



PROVINCE	NORTHWEST TERRITORIES
FIELD	ARROWHEAD
WELL	ANADARKO ARROWHEAD RIVER
	K-35
COMPANY	ANADARKO CANADA CORPORATION
WELL	ANADARKO ARROWHEAD RIVER K-35
FIELD	ARROWHEAD
PROVINCE	NORTHWEST TERRITORIES
DATE	24-FEB-2004
RUN NO.	TWO
Bot. Driller	2812.0 m
Bot. Logger	2810.1 m
First Reading	2799.0 m
Last Reading	2440.5 m
Meters Meas.	358.5 m
CS9. Driller	2442.7 m
CS9. Logger	2440.5 m
Bit Size	155.6 mm
Fluid Type	POLYMER
Dens. Visc.	1045 47
pH Fluid Loss	11 8.0
Sample Source	FLOWLINE
Rm @ Meas. Temp.	1.2 @ 13 °C
Rmf @ Meas. Temp.	1.1 @ 13 °C
Rmc @ Meas. Temp.	1.4 @ 15 °C
Rm @ BHT	0.3 @ 125 °C
Max Rec. Temp	125 °C
Spacing	0.61m
Operating Time	6.0 HRS
Unit #	387
Location	GRANDE PRAIRIE OH
Recorded By	S. MAXWELL
Witnessed By	H. COMAN
	J. BUTT

All interpretations of log data are opinions based on inferences from electrical or other measurements. We do not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

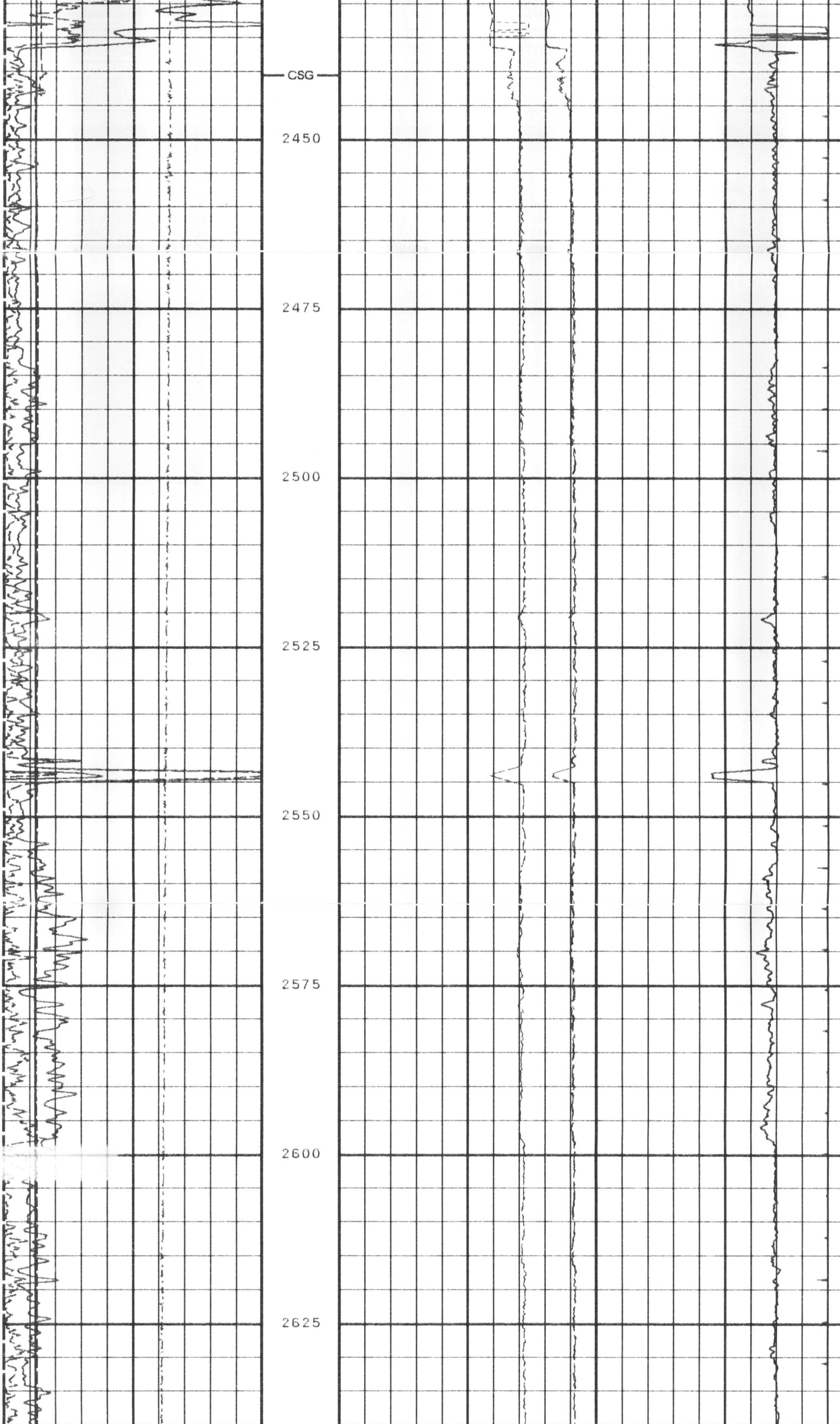
REMARKS	Rig: AKITA 37	Service Order # 30017929
Drilling Stopped 07:45/24 Circulation Stopped 08:30/24 Tool on Bottom 04:25/25 BHT 125 °C		
-RUN 1: SPD2/DLL/SPED/CNT/UGR/CAL LOGGED IN COMBINATION.		
-RUN 2: HMI/SGR/HBC/CAL LOGGED IN COMBINATION.		
-MAX DEVIATION=11.4° @ 2798m. KICKOFF @ 2442m. NO TVD LOGS REQUIRED, JUST DIGITS		
-SHORT OF TD SECOND RUN, PROBABLY FILL.		
Prints: 2		
CHANGES IN MUD TYPE OR NEW SAMPLE		
Date	Sample No.	Type Log
Depth - Driller		Interval
Type Fluid in Hole		Scale
Dens. Visc.		
pH Water Loss		
Source of Sample		EQUIPMENT DATA
Rm @ Meas. Temp.	@ °C	Run No.
Rmf @ Meas. Temp.	@ °C	Tool Type
Rmc @ Meas. Temp.	@ °C	Tool No.
Source Rmf Rmc		Other
Rm @ BHT	@ °C	ONE HBC 173 CENTRALIZED
Rmf @ BHT	@ °C	SGR 114 RA-20S-335
Rmc @ BHT	@ °C	CAL 118 Y-AXIS

