

REMARKS			Rig: PD #247		Service Order # 4111419	
Drilling Stopped 09:30 / 26 Circulation Stopped 21:30 / 26 Tool on Bottom 02:45 / 27 BHT 58 °C						
- STI-SP/SPed/CNT/UGR/MRT/HBC/DAC LOGGED IN COMBINATION						
- MAXIMUM DEVIATION OF 27.4° @ 915m, WITH A KICKOFF OF 470m						
- CALIPERS HAD TO BE CLOSED BRIEFLY ON THE MAIN PASS FOR 1.5m @ 1516m						
- ORINETATION WAS DIFFICULT TO MAINTAIN THROUGH THE DEVIATED HOLE, SEVERAL PASSES WERE ATTEMPTED TO CORRECT						
CHANGES IN MUD TYPE OR NEW SAMPLE			SCALE CHANGES			
Date	Sample No.		Type Log	Interval	Scale	
Depth - Driller						
Type Fluid in Hole						
Dens.	Visc.					
pH	Water Loss					
Source of Sample			EQUIPMENT DATA			
Rm @ Meas. Temp.	(@)	°C	Run No.	Tool Type	Tool No.	Other
Rmf @ Meas. Temp.	(@)	°C	ONE	SPed-AB	192-136	163440B
Rmc @ Meas. Temp.	(@)	°C		CNT-SB	148	17453B
Source Rmf	Rmc			UGR-JB	191	RA-20S-075
Rm @ BHT	(@)	°C		CAL-FA	131	90° OFFSET WITH X-CALIPER
Rmf @ BHT	(@)	°C				
Rmc @ BHT	(@)	°C				

REMARKS
MAIN PASS 1:600 SCALE BULK DENSITY PRESENTATION OPEN HOLE VOLUME ON THE LEFT ANGULAR VOLUME ON THE RIGHT FOR 135.7mm CASING

