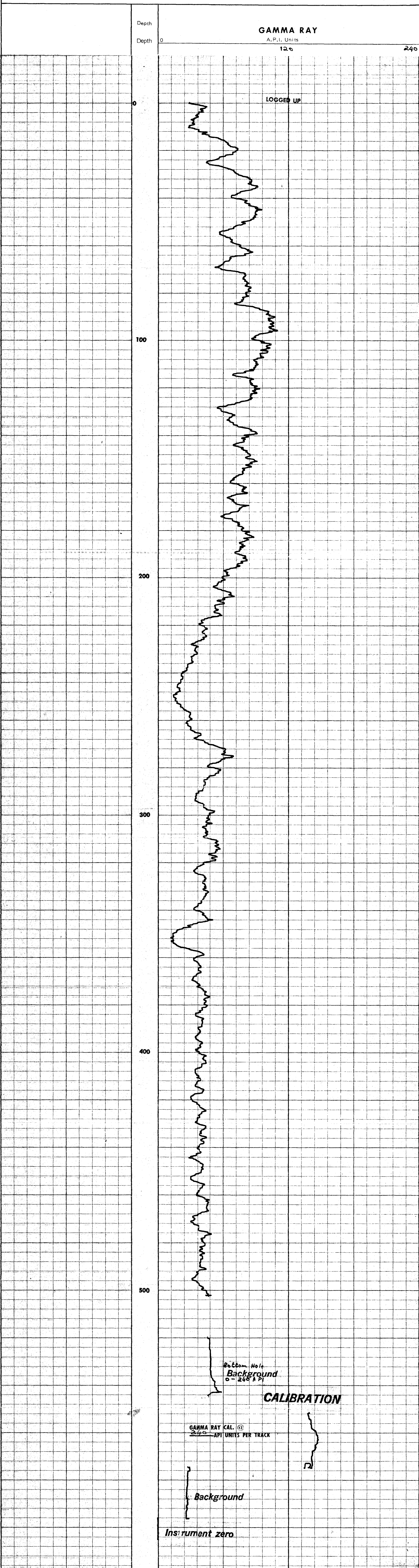
STATE S.A.



COMPANY Petromin N.L.
WELL 244-1
LOCATION Bendieuta Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	5 August 1969		Nature	Bentonite	
First Reading	0		Density		
Last Reading	502'		Viscosity	@ °F	@ °F
Footage Logged	502'		Resistivity	@ °F	@ °F
Depth - driller	545'		Res. @ BHT	@ °F	@ °F
Depth - logger	502'		pH		
Casing - driller	20'		Circ. Temp		
Casing - logger			B.H. Temp.		
Casing - Size	6"		Tool Type	G 10 C	
Bit Size	4 3/4"		Tool Diam	1"	
Logged by	L. READ		Time Consumed	5	Secs.
Witnessed by	E. Hillwood		Logging Speed	15	F6/min

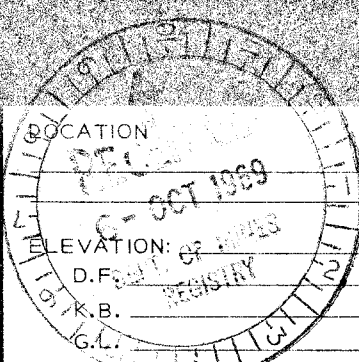
REMARKS Depth Datum is Ground Level.
Logged inside Drill Stem.
Tool would not Descend Below 502'



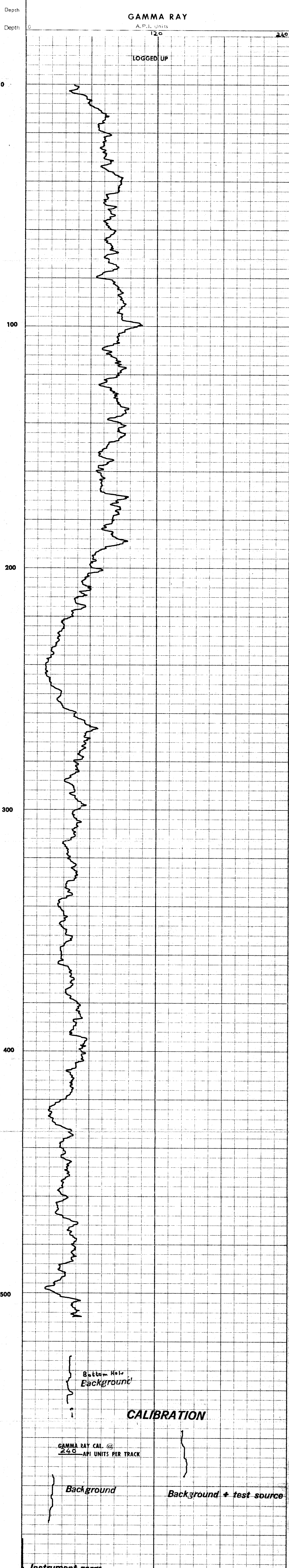
1041(I)-1

DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray Log

COMPANY Petromin N.L.
AREA Bondicoota Creek
WELL 244-2STATE South AustraliaCOMPANY Petromin N.L.
WELL 244-2
LOCATION Bondicoota Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	8 Aug. 1969		Nature		
First Reading	0		Density		
Last Reading	510'		Viscosity	@	@
Footage Logged	510'		Resistivity	@	@
Depth - driller	510'		Res. @ BHT	@	@
Depth - logger	510'		pH		
Casing - driller	20'		Circ. Temp.		
Casing - logger	-		B.H. Temp.		
Casing - Size	6"		G.R. Tool Type	6" I.C.	
Bit Size	4 3/4"		" " Diam	1"	
Logged by	L. READ		Time Constant	5	Secs
Witnessed by	E. Hillwood		Logging Speed	15	F6/min

REMARKS Depth Datum is Ground Level.
Recorded through Drill Pipe

1041(I)-2

DOWN UNDER WELL SERVICES Pty. Ltd.

COMPANY Petroleum N.C.
WELL 244-3
LOCATION Bendabouta Creek
STATE S. A.

Gamma Ray - Resistivity Log

COMPANY Petromin N.L.
AREA Bondieva Creek
WELL 244-3
STATE South Australia

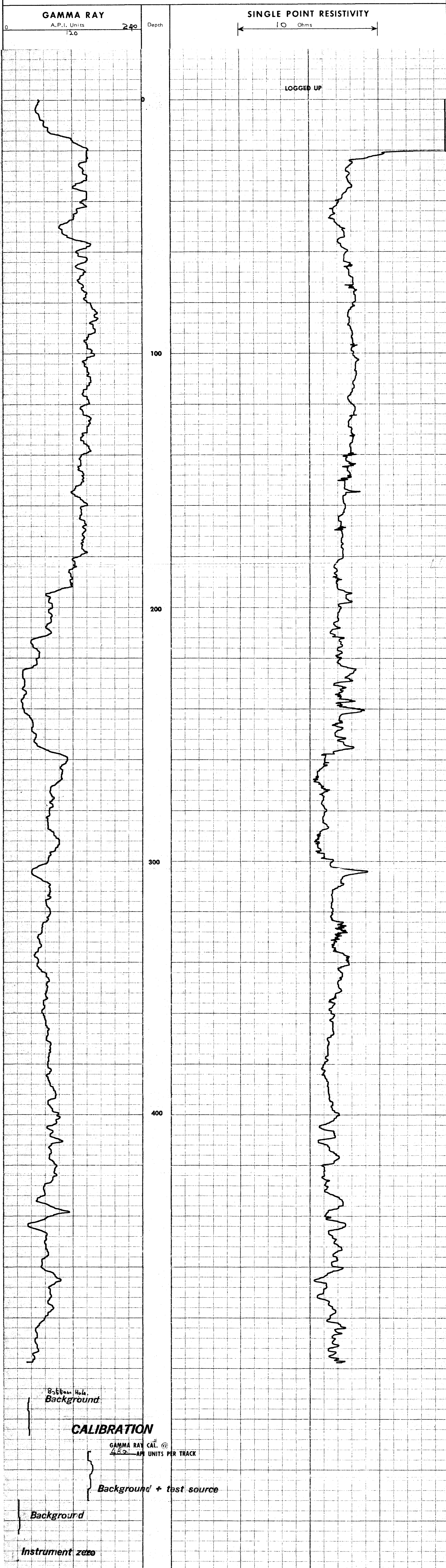
LOCATION

ELEVATION:

D.F.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	10 Aug 1969		Nature	Bentonite	
First Reading	0'		Density		
Last Reading	498'		Viscosity	@ °F	@ °F
Footage Logged	498'		Resistivity	2.65 mho @ 71 °F	@ °F
Depth - driller	510'		Res. @ BHT	@ °F	@ °F
Depth - logger	498'		pH		
Casing - driller	20'		Circ. Temp	73°F	
Casing - logger	20'		B.H. Temp.		
Casing - Size	6"		G.R. Tool Type.	R 67A	
Bit Size	4 3/4"		" " Diam	2 1/2"	
			Time Constant	5	Secs.
Logged by	L. READ		Logging Speed	15.	Ft/min
Witnessed by	E. Hillman				

REMARKS Depth Datum is Ground Level
Tool would not descend Below 498'



1041 (I) - 3

DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray - Resistivity Log

COMPANY Petromin N.L.

AREA Bendieuta Creek

WELL 244-4.

STATE South Australia.

LOCATION

ELEVATION:

D.F.

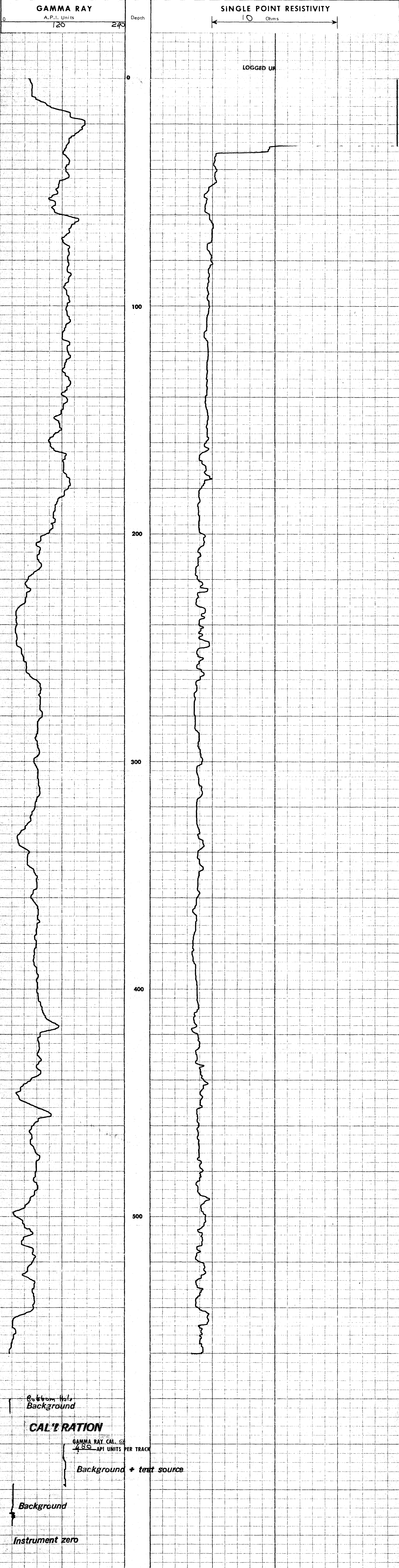
K.B.

G.L.