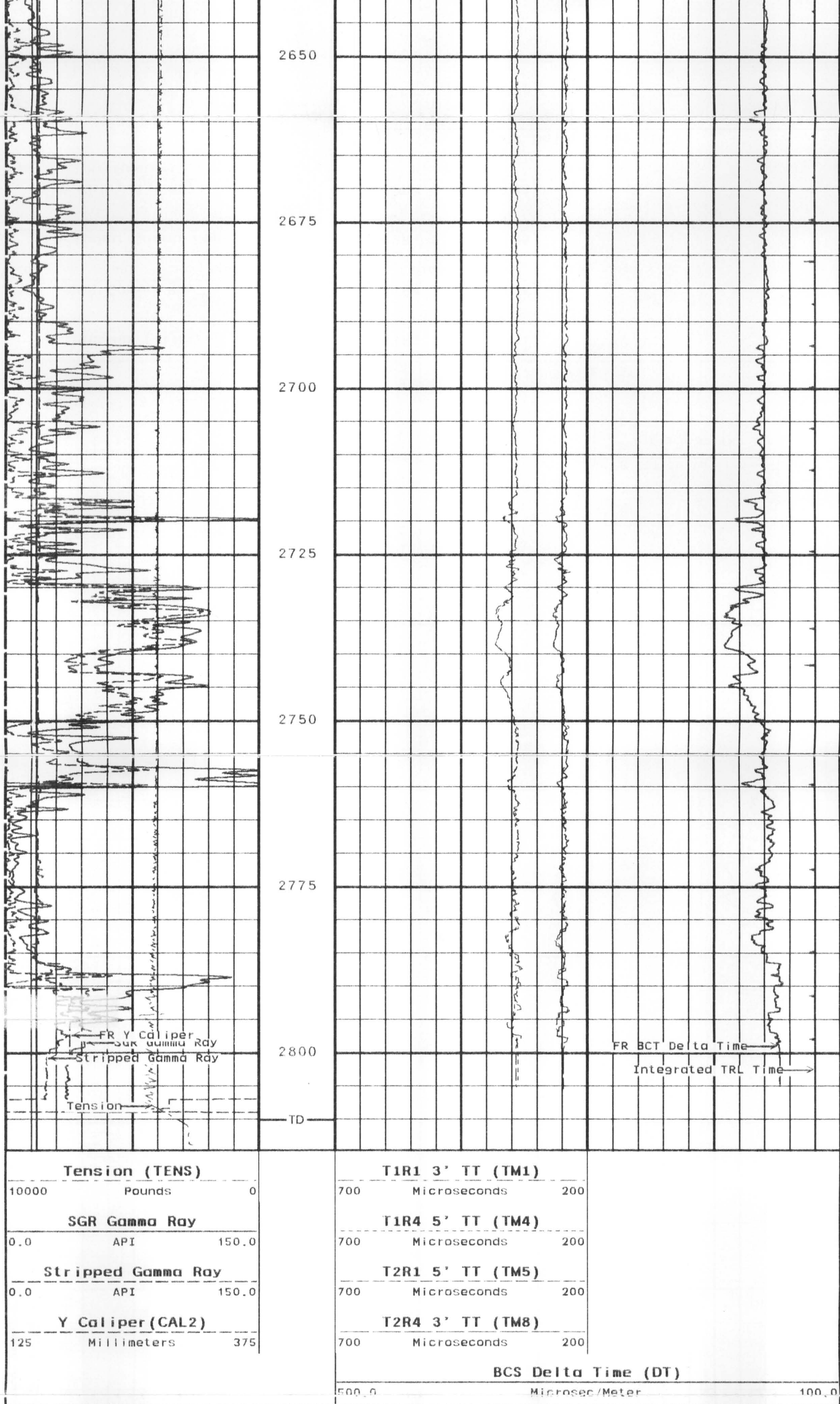
REMARKS
MAIN PASS 1:600 SCALE 500-100 usec/m

DEPTH SCALE: 1:600	VERSION: 2003.07.25.245
MAIN PASS	

30017929 HBCMP1			
FINISH DEPTH: 0.0	Meters	DIRECTION: UP	DATE:
			TIME:
			MODE: TRACE PLAYBACK

Y Caliper (CAL2)		BCS Delta Time (DT)	
125	Millimeters	500.0	Microsec/Meter
375			100.0
Stripped Gamma Ray		T2R4 3' TT (TM8)	
0.0	API	700	Microseconds
150.0		200	
SGR Gamma Ray		T2R1 5' TT (TM5)	
0.0	API	700	Microseconds
150.0		200	
Tension (TENS)		T1R4 5' TT (TM4)	
10000	Pounds	700	Microseconds
0		200	





