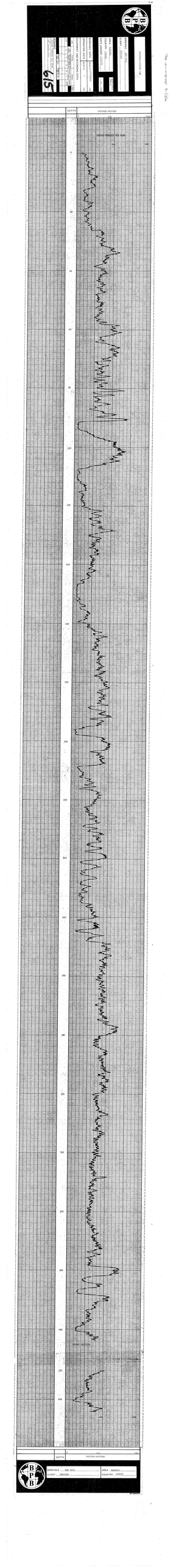
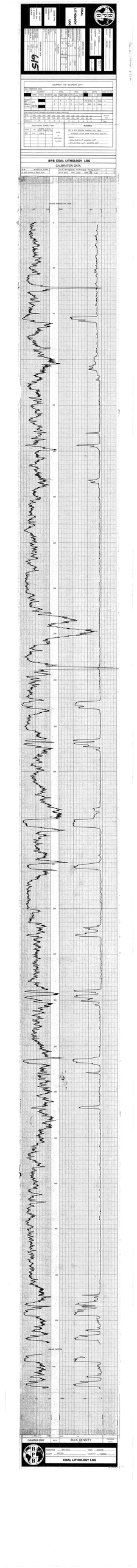
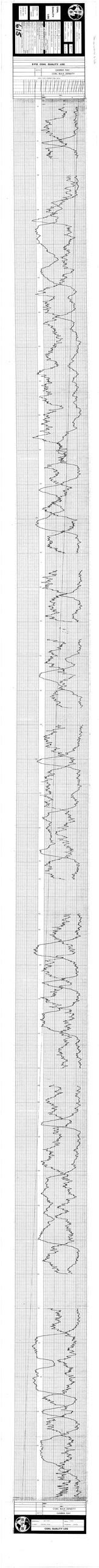
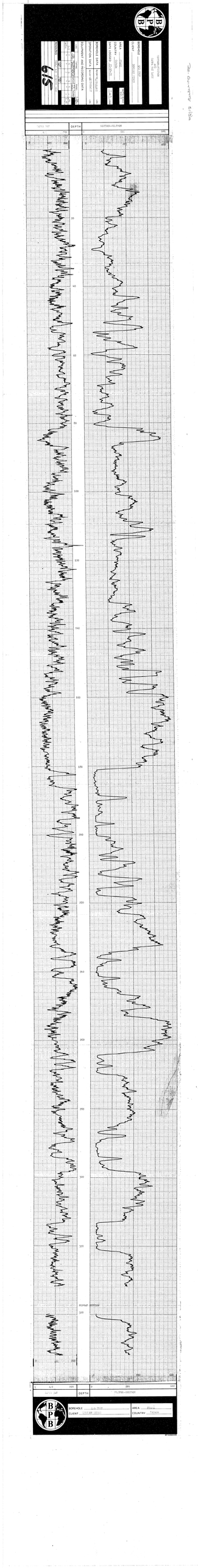

BPB
WELL
FIELD
COUNTY
STATE
COMPANY
DATE RUN
DEPTH
GAMMA RAY
GAMMA RAY CALIBRATION
GAMMA RAY CALIBRATION
GAMMA RAY CALIBRATION


GIS
COAL
LITHOLOGY
LOG
EQUIPMENT AND RECORDED DATA
BPB COAL LITHOLOGY LOG
CALIBRATION DATA
GOOD THICK SW ANOM.
GOOD THICK SW ANOM.
GAMMA RAY
BULK DENSITY
COAL LITHOLOGY LOG

R*A SEAM THICKNESS LOG

CALIPER	BIT SIZE	NEU RESOLUTION DENSITY
6		1000


BPB COAL QUALITY LOG
GAMMA RAY
COAL BULK DENSITY
BPB COAL QUALITY LOG
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG


BPB
SIS
DEPTH
BOREHOLE
CLIENT
AREA
COUNTRY

BPB INSTRUMENTS LTD.
COAL LITHOLOGY LOG
CALIBRATION DATA
EQUIPMENT AND RECORDING DATA
ADDITIONAL SONDES RUN
REMARKS
GAMMA RAY
BULK DENSITY
CALIPER
HOLE SIZE CORRECTION DATA
REPEAT SECTION
BOREHOLE
AREA
CLIENT
COUNTRY
COAL LITHOLOGY LOG

BPB

COAL LITHOLOGY LOG

COAL SEAM LOGGED

COAL SEAM TYPE

DEPTH

DRILLING CONTRACTOR

DRILLING METHOD

DRILLING FLUID

CASING

OPERATION No.

DATE

DRILLER

LOGGING ENGINEER

OPERATOR

CONTRACT No.

DATE

RIG

DRILLER

LOGGING ENGINEER

OPERATOR

DATE LOGGED

DEPTH DRILLER

DEPTH LOGGER

BTM LOG INTERVAL

TOP LOG INTERVAL

CASING DRILLER

CASING LOGGER

BIT

FROM

TO

SIZE

TYPE

FLUID IN HOLE

DENSITY

VISCOSITY

PH

FLUID LOSS

SOURCE OF SAMPLE

RM @ MEAS. TEMP.

RMF @ MEAS. TEMP.

RMC @ MEAS. TEMP.

SOURCE OF RMF

SOURCE OF RMC

RM @ BHT

TIME SINCE CIRC.

MAX. REC. TEMP.

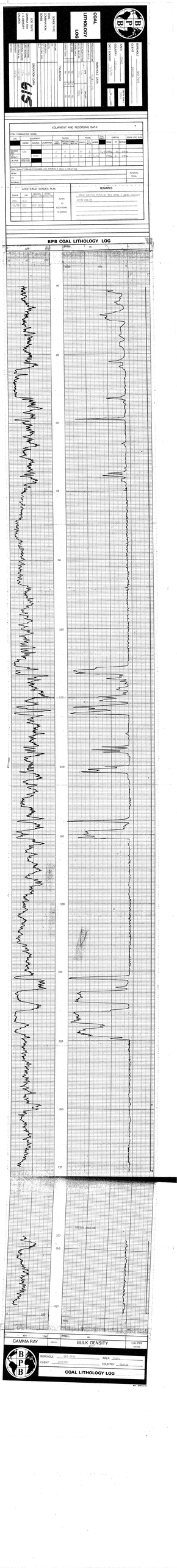
EQUIPMENT AND RECORDING DATA

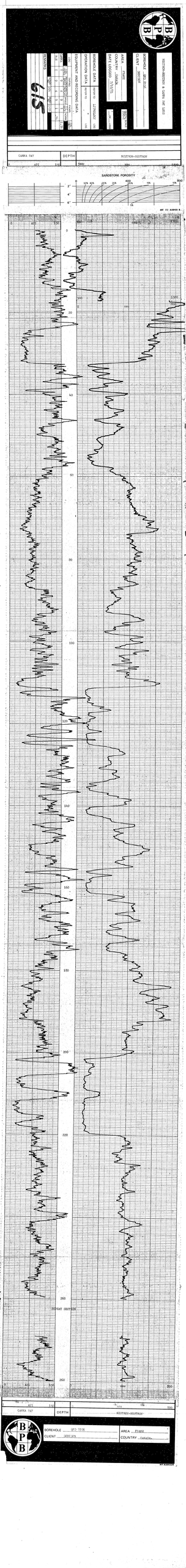
COAL COMBINATION SONDE

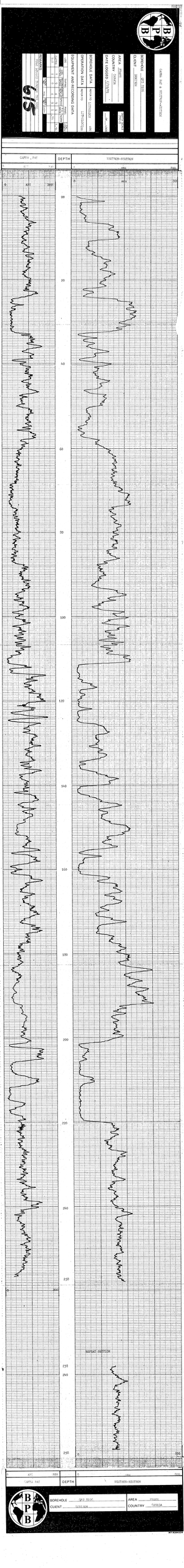
CDC	EQUIPMENT			CASING			PADS		CDC	DEPTH	
	SONDE	SOURCE	SUBHOUSE	SIZE	THICKNESS (WALL)	WEIGHT (NOM. IN AIR)	ARM	PAD		FROM	TO

CDL QUALITY CHECK TOOLS (ID, SERIAL#, Rate & where log)

| Shoe | | | | | | | | | | |

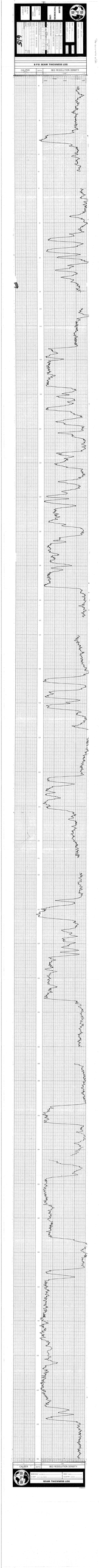

COAL LITHOLOGY LOG
BPB
BOREHOLE
AREA
COUNTY
DATE LOGGED
DRILLER
LOGGER
REMARKS
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE
SONDE
EQUIPMENT
RATING
RANGE
STATUS
REMARKS
GAMMA RAY
BULK DENSITY
CALIPER
BOREHOLE
AREA
CLIENT
COUNTY
COAL LITHOLOGY LOG

