K-SHELL-HORSESHOE R. 79(3)A

(BOOK 4 OF 4)

GEOPHYSICAL

LOGS

APPEN. J (PART 2 OF 2)

403

APPEN. J. - PART 2 of 2.
K- SHELL- HORSESHOE R. 77(3)A

APPEN. J - DOWNHOLE GEOPHYSICAL LOGS.

204 to 210

GEOLOGICAL BRANCH
ASSESSMENT REPORT

00 403

COMPANY	[illegible]
WELL	[illegible]
FIELD	[illegible]
COUNTY	[illegible]
STATE	[illegible]
LOCATION	[illegible]
API SERIAL NO.	[illegible]
SECTION	[illegible]
TOWNSHIP	[illegible]
RANGE	[illegible]
PERMANENT DATUM	[illegible]
LOG MEASURED FROM	[illegible]
DRILLING MEASURED FROM	[illegible]
DATE	[illegible]
RUN NO.	[illegible]
DEPTH-DRILLER	[illegible]
DEPTH-LOGGER	[illegible]
BTM. LOG INTERVAL	[illegible]
TOP LOG INTERVAL	[illegible]
CASING-DRILLER	[illegible]
CASING-LOGGER	[illegible]
BIT SIZE	[illegible]
TYPE FLUID IN HOLE	[illegible]
DENS. / VISC.	[illegible]
PH / FLUID LOSS	[illegible]
SOURCE OF SAMPLE	[illegible]
RM @ MEAS. TEMP.	[illegible]
RMF @ MEAS. TEMP.	[illegible]
RMC @ MEAS. TEMP.	[illegible]
SOURCE RMF / RMC	[illegible]
RM @ BHT	[illegible]
TIME SINCE CIRC.	[illegible]
MAX. REC. TEMP.	[illegible]
EQUIP. LOCATION	[illegible]
RECORDED BY	[illegible]
WITNESSED BY	[illegible]

RUN NO. | BIT SIZE | CASING SIZE | WEIGHT | FROM | TO

REMARKS:
CREW: NAME REPORTING OFFICE: [illegible]
CREW: NAME REPORTING OFFICE: [illegible]

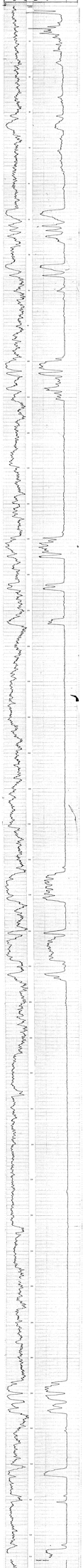
API DUAL LITHOLOGY LOG

CALIBRATION DATA

CALIBRATOR TYPE	[illegible]	CALIBRATOR SERIAL NO.	[illegible]	CALIBRATOR DATE	[illegible]
CALIBRATOR TEMP.	[illegible]	CALIBRATOR TIME	[illegible]	CALIBRATOR BY	[illegible]

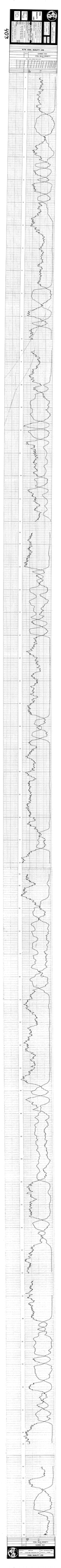
BLACK GEOSCIENCE

CASING SIZE [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible]



COMPANY	[illegible]		BLACK GEOSCIENCE
WELL	[illegible]	API SERIAL NO.	[illegible]
FIELD	[illegible]	COUNTY	[illegible]
STATE	[illegible]	LOCATION	[illegible]
SECTION	[illegible]	TOWNSHIP	[illegible]
RANGE	[illegible]	PERMANENT DATUM	[illegible]
LOG MEASURED FROM	[illegible]	DRILLING MEASURED FROM	[illegible]
DATE	[illegible]	RUN NO.	[illegible]

DUAL LITHOLOGY LOG


NTS 93H, BEAVERTON
GEOPHYSICAL
GEOLOGICAL SURVEY
OF
PETROLEUM RESOURCES
DIVISION
NTS 93H, BEAVERTON
GEOPHYSICAL
GEOLOGICAL SURVEY
OF
PETROLEUM RESOURCES
DIVISION
GEOLOGICAL SURVEY
OF
PETROLEUM RESOURCES
DIVISION

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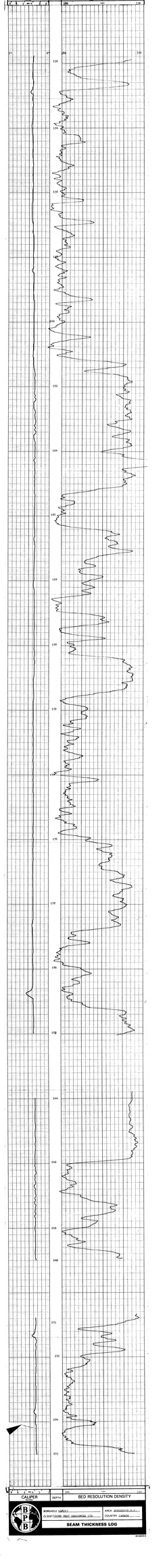
BOREHOLE -NONE-
CLIENT CROWN NEST RESOURCES LTD.
AREA SCHRIEVER,B.C.
COUNTRY CANADA
DATE LOGGED 4-6-2000

SEAM THICKNESS LOG

BOREHOLE DATA
WATER STRATIGRAPHY
OPERATION DATA
WATER STRATIGRAPHY
EQUIPMENT AND RECORDING DATA
DIAMETER (MM) 76 | DEPTH (M) 0.0 | DIAMETER (MM) | DEPTH (M)
DRILLING METHOD: ROTARY
DRILLING FLUID: WATER
DRILLING CONTRACTOR: NONE
DRILLING DATE: NONE
DRILLING RIG: NONE
DRILLER: NONE
LOGGING DATE: 4-6-2000
LOGGING ENGINEER: NONE
LOGGING CONTRACTOR: NONE
LOGGING RIG: NONE

BOREHOLE NO. 30-1
CLIENT: CIGNO RESS RESOURCES LTD.
AREA: BOREHOLE 30-1
COUNTRY: CANADA
DATE: 20 MARCH 1979
RUN NO. 1
DEPTH: 1.5 - 273.5 m
BPB INSTRUMENTS (UK) LIMITED
SEAM THICKNESS LOG
CALIBRATION DATA
CALIBRATOR NO. 5 CALIBRATOR NO. 5
CALIBRATOR NO. 5 CALIBRATOR NO. 5
EQUIPMENT AND RECORDING DATA
DETECTOR NO. 1 DETECTOR NO. 1
DETECTOR NO. 1 DETECTOR NO. 1
RECORDING SPEED 1 m/min
RECORDING SPEED 1 m/min
DATA PROCESSING DETAILS
DATA PROCESSED BY: BPB
DATE PROCESSED: 20 MARCH 1979
SEAM THICKNESS LOG
BPB INSTRUMENTS (UK) LIMITED
BOREHOLE NO. 30-1
CLIENT: CIGNO RESS RESOURCES LTD.
AREA: BOREHOLE 30-1
COUNTRY: CANADA
DATE: 20 MARCH 1979
RUN NO. 1
DEPTH: 1.5 - 273.5 m
DATA PROCESSED BY: BPB
DATE PROCESSED: 20 MARCH 1979

B P B SEAM THICKNESS LOG


CALIBRATOR
CALIBRATOR
CALIBRATOR

403

COMPANY	BPB INSTRUMENTS (GEOPHYSICS) LTD
WELL	CONTINUOUS LOGS
FIELD	
COUNTY	
STATE	
LOCATION	
OTHER SERVICES	
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	GROUND LEVEL
DRILLING MEASURED FROM	GROUND LEVEL
ELEV. PERM. DATUM	0 FT. ABOVE SEA LEVEL
ELEV. K.B.	
ELEV. D.F.	
ELEV. G.L.	
DATE	1-3-78
RUN NO.	ONE
DEPTH-DRILLER	1
DEPTH-LOGGER	1
BTM. LOG INTERVAL	1
TOP LOG INTERVAL	0
CASING-DRILLER	
CASING-LOGGER	
BIT SIZE	
TYPE FLUID IN HOLE	
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF / RMC	
RM @ BHT	
TIME SINCE CIRCULATION	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

EQUIPMENT AND RECORDING DATA

TOOL NUMBER AND TYPE												
RUN NO.	TOOL NO.	TYPE	DIST.	SERIAL NO.	MAX. TEMP.	MAX. PRESS.	MAX. SPEED	MAX. ACCEL.	MAX. SHOCK	MAX. VIBR.		