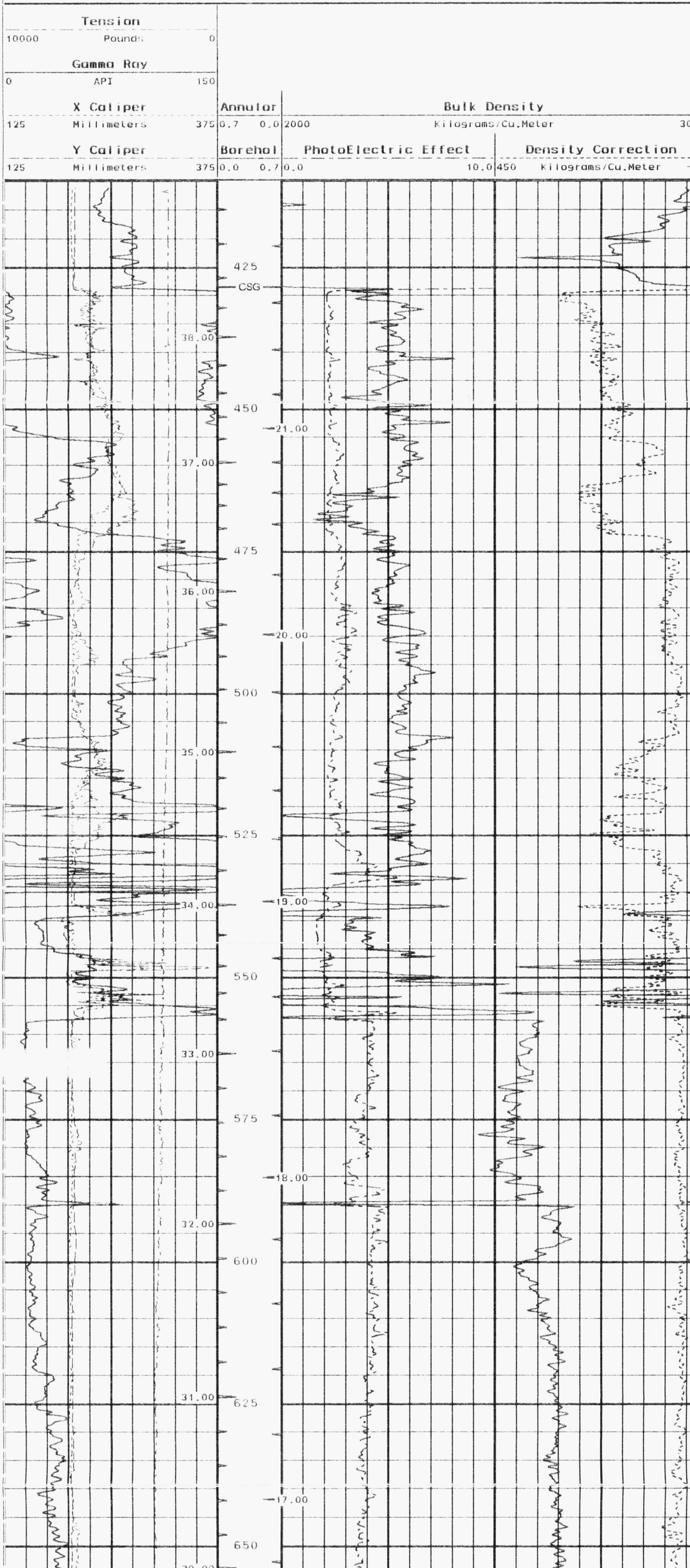
DEPTH SCALE: 1:600

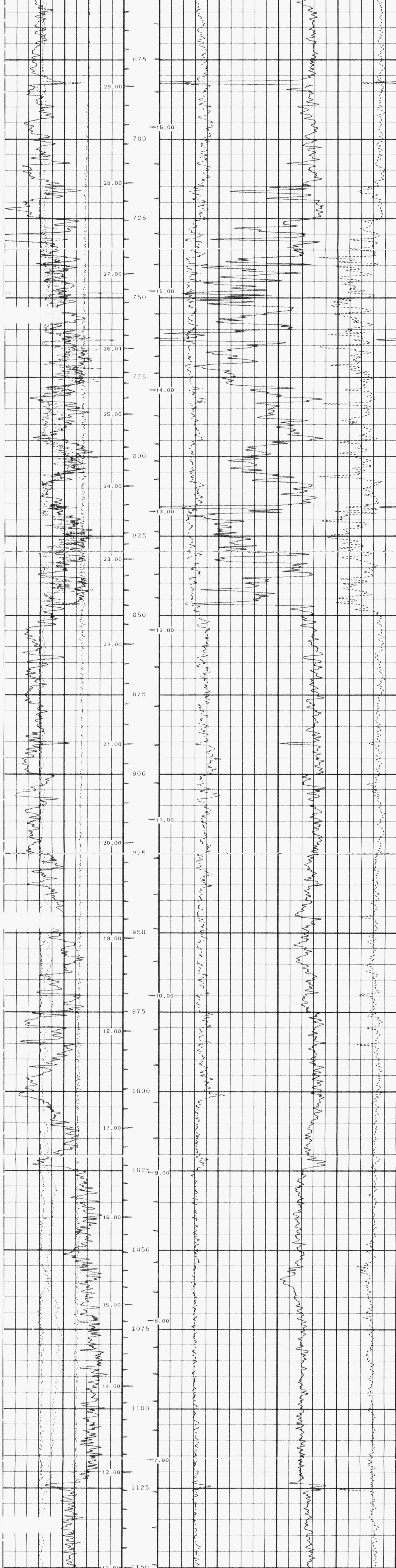
VERSION: 2005.02.23.795

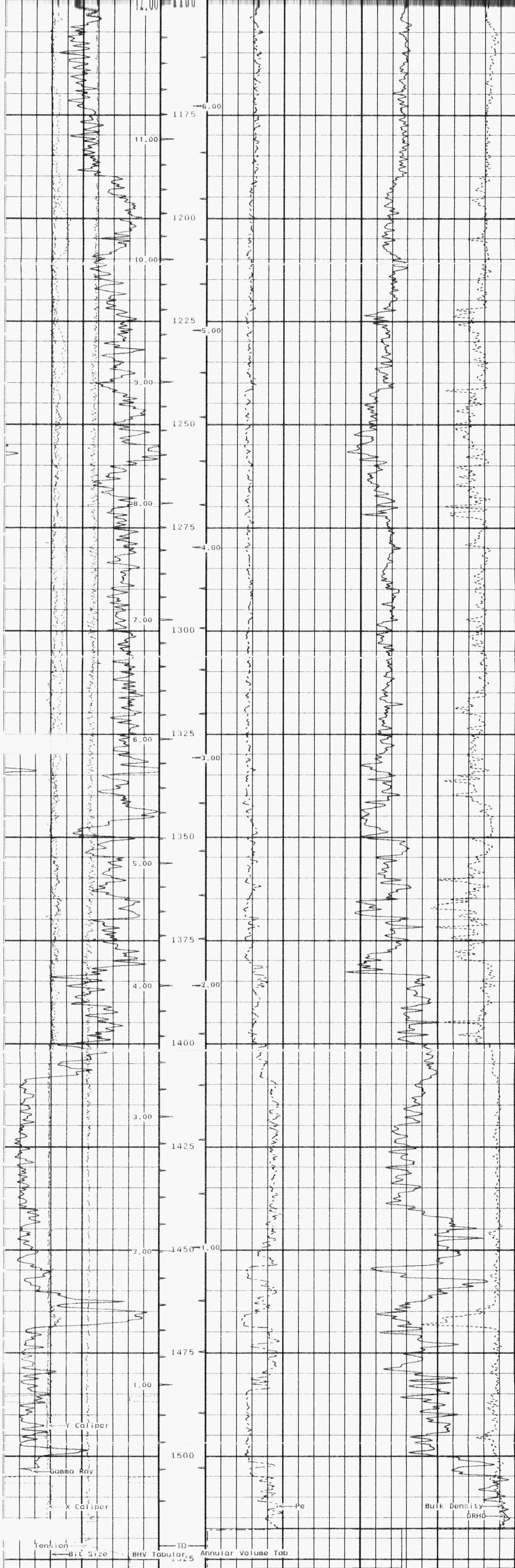
MAIN PASS

4111419 STIMP

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







Y Caliper			Borehol		PhotoElectric Effect		Density Correction	
125	Millimeters	375	0.0	0.7	0.0	10.0	450	Kilograms/Cu.Meter -50
X Caliper			Annular		Bulk Density			
125	Millimeters	375	0.7	0.0	2000	Kilograms/Cu.Meter		3000
Gamma Ray								
0	API	150						
Tension								
10000	Pounds	0						

START DEPTH: 1527.8 DIRECTION: UP DATE: 03/27/2005 TIME:06:58 MODE: TRACE PLAYBACK
BHV CASING SIZE: 139.70 Millimeters CALIPERS: CALI,CAL2,None
4111419 STIMP

MAIN PASS

DEPTH SCALE: 1:600

VERSION: 2005_02_23.795

SYSTEM CONSTANTS			
NAME	DESCRIPTION	VALUE	UNITS
TDL	TD-Logger	1521.80	Meters
BS	Bit Size	200.0	Millimeters
BHT	Bottom Hole Temp	58.0	DegreesCentigrade
BAR1	Barite Correction	OFF	
MW	Mud Weight	1130.0	Kilograms/Cu.Meter
SCAL	Density BH Diam Source	X Caliper	
BHC1	BHV Caliper Source 1	CALI	
BHC2	BHV Caliper Source 2	CAL2	
BHC3	BHV Caliper Source 3	None	
BDC1	BHV Diff Cal Source	CALI	
BHC6	BHV Method	Standard BHV	

REMARKS

MAIN PASS
1:240 SCALE
LIMESTONE MATRIX (2710 kg/m³)

