



BP2 - SUKUNKA 78 (3)A

COAL LITHOLOGY LOG

BOREHOLE DATA
 PERMANENT DATUM: Ground Level
 ELEVATION OF PD: B.P.B.
 MEASUREMENTS FROM: 3.L.
 DEPTH REACHED: 68.5m
 CASING SHOE: 110m
 BIT SIZES: 1 6 1/2" TO T.D., 2" TO 3", 3" TO 4", 4" TO 2"
 CASINGS SIZES: 1" TO 2"

FLUID DATA
 NATURE: Water
 SG: 1.8m
 LEVEL: 1.8m
 VISCOSITY: 665
 Rm at meas temp: 665
 BHT: 665

SONDE TYPE: COAL COMBINATION SONDE

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

BOREHOLE: BP-M6 - Sukunka 1978
CLIENT: BP Coal
AREA: B.C.
COUNTRY: Canada
DATE LOGGED: 26 July '78
DEPTH SCALE: 1:200
LOGS: 1 of 4

EQUIPMENT AND RECORDING DATA

LOG	EQUIPMENT			TAPING			PANEL			CAL COEFF	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT or REPLAY	SPEED	TC SECS	NORM		FROM	TO	INTERVAL	
GAMMA RAY	110		3	Y	9	D	9	1	1.3		67	0	67m	Y
L.S. DENSITY		15852	42	Y	9	D	9	1/3	6.75		67	0	67m	Y
CALIPER		SIDEWALL POSITION		Y	9	R	9	1/3	-		67	0	67m	Y

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

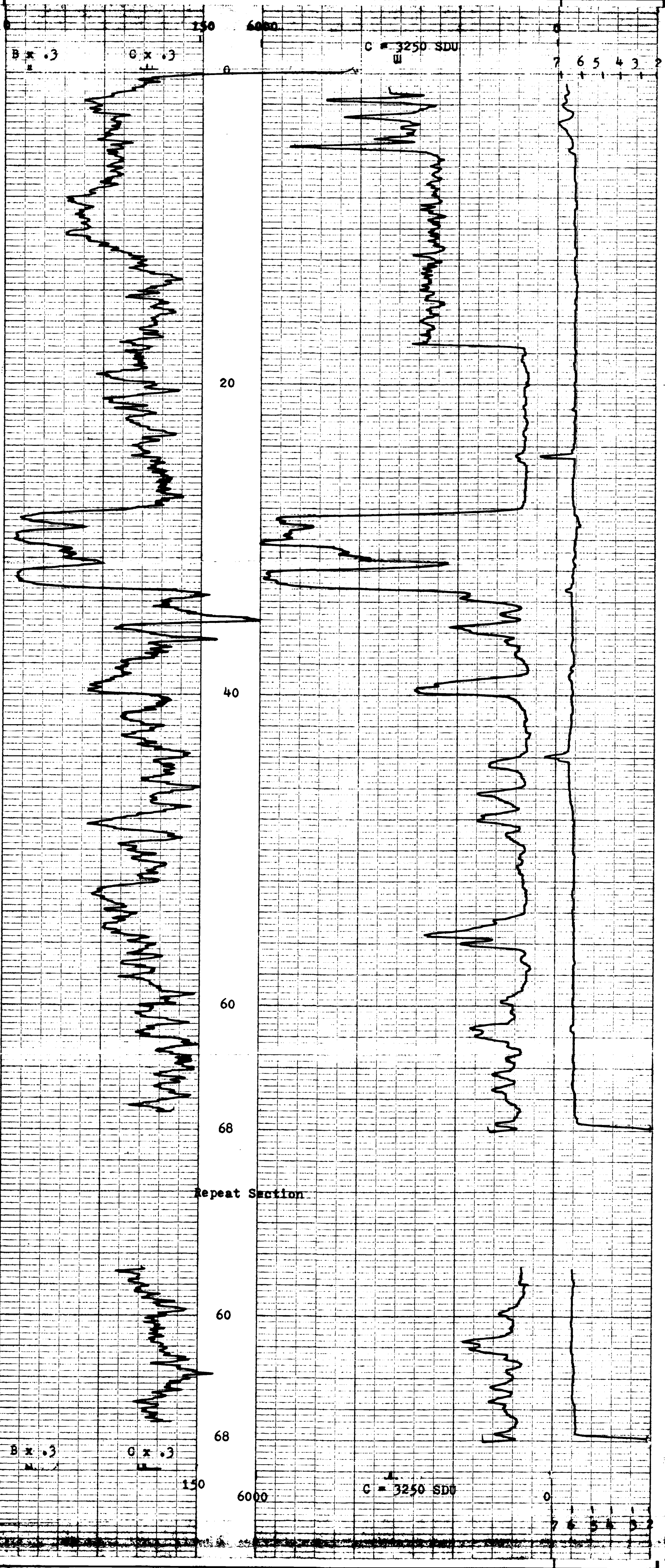
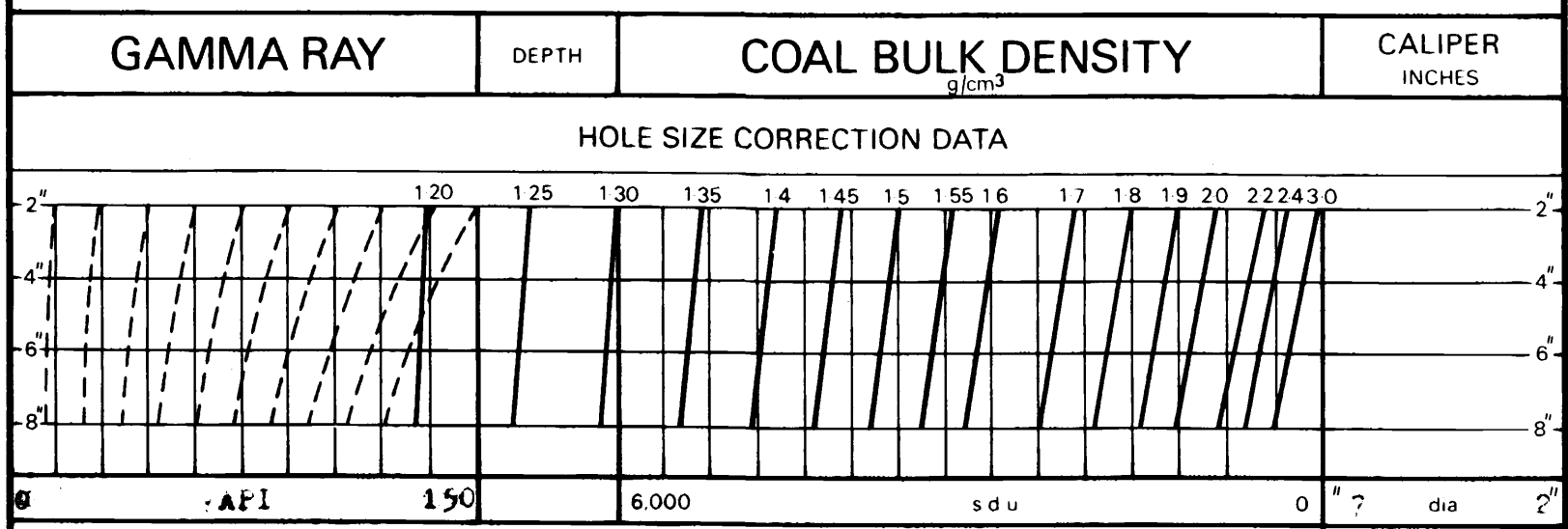
FROM	41	INTERVAL TOTAL
TO	27	
INTERVAL	14m	

ADDITIONAL SONDES RUN				REFER TO ADDITIONAL HEADINGS	REMARKS
SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG		
81	N-N	1:200			Gamma recorded with no source on sonde from 19m - 0.

