

-PR- QUINTETE 82(3)A  
7895 1 2 3

616

Re-Counting 8213A

# ROKE

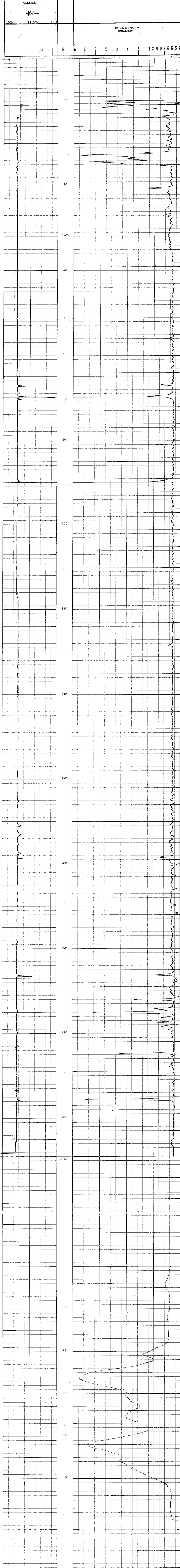
SIDEWALL DENSITOG  
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINITE COAL LTD.
WELL	WELL	QBD - 8201
LOCATION	FIELD	BAROOK
PROVINCE	PROVINCE	BRITISH COLUMBIA
GROUND LEVEL	GROUND LEVEL	56
Log Measured from	REC FLOOR	56
Well Depth Measured from	REC FLOOR	56
Brand No.	ONE	
Date	FEB. 1 1982	
Time Reading	248 M	
Leads Reading	0 M	
Charge Used	248 M	
Depth Reading	248 M	
Charge Used	4.0 M	
Charge Drive	35D	
Fluid Type	35 H	
Liquid Level	HQ	
Min. Depth		
Operating Time	2 HOURS	
Track No.	FT - 1	
Recorded By	JAMES	
Witnessed By	LOTTIE	

RUN NO.	GENERAL		GAMMA RAY		SIDEWALL DENSITOG		CPS/DIV
	FROM	TO	T.C. SEC.	SENS. SETTINGS	T.C. SEC.	ZERO DIV. OR R	
ONE	0	248		5	113.13	2.93	113.13

REMARKS RECORDER ON MAGNETIC TAPE WITH NIMS COMPUTER V1.0  
DENSITY TAPE B-1 (1.7/8) QUIN QUIN QBD - 8201 1 FEB 82  
CALIPER TAPE A-2 (1.7/8) QUIN QUIN QBD - 8201 1 FEB 82



616









# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

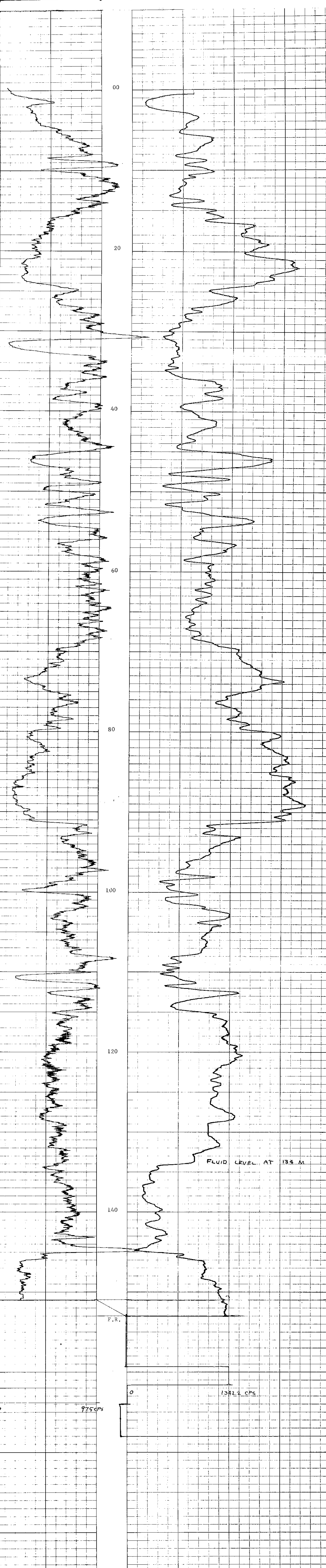
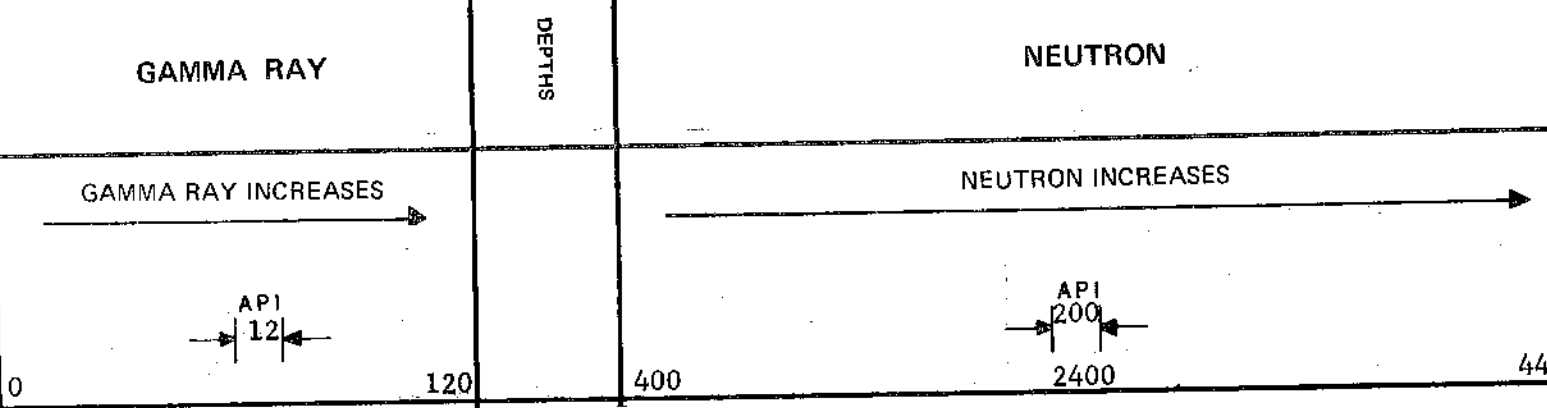
*72-Quintette 823A*

FILE NO.	COMPANY	QUINTEITE COAL LTD.
LSD	WELL	QBD - 8202
SEC	LOCATION	
TYPE	FIELD	BARROCK
ROE		
M		
	PROVINCE	BRITISH COLUMBIA
	GROUND LEVEL	
	Log Measured from	RIG FLOOR 0.6M Above Perm. Datum
	Well Depth Measured from	RIG FLOOR
		K.R. DEN
		OSG
		G.L. 200 METRIC
Run No.	ONE	
Date	10 FEB 1982	
First Reading	132M	
Last Reading	0	
Footage Logged	152	
Depth Reached	152.5	
Depth Driller	157.5	
Casing Bore	5.5	
Casing Driller	300D	
Fluid Type		
Liquid Level	134	
Mm. Diam.	HQ	
Rm @		
Operating Time	2 HRS	
Truck No.	KU-1	

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	GRN125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	34MM	TOOL MODEL NO.	GRN125
DETECTOR MODEL NO.		DIAMETER	34MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	150MM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	430MM
HOIST TRUCK NO.	FU-1	TYPE	AmBe
INSTRUMENT TRUCK NO.	FU-1	STRENGTH	3 CURIES
TOOL SERIAL NO.	A005		

LOGGING DATA											
GENERAL					GAMMA RAY			NEUTRON			
RUN NO.	DEPTHS	SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS	
	FROM	TO	M / MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
ONE	0	152	4	3		0	12	3		2L	200

REMARKS RECORDED ON A-1 QUIN BAB QBD-8202 10 FEB 82



Recorded By: FERGUSON

Witnessed By: LORTIE

616

72 - QUINTEITE 8231A

# ROKE

## SIDEWALL DENSILOG

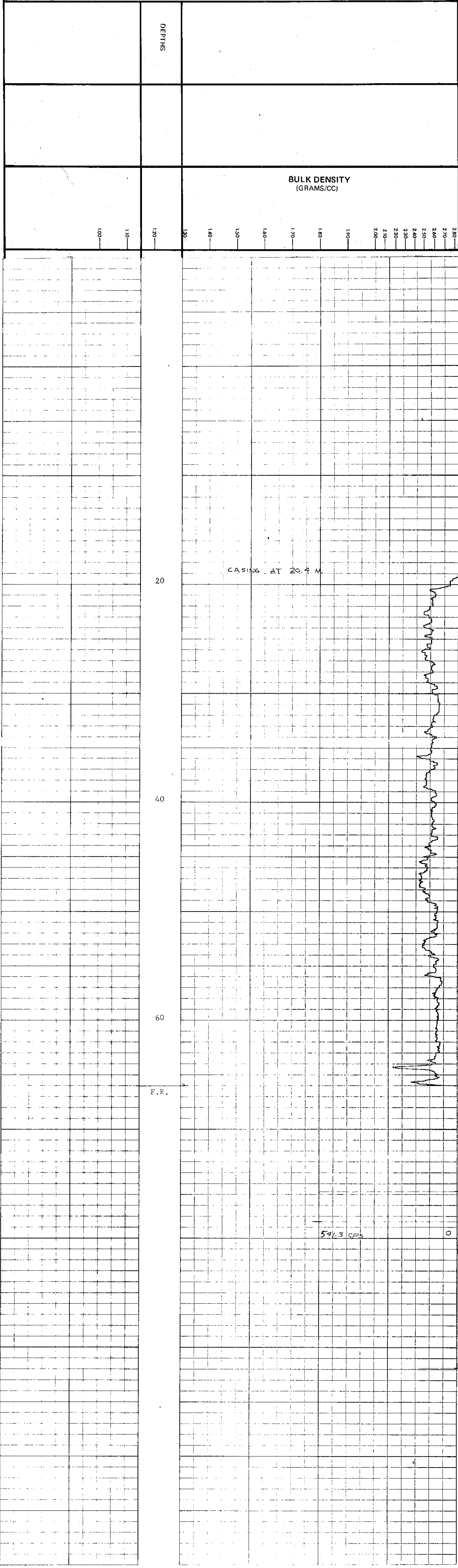
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTEITE COAL LIMITED
LSD	WELL	QBD - 8203
SEC	LOCATION	
TWP	FIELD	BABCOCK
RGE	PROVINCE	BRITISH COLUMBIA
W	GROUND LEVEL	
	RIG / FLOOR	0.6M
	Elev. Above Perm. Datum	
	RIG / FLOOR	
	Other Services:	GRN
	K.B.	
	CSG	
	G.L.	200 METRIC
Perman. Datum		
Log Measured from		
Well Depths Measured from		
Run No.	ONE	
Date	17 FEB 1982	
First Reading	66M	
Last Reading	20	
Footage Logged	46	
Depth Reached	67	
Depth Driller	73.45	
Casing Bore	20.4	
Casing Driller	20.45	
Fluid Type	MUD	
Liquid Level	DRY	
Mfr. Diarn.	HQ	
Operating Time	1 HR	
Truck No.	FU-1	
Recorded By	FERGUSON	Witnessed By
		LOKITE

616

RUN NO.	GENERAL		SPEED M/MIN	GAMMA RAY			SIDEWALL DENSILOG			
	FROM	TO		T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	CPS/ DIV
ONE	20	66	6				.5		2.95R	-54.13

REMARKS RECORDED ON MAGNETIC TAPE WITH NIMS COMPUTER V1.0  
 DENSITY TAPE A-1 (1 7/8) QUIN BAB QBD-8203 FEB 17/1982  
 LOGGED THROUGH HQ DRILL RODS, CASING AT 20.4 M





# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

Mr. Quintette 8212A

FILE NO.	COMPANY	QUINTETT COAL LIMITED
LSD SEC TYP	WELL	QBD - 8203
RGE	LOCATION	
M	FIELD	BABOOCK
	PROVINCE	BRITISH COLUMBIA
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	RIG FLOOR	0.6M Above Perm. Datum
Well Depths Measured from	RIG FLOOR	G.L. _____
		200 METRIC
Run No.	ONE	
Date	17 FEB 1982	
First Reading	0	
Last Reading	68	
Footage Logged	68.5	
Depth Reached	73.45	
Casting Roke	20.4	
Casting Driller	20.45	
Fluid Type	MUD	
Liquid Level	DRY	
Min. Diam.	HO	
Rm @		
Operating Time	1 HR	
Truck No.	FU-1	
Recorded By	FERGUSON	Witnessed By
		LOTTIE

616

### EQUIPMENT DATA

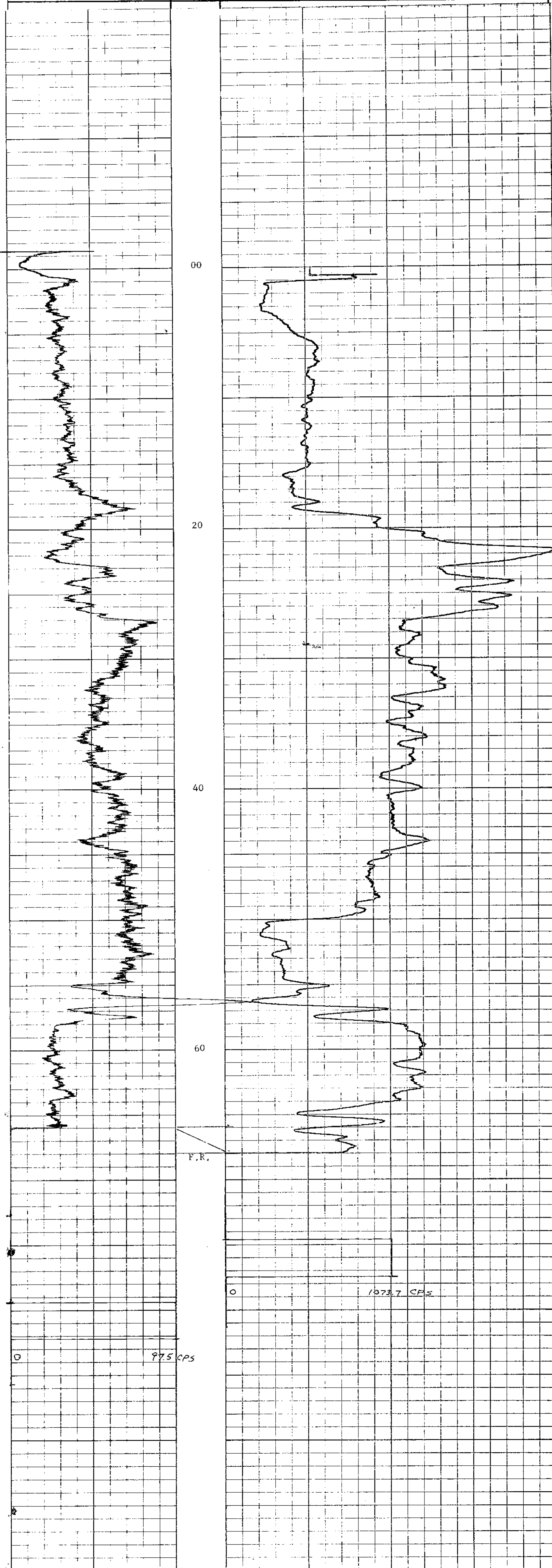
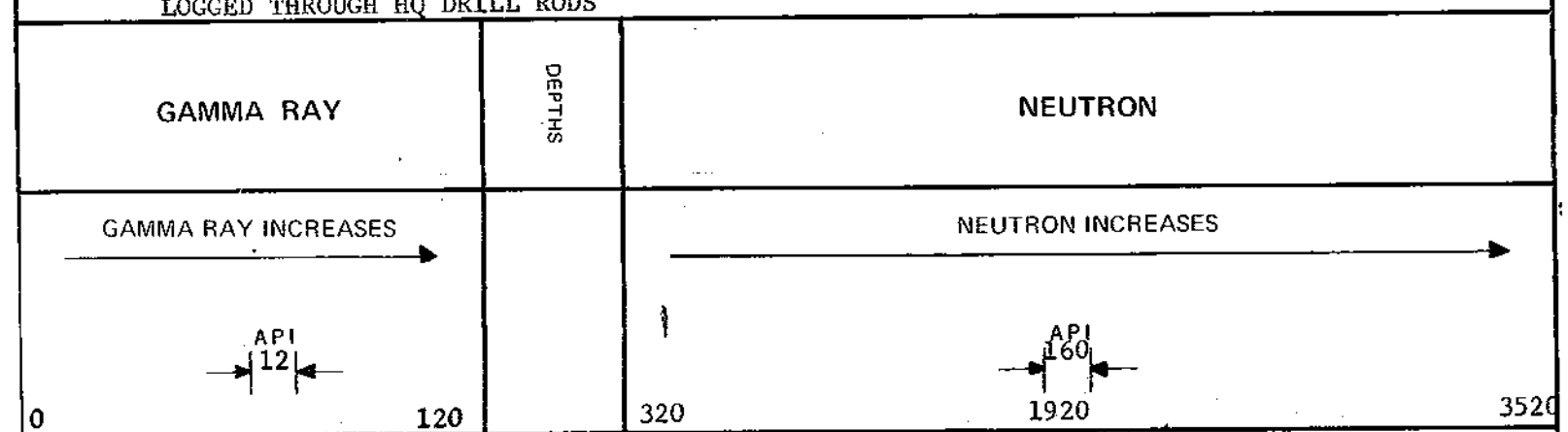
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	GRN 125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	GRN 125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	15CM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	43CM
		TYPE	AmBe
		STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	0	68	4	3		0	12	3		2L	160

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB 8203 FEB 17/82

LOGGED THROUGH HQ DRILL RODS



TR-Oil-Tests 84(2)

# ROKLE

SIDEWALL DENSLOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL: QBD-8204

LOCATION: BARONS

FIELD: BARONS

OPERATOR: GEOMETRIC OIL LTD.

DATE: 1982

LOG NO: 200

LOG TYPE: DENSLOG

LOG SCALE: 1.00

LOG DATE: 1982

LOG TIME: 13:15

LOG BY: J. J. J.

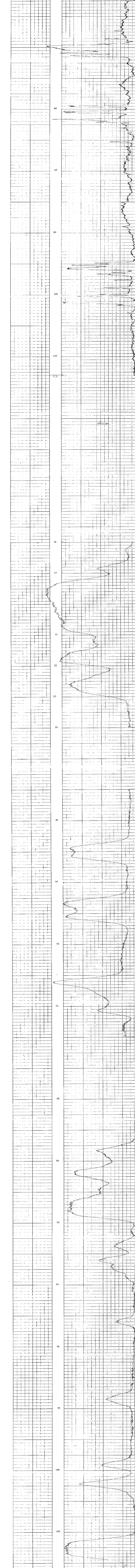
LOG NO: 616

RECORDED BY: J. J. J.

GENERAL				GAMMA RAY				SIDEWALL DENSLOG			
RUN NO.	DEPTHS FROM	TO	SPEED N/ MIN	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR H	API GR. UNITS PER LOG DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR H	CPG/ DIV
ONE	0	126	4					.5			54.13
EXP	18	24	4								
EXP	37	45	4								
EXP	88	104	4								

REMARKS: RECORDED ON MAGNETIC TAPE 5-1 (1.78) QUIN-BAR QBD-8204 5/11/82  
LOGGED THROUGH HQ DRILL ROOM

DEPTH	BULK DENSITY (GRAMS/CC)
0	1.85
10	1.85
20	1.85
30	1.85
40	1.85
50	1.85
60	1.85
70	1.85
80	1.85
90	1.85
100	1.85
110	1.85
120	1.85
130	1.85
140	1.85
150	1.85
160	1.85
170	1.85
180	1.85
190	1.85
200	1.85
210	1.85
220	1.85
230	1.85
240	1.85
250	1.85
260	1.85
270	1.85
280	1.85
290	1.85
300	1.85
310	1.85
320	1.85
330	1.85
340	1.85
350	1.85
360	1.85
370	1.85
380	1.85
390	1.85
400	1.85
410	1.85
420	1.85
430	1.85
440	1.85
450	1.85
460	1.85
470	1.85
480	1.85
490	1.85
500	1.85
510	1.85
520	1.85
530	1.85
540	1.85
550	1.85
560	1.85
570	1.85
580	1.85
590	1.85
600	1.85
610	1.85
620	1.85
630	1.85
640	1.85
650	1.85
660	1.85
670	1.85
680	1.85
690	1.85
700	1.85
710	1.85
720	1.85
730	1.85
740	1.85
750	1.85
760	1.85
770	1.85
780	1.85
790	1.85
800	1.85
810	1.85
820	1.85
830	1.85
840	1.85
850	1.85
860	1.85
870	1.85
880	1.85
890	1.85
900	1.85
910	1.85
920	1.85
930	1.85
940	1.85
950	1.85
960	1.85
970	1.85
980	1.85
990	1.85
1000	1.85



LOGGED THROUGH HQ DRILL ROOM



Mr. Quinte Sala

# ROKE

GAMMA RAY NEUTRON LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTE COAL LTD.
LSD	WELL	QBD - 8204
SEC	LOCATION	
TWP	FIELD	BABCOCK
RGE	PROVINCE	BRITISH COLUMBIA
	Other Services:	DEN
	Permanent Datum	GROUND LEVEL
	Log Measured from	RIG FLOOR 0.6 M Above Perm. Datum
	Well Depth Measured from	RIG FLOOR 200 METRIC
Run No.	ONE	
Date	1 MAR 1982	
First Reading	127M	
Last Reading	0	
Footage Logged	127	
Depth Reached	127.3	
Depth Driller	131	
Casing Rate	4.9	
Casing Driller	4.6	
Fluid Type	MUD	
Liquid Level	80	
Mm. Diam.	HQ	
Rm. @		
Operating Time	2 HR	
Truck No.	FU-1	
Recorded By	FERGUSON	Witnessed By
		LOTTIE

616

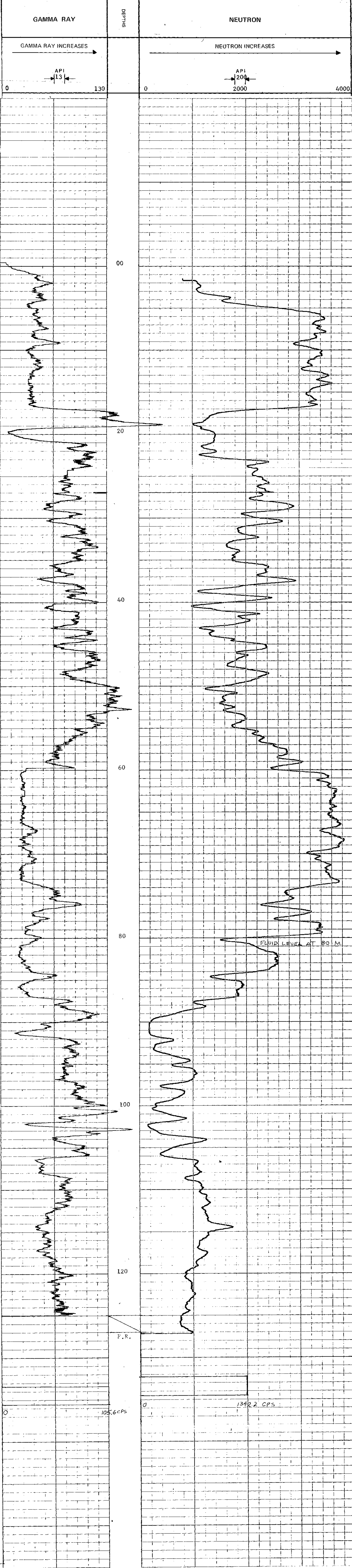
### EQUIPMENT DATA

GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.	32MM			LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	32MM			TOOL MODEL NO.	32MM		
DETECTOR MODEL NO.	SCINTILLATION			DIAMETER	32MM		
TYPE	SCINTILLATION			DETECTOR MODEL NO.	PROPORTIONAL		
LENGTH	10CM			LENGTH	15CM		
DISTANCE TO N. SOURCE	2M			SOURCE MODEL NO.	MRC-N-SS-W		
GENERAL				SERIAL NO.	127		
HOIST TRUCK NO.	FU-1			SPACING	43CM		
INSTRUMENT TRUCK NO.	A005			TYPE	AmBe		
TOOL SERIAL NO.	A005			STRENGTH	3 CURIES		

### LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS
	FROM	TO	M/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
ONE	0	127	4	3			13	3			200

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBD-8204 MAR 1/1982  
LOGGED THROUGH HQ DRILL RODS



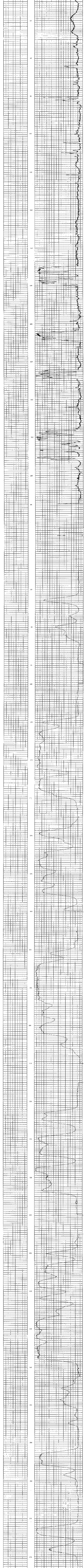
# ROK E

SIDEWALL DENS LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL NO. 72-0117-08  
WELL NAME: OIL ENTERPRISES LTD. 72-0117-08  
LOCATION: 34-00-00-00  
T.O.C. 34-00-00  
FACILITY: 34-00-00  
OPERATOR: OIL ENTERPRISES LTD.  
DATE: 1-1-74  
LOG NO. 1382  
LOG TYPE: DENS LOG  
LOG INTERVAL: 275.4  
LOG START: 275.4  
LOG END: 275.4

GENERAL INFORMATION:  
WELL NO. 72-0117-08  
WELL NAME: OIL ENTERPRISES LTD. 72-0117-08  
LOCATION: 34-00-00-00  
T.O.C. 34-00-00  
FACILITY: 34-00-00  
OPERATOR: OIL ENTERPRISES LTD.  
DATE: 1-1-74  
LOG NO. 1382  
LOG TYPE: DENS LOG  
LOG INTERVAL: 275.4  
LOG START: 275.4  
LOG END: 275.4

DEPTH (m)	GRANULOSITY	GRAIN SIZE	PERCENTAGE	WATER	CLAY	SHALE	SLT	LOG NO.
275.4	100	0	0	0	0	0	0	1382
276.0	100	0	0	0	0	0	0	1382
276.6	100	0	0	0	0	0	0	1382
277.2	100	0	0	0	0	0	0	1382
277.8	100	0	0	0	0	0	0	1382
278.4	100	0	0	0	0	0	0	1382
279.0	100	0	0	0	0	0	0	1382
279.6	100	0	0	0	0	0	0	1382
280.2	100	0	0	0	0	0	0	1382
280.8	100	0	0	0	0	0	0	1382
281.4	100	0	0	0	0	0	0	1382
282.0	100	0	0	0	0	0	0	1382
282.6	100	0	0	0	0	0	0	1382
283.2	100	0	0	0	0	0	0	1382
283.8	100	0	0	0	0	0	0	1382
284.4	100	0	0	0	0	0	0	1382
285.0	100	0	0	0	0	0	0	1382
285.6	100	0	0	0	0	0	0	1382
286.2	100	0	0	0	0	0	0	1382
286.8	100	0	0	0	0	0	0	1382
287.4	100	0	0	0	0	0	0	1382
288.0	100	0	0	0	0	0	0	1382
288.6	100	0	0	0	0	0	0	1382
289.2	100	0	0	0	0	0	0	1382
289.8	100	0	0	0	0	0	0	1382
290.4	100	0	0	0	0	0	0	1382
291.0	100	0	0	0	0	0	0	1382
291.6	100	0	0	0	0	0	0	1382
292.2	100	0	0	0	0	0	0	1382
292.8	100	0	0	0	0	0	0	1382
293.4	100	0	0	0	0	0	0	1382
294.0	100	0	0	0	0	0	0	1382
294.6	100	0	0	0	0	0	0	1382
295.2	100	0	0	0	0	0	0	1382
295.8	100	0	0	0	0	0	0	1382
296.4	100	0	0	0	0	0	0	1382
297.0	100	0	0	0	0	0	0	1382
297.6	100	0	0	0	0	0	0	1382
298.2	100	0	0	0	0	0	0	1382
298.8	100	0	0	0	0	0	0	1382
299.4	100	0	0	0	0	0	0	1382
300.0	100	0	0	0	0	0	0	1382





TR-CONTINENTAL 8251A

# ROKE

OIL ENTERPRISES LTD. CALGARY ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.	COMPANY	QUINTEITE COAL LIMITED
LSD	WELL	QBD 8205
SEC	AGE	
W. M.	LOCATION	
FIELD	BARBOCK	
PROVINCE	BRITISH COLUMBIA	
PERMANENT SURVEY	GRID NO.	Q. G. K.
LOG MEASURED FROM	RIG FLOOR	0.0 M
WELL DEPTH MEASURED FROM	RIG FLOOR	6.1 M
DATE	15 MARCH 1982	
LOG NO.	ONS	
DATE RECORDED	000	
LOG READING	295	
FRONTIER LOGGED	295.5	
DEPTH REACHED	297.8	
Casing Outer	171.0	
Casing Inner	171.0	
Fluid Type	MUD	
Liquid Level	63	
Mm. Dam	HQ	
Operating Time	2 HOURS	
Truck No.	FU - 1	
Recorded By	JERKISON	Witnessed By
		LORTIE

616

### EQUIPMENT DATA

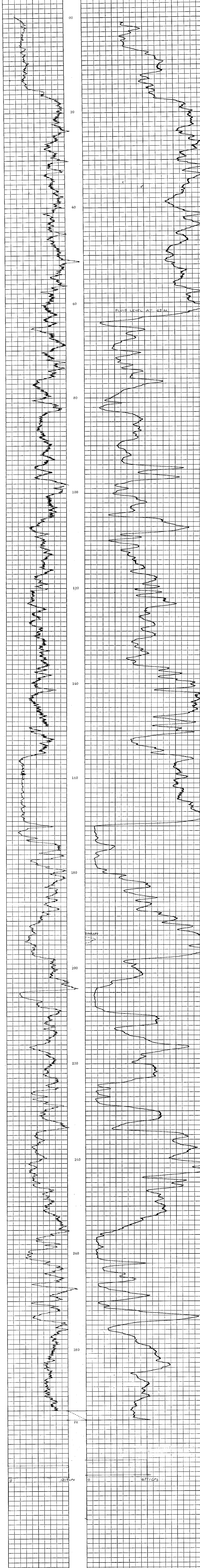
GAMMA RAY				NEUTRON			
RUN NO.	ONE			RUN NO.	ONE		
TOOL MODEL NO.				LOG TYPE	NEUTRON/NEUTRON		
DIAMETER	32 MM			TOOL MODEL NO.	32 MM		
DETECTOR MODEL NO.	SCINTILLATION			DIAMETER			
TYPE				DETECTOR MODEL NO.			
LENGTH	2 M			TYPE	PROPORTIONAL		
DISTANCE TO N. SOURCE				LENGTH	15 CM		
				SOURCE MODEL NO.	MRC-N-SS-W		
				SERIAL NO.			
HOIST TRUCK NO.	FU-1			SPACING	43 CM		
INSTRUMENT TRUCK NO.	FU-1			TYPE	AmBe		
TOOL SERIAL NO.	GRN125A005			STRENGTH	2 CURIES		

### LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH	SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS	
NO.	FROM	TO	M / MIN	SEC.	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	
ONE	000	295	4	3		0	15	3		0	

REMARKS RECORDED ON MAGNETIC TAPE: A-1 ( 1 7/8 ) QUIN BAB QBD 8205 MARCH 15 1982

LOGGED THROUGH HQ DRILL RODS







TR. QUINTELLER BABA

# ROKE

GAMMA RAY NEUTRON LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTELLER COAL LTD.
LSD SEC TWP RGE	WELL	8D - 8206
LOCATION	FIELD	BABCOCK
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	0.6 M
Log Measured from	RIG FLOOR	0.6 M
Well Depths Measured from	RIG FLOOR	0.6 M
Other Services:	DENS	
K.B.	G.L.	
CSG	200 METRIC	
Run No.	ONE	25 MARCH 1982
Date	25 MARCH 1982	
First Reading	00	
Last Reading	90	
Footage Logged	90.5	
Depth Reached	96.6	
Depth Driller	9.2	
Casing Roke	9.1	
Casing Driller	MJD	
Fluid Type	14	
Liquid Level	HQ	
Min. Diam.		
Rm @		
Operating Time	1 HOUR	
Truck No.	FU - 1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

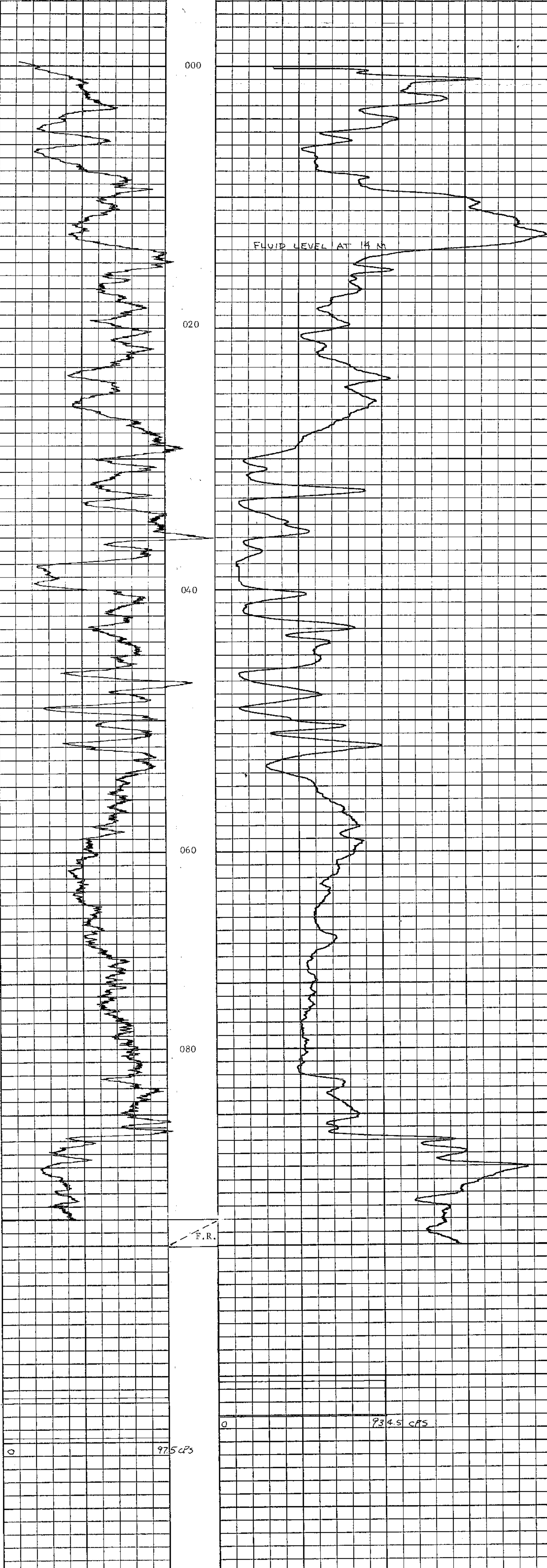
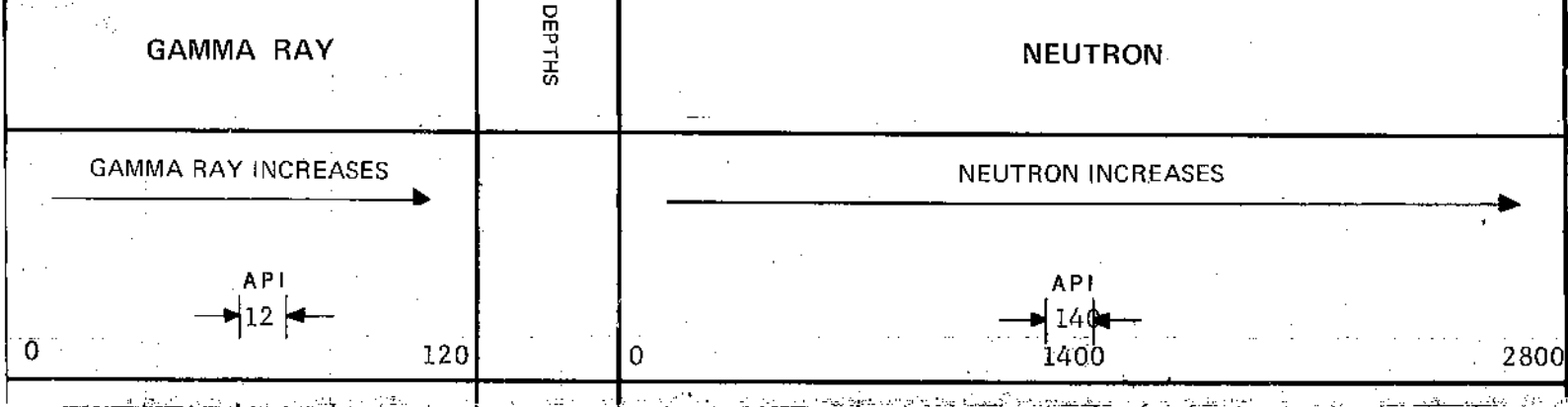
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	3 FU - 1	SPACING	43 CM
INSTRUMENT TRUCK NO.	FU - 1	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A005	STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	DEPTHS		SPEED M/MIN	T.C. SEC.	GAMMA RAY			NEUTRON		
	FROM	TO			ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	00	90	4	3	0	12	3	0	140	

REMARKS RECORDED ON MAGNETIC TAPE A-1 1-7/8 QUIN BAB QBD-8206 MARCH 25, 1982  
LOGGED THROUGH HQ DRILL RODS



97.5 cps



72 - QUINTE SALES

# ROKE

GAMMA RAY NEUTRON LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTECOAL LIMITED
WELL	QBD 8207	
LOCATION		
FIELD	BAROOCK	
PROVINCE	BRITISH COLUMBIA	
PERMIT DATED	GROUND LEVEL	0.7 M
LOG MEASURED FROM	RIG FLOOR	ABOVE FIRM DATUM
WELL DEPTH MEASURED FROM	RIG FLOOR	200 METRIC
DATE	ONE	3 APRIL 1982
FIRST READING		200 M
LAST READING		200
FOOTAGE LOGGED		200.6
DEPTH REACHED		206.3
DRILLER		6.3
CASING DRILLER		MDD
FLUID TYPE		50.7
LIQUID LEVEL		HQ
MTR. DEPTH		
RM @		
OPERATING TIME		2 HOURS
TRUCK NO.		FU-1

616

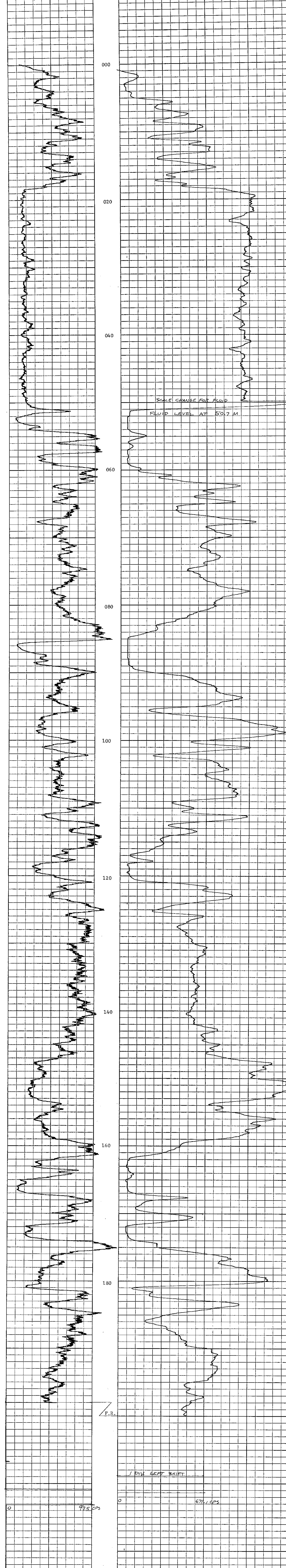
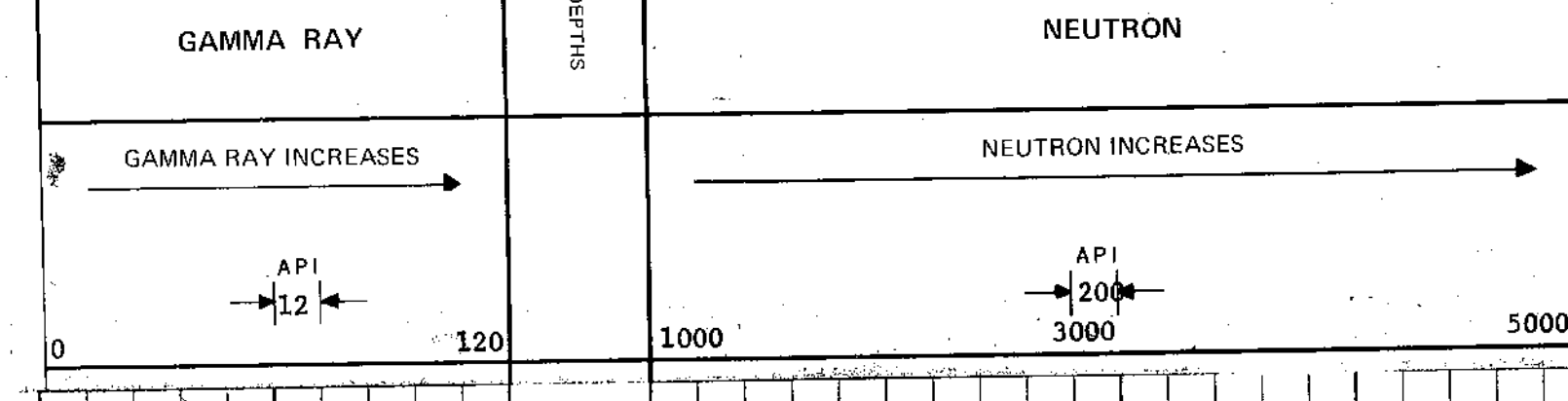
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	32 MM	LOG TYPE	NEUTRON/NEUTRON
DIAMETER		TOOL MODEL NO.	32 MM
DETECTOR MODEL NO.		DIAMETER	
TYPE	SCINTILLATION	DETECTOR MODEL NO.	PROPORTIONAL
LENGTH	10 CM	TYPE	
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	FU-1	SPACING	43 CM
INSTRUMENT TRUCK NO.	FU-1	TYPE	AmBe
TOOL SERIAL NO.	GRN 125A005	STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	GENERAL			GAMMA RAY			NEUTRON			
	DEPTHS	SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS
	FROM	TO	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	00	49.9	4	3		00	12	3		200
1	49.9	200	4	3		00	12	3		-1L*

REMARKS RECORDED ON MAGNETIC TAPE A-1 QUIN BAB QBD 8207 3 APRIL 1982  
LOGGED THROUGH HQ DRILL RODS



P.R.

1 DIV LEFT SHIFT

97.5 CPS

671.1 CPS



# ROKE

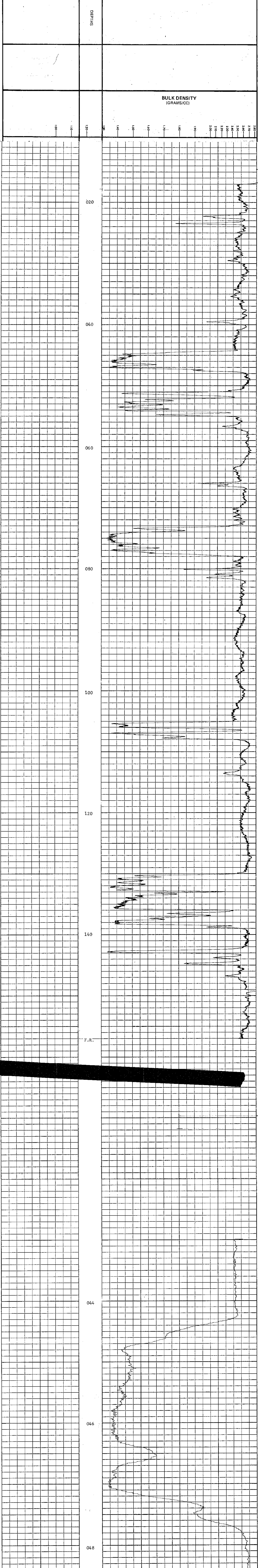
SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINETTE COAL LIMITED
WELL	QBD 8208	
LOCATION		
FIELD	HARCOCK	
PROVINCE	BRITISH COLUMBIA	
PERMANENT DATUM	GROUND LEVEL	
LOG MEASURED FROM	RIG FLOOR	0.6 M Above Form Datum
WELL DEPTH MEASURED FROM	RIG FLOOR	200 METERS
DATE	11 APRIL 1982	
FIRST READING	17	
LAST READING	140	
FOOTAGE LOGGED	138	
DEPTH REACHED	163.6	
DEPTH DILUTE	18.2	
CASING RATE	17	
CASING DRIVER	KOD	
FLUID TYPE	DRY	
LIQUID LEVEL	RD	
MIN. DIAM.		
OPERATING TIME	2 HOURS	
TRUCK NO.	133-FU-1	
RECORDED BY	HENRIKSON	
WITNESSED BY	JORTIE	

RUN NO.	GENERAL		SPEED M/MIN	GAMMA RAY			SIDEWALL DENSILOG			
	FROM	TO		T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API. G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R
1	17	157	8				0.5		2.95 R	-54.13
EXP	43	56	4				0.5		2.95 R	-54.13
EXP	72	79	4				0.5		2.95 R	-54.13
EXP	104	109	4				0.5		2.95 R	-54.13
EXP	129	146	4				0.5		2.95 R	-54.13

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAR QBD 8208 11 APRIL 1982  
LOGGED THROUGH HO DRILL RODS



616

R. O. QUINTELL 8413A

GAMMA RAY NEUTRON LOG

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTELL COAL LIMITED
WELL NO.	WELL	QED 8208
TWP	RGE	
W	M	
LOCATION	FIELD	HABROCK
PROVINCE	BRITISH COLUMBIA	
PERMANENT DATUM	GROUND LEVEL	
LOG MEASURED FROM	RIG FLOOR	0.6 M Above Perm. Datum
WELL DEPTH MEASURED FROM	RIG FLOOR	200 METRIC
Run No.	ONE	
Date	11 APRIL 1982	
First Reading	00	157 M
Last Reading	157	157.3
Footage Logged	157	157.3
Depth Reached	157.3	157.3
Depth Driller	1.7	153.6
Casing Rate	18.3	
Casing Driller	MJD	
Fluid Type	DRY	
Liquid Level	HO	
Min. Diam.		
Fm @		
Operating Time	1 HOURS	
Truck No.	FU-1	
Recorded By	ERAGUSON	Witnessed By
		LOEITE

616

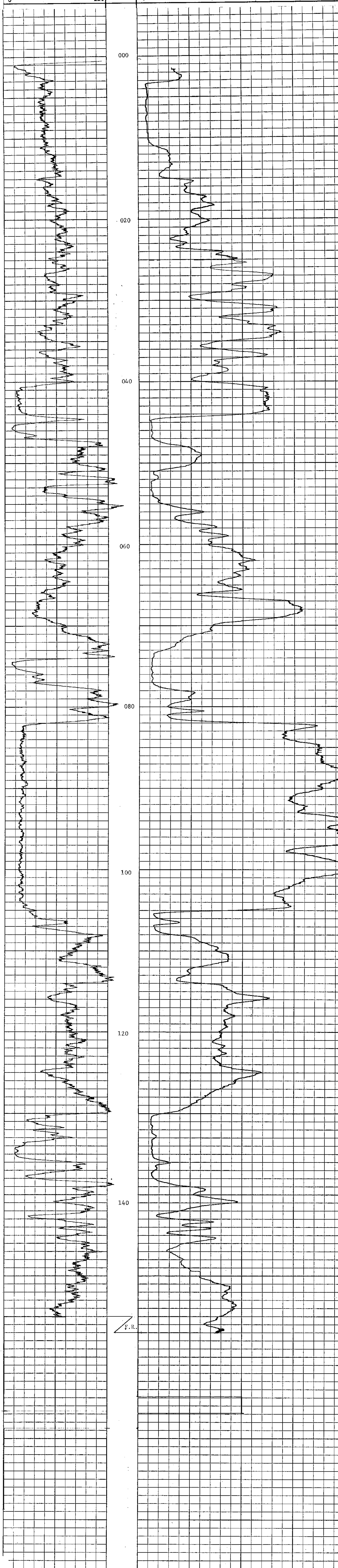
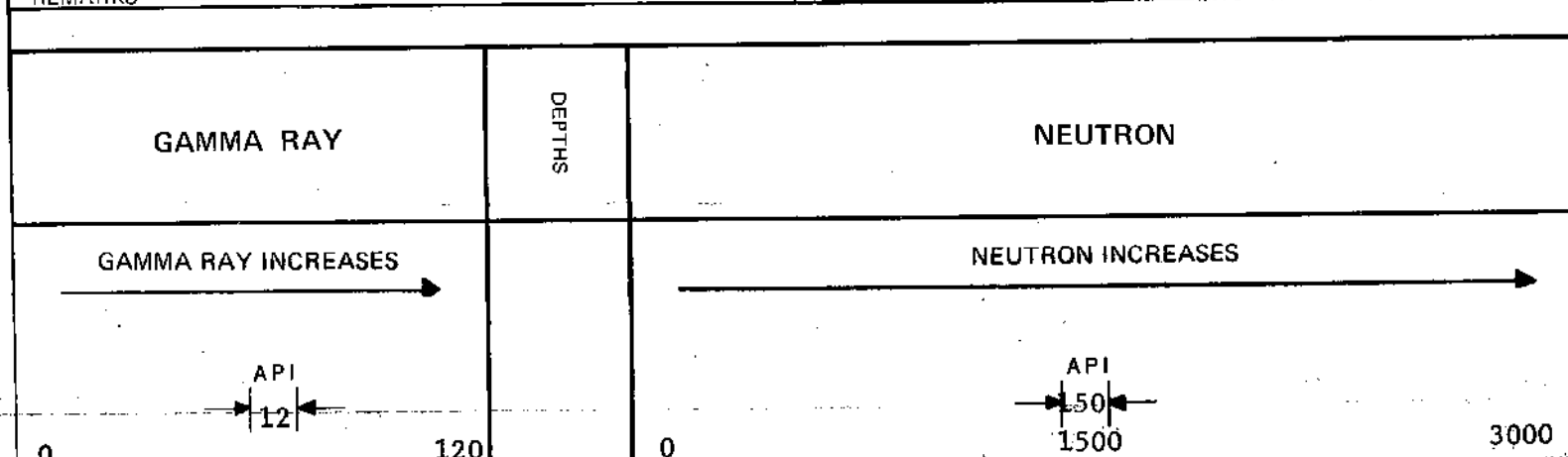
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	FU-1	SPACING	43 CM
INSTRUMENT TRUCK NO.	FU-1	TYPE	AmBe
TOOL SERIAL NO.	125A007	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL			GAMMA RAY				NEUTRON			
	DEPTHS	SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS	
1	FROM TO	M/MIN	SEC	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	
	00 157	4	3			12	3		00	150	

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB 8208 11 APRIL 1982



F.R.



Pa. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8209

LOCATION SYNCLINE EXT.

AREA \_\_\_\_\_

DATE LOGGED JULY 27

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

COAL \_\_\_\_\_

LITHOLOGY \_\_\_\_\_

LOG \_\_\_\_\_

### BOREHOLE DATA

GROUND EL. 902.4

DEPTH DRILLED 45

DEPTH LOGGED 42

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

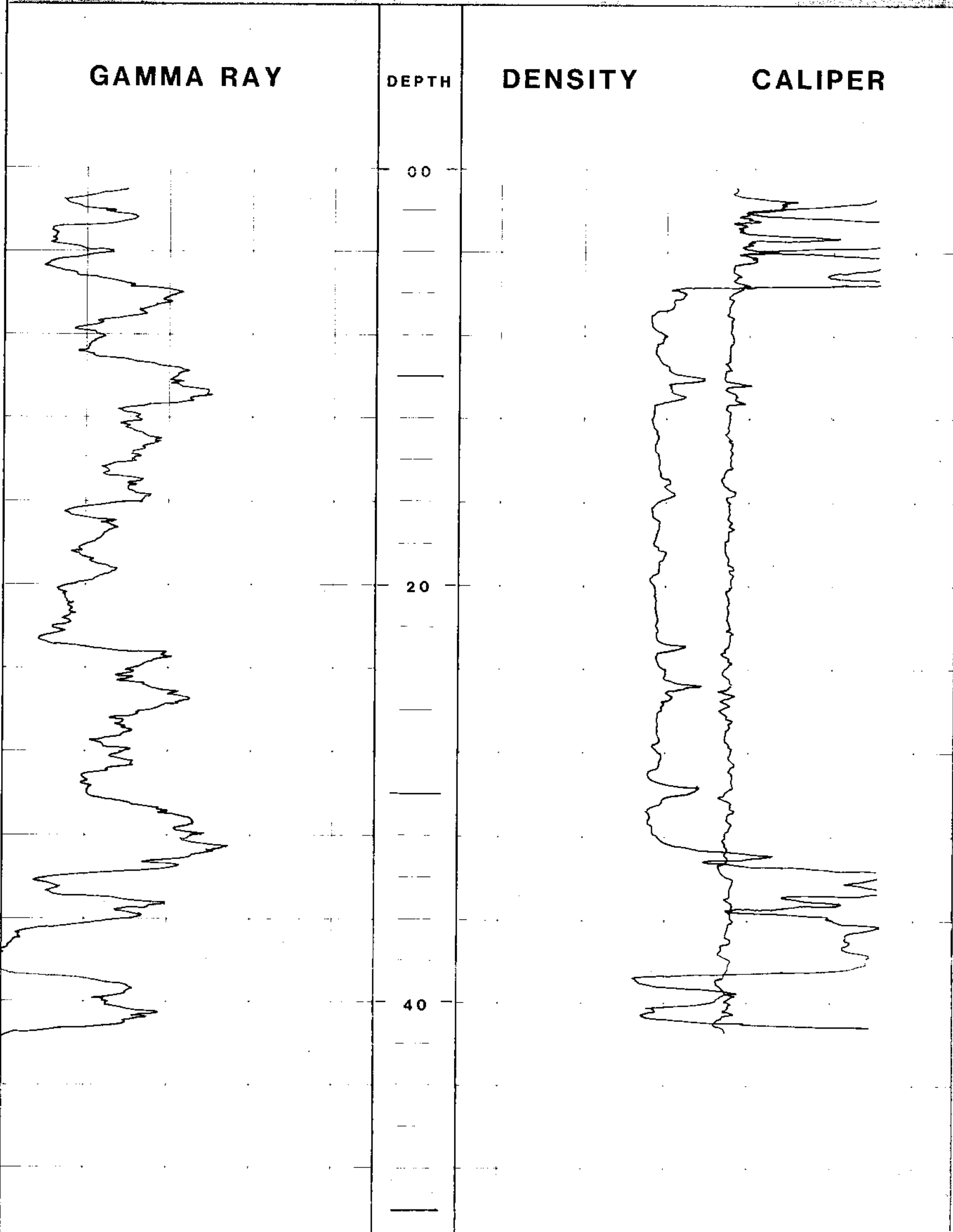
LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

# 616



TR-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8210

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED JULY 30

VERT. SCALE 1:200

CHART SPEED 4 M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 886.7

DEPTH DRILLED 47

DEPTH LOGGED 46

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

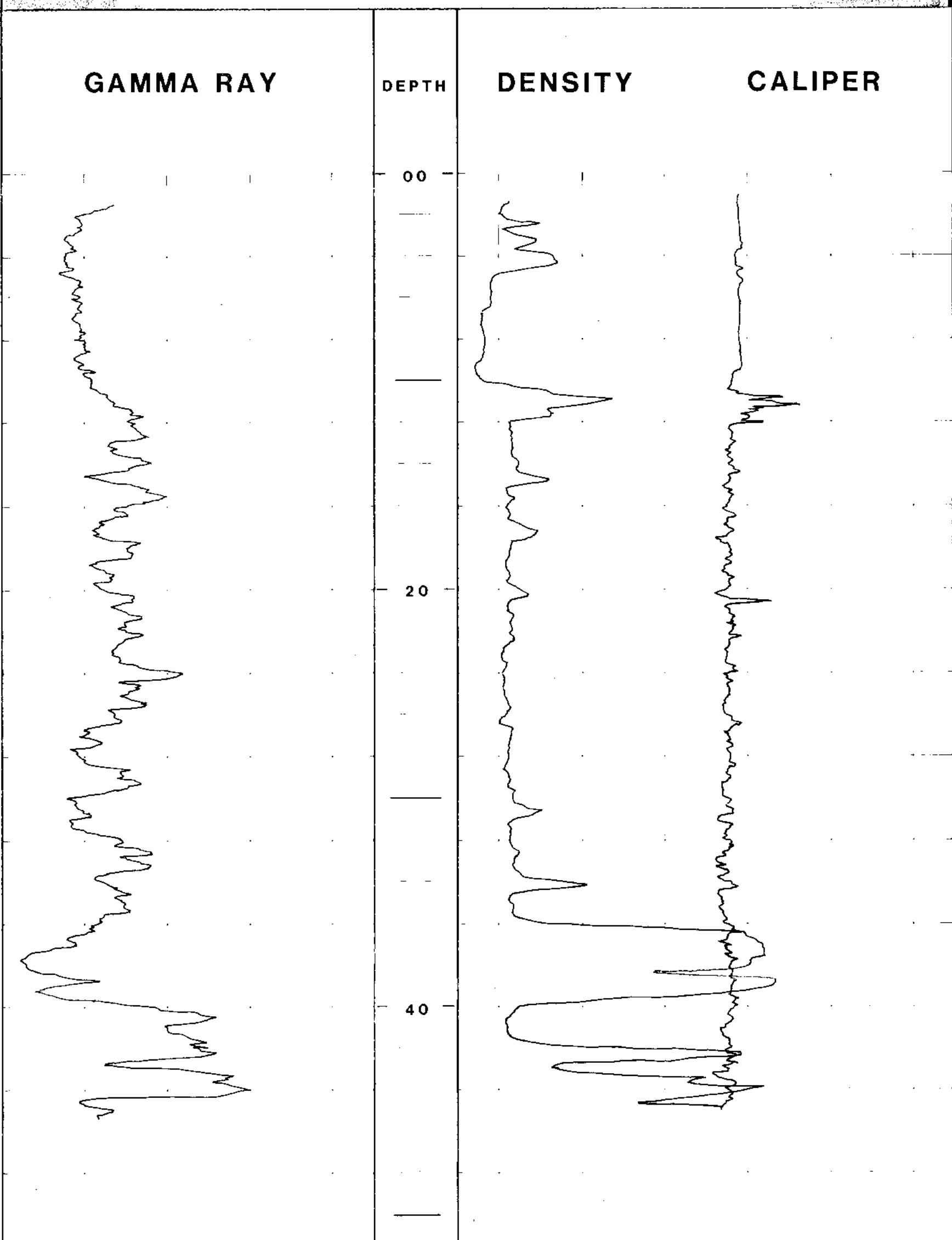
HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE GAMMA-500 cps

DENSITY-5000cps

# 616





PR-QUINTETTE 8263A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8210  
LOCATION SYNCLINE EXT.  
AREA \_\_\_\_\_  
DATE LOGGED JULY 30  
VERT. SCALE 1:50  
CHART SPEED \_\_\_\_\_

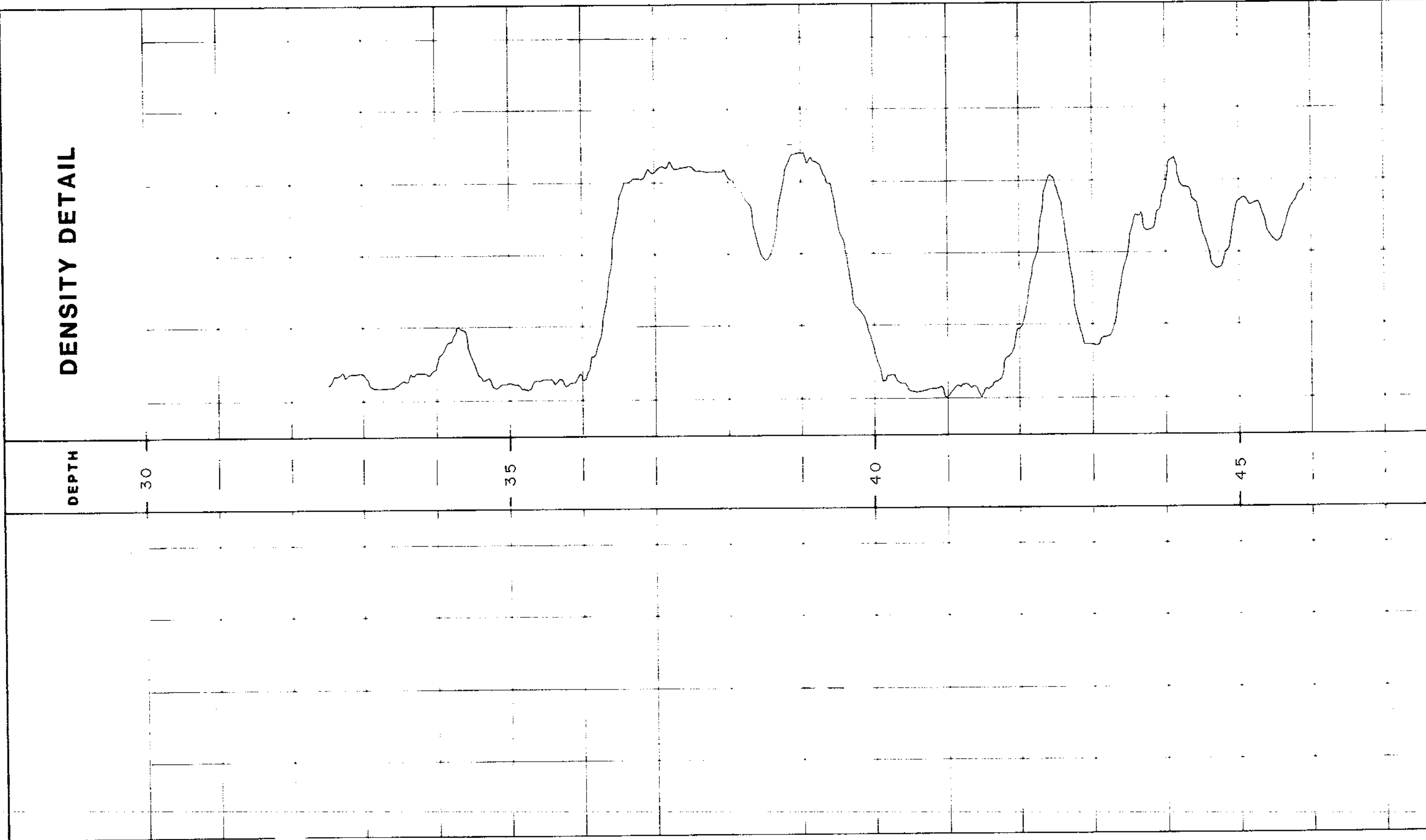
## SEAM DETAIL LOG

### BOREHOLE DATA

GROUND EL. 886.7  
DEPTH DRILLED 47  
DEPTH LOGGED 46  
REMARKS \_\_\_\_\_  
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

## LOG SUITE DENSITY

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps



616





Re-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8211

LOCATION SYNCLINE EXT.

AREA \_\_\_\_\_

DATE LOGGED JULY 23

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL LOG

### BOREHOLE DATA

GROUND EL. 839.1

DEPTH DRILLED 33

DEPTH LOGGED 26

REMARKS \_\_\_\_\_

## LOG SUITE DENSITY

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

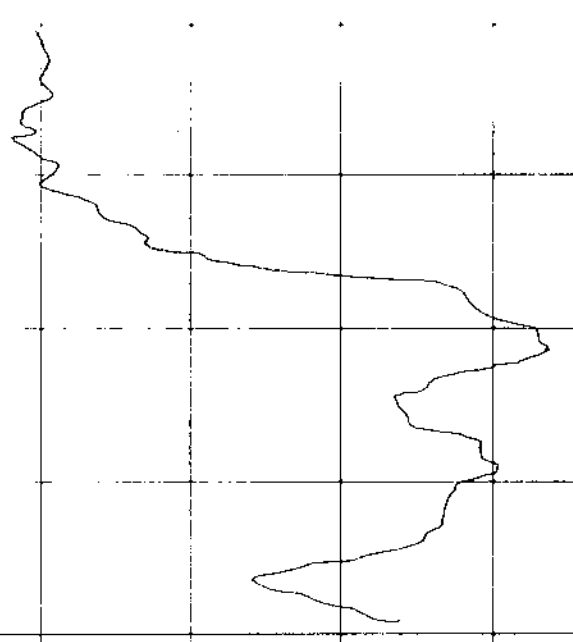
# 616

## DENSITY DETAIL

DEPTH

20

25



TR-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8212

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED JULY 23

VERT. SCALE 1:200

CHART SPEED 48 / MIN

## BOREHOLE DATA

GROUND EL. 835.1

DEPTH DRILLED 57

DEPTH LOGGED 56

REMARKS \_\_\_\_\_

## COAL LITHOLOGY LOG

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

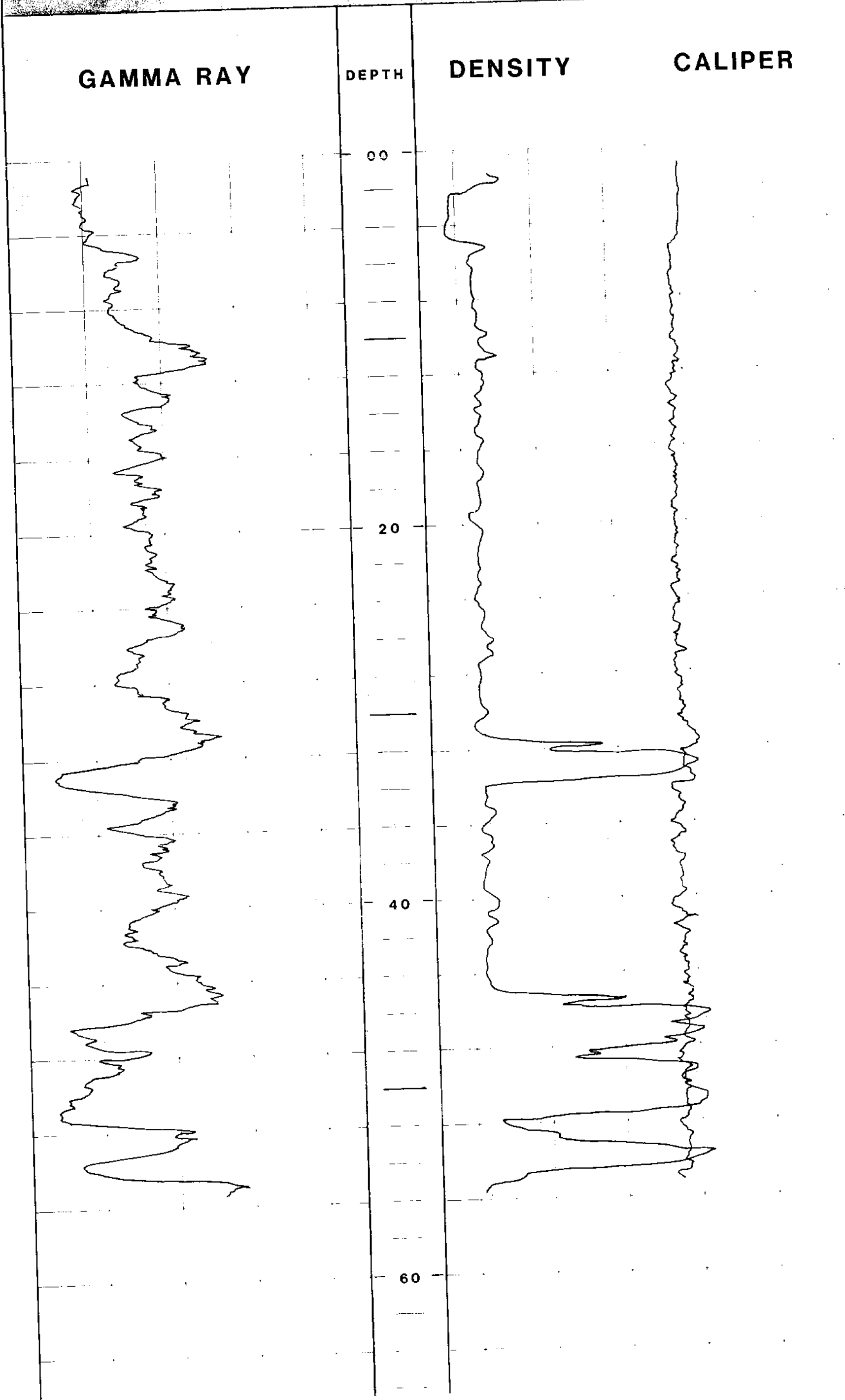
LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE  $\frac{1}{1000}$   
DENSITY-6000cps

# 616



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8213

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED JULY 28

VERT. SCALE 1:200

CHART SPEED 4M./MIN.

## BOREHOLE DATA

DEPTH DRILLED 99

DEPTH LOGGED 88

REMARKS GAMMA STUCK

## COAL LITHOLOGY LOG

**LOG SUITE**

GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

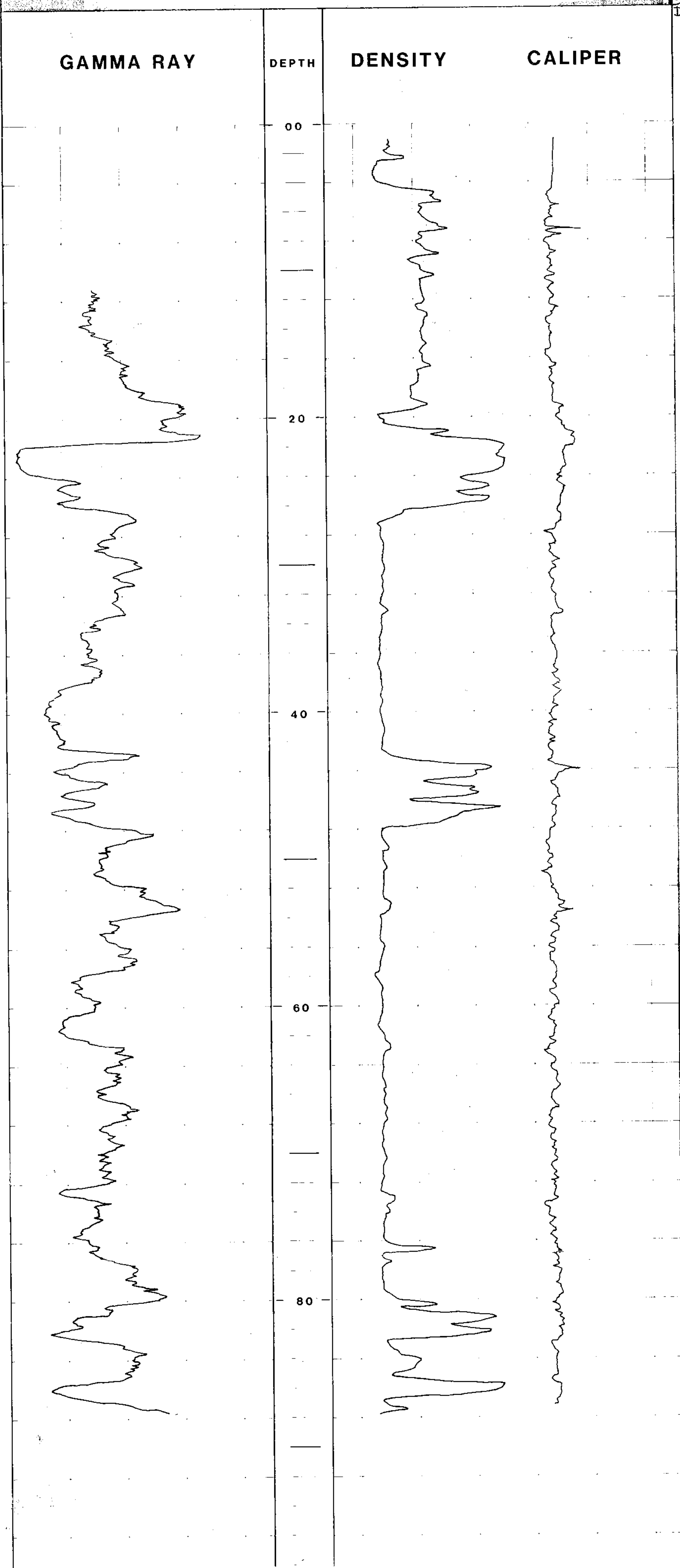
HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

# 616





TR-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE

QBD 8214

LOCATION

SYNCLINE EXT

AREA

DATE LOGGED

JULY 29

VERT. SCALE

1:200

CHART SPEED

4M./MIN.

COAL

BOREHOLE DATA

LITHOLOGY

GROUND EL.

891.2

LOG

DEPTH DRILLED

54

DEPTH LOGGED

54

REMARKS

LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY

L.M.

HOR. SCALE

GAMMA-500 cps

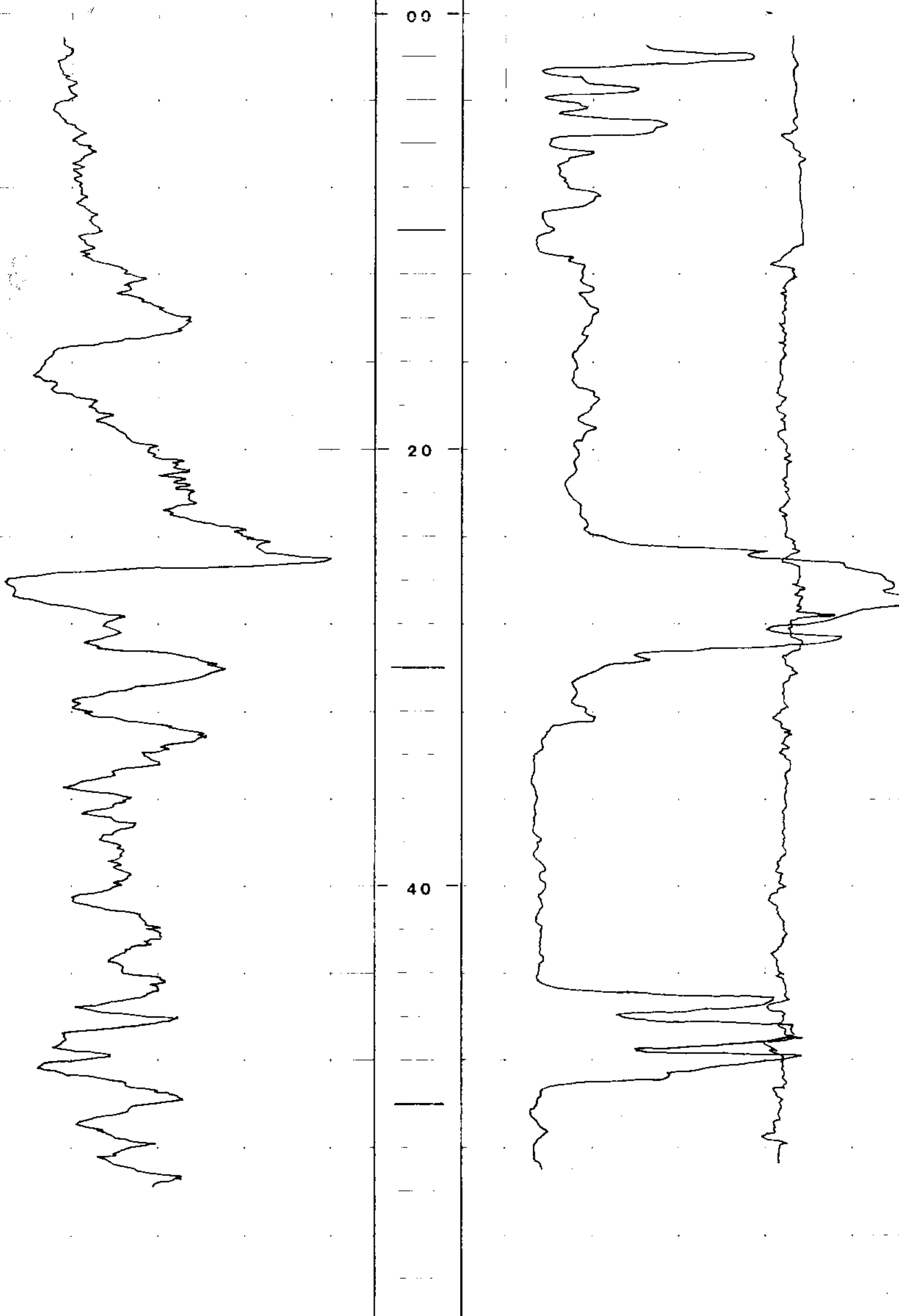
DENSITY-5000cps

GAMMA RAY

DENSITY

CALIPER

DEPTH



616

P2. Quintette 8263A

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QBD 8215

LOCATION SYNCLINE EXT.