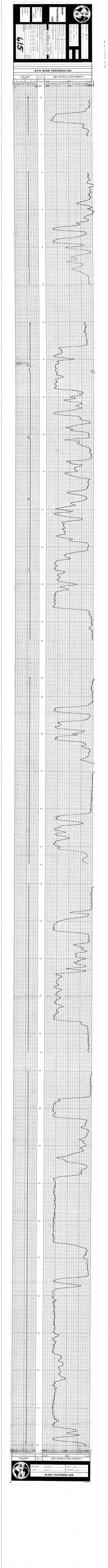

BPB
SIS
REMARKS
EQUIPMENT AND RECORDING DATA
OPERATION DATA
BOREHOLE DATA
AREA
CLIENT
SECTION-BOREHOLE & CASING SIZES
GAMMA RAY
DEPTH
NEUTRON-NEUTRON
SANDSTONE POROSITY
BOREHOLE SP3 1106
CLIENT SPIRIT
AREA PEMBA
COUNTRY TANZANIA

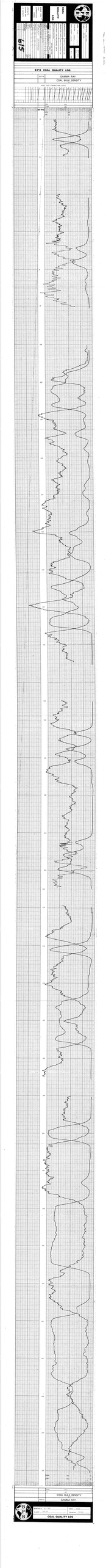

BPB
GR (API)
0
200
DEPTH
SECTION-SECTION
BOREHOLE
CLIENT
REMARKS
RUN NO.
DATE LOGGED
BOREHOLE DATA
OPERATION DATA
EQUIPMENT AND RECORDING DATA
RECORDED BY
WITNESSED BY
DRILLER
MAX. REC. TEMP.
EQUIP. NO.
LOCATION
SRC. OF DRLG. FLUID
DENS.
VISC.
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE OF RMF
SOURCE OF RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
GAPI, PAT
DEPTH
SECTION-SECTION
AZIMUTH-SECTION
BOREHOLE
CLIENT
AREA
COUNTRY

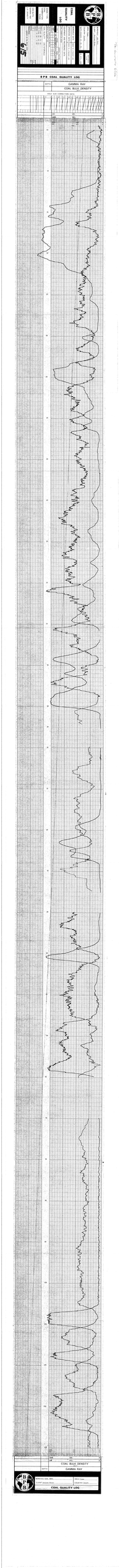
8 P.A SEAM THICKNESS LOG

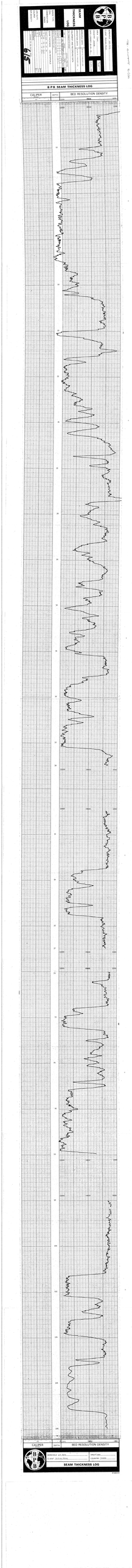
CALIPER	SCALE	SEC RESOLUTION DENSITY




S19
SECTION
RANGE
TOWNSHIP
RPB SEAM THICKNESS LOG
CALIPER
BED RESOLUTION DENSITY
RPB SEAM THICKNESS LOG


BPB COAL QUALITY LOG
GAMMA RAY
COAL BULK DENSITY
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG


BPB COAL QUALITY LOG
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG


SEAM THICKNESS
DATA
8 P.B. SEAM THICKNESS LOG
CALIPER
DEPTH
BED RESOLUTION DENSITY
SEAM THICKNESS LOG

COAL LITHOLOGY LOG

BPB

BOREHOLE	93 TE01
CLIENT	Jenlow Alton
AREA	Powys
COUNTRY	Cymru
DATE LOGGED	19/10/93
LOGGING ENGINEER	[illegible]
CASING DEPTH	0
DRILLING FLUID	WATER
BOREHOLE DIAMETER	200
CASING DIAM.	200
CASING WALL THICK.	5

BOREHOLE 900 7105
CLIENT Denison Mines
AREA Pinex
COUNTRY Canada

DEPTH

Repeat Section

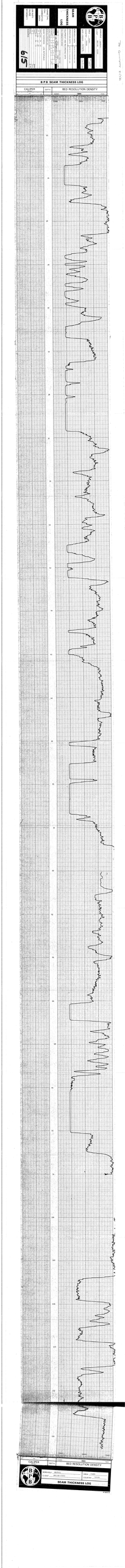
DEPTH

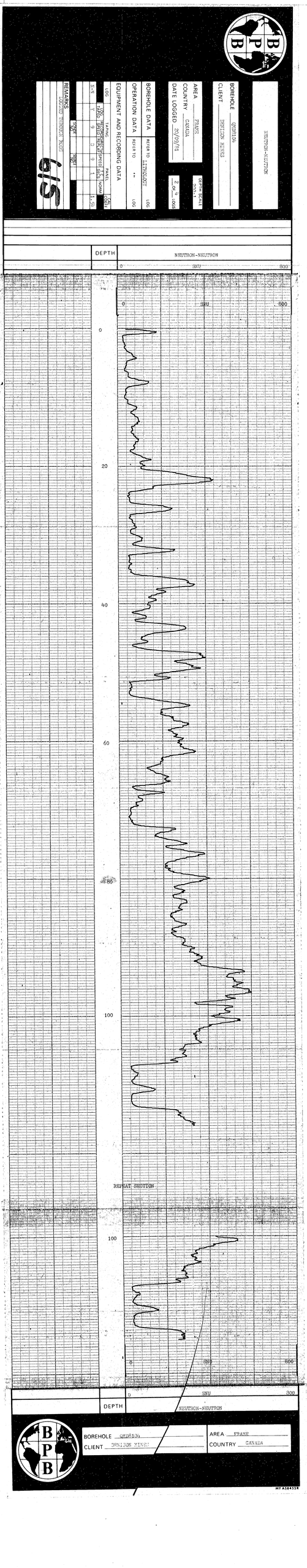
BOREHOLE 900 7105
CLIENT Denison Mines
AREA Pinex
COUNTRY Canada

MT A164339

S-9

DRILLING CONTRACTOR	
DRILLING METHOD	
DRILLING FLUID	
DRILLING DATE	
LOGGING DATE	
LOGGING UNIT	
LOGGING ENGINEER	
LOGGING METHOD	
LOGGING FLUID


S19
B.P.B SEAM THICKNESS LOG
CALIPER
GAMMA
BED RESOLUTION DENSITY
SEAM THICKNESS LOG


B P B
NEUTRON-NEUTRON
BOREHOLE QMDR134
CLIENT DENISON MINES
AREA FRAME
COUNTRY CANADA
DATE LOGGED 20/09/91
DEPTH SCALE 1" = 20' METRIC 1:200
BOREHOLE DATA REFER TO LITHOLOGY LOG
OPERATION DATA REFER TO ... LOG
EQUIPMENT AND RECORDING DATA
LOG RUN PASS LOG CODE
REMARKS LOGGED THROUGH CASING
DEPTH
NEUTRON-NEUTRON
0
SNU
800
0
20
40
60
86
100
REPEAT SECTION
100
0
SNU
800
DEPTH
NEUTRON-NEUTRON
0
SNU
800
BOREHOLE QMDR134
CLIENT DENISON MINES
AREA FRAME
COUNTRY CANADA
MY A544538

COAL LITHOLOGY LOG

LOG SUITE: GAMMA RAY / L.S. DENSITY / CALIPER

LOG COMBINATION SONDE

SONDE TYPE: 1.5"

RUN NUMBER: ONE

TOOL ZERO: 0.00

BOREHOLE: DESCRIPTION / CLIENT: SHELL SUDAN LTD

AREA: FAIFA

COUNTRY: SUDAN

DATE LOGGED: 20/OCT/81

LOG No: 1005

DEPTH DATUM: GROUND LEVEL

WITNESS: [illegible]

