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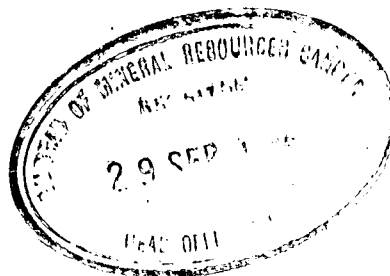
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BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

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GREAT ARTESIAN BASIN

BORE LOGGING,

QUEENSLAND 1962



by

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CONTENTS

	Page
SUMMARY	
1. INTRODUCTION	1
2. GEOLOGY	1
3. EQUIPMENT AND OPERATIONS	1
4. CORRELATION OF LOGS	2
5. CONCLUSIONS	5
6. ACKNOWLEDGEMENTS	6
7. REFERENCES	6

Table 1. Bore index

(Drawing No. G16-10-2)

ILLUSTRATIONS

Plate 1.	Location map and surface geology	(G295-54-4)
Plate 2.	Location map showing depth contours of base of Roma Formation	(G295-54-5)
Plate 3.	Generalised vertical cross-section, eastern region of the Great Artesian Basin	(G295-16)
Plate 4.	Correlation cross-section CC'	(G55/B6-21)
Plate 5.	Correlation cross-section DD'	(G55/B6-18)
Plate 6.	Correlation cross-section EE'	(G55/B6-19)
Plate 7.	Correlation cross-section FF'	(G55/B6-20)
Plate 8.	Correlation cross-section C'G	(G55/B6-17)
Plate 9.	Composite log of bore No.61	(G55/B6-4)
Plate 10.	Composite logs of bores No.62 and 63	(G55/B6-2)
Plate 11.	Composite logs of bores No.64 and 65	(G55/B6-6)
Plate 12.	Composite logs of bores No.66 and 67	(G55/B6-5)
Plate 13.	Composite logs of bores No.68 and 69	(G55/B6-3)
Plate 14.	Composite logs of bores No.70 and 71	(G55/B6-7)
Plate 15.	Composite logs of bores No.72 and 73	(G55/B6-8)

Plate 16.	Composite logs of bore No.74	(G56/B6-3)
Plate 17.	Composite logs of bores No.75 and 76	(G56/B6-1)
Plate 18.	Composite logs of bores No.77 and 78	(G56/B6-4)
Plate 19.	Composite logs of bores No.79 and 80	(G56/B6-2)
Plate 20.	Composite logs of bores No.81 and 82	(H56/B6-1)
Plate 21.	Composite logs of bores No.83 and 84	(G55/B6-1)
Plate 22.	Composite logs of bores No.5 and 6	(G55/B6-13)
Plate 23.	Composite logs of bores No.7 and 15	(G55/B6-14)
Plate 24.	Composite logs of bores No.17 and 18	(G55/B6-15)
Plate 25.	Composite logs of bores No.19 and 22	(G55/B6-16)

SUMMARY

The gamma-ray logging of existing water-bores in the Queensland portion of the Great Artesian Basin was continued in 1962. The bores were more closely spaced than with the 1960 work and gave much more reliable correlations, although some difficulty was experienced tying into oil bores.

Several cross-sections showing structure, mainly in the Blythesdale Group of formations, are presented as well as a contour map of the base of the Roma formation.

1. INTRODUCTION

An experimental programme of gamma-ray logging of water bores in the Queensland portion of the Great Artesian Basin, was commenced by the Geophysical Branch of the Bureau of Mineral Resources, Geology and Geophysics in 1960 (Jesson, Radeski, & Jewell, 1963) and continued in 1961 (Jewell, Radeski & Jesson, 1964). Further work carried out in 1962 is the subject of this Record.

The 1962 work was limited to the region of the Surat Sub-Basin and west to Augathella. The reasons for this were the selection of cool bores suitable for logging with the Bureau's existing gamma-ray probes, and to extend structural information in areas close to recently discovered oil occurrences.

In addition to the bores logged by the Bureau, data from subsidised oil-company bores have been used and some of the logs obtained in 1960 have been reinterpreted.

A total of 24 bores was logged involving almost 33,000 ft of gamma-ray logging. Temperature measurements or temperature logs were also obtained in many of these bores.

The bores, including the oil-company bores, have been numbered from 61 to 113 (see Table 1) for easy identification, the numbers following on from the previous years' work. The oil-company bores have been numbered 85 to 113.

The field work was done by A. Radeski of the Bureau of Mineral Resources with the assistance of two Irrigation and Water Supply Commission (IWSC) officers who prepared and reinstated the bores.

2. GEOLOGY

The geology of the Queensland portion of the Great Artesian Basin has been reported in detail by Whitehouse (1954) and Hill and Denmead (1960). A brief summary of the geology in relation to the gamma-ray logging programme was given by Jesson *et al.* (1963). For reference purposes, the surface geology is shown in Plate 1, and a generalised vertical cross-section through the beds of the eastern region of the Great Artesian Basin (after Whitehouse, 1954) is shown in Plate 3.

3. EQUIPMENT AND OPERATIONS

A Failing Logmaster 5000-ft logging equipment was used throughout the programme. The specially constructed pyrex vacuum flask used to thermally insulate the gamma-ray detector in 1961 was found to be very fragile and had to be replaced several times. For this reason, the standard gamma-ray probe was used in preference to the insulated one, pending further development of the insulated probe.

The log of bore No.62, Yarrawonga, (Plate 10) is considered of little value, water having entered the cable head during logging. The log of bore No.61, Augathella, (Plate 9) is of no value below 1700 ft because of probe failure, as shown by the fact that the up and down runs did not repeat.

The elevations of bores for which data were not available from the IWSC bore list were either estimated from nearby bores or other points of known elevation, or were measured by barometric levelling. A set of three aircraft altimeters was read at each site and at a convenient point of known elevation. Corrections for variations in atmospheric pressure were made by alternate readings at the two points. The elevations are referred to 'mean sea level' as datum.

4. CORRELATION OF LOGS

Bore data are shown in the bore index, Table 1; the location of the bores is shown in Plate 1 and Plate 2. The location of the cross-sections is also shown in Plate 2. Copies of the logs together with lithology, casing data, and stratigraphy as determined by correlation are shown in Plates 9 to 21. The temperature readings have been corrected for a pressure effect on the thermometers by subtracting $5^{\circ}\text{F}/1000\text{-ft}$ depth from the observed temperatures (Ogilvie, 1954).

The temperature observations and temperature logs are of little practical value because the bores were not in a static state when logged. With the exception of the logs for bores No. 65 and 80 they require no comment other than noting that in some cases the maximum-reading thermometers have apparently been shaken down by their movement in the bore.

Bore No.65 (Plate 11) shows an anomalous zone at a depth of about 600 ft where the temperature appears to be about 5°F cooler than the region just above it. While being pumped, the water column above the main aquifer is at a higher temperature than the adjacent formations. When pumping is stopped cool water enters the bore from an aquifer at a depth of 610 ft. This water would be denser than the water below it and would tend to sink, thus explaining the shape of the temperature anomaly.

In bore No.80 (Plate 19) the sudden increase in temperature with depth shown at a depth of 810 ft is attributed to hot water rising in the bore from aquifers at a depth of 1100 ft and mixing with cooler water from an aquifer at a depth of about 810 ft.

Original data on the oil-company bores may be found in the relevant reports (Table 1 and References). In some cases portions of the gamma-ray or electric logs are shown on the correlation cross-sections, which are considered below. For interest, the locations of some oil-company bores are shown on the locality map (Plate 1) although at the time of writing (June 1963) no technical data were available for these.

Bores No. 61-63.

This group of logs (Plates 9 and 10) is of little value for reasons mentioned in the previous section and in Table 1. However, correlation of the upper part of the log of bore No. 61 with those of No. 32 and 17 is fair and gives a depth of 1120 ft to the base of the Roma Formation.

Although the log of bore No. 62 is considered generally unreliable, a feature between depths of 370 and 500 ft corresponds well with a feature between 1410 and 1530 ft on the log of bore No. 61. Allowing for differences of surface elevation, this feature rises 950 ft in level from bore No. 61 to bore No. 62. Assuming this feature is conformable with the base of the Roma Formation, the elevation of the latter is about 1040 ft in bore No. 62.

Bores No. 64-69. (Correlation Cross-section CC', Plate 4).

The correlation of the logs of this group of bores (Plates 11-13) is considered reliable. The resulting correlation cross-section from these bores shows a broad anticlinal feature corresponding to the Nebine Ridge (Plate 2). There does not appear, from the cross-section, to be any wedging out of beds within the Blythesdale Group, but the Transition Beds appear to be about 150 ft thinner west of the Nebine Ridge than east of it.

This group of logs has been tied to the logs for bores No. 6, 7, and 17 of the 1960 work. As a result of this correlation, alterations have been made to the interpretation of these logs. The revised interpretations are shown on the stratigraphy column of the logs (Plates 22-24). Previously correlation between logs of bores No. 6 and 7 was very difficult, which was attributed to an east-trending fault between the two bores, as was postulated by Whitehouse (1954). Jenkins (1960) considered it unnecessary to postulate faulting because the dips are low. The revised correlation of the logs of bores No. 6 and 7 is better than the original one and the correlation of the log of bore No. 69 with the logs of each of bores No. 6 and 7 appears quite reasonable. This favours Jenkins' (*op.cit.*) opinion that it is unnecessary to postulate faulting.

Bores No. 70-74. (Correlation Cross-section DD', Plate 5)

The correlation of this group of logs (Plate 14-16) is considered reliable in spite of the 40-miles spacing between bores No. 72 and 73. The resulting correlation cross-section of these bores shows a broad synclinal feature, presumably the northern edge of the Undulla Syncline which lies between the Weribone-Coomrith Arch to the west (Jenkins, 1960) and the eastern edge of the Basin (Plate 2).

The gamma-ray log of bore No. 92, AAO Combarngo No. 1 (Radeski and Jewell, 1963), has been used as the basis for correlation in this area.

Bores No.73, 75-82. (Correlation Cross-section EE', Plate 6)

The correlation of these logs (Plates 15, 17-20) is considered generally reliable, although tying in to the oil bores No.94-97, 101, and 102 is made difficult by the absence of gamma-ray logs for some of them and by the sudden increase in depth of corresponding formations between bores No.78 and 94. The base of the Roma formation in bore No.94 is about 1700 ft below that in bore No.78. This corresponds to a dip of about four degrees.

The correlation cross-section for this group of bores shows a deep syncline between bores No.78 and 80, which probably represents the eastern portion of the Undulla Syncline mentioned previously. The Mooga Sandstone appears to thin up-structure from bore No.94 to each of bores No.78 and 95.

South of this syncline there is a ridge in the region of bore No.80, after which the beds dip to the south to bore No.101. This ridge is probably associated with Roma Formation inlier (Plate 1) west of bore No.80. There are insufficient data to determine whether any beds wedge out in the region of this ridge.

Bores No.77, 79. (Correlation Cross-section FF', Plate 7)

The correlation of these logs (Plates 18, 19) is considered fair but tying in to oil bore No.100 leads to a less-reliable correlation. The correlation cross-section, which includes bore No.100, shows an anticlinal structure, but whether or not any of the beds wedge out cannot be determined from this cross-section. However, the Fossil Wood Beds appear to thin up-structure from bore No.100 to bore No.79.

This anticlinal feature, the Undulla Nose, is the feature investigated at a greater depth than considered here by bore No.104 (Union-Kern-AOG, 1963).

Bores No.83 and 84.

These bores lie in a region where the Walloon Coal Measures crop out at the surface near the eastern margin of the Basin. The logs of these bores (Plate 21) show no similarity, the oil-company bores No.98 and 99 have no gamma-ray logs, and there are no logs at all above 1035 ft for bore No.98; thus correlation here is virtually impossible.

Bores No.5-19 - revised correlation. (Correlation Cross-section C'G, Plate 8)

The revised interpretation of the logs for bores No. 6, 7, and 17 (as discussed under correlation of bores No.61-63) carries through from bore No.6 to bore No.5, from bore No.7 to groups of bores No.8-13 and 14-16, and from bore No.17 to bores No.18 and 19.

The revised interpretation of the log of bore No.5 is shown in Plate 22. The base of the Roma Formation has been placed at a depth of 1905 ft.

The correlation of the logs of bores No.8-13 as originally shown (Jesson et al., 1963, Plate 8) is virtually unchanged but the identification of the various formations has been revised (Plate 8). The log of bore No.7 has also been added to this plate. The increase in elevation of the formation boundaries, as shown between bores No.8 and 9 on the cross-section, is attributed to the eastern flank of the Nebine Ridge, but there does not appear to be any appreciable expression of this feature between bores No.11 and 12.

The lithologic logs of some of these bores indicate that they reached bedrock. Hence, on this revised interpretation the lower part of the Blythesdale Group and the underlying beds for bores No.12 and 13 must wedge out against the Nebine Ridge.

Bores No.14-16 are still very difficult to correlate and no attempt has been made to revise the correlation other than reconsideration of the base of the Roma Formation, which has been placed 400 ft deeper for bores No.14 and 15 and 650 ft deeper for bore No.16, as compared with the original interpretation. Logs of more closely-spaced bores are required in this region before the interpretation can be finalised.

The revision of interpretation of the log for bore No.17 (Plate 24) consists of lowering the base of the Roma Formation by 30 ft to allow for the sandstone beds at its base. On the log of bore No. 18 (Plate 24) this boundary is lowered by about 250 ft and bore No.19 (Plate 25) is now believed not to penetrate the Transition Beds.

Base of the Roma Formation

A structural contour map showing the elevation of the base of the Roma Formation for this and previous work is shown in Plate 2. On the existing data, these contours can be taken as only indicative of the general structure. In addition, the oil-company bores are generally placed on localised structural 'highs' and therefore the contours near these bores may be too shallow.

5. CONCLUSIONS

The correlation of gamma-ray logs of water bores appears fairly reliable when the bores are not too widely spaced, as they were in the 1960 work. A spacing of 10-15 miles is considered a maximum for correlation with reasonable certainty, although in some places this spacing may be too great.

The correlation cross-sections based on the logs show three subsurface ridges: between bores No.65 and 69 (Nebine Ridge), near bore No.79 (Undulla Nose), and near bore No. 80. There does not appear to be any wedging out of the beds of the Blythesdale Group near these ridges, but the beds underlying the Blythesdale Group may wedge out against the Nebine Ridge at its southern end.

The ridges near bores No.79 and 80, being in the vicinity of the oil discovery at Moonie, are areas of particular interest. However, work has already been carried out in these general areas, namely bore No.104 (Undulla No.1), to test the Undulla Nose, and bore No.97 (Yarril Creek No.1), to test a local structure about nine miles north-east of bore No.80 (Union-Kern-AOG, 1962d).

6. ACKNOWLEDGEMENTS

The authors wish to acknowledge the invaluable assistance given by the Irrigation and Water Supply Commission of Queensland who made officers available to locate, prepare, and reinstate the bores that were logged.

Thanks are also due to the Department of Development and Mines of Queensland for supplying and adding lithological data to the logs and for distribution of the logs to interested organisations; and to the Queensland Petroleum Exploration Group for their suggestions about the programme and insurance of the bores against damage.

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| | 1962d | * AAO Koorringa No.1, well
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GAMMA RAY LOGGING, GREAT ARTESIAN BASIN, QUEENSLAND

Page 1 of 3

INDEX OF BORES

BORE NUMBER	I W S C REG NO	NAME	4-MILE MAP REFERENCE			LOCATION			DEPTH DRILLED	DEPTH LOGGED	ELEVATION OF LOG REF. LEVEL	B M R DRAWING NUMBER	REMARKS
			QUEENSLAND	MILITARY	LAT.	MILES NORTH	LONG.	MILES EAST					
61	311	Augathella	32	Augathella	26°00'	14.0	146°30'	5.4	2950	2910	1211	G55/B6-4	log below 1700 ft is of little value
62	4964	Yarrowonga	32	Charleville	26°15'	1.8	146°30'	0.5	1040	1000	1120	G55/B6-2	water entered cable head, log of little value
63	1197	Highfield	23	Charleville	27°00'	31.8	146°30'	1.1	3335	668	1232	G55/B6-2	obstruction at 668 ft
64	1562	Lomax No. 1	23	Wyandra	27°15'	14.5	146°30'	12.0	2172	1830	1052	G55/B6-6	obstruction at about 1840 ft
65	5022	Calabar No. 2	23	Wyandra	27°15'	5.2	146°30'	4.9	1516	1440	955(e)	G55/B6-6	
66	11315	Baker	23	Wyandra	27°15'	8.0	146°30'	29.0	1000	980	930(b)	G55/B6-5	
67	11866	Gunnawarra	23	Homeboin	27°15'	4.1	147°00'	2.8	995	980	950(e)	G55/B6-5	
68	15183	Tongy No. 4	14	Homeboin	27°30'	7.7	147°00'	16.0	1210	1000	850(e)	G55/B6-3	
69	11954	Tullochard	23	Homeboin	27°15'	4.1	147°00'	19.9	1338	1320	915(b)	G55/B6-3	
70	12421	Taunton	22	Roma	27°00'	8.9	149°00'	1.7	1122	1080	965(b)	G55/B6-7	
71	13155	Wandolin No. 2	22	Roma	27°00'	14.1	149°00'	8.8	1141	1080	920(e)	G55/B6-7	
72	10841	Combargo	22	Roma	27°00'	3.4	149°00'	17.3	1640	1615	875(b)	G55/B6-8	
73	13248	Rippon Lea	21	Roma	27°00'	3.7	149°30'	24.9	1870	1715	935(b)	G55/B6-8	
74	11701	Coolamunda	21	Chinchilla	27°00'	3.5	150°00'	10.9	714	650	920(e)	G56/B6-3	
75	13455	Barromornie No. 3	21	Dalby	27°15'	12.0	150°00'	4.3	1775	1750	925(b)	G56/B6-1	
76	12569	Greenfield	21	Dalby	27°15'	1.8	150°00'	4.8	1975	1950	950(e)	G56/B6-1	
77	13030	Strathalbyn	12	Dalby	27°30'	13.9	150°00'	7.6	2110	2066	950(e)	G56/B6-4	
78	12447	Warroon	12	Dalby	27°30'	4.7	150°00'	13.0	2000	1850	950(e)	G56/B6-4	obstruction at 1852 ft
79	13140	Bellevue Park	12	Dalby	27°30'	12.9	150°00'	17.3	1502	1450	950(e)	G56/B6-2	
80	11743	Monte Cristo	12	Goondiwindi	28°15'	4.9	150°00'	19.6	1120	990	760(e)	G56/B6-2	

G 16-10-2

Elevations by : (b) barometric levelling. (e) estimated

(3)