START DEPTH: 2814.7 DIRECTION: UP DATE: 02/25/2004 TIME: 06:44 MODE: TRACE PLAYBACK
30017929 HBCMP1

MAIN PASS

DEPTH SCALE: 1:600

VERSION: 2003.07.25.245

SYSTEM CONSTANTS

NAME	DESCRIPTION	VALUE	UNITS
TDD	TD-Driller	2812.00	Meters
TDL	TD-Logger	2810.10	Meters
CSIZ	Casing Size	177.8	Millimeters
CWEI	Casing Weight	38.69	Kilograms/Meter
BHT	Bottom Hole Temp	125.0	DegreesCentigrade
SFT	Mean Annual Surf Temp	5.0	DegreesCentigrade
TGRD	Temperature Gradient	0.555	DegC/100Meters
WC00	Upper CAL-F Offset	-5.00	Millimeters
SPTL	Log With SP From	MCS	
WSPD	MCC SPed Pad Down	0.00	Degrees
SWAN	Sheave Wheel Angle	0.00	Degrees
MDSG	Trace Signature Choice Use Gain Scaled		
DAES	Entered Slowness	182.4	Microsec/Meter
DTF	DT Fluid	620.5	Microsec/Meter
DACP	Compaction	1.0	

REMARKS

MAIN PASS
1:240 SCALE
300-100 usec/m

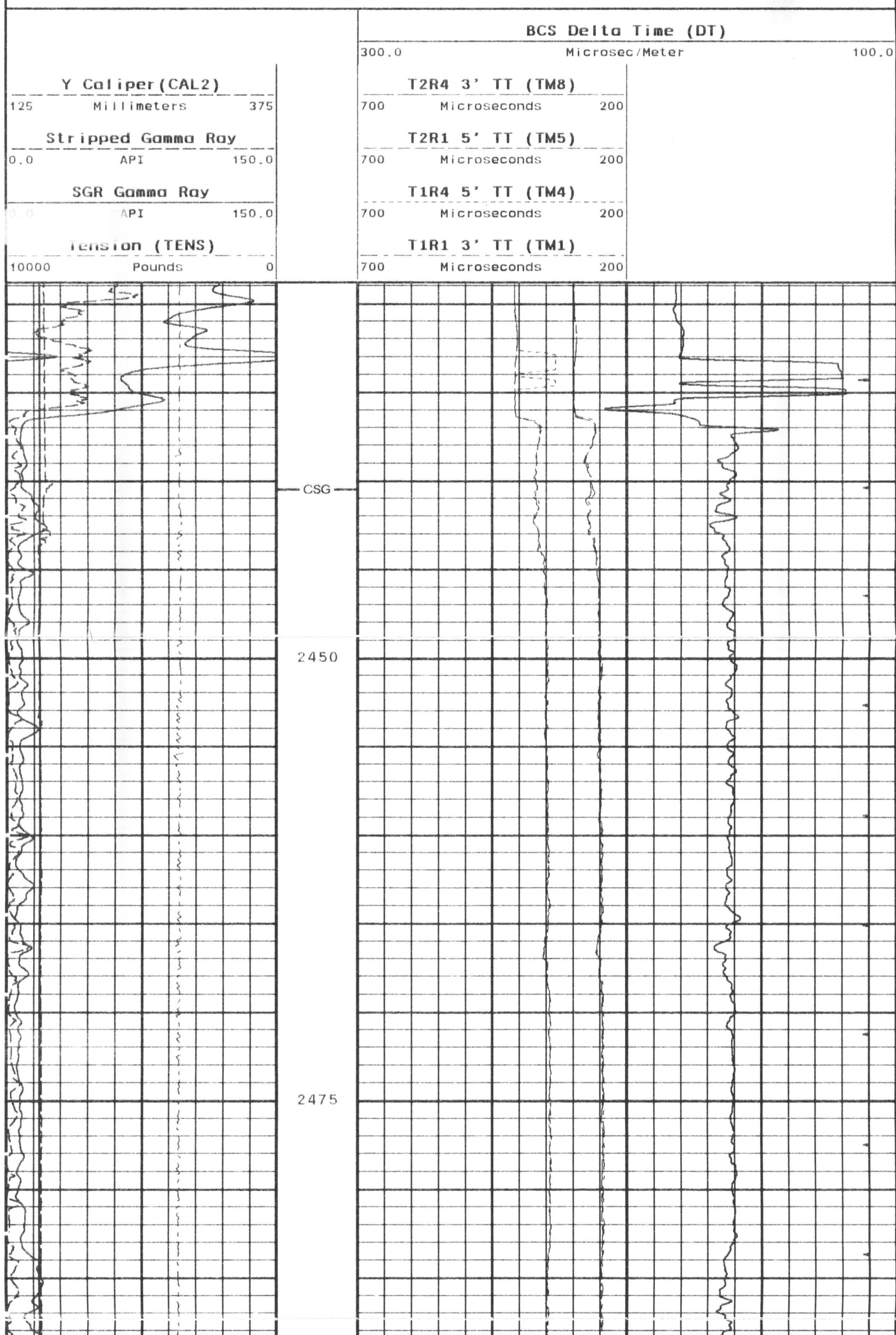
DEPTH SCALE: 1:240

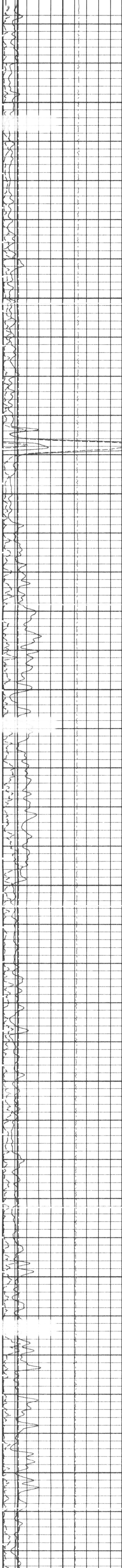
VERSION: 2003.07.25.245

MAIN PASS

30017929 HBCMP1

FINISH DEPTH: 0.0 Meters DIRECTION: UP DATE: TIME: MODE: TRACE PLAYBACK





2500

2525

2550

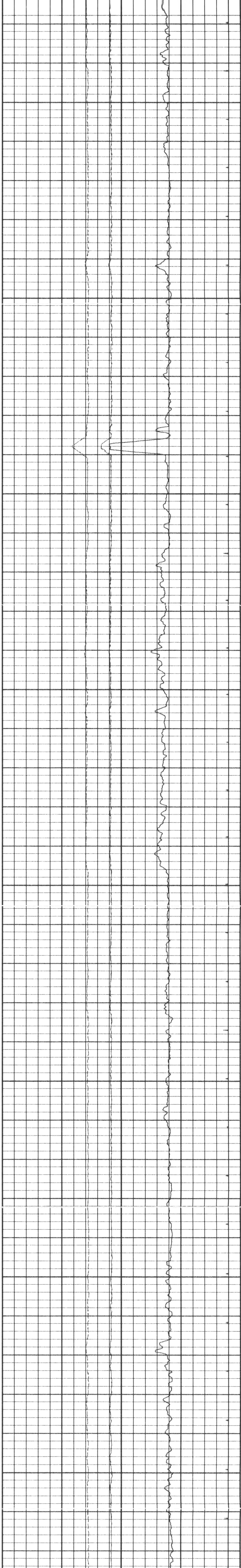
2575

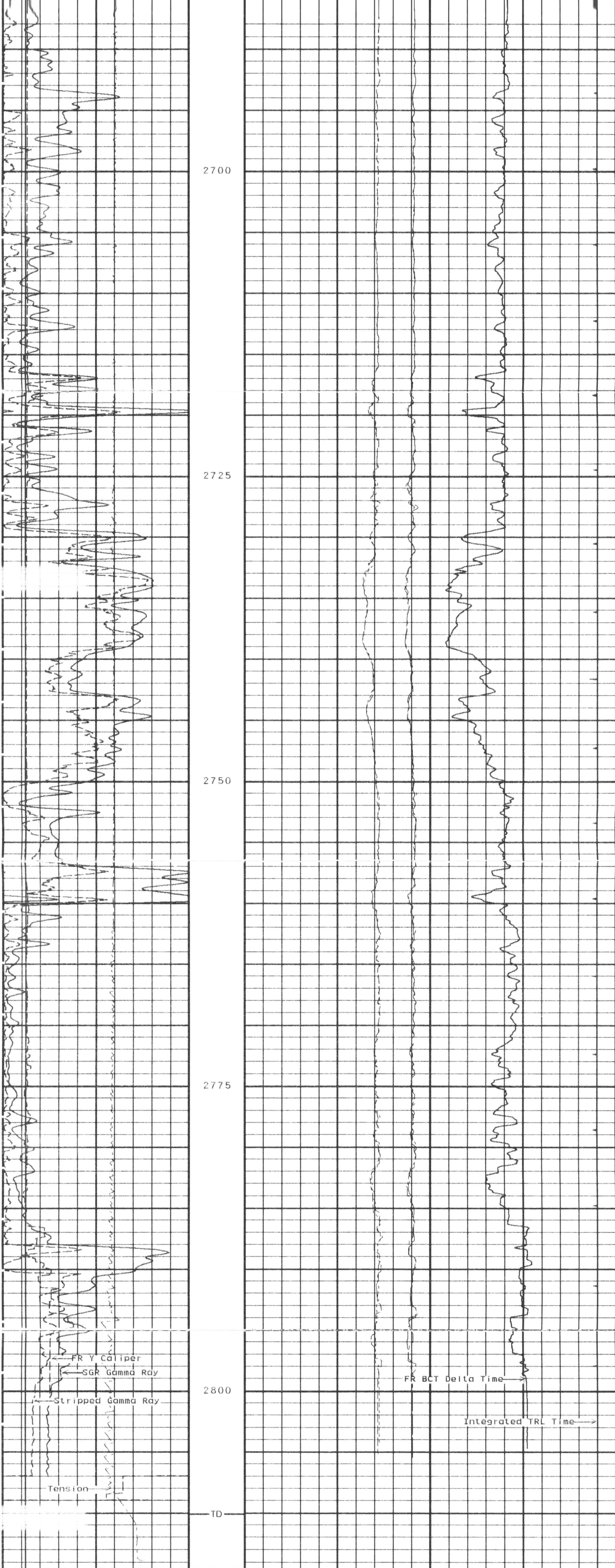
2600

2625

2650

2675





Tension (TENS)		T1R1 3' TT (TM1)	
10000	Pounds	0	
SGR Gamma Ray		T1R4 5' TT (TM4)	
0.0	API	150.0	
Stripped Gamma Ray		T2R1 5' TT (TM5)	
0.0	API	150.0	
Y Caliper (CAL2)		T2R4 3' TT (TM8)	
125	Millimeters	375	
		BCS Delta Time (DT)	
		300.0	100.0

