

Schlumberger

Company: **DEVON CANADA CORPORATION**
 Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**

VARIABLE DENSITY COMPENSATED CEMENT BOND LOG

LOCATION: LSD: L-38, DEVON ET AL KOTANEELEE L-38A/ST3
 COMPANY: DEVON CANADA CORPORATION

Permanent Datum: GROUND LEVEL Elev.: 803.65 m
 Log Measured From: KELLY BUSHING 6.8 m above Perm. Datum
 Drilling Measured From: KELLY BUSHING

API Serial No. 1117 Latitude: 60 D 07' 32.4" N Longitude: 124 D 07' 23.6" W

Logging Date: 7-Mar-2005
 Run Number: THREE
 Depth Driller: 4065 m
 Schlumberger Depth: 3950 m
 Bottom Log Interval: 3950 m
 Top Log Interval: 10 m
 Casing Fluid Type: VERSACLEAN 1400 (INVERT) / FRESH WATER
 Salinity: 850 kg/m3
 Fluid Level: 0 m
 BIT/CASING/TUBING STRING
 Bit Size: 156.000 mm
 From: To:
 Casing/Tubing Size: 177.800 mm
 Weight: 43.16 kg/m
 Grade: L-80
 From: To:
 Maximum Recorded Temperatures: 140 degC
 Logger On Bottom: 7-Mar-2005 11:00
 Unit Number: 2016 Location: GRANDE PRAIRIE
 Recorded By: L. PRIE, J. EASTON
 Witnessed By: PETER WASYLYK

	Run 1	Run 2	Run 3	Run 4
Oil Density				
Water Salinity				
Gas Gravity				
Bo				
Bw				
1/Bg				
Bubble Point Pressure				
Bubble Point Temperature				
Solution GOR				
Maximum Deviation	50.5 deg			
CEMENTING DATA				
Primary/Squeeze	Primary			
Casing String No				
Lead Cement Type				
Volume				
Density				
Water Loss				
Additives				
Tail Cement Type				
Volume				
Density				
Water Loss				
Additives				
Expected Cement Top				
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Fluid Type				
Salinity				
Density				
Fluid Level				
BIT/CASING/TUBING STRING				
Bit Size				
From				
To				
Casing/Tubing Size				
Weight				
Grade				
From				
To				
Maximum Recorded Temperatures				
Logger On Bottom				
Unit Number				
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING
 Date Created: 7-MAR-2005 8:22:27

Depth System Equipment	
Depth Measuring Device	Tension Device
Type: IDW-B	Type: CMTD-B/A
Serial Number: 6159	Serial Number: 2449
Calibration Date: 07-SEP-2004	Calibration Date: 30-AUG-2004
Calibrator Serial Number: 4	Calibrator Serial Number: 78130
Calibration Cable Type: 7-46P	Calibration Gain: 0.89
Wheel Correction 1: -8	Calibration Offset: 414.00
Wheel Correction 2: -8	Conveyance Method: Wireline
	Rig Type: LAND

Depth Control Parameters
 Log Sequence: Subsequent Trip To the Well
 Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
 Reference Log Run Number: TWO
 Reference Log Date: 21-DEC-2004
 Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks
 1. PRIMARY DEPTH DEVICE: IDW
 2.
 3.
 4.
 5.
 6.

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED DATA.

OTHER SERVICES
 OS1: AT
 OS2: HLD/SAPS
 OS3: DSI
 OS4: UBI
 OS5: PFC

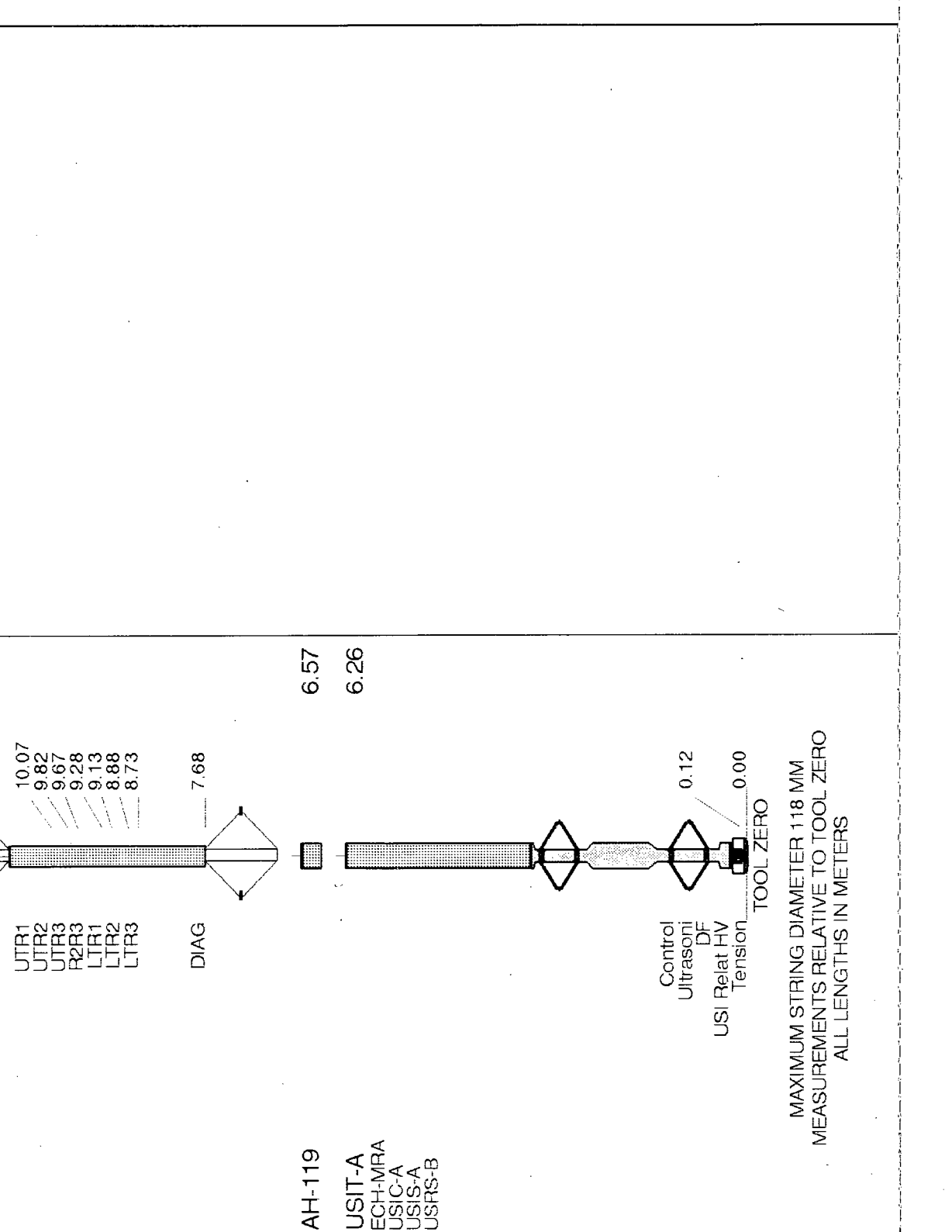
REMARKS: RUN NUMBER 1
 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004
 PRIMARY CASING 244.5 MM, 79.62 KG/MIL-80, LANDED AT 3310 MKB
 INTERMEDIATE CASING 177.8 MM, 43.16 KG/MIL-80, LANDED AT 3953 MKB
 LINER TOP OF INTERMEDIATE CASING SET AT 3105 MKB
 COMPRESSIVE STRENGTH OF CEMENT ASSUMED TO BE 21 MPA
 WELL WAS CONVERTED FROM OIL BASED MUD TO WATER
 CAUSING CYCLE SKIPPING IN CEMENT BOND LOG
 LIST LOG PRESENTED WITH CEMENT EVALUATION & CASING WEAR
 MINIMAL CASING WEAR NOTED WITH WEAR IN THE 244.5 MM SECTION OF 3 - 4 MM
 NO CASING WEAR NOTED IN 177.8 MM SECTION

REMARKS: RUN NUMBER 2

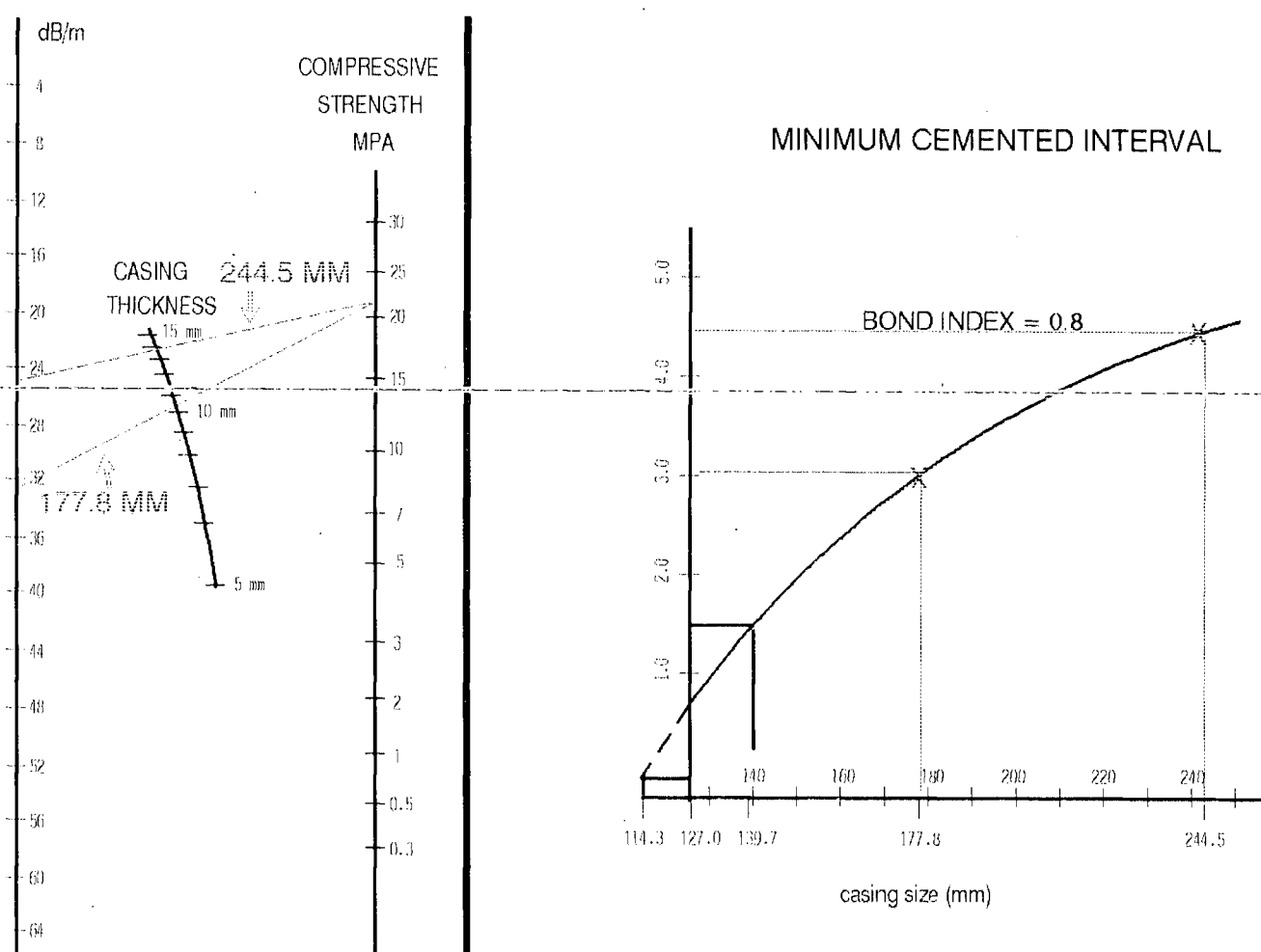
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES
 GRANDE PRAIRIE, AB 780-539-5060
 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNEY.

SERVICE ORDER #: 10829614
 PROGRAM VERSION: 1200-301
 FLUID LEVEL: 0 m

EQUIPMENT DESCRIPTION	
SURFACE EQUIPMENT	RUN 1
WDM-AB	
STM-C	
SRR-JUY	
WTM (CTS)-A	
DOWNHOLE EQUIPMENT	RUN 2
LEH-QT	19.44
LEH-QT	
TCC-BF	18.56
ECH-KC	
TCC-BF	17.64
CAL-Y	17.34
CAL-Y	
SGT-L	16.30
SGH-K	
SGC-SA	16.57
SGD-TAA	
CBT-EB	14.90
AH-127	
CBC-EB	
ECH-VC	
CME-AU	
CBS-DA	
CME-AT	



FIELD INTERPRETATION



$$\text{BOND INDEX} = \frac{\text{ATTENUATION IN ZONE OF INTEREST (dB/m)}}{\text{ATTENUATION IN WELL CEMENTED ZONE (dB/m)}}$$

1.0 BOND INDEX \Rightarrow $\frac{25}{33}$ dB/m
 0.8 BOND INDEX \Rightarrow $\frac{20}{25.4}$ dB/m

HYDRAULIC ISOLATION IN: $\frac{244.5}{177.8}$ mm CASING
 REQUIRES: $\frac{4.5}{3.0}$ METERS OF 0.8 BOND INDEX

INTERPRETATION:

WELL WAS SWITCHED FROM OIL BASED MUD TO WATER
 USED 21 MPA AS COMPRESSIVE STRENGTH OF CEMENT

Output DLIS Files

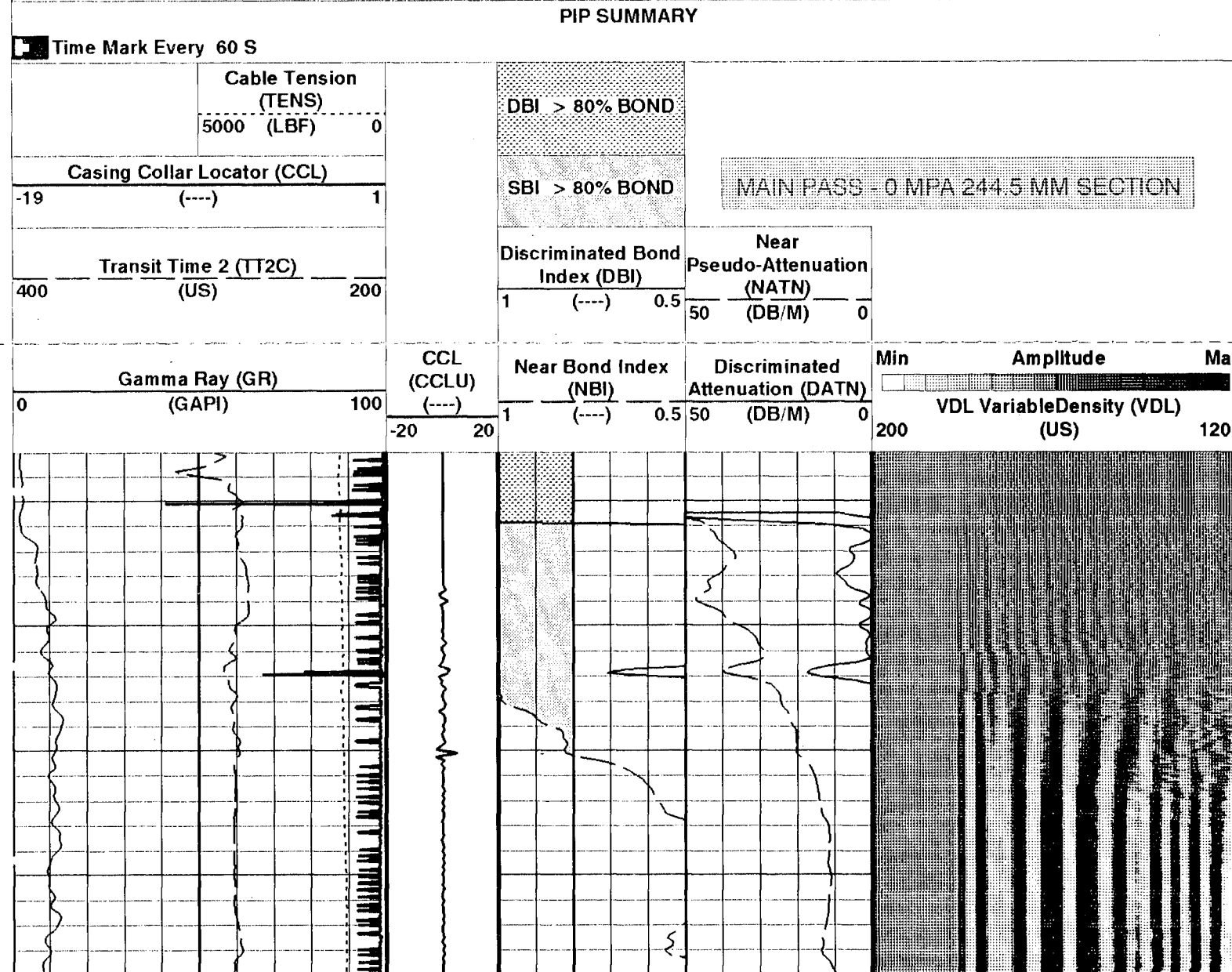
DEFAULT USI_CBT_028LUP FN:29 PRODUCER 07-Mar-2005 13:23 3125.9 M 3.0 M

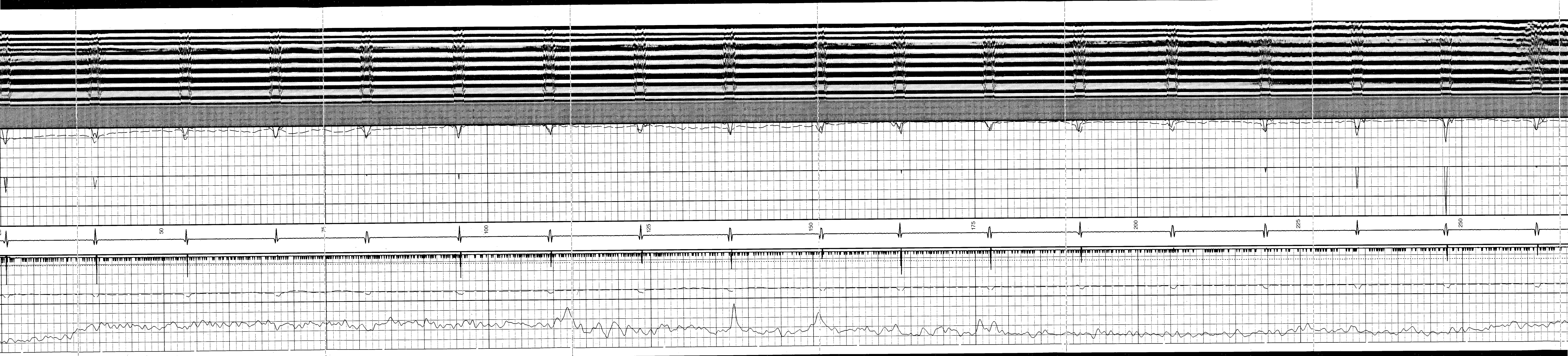
OP System Version: 12C0-301
MCM

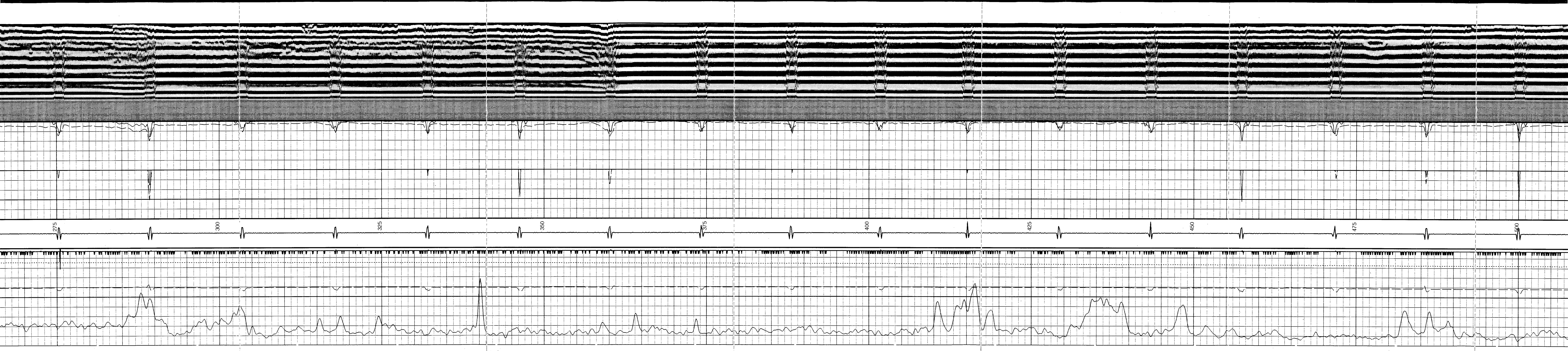
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SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

