FDC CALIBRATION CODING

FDC

1. . . . . MECHANICAL ZERO
2. . . . . RECORDER SENS.
3. . . . . TOOL CAL.#1 P_1=
4. . . . . TOOL CAL.#2 P_2=
5. . . . . LOG POS. P = 2.59 GM/CC ΔP = .015
6. . . . . CALIPER MECHANICAL ZERO
7. . . . . 8" RING.
8. . . . . 12" RING.
9.
10.

GR CALIBRATION CODING

1. MECHANICAL ZERO
1A. ELECTRICAL ZERO
2. RECORDER SENS.
3. MEMORISER SENS.
4. BACKGROUND
5. CALIBRATE - SOURCE IN PLACE.

CALIBRATION DATA

COMPANY HEMATITE PETROLEUM PTY LTD	Rm 0.76 @ 71 °F BHT 281 °F	SCHL. FR 11,932 SCHL. TD 11,983 DRLR TD 11,978
WELL AROO No. 1		Elev:
FIELD WILDCAT		KB 32 DF 31
COUNTY AUSTRALIA STATE TASMANIA		GL -250

5 cm

374139

OR-0339

Enclosure 16

SCHLUMBERGER

CASING COLLAR LOG AND PERFORATING RECORD

COUNTY AUSTRALIA
FIELD or LOCATION WILDCAT
WELL AROO NO.1
COMPANY HEMATITE

COMPANY HEMATITE PETROLEUM PTY.LTD.
WELL AROO NO.1
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA
Location: 39° 47' 30.62" S 145° 26' 51.08" E
Other Services:
Sec. Twp. Rge.

Permanent Datum: M.S.L.; Elev.: 0'
Log Measured From K.B., 32 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 32' D.F. 31' G.L. -250'

Date 20/4/74
Run No. 1FIVE
Depth – Driller
Depth – Logger

DEPTHS BELOW RELATE TO: RADIOACTIVITY LOG MEASUREMENTS: ☐
: SCHLUMBERGER LINE MEASUREMENTS: ☒

CASING COLLARS	
2644'	2683'

PERFORATING DATA

No.Shots	From	To	Gun Type	Gun Size
13	2679'	2676'	EXPENDABLE	2 1/8"

BORE HOLE RECORD

Hole Size	From	To

CASING RECORD

Size	Type	Weight	From	To
13 3/8"		68	282	2979
9 5/8"		47	G.L.	9635

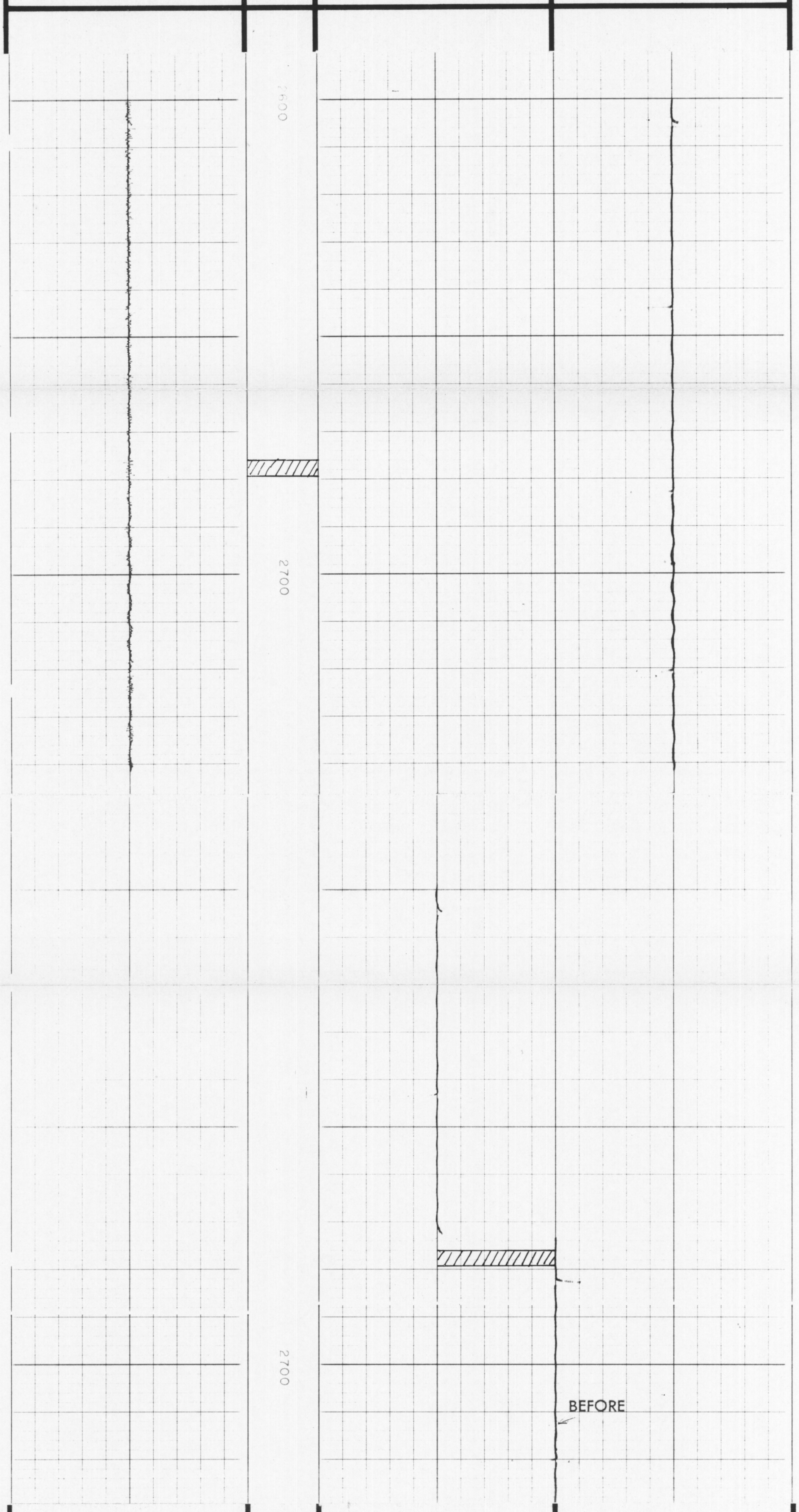
HOLE FLUID TYPE
Nature:
P.S.I./1000':
Viscosity:
Fluid Level: SURFACE

