BAKER HUGHES

Baker Atlas

N E B COPY

MULTIPOLE ARRAY ACOUSTILOG SM
GAMMA RAY LOG

FILE NO:		COMPANY	PARAMOUNT RESOURCES LTD.
		WELL	PARAMOUNT ET AL LIARD K-29A
API NO:		FIELD	FORT LIARD
		PROVINCE	NORTHWEST TERRITORIES
Ver. 3.87		LOCATION:	OTHER SERVICES
UWI:		LIC#: 1125	ZDL-CN-GR
300K296030123303		RIG: AKITA 58	HDIL-GR
			HDIP/CBIL
		GRID: 60-30-123-30	DSL

PERMANENT DATUM	G.L.	ELEVATION	409.6 M	ELEVATIONS:	
LOG MEASURED FROM	K.B.	6.8 M	ABOVE P.D.	KB	416.4 M
DRILL. MEAS. FROM	KELLY BUSHING			DF	
				GL	409.6 M

DATE	16-OCT-2005	
RUN	2	1
SERVICE ORDER	203169	
DEPTH DRILLER	3620 M	
DEPTH LOGGER	3618.2 M	
BOTTOM LOGGED INTERVAL	3600.6 M	
TOP LOGGED INTERVAL	2480 M	
CASING DRILLER	177.8 MM @ 2567 M	@
CASING LOGGER	2568 M	
BIT SIZE	156 MM	
TYPE OF FLUID IN HOLE	GELCHEM	
DENSITY / VISCOSITY	1070 G/C3 / 38 S	
PH / FLUID LOSS	10.5 / 9.1 C3	
SOURCE OF SAMPLE	FLOWLINE	
RM AT MEAS. TEMP.	1.89 OHMM @ 20.5 DEGC	@
RMF AT MEAS. TEMP.	1.84 OHMM @ 20.5 DEGC	@
RMC AT MEAS. TEMP	2.15 OHMM @ 20.5 DEGC	@
SOURCE OF RMF / RMC	MEAS / MEAS	
RM AT BHT	0.47 OHMM @ 145.4 DEGC	@
TIME SINCE CIRCULATION	29.25	
MAX. RECORDED TEMP.	145.4 DEGC	
EQUIP. NO. / LOCATION	E6544 / G. PRAIRIE	
RECORDED BY	D. BUSKER / T. FISHER	
WITNESSED BY	K. ROBERTSON	

REMARKS

RUN 2 TRIP 1 :

LOG RECORDED VIA PIPE CONVEYED WITH THE NAUTILUS HITEMP HDIL/XMAC/DEN/CN/DSL IN A HIGH RESOLUTION MODE ON A DOWNLOG AND AN UPLOG. THE DOWNLOG WAS RECORDED AS A GRANDSLAM WITH AN XMAX IN THE MONOPOLE/DIPOLE SETTING AND THE UPLOG AS A GRANDSLAM AND XMAC IN A X-DIPOLE MODE.
NO CALIPER COULD BE RUN WITH THE NAUTILUS DENSITY DUE TO HIGH ANGLE.
SPIKES ON GR ARE CREATED NOW & THEN DUE TO MAKING A PIPE CONNECTION.

LOST COMMUNICATION WITH TOOL STRING AT 2850 M WHILE COMING UP WITH MAIN PASS DUE TO LINE GETTING KINKED. AFTER CORRECTING PROBLEM, MADE ANOTHER RUN IN THE HOLE TO LOG SECTION MISSED. BOTH LOGS WERE SPLICED TOGETHER FOR FINAL PRESENTATION. USED DOWN LOG AS REPEAT PASS.
PRESENTED DELTA T ON A 100-300 USEC/M SCALE

CIRCULATION STOPPED @ 1430 13-OCT-05.
MAX DEVIATION = 84.8 DEGS.
LOG WAS TIED INTO RUN 1 DATED 21-SEP-05.

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	1	SWVL	3944XC	094415	FREE
2	1	PWRSUB	4430XB	369992	FREE
2	1	TTRM	3981XA	10080042	FREE
2	1	COMR	3514XA	10051809	FREE
2	1	GR	1329XA	172708	DECENT
2	1	CN	2447XA	10040679	DECENT
2	1	DEN	2233EA	10077790	DECENT
2	1	DEN	2233MA	10129053	DECENT
2	1	XMAC	1667EA	119772	CENT
2	1	XMAC	1678MA	188383	CENT
2	1	XMAC	1678PB	10141932	CENT
2	1	XMAC	1668BA	154071	CENT
2	1	HDIL	1515EA	10064999	38MM S.O.
2	1	HDIL	1515MA	10064999	38MM S.O.

