ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

PR Goodrich 81(3)A 81-08

FILE NO.	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 08
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE	W M
Other Services:	DIR DENS-CAL, FBL
Permanent Datum	GROUND LEVEL
Log Measured from	RIG FLOOR 0.6 Above Perm. Datum
Well Depths Measured from	RIG FLOOR
Elev. K.B. / CSG / G.L.	METRIC
Run No.	ONE
Date	13 SEPT 1981
First Reading	474
Last Reading	0
Footage Logged	474
Depth Reached	474
Depth Driller	477
Casing Roke	5
Casing Driller	
Fluid Type	MUD/WATER
Liquid Level	
Min. Diam.	12.7CM
Rm @	18.5Ω m @ 25°C
Operating Time	2 HR
Truck No.	SU#4
Recorded By	WAHL
Witnessed By	ZSCHACH

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	152MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	347
HOIST TRUCK NO.		SPACING	43CM
INSTRUMENT TRUCK NO.	SU#4	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A010	STRENGTH	3 CURIES

LOGGING DATA

RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	GR T.C. SEC.	GR SENS SETTINGS	GR ZERO DIV. L OR R	GR API G. R. UNITS PER LOG DIV.	N T.C. SEC.	N SENS SETTINGS	N ZERO DIV. L OR R	N API N. UNITS PER LOG DIV.
ONE	0	474	5	3	100	0L	12	3	1000	0L	120
	214	227	5					3	1000	20L	120
	243	278	5					3	5000	0L	600
	306	307	5					3	1000	20L	120

REMARKS LOGGED THROUGH HQ DRILL ROD

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12; 0 – 120		NEUTRON INCREASES → API 120; 0 – 1200 – 2400

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

PE-Goodrich 81(3)A 81-09

FILE NO.	
LSD	
SEC	
TWP	
RGE	
W M	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 09
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
Other Services:	DIR DENS-CAL, FBL
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured from	RIG FLOOR .65M Above Perm. Datum
Well Depths Measured from	RIG FLOOR
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE	
Date	15 SEPT 1981	
First Reading	342M	
Last Reading	0	
Footage Logged	342	
Depth Reached	342	
Depth Driller	342.6	
Casing Roke	16.3	
Casing Driller		
Fluid Type	MUD/WATER	
Liquid Level		
Min. Diam.	12.7CM	
Rm. @	22.5Ω m @ 25°C	
Operating Time	1.5 HR	
Truck No.	SU # 4	
Recorded By	WAHL	Witnessed By ZSCHACH

532

EQUIPMENT DATA

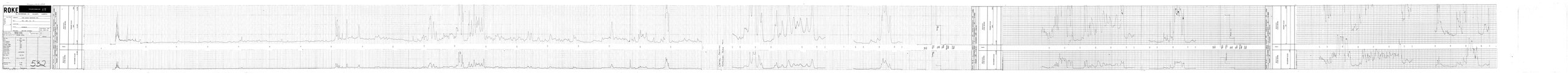
GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	152MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	347
HOIST TRUCK NO.		SPACING	38.1
INSTRUMENT TRUCK NO.	SU #4	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A010	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	342	4	3	100	0L	12	3	1000	0L	120
	271	245	4					3	1000	20L	120
	41	33	4					3	1000	20L	120

REMARKS LOGGED THROUGH HQ RODS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12		NEUTRON INCREASES → API 120
0 — 120		0 — 1200 — 2400


ROKE
532

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

PR Goodrich 8113A 81-10

FILE NO.	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 10
LOCATION	GOODRICH (LOGGED THROUGH DRILL RODS)
FIELD	
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W	
Permanent Datum	GROUND LEVEL
Log Measured from	GROUND LEVEL
Well Depths Measured from	GROUND LEVEL
Elev. Above Perm. Datum	
K.B. / CSG / G.L.	
Other Services	DIR DENS-CAL, FEL
	METRIC

Run No.	ONE
Date	17 SEPT 1981
First Reading	197
Last Reading	0L
Footage Logged	197
Depth Reached	197
Depth Driller	203
Casing Driller	6
Casing Roke	
Fluid Type	AIR/WATER
Liquid Level	
Min. Diam.	12.7CM
Rm @	37/1 @ 25°C
Operating Time	2 HR
Truck No.	SU#4
Recorded By	WAEL
Witnessed By	ZSCHACH