COMPANY	COAL		
WELL	103		
FIELD			
COUNTY		STATE	
LOCATION			
API NO.			
SERVICE COMPANY			
OPERATOR			
RIG			
DATE			
RUN NO.			
DEPTH DRILLER			
DEPTH LOGGER			
BOTTOM LOG INTERVAL			
TOP LOG INTERVAL			
CASING DRILLER			
CASING LOGGER			
BIT SIZE			
TYPE FLUID IN HOLE			
DENSITY			
VISCOSITY			
PH			
FLUID LOSS			
SOURCE OF SAMPLE			
RM @ MEAS. TEMP.			
RMF @ MEAS. TEMP.			
RMC @ MEAS. TEMP.			
SOURCE RMF / RMC			
RM @ BHT			
TIME SINCE CIRCULATION			
MAX. REC. TEMP.			
EQUIP. LOCATION			
RECORDED BY			
WITNESSED BY			

EQUIPMENT AND RECORDING DATA

BOREHOLE RECORD									
RUN NO.	BIT NO.	FROM	TO	SIZE	TYPE	FROM	TO	SIZE	WT. & GRADE

CASING RECORD							
SIZE	WT.	GRADE	THREAD	FROM	TO	MAX. PRESS.	MAX. TEMP.

TOOL STANDOFF (IN.)	
TOOL POSITION	
BOREHOLE CONDITIONS	
EQUIPMENT RATINGS	
REMARKS	

ADDITIONAL SERVICE RUN				REMARKS
RUN	API	CASING DEPTH		

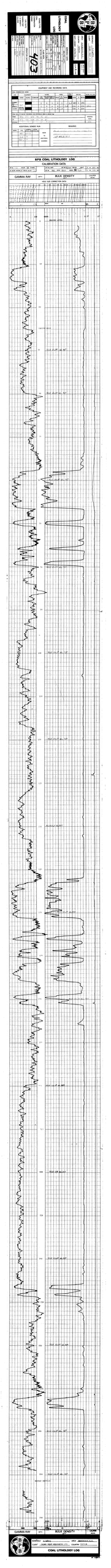
BOREHOLE RECORD	
CASING RECORD	
TOOL STANDOFF	
TOOL POSITION	
BOREHOLE CONDITIONS	
EQUIPMENT RATINGS	
REMARKS	

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

BATTERY VOLTAGE		BEFORE		AFTER			
CALIBRATOR VALUE		BEFORE		AFTER			
GAMMA RAY	API		BULK DENSITY			GM/CM³	

BULK DENSITY CORRECTION DATA


BASE OF COAL
BASE OF COAL
BASE OF COAL

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COAL QUALITY LOG

BOREHOLE NO. [illegible]
CLIENT CROWN MULT RESOURCES LTD.
AREA [illegible]
COUNTRY CANADA
DATE LOGGED 10/9/7[illegible]
DEPTH SCALE 20:1
[illegible] 4.000

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

SONDE	TAPING UNIT	LOG UNIT	PROBE	CABLE	SOCKET	PANEL UNIT	LOG SCALE	SOCKETS	SONDE
G 1000	1	2	1	2	2	2			1+2
L.S. DENSITY			2	1+3		2	1	2+3	

SONDE TYPE: COAL COMBINATION SONDE
CHANGE SONDE AND CABLE ASSEMBLY
REFER TO LITHOLOGY LOG

COAL QUALITY LOG INTERVALS

FROM	22	74	10	
TO	74	80	10	
ZONE	8	14	7	
LOG SUITE				NOW
NOW				LOG
LOGGING				DATE

LOG SUITE: GAMMA RAY L.S. DENSITY

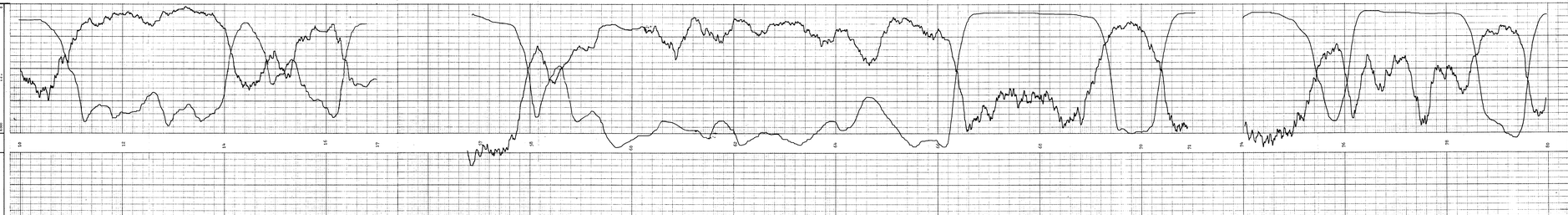
REMARKS
THIS IS 2nd COAL QUALITY LOG

B P B COAL QUALITY LOG

GAMMA RAY
COAL BULK DENSITY

DEPTH

WELL SITE CORRECTION DATA



COAL BULK DENSITY
GAMMA RAY

DEPTH

BOREHOLE [illegible]
AREA [illegible]
COUNTRY CANADA
CLIENT CROWN MULT RESOURCES LTD.

COAL QUALITY LOG

BPB

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COAL QUALITY LOG

BPB

DATE	10/7/79
TOOL TYPE	GAMMA RAY
TOOL NO.	3
DATE	10/7/79
RUN NO.	1
DEPTH DRILLER	275
DEPTH LOGGER	275
BOTTOM LOGGED INTERVAL	275
TOP LOGGED INTERVAL	SURFACE
CASING DRILLER	8 5/8" @ SURFACE
CASING LOGGER	275
BIT SIZE	7 7/8"
TYPE FLUID IN HOLE	AIR
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEASURED TEMP.	
RMF @ MEASURED TEMP.	
RMC @ MEASURED TEMP.	
SOURCE RMF	
SOURCE RMC	
RM @ BHT	
TIME SINCE CIRCULATION	
MAX. REC. TEMP.	
EQUIPMENT LOCATION	
RECORDED BY	
WITNESSED BY	

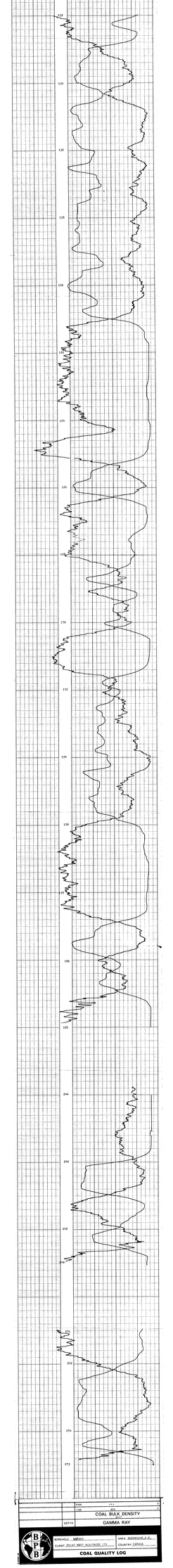
BOREHOLE RECORD

BIT NO.	1
TYPE	CONE BIT
SIZE	7 7/8"
FROM	SURFACE
TO	275'

BPB COAL QUALITY LOG

DEPTH	GAMMA RAY / COAL BULK DENSITY

HOLE SIZE CORRECTION DATA

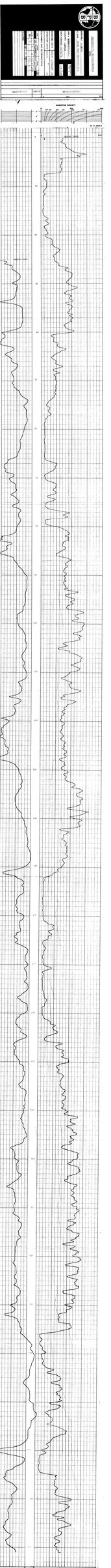


CPS	CPS
0	100
100	200
DEPTH	GAMMA RAY / COAL BULK DENSITY

BPB

BOREHOLE: 300403	AREA: BERESFORD, N.B.
COUNTY: ZONE NEST REGIONERS 176	COUNTRY: CANADA

COAL QUALITY LOG


BHCS
BOREHOLE COMPENSATED SONIC LOG
SCHLUMBERGER
WELL
FIELD
COUNTY
STATE
OTHER SERVICES
SEC
TWP
RGE
PERMANENT DATUM
ELEVATION
LOG MEASURED FROM
DRILLING MEASURED FROM
DATE
RUN NO.
TYPE FLUID IN HOLE
DENSITY
VISCOSITY
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE RMF
SOURCE RMC
RM @ BHT
TIME CIRC. STOPPED
TIME LOGGER ON BOTTOM
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
BOREHOLE RECORD
BIT SIZE
FROM
TO
CASING RECORD
SIZE
WGHT.
FROM
TO
TYPE
TOP LOG INTERVAL
BOTTOM LOG INTERVAL
TYPE OF SONIC
SONIC SERIAL NO.
TRANSMITTER SPACING
RECEIVER SPACING
TIME CONSTANT
SONIC TOOL NO.
TRANSMITTER
RECEIVER
TRANSMITTER VOLTAGE
RECEIVER GAIN
TRANSMITTER FREQUENCY
RECEIVER FREQUENCY
SONIC TOOL
SONIC TOOL NO.
SONIC TOOL POSITION
SONIC TOOL STANDOFF
SONIC TOOL ECCENTRICITY
SONIC TOOL ANGLE
SONIC TOOL DIRECTION
SONIC TOOL DIAMETER
SONIC TOOL LENGTH
SONIC TOOL WEIGHT
SONIC TOOL MATERIAL
SONIC TOOL TYPE
SONIC TOOL SERIAL NO.
SONIC TOOL CALIBRATION
SONIC TOOL CALIBRATION DATE
SONIC TOOL CALIBRATION TEMP.
SONIC TOOL CALIBRATION PRESSURE
SONIC TOOL CALIBRATION VOLTAGE
SONIC TOOL CALIBRATION FREQUENCY
SONIC TOOL CALIBRATION GAIN
SONIC TOOL CALIBRATION TIME CONSTANT
SONIC TOOL CALIBRATION SPACING
SONIC TOOL CALIBRATION TRANSMITTER
SONIC TOOL CALIBRATION RECEIVER
SONIC TOOL CALIBRATION TRANSMITTER VOLTAGE
SONIC TOOL CALIBRATION RECEIVER GAIN
SONIC TOOL CALIBRATION TRANSMITTER FREQUENCY
SONIC TOOL CALIBRATION RECEIVER FREQUENCY