INSTRUMENT CONFIGURATION

Source File: /data/pass/paramount_liard/xmac-tdg

PIPE CONVEYANCE
Series : CABLPCL
Mnemonic : PCL
Diameter : 5.00"
Weight : 45.5 kg
Length : 231.8 cm

DOWNHOLE POWER ADAPTER
Series : 4430XB
Mnemonic : DHPA
Diameter : 3.62"
Weight : 38.4 kg
Length : 160.5 cm

SWIVEL
Series : 3944XD
Mnemonic : SWVL
Diameter : 3.50"
Weight : 29.5 kg
Length : 108.7 cm

HP TTRM SUB
Series : 3981XA
Mnemonic : TTRM
Diameter : 3.63"
Weight : 36.4 kg
Length : 116.8 cm
Measure Point: 42.2 cm: TEMP MP
Measure Point: 34.5 cm: RM MP

HT/HP WTS COMMON REMOTE
Series : 3514XA
Mnemonic : WTS
Diameter : 4.17"
Weight : 126.8 kg
Length : 276.9 cm

HT/HP DIGITAL SPECTRALOG
Series : 1329XA
Mnemonic : DSL
Diameter : 4.17"
Weight : 126.8 kg
Length : 281.9 cm
Measure Point: 79.2 cm: GR MP

GR MP —— 36.78 m

NAUTILUS COMPENSATED NEUTRON
Series : 2447XA
Mnemonic : CN
Diameter : 4.17"
Weight : 118.9 kg
Length : 285.2 cm
Source Type : N/A
Strength : N/A
Measure Point: 80.3 cm: LSN MP
Measure Point: 88.1 cm: SSN MP

LSN MP —— 33.94 m
SSN MP —— 33.82 m

TOOL TURNER
Series : N/A
Mnemonic : N/A
Diameter : 3.63"
Weight : 11.4 kg
Length : 63.5 cm

NAUTILUS SLICK DENSITY ELECTRONICS
Series : 2233EA
Mnemonic : HTD
Diameter : 4.16"
Weight : 97.7 kg
Length : 281.7 cm

NAUTILUS SLICK DENSITY MANDREL
Series : 2233MA
Mnemonic : HTD
Diameter : 4.16"
Weight : 97.7 kg
Length : 267.0 cm
Source Type : N/A
Strength : N/A
Measure Point: 109.5 cm: LSD MP
Measure Point: 96.5 cm: SSD MP

LSD MP —— 28.11 m
SSD MP —— 27.98 m

HT/HP DIGITAL ORIENTATION
Series : 4401XB
Mnemonic : ORIT
Diameter : 3.88"
Weight : 140.9 kg
Length : 388.6 cm
Measure Point: 6.6 cm: ORIENT MP

ORIENT MP —— 23.19 m

HT/HP ARRAY ACOUSTILOG ELECTRONICS
Series : 1667EA
Mnemonic : XMAC
Diameter : 3.88"
Weight : 116.4 kg
Length : 297.2 cm

HT/HP CROSS MULTIPOLE ARRAY ACOUSTILOG
Series : 1678MA
Mnemonic : XMAC
Diameter : 3.88"
Weight : 160.2 kg
Length : 431.8 cm
Measure Point: 167.6 cm: R8
Measure Point: 152.4 cm: R7
Measure Point: 137.2 cm: R6
Measure Point: 121.9 cm: R5
Measure Point: 106.7 cm: R4
Measure Point: 91.4 cm: R3
Measure Point: 76.2 cm: R2
Measure Point: 61.0 cm: R1

R8 —— 17.51 m
R7 —— 17.36 m
R6 —— 17.21 m
R5 —— 17.06 m
R4 —— 16.91 m
R3 —— 16.75 m
R2 —— 16.60 m
R1 —— 16.45 m

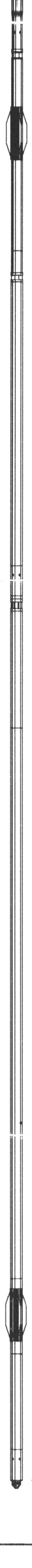
SHEAR WAVE ACOUSTILOG
Series : 1678PB
Mnemonic : XMAC
Diameter : 3.63"
Weight : 61.4 kg
Length : 152.4 cm

MONOPOLE T2 MP —— 13.86 m
DIPOLE T4 MP —— 13.63 m
DIPOLE T3 MP —— 13.32 m
MONOPOLE T1 MP —— 13.10 m

HP/HT MULTI-POLE ARRAY ACOUSTIC
Series : 1888BA
Mnemonic : MAC
Diameter : 3.62"
Weight : 79.5 kg
Length : 210.8 cm
Measure Point: 185.1 cm: MONOPOLE T2 MP
Measure Point: 142.2 cm: DIPOLE T4 MP
Measure Point: 111.8 cm: DIPOLE T3 MP
Measure Point: 88.9 cm: MONOPOLE T1 MP

HT/HP MULTI-POLE ARRAY ACOUSTIC
Series : 1868FA
Mnemonic : MAC
Diameter : 3.88"
Weight : 70.5 kg
Length : 190.5 cm

HP/HT HIGH DEFINITION INDUCTION TOOL
Series : 1515XA
Mnemonic : HDIL
Diameter : 4.17"
Weight : 200.5 kg
Length : 1030.2 cm
Measure Point: 557.3 cm: RXCB MP
Measure Point: 310.9 cm: XMTR MP



RXCB MP — 5.57 m

XMTR MP — 3.11 m

0.00 m

BULL PLUG 3 1/8

TOTAL LENGTH: 47.80 m
TOTAL WEIGHT: 1585.0 kg
MAX DIAMETER: 0'5.00"

MAIN UP LOG - UPPER PRESENTATION

eXpress Unknown eXpress 3.1 last updated 28Sep2005 17:22 Sep 28, 2005 Cplot 8.1 Fri Oct 21 02:02:43 2005
Updates: 1 Pcrplt /main/61 Pdf_Cpp /main/16 Fileview 4.34

