

MEASURED DEPTH MICROLOG

COMPANY				PARAMOUNT RESOURCES LTD.			
WELL				PARA ET AL CAMERON L40			
FIELD				CAMERON HILLS			
PROVINCE				NORTHWEST TERRITORIES			
COUNTRY				CANADA			
LOCATION				300L406010117300			
				COMPACT		FINAL PRINT	
LSD	SEC	TWP	RGE	Other Services		PHOTO DENSITY	
				ARRAY INDUCTION		DUAL SPACED NEUTRON	
API Number				COMPENSATED SONIC			
Permit Number 2045							
Permanent Datum OUND LEVEL, Elevation 684.70 metres				Elevations:			
Log Measured From 5.4 Mabove Permanent Datum				KB 690.10 metres			
Drilling Measured From KELLY BUSHING				DF 684.70 metres			
Date	24-JAN-2007						
Run Number	1						
Depth Driller	1453.00			metres			
Depth Logger	1453.30			metres			
First Reading	1440.70			metre			
Last Reading	1280.00			metre			
Casing Driller	425.00			metres			
Casing Logger	425.10			metres			
Bit Size	200.00			mm			
Hole Fluid Type	GELCHEM						
Density / Viscosity	1110.0 kg/M3			85.00 sec/L			
PH / Fluid Loss	10.00			13.00 ml/30Min			
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.60 @ 25.0			ohm-m			
Rmf @ Measured Temp	0.41 @ 25.0			ohm-m			
Rmc @ Measured Temp	0.83 @ 25.0			ohm-m			
Source Rmf / Rmc	PRESS			FILTER			
Rm @ BHT	0.40 @ 48.0			ohm-m			
Time Since Circulation	6 HRS						
Max Recorded Temp	48.00			deg C			
Equipment Name	3424						
Equipment / Base	QUINT			GPR			
Recorded By	M. SURKA / M. BONNELL						
Witnessed By	B. POWELL						
CIRC. STOP	12.45 JAN 24			Last Line			

BOREHOLE RECORD

Last Edited: 24-JAN-2007 18:55

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	425.00
200.000	425.00	1453.00

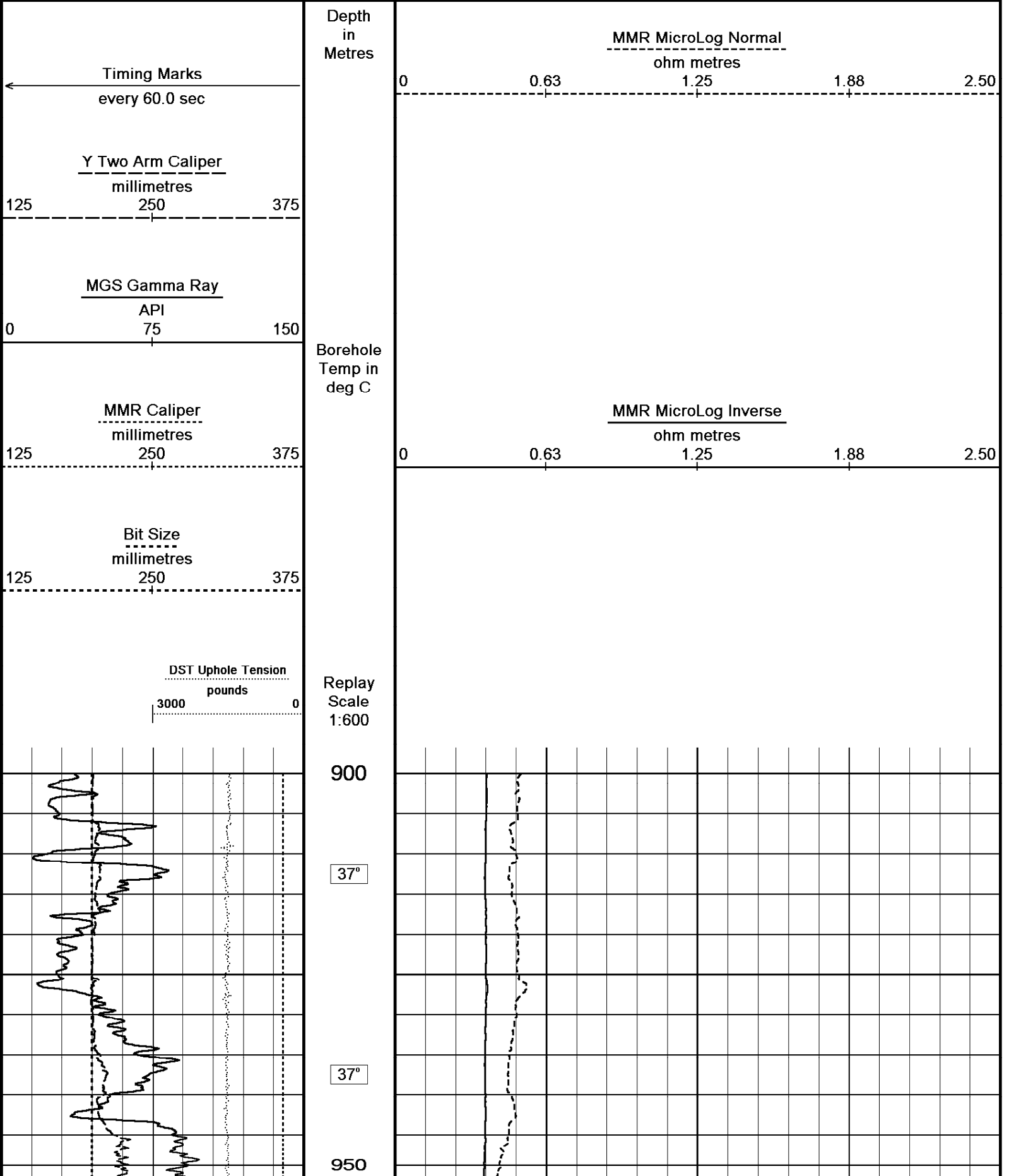
CASING RECORD

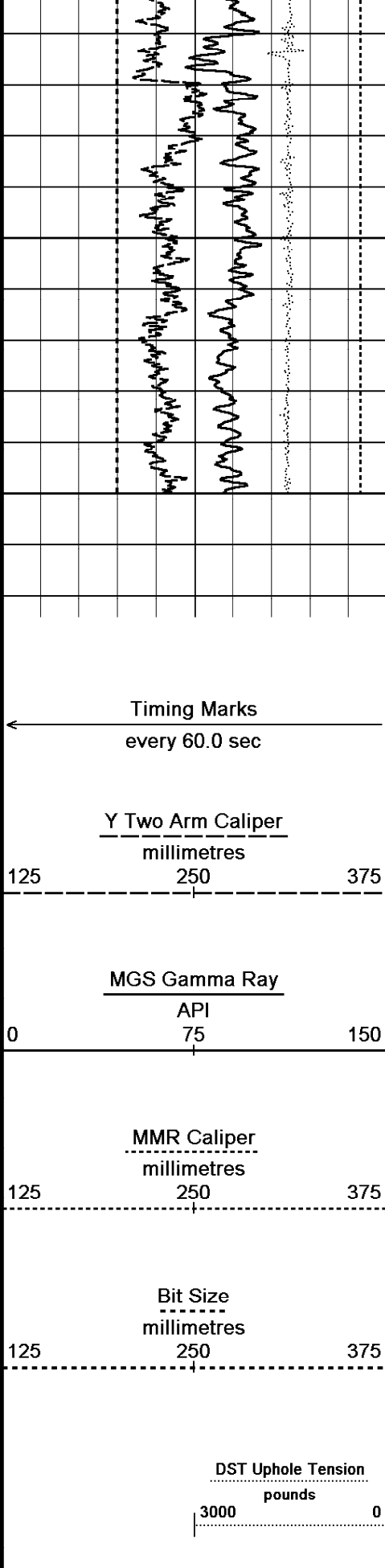
Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight pounds/ft
SURFACE	219.100	0.00	425.00	24.00