COMPANY Petromin N.L.
WELL 244-4.
LOCATION Bendieuta Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	12 Aug. 69		Nature	Bentonite	
First Reading	0		Density		
Last Reading	560'		Viscosity	@ °F	@ °F
Footage Logged	560'		Resistivity	0.84 ohm-in 76 °F	@ °F
Depth - driller	575'		Res. @ BHT	@ °F	@ °F
Depth - logger	560'		pH		
Casing - driller	20'		Circ. Temp	77° F	
Casing - logger			B.H. Temp.		
Casing - Size	6"		G.R. Tool type	RG-7A	
Bit Size	4 1/2"		" " Diam	2 1/2"	
Logged by	L. READ		Time Constant	5	Secs.
Witnessed by			Logging Speed	15'	Ft/min

REMARKS Depth Datum Ground Level.
Tool would not descend below 560'
Static Fluid Level 25'



DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray - Resistivity Log

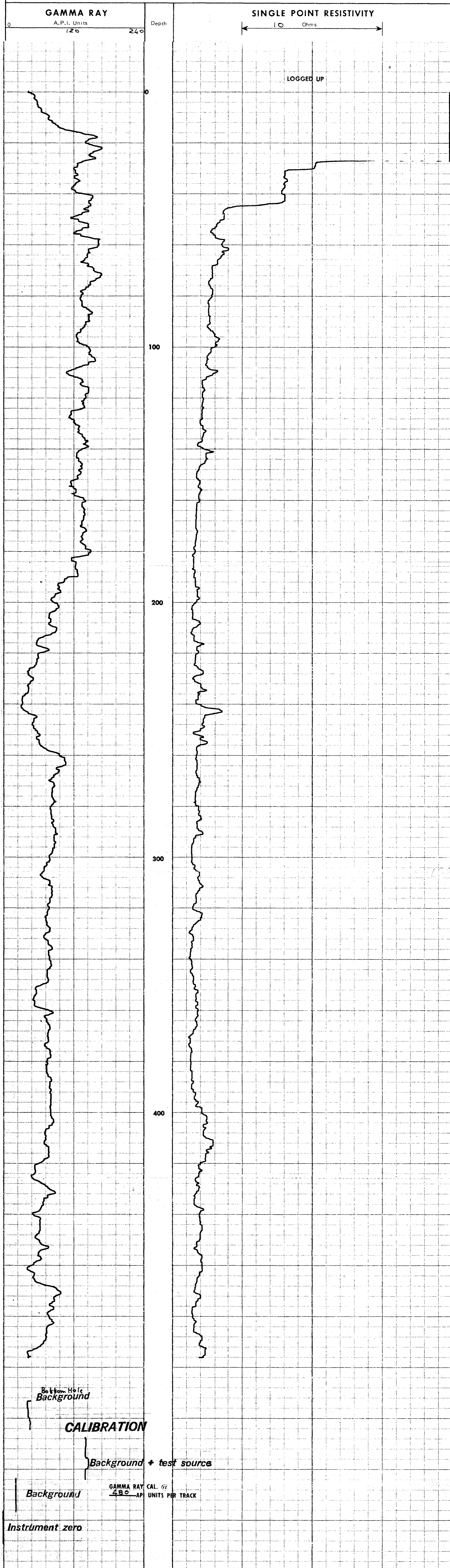
COMPANY Pebromin N.L.
AREA Bendieuta Creek
WELL 244-5
STATE South Australia

LOCATION _____
ELEVATION: _____
D.F. _____
K.B. _____
G.L. _____

COMPANY Pebromin N.L.
WELL 244-5
LOCATION Bendieuta Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	14 Aug. 1969		Nature	Natural Clays	
First Reading	0		Density		
Last Reading	496'		Viscosity	@	@
Footage Logged	496'		Resistivity	0.84 ohm 67 °F	@ °F
Depth - driller	510'		Res. @ BHT	°F	@ °F
Depth - logger	496'		pH		
Casing - driller	20'		Circ. Temp	68° F.	
Casing - logger	-		B.H. Temp.		
Casing - Size	6"		SR Tool Type	RG7A.	
Bit Size	4 3/4"		" " Diam.	2 1/2"	
Logged by	L. READ.		Time Constant	5 1/2	Sec.
Witnessed by			Logging Speed	15	Ft/min

REMARKS Depth Datum is Ground level
Tool would not Descend Below 496'
Static Fluid level 27'



DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray - Resistivity Log

COMPANY Petromin N.L.AREA Bendieva CreekWELL 244-6.STATE South Australia.

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

COMPANY Petromin N.L.
WELL 244-6.
LOCATION Bendieva Creek
STATE SA

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	15 Aug. 1969.		Nature	Bentonite	
First Reading	0		Density		
Last Reading	505'		Viscosity	@ °F	@ °F
Footage Logged	505'		Resistivity	0.75 sec/ft @ 69 °F	@ °F
Depth - driller	525'		Res. @ BHT	@ °F	@ °F
Depth - logger	505'		pH		
Casing - driller	20'		Circ. Temp	70 °F.	
Casing - logger	-		B.H. Temp.		
Casing - Size	6"		G.R. Tool Type	RGTA	
Bit Size	4 1/2"		" Diam.	2 1/2"	
Logged by	L. READ		Time Constant	5	Sees
Witnessed by	E. Hillwood		Logging Speed	15	Ft/min

REMARKS Depth Datum Ground level
Tool would not descend Below 505'
Static Fluid level 9'

GAMMA RAY

A.P.I. Units

120

240

Depth

0

100

200

300

400

500

SINGLE POINT RESISTIVITY

10 Ohms

LOGGED UP

Bottom Hole
Background

CALIBRATION

Background + test source

GAMMA RAY CAL. @
480 API UNITS PER TRACK

Background

Instrument zero

DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray Log

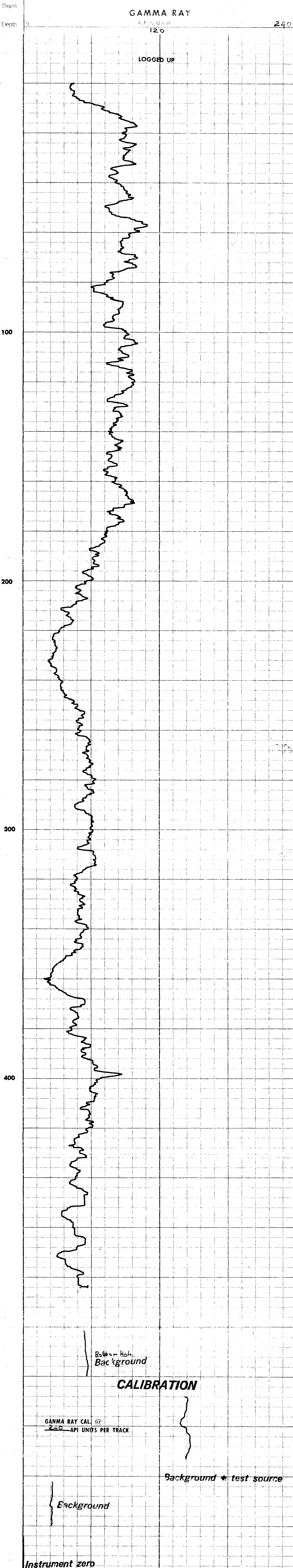
COMPANY Petromin N.L.
AREA Bendureta Creek
WELL 244-7
STATE South Australia

LOCATION _____
ELEVATION: _____
D.F. _____
K.B. _____
G.L. _____

COMPANY Petromin N.L.
WELL 244-7
LOCATION Bendureta Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	16 Aug 1969		Nature	Bentonite	
First Reading	0		Density		
Last Reading	484'		Viscosity	@ F	@ F
Footage Logged	484'		Resistivity	@ F	@ F
Depth - driller	510'		Res. @ BHT	@ F	@ F
Depth - logger	484'		pH		
Casing - driller	20'		Circ. Temp		
Casing - logger			B.H. Temp.		
Casing - Size	6"		G.R. Tool Type	610c.	
Bit Size	4 1/2"		" Diam.	1"	
Logged by	L. READ		Time Constant	5	Sec.
Witnessed by	E. Hillwood		Logging Speed	15	Ft/min

REMARKS Depth Datum is Ground Level.
Tool would not descend Below 484'
Log taken inside Drill Stem.



DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray Log

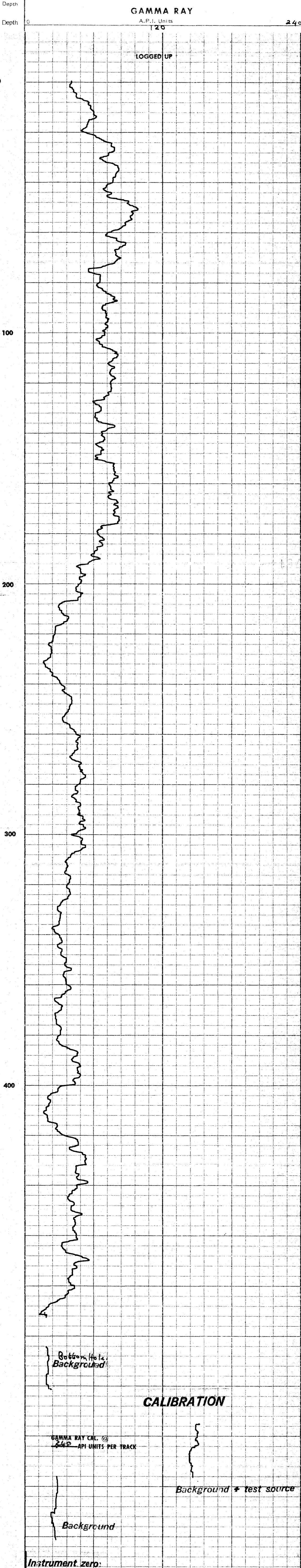
COMPANY Petromin N.L.
AREA Bendieba Creek.
WELL 244-8
STATE South Australia.

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

COMPANY Petromin N.L.
WELL 244-8
LOCATION Bendieba Creek
STATE S. A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	17 Aug. 1969			Bentonite	
First Reading	0'		Nature		
Last Reading	492'		Density		
Footage Logged	492'		Viscosity	@ °F	@ °F
Depth - driller	510'		Resistivity	@ °F	@ °F
Depth - logger	492'		Res. @ BHT	@ °F	@ °F
Casing - driller	20'		pH		
Casing - logger	-		Circ. Temp		
Casing - Size	6"		B.H. Temp.		
Bit Size	4 1/2		G.R. Tool Type	610 c.	
			" Tool Diam	1"	
			Time Constant	5	Secs.
Logged by	L. READ		Logging Speed	15	ft/min.
Witnessed by	E. Hillwood				

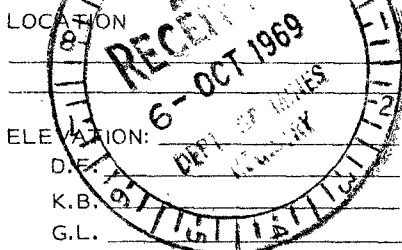
REMARKS Depth Datum is Ground Level.
Tool would not descend below 492'
Log taken inside Drill Stem.



DOWN UNDER WELL SERVICES Pty. Ltd.

Gamma Ray Log

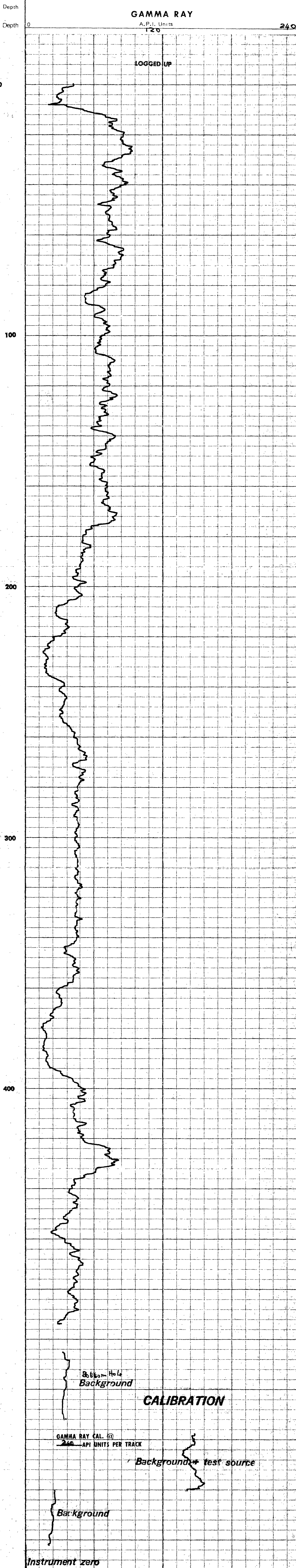
COMPANY Petromin N.L.
AREA Bendieba Creek.
WELL 244-9
STATE South Australia.



COMPANY Petromin N.L.
WELL 244-9
LOCATION Bendieba Creek
STATE S.A.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	18 Aug. 1969.			Bentonite.	
First Reading	0		Nature		
Last Reading	494'		Density	@ °F	@ °F
Footage Logged	494'		Viscosity	@ °F	@ °F
Depth - driller	510'		Res. @ BHT	@ °F	@ °F
Depth - logger	494'		pH		
Casing - driller	20'		Circ. Temp		
Casing - logger	-		B.H. Temp.		
Casing - Size	6"		Tool Type.	G.I.C.	
Bit Size	4 1/2		" Diam.	1"	
Logged by	L. READ		Time Constant	5	Secs.
Witnessed by			Logging Speed	15'	66 mm.

REMARKS Depth Datum is Ground level.
Log Run inside Drill Stem.
Tool would not Descend Below 494'



1041(I)-9

PETROMIN N.L.

1041 I

WELL294.10

LOCATIONBendieuta Creek

STATESouth Australia.

Run No. 1

Run No. 2

MUD

Run No. 1

Run No. 2

Date29 MAY 70

First Reading529'

Last Reading0'

Footage Logged529'

Depth - Driller531'

Depth - Logger531'

Casing - Driller

Casing - Logger

Casing - Size

Bit Size4 3/4"

Logged byP. TOY.

Witnessed byR. THOMPSON.

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

REMARKS

Depth Datum is Ground Level

Log Recorded through Drill Stem.