GAMMA RAY LOGGING, GREAT ARTESIAN BASIN, QUEENSLAND

INDEX OF BORES

TABLE 1
Page 2 of 3

BORE NUMBER	IWSC REG. NO.	NAME	4-MILE MAP REFERENCE		LOCATION			DEPTH DRILLED	DEPTH LOGGED	ELEVATION OF LOG REF. LEVEL	BMR DRAWING NUMBER	REMARKS
			QUEENSLAND	MILITARY	LAT	MILES NORTH	LONG.					
81	12714	Wyaga No.4	2	Goondiwindi	28°15'	0.1	150°30'	8.6	1225	827	945(e)	H56/B6-1 Obstruction at 827 ft
82	11950	Wyaga No.2	12	Goondiwindi	28°15'	0.1	150°30'	6.2	1200	735	854(e)	H56/B6-1 Obstruction at 735 ft
83	11560	Roundhole	30	Roma	26°15'	15.6	149°30'	23.9	2004	1980	768(b)	G55/B6-1
84	10479	Wandoan Test No.2	30	Roma	26°15'	8.4	149°30'	29.1	2150	1097	802	G55/B6-1 Obstruction at 1098 ft
85		A.A.O. Westgrove No.1	31	Eddystone	26°00'	32.0	148°00'	27.1	6443	6442	1715	(Assoc. Aust. Oilfields, 1962 e) No gamma-ray log
86		A.A.O. Kildare No.1	31	Eddystone	26°00'	19.0	148°00'	25.3				(Assoc. Aust. Oilfields, 1963 d) Report not available at time of writing
87		A.A.O. Glentulloch No.1	31	Eddystone	26°00'	14.5	148°00'	23.8	4083	Electric 4083 Gamma 3002	1516	(Assoc. Aust. Oilfields, 1962 c)
88		A.A.O. Koorringa No.1	31	Roma	26°30'	26.0	148°30'	29.7	1823	1823	1168	(Assoc. Aust. Oilfields, 1962 d)
89		A.A.O. Meeleesbee No.1	31	Roma	26°30'	21.7	149°00'	12.3	5075	5075	1040	(Assoc. Aust. Oilfields, 1962 c)
90		A.A.O. Pleasant Hills No.1	22	Roma	26°30'	5.4	149°00'	0.2	3485	3484	1253	(Assoc. Aust. Oilfields, 1963 c) No gamma-ray log
91		A.A.O. Warrathoola No.1	22	Roma	27°00'	16.7	149°00'	5.6	5342	5342	1020	(Assoc. Aust. Oilfields, 1962 a) No gamma-ray log
92		A.A.O. Combarngo No.1	22	Roma	27°00'	10.3	149°00'	9.2	5985	Electric 5985 Gamma 4800	930	(Assoc. Aust. Oilfields, 1961) (Radeski & Jewell, 1963)
93		A.A.O. Sunnybank No.1	22	Roma	27°00'	4.1	149°00'	13.8	7134	7134	832	(Assoc. Aust. Oilfields, 1963 c) Report not avail. at time of writing
94		U.K.A.O.G. Cabawin No.1	12	Dalby	27°30'	0.3	150°00'	11.5	12035	12035	968	(Union-Kern-AOG, 1961) Gamma-ray log below 3000 ft
95		U.K.A.O.G. Middle Creek No.1	12	Dalby	28°00'	24.2	150°00'	19.0	6126	6126	913	(Union-Kern-AOG, 1962 b) No gamma-ray log
96		U.K.A.O.G. Moonie No.1	12	Dalby	28°00'	17.3	150°00'	16.0	6106	6106	893	(Union-Kern-AOG, 1962 a)
97		U.K.A.O.G. Yarril Creek No.1	12	Goondiwindi	28°30'	28.8	150°00'	26.7	4545	4545	908	(Union-Kern-AOG, 1962 d)
98		U.K.A.O.G. Wandoan No.1	30	Roma	26°30'	22.2	149°30'	25.0	10736	10736	977	(Union-Kern-AOG, 1962 c) No gamma-ray log
99		U.K.A.O.G. Burunga No.1	30	Mundubbera	26°00'	0.0	150°00'	4.9	10242	10242	1092	(Union-Kern-AOG, 1962 c) No gamma-ray log
100		U.K.A.O.G. Tara No.1	12	Dalby	27°30'	10.5	150°00'	29.7	6795	6795	1057	(Union-Kern-AOG, 1963 c)

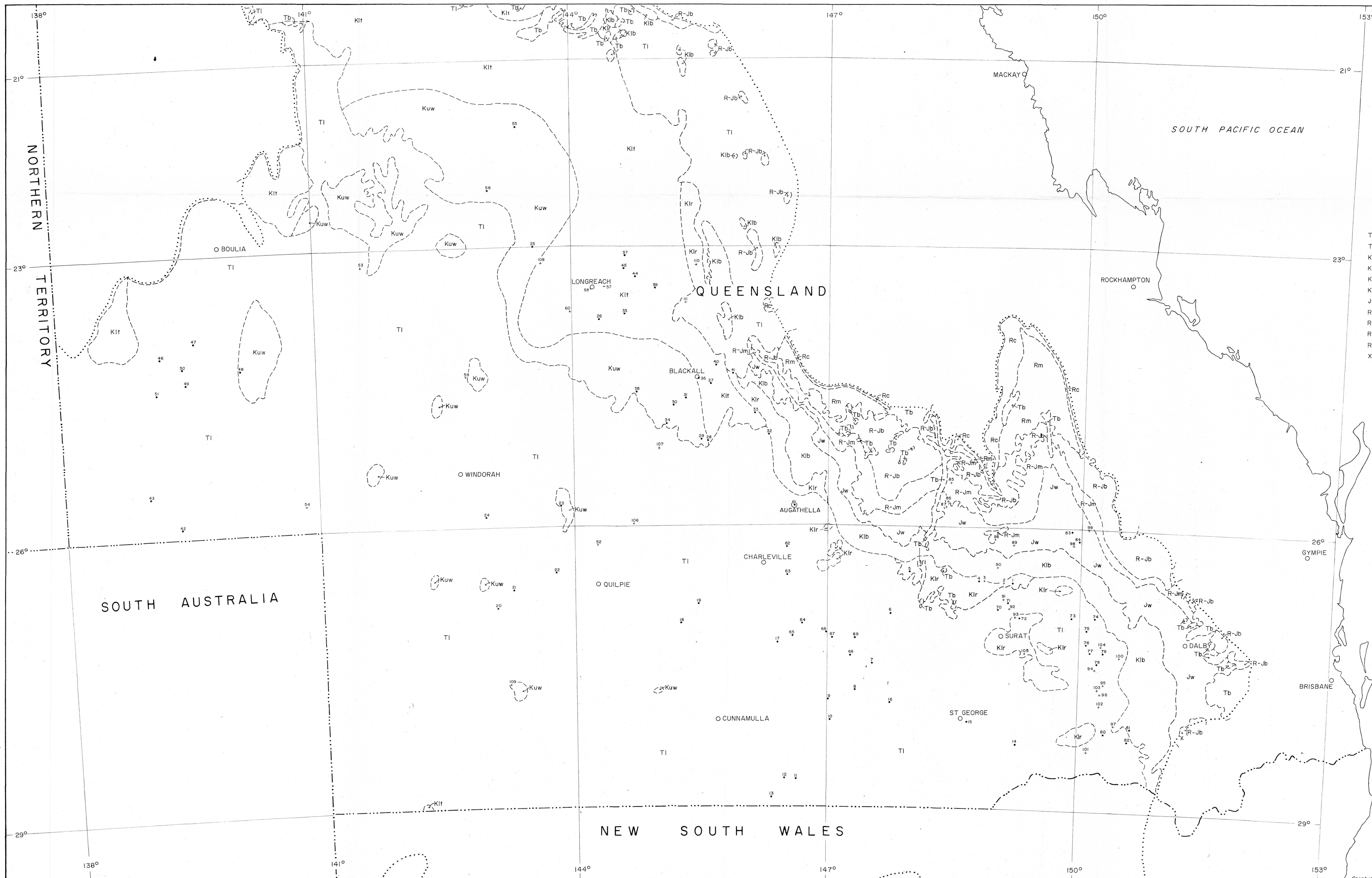
GAMMA RAY LOGGING, GREAT ARTESIAN BASIN, QUEENSLAND

Table 1.

Page 3 of 3

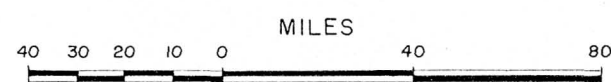
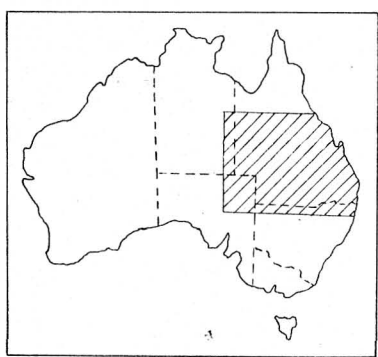
INDEX OF BORES

BORE NUMBER	I W S C REG. NO.	NAME	4-MILE MAP REFERENCE		LOCATION				DEPTH DRILLED	DEPTH LOGGED	ELEVATION OF LOG REF. LEVEL	B M R DRAWING NUMBER	REMARKS
			QUEENSLAND	MILITARY	LAT.	MILES NORTH	LONG.	MILES EAST					
101		U.K.A.O.G. Minima No.1	3	Goondiwindi	28°30'	9.8	150°00'	7.0	7142	7132	691		(Union-Kern-AOG, 1962 f)
102		U.K.A.O.G. Crowder No.1	12	Dalby	28°00'	8.4	150°00'	15.8	5864	5864	868		(Union-Kern-AOG, 1963 a) No gamma-ray log
103		U.K.A.O.G. Southwood No.1	12	Dalby	28°00'	19.6	150°00'	14.0	10897	10085	883		(Union-Kern-AOG, 1963 d) No gamma-ray log. Report not available at time of writing
104		U.K.A.O.G. Undulla No.1	12	Dalby	27°30'	18.1	150°00'	16.2	8849	8849	956		(Union-Kern-AOG, 1963 c) No gamma-ray log. Report not available at time of writing
105		U.K.A.O.G. Weribone No.1	13	Surat	27°30'	11.7	149°00'	21.4	7995	7998	1115		(Union-Kern-AOG, 1963 e) No gamma-ray log. Report not available at time of writing
106		Phillips-Sunray Gumbardo No.1	34	Adavale	26°00'	1.3	144°30'	12.1	12940	12940	930		(Phillips-Sunray, 1963)
107		Phillips-Sunray Etonvale No.1	34	Adavale	25°30'	23.0	144°30'	30.8	11368	(gamma) 10011	1097		(Phillips-Sunray, 1962)
108		A.A.O. Penrith No.1	55	Maneroo	23°30'	22.3	143°30'	8.9	4078	4072	709		(Assoc. Aust. Oilfields, 1963 a)
109		L.H. Smart Orient No.2	17	Thargomindah	28°00'	22.2	143°00'	11.9			473		(Smart Oil Exploration, 1962) Not logged
110		Oil Development Maranda No.1	54	Longreach	23°30'	20.1	145°00'	28.1	6491	6485	862		(Oil Development, 1963) No gamma-ray log
111		Farmout Drillers- Longreach Alice River No.1	54	Jericho	24°00'	26.9	145°00'	20.3					(Farmout Drillers, 1963) Report not available at time of writing.
112		U.K.A.O.G. Flinton No.1	12	Surat	28°00'	5.9	149°30'	10.4					(Union-Kern-AOG, 1963 g) Report not available at time of writing
113		U.K.A.O.G. Tingan No.1	3	Goondiwindi	28°30'	5.6	150°00'	15.7	5957				(Union-Kern-AOG, 1963 f) Report not available at time of writing



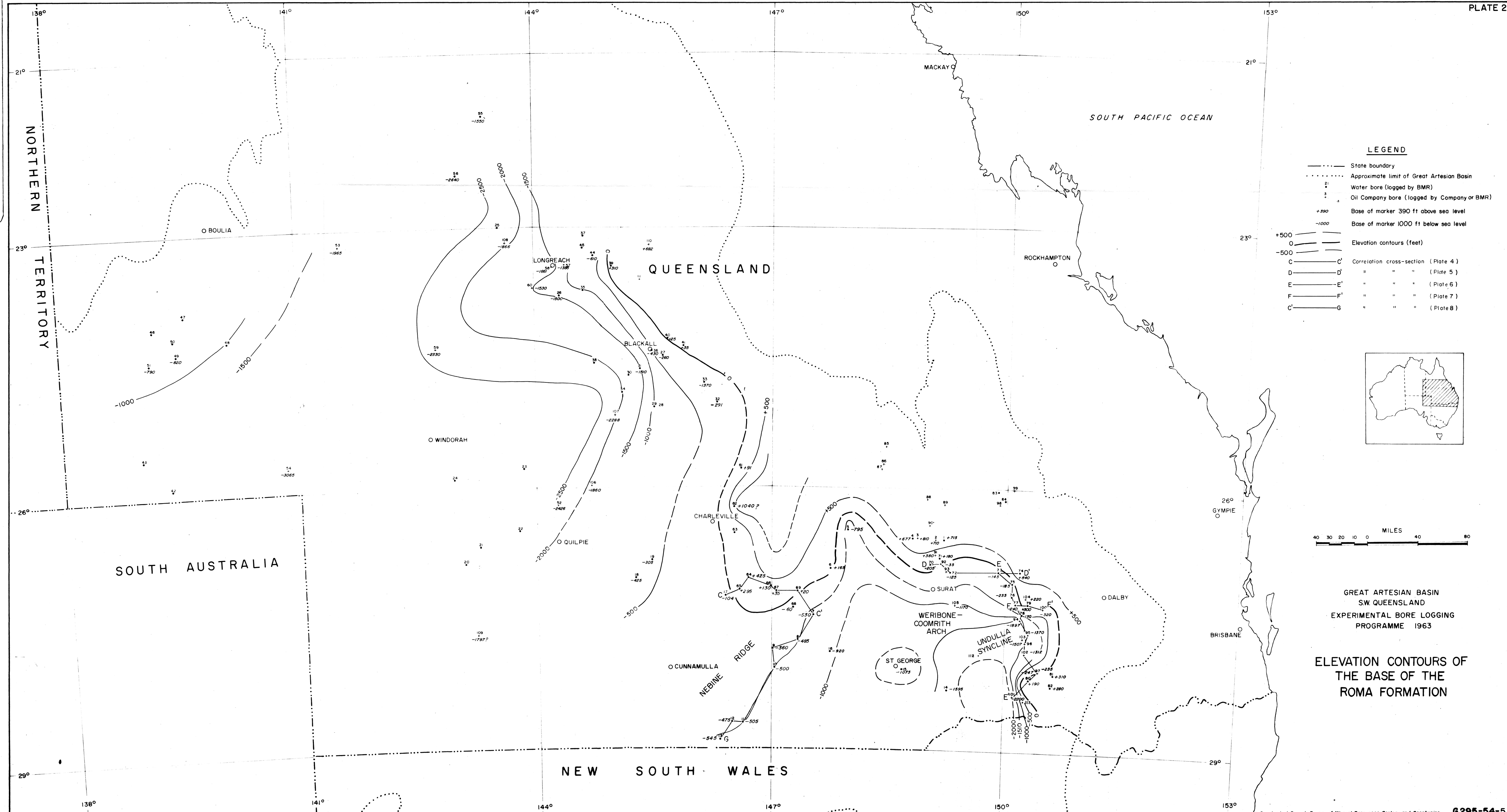
LEGEND

- State boundary
 - - - - - Approximate limit of Great Artesian Basin
 - Water bore (logged by BMR)
 - Oil Company bore (logged by Company or BMR)
- GEOLOGY**
- TI Post-Mesozoic Sedimentary Formations
 - Tb Post-Mesozoic Basalts, etc.
 - Kuw Winton Formation (Albian Cenomanian, etc.)
 - Klt Tambo Formation (Upper Albian)
 - Klr Roma Formation (Aptian)
 - Klb Blythesdale Group (Neocomian—Lower Aptian)
 - Jw Walloon Coal Measures (Jurassic)
 - R-Jm Marburg Group (Upper Triassic—Lower Jurassic)
 - R-Jb Bundamba Group (Middle to Upper Triassic)
 - Rm Moolayember Shales
 - Rc Clematis Sandstone
 - X Bedrock Formations (Palaeozoic and older)
- } Rolling Downs Group (Cretaceous)
- } Lower Triassic



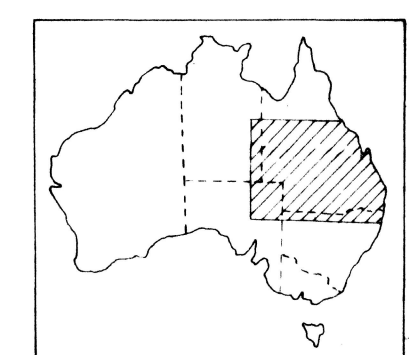
GREAT ARTESIAN BASIN
SW. QUEENSLAND
EXPERIMENTAL BORE LOGGING
PROGRAMME 1963

LOCALITY MAP
AND
SURFACE GEOLOGY



LEGEND

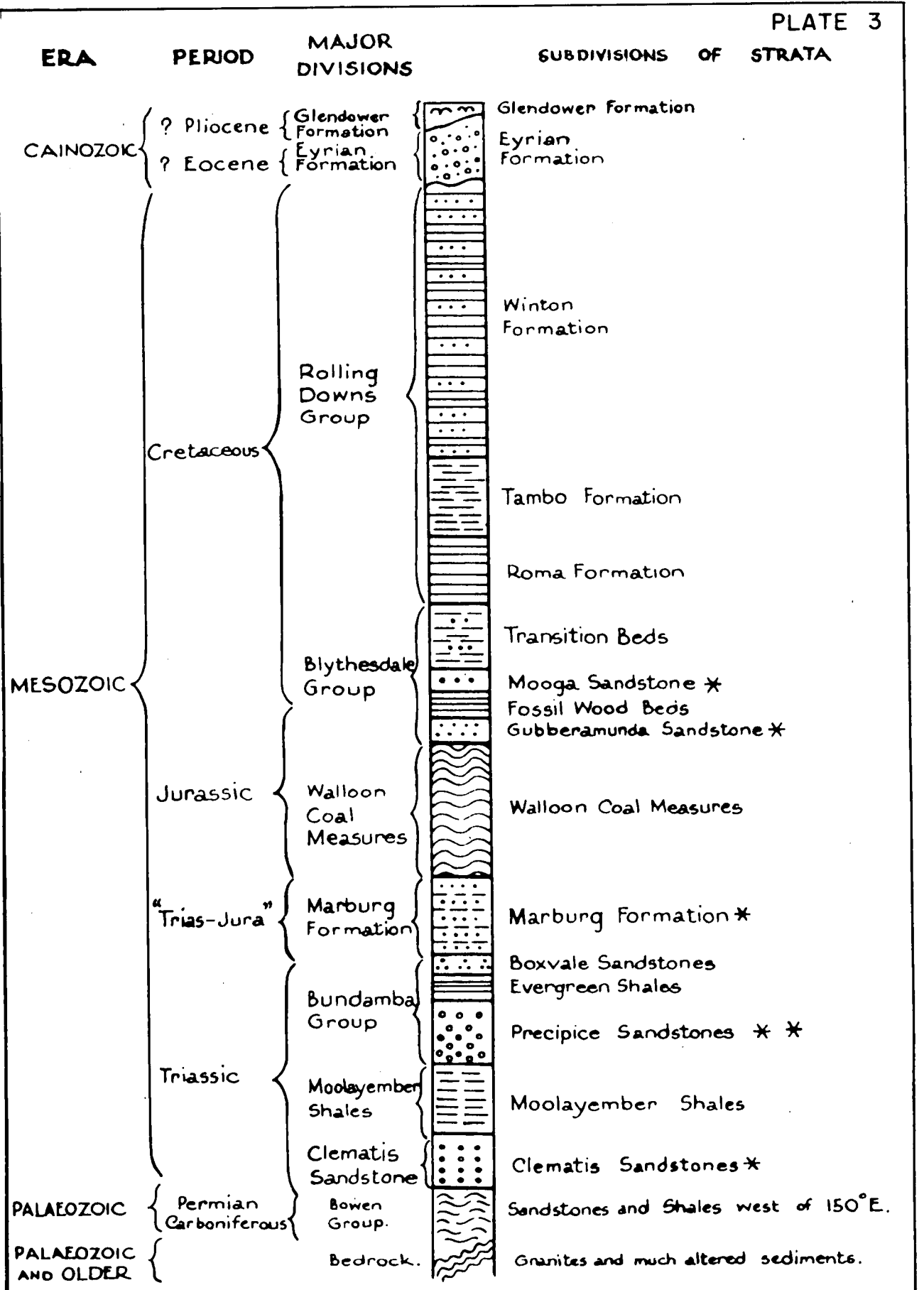
- State boundary
- Approximate limit of Great Artesian Basin
- Water bore (logged by BMR)
- Oil Company bore (logged by Company or BMR)
- +390 Base of marker 390 ft above sea level
- 1000 Base of marker 1000 ft below sea level
- +500
0
-500 Elevation contours (feet)
- C—C' Correlation cross-section (Plate 4)
- D—D' " " " (Plate 5)
- E—E' " " " (Plate 6)
- F—F' " " " (Plate 7)
- G—G' " " " (Plate 8)