Opr. Rig Time: 2½ HOURS
Truck No. 2080
Location: SAL
Recorded By: HANNINGTON
Witnessed By: WHITE

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

REMARKS CCL-L 3.5 FT. ABOVE TOP SHOT

CASING COLLAR LOG AFTER PERFORATION	DEPTHS	CASING COLLAR LOG AFTER PERFORATION	RECORDING OF GUN POSITION AFTER PERFORATION



CASING COLLAR LOG AFTER PERFORATION	DEPTHS	CASING COLLAR LOG AFTER PERFORATION	RECORDING OF GUN POSITION AFTER PERFORATION

COMPANY HEMATITE PETROLEUM PTY. LTD. Rm ____ @ ____ °F
WELL AROO NO.1
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA

SCHL. TD ____
DRLR TD ____
Elev:
KB 32'
DF 31'
GL -250'

374140

OR-0339

Enclosure 17a

Schlumberger Synergetic Log Systems

Computer Processed Interpretation

CORIBAND
Analysis of Complex Reservoirs

Using the following logs: ISF/SONIC-CNT-FDC/GR

COMPANY HEMATITE PETROLEUM PTY.LTD
WELL AROO 1
FIELD WILDCAT
COUNTRY AUSTRALIA **STATE** TASMANIA
DATE PROCESSED JUNE 28,74 **JOB REFERENCE No.** CPI-2047
LOCATION 39° 47' 30.62" S
145° 26' 51.08" E
ELEV. **KB** 32 DF 31 GL-250

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

This SYNERGETIC LOG presentation was computed using CORIBAND— Analysis of Complex Lithologies

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording	Engineer: HANNINGTON	Location: SAL	
Office Recording	Comp. Center: CLIC	Program No: CORIBAND	Analyst: E. FÖRSTER
Mud Measurements	Rm 0.76 @ 71 ° F	Rmf 0.50 @ 68 ° F	BHT 261 °F

COMPUTATION PARAMETERS

Depth Interval From	Depth Interval To	Rw	Rmf	Rcl	Δtcl	ØNcl	ρbcl	ρh	T°		
10553	10336	.23	.15	9.6		129.	2.65	.8	239		
10336	10060	.23	.15	13.		26.	2.66	.8	236		
10060	9650	.23	.157	12.		29.	2.65	.8	232		

Remarks REGARD WITH DISCRETION THOSE RESULTS IN RUGOSE OR CAVED HOLE

Integrated Porosity or Hydrocarbons : Distance between pips is equal to 1 FT of 100 % porosity or hydrocarbons in place.

DEPTH	FORMATION CHARACTERISTICS	WATER SATURATION	POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS BY VOLUME
(FT)	Secondary Porosity 0 % 25	100 % 0	Hydrocarbon ▨ Water ☐ 50 % 0	Clay ▤ Matrix ▨ Porosity ☐ 100 % 0
	Average Grain Density 2.5 gm/cc 3.0	DIFFERENTIAL CALIPER (Caliper — Bit Size) −4 0 inches 12		
	Integrated Porosity Integrated Hydrocarbons			