DEPTH SCALE: 1:240

VERSION: 2005_02_23.795

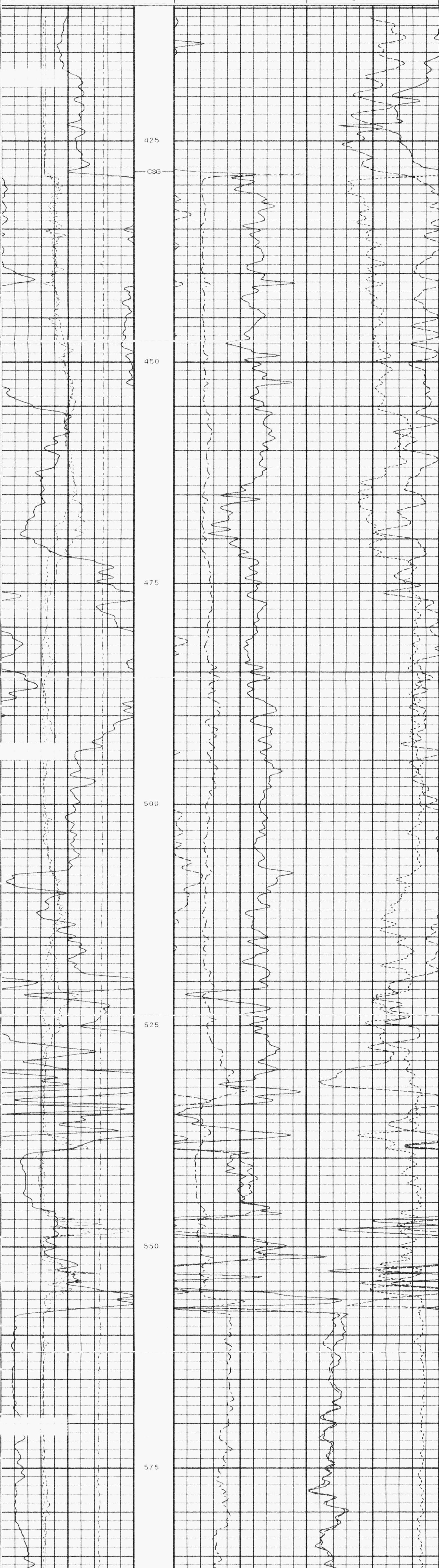
MAIN PASS

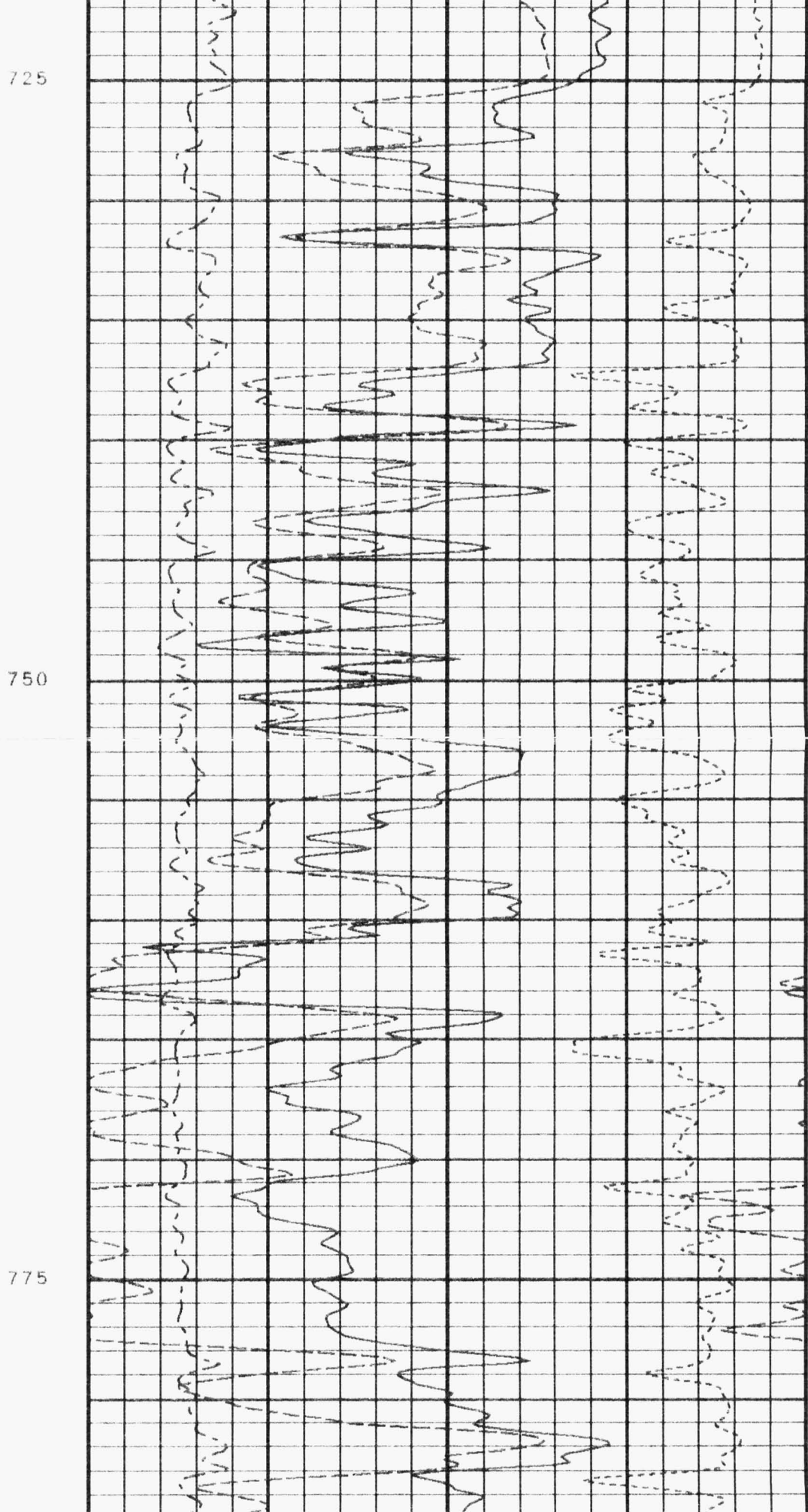
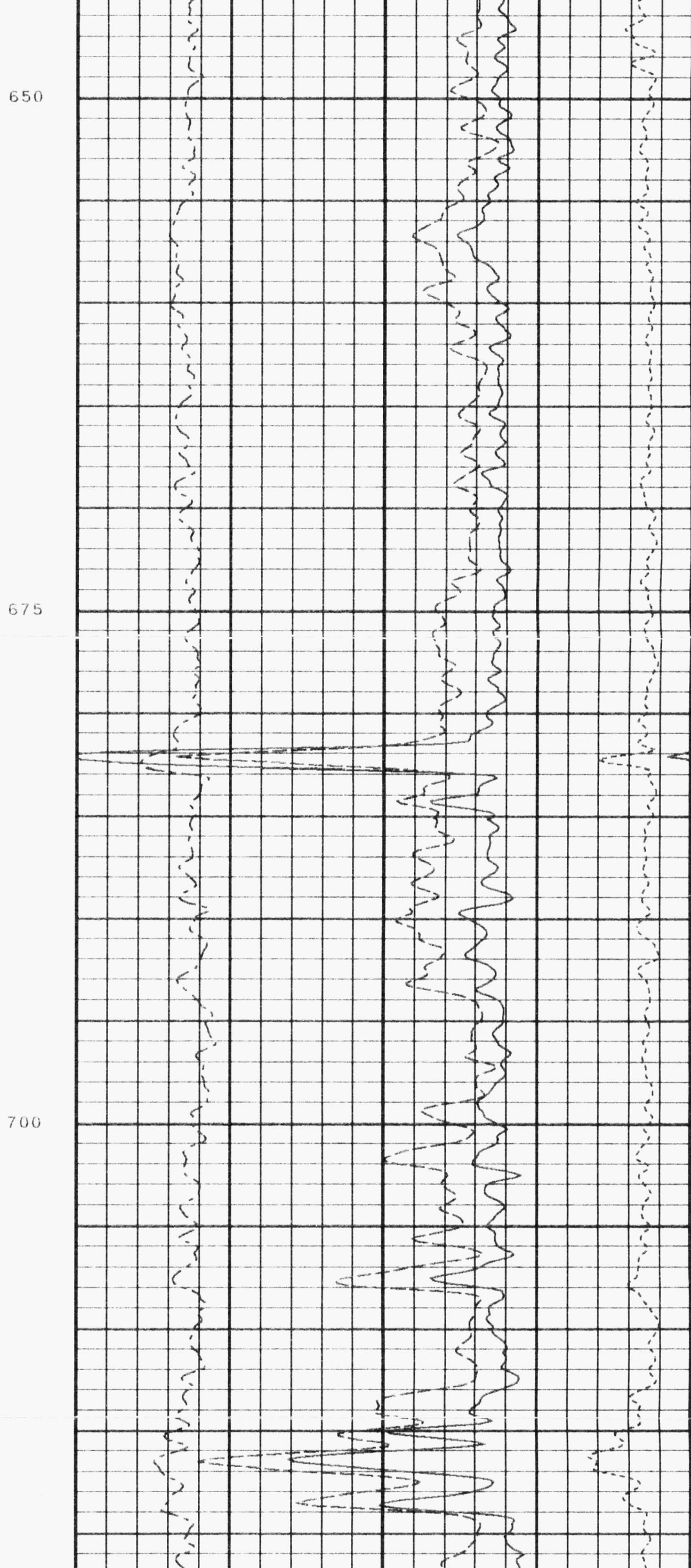