B P B COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No 3	VALUE 30 @ 2" DIAM	JIG CAL DATE 1/7/78	JIG VALUE 3250 DU @ 1.58 g/cm ³	7 ins 955 cps
JIG MARK SHOWN AT ABOVE VALUE - 3.3		JIG No 42	SPAN 6000	NORM SDU = 6.95



0	API	150	6000	sdu	0	2	dia	2"
GAMMA RAY		DEPTH	COAL BULK DENSITY		CALIPER		INCHES	



BOREHOLE: BP-M6 - Sukunka 1978
CLIENT: BP Coal
AREA: B.C.
COUNTRY: Canada

COAL LITHOLOGY LOG



12-52626A-7F(3)4.

BOREHOLE BP-M6 - Sukunka 1978
 CLIENT BP Coal

AREA B.C. DEPTH SCALE 1:20
 COUNTRY Canada

DATE LOGGED 26 July '78 2 of 4 LOGS

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

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

COAL QUALITY LOG

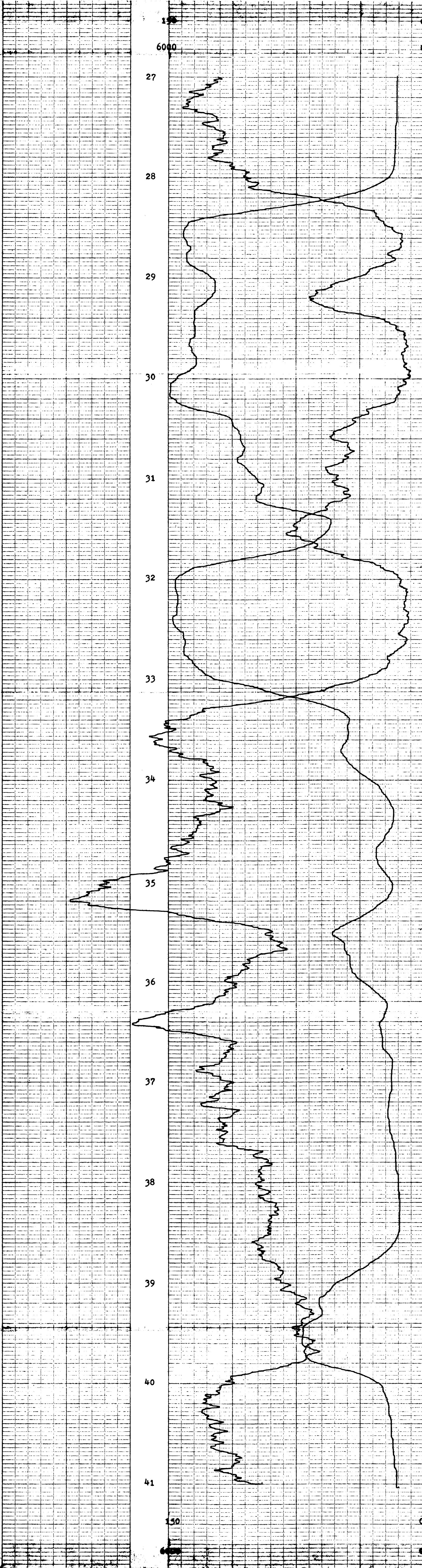
SONDE TYPE:
 COAL COMBINATION SONDE

LOG SUITE:
 GAMMA RAY
 L.S. DENSITY

LOG TAPING	SIDEWALL POSITION	COAL
LOG RECORD SPEED 100	PANEL	COEF
GAMMA RAY	LOG SPEED RELAY	1.3
L.S. DENSITY	X	2
	R	2
	K	1
	2	1
	1	6.95

B P B COAL QUALITY LOG

DEPTH	GAMMA RAY
	COAL BULK DENSITY g/cm^3
HOLE SIZE CORRECTION DATA	
2'	125 13 135 14 145 15 155 16 17 18 19 20 22 24 30
4'	
6'	
8'	
	150 AFI 0
	6000 s d u 0



DEPTH	GAMMA RAY
	COAL BULK DENSITY g/cm^3
	150 AFI 0
	6000 s d u 0

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PH-SUKUNKA 78(5)A.

SEAM THICKNESS LOG

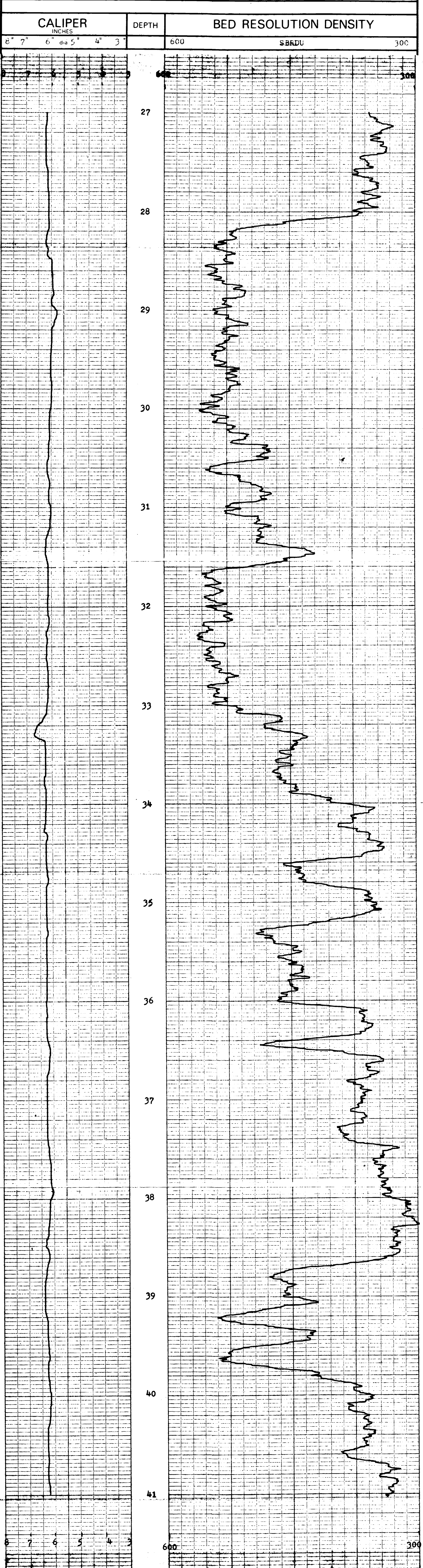
BOREHOLE BP-M6 - Sukunka 1978
 CLIENT BP Coal
 AREA B.C. DEPTH SCALE 1:20
 COUNTRY Canada
 DATE LOGGED 26 July '78 3 OF 4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG
 OPERATION DATA REFER TO LITHOLOGY LOG
 EQUIPMENT AND RECORDING DATA
 COAL COMBINATION SONDE
 COAL COMBINATION SONDE
 LOG TAPING SIDEWALL POSITION
 LOG RECORDING SPEED PANEL COEFF.
 TAPE SPEED REEL AV. SECS. NORM
 CALIPER Y 2 R 2 1 -
 BR DENSITY Y 2 R 2 1 .785
 SOURCE SONDE AND CALIBRATION
 REFER TO LITHOLOGY LOG

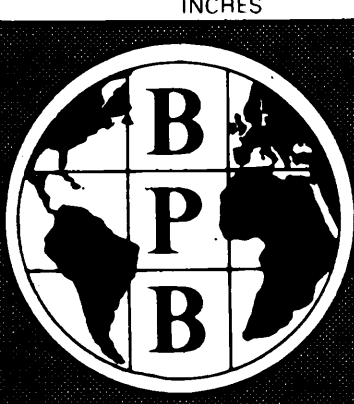
SEAM THICKNESS LOG INTERVALS
 FROM 41
 TO 27
 INTERVAL 14m
 FROM
 TO
 INTERVAL
 REMARKS

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B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
8" 7" 6" dia 5" 4" 3"	600	SRDU 300



BOREHOLE BP-M6 - Sukunka 1978 AREA B.C.
 CLIENT BP Coal COUNTRY Canada

SEAM THICKNESS LOG



NEUTRON-NEUTRON LOG

BP - SUKUNKA 78/31A

COMPANY BP Coal
 BOREHOLE BP-M6 - Sukunka 1978
 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.