DATE LOGGED AUG 2

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

**COAL**

**LITHOLOGY**

**LOG**

**BOREHOLE DATA**

GROUND EL. 882.4

DEPTH DRILLED 77

DEPTH LOGGED 76

REMARKS \_\_\_\_\_

**LOG SUITE**

GAMMA RAY

DENSITY

CALIPER

LOG SUITE \_\_\_\_\_

LOG SUITE \_\_\_\_\_

LOG SUITE \_\_\_\_\_

HOR. SCALE GAMMA-500 CM

HOR. SCALE DENSITY-500 CM

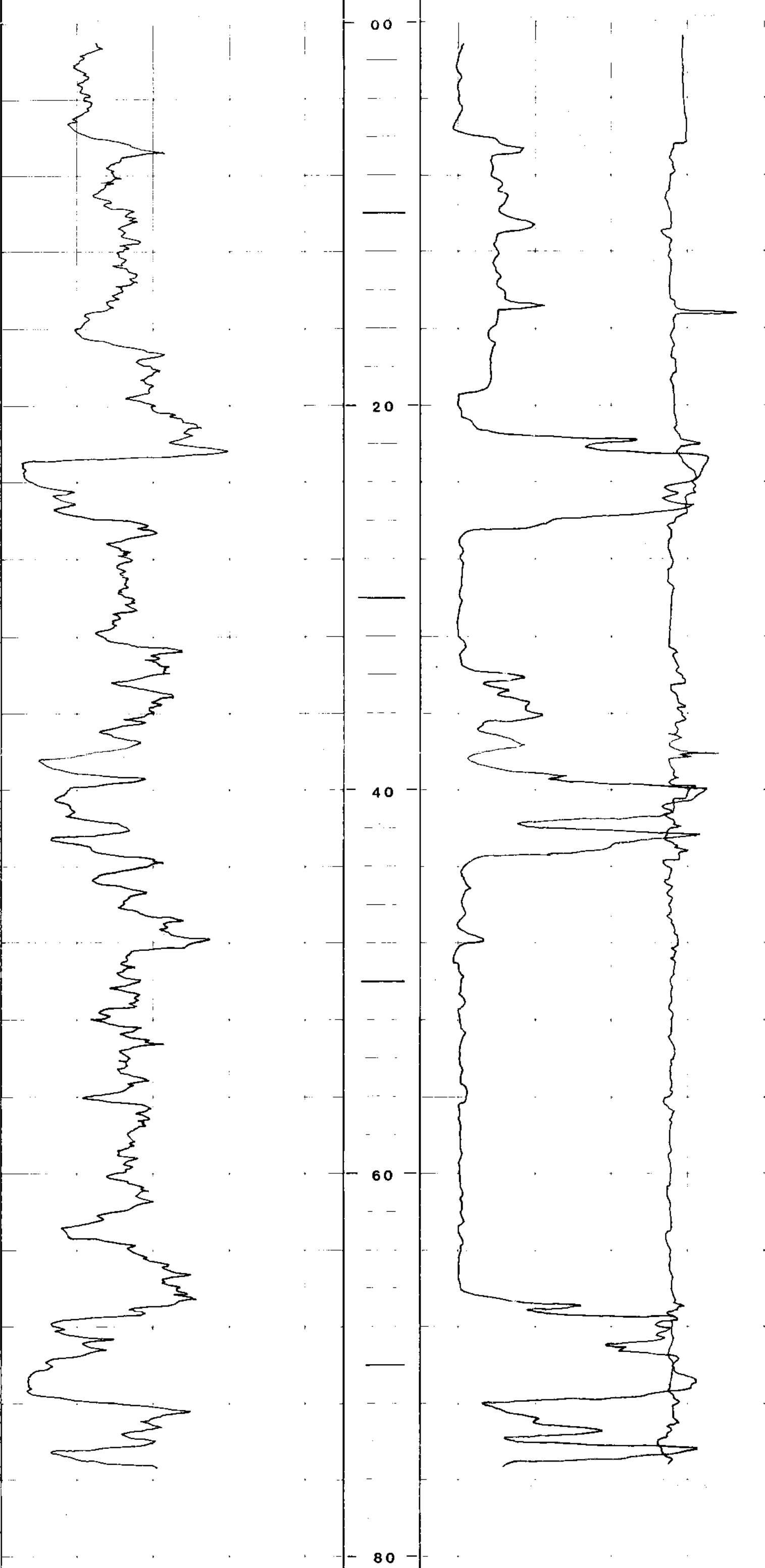
LOGGED BY LM

**GAMMA RAY**

**DEPTH**

**DENSITY**

**CALIPER**



**616**

Fr-Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8216

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED AUG. 1

VERT. SCALE 1-200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 8815

DEPTH DRILLED 27

DEPTH LOGGED 24

REMARKS DENSITY

STUCK \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

## LOG SUITE

GAMMA RAY  
DENSITY  
CALIPER

# 616

GAMMA RAY	DEPTH	DENSITY	CALIPER
	<p>00</p> <p>20</p>		



Pa-Quintette 8a(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8216

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED AUG. 1

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

GROUND EL. 881.5

DEPTH DRILLED 27

DEPTH LOGGED 24

REMARKS \_\_\_\_\_

## LOG SUITE

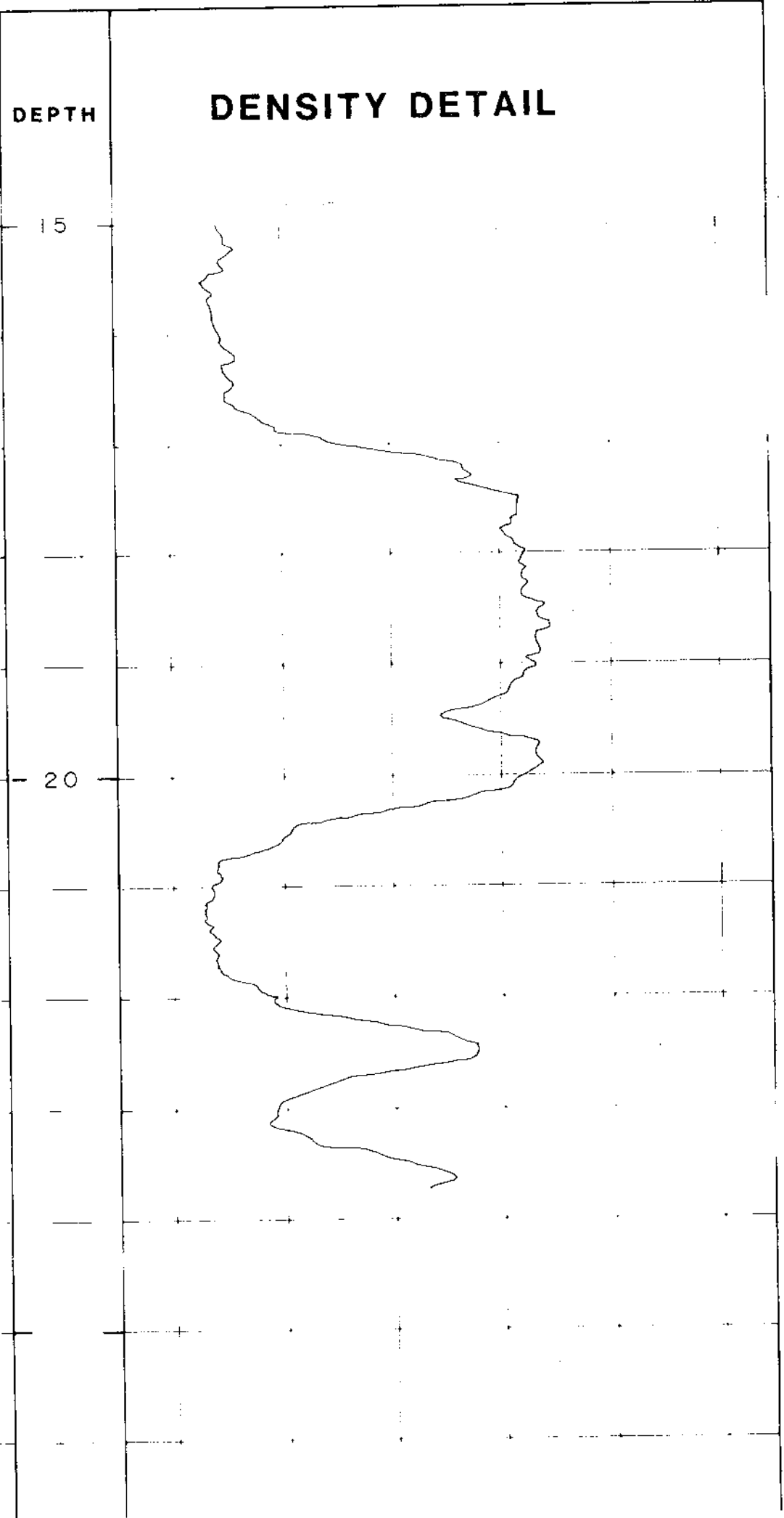
LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

## DENSITY DETAIL



**616**

Pa-Quintette 8213A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QB D 8217

LOCATION SYNCLINE EXT

AREA

DATE LOGGED AUG. 3

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

COAL  
LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 839.0

DEPTH DRILLED 32

DEPTH LOGGED 30

REMARKS

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HON. SCALE  
GAMMA-500 cps  
DENSITY-5000cps

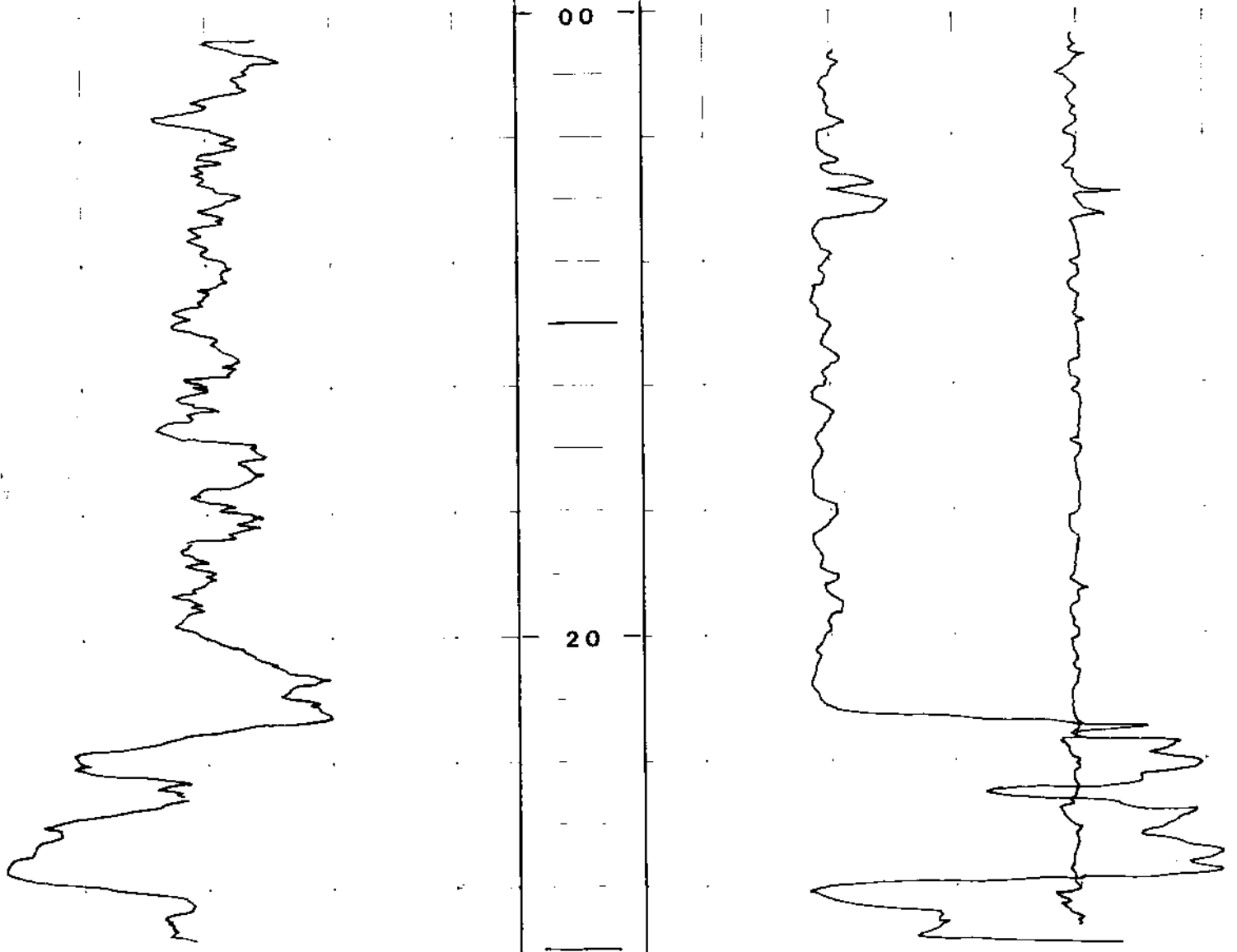
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



R. Quintette 82(5)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8217

LOCATION SYNCLINE EXT.

AREA \_\_\_\_\_

DATE LOGGED AUG. 3

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM

### DETAIL

### LOG

#### BOREHOLE DATA

GROUND EL. 839.0

DEPTH DRILLED 32

DEPTH LOGGED 30

REMARKS \_\_\_\_\_

### LOG SUITE

HOLE DIAMETER \_\_\_\_\_

DENSITY

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

## DENSITY DETAIL

DEPTH

20

25

30



616



72 Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBD 8218

LOCATION SYNCLINE EXT.

AREA \_\_\_\_\_

DATE LOGGED AUG 6

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

COAL \_\_\_\_\_

LITHOLOGY \_\_\_\_\_

LOG \_\_\_\_\_

### BOREHOLE DATA

GROUND EL. 839.1

DEPTH DRILLED 31

DEPTH LOGGED 30

REMARKS \_\_\_\_\_

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

SOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

NON. SCALE ————  
GAMMA-500 cps  
DENSITY-5000cps

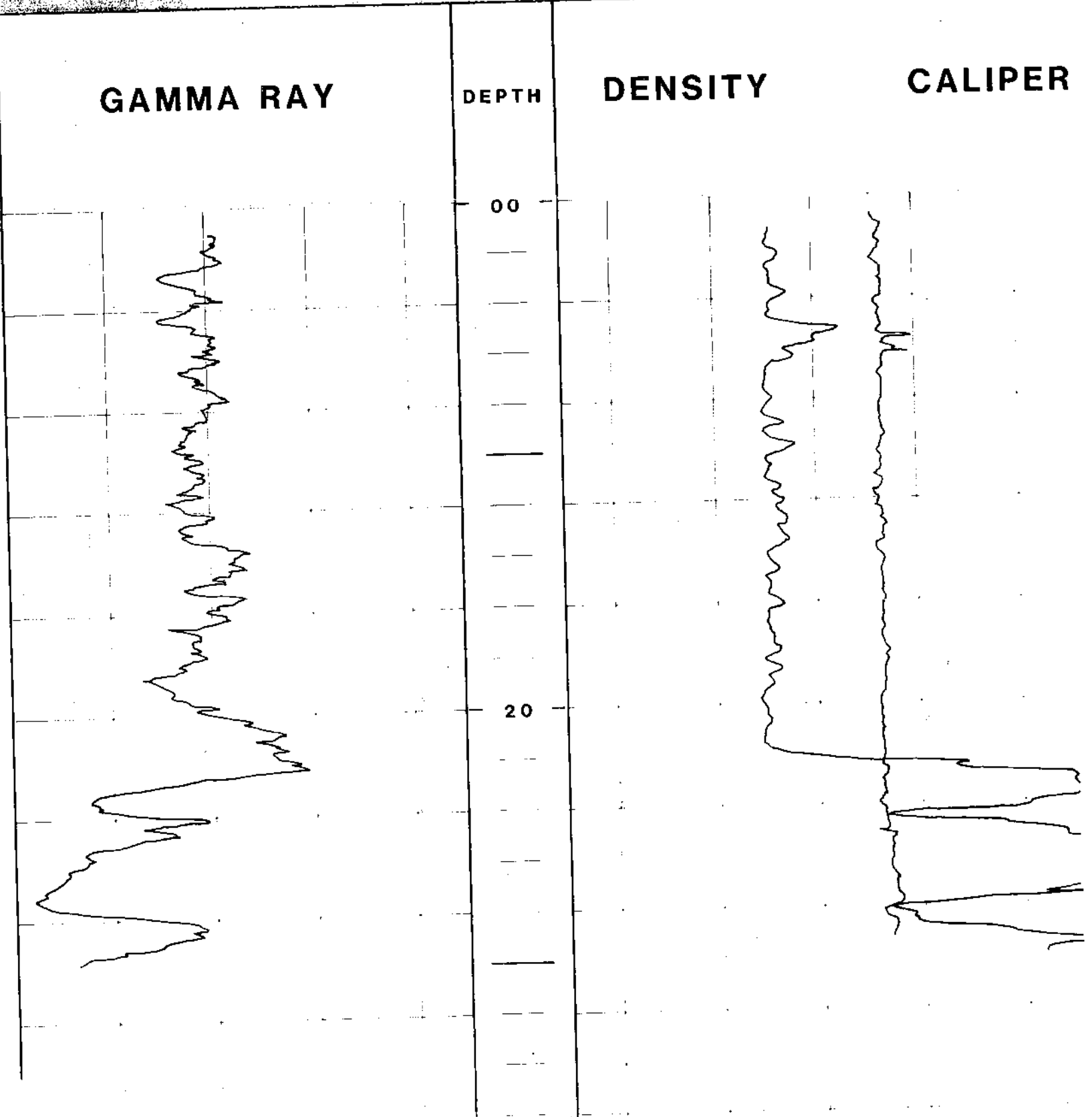
# 616

CALIPER

DENSITY

DEPTH

GAMMA RAY



R-Quintette 84/3A

# ROKE

SIDEWALL DENSILOG  
CALIPER

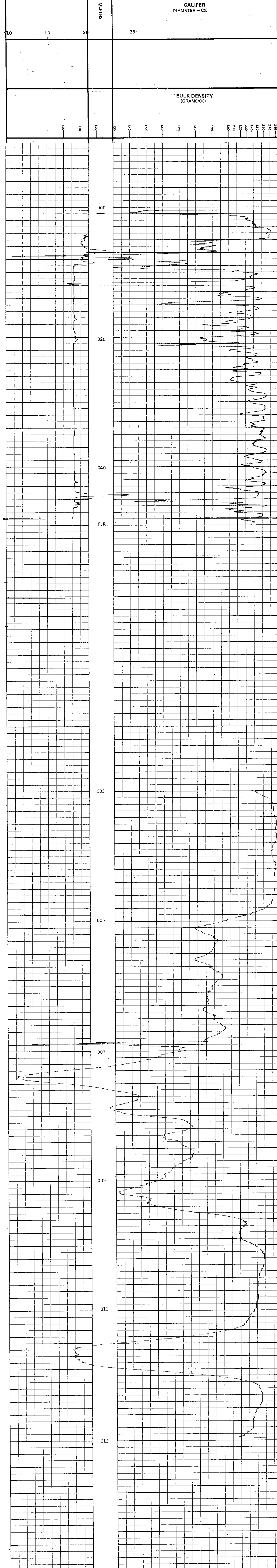
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTETTE COAL LIMITED
LSD SEC	WELL	QBR 8201
TRIP HGE	LOCATION	
W	FIELD	BARBOCK
M	PROVINCE	BRITISH COLUMBIA
	PERMANENT DATUM	GROUND LEVEL
	LOG MEASURED FROM	GROUND LEVEL
	WELL DEPTHS MEASURED FROM	GROUND LEVEL
	Other Services:	GRN
		K.B.
		G.S.C.
		G.I.
		200 METRIC
Run No.	DATE	4 APRIL 1982
First Reading		48.5
Last Reading		00
Footage Logged		48.5
Depth Reached		49.5
Depth Driller		50.3
Casing Roke		6.1
Casing Driller		AIR MATHER
Fluid Type		27.7
Liquid Level		15 CM
Min. Diam.		
Operating Time		2 HOURS
Truck No.		133 FTU-1

616

RUN NO.	GENERAL		SPEED M/MIN	T.C. SEC.	GAMMA RAY			SIDEWALL DENSILOG			
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	CPS/DIV
1	00	48.5	8					0.5		2.93 R	113.13

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8201 4 APRIL 1982



Recorded By: FERGUSON Witnessed By: LORTIE

# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

TR-QUINETTE 82(3)A

FILE NO.	COMPANY	QUINETTE COAL LIMITED
LSD	WELL	QBR 8201
SEC	RGE	
TWP	LOCATION	
RGE	FIELD	BARBOCK
W. M.	PROVINCE	BRITISH COLUMBIA
	Permanent Datum	GROUND LEVEL
	Log Measured from	GROUND LEVEL
	Well Depths Measured from	GROUND LEVEL
	Elev.	
	Above Perm. Datum	
	Other Services:	DJMS-CAL
	K.B.	
	OSG	
	G.L.	200 METRIC
Run. No.	ONE	
Date	4 APRIL 1982	
First Reading	49 M	
Last Reading	00	
Footage Logged	49	
Depth Reached	49.6	
Depth Driller	50.3	
Casing Roke	6.1	
Casing Driller	ATR/WATER	
Fluid Type	27.7	
Liquid Level	15 CM	
Min. Diam.		
Rm @		
Operating Time	2 HOURS	
Truck No.	133 - FU - 1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

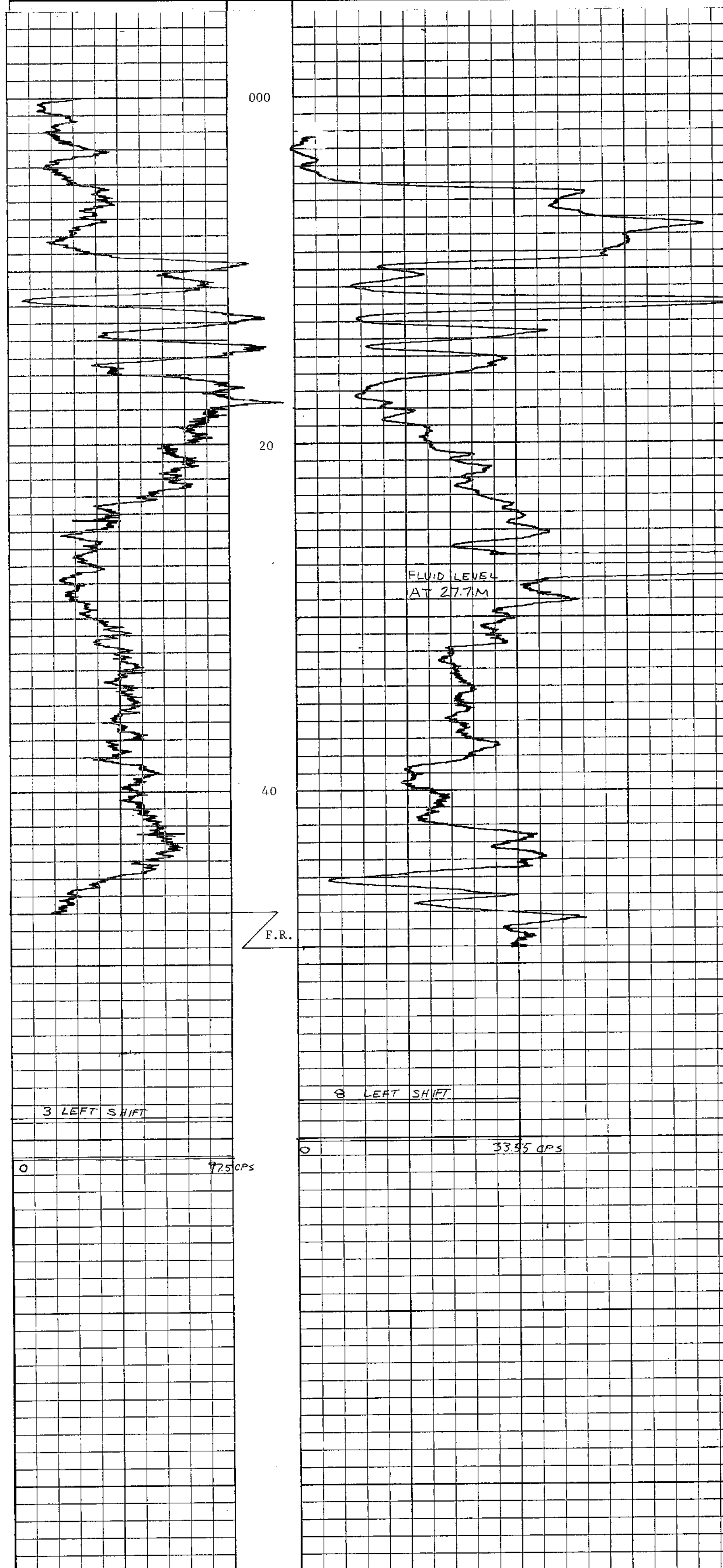
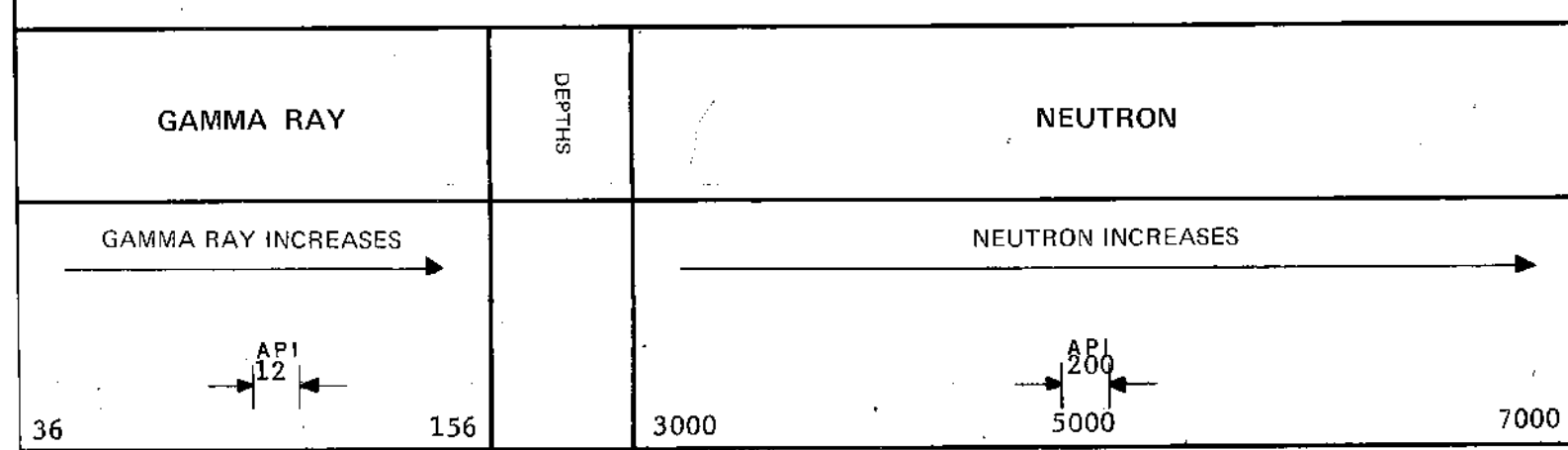
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	43 CM
HOIST TRUCK NO.	133-FU-1	TYPE	AmBe
INSTRUMENT TRUCK NO.	133-FU-1	STRENGTH	3 CURIES
TOOL SERIAL NO.	125A005		

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	26.5	4	3		3L	12	3		15L	200
1	26.5	49.0	4	3		3L	12	3		8L	50

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8201 4 APRIL 1982





72-Quintette 82(3A)

# ROKE

GAMMA RAY NEUTRON LOG  
 OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTETTA COAL LIMITED
LSD	WELL	QBR 8202
SEC	LOCATION	
TWP	FIELD	BANCOCK
RGE	PROVINCE	BRITISH COLUMBIA
M	Permanent Datum	GROUND LEVEL
	Log Measured from	GROUND LEVEL
	Well Depths Measured from	GROUND LEVEL
	Other Services:	DENS-CAL
		K.B.
		CSG
		GL
		200 METRIC
Run No.	ONE	
Date	5 APRIL 1982	
First Reading	78 M	
Last Reading	00	
Footage Logged	78	
Depth Reached	78.4	
Depth Driller	79.5	
Casing Driller	6.1	
Fluid Type	AIR/WATER	
Liquid Level	5.0	
Mfn. Diam.	1.5 CM	
Fm @		
Operating Time	2 HOURS	
Truck No.	133-FU-1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

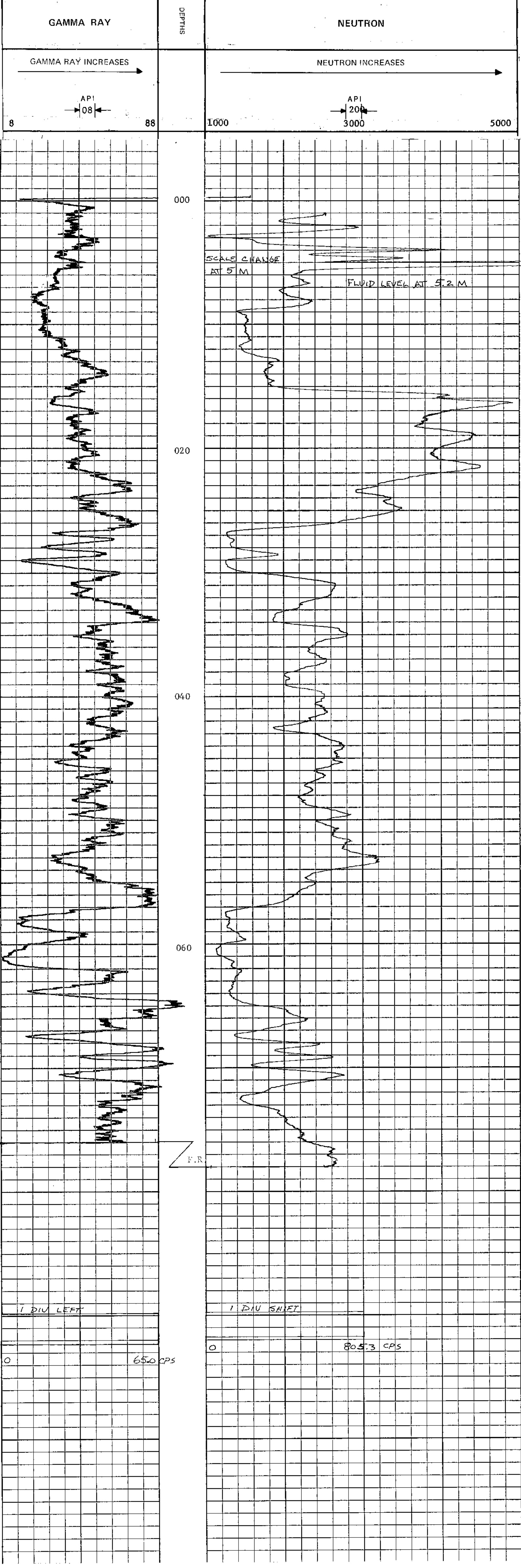
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	43 CM
		TYPE	AmBe
		STRENGTH	3 CURIES

### LOGGING DATA

GENERAL		GAMMA RAY			NEUTRON					
RUN NO.	DEPTHS	SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS
	FROM TO	M/MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	00 5	4	3		1L	8	3		5L	200
1	5 78	4	3		1L	8	3		1L	120

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8202 4 APRIL 1982



Tr. QUINTETE 62 (3)A

# ROKE

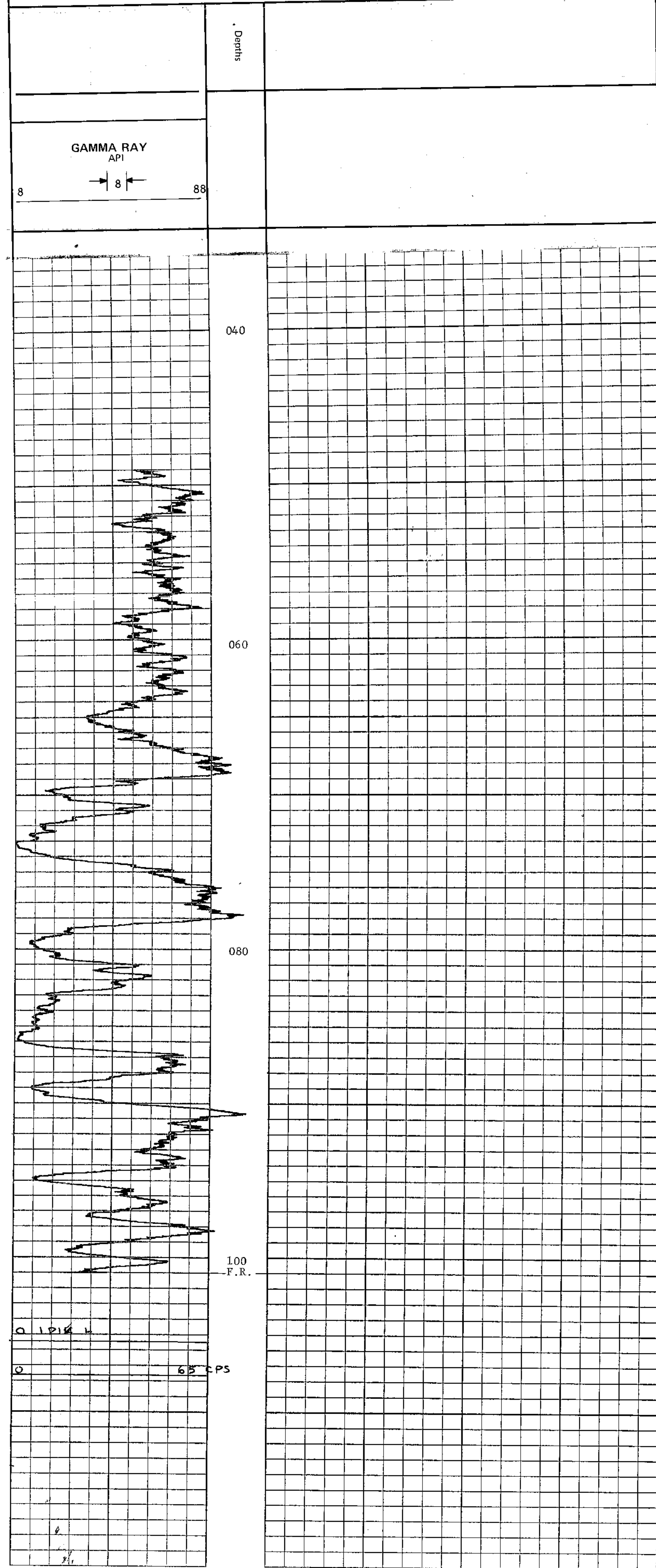
GAMMA RAY

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTETE COAL LIMITED
LSD	WELL	QBR 8203
SEC	LOCATION	
TWP	FIELD	BABCOCK
RGE	PROVINCE	BRITISH COLUMBIA
W	Other Services:	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Above Perm. Datum _____
Well Depths Measured from	GROUND LEVEL	G.L. _____
		200 METRIC
Run No.	ONE	
Date	7 APRIL 1982	
First Reading	101 M	
Last Reading	49	
Footage Logged	52	
Depth Reached	103	
Depth Driller	104	
Casing Roke		
Casing Driller	6.1	
Fluid Type	AIR/WATER	
Liquid Level		
Min. Diam.	15 CM	
Rm. @ 9F		
Operating Time	1 HOUR	
Truck No.	133-FU-1	

616

Remarks GRN 125A009  
 NEUTRON SECTION NOT WORKING-GAMMA RAY QUIT AT 49 M  
 RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8203 7 APRIL 1982



# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

TR-Quintette 8251A

FILE NO.	COMPANY	QUINTEITE COAL LIMITED
WELL	QBR 8204	
LOCATION		
FIELD	BARCOCK	
PROVINCE	BRITISH COLUMBIA	
Log Measured from	GROUND LEVEL	Elev. _____
Well Depths Measured from	GROUND LEVEL	Above Perm. Datum _____
Run No.	ONE	K. B. _____
Date	8 APRIL 1982	CSG _____
First Reading	102 M	G.L. _____
Last Reading	00	200 METERS
Footage Logged	102	
Depth Reached	102.3	
Depth Driller	103	
Casing Bore	6.1	
Casing Driller	AIR/WATER	
Liquid Level	15 CM	
Min. Diam.		
Rm @		
Operating Time	2 HOURS	
Truck No.	133-FU-1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

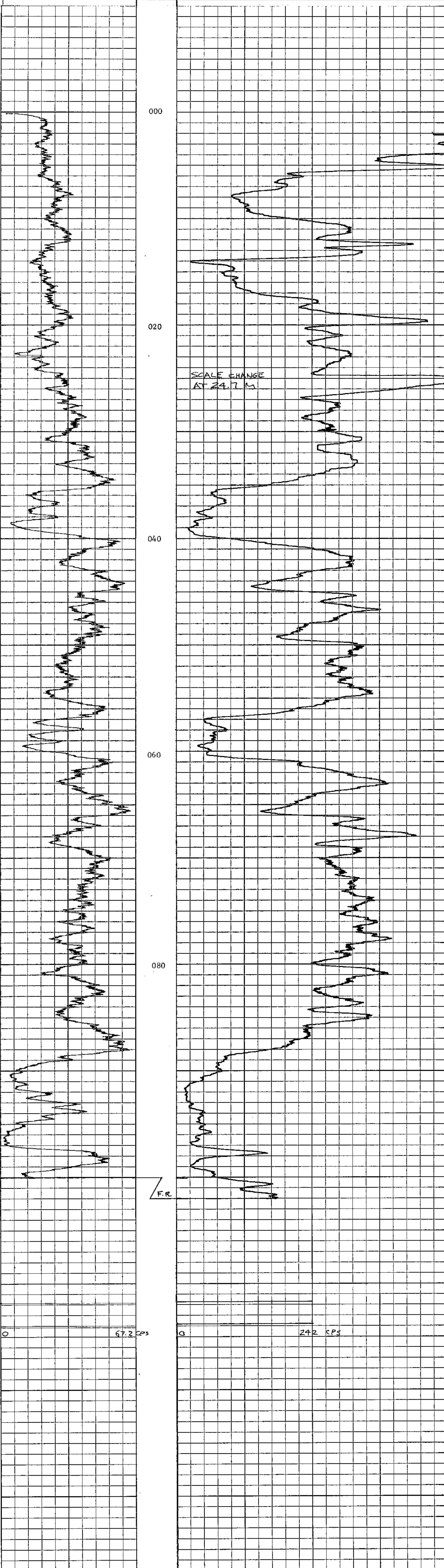
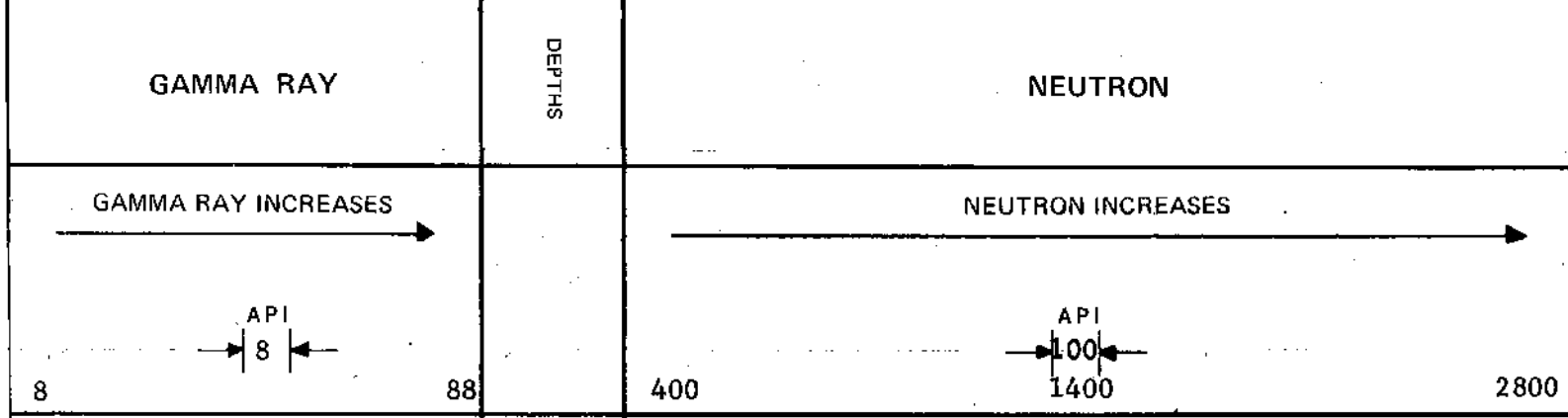
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	133-FU-1	SPACING	43 CM
INSTRUMENT TRUCK NO.	133-FU-1	TYPE	AmBe
TOOL SERIAL NO.	125A005	STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	DEPTHS		SPEED M/MIN	T.C. SEC.	GAMMA RAY			NEUTRON					
	FROM	TO			SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.		
1	00	24.7	4	3			-1	8	3			-4	100
1	24.7	102	4	3			-1	8	3			-2	50

REMARKS RECORDED ON MAGNETIC TAPE B-1 (1 7/8) QUIN BAB QBR 8204 8 APRIL 1982



67.2 cps

242 cps



# ROKE

GAMMA RAY NEUTRON LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

TR-QUINITE 825A

FILE NO.	COMPANY	QUINITE COAL LIMITED
SEC	WELL	QBR 8205
TWP	LOCATION	
RGE	FIELD	BABCOCK
M	PROVINCE	BRITISH COLUMBIA
	GROUND LEVEL	Elev. _____
	GROUND LEVEL	Above Perm. Datum _____
	GROUND LEVEL	G.L. _____
	Other Services:	
Run. No.	ONE	200 METRIC
Date	9 APRIL 1982	
First Reading	50 M	
Last Reading	00	
Footage Logged	50	
Depth Reached	50.3	
Depth Driller	51	
Casing Roke		
Casing Driller	1.3	
Fluid Type	AIR/WATER	
Liquid Level	48	
Min. Diam.	15 CM	
Rm @		
Operating Time	2 HOURS	
Truck No.	133-FU-1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

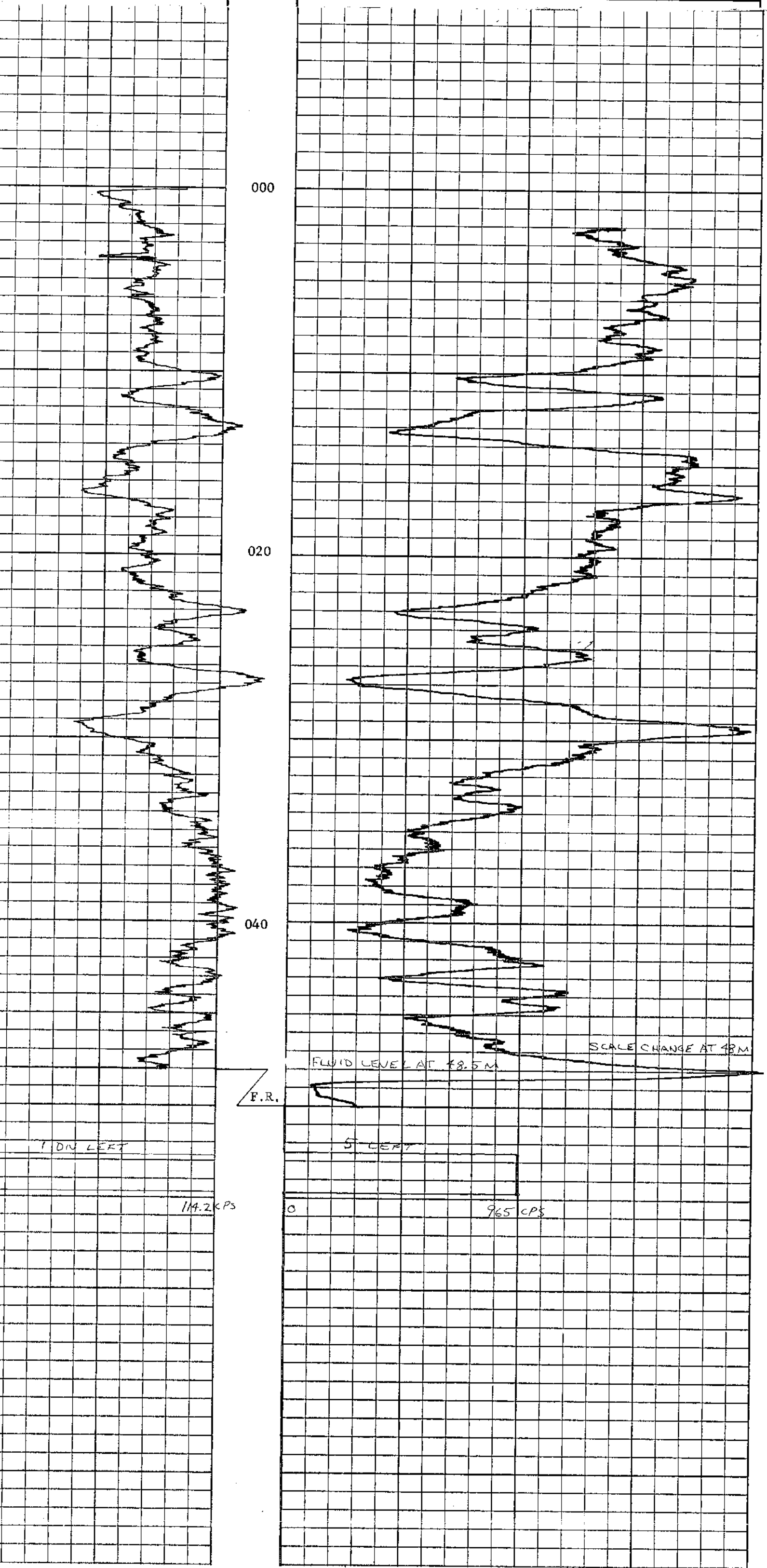
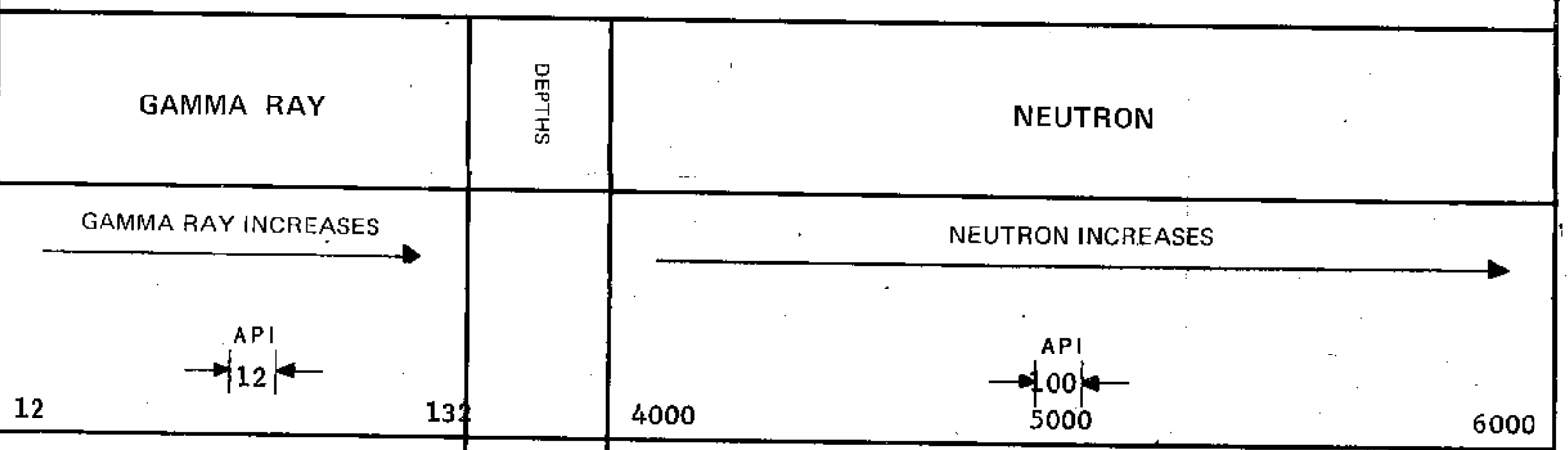
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	43 CM
		TYPE	AmBe
		STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	00	48	4	3		1L	12	3		40L	100
1	48	50	4	3		1L	12	3		5L	200

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8205 9 APRIL 1982



12 - QUINTESE BALSIA

# ROKE

SIDEWALL DENSILOG  
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

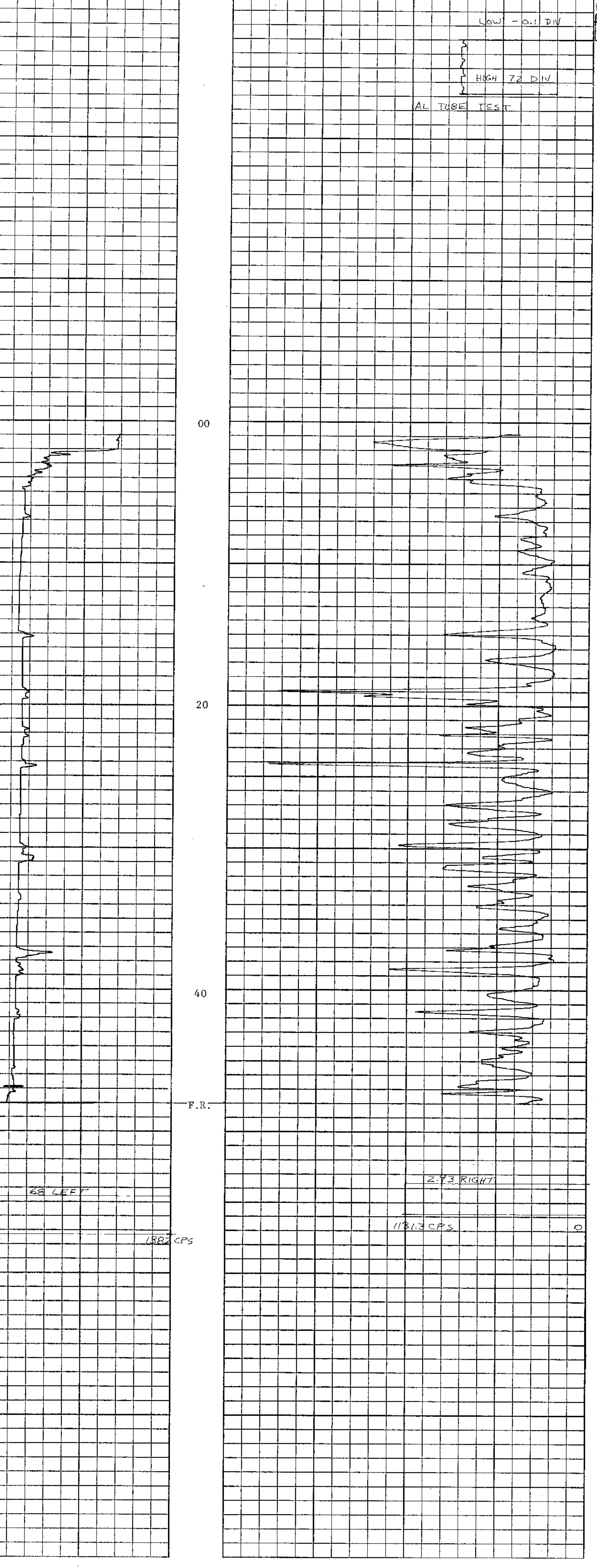
FILE NO.	COMPANY	QUINTESE COAL LIMITED
WELL	QBR 8206	
LOCATION		
FIELD	BABCOCK	
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Above Perm. Datum _____
Well Depths Measured from	GROUND LEVEL	G.L. _____
Other Services:		GRN
Run No.	ONE	
Date	10 APRIL 1982	
First Reading	48 M	
Last Reading	00	
Footage Logged	48	
Depth Reached	49	
Depth Driller	51	
Casing Hole	2	
Casing Driller	2	
Fluid Type	AIR/WATER	
Liquid Level	DRY	
Min. Diam.	15 CM	
Operating Time	2 HOURS	
Truck No.	133-FU-1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

RUN NO.	GENERAL			GAMMA RAY				SIDEWALL DENSILOG			
	DEPTHS FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	CPS/DIV
1	00	48	4					0.5		2.93 R	113.13

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8206 10 APRIL 1982

DEPTHS	15	17.5	20
GAMMA RAY API			
BULK DENSITY (GRAMS/CC)	1.20	1.30	1.40



Fr. Q. Williams 2463A

# ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTELL COAL LIMITED
LSD	WELL	QBR 8206
SEC	LOCATION	
TWP	FIELD	BARCOCK
RGE	PROVINCE	BRITISH COLUMBIA
M	Permanent Datum	GROUND LEVEL
	Log Measured from	GROUND LEVEL
	Well Depths Measured from	GROUND LEVEL
	Other Services:	DENS-CAL
	K.B.	
	CSG	
	G.L.	200 METRIC
Run No.	ONE	
Date	10 APRIL 1982	
First Reading	4.9 M	
Last Reading	00	
Footage Logged	49.3	
Depth Reached	51	
Depth Driller	2	
Casing Roke	2	
Casing Driller	ATR/WATER	
Fluid Type	DRY	
Liquid Level	15 CM	
Mm. Diam.		
Rm @		
Operating Time	1 HOUR	
Truck No.	FU-1	
Recorded By	FERGUSON	Witnessed By
		LORTIE

616

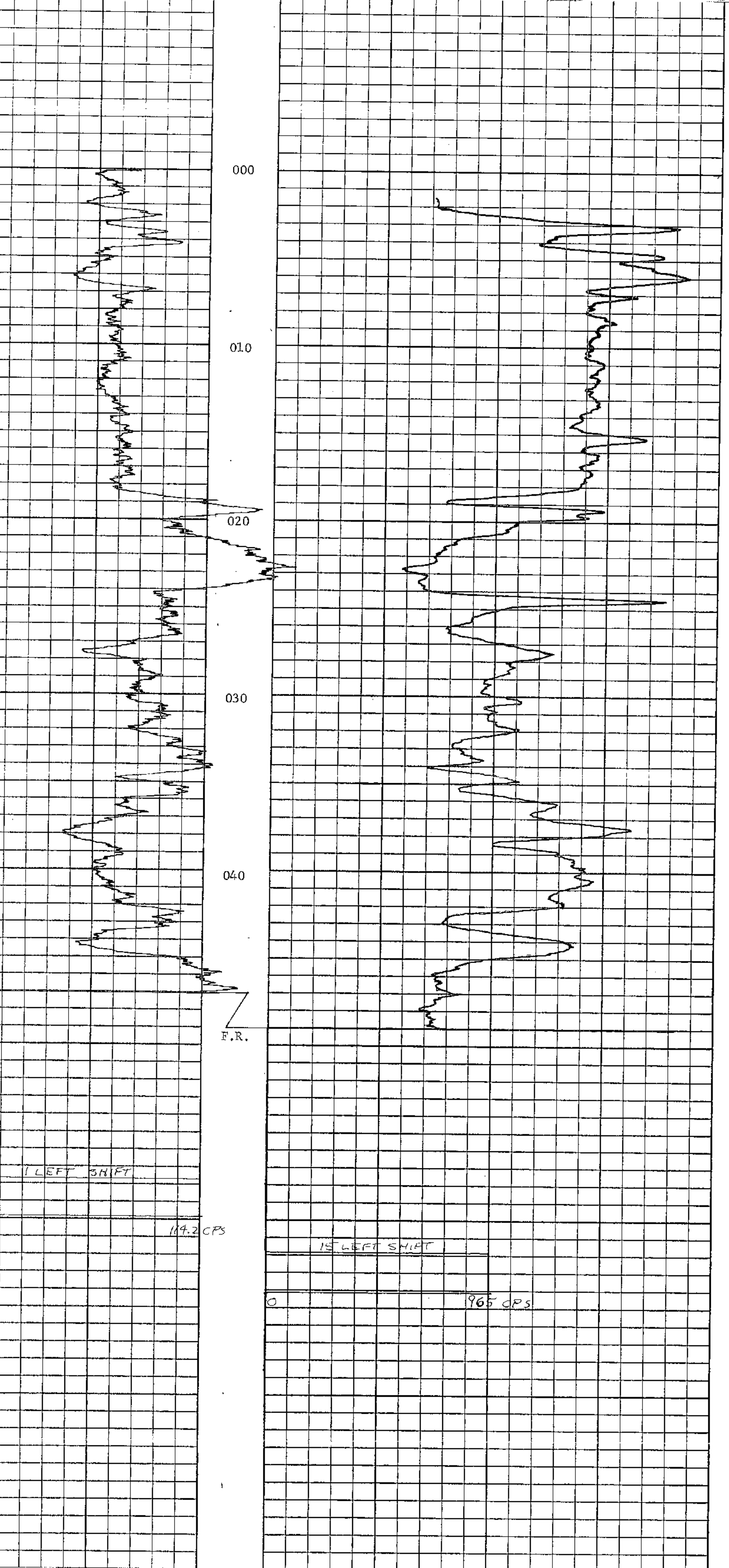
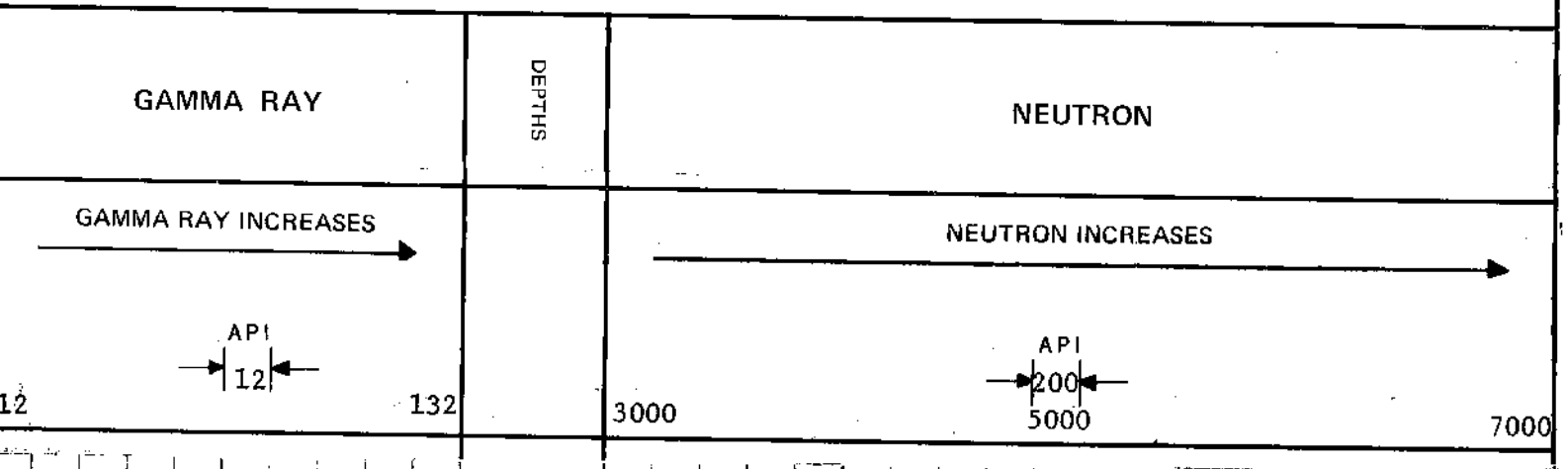
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	FU-1	SPACING	43 CM
INSTRUMENT TRUCK NO.	FU-1	TYPE	AmBe
TOOL SERIAL NO.	125A007	STRENGTH	3 CURIES

### LOGGING DATA

RUN NO.	GENERAL		GAMMA RAY				NEUTRON				
	FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	00	49	4	3		1L	12	3		15L	200

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8206 10 APRIL 1982





# ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

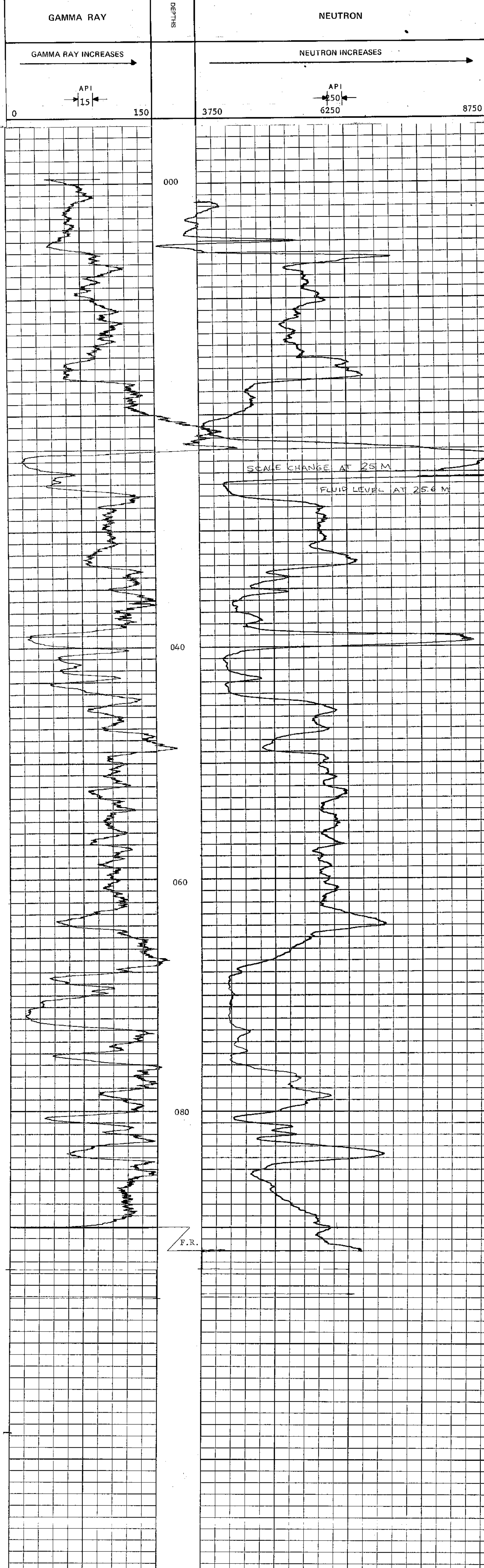
Fr. Quintero Balza

FILE NO.	COMPANY	QUINTEPE COAL LIMITED
LSD	WELL	QBR 8207
SEC	LOCATION	
TWP	RGE	
RGE	FIELD	BARGOCK
PROVINCE	BRITISH COLUMBIA	
Permanent Datum	GROUND LEVEL	Elev. _____
Log Measured from	GROUND LEVEL	Above Perm. Datum
Well Depths Measured from	GROUND LEVEL	
Other Services:	DIMS-CAL	
K.B.	CSG	G.L.
200 METRIC		
Run No.	ONE	
Date	11 APRIL 1982	
First Reading	92 M	
Last Reading	00	
Footage Logged	92	
Depth Reached	92.1	
Depth Driller	92.2	
Casing Roke	7.0	
Casing Driller		
Fluid Type	AIR	
Liquid Level	25	
Min. Diam.	15 CM	
Rm @		
Operating Time	1 HOUR	
Truck No.	FU-1	

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	127
HOIST TRUCK NO.	FU-1	SPACING	43 CM
INSTRUMENT TRUCK NO.	FU-1	TYPE	AmBe
TOOL SERIAL NO.	125A007	STRENGTH	3 CURIES

LOGGING DATA											
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS		SPEED	T.C.	SENS	ZERO	API G. R. UNITS	T. C.	SENS	ZERO	API N. UNITS
	FROM	TO	M / MIN	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.
1	00	25	4	3		00	15	3		-15L	250
1	25	92	4	3		00	15	3		00	150

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8207 11 APRIL 1982



Recorded By: BERGUSON  
Witnessed By: LORLIE

616

12 COURTESY SCSA

# ROKE

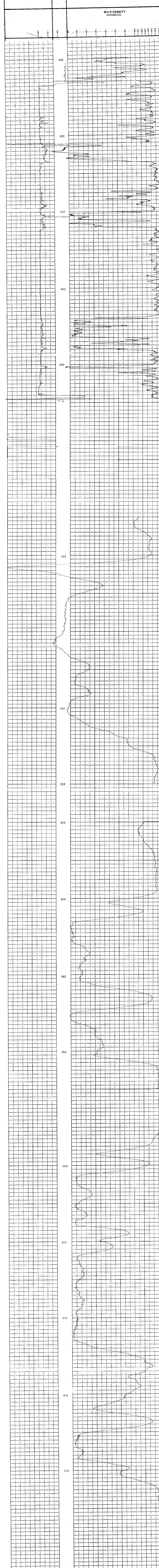
SIDWALL DENSLOG  
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINETTE COAL LIMITED
WELL	WELL	QR 8207
LOCATION	LOCATION	
FIELD	FIELD	BARCOCK
PROVINCE	PROVINCE	BRITISH COLUMBIA
Country	Country	Canada
Operator	Operator	Albert Park Drilling
Well Depth, Measured from	Well Depth, Measured from	Q.I.
Well Depth, Measured from	Well Depth, Measured from	200 METERS
Run No.	Run No.	001
Date	Date	11 APRIL 1982
Final Reading	Final Reading	89 M
Last Logged	Last Logged	00
Depth Reached	Depth Reached	90
Depth Driller	Depth Driller	92.2
Caliper Rate	Caliper Rate	7.0
Fluid Type	Fluid Type	ASX
Liquid Level	Liquid Level	25
Mud, Chem.	Mud, Chem.	15 BX
Operation Time	Operation Time	2 HOURS
Truck No.	Truck No.	133-PT-1

RUN NO.	GENERAL		T.C. SEC.	GAMMA RAY		SIDEWALL DENSLOG	
	FROM	TO		ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	ZERO DIV. L OR R
1	00	89	8		0.5	2.93 R	113.13
EXP	21	28	4		0.5	2.93 R	113.13
EXP	38	45	4		0.5	2.93 R	113.13
EXP	67	77	4		0.5	2.93 R	113.13

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAR ORR 8207 11 APRIL 1982



616

Recorded By: FERGUSON  
Witnessed By: LARTE

R. Quintette 2131A

# ROKE

GAMMA RAY NEUTRON LOG  
OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	COMPANY	QUINTEITE COAL LIMITED
LSD SEC	WELL	QBR 8208
TWP	LOCATION	
RGE	FIELD	BABCOCK
W. M.	PROVINCE	BRITISH COLUMBIA
	PERMITS	GROUND LEVEL, GROUND LEVEL, GROUND LEVEL
	Other Services:	DENS-CAL
	Log Measured from	GROUND LEVEL, GROUND LEVEL, GROUND LEVEL
	Well Depths Measured from	GROUND LEVEL, 200 METERS
Run No.	ONE	
Date	12 APRIL 1982	
First Reading	90 M	
Last Reading	00	
Footage Logged	90	
Depth Reached	90.3	
Depth Driller	91.5	
Casing Roke	6.1	
Casing Driller	6.1	
Fluid Type	AIR	
Liquid Level	21.1	
Min. Diam.	15 CM	
Rm @		
Operating Time	2 HOURS	
Truck No.	FU-1	

616

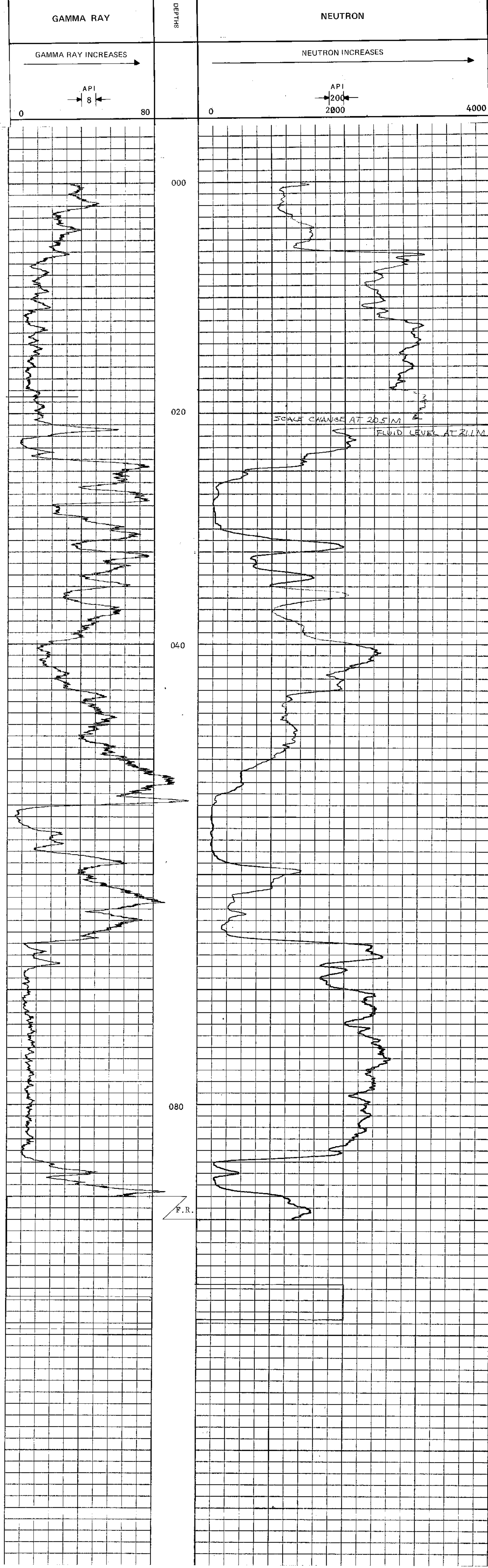
### EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	127
		SPACING	43 CM
HOIST TRUCK NO.	FU-1	TYPE	AmBe
INSTRUMENT TRUCK NO.	FU-1	STRENGTH	3 CURTIS
TOOL SERIAL NO.	125A007		

### LOGGING DATA

RUN NO.	GENERAL			GAMMA RAY			NEUTRON			
	FROM	TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	00	20.5	4	3		00	3		00	200
1	20.5	90	4	3		00	3		00	100

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1 7/8) QUIN BAB QBR 8208 12 APRIL 1982  
LOGGED THROUGH DOUBLE WALL DRILL PIPE



F.R.

Recorded By FERGISON Witnessed By TORRIS



T.G. QUINTELL 8245A

# ROKE

## SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. COMPANY QUINTELL CORP. LIMITED

WELL QBR 8208

LOCATION

FIELD BARBROCK

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL

Log Measured from GROUND LEVEL

Well Depth Measured from GROUND LEVEL

Run No. ONE

Date 12 APRIL 1982

First Reading 27 M

Last Reading 00

Footage Logged 27

Depth Reached 27.2

Depth Driller 91.5

Casing Bore 6.1

Casing Driller ATR

Fluid Type 21.2

Min. Drum 15 CM

Operating Time 2 HOURS

Trace No. PU-1

Recorded By ERICSON

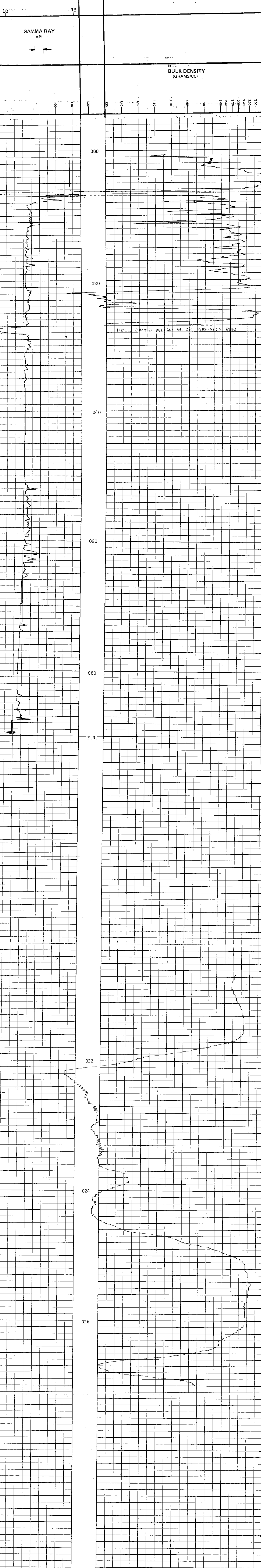
Witnessed By LORTIE

616

RUN NO.	GENERAL		SPEED M/MIN	T.C. SEC.	GAMMA RAY		API G.R. UNITS PER LOG DIV.	SIDEWALL DENSILOG		CPS/DIV
	FROM	TO			ZERO DIV. L OR R	ZERO DIV. L OR R				
1	00	27	8				0.5	2.93 R	113.1	
EXP	21	27	4				0.5	2.93 R	113.1	

REMARKS RECORDED ON MAGNETIC TAPE A-1 (1-7/8) QUIN BAB QBR 8207 12 APRIL 1982

HOLE CAVED AT 27 M ON DENSITY RUN





**QUINTETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

**BOREHOLE** QBR 8209  
**LOCATION** SYNCLINE EXT  
**AREA**  
**DATE LOGGED** JULY 15  
**VERT. SCALE** 1:200  
**CHART SPEED** 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**  
**GROUND EL.** 902.4  
**DEPTH DRILLED** 58  
**DEPTH LOGGED** 58  
**REMARKS**

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

**HOLE DIAMETER**  
**HOLE ANGLE**  
**LOGGED BY** J.M.

**HOR. SCALE** — **GAMMA-500 cps**  
— **DENSITY-5000cps**

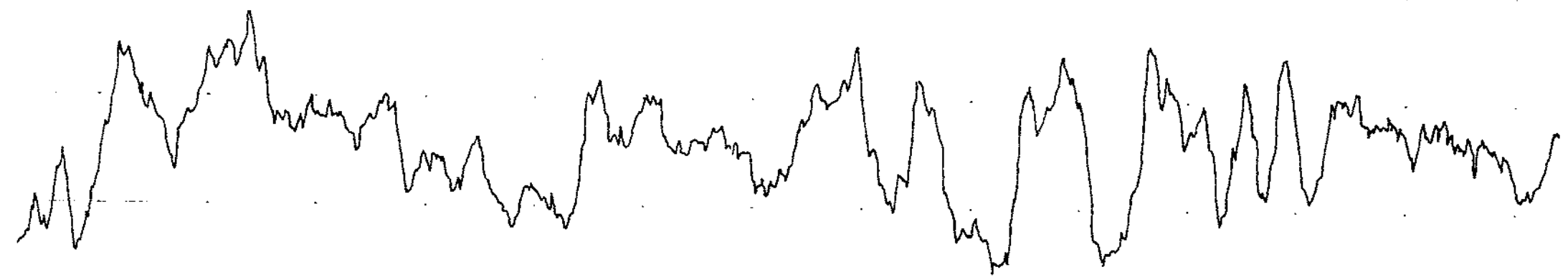
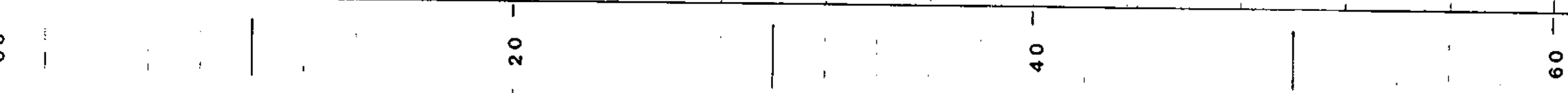
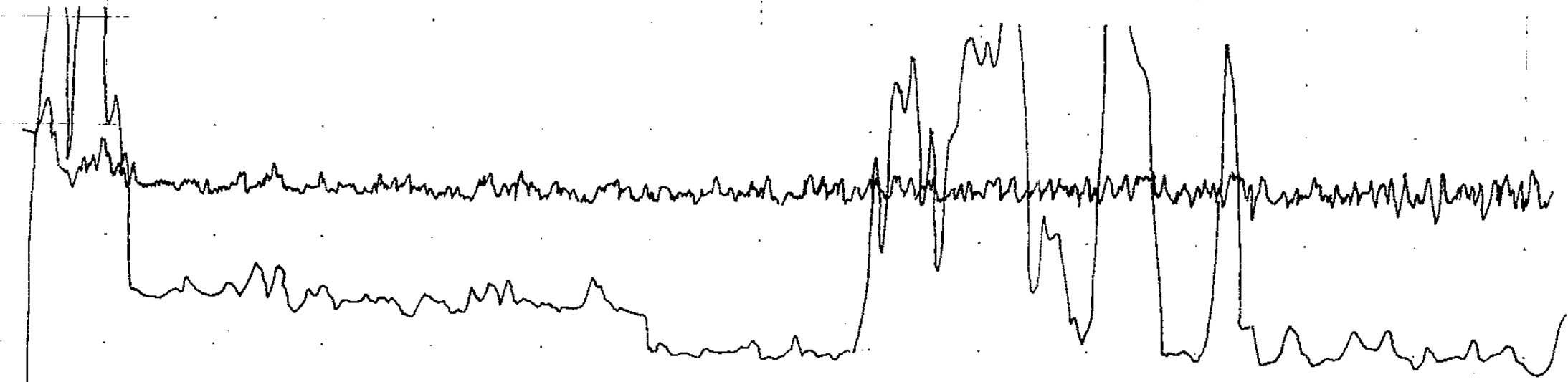
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QBR 8210

LOCATION SYNCLINE EXT

AREA \_\_\_\_\_

DATE LOGGED JULY 17

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

BOREHOLE DATA

GROUND EL. 886.4

DEPTH DRILLED 69

DEPTH LOGGED 60

REMARKS NO GAMMA

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY LM

HOR. SCALE GAMMA-600 cps  
DENSITY-5000cps

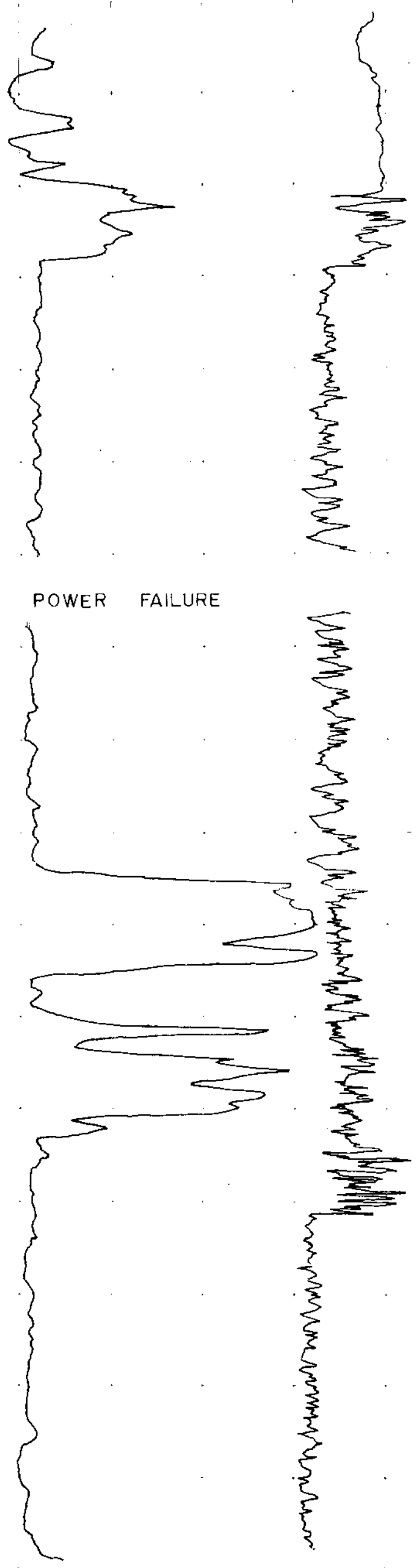
GAMMA RAY

DEPTH

DENSITY

CALIPER

00  
20  
40  
60



616

42 - ANNETTE 8213A

# ANNETTE COAL LIMITED MINES LIMITED (Manager)

BOREHOLE QBR 8213

LOCATION SYNCLINE EXT

DATE LOGGED JULY 23

VENT SCALE 1:200

CHART SPEED 40 / MIN

## BOREHOLE DATA

GROUND EL. 826.0

DEPTH DRILLED 48

DEPTH LOGGED 48

REMARKS

## COAL LITHOLOGY LOG

LOG SITE  
GAMMA RAY  
DENSITY  
CALIPER

NON SCALE  
GAMMA RAY SCALE  
DENSITY 5000cps

BOREHOLE DATA  
HOLE DIAMETER  
HOLE ANGLE  
LOGGED BY L.M.