Depth

Depth

0

100

200

300

400

500

STATISTICAL VARIATIONS

CALIBRATION

GAMMA RAY CAL. @

270 API UNITS PER TRACK

BACKGROUND + TEST SOURCE

BACKGROUND

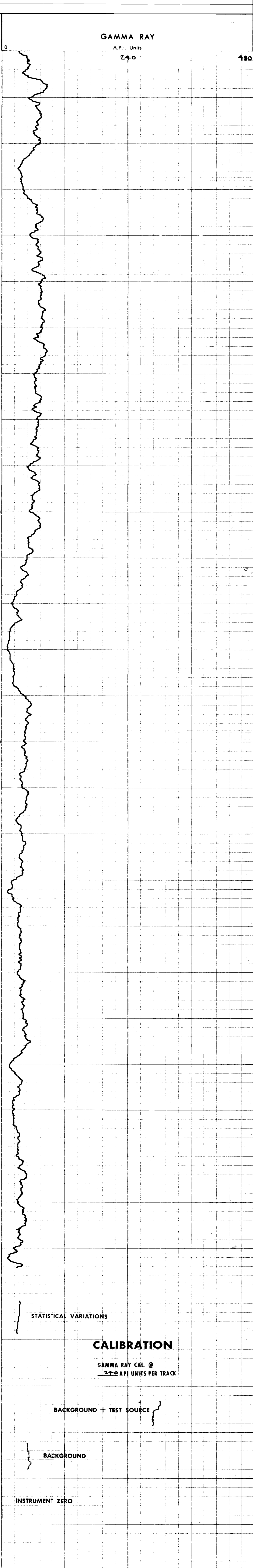
INSTRUMENT ZERO

GAMMA RAY

A.P.I. Units

240

480



PETROMIN N.L.

Gamma Ray Log

WELL244.11

LOCATIONBendieuta Creek

STATESouth Australia

AREA

Bendieuta Creek

WELL

244.11

STATE

South Australia

LOCATION

ELEVATION:

D.F.

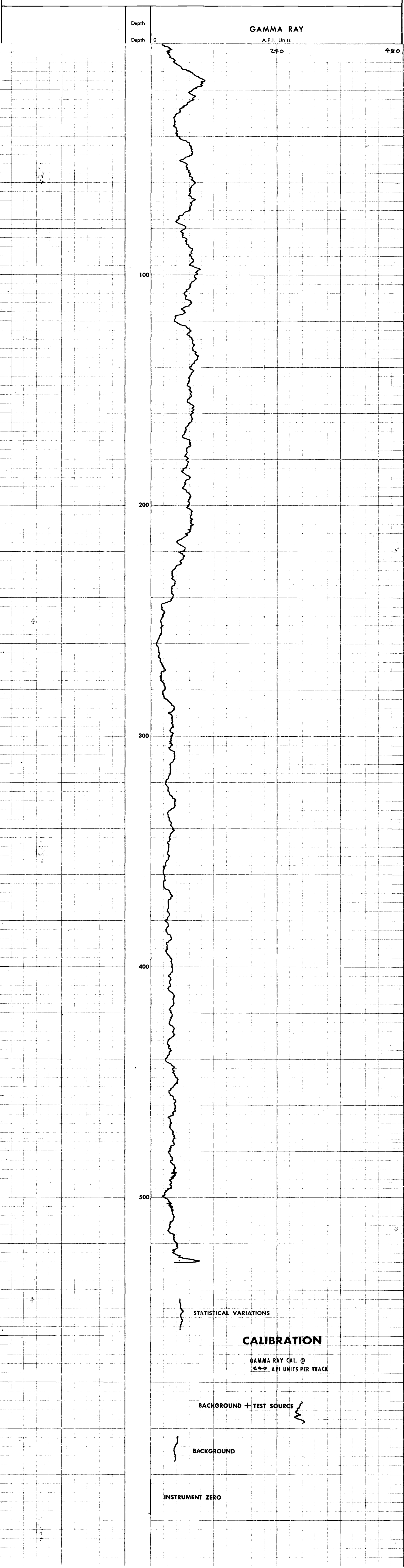
K.B.

G.L.

Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading	29 MAY 70		Nature	-	
Last Reading	528'		Density		
Footage Logged	0'		Viscosity	@ °F	@ °F
Depth - Driller	528'		Resistivity	@ °F	@ °F
Depth - Logger	530'		Res. @ BHT	@ °F	@ °F
Casing - Driller			pH		
Casing - Logger			Circ. Temp.		
Casing - Size			B.H. Temp.		
Bit Size	4 3/4"		Tool Type	G10C	
Logged by	P. TOY.		Tool Diam.	1"	
Witnessed by	R. MCKENNA		Cable Speed	15' per Min	
			Time Constant	5 Sec.	

REMARKS

Depth Datum is Ground Level
Log Recorded through Drill Stem.



PETROMIN N.L.

WELL244.12

LOCATIONBendieuta Creek

STATESouth Australia

Gamma Ray Log

AREA

Bendieuta Creek

WELL

244.12

STATE

South Australia

LOCATION

ELEVATION:

D.F.

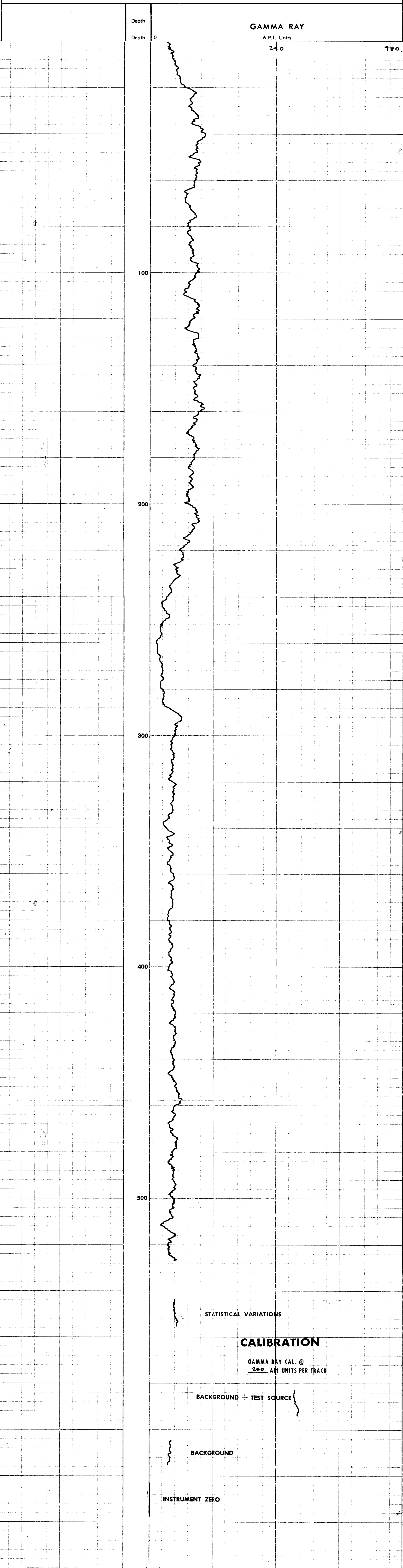
K.B.

GL

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	30 MAY 70		Nature	-	
First Reading	527'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	527'		Resistivity	@ °F	@ °F
Depth - Driller	527'		Res. @ BHT	@ °F	@ °F
Depth - Logger	527'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	R. McKENNA.		Time Constant	5 Sec.	

REMARKS

Depth Datum is Ground Level
Log Recorded through Drill Stem.



PETROMIN N.L.

Gamma Ray Log

WELL
244-13

LOCATION
Bendieuta Creek

STATE
South Australia

AREA
Bendieuta Creek.

WELL
244-13

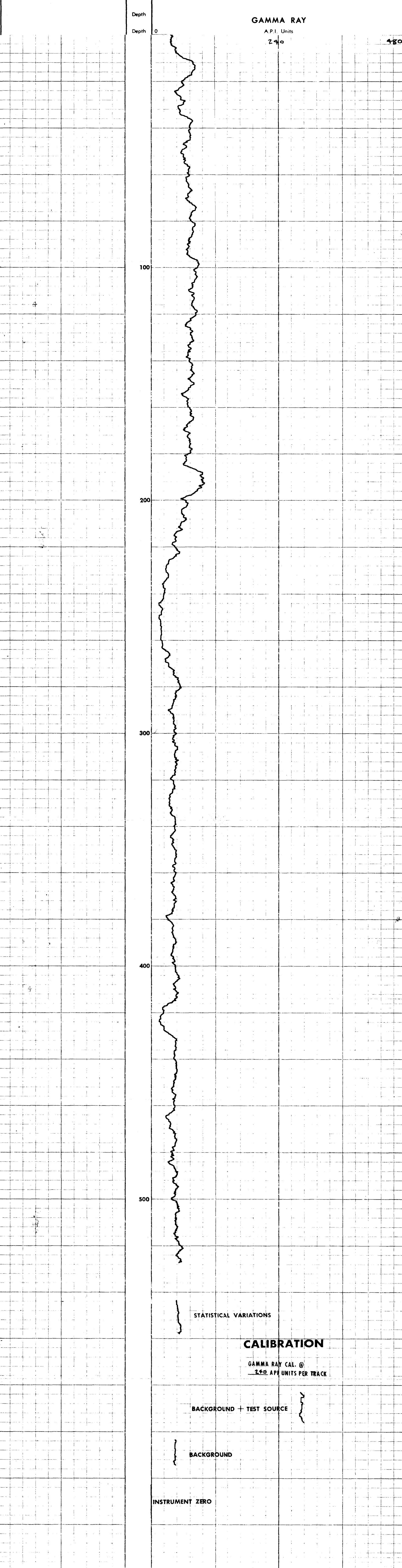
STATE
South Australia.

LOCATION

ELEVATION:
D.F.
K.B.
G.L.

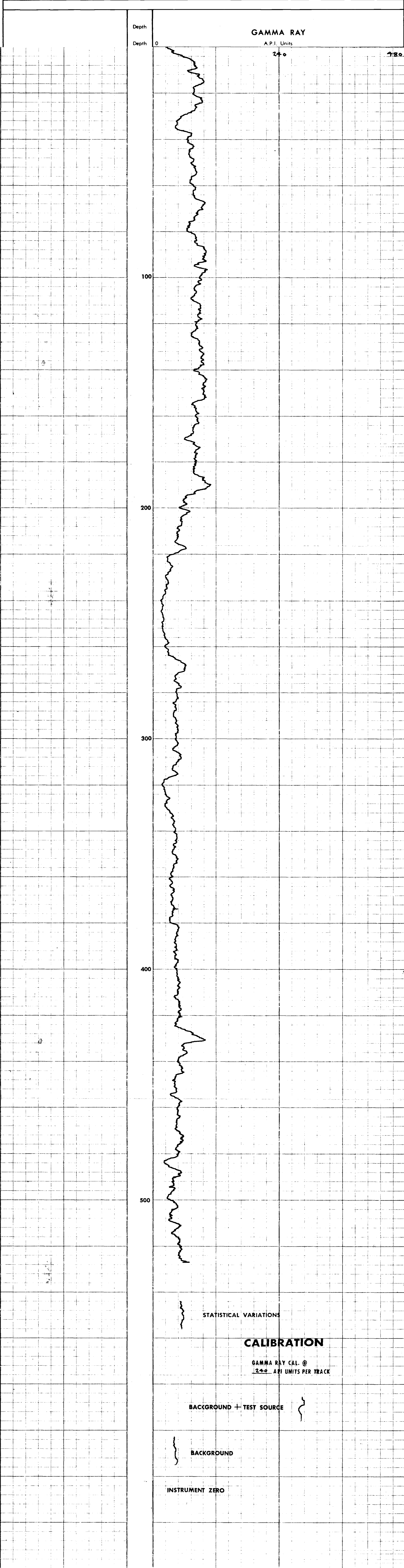
	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	30 MAY 70		Nature	-	
First Reading	527'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	527'		Resistivity	@ °F	@ °F
Depth - Driller	530'		Res. @ BHT	@ °F	@ °F
Depth - Logger	529'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOR.		Cable Speed	15' per Min	
Witnessed by	R. THOMPSON		Time Constant	5 Sec.	

REMARKS
Depth Datum is Ground Level
Log Recorded through Drill Stem



PETROMIN N.L.				WELL 244.14 PETROMIN N.L.	
Gamma Ray Log				LOCATION Bendieuta Creek STATE South Australia	
AREA Bendieuta Creek				LOCATION	
WELL 244.14				ELEVATION:	
STATE South Australia				D.F.	
				K.B.	
				G.L.	
Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading	31 MAY 70.		Nature	Super Col	
Last Reading	522'		Density		
Footage Logged	0'		Viscosity	@ °F	@ °F
Depth - Driller	522'		Resistivity	@ °F	@ °F
Depth - Logger	529'		Res. @ BHT	@ °F	@ °F
Casing - Driller			pH		
Casing - Logger			Circ. Temp.		
Casing - Size			B.H. Temp.		
Bit Size	4 3/4"		Tool Type	GRID C	
			Tool Diam.	1"	
			Cable Speed	15' per Min	
			Time Constant	5 Sec.	
Logged by	P. TOY.				
Witnessed by	R. McKENNA.				

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem.



PETROMIN N.L.