Run No. 1 Date 1:200
 Date 26 July 1978

First Reading 68m
 Last Reading 0
 Interval Measured 68m
 Casing BPH _____
 Casing Driller _____

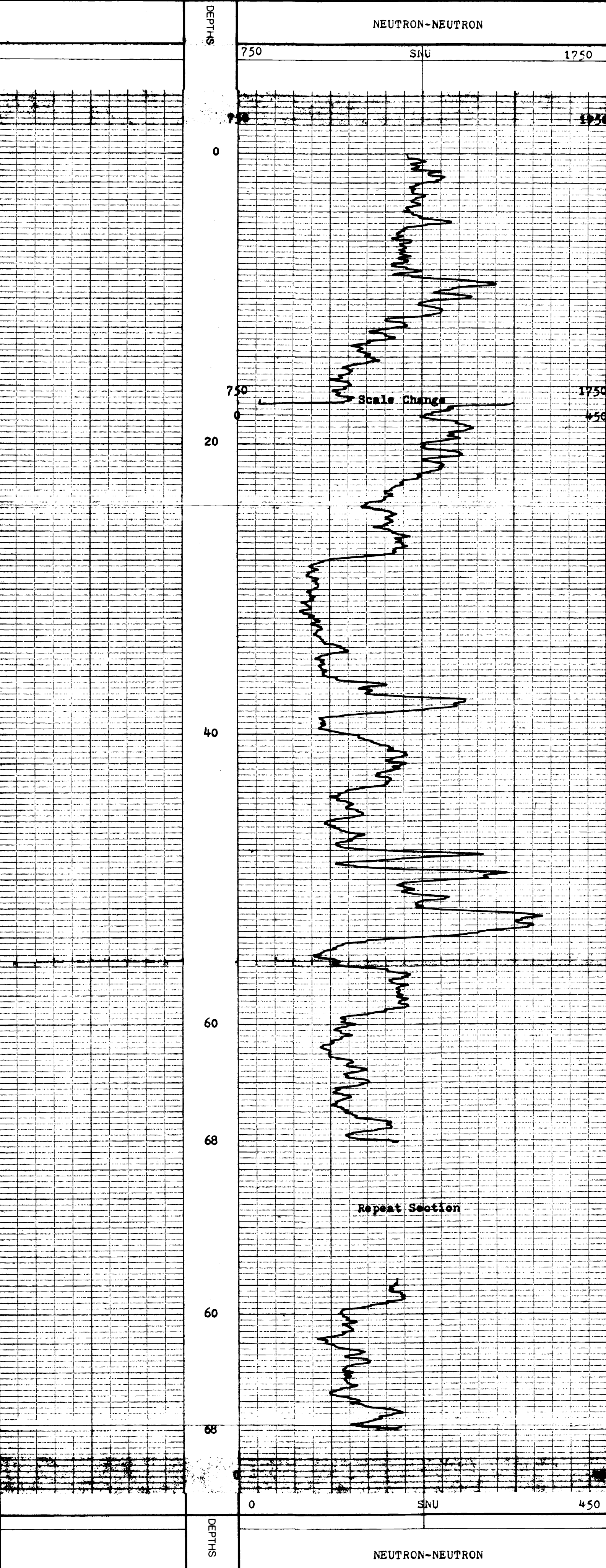
Depth Reached 68.5m
 Bottom Driller 110m
 Mud Nature Water

SG _____ Viscosity _____
 Bit Size 6 1/4" to T.D. _____
 Casing Size 3 to _____
 Rm @ Meas Temp _____ @ _____ °F
 Rmf @ Meas Temp _____ @ _____ °F
 Rmc @ Meas Temp _____ @ _____ °F
 Source Rmf _____ Rmc _____
 Rm @ BHT _____ @ _____ °F
 Rmf @ BHT _____ @ _____ °F
 Rmc @ BHT _____ @ _____ °F

Operating Time 2 hrs.
 Truck No. VZ3/21
 Recorded By R. Bishop
 Witness C. Bickford

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REMARKS		Scale Changes							
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down				
		N-N	17.2	750-1750 SNU	0-450 SNU				
Changes in Mud Type or Additional Samples									
Depth - Driller									
Type Fluid in Hole									
Dens.	Visc.								
ph.	Fluid Loss								
Source of Sample		Equipment Data							
Rm @ Meas Temp	@ _____ °F	Run No.	Tool Type	Tool Position	Other				
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	68	0	9	1	0.74	81	N2479



COMPANY BP Coal
 BOREHOLE BP-M6 - Sukunka 1978
 STATE B.C.
 COUNTRY Canada



12 - SUKUNKA 71(3)A

BOREHOLE BP C50 - Sukunka 1978
 CLIENT BP Coal

AREA B.C.
 COUNTRY Canada

DATE LOGGED 9 July '78

DEPTH SCALE 1:200
 LOSS 1 of 4

COAL

LITHOLOGY LOG

LOG

SONDE TYPE:

COAL COMBINATION SONDE

LOG SUITE:

GAMMA RAY
 L.S. DENSITY
 CALIPER

BOREHOLE DATA

PERMANENT DATUM Ground Level

ELEVATION OF PD 898

MESUREMENTS FROM G.L. RIF. FLOOR

DEPTH REACHED 157.0m 157.0m

CASING SHOE 10m

BIT SIZES 3" TO T.D. 2" TO T.D.

CASING SIZES 3 1/8" TO 10m 2" TO T.D.

FLUID DATA

NATURE QUIK-Gel

LEVEL 665

OPERATION DATA

FIRST READING 153m

LAST READING 6

INTERVAL LOGGED 155m

UNIT - TRUCK NO V23/21

ENGINEER R. Bishop

WITNESS D. Birdwell

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	M5852	42	Y	9	D	9	1	1.3	155	0	155	Y
				Y	9	D	9	1/3	7.55	155	0	155	Y
L.S. DENSITY				Y	9	R	9	1/3	-	155	0	155	Y

