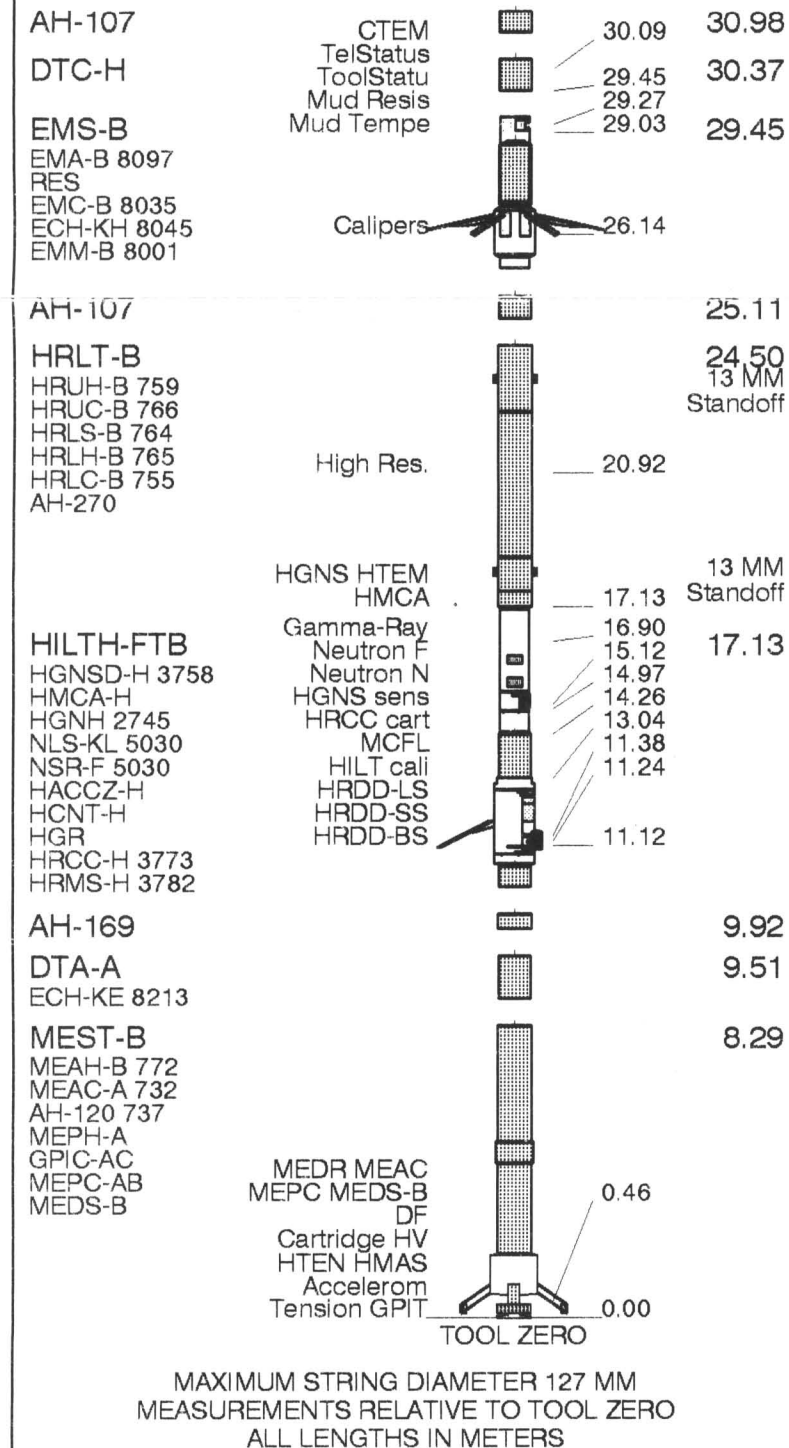




Input DLIS Files

DEFAULT FMS_TLD_MCFL_CNL_067PUP FN:66 PRODUCER 23-Feb-2004 00:36 2642.8 M 2510.5 M

Indexed to True Vertical Depth in this Playback

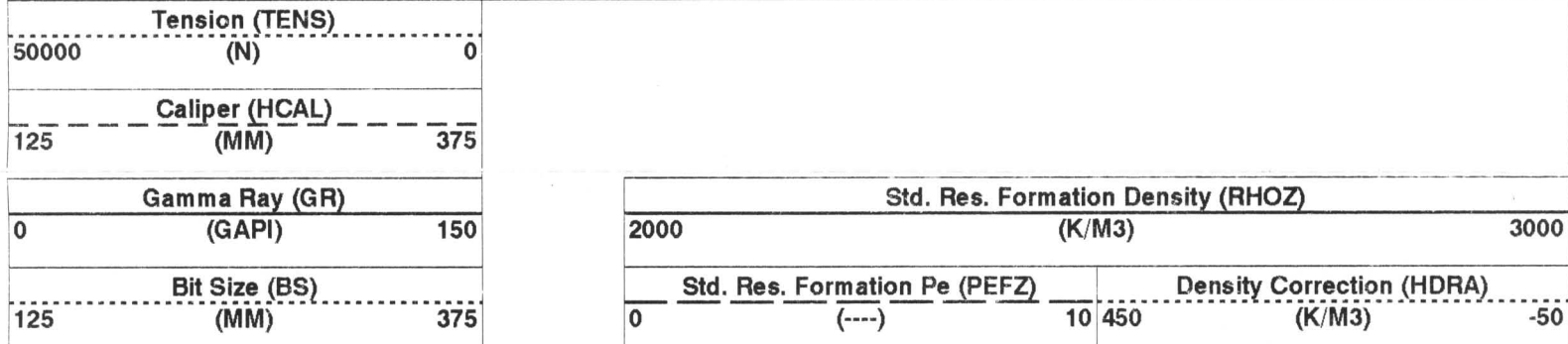
OP System Version: 11C0-305
MCM

MESTB	11C0-305	DTAA	OP11-KP1
HILTHD	op11kp1_newpex150kit_G_b	HRLT	op11kp1_HrltKit_b
EMS	11C0-305	DTCH	11C0-305
SPAA	11C0-305		

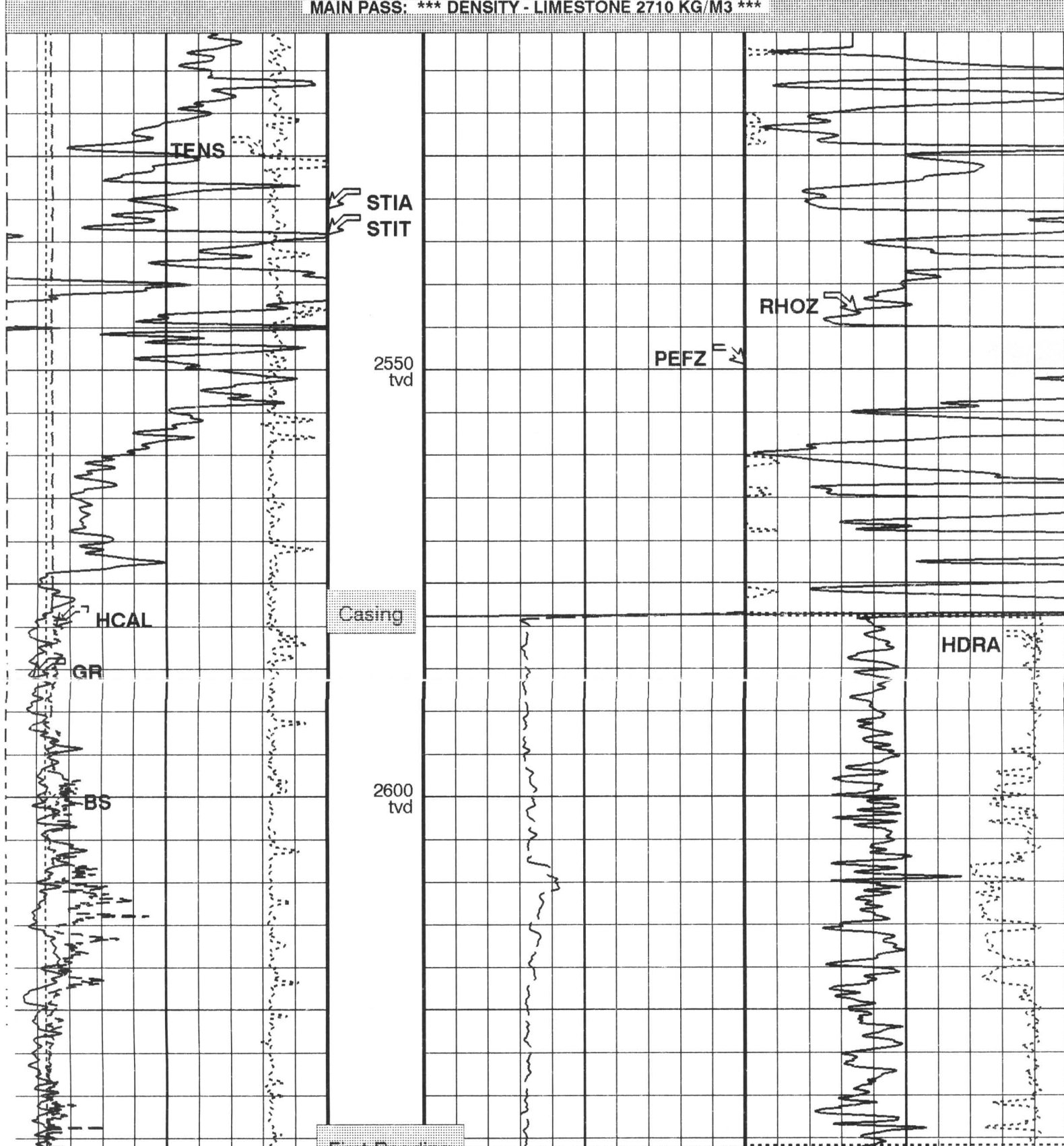
PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3

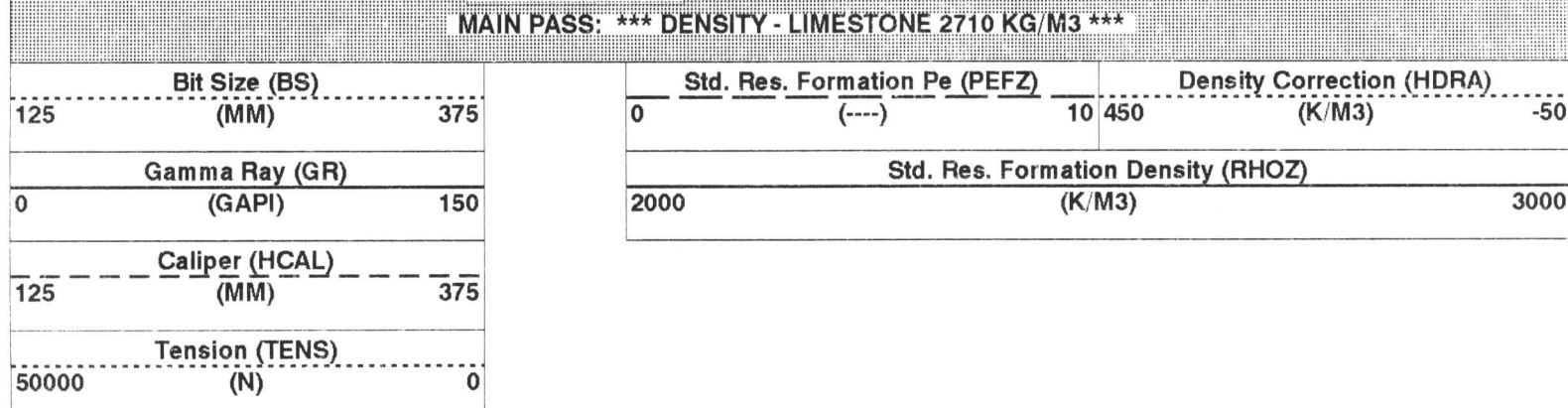
Time Mark Every 60 S



MAIN PASS: * DENSITY - LIMESTONE 2710 KG/M3 *****



MAIN PASS: * DENSITY - LIMESTONE 2710 KG/M3 *****



PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTH-FTB	High resolution Integrated Logging Tool-DTS	
DHC	Density Hole Correction	BS
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HIRES
NSAR	HRDD Depth Sampling Rate	25.400 mm
DIR	Directional Survey Computation	
SPVD	TVD of Starting Point	0.000 m
TIMD	Along-hole depth of Tie-in Point	75.200 m
TIVD	TVD of Tie-in Point	75.200 m
STI	Stuck Tool Indicator	
STKT	STI Stuck Threshold	1.524 m
TDD	Total Depth - Driller	3700.0 m
TDL	Total Depth - Logger	3692.0 m
System and Miscellaneous		
ALTDPCAN	Name of alternate depth channel	TRUEVERTICALDEPTH
BS	Bit Size	156.0 mm
DFD	Drilling Fluid Density	1050.0 kg/m3
PBVSADP	Use alternate depth channel for playback	YES

Format: DENS Vertical Scale: 1:600 Graphics File Created: 23-Feb-2004 01:50

OP System Version: 11C0-305
MCM

MESTB	11C0-305	DTAA	OP11-KP1
HILTHD	op11kp1_newpex150kit_G_b	HRLT	op11kp1_HrltKit_b
EMS	11C0-305	DTCH	11C0-305
SPAA	11C0-305		

Indexed to True Vertical Depth in this Playback

Input DLIS Files

Input DLIS Files						
DEFAULT	EMS_TLD_MCFL_CNL_097PUP	FN:66	PRODUCER	23-Feb-2004 14:40	2931.3 M	4.9 M
Output DLIS Files						
DEFAULT	EMS_TLD_MCFL_CNL_098PUP	FN:88	PRODUCER	23-Feb-2004 15:05	2585.5 M	5.3 M
REDUCED	EMS_TLD_MCFL_CNL_098PUP	FN:89	PRODUCER	23-Feb-2004 15:05	2585.5 M	5.3 M

Indexed to True Vertical Depth in this Playback

OP System Version: 11C0-305			
MCM			
EMS-B	11C0-305	HILTH-FTB	op11kp1_newpex150kit_G_b
DTC-H	11C0-305		

Time Mark Every 60 S

Tension (TENS)
(N)

500000

0

Gamma Ray (GR)
(GAPI)

0

150

Bit Size (BS)
(MM)

125

375

NPOR for LIME (NPOR_LIM)
(V/V)