Gamma Ray Log

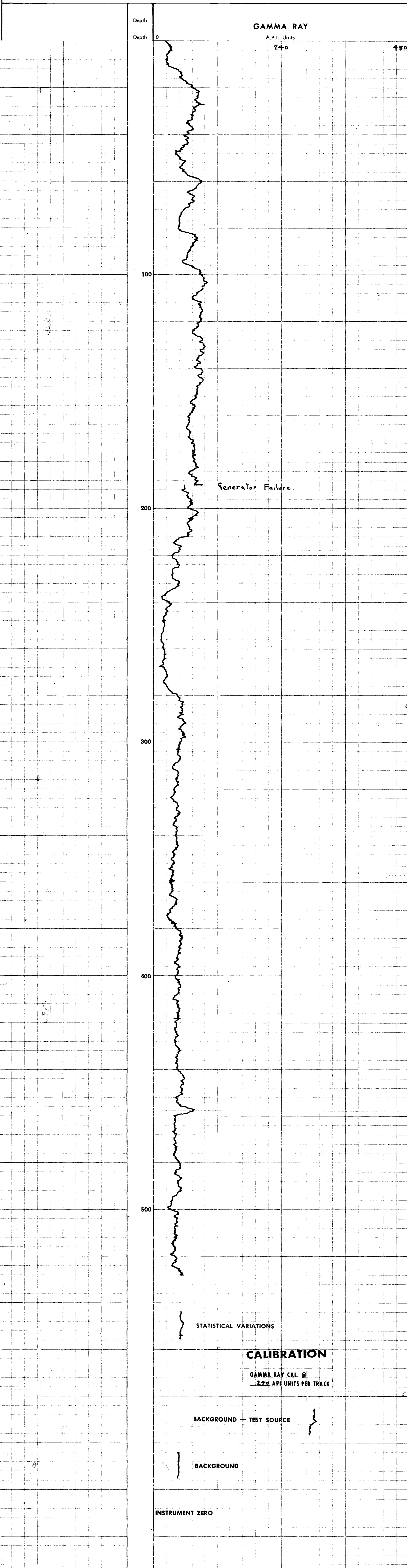
PETROMIN N.L.
WELL 244.15
LOCATION Bendieuta Creek
STATE South Australia

AREA Bendieuta Creek.
WELL 244.15
STATE South Australia

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	31 MAY 70.		Nature		
First Reading	528'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	528'		Resistivity	@ °F	@ °F
Depth - Driller	530'		Res. @ BHT	@ °F	@ °F
Depth - Logger	530'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G 10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	P. LADEMAN.		Time Constant	5 Sec.	

REMARKS
Depth Datum is Ground Level
Log Recorded through Drill Stem.
Throttle Shaft broke on Dean Generator at 190'



PETROMIN N.L.

Gamma Ray Log

WELL244.16

LOCATIONBendieuta Creek

STATESouth Australia

AREA

Bendieuta Creek

WELL

244.16

STATE

South Australia

LOCATION

ELEVATION:

D.F.

K.B.

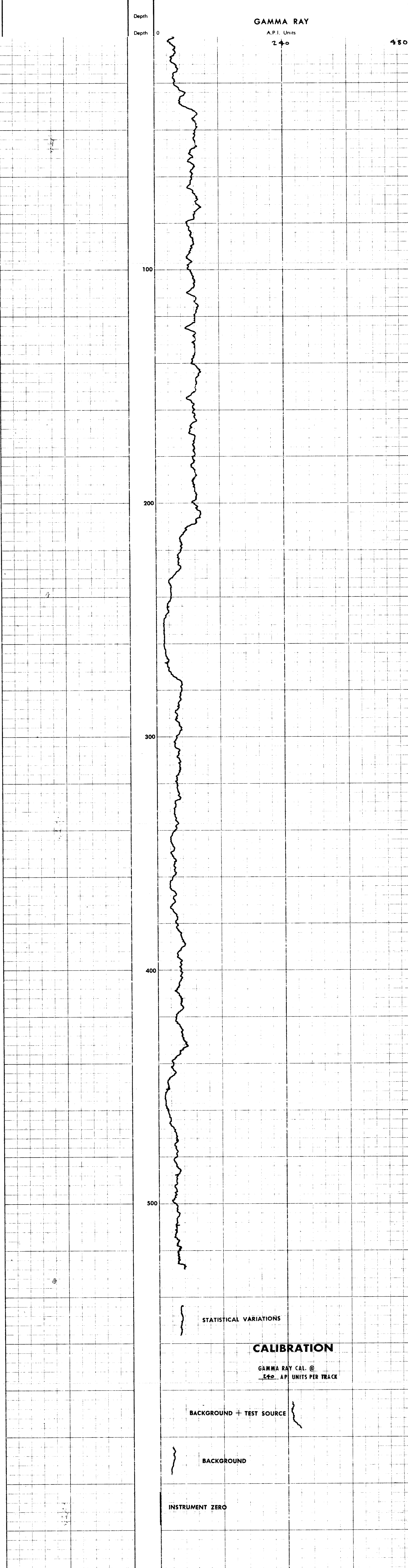
G.L.

Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading	1 JUNE 70		Nature		
Last Reading	528'		Density		
Footage Logged	0'		Viscosity	@ °F	@ °F
Depth - Driller	528'		Resistivity	@ °F	@ °F
Depth - Logger	530'		Res. @ BHT	@ °F	@ °F
Casing - Driller	530'		pH		
Casing - Logger			Circ. Temp.		
Casing - Size			B.H. Temp.		
Bit Size	4 1/2"		Tool Type	G10C	
			Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	R. McKENNA.		Time Constant	5" Sec.	

REMARKS

Depth Datum is Ground Level

Log Recorded through Drill Stem.



PETROMIN N.L.

Gamma Ray Log

WELL244-17

LOCATIONBendieuta Creek

STATESouth Australia

AREA

Bendieuta Creek.

WELL244-17

STATESouth Australia.

LOCATION

ELEVATION:

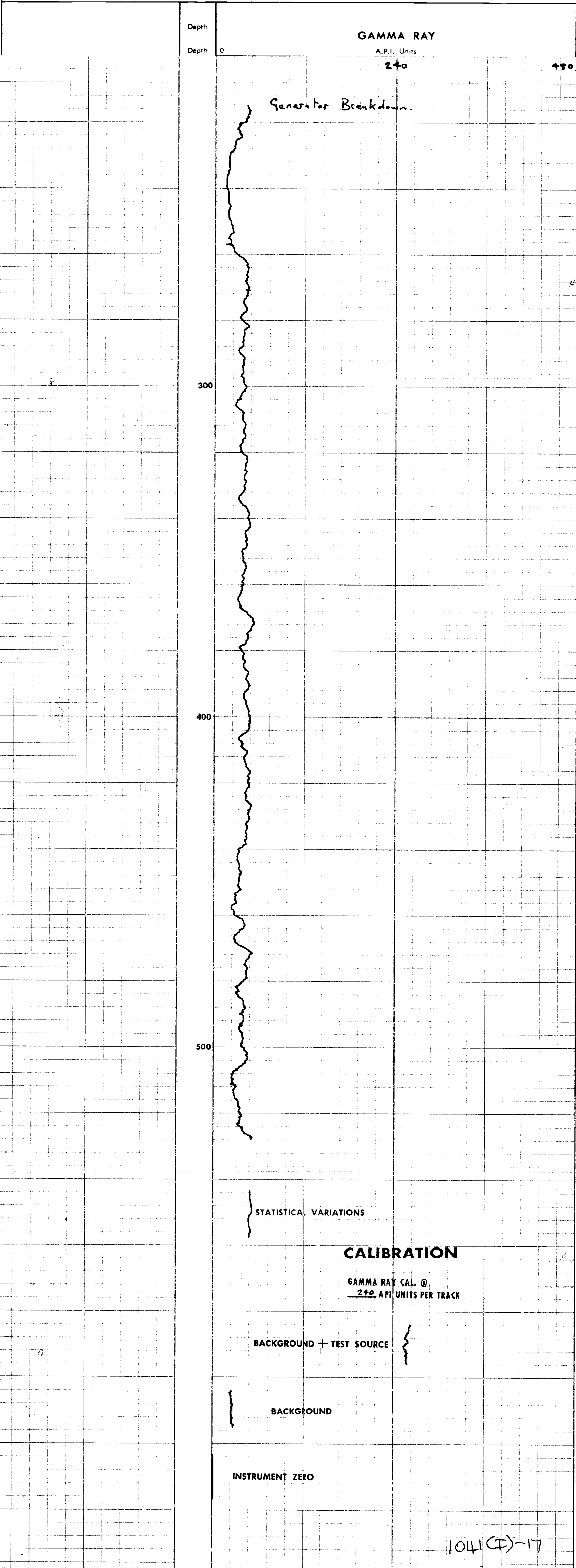
D.F.

K.B.

G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	1 JUNE 70		Nature		
First Reading	528'		Density		
Last Reading	215'		Viscosity	@ °F	@ °F
Footage Logged	313'		Resistivity	@ °F	@ °F
Depth - Driller	530'		Res. @ BHT	@ °F	@ °F
Depth - Logger	530'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	910C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min.	
Witnessed by	P. LADEMAN		Time Constant	5 Sec.	

REMARKS: Depth Datum is Ground Level
Log Recorded through Drill Stem.
215' Onan breakdown. Unable to complete log.



PETROMIN N.L.

Gamma Ray Log

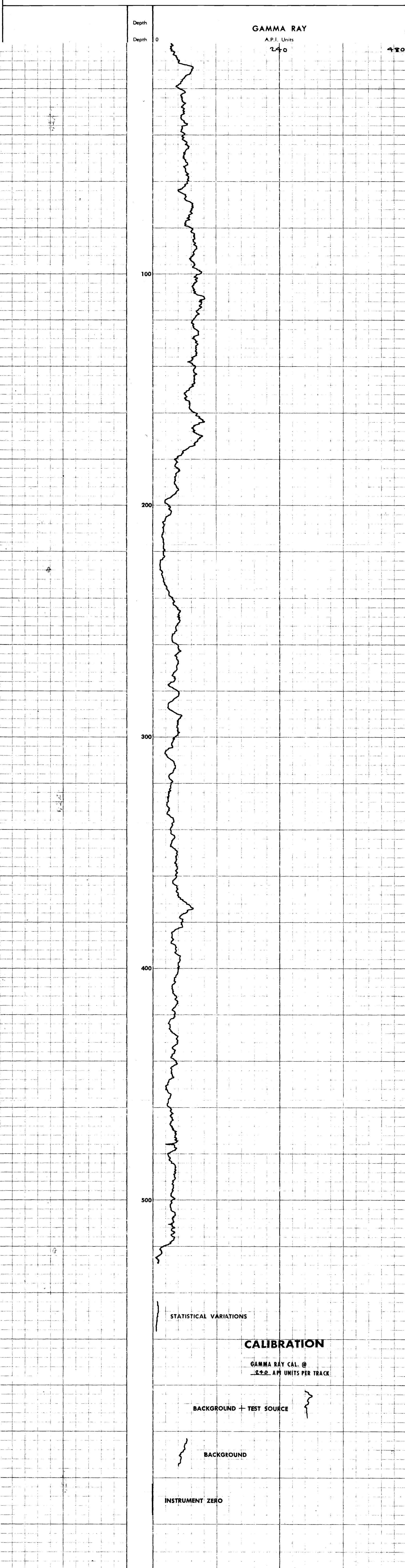
PETROMIN N.L.
WELL 244.18
LOCATION Balcaracana Creek
STATE South Australia

AREA Balcaracana Creek
WELL 244.18
STATE South Australia

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	2 JUNE 70.		Nature		
First Reading	527'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	527'		Resistivity	@ °F	@ °F
Depth - Driller	530'		Res. @ BHT	@ °F	@ °F
Depth - Logger	529'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min.	
Witnessed by	R. McKENNA		Time Constant	5 Sec.	

REMARKS Depth Datum is Ground Level.
Log Recorded through Drill Stem



104(I)-18

Gamma Ray Log

PETROMIN N.L.
 WELL 244-19.
 LOCATION Balcaryana Creek.
 STATE South Australia.

AREA Balcoracina Creek.

WELL 247.19.

STATE South Australia.

