



02 - Burnt River & 2015/1A

BOREHOLE BR-1
 CLIENT Brameda Resources

AREA Burnt River
 COUNTRY Canada
 DATE LOGGED 30/9/78

DEPTH SCALE 1:200
 1 of 4 LOGS

COAL

LITHOLOGY

LOG

LOG SUITE:
 GAMMA RAY
 L.S. DENSITY
 CALIPER

SONDE TYPE:
 COAL
 COMBINATION
 SONDE

BOREHOLE DATA	
PERMANENT DATUM	Ground Level
ELEVATION OF P.O.	
MEASUREMENTS FROM	B.P.B. DRILLER
DEPTH REACHED	C.L.S. 165.0m
CASING SHOE	5 ft.
BITSIZES	1 1 1/4 TO 1 1/2 TO 2 TO 3 TO 4 TO 5 TO
CASING SIZES	1 3/4 TO 4 TO 2 TO
FLUID DATA	
NATURE	QUIK-Set
SG	
LEVEL	
VISCOSITY	
Rm at meas. temp	
B.H.T.	
OPERATION DATA	
FIRST READING	51m
LAST READING	0
INTERVAL LOGGED	51m
UNIT-TRUCK No	21
ENGINEER	R. Bishop
WITNESS	

488

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE													
LOG	EQUIPMENT			TAPING			PANEL		CAL COEFF	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT or REPLAY	SPEED	T.C SECS		NORM	FROM	TO	
GAMMA RAY	110	M5852	3	Y	9	D	9	1	1.67	50	0	50m	Y
L.S. DENSITY			42	Y	9	D	9	1/3	7.20	51	1	50m	Y
CALIPER				Y	9	R	9	1/3	-	51	1	50m	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)		
FROM	23	INTERVAL TOTAL
TO	6	
INTERVAL	17m	

ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			

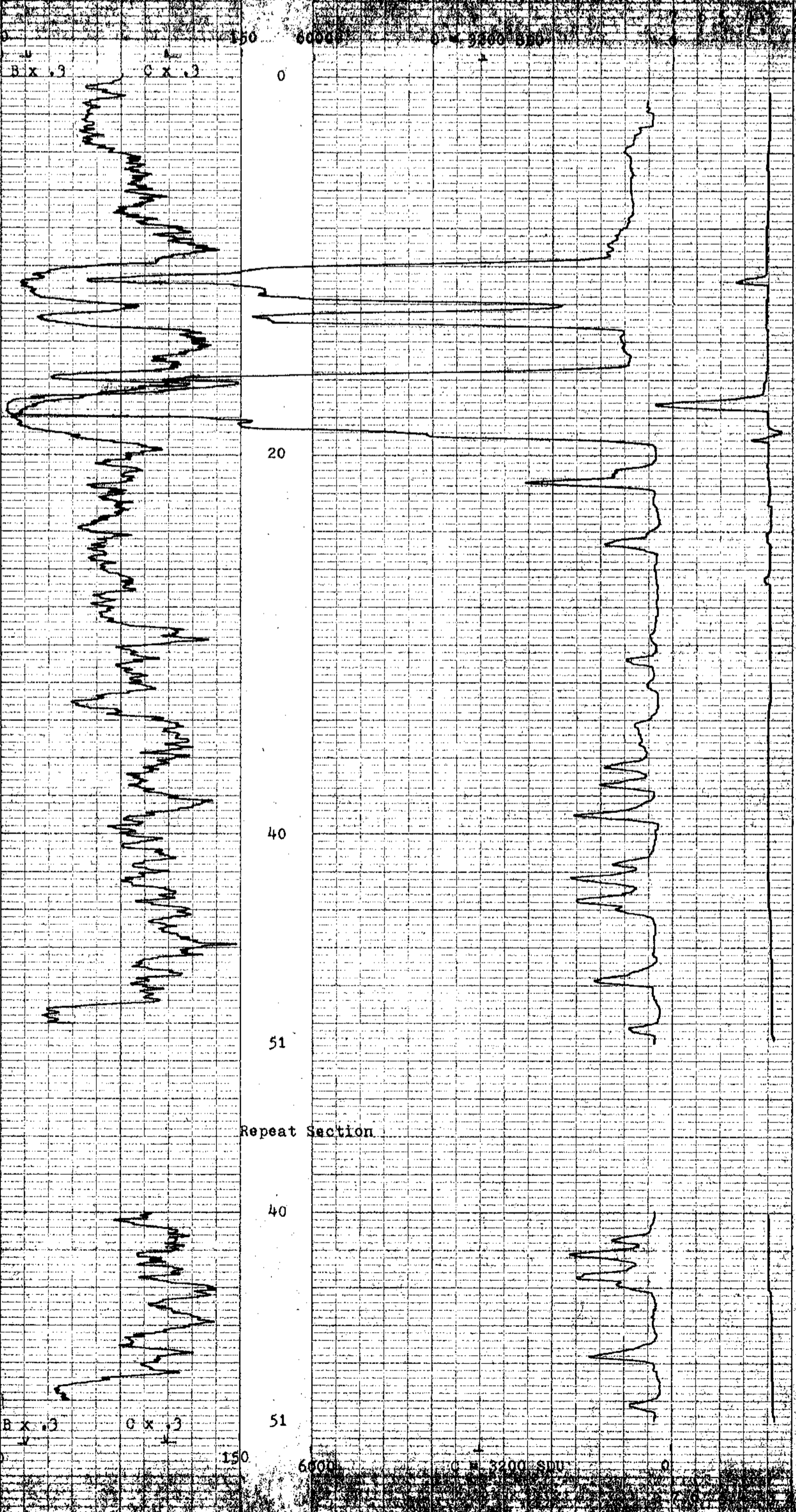
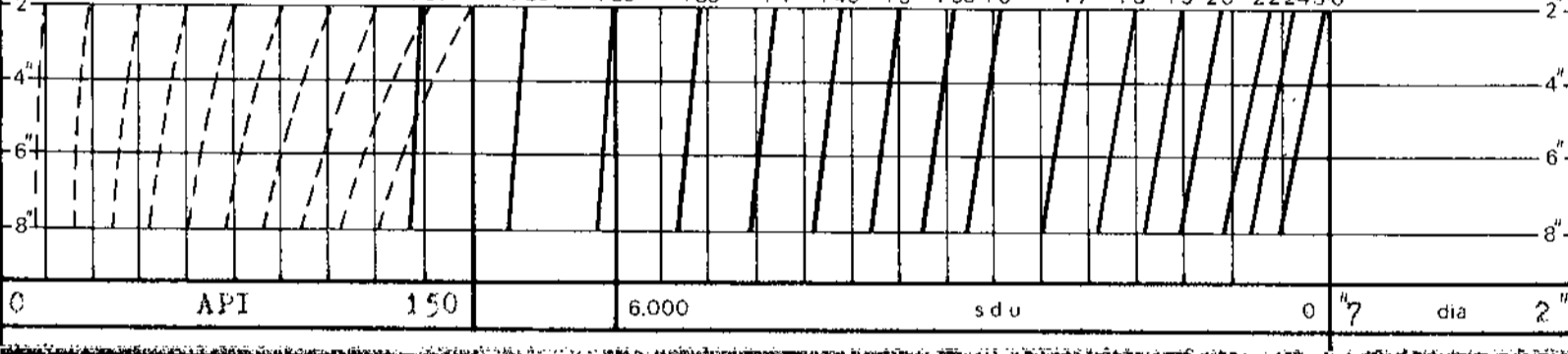
B P B COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 3	VALUE 300@ 2" DIAM	JIG CAL DATE 28/8/78	JIG VALUE 200	SDU@ 1.4 g/cm ³	7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE	3.3	JIG No. 42	SPAN 6000	NORM SDU CPS = 7.20	2 ins 490 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE BR-1 AREA Burnt River
 CLIENT Brameda Resources COUNTRY Canada

COAL LITHOLOGY LOG



22-Burnt River 78(3)A

BOREHOLE BR-1
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

DATE LOGGED 30/9/98

DEPTH SCALE
1:20
2 OF 4 LOGS

COAL QUALITY LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE
SIDEWALL POSITION
LOG TACING LOG RECORD SPEED LOG PANEL CASE
GAMMA RAY TARD SPEED HELIX 2 2 1.67
L.S. DENSITY Y R 2 1 7.2d
SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

SONDE TYPE:
COAL COMBINATION SONDE
LOG SUITE:
GAMMA RAY
L.S. DENSITY

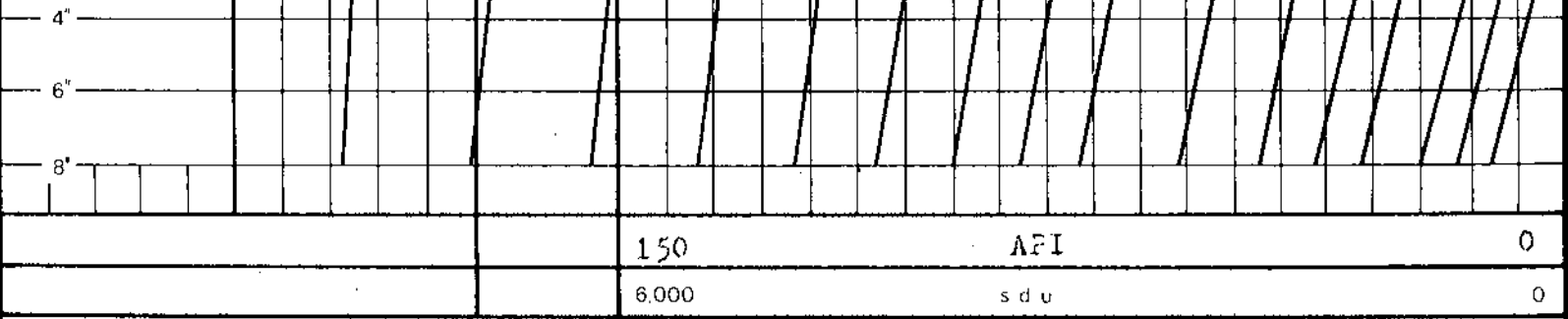
COAL QUALITY LOG INTERVALS
FROM 23
TO 6
INTERVAL 17m
FROM
TO
INTERVAL
TO
REMARKS

488

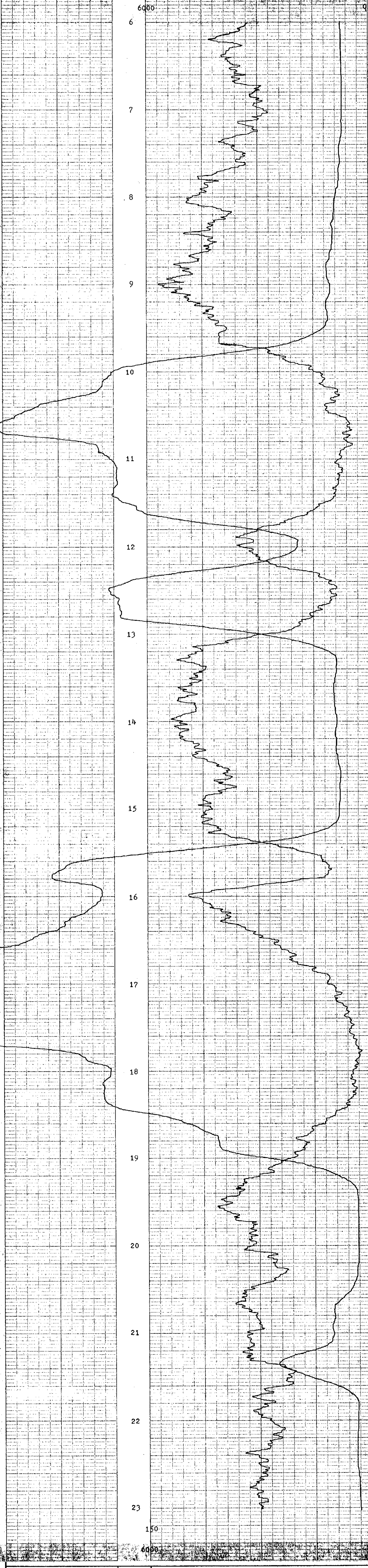
B P B COAL QUALITY LOG

DEPTH	GAMMA RAY
	COAL BULK DENSITY

HOLE SIZE CORRECTION DATA



150 API 0
6000 s d u 0



6000 s d u 0
150 API 0

DEPTH	GAMMA RAY
	COAL BULK DENSITY



BOREHOLE BR-1
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

COAL QUALITY LOG

MT 88027 R

12 - Burnt River 78 (S) A



BOREHOLE BR-1
 CLIENT Brameda Resources

AREA Burnt River
 COUNTRY Canada
 DATE LOGGED 30/9/78

DEPTH SCALE
 1:20
 3. of 4 LOGS

SEAM THICKNESS LOG

SEAM THICKNESS LOG INTERVALS

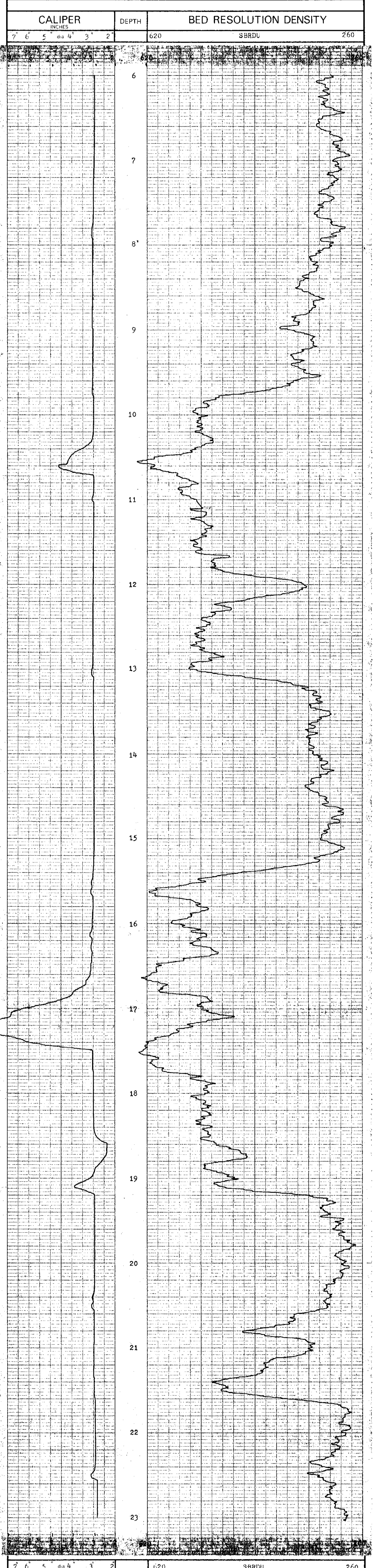
SONDE TYPE:
 COAL COMBINATION
 SONDE

LOG SUITE:
 CALIPER
 BR DENSITY

LOG TAPPING PANEL COAL
 LOG RECORDING SPEED SEC NORMAL
 LABEL SPEED RELAY SEC
 CALIPER Y 2 R 2 1 -
 BR DENSITY Y 2 R 2 1 .725

BOREHOLE DATA REFER TO LITHOLOGY LOG
 OPERATION DATA REFER TO LITHOLOGY LOG
 EQUIPMENT AND RECORDING DATA
 COAL COMBINATION SONDE

B P B SEAM THICKNESS LOG



CALIPER INCHES		DEPTH	BED RESOLUTION DENSITY	
7"	6" dia	620	SBRDU	260



BOREHOLE BR-1
 CLIENT Brameda Resources

AREA Burnt River
 COUNTRY Canada

SEAM THICKNESS LOG

488

Dr - Burnt River (3)A



NEUTRON-NEUTRON LOG

COMPANY Brameda Resources
BOREHOLE BR-1
STATE B.C. COUNTRY Canada

Permanent Datum 1 1,200 1
Log measured from Ground Level Ground Level Elev 1 Ft. 1
Drilling measured from Ground Level Ft. above 1 P.D.

Run No 1
Date 30/9/78
First Reading 51.6m
Last Reading 0
Interval Measured 51.6m
Casing BFB
Casing Driller
Depth Reached

Bottom Driller REFER TO LITHOLOGY LOG
Mud Nature
S.G. Viscosity
Bit Size 1 10 10
2 10 10
3 10 10

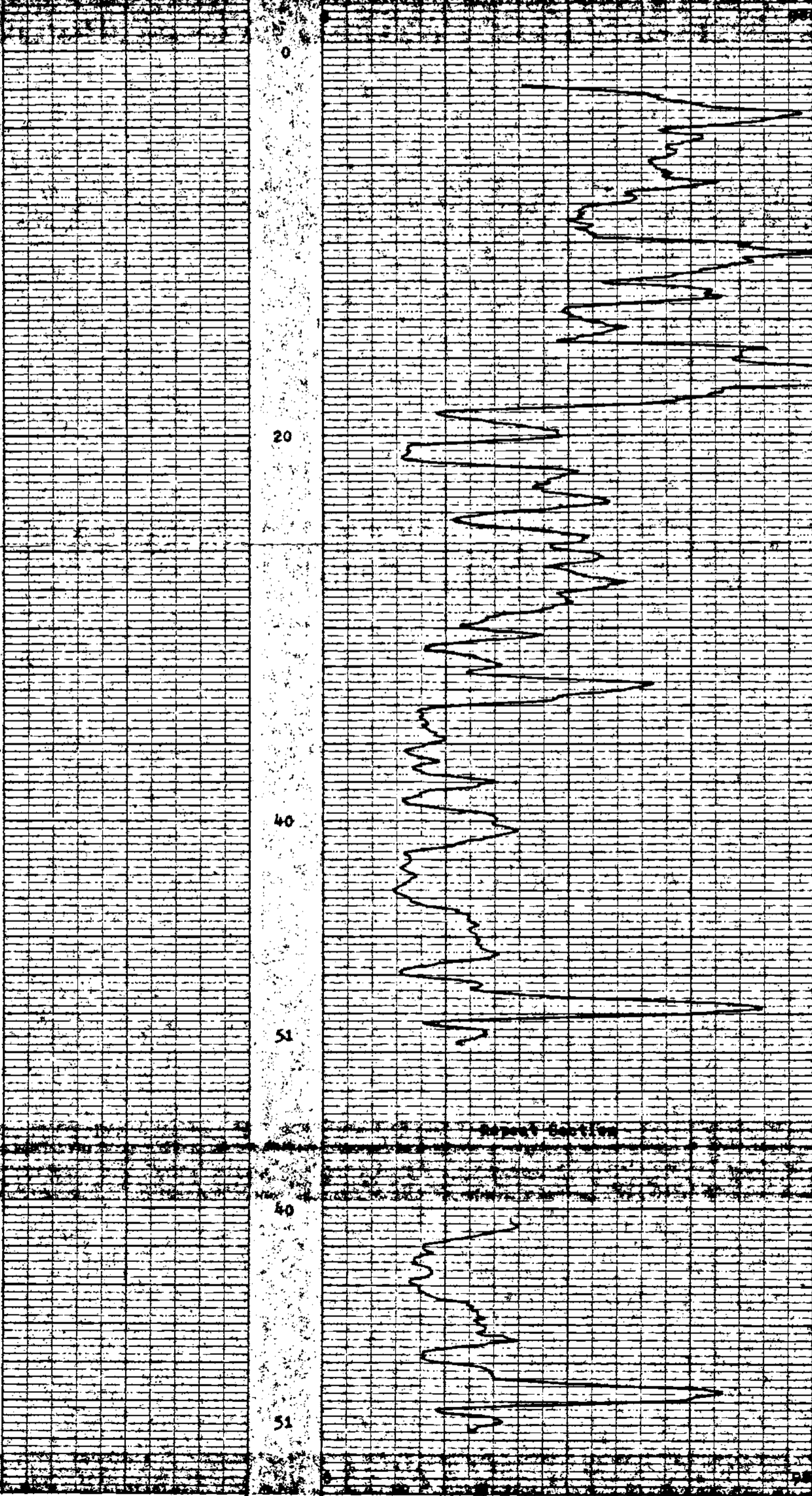
Casing Size 1 10 10 10
2 10 10 10
Rm @ Meas Temp 10 10 10 10
Rmf @ Meas Temp 10 10 10 10
Rmc @ Meas Temp 10 10 10 10
BHT
Operating Time
Tuck No
Recorded By
Checked By

488

REMARKS

Changes in Mud Type or Additional Samples			Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down	
Depth - Driller						
Type Fluid in Hole						
Dens.	Visc.					
ph	Fluid Loss	mi				
Source of Sample			Equipment Data			
Rm	@ Meas Temp	@ °F	@ °F	Run No.	Tool Type	Tool Position
Rmf	@ Meas Temp	@ °F	@ °F			Other
Rmc	@ Meas Temp	@ °F	@ °F			
Source: Rmf		Rmc				
Rm	@ BHT	@ °F	@ °F			
Rmf	@ BHT	@ °F	@ °F			
Rmc	@ BHT	@ °F	@ °F			
Logging Data						
Log	Depths	Speed	T.C.	Norm	Sonde No.	Source Number
	From To					
N-N	51.6m 0	9	1	0.81	81	N2479

DEPTHS	NEUTRON-NEUTRON	
	0	980



DEPTHS	NEUTRON-NEUTRON	
	0	980

COMPANY Brameda Resources
BOREHOLE BR-1
FIELD Burnt River
COUNTY _____ STATE B.C.