0.45

-0.15

PIP SUMMARY

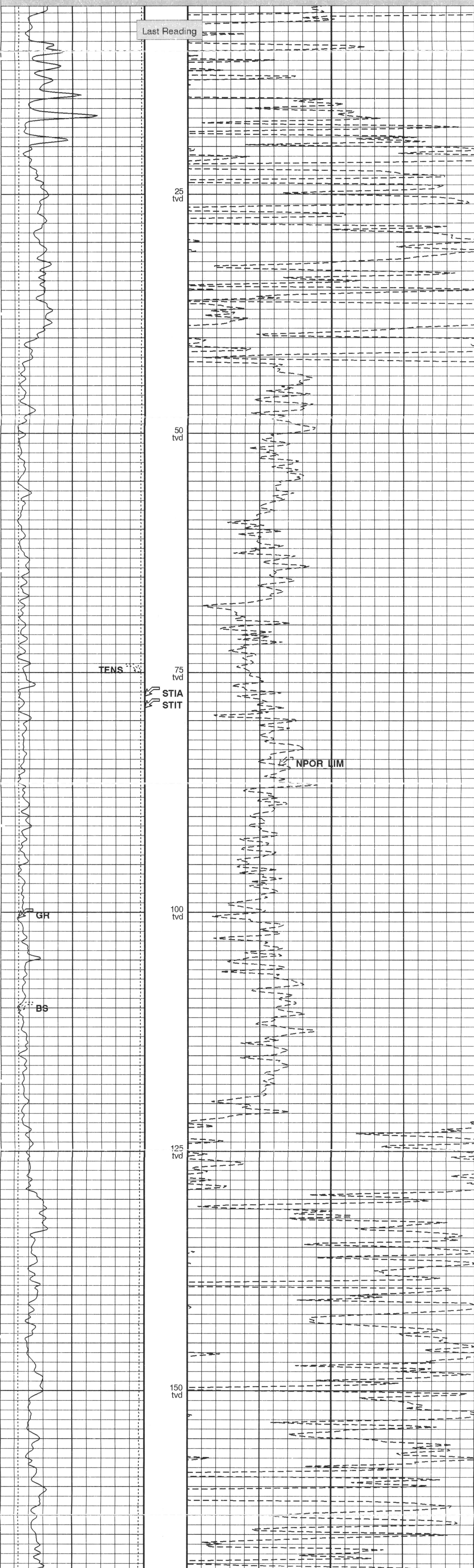
Integrated Cement Volume Major Pip Every 1 M3

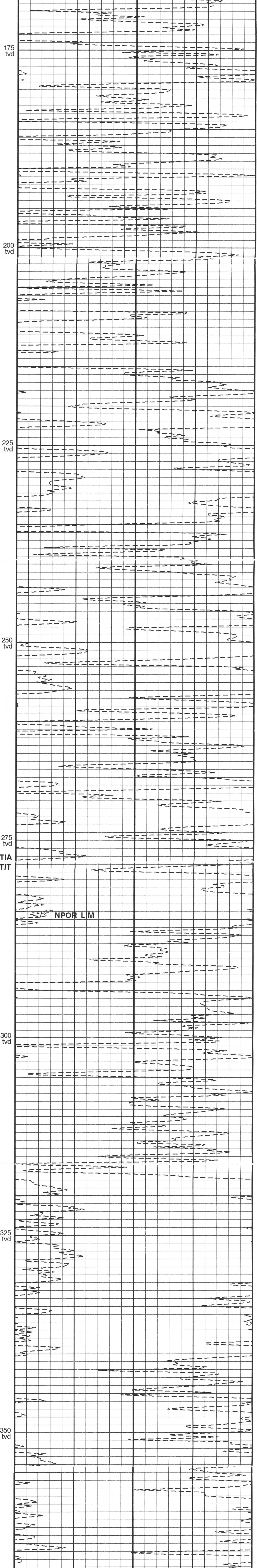
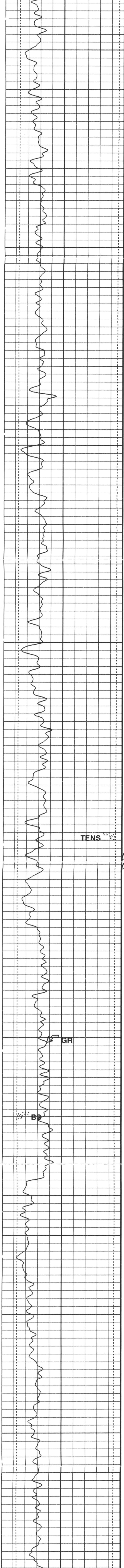
Integrated Cement Volume Minor Pip Every 0.1 M3

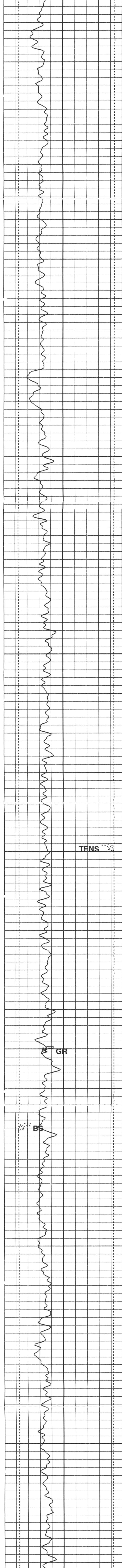
Integrated Hole Volume Major Pip Every 1 M3