LOCATION _____

ELEVATION: _____

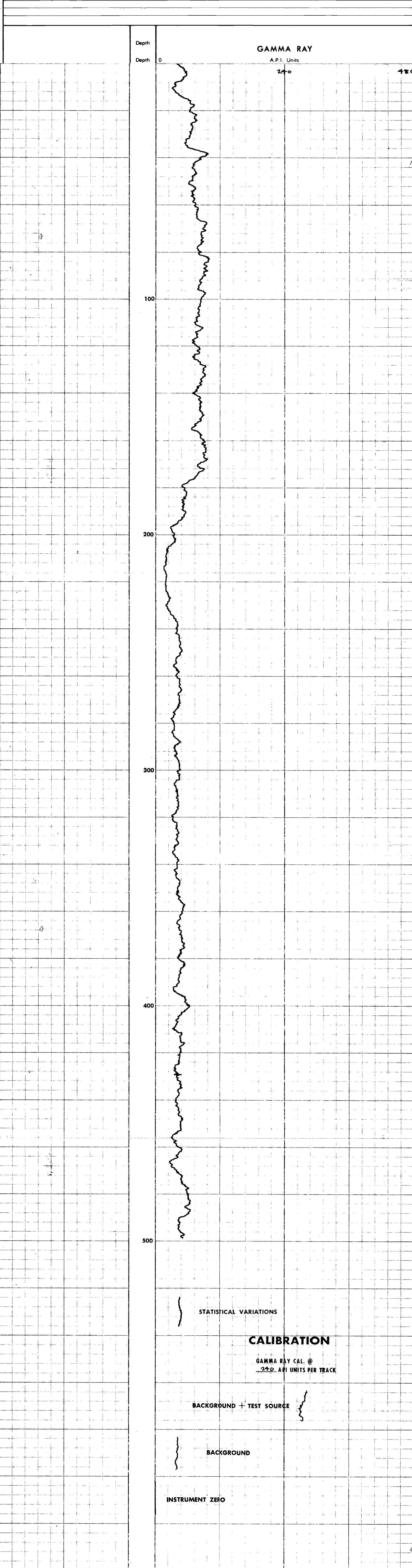
D.F. _____

K.B. _____

G.L. _____

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	2 JUNE 70.		Nature		
First Reading	498'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	498'		Resistivity	@ °F	@ °F
Depth - Driller	500'		Res. @ BHT	@ °F	@ °F
Depth - Logger	500'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G 10 C	
Bit Size	4 $\frac{3}{4}$ "		Tool Diam.	1"	
			Cable Speed	15' per Min	
Logged by	P. TOY.		Time Constant	5 Sec.	
Witnessed by	P. LADEMAN.				

REMARKS	Depth Datum is Ground Level Log Recorded through Drill Stem.
---------	---



Gamma Ray Log

WELL 244.20
LOCATION Bolcoracana Creek
STATE South Australia.

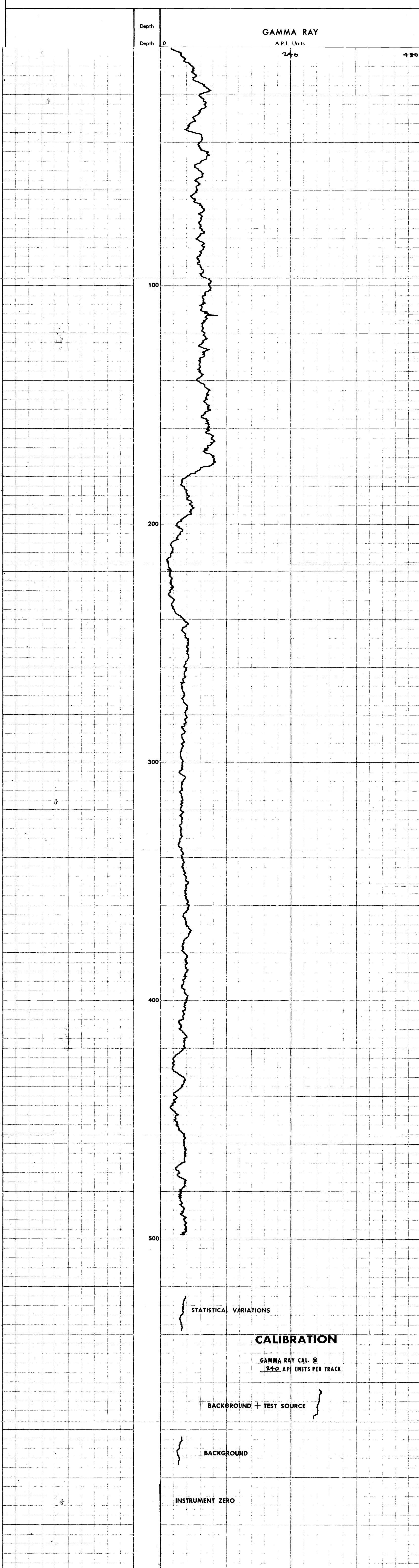
AREA Balcoracina Creek.
WELL 244-20.
 STATE South Australia.

LOCATION

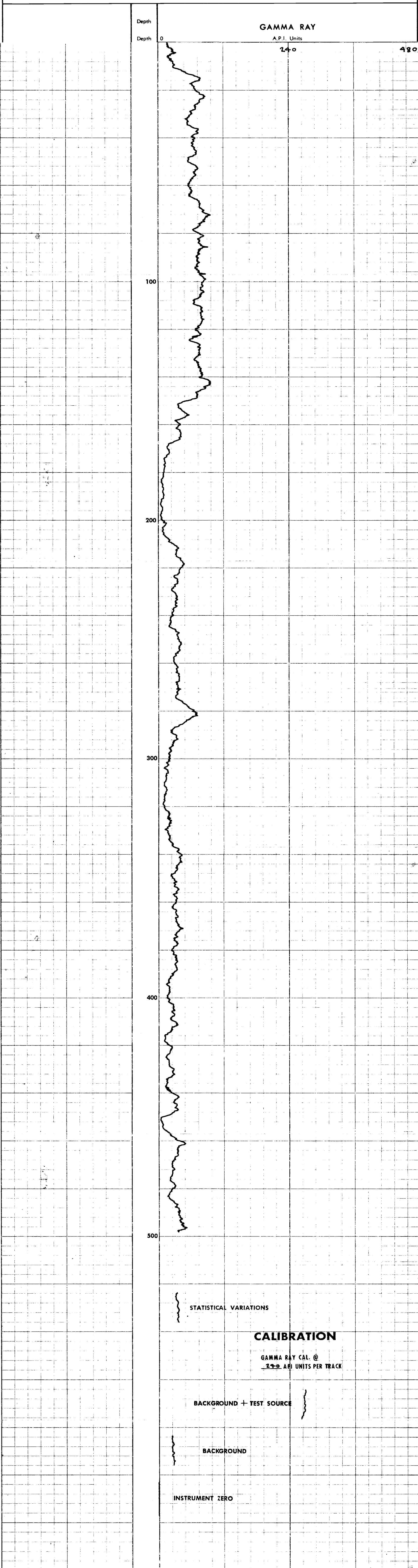
ELEVATION:
D.F. _____
K.B. _____
G.L. _____

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	3 JUNE 70		Nature		
First Reading	498'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	498'		Resistivity	@ °F	@ °F
Depth - Driller	500'		Res. @ BHT	@ °F	@ °F
Depth - Logger	500'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 ³ / ₄ "		Tool Diam.	1"	
			Cable Speed	15' per Min	
Logged by	P. TOY.		Time Constant	5' Sec.	
Witnessed by	R. McKENNA				

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem



PETROMIN N.L.				PETROMIN N.L.	
Gamma Ray Log				WELL 244-21	
AREA Balcoracana Creek				LOCATION Balcoracana Creek	
WELL 244-21				STATE South Australia	
STATE South Australia				LOCATION	
				ELEVATION:	
				D.F.	
				K.B.	
				G.L.	
Date	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading	4 JUNE 70		Nature		
Last Reading	498'		Density		
Footage Logged	0'		Viscosity	@ °F	@ °F
Depth - Driller	498'		Resistivity	@ °F	@ °F
Depth - Logger	500'		Res. @ BHT	@ °F	@ °F
Casing - Driller			pH		
Casing - Logger			Circ. Temp.		
Casing - Size			B.H. Temp.		
Bit Size	4 3/4"		Tool Type	G-10C	
			Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	P. LADEMAN.		Time Constant	5 Sec.	
REMARKS					
Depth Datum is Ground Level.					
Log Recorded through Drill Stem.					



PETROMIN N.L.

Gamma Ray Log

WELL244.26

LOCATIONLake Frome South

STATESouth Australia

AREA

Lake Frome South

WELL

244.26

STATE

South Australia

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

Run No. 1

Run No. 2

MUD

Run No. 1

Run No. 2

Date

5 JUNE 70

Nature

First Reading

481

Viscosity

Last Reading

0

Resistivity

Footage Logged

481

Res. @ BHT

Depth - Driller

483

pH

Depth - Logger

483

Circ. Temp.

Casing - Driller

Casing - Logger

B.H. Temp.

Casing - Size

4 3/4"

Tool Type

Bit Size

1"

Tool Diam.

Logged by

P. TOY.

Cable Speed

15' per Min

Witnessed by

R. McKenna

Time Constant

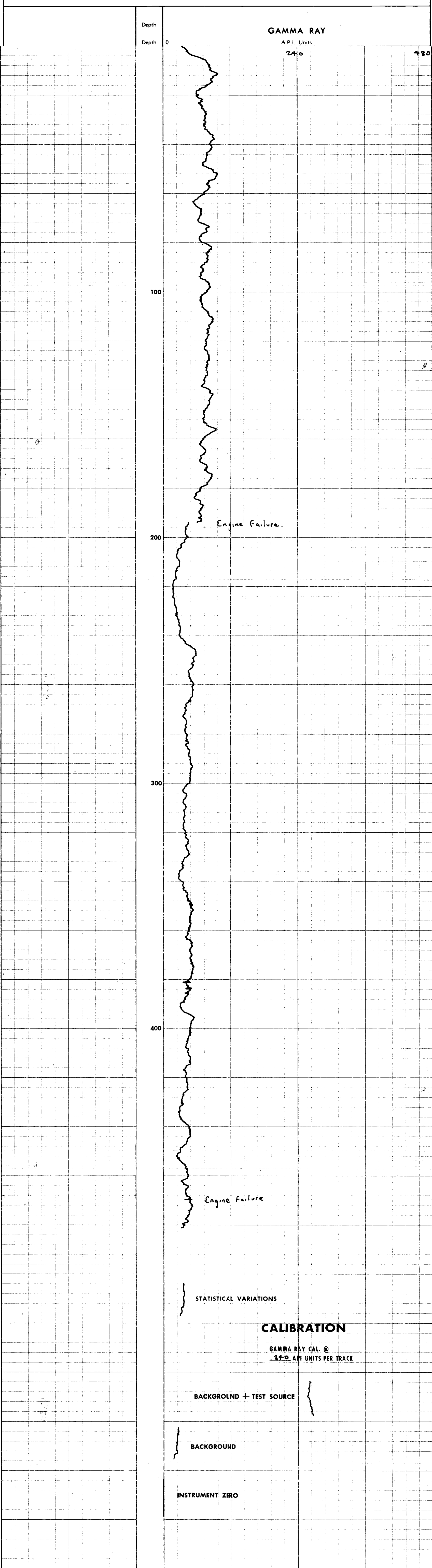
5 Sec.

REMARKS

Depth Datum is Ground Level

Log Recorded Through Drill Stem

199' and 490' Engine Failure.



Gamma Ray Log

AREA Lake Frome South.
WELL 244.27
STATE South Australia.

LOCATION

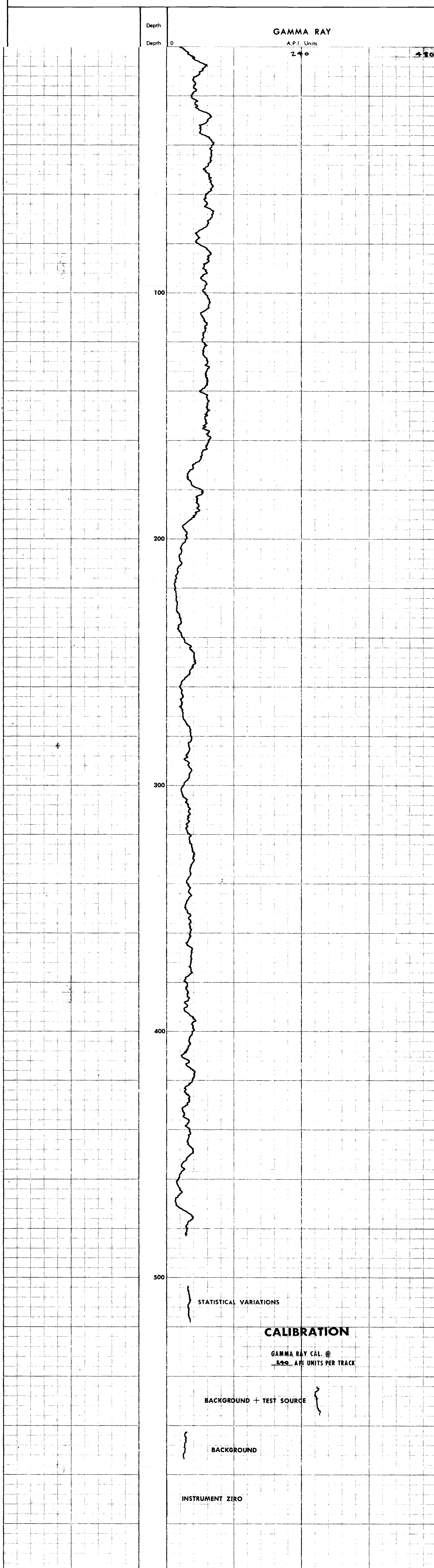
ELEVATION:

DE

D.F.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	4 JUNE 70		Nature		
First Reading	483'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	483'		Resistivity	@ °F	@ °F
Depth - Driller	483'		Res. @ BHT	@ °F	@ °F
Depth - Logger	485'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 $\frac{3}{4}$ "		Tool Diam.	1"	
			Cable Speed	15' per Min.	
Logged by	P. TOY.		Time Constant	5 Sec.	
Witnessed by	R. McKENNA.				