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	152MM
		SOURCE MODEL NO.	MRC-N-SS-W
		SERIAL NO.	347
		SPACING	38.1
		TYPE	AmBe
		STRENGTH	3 CURIES

GENERAL	
HOIST TRUCK NO.	
INSTRUMENT TRUCK NO.	SU#4
TOOL SERIAL NO.	RGRN 125A010

LOGGING DATA

RUN NO.	DEPTHS FROM	DEPTHS TO	SPEED M/MIN	T.C. SEC.	GAMMA RAY SENS SETTINGS	GAMMA RAY ZERO DIV. L OR R	API G. R. UNITS PER LOG DIV.	T.C. SEC.	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	197	0	4	3	100	0L	12	3	1000	0L	120

REMARKS: LOGGED THROUGH HQ RODS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES →		NEUTRON INCREASES →
API 12		API 120
0 — 120		0 — 1200 — 2400

ROKE

BOREHOLE GEOPHYSICS

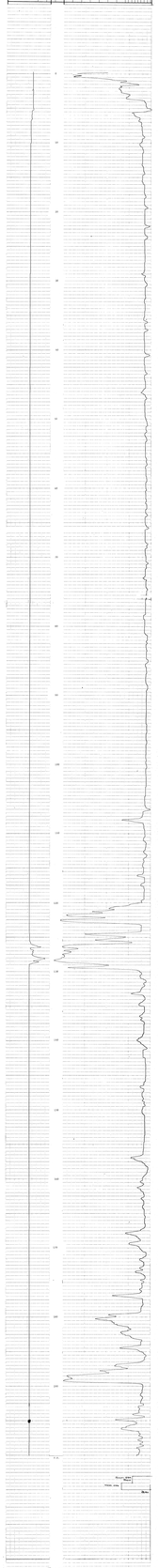
Hole No.	532
Date	8-8-78
Logged by	
Depth Reference	
Log Reference	
Log Scale	1" = 10'
Log Type	Gamma Ray
Log Run	1
Log Time	
Log Speed	30 FT/MIN
Log Sensitivity	1
Log Time Constant	1
Log Offset	
Log Direction	Down
Log Comments	

Casing						Casing Perforations					
Size	Weight	Grade	Top	Bottom	Cement	Top	Bottom	Shots/Ft	Diameter	Date	Comments
6	20		0	20							
4 1/2	9.5		0	1,000							
4 1/2	10.5		1,000	1,100							
4 1/2	9.5		1,100	1,200							
4 1/2	10.5		1,200	1,300							
4 1/2	9.5		1,300	1,400							
4 1/2	10.5		1,400	1,500							

Casing Collar Locator	Casing Collar Locator Comments

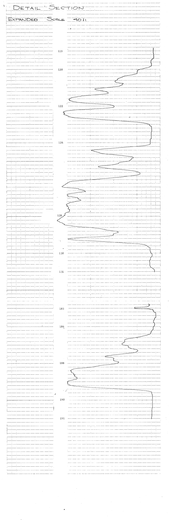
Gamma Ray Calibration	Calibration Comments
0 API 200 API	

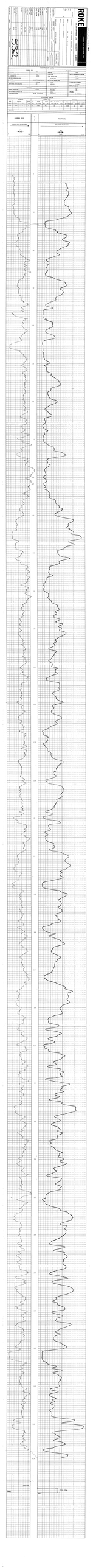
Density Calibration	Density Calibration Comments
1.8 g/cc 3.0 g/cc	