Integrated Hole Volume Minor Pip Every 0.1 M3

MAIN PASS: *** PEX DENSITY POROSITY - LIMESTONE 2710 KG/M3 ***







375
tvd

400
tvd

425
tvd

450
tvd

TENS

475
tvd

STIA
STIT

NPOR LIM

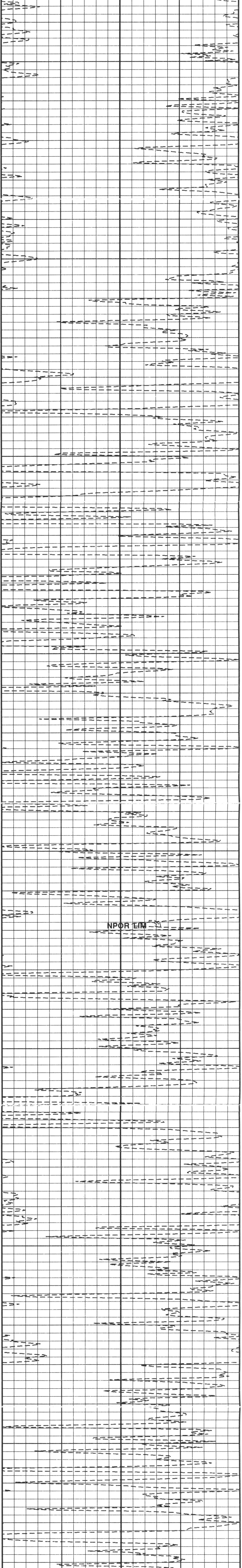
500
tvd

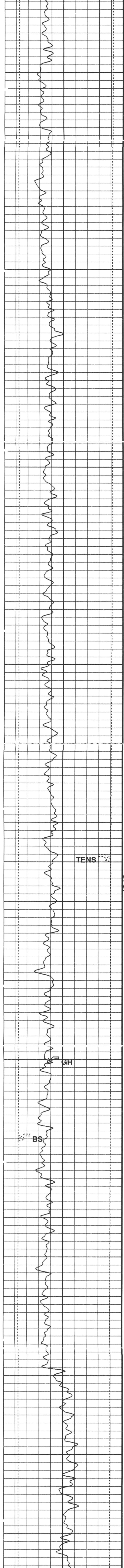
GH

DS

525
tvd

550
tvd





575
tvd

600
tvd

625
tvd

650
tvd

675
tvd

700
tvd

725
tvd

750
tvd

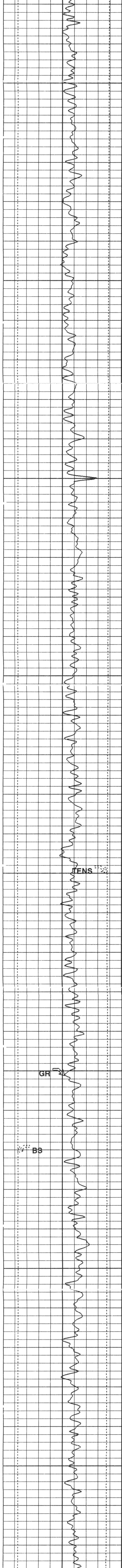
TENS

STIA
STIT

NPOR LIM

GH

BS



775
tvd

800
tvd

825
tvd

850
tvd

875
tvd

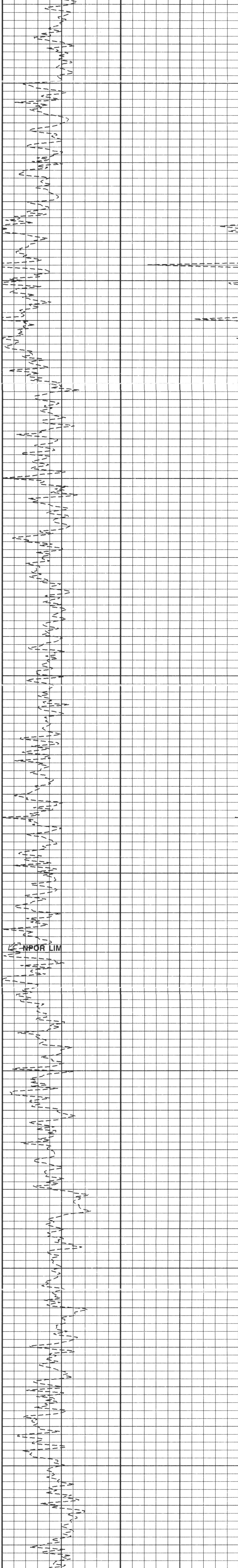
STIA
STIT

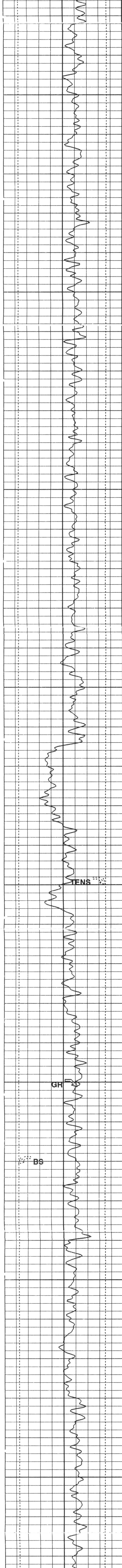
NPOR LIM

900
tvd

925
tvd

950
tvd





TENS

GR

BS

975
tvd

1000
tvd

1025
tvd

1050
tvd

1075
tvd

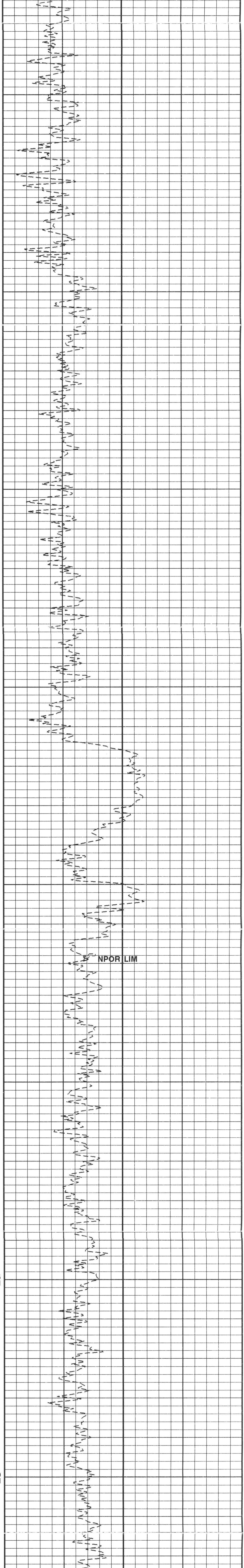
1100
tvd

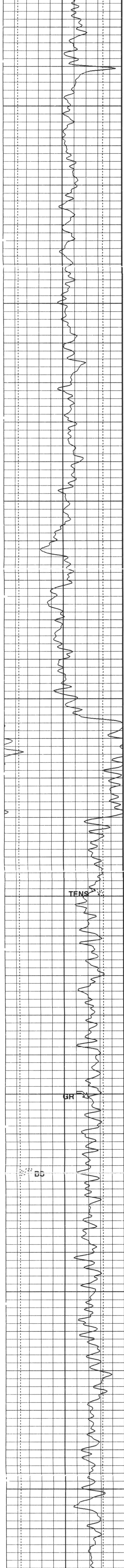
1125
tvd

1150
tvd

STIA
STIT

NPOR LIM





1175
tvd

1200
tvd

1225
tvd

1250
tvd

TENS

1275
tvd

STIA
STIT

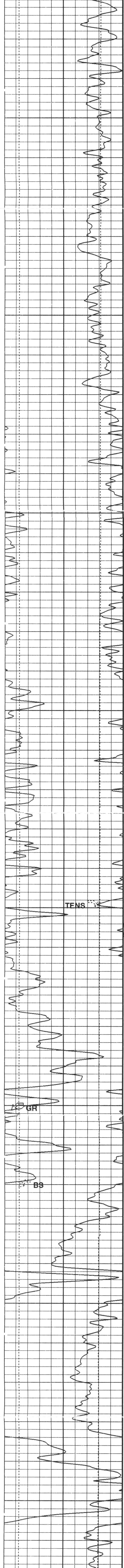
NPOR LIM

1300
tvd

GR

1325
tvd

1350
tvd



1375
tvd

1400
tvd

1425
tvd

1450
tvd

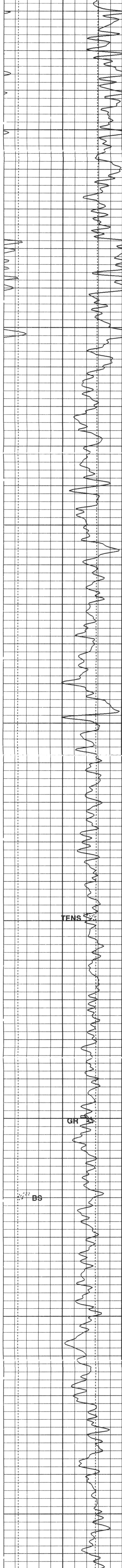
1475
tvd

1500
tvd

1525
tvd

1550
tvd

NPOR LIM



1575
tvd

1600
tvd

1625
tvd

1650
tvd

1675
tvd

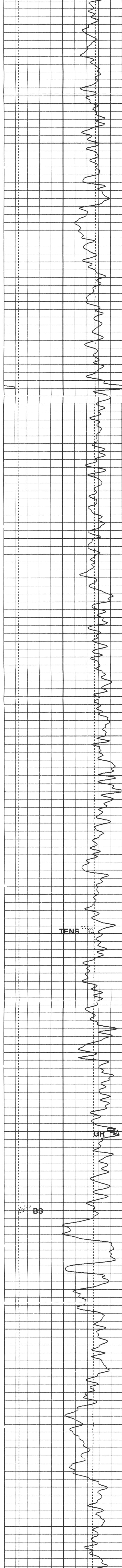
1700
tvd

1725
tvd

1750
tvd

STIA
STIT

NPOR LIM



1775
tvd

1800
tvd

1825
tvd

1850
tvd

1875
tvd

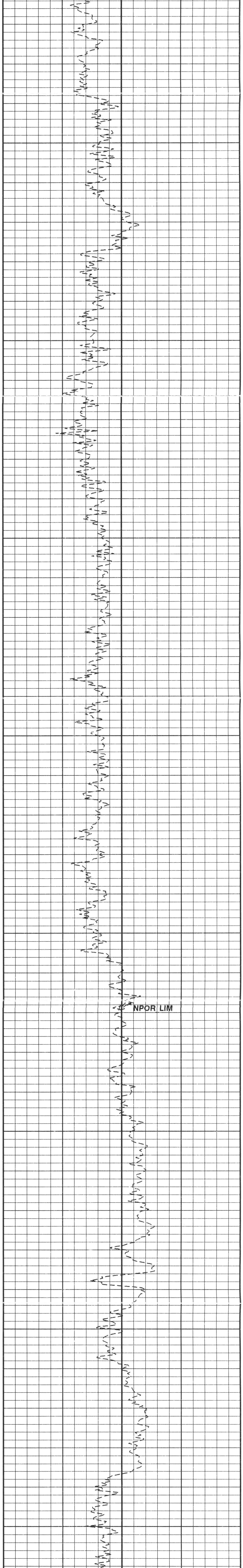
1900
tvd

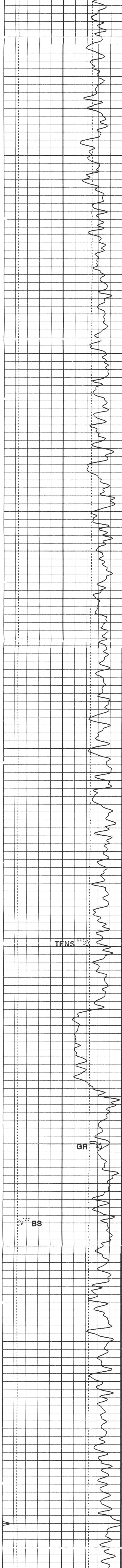
1925
tvd

1950
tvd

STIA
STIT

NPOR LIM





1975
tvd

2000
tvd

2025
tvd

2050
tvd

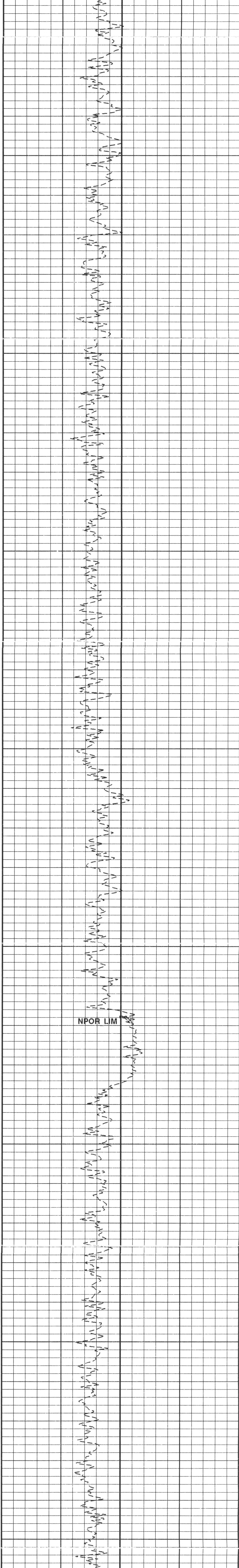
2075
tvd

STIA
STIT

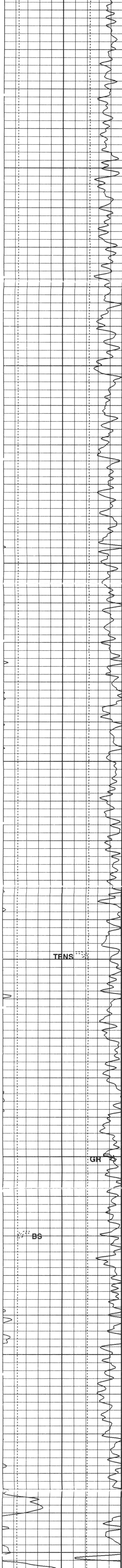
2100
tvd

2125
tvd

2150
tvd



NPOR LIM



2175
tvd

2200
tvd

2225
tvd

2250
tvd

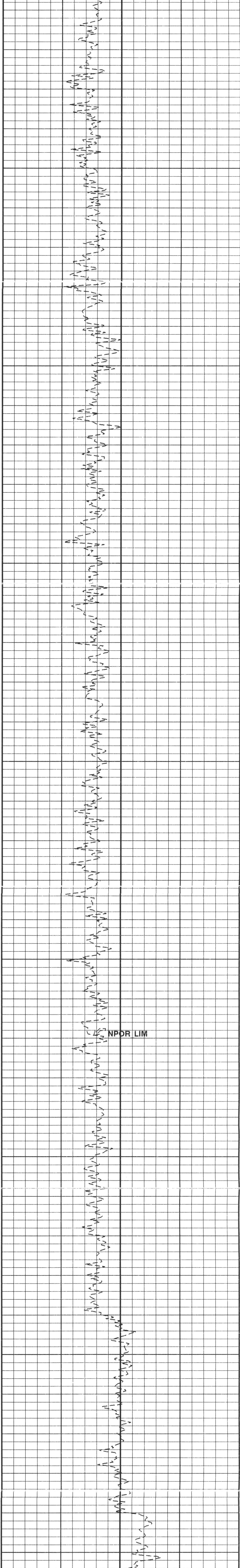
2275
tvd

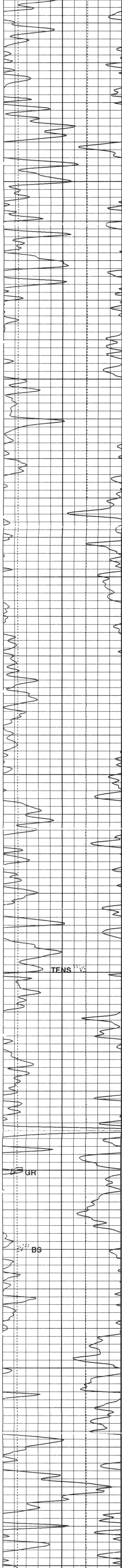
STIA
STIT

2300
tvd

2325
tvd

2350
tvd





2375
tvd

2400
tvd

2425
tvd

2450
tvd

2475
tvd

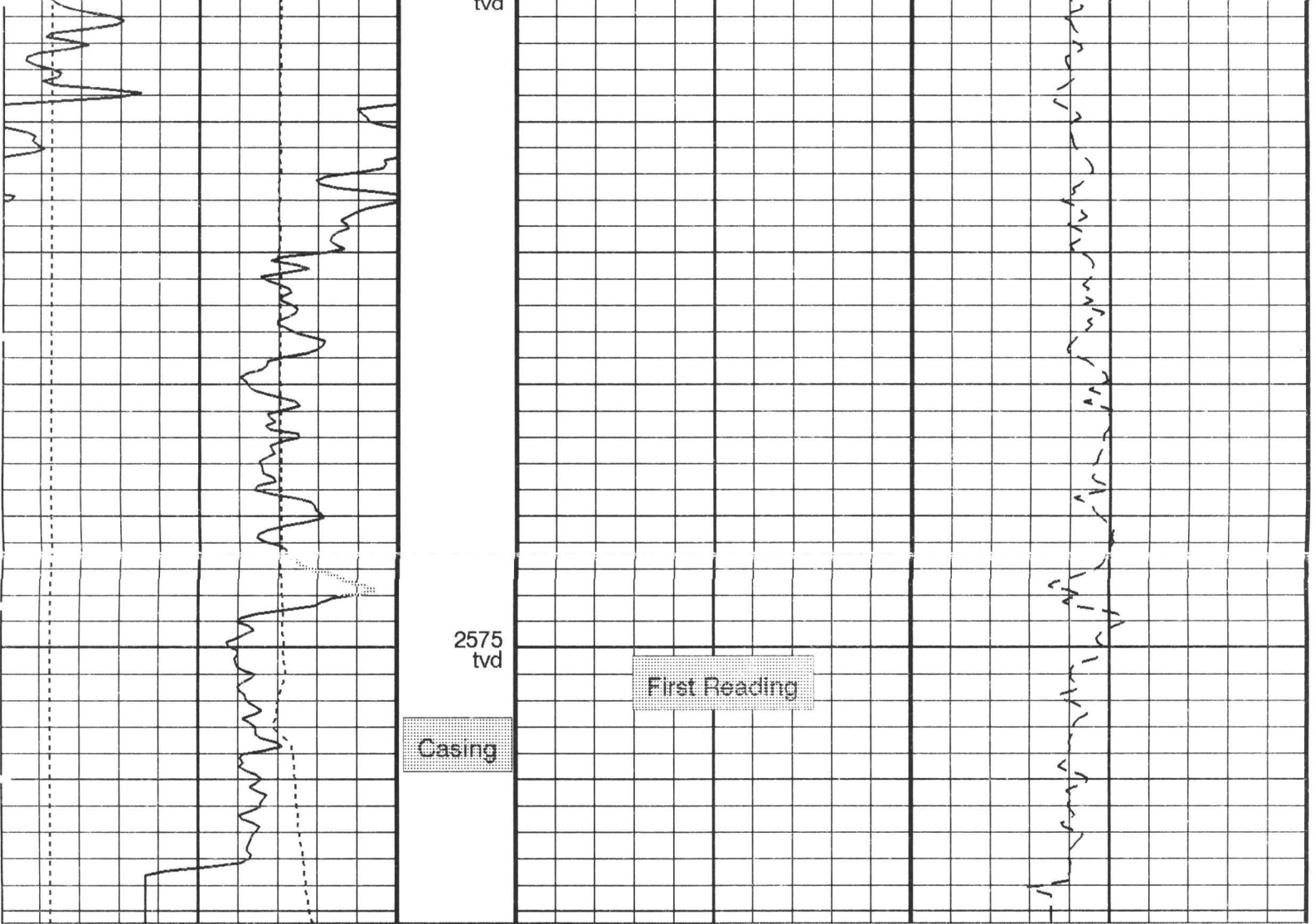
STIA
STIT

NPOR LIM

2500
tvd

2525
tvd

2550



Bit Size (BS)		NPOR for LIME (NPOR LIM)	
125	(MM)	0.45	(V/V)
375			-0.15
Gamma Ray (GR)			
0	(GAPI)		
150			
Tension (TENS)			
50000	(N)		
0			

PIP SUMMARY	
—	Integrated Cement Volume Major Pip Every 1 M3
—	Integrated Cement Volume Minor Pip Every 0.1 M3
└	Integrated Hole Volume Major Pip Every 1 M3
└	Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
EMS-B: Environment Measurement Sonde			
EAAB	EMS Accelerometer Coefficient:Ab	0	
EAAS	EMS Accelerometer Coefficient:As	0	
EABR	EMS Accelerometer Coefficient:Bb	0	
EABS	EMS Accelerometer Coefficient:Bs	0	
EACB	EMS Accelerometer Coefficient:Cb	0	
EACS	EMS Accelerometer Coefficient:Cs	0	
ECOF	EMS Caliper Offset	50.8	MM
EFC	EMS Fixed Caliper Operation	OFF	
ESCL	EMS Synthetic Caliper Log	OFF	
FCD	Future Casing (Outer) Diameter	0	MM
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
HILTH-FTB: High resolution Integrated Logging Tool-DTS			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	149	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	40	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	25	DEGC
HDCOD	HILT Density Coal detection	2000	K/M3
HDSAD	HILT Density Salt detection	2100	K/M3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	K/M3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	0.45	V/V
HNSAD	HILT Neutron Salt detection	0.05	V/V
HPHIECUT	HILT effective Porosity Cutoff	0.05	V/V
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
NMT	HILT Nuclear Mud Type	NOBARITE	
PHIMAX	HILT max porosity	0.35	V/V
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	3.175	MM
SOCO	Standoff Correction Option	YES	
DIR: Directional Survey Computation			
SPED	East Departure of Starting Point	0	M
SPND	North Departure of Starting Point	0	M
SPVD	TVD of Starting Point	0	M
TAZI	Vertical Section Azimuth	0	DEG
TIED	East Departure of Tie-in Point	-0.26	M
TIMD	Along-hole depth of Tie-in Point	75.2	M
TIND	North Departure of Tie-in Point	-0.24	M
TIVD	TVD of Tie-in Point	75.2	M
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	3700.00	M
TDL	Total Depth - Logger	3692.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	TrueVerticalDepth	
BS	Bit Size	156.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	177.800	MM
CWEI	Casing Weight	38.70	KG/M
DFD	Drilling Fluid Density	1050.00	K/M3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	23.53	DEGC
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	1.2110	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	3692	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: PORO-LIME-CAN