START DEPTH: 2814.7 DIRECTION: UP DATE: 02/25/2004 TIME: 06:44 MODE: TRACE PLAYBACK
30017929 HRCMP1

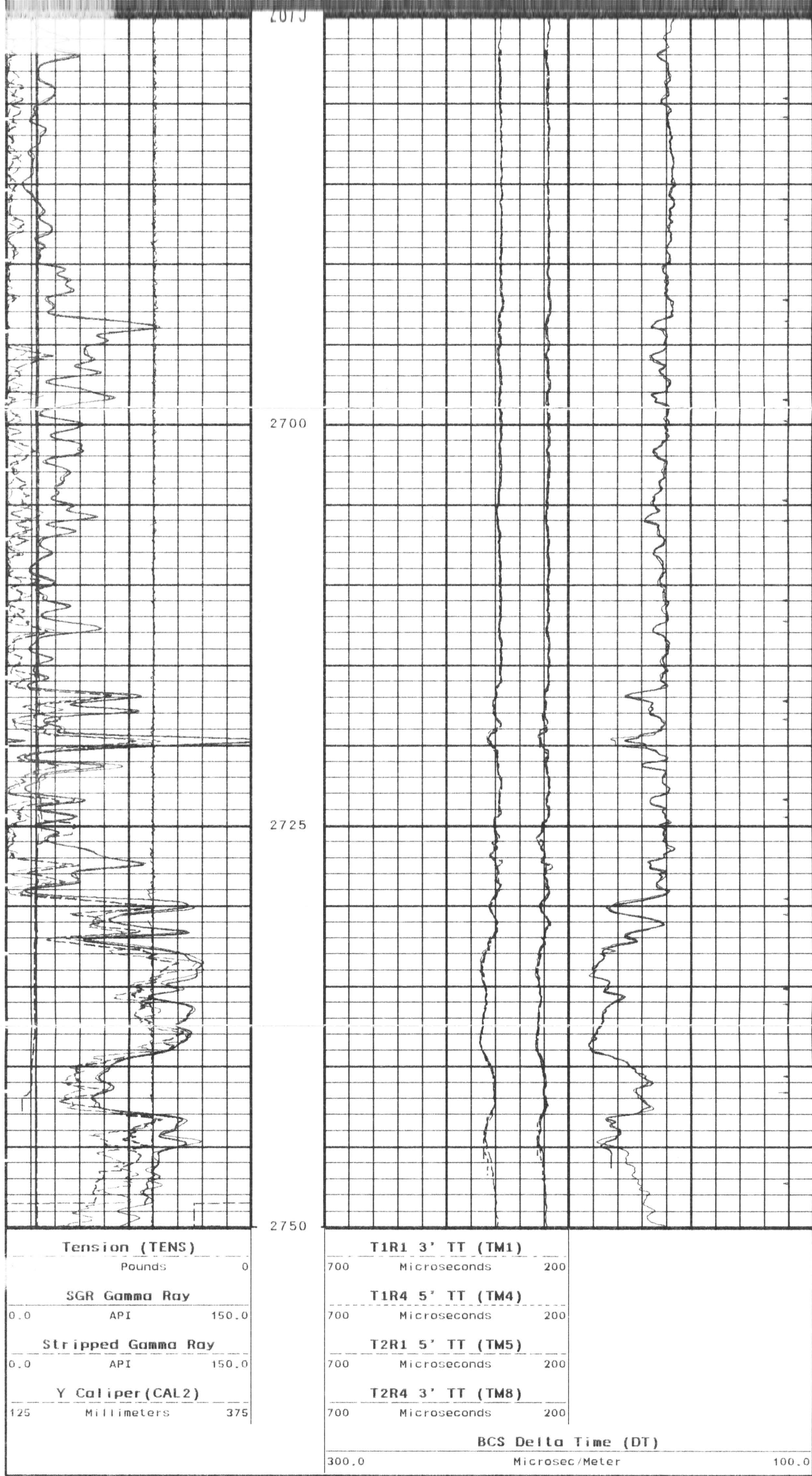
MAIN PASS			
DEPTH SCALE: 1:240		VERSION: 2003.07.25.245	
SYSTEM CONSTANTS			
NAME	DESCRIPTION	VALUE	UNITS
TDD	TD-Driller	2812.00	Meters
TDL	TD-Logger	2810.10	Meters
CSIZ	Casing Size	177.8	Millimeters
CWEI	Casing Weight	38.69	Kilograms/Meter
BHT	Bottom Hole Temp	125.0	DegreesCentigrade
SFT	Mean Annual Surf Temp	5.0	DegreesCentigrade
TGRD	Temperature Gradient	0.555	DegC/100Meters
NC00	Upper CAL-F Offset	-5.00	Millimeters
SPTL	Log With SP From	MCS	
WSPD	MCC SPed Pad Down	0.00	Degrees
SMAN	Sheave Wheel Angle	0.00	Degrees
MDSG	Trace Signature Choice Use Gain Scaled		
DAES	Entered Slowness	182.4	Microsec/Meter
DTF	DT Fluid	620.5	Microsec/Meter
DACP	Compaction	1.0	

REMARKS
REPEAT PASS/MAIN PASS OVERLAY
1:240 SCALE
300-100 usec/■
MAIN PASS = LIGHT LINES
REPEAT PASS = MEDIUM LINES

DEPTH SCALE: 1:240 VERSION: 2003.07.25.245

30017929
FINISH DEPTH: 2677.4 Meters DIRECTION: UP DATE: 02/25/2004 TIME: 07:08 MODE: TRACE PLAYBACK

Y Caliper (CAL2)		T2R4 3' TT (TM8)	
125	Millimeters	375	
Stripped Gamma Ray		T2R1 5' TT (TM5)	
0.0	API	150.0	
SGR Gamma Ray		T1R4 5' TT (TM4)	
0.0	API	150.0	
Tension (TENS)		T1R1 3' TT (TM1)	
10000	Pounds	0	