374141

OR-0339

Enclosure 17b

Schlumberger
Synergetic Log Systems

Computer Processed Interpretation

Using the following logs:
ISF / SONIC, PML, FDC/CNL

COMPANY HEMATITE PETROLEUM PTY. LTD
WELL AROO N° 1
FIELD WILDCAT
COUNTRY AUSTRALIA STATE TASMANIA
DATE PROCESSED APRIL 25,74 JOB REFERENCE No. CPI - 1912
LOCATION LAT 39° 47' 30.62" S
LON 145° 26' 51.08" E
ELEV. KB 32' DF 31' GL -250'

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

This SYNERGETIC LOG presentation was computed using
CORIBAND— Analysis of Complex Lithologies

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording	Engineer: HANNINGTON	Location : SAL		
Office Recording	Comp. Center: CLIC	Program No: CORIBAND (08-BC-11)	Analyst : D. BERGT	
Mud Measurements	Rm .29 @ 204 °	Rmf .22 @ 204 °	BHT 204 °	

COMPUTATION PARAMETERS

Depth Interval From	Depth Interval To	Rw	Rmf	Rcl	Δtcl	ØNcl	ρbcl	ρh	T°		
9678.	9250.	.19	.22	6	-	28	2.68	.8	204		
9250.	8925.	.19	.23	7	-	32	2.66	.8	199		
8925.	8400.	.066	.23	8	-	33	2.60	.8	193		
8400.	8000.	.07	.24	10	-	32	2.56	.8	188		

Remarks

Integrated Porosity or Hydrocarbons : Distance between pips is equal to 1 FT of 100 % porosity or hydrocarbons in place.

DEPTH	FORMATION CHARACTERISTICS	WATER SATURATION	POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS BY VOLUME
(FT)	Secondary Porosity 0 % 25	100 % 0	Residual Moveable Hydrocarbon Water 50 % 0	Clay Matrix Porosity 100 % 0
	Average Grain Density 2.5 gm/cc 3.0	DIFFERENTIAL CALIPER (Caliper — Bit Size) -4 0 inches 12		
	Integrated Porosity Integrated Hydrocarbons			

37442

OR-0339

Enclosure No

Schlumberger
Synergetic Log Systems

Computer Processed Interpretation

NOTE:
SPECIAL PROCESSING ON CLIENT REQUEST

Using the following logs : ISF/SONIC - CNT - FDC/GR

COMPANY	HEMATITE PETROLEUM PTY. LTD.
WELL	AROO 1
FIELD	WILDCAT
COUNTRY	AUSTRALIA **JOB REFERENCE No** 1912 A
DATE PROCESSED	12-8-74 **DATE LOGGED**
LOCATION	39° 47' 30.62" S 145° 26' 51.08" E
ELEV.	**KB** 32 **DF** 31 **GL** -250

FOLD HERE The well name, location and borehole reference data were furnished by the customer

This **SYNERGETIC LOG** presentation was computed using

CORIBAND – Analysis of Complex Lithologies

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording	**Engineer :**	**Location :**	
Office Recording	**Comp. Center : CLIC**	**Program No :**	**Analyst :**
Mud Measurements	**Rm** @ °	**Rmf** @ °	**BHT**

COMPUTATION PARAMETERS

Depth Interval From	Depth Interval To	Rw	Rmf	Rcl	Δtcl	Ø Ncl	ρbcl	ρh	T°	
		SPECIAL PROCESSING ON CLIENT REQUEST								

Remarks

Integrated Porosity or Hydrocarbons : Distance between pips is equal to ______ of 100 % Porosity or Hydrocarbons in place.

DEPTH	FORMATION CHARACTERISTICS	WATER SATURATION	POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS BY VOLUME
( )	Secondary Porosity 0 % 25 Average Grain Density 2.5 gm/cc 3.0 Integrated Porosity Integrated Hydrocarbons Permeability Index 10⁴ 10³ 10² 10 1 .1	100 % 0 DIFFERENTIAL CALIPER (Caliper – Bit Size) -4 0 inches 12	Residual / Moved Hydrocarbon, Water % 0	Clay, Matrix, Porosity 100 % 0

5 cm

5 cm

37443

OR-0339

Enclosure 180

Schlumberger

PROXIMITY LOG-MICROLOG
(WITH CALIPER)

COUNTY AUSTRALIA
FIELD or LOCATION WILDCAT
WELL AROO No.1.
COMPANY HEMATITE

COMPANY HEMATITE PETROLEUM PTY. LTD.
WELL AROO No.1.
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA
LOCATION 39° 47' 30.62" S 145° 26' 51.08" E
Sec. Twp. Rge.
Other Services: ISF/SCT, HDT, CNL/FDC/GR, CIS, CST, FIT

Permanent Datum: MSL Elev. 0
Log Measured From KB 32 Ft. Above Perm. Datum
Drilling Measured From KB
Elev.: K.B. 32' D.F. 31' G.L. -250

