ROKE
ROKE OIL INTERNATIONAL LTD.
SUITE 1000, 736 - 6th AVE. S.W.
CALGARY, ALBERTA
T2P 3T7

5446

| | | |

ROKE

S716

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	
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	

ROKE OIL WELL SERVICES, INC.
2700 POST OAK BLVD., HOUSTON, TEXAS 77056

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		TOOL MODEL NO.	NEUTRON/NEUTRON
DIAMETER	22 SEC	DIAMETER	22 SEC
DETECTOR MODEL NO.		DETECTOR MODEL NO.	
TYPE	SCINTILLATION	SOURCE MODEL NO.	PROPRIETARY
SPACING	2.5 SEC	SPACING	12.5 SEC
DISTANCE TO SOURCE	2.5	DISTANCE	12.5 SEC
		SOURCE MODEL NO.	600 MEW
SENSITIVITY	75	SERIAL NO.	150 W
ASSAY TRACER NO.	30	STRENGTH	1.5 MC
DISTURBANCE TRACER NO.	25	FORM	AMER
TOOL SERIAL NO.	S 1008 1216/22	STRENGTH	S 1008/22

LOGGING DATA

GAMMA RAY						NEUTRON					
RUN NO.	TYPE LOG	DEPTH DRILLER	TYPE LOG	DEPTH LOGGER	BTM. LOG INTERVAL	TOP LOG INTERVAL	RUN NO.	TYPE LOG	DEPTH DRILLER	TYPE LOG	DEPTH LOGGER	BTM. LOG INTERVAL	TOP LOG INTERVAL
ONE	G RAY	2700	S	2705	2705	0	ONE	N/N	2700	S	2705	2705	0

REMARKS: LOGGED THROUGH 85 METAL BAND

GAMMA RAY

GAMMA RAY INCREASES

0 — 100

NEUTRON

NEUTRON INCREASES

1700 — 1800

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

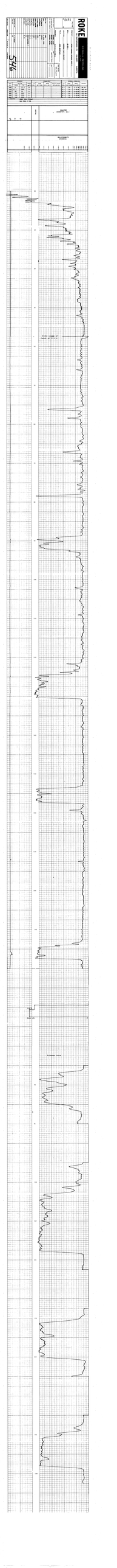
400

410

420

430

440


ROKE
TECHNOLOGIES LTD
546

ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD CALGARY, ALBERTA

FILE NO.

LOG TAKEN BY

WELL COMPANY: STRIDE SANTA CECILIA REG. 2

LOCATION SD-SD-2

FIELD WILDCAT

PROVINCE ALBERTA

RECORDED BY DAVE WORKMAN

WITNESSED BY

Other Services: GRN, DSN, CAL, DIP

Permanent Datum: GROUND LEVEL

Log Measured from: KELLY BUSHING

Drilling Measured from: GROUND LEVEL

Elev.: K.B. 3304 ft. D.F. G.L. 3294 ft.

Date: 1-Sept-1980

Run No.: ONE

Depth-Driller: 6125

Depth-Logger: 6125

Bottom Logged Interval: 6125

Top Logged Interval: 3750

Casing-Driller: 13 3/8 @ 324

Casing-Logger: 324

Bit Size: 12 1/4

Type Fluid in Hole: GEL CHEM

Dens.: 9.8

Visc.: 38

pH: 9.5

Fluid Loss: 8.2 cc

Source of Sample: CIRCULATION

Rm @ °F: 0.75 @ 72°

Rmf @ °F: 0.58 @ 72°

Rmc @ °F:

Source of Rmf & Rmc: CALCULATED

Rm @ BHT: 0.35 @ 150°

Time Since Circ.: 3 HOURS

Max. Temp. °F: 150

Equip. No.: 2

Location: EDMONTON

Recorded By: DAVE WORKMAN

Witnessed By: JIM DOWSON

5416

Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 180 OHMS

ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

DEPTH

RESISTIVITY (OHM-METERS)

SECONDARY SCALE

0 1000

PRIMARY SCALE

0 1000 2000

6300 11500 16500

40 50 60 70 80 90 100 110

T.D.

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP LATCHED ON 100 TAP

100 TAP 1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

OIL ENTERPRISES LTD.

GAMMA RAY NEUTRON LOG

CALGARY, ALBERTA

Recorded By: PRESTON
Witnessed By: DAVIDSON

Run No.	ONE	TWO	THREE
Depth-Driller	5,496'		
Depth-Logger	5,496'		
Bottom Log Interval	5,496'		
Top Log Interval	3,000'		
Casing-Driller	9 5/8" @ 1,000'		
Casing-Logger	1,000'		
Bit Size	8"		
Type Fluid in Hole	GEL-CHEM		
Density	9.5		
Viscosity	54		
pH	9.5		
Fluid Loss	7.6		
Source of Sample	CIRCULATION		
Rm @ Meas. Temp.	.711 @ 74°		
Rmf @ Meas. Temp.	.711 @ 74°		
Rmc @ Meas. Temp.	.711 @ 74°		
Source: Rmf / Rmc	MEASURED		
Rm @ BHT	.711 @ 74°		
Time Since Circ.	12 HRS		
Max. Rec. Temp.	74°		
Equip. Location	3-SER		
Recorded By	B.S.P.		
Witnessed By	B.S.P.		

RUN TWO LOGGED FROM 1,000' TO 5,496'

RUN ONE LOGGED FROM 3,000' TO 1,000'

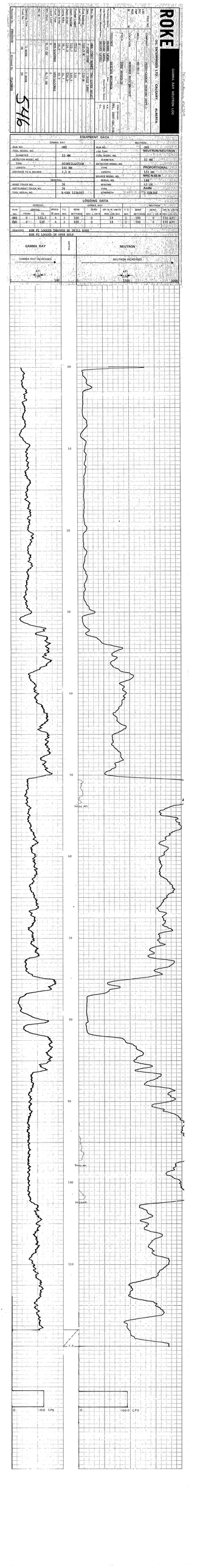
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	33 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	500 MM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	7.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MSC-N-55-M
GENERAL		SERIAL NO.	188
HOIST TRUCK NO.	36	RATING	43 GR
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	R-GRN 1236303	STRENGTH	75 MILLICURIES

LOGGING DATA

RUN	GENERAL DEPTH		SPEED	T.C.	GAMMA RAY SENS	ZERO	API-G.R. UNITS	T.C.	NEUTRON SENS	ZERO	
NO.	FROM	TO	M/MIN	SEC.	SETTING	DIV. L.ON R.	PER LOG DIV.	SEC.	SETTING	DIV. L.ON R.	PER LOG DIV.
ONE	0	1214	4	3	100	0	10	1	100	0	150 API
TWO	0	120	4	3	100	0	10	1	500	0	150 API

REMARKS RUN #1 LOGGED THROUGH 9 5/8 TILL BOOM
RUN #2 LOGGED IN OPEN HOLE



ROKE

SIDEWALL DENSILOG

Compensated

SCHLUMBERGER WELL SERVICES, INC.

HOUSTON, TEXAS

COMPANY

WELL

FIELD

COUNTY

STATE

LOCATION

Other Services

Permanent Datum

Elev.: K.B.

D.F.

G.L.

Log Measured From

Drilling Measured From

Date

Run No.

Depth-Driller

Depth-Logger

Bottom Logged Interval

Top Logged Interval

Type Fluid in Hole

Salinity, PPM Cl

Density

Viscosity

pH

Fluid Loss

Source of Sample

R_m @ Meas. Temp.

R_mf @ Meas. Temp.

R_mc @ Meas. Temp.

Source of R_mf

Source of R_mc

R_m @ BHT

Time Since Circ.

Max. Rec. Temp. Deg. F

Equip. No. Location

Recorded By

Witnessed By

546

RUN NO. | BIT NO. | TYPE | SIZE | FROM | TO

CASING RECORD

TYPE | SIZE | WGT. | GRADE | FROM | TO

BORE RECORD

RUN NO. | BIT NO. | FROM | TO

RUN NO.	BOTTOM	TOP	R_m @ MEAS. TEMP.	R_mf @ MEAS. TEMP.	R_mc @ MEAS. TEMP.

GENERAL

RUN NO.	DATE	DEPTH DRILLER	DEPTH LOGGER	TYPE FLUID IN HOLE	DENSITY	VISCOSITY	PH	FLUID LOSS	SOURCE OF SAMPLE	R_m @ MEAS. TEMP.	R_mf @ MEAS. TEMP.	R_mc @ MEAS. TEMP.	SOURCE OF R_mf	SOURCE OF R_mc
001	0	33.1	8											
001	15.2	159	6											
002	73	186	8											

SIDEWALL DENSILOG

RUN NO.	TOOL NO.	CALIPER	BULK DENSITY
8.1	1 C	2.33 X	86.96
8.1	1 C	2.08 X	107.95
8.1	1 C	2.08 X	107.95

REMARKS: 6000-3000, #1546-
CAL-3000, #106

CALIPER
(DIAMETER - IN)

BULK DENSITY
(GRAMS/CC)

SCALE CHANGE FOR CASING SET 165.10

FORMATION SCALE

6000-FR

ROKE

OIL WATERFLOOD LTD. CALGARY, ALBERTA

RECORDED BEAM SO 30 m

FIELD	
WELL	
LOCATION	
COUNTY	
PROVINCE	
OTHER SERVICES	
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 RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

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

5716

Remarks: FSU # 515 CURRENT RANGE 400 WORKFISH RESISTANCE 2000 OHMS

ELECTRODE SONDE 50 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 500 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE

0 500

RESISTIVITY (OHM-METERS)

PRIMARY SCALE

0 1000 2000

4500 7500 10500

FLUID LEVEL

10

20

30

40

50

60

70

80

90

100

110

120

LOGGED ON 100 TAP

LOG XEED

CAL ON 500 TAP
LATCH ON 100 TAP

100 TAP
1000 CAL

CAL XEED

REC XEED

STOP XEED

ROKE

GAMMA RAY NEUTRON LOG

OIL PETROPHYSICS LTD. CALGARY, ALBERTA

WELL	5-16-24-3
FIELD	WILDCAT
COMPANY	INTERNATIONAL HERALD ET AL
COUNTY, PARISH	
PROVINCE, STATE	ALBERTA
LOCATION	
OTHER SERVICES	
PERMANENT DATUM	GROUND LEVEL
ELEV.	
LOG MEASURED FROM	KB 3.0 M ABOVE PERM. DATUM
DRILLING MEASURED FROM	KB
DATE	1-6-74
RUN NO.	ONE
DEPTH-DRILLER	1000 M
DEPTH-LOGGER	1000 M
BTM. LOG INTERVAL	1000 M
TOP LOG INTERVAL	0
CASING-DRILLER	244.5 MM @ 0 M
CASING-LOGGER	244.5 MM @ 0 M
BIT SIZE	200 MM
TYPE FLUID IN HOLE	GEL CHEM
DENSITY	1.10
VISCOSITY	50
PH	9.5
FLUID LOSS	5.0
SOURCE OF SAMPLE	FLOWLINE
RM @ MEAS. TEMP.	0.30 @ 20 °C
RMF @ MEAS. TEMP.	0.25 @ 20 °C
RMC @ MEAS. TEMP.	0.40 @ 20 °C
SOURCE RMF & RMC	MEASURED
RM @ BHT	0.15 @ 60 °C
TIME CIRC. ENDED	0600
TIME LOGGER ON BOTTOM	0900
MAX. REC. TEMP.	60 °C
EQUIP. LOCATION	3 CORBIS
RECORDED BY	
WITNESSED BY	

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	70 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102 MM	TYPE	PROPORTIONAL
DISTANCE TO R. SOURCE	711 MM	LENGTH	152 MM
		SOURCE MODEL NO.	MPC N-55-39
GENERAL		SERIAL NO.	166
LOGGT TRUCK NO.	36	SPACING	45 CM
INSTRUMENT TRUCK NO.	36	TYPE	AMBA
TOOL SERIAL NO.	3-CBS 1274/003	STRENGTH	3 CURIES

LOGGING DATA

	GENERAL			GAMMA RAY				NEUTRON			
Run No.	DETAIL	SPEED	T.C.	SENS	ZERO	API @ R. UNITS	T.C.	SENS	ZERO	API @ UNITS
Log	FROM / TO	M/min	SEC	DIVISION	SPL. LOG ON	PER LOG DIV.	SEC	DIVISION	SPL. LOG ON	PER LOG DIV.
ONE	0 / 6.7	6	3	100	0	10	2	1000	0	100 API
ONE	6.7 / 971.3	6	3	100	0	10	2	500	0	150 API
REMARKS										

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

API 0 100

API 1000 0

STONE CAPSULE AT 6.7 M

WATER LEVEL AT 9.3 M

3000 CPS

P.B.T.

0 1000 CPS

0 1000 CPS

ROKE

546

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ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY HOME-SUNOCO (OKOTOKS) (1977) LTD.

WELL MD-80-4

LOCATION MORINVILLE RISE PROJECT

FIELD FORT SASKATCHEWAN

PROVINCE ALBERTA

Other Services: DUAL INDUCTION-SFL

Permanent Datum: GROUND LEVEL — Elev.: K.B. 0.0 m, D.F. m, G.L.

Log Measured From: GROUND LEVEL — Above Perm. Datum

Drilling Measured From: GROUND LEVEL

Run No.	ONE		
Date	11-11-1980		
Depth-Driller	70.5 M		
Depth-Logger	69.9		
Bottom Logged Interval	69.9		
Top Logged Interval	24.2		
Casing-Driller	24.2		
Casing-Logger	24.2		
Bit Size	15.9 CM		
Type Fluid in Hole	MUD/AEROMIX		
Density	1.15		
Viscosity	55		
Fluid Loss	8.4		
Source of Sample	CIRC.		
Rm @ Meas. Temp.	0.4 @ 22°C		
Rmf @ Meas. Temp.	0.3 @ 22°C		
Rmc @ Meas. Temp.	1.3 @ 22°C		
Source of Rmf and Rmc	MEAS.		
Rm @ BHT	0.4 @ 22°C		
Time Since Circ.	36 HRS		
Max. Rec. Temp. Deg. C	22		
Equip. Location	8-15-09		
Recorded By	M. JACKSON		
Witnessed By			

Time Since Circ. — Max. Rec. Temp. — Equip. Location — Recorded By — Witnessed By

Operating Time

Time No.

Time Mark on Edge of Log

Primary Depth Control

Secondary Depth Control

Type Log

Type Log

Type Log

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.

COMPANY: PETRO-CANADA (OPERATOR)

WELL: 8C-5-G-4

LOCATION: NORMAN WELLS, N.W.T.

FIELD: NORMAN WELLS

PROVINCE: NORTHWEST TERRITORIES, CANADA

Permanent Datum: K.B. | Elev. 211.2 M
Log Measured From: GROUND LEVEL | Above Perm. Datum
Drilling Measured From: GROUND LEVEL

Elev.: K.B. 211.2 M | D.F. | G.L. 207.6 M

Date: 1-JUNE-1985
Run No.: ONE
Depth-Driller: 2121 M
Depth-Logger: 2121 M
Bottom Logged Interval: 2121 M
Top Logged Interval: 1500 M
Casing-Driller: 244.5 MM @ 1500 M
Casing-Logger: 244.5 MM @ 1500 M
Bit Size: 222 MM
Type Fluid in Hole: GEL CHEM
Density: 1.20 KG/M3
Viscosity: 75 S
pH: 11.0
Fluid Loss: 4.8 C.C.
Source of Sample: CIRCULATION
Rm @ Meas. Temp.: 0.75 @ 21°C
Rmf @ Meas. Temp.: 0.6 @ 21°C
Rmc @ Meas. Temp.: 1.2 @ 21°C
Source: Rmf: MEASURED Rmc: CALCULATED
Rm @ BHT: 0.4 @ 77°C
Time Since Circ.: 3.5 HRS
Time Logger on Bottom: 1 HRS
Unit No.: 36
Recorded By: D.MCINTOSH
Witnessed By: D.ALFORD

S-46

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.	PROPORTIONAL
LENGTH	102 MM	TYPE	152 MM
DISTANCE TO N. SOURCE	2.1 M	LENGTH	MRC-N-SS-W
GENERAL		SOURCE MODEL NO.	
		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	63 CM
INSTRUMENT TRUCK NO.	36	TYPE	Amba
TOOL SERIAL NO.	R-GRN 1254003	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY			NEUTRON			
RUN NO.	DEPTH FROM	DEPTH 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
ONE	0	71	4	3	100	0	18	2	500	0	150 API

REMARKS:

GAMMA RAY | DEPTH | NEUTRON

GAMMA RAY INCREASES

API 0 — 180

NEUTRON INCREASES

API 0 — 1500 — 3000

00
10
20
30
40
50
60

3000 CPS
3000 CPS
3000 CPS
3000 CPS

T.D.

0 — 100 CPS

0 — 1000 CPS

ROKE OIL ENTERPRISES LTD.
SIDEWALL DENSILOG
CALGARY, ALBERTA

FILE
COMPANY
WELL
FIELD
LOCATION
SECTION TWP RGE
COUNTY
PROVINCE
PERMANENT DATUM
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
DENSITY
VISCOSITY
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE RMF
SOURCE RMC
RM @ BHT
TIME CIRC.
TIME LOGGER ON BOTTOM
MAX. REC. TEMP.
EQUIP. NO.
LOCATION
RECORDED BY
WITNESSED BY

| | | |

ROKE

GAMMA RAY NEUTRON LOG

COIL (1978) RESOURCES LTD.

CALGARY, ALBERTA

FILE NO.	
SEC.	
TWP.	
RGE.	
COMPANY	COIL (1978) RESOURCES LTD.
WELL	08-05-1
FIELD	
LOCATION	NORMAN WELLS PROJECT
PROVINCE	NORTH WEST TERRITORIES
PERMANENT DATUM	GROUND LEVEL
ELEV.	
LOG MEASURED FROM	KELLY BUSHING
DRILLING MEASURED FROM	KELLY BUSHING
ELEV. K.B.	
ELEV. D.F.	
ELEV. G.L.	15.5 (4.7 MSL)
DATE	ONE
RUN NO.	ONE
DEPTH DRILLER	120
DEPTH LOGGER	120
BTM. LOG INTERVAL	120
TOP LOG INTERVAL	SURFACE
CASING DRILLER	13 3/8 @ 15
CASING LOGGER	15
BIT SIZE	12 1/4
TYPE FLUID IN HOLE	GEL CHEM
DENSITY	9.8
VISCOSITY	45
PH	9.5
FLUID LOSS	8.8 CC
SOURCE OF SAMPLE	FLOWLINE
RM @ MEAS. TEMP.	.68 @ 60 F
RMF @ MEAS. TEMP.	.54 @ 60 F
RMC @ MEAS. TEMP.	.95 @ 60 F
SOURCE OF RMF	MEASURED
SOURCE OF RMC	CALCULATED
RM @ BHT	.34 @ 120 F
TIME SINCE CIRC.	1 HR
MAX. REC. TEMP.	120 F
EQUIP. LOCATION	1234/003
RECORDED BY	R. COE
WITNESSED BY	

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	37 MM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	39 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	152.5M	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152.5M
GENERAL		SOURCE MODEL NO.	MNC N.05 W
SERIAL NO.	38	SERIAL NO.	168
HOIST TRUCK NO.	38	SPACING	45 CM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL/SERIAL NO.	R-COE 1234/003	STRENGTH	5 CURIE

LOGGING DATA

RUN	DEPTH		SPEED	T.C.	SENS	GAMMA RAY ZERO	GAMMA RAY API & K UNITS	NEUTRON T.C.	NEUTRON SENS	NEUTRON API & UNITS
NO.	FROM	TO	M. /MIN.	SEC.	SETTINGS	DIV. L OR R	PER LOG DIV.	SEC.	SETTINGS	DIV. L OR R
ONE	0	120	6	3	100	0	10	2	500	0

REMARKS

GAMMA RAY

GAMMA RAY INCREASES

API 0 10 100

NEUTRON

NEUTRON INCREASES

API 1000 500 0

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

Tens CPS

0 1000 CPS

0 1000 CPS

ROKE BOREHOLE SERVICES

5746

CLIENT	
CONTRACT	
LOCATION	
BOREHOLE No.	
DRILLING METHOD	
CASING DIAMETER	
CASING DEPTH	
DRILLER	
LOGGING ENGINEER	
DATE	
REMARKS	

CASING			
DIA	DEPTH		
150	12.2	m	
100	12.2	124	ft
150	124	133	ft
127	0	15	m
100	133	1	ft

CASING DIA	CASING DEPTH		
	m	ft	

CASING DIA	CASING DEPTH		
	m	ft	

CASING DIA	CASING DEPTH		
	m	ft	
0.1	0	0.12	0.36
0.1	0	0.07	217.36
0.1	0	0.07	217.36
0.1	0	0.05	221.36
0.1	0	0.05	221.36

CALIPER
DIAMETER - CM)

BULK DENSITY
GRAM/CC)

SINGLE CASING RUN, CASING AT 133 ft

5 PUL

BASE LOG

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM 100 20 CM

12-Microfilm 88(3)A

FILE NO
COMPANY PETRO-CANADA (OPERG. DEPT.)
WELL NO-80-6
LOCATION MONTANA R&R PROJECT
FIELD EVOR-MONTANA
PROVINCE BRITISH COLUMBIA
Other Services DIM, DBHC-CAL

LSD
SEC
TWP
RGE
W M

Permanent Datum GROUND LEVEL Elev.
Log Measured from KELLY BUSHING Ft. Above Perm. Datum
Drlg Measured from GROUND LEVEL
D.F.
G.L.

Run. No.	ONE
Date	17 JULY 1980
Last Reading	52.4 M
First Reading	20
Casing Logged	32
Depth Reached	52.4
Depth Driller	53.9
Casing Size	6.72
Casing Fluid	6.0
Fluid Type	MUD/ALGOMAR
Liquid Level	21
Max. Recorded Temp.	8.75 CM
Min. Datum	
Rm. @ °C	30 @ 27°
Operating Time	3 HOUR
Truck No.	36

Recorded By FERGUSON
Witnessed By FLACHNER

546

Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 500 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS) | Depths | RESISTIVITY (OHM-METERS)

SECONDARY SCALE 0 5000

PRIMARY SCALE 0 1000 2000

6500 11500 16500

30
40
50

F.R.

FLUID LEVEL

LOGGED ON 100 TAP

LOG ZERO

CAL ON 100 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LOG: Measured From: KB 5.3 M above Perm. Datum; Drilling Measured From: KB; Elev.: K.B. 1753.; G.L. 1748.

COMPANY: PETRO-CANADA (INTERN. DEPT.)

WELL: HDL-DH-5

LOCATION: MONKMAN INFIS PROJECT

FIELD: PARK MOUNTAIN

PROVINCE: BRITISH COLUMBIA

COUNTRY: CANADA

Elevations: K.B. 1753. G.L. 1748.

Permanent Datum: GROUND LEVEL

Log Measured from: GROUND LEVEL

Drilling Measured from: GROUND LEVEL

Run No. ONE

Date 17 JULY 1980

First Reading 0

Last Reading 52.5 M

Logged Interval 52.5

Depth Reached 52.7

Casing Driller 5½" @ 52.5 M

Casing Logger 5½" @ 52.5 M

Bit From 6.4

Bit To 52.7

Type Fluid in Hole WATER/GELTONMAN

Fluid Level 2225

Max. Rec. Temp. 8.75 CH

Max. Chan. 8.75 CH

Bit @

Recorded By: FERGUSON

Witnessed By: FAECHNER

Operating Time

Truck No. 36

Logging Unit No. 3 SNORT

5446

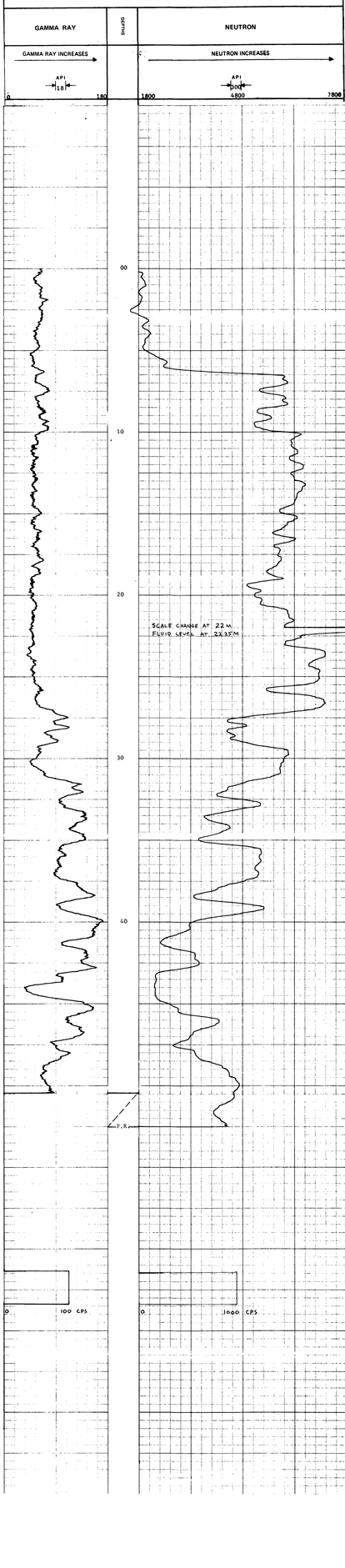
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	36	SERIAL NO.	158.
INSTRUMENT TRUCK NO.	36	SPACING	63 CM
TOOL SERIAL NO.	R-GRN 1254003	TYPE	AmBe
		STRENGTH	3 CURIES

LOGGING DATA

GENERAL 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.
ONE	0	22	4	3	100	0	18	2	1000	6 L	100 API
ONE	22	52.6	4	3	100	0	18	2	500	0	150 API

REMARKS



ROKE

SIDEHALL DENSLOG

FILE NO.	
COMPANY	OIL ENTERPRISES LTD. CALGARY ALBERTA
WELL	PETRO-CANADA DUNSTAN (PCP.)
LOCATION	06-20-5
FIELD	MONNAR RISE PROJECT
PROVINCE	BRITISH COLUMBIA
COUNTY	PEACE RIVER
STATE	
Other Services	CBH / TTL

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

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

Date	17 JUNE 1990
Run No.	ONE
Depth-Driller	514
Depth-Logger	0
Bottom Logged Interval	514
Top Logged Interval	0
Casing-Driller	324
Casing-Logger	324
Bit Size	8.5
Type Fluid in Hole	GEL CHEMICAL
Density	75
Viscosity	8.5 SEC
pH	
Fluid Loss	
Source of Sample	
Rm @ Meas. Temp.	
Rmf @ Meas. Temp.	
Rmc @ Meas. Temp.	
Source of Rmf and Rmc	
Rm @ BHT	
Time Since Circ.	3 HOURS
Max. Rec. Temp.	34
Equip. Location	
Recorded By	
Witnessed By	

GENERAL				GAMMA RAY			SIDEWALL DENSLOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M./MIN.	T.C. SEC.	SENS SETTINGS	ZERO DIVS. OR %	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIVS. OR %	CPS/ DIV
ONE	0	6	8					0.5	5 K	2.37 %	96.96
ONE	6	52	8					0.5	5 K	2.08 %	387.96
ONE	50	66	6					0.5	5 K	2.09 %	387.96

REMARKS: DENS TOOL #5548
GAL TOOL #386

CALIPER
(DIAMETER — CM.)

BULK DENSITY
(GRAMS/CC)

SCALE CHANGE FOR CASING AT 51M.

F.R.

TEMPMOD SCALE

2.0 GM

5000 CPS

0

S46

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

VOGUES MAXI 105 SC 5A

COMPANY: ESSO-CHINA (ESSTRL) LTD.

WELL: No. 2

FIELD: WILDCAT

LOCATION: MONTREAL RIVER AREA

COUNTY: DISTRICT

PROVINCE: NORTHWEST TERRITORIES

Other Services: DLL - MSFL - GR

Permanent Datum: GROUND LEVEL (G.L.) Elevation: 0 ft. above Perm. Datum

Log Measured From: G.L. 0 ft. above Perm. Datum

Drilling Measured From: G.L.

Run No.: ONE

Date: February 11, 1976

Last Reading: 9515 ft.

First Reading: 3150 ft.

Depth Driller: 9515 ft.

Depth Logger: 9515 ft.

Casing Driller: 3.0

Casing Logger: 3.0

Bottom Hole Temp.: NOT RECORDED

Fluid Type: 9.75

Max. Rec. Temp.: 34.5 °C

Equip. No. & Loc.: 34 NWT

Recorded By: M. MORTON

Witnessed By: M. MORTON

S-416

Remarks: FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 500 OHMS

ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

Ohms

RESISTIVITY (OHM-METERS)

PRIMARY SCALE

0 1000 3000

SECONDARY SCALE

0 5000

5500 11500 16500

FLUID LEVEL

00

10

20

30

40

50

60

70

80

90

100

F.L.

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP

LATCHED ON 100 TAP

100 TAP

1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. 346

COMPANY JESSE GARZA, OSCERE SECT.3

WELL NO. MS-BC-3

FIELD LOCATION WILDCAT

COUNTY, PARISH OR BOROUGH

STATE OR PROVINCE

Permanent Datum: GROUND LEVEL Elev.: 0
Log Measured From: KELLY BUSHING 4 Ft. Above Perm. Datum
Drilling Measured From: KELLY BUSHING

Elev.: K.B. 1000 Ft.
D.F.
G.L.

Date: 1-DEC-84
Run No.: ONE
Depth-Driller: 3600
Depth-Logger: 3600
Bottom Logged Interval: 3600
Top Logged Interval: 0
Casing-Driller: 8 5/8 @ 1200
Casing-Logger: 1200
Bit Size: 7 7/8
Type Fluid in Hole: GEL CHEM
Dens.: 9.2
Visc.: 40
pH: 10.5
Fluid Loss: 6.0
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: 1.11 @ 24°C
Rmf @ Meas. Temp.: .93 @ 24°C
Rmc @ Meas. Temp.: 1.34 @ 24°C
Source of Rmf & Rmc: MEASURED
Rm @ BHT: .61 @ 70°C
Time Since Circ.: 24 HRS
Time on Bottom: 0600
Max. Rec. Temp. Deg. F.: 158
Equip. No. & Location: 3 WEST
Recorded By: JOHNSON
Witnessed By: JOHNSON

346

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-05-W
GENERAL		SERIAL NO.	180
HOIST TRUCK NO.	36	SPACING	63 CM
INSTRUMENT TRUCK NO.	36	TYPE	Am-Be
TOOL SERIAL NO.	R-CRM 1256003	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M./MIN.	T.C. SEC.	SENS SETTING	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTING	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	0	110.2	6	3	100	0	18	2	300	0	120 API

REMARKS

GAMMA RAY

GAMMA RAY INCREASES

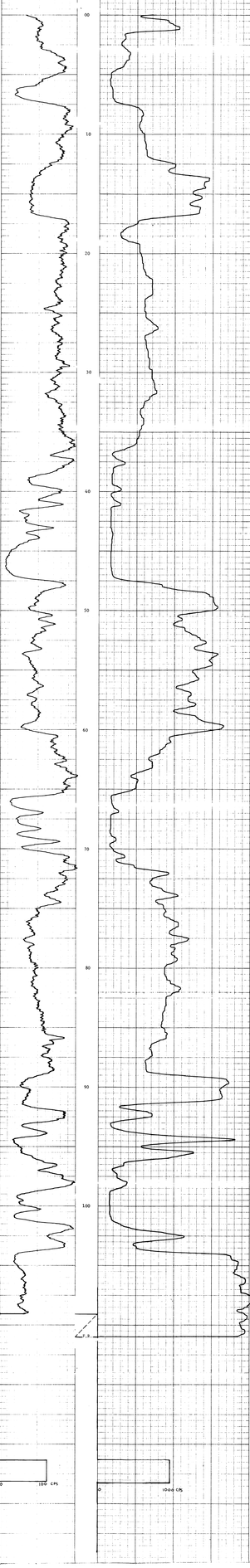
API 0 — 180

DEPTH

NEUTRON

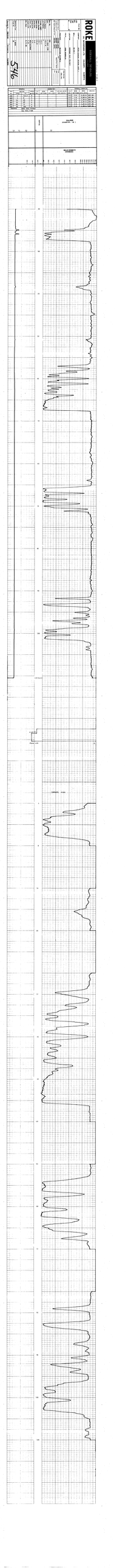
NEUTRON INCREASES

API 1500 — 3000



ROKE

5346



ROKE

KANSAS WELL LOGGING SERVICES

INSTRUMENTS LTD.

CALGARY, ALBERTA

| | | |

ROKE

OIL EXPLORATION SERVICES

ROKE HOUSE, 51-53 HIGH STREET, EPSOM, SURREY KT19 8DG

TELEPHONE: EPSOM (03727) 26611 TELEX: 23344

Client: FEL W

CURRENT RANGE 10 NORTH RESISTIVITY 100 OHMS

ELECTRODE SPACING 16" SCALE NORTH 500 OHMS/CM

PRIMARY 500 OHMS/CM SECONDARY 500 OHMS/CM

RESISTIVITY (OHM-METRES)

SECONDARY SCALE

5000

RESISTIVITY (OHM-METRES)

PRIMARY SCALE

5000 2500

5000 2500

WATER LEVEL IN 7" CSG at 60m

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

CASING at 224.5m DRILLER

CASING at 224.5m LOGGER

TOTAL DEPTH 230.5m DRILLER

CASING at 224.5m LOGGER

TOTAL DEPTH 230.5m LOGGER

ROKE
ROKE OIL COMPANY
SUITE 111 TOWER OAK
HOUSTON, TEXAS 77090

WELL NAME & NUMBER: Stevens A-1
FIELD: Wildcat
COUNTY: Harris
STATE: Texas
LOCATION: 1980' FSL & 1980' FEL
SURVEY: Stevens
SECTION: 16
BLOCK:
TOWNSHIP: 1S
RANGE:
PERMANENT DATUM: G.L.
ELEV.: 100'
LOG MEASURED FROM: K.B.
ELEV.: 110'
DRILLING MEASURED FROM: K.B.
ELEV.: 110'
DATE: 10-15-58
RUN NO.: One
TYPE LOG: Gamma Ray Neutron
DEPTH-DRILLER: 3,346'
DEPTH-LOGGER: 3,346'
BTM. LOG INTERVAL: 3,346'
TOP LOG INTERVAL: 2,800'
CASING-DRILLER: 8 5/8" @ 2,800'
CASING-LOGGER:
BIT SIZE: 7 7/8"
TYPE FLUID IN HOLE: Salt Water Gel
DENSITY: 10.0
VISCOSITY: 45
PH: 9.5
FLUID LOSS: 8 cc
SOURCE OF SAMPLE: Pit
RM @ MEAS. TEMP.: .65 @ 80°F
RMF @ MEAS. TEMP.: .50 @ 80°F
RMC @ MEAS. TEMP.: .75 @ 80°F
SOURCE OF RMF & RMC: Calculated
RM @ BHT: .30 @ 140°F
TIME SINCE CIRC.: 12 hrs.
MAX. REC. TEMP.: 140°F
EQUIP. LOCATION: 16-1S
RECORDED BY: R. Mitchell
WITNESSED BY: J. Smith

RUN NO. One
BOREHOLE RECORD
BIT NO. 1
FROM 0
TO 3,346'

CASING RECORD
1) SIZE 8 5/8" WT. & GRADE 24# J-55
FROM 0
TO 2,800'
2) SIZE
WT. & GRADE
FROM
TO

TUBING RECORD
SIZE
WT. & GRADE
FROM
TO

EQUIPMENT DATA

SURFACE READ
RUN NO. One
LOG TYPE Gamma Ray Neutron
LOG MEAS. NO. Rose 111
LOG SERIAL NO. 12 30
RECORDED BY R. Mitchell
WITNESSED BY J. Smith

RECORDING
RUN NO. One
LOG TYPE Gamma Ray Neutron
LOG MEAS. NO. Rose 111
LOG SERIAL NO. 12 30
RECORDED BY R. Mitchell
WITNESSED BY J. Smith

LOGGING DATA

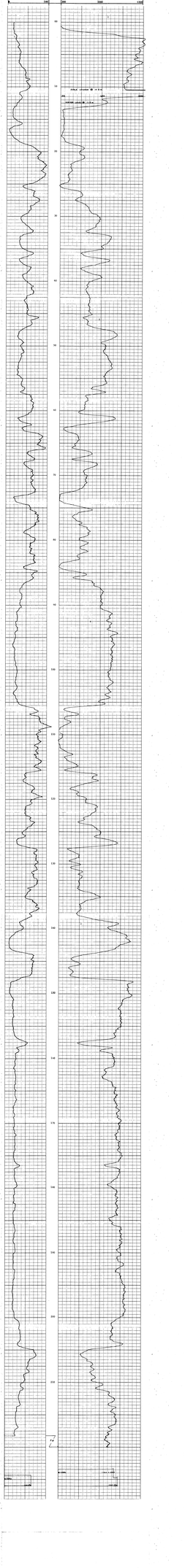
SURFACE READ						RECORDING						
RUN NO.	TIME	TD	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION	RUN NO.	TIME	TD	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION
One	9A	3,346	12 hrs.	140°F	16-1S	One	9A	3,346	12 hrs.	140°F	16-1S
	10A	3,345					10A	3,345			

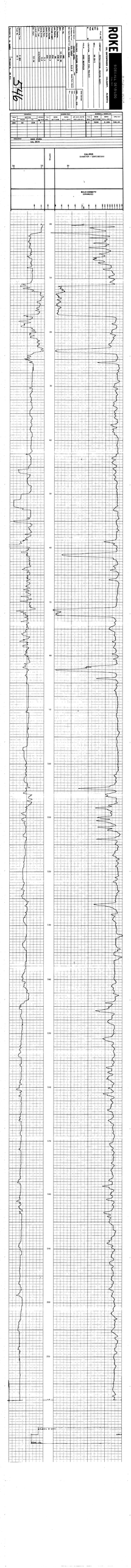
REMARKS: Log Recorded 1.75 Metres Low Scale

GAMMA RAY | NEUTRON

GAMMA RAY INCREASES →
0 — 100

NEUTRON INCREASES →
200 — 0 — +200




ROKE
ROKE OIL & ENERGY LTD.
ROKE OIL & ENERGY LTD.
ROKE OIL & ENERGY LTD.

Pr - Monkman 80(3)A

ROKE

FOCUSED BEAM OIL DIL

OIL ENTERPRISES LTD.
CALGARY, ALBERTA

FILE NO.
COMPANY PETRO-CANADA (OPERIC #672)
WELL 08-26-31
LOCATION MONKMAN (SAL PROJECT)
FIELD JOSEPH MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services
CDM, DIL, BHC-GR-CAL

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

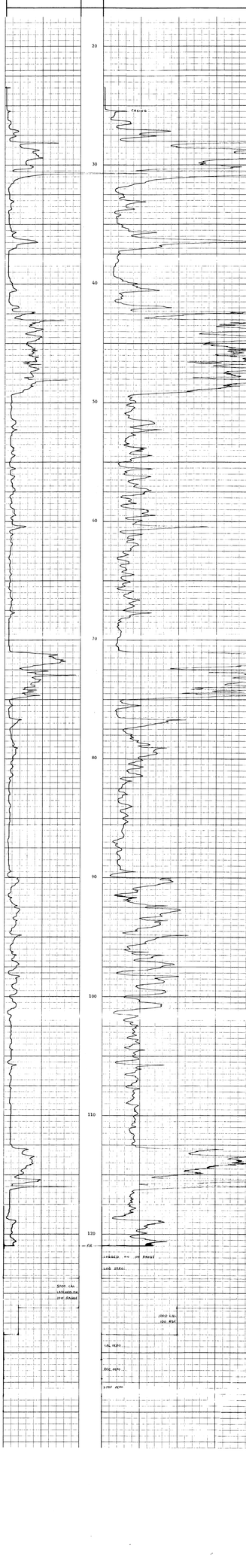
Elev.: K.B. 4,000
D.F.
G.L.

Date: 4-10-80
Run No.: ONE
Depth-Driller: 11,500
Depth-Logger: 11,504
Bottom Logged Interval: 11,504
Top Logged Interval: 3,500
Casing-Driller: 13⅜ @ 3,500
Casing-Logger: 3,500
Bit Size: 12¼
Type Fluid in Hole: AERATED
Salinity, PPM Cl: 1,000
Density: 9.0
Viscosity: 35
Fluid Loss: 25
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: 2.0 @ 68°F
Rmf @ Meas. Temp.: 1.5 @ 68°F
Rmc @ Meas. Temp.: 3.3 @ 70°
Source: Rmf Rmc: CALC
Rm @ BHT: 1.3 @ 170°F
Time Since Circ.: 3 HRS
Time Since Circ.: 10 HRS
Max. Rec. Temp. Deg. F.: 170°F
Equipment No.: 5
Location: 80
Recorded By: D. HANES
Witnessed By: RAMSDEN

5716

Remarks: FBL # 7 CURRENT RANGE 111 MUDFISH RESISTANCE 35 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 5000		PRIMARY SCALE 0 — 1000 — 2000; 6500 — 11500 — 16500



ROKE

OIL ENTERPRISES LTD.

CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

COMPANY ROKE OIL ENTERPRISES LTD.
WELL 16-36-18-3W5
FIELD HOME DISTRICT
COUNTY/PROV. ALBERTA
Permanent Datum: GROUND LEVEL Elev.: 1321.8
Log Measured From: KELLY BUSHING 4.6 m Above Perm. Datum
Drilling Measured From: KELLY BUSHING
Elev.: K.B. 1326.4 D.F. G.L. 1321.8

Date	1-3-75	1-3-75	
Run No.	ONE		
Depth-Driller	1322.0 m		
Depth-Logger	1322.8 m		
Bottom Logged Interval	1322.8 m		
Top Logged Interval	1314.0 m		
Casing-Driller	244.5 @ 324.4		
Casing-Logger	244.5 @ 324.4		
Bit Size	222.2 mm		
Type Fluid in Hole	GEL CHEM		
Density	1.15		
Viscosity	55		
Fluid Loss	8.5		
Source of Sample	CIRC.		
R_m @ Meas. Temp.	0.18 @ 24°C		
R_mf @ Meas. Temp.	0.14 @ 24°C		
R_mc @ Meas. Temp.	0.24 @ 24°C		
Source R_mf / R_mc	MEAS. / CALC.		
R_m @ BHT	0.11 @ 60°C		
Time Since Circ.	8 HRS.		
Max. Rec. Temp.	60°C		
Equip. Location	3-3-3		
Recorded By	A. SIBBS		
Witnessed By	MR. BOSSIO		

Run No. ONE
Bit From 324.4 m
To 1322.8 m
Cased Hole
Open Hole

Rm @ Meas. Temp. 0.18 @ 24°C
Rmf @ Meas. Temp. 0.14 @ 24°C
Rmc @ Meas. Temp. 0.24 @ 24°C
Source of Rmf and Rmc MEAS. / CALC.
Rm @ BHT 0.11 @ 60°C
Time Since Circ. 8 HRS.
Max. Rec. Temp. 60°C
Equip. Location 3-3-3
Recorded By A. SIBBS
Witnessed By MR. BOSSIO

5.46

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	ROKE 125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	ROKE 125
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	32 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	46 CM
		SOURCE MODEL NO.	MNC-N-SLIM
GENERAL		SPACING	171
HOIST TRUCK NO.	SU 5	TYPE	44 CM
INSTRUMENT TRUCK NO.	SU 1	STRENGTH	Amrille
TOOL SERIAL NO.	ROKE 120002		5 CURIES

LOGGING DATA

RUN NO.	LOGGING FROM	LOGGING TO	SPEED m/MIN	T.C. SEC	GAMMA RAY SENS SETTINGS	GAMMA RAY API & m UNITS DIV. / CM R	GAMMA RAY API & m UNITS PER LOG DIV.	NEUTRON T.C. SEC	NEUTRON SENS SETTINGS	NEUTRON API & UNITS DIV. / CM R	NEUTRON API & UNITS PER LOG DIV.
ONE	00	10	6	3	100	0	10	3	1000	0	500
	10	122	6	3	100	0	10	3	500	0	150

REMARKS

GAMMA RAY

GAMMA RAY INCREASES

API or m UNITS

0 — 150

NEUTRON

NEUTRON INCREASES

API or m UNITS

0 — 3000 — 6000

DEPTH

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

CASING COLLAR @ 324.4m

WATER LEVEL @ 1.83m

CASING COLLAR @ 324.4m

WATER LEVEL @ 1.83m

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

SPECIAL DESILOG

File No. 5546

COMPANY: PETROGRAPH (NORTHLAND)
WELL: 16-9-52-11
FIELD: DEER MOUNTAIN
LOCATION: NORWAY COAL PROJECT
Sec. Twp. Rge. W
Other Services: BHC
Permanent Datum: GROUND LEVEL
Elev.: K.B. 1,376 ft. D.F. 1,374 ft. G.L. 1,365 ft.
Log Measured From: K.B. 11 ft. Above Perm. Datum
Drilling Measured From: K.B.
Date: 1-3-83
Run No.: ONE
Depth-Driller: 1,300
Depth-Logger: 1,300
Bottom Logged Interval: 1,300
Top Logged Interval: SURFACE
Type Fluid in Hole: AIR/MIST
Salinity, PPM Cl: N/A
Density: N/A
Level: FULL
Max. Rec. Temp. Deg. F.: 70°F
Operating Rig Time: 5 HRS.
Recorded By: R. BERG
Witnessed By: DOCTOR

GENERAL				GAMMA RAY				BOREHOLE SONDELOG			
RUN NO.	CASING FROM	CASING TO	SPEED MT. MIN.	SENS SETTING	ZERO DIAL DIV.	API G/A UNITS PER DIAL DIV.	T.C. SEC.	SENS SETTING	ZERO DIAL DIV.	CPM/DIV
ONE	00	116	5				0.3	5000	2,000	166.89

REMARKS: DEER FIORA
CAL #879

CASING

CALIPER
DIAMETER - CENTIMETERS

BULK DENSITY
(GRAMS/CC)

CASING

SEARCH 4" LIGHT

BOTTOM

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY ZETTERQUIST GEOTEC (1972)

WELL 06-06-51

LOCATION MORRIN - TIMS PROPERTY

FIELD DEEP CENTRAL

PROVINCE ALBERTA

Permanent Datum: GROUND LEVEL — Elev. 2307.5 ft. above Perm. Datum
Log Measured from: KELLY BUSHING — 10.0 ft. above Perm. Datum
Drilling Measured from: KELLY BUSHING

Date: 6-11-72
Run No.: ONE
Depth-Driller: 1510 ft.
Depth-Logger: 1512 ft.
Bottom Logged Interval: 1512 ft.
Top Logged Interval: 1300 ft.
Casing-Driller: 8 5/8" @ 1510 ft.
Casing-Logger: 1510 ft.
Bit Size: 7 7/8"
Type Fluid in Hole: GEL CHEM
Density: 9.5 lb/gal
Viscosity: 45 sec
Fluid Loss: 10.0 cc
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: 0.75 @ 70 °F
Rmf @ Meas. Temp.: 0.60 @ 70 °F
Rmc @ Meas. Temp.: 1.00 @ 70 °F
Source of Rmf & Rmc: CALCULATED
Rm @ BHT: 0.45 @ 140 °F
Time Since Circ.: 5 HRS
Max. Rec. Temp.: 140 °F
Equip. No. & Location: 5346
Recorded By: JOHNSON

RUN NO. ONE
DEPTH-DRILLER 1510
DEPTH-LOGGER 1512
BTM. LOG INTERVAL 1512
TOP LOG INTERVAL 1300
CASING-DRILLER 8 5/8" @ 1510
CASING-LOGGER 1510
BIT SIZE 7 7/8"
TYPE FLUID IN HOLE GEL CHEM
DENSITY 9.5
VISCOSITY 45
FLUID LOSS 10.0 cc
SOURCE OF SAMPLE FLOWLINE
Rm @ MEAS. TEMP. 0.75 @ 70 °F
Rmf @ MEAS. TEMP. 0.60 @ 70 °F
Rmc @ MEAS. TEMP. 1.00 @ 70 °F
SOURCE OF Rmf & Rmc CALCULATED
Rm @ BHT 0.45 @ 140 °F
TIME SINCE CIRC. 5 HRS
MAX. REC. TEMP. 140 °F
EQUIP. NO. & LOCATION 5346
RECORDED BY JOHNSON
WITNESSED BY MR. ROKE

Remarks: F.B.I. # 2 CURRENT RANGE 111 MUDFISH RESISTANCE 1500 Ohms
ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 500 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE
0 3000

Depths

RESISTIVITY (OHM-METERS)

PRIMARY SCALE
0 1000 2000
0 1500 1500

WATER LEVEL @ 17.5m

CASING

LOGGED ON THE KNEE

LOG ZERO

Radio CAL adjusted on this Knee

END CAL on Knee

CAL ZERO

REL ZERO

SHIP ZERO

Pr - Monkman 8d3A

ROKE

GAMMA RAY NEUTRON LOG

SOL ENTERPRISES LTD.