REMARKS

- 1) SOFTWARE ISSUE: WLS 7.01.0195
- 2) CUSTOMER SCALES AND INTERVALS LOGGED.
- 3) MAI, MSS, MPD, MDN, MMR, ISC, MGS, MTC, MCG RAN IN COMBINATION.
- 4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
MDN: DUAL NEUTRON BOWSPRING
MTC: ONE SIX-LEAF CENTRALIZER
MSS: THREE 25.4 MM STANDOFFS
- 5) SAP# 4145923 # FIELD PRINTS = 2
- 6) RIG: PD 220
- 7) HOLE_CEMENT VOLUMES CALCULATED USING DENSITY CALIPER AND TWO ARM CALIPER IN COMBINATION :
HOLE VOLUME = 39.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 23.8 CU.M
- 8) SONIC FREE PIPE SIGNAL FOUND FROM 305-318M.
- 9) MAXIMUM DEVAITION OF 12.3 DEGREES AT 1230.7 M

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 wilful negligence on our part, be liable or responsible for any





38°

38°

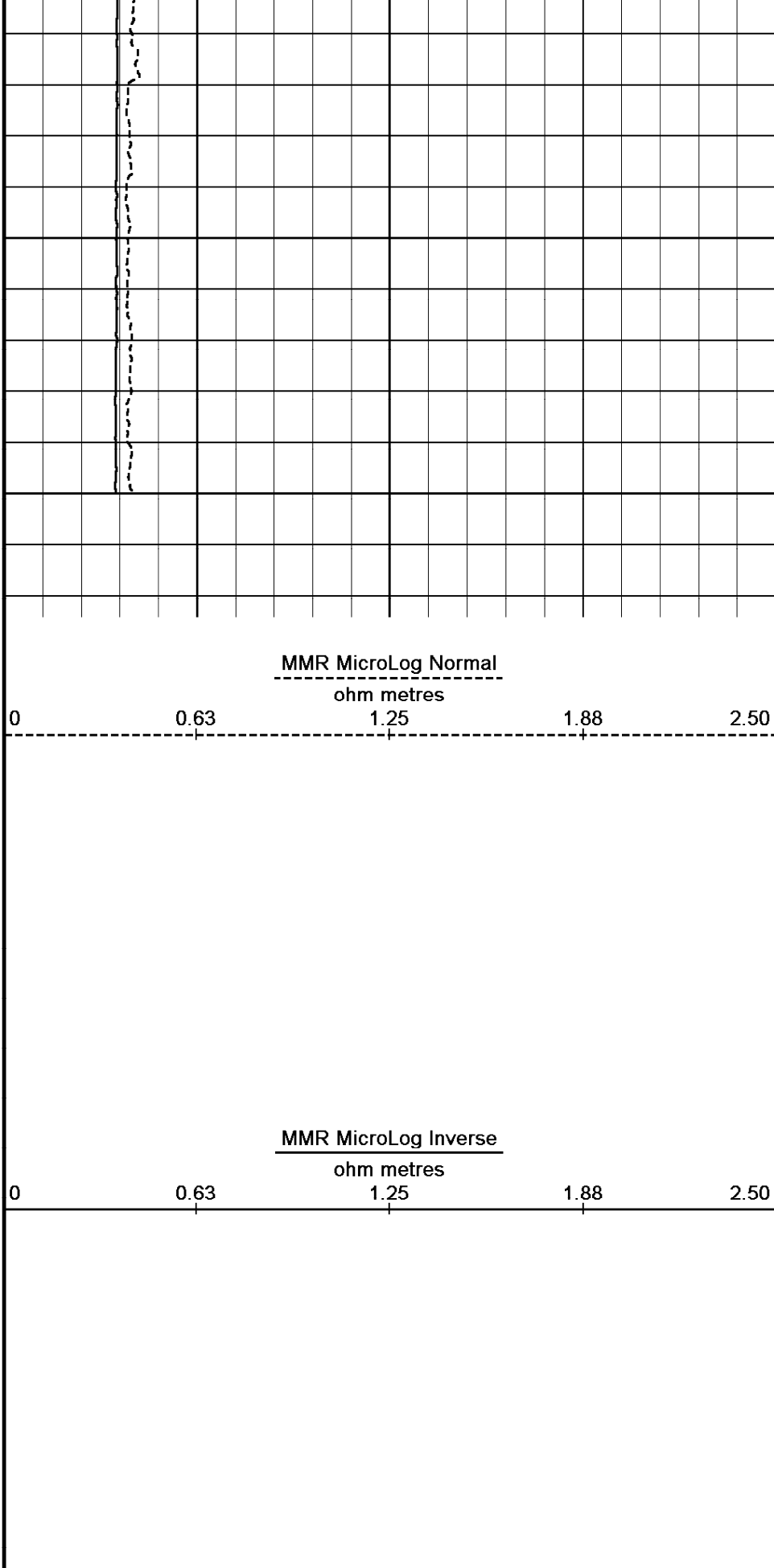
1000

1011

Depth
in
Metres

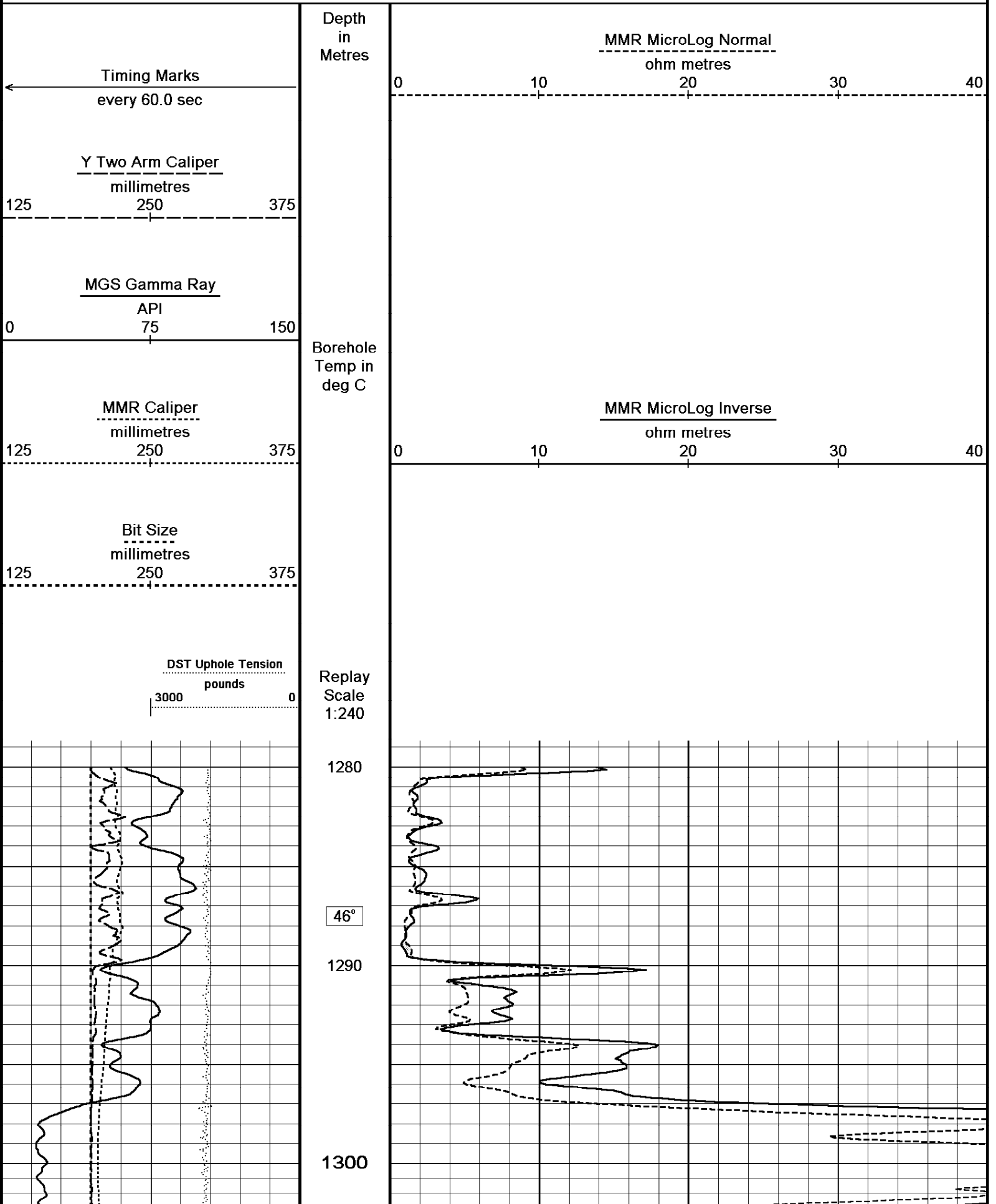
Borehole
Temp in
deg C

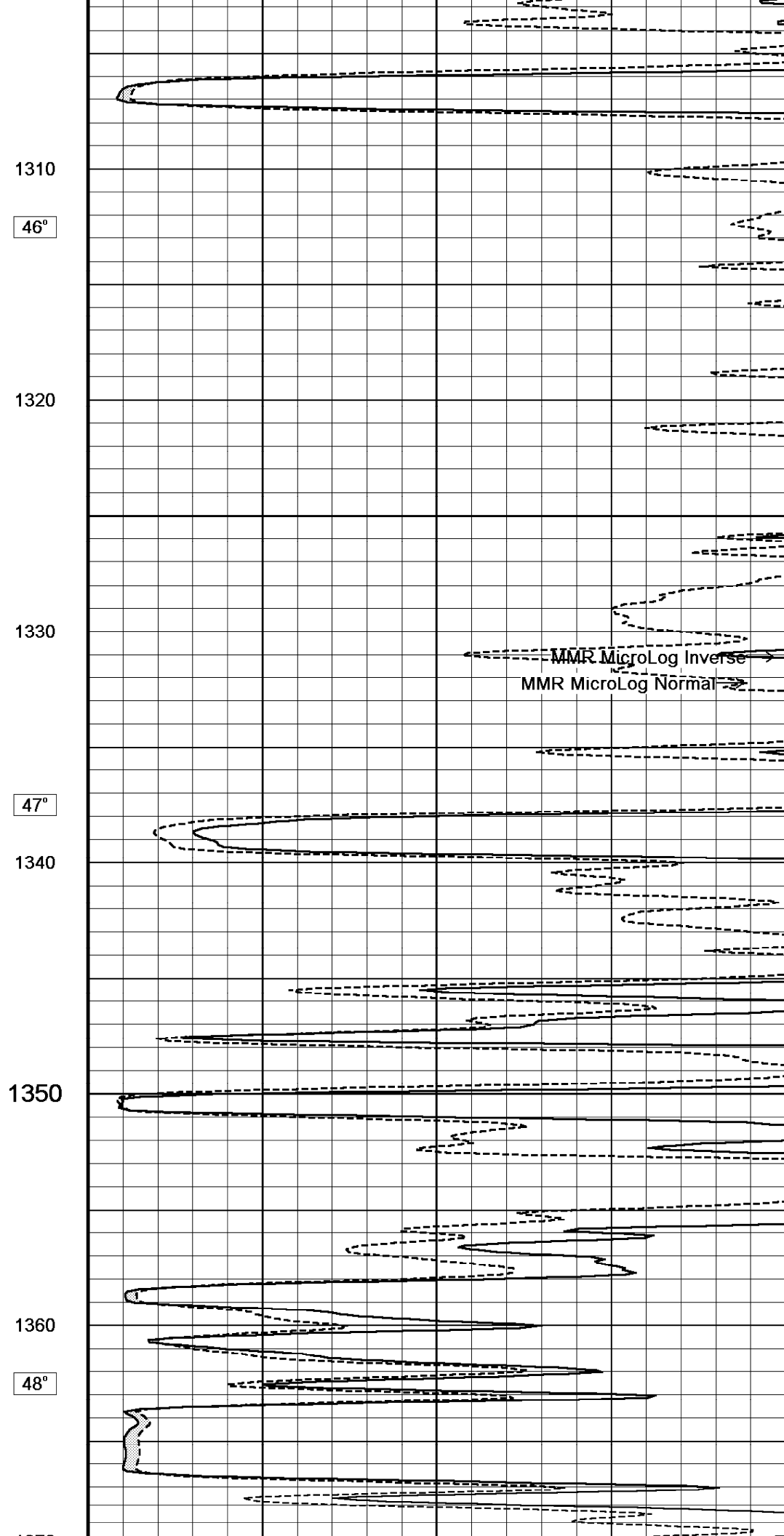
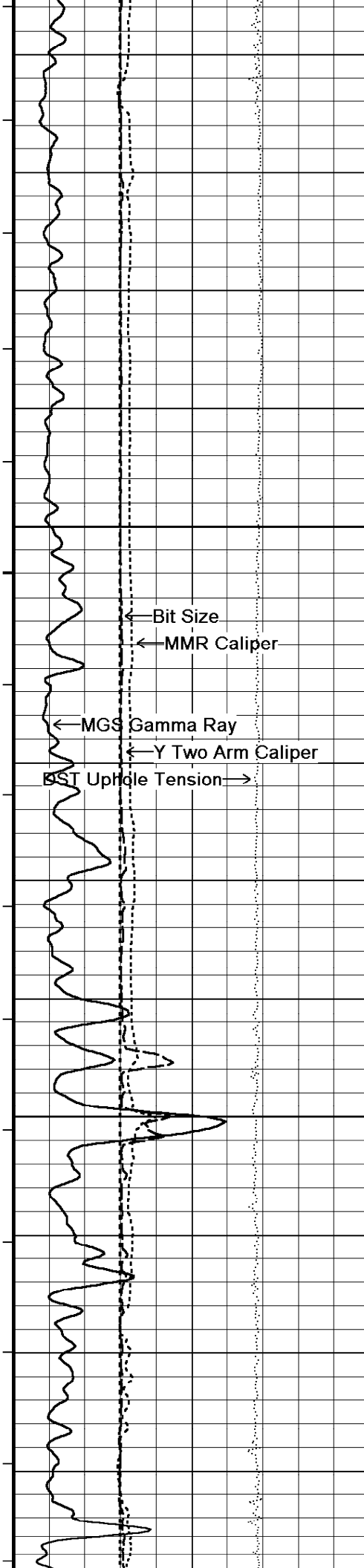
Replay
Scale
1:600



Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\DOCUME~1\murraytm\LOCALS~1\Temp\Precision PreView\40 SPLICE_MAIN.dta
System Versions: Processed with 7.01.0195 Plotted with 7.02.0256