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

FROM	TO	INTERVAL
148	136	41
143	126	37
143	126	37
5	10	4
		6
		25m

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG
81	N-N	1:200	

REFER TO ADDITIONAL HEADINGS

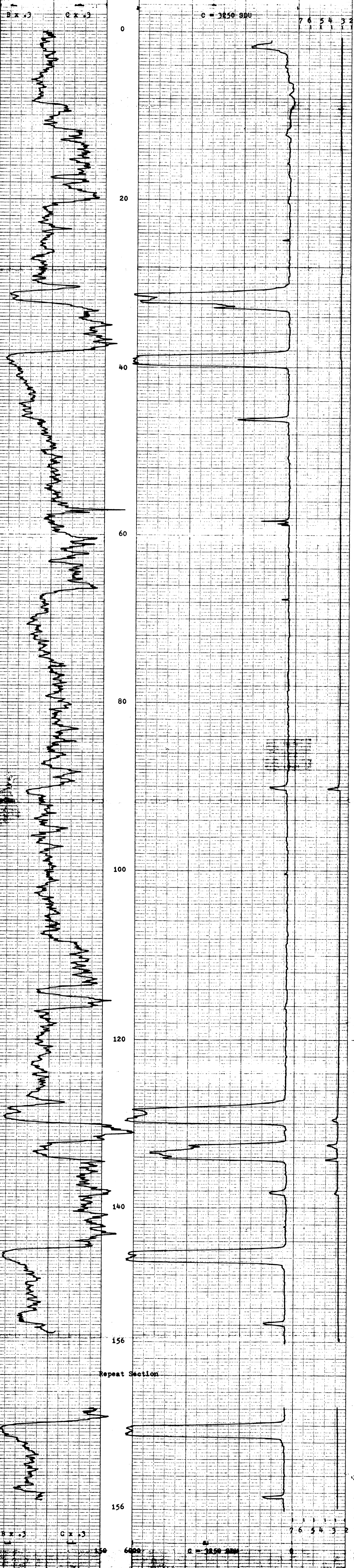
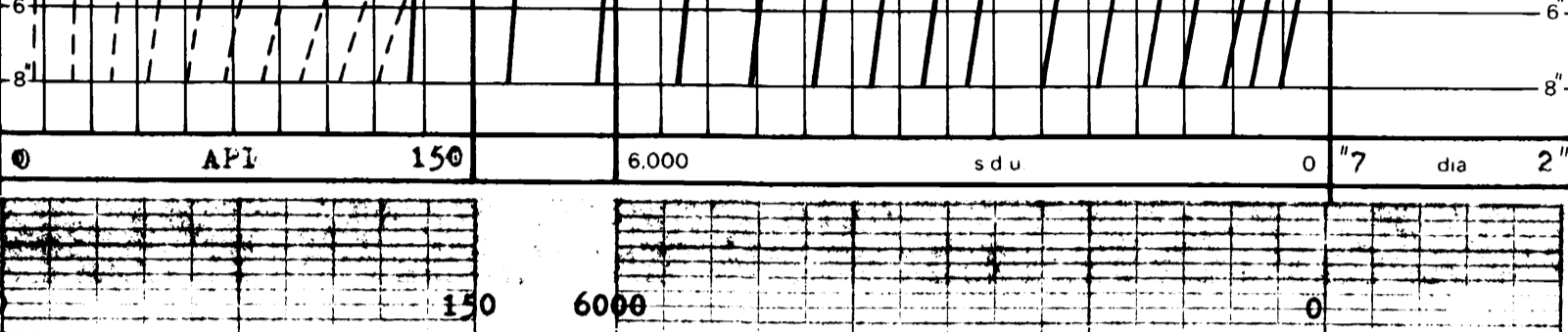
B PB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No <u>3</u>	VALUE <u>300@ 2" DIAM</u>	JIG CAL DATE <u>1/7/78</u>	JIG VALUE <u>3250</u>	SDU @ <u>1.58 g/cm³</u>	<u>7</u> ins <u>955</u> cps
JIG MARK SHOWN AT ABOVE VALUE <u>3.3</u>		JIG No <u>42</u>	SPAN <u>6000</u>	NORM <u>SDU = 7.55</u>	<u>2</u> ins <u>490</u> cps

GAMMA RAY	DEPTH	COAL BULK DENSITY _{g/cm³}	CALIPER INCHES
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HOLE SIZE CORRECTION DATA

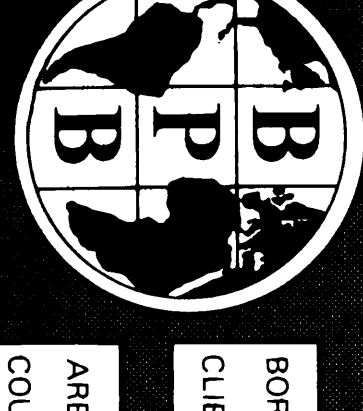


GAMMA RAY	DEPTH	COAL BULK DENSITY _{g/cm³}	CALIPER INCHES
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BOREHOLE BP C50 - Sukunka 1978 AREA B.C.
 CLIENT BP Coal COUNTRY Canada

COAL LITHOLOGY LOG

11- Sukunka 78 (B)A



BOREHOLE BP C50 - Sukunka 1978
 CLIENT BP Coal

AREA B.C.
 COUNTRY Canada

DATE LOGGED 9 JULY '78

DEPTH SCALE 1:20

30-4 LOGS

BOREHOLE DATA REFER TO LITHOLOGY LOG

OPERATION DATA REFER TO LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

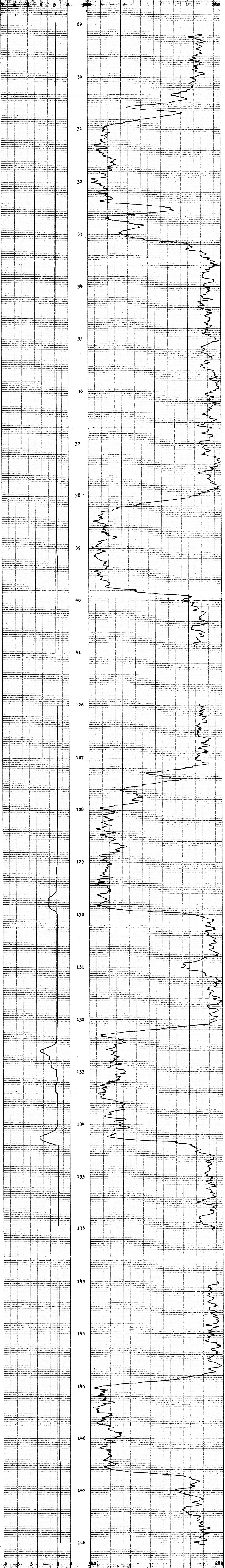
LOG TAPPING PANEL CODE
 LOG SPEED (FEET) 1.1
 LOG SPEED (METERS) 0.33
 LOG SPEED (INCHES) 0.85

LOG CALIPER 1 2 3 4 5 6 7
 BR DENSITY 1 2 3 4 5 6 7

SEAM THICKNESS LOG INTERVALS
 FROM 148 136 41 35
 TO 143 126 37 29
 INTERVAL 5 10 4 6
 FROM 10
 INTERVAL TOTAL 2.50

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B P B SEAM THICKNESS LOG



CALIPER INCHES	DEPTH	BED RESOLUTION DENSITY
7" 6" 5" dia 4" 3" 2"	580	SBRDU 280



BOREHOLE BP C50 - Sukunka 1978
 CLIENT BP Coal

AREA B.C.
 COUNTRY Canada

SEAM THICKNESS LOG

Dr - SUKUNKA 78 (5) A.



NEUTRON-NEUTRON LOG

COMPANY BP Coal
 BOREHOLE BP 550 - Sukunka 1978
 STATE B.C. COUNTRY Canada
 Permanent Datum _____ Ground Level _____ Elev. _____ m.
 Log measured from _____ Ground Level _____ m. above P.D.
 Drilling measured from _____ Rig Floor _____ .5m. above P.D.

