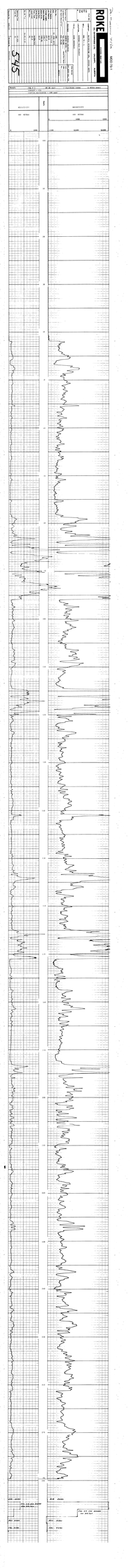
ROKE
S45
Remarks
RUN NO. ONE
DEPTH-DRILLER
DEPTH-LOGGER
BTM. LOG INTERVAL
TOP LOG INTERVAL
CASING-DRILLER
CASING-LOGGER
BIT SIZE
TYPE FLUID IN HOLE
DENSITY
VISCOSITY
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE RMF
SOURCE RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
SCHLUMBERGER
RESISTIVITY
OHMS
GAMMA RAY
API UNITS
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
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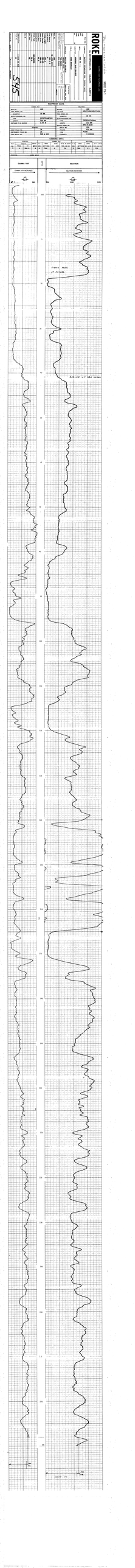
ROKE
SERVICES LTD
SURREY
SGS
GAMMA RAY
NEUTRON
EQUIPMENT DATA
CASING DATA
CASING SHOE AT 1454 METRES
FIRST READ AT 1454 METRES

Pr-Monkman 79(3)A

MDD 79-1

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG
CALIPER

FILE NO.
LSD
SEC
TWP
RGE
W M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL MDD 79 - 1
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: GRN, FDL, DIR

Permanent Datum GROUND LEVEL Elev.
Log Measured from RIG FLOOR Above Perm. Datum
Well Depths Measured from RIG FLOOR

K.B.
CSG
G.L.
METRIC

Run. No.	ONE
Date	11 JUNE 1979
First Reading	279.7 M
Last Reading	0
Footage Logged	279.7
Depth Reached	280.6
Depth Driller	280.91
Casing Roke	42.0
Casing Driller	
Fluid Type	MUD/WATER
Liquid Level	19.0
Min. Diam.	HQ
Operating Time	1 HR 35 MINS
Truck No.	36
Recorded By	CARLSON
Witnessed By	PROUDLOCK

545

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/DIV
1	0	279.7	4					3	1000	2.50 R	76.42
	0	279.9		CALIPER							

REMARKS DENS TOOL # 247
CAL TOOL # 587
OPEN HOLE

ROKE

Borehole Geophysics Ltd.

MAGNETIC SUSCEPTIBILITY LOG

Borehole Name: MW-16

Property: Ontario

Township: Rochester

Location: Approximately 300m North of Lot 16, Concession 1

Elevation: 0 m

Date: Nov. 26/79

Logged by: [illegible]

Witnessed by: [illegible]

Drilling Co.: [illegible]

Drilling Method: [illegible]

Hole Size: [illegible]

Casing Record: [illegible]

Water Level: [illegible]

Remarks: [illegible]

Recorded By: [illegible]

Witnessed By: [illegible]

Remarks: 25 Feet, 2 ELECTRODE SONDE, 25 CM SPAN, 3 METRE ARRAY
CURRENT = 10A
MEASTED RESISTANCE = OHM-(ORS)

RESISTIVITY

OHM-METRES

RESISTIVITY

OHM-METRES

CASING 8 METRES

FOR 12 FOOT ARRAY

FOR 20 FOOT ARRAY

FOR 40 FOOT ARRAY

ROKE
COMPANY
WELL
FIELD
COUNTY
STATE
LOCATION
SECTION
TOWNSHIP
RANGE
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
GAMMA RAY
NO. 1
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MDD 79-16

ROKE OIL ENTERPRISES LTD. — SIDEWALL DENSILOG / CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79-16
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured from	RIG FLOOR 61 CM Above Perm. Datum
Well Depths Measured from	RIG FLOOR
K.B.	
CSG	
G.L.	

Run. No.	ONE		
Date	17 AUG 79		
First Reading	201.70 M		
Last Reading	00		
Footage Logged	201.70		
Depth Reached	202.60		
Depth Driller	203.13		
Casing Roke	3.00		
Casing Driller			
Fluid Type	MUD/WATER		
Liquid Level	00		
Min. Diam.	H Q		
Operating Time	1 HOUR 55 MIN		
Truck No.	36		

Recorded By CARLSON

Witnessed By W. PROUDLOCK

GENERAL: RUN NO.	GENERAL: DEPTHS FROM	GENERAL: DEPTHS TO	GENERAL: SPEED M/MIN	GAMMA RAY: T.C. SEC.	GAMMA RAY: SENS SETTINGS	GAMMA RAY: ZERO DIV. L OR R	GAMMA RAY: API G.R. UNITS PER LOG DIV.	SIDEWALL DENSILOG: T.C. SEC.	SIDEWALL DENSILOG: SENS SETTINGS	SIDEWALL DENSILOG: ZERO DIV. L OR R	SIDEWALL DENSILOG: CPS/DIV
1	0	201.70	4					3	1000	2.5 R	76.42
2	0	202.00		CALIPER							

REMARKS
LOGGED OPEN HOLE
DENS TOOL #247
CAL TOOL #587

CALIPER DIAMETER – CM (scale: 30, 35)

DEPTHS

GAMMA RAY API (scale: 10, 15, 20, 25)

BULK DENSITY (GRAMS/CC) (scale: 1.00, 1.10, 1.20, 1.30, 1.40, 1.50, 1.60, 1.70, 1.80, 1.90, 2.00, 2.10, 2.20, 2.30, 2.40, 2.50, 2.60, 2.70, 2.80)

Pr-Monkman 79(3)A

MDD 79-17

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 20 CM

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W ___ M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79 - 17
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG FLOOR Above Perm. Datum
Well Depths Measured from	RIG FLOOR
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE
Date	17 JULY 1979
First Reading	221.0 M
Last Reading	56.0
Footage Logged	165.0
Depth Reached	221.9
Depth Driller	221.9
Depth Roke	56.0
Casing Driller	
Casing Roke	56.0
Fluid Type	WATER/MUD
Liquid Level	0
Min. Diam.	HQ
Rm @ °C	16.67 @ 25
Operating Time	1 HOUR
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENTA

Remarks: FBL # 5 7 ELECTRODE SONDE 20 CM BEAM 1 METER ARRAY
CURRENT - HIGH
MUDFISH RESISTANCE - 150 ohms

Re-Morkman Jacla

MDD 79-17

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 5 CM

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT)

WELL MDD 79 - 17

LOCATION MORKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

LSD
SEC
TWP
RGE
W4 M

Permanent Datum GROUND LEVEL Elev.
Log Measured from K.B.
Well Depths Measured from G.L. Above Perm. Datum

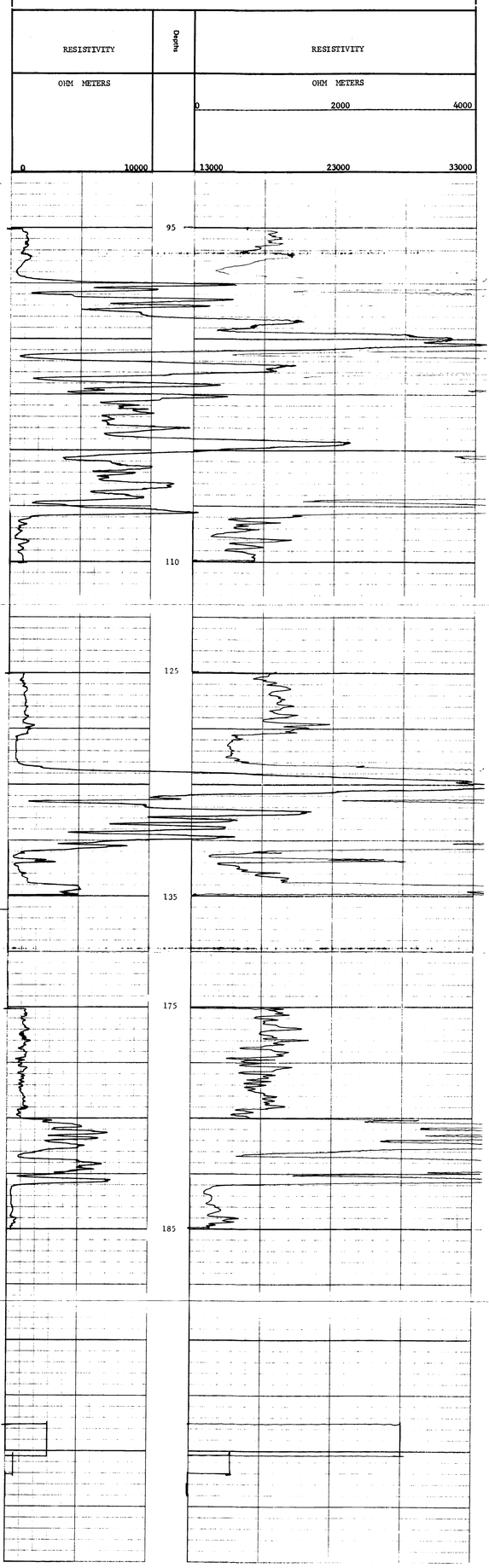
Other Services: 20 CM

Run. No.	ONE		
Date			
First Reading			
Last Reading			
Footage Logged			
Depth Reached			
Depth Driller			
Logging Engineer			
Casing Driller			
Fluid Type			
Liquid Level			
Max. Diam.	80		
Rm @ °			
Operating Time			
Truck No.	36		

Recorded By SZM Witnessed By BIENIA

Remarks

FBL # 5 7 ELECTRODE SONDE 5 CM BEAM WIDTH 60 CM ARRAY
CURRENT - STD RE: LOG OF DEPTHS 95 - 110, 125 - 135, 175 - 185 METERS
MUDFISH RESISTANCE - 150 OHMS



ROKE

OIL WELL CEMENTING SERVICE

ADDRESS

CITY, STATE

COUNTY

FIELD

LOCATION

WELL NO.

LEASE

SECTION

TWP.

RANGE

OTHER SERVICES

CASING

SIZE

WT.

GRADE

FROM

TO

LINER

SIZE

WT.

GRADE

FROM

TO

TUBING

SIZE

WT.

GRADE

FROM

TO

OPEN HOLE

SIZE

T.D.

PERF.

PERF.

PERF.

PERF.

TYPE JOB

PUMP TRUCK

CEMENTER

HELPER

BULK TRUCK

DRIVER

BULK TRUCK

DRIVER

DRILLING MUD

TYPE

DENSITY

VISC.

LOSS

DISPLACEMENT

PRESS.

MAX. PRESS.

LIMIT

REMARKS

545

EQUIPMENT DATA

GAMMA RAY	NEUTRON
RUN NO.	RUN NO.
LOG INTVL.	LOG INTVL.
TOOL MODEL NO.	TOOL MODEL NO.
SCALE(S) 10 SEC	SCALE(S) 10 SEC
CALIBRATION	DETECTOR MODEL NO.
TYPE	TYPE PROPORTIONAL
SOURCE 5 MC RA	SOURCE 100 MC RA-BE
SOURCE-TO-R. DISTANCE	SOURCE MODEL NO.
CASING	DETECTOR-TO-R. 10 IN
CASING SIZE 10	CASING 4 GRADE
WEIGHT/FT.	
TOOL MODEL NO.	

LOGGING DATA

GAMMA RAY						NEUTRON					
TIME CONST.	SPEED FT./MIN.	SENS.	MEAS. PT.	MEAS. FROM	LOG INTVL.	TIME CONST.	SPEED FT./MIN.	SENS.	MEAS. PT.	MEAS. FROM	LOG INTVL.
1	200-0	A	1	TOP		1	200	A	1	TOP	

REMARKS

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API UNITS

0 100

API UNITS

2000 3000

Fruit Ave

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

240

250

260

270

280

290

300

310

320

330

340

350

360

370

380

390

PR-Monkman 79(3)A

MDD 79-17

ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE
W M

COMPANY PETRO-CANADA (MINING DEPT)

WELL MDD 79 - 17

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: GRN, FBL, DIR

Permanent Datum GROUND LEVEL Elev.

Log Measured from RIG FLOOR Above Perm. Datum

Well Depths Measured from RIG FLOOR

K.B.
CSG
G.L.

METRIC

Run. No.	ONE
Date	17 JULY 1979
First Reading	220.0 M
Last Reading	0
Footage Logged	220
Depth Reached	220.9
Depth Driller	221.9
Casing Roke	56.0
Casing Driller	
Fluid Type	WATER/MUD
Liquid Level	-
Min. Diam.	HQ
Operating Time	2 HOURS
Truck No.	36
Recorded By	SIM
Witnessed By	BIENIA

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	TO	SPEED M/ MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	220.0	4					3	1000	2.5 R	76.42
	0	220.5		CALIPER							

REMARKS DENS TOOL # 247
CAL TOOL # 587

CALIPER
DIAMETER - CM

10 15 20 25 30 35

GAMMA RAY
API

DEPTHS

~~BULK DENSITY~~
(GRAMS/CC)

1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80

ROKE

Operator	
Well	
Field	
County	
Location	
Elevation	
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 of Rmf / Rmc	
Rm @ BHT	
Time Since Circ.	
Max. Rec. Temp.	
Equip. Location	
Recorded By	
Witnessed By	

Run No. 1 | Electrical Survey | 02-08-2003 | A Weston Dewey

Remarks: Scientific Drilling Int. USA

Resistivity	Gamma Ray
0.2 ohm 2000	0 API 150
2 ohm 200	
20 ohm 20	
200 ohm 2	
2000 ohm 0.2	

CASING 7" AT 7100

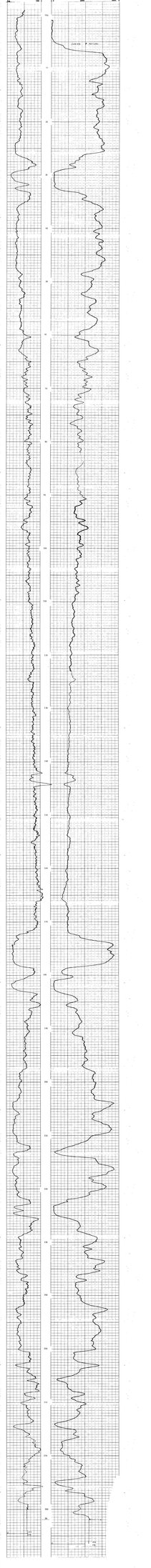
ROKE

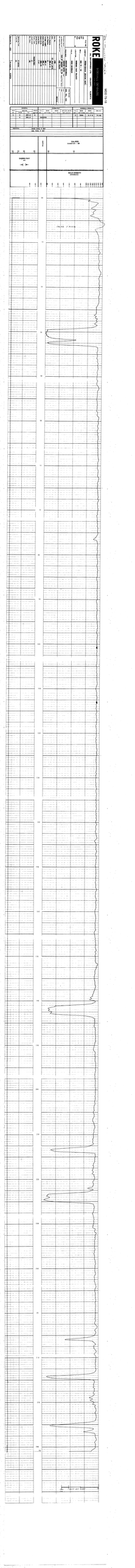
SECTION 31

545

EQUIPMENT DATA

CASING DATA




ROKE
5956'-5966'
5956'-5966'
5956'-5966'
GAMMA RAY
CALIPER
BULK DENSITY
CORRELATION
Caliper 2 Inches
Bulk Density Correction

Pr - Monkman 79(3)A

MDD 79-2

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 20 CM

FILE NO.	
LSD / SEC / TWP / RGE / W M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79 - 2
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING 35 CM Above Perm. Datum
Well Depths Measured from	RIG FLOOR
K.B. / CSG / G.L.	METRIC
Run. No.	ONE
Date	17 JUNE 1979
First Reading	300.6 M
Last Reading	13.4
Footage Logged	287.2
Depth Reached	301.5
Depth Driller	302.26
Casing Roke	13.4
Casing Driller	
Fluid Type	MUD/WATER
Liquid Level	0
Min. Diam.	HQ
Rm @ °C	32.26 @ 25
Operating Time	1 HOUR
Truck No.	36
Recorded By	CARLSON
Witnessed By	PROUDLOCK

545

Remarks FBL # 5 7 ELECTRODE SONDE 20 CM BEAM 1 METER ARRAY
RANGE - STD MUDFISH RESISTANCE - 150 OHMS
NOTE: CALIBRATION INCREASED TO 1000 OHM METERS/DIV
ON SECONDARY PEN AS TO NORMAL 500 OHM/DIV ON PREVIOUS LOGS

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
		0 1000 2000
0 10000		13000 23000 33000

Pr - Monkman 7903A

ROKE

OIL ENTERPRISES LTD. CALGARY ALBERTA

DOUBLE BOX No. 20

MD 792

FILE NO.	125
COMPANY	PETRO-CANADA (WITCH-DEEP)
WELL	WDD 74 - 2
LOCATION	BANFF FOLD PROJECT
FIELD	DEEP MOUNTAIN
PROVINCE	NORTH WEST TERRITORIES
Permanent Datum	GROUND LEVEL Elev.
Log Measured From	10 ft. Above Permanent Datum
Drilling Measured From	KELLY BUSHING
Date	1-2-79
Run No.	ONE
Depth-Driller	11000 ft.
Depth-Logger	11004 ft.
Bottom Logged Interval	10998 ft.
Top Logged Interval	10000 ft.
Casing-Driller	1000 ft.
Casing-Logger	1000 ft.
Bit Size	8 1/2 in.
Type Fluid in Hole	GEL CHEM
Density	9.6
Viscosity	40
pH	10.0
Fluid Loss	5.6
Source of Sample	CIRC
R_m @ Meas. Temp.	0.70 @ 70 °F
R_mf @ Meas. Temp.	0.55 @ 70 °F
R_mc @ Meas. Temp.	1.00 @ 70 °F
Source R_mf / R_mc	MEAS / CALC
R_m @ BHT	0.35 @ 170 °F
Time Since Circ.	12 hrs.
Max. Rec. Temp.	170 °F
Equip. No. - Location	5 - BANFF
Recorded By	MCKENZIE
Witnessed By	MR. MCKENZIE

Run No. ONE

Type Log: DUAL INDUCTION LATEROLOG

Primary Depth Control: DRILLERS DEPTH

Other Services: BHC SONIC GR CALIPER

Borehole Record: Bit No. 1 | From 0 | To 11004 | Size 8 1/2 in.

Casing Record: No. 1 | Size 9 5/8 in. | Wgt. 36 lb/ft | Grade K-55 | From 0 | To 1000 ft.

545

Remarks: FSL # 5 — 7 ELECTRODE SPACING — 5 OHM HEAD — 1 METER ARRAY

CURVES - SFD — BOREHOLE RESISTANCE - 120 OHMS

DIFFERENTIAL SPONTANEOUS POTENTIAL - SHIFTED 225.0 - 230.0 M

CAL TO 2,000 OHMS/DIV ON SECONDARY PEN

Depth

RESISTIVITY — OHM METERS — 0 to 10000

RESISTIVITY — OHM METERS — 0 to 1000 to 2000

13000 to 23000 to 33000

10700 10800 10900 11000 11100 11200 11300 11400 11500 11600 11700 11800 11900 12000 12100 12200 12300 12400 12500 12600 12700 12800 12900 13000

Base Marker

Base Marker

ILD 2 ARRAY
CAL AND ZERO RANGE
LOGS AS RUN

SFD 2 ARRAY
CAL ZERO

ILD 2 ARRAY

CAL AND ZERO RANGES
LOGGED

SFD 2 ARRAY
CAL ZERO

ROKE

COMPANY: ROKE OIL LIMITED
WELL: ROKE ET AL CRESTON NO. 1
FIELD: WILDCAT
LOCATION: 1980' FSL & 1980' FEL OF SEC. 24-T30-R19W4M
PROVINCE: ALBERTA

Other Services: BHC SONIC GR

Permanent Datum: GROUND LEVEL
Elev.: K.B. 3599 ft. D.F. ft. G.L. 3588 ft.
Log Measured From: K.B. 11 ft. Above Perm. Datum
Drilling Measured From: K.B.

Date: 5-JUNE-1979
Run No.: ONE
Depth-Driller: 5745 ft.
Depth-Logger: 5745 ft.
Bottom Logged Interval: 5745 ft.
Top Logged Interval: 1000 ft.
Type Fluid in Hole: GEL CHEM
Salinity: 4000 PPM CL
Density: 10.0 LB/GAL
Level: FULL
Max. Rec. Temp.: 160 °F
Est. Cir. Temp.: °F

Equipment: 5745 | 1000 | 5745 | 1000 | 5745 | 1000 | 5745 | 1000

Recorded By: D. MCCOMB
Witnessed By: MR. MCCOLL

EQUIPMENT DATA

Logging No.	1266	Run No.	ONE
Truck No.		Tool Model No.	NEUTRON
Sonde No.	29 SB	Tool Serial No.	36 SN
Cable No.		Detector Model No.	
Type	SHORT/LONG SPACE	Detector Serial No.	PROPORTIONAL
Mud Resistivity	2.2 Ω @ 21°C	Source Model No.	6.5 Ci Am-Be
Mud Density		Source Serial No.	MOD. 17 SN 1
Mud Viscosity	50	Standoff	3 3/8 IN.
Fluid Loss	8.0 CC	Centered	YES
Time Since Circ.	12HR EST	Eccentered	X GAUGE

LOGGING DATA

Pass	Interval	Speed	Time Constant	Gain	Cal. Interval	Cal. Value	Cal. Interval	Cal. Value
1	5745 - 1000	30 FPM	1 SEC	1	5700 - 5600	1000 CPS	1100 - 1000	1000 CPS
2								
3								

Remarks: LOGGING PROCEDURE: 1 PASS - NEUTRON ACTIVATION ON SHALE AND SAND BEDS.
CASING DETAILS: 8 5/8" @ 1000' - 7 7/8" HOLE TO TOTAL DEPTH.

GAMMA RAY | NEUTRON

GAMMA RAY NEUTRON | NEUTRON NEUTRON

0 API 100 | 100 CPS 1000

EPOCH 10 IN INTERVAL

5700

5800

5900

6000

6100

6200

6300

6400

6500

6600

6700

6800

6900

7000

7100

7200

7300

7400

7500

7600

7700

7800

7900

8000

8100

8200

8300

8400

8500

8600

8700

8800

8900

9000

9100

9200

9300

9400

9500

9600

Pr-Monkman 7A(3)A MDD 79-2

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79 - 2
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING 35 CM Above Perm. Datum
Well Depths Measured from	RIG FLOOR
K.B.	
CSG	
G.L.	
	METRIC

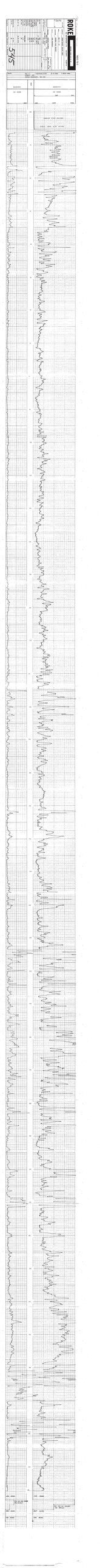
Run. No.	ONE		
Date	17 JUNE 1979		
First Reading	300 M		
Last Reading	0		
Footage Logged	300		
Depth Reached	300.9		
Depth Driller	302.26		
Casing Roke	13.40		
Casing Driller			
Fluid Type	MUD/WATER		
Liquid Level	0		
Min. Diam.	HQ		
Operating Time	2 HOURS		
Truck No.	36		

Recorded By CARLSON — Witnessed By PROUDLOCK

545

GENERAL				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/DIV
1	0	300	4	3	1000	2.5 R	76.42
	0	301		CALIPER			

REMARKS: DENS TOOL # 247, CAL TOOL # 587, OPEN HOLE


ROKE
SYS

Pre-Mississippian MDD 793

ROKE

PIONEERS IN WELL LOGS SINCE 1929

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (CREDIT DEPT.)

WELL 300 79 - 03

LOCATION NORMAN BASE PROJECT

FIELD BOOK REQUIRED

PROVINCE SASKATCHEWAN

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: GROUND LEVEL

Elev.: K.B. 1679 D.F. G.L. 1670

Run No.	One	Two	Three
Date	27 JUNE 1979	27 JUNE 1979	27 JUNE 1979
First Reading	2310 M	385 M	2310 M
Last Reading	385 M	2310 M	385 M
Feet Logged	25	15	10
Depth Driller			
Depth Logger			
Casing Size			
Casing Depth			
Fluid Type	WATER		
Fluid Level			
Max. Temp.	10		
Rm @ °C			
Rmf @ °C			
Rmc @ °C	14.2 @ 0.25		
Operating Time			
Truck No.	20 (25)		

Recorded By GOODRICH

Witnessed By J. BROWNLOW

Other Services: N.D. GR

SHOT HOLE

Remarks: FIG. 2.5 7 ELECTRODE SOUNDING 5 CM READ 1 METER ARRAY

GROUND - RED MEDIUM RESISTANCE 600 OHMS

HOLE A REPEAT RUN OF AREA 375 - 410 WAS MADE ON 1% RANGE

RESISTIVITY (OHMS METERS) 0 — 5000 | 1500 — 13500 — 16500 | 0 — 1000 — 2000

Depths: 250, 270, 325, 335, 340, 375, 380, 390, 395, 405, 410, 415, 380, 395, 405, 410

LOG ECHO — CAL ON 500 RANGE 250 OHMS/DIV — REC ECHO — CAL ECHO

LOG ECHO — CAL ON 500 RANGE 100 OHMS/DIV — REC ECHO — CAL ECHO

NOTE - SCALE CHANGED TO 1% RANGE 1000 OHMS/DIV

250 OHMS/DIV 0 — 2500 — 5000 — 15000 — 25000

5HS

MOD 70.5

ROKE

COMPANY NAME

WELL NAME

FIELD

COUNTY

STATE

LOCATION

API NUMBER

OTHER SERVICES

PERMANENT DATUM

ELEVATION

LOG MEASURED FROM

DRILLING MEASURED FROM

DATE

RUN NUMBER

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

MAX REC TEMP

EQUIP LOCATION

RECORDED BY

WITNESSED BY

545

RUN 1

RUN 2

RUN 3

SCALE

1/100

1/500

1/1000

1/2000

1/5000

1/10000

1/20000

1/50000

1/100000

1/200000

1/500000

1/1000000

1/2000000

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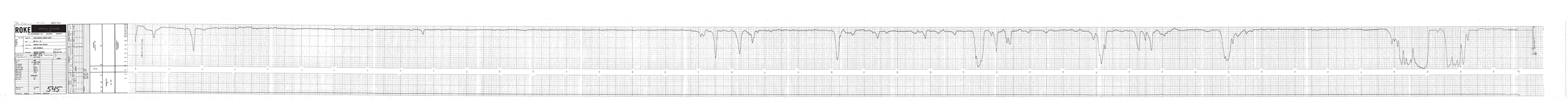
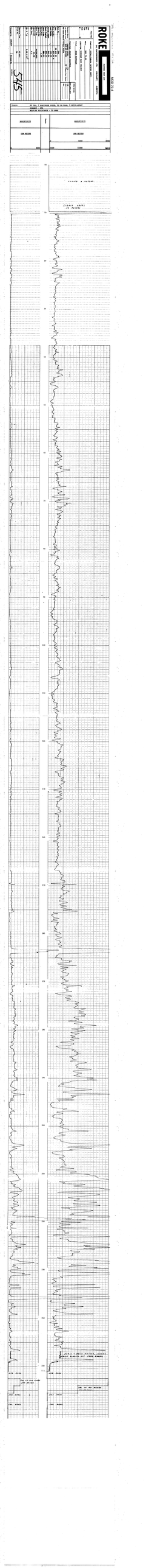

ROKE
CHEMICAL TESTING
MUD TRAY
SAMPLE FROM
SAMPLED BY
MUD TYPE
DEPTH
WEIGHT
VISCOSITY
PH
FILTRATE
CAKE
SOLIDS
SAND
MBT
PM
PF
MF
CHLORIDES
CALCIUM
LIME
GEL
WATER
OIL
SOLIDS
545



ROKE

545

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	
ELEV.	
LOG MEASURED FROM	
DRILLING MEASURED FROM	
DATE	
RUN NO.	
TYPE LOG	
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 OF RMF	
SOURCE OF RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN	BIT	CASING		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
NO.	FROM	TO	SIZE	WGT.	FROM	TO										
1																

EQUIPMENT DATA

CASING NO.	
BOW NO.	
TYPE MODEL NO.	
CAPACITY	
SPACING	
TYPE	
CENTRALIZER	
DISTANCE TO A. SHOES	
SETTING	
BOW SHOES NO.	
TOTAL SPRING NO.	

SOLVENT	
BOW NO.	
TYPE MODEL NO.	
TOOL SPRING NO.	
SPACING	
SOLVENT BOWS NO.	
TYPE	
SOLVENT BOWS NO.	
TYPE	
SOLVENT BOWS NO.	
TYPE	

NEUTRON	
NEUTRON-NEUTRON	
SPACING	
PROPORTIONAL	
DIA. OF	
MISC. SLIM TY	
SPACING	
DIA. OF	
TOOL	
SPACING	

LOGGING DATA

RUN NO.	TIME	DATE	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 OF RMF	SOURCE OF RMC	RM @ BHT	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION	RECORDED BY	WITNESSED BY
1																										

LOGGING MEASUREMENTS

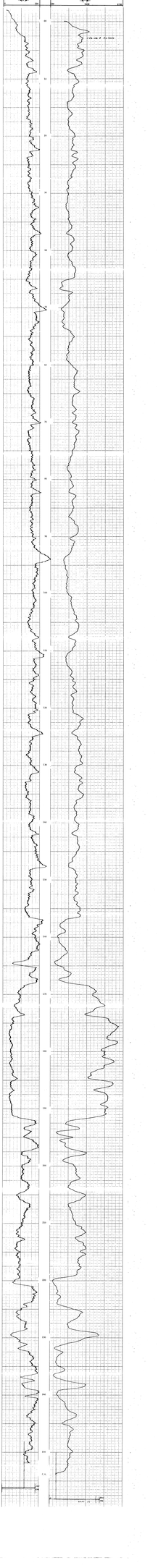
GAMMA RAY

NEUTRON

GAMMA RAY-NEUTRON

NEUTRON-NEUTRON

0 100 100 200



ROKE

MDD 9-4

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
SEC	TWP
RGE	
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	RMC
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN NO. | BIT | FROM | TO | FEET | HOURS

CASING RECORD: SIZE | WGT. | GRADE | FROM | TO

BORE RECORD: BIT | FROM | TO

TYPE JOINT

REMARKS: RUN NO. | TOOL TYPE | SERIAL NO. | POSITION | TOOL STRING (TOP TO BOTTOM) | MAX. REC. TEMP. | EQUIP. LOCATION | RECORDED BY | WITNESSED BY

CALIPER DIAMETER

GAMMA RAY (API)

BULK DENSITY (GM/CC)

545

FEET

Pr- Monkman 79(3)A

MDD 79-5

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG

FILE NO.	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79-5
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE	W M
Other Services:	DIR GRN, DEN, CAL
Permanent Datum	GROUND LEVEL
Elev.	
K.B.	
CSG	
G.L.	
Log Measured from	RIG FLOOR 61 CM Above Perm. Datum
Well Depths Measured from	RIG FLOOR

Run. No.	ONE		
Date	17 SEPT 79		
First Reading	360.30 M		
Last Reading	10.00		
Footage Logged	350.30		
Depth Reached	361.20		
Depth Driller	361.83		
Casing Roke	10.00		
Casing Driller			
Fluid Type	WATER/MUD		
Liquid Level	7.00		
Min. Diam.	HQ		
Rm @ °C	16.67 @ 25°		
Operating Time	50 MIN		
Truck No.	36		
Recorded By	CARLSON	Witnessed By	THOMAS

545

Remarks	#5 FBL, 7 ELECTRODE SONDE, 20 CM BEAM, 1 METER ARRAY
	CURRENT - STD
	MUDFISH RESISTANCE - 10 OHMS

RESISTIVITY	Depths	RESISTIVITY		
OHM METERS		OHM METERS		
		0	1000	2000
0 — 5000		6500	11500	16500

Pr - Monkman 79(3)A

MDD 79-7

ROKE

FOCUSED BEAM 100 S CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT.)