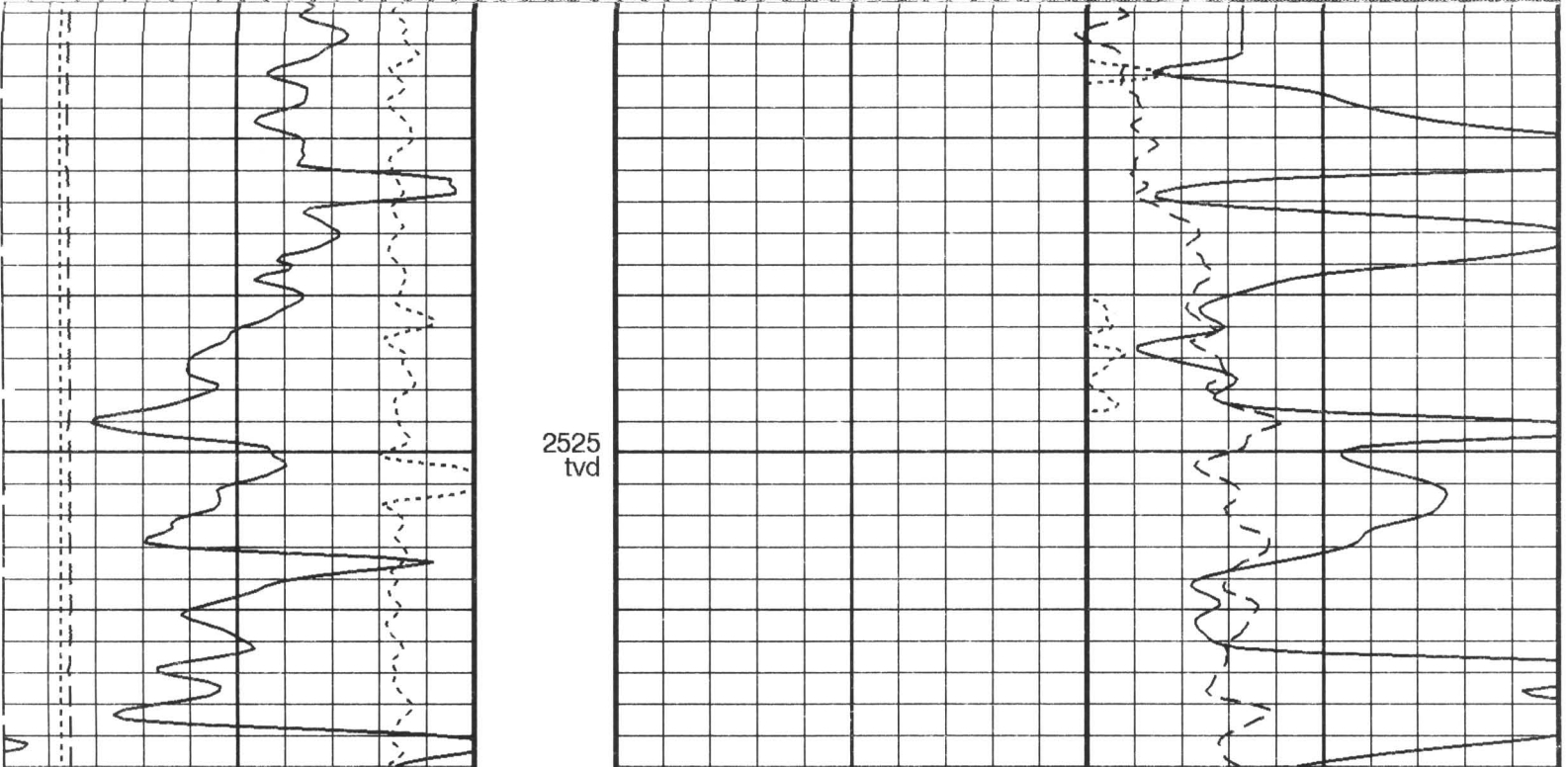
Vertical Scale: 1:240

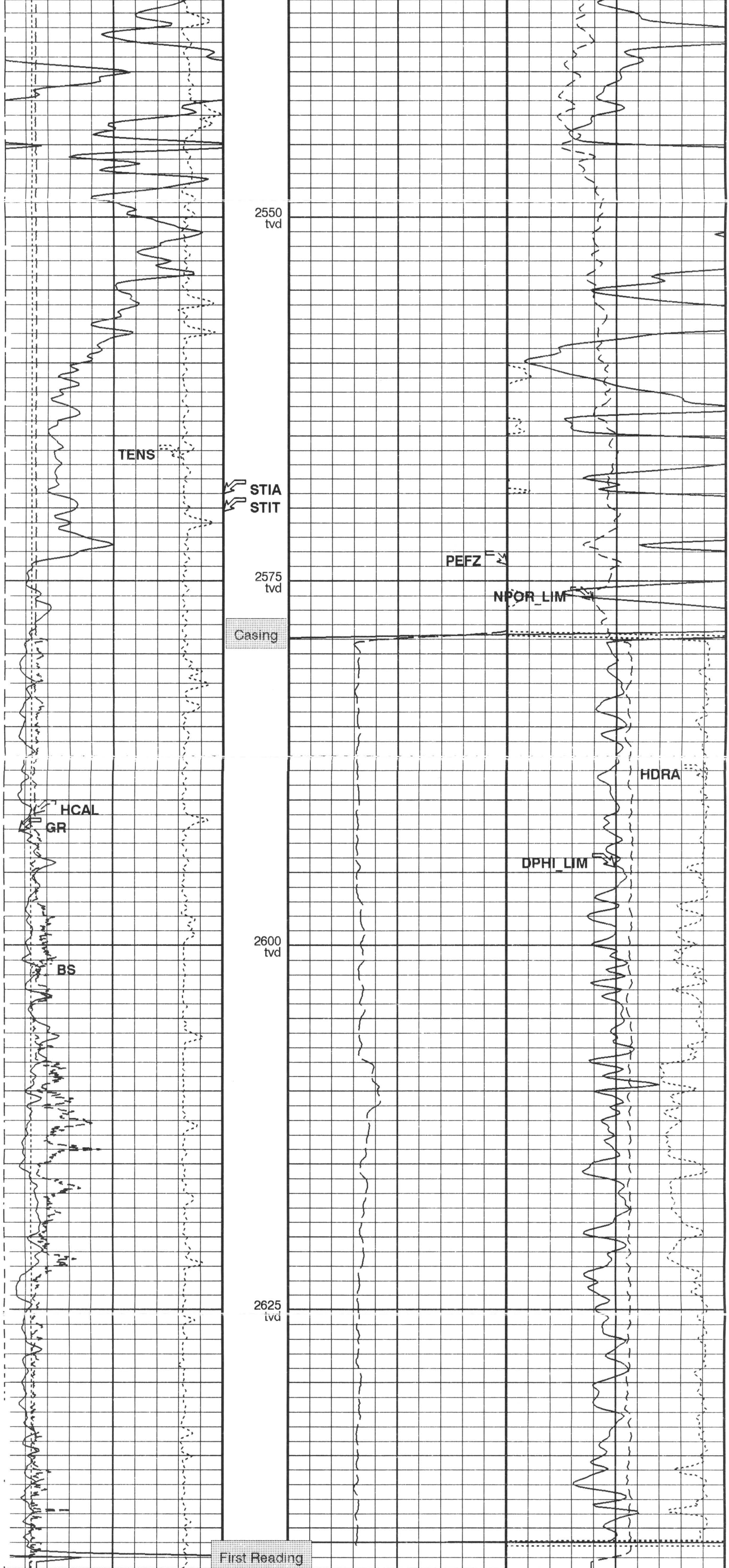
Graphics File Created: 23-Feb-2004 15:05

Format: PORO-LIME-CAN Vertical Scale: 1:240 Graphics File Created: 23-Feb-2004 15:05

OP System Version: 11C0-305			
MCM			
EMS-B	11C0-305	HILTH-FTB	op11kp1_newpex150kit_G_b
DTC-H	11C0-305		
Indexed to True Vertical Depth in this Playback			
Input DLIS Files			
DEFAULT	EMS_TLD_MCFL_CNL_097PUP	FN:86 PRODUCER	23-Feb-2004 14:40 2931.3 M 4.9 M
Output DLIS Files			
DEFAULT	EMS_TLD_MCFL_CNL_098PUP	FN:88 PRODUCER	23-Feb-2004 15:05
REDUCED	EMS_TLD_MCFL_CNL_098PUP	FN:89 PRODUCER	23-Feb-2004 15:05

Input DLIS Files			
DEFAULT	FMS_TLD_MCFL_CNL_067PUP	FN:66 PRODUCER	23-Feb-2004 00:36 2642.8 M 2510.5 M
Indexed to True Vertical Depth in this Playback			
OP System Version: 11C0-305			
MCM			
MESTB	11C0-305	DTAA	OP11-KP1
HILTHD	op11kp1_newpex150kit_G_b	HRLT	op11kp1_HrltKit_b
EMS	11C0-305	DTCH	11C0-305
SPAA	11C0-305		
PIP SUMMARY			
└ Integrated Cement Volume Major Pip Every 1 M3			
└ Integrated Cement Volume Minor Pip Every 0.1 M3			
└ Integrated Hole Volume Major Pip Every 1 M3			
└ Integrated Hole Volume Minor Pip Every 0.1 M3			
Time Mark Every 60 S			
Tension (TENS)			
50000	(N)	0	
Caliper (HCAL)			
125	(MM)	375	
Gamma Ray (GR)			
0	(GAPI)	150	
Bit Size (BS)			
125	(MM)	375	
		Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
		0	(K/M3)
		(----	10 450
		NPOR for LIME (NPOR LIM)	
		0.45	(V/V)
			-0.15
		DPHI for LIME (DPHI LIM)	
		0.45	(V/V)
			-0.15
MAIN PASS: *** PEX DENSITY POROSITY - LIMESTONE 2710 KG/M3 ***			





MAIN PASS: *** PEX DENSITY POROSITY - LIMESTONE 2710 KG/M3 ***

Bit Size (BS) (MM)		375	DPHI for LIME (DPHI_LIM) (V/V)		-0.15
Gamma Ray (GR) (GAPI)		150	NPOR for LIME (NPOR_LIM) (V/V)		-0.15
Caliper (HCAL) (MM)		375	Std. Res. Formation Pe (PEFZ) (-----)		10 450
Tension (TENS) (N)		0	Density Correction (HDRA) (K/M3)		-50

PIP SUMMARY

- Integrated Cement Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
MEST-B: Micro Electrical Scanner - B (Slim)		
ACCC	Accelerometer coefficients	-0.002
ACCM	Accelerometer Month of Calibration	1
ACCN	Accelerometer Serial Number	470
ACCT	Accelerometer Type (Manufacturer Code)	3
ACCY	Accelerometer Year of Calibration	2
ACPP	Accelerometer PROM Presence	PRESENT
AFMO	Accelerometer Filtering Mode	MAVE
ART	Accelerometer Reference Temperature	20.000 degC
ATIM	Time of acc calibration	1077489314
ERDS	EMEX Regulation Data Set	ALL DIP
GLM	GPIT Logging Mode	DIPM
GTM	GPIT Telemetry Mode	DIPM
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION
LATD	Latitude (N=+ S=-)	60.500 deg
LOND	Longitude (E=+ W=-)	-123.500 deg
MAGM	Magnetometer Month of Calibration	10
MAGN	Magnetometer Serial Number	275
MAGT	Magnetometer Type (Manufacturer Code)	3
MAGY	Magnetometer Year of Calibration	98
MAPP	Magnetometer PROM Presence	PRESENT
MDEC	Magnetic Field Declination	24.657 deg
MFIN	Magnetic Field Intensity	46.760 A/m
MGMC	Magnetometer coefficients	-0.001
MINC	Magnetic Field Inclination	78.565 deg
MLM	MEST Logging Mode	FSCA
MRTE	Magneto Reference Temperature	23.000 degC
MTIM	Time of magnetometer calibration	1077489319
PADT	Presentation Allow Disallow Threshold	0.500 deg
PTYP	Pad Type - High Resolution or Medium Extended Coverage	HR
RBS	Resistivity Button Selection	AUTO
SOFF	Standoff	0.000 mm
U-MAEP	MEST Automatic EMEX Policy	TRADITIONAL
XGAI	Gain	3
XMOD	Emex Mode	MANUAL
XOFF	Offset	0
XVOL	Emex Voltage	0 V
DTA-A: Downhole Toolbus Adapter - A		
TMRI	Telemetry Error Msg Report Interval (for SCP)	60 s
TSRI	Telemetry Status Report Interval (for IO Mon)	10 s
HILTH-FTB: High resolution Integrated Logging Tool-DTS		
A1T1	Stab Counts Temperature Correction Coefficient	-31.998
A1T2	Stab Counts Temperature Correction Coefficient	-31.998
A1T3	Stab Counts Temperature Correction Coefficient	-31.998
BHFL	Borehole Fluid Type	WATER
BHS	Borehole Status	CASE
BHT	Bottom Hole Temperature (used in calculations)	149.0 degC
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
ETEM	HILT External Temperature	25.000 degC
EXSICL	External Shale Indicator Clean Value	20.000
EXSISH	External Shale Indicator Shale Value	150.0
FD	Fluid Density	1000.0 kg/m3
FEXP	Form Factor Exponent	2.000
FNUM	Form Factor Numerator	1.000
FPHI	Form Factor Porosity Source	DPHZ
FSCO	Formation Salinity Correction Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	40.000 deg
GGRD	Geothermal Gradient	0.018 degC/m
GLS_VJ_OLD_SERNUM-1	GLS-VJ serial number from previous calibrations	0
GLS_VJ_OLD_SERNUM-2	GLS-VJ serial number from previous calibrations	0
GRSE	Generalized Mud Resistivity Selection	REMS
GTSE	Generalized Temperature Selection	HSTS_HTEM
HACCC	Accelerometer coefficients	-1234.800
HACCM	Accelerometer Month of Calibration	5
HACCN	Accelerometer Serial Number	1598
HACCT	Accelerometer Type (Manufacturer Code)	5
HACCY	Accelerometer Year of Calibration	2
HACPP	Accelerometer PROM Presence	PRESENT_FILE
HACTI	Time of accelerometer calibration	1077489658
HART	Accelerometer Reference Temperature	25.000 degC
HDCOD	HILT Density Coal detection	2000.0 kg/m3
HDSAD	HILT Density Salt detection	2100.0 kg/m3
HETF	HET filter	ON
HILT_GAS_DENSITY	HILT Gas Downhole Density	0.000 kg/m3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF
HISC	HGNS Centered/Eccentered	ECCENTERED
HMCA_BOARD_TYPE	HMCA Board Type	1
HNCOD	HILT Neutron Coal detection	0.450 m3/m3
HNSAD	HILT Neutron Salt detection	0.050 m3/m3
HPHIECUT	HILT effective Porosity Cutoff	0.050 m3/m3