GREAT ARTESIAN BASIN
SW QUEENSLAND
EXPERIMENTAL BORE LOGGING
PROGRAMME 1963

ELEVATION CONTOURS OF
THE BASE OF THE
ROMA FORMATION

GREAT ARTESIAN BASIN, S.W. QLD, 1963

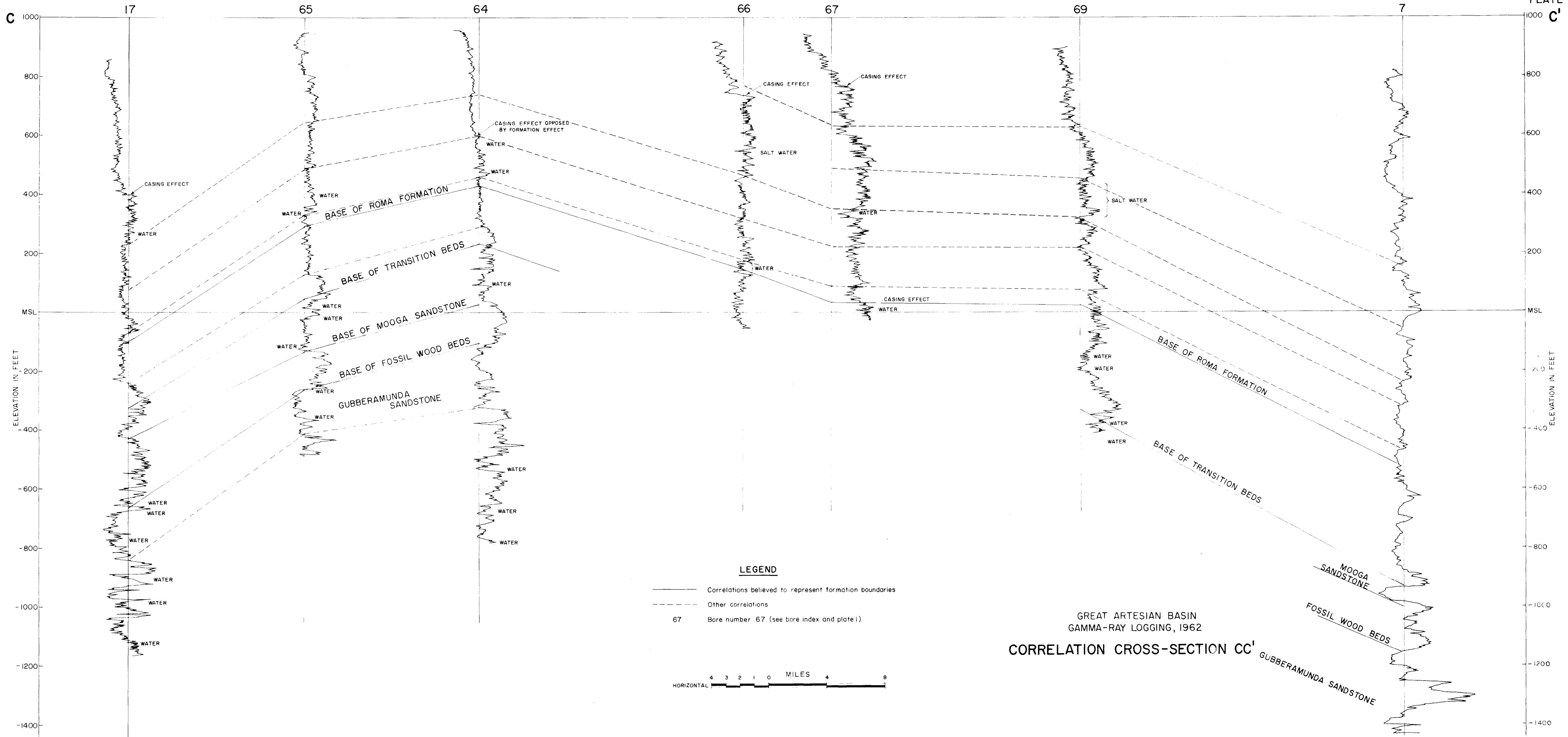


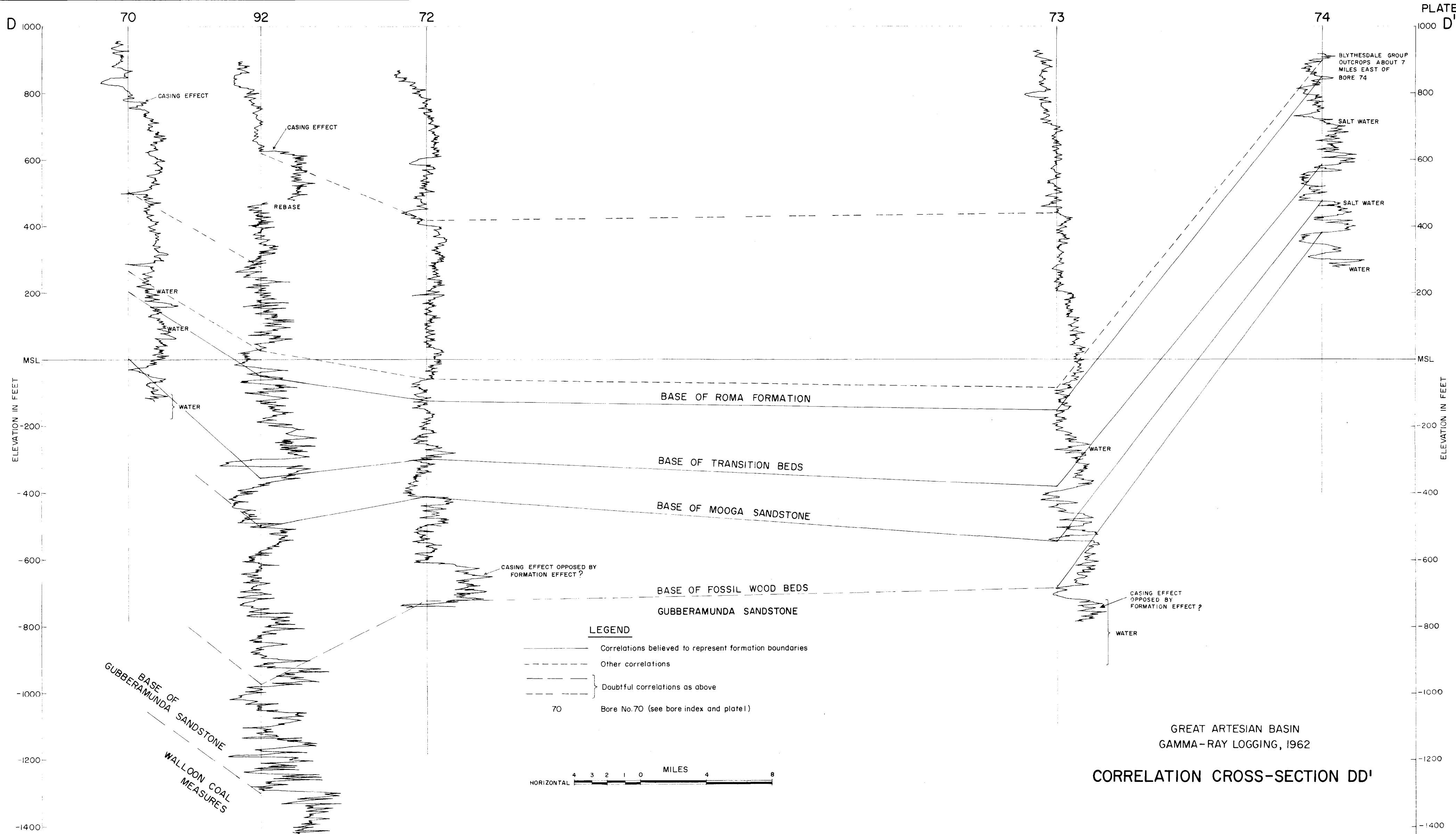
GENERALISED VERTICAL SECTION
THROUGH THE BEDS OF THE EASTERN REGION
OF THE
GREAT ARTESIAN BASIN
AFTER: WHITEHOUSE (1954)

* Chief aquifer formations

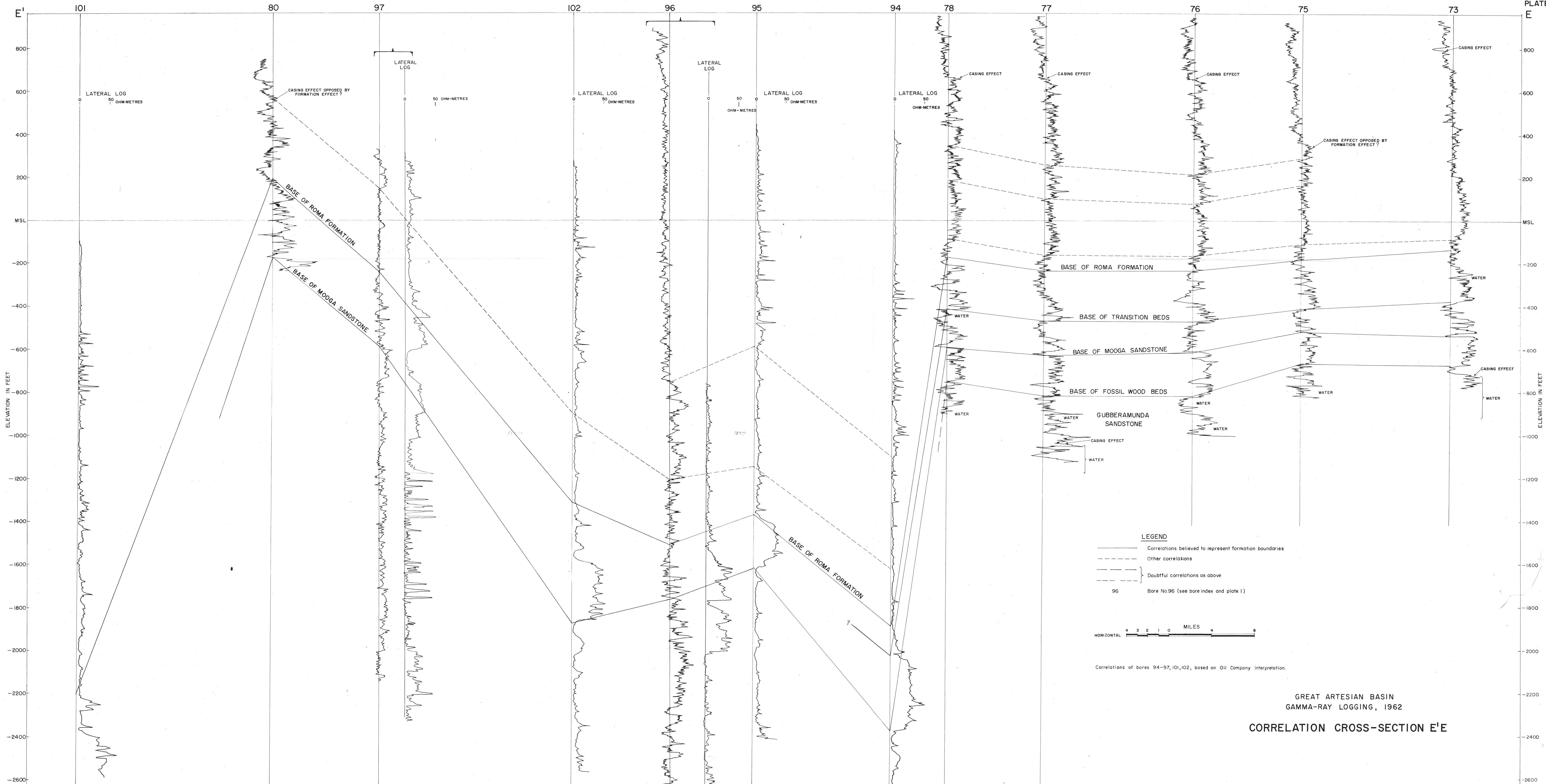
No one formation keeps strictly the same thickness.
In this column an attempt has been made to show types of lithology—
dots for sandy beds, lines for shales.
All Mesozoic formations are freshwater sediments except the
Tambo, Roma, and part of the Blythesdale (Transition beds)
which are of marine origin.

GREAT ARTESIAN BASIN, SW QLD 1962

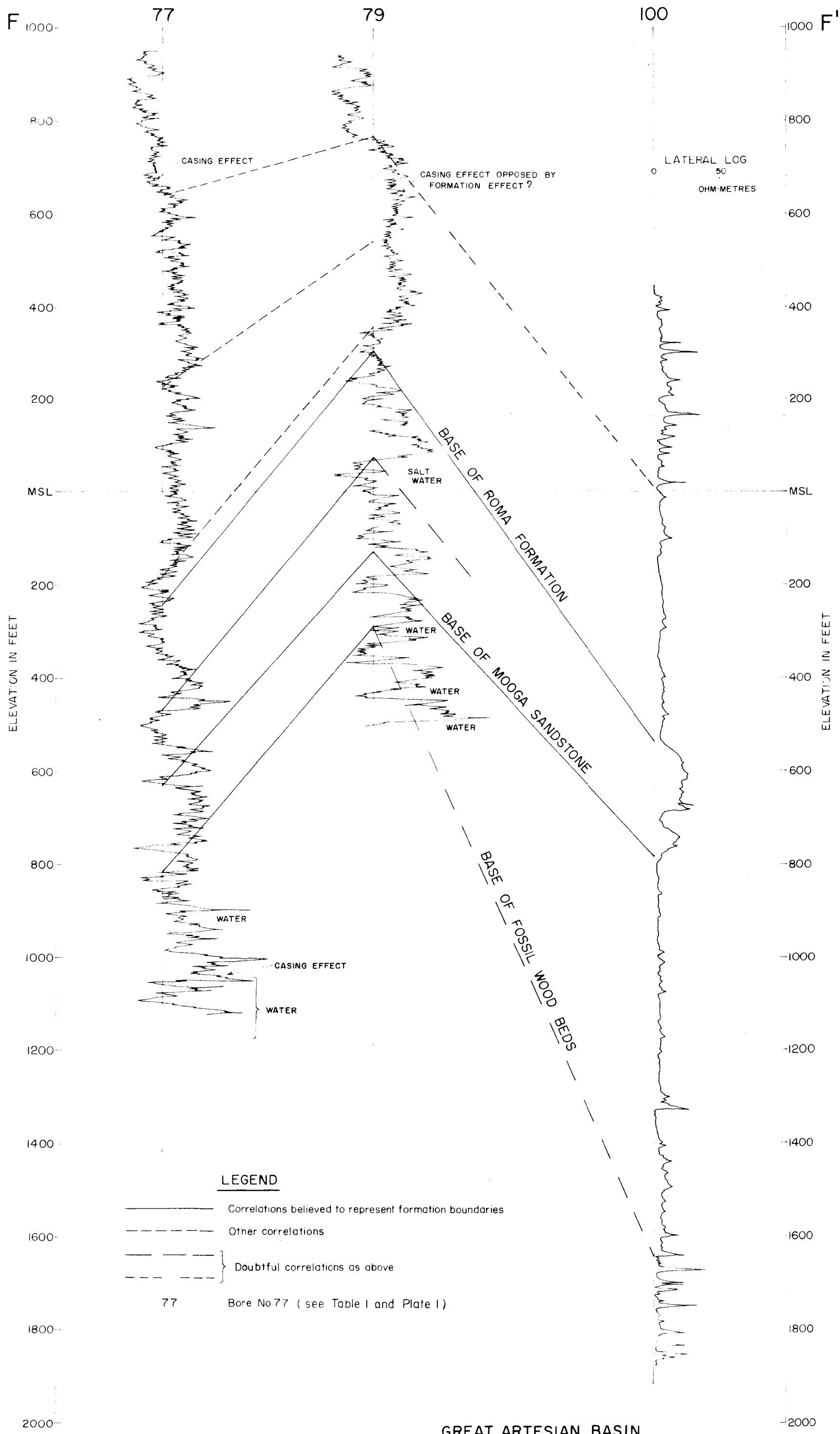




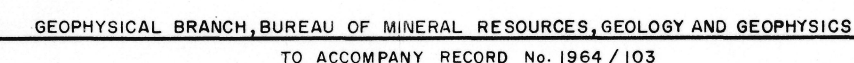
GREAT ARTESIAN BASIN
GAMMA-RAY LOGGING, 1962
CORRELATION CROSS-SECTION DD'



GREAT ARTESIAN BASIN
GAMMA-RAY LOGGING, 1962
CORRELATION CROSS-SECTION E'E



GREAT ARTESIAN BASIN
GAMMA-RAY LOGGING, 1962
CORRELATION CROSS-SECTION FF'



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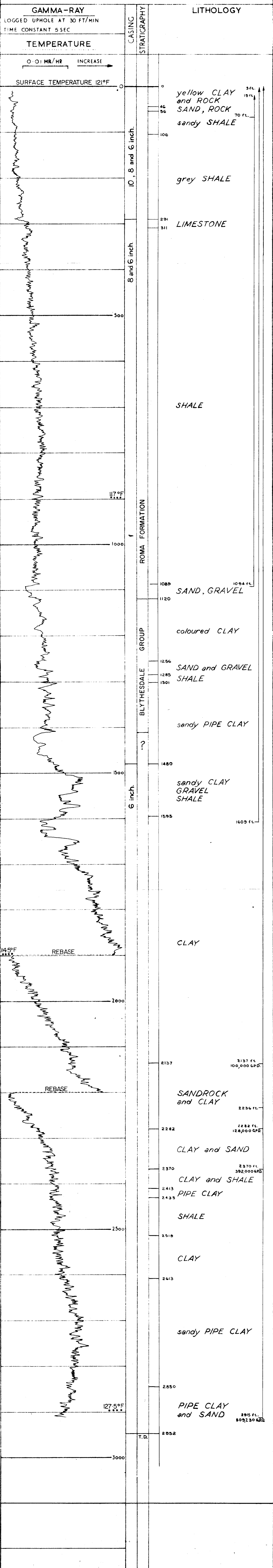
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

AUGATHELLA
(61)

1W.S.C. REGISTERED No.: 311	COORDINATES: 26°00'S,	14 MILES NORTH.
OWNER:	146°3'0"E,	5.4 MILES EAST.
DRILLED: 1914	ELEVATION: GROUND 1211'	
DEPTH, DRILLER: 2950'	REF. LEVEL 1211'	
BORE CONDITION: FLOWING WATER	LOGGED BY: A. RADESKI.	
LOGGING EQUIPMENT: FAILING LOGMASTER.	LITHOLOGY BY: DRILLER.	

RUN	DUMMY	TEMPERATURE	GAMMA - RAY	GAMMA-RAY
DATE			1-10-62	29-9-62
FIRST READING			1700'	2910'
LAST READING			10'	1700'
FOOTAGE LOGGED			1690	1210

REMARKS. LOG BELOW 1700 ft IS FAULTY.
STRATIGRAPHY BY CORRELATION.