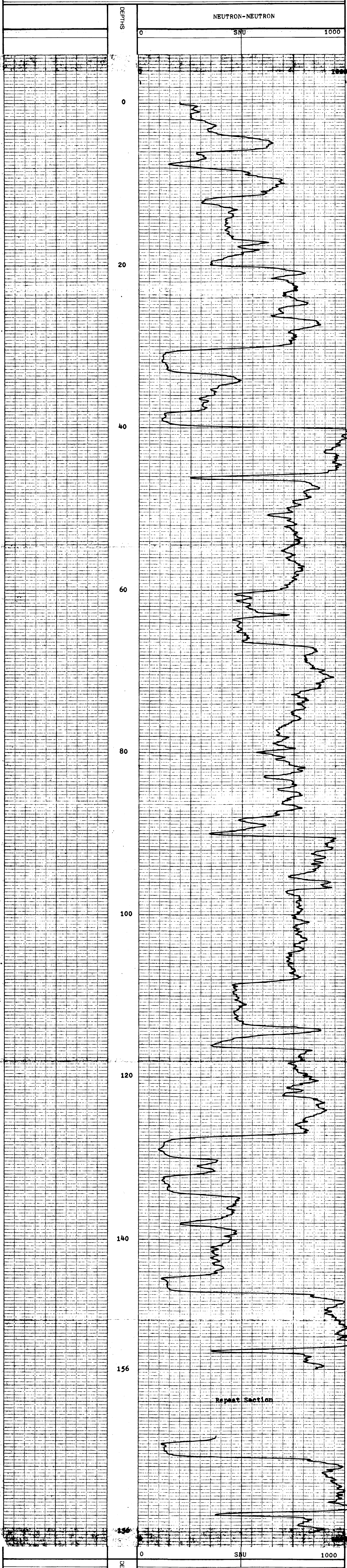
Run No. 1 Date 9 July 1978
 Depth 156m
 Core Length 0
 Core Interval 156m.
 Core Type 1.0m
 Log No. 157.0m
 Run No. 1
 Mud Name Quik-Gel

STU _____ SR SHV
 BHT @ 1' 3" to T.D. _____
 BHT @ 2' _____
 BHT @ 3' _____
 BHT @ 4' _____
 BHT @ 5' _____
 BHT @ 6' _____
 BHT @ 7' _____
 BHT @ 8' _____
 BHT @ 9' _____
 BHT @ 10' _____
 BHT @ 11' _____
 BHT @ 12' _____
 BHT @ 13' _____
 BHT @ 14' _____
 BHT @ 15' _____
 BHT @ 16' _____
 BHT @ 17' _____
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 BHT @ 191' _____
 BHT @ 192' _____
 BHT @ 193' _____
 BHT @ 194' _____
 BHT @ 195' _____
 BHT @ 196' _____
 BHT @ 197' _____
 BHT @ 198' _____
 BHT @ 199' _____
 BHT @ 200' _____

REMARKS

Changes in Mud Type or Additional Samples		Scale Changes			
Date	Sample No.	Type Log	Depth	Scale Up Hole	Scale Down
Type Fluid in Hole					
Dens. Visc.					
ph	Fluid Loss	mi			
Source of Sample					
Rm @ Meas. Temp.	@	°F	@	°F	Run No.
Rmf @ Meas. Temp.	@	°F	@	°F	Tool Type
Rmc @ Meas. Temp.	@	°F	@	°F	Tool Position
Source: Rmf	Rmc				Other
Rm @ BHT	@	°F	@	°F	
Rmf @ BHT	@	°F	@	°F	
Rmc @ BHT	@	°F	@	°F	

Logging Data						
Log	Depths	Speed	T.C.	Norm.	Sonde No.	Source No.
	From	To				
N-N	156	6	9	1	.74 81	N2479



COMPANY BP Coal
 BOREHOLE BP 550 - Sukunka 1978
 STATE B.C.
 COUNTRY Canada

AM (0) 58300

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B.P. Geophysical Services Ltd.

112 - SUKUNKA 2 (S18)

COMPANY: BP Coal BOREHOLE: BP S 23 SUKUNKA '78
 STATE: B.C. COUNTRY: Canada
 Permanent datum: Ground Level Elev: m
 Log measured from: Ground Level m above P.D.
 Drilling measured from: B.S. 1302F m above P.D.

Run No: 1 Run Date: 11/1/78
 Log Scale: 1 Log Type:
 Run Name: 24 AUGUST 1978
 Log Number: 465
 Log Date: 8/28/78
 Log Time: 11:45
 Log Location:
 Log Operator:
 Log Recorder:
 Log Checker:
 Log Editor:
 Log Printer:
 Log Plotter:
 Log Finisher:
 Log Distributor:
 Log Shipper:
 Log Receiver:
 Log Returner:
 Log Return Date:
 Log Return Location:
 Log Return Contact:
 Log Return Phone:
 Log Return Address:
 Log Return City:
 Log Return State:
 Log Return Country:

Scale Changes: Scale Up Hole, Scale Down
 Type Log:
 Depth:
 Scale Up Hole:
 Scale Down:

REMARKS: Changes in Mud Type or Additional Samples

Date	Sample No	Type Log	Depth	Scale Up Hole	Scale Down

Type Fluid in Hole:

Dens.	Visc.	Fluid Loss	mi

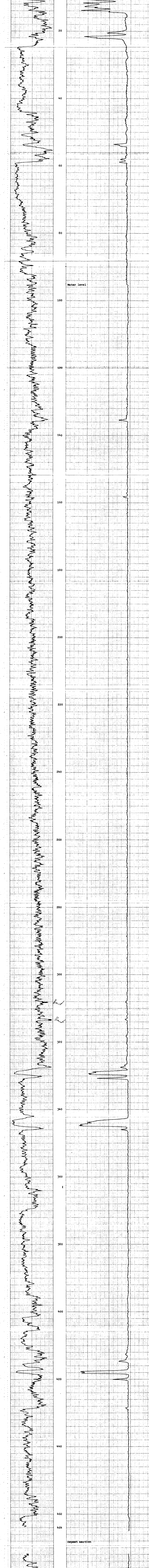
Source of Sample:

Rm @ Meas Temp	Rmc @ Meas Temp	Rm @ BHT	Rmc @ BHT	Run No	Tool Type	Tool Position	Other

Logging Data:

Log	From	To	Speed	T.C	Norm	Source No
Gamma	464	0	9	1	1.3	110
ISD	465	1	9	1/3	7.25	110 M-5152

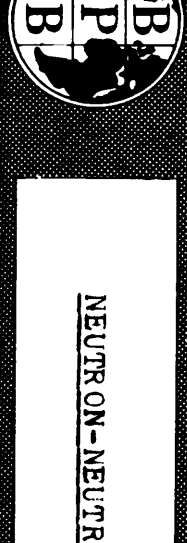
Borehole logged through HQ rods.



COMPANY: BP Coal
 BOREHOLE: BP S 23 Sukunka '78
 STATE: B.C.
 COUNTRY: Canada

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18-21200-27131A



NEUTRON-NEUTRON LOG

COMPANY BP Coal
 BOREHOLE BP S 23 Sukunka '78
 STATE B.C. COUNTRY Canada

Permanent Datum Ground Level
 Log measured from Ground Level
 Drilling measured from 116.11000 m above P.D.