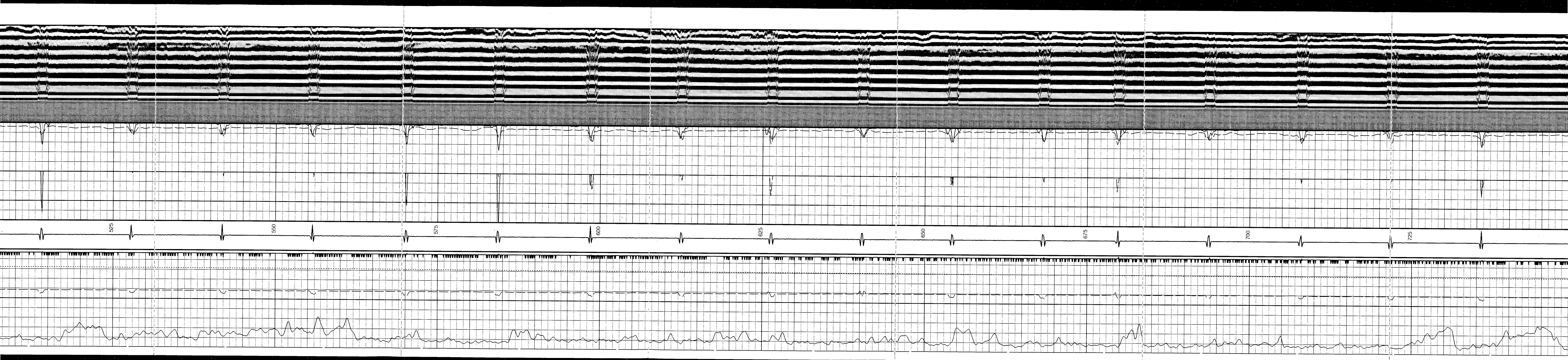
Changed Parameter Summary

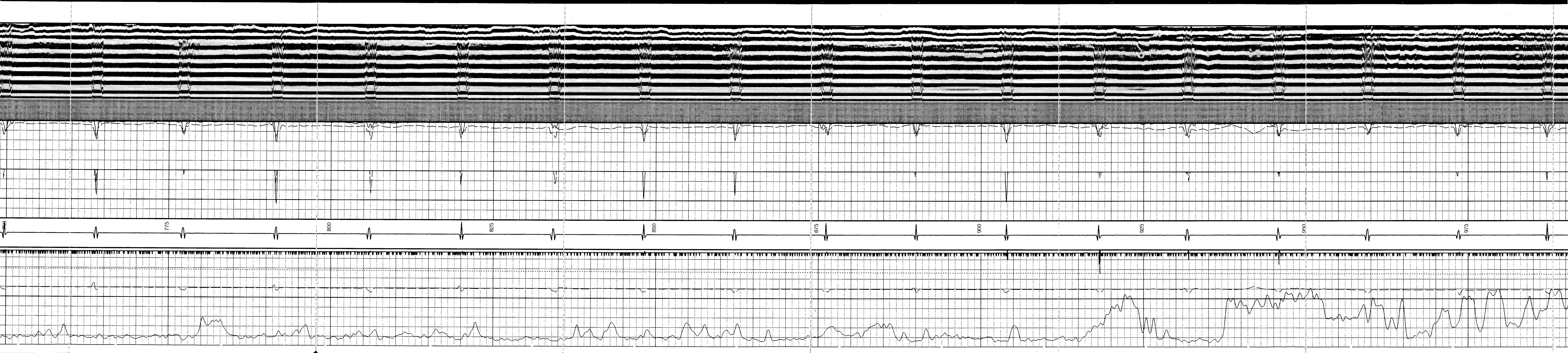
DLIS Name	New Value	Previous Value	Depth & Time
DFVL	762 US/M	758 US/M	3097.3 13:26:01
	758 US/M	762 US/M	3092.1 13:26:22
	755 US/M	755 US/M	3071.4 13:27:42
	758 US/M	755 US/M	3014.8 13:31:21
	755 US/M	758 US/M	2981.5 13:33:29
	750 US/M	755 US/M	2739.2 13:49:01
	745 US/M	750 US/M	2736.8 13:49:12
	740 US/M	745 US/M	2733.8 13:49:23
	738 US/M	740 US/M	2695.0 13:51:54
	735 US/M	738 US/M	2688.4 13:52:19
	730 US/M	735 US/M	2665.9 13:53:46
	725 US/M	730 US/M	2499.4 14:04:29
	735 US/M	725 US/M	2497.8 14:04:35
	740 US/M	735 US/M	2492.9 14:04:54
	730 US/M	740 US/M	2035.1 14:34:42
	720 US/M	730 US/M	2030.7 14:35:00
	710 US/M	720 US/M	1955.3 14:40:00
	720 US/M	710 US/M	1786.8 14:50:52
	710 US/M	720 US/M	1651.3 14:59:30
	720 US/M	710 US/M	1419.9 15:14:57
710 US/M	720 US/M	1255.3 15:25:49	
715 US/M	710 US/M	1238.7 15:26:54	
705 US/M	715 US/M	1188.1 15:30:13	
700 US/M	705 US/M	1184.3 15:30:28	
695 US/M	700 US/M	1150.5 15:32:40	
690 US/M	695 US/M	1142.2 15:33:13	
700 US/M	690 US/M	595.4 16:08:34	
690 US/M	700 US/M	456.5 16:17:41	
700 US/M	690 US/M	119.1 16:39:38	
705 US/M	700 US/M	26.7 16:46:13	
DTMD	720 US/M	770 US/M	1248.8 15:26:15
EMXV	60 V	70 V	1046.5 15:39:23
	50 V	60 V	1028.8 15:40:31