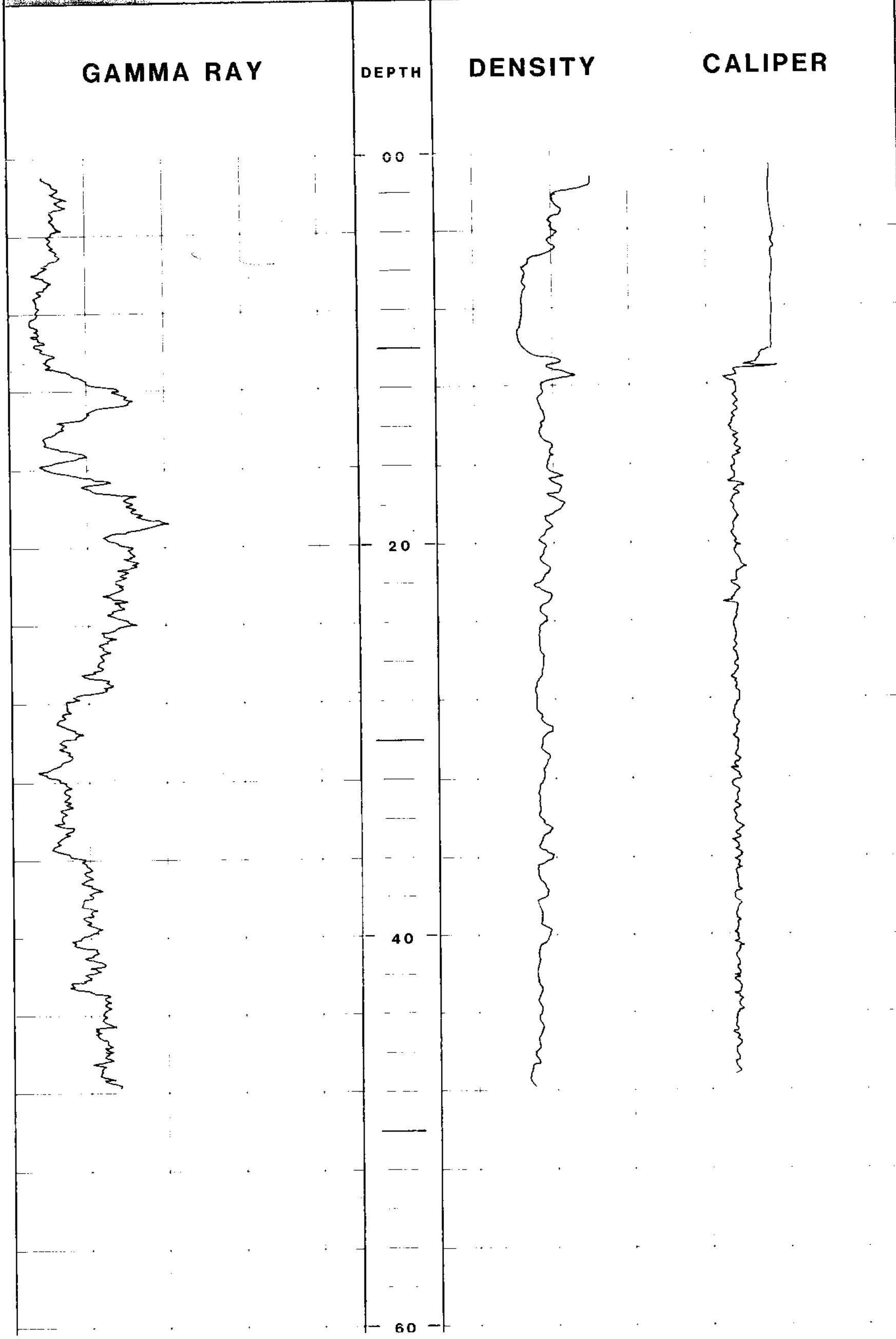
616

### CALIPER

### DENSITY

### DEPTH

### GAMMA RAY



**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QBR 8214

LOCATION SYNCLINE EXT

AREA

DATE LOGGED JULY 18

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

**BOREHOLE DATA**

GROUND CL. 882.6

DEPTH DRILLED 90

DEPTH LOGGED 88

REMARKS NO GAMMA

**COAL LITHOLOGY LOG**

**LOG SUITE**  
 GAMMA RAY  
 DENSITY  
 CALIPER

HOR. SCALE — GAMMA-600 cps  
 DENSITY-5000cps

HOLE DIAMETER  
 HOLE ANGLE  
 LOGGED BY L.M.

616

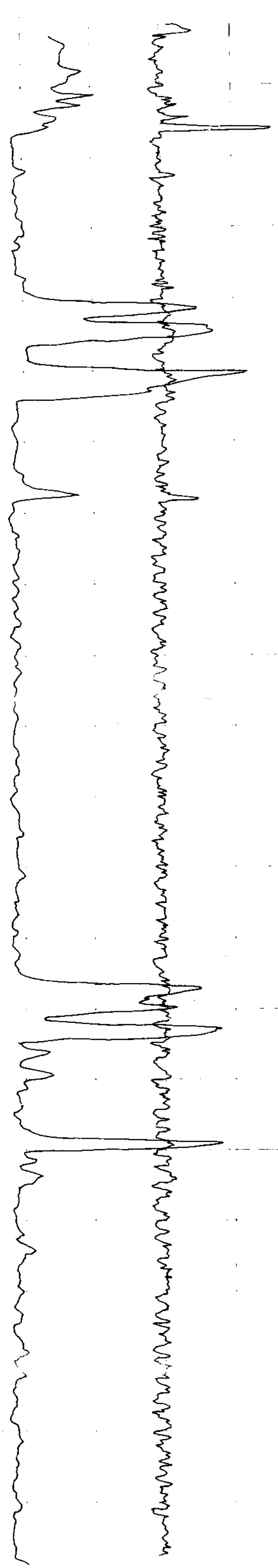
**GAMMA RAY**

**DEPTH**

**DENSITY**

**CALIPER**

00  
 20  
 40  
 60  
 80  
 100





**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QBR 8215

LOCATION SYNCLINE EXT.

AREA \_\_\_\_\_

DATE LOGGED JULY 20

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL** \_\_\_\_\_

**LITHOLOGY** \_\_\_\_\_

**LOG** \_\_\_\_\_

BOREHOLE DATA

GROUND EL. 872.8

DEPTH SMILED 113

DEPTH LOGGED 110

REMARKS NO GAMMA

**LOG SUITE**

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY J.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

**GAMMA RAY**

**DEPTH**

**DENSITY**

**CALIPER**

00

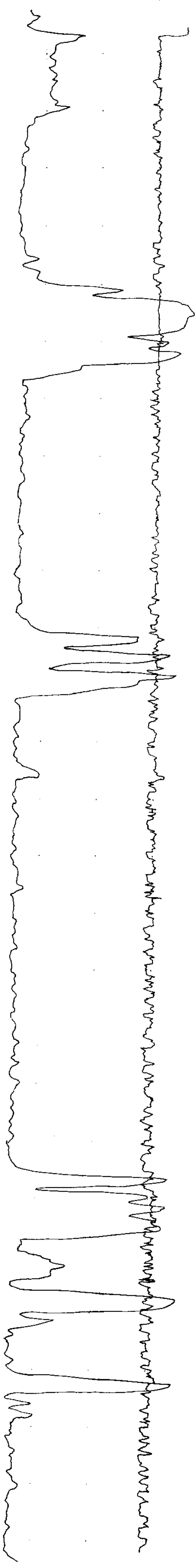
20

40

60

80

100



**616**

**QUINTEITE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE Q/R 8201

LOCATION JOHNSON MTN

ANES \_\_\_\_\_

DATE LOGGED AUG 23

REEL SCALE 1:200

CHART SPEED \_\_\_\_\_

AN / MIN \_\_\_\_\_

**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**

GROUND EL. 1597.7

DEPTH DRILLED 70

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

HOLE DIAMETER \_\_\_\_\_


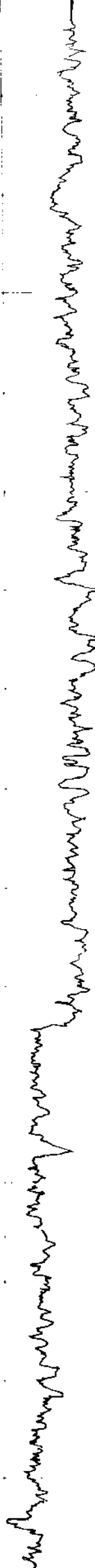

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE

GAMMA-500 CRT  
 DENSITY-5000GPA

**616**

GAMMA RAY	DEPTH	DENSITY	CALIPER
	00		
	20		
	40		
	60		

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

**BOREHOLE**

QJR 8202

**LOCATION**

JOHNSON. MTN

**AREA**

**DATE LOGGED**

AUG. 25

**VERT. SCALE**

1:200

**CHART SPEED**

4M / MIN.

**COAL**

**BOREHOLE DATA**

**LITHOLOGY**

**GROUND EL.**

1608.3

**LOG**

**DEPTH DRILLED**

70

**DEPTH LOGGED**

70

**REMARKS**

**LOG SUITE**

**GAMMA RAY**

**DENSITY**

**CALIPER**

**HOLE DIAMETER**

**HOLE ANGLE**

**LOGGED BY**

J.M.

**HOR. SCALE**

GAMMA-500 cps  
 DENSITY-5000cps

616

**CALIPER**

**DENSITY**

**DEPTH**

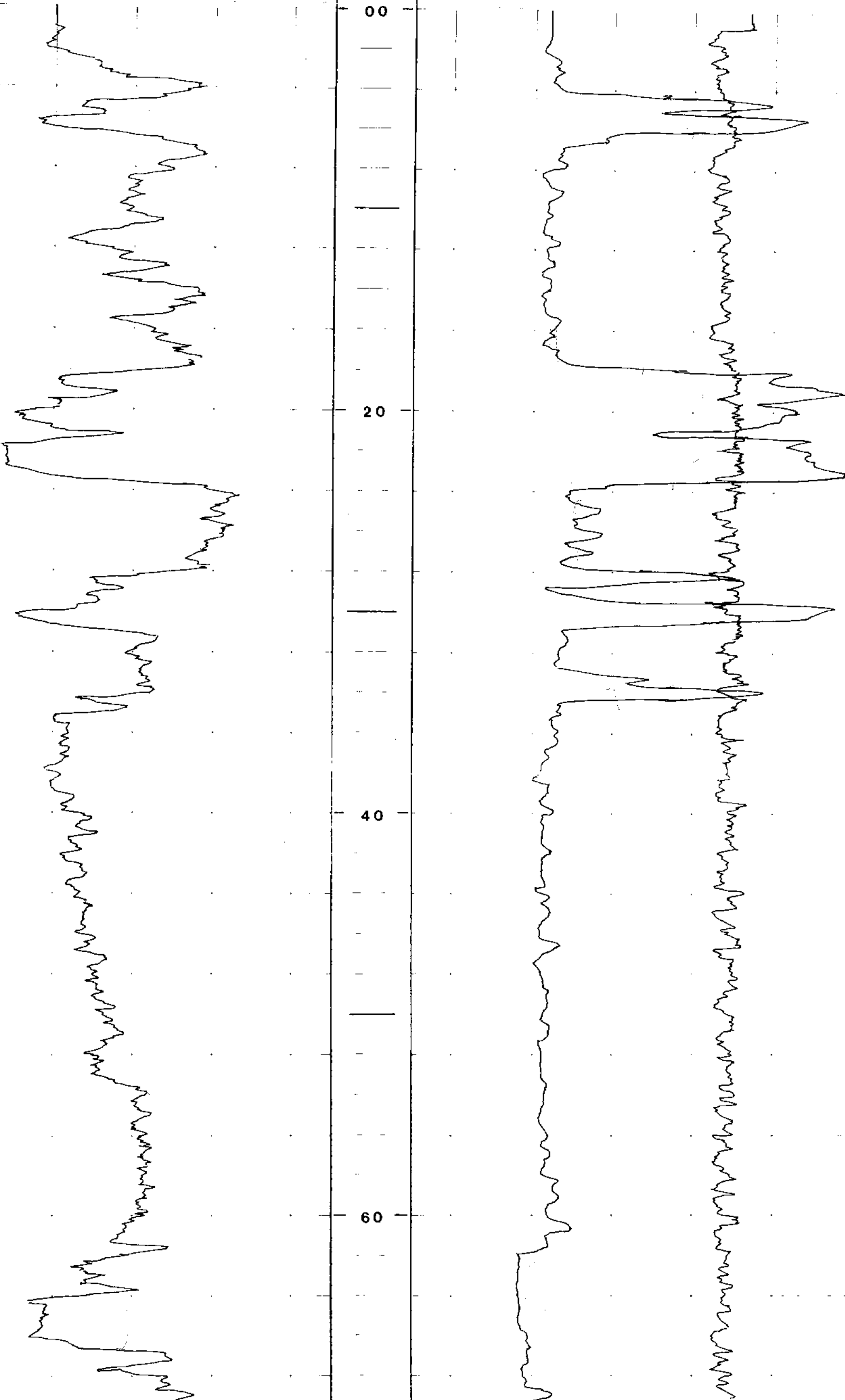
**GAMMA RAY**

00

20

40

60



Dr. Quintette 843A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8202

LOCATION JOHNSON

AREA \_\_\_\_\_

DATE LOGGED AUG 25

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM

## DETAIL

## LOG

BOREHOLE DATA

GROUND EL. 1608.3

DEPTH DRILLED 70

DEPTH LOGGED 70

REMARKS \_\_\_\_\_

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_

DENSITY-5000GPM

## DENSITY DETAIL

DEPTH

00

5

10

15

20

25

30

35

616



Fr-Quintette 8263A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8203

LOCATION JOHNSON MTN

AREA \_\_\_\_\_

DATE LOGGED AUG 25

VERT. SCALE 1:200

DRIFT SPEED 4M / MIN

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1549.0

DEPTH DRILLED 70

DEPTH LOGGED 66

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

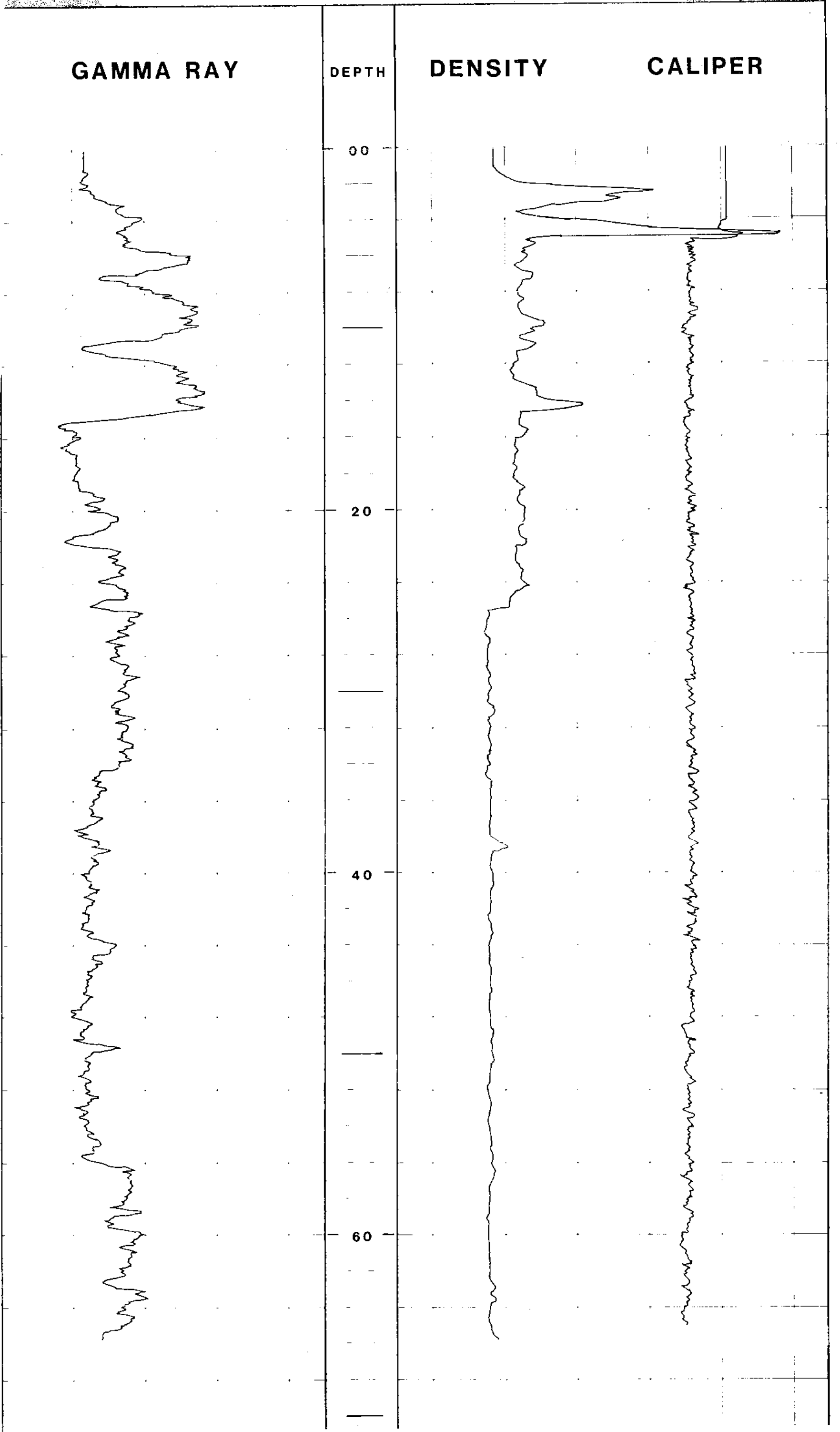
HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

NON SCALE  
GAMMA-500 cps  
DENSITY-5000cps

616



P-Quintette 8231A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8204

LOCATION JOHNSON MTN

AREA

DATE LOGGED AUG 25

VERT. SCALE 1:200

DRIFT SPEED 48 / MIN

## COAL LITHOLOGY LOG

BOREHOLE DATA

GROUND EL 1540.9

DEPTH DRILLED 49

DEPTH LOGGED 48

REMARKS

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE

GAMMA-800 cps  
DENSITY-6000cps

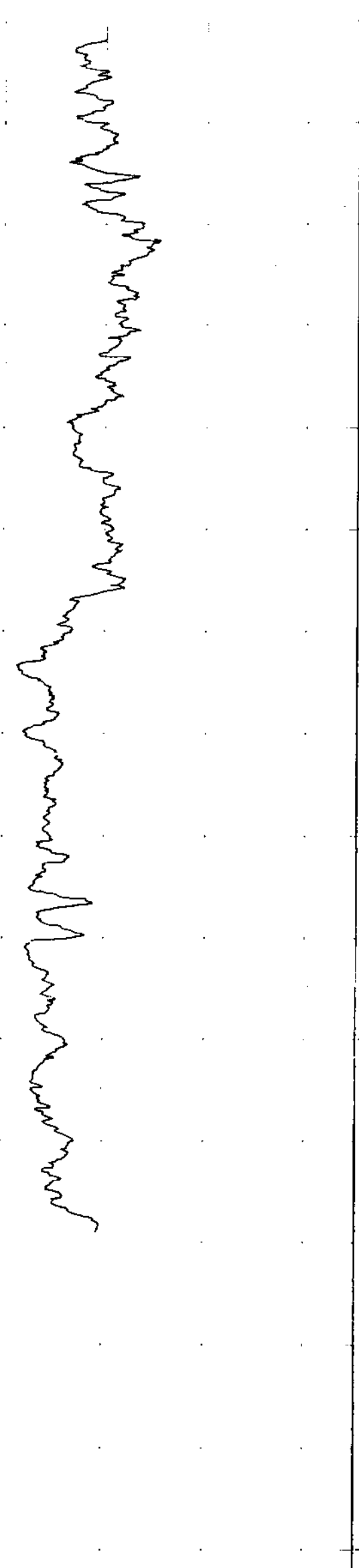
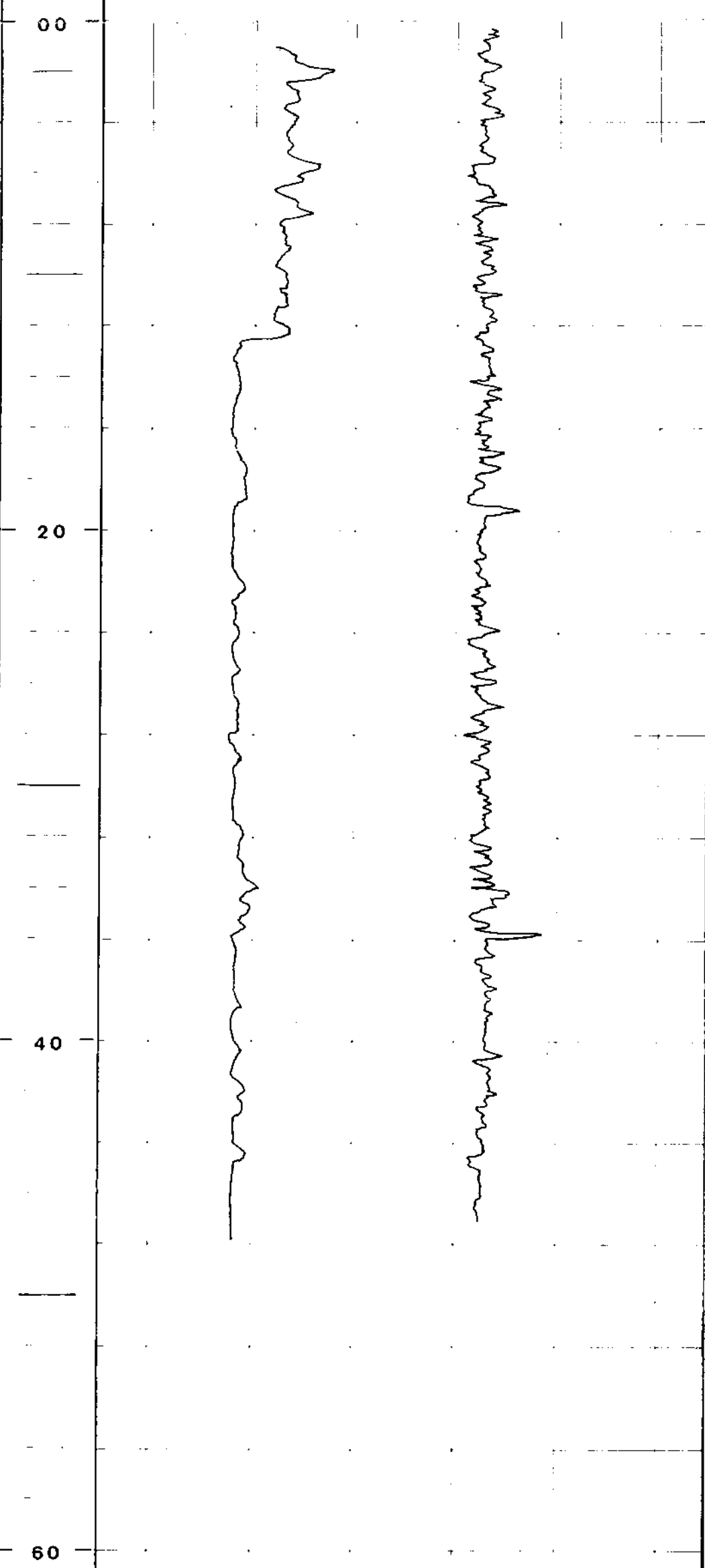
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY LM

CALIPER

DENSITY

DEPTH

GAMMA RAY



616

Fr. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8205

LOCATION JOHNSON MTN

AREA

DATE LOGGED AUG. 25

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

COAL  
LITHOLOGY  
LOG

### BOREHOLE DATA

GROUND EL. 1399.0

DEPTH DRILLED 70

DEPTH LOGGED 64

REMARKS

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L M

HOR. SCALE

GAMMA-600 cps  
DENSITY-5000cps

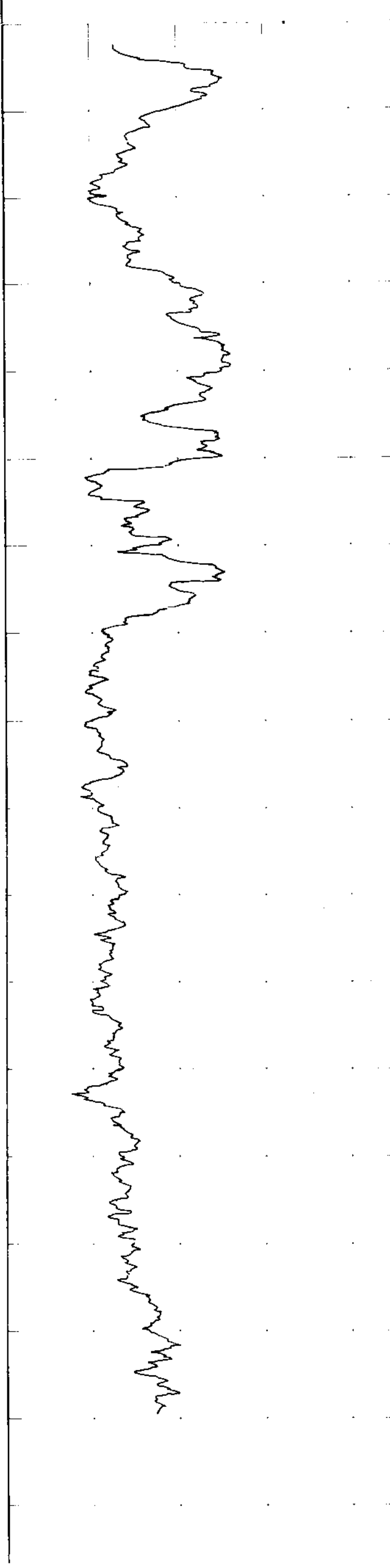
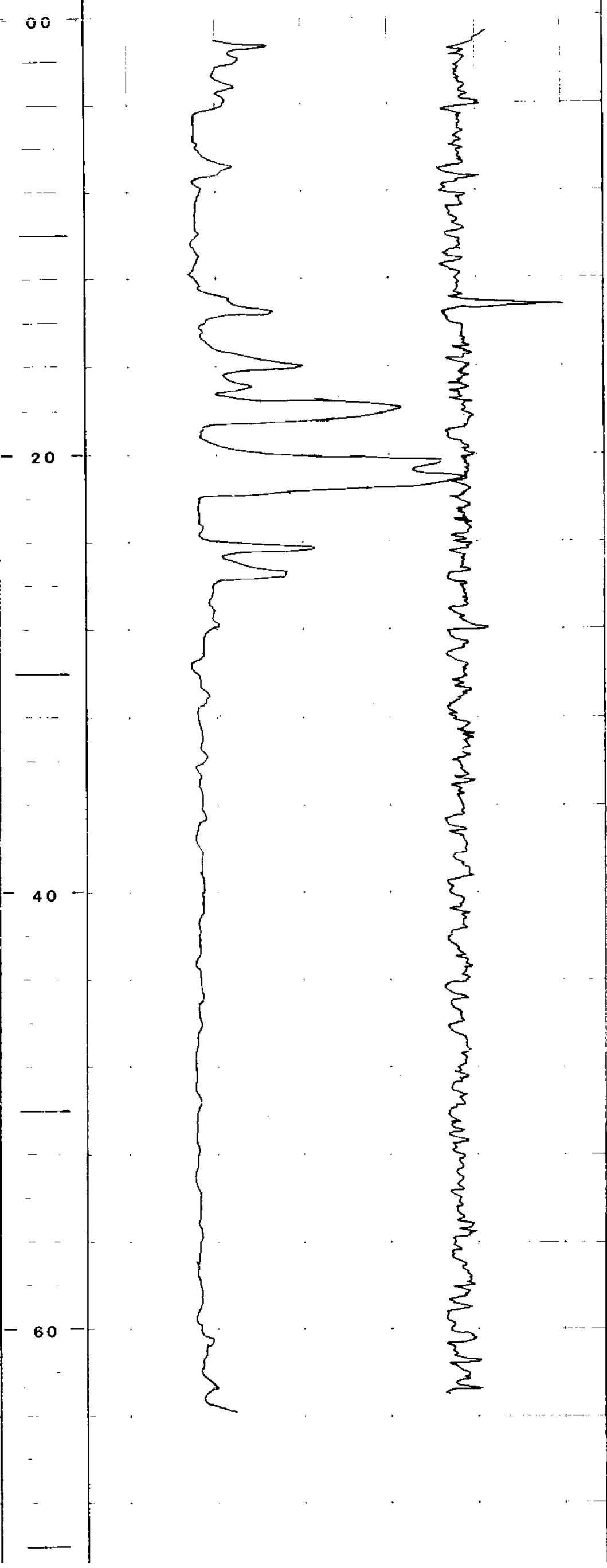
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



FR - Quintette 8263A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8205

LOCATION JOHNSON

AREA \_\_\_\_\_

DATE LOGGED AUG 25

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM

## DETAIL

## LOG

### BOREHOLE DATA

GROUND EL. 1399.0

DEPTH DRILLED 70

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

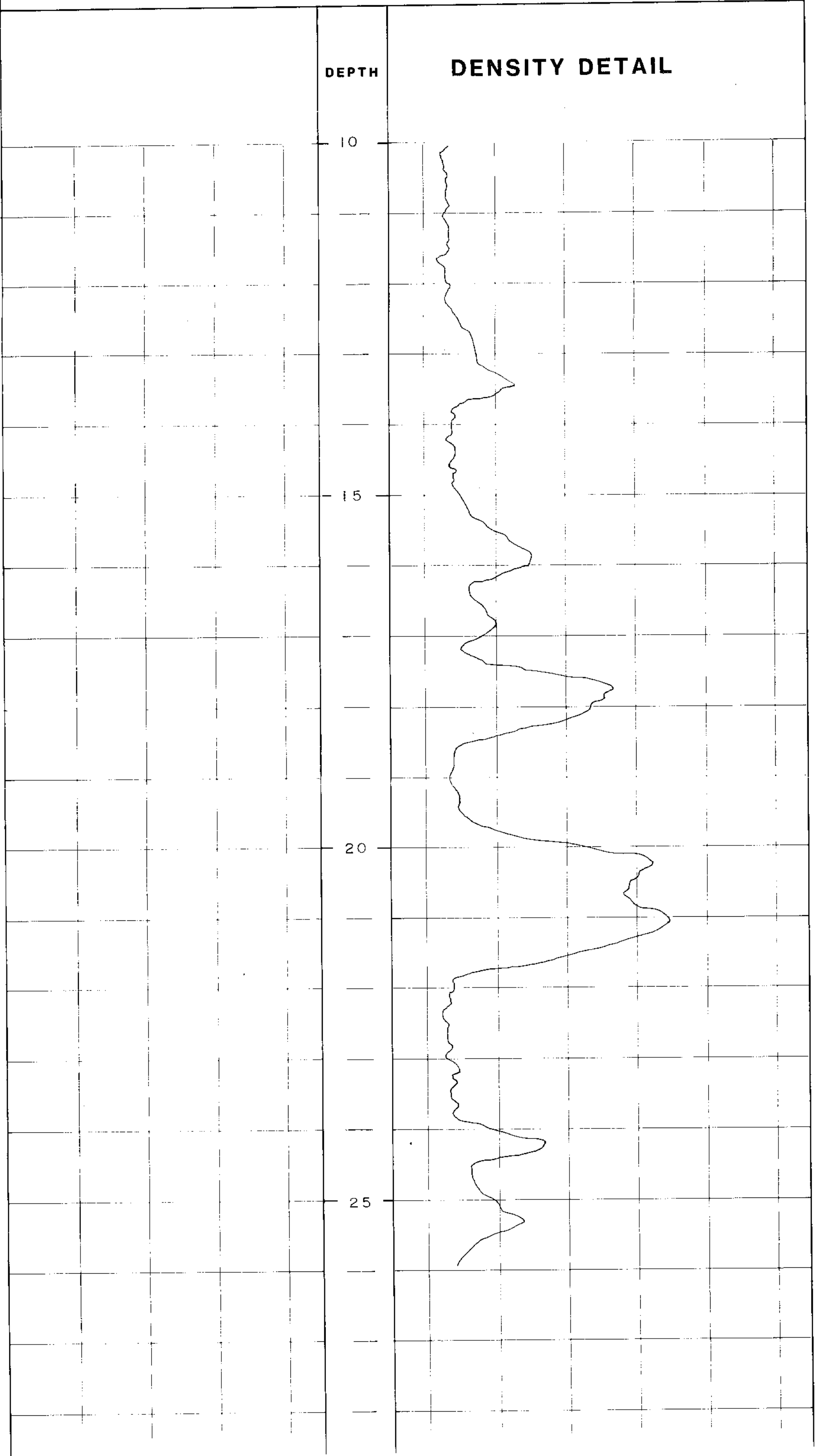
HOLE ANGLE \_\_\_\_\_

LOGGED BY RB

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

## DENSITY DETAIL

DEPTH



616



FR - QUINTETTE 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8206

LOCATION JOHNSON

AREA \_\_\_\_\_

DATE LOGGED AUG 25

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL LOG

### BOREHOLE DATA

GROUND EL. 1373.1

DEPTH DRILLED 61

DEPTH LOGGED 58

REMARKS \_\_\_\_\_

### LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY R.B.

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

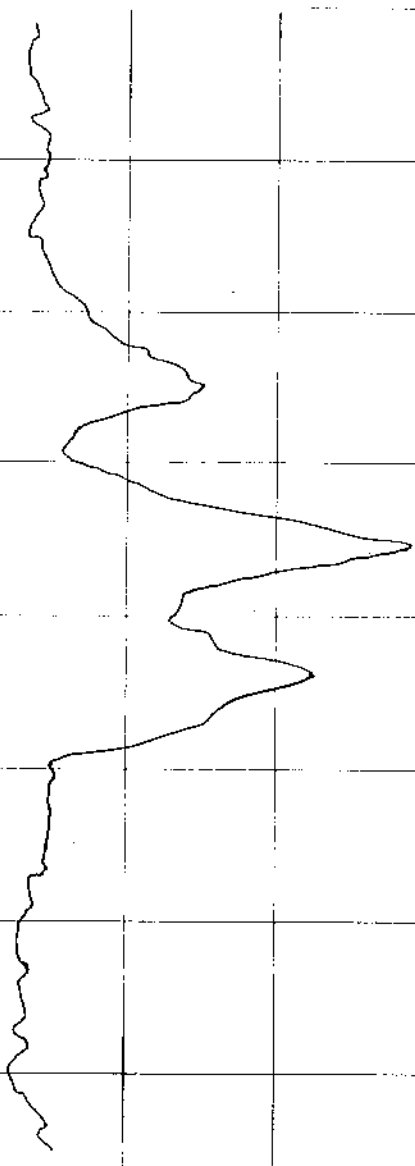
# 616

## DENSITY DETAIL

DEPTH

10

15



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QJR 8206

LOCATION JOHNSON MTN

AREA \_\_\_\_\_

DATE LOGGED AUG. 25

HOIST RECORD L200

LOGGING SPEED 48 / MIN

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EG 13731

DEPTH DRILLED 61

DEPTH LOGGED 58

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

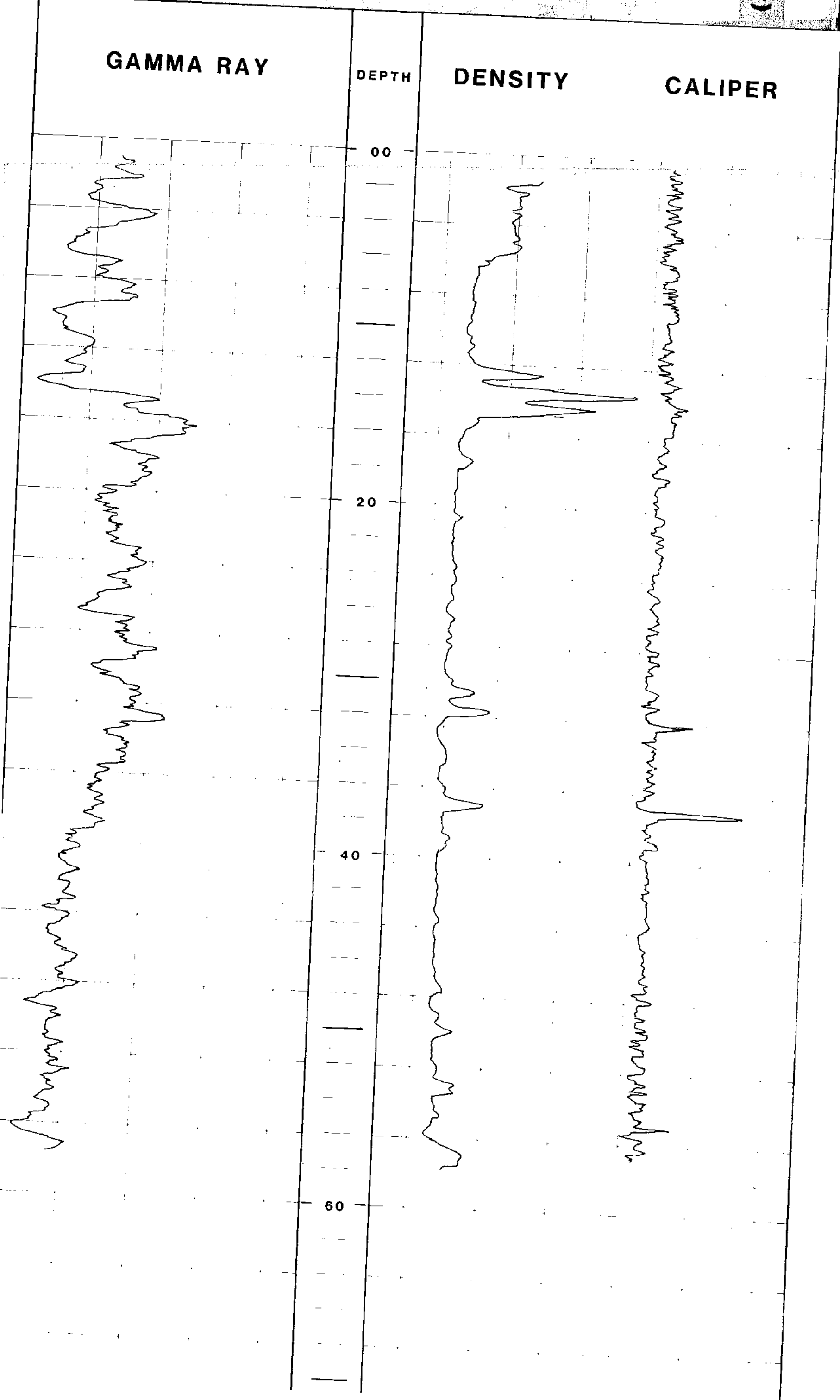
HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_

DENISON MINES LIMITED  
DENSITY - 00000000

# 616



- PR - QUINTETTE 82(3)A

BOOK 2 of 2

616

QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (MANAGER)

SONENOTE GMR 8201  
LOCATION SHERIFF  
AREA DEPUTY  
DATE LOGGED MAY 18  
SCALE 1:200

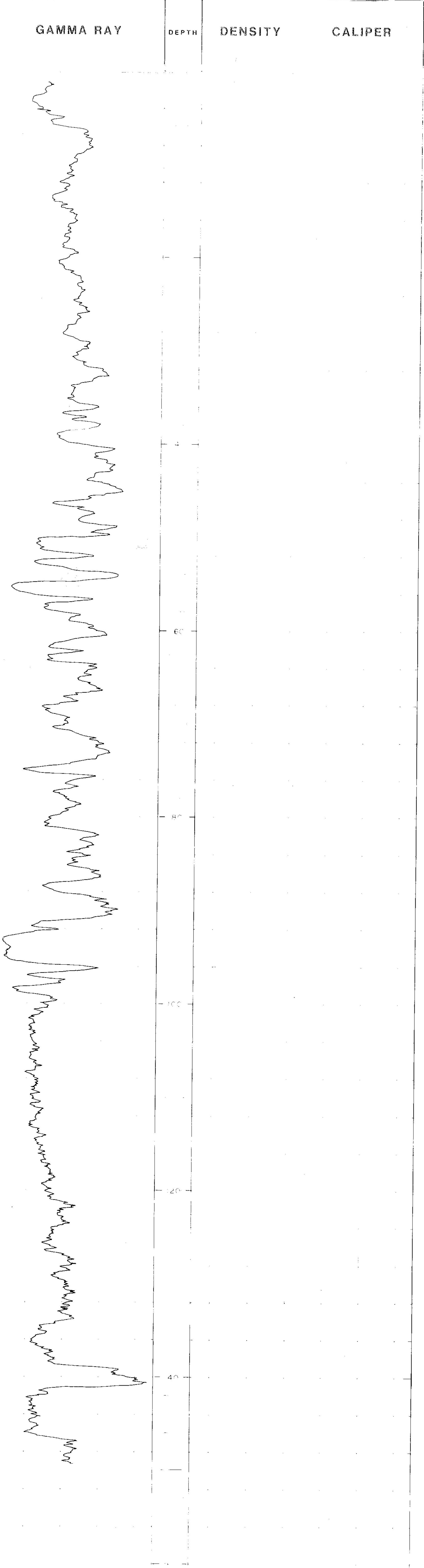
COAL  
LITHOLOGY  
LOG

BOROHOLE DATA  
GROUND EL. 1733.5  
DEPTH SHELLED 150  
DEPTH LOGGED 150  
REMARKS NO DENSITY

LOG SUITE  
GENERAL DATA  
DENSITY  
CALIPER

WELL IDENTIFIER  
WELL NAME  
LOGGED BY L.M.

616





QUINTEITE COAL LIMITED  
DENISON MINES LIMITED (MANAGER)

BOREHOLE QMR 8202

LOCATION \_\_\_\_\_

AREA \_\_\_\_\_

DATE LOGGED MAY 18

SCALE 1:200

COAL  
LITHOLOGY  
LOG

BOREHOLE DATA

GROUND EL. 1735.0

DEPTH DRILL 150

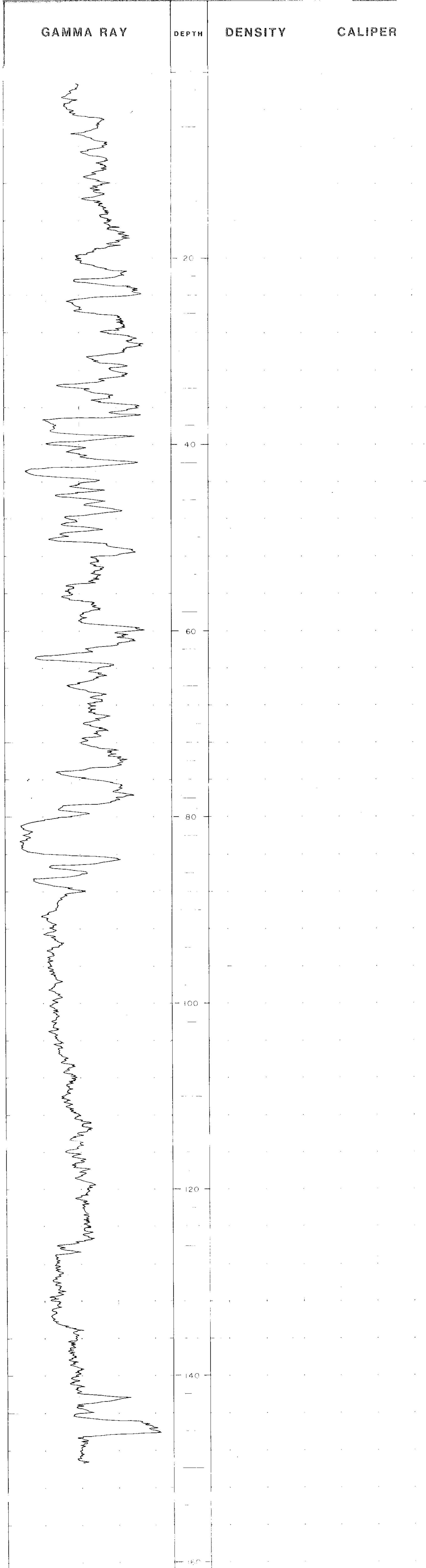
DEPTH LOGGED 150

REMARKS NO. DENSITY

LOG SUITE  
SERIAL NO. \_\_\_\_\_  
SERIES \_\_\_\_\_  
CALIPER \_\_\_\_\_

SOLE DIRECTOR \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

616



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8203

LOCATION \_\_\_\_\_ SHERIFF \_\_\_\_\_

AREA \_\_\_\_\_ DEPUTY \_\_\_\_\_

DATE LOGGED <sup>Month</sup> JUNE 19 \_\_\_\_\_

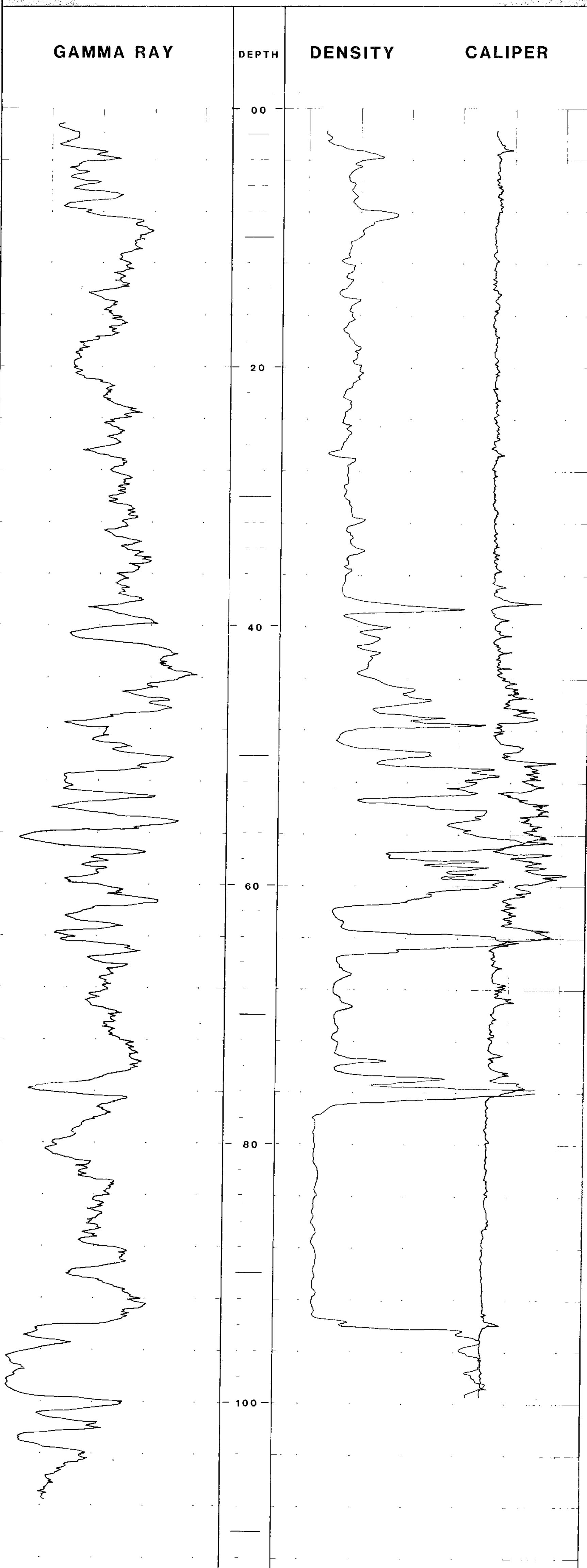
VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL LITHOLOGY LOG**  
BOREHOLE DATA  
GROUND EL. 1734.8  
DEPTH DRILLED 108  
DEPTH LOGGED 108  
REMARKS \_\_\_\_\_

**LOG SUITE**  
GAMMA RAY \_\_\_\_\_  
DENSITY \_\_\_\_\_  
CALIPER \_\_\_\_\_  
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.  
HOR. SCALE — GAMMA-500 cps  
                  — DENSITY-5000cps

616



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8204

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 20

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**  
GROUND EL. 1713.1

DEPTH DRILLED 100

DEPTH LOGGED 100

REMARKS NO DENSITY

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

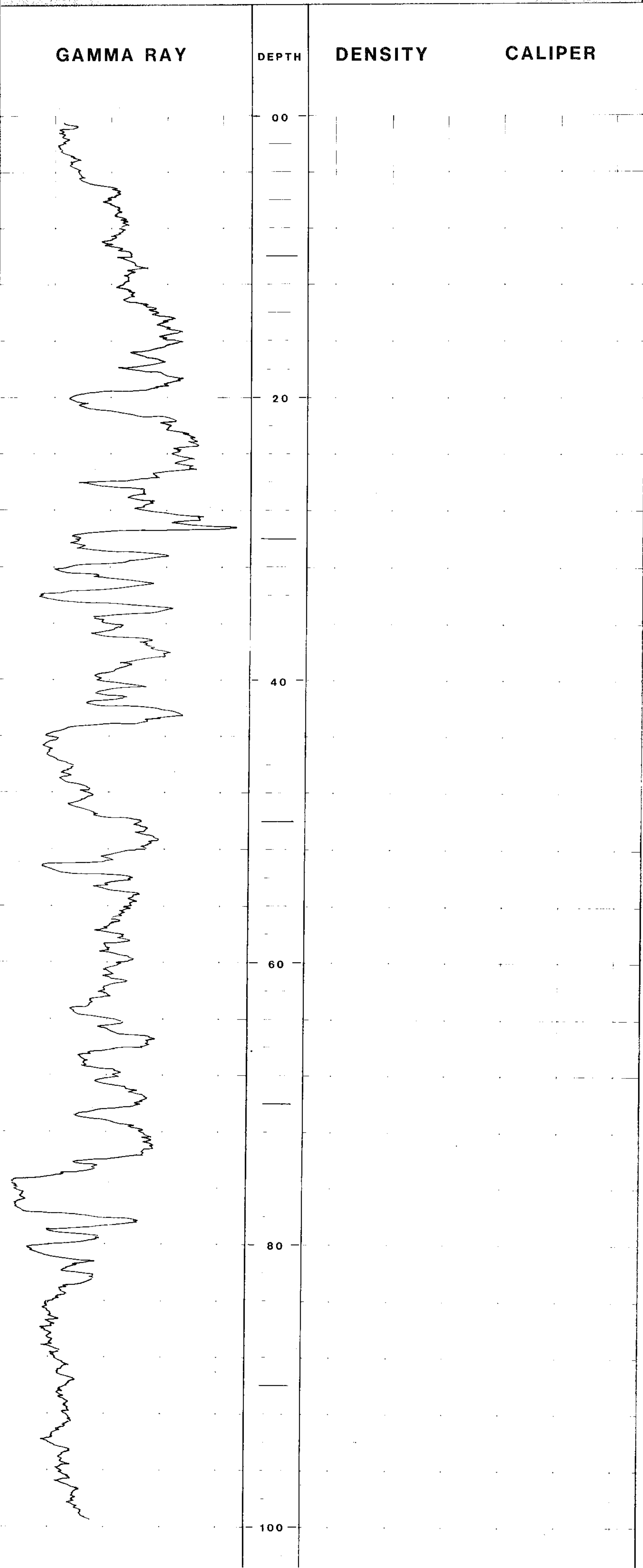
LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

616





QUINTEITE COAL LIMITED  
DENISON MINES LIMITED (INCORPORATED)

QMR 8205

SHERIFF

DEPUTY

MAY 20

1:200

COAL LITHOLOGY LOG

BARRETT'S DATA

WELL NO. 1707.8

DEPTH (METERS) 150

NO. DENSITY

LOG SHEET

DATE

BY

LOG NO.

LOG SHEET

DATE

BY

LOG NO.

616

616

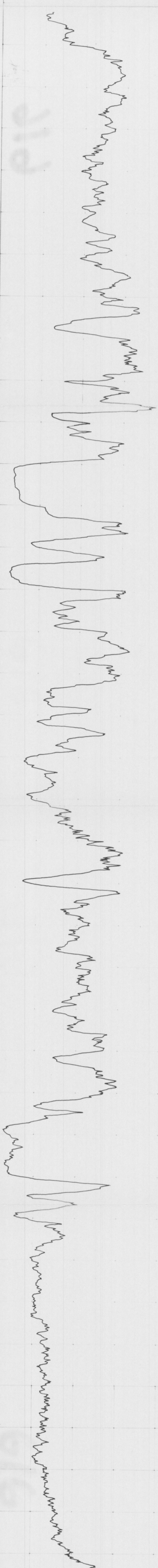
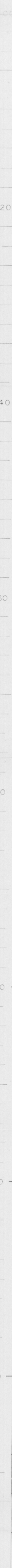
616

GAMMA RAY

DEPTH

DENSITY

CALIPER





QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (INCORPORATED)

BOREHOLE QMR 8206

LOCATION

AREA

DATE LOGGED MAY 22

SCALE 1:200

COAL LITHOLOGY LOG

BOREHOLE DATA

GROUND BL 1699.3

REPORT DATE 150

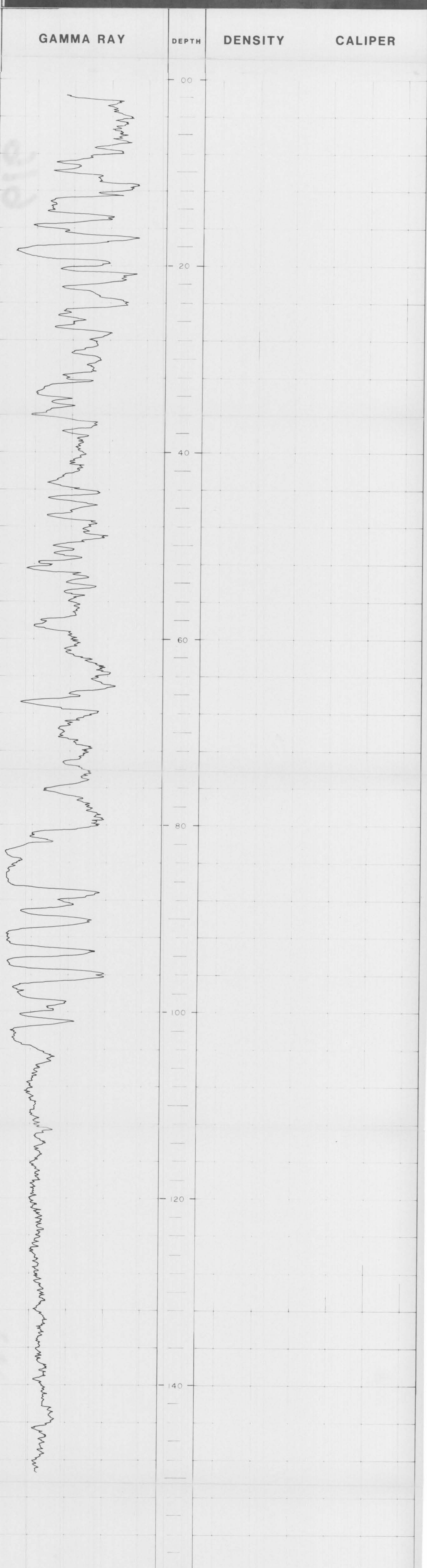
DEPTH LOGGED 150

REMARKS NO DENSITY

LOG SHEET

DATE OF LOG SHEET  
DENSITY  
SCALE  
LOGGED BY L.M.

616



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8207

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 22

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

BOREHOLE DATA  
GROUND EL. 1706.0

DEPTH DRILLED 120

DEPTH LOGGED 120

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 CPS  
DENSITY-5000CPS

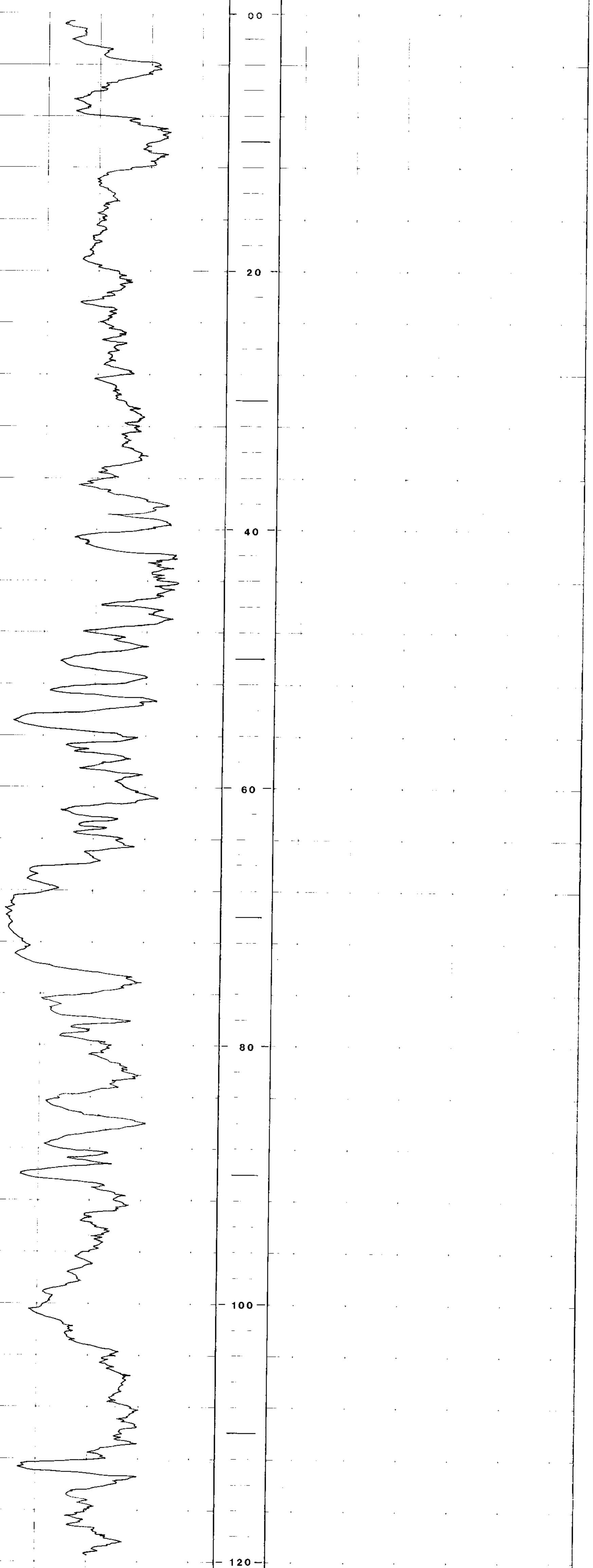
# 616

CALIPER

DENSITY

DEPTH

GAMMA RAY



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8208

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 27

VERT. SCALE 1:200

CHART SPEED 4M / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1669.8

DEPTH DRILLED 46

DEPTH LOGGED 44

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE GAMMA-500 cps

DENSITY-5000cps

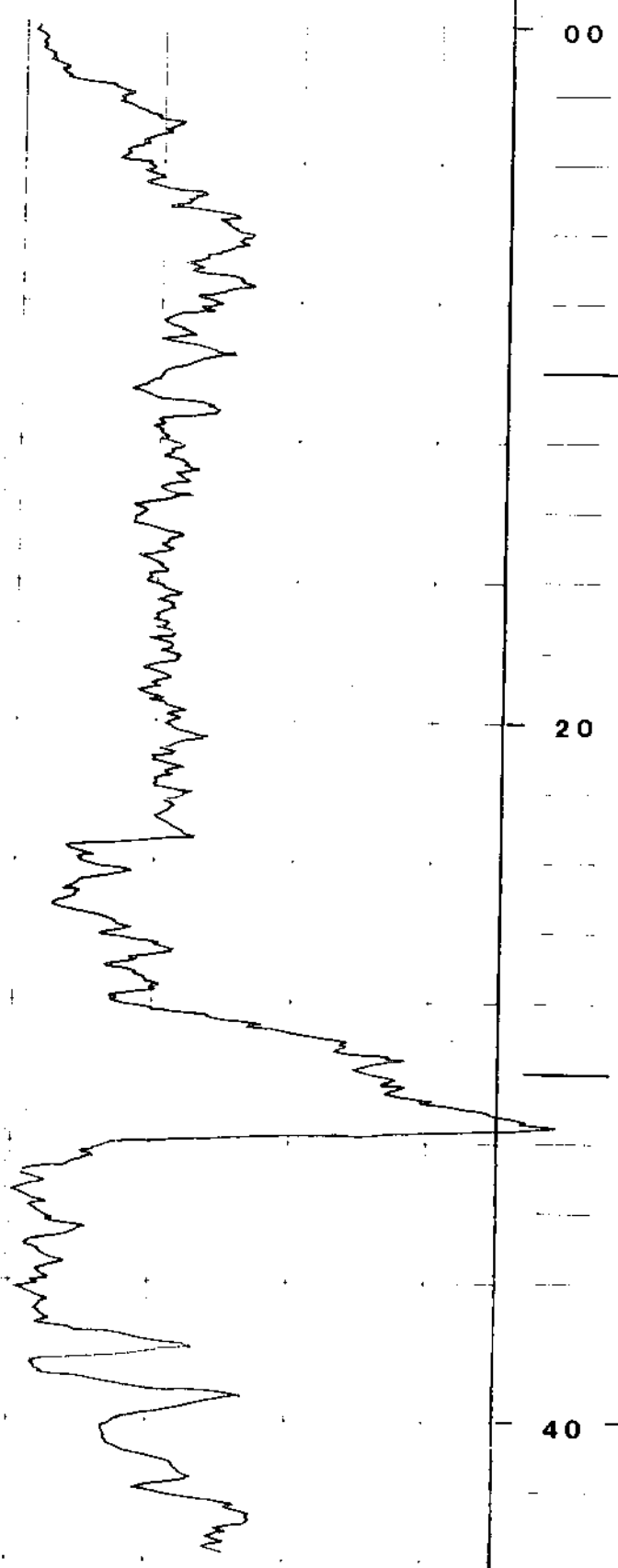
# 616

CALIPER

DENSITY

DEPTH

GAMMA RAY



PR-QUINTETTE 82(S)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE OMR 8209

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 27

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1672.2

DEPTH DRILLED 60

DEPTH LOGGED 48

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE — GAMMA-500 cps  
— DENSITY-5000cps

# 616

GAMMA RAY	DEPTH	DENSITY	CALIPER
	<p>00</p> <p>20</p> <p>40</p>		



TR-Quintette 88(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8210

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 27

VERT. SCALE 1:200

CHART SPEED 4M / MIN

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1668.3

DEPTH DRILLED 100

DEPTH LOGGED 38

REMARKS NO DENSITY

HOLE BLOCKED

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE GAMMA-600 cps  
DENSITY-5000cps

# 616

GAMMA RAY	DEPTH	DENSITY	CALIPER
	00		
	10		
	20		
	30		
	40		
	50		
	60		
	70		
	80		
	90		

FR-Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8211

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 26

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1676.0

DEPTH DRILLED 110

DEPTH LOGGED 110

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY

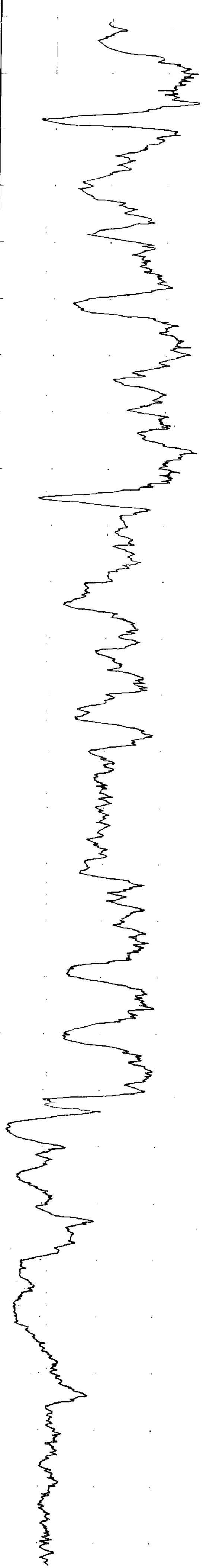
DENSITY

CALIPER

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

### GAMMA RAY



### DENSITY

### CALIPER

DEPTH

00

20

40

60

80

100

616

TR. QUINETTE 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8212

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 28

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1650.0

DEPTH DRILLED 40

DEPTH LOGGED 38

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE

GAMMA-500 cps  
DENSITY-5000cps

616

CALIPER

DENSITY

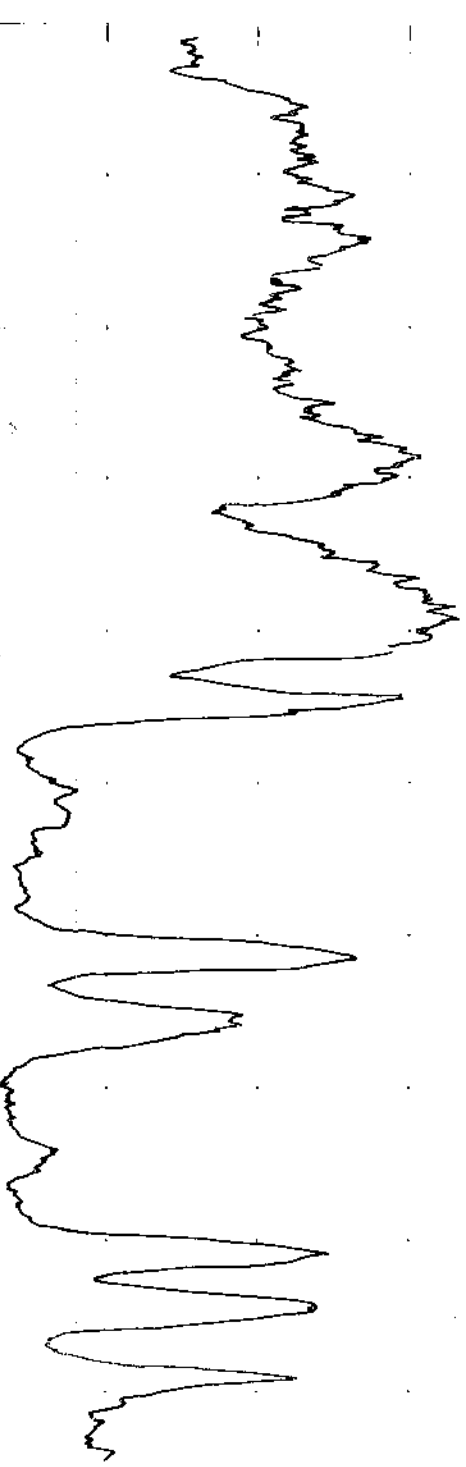
DEPTH

GAMMA RAY

00

20

40



**QUINTEtte COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8213

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 28

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

BOREHOLE DATA

GROUND EL. 1647.9

DEPTH DRILLED 80

DEPTH LOGGED 80

REMARKS NO DENSITY

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

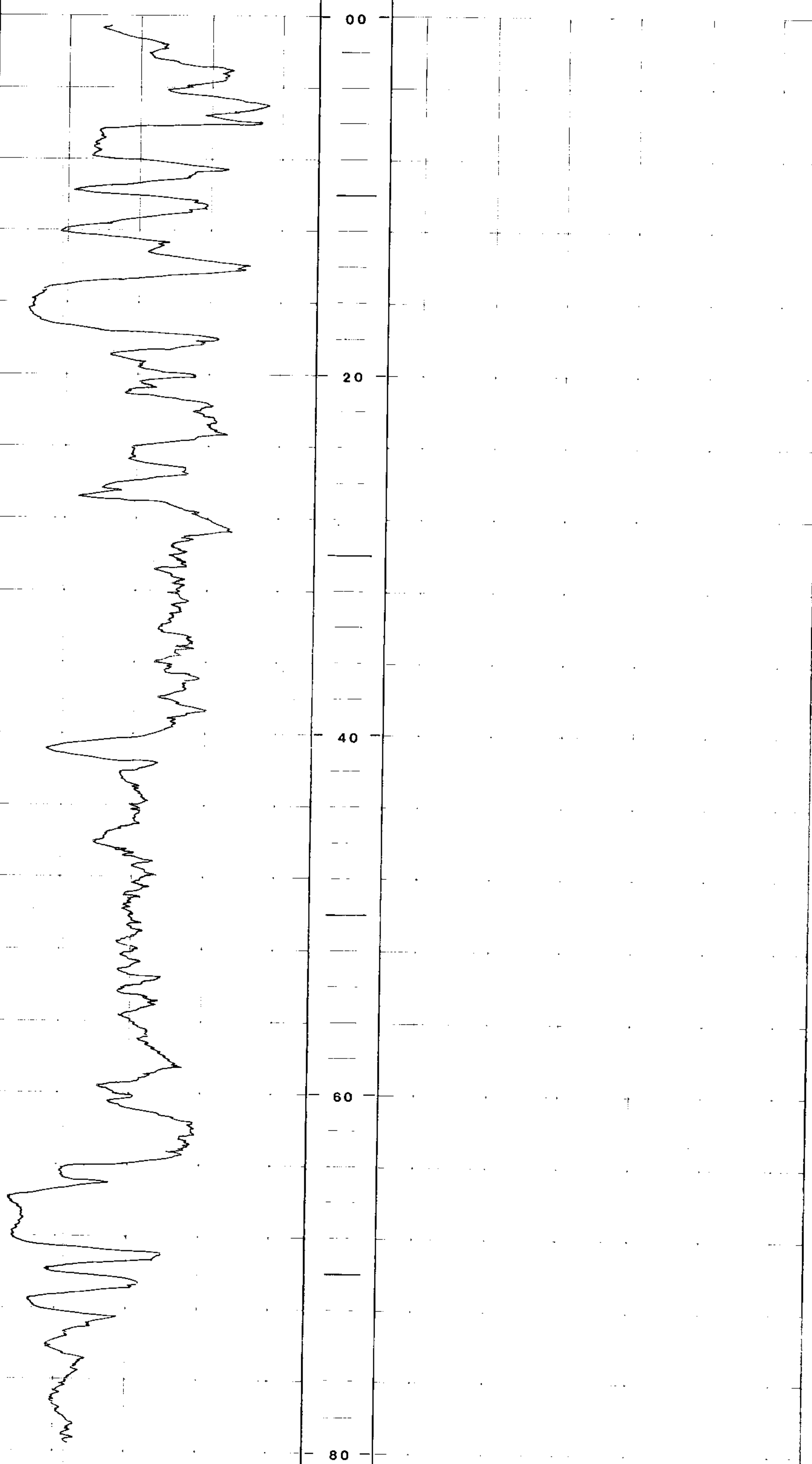
**616**

**CALIPER**

**DENSITY**

**DEPTH**

**GAMMA RAY**





R. Quintette 8214

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8214

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 28

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

BOREHOLE DATA  
GROUND EL. 1647.1

DEPTH DRILLED 50

DEPTH LOGGED 49

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

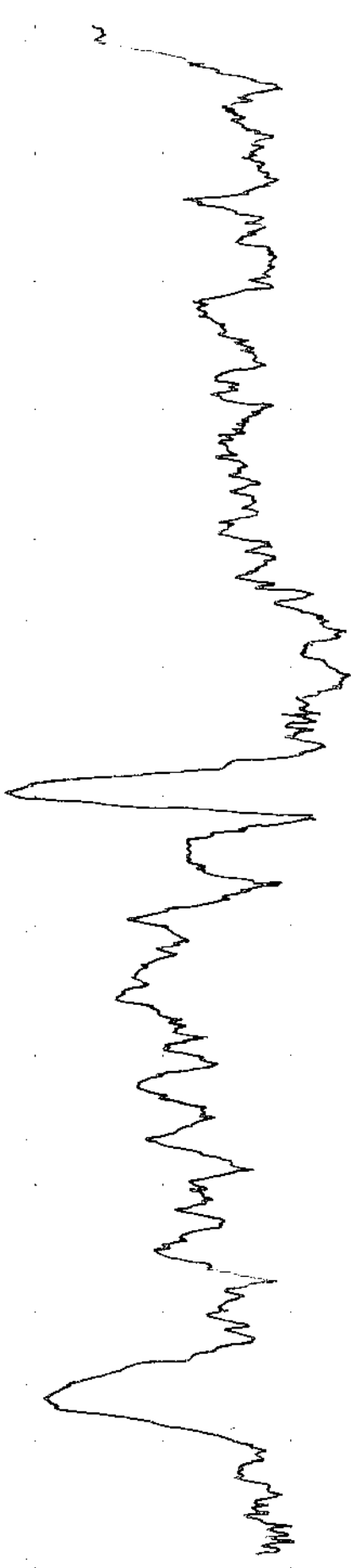
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



Fr. Quintette 8263A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8215

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 13

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1705.4

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE — GAMMA-500 cps  
DENSITY-5000cps

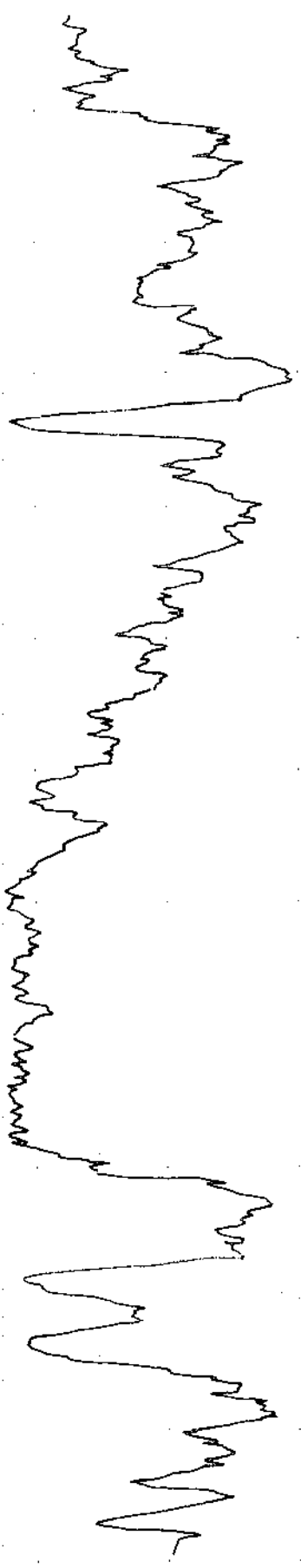
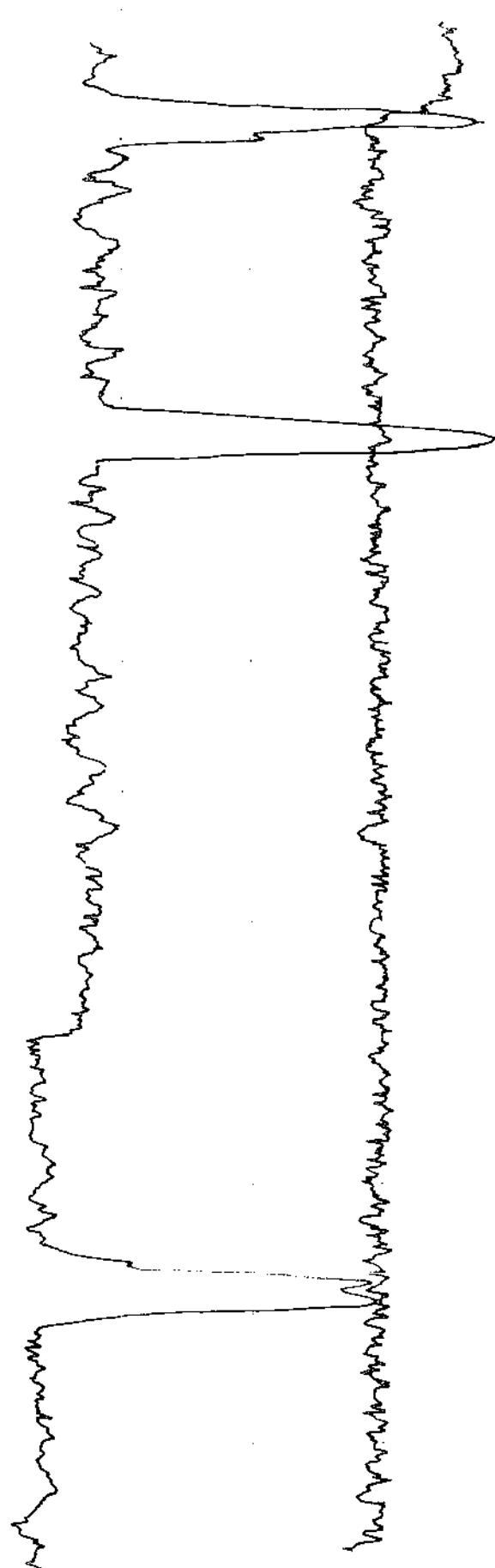
616

### CALIPER

### DENSITY

### DEPTH

### GAMMA RAY



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8215

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG 13

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL LOG

BOREHOLE DATA  
GROUND EL. 1705.4

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS \_\_\_\_\_

### LOG SUITE

HOLE DIAMETER \_\_\_\_\_

### DENSITY

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

616

## DENSITY DETAIL

DEPTH



72-Quintette 82 (3)

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8216

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 30

VERT. SCALE 1:200

CHART SPEED 4 M. / MIN.