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DATE	

BHP MINERALS	BHP MINERALS
LOG	LOG
103	103
BHP MINERALS	BHP MINERALS
LOG	LOG
103	103

EQUIPMENT AND RECORDING DATA

DIP	DIRECTION	TYPE	SERIAL NO.	DATE	TIME	DEPTH	DATE	TIME	DEPTH

ADDITIONAL SURVEY RUN

DIP	DIRECTION	DATE	TIME	DEPTH

REMARKS

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

BPB

COAL LITHOLOGY LOG

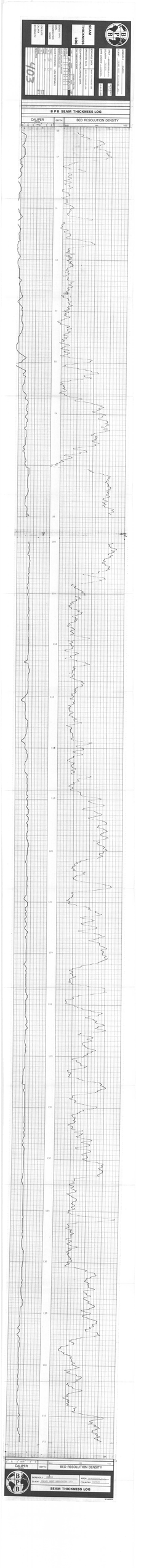
BOREHOLE: B.R. 326
CLIENT:
AREA:
COUNTY:
DATE DRILLED:
DATE LOGGED:

DRILLER: GAMMA RAY / DENSITY / CALIPER
LOGGER: GAMMA RAY / DENSITY / CALIPER

DRILL TYPE: CORE
DRILL CONDITION: GOOD

DRILL DATA: DRILLING METHOD: ROTARY / DRILLING FLUID: AIR / DRILLING DATE: / DRILLING TIME: / DRILLING COMPANY: / DRILLER: / DRILLING RIG: / DRILLING REMARKS:

HOLE DATA: HOLE DIAMETER: 76 mm / CASING: / CASING DEPTH: / WATER LEVEL: / HOLE DEVIATION: / HOLE DIRECTION: / HOLE TEMPERATURE: / HOLE FLUID: / HOLE FLUID LEVEL: / HOLE FLUID DENSITY: / HOLE FLUID VISCOSITY: / HOLE FLUID PH: / HOLE FLUID RESISTIVITY: / HOLE FLUID CHLORIDES: / HOLE FLUID SALINITY: / HOLE FLUID SOURCE: / HOLE FLUID LOSS: / HOLE FLUID GAIN: / HOLE FLUID TEMPERATURE: / HOLE FLUID PRESSURE: / HOLE FLUID FLOW: / HOLE FLUID TYPE: / HOLE FLUID WEIGHT


B P B
SEAM THICKNESS LOG
BED RESOLUTION DENSITY
CALIPER
DEPTH
8 P B SEAM THICKNESS LOG
BOREHOLE
CLIENT
SEAM
DATE
COUNTY
SEAM THICKNESS
SEAM THICKNESS LOG
BED RESOLUTION DENSITY
CALIPER
DEPTH
BED RESOLUTION DENSITY
BOREHOLE
CLIENT
SEAM
DATE
COUNTY
SEAM THICKNESS LOG

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BPB	COAL LITHOLOGY LOG		
WELL NAME			
SURVEY			
DATE			
LOCATION			
COUNTRY			
CLIENT			
RIG			
DATUM			
DRILLER			
LOGGER			
BIT SIZE			
DATE			
TIME			
RUN NO.			
DEPTH			
CASING			
MAX. TEMP.			
LOGGING SPEED			
TIME CONSTANT			
SENSITIVITY			
CALIBRATION			
REMARKS			

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

TYPE	EQUIPMENT NUMBER				SONDE POSITION				PROBE STANDOFF		PROBE TYPE	DETECTOR TYPE	DETECTOR SIZE	DETECTOR WINDOW
	SONDE	PROBE	DETECTOR	CABLE	DEPTH	TEMP	PRESS	DIST	BOW	SPRING				
GAMMA RAY														
BULK DENSITY	1.73													
CALIPER	PADDLE				1	2	3	4	1.73	2.43	1.73	2	1.73	2.43
	PADDLE				1	2	3	4	1.73	2.43	1.73	2	1.73	2.43

COAL BULK DENSITY CALIBRATION

TONE	1.73		ANNULAR TOTAL
TO	1.73	2.1	
ANNULAR	1.73	2.1	

ADDITIONAL SONDES RUN

SONDE	DEPTH	ANNULAR TOTAL

REMARKS

DEPTH
TO
ADDITIONAL
REMARKS

NOT ACCURATE
PROP Minerva RELATED WITH HS 20.000
CH Data.

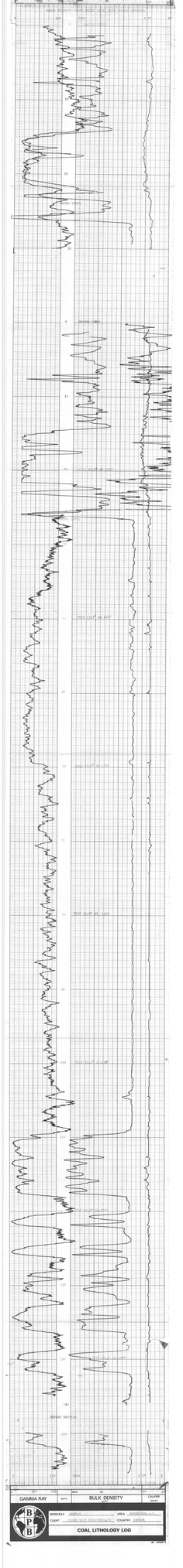
BPB COAL LITHOLOGY LOG

CALIBRATION DATA

AT IN	VALUE @ 1 TONE	BLOCK HIGH	AT HIGH	VALUE	UNIT
AT DOWN SURFACE AT ABOVE VALUE	2.3	AT IN	2.3	DENS 2.3	2.3

GAMMA RAY | DEPTH | BULK DENSITY | CALIPER INCHES

HOLE SIZE CORRECTION DATA



BP B

BOROUGH: [illegible]
AREA: [illegible]
COUNTRY: [illegible]
DATE: [illegible]

COAL QUALITY LOG

DIVISION: [illegible]
DIRECTION: [illegible]
DIRECTION: [illegible]
DIRECTION: [illegible]
DIRECTION: [illegible]
DIRECTION: [illegible]

BOROUGH: [illegible]
CLIENT: [illegible]
COUNTRY: [illegible]
DATE: [illegible]

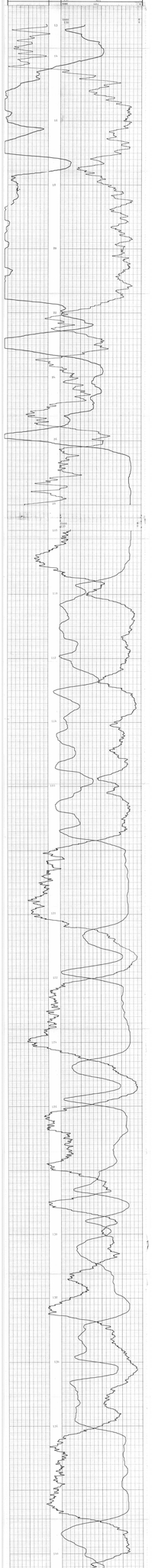
123

BPB COAL QUALITY LOG

DEPTH — GAMMA RAY

COAL BULK DENSITY

HOLE SIZE CORRECTION DATA



	DATE	/ /
	TITLE	COAL BULK DENSITY
	DEPTH	GAMMA RAY
BOROUGH		AREA
CLIENT		COUNTRY CANADA
COAL QUALITY LOG		

BPB

GARRA BAY 1A

BOREHOLE

CLIENT CROWN PRINT ASSOCIATED LTD.