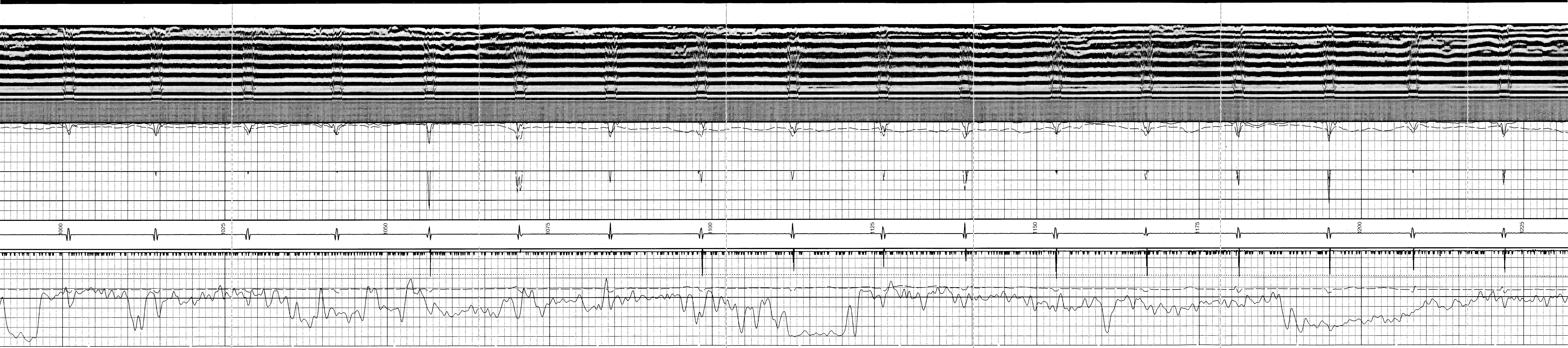


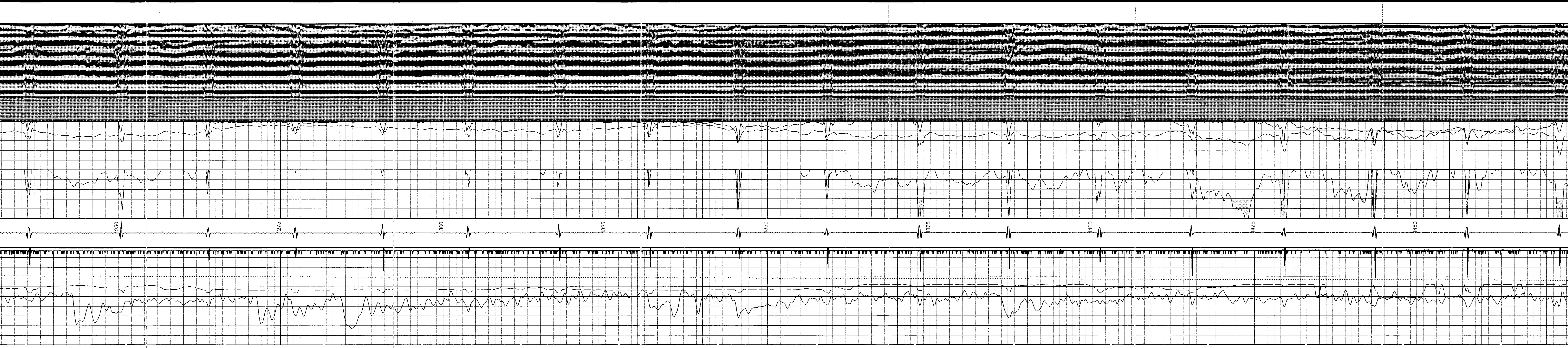


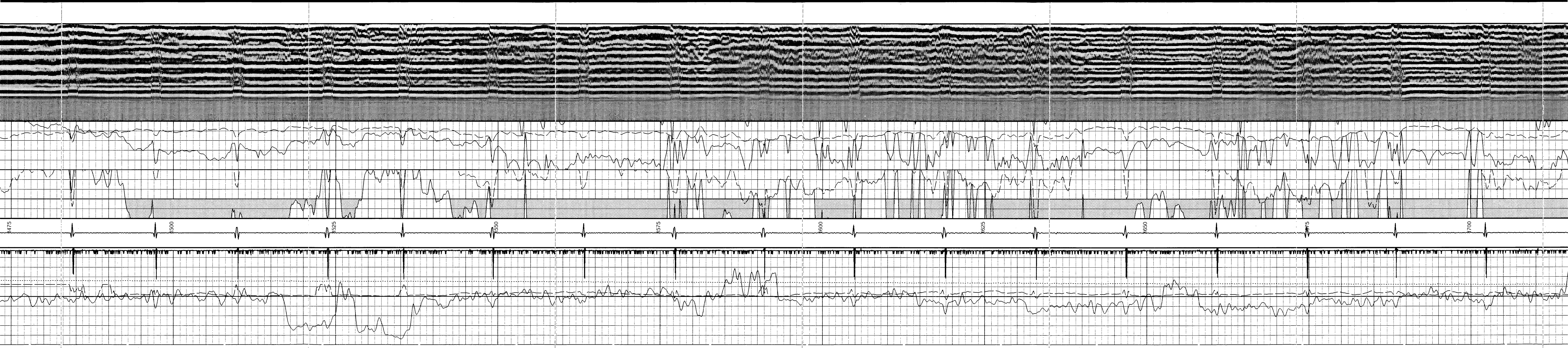


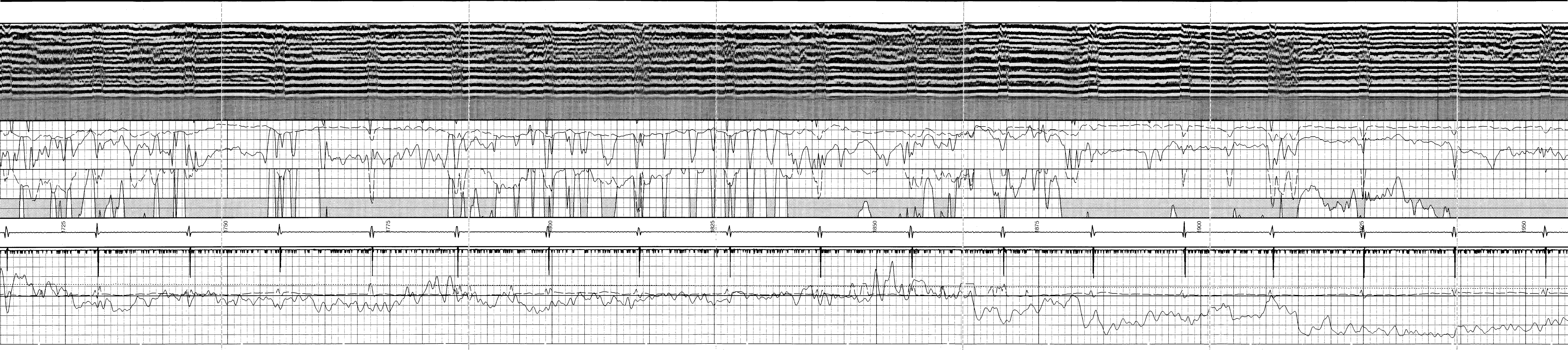


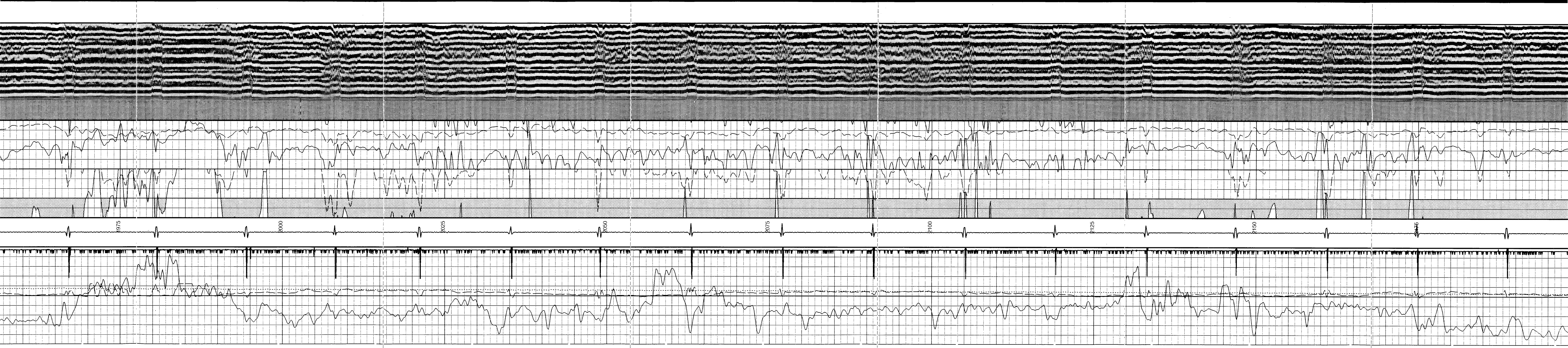


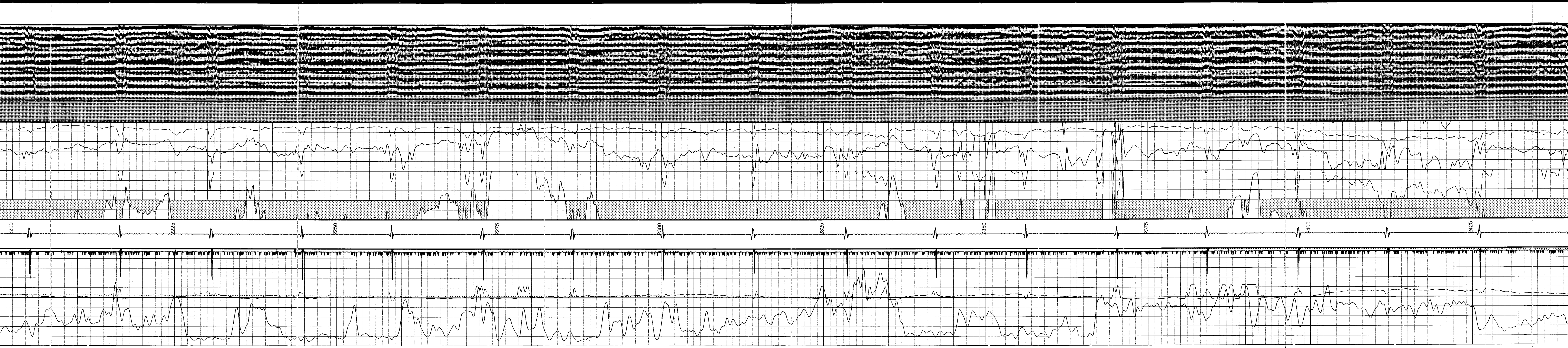


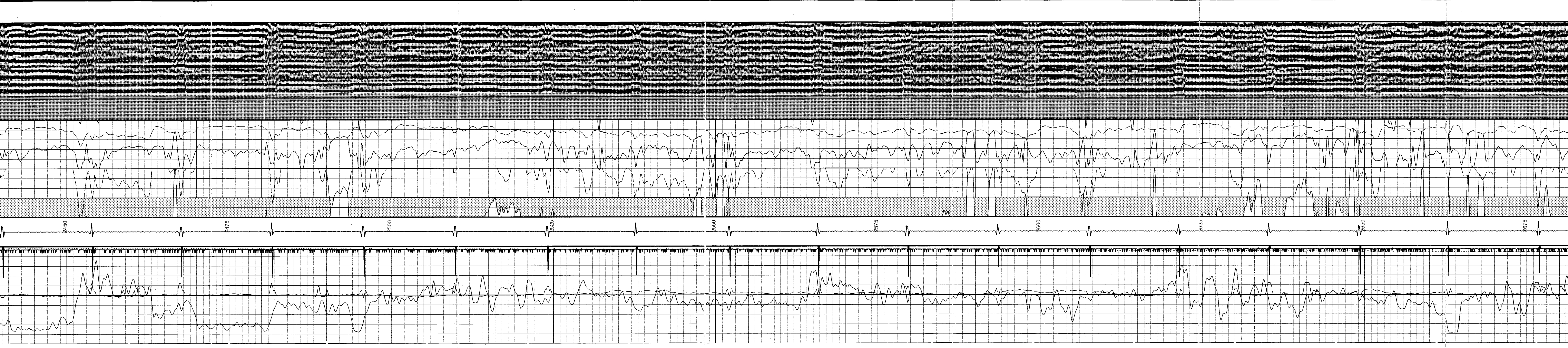


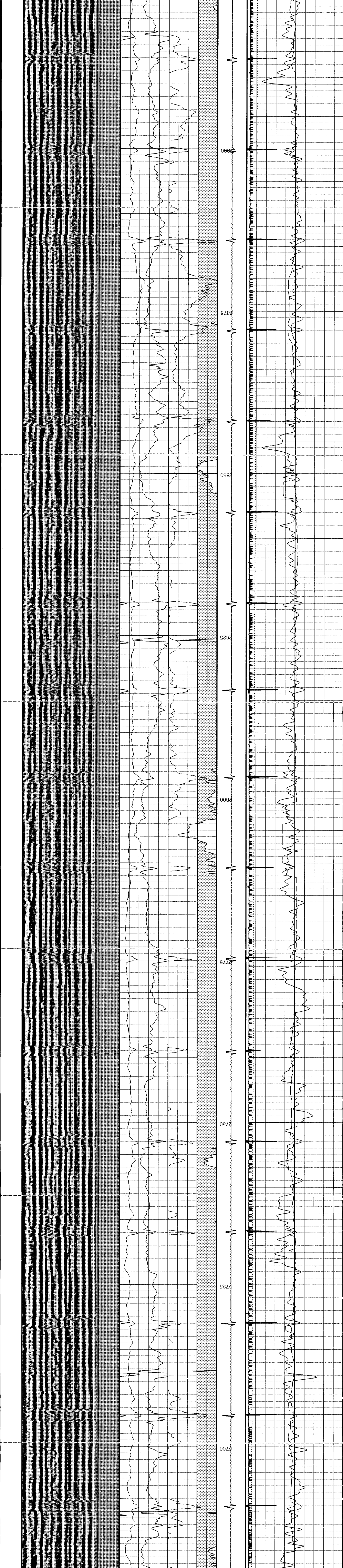


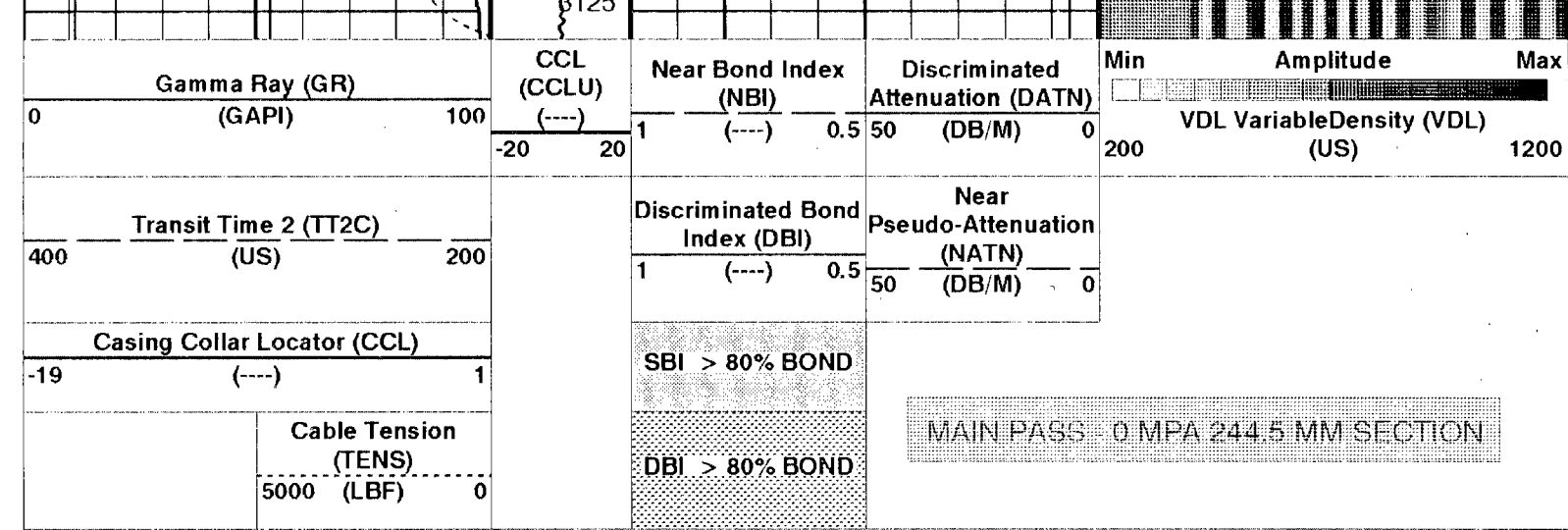
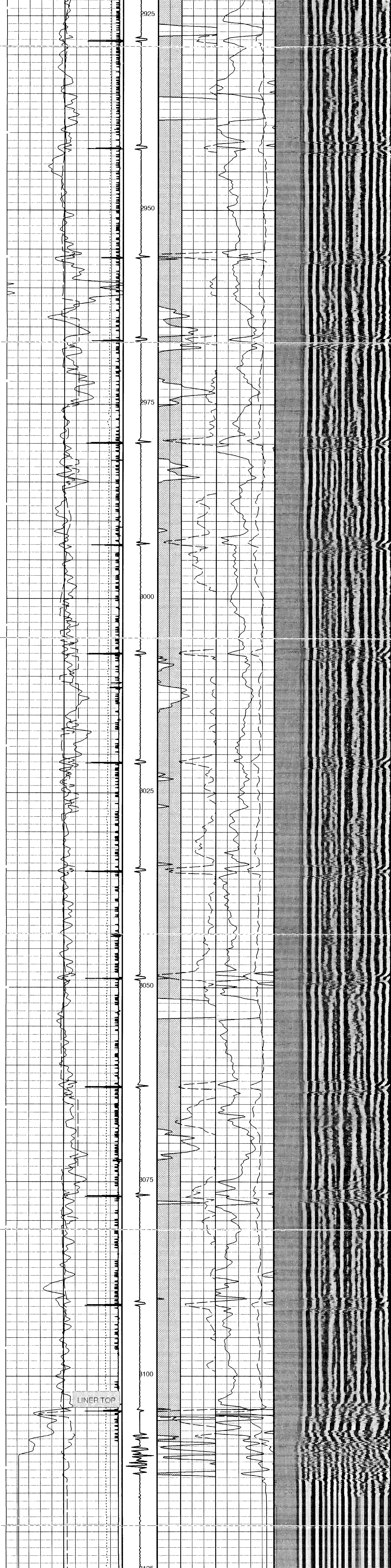












Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
USIT-A: Ultrasonic Imaging		
	Corrosion range minimum	-1.9304 MM
	T 3 Processing Length for FPM	26.045 US
	Corrosion range maximum	1.9304 MM
AGMN	Minimum Gain of Cartridge	-4 DB
AGMX	Maximum Gain of Cartridge	48 DB
BERJ	Bad Echo Rejection	ON
CDIA	Curves Outer Diameter	244.475 MM
CDUN	Curves Unit Declared in Presentation Manager	IN
CSDE	Casing Density	7800 K/M3
CSID	Casing Inner Diameter	216.948 MM
CVST	Casing Yield Strength	0 KPA
DFVL	Default Fluid Velocity	758 US/M
DOT	Diameter of Transducer Sensor	72.9996 MM
EMXV	EMEX Voltage	70 V
FDII	FPM Data Interpolation Interval	0 M
IMAR	Image Rotation	OFF
MW	Mud Weight	850 K/M3
OPLEV	USIT Remove Flagged Data Level	level2
RCOD	Reference Calibrator Outer Diameter	177.8 MM

RCO	Reference Calibrator Standoff	29.9898	MM
RCTH	Reference Calibrator Thickness	7.49808	MM
SDNV	Number of Vertical Samples used for Micro-debonding Computation	5	
SDTHOR	Acoustic Impedance STD Horizontal Threshold for Micro-debonding	0.5	
SDTVR	Acoustic Impedance STD Vertical Threshold for Micro-debonding	0.3	
SUBT	Ultrasonic Subassembly Type	Sub 7 inch_S	
TCUB	T 3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THNO	Nominal Thickness of Casing	13.7636	MM
TMUC	Type of Mud	OBM	
UMAO	USIT Measurement Angular Offset	-10	DEG
UPAT	Emission Pattern	Pattern_250K	
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub 7 inch	
UWKM	Ultrasonic Working Mode	SDEG 6IN LF	
VCAS	Ultrasonic Transversal Velocity in Casing	168.635	US/M
WLEN	T 3 Processing Length	29	US
ZCAS	Acoustic Impedance of Casing	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.4	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY
CBT-EB: Cement Bond Tool			
AGC	Automatic Gain Control	ON	
AGPD	Amplitude Gate Past Detection	25	US
BILI	Bond Index Level of Zone Isolation	0.8	
CCLG	CBT CCL Gain	X1	
CMPPM	Computation Mode	ALL	
CSRL	Cycle Skip Recovery Logic Algorithm	OFF	
DDEL	Digitizing Delay	200	US
DSIN	Digitizer Sample Interval	4	US
DTMD	Delta-T Mud	770	US/M
DWCO	Digitizer Word Count	250	
DWF	Digitized Waveforms	ON	
FMSG	Far Minimum Sliding Gate	344	US
FTTM	Far Transit Time Minimum	354.447	US
GAI	Manual Gain	75	
GOBO	Good Bond	2	MV
MATS	Maximum Attenuation Short	25	DB/M
MATT	Maximum Attenuation	25	DB/M
MCS	Mean Casing Slowness	187.008	US/M
MGAI	Maximum Gain	4000	
MODE	Firing Mode	ALL	
MUXI	Multiplexor Input	RCVR	
NFPI	Near Free Pipe Sonic Amplitude	65	MV
NMSG	Near Minimum Sliding Gate	287	US
NTTM	Near Transit Time Minimum	297.447	US
R2R	R2 to R2 Sensitivity Ratio	0	DB/M
RATE	Firing Rate	R15	
SALL	Sonic Amplitude Lower Limit	0.5	MV
SFPI	Short Free Pipe Sonic Amplitude	50	MV
SGAD	Sliding Gate	OFF	
SLEV	Signal Level for AGC	5000	MV
SMSG	Short Minimum Sliding Gate	196	US
SWW	Sonic Window Width	13	MS
TOCA	To Correction	ON	
TRAN	Transmitter	ON	
TTFF	Transit Time Correction Factor	15	US
TVCA	Transmitter Voltage Correction Algorithm	ON	
UGAI	Uphole Gain	G3	
VDLG	VDL Manual Gain	75	
VOLM	VDL Firing Mode	LTR1	
VMSG	Vary Far Minimum Sliding Gate	435	US
WERA	Wrong Echo Rejection Algorithm	ON	
SGT-L: Scintillation Gamma-Ray - L			
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	140	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	SGT Nuclear Mud Type	NOBARIITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
SOGR	SGT Standoff Distance	0	MM
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	305	MM
CCLT	CCL Detection Level	0.3	V
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	-411.4	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIND	North Departure of Tie-in Point	866.12	M
TIVD	TVD of Tie-in Point	3286	M
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4028.00	M
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	156.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	244.475	MM
CWEI	Casing Weight	79.62	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	4028	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBT_VDL Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 13:23

OP System Version: 12C0-301

MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Output DLIS Files

DEFAULT	USI_CBT_028LUP	FN:29	PRODUCER	07-Mar-2005 13:23
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Output DLIS Files

DEFAULT	USI_CBT_027LUP	FN:28	PRODUCER	07-Mar-2005 12:58	3148.0 M	2907.3 M
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OP System Version: 12C0-301

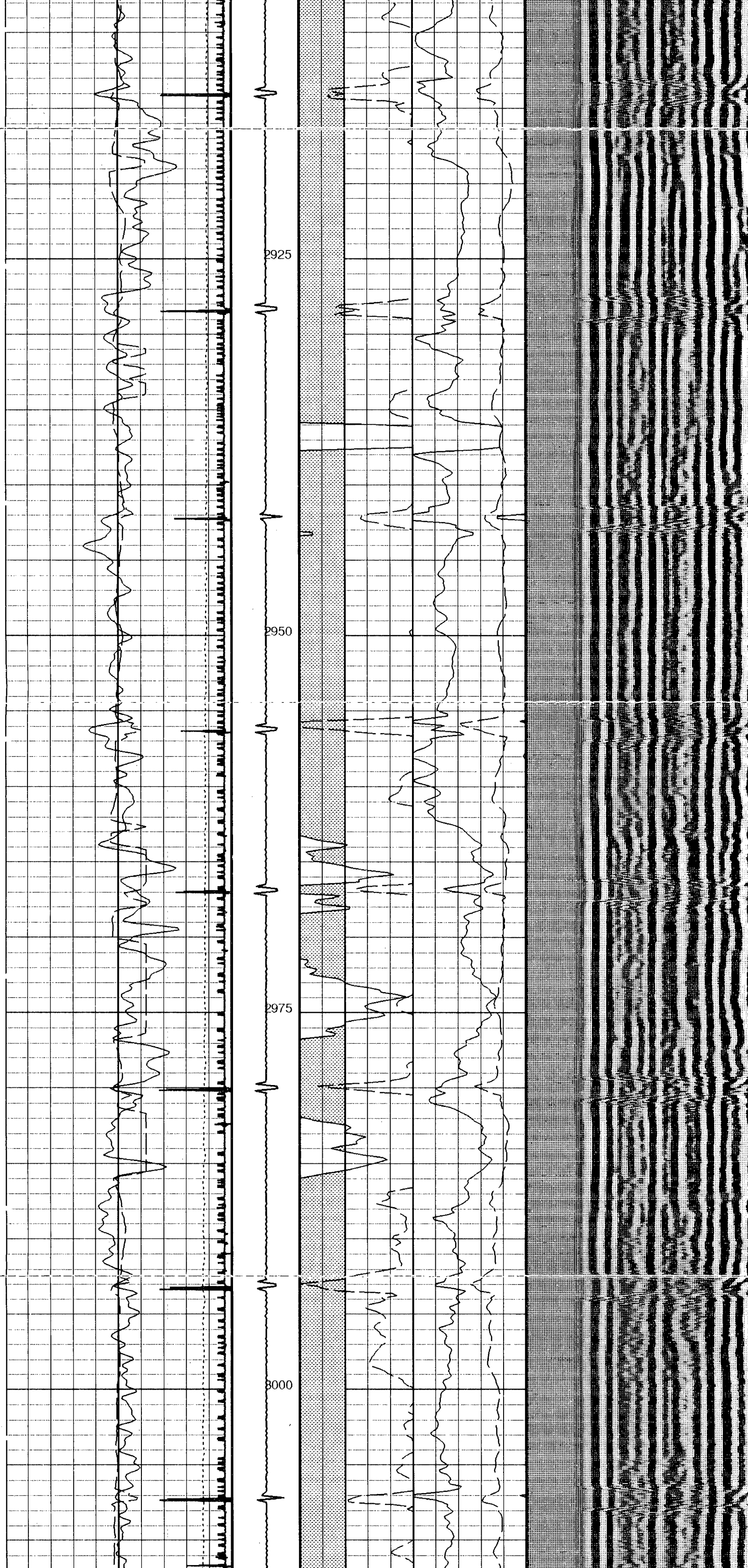
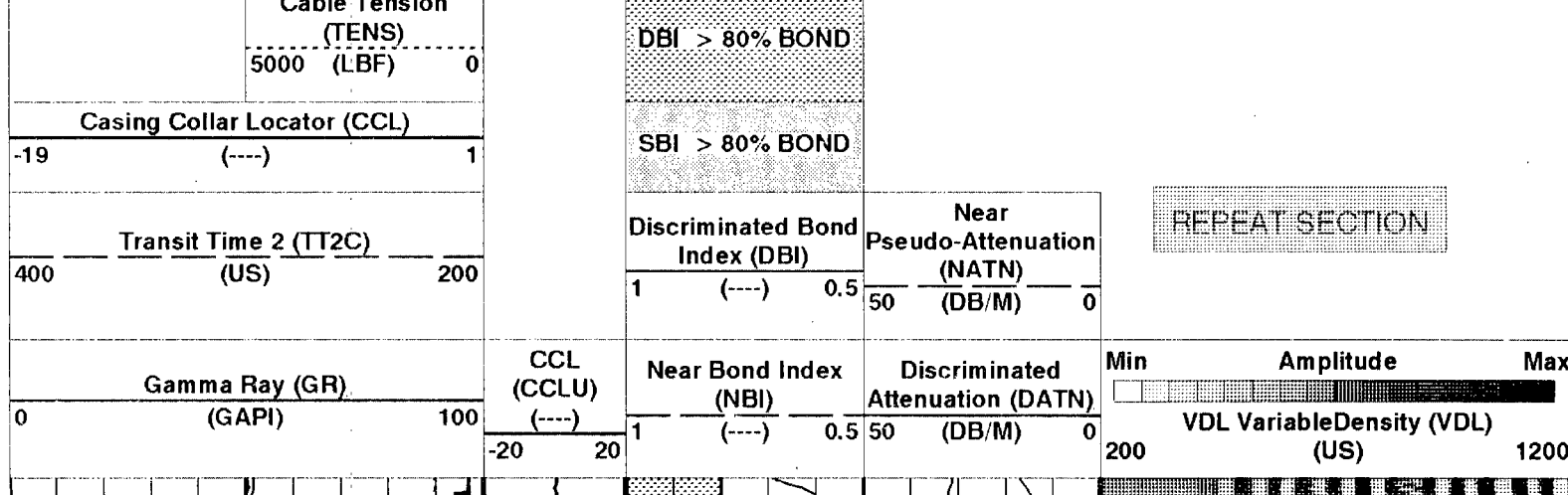
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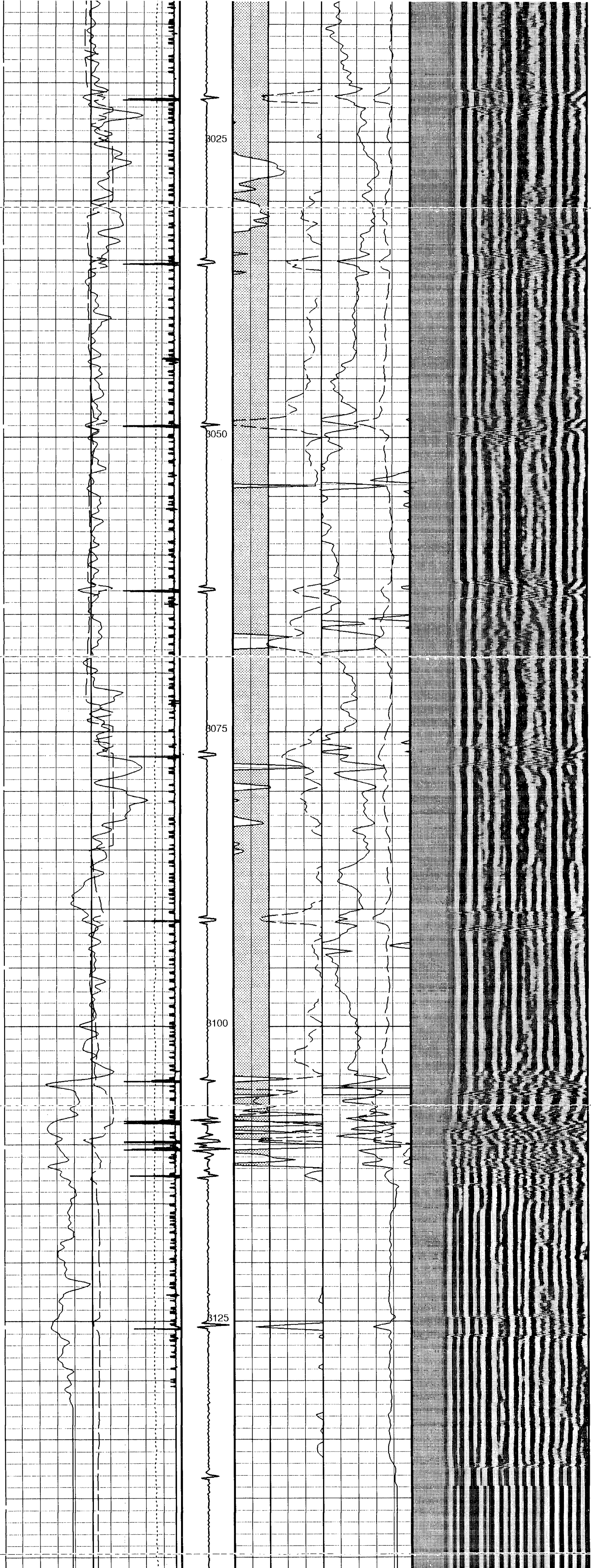
USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
DFVL	758 US/M	760 US/M	3089.8 13:03:26
	760 US/M	758 US/M	3024.0 13:07:44
	762 US/M	760 US/M	3013.4 13:08:25
	758 US/M	762 US/M	2977.2 13:10:47
EMXV	70 V	20 V	3148.1 12:58:58

