COAL LITHOLOGY LOG

COMPANY: BPB INSTRUMENTS (UK) LTD
WELL: 162
FIELD: NOTTINGHAMSHIRE
COUNTY: NOTTINGHAMSHIRE
COUNTRY: ENGLAND
LOCATION: SHERWOOD
SURVEY: COAL LITHOLOGY LOG
DATE: 27-Feb-1986
RUN NO: 1
DRILLER'S DEPTH: 0.00 m
LOGGER'S DEPTH: 0.00 m
BOREHOLE FLUID: AIR
MAX. TEMP. RECORDED: 0 °C
RECORDED BY: J. BRAMWELL
WITNESSED BY: J. BRAMWELL

162

EQUIPMENT AND SETTINGS DATA

COAL LITHOLOGY LOGS

	TOOL TYPE	SERIAL NO.	TOOL POSITION	MAX. RECORDED TEMP.	TIME AFTER CIRCULATION	TIME SINCE CIRCULATION	LOGGING SPEED	TIME CONSTANT	DENSITY CAL.
RUN 1	GAMMA RAY						1.00 m/min	1 sec	
	BULK DENSITY						0.50 m/min	0.25 sec	2.00
RUN 2	GAMMA RAY								
	BULK DENSITY								
RUN 3	GAMMA RAY								
	BULK DENSITY								

RUN 1	GAMMA RAY												
	BULK DENSITY												
RUN 2	GAMMA RAY												
	BULK DENSITY												
RUN 3	GAMMA RAY												
	BULK DENSITY												

ANCILLARY EQUIPMENT

TOOL	SERIAL NO.	DETAILS
CCL		

NOTE: SEE ADDITIONAL DATA

REMARKS

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

BULK DENSITY CALIBRATION DATA

BULK DENSITY			

GAMMA RAY (API) — BULK DENSITY (g/cc)

COAL LITHOLOGY LOG

COMPANY			
WELL			
FIELD			
COUNTY			
STATE			
LOCATION			
SECTION			
TOWNSHIP			
RANGE			
ELEVATION			
DATE			
RUN NO.			
DEPTH DRILLER			
DEPTH LOGGER			
BTM. 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 CIRC.			
TIME SINCE STOP			
MAX. REC. TEMP.			
EQUIP. LOCATION			
RECORDED BY			
WITNESSED BY			

162

VISCOSITY AND SAMPLING DATA

BIT RUN NO.	SIZE	TYPE	NOZZLES	DEPTH IN	DEPTH OUT	HOURS	FOOTAGE	WEIGHT	RPM	PUMP PRESS.	PUMP SPM	PUMP NO.	PUMP LINER	MUD WEIGHT	VISCOSITY	PH	FLUID LOSS	MUD TYPE	

BPB

BORHOLE: BP-201 L
CLIENT: CHONO NEST RESOURCES
AREA: ZIONITE
COUNTRY: CANADA

SEAM THICKNESS LOG

BORHOLE DATA
BORHOLE NO. BP-201 L
CLIENT CHONO NEST RESOURCES
OPERATION DATA
DATE 1 FEBRUARY 1990
OPERATOR: BRIAN HUNTER
COMPANY: ANDRE CHOUINARD
LOGGING DATA
DATE 1 FEBRUARY 1990
LOGGER: BRIAN HUNTER
COMPANY: ANDRE CHOUINARD

BORHOLE: BP-201 L
CLIENT: CHONO NEST RESOURCES
AREA: ZIONITE
COUNTRY: CANADA
MAX. TEMPERATURE: 25°C
Max. Depth: 1 000 m

SONDE TYPE: DENSITY
SONDE NO.: 1
CALIBRATION: 2000
CALIBRATION DATE: 1 FEBRUARY 1990
CALIBRATION DATA: 1 FEBRUARY 1990
CALIBRATOR: BRIAN HUNTER
CALIBRATION DATA: 1 FEBRUARY 1990
CALIBRATOR: BRIAN HUNTER
LOG TYPE: DENSITY
LOG TYPE: DENSITY
Max. Depth: 1 000 m
Max. Depth: 1 000 m
Max. Depth: 1 000 m

BP BL

COMPANY	BP BL
WELL	1
FIELD	WILDCAT
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	GROUND LEVEL
ELEVATION	
LOG MEASURED FROM	KB
DRILLING MEASURED FROM	KB
DATE	1-2-2000
RUN NO.	ONE
DEPTH-DRILLER	1500
DEPTH-LOGGER	1500
BTM. LOG INTERVAL	1500
TOP LOG INTERVAL	0
CASING-DRILLER	13 3/8 @ 0
CASING-LOGGER	
BIT SIZE	12 1/4
TYPE FLUID IN HOLE	WATER
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF / RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIPMENT LOCATION	
RECORDED BY	
WITNESSED BY	

EQUIPMENT AND RECORDING DATA

DIL/SONIC			TURNS			MEAS.			LOGGING
TOOL NO.	TYPE	SERIAL NO.	TOOL NO.	TYPE	SERIAL NO.	TOOL	TYPE	SERIAL NO.	UNIT NO.
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4