Dr. Burnt River 71/31A

BOREHOLE BR-2
CLIENT Bramada Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE 1:500
1 of 4 LOGS

COAL BOREHOLE DATA
PERMANENT DATUM Ground Level
ELEVATION OF P.D. B.P.B. DRILLER G.L.L.
TASIS MARKS FROM G.L.L. 177.0m
DEPTH REACHED 177.0m
CASING SHOE 5ft.
BIT SIZES 1 1/2 TO 1 1/4 2 TO 1 1/2
3 TO 1 1/4 4 TO 1 1/2
CASING SIZES 1 3/4 TO 5"

LITHOLOGY LOG
FLUID DATA
NATURE Quik-Gel
LEVEL 4.5m
VISCOSITY
Rm at 100 rpm

SONDE TYPE: COAL
COMBINATION SONDE
LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

OPERATION DATA
FIRST READING 175m
LAST READING 0
INTERVAL LOGGED 175m
UNIT-TRUCK No 21
ENGINEER R. S. SHOP
WITNESS

488

EQUIPMENT AND RECORDING DATA

LOG	EQUIPMENT			TAPING			PANEL		CAL COEFF	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT/REPLAY	SPEED	T.C. SECS		NORM	FROM	TO	
GAMMA RAY	110		3	Y	9	D	9	1	1.67	175	0	175m	Y
L.S. DENSITY		M5852	42	Y	9	D	9	1/3	7.20	176	1	175m	Y
CALIPER	SIDEWALL POSITION			Y	9	R	9	1/3	-	176	1	175m	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)					INTERVAL TOTAL
FROM	TO	SONDE	LOG	INTERVAL	
111	84	60	25		
101	80	55	22		
10	4	5	3		

ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			

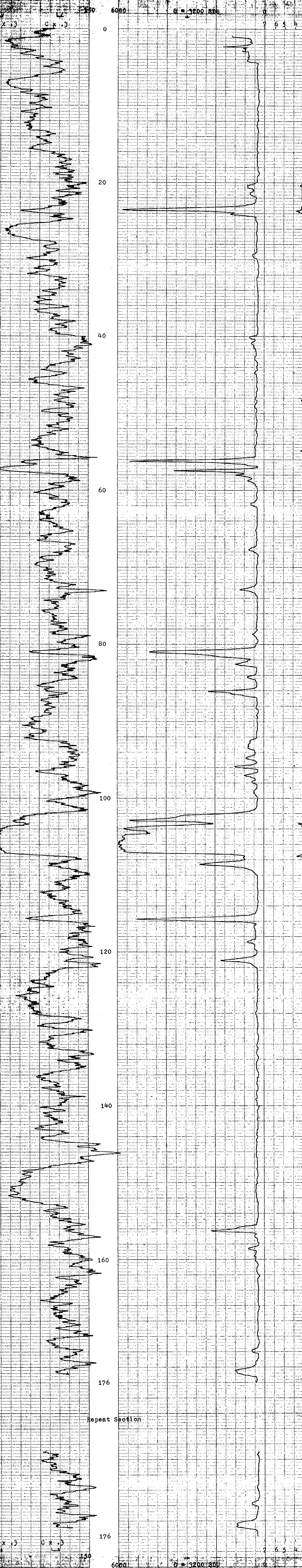
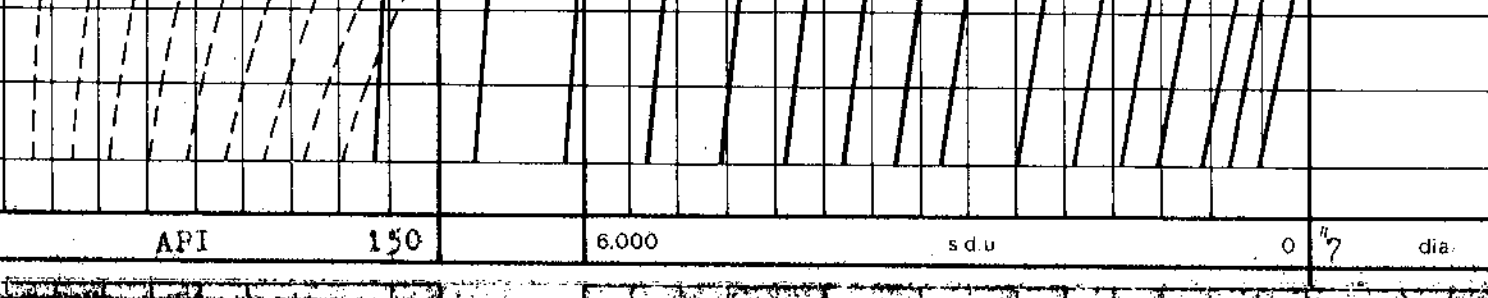
B P B COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No 3	VALU@ 2" DIAM	JIG CAL DATE 28/8/78	JIG VALU@ 200	SOU@ 1.48	7 ins	955 cps	
JIG MARK SHOWN AT ABOVE VALUE	3.33	JIG No 42	SPAN 6000	NORM	SOU CPS = 7.20	2 ins	490 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA



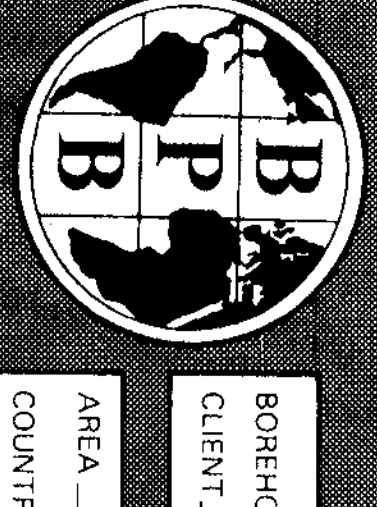
0	API	150	6.000	s.d.u.	0	7	dia.	2
GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER					
		g/cm ³	INCHES					



BOREHOLE BR-2 AREA Burnt River
CLIENT Bramada Resources COUNTRY Canada

COAL LITHOLOGY LOG

Dr. Brent River TR (B)A.



BOREHOLE BR-2
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE
1:20
2 OF 4 LOGS

COAL QUALITY LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SOURCE

LOG TAPPING SIDEWALL POSITION
LOG SPEED PANEL COILS
GAMA V 2 R 2 1.57
LS DENSITY 2 2 1 7.20
SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

SONDE TYPE: COAL QUALITY LOG INTERVALS
COAL COMBINATION SONDE
FROM 111 64 50 25
TO 101 60 55 22
INTERVAL 10 4 5

LOG SUITE: GAMMA RAY
L.S. DENSITY
REMARKS

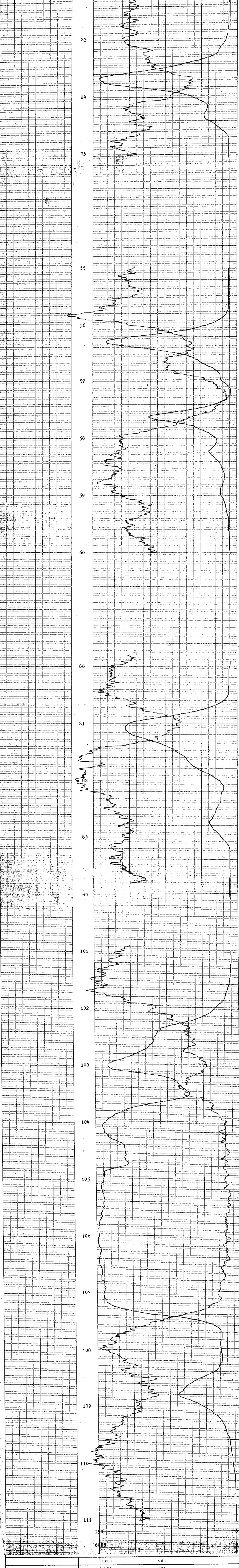
488

B P B COAL QUALITY LOG

DEPTH	GAMMA RAY	
	COAL BULK DENSITY	g/cm ³

HOLE SIZE CORRECTION DATA

2'	1.2	1.26	1.3	1.35	1.4	1.45	1.5	1.55	1.6	1.7	1.8	1.9	2.0	2.2	2.4	2.6	3.0
4'																	
6'																	
8'																	
		1.50							API								0
		6000							s d u								0



	6000		s d u	0
	1.50		API	0
			COAL BULK DENSITY	g/cm ³
DEPTH	GAMMA RAY			



BOREHOLE BR-2
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada

COAL QUALITY LOG

12 - BURNT RIVER 7/5/78



BOREHOLE BR-2
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE
1:120

3' 4' 0' 8'

BOREHOLE DATA REFER TO LITHOLOGY LOG

OPERATION DATA REFER TO LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SOURCE: SIDEWALL POSITION

LOG LOG RECORDING SPEED SECS NORMAL
TAPING PLANT
CALIPER Y 2 R 2 1
BR DENSITY Y 2 R 2 1 .725

SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG INTERVALS

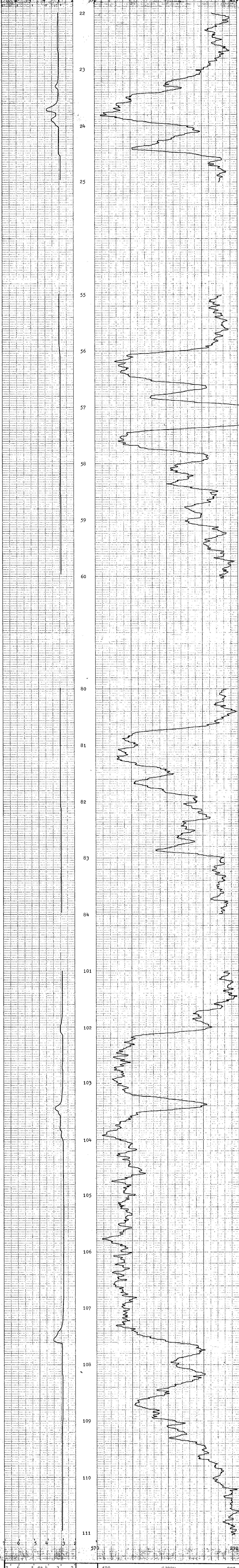
COAL COMBINATION SONDE

LOG SUITE:
CALIPER
BR DENSITY

FROM	11	84	60	25
TO	11	30	55	22
INTERVAL	10	4	5	3
FROM				
TO				
INTERVAL				
TOTAL				
REMARKS				

488

B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
7" 6" 5" dia 4" 3" 2"	570	SBRDU 270



BOREHOLE BR-2
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada

SEAM THICKNESS LOG

Pr - BENT LINE 7813A



NEUTRON-NEUTRON LOG

COMPANY Barabada Resources

BOREHOLE 35-2

STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m.
 Log measured from _____ Ground Level _____ m. above P.D.
 Drilling measured from _____ Ground Level _____ m. above P.D.

GRU REF: E _____ N _____ R _____

Run No. _____ Depth-Base _____ 1 1200

Date 29/9/78 First Reading 175m

Last Reading _____ Interval Meas. Int. _____ 0

Casing BHB _____ Interval Meas. Int. _____ 176m

Casing Depth _____

Depth Reference REFER TO LITHOLOGY LOG

Bottom Driller _____ Mud Name _____

SG _____ Viscosity _____

Bit Size 1 _____ 10 _____ 12 _____

2 _____ 10 _____ 10 _____

Casing Size 1 _____ 10 _____ 12 _____

2 _____ 10 _____ 10 _____

Fm @ Meas Temp _____ @ _____ @ _____

Fm @ Meas Temp _____ @ _____ @ _____

Fm @ Meas Temp _____ @ _____ @ _____

Operating Time _____
 Truck No. _____
 Recorded By _____
 Witness _____

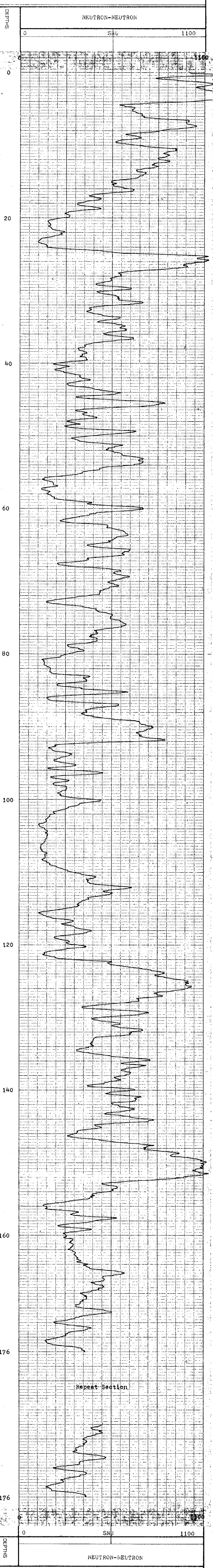
488

REMARKS

Changes in Mud Type or Additional Samples		Type Log	Depth	Scale Changes	
Date	Sample No.			Scale Up Hole	Scale Down
Depth - Driller					
Type Fluid in Hole					
Dens.	Visc				
ph	Fluid Loss				
Source of Sample					
Rm @ Meas Temp					
Rmf @ Meas Temp					
Rmc @ Meas Temp					
Source: Rmf	Rmc				
Rm @ BHT					
Rmf @ BHT					
Rmc @ BHT					

Equipment Data						
Run No.	Tool Type	Tool Position	Other	Log	Speed	T.C.

Logging Data						
Log	Depths	Speed	T.C.	Norm.	Source No.	Source No.
	From	To				
A-N	176	0	9	1	0.81	81



COMPANY	<u>Barabada Resources</u>
BOREHOLE	<u>35-2</u>
STATE	<u>B.C.</u>
COUNTRY	<u>Canada</u>



Dr. Burnt River 791329.

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

SONDE TYPE:
COAL
COMBINATION
SONDE

COAL
LITHOLOGY
LOG

OPERATION DATA
FIRST READING 77m
LAST READING 0
INTERVAL LOGGED 77m
UNIT - TRUCK NO. 21
ENGINEER R. Bistod
WITNESS

FLUID DATA
NATURE
SG
LEVEL
VISCOSITY
Rim at meas. temp.
BHT

BOREHOLE DATA
PERMANENT DATUM Ground Level
ELEVATION OF P.D.
VEASHERMAN FROM G.L.
DEPTH REACHED 78.1m
CASING SHOE 78.3m
BIT SIZES 1 INQ TO TD 2 TO TO
3 TO TO 4 TO TO
CASING SIZES 1 3/4" TO 5" 2 TO TO

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78
DEPTH SCALE 1:200
1 OF 4 LOGS

BOREHOLE BR-4
CLIENT Brameda Resources

EQUIPMENT AND RECORDING DATA

LOG	EQUIPMENT			TAPING			PANEL			CAL COEFF	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT REPLAY	SPEED	T.C. SECS	NORM		FROM	TO	INTERVAL	
GAMMA RAY	110		3	Y	9	D	9	1	1.67		76	0	76m	Y
L.S. DENSITY		M5852	42	Y	9	D	9	1/3	7.20		77	1	76m	Y
CALIPER		SIDEWALL POSITION		Y	9	R	9	1/3	-		77	1	76m	Y

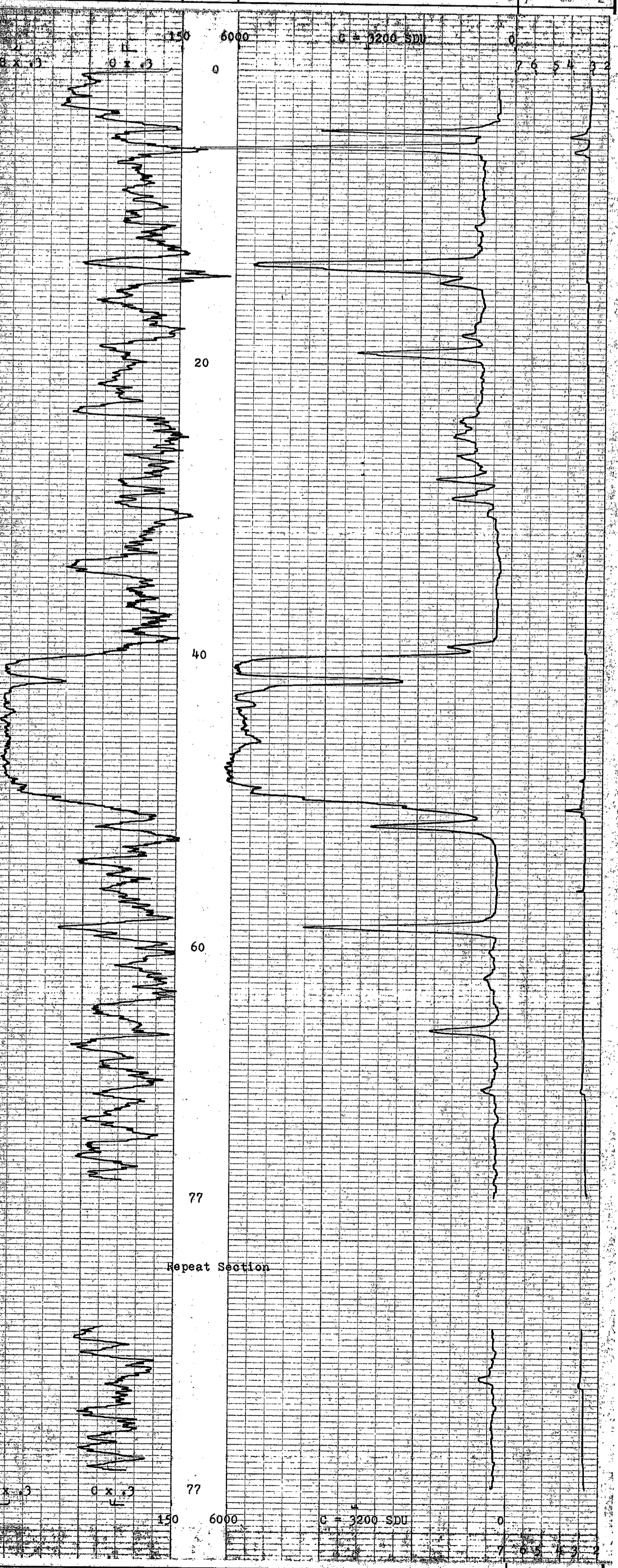
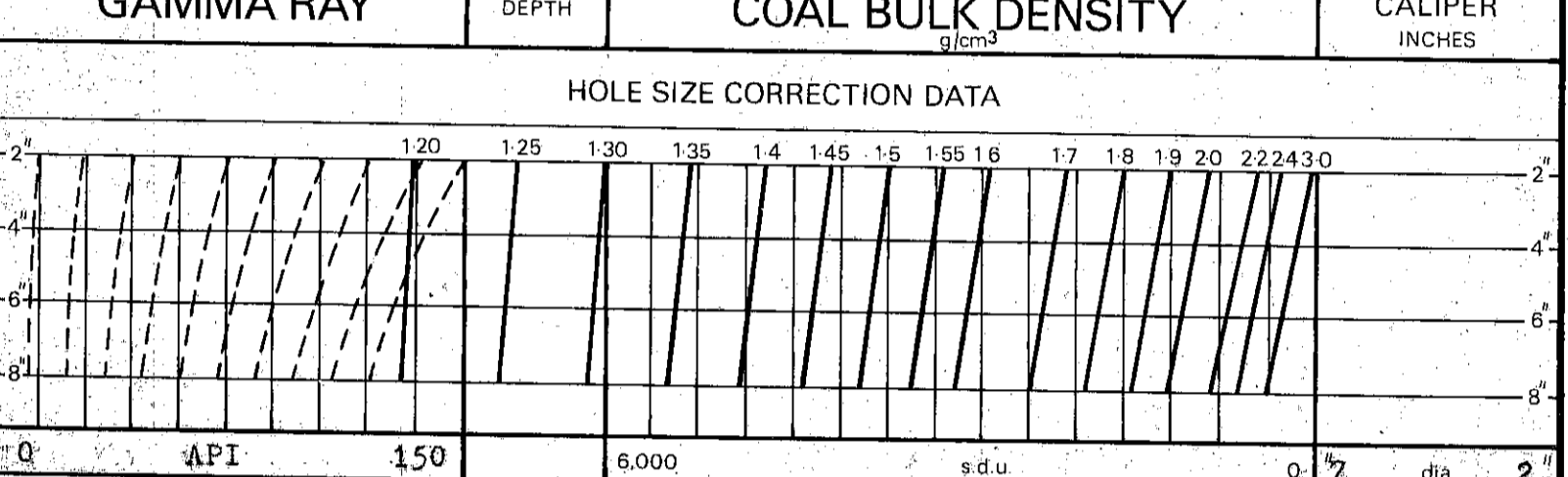
COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)

FROM	53	16	INTERVAL TOTAL
TO	38	12	
INTERVAL	15	4	

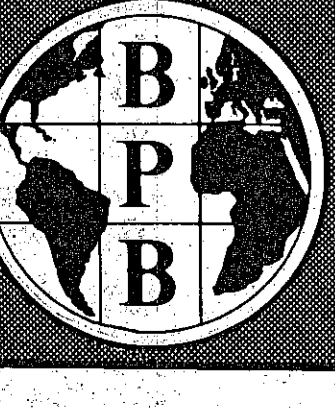
ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			

B P B COAL LITHOLOGY LOG
CALIBRATION DATA

JIG No. 3	VALUE 30@ 2" DIAM	JIG CAL. DATE 28/8/67	JIG VALUE 3200 DU @ 1.48m ³	7 ins 955 cps	
JIG MARK SHOWN AT ABOVE VALUE 3.33		JIG No. 42	SPAN 6000	NORM SDU CPS = 7.20	2 ins 490 cps



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE BR-4
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
COAL LITHOLOGY LOG



Re. Burnt River 78 (3) A.