AREA NORTHERN TERR.

COUNTRY CANADA

DATE LOGGED 2-10-1984

DATUM BELOW G.L.

BOREHOLE DATA REFER TO LITHOLOGY LOG

OPERATION DATA REFER TO " LOG

EQUIPMENT AND RECORDING DATA

LOG	TAPING		PANEL	LOG
	LOG	SPEED	SENSITIVITY	S.P.	Ruler
GR				
	MAG		MAG	

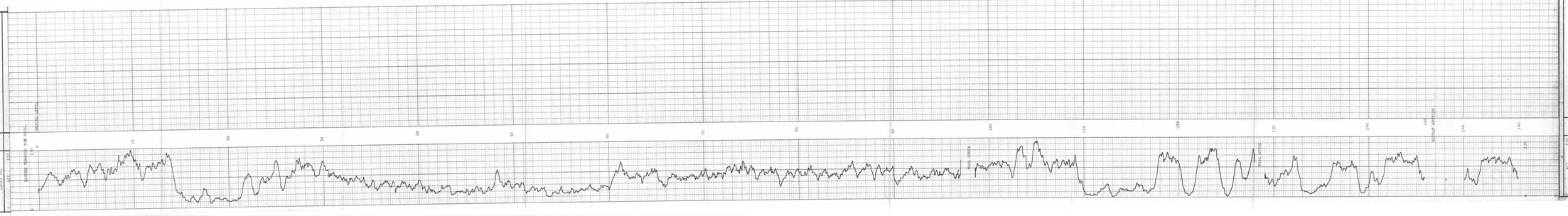
REMARKS

403

DEPTH

SCALE 1:50

REF



BPB

BOREHOLE NO 103

CLIENT ZENGER JOINT MANAGEMENT LTD.

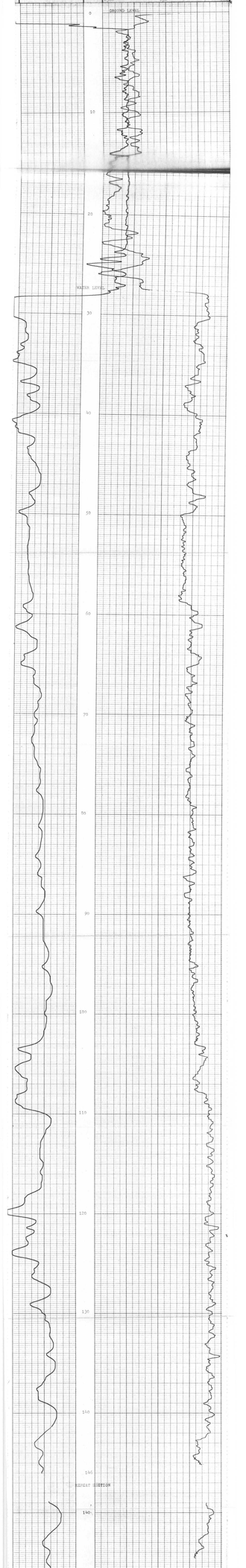
AREA MORESBY/PNG

COUNTRY PAPUA

DATE LOGGED 13-10-1987

BOREHOLE DATA
DIA 9 7/8 TO 1117.5 FT
OPERATION DATA
EQUIPMENT AND RECORDING DATA
LOG NO. 1
SCALE 1:200
RECORDED BY
OPERATOR

RESISTIVITY	DEPTH	NEUTRON-GAMMA
		0.000 0.400 0.800



RESISTIVITY | DEPTH | NEUTRON-GAMMA
0.000 0.400 0.800
BPB
BOREHOLE NO 103
CLIENT ZENGER JOINT MANAGEMENT LTD.
AREA MORESBY/PNG
COUNTRY PAPUA

4103

BP

WELL NAME: [illegible]

PROPOSED [illegible]

CLIENT: [illegible]

AREA: [illegible]

COUNTRY: [illegible]

DATE LOGGED: [illegible]

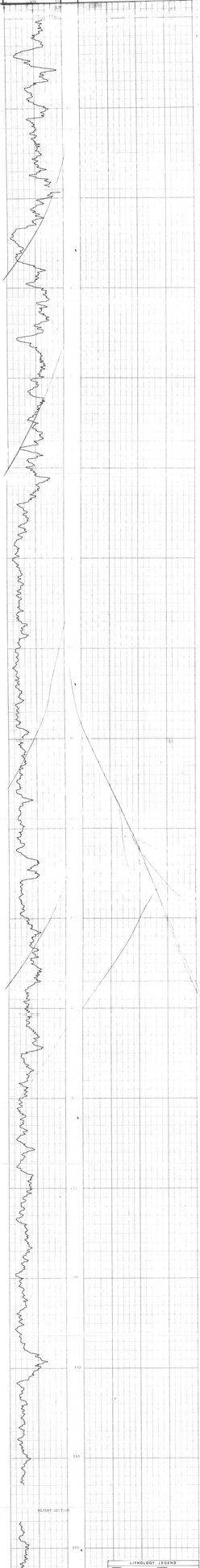
BOREHOLE DATA: [illegible]

OPERATOR DATA: [illegible]

EQUIPMENT AND RECORDING DATA

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

DATA INT	DEPTH
[illegible]	[illegible]



BOREHOLE	[illegible]	AREA	[illegible]
CLIENT	[illegible]	COUNTRY	[illegible]

BP

HA-14 E

BOREHOLE JSR-R-209
CLIENT CROWS NEST RESOURCES LTD.

AREA NORSENDER RIDGE
COUNTRY CANADA
DATE LOGGED 28/09/79

DEPTH SCALE 20:1
__OF__LOGS

SEAM THICKNESS LOG

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

LOG	TAPING			PANEL		CONV
	LOG	PANEL	SPEED	LOG	NORM	
CALIPER	Y	2	8	2	1	
BR DENSITY	Y	3	8	2	1	TYP

SIDEWALL POSITION

SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG INTERVALS

FROM	167m	
TO	181m	
INTERVAL	22m	
FROM		NORMAL
TO		TOTAL
INTERVAL		22

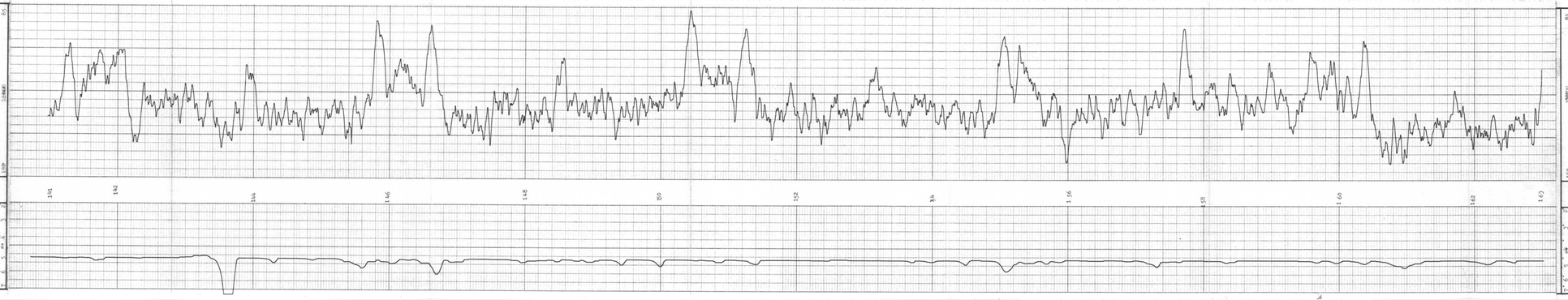
403

REMARKS
LOGGED THROUGH THE ROLL
CALIPER LOGGED THROUGH THE ROLL

SONDE TYPE
COAL
COMBINATION
SONDE

LOG SUITE
CALIPER
B.R. DENSITY

B P B SEAM THICKNESS LOG



BOREHOLE JSR-R-209
CLIENT CROWS NEST RESOURCES LTD.
AREA NORSENDER RIDGE
COUNTRY CANADA

SEAM THICKNESS LOG

BPB

LONG SPACED DENSITY

BOREHOLE: 12¼-8-7/8"
CLIENT: CALMS NOTT RESOURCES LTD.
AREA: BURGUNDY BASIN
COUNTRY: CANADA

DATE	1-2-2000
DEPTH	173
RUN NO.	1
DATA	1
OPERATOR	403
CASING	8-5/8" @ 1.5
BIT SIZE	7-7/8"
MAX. DEPTH	173
MAX. TEMP.	25°C
MAX. PRESS.	0
MUD TYPE	FRESH WATER
MUD WT.	8.4
MUD VISCOSITY	28
MUD RESISTIVITY	1.0
RM @ MEAS. TEMP.	1.0
RMF @ MEAS. TEMP.	1.0
RMC @ MEAS. TEMP.	1.0
RM @ BHT	1.0
RMF @ BHT	1.0
RMC @ BHT	1.0
MAX. REC. TEMP.	25°C
EQUIP. LOCATION	1.5
RECORDED BY	
WITNESSED BY	

EQUIPMENT AND RECORDING DATA

SONDE		EQUIPMENT		TAPING		PANEL		CPS	DEPTHS	
	RANGE	PANEL	SONDE	SPEED	DELAY	SPEED	DELAY	SIGNAL	TOP	BOTTOM
GAMMA	110			5	0	0	0	1		
LSD	110			5	0	5	0	3-2	170	0
									173	0

ADDITIONAL SONDES RUN			REMARKS
SONDE	LTD	TOP	BOTTOM
			DETAILS 163-161
			RECORD THROUGH TBG RUN.