CALGARY ALBERTA

FILE NO.	
LOCATION	2ND PENCE - BETTES-SOUDRIA
WELL	SOL 8d-3A
FIELD	PENCE-MONTNEY
COMPANY	ZETEX/GAMMA LOGGING LTD.

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

Elev.	3332 ft
Elev.	3332 ft
Elev.	3332 ft

Run No.	ONE
Depth Driller	7 333 ft
Depth Logger	7 333 ft
Bottom Logged Interval	7 333 ft
Top Logged Interval	3 150 ft
Casing Driller	13 3/8 @ 153 ft
Casing Logger	153 ft
Bit Size	12 1/4 in
Type Fluid in Hole	GEL CHEM
Density	10.0 lb/gal
Viscosity	55 s
pH	9.5
Fluid Loss	11.2 cc
Source of Sample	CIRC
Rm @ Meas. Temp.	1.33 @ 70 °F
Rmf @ Meas. Temp.	1.06 @ 70 °F
Rmc @ Meas. Temp.	1.73 @ 70 °F
Source: Rmf / Rmc	MEAS / CALC
Rm @ BHT	1.11 @ 150 °F
Time Since Circ.	11 HRS
Max. Rec. Temp.	150 °F
Equip. Location	8 - 3
Recorded By	M. BELL
Witnessed By	J. ROSS

RUN ONE
DATE: 5716

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRD 125	TOOL TYPE	NEUTRON/NEUTRON
DIAMETER	3 3/8 in	TOOL MODEL NO.	NGND 125
DETECTOR MODEL NO.		DIAMETER	3 3/8 in
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	15 CM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	2.07 ft	LENGTH	15 CM
		SOURCE MODEL NO.	MRC N-65-W
GENERAL		SERIAL NO.	171
HOIST TRUCK NO.	80 3	SPACING	42 CM
DEDUTRUCK TRUCK NO.	80 3	TYPE	Amille
TOOL SERIAL NO.	NGRD 125002	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL: DATE	GENERAL: FROM	GENERAL: TO	GENERAL: SPEED IN FPS	GAMMA RAY: T.C. SETTING	GAMMA RAY: SENS. DIV. L ON K	GAMMA RAY: API G. R. UNITS PER LOG DIV.	NEUTRON: T.C. SETTING	NEUTRON: SENS. DIV. L ON K	NEUTRON: API N. UNITS PER LOG DIV.
ONE	00	18.5	4	3	100	0	12	1	1000	0	160
	18.5	117	4	3	100	0	12	3	500	0	120

REMARKS: LOGGED THROUGH DRILL PIPE

GAMMA RAY

GAMMA RAY INCREASES

API 0 120

NEUTRON

NEUTRON INCREASES

API 2600 4600

SCALE CHANGE @ 2.5 ft

FLUID LEVEL @ 75.5 ft

WATER LEVEL @ 75.5 ft

FD

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

Pr - Monkman 80(3)A

Pr Fraser Fm TCDs

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
LSD
SEC
TWP
RGE
W.____M

COMPANY PETRO-CANADA (OPERG DEPT)

WELL 90 80-3A

LOCATION MONKMAN COAL PROJECT

FIELD DAVE MOUNTAIN

Other Services

PROVINCE BRITISH COLUMBIA

Permanent Datum	GROUND LEVEL	Elev.	K.B.
Log Measured from	GROUND LEVEL	Above Perm. Datum	D.F.
Drill Depth Measured from	GROUND LEVEL		G.L.

Run No.	ONE		
Date	7 MAR 80		
First Reading	128 M		
Last Reading	80		
Footage Logged	128		
Depth Reached	128.2		
Depth Driller	128.2		
Casing Size	13		
Casing Driller	13		
Fluid Type	AIR/WATER		
Liquid Level	12.75		
Max. Diam.	13.5 IN		
Rm @ °F	31.4 @ 48		
Operating Time	1 HR		
Truck No.	20 1		

546

Recorded By B. BARRIS Witnessed By PEACHEY

EQUIPMENT DATA

GAMMA RAY: SONDE NO. 335; LOG CTRL. NO. 2; DETECTOR NO. 2; CRYSTAL NO. 2; SHIELDING 2.5 CM; SPACING 30.48 CM; ACCELERATOR 14.0; SOURCE 2.5 MCI

Pr - Monkman 80/3/A

ROKE

SIDEWALL DENSILOG

Recorded by

OIL ENTERPRISES LTD.

CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (DESERT) ET AL

WELL 16-25-15

FIELD DEER MOUNTAIN

LOCATION MONKMAN GAS PROJECT

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elev.: K.B. 3,331 ft. D.F. G.L. 3,320

Date Run One: 3-JAN-1980

Date Log Rec'd: 3-JAN-1980

Depth-Driller 5,546

Depth-Logger 5,546

Bottom Log Interval 5,546

Top Log Interval 4,000

Casing-Driller 9 5/8 @ 4,000

Casing-Logger 4,000

Bit Size 8 1/2

Type Fluid in Hole GEL CHEM

Density 10.0

Viscosity 50

pH 10.5

Fluid Loss 5.0

Source of Sample CIRC.

R_m @ Meas. Temp. .135 @ 150°F

R_mf @ Meas. Temp. .095 @ 150°F

R_mc @ Meas. Temp. .180 @ 150°F

Source: R_mf R_mc

Rm @ BHT .120 @ 150°F

Time Since Circ. 12 HRS.

Max. Rec. Temp. 150°F

Equipment No. & Location 3-3 3-3

Recorded By R. BANKS

Witnessed By J. STEVENS

5546

GENERAL			GAMMA RAY			SIDEWALL DENSILOG		
RUN NO.	CASING FROM	CASING TO	SPEED M/MIN.	T.C. SEC.	ZERO SETTINGS	API G.R. UNITS PER 150 D.U.	T.C. SEC.	ZERO SETTINGS
ONE	00	127	5				0.3	5000

SIDEWALL DENSILOG	
SPEC. DIV.	ZERO D.U.'s G.R.
2.000	188.89

REMARKS DENS FILES
CAL.DATA

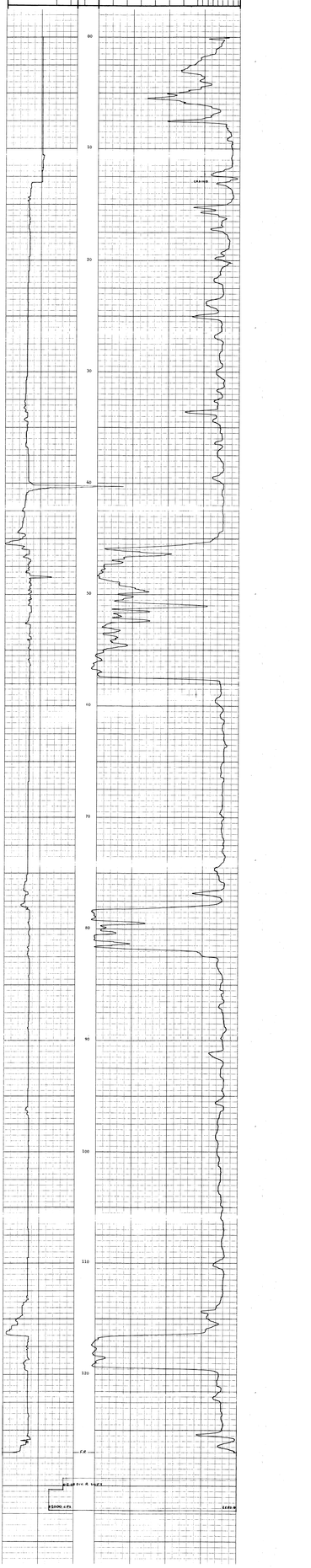
CALIPER
DIAMETER — CENTIMETRES

BULK DENSITY
GRAMS/CC

CASING

T.D.

PBTD



Pr - Monkman 80/3A

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG

LOG
RUN
TAPE
RIG
FILE

FILE NO.

COMPANY PETRO-CANADA (OPERG. DEPT.)

WELL 186-B0-37

LOCATION NORMAN PASS PROJECT

FIELD FORT NORMAN

PROVINCE NORTHWEST TERRITORIES

Log Measured from 10 FT. ABOVE PERM. DATUM

Drilling Measured from GROUND LEVEL

Permanent Datum GROUND LEVEL

Elev. 0 M

Elev.: K.B. 0 M
D.F. 0 M
G.L. 0 M

Date 5 SEPT. 1974
Run No. ONE
Depth-Driller 1875 M
Depth-Logger 1885.9
Bottom Logged Interval 1885.9
Top Logged Interval 1810.5
Casing-Driller 244.0 @ 1875 M
Casing-Logger 244.0 @ 1885.9
Bit Size 216 MM
Type Fluid in Hole WATER
Density 1.00
Level FULL
Max. Rec. Temp. 11.3 °C @ 1875 M
Equipment No. 5
Location 54 KM
Recorded By CARLSON
Witnessed By FAGNITER

Primary Depth Control (This Run) CCL
Secondary Depth Control (This Run) CCL
Type Log Run (This Run) CBL-VDL-GR-CCL
Max. Hole Deviation 2° @ 1874 M
Type Fluid in Hole (This Run) WATER
Max. Rec. Temp. (This Run) 11.3 °C @ 1875 M
Equipment No. (This Run) 5
Location (This Run) 54 KM
Recorded By (This Run) CARLSON
Witnessed By (This Run) FAGNITER

Time Since Circ. 24 HRS
Time Since Circ. (This Run) 24 HRS

Other Services
CBL
VDL
GR
CCL

Remarks: FBL # 5 CURRENT RANGE STANDARD MUDFISH RESISTANCE 100 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 5000		PRIMARY SCALE 0 1000 2000 / 6500 11500 16500

90
100
110
120
130
140
150
160
170
180

CASING 88.0 METERS

F.R.

100 ZERO

CAL ON 500 RANGE
500 OHM/DIV

REC ZERO

CAL ZERO

100 ZERO

CAL ON 100 RANGE
100 OHM/DIV

REC ZERO

CAL ZERO

PR-Monkman SE(3)A

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 MH 80-17 (EXTENSION LOG)

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:

Permanent Datum GROUND LEVEL Elev. K.B.
Log Measured from TOP OF CASING 20 CM Above Perm. Datum CSG
Well Depths Measured from GROUND LEVEL G.L.

Run. No.	TWO		
Date	18 MAR 80		
First Reading	204.50 M		
Last Reading	180.00		
Footage Logged	24.50		
Depth Reached	205.40		
Depth Driller	207.40		
Casing Roke	98.00		
Casing Driller			
Fluid Type	WATER		
Liquid Level	00		
Min. Diam.	13.3 CM		
Rm @ °C	16.39 @ 20		
Operating Time	45 MIN		
Truck No.	36		

546

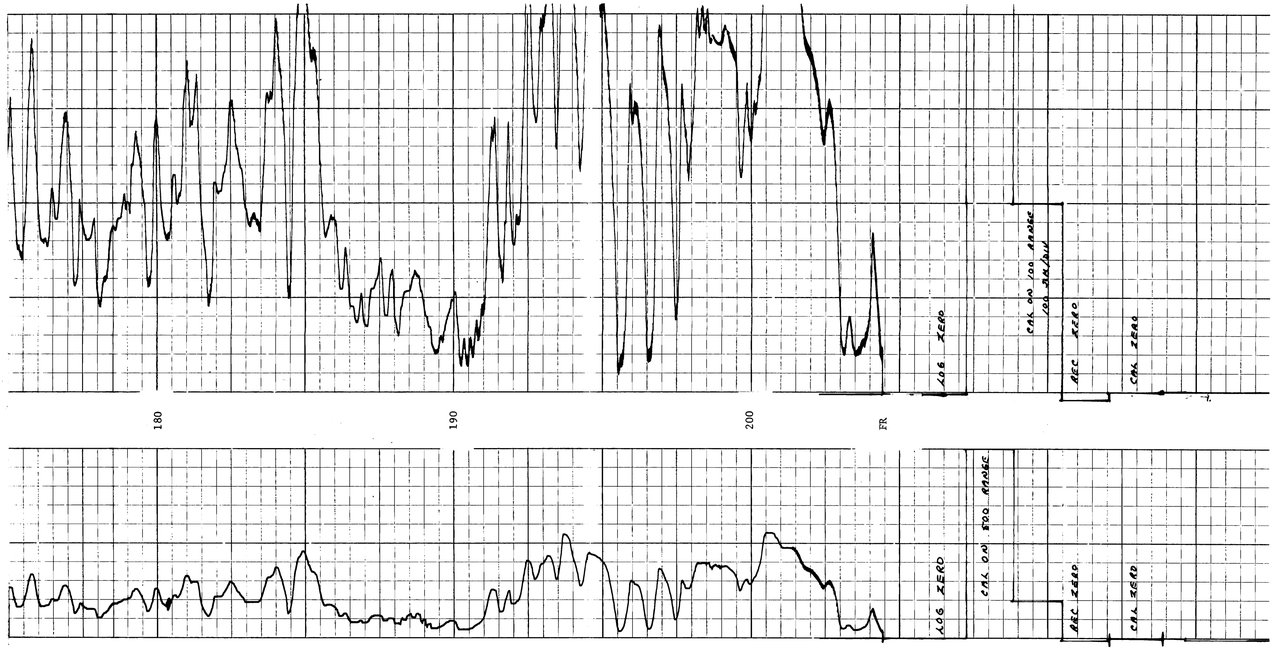
Recorded By CARLSON Witnessed By PLACHNER

Remarks FBL # ELECTRODE SONDE CURRENT RANGE MUDFISH RESISTANCE OHMS
PRIMARY OHM/DIV SECONDARY OHM/DIV CM. BEAM WIDTH CM. ARRAY
SECOND LOG REQUIRED AFTER HOLE HAS DRILLED DEEPER.

RESISTIVITY (OHM-METERS) | PRIMARY SCALE

Depths

RESISTIVITY (OHM-METERS) | SECONDARY SCALE



ROKE

CANADIAN WELL LOGGING LTD.

CALGARY ALBERTA

COMPANY	CANADIAN SUPERIOR OIL LTD.		
WELL	13-26-32-5		
FIELD	WILDCAT		
COUNTY			
PROVINCE	ALBERTA		
LOCATION	13-26-32-5 W4M		
Other Services			
Permanent Datum	G.L.	Elev.	3746
Log Measured From	K.B.	10 Ft. Above Perm. Datum	
Drilling Measured From	K.B.		

Date	1-7-72						
Run No.	ONE						
Depth-Driller	2200						
Depth-Logger	2200						
Bottom Logged Interval	2200						
Top Logged Interval	1000						
Type Fluid in Hole	GEL CHEM						
Salinity, P.P.M. Cl	1000						
Density	9.8						
Level	FULL						
Max. Rec. Temp. Deg. F.	90						
Operating Rig Time	5 HRS						
Recorded By	R. HOLT						
Witnessed By	MR. MOORE						

Run No.	Bit From	Bit To	Size	Type Fluid in Hole	Density	Visc.	Ph	Fluid Loss	Source of Sample
ONE	SURF.	2200	7 7/8	GEL CHEM	9.8	45			

Rm @ Meas. Temp.	.75 @ 70	@	@	@	@	@	@	@
Rmf @ Meas. Temp.	.60 @ 70	@	@	@	@	@	@	@
Rmc @ Meas. Temp.	.90 @ 70	@	@	@	@	@	@	@
Source of Rmf & Rmc	CALC.							
Rm @ BHT	.40 @ 90	@	@	@	@	@	@	@
Time Since Circ.	5 HRS							
Max. Rec. Temp. Deg. F.	90							
Equip. Location	5346							
Recorded By	R. HOLT							
Witnessed By	MR. MOORE							

Run No.	Bit From	Bit To	Size	Type Fluid in Hole	Density	Visc.	Ph	Fluid Loss

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									

5346

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	GGNU 115	TOOL MODEL NO.	NEUTRON/NEUTRON GGNU 115
SONDE NO.	32 SH	SONDE NO.	32 SH
& TOOL MODEL NO.		& TOOL MODEL NO.	
TYPE	RECIPROCATING	DETECTOR MODEL NO.	
LENGTH	500 MM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	307 MM	LENGTH	170 MM
		SOURCE MODEL NO.	GGNU-SOURCE
SONDE NO.		STRENGTH	5Ci
ASSET TRACK NO.	34	SPACING	430 MM
INSTRUMENT TRACK NO.		TYPE	Acidic
FINAL SERIAL NO.	1154005	STRENGTH	5 CURIES

LOGGING DATA

CONTROL		GAMMA RAY				NEUTRON			
RUN	LOCATION	SPEED F.I.	SENS	ZERO	MV % VOLTS	F.I.	SENS	ZERO	MV % VOLTS
ONE	5346	30	8	500	0	10	8	500	0
ONE	0	120.2	8	500	0	10	8	500	0

REMARKS: LOGGED THROUGH DRILL PIPE
MILLIAMP RECORD ON LOG OFF BOTTOM

GAMMA RAY

NEUTRON

GAMMA RAY INCREASES

API UNITS

0 100

NEUTRON INCREASES

API UNITS

0 1000

CASING - 7.0 @ 1000'

F.P.

API UNITS

ROKE OIL ENTERPRISES LTD.

WELL	5-16-39-11 W4M
FIELD	GALAHAD
PROVINCE	ALBERTA

LOCATION	5-16-39-11 W4M
OTHER SERVICES	DUAL INDUCTION LATEROLOG - GAMMA RAY - SP
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	K.B. 10 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM	K.B.

DATE	12-3-74	12-3-74	
RUN NO.	ONE	TWO	
DEPTH-DRILLER	3000	1200	
DEPTH-LOGGER	3000	1200	
BTM. LOG INTERVAL	3000	1200	
TOP LOG INTERVAL	1200	SURFACE	
CASING-DRILLER	8 5/8 @ 1200		
CASING-LOGGER	1200		
BIT SIZE	7 7/8		
TYPE FLUID IN HOLE	GEL CHEM		
DENSITY	9.6		
VISCOSITY	40		
PH	10.5		
FLUID LOSS	8.4		
SOURCE OF SAMPLE	FLOWLINE		
RM @ MEAS. TEMP.	.75 @ 70°F		
RMF @ MEAS. TEMP.	.55 @ 70°F		
RMC @ MEAS. TEMP.	.95 @ 70°F		
SOURCE: RMF / RMC	MEAS / MEAS		
RM @ BHT	.32 @ 140°F		
TIME SINCE CIRC.	4 HRS		
MAX. REC. TEMP.	140°F		
EQUIP. LOCATION	5-16-39-11 W4M		
RECORDED BY	R. MOORE		
WITNESSED BY	MR. BOYLE		

S746

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	GGM 121	LOG FORM	NEUTRON/NEUTRON
DIAMETER	3 1/2 IN	TOOL MODEL NO.	GNM 121
DETECTOR MODEL NO.		GAUGE NO.	31 IN
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
SPACING	3 1/2 IN	TYPE	PROPORTIONAL
DETECTOR TO SOURCE	107 IN	CAPACITY	1/2 IN
		SOURCE MODEL NO.	NSC N-55 W
SONDE		SPACING	3 1/2 IN
SONDE TRUCK NO.	31	SOURCE	4/5 Ci
SONDE MINERAL TRUCK NO.		TYPE	Am/Be
TOOL SERIAL NO.	1224/01	STRENGTH	5 CURIES

LOGGING DATA

GAMMA RAY					NEUTRON				
RUN	GENERAL	SPEED	T.C.	SENS	SCALES	SP1 & SP2 UNITS	T.C.	SENS	SCALES	API & UNITS
NO.	LIMITS FT. TO	IN MIN. (FT.)	SECS.	API UNITS	SP1 1-5 M.V.	SP2 1-50 M.V.	SECS.	API UNITS	SP1 1-5 M.V.	SP2 1-50 M.V.
ONE	00 1200	4	4	500	0	10	4	500	0	100

REMARKS LOGGED OPEN HOLE

GAMMA RAY | SCALE | NEUTRON

GAMMA RAY INCREASES → 0 API 150

NEUTRON INCREASES → 1500 API 0 3000

CASING - TEL MARK

1 IN = 100 FT

F.L.

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT)

WELL MR 80-17 (EXTENSION LOG)

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

LSD
SEC
TWP
RGE
W ____ M

Permanent Datum GROUND LEVEL Elev.
Log Measured from TOP OF CASING 20 CM Above Perm. Datum
Well Depths Measured from GROUND LEVEL

K.B.
CSG
G.L.

Other Services:

Run. No.	TWO
Date	18 MAR 80
First. Reading	205.5 M
Last Reading	180.0
Footage Logged	25.5
Depth Reached	205.8
Depth Driller	207.0
Casing Driller	98.0
Casing Rotary	
Fluid Type	WATER
Liquid Level	00
Min. Diam.	13.3 CM
Rm @	
Operating Time	40 MIN
Truck No.	36
Recorded By	CARLSON
Witnessed By	FLACHNER

546

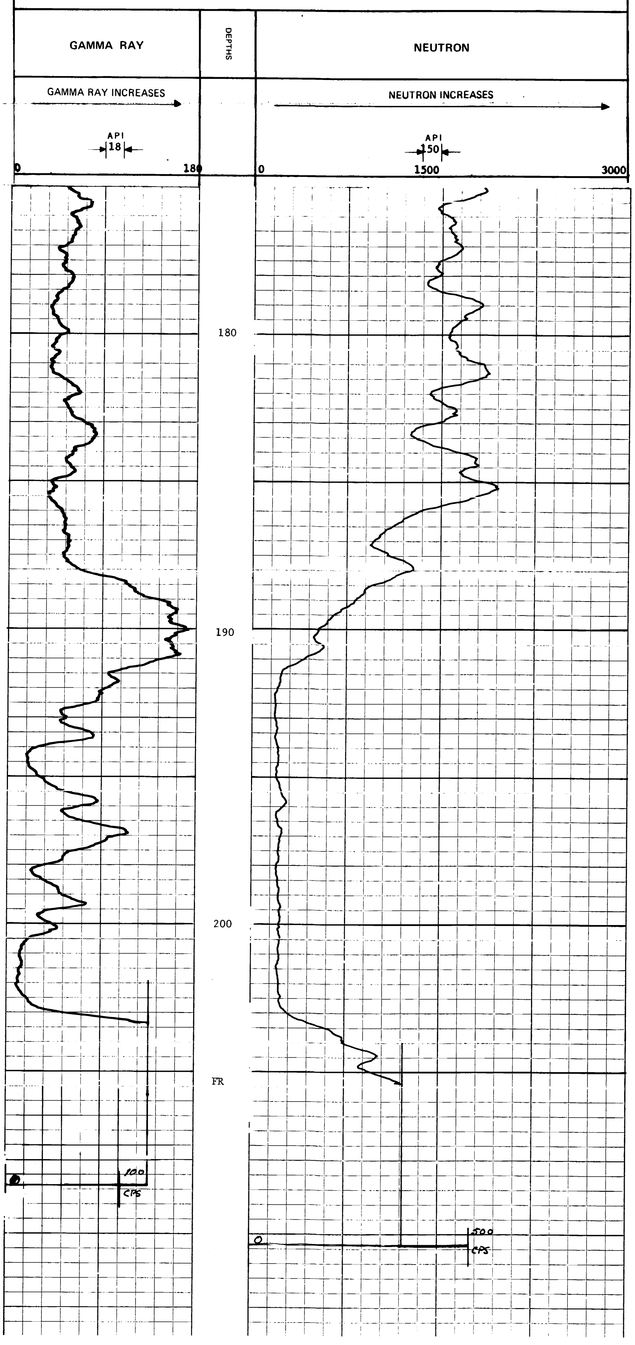
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	TWO	RUN NO.	TWO
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER		TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	
TYPE		DETECTOR MODEL NO.	
LENGTH		TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE		LENGTH	
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	125A001	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.
TWO	180	205.50	4	3	100	0	18	3	500	0	150

REMARKS SECOND LOG REQUIRED AFTER HOLE WAS DRILLED DEEPER



ROKE

ROKE OILFIELD SERVICES LTD. CALGARY, ALBERTA

FILE NO.	05-15-14-25-W5
COMPANY	ANTHEM RESOURCES INC.
WELL	16-15-14-25
FIELD	MOOSE MOUNTAIN (TWP. 15-16)
PROV.	SASKATCHEWAN
LOCATION	16-15-14-25-W5
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	KELLY BUSHING
DRILLING MEASURED FROM	KELLY BUSHING
ELEV.	K.B. 1,966 ft.
	G.L. 1,956 ft.
	D.F. 1,965 ft.
	R.T. 1,965 ft.
API No.	100
Rge.	25
Twp.	14
Sec.	15
Unit	16
Other Services	
Run No.	ONE
Date	15-Jan-08
Depth-Driller	1,500 ft.
Depth-Logger	1,500 ft.
Bottom Logged Interval	1,500 ft.
Top Logged Interval	1,000 ft.
Type Fluid in Hole	WATER
Salinity, PPM Cl	
Density, LB/GAL	
Level	FULL
Max. Rec. Temp. Deg. F.	
Equipment No. & Location	5446
Recorded By	ZIEMBA
Witnessed By	

CASING RECORD									
	SIZE	WEIGHT	GRADE	TOP	BOTTOM	I.D.	BIT SIZE	TOP OF CEMENT	
SURFACE STRING	8 5/8 in.	24 lb/ft	J-55	0 ft.	1,000 ft.	8.097 in.	7 7/8 in.	SURFACE	
PRODUCTION STRING	5 1/2 in.	15.5 lb/ft	J-55	0 ft.	1,500 ft.	4.950 in.	4 1/2 in.	1,000 ft.	
LINER									
OPEN HOLE									

GENERAL					CORING RUN					REAMING RUNS			
Run No.	DATE	SPUD TO	MUD WT.	MUD VISC.	DATA FROM	BIT SIZE & TYPE	BIT SIZE & TYPE FOR LOG RUN	I.D. OF DRILL PIPE	FROM	TO	BIT SIZE & TYPE	CIRC. TIME
ONE	15-Jan-08	1,500 ft.			BOTTOM							
		1,500 ft.			CALIPER							

REMARKS: 8500 GAIN, 45LBS
CAL TOOL #587

CALIPER
DIAMETER - CENTIMETERS

BULK DENSITY
UNWASHED

ORIGINAL FIELD PRINTS

Rice
ATA

Prof-File 4

ROKE

ORIGINAL DATA LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OIVING DEEP)

WELL MR 80-17 (EXTENSION LOG)

LOCATION MORKWAY PASS PROJECT

FIELD RUSK MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev. 0

Log Measured from: TOOL OR CASING — 20 CH — Above Perm. Datum

Other Services:

LSD SEC TWP RGE M

Elev.: K.B. 0 D.F. G.L.

Date	18 MAR 80
Run No.	ONE
First Reading	204.30 M
Last Reading	180.00
Footage Logged	24.30
Bottom Logged	203.40
Depth Driller	203.40
Casing Driller	88.00
Casing Logged	
Fluid Type	WATER
Density	10
Viscosity	53
Max. Temp.	13.30 CH
Operating Time	45 MIN
Truck No.	36

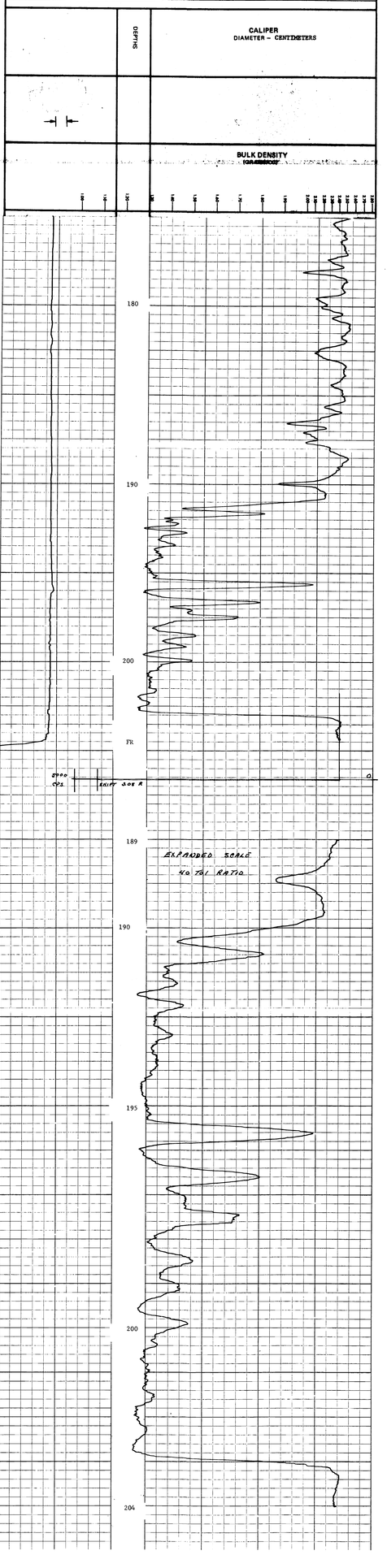
Recorded By CARLSON

Witnessed By FLATCHER

5416

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
TWO	180.00	204.30	10					0.2	5000	2.08 R	188.89
THREE	180.00	205.00			CALIPER						

REMARKS DENS TOOL #128A
CAL TOOL #567
SECOND LOG REQUIRED AFTER HOLE WAS DRILLED DEEPER



Pr - Montman 69/3A

ROKE
ROKE OILFIELD RESEARCH LTD.
CALGARY ALBERTA

Date Run: 1969 JUL 17
Run No. ONE
Depth-Driller 5446
Depth-Logger 5446
Btm. Log Int. 5446
Top Log Int. 4500
Casing-Driller 9 5/8 @ 1510
Casing-Logger 1510
Bit Size 8 1/2
Type Fluid in Hole GEL CHEM
Dens. Visc. 10.0 50
pH Fluid Loss 10.5 5.0
Source of Sample CIRC
Rm @ Meas. Temp. .25 @ 70°F
Rmf @ Meas. Temp. .20 @ 70°F
Rmc @ Meas. Temp. .30 @ 70°F
Source of Rmf & Rmc CALC
Rm @ BHT .19 @ 140°F
Time Since Circ. 12 HRS
Max. Rec. Temp. 140°F
Equip. No. & Location 1303 CAL
Recorded By JACKSON
Witnessed By GARDNER

LOCATION: 5-18-26-5W4M
FIELD: MEDICINE HAT
WELL: CANADIAN SUPERIOR ET AL MEDICINE HAT 5-18-26-5W4M
PROVINCE: ALBERTA
COUNTRY: CANADA
OTHER SERVICES: BHC-GR
PERMANENT DATUM: GL ELEV. 2300
LOG MEASURED FROM: KB 10 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM: KB
ELEV.: K.B. 2310 G.L. 2300

Rec. No. 5446

Remarks: FBL # 5 CURRENT RANGE STANDARD MUDFISH RESISTANCE 586 Ohms
ELECTRODE SPACING PRIMARY 500 SECONDARY 500 C.M. BEAM WIDTH PRIMARY 500 SECONDARY 500 C.M. ARRAY
CCL FROM HARRIS COATED SONDES AND CABLE WITH SMART CCOL.

RESISTIVITY (Ohm-METRES) | Depth | RESISTIVITY (Ohm-METRES)

SECONDARY SCALE 0 — 5000

PRIMARY SCALE 0 — 1000 — 2000 — 3500 — 13500 — 14500

Depth markers: 00, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160

CAL. ZERO.
CAL. 1A 10A 100A RANGE 40A IN FIELD
REF. READ.
CAL. ZERO.
F.S.
A10 ZERO
CAL. 1A 10A RANGE 2A IN FIELD
REF. READ.
CAL. ZERO.

Pr - Monitoren 8093A

ROKE

OILFIELD SERVICES LTD.

CALGARY ALBERTA

COMPANY	ESSO RESOURCES CANADA LIMITED
WELL	10-26-23-5W5
FIELD	JUNIPER
COUNTY, PARISH, BOROUGH OR MUNICIPALITY	BEAVERHILL CREEK
LOCATION	SECONDARY WELL DESIGNATION
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	K.B.
DRILLING MEASURED FROM	K.B.
DATE	1-11-80
RUN NO.	ONE
DEPTH DRILLER	1000
DEPTH LOGGER	1000
BOTTOM LOGGED INTERVAL	1000
TOP LOGGED INTERVAL	0
TYPE FLUID IN HOLE	WATER
SALINITY, PPM CL	3000
DENSITY	1.0
LEVEL	FULL
MAX. REC. TEMP. DEG. F.	90
ESTIMATED BHT	90
TIME SINCE CIRC.	2 HRS
MAX. REC. TEMP. DEG. F.	90
EQUIP. LOCATION	5-26
RECORDED BY	T. MOORE
WITNESSED BY	

RUN NO. ONE | BIT NO. 1 | TYPE 7 7/8 | FROM 0 | TO 1000 | TOTAL FT. 1000

CASING RECORD

	SIZE	WGT.	GRADE	FROM	TO
SURFACE STRING	8 5/8	24	J-55	0	1000
PRODUCTION STRING					
OPEN HOLE	7 7/8			1000	

BORE HOLE RECORD

	SIZE	FROM	TO
	7 7/8	0	1000

REMARKS: 1 1/2" TBG. @ 1000'

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	9058 123	TOOL MODEL NO.	NEUTRON/NEUTRON 9058 123
SONDE S/N	SE 188	SONDE S/N	SE 26
DETECTOR MODEL NO.	SCINTILLATION	DETECTOR MODEL NO.	PROPORTIONAL
S/N	580 SM	S/N	150 SM
LENGTH	5 FT.	LENGTH	5 FT.
DISTANCE TO SOURCE	207 SM	SOURCE MODEL NO.	MISC-N-59 M
		S/N	230
GENERAL		SERIAL NO.	SE 188
ASSIST TRACK NO.	26	STRENGTH	5 curies
ELECTRONICS TRACK NO.			
TOOL SERIAL NO.	1254004	STRENGTH	5 CURIES

LOGGING DATA

GENERAL								GAMMA RAY				NEUTRON			
RUN	LOGGING SPEED			TIME CONSTANT				SCALE SETTING				SCALE SETTING			
NO.	FROM	TO	FEET/MIN	SEC.	DIFFERENCE			API UNITS PER INCH				API UNITS PER INCH			
ONE	0	200	2.0	4	4	1	100	0		10	1	1000		100	
	0	1000	5.0	4	4	1	100	0		10	1	500		0	150

REMARKS: TAGGED OPEN HOLE

GAMMA RAY

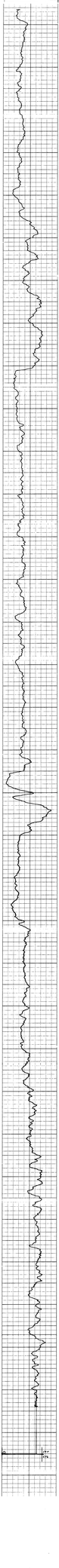
GAMMA RAY INCREASES

0 — 150

NEUTRON

NEUTRON INCREASES

3000 — 1000



Pr - Monkman 8033A

ROKE

OIL WELL SERVICES LTD.

CASED HOLE LOGGING

CALGARY, ALBERTA

FILE NO.	
COMPANY	ESSO RESOURCES CANADA LIMITED
WELL	4D 16-8-8 (TORRENS DRILL SITE)
LOCATION	SUNBURY FIELD (SOUTH)
FIELD	BOW RIVER/SUNBURY
PROVINCE, TERRITORY, MUNICIPALITY	ALBERTA
Other Services	
Permanent Datum	GROUND LEVEL
Elevation	3115 ft.
Log Measured From	K.B. 10 ft. ABOVE PERM. DATUM
Drilling Measured From	K.B.
Date	17-5-78
Run No.	ONE
Depth-Driller	3115 ft.
Depth-Logger	3115 ft.
Bottom Logged Interval	3115 ft.
Top Logged Interval	SURFACE
Type Fluid in Hole	WATER
Salinity, PPM Cl	3.5 % KCL
Density	9.8
Level	FULL
Max. Rec. Temp. Deg. F.	
Operating Rig Time	
Recorded By	JACKSON
Witnessed By	MCKEEN

Run No.	ONE
Type Log	GAMMA RAY NEUTRON
Depth-Driller	3115 ft.
Depth-Logger	3115 ft.
Bottom Logged Interval	3115 ft.
Top Logged Interval	SURFACE
Casing-Driller	9 5/8 @ 307 ft.
Casing-Logger	9 5/8 @ 307 ft.
Bit Size	8 1/2 in.
Type Fluid in Hole	WATER
Salinity, PPM Cl	3.5 % KCL
Density	9.8
Level	FULL
Max. Rec. Temp. Deg. F.	
Equipment No. & Location	1154005
Recorded By	JACKSON
Witnessed By	MCKEEN

RUN NO. ONE
TIME SINCE CIRC. 12 HRS.
MAX. REC. TEMP. DEG. F.
EQUIP. NO. & LOCATION 1154005
RECORDED BY JACKSON
WITNESSED BY MCKEEN

EQUIPMENT DATA

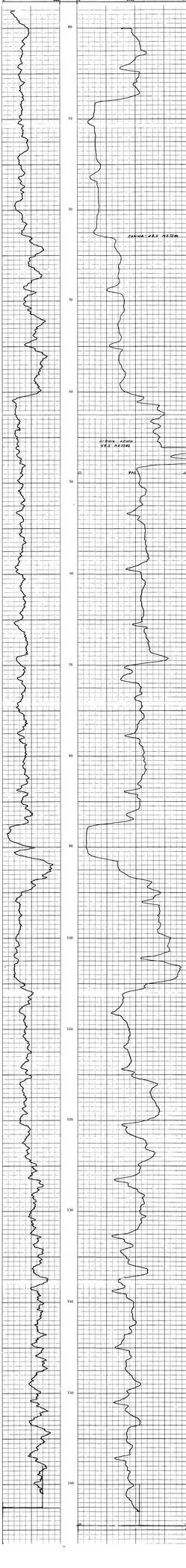
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRR 115	TOOL TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	NGRR 121
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	100 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	307 MM	LENGTH	130 MM
		SOURCE MODEL NO.	MSC-A-60 M
GENERAL		SERIAL NO.	234
LOGGIT TRUCK NO.	36	SPACING	430 MM
INSTRUMENT TRUCK NO.		TYPE	AMERICIUM
LOGIL SERIAL NO.	1154005	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN	METRES		SPEED	SENS	ZERO	API N. R. UNITS	T.C.	SENS	ZERO	API N. UNITS	
NO.	FROM	TO	M/MIN. (MT)	SETTINGS	DIV. L. OF M.	MIN. LOG DEV.	SEC.	SETTINGS	DIV. L. OF M.	MIN. LOG DEV.	
ONE	0	44.0	6	3	100	0	12	3	1000	0	180
	44.0	315.0	6	3	100	0	12	4	500	0	90

REMARKS: LOGGED TOWARDS DRILL STEM - WATER HAS ADDED TO DRILL STEM

GAMMA RAY	SCALES	NEUTRON
GAMMA RAY INCREASES		NEUTRON INCREASES
0 120		0 1600 3600



Pr - Mookanan 8903JA

ROKE

ROKE OIL INTERNATIONAL LTD. CALGARY, ALBERTA

WELL NO. 8-8-28-8

FIELD

COMPANY JEFFERSON-MONTROSE-SIPC

WELL 16-35-28-8

COUNTY MORRIS SEC. 35 TWP. 28 RGE. 8 W

PROV. MANITOBA

OTHER SERVICES

| | | |

ROKE

RESISTIVITY & GRADIENT MEASUREMENTS

Schlumberger

Company: ESSO EXPLORATION AND PRODUCTION NIGERIA LIMITED
Well: OKAN 1
Field: OKAN
County: OFFSHORE
State: NIGERIA
Location: OTHER SERVICES: DIPMETER - BHC - GR
Permanent Datum: MEAN SEA LEVEL
Elev.: K.B. 0 ft. above Perm. Datum
G.L. 0 ft.
Log Measured From: K.B. 0 ft. above Perm. Datum
Drilling Measured From: K.B.