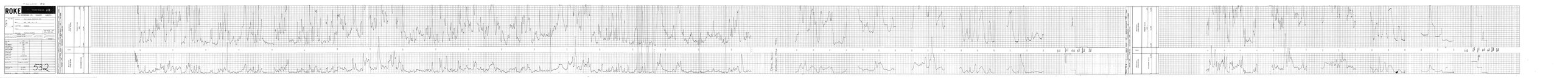


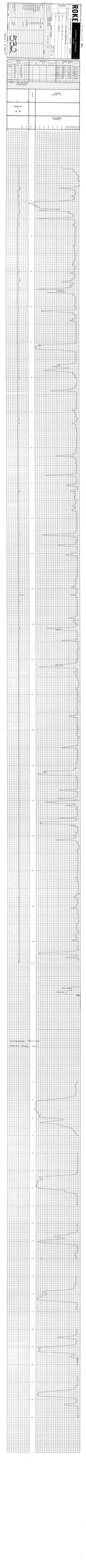
Detail Section

Expanded Scale 40:1




ROKE
332


ROKE
532



ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

PR-Goodrich 81(3)A 81-12

532

Appendix 6 Part 5

FILE NO.	
LSD / SEC / TWP / RGE	W ___ M
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 12
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
Other Services:	DIR DENS-CAL, FBL
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured from	GROUND LEVEL
Above Perm. Datum	
Well Depths Measured from	
K.B.	
CSG	
G.L.	
	METRIC

Run. No.	ONE
Date	22 SEPT 1981
First Reading	227
Last Reading	OM
Footage Logged	227
Depth Reached	227
Depth Driller	227
Casing Roke	5.5
Casing Driller	4.3
Fluid Type	AIR/WATER
Liquid Level	40.5
Min. Diam.	12.7CM
Rm @	179Ω m @ 25°C
Operating Time	1.5 HR
Truck No.	SU # 4
Recorded By	WAHL
Witnessed By	ZSCHACH

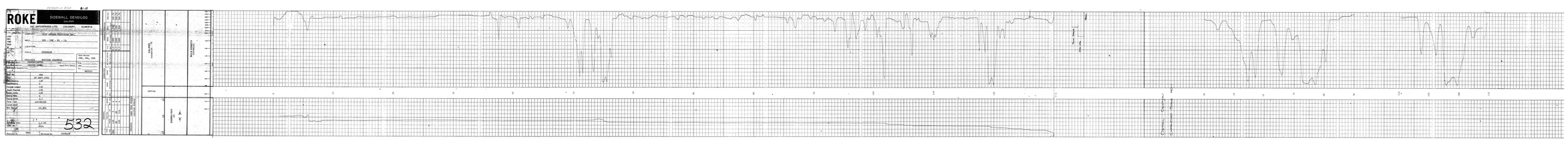
EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	152MM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.		SERIAL NO.	347
INSTRUMENT TRUCK NO.	SU#4	SPACING	38.1
TOOL SERIAL NO.	RGRN 125A010	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	227	40	4	3	100	0L	20	3	1000	0L	190
	40	0	4	3	100	0L	20	3	1000	0L	350

REMARKS


ROKE
SIDEWALL DENSILOG
CALGARY
OIL INTERPRETERS LTD.
CALGARY, ALBERTA
WELL
LOCATION
FIELD
COUNTY
DATE
RUN
DEPTH DRILLED
DEPTH LOGGED
CASING
BIT SIZE
MAX. REC. TEMP.
EQUIPMENT
RECORDED BY
WITNESSED BY
MATRIX
FLUID
DENSITY
PH
RM
RMF
RMC
SOURCE RMF
SOURCE RMC
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE RM @ BHT
BHT
TIME SINCE CIRC.
TIME LOGGED
MAX. REC. TEMP.
EQUIPMENT
RECORDED BY
WITNESSED BY
532
CALIPER
INCHES 6" 16"
GAMMA RAY
0 API 100
SP
MILLIVOLTS
SONIC
DELTA T
μsec/ft 140 40
DENSITY
GRAM/CC 1.95 2.95
NEUTRON
POROSITY
PERCENT 45 -15
Gamma Ray
Caliper
Sonic
Density
Neutron Porosity