OPERATION DATA: RIG No. [illegible] / HOLE READING: DRILLER / LOGGED INTERVAL: 1100 - 1160 / MUD TYPE: [illegible] / MUD RESISTIVITY: [illegible] / MUD TEMPERATURE: [illegible] / MATRIX DENSITY: 2.65 / FLUID DENSITY: 1.0 / MEASURED FROM: GROUND LEVEL / ELEVATION: 0.00

FLUID DATA: CASING SIZES: 13 3/8" @ 1100 / 9 5/8" @ 1100 / 7" @ 1100 / 5" @ 1100 / BIT SIZES: 12 1/4" / 8 1/2" / 6" / CASING SHOE: 1100 / DEPTH INTERVAL: 1100 - 1160 / RECORDED BY: [illegible] / WITNESSED BY: [illegible] / PERMANENT DATUM: GROUND LEVEL / ELEVATION: 0.00 / DRILLER: 1160

BOREHOLE DATA

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT			TAPING			PANEL		COL. CORR.	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATION	LOG SPEED	RECORD SPEED	DIRECT or REPLAY	SPEED	TC SECS	NORM	FROM	TO	BOTTOM	
GAMMA RAY				5	5	D	5	1		1160	0	1160	
L.S. DENSITY				5	5	D	5	1	2.0	1160	0	1160	
CALIPER	SIDEWALL POSITION			5	5	D	5	1		1160	0	1160	

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

											INTERVAL TOTAL
FROM	1116	1095	1055								
TO	1095	1070	1050								
INTERVAL	21	25	5								51

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL COAL LOG	DETAIL COAL LOG
1005	S.S.S.	1320 ft	

REFER TO ADDITIONAL HEADINGS

REMARKS

SONDES THROUGH 1005

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No: VALUE @ 2 DIAM: JIG MARK SHOWN AT ABOVE VALUE =

JIG CAL DATE: JIG VALUE: SDU @ gm/cm³: yrs: 10%

JIG No: SPAN: NORM API*: yrs: 10%

GAMMA RAY	DEPTH	BULK DENSITY gm/cm³	CALIPER INCHES
0 API 150		2000 1000 0	0

0 20 40 60 80 100 120

INSERT SECTION

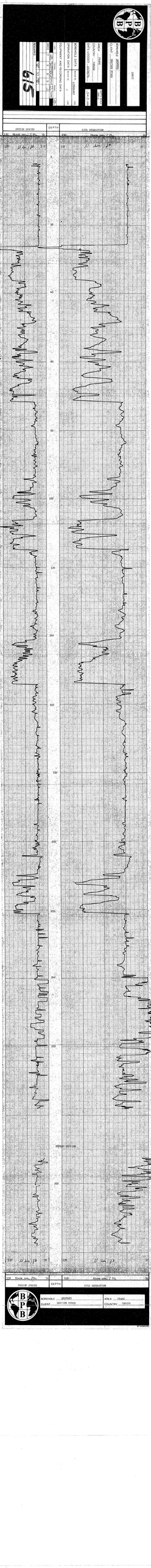
GAMMA RAY	DEPTH	BULK DENSITY gm/cm³	CALIPER INCHES
0 API 150		2000 1000 0	0

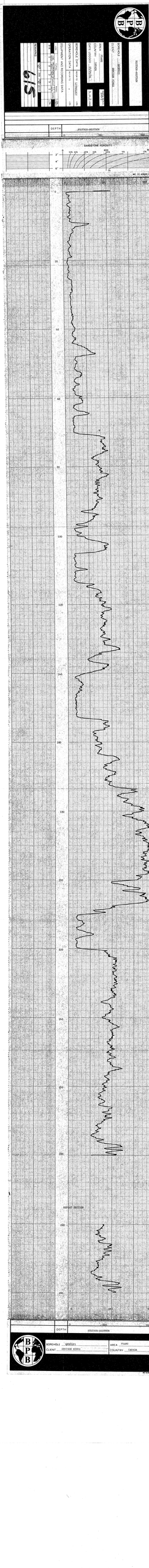
BOREHOLE: [illegible] AREA: FAIFA

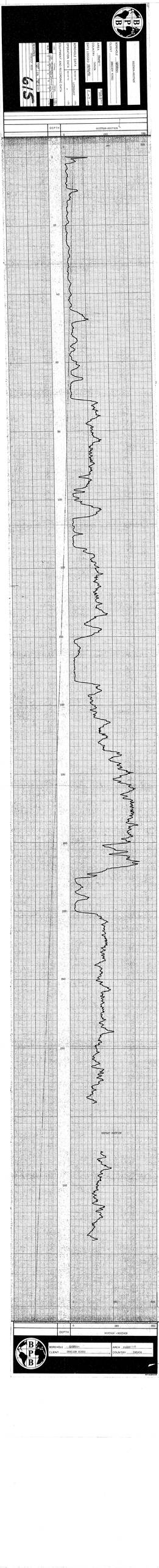
CLIENT: SHELL EXPRO LTD COUNTRY: SUDAN

COAL LITHOLOGY LOG

MT A 5031 W 8


S19
BPB
DEPTH
SITE RESOLUTION
BOREHOLE
CLIENT
AREA
COUNTRY


BPB
SIS
DEPTH
SANDSTONE POROSITY
BOREHOLE
CLIENT
AREA
COUNTRY
CANADA


BPB
DEPTH
RESISTIVITY - RESISTIVITE
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800

BPB

COAL LITHOLOGY LOG

CALIBRATION DATA

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

	EQUIPMENT				PANEL						DEPTH			SOND LOG RUN
	SONDE	SOURCE	CARRIER	LOG	PROBE	DET	SPACE	ATT	SPACE			FROM	TO	
GAMMA	105				3	6	3	1	5			0	205	
DENSITY	111				3	6	3	1	5			205	0	
CALIPER	CALIPER				3	6	3	1	5			205	0	

USE SAND/STEARIN THICKNESS LOG INTERVALS FROM 0 TO 205 FT

FROM	INTERVAL
TO	TOTAL
INTERVAL	

ADDITIONAL SONDES RUN

SONDE	SIN	LOGGING MODE OBJECTIVE
GR	104	2000
DENSITY	20212	2000
ATT	20217	2000

MODE	
TO	
ADDITIONAL	
HEADINGS	

REMARKS

SURVEYED PREVIOUS RUN?

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

AT IN	VALUE @ 2 SHAFT	AT VALUE	500 @ 1000	IN	100
AT SONDE SURFACE AT ABOVE VALUE		AT IN	SPANS	NORM 200	IN	100

GAMMA RAY	DEPTH	BULK DENSITY	CALIPER
		(gm/cc)	INCHES

HOLE SIZE CORRECTION DATA

| | | | | | |

COAL LITHOLOGY LOG

BOREHOLE 615

EQUIPMENT AND RECORDING DATA

COAL COMBINATION ZONES

RUN	TOOL	EQUIPMENT SERIAL NUMBER	TAPING LOG INTERVAL	TAPING LOGGING SPEED	PANEL LOG SCALE	PANEL DEPTH SCALE	LOG SCALE	DEPTHS FROM	DEPTHS TO	BOREHOLE DIAMETERS
1	GAMMA RAY		T	9	3	3	1	0.0	200.0	0
	BULK DENSITY		T	9	3	3	1	0.0	200.0	0
	CALIPER		T	9	3	3	1	0.0	200.0	0

COAL QUALITY CLEAT THICKNESS LOG INTERVALS (Refer to sheet No.)

FROM	INTERVAL TOTAL
TO	
INTERVAL	

ADDITIONAL SONDES RUN

RUN	TOOL	LOGGING INTERVAL (Refer to sheet No.)
1&2	B.H.	2000.0
	SONIC	2000.0
2&3	HOLE	2000.1
	SONIC	2000.1

NOTE TO ADDITIONAL READINGS

REMARKS

BOTTOM RUN GR DATA AND NEUTRON LOGGED THROUGH DRILL

BPB COAL LITHOLOGY LOG

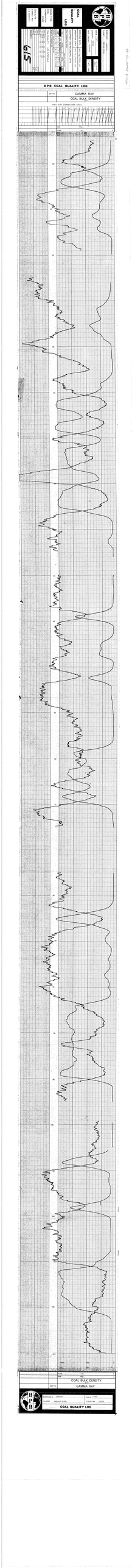
CALIBRATION DATA

AT No.	VALUE @ 2.65MM	AT 2.65 DEN	VALUE	ABOVE	m.
AT MARK SHOWN 6" ABOVE VALUE		AT No.	SPAN	NORM	m.