Date	6-8-74	6-8-74	
Run No.	ONE	ONE	
Depth-Driller	10,000 ft.	10,000 ft.	
Depth-Logger	10,000 ft.	10,000 ft.	
Bottom Logged Interval	10,000 ft.	10,000 ft.	
Top Logged Interval	9,000 ft.	9,000 ft.	
Type Fluid in Hole	WBM	WBM	
Salinity, P.P.M. Cl	1,000	1,000	
Density	9.5	9.5	
Level	FULL	FULL	
Max. Rec. Temp. Deg. F.	200°	200°	
Operating Rig Time	24 HRS	24 HRS	
Recorded By	A. ADEOYE	A. ADEOYE	
Witnessed By	MR. ESU	MR. ESU	

549

Run No. ONE — Date 6-8-74

	Bit	Size	From	To
		12¼"	0	1,000
		8½"	1,000	10,000

	Size	Wgt.	From	To
Surface String	9⅝"	40	0	1,000
Prod. String	7"	23	0	10,000

Type Log: DUAL INDUCTION LATEROLOG — BOREHOLE COMPENSATED SONIC — GAMMA RAY

Type Log: DUAL INDUCTION LATEROLOG — BOREHOLE COMPENSATED SONIC — GAMMA RAY

Source of Sample: —
R_m @ Meas. Temp.: 0.13 @ 80°F
R_mf @ Meas. Temp.: 0.11 @ 80°F
R_mc @ Meas. Temp.: 0.15 @ 80°F
Source: R_mf: MEAS. — R_mc: CALC.
R_m @ BHT: 0.13 @ 200°F
Time Since Circ.: 12 HRS
Max. Rec. Temp. Deg. F.: 200°
Equip. Location: 0150
Recorded By: A. ADEOYE
Witnessed By: MR. ESU

Remarks: F.S. # 1 — CURRENT RANGES: 20 MMHOS — MILIVOLT RESISTANCE: 2 OHMS
ELECTRODE SPACING: 16" — 64" BASE NORMAL — 18' — 64" BASE NORMAL — 64" BASE LATERAL
PRIMARY: OHM/DIV — SECONDARY: MIL OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE
0 — 1000

PRIMARY SCALE
0 — 5000 — 10000

DEPTH

DRAWING - 23.5 INCHES

16" NORMAL

64" NORMAL

18' — 64" BASE NORMAL

64" BASE LATERAL

SPONTANEOUS POTENTIAL (MILLIVOLTS)

ADJ. ZERO

CAL. ZERO

ROKE

ROKE OIL ENTERPRISES LTD.
1000, 736 - 6th Ave. S.W.
CALGARY, ALBERTA

WELL	13-35-18-5
LOCATION	NW SEC. 35 TWP. 18 RGE. 5 W5M
FIELD	JUMPING POUND WEST
COUNTY	ROCKY VIEW
STATE	ALBERTA

API No.	
Permanent Datum	GROUND LEVEL
Log Measured From	K.B.
Drilling Measured From	K.B.
Elevation	K.B. 1345
	D.F. 1343
	G.L. 1335
Date	3-8-78
Run No.	ONE
Depth Driller	3000
Depth Logger	3000
Bottom Logged Interval	3000
Top Logged Interval	1100
Type Fluid in Hole	GEL CHEM
Salinity, PPM Cl	1000
Density	9.2
Level	FULL
Max. Rec. Temp. Deg. F.	120
Operating Rig Time	12:00
Recorded By	D. MC.
Witnessed By	MR. BOB

CASING RECORD

Surface String	Size	8 5/8	
	Wgt.	24	
	Grade	K-55	
	Set At	1100	
	Type Fluid	GEL CHEM	
Prod. String	Size	5 1/2	
	Wgt.	15.5	
	Grade	K-55	
	Set At	3000	
	Type Fluid	GEL CHEM	

5346

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL SERIAL NO.	GGSC-125A	TOOL TYPE	NEUTRON/NEUTRON
SONDE NO.	SC 100	TOOL MODEL NO.	GGSC-125A
DETECTOR MODEL NO.		SONDE NO.	SC 100
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
DETECTOR NO.	393 100	TYPE	PROPORTIONAL
DISTANCE TO SOURCE		LENGTH	175 cm
		SOURCE MODEL NO.	NRC N-10 M
		SERIAL NO.	1
GENERAL		STRENGTH	370 mc
RECORDING TRUCK NO.	20	TYPE	Am/Be
DATA/DEPTH TRUCK NO.		STRENGTH	5 CURIES
TOOL SERIAL NO.	1126005		

LOGGING DATA

GENERAL					GAMMA RAY				NEUTRON			
RUN NO.	LOGGING	SPEED	T.C.	DEAD	TOOL	API & M UNITS	T.C.	DEAD	ZERO	API & UNITS		
NO.	FROM	TO	FT./MIN.	SEC.	TIME	DEAD TIME	SETTING	SEC.	SETTING	DEAD TIME	SETTING	SEC.
ONE	0	595	30	6	5	320	0	10	3	500	0	430

LOGGED

GAMMA RAY

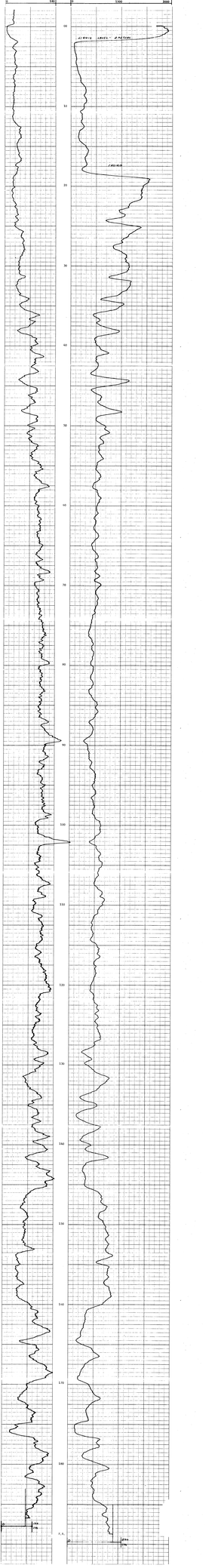
GAMMA RAY INCREASES

0 140

NEUTRON

NEUTRON INCREASES

1100 3000



ROKE

SONIC-GAMMA RAY-CALIPER

Company	ROKE OIL INCORPORATED
Well	HARDEE #1
Field	WILDCAT
County	HARDEE
State	FLORIDA
Location	1980' FSL & 1980' FEL
Sec.	19
Twp.	33S
Rge.	26E
Permanent Datum	GROUND LEVEL
Elev.	0
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elev. K.B.	0
Elev. D.F.	0
Elev. G.L.	0
Date	6-14-83
Run No.	ONE
Depth-Driller	5719
Depth-Logger	5719
Bottom Logged Interval	5719
Top Logged Interval	SURFACE
Type Fluid in Hole	WATER
Salinity, PPM Cl	1000
Density	8.4
Level	FULL
Max. Rec. Temp. Deg. F.	120
Operating Rig Time	4 HRS
Recorded By	R. SMITH
Witnessed By	MR. HARDEE

Run No. ONE — Date 6-14-83

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

5719

GENERAL				SONIC RUN				RESISTIVITY			
RUN NO.	BOTTOM LOGGED INTERVAL	TOP LOGGED INTERVAL	SPACING SEE SKETCH	T.D. DRILLER	SCHLUM.	API G.R. UNITS FOR LOG RUN	T.C. SETTINGS	BOREHOLE SIZE	MUD RESIST.	MUD TEMP.	MEAS. TEMP.
ONE	0	199.5	10				0.2	5000	2.05	120.00	
	0	199.5		CALIPER							

REMARKS: ORIGINAL SONIC RECORDS
CAL. CONV. PORT

CALIPER
DIAMETER - CENTIMETERS

BULK DENSITY
GRAMS/CC

F.P.

Pr - Mohanan ROOA

546

ROKE
OIL EXPLORATION LTD.
CANADA PACIFIC PLAZA, 10TH FLOOR, 90 - 6TH AVENUE S.W., CALGARY, ALBERTA, CANADA T2P 0P4

WELL	
FIELD	
LOCATION	
COUNTY	
PROVINCE	
DATE	
RUN NO.	
DEPTH DRILLER	
DEPTH LOGGER	
BTM. LOG INTERVAL	
TOP LOG INTERVAL	
CASING DRILLER	
CASING LOGGER	
BIT SIZE	
TYPE FLUID IN HOLE	
DENSITY	
VISCOSITY	
PH	
FLUID LOSS	
SOURCE OF SAMPLE	
RM @ MEAS. TEMP.	
RMF @ MEAS. TEMP.	
RMC @ MEAS. TEMP.	
SOURCE RMF & RMC	
RM @ BHT	
TIME SINCE CIRC.	
TIME ON BOTTOM	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

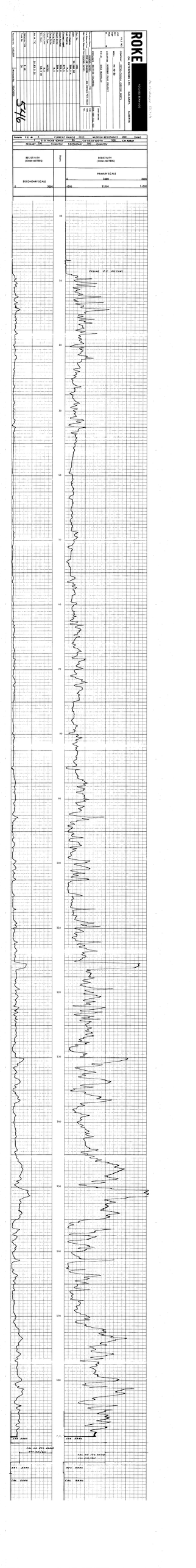
EQUIPMENT DATA

RUN NO.	
TYPE LOG	
BOREHOLE REC.	
CASING REC.	
BOREHOLE	
CASING	
LOGGER	
BIT	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

INTERPRETATION
NO. OF
PROPOSITIONAL
BPD % W.C.
%
Bo/BBL
GOR

GENERAL DATA

| | | |


ROKE
546
RESISTIVITY (OHM-METERS)
10 CONDAMY SCALE
PRIMARY SCALE
RESISTIVITY (OHM-METERS)
CASING AT 1417.5 METERS

ROKE

OKLAHOMA CITY, OKLAHOMA

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
SECTION	
TOWNSHIP	
RANGE	
PERMANENT DATUM	
ELEV.	K.B.
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 OF RMF & RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

5746

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NUCL 122a	GAS CAP.	NEUTRON/SUTTON ACRES 122a
SOURCE	50 MC	TOOL MODEL NO.	50 MC
DETECTOR MODEL NO.		SOURCE	
— LENGTH	SCINTILLATION ▼	DETECTOR MODEL NO.	
— DIAMETER	3 1/2 IN	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	2 1/2' R	SPACING	16" & 32"
		SOURCE MODEL NO.	MN-N-50 M
		STRENGTH	50 MC
LOGGING		STRENGTH	4.50 GM
LOGGY TRUCK NO.	35	LOCATION	Jumbo
EQUIPMENT TRUCK NO.		TYPE	3 1/2X103
TOOL SERIAL NO.	121×101	LOCATION	

LOGGING DATA

GAMMA RAY								NEUTRON					
RUN	GENERAL				GAMMA RAY				GENERAL			NEUTRON	
NO.	DATE	RECORD NO.	SPEED F.P.M.	TIME CONST. SEC.	SENS. (CPS)	API N. UNITS	T. C. SEC.	SENS. (CPS)	API N. UNITS				
ONE	9/2	100	4	3	500	0	12	3	200	0	90		

REMARKS: SANDS TAGGED SMALL STEP.
ONE RUN RUN LOGGED WITH MUD

GAMMA RAY | NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

0 — 100 — 200

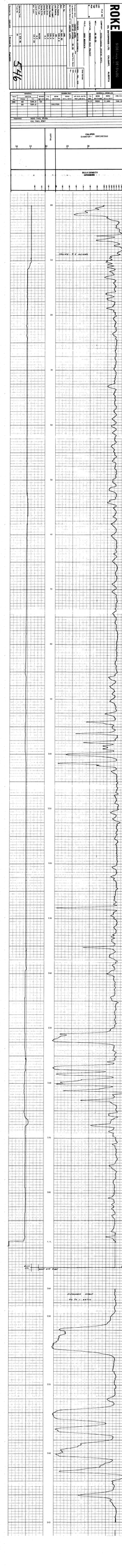
LIQUID LEVEL @ 0' MEAS.

CASING FOC MEASD.

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

FOC MEAS.

Pv - Mississippian (MJA)



ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

RECORDED BEAM LOG

FILE NO.

COMPANY JEFFCO-CANADA (DEEP) LTD.

WELL NO. 105 80-21

FIELD DIKE MOUNTAIN

LOCATION NORMAN PASS PROJECT

Other Services

Permanent Datum: GROUND LEVEL Elev.: K.B. ... ft. above Perm. Datum

Log Measured From: KELLY BUSHING ... ft. above Perm. Datum

Drilling Measured From: KELLY BUSHING

Date: 24 MAR 80

Run No.: ONE

Depth-Driller: 91.0

Depth-Logger: 91.5

Bottom Logged Interval: 91.5

Top Logged Interval: 73.5

Casing-Driller: 9 5/8 @ 73.5

Casing-Logger: 9 5/8 @ 73.5

Bit Size: 8 1/2

Type Fluid in Hole: WATER

Fluid Level: 33.5

Max. Rec. Temp.: 23.32 °C

Equipment No. & Location: 23.32 (9.2D)

Recorded By: 30 SCH

Witnessed By: 30

CARLSON

FALCONER

5746

Remarks: FBL @ 5 CURRENT RANGE STANDARD MUDFISH RESISTANCE 100 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 3000		PRIMARY SCALE 0 — 1000 — 2000; 6500 — 11500 — 16500

LIQUID LEVEL 12.5 METRES

ADE 2280

CAL 50 200 RANGE 200 OHM/DIV

ELEC 2280

CAL 2280

ADE 2280

CAL 50 100 RANGE 100 OHM/DIV

ELEC 2280

CAL 2280

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO. 3

COMPANY ROKE-GAMMA (HISTORIC DEPT.)

WELL MR. RIO #1

FIELD MORAINE MASS PROJECT

LOCATION MORAINE MASS PROJECT

Permanent Datum: GROUND LEVEL Elev. 0

Log Measured from: TOP OF CASING 30 CM Above Perm. Datum

Drilling Measured from: GROUND LEVEL

Elev.: K.B. 0 D.F. G.L.

Date: 14 NOV 80

Run No. 1

Depth-Driller 91.3 M

Depth-Logger 91.5

Bottom Logged Interval 91.3

Top Logged Interval 91.5

Casing-Driller 5.5

Casing-Logger 5.5

Bit Size MAKES

Type Fluid in Hole

Dens. Visc.

pH Fluid Loss

Source of Sample

Rm @ Meas. Temp.

Rmf @ Meas. Temp.

Rmc @ Meas. Temp.

Source of Rmf and Rmc

Rm @ BHT

Time Since Circ.

Max. Rec. Temp. Deg. C.

Equip. No. and Location

Recorded By CARLSON

Witnessed By RAMONES

PSA CALIPER DATA

Other Services

5746

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	BGRS 125A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	BGRN 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.02 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	254
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	1254003	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.
ONE	0	15.0	6	3	100	0	18	3	1000	XL	350
	15.0	91.3	6	3	100	0	18	3	500	0	150

REMARKS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 18		API 350
0 180		1750 5250 8750

SCALE CHANGE AT 1220 METERS

STATIC LEVEL - 160 METERS

1200 3000

F.E.

0 100 CPS

0 200 CPS

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

SPECIAL DESIGN

FILE NO.

COMPANY — ZERO-GAMMA (GEOTECH DEPT.)

WELL — 36-20-31

LOCATION — MORROW BASE PROJECT

FIELD — BEER MEADOW

PROVINCE ALBERTA COUNTRY

Permanent Datum: GROUND LEVEL Elev. 36.25 Elevations: K.B. 36.25 D.F. — G.L. 33.5

Log Measured from: GROUND LEVEL 36.25 Above Perm. Datum

Drilling Measured from: K.B.

Date: 26 OCT

Run No.: ONE

Depth-Driller: 91.5

Depth-Logger: 91.5

Bottom Logged Interval: 91.5

Top Logged Interval: 33.5

Casing-Driller: 33.5

Casing-Logger: 33.5

Bit Size: 7 7/8"

Type Fluid in Hole: WATER

Salinity, PPM Cl: 13.2K CR

Density: 10

Level: FULL

Max. Rec. Temp. Deg. F.: 85

Operating Rig Time: 3 HRS

Recorded By: JACKSON

Witnessed By: MCCARTHY

Other Services: DUAL INDUCTION LATEROLOG

GENERAL				GAMMA RAY				BOREHOLE DIAMETER			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/min	T.C. SEC.	ZERO SETTING	ZERO DIAL DIV.	API G.R. UNITS MEA. LOG DEV.	T.C. SEC.	ZERO SETTING	ZERO DIAL DIV.	CPS/ DIV
ONE	00	90.60	10					0.3	5000	3.08	188.89
	00	91.45		CALIPER							

REMARKS: BESS TOOL #198A
CAL TOOL #287

CENTRE

CALIPER
DIAMETER — CENTIMETERS

10 15 20 25 30

BULK DENSITY
(GRAMS/CC)

2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0

60 10 20 30 40 50 60 70 80 90 F.E.

RADIO ACTIVITY

70 75 85

REFRACTED SCALE
10 TO 1 FOR 710

PR-Monkman 82-3A

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY ALBERTA

FILE NO.
LSD
SEC.
TWP
RGE
W. M.

COMPANY PETRO-CANADA (MINING DEPT)

WELL MH 80-22

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services
GRN, DEN, CAL, DIR

Permanent Datum GROUND LEVEL Elev. K.B.
Log Measured from TOP OF CASING 20 CM Above Perm. Datum CSG.
Well Depths Measured from GROUND LEVEL G.L.

Run No.	ONE		
Date	14 MAR 80		
First Reading	30.10		
Last Reading	12.00		
Footage Logged	8.10		
Depth Reached	30.40		
Depth Driller	31.90		
Casing Roke	5.50		
Casing Driller			
Fluid Type	WATER		
Liquid Level	13.50		
Min. Diam.	15.24 CM		
Rm @ °C	24.39 @ 20		
Operating Time	½ HR		
Truck No.	36		

546

Recorded By CARLSON Witnessed By PLACHNER

CURRENT RANGE STANDARD MUDFISH RESISTANCE 100 OHMS
FBL # 7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

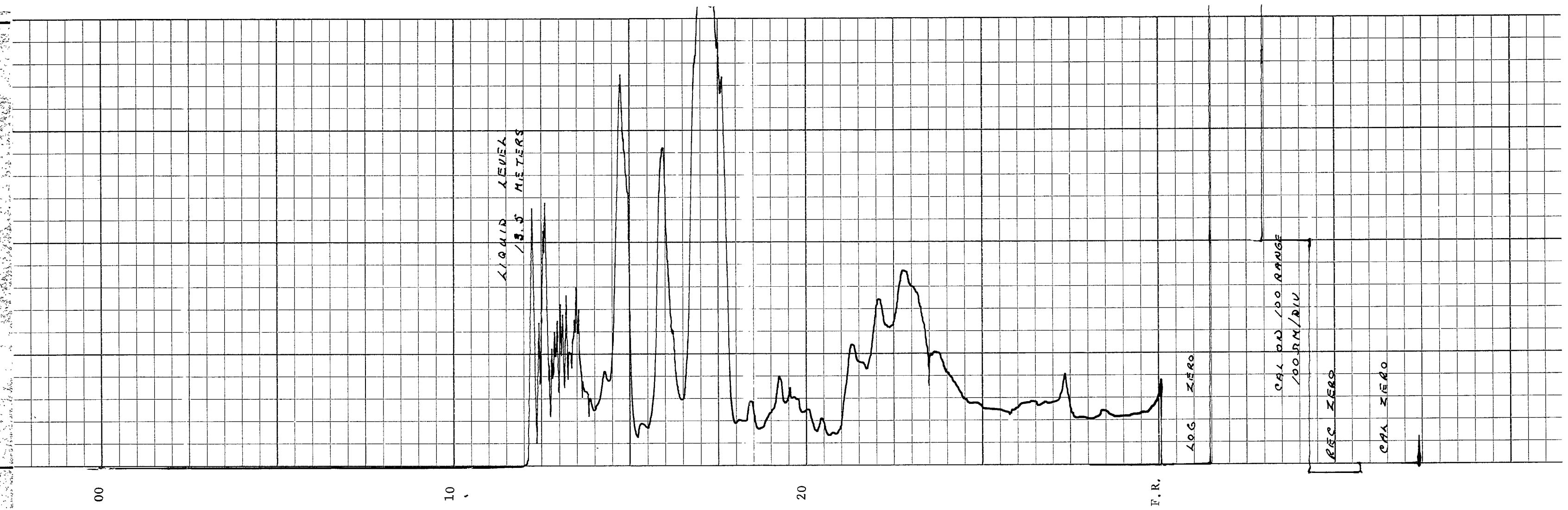
Remarks:

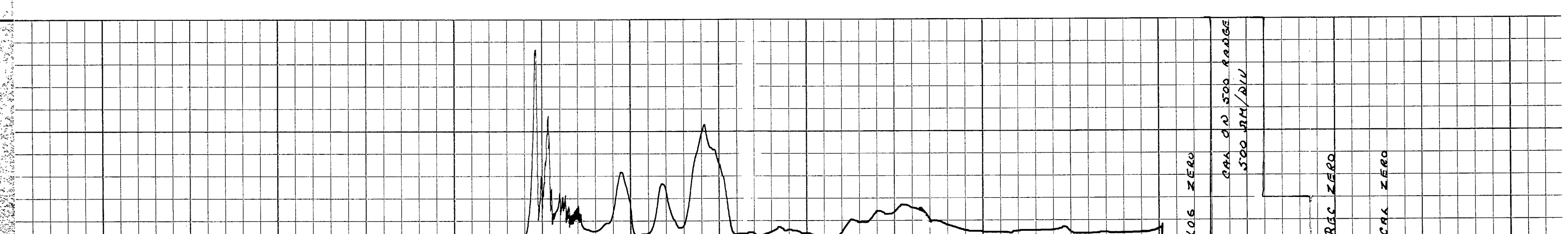
RESISTIVITY (OHM-METERS)

PRIMARY SCALE 2000 1000 0

SECONDARY SCALE 5000 0

Depths 6500 11500 16500





PR-Monkman 80(33)A

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 80-22
LOCATION MONKMAN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: DEN, CAL, FRL, DIR

Permanent Datum GROUND LEVEL Elev. K.B.
Log Measured from TOP OF CASING 20 CM Above Perm. Datum CSG
Well Depths Measured from GROUND LEVEL G.L.

Run. No.		ONE		
Date		14 MAR 80		
First Reading		31.0 M		
Last Reading		00		
Footage Logged		31.0		
Depth Reached		31.3		
Depth Driller		31.4		
Casing Roke		5.5		
Casing Driller				
Fluid Type		WATER		
Liquid Level		12.0		
Min. Diam.		15.24 CM		
Rm @				
Operating Time		½ HR		
Truck No.		36		
Recorded By	CARLSON	Witnessed By	PLACHNER	

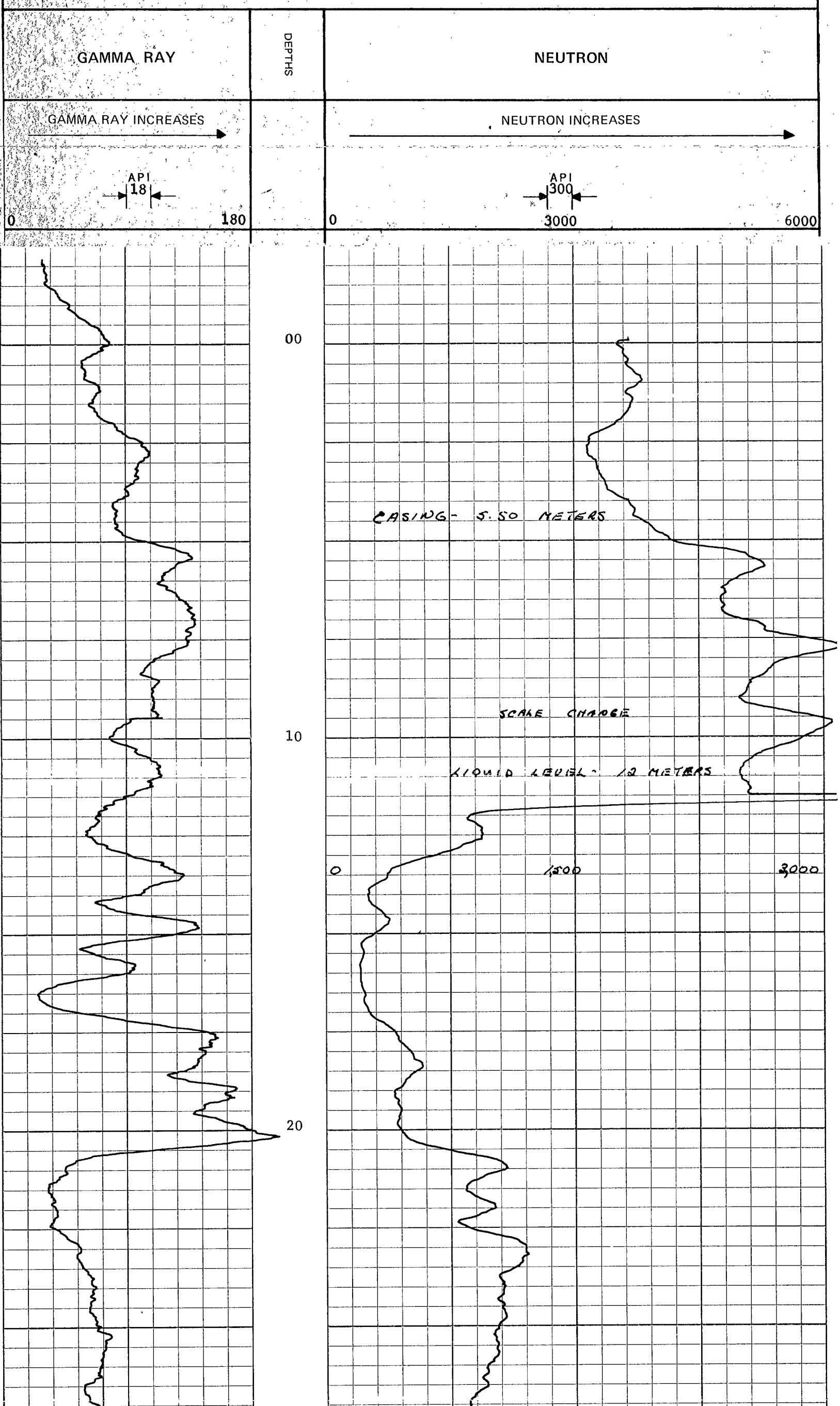
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	RGRN 125A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	RGRN 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	125A001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL 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.
ONE	0	11.5	4	3	100	0	18	3	1000	0	300
	11.5	31.0	4	3	100	0	18	3	500	0	150

REMARKS



ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: PETRO-CANADA (OPTING DEPT)

WELL: MR 80-22

LOCATION: MORKAN PASS PROJECT

FIELD: DOKE MOUNTAIN

PROVINCE: BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev.: Abv.

Log Measured From: GROUND LEVEL — 20. CM. — Above Perm. Datum

Drilling Measured From: G.L.

Other Services: GRN FDC DTB

K.B.

D.F.

G.L.

Rig. No.: ONE

Date: 14 DEC 80

First Reading: 29.7 M

Footage Logged: 30.6 - 29.7

Depth Reached: 30.6

Depth Driller: 31.4

Casing Rotex: 5.5

Casing Driller: 5.5 @ SURF

Liquid Level: 12.0

Min. Diam.: 15.24 CM

Field Truck: MASTER

Operating Time: 4 HR.

Truck No.: 36

Recorded By: GIELSON

Witnessed By: FALCONER

SEC. TWP. RGE. M

LOG

PR-Richardson 82/3/9

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	
ONE	00	29.70	10		CALIPER			0.2	5000	2.08R	188.89	
	00	30.70										

REMARKS: DENS TOOL #128A
CAL TOOL #587

CALIPER
DIAMETER – CENTIMETERS

DEPTH

10 15 20 25 30

BULK DENSITY
(GRAMS/CC)

1.90 1.80 1.70 1.60 1.50 1.40 1.30

00

CASING 5.50 METERS

10

20

F.R.

100 CPS

THICK 3.08 R

12

EXPANDED SCALE
40 TO 1 RATIO

15

19

546

ROKE MANUFACTURING LTD., CALGARY, ALBERTA

Operator: [illegible] Location: [illegible]

Survey: [illegible] Date: [illegible]

Type Log: [illegible] Run No.: [illegible]

Depth Driller: [illegible] Depth Logger: [illegible]

Bottom 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 of Rmf & Rmc: [illegible] Rm @ BHT: [illegible]

Time Since Circ.: [illegible] Max. Rec. Temp. Deg. F: [illegible]

Equip. No. & Location: [illegible] Recorded By: [illegible]

Witnessed By: [illegible]

RUN NO. [illegible] TYPE [illegible] DATE [illegible]

DEPTH DRILLER [illegible] DEPTH LOGGER [illegible]

BOTTOM 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 OF Rmf & Rmc [illegible] Rm @ BHT [illegible]

TIME SINCE CIRC. [illegible] MAX. REC. TEMP. DEG. F. [illegible]

EQUIP. NO. & LOCATION [illegible] RECORDED BY [illegible]

WITNESSED BY [illegible]

5746

Remarks: FIELD PRINT CURRENT RANGE 2500MHO MICROFIT RESISTANCE 20K OHMS

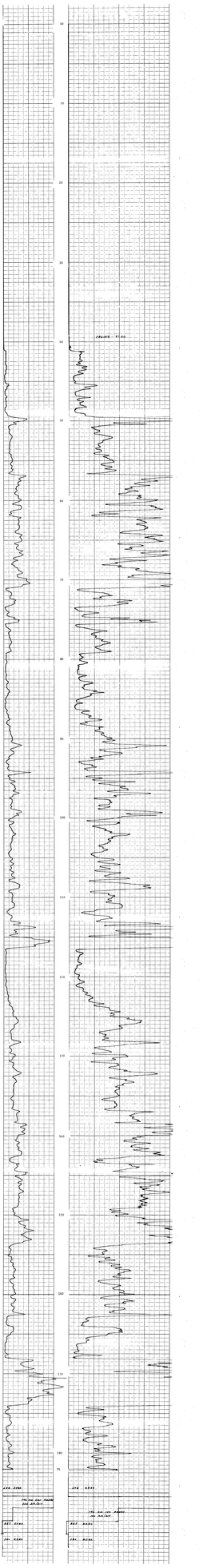
ELECTRODE SPACE 16" CM BLEED SPECIFIC 100 CM ABSENT

PRIMARY 100 OHM/DIV SECONDARY 100 OHM/DIV

RESISTIVITY (OHM-METRES) | DEPTH | RESISTIVITY (OHM-METRES)

PRIMARY SCALE

SECONDARY SCALE 0 1000 | 1500 2000 | 15500 16500



ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD.

CALGARY, ALBERTA

COMPANY OIL ENTERPRISES LTD.

WELL NO. 13-23

FIELD WILDCAT

LOCATION 13-23-26-5W

PERMANENT DATUM GROUND LEVEL

ELEV. 3600

LOG MEASURED FROM K.B.

DRILLING MEASURED FROM K.B.

ELEV. K.B. 3610

D.F. 3609

G.L. 3600

DATE 1-7-74

RUN ONE

TYPE LOG GAMMA RAY NEUTRON

DEPTH-DRILLER 1800

DEPTH-LOGGER 1800

BTM. LOG INTERVAL 1800

TOP LOG INTERVAL 0

CASING-DRILLER 9 5/8" @ 1800

CASING-LOGGER 1800

BIT SIZE 8 3/4

TYPE FLUID IN HOLE GEL CHEM

DENSITY 9.2

VISCOSITY 40

PH 10

FLUID LOSS 10

SOURCE OF SAMPLE PIT

RM @ MEAS. TEMP. .5 @ 60°F

RMF @ MEAS. TEMP. .4 @ 60°F

RMC @ MEAS. TEMP. .6 @ 60°F

SOURCE OF RMF & RMC MEASURED

RM @ BHT .3 @ 120°F

TIME CIRC. LOGGER 5 HRS

TIME SINCE CIRC. 6 HRS

MAX. REC. TEMP. 120°F

EQUIP. NO. & LOCATION 1216 CALGARY

RECORDED BY D. MACKAY

WITNESSED BY MR. SMITH

5-46

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	AGRK 117A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	NGNE 112A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
GENERAL		SOURCE MODEL NO.	MNC.N.8S.W
HOIST TRUCK NO.	36	SERIAL NO.	224
INSTRUMENT TRUCK NO.		SPACING	45 CM
TOOL SERIAL NO.	1216/001	TYPE	Amrille
		STRENGTH	5 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN	T.C. SEC	SENS SETTING	ZERO DIV.	API G. R. UNITS API/DIV.	T.C. SEC	SENS SETTING	ZERO DIV.	API N. UNITS API/DIV.
ONE	00	21.5	4	3	100	0	12	3	1000	0	180
	21.0	1817.00	5	3	100	0	12	3	500	0	90

REMARKS LOGGED THROUGH DRILL STEM

GAMMA RAY

GAMMA RAY INCREASES

API

0 120

Metres

NEUTRON

NEUTRON INCREASES

API

1800 3600

00

10

20

0. RM 1809

30

40

50

60

70

80

90

100

110

120

FR

0 200

0 200

ROKE

INSTRUMENTS, INC. — COMPANY

5546 — WELL

[illegible] — FIELD

[illegible] — COUNTY

[illegible] — STATE

[illegible] — LOCATION

[illegible] — PERMANENT DATUM

[illegible] — ELEV.

[illegible] — LOG MEASURED FROM

[illegible] — DRILLING MEASURED FROM

[illegible] — DATE

[illegible] — RUN NO.

[illegible] — DEPTH—DRILLER

[illegible] — DEPTH—LOGGER

[illegible] — BTM. LOG INTERVAL

[illegible] — TOP LOG INTERVAL

[illegible] — CASING—DRILLER

[illegible] — CASING—LOGGER

[illegible] — BIT SIZE

[illegible] — TYPE FLUID IN HOLE

[illegible] — DENS. VISC.

[illegible] — PH FLUID LOSS

[illegible] — SOURCE OF SAMPLE

[illegible] — RM @ MEAS. TEMP.

[illegible] — RMF @ MEAS. TEMP.

[illegible] — RMC @ MEAS. TEMP.

[illegible] — SOURCE RMF RMC

[illegible] — RM @ BHT

[illegible] — TIME CIRC. STOPPED

[illegible] — TIME LOGGER ON BOTTOM

[illegible] — MAX. REC. TEMP.

[illegible] — EQUIP. LOCATION

[illegible] — RECORDED BY

[illegible] — WITNESSED BY

[illegible] — NEUTRON TOOL

[illegible] — GAMMA RAY TOOL

[illegible] — OTHER SERVICES

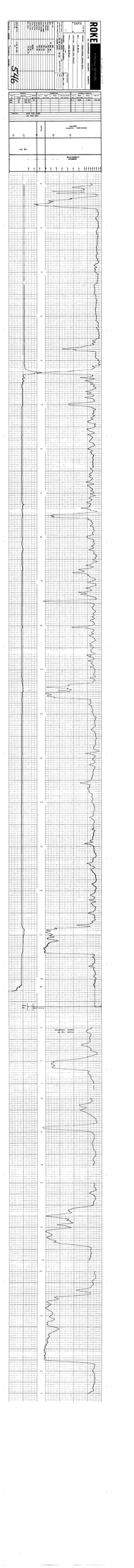
[illegible] — REMARKS

[illegible] — TIE IN WELL

[illegible] — FIELD PRINT

[illegible] — FIELD PRINT

[illegible] — FIELD PRINT



ROKE

OIL DEVELOPMENTS LTD.

GAMMA RAY NEUTRON LOG

COMPANY ROKE OIL DEVELOPMENTS LTD.

WELL 5746

FIELD WILDCAT

COUNTY ALBERTA

LOCATION 16-18-56-10 W4M

PROVINCE ALBERTA

ELEVATION: PERM. DATUM GROUND LEVEL ELEV. 1944.5 ft.

LOG MEASURED FROM KELLY BUSHING 5 ft. ABOVE PERM. DATUM

DRILLED FROM KELLY BUSHING

Date	1-8-74		
Run No.	ONE		
Depth-Driller	3746 ft.		
Depth-Logger	3746 ft.		
Bottom Logged Interval	3744 ft.		
Top Logged Interval	2800 ft.		
Type Fluid in Hole	WATER BASE		
Salinity, PPM Cl	1000		
Density	9.0		
Level	FULL		
Max. Rec. Temp. Deg. F.	120		
Operating Rig Time	5 HRS.		
Recorded By	D. MACKAY		
Witnessed By	MR. BLAIR		

Run No.	Bit From	Bit To	Size	Type Fluid	Density	Visc.	Loss	Pump Pressure	Type Log
ONE	SURF.	3746 ft.	7 7/8	WATER BASE	9.0	38	8.4		GAMMA RAY NEUTRON

Casing Record	Size	Wgt.	Grade	Type Joint	Top	Bottom	Cmtd.
	8 5/8	24	J-55		SURF.	1000 ft.	
	5 1/2	14	J-55		SURF.	3746 ft.	

EQUIPMENT DATA

GAMMA RAY	
RUN NO.	ONE
TOOL MODEL NO.	5280 SDA
GAMETER	SC 1M
DETECTOR MODEL NO.	
TYPE	SCINTILLATION
LENGTH	10.1M
DISTANCE TO N. SOURCE	0.87 M

NEUTRON	
RUN NO.	ONE
LOG COND.	NEUTRON/NEUTRON
TOOL MODEL NO.	5284
GAMETER	SC 1M
DETECTOR MODEL NO.	
TYPE	PROPORTIONAL
LENGTH	13.1M
SOURCE MODEL NO.	MOC 5-50-M
SERIAL NO.	1 CI/222
STRENGTH	1 CI/222

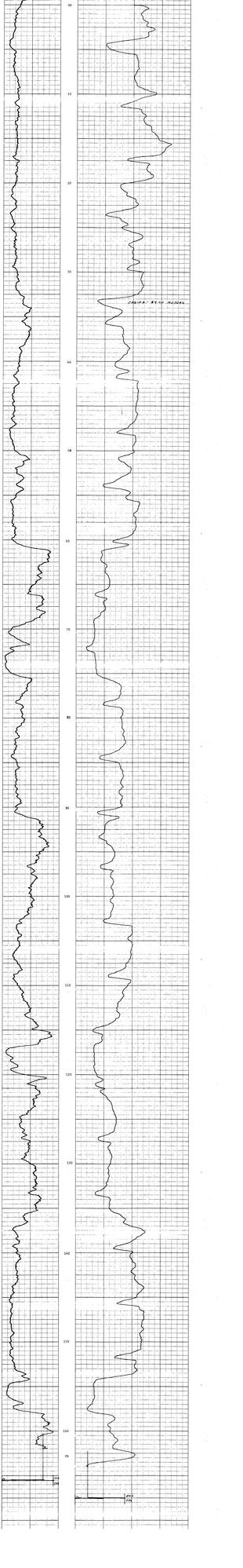
GENERAL	
HOIST CRACK NO.	16
INSTRUMENT TRUCK NO.	
TOOL SERIAL NO.	1234505

GENERAL	
RUN NO.	ONE
LOG COND.	NEUTRON/NEUTRON
TOOL MODEL NO.	5284
GAMETER	SC 1M
DETECTOR MODEL NO.	
TYPE	PROPORTIONAL
LENGTH	13.1M
SOURCE MODEL NO.	MOC 5-50-M
SERIAL NO.	1 CI/222
STRENGTH	1 CI/222
HOIST CRACK NO.	43 TH
INSTRUMENT TRUCK NO.	Audio
TOOL SERIAL NO.	3 CI/222

LOGGING DATA

GAMMA RAY									NEUTRON					
RUN NO.	LOGGING INTERVAL		SPEED FT/MIN	T.C. SETTING	SENS. (API UNITS PER SPC. DEF.)				SPEED FT/MIN	T.C. SETTING	SENS. (API UNITS PER SPC. DEF.)			
	FROM	TO												
ONE	GL	3746 ft.	A	1	100	6	11	1	500	6	100			

REMARKS LOGGED THROUGH 3693 FTPM, NO WATER TO 3700ft



ROKE

GAMMA RAY NEUTRON LOG

RESERVES INC. CALGARY ALBERTA

Company	ROKE RESERVES INC.
Well	5-16
Field	WILDCAT
County	
Province	ALBERTA
Location	5-16-38-10 W4M
Other Services	
Permanent Datum	GROUND LEVEL
Elevation	1010
Log Measured From	K.B. 10 FT. ABOVE PERM. DATUM
Drilling Measured From	K.B.
Date	3-12-83
Run No.	ONE
Depth-Driller	1000
Depth-Logger	1000
Bottom Logged Interval	1000
Top Logged Interval	0
Type Fluid in Hole	WATER
Salinity, PPM Cl	
Density	
Level	FULL
Max. Rec. Temp. Deg. F.	
Operating Rig Time	
Recorded By	
Witnessed By	

BOREHOLE RECORD			
Run No.	Bit From	To	Size
ONE	0	1000	7 7/8

CASING RECORD			
Run No.	Size	Wgt.	From	To
ONE	4 1/2	9.5	0	1000

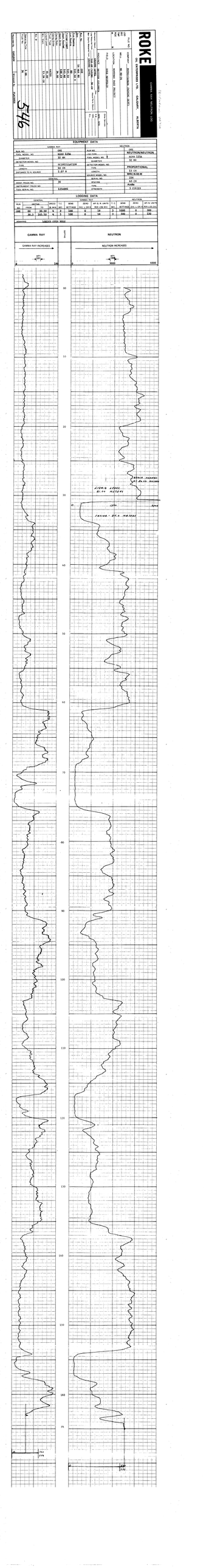
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRT 1256	TOOL MODEL NO.	NEUTRON/NEUTRON
SONDE NO.	32.08	SONDE NO.	NGRT 1256
DETECTOR MODEL NO.		DIAMETER	32.08
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	32.08	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	1.5 M
GENERAL		SOURCE MODEL NO.	NRC-N.88.M
LOGGED TRUCK NO.	30	STRENGTH	226
INSTRUMENT TRUCK NO.		SPACING	63 CM
TOOL SERIAL NO.	1256005	TYPE	RUSH
		STRENGTH	3 CURIES

LOGGING DATA

GAMMA RAY						NEUTRON					
GENERAL			SPEED	T.C.	SONDE	DATA IN UNITS		T.C.	SONDE	DATA IN UNITS	
RUN	DATUM										
NO.	FROM	TO	M. PER MIN.	SEC.	SETTINGS	PER 1.524 M	PER 100 FT	SEC.	SETTINGS	PER 1.524 M	PER 100 FT
ONE	0	1000	6	3	100	0	18	3	1000	0	300
	30.5	165.10	6	3	100	0	18	3	300	0	120

OPERATED CAMERON OPEN HOLE



ROKE

DOWELL SCHLUMBERGER INCORPORATED

COMPANY: PETROLEUM DEVELOPMENT CORP.

WELL: 5-46

FIELD: WILDCAT

COUNTY: EDDY

STATE: NEW MEXICO

LOCATION: 1980' FSL & 1980' FEL

SEC. 5 TWP. 18S RGE. 28E

PERMANENT DATUM: GROUND LEVEL

ELEV.: 3634

LOG MEASURED FROM: KELLY BUSHING

3646 FT. ABOVE PERM. DATUM

DRILLING MEASURED FROM: KELLY BUSHING

RUN NO. ONE

DATE: 1-15-65

TYPE LOG: DENSILOG

DEPTH-DRILLER: 7525

DEPTH-LOGGER: 7525

BTM. LOG INTERVAL: 7525

TOP LOG INTERVAL: 3000

CASING-DRILLER: 8 5/8 @ 3000

CASING-LOGGER: 3000

BIT SIZE: 7 7/8

TYPE FLUID IN HOLE: GEL-CHEM

DENSITY: 10.0

VISCOSITY: 38

PH: 10.5

FLUID LOSS: 6.4

SOURCE OF SAMPLE: MUD PIT

RM @ MEAS. TEMP.: .55 @ 80°

RMF @ MEAS. TEMP.: .45 @ 80°

RM @ BHT: .30 @ 150°

TIME SINCE CIRC.: 6 HRS.

MAX. REC. TEMP.: 150°

EQUIP. NO. & LOCATION: 5546

RECORDED BY: R. MARTIN

WITNESSED BY: MR. HOLLAND

RUN NO. | BIT | CASING (SIZE / WGT. / DEPTH) | TYPE FLUID IN HOLE | DENSITY | VISC. | PH | FLUID LOSS | SOURCE OF SAMPLE | RM @ MEAS. TEMP. | RMF @ MEAS. TEMP. | RM @ BHT | TIME SINCE CIRC. | MAX. REC. TEMP. | EQUIP. NO. & LOCATION | RECORDED BY | WITNESSED BY

ONE | 7 7/8 | 8 5/8 @ 3000 | GEL-CHEM | 10.0 | 38 | 10.5 | 6.4 | MUD PIT | .55 @ 80° | .45 @ 80° | .30 @ 150° | 6 HRS. | 150° | 5546 | R. MARTIN | MR. HOLLAND

DENSILOG | RUN NO. | BOTTOM LOGGED INTERVAL | TOP LOGGED INTERVAL | CASING SIZE | CASING WGT. | CASING DEPTH | BIT SIZE | MUD WGT. | VISCOSITY | FLUID LOSS

ONE | 7525 | 3000 | 8 5/8 | 24 | 3000 | 7 7/8 | 10.0 | 38 | 6.4

REMARKS: RUN THIS FIRM

DENSILOG | GAMMA RAY-NEUTRON

RAW DATA

BULK DENSITY (GRAMS/CC)

CALIPER (INCHES)

GAMMA RAY (API UNITS)

NEUTRON (POROSITY)

EXCESSIVE WASH-OUTS ON CALIPER

TOP OF CEMENT

BASE OF CEMENT

DENSILOG

GAMMA RAY-NEUTRON

RAW DATA

BULK DENSITY (GRAMS/CC)

CALIPER (INCHES)

GAMMA RAY (API UNITS)

NEUTRON (POROSITY)

EXCESSIVE WASH-OUTS ON CALIPER

ROKE

OIL ENTERPRISES LTD.