HPUW	HILT: Power Up Status Words		0	
HRCC_OLD_SERNUM-1	HRCC serial number from previous calibrations		0	
HRCC_OLD_SERNUM-2	HRCC serial number from previous calibrations		0	
HRED	HILT Activate Data Reduction	NO		
HRGD_BOARD_TYPE	HRGD Board Type	WITH_HET		
HRGD_OLD_SERNUM-1	HRGD serial number from previous calibrations		0	
HRGD_OLD_SERNUM-2	HRGD serial number from previous calibrations		0	
HRMS_OLD_SERNUM-1	HRMS serial number from previous calibrations		0	
HRMS_OLD_SERNUM-2	HRMS serial number from previous calibrations		0	
HSCO	Hole Size Correction Option	YES		
HSIS	HILT Shale Indicator Selection	GR		
HSWCUT	HILT Water Saturation from AITH cutoff	50.000	%	
HTES	HMCA: Cable Head Tension Source	NO_HTEN		
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
MCCO	Mud Cake Correction Option	NO		
MCOR	Mud Correction	NATU		
MDEN	Matrix Density	2710.0	kg/m3	
MHC0	MCFL B0 Contrast Correction Coefficient	0.000	ohm	
MHC1	MCFL B1 Contrast Correction Coefficient	0.000	ohm	
MHCC	MCFL High Contrast Correction Switch	NO		
MPOF	MCFL Processing Operation Mode	ON		
MWCO	Mud Weight Correction Option	NO		
NAAC	HRDD APS Activation Correction	OFF		
NCWR	Temperature Correction Scheme			
	PEX150 INDIVIDUAL TEMPERATURE CORRECTION			
NDTC	HRDD Dead Time Correction	APPLY		
NAIV	HRDD Density/Pe Algorithm Version	2.600		
NMT	HILT Nuclear Mud Type	NOBARITE		
NPRM	HRDD Processing Mode	HIRES		
NPUC	HRDD Pile-Up Correction	NOT_APPLY		
NSAR	HRDD Depth Sampling Rate	25.400	mm	
NTCO	HRDD Temperature Correction Option	ON		
PHIMAX	HILT max porosity	0.350	m3/m3	
PTCO	Pressure/Temperature Correction Option	NO		
RIAV	MCFL Resistivity Algorithm Version	1.080		
SD1B	BS Pulse Processing Filter Temperature Coefficient	1.000		
SD1L	LS Pulse Processing Filter Temperature Coefficient	1.000		
SD1S	SS Pulse Processing Filter Temperature Coefficient	1.000		
SDAT	Standoff Data Source	SOCN		
SEXP_HILT	HILT Saturation Exponent	2.000		
SHT	Surface Hole Temperature	20.000	degC	
SNBS	HRGD BS Serial Number	42767.0		
SNLS	HRGD LS Serial Number	42767.0		
SNSS	HRGD SS Serial Number	42767.0		
SOCN	Standoff Distance	3.175	mm	
SOCO	Standoff Correction Option	YES		
SSHB	BS Barium Meas High Energy Temperature Shift	-6.300		
SSHL	LS Barium Meas High Energy Temperature Shift	-6.300		
SSHS	SS Barium Meas High Energy Temperature Shift	-6.300		
SSLB	BS Barium Meas Low Energy Temperature Shift	-6.300		
SSLL	LS Barium Meas Low Energy Temperature Shift	-6.300		
SSLS	SS Barium Meas Low Energy Temperature Shift	-6.300		
STSO_HRDD	HRDD Temperature Source	HET		
TA1B	BS Stab Counts Measurement Temperature	-255.980	degC	
TA1L	LS Stab Counts Measurement Temperature	-255.980	degC	
TA1S	SS Stab Counts Measurement Temperature	-255.980	degC	
T3H3	SS Barium Meas Temperature	-255.980	degC	
TSHL	LS Barium Meas Temperature	-255.980	degC	
TSHS	SS Barium Meas Temperature	-255.980	degC	
	HRLT-B: High Resolution Laterolog Array - B			
ACQMOD	HRLT Acquisition Mode	LOG		
BHS	Borehole Status	CASE		
BHT	Bottom Hole Temperature (used in calculations)	149.0	degC	
CALMOD	HRLT Calibration Mode	LOG_MODE		
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE		
CALTEMP	HRLTB Calibration Temperature	124.0	degC	
FREQ0	HRLT Frequency Index for Mode 0	32		
FREQ1	HRLT Frequency Index for Mode 1	128		
FREQ2	HRLT Frequency Index for Mode 2	104		
FREQ3	HRLT Frequency Index for Mode 3	86		
FREQ4	HRLT Frequency Index for Mode 4	56		
FREQ5	HRLT Frequency Index for Mode 5	44		
FREQ6	HRLT Frequency Index for Mode 6	116		
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal	40.000	deg	
GGRD	Geothermal Gradient	0.018	degC/m	
GRSE	Generalized Mud Resistivity Selection	REMS		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
KFAC_HRLT	HRLT K Factor Option	SONDE		
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW		
LOOPGAIN_S	HRLT Loop Gain for Shallow Modes	0.200		
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO		
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO		
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO		
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO		
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO		
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO		
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO		
MANUATT0	HRLT Manual Source Attenuation Mode 0	21.920	dB	
MANUATT1	HRLT Manual Source Attenuation Mode 1	16.780	dB	
MANUATT2	HRLT Manual Source Attenuation Mode 2	23.950	dB	
MANUATT3	HRLT Manual Source Attenuation Mode 3	24.940	dB	
MANUATT4	HRLT Manual Source Attenuation Mode 4	26.460	dB	
MANUATT5	HRLT Manual Source Attenuation Mode 5	26.830	dB	
MANUATT6	HRLT Manual Source Attenuation Mode 6	17.570	dB	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
MUXFIXCHAN	HRLT Multiplexer Channel Address	VCAL		
MUXPGAMOD	HRLT Multiplexer and Programmable Gain Amplifier Sequence	AUTO		
PGAFIXGN	HRLT Programmable Gain Amplifier Fixed Value	G_1		
PQSELECT	HRLT InPhase or Quadrature Component Selection	P		
PROCINV	Inversion Selection	ON		
PROCMFL	Inversion Micro-Resistivity Selection	FXOZ		
PROCMSO	Mechanical Standoff Fin Size	12.700	mm	
PROCRM	Processing Mud Resistivity Select	EXTERNAL_GRSE		
PROCSPO	Sonde Position	ECCENTERED		
SCMOD	HRLT Slow Channel Mode	SCAN		
SHT	Surface Hole Temperature	20.000	degC	
	EMS-B: Environment Measurement Sonde			
ADCO	ADC offset	2048.0		
BHS	Borehole Status	CASE		
BHT	Bottom Hole Temperature (used in calculations)	149.0	degC	
CD	Casing Shoe Depth	2912.0	m	
EAAB	EMS Accelerometer Coefficient:Ab	0.000		
EAA5	EMS Accelerometer Coefficient:As	0.000		
EABB	EMS Accelerometer Coefficient:Bb	0.000		
EABS	EMS Accelerometer Coefficient:Bb	0.000		
EACB	EMS Accelerometer Coefficient:Cb	0.000		
EACR	EMS ADC Conversion Rate (LSB)	2.210	mV	
EACS	EMS Accelerometer Coefficient:Cs	0.000		
ECOF	EMS Caliper Offset	50.800	mm	
ECOM	EMS Command	8		
EDDP	EMS Diag.Data Parameter	0		
EEM	EMS Error Message	OFF		
EFC	EMS Fixed Caliper Operation	OFF		
EMTY	EMS Type	PS		
EMUD	EMS Mudcake Correction	OFF		
ESCL	EMS Synthetic Caliper Log	OFF		
ESIM	EMS Simulator	TEST		
FCD	Future Casing (Outer) Diameter	0.000	mm	
GCSE	Generalized Caliper Selection	HCAL		
GDEV	Average Angular Deviation of Borehole from Normal	40.000	deg	
GGRD	Geothermal Gradient	0.018	degC/m	
GRSE	Generalized Mud Resistivity Selection	REMS		
GTSE	Generalized Temperature Selection	HSTS_HTEM		
HVCS	Integrated Hole Volume Caliper Selection	C1/C2		
IHVC	Integrated Hole Volume Control	SNAP		
MATR	Rock Matrix for Neutron Porosity Corrections	LIME		
SHT	Surface Hole Temperature	20.000	degC	
VCEM	Cumulated Cement Volume	0.000	m3	
VHOL	Cumulated Hole Volume	0.000	m3	
	DTC-H: DTS Telemetry Tool			
DDLGS	Digital Telemetry Module Downlink Gain	AUTOMATIC		
DDLS	Digital Telemetry Module Downlink Shape	AUTOMATIC		
DULG	Digital Telemetry Cartridge Uplink Gain	AUTOMATIC		
DULM	Digital Telemetry Cartridge Uplink Mode	TST7		
DULR	Digital Telemetry Cartridge Uplink Rate	420KBS		
TMRI	Telemetry Error Msg Report Interval (for SCP)	60	s	
TSRI	Telemetry Status Report Interval (for IO Mon)	10	s	
	SPA-A: SP ADAPTOR			
SPDR	SP Drift	0.000	mV/m	
SPNV	SP Next Value	0.000	mV	
	HOLEV: Integrated Hole/Cement Volume			
CD	Casing Shoe Depth	2912.0	m	
FCD	Future Casing (Outer) Diameter	0.000	mm	
HVCS	Integrated Hole Volume Caliper Selection	C1/C2		
IHVC	Integrated Hole Volume Control	SNAP		
VCEM	Cumulated Cement Volume	0.000	m3	
VHOL	Cumulated Hole Volume	0.000	m3	
	DIP: Dip Computation			
CSBL	CSB DIP Number of Levels	2L		
DPAD	Disabled Pad	NONE		
ELRA	Electrical Radius	12.700	mm	
INT	Correlation Interval	1.219	m	
SANG	Correlation Search Angle	35.000	deg	
SBUT	DIP Set of Buttons	MSD		
SDFA	Side-by-Side Distance Factor	22.860	mm	
SPAN	DIP Spanning	1/4		
STDA	Structural DIP Azimuth	0.000	deg	
STDI	Structural DIP Angle	0.000	deg	
STEP	Correlation Step	0.610	m	
	DIR: Directional Survey Computation			
SPED	East Departure of Starting Point	0.000	m	
SPND	North Departure of Starting Point	0.000	m	
SPVD	TVD of Starting Point	0.000	m	
TAZI	Vertical Section Azimuth	0.000	deg	
TIED	East Departure of Tie-in Point	-0.260	m	
TIMD	Along-hole depth of Tie-in Point	75.200	m	
TIND	North Departure of Tie-in Point	-0.240	m	
TIVD	TVD of Tie-in Point	75.200	m	
	STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL		
STKT	STI Stuck Threshold	1.524	m	
TDD	Total Depth - Driller	3700.0	m	
TDL	Total Depth - Logger	3692.0	m	
	System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	TRUEVERTICALDEPTH		
AMD	Azimuth of Maximum Deviation	130.4	deg	
APD	Above Permanent Datum	7.400	m	
APIN	API Serial Number	SDL99		
BG	Gas Formation Volume Factor, Bg			
BLI	Bottom Log Interval			
BO	Oil Formation Volume Factor, Bo			
BPP	Bubble Point Pressure			
BPT	Bubble Point Temperature			
BS	Bit Size	156.0	mm	
BSAL	Borehole Salinity			
BSDF	Bit Size Depth From			
BSDT	Bit Size Depth To			
BW	Water Formation Volume Factor, Bw			
CADD	Cement Additives			
CADT	Casing Depth To			
CASG	Casing Grade			
CASN	Casing String Number			
CBDR	Casing Bottom of Driller	2912.0	m	
CBLO	Casing Bottom of Logger	2912.0	m	
CDEN	Cement Density			
CDF	Casing Depth From			
CJT	Cement Job Type	Primary		
CLAB	County/Rig Label	Territory:		
CN	Company Name	CHEVRON CANADA RESOURCES LTD.		
CN1	Company Name Line 1			
CONT	Continent			
CONTP	Conveyance Type	DRILLPIPE (TLC)		
COUN	County or Rig Name	NORTHWEST TERRITORIES		
CSIZ	Current Casing Size	177.8	mm	
CTOP	Estimated Cement Top			
CWEI	Casing Weight	38.700	kg/m	
CWLO	Cement Water Loss			
DATE	Date as Month-Day-Year	21-Feb-2004		
DCS	Date Circulation Stopped	21-Feb-2004		
DEPREM1	Depth Remark 1			
DEPREM2	Depth Remark 2	PRIMARY DEPTH MEASUREMENT = IDW		
DEPREM3	Depth Remark 3			
DEPREM4	Depth Remark 4	LOGS CORRELATED TO MWD GR LOG		
DEPREM5	Depth Remark 5			
DEPREM6	Depth Remark 6			
DFD	Drilling Fluid Density	1050.0	kg/m3	
DFL	Drilling Fluid Loss	7.000	cm3	
DFPH	Drilling Fluid PH	9.500		
DFT	Drilling Fluid Type	CLAY-FREE POLYMER		
DFV	Drilling Fluid Viscosity	44.000	s	
DIFF	Maximum Permitted Depth Difference	0.305	m	
DLAB	Date Logger At Bottom	22-Feb-2004		
DMF	Drilling Measured From	KELLY BUSHING		
EDF	Elevation of Derrick Floor	417.0	m	
EGL	Elevation of Ground Level	409.9	m	
EKB	Elevation of Kelly Bushing	417.3	m	
ELZ	Elevation of Log Zero	417.3	m	
ENGI	Engineer's Name	MICHEL LAPOINTE		
ENVI	Acquisition Environment	FTB_TELEMETRY		
EPD	Elevation of Permanent Datum	409.9	m	
FL	Field Location	LATITUDE: 60DEG 28MIN 42.4SEC NORTH		
FL1	Field Location Line 1	LONGITUDE: 123DEG 35MIN 4.3SEC WEST		
FL2	Field Location Line 2			
FLEV	Fluid Level			
FLSHSTRM	Flush depth-delayed streams to output at end	NO		
FN	Field Name	LIARD		
FSAL	Formation Salinity			
GGRA	Gas Gravity			
HIDI	Header Identifier Line 1	HRLA LATEROLOG		