PIP SUMMARY





Gamma Ray (GR) (GAPI)	CCL (CCLU)	Near Bond Index (NBI)	Discriminated Attenuation (DATN)	Min	Amplitude	Max
0	-20 20	1 (----) 0.5	50 (DB/M) 0	200	VDL Variable Density (VDL) (US)	1200
Transit Time 2 (TT2C) (US)		Discriminated Bond Index (DBI)	Near Pseudo-Attenuation (NATN) (DB/M)	REPEAT SECTION		
400		1 (----) 0.5	50 (DB/M) 0			
Casing Collar Locator (CCL) (---)		SBI > 80% BOND				
-19		DBI > 80% BOND				
Cable Tension (TENS) 5000 (LBF)						

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
USIT-A: Ultrasonic Imaging			
	Corrosion range minimum	-1.9304	MM
	T 3 Processing Length for FPM	26.045	US
	Corrosion range maximum	1.9304	MM
AGMX	Minimum Gain of Cartridge	-4	DB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	244.475	MM
CDUN	Curves Unit Declared in Presentation Manager	IN	
CSDE	Casing Density	7800	K/M3
CSID	Casing Inner Diameter	216.948	MM
CYST	Casing Yield Strength	0	KPA
DFVL	Default Fluid Velocity	760	US/M
DOT	Diameter of Transducer Sensor	72.9996	MM
EMXV	EMEX Voltage	20	V
FPII	FPII Data interpolation interval	0	in
IMAR	Image Rotation	OFF	
MW	Mud Weight	850	K/M3
OPLEV	USIT Remove Flagged Data Level	level2	
RCOD	Reference Calibrator Outer Diameter	177.8	MM
RCSO	Reference Calibrator Standoff	29.9999	MM
RCTH	Reference Calibrator Thickness	7.49808	MM
SDNV	Number of Vertical Samples used for Micro-debonding Computation	5	
SDTHOR	Acoustic Impedance STD Horizontal Threshold for Micro-debonding	0.5	
SDTVER	Acoustic Impedance STD Vertical Threshold for Micro-debonding	0.3	
SUBT	Ultrasonic Subassembly Type	Sub 7 inch S	
TCUB	T 3 Processing Level	Vax Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THNO	Nominal Thickness of Casing	13.7636	MM
TMUC	Type of Mud	OBM	
UMAO	USIT Measurement Angular Offset	-10	DEG
UPAT	Emission Pattern	Pattern_250K	
USTO	Ultrasonic Time Offset	-2	US
USUB	Ultrasonic Subassembly Identifier	Sub 7 inch	
UWKM	Ultrasonic Working Mode	SDEG 8IN LF	
VCAS	Ultrasonic Transversal Velocity in Casing	168.635	US/M
WLEN	T 3 Processing Length	29	US
ZCAS	Acoustic Impedance of Casing	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	1.4	MRAY
ZMUD	Acoustic Impedance of Mud	1	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTCG	Acoustic Impedance Threshold for Gas	0.3	MRAY
CBT-EB: Cement Bond Tool			
AGC	Automatic Gain Control	ON	
AGPD	Amplitude Gate Past Detection	25	US
BILI	Bond Index Level of Zone Isolation	0.8	
CCLG	CBT CCL Gain	X1	
CMPM	Computation Mode	ALL	
CSRL	Cycle Skip Recovery Logic Algorithm	OFF	
DBEL	Digitizer Delay	200	US
DSIN	Digitizer Sample Interval	4	US
DTMD	Delta-T Mud	770	US/M
DWCO	Digitizer Word Count	250	
DWF	Digitized Waveforms	ON	
FMSG	Far Minimum Sliding Gate	344	US
FTTM	Far Transit Time Minimum	354.447	US
GAI	Manual Gain	75	
GOBO	Good Bond	2	MV
MATS	Maximum Attenuation Short	25	DB/M
MATT	Maximum Attenuation	25	DB/M
MCS	Mean Casing Slowness	187.008	US/M
MGAI	Maximum Gain	4000	
MUXDE	Multiplex Input	ALL	
NFI	Near Free Pipe Sonic Amplitude	RCVR	
NMSG	Near Minimum Sliding Gate	65	MV
NTTM	Near Transit Time Minimum	287	US
R32R	R3 to R2 Sensitivity Ratio	297.447	US/M
RATE	Firing Rate	0	DB/M
SALL	Sonic Amplitude Lower Limit	0.15	MV
SFPI	Short Free Pipe Sonic Amplitude	50	MV
SGAD	Sliding Gate	OFF	
SMSG	Signal Level for AGC	5000	MV
SMSG	Short Minimum Sliding Gate	19	US
SWW	Sonic Window Width	13	MS
TOCA	T0 Correction	ON	
TRAN	Transmitter	ON	
TTFF	Transit Time Correction Factor	15	US
TVCA	Transmitter Voltage Correction Algorithm	ON	
UGAI	Uphole Gain	G3	
VDLG	VDL Manual Gain	75	
VDLM	VDL Firing Mode	LTR1	
VMSG	Very Far Minimum Sliding Gate	435	US
WERA	Wrong Echo Rejection Gamma-Ray - L	ON	
SGT-L: Scintillation Gamma-Ray - L			
BHT	Borehole Status	CASED	
DPPM	Bottom Hole Temperature (used in calculations)	140	DEGC
GCSE	Density Porosity Processing Mode	HIRS	
GDEV	Generalized Calliper Selection	0	
GGRD	Average Angular Deviation of Borehole from Normal	BS	DEG
GRSE	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
ISSBAR	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	SGT Nuclear Mud Type	NOBARITE	
SHT	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SOGD	Surface Hole Temperature	20	DEGC
SOGH	SGT Standoff Distance	0	MM
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	305	MM
CCLT	CCL Detection Level	0.3	V
DIR: Directional Survey Computation			
SPND	East Departure of Starting Point	0	M
SPVD	North Departure of Starting Point	0	M
TAZI	Vertical of Starting Point	0	M
	Vertical Section Azimuth	0	DEG

TIED	East Departure of Tie-in Point	-411.4	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIND	North Departure of Tie-in Point	866.12	M
TIVD	TVD of Tie-in Point	3286	M
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4028.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	156.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	244.475	MM
CWEI	Casing Weight	79.62	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	4028	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBT_VDL Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 12:58

OP System Version: 12C0-301

MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Output DLIS Files

DEFAULT	USI_CBT_027LUP	FN:28	PRODUCER	07-Mar-2005 12:58
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Input DLIS Files

DEFAULT	USI_CBT_021LUP	FN:22	PRODUCER	07-Mar-2005 11:37	3952.2 M	3103.1 M
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Output DLIS Files

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OP System Version: 12C0-301

MCM

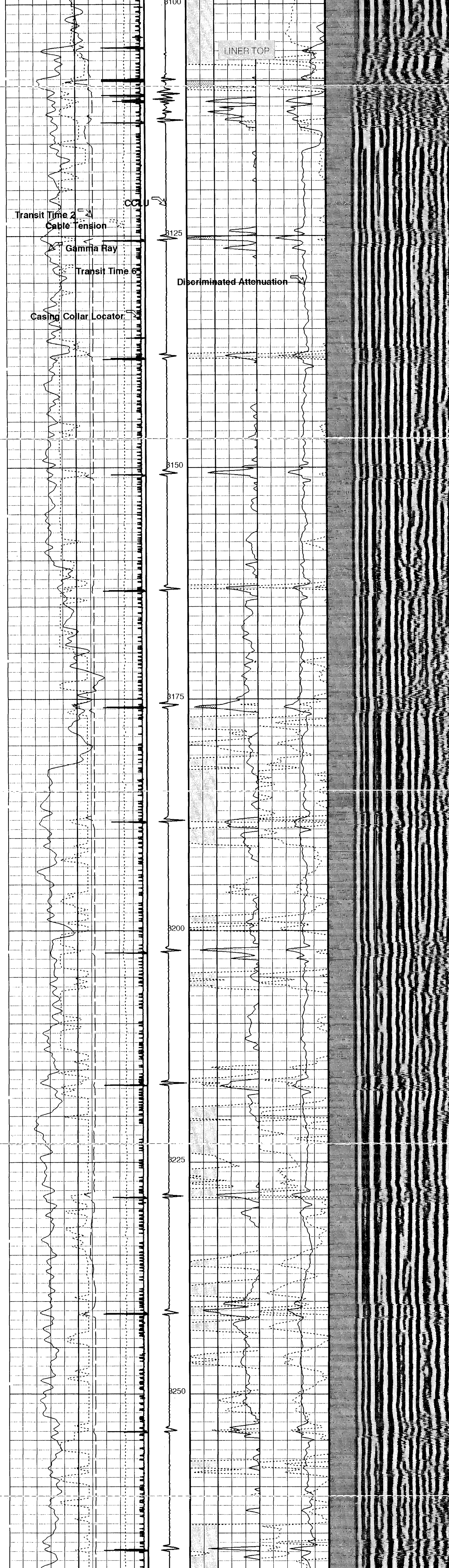
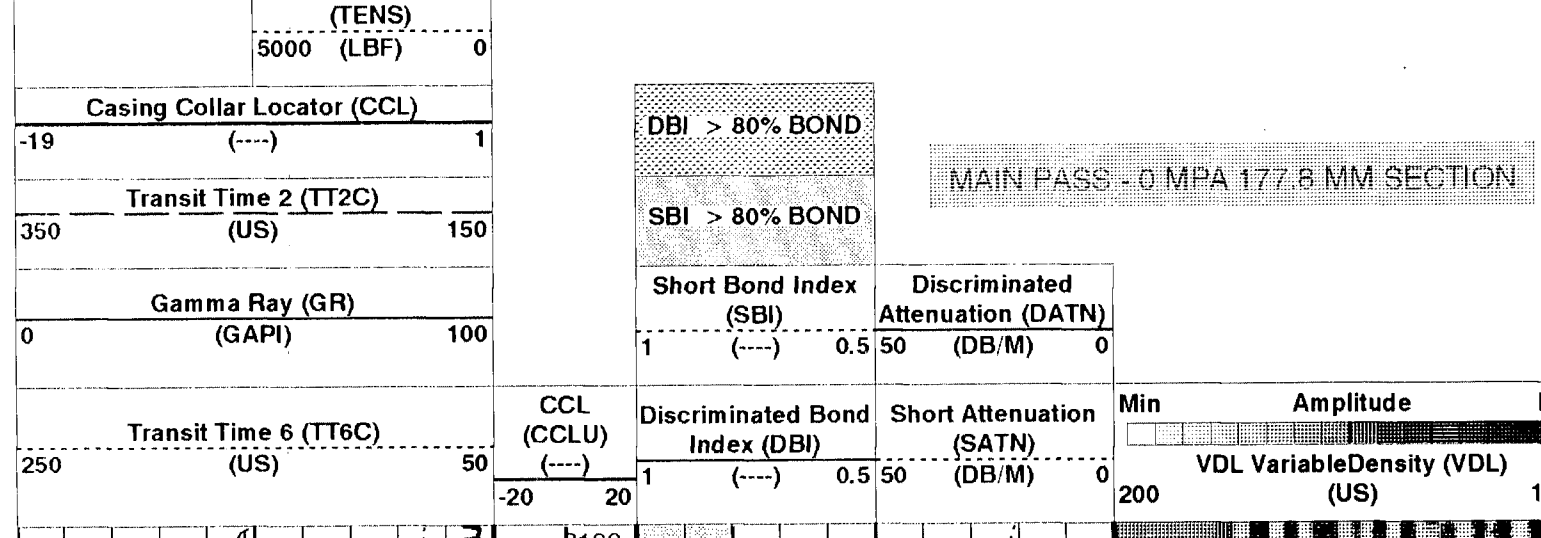
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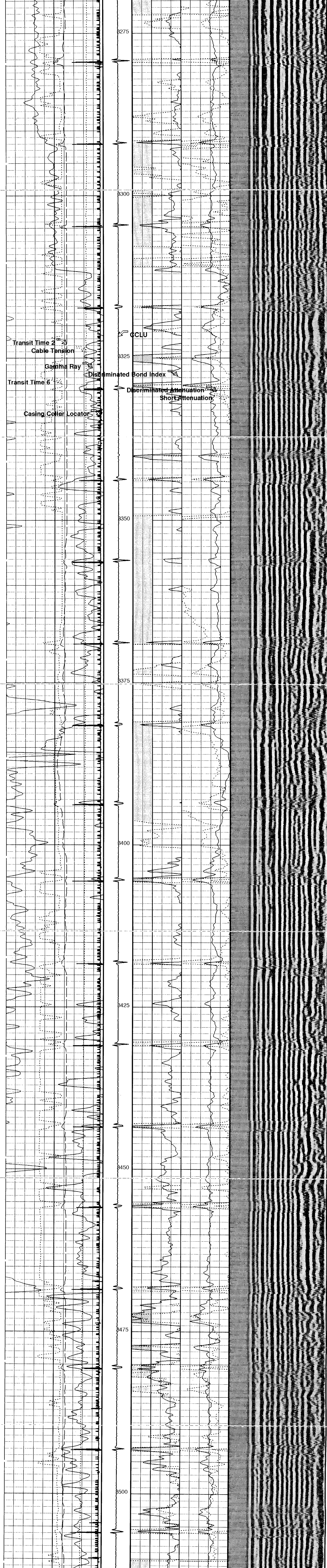
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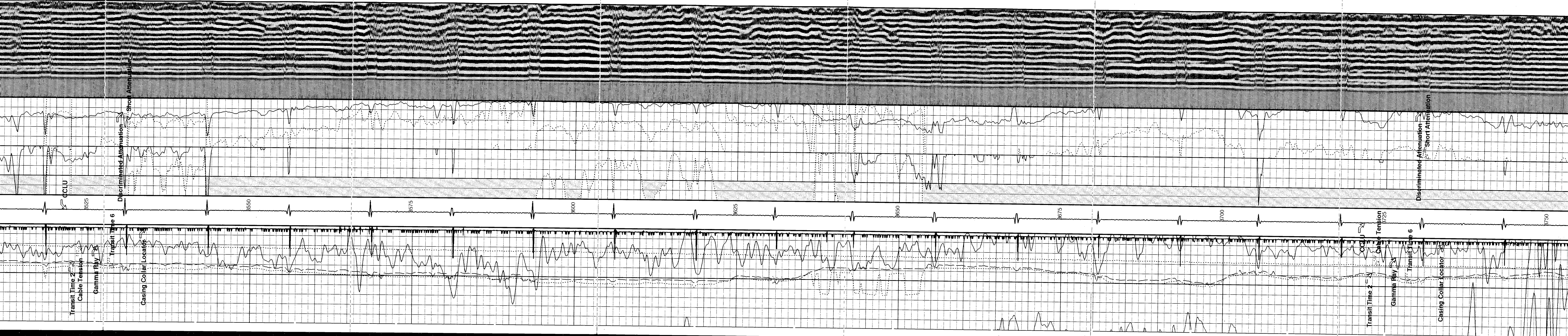
DLIS Name	New Value	Previous Value	Depth & Time
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PIP SUMMARY