BOREHOLE BR-4
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE 1:20
2 OF 4 LOGS

COAL QUALITY LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA

SONDE TYPE: COAL
COMBINATION SONDE
LOG SUITE: GAMMA RAY
L.S. DENSITY

LOG	TAPPING	PANEL	DATE
GAMMA	LOG	RECORD	1.68
RAY	2	2	1.68
L.S. DENSITY	1	2	1.729

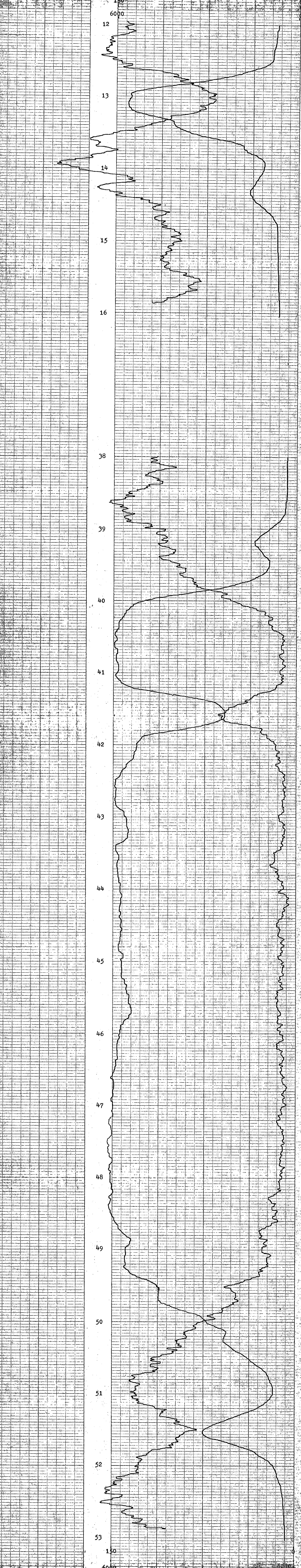
B P B COAL QUALITY LOG

DEPTH
GAMMA RAY
COAL BULK DENSITY g/cm^3

HOLE SIZE CORRECTION DATA

2"	1.2	1.25	1.3	1.35	1.4	1.45	1.5	1.55	1.6	1.7	1.8	1.9	2.0	2.2	2.4	3.0
4"																
6"																
8"																

150 API 0
6,000 s d u 0

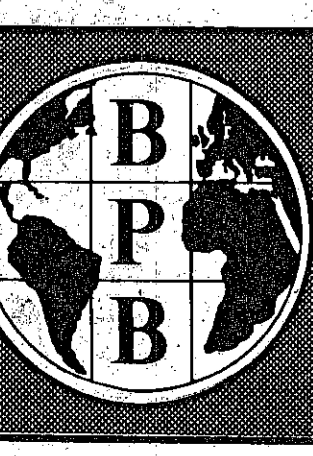


6,000 s d u 0
150 API 0

DEPTH
GAMMA RAY
COAL BULK DENSITY g/cm^3

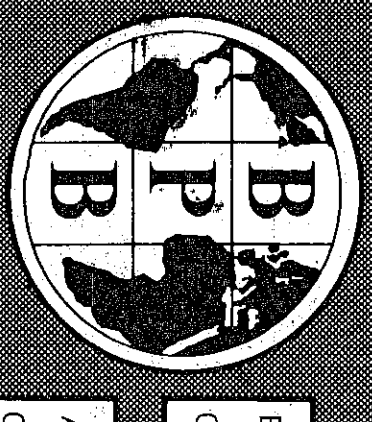
BOREHOLE BR-4
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada

COAL QUALITY LOG



488

7th Street, Burnt River 28/7/78



BOREHOLE BR-4
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE
1:20
3.0 - 4. LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG

EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE: SIDEWALL POSITION

LOG TAPPING PANEL COAL
LOG SPEED RELAY SPEED LOG NORM
CALIPER Y 2 R 2 1
BR DENSITY Y 2 R 2 1 .725

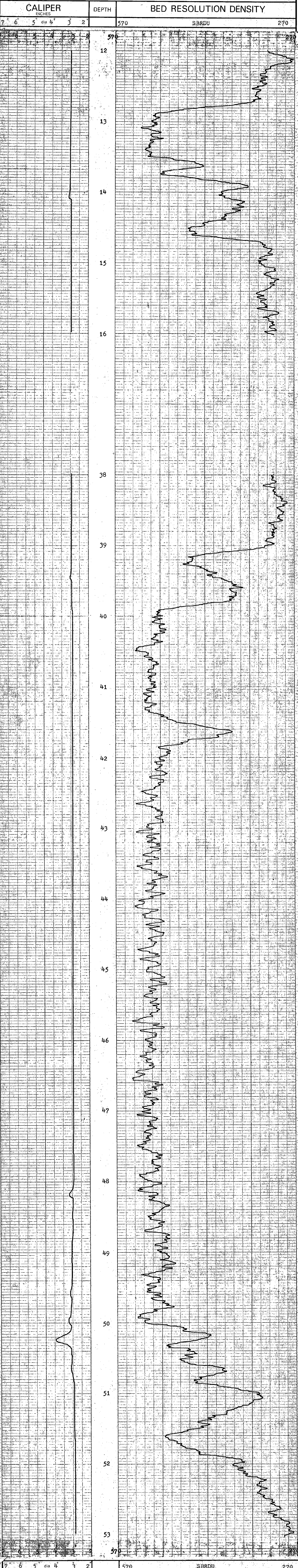
SONDE TYPE:
COAL COMBINATION SONDE

SEAM THICKNESS LOG INTERVALS
FROM 53 TO 16
INTERVAL 38
FROM 15 TO 4
INTERVAL 11

LOG SUITE:
CALIPER
BR DENSITY

REMARKS
488

B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
7 6 5 dia 4 3 2	570	SBRDU 270



BOREHOLE BR-4
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

SEAM THICKNESS LOG



NEUTRON-NEUTRON LOG

Dr. Brent Livers 78(3)A.

COMPANY Brameda Resources
BOREHOLE BR-4
STATE B.C. COUNTRY Canada

Permanent Datum Ground Level Elev. m.
Log measured from Ground Level m. above P.D.
Drilling measured from Ground Level m. above P.D.

GRID REF. E N RL

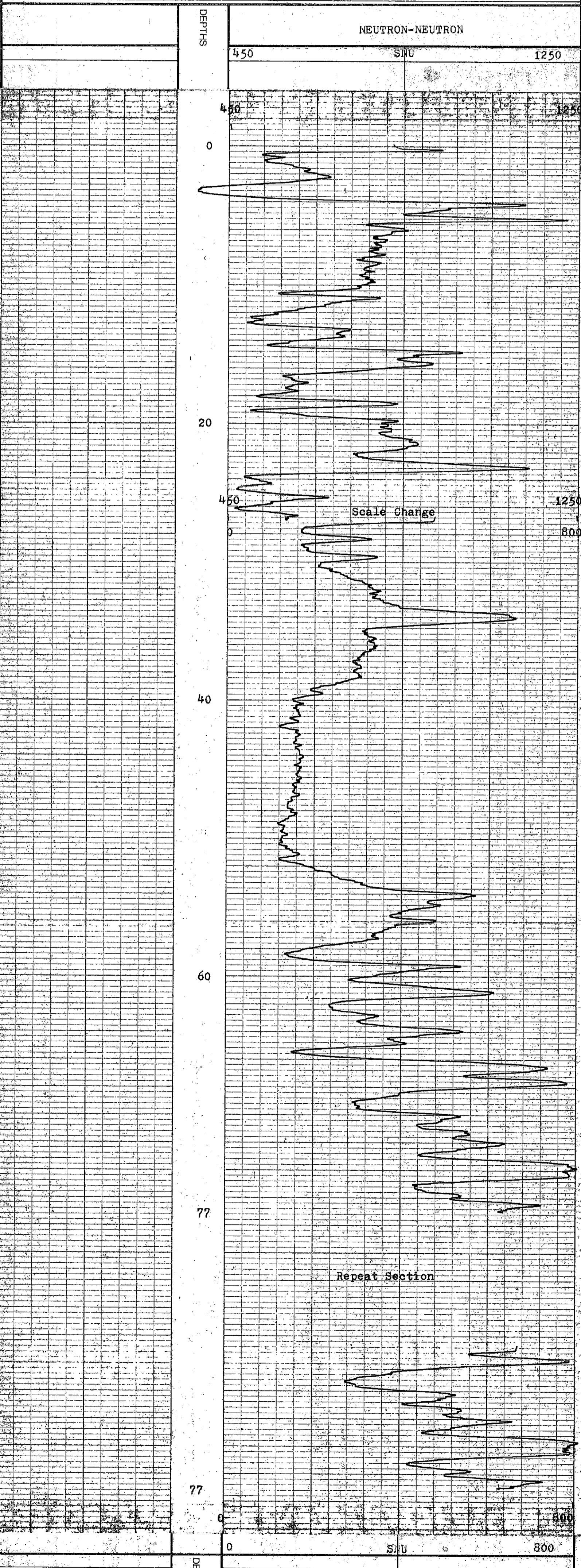
Run No.	1	1:200
Date	28/9/78	
First Reading	77m	
Last Reading	0	
Interval Measured	77m	
Casing BPE		
Casing Driller		
Depth Reached		
Bottom Driller		
Mud Nature		
SG. Viscosity		
Bit Size	1	to
	2	to
	3	to
Casing Size	1	to
	2	to
Rm @ Meas Temp.	@	@
Rmf @ Meas Temp.	@	@
Rmc @ Meas Temp.	@	@
BHT		
Operating Time		
Truck No.		
Recorded By		
Witness		

488

fold here

REMARKS

Changes in Mud Type or Additional Samples		Scale Changes							
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down				
Depth-Driller									
Type Fluid in Hole		N-N	27m	450-1250 SNU	0-800				
Dens.	Visc.								
ph.	Fluid Loss								
Source of Sample		Equipment Data							
Rm @ Meas Temp.	@	Run No.	Tool Type	Tool Position	Other				
Rmf @ Meas Temp.	@								
Rmc @ Meas Temp.	@								
Source: Rmf	Rmc								
Rm @ BHT	@								
Rmf @ BHT	@								
Rmc @ BHT	@								
		Logging Data							
		Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.	
			From	To					
		N-N	77	0	9	1	.81	81	N2479



COMPANY Brameda Resources
BOREHOLE BR-4
STATE B.C.
COUNTRY Canada

11-Burnt River 281319



LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

SONDE TYPE:
COAL
COMBINATION
SONDE

COAL
LITHOLOGY
LOG

BOREHOLE: RR-5
CLIENT: Barameda Resources
AREA: Burnt River
COUNTRY: Canada
DATE LOGGED: 27/9/78
DEPTH SCALE: 1:200
LOSS: 1 of 4

BOREHOLE DATA
PERMANENT DATUM: Ground Level
ELEVATION OF P.D.:
MEASUREMENTS FROM: 81.8 G.I.L.
DEPTH REACHED: 128.3m G.I.L. 128.6m
CASING SHOE: 51.1
CASING SIZES: 1 3 1/2" TO 5" 2 TO 4" TO 5" TO

FLUID DATA
NATURE: Quik-Gel
SG: 1.27
LEVEL: 4.5m
VISCOSITY:
BHT: 488

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE													
LOG	EQUIPMENT		TAPING			PANEL		CAL COEFF	DEPTHS		SEAM LOG RUN		
	SONDE	SOURCE	LOG TAPED	RECORD SPEED	DIRECT OF REPLAY	SPEED	T.C. SECS		NORM	FROM		TO	INTERVAL
GAMMA RAY L.S. DENSITY CALIPER	110 SIDEWALL POSITION	M5852	3	Y	9	D	9	1	1.67	126	0	126m	Y
			42	Y	9	D	9	1/3	7.20	127	1	126m	Y
				Y	9	R	9	1/3	-		127	1	126m

COAL QUALITY/SEAM THICKNESS-LOG INTERVALS (Refer to relevant log)

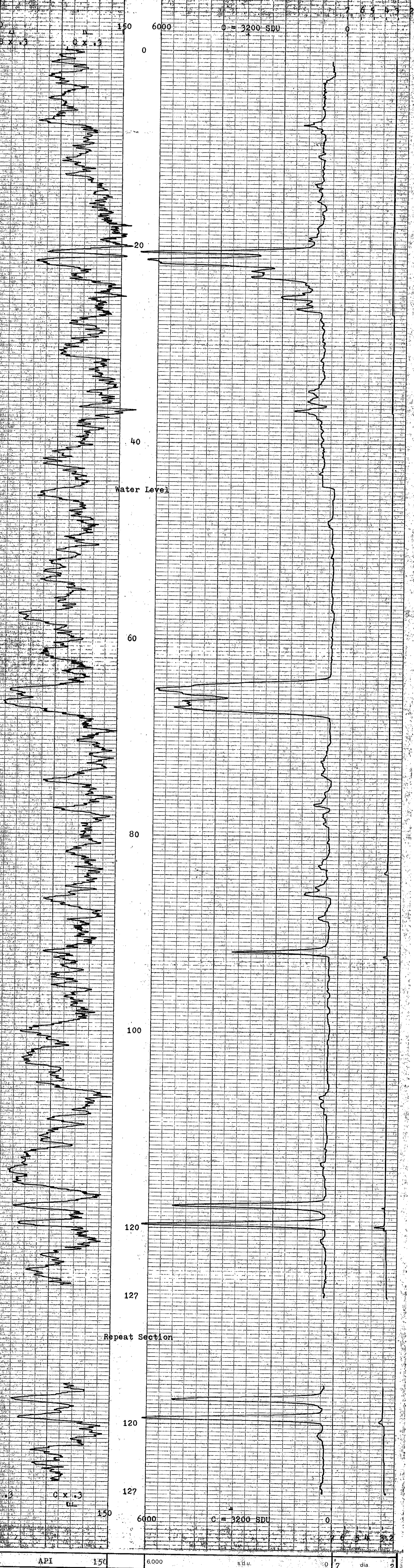
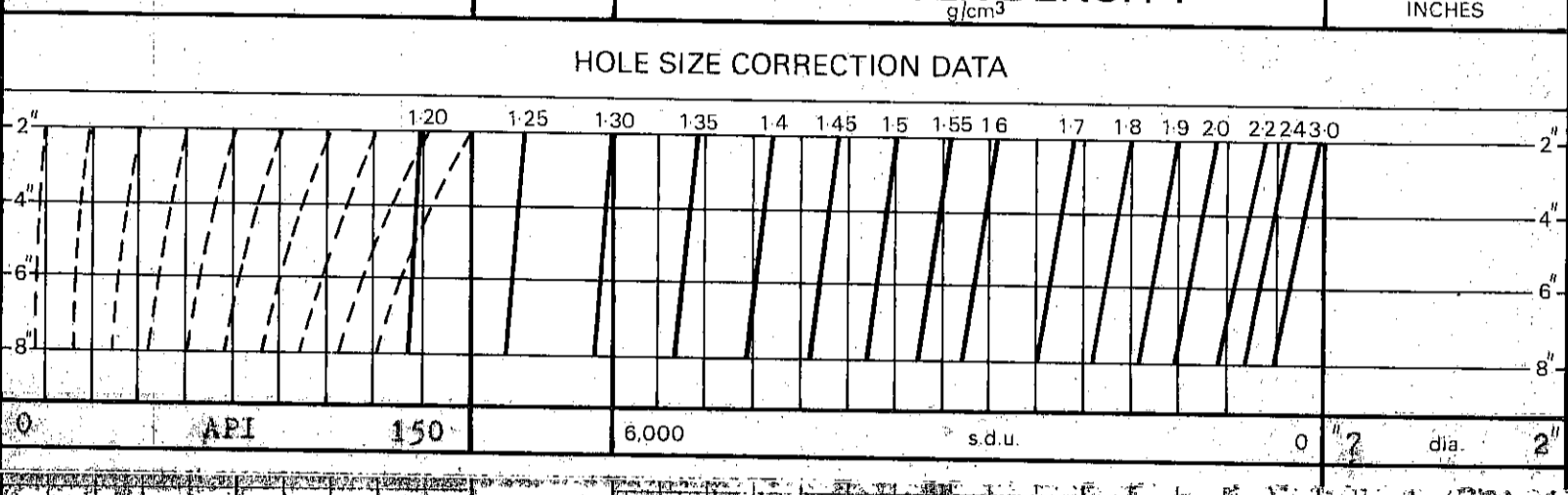
FROM	121	69	27	
TO	116	63	18	
INTERVAL	5	6	9	INTERVAL TOTAL
				20m

ADDITIONAL SONDES RUN				REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG	
81	N-N	1:200		REFER TO ADDITIONAL HEADINGS

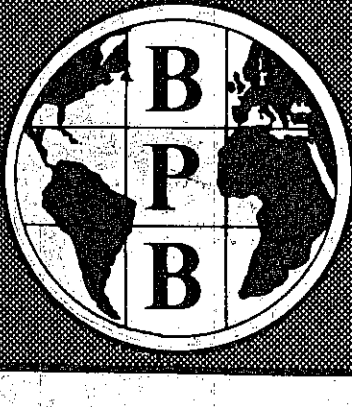
B PB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 3	VAL 500 @ 2" DIAM.	JIG CAL. DATE 28/8/78	JIG VALUE 3200 SDU @ 1.48 g/cm ³	7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE 3.33		JIG No. 42	SPAN 6000	NORM SDU / CPS = 7.20
				2 ins 490 cps



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE: RR-5 AREA: Burnt River
CLIENT: Barameda Resources COUNTRY: Canada

COAL LITHOLOGY LOG

Mr. Brent River 71(5)A



BOREHOLE BR-5
 CLIENT Brama Resources

AREA Burnt River
 COUNTRY Canada
 DATE LOGGED 27/9/78

DEPTH SCALE
 1:20

2 or 4 LOGS

COAL QUALITY LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
 OPERATION DATA REFER TO LITHOLOGY LOG
 EQUIPMENT AND RECORDING DATA