GAMMA RAY | DEPTH | LONG SPACED DENSITY

0 | 4.5 | 150 | 2000 | 2.5

0 | 150 | 2000 | 2.5

ORIGIN LEFT

RETEST SECTION

0 | 150 | 2000 | 2.5

GAMMA RAY | DEPTH | LONG SPACED DENSITY

BOREHOLE: 12¼-8-7/8"
CLIENT: CALMS NOTT RESOURCES LTD.
AREA: BURGUNDY BASIN
COUNTRY: CANADA

BOREHOLE NSR-R-209
CLIENT CROWS NEST RESOURCES LTD.
AREA NSR-R-209
COUNTRY CANADA
DATE LOGGED 28/06/79
DEPTH SCALE 1:100
DEPTH — 100m

COAL QUALITY LOG

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

COAL COMBINATION SONDE — SCHLUMBERGER

COMPONENT	LOG	TAPING	PANEL
L.S. DENSITY	1	PRIMARY	1
GAMMA RAY	2	SECONDARY	2
			3-4

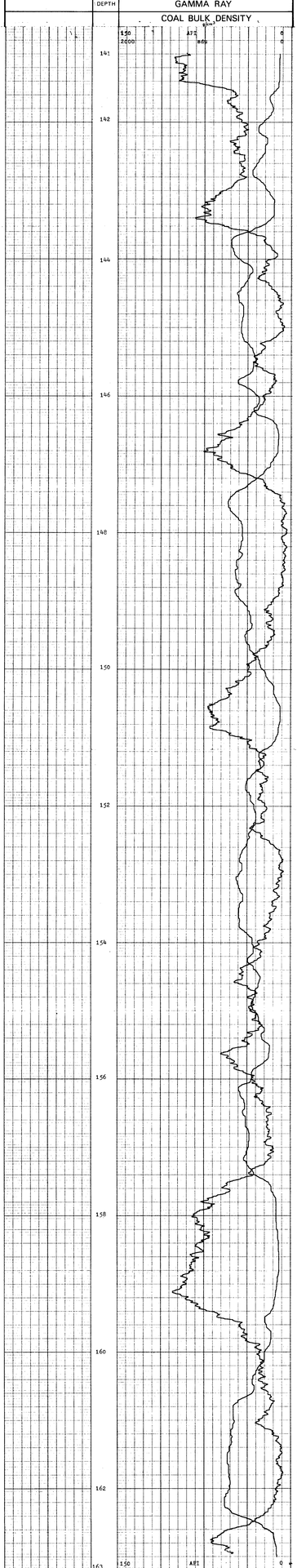
COAL QUALITY LOG INTERVALS
REFER TO LITHOLOGY LOG

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

FROM	15m	
TO	403m	
INTERVAL	388m	
TOTAL LOG LENGTH	403m	

REMARKS: LOGGED THROUGH TUBE ROOF.

BPB COAL QUALITY LOG



	2000 kg/m³	0
	150 API	0
	COAL BULK DENSITY	
DEPTH	GAMMA RAY	

BOREHOLE NSR-R-209
CLIENT CROWS NEST RESOURCES LTD
AREA NORTHERN BIRCH
COUNTRY CANADA

COAL QUALITY LOG

BP BP

BP EXPLORATION (ALASKA) INC. VERTICALITY SURVEY

COMPANY	BP EXPLORATION (ALASKA) INC.
WELL	DUCK ISLAND UNIT / SEAGULL ISLAND
FIELD	SEAGULL ISLAND
COUNTY / PARISH	CHUGACH
STATE	ALASKA
OPERATOR	BP EXPLORATION (ALASKA) INC.
DATE	12-Jan-1989
RUN NO.	1
TYPE FLUID IN HOLE	SEAWATER
MAX. RECORDED TEMP.	32 °F
BOREHOLE SIZE	8 1/2 in
CASING SIZE	7 in
CASING WT.	26 lb/ft
CASING DEPTH	1500 ft
TOP LOG INTERVAL	0 ft
BOTTOM LOG INTERVAL	172 ft
DRILLER'S TD	172 ft
LOGGER'S TD	172 ft
BOREHOLE STATUS	FLUID FILLED
ELEVATION	0 ft
DATUM	MSL
ELEVATIONS	KB: 0 ft DF: 0 ft GL: 0 ft
DATE	12-Jan-1989
TIME	1:00
RECORDED BY	D. SCHMIDT
WITNESSED BY	

EQUIPMENT AND RECORDING DATA

TOOL	EQUIPMENT SERIAL NUMBER	CENTRALIZER LEFT	CENTRALIZER RIGHT	PADS (TRACKED/CALIPERED) LEFT	PADS (TRACKED/CALIPERED) RIGHT	DEPTH (FT) FROM	DEPTH (FT) TO
CAMRA 3.5"		1	0	0	0	172	0
CAL 4.5"		1	0	0	0	172	0
VERTICALITY							

ADDITIONAL SONDES RUN

SONDE	LOG	CAMRA 3.5" DIA. CALIBRATION

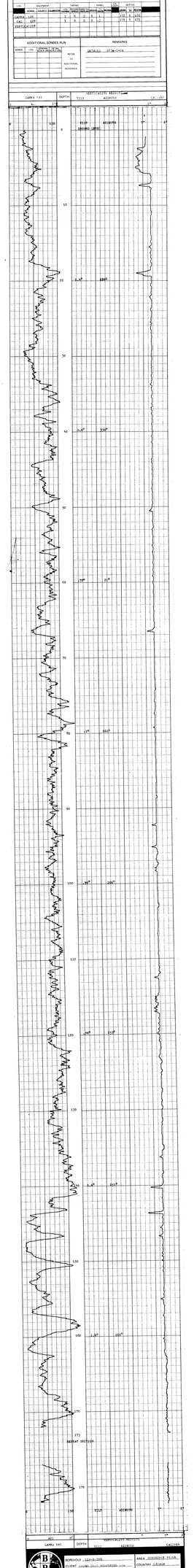
NEXT TO ADDITIONAL HEADINGS

REMARKS

DETAILS 1F.IN-1F.IN

CAMRA 3.5" DEPTH VERTICALITY DEVIATION 0..15°

TILT AZIMUTH

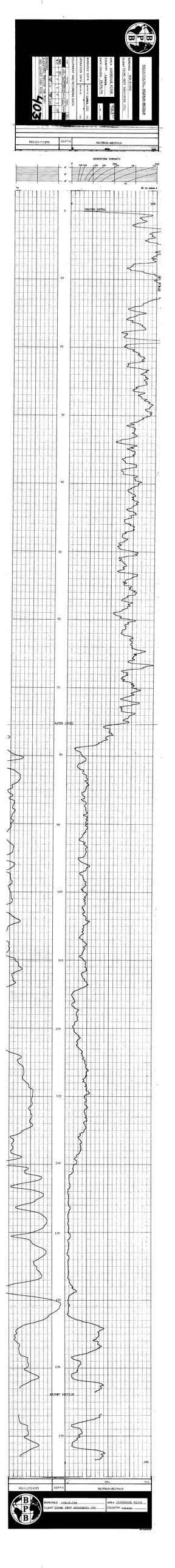


CAMRA 3.5" DEPTH VERTICALITY DEVIATION TILT AZIMUTH CALIBER

BP BP

BOREHOLE : 12-Jan-1989
CLIENT : DUCK ISLAND UNIT/SEAGULL I.U.
AREA : SEAGULL ISLAND
COUNTRY : ALASKA

403


BPB
RESISTIVITY
DEPTH
NEUTRON-NEUTRON
SANDSTONE POROSITY
GROUND LEVEL
WATER LEVEL
REPORT ENDS
BOREHOLE 103-d-200
CLIENT EXXON NEFT RESOURCES LTD.
AREA JUNGERSEN BLOCK
COUNTY CANADA

403

GAMMA RAY, CALIPER LOGS

BOREHOLE HE208

CLIENT CROWS NEST RESOURCES LTD.