Time Mark Every 60 S







CCLU

Discriminated Attenuation

Short Attenuation

Transit Time 2

Cable Tension

Gamma Ray

Transit Time 6

Casing Collar Locator

3525

3550

3675

3600

3625

3650

3675

3700

3725

3750

Transit Time 2

Cable Tension

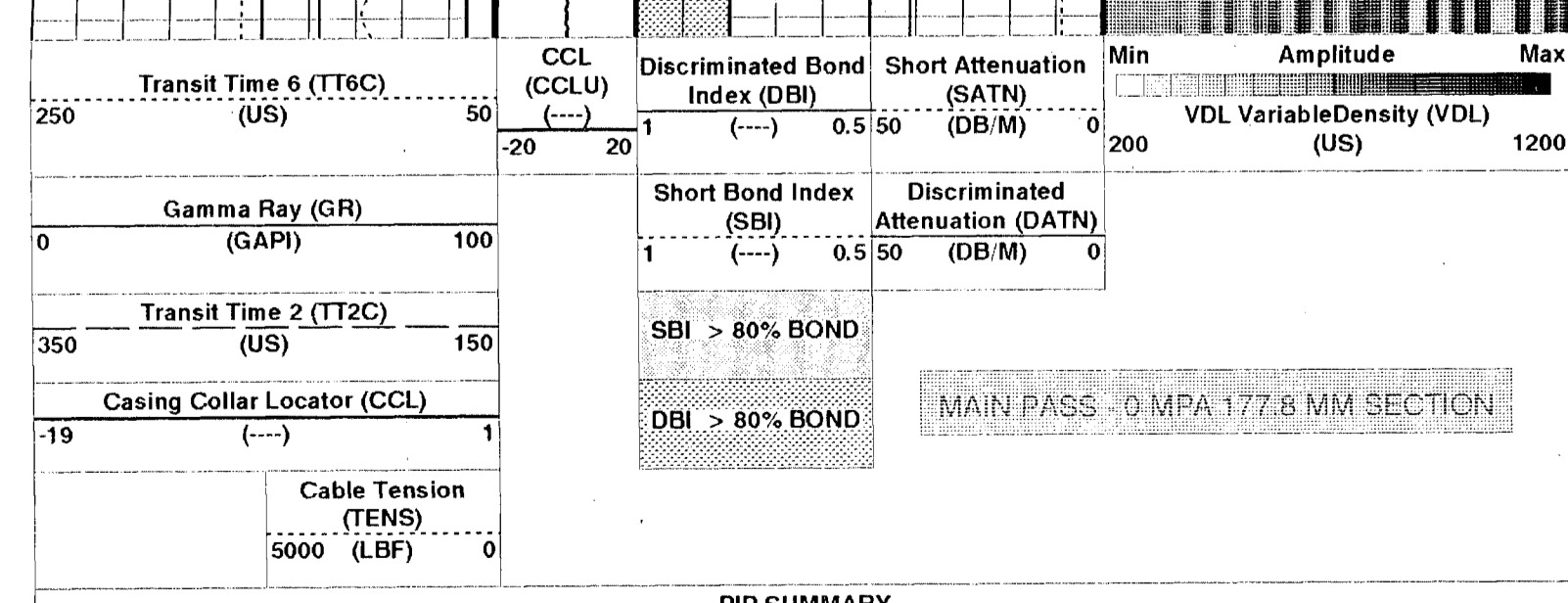
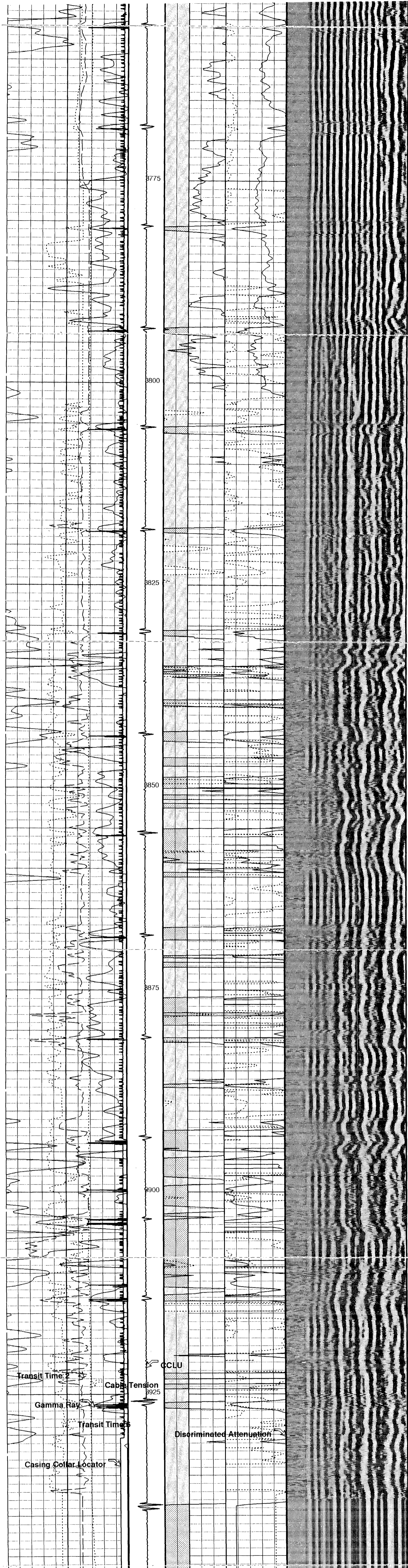
Gamma Ray

Transit Time 6

Casing Collar Locator

Discriminated Attenuation

Short Attenuation



Time Mark Every 60 S

PIP SUMMARY

DLIS Name	Description	Value	Unit
USIT-A: Ultrasonic Corrosion			
	Corrosion range minimum	-1.9304	MM
	Corrosion range maximum	1.9304	MM
	T 3 Processing Length for FPM	26.045	US
AGMN	Minimum Gain of Cartridge	-4	DB
BERJ	Bad Echo Rejection	48	DB
CDIA	Casing Outer Diameter	177.8	MM
CDUN	Curves Unit Declared in Presentation Manager	IN	
CSDE	Casing Density	7800	K/M3
CSID	Casing Inner Diameter	157.091	MM
CVFL	Casing Yield Strength	0	KPA
DFVL	Default Fluid Velocity	830	US/M
DOT	Diameter of Transducer Sensor	72.9996	MM
EMXV	EMEX Voltage	70	V
FDII	FPM Data Interpolation Interval	U	
IMAR	Image Rotation	OFF	
MW	Mud Weight	850	K/M3
OPLEV	USIT Remove Flagged Data Level	177.8	
RCOD	Reference Calibrator Outer Diameter	157.0	MM
RCSD	Reference Calibrator Standoff	29.9999	MM
RCTH	Reference Calibrator Thickness	7.49808	MM
SDNV	Number of Vertical Samples used for Micro-bonding Computation	5	
SDTHOR	Acoustic Impedance STD Horizontal Threshold for Micro-bonding	0.5	
SDTVR	Acoustic Impedance STD Vertical Threshold for Micro-bonding	0.3	
SUBT	Ultrasonic Subassembly Type	Sub 7 inch S	
TCUB	T 3 Processing Level	Vax_Loop	
TDH	Maximum Search Thickness (percentage of nominal)	130	

MAIN PASS - 0 MPA 177.8 MM SECTION

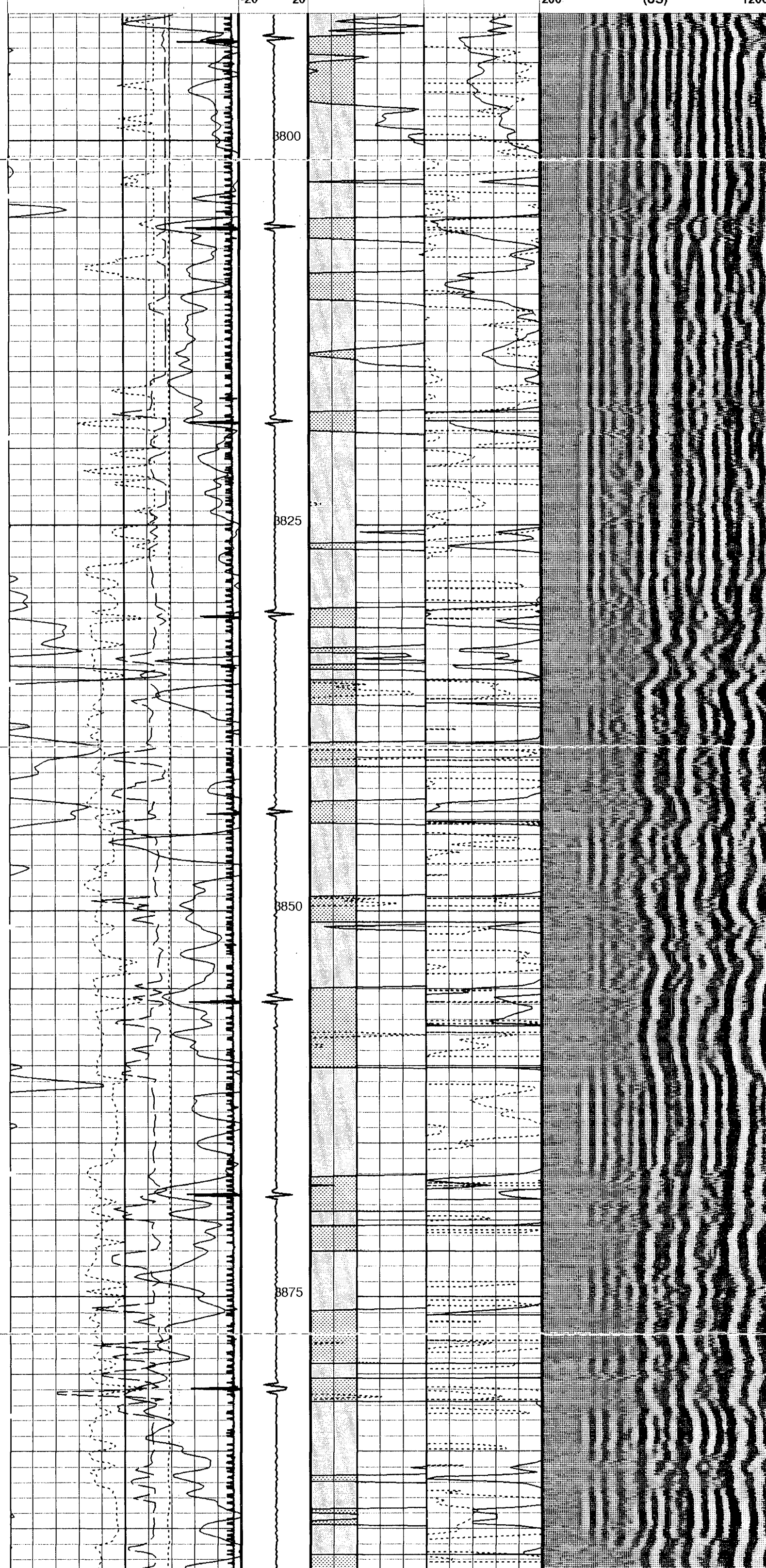
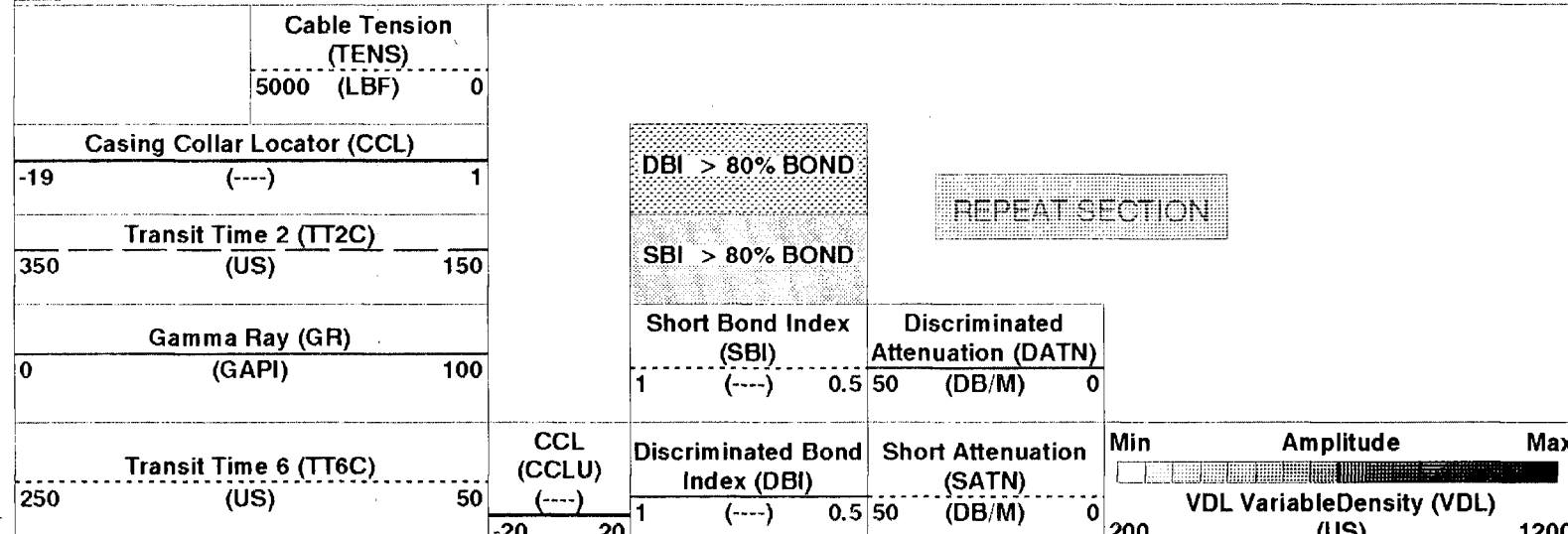
THUD	Minimum Search Thickness (percentage of nominal)	70	
THUC	Nominal Thickness of Casing	10.3547	MM
UMAC	Type of Mud	OBM	
UPAT	USIT Measurement Angular Offset	-10	DEG
USTO	Emission Pattern	Pattern_300K	
USUB	Ultrasonic Time Offset	-2	US
UWKM	Ultrasonic Subassembly Identifier	Sub 7 inch	
VCAS	Ultrasonic Working Mode	SDEG 6IN LF	
WLEN	Ultrasonic Transversal Velocity in Casing	168.635	US/M
ZCAS	T 3 Processing Length	24.462	US
ZINI	Acoustic Impedance of Casing	46.25	MRAY
ZMUD	Initial Estimate of Cement Impedance	-1	MRAY
ZTCM	Acoustic Impedance of Mud	1.4	MRAY
ZTGS	Acoustic Impedance Threshold for Cement	2.6	MRAY
	Acoustic Impedance Threshold for Gas	0.3	MRAY
CBT-EB: Cement Bond Tool			
AGC	Automatic Gain Control	ON	
AGPD	Amplitude Gate Past Detection	25	US
BILI	Bond Index Level of Zone Isolation	0.8	
CCLG	CBT CCL Gain	X1	
CMPM	Computation Mode	ALL	
CSRL	Cycle Skip Recovery Logic Algorithm	OFF	
DDEL	Digitizing Delay	200	US
DSIN	Digitizer Sample Interval	4	US
DTMD	Delta-T Mud	770	US/M
DWCO	Digitizer Word Count	250	
DWF	Digitized Waveforms	ON	
FMSG	Far Minimum Sliding Gate	294	US
FTTM	Far Transit Time Minimum	304.547	US
GAI	Manual Gain	75	
GOBO	Good Bond	2	MV
MATS	Maximum Attenuation Short	33	DB/M
MATT	Maximum Attenuation	33	DB/M
MCS	Mean Casing Slowness	187.008	US/M
MGAI	Maximum Gain	4000	
MODE	Firing Mode	ALL	
MUXI	Multiplexor Input	RCVR	
NFPI	Near Free Pipe Sonic Amplitude	65	MV
NMSG	Near Minimum Sliding Gate	237	US
NTTM	Near Transit Time Minimum	247.547	US
R3R	R3 to R2 Sensitivity Ratio	0	DB/M
RATE	Firing Rate	R15	
SALL	Sonic Amplitude Lower Limit	50	MV
SFPI	Short Free Pipe Sonic Amplitude	50	MV
SGAD	Sliding Gate	OFF	
SLEV	Signal Level for AGC	5000	MV
SMSG	Short Minimum Sliding Gate	146	US
SWW	Sonic Window Width	13	MS
TOCA	T0 Correction	ON	
TRAN	Transmitter	ON	
TFFF	Transit Time Correction Factor	15	US
TVCA	Transmitter Voltage Correction Algorithm	ON	
UGAI	Uphole Gain	G3	
VDLG	VDL Manual Gain	75	
VOLM	VDL Firing Mode	LTR1	
VMSG	Very Far Minimum Sliding Gate	385	US
WERA	Wrong Echo Rejection Algorithm	ON	
SGT-L: Scintillation Gamma-Ray - L			
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	140	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISBAR	SGT Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
SOGF	SGT Standoff Distance	0	MM
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	305	MM
CCLT	CCL Detection Level	0.3	V
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	-411.4	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIND	North Departure of Tie-in Point	866.12	M
TIVD	TVD of Tie-in Point	3286	M
STI: Stuck Tool Indicator			
LBFF	Trigger for MAXIS First Heading Label	IDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4028.00	M
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	BR Size	156.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	177.800	MM
CWEI	Casing Weight	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	-4.5	M
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	4028	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

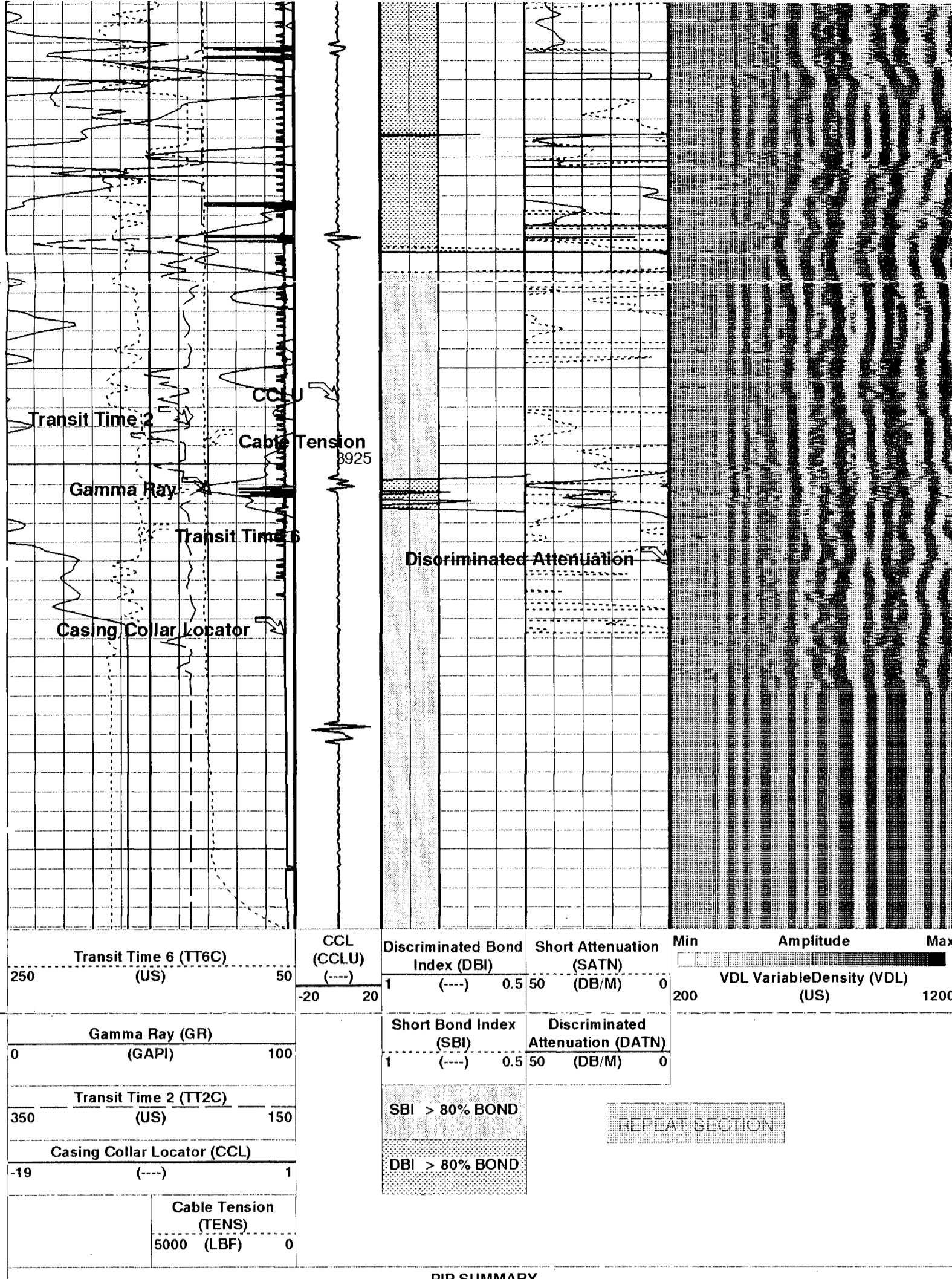
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OP System Version: 12C0-301					
MCM					
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SGT-L	12C0-301	CAL-Y	12C0-301		
TCC-BF	12C0-301				
Input DLIS Files					
DEFAULT	USI_CBT_021LUP	FN:22	PRODUCER	07-Mar-2005 11:37	3952.2 M 3103.1 M
Output DLIS Files					
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Input DLIS Files					
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Output DLIS Files					
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OP System Version: 12C0-301					
MCM					
USIT-A	12C0-301	CBT-EB	12C0-301		
SGT-L	12C0-301	CAL-Y	12C0-301		
TCC-BF	12C0-301				