REMARKS _____ Depth Datum is Ground Level
Log Recorded through Drill Stem.



Gamma Ray Log

PETROMIN N.L.

WELL 244-28

LOCATION Lake Frome South

STATE South Australia

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

AREA Lake Frome South

WELL 244-28

STATE South Australia

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	5 JUNE 70		Nature		
First Reading	458'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	458'		Res. @ BHT	@ °F	@ °F
Depth - Driller	485'		pH		
Depth - Logger	460'		Circ. Temp.		
Casing - Driller			B.H. Temp.		
Casing - Logger			Tool Type	G-10 C	
Casing - Size			Tool Diam.	1"	
Bit Size	4 3/4"		Cable Speed	15' per Min	
Logged by	P. TOY		Time Constant	5 Sec.	
Witnessed by	P. LADEMAN				

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem
Unable to lower Probe past 460' due to obstruction in Drill Stem.

Depth

Depth 0

GAMMA RAY

A.P.I. Units

240

480

100

200

300

400

STATISTICAL VARIATIONS

CALIBRATION

GAMMA RAY CAL. @

240 API UNITS PER TRACK

BACKGROUND + TEST SOURCE

BACKGROUND

INSTRUMENT ZERO

Gamma Ray Log

PETROMIN N.L.

WELL 244.30

LOCATION Lake Frome South.

STATE South Australia.

AREA Lake Frome South

WELL 244.30

STATE South Australia.

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	6 JUNE 70.		Nature		
First Reading	443'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	443'		Resistivity	@ °F	@ °F
Depth - Driller	445'		Res. @ BHT	@ °F	@ °F
Depth - Logger	445'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 1/2"		Tool Diam.	1"	
			Cable Speed	15' per Min	
Logged by	P. TOY.		Time Constant	5 Sec.	
Witnessed by	R. McKENNA				

REMARKS Depth Datum is Ground Level

Log Recorded through Drill Stem.

Depth

Depth

GAMMA RAY

A.P.I. Units

240

480

100

200

300

400

STATISTICAL VARIATIONS

CALIBRATION

GAMMA RAY CAL. @
240 API UNITS PER TRACK

BACKGROUND + TEST SOURCE

BACKGROUND

INSTRUMENT ZERO

104(I)-25

PETROMIN N.L.

Gamma Ray Log

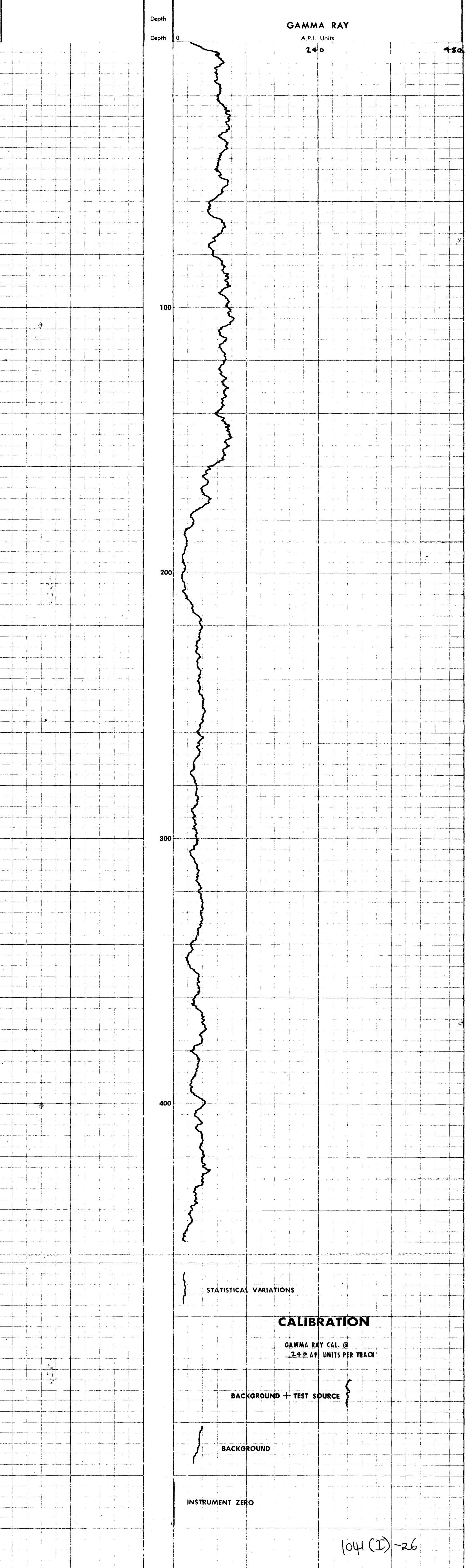
PETROMIN N.L.
WELL 244.31
LOCATION Lake Frome South
STATE South Australia

AREA Lake Frome South
WELL 244.31
STATE South Australia

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	7 June 70.		Nature		
First Reading	452'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	452'		Resistivity	@ °F	@ °F
Depth - Driller	453'		Res. @ BHT	@ °F	@ °F
Depth - Logger	454'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	R. McKenna		Time Constant	5 Sec.	

REMARKS Depth Datum is Ground Level
Log Recorded Through Drill Stem



Gamma Ray Log

AREA Lake Frome South.
WELL 244.32
STATE South Australia.

LOCATION

ELEVATION:
D.F.
K.B.
G.L.

WELL 244.32
LOCATION Lake Frome South
STATE South Australia.

PETROMIN N.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	8 JUNE 70		Nature		
First Reading	452'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	452'		Resistivity	@ °F	@ °F
Depth - Driller	455'		Res. @ BHT	@ °F	@ °F
Depth - Logger	454'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	C-10 C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	R. McKENNA		Time Constant	5 Sec.	

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem.

Depth

Depth

GAMMA RAY

A.P.I. Units

240

480

100

200

300

400

STATISTICAL VARIATIONS

CALIBRATION

GAMMA RAY CAL. @
240 API UNITS PER TRACK

BACKGROUND + TEST SOURCE

BACKGROUND

INSTRUMENT ZERO

1041(I)-27

PETROMIN N.L.

Gamma Ray Log

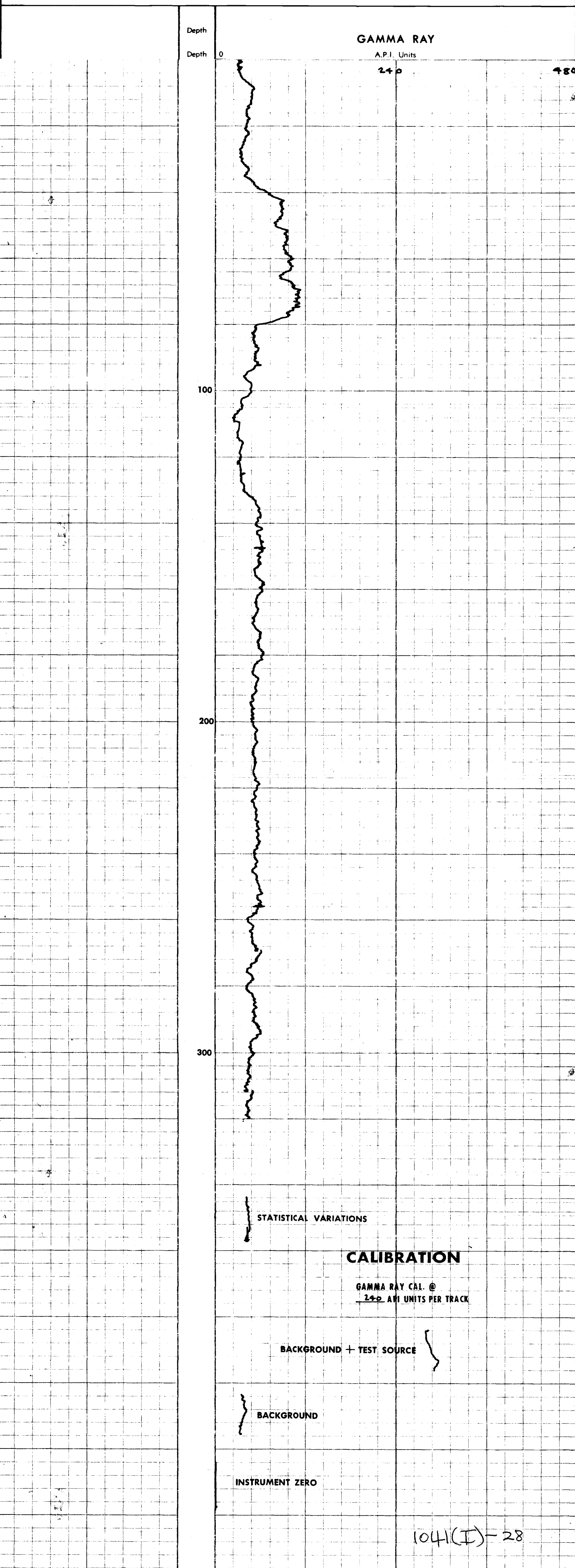
PETROMIN N.L.
WELL 244.33
LOCATION Lake Frome South
STATE South Australia

AREA Lake Frome South
WELL 244.33
STATE South Australia

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	9 JUNE 70		Nature		
First Reading	320'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	320'		Resistivity	@ °F	@ °F
Depth - Driller	322'		Res. @ BHT	@ °F	@ °F
Depth - Logger	322'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G10C	
Bit Size	4 3/4"		Tool Diam.	1"	
			Cable Speed	15' per Min	
Logged by	P. TOY.		Time Constant	5 Sec.	
Witnessed by	P. LADEMAN				

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem.
269' and 312' Generator Stopped.



Gamma Ray Log

PETROMIN N.L.

WELL 244.35

LOCATION LAKE FROME SOUTH

STATE SOUTH AUSTRALIA

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

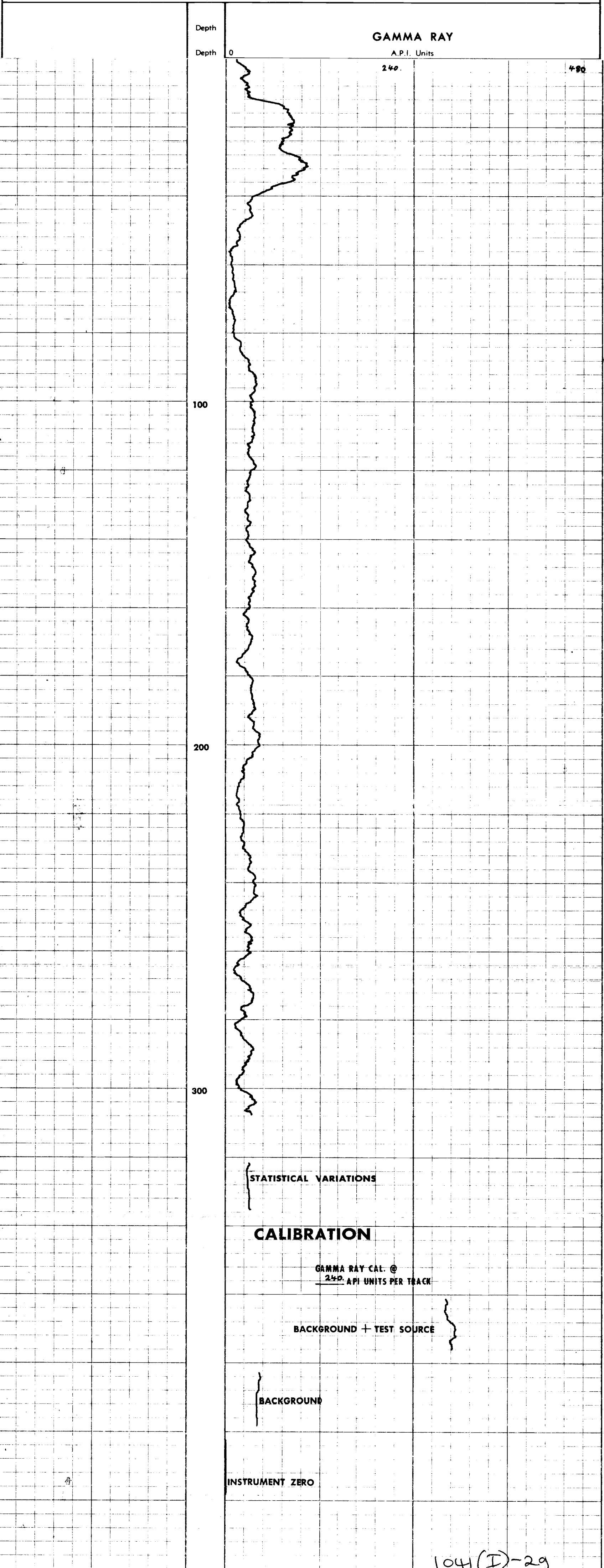
AREA LAKE FROME SOUTH

WELL 244.35

STATE SOUTH AUSTRALIA

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	10. JUNE. 70.		Nature		
First Reading	308		Density		
Last Reading	0		Viscosity	@ °F	@ °F
Footage Logged	308		Resistivity	@ °F	@ °F
Depth - Driller	315		Res. @ BHT	@ °F	@ °F
Depth - Logger	310		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G. 10. C.	
Bit Size	4 3/4"		Tool Diam.	1"	
			Cable Speed	15' PER MIN.	
Logged by	G. DAVIES.		Time Constant	5. SECS.	
Witnessed by	R. MCKENNA.				