GAMMA RAY — DEPTH — BULK DENSITY (G/CC) — CALIPER (INCHES)

HOLE SIZE CORRECTION DATA

API — 0 — 100 — 200 — 300 — MM — 1.95 — 2.20 — 2.45 — 2.70 — 2.95 — 3.20 — 3.45 — 3.70 — 3.95 — 4.20 — 4.45 — 4.70 — 4.95 — 5.20 — 5.45 — 5.70 — 5.95 — 6.20 — 6.45 — 6.70 —

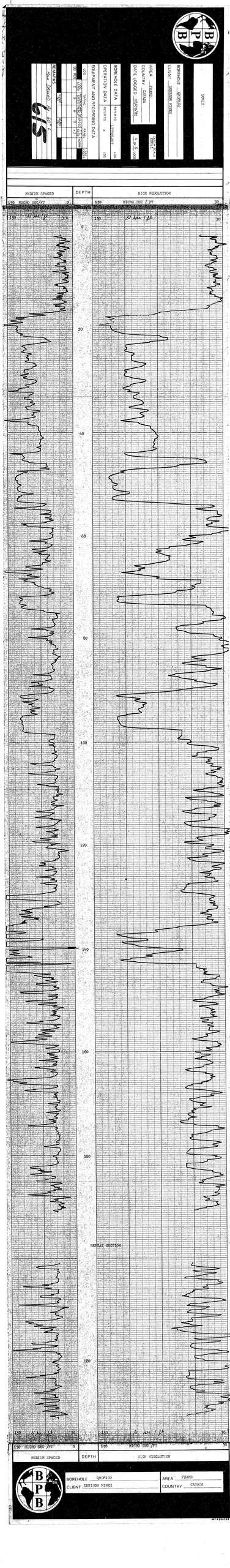

COAL QUALITY LOG
BPB COAL QUALITY LOG
GAMMA RAY
COAL BULK DENSITY
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG

B P B SEAM THICKNESS LOG

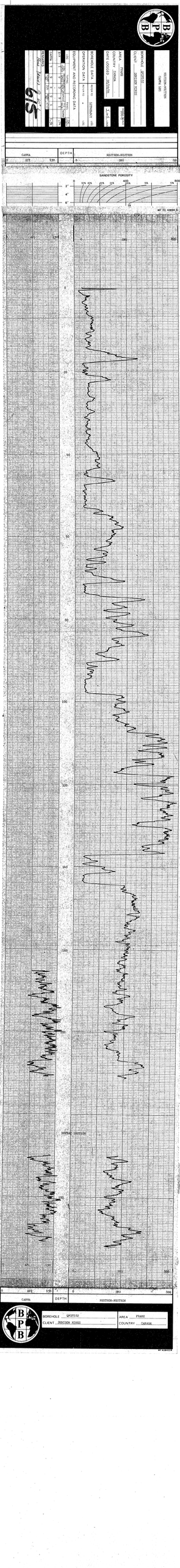
CALIPER | BED RESOLUTION DENSITY

CALIPER | BED RESOLUTION DENSITY

SEAM THICKNESS LOG



RE-QUANTEC 2(3)A


BPB
CASING
BOREHOLE DIAMETER
BOREHOLE FLUID
DENSITY
VISCOSITY
PH
RESISTIVITY
TEMPERATURE
SOURCE
RMF
RMC
RM
BOREHOLE DATA
RUN NO.
TIME
DEPTH-DRILLER
DEPTH-LOGGER
BTM. LOG INTERVAL
TOP LOG INTERVAL
OPERATING RIG TIME
OPERATIONS DATA
RECORDED BY
WITNESSED BY
EQUIPMENT AND RECORDING DATA
TOOL NO.
TYPE
SERIAL NO.
LOCATION
RECORDED
MAX. REC. TEMP.
EQUIPMENT NO.
LOGGING DATE
LOGGING UNIT NO.
LOGGING TRUCK
GAMMA
DEPTH
NEUTRON-NEUTRON
SANDSTONE POROSITY
BOREHOLE
CLIENT
AREA
COUNTRY
CARAMA

COAL LITHOLOGY LOG

SONDE TYPE
SONDE COMBINATION
LOG SUITE
S. GRAVITY CALIBER

BPB

BOREHOLE
CLIENT
DATE LOGGED
COUNTRY
AREA
LOCATION
DRILLER'S DEPTH
LOGGER'S DEPTH
CASING DEPTH
CASING SIZE
BOREHOLE DEPTH
BOREHOLE DIAMETER
FLUID DATA
TYPE
LEVEL
TEMP.
VISCOSITY
PH
RESISTIVITY
SOURCE
OPERATION DATA
RECORDED BY
WITNESSED BY
TIME LOGGER ON BOTTOM
TIME STARTED
UNIT NUMBER

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT SONDE	SOURCE	CALIBRATOR
GAMMA RAY	101		
DENSITY			
CALIPER	SIDEWALL PADDLES		

TAPING			PANEL			COAL SEAM	DEPTHS			SEAM LOG RUN
LOG SPEED	CABLE SPEED	CABLE REPLAY	UPPER	1 / 5 BATT.	5 NORM		FROM	TO	WORK	
7	9	9	9	1		1-91	100	0	100	
7	9	9	9	-3	5-3		100	0	169	
7	9	9	9	+3			172	0	172	

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

FROM	INTERVAL
TO	TOTAL
INTERVAL	

ADDITIONAL SONDES RUN

SONDE	LOG	GRAPHIC SCALE (INCH/1,000 CPS)
20S	8-9	200:1
	20S12	200:1

REFER TO ADDITIONAL HEADINGS

REMARKS

CASING THROUGH SEAM
Hole Deviated at 60° C.

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No.	VALUE @ 2 DAM
JIG MARK SHOWN AT ABOVE VALUE =	

JIG LOG DATA	JIG VALUE	SOLID	MUD*	ins	cps
JIG No.	SPANS	NORM	*	ins	cps

GAMMA RAY — DEPTH — BULK DENSITY — CALIPER (INCHES)

GAMMA RAY		BULK DENSITY		CALIPER
0	150	3000	3000	0
0	20			
	40			
	60			
	80			
	100			

COAL LITHOLOGY LOG

BPB

LOG SUITE
GAMMA RAY
CALIPER

SONDE TYPE
COAL COMBINATION SONDE

LOG NUMBER
DATE LOGGED
AREA
CLIENT
REMARKS

BOREHOLE DATA
CASING
FLUID LEVEL
FLUID DATA
OPERATION DATA
RECORDED BY
WITNESSED BY

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT			JOINING			PANEL			DEPTHS		BEAM LOG RUN	
	SONDE	SOURCE	CALIBRATION	LOG SPEED	CABLE WEIGHT REPLAY	CABLE SPEED	GAIN BATT.	CURVE		FROM	TO	BEAM	
GAMMA RAY	115												
DENSITY													
CALIPER	SIDEWALL PADDED												

COAL QUALITY/BEAM THICKNESS LOG INTERVALS (RAW & DERIVED TVD)

FROM					INTERVAL TOTAL
TO					
INTERVAL					

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL DETAIL LOGGING	REMARKS

REMARKS

FIRST RUN UP HOLE AND RUSTOM

RUN PUMPING NOISE

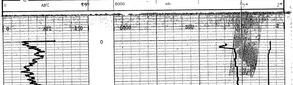
BPB COAL LITHOLOGY LOG

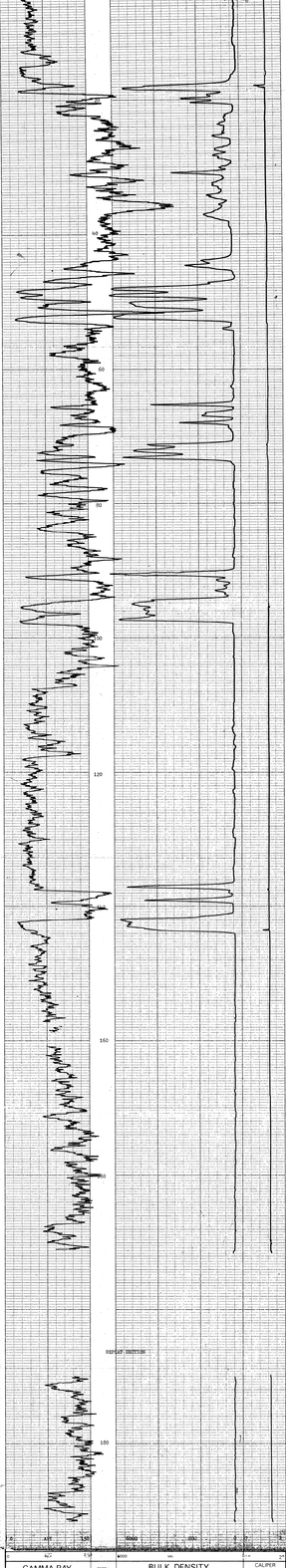
CALIBRATION DATA

AC No.	VALUE	@	DAMP	AC CAL DATA	AC VALUE	1000@	1000
AC MARK SHOWN AT ABOVE VALUE				AC No.	SPANS	50@	150

GAMMA RAY — DEPTH — BULK DENSITY — CALIPER

HOLE SIZE CORRECTION DATA





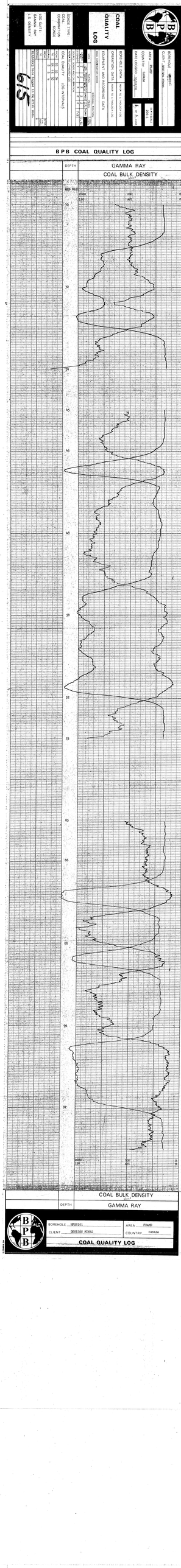
GAMMA RAY — DEPTH — BULK DENSITY — CALIPER