BHFL	HILTH-FIB: High resolution Integrated Logging Tool-DIS	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASE	NO	
BSCO	Borehole Salinity Correction Option	NO		
CCCO	Casing & Cement Thickness Correction Option	NO		
DHC	Density Hole Correction	BS		
FD	Fluid Density	1000.0	kg/m3	
FSCO	Formation Salinity Correction Option	NO		
GDEV	Average Angular Deviation of Borehole from Normal	40.000	deg	
GGRD	Geothermal Gradient	0.018	degC/m	
HSCO	Hole Size Correction Option	YES		
MCCO	Mud Cake Correction Option	NO		
MCOR	Mud Correction	NATU		
MWCO	Mud Weight Correction Option	NO		
NAAC	HRDD APS Activation Correction	OFF		
NMT	HILT Nuclear Mud Type	NOBARITE		
NPRM	HRDD Processing Mode	HIRES		
NSAR	HRDD Depth Sampling Rate	25.400	mm	
PTCO	Pressure/Temperature Correction Option	NO		
SDAT	Standoff Data Source	SOCN		
SOCN	Standoff Distance	3.175	mm	
SOCO	Standoff Correction Option	YES		
HRLT-B: High Resolution Laterolog Array - B				
BHS	Borehole Status	CASE		
GDEV	Average Angular Deviation of Borehole from Normal	40.000	deg	
GGRD	Geothermal Gradient	0.018	degC/m	
EMS-B: Environment Measurement Sonde				
BHS	Borehole Status	CASE		
GDEV	Average Angular Deviation of Borehole from Normal	40.000	deg	
GGRD	Geothermal Gradient	0.018	degC/m	
DIR: Directional Survey Computation				
SPVD	TVD of Starting Point	0.000	m	
TIMD	Along-hole depth of Tie-in Point	75.200	m	
TIVD	TVD of Tie-in Point	75.200	m	
STI: Stuck Tool Indicator				
TDL	Total Depth - Logger	3692.0	m	
System and Miscellaneous				
ALTDPCN	Name of alternate depth channel	TRUEVERTICALDEPTH		
BS	Bit Size	155.0	mm	
BSAL	Borehole Salinity			
CSIZ	Current Casing Size	177.8	mm	
CWEI	Casing Weight	38.700	kg/m	
DFD	Drilling Fluid Density	1050.0	kg/m3	
FSAL	Formation Salinity			
MST	Mud Sample Temperature	23.530	degC	
PBVSADP	Use alternate depth channel for playback	YES		
RMFS	Resistivity of Mud Filtrate Sample	1.211	ohm.m	

Format: PORO-LIME-CAN_REP Vertical Scale: 1:240 Graphics File Created: 23-Feb-2004 01:18

OP System Version: 11C0-305

MCM

MESTB	11C0-305	DTAA	OP11-KP1
HILTHD	op11kp1_newpex150kit_G_b	HRLT	op11kp1_HrltKit_b
EMS	11C0-305	DTCH	11C0-305
SPAA	11C0-305		

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	FMS_TLD_MCFL_CNL_067PUP	FN:66	PRODUCER	23-Feb-2004 00:36	2642.8 M	2510.5 M
DEFAULT	FMS_TLD_MCFL_CNL_070PUP	FN:70	PRODUCER	23-Feb-2004 00:54	2599.2 M	2571.6 M

Input DLIS Files

DEFAULT	FMS_TLD_MCFL_CNL_067PUP	FN:66	PRODUCER	23-Feb-2004 00:36	2642.8 M	2510.5 M
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Indexed to True Vertical Depth in this Playback

OP System Version: 11C0-305

MCM

MESTB	11C0-305	DTAA	OP11-KP1
HILTHD	op11kp1_newpex150kit_G_b	HRLT	op11kp1_HrltKit_b
EMS	11C0-305	DTCH	11C0-305
SPAA	11C0-305		

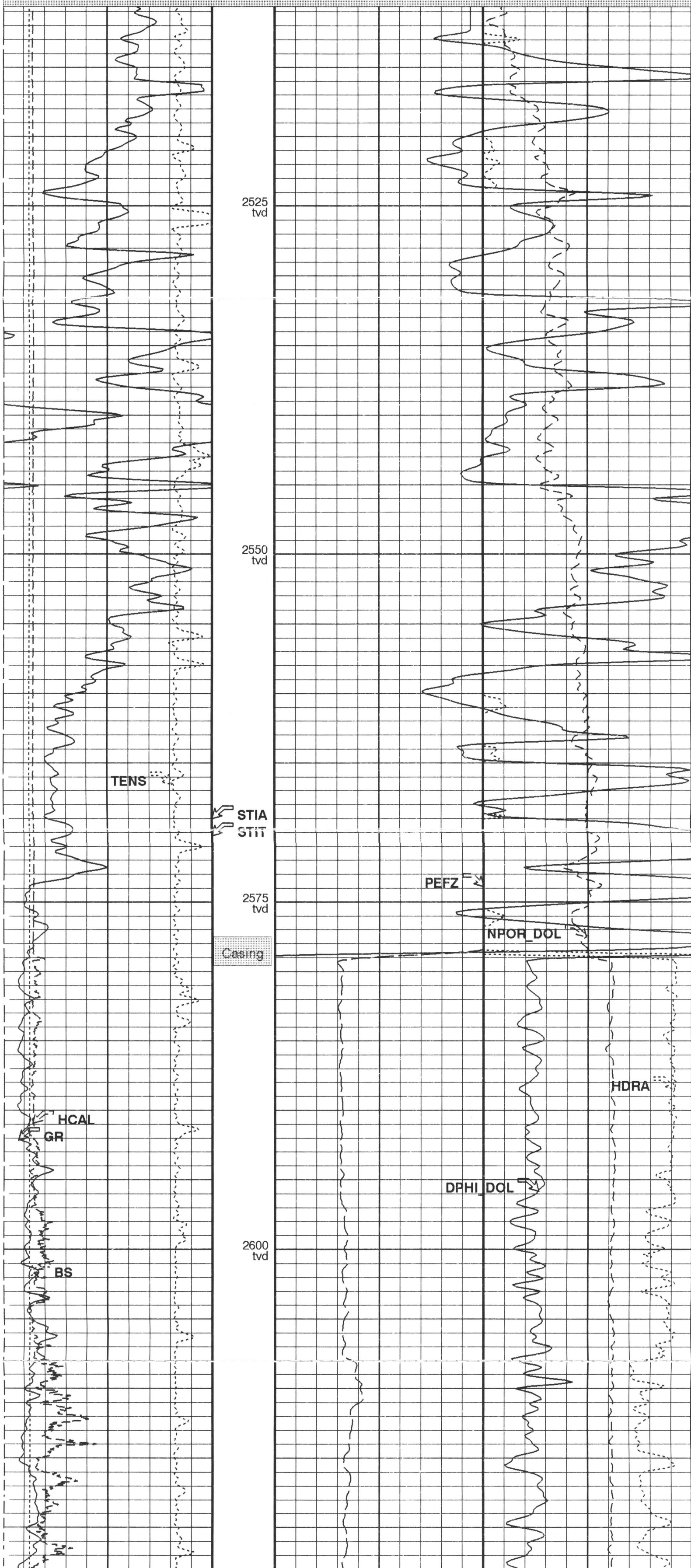
PIP SUMMARY

- Integrated Cement Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

Tension (TENS) (N)		Std. Res. Formation Pe (PEFZ) (---)		Density Correction (HDRA) (K/M3)	
50000	0	0	10 450	-50	
Caliper (HCAL) (MM)		NPOR for DOLO (NPOR_DOL) (V/V)			
125	375	0.45		-0.15	
Gamma Ray (GR) (GAPI)		DPHI for DOLO (DPHI_DOL) (V/V)			
0	150	0.45		-0.15	
Bit Size (BS) (MM)					
125	375				

PLAYBACK SECTION: *** PEX DENSITY POROSITY - DOLOMITE 2850 KG/M3 ***



PIP SUMMARY	
└	Integrated Cement Volume Major Pip Every 1 M3
└	Integrated Cement Volume Minor Pip Every 0.1 M3
└	Integrated Hole Volume Major Pip Every 1 M3
└	Integrated Hole Volume Minor Pip Every 0.1 M3

Parameters		
DLIS Name	Description	Value
HILTH-FTB: High resolution Integrated Logging Tool-DTS		
BHFL	Borehole Fluid Type	WATER
BHS	Borehole Status	CASE
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FD	Fluid Density	1000.0 kg/m3
FSCO	Formation Salinity Correction Option	NO
GDEV	Average Angular Deviation of Borehole from Normal	40.000 deg
GGRD	Geothermal Gradient	0.018 degC/m
HSCO	Hole Size Correction Option	YES
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	NATU
MWCO	Mud Weight Correction Option	NO
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HIRES
NSAR	HRDD Depth Sampling Rate	25.400 mm
PTCO	Pressure/Temperature Correction Option	NO
SDAT	Standoff Data Source	SOCN
SOCN	Standoff Distance	3.175 mm
SOCO	Standoff Correction Option	YES
HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	CASE
GDEV	Average Angular Deviation of Borehole from Normal	40.000 deg
GGRD	Geothermal Gradient	0.018 degC/m
EMS-B: Environment Measurement Sonde		
BHS	Borehole Status	CASE
GDEV	Average Angular Deviation of Borehole from Normal	40.000 deg
GGRD	Geothermal Gradient	0.018 degC/m
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0.000 m
TIMD	Along-hole depth of Tie-in Point	75.200 m
TIVD	TVD of Tie-in Point	75.200 m
STI: Stuck Tool Indicator		
STKT	STI Stuck Threshold	1.524 m
TDD	Total Depth - Driller	3700.0 m
TDL	Total Depth - Logger	3692.0 m
System and Miscellaneous		
ALTDPCN	Name of alternate depth channel	TRUEVERTICALDEPTH
BS	Bit Size	156.0 mm
BSAL	Borehole Salinity	
CSIZ	Current Casing Size	177.8 mm
CWEI	Casing Weight	38.700 kg/m
DFD	Drilling Fluid Density	1050.0 kg/m3
FSAL	Formation Salinity	
MST	Mud Sample Temperature	23.530 degC
PBVSADP	Use alternate depth channel for playback	YES
RMFS	Resistivity of Mud Filtrate Sample	1.211 ohm.m
Format: PORO-DOLO Vertical Scale: 1:240 Graphics File Created: 23-Feb-2004 01:50		
OP System Version: 11C0-305		
MCM		
MESTB	11C0-305	DTAA
HILTHD	op11kp1_newpex150kit_G_b	OP11-KP1
EMS	11C0-305	HRLT
SPAA	11C0-305	DTCH
		op11kp1_HrltKit_b
		11C0-305
Indexed to True Vertical Depth in this Playback		
Input DLIS Files		
DEFAULT	FMS_TLD_MCFL_CNL_067PUP	FN:66
		PRODUCER
		23-Feb-2004 00:36
		2642.8 M
		2510.5 M

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner - B (Slim) Wellsite Calibration - Caliper Calibration							
Before: 17-Feb-2004 15:15							
Caliper 1 Zero Measurement	203.2	N/A	205.8	N/A	N/A	N/A	MM
Caliper 2 Zero Measurement	203.2	N/A	217.4	N/A	N/A	N/A	MM
Caliper 1 Plus Measurement	304.8	N/A	308.9	N/A	N/A	N/A	MM
Caliper 2 Plus Measurement	304.8	N/A	318.2	N/A	N/A	N/A	MM
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 22-Feb-2004 15:35							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	2	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	1	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	470	N/A	N/A	N/A	
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 22-Feb-2004 15:35							
TEMPERATURE REFERENCE :	N/A	N/A	23	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	98	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	275	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Stab Measurement Summary							
Before: 20-Feb-2004 14:18							
BS Window Ratio	0.7664	N/A	0.7637	N/A	N/A	N/A	
BS Window Sum	28520	N/A	28520	N/A	N/A	N/A	CPS
SS Window Ratio	0.4825	N/A	0.4805	N/A	N/A	N/A	
SS Window Sum	12620	N/A	12600	N/A	N/A	N/A	CPS
LS Window Ratio	0.3047	N/A	0.3027	N/A	N/A	N/A	
LS Window Sum	1334	N/A	1323	N/A	N/A	N/A	CPS
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Photo-multiplier High Voltages Calibrations							
Before: 20-Feb-2004 14:18							
BS PM High Voltage (Command)	1421	N/A	1447	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1394	N/A	1404	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1361	N/A	1359	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Crystal Quality Resolutions Calibration							
Before: 20-Feb-2004 14:18							
BS Crystal Resolution	10.63	N/A	10.62	N/A	N/A	N/A	%
SS Crystal Resolution	9.427	N/A	9.446	N/A	N/A	N/A	%
LS Crystal Resolution	9.081	N/A	9.019	N/A	N/A	N/A	%
High resolution Integrated Logging Tool-DTS Wellsite Calibration - MCFL Calibration							
Before: 20-Feb-2004 14:04							
Raw B0 Resistivity	3875	N/A	3828	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3774	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3784	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - HILT Caliper Calibration							
Before: 20-Feb-2004 14:00							
HILT Caliper Zero Measurement	203.2	N/A	199.1	N/A	N/A	N/A	MM
HILT Caliper Plus Measurement	304.8	N/A	306.7	N/A	N/A	N/A	MM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Detector Calibration							
Before: 20-Feb-2004 14:09							
Gamma Ray Background	30.00	N/A	66.14	N/A	N/A	N/A	GAPI
Gamma Ray (Jig - Bkg)	156.3	N/A	156.3	N/A	N/A	14.21	GAPI
Gamma Ray (Calibrated)	167.0	N/A	167.0	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Accelerometer Calibration							
Before: 22-Feb-2004 7:44							
Z-Axis Acceleration	9.810	N/A	9.825	N/A	N/A	N/A	M/S2
High resolution Integrated Logging Tool-DTS Master Calibration - Inversion results							
Master: 2-Feb-2004 21:43							
Rho Aluminum	2596	2602	--	--	--	--	K/M3
Rho Magnesium	1686	1687	--	--	--	--	K/M3
Pe Aluminum	2.570	2.545	--	--	--	--	
Pe Magnesium	2.650	2.618	--	--	--	--	
High resolution Integrated Logging Tool-DTS Master Calibration - Deviation Summary							
Master: 2-Feb-2004 21:43							
BS Average Deviation	0	0.3931	--	--	--	--	%
BS Max Deviation	0	1.134	--	--	--	--	%
SS Average Deviation	0	0.4284	--	--	--	--	%
SS Max Deviation	0	1.624	--	--	--	--	%
LS Average Deviation	0	0.8353	--	--	--	--	%
LS Max Deviation	0	1.817	--	--	--	--	%
High resolution Integrated Logging Tool-DTS Master Calibration - Zero Measurement							
Master: 18-Feb-2004 19:21							
CNTC Background	26.80	26.80	--	--	--	--	CPS
CFTC Background	28.50	28.50	--	--	--	--	CPS
High resolution Integrated Logging Tool-DTS Master Calibration - Tank Measurement							
Master: 18-Feb-2004 19:21							
Thermal Near Corr. (Tank)	6031	5189	--	--	--	--	CPS
Thermal Far Corr. (Tank)	2793	2196	--	--	--	--	CPS
CNTC/CFTC (Tank)	2.159	2.363	--	--	--	--	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M01							
Before: 22-Feb-2004 15:35							
HRLT M0-M1 Voltage Plus - 0	0	N/A	-317.5	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 1	0	N/A	-327.8	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 2	0	N/A	-328.6	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 3	0	N/A	-332.3	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 4	0	N/A	-322.7	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 5	0	N/A	-324.6	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 6	0	N/A	318.4	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 7	0	N/A	-322.7	N/A	N/A	9.681	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M12							
Before: 22-Feb-2004 15:35							
HRLT M1-M2 Voltage Plus - 0	0	N/A	1751	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 1	0	N/A	1807	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 2	0	N/A	1808	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 3	0	N/A	1829	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 4	0	N/A	1777	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 5	0	N/A	1789	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 6	0	N/A	-1763	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 7	0	N/A	1781	N/A	N/A	53.42	UV