LOG TAPPING SIDEWALL POSITION
 LOG RECORDING SPEED PANEL CAL
 TAPED SPEED REFRAY SECS 2 1.67
 GAMMA RAY Y Z R 2 1 7.20
 S.DENSITY X 2 R 2 1 7.20
 SOURCE SONDE AND CALIBRATION
 REFER TO LITHOLOGY LOG

SONDE TYPE:
 COAL COMBINATION SONDE

LOG SUITE:
 GAMMA RAY
 L.S. DENSITY

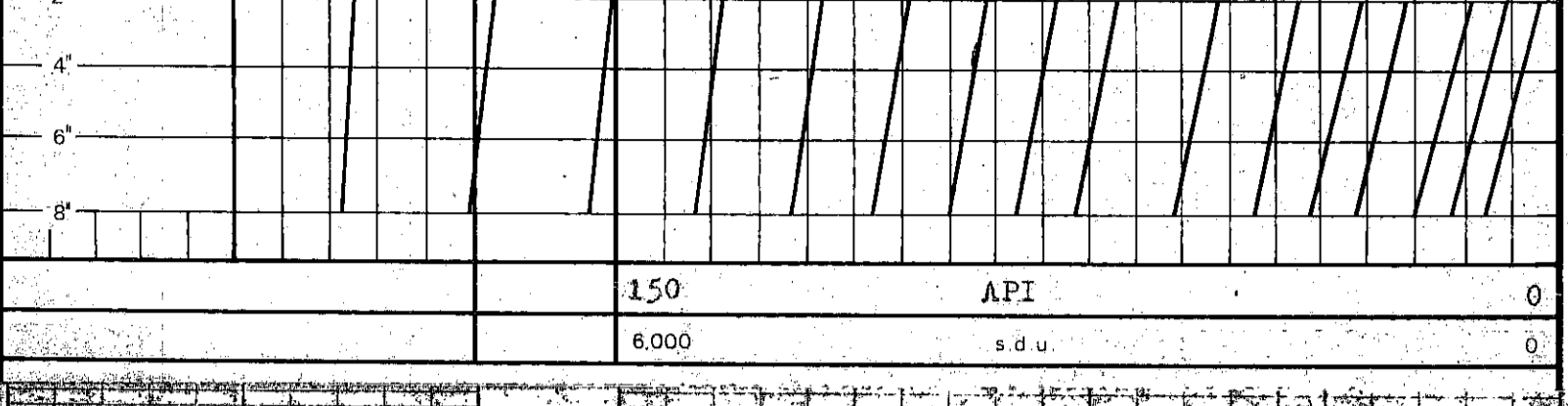
COAL QUALITY LOG INTERVALS	
FROM	TO
121	69
116	63
INTERVAL	9
FROM	TO
INTERVAL	20m
TOTAL	20m

488

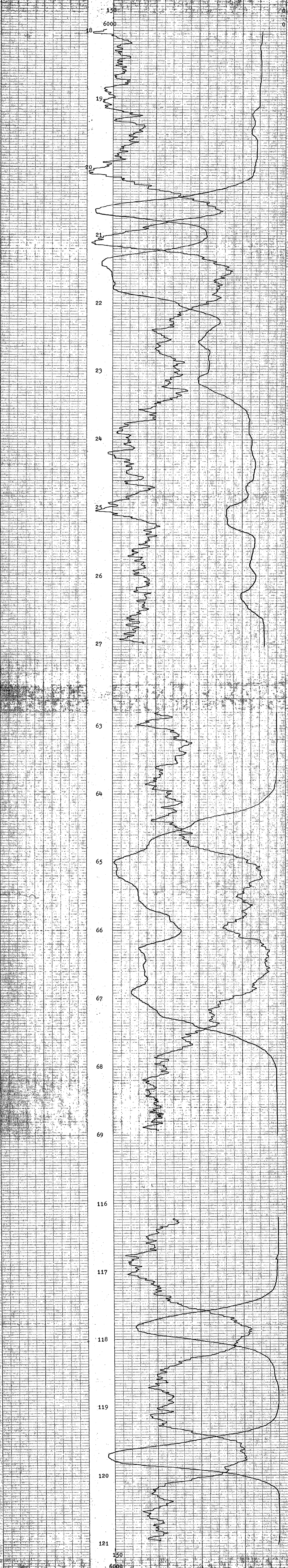
B P B COAL QUALITY LOG

DEPTH
 GAMMA RAY
 COAL BULK DENSITY
 g/cm³

HOLE SIZE CORRECTION DATA



150 API 0
 6000 s.d.u. 0



150 API 0
 6000 s.d.u. 0

DEPTH
 GAMMA RAY
 COAL BULK DENSITY
 g/cm³



BOREHOLE BR-5
 CLIENT Brama Resources

AREA Burnt River
 COUNTRY Canada

COAL QUALITY LOG

12 - Burnt River 21512



BOREHOLE BR-5
 CLIENT Brameda Resources

AREA Burnt River
 COUNTRY Canada
 DATE LOGGED 27/9/78

DEPTH SCALE
 1:20

3.064 LOGS

SEAM THICKNESS LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
 OPERATION DATA REFER TO LITHOLOGY LOG
 EQUIPMENT AND RECORDING DATA
 COAL COMBINATION SONDE

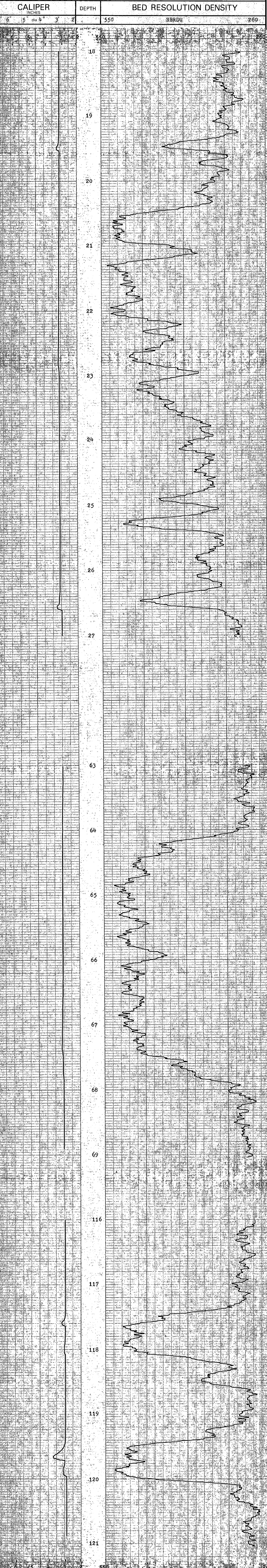
LOG TAPPING PANEL CAL
 LOG RECORD RELATIVE SPEED SECS. NORM
 CALIPER Y 2 R 2 1 1
 BR DENSITY Y 2 R 2 1 1.725
 SOURCE SONDE AND CALIBRATION
 REFER TO LITHOLOGY LOG

SONDE TYPE
 COAL COMBINATION SONDE
 LOG SUITE
 CALIPER
 BR DENSITY

SEAM THICKNESS LOG INTERVALS	
FROM	121 69 27
TO	116 63 18
INTERVAL	5 6 9
FROM	
TO	
INTERVAL	
TOTAL	20m

488

B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
2 6 5 dia 4 3 2	550	SBRDU 260



BOREHOLE BR-5
 CLIENT Brameda Resources
 AREA Burnt River
 COUNTRY Canada

SEAM THICKNESS LOG



NEUTRON-NEUTRON LOG

LA ZAVANI LUG-78 (314)

COMPANY Brameda Resources

BOREHOLE BR-5

STATE B.C. COUNTRY Canada

Permanent Datum Ground Level Elev. m.

Log measured from Ground Level m above P.D.

Drilling measured from Ground Level m above P.D.

GRIP REF. E N RL

Run No. 1 Depth Scale 1 11200

Date 27/9/78

First Reading 128m

Last Reading 0

Interval Measured 128m

Casing Depth 5ft.

Depth Reached

Bottom Driller

Mud Nature SPE LITHOLOGICAL LOG

SGF Viscosity

Bit Size 1 to 10

Bit Size 2 to 10

Bit Size 3 to 10

Casing Size 1 to 10

Casing Size 2 to 10

Rm @ Meas Temp @

Rmc @ Meas Temp @

Rm @ Meas Temp @

Rmc @ Meas Temp @

BHT

Operating Time

Truck No.

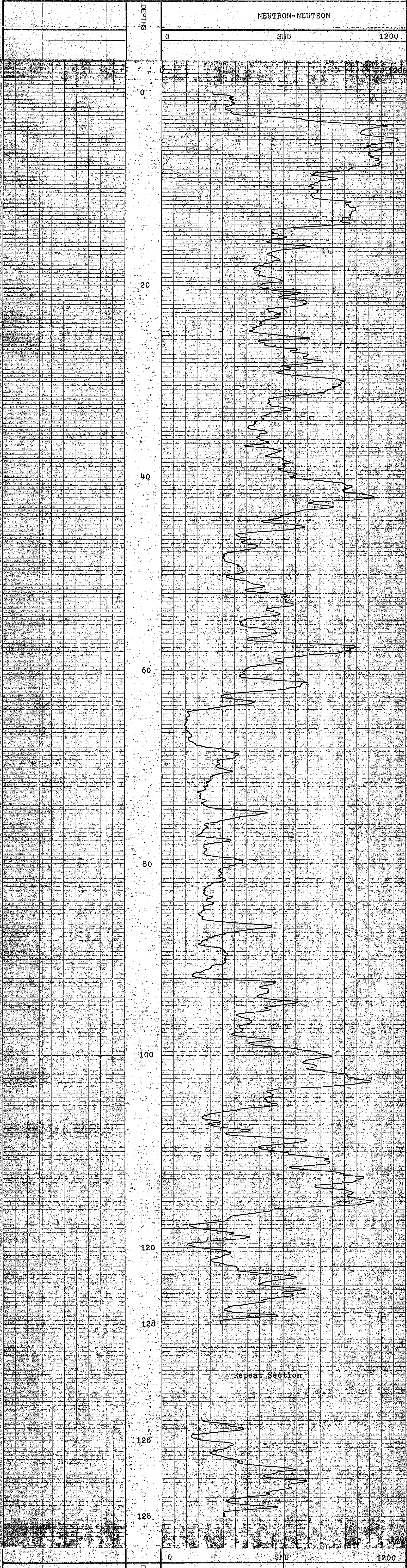
Recorded By

Witness

488

fold here

REMARKS				Scale Changes			
Changes in Mud Type or Additional Samples				Type Log	Depth	Scale Up Hole	Scale Down
Date	Sample No.						
Depth-Driller							
Type Fluid in Hole							
Dens.	Visc.						
ph.	Fluid Loss						
Source of Sample							
Rm @ Meas. Temp.	@	°F	@	°F	Run No.	Tool Type	Tool Position
Rmf @ Meas. Temp.	@	°F	@	°F			Other
Rmc @ Meas. Temp.	@	°F	@	°F			
Source: Rmf	Rmc						
Rm @ BHT	@	°F	@	°F			
Rmf @ BHT	@	°F	@	°F			
Rmc @ BHT	@	°F	@	°F			
				Logging Data			
				Log	Depths	Speed	T.C.
					From	To	Norm.
				N-N	128	0	9
							1
							0.81
							81
							N2479



COMPANY Brameda Resources

BOREHOLE BR-5

STATE B.C.

COUNTRY Canada



Dr - Burnt River 78(3)A

COAL
LITHOLOGY LOG

SONDE TYPE: **488**
COAL COMBINATION SONDE

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

FLUID DATA
NATURE: **Quik-Gel**

BOREHOLE DATA
PERMANENT DATUM: **Ground level**
ELEVATION OF P.D.: **8 P 8**
MEASUREMENTS FROM: **G.I.**
DEPTH REACHED: **77.5m**
CASING SIZES: **1 1/2 TO 2 TO 3 TO 4 TO 10 TO 10**

BOREHOLE: **BR-6**
CLIENT: **Brameda Resources**
AREA: **Burnt River**
COUNTRY: **Canada**
DATE LOGGED: **26/9/78**
DEPTH SCALE: **1:200**
LOGS: **1 of 4**

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE													
LOG	EQUIPMENT			TAPING			PANEL		CAL COEFF.	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT REPLAY	SPEED	T.C SECS		NORM	FROM	TO	
GAMMA RAY	110		3	Y	9	D	9	1	1.67	76	0	76m	Y
L.S. DENSITY		15852	42	Y	9	D	9	1/3	7.30	77	1	76	Y
CALIPER		SIDEWALL POSITION		Y	9	R	9	1/3	-	77	1	76	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)

FROM	26	INTERVAL TOTAL
TO	18	
INTERVAL	8m	

ADDITIONAL SONDES RUN

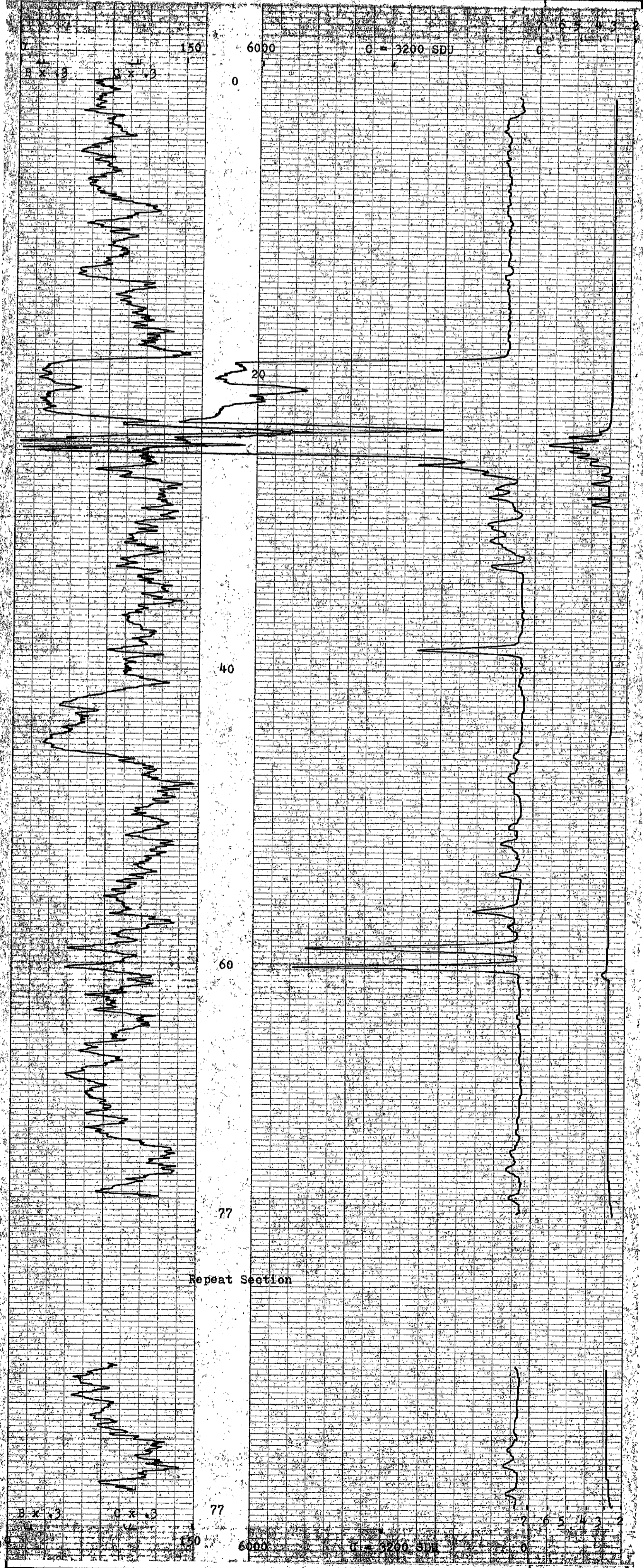
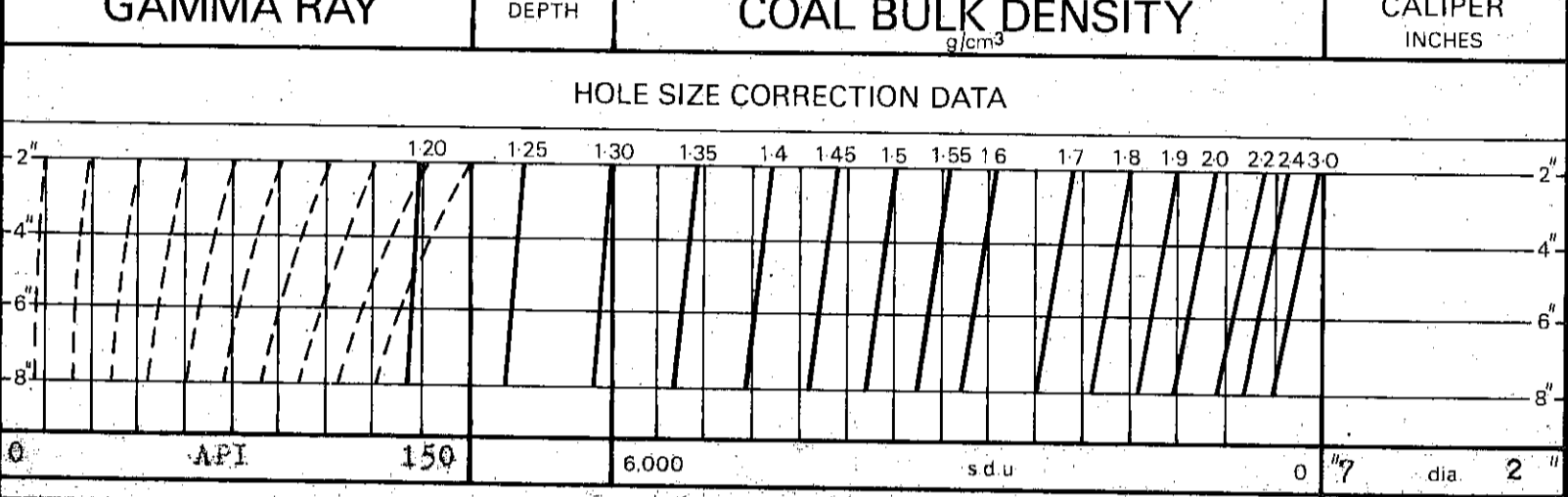
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG	REFER TO ADDITIONAL HEADINGS
81	N-N	1:200		

REMARKS

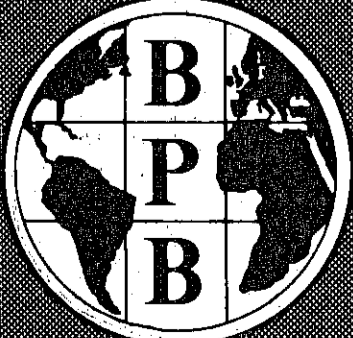
B P B COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 3	VALUE 300 @ 2" DIAM.	JIG CAL. DATE 28/8/78	JIG VALUE 3200 SDU @ 1.48 g/cm ³	7 ins	955 cps	
JIG MARK SHOWN AT ABOVE VALUE 3.33		JIG No. 42	SPAN 6000	NORM SDU CPS = 7.30	2 ins	490 cps



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER INCHES
-----------	-------	-------------------	----------------



BOREHOLE **BR-6** AREA **Burnt River**
CLIENT **Brameda Resources** COUNTRY **Canada**

COAL LITHOLOGY LOG

M. BURN - KANE - 8 (3)A



BOREHOLE BR-6
 CLIENT Brameda Resources
 AREA Burnt River
 COUNTRY Canada
 DATE LOGGED 26/9/78
 DEPTH SCALE 1:20
 2 OF 4 LOGS

SONDE TYPE:
 COAL COMBINATION SONDE

LOG SUITE:
 GAMMA RAY
 L.S. DENSITY

BOREHOLE DATA REFER TO LITHOLOGY LOG
 OPERATION DATA REFER TO LITHOLOGY LOG
 EQUIPMENT AND RECORDING DATA
 COAL COMBINATION SONDE:
 LOG TAPPING PANEL COEF
 LOG RECORDING SPEED SECS NORM
 TAPED SPEED HEAD 2 2 1.67
 GAMMA RAY Y 2 R 2 2 7.30
 L.S. DENSITY Y 2 R 2 1 7.30
 SOURCE SONDE AND CALIBRATION
 REFER TO LITHOLOGY LOG