ROKE

Well No. 532 Field Kuwait Oil Company (K.S.C.) County Ahmadi Governorate State Kuwait
Location Burgan Other Services
Permanent Datum Ground Level Elevation 0 Log Measured From K.B. 0 Ft. Above Perm. Datum
Drilling Measured From K.B. Date 6-Feb-74 Run No. ONE
Depth-Driller 11,500 Depth-Logger 11,500 Bottom Logged Interval 11,500 Top Logged Interval 0
Type Fluid in Hole SALT GEL Salinity, PPM Cl 120,000 Density 10.0 Level FULL
Max. Rec. Temp. Deg. F. 220 Equip. No. & Location 1 AHMADI Recorded By R. ALLEN Witnessed By

RESISTIVITY (OHM-METERS)		RESISTIVITY (OHM-METERS)
SECONDARY SCALE		PRIMARY SCALE
0 — 11,500	0 — 11,500	0 — 11,500

Well No. 532 Field Kuwait Oil Company (K.S.C.) County Ahmadi Governorate State Kuwait
Location Burgan Other Services
Permanent Datum Ground Level Elevation 0 Log Measured From K.B. 0 Ft. Above Perm. Datum
Drilling Measured From K.B. Date 6-Feb-74 Run No. ONE
Depth-Driller 11,500 Depth-Logger 11,500 Bottom Logged Interval 11,500 Top Logged Interval 0
Type Fluid in Hole SALT GEL Salinity, PPM Cl 120,000 Density 10.0 Level FULL
Max. Rec. Temp. Deg. F. 220 Equip. No. & Location 1 AHMADI Recorded By R. ALLEN Witnessed By

RESISTIVITY (OHM-METERS)
SECONDARY SCALE
0 — 11,500
RESISTIVITY (OHM-METERS)
PRIMARY SCALE
0 — 1,500

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

GQ-Goodrich 81(3)A 81-13

FILE NO.

LSD
SEC
TWP
RGE
W____M

COMPANY GULF CANADA RESOURCES INC.

WELL GDR - DDH - 81 - 13

LOCATION GOODRICH

FIELD LOGGED THROUGH DRILL RODS

PROVINCE BRITISH COLUMBIA

Other Services: DIR DENS-CAL, FBL

Permanent Datum GROUND LEVEL Elev.

Log Measured from GROUND LEVEL Above Perm. Datum

Well Depths Measured from

K.B.
CSG
G.L.
METRIC

Run. No.	ONE
Date	20 SEPT 1981
First Reading	125
Last Reading	0
Footage Logged	125
Depth Reached	125
Depth Driller	130
Casing Roke	4
Casing Driller	3.7
Fluid Type	AIR/WATER
Liquid Level	
Min. Diam.	12.7CM
Rm @	53.7Ω m @ 25°C
Operating Time	1 HR
Truck No.	SU#4
Recorded By	WAHL
Witnessed By	ZSCHACH

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.	125	LOG TYPE	NEUTRON/NEUTRON
DIAMETER	32MM	TOOL MODEL NO.	125
DETECTOR MODEL NO.		DIAMETER	32MM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	102MM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2M	LENGTH	152MM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	347
HOIST TRUCK NO.		SPACING	38.1
INSTRUMENT TRUCK NO.	SU#4	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A010	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	125	0	4	3	100	0L	12	3	1000	0L	100

REMARKS LOGGED THROUGH DRILL RODS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 12 (0 – 120)		NEUTRON INCREASES → API 100 (0 – 1000 – 2000)

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

FOCUSED BEAM LOG

FILE NO.

COMPANY GULF CANADA RESOURCES INC.

WELL GDR - DDH - 81 - 22

FIELD GOODRICH

LOCATION

PROVINCE BRITISH COLUMBIA

Other Services: GRN, DENS-CAL

Permanent Datum GROUND LEVEL Elev.

Log Measured from GROUND LEVEL Above Perm. Datum

Well Depths Measured from GROUND LEVEL

K.B.

CSG

G.L.