Run No. 1
 Date 24 August 1978
 Log No. 464
 Log Name N-2479

Bit Size 1 3/4
 Mud Weight 10.2
 Mud Volume 465.5 gal
 Mud Value QUICK 68.1

Operator time 5 hrs
 Trial No. 23/21
 Recorder D. Fisher
 F. Valine

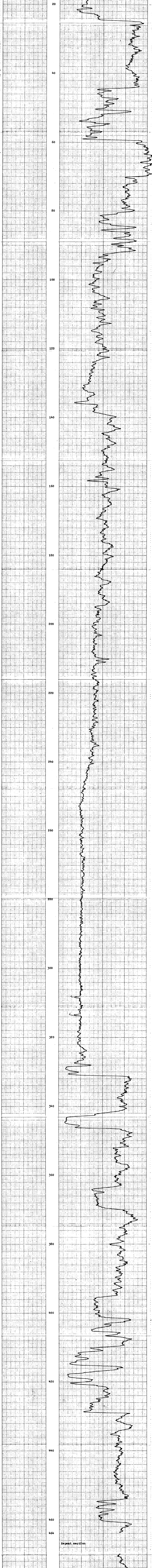
REMARKS

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					
Rnc @ Meas Temp	Rnc	Run No	Tool Type	Tool Position	Other
Rnc @ Meas Temp	Rnc				
Source Rmt	Rmc				
Rm @ BHT	Rm				
Rnc @ BHT	Rnc				
Rnc @ BHT	Rnc				

Logging Data

Log	Depth	Speed	T.C	Norm	Booth	Source No
N-N	464	0	9	1	0.75	81

Borehole logged through HQ rods.



NEUTRON-NEUTRON

COMPANY BP Coal
 BOREHOLE BP S 23 Sukunka '78
 STATE B.C.
 COUNTRY Canada

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SEAM THICKNESS LOG

72 - SIKUNKA 78 (S)A

COMPANY: BP Coal BOREHOLE: BF S 23 Sukunka *78
 STATE: B.C. COUNTRY: Canada
 Permanent Datum: Ground Level Elev. m
 Log measured from: Ground Level m above P.D.
 Drilling measured from: R.F. FLOOR m above P.D.
 Unit Ref: E N
 Date: 24 August 1978
 First Reading: 421 347 333 24
 Last Reading: 418 341 336 8
 Interval Measured: 7 6 7 16
 Coring Depth: 465.5m
 Run Time: 465.50m
 Mud Name: QUICK 481

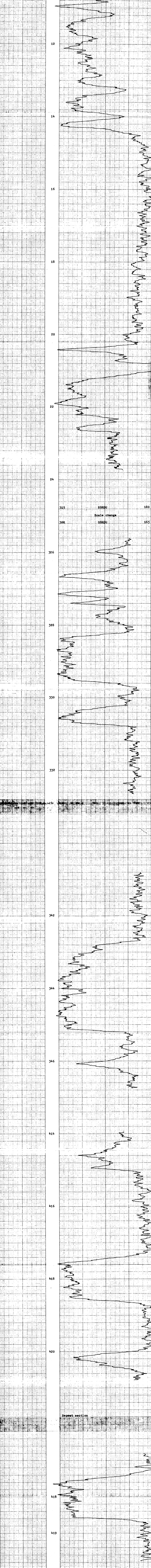
REMARKS

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

Logging Data

Log	Depths m	Speed	T.C	Norm	Source No
	From To				
BRD	421	8	2	1	0.26 110 M5852

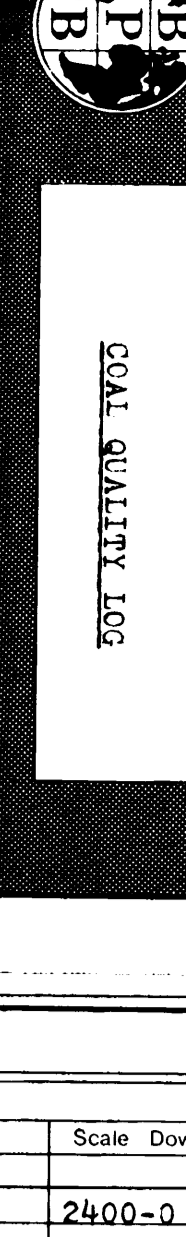
Borehole logged through HQ rods.



COMPANY: BP Coal BOREHOLE: BF S 23 Sukunka *78
 STATE: B.C. COUNTRY: Canada

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Dr - SINKER 71 (S)A



SOIL QUALITY LOG

COMPANY: BP Coal
 BOREHOLE: BF S 23 STATE: B.C. COUNTRY: Canada
 SURVEY: '78

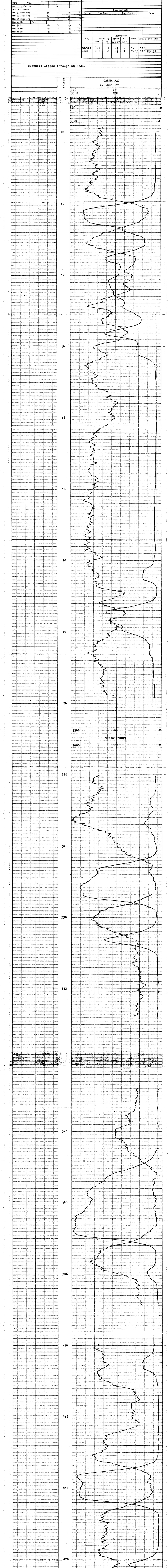
Permanent Datum: _____ Elev: _____ m
 Log measured from: _____ m above P.D.
 Drilling measured from: RTE EL00Z m above P.D.

Run No: _____
 Date: 24 August 1978
 Log Headed by: 421 347 333 26
 Interval Measured: 7 6 7 16
 Casing Depth: _____
 Depth Meter used: 4.55, 5m
 Bottom Datum: quick gel
 Mud Nature: _____

Drill Size: 3" to "D"
 Casing Size: 1" to "D"
 Casing Size: 2" to "D"
 Casing Size: 3" to "D"
 Casing Size: 4" to "D"
 Casing Size: 5" to "D"
 Casing Size: 6" to "D"
 Casing Size: 7" to "D"
 Casing Size: 8" to "D"
 Casing Size: 9" to "D"
 Casing Size: 10" to "D"
 Casing Size: 11" to "D"
 Casing Size: 12" to "D"
 Casing Size: 13" to "D"
 Casing Size: 14" to "D"
 Casing Size: 15" to "D"
 Casing Size: 16" to "D"
 Casing Size: 17" to "D"
 Casing Size: 18" to "D"
 Casing Size: 19" to "D"
 Casing Size: 20" to "D"
 Casing Size: 21" to "D"
 Casing Size: 22" to "D"
 Casing Size: 23" to "D"
 Casing Size: 24" to "D"
 Casing Size: 25" to "D"
 Casing Size: 26" to "D"
 Casing Size: 27" to "D"
 Casing Size: 28" to "D"
 Casing Size: 29" to "D"
 Casing Size: 30" to "D"
 Casing Size: 31" to "D"
 Casing Size: 32" to "D"
 Casing Size: 33" to "D"
 Casing Size: 34" to "D"
 Casing Size: 35" to "D"
 Casing Size: 36" to "D"
 Casing Size: 37" to "D"
 Casing Size: 38" to "D"
 Casing Size: 39" to "D"
 Casing Size: 40" to "D"
 Casing Size: 41" to "D"
 Casing Size: 42" to "D"
 Casing Size: 43" to "D"
 Casing Size: 44" to "D"
 Casing Size: 45" to "D"
 Casing Size: 46" to "D"
 Casing Size: 47" to "D"
 Casing Size: 48" to "D"
 Casing Size: 49" to "D"
 Casing Size: 50" to "D"

Checked by: 5 hrs
 Recorded by: D. Fisher
 Witness: F. Cairne

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COMPANY: BP Coal
 BOREHOLE: BF S 23 STATE: British Columbia
 SURVEY: _____ COUNTRY: Canada



02 - SUKUNKA 78 (S)A.