ADDITIONAL SONDES RUN				REMARKS
TOOL	SERIAL NO.	TYPE		RUN
				CASING
				INTERVAL
				REMARKS

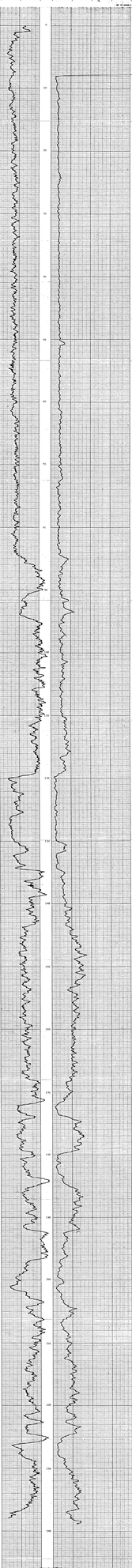
DEPTH		
1 CABLE 1/2	1	1 CABLE 1/2 TRIPS
2 CABLE 1/2	2	2

SONDE PRESENT

1	2	3	4
DIL/SONIC			

DEVIATION PRESENT

1	2	3	4
DIL/SONIC			



BP BL

COMPANY	BP BL
WELL	1
FIELD	WILDCAT
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	GROUND LEVEL
ELEVATION	
LOG MEASURED FROM	KB
DRILLING MEASURED FROM	KB
DATE	1-2-2000
RUN NO.	ONE
DEPTH-DRILLER	1500
DEPTH-LOGGER	1500
BTM. LOG INTERVAL	1500
TOP LOG INTERVAL	0
CASING-DRILLER	13 3/8 @ 0
CASING-LOGGER	
BIT SIZE	12 1/4
TYPE FLUID IN HOLE	WATER
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF / RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIPMENT LOCATION	
RECORDED BY	
WITNESSED BY	

PERMANENT DATUM: GROUND LEVEL	AREA: WILDCAT
ELEVATION:	COUNTY: CITRUS
LOG MEASURED FROM: DRILL FLOOR RECORDED BY:	COUNTY: CITRUS

COAL QUALITY LOG

BPB INSTRUMENTS

COMPANY CHINA KOST RESOURCES
WELL DIAMOND DRILLING
COUNTRY CANADA
DATE 1-8-90
RUN 1

DIAMOND DRILLING
CHINA KOST RESOURCES
CANADA

COAL QUALITY LOG

DIAMOND DRILLING
CHINA KOST RESOURCES
CANADA

DATE	1-8-90		
RUN	1		
DEPTH			
GAMMA RAY			
COAL BULK DENSITY			
HOLE SIZE CORRECTION DATA			
6	7	8	9
10	11	12	13
14	15	16	17
18	19	20	21

COMPANY	BP EXPLORATION (ALASKA) INC.
WELL	PRUDHOE BAY DS 4-9
FIELD	PRUDHOE BAY
COUNTY	NORTH SLOPE
STATE	ALASKA
LOCATION	1 FSL & 1 FEL
SEC. 33	TWP. 11 N
RGE. 14 E	PERMANENT DATUM: MSL
ELEV.	
LOG MEASURED FROM	KB 36.5 ABOVE PERMANENT DATUM
DRILLING MEASURED FROM	KB
DATE	12-2-83
RUN NO.	ONE
DEPTH-DRILLER	10200
DEPTH-LOGGER	10198
BTM. LOG INTERVAL	10198
TOP LOG INTERVAL	9800
CASING-DRILLER	9 5/8 @ 9800
CASING-LOGGER	
BIT SIZE	8 1/2
TYPE FLUID IN HOLE	DIESEL
DENSITY	8.4
VISCOSITY	28
PH	9.5
FLUID LOSS	4.0
SOURCE OF SAMPLE	PIT
RM @ MEAS. TEMP.	.75 @ 70
RMF @ MEAS. TEMP.	.65 @ 70
RMC @ MEAS. TEMP.	.85 @ 70
SOURCE RMF & RMC	MEASURED
RM @ BHT	.27 @ 200
TIME SINCE CIRCULATION	24 HRS
MAX. REC. TEMP.	200
EQUIPMENT LOCATION	PRUDHOE BAY
RECORDED BY	J. WEBB
WITNESSED BY	J. MCMAHON

162

EQUIPMENT AND RECORDING DATA

TOOL NAME	TOOL NO.	DIST. FROM BIT	RUN	TIME	BOTTOM	TOP
DIL-SP-GR	1221		1	18	10198	9800
			2			
			3			
			4			
			5			
			6			
			7			
			8			
			9			
			10			
			11			
			12			

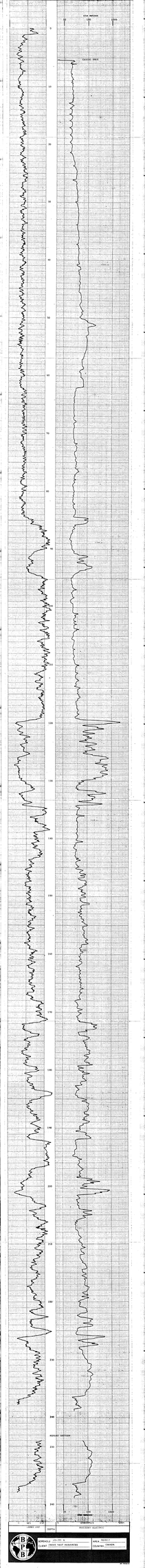
ADDITIONAL SENSORS RUN			
SENSOR	SERIAL NO.	DIST. FROM BIT	

REMARKS

DIFFERENTIAL	
ABSOLUTE	
ADDITIONAL	

	DEPTH	
CASING LOG		RECTANGULAR COORDINATES
DIL	1.750	1

SCALE



BP	BOROUGH: N. SLOPE, AK
	SCALE: 1" = 100'
	COMPANY: BP EXPLORATION (ALASKA) INC.
	COUNTY: ALASKA

BP PETROLEUM			

COMPANY NAME	BPB INSTRUMENTS (UK) LTD
WELL NAME	162
FIELD	
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	KELLY BUSHING
DRILLING MEASURED FROM	KELLY BUSHING
ELEVATION	K.B.
	D.F.
	G.L.