COAL QUALITY LOG INTERVALS

FROM	26	INTERVAL	
TO	18	FROM	
INTERVAL	8m	TO	
FROM		INTERVAL	
TO		VIA	
INTERVAL		TOTAL	

REMARKS

488

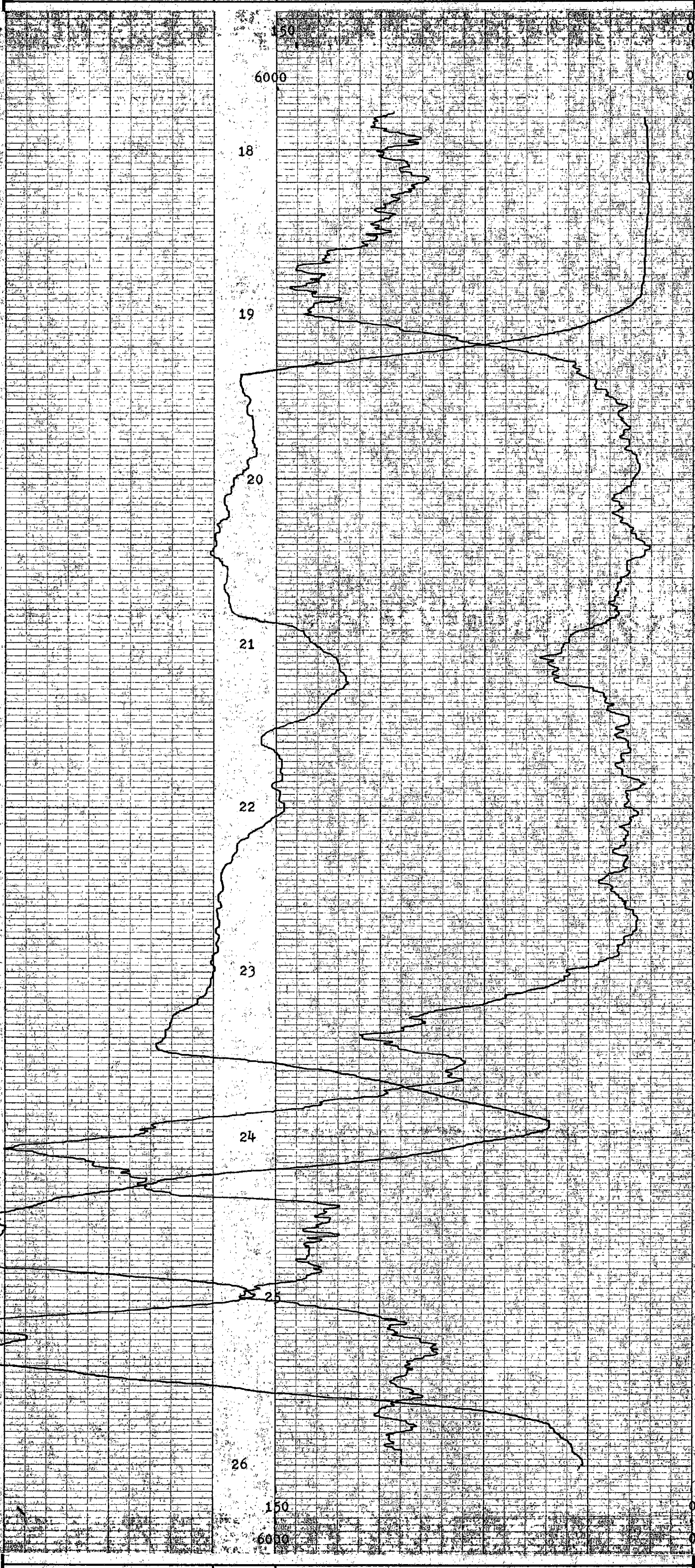
BPB COAL QUALITY LOG

DEPTH GAMMA RAY
 COAL BULK DENSITY g/cm^3

HOLE SIZE CORRECTION DATA

2"	1.2	1.25	1.3	1.35	1.4	1.45	1.5	1.55	1.6	1.7	1.8	1.9	2.0	2.2	2.4	3.0
4"																
6"																
8"																

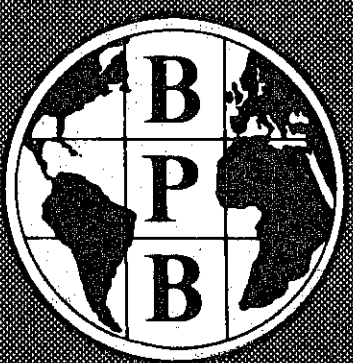
150 API 0
 6,000 s.d.u. 0



6,000 s.d.u. 0
 150 API 0
 COAL BULK DENSITY g/cm^3
 GAMMA RAY

BOREHOLE BR-6 AREA Burnt River
 CLIENT Brameda Resources COUNTRY Canada

COAL QUALITY LOG





12- Burnt River 2153a

BOREHOLE BR-6
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 26/9/78
DEPTH SCALE 1:20
3 of 4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE

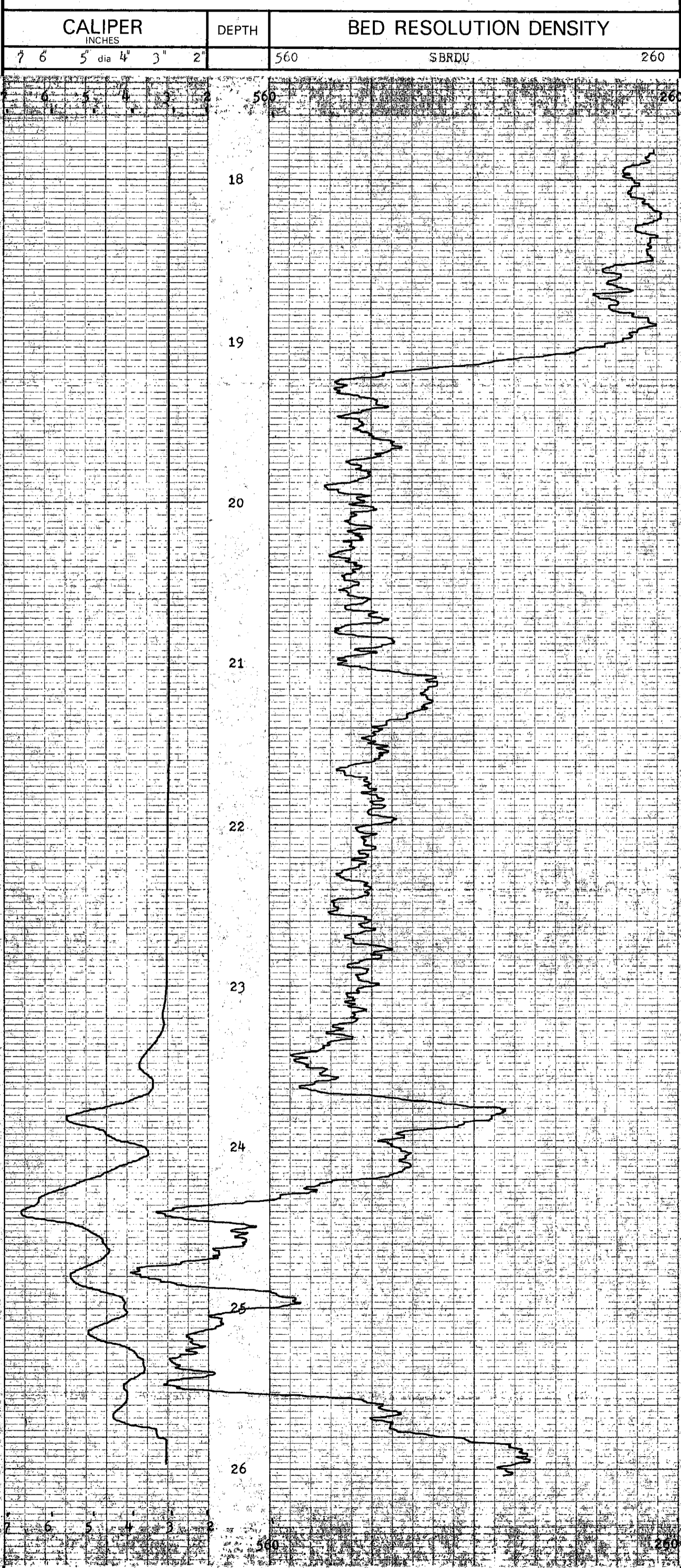
LOG TAPPING PANEL COAL
LOG RECORD SPEED SECS NORM
CALIBER Y 2 R 2 1 .725
BR DENSITY Y 2 R 2 1 -

SONDE TYPE:
COAL COMBINATION SONDE
SEAM THICKNESS LOG INTERVALS
FROM 26
TO 18
INTERVAL 8m

LOG SUITE:
CALIBER
BR DENSITY

488

B P B SEAM THICKNESS LOG



CALIPER INCHES		DEPTH	BED RESOLUTION DENSITY					
7	6	5" dia	4"	3"	2"	560	SBRDU	260
7 6 5 4 3 2		25	560		260	[Graph showing density fluctuations between 25 and 26 meters depth]		

BOREHOLE BR-6	AREA Burnt River
CLIENT Brameda Resources	COUNTRY Canada

SEAM THICKNESS LOG

Pr - Barent River 71(3)A



NEUTRON-NEUTRON LOG

COMPANY Barama Resources
 BOREHOLE BR-6
 STATE B.C. COUNTRY Canada

Permanent Datum _____ Ground Level _____ Elev. _____ m.
 Log measured from _____ Ground Level _____ m. above P.D.
 Drilling measured from _____ Ground Level _____ m. above P.D.

GRID REF. E. _____ N _____ RL _____

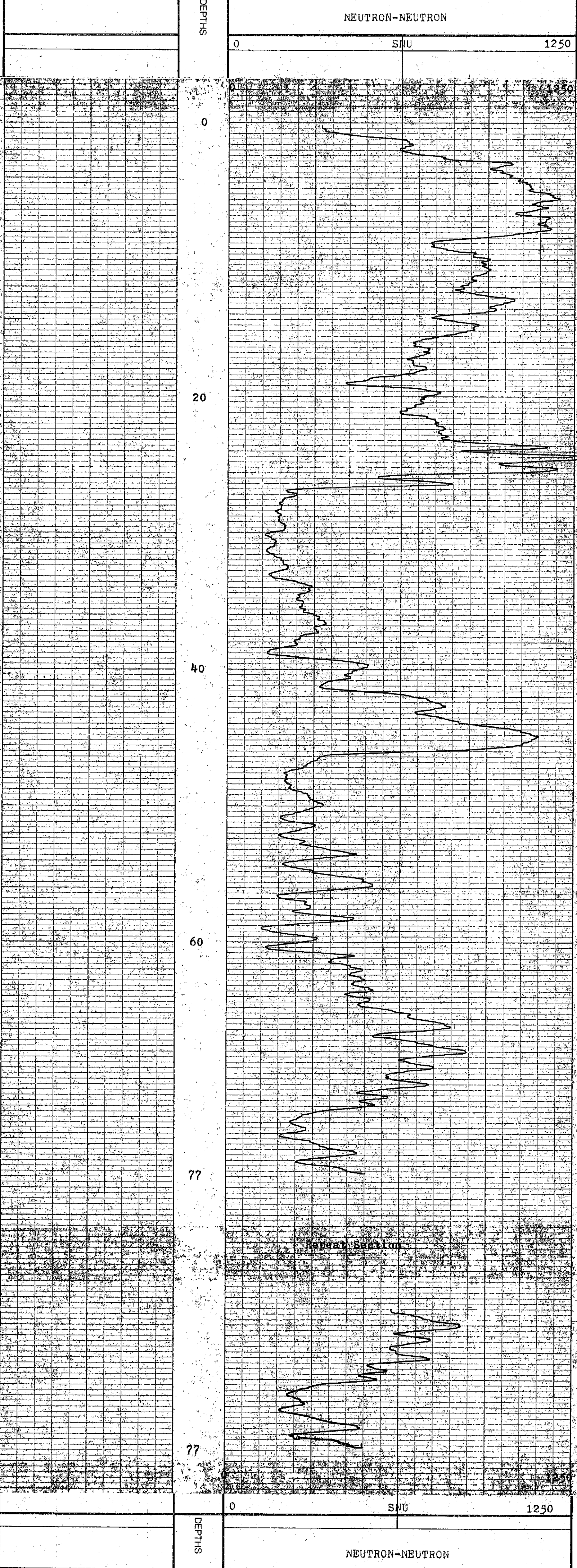
Run No.	1	1,200
Date	26.9.78	
First Reading	77m	
Last Reading	0	
Interval Measured	77m	
Casing BPH		
Casing Driller		
Depth Reached	REVER TO LITHOLOGY LOG	
Bottom Driller		
Mud Nature		
SG	Viscosity	
Bit Size 1	to	to
2	to	to
3	to	to
Casing Size 1	to	to
2	to	to
Rm @ Meas Temp	@	@
Rmf @ Meas Temp	@	@
Rmc @ Meas Temp	@	@
BHT		
Operating Time		
Truck No		
Recorded By		
Witness		

488

fold here

REMARKS

Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down		
Depth-Driller							
Type Fluid in Hole							
Dens.	Visc.						
ph.	Fluid Loss	ml					
Source of Sample				Equipment Data			
Rm @ Meas. Temp.	@	@	Run No.	Tool Type	Tool Position	Other	
Rmf @ Meas. Temp.	@	@					
Rmc @ Meas. Temp.	@	@					
Source: Rmf				Rmc			
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
Logging Data							
Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.	
	From To						
N-N	77 0	9	1	0.81	81	N2479	



COMPANY Barama Resources
 BOREHOLE BR-6
 STATE B.C.
 COUNTRY Canada



NEUTRON-NEUTRON LOG

Pr. Burnt River - 78(5)A.

COMPANY Brameda Resources

BOREHOLE BR-7

STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m

Log measured from _____ Ground Level _____ m above P.D.

Drilling measured from _____ Ground Level _____ m above P.D.

GRID REF. E _____ N _____ RL _____

Run No. 1 Depth/Scale 11200

Date 28/9/78

Last Reading 74m

Interval Measured 0

Casing BPS 74m

Casing Driller 5ft.

Depth Reached 75.3m

Bottom Driller 75.9m

Mud Nature Quik-Gel

SG Viscosity _____

Bit Size NO to TD

Casing Size 3 1/2" to 5"

Rm @ Meas Temp _____ @ _____ °F

Rmf @ Meas Temp _____ @ _____ °F

Rmc @ Meas Temp _____ @ _____ °F

BHT _____

Operating Time 3/4 hr.

Truck No. 21

Recorded By R. Bishop

Witness _____

488

fold here

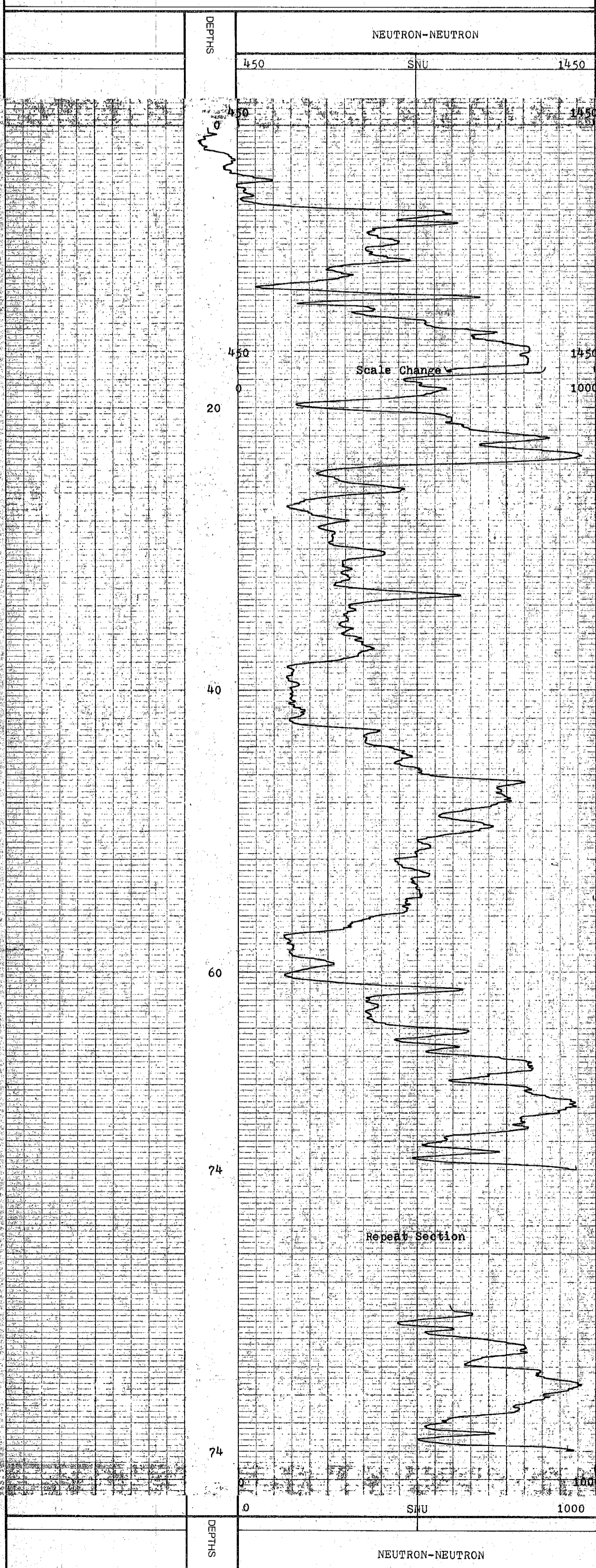
REMARKS

Changes in Mud Type or Additional Samples		Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down
		N-N	17m	450-1450 SNU	0-1000

Source of Sample		Equipment Data			
Rm @ Meas. Temp.	Fluid Loss	Run No.	Tool Type	Tool Position	Other
@					
@					
@					
@					
@					
@					
@					

Logging Data						
Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.
	From To					
N-N	74 0	9	1	0.81	81	N2479

CCS would not go down-hole below 7m



COMPANY Brameda Resources
 BOREHOLE BR-7
 STATE B.C.
 COUNTRY Canada



BR-8
Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 25/9/78

DEPTH SCALE
1:200
1 of 2 LOGS

BOREHOLE DATA
PERMANENT DATUM Ground Level
ELEVATION OF P.D. 8 ft 8
MEASUREMENTS FROM G.L.
DEPTH REACHED 142.5m 148.17m
CASING SHOE 3m
BITSIZES 1 3/4" TO 1.75" 2" TO 3"
CASING SIZES 1 3/4" TO 3m 2" TO

COAL LITHOLOGY LOG

SONDE TYPE: 30m
COAL COMBINATION SONDE

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

LOG	EQUIPMENT	TAPING	PANEL	CAL COEFF	DEPTHS	SEAM LOG RUN						
SONDE	SOURCE	LOG TAPED	RECORD SPEED	DIRECT OF REPLAY	SPEED	T.C SECS	NORM	FROM	TO	INTERVAL		
GAMMA RAY	110	3	Y	9	D	9	1	1.67	140	0	140	N
L.S. DENSITY	42	42	Y	9	D	9	1/3	7.0	141	1	140	N
CALIPER	SIDEWALL POSITION		Y	9	R	9	1/3	-	141	1	140	N

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)	INTERVAL TOTAL
FROM	
TO	
INTERVAL	

ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			

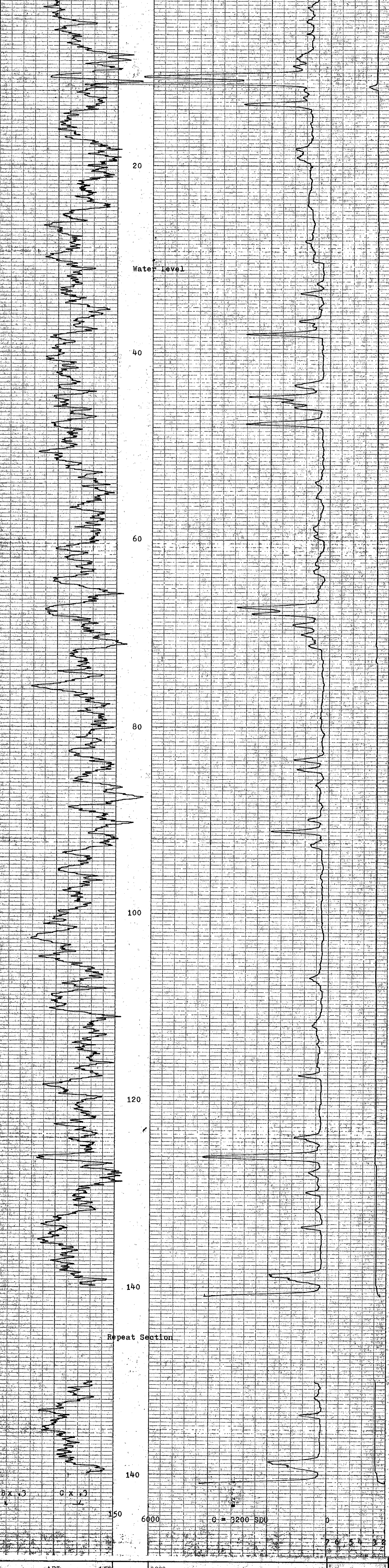
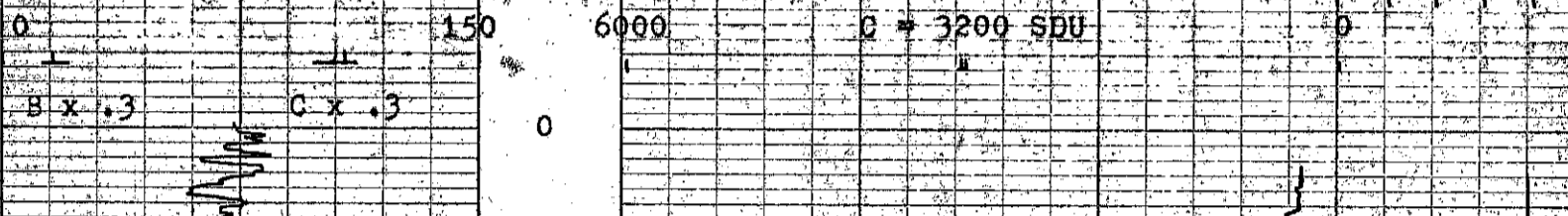
B PB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 3	VALUE 30 @ 2" DIAM.	JIG CAL. DATE 28/8/78	JIG VALUE 3200 DU @ 1.48 g/cm ³	7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE 3.33		JIG No. 42	SPAN 6000	NORM SDU CPS = 7.00

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE BR-8 AREA Burnt River
CLIENT Brameda Resources COUNTRY Canada

COAL LITHOLOGY LOG



NEUTRON-NEUTRON LOG

Mr. BARNER River 21(3)A

COMPANY Brameda Resources

BOREHOLE BR-8

STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m.