COAL BOREHOLE DATA

LITHOLOGY GROUND EL. 1708.6

LOG DEPTH DRILLED 60

DEPTH LOGGED 60

REMARKS NO DENSITY

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

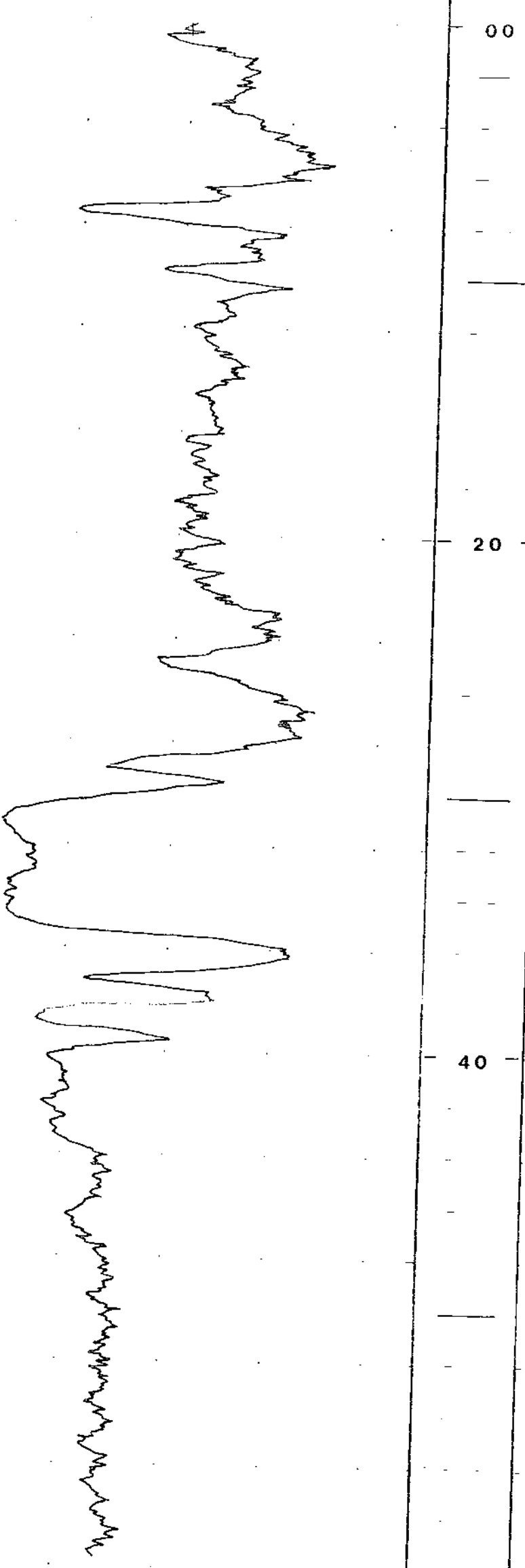
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





R. Quintette 82/39

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8217

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 31

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

BOREHOLE DATA  
GROUND EL. 1708.7

DEPTH DRILLED 98

DEPTH LOGGED 98

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

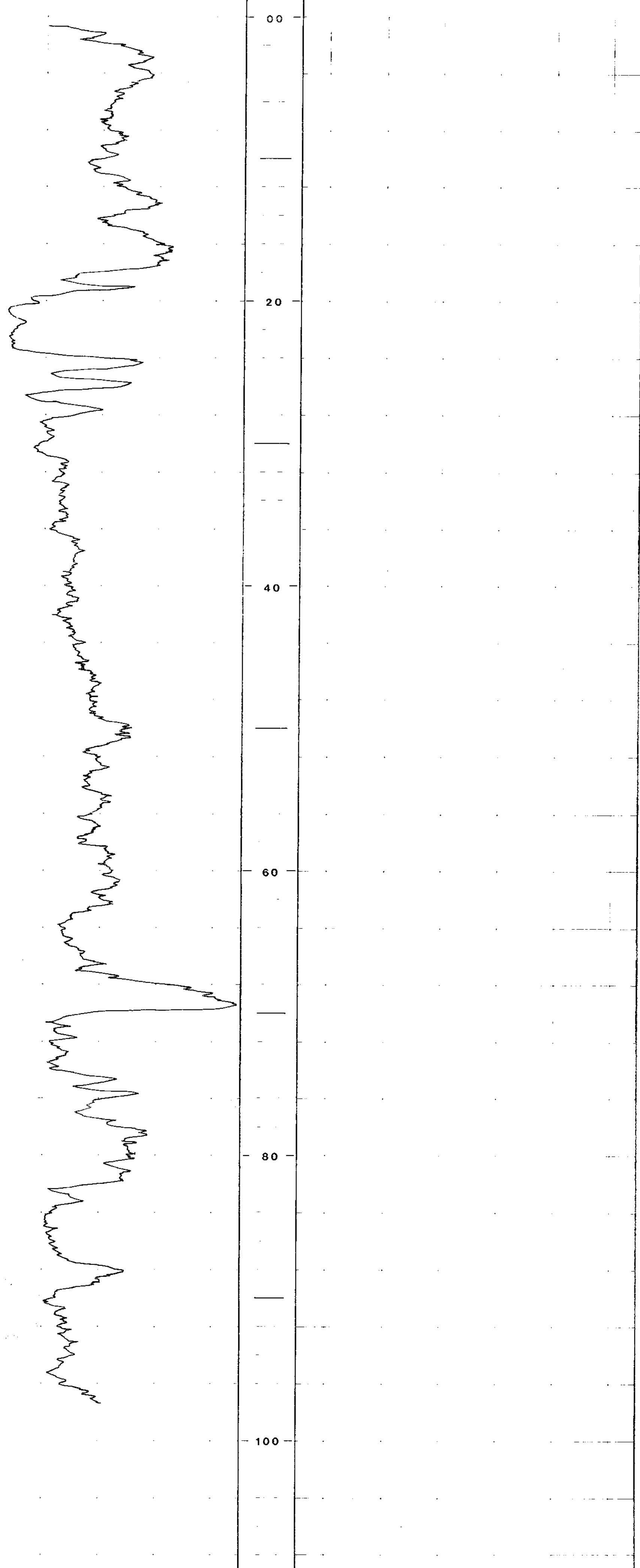
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



Fr. Quintette 8218/A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8218

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 27

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1679.9

DEPTH DRILLED 60

DEPTH LOGGED 60

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

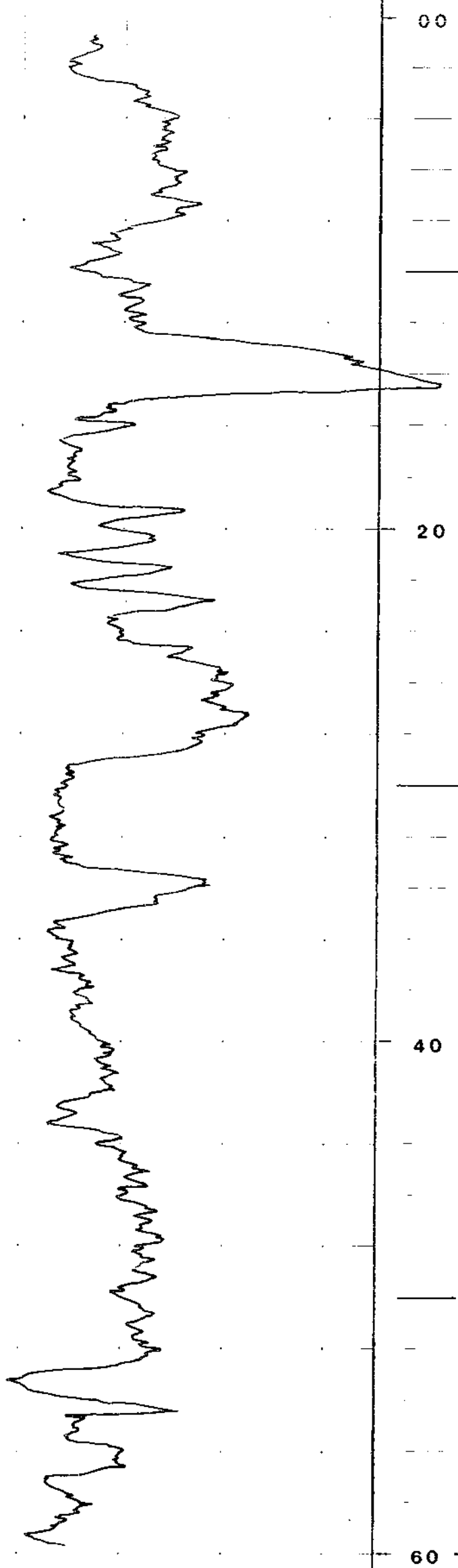
616

### GAMMA RAY

### DEPTH

### DENSITY

### CALIPER



Pg. Quintette 8263A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8219

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JUNE 2

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1723.6

DEPTH DRILLED 67

DEPTH LOGGED 67

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY  
DENSITY  
CALIPER

LOGGED BY L.M.

HOLE DIAMETER

HOLE ANGLE

HOR. SCALE — GAMMA-500 cps  
DENSITY-5000cps

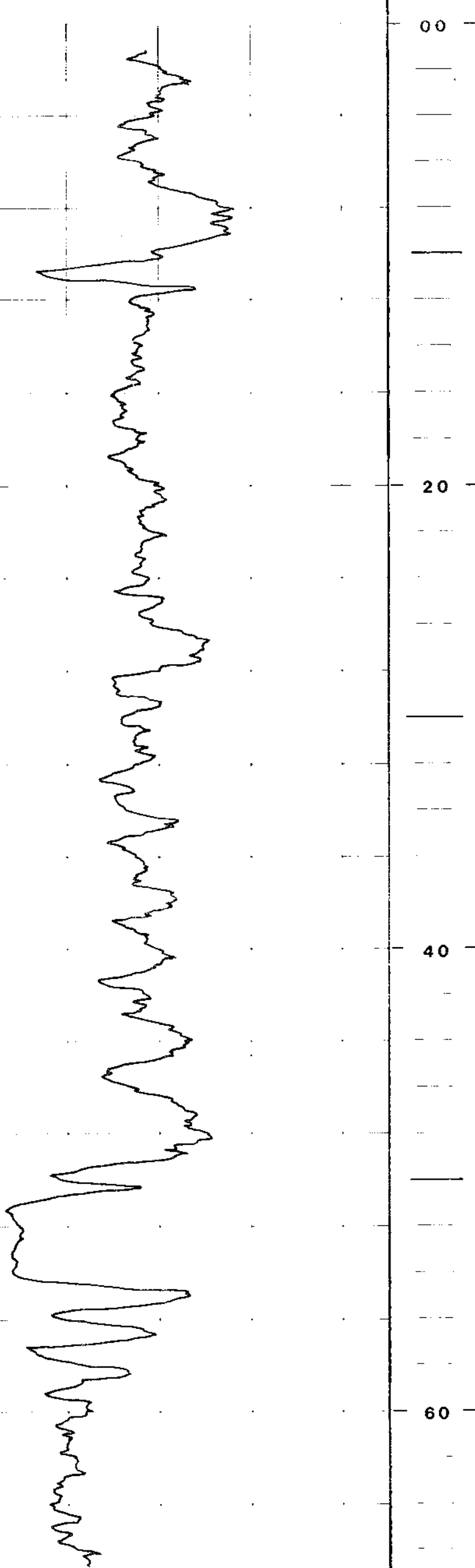
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



P3-Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8220

LOCATION \_\_\_\_\_

AREA \_\_\_\_\_

DATE LOGGED JUNE 2

VERT. SCALE 1:200

CHART SPEED 4M./MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1727.7

DEPTH DRILLED 70

DEPTH LOGGED 70

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE GAMMA-500 cps

DENSITY-5000cps

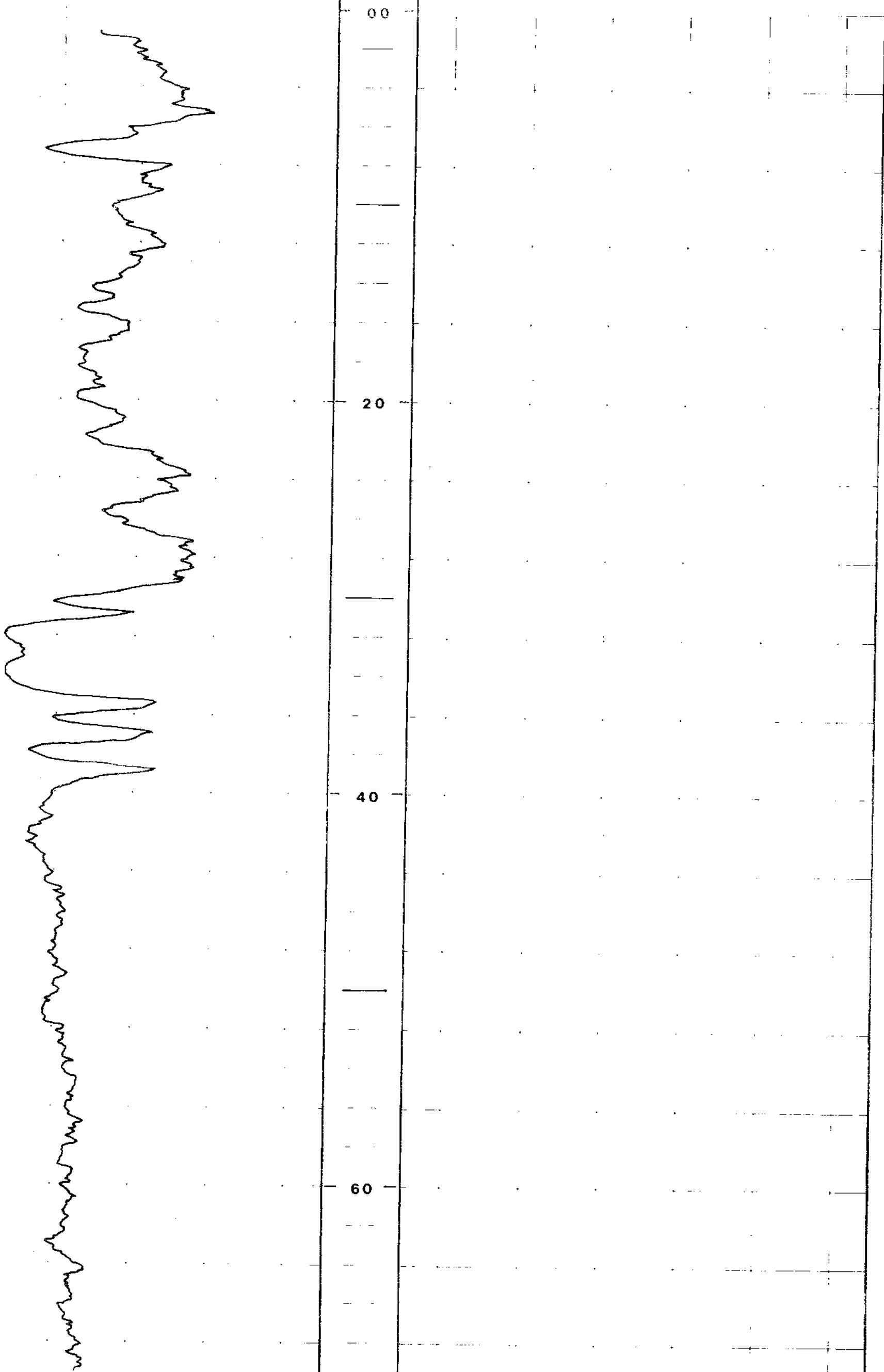
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





FR - QUINTETTE 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8221

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JUNE 2

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL  
LITHOLOGY  
LOG**

### BOREHOLE DATA

GROUND EL. 1735.5

DEPTH DRILLED 50

DEPTH LOGGED 50

REMARKS NO DENSITY

**LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

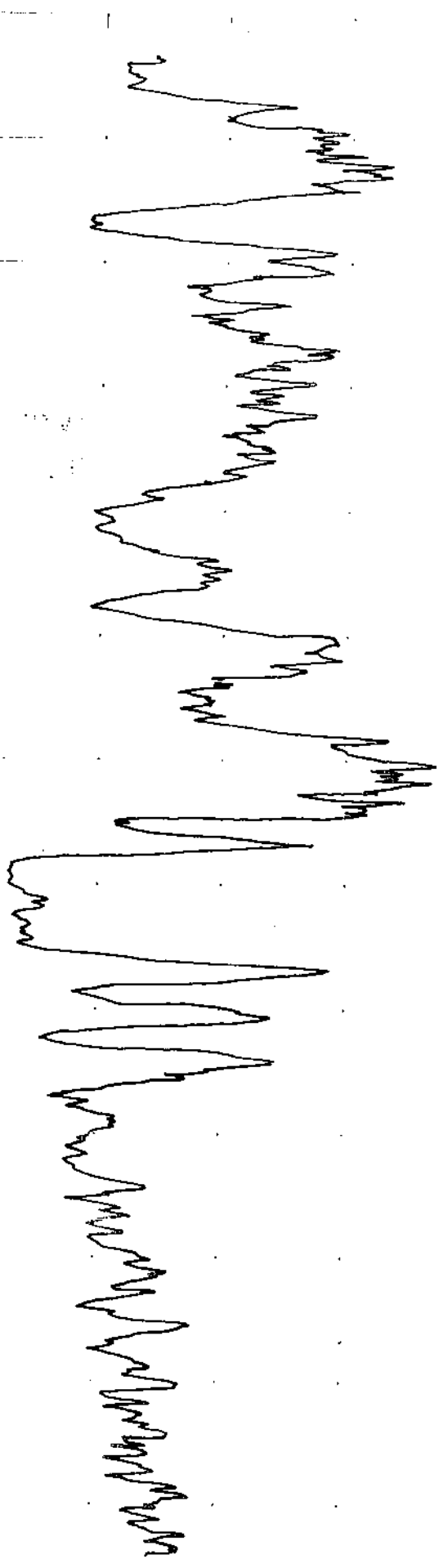
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



Fr. Quintette 83(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8222

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 4

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1722.7

DEPTH DRILLED 70

DEPTH LOGGED 48

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE ——— GAMMA-500 cps  
DENSITY-5000cps

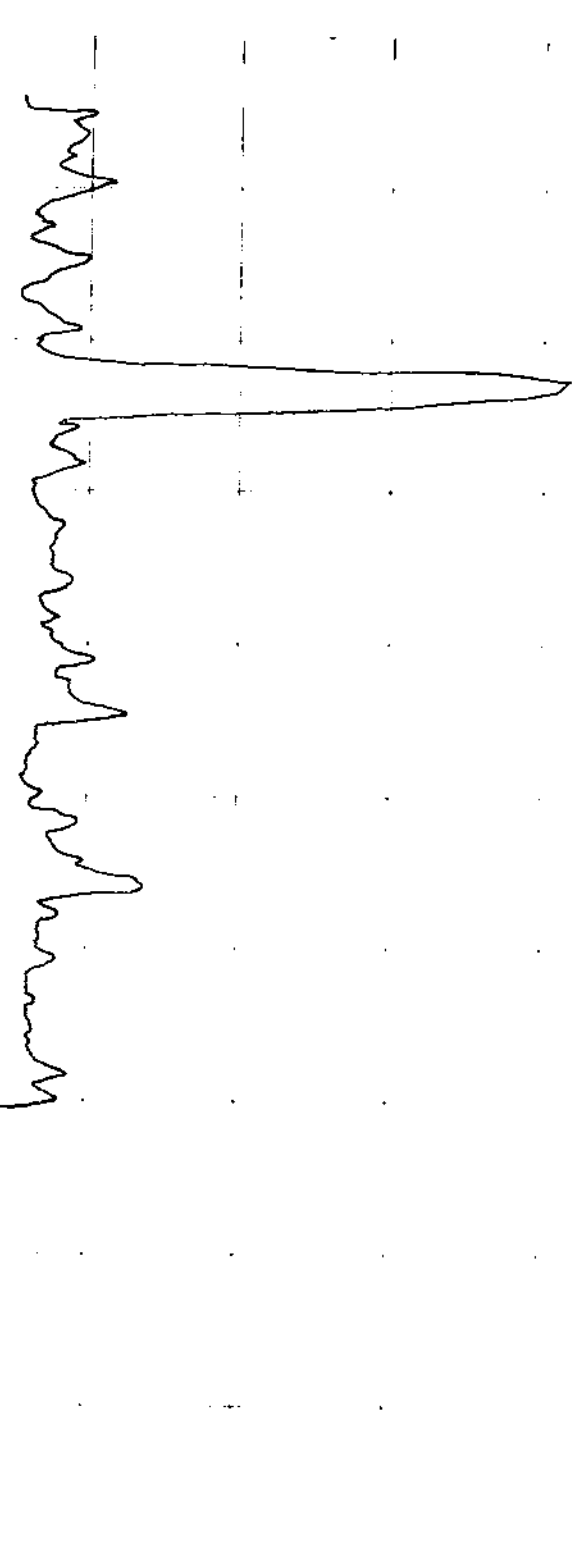
615

CALIPER

DENSITY

DEPTH

GAMMA RAY



Fr. Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8222

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 19

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

GROUND EL. 1722.7

DEPTH DRILLED 70

DEPTH LOGGED 48

REMARKS \_\_\_\_\_

## LOG

### LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

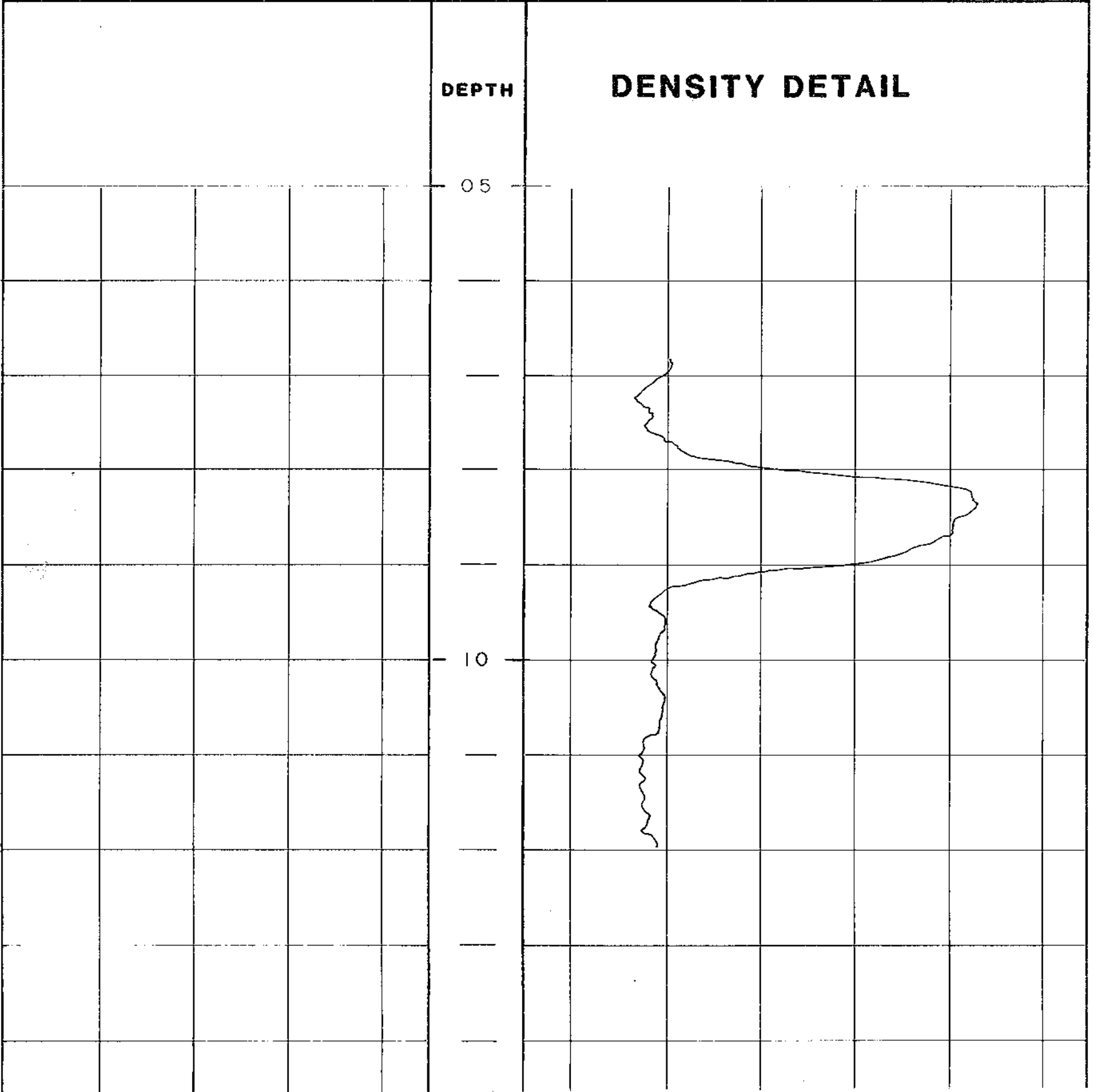
HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

## DENSITY DETAIL

DEPTH

05

0



616

TR. QUINTETTE 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8223

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 4

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1735.2

DEPTH DRILLED 70

DEPTH LOGGED 70

REMARKS \_\_\_\_\_

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

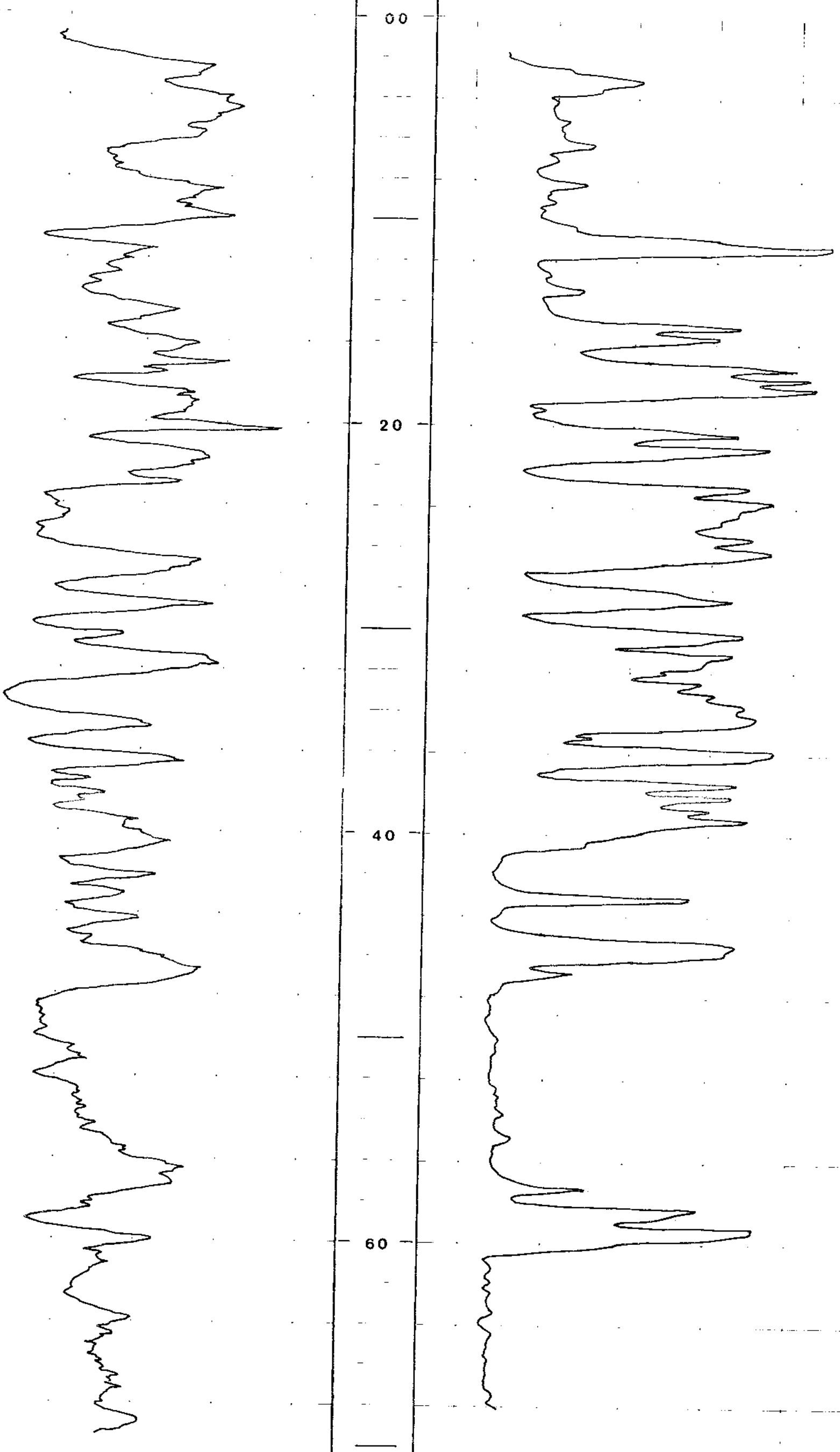
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





**QUINLETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8223

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 18

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

**SEAM**  
**DETAIL**

BOREHOLE DATA  
GROUND EL. 1735.2

DEPTH DRILLED 70

DEPTH LOGGED 70

REMARKS \_\_\_\_\_

**LOG SUITE**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

DENSITY LOGGED BY LM

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

616

**DENSITY DETAIL**

DEPTH

00

5

10

15

20

25

30

35

40

45

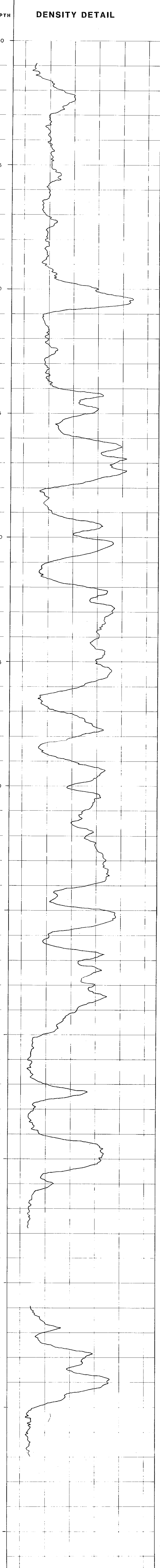
50

55

60

65

70



TR. Quintette 82(3A)

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8224

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 4

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL  
LITHOLOGY  
LOG**

**BOREHOLE DATA**

GROUND EL. 1733.9

DEPTH DRILLED 55

DEPTH LOGGED 55

REMARKS \_\_\_\_\_

**LOG SUITE**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE — **GAMMA-500 cps**  
— **DENSITY-5000 cps**

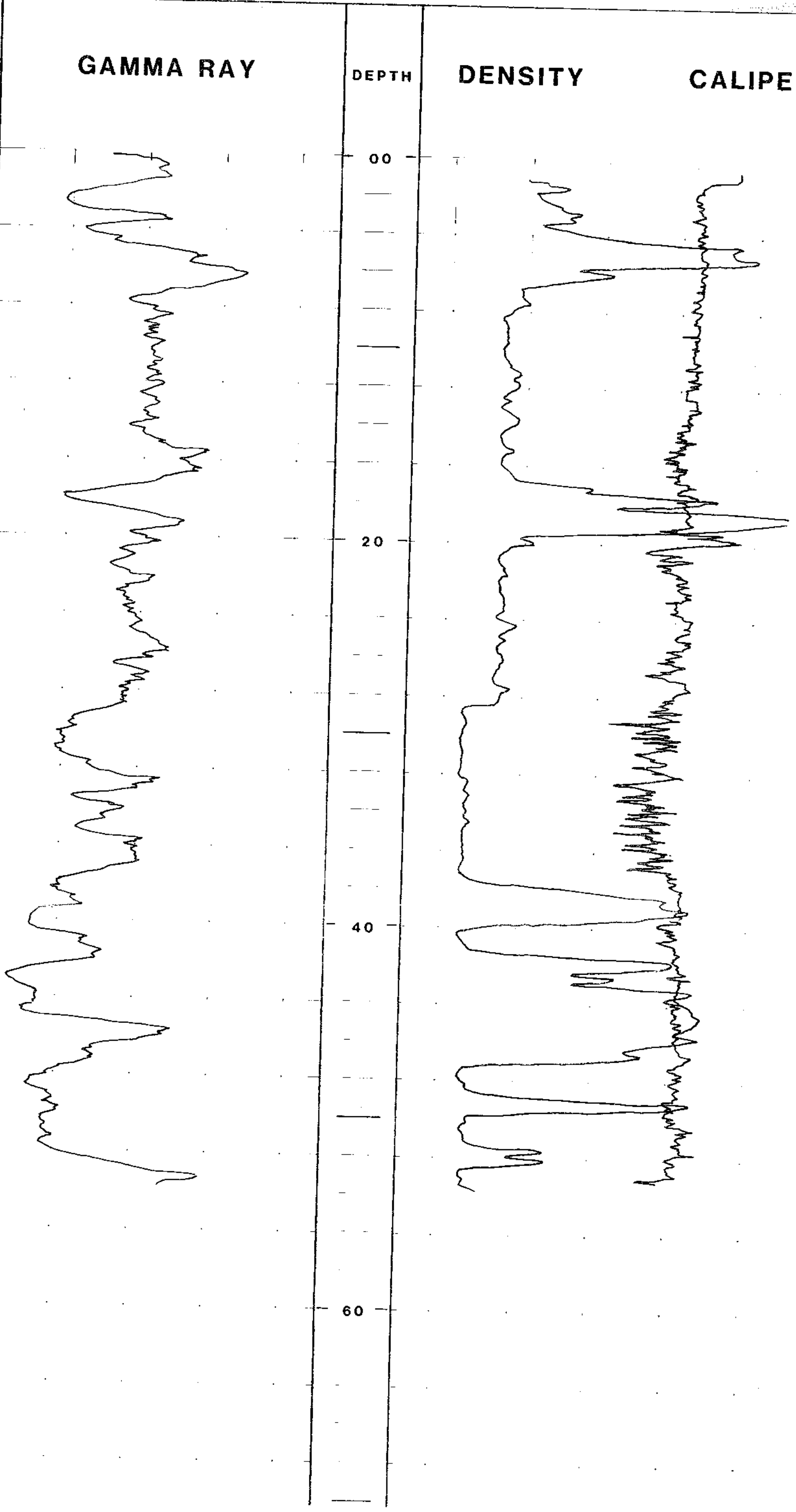
**616**

**CALIPER**

**DENSITY**

**DEPTH**

**GAMMA RAY**



R. Quintette 8243A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8224

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 16

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL LOG

BOREHOLE DATA  
GROUND EL. 1733.9

DEPTH DRILLED 35

DEPTH LOGGED 55

REMARKS \_\_\_\_\_

LOG SUITE \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

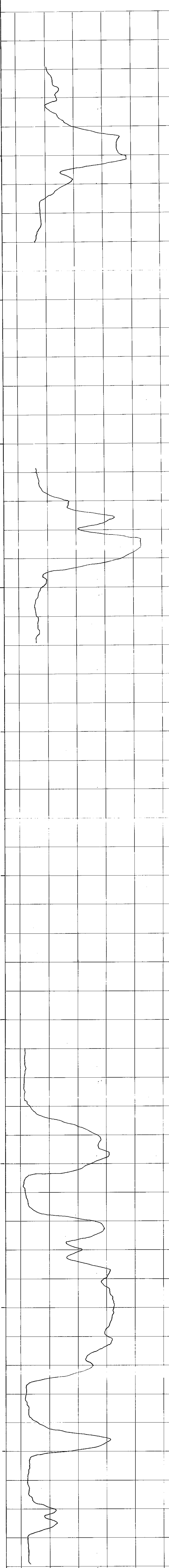
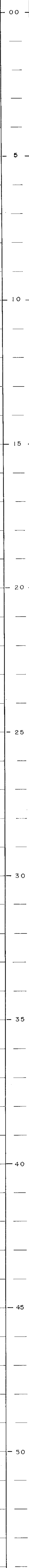
DENSITY LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

616

## DENSITY DETAIL

DEPTH



**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8225

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 6

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

BOREHOLE DATA  
 GROUND EL. 1712.5

DEPTH DRILLED 97

DEPTH LOGGED 97

REMARKS NO DENSITY

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

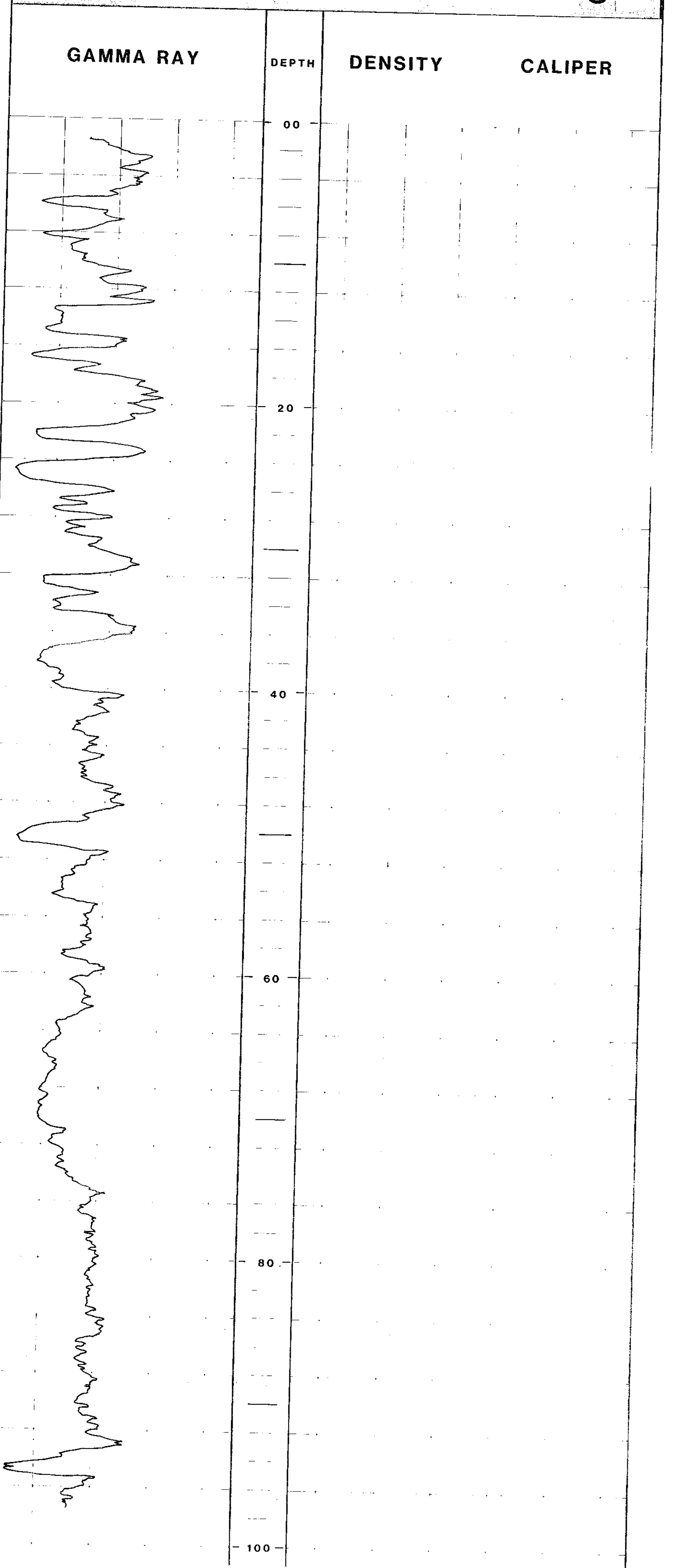
HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

**616**





FR. Quintette 82(SA)

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8226

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 12

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL LITHOLOGY LOG**  
BOREHOLE DATA  
GROUND EL. 1724.8  
DEPTH DRILLED 80  
DEPTH LOGGED 80  
REMARKS \_\_\_\_\_

**LOG SUITE**  
GAMMA RAY \_\_\_\_\_  
DENSITY \_\_\_\_\_  
CALIPER \_\_\_\_\_  
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY LM

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

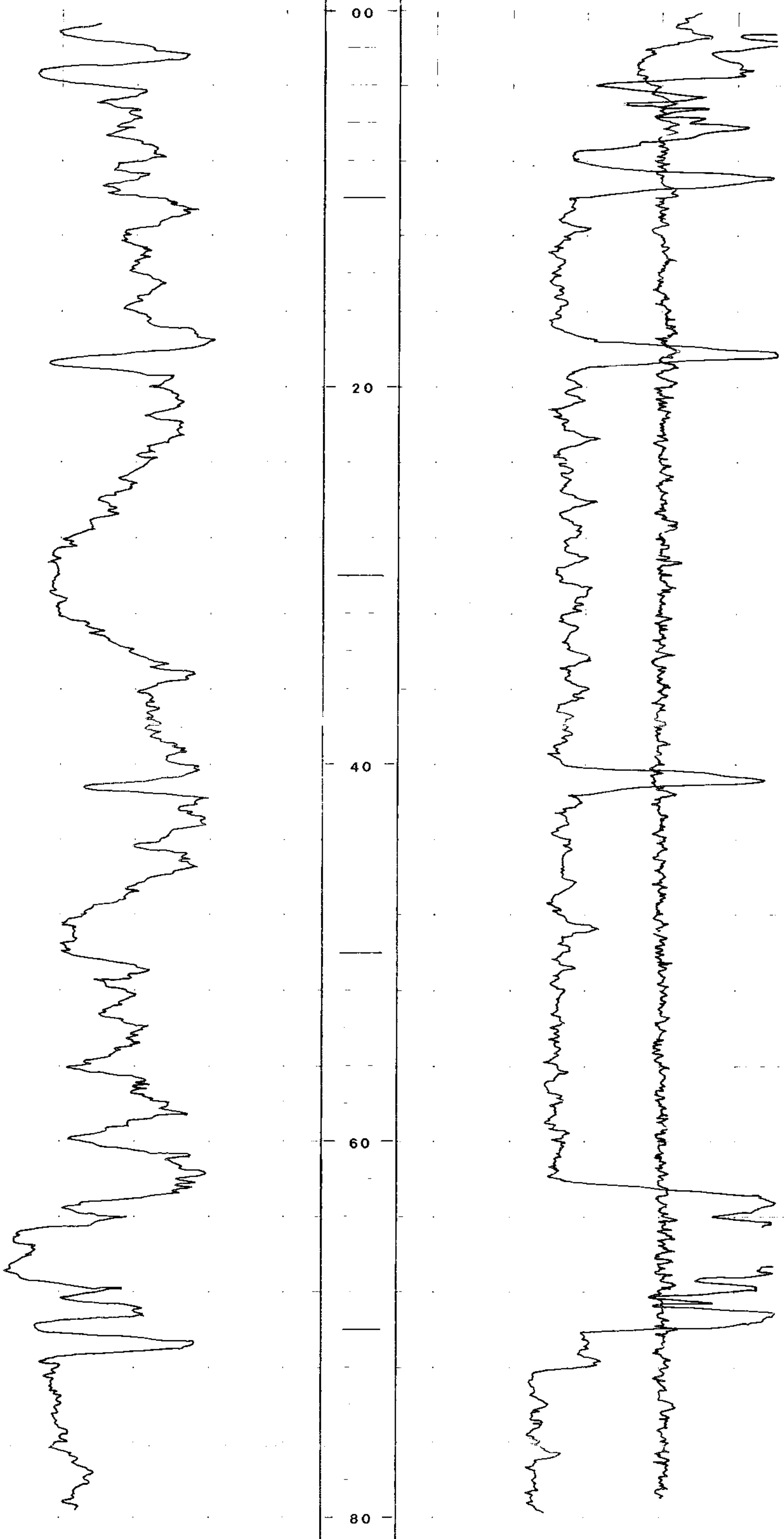
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





PR. Quintette BA (3)  
**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE OME 8227

LOCATION \_\_\_\_\_

AREA \_\_\_\_\_

DATE LOGGED July 82

VERT. SCALE 1:200

**COAL**  
 NORTHING 609884.1  
 EASTING 615846.9

**LITHOLOGY**  
 ELEVATION 1761.2  
 DEPTH DRILLED 225m  
 DEPTH LOGGED 220m

REMARKS \_\_\_\_\_

LOG SUITE \_\_\_\_\_

GAMMA \_\_\_\_\_

DENSITY \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

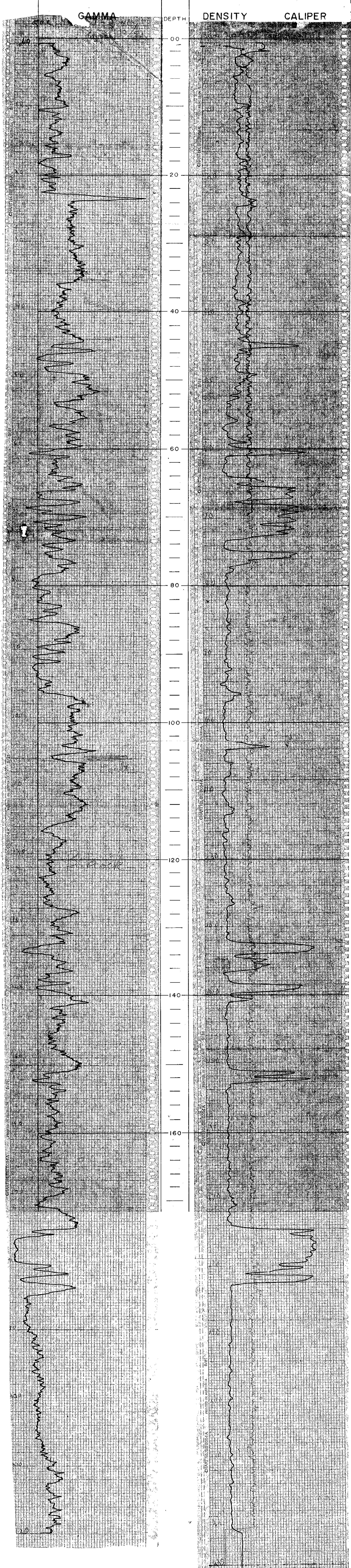
HOLE ANGLE \_\_\_\_\_

VERT. \_\_\_\_\_

LOGGED BY \_\_\_\_\_

HOR. SCALE GAMMA - 500 c.p.s.  
DENSITY - 5000 c.p.s.

**616**





R. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8228

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 29

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL BOREHOLE DATA

LITHOLOGY GROUND EL. 1680.0

LOG DEPTH DRILLED 55

DEPTH LOGGED 55

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-600 cps

DENSITY-5000cps

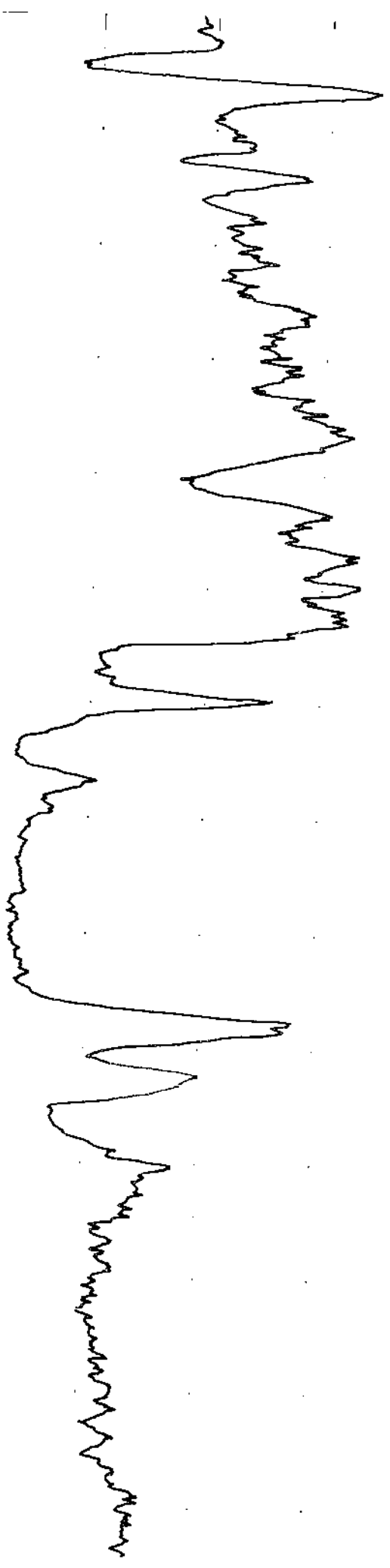
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



Fr. Quintette 88(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8229

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 29

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 16791

DEPTH DRILLED 55

DEPTH LOGGED 54

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

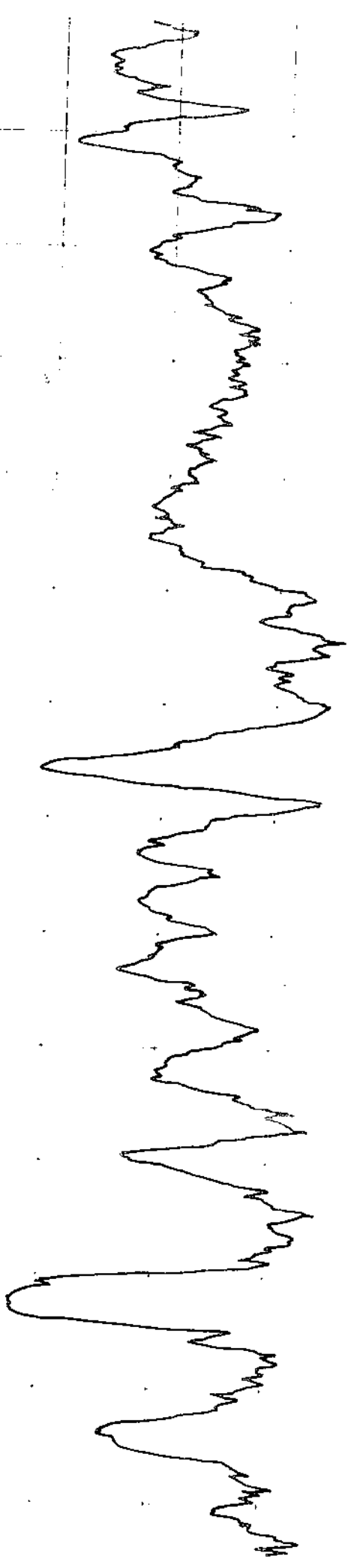
616

### CALIPER

### DENSITY

### DEPTH

### GAMMA RAY



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OMR 8320

SHERIFF

DEPUTY

JULY 2

11:200

COAL  
LITHOLOGY  
LOG

BOZEMAN DATA

1676.4

178

178

LOG SHEET

178

178

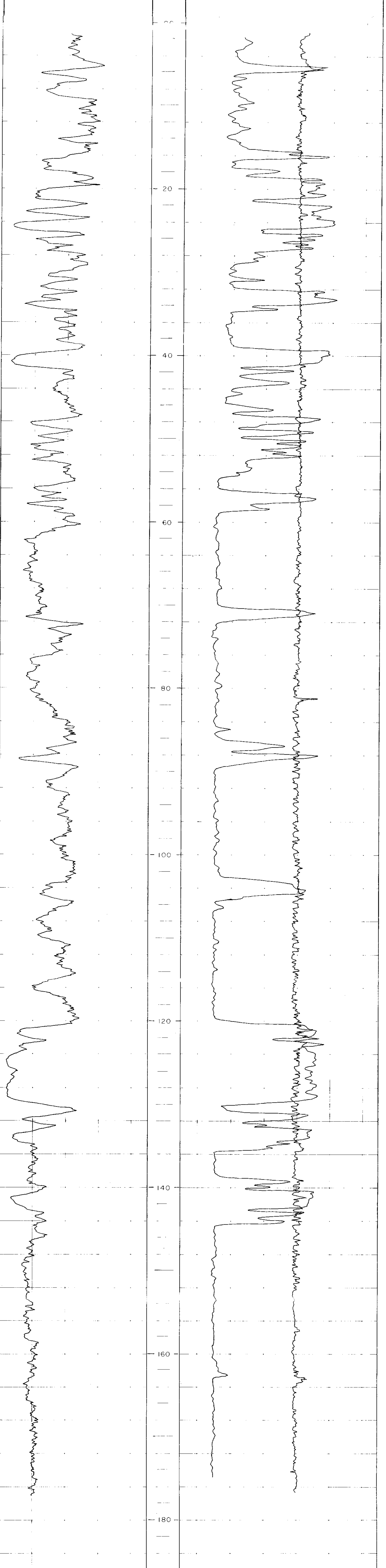
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





78-Quintette 5263A

QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8230

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 2

VERT. SCALE 1:50

CHART SPEED

SEAM BOREHOLE DATA

GROUND EL. 1676.4

DEPTH DRILLED 178

DEPTH LOGGED 178

REMARKS PART 1

LOG SUITE

HOLE DIAMETER

HOLE ANGLE

DENSITY LOGGED BY L.M.

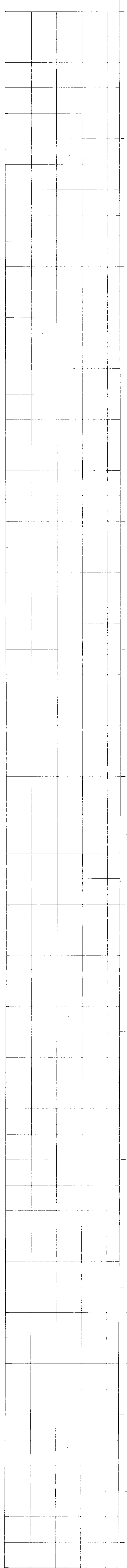
HOR. SCALE DENSITY-5000cps

616

DENSITY DETAIL

DEPTH

00 5 10 15 20 25 30 35 40 45 50 55



R. Quintette 82(3)9

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8230

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 2

VERT. SCALE 1:50

CHART SPEED

## SEAM DETAIL LOG

BOREHOLE DATA  
GROUND EL. 1676.4

DEPTH DRILLED 178

DEPTH LOGGED 178

REMARKS PART 2

## LOG SUITE

HOLE DIAMETER

DENSITY

HOLE ANGLE

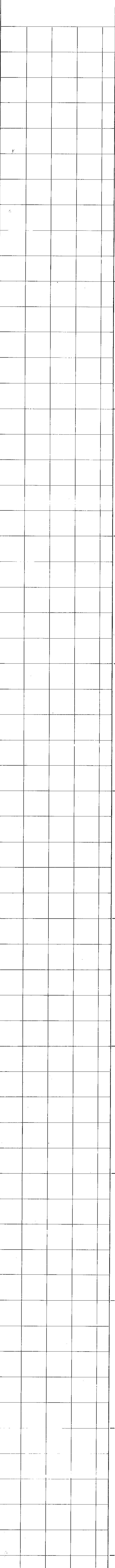
LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

## DENSITY DETAIL

DEPTH

65  
70  
85  
90  
100  
105  
120  
125  
130  
135  
140  
145



616

Fr-Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8231

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 10

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1689.2

DEPTH DRILLED 70

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

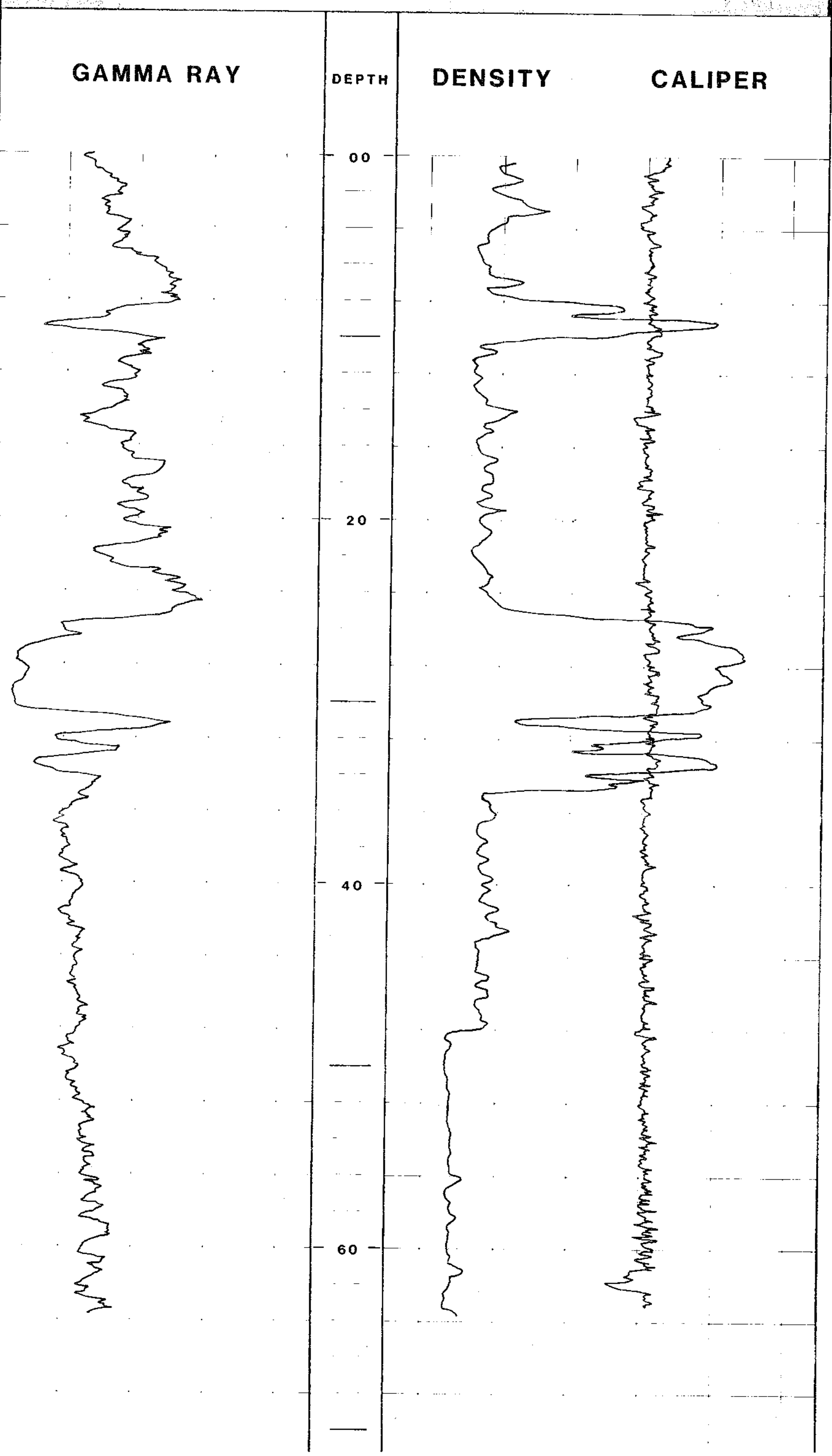
## LOG SUITE

GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

616



12. Quintette 82(S)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8231

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 16

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

GROUND EL. 1689.2

DEPTH DRILLED 70

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

DENSITY

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_

DENSITY-5000cps

616

## DENSITY DETAIL

DEPTH

00

05

10

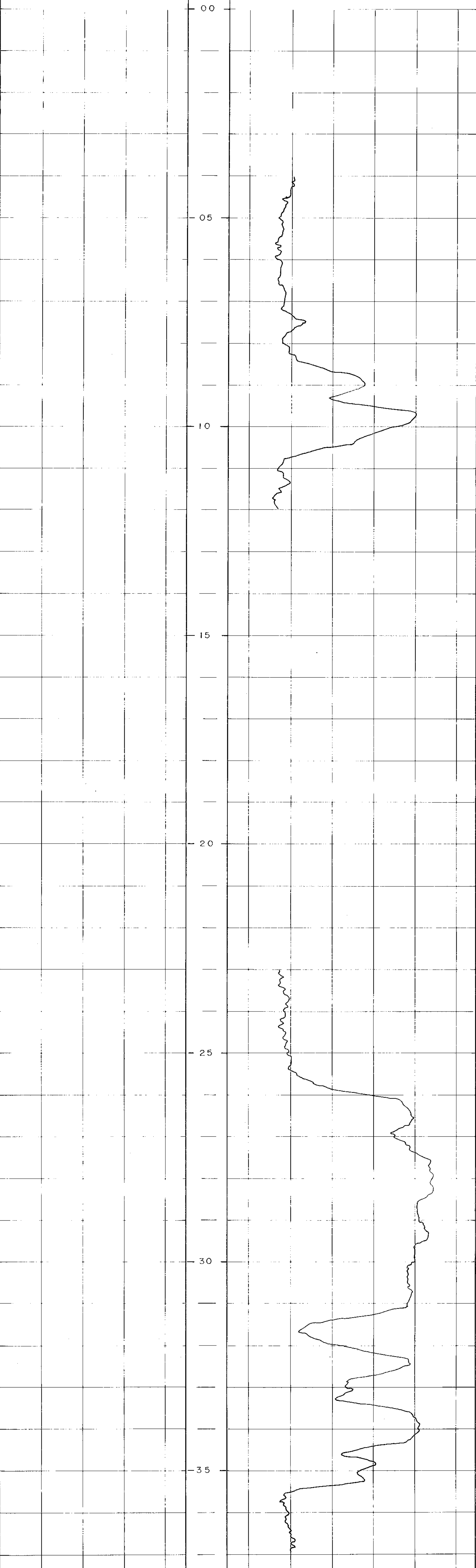
15

20

25

30

35





72- Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8232

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 15

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

COAL BOREHOLE DATA

LITHOLOGY GROUND EL. 1693.5

LOG DEPTH DRILLED 70

DEPTH LOGGED 69

REMARKS

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE — GAMMA-600 cps  
DENSITY-5000cps

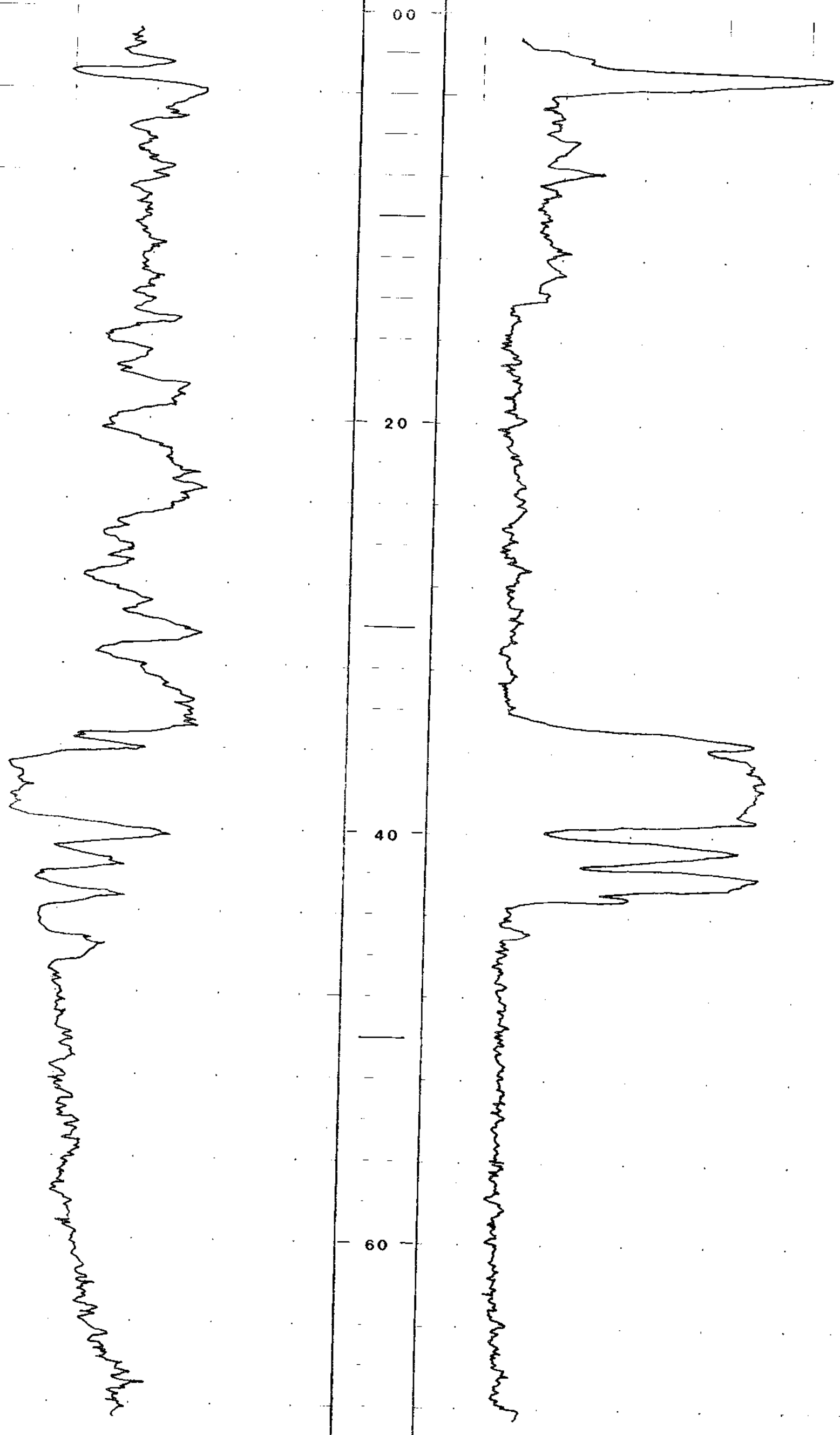
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



P.R. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8232

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 15

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

BOREHOLE DATA  
GROUND EL. 1693.5

DEPTH DRILLED 70

DEPTH LOGGED 69

REMARKS \_\_\_\_\_

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

646

## DENSITY DETAIL

DEPTH

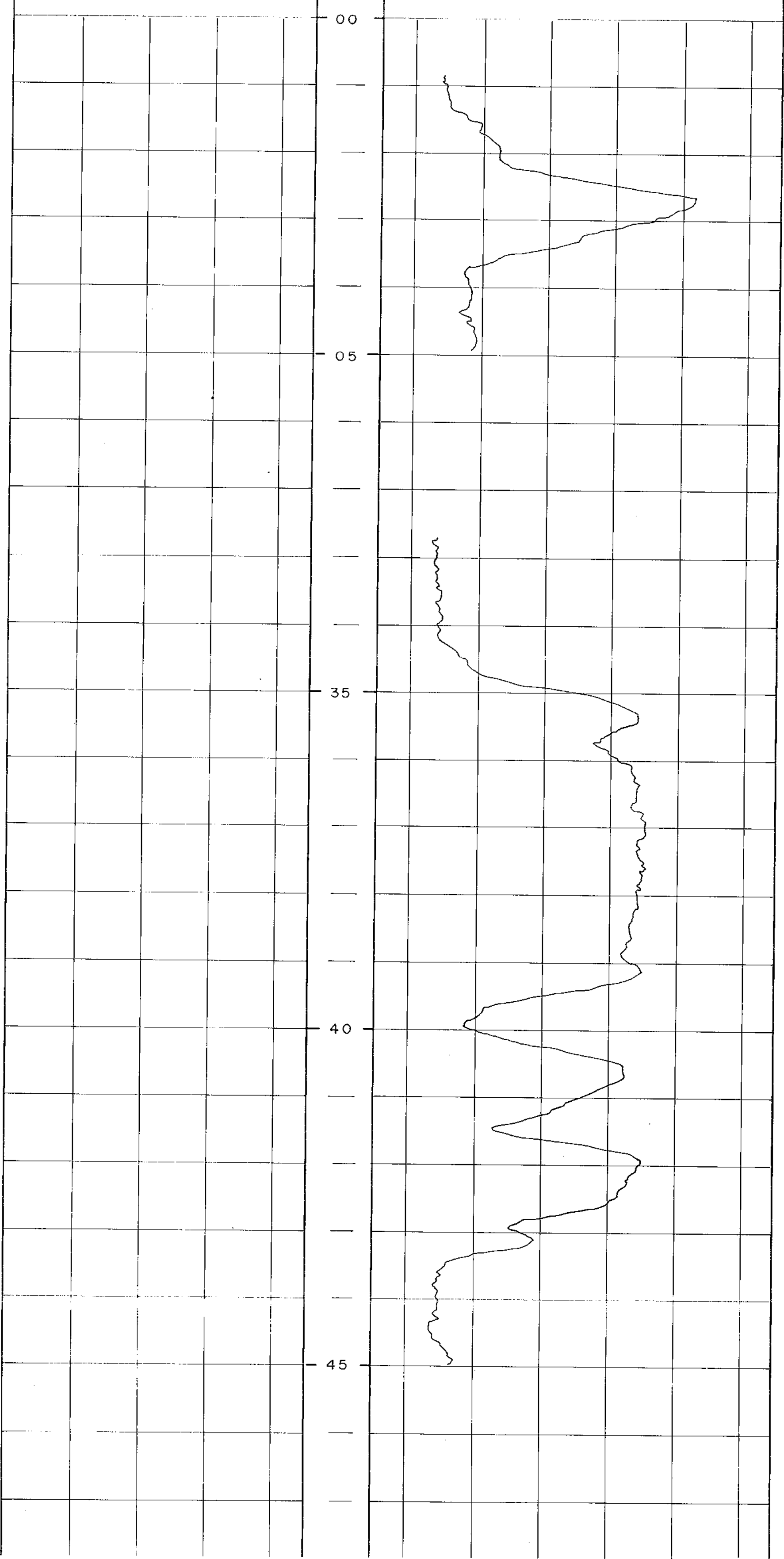
00

05

35

40

45



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8233

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 9

VERT. SCALE 1:200

CHART SPEED 4M./MIN.