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:CHT	CHT	Oct 16 11:06:41 2005	CABLE HEAD TENSION
F1:DT24QI	DTC.I	Oct 16 11:06:41 2005	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Oct 16 11:06:42 2005	GAMMA RAY
F1:MMRK	MMRK	Oct 16 11:06:42 2005	MINUTE MARK
F1:TEN	TEN	Oct 16 11:06:44 2005	DIFFERENTIAL TENSION
F1:TT	TT	Oct 16 12:23:31 2005	INTEGRATED TRAVEL TIME FROM ACOUSTIC DELTA-T

CURVE MEASURE POINT OFFSET

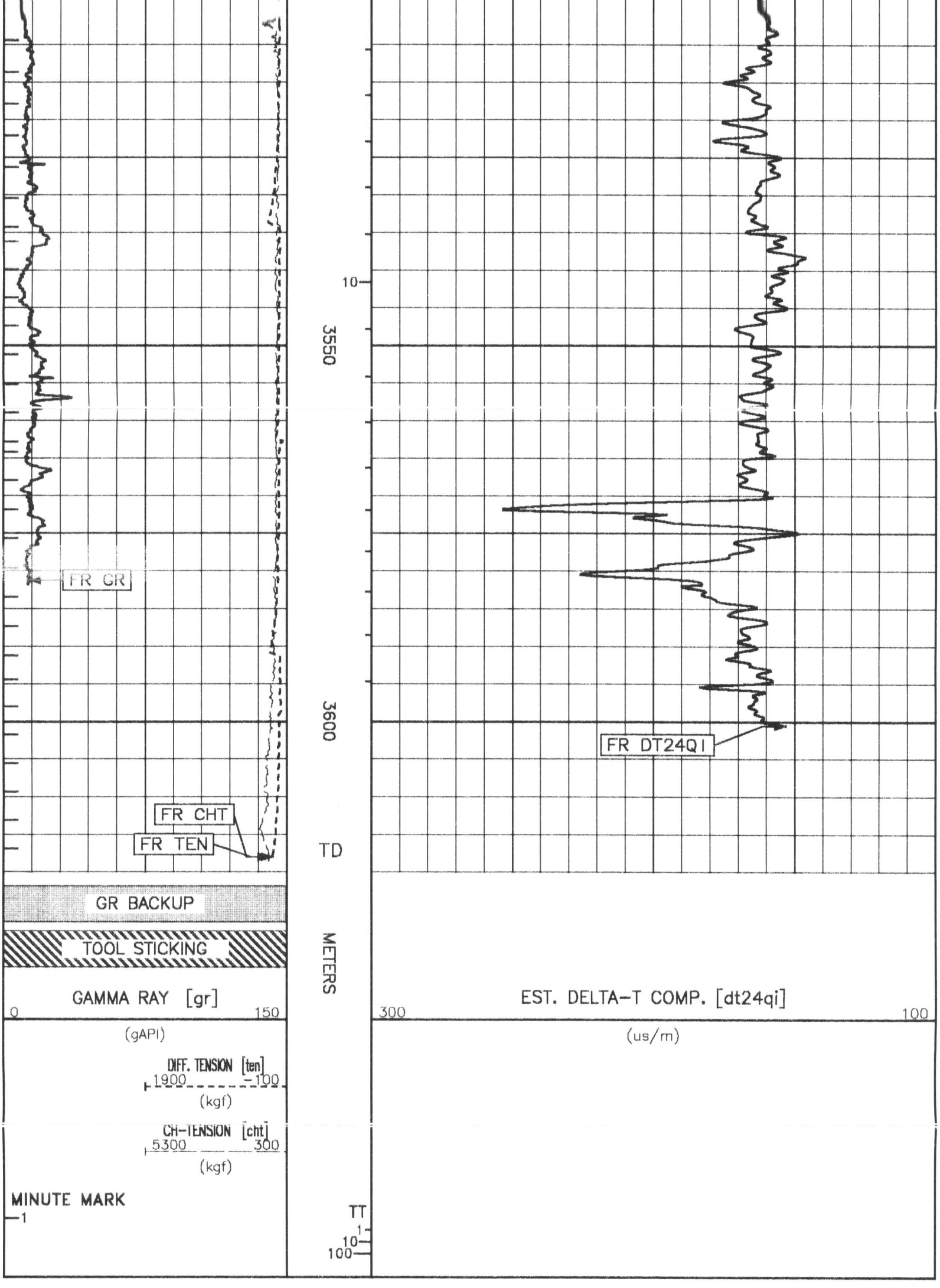
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
CHT	0.00	DT24QI	14.48	GR	36.77	TEN	0.00

Project : /data/ddc/203169
User : jlanwel
Presentation : calsunsrv2:/data/ddc/203169/mac_upper.pdf [1:600 Scale]
Plot Interval : 2451.35 - 3620 Meters

Data File 1 : F1 : calsunsrv2:/data/ddc/203169/splice_up.xtf
Created On : Oct 14 19:37:00 2005
Company : PARAMOUNT RESOURCES LTD
Well : PARAMOUNT ET AL LIARD K-29A
Field : FORT LIARD
File Interval : 2451.35 - 3618.89 Meters
Oct : 187ba