AREA HORSESHOE RIDGE, BC

COUNTRY CANADA

DATE LOGGED 23/09/79

DEPTH SCALE 1001

1 OF 2 LOGS

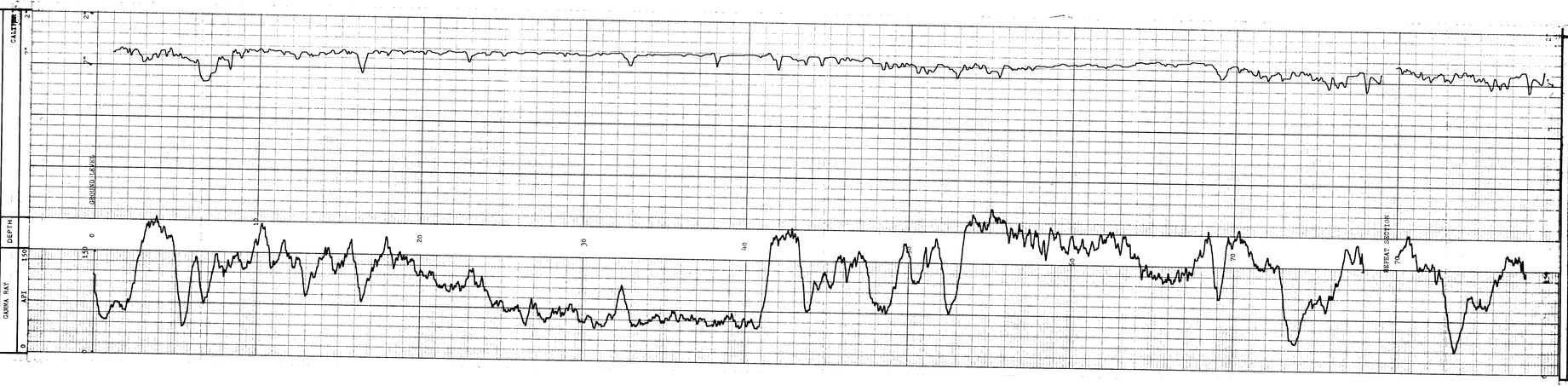
BOREHOLE DATA	REFER TO	LITHOLOGY
OPERATION DATA	REFER TO	LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA

LOG	TAPING				PANEL			CHART LOGS
	LOG TAPED	RECORDER SPEED	RECORDER REPLAY	SPEED	T.C. MODE	NORM		
GAMMA	Y	9	D	9	1			
CAL	Y	9	D	9	13			
		BOOK	128	PAGE	61			

REMARKS

LOGGED OPEN HOLE.



CALIPER

DEPTH

GAMMA RAY

AREA HORSESHOE RIDGE, B.C.

COUNTRY CANADA

BOREHOLE HE208

CLIENT CROWS NEST RESOURCES LT.

403

BPB PACIFIC

BOREHOLE WS-208
CLIENT CROWS NEST RESOURCES LTD.
AREA MORGESHOE RIVER
COUNTRY CANADA
DATE LOGGED 23/09/79

COAL LITHOLOGY LOG

BOREHOLE DATA	
BOREHOLE NO.	WS-208
CLIENT	CROWS NEST RESOURCES LTD.
AREA	MORGESHOE RIVER
COUNTRY	CANADA
DATE LOGGED	23/09/79
DATE COMPLETED	23/09/79
DRILLING CONTRACTOR	BPB
DRILL RIG	CMDR
DRILLING METHOD	RCD
DRILL BIT DIAMETER	5.5"
DEPTH DRILLED	115
DEPTH LOGGED	115
DATE RUN	23/9/79
LOG RUN NO.	1
CLEARED HOLE	YES
FULL DATA	YES
OPERATION DATA	
PRESSURE	AIR
LEVEL	20m
DRILL RECORD	
DRILL RECORD	YES
DRILL RECORD	YES
GEOLOGICAL LOG	
GEOLOGICAL LOG	YES
GEOLOGIST	P. PARKY

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

LOG	EQUIPMENT: SONDE	EQUIPMENT: SOURCE	EQUIPMENT: CALIBRATOR	TAPING: LOG TAPED	TAPING: RECORD SPEED	TAPING: DIRECT/REPLAY	PANEL: SPEED	PANEL: TC SECS	PANEL: NORM	CAL CODE	DEPTHS: FROM	DEPTHS: TO	DEPTHS: INTERVAL	SEAM LOG RUN
GAMMA RAY	99			Y	9	D	9	1			28	0	75	
TC DENSITY				Y	9	D	9	.3	-		23	0	52	
CALIPER		RADIAL POSITION												

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

FROM		INTERVAL TOTAL
TO		
INTERVAL		

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL SCALE	DETAIL SCALE	LOG/SCALE

REFER TO ADDITIONAL HEADINGS

REMARKS

ANGLE HOLE.
LOGGED THROUGH THE HOLE.
WITH WATER LEVEL-72metres.
LSU REPEAT SECTION 2000-0
GENERAL 6000-0

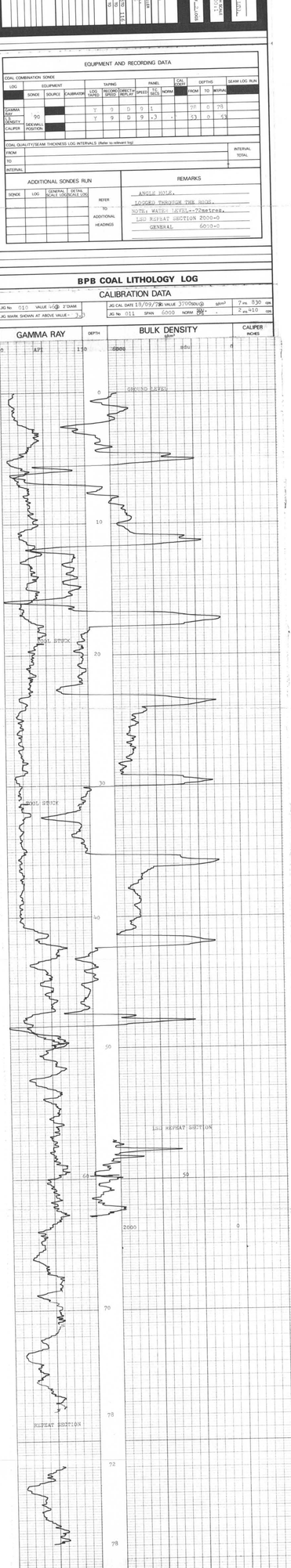
BPB COAL LITHOLOGY LOG

CALIBRATION DATA

JIG No. 013 VALUE 1000 @ 2"DIAM
JIG MARK SHOWN AT ABOVE VALUE - 3.0

JIG CAL DATE 19/09/79 VALUE 3700SDU@ g/cm³ 7 ins 830 cps
JIG No 011 SPAN 6000 NORM 99* - 5 ins 410 cps

GAMMA RAY	DEPTH	BULK DENSITY g/cm³	CALIPER INCHES



GAMMA RAY	DEPTH	BULK DENSITY g/cm³	CALIPER INCHES
0 API 150	2000 sdu	0	

BPB

BOREHOLE WS-208 AREA MORGESHOE RIVER
CLIENT CROWS NEST RESOURCES LTD. COUNTRY CANADA

COAL LITHOLOGY LOG

MT A50341 R

403

GAMMA RAY. L.S.DENSITY.

BOREHOLE HE/Cob
CLIENT Crown Nest Resources Ltd.

AREA Horse-shoe Bldg
COUNTRY Canada
DATE LOGGED 23/09/79

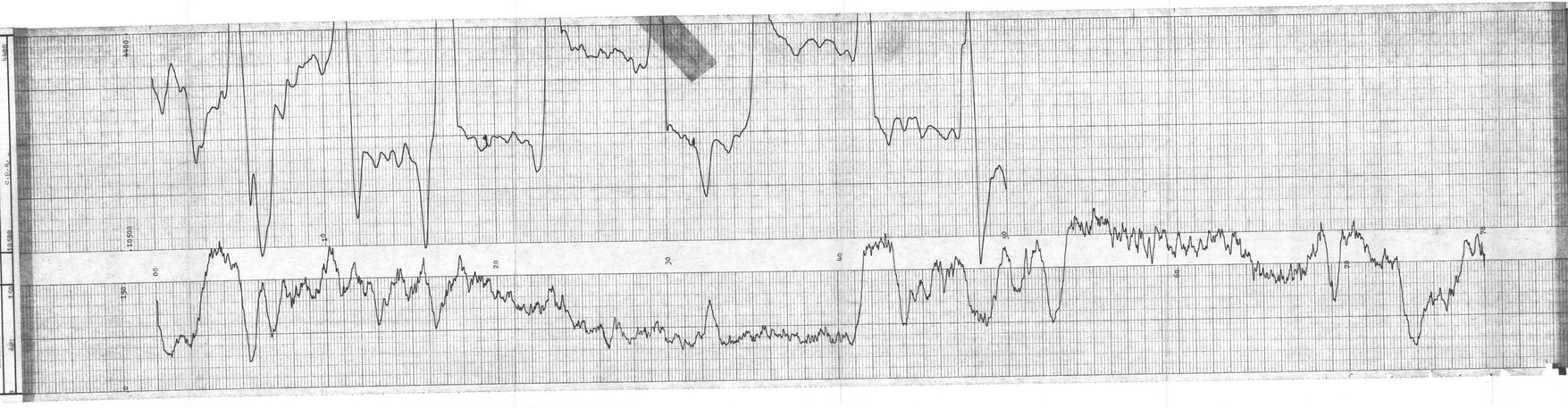
DEPTH SCALE 1:50 1 for 1 LOGS

BOREHOLE DATA	REFER TO	LOG
OPERATION DATA	REFER TO	LOG

EQUIPMENT AND RECORDING DATA

LOG		LOG TAPE	TAPING SPEED	RECORD REPEAT	SPEED	PANEL GAIN	NORM	LOG OFFSET
GAMMA	Y	9	R	9	1	-		
LsDen.	Y	9	R	9	1			
		50MX	128	50M				

REMARKS
GAMMA 78m L.S.D. 50m
0m 0m
78m 50m



4400
c.p.s.
L.S.DENSITY
10500
DEPTH
1:50
GAMMA RAY.
A/21
0

BOREHOLE HE/Cob
CLIENT Crown Nest Resources Ltd.
AREA Horse-shoe Bldg.
COUNTRY Canada.