GAMMA RAY NEUTRON LOG

CALGARY, ALBERTA

COMPANY	ROKE OIL ENTERPRISES LTD.		
WELL	No. 10-26-74		
FIELD	WILDCAT		
COUNTY/PARISH	VERMILION RIVER		
STATE/PROVINCE	ALBERTA		
LOCATION	10-26-74-10W4M		
OTHER SERVICES	DIPMETER		
PERMANENT DATUM	GROUND LEVEL	ELEV.	1750
LOG MEASURED FROM	KELLY BUSHING		10 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM	KELLY BUSHING		
API SERIAL NO.			
SECTION	10		
TOWNSHIP	74		
RANGE	10		
PERMANENT DATUM	GROUND LEVEL	ELEV.	1750
LOG MEASURED FROM	KELLY BUSHING		10 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM	KELLY BUSHING		

RUN NO.	ONE		
DATE	5-11-76		
TYPE LOG	GAMMA RAY NEUTRON		
DEPTH-DRILLER	1400		
DEPTH-LOGGER	1400		
BOTTOM LOGGED INTERVAL	1400		
TOP LOGGED INTERVAL	0		
TYPE FLUID IN HOLE	WATER		
SALINITY, PPM CL			
DENSITY LB/GAL			
LEVEL	FULL		
MAX. REC. TEMP. DEG. F			
OPERATING RIG TIME			
RECORDED BY			
WITNESSED BY			

BOREHOLE RECORD			
RUN NO.	ONE		
BIT NO.	1		
FROM	SURFACE		
TO	1400		
SIZE	7 7/8		
WEIGHT & TYPE	9.2		
FLUID LOSS	8		
SOURCE OF SAMPLE	MUD PIT		
RM @ MEAS. TEMP.	1.8 @ 70		
RMF @ MEAS. TEMP.	1.5 @ 70		
RMC @ MEAS. TEMP.	1.2 @ 70		
SOURCE: RMF RMC	MEASURED		
RM @ BHT	1.1 @ 120		
TIME SINCE CIRC.	5 HRS		
MAX. REC. TEMP. DEG. F	120		
EQUIP. LOCATION	5716		
RECORDED BY			
WITNESSED BY			

CASING RECORD

	SIZE	WGT.	FROM	TO
SURF. STRING	8 5/8	24	0	30
PROD. STRING	4 1/2	9.5	0	1400
LINER				
LINER				

5716

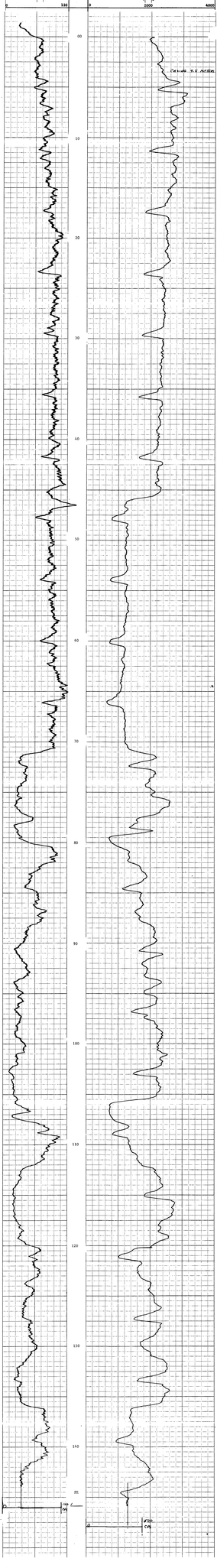
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	SGRS 3.5SA	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3.5 IN	TOOL MODEL NO.	SGNS 3.5SA
DETECTOR MODEL NO.		DIAMETER	3.5 IN
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	1.07 M	LENGTH	15 CM
GENERAL		SOURCE MODEL NO.	MRC-N-85 M
		SERIAL NO.	154
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.		TYPE	Amble
TOOL SERIAL NO.	1256001	STRENGTH	3 CURIES

LOGGING DATA

	GENERAL			GAMMA RAY				NEUTRON		
RUN NO.	INTERVAL FROM	TO	SPEED IN MPH	T.C. SEC.	SENS. SETTING	FULL SCALE DEV.	API & UNITS PER DIV.	SENS. SETTING	FULL SCALE DEV.	API & UNITS PER DIV.
ONE	00	145.70	4	1	100	0	12	500	0	500

REMARKS: LOGGED THROUGH DRILL RODS - NO WATER INSIDE RODS



Pr - Monkman 80(3)A

ROKE

FOCUSED BEAM LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
SEC.
TWP.
RGE.
M.

COMPANY PETRO-CANADA (NORTH WEST)

WELL NO. 16-20-28

FIELD STONE MOUNTAIN

LOCATION NORMAN BASIN PROSPECT

Permanent Datum: GROUND LEVEL Elev.
Log Measured from: KELLY BUSHING 20.00 Above Perm. Datum
D.F. G.L.

Other Services

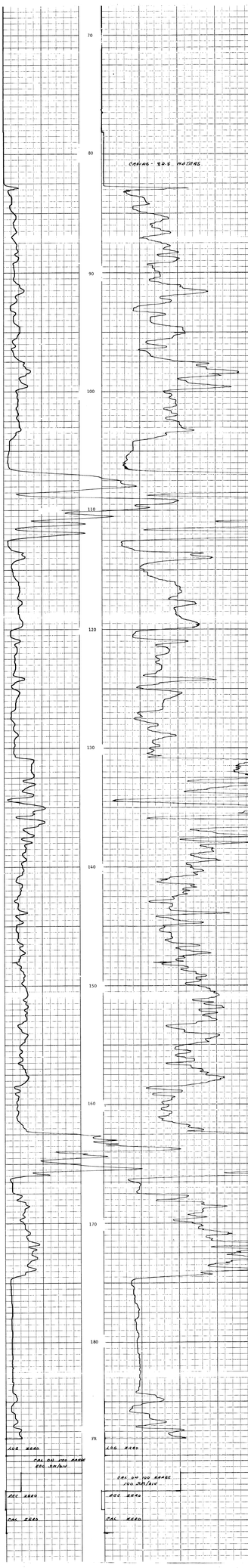
DUAL INDUCTION LATEROLOG

Run No. ONE
Depth-Driller 7700
Depth-Logger 7700
Bottom Logged Interval 7700
Top Logged Interval 3000
Type Fluid in Hole SALT GEL
Salinity, PPM Cl 13,000
Density 10.2
Level FULL
Max. Rec. Temp. °C 171 DEG. F @ 7700
Equip. No. & Location 1606 3378
Recorded By D. MCINTYRE
Witnessed By R. SLOCOMBE

5546

Remarks FBL # 5 CURRENT RANGE STANDARD MUDFISH RESISTANCE 10 OHMS
ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY - (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 5000		PRIMARY SCALE 0 — 1000 — 2000; 6500 — 11500 — 16500



ROKE

OIL & GAS LTD.

COMPANY: ROKE OIL & GAS LTD.

WELL: 16-24-49-10W4

FIELD: BEAVERHILL LAKE

COUNTY: STRATHCONA

PROVINCE: ALBERTA

LOCATION: 16-24-49-10W4

ELEVATION: K.B. 1756 ft. D.F. 1754 ft. G.L. 1744 ft.

PERMANENT DATUM: GROUND LEVEL

LOG MEASURED FROM: K.B. 12 ft. ABOVE PERM. DATUM

DRILLING MEASURED FROM: K.B.

DATE: 1-Jul-85

RUN NO.: ONE

DEPTH-DRILLER: 2100

DEPTH-LOGGER: 2100

BTM. LOG INTERVAL: 2100

TOP LOG INTERVAL: 1000

CASING-DRILLER: 244.5 mm @ 1000

CASING-LOGGER: 1000

BIT SIZE: 222 mm

TYPE FLUID IN HOLE: GEL CHEM

DENSITY: 1.10

VISCOSITY: 50

PH: 10.5

FLUID LOSS: 6.0

SOURCE OF SAMPLE: CIRC

RM @ MEAS. TEMP.: 0.55 @ 20°C

RMF @ MEAS. TEMP.: 0.44 @ 20°C

RMC @ MEAS. TEMP.: 0.66 @ 20°C

SOURCE OF RMF: MEAS

SOURCE OF RMC: MEAS

RM @ BHT: 0.30 @ 60°C

TIME CIRC. (HRS): 6

TIME SINCE CIRC. (HRS): 2

MAX. REC. TEMP.: 60°C

EQUIP. LOCATION: 49-10

RECORDED BY: D. MCLEAN

WITNESSED BY: MR. BLACK

546

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	ADGR 1226	TOOL MODEL NO.	NEUTRON/NEUTRON
SONDE NO.	32 SN	SONDE NO.	ADN 1134
DETECTOR MODEL NO.		SONDE NO.	32 SN
SERIAL NO.	SCINTISAT3109	DETECTOR MODEL NO.	
LENGTH	10 ft	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	2.07 m	LENGTH	15 in
		SOURCE MODEL NO.	NTG-A-22-M
GENERAL		SERIAL NO.	151
SHEET TRACK NO.	36	STRENGTH	3 curies
CARTOGRAPH TRACK NO.		TYPE	AmBe
TOOL SERIAL NO.	1134001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL					GAMMA RAY				NEUTRON			
RUN	LOGGED	SPEED	T.C.	SPAN		API & % UNITS		T.C.	SPAN		API & UNITS
	TOP				(kHz)	API & UNITS				(kHz)	
ONE	1000	9 m	SETTING	SEC	GR + SPAN	PER 100 DIV	SEC	SETTING	SEC	Hz	PER 100 DIV
1	2100	9 m	1	3	100	0	3	1000	3	0	500
2	1975.5	9 m	1	3	100	0	10	2	3000	0	250

REMARKS: LOGGED OPEN HOLE

GAMMA RAY | NEUTRON

GAMMA RAY INCREASES

NEUTRON INCREASES

0 — 150 — 2100 — 3100 — 4100

SCALE MARKER AT 2100 METERS

CASING - 244.5 MM @ 1000 METERS

0 — 100% — 40%

1000

1100

1200

1300

1400

1500

1600

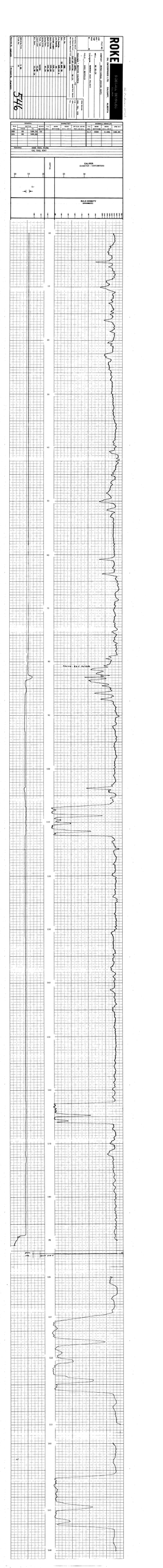
1700

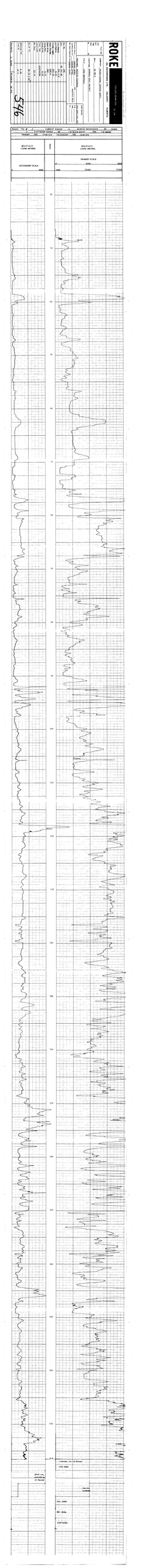
1800

1900

2000

TD


ROKE
5716
CALIPER
BULK DENSITY


ROKE
546
RESISTIVITY (OHM-METERS)
SECONDARY SCALE
PRIMARY SCALE
1000
2000
3000
4000
CALIBRATION
CAL. AMPS.
REC. DEVs.
LEAD SLAG

ROKE OIL INCORPORATED

COMPANY

WELL

FIELD

COUNTY

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

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

546

EQUIPMENT DATA

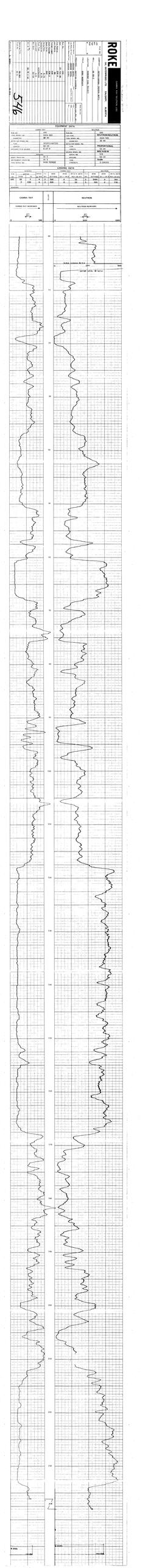
GAMMA RAY		NEUTRON	
RUN NO.		RUN NO.	
TOOL SERIAL NO.		TOOL SERIAL NO.	
DIAMETER	3 3/8	DIAMETER	3 3/8
STANDOFF (IN/CM)		STANDOFF (IN/CM)	
LOCATION		DETECTOR MODEL NO.	
		TYPE	
SPACING (FT/CM)	5 FT.	SPACING	
		PULSE RATE/SEC.	
		SERIAL NO.	
SONDE TRACK NO.		CAL.	
DETAILED CALIBRATION		CAL.	
TOOL SERIAL NO.		CAL.	

NEUTRON/NEUTRON	
TOOL SERIAL NO.	1101
SPACING	16 IN.
	PROPORTIONAL
	1
	MEC 4.50 M
	111
	16 IN.
	RUN
	3 1/8X33

LOGGING DATA

GAMMA RAY								NEUTRON							
RUN NO.	TIME	DATE	DEPTH DRILLER	DEPTH LOGGER	BTM. LOG INTERVAL	TOP LOG INTERVAL	CASING DRILLER	RUN NO.	TIME	DATE	DEPTH DRILLER	DEPTH LOGGER	BTM. LOG INTERVAL	TOP LOG INTERVAL	CASING DRILLER
ONE	10	3	5	5	500	0	14	ONE	10	3	5	5	500	0	14
TWO	2	4	5	5	1000	500	14	TWO	2	4	5	5	1000	500	14
THREE								THREE							

REMARKS:



LOGGING SERVICE

ROKE

SPECIAL CORE ANALYSIS

COMPANY	ROKE OIL EXPLORATION NL
WELL	[illegible]
FIELD	[illegible]
COUNTY	[illegible]
STATE	[illegible]

LOCATION	[illegible]
ELEVATION	[illegible]
DATE	[illegible]
DRILLING MEASURED FROM	[illegible]
PERMANENT DATUM	[illegible]
LOG MEASURED FROM	[illegible]
DRILLING MEASURED FROM	[illegible]

RUN NO.	[illegible]
DEPTH DRILLER	[illegible]
DEPTH LOGGER	[illegible]
BTM. LOG INTERVAL	[illegible]
TOP LOG INTERVAL	[illegible]
CASING DRILLER	[illegible]
CASING LOGGER	[illegible]
BIT SIZE	[illegible]
TYPE FLUID IN HOLE	[illegible]
DENS. VISC.	[illegible]
PH FLUID LOSS	[illegible]
SOURCE OF SAMPLE	[illegible]
RM @ MEAS. TEMP.	[illegible]
RMF @ MEAS. TEMP.	[illegible]
RMC @ MEAS. TEMP.	[illegible]
SOURCE RMF RMC	[illegible]
RM @ BHT	[illegible]
TIME SINCE CIRC.	[illegible]
MAX. REC. TEMP.	[illegible]
EQUIP. LOCATION	[illegible]
RECORDED BY	[illegible]
WITNESSED BY	[illegible]

[illegible]

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERATOR DEPT)

WELL NW 80-31

LOCATION MONTANA PASS PROJECT

FIELD DOME MOUNTAIN

PROVINCE BRITISH COLUMBIA

LSD SEC TWP RGE W..... M

Permanent Datum GROUND LEVEL Elev. 0

Log Measured from TOP OF CASING 30 CM Above Perm. Datum

Drilling Measured from GROUND LEVEL

Other Services: BHC

K.B. DFSL CSGL TBGL

Run No. ONE

Date 23/10/80

Depth-Driller 67.10

Depth-Logger 67.10

Btm. Log Interval 67.10

Top Log Interval 00

Casing-Driller 30.00 CM @ 0

Casing-Logger 30.00

Bit Size 20.00

Type Fluid WATER

Density Viscosity

Source: Rm @ Rmf @ Rmc @

Rm @ Meas. Temp.

Source: Rmf @ Rmc @

Rm @ BHT 15.38 CM

Time Since Circ. Max. Rec. Temp. Equip. No. Location

Recorded By CARLSON

Witnessed By TEACHER

Operating Time 1 HR.

Truck No. 36

546

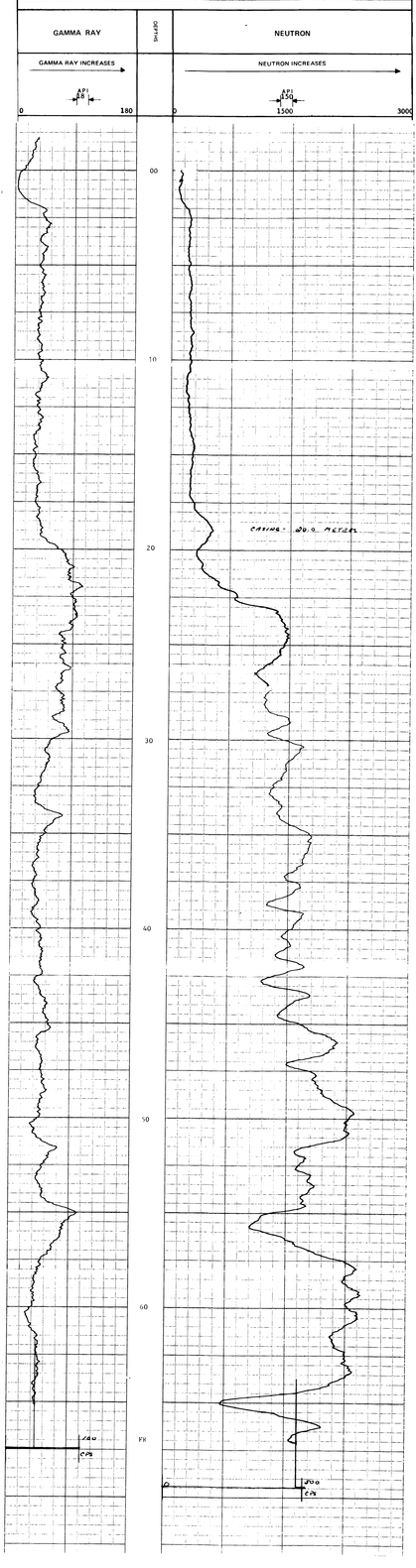
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	RGRN 125A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	RGRN 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 CM	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	125A001	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.
ONE	00	67.10	4	3	100	0	18	3	500	0	150

REMARKS LOGGED OPEN HOLE. DRILL BROKE DOWN AND DID NOT FINISH THIS HOLE.



ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

LSD. SEC. TWP. RGE. W.

COMPANY PETRO-CANADA (OPERATOR 100%)

WELL NO. 80-37

LOCATION HORNER BASE (BLOCK 37)

FIELD HORN MOUNTAIN

PROVINCE NORTHWEST TERRITORIES COORDINATES

Permanent Datum: GROUND LEVEL — Elev. 1,707 ft.

Log Measured from: GROUND LEVEL — Above Perm. Datum

Drilling Measured from: GROUND LEVEL — Elev. 1,707 ft.

Other Services: DIPMETER

Run No. ONE

Depth Driller 3,170 M

Depth Logger 3,170 M

Bottom Logged Interval 3,170 M

Top Logged Interval 90.10 M

Casing Driller 90.10 M @ 90.10 M

Casing Logger 90.10 M

Bit Size 7.00 IN

Type Fluid in Hole WATER

Salinity, PPM Cl

Density

Level FULL

Max. Temp. Recorded 11.3 °C

Operating Time

Unit No.

Recorded By CARLSON

Witnessed By FALCONER

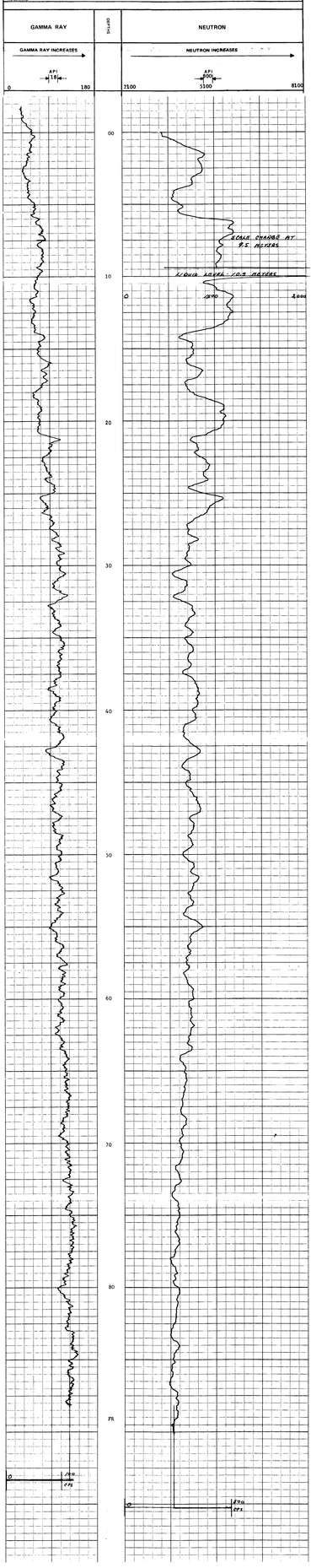
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	ROKE 125A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	ROKE 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.		TYPE	AmBe
TOOL SERIAL NO.	125A001	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL FROM	GENERAL TO	SPEED M/MIN	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.
ONE	00	9.5	4	3	100	0	18	3	1000	76	200
	9.5	90.20	6	3	100	0	18	3	500	0	150

REMARKS



ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: TEXACO-CANADA (OPERG) DEPT.

WELL: IS 86-27

FIELD: DEVONIAN REEF PROJECT

LOCATION: KAYBOB

PROVINCE: ALBERTA

GROUND LEVEL: Above Perm. Datum

K.B. 3,000

D.F.

G.L.

Other Services: CBHC

Rge. 24 W5

Twp. 58

Sec. 27

Elev.: K.B. 3,000 D.F. G.L.

Permanent Datum: Ground Level

Log Measured From: K.B.

Drilling Measured From: K.B.

Date: 1-10-86

Run No.: ONE

Depth-Driller: 3,170

Depth-Logger: 3,170

Bottom Logged Interval: 3,170

Top Logged Interval: 2,700

Type Fluid in Hole: SALT GEL

Salinity, PPM Cl: 150,000

Density: 10.0

Viscosity: 50

Fluid Loss: 10.0 cc

Source of Sample: CIRC.

R_m @ Meas. Temp.: .078 @ 70°F

R_mf @ Meas. Temp.: .065 @ 70°F

R_mc @ Meas. Temp.: .105 @ 70°F

Source: R_mf: MEAS. R_mc: CALC.

R_m @ BHT: .045 @ 150°F

Time Since Circ.: 3 HRS.

Max. Rec. Temp.: 150°F

Equip. No. & Location: 1-30

Recorded By: J. MCDONALD

Witnessed By: MR. DAVIS

RUN NO.	GENERAL DEPTHS FROM	TO	SPEED F.P.M.	GAMMA RAY SENS SETTING	GAMMA RAY ZERO D.V.L. OR R	API G.R. UNITS PER LOG DIV.	SIDEWALL DENSILOG V.S. SENS SETTING	SIDEWALL DENSILOG ZERO D.V.L. OR R	SIDEWALL DENSILOG CPS/ DIV.
ONE	00	89.50	10				0.2	5000	1,000 / 100.00

REMARKS: BOWS TOOL #1784

CALIPER

BULK DENSITY (GRAMS/CC)

3.0 2.9 2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 .9

00 10 20 30 40 50 60 70 80 FR

5000 CPS

RUN 2 OF 2

5946

Py - Montmartre 80/3/A

ROKE OIL EXPLORATIONS LTD. CALGARY, ALBERTA

546

Run No. 1 | Depth Driller 5346 | Depth Logger 5346 | Bottom Log Interval 5346 | Top Log Interval 4500 | Casing Driller 7" @ 5346 | Casing Logger 5346 | Bit Size 6 1/4" | Type Fluid in Hole Gel Chem | Density 9.6 | Viscosity 50 | pH 10 | Fluid Loss 6.4 | Source of Sample Flowline | Rm @ Meas. Temp. 0.75 @ 70°F | Rmf @ Meas. Temp. 0.60 @ 70°F | Rmc @ Meas. Temp. 1.00 @ 70°F | Source of Rmf & Rmc Measured | Rm @ BHT 0.40 @ 150°F | Time Since Circ. 7 HRS | Max. Rec. Temp. 150°F | Equip. No. & Location 1001 | Recorded By JOHNS | Witnessed By MR. BOYLE

LOGGING DISTANCE (FROM DERRICK FLOOR) | 5346 | 5346 | 5346 | 4500 | 5346 | 5346 | 5346

ROKE

RESERVOIR EVALUATION SERVICES

COMPANY	ARCO OIL & GAS COMPANY
WELL	5-46
FIELD	PRUDHOE BAY
COUNTY	NORTH SLOPE BOROUGH
STATE	ALASKA
LOCATION	1320' FNL & 1320' FEL
SEC. 36	TWP. 11N
RGE. 13E	PERMANENT DATUM: MSL
ELEV. 0	LOG MEASURED FROM: KB 54.5 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM: KB	

| | | |

Pr. Mountain 8G2pA

ROKE
ENGINEERING LTD. CALGARY, ALBERTA

WELL NAME: Pr. Mountain 8G2pA
LOCATION: 8-2-6-5W
FIELD: Pr. Mountain
COMPANY: Pr. Mountain Oil & Gas Ltd.
DATE: 1-Jan-1900
RUN NO.: ONE
DEPTH DRILLER: 1,200.00 m
DEPTH LOGGER: 1,200.00 m
BTM LOG INTERVAL: 1,200.00 m
TOP LOG INTERVAL: 0.00 m
CASING DRILLER: 244.5 mm @ 0.00 m
CASING LOGGER: 244.5 mm @ 0.00 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 cm³
SOURCE OF SAMPLE: Pit
RM @ MEAS TEMP: 0.200 @ 20 °C
RMF @ MEAS TEMP: 0.150 @ 20 °C
RMC @ MEAS TEMP: 0.250 @ 20 °C
SOURCE RMF: Measured
SOURCE RMC: Measured
RM @ BHT: 0.100 @ 40 °C
TIME CIRC STOPPED: 1:00
TIME LOGGER ON BOTTOM: 2:00
MAX REC TEMP: 40 °C
EQUIP NO: 1
LOCATION: Pr. Mountain
RECORDED BY: J. Smith
WITNESSED BY: K. Jones

RUN	BIT	FROM	TO	FEET	HOURS
ONE	200.0 mm	0.00 m	1,200.00 m	1,200.00	24.00

TOOL	TYPE	SERIAL NO.	O.D.	MAX REC TEMP	MAX REC PRESS
GR	GR	1234	89 mm	40 °C	20,000 kPa
DIL	DIL	5678	89 mm	40 °C	20,000 kPa

TOOL	TYPE	SERIAL NO.	O.D.	MAX REC TEMP	MAX REC PRESS
SDL	SDL	9012	89 mm	40 °C	20,000 kPa
DSN	DSN	3456	89 mm	40 °C	20,000 kPa

REMARKS: GR, DIL, SDL, DSN
Field Print, 8G2pA

CALIPER
CALIPER IN CENTIMETRES

BULK DENSITY
BULK DENSITY

Scale 1:200

ROKE OIL ENTERPRISES LTD.

GAMMA RAY-NEUTRON LOG

CASAMYR — ANDERSON 5-27-30-5W4

ALBERTA

WELL: 5-27-30-5W4 | LOCATION: ANDERSON | FIELD: CASAMYR | PROVINCE: ALBERTA | COMPANY: ROKE OIL ENTERPRISES LTD.

Elev.: K.B. 1135 | D.F. | G.L. 1132

Permanent Datum: GROUND LEVEL | Elev. 1132

Log Measured From: K.B. 3 Ft. Above Perm. Datum

Drilling Measured From: K.B.

Date: 30-JAN-82 | Run No.: ONE | Depth-Driller: 1200 | Depth-Logger: 1200 | Bottom Logged Interval: 1200 | Top Logged Interval: 0 | Type Fluid in Hole: WATER BASE MUD | Salinity, PPM Cl: 1000 | Density: 10.0 | Level: FULL | Max. Rec. Temp. Deg. F: 70 | Operating Rig Time: 12:00 | Recorded By: D. MCKAY | Witnessed By: MR. BOB

CASING RECORD: SURFACE STRING — Size: 8 5/8 | Wgt.: 24 | Grade: K-55 | From: 0 | To: 30 | Bit Size: 7 7/8 | Type Fluid in Hole: WATER BASE MUD

PRODUCTION STRING — Size: 5 1/2 | Wgt.: 15.5 | Grade: K-55 | From: 0 | To: 1200 | Bit Size: 7 7/8 | Type Fluid in Hole: WATER BASE MUD

TUBING RECORD — Size: 2 3/8 | Wgt.: 4.7 | Grade: J-55 | From: 0 | To: 1100

Type Completion: SINGLE

Perforations: 1100 - 1120

Remarks: RUN GAMMA RAY-NEUTRON LOG FOR CASING EVALUATION.

Rig No.: 5

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	SGDD 121	LOG RUN	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	SGNN 123
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	1.07 M	TYPE	PROPORTIONAL
DISTANCE TO N SOURCE	1.07 M	LENGTH	15 CM
		SOURCE MODEL NO.	NRC N-55-W
GENERAL		SERIAL NO.	175
HOIST TRUCK NO.	ID 5	SPACING	45 CM
ANCHORING TRUCK NO.	ID 5	TYPE	Pu-Be
TOOL SERIAL NO.	SGDD 115002	STRENGTH	5 CURIES

LOGGING DATA

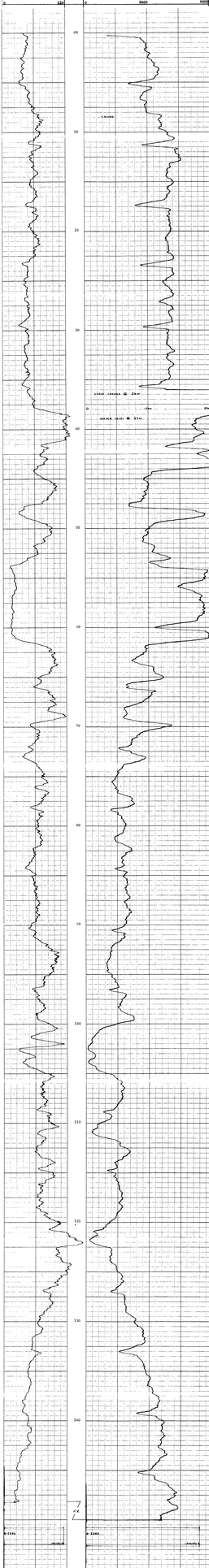
GENERAL					GAMMA RAY					NEUTRON			
RUN NO.	INTERVAL FROM	TO	SPEED M/min	T.C. SEC	SENS SETTINGS	API & N. UNITS DIV.	CPS PER DIV.	T.C. SEC	SENS SETTINGS	ZERO DIV.	API & UNITS PER DIV.
ONE	60	30	6	3	100	0	10	3	1000	5	200
	30	130	6	3	100	0	10	3	500	0	100

REMARKS: LOGGED THROUGH DRILL HOUSE

GAMMA RAY | NEUTRON

GAMMA RAY INCREASES → 0 — 100

NEUTRON INCREASES → 0 — 3600 — 4800



5-46

ROKE
ROKE OIL EXPLORATION LTD.
1000 801 6th AVE. S.W. CALGARY, ALBERTA T2P 3W3

Company: ROKE OIL EXPLORATION LTD.
Well: 16-36-36-5W5
Field: WILLESDEN GREEN
Province: ALBERTA

Location: 16-36-36-5W5
Elevation: K.B. 3966 ft. G.L. 3956 ft.
Permanent Datum: GROUND LEVEL
Log Measured From: K.B. 10 ft. Above Perm. Datum
Drilling Measured From: K.B.

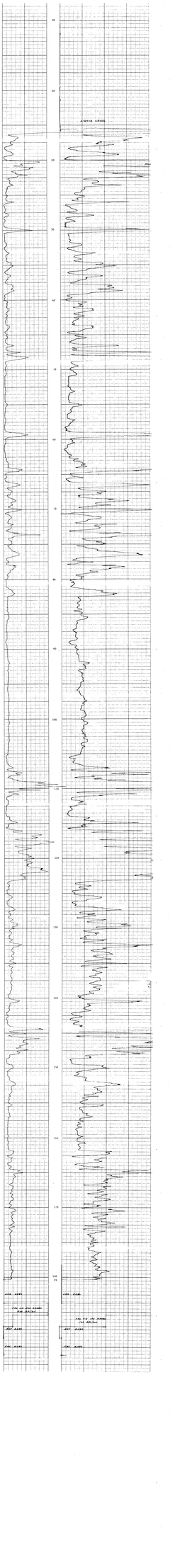
Date: 1-12-72
Run No.: ONE
Depth-Driller: 6000 ft.
Depth-Logger: 6000 ft.
Bottom Logged Interval: 6000 ft.
Top Logged Interval: 1000 ft.
Type Fluid in Hole: GEL CHEM
Salinity: 2000 PPM CL
Density: 9.6 LB/GAL
Level: FULL
Max. Rec. Temp. Deg. F.: 140
Operating Rig Time: 24 HRS
Recorded By: R. BLAKE
Witnessed By: MR. MOORE

RUN NO.	BIT	FROM	TO	FEET	HOLE SIZE	CASING SIZE	WEIGHT	GRADE	FROM	TO
ONE	1	SURF.	1000	1000	12¼	9⅝	36	J-55	SURF.	1000
ONE	2	1000	6000	5000	8¾					

Equipment: 5716
Recorded: FEB. 1/72
Run: ONE
Tool: DUAL INDUCTION LATEROLOG
Serial No.: 1009
Mud Resistivity: 0.45 @ 70 °F
Mud Filtrate Resistivity: 0.35 @ 70 °F
Mud Cake Resistivity: 0.60 @ 70 °F
Source: MEASURED
Rm @ BHT: 0.20 @ 140 °F
Rmf @ BHT: 0.15 @ 140 °F
Rmc @ BHT: 0.30 @ 140 °F
Max. Rec. Temp. Deg. F.: 140
Equipment Location: CALGARY
Recorded By: R. BLAKE
Witnessed By: MR. MOORE

Remarks: FILM # 5
CURRENT RANGE 2000MMHO — MIDPOINT RESISTANCE 500 OHMS
ELECTRODE SPACING 8 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 16IN OHM/CM/V SECONDARY 80IN OHM/CM/V

RESISTIVITY (OHM-METRES)	Depth	RESISTIVITY (OHM-METRES)
SECONDARY SCALE 0 500		PRIMARY SCALE 5000 0 5000



ROKE

GAMMA RAY NEUTRON LOG

COMPANY: ROKE OIL, INC.

WELL: 5-746

FIELD: WILDCAT

COUNTY: CLEVELAND

STATE: OKLAHOMA

LOCATION: 1320' FSL & 1320' FEL

SEC. 5 TWP. 9N RGE. 2E

ELEVATION: 1000' GL

DATE: 10-15-2013

RUN NO. ONE

DEPTH DRILLER: 6100'

DEPTH LOGGER: 6100'

BTM. LOG INTERVAL: 6100'

TOP LOG INTERVAL: SURFACE

CASING: 8 5/8" @ 1000'

TYPE FLUID IN HOLE: FRESH WATER

DENSITY: 8.4

VISCOSITY: 28

PH: 7.0

FLUID LOSS: 8 CC

SOURCE OF SAMPLE: FLOWLINE

RM @ MEAS. TEMP.: 1.00 @ 70°

RMF @ MEAS. TEMP.: 1.00 @ 70°

RMC @ MEAS. TEMP.: 1.00 @ 70°

SOURCE OF RMF: MEASURED

SOURCE OF RMC: MEASURED

RM @ BHT: 0.50 @ 120°

TIME CIRC. STOPPED: 12:00 AM

TIME LOGGER ON BOTTOM: 4:00 AM

MAX. REC. TEMP.: 120°

EQUIP. LOCATION: 52 CR

RECORDED BY: J. ATTW

WITNESSED BY: MR. ROKE

RUN NO. ONE

BIT NO. 1

TYPE: 7 7/8

SIZE: 7 7/8

FROM: 1000'

TO: 6100'

FOOTAGE: 5100'

HOURS: 23.5

MUD TYPE: FRESH WATER

DENSITY: 8.4

VISCOSITY: 28

PH: 7.0

FLUID LOSS: 8 CC

RM @ MEAS. TEMP.: 1.00 @ 70°

RMF @ MEAS. TEMP.: 1.00 @ 70°

RMC @ MEAS. TEMP.: 1.00 @ 70°

RM @ BHT: 0.50 @ 120°

SOURCE OF SAMPLE: FLOWLINE

SOURCE OF RMF: MEASURED

SOURCE OF RMC: MEASURED

TIME CIRC. STOPPED: 12:00 AM

TIME LOGGER ON BOTTOM: 4:00 AM

MAX. REC. TEMP.: 120°

EQUIP. LOCATION: 52 CR

RECORDED BY: J. ATTW

WITNESSED BY: MR. ROKE

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	8168 SGR	TOOL MODEL NO.	8312 CNS
SONDE NO.	32 GR	TOOL SERIAL NO.	32 CN
DETECTOR SERIAL NO.		DETECTOR SERIAL NO.	
TYPE	SCINTILLATION	TYPE	EPITHERMAL
ARRAY	32 CR	SONDE NO.	32 CN
STANDOFF (IN & OVER)	4 1/2" &	MUD WEIGHT	8.4
		MUD SALINITY, NO.	8000
GENERAL		BOREHOLE SIZE	7 7/8
ENGINEER NO.	32	STANDOFF	4 1/2"
WITNESSED BY NO.		MATRIX	SANDSTONE
DRILLING RIG NO.	STEAMER	ATTENUATION	2.121223

LOGGING DATA

GAMMA RAY								NEUTRON							
RUN	LOGGING DATE	TYPE FLUID IN HOLE	DENS.	VISC.	PH	FLUID LOSS	RM @ MEAS. TEMP.	RUN	LOGGING DATE	TYPE FLUID IN HOLE	DENS.	VISC.	PH	FLUID LOSS	RM @ MEAS. TEMP.
ONE	10-15-2013	FRESH WATER	8.4	28	7.0	8 CC	1.00 @ 70°	ONE	10-15-2013	FRESH WATER	8.4	28	7.0	8 CC	1.00 @ 70°
TD	6100'	RMF @ MEAS. TEMP.						TD	6100'	RMF @ MEAS. TEMP.					
10-15-2013	4:00 AM	1.00 @ 70°						10-15-2013	4:00 AM	1.00 @ 70°					
10-15-2013	12:00 AM	RMC @ MEAS. TEMP.						10-15-2013	12:00 AM	RMC @ MEAS. TEMP.					
10-15-2013	12:00 AM	1.00 @ 70°						10-15-2013	12:00 AM	1.00 @ 70°					
10-15-2013	12:00 AM	RM @ BHT						10-15-2013	12:00 AM	RM @ BHT					
10-15-2013	12:00 AM	0.50 @ 120°						10-15-2013	12:00 AM	0.50 @ 120°					

REMARKS: LOGGED OVER DRILL

GAMMA RAY

GAMMA RAY INCREASES

0 API 150

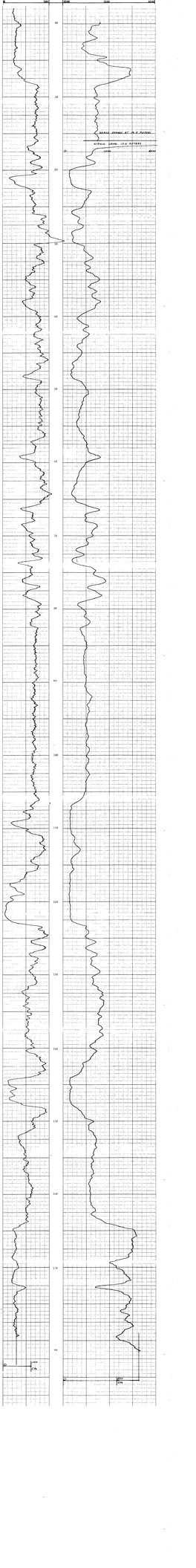
NEUTRON

NEUTRON INCREASES

0.45 LIMESTONE POROSITY UNITS -0.15

SCALE CHANGE AT 5,900 FEET

CASING SHOE AT 1000 FEET



ROKE
RESOURCES INC.

5946

API NO.	42-481-34
OPERATOR	ROKE RESOURCES INC.
LEASE NAME	[illegible]
WELL NO.	[illegible]
FIELD	[illegible]
COUNTY	KNOX
LOCATION	[illegible]
ELEVATION	[illegible]
TOTAL DEPTH	[illegible]
DATE	[illegible]

API NO.	42-275-34
OPERATOR	ROKE RESOURCES INC.
LEASE NAME	[illegible]
WELL NO.	[illegible]
FIELD	[illegible]
COUNTY	KING
LOCATION	[illegible]
ELEVATION	[illegible]
TOTAL DEPTH	[illegible]
DATE	[illegible]

API NO.	42-269-34
OPERATOR	ROKE RESOURCES INC.
LEASE NAME	[illegible]
WELL NO.	[illegible]
FIELD	[illegible]
COUNTY	KENT
LOCATION	[illegible]
ELEVATION	[illegible]
TOTAL DEPTH	[illegible]
DATE	[illegible]

API NO.	42-155-34
OPERATOR	ROKE RESOURCES INC.
LEASE NAME	[illegible]
WELL NO.	[illegible]
FIELD	[illegible]
COUNTY	KNOX
LOCATION	[illegible]
ELEVATION	[illegible]
TOTAL DEPTH	[illegible]
DATE	[illegible]

API NO.	42-481

ROKE

OIL ENTERPRISES LTD.

CALGARY ALBERTA

COMPANY ZETES-GAMMA ZEDEX WELL

WELL NO. 16-14 16-14 PAD

FIELD UNNAMED

COUNTY PEACE RIVER

PROVINCE ALBERTA

Other Services: BHC GR CALIPER

Permanent Datum: GROUND LEVEL Elev.: K.B. 1,000 / D.F. / G.L.

Log Measured From: K.B. 18 FT. ABOVE PERM. DATUM

Drilling Measured From: K.B.