Date	27-3-74			
Run No.	ONE			
Depth—Driller	9686'			
Depth—Logger	9686'			
Btm. Log Interval	9685'			
Top Log Interval	2988'			
Casing—Driller	13 3/8 @ 2979'	@	@	@
Casing—Logger	2988			
Bit Size	12 1/4"			
Type Fluid in Hole	LIGNOSULPH			
Dens. | Visc.	9.8 | 55			
pH | Fluid Loss	9.9 | 5.6 ml	ml	ml	ml
Source of Sample	FLOWLINE			
R_m @ Meas. Temp.	0.82 @ 75 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	0.53 @ 73 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	0.96 @ 72 °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	PRESS | PRESS			
R_m @ BHT	0.27 @ 223 °F	@ °F	@ °F	@ °F
Time Since Circ.	8 HOURS			
Max. Rec. Temp.	223 °F	°F	°F	°F
Equip. | Location	2080 | SAL			
Recorded By	HANNINGTON			
Witnessed By	HODGSON			

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES		
Date | Sample No.		
Depth - Driller		
Type Fluid in Hole		
Dens. | Visc.		
ph | Fluid Loss	ml	ml
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} | R_{mc}		
R_m @ BHT	@ °F	@ °F
R_{mf} @ BHT	@ °F	@ °F
R_{mc} @ BHT	@ °F	@ °F

SCALE CHANGES			
Type Log	Depth	Scale Up Hole	Scale Down Hole
PML			

EQUIPMENT DATA	
Run No.	TWO
Panel No.	
Cart No.	
Sonde No.	
TTR No.	
Speed-F.P.M.	

REMARKS
Service Order No. -
API Serial No. -

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

MICRO-RESISTIVITY OHMS — M²/M	DEPTHS	RESISTIVITY OHMS — M²/M
10" CALIPER 20" MICRO NORMAL 2" 5 0 MICRO INVERSE 1" x 1" 5 0	2"	PROXIMITY LOG 0.2 1.0 10 100 1000 2000
CALIPER HOLE DIAM. IN INCHES 10" 20"		5 cm

CALIPER HOLE DIAMETER IN INCHES 10" 20"	2"	
MICRO INVERSE 1" x 1" 5 0		
MICRO NORMAL 2" 5 0		PROXIMITY LOG 0.2 1.0 10 100 1000 2000
MICRO-RESISTIVITY OHMS — M²/M	DEPTHS	RESISTIVITY OHMS — M²/M

COMPANY HEMATITE PETROLEUM PTY. LTD.
WELL AROO No.1.
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA

SCHL. FR 9685'
SCHL. TD 9686'
DRLR TD 9686'
Elev:
KB 32'
DF 31'
GL -250

5 cm

374144

OR-0339

Enclosure 18b

Schlumberger

PROXIMITY LOG-MICROLOG
(WITH CALIPER)

COUNTY AUSTRALIA
FIELD or LOCATION WILDCAT
WELL AROO No.1.
COMPANY HEMATITE

COMPANY HEMATITE PETROLEUM PTY. LTD.
WELL AROO No.1.
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA

LOCATION
39° 47' 30.62" S
145° 26' 51.08" E
Sec. Twp. Rge.

Other Services:
ISF/SCT,HDT
CNL/FDC/GR
CIS,CST,FIT

Permanent Datum: MSL, Elev. 0
Log Measured From KB, 32 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 32'
D.F. 31'
G.L. -250

Date	27-3-74			
Run No.	ONE			
Depth—Driller	9686			
Depth—Logger	9686			
Btm. Log Interval	9685			
Top Log Interval	2988			
Casing—Driller	13 3/8 @ 2979	@	@	@
Casing—Logger	2988'			
Bit Size	12¼"			
Type Fluid in Hole	LIGNOSULPH			
Dens. | Visc.	9.8 | 55			
pH | Fluid Loss	9.9 | 5.6 ml	ml	ml	ml
Source of Sample	FLOWLINE			
Rm @ Meas. Temp.	0.82 @ 75 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	0.53 @ 73 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	0.96 @ 72 °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	PRESS | PRESS			
Rm @ BHT	0.27 @ 223 °F	@ °F	@ °F	@ °F
Time Since Circ.	8 HOURS			
Max. Rec. Temp.	223 °F	°F	°F	°F
Equip. Location	2080 | SAL			
Recorded By	HANNINGTON			
Witnessed By	HODGSON			

The well name, location and borehole reference data were furnished by the customer.

FOLD HERE

CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES

Date | Sample No.		
Depth - Driller		
Type Fluid in Hole		
Dens. | Visc.		
ph | Fluid Loss	ml	ml
Source of Sample		
Rm @ Meas. Temp.	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F
Source: Rmf | Rmc		
Rm @ BHT	@ °F	@ °F
Rmf @ BHT	@ °F	@ °F
Rmc @ BHT	@ °F	@ °F

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
PML			

EQUIPMENT DATA

Run No.	TWO
Panel No.	
Cart No.	
Sonde No.	
TTR No.	
Speed-F.P.M.	