GR
TEN
CHT
CSG
DT24QI
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
170
160
150
140
130
120
110
100

90
3050
80
3100
3150
70
3200
60
3250
50
3300
40
3350
3400
30
3450
20
3500



MAIN UP LOG

eXpress Unknown eXpress 3.1 last updated 28Sep2005 17:22 Sep 28, 2005 Cplot 8.1 Fri Oct 21 02:03:00 2005
Updates: 1 Pcrplt /main/61 Pdf_Cpp /main/16 Fileview 4.34

CURVE DESCRIPTION REPORT

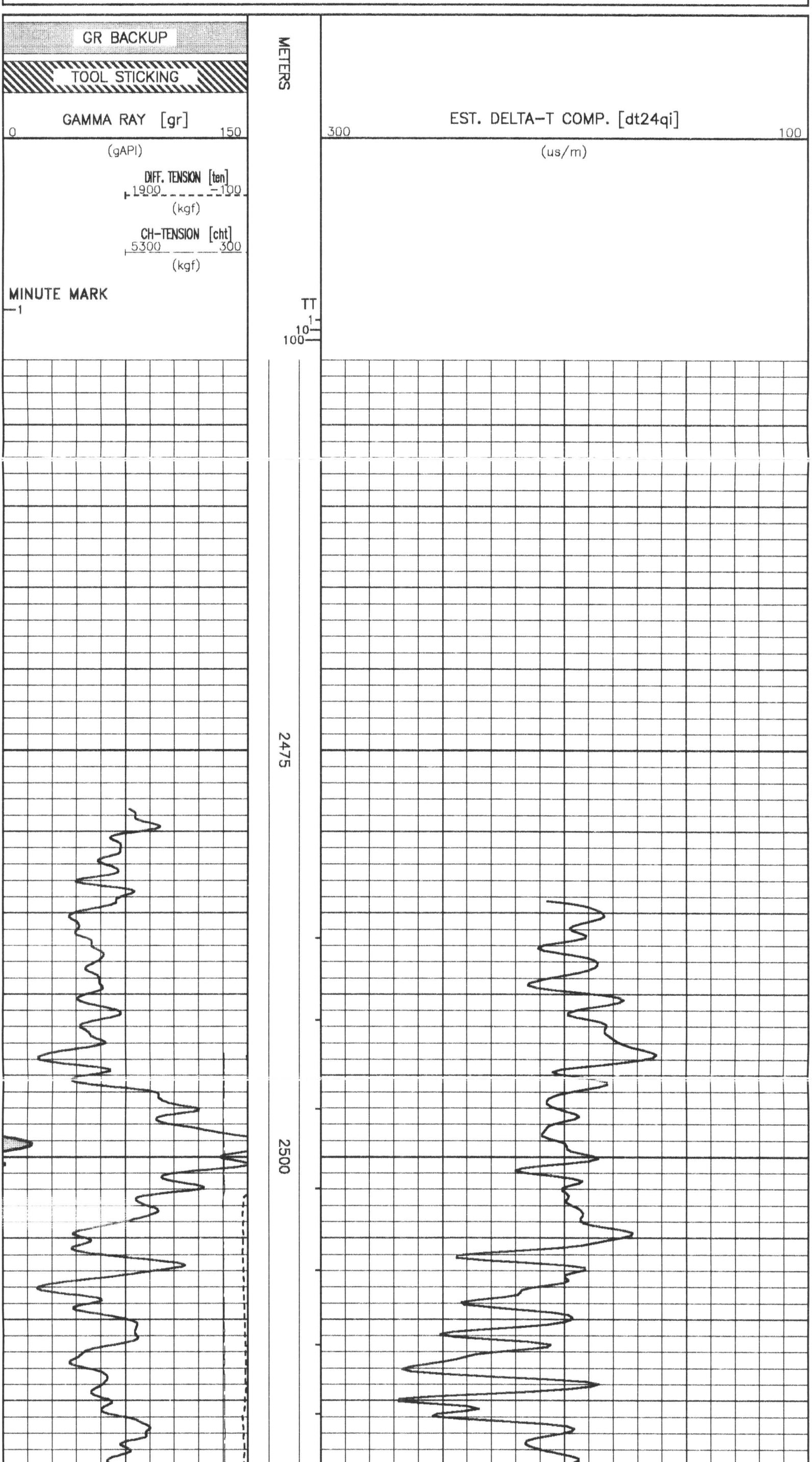
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:CHT	CHT	Oct 16 11:06:41 2005	CABLE HEAD TENSION
F1:DT24QI	DTC.I	Oct 16 11:06:41 2005	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Oct 16 11:06:42 2005	GAMMA RAY
F1:MMRK	MMRK	Oct 16 11:06:42 2005	MINUTE MARK
F1:TEN	TEN	Oct 16 11:06:44 2005	DIFFERENTIAL TENSION
F1:TT	TT	Oct 16 12:23:31 2005	INTEGRATED TRAVEL TIME FROM ACOUSTIC DELTA-T