METRIC

Run. No.	ONE
Date	17 OCT 1981
First Reading	338.0M
Last Reading	36.6
Footage Logged	301.4
Depth Reached	339.0
Depth Driller	339
Casing Roke	36.6
Casing Driller	36.6
Fluid Type	WATER/MUD
Liquid Level	
Min. Diam.	HQ
Rm @ °C	18.8 @ 25
Operating Time	2 HRS
Truck No.	SU - 4
Recorded By	FAGERNESS
Witnessed By	ZSCHACH

532

Remarks FBL # 6 CURRENT RANGE STD MUDFISH RESISTANCE 1200 OHMS
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 200 OHM/DIV SECONDARY 1000 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE		PRIMARY SCALE 0 2000 4000
0 10000		13000 23000 33000

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

Pt Goodrich 81(3)A

FILE NO.

LSD / SEC / TWP / RGE / W ___ M

COMPANY: GULF CANADA RESOURCES INC.

WELL: GDR - DDH - 81 - 19

LOCATION:

FIELD: GOODRICH

PROVINCE: BRITISH COLUMBIA

Other Services: DIR DENS-CAL, FBL

Permanent Datum: GROUND LEVEL Elev.

Log Measured from: GROUND LEVEL Above Perm. Datum

Well Depths Measured from: GROUND LEVEL

K.B. / CSG / G.L.

METRIC

Run. No.	ONE
Date	9 OCT 1981
First Reading	379.0M
Last Reading	0
Footage Logged	379.0
Depth Reached	379.5
Depth Driller	380
Casing Roke	29.0
Casing Driller	29.0
Fluid Type	WATER/MUD
Liquid Level	FLOWING
Min. Diam.	HQ
Rm @	
Operating Time	2 HRS
Truck No.	SU-4
Recorded By	FAGERNESS
Witnessed By	WILLIAMS

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3.18CM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	3.18CM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10.16CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.0M	LENGTH	15.24CM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	SU-4	SERIAL NO.	347
INSTRUMENT TRUCK NO.	SU-4	SPACING	38.1CM
TOOL SERIAL NO.	RGRN125A010	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	379.0	4	3	500	0	15	3	5000	0	150

REMARKS: LOGGED THROUGH HQ DRILL RODS

GAMMA RAY	DEPTHS	NEUTRON
GAMMA RAY INCREASES → API 15, 0 – 150		NEUTRON INCREASES → API 150, 0 – 1500 – 3000

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO.

COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 20
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA

LSD ___ SEC ___ TWP ___ RGE ___ W ___ M

Other Services: DIR DENS-CAL, FBL

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

K.B. ___ CSG ___ G.L. ___

METRIC

Run. No.	ONE		
Date	8 OCT 1981		
First Reading	247.0M		
Last Reading	0		
Footage Logged	247.0		
Depth Reached	248.0		
Depth Driller	248		
Casing Roke	46.3		
Casing Driller	46.3		
Fluid Type	WATER/MUD		
Liquid Level	14.5		
Min. Diam.	HQ		
Rm @			
Operating Time	1.5 HR		
Truck No.	SU-4		
Recorded By	FAGERNESS	Witnessed By	WILLIAMS

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3.18CM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	3.18CM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10.16CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.0M	LENGTH	15.24CM
		SOURCE MODEL NO.	MRC-N-SS-W
GENERAL		SERIAL NO.	347
HOIST TRUCK NO.	SU-4	SPACING	38.1CM
INSTRUMENT TRUCK NO.	SU-4	TYPE	AmBe
TOOL SERIAL NO.	RGRN 125A010	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	5.0	247.0	4	3	500	0	18	3	5000	0	120
ONE	0	5.0	4	3	500	0	18	3	10000	0	240

REMARKS LOGGED THROUGH HQ DRILL RODS

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

FILE NO.	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 20
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Other Services:	DIR GRN, DENS-CAL
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured from	GROUND LEVEL
Above Perm. Datum	
Well Depths Measured from	GROUND LEVEL
K.B. / CSG / G.L.	
METRIC	
Run. No.	ONE
Date	8 OCT 1981
First Reading	247.0
Last Reading	46.3
Footage Logged	200.7
Depth Reached	248
Depth Driller	248
Casing Roke	46.3
Casing Driller	46.3
Fluid Type	WATER/MUD
Liquid Level	
Min. Diam.	HQ
Rm @ °C	15.6 @ 25
Operating Time	2 HRS
Truck No.	SU-4
Recorded By	FAGERNESS
Witnessed By	WILLIAMS

532

GR - Goodrich 81-20

Remarks FBL # 6 CURRENT RANGE STD MUDFISH RESISTANCE 2000 OHMS.
7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY
PRIMARY 200 OHM/DIV SECONDARY 1000 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE 0 — 10000		PRIMARY SCALE 0 — 2000 — 4000; 13000 — 23000 — 33000

ROKE OIL ENTERPRISES LTD. CALGARY, ALBERTA

SIDEWALL DENSILOG

COMPANY: GULF CANADA RESOURCES INC.