REMARKS DEPTH DATUM IS GROUND LEVEL.
LOG RECORDED THROUGH DRILL STEM.



Gamma Ray Log

WELL 244.36

PETROMIN N.L.

LOCATION LAKE FROME SOUTH.

STATE South Australia.

LOCATION

ELEVATION:

D.F.

K.B.

G.L.

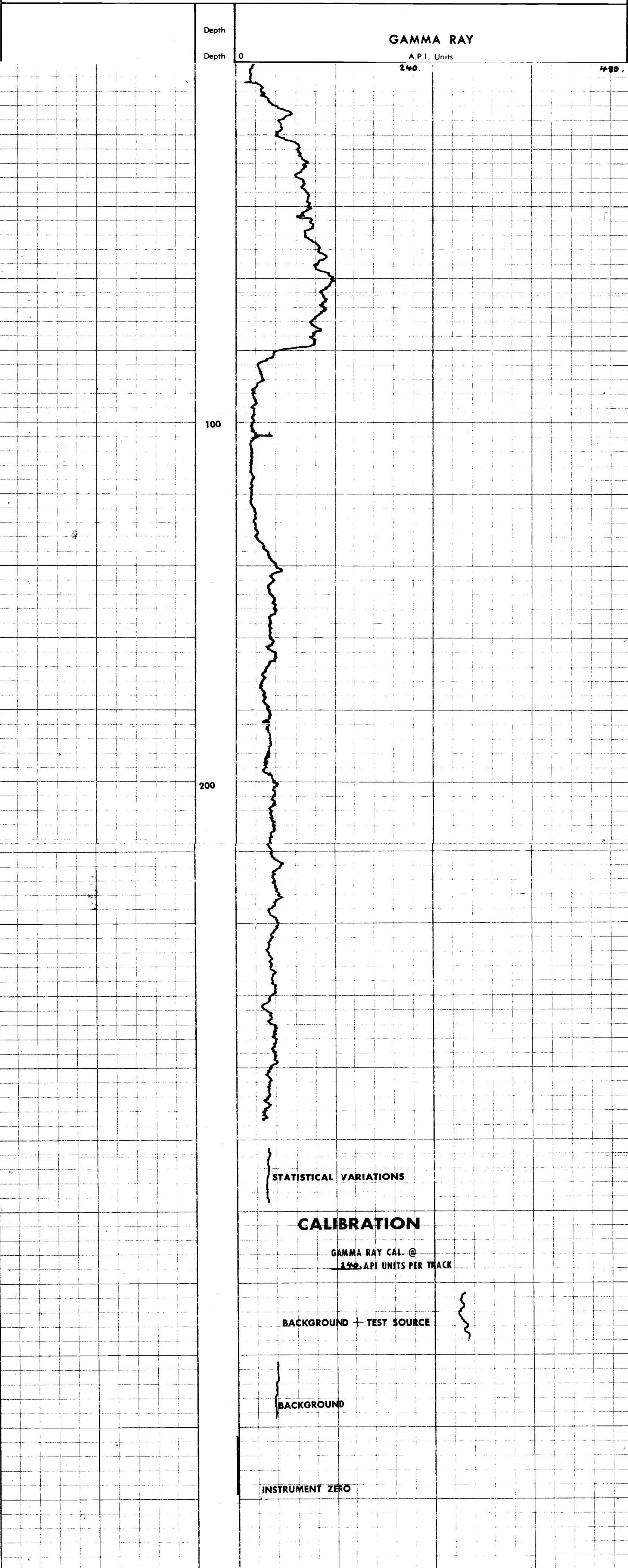
AREA LAKE FROME SOUTH.

WELL 244.36

STATE South Australia.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	10. JUNE 70		Nature		
First Reading	294'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	294'		Resistivity	@ °F	@ °F
Depth - Driller	305'		Res. @ BHT	@ °F	@ °F
Depth - Logger	295'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G. 10. C.	
Bit Size	4 3/4"		Tool Diam.	1"	
			Cable Speed	15' PER MIN.	
Logged by	G. DAVIES.		Time Constant	5. SECS.	
Witnessed by	P. LEDERMAN.				

REMARKS DEPTH DATUM IS GROUND LEVEL.
LOG RECORDED THROUGH DRILL STEM.
ERRORS AT 6' AND 104' DUE TO PAPER NOT RIDING STRAIGHT OVER PAPER DRUM.



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Gamma Ray Log

AREA LAKE FROME SOUTH.

WELL 244.37

STATE SOUTH AUSTRALIA.

LOCATION

ELEVATION:

D.F.
K.B.
G.L.

PETROMIN N.L.
WELL 244.37
LOCATION LAKE FROME SOUTH
STATE SOUTH AUSTRALIA

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	10. JUNE. 70		Nature		
First Reading	296'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	296'		Resistivity	@ °F	@ °F
Depth - Driller	305'		Res. @ BHT	@ °F	@ °F
Depth - Logger	296'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G. 10.C.	
Bit Size	4 3/4"		Tool Diam.	1"	
			Cable Speed	15' PER MIN.	
Logged by	G. DAVIES.		Time Constant	5. SECS	
Witnessed by	P. LEDERMAN.				

REMARKS DEPTH DATUM IS GROUND LEVEL.
LOG RECORDED THROUGH DRILL STEM

Depth

Depth 0

100

200

GAMMA RAY

A.P.I. Units

240

480

STATISTICAL VARIATIONS

CALIBRATION

GAMMA RAY CAL. @
240 API UNITS PER TRACK

BACKGROUND + TEST SOURCE

BACKGROUND

INSTRUMENT ZERO

PETROMIN N.L.
WELL 244.38.
LOCATION LAKE FRONE SOUTH.
STATE SOUTH AUSTRALIA.

AREA LAKE FROME SOUTH.

WELL 244.38.

STATE SOUTH AUSTRALIA.

LOCATION

ELEVATION:

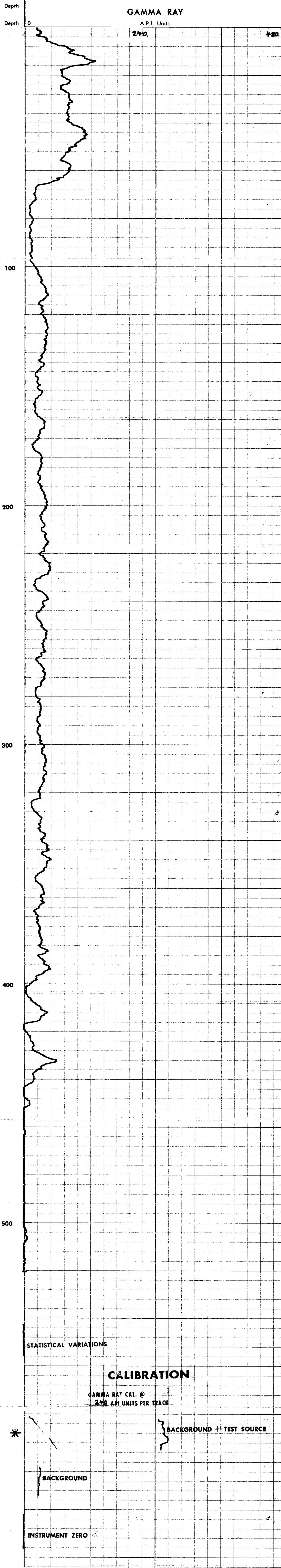
D.F.

K.B.

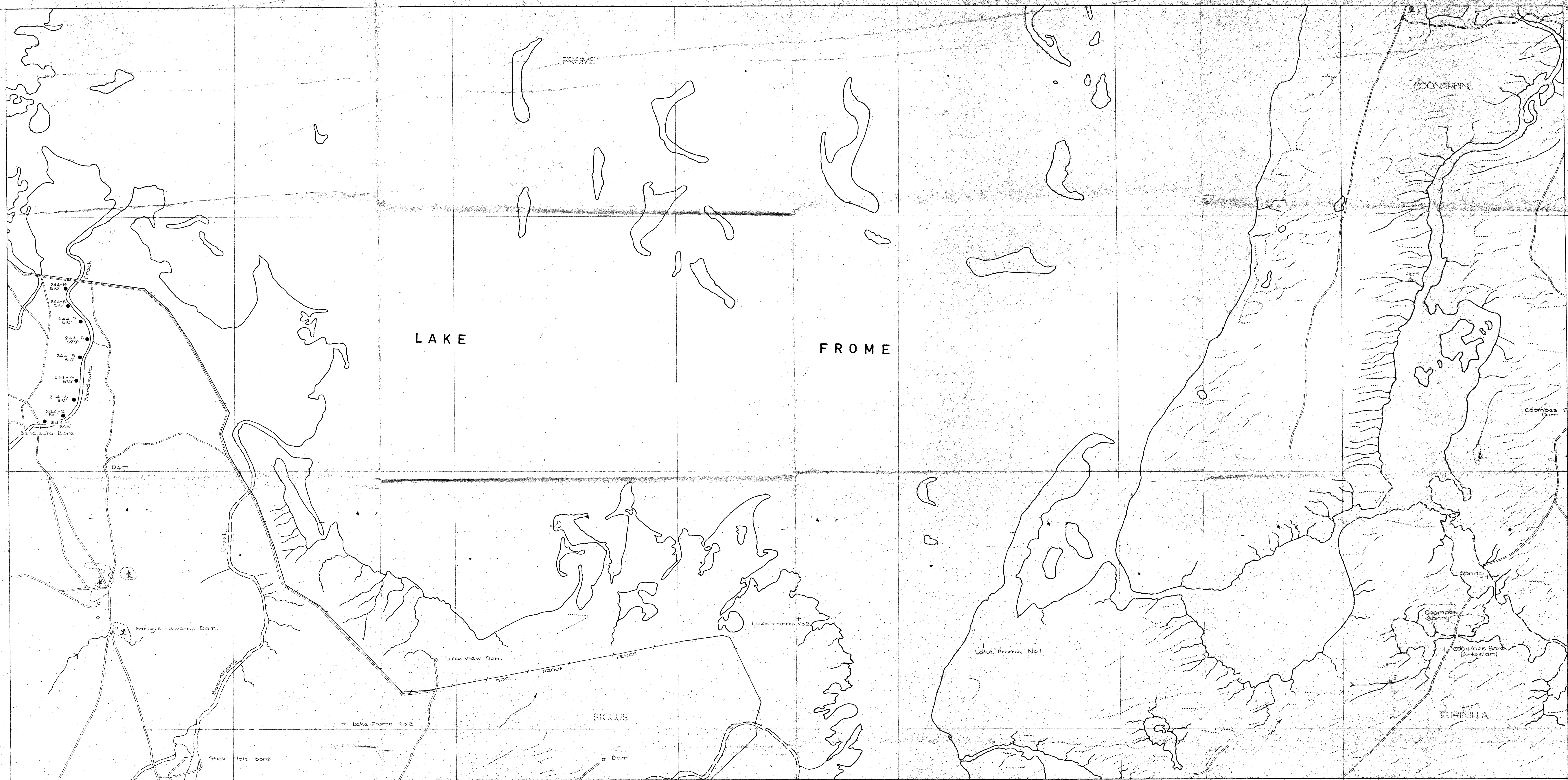
	Run No. 1	Run No. 2	MLD	Run No. 1	Run No. 2
Date	12. JUNE. 70.		Nature	S. Col. (350-2)	
First Reading	520'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	520'		Resistivity	@ °F	@ °F
Depth - Driller	530'		Res. @ BHT	@ °F	@ °F
Depth - Logger	522'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G. 10. C.	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	G. DAVIES.		Cable Speed	15' PER MIN.	
Witnessed by	R. M'KENNA.		Time Constant	5. SECS.	

REMARKS DEPTH DATUM IS GROUND LEVEL.
LOG RECORDED THROUGH DRILL STEM.

*. N.B. PEN SLIPPED FROM CRADLE AT THIS POINT.