COAL LITHOLOGY LOG

162

EQUIPMENT AND RECORDING DATA

COAL THICKNESS MODE

COAL LITHOLOGY LOG

BPB INSTRUMENTS (UK) LIMITED

WELL	
FIELD	
COUNTY	
STATE	
COMPANY	
LOCATION	
SERVICE COMPANY	
RIG	
DATE	
RUN NO.	
DRILLER	
LOGGER	
TYPE FLUID IN HOLE	
DENSITY	
VISCOSITY	
PH	
FLUID LEVEL	
MAX. REC. TEMP.	
BIT SIZE	
TOP LOGGED INTERVAL	
BOTTOM LOGGED INTERVAL	
CASING-DRILLER	
CASING-LOGGER	
BIT RUN	
TIME SINCE CIRCULATION	
TIME ON BOTTOM	
MAX. RECORDED TEMP.	
EQUIPMENT NO.	
LOCATION	
RECORDED BY	
WITNESSED BY	

EQUIPMENT AND RECORDING DATA

TOOL TEMPERATURE LIMITS											
TOOL	CURRENT DRAIN		TOTAL CURRENT		TOTAL DRAIN		TOOL OPERATING TEMPERATURE		LATTICE TEMPERATURE		CURRENT DRAIN
	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	

TOOL TEMPERATURE RANGES: (A) NORMAL (B) EXTENDED (C) HIGH

TOOL: (A) 0°C - 70°C (B) 0°C - 125°C (C) 0°C - 175°C

LATTICE: (A) 0°C - 70°C (B) 0°C - 125°C (C) 0°C - 175°C

TOOL OPERATING TEMPERATURE: (A) NORMAL (B) EXTENDED (C) HIGH

TOOL	(A) 0°C - 70°C	(B) 0°C - 125°C	(C) 0°C - 175°C	NORMAL
LATTICE	(A) 0°C - 70°C	(B) 0°C - 125°C	(C) 0°C - 175°C	NORMAL

ADDITIONAL SUNDER RUN				
RUN	LOG	SUNDER SETTING		

NOTE: ALL SUNDER SETTINGS ARE TO BOTTOM OF LOG UNLESS OTHERWISE STATED

REMARKS

BPB COAL LITHOLOGY LOG

CALIBRATION DATA

ALL	2.5	2.0	2.5	2.0	2.5	2.0	2.5
ALL	2.5	2.0	2.5	2.0	2.5	2.0	2.5

COMPANY	BPB INSTRUMENTS (AUSTRALIA) PTY. LTD.
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
OTHER SERVICES	
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	KELLY BUSHING
DRILLING MEASURED FROM	KELLY BUSHING
ELEVATION	
DATE	
RUN NO.	
DEPTH-DRILLER	
DEPTH-LOGGER	
BTM. 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	
SOURCE RMC	
RM @ BHT	
TIME SINCE CIRC.	
TIME SINCE STOP	
MAX. RECORDED TEMP.	
EQUIPMENT NO.	
LOCATION	
RECORDED BY	
WITNESSED BY	

COAL GAMMA LOG

BPB INSTRUMENTS (AUSTRALIA) PTY. LTD.

162

BPB COAL QUALITY LOG

DEPTH	GAMMA RAY
	COAL BULK DENSITY

HOLE SIZE CORRECTION DATA

| | | |

COMPANY	BP EXPLORATION (ALASKA) INC.
WELL	16-12
FIELD	PRUDHOE BAY
COUNTY	NORTH SLOPE
STATE	ALASKA
SEAM THICKNESS LOG	
DATE	12-Jan-1993
RUN NO.	ONE
DEPTH DATUM	KB
LOG MEASURED FROM	54.00 ft. ABOVE PERMANENT DATUM
DRILLING MEASURED FROM	KB
ELEVATION	PERMANENT DATUM: MSL 0.00 ft.
	LOG MEASURED: KB 54.00 ft.
	DRILL MEASURED: KB 54.00 ft.
	GL 19.00 ft.
	DF 52.00 ft.
	KB 54.00 ft.
	DATE 12-Jan-1993
	RUN NO. ONE
	DEPTH DATUM KB
	LOG MEASURED FROM 54.00 ft. ABOVE PERMANENT DATUM
	DRILLING MEASURED FROM KB
	ELEVATION PERMANENT DATUM: MSL 0.00 ft.
	LOG MEASURED: KB 54.00 ft.
	DRILL MEASURED: KB 54.00 ft.
	GL 19.00 ft.
	DF 52.00 ft.
	KB 54.00 ft.