WELL: GGR - DDH - 81 - 20

FIELD:

LOCATION: GOODRICH

PROVINCE: BRITISH COLUMBIA

Permanent Datum: GROUND LEVEL

Log Measured From: GROUND LEVEL

Other Services: GGR, FBL

METRIC

Run No.	ONE
Date	8 OCT 1981
First Reading	247.0
Last Reading	0
Footage Logged	247.0
Depth Reached	248.0
Depth Driller	248.0
Casing Driller	46.3
Casing Rods	46.3
Fluid Type	WATER/MUD
Bit Size	HQ
Operating Time	2 HRS
Truck No.	SU-4
Witnessed By	WILLIAMS

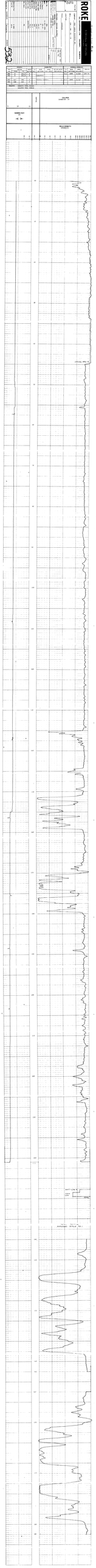
532

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	247.0	8					0.5	5000	2.56R	149.76
ONE	0	247.0	8	CALIPER							
ONE	208	227	4	DETAIL DENSITY				0.5	5000	2.56R	149.76

REMARKS

DENSITY TOOL #422A5

CALIPER TOOL #20A45


ROKE
533

ROKE

OIL ENTERPRISES LTD. CALGARY, ALBERTA

GAMMA RAY NEUTRON LOG

FILE NO	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDH - 81 - 21
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W M	
Permanent Datum	GROUND LEVEL
Log Measured from	GROUND LEVEL
Well Depths Measured from	GROUND LEVEL
Elev. Above Perm. Datum	
K.B. / CSG. / G.L.	
Other Services	DIR DENS-CAL, FBL
	METRIC

Run No.	ONE
Date	13 OCT 1981
First Reading	242.0M
Last Reading	0
Footage Logged	242.0
Depth Reached	245.0
Depth Driller	245
Casing Roke	44.5
Casing Driller	44.5
Fluid Type	WATER/MUD
Fluid Level	16.75
Min Diam.	HQ
Rm @	
Operating Time	1.5 HR
Truck No.	SU-4
Recorded By	FAGERNESS
Witnessed By	ZSCHACH

532

EQUIPMENT DATA

GAMMA RAY		NEUTRON	
RUN NO.	ONE	RUN NO.	ONE
TOOL MODEL NO.		LOG TYPE	NEUTRON/NEUTRON
DIAMETER	3.18CM	TOOL MODEL NO.	
DETECTOR MODEL NO.		DIAMETER	3.18CM
TYPE	SCINTILLATION	DETECTOR MODEL NO.	
LENGTH	10.16CM	TYPE	PROPORTIONAL
DISTANCE TO N. SOURCE	2.0M	LENGTH	15.24CM
GENERAL		SOURCE MODEL NO.	MRC-N-SS-W
HOIST TRUCK NO.	SU-4	SERIAL NO.	347
INSTRUMENT TRUCK NO.	SU-4	SPACING	38.1CM
TOOL SERIAL NO.	RGRN 125 A 010	TYPE	AmBe
		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	API G.R. UNITS PER LOG DIV.	NEUTRON T.C. SEC.	NEUTRON SENS SETTINGS	NEUTRON ZERO DIV. L OR R	API N. UNITS PER LOG DIV.
ONE	0	242.0	4	3	500	0	20	3	5000	0	190