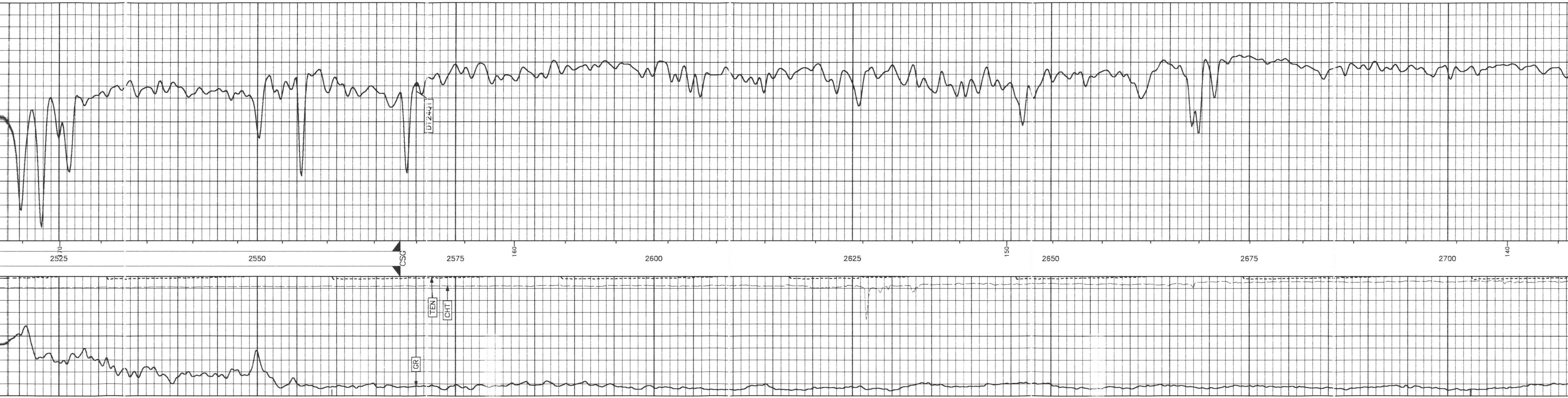
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
CHT	0.00	DT24QI	14.48	GR	36.77	TEN	0.00

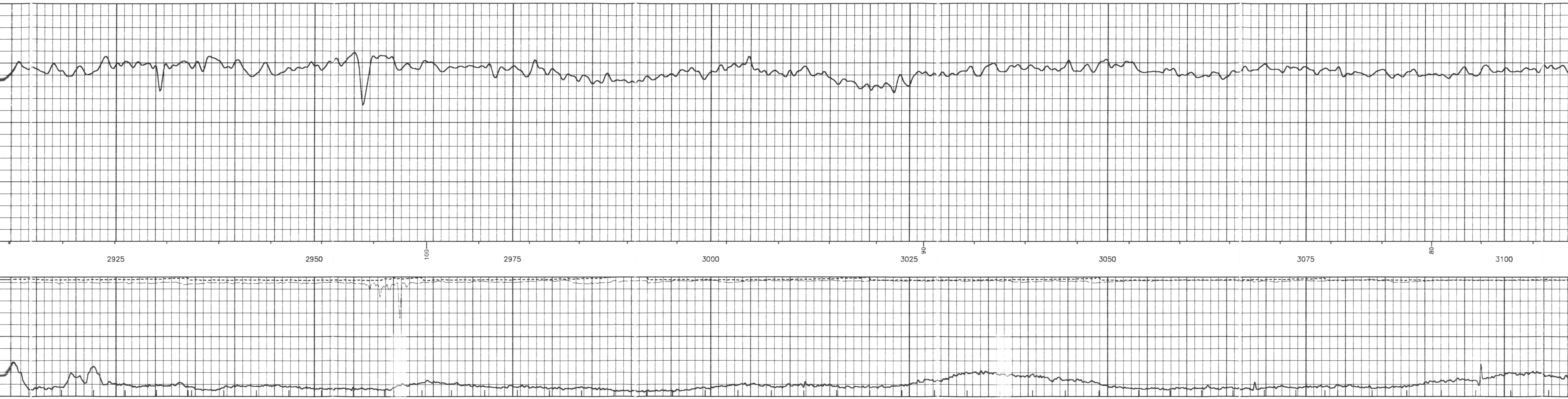
Project : /data/ddc/203169
User : jianwei
Presentation : calsunsrv2:/data/ddc/203169/mac_main_up.pdf [1:240 Scale]
Plot Interval : 2451.35 - 3620 Meters