162

BPB SEAM THICKNESS LOG

CALIPER	DEPTH	BED RESOLUTION DENSITY
6.00 ... 16.00		0.000 ... 2.000 ... 3.000

CALIPER	DEPTH	BED RESOLUTION DENSITY
6.00 ... 16.00		0.000 ... 2.000 ... 3.000

FORMULA : 2D-LINE	AREA:0.0012
SCALE: 20.00 FEET PER INCH(S)	COUNT:0 ZERO:0

SEAM THICKNESS LOG

Schlumberger

COMPANY: CONOCO INC.
WELL: 162
FIELD: ANTELOPE
COUNTY: TRUMBULL
STATE: OHIO
LOCATION: 1 MILE SOUTH OF ANTELOPE

162

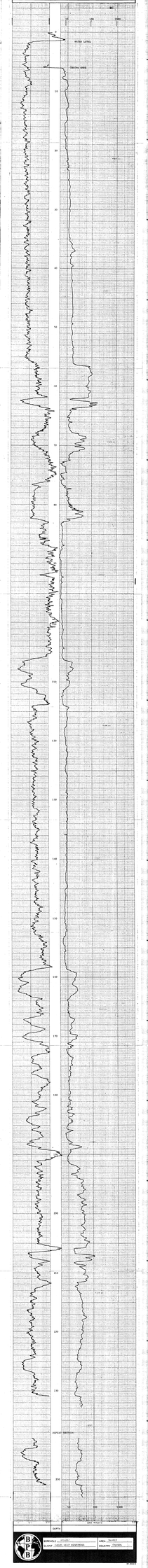
EQUIPMENT AND RECORDING DATA

	DIAMETER		DEPTHS		FLUID		DENSITY	

ADDITIONAL SONICS RUN				REMARKS
DATE	SONICS	DEPTH		

DATE OF ADDITIONAL SONICS RUN		

DATE OF LAST CALIBRATION	DEPTH	ANTELOPE ABSOLUTE
		DATE 11-5-79



BPB

REPORT NO. 1-11-2-1
FIELD: ANTELOPE
AREA: TRUMBULL
COUNTY: TRUMBULL
STATE: OHIO
COMPANY: CONOCO INC. WELL: 162

BHP BILLITON

COMPANY	BHP BILLITON PETROLEUM (AUSTRALIA) PTY LTD
WELL	BASS STRAIT OIL COMPANY LIMITED
FIELD	BASS STRAIT
COUNTY	GIPPSLAND
STATE	VICTORIA
LOCATION	LAT 38° 29' 0.000" S LONG 148° 0' 0.000" E
OTHER SERVICES	
PERMANENT DATUM	MEAN SEA LEVEL
LOG MEASURED FROM	RT 25.0 m ABOVE PERM. DATUM
DRILL MEASURED FROM	RT
ELEVATION	K.B. 25.0 m / D.F. / G.L. -1.0 m
DATE	13-Jun-2006
RUN NO.	162
DEPTH-DRILLER	1800.0 m
DEPTH-LOGGER	1798.0 m
BTM LOG INTERVAL	1796.0 m
TOP LOG INTERVAL	1.0 m
CASING-DRILLER	20" @ 1.0 m
CASING-LOGGER	20" @ 1.0 m
BIT SIZE	17.5"
TYPE FLUID IN HOLE	SEAWATER
DENSITY	1.03 g/cm³
VISCOSITY	1.0 cp
PH	8.0
FLUID LOSS	0 cc
SOURCE OF SAMPLE	CIRCULATED
RM @ MEASURED TEMP	0.0 Ω-m @ 0.0 °C
RMF @ MEASURED TEMP	0.0 Ω-m @ 0.0 °C
RMC @ MEASURED TEMP	0.0 Ω-m @ 0.0 °C
RM @ BHT	0.0 Ω-m @ 0.0 °C
MAXIMUM RECORDED TEMP	0.0 °C
BLOCK HEIGHT	0.0 m
TIME CIRCULATION STOPPED	0:00
TIME LOGGER ON BOTTOM	0:00
LOGGING UNIT NO.	1
LOGGING MEASURE	0.0 m
LOGGING DISPLACEMENT	0.0 m
MAX. RECORDED TEMP.	0.0 °C
ESTIMATED CEMENT TOP	0.0 m
TIME SINCE CIRCULATION	0:00
TIME SINCE CEMENTING	0:00
TOOL NO.	1
TOOL POSITION	0.0 m
RUN NO.	162
DATE	13-Jun-2006
TIME	0:00
DEPTH	1800.0 m
TOOL	0.0 m
TOOL	0.0 m
TOOL	0

WELL	Pilot Hole
FIELD	
COUNTY	
STATE	
COUNTRY	TANZANIA
DATE	
RUN NO.	1
DEPTH-DRILLER	
DEPTH-LOGGER	
BTM. 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	
MAX. REC. TEMP.	
EQUIPMENT LOCATION	
RECORDED BY	
WITNESSED BY	

BPB INSTRUMENTS

ZONAL ISOLATION TOOL

COMPANY TANZANIA PETROLEUM DEVELOPMENT CORPORATION

WELL Pilot Hole

FIELD

COUNTY

STATE

COUNTRY TANZANIA

162 (b)

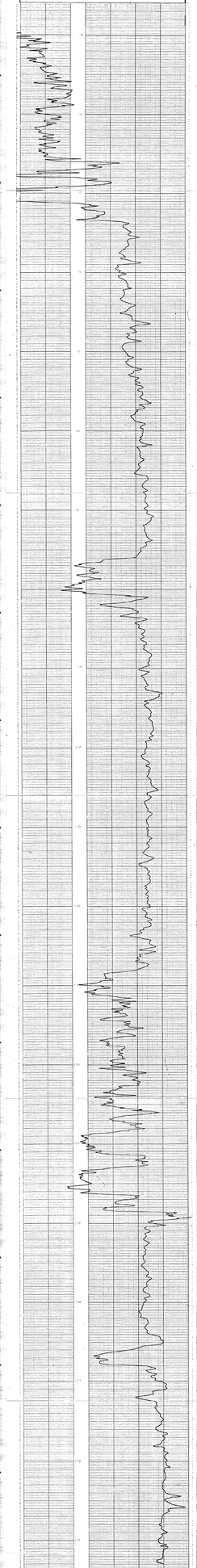
EQUIPMENT AND RECORDING DATA

TOOL	EQUIPMENT			TOOL	TOOL	TOOL	PADS			TYPE	DEPTH
	TOOL	DEPTH	SCHEMATIC	DIAMETER	WEIGHT	LENGTH	NO.	SIZE	SPACING		FROM TO INTERVAL
BHC				7	8	9	3	1			2175 - 90 - 184