Plotted on 25-JAN-2007 03:16
Recorded on 24-JAN-2007 18:58







1370

1380

48°

1390

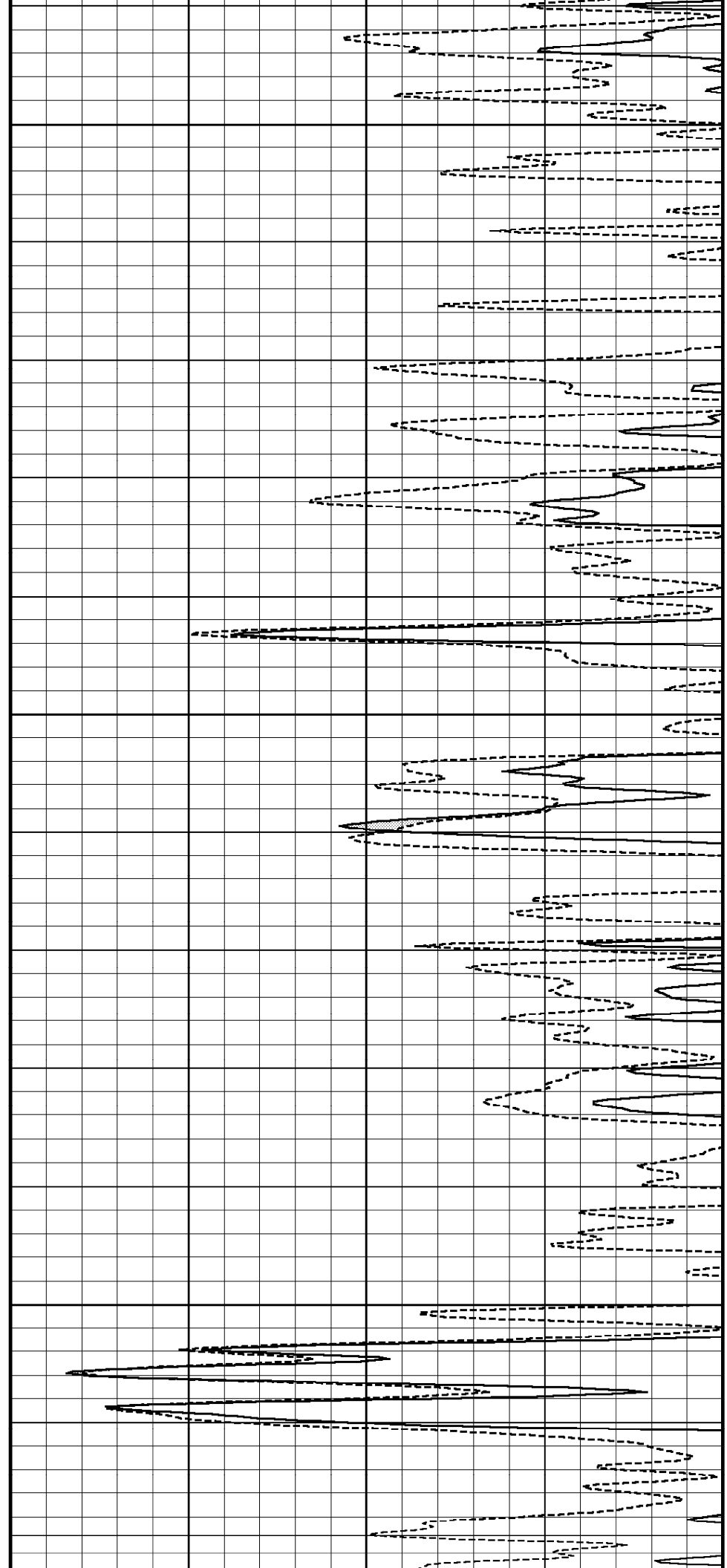
1400

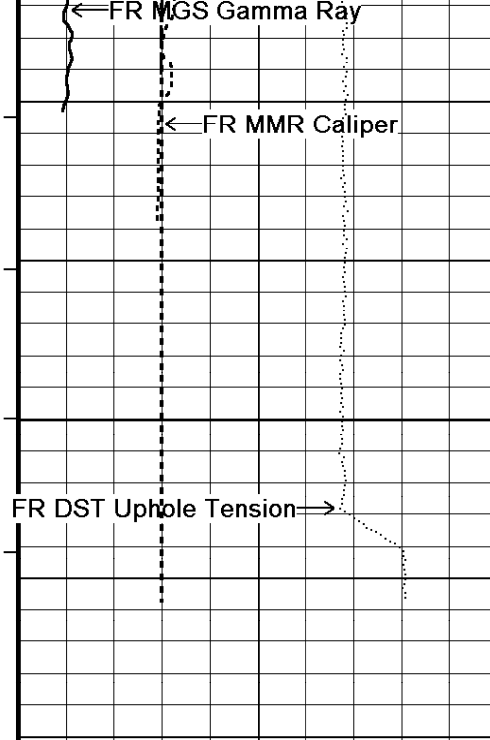
1410

48°

1420

1430

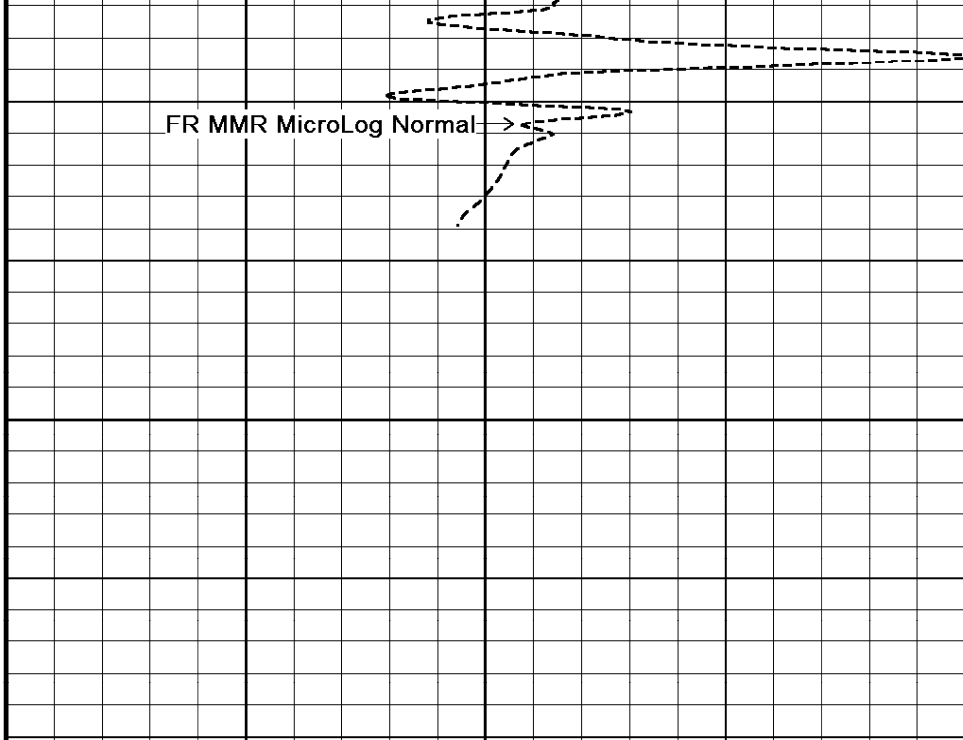




1440

1450

1460
Depth
in
Metres



Timing Marks
every 60.0 sec

Y Two Arm Caliper
millimetres
125 250 375

MGS Gamma Ray
API
0 75 150

MMR Caliper
millimetres
125 250 375

Bit Size
millimetres
125 250 375

DST Uphole Tension
pounds
3000 0

Borehole
Temp in
deg C

Replay
Scale
1:240

MMR MicroLog Normal
ohm metres
0 10 20 30 40

MMR MicroLog Inverse
ohm metres
0 10 20 30 40

Depth Based Data - Maximum Sampling Increment 10.0cm

Filename: C:\DOCUME~1\murraytm\LOCALS~1\Temp\Precision PreView\L40 SPLICE_MAIN.dta