REMARKS: LOGGED THROUGH HQ DRILL RODS

ROKE

FOCUSED BEAM LOG 5 CM 20 CM

OIL ENTERPRISES LTD. CALGARY, ALBERTA

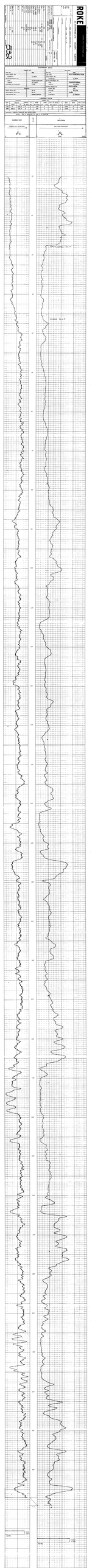
PR-Goodrich 81(3)A 81-21

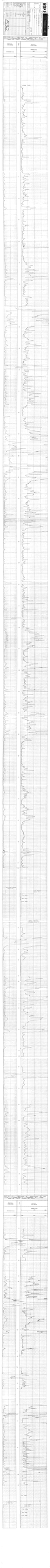
FILE NO.	
COMPANY	GULF CANADA RESOURCES INC.
WELL	GDR - DDE - 81 - 21
LOCATION	
FIELD	GOODRICH
PROVINCE	BRITISH COLUMBIA
LSD / SEC / TWP / RGE / W / M	
Permanent Datum	GROUND LEVEL
Elev	
Log Measured from	GROUND LEVEL
Above Perm. Datum	
Well Depths Measured from	GROUND LEVEL
Other Services	DIR GRN, DENS-CAL,
KB / CSG / GL	
	METRIC
Run No.	ONE
Date	13 OCT 1981
First Reading	241.0M
Last Reading	44.5
Footage Logged	196.5
Depth Reached	242.0
Depth Driller	245
Casing Roke	44.5
Casing Driller	44.5
Fluid Type	WATER/MUD
Liquid Level	
Min. Diam	HQ
Rm @ °C	25.6 @ 25
Operating Time	2 HRS
Truck No.	SU-4
Recorded By	FAGERNESS
Witnessed By	ZSCHACH

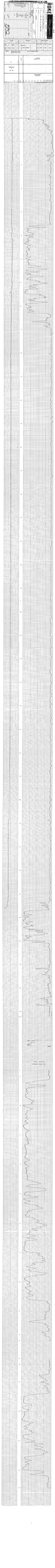
532

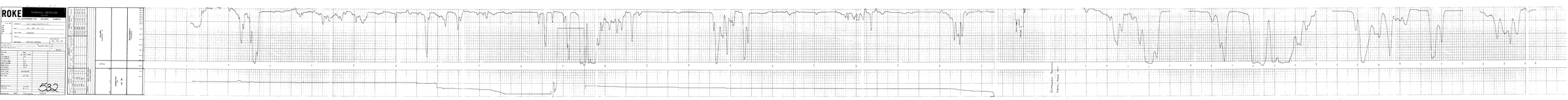
Remarks FBL # 6 CURRENT RANGE STD MUDFISH RESISTANCE 600 OHMS 7 ELECTRODE SONDE 20 CM BEAM WIDTH 100 CM ARRAY PRIMARY 200 OHM/DIV SECONDARY 1000 OHM/DIV

RESISTIVITY (OHM-METERS)	Depths	RESISTIVITY (OHM-METERS)
SECONDARY SCALE		PRIMARY SCALE 0 2000 4000
0 10000		13000 23000 33000


ROKE
GAMMA RAY
SELECTIVE
GAMMA RAY
SELECTIVE
GAMMA RAY
SELECTIVE






ROKE
SIDEWALL DENSILOG
OIL DEVELOPMENTS LTD. CALGARY, ALBERTA
WELL NAME
FIELD
LOCATION
COUNTY
PROVINCE
ELEVATION
DATE
RUN NO.
DEPTH DRILLED
DEPTH LOGGED
CASING
BIT SIZE
MUD TYPE
MUD WEIGHT
VISCOSITY
PH
FLUID LOSS
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE OF RMF
SOURCE OF RMC
RM @ BHT
TIME CIRC. STOPPED
TIME LOGGED
MAX. REC. TEMP.
EQUIP. NO.
LOCATION
RECORDED BY
WITNESSED BY
532