ADDITIONAL SONDES RUN				REMARKS
SONDE	USE	CENTRAL SONDE	PAD	
1 BHC	CCL	1.0 m	2.0 m	NOTE TO ADDITIONAL HEADINGS
2	B.HC	1.0 m	1.0 m	
	F.G.C.	1.0 m		

DEPTH

BHC micro weight track



DEPTH

BHC micro weight track

BPB INSTRUMENTS

BOREHOLE 200-202

CLIENT TANZANIA PETROLEUM DEVELOPMENT

AREA LINDI

COUNTRY TANZANIA

COMPANY	BPB	TOOL	LITHOLOGY	BPB	BPB
WELL		DATE			
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					
DENSITY		VISC.			
PH		FLUID LOSS			
SOURCE OF SAMPLE					
RM @ MEAS. TEMP.		@			
RMF @ MEAS. TEMP.		@			
RMC @ MEAS. TEMP.		@			
SOURCE RMF	RMC				
RM @ BHT		@			
TIME SINCE CIRC.					
MAX. REC. TEMP.					
EQUIP. LOCATION					
RECORDED BY					
WITNESSED BY					

162

EQUIPMENT AND RECORDING DATA

TOOL TYPE (AND SERIAL NO.)											
TOOL POSITION											
BOREHOLE RECORD	BIT SIZE	FROM	TO	BIT SIZE	FROM	TO	CASING SIZE	WGT.	GRADE	FROM	TO

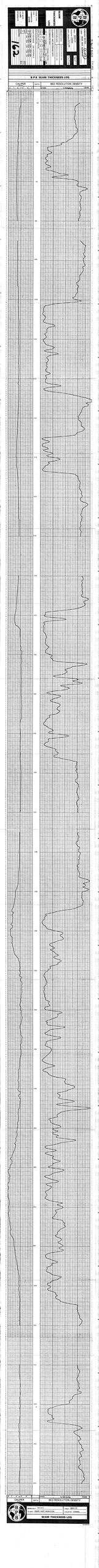
162

BPB INSTRUMENTS

COAL LITHOLOGY LOG

WELL	
FIELD	
COUNTY	
STATE	
COMPANY	
DATE	
RUN NO.	
DEPTH	
LOGGED	
RECORDED	
ENGINEER	
WITNESS	

| | | |


B.P.H. SEAM THICKNESS LOG
CALIPER
BLD RESOLUTION DENSITY
1000
1500
1000
1500
CALIPER
BLD RESOLUTION DENSITY
SEAM THICKNESS LOG

Company	Colorado Fuel and Iron Steel and Coal Company
Well	Sunset Mesa Coal Test Hole No. 1
Field	Sunset Mesa
County	Las Animas
State	Colorado
Other Services	Gamma Ray Density
Permanent Datum	Ground Level
Log Measured From	Kelly Bushing
Elevation	6,000 ft.
Date	1-8-80
Run No.	1
Depth Driller	1,000
Depth Logger	1,000
Bottom Log Interval	1,000
Top Log Interval	0
Casing Driller	0
Casing Logger	0
Bit Size	6 1/4
Type Fluid in Hole	Air
Density	
Viscosity	
Fluid Loss	
Source of Sample	
Rm	
Rmf	
Rmc	
Rm @ BHT	
Max. Rec. Temp.	
Equipment Location	Grand Junction, Colorado
Recorded By	Jim Hamilton
Witnessed By	Jim Hamilton