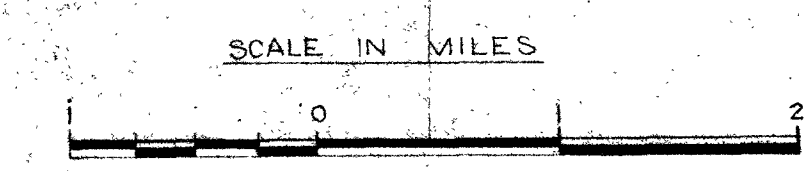
1041(1)-32



LEGEND

- | | |
|---|--------------------------------------|
| Swamp | Road |
| Dog Proof Fence | Track |
| Sand Dunes | Drill Site |
| Creek | Drill hole completed and Total Depth |
| Water Bore and/or other holes previously drilled. | Hole logged (& and/or resistivity) |
| Dam. | |

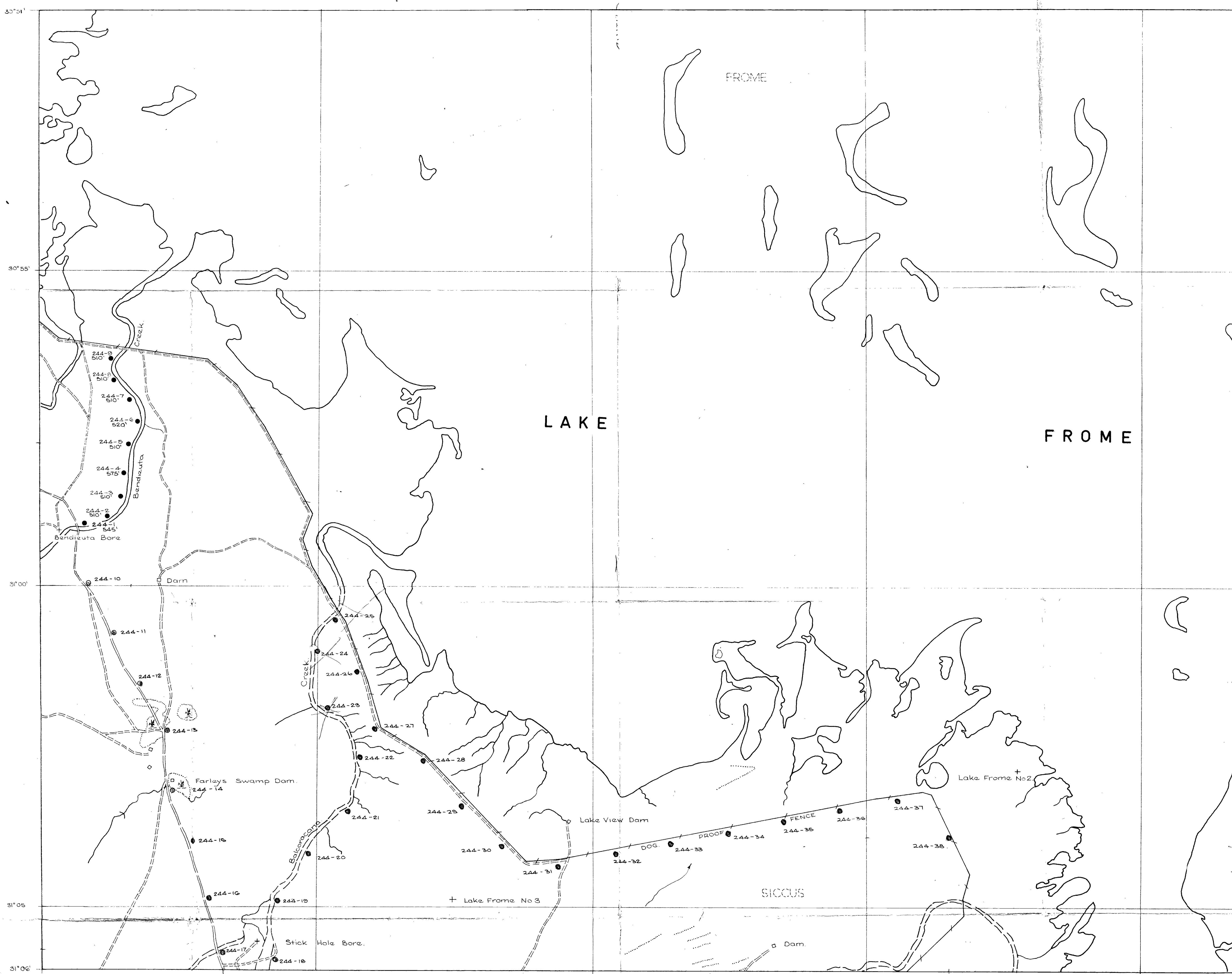
Compiled From:
Department of Mines Topographic
Sheets: Frome G52
Cognarine G53
Siccus G62
Eurinilla G63.



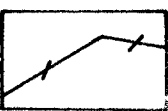
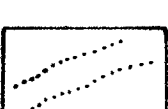
EXOIL N.L.— TRANSOIL N.L.— PETROMIN N.L.
SPECIAL MINING LEASE 244
LAKE FROME AREA
PLAN SHOWING LOCATION OF DRILL HOLES.

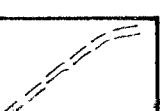
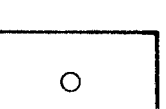
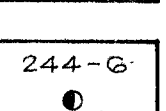
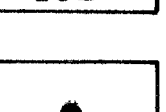
Geology by E.R. Hillwood.





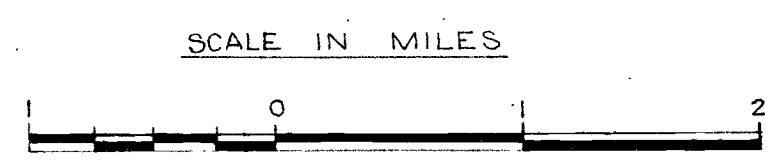
LEGEND

-  Swamp
-  Dog Proof Fence
-  Sand Dunes
-  Creek
-  Water Bore and/or holes previously drilled.
-  Dam.

-  Road.
-  Track
-  Drill Site
-  Drill hole completed and Total Depth
-  Hole logged (X and/or resist)

WESTERN PORTION
SML 244

Compiled From:
Department of Mines Topographic
Sheets: Frome G52
Coonabine G53
Siccus G62
Eurilla G63.



1041(II)-2

10411

PETROMIN N.L. 1041(II)-3

WELL 244.25

LOCATION LAKE FROME SOUTH

STATE South Australia

AREA LAKE FROME SOUTH

WELL 244.25

STATE South Australia

LOCATION

ELEVATION:

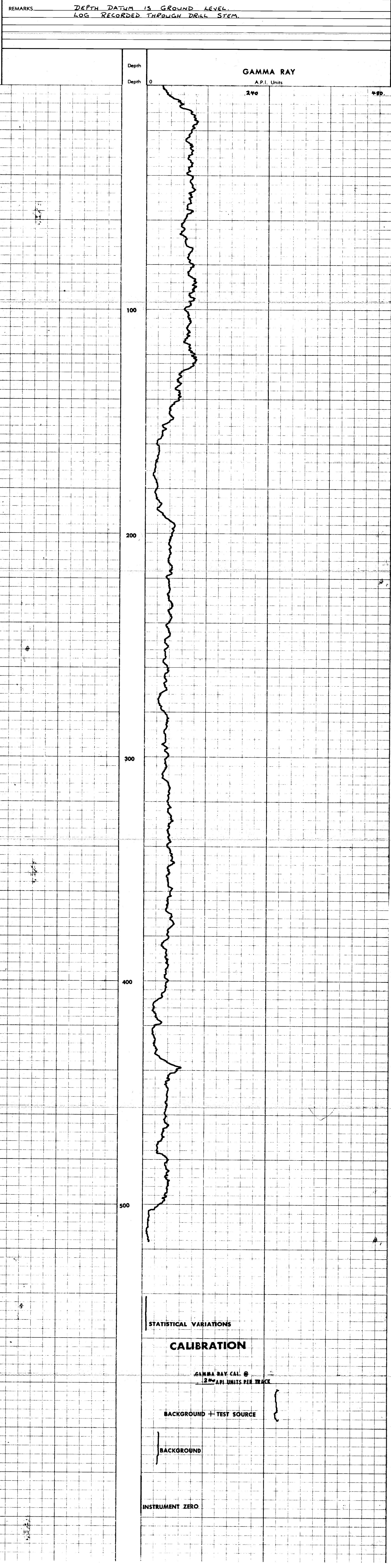
D.F.

K.B.

G.L.

Date	10. JUNE. 70.	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
First Reading	516'			Nature		
Last Reading	0'			Density		
Footage Logged	516'			Viscosity	@ °F	@ °F
Depth - Driller	530'			Resistivity	@ °F	@ °F
Depth - Logger	517'			Res. @ BHT	@ °F	@ °F
Casing - Driller				pH		
Casing - Logger				Circ. Temp.		
Casing - Size				B.H. Temp.		
Bit Size	4 3/4"			Tool Type	G. I. C.	
				Tool Diam.	1"	
Logged by	G. DAVIES			Cable Speed	15' PER MIN.	
Witnessed by	R. McKenna			Time Constant	5 SECS.	

REMARKS: DEPTH DATUM IS GROUND LEVEL.
LOG RECORDED THROUGH DRILL STEM.



Gamma Ray Log

PETROMIN N.L.
WELL 244.29.
LOCATION Lake Frome South
STATE South Australia.

AREA Lake Frome South.
WELL 244.29.
STATE South Australia.

LOCATION

ELEVATION:

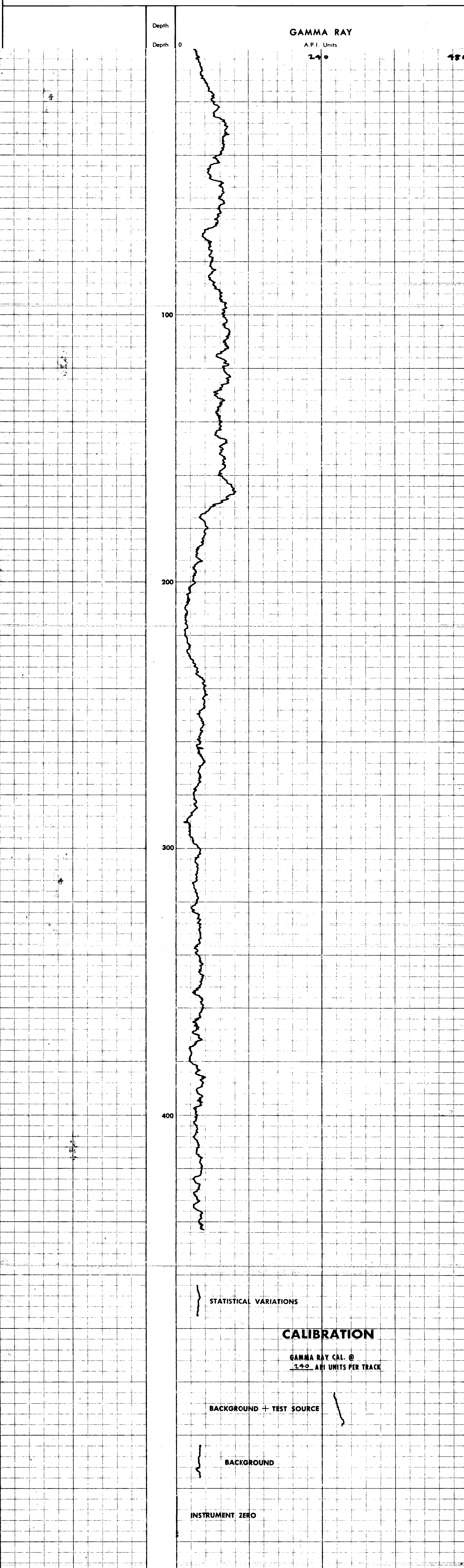
D.F.

K.B.

G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	6 JUNE 70		Nature		
First Reading	443'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	443'		Resistivity	@ °F	@ °F
Depth - Driller	445'		Res. @ BHT	@ °F	@ °F
Depth - Logger	445'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	G-10 C	
Bit Size	4 3/4"		Tool Diam.	1"	
			Cable Speed	15' per Min	
Logged by	P. TOY.		Time Constant	5 Sec.	
Witnessed by	R. McKenna.				

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem.



PETROMIN N.L.

1041 II
1041 (II) - 5

Gamma Ray Log

PETROMIN N.L.
WELL 244.34
LOCATION Lake Frome South
STATE South Australia

AREA Lake Frome South
WELL 244.34
STATE South Australia

LOCATION
ELEVATION:
D.F.
K.B.
G.L.

	Run No. 1	Run No. 2	MUD	Run No. 1	Run No. 2
Date	8 JUNE 70		Nature		
First Reading	308'		Density		
Last Reading	0'		Viscosity	@ °F	@ °F
Footage Logged	308'		Resistivity	@ °F	@ °F
Depth - Driller	320'		Res. @ BHT	@ °F	@ °F
Depth - Logger	310'		pH		
Casing - Driller			Circ. Temp.		
Casing - Logger			B.H. Temp.		
Casing - Size			Tool Type	CS10C	
Bit Size	4 3/4"		Tool Diam.	1"	
Logged by	P. TOY.		Cable Speed	15' per Min	
Witnessed by	R. McKenna		Time Constant	5 Sec.	

REMARKS Depth Datum is Ground Level
Log Recorded through Drill Stem.
Unable to lower probe past 310' - Blockage