System Versions: Processed with 7.01.0195 Plotted with 7.02.0256

Plotted on 25-JAN-2007 03:16

Recorded on 24-JAN-2007 18:58



MAIN LOG 1:240





REPEAT SECTION

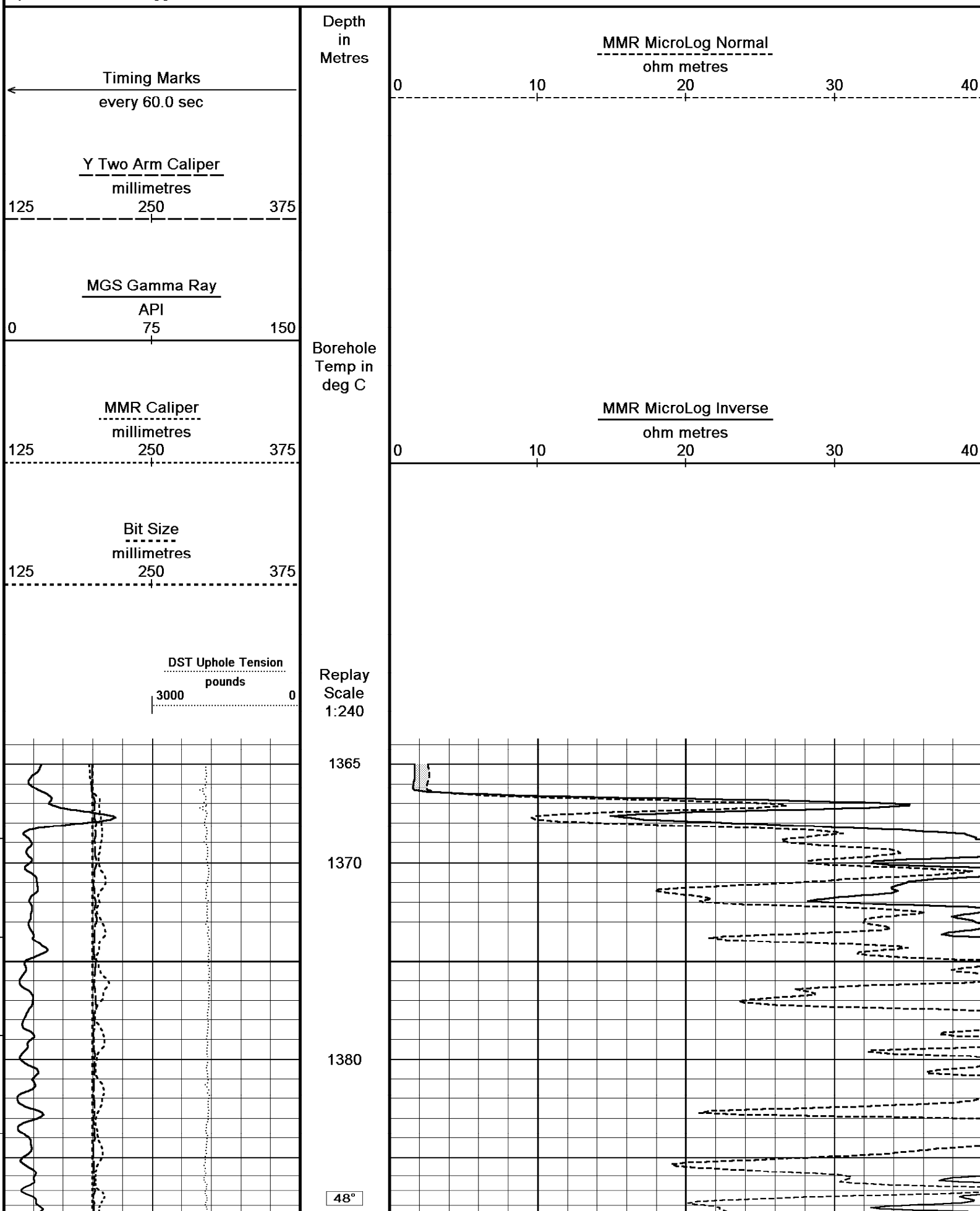
Depth Based Data - Maximum Sampling Increment 10.0cm

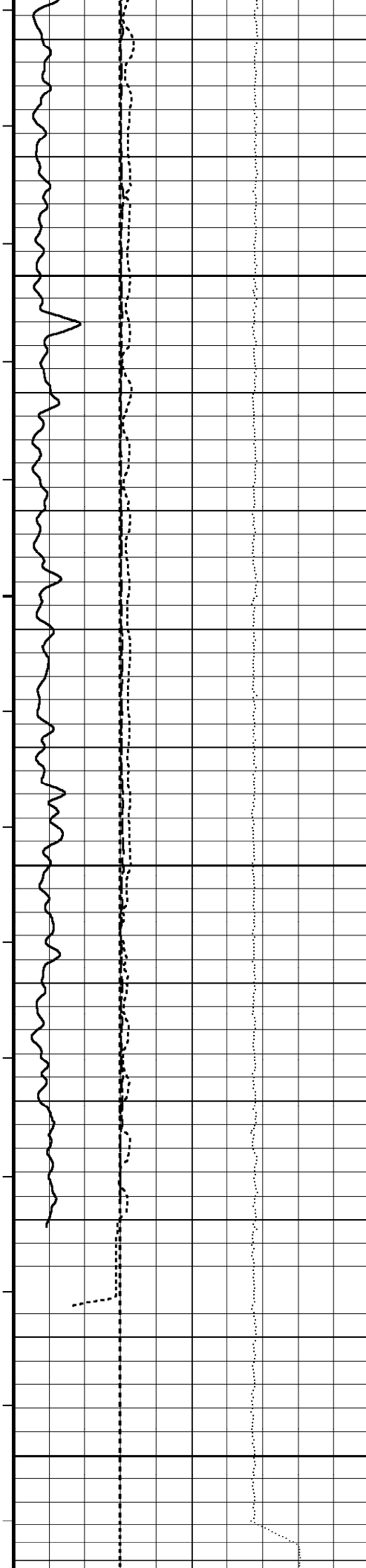
Plotted on 25-JAN-2007 03:16

Filename: C:\DOCUME~1\murraytm\LOCALS~1\Temp\Precision PreView\L40PARAQUINTRPT2.dta