Date	3-5-69		
Run No.	ONE		
Depth-Driller	165.50		
Depth-Logger	165.50		
Bottom Logged Interval	165.50		
Top Logged Interval	31.50		
Casing-Driller	13 3/8 @ 30.00		
Casing-Logger	30.00		
Bit Size	12 1/4		
Type Fluid in Hole	GEL CHEM		
Dens.	9.2		
Visc.	40		
pH	9.0		
Fluid Loss	10.0		
Source of Sample	CIRC		
Rm @ Meas. Temp.	.300 @ 70		
Rmf @ Meas. Temp.	.250 @ 70		
Rmc @ Meas. Temp.	.400 @ 70		
Source of Rmf & Rmc	CALC		
Rm @ BHT	.200 @ 100		
Time Since Circ.	4 HRS		
Max. Rec. Temp.	100		
Equip. Location	3-14-24-25		
Recorded By	R. SCHMIDT		
Witnessed By	MR. ROKE		

RUN SERVICE ORDER NO. 5719

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	ROSS 125A	TOOL MODEL NO.	NEUTRON/NEUTRON ROSS 125A
DIAMETER	32 MM	DIAMETER	32 MM
DETECTOR MODEL NO.		DETECTOR MODEL NO.	
TYPE	SCINTILLATION	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	10 CM 2.07 M	LENGTH	15 CM
		SOURCE MODEL NO.	MNC N-55-M
GENERAL		SERIAL NO.	256
HOIST TRUCK NO.	34	SPACING	45 CM
INSTRUMENT TRUCK NO.		TYPE	Am-Be
TOOL SERIAL NO.	1254005	STRENGTH	3 CURIES

LOGGING DATA

	GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M./MIN.	T.C. SEC.	SENS SETTINGS	ZERO DIV., CPS M.	API G. & UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV., CPS M.	API N. UNITS PER LOG DIV.
ONE	00	31.50	6	3	100	0	18	3	1000	75	300
	31.50	165.50	6	3	100	0	18	3	500	0	150

REMARKS: LOGGED OPEN HOLE

GAMMA RAY (Run ONE) | NEUTRON

GAMMA RAY INCREASES → | NEUTRON INCREASES →

0 — API — 100 | 2100 — API — 0100

CASING COLLAR LOCATIONS

BEGIN LOGGING AT 31.50 METRES

LOGGING ABOVE 30.0 METRES

METRES — 1:200

00 10 20 30 40 50 60 70 80 90 100 110 120 130 140 PR

0 — API — 100 | 2100 — API — 0100

ROKE

546

| | | |

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

PROBE BEAM DOC 2C INC

FILE NO.
COMPANY: ESSO-GAMMA (OSTEN ESSO)
WELL: 16-10-43
LOCATION: MORNIN RISE PROJECT
FIELD: ROSE MORNIN
PROVINCE: ALBERTA
COUNTY: RED DEER
STATE:
Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Run No.	ONE	
Date	5-12-76	
First Reading	2,312.00 ft.	
Last Reading	2,100.00 ft.	
Casing Logged	2,100.00 ft.	
Casing Driller	2,100.00	
Casing Logger	2,100.00	
Bottom Driller	2,312.00	
Bottom Logger	2,312.00	
Logged Interval	212.00	
Type Fluid in Hole	GEL CHEM	
Density	9.2	
Viscosity	50	
Fluid Loss	7.8	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp.	1.76 @ 72F	
Rmf @ Meas. Temp.	1.76 @ 72F	
Rmc @ Meas. Temp.		
Source of Rmf & Rmc		
Rm @ BHT	1.76 @ 72F	
Time Since Circ.	24.00	
Time on Bottom	24.00	
Max. Rec. Temp.	72F	
Equipment No.	43, 103	
Location	36	
Recorded By	CARAVAN	
Witnessed By	ANDREWS	

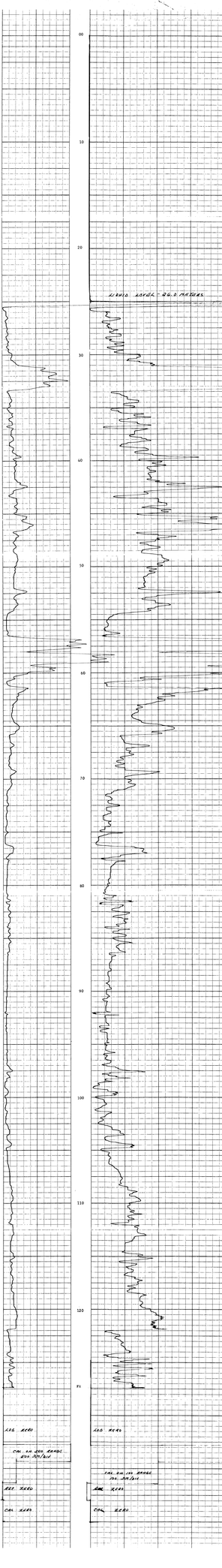
Other Services: BHC-GR-CAL-ML

Permanent Datum: GROUND LEVEL — Elev.: 2,312.00 ft. — Above Perm. Datum
Log Measured From: KELLY BUSHING — 16.00 ft. — Above Perm. Datum
Drilling Measured From: KELLY BUSHING

5716

Remarks: FBL # — CURRENT RANGE: STANDARD — MUDFISH RESISTANCE: — OHMS
ELECTRODE SONDE — CM BEAM WIDTH: 100 — CM ARRAY
PRIMARY: 100 OHM/DIV — SECONDARY: 100 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 2000		PRIMARY SCALE 0 — 1000 — 2000; 6500 — 11500 — 16500



ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL: 16-05-53-5 W5M

FIELD: BRAZEAU RIVER DISTRICT

COMPANY: ESSO-GULF-CANADIAN (OPERATING SLAVE)

Other Services: DIL

Permanent Datum: GROUND LEVEL Elev.: 2,500

Log Measured From: KELLY BUSHING 26 Ft. Above Perm. Datum

Drilling Measured From: KELLY BUSHING

Date	26-10-65		
Run No.	ONE		
Depth-Driller	5,525		
Depth-Logger	5,520		
Bottom Logged Interval	5,520		
Top Logged Interval	3,000		
Type Fluid in Hole	SALT GEL		
Salinity, PPM Cl	30,000		
Density	10.0		
Level	FULL		
Max. Rec. Temp. Deg. F.	150		
Operating Rig Time	12 HRS		
Recorded By	R. SCHMIDT		
Witnessed By	MR. BOYD		

Run No.	ONE		
Bit From	5,525		
Bit To	3,000		
Size	7 7/8"		
Type	F-3		
Weight	30,000		
Rotary RPM	60		
Pump Press. PSI	1,500		
Pump Make	GARDNER DENVER		
Pump Model	PZ-8		
Pump SPM	90		
Pump Liner	7"		
Flow Rate	350 GPM		
Viscosity	70 SEC		
Fluid Loss	7.5 ML/30 MIN		

Rm @ Meas. Temp. 0.35 @ 70 °F

Rmf @ Meas. Temp. 0.28 @ 70 °F

Rmc @ Meas. Temp. 0.45 @ 70 °F

Source of Rmf & Rmc: CALCULATED

Rm @ BHT 0.25 @ 150 °F

Time Since Circ. 12 HRS

Max. Rec. Temp. Deg. F. 150

Equip. No. & Location 5736 EDMONTON

Recorded By R. SCHMIDT

Witnessed By MR. BOYD

5746

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRS 125A	CALIBRATION TANK NO.	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	NGRS 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.69 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-55-W
GENERAL		DETAILS NO.	256
MODEL TRUCK NO.	36	SPACING	45 CM
INSTRUMENT TRUCK NO.		TYPE	Amba
TOOL SERIAL NO.	1256005	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	GATING FROM	GATING TO	SPEED IN. MIN.	T.C. SECS.	SENS. SETTINGS	ZERO API & M. UNITS DIV.	API & M. UNITS PER LOG DIV.	T. C. SECS.	SENS. SETTINGS	ZERO API & M. UNITS DIV.	API & M. UNITS PER LOG DIV.
ONE	00	26.0	4	3	100	0	16	3	1000	75	300
	26.0	3RD.MD	4	3	100	0	16	3	500	0	150

REMARKS: LOGGED OPEN HOLE

GAMMA RAY

GAMMA RAY INCREASES

API UNITS

0 100

NEUTRON

NEUTRON INCREASES

API UNITS

2500 5100 8100

SCALE CHANGE AT 5100 FEET

1011 CPS = 202 API UNITS

2400 2500

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

0 FT.

Pr - Mookman 89/3/A

ROKE
OIL & ENVIRONMENTAL LTD.
CALGARY, ALBERTA

WELL NAME: 100/16-14-25-20W4
COMPANY: ANSCHUTZ CORP. ET AL
FIELD: WILDCAT
LOCATION: 16-14-25-20W4
PROVINCE: ALBERTA

Engineer: MOORE
Operator: MOORE

Recorded By: MOORE
Witnessed By: MOORE

Run No. 1
Date: 89 03 01
Depth-Driller: 1220.00
Depth-Logger: 1220.00
Bottom Logged Interval: 1220.00
Top Logged Interval: 1000.00
Type Fluid in Hole: WATER
Salinity, PPM Cl: 3000
Density: 1.00
Level: FULL
Max. Rec. Temp. Deg. F: 90
Equip. Location: 3-25-20W4
Rec. Time Since Circ.: 1 HR
Max. Temp. Deg. F: 90
Equipment No. & Location: 5146 3-25-20W4
Recorded By: MOORE
Witnessed By: MOORE

5146

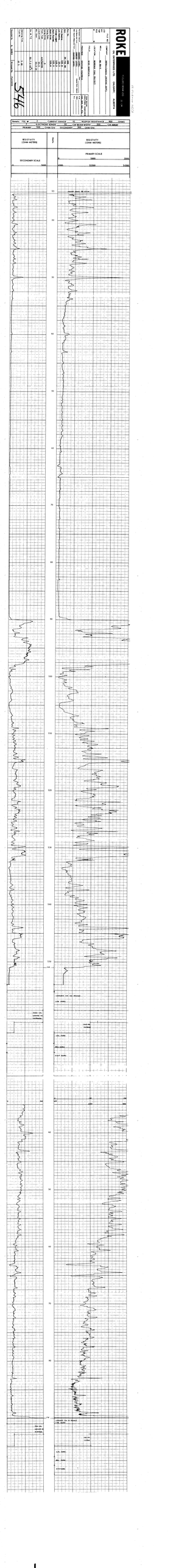
RUN	BIT	CASING (LOGGER)		TYPE FLUID IN HOLE	DENSITY	VISCOSITY	PH	FLUID LOSS	SOURCE OF SAMPLE	RM @ MEAS. TEMP.	RMF @ MEAS. TEMP.	RMC @ MEAS. TEMP.	SOURCE OF RMF	SOURCE OF RMC	RM @ BHT	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION	RECORDED BY	WITNESSED BY
	SIZE	SIZE	WGT.																	
ONE	8	117.86	32	WATER	1.0	3000				0.2	3.98 @ 1	199.89				1 HR	90	3-25-20W4	MOORE	
ONE	8	125.00																		

REMARKS
ODDS TOOL RUNS
CAL TOOL RUN

GAMMA RAY
API UNITS

CALIPER
DIAMETER IN CENTIMETERS

BULK DENSITY
GRAMS/CC


ROKE
546
RESISTIVITY (OHM-METRES)
SECONDARY SCALE
PRIMARY SCALE
RESISTIVITY (OHM-METRES)

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

COMPANY: ESSO-SHOCA (ENTRO-DEP.)

WELL: No. 10-5-

LOCATION: NORMAL TAIL PROJECT

FIELD: BEAVER DOMINICAN

PROVINCE: ALBERTA

COUNTY OR DISTRICT: CALGARY

PERMANENT DATUM: GROUND LEVEL

LOG MEASURED FROM: K.B.

DRILLING MEASURED FROM: K.B.

Date	25 3 83		
Run No.	ONE		
Depth-Driller	33.178 M.		
Depth-Logger	33.174 M.		
Bottom Logged Interval	33.170 M.		
Top Logged Interval	80		
Casing-Driller	133.2		
Casing-Logger	133.2		
Bit Size	7 7/8		
Type Fluid in Hole	GEL CHEM		
Density	1.15		
Viscosity	45		
Fluid Loss	7.5		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp.	.2 @ 17		
Rmf @ Meas. Temp.	.17 @ 17		
Rmc @ Meas. Temp.	.25 @ 17		
Source of Rmf & Rmc	CALC		
Rm @ BHT	.2 @ 17		
Time Since Circ.	13.30		
Max. Rec. Temp.	17		
Equip. Location	ATHABASCA		
Recorded By	R. MOSS		
Witnessed By			

Temporary Benchmark: 1.5 M. ABOVE GROUND LEVEL

Permanent Benchmark: GROUND LEVEL

Elevation: K.B. 0 M. D.F. M. G.L. 0 M.

Elevation: 0 M.

Rotary Table Elevation: 0 M.

Above Permanent Datum: 0 M.

Log Measured From: K.B.

Drilling Measured From: K.B.

5746

EQUIPMENT DATA

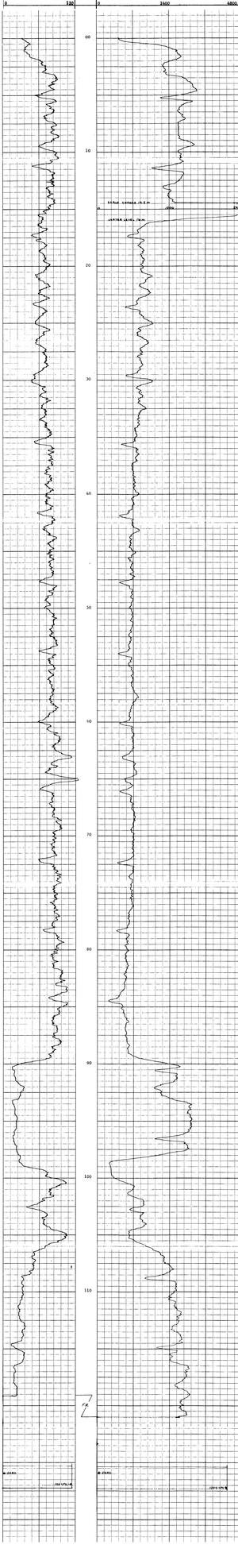
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	RGNR 125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	RGNR 125
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
GENERAL		SOURCE MODEL NO.	MISC N-88 W
HOIST TRUCK NO.	III 1	SERIAL NO.	171
INSTRUMENT TRUCK NO.	III 1	SPACING	42 CM
TOOL SERIAL NO.	RGNR 125002	TYPE	Amlite
		STRENGTH	5 CURIES

LOGGING DATA

RUN NO.	GETTIE FROM	GETTIE TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	GAMMA RAY ZERO	GAMMA RAY API G. R. UNITS PER LOG DIV.	T.C. SEC.	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV. LOG	NEUTRON API N. UNITS PER LOG DIV.
ONE	00	34.5	4	3	100	0	12	3	1000	0	250
	34.5	121	4	3	100	0	12	3	500	0	100

REMARKS

LOGGED THROUGH DRILL RODS



Pr - Monkman 80(3)A

Pr - Monkman 6903A

ROKE

SPECTRAL DENSITY LOG

Run No. One
Depth-Driller 5546
Depth-Logger 5546
Btm. Log Interval 5544
Top Log Interval 3000
Casing-Driller 9 5/8 @ 3000
Casing-Logger
Bit Size 8 1/2
Type Fluid in Hole WATER BASE MUD
Density 10.0 lb/gal
Viscosity 45 sec
Fluid Loss 6.0 cc
Source of Sample CIRCULATION
R_m @ Meas. Temp. 0.25 @ 70 °F
R_mf @ Meas. Temp. 0.20 @ 70 °F
R_mc @ Meas. Temp. 0.30 @ 70 °F
Source of R_mf & R_mc MEASURED
R_m @ BHT 0.15 @ 150 °F
Time Since Circ. 12 HRS
Max. Rec. Temp. 150 °F
Equip. No. & Location 1103 A
Recorded By J. SMITH
Witnessed By J. MAYNARD

Run No. One
Depth-Driller 5546
Depth-Logger 5544
Btm. Log Interval 5544
Top Log Interval 3000
Casing-Driller 9 5/8 @ 3000
Casing-Logger
Bit Size 8 1/2
Type Fluid in Hole WATER BASE MUD
Density 10.0 lb/gal
Viscosity 45 sec
Fluid Loss 6.0 cc
Source of Sample CIRCULATION
R_m @ Meas. Temp. 0.25 @ 70 °F
R_mf @ Meas. Temp. 0.20 @ 70 °F
R_mc @ Meas. Temp. 0.30 @ 70 °F
Source of R_mf & R_mc MEASURED
R_m @ BHT 0.15 @ 150 °F
Time Since Circ. 12 HRS
Max. Rec. Temp. 150 °F
Equip. No. & Location 1103 A
Recorded By J. SMITH
Witnessed By J. MAYNARD

5546

COMPANY: ESSO RESOURCES CANADA LIMITED
WELL: MONKMAN 6903A
LOCATION: NORTHWEST 10-69-3-W6M
FIELD: ZAMA
PROVINCE: ALBERTA

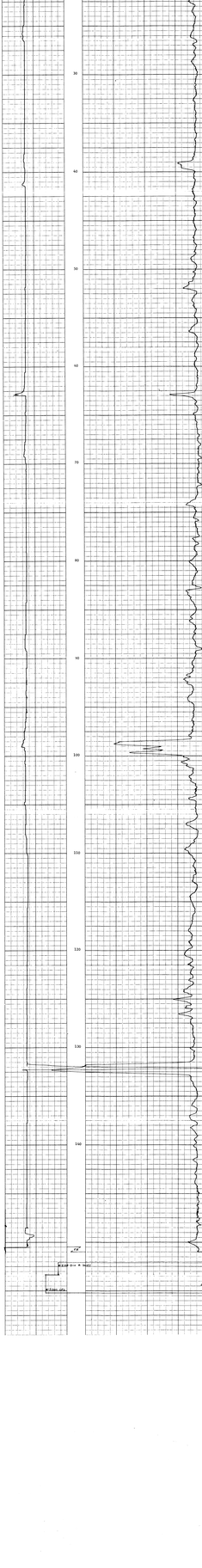
SERVICE ORDER NO. 1103-1
PERMANENT DATUM: GROUND LEVEL
ELEV. 2000
LOG MEASURED FROM: KELLY BUSHING
ELEV. 2009
DRILLING MEASURED FROM: KELLY BUSHING

RUN NO.	GENERAL: DATE	GENERAL: TIME	GENERAL: SPEED	CASING REC: T.D. DRILLER	CASING REC: T.D. LOGGER	CASING REC: BTM. LOG INTV.	CASING REC: TOP LOG INTV.	SCHLUM. CABLE(S): SERIAL NO.	SCHLUM. CABLE(S): TYPE	SCHLUM. CABLE(S): LENGTH
ONE	80	11	3					0.2	3000	2.089	188.00

REMARKS: 1000 ATAM
CAL.FACT.

CALIPER
DIAMETER - CENTIMETRES

BULK DENSITY
GRAMS/CC



ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO

COMPANY PETRO-CANADA (OPERTG DEPT)

WELL MR 80-6

LOCATION MORKAM COAL PROJECT

FIELD ROKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev.

Log Measured From GROUND LEVEL Above Perm. Datum

Rev. Depths Measured From GROUND LEVEL

GRN. BRASS CAL

CSG.

G.L.

Other Services

LSD SEC TWP RGE W M

Rec. No. 006

Date 25 JUL 80

Last Reading 114 M

Feet Logged 51

Depth Reached 63

Depth Driller 114.9

Depth Logger 115.2

Casing Driller 51

Casing Logger 51

Fluid Type AIR/WATER

Liquid Level

Max. Diam. 13.3 CM

Rec. @ °C 23.15 @ 30°F

Operating Time 3 HR

Truck No. 81 1

Recorded By B. BANKS

Witnessed By FLASCHNER

5416

Remarks FBL # 7 CURRENT RANGE HI MUDFISH RESISTANCE 25 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE

0 5000

Depths

RESISTIVITY (OHM-METERS)

PRIMARY SCALE

0 1000 2000

6500 11500 16500

50

60

70

80

90

100

110

CAL-HI

FR

LOGGED ON .100 RANGE

LOG ZERO

5000 CAL LOGGED ON .100 RANGE

1000 CAL .100 RGE

CAL ZERO

REC ZERO

STOP ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

File No.

Log Measured From: KB

Drilling Measured From: KB

Permanent Datum: GROUND LEVEL

Elev.: K.B. 1135.0 ft. D.F. G.L.

COMPANY: KERR-DAWSON LOGGING (1977)

WELL: MK 80-5

LOCATION: NORDEG COAL PROJECT

FIELD: FORK MOUNTAIN

PROVINCE: BRITISH COLUMBIA

Other Services: DENSITY, GAMMA

Run No. ONE

Depth-Driller 1135.0 ft.

Depth-Logger 1135.0 ft.

Bottom Logged Interval 1135.0 ft.

Top Logged Interval 35 ft.

Casing-Driller 13 3/8 @ 35 ft.

Casing-Logger 35 ft.

Bit Size 17 1/2 in.

Type Fluid in Hole AIR/WATER

Density lb/gal

Viscosity sec

pH

Fluid Loss cc

Source of Sample

Rm @ Meas. Temp.

Rmf @ Meas. Temp.

Rmc @ Meas. Temp.

Source of Rmf

Source of Rmc

Rm @ BHT

Time Since Circ. 3 HR

Time On Bottom 20 1

Recorded By R. RAMER

Witnessed By RALPHSON

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRS 125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	NGRS 125
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	SU 1	SERIAL NO.	171
INSTRUMENT TRUCK NO.	SU 1	SPACING	43 CM
TOOL SERIAL NO.	NGRS 123002	TYPE	Ambe
		STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL INTERVAL FROM	INTERVAL TO	SPEED M. MIN.	T.C. SEC.	GAMMA RAY SENS SETTING	GAMMA RAY ZERO DIV. L. ON M.	GAMMA RAY API G. R. UNITS PER LOG DIV.	NEUTRON T.C. SEC.	NEUTRON SENS SETTING	NEUTRON ZERO DIV. L. ON M.	NEUTRON API N. UNITS PER LOG DIV.
ONE	00	115	6	3	100	0	18	3	500	0	150

REMARKS

GAMMA RAY — DEPTH — NEUTRON

GAMMA RAY INCREASES → API 0 18 100

NEUTRON INCREASES → API 1350 1500 3000

WATER LEVEL @ 2.4 MIN.

CASING

F.R.

0 ZERO

1500 ZERO

5746

ROKE OIL ENTERPRISES LTD.

SEISMIC SERVICES

FILE NO.

COMPANY: SEISMOGRAPH SERVICE (1971) LTD. CALGARY, ALBERTA

WELL: 16-9-24-5

LOCATION: NORMAL OIL FIELDS

FIELD: BOW RIVERVIEW

PROVINCE: ALBERTA (ONSHORE)

Permanent Datum: GROUND LEVEL — Elev.: 1000

Log Measured From: GROUND LEVEL — Above Perm. Datum

Drilling Measured From: KELLY BUSHING — Elev.: 1014

Date: 1-3-72

Run No.: ONE

Depth-Driller: 1000

Depth-Logger: 1000

Bottom Logged Interval: 1000

Top Logged Interval: 00

Casing-Driller: 1014

Casing-Logger: 14

Bit Size: 7 7/8

Type Fluid in Hole: KCL/WATER

Density: 9.1

Viscosity: 55

pH: 7.5

Fluid Loss: 13.3 CC

Source of Sample: CUTTINGS

Rm @ Meas. Temp.: .095 @ 21 °C

Rmf @ Meas. Temp.: .075 @ 21 °C

Rmc @ Meas. Temp.: .06 @ 21 °C

Source of Rmf & Rmc: CALC

Rm @ BHT: 114 °F

Time Since Circ.: 3 1/2 HRS

Max. Rec. Temp.: 114 °F

Equip. No. & Location: 5 — 5406

Recorded By: R. MARO

Witnessed By: MESSRS

5416

GENERAL				GAMMA RAY			SOBRALL DENSLOG			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN.	T.C.	SENS SETTINGS	ZERO D.I.L. UNITS	API G.R. UNITS PER LOG DIV.	T.C. SECS.	SENS SETTINGS	ZERO D.I.L. UNITS	CPS/DIV
ONE	00	50	5					0.2	5000	1.72 5	87.36
	50	114	5					0.2	5000	2.08 3	106.35

REMARKS: DENS #128A
CAL #879

CALIPER
DIAMETER – CENTIMETERS

BULK DENSITY
GRAMS/CC

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

FEED
FEED
FEED

DR-Monkman 8VC31A

ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
CSD
SEC
TWP
RGE
W - M

COMPANY PETRO-CANADA

WELL MH 80-7

LOCATION MONKMAN COAL PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:
GRN, DENS

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

K.B.
CSG
G.L.

Run. No.	ONE	
Date	25 FEB 80	
First Reading	102.5 M	
Last Reading	70.5	
Footage Logged	32.0	
Depth Reached	103.4	
Depth Driller	103.6	
Casing Roke	70.5	
Casing Driller	70	
Fluid Type	WATER	
Liquid Level		
Min. Diam.	13.3 CM	
Rm @ °C	30.3 @ 50°F	
Operating Time	½ HR	
Truck No.	SU 1	546

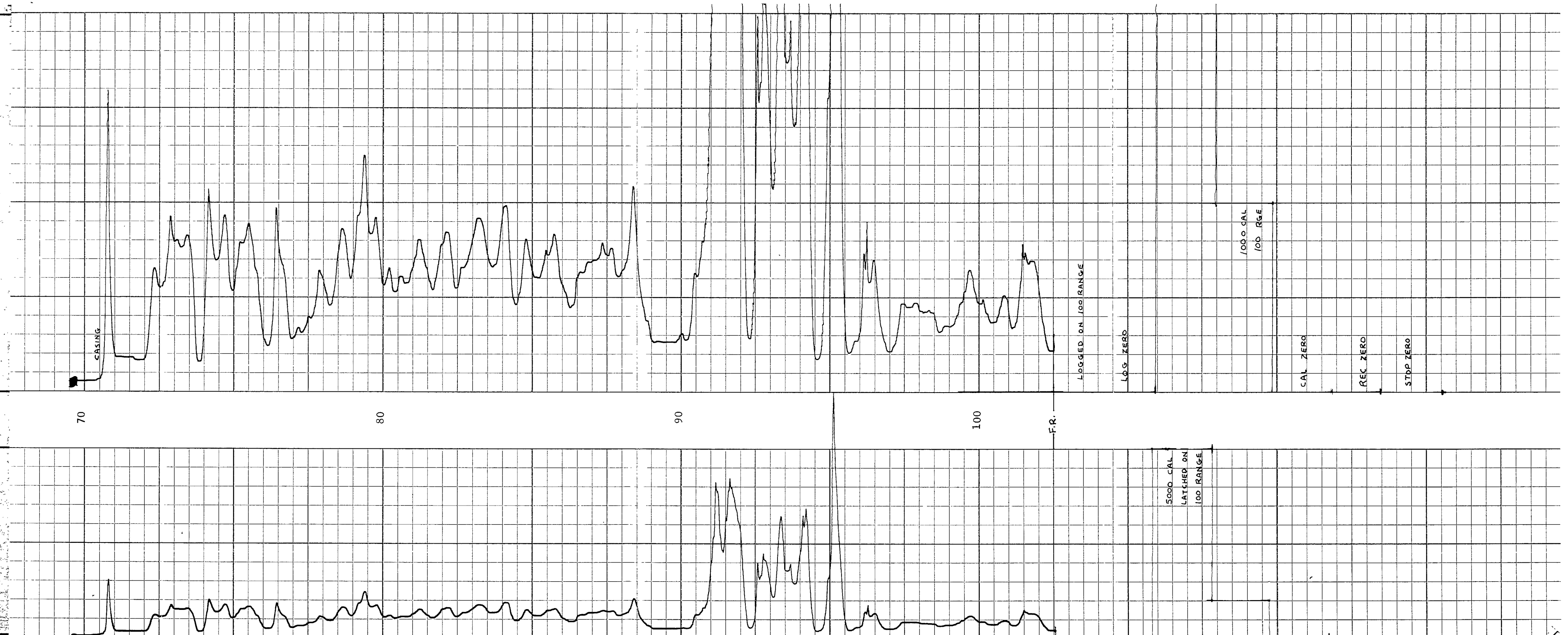
Recorded By B. BANKS Witnessed By PLACHNER

Remarks: FBL # 7 CURRENT RANGE 111 MUDFISH RESISTANCE 600 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS) PRIMARY SCALE 2000 1000 0 16500 11500 6500

Depths

RESISTIVITY (OHM-METERS) SECONDARY SCALE 5000 0



ROKE OIL ENTERPRISES LTD.

GAMMA RAY NEUTRON LOG

CALGARY, ALBERTA

Recorded By: R. YOUNG
Witnessed By:
Truck No.: 1
Date: 30 3
Run No.: ONE
Depth Driller: 303.5
Depth Logger: 303.5
Bottom Logged Interval: 303.5
Top Logged Interval: SURFACE
Casing Driller: 13.5 CM @ SURFACE
Casing Logger: 13.5 CM @ SURFACE
Bit Size: 20.3 CM
Type Fluid in Hole: WATER
Salinity: 50
Density: 8.34 LB/GAL
Level: FULL
Max. Rec. Temp.: 25°C
Equipment No.: 1
Location: 1 MILE NORTH OF HIGHWAY 2 ON GLENMORE TRAIL
Recorded By: R. YOUNG
Witnessed By: MR. DOLF
Permanent Datum: GROUND LEVEL
Elev.: K.B. 1050 FT. ABOVE PERM. DATUM
Log Measured From: K.B. 10 FT. ABOVE PERM. DATUM
Drilling Measured From: K.B.
Rig No.: 1
Date: 30 3 56
Run No.: ONE
Depth Driller: 303.5
Depth Logger: 303.5
Bottom Logged Interval: 303.5
Top Logged Interval: SURFACE
Casing Driller: 13.5 CM @ SURFACE
Casing Logger: 13.5 CM @ SURFACE
Bit Size: 20.3 CM
Type Fluid in Hole: WATER
Salinity: 50
Density: 8.34 LB/GAL
Level: FULL
Max. Rec. Temp.: 25°C
Equipment No.: 1
Location: 1 MILE NORTH OF HIGHWAY 2 ON GLENMORE TRAIL
Recorded By: R. YOUNG
Witnessed By: MR. DOLF

Other Services: CNL
Elev.: K.B. 1050 FT. ABOVE PERM. DATUM
Permanent Datum: GROUND LEVEL
Log Measured From: K.B. 10 FT. ABOVE PERM. DATUM
Drilling Measured From: K.B.

ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY ALBERTA

LSD ___ (FILE NO.)
SEC ___ TWP ___ RGE ___ M
COMPANY PETRO-CANADA (OPTING DEEP)
WELL 102-25-7
LOCATION NORMAL GAS PROJECT
FIELD BOOK MOUNTAIN
PROVINCE BRITISH COLUMBIA
GROUND LEVEL ___ Elev.
Permanent Datum ___ Above Perm. Datum
Log Measured From ___ K.B.
Drilling Measured From ___ G.L.
GROUND LEVEL ___
GROUND LEVEL ___
DFD ___ Other Services:
CAL ___ FDL ___ GRN ___

Run. No. ONE
Date 25-FEB 80
First Reading 102.5 M
Last Reading 71.5
Density Logged 102.4
Depth-Driller 103.4
Depth-Logger 103.6
Casing-Rake 70
Fluid Type WATER
Fluid Level
Max. Rec. Temp. Deg. C
Min. Ohmm 13.3 OH
Equipment No.
Truck No. SIT 1
Operating Time 9 HRS

Recorded By B. WARES
Witnessed By P.A. GORDEY

546

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS. SETTINGS	ZERO DIV.S OR A	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS. SETTINGS	ZERO DIV.S OR A	CPM/DIV.
ONE	71.5	102.5	5					0.2	5000	2.088	188.89

REMARKS DENS #128A
CAL #879
TOOL BECAME STUCK IN DRILLHOLE AT 71.5M

DEPTHS

BULK DENSITY (GRAMS/CC)

70
80
90
100

Tool Became stuck in drillhole @ 71.5m

FR

← 200 DIV. R. SHIFT

← 5000 CPS

ZERO →

REPEAT SECTION

90
100

FR

← 200 DIV. R. SHIFT

← 5000 CPS

ZERO →

Pr - Mortman 9B3JA

ROKE OIL EXPLORATIONS LTD. CALGARY, ALBERTA

RESISTIVITY SURVEY

FIELD: [illegible]
WELL: 16-08-5
COMPANY: MORTMAN OIL PROJECT
LOCATION: MORRIS OIL PROJECT
FIELD: MORE MOUNTAIN
PROVINCIAL: ALBERTA
Elev. Perm. Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING
Elev.: K.B. 2881 ft.
G.L. 2871 ft.
D.F. [illegible]
Date: 23-3-76
Run No.: ONE
Depth-Driller: 11500
Depth-Logger: 11500
Bottom Logged Interval: 11500
Top Logged Interval: 6500
Type Fluid in Hole: WATER
Salinity, PPM Cl: [illegible]
Density: [illegible]
Level: FULL
Max. Rec. Temp. Deg. F.: [illegible]
Operating Rig Time: [illegible]
Recorded By: A. BERRY
Witnessed By: MORRIS

5K16

Remarks: FIELD # 7 CURRENT RANGE 32 MUDFISH RESISTANCE 150 Ohms
7 ELECTRODE SONDE 20 CM BEAM WIDTH 500 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE
0 5000

Depth

RESISTIVITY (OHM-METERS)

PRIMARY SCALE
0 1000 2000
6500 11500 11500

00
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
/0

LATERAL 16 - 16 in.

UPPER 16 - 04 ENTRY

LOG BASE

ENTRY ON, UNCASED IN, PIC PICKS

GAMMA RAY API

CAL. LOG

RES. LOG

STOP LOG

ROKE OIL ENTERPRISES LTD.

CALGARY, ALBERTA

Well	06-35-3
Field	DEEP BASIN
Location	06-35-3-5W5
Province	ALBERTA
Company	ROKE OIL ENTERPRISES LTD.
Well	06-35-3
Field	DEEP BASIN
Location	06-35-3-5W5
Province	ALBERTA

Permanent Datum: G. LEVEL
Elevation: 1171.5 m
Log Measured From: K.B. 3.5 m
Drilling Measured From: K.B.

Date	84 Dec 04
Run No.	ONE
Depth Driller	3500 m
Depth Logger	3498 m
Bottom Logged Interval	3498 m
Top Logged Interval	1171.5 m
Casing Driller	244.5 m
Casing Logger	244.5 m
Bit Size	222 mm
Type Fluid in Hole	GEL CHEM
Density	1.15
Viscosity	50
Fluid Loss	6.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp.	0.26 @ 24 °C
Rmf @ Meas. Temp.	0.21 @ 24 °C
Rmc @ Meas. Temp.	0.35 @ 24 °C
Source of Rmf & Rmc	CALCULATED
Rm @ BHT	0.13 @ 110 °C
Time Since Circ.	12 HRS
Max. Rec. Temp.	110 °C
Equip. Location	3-5-5W5
Recorded By	R. SMITH
Witnessed By	MR. BILL

RECORDED: GEIGER-MARMA (DOUBLE DETECTOR)
RUN NO.: ONE
PASS: SINGLE, NORMAL (SAND, PRIMARY)

CASING RECORD

	SIZE	WEIGHT	GRADE	FROM	TO
SURFACE	244.5 mm	53.6 kg/m	K-55	0 m	244.5 m
PRODUCTION	177.8 mm	34.2 kg/m	K-55	0 m	3500 m

TUBING RECORD

SIZE	WEIGHT	GRADE	FROM	TO

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

EQUIPMENT DATA

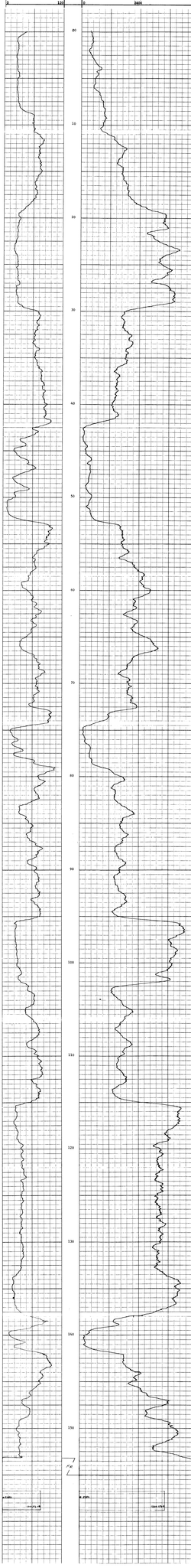
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	SGNL 115	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	SGNL 115
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	2.07 M	LENGTH	10 CM
		SOURCE MODEL NO.	SGNL 4.5 GS-M
GENERAL		SERIAL NO.	175
HOSE/TRUCK NO.	SU 3	STRENGTH	5.1 CR
HOSE/TRUCK NO.	SU 1	TYPE	AmBe
FUEL/SERIAL NO.	SGNL 115003	STRENGTH	5 CURIES

LOGGING DATA

GENERAL				GAMMA RAY			NEUTRON		
RUN NO.	INTERVAL FROM	INTERVAL TO	SPEED M/min	SENS SETTINGS	DIV. LOG M	API & API UNITS PER LOG DIV.	T.C. SETTINGS	SENS DIV.	API & API UNITS DIV. / OR K/MA LOG DIV
ONE	00	44	5	100	0	12	3	1000	150
	33	1448.3	5	100	0	12	3	500	120

REMARKS: LOGGED THROUGH DRILL RODS

GAMMA RAY	Depth	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
0 — 120		0 — 3600 — 4800



ROKE

WELL SERVICES LTD.

CALGARY, ALBERTA

FILE NO. 3606

COMPANY: ASHCROFT PETROLEUM LTD.

WELL: 16-36-8

FIELD: TWIN VALLEY

LOCATION: 16-36-8

COUNTY: PEACE RIVER

PROVINCE: ALBERTA

Other Services: DIL, SNP, CDL

Permanent Datum: GROUND LEVEL

Elevation: 1,000 ft

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elevation: K.B. 1,010 ft

D.F. 1,009 ft

G.L. 1,000 ft

Date: 1-11-80

Run No.: ONE

Depth-Driller: 1,000 ft

Depth-Logger: 1,000 ft

Bottom Logged Interval: 1,000 ft

Top Logged Interval: SURFACE

Type Fluid in Hole: GEL CHEM

Salinity: 1,000 PPM CL

Density: 9.5 LB/GAL

Viscosity: 45 SEC

Fluid Loss: 10 CC

Source of Sample: FLOWLINE

Rm @ Meas. Temp.: 1.0 @ 70 °F

Rmf @ Meas. Temp.: 0.8 @ 70 °F

Rmc @ Meas. Temp.: 1.2 @ 70 °F

Source: Rmf: CALC Rmc: CALC

Rm @ BHT: 0.5 @ 150 °F

Time Since Circ.: 6 HRS

Max. Rec. Temp.: 150 °F

Equip. No. & Location: 3606 DRAYTON VALLEY

Recorded By: A. SMITH

Witnessed By: MR. MOIR

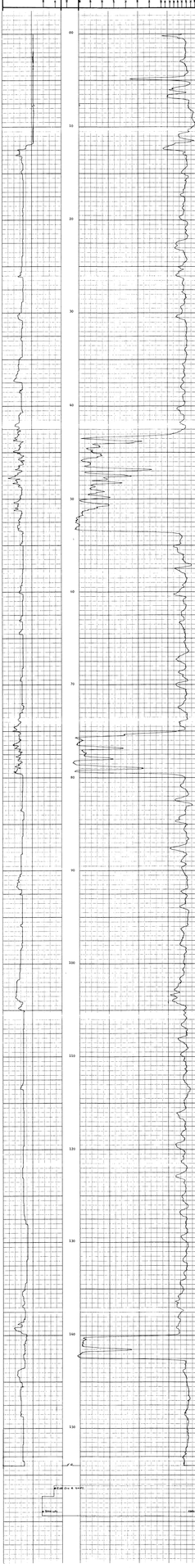
GENERAL				CASING REC				SIDEWALL SAMPLING			
RUN NO.	BIT FROM	BIT TO	METRES DRILLED	T.D. DRILLER	SIZE & WEIGHT	WT. & H. GRADE PER LIN. FT.	T.D. LOGGER	SIZE	NO. OF SHOTS	CPM TOT
ONE	00	1,74	3				0.3	5000	2.185	148.83

REMARKS: GOOD PIPES

CAL. FACTO

CALIPER
DIAMETER — CENTIMETRES

BULK DENSITY
(GRAMS/CC)



Scale cm

Scale ft

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM GG 2 - 54

FILE NO.

COMPANY PETRO-CANADA (OPERG DEPT)

WELL HK 80-24

LOCATION NORMAL PASS PROJECT

FIELD ROSE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL Elev. 0

Log Measured From: ZERO OF CASING 30.12ft Above Perm. Datum

Drilling Measured From: GROUND LEVEL D.F. G.L.

Other Services: DUAL INDUCTION LATEROLOG

LOG
SEC
TWP
RGE
M

Run. No.	ONE	
Date	31-Dec-70	
First Reading	5% 70	
Last Reading	13.00	
Bit Size	7.7/8"	
Type Fluid in Hole	GEL CHEM	
Density	9.6	
Viscosity	37.00	
Fluid Loss	13.00	
Source of Sample	CIRC.	
Rm. @ Meas. Temp.	.97@ 70°F	
Rmf. @ Meas. Temp.	.78@ 70°F	
Rmc. @ Meas. Temp.	1.19@ 70°F	
Source Rmf. Rmc.	MEAS.	
Rm. @ Bot. Circ.	1.19@ 70°F	
Time Circ. Stopped	13.00	
Time Logger on Bottom	8.50	
Max. Rec. Temp.	13.30 CH	
Equip. No. & Location	15.23 @ 20	
Recorded By	A.K.H.	
Witnessed By	36	

Logged By CARLSON

Witnessed By STAFFORD

546

Remarks FBL @ 5 CURRENT RANGE STANDARD MUDFISH RESISTANCE 200 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 5000		PRIMARY SCALE 0 — 1000 — 2000; 6500 — 11500 — 16500

CASING

00 10 20 30 40 50 60 70 80 90

FR

LOG ZERO

CAL ON 100 OHMS 100 OHMS DIV

REC ZERO

CAL ZERO

LOG ZERO

CAL ON 100 OHMS 100 OHMS DIV

REC ZERO

CAL ZERO

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.

COMPANY PETRO-CANADA (OPERATOR SUPCO)

WELL HR 80-29

LOCATION HORNBY PASS PROJECT

FIELD PEACE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev.
Log Measured From: GROUND LEVEL — 0.0 M Above Perm. Datum
Drilling Measured From: GROUND LEVEL — G.L.

Other Services: SONIC CALIPER GR

Rec. No. 1
Date 23 MAR 80
Run No. ONE
Depth-Driller 1750.0 M
Depth-Logger 1750.0 M
Bottom Logged Interval 97.60
Top Logged Interval 95.00
Casing-Driller 177.80 @ 95.00
Casing-Logger 177.80 @ 95.00
Bit Size 152.4 MM
Type Fluid in Hole WATER
Density / Viscosity
pH / Fluid Loss
Source of Sample
Rm @ Measured Temp.
Rmf @ Measured Temp.
Rmc @ Measured Temp.
Source of Rmf / Rmc
Rm @ BHT
Time Since Circ. 13.30 CH
Max. Rec. Temp. Deg. C
Equip. Location 36
Recorded By KARACHI
Witnessed By FANCHER

Operating Time
Truck No.
3 HR
36

5416

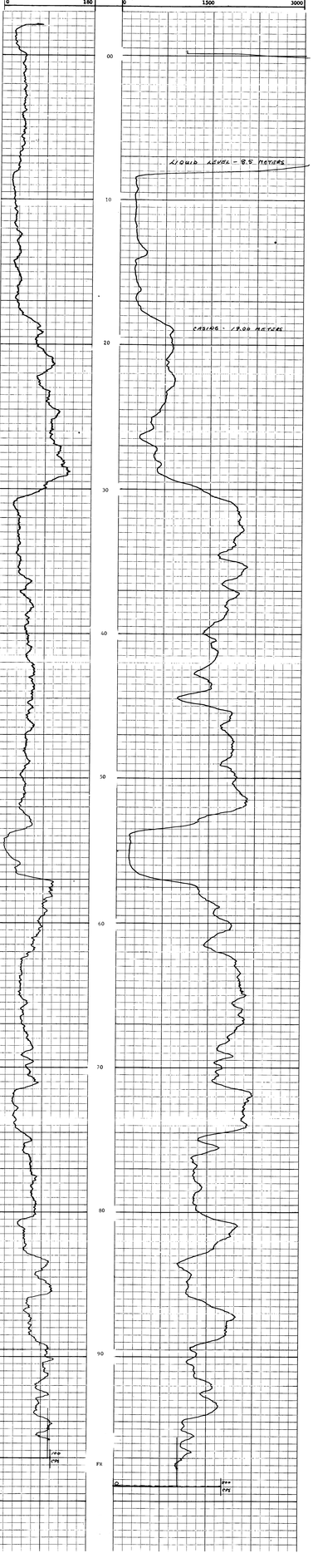
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	NGRM 125A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	NGRM 125A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.07 M	LENGTH	15 CM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	36	SERIAL NO.	256
INSTRUMENT TRUCK NO.		SPACING	43 CM
TOOL SERIAL NO.	125A001	TYPE	Am-Be
		STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON		
RUN NO.	DEPTH FROM	DEPTH 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.
ONE	00	97.80	4	3	100	0	18	3	500	0	150

REMARKS LOGGED OPEN HOLE



ROKE

OIL ENTERPRISES LTD. CALGARY ALBERTA

SIDEWALL DENSILOG

File No. 120

COMPANY — ATCO-CANADA CENTRAL (BETA)

WELL — No. 16-29

LOCATION — ANDORA 29S2 PROJECT

FIELD — DOVE MOUNTAIN

PROVINCE — NORTHERN ALBERTA

Permanent Datum: GROUND LEVEL — Elev.: 1241

Log Measured From: KELLY BUSHING — 10 Ft. Above Perm. Datum

Drilling Measured From: KELLY BUSHING

Elev.: K.B. 1251 — D.F. — G.L. 1241

Other Services: DIL

Rec. No. 1 — Date: 31 MAR 80

Run No. 1 — Depth-Driller: 2000.00

Depth-Logger: 2000.00

Bottom Logged Interval: 1999.00

Top Logged Interval: 1700.00

Casing-Driller: 13 3/8 @ 1700.00

Casing-Logger: 13 3/8 @ 1700.00

Bit Size: 8 1/2

Type Fluid in Hole: WATER

Density: 9.1

Viscosity: 40

Fluid Loss: 8.5

Source of Sample: CIRC.

Rm @ Meas. Temp.: 0.22 @ 24°C

Rmf @ Meas. Temp.: 0.18 @ 24°C

Rmc @ Meas. Temp.: 0.28 @ 24°C

Source of Rmf & Rmc: CALCULATED

Rm @ BHT: 0.12 @ 74°C

Time Since Circ.: 12 HRS

Time Logger on Bottom: 0730

Max. Rec. Temp. Deg. C: 74

Equip. No. & Location: 5307 EDM

Recorded By: CARLSON

Witnessed By: MCINTOSH

S46

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'S. ON #	GAMMA RAY API G.R. UNITS PER LOG DIV.	BOREHOLE DENSILOG T.C. SEC.	BOREHOLE DENSILOG SENS SETTINGS	BOREHOLE DENSILOG ZERO DIV'S. ON #	CPS/DIV
088	00	99.60	10					0.1	5000	2.084	100.00
CAL	00	97.40									

REMARKS: DEN TOOL #1284
CAL TOOL #587

CALIPER
DIAMETER – CENTIMETERS

BULK DENSITY
(GRAMS/CC)

DEPTH

FR

SHALE

SHALE

SHALE

ROKE
ROKE TECHNOLOGY LTD
Unit 2, Hithercroft Court, Lakeside Drive, Wallingford, Oxfordshire, OX10 9HX, UK
Tel: +44 (0)1491 822800 Fax: +44 (0)1491 822801
www.roke.co.uk

S46

WELL NAME	
WELL No.	
LOCATION	
COUNTY	
STATE	
COUNTRY	
API No.	
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 RMC	
RM @ BHT	
TIME CIRC	
TIME LOGGER ON BOTTOM	
MAX REC TEMP	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN No.	
TOOL TYPE (MNEMONIC)	
TOOL SERIAL No.	
TOOL LENGTH	
WEIGHT	
MAX REC. TEMP.	
CALIPER	
CALIPER CORRECTION	
DEPTH CONTROLLED BY	
TOP LOGGED INTERVAL	
BOTTOM LOGGED INTERVAL	
TYPE LOG	
SCALE	

Pr - Monkman 8609A

ROKE OIL ENTERPRISES LTD.
TOOLS-STEAM-GO
CALGARY, ALBERTA

File No. 8609A
Run No. 1
Date 8-10-84
Time 1:30 PM

COMPANY: HUSKY OIL OPERATIONS LTD.
WELL: HR 10-34
LOCATION: REDWATER FIELD, ALBERTA
FIELD: REDWATER
COUNTY: STRATHCONA
PROVINCE: ALBERTA, CANADA
Other Services: GR-CBL-CCL-VDL
Permanent Datum: GROUND LEVEL
Elev.: K.B. 1985
Log Measured From: K.B. 10 Ft. Above Perm. Datum
Drilling Measured From: K.B.
Elev.: K.B. 1985
G.L. 1975
D.F. 1983

Rge. 26 W4M
Twp. 56
Sec. 34
Unit
Other Services

Bore Hole Record
Bit No. 1
From 0
To 1500
Size 9 7/8"
Type
Fluid Type
Fluid Density
Fluid Level
Max. rec. temp.
Time since circ.
Time on bottom
Equip. No. & Loc.
Recorded By
Witnessed By

Casing Record
Size 9 5/8"
Wgt. 36.0 #
Grade K-55
Type ST&C
From 0
To 1500

Run No. 1
Date 8-10-84
Depth-Driller 1500
Depth-Logger 1500
Bottom Logged Interval 1500
Top Logged Interval 1000
Type Fluid in Hole WATER BASED
Salinity, PPM Cl 1000
Density
Level FULL
Max. Rec. Temp. Deg. F.
Equipment No. & Location 8609A
Recorded By
Witnessed By

Remarks: FBL # 3 CURRENT RANGE 120 mA MUDFISH RESISTANCE 110 OHMS
ELECTRODE SONDE 48 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 100 OHM/DIV

RESISTIVITY (OHM-METERS)
SECONDARY SCALE
0 1000

Depth

RESISTIVITY (OHM-METERS)
PRIMARY SCALE
0 1000 2000
6500 13500 14500

LIQUID LEVEL

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

LOG ZERO
CAL ON TOP
SATURATE ON TOP
CAL ZERO
REC ERR
STOP ERR

LOG ON TOP
1000 CPS

SK16

Pr - Micrometer RDOA

ROKE

OIL FIELD RESEARCH, INC.

GARLAND, TEXAS

COMPANY

WELL

FIELD

COUNTY

STATE

LOCATION

SECTION

BLOCK

SURVEY

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

EQUIPMENT DATA

GAMMA RAY

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

NEUTRON

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

LOGGING DATA

RUN	BIT SIZE	CASING FROM	CASING TO	TYPE FLUID	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
ONE	7 7/8	SURF.	1,170	SALT GEL	10.0	48	10.5	6.4	MUD PIT	.19 @ 72°	.14 @ 72°	.24 @ 72°	MEAS.	MEAS.	.14 @ 120°	24 HRS.	120°	2 MILES		
TWO	7 7/8	1,170	2,000	SALT GEL	10.0	48	10.5	6.4	MUD PIT	.19 @ 72°	.14 @ 72°	.24 @ 72°	MEAS.	MEAS.	.14 @ 120°	24 HRS.	120°	2 MILES		
THR	7 7/8	2,000	2,500	SALT GEL	10.0	48	10.5	6.4	MUD PIT	.19 @ 72°	.14 @ 72°	.24 @ 72°	MEAS.	MEAS.	.14 @ 120°	24 HRS.	120°	2 MILES		

GAMMA RAY

GAMMA RAY MICROGRAMS

NEUTRON

NEUTRON MICROGRAMS

Tubing Shoe

Liner Top

Liner Shoe

Plug Back TD

Total Depth

Ran 1 joint 4½ O.D. 10.5# J-55 with total of 41.24 ft.