WELL MDD 79-7

LOCATION MONKMAN PASS PROJECT

FIELD MTN. MONTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev.

Log Measured From RIG FLOOR 31 CM Above Perm. Datum

Other Services DUAL INDUCTION LOG (DIL) 20 CM; SPECIAL COAL DENSITY (SCD) 20 CM

Rig No. ONE

Date 7 SEPT 79

Run No. ONE

Depth Driller 15.00

Depth Logger 15.00

Bottom Logged Interval 15.00

Top Logged Interval SURFACE

Casing Driller

Casing Logger

Bit Size HQ

Type Fluid in Hole WATER/MUD

Salinity, PPM Cl

Density

Level

Max. Rec. Temp. Deg. F

Est. Static Temp.

Max. Rec. Temp. Deg. C

Equip. Location 545

Recorded By CARLSON

Witnessed By TIDMAS

Run No. ONE

Date 7 SEPT 79

First Reading 15.00

Last Reading SURFACE

Depth Reached SURFACE

Depth Driller COAL SEAMS

Casing Size

Casing Driller

Casing Logger

Bit Size HQ

Type Fluid in Hole WATER/MUD

Salinity, PPM Cl

Density

Level

Max. Rec. Temp. Deg. F 14.67 @ 25°

Est. Static Temp.

Max. Rec. Temp. Deg. C

Equip. Location 545

Recorded By CARLSON

Witnessed By TIDMAS

Operating Time 40 MIN

Truck No. 36

Remarks

#5 FBL, 7 ELECTRODE SONDE, 5 CM BEAM, 60 CM ARRAY

CURRENT - STD LOGGED COAL SEAMS ONLY FOR DEMO PURPOSES

MUDFISH RESISTANCE - 100 OHMS 180-185, 260-275, 295-310, 330-340

RESISTIVITY

OHM METERS

0 20000

Depths

RESISTIVITY

OHM METERS

0 1000 2000

26000 46000 66000

180

195

260

270

275

295

300

310

330

340

LOG ZERO

CAL ON 200 RANGE 2000 OHM/DIV

RSC ZERO

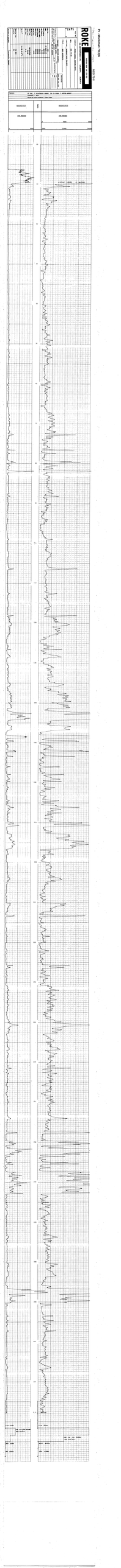
CAL ZERO

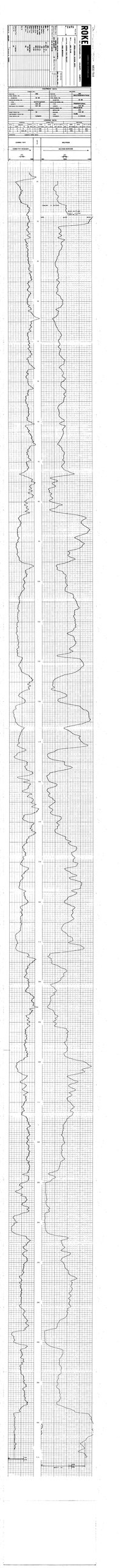
LOG ZERO

CAL ON 200 RANGE 100 OHM/DIV

RSC ZERO

CAL ZERO




ROKE
ROKE OIL & GAS PLC
ROKE HOUSE
ROKE
SURREY
GU10 2DY
TEL: 01483 898000
FAX: 01483 898001
WELL NO. 1
FIELD
COUNTY
STATE
LOCATION
SEC
TWP
RGE
PERMANENT DATUM
ELEV.
LOG MEASURED FROM
DRILLING MEASURED FROM
DATE
RUN NO.
TYPE LOG
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 OF RMF
SOURCE OF RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
RUN NO.
BIT
FROM
TO
CASING
BIT
SIZE
TYPE
WEIGHT
FROM
TO
TYPE
DENSITY
VISCOSITY
PH
FLUID LOSS
SOURCE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
RM @ BHT
TIME CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
GAMMA RAY
NEUTRON
GAMMA RAY SCALE
0
100
NEUTRON REFERENCE
0
LIMESTONE
DENSITY
0.25
0.45
0.65
0.85
1.05
1.25
1.45
1.65
1.85
2.05
2.25
2.45
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6.25
6.45
6.65
6.85
7.05
7.25
7.45
7.65
7.85
8.05

Pr - Monkman 79(3)A

Pr- Monkman 79(3)A MDD 79-8

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W ___ M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79-08
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, FBL, DIR

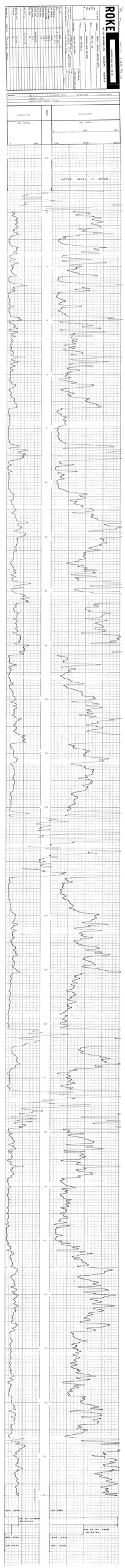
Permanent Datum GROUND LEVEL Elev. ___ K.B. ___
Log Measured from TOP OF CASING 31 CM Above Perm. Datum CSG ___
Well Depths Measured from TOP OF CASING G.L. ___

Run. No.	ONE		
Date	27 SEPT 79		
First Reading	317.90 M		
Last Reading	00		
Footage Logged	317.90		
Depth Reached	318.21		
Depth Driller	319.64		
Casing Roke	6.00		
Casing Driller			
Fluid Type	WATER/MUD		
Liquid Level	11.00		
Min. Diam.	HQ		
Operating Time	2½ HOURS		
Truck No.	36		

Recorded By CARLSON — Witnessed By THOMAS

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	CPS/DIV
1	0	317.90	4					3	1000	2.5R	76.42
2	0	318.50		CALIPER							

REMARKS: DENS TOOL #247 CAL TOOL #587 LOGGED OPEN HOLE



ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 5 CM

FILE NO.

COMPANY PETRO-CANADA (OPERTOR DEPT.)

WELL MDD - 79 - 10

LOCATION MOOSEHAS PASS PROJECT

FIELD ROSE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: GR, CAL, 20 CM, FBL, MISC

Permanent Datum: _____ Elev.: _____

Log Measured from: _____ K.B. _____

Rec. Datum: _____ D.F. _____

Perm. Datum: _____ G.L. _____

Above Perm. Datum

Date: _____

Run No.: _____

First Reading: _____

Last Reading: _____

Depth Driller: _____

Depth Logger: _____

Casing Driller: _____

Casing Logger: _____

Fluid Type: _____

Fluid Level: _____

Max. Rec. Temp. Deg. C: _____

Equip. Location: _____

Recorded By: CARLSON

Witnessed By: BERTA

Remarks

FBL # 5 7 ELECTRODE SONDE 5 CM BEAM 60 CM ARRAY

GROUND - SEA

SURFACE RESISTANCE - 5 OHMS

REPAIR OF COAL SEAMS O.K.

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 10000		0 1000 2000
		13000 23000 33000
	15	
	20	
	30	
	50	
	80	
	120	
	130	
	135	
	155	
	160	
	170	
	185	

LOG ZERO

CAL. ZERO

CAL. 0.A 200 RANGE 100 OHM/div

REC ZERO

LOG ZERO

CAL. ZERO

CAL. 0.A 2000 RANGE 100 OHM/div

REC ZERO

CAL. ZERO

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LOG TYPE	SIDEWALL DENSILOG CALIPER
WELL	10BH-04-062-04W5M (SURF. SITE)
LOCATION	10BH-04-062-04W5M (BOTTOM HOLE)
FIELD	4062 04W5M/10
PROVINCE	ALBERTA
	4062 04W5M/10
	SEC. 04 TWP. 062 RGE. 04 W5M
	10BH-04-062-04W5M (SURF. SITE)
	10BH-04-062-04W5M (BOTTOM HOLE)

Elev. No.	
Elev. Perm.	K.B. 1819.5
Log Measured From	K.B. 10.0 ft
Log Reading	K.B.
Drilling Measured From	G.L.
Date Recorded	FEB 9
Depth Driller	7412.0
Depth Logger	7412.0
Casing Driller	0.0
Casing Logger	0.0
Bit Size	200.0
Type Fluid in Hole	WATER BASED
Density	9.2
Viscosity	50.0
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	

Density Type	S. STN. DEN.
Scale Up	UP

Service No. 4585218 Mnemonic No. 8305A

RUN NO.	ONE
DATE	FEB 9 '78
TYPE LOG	DENSILOG
DEPTH-DRILLER	7412
DEPTH-LOGGER	7412
BTM. LOG INTERVAL	7412
TOP LOG INTERVAL	0
CASING-DRILLER	0
CASING-LOGGER	0
BIT SIZE	200
TYPE FLUID IN HOLE	WATER BASED
DENSITY	9.2
VISCOSITY	50
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	

CALIPER
6 IN
16 IN

GAMMA RAY
0 API
150 API

DENSITY
2.0 G/C3
3.0 G/C3

PEF
0 B/E
10 B/E

BULK DENSITY CORRECTION
-0.25 G/C3
0.25 G/C3

POROSITY
45 %
-15 %

DENSITY POROSITY
45 %
-15 %

LITHOLOGY
SANDSTONE
LIMESTONE
DOLOMITE

CALIPER
6 IN
16 IN

GAMMA RAY
0 API
150 API

DENSITY
2.0 G/C3
3.0 G/C3

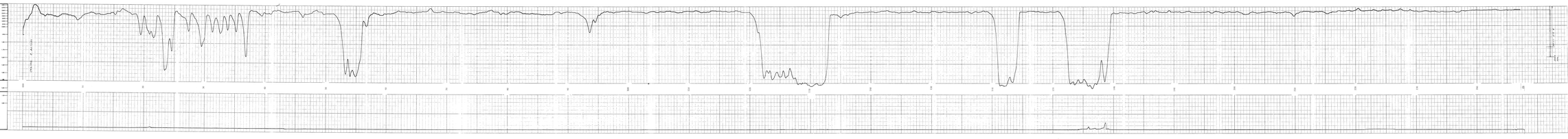
PEF
0 B/E
10 B/E

BULK DENSITY CORRECTION
-0.25 G/C3
0.25 G/C3

POROSITY
45 %
-15 %

DENSITY POROSITY
45 %
-15 %

LITHOLOGY
SANDSTONE
LIMESTONE
DOLOMITE



Dr - Monkman 79(3)a MDD 79-10

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.	
LSD / SEC / TWP / RGE / W__M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD - 79 - 10
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	DENS-CAL, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING 35 CM Above Perm. Datum
Well Depths Measured from	TOP OF RIG FLOOR
K.B. / CSG / G.L.	METRIC

Run. No.	ONE
Date	6 JULY 1979
First Reading	247.80 M
Last Reading	0
Footage Logged	247.8
Depth Reached	248.25
Depth Driller	248.50
Casing Roke	3.0
Casing Driller	
Fluid Type	WATER/MUD
Liquid Level	11.0
Min. Diam.	HQ
Rm @	
Operating Time	1 HR 15 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENIA

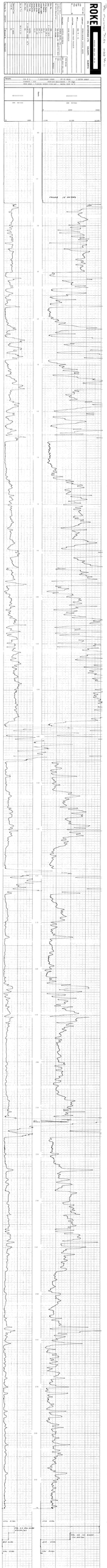
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	150 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125A 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	10	4	4	100	0	18	4	1000	7 L	300
	10	247.8	4	4	100	0	18	4	500	1 L	150

REMARKS OPEN HOLE



PR-Monkman 79(3)A MDD 79-11

ROKE

FOCUSED BEAM LOG 5 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W M

COMPANY PETRO - CANADA (MINING DEPT)

WELL MDD 79 - 11

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:
FBL 20

Permanent Datum _____ Elev. _____
Log Measured from _____ _____ . Above Perm. Datum
Well Depths Measured from _____

K.B. _____
CSG _____
G.L. _____

METRIC

Run. No.	ONE		
Date	2 JULY 1979		
First Reading			
Last Reading			
Footage Logged			
Depth Reached			
Depth Driller			
Casing Roke			
Casing Driller			
Fluid Type			
Liquid Level			
Min. Diam.			
Rm @ °			
Operating Time			
Truck No.			

Recorded By CARLSON

Witnessed By W. PROUDLOCK

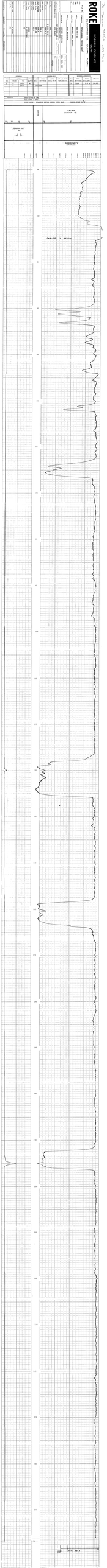
Remarks: FBL # 5 — 7 ELECTRODE SONDE — 5 CM BEAM — 60 CM ARRAY
CURRENT - STD — LOGGED TWO COAL SEAMS ONLY
MUDFISH RESISTANCE - 20 OHMS

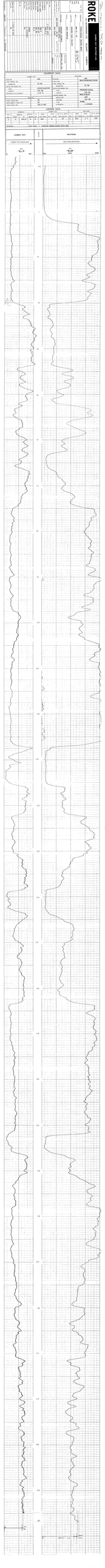
RESISTIVITY
OHM METERS
2000
1000
0

Depths
16500
11500
6500
155
170
210
220

RESISTIVITY
OHM METERS
5000
0

CAL 60 500 RANGE
100 OHM/DIV
LOG ZERO
5000 OHM/DIV
500 RANGE
LOG ZERO
CAL 60 500 RANGE
500 OHM/DIV
LOG ZERO
CAL ZERO


ROKE
GENERAL HOSPITAL
CASED HOLE
CALIPER
BULK DENSITY
GAMMA RAY


BROKE
GAMMA RAY, NEUTRON
GAMMA RAY
NEUTRON
GAMMA RAY (API)
NEUTRON (LIMESTONE)

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

PROBE 32AM 16M 32 SN

FILE NO.

COMPANY PEDCO-DOMAN (DOUBLE DEEP)

WELL 09-19-T-12

LOCATION BORDEN BAR PROJECT

FIELD DEEP MICROCELL

PROVINCE SASKATCHEWAN

Recorded By [illegible]

Witnessed By [illegible]

Run No. 1

Date 3-10-1979

Depth-Driller 2150

Depth-Logger 2150

Btm.Log Interval 2150

Top Log Interval 1400

Casing-Driller 244.5@0

Casing-Logger 244.5@0

Bit Size 7.875

Type Fluid in Hole WATER BASED MUD

Density 10.0

Viscosity 50

pH 11.0

Fluid Loss 6.0

Source of Sample CIRC. SAMPLE

Rm @ Meas. Temp. 0.25@20

Rmf @ Meas. Temp. 0.2@20

Rmc @ Meas. Temp. 0.5@20

Source Rmf / Rmc MEASURED / CALC.

Rm @ BHT 0.15@60

Time Since Circ. 30 HRS

Max. Rec. Temp. 60

Equip. No. 1

Location

Recorded By [illegible]

Witnessed By [illegible]

Other Services

SPECTRALOG

Remarks

PRI. P S 2 ELECTRODE SONDE 32-CM BEAM 1 METER ARRAY

CURRENT = MEW

MEASURED RESISTANCE = 600 OHMS

RESISTIVITY

OHM METERS

0 5000

Depth

RESISTIVITY

OHM METERS

0 3000 2000

6500 11500 16500

LIQUID LEVEL IT RETURNS

REC. READ.

CAL. READ.

CAL. ON REC. RANGE
100 AM/DIV.

REC. READ.

CAL. READ.

CAL. ON REC. RANGE
100 AM/DIV.

REC. READ.

CAL. READ.

ROKE

SIDEWALL DENSILOG
CALIPER

FILE NO.
SEC. TWP. RGE. M.

COMPANY: ROKE OIL ENTERPRISES LTD.
WELL: 1001-24-12
FIELD: JUMPING POUND
LOCATION: 30 METRES FROM 200/07E
PROVINCE: ALBERTA
CALGARY

Permanent datum: GROUND LEVEL — Elev.: 1128
Log measured from: KELLY BUSHING — 2.5 m above Perm. Datum
Drilling measured from: KELLY BUSHING

Date: 7 MAY 85
Run No.: ONE
Depth-Driller: 1337.0
Depth-Logger: 1336.70
Bottom Logged Interval: 1336.70
Top Logged Interval: 135.00
Casing-Driller: 244.5 @ 135.0
Casing-Logger: 135.00
Bit Size: 200.0
Type Fluid in Hole: WATER/GEL
Density: 9.0
Viscosity: 90.0
Fluid Loss:
Source of Sample: CIRC.
Rm @ Meas. Temp.:
Rmf @ Meas. Temp.:
Rmc @ Meas. Temp.:
Source of Rmf & Rmc:
Rm @ BHT:
Time Since Circ.: 3 HRS
Max. Rec. Temp.: 35°C
Equip. Location: 3 STETTLER
Recorded By: CALLSEN
Witnessed By: BRUNNER

GENERAL

RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/min
1	0	136.7	6
	0	135.0	
		CALIPER	

GAMMA RAY

T.C. SEC.	ZERO SETTING	API U.R. UNITS PER 100 DIV.	API U.R. UNITS PER DIV.

SIDEWALL DENSILOG

T.C. SEC.	GAIN SETTING	BIAS DIVS. OR R	CPS/DIV
3	1000	7.5 R	76.48

REMARKS
3800 TOOL # 597
GAL TOOL # 597

DEPTHS

CALIPER
DIAMETER — CM
10 15 20 25 30 35

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)
-.25 0 .25 .5 .75 1 1.25 1.5 1.75 2 2.25 2.5 2.75 3

10 20 30 40 50 60 70 80 90 100 110 120 130 140

1000 UNIT SET R

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY PEPPER-CHUNKS ODD SOC (CARD)

WELL 1 LOCATION 2000 FT. - 12 SECOND ZONE PINNACLE

FIELD WILDCAT

PROVINCE BATTLES COORDINATES

Other Services

SEC. TWP. RGE.

Permanent Datum: GROUND LEVEL Elev.: K.B. 2,000 Elev.: 1,975

Log Measured From: KELLY BUSHING 25 Ft. Above Perm. Datum

Drilling Measured From: K.B.

Date	31-DEC-1975	
Run No.	ONE	
Depth Driller	2,100	
Depth Logger	2,100	
Bottom Logged Interval	2,100	
Top Logged Interval	1,975	
Type Fluid in Hole	WATER	
Salinity, PPM Cl	11,000	
Density	10.0	
Level	FULL	
Max. Rec. Temp. Deg. F.	80	
Operating Rig Time	1 HOUR	
Recorded By	KARSTEN	
Witnessed By	KARSTEN	

RUN NO. ONE

LOG TYPE NEUTRON/NEUTRON

TOOL MODEL NO.

DIAMETER 3 3/8

DETECTION MODEL NO. SCINTILLATOR 100 MK

TYPE PROPORTIONAL

LENGTH 2.07 M

SOURCE MODEL NO. 256

SPACING 432 MM

TYPE Amdis

STRENGTH 3 CURIES

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTION MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATOR	DETECTION MODEL NO.	
LENGTH	100 MK	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	130 MM
		SOURCE MODEL NO.	MRC-N-50 M
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	Amdis
TOOL SERIAL NO.	123 A 001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL DEPTHS FROM	TO	SPEED M/MIN	GAMMA RAY T.C. SEC.	SENS SETTINGS	ZERO DIV. | DIR	API G. R. UNITS PER LOG DIV.	N T.C. SEC.	NEUTRON SENS SETTINGS	ZERO DIV. | DIR	API N. UNITS PER LOG DIV.
1	0	9.5	4	4	100	0	10	4	1000	7 L	300
	9.5	135.10	4	4	100	0	10	4	500	1 L	150

REMARKS

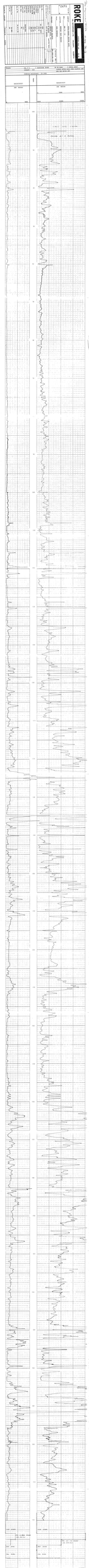
GAMMA RAY	SHIFTS	NEUTRON
GAMMA RAY INCREASES → API 0 150		NEUTRON INCREASES → API 2100 2500 3100

CHANGE 9.5 METERS

REMAKE RUNNED 135.10 METERS

0 @ 0 @ 2100

DIFF 1L DIFF 1L


ROKE
[redacted]

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

BOREHOLE SONIC LOG 5 CM

FILE NO
LSD
SEC
TWP
RGE
M

COMPANY PETRO-CANADA (WESTERN DEPT)

WELL MDH 79 - 13

LOCATION MINDORA BASS PROSPECT

FIELD MOSE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services
FDL 20

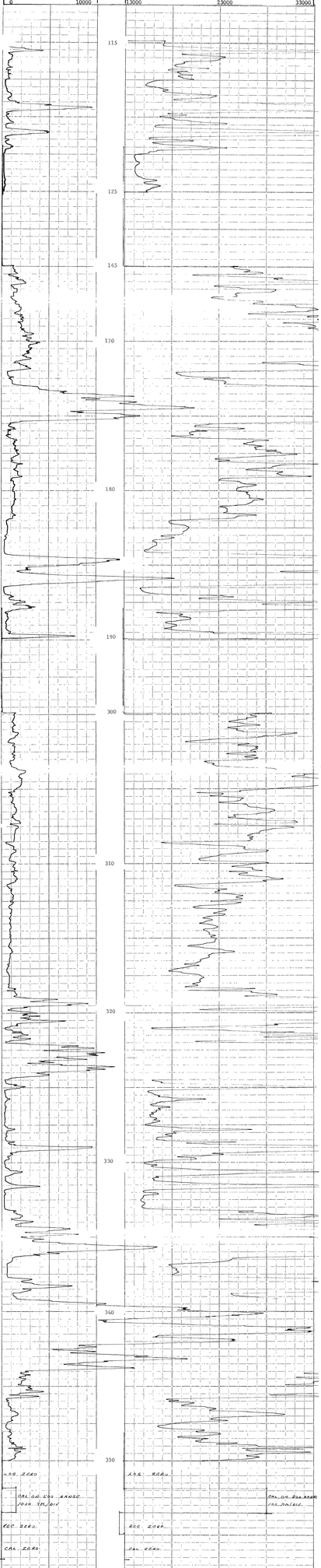
Permanent Datum: GROUND LEVEL Elev.
Log Measured From: K.B.
Drilling Measured From: G.L.
Above Perm. Datum

Date: 24 APRIL 1979
Run No: ONE
Depth-Driller: 350
Depth-Logger: 350
Bottom Log Interval: 350
Top Log Interval: SURFACE
Casing-Driller: 13 3/8 @ 30
Casing-Logger:
Bit Size: 12 1/4
Type Fluid in Hole: GEL CHEM
Dens: 9.6
Visc: 40
pH: 9
Fluid Loss: 10
Source of Sample: FLOWLINE
Rm @ Meas. Temp: .90 @ 70°F
Rmf @ Meas. Temp: .70 @ 70°F
Rmc @ Meas. Temp: 1.2 @ 70°F
Source of Rmf and Rmc: CALC
Rm @ BHT: .50 @ 150°F
Time Since Circ.: 6 HRS
Max. Rec. Temp. Deg. F: 150°F
Equip. No. and Location: 1301 KAMLOOPS
Recorded By: CARLSON
Witnessed By: STEVEN

Remarks

FDL # 5 7 ELECTRODE SONDE 5 CM BEAM 60 CM ARRAY
CURRENT - STD - 10 OHMS
MUDFISH RESISTANCE - 10 OHMS DEMO: LOGGED COAL SEAMS ONLY

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 10000		13000 23000 33000
		0 1000 2000



ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG
CALIPER

DR - MONKMAN 79(3)A MDD 79-13

FILE NO.	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD - 79 -13
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W___M	
Other Services:	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF DRILL ROD 2.44 Above Perm. Datum
Well Depths Measured from	TOP OF CASING
K.B. / CSG / G.L.	METRIC
Run No.	ONE
Date	25 JULY 1979
First Reading	380.0 M
Last Reading	0
Footage Logged	380.0
Depth Reached	380.9
Depth Driller	386.13
Casing Roke	8.0
Casing Driller	
Fluid Type	WATER/MUD
Liquid Level	0
Min. Diam.	HQ
Operating Time	1 HOUR 55 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENIA

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/DIV
1	0	380	4					3	1000	2.5 R	33.63
	0	370		CALIPER							

REMARKS: DENS TOOL # 247 CAL TOOL # 587 — DENS LOGGED THROUGH HQ DRILL RODS. RODS STUCK ON BOTTOM-CORE TUBE WAS NOT IN CORE BARREL. RODS BLASTED OFF ABOVE CORE BARREL. CAL LOGGED AFTER RODS REMOVED.

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

PR-Monkman 79(3)A MDD 79-13

FILE NO.

LSD, SEC, TWP, RGE, W___M

COMPANY: PETRO-CANADA (MINING DEPT)

WELL: MDD 79 - 13

LOCATION: MONKMAN PASS PROJECT

FIELD: DUKE MOUNTAIN

PROVINCE: BRITISH COLUMBIA

Other Services: DENS-CAL, FBL, DIR

Permanent Datum: GROUND LEVEL Elev.

Log Measured from: TOP OF DRILL ROD @ 2.44 M above Perm. Datum — K.B., CSG, G.L.