PIP SUMMARY





PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value	Units
USIT-A: Ultrasonic Imaging			
	Corrosion range minimum	-1.9304	MM
	Corrosion range maximum	1.9304	MM
	T 3 Processing Length for FPM	26.045	US
AGMN	Minimum Gain of Cartridge	-4	DB
AGMX	Maximum Gain of Cartridge	48	DB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	177.8	MM
CDUN	Curves Unit Declared in Presentation Manager	IN	
CSDE	Casing Density	7800	K/M3
CSID	Casing Inner Diameter	157.091	MM
CYST	Casing Yield Strength	0	KPA
DFVL	Default Fluid Velocity	836	US/M
DOT	Diameter of Transducer Sensor	72.9996	MM
EMXV	EMEX Voltage	50	V
FDII	FPM Data Interpolation Interval	0	M
IMAR	Image Rotation	OFF	
MW	Mud Weight	850	K/M3
OPLEV	USIT Remove Flagged Data Level	level2	
RCOD	Reference Calibrator Outer Diameter	177.8	MM
RCSO	Reference Calibrator Standoff	29.9999	MM
RCTH	Reference Calibrator Thickness	7.49808	MM
SDNV	Number of Vertical Samples used for Micro-bonding Computation	5	
SDTHOR	Acoustic Impedance STD Horizontal Threshold for Micro-bonding	0.5	
SDTVER	Acoustic Impedance STD Vertical Threshold for Micro-bonding	0.3	
SUBT	Ultrasonic Subassembly Type	Sub 7_inch_S	
TCUB	T 3 Processing Level	Vax_Loop	
THDH	Maximum Search Thickness (percentage of nominal)	130	
THDL	Minimum Search Thickness (percentage of nominal)	70	
THNO	Nominal Thickness of Casing	10.3547	MM
TMUC	Type of Mud	OBM	
UMAO	USIT Measurement Angular Offset	-10	DEG
UPAT	Emission Pattern	Pattern_250K	
USTO	Ultrasonic Time Offset	2	US
USUB	Ultrasonic Subassembly Identifier	Sub 7_inch	
UWKM	Ultrasonic Working Mode	5DEG_6IN_LF	
VCAS	Ultrasonic Transversal Velocity in Casing	168.635	US/M
WLEN	T 3 Processing Length	29	US
ZCAS	Acoustic Impedance of Casing	46.25	MRAY
ZINI	Initial Estimate of Cement Impedance	-1	MRAY
ZMUD	Acoustic Impedance of Mud	1.4	MRAY
ZTCM	Acoustic Impedance Threshold for Cement	2.6	MRAY
ZTGS	Acoustic Impedance Threshold for Gas	0.3	MRAY
CBT-EB: Cement Bond Tool			
AGC	Automatic Gain Control	ON	
AGPD	Amplitude Gate Past Detection	25	US
BIL	Bond Index Level of Zone Isolation	0.8	
CCLG	CBT CCL Gain	X1	
CMPM	Computation Mode	ALL	
CSRL	Cycle Skip Recovery Logic Algorithm	OFF	
DDEL	Digitizing Delay	200	US
DSIN	Digitizer Sample Interval	4	US
DTMD	Delta-T Mud	770	US/M
DWCO	Digitizer Word Count	250	
DWF	Digitized Waveforms	ON	
FMSG	Far Minimum Sliding Gate	294	US
FTTM	Far Transit Time Minimum	304.547	US
GAI	Manual Gain	75	
GOBO	Good Bond	2	
MATS	Maximum Attenuation Short	25	DB/M
MATT	Maximum Attenuation	25	DB/M
MCS	Mean Casing Slowness	187.008	US/M
MGAI	Maximum Gain	4000	
MODE	Firing Mode	ALL	
MUXI	Multiplexor Input	RCVR	
NFPI	Near Free Pipe Sonic Amplitude	65	MV
NMSG	Near Minimum Sliding Gate	237	US
NTTM	Near Transit Time Minimum	247.547	US
R32R	R3 to R2 Sensitivity Ratio	0	DB/M
RATE	Firing Rate	R15	
SALL	Sonic Amplitude Lower Limit	0.5	MV
SFPI	Short Free Pipe Sonic Amplitude	50	MV
SGAD	Sliding Gate	OFF	
SLEV	Signal Level for AGC	5000	MV
SMSG	Short Minimum Sliding Gate	146	US
SWW	Sonic Window Width	13	MS
TOCA	T0 Correction	ON	
TRAN	Transmitter	ON	
TFFF	Transit Time Correction Factor	15	US
TVCA	Transmitter Voltage Correction Algorithm	ON	
UGAI	Uphole Gain	G3	
VDLG	VDL Manual Gain	75	
VDLM	VDL Firing Mode	LTR1	
VMSG	Very Far Minimum Sliding Gate	385	US
WERA	Wrong Echo Rejection Algorithm	ON	
SGT-L: Scintillation Gamma-Ray - L			
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	140	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART GEN 9	
GTSE	Generalized Temperature Selection	LINEAR ESTIMATE	
ISSBAR	SGT Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
SOGR	SGT Standoff Distance	0	MM
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	305	MM
CCLT	CCL Detection Level	0.3	V
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	DEG
TAZI	Vertical Section Azimuth	0	DEG
TIED	East Departure of Tie-in Point	-411.4	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIND	North Departure of Tie-in Point	866.12	M
TIVD	TVD of Tie-in Point	3286	M
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4028.00	M
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	156.000	MM
BSAL	Borehole Salinity	50000.00	PPM
CSIZ	Current Casing Size	177.800	MM
CWEI	Casing Weight	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	-0.8	M
MST	Mud Sample Temperature	-50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	4028	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBT_VDL Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 18:17

OP System Version: 12C0-301
MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Input DLIS Files

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Output DLIS Files

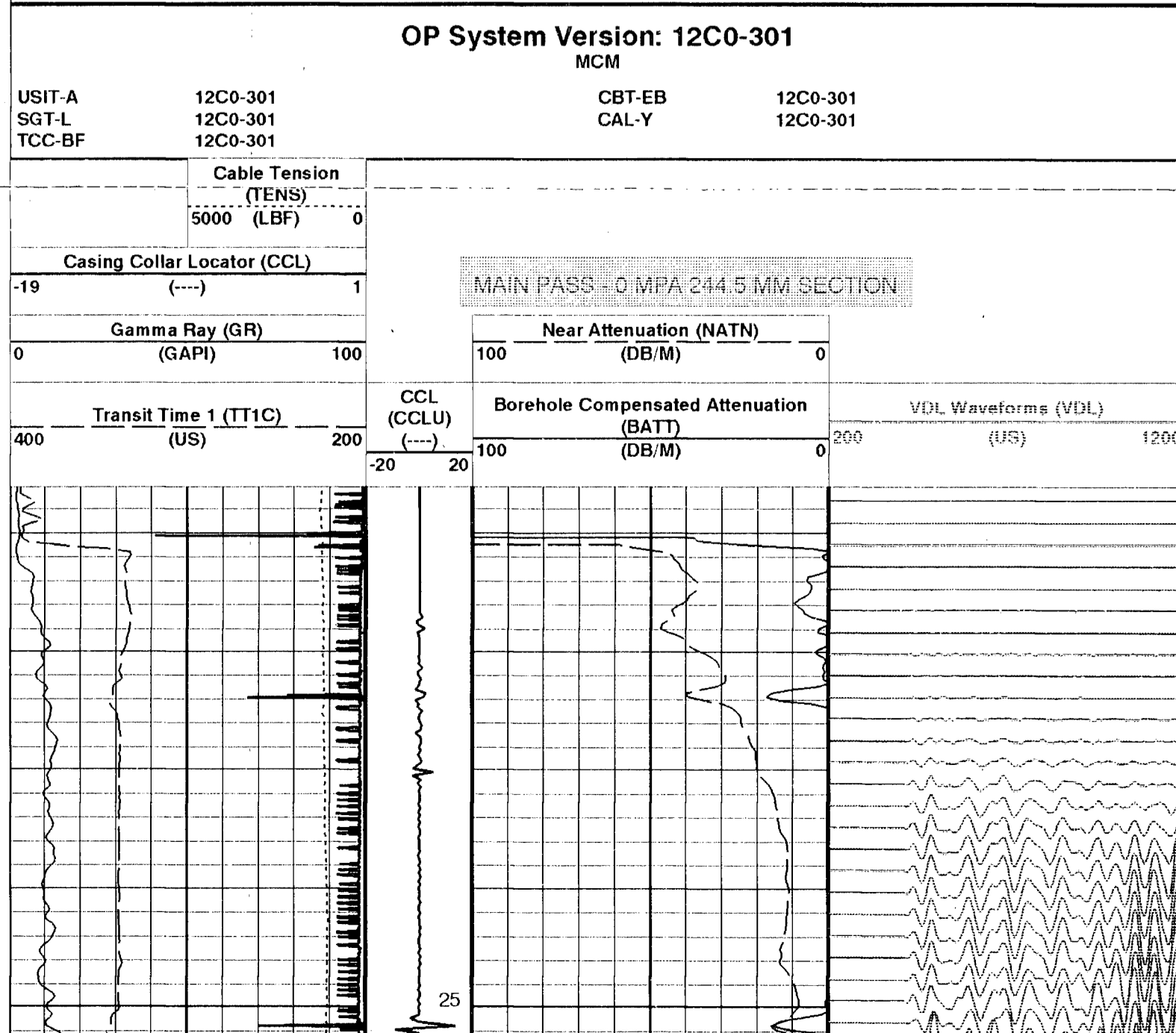
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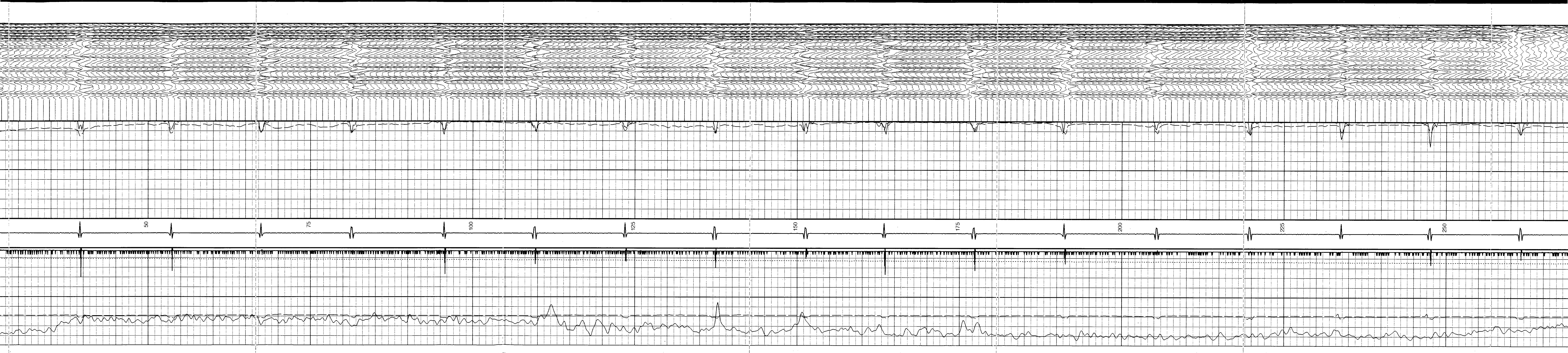
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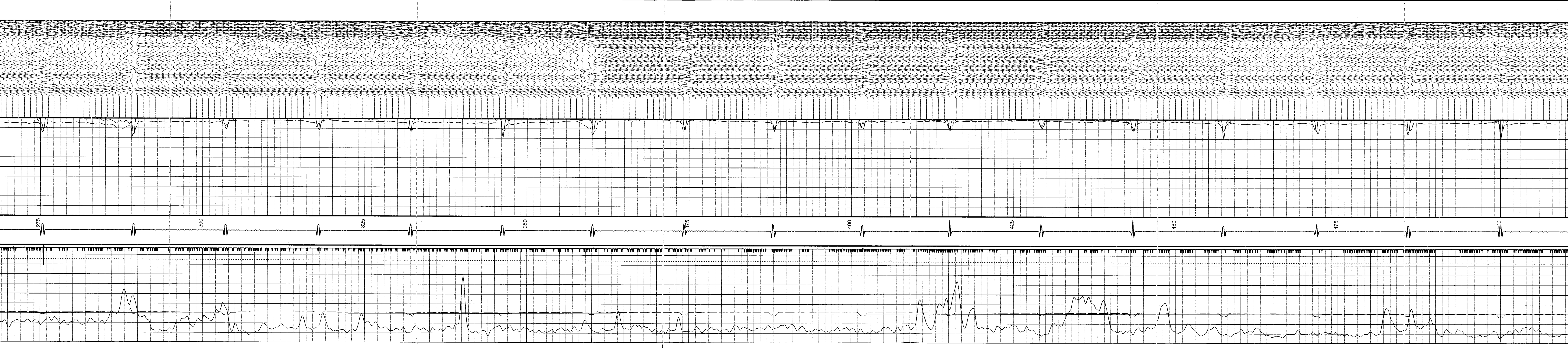
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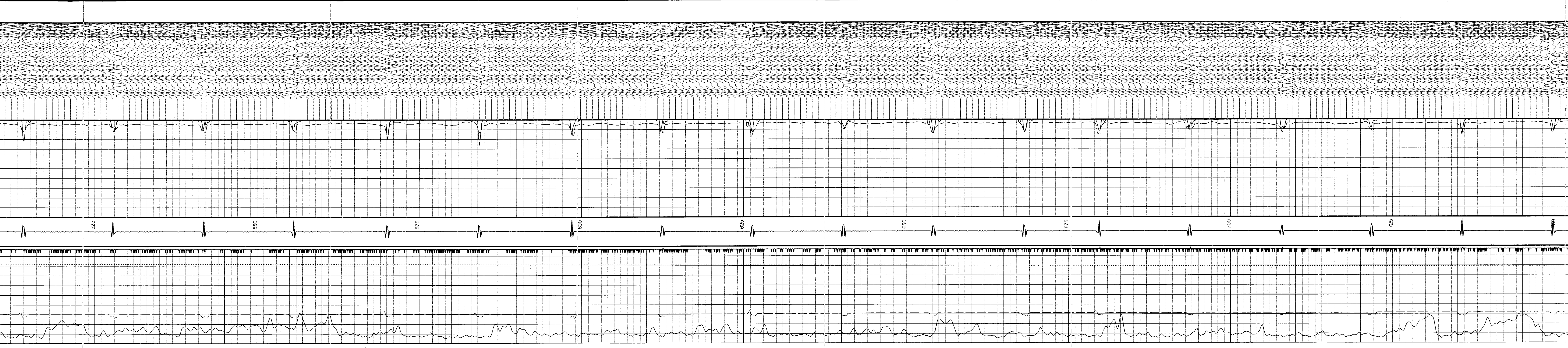
OP System Version: 12C0-301
MCM

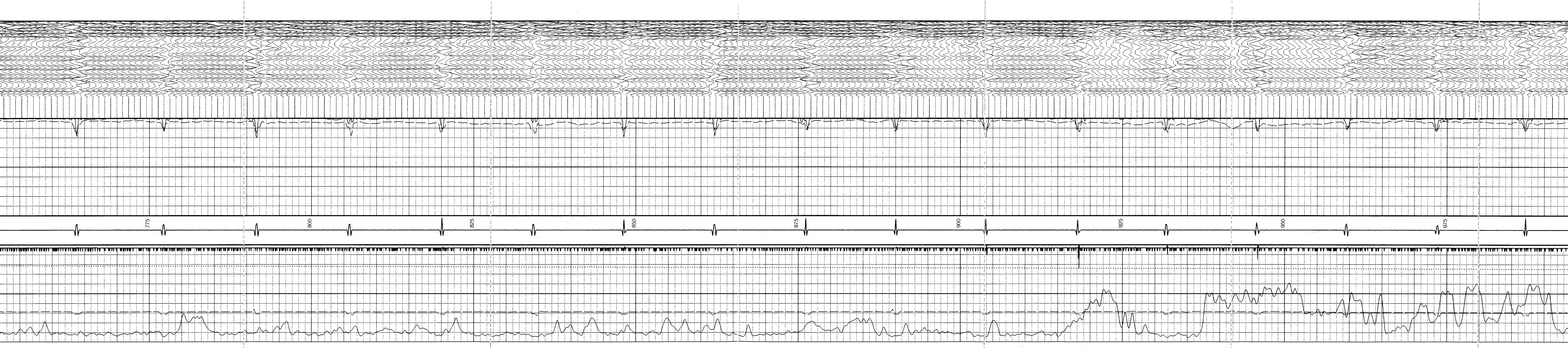
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SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