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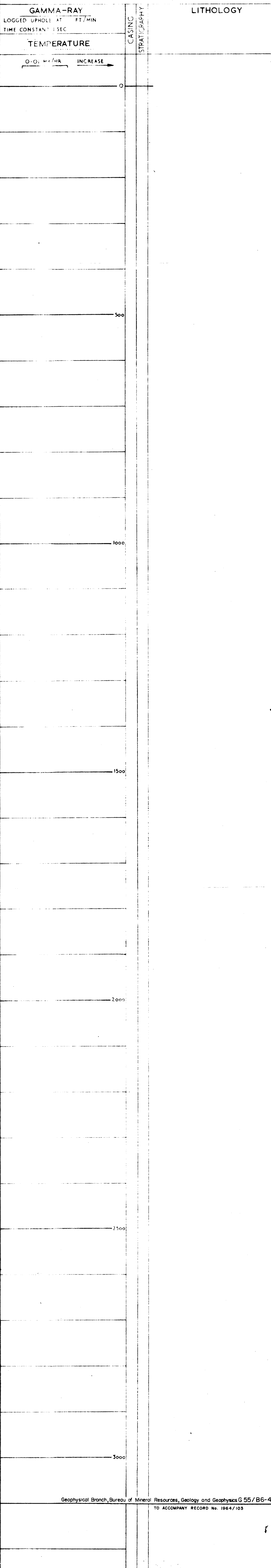
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

IWSC. REGISTERED NO. :	COORDINATES:	°OO'S,	MILES NORTH
OWNER :		°OO'E,	MILES EAST.
DRILLED:	ELEVATION:	GROUND	
DEPTH, DRILLER:		REF. LEVEL	
BORE CONDITION:	LOGGED BY:	A. RADESKI.	
LOGGING EQUIPMENT: FAIRING LOGMASTER.			
	LITHOLOGY BY: DRILLER.		

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE				
FIRST READING				
LAST READING				
FOOTAGE LOGS				

REMARKS.

PRELIMINARY COPY ONLY.



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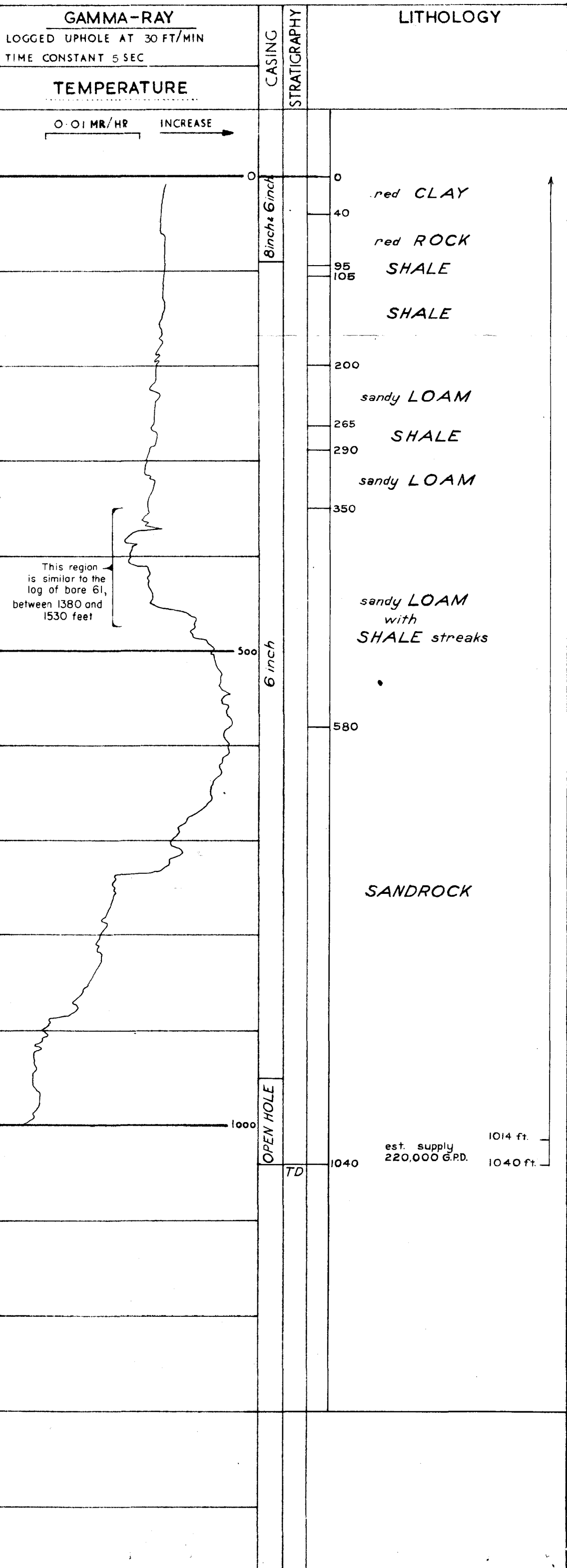
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

YARRAWONGA
(62)

I.W.S.C. REGISTERED No.: 4964 COORDINATES: 26° 15'S, 146° 30'E, 1.8 MILES NORTH
OWNER: 146° 30'E, 0.5 MILES EAST.
DRILLED: 1911 ELEVATION: GROUND 1120'
DEPTH, DRILLER: 1040' REF. LEVEL 1120'
BORE CONDITION: LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER. LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE			3-10-62	
FIRST READING			1000'	
LAST READING			10'	
FOOTAGE LOGGED			990	

REMARKS. WATER ENTERED CABLE HEAD, LOG UNRELIABLE



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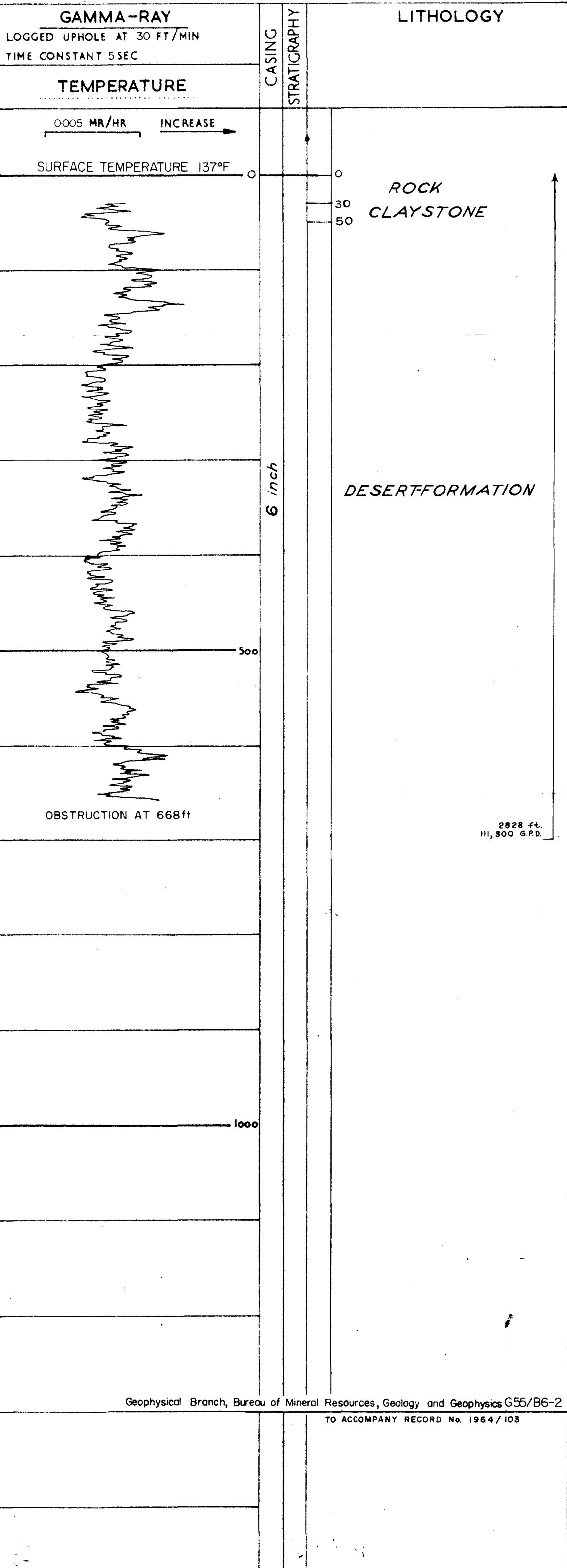
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

HIGHFIELD
(63)

I.W.S.C. REGISTERED No.: 1197 COORDINATES: 27° 00'S, 146° 30'E, 31.8 MILES NORTH
OWNER: 146° 30'E, 1.1 MILES EAST.
DRILLED: 1897 ELEVATION: GROUND 1232'
DEPTH, DRILLER: 3335' REF. LEVEL 1232'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER. LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE			3-10-62	
FIRST READING			668'	
LAST READING			30'	
FOOTAGE LOGGED			638	

REMARKS.



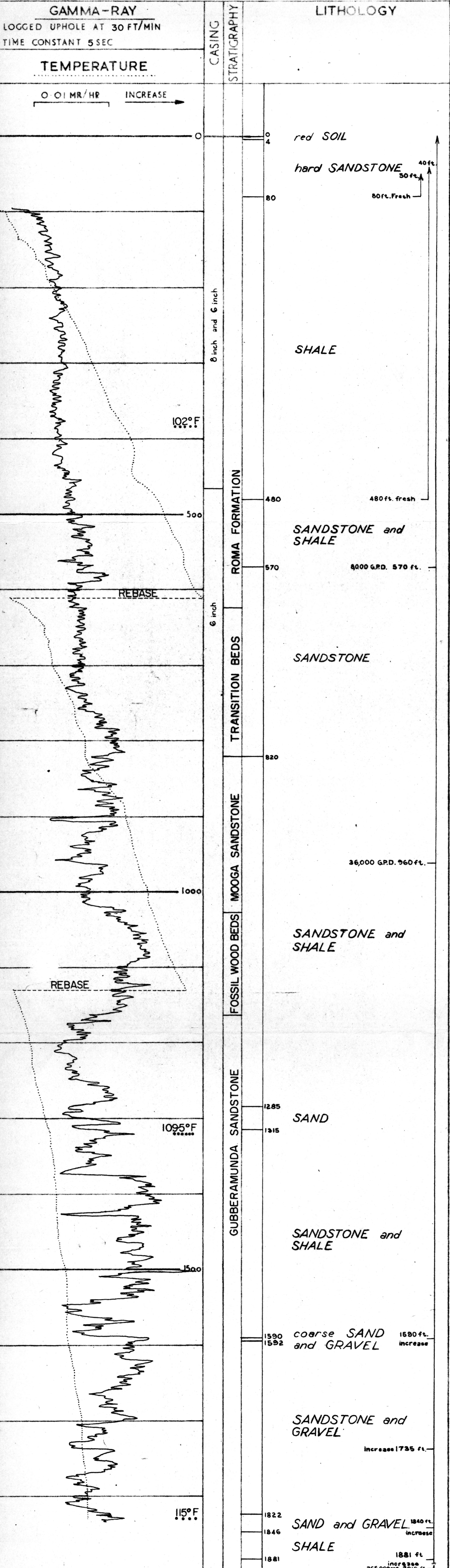
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

LOMAX No1
(64)

I.W.S.C. REGISTERED No.: 1562 COORDINATES: 27° 15' S, 14.5 MILES NORTH
OWNER: 146° 30' E, 12.0 MILES EAST.
DRILLED: 1916 ELEVATION: GROUND 1052'
DEPTH, DRILLER: 2172' REF. LEVEL 1052'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER. LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		24-10-62	24-10-62
FIRST READING		1830'	1830'
LAST READING		100'	100'
FOOTAGE LOGGED		1730	1730

REMARKS. STRATIGRAPHY BY CORRELATION



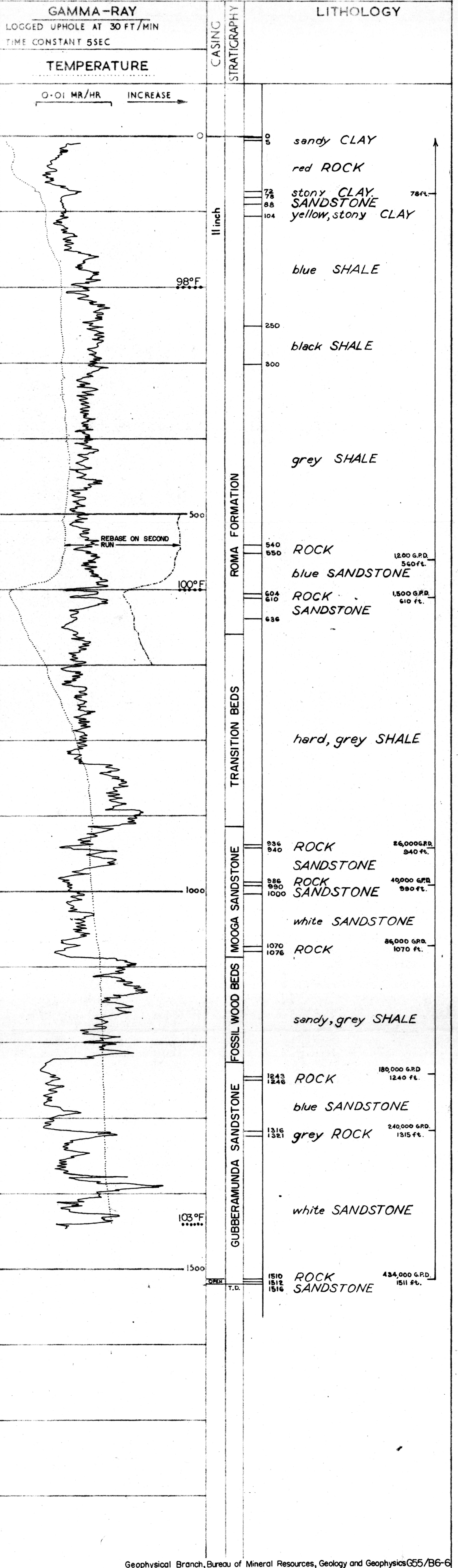
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

CALABAR No2
(65)

I.W.S.C. REGISTERED No.: 5022 COORDINATES: 27° 15' S, 5.2 MILES NORTH
OWNER: 146° 30' E, 4.9 MILES EAST.
DRILLED: 1933 ELEVATION: GROUND 955'(e)
DEPTH, DRILLER: 1516' REF. LEVEL 955'(e)
BORE CONDITION: PUMPED, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER. LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	TEMPERATURE
DATE		29-10-62	29-10-62	29-10-62
FIRST READING		1440'	1440'	700'
LAST READING		10'	10'	500'
FOOTAGE LOGGED		1430	1430	200

REMARKS. STRATIGRAPHY BY CORRELATION



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GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

BAKER
(66)

I.W.S.C. REGISTERED No.: 11315

COORDINATES: 27° 15'S, 80 MILES NORTH
146° 30'E, 29.0 MILES EAST.

OWNER :

DRILLED: 1949

ELEVATION: GROUND 930'

DEPTH, DRILLER: 1000'

REF. LEVEL 930

SORE CONDITION.

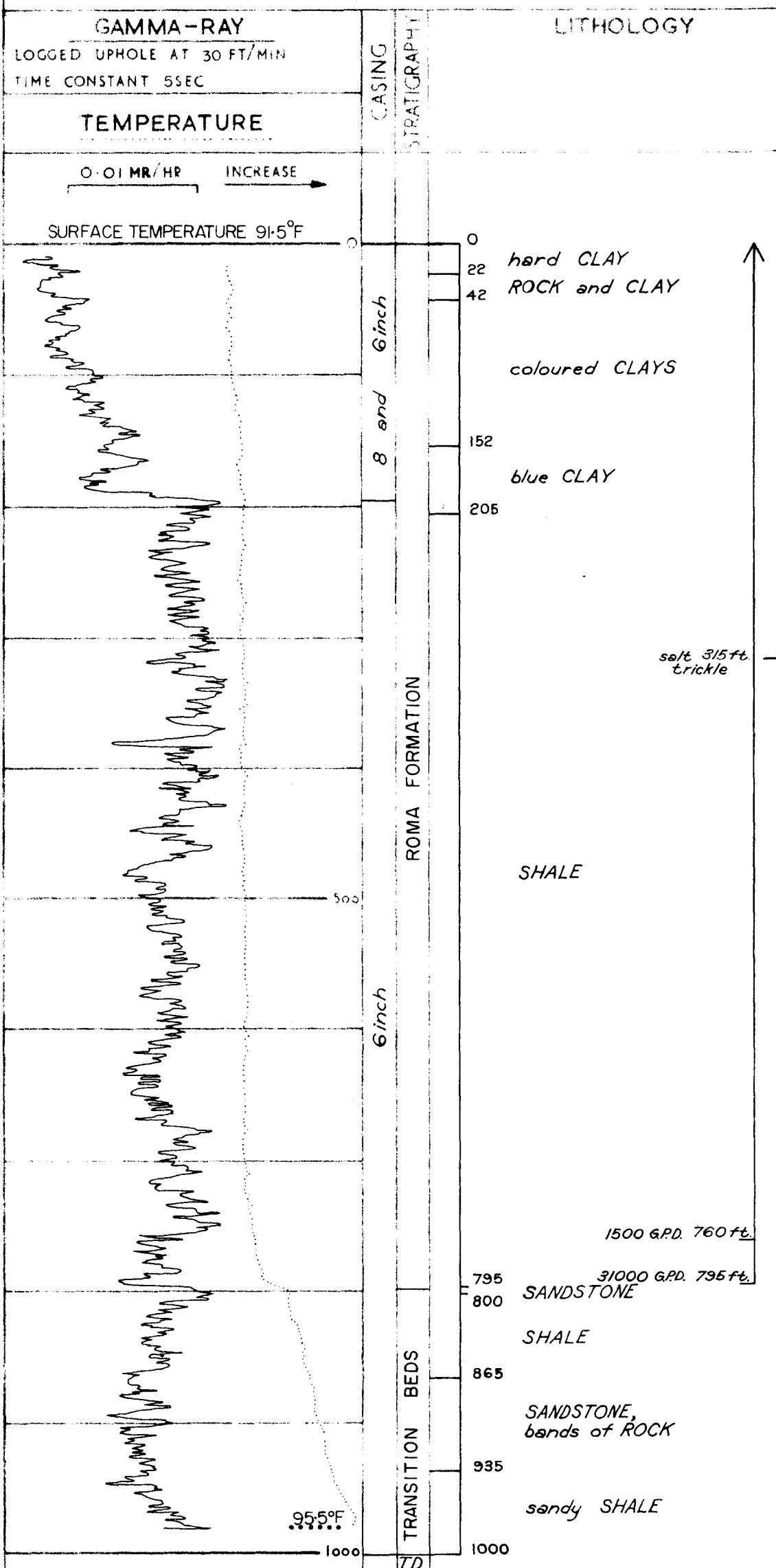
LOGGED BY: A. K. L. 1941

LOGGING EQUIPMENT: FAILING LOGMASTER.

LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA - RAY
DATE		18-10-62	18-10-62
FIRST READING		980'	980'
LAST READING		10'	10'
FOOTAGE LOGGED		970	970

REMARKS STRATIGRAPHY BY CORRELATION



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GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

GUNNAWARRA
(67)

IW.S.C. REGISTERED No : 11866

COORDINATES: 27° 15' S, 4.1 MILES NORTH.

OWNER :

147°00'E, 2.8 MILES EAST.