Recorded on 24-JAN-2007 18:33

System Versions: Logged with 7.01.0195 Plotted with 7.02.0256





1390

1400

1410

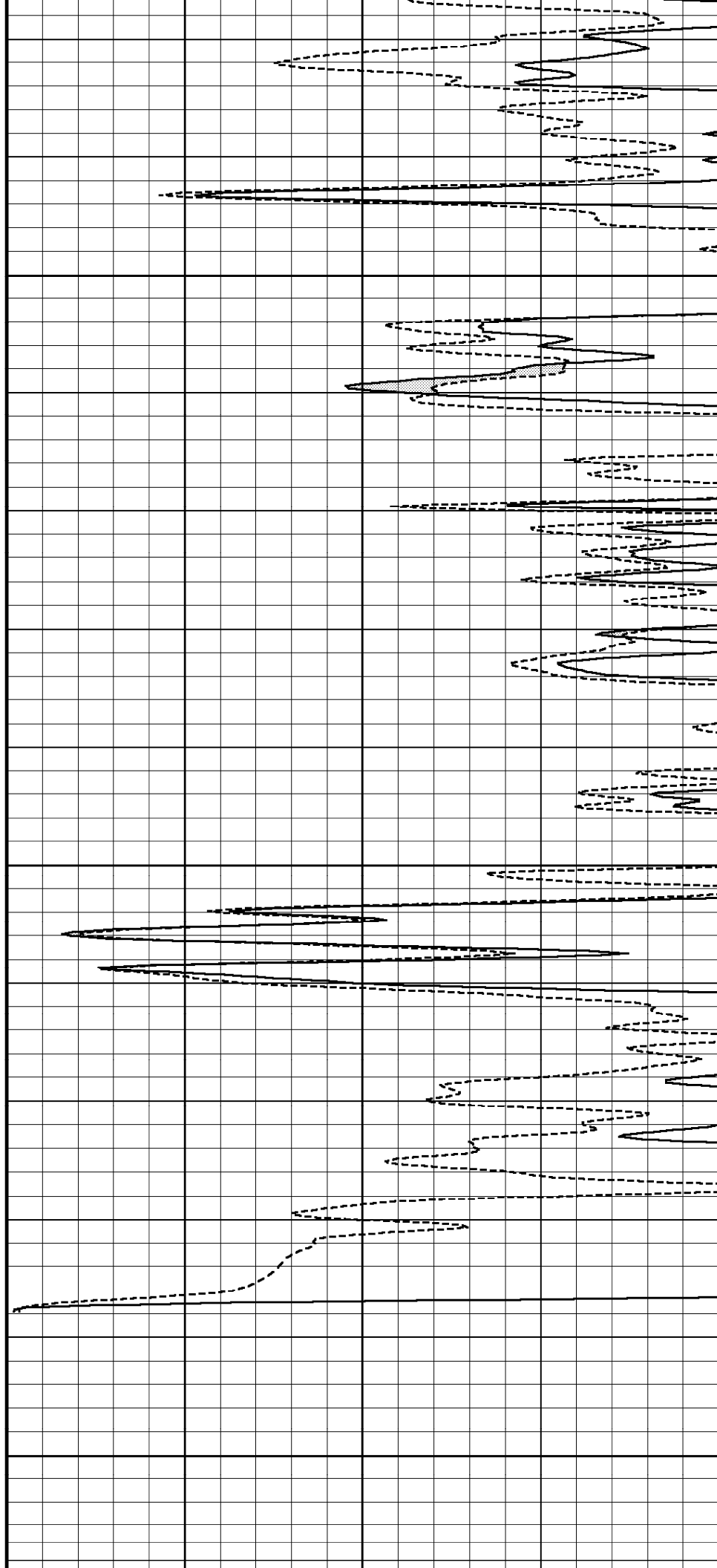
48°

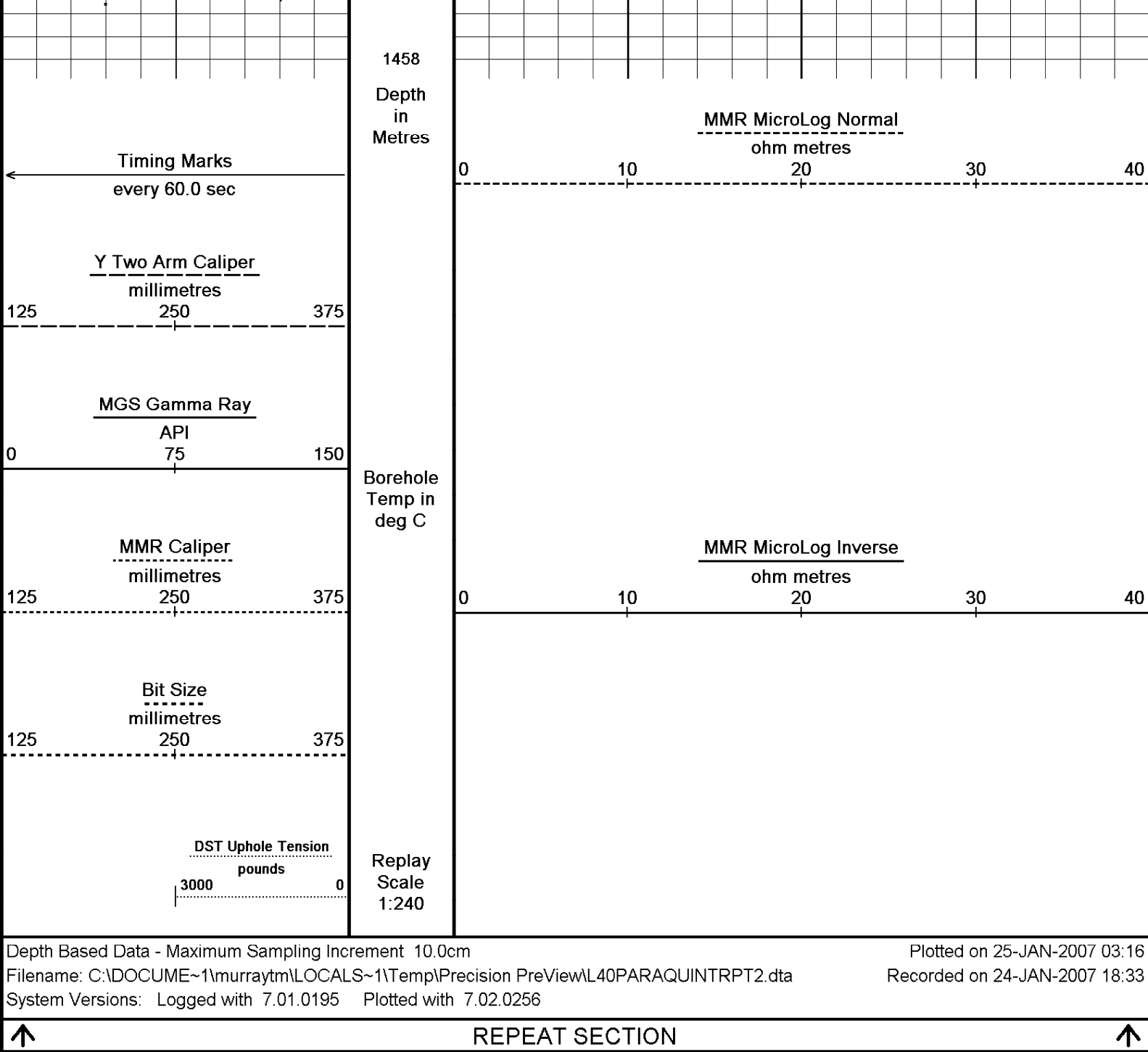
1420

1430

1440

1450





BEFORE SURVEY CALIBRATION		
C:\DOCUME~1\murraytm\LOCALS~1\Temp\Precision PreView\L40PARAQUINTRPT2.dta		
General Constants All 000		Last Edited on 23-JAN-2007,22:35
General Parameters		
Mud Resistivity	0.600	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Y Two Arm Caliper	
Annular Volume Diameter	139.700	mm
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Base Density Porosity	
Resistivity used	Deep Induction	

Resistivity (ohm-in)	Deep Induction	0.610	
RWA Constant A		2.150	
RWA Constant M			
Gamma Calibration MCG 131			Field Calibration on 8-JAN-2007,20:07
	Measured	Calibrated (API)	
Background	46	30	
Calibrator (Gross)	1264	824	
Calibrator (Net)	1219	794	
Gamma Constants MCG 131			Last Edited on 24-JAN-2007,19:31
Gamma Calibrator Number	GRC 095		
Mud Density	1110.00	kg/m3	
Caliper Source for Processing	Density Caliper		
Tool Position	Centred		
Concentration of KCl	0.00	kppm	
SP Calibration MCG 131			Field Calibration on 18-JAN-2007 08:47
	Measured	Calibrated (mV)	
Reference 1	100.6	100.0	
Reference 2	-100.0	-100.0	
High Resolution Temperature Calibration MCG 131			Field Calibration on 15-DEC-2006,15:05
	Measured	Calibrated(Deg C)	
Lower	1.00	1.00	
Upper	10.00	10.00	
High Resolution Temperature Constants MCG 131			
Pre-filter Length	11		
FE Calibration MFE 038			Base Calibration on 4-DEC-2006 15:24 Field Check on 23-JAN-2007,22:36
Base Calibration			
	Measured	Calibrated (ohm-m)	
Reference 1	0.0	0.0	
Reference 2	974.1	126.8	
Base Check		278.0	
Field Check		278.7	
FE Constants MFE 038			Last Edited on 15-DEC-2006,13:39
Caliper Source for FE correction	Density Caliper		
Rm Source for FE correction	Temperature Corr		
Temp. for Rm Corr.	MCG External Temperature		
Stand-off	Centred	millimetres	
Caliper Calibration MTC 037			Base Calibration on 11-JAN-2007 22:22 Field Calibration on 22-JAN-2007,06:17
Base Calibration			
Reading No	Measured	Calibrator Size (mm)	
1	15375	110.00	
2	18236	162.00	
3	21038	212.00	
4	23830	262.00	
5	26651	311.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (mm)	Actual Caliper (mm)	
	167.00	166.00	
Gamma Calibration MGS 029			Field Calibration on 18-JAN-2007,10:05
	Measured	Calibrated (API)	
Background	58	38	
Calibrator (Gross)	1286	832	
Calibrator (Net)	1228	794	
Gamma Constants MGS 029			Last Edited on 24-JAN-2007,22:42