HRLT M2-M3 Voltage Plus - 0	0	N/A	1741	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 1	0	N/A	1812	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 2	0	N/A	1812	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 3	0	N/A	1836	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 4	0	N/A	1778	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 5	0	N/A	1790	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1757	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V34							
Before: 22-Feb-2004 15:35							
HRLT A3-A4 Voltage Plus - 0	0	N/A	68660	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 1	0	N/A	71390	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 2	0	N/A	71660	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 3	0	N/A	72830	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 4	0	N/A	70460	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 5	0	N/A	70950	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 6	0	N/A	-68200	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45							
Before: 22-Feb-2004 15:35							
HRLT A4-A5 Voltage Plus - 0	0	N/A	68600	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	70950	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	71300	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	72580	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	70350	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70880	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-67740	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56							
Before: 22-Feb-2004 15:35							
HRLT A5-A6 Voltage Plus - 0	0	N/A	68740	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	71380	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	71660	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	72870	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	70520	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	71020	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68190	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP							
Before: 22-Feb-2004 15:35							
HRLT Torpedo-M0 Voltage - 0	0	N/A	-67950	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-70990	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-71280	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-72490	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-70180	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-70660	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	67790	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD							
Before: 22-Feb-2004 15:35							
HRLT Bridle#9-M0 Voltage - 0	0	N/A	-67960	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-71010	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-71290	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-72520	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-70190	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70670	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	67800	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO							
Before: 22-Feb-2004 15:35							
HRLT Source Current Plus - 0	0	N/A	283.3	N/A	N/A	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	N/A	N/A	8.520	UA
High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV							
Before: 22-Feb-2004 15:35							
HRLT Vertical Voltage PI - 0	0	N/A	-317.9	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-320.7	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-320.7	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-322.6	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-310.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-327.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	324.3	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	N/A	N/A	9.681	UV

The GLS-VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT-B Water Temperature 17.7 DEGC.
Thermal Housing Size 85.700 MM.
NSR-F serial number 5030

Micro Electrical Scanner - B (Slim) / Equipment Identification

Primary Equipment:
MEST Sonde - B
MEST Preamplifier Cartridge - AB
GPIT Cartridge - AC
MEST Acquisition Cartridge - A
MEDS - B
MEPC - AB
GPIC - AC
MEAC - A
732

Auxiliary Equipment:
MEST-B Preamplifier Cartridge Housing
MEST Acquisition Cartridge Housing (Slim)
MEPH - A
MEAH - B
772

High resolution Integrated Logging Tool-DTS / Equipment Identification

Primary Equipment:
HILT high-Resolution Mechanical Sonde
HILT Rxo Gamma-ray Device
HILT Micro Cylindrically Focused Log Dev
GR Logging Source
HILT High Res. Control Cartridge
HILT Gamma-Ray Neutron Sonde-DTS
HILT Gamma-Ray Device
HILT Neutron Detector with Alpha Source
HRMS - H
HRGD - H
MCFL - H
GLS - VJ
HRCC - H
HGNS - H
HGR -
HCNT - H
3762
3794
7801
3773
3758

Auxiliary Equipment:
Neutron Calibration Tank
Gamma Source Radioactive
NCT - B
GSR - U/Y

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Stab Measurement Summary

Stat Measurement Summary											
Phase	BS Window Ratio		Value	Phase	SS Window Ratio		Value	Phase	LS Window Ratio		Value
Before			0.7637	Before			0.4805	Before			0.3027
	0.7281 (Minimum)	0.7684 (Nominal)	0.8048 (Maximum)		0.4584 (Minimum)	0.4825 (Nominal)	0.5066 (Maximum)		0.2894 (Minimum)	0.3047 (Nominal)	0.3199 (Maximum)
Phase	BS Window Sum CPS		Value	Phase	SS Window Sum CPS		Value	Phase	LS Window Sum CPS		Value
Before			28520	Before			12600	Before			1323
	27090 (Minimum)	28520 (Nominal)	29940 (Maximum)		11990 (Minimum)	12620 (Nominal)	13250 (Maximum)		1267 (Minimum)	1334 (Nominal)	1401 (Maximum)
Before: 20-Feb-2004 14:18											

Before: 20-Feb-2004 14:18

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Photo-multiplier High Voltages Calibrations

Photo-multiplier High Voltages Calibrations									
Phase	BS PM High Voltage (Command) V	Value	Phase	SS PM High Voltage (Command) V	Value	Phase	LS PM High Voltage (Command) V	Value	
Before		1447	Before		1404	Before		1359	
	1321 (Minimum)	1421 (Nominal)	1521 (Maximum)	1294 (Minimum)	1394 (Nominal)	1494 (Maximum)	1261 (Minimum)	1361 (Nominal)	1461 (Maximum)

Before: 20-Feb-2004 14:18

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Crystal Quality Resolutions Calibration

Crystal Quality Resolutions Calculation											
Phase	BS Crystal Resolution %		Value	Phase	SS Crystal Resolution %		Value	Phase	LS Crystal Resolution %		Value
Before			10.62	Before			9.446	Before			9.019
	9.633 (Minimum)	10.63 (Nominal)	11.63 (Maximum)		8.427 (Minimum)	9.427 (Nominal)	10.43 (Maximum)		8.081 (Minimum)	9.081 (Nominal)	10.08 (Maximum)

Before: 20-Feb-2004 14:18

High resolution Integrated Logging Tool-DTS Wellsite Calibration

MCFL Calibration

MCFL Calibration											
Phase	Raw B0 Resistivity OHMM		Value	Phase	Raw B1 Resistivity OHMM		Value	Phase	Raw B2 Resistivity OHMM		Value
Before			3828	Before			3774	Before			3784
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)

Before: 20-Feb-2004 14:04

High resolution Integrated Logging Tool-DTS Wellsite Calibration

HILT Caliper Calibration

HILT Caliper Calibration							
Phase HILT Caliper Zero Measurement MM			Value	Phase HILT Caliper Plus Measurement MM			Value
Before			199.1	Before			306.7
152.4 (Minimum)	203.2 (Nominal)	254.0 (Maximum)		228.6 (Minimum)	304.8 (Nominal)	381.0 (Maximum)	

Before: 20-Feb-2004 14:00

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Detector Calibration

Detector Calibration											
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig - Bkg) GAPI		Value	Phase	Gamma Ray (Calibrated) GAPI		Value
Before			66.14	Before			156.3	Before			167.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		142.1 (Minimum)	156.3 (Nominal)	170.5 (Maximum)		152.0 (Minimum)	167.0 (Nominal)	182.0 (Maximum)

Before: 20-Feb-2004 14:09

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Accelerometer Calibration

Wellsite Calibration			
Accelerometer Calibration			
Phase	Z-Axis Acceleration M/S2		Value
Before			9.825
	9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)

Before: 22-Feb-2004 7:44

High resolution Integrated Logging Tool-DTS Master Calibration

Inversion results

Inversion results							
Phase	Rho Aluminum K/M3		Value	Phase	Rho Magnesium K/M3		Value
Master			2602	Master			1687
	2566 (Minimum)	2596 (Nominal)	2606 (Maximum)		1676 (Minimum)	1686 (Nominal)	1696 (Maximum)
Phase	Pe Aluminum		Value	Phase	Pe Magnesium		Value
Master			2.545	Master			2.618
	2.470 (Minimum)	2.570 (Nominal)	2.670 (Maximum)		2.550 (Minimum)	2.650 (Nominal)	2.750 (Maximum)

Master: 2-Feb-2004 21:43

High resolution Integrated Logging Tool-DTS Master Calibration

Deviation Summary

Deviation Summary											
Phase	BS Average Deviation %		Value	Phase	SS Average Deviation %		Value	Phase	LS Average Deviation %		Value
Master			0.3931	Master			0.4284	Master			0.8353
	-0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)		-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)
Phase	BS Max Deviation %		Value	Phase	SS Max Deviation %		Value	Phase	LS Max Deviation %		Value
Master			1.134	Master			1.624	Master			1.817
	-1.600 (Minimum)	0 (Nominal)	1.600 (Maximum)		-2.500 (Minimum)	0 (Nominal)	2.500 (Maximum)		-3.500 (Minimum)	0 (Nominal)	3.500 (Maximum)

Master: 2-Feb-2004 21:43

High Resolution Laterolog Array - B Wellsite Calibration							
			HRLT MV				
idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum	
0	Before		-317.9	-322.7	-280.7	-379.7	
1	Before		-320.7	-322.7	-280.7	-379.7	
2	Before		-320.7	-322.7	-280.7	-379.7	
3	Before		-322.6	-322.7	-280.7	-379.7	
4	Before		-310.4	-322.7	-280.7	-379.7	
5	Before		-327.4	-322.7	-280.7	-379.7	
6	Before		324.3	322.7	379.7	280.7	
7	Before		-322.7	-322.7	-280.7	-379.7	
		(Minimum)	(Nominal)	(Maximum)			
Before: 22-Feb-2004 15:35							