DRILLED: 1951

ELEVATION: GROUND 950'(e)

DEPTH DRILLER 995'

REF. LEVEL 950' (e)

BORE CONDITION: FLOWING, WATER

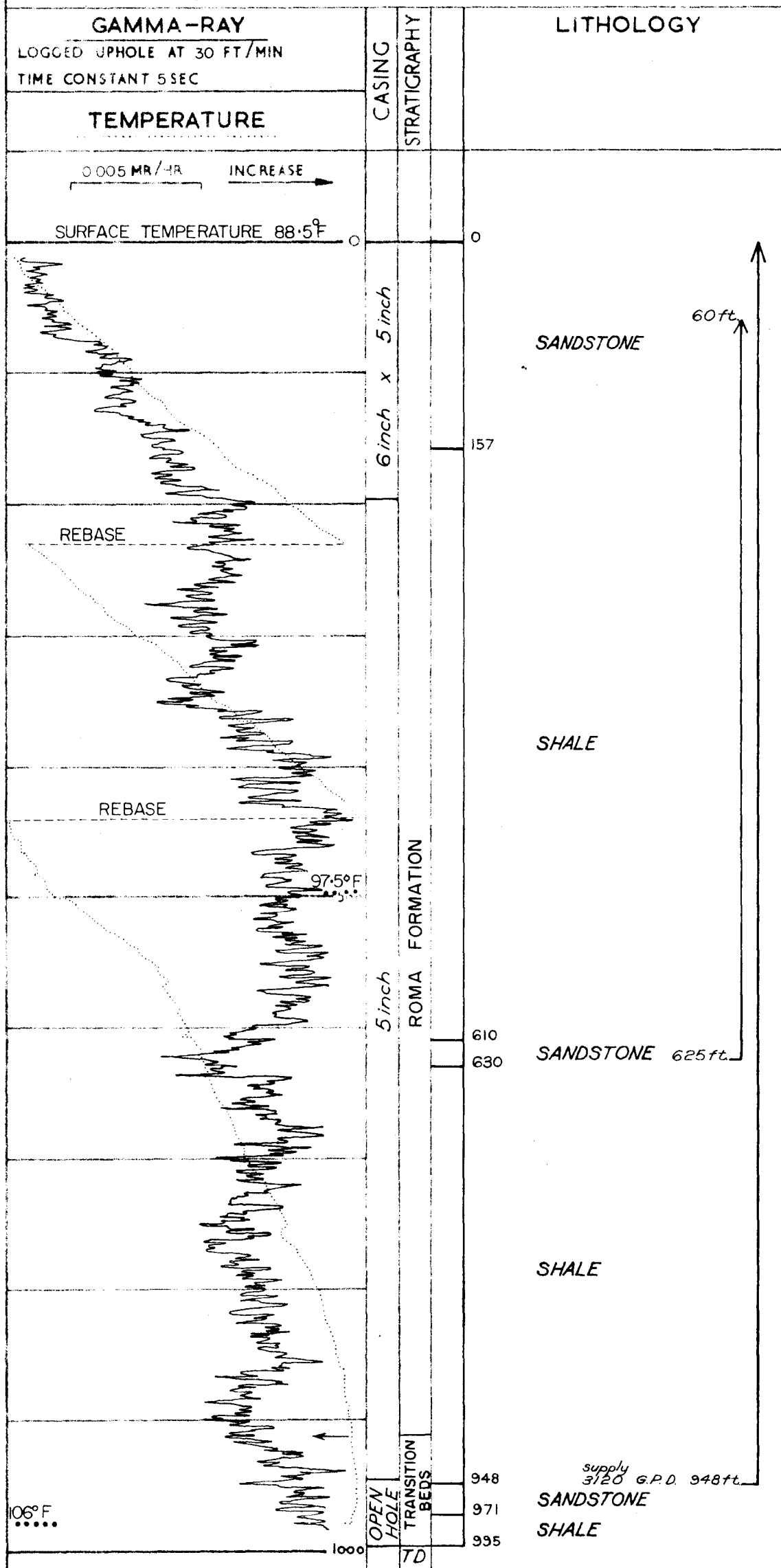
LOGGED BY: A. RADESKI

LOGGING EQUIPMENT; FAIRING LOGMASTER.

LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		20-10-62	20-10-62	
FIRST READING		980'	980'	
LAST READING		10'	10'	
FOOTAGE LOGGED		970	970	

REMARKS. STRATIGRAPHY BY CORRELATION



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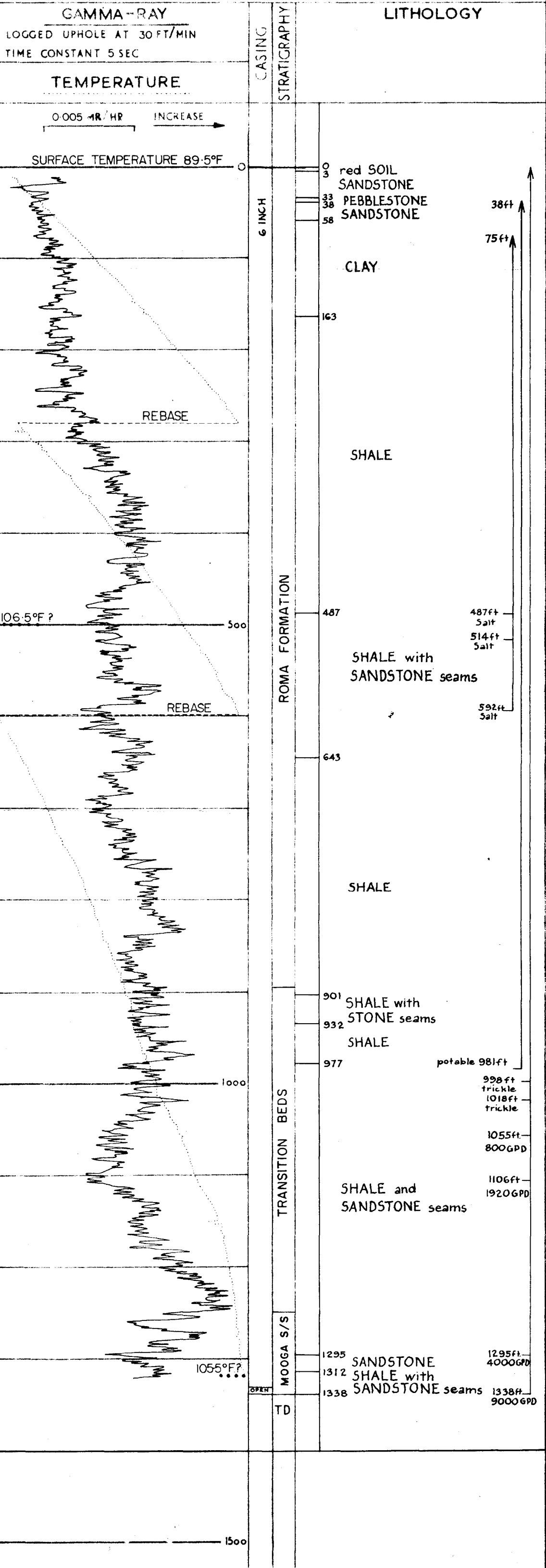
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

TULLOCHARD
(69)

I.W.S.C. REGISTERED No.: 11954 COORDINATES: 27° 15'S, 41 MILES NORTH
OWNER: 147° 00'E, 19.9 MILES EAST.
DRILLED: 1952 ELEVATION: GROUND 915'
DEPTH, DRILLER: 1338' REF. LEVEL 915'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAIRING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA - RAY
DATE		19-10-62	19-10-62
FIRST READING		1320'	1320'
LAST READING		10'	10'
FOOTAGE LOGGED		1310	1310

REMARKS STRATIGRAPHY BY CORRELATION



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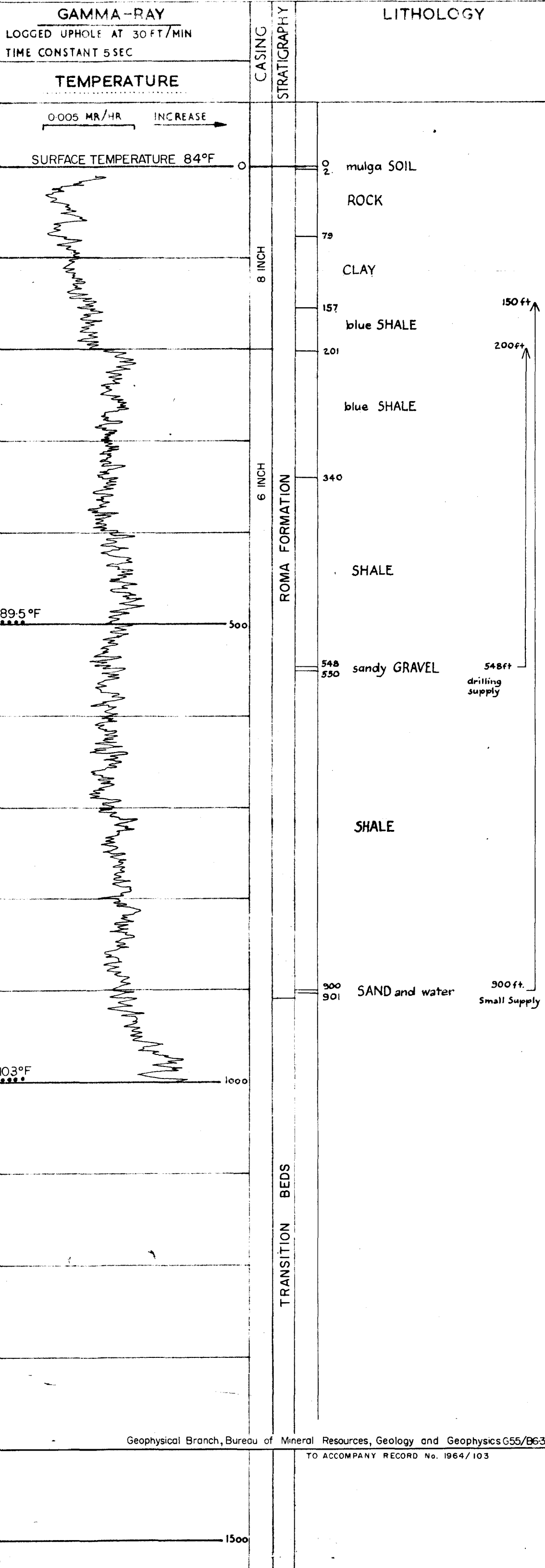
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

TONGY No.4
(68)

I.W.S.C. REGISTERED No.: 15183 COORDINATES: 27° 30'S, 7.7 MILES NORTH
OWNER: 147° 00'E, 16.0 MILES EAST.
DRILLED: 1963 ELEVATION: GROUND 850'(e)
DEPTH, DRILLER: 1210' REF. LEVEL 850'(e)
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAIRING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA - RAY
DATE		21-10-62	
FIRST READING		1000'	
LAST READING		10'	
FOOTAGE LOGGED		990	

REMARKS STRATIGRAPHY BY CORRELATION



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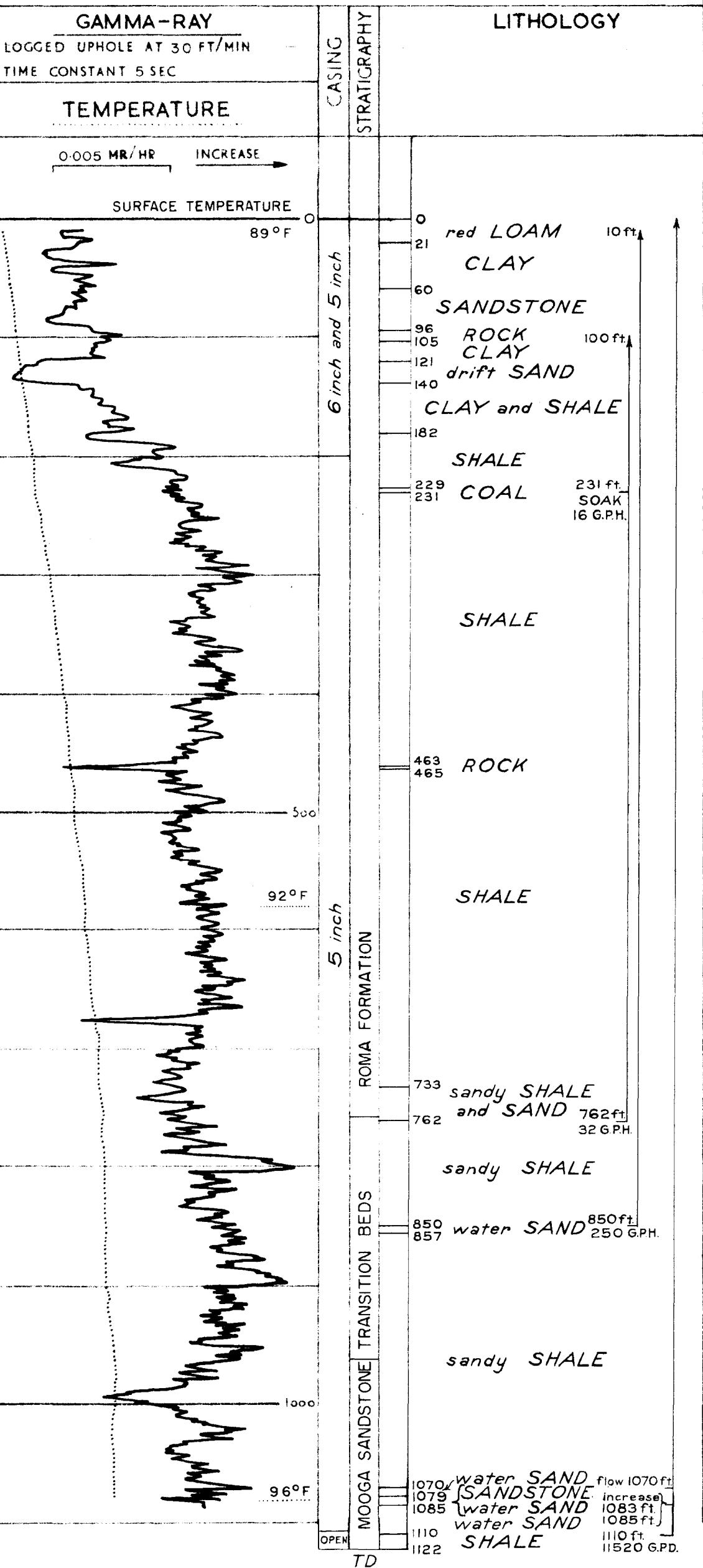
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

TAUNTON
(70)

I.W.S.C. REGISTERED No.: 12421 COORDINATES: 27°00'S, 8.9 MILES NORTH
OWNER: 149°00'E, 1.7 MILES EAST.
DRILLED: 1955 ELEVATION: GROUND 965'
DEPTH, DRILLER: 1122' REF. LEVEL 965'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		3-11-62	3-11-62
FIRST READING		1080'	1080'
LAST READING		10'	10'
FOOTAGE LOGGED		1070	1070

REMARKS. STRATIGRAPHY BY CORRELATION



BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS.

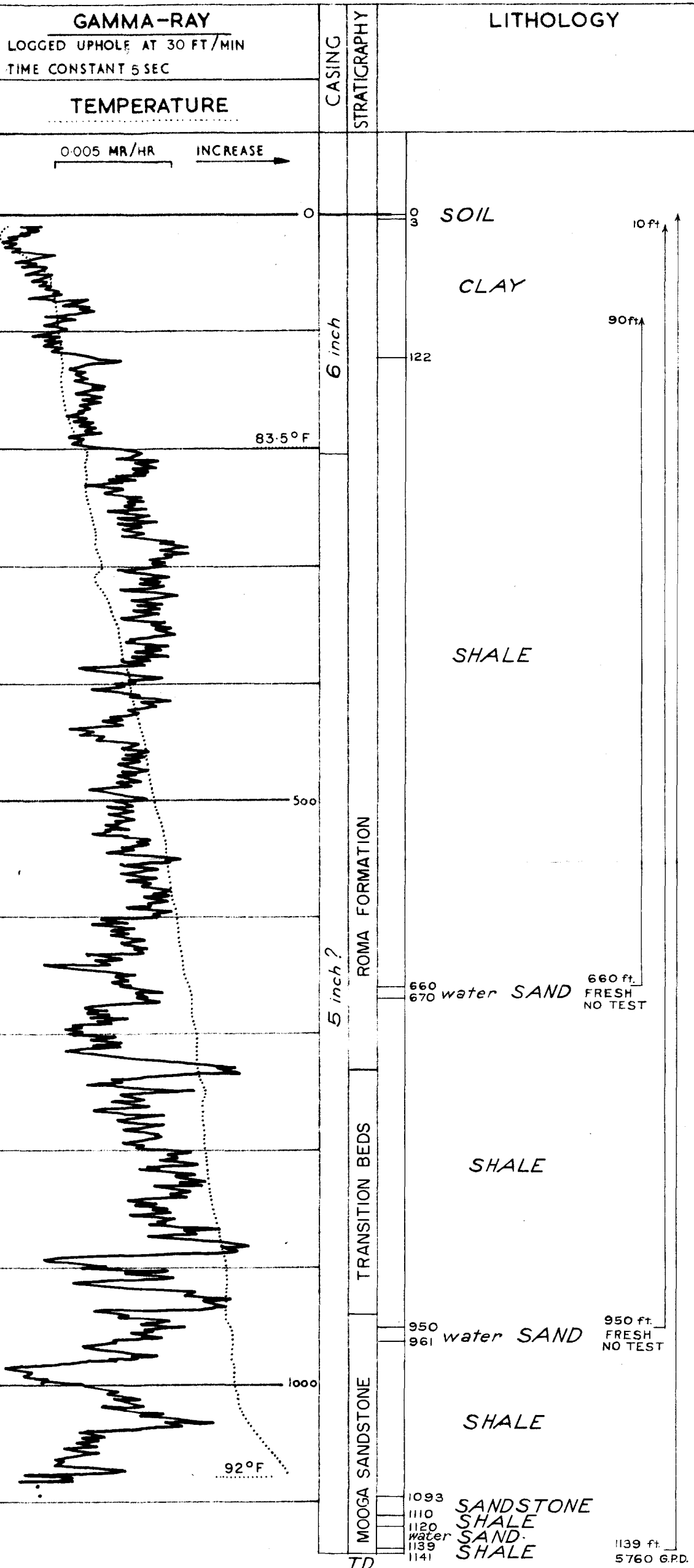
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

WANDOLIN No 2
(71)

I.W.S.C. REGISTERED No.: 13155 COORDINATES: 27°00'S, 14.1 MILES NORTH
OWNER: 149°00'E, 8.8 MILES EAST.
DRILLED: 1956 ELEVATION: GROUND 920'(e)
DEPTH, DRILLER: 1141' REF. LEVEL 920'(e)
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		2-11-62	2-11-62
FIRST READING		10'	1080'
LAST READING		1080'	10'
FOOTAGE LOGGED		1070	1070

REMARKS. STRATIGRAPHY BY CORRELATION



BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

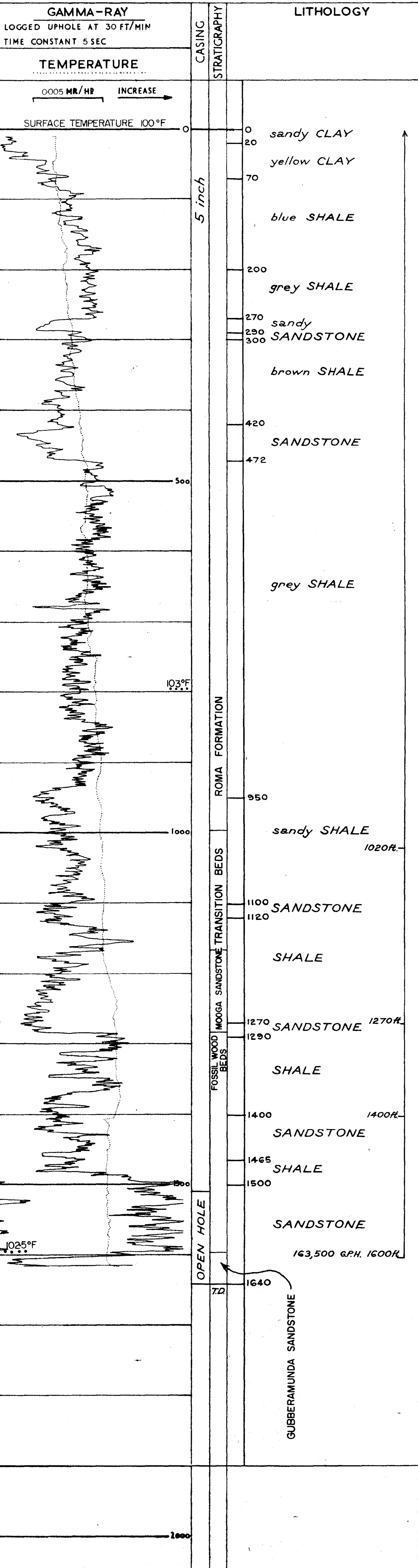
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

COMBARNGO
(72)

I.W.S.C. REGISTERED No.: 10841 COORDINATES: 27°00'S, 3.4 MILES NORTH
OWNER: 149°00'E, 17.3 MILES EAST.
DRILLED: 1948 ELEVATION: GROUND 875'
DEPTH, DRILLER: 1640' REF. LEVEL 875'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		5-11-62	5-11-62	
FIRST READING		1615'	1615'	
LAST READING		10'	10'	
FOOTAGE LOGGED		1605	1605	

REMARKS. STRATIGRAPHY BY CORRELATION



BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS.