Gamma Constants MGS 029			Last Edited on 24-JAN-2007,03:16		
Gamma Calibrator Number	GRCC095				
Mud Density	1110.00	kg/m3			
Caliper Source for Processing	Density Caliper				
Tool Position	Centred				
Concentration of KCl	0.00	kppm			
SP Calibration MGS 029					
	Measured	Calibrated (mV)	Field Calibration on 7-DEC-2006,17:01		
Reference 1	100.0	100.0			
Reference 2	-100.0	-100.0			
High Resolution Temperature Calibration MGS 029					
	Measured	Calibrated(Deg C)	Field Calibration on 7-DEC-2006,17:01		
Lower	1.00	1.00			
Upper	5.00	5.00			
High Resolution Temperature Constants MGS 029					
Pre-filter Length	11				
Micro Laterolog Constants MMR 031					
Micro Laterolog K Factor	0.0128				
Standoff Offset	0.0000	inches			
Borehole Correction Constants					
Mud Cake Source	Constant Value				
Mud Cake Thickness	0.4000	inches			
Mud Cake Thickness Caliper	0				
Mud Cake Resistivity	0.1500	ohm-m			
Caliper Calibration MMR 031			Base Calibration on 25-NOV-2006 12:45 Field Calibration on 6-JAN-2007,05:52		
Base Calibration					
Reading No	Measured	Calibrator Size (mm)			
1	14823	162.00			
2	18001	212.00			
3	21431	262.00			
4	25325	311.00			
5	0	0.00			
6	N/A	N/A			
Field Calibration					
	Measured Caliper (mm)	Actual Caliper (mm)			
	200.60	205.70			
Micro Normal and Micro Inverse Calibration MMR 031			Base Calibration on 25-NOV-2006,12:58 Field Check on 23-JAN-2007 22:10		
Base Calibration					
Channel	Resistor 1	Measured Resistor 2	Calibrated (ohm-m) Resistor 1	Resistor 2	
Micro Normal	9.9	49.1	5.1	25.6	
Micro Inverse	9.8	49.8	3.4	16.9	
Channel	Base Check (ohm-m)		Field Check (ohm-m)		
Micro Normal	94.7		94.7		
Micro Inverse	61.5		61.5		
Micro Normal and Micro Inverse Constants MMR 031			Last Edited on 25-NOV-2006,14:14		
Micro Normal K Factor	0.5110				
Micro Inverse K Factor	0.3380				
Standoff Offset	0.0000	millimetres			
Neutron Calibration MDN 016			Base Calibration on 11-JAN-2007 20:47 Field Check on 23-JAN-2007 22:05		
Base Calibration					
	Measured	Calibrated (cps)			
Near	Far	Near	Far		
3219	98	3714	110		

32.703

33.764

Field Calibrator at Base

Calibrated (cps)

2486 3648

Ratio

0.681

Field Check

Calibrated (cps)

2511 3822

Ratio

0.657

Neutron Constants MDN 016

Last Edited on 15-JAN-2007,07:16

Neutron Source Id 277

Neutron Jig Number N636

Epithermal Neutron No

Caliper Source for Processing Density Caliper

Stand-off 0.00 mm

Mud Density 1000.00 kg/m3

Limestone Sigma 7.10 cu

Sandstone Sigma 4.26 cu

Dolomite Sigma 4.70 cu

Formation Pressure Source Constant Value

Formation Pressure 0.00 kPa

Temperature Source Constant Value

Temperature 20.00 degrees C

Mud Salinity 0.00 kppm

Formation Fluid Salinity Source Constant Value

Formation Fluid Salinity 0.00 kppm

Barite Mud Correction Not Applied

Photo Density Calibration MPD 093

Base Calibration on 19-JAN-2007,19:16

Field Check on 23-JAN-2007 22:00

Density Calibration

Base Calibration

Measured

Calibrated (sdu)

Near

Far

Near

Far

Reference 1 71274 37606 60352 31615

Reference 2 29326 2540 25043 2540

Field Check at Base

0.0

0.0

Field Check

741.6

865.3

PE Calibration

Base Calibration

Measured

Calibrated

WS

WH

Ratio

Ratio

Background 133 653

Reference 1 29377 71091 0.415 0.400

Reference 2 7941 29220 0.273 0.272

Field Check at Base

133.0

649.2

Field Check

134.6

655.5

Density Constants MPD 093

Last Edited on 24-JAN-2007,03:16

Density Source Id 16151b

Nylon Calibrator Number 608

Aluminium/Fe Calibrator Number 608

Density Shoe Profile 4 inch

Caliper Source for Processing Density Caliper

PE Correction to Density Not Applied

Mud Density 1110.00 kg/m3

Mud Density Z/A Correction 1.11

Mud Filtrate Density 1000.00 kg/m3

Dry Hole Mud Filtrate Density 1000.00 kg/m3

DNCT 0.00 kg/m3

CRCT 0.00 kg/m3

Matrix Density (kg/m3)	Depth (m)
2710.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Caliper Calibration MPD 093			Base Calibration on 11-JAN-2007 21:58
			Field Calibration on 22-JAN-2007,06:17
Base Calibration			
Reading No	Measured	Calibrator Size (mm)	
1	15040	110.00	
2	23085	162.00	
3	31440	212.00	
4	40233	262.00	
5	49152	311.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (mm)	Actual Caliper (mm)	
	166.00	165.00	

Sonic Constants MSS 075			Last Edited on 18-JAN-2007,10:05	
Maximum Boundary Contrast	328.08	micro-sec/m		
Fluid Transit Time	620.08	micro-sec/m		
Limestone Transit Time	155.84	micro-sec/m		
Sandstone Transit Time	182.09	micro-sec/m		
Dolomite Transit Time	142.72	micro-sec/m		
Sonic used for Porosities	3-5' Compensated Sonic			
Correction for Sonde Skew	Applied			
Cycle Stretch Algorithm	Applied			
MN3FT	N/A	micro-sec		
MX3FT	N/A	micro-sec		
Fixed Gate Parameters				
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
Down Hole Fixed Gate Parameters				
Gate Start	N/A	micro-sec		
Gate Width	N/A	micro-sec		
Initial Discriminator Level	0.0000	mVolts		
Full Waveform Parameters				
Use 3' Waveform to derive TR	N/A			
Use 4' Waveform to derive TR	N/A			
Use 5' Waveform to derive TR	N/A			
Use 6' Waveform to derive TR	N/A			
3' Waveform Discriminator Level	N/A	mV		
4' Waveform Discriminator Level	N/A	mV		
5' Waveform Discriminator Level	N/A	mV		
6' Waveform Discriminator Level	N/A	mV		
3' Waveform Filter	N/A			
4' Waveform Filter	N/A			
5' Waveform Filter	N/A			
6' Waveform Filter	N/A			
Semblance Level	N/A			
Semblance Window Width	N/A	micro-sec		
Sonic 1 Despiker	N/A	N/A		
Sonic 2 Despiker	N/A	N/A		

Induction Calibration MAI 092			Base Calibration on 19-JAN-2007 19:26
			Field Check on 23-JAN-2007 22:08

Base Calibration

Test Loop Calibration

Channel

Low

High

Measured

Low

High

Calibrated (mmho/m)

1

17.5

473.2

9.3

966.2

2

5.9

374.5

7.6

821.4

3

2.8

255.0

5.2

566.0

4

1.3

130.5

2.6

279.2

Array Temperature

23.9

Deg C

Channel

Base Check (mmho/m)

Field Check (mmho/m)

Low

High

Low

High

1

10.3

3853.0

6.5

3842.8

2

30.0

3605.8

28.7

3599.3

3

29.7

3109.7

28.9

3103.7

4

20.7

2116.7

20.6

2113.5

Deep

19.0

2017.4

18.7

2013.4

Medium

43.3

4115.3

42.3

4107.3

Shallow

43.5

5343.3

41.2

5333.9

Array Temperature

11.6

-16.7

Deg C

Induction Constants MAI 092

Last Edited on 20-JAN-2007,04:19

Induction Model

VECTAR

Caliper for Borehole Corr.

Density Caliper

Hole Size for Borehole Correction

N/A

millimetres

Stand-off

25.40

millimetres

Number of Fins on Stand-off

5.0000

Stand-off Fin Width

12.7000

millimetres

Borehole Corr. Rm Source

Temperature Corr

Temp. for Rm Corr.