START DEPTH: 2750.0 DIRECTION: UP DATE: 02/25/2004 TIME: 07:08 MODE: TRACE PLAYBACK

DEPTH SCALE: 1:240

VERSION: 2003.07.25.245

SYSTEM CONSTANTS

NAME	DESCRIPTION	VALUE	UNITS
TDD	TD-Driller	2812.00	Meters
TDL	TU-Logger	2810.10	Meters
CSIZ	Casing Size	177.8	Millimeters
CMEI	Casing Weight	38.69	Kilograms/Meter
BHT	Bottom Hole Temp	125.0	DegreesCentigrade
SFT	Mean Annual Surf Temp	5.0	DegreesCentigrade
TGRD	Temperature Gradient	0.555	DegC/100Meters
WC00	Upper CAL-F Offset	-5.00	Millimeters
SPTL	Log With SP From	0.00	MCS
WSPD	WCC SPed Pad Down	0.00	Degrees
SWAN	Sheave Wheel Angle	0.00	Degrees
MDSG	Trace Signature Choice Use Gain Scaled	182.4	Microsec/Meter
DAES	Entered Slowness	620.5	Microsec/Meter
DTF	DT Fluid	1.0	
DACP	Compaction		

TVD CALCULATION SUMMARY

CALCULATION METHOD : Minimum Curvature
TVD DATA FILE : /u/os9-port/cs400/8000/30017929/30017929.tvdb

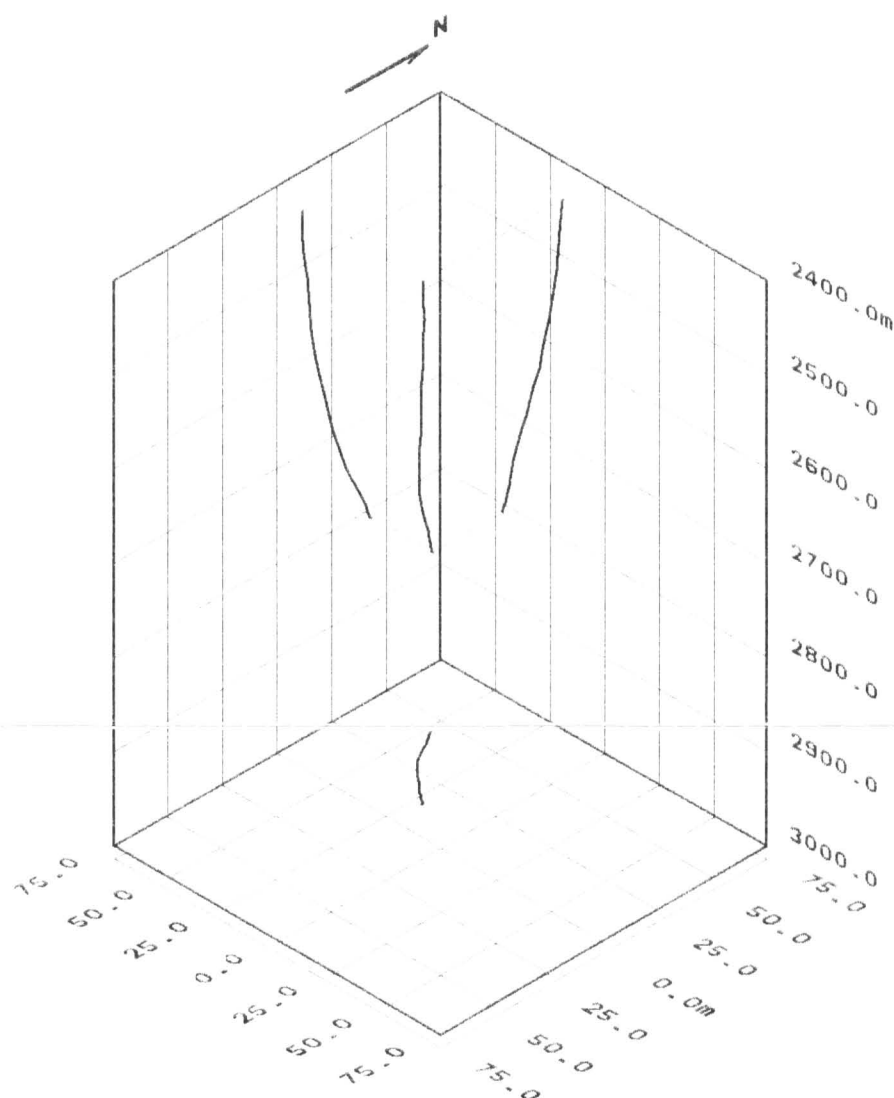
VERSION : 1.0

COMPANY : ANADARKO CANADA CORPORATION
WELL : ANADARKO ARROWHEAD RIVER K-35
LOCATION : K-35
DATE : FEBRUARY 24, 2004

DRILLED DEPTH : 2812.24 m
TRUE VERTICAL DEPTH : 2809.14 m
BOTTOM HOLE DISPLACEMENT : N 43.49 m W 47.77 m
TARGET DISPLACEMENT : N 0.00 m E 0.00 m

STATION NUMBER	MEASURED DEPTH (M)	INCLINATION ANGLE (DD)	AZIMUTH (DD)	VERTICAL DEPTH (M)	NORTH +ve (M)	EAST +ve (M)
TIE	0.00	0.00	0.00	0.00	0.00	0.00
1	2441.63	1.11	300.72	2441.48	12.08	-20.33
2	2460.82	2.00	325.20	2460.66	12.45	-20.68
3	2489.71	3.10	315.00	2489.52	13.42	-21.52
4	2518.48	3.50	303.90	2518.24	14.46	-22.80
5	2547.20	3.80	300.30	2546.91	15.43	-24.35
6	2575.97	4.70	307.60	2575.60	16.63	-26.11
7	2604.35	6.20	313.00	2603.85	18.38	-28.15
8	2633.42	7.40	313.20	2632.71	20.73	-30.66
9	2662.38	7.90	313.00	2661.41	23.37	-33.48
10	2691.22	8.80	311.30	2689.95	26.18	-36.58
11	2714.15	8.60	313.30	2712.61	28.51	-39.15
12	2747.66	10.10	338.60	2745.69	32.97	-42.05
13	2776.48	10.50	335.50	2774.05	37.71	-44.06
14	2798.24	11.40	324.00	2795.41	41.25	-46.14
15	2812.24	11.40	324.00	2809.14	43.49	-47.77