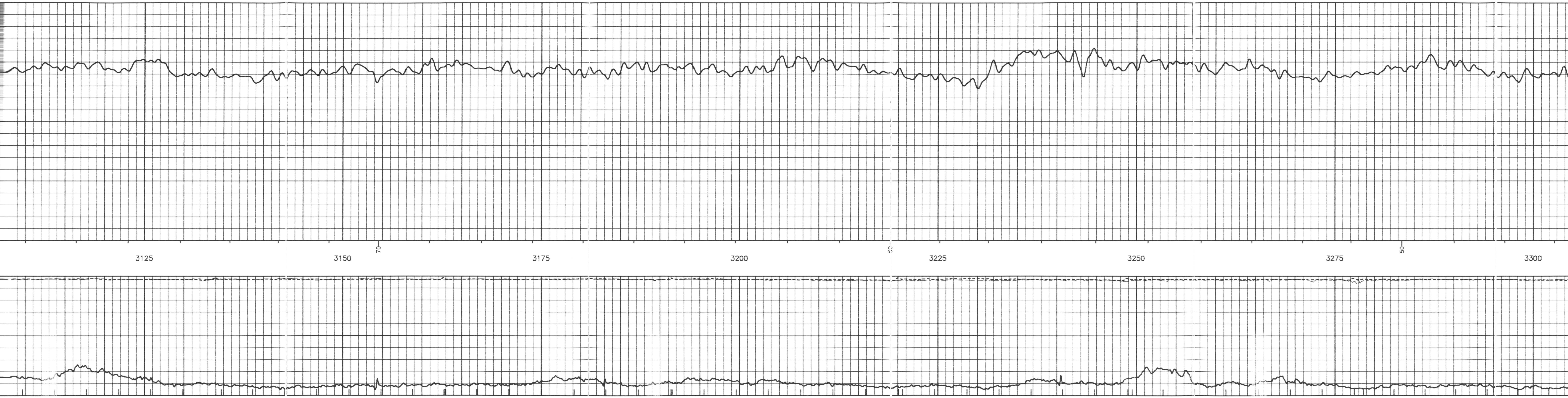
Data File 1 : F1 : calsunsrv2:/data/ddc/203169/splice_up.xtf
Created On : Oct 14 19:37:00 2005
Company : PARAMOUNT RESOURCES LTD
Well : PARAMOUNT ET AL LIARD K-29A
Field : FORT LIARD
File Interval : 2451.35 - 3618.89 Meters
Oct : i87ba



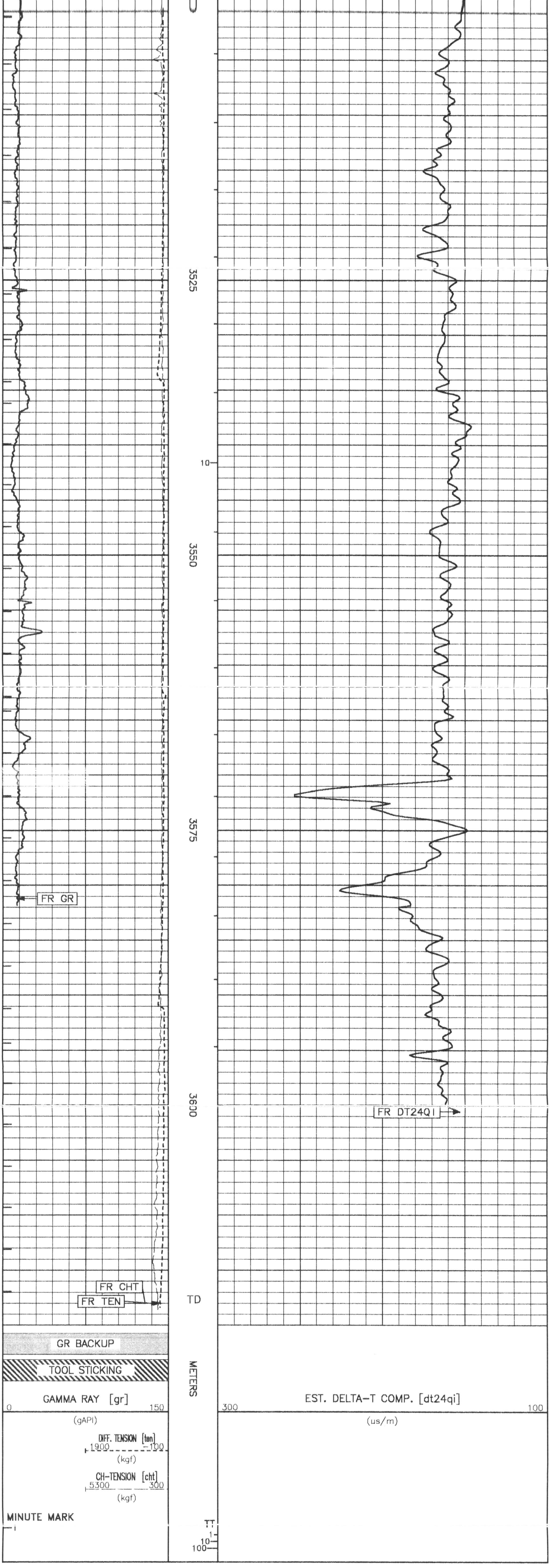

DT 2491
CSG
TEN
CHT
GR
2525
2550
2575
2600
2625
2650
2675
2700
160
150
140

2725
2750
130
2775
2800
2825
120
2850
2875
10
2900


2925
2950
100
2975
3000
3025
90
3050
3075
80
3100


3125
3150
70
3175
3200
50
3225
3250
3275
50
3300

3325
40
3350
3375
3400
30
3425
3450
3475
20
3500



REPEAT DOWN LOG

eXpress Unknown eXpress 3.1 last updated 28Sep2005 17:22 Sep 28, 2005 Cplot 8.1 Fri Oct 21 02:03:16 2005
Updates: 1 Pcrplt /main/61 Pdf_Cpp /main/16 Fileview 4.34

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:CHT	CHT	Oct 14 13:31:21 2005	CABLE HEAD TENSION
F1:DT24QI	DTC.I	Oct 14 13:31:21 2005	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Oct 15 02:30:58 2005	GAMMA RAY
F1:MMRK	MMRK	Oct 14 13:31:21 2005	MINUTE MARK
F1:TEN	TEN	Oct 14 13:31:21 2005	DIFFERENTIAL TENSION