CFI

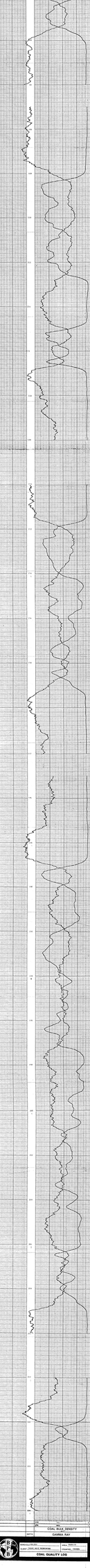
Log

 # 2 COAL QUALITY LOG

DEPTH	GAMMA RAY
	COAL BULK DENSITY

HOLE FOR CORING DATA

0	100
100	200
200	300
300	400
400	500
500	600
600	700
700	800
800	900
900	1000



BPB

COMPANY	BP CANADA
WELL	HERMITE
FIELD	
COUNTY	
STATE	
COUNTRY	CANADA
API SERIAL NO.	
LOCATION	
PERMANENT DATUM	GROUND LEVEL
ELEV.	
LOG MEASURED FROM	KELLY BUSHING
ELEV.	
DRILLING MEASURED FROM	KELLY BUSHING
ELEV.	
DATE	1-11-81
RUN NO.	ONE
DEPTH-DRILLER	1162
DEPTH-LOGGER	1160
BTM. LOG INTERVAL	1160
TOP LOG INTERVAL	40
CASING-DRILLER	9 5/8 @ 40
CASING-LOGGER	
BIT SIZE	8 1/2
TYPE FLUID IN HOLE	GEL CHEM
DENSITY	9.2
VISCOSITY	40
PH	9.5
FLUID LOSS	4.0
SOURCE OF SAMPLE	FLOWLINE
RM @ MEAS. TEMP.	.75 @ 60
RMF @ MEAS. TEMP.	.65 @ 60
RMC @ MEAS. TEMP.	.95 @ 60
SOURCE RMF & RMC	MEASURED
RM @ BHT	.35 @ 150
TIME CIRC. STOPPED	4:00
TIME LOGGER ON BOTTOM	6:00
MAX. REC. TEMP.	150
EQUIPMENT NO.	1162
LOCATION	
RECORDED BY	
WITNESSED BY	

162

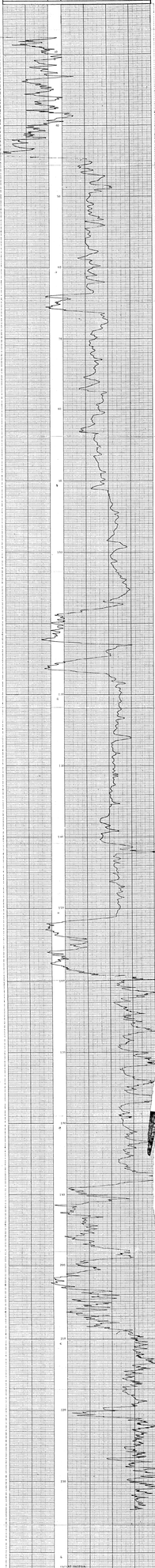
LEGITIMACY AND RECORDING DATA

RUN	EQUIPMENT CODE	LENGTH	DIAMETER	TOTAL CTS.	TOTAL CTS. DEFECTIVE	CTS. DEFECTIVE	CTS. REPAIRED	CTS. ADDED	DEPTHS FROM	TO

ADDITIONAL SENSORS RUN				REMARKS
SENSOR CODE	LOC. CODE	SPACING FROM CALIPER	DEPTH FROM TO	NOTE TO INTERPRETER HEADINGS
CAL	SLOT	1.00	1.00	
		1.00	1.00	
		1.00	1.00	

DEPTH

1:60 MEDIUM RESOLUTION TIME 1:60



DEPTH

1:60 MEDIUM RESOLUTION TIME 40

BPB

BOREHOLE: 1 - 1162.5FT	AREA: HERMITE
GLOBAL CONDITIONS: WEST AUSTRALIA	COUNTRY: CANADA

BP CANADA

COMPANY	BP EXPLORATION (ALASKA) INC.
WELL	162
FIELD	PRUDHOE BAY
COUNTY	NORTH SLOPE BOROUGH
STATE	ALASKA
LOCATION	2310' FSL, 2310' FEL, SEC. 11, T11N, R14E, UM
PERMANENT DATUM	MSL
LOG MEASURED FROM	RKB 64.0' ABOVE PERMANENT DATUM
DRILLING MEASURED FROM	RKB
API SERIAL NO.	50-029-20267
SECTION	11
TOWNSHIP	11N
RANGE	14E
PERMANENT DATUM: ELEVATION	MSL
LOG MEASURED FROM: ELEVATION	RKB 64.0' ABOVE PERMANENT DATUM
DRILLING MEASURED FROM: ELEVATION	RKB
ELEVATION: KB	64.0'
ELEVATION: DF	
ELEVATION: GL	
DATE	1-2-82
RUN NO.	ONE
DEPTH-DRILLER	10,000'
DEPTH-LOGGER	9,996'
BTM. LOG INTERVAL	9,990'
TOP LOG INTERVAL	9,000'
CASING-DRILLER	13 3/8" @ 2,700'
CASING-LOGGER	2,700'
BIT SIZE	12 1/4"
TYPE FLUID IN HOLE	DIL/GEL
DENSITY	10.0
VISCOSITY	40
PH	10.5
FLUID LOSS	4.0
SOURCE OF SAMPLE	PIT
RM @ MEAS. TEMP.	.195 @ 70°
RMF @ MEAS. TEMP.	.195 @ 70°
RMC @ MEAS. TEMP.	.195 @ 70°
SOURCE RMF & RMC	MEAS.
RM @ BHT	.195 @ 180°
TIME CIRC. STOPPED	4:00
TIME LOGGER ON BOTTOM	6:00
MAX. REC. TEMP.	180°
EQUIPMENT NO.	1162
LOCATION	PRUDHOE BAY
RECORDED BY	D. HOLLIS
WITNESSED BY	J. MCMAHON

162

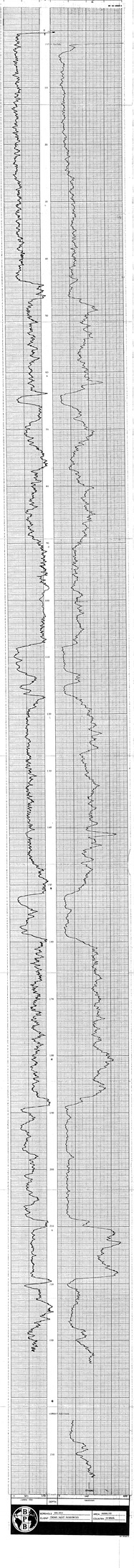
EQUIPMENT AND RECORDING DATA

RUN	EQUIPMENT			CASING		TUBING		CASING		OPEN HOLE					
	TYPE	LENGTH	DIAMETER	WEIGHT	DEPTH	WEIGHT	DEPTH	SIZE	DEPTH	SIZE	DEPTH	BIT	MUD	RM	RMF
ONE	DIL							13 3/8"	2,700'	12 1/4"	10,000'		DIL/GEL	.195 @ 70°	.195 @ 70°