### BOREHOLE DATA

GROUND EL. 1688.2

DEPTH DRILLED 70

DEPTH LOGGED 68

REMARKS DENSITY

STUCK \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

## COAL LITHOLOGY LOG

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

### GAMMA RAY

### DEPTH

### DENSITY

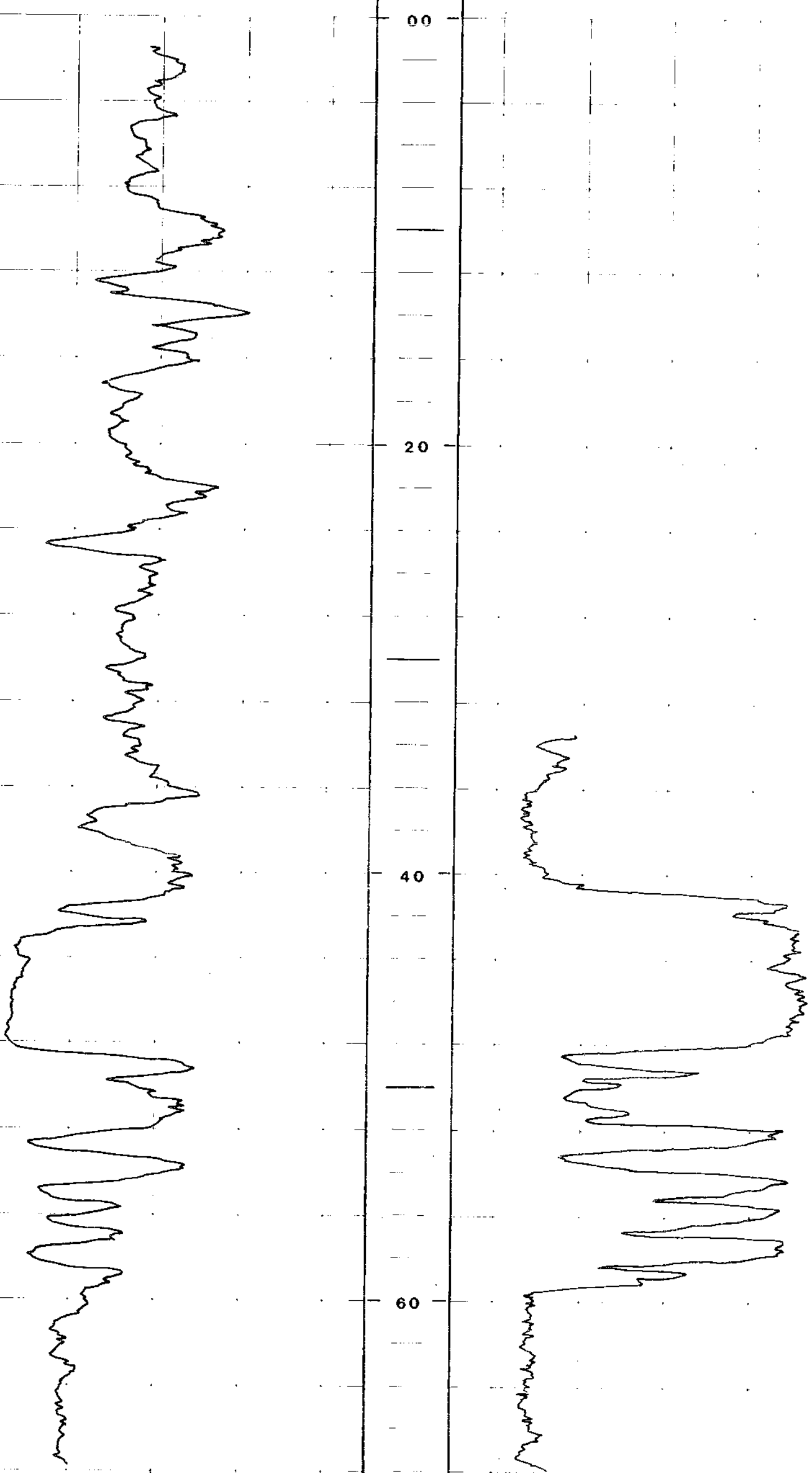
### CALIPER

00

20

40

60



616

Fr. Quintette 82 (3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8234

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 24

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

BOREHOLE DATA

GROUND EL. 1673.6

DEPTH DRILLED 86

DEPTH LOGGED 86

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE — GAMMA-500 cps  
DENSITY-5000cps

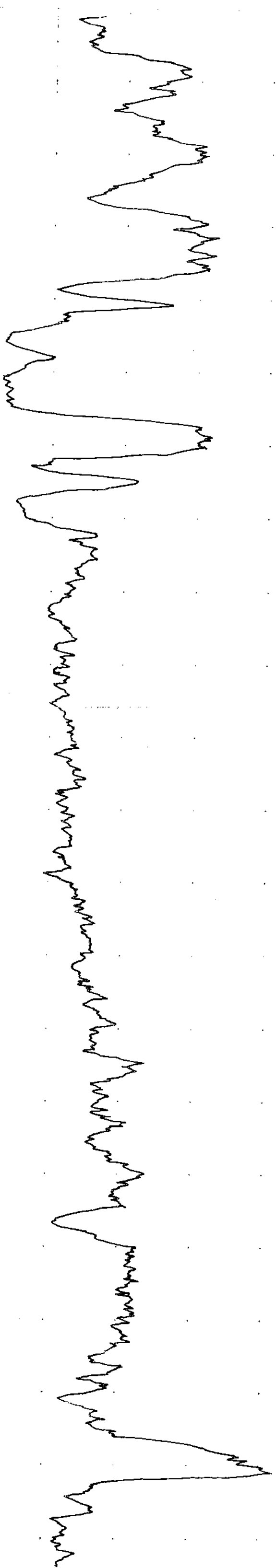
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





Fr. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8235

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 25

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

BOREHOLE DATA

GROUND EL. 1672.1

DEPTH DRILLED 82

DEPTH LOGGED 82

REMARKS NO DENSITY

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

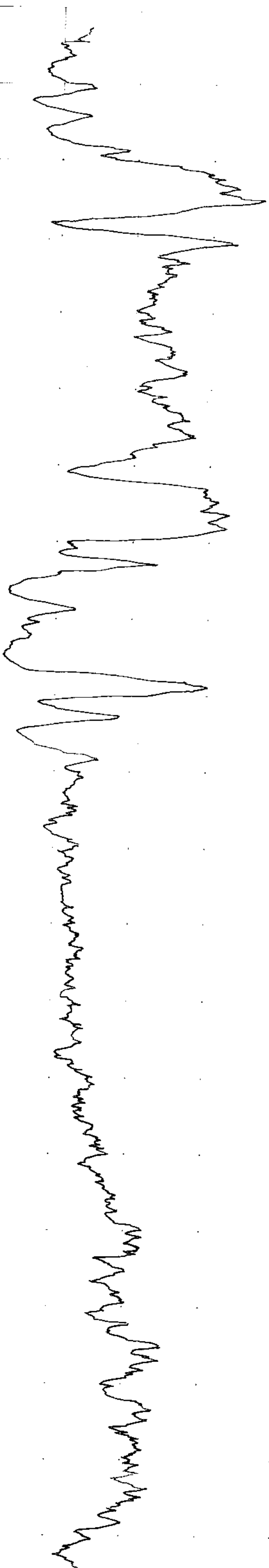
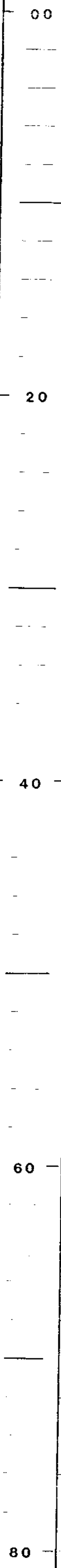
**616**

CALIPER

DENSITY

DEPTH

GAMMA RAY



TR-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8236

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 26

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1672.4

DEPTH DRILLED 54

DEPTH LOGGED 51

REMARKS NO DENSITY

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

LOGGED BY L.M.

HOR. SCALE — GAMMA-500 cps  
DENSITY-5000cps

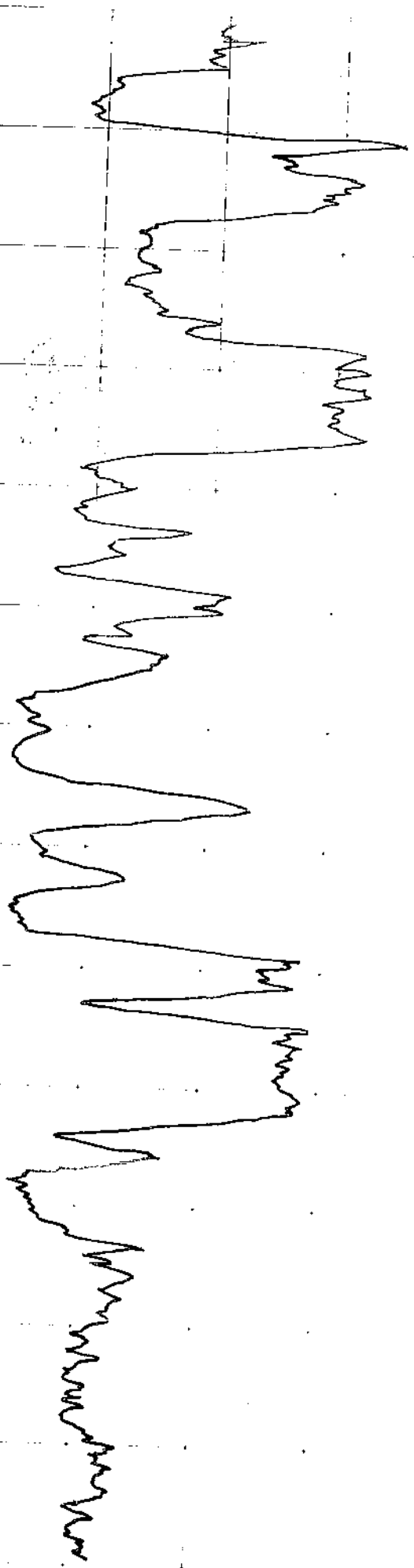
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



Re. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8237

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 29

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**  
GROUND EL. 1695.1

DEPTH DRILLED 120

DEPTH LOGGED 120

REMARKS NO DENSITY

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

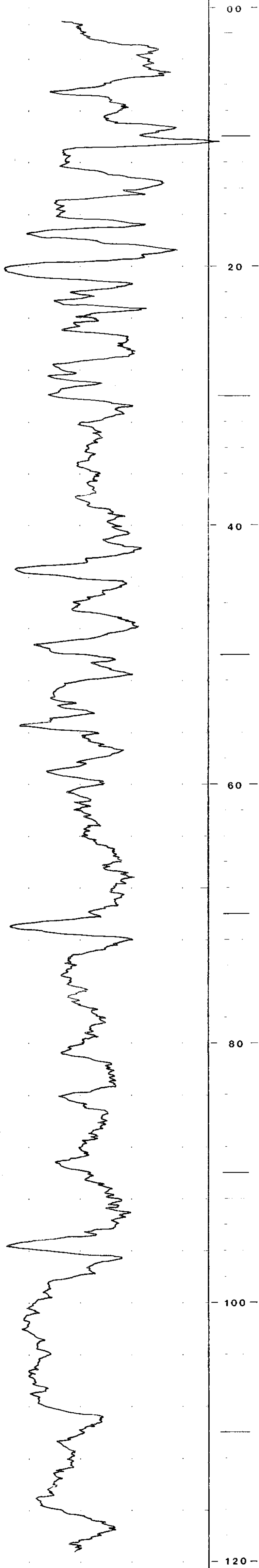
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



72-OWHETE 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8237

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED MAY 29

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

BOREHOLE DATA  
GROUND EL. 1695.1

DEPTH DRILLED 120

DEPTH LOGGED 120

REMARKS NO DENSITY

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE

GAMMA-500 cps  
DENSITY-5000cps

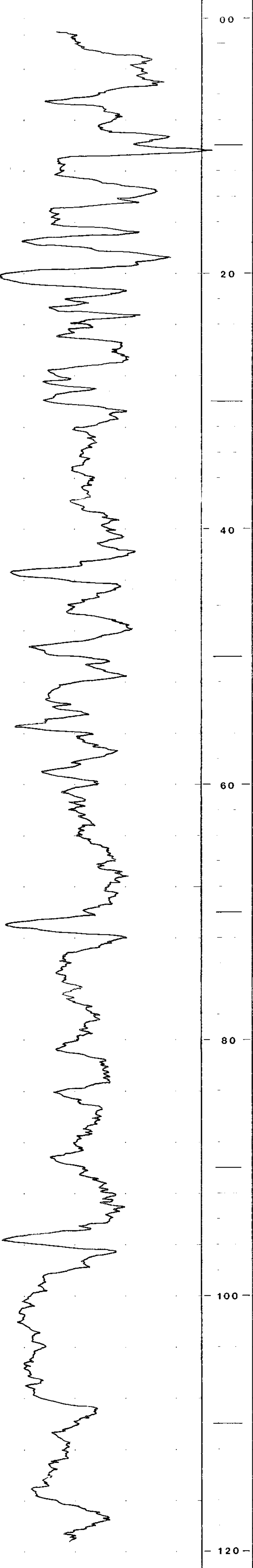
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





Pa. Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8238

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG 8

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## BOREHOLE DATA

GROUND EL. 1734.1

DEPTH DRILLED 55

DEPTH LOGGED 52

REMARKS DENSITY

STUCK \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

**LOG SUITE**

GAMMA RAY

DENSITY

CALIPER

HOR. SCALE — GAMMA-500 cps  
 — DENSITY-5000cps

# 616

CALIPER

DENSITY

DEPTH

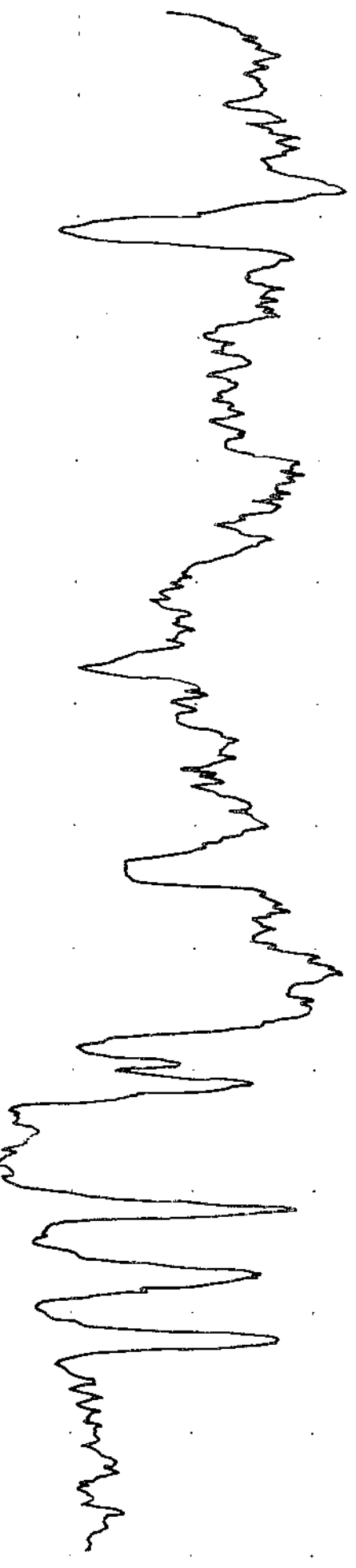
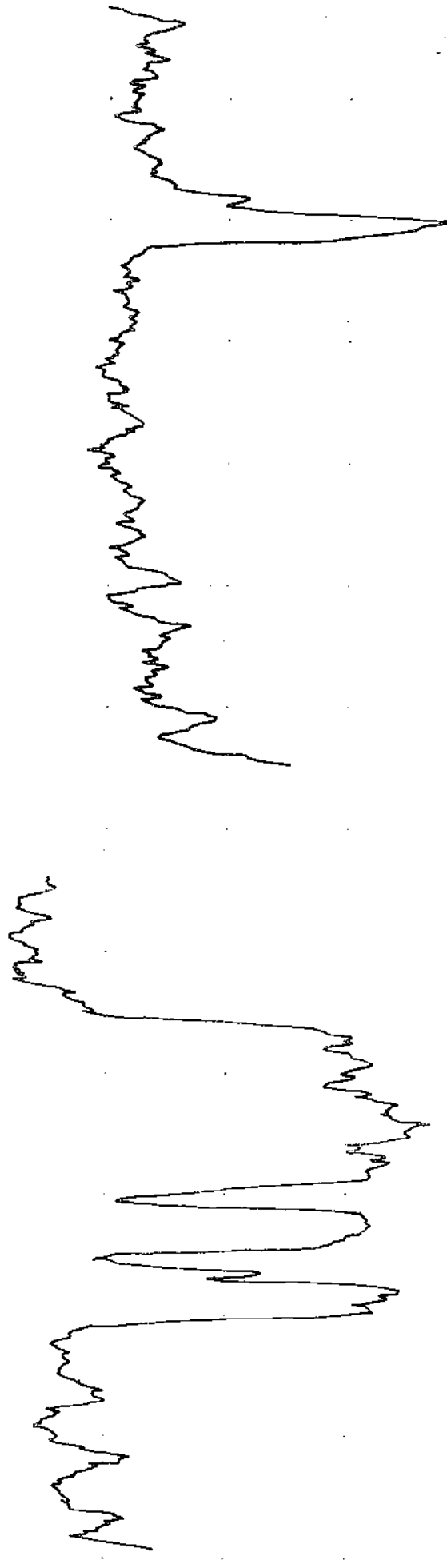
GAMMA RAY

00

20

40

60



Fr. Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8238

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 8

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

BOREHOLE DATA  
GROUND EL. 1734.1

DEPTH DRILLED 55

DEPTH LOGGED 52

REMARKS \_\_\_\_\_

LOG SUITE \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

616

## DENSITY DETAIL

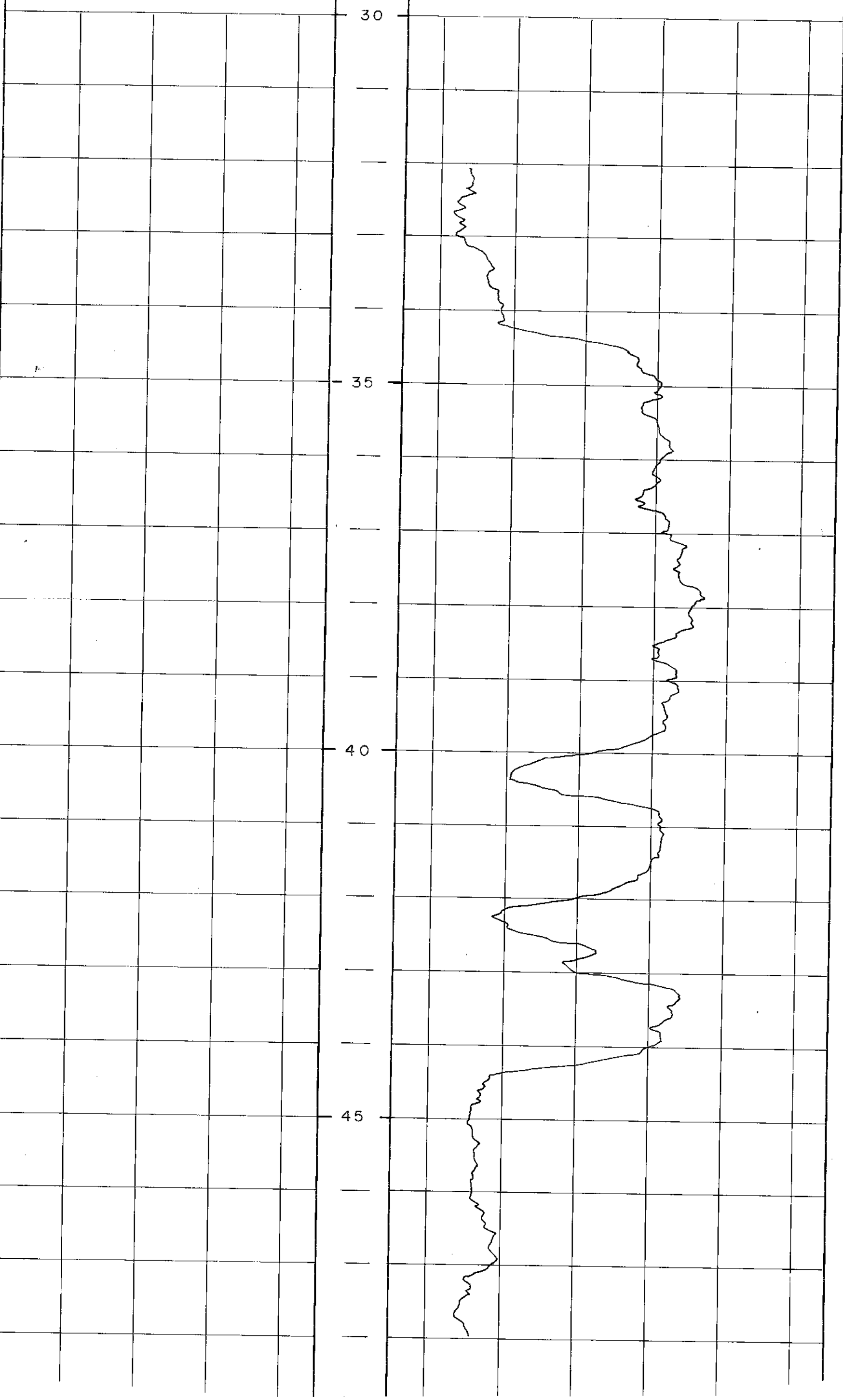
DEPTH

30

35

40

45



72-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8240

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 4

VERT. SCALE 1:200

CHART SPEED 4M./MIN.

**COAL** BOREHOLE DATA

**LITHOLOGY** GROUND EL. 1726.9

**LOG** DEPTH DRILLED 70

DEPTH LOGGED 70

REMARKS NO DENSITY

**LOG SUITE**

**GAMMA RAY** HOLE DIAMETER

**DENSITY** HOLE ANGLE

**CALIPER** LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

**616**

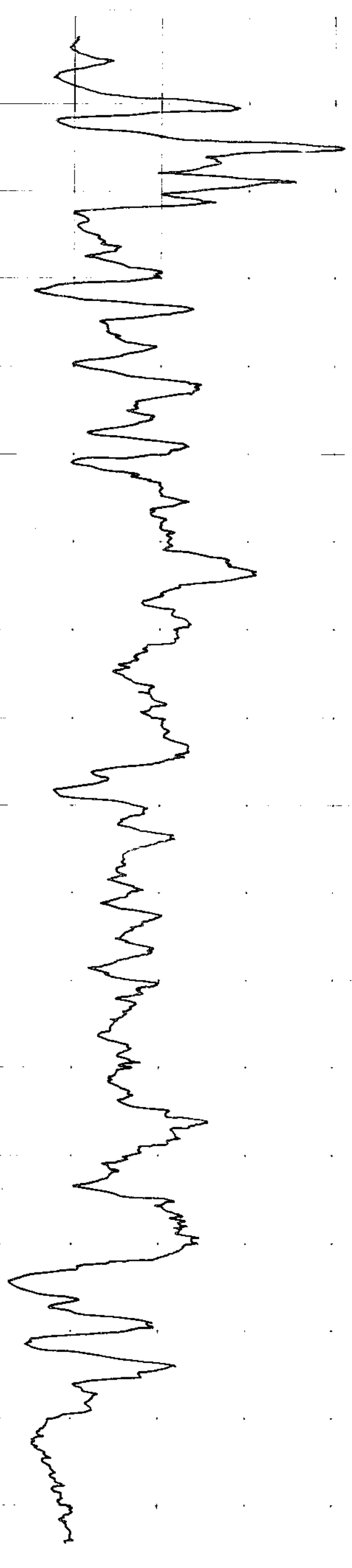
**CALIPER**

**DENSITY**

**DEPTH**

**GAMMA RAY**

00  
20  
40  
60



P. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8241

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 4

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL  
LITHOLOGY  
LOG**

### BOREHOLE DATA

GROUND EL. 1694.2

DEPTH DRILLED 120

DEPTH LOGGED 84

REMARKS NO DETAIL

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

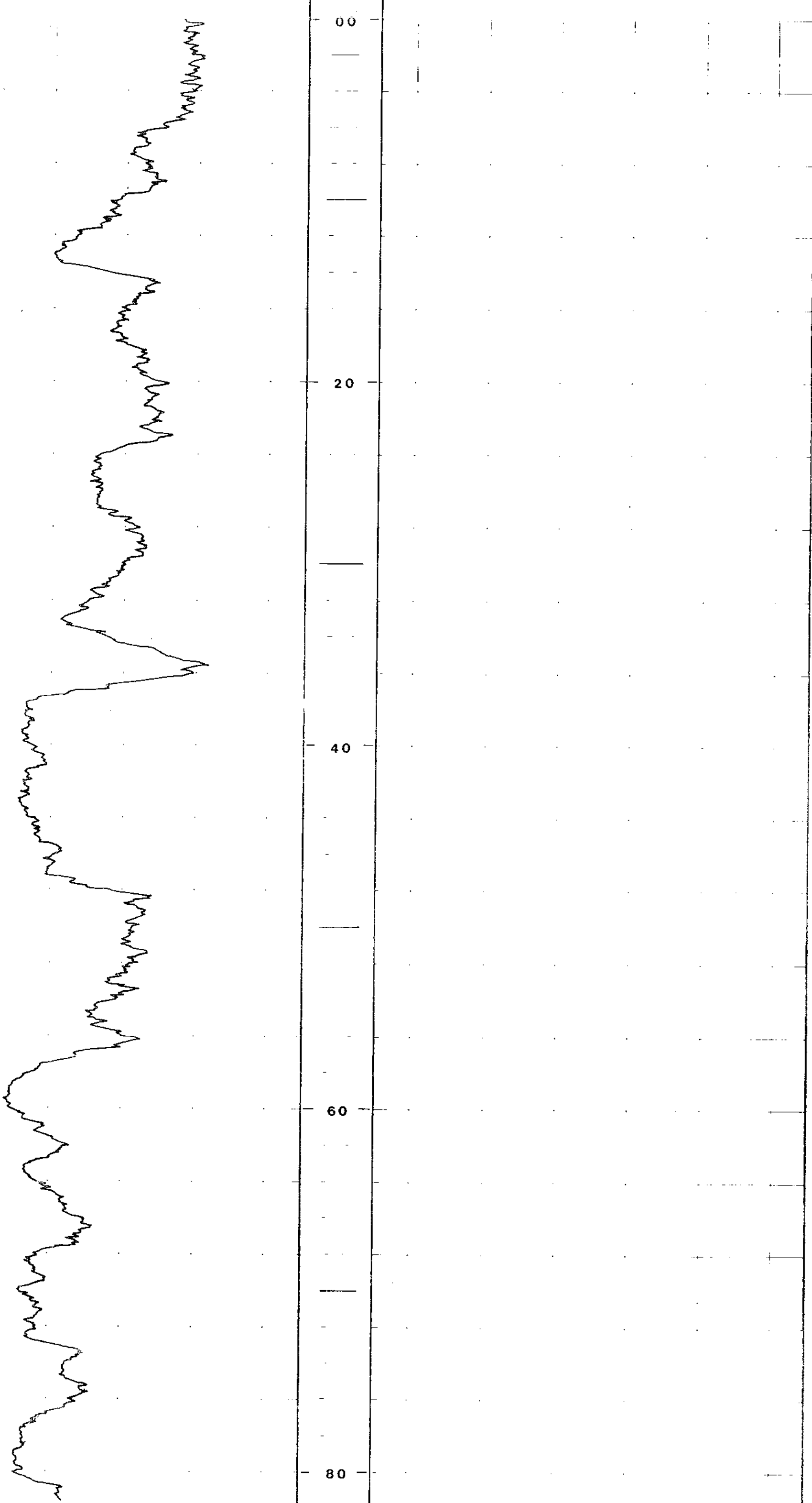
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8242

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 8

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL BOREHOLE DATA

LITHOLOGY GROUND EL. 1735.1

LOG DEPTH DRILLED 83

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps

DENSITY-5000cps

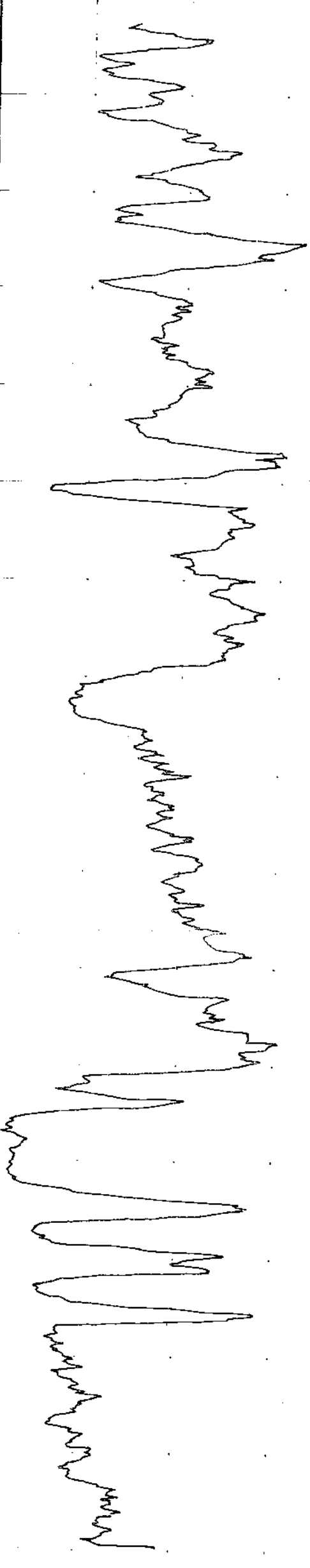
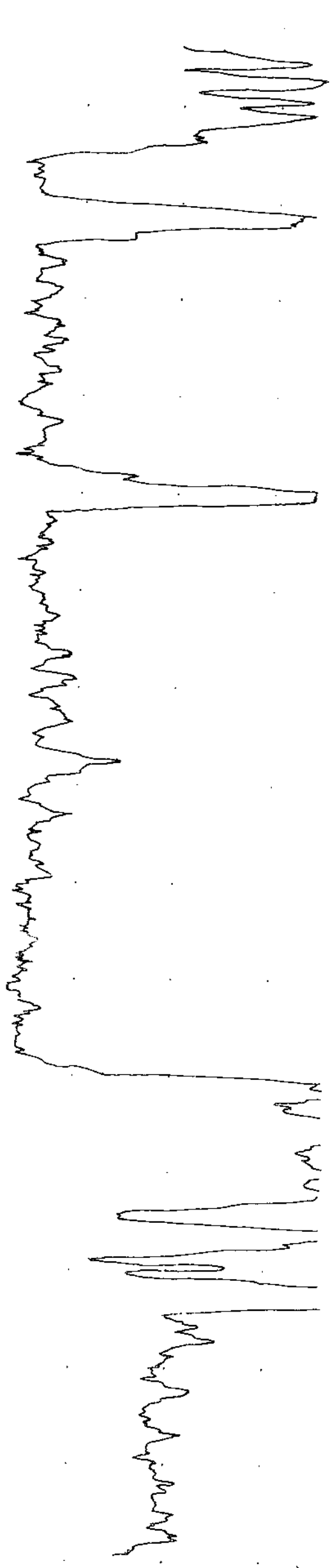
# 616

CALIPER

DENSITY

DEPTH

GAMMA RAY



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8242

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG 8

VERT. SCALE 1:50

CHART SPEED

## SEAM DETAIL LOG

BOREHOLE DATA

GROUND EL. 1735.1

DEPTH DRILLED 83

DEPTH LOGGED 64

REMARKS

## LOG SUITE

HOLE DIAMETER

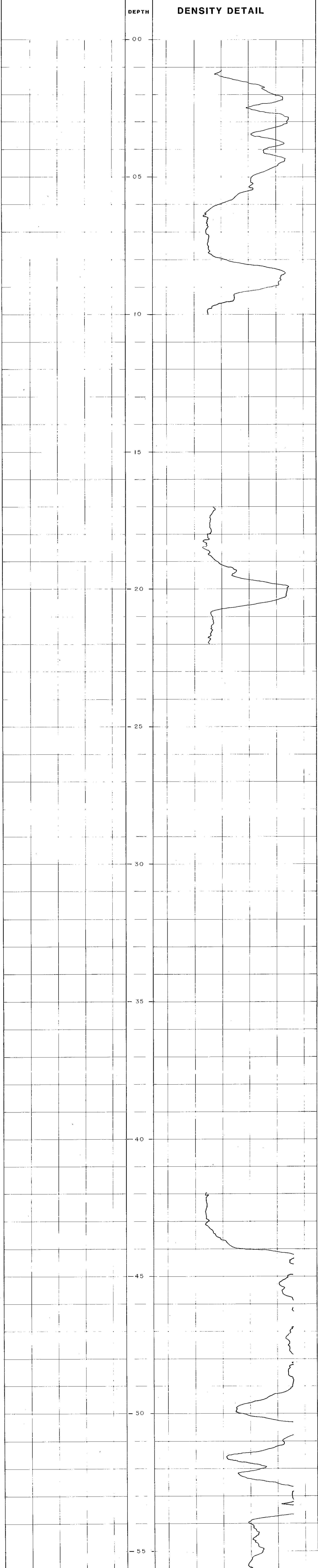
HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

## DENSITY DETAIL

DEPTH



616

P. Quintette 826319

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8243

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG 10

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## BOREHOLE DATA

GROUND EL. 1729.3

DEPTH DRILLED 70

DEPTH LOGGED 66

REMARKS \_\_\_\_\_

**COAL  
LITHOLOGY  
LOG**

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

LOGGED BY L.M.

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

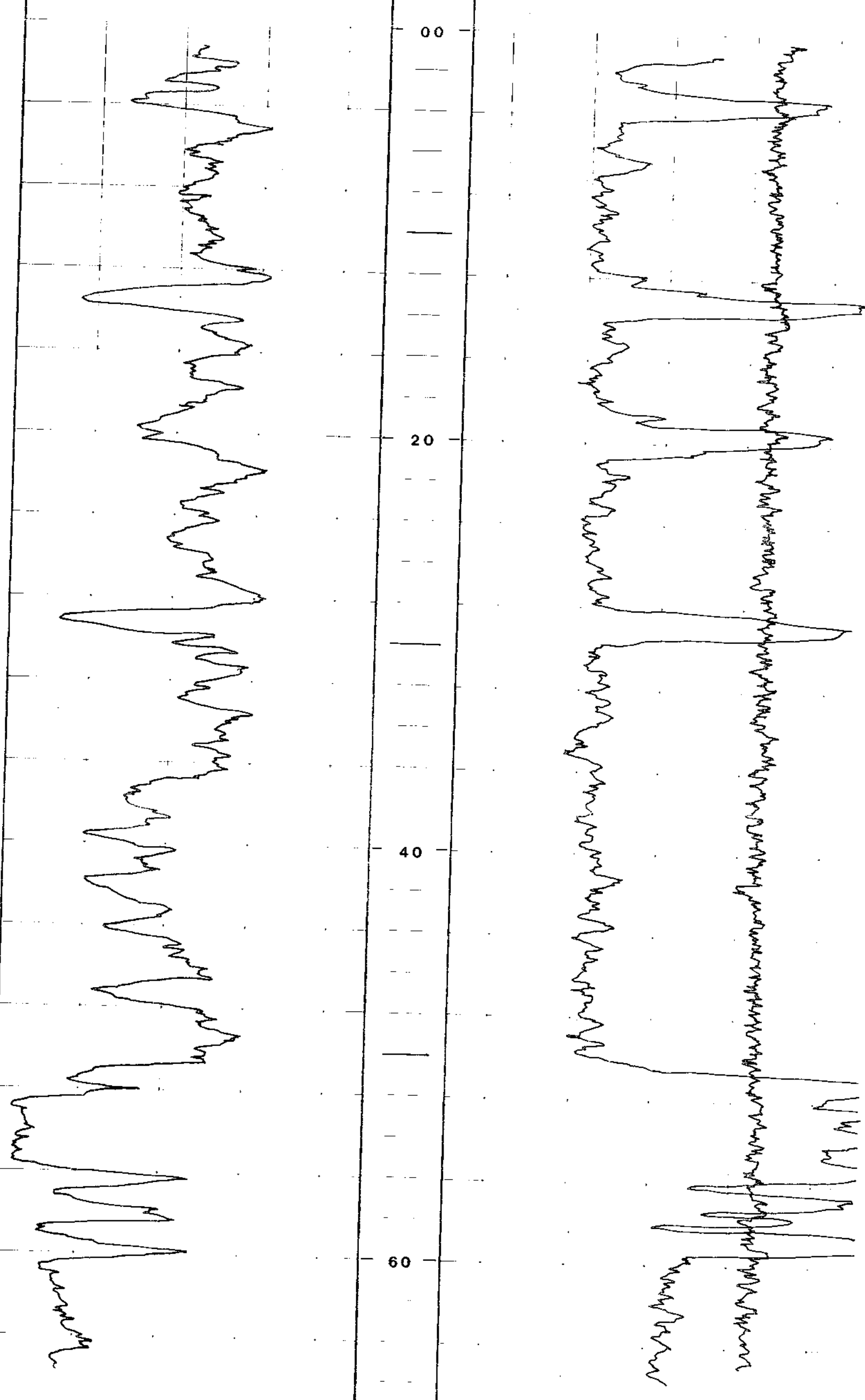
**615**

**CALIPER**

**DENSITY**

**DEPTH**

**GAMMA RAY**



QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (INCORPORATED)

SCHEDULE QMR 8244

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 7

SCALE 1:200

COAL LITHOLOGY LOG

BOREHOLE DATA

GRINDS NO. 1803.6

DEPTH PAULS 140

DEPTH LOGS 140

ANALYSIS NO. DENSITY

LOG SHEET

GAMMA RAY

DENSITY

CALIPER

BOREHOLE NO.

WELL NAME

LOGGERS

LOGGED BY

DATE

TIME

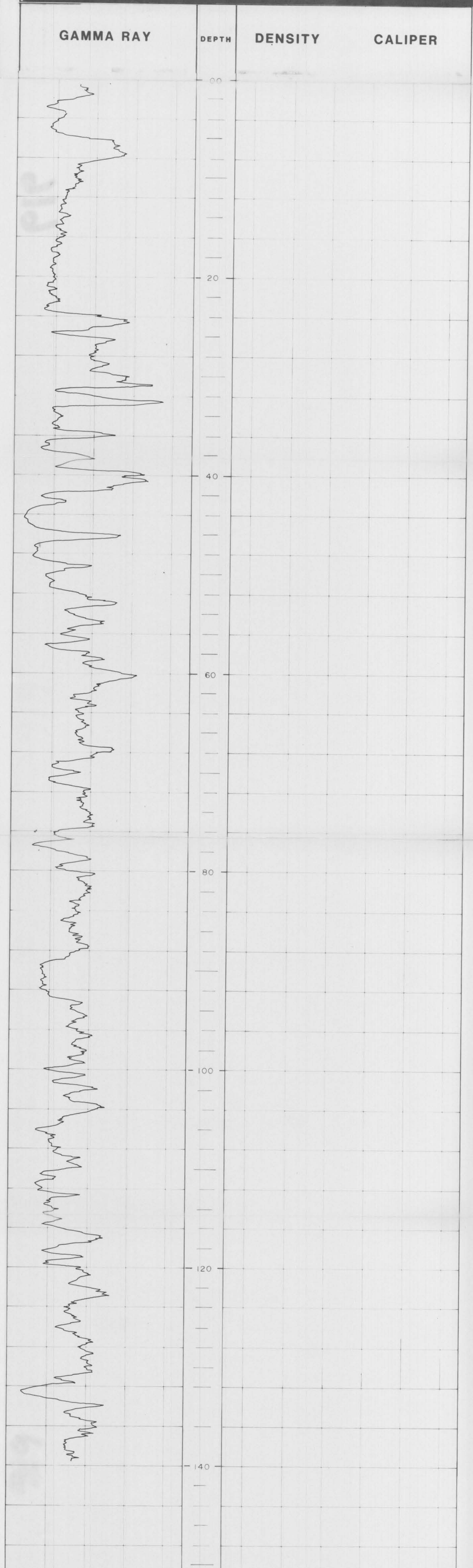
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





TR-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8245

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

### BOREHOLE DATA

GROUND EL. 1726.2

DEPTH DRILLED 50

DEPTH LOGGED 50

REMARKS \_\_\_\_\_

**COAL  
LITHOLOGY  
LOG**

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE  $\frac{1}{2}$  GAMMA-500 cps  
 $\frac{1}{2}$  DENSITY-5000cps

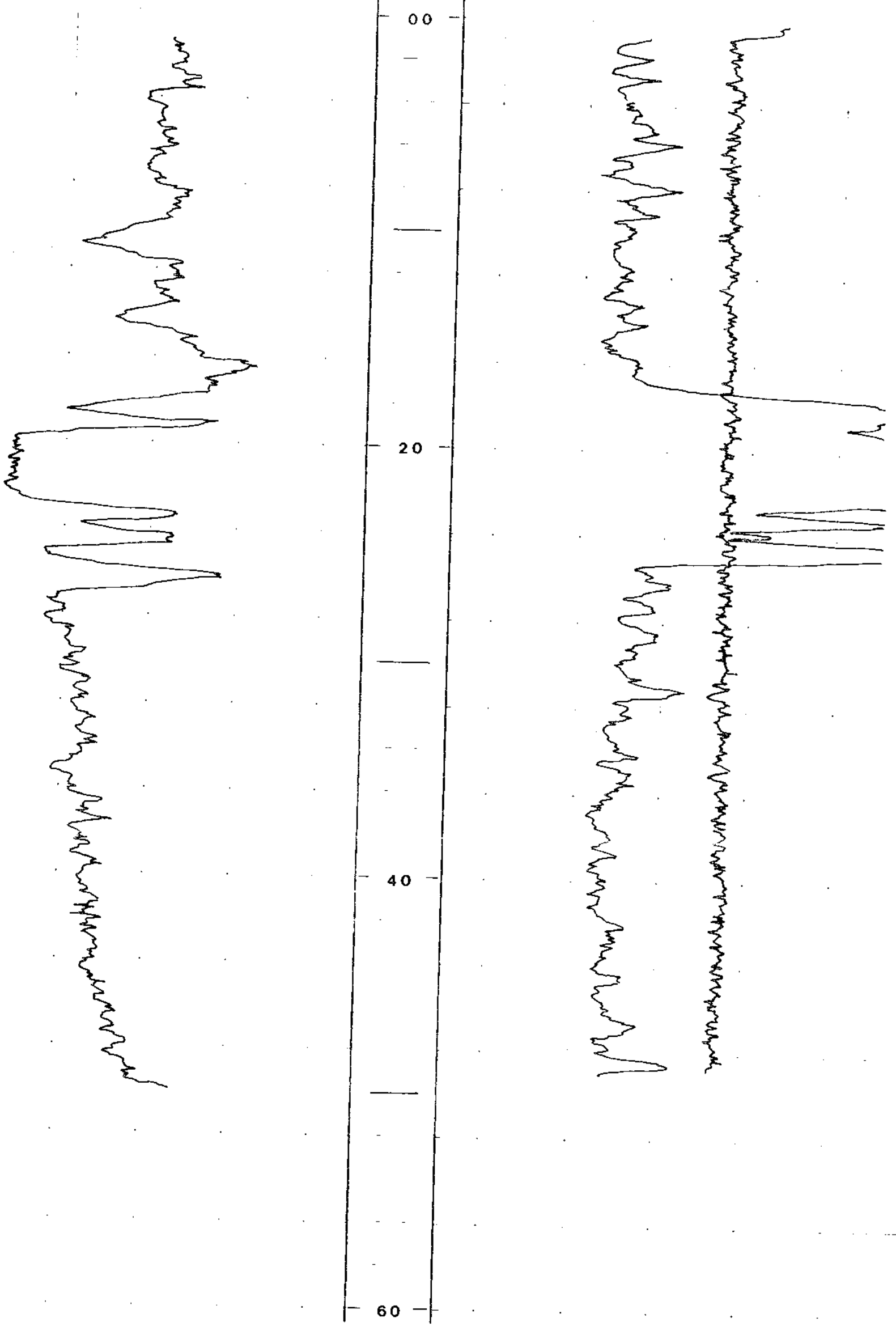
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8245

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM BOREHOLE DATA

DETAIL GROUND EL. 1726.2

LOG DEPTH DRILLED 50

DEPTH LOGGED 50

REMARKS

### LOG SUITE

HOLE DIAMETER

DENSITY HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

## DENSITY DETAIL

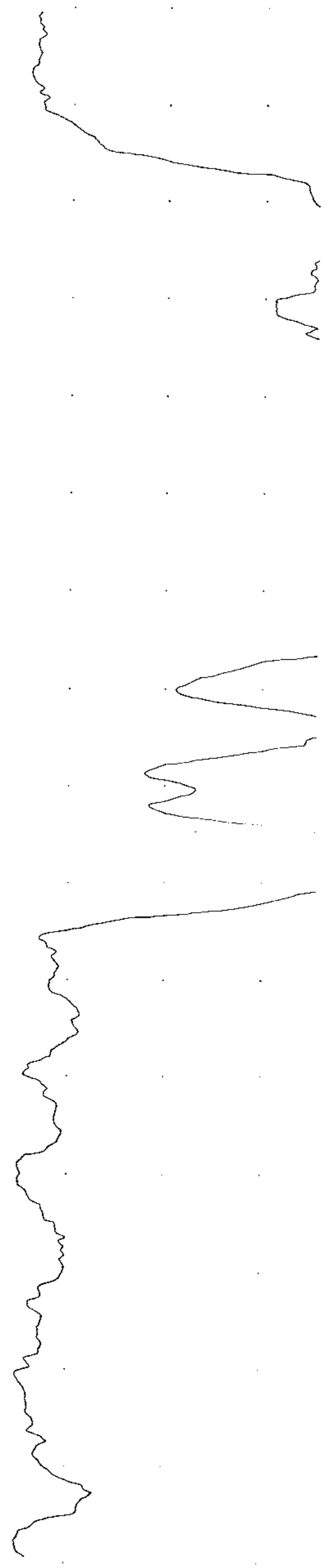
DEPTH

15

20

25

30



616

12- Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8246

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

### BOREHOLE DATA

GROUND EL. 1719.6

DEPTH DRILLED 50

DEPTH LOGGED 50

REMARKS NO DETAIL

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps

DENSITY-6000cps

# 616

CALIPER

DENSITY

DEPTH

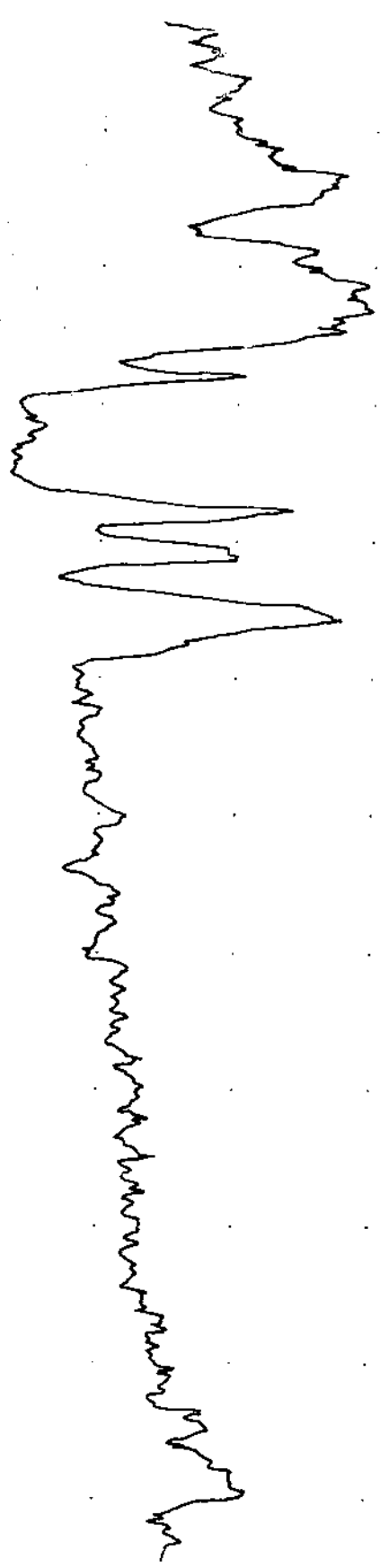
GAMMA RAY

00

20

40

60



FR - QUINLETTE 88(5)A

# QUINLETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE

QMR 8247

LOCATION

SHERIFF

AREA

MESA

DATE LOGGED

AUG 7

VERT. SCALE

1:200

CHART SPEED

4M / MIN

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL.

1722.0

DEPTH DRILLED

50

DEPTH LOGGED

50

REMARKS

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

NOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE

GAMMA RAY  
DENSITY - 5500cps

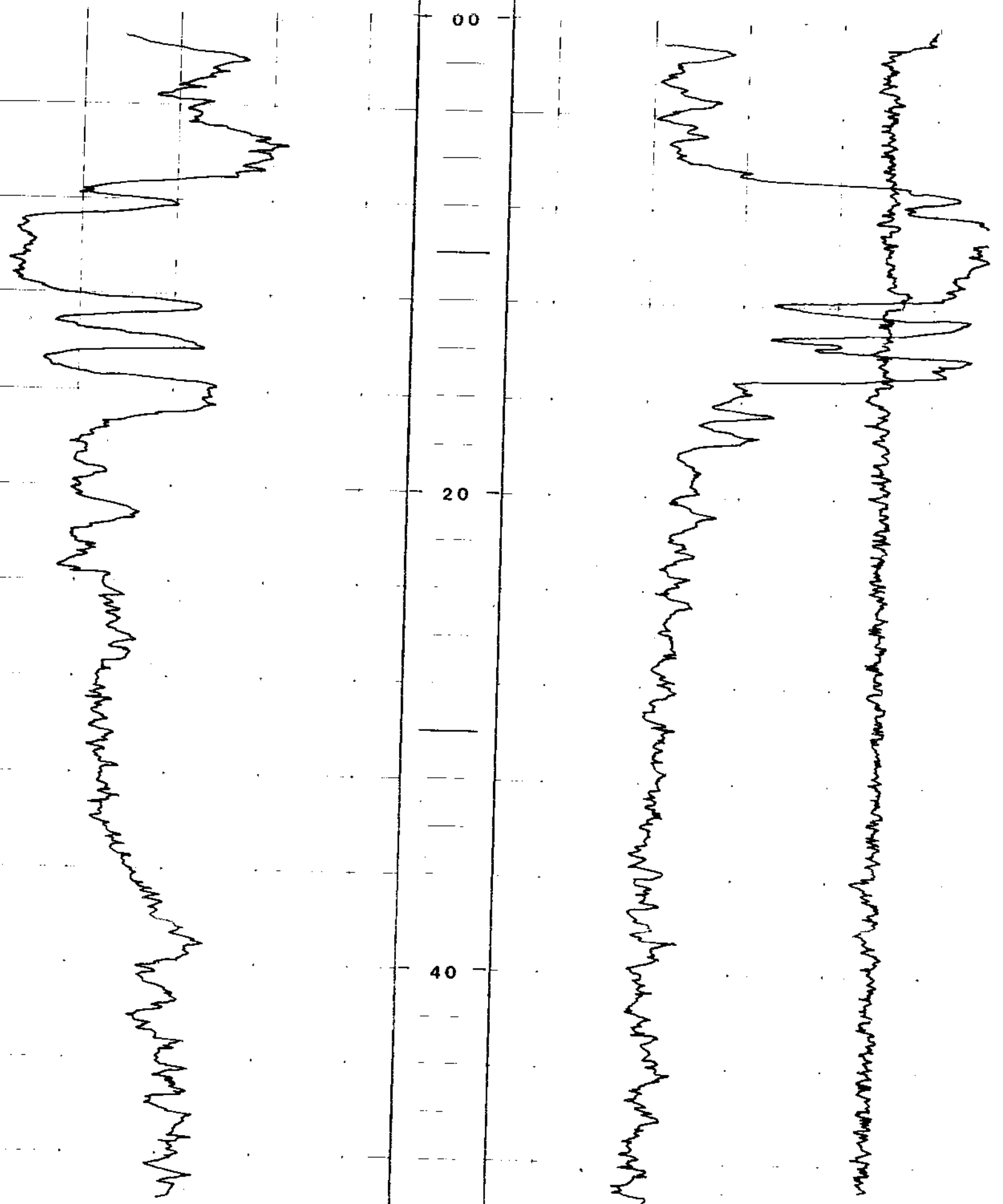
616

CALIPER

DENSITY

DEPTH

GAMMA RAY





Pa-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8247

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:50

CHART SPEED

## SEAM

### DETAIL

### LOG

#### BOREHOLE DATA

GROUND EL. 1722.0

DEPTH DRILLED 50

DEPTH LOGGED 50

REMARKS

### LOG SUITE

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

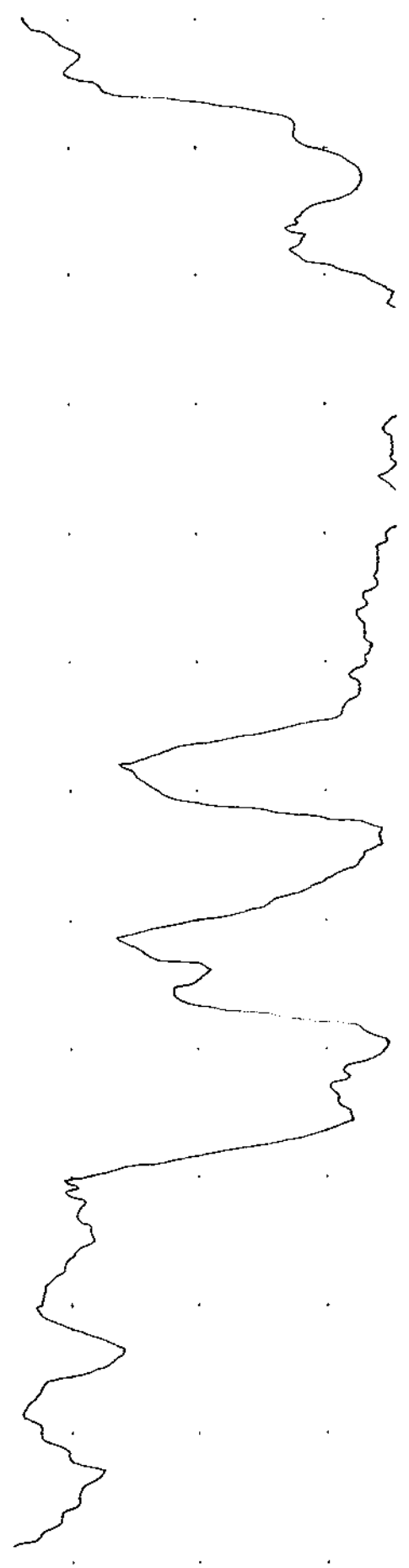
## DENSITY DETAIL

DEPTH

05

10

15



616

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8248

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 6

VERT. SCALE 1:200

ROTT SPEED 4M / MIN

**COAL LITHOLOGY LOG**

BOREHOLE DATA

GROUND EL. 1718.2

DEPTH DRILLED 95

DEPTH LOGGED 95

REMARKS NO DETAIL

**LOG SUITE**  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER

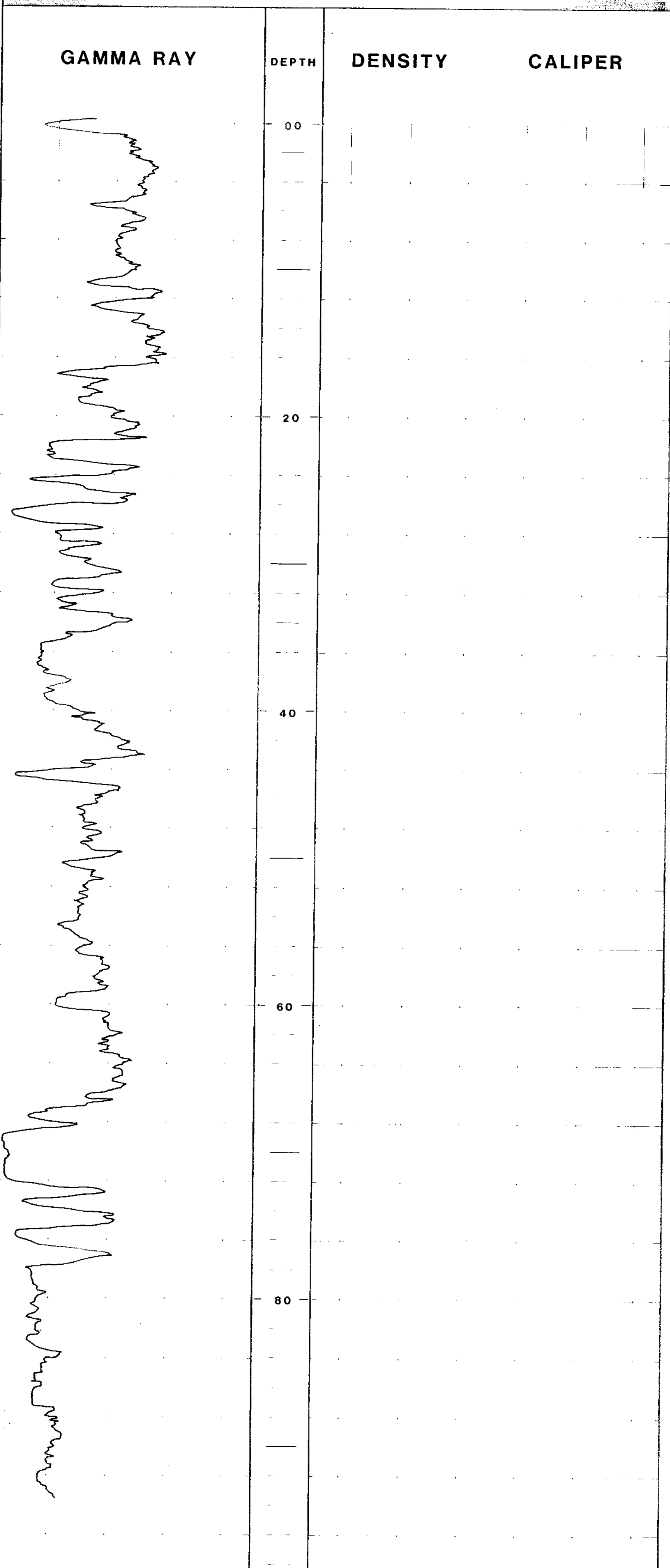
HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE

GAMMA-500 cps  
DENSITY-5000cps

# 616



# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8249

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## BOREHOLE DATA

GROUND EL. 1722.0

DEPTH DRILLED 60

DEPTH LOGGED 60

REMARKS \_\_\_\_\_

## COAL LITHOLOGY LOG

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

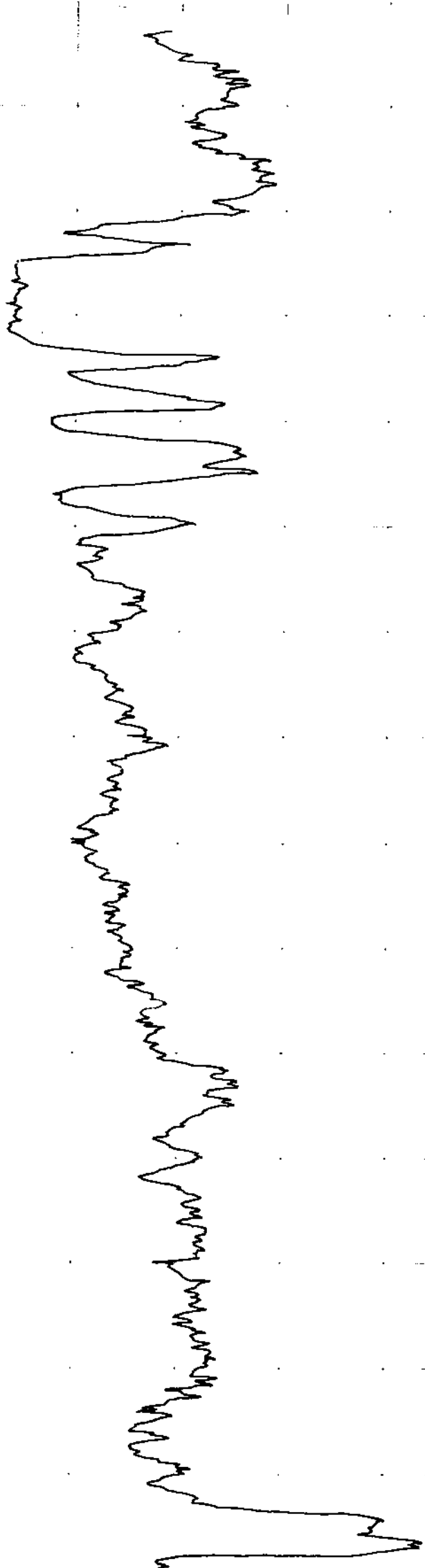
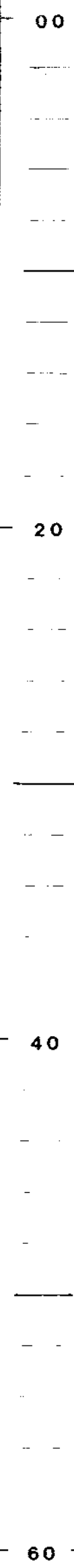
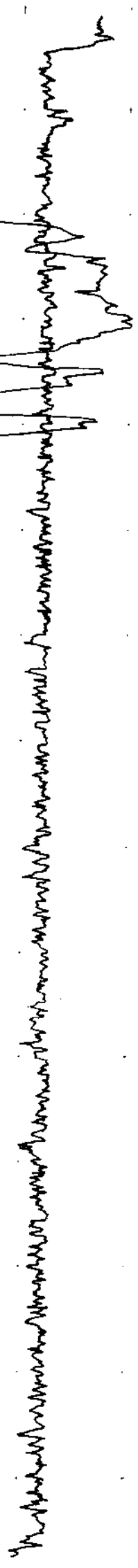
# 616

### CALIPER

### DENSITY

### DEPTH

### GAMMA RAY



PR-Quintette 8452A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8249

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 7

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM BOREHOLE DATA

DETAIL GROUND EL. 1722.0

LOG DEPTH DRILLED 60

DEPTH LOGGED 60

REMARKS \_\_\_\_\_

### LOG SUITE

HOLE DIAMETER \_\_\_\_\_

DENSITY HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

## DENSITY DETAIL

DEPTH

00

05

10

15

616



**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8250

LOCATION FRAMF

AREA

DATE LOGGED JUNE 14

SCALE 1:200

**COAL LITHOLOGY LOG**

**BOREHOLE DATA**

GROUND EL. 1792.3

DEPTH DRILLED 232

DEPTH LOGGED 230

REMARKS

**LOG SUITE**

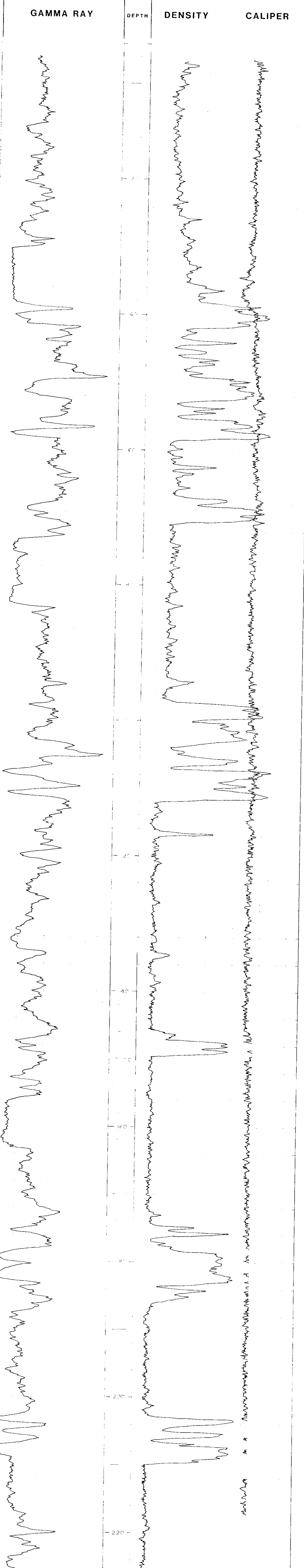
GAMMA RAY

DENSITY

CALIPER

NOSE DIAMETER \_\_\_\_\_  
NOSE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

616



QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE OMR 8250

LOCATION FRAME

AREA

DATE LOGGED JUNE 20

VERT. SCALE 1:50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 1792.3

DEPTH DRILLED 232

DEPTH LOGGED 230

REMARKS PART

LOG SUITE

DENSITY

HOLE DIAMETER

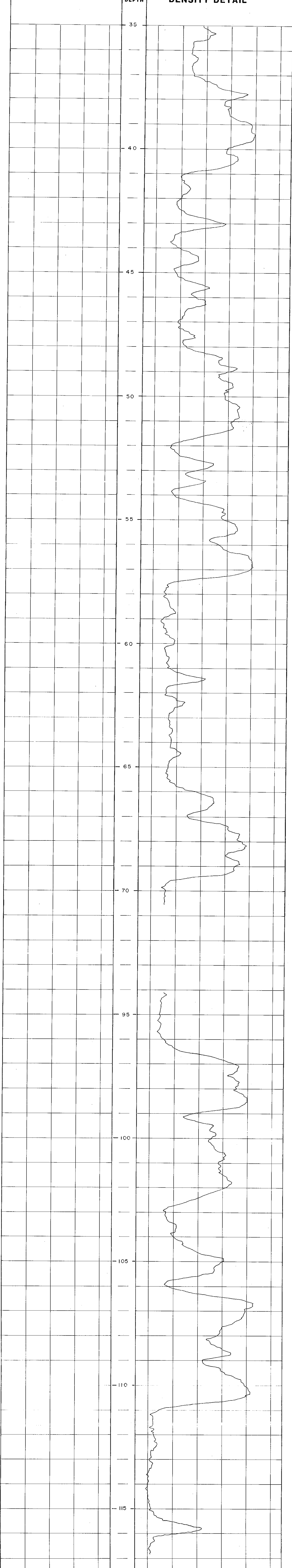
HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

DENSITY DETAIL

DEPTH



616

**QUINTETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8250

LOCATION FRAME

AREA \_\_\_\_\_

DATE LOGGED JUNE 20

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

**SEAM**  
**DETAIL**  
**LOG**

BOREHOLE DATA

GROUND EL. 1792.3

DEPTH DRILLED 232

DEPTH LOGGED 230

REMARKS PART 2

LOG SUITE \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY \_\_\_\_\_

HOR. SCALE \_\_\_\_\_

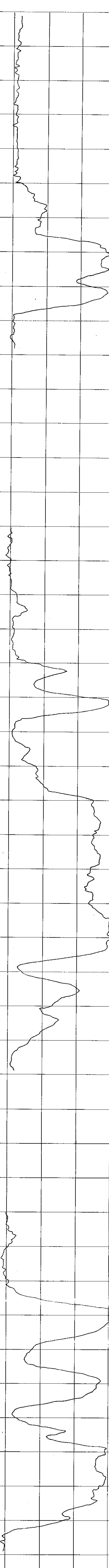
DENSITY-5000cps

616

**DENSITY DETAIL**

DEPTH

140  
145  
150  
170  
175  
180  
185  
200  
205  
210







# QUANTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

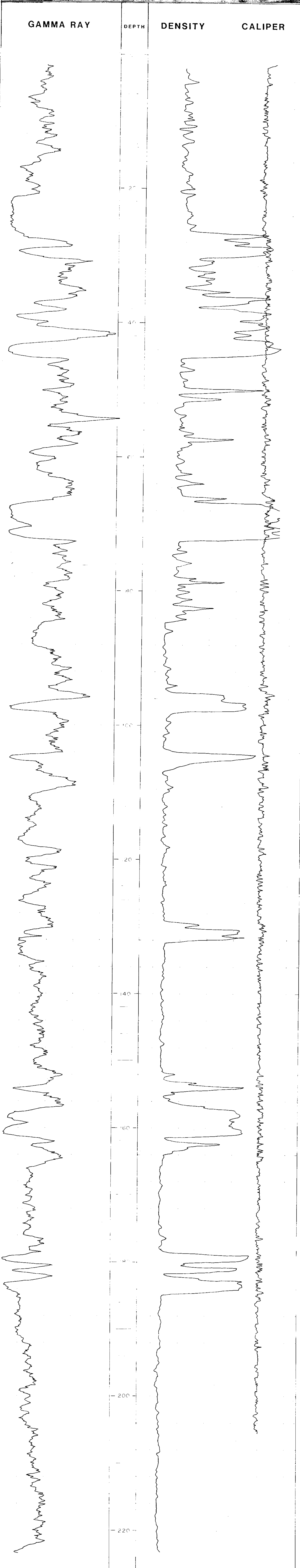
BOREHOLE QMR 8252  
 LOCATION \_\_\_\_\_  
 AREA \_\_\_\_\_  
 DATE LOGGED JUNE 24 1958  
 SCALE 1:200

**COAL LITHOLOGY LOG**  
 BOREHOLE DATA  
 GROUND EL. 1720.9  
 DEPTH DRILLED 225  
 DEPTH LOGGED 224  
 REMARKS \_\_\_\_\_

**LOG SUITE**  
 GAMMA RAY \_\_\_\_\_  
 DENSITY \_\_\_\_\_  
 CALIPER \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_  
 HOLE ANGLE \_\_\_\_\_  
 LOGGED BY L.M.

# 616



TR - QUINTETTE 8263A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8252

LOCATION FRAME

AREA \_\_\_\_\_

DATE LOGGED JUNE 2

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

BOREHOLE DATA

GROUND EL. 17209

DEPTH DRILLED 225

DEPTH LOGGED 224

REMARKS PART 1

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

DENSITY LOGGED BY LM

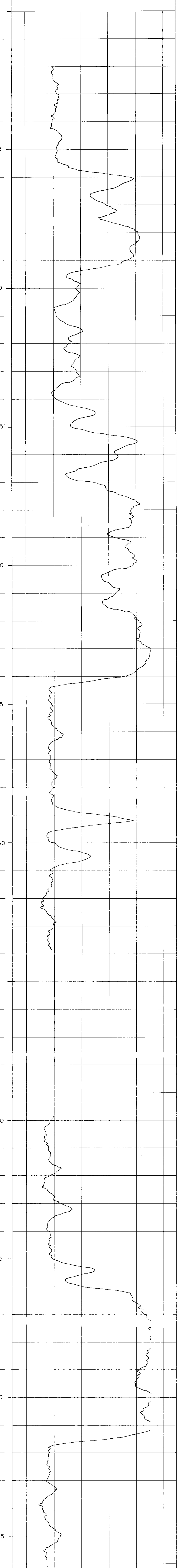
HOR. SCALE \_\_\_\_\_ DENSITY-5000cps

616

## DENSITY DETAIL

DEPTH

20  
25  
30  
35  
40  
45  
50  
60  
65  
70  
75



QUINETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8252

LOCATION FRAME

AREA

DATE LOGGED JUNE 2

VERT. SCALE 1:50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 1720.9

DEPTH DRILLED 225

DEPTH LOGGED 224

REMARKS PART 2

LOG SUITE

HOLE DIAMETER

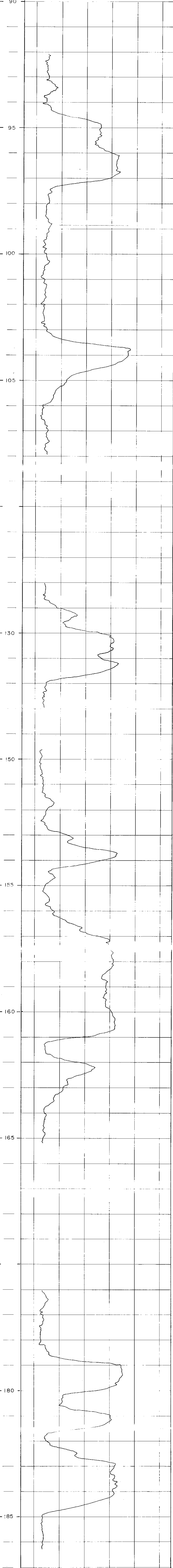
DENSITY HOLE ANGLE

LOGGED BY LM

HOR. SCALE DENSITY-5000cps

DENSITY DETAIL

DEPTH



616

R. Quintette 8263A

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8253  
LOCATION SHERIFF  
AREA MARMOT  
DATE LOGGED JUNE 13  
SCALE 1:200

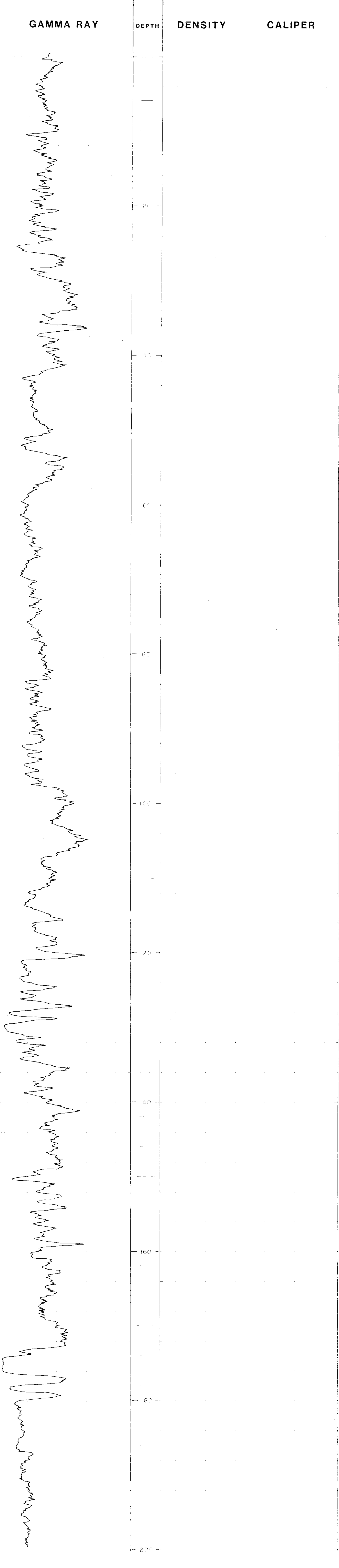
**COAL LITHOLOGY LOG**

**BOREHOLE DATA**  
GROUND EL. 1735.0  
DEPTH DRILLED 232  
DEPTH LOGGED 200  
REMARKS NO. DENSITY

**LOG SUITE**

GAMMA RAY  
DENSITY  
CALIPER  
HOLE DIAMETER  
HOLE ANGLE  
LOGGED BY L.M.