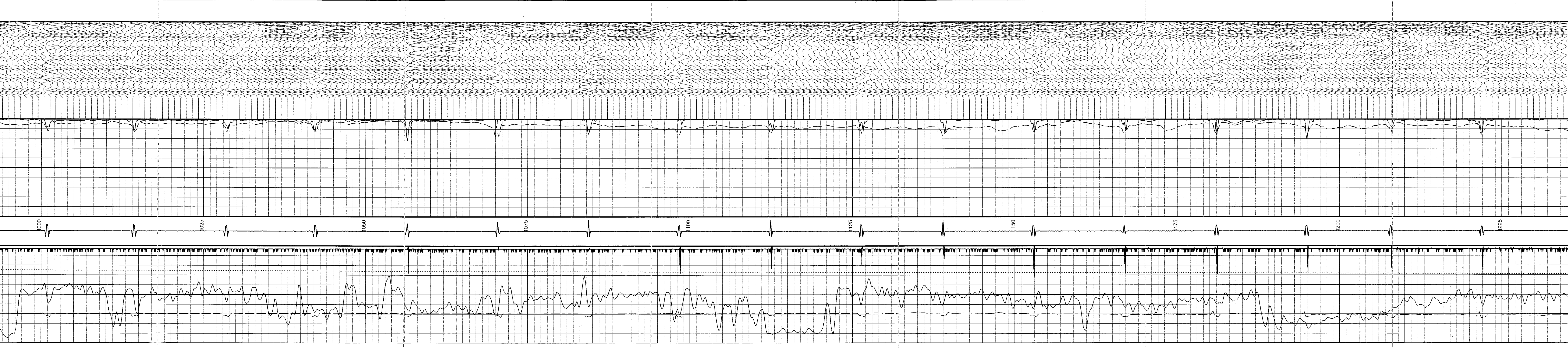


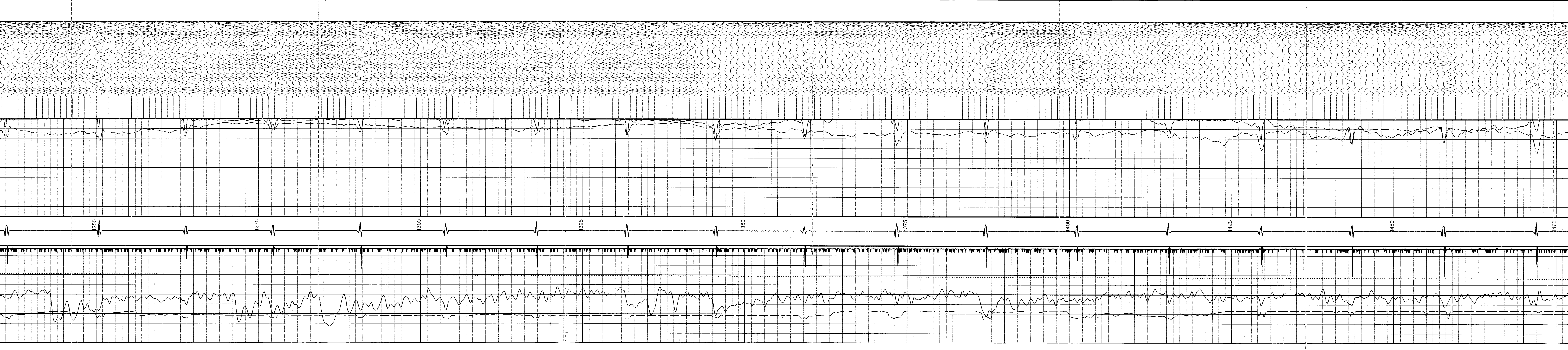


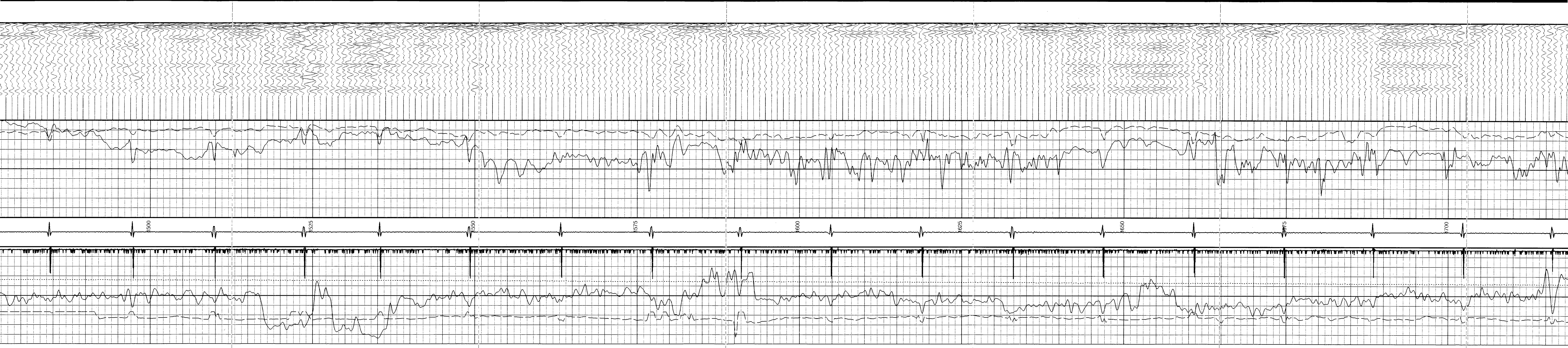


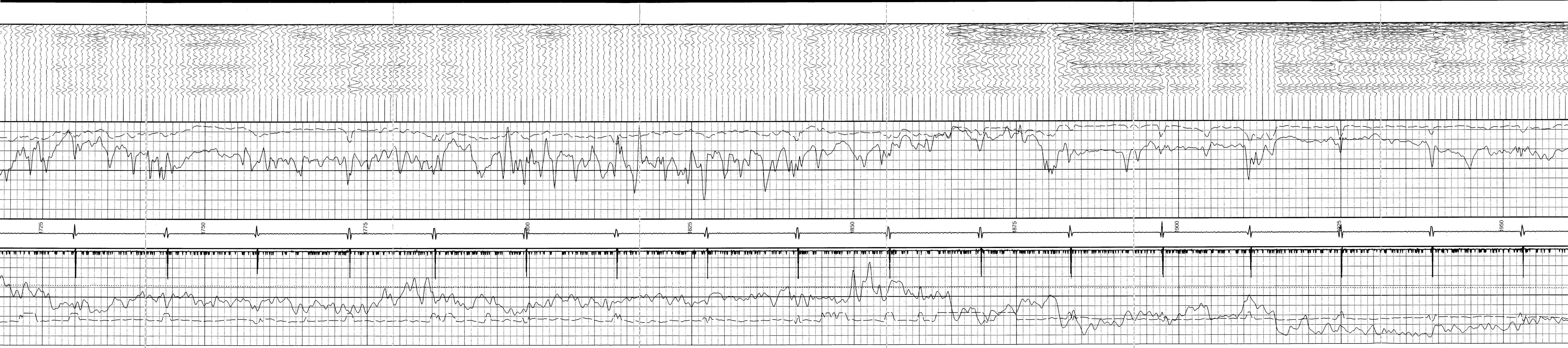


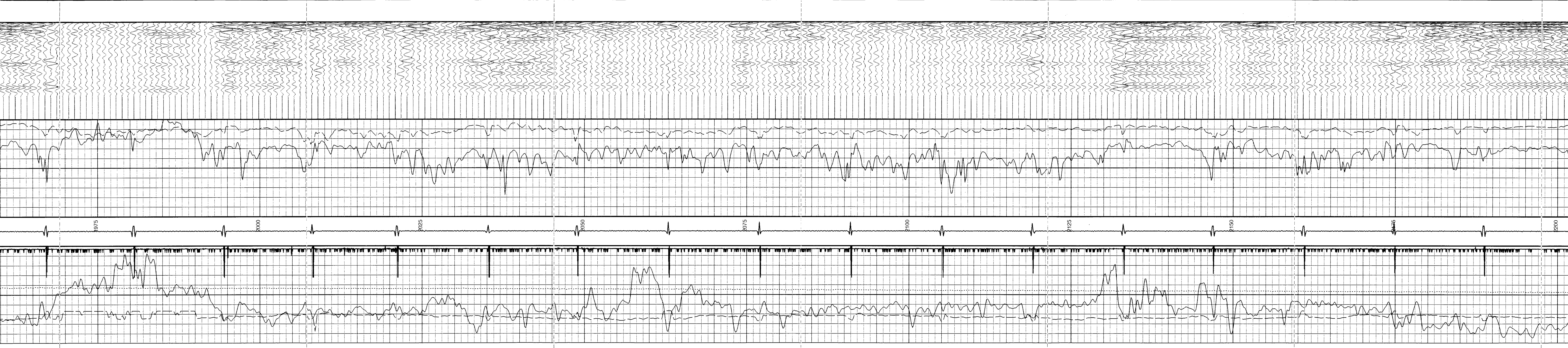






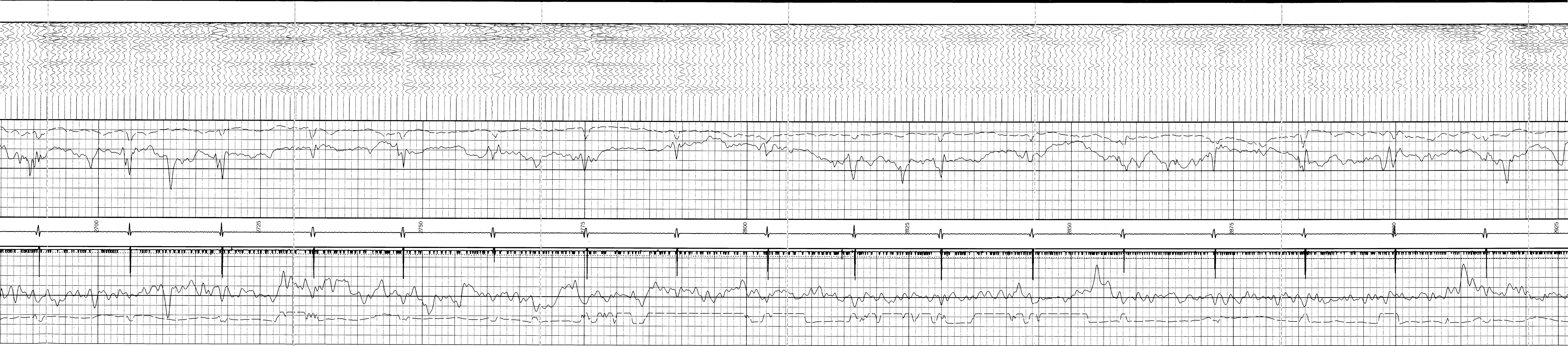


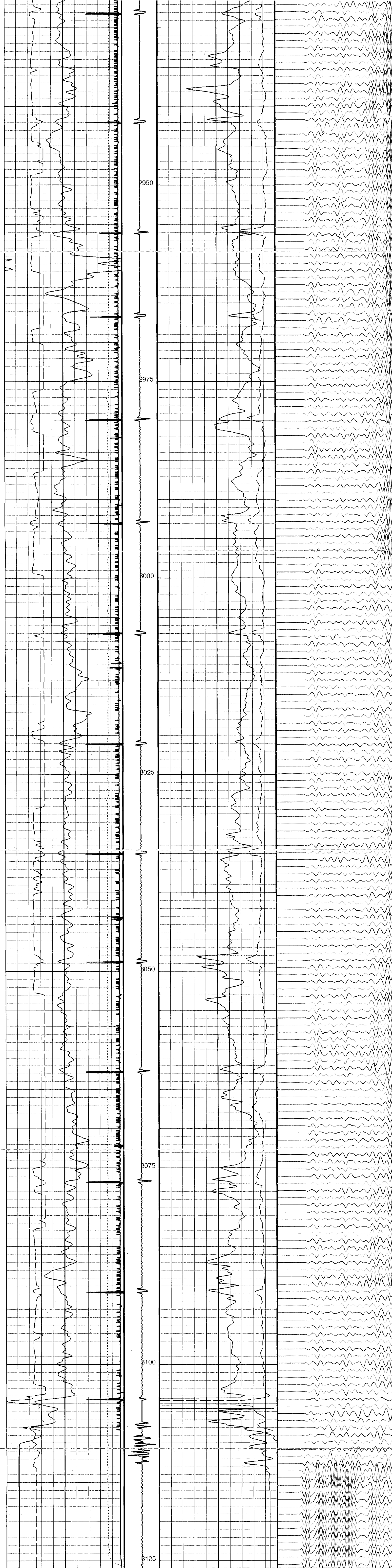












Transit Time 1 (TT1C) (US)	400	200	CCL (CCLU) (---)	-20	20	Borehole Compensated Attenuation (BATT) (DB/M)	100	0	VDL Waveforms (VDL) (US)	200	1200
Gamma Ray (GR) (GAPI)	0	100				Near Attenuation (NATN) (DB/M)	100	0			
Casing Collar Locator (CCL) (---)	-19	1									
Cable Tension (TENS) (LBF)	5000	0									

MAIN PASS - 0 MPA 244.5 MM SECTION

Format: CBT_WAVE Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 13:23

OP System Version: 12C0-301
MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Output DLIS Files

DEFAULT	USI_CBT_028LUP	FN:29	PRODUCER	07-Mar-2005 13:23
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Output DLIS Files

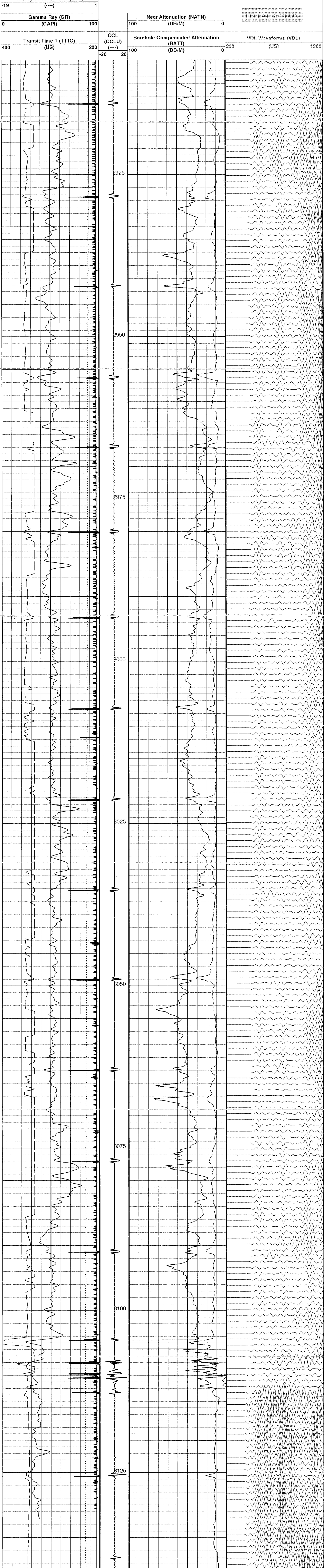
DEFAULT	USI_CBT_027LUP	FN:28	PRODUCER	07-Mar-2005 12:58	3148.0 M	2907.3 M
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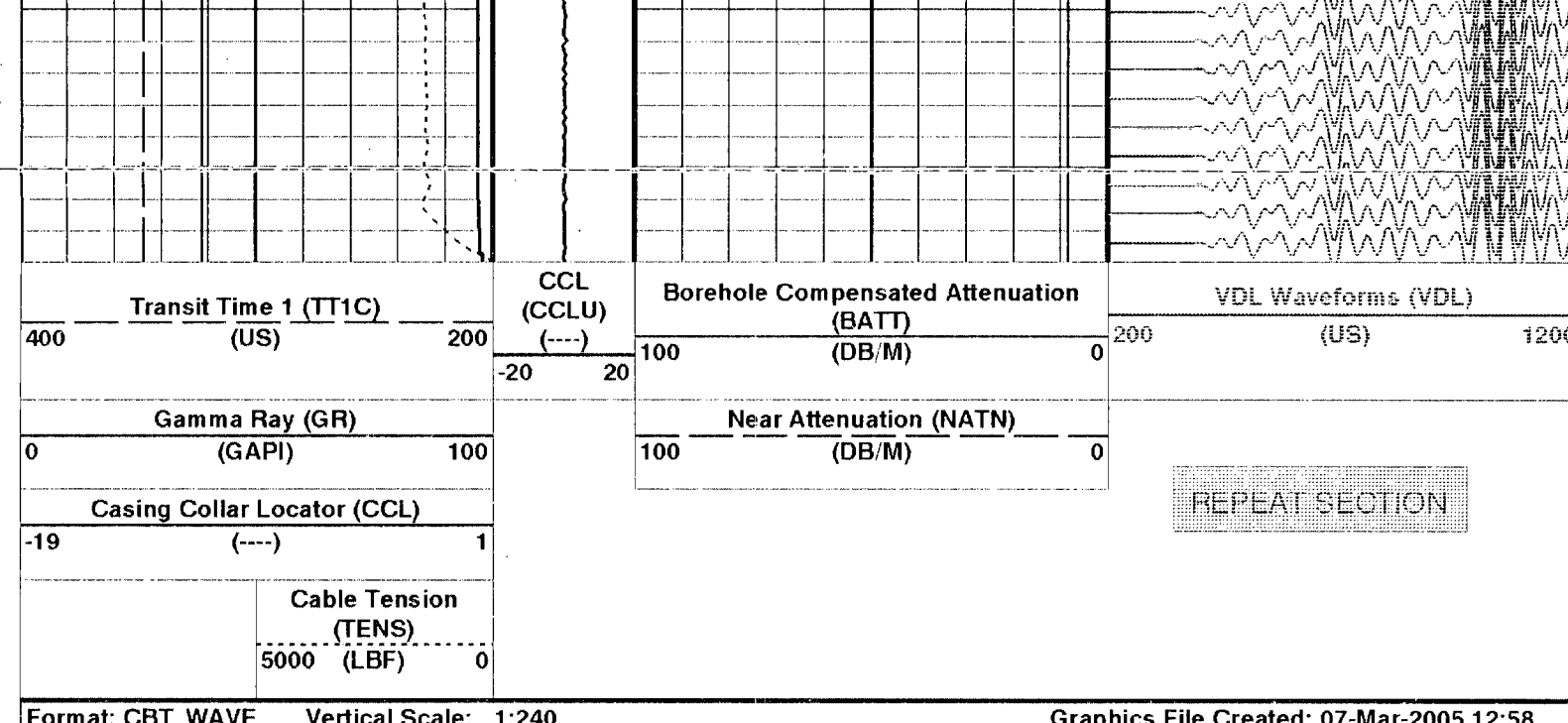
OP System Version: 12C0-301
MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Cable Tension (TENS)
(LBF) 5000 0

Casing Collar Locator (CCL)





Format: CBT_WAVE Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 12:58

OP System Version: 12C0-301
MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Output DLIS Files

DEFAULT	USI_CBT_027LUP	FN:28	PRODUCER	07-Mar-2005 12:58
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Input DLIS Files