GAMMA RAY MICROGRAMS

NEUTRON MICROGRAMS

Pr - Monkman 80(3)A

ROKE

OIL ENTERPRISES LTD. CALGARY ALBERTA

FOCUSED BEAM LOG 20 CM

Run No.	ONE
Date	9 DEC 1980
Depth Driller	16504
Depth Logger	16504
Bottom Logged Interval	16504
Top Logged Interval	9000
Type Fluid in Hole	SALT GEL
Salinity, PPM Cl	150K
Density	10.2
Viscosity	42
Fluid Loss	6.5
Source of Sample	CIRCULATION
Rm @ Meas. Temp.	.134 @ 70°F
Rmf @ Meas. Temp.	.125 @ 70°F
Rmc @ Meas. Temp.	.245 @ 70°F
Source of Rmf & Rmc	CALCULATED
Rm @ BHT	.134 @ 70°F
Time Since Circ.	5 HRS
Max. Rec. Temp. Deg. F.	70°F
Equipment Number	546
Location	10-36-5-5
Recorded By	MORRIS/DEE
Witnessed By	CUTLER

546

Permanent Datum: GROUND LEVEL Elev. 0
Log Measured From: GROUND LEVEL 0 Ft. Above Perm. Datum
Drilling Measured From: GROUND LEVEL

FIELD
LOCATION
WELL
COMPANY
SEC. TWP. RGE.

Rig No. 36 Type: CONVENTIONAL
Bit Size: 8 1/2" Type Fluid in Hole: SALT GEL
Max. Rec. Temp. 70°F Equipment Location: 546
Recorded By: MORRIS/DEE Witnessed By: CUTLER

RUN NO. ONE
Date 9 DEC 1980
Type Log FOCUSED
Depth-Driller 16504
Bottom Logged Interval 16504
Top Logged Interval 9000
Type Fluid in Hole SALT GEL
Salinity, PPM Cl 150K
Density 10.2
Viscosity 42
Fluid Loss 6.5
Source of Sample CIRCULATION
Rm @ Meas. Temp. .134 @ 70°F
Rmf @ Meas. Temp. .125 @ 70°F
Rmc @ Meas. Temp. .245 @ 70°F
Source of Rmf & Rmc CALCULATED
Rm @ BHT .134 @ 70°F
Time Since Circ. 5 HRS
Max. Rec. Temp. Deg. F. 70°F
Equipment Number 546
Location 10-36-5-5
Recorded By MORRIS/DEE
Witnessed By CUTLER

Run No. ONE

Remarks FBL # 3 CURRENT RANGE 320 MUDFISH RESISTANCE 600 OHMS
ELECTRODE SONDE 32 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

RESISTIVITY (OHM-METERS)

PRIMARY SCALE
0 1000 2000

SECONDARY SCALE
0 5500 11500 16500

Depth

10
20
30
40
50
60
80
90
100

TVD

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
100 CAL

CAL ZERO

RECORD ZERO

STOP ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: PETRO-CANADA (OPERG. DEPT.)

WELL: WC-85-S4

LOCATION: NORMAN WELLS PROJECT

FIELD: NORMAN WELLS

PROVINCE: NORTHWEST TERRITORIES

COUNTY: MACKENZIE

STATE: MACKENZIE

PERMANENT DATUM: GROUND LEVEL

LOG MEASURED FROM: GROUND LEVEL

DRILLING MEASURED FROM: GROUND LEVEL

Other Services: PEL-DISP-CAL-DIP

Elev.: K.B. 0 M, D.F. 0 M, G.L. 0 M

Date: 1-Dec-1990

Run No.: ONE

Depth-Driller: 1056.0 M

Depth-Logger: 1056.0

Bottom Logged Interval: 1056.0

Top Logged Interval: 22.2

Casing-Driller: 219.1 @ 22.2

Casing-Logger: 219.1 @ 22.2

Bit Size: 311.1 MM

Type Fluid in Hole: KCL WATER

Dens. Visc.: 1.13 KG/L 50 S

pH: 11.5

Fluid Loss: 3 CC

Source of Sample: CIRC

R_m @ Meas. Temp.: 0.17 @ 20 C

R_mf @ Meas. Temp.: 0.13 @ 20 C

R_mc @ Meas. Temp.: 0.23 @ 20 C

Source R_mf / R_mc: MEAS / CALC

R_m @ BHT: 0.08 @ 60 C

Time Since Circ.: 36 HOURS

Max. Rec. Temp.: 60 C

Equip. No. & Location: 1 NORM

Recorded By: PRESTON

Witnessed By: FALCONER

5746

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	45 CM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	R-GRN 1256003	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY					NEUTRON				
RUN NO.	DEPTH FROM	DEPTH 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.	
ONE	0	8	6	3	100	0	18		3	1 K	8 L	300 API	
ONE	8	105	6	3	100	0	18		3	500	0	150 API	

REMARKS

GAMMA RAY | DEPTH | NEUTRON

GAMMA RAY INCREASES → API 0 180

NEUTRON INCREASES → API 3600 3400 3200

SCALE CHANGE AT 8 M.

WATER LEVEL AT 8.15M.

0 100 CPS

0 1000 CPS

ROKE

OIL ENTERPRISES LTD.
CALGARY

SIDEWALL RESULTS

WELL NO.	
COMPANY	ROKE OILS (OFFSET) LTD.
WELL	
LOCATION	NW-30-27-4
FIELD	
PROVINCE	ALBERTA
COUNTRY	CANADA

Permanent Datum: GROUND LEVEL — Elev.: 1285
Log Measured From: KELLY BUSHING — 20 ft. A.G.L.
Drilling Measured From: KELLY BUSHING

Date: 3-JUL-80
Run No.: ONE
Depth-Driller: 3135
Depth-Logger: 3135
Bottom Log Interval: 3132
Top Log Interval: 2200
Casing-Driller: 244.5 @ 3135
Casing-Logger: 244.5 @ 3135
Bit Size: 7.875
Type Fluid in Hole: LIGNOSULPHONATE
Density: 10.2
Viscosity: 45
Fluid Loss: 3.2
Source of Sample: CIRC
Rm @ Meas. Temp.: 0.71 @ 23
Rmf @ Meas. Temp.: 0.53 @ 23
Rmc @ Meas. Temp.: 1.06 @ 23
Source: Rmf: MEAS. Rmc: MEAS.
Rm @ BHT: 0.39 @ 93
Time Since Circ.: 12 HRS
Max. Rec. Temp.: 93 C
Equipment No.: 2-0008
Location: 5 MI. S.

Recorded By: GRIFFITH
Witnessed By: MR. PATTON

GENERAL RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED (ft/min)	T.C. SEC.	GAMMA RAY SENS SETTINGS	GAMMA RAY ZERO SKILL DIV'S	API-GA UNITS PER LOG DIV.	SIDEWALL SENSI/DE T.C. SEC.	SIDEWALL SENSI/DE SENS SETTINGS	SIDEWALL SENSI/DE ZERO SKILL DIV'S	SIDEWALL SENSI/DE CPM/DIV
ONE	0	2215	8					.5	1 K	2.77 A	96.95
TWO	2215	3410	8					.5	5 K	2.69 A	107.96
RXP	66	75	6					.5	5 K	2.69 A	107.96

REMARKS: DEMO TOOL #1566

CALIPER
DIAMETER — CK

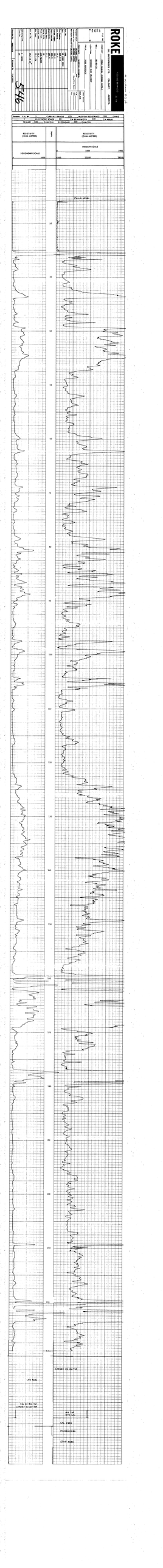
BULK DENSITY
GRAM/CC

DEPTH

SCALE CHANGE FOR CASING AT 11 KM

DENSITY DETAIL
EXPANDED SCALE

546


ROKE
ROKE OIL (U.K.) LTD.
ROKE HOUSE
HORSHAM
SURREY
RH12 1TE
TEL: (0403) 64144
TELEX: 87455
ROKE OIL (U.K.) LTD.
ROKE HOUSE
HORSHAM
SURREY
RH12 1TE
TEL: (0403) 64144
TELEX: 87455
SHELL U.K. EXPLORATION AND PRODUCTION
SHELL CENTRE
LONDON SE1 7NA
TEL: 01-934 1234
TELEX: 915850

ROKE
ROCKY MOUNTAIN OIL WELL SURVEYING CO.
DENVER, COLORADO

Radioactivity Log

COMPANY	
WELL	
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.	
RM @	
RMF @	
RMC @	
SOURCE OF RMF & RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. NO. & LOCATION	
RECORDED BY	
WITNESSED BY	

EQUIPMENT DATA

GAMMA RAY	NEUTRON
1.688	
LOG RUN NO.	LOG RUN NO.
TOOL MODEL NO.	TOOL MODEL NO.
1.5" OD	1.5" OD
DETECTOR MODEL NO.	DETECTOR MODEL NO.
SCINTILLATION	PROPORTIONAL
DETECTOR NO.	DETECTOR NO.
1.5" OD	1.5" OD
AMPLIFIER TYPE & VOLTAGE	AMPLIFIER MODEL NO.
1.5" OD	1.5" OD
AMPLIFIER NO.	AMPLIFIER NO.
1.5" OD	1.5" OD
ANNEX CABLE NO.	ANNEX CABLE NO.
1.5" OD	1.5" OD
AMPLIFIER CABLE NO.	AMPLIFIER CABLE NO.
1.5" OD	1.5" OD
WELL BORE NO.	WELL BORE NO.
4.688 STANDARD	4.688 OD

LOGGING DATA

	GAMMA RAY						NEUTRON					
RUN	FROM	TO	SPEED	T.C.	GAIN	SCALE	FROM	TO	SPEED	T.C.	GAIN	SCALE
1ST	2700	100	30 MIN.	.01	AUTOMATIC	200	2700	100	30 FT/MIN.	.01	AUTOMATIC	200
2ND	2700	100	30 MIN.	.01	AUTOMATIC	200	2700	100	30 FT/MIN.	.01	AUTOMATIC	200
3RD												

REMARKS: CHECKED AND CALIBRATED TOOLS WITH RADIOACTIVE BEAD IN CALIPER BOX STANDARD API CALIBRATION

GAMMA RAY — NEUTRON

GAMMA RAY INCREASES → API 0 — 100

NEUTRON INCREASES → API 1800 — 1000

3134 Gamma AT 67.5 ft.

WATER LEVEL AT 145.1 ft.

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3134

3200

3300

3400

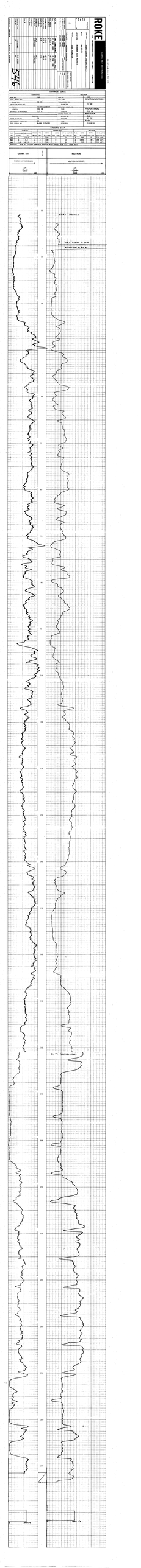
3500

3600

3700

3800

3900


ROKE
546
DATE
RUN
TIME
RECORDED BY
WITNESSED BY
LOCATION
FIELD
COUNTY
STATE
PERMANENT DATUM
ELEV.
LOG MEASURED FROM
DRILLING MEASURED FROM
CASING DRILLER
CASING LOGGER
BTM. CSG. INTERVAL
TOP LOG INTERVAL
OPEN HOLE 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
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 RMF
SOURCE RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY
GAMMA RAY
NEUTRON
GAMMA RAY NEUTRON
API
0
150
NEUTRON POROSITY
API
60
0
100
Water Level at Time
Water Level at Time
Gas Pay Gas Pay

ROKE

COMPANY
WELL
FIELD
COUNTY
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 RMF
SOURCE RMC
RM @ BHT
TIME SINCE CIRC.
MAX. REC. TEMP.
EQUIP. LOCATION
RECORDED BY
WITNESSED BY

RUN | BIT | CASING | FROM | TO

TYPE | MAKE | SERIAL NO. | DIA. | LOG | SHOE

TYPE | MAKE | SERIAL NO. | DIA. | LOG | SHOE

RUN	SCALE INTERVAL FROM	SCALE INTERVAL TO	TIME SINCE CIRC.	MAX. REC. TEMP.	EQUIP. LOCATION	RECORDED BY	WITNESSED BY
ONE	0	11	8				
TWO	0	180	8				

REMARKS: 3.885 TOOL FITTED

CALIPER
DIAMETER IN

BULK DENSITY
GRAMS/CC

DEPTH
FEET

BULK DENSITY AT 0.0 g/cc
AT 2:1 M.

Form 4
2 in 1

Scale 4 ft

Run 1

Run 2

Run 3

Run 4

Run 5

Run 6

Run 7

Run 8

Run 9

Run 10

Run 11

Run 12

Run 13

Run 14

Run 15

Run 16

Run 17

Run 18

Run 19

Run 20

Run

ROKE

OIL ENTERPRISES LTD.

CALGARY, ALBERTA

DOUBLE BEAM SSS 30 CM

Field No. | Run No. | Date | Time

Company: ENTER-OCEAN OIL (INTL.) LTD.

Well: MURRAY PROV. PROJECT

Location: ROKE MURRAY PROV. PROJECT

Field: ROKE MURRAY PROV. PROJECT

Elev. | Perm. Datum | Log Measured From | Drilling Measured From

Recorded By: [illegible]

Witnessed By: [illegible]

Bore Record: Run No. | Bit Size | Type Fluid in Hole | Max. Rec. Temp. | Time Since Circ. | Time Logger on Bottom

Casing Record: String | Size | Wgt. | Grade | Type Joint | Depth-Driller | Depth-Logger | Bottom Logged Interval | Top Logged Interval

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 Logger on Bottom

Equipment No. | Location

RECORDED

Operating Time | Recording Time

Checked By

Remarks: FBI # 3 | CURRENT RANGE STD | MUDFISH RESISTANCE 700 OHMS

ELECTRODE SONDE 100 | CM BEAM WIDTH 150 | CM ARRAY

PRIMARY 500 OHM/DIV | SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS) | Depths | RESISTIVITY (OHM-METERS)

SECONDARY SCALE 0 – 5000

PRIMARY SCALE 0 – 1000 – 2000

6500 – 11500 – 16500

FLUID LEVEL

30 60 80 90 100 110 120 130 140

KB

LOGGED ON 100 TMP

LOG 2280

CAL ON 500 TMP
LATCHED ON 100 TMP

100 TMP
1000 TMP

CAL 2220

REC 2220

STOP 2220

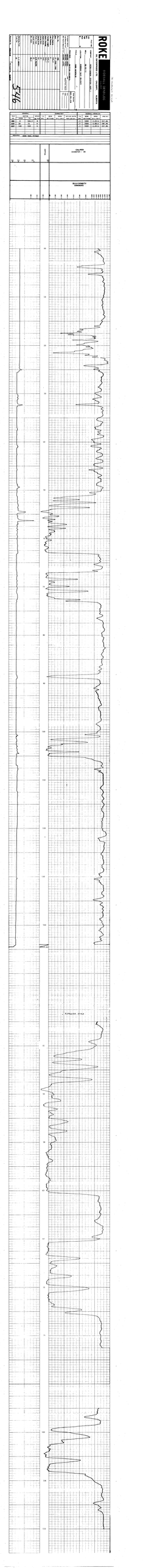
ST16

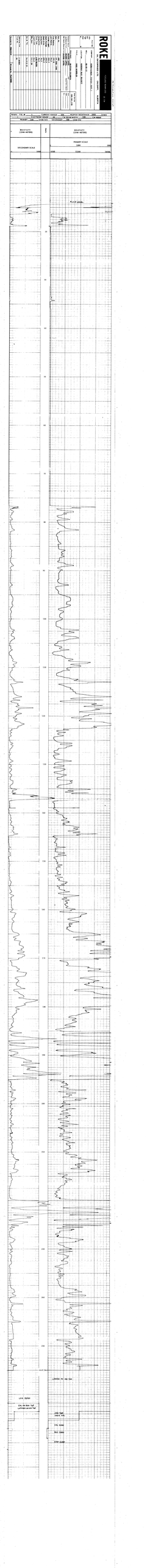
SSS

ROKE

GAMMA RAY NEUTRON LOG

COMPANY	ROKE OIL (U.K.) LTD.
WELL	30/16a-5
FIELD	
COUNTY	
LOCATION	GEMINI 30/16a
	30/16a-5
	30/16a-5
	30/16a-5


ROKE
CASING
CASING RECORD
CALIPER
CALIPER 6 - 16
BULK DENSITY
BULK DENSITY
CORRECTION
CORRECTION
FORMATION DENSITY
FORMATION DENSITY
COMPENSATED
COMPENSATED
FORMATION DENSITY
COMPENSATED
GAMMA RAY
GAMMA RAY
GAMMA RAY


ROKE
FLUID LEVEL

ROKE

COMPENSATED NEUTRON - GAMMA RAY

COMPANY	
WELL	
FIELD	
COUNTY	
STATE	
LOCATION	
OTHER SERVICES	
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 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 | SOURCE OF RMC | RM @ BHT | TIME SINCE CIRC. | MAX. REC. TEMP. | EQUIP. LOCATION | RECORDED BY | WITNESSED BY

EQUIPMENT DATA

CASING 1		SELECTED
RUN NO.	ONE	NEUTRON INTERPRETATION
TOOL MODEL NO.	33-RE	
DETECTOR MODEL NO.		RUN NO. 1
LOG	NEUTRON	TOOL MODEL NO. 33-RE
CASING	5½" OD	DETECTOR MODEL NO.
CASING O.D. INCHES	5½" OD	CASING
		CASING NO.
		WEIGHT LBS.
	SELECTED	GRADE
CASING WEIGHT PER FT.	14	TOP LOG
CASING GRADE	H-40	BOTTOM LOG
TOOL MODEL NO.	R-33RE 33RE000	CASING

LOGGING DATA												SELECTED
RUN	DATE	SPEED	TIME	MAX. R. T. REC.	T.D.	TOP LOG	BTM. LOG	CASING	BIT SIZE	FLUID	DENS.	VISC.
ONE	5-25-71	30	1 HR	120	1,200	0	1,200	5½	7⅞	WTR	8.4	28 SEC.
TWO	5-26-71	30	1 HR	120	1,200	0	1,200	5½	7⅞	WTR	8.4	28 SEC.
THREE	5-27-71	30	1 HR	120	1,200	0	1,200	5½	7⅞	WTR	8.4	28 SEC.

WITNESS: MR. E. TRIGGS WELL SITE, MR. ED. REED, BASE

GAMMA RAY

NEUTRON

GAMMA RAY NEUTRON

NEUTRON GAMMA RAY

0" 100

0" 100

0 200

0 200

TOTAL CASING AT 49 M.

WATER table at 9.0 M.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

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28

29

30

31

32

33

34

35

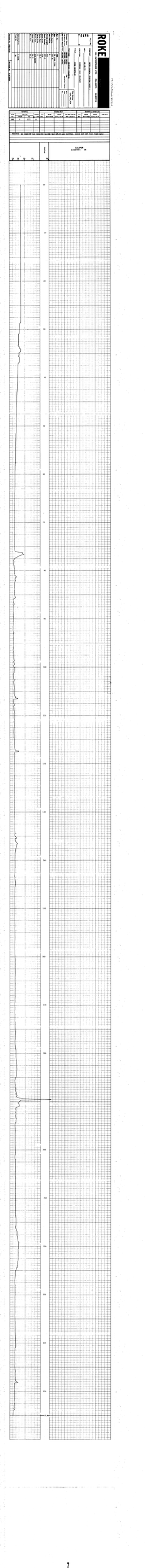
36

37

38

39

40



ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT.)

WELL MR-80-56

LOCATION MORKWAN PASS PROJECT

FIELD DUKE MORTAIN

PROVINCE BRITISH COLUMBIA

Other Services: GRN, DENS-CAL, DIR

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 K.B. CSG. G.L.

Run. No.	ONE
Date	18 JUNE 1980
First Reading	73.5 M
Last Reading	32
Footage Logged	41.5
Depth Reached	74.2
Depth Driller	74.2
Depth Logger	38.0
Casing Driller	39.4
Fluid Type	AIR/WATER
Liquid Level	32.5
Min. Diam.	13.3 CM
Rm @ °C	30.7 @ 23°
Operating Time	1 HOUR
Truck No.	36

Recorded By FERGUSON

Witnessed By FLAGNER

Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 1000 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 5000		PRIMARY SCALE 0 1000 2000 / 6500 11500 16500

FLUID LEVEL

40

50

60

70

F.R.

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.

LSD SEC TWP RGE W.....M

COMPANY PETRO-CANADA (NORTHERN DIVISION)

WELL NO. 1-35-54

FIELD LOCATION NORTHERN INDEX MOUNTAIN

PROVINCE NORTHWEST TERRITORIES

GROUND LEVEL Elev. 3 FSL, 1086 E of 4 SL

Permanent Datum: GROUND LEVEL Elev. 3 FSL, 1086 E of 4 SL

Log Measured from: GROUND LEVEL Above Perm. Datum

Drilling Measured from: GROUND LEVEL

K.B. DF GL

Other Services: FSL, DDBS, CALI, DIR

Rec. No.	ONE
Date	13 OCTOBER 1980
First Reading	74 ft
Last Reading	0
Footage Logged	74 ft
Bottom Driller	74 ft
Bottom Logger	74.2
Depth Control	DDBS
Logging Rate	38
Casing Driller	244.5 @ 3 m
Casing Logger	244.5 @ 3 m
Fluid Type	AIR/WATER
Liquid Level	32.2
Max. Chain	13.3 CM
Rec. #	
Operating Time	
Truck No.	36

Witnessed By: 1 ROKER

Recorded By: 1 ROKER

Rig No.

Type Log

Run No.

Depth Driller

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

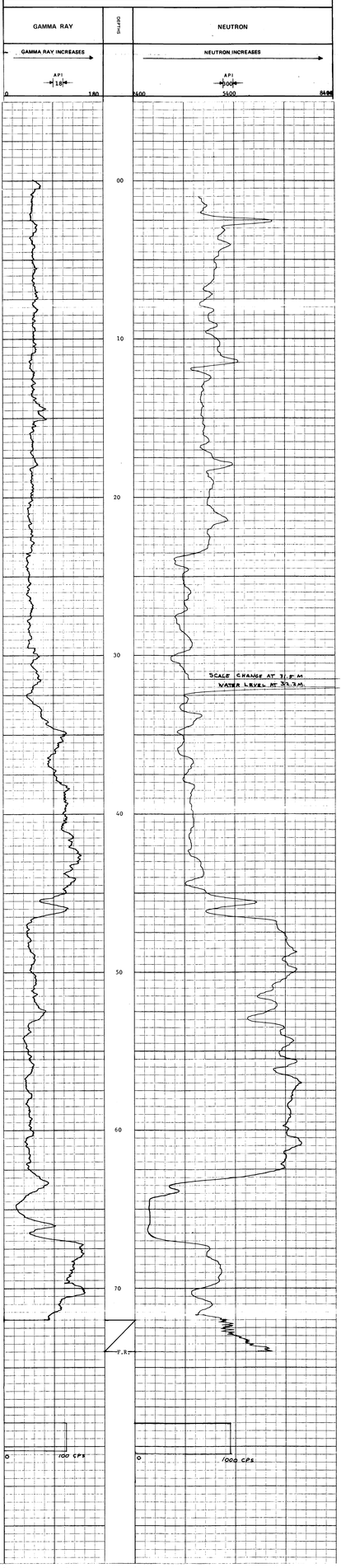
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	R-GRN 125A003	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
ONE	0	31.5	4	3	100	0	18	2	1000	RL	200 API
ONE	31.5	74	4	3	100	0	18	2	500	0	150 API

REMARKS



ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: ROKE-GAMMA CENTRE REPT.)

WELL: 16C-30-54

LOCATION: NORMAN RIVER PROJECT

FIELD: DOME ROSEBUD M

PROVINCE: BRITISH COLUMBIA

Other Services: DENSILOG (CENTRE DETECTOR) DENSILOG (GUARD DETECTOR)

Permanent Datum: G.L.

Log Measured From: K.B.

Drilling Measured From: K.B.

Elev.: K.B. 731.220 ft. G.L.

Rec. No.: 1-3 RUNS

Date: 16

Operating Time

Truck No.

Recorded By: P.ANDREWS

Witnessed By: P.A.ANDREWS

Bit No.: 1 2 3

Size: 7 7/8" 7 7/8" 7 7/8"

Type: STEEL STEEL STEEL

From: 0 32.3 62

To: 32.3 62 68

Hole Fluid: GEL CHEM GEL CHEM GEL CHEM

Density: 9.1 9.1 9.1

Viscosity: 45 45 45

Fluid Loss: 14.0 14.0 14.0

Source of Sample: CIRC. MATER CIRC. MATER CIRC. MATER

Rm @ Meas. Temp.: 3.3 @ 70°F 3.3 @ 70°F 3.3 @ 70°F

Rmf @ Meas. Temp.: 2.5 @ 70°F 2.5 @ 70°F 2.5 @ 70°F

Rmc @ Meas. Temp.: 4.4 @ 70°F 4.4 @ 70°F 4.4 @ 70°F

Source of Rmf & Rmc: CALC CALC CALC

Rm @ BHT: 2.5 @ 120°F 2.5 @ 120°F 2.5 @ 120°F

Time Since Circ.: 3 HRS. 3 HRS. 3 HRS.

Max. Rec. Temp.: 120°F 120°F 120°F

Equip. Location: 1396 1396 1396

Recorded By: P.ANDREWS P.ANDREWS P.ANDREWS

Witnessed By: P.A.ANDREWS P.A.ANDREWS P.A.ANDREWS

P.E. Anderson Division

GENERAL			GAMMA RAY			SIDEWALL DENSILOG		
RUN NO.	DEPTH FROM	DEPTH 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
ONE	0	32.3	8					5	5000	2.09 R	207.96
TWO	62	68	6					5	5000	2.09 R	207.96

REMARKS: DENS TOOL #1566R

DEPTHS

CALIPER
DIAMETER — CM

BULK DENSITY
(GRAMS/CC)

00
10
20
30
40
50
60
70

7.5"

CMR

5000 CPS

0

EXPANDED SCALE

62
64
66
68

ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERG DEPT.)

LSD

SEC

TWP

RGE

W ____ M

WELL MBL-80-55

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services

CBHC | DDS-CAL | DTE

Permanent Datum: GROUND LEVEL — Elev. ____ — Above Perm. Datum

Log Measured From: KELLY BUSHING — K.B. ____

Drilling Measured From: GROUND LEVEL — G.L. ____

Run. No.	ONE
Date	19 JUNE 1980
Last Reading	2124
Last Reading	31.5
Footage Logged	39.5
Depth Reached	71.1
Depth Reached	71.2
Casing Driller	
Casing Logger	
Casing Driller	31.9
Fluid Type	AIR/WATER
Liquid Level	31.5
Mfr. Ohm.	12.7
Rm @ °C	30.7 @ 25°
Operating Time	
Truck No.	1 WOOD
	36

Recorded By: FERGUSON

Witnessed By: FARQUHER

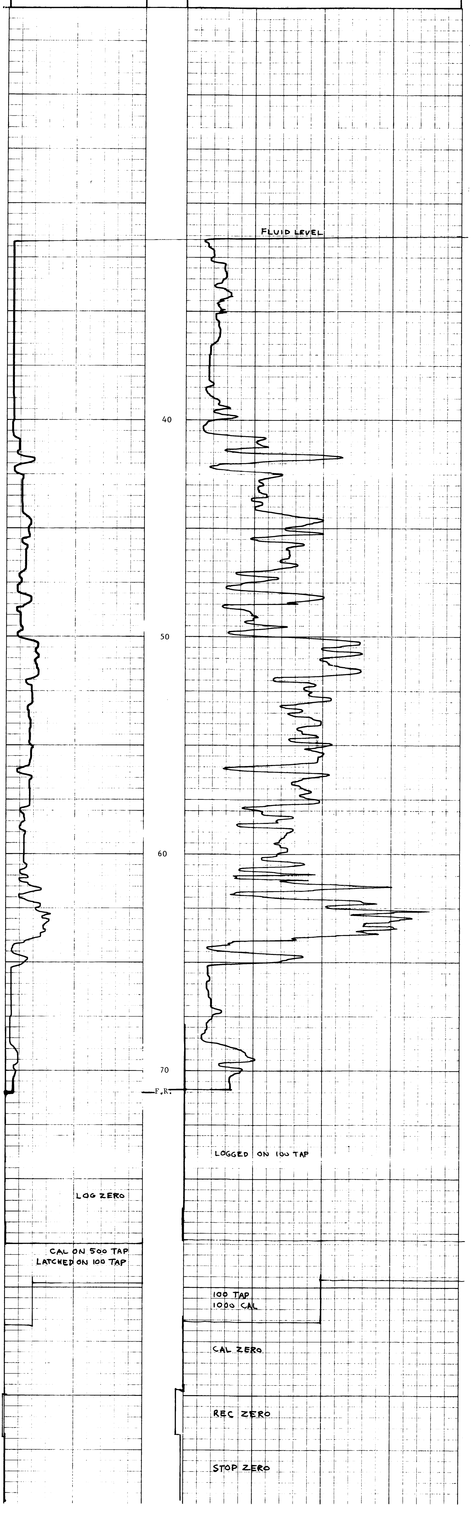
Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 800 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS) | Depths | RESISTIVITY (OHM-METERS)

SECONDARY SCALE 0 — 5000 | 6500 | PRIMARY SCALE 0 — 1000 — 2000 — 11500 — 16500



ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

File Proformer 85/5/28

FILE NO.	
SEC.	
TWP.	
RGE.	
M.	
COMPANY	ROKE OIL ENTERPRISES LTD. (OPERATOR)
WELL	MRC 10-35
FIELD	BONANZA CREEK PROJECT
LOCATION	BONANZA CREEK PROJECT
PROVINCE	ALBERTA COLUMBIA
Other Services	GAMMA RAY NEUTRON
Permanent Datum	GROUND LEVEL
Log Measured from	GROUND LEVEL
Drilling Measured from	KELLY BUSHING
Elev.: K.B.	
G.L.	
Date	FEB. 10TH. 1990
Run No.	ONE
Depth-Driller	32 M
Depth-Logger	31
Bottom Logged Interval	31
Top Logged Interval	0
Casing-Driller	31.4
Casing-Logger	31.4
Bit Size	4 3/4 INCHES
Type Fluid in Hole	LIGHT WATER
Dens.	11+2
Visc.	11+2
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. Deg.	
Equip. Location	
Recorded By	PROCTOR
Witnessed By	MACINTOSH

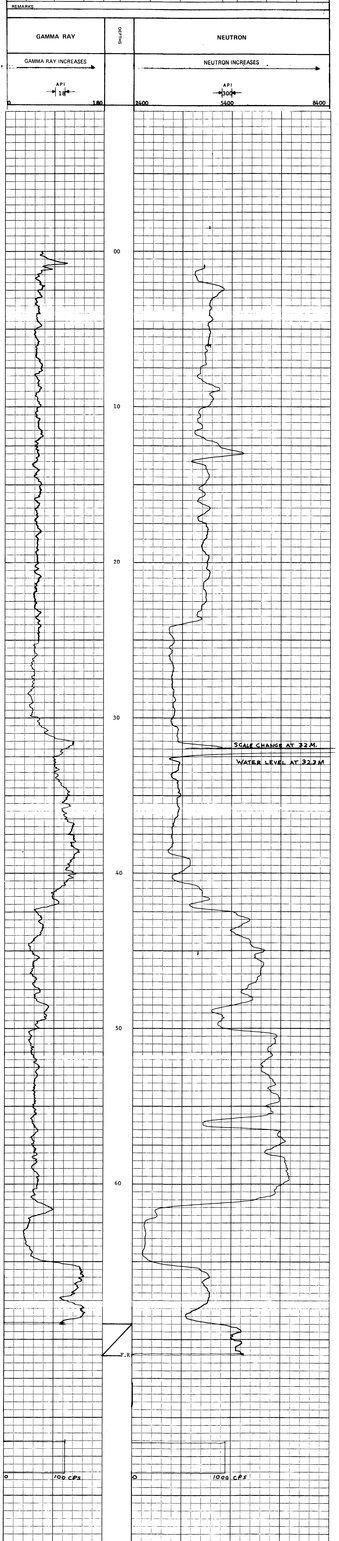
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	36	SERIAL NO.	188
INSTRUMENT TRUCK NO.	36	SPACING	43 CM
TOOL SERIAL NO.	S-CNN 1234003	TYPE	Amba
		STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL SETTING FROM	TO	SPEED M/min	T.C. SEC.	GAMMA RAY SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	NEUTRON SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	0	32	4	3	100	0	18	3	1000	8L	300 API
ONE	32	71	4	3	100	0	18	3	500	0	150 API

REMARKS



ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LOG No. _____
RUN No. _____
DATE _____

COMPANY PETRO-CANADA OPERATING GROUP

WELL 9BE-28-55

LOCATION NORMAN BASE PROJECT

FIELD BOOK MOUNTAIN

PROVINCE ALBERTA

Permanent Datum: GROUND LEVEL Elev. _____ Above Perm. Datum
Log Measured from: KELLY BUSHING Ft. _____ Above Perm. Datum
Drilling Measured from: GROUND LEVEL Ft. _____ Above Perm. Datum

K.B. _____
D.F. _____
G.L. _____

Other Services: _____

Run. No.	ONE
Date	2 DEC 1980
First Reading	0
Last Reading	71
Bit Size	11"
Depth Driller	71.1
Depth Logger	70.5
Casing Size	31.25
Casing Depth	31.3
Fluid Type	AIR/WATER
Fluid Density	31.5
Liquid Level	31.3
Max. Temp.	
Operating Time	
Truck No.	
	3 WAYS
	35

Recorded By: BRIDGEMAN

Witnessed By: PARKINSON

RUN NO.	GENERAL DEPTHS FROM	TO	W/ WIND	SPEED	T.C. SEC.	GAMMA RAY SENS SETTINGS	ZERO DIV'L OR R	API G.R. UNITS PER LOG DIV.	SIDEWALL DENSILOG T.C. SEC.	SENS SETTINGS	ZERO DIV'L OR R	CPS/ DIV.
ONE	0	31.3		8					.5	5000	2.37 R	96.96
ONE	31.3	71		8					.5	5000	2.09 R	207.96
RPT	60	67		6					.5	5000	2.09 R	207.96

REMARKS DENS TOOL FS565

CALIPER
DIAMETER – CM

BULK DENSITY
(GRAMS/CC)

SCALE CHANGE AT CASING AT 31.2M

EXPANDED SCALE

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERG. DEPT.)

WELL 16-35-5

FIELD

LOCATION NORMAN REG. PROJECT

PROVINCE NORTHWEST TERRITORIES

COUNTRY CANADA

Other Services

CBL/VDBL/CAL/GR

Permanent Datum: GROUND LEVEL

Log Measured From: GROUND LEVEL

Drilling Measured From: GROUND LEVEL

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

Date 1-DEC-1990

Run No. ONE

Depth-Driller 1000.0

Depth-Logger 1000.5

Bottom Logged Interval 1000.5

Top Logged Interval 21

Casing-Driller 244.5 @ 21

Casing-Logger 244.5 @ 21

Bit Size 311.1 MM

Type Fluid in Hole A.B.M.W.S.

Dens. Visc. 1.1 SG

pH Fluid Loss 9.5 PH

Source of Sample CIRCULATED

Rm @ Meas. Temp. 3.33 @ 23

Rmf @ Meas. Temp.

Rmc @ Meas. Temp.

Source of Rmf & Rmc

Rm @ BHT 3.33 @ 23

Time Since Circ. 3 HRS

Max. Rec. Temp. Deg. C. 23

Equip. No. & Location 5746

Recorded By PRESTON

Witnessed By MADSEN

Remarks FBL @ 3 CURRENT RANGE STD MUDFISH RESISTANCE 325 OHMS

ELECTRODE SONDE 30 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
		PRIMARY SCALE 0 1000 2000
SECONDARY SCALE 0 5000		6500 11500 16500

FLUID LEVEL

20

30

40

50

60

70

80

90

LOGGER ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO. 5746

COMPANY PETRO-CANADA (NORTH SEA) LTD.

WELL 30/16-5A

FIELD JOHN BEAUFORT

LOCATION NORTH SEA OFFSHORE

PERMANENT DATUM: GROUND LEVEL — ELEV. 0
LOG MEASURED FROM: GROUND LEVEL — 0 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM: GROUND LEVEL — K.B. 0, G.L.

DRILLING FLUID: SEA WATER

RIG: TRIL-JOHN CALLOTTE

Run No.	ONE	
Date - Beginning	12-6-1985	
Last Reading	12-6	
Depth Driller	101.4	
Depth Logger	101.2	
Casing Bottom	100.5	
Casing Size	20	
Bit No.	26" OPEN HOLE	
Type Fluid in Hole	SEA WATER	
Density	1.03	
Level	FULL	
Max. Rec. Temp.	23°C	
Equipment No.	11	
Location	11.5 KM.	
Recorded By	FERGUSON	
Witnessed By	HUGHES	

Observation Time: 1 DAY
Observation Time No.: 36

Ref: Hydrocarbon Log 5746

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	102 MM	Type	PROPORTIONAL
Distance to Source	2.1 M	Length	152 MM
		Source Model No.	MRC-N-85-W
GENERAL		Serial No.	188
Hoist Truck No.	36	Spacing	63 CM
Instrument Truck No.	36	Type	Amba
Tool Serial No.	X-GRM 1256003	Strength	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
Run No.	Gate No. From	Gate No. To	Speed M./min.	T.C. Sec.	Sens Setting/Div.	Zero Div. L or R	API G. R. Units per Log Div.	T.C. Sec.	Sens Setting/Div.	Zero Div. L or R	API N. Units per Log Div.
ONE	0	11.5	4	3	100	0	18	2	1000	0	300 API
ONE	11.5	102	4	3	100	0	18	2	500	0	150 API

REMARKS

GAMMA RAY	DEPTH	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 0 — 150		API 3000 — 6000

SCALE CHANGE AT 11.5 M

WATER LEVEL AT 12 M

0 — 100 CPS	0 — 1000 CPS

ROKE
ROKE TECHNOLOGIES LTD. CALGARY, ALBERTA

SPECIAL DISTRICT

Company: [illegible]
Well: [illegible]
Field: [illegible]
Province: [illegible]
Location: [illegible]
Elevation: [illegible]
Permanent Datum: [illegible]
Log Measured From: [illegible]
Drilling Measured From: [illegible]
Date: [illegible]
Run No.: [illegible]
Depth-Driller: [illegible]
Depth-Logger: [illegible]
Bottom Logged Interval: [illegible]
Top Logged Interval: [illegible]
Type Fluid in Hole: [illegible]
Density: [illegible]
Viscosity: [illegible]
Fluid Loss: [illegible]
Source of Sample: [illegible]
Rm @ Meas. Temp.: [illegible]
Rmf @ Meas. Temp.: [illegible]
Rmc @ Meas. Temp.: [illegible]
Source of Rmf & Rmc: [illegible]
Rm @ BHT: [illegible]
Time Since Circ.: [illegible]
Max. Rec. Temp. Deg. F: [illegible]
Equip. Location: [illegible]
Recorded By: [illegible]
Witnessed By: [illegible]

546

RUN NO.	CASING (DRILLER)			CASING (LOGGER)			BOREHOLE RECORD			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. DEG. F	EQUIP. LOCATION	RECORDED BY	WITNESSED BY
	SIZE	WGT.	FROM	TO	SIZE	FROM	TO																			
1																									

REMARKS: [illegible]

RUN	LOGGED INTERVAL		SCALE	TOOL STRING (BOTTOM TO TOP)						RUN	RECORDED INTERVAL		TIME CONSTANT
NO.	FROM	TO	NO.							NO.	FROM	TO	
1	23.5	100	5							1	100	23.5	1.0
2	23.5	100	5							2	100	23.5	1.0
3	23.5	100	5							3	100	23.5	1.0
4	23.5	100	5							4	100	23.5	1.0
5	23.5	100	5							5	100	23.5	1.0

REMARKS: [illegible]

CALIPER
DIAMETER - CM

BULK DENSITY
GRAMS/CC

Depth

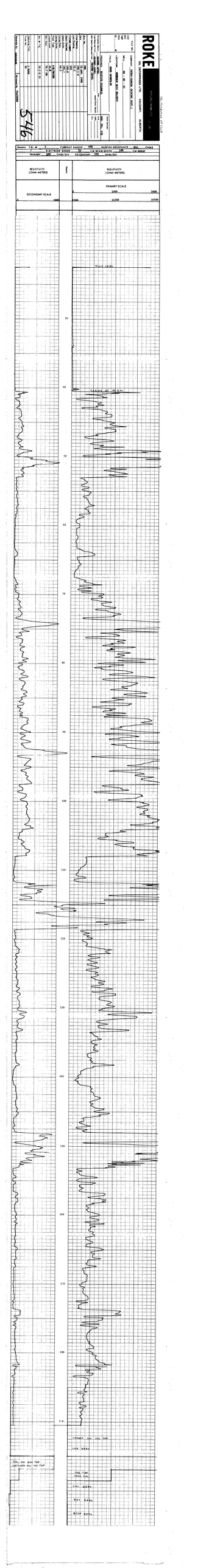
SCALE CHANGE FOR CASING 23.5 TO 0

P.E.

LATE

Time Curve

STRAIGHTEN 23.5 FLAT


ROKE
OIL (ANTHONY) LTD.
CALGARY, ALBERTA
WELL NO. 16-35-33
LOCATION: ARDROSS SEA (MAIN)
FIELD: ARDROSS SEA (MAIN)
DRILLING CONTRACTOR: CANADIAN DRILLING
RIG NO. 1
ELEVATIONS: DERRICK FLOOR 3500 GROUND 3488
CASING RECORD: SURFACE 9 5/8 @ 1500 PRODUCTION 7" @ 11,500
DATE: 1-3-65
RUN NO. ONE
DEPTH-DRILLER 11,500
DEPTH-LOGGER 11,500
BTM. LOG INTERVAL 11,500
TOP LOG INTERVAL 1500
TYPE FLUID IN HOLE GEL CHEM
DENS. 10.2
VISC. 50
PH 10.5
FLUID LOSS 6.8 CC
SOURCE OF SAMPLE FLOW LINE
RM @ MEAS. TEMP. .65 @ 150°F
RMF @ MEAS. TEMP. .55 @ 150°F
RMC @ MEAS. TEMP. .75 @ 150°F
SOURCE OF RMF & RMC MEASURED
RM @ BHT .35 @ 200°F
TIME SINCE CIRC. 12 HRS.
MAX. REC. TEMP. 200°F
EQUIP. NO. & LOCATION 1500 CALGARY
RECORDED BY R. SMITH
WITNESSED BY J. JONES
5716
Remarks: FBL @ 0
CURRENT RANGE 400
MUDFISH RESISTANCE 80Ω OHMS
ELECTRODE SONDE 50 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV
RESISTIVITY (OHM-METERS)
SECONDARY SCALE
0 5000
Depth
RESISTIVITY (OHM-METERS)
PRIMARY SCALE
0 1000 2000
4500 11500 14500
TWO-KERB
CASING AT 11,511'
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
T.D.
TWO-TOP
ONE-KERB
CAL. KERB
REC. KERB
STOP KERB
CAL ON 200 TAP
LATER ON 40 TAP
ONE-TOP
TWO-KERB
CAL. KERB
REC. KERB
STOP KERB

ROKE

COMPANY OF CANADA LTD.