Well Depths Measured from: TOP OF CASING

METRIC

Run. No.	ONE
Date	25 JULY 1979
First Reading	385.0 M
Last Reading	0
Footage Logged	385.0
Depth Reached	385.35
Depth Driller	386.13
Casing Roke	8.0
Casing Driller	
Fluid Type	WATER/MUD
Liquid Level	0
Min. Diam.	HQ
Rm @	
Operating Time	1 HOUR 50 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENTA

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	150 MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 A 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	385.0	4	4	100	0	12	4	500	1 L	130

REMARKS: LOGGED THROUGH HQ DRILL RODS. RODS WERE STUCK ON BOTTOM

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12; 0 – 120		NEUTRON INCREASES → API 130; 130 – 1430 – 2730

Pr-Monkman 79(3)A MDD 79-14

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79 - 14
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING 61 CM Above Perm. Datum
Well Depths Measured from	TOP OF CASING
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE
Date	2 AUG 1979
First Reading	384.0 M
Last Reading	68.0
Footage Logged	316.0
Depth Reached	384.9
Depth Driller	386.13
Casing Roke	68.0
Casing Driller	66.0
Fluid Type	WATER/MUD
Liquid Level	9.5
Min. Diam.	HQ
Rm @ °C	16.39 @ 25
Operating Time	40 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENIA

Remarks: FBL # 5 7 ELECTRODE SONDE 20 CM BEAM 1 METER ARRAY
CURRENT - STD CASING PULLED APART - REFER TO DENS LOG
FISH - 45 OHMS

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
		0 1000 2000
0 5000		6500 11500 16500

ROKE

ROKEWELL CRYSTAL LTD

Test Type	Initial	Test Pressure (Psig)	10000
Well	Operator	BRITISH GAS - ANSON 3WD	
Well	Well	48/24a-A3Z	
Well	Field	MORECAMBE BAY	
Well	Country	ENGLAND	
Test Company		ROKEWELL TESTING	
Location Test Witness		SEE ATTACHED SHEET	
Job Number		1	

Test Start	2009/11/17 - 00:00:00
Test Finish	2009/11/17 - 23:59:59
Gauge Number	1
Gauge Depth	3811.00 ft
Gauge Type	Quartz
Gauge Range	10000 psi
Clock Type	8 Day
Chart Type	12 hr

Operating Fluid	1.4SG MI MUD
Comments	

Engineer: [illegible]

Witness: [illegible]

Dr - Monkman 79(3)A MDD (79-14) file #545

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDD 79 - 14
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	DENS-CAL, FBL, DIR

Permanent Datum GROUND LEVEL Elev.
Log Measured from TOP OF CASING 61 CM Above Perm. Datum
Well Depths Measured from TOP OF CASING

K.B.
CSG
G.L.
METRIC

Run. No.	ONE		
Date	2 AUG 1979		
First Reading	384.90 M		
Last Reading	0		
Footage Logged	384.9		
Depth Reached	385.35		
Depth Driller	386.13		
Casing Roke	68.0		
Casing Driller	66.0		
Fluid Type	MUD/WATER		
Liquid Level	9.5		
Min. Diam.	HQ		
Rm @			
Operating Time	1 HOUR 35 MIN		
Truck No.	36		
Recorded By	CARLSON	Witnessed By	BIENIA

EQUIPMENT DATA

NEUTRON	
RUN NO.	ONE
LOG TYPE	NEUTRON/NEUTRON
TOOL MODEL NO.	
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	PROPORTIONAL
LENGTH	150 MM
SOURCE MODEL NO.	MRC-N-SS-W
SERIAL NO.	256
SPACING	432 MM
TYPE	AmBe
STRENGTH	3 CURIES

GAMMA RAY	
RUN NO.	ONE
TOOL MODEL NO.	
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	SCINTILLATION
LENGTH	100 MM
DISTANCE TO N. SOURCE	2.07 M

GENERAL	
HOIST TRUCK NO.	36
INSTRUMENT TRUCK NO.	36
TOOL SERIAL NO.	125 A001

LOGGING DATA

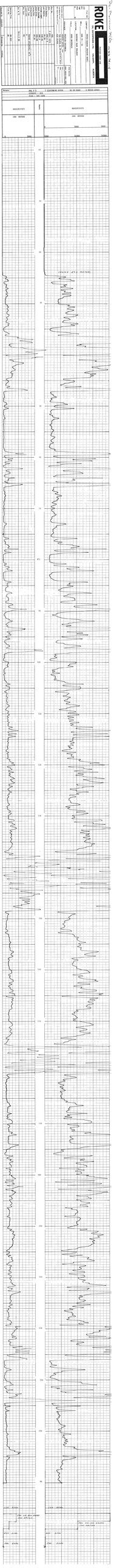
	NEUTRON				GAMMA RAY				GENERAL		
	API N. UNITS PER LOG DIV.	ZERO DIV. L OR R	SENS SETTINGS	T. C. SEC.	API G. R. UNITS PER LOG DIV.	ZERO DIV. L OR R	SENS SETTINGS	T.C. SEC.	SPEED M/MIN	DEPTHS TO	DEPTHS FROM
RUN NO. 1	150	1 L	500	4	18	0	100	4	4	384.90	0

REMARKS: IT APPEARS THE CASING PULLED APART IN TWO PLACES - REFER TO DENS LOG

NEUTRON — NEUTRON INCREASES — API 150 — 150 1650 3150

DEPTHS

GAMMA RAY — GAMMA RAY INCREASES — API 18 — 0 180



ROKE
RESOURCES LTD.
SUITE 1500, 1066 WEST HASTINGS STREET
VANCOUVER, B.C. V6E 3X1

WELL NAME: [illegible]
LOCATION: [illegible]
FIELD: [illegible]
PROVINCE: [illegible]
COUNTRY: [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]
DENSITY: [illegible]
VISCOSITY: [illegible]
PH: [illegible]
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 CIRC: [illegible]
MAX REC TEMP: [illegible]
EQUIP NO LOCATION: [illegible]
RECORDED BY: [illegible]
WITNESSED BY: [illegible]

RUN | BIT | CASING | DEPTH DRILLER | DEPTH LOGGER | BTM LOG INTERVAL | TOP LOG INTERVAL | 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 CIRC | MAX REC TEMP | EQUIP NO LOCATION | RECORDED BY | WITNESSED BY

1 | 7 7/8 | 5 1/2 @ 2010 | 2010 | 2009 | 2009 | 1900 | GEL CHEM | 9.2 | 40 | 10.5 | 8.0 | MUD PIT | 1.10 @ 20°C | 0.82 @ 20°C | 2.20 @ 20°C | MEAS | 0.55 @ 20°C | 4 HRS | 20°C | 2009 | [illegible] | [illegible]

LOGGING DISTANCE: 2009 - 1900 = 109

GAMMA RAY | NEUTRON | DENSITY | MICRO | CALIPER | BOREHOLE COMPENSATED SONIC | ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC

CALIPER (inches) 6 — 16

GAMMA RAY 0 — 200

ROCK DENSITY (GRAM/CC) 1.95 — 2.95

ORIGINAL LOG OF RECORD

1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
2060
2070
2080
2090
2100
2110
2120
2130
2140
2150
2160
2170
2180
2190
2200
2210
2220
2230
2240
2250
2260
2270
2280
2290

ROKE

RESERVOIR SERVICES

Rotary Table Elevation: 0 ft
Kelly Bushing Elevation: 0 ft
Ground Elevation: 0 ft

Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Date: 10-Jul-2015
Run Number: ONE
Depth Driller: 2,000 ft
Depth Logger: 2,000 ft
Bottom Logged Interval: 2,000 ft
Top Logged Interval: 0 ft
Casing Driller Size @ Depth: 9.625 in @ 0 ft
Casing Logger Size @ Depth: 9.625 in @ 0 ft
Bit Size: 8.5 in
Type Fluid in Hole: WATER BASED MUD
Density: 10.0 lb/gal
Viscosity: 50 s/qt
PH: 9.0
Fluid Loss: 0 cc
Source of Sample: FLOWLINE
Rm @ Measured Temp: 0.1 @ 70 °F
Rmf @ Measured Temp: 0.1 @ 70 °F
Rmc @ Measured Temp: 0.1 @ 70 °F
Source of Rmf / Rmc: MEASURED / MEASURED
Rm @ BHT: 0.1 @ 70 °F
Time Since Circulation: 1 hr
Max Rec. Temperature: 70 °F
Equipment Number: 1
Location: 0 DEGREE
Recorded By: ROKE RES. ENG. TEAM
Witnessed By: ROKE RES. ENG. TEAM

EQUIPMENT DATA

GAMMA RAY

Run No.: ONE
Tool General No.: 32 MM
Detector Serial No.: SCINTILLATOR
Location: SUB SEA
Recorded Over Interval: 2,000 ft

NEUTRON

Run No.: ONE
Tool General No.: 32 MM
Detector Serial No.: PROPRIETORIAL
Type: EPITHERMAL
Recorded Over Interval: 2,000 ft

DENSITY

Mnemonic: DEN
Serial No.: 32 MM
Detector Serial No.: Avida 12 SPC
Type: DENSITY
Location: 0 DEGREE
Recorded Over Interval: 2,000 ft

LOGGING DATA

Pass	Type Log	Direction	Speed (ft/hr)	Density Filter (s)	Neutron Filter (s)	Sample Rate (s)	Depth Control	Max Recorded Temp (°F)	Equipment Number
1	MAIN	DOWN	1,800	1	1	0.25	YES	70	1
2	MAIN	UP	1,800	1	1	0.25	YES	70	1

Remarks:

LOGGED AND PROCESSED USING SCHLUMBERGER SOFTWARE

GAMMA RAY

GAMMA RAY (API)
0 — 150

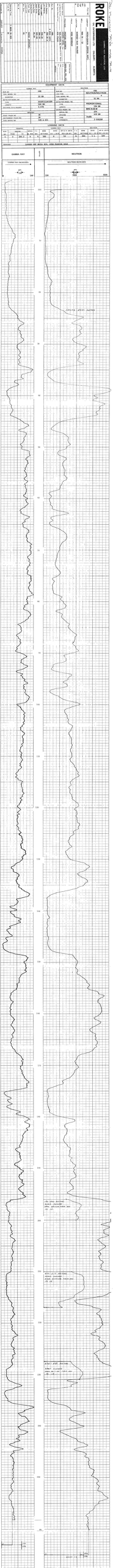
NEUTRON

NEUTRON (DECIMAL)
0.45 — -0.15

DENSITY

DENSITY (G/CC)
1.95 — 2.95

Scale 1:240



Pr. Resistivity (Ω-m)

MD11520

ROKE

Rokeby Mud Logging Inc. Calgary

Operator: Rokeby Mud Logging Inc.
Well: 545
Field: Pr. Resistivity (Ω-m)
Location: MD11520
Province: Calgary
Country: Rokeby Mud Logging Inc.
Rig: Rokeby Mud Logging Inc.
Elevation: Rokeby Mud Logging Inc.
Spud Date: Rokeby Mud Logging Inc.
Drilling Completed: Rokeby Mud Logging Inc.
Surface Coordinates: Rokeby Mud Logging Inc.
Bottom Hole Coordinates: Rokeby Mud Logging Inc.
Ground Elevation: Rokeby Mud Logging Inc.
K.B. Elevation: Rokeby Mud Logging Inc.
Logged Interval: Rokeby Mud Logging Inc.
Total Depth: Rokeby Mud Logging Inc.
Type of Drilling Fluid: Rokeby Mud Logging Inc.
Remarks: Rokeby Mud Logging Inc.

545

Formation | Gas Ratio | Pr. Resistivity (Ω-m) | Drilling Rate (min/m) | Lithology

Gas Ratio: 0 | 1000 | 2000 | 3000
Pr. Resistivity (Ω-m): 0.2 | 2 | 20 | 200
Drilling Rate (min/m): 0 | 5 | 10 | 15
Lithology: SHALE | SILTSTONE | SANDSTONE | COAL

Remarks: GAS % C1 - C4 ELECTRONIC GASER 30 SEC GASS. 1 METER AHEAD
PUMPED SLUG@4000m - 30 BBLS

4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900

Pr: Moammar Pk21A

ROKE

RESERVOIR EVALUATION

MD#218.00

Pr - Monkman 79J3A

MDH 79-1

ROKE

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

PROFILE FROM GPS

FILE NO.

DATE

SURVEY BY

COMPANY ANDESITE PETROLEUM LTD. (OPERATOR ONLY)

WELL NO. 79-1-3

LOCATION MONKMAN COAL PROPERTY

FIELD

PROV. OR TERRITORY

Type Survey: RESISTIVITY / IP / SELF POTENTIAL / MAGNETIC

Instrument: RESISTIVITY METER / IP RECEIVER / MAGNETOMETER

Operating Mode: TIME DOMAIN / FREQUENCY DOMAIN

Electrode Array: WENNER / SCHLUMBERGER / DIPOLE-DIPOLE / OTHER

Transmitter: MANUFACTURER / MODEL / POWER OUTPUT

Receiver: MANUFACTURER / MODEL / NUMBER OF CHANNELS

Electrode Spacing: 1 METRE

Coupling: CAPACITIVE / RESISTIVE / INDUCTIVE

Frequency: 0.5 / 2 / 8 / 32 Hz

Filter: LOW PASS / HIGH PASS / NOTCH

Gain: FIXED / AUTOMATIC

Data Recording: DIGITAL / ANALOG

Data Storage: MAGNETIC TAPE / DISK / PAPER

Data Processing: MANUAL / COMPUTER

Survey Line No.

Station No.

Station Interval

Line Bearing

Line Length

Total Stations

Total Readings

Date Surveyed

Crew

Comments re. Problems

Terrain & Vegetation

Geology

Weather

Operator's Name & Address

Signature of Operator

545

Remarks: PRL # 3 7 ELECTRODE ROVER. 20 CM READ. 1 METRE ARRAY

HOLDFIN RESISTANCE = 5.0MOHM

RESISTIVITY

OHM METRES

500

0 1000 2000

RESISTIVITY

OHM METRES

500

0 5000

1000 1500

SLOPE FROM 7 METRES

CAVING ICE METRES

CAL 800 OHM/DIV

REF 5000

CAL 0

CAL 100 OHM/DIV

REF 1000

CAL ZERO

PR - MONKMAN 79(3)A

MDH 79-1

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 1
LOCATION	MONKMAN COAL PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Other Services:	DENS-CAL, FBL, DIR
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured from	GROUND LEVEL
Above Perm. Datum	
Well Depths Measured from	GROUND LEVEL
K.B.	
CSG	
G.L.	
	METRIC

Run No.	ONE
Date	13 MAR 1979
First Reading	175.01 M
Last Reading	0
Footage Logged	175.01
Depth Reached	175.50
Depth Driller	176.90
Casing Roke	16.50
Casing Driller	
Fluid Type	WATER
Liquid Level	7.0
Min. Diam.	15.24 CM
Rm @	
Operating Time	1 HOUR
Truck No.	36
Recorded By	CARLSON
Witnessed By	PROUDLOCK

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	6	4	4	100	0	18	3	500	6 L	150
	6	175.01	4	4	100	0	18	3	500	1 L	150

REMARKS GAS BLOWING IN HOLE

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18; 0 – 180		NEUTRON INCREASES → API 150; 150 – 1650 – 3150

ROKE

ROKE RES. ANTHRACITE VAL CHURCHILL ALBERTA

WELL NAME: ROKE RES. ANTHRACITE VAL CHURCHILL ALBERTA

LOCATION: 1-34-25-14W4M

FIELD: WILDCAT

PROVINCE: ALBERTA

COUNTRY: CANADA

SURFACE LOCATION: 1-34-25-14W4M

ELEVATION: K.B. 1,676 ft. G.L. 1,671 ft.

DATUM: K.B.

DRILLING MEASURED FROM: K.B.

PERMANENT DATUM: G.L.

ELEVATIONS: K.B. 1,676 ft. G.L. 1,671 ft.

DEPTH: DRILLER 1,676 ft. LOGGER 1,676 ft.

DATE: 1-34-25-14W4M

RUN NO.: ONE

TYPE LOG: GAMMA RAY - BULK DENSITY

DEPTH: DRILLER 1,676 ft. LOGGER 1,676 ft.

BTM. LOG INTERVAL: 1,676 ft.

TOP LOG INTERVAL: 1,670 ft.

CASING: DRILLER 1,676 ft. LOGGER 1,676 ft.

BIT SIZE: 7 7/8 in.

TYPE FLUID IN HOLE: GEL CHEM

DENSITY: 9.2 lb/gal

VISCOSITY: 45 s

PH: 10.5

FLUID LOSS: 6.4 cc

SOURCE OF SAMPLE: CIRCULATED

RM @ MEAS. TEMP.: 0.75 @ 70 °F

RMF @ MEAS. TEMP.: 0.55 @ 70 °F

RMC @ MEAS. TEMP.: 1.0 @ 70 °F

SOURCE OF RMF: MEASURED

SOURCE OF RMC: MEASURED

RM @ BHT: 0.35 @ 120 °F

TIME SINCE CIRC.: 12 HRS

MAX. REC. TEMP.: 120 °F

EQUIP. NO. & LOCATION: 1-34-25-14W4M

RECORDED BY: D. MCKENZIE

WITNESSED BY: MR. MCKENZIE

REMARKS: RUN ONE @ 1,676 FT.

GENERAL					GAMMA RAY					SONIC			
BOW SPRING NO.	CENTRALIZER NO.	WEIGHT lb/ft	TYPE FLUID IN HOLE	MUD DENSITY lb/gal	VISCOSITY s	FLUID LOSS cc	MATRIX CORR.	MEAS. POINT	REMARKS	TYPE FLUID IN HOLE	MUD DENSITY lb/gal	MEAS. POINT	REMARKS
6	12	17#	GEL CHEM	9.2	45	6.4							

RUN ONE @ 1,676 FT.

MDH 79-10

ROKE — RECORDED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
SEC
TWP
RGE
W.____M

COMPANY PACIFIC PETROLEUMS LTD. (OPERG. REPT.)

WELL MDH 79 - 10

LOCATION MORICETOWN BAND PROVINCE

FIELD DOME MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services

Permanent Datum: GROUND LEVEL — Elev.: K.B. — Elev.: D.F. — Elev.: G.L.

Log Measured From: GROUND LEVEL — 2.5 M. Above Perm. Datum

Drilling Measured From: GROUND LEVEL

DIL | BHC-GR-CAL | SFL

Run No. ONE | TWO | THREE

Depth-Driller 3154.5 | 3154.5 | 3154.5

Depth-Logger 3156.3 | 3156.3 | 3156.3

Bottom Logged Interval 3154.5 | 3154.5 | 3154.5

Top Logged Interval 1196.3 | 1196.3 | 1196.3

Casing-Driller 508 @ 1196.3 | 508 @ 1196.3 | 508 @ 1196.3

Casing-Logger 1196.3 | 1196.3 | 1196.3

Bit Size 311.0 | 311.0 | 311.0

Type Fluid in Hole WATER | WATER | WATER

Dens. Visc. 10.0 | 10.0 | 10.0

pH | Fluid Loss 11.0 CM | 11.0 CM | 11.0 CM

Source of Sample CIRC. | CIRC. | CIRC.

Rm @ Meas. Temp. 0.718 @ 25 | 0.718 @ 25 | 0.718 @ 25

Rmf @ Meas. Temp. | | |

Rmc @ Meas. Temp. | | |

Source of Rmf & Rmc | | |

Rm @ BHT | | |

Time Since Circ. 4HR. | 4HR. | 4HR.

Max. Rec. Temp. Deg. C. 25 | 25 | 25

Equip. No. & Location 36 | | |

Recorded By J. STEWARDSON

Witnessed By A. GARRETT

545

Remarks: FBS. # 5 — 7 ELECTRODE SONDE — 20 CM SPAN — 1 METER ARRAY

SYS RANGE

MURPHY RESISTANCE 20 OHMS

RESISTIVITY | Depths | RESISTIVITY

OHM METERS | OHM METERS

0 — 5000 | 0 — 1000 — 2000 | 6500 — 11500 — 16500

160

112

KIDHO LEVEL 113 METERS

120

130

140

150

160

170

180

190

195 FR

10A ZERO

CAL 20 OHM RANGE 50-20/div

REC ZERO

CAL ZERO

AO ZERO

CAL 80 OHM RANGE 100 OHM/div

REC ZERO

CAL ZERO

ROKE

OIL DEVELOPMENTS LTD.
CALGARY, ALBERTA

WELL NO. 10-10-78-10-W5M
FIELD
LOCATION: 10-10-78-10-W5M
COUNTY OR DISTRICT: GRANDE PRAIRIE
PROVINCE: ALBERTA
OTHER SERVICES: BHC, FDC, CNL, DIL, SONIC, GR, CBL
PERMANENT DATUM: GROUND LEVEL
ELEV.: K.B. 2,191 ft.
D.F.
G.L. 2,178 ft.
LOG MEASURED FROM: K.B. 13 ft. ABOVE PERM. DATUM
DRILLING MEASURED FROM: K.B.
DATE: 1-2-79
RUN NO.: ONE
DEPTH-DRILLER: 5,345
DEPTH-LOGGER: 5,345
BTM. LOG INTERVAL: 5,338
TOP LOG INTERVAL: 4,700
CASING-DRILLER: 9 5/8" @ 1,200
CASING-LOGGER: 1,200
BIT SIZE: 8 3/4"
TYPE FLUID IN HOLE: GEL CHEM
DENSITY: 9.7
VISCOSITY: 40
PH: 10.5
FLUID LOSS: 6.4
SOURCE OF SAMPLE: CIRC.
RM @ MEAS. TEMP.: .95 @ 70°F
RMF @ MEAS. TEMP.: .75 @ 70°F
RMC @ MEAS. TEMP.: .95 @ 70°F
SOURCE: RMF & RMC: MEASURED
RM @ BHT: .45 @ 140°F
TIME SINCE CIRC.: 6 HRS.
MAX. REC. TEMP.: 140°F
EQUIP. NO. & LOCATION: 5345 GP
RECORDED BY: D. GIBSON
WITNESSED BY: MR. MOORE

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL SERIAL NO.		TOOL CODE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATOR	DETECTOR MODEL NO.	
SPACING	10 FEET	TYPE	PROPORTIONAL
DISTANCE TO Ra SOURCE	5 1/2 IN.	SPACING	10 FEET
		SOURCE MODEL NO.	BRC-N-50-C
GENERAL		DISTANCE	24
ASSIST TRUCK NO.	30	STRENGTH	2.5 MC
INSTRUMENT TRUCK NO.	30	TYPE	Amilo
TOOL SERIAL NO.	110-305	STRENGTH	2.5Ci/Be

LOGGING DATA

GAMMA RAY							NEUTRON				
RUN	CASING	SPEED F/M	TIME SEC.	ZERO API & N. UNITS	T.C. SEC.	GAIN	ZERO	API & UNITS			
ONE	9 5/8 @ 1,200	1,800	3	100	0	14	3	500	3 S	130	
	111	1,800	3	100	0	14	3	500	3 S	130	
	111	181.5	6	106	0	14	3	500	3 S	130	

REMARKS

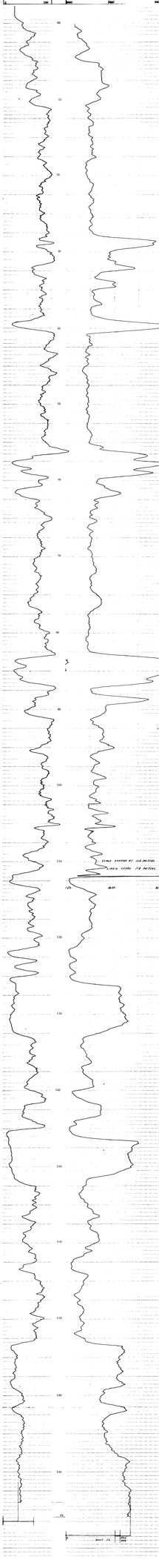
GAMMA RAY | NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API 0 — 100 — 200

API 6000 — 6500 — 6600



Pr. Monkman 79(3)a

ROKE

GAMMA RAY NEUTRON LOG

MDH 79-10

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE W M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL MDH 79 - 10
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: DIR, GRN, DENS-CAL, FBL

Permanent Datum GROUND LEVEL Elev.
Log Measured from GROUND LEVEL Above Perm. Datum
Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

METRIC

Run. No.	ONE
Date	4 APR 1979
First Reading	177.9 M
Last Reading	0
Footage Logged	177.9
Depth Reached	178.35
Depth Driller	178.43
Casing Roke	5.0
Casing Driller	
Fluid Type	DRY
Liquid Level	
Min. Diam.	15.24 CM
Rm @	
Operating Time	1 HOUR
Truck No.	36
Recorded By	CARLSON
Witnessed By	W. PROUDLOCK

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M /MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	177.9	4	3	100	0	12	3	500	1 L	170

REMARKS LOGGED THROUGH RODS - NO WATER

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12		NEUTRON INCREASES → API 170
0 120		170 1870 5270

ROKE OIL EXPLORATION LTD.

SHERWOOD 2E-10-5

WELL NAME AND NUMBER: SHERWOOD 2E-10-5

FIELD: WILDCAT

POOL: WILDCAT

LOCATION: 1980' FSL & 660' FWL

SEC. 10 TWP. 5N RGE. 2E W. MERIDIAN

ELEVATION: GROUND 1,000 ft. K.B. 1,010 ft.

DATE: 1-JUNE-1990

PERMANENT DATUM: MEAN SEA LEVEL

LOG MEASURED FROM: K.B. 10 ft. ABOVE PERM. DATUM

DRILLING MEASURED FROM: K.B.

CASING RECORD: SURFACE 9 5/8" @ 1,000 ft. | PRODUCTION 7" @ 7,000 ft.

DRILLING FLUID: TYPE GEL-CHEM | DENSITY 9.2 ppg | VISCOSITY 45 sec/qt | PH 9.5 | FLUID LOSS 4.0 cc/30 min | SOURCE MUD PIT

RM @ MEAS. TEMP. 0.95 @ 60 °F | RMF @ MEAS. TEMP. 0.76 @ 60 °F | RMC @ MEAS. TEMP. 1.20 @ 60 °F

RM @ BHT 0.45 @ 120 °F | TIME CIRC. 12 hrs | TIME SINCE CIRC. 24 hrs | MAX. REC. TEMP. 120 °F

EQUIP. LOCATION: 2E-10-5 | RECORDED BY: R. MCINTOSH | WITNESSED BY: J. MCKAY

RUN NO. 1 | DATE 1-JUNE-1990 | DEPTH-DRILLER 7,000 ft. | DEPTH-LOGGER 7,000 ft. | BTM. LOG INTERVAL 6,998 ft. | TOP LOG INTERVAL 1,000 ft. | CASING-DRILLER 9 5/8" @ 1,000 ft. | CASING-LOGGER 1,000 ft. | BIT SIZE 8 1/2 in. | TYPE FLUID IN HOLE GEL-CHEM | DENSITY 9.2 ppg | VISCOSITY 45 sec/qt | PH 9.5 | FLUID LOSS 4.0 cc/30 min | SOURCE OF SAMPLE MUD PIT | RM @ MEAS. TEMP. 0.95 @ 60 °F | RMF @ MEAS. TEMP. 0.76 @ 60 °F | RMC @ MEAS. TEMP. 1.20 @ 60 °F | SOURCE OF RMF & RMC MEASURED | RM @ BHT 0.45 @ 120 °F | TIME CIRC. 12 hrs | TIME SINCE CIRC. 24 hrs | MAX. REC. TEMP. 120 °F | EQUIP. LOCATION 2E-10-5 | RECORDED BY R. MCINTOSH | WITNESSED BY J. MCKAY

545

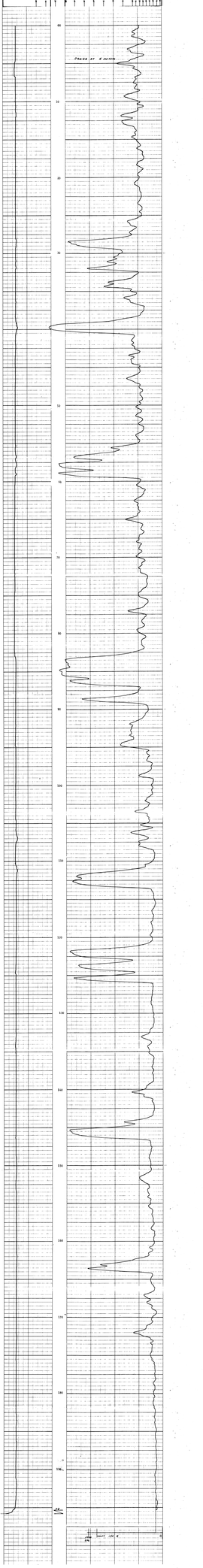
RUN NO.	PASS NO.	TOP LOG INTERVAL	BOTTOM LOG INTERVAL	OPEN HOLE BIT SIZE	TYPE FLUID IN HOLE	DENSITY	VISCOSITY	PH	FLUID LOSS	SOURCE OF SAMPLE	RM @ MEAS. TEMP.	RMF @ MEAS. TEMP.	RMC @ MEAS. TEMP.	SOURCE OF RMF & RMC	RM @ BHT	TIME CIRC.	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION	RECORDED BY	WITNESSED BY
1	0	1,000 ft.	7,000 ft.	8 1/2 in.	GEL-CHEM	9.2 ppg	45 sec/qt	9.5	4.0 cc/30 min	MUD PIT	0.95 @ 60 °F	0.76 @ 60 °F	1.20 @ 60 °F	MEAS.	0.45 @ 120 °F	12 hrs	24 hrs	120 °F	2E-10-5	R. MCINTOSH	J. MCKAY
1	1	1,000 ft.	7,000 ft.																		

REMARKS: 1000' SSW @ 045

ONE TOOL @ 30°

Scale(s)	CALIPER DIAMETER — CENTIMETERS	GAMMA RAY API	BULK DENSITY GRAMS/CC
5" = 100'	6 — 16	0 — 150	1.95 — 2.95

FRAME AT 5 METERS



MDH 79-11

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD / SEC / TWP / RGE / W M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT.)
WELL	MDH 79 - 11
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL
Log Measured from	GROUND LEVEL
Well Depths Measured from	GROUND LEVEL
Elev. K.B. / CSG / G.L.	METRIC

Run. No.	ONE
Date	9 APR 1979
First Reading	234.6 M
Last Reading	47.5
Footage Logged	187.1
Depth Reached	235.5
Depth Driller	236.07
Casing Roke	6.0
Casing Driller	
Fluid Type	WATER
Liquid Level	47.50
Min. Diam.	15.24 CM
Rm @ °C	40.0 @ 25
Operating Time	45 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	W. PROUDLOCK

545

Remarks: FBL # 5, 7 ELECTRODE SONDE, 20 CM BEAM, 1 METER ARRAY
STD RANGE
MUDFISH RESISTANCE - 15 OHMS

RESISTIVITY OHM METERS	Depths	RESISTIVITY OHM METERS
0 — 5000		0 — 1000 — 2000 / 6500 — 11500 — 16500

Pr. Monkman 79(3)A

MDH 79-11

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA NEUTRON LOG

FILE NO.	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 11
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	GROUND LEVEL Above Perm. Datum
Well Depths Measured from	GROUND LEVEL
Other Services:	DENS-CAL, FEL, DIR
K.B. / CSG / G.L.	METRIC

Run. No.	ONE
Date	9 APR 1979
First Reading	235.30 M
Last Reading	0
Footage Logged	235.30
Depth Reached	235.75
Depth Driller	236.07
Casing Roke	6.0
Casing Driller	
Fluid Type	WATER
Liquid Level	47.50
Min. Diam.	15.24 CM
Rm @	
Operating Time	1½ HOURS
Truck No.	36
Recorded By	CARLSON
Witnessed By	W. PROUDLOCK

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	GAMMA RAY T.C. SEC.	GAMMA RAY SENS SETTINGS	GAMMA RAY ZERO DIV. L OR R	GAMMA RAY API G. R. UNITS PER LOG DIV.	NEUTRON T.C. SEC.	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV. L OR R	NEUTRON API N. UNITS PER LOG DIV.
1	0	47.0	4	3	100	0	18	3	1000	8 L	300
	47.0	235.30	4	3	100	0	18	3	500	1 L	150

REMARKS

ROKE

SCHLUMBERGER

575

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	
LOG MEASURED FROM	
DRILLING MEASURED FROM	
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.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN	CASING			BOREHOLE RECORD			TUBING
	SIZE	WGT.	FROM	TO	BIT SIZE	FROM	TO

REMARKS

RUN	BOREHOLE RECORD			TUBING
	BIT SIZE	FROM	TO	SIZE

REMARKS

CALIPER
(Inches)

GAMMA RAY
API

BULK DENSITY
(g/cm3)

PR- MONKMAN 79(3)A

MDH 79-12

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD / SEC / TWP / RGE / W M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 12
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	NONE
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	DRILL TABLE 1.22 Above Perm. Datum
Well Depths Measured from	DRILL TABLE
K.B. / CSG / G.L.	METRIC

Run. No.	ONE
Date	11 APR 1979
First Reading	231.80 M
Last Reading	0
Footage Logged	231.80
Depth Reached	231.80
Depth Driller	231.80
Casing Roke	6.10
Casing Driller	
Fluid Type	WATER - OUTSIDE RODS
Liquid Level	60
Min. Diam.	13.34 CM
Rm @	
Operating Time	1½ HOURS
Truck No.	36
Recorded By	CARLSON
Witnessed By	SMITH

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	31	4	3	100	0	12	3	500	1 L	170
	31	47	4	3	100	0	12	3	500	8 L	170
	47	231.8	4	3	100	0	12	3	500	1 L	170

REMARKS LOGGED THROUGH RODS - DUE TO WATER BEHIND RODS, NEUTRON DOES NOT RESPOND AS NORMAL IN A DRY HOLE

ROKE
MADE IN ENGLAND

MECH 19 5

545

ROKE

GAMMA RAY - NEUTRON LOG

MDH-1761-E3

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
SEC.	TWP.
RGE.	
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	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF	RMC
RM @ BHT	
TIME CIRC.	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

EQUIPMENT DATA			
GAMMA RAY		NEUTRON	
RUN NO.	106	RUN NO.	106
TOOL MODEL NO.		TOOL MODEL NO.	NEUTRON-FORMATION
SONDE NO.	22 SB	SONDE NO.	22 SB
DETECTOR TOOL NO.		DETECTOR TOOL NO.	
CTM	SCINTILLATION	CTM	PROPORTIONAL
SPACING	3.07 M	SPACING	3.07 M
DISTANCE TO A SOURCE		DISTANCE TO A SOURCE	3.07 M
		MATRIX No.	520 SB
		ENGINE	520 SB
		STANDOFF	4 INCHES
		STANDOFF	4 INCHES

LOGGING DATA															
GAMMA RAY									NEUTRON						
RUN	DETECTOR	SPACING	FILTER	SPEED	SENSITIVITY	TIME CONSTANT	LOG INTERVAL		RUN	DETECTOR	SPACING	SPEED	SENSITIVITY	TIME CONSTANT	LOG INTERVAL
NO.	TYPE						FROM	TO	NO.	TYPE					FROM TO
1	SB	22	0	30	0	10	0	1	1	SB	22	30	0	10	0 1
2	SB	22	0	30	0	10	1	500	2	SB	22	30	0	10	1 500
3	SB	22	0	30	0	10	500	1000	3	SB	22	30	0	10	500 1000

REMARKS:

GAMMA RAY

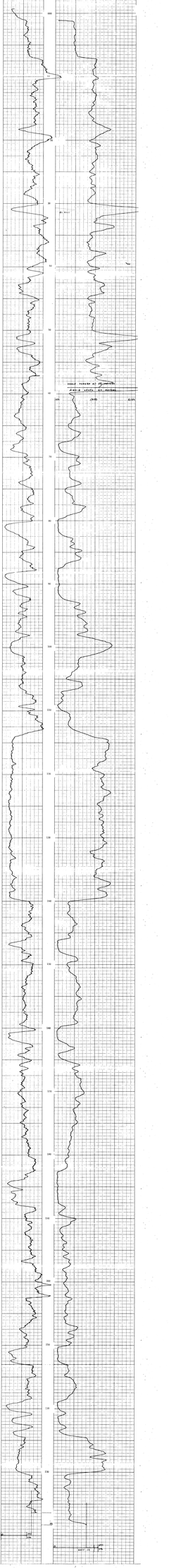
NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

0 150

1200 600 700



PR-Monkman 79(3)A

MDH 79-13

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 13
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W___M	
Other Services:	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG TABLE 1.22M Above Perm. Datum
Well Depths Measured from	RIG TABLE
K.B. / CSG / G.L.	METRIC

Run. No.	ONE			
Date	17 APR 1979			
First Reading	235.30 M			
Last Reading	0			
Footage Logged	235.30			
Depth Reached	236.20			
Depth Driller	238.51			
Casing Roke	7.50			
Casing Driller				
Fluid Type	WATER			
Liquid Level	60			
Min. Diam.	15.24 CM			
Operating Time	1 HOUR 20 MINS			
Truck No.	36		545	
Recorded By	CARLSON	Witnessed By	SMITH	

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	235.3	4					3	1000	1.75 R	64.56
	0	238.0		CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 587

Pr - Minman - 79(3)a

MDH 79-14

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE
W.M.