REMARKS
Service Order No. -
API Serial No. -

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300
7400
7500
7600
7700
7800
7900
8000
8100
8200
8300
8400
8500
8600
8700
8800
8900

10" 20'

CALIPER
HOLE DIAMETER IN INCHES

5 MICRO INVERSE 1" x 1" 0

5 MICRO NORMAL 2" 0

MICRO- RESISTIVITY
OHMS – M²/M

5"

DEPTHS

PROXIMITY LOG

0.2 1.0 10 100 1000 2000

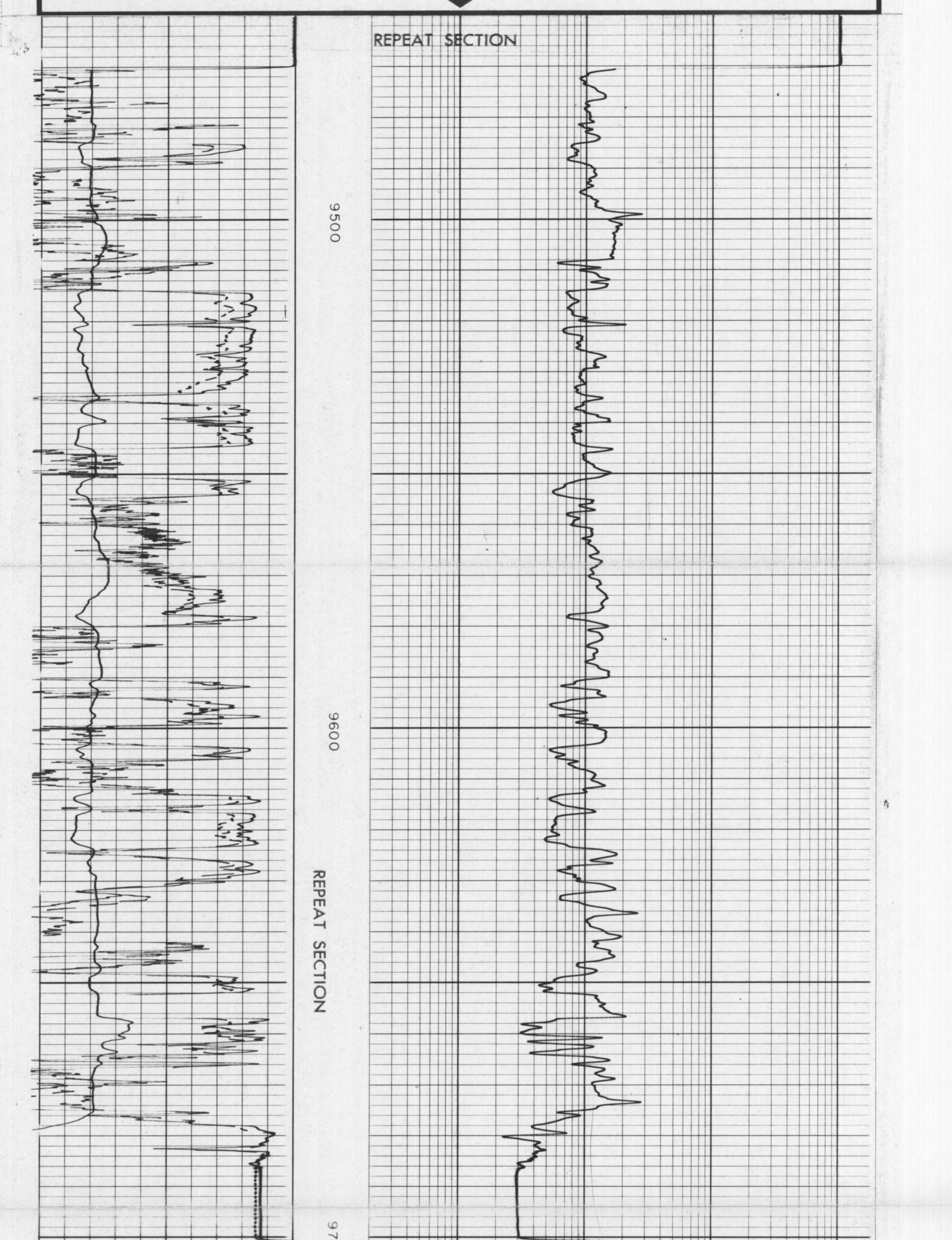
RESISTIVITY
OHMS – M²/M

COMPANY HEMATITE PETROLEUM PTY. LTD.
WELL AROO No.1.
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA

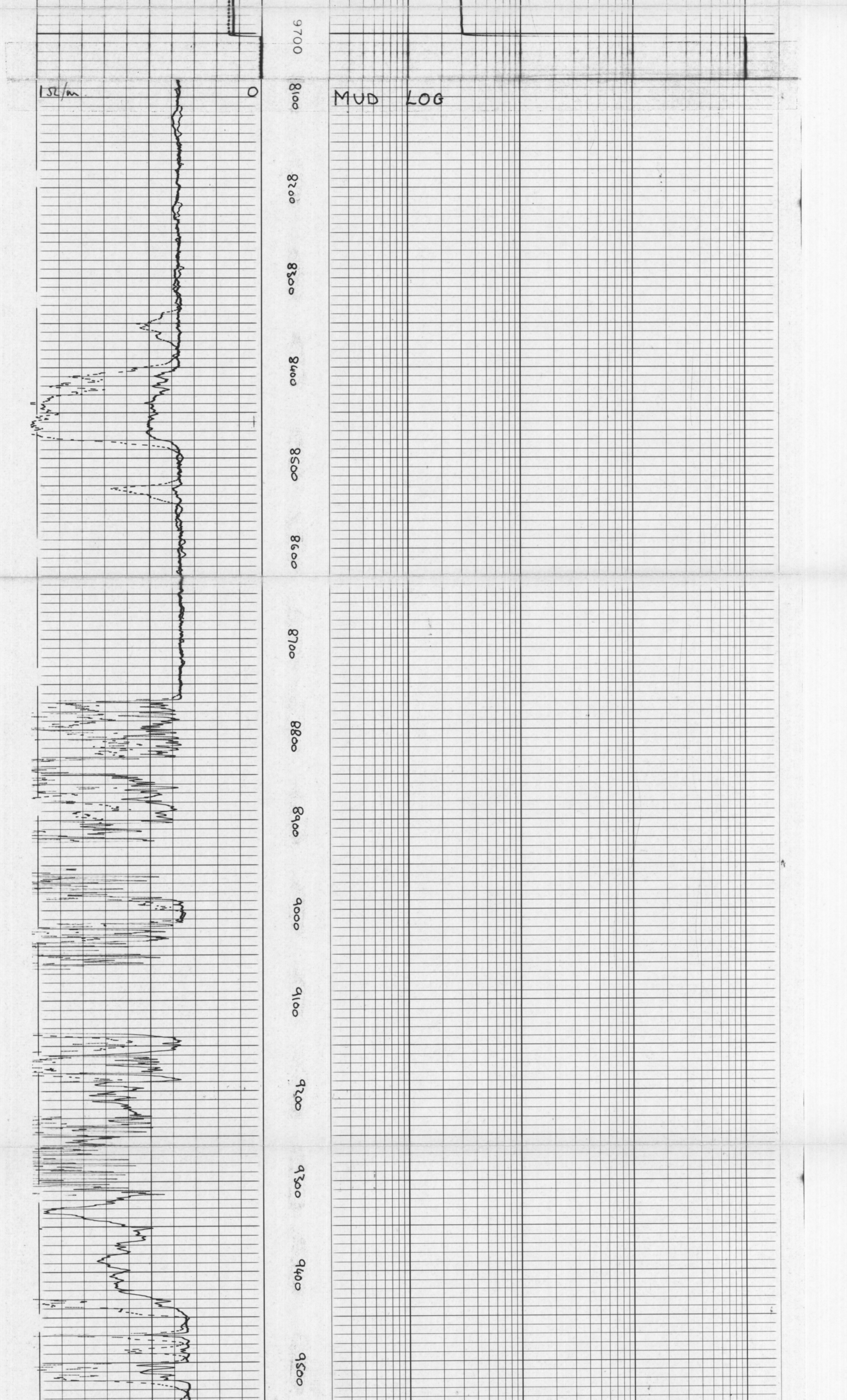
SCHL. FR 9685
SCHL. TD 9686
DRLR TD 9686
Elev:
KB 32'
DF 31'
GL-250'