ADDITIONAL SURVEYS RUN			REMARKS

DATE	DEPTH	METRES
1-2-82	1,000'	305

WHERE NO ABOVE



WELL NAME	162
DATE	1-11-82
RIG	
COMPANY	BP
FIELD	
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
ELEVATION	
DATUM	
PERMANENT DATUM	
LOG MEASURED FROM	
DRILLING MEASURED FROM	
DRILLER	
LOGGER	
BOTTOM LOGGED INTERVAL	
TOP LOGGED INTERVAL	
CASING DRILLER	
CASING LOGGER	
BIT SIZE	
TYPE FLUID IN HOLE	
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEASURED TEMP	
RMF @ MEASURED TEMP	
RMC @ MEASURED TEMP	
SOURCE RMF	
SOURCE RMC	
RM @ BHT	
TIME CIRC. STOPPED	
TIME LOGGER ON BOTTOM	
MAX. REC. TEMP.	
EQUIPMENT NO.	
LOCATION	
RECORDED BY	
WITNESSED BY	

RUN 1

162

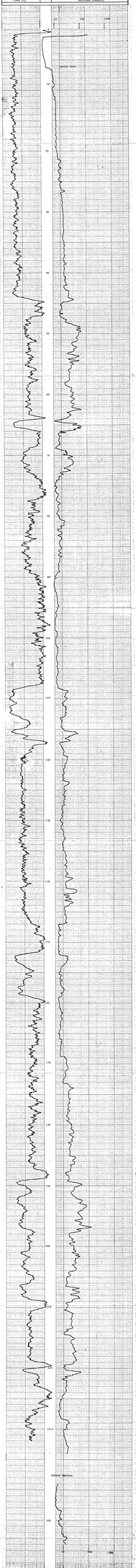
EQUIPMENT AND RECORDING DATA

TOOL	CALIBRATOR		CALIBRATOR		TOOL		DEPTH	
	TOOL	CALIBRATOR	TOOL	CALIBRATOR	NO.	NO.	TOP	BOTTOM
[illegible]	[illegible]	171	8	8	[illegible]	[illegible]	[illegible]	[illegible]

ADDITIONAL SONDES RUN				REMARKS
SONDE	LOG	SONDE NO.	DEPTH	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	

0	GR	150	DEPTH
CORAL FEET			

0	CCL MV/DIV	5000	
MILLIVOLTS / DIVISION			



0	DEPTH	250	
CORAL FEET			

0	CCL MV/DIV	5000	
MILLIVOLTS / DIVISION			

BP

WELL: 162

LOCATION: PRUDHOE BAY, NORTH SLOPE

AREA: PRUDHOE

COUNTRY: ALASKA

BPB

BPB SEAM THICKNESS LOG

PROVINCE / STATE	ALBERTA
COUNTRY	CANADA
LOCATION	10-35-27-W4
LEAST SQUARES SEAM ANALYSIS	
SEAM THICKNESS	
0.00 - 0.00	0.00
0.00 - 0.00	0.00
0.00 - 0.00	0.00

BPB INSTRUMENTS (UK) LTD
CHARTWELL HOUSE, BEECHWOOD
CHORLEY WOOD, RICKMANSWORTH
HERTS. WD3 5PX
TEL: (0923) 774777

COAL QUALITY LOG

BOREHOLE NO. 20H-254
COUNTY: CHAVEZ
STATE: NEW MEXICO

DATE: 1-7-81
RUN NUMBER: ONE

BOREHOLE DATA
DATE: 1-7-81
RUN NUMBER: ONE
DRILLER'S DEPTH: 1200 FT
LOGGER'S DEPTH: 1200 FT
CASING: 8 5/8" @ 1200 FT
BIT SIZE: 7 7/8"
MUD TYPE: WATER
MUD WEIGHT: 8.4 LB/GAL
MUD VISCOSITY: 28 SEC
MUD RESISTIVITY: 1.0 OHM-M @ 75 DEGF
MUD LOSS: NONE
RIG: 1
OPERATOR: MCCULLOUGH
RECORDED BY: R. BRADFORD
WITNESSED BY: J. CLARK

CLIENT INFORMATION
COMPANY: BOOTH, THE
CORPORATION COMMISSION
BOREHOLE: 20H-254
COUNTY: CHAVEZ
STATE: NEW MEXICO
COMPANY: BAY
LOCATION: 1 MILE N OF
ROSWELL, NEW MEXICO

Printed 8/6/81

162

BPB COAL QUALITY LOG

DEPTH	GAMMA RAY
	COAL BULK DENSITY

HOLE SIZE CORRECTION DATA

| | | |

BPB INSTRUMENTS (UK) LIMITED

COAL LITHOLOGY LOG

WELL	
LOCATION	
COUNTY	
STATE	
DATE	
RUN NO.	
DEPTH	
ELEVATION	
DRILLER	
LOGGER	
BIT SIZE	
CASING	
MUD TYPE	
MUD WT.	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF & RMC	
RM @ BHT	
TIME CIRC. STOPPED	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