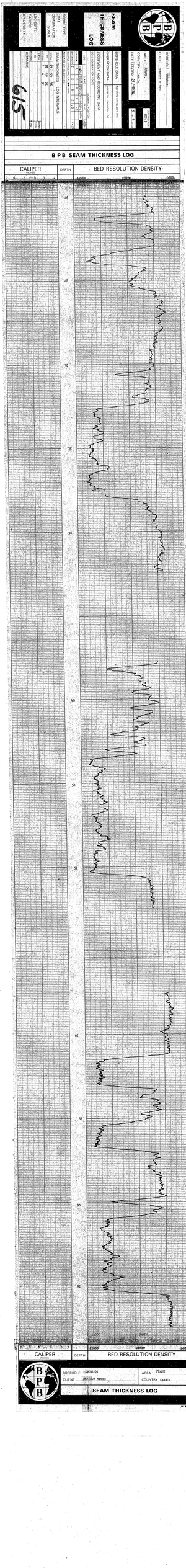
BPB

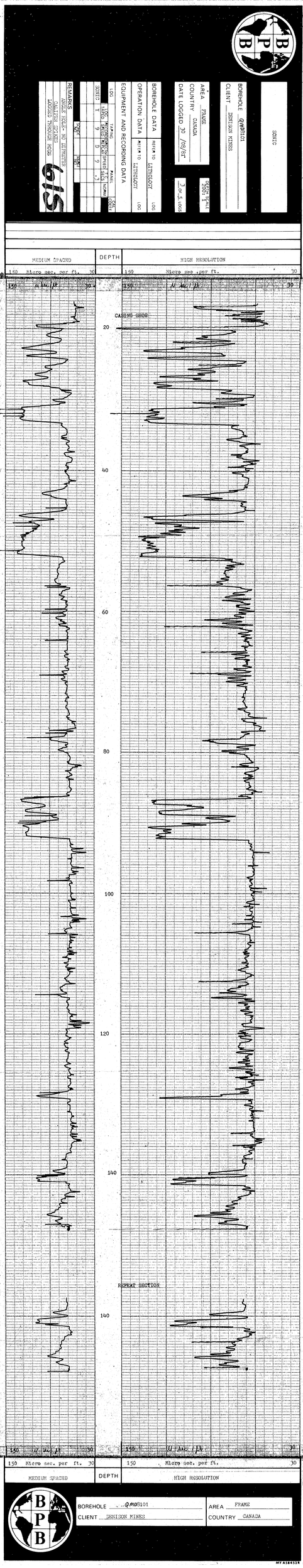
BOREHOLE
CLIENT
AREA
COUNTRY

COAL LITHOLOGY LOG

BPB 4355M 1

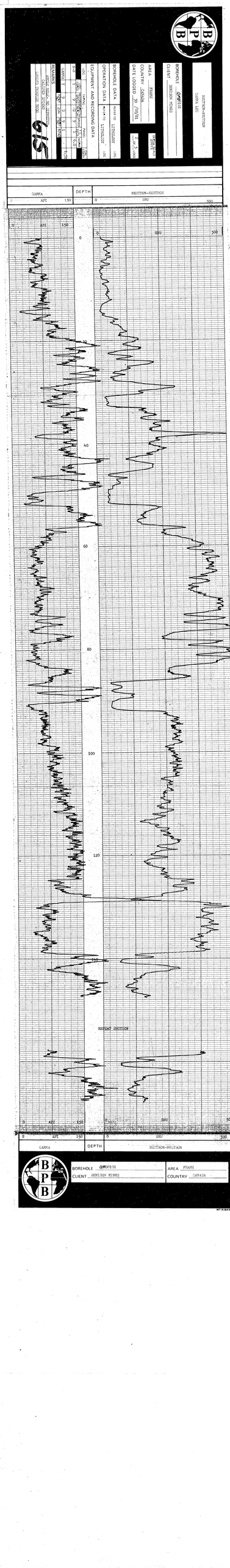

COAL QUALITY LOG
BPB COAL QUALITY LOG
DEPTH
GAMMA RAY
COAL BULK DENSITY
COAL BULK DENSITY
DEPTH
GAMMA RAY
BOREHOLE SP3E101
CLIENT SEKISUI MINES
AREA PEACE
COUNTRY CANADA
COAL QUALITY LOG


SEAM THICKNESS LOG
BPB
BOREHOLE TYPE
COAL FORMATION SHOWN
CONSISTENT CALIPER AS CHOSEN
SEAM THICKNESS
LOG INTERVALS
OPERATOR DATA
EQUIPMENT AND RECORDING DATA
BOREHOLE DATA
DATE RECORDED 27-Nov-96
AREA PEMBINA
CLIENT GENERAL MINES
REFERENCE TOPSEAL
DRILLING MUD
SPECIAL CONDITIONS
CALIPER
DEPTH
BED RESOLUTION DENSITY
BOREHOLE 02MB0593
CLIENT GENERAL MINES
AREA PEMBINA
COUNTRY CANADA
SEAM THICKNESS LOG



R2. QUANTITE 81/3/A

MT A584328


BPB
BOREHOLE GM0191
CLIENT DOMTAR MINES
AREA PERRY
COUNTRY CANADA
DATE LOGGED 30/8/81
RUN NO. 1
DEPTH DRILLER 150
DEPTH LOGGER 150
BTM LOG INTERVAL 150
TOP LOG INTERVAL 0
CASING DRILLER 6
CASING LOGGER 6
BIT SIZE 5.5
TYPE FLUID WATER
DENSITY 1.0
LEVEL FULL
MAX REC TEMP 20°C
EQUIPMENT NUMBER 1
LOGGING ENGINEER
WITNESS
REMARKS
GAMMA
API
DEPTH
NEUTRON-NEUTRON
SNU
REPEAT SECTION

COAL LITHOLOGY LOG

BPB

LOG SUITE: GAMMA RAY, L.S. DENSITY, CALIPER

SONDE TYPE: DUAL COMBINATION SONDE

BOREHOLE RECORD — CLIENT: DENDYSON MINES; AREA: PEACE; COUNTRY: CANADA; DATE LOGGED: 31-JULY-81; RUN NO.: ONE; DEPTH DRILLER: 200ft; DEPTH LOGGER: 200ft; BOTTOM LOGGED INTERVAL: 200ft; TOP LOGGED INTERVAL: SURFACE; CASING: DRILLER 200ft, LOGGER 200ft; CASING SIZE: 6 in; CASING WEIGHT: 15 lbs/ft; BIT SIZE: 5 7/8 in; TYPE FLUID IN HOLE: WATER; DENSITY: 1.0; VISCOSITY: 50; PH: 7; FLUID LOSS: 10 ml; SOURCE OF SAMPLE: CIRCULATED; RM @ MEAS. TEMP: 0.1 @ 70°F; RMF @ MEAS. TEMP: 0.1 @ 70°F; RMC @ MEAS. TEMP: 0.1 @ 70°F; SOURCE RMF: MEASURED; SOURCE RMC: MEASURED; RM @ BHT: 0.1 @ 70°F; TIME SINCE CIRC: 10 HRS; MAX. REC. TEMP: 70°F; EQUIP. LOCATION: 3304; RECORDED BY: J. SMITH; WITNESSED BY: MR. BROWN

OPERATION DATA — MAT. DENSITY: 2.65; MAT. VELOCITY: 18000; MATRIX: LIMESTONE

FLUID DATA — FLUID DENSITY: 1.0; FLUID TYPE: WATER

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT: SONDE	SOURCE	CALIBRATOR	TAPING: LOG TAPED	RECORD SPEED	DIRECTION REPLAY	PANEL: SPEED	TC SECS	NORM	CAL DEPTH	DEPTHS: FROM	TO	MORE	SEAM LOG RUN
GAMMA RAY	101			Y	9	U	9	1		1.51	1.51	0	150	
DENSITY				Y	9	U	9	3	7.9		1.51	0	150	
CALIPER	SIDEWALL POSITION			Y	9	U	9	3			1.51	0	150	

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

										INTERVAL TOTAL
FROM	93	53	30							
TO	65	43	30							
INTERVAL	3	8	3							30

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG
204	8-8	200:1	
	8D12	200:1	

REFER TO ADDITIONAL HEADINGS

REMARKS

LOGGED THROUGH CASE
ANGLE HOLE- 90 DEGREES
CALIPER STUCK

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. VALUE 2770 2" DIAM
JIG MARK SHOWN AT ABOVE VALUE -

JIG CAL DATE 27/7/81 JIG VALUE 3040 SDU/gm/cm³ 1.098
JIG No 994 SPAN 6000 NORM 70% 2.2

2" PR 509 SPR
7 PR 91 SPR

GAMMA RAY — API — 0 — 150
DEPTH
BULK DENSITY — SDU — 3000 — 0
CALIPER — INCHES — 2" — 7"

* SHOTS SPIKE

REPEAT SECTION

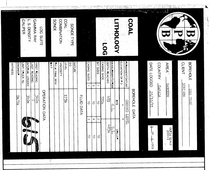
GAMMA RAY — DEPTH — BULK DENSITY — CALIPER (INCHES)

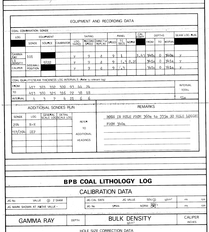
BPB

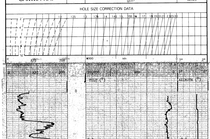
BOREHOLE: amo 810 — AREA: PEACE
CLIENT: DENDYSON MINES — COUNTRY: CANADA