**616**



**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (MANAGER)**

BOREHOLE QMR 8254  
LOCATION FRAME  
AREA \_\_\_\_\_  
DATE LOGGED JUNE 24  
SCALE 1:200

**COAL LITHOLOGY LOG**

**BOREHOLE DATA**  
GROUND EL. 1668.5  
DEPTH DRILLED 200  
DEPTH LOGGED 198  
REMARKS \_\_\_\_\_

**LOG SUITE**

**GAMMA RAY**  
**DENSITY**  
**CALIPER**  
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY LM

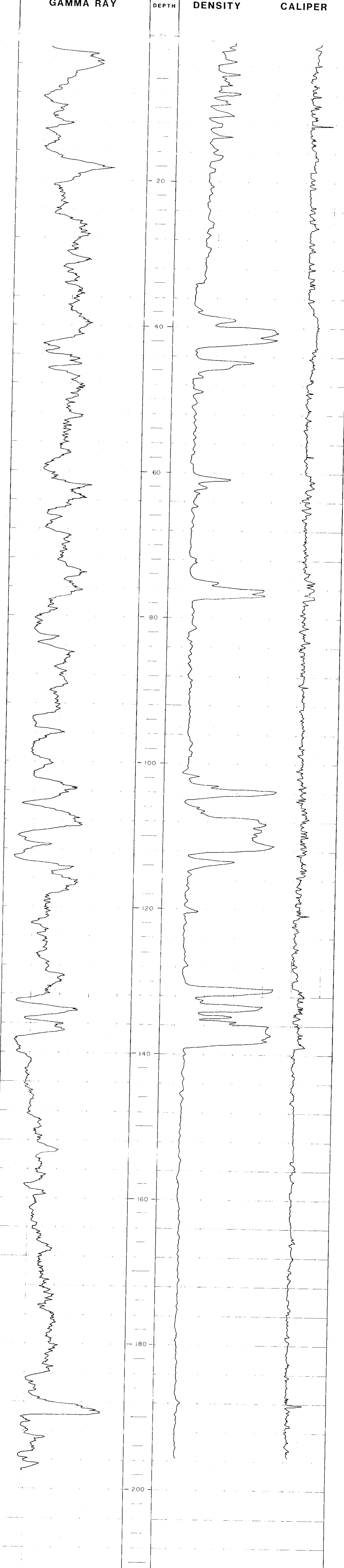
**616**

CALIPER

DENSITY

DEPTH

GAMMA RAY





QUINETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8254

LOCATION FRAME

AREA

DATE LOGGED JUNE 24

VERT. SCALE 1:50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 16685

DEPTH DRILLED 200

DEPTH LOGGED 198

REMARKS

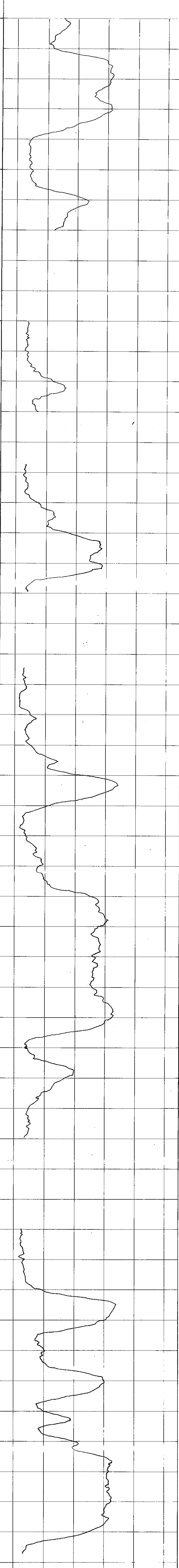
LOG SUITE  
HOLE DIAMETER  
DENSITY  
HOLE ANGLE  
LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

DENSITY DETAIL

DEPTH

40  
45  
60  
75  
105  
110  
115  
130  
135  
140



616

QUANTETTE COAL LIMITED  
DEARSON MINES LIMITED (PVT) LTD

QMR 8285

FRAME

DATE LOGGED JUNE 25

SCALE 1:200

BOREHOLE DATA

BOREHOLE NO. 1620.1

DEPTH GAUGED 190

DEPTH APPROX. 188

REMARKS

LOG SHEET

DATE LOGGED

SCALE

LOG SHEET

DATE LOGGED

SCALE

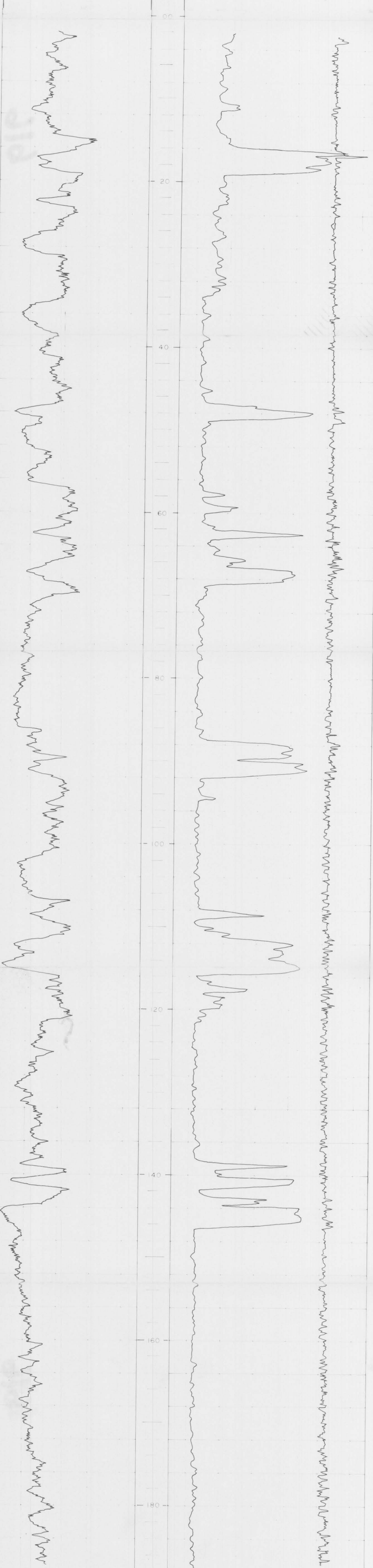
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



616

**QUINTETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8255

LOCATION FRAME

AREA

DATE LOGGED JUNE 25

VERT. SCALE 1:50

CHART SPEED

**SEAM**  
**DETAIL**  
**LOG**

BOREHOLE DATA

GROUND EL. 16201

DEPTH DRILLED 190

DEPTH LOGGED 188

REMARKS PART

**LOG SUITE**

HOLE DIAMETER

DENSITY

HOLE ANGLE

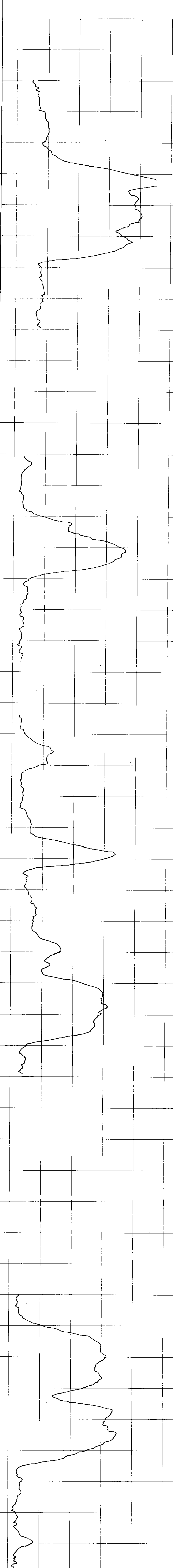
LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

**DENSITY DETAIL**

DEPTH

10  
15  
20  
45  
50  
60  
65  
85  
90  
95



616

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8255

LOCATION FRAME

AREA \_\_\_\_\_

DATE LOGGED JUNE 25

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM DETAIL

BOREHOLE DATA

GROUND EL. 1620.1

DEPTH DRILLED 190

DEPTH LOGGED 188

REMARKS PART 2

## LOG SUITE

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY LM

HOR. SCALE \_\_\_\_\_

DENSITY-5000CPS

# 616

## DENSITY DETAIL

DEPTH

105

110

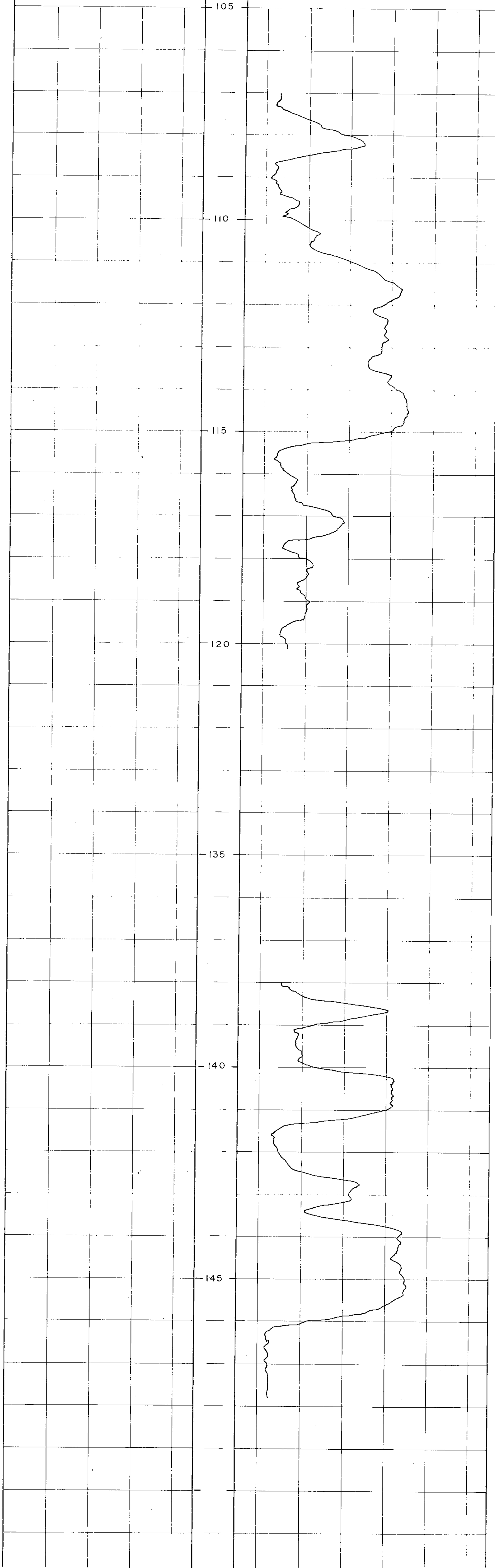
115

120

135

140

145





QUINETTE COAL LIMITED  
DENISON MINES LIMITED (MANAGER)

BORHOLE QMR 8256

LOCATION SHERIFF

AREA MARMOT

DATE LOGGED JUNE 6

SCALE 1:200

COAL LITHOLOGY LOG

BORHOLE DATA

GROUND EL. 1734.6

DEPTH DRILLED 180

DEPTH LOGGED 180

REMARKS

LOG SUITS

ALPHA RAY

DENSITY

CALIPER

SOLE SHEETER

SOLE ANGLE

LOGGED BY L.M.

GAMMA RAY

DEPTH

DENSITY

CALIPER



616

616

616



QUINETTE COAL LIMITED  
DENISON MINES LIMITED (INCORPORATED)

BOREHOLE QMR 8257

LOCATION FRAME

AREA

DATE LOGGED JUNE 27

SCALE 1:200

COAL LITHOLOGY LOG

BOREHOLE DATA  
GROUND BL. 15522

DEPTH DRILLED 159

DEPTH LOGGED 158

REMARKS

LOG SHEET

LOG SHEET

DATE

TIME

LOGGED BY L.M.

616

CALIPER

DENSITY

DEPTH

GAMMA RAY



616

616

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (MANAGER)**

BOREHOLE QMR 8258

LOCATION FRAME

AREA \_\_\_\_\_

DATE LOGGED JULY 1

SCALE 1:200

**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**

GROUND EL. 1513.1

DEPTH DRILLER 128

DEPTH LOGGED 128

REMARKS \_\_\_\_\_

**LOG SUITE**

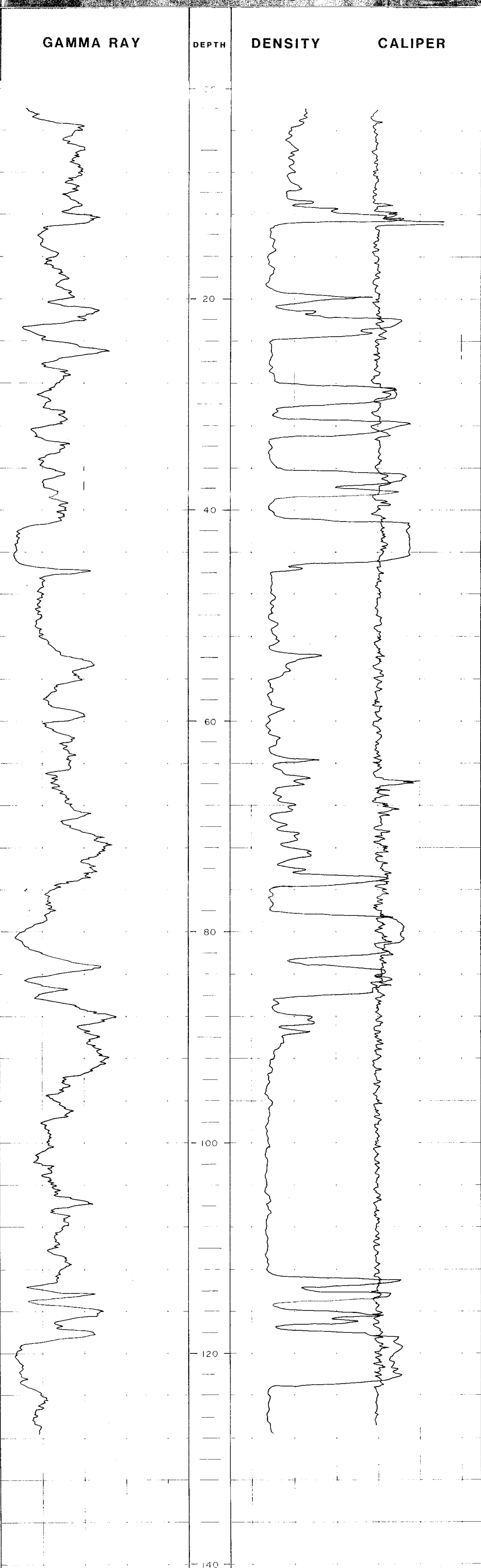
GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

NOLE DIRMETER \_\_\_\_\_  
NOLE ANGLE \_\_\_\_\_  
LOGGED BY L.M.

616



P. Quintette 8258

QUINETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE OMR 8258

LOCATION FRAME

AREA

DATE LOGGED JULY 1

VERT. SCALE 1:50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 1513.1

DEPTH DRILLED 128

DEPTH LOGGED 128

REMARKS PART 1

LOG SUITE

HOLE DIAMETER

HOLE ANGLE

DENSITY LOGGED BY LM

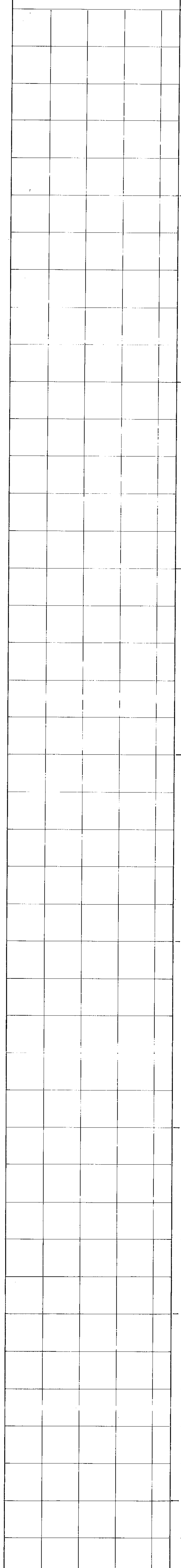
HOR. SCALE DENSITY-5000cps

616

DENSITY DETAIL

DEPTH

05  
10  
15  
20  
25  
30  
35  
40  
45



P2-Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8258

LOCATION FRAME

AREA

DATE LOGGED JULY 1

VERT. SCALE 1:50

CHART SPEED

## SEAM DETAIL LOG

BOREHOLE DATA

GROUND EL. 1513.1

DEPTH DRILLED 128

DEPTH LOGGED 128

REMARKS PART 2

## LOG SUITE

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

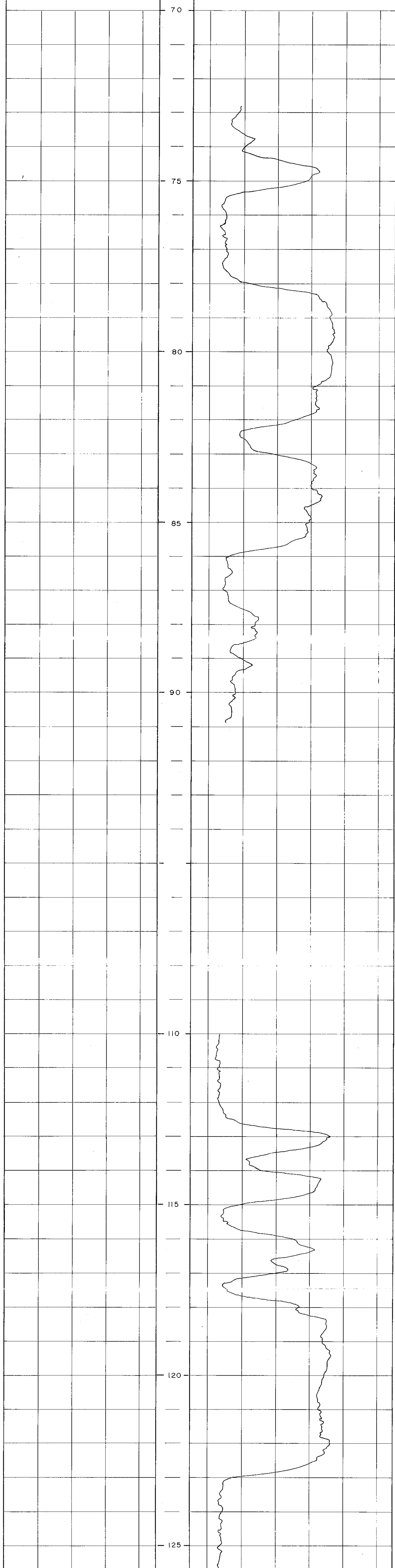
HOR. SCALE DENSITY-5000cps

# 616

## DENSITY DETAIL

DEPTH

70  
75  
80  
85  
90  
110  
115  
120  
125





QUINTEITE COAL LIMITED  
DENISON MINES LIMITED (Managed)

BOREHOLE OMR 8259  
LOCATION FRAME  
AREA  
DATE LOGGED JUNE 21  
SCALE 1:200

COAL  
LITHOLOGY  
LOG

BOREHOLE DATA  
GROUND EL. 1722.5  
DEPTH DRILLER 235  
DEPTH LOGGER 212  
REMARKS NO. CALIPER

LOG SUITE  
GAMMA RAY  
DENSITY  
CALIPER

HOLE DIAMETER  
HOLE ANGLE  
LOGGER REF. LM

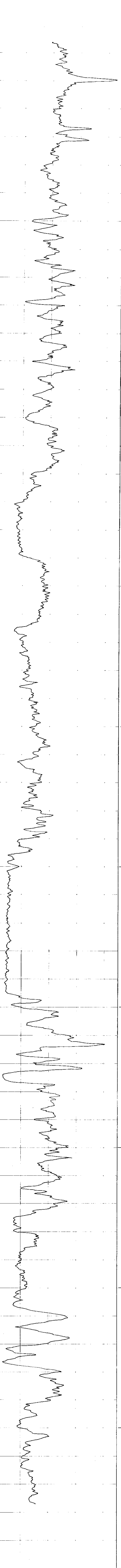
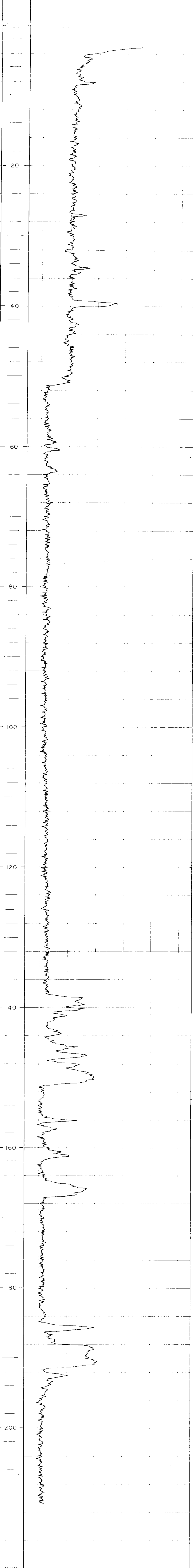
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8259

LOCATION FRAME

AREA

DATE LOGGED JUNE 21 1954

VERT. SCALE 1:50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 1722.5

DEPTH DRILLED 235

DEPTH LOGGED 212

REMARKS

LOG SUITE

HOLE DIAMETER

DENSITY

HOLE ANGLE

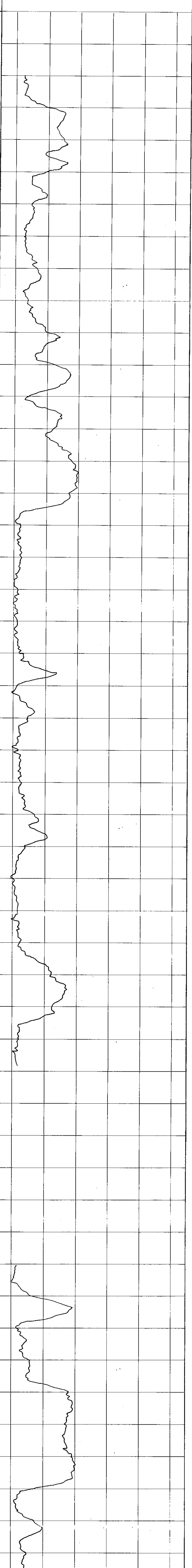
LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

DENSITY DETAIL

DEPTH

135  
140  
145  
150  
155  
160  
165  
185  
190



616

Pa. QUINETTE 82(S)A

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8260

LOCATION FRAME

AREA \_\_\_\_\_

DATE LOGGED JUNE 16

SCALE 1:200

**COAL LITHOLOGY LOG**

**BOREHOLE DATA**

GROUND EL. 1775.9

DEPTH DRILLED 155

DEPTH LOGGED 152

REMARKS \_\_\_\_\_

LOG SUITE

GAMMA RAY

DENSITY

CALIPER

BOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

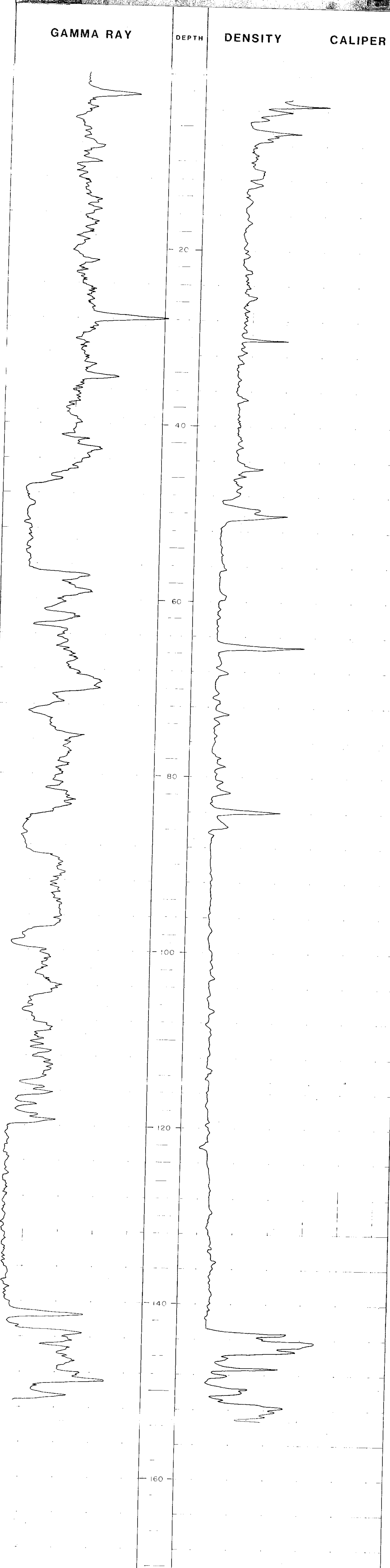
**616**

CALIPER

DENSITY

DEPTH

GAMMA RAY



**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE OMR 8261  
LOCATION FRAME Skeriff  
AREA Deputy  
DATE LOGGED JULY 10  
SCALE 1:200

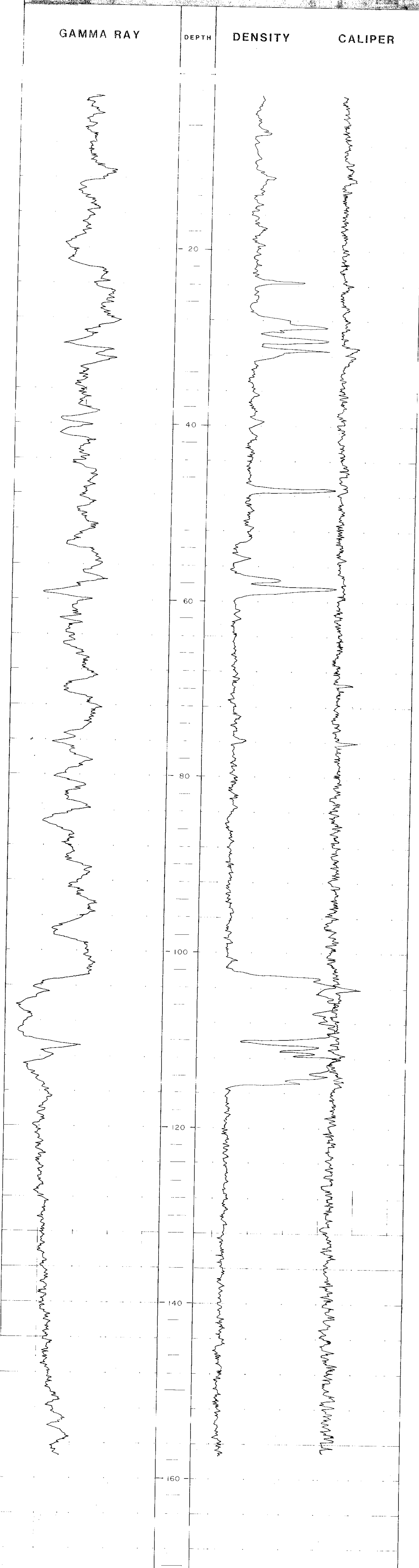
**COAL**  
**LITHOLOGY**  
**LOG**

**BOREHOLE DATA**  
GROUND EL. 1688.9  
DEPTH DRILLED 160  
DEPTH LOGGED 158  
REMARKS \_\_\_\_\_

**LOG SUITE**

GAMMA RAY \_\_\_\_\_  
DENSITY \_\_\_\_\_  
CALIPER \_\_\_\_\_  
HOLE DIAMETER \_\_\_\_\_  
HOLE ANGLE \_\_\_\_\_  
LOGGED BY LM

**616**





Pc Quintette 843A

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8262  
LOCATION FRAME

AREA \_\_\_\_\_  
DATE LOGGED JULY 15

SCALE 1:200

**COAL LITHOLOGY LOG**

**BOREHOLE DATA**

GROUND EL. 1702.0

DEPTH DRILLED 189

DEPTH LOGGED 186

REMARKS \_\_\_\_\_

**LOG SUITE**

GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOPE ANGLE \_\_\_\_\_

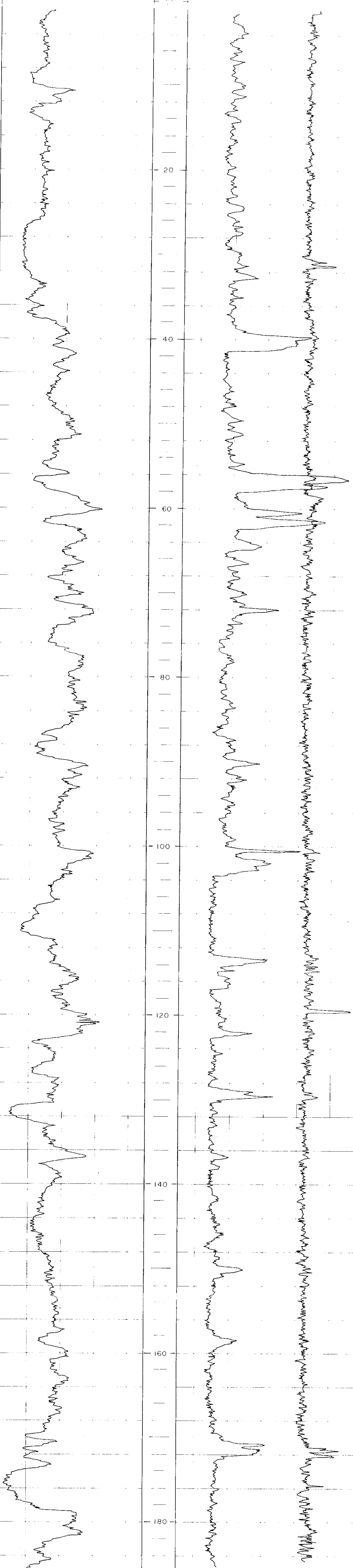
LOGGED BY LM

**GAMMA RAY**

**DEPTH**

**DENSITY**

**CALIPER**



QUINETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8261

LOCATION SHERIFF

AREA DEPUTY

DATE LOGGED JULY 10

VERT. SCALE 1:50

CHART SPEED

SEAM

DETAIL

LOG

BOREHOLE DATA

GROUND EL. 1688.8

DEPTH DRILLED 160

DEPTH LOGGED 158

REMARKS

LOG SUITE

HOLE DIAMETER

DENSITY

HOLE ANGLE

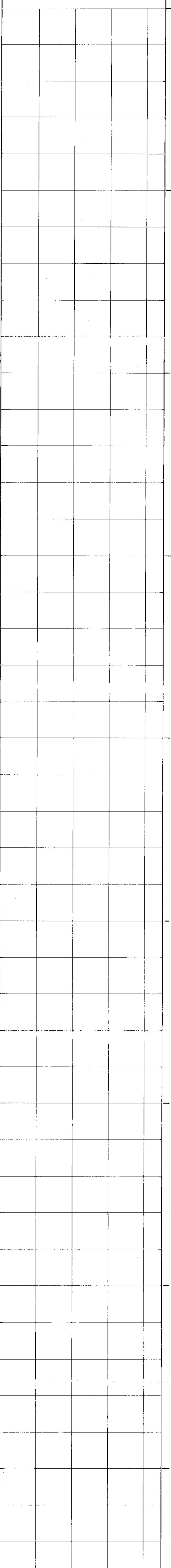
LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

DENSITY DETAIL

DEPTH

20  
25  
30  
60  
100  
105  
110  
115



616

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE

QMR 8264

LOCATION

SHERIFF

AREA

MESA

DATE LOGGED

AUG. 14

VERT. SCALE

1:200

CHART SPEED

4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL.

1671.7

DEPTH DRILLED

65

DEPTH LOGGED

64

REMARKS

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE

GAMMA-500 cps

DENSITY-5000cps

CALIPER

DENSITY

DEPTH

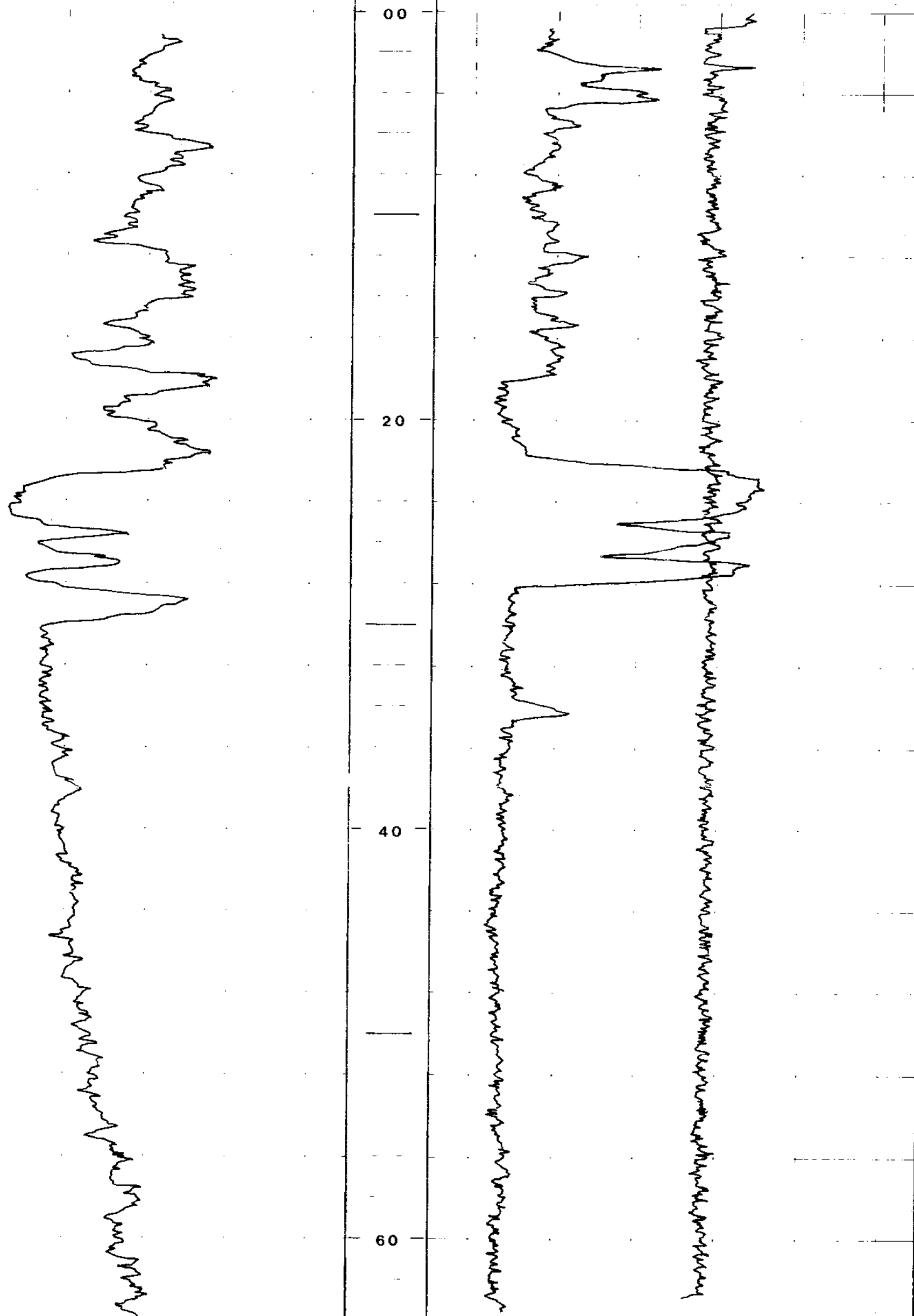
GAMMA RAY

00

20

40

60



616

*Pr. Quintette 8264*

**QUINTETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8264

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 14

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

**SEAM  
DETAIL**

BOREHOLE DATA  
GROUND EL. 1671.7

DEPTH DRILLED 65

DEPTH LOGGED 64

REMARKS \_\_\_\_\_

LOG SUITE \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

DENSITY  
LOGGED BY L.M.

HOR. SCALE \_\_\_\_\_ DENSITY-5000 cps

**616**

**DENSITY DETAIL**

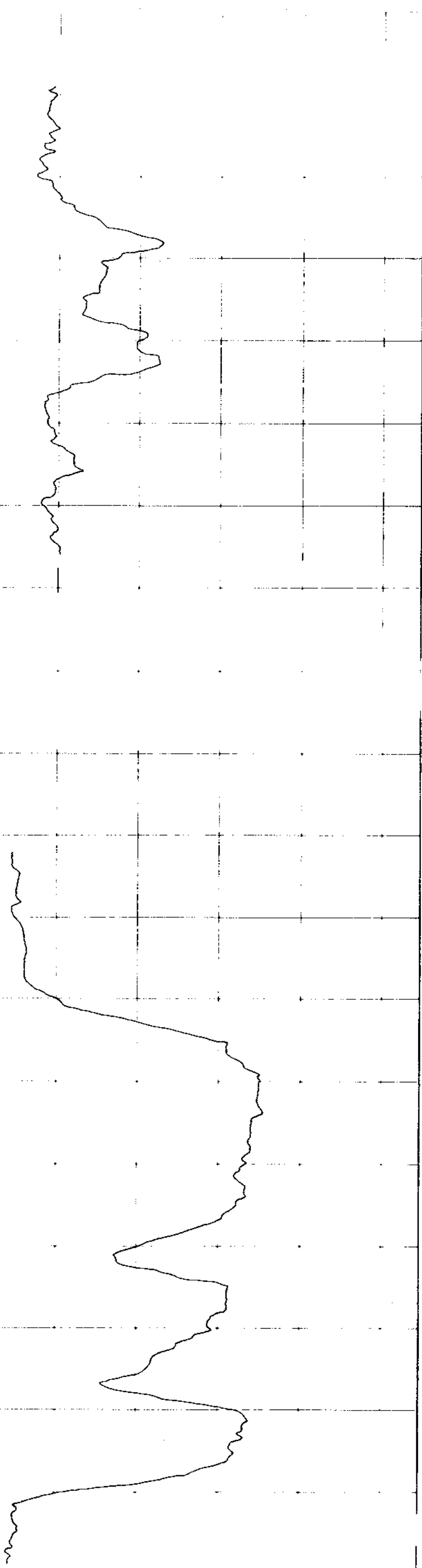
DEPTH

00

05

20

25







# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8265

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 18

VERT. SCALE 1:50

CHART SPEED \_\_\_\_\_

## SEAM BOREHOLE DATA

DETAIL GROUND EL. 1681.1

LOG DEPTH DRILLED 48

DEPTH LOGGED 48

REMARKS

### LOG SUITE

HOLE DIAMETER

DENSITY HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

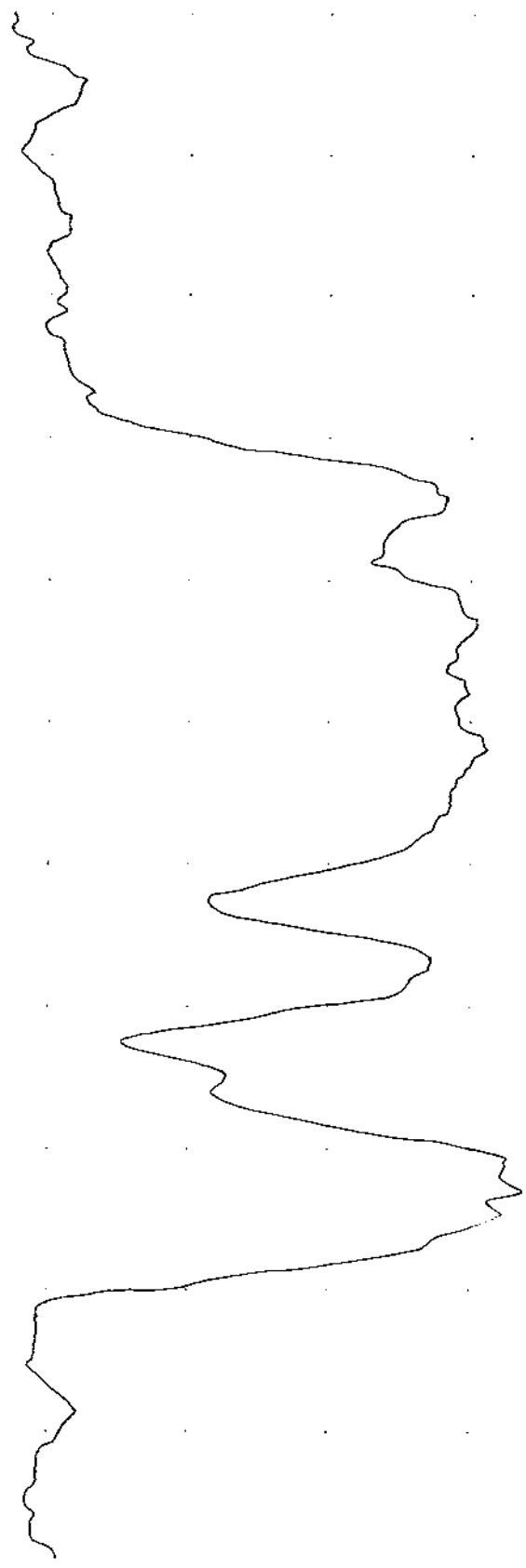
### DENSITY DETAIL

DEPTH

00

05

10



# 616

R. Quintette 82(3)A

**QUINETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8266

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 22

VECT. SCALE 1:200

CHART SPEED

AM / MIN

**COAL LITHOLOGY LOG**

**BOREHOLE DATA**

GROUND EL. 1687.3

DEPTH DRILLED 100

DEPTH LOGGED 98

REMARKS

**LOG SITE**

GAMMA RAY

DENSITY

CALIPER

LOGGED BY L.M.

HOR. SCALE

GAMMA RAY  
DENSITY  
5000 CPS

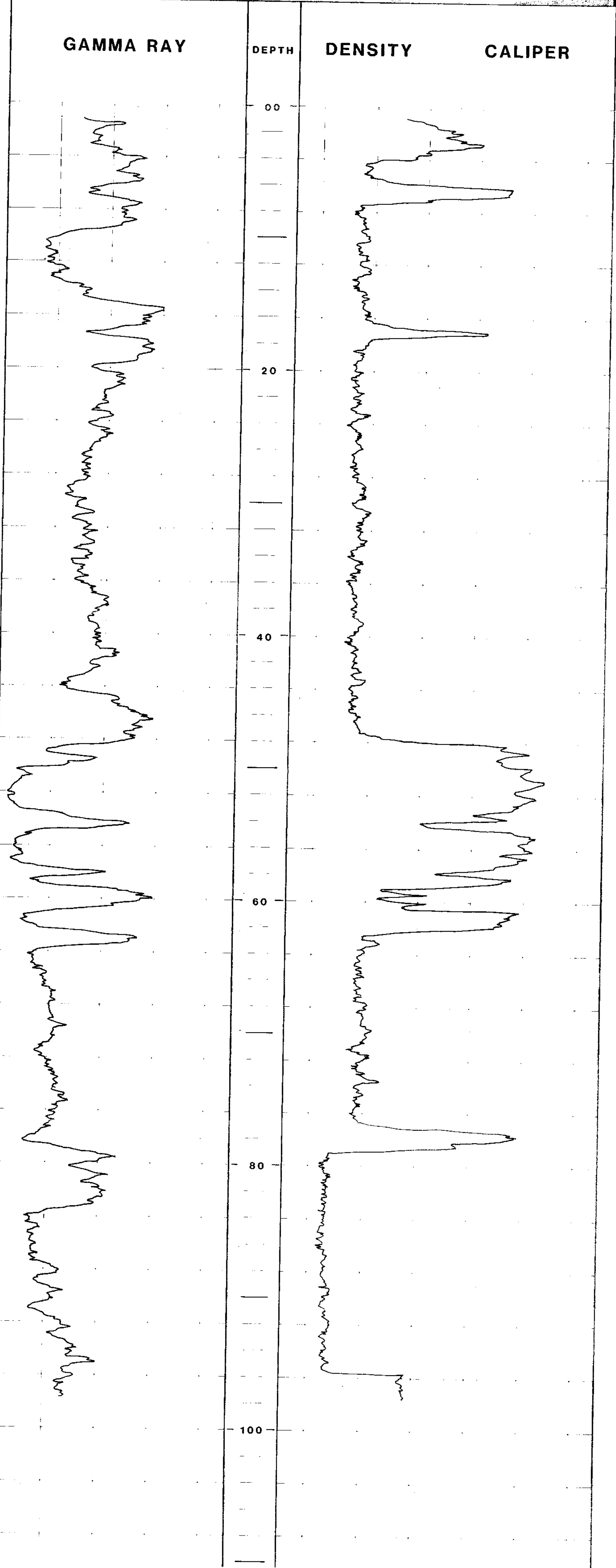
616

CALIPER

DENSITY

DEPTH

GAMMA RAY



QUINLETTE COAL LIMITED  
DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8266

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 22

VERT. SCALE 1.50

CHART SPEED

SEAM  
DETAIL  
LOG

BOREHOLE DATA

GROUND EL. 16873

DEPTH DRILLED 100

DEPTH LOGGED 98

REMARKS

LOG SUITE

HOLE DIAMETER

DENSITY

HOLE ANGLE

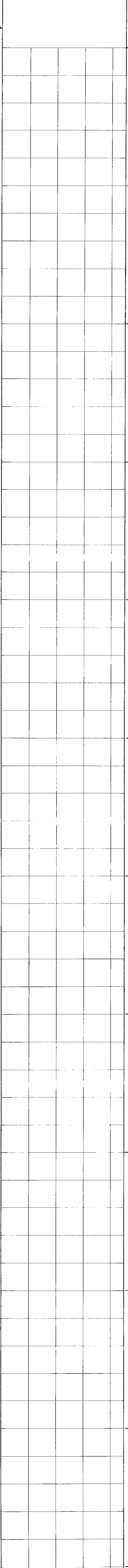
LOGGED BY L.M.

HOR. SCALE DENSITY-5000CPS

DENSITY DETAIL

DEPTH

00  
05  
15  
20  
45  
50  
55  
60  
65  
75  
80



616

TR - Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8268

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 14

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1674.8

DEPTH DRILLED 66

DEPTH LOGGED 66

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY \_\_\_\_\_

DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

NOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

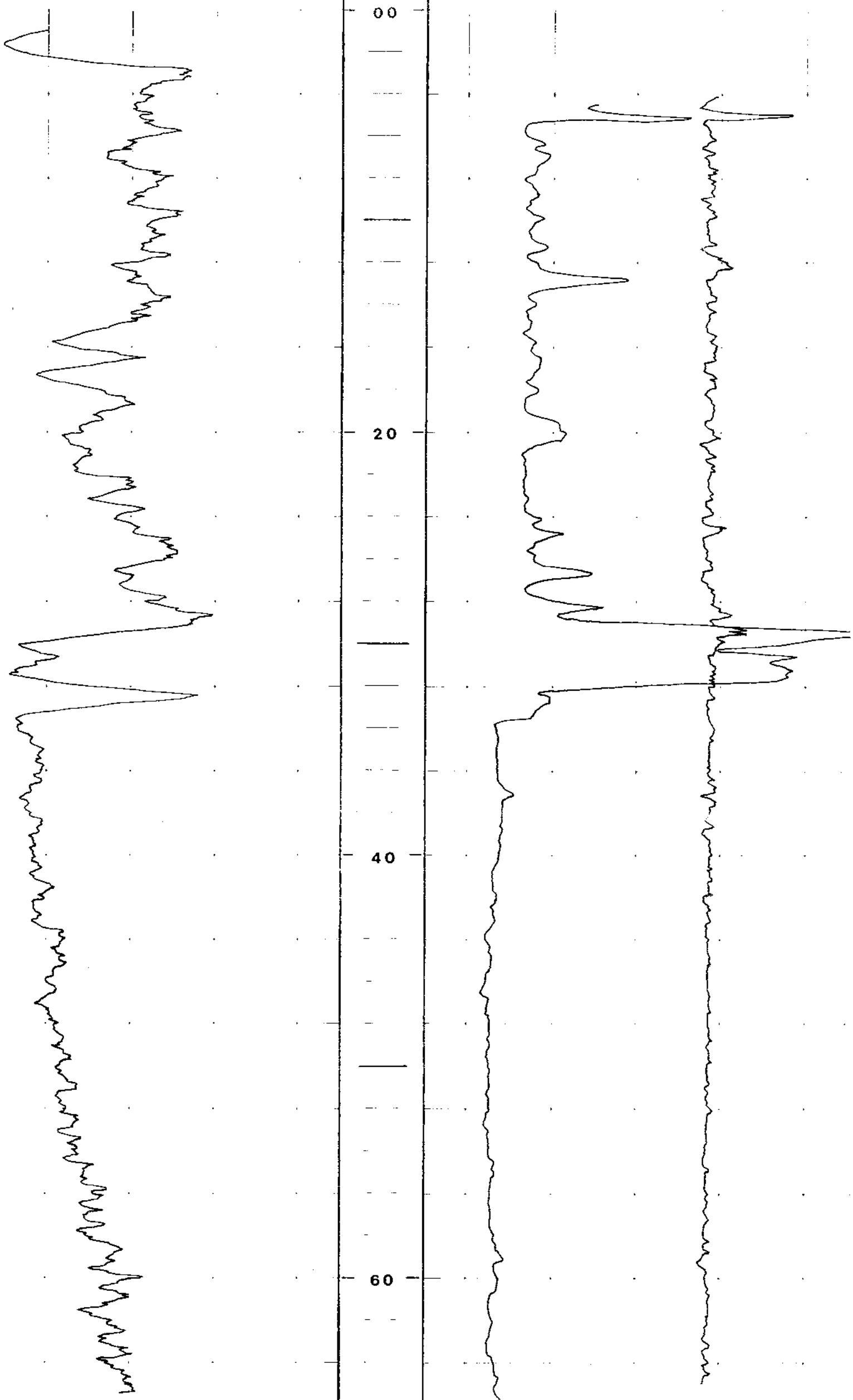
# 616

CALIPER

DENSITY

DEPTH

GAMMA RAY





Fr. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8269

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 21

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1682.4

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS \_\_\_\_\_

## LOG SUITE

GAMMA RAY \_\_\_\_\_

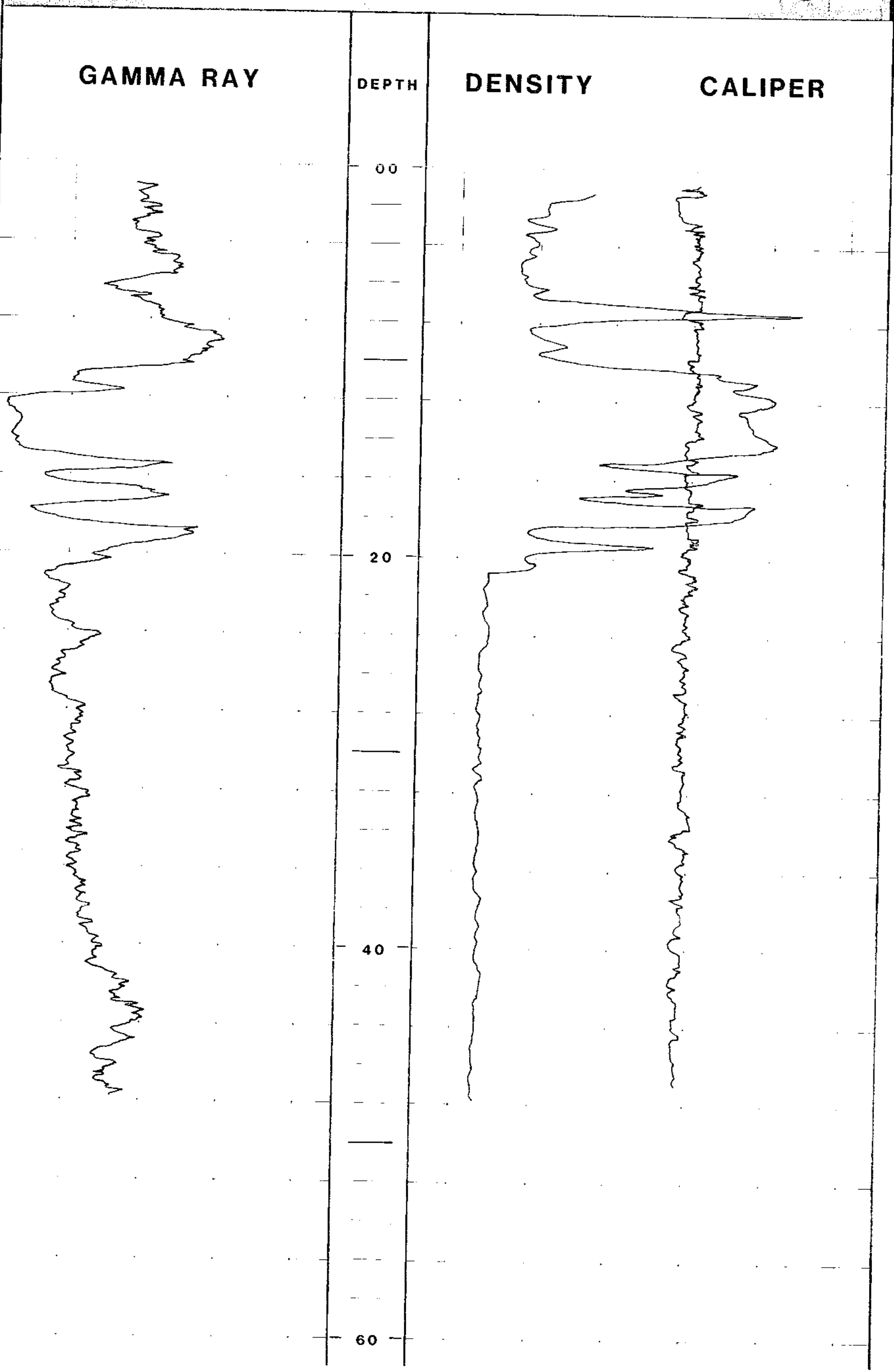
DENSITY \_\_\_\_\_

CALIPER \_\_\_\_\_

LOGGED BY L.M.

NON. SCALE GAMMA-500 cps  
DENSITY-5000cps

# 616



P. Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8269

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 21

VERT. SCALE 1:50

CHART SPEED

## SEAM BOREHOLE DATA

GROUND EL. 1682.4

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS

## LOG SUITE

HOLE DIAMETER

HOLE ANGLE L.M.

LOGGED BY

HOR. SCALE DENSITY-5000cps

## DENSITY DETAIL

DEPTH

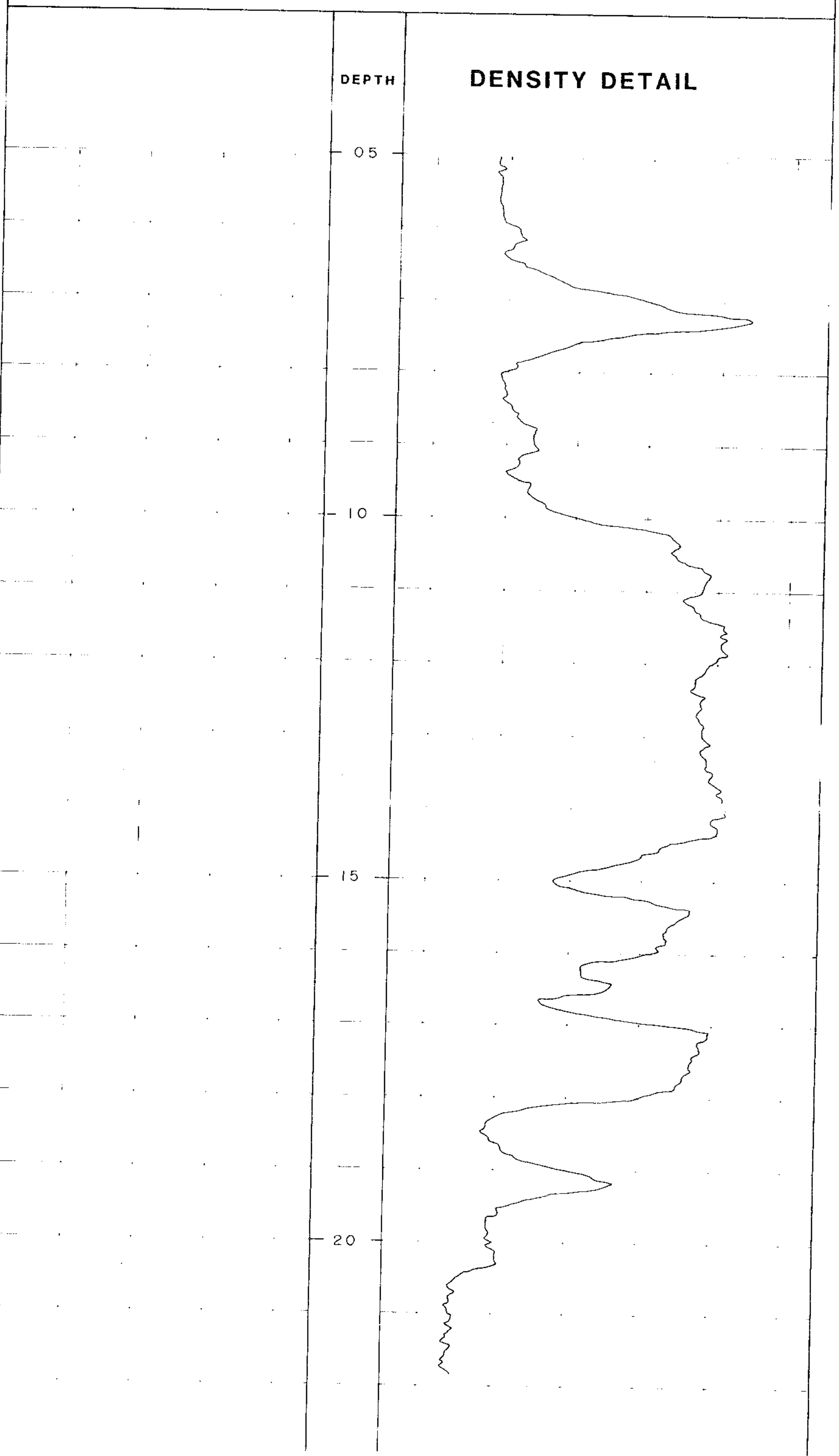
05

10

15

20

616



Pr. Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8268

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 14

VERT. SCALE 1:50

CHART SPEED

## SEAM BOREHOLE DATA

DETAIL GROUND EL. 1674.8

LOG DEPTH DRILLED 66

DEPTH LOGGED 66

REMARKS

## LOG SUITE

HOLE DIAMETER

DENSITY HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

## DENSITY DETAIL

DEPTH

25

30



# 616

TR - Quintette 82(3)A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8270

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 21

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1670.9

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS

## LOG SUITE

GAMMA RAY

DENSITY

CALIPER

HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE — GAMMA-500 cps  
DENSITY-5000cps

# 616

CALIPER

DENSITY

DEPTH

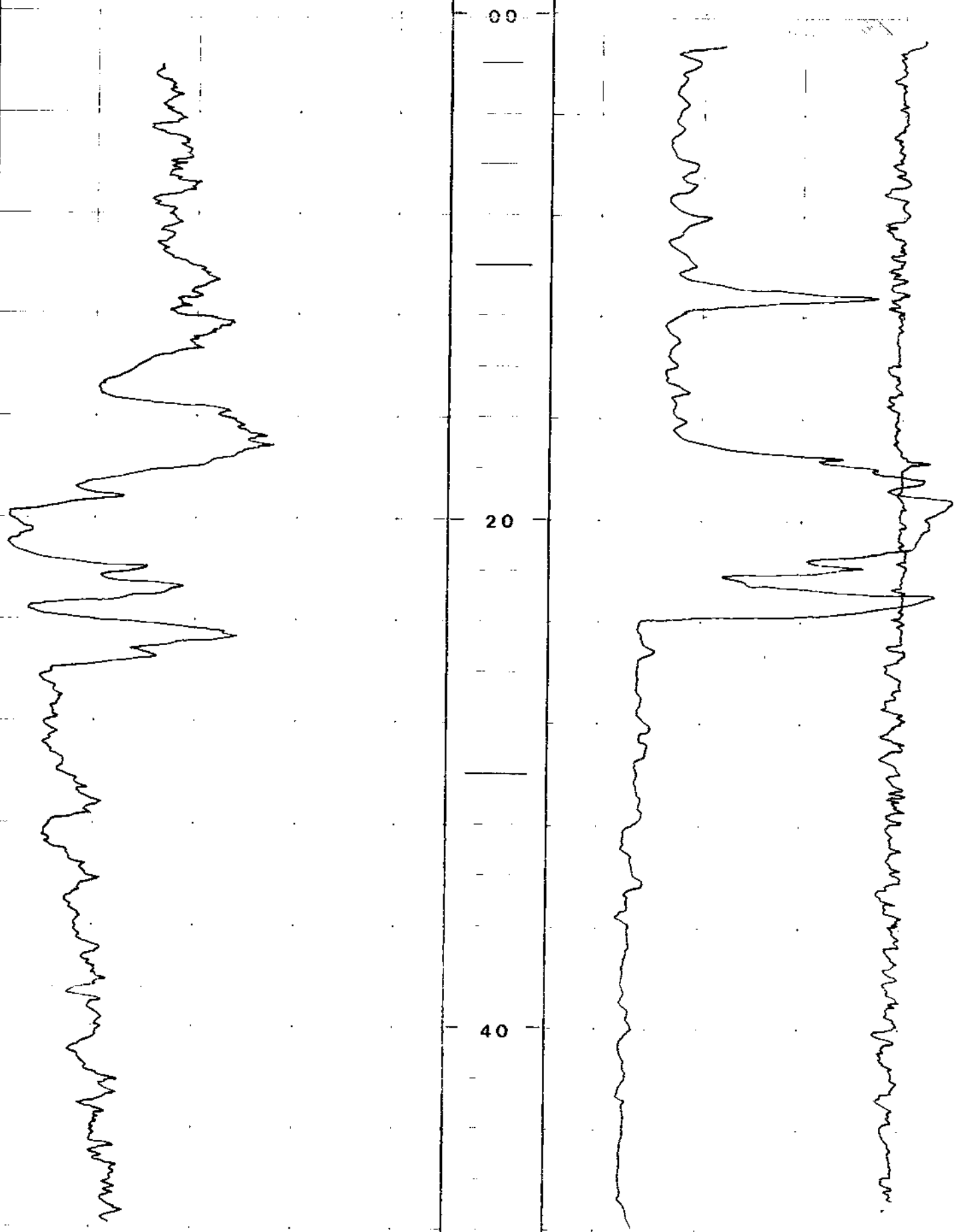
GAMMA RAY

00

20

40

60



Re-Quintette 82(3)A

# QUINTETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8270

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 21

VERT. SCALE 1:50

CHART SPEED

## SEAM BOREHOLE DATA

DETAIL GROUND EL. 1670.9

LOG DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS

### LOG SUITE

HOLE DIAMETER

DENSITY HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

### DENSITY DETAIL

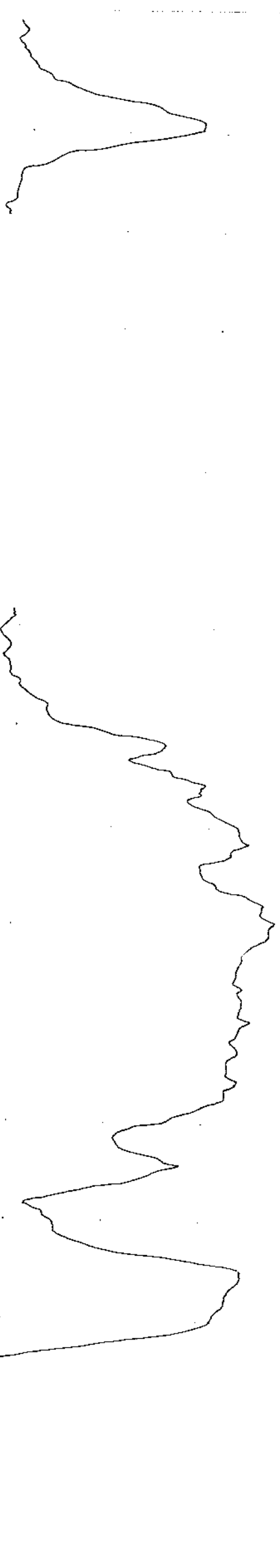
DEPTH

10

15

20

25



# 616



TR. QUINTETTE 8263A

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8271

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 20

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

## COAL LITHOLOGY LOG

### BOREHOLE DATA

GROUND EL. 1673.1

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS \_\_\_\_\_

### LOG SUITE

GAMMA RAY

DENSITY

CALIPER

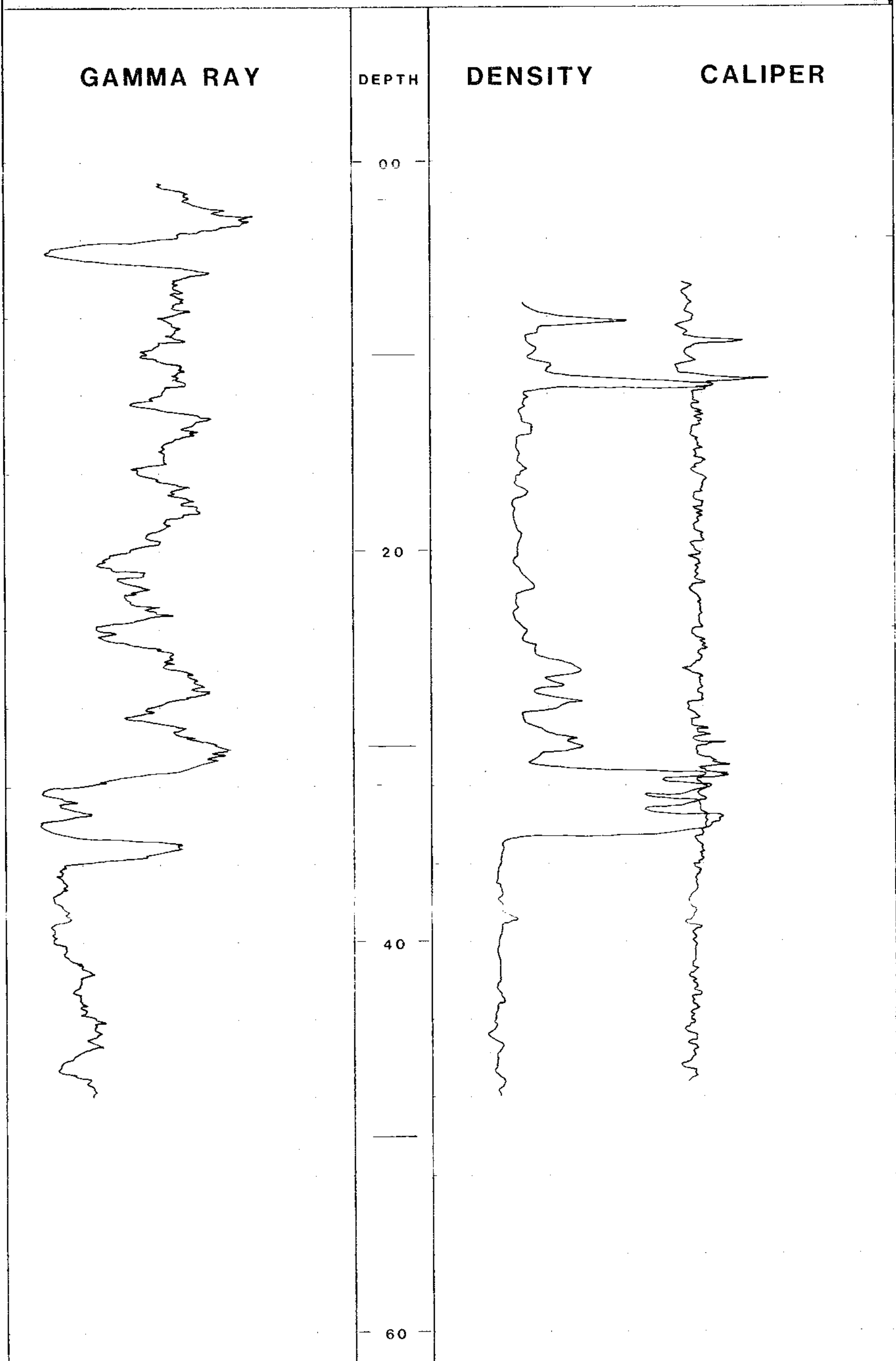
HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

616



Fr. Quintette 825A

**QUINTETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8271

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 20

VERT. SCALE 1:50

CHART SPEED

**SEAM**  
**BOREHOLE DATA**

GROUND EL. 1673.1

DEPTH DRILLED 50

DEPTH LOGGED 48

REMARKS

**LOG SUITE**

HOLE DIAMETER

DENSITY

HOLE ANGLE

LOGGED BY L.M.

HOR. SCALE DENSITY-5000cps

**DENSITY DETAIL**

DEPTH

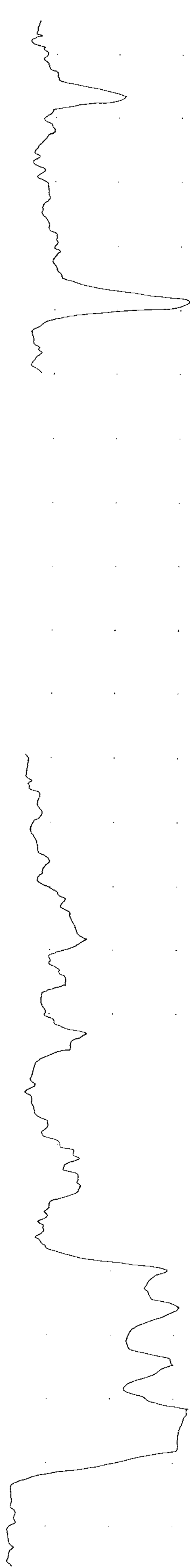
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35



616

# QUINETTE COAL LIMITED DENISON MINES LIMITED (Manager)

BOREHOLE QMR 8273

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG. 21

VERT. SCALE 1:200

CHART SPEED 4M. / MIN.

**COAL**  
**LITHOLOGY**  
**LOG**

BOREHOLE DATA

GROUND EL. 1646.2

DEPTH DRILLED 40

DEPTH LOGGED 34

REMARKS \_\_\_\_\_

**LOG SUITE**  
**GAMMA RAY**  
**DENSITY**  
**CALIPER**

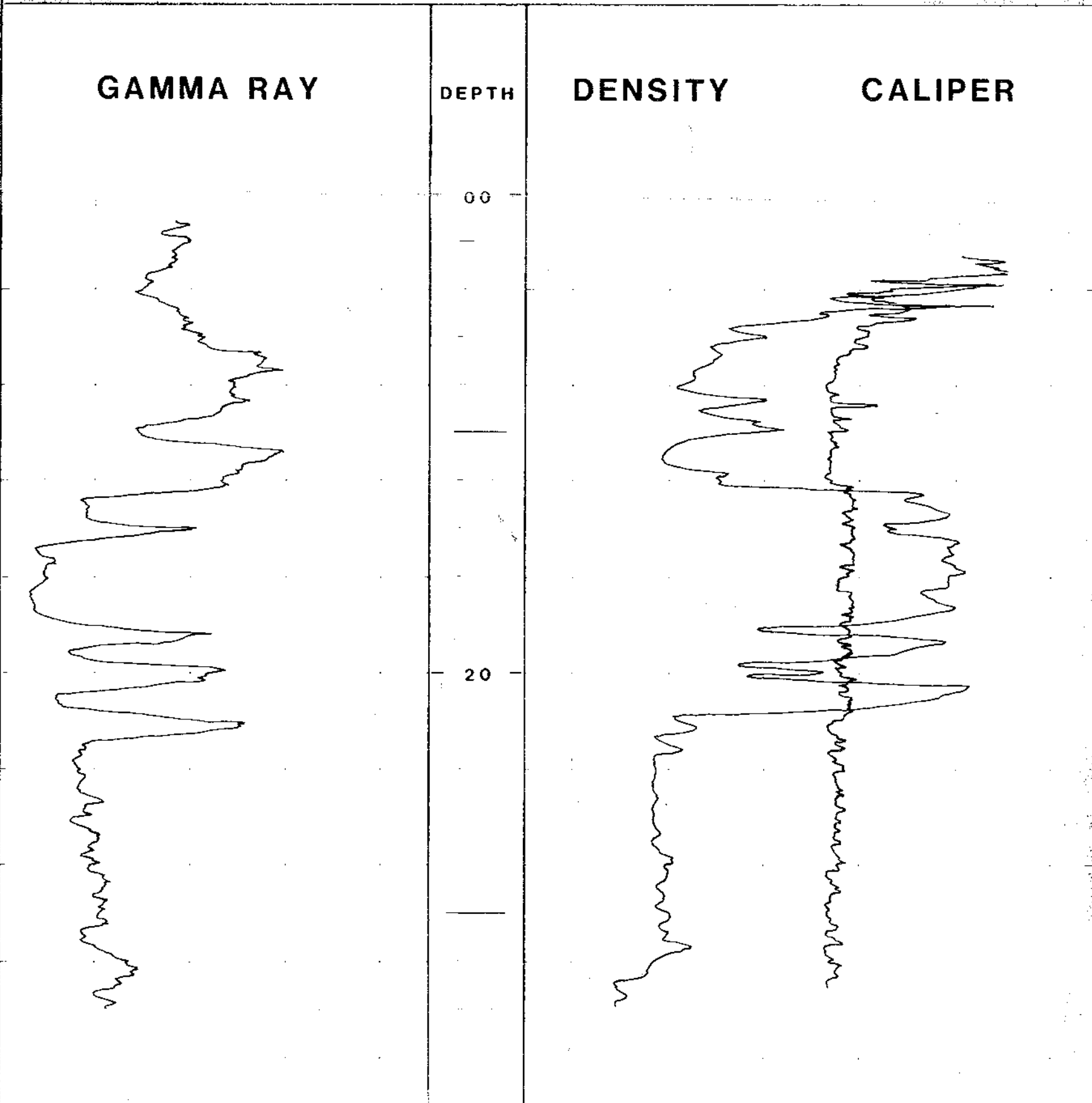
HOLE DIAMETER \_\_\_\_\_

HOLE ANGLE \_\_\_\_\_

LOGGED BY L.M.