CALGARY ALBERTA

COMPANY: [illegible]

WELL: [illegible]

FIELD: [illegible]

COUNTY: [illegible]

PROVINCE: [illegible]

LOCATION: [illegible]

SEC. [illegible] TWP. [illegible] RGE. [illegible]

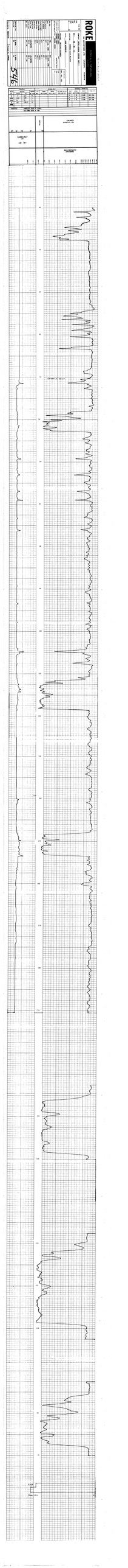
PERMANENT DATUM: [illegible]

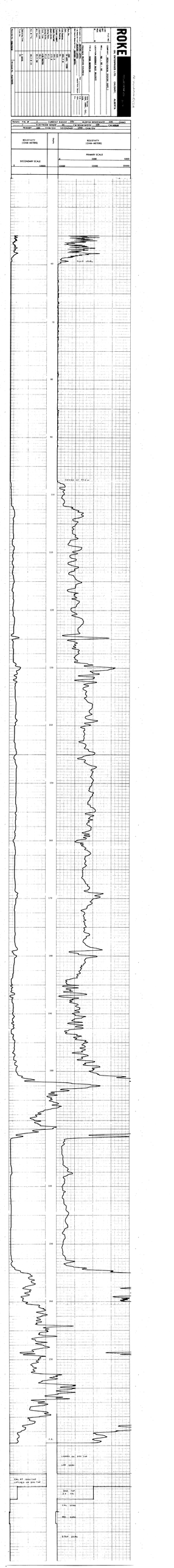
ELEV. [illegible]

LOG MEASURED FROM: [illegible]

DRILLING MEASURED FROM: [illegible]

| | | |




ROKE
Oil Tools (U.K.) Limited
Kirkhill Industrial Estate
Dyce
Aberdeen
AB2 0EF
Scotland
Tel: 0224 723534
Telex: 739234
Fax: 0224 723535
Cable: ROKE DYCE
Company
Well
Field
County
State
Location
Other Services
Permanent Datum
Log Measured From
Drilling Measured From
Elev.
Ft. Above Perm. Datum
Date
Run No.
Depth-Driller
Depth-Logger
Bottom Logged Interval
Top Logged Interval
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. Deg. F
Equip. No. & Location
Recorded By
Witnessed By
Run No.
Bit No.
Type
Size
From
To
Size
Wt.
Type
Grade
From
To
Size
Wt.
Grade
From
To
Type Joint
Top
Bottom
Type
Size
Wt.
Grade
Thread
Type
Size
Wt.
Grade
Thread
Type
Size
Wt.
Grade
Thread

ROKE

COMPENSATED NEUTRON-GAMMA RAY

API NO. 15-___-___

COMPANY	
WELL	
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 RMF	RMC
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. NO. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN NO. | **BOREHOLE RECORD** | **CASING RECORD**

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

546

EQUIPMENT DATA

NEUTRON TOOL TYPE	
MATRIX	
LOG MEAS. NO.	
DEPTH MEAS. NO.	FT. OR
LOG	DEPTH LOCATION
SCALE	0-100 API
RECORD, S.S. OVERLAY	0-100 API

NEUTRON	
MATRIX	SANDSTONE
LOG MEAS. NO.	
DEPTH MEAS. NO.	FT. OR
LOG	DEPTH LOCATION
SCALE	0-100 API
RECORD, S.S. OVERLAY	0-100 API

GAMMA RAY	
MATRIX	SANDSTONE
LOG MEAS. NO.	
DEPTH MEAS. NO.	FT. OR
LOG	DEPTH LOCATION
SCALE	0-100 API
RECORD, S.S. OVERLAY	0-100 API

CASING DATA

CASING 1						CASING 2					
SIZE	WEIGHT	GRADE	TOP	BTM	BTM @ MEAS.	SIZE	WEIGHT	GRADE	TOP	BTM	BTM @ MEAS.

REMARKS: RUN NO. 1 - GAMMA RAY - NEUTRON - CASING COLLAR LOG

GAMMA RAY — API — 0 — 100

NEUTRON — API — 100 — 0

Run # 1 GR+ CCL

Run # 1 CCL

Run # 1 Time Mkr. Run

ROKE

ISOLATED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERATOR)

WELL 16-36-80-21

LOCATION NORMAN REEF PROJECT

FIELD NORMAN REEF

PROVINCE BRITISH COLUMBIA

Other Services: CBL, DSN-I, GR

Permanent Datum: GROUND LEVEL — Elev. —
Log Measured From: GROUND LEVEL — 4.6 ft. Above Perm. Datum
Drilling Measured From: GROUND LEVEL — G.L.

Rec. No. 1
Date No. 20 DEC. 1980
Run No. ONE
Depth Driller 1364 M
Depth Logger 1364 M
Bottom Logged Interval 1364 M
Top Logged Interval 96.4
Casing Size 244.5
Casing Wgt. & Grade 59.5 K55
Fluid Type 0
Fluid Density 0
Fluid Level 79.6
Max. Rec. Temp. 31.5 DEG C
Equip. Location 21 @ 25
Recorded By FERGUSON
Witnessed By PEACOCKS

Circulation Stopped Time
Logger On Bottom Time
Unit No. 5
Location NORMAN WELLS

5746

02-Feb-1981 09:13:19

Remarks FBL # 5 CURRENT RANGE RTD MUDFISH RESISTANCE 675 OHMS

7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY

PRIMARY 100 OHM/DIV SECONDARY 100 OHM/DIV

RESISTIVITY (OHM-METERS) | Depths | RESISTIVITY (OHM-METERS)

SECONDARY SCALE 0 5000

PRIMARY SCALE 0 1000 2000 | 6500 11500 16500

80 90 100 110 120 130 140 150 160

FLUID LEVEL

F.R.

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

GAMMA RAY NEUTRON LOG

Company: [illegible]
Well: [illegible]
Field: [illegible]
County: [illegible]
State: [illegible]

Location: [illegible]
Other Services: [illegible]
Permanent Datum: [illegible] Elev.: [illegible]
Log Measured From: [illegible] [illegible] Above Perm. Datum
Drilling Measured From: [illegible]
Date: [illegible]
Run No.: [illegible]
Depth-Driller: [illegible]
Depth-Logger: [illegible]
Bottom Logged Interval: [illegible]
Top Logged Interval: [illegible]
Casing-Driller: [illegible] @ [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] @ [illegible]
Rmf @ Meas. Temp.: [illegible] @ [illegible]
Rmc @ Meas. Temp.: [illegible] @ [illegible]
Source of Rmf & Rmc: [illegible]
Rm @ BHT: [illegible] @ [illegible]
Time Since Circ.: [illegible]
Max. Rec. Temp.: [illegible] @ [illegible]
Equip. Location: [illegible]
Recorded By: [illegible]
Witnessed By: [illegible]

546

EQUIPMENT DATA

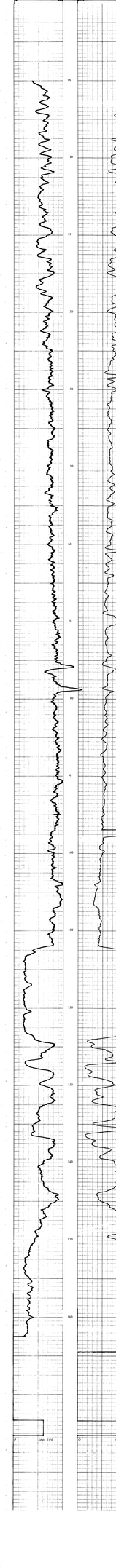
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	32 MK	LOG TYPE	NEUTRON/NEUTRON
DIAMETER		SERIAL NO.	120
DETECTOR MODEL NO.	SCINTILLATION	DIAMETER	73
LENGTH	102 MK	DETECTOR MODEL NO.	PROPORTIONAL
DISTANCE TO SOURCE	2.5 ft	LENGTH	112 MK
		SOURCE STRENGTH, MC	MINC-N 50 M
		SERIAL NO.	120
		SPACING	12 ON
		TYPE	4 2SS
		DISTANCE	4 2SS SBS

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN	DATE	SPEED	T.C.	GAIN	API N. M. UNITS		T.C.	GAIN	API N. UNITS	
		ft MIN.	SEC.	SETTING	API N. M. UNITS	SPC.	SEC.	SETTING	API N. UNITS	SPC.
1	2-[illegible]	30	1	100	18	2		1000	0	500
1	9-1-[illegible]	30	1	100	18	2		500	0	250

REMARKS

GAMMA RAY		NEUTRON
GAMMA RAY INCREASES		NEUTRON INCREASES
0 API	100	1000	0 API	500
A		B		



COMPANY COPY

ROKE

SPECIAL DENSITY

Company ROKE PETROLEUM LTD.
Well 3-16-18-29 W1M
Field ROKE
Province ALBERTA

Location: 3-16-18-29 W1M

Other Services: DUAL INDUCTION LATEROLOG, BOREHOLE COMPENSATED SONIC

Permanent Datum: GROUND LEVEL
Elev.: K.B. 1141.5 ft.
Log Measured From: K.B. 10.0 ft. Above Perm. Datum
D.F. 1139.5 ft.
G.L. 1131.5 ft.

Date: 3-16-82
Run No.: ONE
Depth-Driller: 1744 ft.
Depth-Logger: 1744 ft.
Bottom Logged Interval: 1744 ft.
Top Logged Interval: 1000 ft.
Type Fluid in Hole: GEL CHEM
Salinity: 1.0 PPM CL
Density: 10.0 LB/GAL
Viscosity: 50 SEC
Fluid Loss: 6.0 CC
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: 0.55 @ 70 °F
Rmf @ Meas. Temp.: 0.45 @ 70 °F
Rmc @ Meas. Temp.: 0.75 @ 70 °F
Source of Rmf & Rmc: MEASURED
Rm @ BHT: 0.30 @ 140 °F
Time Since Circ.: 12 HRS
Max. Rec. Temp.: 140 °F
Equip. No. & Location: 5346 CAL
Recorded By: D. MCKAY
Witnessed By: MR. T. LEE

5346

| CASING RECORD | | |

ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERS. DEPT.)

WELL MB - BD - 68

LOCATION MORDEN DEEP PROJECT

FIELD DOME MORDEN

PROVINCE MANITOBA

Other Services: NIL

Permanent Datum: GROUND LEVEL — Elev.: Above Perm. Datum

Log Measured from: GROUND LEVEL — K.B.

Rec. Depths Measured from: GROUND LEVEL — D.F.

G.L.

LOC
SEC
TWP
RGE
M.

Run No. ONE

Date 29 AUG. 1980

First Reading 31

Last Reading 0

Footage Logged 31

Depth Reached 31.3

Depth Scale 6:1

Casing Driller 6.09

Casing Type AIR/WATER

Liquid Level

Mud Chem.

13.3 CM

Operating Time 5 HOURS

Truck No. 36

Recorded By TRUSCHON

Witnessed By RAMSAY

546

Re-Registration 6253A

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	BKNS SETTINGS	ZERO DIV.L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	BKNS SETTINGS	ZERO DIV.L OR R	CPS/DIV
1	0	31	8					.5	5 K	2.09 R	207.96

REMARKS DENSITY TOOL # 554AS

CALIPER
DIAMETER — CM

DEPTHS

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280

00

10

20

30

F.R.

2.09 R

5000 CPS

0

ROKE

CASED HOLE SERVICES

5916

| | | |

ROKE

FOCUSED BEAM LOG 20 c.m.

OIL ENTERPRISES LTD. CALGARY, ALBERTA

File No.

COMPANY INTER-CANADA (OVERSEAS) LTD.

WELL No. 16 - 36 - 26 - 11

LOCATION MORINVILLE DISTRICT

FIELD MORINVILLE

COUNTY STRATHCONA PROVINCE ALBERTA

Permanent Datum: GROUND LEVEL Elev. 2250

Log Measured From: K.B. 9.5 Ft. Above Perm. Datum

Drilling Measured From: K.B.

Date	3 SEPT. 1980	
Run No.	ONE	
Depth Driller	5400	
Depth Logger	5396	
Bottom Logged Interval	5396	
Top Logged Interval	1504.5	
Casing Driller	9 5/8 @ 1504.5	
Casing Logger	9 5/8	
Bit Size	7 7/8	
Type Fluid in Hole	LIGNOSULFONATE	
Density	9.4	
Viscosity	43	
Fluid Loss	9.6	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp.	.22 @ 25	
Rmf @ Meas. Temp.	.3 @ 25	
Rmc @ Meas. Temp.	36	
Source of Rmf and Rmc	CALC.	
Rm @ BHT	.16 @ 120	
Time Since Circ.	36 HRS.	
Max. Rec. Temp. Deg. F.	120	
Equipment Number	5396	
Location		
Recorded By	P. LAMBERT	
Witnessed By	MR. BROWN	

RUN 1 — DIGITAL RECORDING SYSTEM — 5396 FEET

Remarks: FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 100 OHMS

ELECTRODE SONDE 20 C.M. BEAM WIDTH 100 C.M. ARRAY

PRIMARY 1000 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)

SECONDARY SCALE

0 to 5000

OHMS

RESISTIVITY (OHM-METERS)

PRIMARY SCALE

0 1000 2000

5500 11500 16500

10 20 30 40 50 60 70 80 90 100 FR

LOGGED ON 10X TAP

LOG ZEROS

CAL on 500 TAP
MATCHED ON 10X TAP

10X TAP
10X0 CAL

CAL ZERO

REC ZERO

5500 ZERO

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

Company	OIL ENTERPRISES LTD. (OPER.)
Well	HR. N. 11
Field	ROKE WOODBEND
Location	NW/NW/4, SEC. 11, TP. 29, RGE. 5, W. 4th MER.
Province	ALBERTA
Other Services	
Permanent Datum	GROUND LEVEL
Elevation	1041.5 ft.
Log Measured From	KELLY BUSHING
Drilling Measured From	K.B.
Date	JUNE 8, 1990
Run No.	ONE
Depth Driller	1134 ft.
Depth Logger	1131 ft.
Bottom Logged Interval	1126 ft.
Top Logged Interval	0 ft.
Casing Driller	8.5/8 @ 1126 ft.
Casing Logger	8.5/8 @ 1126 ft.
Bit Size	7.7/8 in.
Type Fluid in Hole	WATER
Density	8.4
Viscosity	30
Fluid Loss	10
Source of Sample	CIRC.
R_m @ Measured Temp.	0.5 @ 20°C
R_mf @ Measured Temp.	0.4 @ 20°C
R_mc @ Measured Temp.	0.6 @ 20°C
Source R_mf / R_mc	CALC.
R_m @ BHT	0.3 @ 30°C
Time Since Circ.	3 HRS.
Max. Rec. Temp.	30°C
Equipment No.	5476
Recorded By	MCKOOD
Witnessed By	MR. BOYD

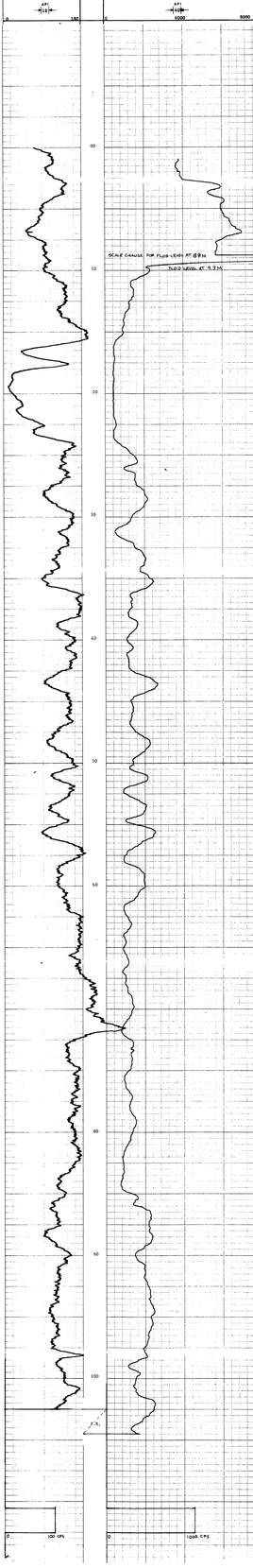
EQUIPMENT DATA

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	152 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	305 MM
GENERAL		SOURCE MODEL NO.	MXC-N.55-M
		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	45 CM
INSTRUMENT TRUCK NO.	36	TYPE	Am-Be
TOOL SERIAL NO.	CBX 1134002	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN	F.C.	GAMMA RAY SENS.	GAMMA RAY ZERO	GAMMA RAY API & % UNITS	F.C.	NEUTRON SENS.	NEUTRON ZERO	NEUTRON API & % UNITS
					METHODS (SEC.)	LOG HEAD DEV.	LOG HEAD DEV.	SEC.	METHODS (SEC.)	LOG HEAD	LOG DEV.
1	0	1126	6	1	100	0	10	1	1000	0	500
2	810	1126.5	6	3	100	0	10	3	500	0	250

REMARKS: NEW SCALE ON NEUTRON TRACK TO COMPENSATE FOR NEW GEN LOGGING TOOL



ROKE OIL EXPLORATION LTD.

5146

COMPANY	ROKE OIL EXPLORATION LTD.
WELL	16-35-31-5W
FIELD	WILDCAT
COUNTY, PARISH OR BLOCK	
STATE OR PROVINCE	SASKATCHEWAN
LOCATION	16-35-31-5W
PERMANENT DATUM	GROUND LEVEL
LOG MEASURED FROM	K.B. 10 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM	K.B.
DATE	3-6-74
RUN NO.	ONE
DEPTH-DRILLER	1225
DEPTH-LOGGER	1225
BTM. LOG INTERVAL	1225
TOP LOG INTERVAL	1000
CASING-DRILLER	8 5/8 @ 1000
CASING-LOGGER	
BIT SIZE	7 7/8
TYPE FLUID IN HOLE	GEL CHEM
DENS. VISC.	9.6 50
PH FLUID LOSS	10.5 8.4
SOURCE OF SAMPLE	FLOW LINE
RM @ MEAS. TEMP.	.75 @ 70°F
RMF @ MEAS. TEMP.	.65 @ 70°F
RMC @ MEAS. TEMP.	.95 @ 70°F
SOURCE RMF RMC	MEAS MEAS
RM @ BHT	.32 @ 120°F
TIME SINCE CIRC.	4 HRS
MAX. REC. TEMP.	120°F
EQUIP. LOCATION	3-31-5W
RECORDED BY	MR. D. L.
WITNESSED BY	MR. BOWMAN

RUN NO. ONE

BOREHOLE RECORD			
BIT NO.	FROM	TO	SIZE
1	0	1225	7 7/8

CASING RECORD			
SIZE	WGT.	FROM	TO
8 5/8	24	0	1000

| GENERAL | | |

ROKE

FOCUSED BEAM LOG 20 C/M

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LSD SEC TWP RGE W.....M

FILE NO.

COMPANY ZETCO-CANADA (DRILLING DEPT.)

WELL 38 - 80 - 72

FIELD DOME MOUNTAIN

LOCATION MONTNEY BASIS PROJECT

PERMANENT DATUM: GROUND LEVEL
LOG MEASURED FROM: KELLY BUSHING
DRILLING MEASURED FROM: GROUND LEVEL

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

Other Services: DIPLOG, CAL, DEN

Rec. No. CORE
Date 30 AUG. 1980
Run No. ONE
Depth Logged 3000
Depth Driller 3000
Depth Logger 3000
Bottom Log Interval 2997
Top Log Interval 2500
Casing Driller 5 1/2 @ 3000
Casing Logger 5 1/2 @ 3000
Bit Size 4 7/8
Type Fluid in Hole SALT WATER
Dens. Visc. 10.0 LB/GAL 50 SEC
pH Fluid Loss 10.5 CM
Source of Sample CIRC.
Rm @ °F 28.6 @ 93
Rmf @ °F
Rmc @ °F
Source: Rmf — Rmc —
Operating Time 3.5 HOURS
Truck No. 36

Recorded By BERGERON
Witnessed By FALCONER

Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 220 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 5000		PRIMARY SCALE 0 — 1000 — 2000 6500 — 11500 — 16500

00
10
20
30
40
50
60
70
80

FLUID LEVEL

T.R.

LOG ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

5716

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

Recorded By	PRECISION
Witnessed By	MUSTARD
Operating Time	
Truck No.	36
Run No.	ONE
Date Recorded	Dec. 3, 1990
Type Log	MAIN
Last Reading	86.5
Feet Logged	86.5
Depth Driller	86.5
Depth Logger	86.5
Casing Size	5.5
Casing Wgt.	15.5
Fluid Type	FRESH WATER
Fluid Level	FULL
Max. Rec. Temp.	113 DEG
Equipment Number	
Location	
Recorded By	
Witnessed By	

546

COMPANY: ROKE OIL ENTERPRISES LTD. (100%)

WELL: No. 80 - 22

LOCATION: NORMAN WELLS PROJECT

FIELD: FORT NORMAN

PROVINCE: NORTHWEST TERRITORIES

Permanent Datum	GROUND LEVEL	Elev.	
Log Measured From	KELLY BUSHING		8 FT. ABOVE PERM. DATUM
Drilling Measured From	KELLY BUSHING		

API No.		Other Services	
Sec.	Twp.	Rge.	

Date	3-DEC-90	Type Log	CCL
Depth-Driller	1380		
Depth-Logger	1380		
Bottom Logged Interval	1380		
Top Logged Interval	1000		
Casing-Driller	5.5 @ 1000		
Casing-Logger	5.5 @ 1000		
Bit Size	4.5		
Type Fluid in Hole	WATER		
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.	
Equipment Number		Location	
Recorded By		Witnessed By	

EQUIPMENT DATA

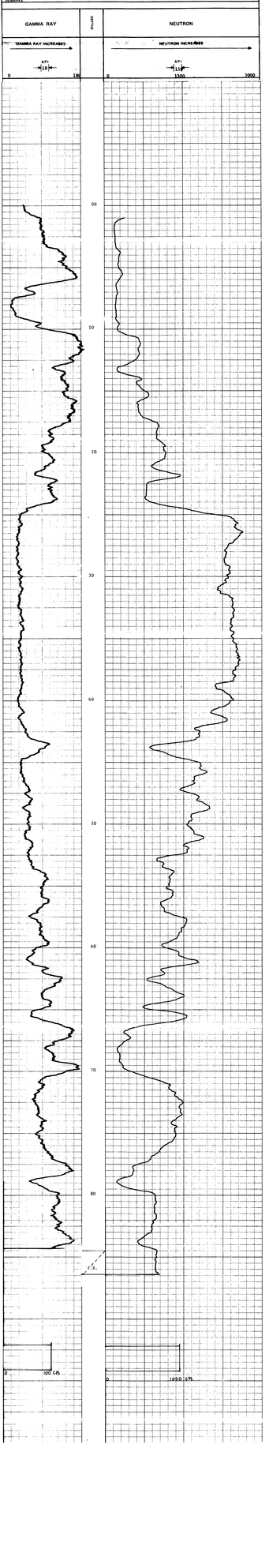
GAMMA RAY	
RUN NO.	ONE
TOOL MODEL NO.	
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	SCINTILLATION
LENGTH	102 MM
DISTANCE TO N. SOURCE	2.1 M
GENERAL	
HOIST TRUCK NO.	36
INSTRUMENT TRUCK NO.	36
TOOL SERIAL NO.	RGSU 1256003

NEUTRON	
RUN NO.	ONE
LOG TYPE	NEUTRON/NEUTRON
TOOL MODEL NO.	
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	PROPORTIONAL
LENGTH	152 MM
SOURCE MODEL NO.	MRC N-SS-W
SERIAL NO.	188
SPACING	45 CM
TYPE	Amilo
STRENGTH	3 CUR IES

LOGGING DATA

RUN	DEPTHS FROM	DEPTHS TO	SPEED M./MIN.	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.
NO.											
1	0	86.5	4	3	100	0	18	2	500	0	150

REMARKS



ROKE

SPECIAL SERVICES

ROKE OIL EXPERIMENTAL LTD. CALGARY, ALBERTA

WELL: 06-16-26-12

COMPANY: CANADA-CONTINENTAL RESOURCES LTD.

LOCATION: GEORGIA GAS COMPLEX

FIELD: WILDCAT

COUNTY: PROVINCE: ALBERTA

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elev.	K.B.	1,000
	D.F.	
	G.L.	975

Date		5-16-78
Run No.		ONE
Depth-Driller		8,000
Depth-Logger		8,000
Bottom Logged Interval		8,000
Top Logged Interval		SURFACE
Type Fluid in Hole		SALT GEL
Salinity, PPM Cl		10,000
Density		10.0
Level		FULL
Max. Rec. Temp. Deg. F.		180
Operating Rig Time		8 HRS
Recorded By		R. SMITH
Witnessed By		J. DOE

RUN NO.	BIT SIZE	FROM	TO	FEET
1	12 1/4	SURFACE	1,000	1,000
2	8 3/4	1,000	8,000	7,000

RUN NO.	CASING SIZE	WEIGHT	GRADE	FROM	TO
1	9 5/8	36	K-55	SURFACE	1,000
2	7	23	K-55	SURFACE	8,000

RUN NO.	TYPE FLUID IN HOLE	DENSITY LBS/GAL	VISCOSITY SEC/QT	PH	FLUID LOSS CC/30 MIN
1	FRESH WATER GEL	8.5	28	10	15
2	SALT GEL	10.0	40	9	8

RUN NO.	TYPE	MAX. REC. TEMP. DEG. F.	EQUIP. LOCATION
1	GR-N	120	1,000
2	GR-N	180	8,000

ROKE
ROKE OIL INCORPORATED
500 NORTH 159 EAST
LAYTON, UTAH 84041
PHONE 801-544-9017

WELL NAME	Fed 1
LOCATION	NW NW
SECTION	1
TOWNSHIP	35 S
RANGE	13 W
COUNTY	San Juan
STATE	Utah
API NO.	43-037-31546
ELEVATION	6,722 GL
	6,734 KB
DATE	7-10-97
TYPE LOG	Gamma Ray Neutron
DEPTH DRILLER	5,546
DEPTH LOGGER	5,546
BTM LOG INTERVAL	5,546
TOP LOG INTERVAL	4,900
CASING DRILLER	8 5/8 @ 1,000
CASING LOGGER	
BIT SIZE	7 7/8
TYPE FLUID IN HOLE	Water
DENSITY	8.4
VISCOSITY	27
PH	10
FLUID LOSS	
SOURCE OF SAMPLE	Pit
RM @ MEAS TEMP	.8 @ 70
RMF @ MEAS TEMP	.6 @ 70
RMC @ MEAS TEMP	1.1 @ 70
SOURCE OF RMF & RMC	Measured
RM @ BHT	.4 @ 120
TIME SINCE CIRC	4 hrs
MAX REC TEMP	120
EQUIP LOCATION	1
RECORDED BY	Jeff Hall
WITNESSED BY	Mr. Roke

5546

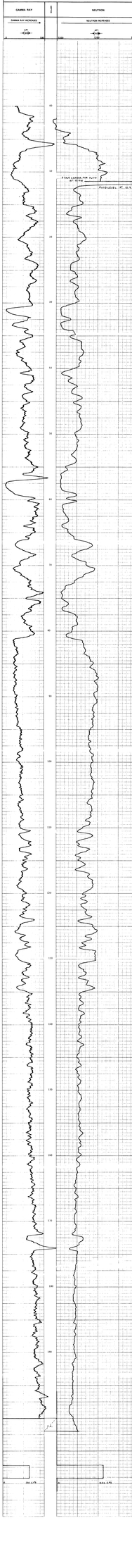
EQUIPMENT DATA

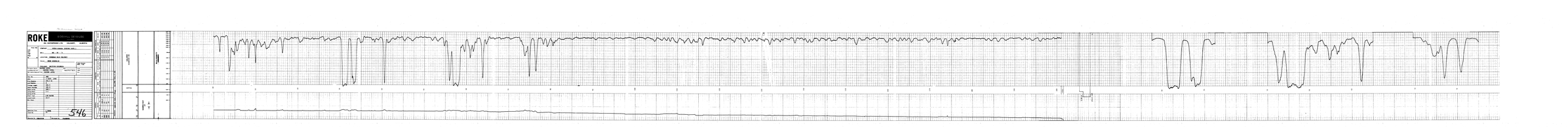
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
DETECTOR SERIAL NO.		DETECTOR SERIAL NO.	
SOURCE	12 MM	CNL SERIAL NO.	
MONITOR MODEL NO.		SOURCE	51 MM
SPACING	INTERPOLATION	MONITOR SERIAL NO.	
LITHOLOGY	LIME MM	TYPE	PROPORTIONAL
DISTANCE TO G.R. SOURCE	5.5 ft	LOCATION	
		MONITOR SERIAL NO.	MNC 4.88 M
SONIC		SPECIAL NO.	109
SONIC TRACK NO.	36	SPACING	4.5 CN
SONIC SERIAL NO.	109	LITHOLOGY	LIME MM
FINAL SERIAL NO.	109 SONIC		2 7/8 DC

LOGGING DATA

GENERAL		GAMMA RAY				NEUTRON			
RUN	ONE	TWO	DEPTH	SCALE	MFR & UNITS	DEPTH	SCALE	MFR & UNITS
BIT	7 7/8		5,546	100	MNC API	5,546	100	MNC API
CASING	8 5/8 @ 1,000		1,000	0	150	1,000	0	150

REMARKS: WELL FILLED UP OVERNIGHT, TRACE OF CONDITIONS FOR RUN AND LOGGING RUN.




ROKE
546

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

D.A. - Mankenzie 80/3/2

FILE NO.
COMPANY PEZCO-CANADA (MINING DEPT.)
WELL MSC - 80 - 25
FIELD DUKE MOUNTAIN
LOCATION MOOSEHAT PASS PROJECT
PROVINCE BRITISH COLUMBIA
Other Services: NONE

LSD. SEC. TWP. RGE. W4M

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

Run No.	ONE
Date	12 SEPT. 1980
First Reading	36 M
Last Reading	0
Footage Logged	36
Depth Reached	
Depth Driller	
Casing Size	33.5
Casing Driller	
Fluid - Type	
Liquid Level	24.9
Min. Diam.	
Rm @	
Operating Time	.5 HOURS
Truck No.	36

Recorded By: FERGUSON
Witnessed By: KNEALE

3716

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	188
		SPACING	43 CM
		TYPE	AmBe
		STRENGTH	3 CURIES

GENERAL	
HOIST TRUCK NO.	36
INSTRUMENT TRUCK NO.	36
TOOL SERIAL NO.	GRN 125A002

LOGGING DATA

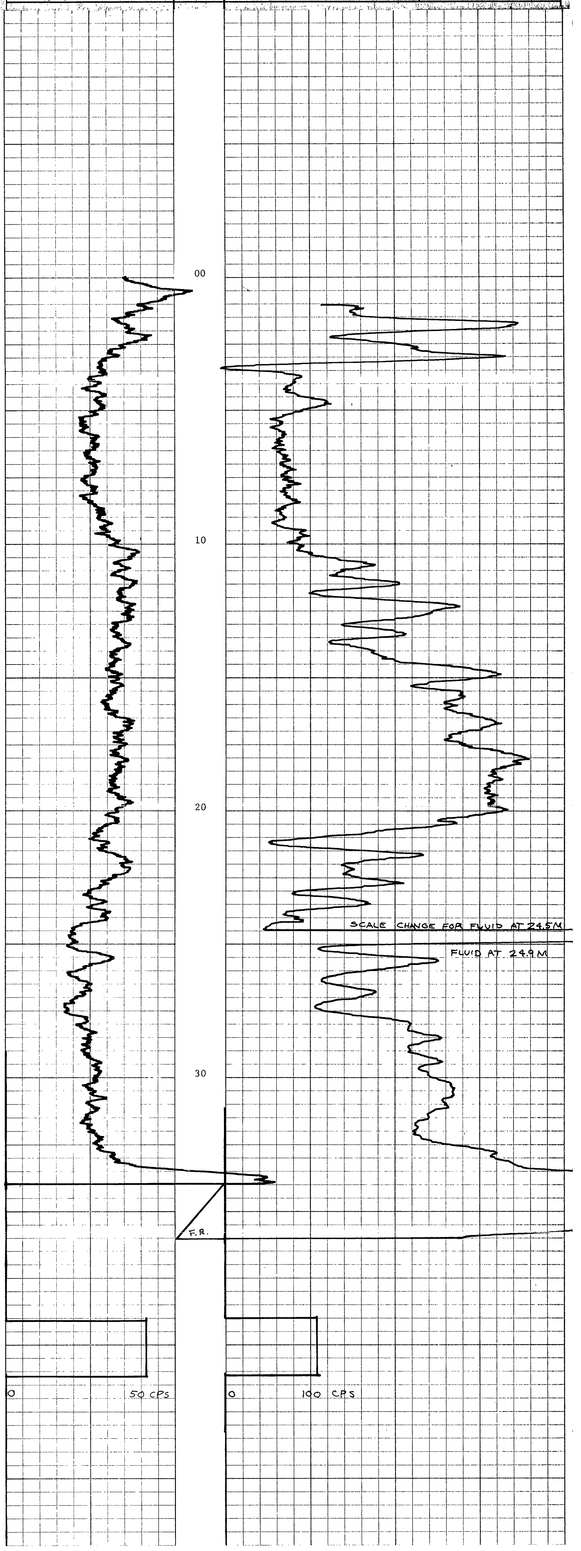
GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T. C. SEC.	SENS SETTINGS	ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
1	0	24.5	4	3	500	0	7	3	1000	46 L	80
1	24.5	36	4	3	500	0	7	3	500	0	40

REMARKS

GAMMA RAY — DEPTHS — NEUTRON

GAMMA RAY INCREASES → API 7 → 0 … 70

NEUTRON INCREASES → API 80 → 3680 … 4480 … 5280



ROKE BOREHOLE DRILLING

Borehole No. 546

Client: [illegible]
Contract: [illegible]
Site: [illegible]
Engineer: [illegible]
Contractor: [illegible]

Date Started: [illegible]
Date Completed: [illegible]
Ground Level: [illegible]
Co-ordinates: [illegible]

Method of Drilling: [illegible]
Diameter: [illegible]
Depth: [illegible]

Water Strikes: [illegible]
Casing: [illegible]
Water Level: [illegible]
Remarks: [illegible]

| CASING | | | | SAMPLES | | | |

Borehole Logs

ROKE

BOREHOLE LOGGING

ROKE TECHNOLOGY LTD. QUARRY HOUSE QUARRY HILL BOXHILL RIVERVIEW KT22 7RA

Site	
Company	
Engineer	
Contractor	
Driller	
Borehole No.	
Date	
Time	
Ground Level	
Datum	
Depth Driller	
Depth Logger	
Bottom Logged Interval	
Top Logged Interval	
Casing Driller	
Casing Logger	
Bottom Casing	
Top Casing	
Type Fluid in Hole	
Density	
Viscosity	
Max. Recorded Temp.	
Resistivity	
Time Since Circ.	
Max. Rec. Temp.	
Equip. No. Location	
Recorded By	
Witnessed By	

BOREHOLE RECORD

No.	Bit	From	To

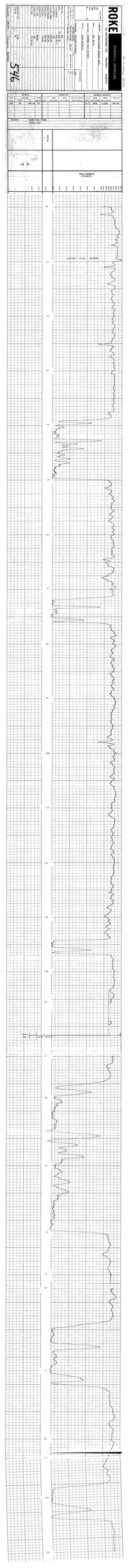
CASING RECORD

No.	Size	Wgt.	From	To

RUN	TOOL STRING	BOREHOLE RECORD			CASING RECORD			
		No.	Bit	From	To	No.	Size	Wgt.	From	To
1	GAMMA RAY	1	6.1	SURFACE	1,000	1	5.1	SURFACE	1,000

REMARKS:	

REMARKS:	GAMMA RAY
	CASED HOLE
	LOG 1



Property of Rocky Mountain Geo-Engineering Corp.

ROKE

ROCKY MOUNTAIN GEO-ENGINEERING CORP.

546

Company	Rocky Mountain Geo-Engineering Corp.
Well	Rocky Mountain Geo-Engineering Corp.
Location	
Field	
County	
State	
Other Services	
Permanent Datum	
Log Measured From	
Drilling Measured From	
Elev.	K.B.
	D.F.
	G.L.
Date	
Run No.	
Depth-Driller	
Depth-Logger	
Bottom Logged Interval	
Top Logged Interval	
Type Fluid in Hole	
Salinity, PPM Cl	
Density	
Level	
Max. Rec. Temp. Deg. F	
Operating Rig Time	
Recorded By	
Witnessed By	

Run No.	
Type Log

ROKE

SUBSURFACE GEOLOGY

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LSD ____ SEC ____ TWP ____ RGE ____ W ____ M

FILE NO.

COMPANY PETRO-CANADA (OCEAN DEEP)

WELL SEC. 20-32

LOCATION MONTNEY RISE PROJECT

FIELD DEEP MONTNEY

PROVINCE BRITISH COLUMBIA

Other Services: BHC

Permanent Datum: GROUND LEVEL Elev.: 0.0

Log Measured From: GROUND LEVEL 16.00 Ft. Above Perm. Datum

Drlg. Measured From: GROUND LEVEL

Elev.: K.B. 16.00 D.F. G.L.

Date: 23 MAR. 80

Run No.: ONE

Depth-Driller: 67.10

Depth-Logger: 66.40

Bottom Logged Interval: 66.40

Top Logged Interval: 00

Type Fluid in Hole: WATER

Salinity, PPM Cl: 1,500

Density: 8.4

Level: FULL

Max. Temp. Deg. F.: 13.24 DK

Operating Time: 1.00

Truck No.: 36

Recorded By: CHARLIE

Witnessed By: FAIRBAIRN

GENERAL				GAMMA RAY				BIDWELL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV'S. OR A	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV'S. OR A	CPS/ DIV
ONE	00	66.40	10					0.2	5000	2.08	188.89

REMARKS: DENS TOOL #128A
CORED HOLE

DEPTHS

BULK DENSITY (GRAMS/CC)

00 10 20 30 40 50 60 PK 52 57 61

EOPRO 0%

EOPF 200R

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

Company	ROKE OIL ENTERPRISES LTD.
Well	ROKE NO. 13
Field	WILDCAT
County	BIG VALLEY
Province	ALBERTA
Location	1980' FNL & 1980' FEL
Sec.	13
Twp.	39
Rge.	5 W5M
Permanent Datum	GROUND LEVEL
Elev.	2436
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elev. K.B.	2446
Elev. D.F.	
Elev. G.L.	2436
Date	3-11-80
Run No.	ONE
Depth Driller	1354
Depth Logger	1354
Bottom Logged Interval	1354
Top Logged Interval	0
Type Fluid in Hole	GEL CHEM
Salinity, PPM Cl	1700
Density	9.5
Level	FULL
Max. Rec. Temp. Deg. F.	90
Operating Rig Time	5 HRS
Recorded By	D. MCKENZIE
Witnessed By	MR. ROKE

Equipment No. 2 — Location: 5-39-5 W5M

Recorded By: D. MCKENZIE — Witnessed By: MR. ROKE

Run No. ONE — Bit No. 1 — Type Log: GAMMA RAY NEUTRON — Depth-Driller: 1354 — Depth-Logger: 1354 — Bottom Logged Interval: 1354 — Top Logged Interval: 0 — Type Fluid in Hole: GEL CHEM — Salinity, PPM Cl: 1700 — Density: 9.5 — Level: FULL — Max. Rec. Temp. Deg. F.: 90 — Operating Rig Time: 5 HRS — Recorded By: D. MCKENZIE — Witnessed By: MR. ROKE

Primary Control (Depth or Time): DEPTH

Permanent Datum: GROUND LEVEL — Elev.: 2436 — Log Measured From: KELLY BUSHING 10 FT. ABOVE PERM. DATUM — Drilling Measured From: KELLY BUSHING — Elev. K.B.: 2446 — Elev. D.F.: — Elev. G.L.: 2436

5746

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	ROKE 117A	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	ROKE 115A
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10 CM	TYPE	PROPORTIONAL
DISTANCE TO X SOURCE	1.01 M	LENGTH	15 CM
		SOURCE MODEL NO.	MRC-N-55-M
GENERAL		SERIAL NO.	216
POST TRUCK NO.	38	SPACING	61 CM
INSTRUMENT TRUCK NO.		TYPE	Am/Be
TOOL SERIAL NO.	1254.001	STRENGTH	3 CURIES

LOGGING DATA

GENERAL					GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/min.	T.C. SEC.	SENS DEFLECTION	ZERO API G. R. UNITS	T.C. SEC.	SENS DEFLECTION	ZERO API N. UNITS			
ONE	00	136.0	6	3	100	0	12	3	100	0	200	

REMARKS: LOGGED THROUGH DRILL RODS. NO FURTHER LOGGING DONE DUE TO HAZARDOUS CONDITION OF HOLE.

GAMMA RAY — GAMMA RAY INCREASES — 0 — 120

NEUTRON — NEUTRON INCREASES — 0 — 2000 — 4000

Metres

00 10 20 30 40 50 60 70 80 90 100 110 120 130 136

ROKE OIL

ROCKY BAYOU UNIT NO. 31-14

Sec. 14 T. 21 S. R. 24 E.

Elevation: 3 Ft. above Ground Level

Total Depth: 11,600 Ft.

Date: 10-30-75

Contractor: ROKE OIL

Rig No. 1

Type Tools: ROTARY

Size Hole: 7 7/8"

Drilling Fluid: Salt Gel

Wt. 10.0 Vis. 38 WL 8.0 PH 10.5

Source of Sample: Drill Cuttings

Bottom Hole Temp. 160°

Max. Rec. Temp. 160°

Equip. at Rec. Temp. 11,600

Time Since Circ. 12 Hrs.

Time on Bottom 10:30 P.M. 10-30-75

Time Off Bottom 10:30 A.M. 10-31-75

ROKE OIL ENTERPRISES LTD.
GAMMA RAY NEUTRON LOG
SUITE 1005, 505 - 5th AVE. S.W. CALGARY, ALBERTA

Company ROKE OIL ENTERPRISES LTD.
Well NO. 11-6-23-4W4
Field WILDCAT
County/Parish BIG VALLEY
State/Province ALBERTA
Location 11-6-23-4W4
Other Services
Permanent Datum GROUND LEVEL
Elevation 3036 ft
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Date 30-DEC-81
Run No. ONE
Depth-Driller 3600 ft
Depth-Logger 3600 ft
Bottom Logged Interval 3600 ft
Top Logged Interval 3300 ft
Type Fluid in Hole GEL CHEM
Salinity, PPM Cl 1000
Density 9.5 LB/G
Level FULL
Max. Rec. Temp. 120 F
Equipment No. CALGARY
Recorded By J. MCKAY
Witnessed By MR. BOYLE

Run No. ONE
Bit From 0 ft
To 3600 ft
Size 7.875 in
Type
Weight
Viscosity 50 S
Fluid Loss 8.0 CC
Source of Sample CIRC. PIT
Rm @ Meas. Temp. 0.75 @ 70 F
Rmf @ Meas. Temp. 0.55 @ 70 F
Rmc @ Meas. Temp. 1.0 @ 70 F
Source of Rmf & Rmc MEASURED
Rm @ BHT 0.35 @ 120 F
Time Since Circ. 12 HRS
Max. Rec. Temp. 120 F
Equipment No. CALGARY
Location 11-6-23-4W4
Recorded By J. MCKAY
Witnessed By MR. BOYLE

5716

EQUIPMENT DATA

GAMMA RAY	
RUN NO.	ONE
TOOL MODEL NO.	NGRS 1156
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	SCINTILLATION
LENGTH	10 CM
DISTANCE TO S. SOURCE	0.07 M
GENERAL	
HOIST TRUCK NO.	34
INSTRUMENT TRUCK NO.	
TOOL SERIAL NO.	1156001

NEUTRON	
RUN NO.	ONE
LOG TYPE	NEUTRON/NEUTRON
TOOL MODEL NO.	NSGS 1156
DIAMETER	32 MM
DETECTOR MODEL NO.	
TYPE	PROPORTIONAL
LENGTH	63 CM
SOURCE MODEL NO.	AMC-N-50-M
STRENGTH	250 MC
SPACING	63 CM
TYPE	Am-Be
STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	GENERAL TOP (FROM)	BOTTOM (TO)	SPEED IN F/H	SPEED OUT F/H	GAMMA RAY TIME CONST. SEC	GAMMA RAY SENS. API GR & UNITS PER LOG DIV.	GAMMA RAY T.C. SEC	NEUTRON SENS. API GR & UNITS PER LOG DIV.	NEUTRON TIME CONST. SEC	NEUTRON SENS. API N. UNITS PER LOG DIV.
ONE	00	14.1	600	600	3	0	1S	1000	3	100
	14.1	151.1	6	3	3	0	1S	500	0	150

REMARKS CASED HOLE

GAMMA RAY

GAMMA RAY INCREASES →

0 — 150

NEUTRON

NEUTRON INCREASES →

3300 — 3500 — 3100

SCALE CHANGE AT 75.5 METERS

FINAL LOGGED AT 75.5 METERS

CASED - PI MEDIUM

00 10 20 30 40 50 60 70 80 90 100 110 120 130 140 FR

ROKE

Company: CONTINENTAL RESOURCES, INC.

Well: [illegible]

Field: [illegible]

County: [illegible]

Location: [illegible]

Other Services: [illegible]

Permanent Datum: [illegible]

Log Measured From: [illegible]

Drilling Measured From: [illegible]

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

Run No.	Bit No.	Type	Size	From	To

Type	Wt.	Size	From	To

| Run No. | Type

ROKE

COMPANY	CONTINENTAL OIL COMPANY
WELL	ROKE UNIT NO. 1
FIELD	WILDCAT
COUNTY	ROOSEVELT
STATE	NEW MEXICO

Other Services: DIL, CDL, CNL, GR

Permanent Datum: GROUND LEVEL
Elev.: K.B. 4,000 ft.
Log Measured From: K.B. 10 ft. above Perm. Datum
Drilling Measured From: K.B.

Date	12-15-65
Run No.	ONE
Depth-Driller	12,000 ft.
Depth-Logger	12,000 ft.
Bottom Logged Interval	12,000 ft.
Top Logged Interval	11,800 ft.
Type Fluid in Hole	SALT GEL
Salinity, PPM Cl	5,000
Density	10.0
Level	FULL
Max. Rec. Temp. Deg. F.	180
Operating Rig Time	12 HRS
Recorded By	R. HOLT
Witnessed By	MR. [illegible]

Run No.	Bit From	Bit To	Size	Type	Amount
ONE	0	12,000	7 7/8"	OSC	

Run No.	Type	From	To	Size	Wgt.	Grade	Top
ONE	SURFACE	0	1,200	8 5/8"	24#	J-55	
	PRODUCTION	0	12,000	5 1/2"	15.5#	J-55	

Run No.	Type	Density	Viscosity	pH	Fluid Loss
ONE	SALT GEL	10.0	45	10.5	10 cc

Source of Sample	R_m @ Meas. Temp.	R_mf @ Meas. Temp.	R_mc @ Meas. Temp.	Rm @ BHT
MUD PIT	1.00 @ 80°	1.00 @ 80°		0.60 @ 180°

Equipment	Location
8 5/8"	1,200 ft.
5 1/2"	12,000 ft.