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT.)

WELL MDH 79 - 14

LOCATION MINGMAN PASS PROJECT

FIELD DEASE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev.

Log Measured from TOP OF CASING 38 CM Above Perm. Datum

Well Depths Measured from TOP OF CASING

Other Services: GRN, DENS-CAL, DIS

K.B.
C.S.G.
G.L.

METRIC

Run No.	ONE
Date	6 APR 1979
First Reading	50.3 M
Last Reading	11.30
Footage Logged	51.20
Depth Reached	51.85
Depth Driller	6.0
Casing Bottom	
Casing Size	
Fluid Type	WATER
Liquid Level	38.0
Max. Temp.	15.24 CM
Min. Diam.	
Rm @ °C	30.77 @ 25
Operating Time	20 MIN
Truck No.	36

Recorded By CARLSON

Witnessed By PROULACK

545

Remarks FBL # 5 7 ELECTRODE SONDE, 20 CM BEAM, 1 METER ARRAY
STD RANGE

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 5000		0 1000 2000
		6500 11500 16500

CASING AT 6.00 METERS

LIQUID LEVEL 38 METERS

LOG ZERO

CAL ON 200 RANGE
500 OHM/DIV

REC ZERO

CAL ZERO

LOG ZERO

CAL ON 100 RANGE
100 OHM/DIV

REC ZERO

CAL ZERO

ROKE

GAMMA RAY NEUTRON LOG

FILE NO.

LSD / SEC / TWP / RGE / W ____ M

COMPANY: PACIFIC PETROLEUMS LTD. (KELSEY DEPT.)

WELL: MDH 79 - 14

LOCATION: MONKMAN PASS PROJECT

FIELD: DOEE MOUNTAIN

PROVINCE: BRITISH COLUMBIA

OTHER SERVICES: BHC-GR-CAL/FDL-DTA

Permanent Datum: GROUND LEVEL — Elev.

Log Measured from: 300 CM CASING — 38 CM Above Perm. Datum

Drill Depths Measured from: TOP OF CASING — G.L. ____ CSG. ____

RECORDED BY: GARLSON

WITNESSED BY: M. PRUDHOMME

Run. No.	ONE
Date	6 APR 1979
First Reading	50.80 M
Last Reading	0 M
Feet/cm Logged	50.80
Depth Reached	51.82
Top Log Int.	51.82
Casing Driller	51.0
Casing Logger	51.0
Bit	15.24 CM
Fluid Type	
Fluid Level	
Max. Rec. Temp.	
Equipment No.	
Location	
Recorded By	GARLSON
Witnessed By	M. PRUDHOMME
Run No.	0
Depth-Driller	37.5
Depth-Logger	37.5
Bottom Log Int.	37.5
Top Log Int.	0
Open Hole Size	15.24 CM
Type Fluid in Hole	MUD
Density	1.1
Viscosity	38
pH	10.5
Fluid Loss	15 CC
Source of Sample	MUD PIT
Rm @ Meas. Temp.	0.2 @ 20 °C
Rmf @ Meas. Temp.	0.2 @ 20 °C
Rmc @ Meas. Temp.	0.2 @ 20 °C
Source of Rmf & Rmc	MEASURED
Rm @ BHT	0.2 @ 20 °C
Time Since Circ.	30 MIN
Max. Rec. Temp.	20 °C
Equip. Location	36
Recorded By	GARLSON
Witnessed By	M. PRUDHOMME

545

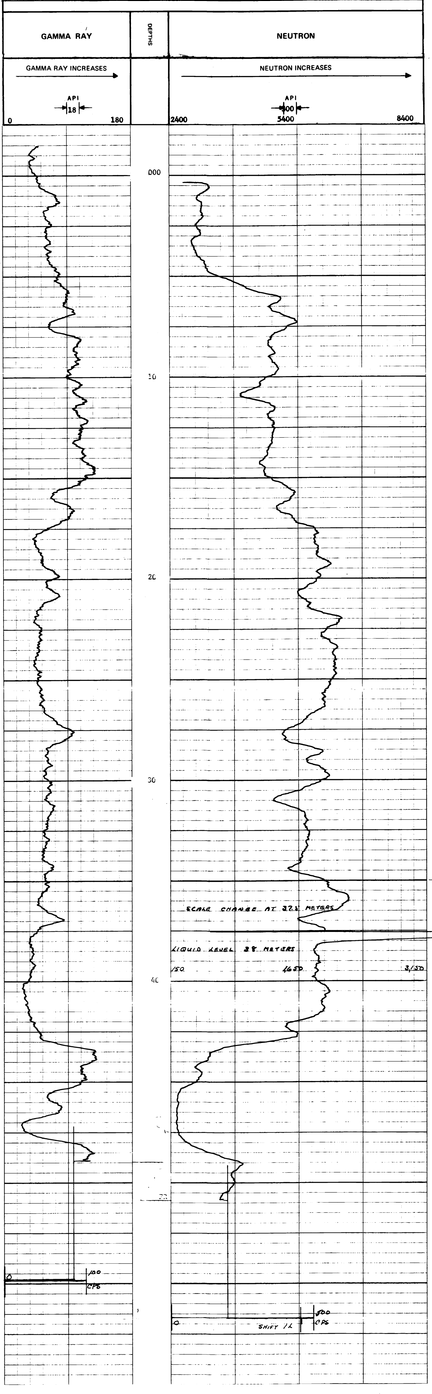
EQUIPMENT DATA

GAMMA RAY	ONE	NEUTRON	ONE
RUN NO.		RUN NO.	
TOOL MODEL NO.		TOOL TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	37.5	4	3	100	0	18	3	1000	8 L	300
	37.5	50.8	4	3	100	0	18	3	500	1 L	150

REMARKS



MDH 79-14

MDH 79-14

ROKE

SIDEWALL DENSILOG
CALIPER

FILE NO.

COMPANY: PACIFIC PETROLEUMS LTD. (OPERATING AGENT)
OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL: MDH 79 - 14

LOCATION: MONAGHAN BASE PROJECT

FIELD: DUKE MOUNTAIN

PROVINCE: BRITISH COLUMBIA

Other Services: CBHV, FDL, DIFL

Permanent Datum: GROUND LEVEL
Log Measured from: TOP OF CASING, 30 CM Above Perm. Datum
Rev. Depths Measured from: TOP OF CASING

Elev.: K.B. / D.F. / G.L.

METRIC

Run No.	ONE
Date	6 APR 1979
Last Reading	50.30 M
Bit Size	15.24
Feet/Hour Logged	50.30
Depth Driller	51.80
Depth Reached	51.80
Max. Rec. Temp.	6.0
Casing Driller	
Casing Logger	
Bottom Hole Temp.	10°C 10°C
Fluid Type	WATER
Fluid Density	1.0
Fluid Viscosity	1.0
Fluid Loss	12.2A
Source of Sample	
Rm @ Meas. Temp.	
Rmf @ Meas. Temp.	
Rmc @ Meas. Temp.	
Source of Rmf & Rmc	
Rm @ BHT	
Time Since Circ.	
Max. Rec. Temp.	
Equip. Location	
Recorded By	CARLSON
Witnessed By	M. FRONTBLACK

Operating Time: 30 MIN
Truck No.: 38

545

GENERAL				GAMMA RAY			SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV'L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV'L OR R	CPS/DIV
1	0	50.30	4					3	1000	1.75 R	64.56
	0	50.80			CALIPER						

REMARKS: DENS TOOL # 420
CAL TOOL # 587

DEPTHS

CALIPER
DIAMETER – CENTIMETERS
10 15 20 25 30 35

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

CASING AT 6.00 METRES

FR.

LAND 1.15 R EMPTY
CPS

Pre-Monument 79/3A MDH 79-15

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)

LSD SEC TWP RGE W M

WELL MDH 79 - 15

LOCATION MONUMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev.

Log Measured from TOP OF CASING 38 CM Above Perm. Datum

Well Depths Measured from TOP OF CASING

K.B.

C.S.G.

G.L.

Other Services: DENS-CAL, DIR

METRIC

Run. No.	ONE
Date	7 APR 1979
First Reading	35.40 M
Last Reading	0
Footage Logged	35.40
Depth Reached	35.85
Depth Driller	35.60
Casing Rdrs.	20.0
Casing Driller	
Fluid Type	WATER
Liquid Level	34.50
Max. Diam.	15.24 CM
Rm @	
Operating Time	½ HOUR
Truck No.	36

Recorded By CARLSON

Witnessed By W. REPOTLOCK

545

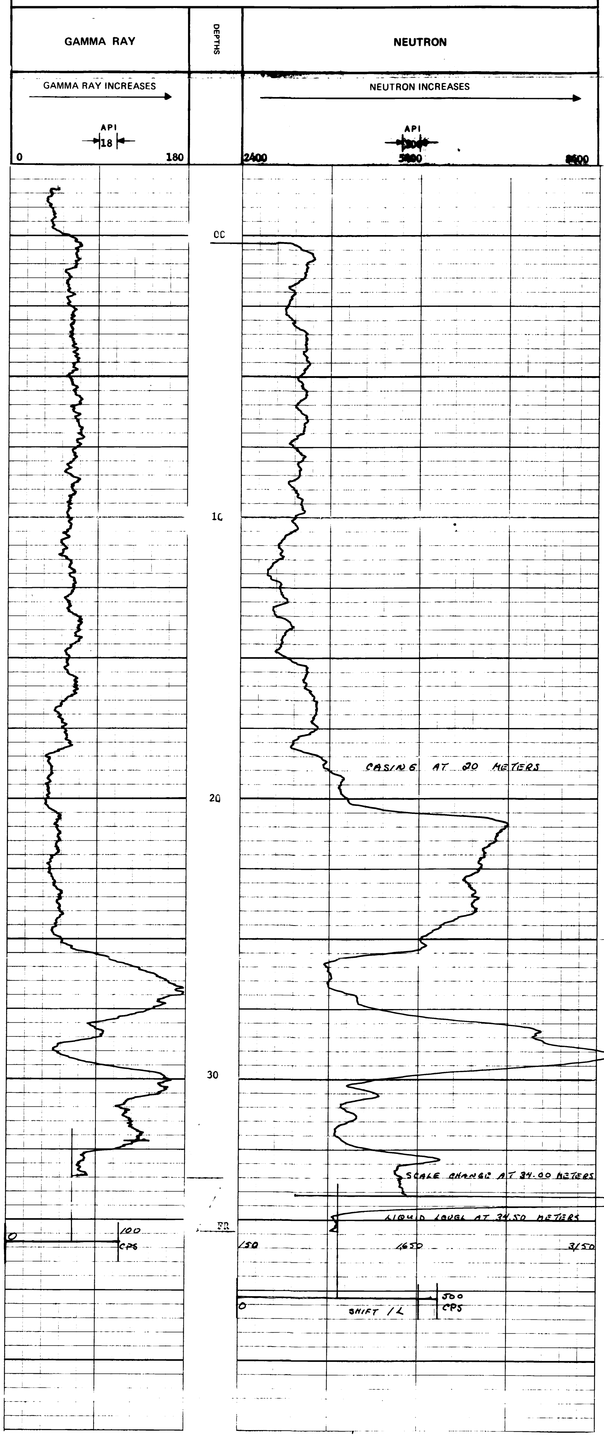
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV
1	0	34.0	4	3	100	0	18	3	1000	8 L	300
	34.0	35.40	4	3	100	0	18	3	500	1 L	150

REMARKS



MDH 79-15

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG
CALIPER

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (KEYING DEPT)

WELL MDH 79 - 15

LOCATION MONUMAN MASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: GRN, DIR

Permanent Datum: GROUND LEVEL Elev. 0 m

Log Measured from: K.B. 3.0 m Above Perm. Datum

Depths Measured from: TOP OF CASING: 38 GM

TOP OF CASING: G.L.

METRIC

Run No. ONE

Date 7 APR 1979

Time 34.80 M

First Reading 0

Last Reading 34.80

Footage Logged 34.80

Depth Reached 35.70

Depth Driller 35.65

Casing Rate 20.00

Casing Driller

Fluid Type WATER

Liquid Level 34.50

Max. Diam. 15.24 CM

Min. Diam.

Operating Time 30 MIN

Truck No. 36

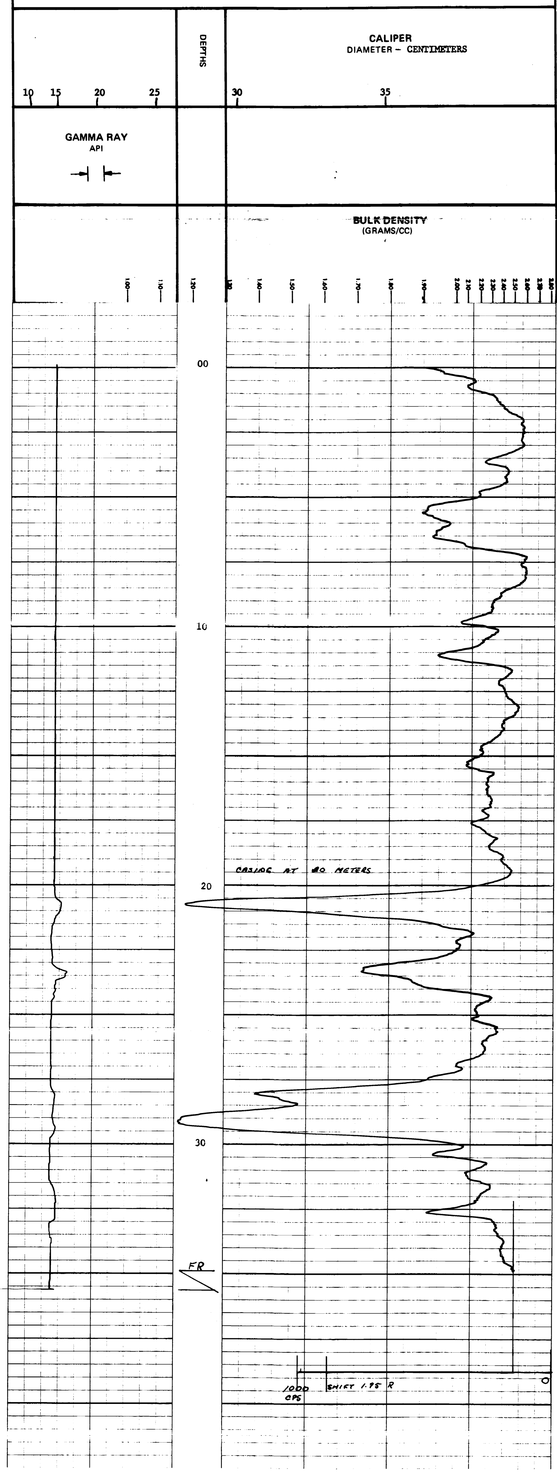
Recorded By CARLSON

Witnessed By K. PROTOLACK

545

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	34.80	4					3	1000	1.75 R	64.56
	0	35.40		CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 585



MDH 79-16

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

RECEIVED BEAM LOG

FILE NO

SEC TWP RGE M

COMPANY PACIFIC PETROLEUMS LTD. (OPERATOR 100%)

WELL HBM 75 - 16

LOCATION WESTROCK RIVER TRIBUTARY

FIELD DEEP MOUNTAINS

PROVINCE BRITISH COLUMBIA

Other Services

Run No.	ONE		
Date No.	8 DEC 1975		
First Reading	3107.4 M		
Last Reading	91.4		
Feet Logged	3016		
Depth Reached	3016		
Casing Size	10.0		
Depth Driller			
Depth Logger			
Bottom Logged Interval			
Type Fluid in Hole	WATER		
Salinity, PPM Cl			
Density			
Level	FULL		
Max. Temp. Recorded	31.5 @ 0D		
Time at Bottom	31:13:2 25		
Operating Time			
Truck No.			
Recorded By	M. DERR		
Witnessed By	J. PROVENCH		

SERVICE

Remarks

FEL # 5. 20 OM BEAM. 7 ELECTRODE SONDE. 1 METER ARRAY
STD CURRENT RANGE
NEUTRON RESISTANCE - 5 OHME

RESISTIVITY

OHM METERS

0 5000

Depths

RESISTIVITY

OHM METERS

0 1000 2000

4500 11500 14500

LIONIC CHART NO 1101245

00 10 20 30 40 50 60 70 80 90 100

FR

LOG ZERO

CAL 0.02 200 RANGE
200 IN/DIV

REC ZERO

CAL ZERO

LOG ZERO

CAL 0.01 100 RANGE
100 IN/DIV

REC ZERO

CAL ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (OPERG. DEPT.)

WELL

LOCATION NW 25 - 14 - W5

LSD

SEC

TWP

RGE

M

FIELD BIRCH MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services

DENSILOG (PSL-GR)

Permanent Datum GROUND LEVEL Elev. 0

Log Measured From KB Ft. Above Perm. Datum

Drilling Measured From KB

Date 3-NOV-79

Run No. ONE

Depth Driller 1000

Depth Logger 1000

Bottom Logged Interval 997.74

Top Logged Interval 100.13

Casing Size 139.7 @ 100.7

Casing Type

Casing Wgt. & Grade 20.0

Fluid Type WATER

Fluid Level FULL

Max. Rec. Temp. 15.56 DEG C

Equip. No.

Operating Time

Truck No. 36

Recorded By K. PROVENCHER

Witnessed By M. MACDONALD

545

MDH 79-16

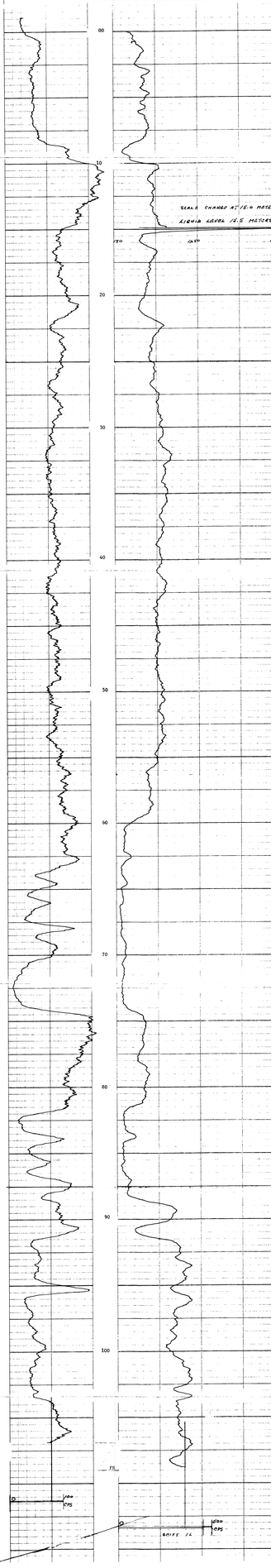
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC N 65-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	5 CURIE EQ

LOGGING DATA

RUN NO.	GENERAL DEPTHS FROM	TO	SPEED M/MIN	T.C. SEC	GAMMA RAY SENS SETTINGS	ZERO DIV. L. OR R	API G. R. UNITS PER 1 DIV	NEUTRON T.C. SEC.	SENS SETTINGS	ZERO DIV. L. OR R	API N. UNITS PER 1 DIV
1	0	12.0	4	3	100	0	18	3	1000	R 1	100
	12.0	108.7	4	3	100	0	18	3	500	L 1	150

REMARKS



MDH 79-16

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W

COMPANY PACIFIC PETROLEUMS LTD. (OPERATOR)
WELL DOE 79 - 15
LOCATION NORMAN BAND PROJECT
FIELD DOE NORMAN

PROVINCE BRITISH COLUMBIA
COUNTY PEACE RIVER

Other Services
CBL VDL GR

Permanent Datum
Log Measured From
Drilling Measured From

Rig No. 1
Date 7-JAN-80
Run No. ONE
Depth-Driller 6 420
Depth-Logger 6 419 M
Btm. Log Interval 6 420
Top Log Interval 0
Casing-Driller 508 @ 80
Casing-Logger 508 @ 80
Bit Size 200
Type Fluid in Hole WATER
Dens. Visc. 1.0 54
pH Fluid Loss 14.5
Source of Sample CIRC.
Rm @ Meas. Temp. 15.56 @ 4°C
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf & Rmc
Rm @ BHT
Time Since Circ. 3 HOURS
Max. Rec. Temp. Deg. C 54
Equip. No. & Location 1309 PRG. 525
Recorded By C. PROVENCHER
Witnessed By A. MACDONALD

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN.	T.C. SEC.	SENS SETTINGS	ZERO DIVS. OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIVS. OR R	CPS/ DIV
1	0	107.90	4					3	1000	1.75 R	66.56
	0	108.50			CALIPER						

REMARKS
DENS TOOL # 420
CAL TOOL # 387

CALIPER
DIAMETER - CENTIMETRES
10 15 20 25 DEPTH 30 35

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)
1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0

00
10
20
30
40
50
60
70
80
90
100
110

END OF RUN

END OF LOG

BHT - SITE 2

Re-processed (3)a

MDH 79-17

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LOC. SEC TWP RGE W. M

COMPANY PACIFIC PETROLEUMS LTD. (NORTHERN DEPT.)

WELL MDH 79 - 17

LOCATION MONTANA MASS PROJECT

FIELD DOKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev. Perm. Datum

Log Measured from: GROUND LEVEL — Above Perm. Datum

Drilling Measured from: GROUND LEVEL — Elev.

Other Services: DUAL INDUCTION-GAMMA RAY

RUN: ONE

DATE: 9 APR 1979

DEPTH: Driller 59.9 M, Logger 59.9 M

CASING: Driller 21.5 M, Logger 21.5 M

BIT: Size 15.24 CM, From 21.5 M, To 59.9 M

TYPE FLUID IN HOLE: WATER

DENSITY: 1.0

LEVEL: FULL

SOURCE OF SAMPLE:

RM @ MEAS. TEMP: 40.0 @ 25 °C

RMF @ MEAS. TEMP:

RMC @ MEAS. TEMP:

SOURCE OF RMF: RMC:

RM @ BHT: 40.0 @ 25 °C

TIME CIRC.: 20 HRS

TIME SINCE CIRC.: 36

MAX. REC. TEMP.: 40.0 @ 25 °C

EQUIP. LOCATION: 9 AVR 1979

RECORDED BY: GARLSON

WITNESSED BY: M. PROVOSOR

NOTES:

545

Remarks: FM1 @ 5 7 ELECTRODE SONDE 20 CM BEAM 1 METER ARRAY
STD RANGE
MUDFISH RESISTANCE - 10 OHMS

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 5000		0 1000 2000
		6500 11500 16500

LIQUID LEVEL 20.40

CASING AT 21.50 METERS

LOG ZERO

CAL 0.0 200 RANGE
200 OHM/DIV

REC ZERO

CAL ZERO

LOG ZERO

CAL 0.0 100 RANGE
100 OHM/DIV

REC ZERO

CAL ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (OPERATING DEPT.)

WELL MBR 79 - 17

LOCATION MERRYMAN BASS PROJECT

FIELD DOVE SECONDARY

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev. K.B. / D.F. / G.L.

Log Measured from: GROUND LEVEL — 9 Feet Above Perm. Datum

Well Depths Measured from: GROUND LEVEL

Other Services

LSD SEC RGE W M

Run No. ONE

Date 9 APR 1979

Last Reading 59.6 M

Footage Logged 59.6

Depth Reached 60.05

Bottom Logged 60.05

Casing Rules 21.5

Casing Driller

Casing Logged

Liquid Type WATER

Liquid Level 20.50

Max. Temp. 15.24 CH

Min. Chem.

Rm @

Operator's Time

Truck No. 36

Recorded By GARLSON

Witnessed By W. PROCHUCK

545

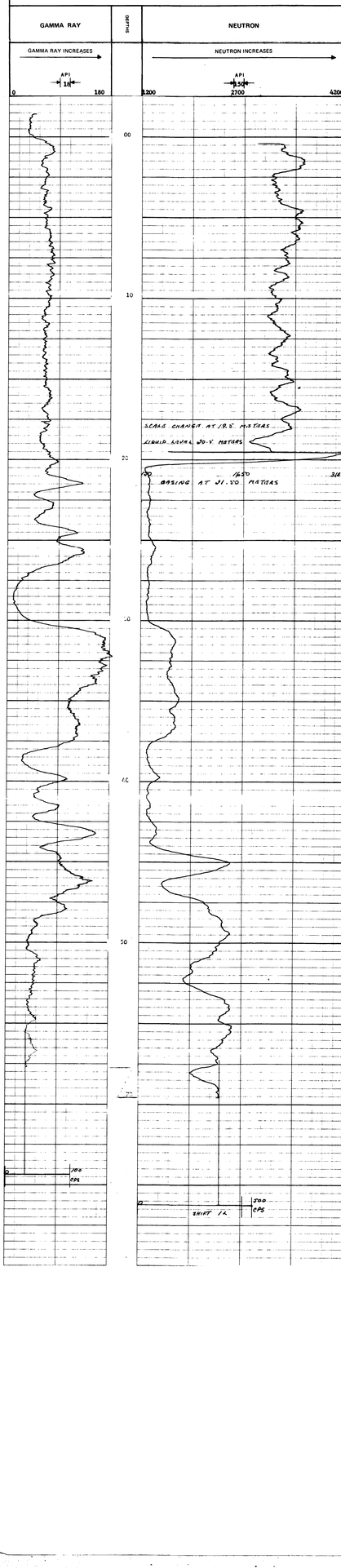
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY					NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN.	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	19.5	4	3	100	0	18	3	500	8 L	150
	19.5	59.6	4	3	100	0	18	3	500	1 L	150

REMARKS



MDH 79-17

MDH 79-17

ROKE

SIDEWALL DENSLOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY BASTED DEVELOPERS LTD. (ONGOING DEEP)

WELL MDH 79 - 17

LOCATION MORMAN BARS PROJECT

FIELD DOKE MORMAN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL

Log Measured From GROUND LEVEL

Drilling Measured From GROUND LEVEL

Elev.: K.B. — D.F. — G.L. —

Other Services: CBHR, FDL, DIR.

LSD SEC TWP RGE W M

FILE NO.

Date 9 APR 1979

Run No. ONE

First Reading 58.90 M

Last Reading 0

Feet Measured

Feet Logged 58.90

Depth Reached 59.80

Depth Driller 61.0

Casing Driller 21.35

Casing Logger

Fluid Type WATER

Density / Viscosity 25 / 50

Level FULL

Max. Temp. 13.26 CM

Operating Time

Truck No. 36

1 HOUR

Recorded By GARLSON

Witnessed By M. PRENTOCOK

545

GENERAL				GAMMA RAY				SIDEWALL DENSLOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/DIV
1	0	58.90	4					3	1000	1.75 R	64.56
	0	59.90			CALIPER						

REMARKS DENS TOOL # 420
CAL TOOL # 587

DEPTHS

CALIPER
DIAMETER – CENTIMETERS
10 15 20 25 30 35

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

00
10
20
30
40
50

CASING AT 21.50 METRES

ADD 2.54 GM/CC

BASE LINE 1.75 R

MDH 792

ROKE

PROCESSED FROM DOE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LSD SEC TWP RGE M

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (OPERATING DEPT.)

WELL HDR - 71 - 2

FIELD

LOCATION HORDMAN CREEK PROJECT

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL
Log Measured from: KELLY BUSHING
Drilling Measured from: GROUND LEVEL

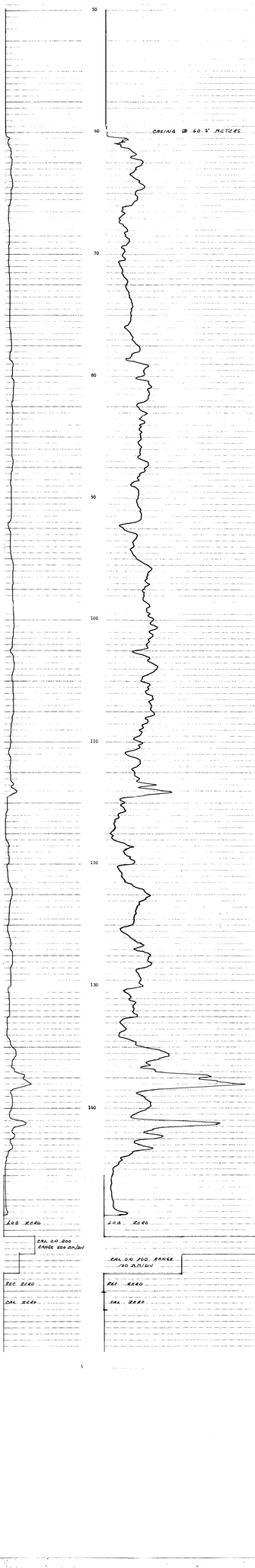
Other Services
CBH, ISBH-DAL, DIFF

Run No. ONE
Depth Driller 1700
Depth Logger 1699
Bottom Logged Interval 1695
Top Logged Interval 60.5
Casing Driller 244 @ 24
Casing Logger 60.5
Bit Size 134.11
Type Fluid in Hole WATER
Density / Viscosity
pH / Fluid Loss
Source of Sample
Rm @ °C 34.82 @ 22
Rmf @ °C
Source of Rmf / Rmc
Rm @ BHT
Time Since Circ. 40 HRS
Time Logger on Bottom 36
Maximum Recorded Temp.
Equipment Number
Location
Recorded By BOUCHARD
Witnessed By

545

Remarks: RUN # 5. 7 ELECTRODE SONDE. 20 CM SPAN 1 METER ARRAY
MUDFISH RESISTANCE - 25 OHMS

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 5000		0 1000 2000
		6500 11500 16500



ROKE OIL

ROKE OILS (1958) LTD. — CALGARY, ALBERTA

WELL NO. 13-3-8 — FIELD — LOCATION: SW/4 SEC. 3 TWP. 32 RGE. 28 W4M — COMPANY: ROKE OILS (1958) LTD. CALGARY, ALBERTA

Elevations: Perm. Datum: G.L. 1,111.32 ft. | K.B. 1,121.32 ft. | D.F. | Log Measured From: K.B. 10.00 ft. above Perm. Datum | Drilling Measured From: K.B.

Run No.	One	Two	Three
Date	3-3-65	3-3-65	
Depth-Driller	3,615 ft.	3,615 ft.	
Depth-Logger	3,615 ft.	3,615 ft.	
Bottom Logged Interval	3,615 ft.	3,615 ft.	
Top Logged Interval	1,100 ft.	1,100 ft.	
Type Fluid in Hole	Gel Chem	Gel Chem	
Salinity, P.P.M. Cl	1,500	1,500	
Density	9.2	9.2	
Level	Full	Full	
Max. Rec. Temp. Deg. F.	90	90	
Operating Rig Time	3 HRS.	3 HRS.	
Recorded By	J. SIMS	J. SIMS	
Witnessed By	MR. JOHNSON	MR. JOHNSON	

Run No. ONE & TWO — Type Log: NEUTRON/NEUTRON — Depth-Driller: 3,615 ft. — Depth-Logger: 3,615 ft. — Bottom Logged Interval: 3,615 ft. — Top Logged Interval: 1,100 ft. — Type Fluid in Hole: Gel Chem — Salinity, P.P.M. Cl: 1,500 — Density: 9.2 — Level: Full — Max. Rec. Temp. Deg. F.: 90 — Operating Rig Time: 3 HRS. — Recorded By: J. SIMS — Witnessed By: MR. JOHNSON

Elevations: Perm. Datum: G.L. 1,111.32 ft. | K.B. 1,121.32 ft. | D.F. | Log Measured From: K.B. 10.00 ft. above Perm. Datum | Drilling Measured From: K.B.