BOREHOLE BP-S19 - Sukunka 1978
CLIENT BP Coal

AREA B.C.
COUNTRY Canada
DATE LOGGED 14 July '78

DEPTH SCALE 1:200
1 of 4 LOGS

BOREHOLE DATA
PERMANENT DATUM Ground Level
ELEVATION OF P.D. 898
MAGNETISM FROM G.L. R1E Floor
DEPTH REACHED 189.0m
CASING SHOE 5.5m
CASING SIZES 1 3" TO 189.32 TO
2 3" TO 4 TO
3 3" TO TO

COAL LITHOLOGY LOG

SONDE TYPE: Quik-Gel
COAL COMBINATION: 665
SONDE

LOG SUITE: GAMMA RAY
L.S. DENSITY
CALIPER

ENGINEER: H. Bishop
WITNESS: C. Alckford

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	M5852	3	Y	9	D	9	1	1.3	187	0	187	Y
L.S. DENSITY			42	Y	9	D	9	1/3	6.8	187	0	187	Y
CALIPER				Y	9	R	9	1/3	-	187	0	187	Y

FROM	TO	INTERVAL	SEAM THICKNESS LOG INTERVALS (Refer to relevant log)	INTERVAL TOTAL
180	53			
165	38			
15	15			± 30m

SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG	REFER TO ADDITIONAL HEADINGS	REMARKS
81	N-N	1:200			Probable water level at 98m - LSD density values not reliable above this point.
	Verticality				

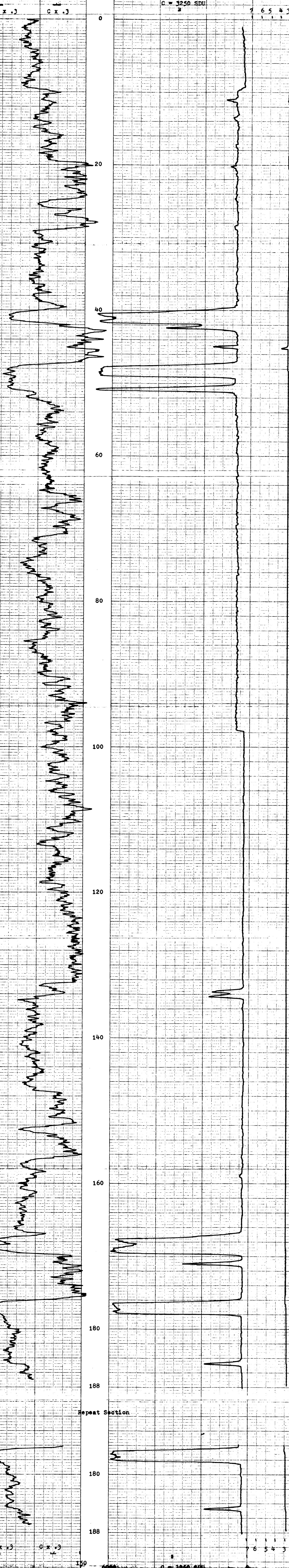
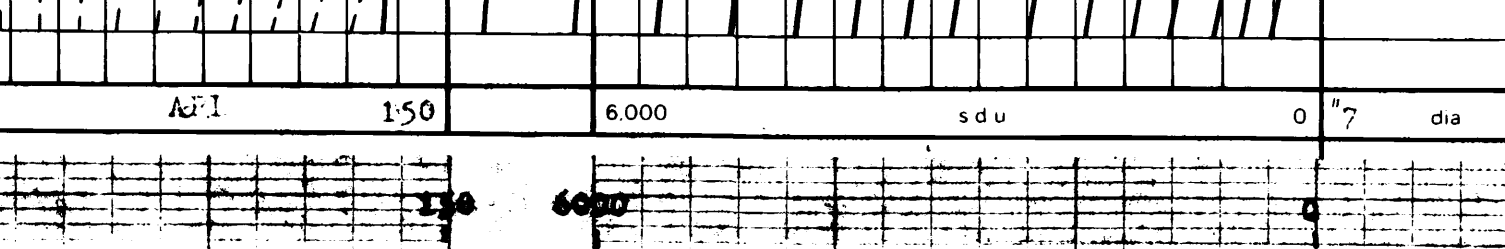
B PB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No 3	VALUE 3000 @ 2" DIAM	JIG CAL DATE 1/7/78	JIG VALUE 3250 @ 1.5g/cm ³	7 ins 950 cps
JIG MARK SHOWN AT ABOVE VALUE -3.3		JIG No 42	SPAN 6000	NORM SDU CPS = 6.80

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

HOLE SIZE CORRECTION DATA



Repeat Section

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



BOREHOLE BP-S19 - Sukunka 1978 AREA B.C.
CLIENT BP Coal COUNTRY Canada

COAL LITHOLOGY LOG



BP - SUKUNKA 1978

BOREHOLE BF-S19 - Sukunka 1978
CLIENT BP Coal

AREA B.C.
COUNTRY Canada
DATE LOGGED 11/20/78
Z OF S. LOGS

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

COAL QUALITY LOG
COAL COMBINATION SOND
SERIAL POSITION 665

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

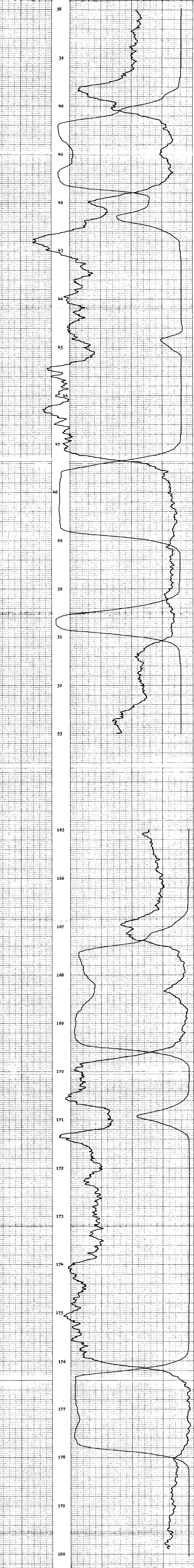
B P B COAL QUALITY LOG

DEPTH GAMMA RAY
COAL BULK DENSITY g/cm^3

HOLE SIZE CORRECTION DATA

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 AFI 0
6000 s d u 0



6000 s d u 0
150 AFI 0

COAL BULK DENSITY g/cm^3
DEPTH GAMMA RAY

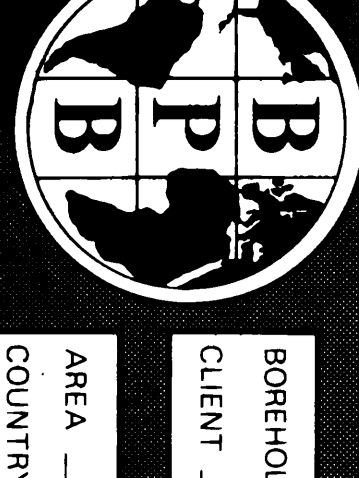
BOREHOLE BF-S19 - Sukunka 1978
CLIENT BP Coal
AREA B.C.
COUNTRY Canada

COAL QUALITY LOG

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11 - Sukunka 7/13/78



BOREHOLE BF-S19 - Sukunka 1978
 CLIENT BP Coal

AREA B.C.
 COUNTRY Canada

DEPTH SCALE 1:20
 DATE LOGGED July 78

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

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SOURCE
 LOGS TAPPING METHOD (SPEED) SECS. NORM
 CALIPER X 1 R 2 Z 1 I -753
 BRIDGMAN X 1 R 2 Z 1 I -753