403

GAMMA RAY (API)

BOREHOLE NUMBER

CLIENT CROWN PRINT ENTERPRISES LTD.

AREA BRIDGEVIEW

COUNTRY CANADA

DATE LOGGED 2.7.1992

RECORDED BY

<5M ..5MM

BOREHOLE DATA METER TO M

OPERATION DATA METER TO M

EQUIPMENT AND RECORDING DATA

UNIT	TAPING	PANEL	TOOL
	UNIT NUMBER	CHART SPEED	SERIAL
GAMMA	1	2	
	CHART	TAPE	

REMARKS CROWN BOREHOLE NO. BG001
TD 165.5 M. CASING 0.0 TO 12.0 M
SPEED 1.5 M/MIN
GR 1.0/0.5 TO 0
BRITISH PYRO WATER

DEPTH

GAMMA RAY

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 165

BOREHOLE NO.

CLIENT CROWN PRINT ENTERPRISES LTD.

AREA BRIDGEVIEW

COUNTRY CANADA

403

GAMMA RAY/LONG SPACED DENSITY

BOREHOLE	HBR-0-Z10
CLIENT	CROWS NEST RESOURCES LTD
AREA	BONNEBRIDGE RIDGE
COUNTY	CANADA
DATE LOGGED	06/06/82
RUN NO.	ONE
DEPTH DATUM	GROUND LEVEL

BOREHOLE DATA

PERMANENT DATUM	GROUND
ELEVATION OF P.D.	
LOG MEASURED FROM	DRILLER
DRILLER'S DEPTH	97m
DATE	6/6/82
CASING SHOE	32m
BIT SIZE	76 mm
CASING SIZE	76 mm
FLUID TYPE	WATER
FLUID LEVEL	
MAX. RECORDED TEMP.	
TIME SINCE CIRCULATION	

OPERATION DATA

RIG	1
TIME ON BOTTOM	10:00
TIME OFF BOTTOM	10:30
TIME STARTED	10:40
TIME FINISHED	11:00
TOTAL RECORDING TIME	20
NO. OF RUNS	1
OPERATOR	
RECORDER	
WITNESS	

EQUIPMENT AND RECORDING DATA

LOG	SONDE	EQUIPMENT SOURCE	CALIBRATOR	TAPING CODE	RECORDING SPEED	DIRECTION	DELAY	PANEL SPEED	TIME CONST. SECS	GAIN NORM	CAL. DEPTH	DEPTHS FROM	TO	INTERVAL
GAMMA	125			7	9	0	0	0	1			57	0	87
LSD	90	G-52		7	9	0	0	9	.3			55	0	87

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL SCALE/LOGS	DETAIL SCALE/LOGS

REFER TO ADDITIONAL HEADINGS

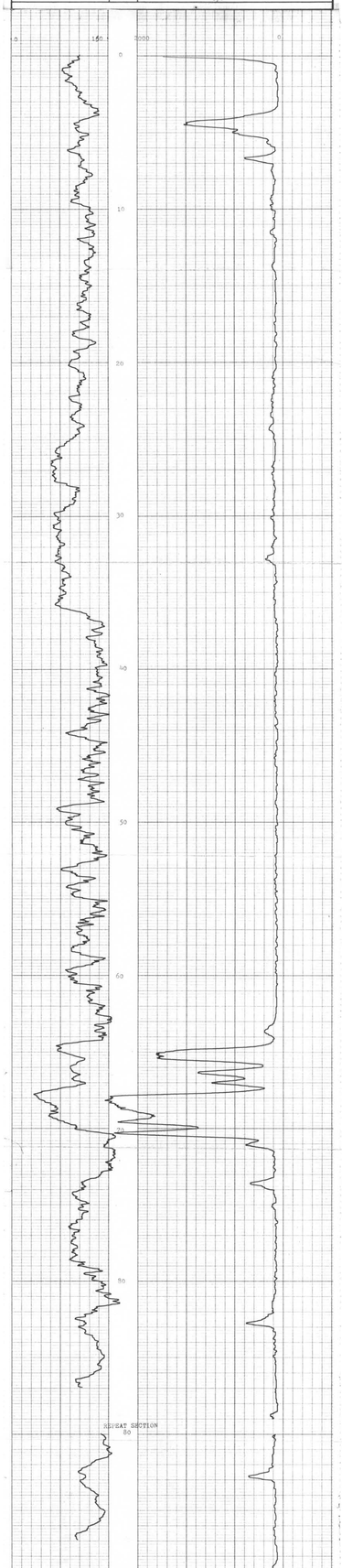
REMARKS

LOGGED THROUGH THE RODS

.3metre depth error on LSD log

(ie: 69.3m on log actually 69m)

GAMMA RAY	DEPTH	LONG SPACED DENSITY
0 API 150	2000 cps 0	



GAMMA RAY	DEPTH	LONG SPACED DENSITY
0 API 150	2000 cps 0	

BOREHOLE HBR-0-Z10	AREA BONNEBRIDGE RIDGE
CLIENT CROWS NEST RESOURCES LTD	COUNTRY CANADA

BP B

MF 001883 5

BOREHOLE HSR-J-210
CLIENT CROWS NEST RESOURCES LTD

AREA HORSESHOE
COUNTRY CANADA
DATE LOGGED 01/10/79

DEPTH SCALE 20:1

1 OF 4 LOGS

SEAM THICKNESS LOG

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

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

SIDEWALL POSITION

LOG	TAPING				PANEL			CAL COEFF
	LOG TAPED	RECORDER SPEED	DIRECT OF REPLAY	SPEED	SEPS	NORM		
CALIPER								
B R DENSITY	Y	2	R	2	1	.796		