MEM 742

545

EQUIPMENT DATA

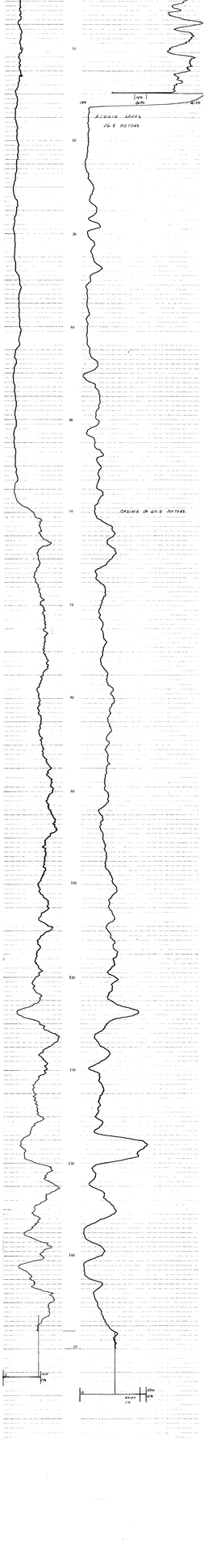
GAMMA RAY		NEUTRON	
RUN NO.	ONE & TWO	RUN NO.	ONE & TWO
TOOL MODEL NO.		LOG TYPE / MEAS. TYPE	NEUTRON/NEUTRON
SCINTILLOMETER		TOOL MODEL NO.	
DETECTOR MODEL NO.	32 MM	DETECTOR MODEL NO.	32 MM
TYPE	SCINTILLATION	TYPE	PROPORTIONAL
LENGTH	500 MM	LENGTH	521 MM
DISTANCE TO Ra SOURCE	2.07 M	SOURCE MODEL NO.	MRC-N-20-M
GENERAL		SERIAL NO.	521 MM
MINUT TRACK NO.	26	SPACING	
INSTRUMENT TRUCK NO.	20	OPERATOR	Amble
TOOL SERIAL NO.	122 001	WITNESS	J. CHEESE

LOGGING DATA

RUN	GAMMA RAY LOGGING SPEED		T.C.	SENS.	GAMMA RAY SPC. & UNITS		T.C.	SENS.	NEUTRON SPEED	API & UNITS	
NO.	FROM	TO	SEC.	SETTING	PER 1,000 CPS	PER 100 CPS	SEC.	SETTING	PER 1,000 CPS	PER 100 CPS	
1	0	10.5	4	2	100	0	10	3	300	4 L	130
	10.5	126.0	4	3	100	0	10	2	300	1 L	130
2	126.0	130.0	4	3	100	0	10	3	300	1 L	130

REMARKS: 4 SPM START DATA — ALL DATA RECORDED ON THIS PAPER AUTOMATICALLY TO 1/4

TIME SCALE: 1 INCH = 1 MINUTE



ROKE

SIDETRACKED

OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL NO. 14-2

COMPANY ROCKY MOUNTAIN DRILL RIGS (1975) LTD.

WELL 14-2

FIELD

LOCATION NW 14-2 W

COUNTY OR DISTRICT

PROVINCE OR STATE

Permanent Datum	GROUND LEVEL
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elevation	K.B. 1
	D.F.
	G.L.

Date	1-3-80
Run No.	ONE
Depth—Driller	150
Depth—Logger	150
Bottom Logged Interval	150
Top Logged Interval	SURFACE
Type Fluid in Hole	WATER
Salinity, PPM Cl	
Density	
Level	FULL
Max. Rec. Temp. Deg. F.	
Operating Rig Time	
Recorded By	D. SCHMIDT
Witnessed By	

Run No.	ONE
Type Log	GAMMA RAY
Depth—Driller	150
Depth—Logger	150
Bottom Logged Interval	150
Top Logged Interval	SURFACE
Type Fluid in Hole	WATER
Salinity, PPM Cl	
Density	
Level	FULL
Max. Rec. Temp. Deg. F.	
Operating Rig Time	
Recorded By	D. SCHMIDT
Witnessed By	

BOREHOLE RECORD

BIT NO.	FROM	TO
1	0	150

CASING RECORD

SIZE	WGT.	GRADE	FROM	TO
4 1/2	9.5	J-55	0	150

TUBING RECORD

SIZE	WGT.	GRADE	FROM	TO

REMARKS

Rig Time	
Source of Sample	
Rm @ Meas. Temp.	
Rmf @ Meas. Temp.	
Rmc @ Meas. Temp.	
Source of Rmf & Rmc	
Rm @ BHT	
Time Since Circ.	
Max. Rec. Temp. Deg. F.	
Equip. Location	
Recorded By	
Witnessed By	

GENERAL

RUN NO.	LOGGED FROM	LOGGED TO	SPEED FT/MIN	T.C. SET?	ZERO SETTINGS	CAL. SET?	API G.R. UNITS PER 100 DIV.	T.C. SET?	SPAN SETTINGS	ZERO SETTINGS	CAL. SET?
1	0	150.0	30	YES				YES	1000	2.42	YES
	0	149.8									

GAMMA RAY

RUN NO.	SCALE SETTINGS	API G.R. UNITS PER 100 DIV.

OVERALL CALIBRATION

RUN NO.	SPAN SETTINGS	ZERO SETTINGS	CAL. SET?
1	1000	2.42	YES

REMARKS

2820 TOOL # 427
CAL TOOL # 387

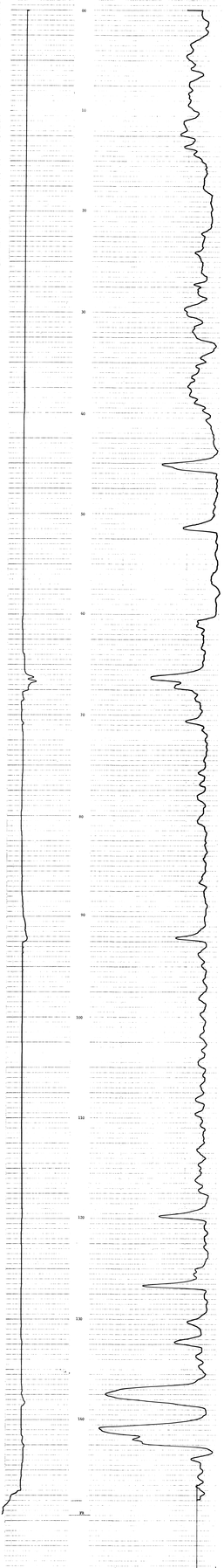
1969 P.S. - LOGGED 123.90 TO SURFACE
1969 P.S. - LOGGED 150.0 TO 0
1969 P.S. - LOGGED 149.8 TO 98.0

SCALES

CALIPER
DIAMETER — CENTIMETERS

GAMMA RAY
API

BULK DENSITY
GRAMS/CC



MDH 79-20

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA — PIONEER 8000-500

FILE NO. 345

COMPANY: PACIFIC PETROLEUMS LTD. (OPERATOR)

WELL: 8B-17-20

FIELD: BIRCH MOUNTAIN

LOCATION: BIRCH MOUNTAIN FIELDS

PROVINCE: NORTHWEST TERRITORIES

DRILLING FLUID: GEL CHEM

Type Surface: 8 3/4 SHALE

Type Bottom: 8 3/4 SHALE

Elevations: K.B. 1,000 ft. G.L. 1,000 ft.

Permanent Datum: MEAN SEA LEVEL

Log Measured From: K.B. 10 ft. Above Perm. Datum

Drilling Measured From: K.B.

Run No.	ONE
Date	24 JULY 79
Depth-Driller	11,500 ft.
Depth-Logger	11,501 ft.
Bottom Logged Interval	11,501 ft.
Top Logged Interval	10,500 ft.
Casing-Driller	9 5/8 @ 10,500 ft.
Casing-Logger	10,500 ft.
Bit Size	8 3/4 in.
Type Fluid in Hole	GEL CHEM
Density	10.0 LB/GAL
Viscosity	50 SEC
pH	10.5
Fluid Loss	10.0 CC
Source of Sample	CIRC.
Rm @ Meas. Temp.	0.90 @ 70 °F
Rmf @ Meas. Temp.	0.70 @ 70 °F
Rmc @ Meas. Temp.	1.20 @ 70 °F
Source: Rmf / Rmc	MEAS. / MEAS.
Rm @ BHT	0.45 @ 170 °F
Time Since Circ.	24 HRS
Max. Rec. Temp.	170 °F
Equip. Location	8B-17-20
Recorded By	GARRISON
Witnessed By	SMITH

345

Remarks: FIG. # 3 — 3 ELECTRODE SONDE — 20 OHM RSAT — 1 METER ARRAY

FIG RANGE

MUDFISH RESISTANCE = 3 OHMS

RESISTIVITY — OHM METERS — 0 — 1000 — 2000

Depth — RESISTIVITY — OHM METERS — 1500 — 11500 — 16500

00 10 20 30 40 50 60 70 80 90 100 110 120 130

LIQUID LEVEL 10,510 METERS

FR

LOG READ

CAL READ

SEC READ

CAL

SEC

Dir. Monkman 79(3)9

MDH 79-20

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W ____ M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 20
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	DENS-CAL, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG TABLE 1.22 M above Perm. Datum
Well Depths Measured from	RIG TABLE
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE		
Date	12 APR 1979		
First Reading	134.50 M		
Last Reading	0		
Footage Logged	134.50		
Depth Reached	134.95		
Depth Driller	135.12		
Casing Roke	6.0		
Casing Driller			
Fluid Type	WATER		
Liquid Level	23.50		
Min. Diam.	15.24 CM		
Rm @			
Operating Time	1 HOUR	545	
Truck No.	36		

Recorded By CARLSON | Witnessed By SMITH

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	23.0	4	3	100	0	18	3	1000	8 L	300
	23.0	134.50	4	3	100	0	18	3	500	1 L	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18		NEUTRON INCREASES → API 300
0 — 180		2400 — 5400 — 8400

MDH 79-20

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTREPRENEURS LTD. CALGARY, ALBERTA

Co. File No.	125
API No.	
Permit No.	
Well	MOBIL ET AL 10-25-69-5
Field	BEAR MEADOW
Location	
Sec. 25 Twp. 69 Rge. 5 W. 6 M.	
Province	ALBERTA
Other Services	
Permanent Datum	GROUND LEVEL Elev. 1,799 ft.
Log Measured From	K.B. 10 ft. Above Perm. Datum
Drilling Measured From	K.B.
Date	31-10-79
Run No.	ONE
Depth-Driller	11,105 ft.
Depth-Logger	11,103.80 ft.
Bottom Logged Interval	11,103.5 ft.
Top Logged Interval	1,799.50 ft.
Casing-Driller	13 3/8 @ 1,799.50 ft.
Casing-Logger	1,796.50 ft.
Bit Size	12 1/4 in.
Type Fluid in Hole	GEL CHEM
Density	10.0 lb/gal
Viscosity	38 sec
Fluid Loss	8.0 cc
Source of Sample	FLOWLINE
Rm @ Meas. Temp.	0.70 @ 70 °F
Rmf @ Meas. Temp.	0.55 @ 70 °F
Rmc @ Meas. Temp.	1.00 @ 70 °F
Source of Rmf & Rmc	MEASURED
Rm @ BHT	0.35 @ 170 °F
Time Since Circ.	12 HRS
Time on Bottom	1 HR
Max. Rec. Temp.	170 °F
Equip. No. & Location	5745
Recorded By	D. BRADLEY
Witnessed By	MR. BRUCE

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3 3/8 in	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	3 3/8 in
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	5.00 in	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 in	LENGTH	1.52 in
GENERAL		SOURCE MODEL NO.	MRC-N-55 M
SERIAL NO.		SERIAL NO.	256
MONIT TRUCK NO.	36	STRENGTH	4.50 MC
INSTRUMENT TRUCK NO.	36	TYPE	Amilo
TOOL SERIAL NO.	103 003	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	FROM	TO	GAMMA RAY SPEED IN/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.	API G. R. UNITS PER 1 DIV.	T.C. SEC.	NEUTRON SENS SETTINGS	ZERO DIV.	API N. UNITS PER 1 DIV.
1	0	133.50	6	1	100	0	12	1	500	1	170

REMARKS: LOGGED THROUGH DRILL ROME

GAMMA RAY

GAMMA RAY INCREASES

API 0 120

NEUTRON

NEUTRON INCREASES

API 170 2570

00

10

20

30

40

50

60

70

80

90

100

110

120

130

SHOT @

FT

SHOT @

FT

MDH 79-20

ROKE

SIDEWALL GEOLOGS

FILE NO.	
COMPANY	ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA
WELL	ROKE ET AL DEVIL'S HEAD 13-27-32-26
FIELD	WILDCAT
COUNTY, PARISH	PROVINCE SASKATCHEWAN
LOCATION	13-27-32-26 W3M
SEC. TWP. RGE.	27 32 26 W3
PERMANENT DATUM	GROUND LEVEL
ELEV.	K.B. 1,543.0 ft.
LOG MEASURED FROM	K.B. 7.0 ft. ABOVE PERM. DATUM
DRILLING MEASURED FROM	K.B.
DATE	12-MAR-79
RUN NO.	ONE
TYPE LOG	SIDEWALL CORE GEOLOGS
DEPTH-DRILLER	1,550.0 ft.
DEPTH-LOGGER	1,550.0 ft.
BTM. LOG INTERVAL	1,550.0 ft.
TOP LOG INTERVAL	133.7 ft.
CASING-DRILLER	244.5 mm @ 133.7 ft.
CASING-LOGGER	244.5 mm @ 133.7 ft.
BIT SIZE	222.2 mm
TYPE FLUID IN HOLE	GEL CHEM
DENSITY	1.15 kg/m³
VISCOSITY	50 s
PH	10.5
FLUID LOSS	6.0 cc
SOURCE OF SAMPLE	MUD PIT
RM @ MEAS. TEMP.	0.33 @ 20 °C
RMF @ MEAS. TEMP.	0.33 @ 20 °C
RMC @ MEAS. TEMP.	0.33 @ 20 °C
SOURCE RMF & RMC	MEASURED
RM @ BHT	0.33 @ 20 °C
TIME SINCE CIRC.	3 HRS
MAX. REC. TEMP.	20 °C
EQUIP. LOCATION	5545
RECORDED BY	M. THIESSEN
WITNESSED BY	

Permanent Datum: GROUND LEVEL — Elev.: 1,543.0 ft.
Log Measured From: K.B. 7.0 ft. Above Perm. Datum
Drilling Measured From: K.B.

GENERAL				GAMMA RAY			SIDEWALL SAMPLES			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN	T.C. SEC.	SENS SETTING	PETD DIV'S	API G.R. UNITS PER DIV'S	T.C. SEC.	SENS SETTING	PETD DIV'S
1	0	133.7	6					1	1000	1.15
	0	136.50		CALIPER						

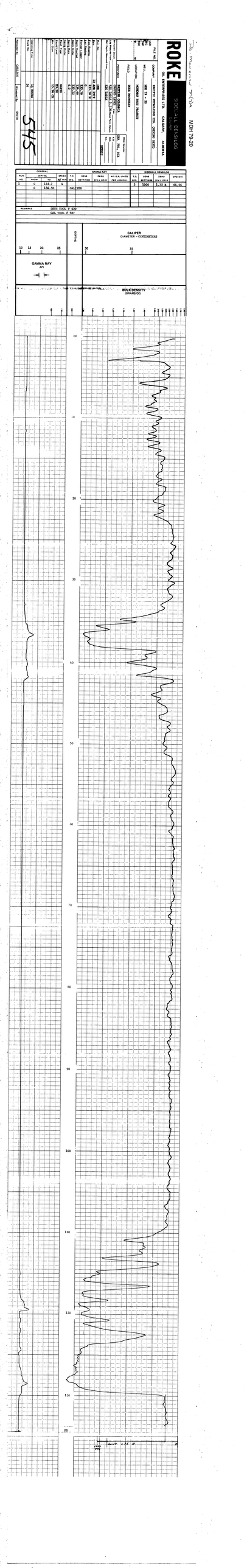
RUN NO.	SIDEWALL SAMPLES		
	DEPTH DIV'S	CPM DIV'S	
1	1.15	66.56	

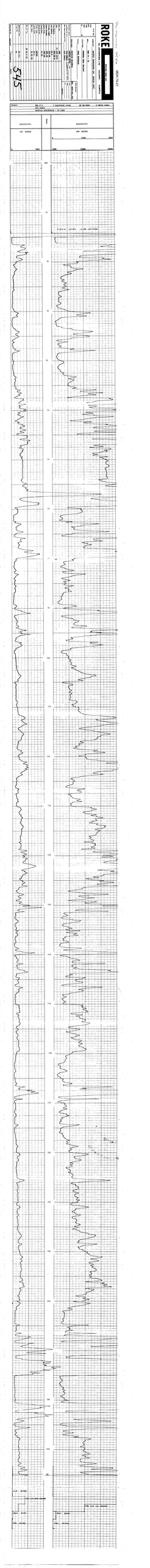
REMARKS
SENS TOOL # 420
CAL TOOL # 587

CALIPER
DIAMETER - CENTIMETERS

GAMMA RAY
API

BULK DENSITY
GRAM/CC





Dr. Monkman 79(3)a

MDH 79-21

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 21
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W___M	
Other Services:	DENS-CAL, FBI, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG TABLE 1.22M Above Perm. Datum
Well Depths Measured from	RIG TABLE
K.B. / CSG / G.L.	METRIC

Run. No.	ONE
Date	17 APR 1979
First Reading	266.0 M
Last Reading	0
Footage Logged	266.0
Depth Reached	266.45
Depth Driller	266.88
Casing Roke	14.50
Casing Driller	
Fluid Type	WATER
Liquid Level	16.0
Min. Diam.	15.24 CM
Rm @	
Operating Time	1½ HRS
Truck No.	36
Recorded By	CARLSON
Witnessed By	SMITH

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	207 MM	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	15.5	4	3	100	0	18	3	1000	5 L	300
	15.5	266.0	4	3	100	0	18	3	500	1 L	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18		NEUTRON INCREASES → API 300
0 — 180		1500 — 4500 — 7500

Pr-Monkman 79(3)a

MDH 79-21

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W______M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL MDH 79 - 21
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: DIR GRN, DENS-CAL, FBL

Permanent Datum GROUND LEVEL Elev. ____
Log Measured from RIG TABLE 1.5 M Above Perm. Datum
Well Depths Measured from RIG TABLE

K.B. ____
CSG ____
G.L. ____

METRIC

Run. No.	ONE
Date	15 APR 1979
First Reading	243.10 M
Last Reading	0
Footage Logged	243.10
Depth Reached	243.55
Depth Driller	244.0
Casing Roke	13.0
Casing Driller	
Fluid Type	DRY HOLE
Liquid Level	
Min. Diam.	15.24 CM
Rm @	
Operating Time	1 HOUR
Truck No.	36

Recorded By CARLSON Witnessed By SMITH

545

EQUIPMENT DATA

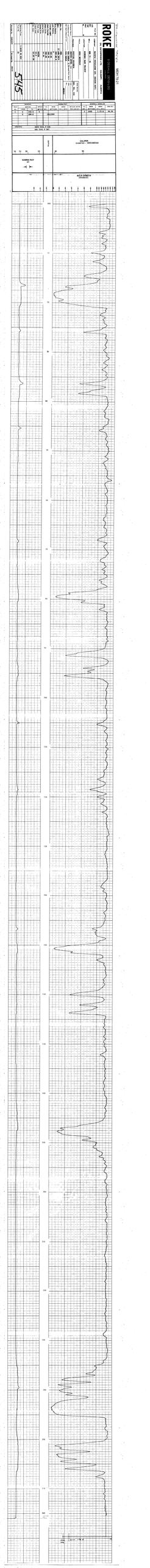
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

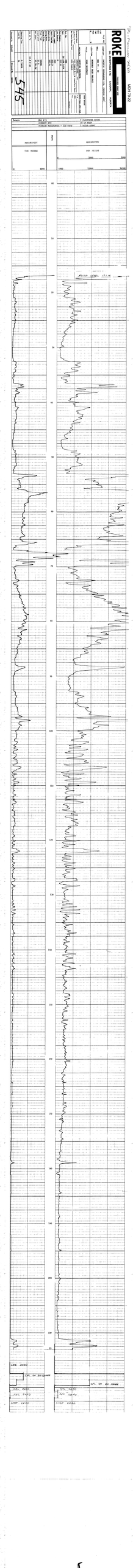
LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	243.1	4	3	100	0	12	3	500	1 L	170

REMARKS LOGGED THROUGH RODS - WATER ON OUTSIDE OF RODS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12 (0 – 120)		NEUTRON INCREASES → API 170 (170 – 1870 – 3570)


ROKE
5715


ROKE
Schlumberger
RKCH 22-02
545
Remarks
DEL # 2
CASING DRILLER
CASING RECORDER - SEE SIDE
1 CASING SIDE
2 HOLE SIDE
AS023572273
FAR RESIS
AS023572273
NEAR RESIS
FLUID LEVEL 17.5 ft
CPL OR SS ZONE
CPL OR SS ZONE

ROKE

OIL & GAS EXPLORATION & PRODUCTION

CASING & TUBING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
13 3/8	54.5	K-55	SURF	1,000
9 5/8	36	K-55	SURF	5,000
7	23	K-55	SURF	10,000

COMPANY	ROKE OIL & GAS EXPLORATION LTD.
WELL	545
FIELD	WILDCAT
COUNTY, PARISH OR MUNICIPALITY	CALGARY
PROVINCE, STATE OR COUNTRY	ALBERTA
LOCATION	10-36-1W5
OTHER SERVICES	
PERMANENT DATUM	GROUND LEVEL
ELEVATION	3,000 FT
LOG MEASURED FROM	KELLY BUSHING
DRILLING MEASURED FROM	KELLY BUSHING
DATE	MARCH 29, 22
RUN NO.	ONE
DEPTH-DRILLER	10,000
DEPTH-LOGGER	9,997
BTM. LOG INTERVAL	9,995
TOP LOG INTERVAL	1,000
CASING-DRILLER	9 5/8 @ 5,000
CASING-LOGGER	9 5/8 @ 5,000
BIT SIZE	8 1/2
TYPE FLUID IN HOLE	GEL CHEM
DENSITY	10.2
VISCOSITY	45
PH	9.5
FLUID LOSS	6.2
SOURCE OF SAMPLE	CIRC
RM @ MEAS. TEMP.	0.42 @ 70
RMF @ MEAS. TEMP.	0.37 @ 70
RMC @ MEAS. TEMP.	0.52 @ 70
SOURCE: RMF	RMC
RM @ BHT	0.22 @ 180
TIME SINCE CIRC.	12 HRS
MAX. REC. TEMP.	180
EQUIP. LOCATION	10-36-1W5
RECORDED BY	J. DOE
WITNESSED BY	MR. SMITH

MCH-29-22

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
LOG NO.		LOG NO.	NEUTRON/NEUTRON
SOURCE	30 MC	COIL MODEL NO.	
DETECTOR MODEL NO.		SOURCE	30 MC
TYPE	SCINTILLATOR	DETECTOR MODEL NO.	
LENGTH	120 MM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	0.82 M	LENGTH	172 MM
		SOURCE MODEL NO.	MNC-1 010 M
GENERAL		SERIAL NO.	234
MUDCAKE THICK. NO.	36	DISTANCE	0.82 M
MUDCAKE/CAKE NO.	36	FLUID	FLUID 172 MM
LOG SERIAL NO.	122 001	SPACINGS	3 CM/M

LOGGING DATA

GENERAL						GAMMA RAY				NEUTRON			
RUN	LOGGED	SPEED	T.C.	SENS.		SENS.	DIR. & VERT.	T.C.	SENS.		SENS.		
NO.	FROM TO	M/MIN	SEC.	SETTING		REV. / API	REV. / API	SEC.	SETTING		REV. / K. CPS		
ONE	1,000 9,995	9	1	100		1.5		1	300		1.5		

REMARKS: LOGGED PUMPING MUD & WATER ON OUTSIDE OF HOLE

LOGGED TO DEAD CRUDE FROM 151 TO 159 M

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API UNITS

100

SCALE

API UNITS

1000

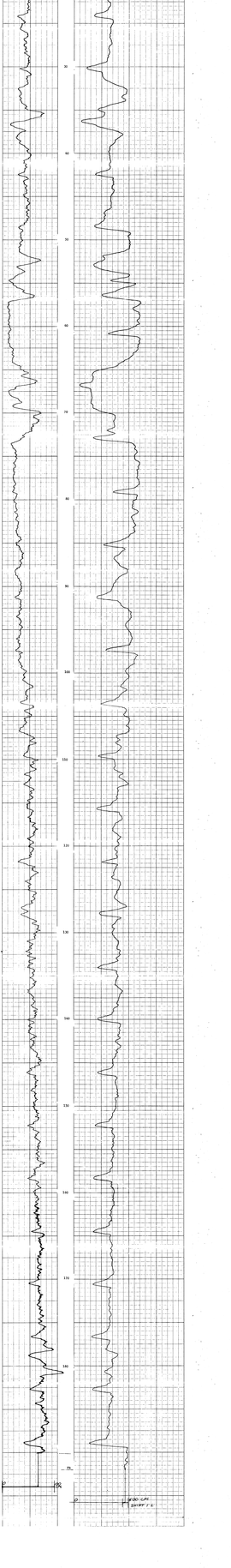
1

100

SCALE

1

1000



HEAD CAR
DEPTH 7.2

Pa-Monkman 79(3)a

ROKE

GAMMA RAY NEUTRON LOG

MDH 79-22

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 22
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG TABLE 1.1 M Above Perm. Datum
Well Depths Measured from	RIG TABLE
Other Services:	DIR, DENS-CAL, GRN, FBL
K.B. / CSG / G.L.	METRIC
Run. No.	ONE
Date	20 APR 1979
First Reading	213 M
Last Reading	0
Footage Logged	213
Depth Reached	213.3
Depth Driller	213.4
Casing Roke	6
Casing Driller	6.1
Fluid Type	WATER
Liquid Level	17.1
Min. Diam.	15.24 CM
Rm @	
Operating Time	1.3 HOUR
Truck No.	36
Recorded By	FURANZ
Witnessed By	SMITH

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	16.5	4	3	100	0	18	3	1000	8 L	300
	16.5	213.0	4	3	100	0	18	3	500	1 L	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18; 0 – 180		NEUTRON INCREASES → API 300; 2400 – 5400 – 8400

Pr-Monkman 79(3)a

MDH 79-22

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG CALIPER

FILE NO.
LSD
SEC
TWP
RGE
W_____M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL MDH 79 - 22
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: GRN, FBL, DIR

Permanent Datum GROUND LEVEL Elev. K.B.
Log Measured from RIG TABLE 1.1 M Above Perm. Datum CSG
Well Depths Measured from RIG TABLE G.L.

METRIC

Run. No.	ONE
Date	20 APR 1979
First Reading	212.5 M
Last Reading	0
Footage Logged	212.5
Depth Reached	213.3
Depth Driller	213.4
Casing Roke	6.1
Casing Driller	
Fluid Type	WATER
Liquid Level	17.1
Min. Diam.	15.24 CM
Operating Time	1.7 HOURS
Truck No.	36

Recorded By PUBANZ Witnessed By SMITH

545

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/ MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	212.5	4					3	1000	1.75 R	64.56
	0	212.5	10	CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 587

CALIPER
DIAMETER – CENTIMETERS
10 15 20 25 DEPTHS 30 35

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)
1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80

Dr. Monkman 79(3)a

MDH 79-23

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W___M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 23
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	DENS-CAL, GRN, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	GROUND LEVEL Above Perm. Datum
Well Depths Measured from	GROUND LEVEL
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE		
Date	26 APR 1979		
First Reading	191 M		
Last Reading	0		
Footage Logged	191		
Depth Reached	191.8		
Depth Driller	201.2		
Casing Roke	20.3		
Casing Driller			
Fluid Type	WATER		
Liquid Level	7.2		
Min. Diam.	13 CM		
Rm @ °C	28.6 @ 25		
Operating Time	0.8 HOUR		
Truck No.	36		
Recorded By	PUBANZ	Witnessed By	PROUDLOCK

545

Remarks		
	FBL #5	7 ELECTRODE SONDE
	CURRENT - STD	20 CM BEAM
	MUDFISH RESISTANCE 300 OHMS	1 METER ARRAY

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
		0 — 1000 — 2000
0 — 5000		6500 — 11500 — 16500

MDH 79-23

ROKE OIL & ENTERPRISES LTD.

CANADA TUNGSTEN MINING CORP. LTD.

COMPANY	ROKE OIL & ENTERPRISES LTD.
WELL	CANADA TUNGSTEN MINING CORP. LTD.
FIELD	WILDCAT
COUNTY	PROVINCE
LOCATION	OTHER SERVICES
SEC. TWP. RGE.	
PERMANENT DATUM	ELEV.
LOG MEASURED FROM	ELEV. K.B.
DRILLING MEASURED FROM	ELEV. D.F.
DATE	ELEV. G.L.
RUN NO.	
TYPE LOG	
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 RMC	
RM @ BHT	
TIME CIRC. ORDERED	
TIME LOGGER ON BOTTOM	
MAX. REC. TEMP.	
EQUIP. NO. LOCATION	
RECORDED BY	
WITNESSED BY	

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
LOG. MEAS. NO.		LOG. MEAS. NO.	NEUTRON/NEUTRON
SOURCE STRENGTH	20 MC	SOURCE	20 MC
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	5.25" M	LENGTH	PROPORTIONAL
DISTANCE TO SOURCE	5.25" M	SOURCE MODEL NO.	4.25 MC
		SPACING	MRC 9.25 M
GENERAL		SERIAL NO.	236
MEAS. CABLE NO.	26	TYPE	4.25 MC
MECHANICAL CABLE NO.	26	CAL.	PURE SAND
CABL. SERIAL NO.	120 503	ATTENUATE	2 010220

LOGGING DATA

RUN NO.	GENERAL INTERVAL FROM	TO	SPEED F/M	T.C. TIME CONST.	GAMMA RAY SCALE SETTINGS BOTTOM	TOP	SENS.	NEUTRON SCALE SETTINGS BOTTOM	TOP	SENS.
ONE	0	545	5	3	000	0	10	7800	3600	100

REMARKS:

GAMMA RAY — NEUTRON

GAMMA RAY INCREASES → 0 AT 0 — 100

NEUTRON INCREASES → 7800 AT 7800 — 3600

SCALE CHANGE AT 6M.

HEAD FLOAT ABOVE 2.0M

100 CPS

800 CPS
OFFSET 1C

Pr-Monkman 79(3)a

MDH 79-23

ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE
W ___ M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)

WELL MDH 79 - 23

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: GRN, FBL, DIR

Permanent Datum GROUND LEVEL Elev.