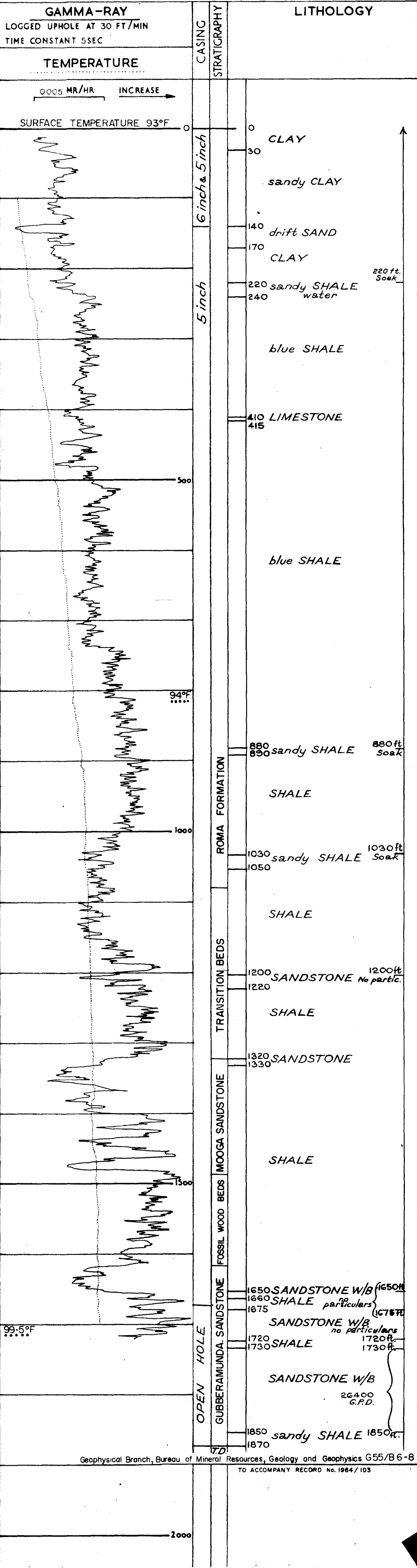
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

RIPPON LEA
(73)

I.W.S.C. REGISTERED No.: 13248 COORDINATES: 27°00'S, 3.7 MILES NORTH
OWNER: 149°30'E, 24.9 MILES EAST.
DRILLED: 1956 ELEVATION: GROUND 935'
DEPTH, DRILLER: 1870' REF. LEVEL 935'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		14-11-62	14-11-62	
FIRST READING		1700'	1715'	
LAST READING		100'	10'	
FOOTAGE LOGGED		1600	1705	

REMARKS. STRATIGRAPHY BY CORRELATION



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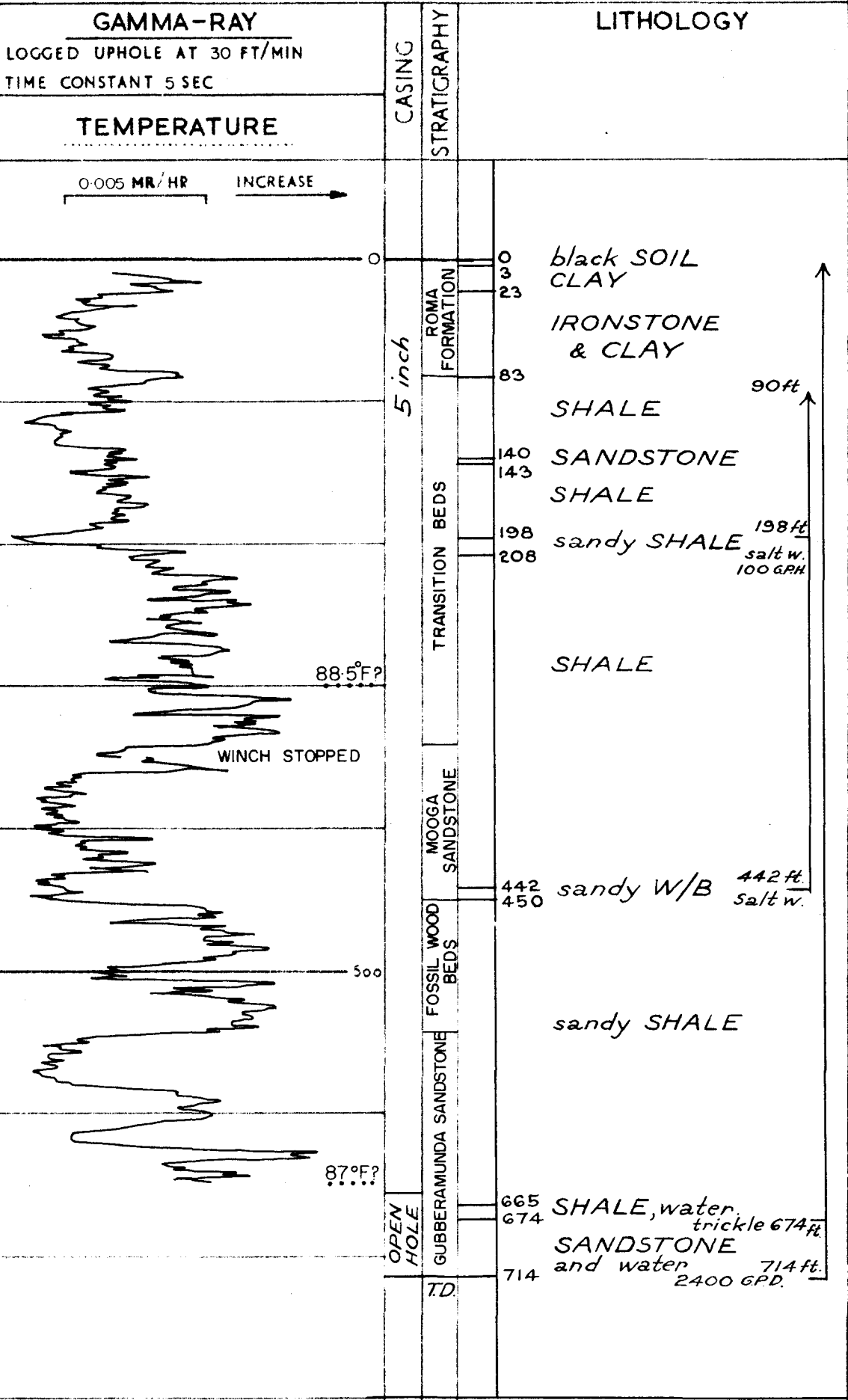
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

COOLAMUNDA
(74)

I.W.S.C. REGISTERED No.: 11701
OWNER :
DRILLED: 1950
DEPTH, DRILLER: 714'
BORE CONDITION: PUMPED, WATER
LOGGING EQUIPMENT: FAILING LOGMASTER.
COORDINATES: 27° 00'S, 35 MILES NORTH,
150° 00'E, 10.7 MILES EAST.
ELEVATION: GROUND 920' (a)
REF. LEVEL 920' (a)
LOGGED BY: A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE			13-11-62
FIRST READING			650'
LAST READING			10'
FOOTAGE LOGGED			640

REMARKS. STRATIGRAPHY BY CORRELATION



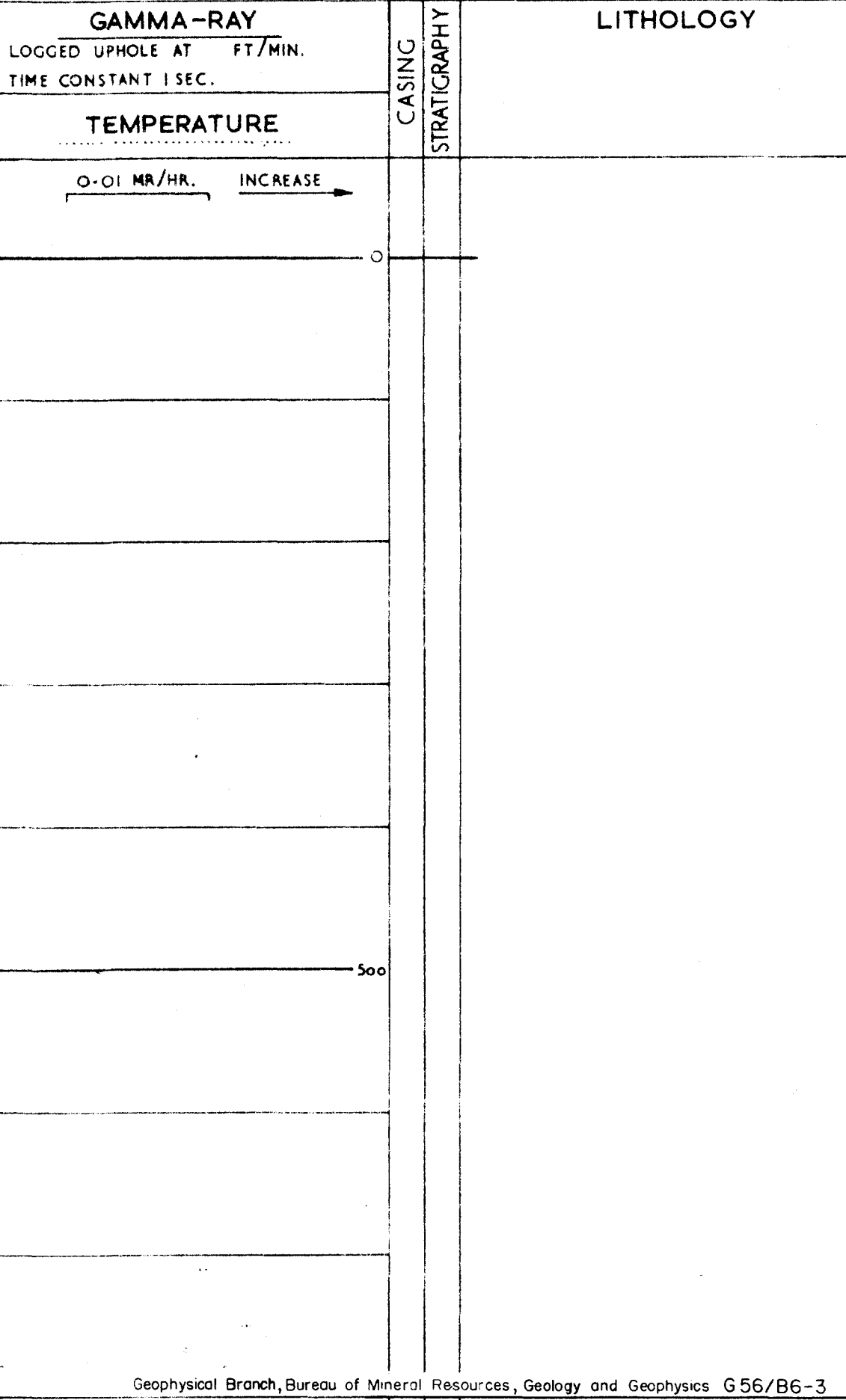
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS.

GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

I.W.S.C. REGISTERED No.:
OWNER :
DRILLED:
DEPTH, DRILLER:
BORE CONDITION:
LOGGING EQUIPMENT: FAILING LOGMASTER.
COORDINATES: ° 00'S, MILES NORTH,
° 00'E, MILES EAST.
ELEVATION: GROUND
REF. LEVEL
LOGGED BY: A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE			
FIRST READING			
LAST READING			
FOOTAGE LOGGED			

REMARKS.



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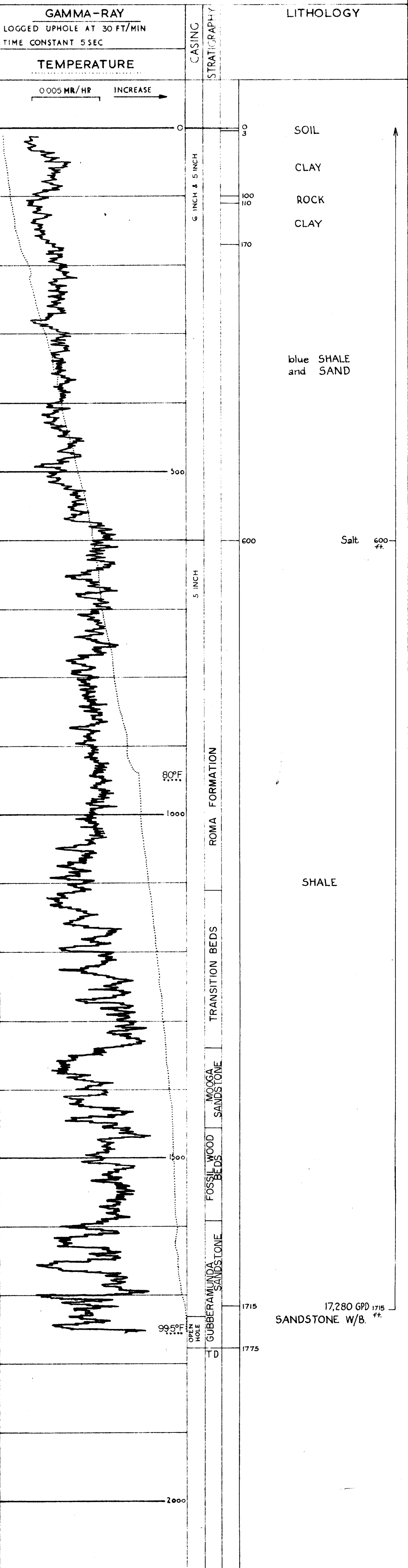
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

BARRAMORNIE No3
(75)

I.W.S.C. REGISTERED No.: 13455 COORDINATES: 27° 15'S, 12.0 MILES NORTH,
OWNER: 150° 00'E, 4.3 MILES EAST.
DRILLED: 1956 ELEVATION: GROUND 925'
DEPTH, DRILLER: 1775' REF. LEVEL 925'
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER LITHOLOGY BY: DRILLER

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		15-11-62	15-11-62	
FIRST READING		1750'	1750'	
LAST READING		10'	10'	
FOOTAGE LOGGED		1740	1740	

REMARKS. STRATIGRAPHY BY CORRELATION



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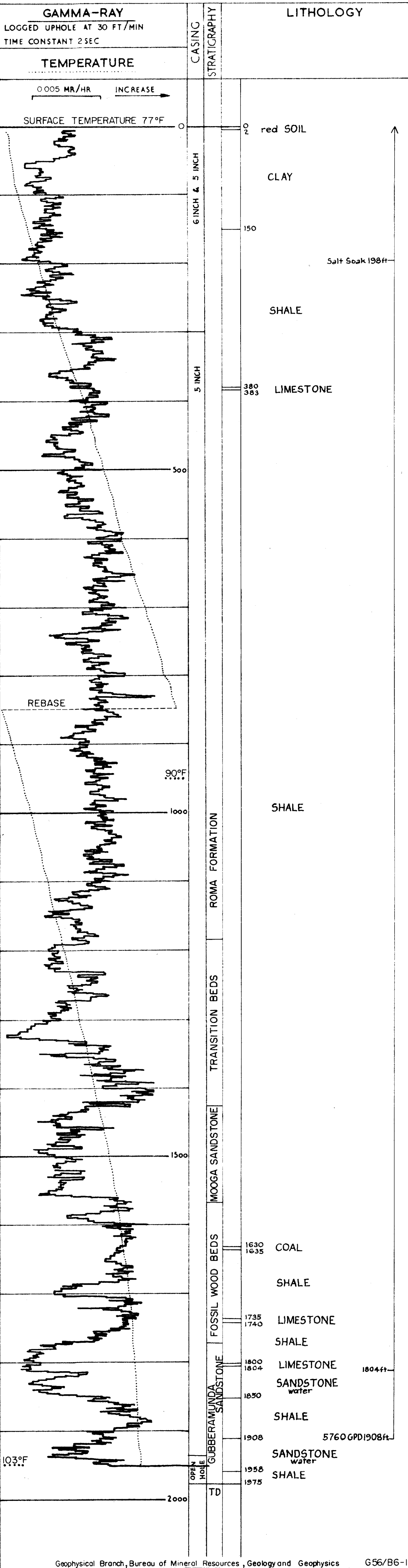
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

GREENFIELD
(76)

I.W.S.C. REGISTERED No.: 12569 COORDINATES: 27° 15'S, 1.8 MILES NORTH,
OWNER: 150° 00'E, 4.8 MILES EAST.
DRILLED: 1954 ELEVATION: GROUND 950'(e)
DEPTH, DRILLER: 1975' REF. LEVEL 950'(e)
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER LITHOLOGY BY: DRILLER

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		16-11-62	16-11-62	
FIRST READING		1950'	1950'	
LAST READING		10'	10'	
FOOTAGE LOGGED		1940	1940	

REMARKS. STRATIGRAPHY BY CORRELATION



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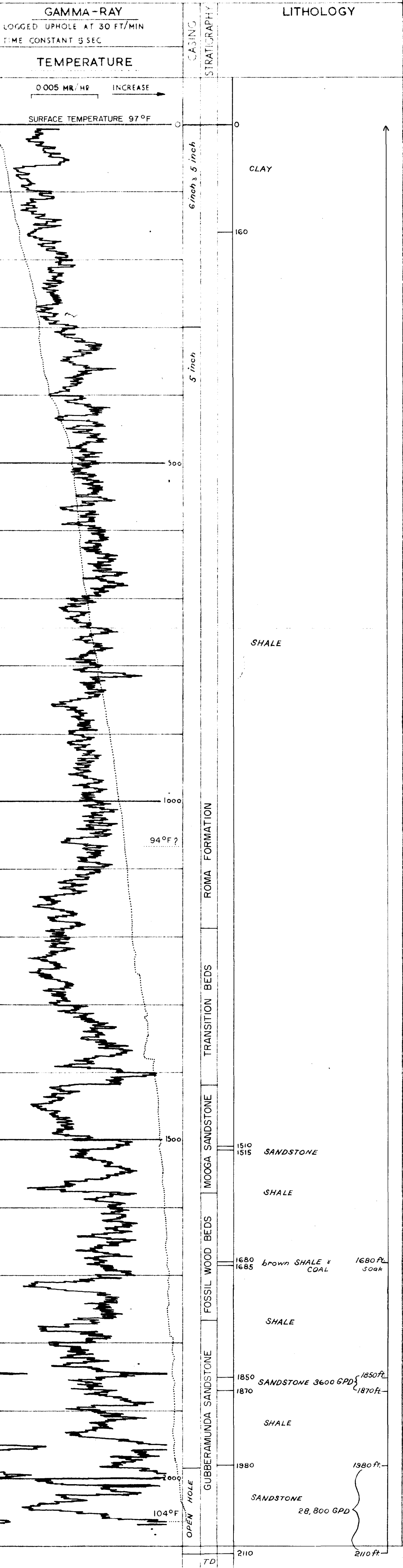
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