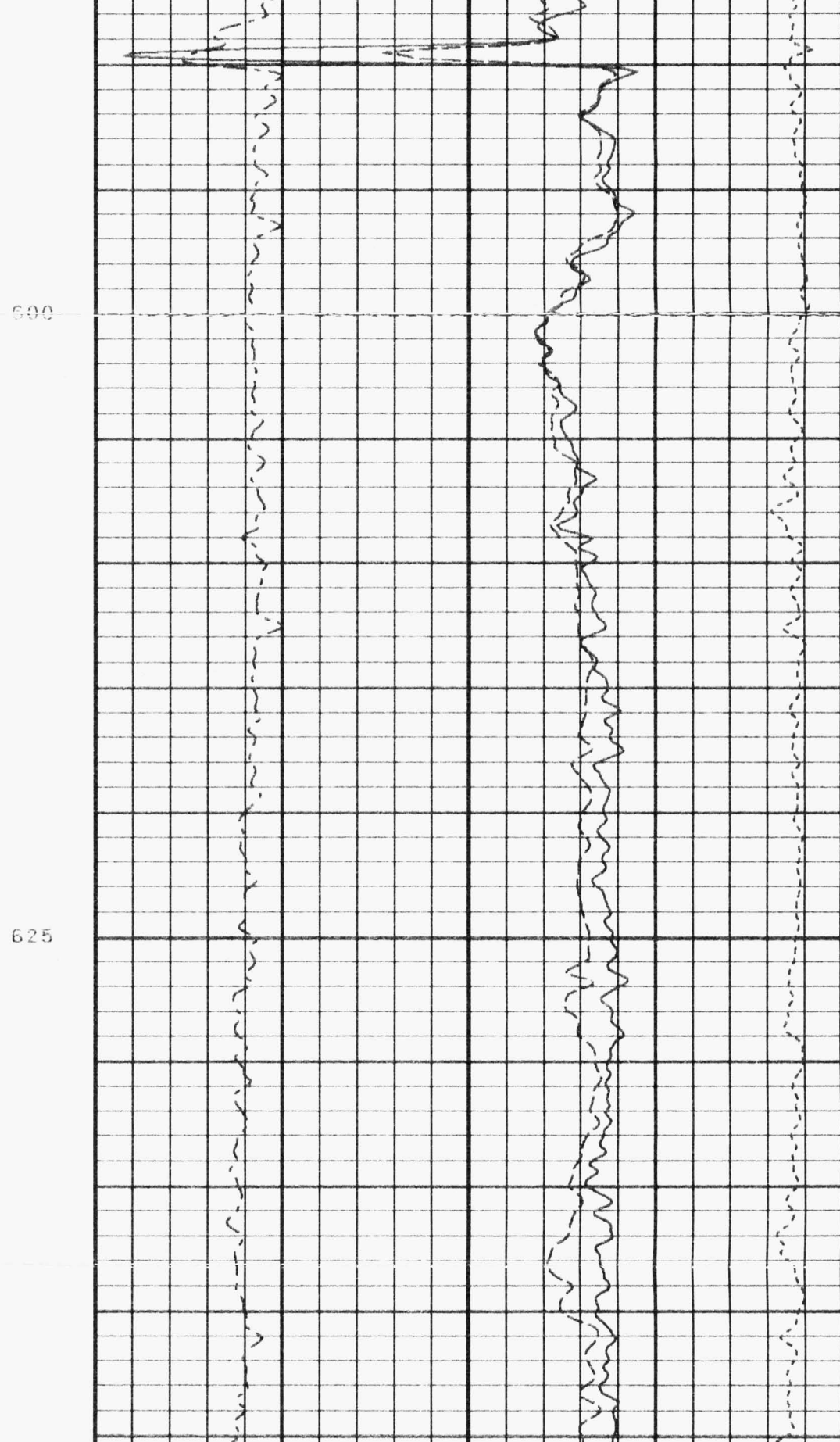
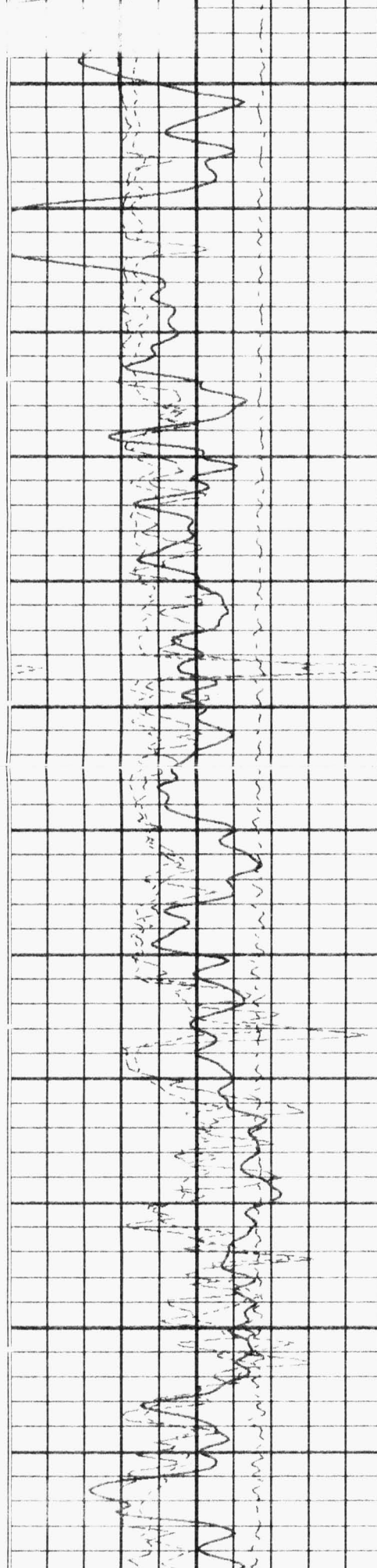
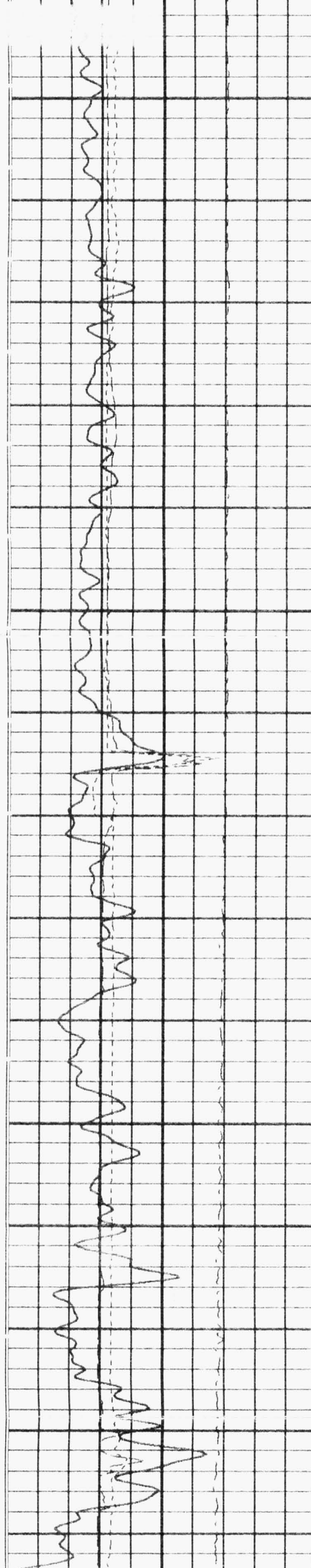
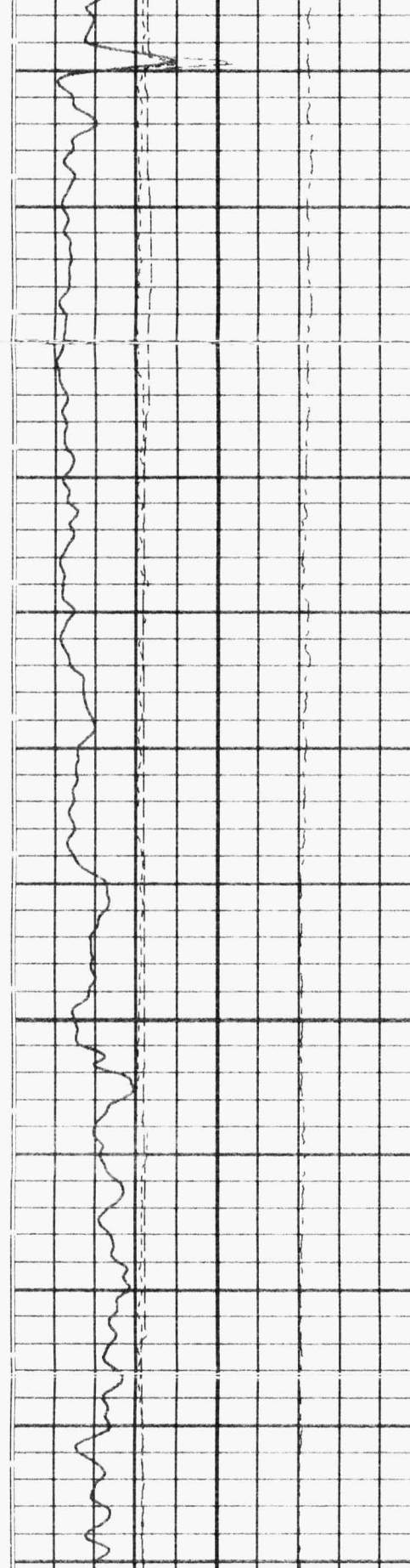
4111419 STIMP