Log measured from _____ Ground Level _____ m. above P.D.

Drilling measured from _____ Ground Level _____ m. above P.D.

GRID REF. E. _____ N. _____ R. _____

Run No. 1 Depth/Scale 11200

Date 25/9/78

First Reading 141m

Last Reading 0

Interval Measured 141m

Casing BPS 3m

Casing Driller 142.5m

Depth Reached 148.17m

Bottom Driller Quik-Gel

Mud Nature _____

SS & Viscosity _____

Bit Size 1 3" to T.D. _____

Bit Size 2 _____

Bit Size 3 _____

Casing Size 1 3 1/2" to 3m _____

Casing Size 2 _____

Rm @ Meas Temp _____

Rmf @ Meas Temp _____

Rmc @ Meas Temp _____

Operating Time 2 hrs.

Truck No. V23221

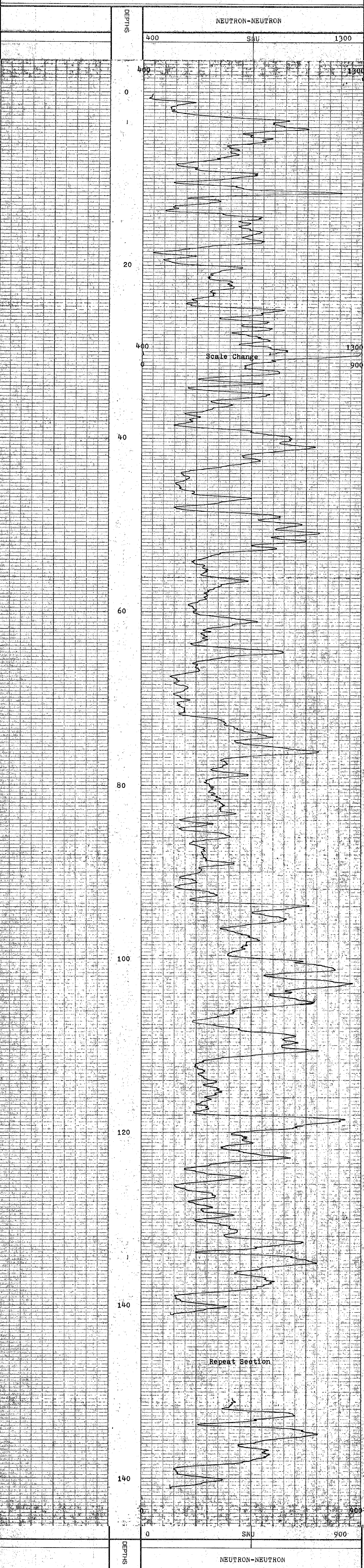
Recorded By R. Bishop

488

fold here

REMARKS

Changes in Mud Type or Additional Samples			Scale Changes			
Date	Sample No.		Type Log	Depth	Scale Up Hole	Scale Down
			N-N	30m	400-1300 SNU	0-900 SNU
Dens. _____			Equipment Data			
ph.	Fluid Loss	ml	Run No.	Tool Type	Tool Position	Other
Source of Sample						
Rm @ Meas. Temp.	@	°F				
Rmf @ Meas. Temp.	@	°F				
Rmc @ Meas. Temp.	@	°F				
Source: Rmf	Rmc					
Rm @ BHT	@	°F				
Rmf @ BHT	@	°F				
Rmc @ BHT	@	°F				
Logging Data						
Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.
	From To					
N-N	141 0	9	1	0.81	81	N2479



COMPANY <u>Brameda Resources</u>
BOREHOLE <u>BR-8</u>
STATE <u>B.C.</u>
COUNTRY <u>Canada</u>



12- Burnt River - RLS 1A

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

SONDE TYPE:
COAL
COMBINATION
SONDE

COAL
LITHOLOGY
LOG

BOREHOLE BR-9
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
DATE LOGGED 25/9/78
DEPTH SCALE 1:200
LOGS 1 of 4

BOREHOLE DATA
PERMANENT DATUM Ground level
ELEVATION OF P.D. 878
MEASUREMENTS FROM G.L. G.L.
DEPTH REACHED 106.6m 108.5m
CASING SHOE 3m
BIT SIZES 1 3" TO T.D., 2 TO 3m
2 3" TO 3m
3 3" TO 3m
4 TO TO
CASING SIZES 1 3" TO 3m 2 TO TO
FLUID DATA
NATURE Quik-Cel
SG 4.1m
LEVEL
VISCOSITY
FILM AT MEAS. TEMP.
CHIT

OPERATION DATA
FIRST READING 106m
LAST READING 0
INTERVAL LOGGED 106m
UNIT-TRUCK NO V23/21
ENGINEER R. Bishop
WITNESS

488

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE														
LOG	EQUIPMENT			TAPING			PANEL			CAL COEFF	DEPTHS		SEAM LOG RUN	
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT REPLAY	SPEED	T.C. SECS	NORM		FROM	TO		INTERVAL
GAMMA RAY	110		3	Y	9	D	9	1	1.67		105	0	105m	Y
L.S. DENSITY		N5852	42	Y	9	D	9	1/3	7.0		106	1	105	Y
CALIPER				Y	9	R	9	1/3			106	1	105	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)				
FROM	99	86	35	
TO	92	73	30	INTERVAL TOTAL
INTERVAL	7	13	5	= 25m

ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			

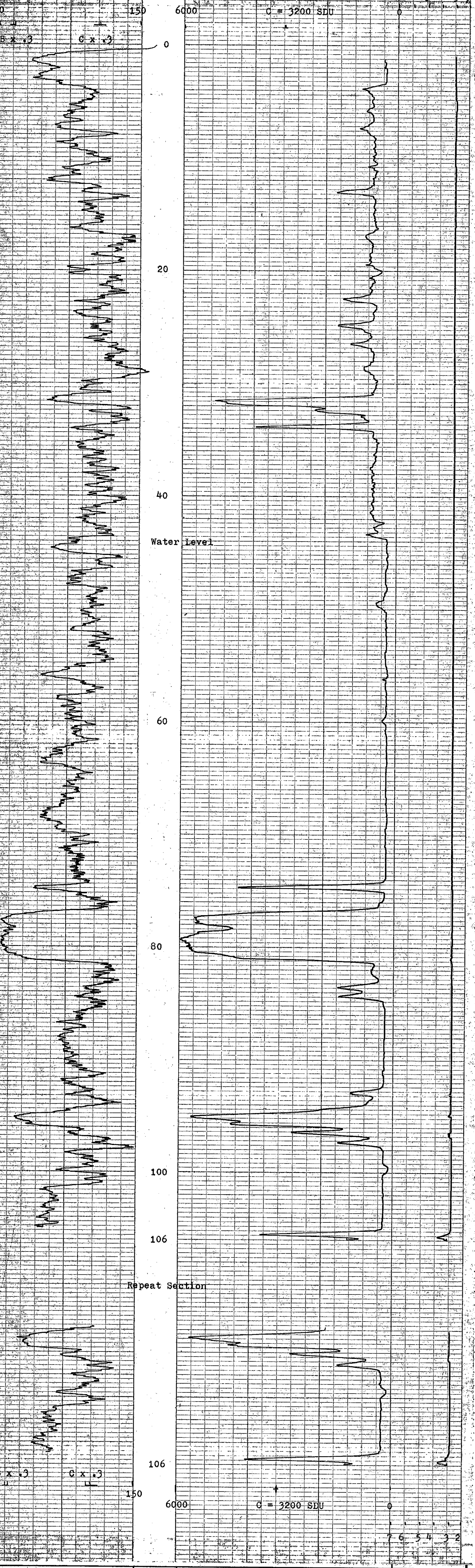
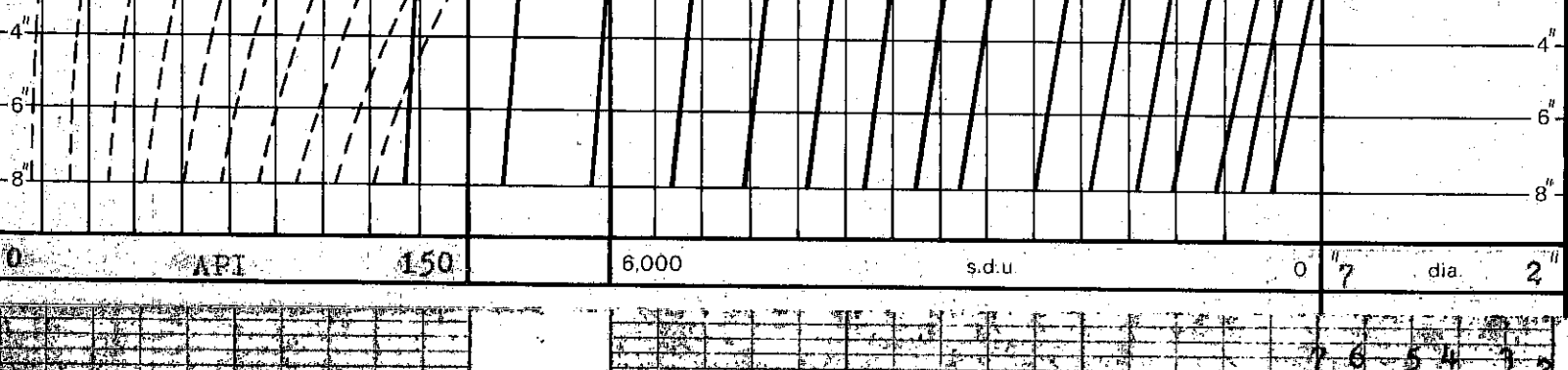
B P B COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 3	VALU@ 2" DIAM.	JIG CAL. DATE 28/8/78	JIG VALUE 3200	SDU @ 1.48/cm ³	7 ins	955 cps
JIG MARK SHOWN AT ABOVE VALUE -3.3		JIG No. 42	SPAN 6000	NORM SDU/CPS = 7.00	2 ins	490 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA



0	API	150	6000	s.d.u.	0	7	dia.	2"
---	-----	-----	------	--------	---	---	------	----

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE BR-9 AREA Burnt River
CLIENT Brameda Resources COUNTRY Canada

COAL LITHOLOGY LOG

12 - Burnt River 2131A



LOG SUITE:
GAMMA RAY
L.S. DENSITY

SONDE TYPE:
COMBINATION
SONDE

COAL
QUALITY
LOG

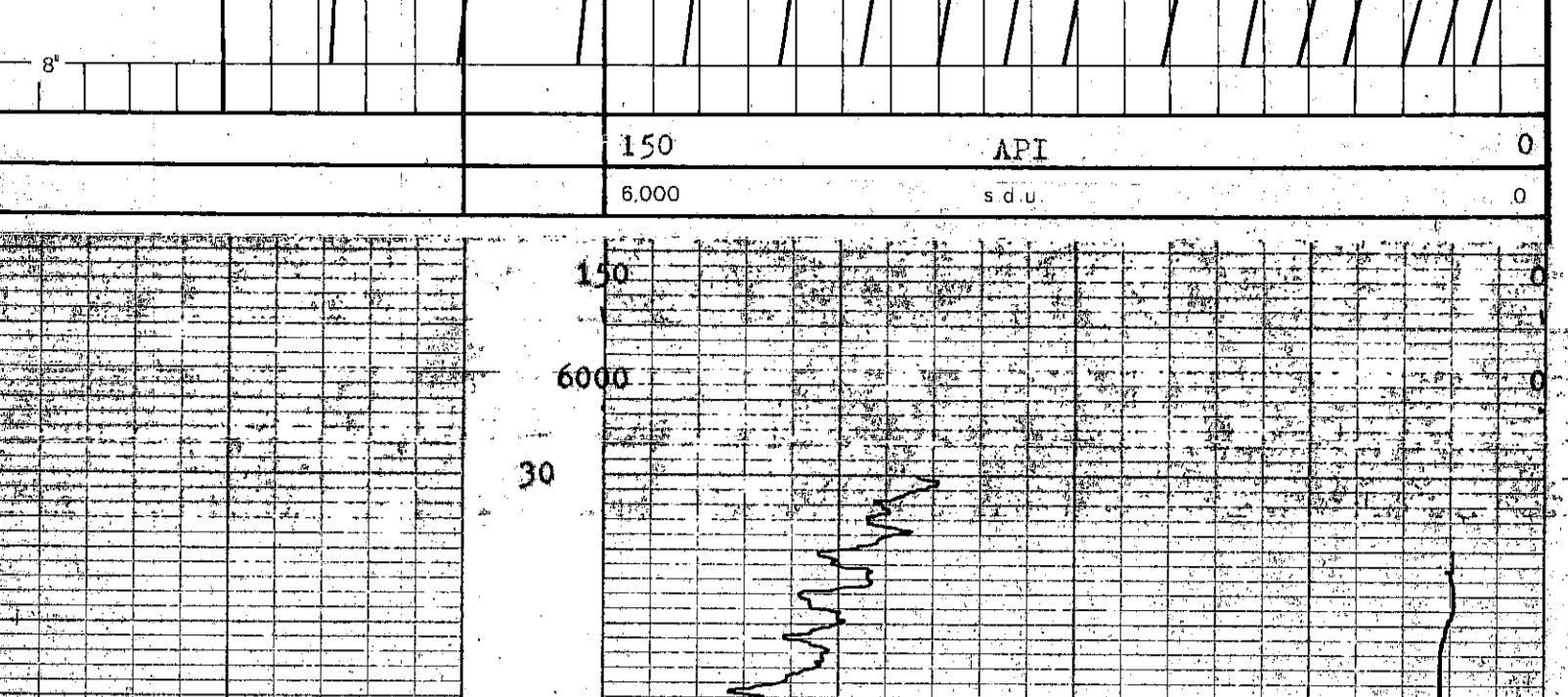
BOREHOLE BR-9
CLIENT Bramedia Resources
AREA Burnt River
COUNTRY Canada
DATE LOGGED 25/9/78
DEPTH SCALE 1.20
2 OF 4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE
LOG TAPPING PANEL COL-
L.S. DENSITY 2 1.67
GAMMA RAY 2 1.67
L.S. DENSITY X 2 1 7.0
SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

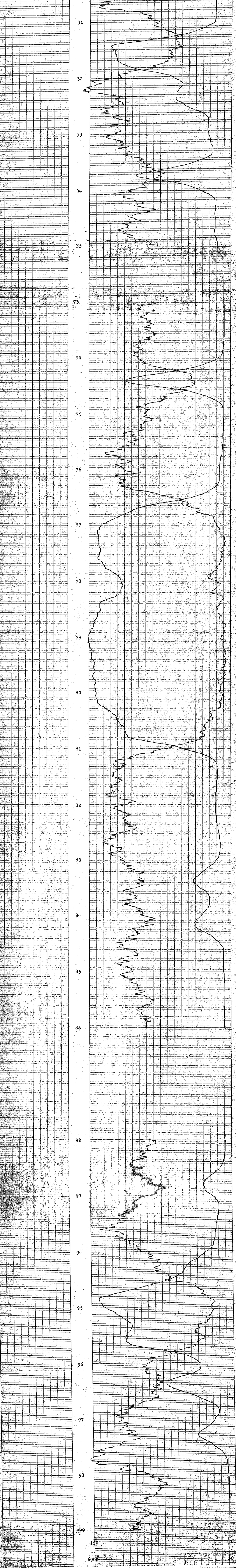
BPPB COAL QUALITY LOG

DEPTH GAMMA RAY
COAL BULK DENSITY
g/cm³

HOLE SIZE CORRECTION DATA

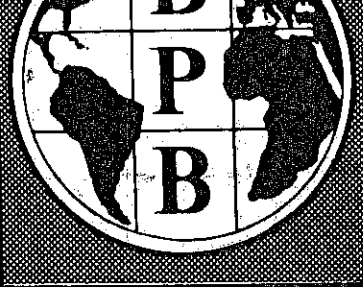


150 API 0
6.000 s.d.u. 0



150 API 0
6.000 s.d.u. 0

DEPTH GAMMA RAY
COAL BULK DENSITY
g/cm³



BOREHOLE BR-9
CLIENT Bramedia Resources
AREA Burnt River
COUNTRY Canada

COAL QUALITY LOG

488



12 - Burnt River Area - BR-9

BOREHOLE BR-9
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

DATE LOGGED 25/9/78

DEPTH SCALE
1:200

3.0 - 4.0 LOGS

SEAM THICKNESS LOG

LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE
LOG TAPPING SIDEWALL POSITION
LOG RECORDING SPEED NORM
CALIPER X 2 R 2 1 -
BARRETTIN Y 2 R 2 1 -725

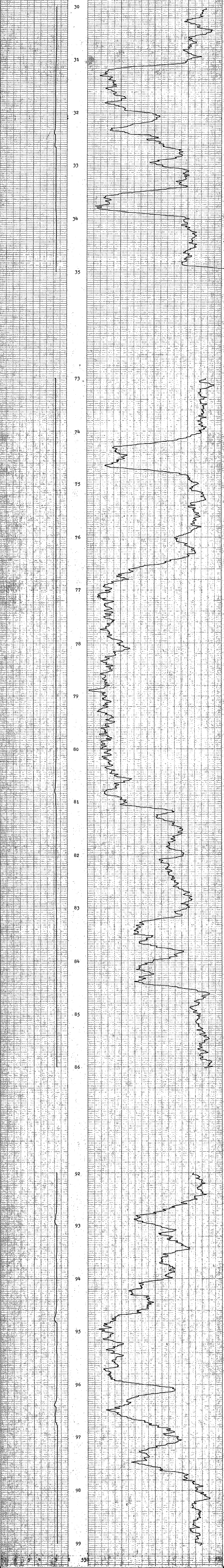
SONDE TYPE:
COAL
COMBINATION SONDE
SEAM THICKNESS LOG INTERVALS


SEAM THICKNESS LOG INTERVALS
FROM 99 86 35
TO 92 73 30
INTERVAL 7 13 5

LOG SUITE:
CALIPER
BR DENSITY

488

B P B SEAM THICKNESS LOG




 BOREHOLE BR-9
 CLIENT Brameda Resources
 AREA Burnt River
 COUNTRY Canada
SEAM THICKNESS LOG

Pl. BENT NUT 21(3)A.