SEAM THICKNESS LOG INTERVALS

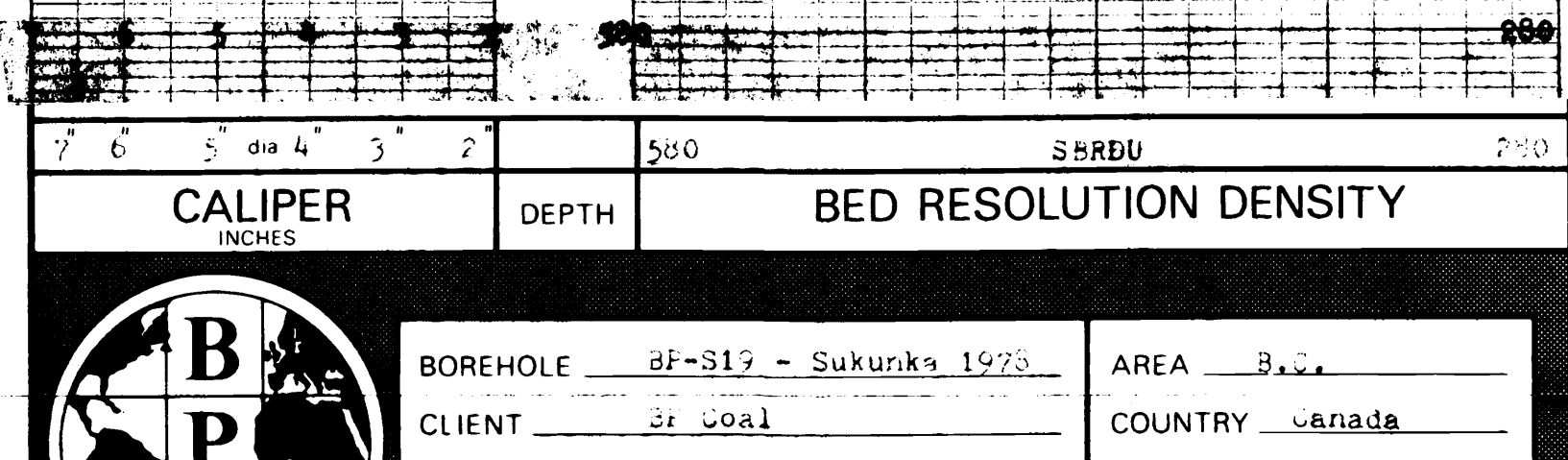
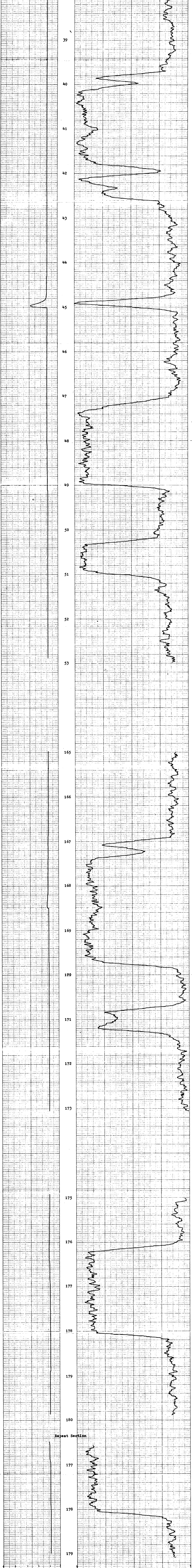
SEAM THICKNESS LOG INTERVALS

LOG SUITE:
 CALIPER
 BR DENSITY

SEAM THICKNESS LOG INTERVALS

SEAM THICKNESS LOG INTERVALS

B P B SEAM THICKNESS LOG



SEAM THICKNESS LOG

BOREHOLE BF-S19 - Sukunka 1978
 CLIENT BP Coal

AREA B.C.
 COUNTRY Canada



SEAM THICKNESS LOG INTERVALS

SEAM THICKNESS LOG INTERVALS

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Mr. SIKUNKA 78 (S)A.



NEUTRON-NEUTRON LOG

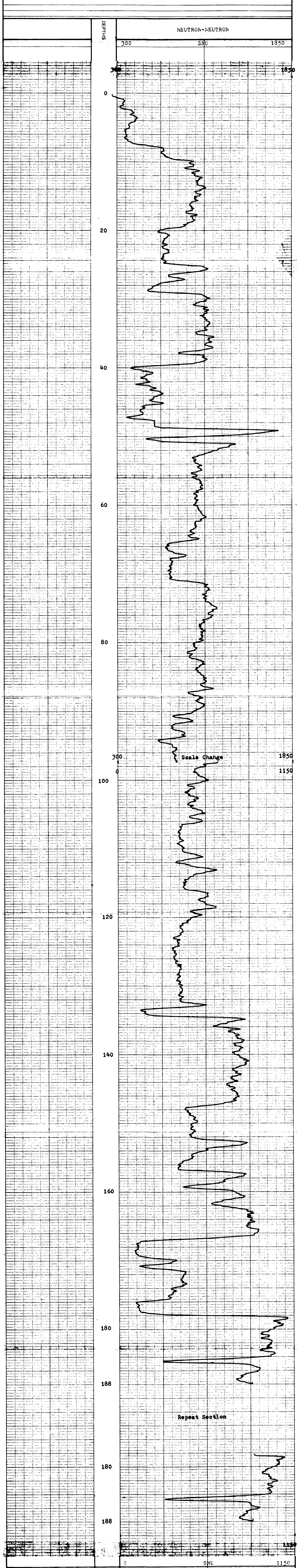
COMPANY BP Coal
 BOREHOLE BP-S19 - Sukunka 1978
 STATE B.C. COUNTRY Canada

Permanent Datum _____ Elev. _____ m
 Log measured from _____ Ground Level _____ m above P.D.
 Drilling measured from _____ RIG FLOOR _____ .5m above P.D.

DATE 14 July 1978
 TIME 188m
 LOGGERS 188m
 OPERATOR Unknown
 DEPTH 189.0m
 BOREHOLE 189.2m
 MUD NAME Quik-Gel

Run No.	1	1:200		
Date	14 July 1978			
Time	188m			
Loggers	188m			
Operator	Unknown			
Depth	189.0m			
Borehole	189.2m			
Mud Name	Quik-Gel			
SD	3" to 11.D.	to	to	to
BT	3" to 11.D.	to	to	to
Carving	3" to 7"	to	to	to
Carving	3" to 7"	to	to	to
Rm @ Meas Temp	@	@	@	@
Rmc @ Meas Temp	@	@	@	@
Rm @ BHT	@	@	@	@
Rmc @ BHT	@	@	@	@
Operating Time	5 hrs.			
Truck No.	V23/21			
Recorded By	R. Bishop			
Witness	C. Blackford			

REMARKS		Scale Changes			
Date	Sample No	Type Log	Depth	Scale Up Hole	Scale Down
		N-N	98m	300-1850 SNU	0-1150 SNU
Changes in Mud Type or Additional Samples					
Type Fluid in Hole					
Dens	Visc				
ph	Fluid Loss				
Source of Sample		Equipment Data			
Rm @ Meas Temp	@	Run No.	Tool Type	Tool Position	Other
Rmc @ Meas Temp	@				
Source Rmt	Rmc				
Rm @ BHT	@				
Rmc @ BHT	@				
		Logging Data			
		Log	Depths	Speed	T.C.
			From To		Norm
		N-N	188 0	9	1
					0.74
					81
					N2479



COMPANY	<u>BP Coal</u>
BOREHOLE	<u>BP-S19 - Sukunka 1978</u>
STATE	<u>B.C.</u>
COUNTRY	<u>Canada</u>