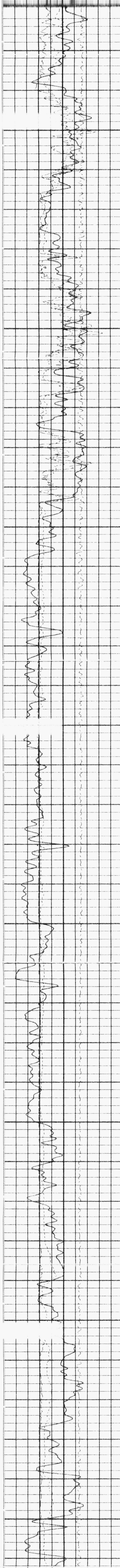
FINISH DEPTH: 0.0 Meters DIRECTION: UP DATE: TIME: MODE: TRACE PLAYBACK

Tension		
10000	Pounds	0
Gamma Ray		
0	API	150
X Caliper		
125	Millimeters	375
Y Caliper		
125	Millimeters	375

Neut. Porosity (LS)		
45.0	Percent	-15.0
Den. Porosity (LS)		
45.0	Percent	-15.0
PhotoElectric Effect		Density Correction
0.0	10.0 450	Kilograms/Cu.Meter -50







800

825

850

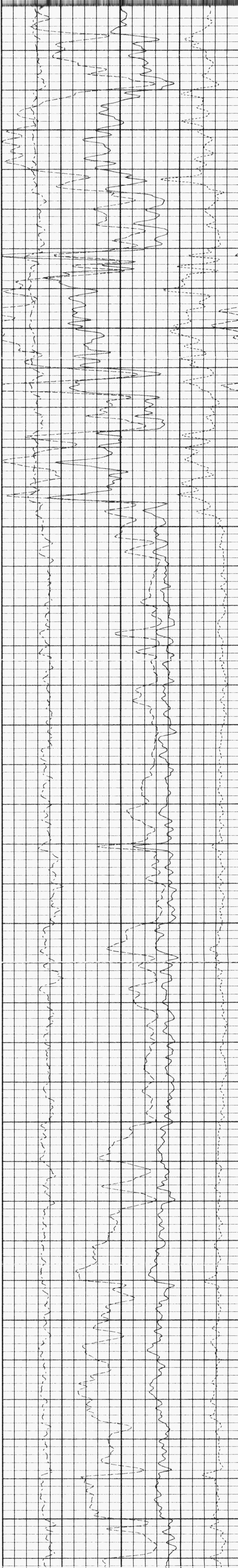
875

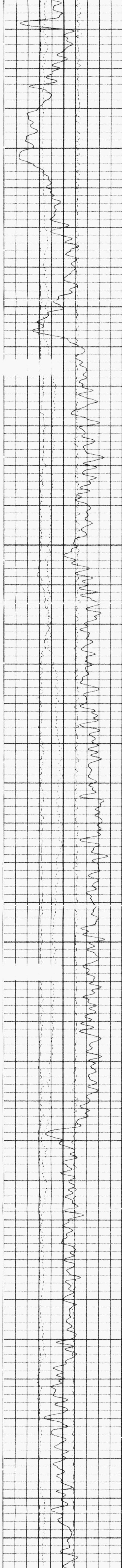
900

925

950

975





1000

1025

1050

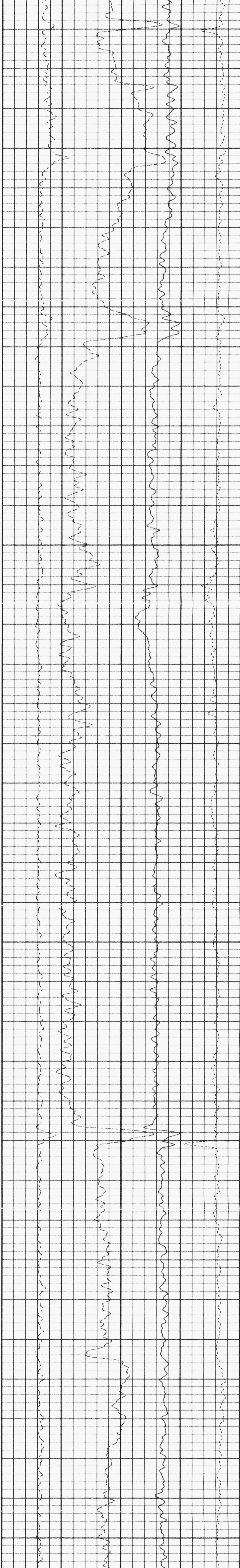
1075

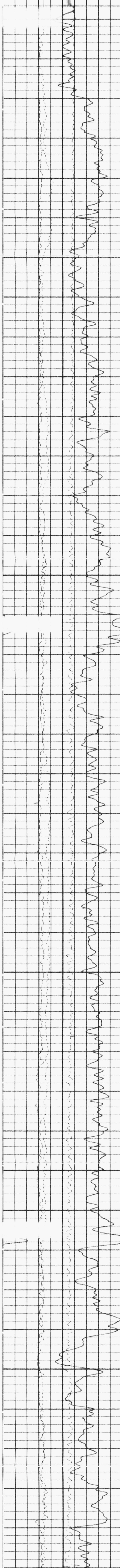
1100

1125

1150

1175





1200

1225

1250

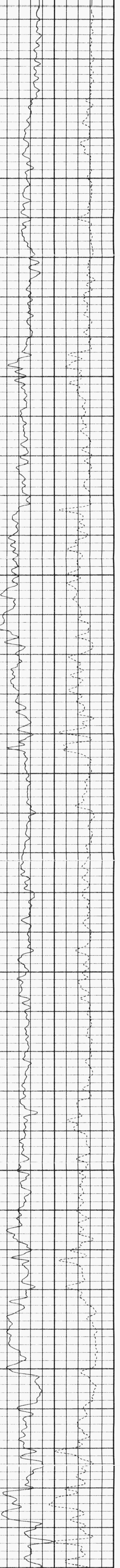
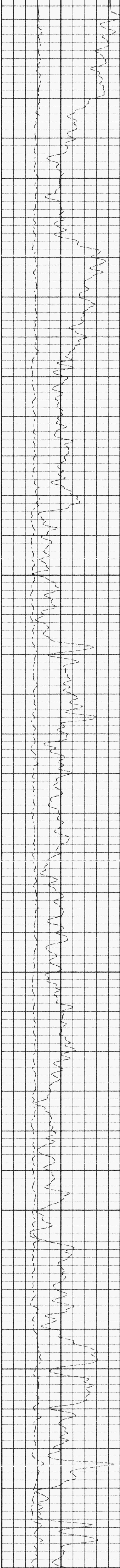
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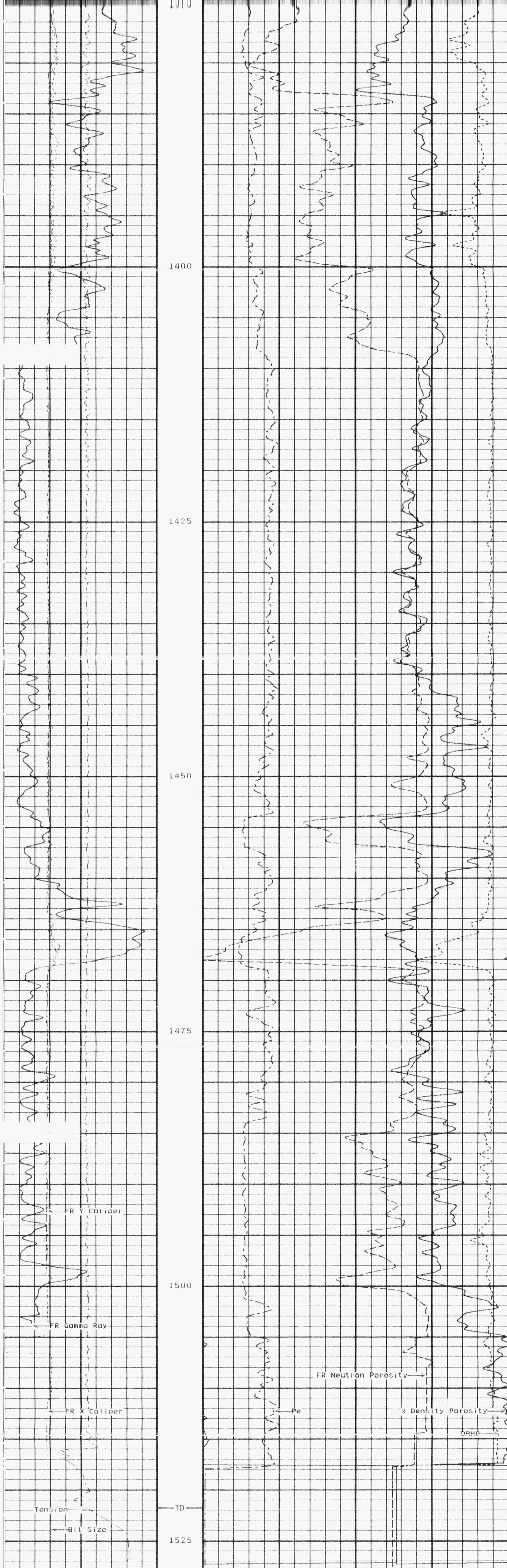
1300