NEUTRON-NEUTRON LOG

COMPANY Bramedia Resources

BOREHOLE BR-9

STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m.

Log measured from _____ Ground Level _____ m. above P.D.

Drilling measured from _____ Ground Level _____ m. above P.D.

GRID REF E _____ N _____ RL _____

Run No _____ Depth Scale _____

Date 25/9/78

First Reading 106m

Last Reading 0

Interval Measured 106m

Casing BPP _____

Casing Driller 3m

Depth Reached 106.6m

Bottom Driller _____

Mud Nature Quik-Cel

SG. Viscosity _____

Bit Size 3" to T.D. _____

_____ to _____

_____ to _____

Casing Size 1 3 1/2" to 3m

_____ to _____

Rm @ Meas Temp _____ @ _____

Rm @ Meas Temp _____ @ _____

Rm @ Meas Temp _____ @ _____

BHT _____

Operating Time 2 3/4 hrs

Ticket No V2321

Recorded By R. Bishop

488

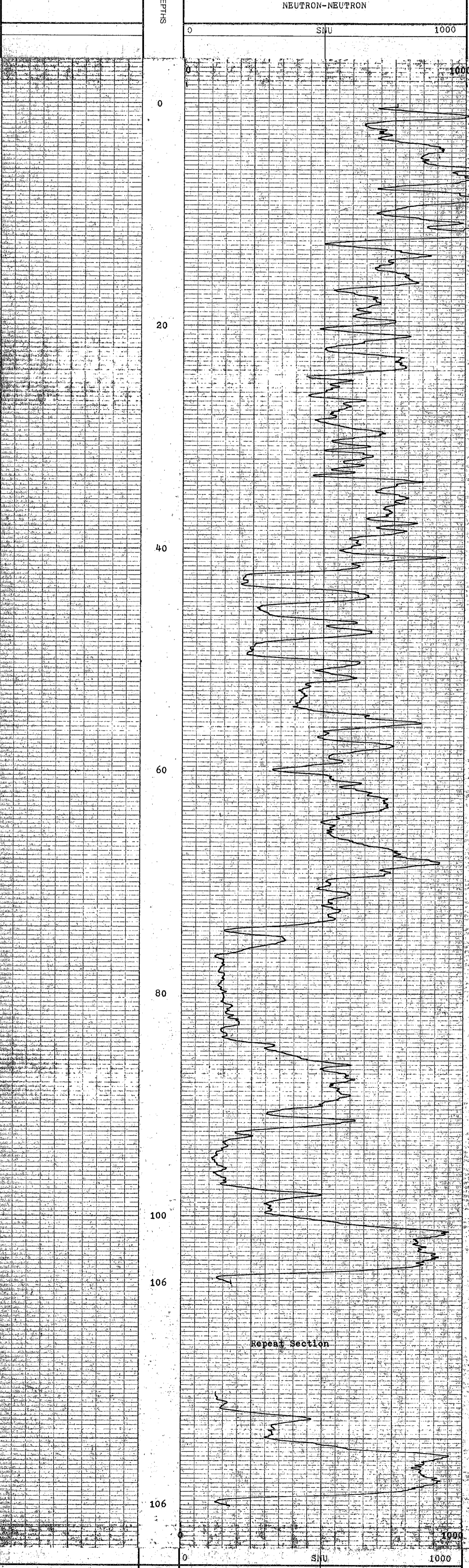
fold here

REMARKS

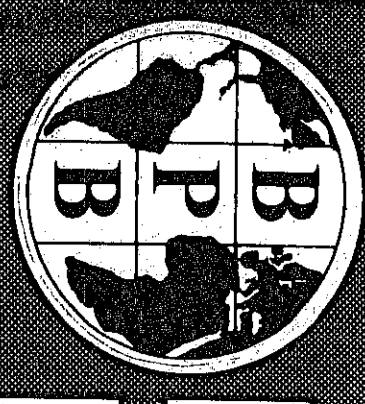
Changes in Mud Type or Additional Samples		Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down

Equipment Data	
Run No.	Tool Type

Logging Data							
Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.	
N-N	106	0	9	1	0.81	81	N2479



COMPANY	<u>Bramedia Resources</u>
BOREHOLE	<u>BR-9</u>
STATE	<u>B.C.</u>
COUNTRY	<u>Canada</u>



Mc-Burnt River-78 (3)A

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

SONDE TYPE:
COAL
COMBINATION
SONDE

COAL
LITHOLOGY
LOG

OPERATION DATA
FIRST READING 93m
LAST READING 0
INTERVAL LOGGED 93m
UNIT - TRUCK No. V23/21
ENGINEER R. Bishop
WITNESS

FLUID DATA
NATURE
SG
LEVEL
VISCOSITY
From at meas. temp.
BIT

BOREHOLE DATA
PERMANENT DATUM Ground Level
ELEVATION OF P.D. 8 P.S.
MEASUREMENTS FROM G.I.
DEPTH REACHED 93.9m
CASING SHOE 3m
BIT SIZES 1 3" TO 1 1/2" 2 TO
3 TO 4 TO
CASING SIZES 1 3 1/2" TO 3" 2 TO

BOREHOLE BR-10
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
DATE LOGGED 25/9/78
DEPTH SCALE 1:200
1 OF 4 LOGS

EQUIPMENT AND RECORDING DATA													
COAL COMBINATION SONDE													
LOG	EQUIPMENT			TAPING			PANEL		CAL COEFF	DEPTHS		SEAM LOG RUN	
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT OF REPLAY	SPEED	T.C. SECS		NORM	FROM		TO
GAMMA RAY	110		3	Y	9	D	9	1	1.67	92	0	92m	Y
L.S. DENSITY		M5852	42	Y	9	D	9	1/3	7.00	93	1	92m	Y
CALIPER				Y	9	R	9	1/3	-	93	1	92m	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)			
FROM	65	45	
TO	57	35	INTERVAL TOTAL
INTERVAL	8	10	= 18m

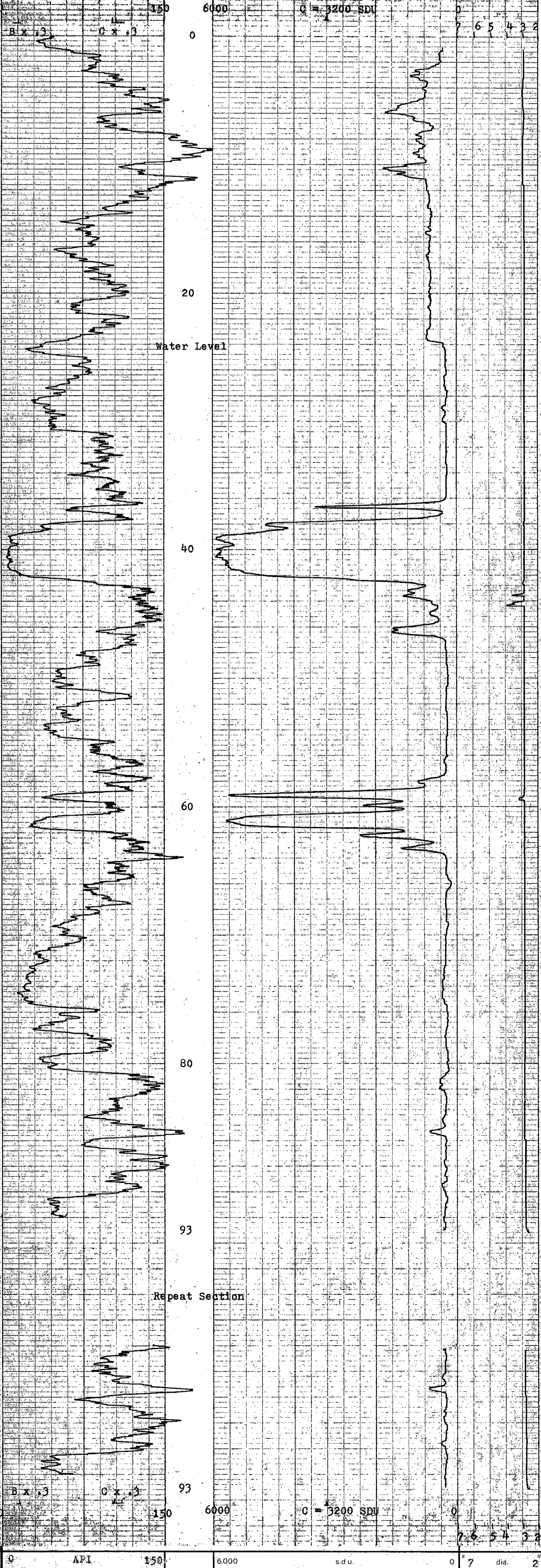
ADDITIONAL SONDES RUN				REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG	
81	N-N	1:200		REFER TO ADDITIONAL HEADINGS

B P B COAL LITHOLOGY LOG
CALIBRATION DATA

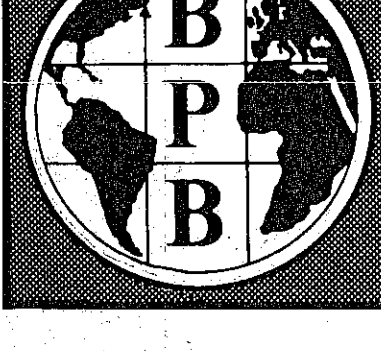
JIG No. 3 VALUE 300 @ 2" DIAM JIG CAL. DATE 28/8/78 G VALUE 3200 @ 1.49 g/cm³ 7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE -3.3 JIG No. 42 SPAN 6000 NORM SDU CPS = 7.00 2 ins 490 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA	
2"	1.20 1.25 1.30 1.35 1.4 1.45 1.5 1.55 1.6 1.7 1.8 1.9 2.0 2.2 2.4 3.0
4"	
6"	
8"	
0	API 150 6000 s.d.u. 0 7 dia. 2"



GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES



BOREHOLE BR-10 AREA Burnt River
CLIENT Brameda Resources COUNTRY Canada

COAL LITHOLOGY LOG



La Bient Kiese 2131A

LOG SUITE:
GAMMA RAY
L.S. DENSITY

SONDE TYPE:
COAL COMBINATION
SONDE

COAL QUALITY LOG

BOREHOLE BR-10
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
DATE LOGGED 25/9/73

DEPTH SCALE
1.20
2 OF 4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE
LOG TAPPING SIDEWALL POSITION
LOG TAPPING RECORDING SPEED PANEL SCALE
GAMMA 1 2 R R 2 2 1 67
L.S. DENSITY 1 2 R 2 1 7.00
SOURCE, SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

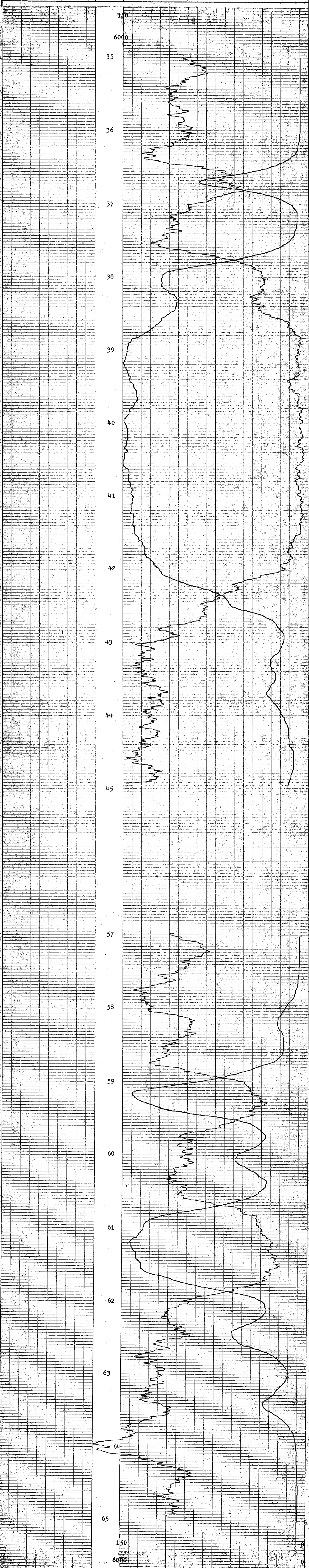
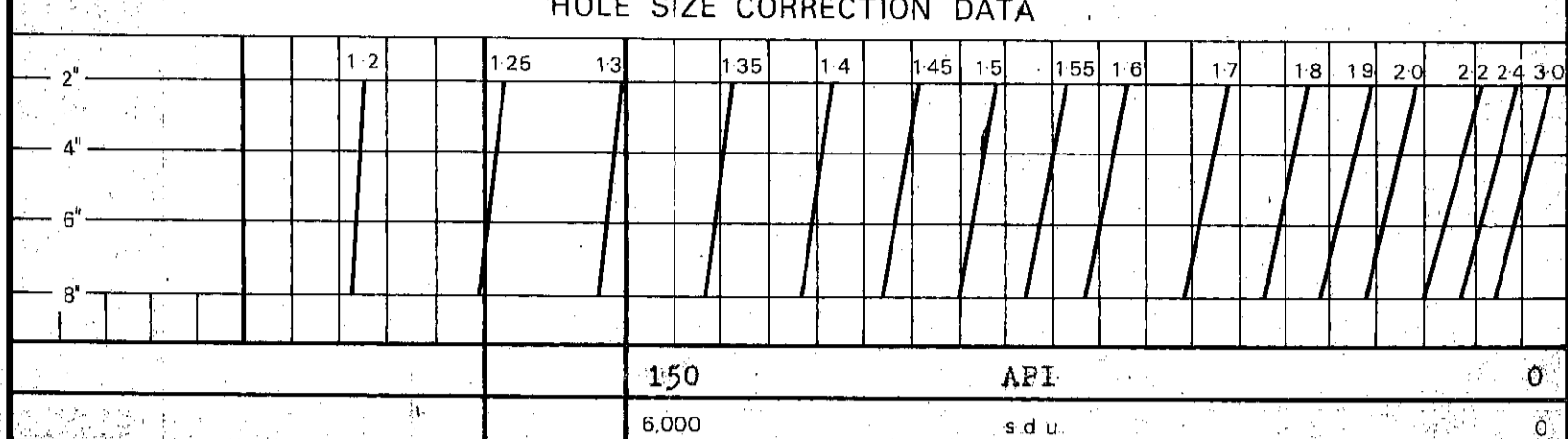
COAL QUALITY LOG INTERVALS
FROM 6.5 4.5
TO 5.2 3.5
MEASUREMENT 8 10
FROM
TO
INTERVAL
VAL TOTAL
REMARKS

488

B P B COAL QUALITY LOG

DEPTH GAMMA RAY
COAL BULK DENSITY
g/cm³

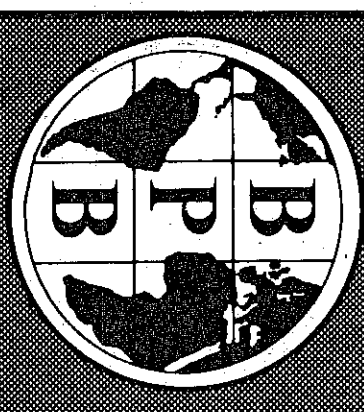
HOLE SIZE CORRECTION DATA



DEPTH GAMMA RAY
COAL BULK DENSITY
g/cm³



BOREHOLE BR-10
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
COAL QUALITY LOG



M. Burnt River 7/8/78

BOREHOLE BR-10
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

DATE LOGGED 25/9/78

3 OF 4 LOGS

DEPTH SCALE
1:20

SEAM THICKNESS LOG

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE

LOG TAPING LOG SPEED REFLECT SPEED SECS NORM
CALIPER Y 2 R 2 1 1
BAR DENSITY Y 2 R 2 1 1 -72.5

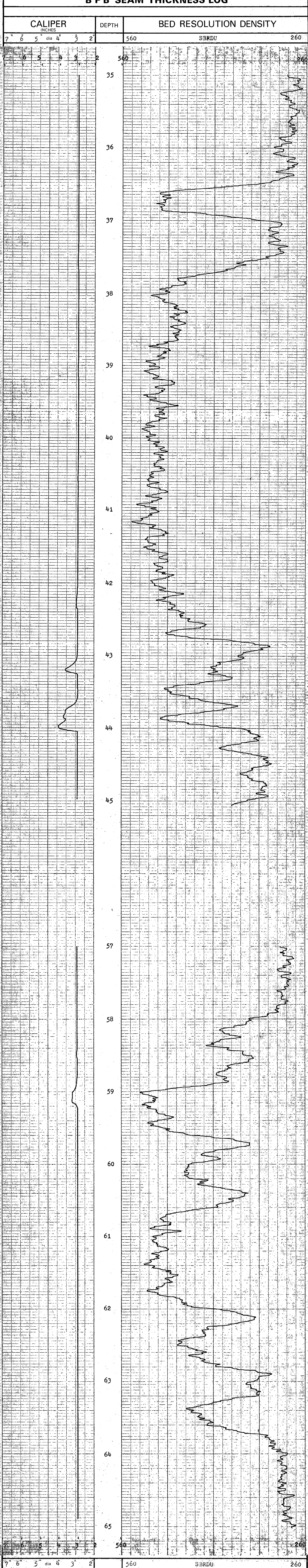
SONDE TYPE:
COAL COMBINATION SONDE
SEAM THICKNESS LOG INTERVALS

FROM 65 45
TO 57 35
INTERNAL FROM 8 10
INTERNAL TO
INTERNAL TOTAL 18m

LOG SUITE:
CALIPER
BR DENSITY

488

B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
7	35	560
6	36	560
5	37	560
4	38	560
3	39	560
2	40	560
2	41	560
2	42	560
2	43	560
2	44	560
2	45	560
2	57	560
2	58	560
2	59	560
2	60	560
2	61	560
2	62	560
2	63	560
2	64	560
2	65	560



BOREHOLE BR-10
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada

SEAM THICKNESS LOG



NEUTRON-NEUTRON LOG

Mr. Brent River 21(5)A

COMPANY Brameda Resources

BOREHOLE BR-10

STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m.

Log measured from _____ Ground Level _____ m. above P.D.

Drilling measured from _____ Ground Level _____ m. above P.D.

GRID REF. E _____ N _____ R.L. _____

Run No. 1 Depth Scale 1:200

Date 25/9/78

First Reading 93m

Last Reading 0

Interval Measured 93m

Casing SPB 93m

Casing Driller: _____

Depth Reached 93.9m

Bottom Driller 93.9m

Mud Nature Quik-Gel

S.G. Viscosity _____

Bit Size 3" to 1.75"

_____ to _____

_____ to _____

Casing Size 1 3 1/2" to 3m

Casing Size 2 _____ to _____

Rm @ Meas Temp. _____ @ _____

Rmc @ Meas Temp. _____ @ _____

BHT _____

Operating Time 1 1/2 hrs.