Log Measured from GROUND LEVEL Above Perm. Datum

Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

METRIC

Run. No.	ONE
Date	26 APR 1979
First Reading	191 M
Last Reading	0
Footage Logged	191
Depth Reached	192
Depth Driller	201.2
Casing Roke	20.3
Casing Driller	
Fluid Type	WATER
Liquid Level	7.2
Min. Diam.	13 CM
Operating Time	1.5 HOUR
Truck No.	101
Recorded By	PURANZ
Witnessed By	PROUDLOCK

545

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	191	4					3	1000	1.75 R	64.56
	0	191	10	CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 587

GAMMA RAY
API

DEPTHS

CALIPER
DIAMETER – CENTIMETERS

BULK DENSITY
(GRAMS/CC)

ROKE

Company: ARKLA EXPLORATION COMPANY
Well: MACH 1-24
Field: WILDCAT
County: LINCOLN
State: OKLAHOMA

Elev.: K.B. 1015
D.F.
G.L. 1005

Date: 10-10-82
Run No.: ONE
Depth-Driller: 7500
Depth-Logger: 7500
Bottom Logged Interval: 7500
Top Logged Interval: 1000
Type Fluid in Hole: SALT GEL
Salinity, PPM Cl: 5000
Density: 9.2
Level: FULL
Max. Rec. Temp. °F: 170
Operating Rig Time: 12 HRS
Recorded By: D. MOSS
Witnessed By: MR. BOB

	Run No.	Bit From	Bit To	Size	Type	Amount
Casing Record						
Borehole Record	ONE	SURF.	7500	7 7/8		

	Type	Amount	Source	R_m @ Meas. Temp.	R_mf @ Meas. Temp.	R_mc @ Meas. Temp.
Mud Data	GEL			.75 @ 70	.56 @ 70	1.0 @ 70

Rm @ BHT: .39 @ 170

Equipment Numbers: 5345 / 5345 / 5345

Remarks: RAN # 2 ; 2 ELECTRODE SONDE
RAN # 1 ; 6 FOOT ARRAY
CASING DISCREPANCY - TD LOGGER - 7500 ; 8 FOOT ARRAY

RESISTIVITY
400 OHMS

RESISTIVITY
0 1000 2000

POROSITY
60 0 -15

FLUID LEVEL 11'

1000
2000
3000
4000
5000
6000
7000
7500

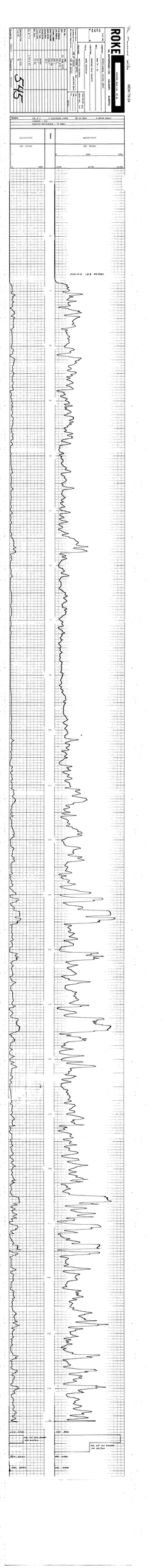
LOG ZERO
CAL IN 400 OHMS
CAL ZERO
REC ZERO

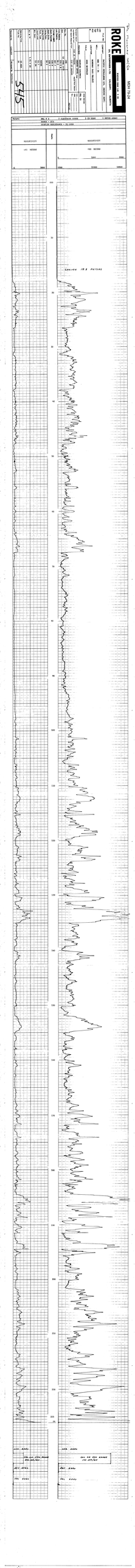
LOG ZERO
CAL IN 400 OHMS
CAL ZERO
REC ZERO

ROKE

NORTH SEA

545




ROKE
ROKE OIL EXPLORATION LIMITED
NORTH SEA
545
SCALED IES PRINT

Pa - Monkman 79(3)A

MDH 79-24

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W	M
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 24
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	FBL, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING Above Perm. Datum
Well Depths Measured from	TOP OF CASING
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE
Date	28 APR 1979
First Reading	227 M
Last Reading	0
Footage Logged	227
Depth Reached	227.5
Depth Driller	228.7
Casing Roke	18.3
Casing Driller	18.3
Fluid Type	WATER
Liquid Level	15.6
Min. Diam.	15.24 CM
Rm @	
Operating Time	1.2 HOUR
Truck No.	36
Recorded By	PUBANZ
Witnessed By	W. PROUDLOCK

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M /MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	15	4	3	100	0	18	3	1000	8 L	300
	15	227	4	3	100	0	18	3	500	1 L	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 18; 0 – 180		API 300; 2400 – 5400 – 8400

THIS PRINT IS THE PROPERTY OF ROKE OIL, INC. AND IS LOANED SUBJECT TO RETURN UPON REQUEST

MCH 79-24

ROKE

OIL, INC.

WELL NO. 1 — FARM

COUNTY — STATE — MONTGOMERY CO., MISSOURI — KANSAS

LOCATION — 1980' FSL & 1980' FWL

SEC. 34 — TWP. 31 N. — RGE. 18 W.

ELEVATION — DERRICK FLOOR 1000' — GROUND 997'

DRILLING MEASURED FROM — DERRICK FLOOR

DATE — 1-17-79

TOTAL DEPTH — 1-18-79

PBTD — 1-18-79

PRODUCING INTERVAL — 1-18-79

ELECTRICAL SURVEY — 1-18-79

DRILLING TIME — 1-18-79

SAMPLES — 1-18-79

CASING RECORD

SIZE	WEIGHT	GRADE	TYPE	NEW OR USED	DEPTH SET	SACKS CEMENT	TOP OF CEMENT
8 5/8"	24#	J-55		NEW	1000'	175 SX	SURFACE
4 1/2"	10.5#	J-55		NEW	1000'	175 SX	SURFACE

TUBING RECORD

SIZE	WEIGHT	GRADE	DEPTH SET	PACKER SET AT
2"	4.7#	J-55	1000'	

PERFORATION RECORD

SHOTS PER FT.	SIZE & TYPE	DEPTH INTERVAL
4	JET	1000'

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL TREATED
500 GAL 15% HCL	1000'

INITIAL PRODUCTION

DATE	OIL BBLS.	GAS MCF	WATER BBLS.	GAS-OIL RATIO	GRAVITY
1-18-79	10 BBLS	STM			34

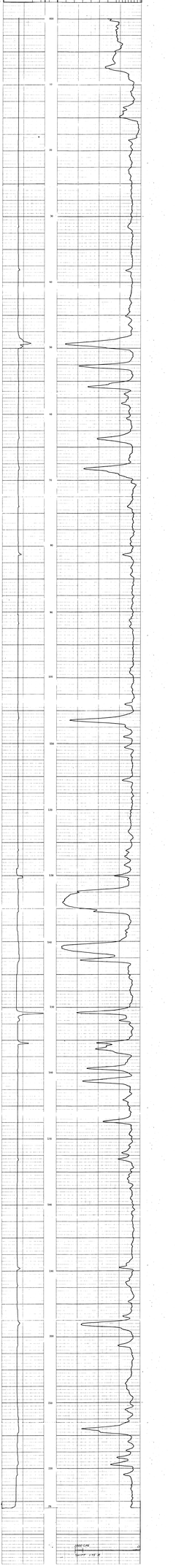
REMARKS: DRILL STEM @ 1000 Opn. 30min. IF 267

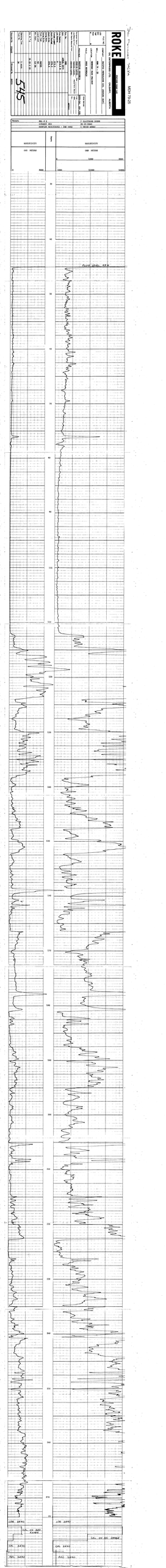
GAMMA RAY API

CALIPER DIAMETER - EXPLORATION

NEUTRON DENSITY LIMESTONE

345




ROKE
545
MAGNETOMETER
MAGNETOMETER
MAGNETOMETER
FLUID LEVEL 42 ft
LOW ZERO
CAL. ON 200 OHMS
CAL. ON 100 OHMS
CAL ZERO
REC. ZERO

ROKE

ROKE PETROLEUM LTD.

SUITE 1000, 736 - 6th AVENUE S.W. CALGARY, ALBERTA T2P 3T7

WELL NO. 16-26-30-20W4M

FIELD

LOCATION

COUNTY OR DISTRICT

PROVINCE

COMPANY

WELL

FIELD

LOCATION

COUNTY OR DISTRICT

PROVINCE

345

SEC. TWP. RGE.

PERMANENT DATUM

ELEV.

LOG MEASURED FROM

DRILLING MEASURED FROM

ELEV.: K.B.

D.F.

G.L.

DATE

RUN NO.

TYPE LOG

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 OF RMF

SOURCE OF RMC

RM @ BHT

TIME SINCE CIRC.

MAX. REC. TEMP.

EQUIP. LOCATION

RECORDED BY

WITNESSED BY

RUN BIT CASING LOGGED INTERVAL TYPE JOINT SIZE WEIGHT GRADE FROM TO

TUBING DATA

SIZE WEIGHT GRADE FROM TO

REMARKS

GAMMA RAY

NEUTRON

CORRELATION

SCALE CHANGES AT 2730'

CASING SHOE

PBTD

TOP CEMENT

TOP PERF.

BASE PERF.

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

PHOENIX MARK VII

FILE NO.

COMPANY ROKE OIL ENTERPRISES LTD. (OPERATOR)

WELL 8-5 WELL

FIELD MORE PINNACLE

LOCATION NW 8-26-5 W4M

PROVINCE ALBERTA

Permanent Datum: GROUND LEVEL Elev.

Log Measured From: GROUND LEVEL

Drilling Measured From: GROUND LEVEL

Elev.: K.B. 1000 / D.F. / G.L. 990

Other Services: DUAL INDUCTION SFL

Date: 22 8 83

Run No.: ONE

Depth-Driller: 3130

Depth-Logger: 3130

Bottom Logged Interval: 3130

Top Logged Interval: SURFACE

Type Fluid in Hole: FRESH WATER GEL

Salinity, PPM Cl: 1000

Density: 9.1

Viscosity: 50

Fluid Loss: 8.0

Source of Sample: FLOWLINE

Rm @ Meas. Temp: 1.75 @ 20

Rmf @ Meas. Temp: 1.40 @ 20

Rmc @ Meas. Temp: 2.50 @ 20

Source: Rmf: MEAS. Rmc: CALC.

Rm @ BHT: 1.10 @ 50

Time Since Circ.: 5 HRS

Time on Bottom: 1 HR

Max. Rec. Temp.: 50

Equip. No. & Location: 3030 5

Recorded By: K. JACKSON

Witnessed By: K. JACKSON

MDH 1926

Remarks	FIG. # 5	7 ELECTRODE SONDE
	CURRENT STD	SS 20 SAAD
	MINIMUM RESISTANCE = 250 OHMS	1 METER ARRAY

RESISTIVITY	Depth	RESISTIVITY
OHM METERS		OHM METERS
0 5000		0 1000 2000 / 4500 11500 16500

FLUID LEVEL 9.9 M

LOG ZERO

CAL ON 200 RANGE

CAL. ZERO

REC. ZERO

LOG ZERO

CAL ON 100 RANGE

CAL. ZERO

REC. ZERO

ROKE

OIL CORPORATION LTD.

CALGARY, ALBERTA

Company	ROKE OIL CORPORATION LTD.
Well	14-36-30-5W
Field	SEVEN PERSONS
County	
Province	ALBERTA
Location	14-36-30-5W
Other Services	
Permanent Datum	GROUND LEVEL
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elevation	3 098 ft.
Elev. K.B.	3 108 ft.
Elev. D.F.	
Elev. G.L.	3 098 ft.
Date	5-11-82
Run No.	ONE
Depth-Driller	3 135 ft.
Depth-Logger	3 135 ft.
Bottom Logged Interval	3 135 ft.
Top Logged Interval	100 ft.
Type Fluid in Hole	GEL CHEM
Salinity, PPM Cl	
Density	9.2 LB/GAL
Viscosity	50 SEC
Fluid Loss	8.4 CC
Source of Sample	CIRCULATION
R_m @ Meas. Temp.	1.0 @ 68 °F
R_mf @ Meas. Temp.	0.8 @ 68 °F
R_mc @ Meas. Temp.	1.2 @ 68 °F
Source R_mf / R_mc	MEASURED / CALCULATED
R_m @ BHT	0.5 @ 120 °F
Time Since Circ.	12 HRS
Max. Rec. Temp.	120 °F
Equip. Location	5-36-30-5W
Recorded By	R. MOORE
Witnessed By	MR. MCNEIL

RUN NO. ONE

DENSITY - NEUTRON GAMMA RAY NEUTRON

DUAL INDUCTION - SFL GAMMA RAY

S45

MICRO-SEISMOGRAM

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		TOOL MODEL NO.	NEUTRON/NEUTRON
DIAMETER	32 MM	DIAMETER	32 MM
DETECTOR MODEL NO.		DETECTOR MODEL NO.	
TYPE	SCINTILLATION	TYPE	PROPORTIONAL
LENGTH	305 MM	SOURCE	5 CURIES
DISTANCE T.D. TO SOURCE	5.07 M	SOURCE MODEL NO.	MOD-5/55 M
GENERAL		SERIAL NO.	224
JOINT TRUCK NO.	96	STRENGTH	5.01 MC
INSTRUMENT TRUCK NO.	24	TYPE	RUBY
FINAL SERIAL NO.	145 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL																					
RUN	DATE		SPEED	T.C.	MUD		DENS.	VISC.	F.L.	MUD		RECORDED									
NO.	FROM	TO	FT./MIN.	SEC.	SETTING		KG/L	LB/G	SEC	CC	PH	MAX. REC. TEMP.	BOTTOM	SEC.	CC	PH	RM @ MEAS. TEMP.				
ONE	100	3135	30	2	100								3135								

REMARKS

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API UNITS

0 100

API UNITS

1500 3100

FLUID LEVEL 6.7M

100

110

120

130

140

150

160

170

180

190

200

210

220

230

236

400 CPS

400 CPS

ROKE

SIDEWALL DENSILOG

MDH 79-26

FILE NO.

COMPANY PACIFIC PETROLEUMS LTD. (OPER. 50%)

WELL DOE 7-26

LOCATION DOE RIVER AREA

FIELD DOE RIVER

PROVINCE NORTHERN BRITISH COLUMBIA

Other Services: Sidewall Neutron

Elev.: K.B. 1000 G.L. 990 D.F. 999

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Permanent Datum: GROUND LEVEL

Elev.: 990

Rge	26	W6M
Twp	84	
Sec	26	
Lsd	7	

OIL ENTERPRISES LTD. CALGARY, ALBERTA

API No.		
Permanent No.	20XXXX	
Drilling Finished	26	1-3-1977
Total Depth	26	1-3-1977
Top Logged Interval	3	
Bottom Log Interval	26	
Casing Driller	13 3/8	@ 1977
Casing Logger		
Bit Size	8 1/2	
Type Fluid in Hole	GEL CHEM	
Density	9.6	
Viscosity	38	
Fluid Loss	8.4	
Source of Sample	CIRC.	
Rm @ Meas. Temp.	1.35 @ 54	
Rmf @ Meas. Temp.	.93 @ 54	
Rmc @ Meas. Temp.	2.7 @ 54	
Source Rmf / Rmc	MEAS / CALC	
Rm @ BHT	1.35 @ 150	
Time Since Circ.	5 HRS	
Max. Rec. Temp.	150	
Equip. Location	5-26	
Recorded By		
Witnessed By	G. RICHARDS	

54/5

GENERAL				GAMMA RAY			SIDEWALL DENSILOG		
RUN NO.	BOTTOM LOG INTERVAL	TOP LOG INTERVAL	SPEED (ft/min)	T.C. SETTINGS	SENS. (cps/in)	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTING	DEN DIV (g/cc)
1	0	132	6				3	5000	66.56
	0	132	30	CALIPER				3.173	

REMARKS: 3600 TOOL # 628
CAL TOOL # 587

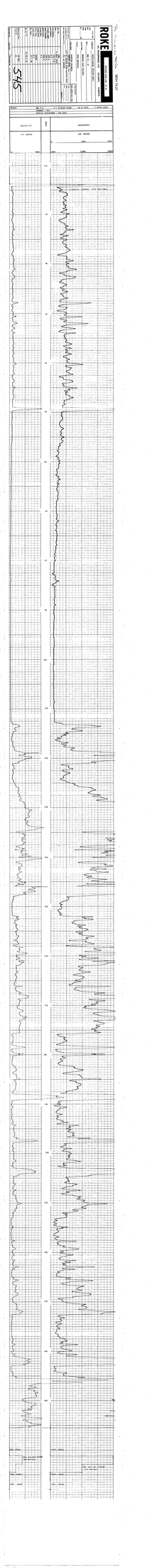
CALIPER
DIAMETER — CENTIMETERS

GAMMA RAY
API

BULK DENSITY
(GRAM/CC)

1000 CPS

SHIFT 132'


ROKE
ROKE OIL LTD.
WELL
FIELD
COUNTY
PROVINCE
LOCATION
SURFACE
BOTTOM HOLE
ELEVATION
DATE
RUN NO.
DEPTH DRILLER
DEPTH LOGGER
CASING
BIT
TYPE FLUID
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.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
545
RESISTIVITY
CONDUCTIVITY
GAMMA RAY
API UNITS
SPONTANEOUS POTENTIAL
MILLIVOLTS
CALIPER
INCHES
DEPTH
FEET
1 INCH = 100 FEET
1 INCH = 20 FEET
1 INCH = 5 FEET
1 INCH = 1 FEET

ROKE

COMPANY OR OPERATOR

WELL

FIELD

COUNTY

STATE

LOCATION

API NO.

SERVICE ORDER NO.

DATE

545

EQUIPMENT DATA

GAMMA RAY

NEUTRON

RUN NO.

DEN. NO.

DEN. MODEL NO.

DEN. SERIAL NO.

DEN. SOURCE

DETECTOR NO.

CAL.

CAL. SOURCE

CAL. SERIAL NO.

ACCESS. TO H. HOLDER

LOGGING DATA

GAMMA RAY

NEUTRON

GAMMA RAY NORMALIZED

NEUTRON NORMALIZED

API

0 GAMMA RAY 100

API

60 NEUTRON 0

FEET

MDH 79-27

ROKE SPECIALTIES

OIL DEVELOPERS LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: ESSO-SUNOIL ZAMA INC.

WELL: ZAMA 79 - 27

LOCATION: ZAMA AREA PEACE

FIELD: ZAMA

PROVINCE: NORTHERN ALBERTA

Elevation Above Sea Level: GR 2128 KB 2138 Ground Above Sea Level: 2128

Permanent Datum: GROUND LEVEL

Run No.	ONE
Log Reading	2 DEC 1979
Depth Driller	2016.8
Depth Logger	2016.7
Depth Recorded	2016.4
Bottom Log Int.	2016.4
Top Log Int.	1.5
Open Hole Size	12 1/4
Type Fluid in Hole	GEL CHEM
Density	1.17
Viscosity	47
Fluid Loss	7.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp.	.17 @ 70
Rmf @ Meas. Temp.	.14 @ 70
Rmc @ Meas. Temp.	.23 @ 70
Source of Rmf & Rmc	MEASURED
Rm @ BHT	.08 @ 170
Time Since Circ.	12 HRS
Max. Rec. Temp.	170
Equip. Location	545
Recorded By	GEOFF
Witnessed By	MR. PROVOST

DUAL INDUCTION SFL

SONIC

GAMMA RAY NEUTRON

DENSITY

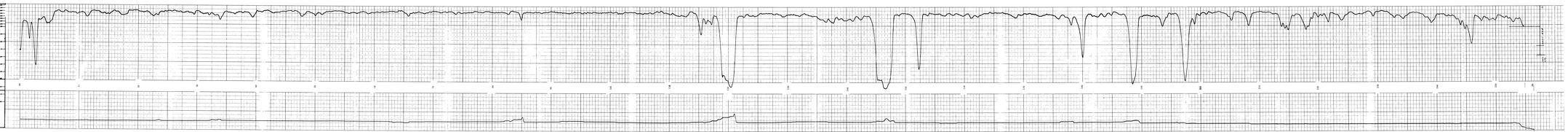
CALIPER

GAMMA RAY

SP

RESISTIVITY

DEPTH



PR-MONKMAN 79(3)A

MDH 79-28

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 20 CM

FILE NO.	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDH 79 - 28
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Other Services:	GRN, DENS-CAL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	TOP OF CASING 55 CM Above Perm. Datum
Well Depths Measured from	TOP OF CASING
K.B. / CSG / G.L.	METRIC
Run No.	ONE
Date	5 JULY 1979
First Reading	153.6 M
Last Reading	7.0
Footage Logged	146.6
Depth Reached	154.5
Depth Driller	154.6
Casing Roke	1.0
Casing Driller	
Fluid Type	WATER
Liquid Level	7.0
Min. Diam.	15.24 CM
Rm @ °C	11.63 @ 25
Operating Time	45 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	PROUDLOCK

545

Remarks	FBL # 5	7 ELECTRODE SONDE	20 CM BEAM	1 METER ARRAY
	CURRENT - STD			
	MUDFISH RESISTANCE - 5 OHMS			

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
		0 — 1000 — 2000
0 — 5000		6500 — 11500 — 16500

PR- Mackenzie 74(3)A MDH 79-28

ROKE

FOCUSED BEAM LOG 5 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT)

WELL MDH 79 - 28

LOCATION MONTANAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

LSD
SEC
TWP
RGE
W. M

Permanent Datum
Log Measured from
Well Depths Measured from
Elev.
Above Perm. Datum
K.B.
D.F.
G.L.

Other Services:
FBL 20

METRIC

Run. No.	ONE
Date	5 JULY 1979
First Reading	
Last Reading	
Footage Logged	
Depth Reached	
Depth Driller	
Casing Rote	
Casing Driller	
Fluid Type	
Liquid Level	
Min. Diam.	
Rm @ °	
Operating Time	
Truck No.	36

Recorded By GARLAND

Witnessed By PROULJACK

545

Remarks: FBL # 5 7 ELECTRODE SONDE 5 CM BEAM 60 CM ARRAY
CURRENT - STD RE-RUN OF COAL SEAMS 10 - 30, 63 - 70, 78 - 85, 88 - 95 M
MUDFISH RESISTANCE - 5 OHMS

RESISTIVITY	Depths	RESISTIVITY
OHM METERS		OHM METERS
0 5000		0 1000 2000
		6500 11500 16500
	10	
	20	
	30	
	63	
	70	
	78	
	85	
	88	
	95	
LOG ZERO		LOG ZERO
CAL ON 500 RANGE 500 OH M/DIV		CAL ON 100 RANGE 100 OH M/DIV
REC ZERO		REC ZERO
CAL ZERO		CAL ZERO

ROKE

OIL ENTERPRISES LTD.

1000 TOTAL PLAZA, 10 - 5 AVE. S.W. CALGARY, ALBERTA

Elev.: K.B.	
D.F.	
G.L.	
Permanent Datum:	
Log Measured From:	
Drilling Measured From:	

COMPANY: ROKE OIL ENTERPRISES LTD.

WELL: NO. 74-36

FIELD: BIGORAY RIVER-PEACE

COUNTY: PEACE RIVER (GROUP GRIFF)

LOCATION: 1980 FEET FROM THE SOUTH LINE AND 1980 FEET FROM THE EAST LINE OF SECTION 36 TOWNSHIP 78 RANGE 20 WEST OF THE 6TH MERIDIAN

PROVINCE: ALBERTA

Other Services: DIL

Run No.: ONE

Depth-Driller: 1 3370

Depth-Logger: 3370

Bottom Logged Interval: 3370

Top Logged Interval: 2000

Type Fluid in Hole: GEL CHEM

Salinity, PPM Cl: 1000

Density: 10.0

Level: FULL

Max. Rec. Temp. Deg. F: 90

Operating Rig Time: 12 HRS

Recorded By: R. ROBINSON

Witnessed By: MR. BOB

MDH 78-28

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATOR	DETECTOR MODEL NO.	
LENGTH	900 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	530 MM
		SOURCE MODEL NO.	MRC N-55 M
GENERAL		SERIAL NO.	224
HOIST TRUCK NO.	76	STRENGTH	4.22 MC
INSTRUMENT TRUCK NO.	76	TYPE	Amb.
TOOL SERIAL NO.	122 A WS	DISTANCE	1.125/508

LOGGING DATA

RUN NO.	INTERVAL FROM	INTERVAL TO	SPEED FT/MIN	T.C. SEC	SENS (SCALE SETTING)	GAMMA RAY API & % UNITS DIV.	L OR R	T.C. SEC	NEUTRON SENS (SCALE SETTING)	NEUTRON API & % UNITS DIV.	L OR R	LOG SCALE
1	0	1314	A	A	500	2	L	1	1000	5	L	100
1	1314	3370	A	A	500	2	L	1	500	5	L	100

REMARKS: OPEN HOLE

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API

0 — 100

500 — 1100

CASING / PERFS

SCALE CHANGE AT 1X METRES LOGGED FROM ORIGIN

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3370

Base of Fish

ROKE

SUBSIDIARY OF SUPERIOR OIL

CALGARY, ALBERTA

WELL NO. 1

LOCATION: 14-35-25-5W4M

FIELD: WILDCAT

COUNTY OR DISTRICT: FOOTHILLS

PROVINCE: ALBERTA

SURFACE LOCATION: 1980 FEET FROM THE SOUTH LINE AND 1980 FEET FROM THE WEST LINE OF SECTION 14 TOWNSHIP 25 RANGE 5 WEST OF 4TH MERIDIAN

ELEVATIONS: KB 3910 DF GL 3900

DATE: 19 JUNE 1978

RUN NO.: ONE

TYPE LOG: DUAL INDUCTION LATEROLOG

DEPTH DRILLER: 3300

DEPTH LOGGER: 3301

BTM. LOG INTERVAL: 3301

TOP LOG INTERVAL: 247

CASING: SIZE 9 5/8 WGT. 36 GRADE K-55 SET AT 247

TYPE FLUID IN HOLE: GEL CHEM

DENSITY: 9.9

VISCOSITY: 45

PH: 10.5

FLUID LOSS: 6.4 ML

SOURCE OF SAMPLE: MUD PIT

RM @ MEAS. TEMP.: 1.0 @ 70°F

RMF @ MEAS. TEMP.: 1.0 @ 70°F

RMC @ MEAS. TEMP.: 1.0 @ 70°F

SOURCE OF RMF & RMC: MEASURED

RM @ BHT: 0.5 @ 120°F

TIME SINCE CIRC.: 4 HRS

MAX. REC. TEMP.: 120°F

EQUIP. NO. & LOCATION: 545 CALGARY

RECORDED BY: D. MCKENZIE

WITNESSED BY: MR. MOORE

GENERAL				GAMMA RAY				BOREHOLE RECORD			
RUN NO.	DEPTH DRILLER FROM	TO	SPEED FT./MIN.	T.D. DRILL.	BHTM	SPC & AL UNITS PER LOG DIV.	TIME SINCE CIRC.	BIT RUN	FROM BOTTOM	TO SURFACE	ONE DIV.
1	0	3310.0	6					2	3300	0.00	10.62
		3316.0		3316							

REMARKS

RUN TOOL # 347

CAL SHD. # 381

OPEN HOLE

CALIPER
DIAMETER — IN

GAMMA RAY
API

BULK DENSITY
(GRANIDCO)

Coals inside

SHOT HOLE

Dia - Mountney 79(3)a

MDH 79-29

ROKE

POWERED BEAM 100, 20 CH

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LSD
SEC
TWP
RGE
M

FILE NO.
COMPANY: PETRO-CANADA (OCCIDENTAL EXPL)
WELL: MDH 79 - 29
LOCATION: MORMAN PASS PROJECT
FIELD: ROSE MOUNTAIN
PROVINCE: BRITISH COLUMBIA
Other Services: CDN, MSFL-GR, SFT
Permanent Datum: GROUND LEVEL
Log Measured From: GROUND LEVEL
Drilling Measured From: G.L.
Elev.: K.B. —, D.F. —, G.L. —

Rec. No. 006
Date 31 JUL 79
Run No. 2
Depth-Driller 2134.8
Depth-Logger 2134.8
Bottom Logged Interval 2134.8
Top Logged Interval 85.6
Casing-Driller 85.6 @ 85.6
Casing-Logger 85.6
Bit Size 311.15
Type Fluid in Hole WATER
Density / Viscosity 1.00 / 1.00 (g/cc)
Max. Rec. Temp. deg. F. 13.5 @ CH
Operating Time 30 MIN
Truck No. 34
Recorded By GARRISON
Witnessed By STEVEN

545

Remarks: FIL # 5 7 ELECTRODE BOOSH 20 CH BEAM 1 METER ARRAY
CURRENT - STD
MUSPIN RESISTANCE - 100 OHMS

RESISTIVITY — OHM METERS — 0 — 5000
Depths
RESISTIVITY — OHM METERS — 0 — 1000 — 2000
6500 — 11500 — 14500

ANALOG - 4 METERS

000
10
20
30
40
50
60
70
80
90
FR

LOG 2240
CAL 0.0 ADJ ANGLE
400 AM/AM
REC 2240
SAL 2240

LOG 2240
CAL 0.0 ADJ RANGE
100 AM/AM
REC 2240
SAL 2240

Pa. Mackenzie Delta

MDH 79-29

ROKE

PROCESSED BY ROKE LOGS S.C.M.

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERG DEPT)

WELL MDH 79-29

LOCATION BOSWORTH RANGE PROJECT

FIELD DOGS MOUNTAIN

PROVINCE MACKENZIE DELTA

COUNTY/STATE

OTHER SERVICES DIPL

SEC. TWP. RGE.

PERMANENT DATUM

LOG MEASURED FROM

DRILLING MEASURED FROM

ELEV.: K.B. D.F. G.L.

Date	22-Jan-80		
Run No.	ONE		
Depth-Driller	9730		
Depth-Logger	9729		
Bottom Logged Interval	9729		
Top Logged Interval	8410		
Casing-Driller	13 3/8 @ 2977		
Casing-Logger	2977		
Bit Size	12 1/4		
Type Fluid in Hole	WATER		
Density	9.0 (SEAWTR)		
Viscosity	53		
Fluid Loss	4.0		
Source of Sample	CIRC		
Rm @ Meas. Temp.	0.19 @ 70		
Rmf @ Meas. Temp.	0.15 @ 70		
Rmc @ Meas. Temp.	0.26 @ 70		
Source of Rmf / Rmc	CALC		
Rm @ BHT	0.13 @ 210		
Time Since Circ.	36		
Max. Rec. Temp.	210		
Equipment No.	5545		
Location			
Recorded By	SANDERS		
Witnessed By	SIEBERT		

545

Remarks: FXL 8.5 7 ELECTRODE SONDE 5 CU DIAM: 1 METER ARRAY

CURRENT SYD

MURPHY RESISTANCE 100 OHMS

RESISTIVITY — OHM METERS — 0 — 5000

Depths: 000, 10, 20, 30, 40, 50, 60, 70, 80, 90, FX

RESISTIVITY — OHM METERS — 0 — 1000 — 2000

6500 — 11500 — 16500

LOG ZERO

CAL 0.0 ERR 10.0 OHM

200.0 OHM/IN

REC ZERO

CAL ZERO

LOG ZERO

CAL 0.0

ERR 10.0 OHMS

100.0 OHM/IN

REC ZERO

CAL ZERO

Perforation Log

MDH 79-29

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: PETRO-GAMMA (DEPTH DEPT.)

WELL: HMR 79 - 29

LOCATION: MORNAR RIGS PROJECT

FIELD: RIGS WORKING

PERMANENT DATUM: GROUND LEVEL

ELEV.: K.B. D.F. G.L.

LOG MEASURED FROM: GROUND LEVEL

DRILLING MEASURED FROM: K.B.

Other Services: NONE

Rec. No. 32 (GR)

Run No. ONE

Date Recorded 13 DEC 1979

Depth Driller 2140.0 M

Depth Logger 2140.0

Bottom Logged Interval 2140.0

Top Logged Interval 90.0

Casing Driller 244.5 @ 90.0

Casing Logger 4.0

Bit Size 7 7/8"

Type Fluid in Hole WATER

Density / Viscosity 0 / 0

Max. Rec. Temp. 13, 30 OR

Operating Time

Truck No. 1, 3005, 36

Recorded By CARLSON

Witnessed By STEVEN

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-55-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	Am-Be
TOOL SERIAL NO.	125A 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	GR/CBL FROM	GR/CBL TO	SPEED M/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	92.0	4	4	100	0	18	4	500	1 L	150

REMARKS: PLUGGING WELL WITH GAS

GAMMA RAY — DEPTHS — NEUTRON

GAMMA RAY INCREASES → API 18 — 180

NEUTRON INCREASES → API 150 — 3150

CASING - N. NATURE

000 10 20 30 40 50 60 70 80 90 93

100 CPS

100 CPS

MDH 79-29

ROKE

SIDEWALL DENSILOG
CALIPER

FILE NO:

COMPANY: ESSO-SARNIA (OCCIDENTAL ESSO)

WELL: MDH 79 - 29

LOCATION: NORMANBY 36&5 TOWNSHIP

FIELD: DOVER PROVINCE

KB/DERRICK FLOOR
GROUND LEVEL
DRILLING MEASURED FROM

OTHER SERVICES

OIL ENTERPRISES LTD. CALGARY, ALBERTA

SEC
TWP
RGE
M

Elev.: K.B.
D.F.
G.L.