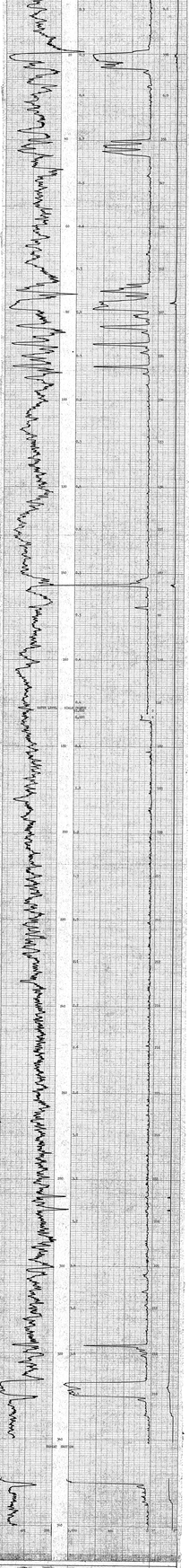
COAL LITHOLOGY LOG

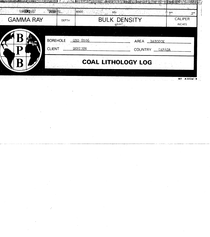
MY A30241 B

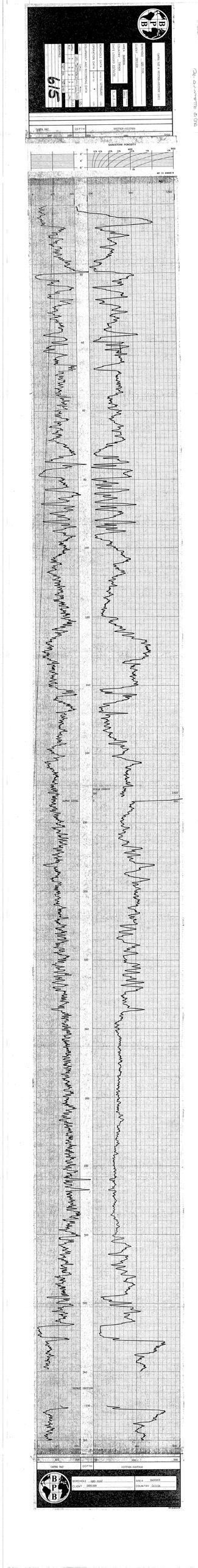

BPB
COAL LITHOLOGY LOG
CLIENT
BOREHOLE
AREA
COUNTY
LOCATION
DRILLING CONTRACTOR
RIG
DRILLER
LOGGED BY
DATE
REMARKS

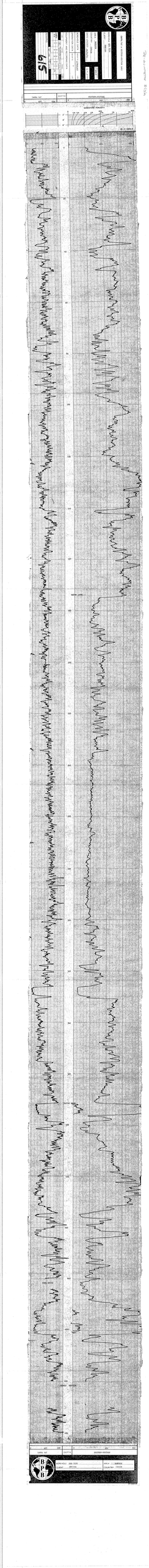

EQUIPMENT AND RECORDING DATA
COAL CALIBRATION TUBES
EQUIPMENT
TUBE
PROBE
COAL
DEPTH
GAMMA
DENSITY
SERIAL No.
SERIAL No.
TYPE
SERIAL No.
SCALE
FROM
TO
SCALE
GAMMA
DENSITY
CALIBRATION CHECKS
BEFORE LOGGING
AFTER LOGGING
ADDITIONAL GAMMA RUN
SCALE
REMARKS

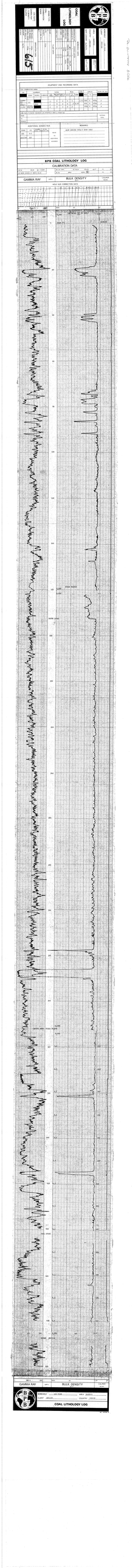

BPB COAL LITHOLOGY LOG
CALIBRATION DATA
GAMMA RAY
BULK DENSITY
CALIPER
HOLE SIZE CORRECTION DATA
BOREHOLE
AREA
CLIENT
COUNTY
LOCATION
COAL LITHOLOGY LOG

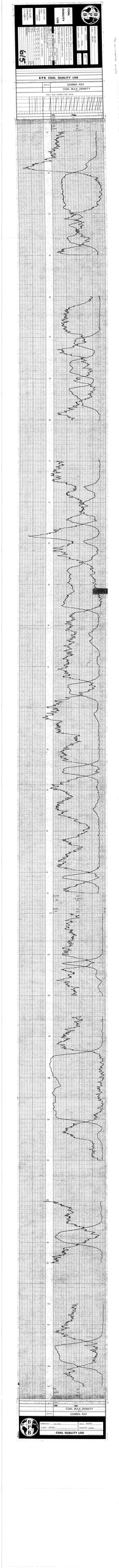

GAMMA RAY
BULK DENSITY
CALIPER
WATER LEVEL
FINAL LOGGED DEPTH

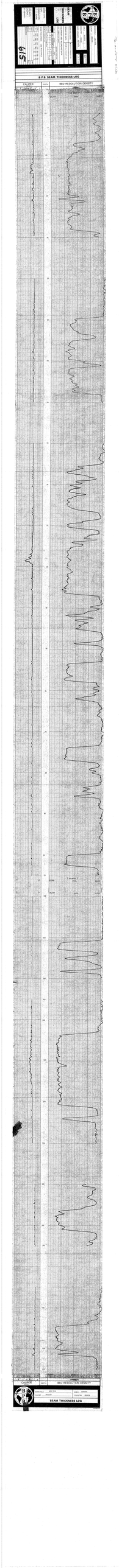

GAMMA RAY
BULK DENSITY
CALIPER
BOREHOLE
AREA
CLIENT
COUNTY
LOCATION
COAL LITHOLOGY LOG

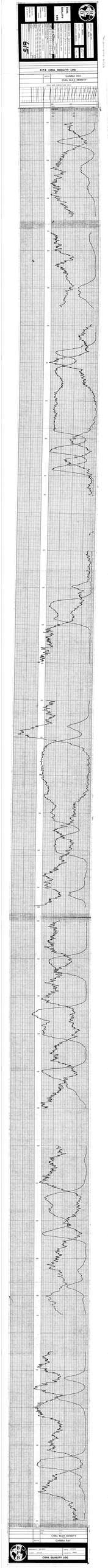

BPB
SONIC LOG
SONIC - LSS TYPE
SONIC - BOREHOLE CORR.
DATE LOGGED (DD/MM/YY)
RUN NO.
TIME LOGGED (24 HOUR CLOCK)
DEPTH DRILLER
DEPTH LOGGER
BOTTOM LOGGED INTERVAL
TOP LOGGED INTERVAL
TYPE FLUID IN HOLE
SALINITY
DENSITY
VISCOSITY
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE OF RMF
SOURCE OF RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
LOGGING DISTANCE
SONIC
SONIC
SONIC

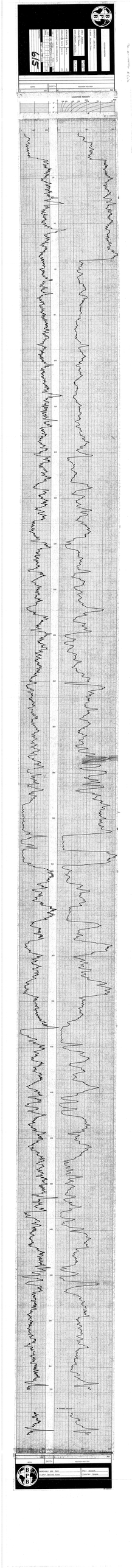


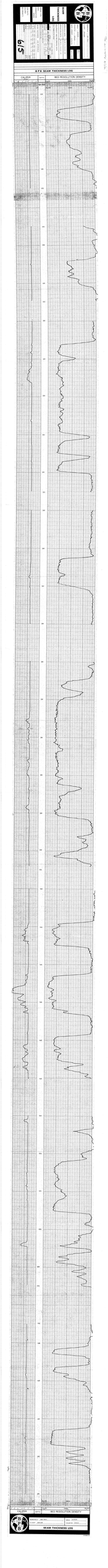

BPB
COAL LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
CALIBRATION DATA
GAMMA RAY
BULK DENSITY
HOLE SIZE CORRECTION DATA
ADDITIONAL SONDES RUN
REMARKS
GAMMA RAY
BULK DENSITY
COAL LITHOLOGY LOG