STRATHALBYN
(77)

IWSC REGISTERED No. 13030 COORDINATES: 27° 30'S, 13.9 MILES NORTH,
OWNER: 150° 00'E, 7.6 MILES EAST.
DRILLED: 1956 ELEVATION: GROUND 950'(e)
DEPTH, DRILLER: 2110' REF. LEVEL 950'(e)
BORE CONDITION: FLOWING WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		17-11-62	17-11-62
FIRST READING		2060	2066'
LAST READING		10'	10'
FOOTAGE LOGGED		2050	2056

REMARKS STRATIGRAPHY BY CORRELATION



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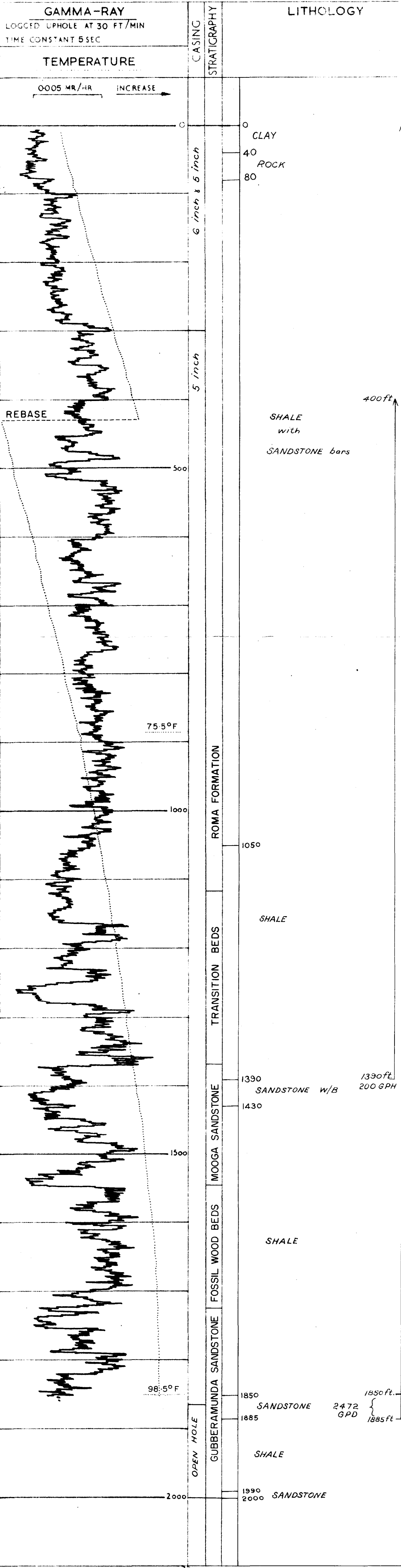
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

WARROON
(78)

IWSC REGISTERED No. 12447 COORDINATES: 27° 30'S, 4.7 MILES NORTH,
OWNER: 150° 00'E, 13.0 MILES EAST
DRILLED: 1953 ELEVATION: GROUND 950'(e)
DEPTH, DRILLER: 2000' REF. LEVEL 950'(e)
BORE CONDITION: FLOWING WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		20-11-62	20-11-62
FIRST READING		1850'	1850'
LAST READING		10'	10'
FOOTAGE LOGGED		1840	1840

REMARKS STRATIGRAPHY BY CORRELATION



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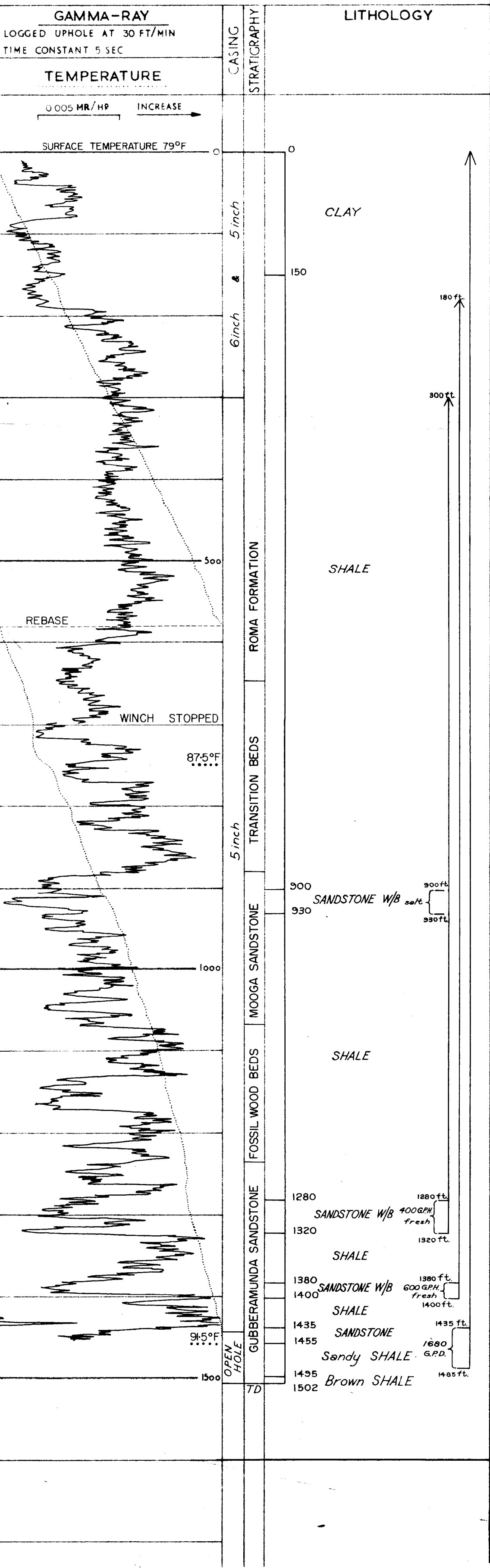
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

BELLEVUE PARK
(79)

I.W.S.C. REGISTERED No.: 13140 COORDINATES: 27° 30'S, 12.9 MILES NORTH.
OWNER: 150° 00'E, 17.3 MILES EAST.
DRILLED: 1955 ELEVATION: GROUND 950' (e)
DEPTH, DRILLER: 1502' REF. LEVEL 950' (e)
BORE CONDITION: PUMPED, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE		19-11-62	19-11-62	
FIRST READING		1450'	1450'	
LAST READING		20'	10'	
FOOTAGE LOGGED		1430	1440	

REMARKS. STRATIGRAPHY BY CORRELATION



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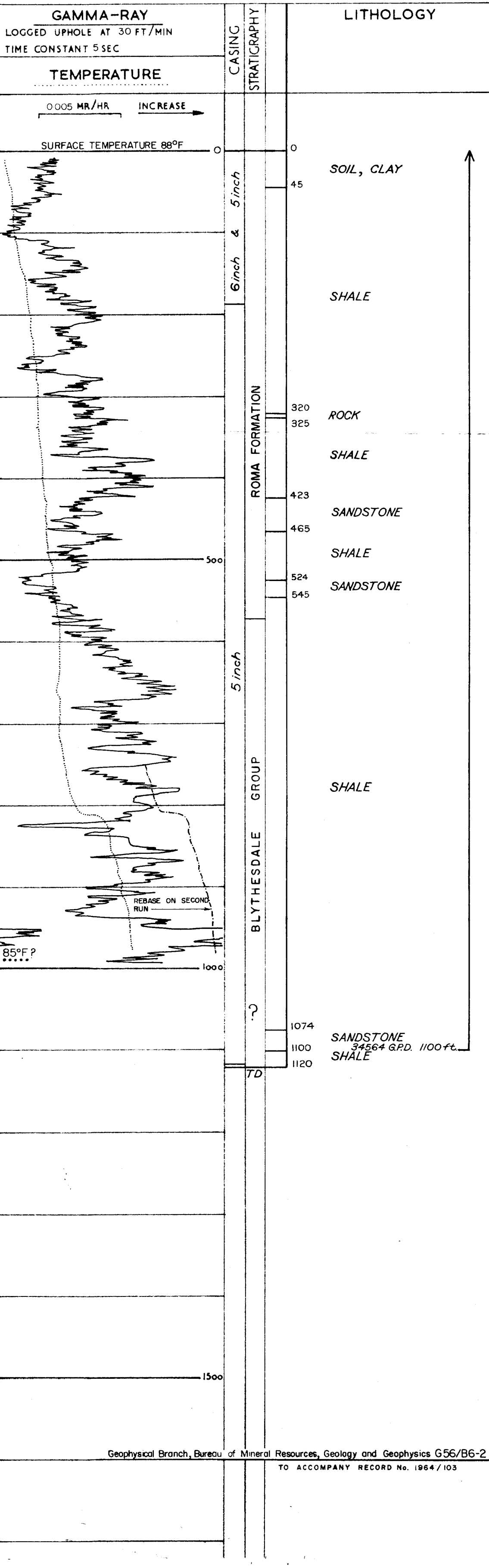
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

MONTE CRISTO
(80)

I.W.S.C. REGISTERED No.: 11743 COORDINATES: 28° 15'S, 4.9 MILES NORTH.
OWNER: 150° 00'E, 19.6 MILES EAST.
DRILLED: 1951 ELEVATION: GROUND 760' (e)
DEPTH, DRILLER: 1120' REF. LEVEL 760' (e)
BORE CONDITION: FLOWING, WATER LOGGED BY: A. RADESKI
LOGGING EQUIPMENT: FAILING LOGMASTER
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	TEMPERATURE
DATE		22-11-62	22-11-62	22-11-62
FIRST READING		980'	990'	980'
LAST READING		10'	10'	750'
FOOTAGE LOGGED		970	980	230

REMARKS. STRATIGRAPHY BY CORRELATION



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GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

WYAGA No.4
(81)

I.W.S.C. REGISTERED No. : 12714

COORDINATES: 28° 15'S, 10.1 MILES NORTH
150° 30'E, 8.6 MILES EAST.

OWNER :

DRILLED: 1955

ELEVATION: GROUND 945'(e)

DEPTH, DRILLER: 1225'

REF. LEVEL 950'(e)

BORE CONDITION: PUMPED WATER

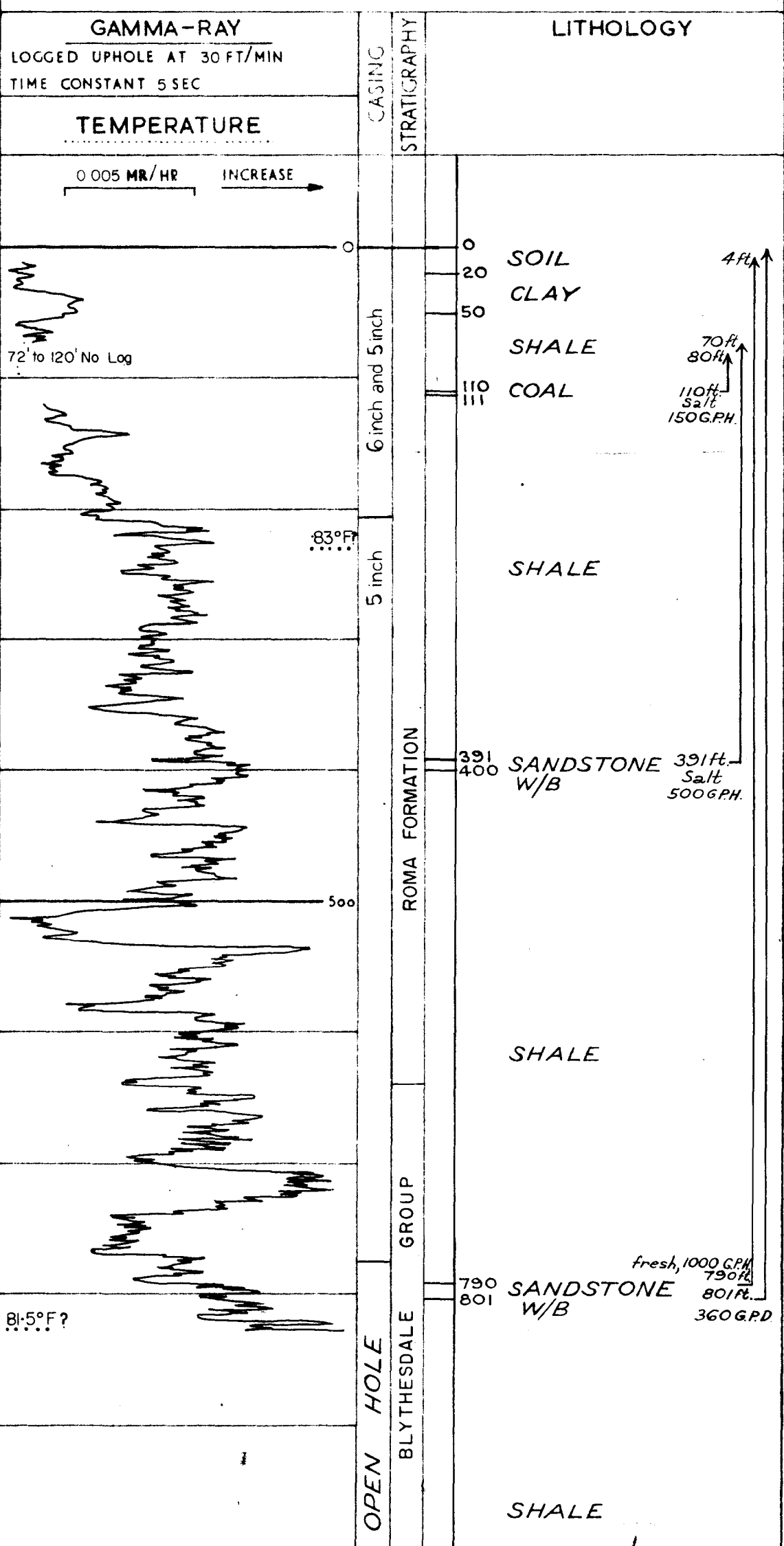
LOGGED BY: A. RADESKI.

LOGGING EQUIPMENT: FALING LOGMASTER

LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE			22-11-62	
FIRST READING			827'	
LAST READING			10'	
FOOTAGE LOGGED			817	

REMARKS. STRATIGRAPHY BY CORRELATION



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GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

WYAGA No.2
(82)

I.W.S.C REGISTERED No. : 11950

COORDINATES: 28° 15' S, 0.1 MILES NORTH.
150° 30' E, 6.2 MILES EAST.

OWNER :

DRILLED: 1952

ELEVATION: GROUND 854'(e)

DEPTH DRILLER: 1200'

REF. LEVEL 858'(e)

BORE CONDITION: PUMPED, WATER

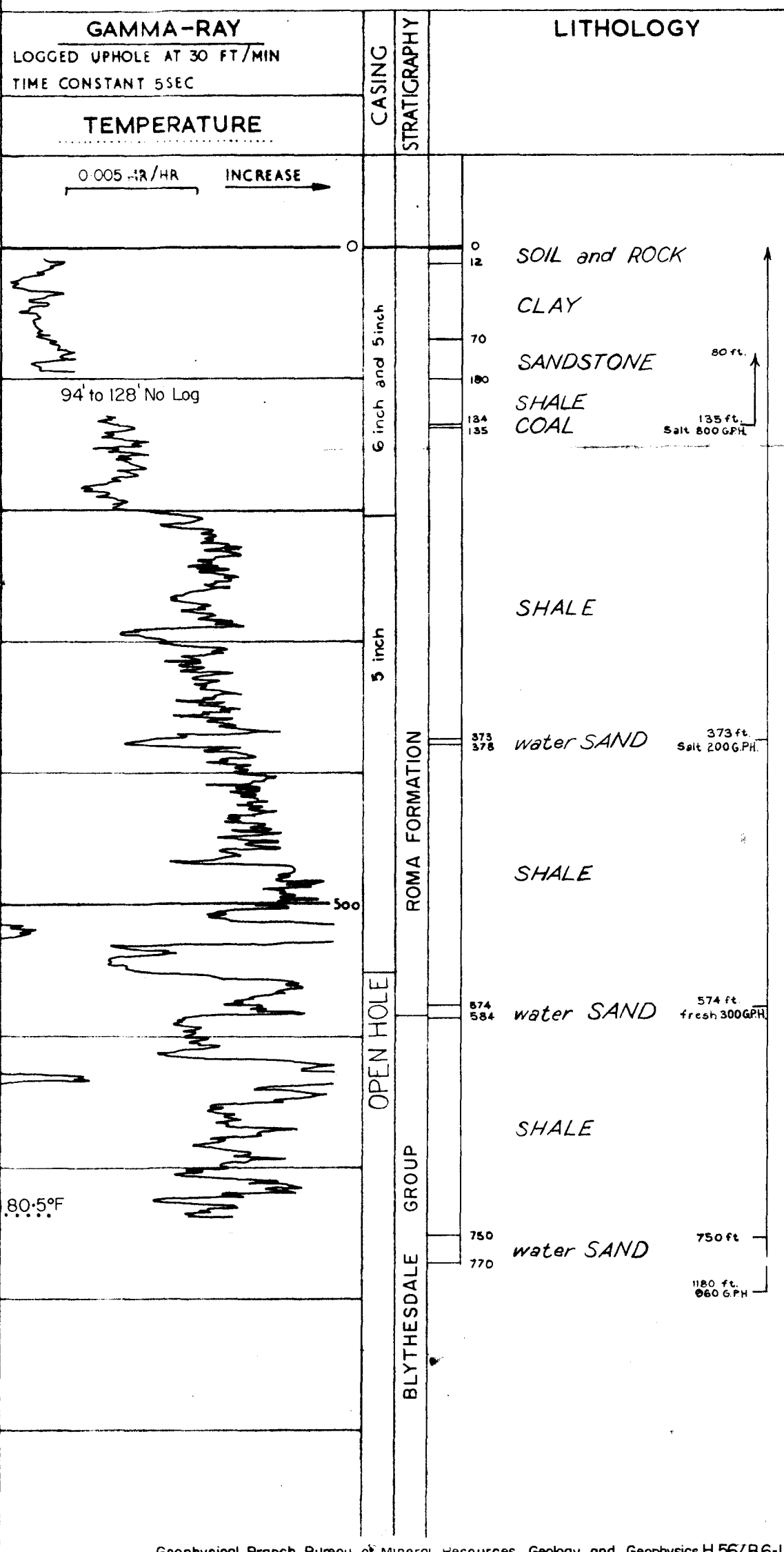
LOGGED BY: A. RADESKI.

LOGGING EQUIPMENT: FAILING LOGMASTER.

LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY	
DATE				
FIRST READING			735'	
LAST READING			10'	
FOOTAGE LOGGED			725	

REMARKS: STRATIGRAPHY BY CORRELATION



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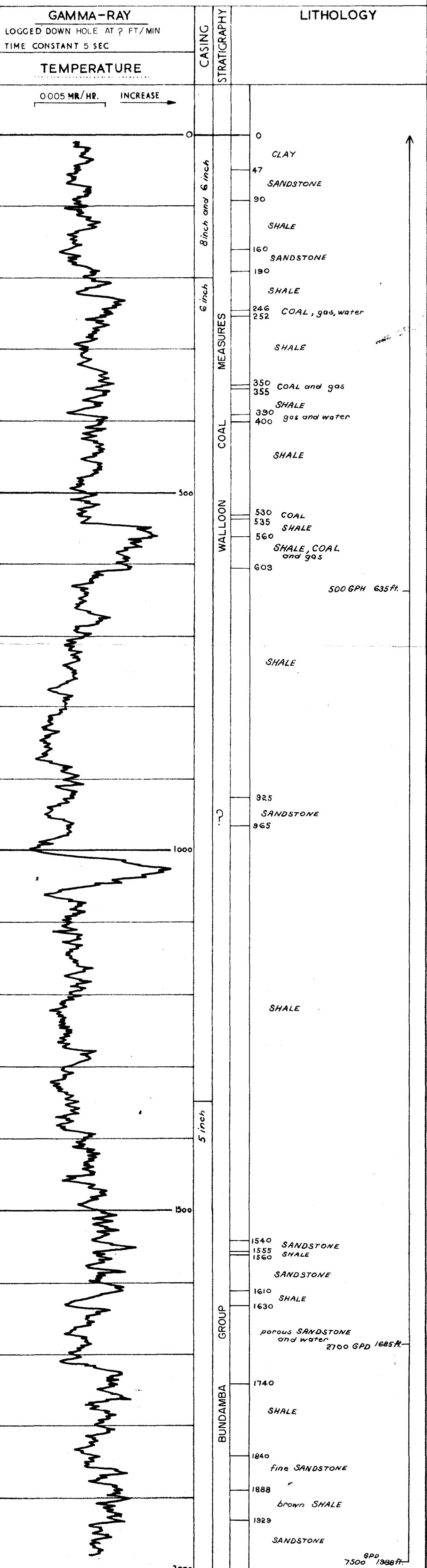
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

ROUNDHOLE
(83)

I.W.S.C. REGISTERED No.: 11560 COORDINATES: 26° 15' S, 15.6 MILES NORTH
OWNER: 149° 3' 0"E, 23.9 MILES EAST.
DRILLED: 1951 ELEVATION: GROUND 968'
DEPTH, DRILLER: 2004' REF. LEVEL 968'
BORE CONDITION: LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE			9-11-62
FIRST READING			10'
LAST READING			1980'
FOOTAGE LOGGED			1970

REMARKS.



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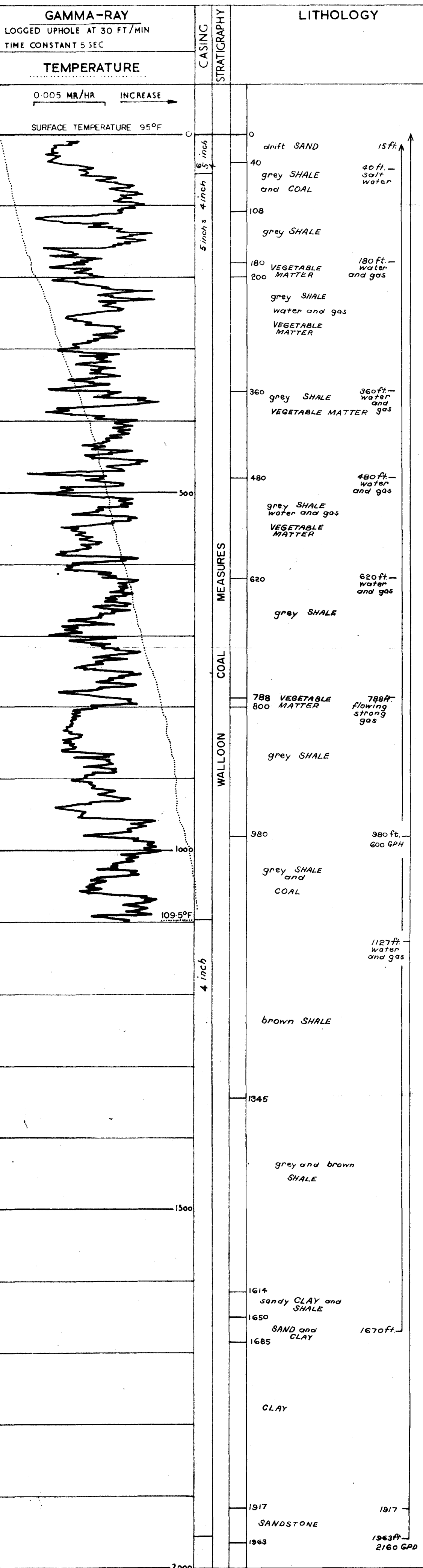
GREAT ARTESIAN BASIN, QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1962

WANDOAN TEST 2
(84)

I.W.S.C. REGISTERED No.: 10479 COORDINATES: 26° 15' S, 8.4 MILES NORTH
OWNER: 149° 3' 0"E, 29.1 MILES EAST.
DRILLED: 1948 ELEVATION: GROUND 799'
DEPTH, DRILLER: 2150' REF. LEVEL 802'
BORE CONDITION: FLOWING WATER LOGGED BY: A. RADESKI.
LOGGING EQUIPMENT: FAILING LOGMASTER.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE		13-11-62	13-11-62
FIRST READING		1080'	1097'
LAST READING		10'	10'
FOOTAGE LOGGED		1070	1087

REMARKS.



GREAT ARTESIAN BASIN, S.W. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960

(6)

WISC REGISTERED No.: 1610 COORDINATES: 27°00' S 40 MILES NORTH
OWNER: PRIVATE. 147°30' E 15-5 MILES EAST.
DRILLED: 1915. ELEVATION: GROUND 1204'.
DEPTH, DRILLER: 3408' REF. LEVEL 1204'.
BORE CONDITION: STANDING, WATER. LOGGED BY: E.E. JESSON, JR.
LOGGING EQUIPMENT: WIDCO. A. RADESKI.
LITHOLOGY BY DRILLER.

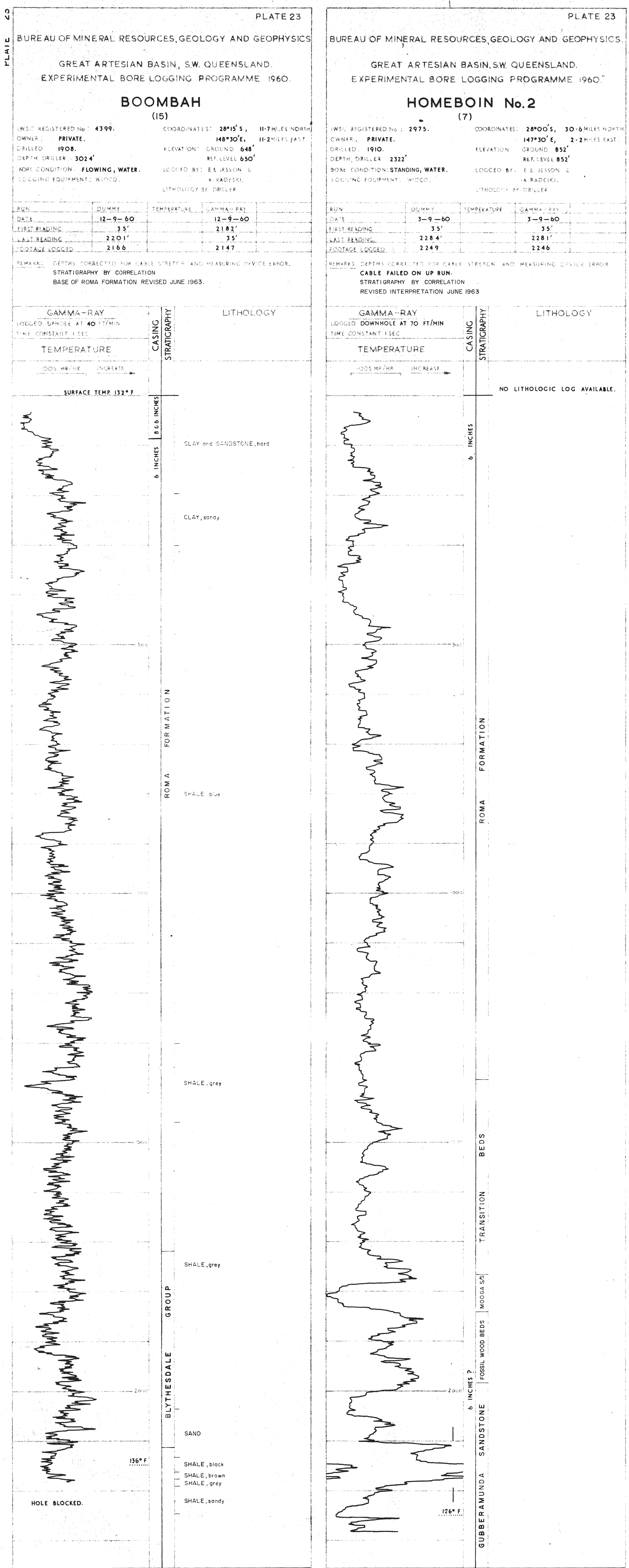
REMARKS. DEPTHS CORRECTED FOR CABLE STRETCH AND MEASURING DEVICE ERROR.
STRATIGRAPHY BY CORRELATION
REVISED INTERPRETATION: JUNE 1963

GREAT ARTESIAN BASIN, SW. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960

(5)

W.S.C. REGISTERED NO.: 13951	COORDINATES: 26°30' N 147°30' E	0.0 MILES NORTH 29.0 MILES EAST.
OWNER: MITCHELL SHIRE COUNCIL	ELEVATION: GROUND 1110.	REF. LEVEL 1111.
DRIILLED: 1960.	DEPTH, DRILLER: 2920'	
BORE CONDITION: FLOWING, WATER.	LOGGED BY: F. JEWELL &	
LOGGING EQUIPMENT: FAILING LOGMASTER.		N.D. JACKSON.
	LITHOLOGY BY: DRILLER	

REMARKS. DEPTHS CORRECTED FOR CABLE STRETCH
STRATIGRAPHY BY CORRELATION
REVISED INTERPRETATION JUNE 1963



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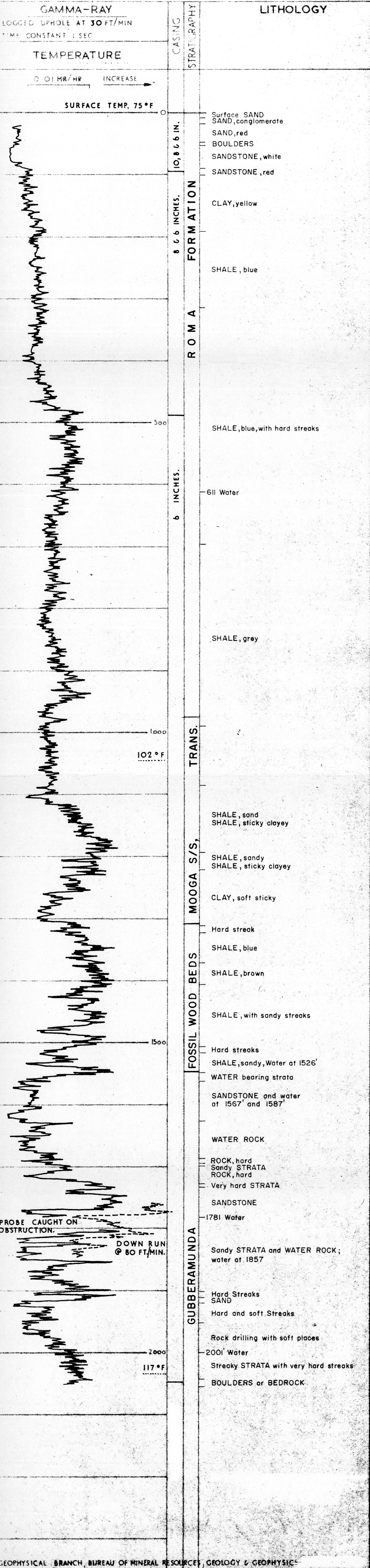
GREAT ARTESIAN BASIN, S.W. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960.

ELVERSTON No.2.
(17)

IWSL REGISTERED No.: 2512. COORDINATES: 27° 30'S, 16.8 MILES NORTH
OWNER: PRIVATE. 146° 00'E, 24.8 MILES EAST.
DRILLED: 1923. ELEVATION: GROUND 870'.
DEPTH, DRILLER: 2050'. REF. LEVEL 871'.
BORE CONDITION: STANDING WATER. LOGGED BY: E.E. JESSON &
LOGGING EQUIPMENT: FAILING LOGMASTER. A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE	22-10-60	22-10-60	22-10-60
FIRST READING	0'	0'	2052'
LAST READING	2058'	1436'	20'
FOOTAGE LOGGED	2058	1436	2032

REMARKS DEPTHS CORRECTED FOR CABLE STRETCH.
TEMPERATURE LOG UNRELIABLE, WATER ENTERED PROBE.
STRATIGRAPHY BY CORRELATION
REVISED INTERPRETATION JUNE 1963



BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

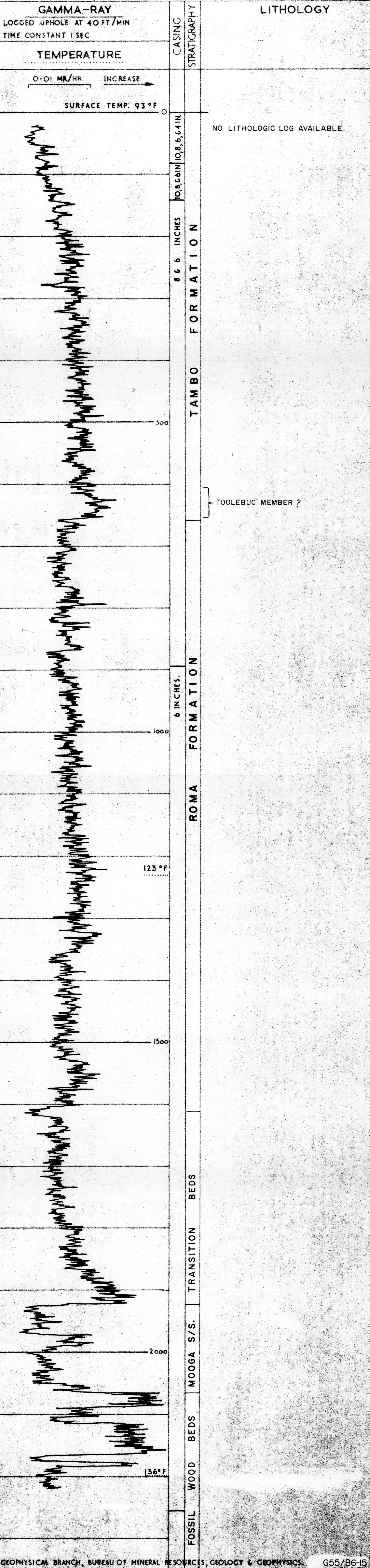
GREAT ARTESIAN BASIN, S.W. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960

MOUNT ALFRED No.1.
(18)

IWSL REGISTERED No.: 3854. COORDINATES: 27° 15'S, 13.6 MILES NORTH
OWNER: PRIVATE. 145° 00'E, 15.3 MILES EAST.
DRILLED: 1910. ELEVATION: GROUND 961'.
DEPTH, DRILLER: 2253'. REF. LEVEL 964'.
BORE CONDITION: PUMPED WATER. LOGGED BY: E.E. JESSON &
LOGGING EQUIPMENT: FAILING LOGMASTER. A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE	27-10-60	27-10-60	27-10-60
FIRST READING	0'		2222'
LAST READING	2232'		20'
FOOTAGE LOGGED	2232		2202

REMARKS DEPTHS CORRECTED FOR CABLE STRETCH.
STRATIGRAPHY BY CORRELATION
REVISED INTERPRETATION JUNE 1963



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GREAT ARTESIAN BASIN, S.W. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960.

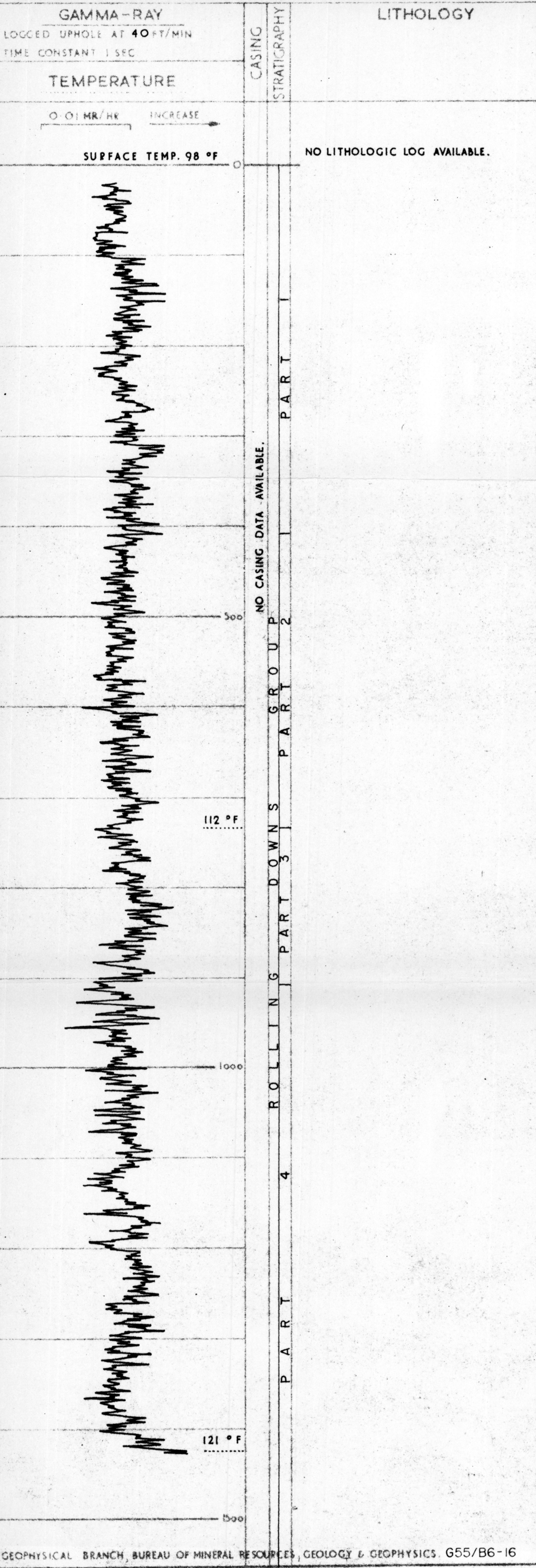
OPAL CREEK.

(22)

I.W.S.C. REGISTERED No : 6452. COORDINATES: 27° 00'S, 33.9 MILES NORTH
OWNER: PRIVATE. 143° 30'E, 16.8 MILES EAST
DRILLED: 1931. ELEVATION: GROUND 690'
DEPTH, DRILLER 1448' REF. LEVEL 693'
BORE CONDITION: PUMPED, WATER. LOGGED BY: E.E. JESSON &
LOGGING EQUIPMENT: FAILING LOGMASTER. A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE	7-11-60		7-11-60
FIRST READING	0'		1426'
LAST READING	1433'		20'
FOOTAGE LOGGED	1433		1406

REMARKS: DEPTHS CORRECTED FOR CABLE STRETCH.
SUB-ARTESIAN BORE.
PARTS OF ROLLING DOWNS GROUP AS SHOWN HAVE NO PHYSICAL SIGNIFICANCE



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GREAT ARTESIAN BASIN, S.W. QUEENSLAND.
EXPERIMENTAL BORE LOGGING PROGRAMME 1960.

YARRONVALE.

(19)

I.W.S.C. REGISTERED No : 12028. COORDINATES: 27° 00'S, 13.0 MILES NORTH
OWNER: PRIVATE. 145° 30'E, 1.5 MILES EAST
DRILLED: 1954. ELEVATION: GROUND 940'
DEPTH, DRILLER 2430' REF. LEVEL 942'
BORE CONDITION: FLOWING, WATER. LOGGED BY: E.E. JESSON &
LOGGING EQUIPMENT: FAILING LOGMASTER. A. RADESKI.
LITHOLOGY BY: DRILLER.

RUN	DUMMY	TEMPERATURE	GAMMA-RAY
DATE	26-10-60		26-10-60
FIRST READING	0'		1401'
LAST READING	2425'		20'
FOOTAGE LOGGED	2425		1381

REMARKS: DEPTHS CORRECTED FOR CABLE STRETCH.
STRATIGRAPHY BY CORRELATION
REVISED INTERPRETATION JUNE 1963