162 (5)

EQUIPMENT AND RECORDING DATA

TOOL DESIGNATION AND SERIAL NO.		CALIBRATOR	SONDE TYPE	SONDE SERIAL NO.	SONDE POSITION	MAX. REC. TEMP.	TIME SINCE CIRC.	TIME ON BOTTOM
TYPE	SERIAL NO.							
GAMMA RAY								
BULK DENSITY	3-1-8-8		STY	Y	R	R	1.7-10.10	3.5-9.7
CALIPER								
BULK DENSITY	3-1-8-8		2-1-1-8	Y	R	1.5-1.5	7.10-9	3.1-9.7
CALIPER							1.10-9	1.1-5

WELL	162
FIELD	
COUNTY	
STATE	
COUNTRY	TUNISIA
DATE	1-1-1
RUN	1
DEPTH DRILLER	1-1-1
DEPTH LOGGER	1-1-1
BTM LOG INTERVAL	1-1-1
TOP LOG INTERVAL	1-1-1
CASING-DRILLER	1-1-1
CASING-LOGGER	1-1-1
BIT SIZE	1-1-1
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 CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

162

EQUIPMENT AND RECORDING DATA

BOREHOLE RECORD						CASING RECORD				
RUN	BIT	FROM	TO	SIZE	WT.	FROM	TO	SIZE	WT.	TYPE
						SURF	1-1-1	1-1-1		
CURVE	1-1-1	1-1-1	1-1-1	1-1-1	1-1-1	SURF	AMENT	1-1-1	1-1-1	

ADDITIONAL SONDES RUN				REMARKS
SONDE TYPE	SONDE SERIAL NO.	DEPTH INTERVALS FROM	TO	NOTES TO ADDITIONAL HEADINGS
1-1-1	1-1-1	1-1-1	1-1-1	
1-1-1	1-1-1	1-1-1	1-1-1	

GAMMA RAY — DEPTH — POTENTIAL ELECTRODE

0 — 100 — 10 — 100 — 1000

MIN. 1-1-1 — DEPTH — MAX. 1-1-1

MIN. 1-1-1 — MIN. MEASURE — MAX. 1-1-1

REPEAT SECTION

Document: CONDITIONS

BOREHOLE: HOLE

CLIENT: CONOCO INCORPORATED

AREA: TUNISIA

COUNTRY: TUNISIA

DATE	1-Feb-1984
RUN NO.	ONE
TYPE OF LOG	GAMMA RAY - NEUTRON
DRILLER'S DEPTH	1140
LOGGER'S DEPTH	1140
BOREHOLE RECORD	BIT SIZE 8 3/4" FROM 0 TO 1140
CASING RECORD	9 5/8" 36# J-55 FROM 0 TO 1140
BOREHOLE FLUID	WATER
DENSITY	
VISCOSITY	
PH	
FLUID LEVEL	
MAX. RECORDED TEMP.	
LOGGING UNIT NO.	1
OPERATOR	
WITNESS	
OPERATING RIGS	
DRILL	
WORKOVER	
SCALE	1:200 FOR 100 FT

162

EQUIPMENT AND RECORDING DATA

UNIT	EQUIPMENT			TUBING			PANEL			LOG	DEPTHS	
	STACK	SENSOR	SUPPORT	LENGTH	DIAMETER	WEIGHT	PRESSURE	DEPTH		FROM	TO	INTERV.
1N	2-3	1-5								1140	0	1-5

ADDITIONAL SONDES RUN			REMARKS
SONDE	UNIT	SONDE NO.	
LNGR	1N	150-L1	
1S	N-N	150-L1	REFER TO ADDITIONAL HEADINGS
P.E.	1N	150-L1	

DEPTH

140 NGRN NEUTRON FLOAT 40

80

90

100

110

120

130

140

150

160

170

180

190

200

ASPHALT - BITTUMEN

210

220

DEPTH

140 NGRN NEUTRON FLOAT 40

BPB

BOREHOLE: WM-204

CLIENT: THOMS GEST RESOURCES

AREA: TORRCITY

COUNTRY: CANADA

BP 10004

COMPANY	CROWN WEST RESOURCES
WELL	WM-304
FIELD	
COUNTY	
STATE	
LOCATION	
API NO.	
SERVICE COMPANY	BPB INSTRUMENTS
OPERATOR	
RIG	
DATE	
TYPE FLUID IN HOLE	
DENSITY	
VISCOSITY	
PH	
FLUID LEVEL	
MAX. REC. TEMP.	
RECORDED BY	
WITNESSED BY	

PERMANENT DATUM	GROUND LEVEL
ELEV.	
LOG MEASURED FROM	
DRILLING MEASURED FROM	

163

BPB

COAL LITHOLOGY LOG

BOREHOLE	BP 1
AREA	
COUNTY	
STATE	
DATE	1-8-79
RUN	ONE
DRILLER	
LOGGER	
ELEV.	
DATUM	
DRILL FROM	
DRILL TO	
CASING	
BIT	
MUD	
RIG	
REMARKS	

COMPANY AND RECORDING DATA

COAL CHARACTER ZONES

	CODE	COLOR	COMPANY	NAME	DATE	CO.	DATUM	BASE OF PLY
	NONE	COLOR	CHARACTER	CODE	RECORD	CHART	CO.	PLY	TOP	BASE
COAL CHARACTER ZONES										