BPB COAL QUALITY LOG
GAMMA RAY
COAL BULK DENSITY
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG


B P E SEAM THICKNESS LOG
CALIPER
BED RESOLUTION DENSITY
SEAM THICKNESS LOG


SP
GAMMA RAY
COAL BULK DENSITY
COAL QUALITY LOG




BPB SEAM THICKNESS LOG
CALIPER
MED RESOLUTION DENSITY
SEAM THICKNESS LOG
MED RESOLUTION DENSITY

DO NOT SCALE

DRAWING

ISSUE

DRAWING NUMBER

DRAWING STATUS

DRAWING TITLE

DRAWING SIZE

SCALE

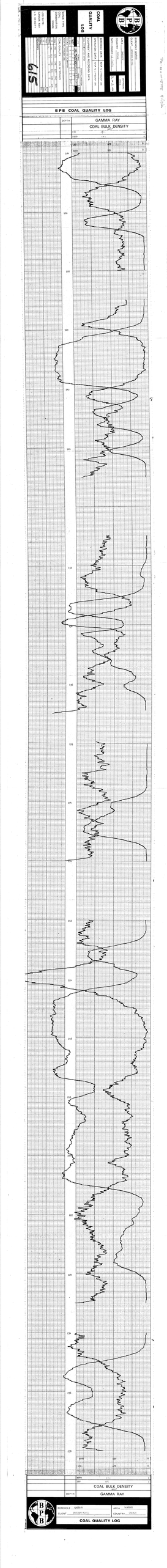
DRAWN

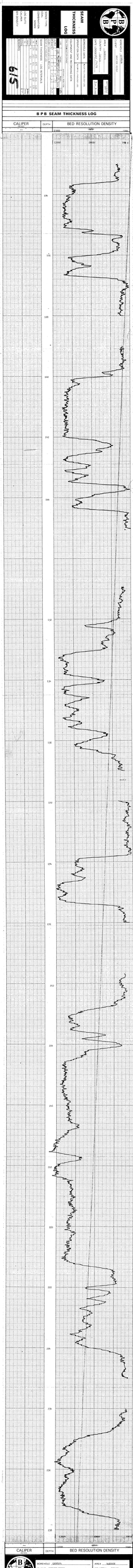
CHECKED

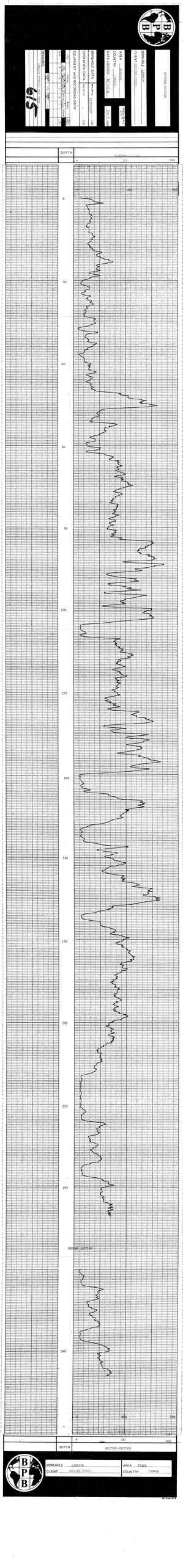
APPROVED

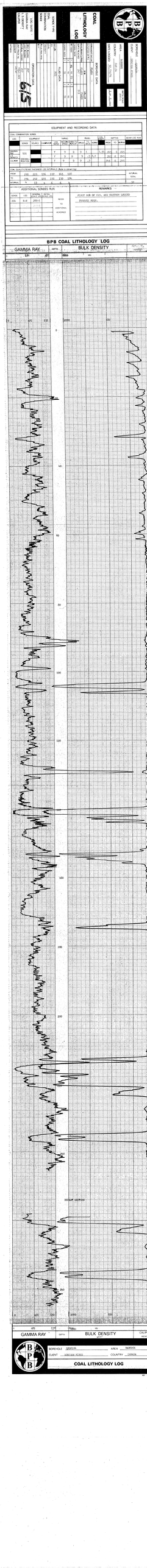
DATE

EQUIPMENT AND RECORDING DATA


BPB
COAL QUALITY LOG
BOREHOLE NO. 1
COUNTY
AREA
SURVEY DATE
DRILLING DATE
DRILLING CONTRACTOR
DRILLING METHOD
CASING DIAMETER
CASING DEPTH
WATER LEVEL
DRILLER
LOGGED BY
REMARKS
DEPTH
GAMMA RAY
COAL BULK DENSITY
BPB COAL QUALITY LOG
BOREHOLE 1/2/2015
CLIENT ROCKER PLC
AREA 1/2/2015
COUNTY 1/2/2015
COAL BULK DENSITY
GAMMA RAY
COAL QUALITY LOG


B P B
SEAM THICKNESS LOG
B P B SEAM THICKNESS LOG
CALIPER
DEPTH
BED RESOLUTION DENSITY
S19
BOREHOLE
AREA
COUNTY
STATE
SEAM THICKNESS LOG


BPB
GIS
DEPTH
0
500
1000
0
20
40
60
80
100
120
140
160
180
200
220
240
260
REPEAT SECTION
BOREHOLE CADELIN
CLIENT SHELL
AREA FRANCE
COUNTRY FRANCE


COAL LITHOLOGY LOG
BPB
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE
ADDITIONAL SONDES RUN
REMARKS
BPB COAL LITHOLOGY LOG
GAMMA RAY
BULK DENSITY
CALIPER
API
GAPI
KG/M3
INCHES
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
1100
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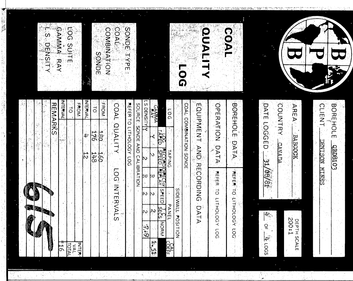
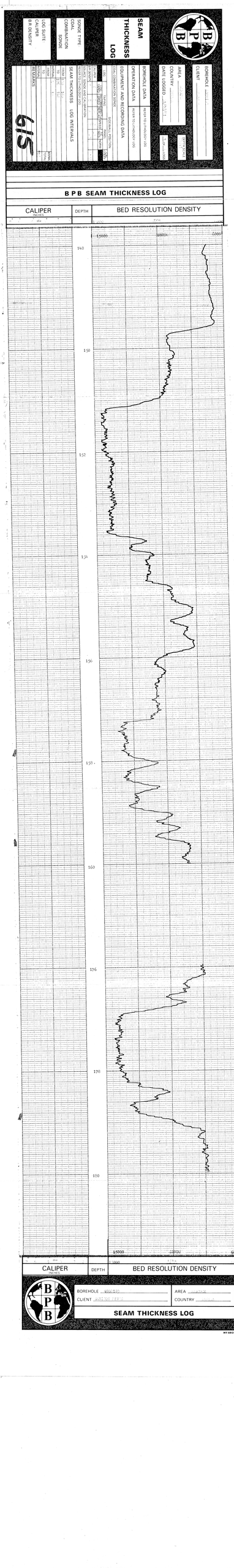
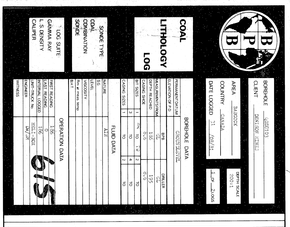

COAL QUALITY LOG
BPB
BOREHOLE 92-01
CLIENT TERRACE MINES
AREA BABCOCK
COUNTRY CANADA
DATE LOGGED 30/09/92
ELEVATION 2004
SOURCE TYPE COMBINATION SONDE
LOG SUITE GAMMA-GAMMA DENSITY
REMARKS
COAL QUALITY LOG INTERVALS
BOREHOLE DATA
OPERATION DATA
EQUIPMENT AND RECORDING DATA
GAMMA RAY
COAL BULK DENSITY
HOLE SIZE CORRECTION DATA
BPB COAL QUALITY LOG
DEPTH
GAMMA RAY
COAL BULK DENSITY
BOREHOLE 92-01
CLIENT TERRACE MINES
AREA BABCOCK
COUNTRY CANADA
COAL QUALITY LOG


SEAM THICKNESS LOG
BPB
SONDE TYPE
COAL COMBUSTION SONDE
LOG SUITE
CALIPER
BR DENSITY
SEAM THICKNESS LOG INTERVALS
CALIPER
INCHES
DEPTH
BED RESOLUTION DENSITY
BOREHOLE
CLIENT
AREA
COUNTRY
DATE LOGGED
BOREHOLE DATA
OPERATION DATA
EQUIPMENT AND RECORDING DATA
SEAM THICKNESS LOG



EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT: SONDE	SOURCE	ELEMENT	TYPE/SIZE: LOG	RATIO	DIRECTION DISPLAY	SPEED	PANEL: DATA	NUMB	CAL: NOM	DEPTHS: TO	BASE	SEAM LOG RUN
GAMMA RAY	101			1	9	4	3	1		1.42	150	3.95	
BULK DENSITY				1	9	2	9	1	7-3		150	3.95	
CALIPER	SIDEWALL POSITION			1	9	9	9	3			150	3.95	

COAL QUALITY/SEAM THICKNESS LOG INTERVALS (Metres to nearest 5cm)