HOR. SCALE GAMMA-500 cps  
DENSITY-5000cps

# 616



Fr. Quintette 82(3)A

**QUINTETTE COAL LIMITED**  
**DENISON MINES LIMITED (Manager)**

BOREHOLE QMR 8273

LOCATION SHERIFF

AREA MESA

DATE LOGGED AUG 21

VERT. SCALE 1:50

CHART SPEED

**SEAM** BOREHOLE DATA

**DETAIL** GROUND EL. 1646.2

**LOG** DEPTH DRILLED 40

DEPTH LOGGED 34

REMARKS

**LOG SUITE**

HOLE DIAMETER

DENSITY

HOLE ANGLE

LOGGED BY LM

HOR. SCALE DENSITY-5000cps

**616**

**DENSITY DETAIL**

DEPTH

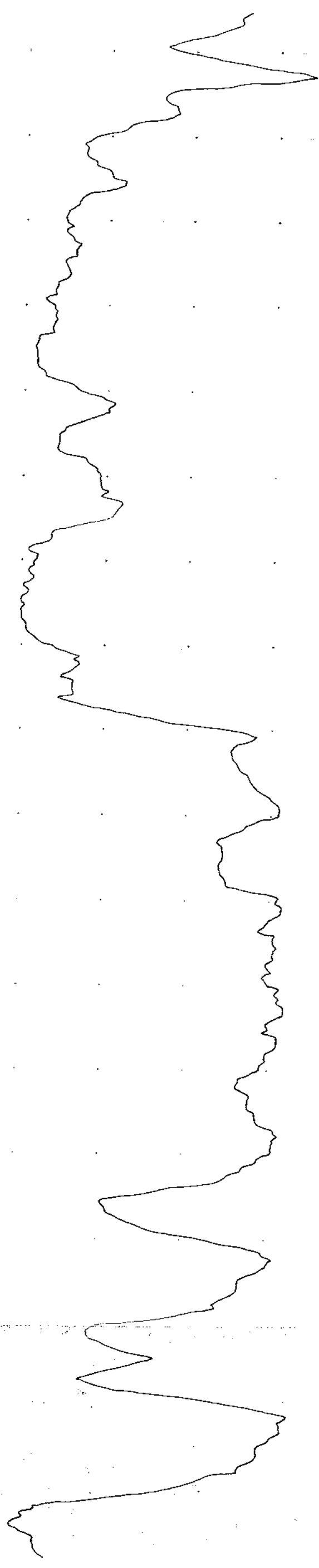
00

05

10

15

20



PR-QUINTETTE 82(3)A  
3 of 3

616



**CONFIDENTIAL**

**OPEN FILE**

**APPENDIX 1.3**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**00 616**

## **APPENDIX 1.3.2**

**DRILLING  
DESCRIPTIVE LOGS  
(CORE HOLES)**



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	6.94		63			SANDSTONE: medium grained, medium grey, calcite stringers, some con- glomerate lenses					23'/7m				
53			78			AS ABOVE: calcite stringers					27'/8.2m				
		8.93	58			AS ABOVE:									
	8.93	9.11	18			CONGLOMERATE: rounded clasts, quartz and chert, clasts less than .5cm, (grit?)									
						BOX 3									
44	9.11	10.80	169			SANDSTONE: very fine grained, medium grey, poorly laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY			MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	ash Colour	Bedding Charact.			Other Sed. Charact.	bd.	
	10.80	11.03	23			CONGLOMERATE: sub-rounded quartz and chert, clasts less than .5cm							
	11.03		15			SANDSTONE: fine grained, medium grey, massive			37'/11.3m				
29			50			AS ABOVE: medium grained towards base							
						BOX 4							
		12.41	73			AS ABOVE:							
	12.41		15			COAL C2: broken							
		12.82	26			COAL LOSS:							
	12.82	13.12	30			CLAYSTONE: carbonaceous							

DRILL CORE LOG

HOLE No. QBD 8201

PAGE No. 3



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	13.12	13.18	6			COAL C1: shiny									
	13.18	13.21	3			CLAYSTONE: carbonaceous									
	13.21	13.61	40			COAL C1: core broken									
	13.61	13.78	17			CLAYSTONE: very carbonaceous, core very broken									
	13.78	13.88	10			COAL C2: very broken									
	13.88	14.04	16			CLAYSTONE: dark grey to brown, core very broken									
	14.04	14.17	13			COAL C3: very broken, possibly some C4									
	14.17	14.34	17			COAL LOSS:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											47' / 14.3m				
	14.34	14.46	12			CLAYSTONE: broken, carbonaceous									
	14.46	14.93	47			COAL AND CLAYSTONE MIXED: core has been grounded									
						BOX 5									
	14.93		8			CLAYSTONE: very carbonaceous, broken									
		15.70	69			CLAYSTONE: dark grey, massive									
47	15.70		69			SILTSTONE: dark to medium grey, poorly laminated									
											57' / 17.4m				
38		17.76	137			AS ABOVE: core broken, iron stains along fractures									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 6									
33	17.76		194			CLAYSTONE: silty laminations									
											66' / 20.1m				
			73			AS ABOVE:									
						BOX 7									
						AS ABOVE:									
	20.61		18												
	20.61	20.73	12			COAL C2 & C3: very broken and grounded									
52	20.73		219			SANDSTONE: fine grained at top, medium grained towards base, light grey, salt and pepper texture, thin carbonaceous stringers, calcite veins throughout									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											76' / 23.2m				
			14			AS ABOVE:									
									BOX 8						
45			270			AS ABOVE: abundant calcite stringers									
									BOX 9						
			24			AS ABOVE: core broken									
											86.5' / 26.4m				
			41			AS ABOVE:									
30			203			SANDSTONE: very fine grained, medium to dark grey, laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 10									
			75			AS ABOVE: core broken									
											97' / 30.0m				
33			112			AS ABOVE:									
			70			SANDSTONE: medium grained, light grey, massive									
						BOX 11									
36	32.02		101			AS ABOVE:									
	32.02		23			CLAYSTONE: dark grey, poorly laminated, silty									
											107' / 32.6m				







B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 16									
			144			AS ABOVE:									
38			134			SANDSTONE: fine grained, thin laminations, dark grey, carbonaceous									
											57' / 47.9m				
						BOX 17									
		49.20	196			AS ABOVE: becoming silty towards base									
	49.20		89			CLAYSTONE: with siltstone laminations, dark grey, thin carbonaceous material along bedding									
						BOX 18									



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
33		56.32	82			SANDSTONE: very fine grained, light grey, abundant calcite stringers									
	56.32		33			SILTSTONE: dark grey, massive, core broken, calcite stringers									
											187'/57.0m				
			106			AS ABOVE:									
											191'/58.2m				
			61			AS ABOVE:									
						BOX 21									
42	58.42		138			SANDSTONE: very fine grained, medium grey, with thin dark grey laminations, calcite veining perpendicular to bedding									

DRILL CORE LOG

HOLE No. QBD 8201

PAGE No. 13



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			128			AS ABOVE:									
		61.12	4			AS ABOVE:									
27	61.12		178			CLAYSTONE: dark grey, laminated, minor calcite veining, sandstone bands									
			6			AS ABOVE: core very broken									
			17			AS ABOVE:									
			73			AS ABOVE: core very broken, possible fault zone									

207' / 63.1m

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC./m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 23									
		63.93	7			AS ABOVE:									
34	63.93		216			SILTSTONE: dark grey, thin laminations minor calcite fractures									
											217'/66.1m				
			45			AS ABOVE:									
						BOX 24									
		67.59	105			AS ABOVE: core broken									
24	67.59	69.09	150			CLAYSTONE: silty in places, poorly lam- inated, abundant calcite vein- ing perpendicular to bedding									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	69.09		9			SANDSTONE: very fine grained, dark grey, laminated, core broken									
											227' / 69.2m				
						BOX 25									
			282			AS ABOVE: core broken, laminated, thin claystone bands									
						BOX 26									
			39			AS ABOVE:									
											237' / 72.2m				
33	74.69	230				AS ABOVE:									
						BOX 27									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	74.69		72			SILTSTONE: dark grey, with thin light grey laminations, calcite fractures, fine grained sandstone in places									
											247' / 75.3m				
29			200			AS ABOVE: dark grey, claystone laminations no rythm to thickness of lam- inations, plainer bedding									
						BOX 28									
25			102			AS ABOVE: calcite veining									
											257' / 78.3m				
			174			AS ABOVE:									
						BOX 29									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		81.20	103			AS ABOVE:									
											267'	81.4m			
	81.20	81.27	7			CLAY: grey green									
34	81.27	82.86	159			SILTSTONE & SANDSTONE: dark grey, light grey laminations, minor calcite stringers, slickensides along bedding									
						BOX 30									
	82.86	84.31	145			AS ABOVE: claystone bands									
											277'	84.4m			
33	84.31		133			CLAYSTONE: dark grey, thin sandstone laminations less than 1cm									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 31									
			184			AS ABOVE: silty in places, core broken									
											287' / 87.5m				
			92			CLAYSTONE: dark grey, silty, minor plain fragments along bedding									
						BOX 32									
		88.93	53			AS ABOVE:									
31	88.93		51			SANDSTONE: very fine grained, light grey, thin laminations (carbonaceous?)									
			126			AS ABOVE: core very broken, abundant calcite veining, possible fault zone									

DRILL CORE LOG



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 35									
			22			AS ABOVE:									
											317' / 97.0m				
26	98.41	156				AS ABOVE:									
	98.41		97			SANDSTONE: fine grained, medium grey, poorly laminated, claystone layers									
						BOX 36									
			63			AS ABOVE:									
											327' / 10.0m				
	100.57	56				SANDSTONE: fine grained, inter-bedded, dark grey claystone									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
45	100.57	100.87	30			CLAYSTONE: thin inter-beds of sandstone less than .5cm, dark grey									
	100.87	101.30	43			SANDSTONE: very fine grained, massive									
	101.30		51			CLAYSTONE: dark grey, thin light grey laminations of sandstone									
						BOX 37									
45			105			AS ABOVE:									
										337'/102.7m					
		103.05	19		AS ABOVE:										
	103.05		152		SILTSTONE: medium to dark grey, core broken, calcite veining										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 38									
48		104.68	11			AS ABOVE:									
	104.68		135			CLAYSTONE: silty, poorly laminated									
											347' / 105.8m				
38			139			AS ABOVE:									
						BOX 39									
		107.50	8			AS ABOVE:									
	107.50	107.93	43			SANDSTONE: fine grained, light grey, thin dark grey laminations, poorly cross bedded, some dark grey laminations, claystone lam- inations less than 2cm									







B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 43									
			40			AS ABOVE:									
45			230			CLAYSTONE: thinly laminated, slickenslides along fractures									
						BOX 44									
			47			AS ABOVE:									
											397' / 121.0m				
			240			AS ABOVE:									
						BOX 45									
			72			CLAYSTONE: dark grey to brown, massive few light grey laminations, calcite stringers									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 48									
42			160			AS ABOVE:									
											437' / 133.1m				
			114			AS ABOVE:									
						BOX 49									
40			158			AS ABOVE: core broken at base									
											445' / 135.6m				
			60			AS ABOVE:									
											447' / 136.2m				
			48			AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			240												
						AS ABOVE:									
			25												
						AS ABOVE:									
45			35												
						AS ABOVE:									
			191												
						AS ABOVE:									
			38												
						AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			89			AS ABOVE:									
											496' / 151.1m				
			192			AS ABOVE:									
							BOX 56								
			163			AS ABOVE:									
											506.6' / 154.4m				
							BOX 57								
45			150			AS ABOVE:									
											517' / 157.6m				
			128			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 58									
			187			AS ABOVE:									
											527'	160.8m			
			92			AS ABOVE:									
						BOX 59									
			214			AS ABOVE:									
											537'	163.7m			
41			59			AS ABOVE:									
						BOX 60									
			240			AS ABOVE:									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												547' / 166.7m			
			17			AS ABOVE:									
							BOX 61								
			279			AS ABOVE:									
							BOX 62								
			26			AS ABOVE:									
												557' / 169.8m			
			253			AS ABOVE:									
							BOX 63								
			59			AS ABOVE:									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											586' / 178.6m				
		177.96	35			AS ABOVE:									
	177.96	178.10	14			CLAY: light grey, soft									
			147			CLAYSTONE: dark grey, poorly laminated, silty in places, core broken									
						BOX 66									
			136			AS ABOVE:									
											596.6' / 181.8m				
			142			AS ABOVE:									
						BOX 67									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30			185			AS ABOVE:									
										607'	185.0m				
			94			AS ABOVE:									
			221			AS ABOVE:									
										617'	188.1m				
			50			AS ABOVE:									
			268			AS ABOVE:									
										527'	191.1m				
			7			AS ABOVE:									

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 70									
			283			AS ABOVE:									
						BOX 71									
			18			AS ABOVE:									
											637' / 194.2m				
			267			AS ABOVE:									
						BOX 72									
			36			AS ABOVE:									
											647' / 197.2m				
			205			AS ABOVE: core broken at base									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											553' / 199.0m				
			39			AS ABOVE:									
			81			CLAYSTONE: dark grey, silty, calcite veining, massive									
											557' / 200.3m				
			188			AS ABOVE: core broken									
			119			AS ABOVE:									
											567' / 203.3m				
			101			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			32			AS ABOVE: core very broken									
						BOX 75									
			52			AS ABOVE: core broken									
											672'	204.8m			
50			119			AS ABOVE: core broken, pyrite blebs									
											677'	206.3m			
			74			AS ABOVE:									
			52			AS ABOVE: core very broken									
						BOX 76									
			52			SILTSTONE: dark grey, massive, some fine grained sandstone, greenish in color									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											681' / 207.6m				
70			193			AS ABOVE:									
											687' / 209.4m				
			32			CLAYSTONE: dark grey, massive, slicken- slides along fracture									
			153			AS ABOVE:									
48			132			SILTSTONE: dark grey, pyrite along bedding?									
			15			AS ABOVE:									



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											697' / 212.4m				
			5			AS ABOVE: carbonaceous									
			27			COAL C2 & C3: broken and powdered									
48			230			CLAYSTONE: dark grey, calcite stringers carbonaceous									
			5			COAL C2: very broken									
						BOX 79									
			13			COAL C3: broken									
			22			CLAYSTONE: carbonaceous, broken									
											707' / 215.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			31			COAL & CLAYSTONE: more coal than clay- stone, coal C1 & C2									
			13			COAL C1: broken									
			92			CLAYSTONE: silty, core very broken, abun- dant calcite stringers, car- bonaceous									
			83			AS ABOVE: silty towards base, pyrite towards base									
			25			SILTSTONE: dark grey, still pyrite along bedding									
						BOX 80									
			41			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			46			CLAYSTONE: dark grey, poorly laminated, carbonaceous, core very broken									
												716.6'	218.4m		
44			65			AS ABOVE:									
			30			COAL C1: core broken									
			108			CLAYSTONE: dark grey, pyrite blebs throughout, core broken									
						BOX 81									
			20			AS ABOVE:									
			54			CLAYSTONE: core very broken, mixed with drilling mud									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			143			AS ABOVE:									
											745'	227.1m			
			143			AS ABOVE: abundant calcite veining									
							BOX 84								
			173			AS ABOVE:									
											755'	230.1m			
			29			AS ABOVE:									
			84			SILTSTONE: medium grey, massive									
							BOX 85								
			49			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			36			SANDSTONE: very fine grained, thinly lam- inated									
			127			SILTSTONE: dark grey, poorly laminated minor calcite veining									
												765' / 233.2m			
55			81			AS ABOVE:									
												767' / 233.8m			
						BOX 86									
			108			AS ABOVE:									
50			109			CLAYSTONE: dark grey, laminated, silty at top									
			26			COAL: powdered, C1 & C2									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			32			CLAYSTONE: silty, calcite veining									
						BOX 87									
			24			AS ABOVE: abundant calcite									
											777' / 236.8m				
			261			SILTSTONE: medium grey, abundant calcite veining at top									
						BOX 88									
76			41			AS ABOVE:									
											787' / 239.9m				
			59			AS ABOVE:									
52			162			AS ABOVE:									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			30			SANDSTONE: very fine grained									
						BOX 89									
			60			AS ABOVE:									
											797'	242.9m			
65			145			AS ABOVE:									
			90			SILTSTONE: medium grey									
			25			CLAYSTONE: dark grey, silty									
						BOX 90									
			106			AS ABOVE: core broken, calcite veining									
											807'	246.0m			

DRILL CORE LOG

HOLE No. QBD 8201

PAGE No. 48

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			20			AS ABOVE: calcite veining									
			93			AS ABOVE:									
74			64			SILTSTONE: dark grey, light grey lam- inations									
						BOX 91									
			36			AS ABOVE:									
55			95			SANDSTONE: fine grained, dark grey, calcite veining									
											817' / 249.0m				
						E.O.H.									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	8.26	8.76	50	48	1829	COAL C2: vitrinite bands									
	8.76	9.45	69	66	↑	CLAYSTONE: carbonaceous, core broken									
	9.45		45	43	1830	COAL LOSS: (C3-C4)?									
		10.03	13	12	↓	COAL C1:									
	10.03	10.11	8	8	↓	C4: core very broken, carbonaceous									
	10.11	10.21	10	10	↓	COAL:									
	10.21		18	17	↓	CLAYSTONE: very carbonaceous									
						BOX 3									
15		10.51	12	12		AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	10.51		12			COAL C1:									
		10.71	8			COAL LOSS:									
											37'/11	3m			
	10.71	10.75	4			CLAYSTONE: very carbonaceous									
	10.75		246			CLAYSTONE: carbonaceous, dark grey									
							BOX 4								
		13.33	12			AS ABOVE: carbonaceous									
	13.33		11			COAL C2:									
											47'/14	3m			
			9			COAL C2:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		13.78	25			COAL LOSS:									
	13.78		95			CLAYSTONE: carbonaceous, core broken									
		14.97	24			AS ABOVE: core very broken, silty towards base									
	14.97	15.92	95			SILTSTONE: dark grey, massive									
14	15.92	16.35	43			SANDSTONE: very fine grained, dark grey, carbonaceous material along bedding									
						BOX 5									
	16.35	16.59	24			CLAYSTONE: dark grey, silty									
	16.59	16.72	13			SANDSTONE: fine grained, medium grey, thinly laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											57' / 17.4m				
20	16.72	18.98	226			SANDSTONE: medium grained, medium grey, salt and pepper texture, poorly cross-bedded									
						BOX 6									
16	18.98		141			SANDSTONE: fine grained, light grey, dark grey laminations, salt and pepperish, poorly cross- bedded									
											69.5' / 21.2m				
16			138			AS ABOVE: medium grained, some carbon- aceous material along bedding									
						BOX 7									
12			87			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											77'/23.5m				
		24.39		175		AS ABOVE:	fractured with rust stains at								
							150cm								
	24.39			19		SANDSTONE:	very fine grained, medium to								
							dark grey, carbonaceous								
							with silty laminations								
							BOX 8								
		24.71		13		AS ABOVE:									
	24.71	25.63		92		CLAYSTONE:	dark grey, silty in places,								
							massive								
	25.63			7		SANDSTONE:	fine grained, dark grey,								
							soft sediment deformation								
											87'/26.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
18		26.91	121		↑	AS ABOVE:									
	26.91		33			CLAYSTONE: dark grey to black, carbon- aceous, laminated									
						BOX 9									
			93			AS ABOVE: silty in places									
											95' / 29.0m				
20			173	163		AS ABOVE:									
						BOX 10									
		30.97	107	101		AS ABOVE: core broken, very carbonaceous at base									
	30.97	31.07	10	10		COAL C3: silver grey, metallic									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	31.07	31.41	34	32	1831	COAL C1: vitrinite bands, thin claystone bands less than .5cm									
	31.41	31.51	10	10		COAL C1 & C2: broken and powdered									
											105'	32.0m			
	31.51	31.66	15	14		COAL C1:									
	31.66	31.96	30	29		COAL C2: core broken									
	31.96	32.17	21	20		COAL C3: vitrinite bands, claystone bands less than .5cm									
	32.17	32.63	46	44		COAL C2: vitrinite bands, also claystone bands less than .5cm									
											109'	33.2m			
					BOX 11										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	32.63	32.98	35	33	↓	COAL C2: vitrinite bands, thin claystone bands less than .5cm									
	32.98	34.06	108	103		CLAYSTONE: very carbonaceous, core broken, dark gray to black, coal bands less than 2cm									
15	34.06	34.15	9	9		COAL C4:									
	34.15	34.29	14	14		COAL C2: vitrinite bands, 2cm of mush									
	34.29	34.70	41			CLAYSTONE & DRILLERS MUD: core very broken									
											117'/35.7m				
	34.70	35.03	33			COAL C4: vitrinite bands less than 2cm									
	35.03	35.07	4			COAL C2:									

DRILL CORE LOG

HOLE No. QBD 8202

PAGE No. 9



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	35.07	35.11	4			COAL C4:									
	35.11	35.41	30			CLAYSTONE: very carbonaceous, coal bands less than 2cm									
						BOX 12									
	35.41	35.52	11			COAL C3: vitrinite bands, claystone bands									
	35.52	36.12	60			CLAYSTONE: carbonaceous									
	36.12	36.67	55			CLAYSTONE: dark grey, silty towards base									
21	36.67	37.89	122			SANDSTONE: very fine grained, light grey, poorly laminated, some silt- stone bands									
	37.89		12			CLAYSTONE: dark grey, massive, core broken									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												127'/38.7m			
		38.07	6			AS ABOVE:									
						BOX 13									
20	38.07	38.62	55			SANDSTONE: very fine grained, medium grey, laminated, soft sediment de- formation, light grey lam- inations									
	38.62		221			CLAYSTONE: medium to dark grey, silty									
						BOX 14									
			14			AS ABOVE:									
												137'/41.8m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
18			257			AS ABOVE: carbonaceous, thin sandstone bands in places, plant fragments along bedding									
						BOX 15									
			58			AS ABOVE:									
											147' / 44.8m				
		45.23	111			AS ABOVE:									
15	45.23		103			SANDSTONE: fine grained at top, medium grained at bottom, laminated, some carbonaceous material along bedding, calcite in fractures									
						BOX 16									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		47.08	82		1832	AS ABOVE: claystone bands									
21	47.08	47.19	11	10		CLAYSTONE: medium grey, poorly laminated									
											157' / 47.9m				
	47.19	47.86	67	63		CLAYSTONE: as above									
	47.86		14	13		COAL C2: claystone bands less than .5cm, vitrinite bands									
			20	19		COAL C3: metallic grey color, claystone bands less than .5cm									
		48.30	10	9		COAL LOSS:									
18	48.30	48.57	27	26		SILTSTONE: light to medium grey, lam- inated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
	48.57	49.14	57	54	1833	CLAYSTONE: silty at top, dark grey, plant fragments along bedding									
						BOX 17									
	49.14	49.37	23	22		CLAYSTONE: very carbonaceous, black in color									
	49.37	49.46	9	9		COAL C3: vitrinite bands, metallic									
	49.46	49.73	27	26		COAL C2: thin claystone bands less than .5cm, vitrinite bands									
	49.73	49.78	5	5		COAL C4:									
	49.78		8	8		COAL C1:									
											167' / 50.9m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		50.09	23	22	1834 ↓	COAL C1: vitrinite bands									
	50.09	50.14	5	5		COAL LOSS:									
											168' / 51.2m				
	50.14		139	134		CLAYSTONE: dark brown grey, very carbonaceous									
		51.60	7			ROCK LOSS:									
	51.60	51.93	33	32	1834	COAL C2: vitrinite bands, thin claystone bands less than .5cm									
	51.93	51.97	4	4		COAL C4:									
	51.97	52.00	3	3		C1:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1834 ↓	BOX 18									
	52.00	52.05	5	5		COAL C1: vitrinite bands									
14	52.05	52.73	68	66		CLAYSTONE: very carbonaceous, coaly bands less than 1cm along bedding									
	52.73		33			CLAYSTONE: dark grey, carbonaceous mat- erial along bedding, laminated, thin sandstone bands									
												177' / 53.9m			
		53.18	12			AS ABOVE:									
19	53.18	54.54	136			SANDSTONE: fine grained, light to medium grey, thin laminations, minor carbonaceous material along bedding									

DRILL CORE LOG

HOLE No. QBD 8202

PAGE No. 16

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	54.54		34			CLAYSTONE: carbonaceous, very carbonaceous at base, black									
						BOX 19									
			128			AS ABOVE:									
											187' / 57.0m				
		56.38	22			AS ABOVE:									
	56.38	57.60	122			SANDSTONE: very fine grained, dark grey, cross-bedded, inter-bedded with siltstone									
						BOX 20									
16	57.60	58.31	71			CLAYSTONE: silty, dark grey, light grey sandstone laminations									

DRILL CORE LOG

HOLE No. QBD. 8202

PAGE No. 17

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	58.31	59.16	85			CLAYSTONE: silty, medium to dark grey, carbonaceous in places									
											197'/60.0m				
	59.16	59.88	72			SILTSTONE: medium grey, massive									
	59.88		51			CLAYSTONE: silty in places, carbonaceous material throughout									
							BOX 21								
			187			AS ABOVE: sandy towards base									
											207'/63.1m				
			105			AS ABOVE:									
							BOX 22								









B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10			211			AS ABOVE:									
						BOX 29									
		83.65	92			AS ABOVE: coarse grained, sandstone bands near base									
											277' / 84.4m				
	83.65		187			SANDSTONE: medium grained, medium to light grey, conglomeritic bands, carbonaceous material in places									
						BOX 30									
		86.01	49			AS ABOVE:									
	86.01		76			SANDSTONE: very coarse grained at top, conglomeritic, carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						material, rock fragments include rounded quartz and chert									
												287'/87.5m			
			147			AS ABOVE:									
						BOX 31									
						AS ABOVE: conglomeritic at base									
			150									297'/90.5m			
		91.03	129			AS ABOVE: conglomerate clasts 1.5cm, carbonaceous material through- out									
						BOX 32									
		91.03	91.13	10		SANDSTONE: as above;									

DRILL CORE LOG

HOLE No. QBD 8202  
PAGE No. 23

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	91.13	91.62	49			CONGLOMERATE: clasts consist of rounded quartz and chert, sedimentary rock fragments less than 1.5cm, sandstone matrix									
	91.62		122			SANDSTONE: very fine grained, laminated dark to medium grey									
											307'	93.6m			
14			94			AS ABOVE: carbonaceous material along bedding, silty at top									
						BOX 33									
15	94.80		102			AS ABOVE: thin claystone laminations									
	94.80		103			CLAYSTONE: medium grey, silty, carbonaceous material along bedding, poorly laminated									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1836	BOX 35									
			33	32		AS ABOVE:									
	99.69		8	8		COAL C4:									
	99.69	100.26	57	55		↓ COAL C2:									
	100.26	100.60	34	33		1835 CLAYSTONE: dark grey, carbonaceous material									
	100.60	100.62	2	2	COAL C1: broken										
	100.62	100.99	37	36	CLAYSTONE: very carbonaceous, coaly bands										
	100.99	101.04	5		COAL C1:										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	101.04	101.29	25			CLAYSTONE: very carbonaceous									
	101.29	101.34	5			COAL C2:									
	101.34	101.37	3			CLAYSTONE: very carbonaceous									
	101.37	101.39	2			COAL C1:									
	101.39	101.44	5			CLAYSTONE: very carbonaceous									
	101.44	101.50	6			COAL C2:									
	101.50	101.57	7			CLAYSTONE: very carbonaceous									
	101.57	101.66	9			COAL C3:									
	101.66	102.00	34			CLAYSTONE: very carbonaceous									

DRILL CORE LOG

HOLE No. QBD 8202

PAGE No. 27



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											337'	102.7m			
	102.00		7			CLAYSTONE:	as above,	dark grey,	very						
							carbonaceous	at top							
							BOX 36								
		102.67	60			AS ABOVE:	silty	at base							
	21	102.67	232			SANDSTONE:	very fine	grained,	thinly						
							laminated,	light to	dark grey,						
							carbonaceous	material	along						
							bedding								
							BOX 37								
			4			AS ABOVE:									
											347'	105.8m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	109.73		12			COAL LOSS:									
		109.94	9			COAL & CLAYSTONE: broken and powdered									
	109.94		5	5		COAL LOSS:									
		110.36	37	36		CLAYSTONE: very carbonaceous, core broken									
	110.36	110.42	6	6	1839 ↑	COAL C3: vitrinite bands, metallic									
	110.42	110.52	10	10		COAL C1: vitrinite bands									
	110.52	110.72	20	20		COAL C2: thin vitrinite bands, carbonaceous bands along bedding less than .5cm									
	110.72	110.75	3	3		C1:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	110.75	110.82	7	7	1839 ↓	C2:										
	110.82		22	22			C1: vitrinite bands									
		111.09	5	5			C1: core very broken									
	111.09	111.34	25	25		C2: thin claystone bands less than .3cm, vitrinite bands										
	111.34	111.85	51	50		CLAYSTONE: very carbonaceous, dark grey										
	111.85	111.88	3	3		C2:										
	111.88	112.41	53			CLAYSTONE: very carbonaceous										

367' / 111.9m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
13	12.41	13.26	85			SILTSTONE: inter-bedded, fine grained sandstone, light to dark grey, carbonaceous material along bedding									
	13.26		26			CLAYSTONE: silty, dark grey, carbonaceous, poorly laminated									
						BOX 40									
			53			AS ABOVE:									
											377' / 114.9m				
	115.13		108			AS ABOVE:									
10	15.13		124			SANDSTONE: light grey, dark grey claystone laminations, coarse grained at top, fine grained towards base									

DRILL CORE LOG

HOLE No. QBD 8202

PAGE No. 32

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 41									
			76			AS ABOVE:									
											387' / 118.0m				
11			209			AS ABOVE:									
						BOX 42									
						AS ABOVE:									
12	120.23		101								397' / 121.0m				
	120.23		178			SANDSTONE: light to medium grey, medium to fine grained, massive									
						BOX 43									
			140			AS ABOVE: thin claystone bands in places									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												407' / 124.1m			
		123.71	30			AS ABOVE:									
	123.71	124.03	32			CLAYSTONE: dark grey, silty, poorly lam- inated									
	124.03		79			SANDSTONE: light grey, claystone laminations									
						BOX 44									
			158			AS ABOVE: silty in places									
												417' / 127.1m			
11			126			AS ABOVE:									
						BOX 45									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		129.27	161			AS ABOVE:									
	129.27		24			CLAYSTONE: dark grey, silty									
											427'	130.1m			
		130.30	79			AS ABOVE: very silty at base									
	130.30		18			SANDSTONE: very fine grained, light grey, massive									
						BOX 46									
8		132.24	176			AS ABOVE: claystone laminations									
	132.24		29			CLAYSTONE: silty, medium grey, very poorly laminated									
											437'	133.2m			







B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		142.92	125			AS ABOVE: core very broken									
	142.92	143.56	64			SANDSTONE: fine to medium grained, salt and pepper texture, core broken									
	143.56	143.63	7			CLAY: dark grey and light grey									
	143.63	144.29	66			SANDSTONE: medium grained, light grey, thin claystone laminations									
16	144.29		17			CLAYSTONE: dark grey, thin sandstone bands									
						BOX 51									
			16			AS ABOVE:									
											476'	145.1m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		145.38	76			AS ABOVE:									
	145.38	145.67	29			SANDSTONE: fine grained, light grey, massive									
	145.67	145.88	21			CLAYSTONE: dark grey, poorly laminated, some fine sandstone									
	145.88	146.21	33			SANDSTONE: fine grained, light grey, thin claystone bands									
	146.21		110			SANDSTONE: medium to fine grained, light grey, coarse grained bands									
						BOX 52									
			52			AS ABOVE:									
											486.6'	148.3m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
9			233			AS ABOVE:									
						BOX 53									
						AS ABOVE:									
		150.93	77												
											497'	151.5m			
		150.93	205			AS ABOVE:									
						BOX 54									
						AS ABOVE:									
			104												
											507'	154.5m			
						AS ABOVE:									
			180												
						BOX 55									

DRILL CORE LOG







B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												67'/20.4m			
19	20.42		121			AS ABOVE: medium grained, poorly cross-bedded									
												71'/21.6m			
		21.96	33			AS ABOVE: core broken									
						BOX 2									
	21.96		158			SANDSTONE: light grained, dark grey, laminations less than .5cm, fine to medium grained									
												77'/23.4m			
31	23.67		13			AS ABOVE:									
	23.67	24.77	110			SILTSTONE: dark grey, laminated, thin sandstone bands									

DRILL CORE LOG

HOLE No. QBD 8203

PAGE No. 2

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	24.77		4			SANDSTONE: medium grained, light grey, thin dark grey laminations, salt and pepper texture									
						BOX 3									
21		26.48	167			AS ABOVE: claystone fragments									
											87' / 26.5m				
	26.48	26.80	32			CLAYSTONE: dark grey, poorly laminated, silty in places									
	26.80	27.36	56			SANDSTONE: medium grained, light grey, salt and pepper texture									
	27.36		14			CLAYSTONE: dark grey, silty									
						BOX 4									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		27.54	4			AS ABOVE:									
	27.54	27.68	14			SANDSTONE: medium grained, light grey, salt and pepper texture									
	27.68		6			CLAYSTONE: dark grey, silty, poorly lam- inated									
											91'/27.7m				
			176			AS ABOVE: silty, poorly laminated									
											97'/29.5m				
15			62			AS ABOVE: silty towards base, abundant claystone fractures, iron stains along bedding									
						BOX 5									
		30.22	10			AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			9			AS ABOVE:									
											117'	35.6m			
13			272			AS ABOVE:									
						BOX 8									
			33			AS ABOVE:									
											127'	38.7m			
11	39.65		87			AS ABOVE:									
	39.65	40.85	120			SANDSTONE: medium grained, light grey with dark grey claystone laminations up to 3cm									
	40.85		35			SANDSTONE: fine grained, medium grey, massive									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 9									
39		41.30	10			AS ABOVE:									
	41.30		40			SILTSTONE: dark grey, very poorly lam- inated									
											137' / 41.7m				
			212			AS ABOVE: clays in places									
						BOX 10									
		44.52	70			AS ABOVE:									
	44.52	44.85	33			SANDSTONE: fine grained, light grey									
											147' / 44.8m				
	44.85	45.49	64			SANDSTONE: as above, medium grained, salt and pepper texture									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
32	45.49	45.98	49			SILTSTONE: dark grey, massive									
	45.98	46.20	22			SANDSTONE: poorly laminated, claystone band at top, fine grained, medium grey									
10	46.20		43			CLAYSTONE: dark grey, thin light grey sandstone laminations less than 1cm									
						BOX 11									
		46.86	23			AS ABOVE:									
14	46.86	47.00	14			SANDSTONE: fine grained, light grey, dark grey claystone laminations									
	47.00	47.13	13			CLAYSTONE: silty, poorly laminated									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												157' / 47.8m			
	47.13		143			AS ABOVE:									
20			169			AS ABOVE: laminated									
												167' / 50.9m			
25	51.34		109			AS ABOVE:									
	51.34	51.69	35			CLAYSTONE: dark grey, silty									
	51.69	51.80	11			SANDSTONE: fine grained, light grey, poorly laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30	51.80		141			CLAYSTONE:	dark grey,	sandstone bands							
							less than 2cm,	core broken							
											177'	53.9m			
			69			AS ABOVE:	core broken								
							BOX 14								
		55.00	110			AS ABOVE:	core broken with rust stains								
	55.00	55.05	5			CLAY BAND:									
	55.05		43			SANDSTONE:	medium grained,	light grey,							
							salt and pepper texture,								
							core broken at base								
											183'	55.8m			
		56.22	74			AS ABOVE:	claystone bands less than 1cm								

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											187' / 57.0m				
	56.22		13			CLAYSTONE: dark grey, very soft, clay like									
						BOX 15									
		56.65	31			AS ABOVE:									
16	56.65	57.41	76			SANDSTONE: fine grained, light grey, thin claystone bands									
	57.41	57.54	13			CLAYSTONE: dark grey, silty, core broken, poorly laminated									
	57.54		87			SANDSTONE: medium grained, light grey, thin claystone bands									
											195' / 59.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			63			AS ABOVE:									
							BOX 16								
			12			AS ABOVE:									
												197' / 60.0m			
31			264			AS ABOVE:									
							BOX 17								
			41			AS ABOVE:									
												207' / 63.1m			
		64.63	242			AS ABOVE: conglomeritic bands									
							BOX 18								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	64.63		62			SANDSTONE: fine grained, light grey, core broken, iron stains along bedding									
											217'/65.1m				
			222			AS ABOVE: fine grained, conglomerate bands									
			96			AS ABOVE:									
											227'/69.2m				
		69.17	74			AS ABOVE:									
	69.17		118			SANDSTONE: fine grained, light grey, thin dark grey laminations									







B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
11	10.89	13.49	260			AS ABOVE: cross-bedded, core grains towards base, carbonaceous material along bedding									
						BOX 4									
	13.49		55			AS ABOVE: coarse grained									
											47' / 14.3m				
12		16.39	235			AS ABOVE:									
						BOX 5									
14	16.39		76			SANDSTONE: as above, cross-bedded									
											57' / 17.4m				
			7	7		AS ABOVE: carbonaceous material through- out									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		17.27	5	5		SANDSTONE: very coarse grained, salt and pepper texture, light grey									
	17.27	18.72	145	141		CLAYSTONE: light grey at top, dark grey at base, carbonaceous at base									
	18.72	18.91	19	18	↓	COAL C3: core broken									
	18.91		9	9		ROCK LOSS:									
		19.21	21	20	1840	CLAYSTONE: dark grey, carbonaceous									
	19.21	19.23	2	2		COAL C2:									
											67' / 20.4m				
	19.23	19.27	4	4		COAL C1: vitrinite bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1840 →											
	19.27	19.73	46	45		COAL C1: core broken, vitrinite bands										
	19.73	20.91	118	114		COAL LOSS:										
					1841 ↙											
	20.91	20.97	6	6		CLAYSTONE: dark grey, carbonaceous										
	20.97	21.35	38	37		ROCK LOSS:										
					1841 ↘											
	21.35	21.39	4	4		COAL: powdered and claystone										
	21.39	21.52	13	13		CLAYSTONE: dark grey, carbonaceous material throughout										
					1841 →											
	21.51	21.63	11	11		COAL LOSS:										
					1841 ↙											
	21.63	21.73	10	10		COAL C2: metallic color, vitrinite bands										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	21.73	21.86	13	13	1842	C1: core very broken, abundant vitrinite bands									
	21.86	21.91	5	5		CLAYSTONE: core very broken									
	21.91	21.96	5	5		COAL C1: core broken, vitrinite bands									
	21.96		36	35	1843	CLAYSTONE: dark grey, very carbonaceous									
		22.38	6	6		ROCK LOSS:									
	22.38	22.48	10	10		COAL C1: core very broken, vitrinite bands, thin claystone bands									
	22.48	22.51	3	3	1844	C3 & C4: vitrinite bands									
	22.51	22.55	4	4		C4:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	22.55	22.69	14	14	1844 →	COAL C1: vitrinite bands, core very broken									
	22.69		15	15		C3: core broken vitrinite bands									
		22.94	10	10		COAL LOSS:									
	22.94	22.97	3	3		CLAYSTONE: dark grey, very carbonaceous									
											77' / 23.5m				
	22.97		75	74	CLAYSTONE: silty, dark to medium grey, thin sandstone bands										
					BOX 7										
5			234	233	AS ABOVE:										
										87' / 26.5m					

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			39			AS ABOVE:									
							BOX 8								
15			263			AS ABOVE:									
			24			AS ABOVE:									
							BOX 9								
		30.33	101			AS ABOVE:									
20	30.33	30.66	33			SANDSTONE: very fine grained, light to dark grey, cross-bedded									
	30.66		153			CLAYSTONE: medium to dark grey, carbonaceous in places, silty									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 12									
			43	43		AS ABOVE:									
											127' / 38.7m				
		38.74	33	33		AS ABOVE:									
	38.74	39.29	55	54	1845	COAL C1: vitrinite bands									
	39.29	40.51	122	120		CLAYSTONE: dark grey, carbonaceous									
10	40.51	40.73	22	22	1846	COAL C1: vitrinite bands, thin carbonaceous bands									
						BOX 13									
	40.73	41.05	32	32		COAL C2: core broken, vitrinite bands, thin claystone bands along									

bedding less than 2/10cm

HOLE No. QBD 8204

PAGE No. 9

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	41.05	41.24	19	19	↑	COAL LOSS:									
	41.24		12	12		CLAYSTONE: dark grey, carbonaceous, core broken									
													137' / 41.8m		
		43.08	172	169		AS ABOVE:									
	43.08		26	26		COAL C1: vitrinite bands, core very broken									
														144' / 43.9m	
		43.37	3			COAL C1:									
	43.37		25			CLAYSTONE: very carbonaceous									
															145' / 44.2m
															BOX 14

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY, DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
11			247			CLAYSTONE:	dark grey,	silty,	carbonaceous						
							material along	bedding,	thin						
							sandstone	laminations							
											153'	46.6m			
			34			AS ABOVE:									
							BOX 15								
5			100			AS ABOVE:									
8			125			CLAYSTONE:	medium grey,	thin	light grey						
							sandstone	laminations							

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											167' / 50.9m				
			159			AS ABOVE:									
								BOX 17							
			128			AS ABOVE: carbonaceous material along bedding									
											177' / 53.9m				
4			151			AS ABOVE: silty towards base									
								BOX 18							
		54.97	16			CLAYSTONE: as above, carbonaceous									
	54.97		128			SILTSTONE: medium grey, thin light grey sandstone bands									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	89.52		6			COAL C1: core very broken									
		89.78	20	20		COAL LOSS:									
											295' / 89.9m				
11	89.78	90.22	44	43		CLAYSTONE: very carbonaceous									
	90.22	90.45	23	23	1847 ↙	COAL C1: vitrinite bands									
	90.45	90.54	9	9		C3: vitrinite bands									
	90.54	90.68	14	14	1848 ↙	CLAYSTONE: very carbonaceous (C4ish)									
	90.68		36	35		CLAYSTONE: carbonaceous, thin coaly bands, core broken									
		91.19	15	15		1848 ↗	ROCK LOSS:								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 21									
		63.82	63			AS ABOVE:									
	63.82	64.17	35			SANDSTONE: medium grained, light grey, salt and pepper texture									
	64.17	65.33	116			CONGLOMERATE: as before, clasts less than 1.5cm									
	65.33		34			SANDSTONE: coarse to medium grained, light grey, salt and pepper texture									
											217'/66.1m				
		65.71	4			AS ABOVE:									
	65.71		35			CONGLOMERATE: as before, clasts less than 1.5cm									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 22									
		66.94	88			CONGLOMERATE: as above; minor carbon- aceous material, clasts less than 1.5cm									
	66.94		185			SANDSTONE: light grey, fine to medium grained, conglomerate bands, coarse grained at base									
											227'/69.2m				
			9			AS ABOVE:									
						BOX 23									
		69.07	19			AS ABOVE:									
4	69.07	70.59	152			CONGLOMERATE: subrounded clasts, white quartz, grey claystone fragments, light green chert,									

DRILL CORE LOG

HOLE No. QBD 8204

PAGE No. 16



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		73.35	149			AS ABOVE:									
	73.35	73.95	60			CONGLOMERATE: subrounded clasts of quartz and chert, claystone rock fragments, clasts less than 2cm									
4	73.95		53			SANDSTONE: medium grained, medium grey, claystone rock fragments, carbonaceous material along bedding									
						BOX 25									
			32			AS ABOVE:									
											247' / 75.3m				
12	75.84		104			AS ABOVE:									
	75.84	76.55	71			CONGLOMERATE: angular clasts, dark grey claystone up to 4cm long									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
10	76.55		67			SANDSTONE: fine to medium grained at top conglomerate towards base, salt and pepper texture, light grey									
						BOX 26									
			64			AS ABOVE: carbonaceous bands									
											257' / 78.3m				
18			212			AS ABOVE: conglomerate bands 7cm from top									
						BOX 27									
			94			AS ABOVE: carbonaceous bands along bedding, thin conglomerate bands									
											267' / 81.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		81.46	54			AS ABOVE: very coarse grained at base									
	81.46		134			CONGLOMERATE: sub-angular, subrounded clasts of white quartz, light grey chert and light green chert, sedimentary rock fragments. clasts range in size of 2/10cm to 3cm, pyrite belbs, fine grained sandstone matrix									
						BOX 28									
			117			AS ABOVE:									
											277' / 84.4m				
		84.32	35			AS ABOVE:									
11	84.32		122			SANDSTONE: fine grained at top, medium grained towards base, light grey									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						thin dark grey laminations, salt and pepper texture									
						BOX 29									
			145			AS ABOVE: coarse grained in places									
											287' / 87.5m				
		87.38	39			AS ABOVE:									
8	87.38		93			CLAYSTONE: dark grey, light grey siltstone laminations, carbonaceous at top									
						BOX 30									
		89.52	121			AS ABOVE: carbonaceous material along bedding									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	89.52		6			COAL C1: core very broken									
		89.78	20	20		COAL LOSS:									
											295' / 89.9m				
11	89.78	90.22	44	43		CLAYSTONE: very carbonaceous									
	90.22	90.45	23	23	1847 ↙	COAL C1: vitrinite bands									
	90.45	90.54	9	9		C3: vitrinite bands									
	90.54	90.68	14	14	1848 ↙	CLAYSTONE: very carbonaceous (C4ish)									
	90.68		36	35		CLAYSTONE: carbonaceous, thin coaly bands, core broken									
		91.19	15	15		1848 ↗	ROCK LOSS:								



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	91.91	91.40	21	21	1849 ↓	COAL C2:									
	91.40	91.55	15	15			C1: vitrinite bands								
	91.55	91.83	28	27			COAL C1: vitrinite bands up to 3cm, thin claystone bands less than 2/10cm core broken								
	91.83		38	35	↑	CLAYSTONE: silty, thin carbonaceous bands, massive									
		92.74	53	48		CLAYSTONE: dark grey, carbonaceous mat- erial along bedding									
	92.74	92.78	4			COAL C1: vitrinite bands									

304' / 92.7m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	92.78	92.99	21			CLAYSTONE: very carbonaceous material along bedding									
	92.99	93.07	8			COAL C1:									
	93.07	93.30	23			CLAYSTONE: dark grey, very carbonaceous									
	93.30	93.37	7			COAL C2: claystone bands less than .5cm									
	93.37	93.43	6			CLAYSTONE: dark grey, very carbonaceous									
		93.46	3			COAL C1: vitrinite bands									
9	93.46		99			CLAYSTONE: dark grey, carbonaceous mat- erial along bedding									
						BOX 32									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		95.10	65			AS ABOVE:									
	95.10	95.11	1			COAL C1:									
											314'/95.7m				
		95.16	5			COAL C1: vitrinite bnads									
	95.16		102			CLAYSTONE: dark to medium grey, massive, some carbonaceous material along bedding									
												317'/96.6m			
11			130			AS ABOVE: silty in places, poorly laminated in places									
12		97.81	33			AS ABOVE: very carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	97.81	97.84	3			COAL C4:									
	97.84		136			CLAYSTONE: medium to dark grey, carbon- aceous material along bedding, massive									
		99.93	73			AS ABOVE:									
	99.93	100.05	12			C3: thin vitrinite bands less than .5cm. cpre broken									
	100.05		40	37		CLAYSTONE: dark grey, carbonaceous									
						BOX 34									
6		102.22	177	163		AS ABOVE: sandy in places, carbonaceous in places									

327' / 99.7m

BOX 34

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												337' / 102.7m			
	102.22	102.85	63	62	1850 ↙ ↘	COAL C1: vitrinite bands less than 1cm									
	102.85		63	62			CLAYSTONE: very carbonaceous in places								
						BOX 35									
12			183	179		AS ABOVE: sandstone bands									
												347' / 105.8m			
			96	94		AS ABOVE: silty, core very broken									
						BOX 36									
	106.63		36			AS ABOVE:									
	106.63		54			SANDSTONE: fine grained, medium to dark									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						grey, poorly laminated, core broken									
											356'	108.5m			
11	107.65		48			AS ABOVE:									
											357'	108.8m			
	107.65		50			SILTSTONE: dark grey, carbonaceous material along bedding									
						BOX 37									
9			256			SILTSTONE: medium grained, dark grey, claystone bands, thin light grey sandstone bands									
											367'	111.9m			
			24			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 38									
						AS ABOVE:									
		112.26	131			AS ABOVE:									
						AS ABOVE:									
		112.26	10			SANDSTONE: fine grained, medium grey, massive									
											373' / 113.7m				
6			139			AS ABOVE:									
											377' / 114.9m				
						BOX 39									
						AS ABOVE: thin carbonaceous bands									
						BOX 40									
						AS ABOVE:									
			22			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											387' / 117.9m				
11		118.79	193			AS ABOVE:	thin claystone bands								
	118.79		61			CLAYSTONE:	dark grey, laminated, silty								
											397' / 121.0m				
							BOX 41								
6			273			AS ABOVE:	sandstone bands up to 5cm								
											407' / 124.1m				
							BOX 42								
7			281			AS ABOVE:	sandstone bands								
							BOX 43								



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			23			AS ABOVE:									
											417'	127.1m			
			255			CLAYSTONE: dark grey, silty									
			46			AS ABOVE:									
											427'	130.1m			
8			241			AS ABOVE: thin sandstone bands									
			67			AS ABOVE: sandstone bands less than 2cm									
											437'	133.1m			
6			217			AS ABOVE:									

HOLE No. QBD 8204

PAGE No. 31





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	22.15		84			AS ABOVE:									
										77' / 23.5m					
21			178			AS ABOVE: sandstone bands less than 2cm									
							BOX 4								
			149			AS ABOVE:									
										87' / 26.5m					
21	27.62		136			AS ABOVE:									
							BOX 5								
	27.62		178			AS ABOVE:									
										97' / 29.6m					
24			107			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
						BOX 6									
23			197			AS ABOVE:									
											107' / 32.6m				
		33.20	76			AS ABOVE:									
						BOX 7									
28	33.20		235			AS ABOVE:									
											117' / 35.7m				
			39			AS ABOVE:									
						BOX 8									
23		38.67	273			AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
21			215			AS ABOVE:	.	.	.	.						
						.	.	.	.	.						
						BOX 12	.	.	.	.						
						.	.	.	.	.						
	47.86		83			AS ABOVE:	.	.	.	.						
						.	.	.	.	.						
											157'/47.9m					
						.	.	.	.	.						
27	47.86		187			AS ABOVE:	.	.	.	.						
						.	.	.	.	.						
						BOX 13	.	.	.	.						
						.	.	.	.	.						
			119			AS ABOVE:	.	.	.	.						
						.	.	.	.	.						
										167'/50.9m						
					.	.	.	.	.							
22			168		AS ABOVE:	.	.	.	.							
					.	.	.	.	.							
					BOX 14	.	.	.	.							
					.	.	.	.	.							





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 17									
22	61.07		233			AS ABOVE: abundant sandstone bands									
											207'	63.1m			
			36			AS ABOVE:									
						BOX 18									
25		65.00	124			AS ABOVE:									
	65.00	65.09	9			CONGLOMERATE: rounded clasts of quartz, rock fragments less than .2cm, holcross gates									
	65.09	65.20	11			CLAYSTONE: dark grey, light grey sand- stone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		65.24	4			CONGLOMERATE: as before									
	65.24	65.29	5			COAL C1:									
	65.29		3			CLAYSTONE: dark grey, very carbonaceous									
											213'/64.9m				
		66.31	99			AS ABOVE: coaly bands									
											217'/66.1m				
	66.31		19			SANDSTONE: medium grained, medium to dark grey, carbonaceous material along bedding									
						BOX 19									
19		67.21	71			AS ABOVE: thin claystone laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	67.21		194			CLAYSTONE: medium to dark grey, massive, plant fragments along bedding									
						BOX 20									
			8			AS ABOVE:									
											227' / 69.2m				
12			266			AS ABOVE: core broken, sandstone bands									
						BOX 21									
			47			AS ABOVE:									
											237' / 72.2m				
22			230			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 22									
			77			AS ABOVE:									
											247'	75.3m			
		77.37	194			AS ABOVE: plant fragments along bedding, silty at base									
						BOX 23									
23	77.37		113			SANDSTONE: fine to medium grained, light grey, dark grey claystone bands in places									
											257'	78.3m			
		79.23	73			AS ABOVE:									
26	79.23		85			CLAYSTONE: dark grey, thin light grey sandstone laminations, plant fragments along bedding									

DRILL CORE LOG

HOLE No. QBD 8205

PAGE No. 10

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												273' / 83.2m			
			17			AS ABOVE:									
			80			CLAYSTONE: dark to medium grey, silty towards base									
												277' / 84.4m			
		84.80	21			AS ABOVE:									
21	84.80		62			SANDSTONE: fine grained, medium grey, thin dark grey claystone bands less than 2cm, carbon- aceous bands									
						BOX 26									
21			213			AS ABOVE:									
												287' / 87.5m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		88.25	70			AS ABOVE:									
						BOX 27									
22	88.25	90.05	180			SILTSTONE: medium grey with thin light grey sandstone bands less than 2cm									
	90.05		48			CLAYSTONE: medium grey, silty, massive									
											297' / 90.5m				
			50			AS ABOVE:									
						BOX 28									
		92.69	166			AS ABOVE:									
	92.69	93.09	40			SANDSTONE: very fine grained, light to dark grey									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		97.26	75			AS ABOVE: silty towards base									
24	97.26	98.12	86			SANDSTONE: medium grained, light to medium grey, dark grey claystone laminations									
	98.12		119			CLAYSTONE: medium to dark grey, carbon- aceous towards base, silty									
						BOX 31									
			42			AS ABOVE: very carbonaceous									
											327' / 99.7m				
23			232			AS ABOVE: very carbonaceous at top									
						BOX 32									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			71			AS ABOVE:									
											337'	102.7m			
			213			AS ABOVE:									
			55			AS ABOVE:									
			36			CLAYSTONE: very carbonaceous									
											347'	105.8m			
			6			AS ABOVE:									
		107.01	115			CLAYSTONE: dark grey, silty towards base, poorly laminated									
21	107.01		63			SANDSTONE: fine grained, medium grey, dark grey claystone laminations									

DRILL CORE LOG

HOLE No. QBD 8205

PAGE No. 16

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 34									
			31			AS ABOVE: carbonaceous material along bedding									
			99			SANDSTONE: medium grained, medium grey with dark grey laminations, carbonaceous material along bedding, poorly cross-bedded									
											357'/108.8m				
16	109.57		63			AS ABOVE:									
	109.57	110.04	47			CLAYSTONE: dark grey, carbonaceous material along bedding, silty towards base									
	110.04		45			SANDSTONE: medium grained, medium grey, dark grey claystone laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 35									
17		110.79	30			AS ABOVE:									
	110.79		101			CLAYSTONE: dark grey, very carbonaceous in places, sandstone bands									
											367'/111.9m				
			139			AS ABOVE:									
						BOX 36									
21			173			CLAYSTONE: dark grey, silty, light grey sandstone bands less than 1cm									
											377'/114.9m				
			116			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 37									
		116.38	30			AS ABOVE:									
22	16.38		121			SANDSTONE: very fine grained, medium grey, dark grey siltstone bands									
			40			SANDSTONE: fine grained, light to medium grey, thin claystone bands less than .5cm									
											387'	117.0m			
21			71			AS ABOVE: calcite stringers									
						BOX 38									
21			230			AS ABOVE:									
											397'	121.0m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		121.12		12		AS ABOVE:									
	121.12	121.34		22		CLAY: light grey, sandy									
	121.34			14		SANDSTONE: light grey, medium grey clay- stone bands, medium grained									
							BOX 39								
14				245		AS ABOVE:									
21				277		AS ABOVE: claystone bands up to 5cm, calcite along fractures									

407°/124.1m





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
16	35.21	136.01	80			CLAYSTONE: medium grey, laminated, thin sandstone bands less than 1cm									
	36.01		19			SANDSTONE: fine grained, light to medium grey, dark grey claystone bands less than 5cm									
											447' / 136.2m				
18			177			AS ABOVE: claystone bands less than 10cm									
						BOX 45									
			115			AS ABOVE: claystone bands less than 5cm									
											457' / 139.3m				
24			157			AS ABOVE:									
						BOX 46									

DRILL CORE LOG



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			116			AS ABOVE:									
										467' / 142.3m					
			94			AS ABOVE:									
			72			AS ABOVE: core broken and ground									
			122			AS ABOVE: broken and ground									
										477' / 145.4m					
26			150			AS ABOVE: thin brown claystone bands									
			154			AS ABOVE: dark grey claystone bands, coaly bands at base									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												487' / 148.4m			
			110			AS ABOVE:									
								BOX 49							
26			190			AS ABOVE: claystone bands less than 10cm									
												497' / 151.5m			
		150.96	18			AS ABOVE:									
	150.96	151.00	4			CLAY BAND: dark grey									
	151.00	151.49	49			SANDSTONE: fine grained, thin clay bands less than 1cm, medium grey									
	151.49	151.54	5			CLAY: dark grey									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	151.54		4			SANDSTONE: very fine grained, medium to dark grey									
						BOX 50									
		151.84	26			AS ABOVE:									
	151.84	151.93	9			CLAY: dark grey, sandy									
26	151.93		181			SANDSTONE: very fine grained, medium grey, dark claystone bands less than 5cm, core broken									
											507'	154.5			
			50			AS ABOVE: sandstone medium grained									
						BOX 51									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
30		155.73	149			AS ABOVE:									
	155.73		50			CONGLOMERATE: subrounded clasts of quartz and chert, rock fragments, sandstone matrix, clasts size up to 3cm in diameter									
			63			AS ABOVE: clasts less than 1cm									
											517'/157.6m				
			16			AS ABOVE: clasts less than .5cm									
						BOX 52									
			281			AS ABOVE: clasts range in size from .2cm to 1cm									
											527'/160.6m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 53									
			71			AS ABOVE: clasts range in size from 1cm to 2.5cm									
			210			AS ABOVE: clasts range in size from 1cm to 2cm									
						BOX 54									
			32			AS ABOVE:									
											537 <sup>1</sup> /163.7m				
			200			AS ABOVE:									
			55			AS ABOVE: clasts range from .5cm to 2cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 55									
			42			AS ABOVE:									
											547'	166.7m			
21			232			AS ABOVE: thin sandstone bands									
						BOX 56									
			66			AS ABOVE: pyrite blebs, carbonaceous material along bedding									
											557'	169.8m			
		169.17	26			AS ABOVE:									
22	169.17	169.85	68	64		SANDSTONE: very coarse grained at top, very fine grained at base, light to medium grey, carbonaceous material along bedding									

DRILL CORE LOG

HOLE No. QBD 8205

PAGE No. 28

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	169.85	170.10	25	23	1851 ↓	COAL C1: vitrinite bands, thin claystone									
						bands less than .2cm, pyrite									
						band at base 2cm									
	170.10		9	10		CLAYSTONE: very carbonaceous, dark grey									
						to black									
		170.38	18	17		ROCK LOSS:									
	170.38	170.49	11	10		C2: dull, claystone bands less than 2.5cm									
										562'/172.8m					
	170.49	170.95	46	43	C2: vitrinite bands										
					BOX 57										
	170.95		109	101	C1: claystone bands less than 1cm,										
					vitrinite bands										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					1851							567'	172.8m			
	172.57		53	49		COAL C1: vitrinite bands up to 1cm, dull bands up to 3cm										
	172.57	172.77	20	19		CLAYSTONE: grey brown to black										
	172.77	172.85	8	7		C3:										
	172.85	173.54	69	64		C1:										
	173.54	173.63	9	8		COAL: claystone mixed, powdered and ground										
						BOX 58										
	173.63	173.77	14	13		COAL & CLAYSTONE: powdered and ground										
	173.77	173.86	9	8		COAL LOSS:										



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	173.86	173.90	4	4	↑	C3: core broken									
	173.90	173.99	9	9		CLAYSTONE: core broken, very carbonaceous									
											572.5'	174.5m			
	173.99	174.06	7			COAL C4: vitrinite bands									
	174.06	174.34	28			CLAYSTONE: very carbonaceous at top, black to dark grey									
	174.34		79			CLAYSTONE: medium to dark grey, carbon- aceous material along bedding									
											577'	175.9m			
		175.42	49			AS ABOVE:									
25	175.42	175.66	24	22		↓	CLAYSTONE: very carbonaceous, coaly bands less than 2cm								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	175.66	176.10	44	40	1852 ↙	COAL C1: vitrinite bands 1cm, dull bands .5cm									
	176.10		14	13	1853 ↙	CLAYSTONE: very carbonaceous, coal bands less than 3cm									
		176.44	20	18	1854 ↙	AS ABOVE:									
	176.44	176.74	30	27	1854 ↙	CLAYSTONE: dark grey, carbonaceous mat- erial along bedding									
	176.74	177.01	27	24	1854 ↙	COAL C2: vitrinite bands less than 3cm									
	177.01	177.08	7	6			CLAYSTONE:								
	177.08	177.75	67	61		COAL C1: vitrinite bands less than 1cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1854	claystone bands less than 1cm									
24	77.75	77.96	21	19		CLAYSTONE: dark grey, very carbonaceous									
	77.96		5	5		COAL C1: vitrinite bands, core broken									
												587' / 178.9m			
		178.50	49	45		C1: vitrinite bands less than 1cm, claystone bands									
		178.50	11	10		CLAYSTONE: very carbonaceous (C4)?									
		178.61	4	4		ROCK LOSS:									
		178.65	8	7		C1: vitrinite bands less than .5cm, claystone bands less than .2cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1854 ⇒	BOX 60									
	178.73	179.11	38	35		COAL C1: claystone bands up to 1cm, vit- rinite bands up to .5cm									
	179.11		103			CLAYSTONE: dark grey, carbonaceous mat- erial along bedding, very carbonaceous in places, coal bands less than 3cm									
26			98		CLAYSTONE: dark grey, carbonaceous mat- erial along bedding, silty										
											597'/182.0m				
			34		AS ABOVE:										
					BOX 61										
24			263		AS ABOVE: sandy bands less than 2cm, silty in places										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											607'	185.0m			
			17			AS ABOVE:									
24			280			AS ABOVE: silty, sandstone bands									
			3			AS ABOVE:									
											617'	188.1m			
		187.90	81			AS ABOVE: carbonaceous towards base									
21	87.90		199			SANDSTONE: very fine grained, medium to									
						dark grey, claystone laminations									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 64									
			24			AS ABOVE:									
											627'	191.1m			
43			253			AS ABOVE: fine grained at base, medium grained towards middle, cal- cite along fractures									
						BOX 65									
			58			AS ABOVE:									
											637'	194.2m			
30			224			AS ABOVE: medium grained, salt and pepper texture, laminations, cross-bedded									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 66									
			71			AS ABOVE:									
											647'	197.2m			
26		197.89	170			AS ABOVE: fine grained towards base									
	197.89		41			CLAYSTONE: dark grey, pyrite, carbon- aceous towards base									
						BOX 67									
			102			AS ABOVE: very carbonaceous in places, coal bands less than 2cm									
											656'	199.9m			
			173			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 68									
28			140			AS ABOVE: silty									
											667' / 203.3m				
26			141			CLAYSTONE: carbonaceous bands along bedding, dark grey to black									
						BOX 69									
		204.02	16			CLAYSTONE: dark grey, carbonaceous									
	204.02	204.33	31	28	↓	COAL C3: dull metallic grey, occasional vitrinite bands									
	204.33	204.63	30	27	SS81	CLAYSTONE: very carbonaceous, C4									
	204.63	204.97	34	31		C2: vitrinite bands									

**DRILL CORE LOG**





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	207.06	207.13	7	6	1855	C2: dull metallic grey									
	207.13	207.51	38	45		C1: vitrinite bands									
	207.51	207.58	7	6		C3: claystone bands									
	207.58	207.66	8	7		ROCK LOSS:									
	207.66	207.75	9	8		CLAYSTONE: very carbonaceous									
	207.75	207.89	14	13	C2: vitrinite bands less than .5cm, dull bands less than .5cm, alternating										
	22	207.89	207.92	3	3	CLAYSTONE: very carbonaceous									
	207.92	208.48	56	51	C2: vitrinite bands less than 2cm, clay- stone bands less than .5cm, good core										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	208.48	208.53	5	5	↑	C1: broken and powdered, vitrinite bands									
											687'	209.4m			
26	208.53		90			CLAYSTONE: very carbonaceous, coal bands less than .5cm									
			24			AS ABOVE:									
22		211.35	168		CLAYSTONE: silty, medium grey to dark grey, poorly laminated, thin sandstone bands towards base										
	211.35		24		SANDSTONE: very fine grained, medium to dark grey, calcite stringers throughout										
										697'	212.4m				



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
43		216.09	126			AS ABOVE: poorly laminated									
162	16.09		148			SANDSTONE: very fine grained, medium grey, dark grey laminations									
						BOX 74									
		217.69	12			AS ABOVE:									
											717'	218.5m			
192	17.69		122			CLAYSTONE: dark grey, thin sandstone bands less than 1cm									
			142			CLAYSTONE: dark grey, very poorly lam- inated, carbonaceous material along bedding									
						BOX 75									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			41			AS ABOVE: silty									
											727'	221.6m			
28			233			AS ABOVE: abundant sandstone bands, soft sediment deformation									
			68			AS ABOVE:									
										737'	224.6m				
32	224.43		68		AS ABOVE: carbonaceous towards base										
21	224.43	225.01	58	52	1856	COAL C1: vitrinite bands throughout, claystone bands less than 1cm									
	225.01	225.20	19	17		C3: vitrinite bands less than .5cm, dull metallic grey									

DRILL CORE LOG



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	226.59	226.87	28	25	1858 ⇒	COAL C1:									
											747'	227.7m			
	226.87	226.90	3	3	1859 ⇐	COAL C1:									
	226.90	227.38	48	43	1859 ⇐	CLAYSTONE: dark grey to black, very carbonaceous									
	227.38	227.51	13	12	1860 ⇐	COAL C2: thin claystone bands, core broken									
	227.51	227.73	22	20	1860 ⇐	COAL C1:									
	227.73	228.12	39	35	1860 ⇐	COAL C3:									
	228.12	228.55	43	39	1860 ⇐	CLAYSTONE: very carbonaceous, coal bands less than 4cm, core broken C4									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 79									
27		232.45	111			AS ABOVE: poorly cross-bedded									
	232.45		58			CLAYSTONE: dark grey, poorly laminated, carbonaceous material along bedding									
											767'/233.8m				
			115			AS ABOVE: very carbonaceous in places, core broken									
						BOX 80									
		234.47	29			AS ABOVE:									
34	234.47		166			SANDSTONE: fine to medium grained, light grey, thinly laminated, minor carbonaceous material along bedding									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			126			AS ABOVE:									
31			144			SANDSTONE: very fine grained, medium grey, dark grey claystone laminations carbonaceous material along bedding, some medium grained sandstone bands									
						BOX 85									
			22			AS ABOVE:									
											817' / 249.0m				
25			255			AS ABOVE:									
						BOX 86									
			44			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											827' / 252.1m				
		252.02	95			AS ABOVE:									
28	252.02		147			CLAYSTONE: silty, medium grey, thinlight grey sandstone laminations less than 2cm									
						BOX 87									
			62			AS ABOVE: minor siltstone bands									
											837' / 255.1m				
			102			CLAYSTONE: dark grey, poorly laminated, core broken									
											840' / 256.0m				
		255.88	75			AS ABOVE: carbonaceous at base									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	255.88	256.12	24	21	1861 ← →	COAL C1: vitrinite bands less than 1cm										
							BOX 88									
	31256.12	256.54	42	36	1867 ← →	CLAYSTONE: very carbonaceous, coal bands along bedding										
	256.54	256.66	12	10	1862 ← →	C3: vitrinite bands less than .5cm, claystone bands										
	256.66	256.74	8	7	1862 ← →	COAL C4:										
	256.74	256.81	7	6	1862 ← →	COAL C1:										
	256.81	256.84	3	3	1862 ← →	CLAYSTONE: C4										
	256.84	256.90	6	5	1862 ← →	COAL C1: vitrinite bands										

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	256.90	256.97	7	6	1862	CLAYSTONE: C4									
	256.97	257.05	8	7		COAL C1: vitrinite bands									
	257.05	257.07	2	2		C4:									
	257.07	257.10	3	3		C2:									
	257.10	257.26	16	14		CLAYSTONE: very carbonaceous, coal bands less than .5cm									
	257.26	257.38	12	10		C3: dull metallic grey black									
											847'	258.2m			
	257.44	257.91	47	40		C2: metallic grey black, vitrinite bands less than .5cm									
	257.91	258.15	24	21		CLAYSTONE: very carbonaceous									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	259.09	259.13	4	3	1863	CLAYSTONE:									
	259.13	259.17	4	3			C2:								
					1864	CLAYSTONE: (C4)?									
	259.17	259.34	17	15											
					1864	C3: vitrinite bands									
	259.34	259.59	25	21											
					1864	C2: vitrinite bands less than .3cm on thin claystone bands less than .2cm									
	259.59	260.53	94	81											
					1864						857' / 261.2m				
	260.53	260.72	19	16			COAL C1:								
					1864										
	260.72	260.84	12	10			CLAYSTONE: very carbonaceous								
					1864										
	260.84	261.57	73	63			COAL C1:								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					1864 →	BOX 90									
	261.57	261.66	9	8		COAL C1:									
26	261.66	261.97	31			CLAYSTONE: silty, medium to dark grey									
	261.97	262.37	40			SANDSTONE: very fine grained, medium to dark grey									
	262.37		102			CLAYSTONE: dark grey, silty at top, coal bands less than .2cm									
											867' / 264.3m				
			87			AS ABOVE:									
						BOX 91									
29			57			CLAYSTONE: dark grey, sandstone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			12			COAL & CLAYSTONE: broken and ground									
			143			CLAYSTONE: dark grey, carbonaceous material along bedding									
	266.43		5			CLAYSTONE: very carbonaceous									
	266.43	266.53	10	9	1865 ↓ 5981 ↑	COAL C1: core broken, vitrinite bands less than 2cm									
											877'	267.3m			
	266.53	266.80	27	24		COAL C2:									
	266.80	266.92	12	11		C2: broken and powdered									
	266.92	267.25	33	30		COAL LOSS:									
	267.25		11			CLAYSTONE: broken, very soft, carbonaceous									

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 92									
20		268.77	141			CLAYSTONE: carbonaceous at top; dark grey									
	268.77	269.56	79			SANDSTONE: very fine grained, medium grey, dark grey claystone laminations									
	269.56		8			CLAYSTONE: dark grey, laminated									
											887' / 270.4m				
			47			AS ABOVE:									
						BOX 93									
		270.37	26			AS ABOVE:									
	270.37	270.94	57	54	↓ 1866 9981 ↗	COAL C1: vitrinite bands less than 2cm, thin claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	270.94	271.42	48			CLAYSTONE: very carbonaceous									
	271.42	271.49	7			COAL C1: broken									
	271.49	271.53	4			CLAYSTONE:									
	271.53	271.66	13			COAL: broken and powdered									
	271.66	271.80	14			COAL LOSS:									
27	271.80		73			CLAYSTONE: medium to dark grey, thin sandstone bands									
											897' / 273.4m				
	272.76		23			AS ABOVE:									
	272.76		19			SANDSTONE: medium grained, light grey, medium grey sandstone bands									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			30			AS ABOVE:									
		280.45	128			CLAYSTONE: dark grey, light grey sandstone laminations less than 2cm									
21	280.45		105			SANDSTONE: fine grained, light grey, dark grey claystone laminations, cross-bedded									
						BOX 97									
26			54			SANDSTONE: fine grained, medium grey, dark grey claystone bands less than 4cm									
											927'/282.5m				
			226			AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 98									
			69			AS ABOVE:									
											937'	285.6m			
26			195			AS ABOVE:									
						BOX 99									
			111			AS ABOVE:									
											947'	288.6m			
28			171			AS ABOVE:									
						BOX 100									
30	290.92		116			AS ABOVE:									

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	290.92		19			CLAYSTONE: dark grey, silty, poorly lam-									
						inated									
											957' / 291.7m				
			40			AS ABOVE:									
							BOX 101								
			165			AS ABOVE: thin sandstone bands less than									
						1cm									
											967' / 294.7m				
32			115			AS ABOVE:									
							BOX 102								
28	296.25		194			AS ABOVE:									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	22.15		84			AS ABOVE:									
											77'/23.5m				
21			178			AS ABOVE: sandstone bands less than 2cm									
							BOX 4								
			149			AS ABOVE:									
											87'/26.5m				
21	27.62		136			AS ABOVE:									
							BOX 5								
	27.62		178			AS ABOVE:									
											97'/29.6m				
24			107			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 6									
23			197			AS ABOVE:									
											107' / 32.6m				
		33.20	76			AS ABOVE:									
						BOX 7									
28	33.20		235			AS ABOVE:									
											117' / 35.7m				
			39			AS ABOVE:									
						BOX 8									
23		38.67	273			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	6.21	6.89	68												
	6.89	6.96	7												
	6.96	7.19	23												
	7.19		21												
38			110												

BOX 1

23' / 7.0m

CLAYSTONE: dark grey, silty, rust bands,  
core broken

COAL C2: broken and powdered

C3: broken, claystone bands

CLAYSTONE: very carbonaceous, coal bands  
less than 2cm, core broken

27' / 8.2m

AS ABOVE:

CLAYSTONE: dark grey, poorly laminated,

HOLE No. QBD 8206

PAGE No. 1

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						thin coaly bands less than .5cm									
						BOX 2									
		9.83	112			AS ABOVE:									
	9.83		8			SANDSTONE: very fine grained, medium grey, dark grey laminations									
											37' / 11.3m				
			150			AS ABOVE:									
						BOX 3									
			162			AS ABOVE: medium grained, calcite filling fractures									
											47' / 14.3m				

DRILL CORE LOG

HOLE No. QBD 8206

PAGE No. 2



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
25		13.50	47			AS ABOVE: claystone bands towards base									
	13.50		66			CLAYSTONE: medium to dark grey, silty, core broken									
						BOX 4									
		14.71	55			AS ABOVE:									
	14.71	14.83	12			COAL & CLAYSTONE: ground and powdered									
	14.83	15.40	57			CLAYSTONE: dark grey, silty, poorly lam- inated									
	15.40		72			SANDSTONE: very fine grained, medium grey, dark grey laminations									
											57' / 17.4m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
26			79			AS ABOVE: siltstone bands									
						BOX 5									
	16.99		8			AS ABOVE:									
	16.99		218			SILTSTONE: dark grey, medium grey sand- stone laminations									
											67' / 20.4m				
28			57			AS ABOVE:									
						BOX 6									
			258			AS ABOVE: claystone bands, medium to dark grey, core broken									
											77' / 23.5m				



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						grey sandstone bands less than 1cm									
						BOX 9									
			35			AS ABOVE:									
											97' / 29.6m				
	29.91		151			AS ABOVE: massive, core broken at base, carbonaceous towards base									
											102' / 31.1m				
	29.91		41			COAL LOSS: (C3 & C4)									
		30.53	21			COAL C3: core broken									
	30.53	31.15	62			CLAYSTONE: dark grey, carbonaceous bands along bedding less than 1cm, silty									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		31.69	54												
		31.95	26												
		32.73	78												
26		33.14	41												
		33.14	33.18	4											
		33.18	33.54	36											
		33.54	33.65	11											

BOX 10

AS ABOVE:

107' / 32.6m

AS ABOVE:

SANDSTONE: very fine grained, medium grey,  
laminated

CLAYSTONE: dark grey, carbonaceous mat-  
terail along bedding

COAL LOSS:

COAL C3: thin vitrinite bands

CLAYSTONE: dark grey, very carbonaceous

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	33.65	33.81	16			ROCK LOSS:									
	33.81	33.97	16			COAL C3: broken									
		34.05	8			CLAYSTONE: very carbonaceous, dark grey to black									
						BOX 11									
		34.84	79			AS ABOVE: thin sandstone bands, core broken									
											117'/35.7m				
		36.22	138			AS ABOVE: core broken, silty, thin sand- stone bands									
	36.22	36.41	19			COAL C1: very soft and crumbly									
	36.41	36.45	4			CLAYSTONE: very carbonaceous									

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	36.45	36.51	6			COAL C2:									
	36.51	36.53	2			CLAYSTONE:									
	36.53	36.58	5			COAL C3:									
	36.58	36.75	17			COAL LOSS:									
	36.75	36.84	9	8		CLAYSTONE: broken and powdered									
						BOX 12									
	36.84	37.63	79	72		CLAYSTONE: dark grey to black, carbon- aceous material along bedding									
	37.63	37.78	15	14		COAL & CLAYSTONE: powdered and mixed									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	37.78	37.83	5	5	1879 ↓	CLAYSTONE: black, carbonaceous									
													127'	38.7m	
	37.83	38.14	31	28			COAL C2: vitrinite bands, claystone bands								
		38.37	23	21			C1:								
		38.41	4	4			C4:								
		38.72	31	28			C3:								
		38.83	11	10		C4: pyrite along bedding									
		38.88	5	5		CLAYSTONE: dark grey									
		39.02	14	13		COAL C3: soft and powdery									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	39.02		16	15	1879	CLAYSTONE: broken, very carbonaceous										
		39.30	12	11		ROCK LOSS:										
	39.30	39.59	29	27		COAL C3: broken and powdered, pyrite belbs along bedding										
						BOX 13										
	39.59	39.89	30	28		1880	COAL C2:									
	39.89		58	51	CLAYSTONE: dark grey, carbonaceous mat- erial along bedding											
										135.5'	41.3m					
21			198	179	AS ABOVE: silty towards base											
					BOX 14											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		42.51	6			AS ABOVE:									
	42.51	43.10	59			SILTSTONE: medium to dark grey; thin sandstone bands									
21	43.10		46			CLAYSTONE: dark grey, carbonaceous bands less than 2cm, silty									
											146' / 44.5m				
21			193	175		AS ABOVE: sandstone bands									
		46.20	71	64		AS ABOVE:									
	46.20	46.29	9	8	↓	COAL C1:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	46.29	46.65	36	33	8581 ↑	C3:										
	46.65	46.82	17	15		CLAYSTONE:										
	46.82	47.02	20	18		COAL C1: broken										
											156.6'	47.7m				
	47.02	47.09	7	6		CLAYSTONE: dark grey										
	47.09	47.15	6	5		C4: broken										
30	47.15		120			CLAYSTONE: dark grey, silty, thin sand- stone bands										
						BOX 16										
		48.84	49	42		AS ABOVE:										



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	51.85		134			CLAYSTONE: medium grey, sandy at top									
											177'	53.9m			
			60			AS ABOVE:									
						BOX 18									
24			241			AS ABOVE: silty, laminated, core broken									
											187'	57.0m			
			12			AS ABOVE:									
						BOX 19									
		56.45	13			AS ABOVE:									
18	56.45	58.57	212			SILTSTONE: medium grained, dark grey claystone laminations, light									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						grey sandstone laminations									
											197'/60.0m				
	58.57		57			SANDSTONE: fine to medium grained, poorly laminated, light to medium grey									
						BOX 20									
			285			AS ABOVE:									
						BOX 21									
			28			AS ABOVE:									
											207'/63.1m				
22			202			AS ABOVE: core broken, calcite fractures perpendicular to bedding									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
	67.02	67.26	24			CLAYSTONE: silty, poorly laminated, medium grey									
	67.26		20			SANDSTONE: fine grained, light grey, thin claystone bands									
						BOX 23									
		67.67	21			AS ABOVE:									
	67.67		108			CLAYSTONE: silty, medium grey, light grey sandstone bands less than 3cm									
											227' / 69.2m				
21			157			AS ABOVE:									
						BOX 24									









B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
57			226			AS ABOVE:	abundant calcite fractures								
							BOX 31								
			51			AS ABOVE:									
												297' / 90.5m			
66			223			AS ABOVE:									
							BOX 32								
			204			AS ABOVE:									
		95.12	53			AS ABOVE:									
	95.12		17			SANDSTONE:	very coarse grained, conglomeritic								

DRILL CORE LOG





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 3									
30	10.45		284			SANDSTONE: fine to medium grained, medium grey, dark grey claystone bands less than 3cm									
						BOX 4									
											47' / 14.3m				
		13.33	4			AS ABOVE:									
	13.33	13.93	60			CLAYSTONE: dark grey, thin sandstone bands less than 2cm									
25	13.93		212			SANDSTONE: fine to medium grained, medium grey, dark grey claystone bands									
						BOX 5									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			36			AS ABOVE:									
											57' / 17.4m				
27	17.53		112			AS ABOVE: core broken									
	17.53	17.58	5			CLAY BAND: dark grey									
	17.58		119			CONGLOMERATE: sub-rounded clasts of quartz and chert, rock fragments, clasts range in size from 2cm to .5cm									
						BOX 6									
			33			AS ABOVE:									
											67' / 20.4m				
35			245			AS ABOVE: thin sandstone bands, clasts range from 3cm to .5cm									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 7									
			70			AS ABOVE:									
											77'	23.5m			
			215			AS ABOVE: core broken at top, iron stains along fractures, clasts range from 1.5cm to .5cm									
						BOX 8									
			101			AS ABOVE: clasts range from 2cm to .5cm									
											87'	26.5m			
			176			AS ABOVE:									
						BOX 9									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		28.15	98			AS ABOVE:									
29	28.15		33			SANDSTONE: fine to medium grained, light grey, poorly laminated									
											97'/29.6m				
		28.79	31			AS ABOVE:									
	28.79	29.97	118			CONGLOMERATE: sub-rounded clasts of quartz and chert, rock fragments, clasts range from 1.5cm to .5cm, thin sand- stone bands									
						BOX 10									
	29.97	30.69	72			SANDSTONE: fine grained, conglomerate bands, light grey									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		37.95	231			AS ABOVE: clasts range up to 2cm									
27	37.95		10			SANDSTONE: fine to medium grained, light grey									
											127'/38.7m				
			38			AS ABOVE:									
						BOX 13									
23		39.49	106			AS ABOVE:									
	39.49	40.77	128			CONGLOMERATE: sub-rounded clasts of quartz and chert, rock fragments, clasts range in size from 1cm to .5cm									
	40.77		35			SANDSTONE: fine to medium grained, light grey, salt and pepper texture									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			131			AS ABOVE: clasts range from 3cm to .5cm									
						BOX 16									
			40			AS ABOVE:									
											157'/47.9m				
		48.96	170			AS ABOVE: clasts range up to 3cm									
29	48.96		75			SANDSTONE: fine to medium grained, light grey, conglomerate bands									
						BOX 17									
			68	59		AS ABOVE:									
											167'/50.9m				
29		50.96	57	50		AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	50.96	51.27	31	27	180 ↓	COAL C3: pyrite bands, vitrinite bands less than 1cm; core broken									
	51.27	51.33	6	5		CLAYSTONE: dark grey, carbonaceous									
	51.33		100	87		C1: vitrinite bands less than 1cm, clay- stone bands less than .5cm, pyrite in places, solid core									
						BOX 18									
			100	87		C1: claystone bands less than .5cm, vitrinite bands									
											177'/53.9m				
		53.39	6	5		C2:									
	53.39		12	10		CLAYSTONE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
		53.60	9	8	180 ↑	ROCK LOSS:										
	53.60	53.70	10	9		COAL LOSS:										
	53.70	53.75	5	4		COAL C3:										
	53.75	53.89	14	12		C2: vitrinite bands										
	53.89	54.36	47	41		C1: thin claystone bands										
	54.36	54.39	3	3		CLAYSTONE:										
	54.39	54.43	4	3		COAL C1:										
31	54.43		69	59		CLAYSTONE: carbonaceous, coaly bands along bedding										