Permanent Datum
Log Measured From
Drilling Measured From

Date
Run No.
Depth-Driller
Depth-Logger
Bottom Logged Interval
Top Logged 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 of Rmf & Rmc
Rm @ BHT
Time Circ. Stopped
Time Logger on Bottom
Max. Rec. Temp. Deg. F.
Equip. Location
Recorded By
Witnessed By

22 JUNE 1979
91.5M
91.5M
91.5
91.03
4.0
WATER
GROSS
13.5K OH
SARNIA
STEVENS
SAMPSON

GENERAL				GAMMA RAY			SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/M SEC.	T.C. SEC	SENS SETTINGS	ZERO DIV. OR R	API G.R. UNITS PER DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. OR R	CPS/ DIV
1	0	91.5	4					3	1000	2.5 R	76.68
	0	93.30		CALIPER							

REMARKS
DENS TOOL # 267
CAL TOOL # 587
FLUSHING HOLE - BLOWING GAS

CALIPER
DIAMETER - CH

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

DEPTHS

CALIPER - 4 METERS

FT.

ROKE OIL

PRINT 265 R

MDH 79-3

ROKE OIL ENTERPRISES LTD. PRODUCTION SERVICES

CALGARY, ALBERTA

FILE NO.

COMPANY PACIFIC PETROLEUM LTD. (OPERATOR)

WELL HBR 74-3

LOCATION HARMONY 3851 (WILDCAT)

FIELD

PROVINCE

Other Services

Permanent Datum: GROUND LEVEL — Elev.: K.B. — Elev.: D.F. — Elev.: G.L.

Log Measured From: K.B. — 6.00 Ft. Above Perm. Datum

Drilling Measured From: K.B.

Date	13 DEC 1973		
Run No.	ONE		
Depth-Driller	13,800		
Depth-Logger	13,814		
Bottom Logged Interval	13,813		
Top Logged Interval	9000		
Casing-Driller	13.3/8 @ 5000		
Casing-Logger	13.3/8 @		
Bit Size	8.1/2 & 12.1/4		
Type Fluid in Hole			
Density			
Viscosity			
pH			
Fluid Loss			
Source of Sample			
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Source of Rmf & Rmc			
Rm @ BHT			
Time Since Circ.			
Max. Rec. Temp.			
Equip. Location			
Recorded By			
Witnessed By			

Run No. ONE — Type Log: DUAL INDUCTION SFL — Depth-Driller: 13,814 — Depth-Logger: 13,813 — Bottom Logged Interval: 13,813 — Top Logged Interval: 5000 — Type Fluid in Hole: — Salinity, PPM Cl: — Density: — Viscosity: — Fluid Loss: — Source of Sample: — Rm @ Meas. Temp.: — Rmf @ Meas. Temp.: — Rmc @ Meas. Temp.: — Source of Rmf & Rmc: — Rm @ BHT: — Time Since Circ.: — Max. Rec. Temp.: — Equip. Location: — Recorded By: — Witnessed By:

545

Remarks: PEX # 3. 7 ELECTRONIC GUNGS. 25 CM SCALE. 1 METER ASSAY. RECEIVED ASSISTANCE - 2 UNITS

RESISTIVITY | Depth | RESISTIVITY

OHM METERS | OHM METERS

0 — 5000 | 1000 — 2000 | 12500 — 14500

CASING @ BICO MARK

SFL/SN OHM METERS 0.2 — 2000

DUAL IND SFL RAMGE 200 OHM/M

DIL OHM METERS 0.2 — 2000

DUAL IND SFL RAMGE 200 OHM/M

LLD ZERO

DUAL IND LOG RAMGE 200 OHM/M

SFL ZERO

LLS ZERO

SFL ZERO

DUAL IND LOG RAMGE 200 OHM/M

MSFL ZERO

SFL ZERO

MDH-7B-3

ROKE

ROKE OIL DEVELOPMENTS LTD.
GAMMA RAY NEUTRON LOG
CALGARY, ALBERTA

FIELD: [illegible]
WELL: 100/16-36-038-08W4
COMPANY: ROKE OIL DEVELOPMENTS LTD. (100%)
LOCATION: [illegible]

PERMANENT DATUM	GROUND LEVEL	ELEV.	1,000
LOG MEASURED FROM	KELLY BUSHING	ELEV.	1,010
DRILLING MEASURED FROM	KELLY BUSHING	ELEV.	1,010

DATE	31 DEC 82		
RUN NO.	ONE		
DEPTH-DRILLER	3,170 M		
DEPTH-LOGGER	3,170 M		
BTM. LOG INTERVAL	3,170 M		
TOP LOG INTERVAL	1,000 M		
CASING-DRILLER	244.5 MM @ 1,000 M		
CASING-LOGGER	244.5 MM @ 1,000 M		
BIT SIZE	222 MM		
TYPE FLUID IN HOLE	GEL CHEM		
DENSITY	1.14	VISCOSITY	50
PH	10.5	FLUID LOSS	6.0
SOURCE OF SAMPLE	CIRCULATION		
RM @ MEAS. TEMP.	0.22 @ 20°C		
RMF @ MEAS. TEMP.	0.18 @ 20°C		
RMC @ MEAS. TEMP.	0.28 @ 20°C		
SOURCE: RMF	MEASURED		
RM @ BHT	0.10 @ 80°C		
TIME SINCE CIRC.	12 HRS		
MAX. REC. TEMP.	80°C		
EQUIP. LOCATION	100/16-36-038-08W4		
RECORDED BY	[illegible]		
WITNESSED BY	[illegible]		

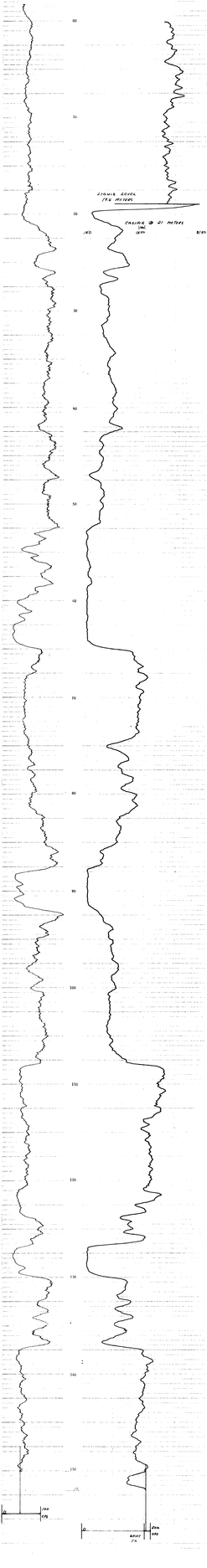
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATOR	DETECTOR MODEL NO.	
LENGTH	305 MM	TYPE	PROPORTIONAL
DISTANCE TO A SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MISC-5.05-M
GENERAL		SERIAL NO.	326
HOIST TRUCK NO.	36	STRENGTH	444 MC
INSTRUMENT TRUCK NO.	42	TYPE	Am-Be
TOOL SERIAL NO.	122 001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	INTERVAL FROM	INTERVAL TO	SPEED M. PER MIN.	T.C. SEC.	GAMMA RAY SENS.	GAMMA RAY API & N. UNITS	T.C. SEC.	NEUTRON SENS.	NEUTRON API & N. UNITS
									ZERO / API & N. UNITS (20 DIV.)
1	0	13.30	4	3	100	0	10	1	500 / 0 L 150
	13.30	152.2	4	1	100	0	10	1	500 / 0 L 150

REMARKS



PR - Monkman 79(3)A

MDH 79-3

ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W___M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 3
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	GROUND LEVEL Above Perm. Datum
Well Depths Measured from	GROUND LEVEL
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE	TWO
Date	18 MAR 1979	
First Reading	71.90 M	151.30 M
Last Reading	0	71.90
Footage Logged	71.90	79.40
Depth Reached	72.80	152.20
Depth Driller	73.20	153.0
Casing Roke	21.0	21.0
Casing Driller		
Fluid Type	WATER	WATER
Liquid Level	19.50	19.50
Min. Diam.	15.24 CM	15.24 CM
Operating Time	3 HRS	
Truck No.	36	
Recorded By	CARLSON	
Witnessed By	PROUDLOCK	

545

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	71.90	4	(18	MAR'79)			3	1000	2.67 R	63.67
	71.90	151.30	4	(19	MAR'79)	NEW SONDE		3	1000	1.75 R	64.56
	0	71.90		CALIPER							
	71.90	152.0		CALIPER							

REMARKS DENS TOOL # 457 - 1st RUN
DENS TOOL # 420 - 2nd RUN
CAL TOOL # 587

Pre- Monkman 79(3)A

MDH 79-30

ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE
W _____ M

COMPANY PETRO-CANADA (MINING DEPT)

WELL MDH 79 - 30

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:

Permanent Datum GROUND LEVEL Elev.
Log Measured from GROUND LEVEL . Above Perm. Datum
Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

METRIC

Run. No.	ONE
Date	22 JUNE 1979
First Reading	19.0 M
Last Reading	02.0
Footage Logged	17.0
Depth Reached	19.8
Depth Driller	19.83
Casing Roke	1.5
Casing Driller	
Fluid Type	WATER
Liquid Level	2.0
Min. Diam.	13.34
Rm @ °C	19.23 @ 25
Operating Time	20 MIN
Truck No.	36

545

Recorded By CARLSON Witnessed By BIENIA

Remarks

FBL # 5 7 ELECTRODE SONDE 20 CM BEAM 1 METER ARRAY
CURRENT - STD
MUDFISH RESISTANCE - 500 OHMS

RESISTIVITY — OHM METERS — 2000 — 1000 — 0 — 16500 — 11500 — 6500

Depths

RESISTIVITY — OHM METERS — 5000 — 0

CASING 1.5 METERS
LIQUID LEVEL 2 METERS

CAL 0.0 100 RANGE
100 OHM/DIV
LOG ZERO
REF ZERO
CAL ZERO

000
10
FR

CAL 0.0 200 RANGE
200 OHM/DIV
LOG ZERO
REF ZERO
CAL ZERO

PR. MONKMAN 79(3)A

MDH 79-30

ROKE

FOCUSED BEAM LOG 5 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W M

COMPANY PETRO-CANADA (MINING DEPT)

WELL MDH 79 - 30

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:
FBL 20 CM

Permanent Datum GROUND LEVEL Elev.
Log Measured from GROUND LEVEL ' Above Perm. Datum
Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

METRIC

Run. No.	ONE		
Date	22 JUNE 1979		
First Reading	18.90 M		
Last Reading	2.0		
Footage Logged	16.90		
Depth Reached	19.70		
Depth Driller	19,83		
Casing Roke	1.50		
Casing Driller			
Fluid Type	WATER		
Liquid Level	2.0		
Min. Diam.	13.34		
Rm @ °C	19.23 @ 25		
Operating Time	25 MIN		
Truck No.	36		

545

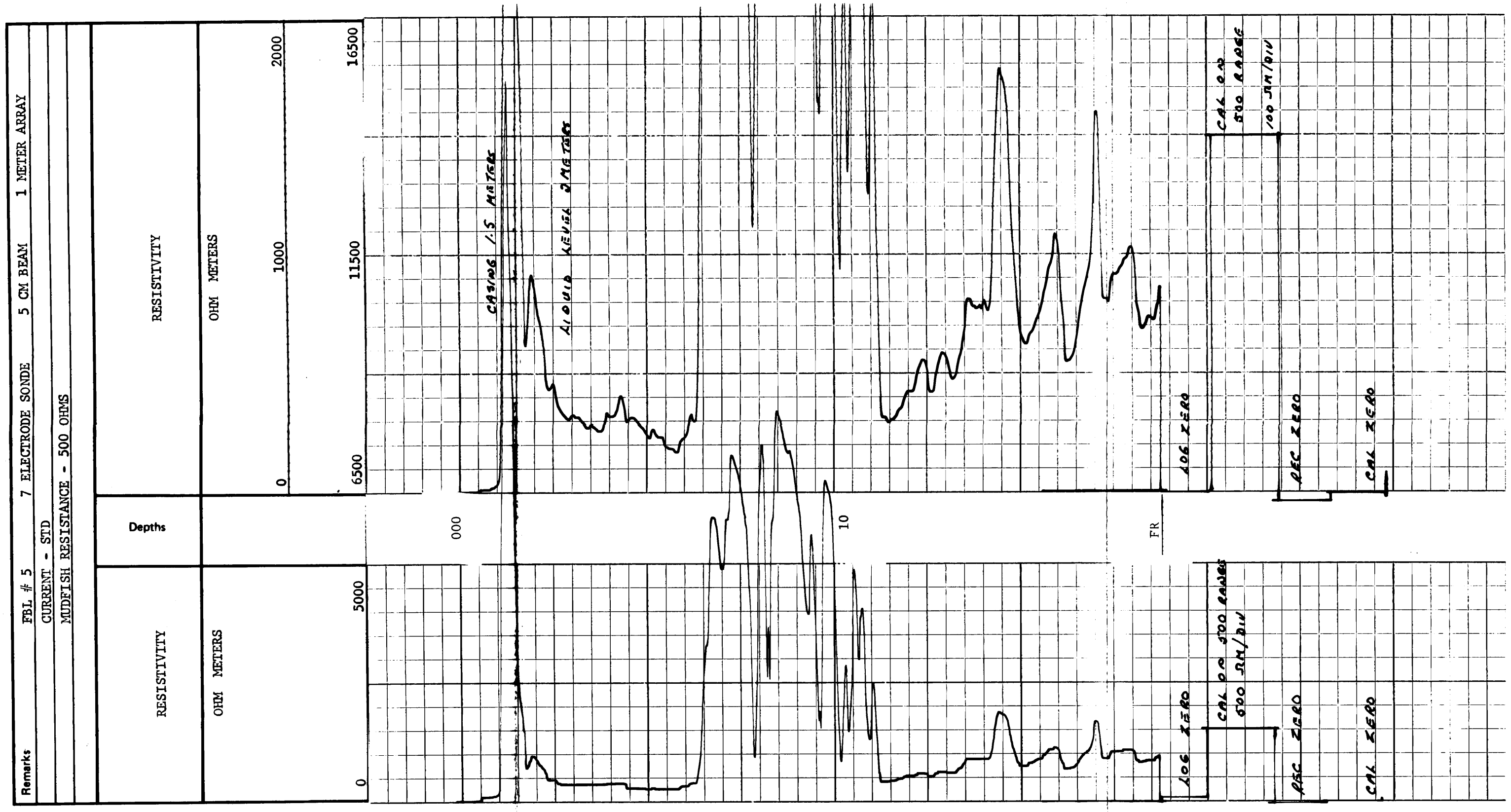
Recorded By CARLSON Witnessed By BIENIA

Remarks
FBL # 5 7 ELECTRODE SONDE 5 CM BEAM 1 METER ARRAY
CURRENT - STD
MUDFISH RESISTANCE - 500 OHMS

RESISTIVITY OHM METERS 2000 1000 0 16500 11500 6500

Depths

RESISTIVITY OHM METERS 5000 0



Pr- Monkman 79(3)A MDH 79-30

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD
SEC
TWP
RGE
W_____M

COMPANY PETRO-CANADA (MINING DEPT)

WELL MH 79 - 30

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev.

Log Measured from GROUND LEVEL Above Perm. Datum

Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

METRIC

Other Services:
DENS-CAL, FBL, DIR

Run. No.	ONE
Date	22 JUNE 1979
First Reading	19.0 M
Last Reading	0
Footage Logged	19.0
Depth Reached	19.45
Depth Driller	19.83
Casing Roke	1.50
Casing Driller	
Fluid Type	WATER
Liquid Level	2.0
Min. Diam.	13.34 CM
Rm @	
Operating Time	20 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	BIENIA

54

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125A 001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M /MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	19.0	4	4	100	0	18	4	500	1 L	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 18		API 150
0 — 180		150 — 1650 — 3150
	00	CASING 1.5 METERS
		LIQUID LEVEL 2 METERS
	10	
	FR	
0 — 100 CPS		0 — SHIFT 1A — 500 CPS

Pre-Monkman 79(3)A MDH 79-30

ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W M

COMPANY PETRO-CANADA (MINING DEPT)
WELL MDH 79 - 30
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services:
GRN, FBL, DIR

Permanent Datum	GROUND LEVEL	Elev.	K.B.
Log Measured from	GROUND LEVEL	Above Perm. Datum	CSG
Well Depths Measured from	GROUND LEVEL		G.L.

METRIC

Run. No.	ONE	
Date	22 JUNE 1979	
First Reading	18.4 M	
Last Reading	0	
Footage Logged	18.4	
Depth Reached	19.3	
Depth Driller	19.83	
Casing Roke	1.5	
Casing Driller		
Fluid Type	WATER	
Liquid Level	2.0	
Min. Diam.	13.34 CM	
Operating Time	20 MIN	
Truck No.	36	545

Recorded By CARLSON Witnessed By BIENIA

GENERAL: RUN NO. 1; DEPTHS FROM 0 TO 18.40; SPEED M/MIN 4

GAMMA RAY: T.C. SEC. 3; SENS SETTINGS 1000; ZERO DIV.L OR R 2.5 R; API G.R. UNITS PER LOG DIV. 76.42 CPS/DIV

SIDEWALL DENSILOG: T.C. SEC. CALIPER; SENS SETTINGS; ZERO DIV.L OR R; API G.R. UNITS PER LOG DIV.

REMARKS: DENS TOOL # 247; CAL TOOL # 587

CALIPER
DIAMETER — CM
35
30

DEPTHS

GAMMA RAY
API
25
20
15
10

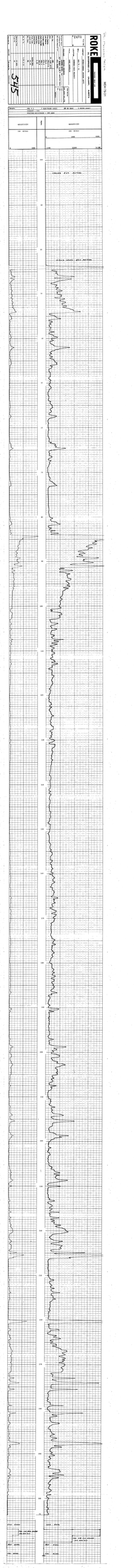
BULK DENSITY
(GRAMS/CC)

2.80 2.70 2.60 2.50 2.40 2.30 2.20 2.10 2.00 1.90 1.80 1.70 1.60 1.50 1.40 1.30 1.20 1.10 1.00

CASING 1.5 METERS
CASING ABOVE 2 METERS

000 10 FR

0 SHOT 2.5 R 1000 CPS



PR-MONKMAN 79(3)A

MDH 79-31

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W___M	
COMPANY	PETRO-CANADA (MINING DEPT)
WELL	MDH 79 - 31
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	DENS-CAL, FBL, DIR
Permanent Datum	GROUND LEVEL Elev.
Log Measured from	RIG TABLE 1.4 Above Perm. Datum
Well Depths Measured from	RIG TABLE
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE			
Date	29 JUNE 1979			
First Reading	304.0 M			
Last Reading	0			
Footage Logged	304.0			
Depth Reached	304.45			
Depth Driller	305.0			
Casing Roke	2.5			
Casing Driller				
Fluid Type	WATER/MUD			
Liquid Level	24.0			
Min. Diam.	HQ			
Rm @				
Operating Time	1 HOUR 30 MIN			
Truck No.	36			
Recorded By	CARLSON	Witnessed By	W. PROUDLOCK	

545

EQUIPMENT DATA

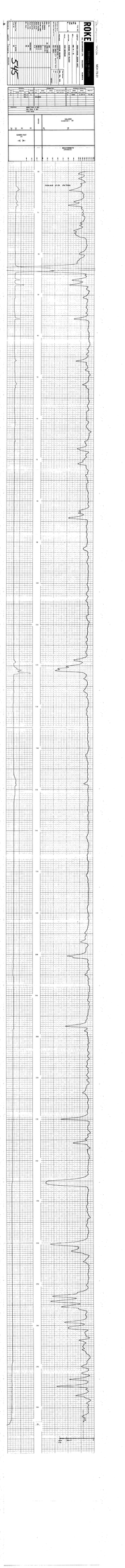
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125A 001	STRENGTH	3 CURIES

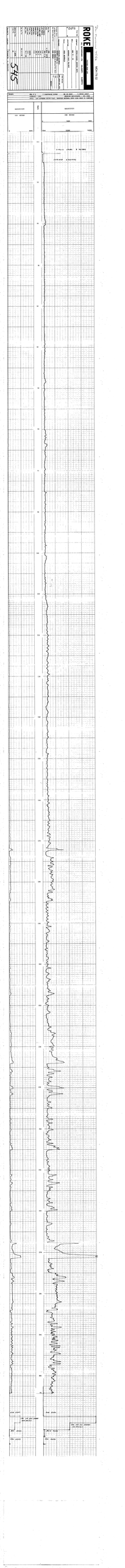
LOGGING DATA

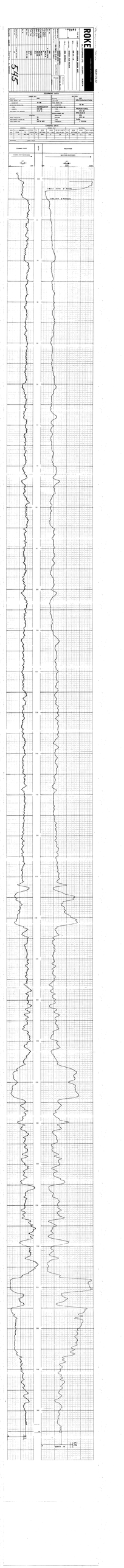
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	23.5	4	4	100	0	18	4	1000	6 L	300
	23.5	304.0	4	4	100	0	18	4	500	1 L	150

REMARKS OPEN HOLE

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18 — 0 … 180		NEUTRON INCREASES → API 300 — 1800 … 4800 … 7800


ROKE
ROKE OIL LTD 1966
545
CALIPER
CORRELATION
GAMMA RAY
API
0
100
FORMATION DENSITY
COMPENSATED
1.95
2.95
g/cc
0
30
%
FORMATION DENSITY
COMPENSATED
1.95
2.95
g/cc
0
30
%


ROKE
545


ROKE
545
GAMMA RAY NEUTRON
NEUTRON

MCH 73-32

ROKE GEOSEAL CASING

Dr. Mason Tech

Operator: ARCO/CHEVRON - ANCHOR ROAD

Well: NPR No. 1 - 32

Location: ANCHOR ROAD UNIT

Field: NPR, NORTHSLOPE

Date Run: 10-JUL-73

Location: 1320' FNL & 1320' FEL

Sec. 32 Twp. 13N Rge. 6E

Permanent Datum: MEAN SEA LEVEL

Log Measured From: KB 52.0 Ft. Above Perm. Datum

Drilling Measured From: KB

	RUN ONE	RUN TWO	RUN THREE
Run No.	ONE		
Date	9 JUL 1973		
Type Log	GR-CCL		
Log Depth	9,000		
Depth Driller	9000		
Casing Driller	9000 @		
Casing Logged	9000		
Bottom Log	9000		
Top Log	SURF.		
Max. Temp.	75 F @		

Operating Time: 1 HOUR

Truck No.: 1

Recorded By: GRIFFIN

Witnessed By: PATTERSON

545

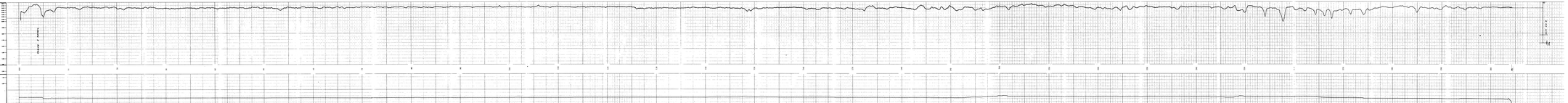
GAMMA RAY (API)

CASING COLLAR LOCATOR

CCL

CASING COLLAR LOCATOR

CCL



Pr - Monkman 79(3)A

MDH 79-5

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD / SEC / TWP / RGE / W___M

COMPANY PACIFIC PETROLEUMS LTD. (MINING DEPT)

WELL MDH 79 - 5

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: DENS-CAL, FBL, DIR

Permanent Datum GROUND LEVEL Elev.

Log Measured from GROUND LEVEL Above Perm. Datum

Well Depths Measured from GROUND LEVEL

K.B. / CSG / G.L.

METRIC

Run. No.	ONE
Date	23 MAR 1979
First Reading	268.10 M
Last Reading	0
Footage Logged	268.10
Depth Reached	268.55
Depth Driller	268.55
Casing Roke	17.50
Casing Driller	
Fluid Type	WATER
Liquid Level	1.0
Min. Diam.	15.24 CM
Rm @	
Operating Time	1 HOUR 15 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	W. PROUDLOCK

345

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	432 MM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	125 -001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	GAMMA RAY T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	NEUTRON T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	268.10	4	3	100	0	18	3	500	1 L	150

REMARKS FLOWING HOLE

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 18; 0 – 180		NEUTRON INCREASES → API 150; 150 – 1650 – 3150

Pa - Moorehead 7S/24

MCH 7-9-6

ROKE
OIL EXPLORATION COMPANY
DENVER, COLORADO

COUNTY	
FIELD	
WELL NO.	
LOCATION	
SEC.	
TWP.	
RGE.	
ELEV.	
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 OF RMF & RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN NO. ONE
DEPTH-DRILLER 5,145
DEPTH-LOGGER 5,145
BTM. LOG INTERVAL 5,145
TOP LOG INTERVAL 3,000
CASING-DRILLER 8 5/8 @ 320
CASING-LOGGER 320
BIT SIZE 7 7/8
TYPE FLUID IN HOLE GEL CHEM
DENS. 9.2
VISC. 38
PH 10.5
FLUID LOSS 8 CC
SOURCE OF SAMPLE MUD PIT
RM @ MEAS. TEMP. .85 @ 70°F
RMF @ MEAS. TEMP. .75 @ 70°F
RMC @ MEAS. TEMP. .95 @ 70°F
SOURCE OF RMF & RMC MEASURED
RM @ BHT .45 @ 140°F
TIME SINCE CIRC. 12 HRS.
MAX. REC. TEMP. 140°F
EQUIP. LOCATION 3-COLO.
RECORDED BY R. HOLLAND
WITNESSED BY MR. JOHNSON

RUN NO. ONE
DEPTH-DRILLER 5,145
DEPTH-LOGGER 5,148
BTM. LOG INTERVAL 5,145
TOP LOG INTERVAL 3,000
CASING-DRILLER 8 5/8 @ 320
CASING-LOGGER 320
BIT SIZE 7 7/8
TYPE FLUID IN HOLE GEL CHEM
DENS. 9.2
VISC. 38
PH 10.5
FLUID LOSS 8 CC
SOURCE OF SAMPLE MUD PIT
RM @ MEAS. TEMP. .85 @ 70°F
RMF @ MEAS. TEMP. .75 @ 70°F
RMC @ MEAS. TEMP. .95 @ 70°F
SOURCE OF RMF & RMC MEASURED
RM @ BHT .45 @ 140°F
TIME SINCE CIRC. 12 HRS.
MAX. REC. TEMP. 140°F
EQUIP. LOCATION 3-COLO.
RECORDED BY R. HOLLAND
WITNESSED BY MR. JOHNSON

GAMMA RAY	1/100
GAMMA RAY INCREASES	NEUTRON INCREASES
API 0	API 1000

GAMMA RAY	NEUTRON
API 0	API 1000

CASING - 8 5/8" @ 320 FEET.

TD REACHED, ATTEMPTS TO RECORD ALL CURVES.

FLUID LEVEL @ 4,700 FEET.

NEAR OFFSET AT SEDALIA FIELD, SEC 24, T7S, R67W.

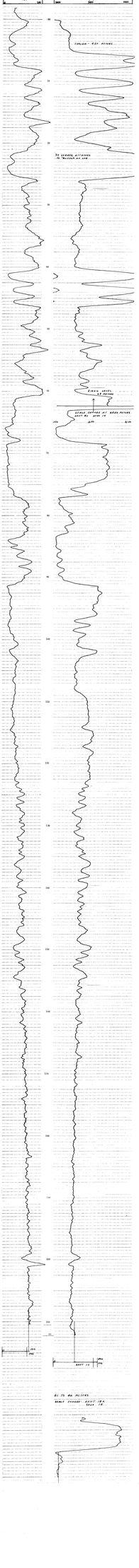
GR

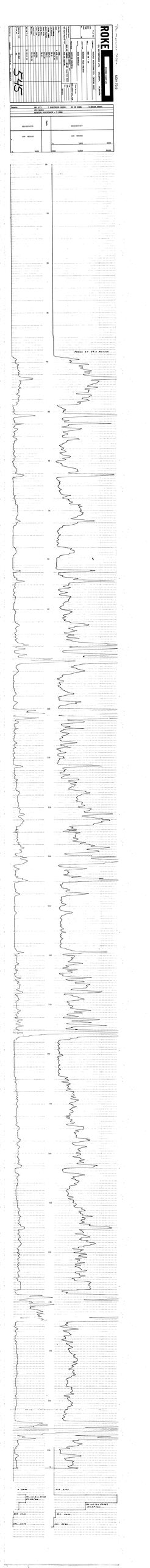
NEUTRON

BHT 140°

RUN NO. ONE
DEPTH-DRILLER 5,145
DEPTH-LOGGER 5,148
BTM. LOG INTERVAL 5,145
TOP LOG INTERVAL 3,000
CASING-DRILLER 8 5/8 @ 320
CASING-LOGGER 320
BIT SIZE 7 7/8
TYPE FLUID IN HOLE GEL CHEM
DENS. 9.2
VISC. 38
PH 10.5
FLUID LOSS 8 CC
SOURCE OF SAMPLE MUD PIT
RM @ MEAS. TEMP. .85 @ 70°F
RMF @ MEAS. TEMP. .75 @ 70°F
RMC @ MEAS. TEMP. .95 @ 70°F
SOURCE OF RMF & RMC MEASURED
RM @ BHT .45 @ 140°F
TIME SINCE CIRC. 12 HRS.
MAX. REC. TEMP. 140°F
EQUIP. LOCATION 3-COLO.
RECORDED BY R. HOLLAND
WITNESSED BY MR. JOHNSON

DENSITY											NEUTRON									
RUN	TOOL TYPE	SOURCE STRENGTH	DETECTOR	SPACING	CSG. SIZE	WGHT.	BOREHOLE CORR.	MUD WGHT.	MUD VISC.	MUD W.L.	RUN	TOOL TYPE	SOURCE STRENGTH	DETECTOR	SPACING	CSG. SIZE	WGHT.	BOREHOLE CORR.	MUD WGHT.	MUD VISC.	MUD W.L.
1	FDC	30	6	5.5	8 5/8	32	NONE	9.2	38	8	1	CNL	50	6	5.5	8 5/8	32	NONE	9.2	38	8
2	FDC	30	6	5.5	8 5/8	32	NONE	9.2	38	8	2	CNL	50	6	5.5	8 5/8	32	NONE	9.2	38	8
3	FDC	30	6	5.5	8 5/8	32	NONE	9.2	38	8	3	CNL	50	6	5.5	8 5/8	32	NONE	9.2	38	8
REMARKS											REMARKS									




ROKE
545
Faces at 87.4 metres

ROKE

ROKE OIL EXPLORATION PTY. LTD.