			INTERVAL
FROM	130	160	
TO	170	150	TOTAL
INTERVAL	4	1.2	10

ADDITIONAL SONDES RUN

SONDE	LOG	SERIAL T. WIRE SCALE LOG/SCALE LOG	
DEN	9-3	2001-1	ROTER
			TO
			ADDITIONAL
			HEADINGS

REMARKS

ADDING SYNTHETIC LOG

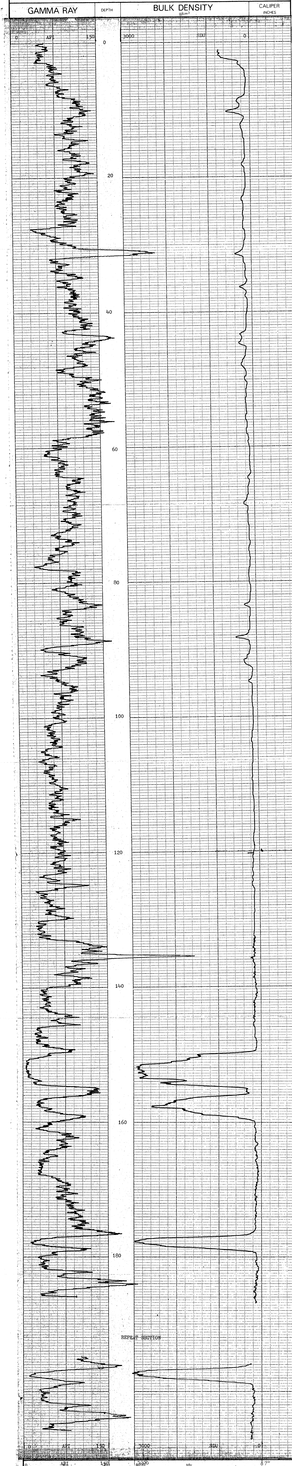
DEAD SEATWORK AT 6m

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

LOG No. VALUE 7.89 g/cm³ SEAM	LOG CAL. DATA 23/07/93 CAL VALUE 3.57 Mn/m² 1.39g/cm³	5 ins 105 ohms
LOG MARK SHOWN AT ABOVE VALUE =	LOG No. 2001-1 SPAN 4.00 NORM 2.12	2 ins 41.1 ohms

GAMMA RAY | DEPTH | BULK DENSITY | CALIBRATION INCHES



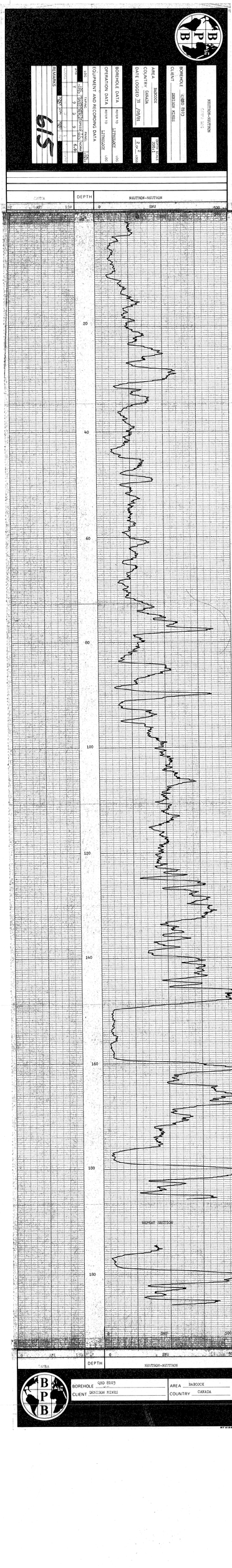
GAMMA RAY | DEPTH | BULK DENSITY | CALIBRATION INCHES

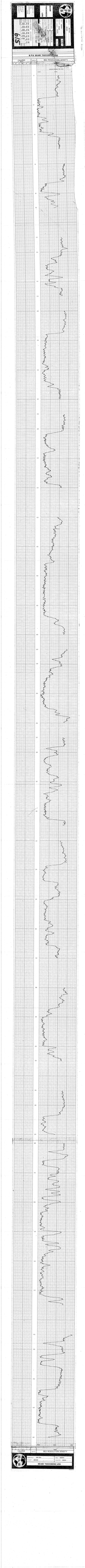
BPB

BOREHOLE UGT1-2 AREA MAIDEN

CLIENT BRITISH FUELS COUNTRY JAMAICA

COAL LITHOLOGY LOG


BPB
BOREHOLE QHD 8103
CLIENT DENISON MINES
NEUTRON-NEUTRON
AREA BABCOCK
COUNTRY CANADA
DATE LOGGED 31 /08/81
RECORDED BY 20011
WITNESSED BY J.Sw
OPERATION DATA
EQUIPMENT AND RECORDING DATA
BOREHOLE DATA
REMARKS
CAMBA
DEPTH
NEUTRON-NEUTRON
0
SNU
500
20
40
60
80
100
120
140
160
180
NEUTRON-NEUTRON
BOREHOLE QHD 8103
CLIENT DENISON MINES
AREA BABCOCK
COUNTRY CANADA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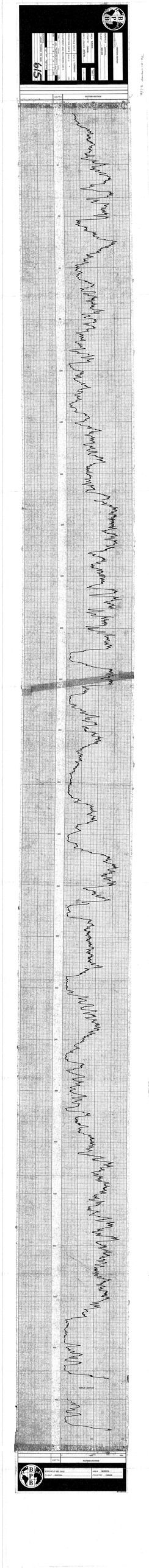
SCHLUMBERGER
SCHLUMBERGER WELL SURVEYING CORPORATION
COMPANY
WELL
FIELD
COUNTY
STATE
LOCATION
OTHER SERVICES
PERMANENT DATUM
ELEV.
LOG MEASURED FROM
DRILLING MEASURED FROM
DATE
RUN NO.
DEPTH-DRILLER
DEPTH-LOGGER
BTM. LOG INTERVAL
TOP LOG INTERVAL
CASING-DRILLER
CASING-LOGGER
BIT SIZE
TYPE FLUID IN HOLE
DENS.
VISC.
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE RMF
SOURCE RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
NEUTRON-NEUTRON
DEPTH
BPB
BOROUGH OF BRONX
AREA
COUNTY
STATE

COAL LITHOLOGY LOG

SONDE TYPE: COMBINATION SONDE

LOG SUITE: GAMMA RAY - BULK DENSITY - CALIPER

RUN NO: 1

DATE LOGGED: 11/11/94

BOREHOLE: BH 1111

COUNTY: Somerset (Avon)

COUNTRY: England

LOCATION: Mine

SURFACE LEVEL: 0.00 m

DATUM: Ground Level

DRILLER'S DEPTH: 615.00 m

LOGGER'S DEPTH: 615.00 m

CASING: 0.00 m

BOREHOLE DATA

	FROM	TO
DIAMETER	0.00	615.00
DEVIATION	0.00	615.00

FLUID DATA

	FROM	TO
LEVEL	0.00	615.00
TEMP. °C	0.00	615.00
DENSITY	0.00	615.00
VISCOSITY	0.00	615.00
PH	0.00	615.00
RESISTIVITY	0.00	615.00
CHLORIDES	0.00	615.00

OPERATING DATA

RECORDED BY	Jonathan Hicks
WITNESSED BY	Mr. Smith
LOGGING UNIT NO.	1
LOGGING UNIT LOCATION	Mine
RECORDED DATE	11/11/94
RUN NO.	1
DEPTH DRILLER	615.00 m
DEPTH LOGGER	615.00 m
BOTTOM LOGGED INTERVAL	615.00 m
TOP LOGGED INTERVAL	0.00 m
CASING DRILLER	0.00 m
CASING LOGGER	0.00 m
BIT SIZE	0.00 mm
TYPE FLUID IN HOLE	Air
SALINITY	0.00 ppm
DENSITY	0.00 kg/m³
LEVEL	0.00 m
MAX. REC. TEMP.	0.00 °C
ESTIMATED TEMP.	0.00 °C
TIME SINCE CIRC.	0.00 hrs
TIME ON BOTTOM	0.00 hrs
UNIT LOCATION	Mine

SIS

EQUIPMENT AND RECORING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT			TAPING		PANEL			LOG SPEED	DEPTHS		BEAM LOG RUN	
	SONDE	SOURCE	CASEMATE	LOG HEAD	RECORDER/PLAYBACK	SPEED	T.C. DECS.	NORM		FROM	TO	FROM	TO
GAMMA RAY		10GR		1	9	9	1			0.00	615.00		
CALIPER				1	9	9	1	5.0		0.00	615.00		
BULK DENSITY CALIPER	SIDEWALL POSITION	10GR		1	9	9	1			0.00	615.00		

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

FROM	598	1750	1410	1350	1116	1063	1049					INTERVAL TOTAL
TO	1150	1666	1145	1220	1119	1068	1054					
INTERVAL	8	5	35	6	3	5	5					70

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL (BOAL LOG)	DETAIL (BOAL LOG)
9-5		11703	

REFER TO ADDITIONAL HEADING

REMARKS

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No.	VALUE @ 2" CHAMP	JIG CAL DATE	JIG VALUE	50Hz/@	ms
JIG MARK SHOWN AT ABOVE VALUE =		JIG No.	SPAN	NORM PAY	ms

GAMMA RAY	DEPTH	BULK DENSITY	CALIPER
			INCHES

HOLE SIZE CORRECTION DATA

6 8 10 12 14 16 18 20 22 24 26 28 30

API | 600 | 6000 | 1000 | GAMMA

0 API 200 | 10000 | 5000 | 0 | 0" 8"

20 | 40 | 60 | WATER LEVEL | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260

API 200 | 6000 | 5000 | 0 | 0" 8"

REPEAT SECTION

GAMMA RAY	DEPTH	BULK DENSITY	CALIPER
			INCHES

BOREHOLE QBS 7119 AREA Mine

CLIENT Jonathan Hicks COUNTRY England

COAL LITHOLOGY LOG