1325

1350

1375





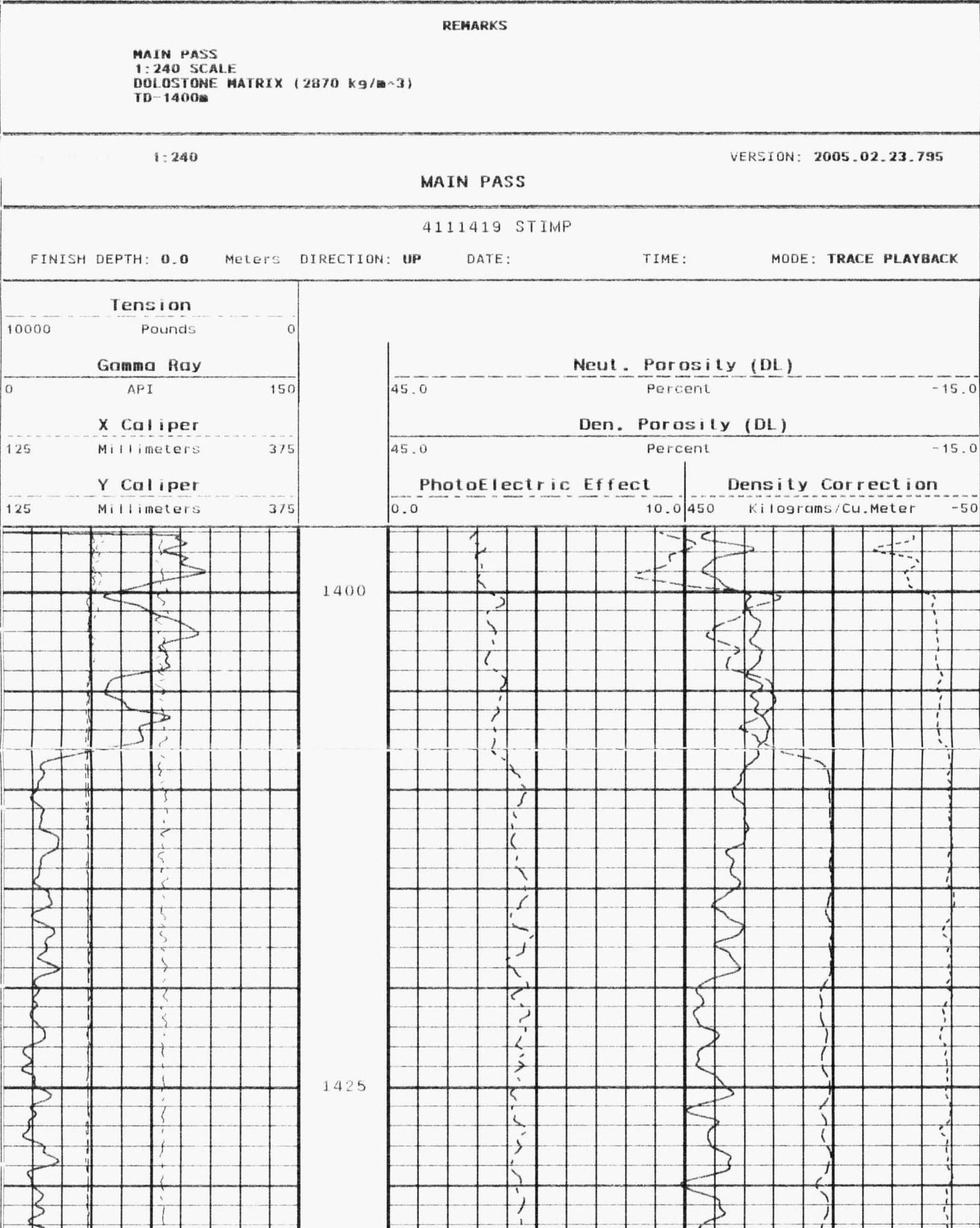
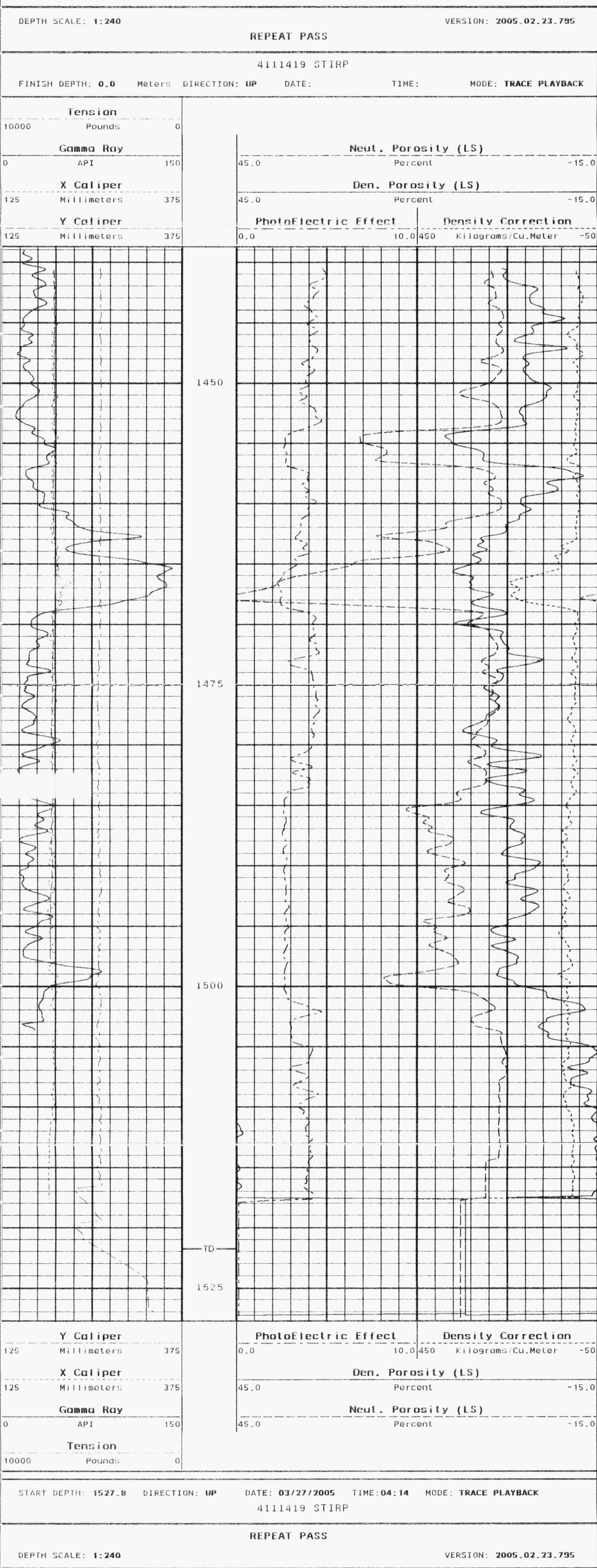
Y Caliper		PhotoElectric Effect		Density Correction	
125	Millimeters	375	0.0	10.0	450 Kilograms/Cu.Meter
X Caliper		Den. Porosity (LS)		Neut. Porosity (LS)	
125	Millimeters	375	45.0	Percent	-15.0
Gamma Ray					
0	API	150	45.0	Percent	-15.0
Tension					
10000	Pounds	0			

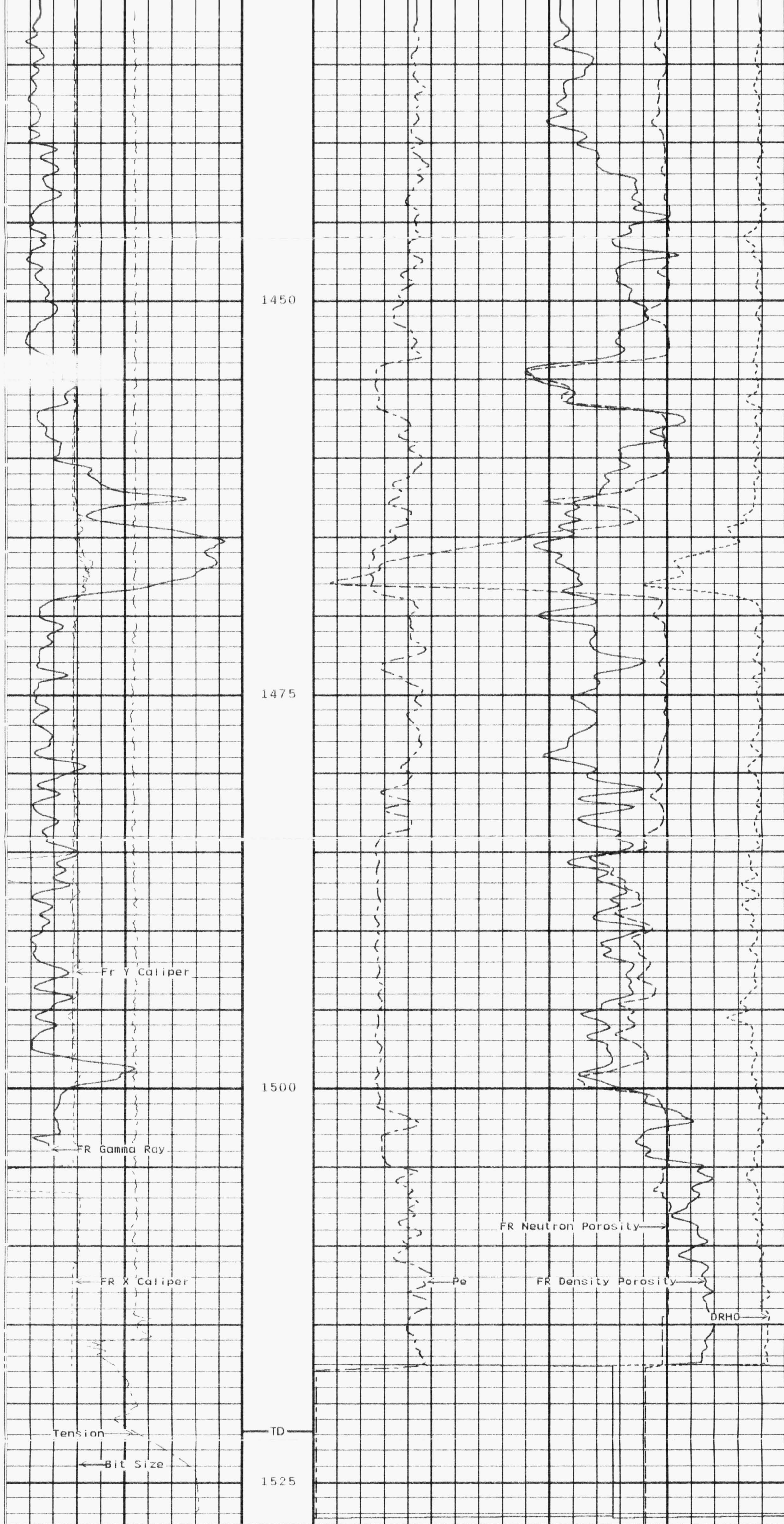
START DEPTH: 1527.8 DIRECTION: UP DATE: 03/27/2005 TIME:06:58 MODE: TRACE PLAYBACK
4111419 STIMP