MCG External Temperature

Squasher Start

0.0020

mhos/metre

Borehole Normalisation

DRM1

0.0000

DRC1

0.0000

DRM2

0.0000

DRC2

0.0000

MRM1

0.0000

MRC1

0.0000

MRM2

0.0000

MRC2

0.0000

SRM1

0.0000

SRC1

0.0000

SRM2

0.0000

SRC2

0.0000

Calibration Site Corrections

Channel 1

0.00

mmhos/metre

Channel 2

0.00

mmhos/metre

Channel 3

0.00

mmhos/metre

Channel 4

0.00

mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)

1.00

Cementation Exponent (M)

2.00

Saturation Exponent (N)

2.00

Saturation of Water for Apor

100.00

percent

Resistivity of Water for Apor and Sw

0.05

ohm-m

Resistivity of Mud Filtrate for Sw

0.00

ohm-m

High Resolution Temperature Calibration MAI 092

Field Calibration on 13-SEP-2005,13:50

Measured

Calibrated(Deg C)

Lower

1.00

1.00

Upper

50.00

50.00

High Resolution Temperature Constants MAI 092

Pre-filter Length

11

DOWNHOLE EQUIPMENT

C:\DOCUME~1\murraytm\LOCALS~1\Temp\Precision PreView\L40PARAQUINTRPT2.dta

Compact Gamma
MCG 131 Length: 2.65 m Weight: 63.9 lb

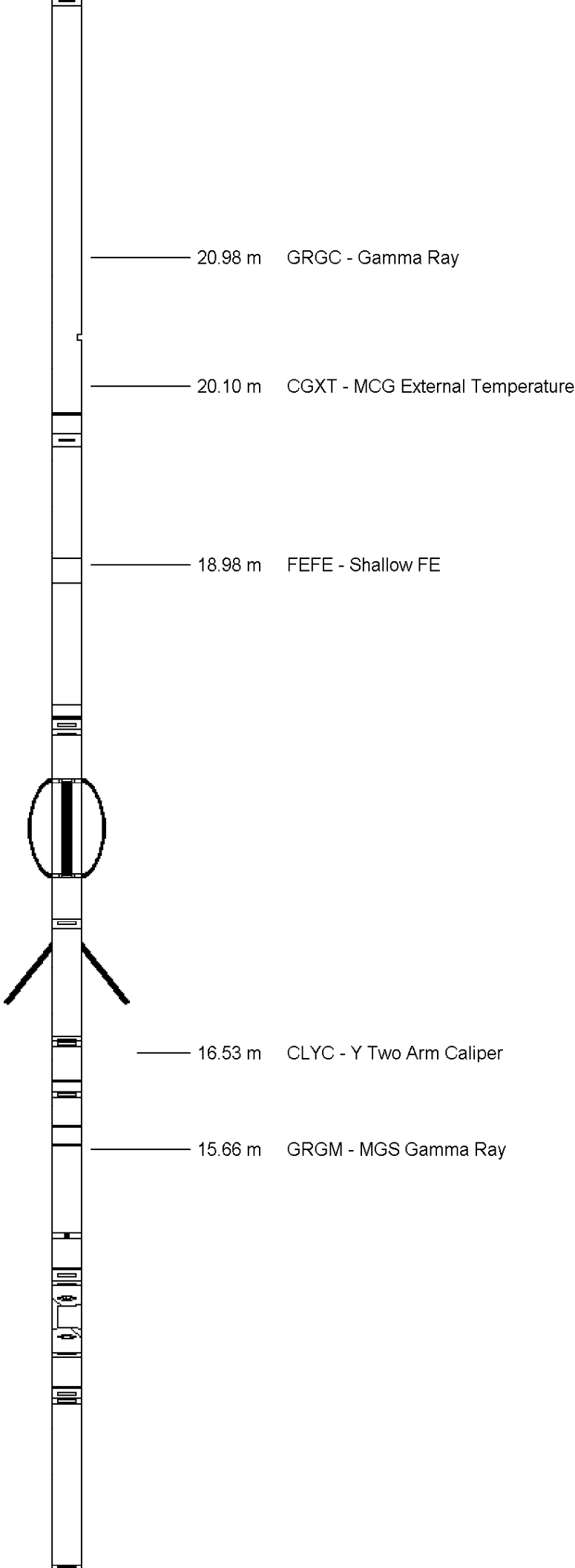
Compact Focussed Electric
MFE 38 Length: 1.84 m Weight: 48.5 lb

Compact Two Arm Caliper
MTC 37 Length: 2.17 m Weight: 61.7 lb

Compact Short Gamma
MGS 29 Length: 1.04 m Weight: 24.3 lb

Compact InterSonde Crank
ISC 151 Length: 0.71 m Weight: 24.3 lb

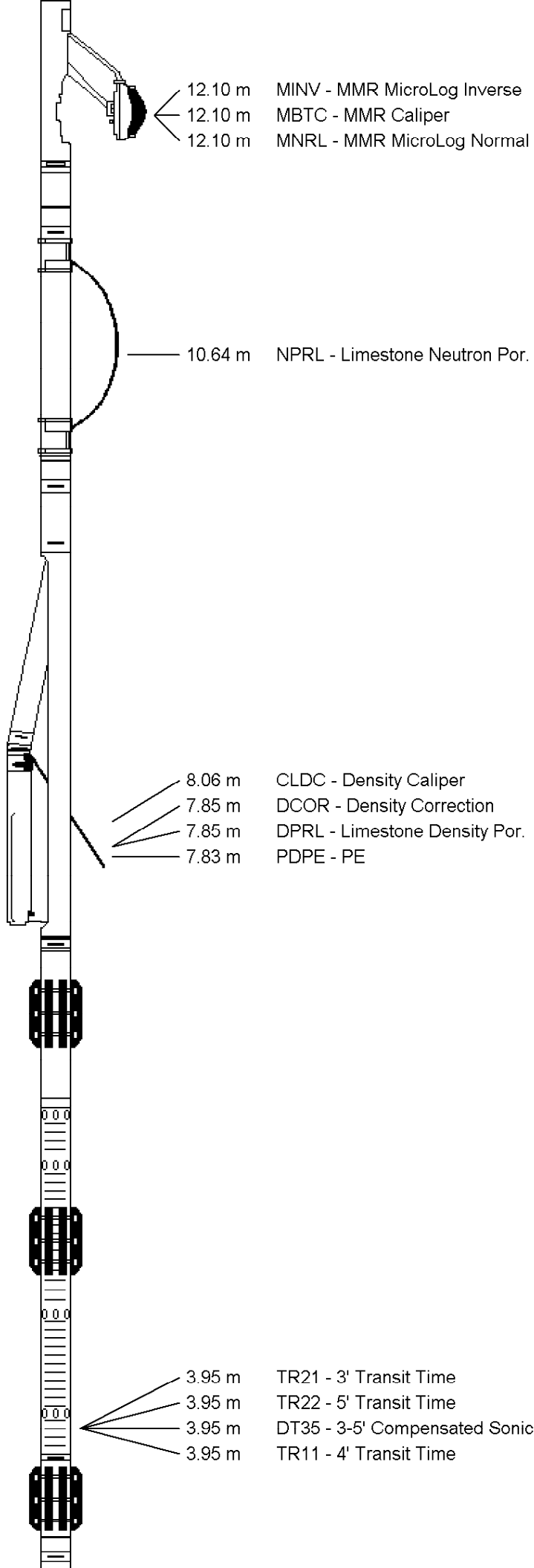
Compact Micro-Resistivity
MMR 31 Length: 2.62 m Weight: 81.6 lb



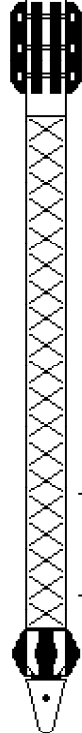
Compact Neutron
MDN 16 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper
MPD 93 Length: 2.92 m Weight: 90.4 lb

Compact Sonic
MSS 75 Length: 3.82 m Weight: 72.8 lb



Compact Induction
MAI 92 Length: 3.29 m Weight: 48.5 lb



0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction
0.07 m SPCG - Spontaneous Potential
Tool Zero (0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb
Total Length: 22.83 m Weight: 568.8 lb

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARA ET AL CAMERON L40
FIELD	CAMERON HILLS
PROVINCE	NORTHWEST TERRITORIES
COUNTRY	CANADA

Elevation Kelly Bushing	690.10	metres	First Reading	1440.70	metre
Elevation Drill Floor		metres	Depth Driller	1453.00	metres
Elevation Ground Level	684.70	metres	Depth Logger	1453.30	metres



Weatherford®

MEASURED DEPTH
MICROLOG