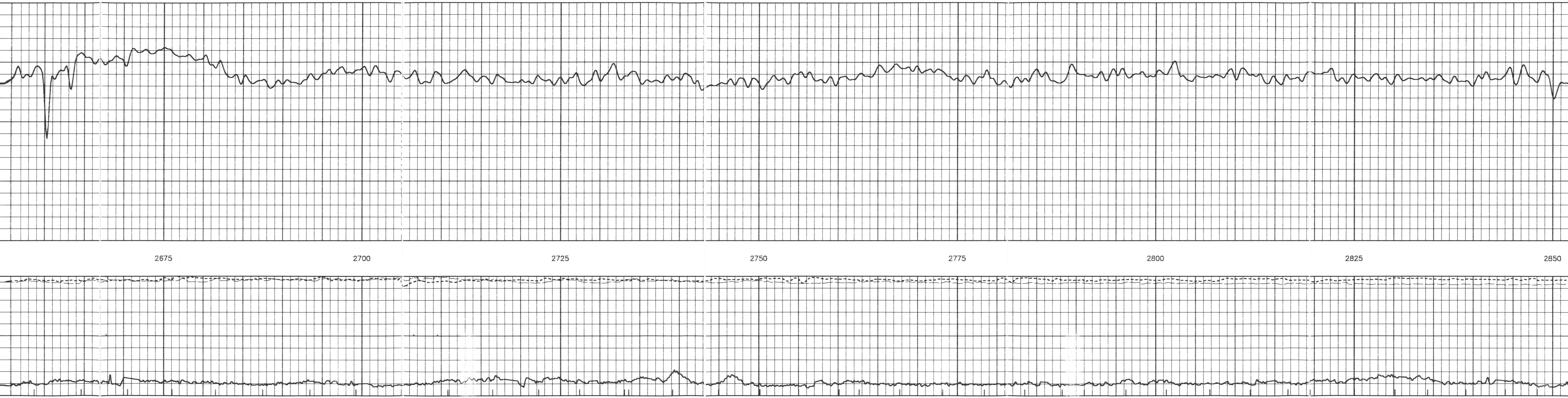
CURVE MEASURE POINT OFFSET

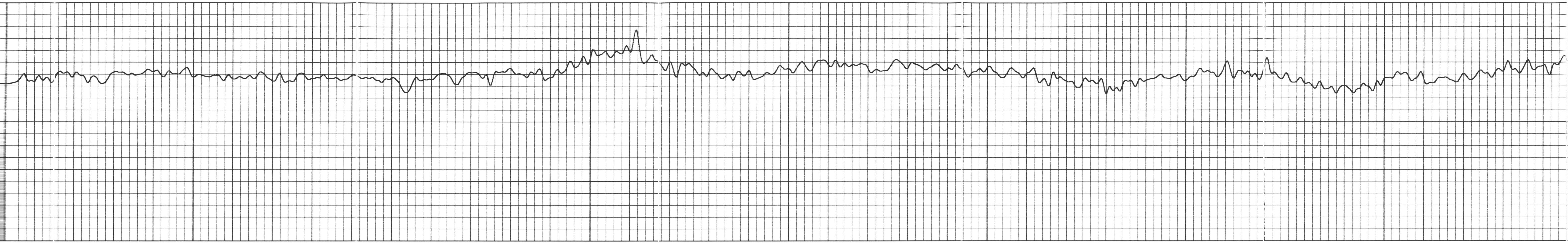
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
CHT	0.00	DT24QI	14.48	GR	36.77	TEN	0.00

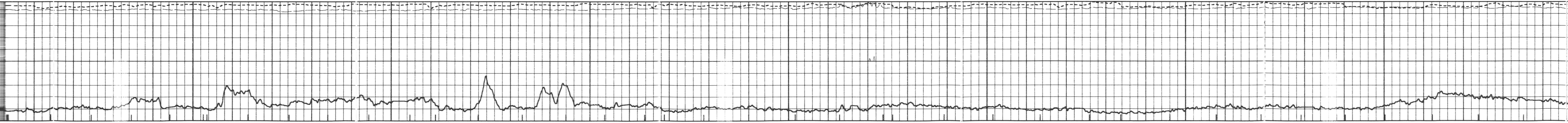
Project : /data/ddc/203169
User : jianwei
Presentation : calsunsrv2:/data/ddc/203169/mac_main_down.pdf [1:240 Scale]
Plot Interval : 2463.7 - 3626.97 Meters

Data File 1 : F1 : calsunsrv2:/data/ddc/203169/187ba01.xtf
Created On : Oct 14 13:31:21 2005
Company : PARAMOUNT RESOURCES LTD
Well : PARAMOUNT ET AL LIARD K-29A
Field : FORT LIARD
File Interval : 2463.7 - 3626.97 Meters
Oct : 187ba