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 19									
29	55.75	63	55			AS ABOVE:									
	55.75	55.83	8	7	↓	C3:									
	55.83	55.97	14	12	1881	C1:									
	55.97	56.20	23	20	⇒	C3: claystone bands									
	56.20	56.33	13	11	↓	COAL & CLAYSTONE:									
	56.33	56.42	10	9	1882	CLAYSTONE: very carbonaceous, core broken									
	56.42	56.91	48	42	⇒	CLAYSTONE: very carbonaceous									

187' / 57.0m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	56.91	57.12	21	18	1883	C2: vitrinite bands									
	57.12		7	6		CLAYSTONE: carbonaceous									
		57.30	11	10		ROCK LOSS:									
	57.30	57.89	59	53		C3:									
	57.89	57.94	5	4		CLAYSTONE:									
						BOX 20									
	57.94	57.98	4	4		C3:									
	57.98	58.01	3	3		CLAYSTONE:									
	58.01	58.14	13	12		C1: core broken									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	58.14		15	13	1883 ↑	CLAYSTONE:									
		58.33	4	4		ROCK LOSS:									
	58.33	58.84	51	46		C2: vitrinite bands, claystone bands									
	58.84	59.06	22	20		CLAYSTONE: very carbonaceous (C4ish)?									
	59.06	59.46	40	36		C2 & C3: vitrinite bands									
											197'/60.0m				
	59.46	59.52	6	5		COAL C1:									
	59.52		24	23		CLAYSTONE: dark grey black, carbonaceous									
											198'/60.4m				
22			78	73		AS ABOVE: coaly bands along bedding									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		61.97	143			AS ABOVE: silty, sandstone bands									
	61.97		50			SANDSTONE: very fine grained, dark grey, carbonaceous									
											207'	63.1m			
21		62.89	42			AS ABOVE: carbonaceous bands along bedding									
	62.89		46			SILTSTONE: carbonaceous, dark grey to black, dark grey claystone bands									
						BOX 22									
		64.61	126			AS ABOVE:									
23	64.61	65.07	46			SANDSTONE: fine grained, medium to dark grey									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			20			AS ABOVE:									
							BOX 24								
22			281			AS ABOVE: sandstone bands									
							BOX 25								
			11			AS ABOVE:									
											237' / 72.2m				
			261			AS ABOVE:									
							BOX 26								
23			39			AS ABOVE: silty, thin sandstone bands									
											247' / 75.3m				

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			234			AS ABOVE: silty									
						BOX 27									
			69			AS ABOVE: thin sandstone bands									
											257' / 78.3m				
16			210			AS ABOVE:									
						BOX 28									
			92			AS ABOVE:									
											267' / 81.4m				
			196			AS ABOVE: plant fragments along bedding									
						BOX 29									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			111	104		AS ABOVE: carbonaceous material along bedding									
											277'	84.4m			
21	84.50		66	62		AS ABOVE: very carbonaceous									
	84.50	84.80	30	28	↓	C3: metallic grey black; vitrinite bands less than 1cm									
	84.80	85.12	32	30		C4:									
	85.12	85.45	33	31		C2: vitrinite bands less than 2cm									
					1888	BOX 30									
	85.45	86.83	138	128		C1: vitrinite bands less than 2cm, minor claystone bands less than 3cm									
											287'	87.5m			



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	86.83	87.17	34	33	2881	C2: vitrinite bands less than 2cm, clay- stone bands less than 1cm									
	87.17	87.21	4	4		CLAYSTONE:									
	87.21	87.25	4	4		C1:									
	87.25	87.32	7	6		CLAYSTONE & COAL: core very broken									
	87.32	87.45	13	12		COAL & CLAYSTONE: ground									
	87.45	87.67	22	20	C3: core broken										
	87.67	88.02	35	32	C1: vitrinite bands, solid core										
	88.02	88.12	10	9	CLAYSTONE: very carbonaceous										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	88.12	88.27	15	14	1888 ↑	ROCK LOSS:									
	88.27	88.40	13	12			C2:								
							COAL C1 & CLAYSTONE:								
	88.53	88.59	6	6		CLAYSTONE; soft and broken									
	88.59	88.68	9	8		COAL & CLAYSTONE:									
	88.68	88.81	13	12		CLAYSTONE: soft, mixed with 30% coal									
	88.81	88.84	3	3		CLAYSTONE:									
	88.84	88.97	13	12		COAL C3: broken and powdered									

DRILL CORE LOG

HOLE No. QBD 8207

PAGE No. 21

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	88.97	89.15	18			CLAYSTONE: coaly bands less than 3cm									
	89.15	89.25	10			CLAYSTONE: broken and powdered									
	89.25	89.32	7			CLAYSTONE:									
	89.32	89.48	16			CLAYSTONE & COAL?: broken and powdered									
	89.48	89.55	7			C4:									
	89.55		8			CLAYSTONE: broken and powdered									
			9			CLAYSTONE: good core, very carbonaceous									
												297' / 90.5m			
			117			CLAYSTONE: carbonaceous, dark grey to black, massive									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
						BOX 32									
			189			CLAYSTONE: silty, dark grey to black, thin sandstone bands less than 1cm									
											307'/93.6m				
45			80			AS ABOVE:									
						BOX 33									
45			214			AS ABOVE: coaly bands									
											317'/96.6m				
		96.15	43			AS ABOVE:									
	96.15		12			SANDSTONE: medium grained, light to med- ium grey, calcite stringers,									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						carbonaceous material									
						BOX 34									
71			67			AS ABOVE: abundant calcite filling fractures									
48			185			AS ABOVE:									
											327'/99.7m				
			24			AS ABOVE:									
						BOX 35									
		99.31	28			AS ABOVE:									
	99.31	100.29	98			CLAYSTONE: dark grey, sandstone bands, calcite fractures perpendicular to bedding									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
45	100.29	101.16	87			SANDSTONE: very fine grained, light grey, abundant calcite throughout									
	101.16	101.79	63			SILTSTONE: dark grey, abundant calcite									
											337'	102.7m			
	101.79		16			CLAYSTONE: dark grey, carbonaceous									
						BOX 36									
			17			AS ABOVE: coaly bands along bedding									
13			262			CLAYSTONE: dark grey, laminated, thin medium grey sandstone bands less than 1cm, core broken									
						BOX 37									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			18			AS ABOVE:									
											347'	105.8m			
17			243			AS ABOVE: minor carbonaceous material along bedding									
						BOX 38									
10			58			AS ABOVE: abundant sandstone bands at top									
											357'	108.8m			
15			213			AS ABOVE:									
						BOX 39									
			91			AS ABOVE: carbonaceous at top, some sandstone bands, calcite stringers									
											367'	111.9m			

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
25			177			AS ABOVE: thin sandstone bands									
						BOX 40									
			126			AS ABOVE: massive towards base									
											377'	114.9m			
			150			AS ABOVE: carbonaceous material along bedding, very carbonaceous at base									
						BOX 41									
		115.79	29			CLAYSTONE: very carbonaceous									
	115.79	115.90	11			SANDSTONE: fine grained, light to medium grey									



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	15.90	15.92	2		1889	C4:										
	15.92	16.02	10			CLAYSTONE: very carbonaceous										
	16.02	16.12	10			C1: core broken										
21	16.12	16.30	18			SANDSTONE: fine grained, medium to dark grey										
	16.30	16.70	40	38		CLAYSTONE: dark grey to black, carbonaceous, coal bands less than 2cm										
	16.70	16.98	28	26	C2: vitrinite bands less than .5cm											
	16.98	17.03	5	5	C3:											
	17.03	17.32	29	27	C1: core broken											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	17.32	117.41	9	8	1881	COAL LOSS:									
	17.41	117.50	9	8	1890	C3:									
	17.50	117.62	12	11	1891	ROCK LOSS:									
	17.62	117.98	36	34	1891	CLAYSTONE: carbonaceous, silty									
	17.98	118.38	40	37	1891	C1: vitrinite bands									
					1891	BOX 42									
	118.38	118.45	7	7	1891	C4: vitrinite bands									
	118.45	118.50	5	5	1891	C3: earthy									
	118.50	118.56	6	6	1891	C4:									

DRILL CORE LOG

HOLE No. QBD 8207

PAGE No. 29

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	118.56	118.99	43	40	1891	C2: vitrinite bands less than 2cm, C4 bands less than 2cm									
	118.99	119.01	2	2		CLAYSTONE:									
	119.01	119.09	8	7		C3:									
	119.09	119.23	14	13		CLAYSTONE:									
	119.23	119.26	3	3	ROCK LOSS:										
	119.26		30	28	C1: vitrinite bands, core broken										
		119.66	10	9	COAL LOSS:										
	119.66	119.68	2	2	CLAYSTONE: very carbonaceous										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	119.68	120.00	32	29	1892 ↑	C3: vitrinite bands, coal broken and powdered, claystone mixed									
24	120.00	120.14	14	13		CLAYSTONE: coaly bands									
	120.14	120.49	35	32		ROCK LOSS:									
	120.49		16	15		C2: broken, 10% claystone mixed									
	120.72		7	6		COAL LOSS:									
	120.72		4	4		CLAYSTONE: coal bands									
											397' / 121.0m				
			46	43		AS ABOVE: core broken									
			41			CLAYSTONE: silty, sandstone bands, dark grey									

DRILL CORE LOG

HOLE No. QBD 8207

PAGE No. 31

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 43									
36			202			AS ABOVE:									
											407' / 124.1m				
			68			AS ABOVE: sandstone bands less than 2cm									
						BOX 44									
41			227			AS ABOVE:									
											417' / 127.1m				
			40			AS ABOVE:									
						BOX 45									
			262			AS ABOVE: thin clay bands									



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			229			AS ABOVE: core broken at base									
						BOX 49									
			27			AS ABOVE: core broken									
											455'	138.7m			
			166			AS ABOVE: core broken, calcite stringers									
			33			AS ABOVE: core very broken									
											461'	140.5m			
			32			AS ABOVE: core very broken									
						BOX 50									
			127			AS ABOVE:									

DRILL CORE LOG

HOLE No. QBD 8207

PAGE No. 34

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
												467' / 142.3m			
		142.44	70			AS ABOVE:									
30	142.44	142.83	39			SANDSTONE: very fine grained, medium grey, claystone bands									
	142.83		27			CLAYSTONE: silty, medium grey, light grey sandstone bands									
						BOX 51									
			163			AS ABOVE: sandstone band at base									
												477' / 145.4m			
			101			AS ABOVE: abundant sandstone bands									
						BOX 52									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		146.62	88			AS ABOVE: silty									
		146.62	123			SANDSTONE: medium grained, medium grey, claystone bands, minor carbon- aceous material along bedding									
											487'/148.4m				
25			72			AS ABOVE:									
23			233			SANDSTONE: medium grained, light grey, carbonaceous material along bedding									
											497'/151.5m				
			42			AS ABOVE:									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											517'/157.6m				
21	159.12		222			AS ABOVE:									
	159.12		25			CLAYSTONE: dark grey, massive, sandy at top									
								BOX 57							
			63			AS ABOVE:									
											527'/160.6m				
			160	152		AS ABOVE: carbonaceous material along bedding									
	161.65		5	5		CLAYSTONE: very carbonaceous, C4ish									
	161.65	161.83	18	17	↓	C3: claystone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	161.83	161.85	3	3	1893	COAL LOSS:									
	161.86	161.89	3	3		C4:									
	161.89	161.96	7	7		C4: vitrinite bands									
	161.96	162.14	18	17		CLAYSTONE: very carbonaceous									
	162.14	162.34	20	19	C3: vitrinite bands less than 1cm, minor claystone bands										
	162.34	162.42	8	8	C1:										
	162.42	162.52	10	9	C3: vitrinite bands										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
	162.52	162.59	7	7	1893	C2:										
	162.59	162.62	3	3		CLAYSTONE:										
	162.62	162.79	17	16		C4 & C3 BANDS:										
	162.79	162.90	11	10		CLAYSTONE: very carbonaceous, (C4ish?) core broken										
	162.90	163.04	14	13	COAL C2: core broken, minor claystone fragments											
	163.04	163.14	10	9	C3: claystone bands less than .5cm											
	163.14	163.25	11	10	C2: claystone bands											
	163.25	163.36	11	10	C3: metallic grey											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	163.36	163.42	6	6	1893	COAL LOSS:									
	163.42	163.47	5	5		CLAYSTONE: very carbonaceous									
	163.47	163.69	22	21	1894	C4: vitrinite bands, claystone bands less than 3/10cm									
	163.69	163.79	10	10		C3:									
	163.79	163.91	12	11	1894	C1: broken and powdered									
	163.91	164.06	15	14		CLAYSTONE: very carbonaceous									
	164.06	164.19	13	12	1894	C3: vitrinite bands									
16	164.19	164.31	12	12		CLAYSTONE: carbonaceous									

DRILL CORE LOG

HOLE No. DBD 8207

PAGE No. 41

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	164.31	164.46	15	14	1894 ⇒	C2: vitrinite bands less than 2cm									
	164.46	164.70	24	23			CLAYSTONE: carbonaceous								
	164.70	164.79	9	9	⇒	ROCK LOSS:									
							BOX 59								
	164.79	165.21	42	40	⇐	COAL & CLAYSTONE: powdered and mixed, 70% coal, 30% claystone									
	165.21	166.02	81	78			COAL LOSS:								
					1895						547' / 166.7m				
	166.02	166.20	18	17			C3: core broken								
	166.20	166.21	1	1		CLAYSTONE:									

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	66.21	66.26	5	5	1895 ↑	C3:	.	.	.	.					
							.	.	.	.	.				
	66.26	66.28	2	2			CLAYSTONE:	.	.	.	.				
							.	.	.	.	.				
	66.28	66.53	25	24			C1: vitrinite bands	.	.	.	.				
							.	.	.	.	.				
	66.53	66.78	25	24			C2: thin claystone bands	.	.	.	.				
							.	.	.	.	.				
	66.78	66.86	8	8			C1:	.	.	.	.				
							.	.	.	.	.				
	66.86	66.94	8	8		C2:	.	.	.	.					
						.	.	.	.	.					
	66.94	67.26	32	30		C1: with C2 bands, thin claystone bands	.	.	.	.					
						.	.	.	.	.					
21	67.26		112			CLAYSTONE: dark grey, carbonaceous material along bedding, silty	.	.	.	.					
						.	.	.	.	.					
						.	.	.	.	.					





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		171.66	7	6	1896 ↓	CLAYSTONE: very carbonaceous									
	171.66	172.20	54	50		C1: coal, vitrinite bands, claystone bands less than 1cm									
	172.20	172.38	18	17		C3: vitrinite bands, dull									
	172.38	172.41	3	3		C1:									
	172.41	172.69	28	26		C3: soft and crumbly									
	172.69	173.38	69	64		C2: vitrinite bands less than 2cm, dull bands less than 1cm, core broken									
	173.38	173.44	6	6		COAL: broken and powdered									
	173.44	174.08	64	59		COAL LOSS:									

567' / 172.8m

1896

↑

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	174.08		39	36		CLAYSTONE: very carbonaceous									
						BOX 62									
			38	35		AS ABOVE: carbonaceous, core broken									
											576' / 175.6m				
	176.59	174				CLAYSTONE: medium grey, with light grey sandstone bands, silty, laminated									
24	176.59		71			SANDSTONE: very fine grained, medium grey, dark grey claystone laminations									
						BOX 63									
			69			AS ABOVE:									
											586.6' / 178.8m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
18			208			AS ABOVE: medium grained towards base									
						BOX 64									
	180.74		67			AS ABOVE: carbonaceous									
	180.74	181.16	42			C1: broken and powdered									
											596.5'	181.8m			
	181.16	181.20	4			C1: broken and powdered									
	181.20		119			CLAYSTONE: very carbonaceous									
28			55			CLAYSTONE: dark grey, carbonaceous material along bedding									
						BOX 65									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		183.12	18			AS ABOVE:	silty								
40	183.12	183.53	41			SANDSTONE:	medium grained, light to medium grey, claystone along bedding, calcite fractures along bedding								
	183.53		71			CLAYSTONE:	silty at top, minor carbonaceous along bedding								
			157			CLAYSTONE:	medium to dark grey, very poorly laminated								
							BOX 66								
			54			AS ABOVE:									
			131			AS ABOVE:									

607'/185.0m

617'/188.1m



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
								BOX 69							
		194.11		93				AS ABOVE:							
		194.11		136				CLAYSTONE: very silty, some sandstone bands							
											647' / 197.2m				
28		195.73		26				AS ABOVE:							
		195.73		16				SANDSTONE: very fine grained, light to medium grey, claystone bands along bedding							
		197.46		157				AS ABOVE:							







B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
	15.39		23			CLAY: very soft, little pebbles									
		15.93	31			CLAY: solid but very soft, light grey									
	15.93		193			SANDSTONE: very fine grained, light to medium grey; claystone bands less than 3cm									
											57' / 17.4m				
3			36			AS ABOVE:									
						BOX 2									
			273			AS ABOVE: claystone bands less than 6cm									
											67' / 20.4m				



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	26.76		4			SANDSTONE: fine grained, light to medium grey									
											87' / 26.5m				
4			263			AS ABOVE: claystone bands less than 5cm, sandstone poorly laminated									
							BOX 6								
			45			AS ABOVE: core broken									
		30.22	34			AS ABOVE:									
	30.22	30.43	21			CLAY: dark grey, soft									
10	30.43		179			SANDSTONE: fine grained, light to medium grey, claystone bands less than 4cm									

DRILL CORE LOG



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			91								127' / 38.7m				
						AS ABOVE:									
			31			SANDSTONE: broken and powdered, mixed with clay									
3	40.46		55			SANDSTONE: very fine grained, medium to dark grey, claystone bands less than 1cm									
	40.46		10			CONGLOMERATE: sub-rounded clasts of quartz, chert and rock fragments ranging in size from 2cm to .5cm									
						BOX 10									
			64			AS ABOVE:									
											137' / 41.8m				

DRILL CORE LOG

HOLE No. QBD 8208

PAGE No. 5

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			224			AS ABOVE: clasts range in size from 1cm to .5cm									
						BOX 11									
			82	82		AS ABOVE:									
										147' / 44.8m					
		44.47	21	21		AS ABOVE:									
	44.47	44.53	6	6		C2:									
		44.57	4	4		CLAYSTONE:									
		44.63	6	6		C3: vitrinite bands less than 1cm									
		44.91	28	28		C1:									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		44.99	8	8		C3:	.	.	.	.					
						.	.	.	.	.					
		45.21	22	22		C2:	.	.	.	.					
						.	.	.	.	.					
		45.31	10	10		C1: pyrite blebs	.	.	.	.					
						.	.	.	.	.					
		45.57	26	26		C2:	.	.	.	.					
						.	.	.	.	.					
		45.58	1	1		C4:	.	.	.	.					
						.	.	.	.	.					
		45.60	11	11		C3:	.	.	.	.					
						.	.	.	.	.					
		46.08	39	39		C2:	.	.	.	.					
						.	.	.	.	.					
		46.20	12	12		C1:	.	.	.	.					
						.	.	.	.	.					
						.	.	.	.	.					



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 12									
		46.43	23	23		C1: C4 bands less than 1cm									
	46.43	46.60	17	17		CLAYSTONE: very carbonaceous									
	46.60	47.23	63	62		C1: vitrinite bands, bright and shiny									
											157' / 47.9m				
	47.23	47.28	5	5		C4: broken and powdered									
	47.28	47.45	17			ROCK LOSS:									
	47.45		23	22		CLAYSTONE: very carbonaceous									
12			155	152		CLAYSTONE: dark grey, carbonaceous material along bedding, silty, poorly laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 13									
			104	103		AS ABOVE:									
9	51.06		79	78		AS ABOVE: laminated, carbonaceous material along bedding									
	51.06		20	20		C1: vitrinite bands									
		51.46	20	20		COAL LOSS:									
	51.46	51.65	19	19		ROCK LOSS:									
	51.65	52.12	47	46		CLAYSTONE: carbonaceous material along bedding									
	52.12	52.31	19	19		C1: vitrinite bands less than 4cm, claystone									

bands less than .5cm

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	52.31	52.39	8	8		CLAYSTONE: carbonaceous									
	52.39	52.55	16	16		ROCK LOSS:									
	52.55	52.57	2	2		C1:									
						BOX 14									
		52.71	14	14		C1: vitrinite bands less than 2cm, dull bands less than 2cm									
		52.86	15	15		C3:									
		53.00	14	14		C1: vitrinite bands less than 5cm, C4 bands less than 2cm									
	53.00	53.14	14	14		CLAYSTONE:									

DRILL CORE LOG

HOLE No. QBD 8208  
PAGE No. 10

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		53.27	13	13		C4:									
	53.27	53.33	6	6		C3:									
		53.36	3	3		C3:									
		53.66	30	30		C1: vitrinite bands less than 10cm, clay-									
						stone bands less than 3/10cm									
	53.66	53.92	26	26		C4:									
	53.92	54.26	34	34		C1: vitrinite bands less than 4cm									
	54.26	54.34	8	8		CLAYSTONE: very soft, broken and powdered,									
						very carbonaceous									
	54.34	54.64	30	30		CLAYSTONE: dark grey to black									

177' / 53.9m

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	54.64	54.90	26	26		C3: broken and powdered, C4 bands									
	54.90	54.95	5	5		coal loss									
	54.95		8	8		CLAYSTONE: very broken									
			38	38		CLAYSTONE: dark gray carbonaceous material along bedding, core broken									
						BOX 15									
4			98	97		AS ABOVE: core broken, sandstone bands 75 cm									
											187' / 57.0				
			183			AS ABOVE: carbonaceous material along bedding									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 16									
16			119			CLAYSTONE: drak gray, light gray, sandstone bands >2 cm, claystone bands 3 cm									
											197'/60.0				
		60.25	84			AS ABOVE									
	60.25		91			SANDSTONE: very fragmented; claystone bands >2 cm, medium grey									
						BOX 17									
			136			AS ABOVE									
											207'/63.1				

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
12			139			AS ABOVE:									
						BOX 18									
			160			AS ABOVE: claystone bands >3 cm									
										217'/66.1					
5			129			AS ABOVE: sandstone medium grey, laminated									
						BOX 19									
			160			AS ABOVE:									
										227'/69.2					
		69.56	116			AS ABOVE:									
9	69.56		18			CLAYSTONE: Silty, dark grey to medium grey									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 20									
			170			CLAYSTONE: silty carbonaceous material along bedding, core broken, dark grey									
											237' / 72.2				
14			111	108		AS ABOVE:									
						BOX 21									
		73.25	70	68		AS ABOVE: carbonaceous material along bedding									
	73.25	73.37	12	12		C1:									
		73.42	5	5		C3:									
		73.59	17	16		C3:									

DRILL CORE LOG



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	73.59	73.93	34	33		C4:									
	73.93	74.20	27	26		C3: vitrinite bands									
		74.33	13	13		C1: vitrinite bands >2 cm claystone bands									
		74.60	27	26		C2:									
											247' / 75.3				
		74.78	18	17		C1: core broken									
		74.89	11	11		C3:									
		75.25	36	35		C1: vitrinite bands									
		75.28	3	3		C4:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 22									
		75.81	53	52		C1: vitrinite bands, C4 bands 1 cm									
		75.87	6	6		C3:									
		75.92	5	5		CLAYSTONE: broken and powdered									
		76.04	12	12		C1:									
		76.15	11	11		C3:									
		76.21	6	6		C1:									
		76.44	23	23		C2:									
		76.46	2	2		CLAYSTONE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		76.49	3	3		C1:									
	76.49	76.71	22	22		CLAYSTONE: very carbonaceous									
	76.71	76.78	7	7		C1: core broken and powdered									
	76.78	76.89	11	11		COAL & CLAYSTONE: 6% claystone, 4% coal									
	76.89	76.95	6	6		C3:									
	76.95	77.73	28	28		C1:									
	77.23	77.24	1	1		C4:									
	77.24	77.29	5	5		C1:									
	77.29	77.31	2	2		CLAYSTONE:									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	77.31	77.43	12	12		C1:									
	77.43	77.48	5	5		CLAYSTONE: very carbonaceous									
	77.48	77.64	16	16		rock loss									
											257' / 78.3				
	77.64		57	57		CLAYSTONE: dark grey, very carbonaceous at top silty									
		79.96	175	171		AS ABOVE: coal bands along bedding									
5	79.96	80.00	4	4		C4:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY, DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	80.00	80.11	11			C1:									
	80.11		53			CLAYSTONE: dark grey, silty, coally bands along bedding									
						BOX 24									
		81.22	58			AS ABOVE									
	81.22		208			CONGLOMERATE: rounded to sub-rounded clasts quartz, chert claystone rock fragments, sandstone rock fragments clasts range in size 1-3 cm, cement									
											277' /84.4				
			17			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 25									
			74			AS ABOVE:									
			222			AS ABOVE: thin medium grey sandstone bands > 5 cm, clasts range up to 5 cm									
										287' / 87.5					
						BOX 26									
			115			AS ABOVE: 20 cm of sandstone at base, clasts range up to 1.5 cm									
		88.64	106			AS ABOVE: clasts range up to 2 cm									
9	88.64		66			SANDSTONE: medium grey, light grey conglomerate bands > 2 cm, poorly laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 27									
			22			AS ABOVE:									
											297'/90.5				
		89.86	34	34		AS ABOVE:									
	89.86		31	31		CONGLOMERATE: rounded, sub-rounded clasts quartz, chert, sediment rock fragments mainly claystone, clasts range in size 6 cm to 3/10 cm									
		91.91	174	174		AS ABOVE: clasts range from 1 cm to .3 cm									
	91.91		21			SANDSTONE: coarse grained, striped texture, light grey									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 28									
		92.40	28			AS ABOVE:									
	92.40		17			CONGLOMERATE: as before clasts range in size from 2 cm to .3 cm, carbonaceous material along bedding									
											307'/93.6				
			246			AS ABOVE: clasts range in size from 2 cm to .3 cm									
						BOX 29									
			70			AS ABOVE: clasts range from 4 cm to .3 cm calcite cement									
											317'/96.6				



B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
			159			AS ABOVE: sandstone bands									
			56			AS ABOVE: clasts range from 1 - .3 cm									
						BOX 30									
			98			AS ABOVE: clasts range from 1 - .3 cm.									
											327' / 99.7				
			192			AS ABOVE: clasts range from 3 - .3 cm sandstone matrix									
						BOX 31									
			45			AS ABOVE:									
			72			AS ABOVE: clasts range from 1 - .1 cm calcite cement									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											337'/102.7				
			175			AS ABOVE:									
			131			AS ABOVE: claystone band at base									
			12	12		AS ABOVE: clasts range from 3 - .3 cm									
											347'/105.8				
		105.22	9	9		AS ABOVE: clasts range from 1.5 - .3 cm									
8	105.22	105.57	35	35		C1 - vitrinite bands > 3 cm dull bands 4 cm claystone bands .3 cm									
		105.62	5	5		C4:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		105.70	8	8		C3:									
		105.74	4	4		C2:									
	105.74	105.98	24	24		C3:									
	105.98	106.18	20	20		C1:									
	106.18		43	43		SILTSTONE: dark grey, very carbonaceous									
						BOX 33									
		106.75	14	14		AS ABOVE:									
	106.75	106.90	15	15		C2: dull bands dominate									
		107.17	27	27		C1: bright and shiny									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	107.38		21	21		C3 + C4:									
	107.38	107.43	5	5		C4:									
	107.43	107.47	4	4		C3:									
	107.47	107.50	3	3		CLAYSTONE:									
	107.56	107.56	6	6		C1:									
	107.56	107.80	24	24		CLAYSTONE: very carbonaceous, C4ish									
	107.80	107.88	8	8		C3: broken									
	107.88		6	6		CLAYSTONE: broken; soft, carbonaceous									
			19	19		CLAYSTONE: dark grey, very carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
											357'/108.8				
2			137	136		CLAYSTONE: light grey, wack grey bands, medium grey sandstone bands									
						BOX 34									
		110.22	72			AS ABOVE:									
4	110.22		106			SANDSTONE: very fragmented, light-medium grey claystone bands > 4 cm									
											367'/111.9				
		111.62	34			AS ABOVE:									
	111.62		54			CLAYSTONE: medium-dark grey, silty at top									
			15			AS ABOVE: core very broken, soft									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 35									
			12			AS ABOVE: core very broken, soft									
			185			AS ABOVE: mass, solid core, occasional coaly bands									
											377'/114.9				
		114.60	32			AS ABOVE: silty									
6	114.60		41			SANDSTONE: very fragmented to fragmented, light-medium grey, poorly laminated									
						BOX 36									
			225			AS ABOVE: very banded upright claystone bands to base									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 39									
			108			AS ABOVE:									
6			167			AS ABOVE: medium grey, claystone bands > 3 cm									
						BOX 40									
			29			AS ABOVE:									
											417'/127.1				
		126.89	49			AS ABOVE: abundant claystone bands to base									
7	126.89		144			CLAYSTONE: dark grey, light grey sandstone bands > 3 cm laminated									
			69	68		CLAYSTONE: mass									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 41									
			43	43		AS ABOVE:									
											427'/130.1				
		130.18	73	72		AS ABOVE: very carbonaceous core broken									
	130.18	131.62	144	143		Coal Loss									
		131.68	6	6		C3:									
		131.89	21	21		C2: vitrinite bands, core broken									
		132.13	24	24		C3: core broken and powdered									
		132.22	9	9		C4: core broken									
		132.25	3	3		C3: core soft and broken									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		132.39	14	14		C1:									
		132.61	22	22		C2: claystone band >3 cm core broken									
		132.72	11	11		C1: core broken									
										437'/133.2					
		132.73	1	1		CLAYSTONE:									
		132.80	7	7		C2: core very broken									
	132.80	132.97	17	17		CLAYSTONE:									
	132.97	133.08	11	11		Rock Loss									
	133.08	133.22	14	14		C1: bright and shiny									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	133.22	133.34	12	12		C4: claystone bands									
							BOX 42								
	133.34	133.40	6	6		CLAYSTONE:									
	133.40	133.47	7	7		C4:									
	133.47	133.67	20	20		C3: vitrinite bands > 2 cm									
		133.73	6	6		CLAYSTONE:									
		133.80	7	7		C2:									
		134.04	24	24		C3:									
		134.67	63	63		C2: dull bands, core broken									

DRILL CORE LOG

HOLE No. QBD 8208

PAGE No. 34

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		134.76	9	9		C4:									
		135.11	35	35		C2:									
		135.16	5	5		C4:									
		135.40	24	24		C1:									
		135.48	8	8		C3:									
		135.54	6	6		C1:									
		135.61	7	7		C1: claystone bands									
		135.82	21	21		C2:									
	135.82		17	17		CLAYSTONE: very carbonaceous									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 43									
		136.26	27	27		CLAYSTONE: very carbonaceous									
	136.26	136.36	10	10		Rock Loss									
		136.39	3	3		C1:									
		136.42	3	3		CLAYSTONE:									
		136.46	4	4		C1:									
		136.49	3	3		CLAYSTONE:									
		136.54	5	5		C1:									
		136.58	4	4		CLAYSTONE:									
		136.62	4	4		C3:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		136.67	5	5		CLAYSTONE:									
		136.69	2	2		C4:									
	136.83	137.07	24	24		C4: vitrinite bands >2 cm									
	137.07	137.12	5	5		CLAYSTONE:									
	137.12	137.37	25	25		C1: vitrinite bands									
	137.37	137.50	13	13		CLAYSTONE: very carbonaceous									
	137.50	137.66	16	16		C1:									
	137.66	137.75	9	9		C2: vitrinite bands >2 cm									
	137.75	138.40	65	65		C1:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	138.40		23	23		CLAYSTONE: carbonaceous, dark grey									
											457'/134.	3			
			30	29		AS ABOVE:									
						BOX 44									
		140.59	166			CLAYSTONE: dark - medium grey, sandstone bands > 1 cm									
9	140.59	141.37	78	75		SANDSTONE: fragmented-medium grained, claystone bands > 1 cm									
	141.37		39	38		CLAYSTONE: dark grey, laminated									
											467'/142.	3			

DRILL CORE LOG

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 45									
		142.50	74	72		AS ABOVE: very carbonaceous at base									
	142.50	142.69	19	19		C2: vitrinite bands									
	142.69	142.97	28	28		Coal Loss									
	142.97	143.04	7	7		CLAYSTONE: very carbonaceous									
11	143.04	143.48	44	43		SANDSTONE: very fragmented, medium-dark grey, claystone bands >1 cm									
	143.48	143.84	41			CLAYSTONE: very carbonaceous, dark grey									
		144.43	54			SANDSTONE: very fragmented, laminated									
		144.74	31			CLAYSTONE: very carbonaceous									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
		144.79	5			C3:									
											477'/145.4				
			10			CLAYSTONE: dark grey, carbonaceous, core broken									
						BOX 46									
			93			AS ABOVE: sandstone bands > 10 cm, laminated									
11			188			CLAYSTONE: dark grey, carbonaceous in places, sandstone bands > 1 cm, core broken									
						BOX 47									
			27			CLAYSTONE: dark grey-black, silty									
											487'/148.4				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
5			265			AS ABOVE: sandstone bands less than 3 cm									
						BOX 48									
			31			AS ABOVE:									
											497'/151.5				
		151.06	13			AS ABOVE:									
6	151.06		219			SANDSTONE: very fragmented, med-light grey, claystone bands > 2 cm									
											505.6'/154.1				
			10			AS ABOVE:									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 49									
			45			AS ABOVE: carbonaceous bands along bedding									
											507'	154.5			
8			228			AS ABOVE: claystone > 5 cm									
						BOX 50									
			82			AS ABOVE:									
											517'	157.6			
6			192			AS ABOVE: claystone bands > 3 cm									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											30m				
20	30.53	31.56	103			CLAYSTONE - medium dark gray, large gray sand- stone bands 2 cm									
	31.56	32.00	44			CLAYSTONE - dark gray-black, poorly laminated									
						BOX 2									
											31.5m				
	32.00	32.80	80			As Above									
	32.80		23	22		COAL-C-1 - Vitrinite bands, 2 cm, dull bands 1 cm, core broken									
		33.10	7	7		Coal Loss									
					10224										
	33.10	33.46	36	34		CLAYSTONE - Very carbonaceous, dark gray to black									
						BOX 3									
											33m				
	33.46	33.47	1	1		C-4									
	33.47	33.76	29	27		COAL-C-2 - Vitrinite bands, 1 cm, dull, black, core broken, claystone bands, 1 cm									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10224	BOX 3 CON'T									
	33.76	34.17	41	39		COAL C-3 - Very broken, platy									
	34.17	34.25	8	8		C-4 - Core broken									
	34.25	34.77	52	49		COAL-C-1 - Dull bands, 2 cm, vitrinite bands, 3 cm, core broken									
						BOX 4									
											34.5m				
	34.77	34.85	8	8	10225	COAL-C-3 - Thin vitrinite bands									
	34.85		18	17		Rock Loss									
		35.25	22	21		CLAYSTONE - Dark gray, black, coaly bands, core broken									
	35.25	35.50	25	24		COAL-C-1 - Vitrinite bands, 2 cm, dull bands, 3 cm									
	35.50	35.80	30	29		CLAYSTONE - Very carbonaceous, dark gray-black, thin coal bands, 3 cm									
	35.80	36.04	24	23		10226	Coal Loss								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10226 ↓	BOX 4 CON'T									
	36.04	36.26	22	21		COAL-C-2 - Very broken & powder, thin vitrinite bands									
						BOX 5									
											36m				
	36.26	36.65	39	37		COAL-C-3 - Vitrinite bands, 2 cm, dull inert bands, 2 cm									
	36.65	36.80	15	14		C-4									
	36.80	37.04	24	23		COAL-C-2 - vitrinite bands, 1 cm, dull bands ½ cm, core broken									
	37.04	37.39	35	33		COAL-C-3 - Inert bands, 5 cm, vitrinite bands, ½ cm									
	37.39	37.61	22	21		C-4									
						BOX 6									
											37.5m				
	37.61	37.95	34	32		COAL-C-2 - Vitrinite bands, 1 cm, 80% dull bands									
	37.95	37.99	4	4	C-4										

DRILL CORE LOG

HOLE No. QBD 8209

PAGE No. 3

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC./m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10226 ↑	BOX 6 CON'T									
	37.99	38.65	66	62		COAL-C-1 - Vitrinite bands, 3 cm. thin clay- stone bands, ½ cm									
	38.65	38.75	10		↑	CLAYSTONE - Dark gray, plant fragments along bedding									
21	38.75	39.02	27			SANDSTONE - Fine grain, light gray, dark gray laminated									
						BOX 7									
	39.02	39.12	10			As Above					39m				
	39.12	39.38	26			CLAYSTONE - Very carbonaceous, poorly laminated									
	39.38	40.11	73			CLAYSTONE - Very carbonaceous, core very broken, coal bands 3 cm									
	40.11	40.23	12			Rock Loss									
						BOX 8									
	40.23	41.03	80			As Above - Core broken					40.5m				

DRILL CORE LOG

HOLE No. QBD 8209

PAGE No. 4





B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
					10228 ↓						37m				
	36.40	36.83	43	34		CORING started at 36.83									
	36.83	38.37	154	123		COAL-C-1 - Vitrinite bands, 3 cm, semi-bright bands, solid core, inert bands									
	38.37	38.42	5	4		C-4 - Core broken									
	38.42	38.53	11	9		Rock Loss									
						BOX 2									
											38.5m				
	38.53	38.64	11	9		CLAYSTONE - Very carbonaceous, black									
	38.64	38.70	6	5		C-4 - Pyrite									
	38.70	38.76	6	5		Coal Loss									
	38.76	39.72	96	77	↑ COAL-C-1 - Core broken, vitrinite bands, 2 cm. semi-bright bands, 3 cm										
	39.72	39.84	12	10	Rock Loss										
	39.84	40.00	16		CLAYSTONE - Very carbonaceous, core broken & powder black										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 3									
											40m				
37	40.00	41.36	136			CLAYSTONE - As Above - dark gray, carbonaceous									
						BOX 4									
											41.5m				
	41.36	42.20	84			As Above - very carbonaceous at base									
					↓										
	42.20	42.32	12	10	10229	Coal Loss									
	42.32	42.73	41	33	↑	COAL-C-1 - Vitrinite bands dull Claystone bands, solid core									
					↓										
	42.73	42.91	18	14	10230	CLAYSTONE - Very carbonaceous black									
					↓										
					↑						43m				
	42.91	43.44	53	42	10231	As Above									
					↓										
	43.44	43.54	10	8	10231	Coal Loss									
					↑										
	43.54	43.72	18	14	10231	COAL-C-1 - 80% vitrinite									
					↓										
	43.72	43.80	8	6	10231	C-4									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10231	BOX 5 CON'T									
	43.80	44.34	54	43		COAL-C-1 - Vitrinite bands 3 cm. invert bands 1 cm. claystone bands									
						BOX 6									
											44.5m				
	44.34	44.47	13	10		COAL-C-1 - As before									
	44.47	44.53	6	5		C-4									
	44.53	44.82	29	23		CLAYSTONE - Very carbonaceous									
	44.82	44.97	15	12		Rock Loss									
	44.97	45.54	57	46		COAL-C-1 - 90% vitrinite. thin inert bands <del>x</del> 1cm									
	45.54	45.67	13	10		C-4									
	45.67	45.94	27	22		COAL-C-1									
	45.94	46.03	9	7		Coal Loss									
						BOX 7									
											46m				
	46.03	46.98	95			CLAYSTONE - very carbonaceous. coaly bands <3cm									

DRILL CORE LOG

HOLE No. QBD 8210

PAGE No. 3



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											19m				
21	19.87	21.25	138			SANDSTONE - fine grained, medium-gray laminated thin, dark gray claystone bands, minor carbonaceous material along bedding									
						BOX 2									
											20.5m				
16	21.25	22.69	144			CLAYSTONE - medium-dark gray, silty, thin sand- stone bands, >1 cm. laminated									
						BOX 3									
											22m				
21	22.69	23.70	101			CLAYSTONE - As above, poorly laminated									
	23.70	23.85	15	14	↓ 10232	COAL-C-1 - Vitrinite bands, core broken									
	23.85	23.92	7	7		CLAYSTONE - Very carbonaceous, dark gray									
	23.92	24.05	13	12		COAL-C-2 - Vitrinite bands 40%. > 5 cm. dull, metallic black bands > 2 cm. solid core									

DRILL CORE LOG

HOLE No. QBD 8211

PAGE No. 1

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10232	BOX 4									
											23.5m				
	24.05	24.44	39	36			COAL-C-2 - Dull metallic black, vitrinite bands >1 cm								
	24.44	24.72	28	26			COAL-C-3 - Dull metallic black, with inert bands >2 cm, vitrinite bands >5 cm								
	24.72	25.19	47	44			COAL-C-2 - Dull black with vitrinite bands >1cm inert bands >1 cm								
	25.19	25.24	5	5			C-4								
	25.24	25.44	20	19		COAL-C-2 - Vitrinite bands >2 cm, core broken									
						BOX 5									
										25m					
	25.44	25.55	11	10		COAL-C-3 - Dull metallic black									
	25.55	26.02	47	44		COAL-C-1 - Vitrinite bands >1 cm, inert bands >2cm									
	26.02	26.09	7	7		C-4 - COAL-C-3 mixed									
	26.09	26.19	10	9	10233	CLAYSTONE - Dark gray-black, very carbonaceous									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
					10233	BOX 5 CON'T									
	26.19	26.27	8	7		COAL-C-2 - Vitrinite bands >1 cm, dull metallic black									
	26.27	26.47	20	19		Coal Lost									
	26.47	26.58	11	10		CLAYSTONE - Very carbonaceous, dark gray-black core broken									
	26.58	26.68	10	9		Rock Loss									
	26.68	27.55	87	81	10234	Coal Loss									
	27.55	27.61	6	6		COAL-C-1 - Core broken									
	27.61	27.67	6	6		CLAYSTONE - Very carbonaceous, C-4ish									
	27.67	27.80	13	12		COAL-C-1 - 90% vitrinite bands									
	27.80	27.90	10	9		C-4 - Vitrinite bands >1 cm									
	27.90	27.97	7	7		COAL-C-1 - 90% vitrinite bands									
	27.97	28.03	6	7		COAL-C-2 - Dull metallic black luster									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10234 ↓	BOX 6									
											26.5m				
	28.03	28.39	36	34			COAL-C-2 - Dull metallic luster, vitrinite bands > 3 cm, white stain along fractures								
							C-4 - Vitrinite bands, massive								
	28.39	28.47	8	7			COAL-C-2 - Vitrinite bands >3 cm, dull metallic luster, core broken								
	28.47	28.88	41	38			C-4 - Massive								
	28.88	29.94	6	6			COAL-C-1 - 90% vitrinite bands, dull inert bands								
	28.94	29.43	49	46		↑	BOX 7								
										28m					
18	29.43	29.91	48			SANDSTONE - Very fine grained, medium-gray, light gray claystone bands, coaly rootlets									
	29.91	29.94	3			COAL-C-1 - Vitrinite bands									
	29.94	30.03	9			CLAYSTONE - very carbonaceous									
	30.03	30.06	3			COAL-C-2									

DRILL CORE LOG

HOLE No. QBD 8211

PAGE No. 4

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 7 CON'T									
	30.06	30.34	28			CLAYSTONE - Very carbonaceous, coal bands >2 cm core broken									
	30.34	30.39	5			COAL-C-3 - Dull metallic luster, core broken, thin vitrinite band									
						BOX 8									
	30.39	30.58	19			COAL-C-2 - Vitrinite bands, core broken					29.5m				
	30.58	30.70	12			CLAYSTONE - Very carbonaceous, core broken									
	30.70	30.88	18			COAL-C-2 - Vitrinite bands >3 cm									
	30.88	30.98	10			CLAYSTONE - Very carbonaceous									
	30.98	31.57	59	58	↓	COAL-C-1 - 85% vitrinite bands, 15% dull bands									
	31.57	31.78	21	20	↑	Coal Loss									
16	31.78	31.99	21			CLAYSTONE - Dark gray-black, carbonaceous material along bedding									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											32m				
	32.10	32.19	9			Rock Loss									
	32.19	32.40	21			CLAYSTONE - To clay: gray brown soft, very broken									
	32.40	32.52	12	10	↓ 10236 ↑	Coal Loss									
	32.52	32.87	35	28		COAL-C-1, C-2 - Very broken & powdered - no pieces bigger than 3 cm									
	32.87	33.80	93	75		COAL-C-1, C-2 - Broken & powdered pieces >10cm, vitrinite bands									
						BOX 2									
36	33.80	34.39	59			CLAYSTONE - Medium gray. silty, carbonaceous material along bedding, calcite fractures					34m				
						BOX 3									
											46m				
	46.15	46.98	83	74	↓ 10237	COAL-C-2 - Dull metallic black core broken to very broken - vitrinite bands >1 cm. coal very platy									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	it.	
					10237	BOX 3 CON'T									
	46.98	47.03	5	4		C-4									
	47.03	47.11	8	7		COAL-C-1 - Vitrinite bands shiney									
											47.5m				
							BOX 4								
	47.11	47.70	59	53		COAL-C-1 - Core broken, vitrinite bands > 2 cm, dull bands 1 cm									
	47.70	48.15	45	40		COAL-C-2 - Dull bands >2 cm, vitrinite bands >5cm core broken									
	48.15	48.23	8	7		Rock Loss									
	48.23	48.29	6	5		CLAYSTONE - Dark gray-black, very carbonaceous									
	48.29	48.43	14	12		Coal Loss									
	48.43	48.54	11	10	COAL-C-1 - Very broken, soft and powdered										
	48.54	48.77	23	20	Rock Loss										
					10238										

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10238 ↑	BOX 4 CON'T									
	48.77	48.95	18	16		CLAYSTONE - Silty, carbonaceous gray brown						49m			
					↓	BOX 5									
	48.95	50.40	145	129		COAL-C-2 - Broken & powdered, dull bands >2 cm vitrinite bands >1.5 cm									
	50.40	50.50	10	9	10239 ↑	Coal Loss									
						BOX 6						50.5m			
	50.50	51.80	130	116	↑	COAL-C-1 - Broken - very broken, vitrinite bands >3 cm, dull bands >1 cm, claystone bands >5 cm									
												52m			
	51.80	51.89	9			CLAYSTONE - Dark gray, carbonaceous material along bedding									
						BOX 7									
	51.89	52.05	16			CLAYSTONE - Dark gray, coaly rootlets upright									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From.	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 7 CON'T									
27°	52.05	52.25	20			SANDSTONE - Fine grained, medium gray, carbonaceous material along bedding									
	52.25	52.48	23			CLAYSTONE - Dark gray-brown, carbonaceous material along bedding									
	52.48	52.53	5			COAL-C-1 - 90% vitrinite									
	52.53	52.60	7			CLAYSTONE - Very carbonaceous, dark gray-black									
	52.60	52.65	5			COAL-C-1 - 90% vitrinite, well banded									
	52.65	53.16	51			CLAYSTONE - Dark gray - carbonaceous material along bedding - vitrinite bands >3cm core broken									
	53.16	53.48	32	29		Rock Loss									
	53.48	53.59	11	10	↓	COAL-C-1 - Vitrinite bands 80%. >2 cm core broken									
					10240	BOX 8					53.5m				
	53.59	53.68	9	8		COAL-C-1 - Vitrinite bands 85%, claystone bands >1 cm, core broken									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10240 ↑	BOX 8 CON'T									
	53.68	53.76	8	7		C-4									
	53.76	54.38	62	55		COAL-C-3 - Vitrinite bands 20% dull metallic bands 80%. core broken									
	54.38	54.60	22			COAL-C-1 - 90% vitrinite bands >3 cm. good core									
	54.60	54.65	5			CLAYSTONE - Dark gray, carbonaceous material along bedding									
						BOX 9									
28	54.65	54.81	16			CLAYSTONE - As above					55m				
	54.81	55.16	35			C-4 - Vitrinite band >3 cm, core broken									
						BOX 10									
22	55.16	56.54	138			CLAYSTONE - Dark-medium grain, silty, sandstone bands >5 cm, minor carbonaceous material									
					E.O.H.					58m					

DRILL CORE LOG

HOLE No. QBD 8212

PAGE No. 5



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10241	BOX 1									
											17m				
	17.58	17.89	31			CLAYSTONE - Gray, medium-dark, fissile, carbon- aceous material along bedding									
45	17.89	18.91	102			CLAYSTONE - Silty, medium gray, thin light gray siltstone laminations									
						BOX 2									
											18.5m				
46	18.91	20.06	115			As Above - soft									
						BOX 3									
											20m				
	20.06	20.17	11			As Above									
	20.17	20.49	32	22	↓ 10241	Coal Loss - C-3									
	20.49	20.95	46	32		Rock Loss - C-4									
	20.95	23.13	218	151		Coal Loss - C-1									
											23m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10241	BOX 4									
											23m				
	23.13	23.22	9	6			CLAYSTONE - Very carbonaceous, core broken, vitrinite bands								
	23.22	23.46	24	15			COAL-C-2 - Vitrinite bands, bright bands, core broken								
	23.46	23.54	8	6			CLAYSTONE - Very carbonaceous, core broken								
	23.54	23.91	37	26			COAL-C-1 - Core very broken, black, shiny bands 20% dull bands								
	23.91	24.06	15	10		COAL-C-1 - Solid core, semi dull metallic luster									
	24.06	24.62	56	39		COAL-C-2 - Fissile, core very broken, abundant vitrinite									
						BOX 5									
										24.5m					
	24.62	25.65	103	72		COAL-C-2, C-3 - Core broken, 85% vitrinite band >3' cm, 15% inert bands, dull gray									

DRILL CORE LOG

HOLE No. OBD 8213

PAGE No. 2

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 6									
											26m				
	25.65	26.49	84			CLAYSTONE - Very carbonaceous, C-4ish, vitrinite bands 2 cm, core very broken									
	26.49	26.54	15			CLAYSTONE - Medium grey, silty, core broken									
						BOX 7									
											42m				
	42.07	42.14	7			SANDSTONE - Medium grained, light grey, poorly laminated									
21	42.14	43.06	92			CLAYSTONE - Medium grey, carbonaceous thin sandstone, core broken at base									
					↓										
	43.06	43.72	66	59	10242	Coal Loss									
	43.72	44.13	41	37		COAL-C-1 - Vitrinite bands, core broken powdered									
					↑										
					↓										
						BOX 8									
											44m				
	44.13	44.47	34	30	10243	CLAYSTONE - Very carbonaceous, black, core broken									
	44.47	44.57	10	9		Rock Loss									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10243	BOX 8 CONT									
					↑ ↓										
	44.57	45.29	72	64	10244	COAL-C-1 - 80% vitrinite, dull bands, less ½ cm. core broken									
					↑ ↓										
	45.29	45.42	13	12		Coal Loss									
	45.42	45.47	5	4	10245	CLAYSTONE - dark gray, some carbonaceous material									
	45.47	45.78	31	28		Rock Loss									
						BOX 9									
											45.5m				
	45.78	45.90	12	11	↑	As Above									
					↓										
	45.90	46.78	88	78		COAL-C-2 - Vitrinite bands, less than 2 cm, dull bands less 1 cm									
					10246	BOX 10									
											47m				
	46.78	46.88	10	9		COAL-C-1 - 10 cm, 90% vitrinite									
	46.88	47.18	30	27		C-4 - Minor vitrinite bands, claystone bands less than 2 cm									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10246 ↑	BOX 10 CON'T									
32	47.18	47.40	22	20		COAL-C-3 - Core broken. claystone broken. less 1 cm. minor vitrinite bands broken									
	47.40	48.18	78	69		CLAYSTONE - Medium-dark gray. thin sandstone bands					48.5m				
						BOX 11					78m				
	79.14	80.10	96			CLAYSTONE - Dark gray black, poorly laminated. core broken at base									
	80.10	80.36	26	19	10247 ↓	COAL-C-3 - Dull gray black, core broken									
						BOX 12					79.5m				
	80.36	80.55	19	14		Rock Loss									
	80.55	80.82	27	20		CLAYSTONE - Dark gray, carbonaceous, material long bedding, core broken									
	80.82	81.96	114	85		COAL-C-1 - Core broken, thin vitrinite bands									

B C N	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10247 ↑	BOX 13									
												81m			
	81.96	82.50	54	40			COAL-C-1 - Core very broken; vitrinite bands, dull bands 2cm								
	82.50	82.65	15				SANDSTONE - Very fine grain; medium-dark grained rootlets								
	82.65	82.66	1				FAULT, SANDSTONE - brecciated abundant calcite								
42	82.66	83.32	66				SANDSTONE - As Before								
							BOX 14								
												82.5m			
	83.32	84.65	133				CLAYSTONE - carbonaceous, core bands 2cm, core broken								
	84.65	84.92	27				Rock Loss								
						BOX 15									
											84m				
	84.92	84.99	7			As Above									
	84.99	85.32	33			SILTSTONE - Medium-dark grey. thin calcite bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 15 CON'T									
	85.32	85.36	4			CLAYSTONE - Dark gray, core very broken									
	85.36	85.52	16	13		Rock Loss									
	85.52	86.06	54	43	↓	COAL-C-1 - Vitrinite bands, 3 cm, thin clayst bands, core broken									
					10248	BOX 16									
	86.06	86.50	44	35	↑	COAL-C-2 - Core very broken, vitrinite bands 2cm					85.5m				
38	86.50	87.34	84			CLAYSTONE - Medium-dark grained, thin carbonaceous bands									
						BOX 17									
45	87.34	88.05	71			SANDSTONE - Fine grain, large grained, medium grained laminated calcite stringers					87m				
	88.05	88.64	59			CLAYSTONE - Dull gray, siltstone bands									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 18									
											88.5m				
41	88.64	89.78	114			CLAYSTONE - Dark gray - medium grey, laminated carbonaceous material on bedding									
	89.78	90.20	42			SANDSTONE - Medium grained, medium gray, thin carbonaceous bands, calcite stringers									
						BOX 19									
	90.20	90.65	45			CLAYSTONE - Dark gray, poorly laminated					90m				
	90.65	91.37	72	54	↓	COAL-G-1 - Dull bands 1 cm, vitrinite band 2 cm core broken									
					↑	BOX 20									
	91.37	92.51	114			SANDSTONE - Medium grained, medium gray, dark gray, laminated plant fragments, calcite along fractures					91.75m				
						BOX 21									
											92.5m				
45	92.51	92.99	48			As Above									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.g.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 21 CON'T									
	92.99	93.82	83			CLAYSTONE - Very carbonaceous, dark gray to black, vitrinite bands 1 cm, core broken									
						BOX 22									
46	93.82	95.10	128			SANDSTONE - Fine grain, medium-dark gray, laminated calcite					94m				
						BOX 23									
	95.10	95.74	64			As Above					95.5m				
	95.74	96.50	76			CLAYSTONE - Dark gray to black, carbonaceous material along bedding									
						BOX 24									
	96.50	97.72	122			As above					97m				
						BOX 25									
	97.72	99.15	143			As Above					98.5m 100m				

DRILL CORE LOG

HOLE No. QBD 8213

PAGE No. 9

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
	24.07	25.92	185	160	10250 ↓       ↑	COAL NOT CORED									
						BOX 1									
											25.5m				
	25.92	26.08	16	14		C-4 - very broken									
	26.08	27.37	129	112		COAL-C-1 - Abundant vitrinite, core very broken									
						powdered base									
						BOX 2									
											27m				
	27.37	27.62	25	22		COAL-C-1 - Core broken, abundant vitrinite bands									
	27.62	28.64	102	88	COAL-C-3 - Core broken, vitrinite bands, thin										
					claystone 10cm										
					BOX 3										
										28.5m					
	28.64	28.70	6	5	COAL-C-1 - Abundant vitrinite										
	28.70	30.12	142		CLAYSTONE - Very carbonaceous, dark gray black,										
					vitrinite bands, core broken										
					BOX 4										
										30m					
30	30.12	31.20	108		SANDSTONE - Very fine grain, medium grey to dark,										
					gray claystone bands										

HOLE No. QBD 8214

PAGE No. 1

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 4 CON'T									
	44.62	45.39	77	65		Coal Loss - Not Cored - Hammered									
	45.39	45.68	29	24		Rock Loss - Not Cored - Hammered									
						BOX 5									
											45m				
	45.68	45.94	26	22		CLAYSTONE - Dark gray to black, carbonaceous									
	45.94	46.33	39	33	↓	COAL-C-1 - Abundant vitrinite bands 3 cm, solid core, thin clyst bands									
	46.33	46.61	28	23	10251	COAL-C-2 - Dull black, vitrinite bands ½ cm									
	46.61	46.96	35	29		COAL-C-1 - Vitrinite bands, 2' cm dull bands									
	46.96	47.06	10	8	↑	Coal Loss									
	47.06	47.18	12	10	10252	SILTSTONE - Dark gray black, carbonaceous									
						BOX 6									
											46.5m				
	47.18	47.30	12	10		As Above									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10252	BOX 6 CON'T									
	47.30	47.45	15	13	↑	Rock Loss									
	47.45	47.87	42	35	↓	COAL-C-1 - Abundant vitrinite, thin dull bands									
	47.87	47.96	9	7		COAL-C-3 - Thin claystone bands 1 cm									
	47.96	48.23	27	23	10253	COAL-C-1 - Abundant vitrinite									
	48.23	48.51	28	23		C-4 & carbonaceous, claystone									
	48.51	48.71	20	17		Coal & clyst mix, core broken									
	48.71	48.88	17	14	↑	Coal Loss, C-3, C-4									
						BOX 7									
	48.88	49.66	78			CLAYSTONE - Silstone, medium grey to dark gray laminated					48m				
39	49.66	50.26	60			SANDSTONE - Fine & medium grain, light to medium grey some carbonaceous material									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10254	BOX 1									
											21m				
	18.81	20.17	136			CLAYSTONE - Medium-dark gray, laminated, minor carbonaceous material along bedding core broken at base									
						BOX 2									
											22.5m				
	20.17	21.08	91			As Above - broken									
	21.08	21.42	34	32		COAL-C-1 - Semibright vitrinite bands < 1/2 cm Claystone bands < .3 cm, core broken									
	21.42	21.48	6	6	C-4 - Core broken										
	21.48	21.66	18	17	Rock Loss										
					BOX 3										
										24m					
	21.66	21.85	19	18	C-4										
	21.85	23.08	123	117	COAL-C-1 - Semibright to bright, vitrinite bands < 2 cm, solid core										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10254	BOX 4									
												25.5m			
	23.08	23.77	64	61			COAL-C-1 - Semibright to bright, thin claystone								
							bands < 1/2 cm, vitrinite bands < 3 cm,								
							good core								
	23.72	23.79	7	7			C-4 - Core broken, platy								
	23.79	23.88	9	9			Coal Loss								
	23.88	24.13	25	24			COAL-C-3 - Core very broken, platy								
	24.13	24.32	19	18			COAL-C-2 - Dull metallic black, thin vitrinite								
							bands								
	24.32	24.63	31	29			COAL-C-1 - Vitrinite bands < 2 cm. inert bands								
							< 1 cm. core broken								
							BOX 5								
												27m			
	24.63	25.08	45	43			COAL-C-1 - Vitrinite bands 2 cm. dull bands								
						1 cm									
	25.08	25.10	2	2		CLAYSTONE - Dark gray. very carbonaceous. core									
						broken									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10254 ↑	BOX 6									
											27.5m				
	25.10	25.26	16	15		COAL-C-1 - Fine vitrinite bands <1 cm, semi-									
						bright bands									
	25.26	25.30	4			C-4									
	25.30	25.48	18			CLAYSTONE - Very carbonaceous, vitrinite bands									
						< 1/2 cm									
18	25.48	26.09	61			SANDSTONE - Very fine grained, medium to dark									
					gray, dark gray claystone laminated										
					BOX 7										
										38m					
	38.44	38.66	22		Conglomerate clastic red quartz, chert, sedi-										
					mentary rock fragments, clastic range in size										
					1/2 cm to 1 cm										
	38.66	39.40	74		CLAYSTONE - Silty, dark gray to black, carbona-										
					ceous material on bedding										



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
						BOX 8										
											40m					
	39.40	39.68	28			As Before - conglomerate										
					10255											
	39.68	39.92	24	20		↓	Coal Loss									
	39.92	40.55	63	53			COAL-C-2 - Vitrinite bands <1 cm, core very broken, semibright									
	40.55	40.63	8	7			C-4									
	40.63	40.97	34	29			COAL-C-1 - Vitrinite bands <1 cm, semibright, core broken									
							BOX 9									
												43m				
	40.97	41.60	63	53			COAL-C-2 & C-3 - Core broken & powdered vitrinite bands in C-2									
	41.60	41.85	25	21		10256	CLAYSTONE - Vitrinite carbonaceous, core broken									
32	41.85	42.18	33	28	↑		SANDSTONE - very fine grain, dark gray, thin claystone laminated									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 9 CON'T									
	42.18	42.28	10	8	10257	COAL & CLAYSTONE C-2 - core broken,									
	42.28	42.91	63	53		Coal Lost									
						BOX 10									
	42.91	43.00	9	8		C-4					45.5m				
	43.00	43.44	44	37		COAL-C-3 - Vitrinite bands <2 cm. thin claystone bands < 1/2 cm, core broken									
	43.44	43.87	43			SILTSTONE - Dark gray massive					47m				
						BOX 11									
	67.52	67.87	35	33	10258	COAL-C-1 - Semibright vitrinite bands <1 cm thin claystone bands < 1/2 cm									
						BOX 12									
	67.87	67.97	10	9		C-4 - Semibright					70.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10258	BOX 12 CON'T									
	67.97	68.12	15	14		COAL-C-3 - Vitrinite bands									
	68.12	68.45	33	31		COAL-C-1 - Vitrinite bands < 1/2 cm. semibright, inert bands < 2 cm									
	68.45	68.48	3	3		C-4									
	68.48	68.88	40	37		COAL-C-2 - Vitrinite bands < 2 cm thin claystone bands < 1/2 cm. inert bands < 1 cm									
	68.88	68.97	9	8		CLAYSTONE - Very carbonaceous, core broken									
	68.97	69.12	15	14	Rock Loss C-4										
	69.12	69.38	26	24	10259	COAL-C-2 - Semibright thin vitrinite bands < 1 cm thin claystone bands									
	69.38	69.53	15	14	Rock Loss C-4										
	69.53	69.56	3	3	CLAYSTONE - Dark gray to black, very carbonaceous										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
						BOX 13										
											72m					
	69.56	71.00	14.4	134	↓  10260  ↑	COAL-C-2 - Semibright, thin vitrinite bands < 1 cm, inert bands 1 cm, solid core										
							BOX 14									
												73.5m				
	71.00	71.50	50	47			COAL-C-3 - Vitrinite bands ½ cm dull inert bands									
	71.50	71.80	30	28		COAL-C-1 - abundant vitrinite bands, thin clay- stone bands, core broken										
	71.80	72.29	49			SILTSTONE - Dark gray light gray sandstone laminated carbonaceous										
						BOX 15										
											75m					
21	72.29	72.82	53			CLAYSTONE - very carbonaceous, coal bands < 4 cm										
	72.82	73.02	20			COAL-C-3 - Vitrinite bands < ½ cm thin claystone bands < ½ cm										

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 15 CON'T									
	73.02	73.07	5			C-4									
	73.07	73.46	39			CLAYSTONE - Vitrinite carbonaceous, C-1 bands <1 cm									
	73.46	73.86	40			Rock Loss									
						BOX 16									
	73.86	74.20	34			CLAYSTONE - Silty carbonaceous					76.5m				
	74.20	74.48	28	27	↓	COAL-C-2 - Vitrinite bands <2 cm									
					10261										
	74.48	75.04	56	54	↑	COAL-C-1 - 80% vitirnite thin claystone bands									
	75.04	75.27	23			CLAYSTONE - Vitrinite carbonaceous dark gray									
						BOX 17									
											78m				
16	75.27	76.73	146			CLAYSTONE - Dark gray, medium grain sandstone bands, poorly laminated									
						E.O.H.					79.5m				

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. a. d. d. o. b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											16m				
	17.06	17.35	29	26	10262 ↓	Coal Loss									
	17.35	17.81	46	42		COAL-C-3 - Thin vitrinite bands, rust stain throughout, dull									
	17.81	18.22	41	37		COAL-C-1 - Abundant vitrinite bands <2 cm									
	18.22	18.70	48	44		COAL-C-2 - Dull vitrinite bands <1 cm, rust stain									
						BOX 2									
	18.70	19.36	66	60		COAL-C-1 - semibright vitrinite bands <1 cm dull inert bands <1 cm, minor rust stains					17.5m				
	19.36	19.59	23	21		Rock Loss - C-4									
	19.59	19.62	3	3		CLAYSTONE - very carbonaceous									
	19.62	19.73	11	10		Coal Lost									
	19.73	20.36	63	58		↑	COAL-C-1 - Vitrinite bands <2 cm, oily stain								

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 3									
											19m				
24	20.36	21.74	138			CLAYSTONE - medium grained, carbonaceous along bedding laminated									
						BOX 4									
											20.5m				
	21/84	22/-2	28			CLAYSTONE - Very carbonaceous									
	22.02	22.23	21			Rock Loss									
	22.23	22.58	35	32	↓	COAL-C-2 - Vitrinite bands < 3 cm. core broken									
					10263										
	22.58	22.75	17	16	↑	Coal Loss									
					↓										
	22.75	23.42	67	61	↓	CLAYSTONE - Very carbonaceous, dark gray to black									
					10264										
					↑	BOX 5									
											21m				
	23.42	23.94	52	48	↓	COAL-C-1 - 9% vitrinite, thin claystone bands < 1/2 cm									
					10265										
	23.94	24.00	6	5		CLAYSTONE									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10265 ↑	BOX 5 CONT									
	24.00	24.13	13	12		COAL-C-2 - Semibright thin vitrinite bands < 1/2 cm									
	24.13	24.19	6	5		CLAYSTONE - Very carbonaceous									
	24.19	24.65	46	42		COAL-C-2 - Semibright vitrinite bands < 2 cm thin claystone bands < .3 cm solid core									
						BOX 6						23.5m			
	24.65	25.29	64	58		COAL-C-2 - vitrinite bands < 2 cm claystone bands < 1 cm									
	25.29	26.00	71			CLAYSTONE - Very carbonaceous core soft broken									
						BOX 7						25m			
						As Above									
	26.00	26.12	12			SANDSTONE - very fine grain light gray - medium gray claystone laminated									





B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											20m				
	19.83	20.28	45			SANDSTONE - Very fine grain light gray thin claystone bands < 3 cm									
18	20.28	21.08	80			CLAYSTONE - Medium grey, thin, sandstone bands									
						BOX 2									
											21.5m				
	21.08	22.42	134			As Above									
						BOX 3									
											23m				
	22.42	22.56	14			As Above									
	22.56	22.74	18	17		Coal Loss									
	22.74	22.94	20	19	10266	COAL-C-1 - Vitrinite bands < 1/2 cm semibright bands core broken									
	22.94	23.09	15	14		Rock Loss									
	23.09	23.19	10	10		CLAYSTONE - Dark gray, carbonaceous									

DRILL CORE LOG

HOLE No. QBD 8217

PAGE No. 1

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
						BOX 3 CON'T										
	23.19	23.29	10	10	10266	COAL-C-3 - Dull Gray-Black thin claystone bands										
	23.29	23.56	27	26		COAL-C-1 - Vitrinite bands <2 cm inert bands 1 cm, thin claystone bands 3 cm										
	23.56	23.63	7	7		COAL-C-2 - Semi-metallic luster, hard										
	23.63	23.81	18	17		COAL-C-1 - Vitrinite bands <2 cm, semibright bands <1 cm										
	23.81	23.88	7	7		C-4 - Thin vitrinite bands										
	23.88	23.93	5	5		COAL-C-2 - Thin vitrinite bands .1 cm										
	23.93	24.23	30	29		Coal Loss										
	24.23	24.27	3	3		10267	C-4									
							BOX 4									
												24.5m				
	24.27	24.35	8	8	CLAYSTONE - very carbonaceous, thin coal											
	24.35	24.43	8	8	Rock Loss											

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.a.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10267	BOX 4 CON'T									
	24.43	24.67	24	23		COAL-C-1 - Abundant vitrinite thin inert bands									
	24.67	24.75	6	6		Coal Loss									
	24.73	24.87	14	13		Rock Loss									
	24.87	25.10	23	22		CLAYSTONE - Thin, coaly bands									
	25.10	25.21	11	10		COAL-C-1 - Abundant vitrinite									
	25.21	25.31	10	10	10268	COAL-C-2 - Semibright, thin vitrinite bands									
	25.31	25.34	3	3		C-4									
	25.34	25.44	10	10		COAL-C-1									
	25.44	25.47	3	3		CLAYSTONE									
	25.47	25.70	23	22		COAL-C-3 - dull, metallic gray, high inert									
	25.70	25.73	3	3		C-4									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r. q. d. d. o. b.	STR.	FRAC / m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10268 ↓	BOX 4 CON'T									
	25.73	25.92	19	18		COAL-C-1 - Vitrinite bands <1 cm, thin semi-bright, bands <2 cm, core broken									
						BOX 5									
	25.92	29.96	4	4		COAL-C-2 - Thin vitrinite bands <1/2 cm					26m				
	25.96	25.99	3	3		C-4									
	25.99	26.12	13	12		COAL-C-1									
	26.12	26.48	36	34		COAL-C-3 - metallic gray black									
	26.48	26.95	47	45		COAL-C-2 - Vitrinite bands <1 cm, claystone bands <1 cm, inert bands <2 cm, semi-bright, heavy									
						BOX 6									
	26.95	27.02	7	7		C-4					27.5m				
	27.02	27.85	83	80		COAL-C-1 - Vitrinite bands <2 cm, inert bands <1 cm, semibright, core broken at base									

DRILL CORE LOG

HOLE No. QBD 8217

PAGE No. 4

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS	
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.		
					10268 ↑	BOX 6 CON'T										
	27.85	28.05	20	19		C-4 - Claystone bands, platy										
						BOX 7										
	28.05	29.11	106	101		CLAYSTONE - very carbonaceous, C-1 bands, vitrinite bands <2 cm					29m					
	29.11	29.70	59	56		Rock Loss										
						BOX 8										
											30.5m					
	29.70	30.22	52	49		10269 ↓ ↑	COAL-C-1 - Vitrinite bands <2 cm, dull inert bands <1 cm, semibright solid core									
	30.22	30.28	6	6			CLAYSTONE - Very carbonaceous									
	30.28	30.61	33	32			COAL-C-1 - Core broken powder									
	30.61	30.82	21		CLAYSTONE - Very carbonaceous, core broken											
	30.82	30.99	17		CLAYSTONE - Dark gray, coaly bands, poorly laminated											



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 1									
											21m				
	20.96	22.35	139			CLAYSTONE - Dark gray with large gray sandstone bands									
						BOX 2									
											22.5m				
	22.35	22.71	36			As Above - core very broken									
	22.71	22.95	24	23	10270 ↓	COAL-C-1 - Broken & powdered									
	22.95	23.13	18	17		CLAYSTONE - very carbonaceous									
	22.75	23.13	38	36		Coal Loss									
	23.13	23.43	30	29		COAL-C-1 - Vitrinite bands <2 cm. semibright coal									
	23.43	23.53	10	10		COAL-C-2 - Semibright									
	23.53	23.57	4	4		C-4									
	23.57	23.60	3	3		COAL-C-3									



B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10270	BOX 3									
											24m				
	23.60	23.89	29	28			COAL-C-1 - Vitrinite bands <2 cm, inert bands ½ cm, semibright coal								
	23.89	23.92	3	3			C-4								
	23.92	24.30	38	36			COAL-C-1 - Abundant vitrinite, inert bands <½cm								
	24.30	24.50	20	19			CLAYSTONE - Very carbonaceous, dark gray black								
	24.50	24.53	3	3		C-4									
					10271										
	24.53	24.71	18	17			COAL-C-1 - Core broken, abundant vitrinite								
	24.71	24.80	9	9			CLAYSTONE - Very carbonaceous, dark gray black								
					10272										
	24.80	24.83	3	3			COAL-C-3								
							BOX 4								
											25.5m				
	24.83	24.88	5	5		COAL-C-3									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
					10272	BOX 4 CON'T									
	24.88	25.07	19	18		COAL-C-2 - Thin vitrinite bands, dull gray black, inert, core broken									
	25.07	25.31	24	23		COAL-C-2									
	25.31	25.52	21	20		COAL-C-3 - Dull metallic gray black									
	25.52	25.87	35	33		COAL-C-2 - Thin vitrinite bands semibright									
	25.87	26.13	26	25		COAL-C-3 - Very hard, dull metallic gray black									
						BOX 5									
	26.13	26.22	9	9		COAL-C-3 - Dull, very hard						27m			
	26.22	26.41	19	18		COAL-C-1 -Vitrinite bands <1 cm, semibright bands < 2 cm									
	26.41	26.47	6	6		C-4									
	26.47	26.87	40	38		COAL-C-1 - Core broken, 90% vitrinite									
	26.87	27.70	83	79		Coal Loss									

B C N.	UNIT		THICKNESS		SAMPLE NO.	LITHOLOGY DESCRIPTION					MARKER rec. r.q.d. d.o.b.	STR.	FRAC/m		FRACTURE TYPE AND CHARACTERISTICS
	From	To	Apparent	True		Strat. Lithology	Grain Size	Fresh Colour	Bedding Charact.	Other Sed. Charact.			bd.	jt.	
						BOX 5 CON'T									
	27.70	28.00	30	29		CLAYSTONE - Dark gray, sandstone bands, carbonaceous									
						BOX 6									
											28.5m				
	28.00	28.10	10	10		As Above									
	28.10	29.05	95	91		CLAYSTONE - Very carbonaceous, black, core broken									
	29.05	29.11	6	6		COAL-C-1									
						BOX 7									
											30m				
	29.11	29.52	41	39		COAL-C-1 - Core broken, vitrinite bands									
	29.52	29.95	43	41		Coal Loss *Thickness for J <sub>3</sub> from QBR 8112									
	29.95	30.01	6			CLAYSTONE - Dark gray black, very carbonaceous									
						BOX 8									
											31.5m				
17	30.01	31.20	119			As Above - Silky towards base									
											32m				
						E.O.H.									

↓  
10273  
↑

PR-QUINTETTE B2(4)A

BOOK 12

616



P. O. Box 1500  
Tumbler Ridge, B.C., Canada  
V0C 2W0

Administration Building/Process Plant  
(604) 242-3221

Mine Office/McConkey Service Complex  
(604)242-3211

Alec Matheson  
Geological Branch  
Ministry of Energy Mines & Petroleum Resources  
Victoria, BC  
V8V 3A3

Dear Alec:

Enclosed are single copies of the summary sheets from QBD8213 through 8218 from the Shikano Pit area. These are to replace the copies that are not in your copy of Quintette's 1982 Geological Report as per your request.

Regards,

QUINTETTE COAL LIMITED

A handwritten signature in cursive script that reads "Dave".

D. Johnson  
Geologist

DJ/dam  
cc: M.R. Pennock

Enclosures

LOG NO:	87.3.30	U 1
ACTION:	Alex	
FILE NO:		