SOURCE SONDE AND CALIBRATION

REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG INTERVALS

FROM	72
TO	63
INTERVAL	9m
FROM	
TO	
INTERVAL	

INTERVAL TOTAL #9

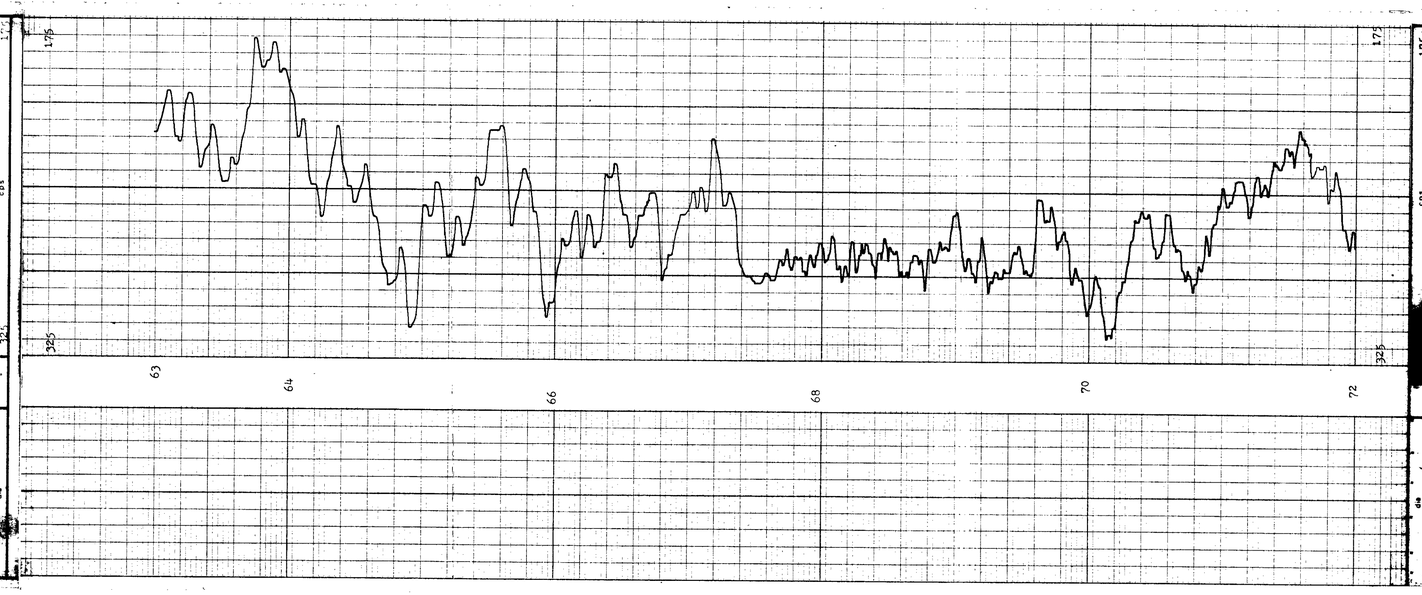
403

REMARKS
LOGGED THROUGH THE RODS

SONDE TYPE
COAL COMBINATION SONDE

LOG SUITE
CALIPER
B.R. DENSITY

B P B SEAM THICKNESS LOG



BED RESOLUTION DENSITY
cps
175
325
DEPTH
CALIPER
INCHES
da

BOREHOLE HSR-J-210
CLIENT CROWS NEST RESOURCES LTD

AREA HORSESHOE RIDGE
COUNTRY CANADA

SEAM THICKNESS LOG

MY 8800

BOREHOLE HSR-D-210
CLIENT CROWS NEST RESOURCES LTD

AREA HORSESHOE RIDGE
COUNTRY CANADA
DATE LOGGED 08/10/79

DEPTH SCALE 20:1

1 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

LOG	TAPING			PANEL			SIDEWALL POSITION	CAL. TYPE
	LOG TAPED	RECORDER SPEED	DIRECT OF INCR. RAY	SPEED	A.F.C. SECS	NORM		
GAMMA RAY	Y	2	R	2	4			
L.S. DENSITY	Y	2	R	2	1			

SOURCE, SONDE AND CALIBRATION

REFER TO LITHOLOGY LOG

COAL QUALITY LOG INTERVALS

FROM	72
TO	63
INTERVAL	9m
FROM	
TO	
INTERVAL	
INTERVAL TOTAL	9m

403

REMARKS

LOGGED THROUGH THE RODS

SONDE TYPE: COAL COMBINATION SONDE

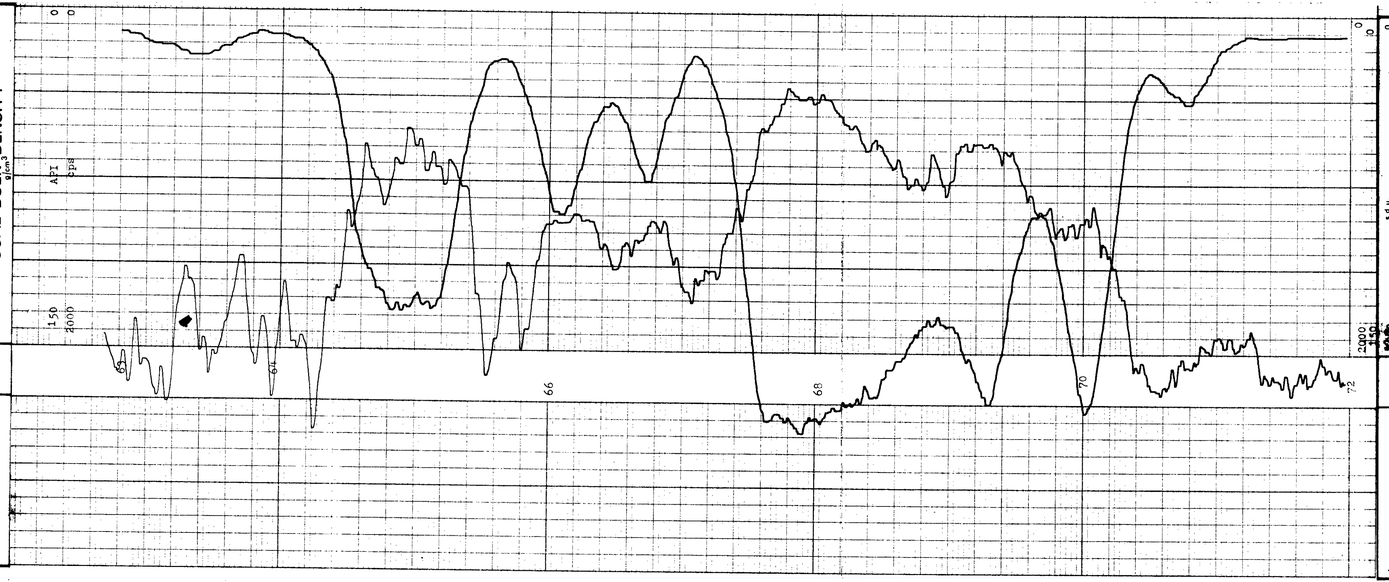
LOG SUITE: GAMMA RAY L.S. DENSITY

B P B COAL QUALITY LOG

GAMMA RAY

COAL BULK DENSITY g/cm³

DEPTH



BOREHOLE HSR-D-21
CLIENT CROWS NEST RESOURCES LTD.
AREA HORSESHOE RIDGE
COUNTRY CANADA

COAL QUALITY LOG

MY 88002 R

BPB

NEUTRON-NEUTRON

BOREHOLE HBR-2-210
CLIENT CROWS NEST RESOURCES LTD.
AREA HORSESHOE BLUFF
COUNTRY CANADA
DATE LOGGED 08/10/79
Run No. 1

BOREHOLE DATA RECORD TO 1170.0 CASING 0
OPERATION DATA RECORD TO - LOG
EQUIPMENT AND RECORDING DATA

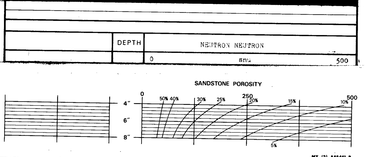
LOG	TYPE	PANEL			
NNN	1000	1000			
	2	4			
	4	4			
	6	4			
	8	4			

RECORDED TIME/DATE 10:00 10/08/79
ADDED TIME/DATE 10:00 10/08/79

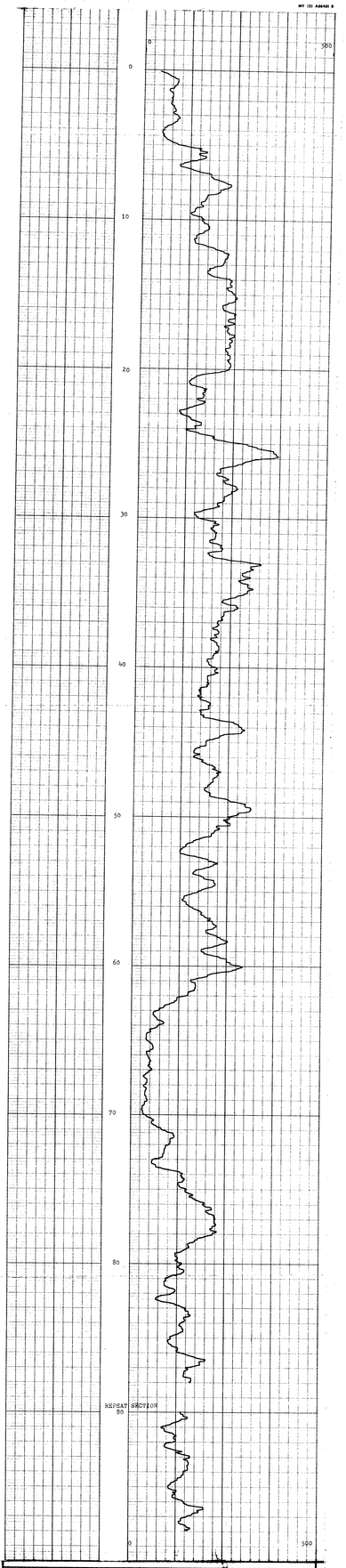
403

DEPTH	NEUTRON NEUTRON	
	0 BPU	500

SANDSTONE POROSITY



MF (3) AMAR 8



DEPTH	NEUTRON-NEUTRON	
	0 BPU	500

BPB

BOREHOLE HBR-2-210 | AREA HORSESHOE BLUFF
CLIENT CROWS NEST RESOURCES LTD. | COUNTRY CANADA

MF A3243318

CL 368
CL 295
CL 296
CL 373
CL 369
CL 296
CL 369
CL 299
NORTH
CENTRAL
SOUTH
No. 9 S5
No. 7 S5
CREEK
MAP INDEX
AERIAL PHOTO INDEX
RD G/15
SCALE
50 0 100 200 300 400 METERS
REFERENCE
MAP PROJECTION - UNIVERSAL TRANSVERSE MERCATOR
CENTRAL MERIDIAN REFERENCE 117° W
P.T. No. 1 OUTLINE
THE LOT BOUNDARIES HAVE
BEEN TRANSFERRED GRAPHICALLY
FROM FOREST COVER MAPS T35, 840
THEREFORE THEIR POSITION IS
APPROXIMATE ONLY.
Crows Nest Resources Limited
EXPLORATION
HORSESHOE RIDGE AREA
SE BC
GEOLOGICAL MAP
DRAWN BY J. SCHLENDER
DATE APR 1981
SCALE 1:500
DRAWING No. HD-301

403