Truck No. V23/21

Recorded By R. Bishop

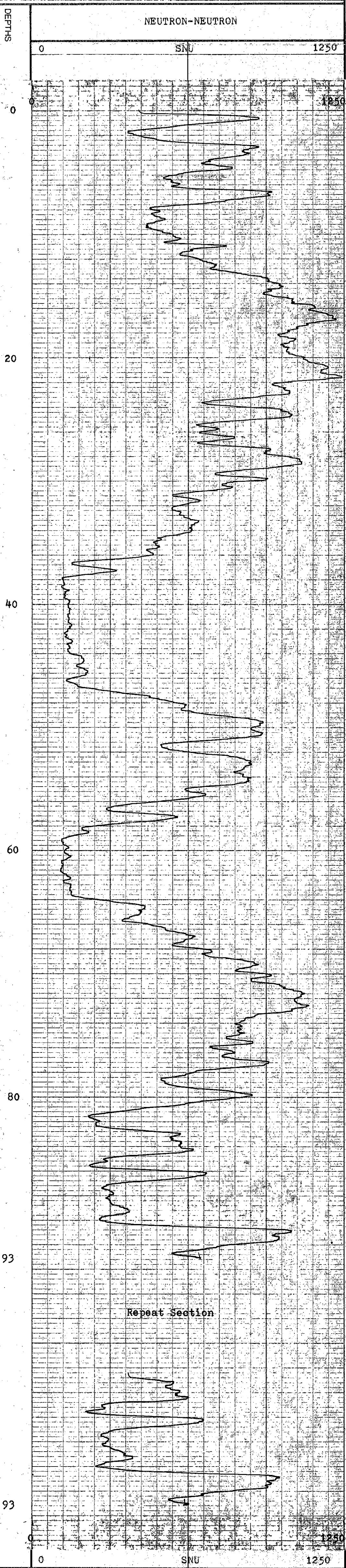
488

fold here

REMARKS

Changes in Mud Type or Additional Samples		Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down
Depth-Driller					
Type Fluid in Hole					
Dens.	Visc.				
ph.	Fluid Loss				
Source of Sample					
Rm @ Meas. Temp.					
Rmf @ Meas. Temp.					
Rmc @ Meas. Temp.					
Source: Rmf	Rmc				
Rm @ BHT					
Rmf @ BHT					
Rmc @ BHT					

Equipment Data				Logging Data						
Run No.	Tool Type	Tool Position	Other	Log	Depths From To	Speed T.C.	Norm.	Sonde No.	Source No.	
					N-N	93 0	9 1	0.81	81	N2479



COMPANY Brameda Resources
 BOREHOLE BR-10
 STATE B.C.
 COUNTRY Canada



BR-11 Burnt River 28/9/78

BOREHOLE BR-11
CLIENT Brameda Resources

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

DEPTH SCALE 1:200
1 of 4 LOGS

COAL

LITHOLOGY LOG

LOG SUITE:
GAMMA RAY
L.S. DENSITY
CALIPER

SONDE TYPE:
COAL COMBINATION
SONDE

BOREHOLE DATA	
PERMANENT DATUM	Ground Level
ELEVATION OF P.D.	
MEASUREMENTS FROM	B.P.B. DRILLER
DEPTH REACHED	G.L. 62.8m
CASING SHOE	5ft.
BIT SIZES	1 NQ TO TD 2 TO TO
CASING SIZES	1 3 1/2" TO 5" 2 TO TO
FLUID DATA	
NATURE	Quick-Gel
SG	
LEVEL	18m
VISCOSITY	
Pin at press. temp.	
B.H.T	
OPERATION DATA	
FIRST READING	62m
LAST READING	0
INTERVAL LOGGED	62m
UNIT - TRUCK NO.	21
ENGINEER	R. Bishop
WITNESS	

488

EQUIPMENT AND RECORDING DATA

LOG	EQUIPMENT		TAPING			PANEL		CAL COEFF.	DEPTHS			SEAM LOG RUN	
	SONDE	SOURCE	LOG TAPED	RECORD SPEED	DIRECT or REPLAY	SPEED	T.C SECS		NORM	FROM	TO		INTERVAL
GAMMA RAY	110		3	Y	9	D	9	1	1.67	61	0	61m	Y
L.S. DENSITY		M5852	42	Y	9	D	9	1/3	7.20	62	1	61m	Y
CALIPER		SIDEWALL POSITION		Y	9	R	9	1/3	-	62	1	61m	Y

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Refer to relevant log)			
FROM	58	17	
TO	51	12	
INTERVAL	7	5	INTERVAL TOTAL 12m

ADDITIONAL SONDES RUN				REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG	
81	N-N	1:200		REFER TO ADDITIONAL HEADINGS

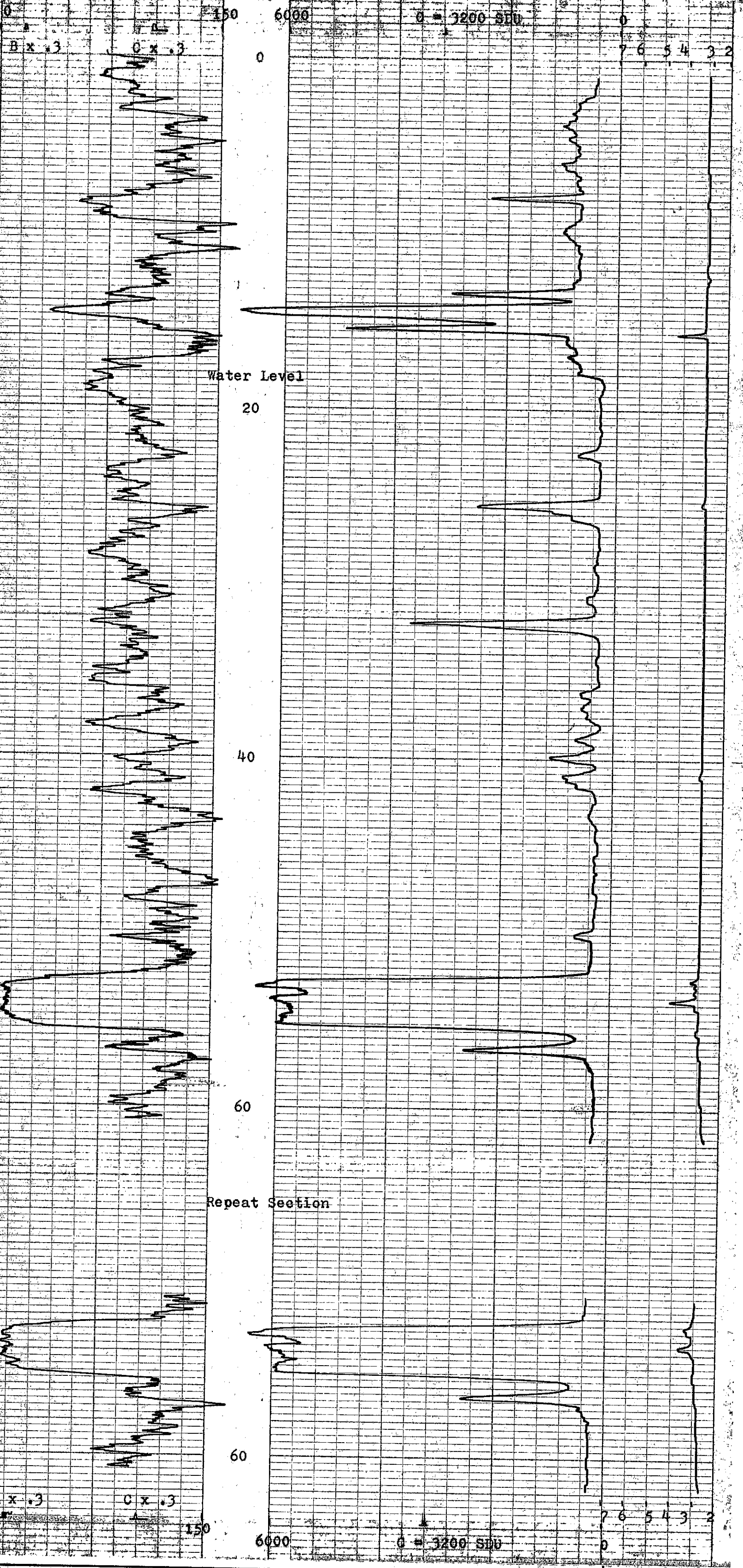
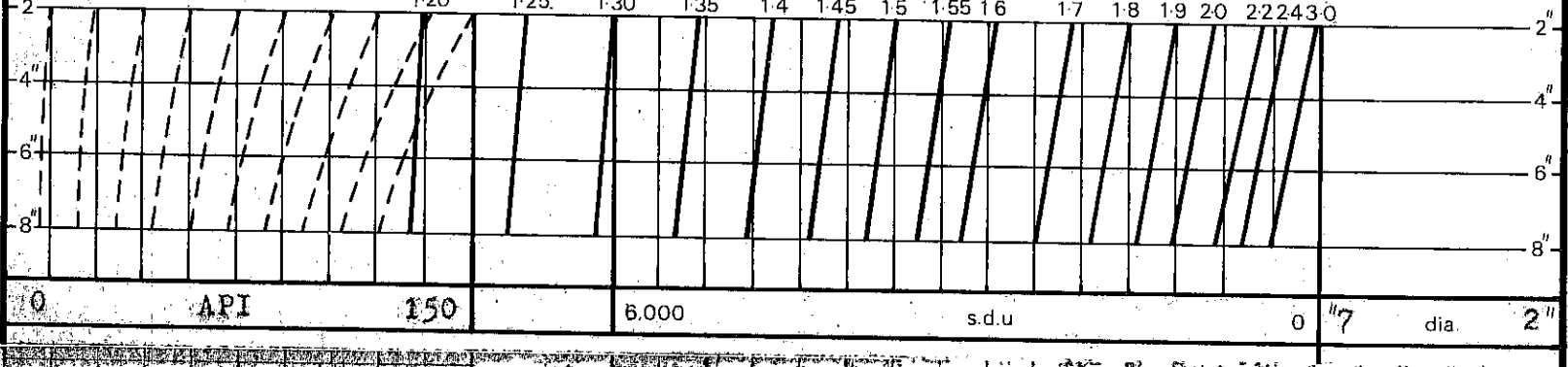
B.P.B. COAL LITHOLOGY LOG

CALIBRATION DATA

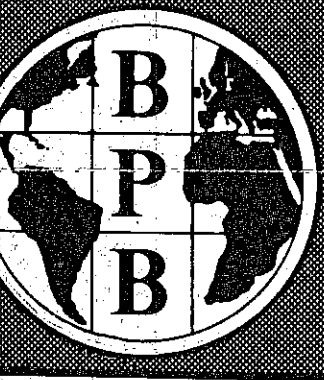
JIG No. 3	VALU@ 300 @ 2" DIAM.	JIG CAL. DATE 28/8/78	JIG VALUE 3200	SDU @ 1.48 g/cm ³	7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE -3.33		JIG No. 42	SPAN 6000	NORM SDU = 7.20	2 ins 490 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm ³	INCHES

HOLE SIZE CORRECTION DATA



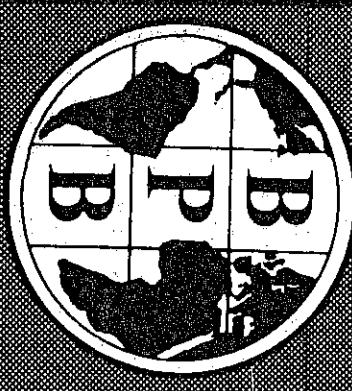
0	API	150	6000	s.d.u.	0	7 dia.	2"
GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER				
		g/cm ³	INCHES				



BOREHOLE BR-11 AREA Burnt River
CLIENT Brameda Resources COUNTRY Canada

COAL LITHOLOGY LOG

12-Burnt River 7/12/78



COAL QUALITY LOG

SONDE TYPE:
COAL COMBINATION SONDE

LOG SUITE:
GAMMA RAY
L.S. DENSITY

BOREHOLE BR-11
CLIENT Brameda Resources

DEPTH SCALE
1:20

AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78

2 OF 4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE

LOG	TAPPING	SIDEWALL POSITION	PANEL	COEF.
GAMMA RAY	Y	K	2	1.67
L.DENSITY	Y	R	2	1.72D

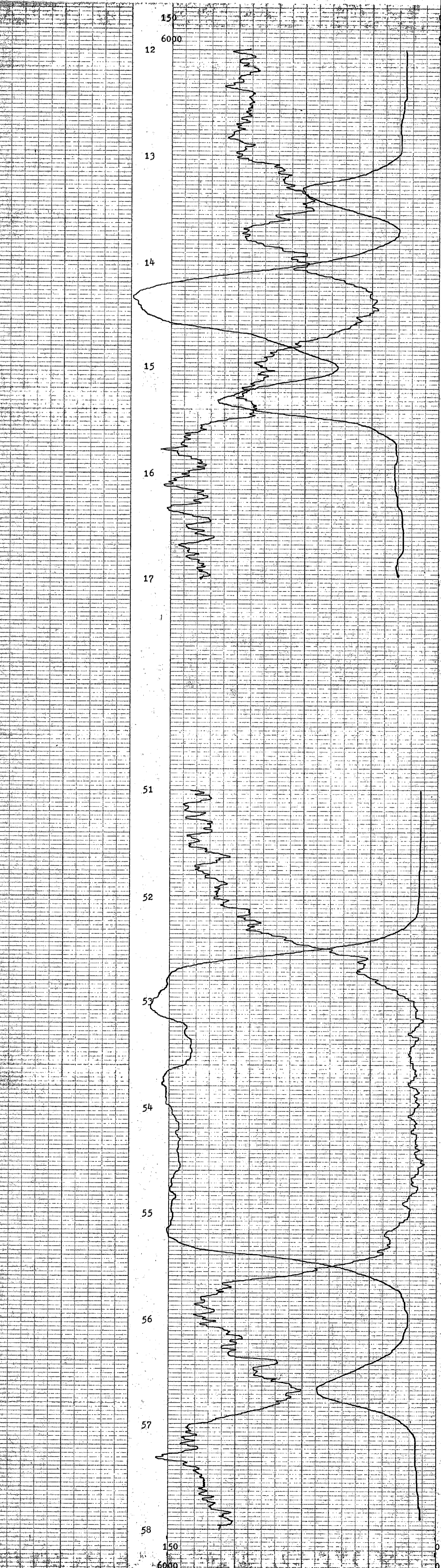
REFER TO LITHOLOGY LOG

COAL QUALITY	LOG INTERVALS
FROM	58
TO	17
INTERVAL	51
FROM	7
TO	5
INTERVAL	1.2m
REMARKS	

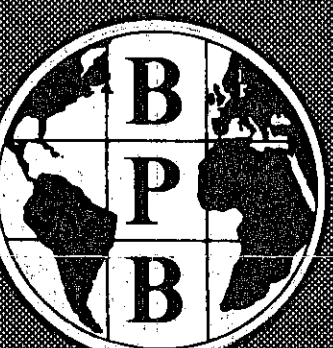
488

B P B COAL QUALITY LOG

DEPTH	GAMMA RAY	COAL BULK DENSITY
		g/cm ³
HOLE SIZE CORRECTION DATA		
2'	1.2	1.25
4'	1.3	1.35
6'	1.4	1.45
8'	1.5	1.55
	1.6	1.6
	1.7	1.7
	1.8	1.8
	1.9	1.9
	2.0	2.0
	2.2	2.2
	2.4	2.4
	3.0	3.0
	150	API
	6,000	s.d.u.



	6,000	s.d.u.	0
	150	API	0
		COAL BULK DENSITY	g/cm ³
DEPTH		GAMMA RAY	



BOREHOLE BR-11 AREA Burnt River
CLIENT Brameda Resources COUNTRY Canada

COAL QUALITY LOG



Mr. Brent Kues 78(3)4

SONDE TYPE:
COAL COMBINATION SONDE

SEAM THICKNESS LOG

BOREHOLE BR-11
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada
DATE LOGGED 28/9/78
DEPTH SCALE 1:20
3 of 4 LOGS

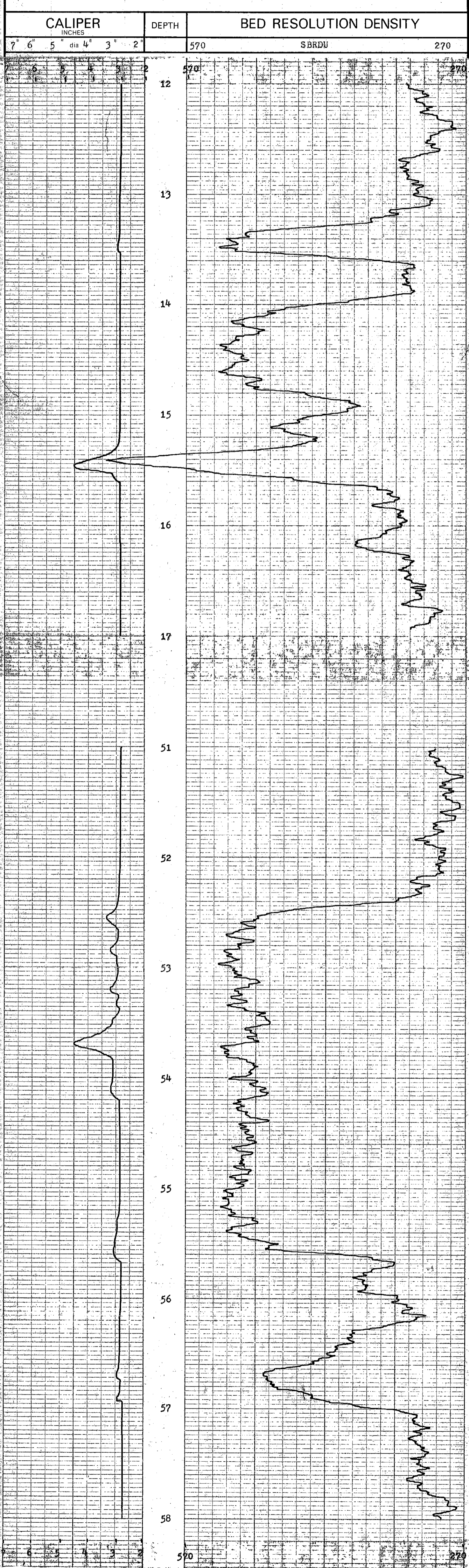
BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE
LOG TAPPING PANEL COEFF
LOG RECORD SPEED 100 NORM
TAPED SPEED REPLY 1
CALIPER Y 2 R 2 1
BR DENSITY Y 2 R 2 1
SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG INTERVALS

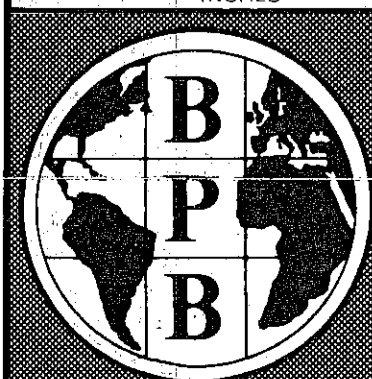
FROM	58	17
TO	51	12
INTERNAL	7	5
FROM		
TO		
INTERNAL		
TO/DIAL		± 2m

488

B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
7" 6" 5" dia 4" 3" 2"	570	SBRDU 270



BOREHOLE BR-11
CLIENT Brameda Resources
AREA Burnt River
COUNTRY Canada

SEAM THICKNESS LOG



NEUTRON-NEUTRON LOG

W. Brent Kiser 713A

COMPANY Brameda Resources

BOREHOLE BR-11

STATE B.C. COUNTRY Canada

Permanent Datum Ground Level Elev. m.

Log measured from Ground Level m. above P.D.

Drilling measured from Ground Level m. above P.D.

GRID REF E N R.L.

Run No. 1 Depth Scale 1:200

Date 28/9/78

First Reading 62m

Last Reading 0

Interval Measured 62m

Casing BPs

Casing Driller

Depth Reached

Bottom Driller REFER TO LITHOLOGY LOG

Mud Nature

SG Viscosity

Bit Size 1 to

Bit Size 2 to

Bit Size 3 to

Casing Size 1 to

Casing Size 2 to

Rm @ Meas Temp. @

Rmf @ Meas Temp. @

Rmc @ Meas Temp. @

Source: Rmf Rmc

Rm @ BHT @

Rmf @ BHT @

Rmc @ BHT @

BHT

Operating Time

Truck No.

Recorded By

Witness

488

fold here

REMARKS

Changes in Mud Type or Additional Samples

Date	Sample No.

Depth-Driller

Type Fluid in Hole

Dens. Visc.

ph. Fluid Loss ml

Source of Sample

Rm @ Meas Temp. @

Rmf @ Meas Temp. @

Rmc @ Meas Temp. @

Source: Rmf Rmc

Rm @ BHT @

Rmf @ BHT @

Rmc @ BHT @

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down
N-N	15m	400-1200 SNU	0-800 SNU

Equipment Data

Run No.	Tool Type	Tool Position	Other

Logging Data

Log	Depths		Speed	T.C.	Norm.	Sonde No.	Source No.
	From	To					
N-N	62	0	9	1	0.81	81	N2479

DEPTHS

NEUTRON-NEUTRON

400 SNU 1200

400

1200

9

400

1200

Scale Change

400

1200

0

800

20

40

60

60

0

800

Repeat Section

60

60

0

800

DEPTHS

NEUTRON-NEUTRON

COMPANY Brameda Resources

BOREHOLE BR-11

STATE B.C.

COUNTRY Canada