Directional Survey Manually-Entered Inclinometry Summary					
Tie In Point : Measured Depth True Vertical Depth North Departure East Departure					
75.20 M			75.20 M	-0.24 M	-0.26 M
Depth	Deviation	Azimuth	True Vertical Depth	North Departure	East Departure
75.20 M	0.54 DEG	227.19 DEG	75.20 M	-0.24 M	-0.26 M
132.60 M	0.66 DEG	188.11 DEG	132.60 M	-0.77 M	-0.53 M
184.30 M	1.98 DEG	248.60 DEG	184.28 M	-1.59 M	-1.31 M
223.00 M	2.49 DEG	257.04 DEG	222.95 M	-2.03 M	-2.75 M
241.80 M	2.11 DEG	246.27 DEG	241.74 M	-2.27 M	-3.47 M
260.10 M	1.08 DEG	211.37 DEG	260.03 M	-2.59 M	-3.86 M
269.20 M	1.62 DEG	169.13 DEG	269.13 M	-2.79 M	-3.89 M
287.30 M	2.97 DEG	138.74 DEG	287.21 M	-3.43 M	-3.56 M
315.80 M	4.23 DEG	138.28 DEG	315.66 M	-4.77 M	-2.37 M
334.80 M	5.04 DEG	139.26 DEG	334.59 M	-5.93 M	-1.36 M
354.20 M	6.33 DEG	147.85 DEG	353.90 M	-7.47 M	-0.23 M
373.60 M	7.13 DEG	156.68 DEG	373.16 M	-9.48 M	0.83 M
393.20 M	8.38 DEG	167.97 DEG	392.58 M	-12.00 M	1.62 M
412.40 M	10.46 DEG	178.21 DEG	411.52 M	-15.12 M	1.99 M
431.80 M	12.72 DEG	179.99 DEG	430.53 M	-19.02 M	2.05 M
451.20 M	14.53 DEG	179.88 DEG	449.38 M	-23.59 M	2.06 M
489.80 M	17.69 DEG	183.62 DEG	486.46 M	-34.29 M	1.72 M
528.40 M	20.38 DEG	182.09 DEG	522.95 M	-46.86 M	1.09 M
547.90 M	21.11 DEG	179.24 DEG	541.18 M	-53.77 M	1.02 M
566.90 M	22.94 DEG	176.66 DEG	558.79 M	-60.89 M	1.27 M
586.20 M	24.35 DEG	175.98 DEG	576.47 M	-68.61 M	1.77 M
605.50 M	26.35 DEG	177.97 DEG	593.91 M	-76.86 M	2.20 M
624.40 M	27.41 DEG	178.69 DEG	610.77 M	-85.40 M	2.45 M
644.00 M	27.64 DEG	180.94 DEG	628.15 M	-94.46 M	2.48 M
663.30 M	27.68 DEG	181.35 DEG	645.25 M	-103.42 M	2.30 M
682.80 M	28.51 DEG	179.84 DEG	662.45 M	-112.60 M	2.21 M
702.00 M	29.15 DEG	179.83 DEG	679.27 M	-121.86 M	2.23 M
721.20 M	29.29 DEG	177.11 DEG	696.03 M	-131.23 M	2.48 M
740.10 M	29.44 DEG	176.54 DEG	712.50 M	-140.48 M	3.00 M
787.50 M	27.58 DEG	174.50 DEG	754.15 M	-163.04 M	4.76 M
831.20 M	24.42 DEG	167.18 DEG	793.42 M	-181.94 M	7.79 M
850.10 M	27.28 DEG	165.79 DEG	810.43 M	-189.95 M	9.71 M
868.40 M	28.23 DEG	164.74 DEG	826.62 M	-198.19 M	11.88 M
887.10 M	28.38 DEG	170.19 DEG	843.09 M	-206.84 M	13.80 M
904.00 M	27.50 DEG	171.76 DEG	858.02 M	-214.66 M	15.05 M
923.00 M	27.63 DEG	172.29 DEG	875.86 M	-223.76 M	16.32 M
942.70 M	28.68 DEG	175.41 DEG	892.23 M	-232.60 M	17.27 M
959.60 M	28.28 DEG	177.56 DEG	907.09 M	-240.64 M	17.77 M
980.00 M	28.25 DEG	176.81 DEG	925.06 M	-250.29 M	18.24 M
1002.40 M	28.30 DEG	176.81 DEG	944.78 M	-260.89 M	18.83 M
1021.60 M	28.08 DEG	176.44 DEG	961.71 M	-269.94 M	19.37 M
1040.80 M	27.55 DEG	176.31 DEG	978.69 M	-278.88 M	19.93 M
1060.40 M	28.20 DEG	174.59 DEG	996.01 M	-288.02 M	20.66 M
1078.90 M	28.50 DEG	176.34 DEG	1012.29 M	-296.77 M	21.35 M
1098.50 M	28.38 DEG	174.81 DEG	1029.53 M	-306.08 M	22.07 M
1117.40 M	28.50 DEG	174.14 DEG	1046.15 M	-315.04 M	22.94 M
1136.60 M	28.40 DEG	172.99 DEG	1063.03 M	-324.13 M	23.97 M
1155.80 M	27.83 DEG	173.91 DEG	1079.96 M	-333.12 M	25.00 M
1174.90 M	28.18 DEG	175.01 DEG	1096.83 M	-342.04 M	25.87 M
1193.40 M	27.85 DEG	174.79 DEG	1113.16 M	-350.70 M	26.64 M
1213.00 M	28.15 DEG	172.21 DEG	1130.46 M	-359.84 M	27.68 M
1231.90 M	27.55 DEG	174.79 DEG	1147.18 M	-368.61 M	28.68 M
1251.20 M	27.85 DEG	174.61 DEG	1164.26 M	-377.54 M	29.51 M
1270.20 M	27.20 DEG	175.21 DEG	1181.11 M	-386.29 M	30.29 M
1289.30 M	28.10 DEG	172.86 DEG	1198.03 M	-395.11 M	31.21 M
1308.40 M	28.25 DEG	173.51 DEG	1214.87 M	-404.06 M	32.28 M
1327.60 M	28.10 DEG	174.26 DEG	1231.79 M	-413.07 M	33.25 M
1347.00 M	28.45 DEG	173.74 DEG	1248.88 M	-422.21 M	34.21 M
1365.50 M	28.75 DEG	173.54 DEG	1265.12 M	-431.02 M	35.19 M
1384.90 M	29.00 DEG	177.46 DEG	1282.11 M	-440.35 M	35.92 M
1404.00 M	28.85 DEG	176.06 DEG	1298.83 M	-449.58 M	36.45 M
1422.20 M	28.90 DEG	175.49 DEG	1314.76 M	-458.34 M	37.09 M
1442.20 M	28.63 DEG	173.26 DEG	1332.30 M	-467.92 M	38.04 M
1461.10 M	28.80 DEG	175.41 DEG	1348.87 M	-476.95 M	38.93 M
1480.30 M	28.63 DEG	176.96 DEG	1365.71 M	-486.16 M	39.55 M
1497.60 M	28.58 DEG	176.76 DEG	1380.90 M	-494.43 M	40.00 M
1518.50 M	28.15 DEG	173.59 DEG	1399.29 M	-504.32 M	40.84 M
1537.50 M	28.33 DEG	176.01 DEG	1416.03 M	-513.27 M	41.65 M
1556.80 M	28.18 DEG	175.89 DEG	1433.03 M	-522.39 M	42.30 M
1575.90 M	28.35 DEG	175.44 DEG	1449.85 M	-531.41 M	42.98 M
1594.90 M	28.48 DEG	173.41 DEG	1466.56 M	-540.40 M	43.86 M
1614.30 M	27.83 DEG	175.11 DEG	1483.67 M	-549.51 M	44.77 M
1633.40 M	27.83 DEG	174.26 DEG	1500.56 M	-558.39 M	45.60 M
1652.10 M	28.23 DEG	173.01 DEG	1517.06 M	-567.12 M	46.58 M
1671.50 M	28.38 DEG	174.26 DEG	1534.14 M	-576.26 M	47.60 M
1690.50 M	28.30 DEG	172.74 DEG	1550.87 M	-585.23 M	48.62 M
1709.70 M	28.95 DEG	173.31 DEG	1567.72 M	-594.36 M	49.73 M
1728.80 M	28.33 DEG	177.69 DEG	1584.48 M	-603.48 M	50.45 M
1747.80 M	28.33 DEG	177.56 DEG	1601.21 M	-612.49 M	50.83 M
1764.50 M	28.20 DEG	177.81 DEG	1615.92 M	-620.39 M	51.15 M
1782.80 M	28.20 DEG	174.99 DEG	1632.04 M	-629.02 M	51.69 M
1801.40 M	27.45 DEG	174.31 DEG	1648.49 M	-637.66 M	52.50 M
1820.90 M	26.80 DEG	174.16 DEG	1665.85 M	-646.51 M	53.39 M
1839.90 M	26.43 DEG	179.26 DEG	1682.83 M	-655.00 M	53.88 M
1858.60 M	26.85 DEG	179.06 DEG	1699.55 M	-663.39 M	54.00 M
1878.20 M	27.68 DEG	176.39 DEG	1716.97 M	-672.36 M	54.36 M
1897.30 M	28.18 DEG	177.99 DEG	1733.85 M	-681.29 M	54.80 M
1916.30 M	27.95 DEG	174.66 DEG	1750.61 M	-690.21 M	55.37 M
1935.70 M	28.00 DEG	174.84 DEG	1767.74 M	-699.28 M	56.20 M
1954.80 M	28.48 DEG	171.96 DEG	1784.57 M	-708.25 M	57.24 M
1973.30 M	28.05 DEG	171.06 DEG	1800.87 M	-716.92 M	58.54 M
2002.40 M	28.65 DEG	175.21 DEG	1826.48 M	-730.63 M	60.19 M
2020.10 M	28.63 DEG	173.36 DEG	1842.01 M	-739.07 M	61.03 M
2040.60 M	28.10 DEG	174.49 DEG	1860.05 M	-748.76 M	62.06 M
2059.40 M	28.35 DEG	174.46 DEG	1876.61 M	-757.61 M	62.92 M
2078.80 M	28.20 DEG	173.34 DEG	1893.70 M	-766.75 M	63.89 M
2097.90 M	28.43 DEG	174.41 DEG	1910.51 M	-775.75 M	64.86 M
2116.80 M	27.98 DEG	174.91 DEG	1927.17 M	-784.65 M	65.69 M
2136.00 M	27.85 DEG	173.16 DEG	1944.13 M	-793.59 M	66.63 M
2155.20 M	27.88 DEG	173.61 DEG	1961.11 M	-802.50 M	67.66 M
2174.30 M	27.53 DEG	176.01 DEG	1978.02 M	-811.34 M	68.46 M
2193.50 M	27.60 DEG	173.81 DEG	1995.04 M	-820.19 M	69.25 M
2212.40 M	27.68 DEG	177.74 DEG	2011.78 M	-828.94 M	69.90 M
2231.40 M	27.43 DEG	177.46 DEG	2028.63 M	-837.72 M	70.27 M
2250.70 M	27.17 DEG	177.09 DEG	2045.78 M	-846.56 M	70.69 M
2269.80 M	27.30 DEG	175.24 DEG	2062.76 M	-855.28 M	71.27 M
2288.20 M	27.18 DEG	176.16 DEG	2079.12 M	-863.68 M	71.90 M
2307.90 M	27.38 DEG	173.56 DEG	2096.63 M	-872.67 M	72.71 M
2327.10 M	27.13 DEG	173.26 DEG	2113.70 M	-881.41 M	73.72 M
2345.60 M	26.85 DEG	171.21 DEG	2130.18 M	-889.72 M	74.86 M
2367.40 M	26.45 DEG	171.59 DEG	2149.67 M	-899.39 M	76.32 M
2386.40 M	26.08 DEG	172.41 DEG	2166.70 M	-907.72 M	77.49 M
2405.50 M	26.27 DEG	174.21 DEG	2183.85 M	-916.09 M	78.48 M
2424.50 M	25.89 DEG	172.93 DEG	2200.91 M	-924.39 M	79.41 M
2443.80 M	25.90 DEG	172.76 DEG	2218.27 M	-932.75 M	80.46 M
2462.40 M	25.60 DEG	173.46 DEG	2235.02 M	-940.77 M	81.43 M
2481.90 M	25.77 DEG	173.96 DEG	2252.60 M	-949.17 M	82.36 M
2501.10 M	26.10 DEG	171.34 DEG	2269.86 M	-957.50 M	83.43 M
2520.00 M	26.23 DEG	169.89 DEG	2286.83 M	-965.72 M	84.79 M
2539.30 M	26.85 DEG	171.04 DEG	2304.17 M	-974.08 M	86.19 M
2558.40 M	26.00 DEG	168.91 DEG	2321.35 M	-982.30 M	87.65 M
2577.50 M	27.08 DEG	171.04 DEG	2338.43 M	-990.70 M	89.13 M
2596.60 M	29.00 DEG	170.86 DEG	2355.29 M	-999.57 M	90.54 M
2615.70 M	28.98 DEG	168.09 DEG	2372.00 M	-1008.67 M	92.24 M
2636.20 M	28.70 DEG	162.91 DEG	2389.95 M	-1018.24 M	94.71 M
2655.40 M	31.20 DEG	157.63 DEG	2406.59 M	-1027.26 M	97.95 M
2674.50 M	30.23 DEG	156.34 DEG	2423.01 M	-1036.24 M	101.76 M
2692.70 M	29.35 DEG	152.93 DEG	2438.80 M	-1044.41 M	105.64 M
2711.70 M	30.30 DEG	149.18 DEG	2455.29 M	-1052.67 M	110.21 M
2731.70 M	33.05 DEG	146.96 DEG	2472.23 M	-1061.69 M	115.83 M
2750.90 M	38.02 DEG	147.68 DEG	2487.77 M	-1071.17 M	121.91 M
2770.00 M	43.57 DEG	149.83 DEG	2502.23 M	-1081.83 M	128.38 M
2789.70 M	46.51 DEG	152.92 DEG	2516.15 M	-1094.07 M	135.05 M
2808.10 M	51.29 DEG	156.48 DEG	2528.24 M	-1106.60 M	140.97 M

2826.60 M	56.96 DEG	156.25 DEG	2539.08 M	-1120.33 M	146.98 M
2845.70 M	58.43 DEG	154.26 DEG	2549.28 M	-1134.99 M	153.73 M
2864.60 M	60.51 DEG	154.75 DEG	2558.88 M	-1149.68 M	160.74 M
2884.40 M	65.01 DEG	155.49 DEG	2567.94 M	-1165.65 M	168.14 M
2921.50 M	69.91 DEG	155.80 DEG	2582.16 M	-1196.85 M	182.27 M
2941.30 M	71.55 DEG	155.72 DEG	2588.70 M	-1213.90 M	189.94 M
2959.60 M	73.46 DEG	154.72 DEG	2594.20 M	-1229.74 M	197.26 M
2979.10 M	75.84 DEG	153.37 DEG	2599.36 M	-1246.65 M	205.49 M
2998.00 M	76.03 DEG	151.71 DEG	2603.95 M	-1262.92 M	213.94 M
3017.10 M	77.46 DEG	150.61 DEG	2608.33 M	-1279.20 M	222.91 M
3036.60 M	79.14 DEG	148.09 DEG	2612.29 M	-1295.63 M	232.64 M
3055.70 M	79.70 DEG	146.23 DEG	2615.79 M	-1311.40 M	242.82 M
3074.40 M	81.13 DEG	144.60 DEG	2618.91 M	-1326.58 M	253.29 M
3093.80 M	82.27 DEG	142.15 DEG	2621.71 M	-1341.98 M	264.74 M
3112.90 M	82.06 DEG	141.49 DEG	2624.31 M	-1356.86 M	276.44 M
3131.60 M	83.10 DEG	140.09 DEG	2626.72 M	-1371.23 M	288.16 M
3151.10 M	85.27 DEG	139.08 DEG	2628.70 M	-1385.99 M	300.74 M
3170.30 M	85.54 DEG	135.98 DEG	2630.24 M	-1400.11 M	313.66 M
3189.20 M	86.71 DEG	134.60 DEG	2631.52 M	-1413.51 M	326.92 M
3208.50 M	89.14 DEG	133.04 DEG	2632.21 M	-1426.86 M	340.84 M
3227.80 M	90.34 DEG	130.88 DEG	2632.30 M	-1439.77 M	355.19 M
3246.70 M	90.03 DEG	130.57 DEG	2632.24 M	-1452.10 M	369.51 M
3266.10 M	90.31 DEG	130.37 DEG	2632.18 M	-1464.69 M	384.27 M
3294.80 M	88.15 DEG	128.00 DEG	2632.57 M	-1482.82 M	406.51 M
3314.10 M	88.35 DEG	126.73 DEG	2633.16 M	-1494.53 M	421.84 M
3333.10 M	88.56 DEG	126.91 DEG	2633.67 M	-1505.91 M	437.05 M
3352.90 M	88.77 DEG	126.15 DEG	2634.13 M	-1517.69 M	452.95 M
3371.80 M	88.15 DEG	127.14 DEG	2634.64 M	-1528.97 M	468.11 M
3390.20 M	88.12 DEG	125.36 DEG	2635.24 M	-1539.84 M	482.94 M
3410.04 M	87.91 DEG	125.43 DEG	2635.93 M	-1551.33 M	499.10 M
3429.50 M	87.18 DEG	127.10 DEG	2636.76 M	-1562.83 M	514.78 M
3448.50 M	88.18 DEG	128.12 DEG	2637.53 M	-1574.41 M	529.82 M
3467.90 M	89.62 DEG	126.67 DEG	2637.90 M	-1586.19 M	545.23 M
3487.60 M	88.25 DEG	124.87 DEG	2638.27 M	-1597.70 M	561.21 M
3506.60 M	87.70 DEG	126.00 DEG	2638.94 M	-1608.71 M	576.68 M
3525.80 M	88.77 DEG	125.93 DEG	2639.53 M	-1619.98 M	592.21 M
3545.10 M	89.42 DEG	126.21 DEG	2639.84 M	-1631.34 M	607.81 M
3563.90 M	89.49 DEG	126.78 DEG	2640.01 M	-1642.52 M	622.92 M
3583.40 M	88.53 DEG	126.65 DEG	2640.35 M	-1654.18 M	638.55 M
3602.50 M	88.08 DEG	127.94 DEG	2640.92 M	-1665.75 M	653.74 M
3621.70 M	88.97 DEG	128.37 DEG	2641.41 M	-1677.61 M	668.83 M
3641.00 M	89.38 DEG	129.21 DEG	2641.69 M	-1689.70 M	683.87 M
3660.30 M	89.79 DEG	127.17 DEG	2641.83 M	-1701.63 M	699.04 M
3682.80 M	87.57 DEG	124.73 DEG	2642.35 M	-1714.83 M	717.25 M
3700.00 M	87.00 DEG	124.00 DEG	2643.16 M	-1724.53 M	731.43 M

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