WELL	ROKE 1
FIELD	WILDCAT
LOCATION	1.5 KM SOUTH OF ROKE 1
COUNTY	
STATE	SOUTH AUSTRALIA
PERMANENT DATUM	GROUND LEVEL
ELEV. PERM. DATUM	0 M
LOG MEASURED FROM	KELLY BUSHING
ELEV. K.B.	5.5 M
ELEV. D.F.	
ELEV. G.L.	0 M
DATE	5-7-72
RUN NO.	ONE
DEPTH-DRILLER	1,615 M
DEPTH-LOGGER	1,615 M
BTM. LOG INTERVAL	1,615 M
TOP LOG INTERVAL	1,000 M
CASING-DRILLER	1,000 M
CASING-LOGGER	1,000 M
BIT SIZE	8 1/2"
TYPE FLUID IN HOLE	GEL CHEM
DENS. VISC.	1.2 SG 60
PH/FLUID LOSS	9.5 10 CC
SOURCE OF SAMPLE	FLOWLINE
RM @ MEAS. TEMP.	0.4 @ 30°C
RMF @ MEAS. TEMP.	0.3 @ 30°C
RMC @ MEAS. TEMP.	0.5 @ 30°C
SOURCE RMF & RMC	MEASURED
RM @ BHT	0.2 @ 60°C
TIME SINCE CIRC.	6 HOURS
MAX. REC. TEMP.	60°C
EQUIP. LOCATION	ADELAIDE
RECORDED BY	R. SMITH
WITNESSED BY	J. BROWN

EQUIPMENT DATA

GAMMA RAY	NEUTRON
RUN NO. ONE	RUN NO. ONE
TYPE INSTR. GR	TYPE INSTR. NEUTRON
SERIES 30	LOG SERIAL NO.
LOG SERIAL NO.	30
LOG	RECORDED BY
RECORDED BY R. SMITH	WITNESSED BY J. BROWN
WITNESSED BY J. BROWN	LOG PROPAGATIONAL
LOG PROPAGATIONAL	SPEED 30 M/MIN
SPEED 30 M/MIN	SENSITIVITY
SENSITIVITY	SENSE SWITCH NO.
SENSE SWITCH NO.	1
1	GAIN 20 DB
GAIN 20 DB	FILTER
FILTER	1 SECOND
TIME CONSTANT	1 SECOND

CASING DATA

GENERAL								GENERAL							
NO.	STRING	WEIGHT	GRADE	THREAD	I.D.	DRIFT DIA.	TOP	NO.	STRING	WEIGHT	GRADE	THREAD	I.D.	DRIFT DIA.	TOP
1	7"	23 LBS	J	ST&C	6.366"	6.241"	0 M	1	9 5/8"	40 LBS	J	ST&C	8.835"	8.679"	0 M
2	9 5/8"	40 LBS	J	ST&C	8.835"	8.679"	1,000 M	2	7"	23 LBS	J	ST&C	6.366"	6.241"	1,000 M

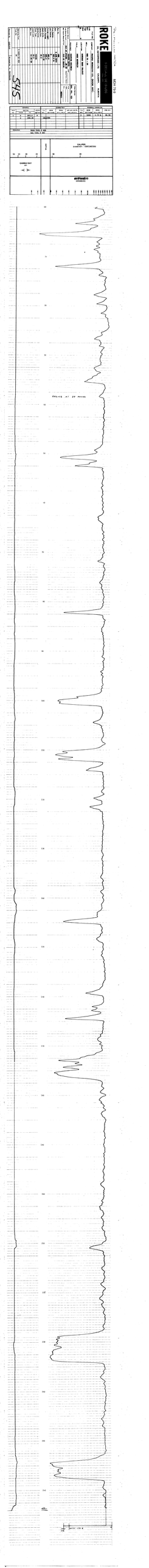
REMARKS:

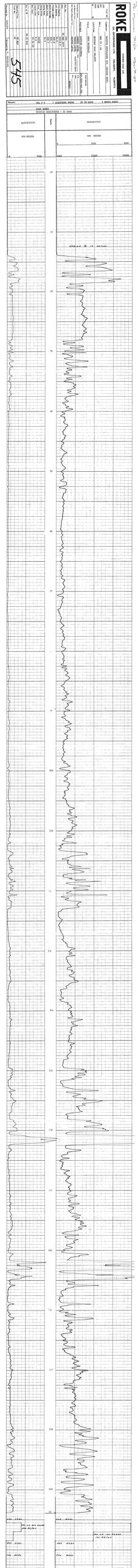
GAMMA RAY

NEUTRON

CASING SHOE INDICATED

SOLUTION INDICATED


ROKE
SURVEY No. 1
SHEET No. 1
SHS
CASING RECORD
CALIPER
Diameter - CENTIMETRES
GAMMA RAY
Counts per second
Scale
Casing at 89 metres
Depth in metres


ROKE
ROKE OIL & DEVELOPMENTS LTD.
CALGARY ALBERTA
COMPANY
WELL
FIELD
LOCATION
ELEVATION
Remarks
RUN # 3 7 SUBSTRUCTURE BOOMER 30 CM GRAD 5 METERS HIGHS
ZERO DATUM
MEASURED HEIGHTS = 23.0000
RESISTIVITY
RESISTIVITY
OHMS PER METER
OHMS PER METER
Casing @ 11.4 metres
Run #1 @ 11.4 metres
Run #2 @ 11.4 metres
Run #3 @ 11.4 metres
Run #4 @ 11.4 metres
Run #5 @ 11.4 metres
Run #6 @ 11.4 metres
Run #7 @ 11.4 metres
Run #8 @ 11.4 metres
Run #9 @ 11.4 metres
Run #10 @ 11.4 metres
Run #11 @ 11.4 metres
Run #12 @ 11.4 metres
Run #13 @ 11.4 metres
Run #14 @ 11.4 metres
Run #15 @ 11.4 metres
Run #16 @ 11.4 metres
Run #17 @ 11.4 metres
Run #18 @ 11.4 metres
Run #19 @ 11.4 metres
Run #20 @ 11.4 metres
Run #21 @ 11.4 metres
Run #22 @ 11.4 metres
Run #23 @ 11.4 metres
Run #24 @ 11.4 metres
Run #25 @ 11.4 metres
Run #26 @ 11.4 metres
Run #27 @ 11.4 metres
Run #28 @ 11.4 metres
Run #29 @ 11.4 metres
Run #30 @ 11.4 metres
Run #31 @ 11.4 metres
Run #32 @ 11.4 metres
Run #33 @ 11.4 metres
Run #34 @ 11.4 metres
Run #35 @ 11.4 metres
Run #36 @ 11.4 metres
Run #37 @ 11.4 metres
Run #38 @ 11.4 metres
Run #39 @ 11.4 metres
Run #40 @ 11.4 metres
Run #41 @ 11.4 metres
Run #42 @ 11.4 metres
Run #43 @ 11.4 metres
Run #44 @ 11.4 metres
Run #45 @ 11.4 metres
Run #46 @ 11.4 metres
Run #47 @ 11.4 metres
Run #48 @ 11.4 metres
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Run #50 @ 11.4 metres
Run #51 @ 11.4 metres
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Run #60 @ 11.4 metres
Run #61 @ 11.4 metres
Run #62 @ 11.4 metres
Run #63 @ 11.4 metres
Run #64 @ 11.4 metres
Run #65 @ 11.4 metres
Run #66 @ 11.4 metres
Run #67 @ 11.4 metres
Run #68 @ 11.4 metres
Run #69 @ 11.4 metres
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Run #1000 @ 11.4 metres

PR - MONKMAN 79(3)A MDH-79-04

ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 04
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services:	GRN, FBL, DIR

Permanent Datum	GROUND LEVEL	Elev.	K.B.
Log Measured from	GROUND LEVEL	Above Perm. Datum	CSG
Well Depths Measured from	GROUND LEVEL		G.L.
			METRIC

Run. No.	ONE	TWO	
Date	21 MAR 1979	22 MAR 1979	
First Reading	167.0 M	223.40 M	
Last Reading	0	167.0	
Footage Logged	167.0	56.40	
Depth Reached	167.90	224.30	
Depth Driller	168.0	225.70	
Casing Roke	14.0	14.0	
Casing Driller			
Fluid Type	WATER	WATER	
Liquid Level	8.0	8.0	
Min. Diam.	15.24 CM	15.24 CM	
Operating Time	3 HOURS	545	
Truck No.	36		

Recorded By CARLSON Witnessed By W. PROUDLOCK

GENERAL				SIDEWALL DENSILOG				GAMMA RAY			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/DIV	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.
1	0	167.0	4	3	1000	1.75 R	64.56				
	167.0	223.4	4	3	1000	1.75 R	64.56				
CALIPER	0	425.0									

REMARKS

DENS TOOL # 420

CAL TOOL # 587

ROKE

OIL DEVELOPMENTS LTD.

CALGARY, ALBERTA

WELL NAME AND NUMBER: ANAPP 10-35-35-5W4

FIELD: ANAPP

LOCATION: 10-35-35-5W4

LSD: 10 SEC: 35 TWP: 35 RGE: 5 W4M

PROVINCE: ALBERTA

ELEVATIONS: KB 1,139.0 m | DF | GL 1,135.0 m

LOG MEASURED FROM: KB 4.0 m ABOVE PERM. DATUM

DRILLING MEASURED FROM: KB

DATE: 1-Jan-1900

RUN NO.: ONE

DEPTH-DRILLER: 1,000.0 m

DEPTH-LOGGER: 1,000.0 m

BTM. LOG INTERVAL: 1,000.0 m

TOP LOG INTERVAL: 300.0 m

CASING-DRILLER: 244.5 mm @ 300.0 m

CASING-LOGGER: 300.0 m

BIT SIZE: 200.0 mm

TYPE FLUID IN HOLE: GEL CHEM

DENSITY: 1,100 kg/m³

VISCOSITY: 50 s

PH: 9.0

FLUID LOSS: 10.0 cm³/30 min

SOURCE OF SAMPLE: PIT

RM @ MEAS. TEMP.: 0.200 Ω·m @ 20 °C

RMF @ MEAS. TEMP.: 0.150 Ω·m @ 20 °C

RMC @ MEAS. TEMP.: 0.250 Ω·m @ 20 °C

SOURCE: RMF: MEASURED | RMC: CALCULATED

RM @ BHT: 0.100 Ω·m @ 60 °C

TIME SINCE CIRC.: 12 HRS

MAX. REC. TEMP.: 60 °C

EQUIP. LOCATION: 10-35-35-5W4

RECORDED BY: J. MILLER

WITNESSED BY: J. SMITH

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		TOOL MODEL NO.	NEUTRON/NEUTRON
DETECTOR MODEL NO.	11.1M	DIAMETER	11.1M
TYPE	ACCUMULATOR	DETECTOR MODEL NO.	
SOURCE	2 UR	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	0.27 M	SOURCE	137 MBq
		SPACING MODEL NO.	MAG-0.35 M
SONDES		SPACING	0.35 M
MODEL TRACK NO.	30	MODEL NO.	435 MB
INSTRUMENT USED NO.	30	TYPE	Pu/Be
TOOL SERIAL NO.	525 001	CYPHER	3 GR6264

LOGGING DATA

SONDES					GAMMA RAY					NEUTRON				
RUN	FROM	TO	SPEED m/min	TC s	MEAS. PT.	BOTTOM	API @ TEMP.	TC s	MEAS. PT.	BOTTOM	API @ TEMP.
1	0	7.6	6	5	KB	500	0	14	1	KB	500	0	14
1	7.6	226.5	6	5	KB	500	0	14	1	KB	500	0	14

REMARKS

GAMMA RAY | DEPTH | NEUTRON

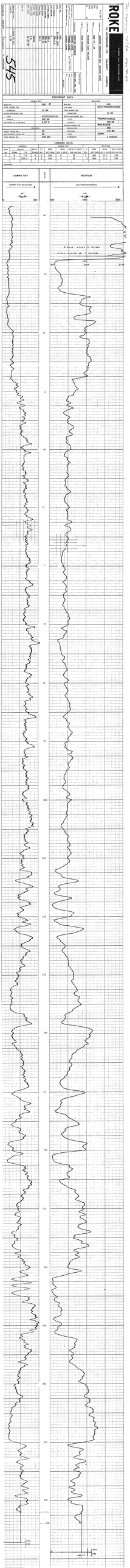
GAMMA RAY INCREASES →

API 0 — 150

← NEUTRON INCREASES

API 0.45 — 0.15

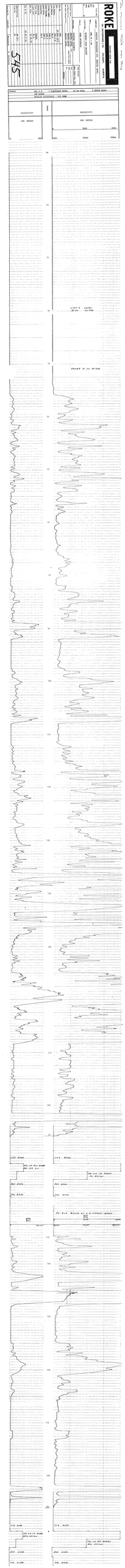
1000 — 1000



ROKE

545

Recorded: MAY 2, 1955 — 7 ELECTRICAL LOGS — 10 IN HOLE — 5 BEING SENT
CSG SHOE @ 3000
SECTION ACCIDENTAL — TWP 20NW



ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG
CALIPER

FILE NO	
LSD	
SEC	
TWP	
RGE	
W	M
COMPANY	PACIFIC PETROLEUMS LTD. (MINING DEPT)
WELL	MDH 79 - 06
LOCATION	MONKMAN PASS PROJECT
FIELD	DUKE MOUNTAIN
PROVINCE	BRITISH COLUMBIA
Other Services.	GRN, FBL, DIR
Permanent Datum	GROUND LEVEL Elev
Log Measured from	GROUND LEVEL Above Perm. Datum
Well Depths Measured from	GROUND LEVEL
K.B	
CSG	
G L	
	METRIC

Run No.	ONE	TWO
Date	28 MAR 1979	29 MAR 1979
First Reading	163.50 M	185.50 M
Last Reading	0	163.50
Footage Logged	163.50	22.0
Depth Reached	164.40	186.40
Depth Driller	165.40	195.20
Casing Roke	46.0	46.0
Casing Driller		
Fluid Type	WATER	WATER
Liquid Level	31.50	31.50
Min Diam	15.24 CM	15.24 CM
Operating Time	1 HOUR	1 HOUR
Truck No	36	36
Recorded By	CARLSON	Witnessed By W. PROUDLOCK

545

Pr-Monkman 79(3)a MDH 79-6

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV.L OR R	CPS/ DIV
1	0	163.50	4					3	1000	1.75 R	64.56
	163.50	185.50	4					3	1000	1.75 R	64.56
	0	186.0		CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 587
HOLE PLUGGED AT 186.00 M

ROKE

COMPANY: SCHLUMBERGER LTD. - OILFIELD SERVICES

GAMMA RAY NEUTRON LOG

WELL: ROKE 1 (SEC. 30, BLK. 2, H. & G.N. RR. CO. SURVEY)

FIELD: WILDCAT

COUNTY: HUTCHINSON

STATE: TEXAS

Other Services: DIL

Permanent Datum: GROUND LEVEL

Elev.: K.B. 3295 ft. D.F. G.L. 3284 ft.

Log Measured From: K.B. 11 ft. above Perm. Datum

Drilling Measured From: K.B.

Date: 1-6-69

Run No.: ONE

Depth-Driller: 6330

Depth-Logger: 6330

Bottom Logged Interval: 6330

Top Logged Interval: 1300

Type Fluid in Hole: WATER BASE MUD

Salinity, PPM Cl: 1000

Density: 9.2 LB/GAL

Level: FULL

Max. Rec. Temp. Deg. F: 130

Operating Rig Time: 12 HRS

Recorded By: J. JONES

Witnessed By: MR. SMITH

Run No. | Bit Size | Casing Size | Wgt. | Grade | From | To

ONE | 7 7/8 | 5 1/2 | 14 | J-55 | 0 | 6330

EQUIPMENT DATA

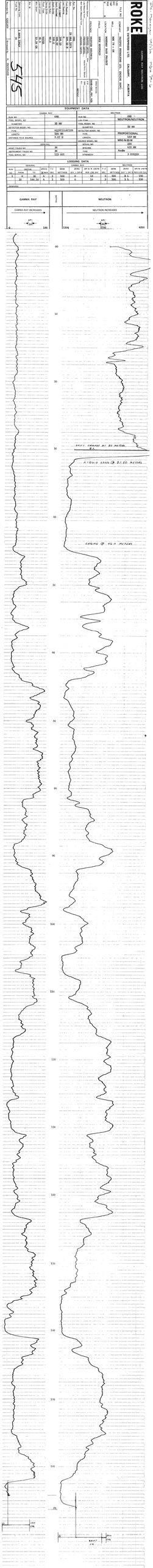
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3 3/8 IN.	SOURCE STRENGTH, MC	50 MC
DETECTOR MODEL NO.		DIAMETER	3 3/8 IN.
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	5.65 IN.	TYPE	PROPORTIONAL
DISTANCE TO R. SOURCE	2.67 ft.	LENGTH	4.23 IN.
		DISTANCE TO R. SOURCE	MRC-N-5000
CENTRAL		SPECIAL NO.	224
HEAD TRACK NO.	36	DESIGNS	4.50 IN.
INSTRUMENT TRACK NO.	36	TYPE	Amille
TOOL SERIAL NO.	123 101	STRENGTH	3 000000

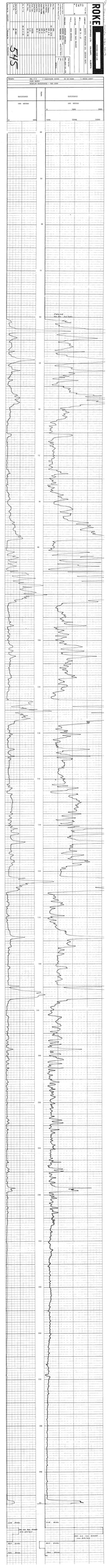
LOGGING DATA

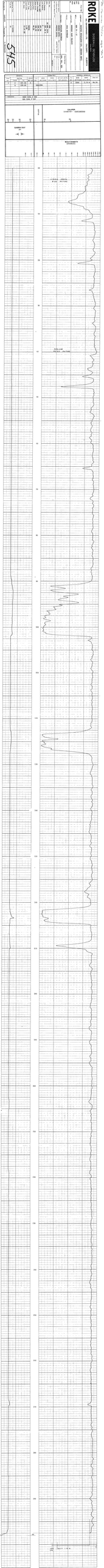
RUN NO.	GAMMA RAY INTERVAL FROM	TO	SPEED (ft./min.)	T.C. TIME CONST.	GAIN SETTING (API UNITS)	NEUTRON INTERVAL FROM	TO	SPEED (ft./min.)	T.C. TIME CONST.	GAIN SETTING (API UNITS)
ONE	0	6330	30	3	500	1300	6330	30	3	500

CALIBRATION

GAMMA RAY		NEUTRON	
API UNITS	0 / 100	API UNITS	1300 / 6330
GAMMA RAY INCREASES →		NEUTRON INCREASES →	




ROKE
545


ROKE
CONTRACTING
545
GAMMA RAY
CALIPER
BULK DENSITY
FULL-LINE
RESISTIVITY

ROKE

ROKE OIL COMPANY

545

COMPANY	ROKE OIL COMPANY
WELL	545
FIELD	WILDCAT
COUNTY	LINCOLN
STATE	NEW MEXICO
LOCATION	1980' FSL & 1980' FEL
SEC.	34
TWP.	9S
RGE.	34E
PERMANENT DATUM	GROUND LEVEL
ELEV.	4,000ft
LOG MEASURED FROM	KB 10ft ABOVE PERM. DATUM
DRILLING MEASURED FROM	KB
ELEV. KB	4,010ft
ELEV. DF	4,009ft
ELEV. GL	4,000ft

DATES	
SPUD	14-JUL-1957
COMPLETED	28-JUL-1957
RECEIVED	30-JUL-1957

RUN NO.	ONE
DEPTH-DRILLER	5,200ft
DEPTH-LOGGER	5,198ft
BTM. LOG INTERVAL	5,198ft
TOP LOG INTERVAL	1,000ft
CASING-DRILLER	8.625" @ 1,000ft
CASING-LOGGER	1,000ft
BIT SIZE	7.875"
TYPE FLUID IN HOLE	GEL-CHEM
DENS. / VISC.	9.8ppg / 42s
PH / FLUID LOSS	10.5 / 8.2cc
SOURCE OF SAMPLE	FLOWLINE
RM @ MEAS. TEMP.	0.18Ω @ 72°F
RMF @ MEAS. TEMP.	0.14Ω @ 72°F
RMC @ MEAS. TEMP.	0.22Ω @ 72°F
SOURCE RMF / RMC	CALC / CALC
RM @ BHT	0.09Ω @ 142°F
TIME SINCE CIRC.	6 HOURS
MAX. REC. TEMP.	142°F
EQUIP. LOCATION	4 - 4500SS
RECORDED BY	J. HARRIS
WITNESSED BY	T. MORGAN

RUN	BOREHOLE RECORD			CASING RECORD			
	BIT NO.	FROM	TO	SIZE	WGT.	GRADE	FROM	TO
ONE	1	0	5,200ft	8.625"	24#	J-55	0	1,000ft

LOGGING DISTRICT	HOBBS
LOGGING ENGINEER	R. KOWALSKI
UNIT NUMBER	12

GAMMA RAY

CORRECTED NEUTRON

0 API 150

NEUTRON

NEUTRON INCREASES

0.45 φ 0.00

DENSITY

DENSITY INCREASES

2.95 ρb 2.00

1" = 100ft

1,000ft

5,200ft

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO

SEC
TWP
RGE
M

COMPANY PACIFIC PETROLEUMS LTD. (OPERTING DEPT.)

WELL MDE 79 - 19

LOCATION MORIARTY BASS TRIBUTARY

FIELD DEASE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services

CBM, DDBS-CAL, DTE

Permanent Datum
Log Measured from
Drlg Measured from

ROT. OF CASING 63 CM
CASING-DRILLER 1.22 M
CASING-LOGGER 1.22 M

Elev.
K.B.
D.F.
G.L.

METRIC

Run. No.	ONE
Date	14 DEC 1979
First Reading	84.7 M
Last Reading	24.5
Footage Logged	60.2
Depth Driller	85.0
Depth Logger	89.3
Bottom Logged Interval	MASTER
Top Logged Interval	24.5
Type Fluid in Hole	12.26 CM
Max. Recorded Temp.	36.38 @ 25
Rm. @ °C	
Operating Time	30 MIN
Truck No.	36

Recorded By CARLSON

Witnessed By L. PROVOLOCK

545

Remarks

FBL # 5, 7 ELECTRODE SONDE, 20 CM BEAM, 1 METER ARRAY
STD RANGE
MUDFISH RESISTANCE - 10 OHMS

RESISTIVITY — OHM METERS — 0 — 5000

Depths

RESISTIVITY — OHM METERS — 0 — 1000 — 2000

6500 — 11500 — 16500

000
10
20
30
40
50
60
70
80

LIQUID LEVEL 24.50 METERS

FR

LOG ZERO

CAL ON 200 RANGE

RAC ZERO

CAA ZERO

LOG ZERO

CAL ON 100 RANGE

RAC ZERO

CAA ZERO

ROKE

SIDEWALL DENSLOG CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO

COMPANY BALLISTIC DETONATORS LTD. (CODING DEPT.)

WELL NBM 79 - 19

LOCATION MONKMAN PASS PROJECT

FIELD TUMBLE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev.
Log Measured from: KB — Above Perm. Datum
Drlg. Measured from: GRD. — Elev.

Other Services: GRN. FRA. DIS.

SECTION TWP RGE W of M

Rec. No. ONE
Date 10 APR 1979
Type Log 1ST RUN
Last Reading 0
Fluid in Hole SALT WATER
Density Recorded 84.70
Depth Logged 85.30
Bit Size 8½"
Casing Size 5.50
Casing Driller
Casing Logger
Liquid Level
Max. Temp. Recorded
Min. Diam.

Operating Time 1 HOUR
Truck No 36

Recorded By CARLSON
Witnessed By M. PROVENCHER

5745

SURFACE: 500 AIR CASING 1.125 WALL

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC	SENS SETTINGS	ZERO DIV L OR R	API G R UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV L OR R	CPS/ DIV
1	0	84.70	4					3	1000	1.75 R	64.56
	0	85.30		CALIPER							

REMARKS DENS TOOL # 420
CAL TOOL # 587

CALIPER
DIAMETER – CENTIMETERS

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

DEPTHS

00
10
20
30
40
50
60
70
80

EOT

1000 CPS

CURVE 1.75 R

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO
COMPANY PACIFIC PETROLEUMS LTD. (OPERS. DEPT.)
WELL MBR 79 - 19
LOCATION MONKMAN PASS PROJECT
FIELD BOOZ MOUNTAIN
PROVINCE BRITISH COLUMBIA

LSD
SEC
TWP
RGE
M

Permanent Datum: GROUND LEVEL
Log Measured From: 300' OF CASING 30' CM
Drilling Measured From: 300' OF CASING 1.22 M/CM

Elev.: K.B. / D.F. / G.L.

Other Services: DENSI-CAL, CBL, DTR

Run No.	ONE
Date	10 - 24 - 1979
Depth Driller	85.3
Last Reading	85.3
Footage Logged	0
Bottom Reached	85.3
Depth Reached	85.3
Casing Driller	85.3
Casing Logger	85.3
Casing Bottom	85.3
Casing Size	5.5
Casing Wt.	
Type Fluid in Hole	
Density	
Viscosity	
Fluid Loss	
Source of Sample	
Rm @ Meas. Temp.	
Rmf @ Meas. Temp.	
Rmc @ Meas. Temp.	
Source of Rmf & Rmc	
Rm @ BHT	
Time Since Circ.	
Max. Rec. Temp.	
Equip. Location	
Recorded By	GANZEVOORT
Witnessed By	M. PROTOPOCK

Operating Time: 1 HOUR
Truck No: 35

545

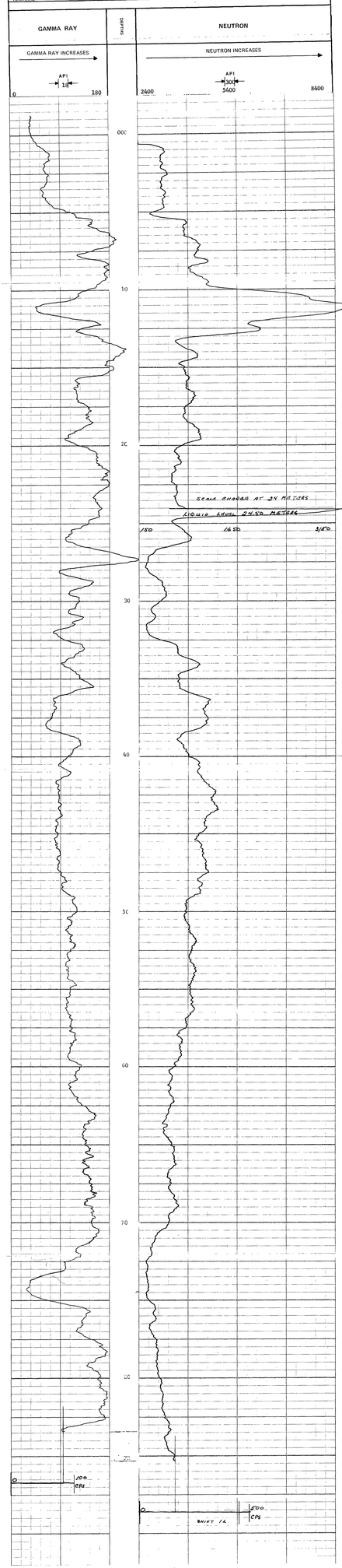
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO		TOOL TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO	
DETECTOR MODEL NO		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N SOURCE	2.07 M	LENGTH	152 MM
GENERAL		SOURCE MODEL NO	MRC-N-55-W
HOIST TRUCK NO	36	SERIAL NO	256
INSTRUMENT TRUCK NO	36	SPACING	432 MM
TOOL SERIAL NO	125 001	TYPE	AmBe
		STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY					NEUTRON			
RUN NO	DEPTHS FROM	DEPTHS TO M	SPEED M/MIN	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API G R UNITS PER LOG DIV	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV
1	0	24.0	4	3	100	0	18	3	1000	8 L	300
	24.0	85.3	4	3	100	0	18	3	500	1 L	150

REMARKS



ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO

SEC
TWP
RGE
W M

COMPANY PACIFIC PETROLEUMS LTD. (OPERATING DEPT.)

WELL MBM 79 - 19

LOCATION MONUMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev
Log Measured from KB
Rec Depths Measured from CASING TOP 90 CM Above Perm Datum DF
TOP OF CASING GSC
GL

Other Services

MEMO

Run. No.	ONE
Date	9 APR 1979
Last Reading	60.10 M
First Reading	0
Footage Logged	60.10
Depth Reached	60.55
Depth Driller	60.70
Casing Rote	6.10
Casing Driller	
Fluid Type	WATER
Liquid Level	DRY
Max. Diam	15.24 CM
Rm @	
Operating Time	45 MIN
Truck No	36

Recorded By CARLSON

Witnessed By W. PRODLOCK

545

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO	ONE	RUN NO	ONE
TOOL MODEL NO		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	
DETECTOR MODEL NO		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N SOURCE	2.07 M	LENGTH	152 MM
		SOURCE MODEL NO	MRC-N-SS-W
		SERIAL NO	256
		SPACING	432 MM
		TYPE	AmBe
		STRENGTH	3 CURIES

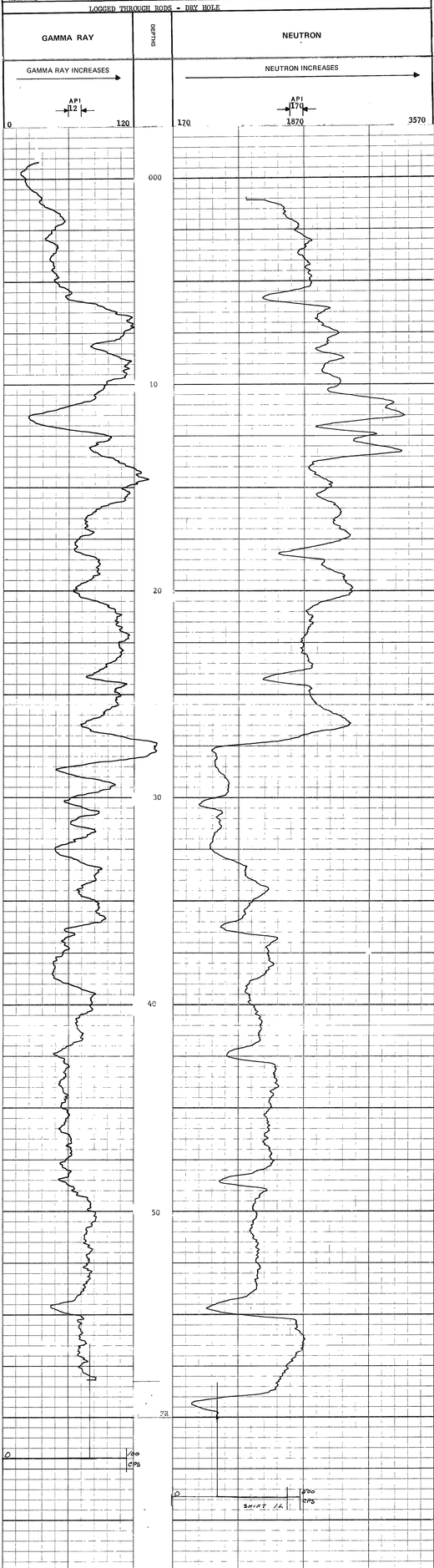
GENERAL	
HOIST TRUCK NO	36
INSTRUMENT TRUCK NO	36
TOOL SERIAL NO	125 001

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO	DEPTHS FROM	DEPTHS TO	SPEED M /MIN	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API G R UNITS PER LOG DIV	T C SEC	SENS SETTINGS	ZERO DIV L OR R	API N UNITS PER LOG DIV
1	0	60.10	4	3	100	0	12	3	500	1 L	170

REMARKS

LOGGED THROUGH RODS - DRY HOLE



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