ROKE OIL (1969) LIMITED

CALGARY ALBERTA

532

Well	16-34-27-5 W4M
Field	KNEEHILL
Province	ALBERTA
Location	660 FSL & 660 FEL
Elevation	KB 1144.0 m
Permanent Datum	GROUND LEVEL
Log Measured From	KB 3.0 m Above Perm. Datum
Drilling Measured From	KB
Date	1-Jul-1988
Run No.	ONE
Depth Driller	1200 m
Depth Logger	1199 m
Bottom Logged Interval	1199 m
Top Logged Interval	0 m
Casing Driller	244.5 mm @ 0 m
Casing Logger	244.5 mm @ 0 m
Bit Size	200 mm
Type Fluid in Hole	WATER
Density	1.0
Viscosity	50
Fluid Loss	0
Source of Sample	CIRCULATED
Rm @ Measured Temp	0.2 @ 20 °C
Rmf @ Measured Temp	0.2 @ 20 °C
Rmc @ Measured Temp	0.2 @ 20 °C
Source of Rmf and Rmc	CALCULATED
Rm @ BHT	0.2 @ 20 °C
Time Since Circulation	12 HOURS
Max. Rec. Temperature	20 °C
Equipment Number	2
Location	
Recorded By	D. MACKAY
Witnessed By	

EQUIPMENT Data

GAMMA RAY		NEUTRON	
Run No.	ONE	Run No.	ONE
Tool Model No.	133	Tool Code	NEUTRON/NEUTRON
Source	1000	Tool Model No.	133
Source Model No.		Source	1000
Type	SCINTILLATION	Detector Model No.	
Length	1100m	Type	PROPORTIONAL
Distance to Source	m	Length	1100m
		Source Model No.	NRC 4.55 GR
GENERAL		Serial No.	367
Hoist Truck No.		Spacing	0.3
Mechanic Truck No.	0074		Axial
Tool Serial No.	NONE 1734010	Strength	1 CURIES

LOGGING Data

GAMMA RAY							NEUTRON						
Run	Recor.	Speed	F.S.	Wire	Cable	API to A. units		F.S.	Wire	API to A. units			
No.	From	To	m min.	Sec.	Bottom	Eff. Length	Max. Log Rdg.	sec.	Bottom	Eff. Length	Max. Log Rdg.		
ONE	1173	0	5	0	1199	m			1199	m			

Remarks

GAMMA RAY

GAMMA RAY INCREASES

API Units

0 200

NEUTRON

NEUTRON INCREASES

A. Units

1000 0

1 : 240

Metres

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

200

Metres

ROKE

COMPANY	ROKE OIL (U.K.) LIMITED
WELL	22/30a-ROKE 1
FIELD	
COUNTY, PARISH, BLOCK OR SURVEY	
COMPANY	
SERVICE	
LOCATION	

API NO.	
OTHER SERVICES	
PERMANENT DATUM	
ELEV.	
LOG MEASURED FROM	
DRILLING MEASURED FROM	

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

EQUIPMENT DATA

BOREHOLE RECORD				CASING RECORD			
NO.	BIT SIZE	FROM	TO	NO.	SIZE	WGT.	FROM	TO

CASING DATA

RUN	DATE	CASING	WGT.	GRADE	THREAD	TOP	BOTTOM

LOGGING DISTRICT	
LOGGING ENGINEER	
OPERATING WITNESS	

LOGGING DATA

RUN	DATE	TOOL	TOP	BOTTOM	TOOL	TOP	BOTTOM

RECEIVED	
PLOTTED	
CHECKED	

RECEIVED	
PLOTTED	
CHECKED	

RECEIVED	
PLOTTED	
CHECKED	

REMARKS: SPACE, SPACING AS SHOWN

LOGGING RUN			

GAMMA RAY NEUTRON

GAMMA RAY (API) NEUTRON (NEUTRON)

0 100 0 100

LOGGING SCALE 1/500