MAIN PASS
DEPTH SCALE: 1:240 VERSION: 2005.02.23.795

SYSTEM CONSTANTS			
NAME	DESCRIPTION	VALUE	UNITS
TDL	TD-Logger	1521.80	Meters
BS	Bit Size	200.0	Millimeters
BHT	Bottom Hole Temp	58.0	DegreesCentigrade
SACC	Accumulation Time	100	Seconds
BARI	Barite Correction	OFF	
MW	Mud Weight	1130.0	Kilograms/Cu.Meter
NGAI	K Factor-NEU	1.028	
BHS	Open/Cased Hole	Open	
NBGS	BitSize/Calp Sel-CNT	Caliper	
NTLS	Tool Type-CNT	CNT-S	
NCOT	Constant Temp-CNT	21.0	DegreesCentigrade
OCOR	Cnt Environ.correction	OFF	
NCAL	LIS Caliper Name-CNT	X Caliper	
SCAL	Density BH Diam Source	X Caliper	

REMARKS
REPEAT PASS
1:240 SCALE
LIMESTONE MATRIX (2710 kg/m^3)





Y Caliper		PhotoElectric Effect		Density Correction	
meters	375	0.0	10.0	450	Kilograms/Cu.Meter -50
X Caliper		Den. Porosity (DL)			
125	Millimeters 375	45.0	Percent		-15.0
Gamma Ray		Neut. Porosity (DL)			
0	API 150	45.0	Percent		-15.0
Tension					
10000	Pounds 0				

START DEPTH: 1527.8 DIRECTION: UP DATE: 03/27/2005 TIME:04:17 MODE: TRACE PLAYBACK
4111419 STIMP

MAIN PASS
DEPTH SCALE: 1:240 VERSION: 2005.02.23.795

SYSTEM CONSTANTS				
NAME	DESCRIPTION	VALUE	UNITS	
TDL	TD-Logger	1521.80	Meters	
BS	Bit Size	200.0	Millimeters	
BHT	Bottom Hole Temp	58.0	DegreesCentigrade	
SACC	Accumulation Time	100	Seconds	
BARI	Barite Correction	OFF		
MM	Mud Weight	1130.0	Kilograms/Cu.Meter	
NGAI	K Factor-NEU	1.028		
BHS	Open/Cased Hole	Open		
NBGS	Bitsize/Calp Sel-CNT	Caliper		
NTLS	Tool Type-CNT	CNT-S		
NCOT	Constant Temp-CNT	21.0	DegreesCentigrade	
NCOR	Cnt. Environ. correction	OFF		
NCAL	LIS Caliper Name-CNT	X Caliper		
SCAL	Density BH Diam Source	X Caliper		

03/26/05	22:51	0.0 M	Ver 50223795	Job 4111419
Caliper Before Survey Calibration				
Tool Type: CAL-FA		Serial No: CALF131		
	Measured		Calibrated	
	Small Large Units	Small Large Units		
MCLO	671.5 1513.4 mV	177.8 355.6 mm		

03/26/05	22:56	0.0 M	Ver 50223795	Job 4111419
Gamma Ray Before Survey Calibration				
Tool Type: UGR-JA		Serial No: UGRJ191		
Calibrator No:				
Background	Calibrator	Standard	Units	
120.3	632.1	140.0	API	
Delta Counts Per Sec: 511.8		CPS/API = 3.656		

02/02/05	18:00	0.0 M	Ver 41007739	Job SHOP
Compensated Neutron Shop Calibration				
Tool Type: CNT-S		Serial No: CNTS145		
Verifier No: NSV-167		Source No: 174538		
Tank Type: NCT-AA				
	Low Porosity	Med Porosity	High Porosity	Units
Tank Ratio:	0.713	1.457	2.294	SS/LS
Tank Porosity:	-0.76	10.25	25.73	LM-PU
LS Detector:	1461.7	347.1	147.1	CPS
SS Detector:	984.8	491.8	334.7	CPS
Tool Ratio:	0.674	1.417	2.275	SS/LS
Tool Porosity:	-0.98	10.25	26.70	LM-PU
Tool Constant: 1.028				
Surface Temperature: 21 DegC				
	SS Detector	LS Detector	Ratio	Porosity
	281.8 CPS	169.7 CPS	1.660	14.66

03/26/05	22:49	0.0 M	Ver 50223795	Job 4111419
Compensated Neutron Before Survey Calibration				
Tool Type: CNT-S		Serial No: CNTS145		
Verifier No: NSV-167		Source No: 174538		
	LS Detector:	Verifier Check	Units	
		173.6	CPS	
	SS Detector:	282.7	CPS	

Tool Ratio:	1.628	SS/LS
Tool Porosity:	14.07	LM-PU
Tool Constant:	1.028	

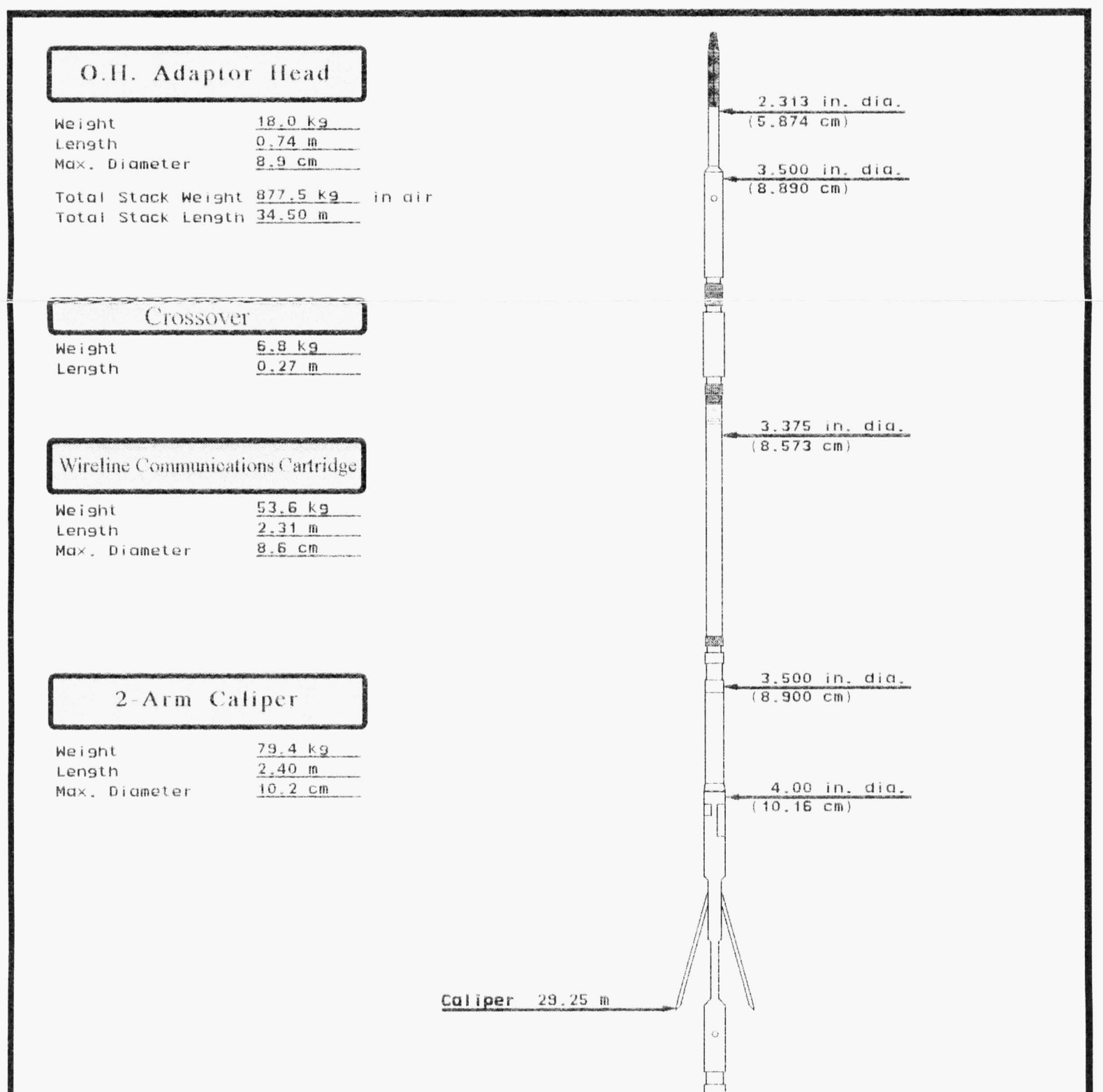
03/27/05	08:11	0.0 M	Ver 50223795	Job 4111419
Compensated Neutron After Survey Calibration				
Tool Type: CNT-S		Serial No: CNTS145		
Verifier No: MSV-167		Source No: 174538		
	Verifier Check			
	Before	After	Units	
LS Detector:	173.6	172.5	CPS	
SS Detector:	282.7	281.4	CPS	
Tool Ratio:	1.628	1.631	SS/LS	
Tool Porosity:	14.07	14.12	LM-PU	
Tool Constant:	1.028			