CALIBRATION DATA

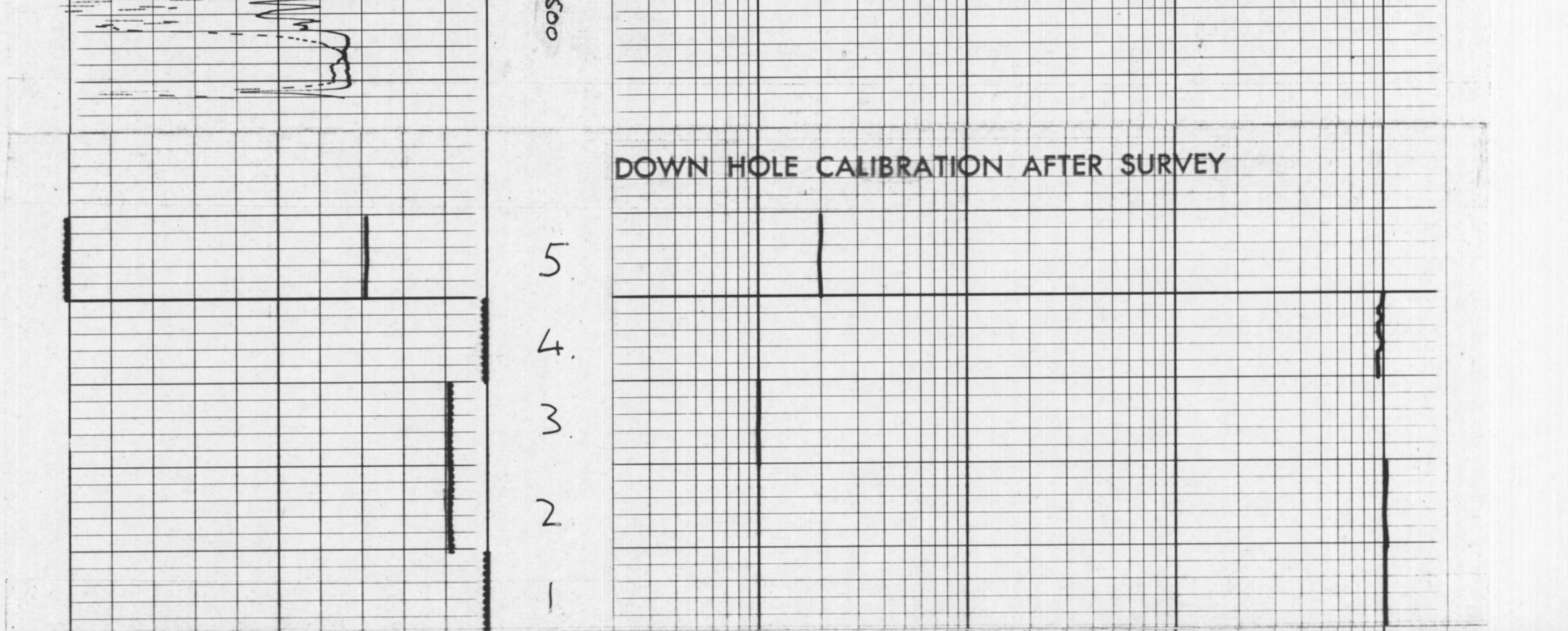
REPEAT SECTION



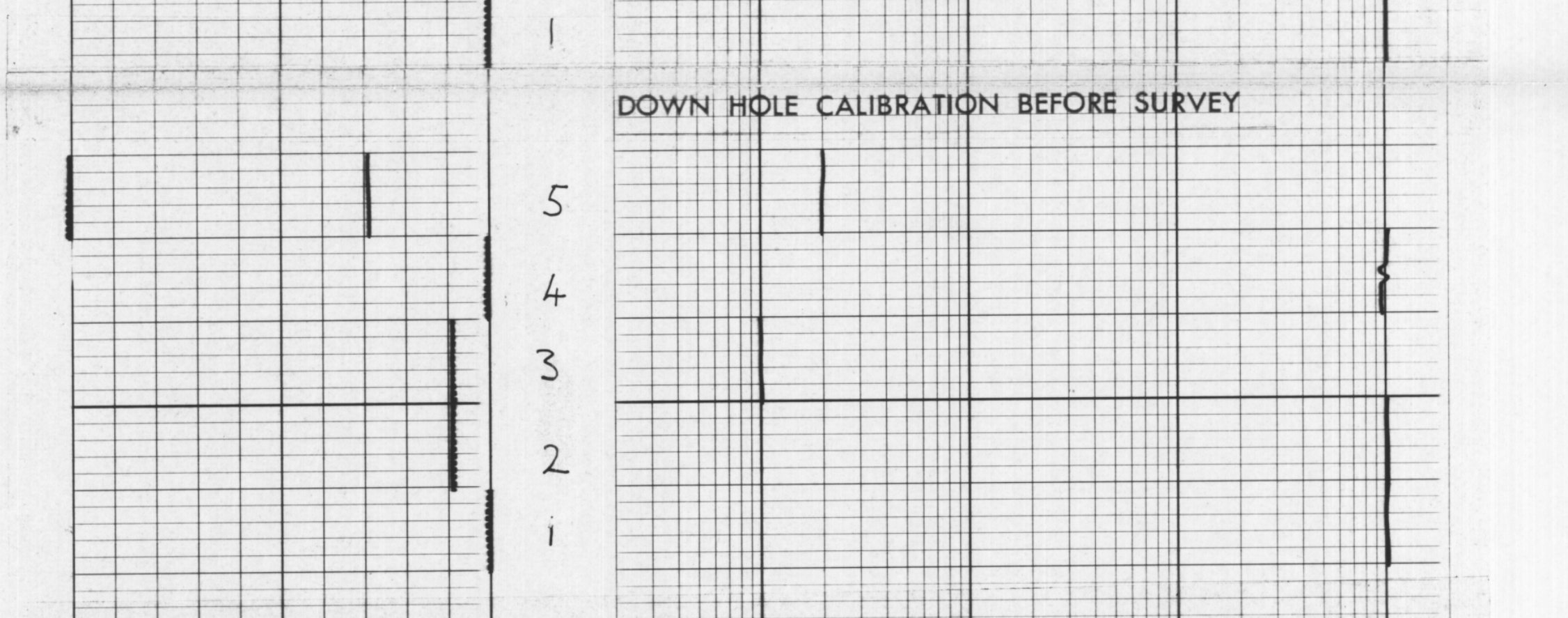
MUD LOG

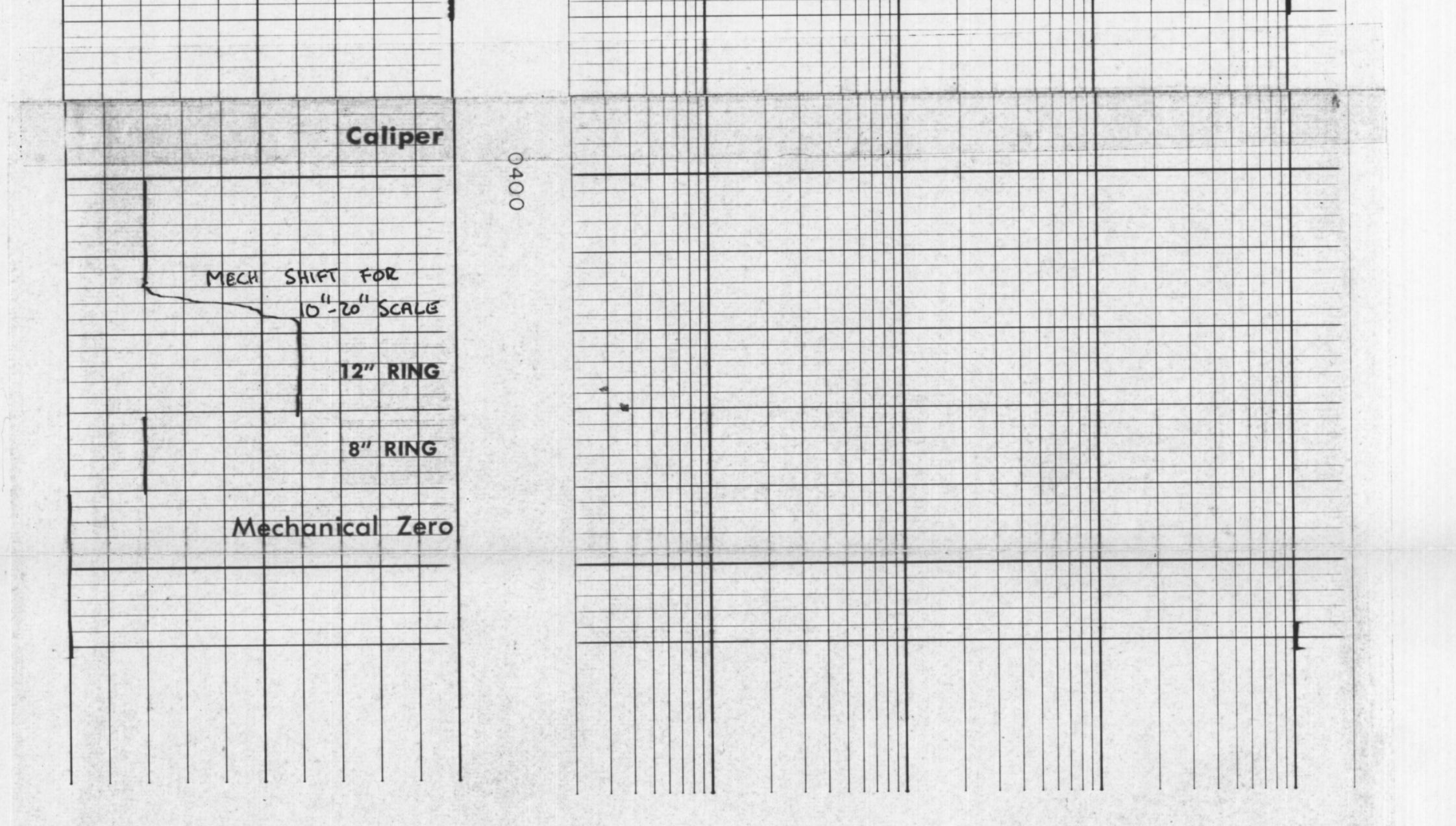


DOWN HOLE CALIBRATION AFTER SURVEY



DOWN HOLE CALIBRATION BEFORE SURVEY





PML CALIBRATION CODING
1) Mechanical zero.
2) 1000 } PANEL CALIBRATION.
3) 1
4) 1000 Ω/m. Elec zero.
5) 2 Ω/m Calibrate.

CALIBRATION DATA

COMPANY HEMATITE PETROLEUM PTY. LTD.
WELL AROO No.1.
FIELD WILDCAT
COUNTY AUSTRALIA STATE TASMANIA

SCHL. FR 9685
SCHL. TD 9686
DRLR TD 9686
Elev:
KB 32'
DF 31'
GL-250

5 cm