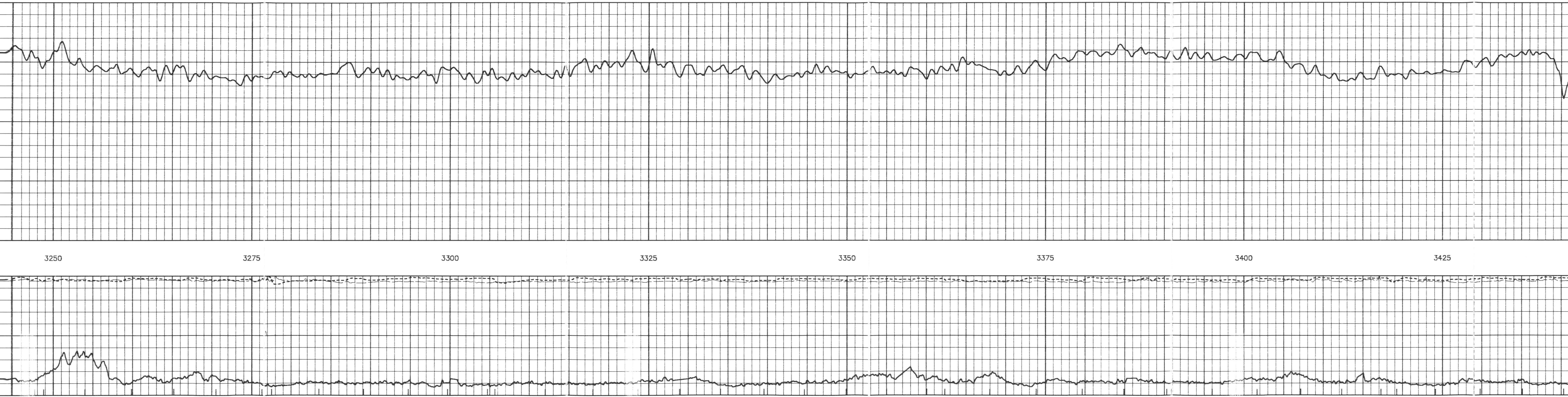
MINUTE MARK
1
2475
2500
2525
2550
CSG
GR
TEN
CHT
DT24QI
2575
2600
2625
2650

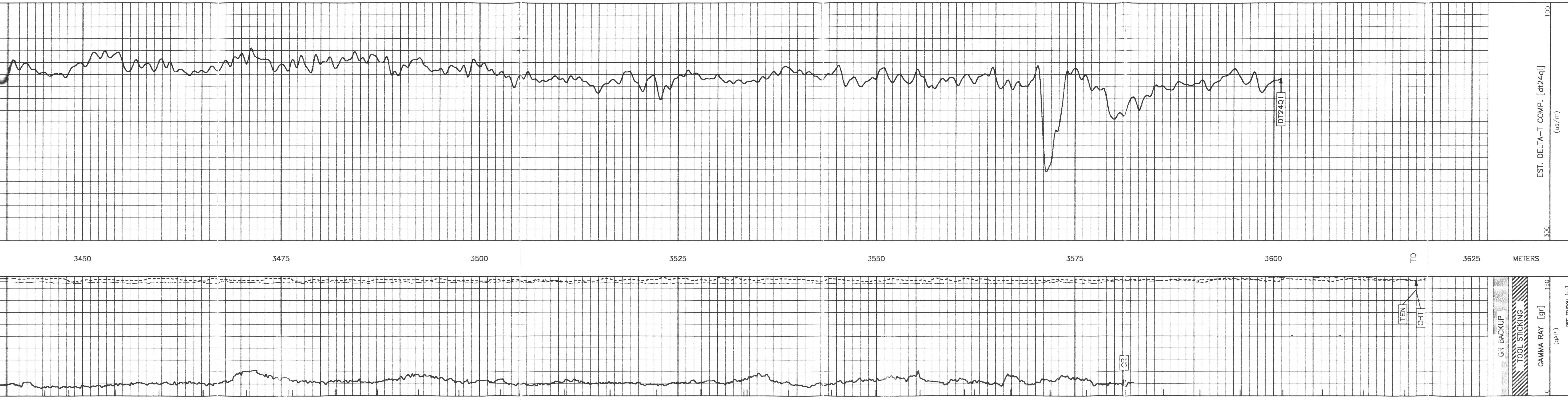

2675
2700
2725
2750
2775
2800
2825
2850


2875
2900
2925
2950
2975
3000
3025



3050
3075
3100
3125
3150
3175
3200
3225


3250
3275
3300
3325
3350
3375
3400
3425


EST. DELTA-T COMP. [dt24qi]
(us/m)
100
300
DT24QI
3450
3475
3500
3525
3550
3575
3600
TD
3625
METERS
GR BACKUP
TOOL STICKING
GAMMA RAY [gr]
(gAPI)
150
0
CP
TEN
CHT

DIFF. TENSION [tdt]
1900 -100
(kgf)

CH-TENSION [cht]
4500 -500
(kgf)

MINUTE MARK
-1

BAKER HUGHES Baker Atlas	COMPANY PARAMOUNT RESOURCES LTD. WELL PARAMOUNT ET AL LIARD K-29A FIELD FORT LIARD PROVINCE NORTHWEST TERRITORIES		FILE NO: API NO:
	LOCATION: LIC#: 1125 RIG: AKITA 58 GRID: 60-30-123-30	ELEVATIONS: KB 416.4 M DF GL 409.6 M DATE 16-OCT-2005	UWI: 300K296030123303