Remarks: HOLE SIDE PICKED
CIRCU 5000

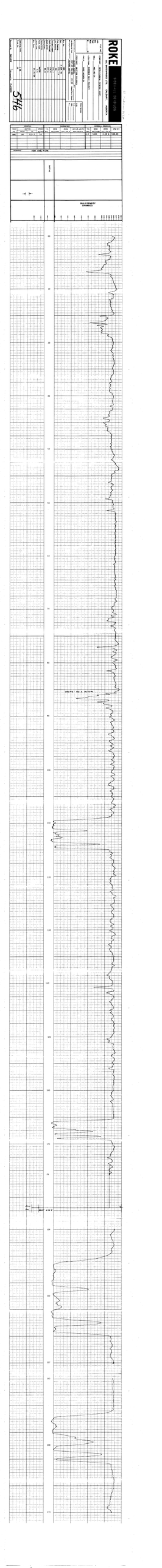
Run No.	Bottom Log Interval	Top Log Interval	Casing Size	Type Fluid in Hole	Density	Viscosity	pH	Fluid Loss
ONE	12,000 ft.	11,800 ft.	5 1/2" @ 12,000 ft.	SALT GEL	10.0	45	10.5	10 cc

Source of Sample	R_m @ Meas. Temp.	R_mf @ Meas. Temp.	R_mc @ Meas. Temp.	Rm @ BHT
MUD PIT	1.00 @ 80°	1.00 @ 80°		0.60 @ 180°

Remarks: HOLE SIDE PICKED
CIRCU 5000

Run No.	Equipment	Location
ONE	8 5/8"	1,200 ft.
	5 1/2"	12,000 ft.

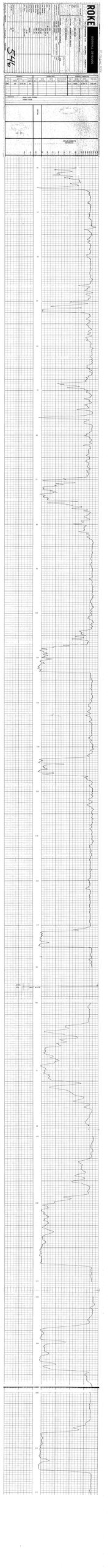
Remarks: HOLE SIDE PICKED
CIRCU 5000


ROKE
Roke Manor Research Limited
Romsey, Hampshire SO51 0ZN
Telephone: 0794 [illegible]
Telex: [illegible]
Fax: [illegible]
Title
Author
Date
Project
Customer
Customer Ref.
Sheet
Issue
Classification
Distribution
Keywords
Abstract
Roke Ref.

ROKE

VOYAGE TYPHOON

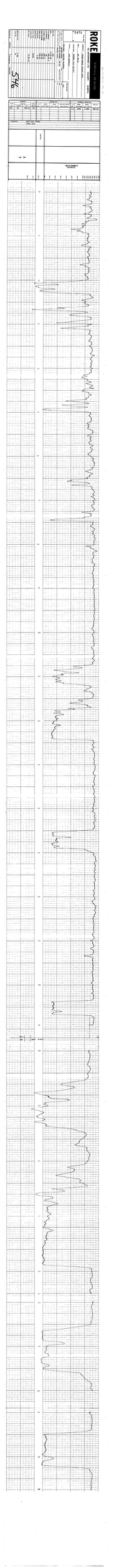
545



ROKE

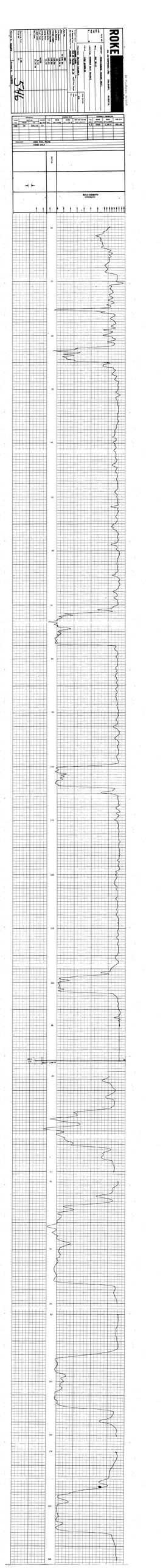
SURVEYING SERVICES

546



ROKE

546



DO NOT SCALE

ROKE
OIL & EXPLORATION LTD.

BOREHOLE GEOPHYSICS

WELL NAME	
LOCATION	
FIELD	
COUNTY	
PROVINCE	
COMPANY	
DRILLING MEASURED FROM	
ELEVATION	
PERMANENT DATUM	
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 OF RMF & RMC	
RM @ BHT	
TIME SINCE CIRC.	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

5716

RUN	BIT	FROM	TO

CASING RECORD	SIZE	WGT.	GRADE	FROM	TO

BORE HOLE RECORD		
	BIT SIZE	FROM — TO

TYPE	SERIAL NO.	DIA.	WT.	MAX. TEMP.	MAX. PRESS.

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT.)

WELL MRC - 80 - 25

LOCATION MONROAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Elev. GROUND LEVEL

Above Perm. Datum

Other Services: NONE

K.B.

D.F.

G.L.

Permanent Datum GROUND LEVEL

Log Measured from GROUND LEVEL

All Depths Measured from GROUND LEVEL

Run No. ONE

Date 12 SEPT. 1980

First Reading 36 M

Last Reading 0

Recorded By FERGUSON

Witnessed By KNAUR

Bottom Logged 36

Bottom Driller 33.5

Casing Driller

Casing Logger

Bit From 24.9

Fluid Type

Fluid Level

Max. Rec. Temp.

Equip. No.

Location

Rec. No.

Operating Time 5 HOURS

Truck No. 36

5346

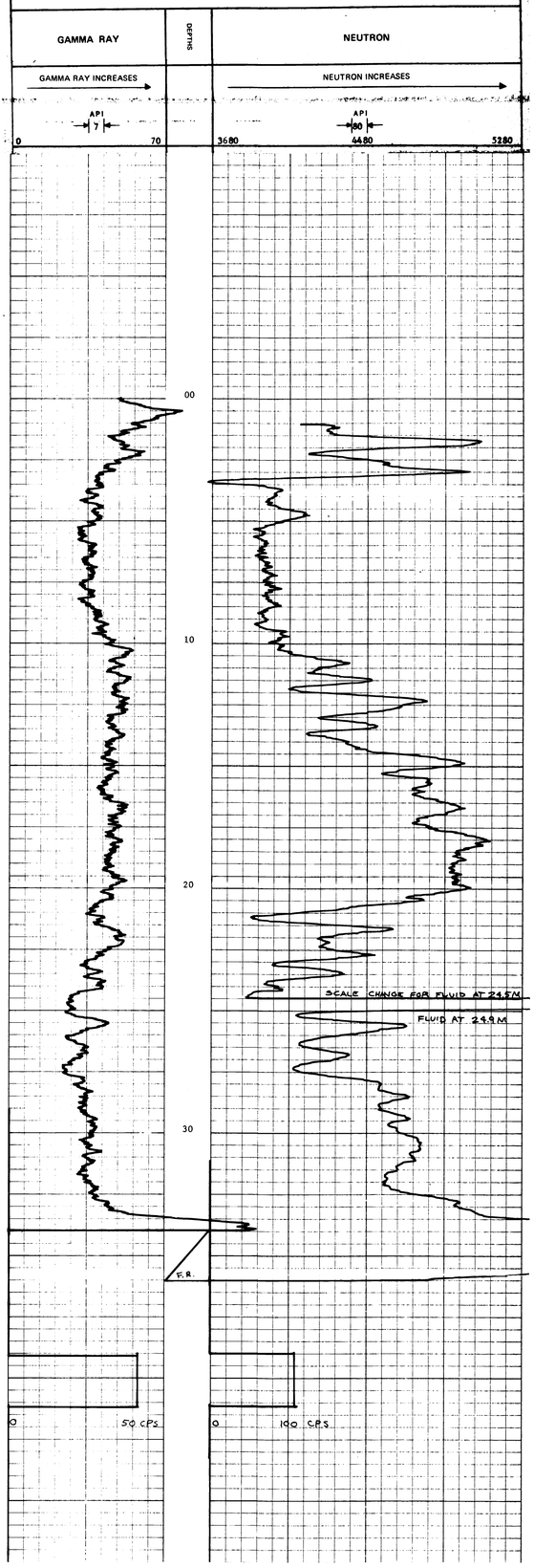
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	36	SERIAL NO.	188
INSTRUMENT TRUCK NO.	36	SPACING	43 CM
TOOL SERIAL NO.	GRN 125A002	TYPE	AmBe
		STRENGTH	3 CURIES

LOGGING DATA

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.	NEUTRON T. C. SEC.	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV. L OR R	NEUTRON API N. UNITS PER LOG DIV
1	0	24.5	4	3	500	0	7	3	1080	46 L	80
1	24.5	36	4	3	500	0	7	3	500	0	40

REMARKS



ROKE

RESERVOIR
OIL AND GAS LIMITED

5746

WELL	14-36-28-20W4
FIELD	ROKE
LOCATION	14-36-28-20W4
PROVINCE	ALBERTA
COMPANY	ROKE RESERVOIR OIL AND GAS LIMITED
DATE	15 JUL 91

RUN	DATE	DEPTH DRILLER	DEPTH LOGGER	BTM LOG INTERVAL	TOP LOG INTERVAL	CASING DRILLER	CASING LOGGER	BIT SIZE
ONE	15 JUL 91	1170.00				177.80 @ 0.00		155.60
TWO	16	1170.00						

RUN	BOREHOLE RECORD BIT SIZE	FROM	TO	CASING RECORD SIZE	WEIGHT	GRADE	FROM	TO
ONE	155.60	0.00	1170.00	177.80	34.23	J-55	0.00	1170.00

RUN	TYPE	DENSITY	VISCOSITY	PH	FLUID LOSS	SOURCE OF SAMPLE	RM @ MEAS TEMP	RMF @ MEAS TEMP	RMC @ MEAS TEMP	SOURCE RMF	SOURCE RMC	RM @ BHT	TIME CIRC
ONE	GEL CHEM	1.20	0.0	0.0	0.0								
TWO	GEL CHEM	1.20	0.0	0.0	0.0								

RUN	MATRIX	MATRIX DENSITY	HOLE CORR (CALIPER)	HOLE CORR (BIT SIZE)	FLUID DENSITY	FLUID SALINITY	FLUID LEVEL
ONE	2.65	2.650	0.000	0.000	1.000	0.00	0.00

REMARKS

ZERO FEET ABOVE
GROUND LEVEL

CALIPER
Scale 0.00 = 155.60 mm

BULK DENSITY
(GRAMMA)

Scale 0.00 = 155.60 mm

Differential Effects
Run No. Marks

Scale 0.00 = 155.60 mm

ROKE

SPECIAL SERVICES

COMPANY	ROKE OILFIELD SERVICES LTD.
WELL	PETROLEUMS JOSEPH BOYLE
FIELD	
COUNTY	
PROVINCE	ALBERTA

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

Date	
Run No.	
Depth-Driller	
Depth-Logger	
Bottom Logged Interval	
Top Logged Interval	
Type Fluid in Hole	
Salinity, PPM Cl	
Density	
Level	
Max. Rec. Temp. Deg. F	
Operating Rig Time	
Recorded By	
Witnessed By	

Run No.	ONE
Bit From	SURF.
Size	7 7/8"
Type	STEEL
Weight	10.5
Viscosity	40
Fluid Loss	
Source of Sample	
R_m @ Meas. Temp.	
R_mf @ Meas. Temp.	
R_mc @ Meas. Temp.	
Source R_mf & R_mc	
R_m @ BHT	
Time Since Circ.	
Max. Rec. Temp. Deg. F	
Equip. Location	
Recorded By	
Witnessed By	

Run No.	
Bit From	
Size	
Type	
Weight	
Viscosity

ROKE
SPECIAL DESIGNS

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: ESSO RESOURCES CANADA LIMITED

WELL: IMC 10-31

LOCATION: IMPERIAL IMC 10-31 PROJECT

FIELD: BEAVER RIVER

PROVINCE: NORTHWEST TERRITORIES

Permanent Datum: GROUND LEVEL — Elev.: 0
Log Measured From: KELLY BUSHING — 12 Ft. Above Perm. Datum
Drilling Measured From: KELLY BUSHING

Rge.	10	W
Twp.	26	
Sec.	31	
Other Services		
Date	21 JUNE 1980	
Run No.	ONE	
Depth-Driller	65.5	
Depth-Logger	65.2	
Bottom Logged Interval	65.2	
Top Logged Interval	55.5	
Casing-Driller	13 3/8 @ 55.5	
Casing-Logger	55.5	
Bit Size	12 1/4	
Type Fluid in Hole	GEL CHEM	
Dens. / Visc.	11.3 / 39	
pH / Fluid Loss		
Source of Sample		
Rm @ Meas. Temp.		
Rmf @ Meas. Temp.		
Rmc @ Meas. Temp.		
Source of Rmf / Rmc		
R.M. @ Meas. Temp.		
Time Since Circ.		
Max. Rec. Temp.		
Equip. Location		
Recorded By		
Witnessed By		

Primary Depth Control: WIRELINE
Log Correlated to: GAMMA RAY NEUTRON

Run No.	ONE	
Bit From	0	
Bit To	65.5	
Hole Size	12 1/4	
Casing Size	13 3/8 @ 55.5	
Type Fluid in Hole	GEL CHEM	
Dens.	11.3	
Visc.	39	
pH		
Fluid Loss		
Source of Sample		
Rm @ Meas. Temp.		
Rmf @ Meas. Temp.		
Rmc @ Meas. Temp.		
Source of Rmf / Rmc		
R.M. @ Meas. Temp.		
Time Since Circ.		
Max. Rec. Temp.		
Equip. Location		
Recorded By		
Witnessed By		

Operating Time: 3 HRS.
Truck No.: 36

5746

GENERAL RUN NO.	DEPTH FROM	DEPTH TO	SPEED M/MIN	T.C. SEC.	GAMMA RAY SENS SETTING	GAMMA RAY ZERO DIVS. ON R	GAMMA RAY API G.R. UNITS PER LOG DIV.	BIRDWELL DENSILOG T.C. SEC.	BIRDWELL DENSILOG SENS SETTING	BIRDWELL DENSILOG ZERO DIVS. ON R	BIRDWELL DENSILOG CPM/DIV
ONE	0	65.5	8					.5	5 K	2.09 R	207.96
RPT	55	65	5					.5	5 K	2.09 R	207.96

REMARKS: DENS TOOL FISSILE

CALIPER
DIAMETER — CM

BULK DENSITY
(GRAMS/CC)

00
10
20
30
40
50
60
2.084
5000 CPS
0
EXTENDED SCALE
56
60
64

ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY: ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

WELL: NEWCROW RES. REDWATER

FIELD: REDWATER

LOCATION: NEWCROW RES. REDWATER

PROVINCE: ALBERTA

Other Services: NIL

Permanent Datum: GROUND LEVEL

Log Measured From: GROUND LEVEL

Drilling Measured From: GROUND LEVEL

Elevation: K.B. 2705 D.F. G.L. 2695

Date: 27-7-96

Run No.: ONE

Depth-Driller: 1000

Depth-Logger: 1000

Bottom Logged Interval: 992

Top Logged Interval: 32

Casing-Driller: 9 5/8 @ 32

Casing-Logger: 32

Bit Size: 7 7/8

Type Fluid in Hole: WATER

Dens. Visc.: 8.3 -

pH: 7.0

Fluid Loss: -

Source of Sample: CIRC.

Rm @ Meas. Temp.: -

Rmf @ Meas. Temp.: -

Rmc @ Meas. Temp.: -

Source of Rmf & Rmc: -

Rm @ BHT: -

Time Since Circ.: -

Max. Rec. Temp. Deg. F.: -

Equip. No. & Location: 546

Recorded By: P.CUMMINGS

Witnessed By: P.CUMMINGS

RUN NO.	GENERAL DEPTHS FROM	TO	SPEED FT/MIN	GAMMA RAY T.C. 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
ONE	0	59.5	8				.5	5 K	2.09 R	207.96
ONE	32	59	8				.5	5 K	2.09 R	207.96

REMARKS: HOLE TYPE: CASED

CALIPER
DIAMETER — CH

BULK DENSITY
(GRAMS/CC)

DEPTHS

00
10
20
30
33
35
37
39

TAR.

2.09 R

5000 CPS

0

EXPANDED SCALE

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG 20 CM

FILE NO

COMPANY PETRO-CANADA (MINING DEPT.)

LSD
SEC
TWP
RGE
M M

WELL MRC-80-59

LOCATION MONTNEAN 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

Other Services
K.B
DSO
G.L
GRM, DDIS, CAL, DIR

Run. No.	ONE
Date	21 JUNE 1980
First Reading	25.5 M
Last Reading	0
Footage Logged	25.5
Depth Drilled	25.9
Depth Logged	24.4
Casing Rake	6.0
Casing Driller	6.1
Fluid Type	AIR/WATER
Liquid Level	0.0
Min. Diam.	13.3 CM
Rm @ °C	40 @ 25
Operating Time	5 HOURS
Truck No.	96

Recorded By PERGUSON

Witnessed By RAFFIADO

5746

Remarks FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 350 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS) | Depths | RESISTIVITY (OHM-METERS)

SECONDARY SCALE 0 5000

PRIMARY SCALE 0 1000 2000 | 6500 11500 16500

FLUID LEVEL

00

10

20

F.R

LOGGED ON 100 TAP

LOG ZERO

CAL ON 500 TAP
LATCHED ON 100 TAP

100 TAP
1000 CAL

CAL ZERO

REC ZERO

STOP ZERO

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (MINING DEPT.)

WELL MRC-80-59

LOCATION MONTANA PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services: FDL, DNSS, CAL, DIR

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 — K.B.
CSG
G.L.

Run. No.	ONE
Date	22 JUNE 1980
First Reading	26 M
Last Reading	0
Hole Size	26
Depth Logged	26.1
Depth Driller	26.91
Casing Driller	6.0
Casing Rake	6.1
Fluid Type	AIR/WATER
Liquid Level	0.0
Min. Diam.	13.3 CM
Rm @	
Operating Time	5 HOURS
Truck No.	36

Recorded By: PRECISION
Witnessed By: SANTIAGO

546

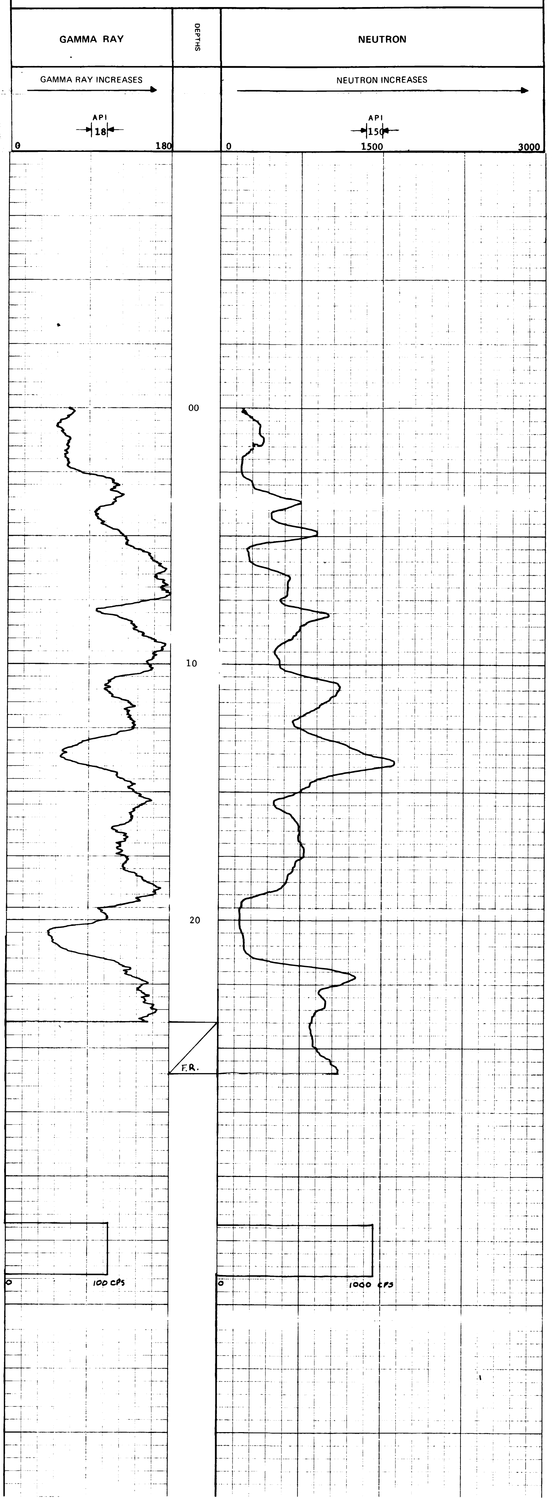
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO SOURCE	2.1 M	LENGTH	152 MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	36	SERIAL NO.	188
INSTRUMENT TRUCK NO.	36	SPACING	43 CM
TOOL SERIAL NO.	R-GRN 125A003	TYPE	AmBe
		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
ONE	0	26	4	3	100	0	18	2	500	0	150 API

REMARKS



ROKE

SIDEWALL DENSILOG
CALIPER

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY PETRO-CANADA (OPERATING AGENT)

WELL MGC-90-59

LOCATION MONTANA PASS PROJECT

FIELD DYKE 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.

G.L.

Other Services: FDL-GRN-DIR

LSD SEC TWP RGE W ... M

Recorded By FERGUSON

Witnessed By HAMPTAGO

Operating Time

Truck No. 36

.5 HOUR

546

Run No. ONE

Date 23 JUNE 1990

Last Reading 26 M

First Reading 0

Footage Logged 26

Depth Driller 26.2

Depth Logged 26.4

Casing Rotes 5.0

Casing Driller 6.1

Fluid Type AIR/WATER

Density 0.00 g/cm³

Min. Diam. 13.3 CM

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
ONE	0	26	8					.5	5 K	2.09 R	207.96
EXP	18	24	6					.5	5 K	2.09 R	207.96

REMARKS DENS TOOL #5544AS

CALIPER
DIAMETER — CM

BULK DENSITY
(GRAMS/CC)

DEPTHS

00

10

20

F.R.

2.09 R

5000 CPS

0

EXPANDED SCALE

18

20

22

24

ROKE

FOCUSED BEAM LOG 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

LOG NO. 546
RUN NO. ONE
DATE 22 JUNE 1960
TIME
REF.

COMPANY PETRO-CANADA (OPERATOR)
WELL 9MC-8H-60
LOCATION 9MOBERLY 8H8 - 60 DIRECT
FIELD MOBERLY
PROVINCE BRITISH COLUMBIA

Log Measured from GROUND LEVEL
Drilling Measured from GROUND LEVEL
Elevation: GROUND LEVEL

Permanent Datum GROUND LEVEL
Elevation 1979.8
Above Perm. Datum
Log Measured from KB
Drilling Measured from KB

Other Services
DIR. DENS-GAL-DIR.

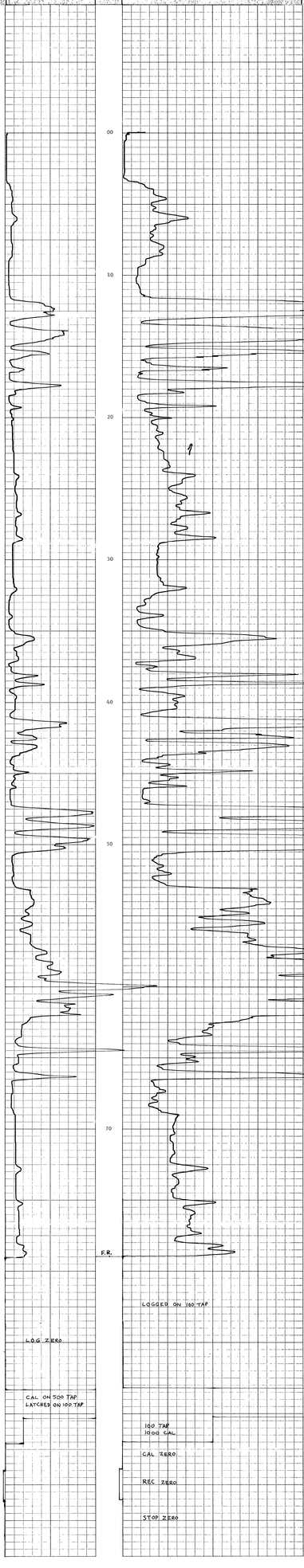
Run No.	ONE
Date	22 JUNE 1960
Last Reading	0
First Reading	5516
Casing Logged	1979.8
Depth Driller	5516
Depth Logger	5516
Casing Driller	9 5/8
Casing Logger	9 5/8
Fluid Type	AIR/WATER
Mud Density	
Fluid Level	
Max. Rec. Temp. °C.	26.5 @ 25°
Operating Time	5 HRS.
Truck No.	36

Recorded By: PRINGLE
Witnessed By: SANTIAGO

546

Remarks FBL @ 5 CURRENT RANGE STD MUDFISH RESISTANCE 300 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 5000		PRIMARY SCALE 0 — 1000 — 2000; 1500 — 11500 — 13500



ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
SEC. TWP. RGE. W
COMPANY: ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA
WELL: MRC 16-09
LOCATION: MORROW AREA PROJECT
FIELD: MORROW AREA
PROVINCE: ALBERTA
RECORDED: ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA
Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING
Elev.: K.B. 4,190 ft. G.L. 4,178 ft.
Other Services: DIL, SONIC CAL, TDL

Run No.	ONE	
Date	27-JUN-1980	
Depth-Driller	79.2 M	
Depth-Logger	79.6	
Bottom Logged Interval	79.5	
Top Logged Interval	24.6	
Casing-Driller	24.6	
Casing-Logger	24.6	
Bit Size	7.8	
Type Fluid in Hole	GEL CHEM	
Density / Viscosity	9.0	
Max. Rec. Temp. Deg. C.	124	
Estimated Surface Temperature		
Equipment Number		
Location		
Recorded By	E. BURR	
Witnessed By	SANTORO	

Operating Time
Time No.
Rig No.

5716

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	R-GRN 125A003	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH 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.
ONE	0	79.5	4	3	100	0	18	2	500	0	150 API

REMARKS

GAMMA RAY	DEPTH	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 0 — 180		API 1500 — 1000

00
10
20
30
40
50
60
70

FR

0 — 100 cps

0 — 1000 cps

ROKE
GEOPHYSICAL SERVICES
CALGARY, ALBERTA

COMPANY	
WELL	
FIELD	
COUNTY	
PROVINCE	
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.	
TIME ON BOTTOM	
MAX. REC. TEMP.	
EQUIP. LOCATION	
RECORDED BY	
WITNESSED BY	

RUN	BIT	FROM	TO

CASING RECORD	SIZE	WGT.	GRADE	FROM	TO
SURFACE STRING					
INTERMEDIATE STRING					
PRODUCTION STRING					
LINER					
LINER					

BOREHOLE RECORD	BIT SIZE	FROM	TO

RIG NAME	
RIG NO.	
TRUCK NO.	
ENGINEER	
OPERATOR	
REMARKS	

GENERAL				GAMMA RAY				GENERAL					
RUN NO.	DEPTH SCALE		SPEED FPM SEC.	TIE	ZERO BOTTOM	ZERO FULL SCALE	PER API UNIT	CALIPER	RUN NO.	SCALE	FULL SCALE	PER API UNIT	
GRR	1	24	6						1	5 K	0.31 %	62.5%	
GRR	1	24	6						1	5 K	0.62 %	125.0%	
RRP	24	02	6						1	5 K	2.25 %	312.5%	
RRP	10	00	6						1	5 K	4.25 %	625.0%	

RECORDED ZERO FULL SCALE

CALIPER
DIAMETER —IN

BULK DENSITY
(GRAMS/CC)

SCALE ORIGIN AT CASING W.TIE

P.B.

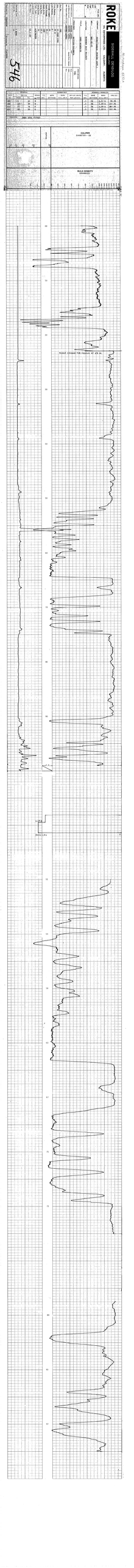
ZERO

CENTRE SCALE

ROKE

BOREHOLE GEOLOGY

546



ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

Recorded By: JACKET — Witnessed By: ROKE

Location: LSD 11 SEC 26 TWP 26 RGE 4 W — Permanent Datum: GROUND LEVEL — Elev.: K.B. 1,378 — Log Measured From: KELLY BUSHING — Elev.: G.L. 1,376 — Drilling Measured From: KELLY BUSHING

Date: 1-8-1990 — Run No.: ONE — Depth-Driller: 106 — Depth-Logger: 106 — Bottom Logged Interval: 105.7 — Top Logged Interval: 25.6 — Casing-Driller: 13 3/8 @ 25.6 — Casing-Logger: 13 3/8 @ 25.6 — Bit Size: 12 1/4 — Type Fluid in Hole: WATER — Salinity: 1,500 — Density: 8.5 — Level: FULL

Max. Rec. Temp.: 20°C — Equip. Location: 3-26-26-4 — Recorded By: JACKET — Witnessed By: ROKE

FIELD: ROSEBUD — WELL: 3RC - 26 - 26 - 4 W4 — COMPANY: ROKE OIL ENTERPRISES LTD. (OPER.)

LOCATION: NORDEGG & REG. PM. (ROSEBUD)

PROVINCE: ALBERTA — COUNTRY: CANADA — Other Services: G.R. CCL GUN PERF.

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

5146

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32 MM	TOOL MODEL NO.	I
DETECTOR MODEL NO.		DIAMETER	32 MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 M
GENERAL		SOURCE MODEL NO.	MRC-N-65-W
		SERIAL NO.	168
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.	36	TYPE	Amba
TOOL SERIAL NO.	SCSR 1256/003	STRENGTH	3 CURIES

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
RUN NO.	DEPTH FROM	DEPTH 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	11.8	6	3	100	0	16	2	1000	8 L	200
1	11.8	106	6	3	100	0	16	2	500	0	150

REMARKS

GAMMA RAY	DEPTH	NEUTRON
GAMMA RAY INCREASES → API 0 — 100		NEUTRON INCREASES → API 2600 — 1600 — 2600
	00	
	10	SCALE CHANGE FOR FLUID LEVEL AT 12 M
	20	FLUID LEVEL AT 12 M
	30	
	40	
	50	
	60	
	70	
	80	
	90	
	100	
		T.D.
0 — 100 CPS		0 — 1600 CPS

Reproduction Prohibited

ROKE OIL EXPLORATIONS LTD. CALGARY, ALBERTA

546

WELL NO.	1
FIELD	WILDCAT
COUNTY, PARISH OR DISTRICT	MACKENZIE DELTA
PROVINCE OR STATE	N.W.T.
LOCATION	1980' FNL & 1980' FEL
SECTION	34
TOWNSHIP	117N
RANGE	13W
PERMANENT DATUM	MEAN SEA LEVEL
ELEVATION	0
LOG MEASURED FROM	K.B.
DRILLING MEASURED FROM	K.B.
ELEVATION K.B.	0
ELEVATION D.F.	0
ELEVATION G.L.	0
DATE	1-5-72
RUN NO.	ONE
DEPTH DRILLER	1,000
DEPTH LOGGER	1,000
BOTTOM LOGGED INTERVAL	1,000
TOP LOGGED INTERVAL	SURFACE
TYPE FLUID IN HOLE	WATER
SALINITY, PPM CL	0
DENSITY	8.8
LEVEL	FULL
MAX. REC. TEMP. DEG. F.	60
ESTIMATED BHT	60
TIME SINCE CIRC.	1 HR.
TIME ON BOTTOM	1 HR.
EQUIP. NO. & LOCATION	1
RECORDED BY	J. SMITH
WITNESSED BY	

RUN	BIT	FROM	TO	SIZE	MAKE	TYPE	FLUID IN HOLE	DENSITY	VISCOSITY	PH	FLUID LOSS
ONE	1	SURF.	1,000	8 3/4			WATER	8.8			

RUN	BIT	FROM	TO	SIZE	MAKE	TYPE	FLUID IN HOLE	DENSITY	VISCOSITY	PH	FLUID LOSS

CASING RECORD

RUN	SIZE	WEIGHT	GRADE	TOP	BOTTOM	NO. JTS.	CEMENTED WITH	CEMENT TYPE
ONE	9 5/8	32.3	H					

GAMMA RAY CALIBRATION

RUN	SIZE	WEIGHT	GRADE	TOP	BOTTOM	API UNITS	API-MARKER

NORMAL DEVIATION

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

RUN	DEGREES	AT DEPTH
ONE	1 1/4	1,000

REMARKS

CALIPER
Scale 1" = 10"

GAMMA RAY
Scale 1" = 100 API

BULK DENSITY
(GAMMA)

TRUE VERTICAL DEPTH CORRECTION
AT 1,000 M.D.
CASING HEAD IS 0 M.

ESTIMATED DEPTH

ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.

COMPANY TEXACO CANADA (OSTENSIC DEPT.)

WELL REC - 80 - 65

FIELD FOOTHILLS LOCATION WOODMAN BLKS PROJECT

COUNTY PEACE RIVER PROVINCE BRITISH COLUMBIA

Permanent Datum GROUND LEVEL Elev. Log Measured from GROUND LEVEL Elev. Drill Measured from GROUND LEVEL Elev.

Date 1-SEP-1980 Run No. ONE Depth-Driller 38.5 M Depth-Logger 38.5 Bottom Logged Interval 38.5 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 Since Circ. Max. Rec. Temp. Equip. Location Recorded By PRINCETT Witnessed By PRINCETT

Operating Time 3 HOURS Truck No. 36

5446

GENERAL				GAMMA RAY			SIDEWALL DENSILOG		
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN SEC.	T.C. SENS SETTINGS	SENS DIV/L OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV/L OR R
1	0	38.5	8				.5	5 K	2.09 R
REP	32	38	4				.5	5 K	2.09 R

CPS/DIV
207.96
207.96

REMARKS

DENSITY TOOL # 5346S

CALIPER TOOL # 586

CALIPER
DIAMETER -CM

DEPTHS

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

F.R.

5000 CPS

0

ROKE

GAMMA RAY NEUTRON LOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.
COMPANY PETRO-CANADA (MINING DEPT.)
WELL MRC - 80 - 69
LOCATION MOUNTAIN PASS PROJECT
FIELD DUKE MOUNTAIN
PROVINCE BRITISH COLUMBIA

Other Services: RBHS CAL

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

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

LSD
SEC
TWP
RGE
W M

Run. No.	ONE
Date	21 AUG. 1980
First Reading	30.5 M
Last Reading	0
Footage Logged	30.5
Depth Reached	30.6
Depth Driller	30.6
Depth Logger	30.5
Casing Reader	5.5
Casing Driller	
Fluid Type	AIR/WATER
Liquid Level	4.7 M
Min. Diam.	12.7 CM
Rm @	
Operating Time	.5 HOURS
Truck No.	36

Recorded By FERGUSON
Witnessed By PANCHY

5A6

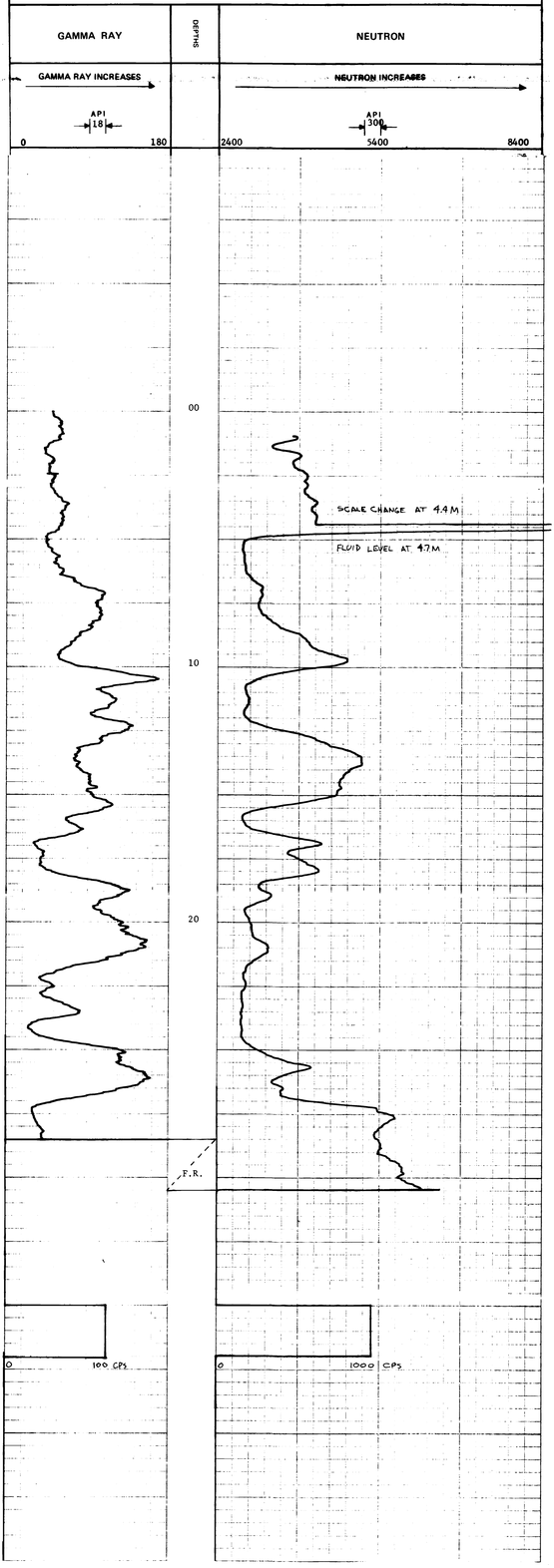
EQUIPMENT DATA

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	102 MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.1 M	LENGTH	152 MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	188
HOIST TRUCK NO.	36	SPACING	43 CM
INSTRUMENT TRUCK NO.	36	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A003	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	4.4	4	3	100	0	18	2	1000	8 L	300
1	4.4	30.5	4	3	100	0	18	2	500	0	150

REMARKS



ROKE

SIDEWALL DENSILOG

OIL ENTERPRISES LTD. CALGARY, ALBERTA

File No.

Company PEKO-GAMMA (KEEPER DEPT.)

Well INDC - 80 - 69

Field FORT NORMAN

Location NORMAN PASS PROJECT

Province or Territory NORTHWEST TERRITORIES

Permanent Datum GROUND LEVEL

Log Measured from GROUND LEVEL

Drilling Measured from GROUND LEVEL

Elev. K.B. 0

D.F. 0

G.L. 0

Date 1-5-80

Run No. ONE

Depth One 31.4.80.

Depth Two 31.4.80.

Top Logged Interval 0

Bottom Logged Interval 29.5

Casing Driller 29.5

Casing Logger 31.0

Bit Size 8

Type Fluid in Hole AIR MIST

Density Viscosity

Level Full

Max. Temp. Rec. 12.7 CM

Operating Time 5 HOURS

Truck No. 36

Recorded By PERKINSON

Witnessed By DUNTOY

548

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	29.5	8					.5	5 K	2.09 R	207.96
EXP	21	26	4					.5	5 K	2.09 R	207.96

REMARKS DENSITY TOOL # 5544S

CALIPER TOOL # 586

CALIPER
DIAMETER -CM

10 25 30 35

DEPTHS

GAMMA RAY
API

BULK DENSITY
(GRAMS/CC)

00

10

20

F.R.

22

26

2.09 R

5000 CPS

0

PR-Monkman 80-73A

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 MRC - 80 - 73

LOCATION MONKMAN PASS PROJECT

FIELD DUKE MOUNTAIN

PROVINCE BRITISH COLUMBIA

Other Services:
DENS, CAL

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

Run. No.	ONE		
Date	3 SEPT. 1980		
First Reading	17 M		
Last Reading	0		
Footage Logged	17		
Depth Reached	17.2		
Depth Driller	18.2		
Casing Roke	3.5		
Casing Driller			
Fluid Type	AIR/WATER		
Liquid Level	0.0		
Min. Diam.			
Rm @ °C	45.5 @ 25		
Operating Time	.5 HOURS		
Truck No.	36		

546

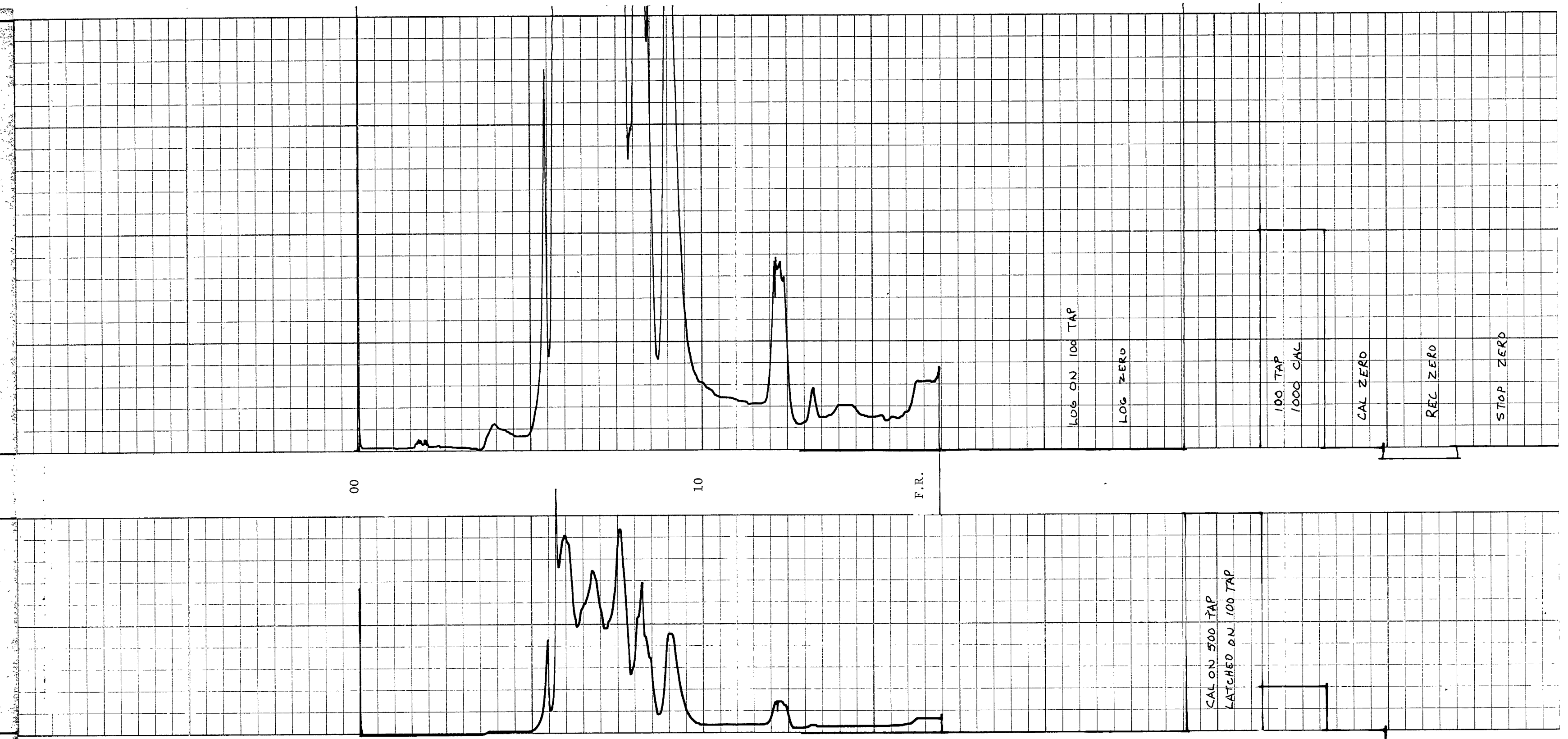
Recorded By FERGUSON Witnessed By PLACHNER

Remarks
FBL # 5 CURRENT RANGE STD MUDFISH RESISTANCE 450 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 100 OHM/DIV SECONDARY 500 OHM/DIV

RESISTIVITY (OHM-METERS)
PRIMARY SCALE 2000 1000 0
16500 11500 6500

Depths

RESISTIVITY (OHM-METERS)
SECONDARY SCALE 5000 0



ROKE

SIDEWALL DENSILOG

CALIPER

OIL ENTERPRISES LTD. - CALGARY, ALBERTA

FILE NO.

COMPANY: ESSO-CANADA (OPERATOR)

WELL: MBC 89 - 73

LOCATION: MONKMAN PASS PROJECT

FIELD: STONE MOUNTAIN

PROVINCE: BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL — Elev.: — Above Perm. Datum

Log Measured from: GROUND LEVEL — K.B.: — Other Services: ZDL

Drill Measured from: GROUND LEVEL — D.F.: — CSG.: — G.L.: —

Run No.	ONE
Date	3-SEPT-1980
First Reading	17.2'
Last Reading	0
Footage Logged	17.2'
Depth Reached	18.2'
Casing Driller	4.25
Casing Logger	
Fluid Type	AIR/WATER
Liquid Level	070
Max. Diam.	
Operating Time	
Truck No.	36

SEC. — TWP. — RGE. — M

Recorded By: FRANDSEN

Witnessed By: FRANDSEN

5416

Rerun 9173

GENERAL				GAMMA RAY				SIDEWALL DENSILOG			
RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	SENS SETTINGS	ZERO DIV. OR R	API G.R. UNITS PER LOG DIV.	T.C. SEC.	SENS SETTINGS	ZERO DIV. OR R	CPS/DIV.
1	0	17	8					.5	5 K	2.09 R	207.96
EXP	4	12	4					.5	5 K	2.09 R	207.96

REMARKS: DENSITY TOOL # 554AS — CALIPER TOOL # 586

CALIPER
DIAMETER - CM
10 15 20 25 30

DEPTHS

GAMMA RAY
API
100 150

BULK DENSITY
(GRAMS/CC)
1.25 1.30 1.35 1.40 1.45 1.50 1.55 1.60 1.65 1.70 1.75 1.80 1.85 1.90 1.95 2.00 2.05 2.10 2.15 2.20 2.25 2.30 2.35 2.40 2.45 2.50 2.55 2.60 2.65 2.70 2.75

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