01/29/05	15:12	0.0 M	Ver 41007739	Job SHOP
Spectral Pe Density Shop Calibration				
Tool Type: SPS-AB		Sonde No: SPSB192		
Firmware Ver: . 0		Electronics No: SPCB136		
Aluminum BIK No: ALBA110		Source No: 16940B		
		Magnesium BIK No: MGBA110		
	BK9	Al	Al+Fe	Mg Units
Cs Pk	110.20	110.08	110.10	110.06 Ch
Gain	0.167	0.166	0.166	0.166 Ch/Kev
Tng Pk	11.39			
Off	-0.102			
Res	8.87	8.88	8.76	8.98 %
LLPE	154	1287	847	8731 cps
LUPE	82	989	762	6203 cps
LSUC	495	945	859	5537 cps
LCMP	1002	3686	3266	22048 cps
Cs Pk	110.03	109.98	110.03	110.10 Ch
Gain	0.166	0.166	0.166	0.167 Ch/Kev
Tng Pk	11.32			
Off	-0.170			
Res	9.54	9.74	9.44	9.61 %
SLPE	152	2387	1692	3612 cps
SUPE	80	1808	1389	2648 cps
SSUC	449	4627	4228	6573 cps
SCMP	931	10939	9768	16241 cps
Acc	250	250	250	250 Secs
Density Calibration				
		Fresh	Barite	
Spine Angle =		77.54	78.77	
Spine Length =		202.07	198.84	
Pe Calibration				
		Fresh	Barite	
LS Slope =		1.7230	0.3860	
LS Intercept =		-0.2380	-0.1620	

03/26/05	22:59	0.0 M	Ver 50223795	Job 4111419
Spectral Pe Density Before Survey Tool Check				
Tool Type: SPS-AB		Sonde No: SPSB192		
Firmware Ver: . 0		Electronics No: SPCB136		
Aluminum BIK No: ALBA110		Source No: 16940B		
		Magnesium BIK No: MGBA110		
	Shop	Before		Units
Cs Pk	110.20	110.20		Ch
Gain	0.167	0.166		Ch/Kev
Tng Pk	11.39	11.42		Ch
Off	-0.102	-0.063		Ch
Res	8.87	8.65		%
LLPE	154	158		
LUPE	82	83		
LSUC	495	497		
LCMP	1002	1004		
Cs Pk	110.03	109.87		Ch
Gain	0.166	0.164		Ch/Kev
Tng Pk	11.32	11.52		Ch
Off	-0.170	-0.291		Ch
Res	9.54	9.63		%
SLPE	152	153		
SUPE	80	82		
SSUC	449	451		
SCMP	931	934		
Acc	250	100		Secs

03/27/05	08:25	0.0 M	Ver 50223795	Job 4111419
Spectral Pe Density After Survey Tool Check				
Tool Type: SPS-AB		Sonde No: SPSB192		
Firmware Ver: . 0		Electronics No: SPCB136		
Aluminum BIK No: ALBA110		Source No: 16940B		
		Magnesium BIK No: MGBA110		
	Shop	Before	After	Units
Cs Pk	110.20	110.20	110.40	Ch
Gain	0.167	0.166	0.166	Ch/Kev
Tng Pk	11.39	11.42	11.25	Ch
Off	-0.102	-0.063	-0.014	Ch
Res	8.87	8.65	8.59	%
LLPE	154	158	157	cps
LUPE	82	83	83	cps
LSUC	495	497	498	cps
LCMP	1002	1004	1004	cps
Cs Pk	110.03	109.87	110.30	Ch
Gain	0.166	0.164	0.166	Ch/Kev
Tng Pk	11.32	11.52	11.08	Ch
Off	-0.170	-0.291	-0.108	Ch
Res	9.54	9.63	9.88	%
SLPE	152	153	153	cps
SUPE	80	82	81	cps
SSUC	449	451	450	cps
SCMP	931	934	932	cps
Acc	250	100	100	Secs

03/26/05	22:53	0.0 M	Ver 50223795	Job 4111419
Caliper Before Survey Calibration				
Tool Type: SPD-CL		Serial No:SPSB192		
	Measured	Units	Calibrated	
	Small Large		Small Large	Units
MCL2	1502.9 3416.2	mm	177.8 355.6	mm



Borehole Compensated Sonic

Weight 104.0 kg
Length 4.62 m
Max. Diameter 8.6 cm

TOP RX 25.30 m

Delta T 25.99 m

BOT RX 25.69 m

Centralizer

Weight 30.9 kg
Length 1.38 m
Max. Diameter 8.6 cm

MRT 400

Weight 121.5 kg
Length 4.04 m
Max. Diameter 12.7 cm

SPeD 400 Electronics

Weight 56.7 kg
Length 2.92 m
Max. Diameter 8.6 cm

Universal GR

Weight 37.3 kg
Length 1.40 m
Max. Diameter 8.6 cm

Mandrel Neutron

Weight 45.4 kg
Length 2.07 m
Max. Diameter 8.6 cm

SPeD 400 Pad Section

Weight 141.5 kg
Length 3.38 m
Max. Diameter 11.4 cm

Simultaneous Triple Induction

Weight 176.9 kg
Length 8.75 m
Max. Diameter 10.2 cm

Stand - Off

Weight 5.5 kg
Length 0.20 m

3.375 in. dia.
(8.573 cm)

3.500 in. dia.
(8.890 cm)

3.500 in. dia.
(8.890 cm)

3.750 in. dia.
(9.525 cm)

4.00 in. dia.
(10.16 cm)

2 in. 19.33 m
1 in. 19.32 m

Caliper 19.32 m

3.375 in. dia.
(8.573 cm)

3.375 in. dia.
(8.573 cm)

GR 15.41 m

3.375 in. dia.
(8.573 cm)

LS cps
PHIN 13.08 m
SS cps

3.67 in. dia.
(9.32 cm)

4.19 in. dia.
(10.64 cm)

Caliper 9.61 m

LS cps/PE

PHID 9.63 m

SS cps/PE

4.00 in. dia.
(10.16 cm)

3.375 in. dia.
(8.573 cm)

4.00 in. dia.
(10.16 cm)

ILD 3.28 m

SFL 2.65 m
SP 2.41 m
ILM 2.10 m

WELL

PARA ET AL CAMERON 2M-73

FIELD

CAMERON HILLS PROVINCE N.T.