TVD - 3D PLOT



Company : ANADARKO CANADA CORPORATION
Well : ANADARKO ARROWHEAD RIVER K-35
Location : K-35
Date : FEBRUARY 24, 2004

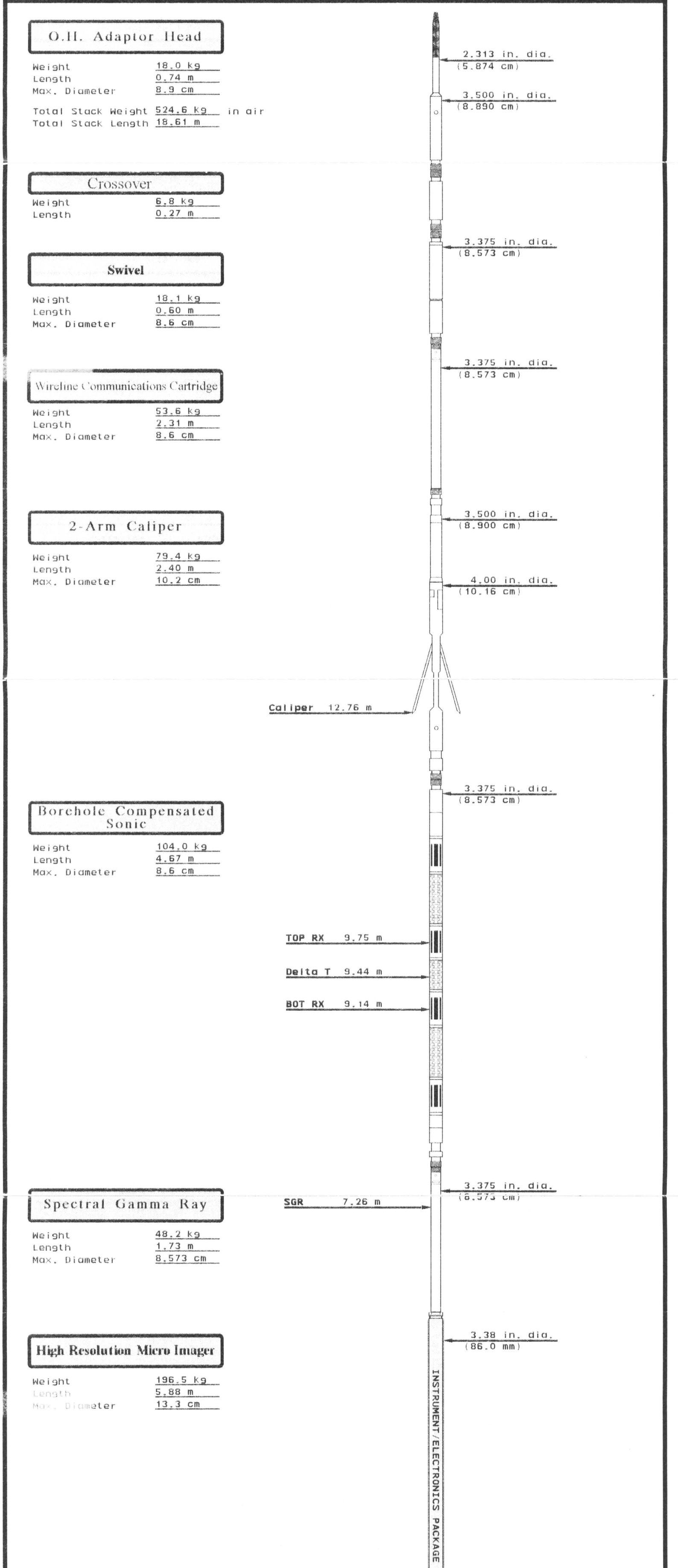
Drilled Depth : 2812.24
True Vertical Depth : 2809.14
Bottom Hole Displacement : N 43.49 m W 47.77 m
Target Displacement : N 0.00 m E 0.00 m

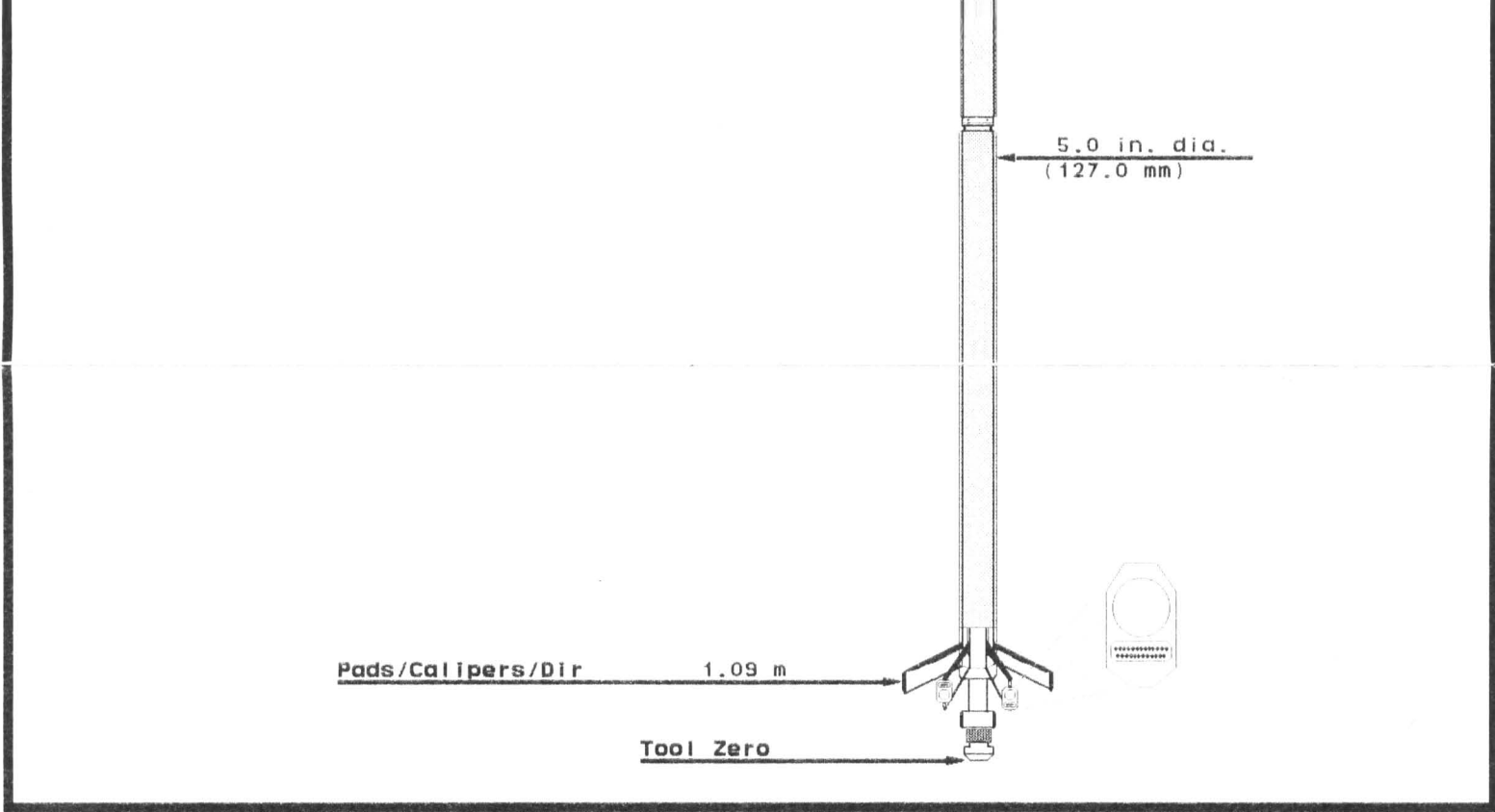
02/24/04	15:02	0.0 M	Ver 30725245	Job 30017929
Caliper Before Survey Calibration				
Tool Type: CAL-FA		Serial No:calf118		
	Measured		Calibrated	
	Small	Large	Units	Small Large Units
WCL0	766.2	1399.2	mv	177.8 355.6 mm

10/14/03	12:08	0.0 M	Ver 30725245	Job Shop Cal
SGR Shop Calibration				
Tool Type:	SGR-BA	Serial No:SGRB114		
Calibrator No:	168	Blank No: 175		
Temperature:	30 DegC	High Voltage: 1024 V		
Concentrations				
	Calibrator	Measured	Centroid	FWHM
K	1.92 %	1.85 %	109	13.60 %
U	12.84 PPM	12.87 PPM	135	16.30 %
Th	24.38 PPM	23.85 PPM	196	10.78 %
Backscatter			13	12.89 %
Window				
	Amersham	Blank		
1	845.6 CPS	79.9 CPS		
2	180.5 CPS	13.3 CPS		
3	59.1 CPS	6.7 CPS		
4	18.0 CPS	0.0 CPS		
5	22.9 CPS	2.2 CPS		
Software gain:	0.0133	Concentration Ratio: 1.0026		
Gross Gamma Ray Calibration				
KUT Calibrator				
Blank	Calibrator	Standard	Delta CPS	CPS/API
136.9 CPS	1631.5 CPS	228.0 API	1494.6 CPS	6.555
Radium Verifier				
	Serial No.	Background	Verifier	Delta CPS Delta API
SHOP	RA-20S-597	174.0 CPS	841.5 CPS	667.5 CPS 101.8 API

02/25/04	02:36	0.0 M	Ver 30725245	Job 30017929	
SGR Before Survey Verification					
Tool Type:	SGR-BA	Serial No:SGRB114			
Temperature:	76 DegC	High voltage: 386			
Radium Verifier					
	Serial No.	Background	Verifier	Delta CPS	Delta API
SHOP	RA-20S-597	190.2 CPS	841.5 CPS	651.3 CPS	99.4 API
BEFORE	RA-20S-335	202.1 CPS	890.3 CPS	688.2 CPS	105.0 API

02/25/04	08:45	0.0 M	Ver 30725245	Job 30017929	
SGR After Survey Verification					
Tool Type:	SGR-BA	Serial No:SGRB114			
Temperature:	76 DegC	High voltage: 1011			
Radium Verifier					
	Serial No.	Background	Verifier	Delta CPS	Delta API
SHOP	RA-20S-597	190.2 CPS	841.5 CPS	651.3 CPS	99.4 API
BEFORE	RA-20S-335	202.1 CPS	890.3 CPS	688.2 CPS	105.0 API
AFTER	RA-20S-335	190.2 CPS	881.7 CPS	691.5 CPS	105.5 API





COMPANY	ANADARKO CANADA CORPORATION
WELL	ANADARKO ARROWHEAD RIVER K-35
FIELD	ARROWHEAD PROVINCE N.W.T.

PRECISION

Wireline Technologies