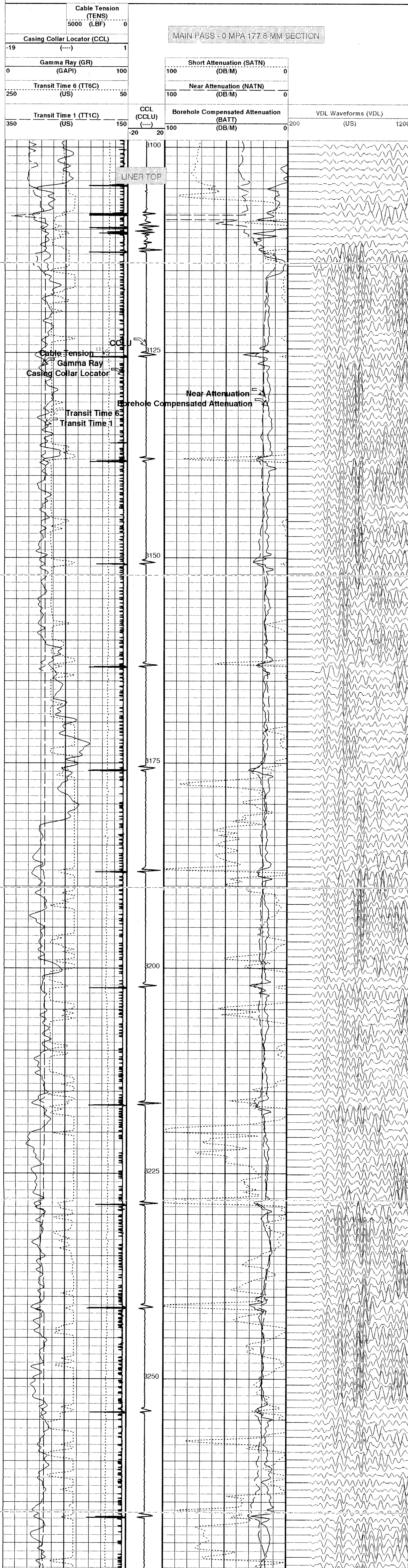
DEFAULT	USI_CBT_021LUP	FN:22	PRODUCER	07-Mar-2005 11:37	3952.2 M	3103.1 M
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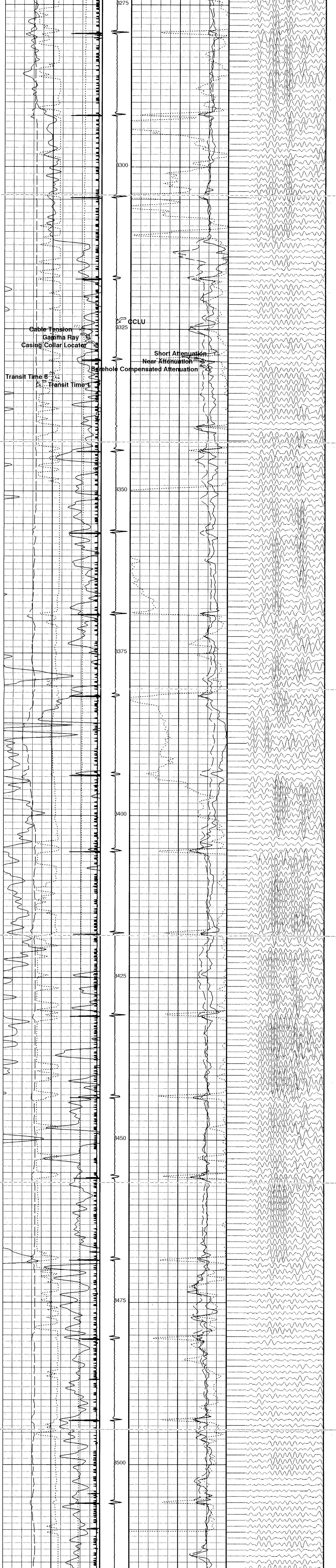
Output DLIS Files

DEFAULT	USI_CBT_023PUP	FN:24	PRODUCER	07-Mar-2005 12:42	3947.6 M	3099.1 M
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OP System Version: 12C0-301
MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		





8275

8300

8325

8350

8375

8400

8425

8450

8475

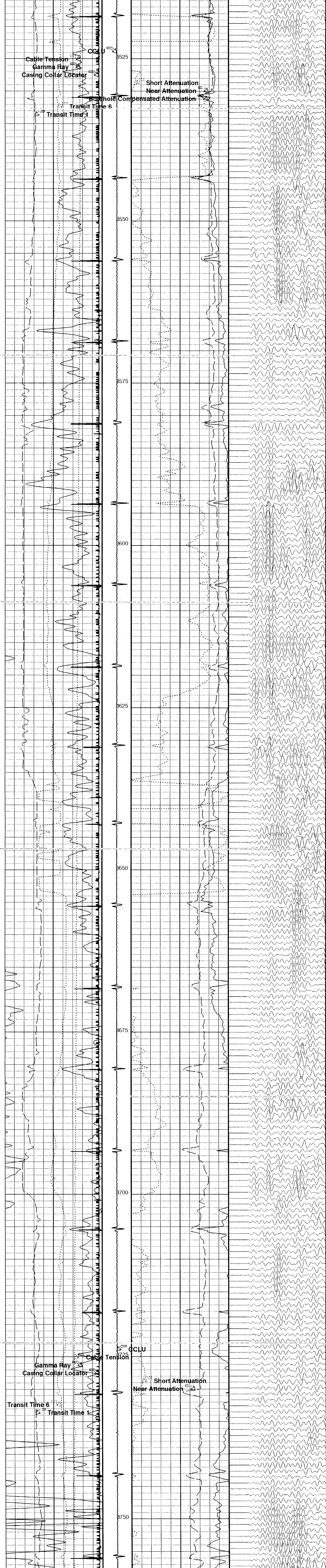
8500

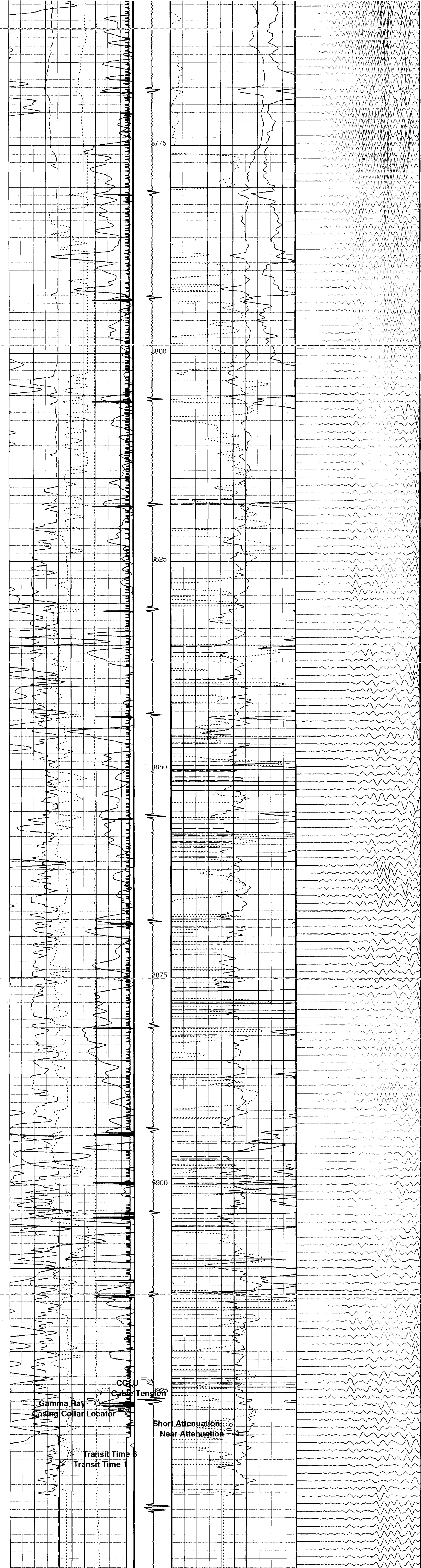
Cable Tension
Gamma Ray
Casing Collar Locator

Transit Time B
Transit Time A

CCLU

Short Attenuation
Near Attenuation
Borehole Compensated Attenuation





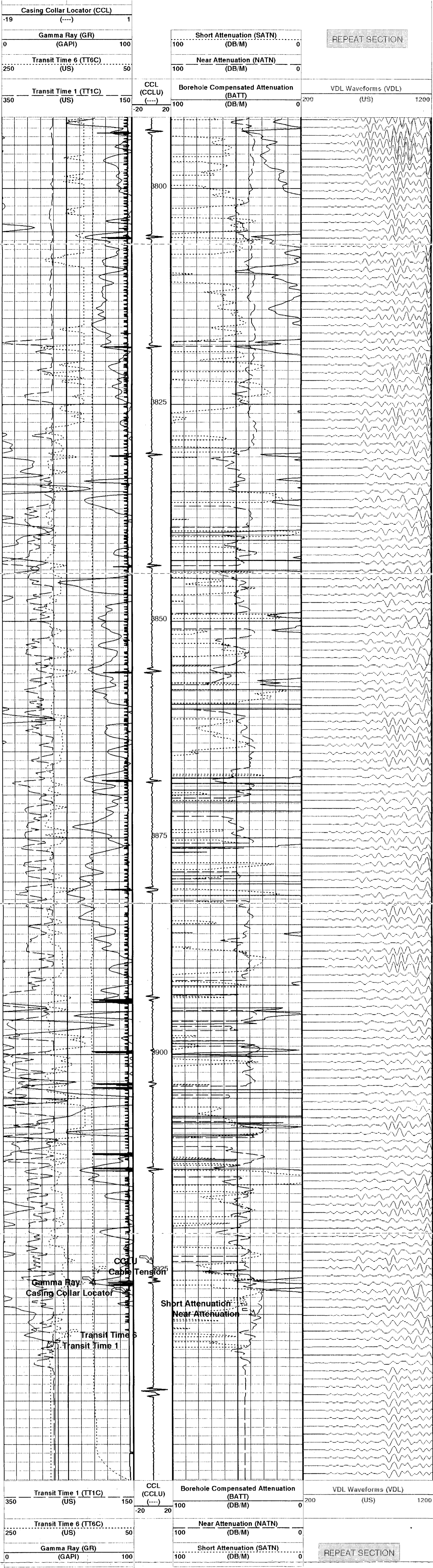
Transit Time 1 (TT1C) (US)	CCL (CCLU) (---)	Borehole Compensated Attenuation (BATT) (DB/M)	VDL Waveforms (VDL) (US)
350	150	100	200
250	50	100	1200
Gamma Ray (GR) (GAPI)		Near Attenuation (NATN) (DB/M)	
0	100	100	0
Casing Collar Locator (CCL) (---)		Short Attenuation (SATN) (DB/M)	
-19	1	100	0
Cable Tension (TENS) (LBF)		MAIN PASS - 0 MPA 177.8 MM SECTION	
5000	0		

Format: CBT_WAVE Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 12:42

OP System Version: 12C0-301					
MCM					
USIT-A	12C0-301	CBT-EB	12C0-301		
SGT-L	12C0-301	CAL-Y	12C0-301		
TCC-BF	12C0-301				
Input DLIS Files					
DEFAULT	USI_CBT_021LUP	FN:22	PRODUCER	07-Mar-2005 11:37	3952.2 M 3103.1 M
Output DLIS Files					
DEFAULT	USI_CBT_023PUP	FN:24	PRODUCER	07-Mar-2005 12:42	

OP System Version: 12C0-301					
MCM					
USIT-A	12C0-301	CBT-EB	12C0-301		
SGT-L	12C0-301	CAL-Y	12C0-301		
TCC-BF	12C0-301				
Input DLIS Files					
DEFAULT	USI_CBT_019LUP	FN:20	PRODUCER	07-Mar-2005 11:16	3949.9 M 3791.9 M
Output DLIS Files					
DEFAULT	USI_CBT_030PUP	FN:31	PRODUCER	07-Mar-2005 18:17	3949.1 M 3791.7 M

Cable Tension (TENS) (LBF)	
5000	0



Format: CBT_WAVE Vertical Scale: 1:240 Graphics File Created: 07-Mar-2005 18:17

OP System Version: 12C0-301

MCM

USIT-A	12C0-301	CBT-EB	12C0-301
SGT-L	12C0-301	CAL-Y	12C0-301
TCC-BF	12C0-301		

Input DLIS Files

DEFAULT	USI_CBT_019LUP	FN:20	PRODUCER	07-Mar-2005 11:16	3949.9 M	3791.9 M
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Output DLIS Files

DEFAULT	USI_CBT_030PUP	FN:31	PRODUCER	07-Mar-2005 18:17
---------	----------------	-------	----------	-------------------

Company: **DEVON CANADA CORPORATION**
Schlumberger

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**

VARIABLE DENSITY
 COMPENSATED CEMENT
 BOND LOG

Schlumberger

Company: **DEVON CANADA CORPORATION**

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**

Field: **KOTANEELEE**

Territory: **YUKON** ****MD****

Logging Date: 6-Mar-2005
Run Number: THREE
Depth Driller: 4065 m
Schlumberger Depth: 4054.5 m
Bottom Log Interval: 4051.2 m
Top Log Interval: 3951.5 m
Casing Driller Size @ Depth: 177.800 mm @ 3953 m @
Casing Schlumberger: 3951.5 m
Bit Size: 156.000 mm
Type Fluid In Hole: VERSACLEAN 1400 (INVERT) / FRESH WATER
Density: 850 kg/m3
Viscosity: 37 s
Fluid Loss: PH
Source Of Sample: N/A
RM @ Measured Temperature: 1.000 ohm.m @ 16 degC @
RMF @ Measured Temperature: @ @
RMC @ Measured Temperature: @ @
Source RMF: N/A
RM @ MRT: 0.227 @ 144 @ 144 @
RMF @ MRT: @ @
Maximum Recorded Temperatures: 144 degC
Circulation Stopped: 5-Mar-2005 14:15
Logger On Bottom: 9-Mar-2005 22:05
Unit Number: 2016 GRANDE PRAIRIE
Recorded By: I. PIRIE, J. EASTON
Witnessed By: PETER WASYLYK

Logging Date: 6-Mar-2005
Run Number: THREE
Depth Driller: 4065 m
Schlumberger Depth: 4054.5 m
Bottom Log Interval: 4051.2 m
Top Log Interval: 3951.5 m
Casing Driller Size @ Depth: 177.800 mm @ 3953 m @
Casing Schlumberger: 3951.5 m
Bit Size: 156.000 mm
Type Fluid In Hole: VERSACLEAN 1400 (INVERT) / FRESH WATER
Density: 850 kg/m3
Viscosity: 37 s
Fluid Loss: PH
Source Of Sample: N/A
RM @ Measured Temperature: 1.000 ohm.m @ 16 degC @
RMF @ Measured Temperature: @ @
RMC @ Measured Temperature: @ @
Source RMF: N/A
RM @ MRT: 0.227 @ 144 @ 144 @
RMF @ MRT: @ @
Maximum Recorded Temperatures: 144 degC
Circulation Stopped: 5-Mar-2005 14:15
Logger On Bottom: 9-Mar-2005 22:05
Unit Number: 2016 GRANDE PRAIRIE
Recorded By: I. PIRIE, J. EASTON
Witnessed By: PETER WASYLYK

	Run 1	Run 2	Run 3	Run 4
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth				
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density				
Viscosity				
Fluid Loss				
Source Of Sample				
RM @ Measured Temperature				
RMF @ Measured Temperature				
RMC @ Measured Temperature				
Source RMF				
RM @ MRT				
RMF @ MRT				
Maximum Recorded Temperatures				
Circulation Stopped				
Logger On Bottom				
Unit Number				
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Trip To the Well
Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
Reference Log Run Number: TWO
Reference Log Date: 21-DEC-2004
Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks

1. PRIMARY DEPTH DEVICE: IDW.
2.
3.
4.
5.
6.

DISCLAIMER
THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON COMPANIES FROM REPRODUCING, DISTRIBUTING, OR OTHERWISE USING THIS RECORDED DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING THE ACCURACY, COMPLETENESS, OR RELIABILITY OF THE RECORDED DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED DATA.

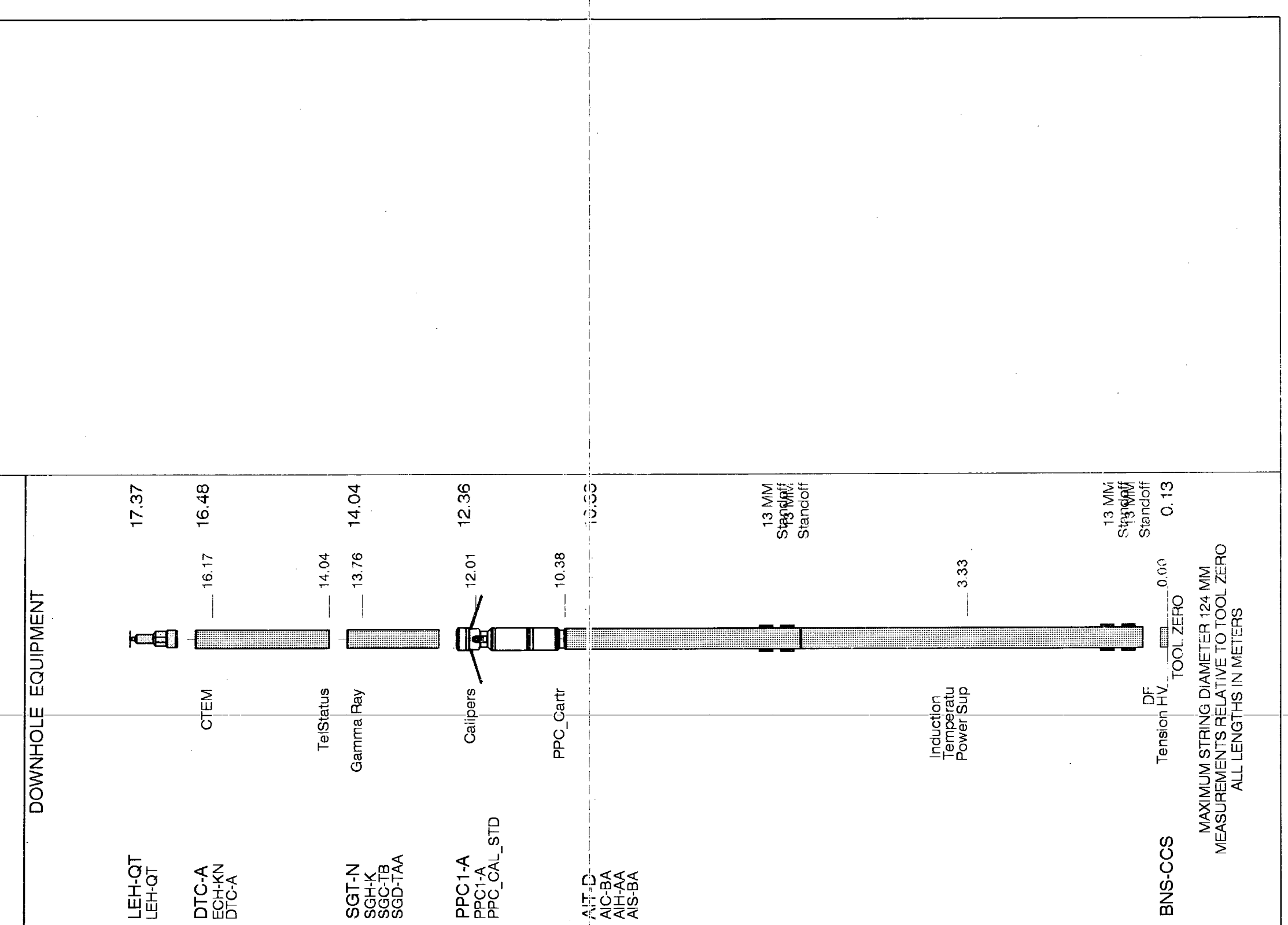
OTHER SERVICES:
OS1: AIT
OS2: HLDS/APS
OS3: DSI
OS4: UBI
OS5: PPC
REMARKS: RUN NUMBER 1
THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.

FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS.
FLUID LEVEL THIS RUN: 1845 M.
AIT RUN IN COMPUTE MUD RESISTIVITY MODE.
PPC RUN AS CALIPEE INPUT FOR RESISTIVITY COMPUTATION.
(NOT POWERED).
SIDE TRACKED WELL BETWEEN 3985 M AND 3970 M.

THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.
GRANDE PRAIRIE, AB 780-538-5060
YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
RUN 1	1829814	1200-301	RUN 2		
SERVICE ORDER #:	10829814		SERVICE ORDER #:		
PROGRAM VERSION:	1200-301		PROGRAM VERSION:		
FLUID LEVEL:	1845 m		FLUID LEVEL:		

EQUIPMENT DESCRIPTION



Output DLIS Files					
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M 3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M 3913.9 M

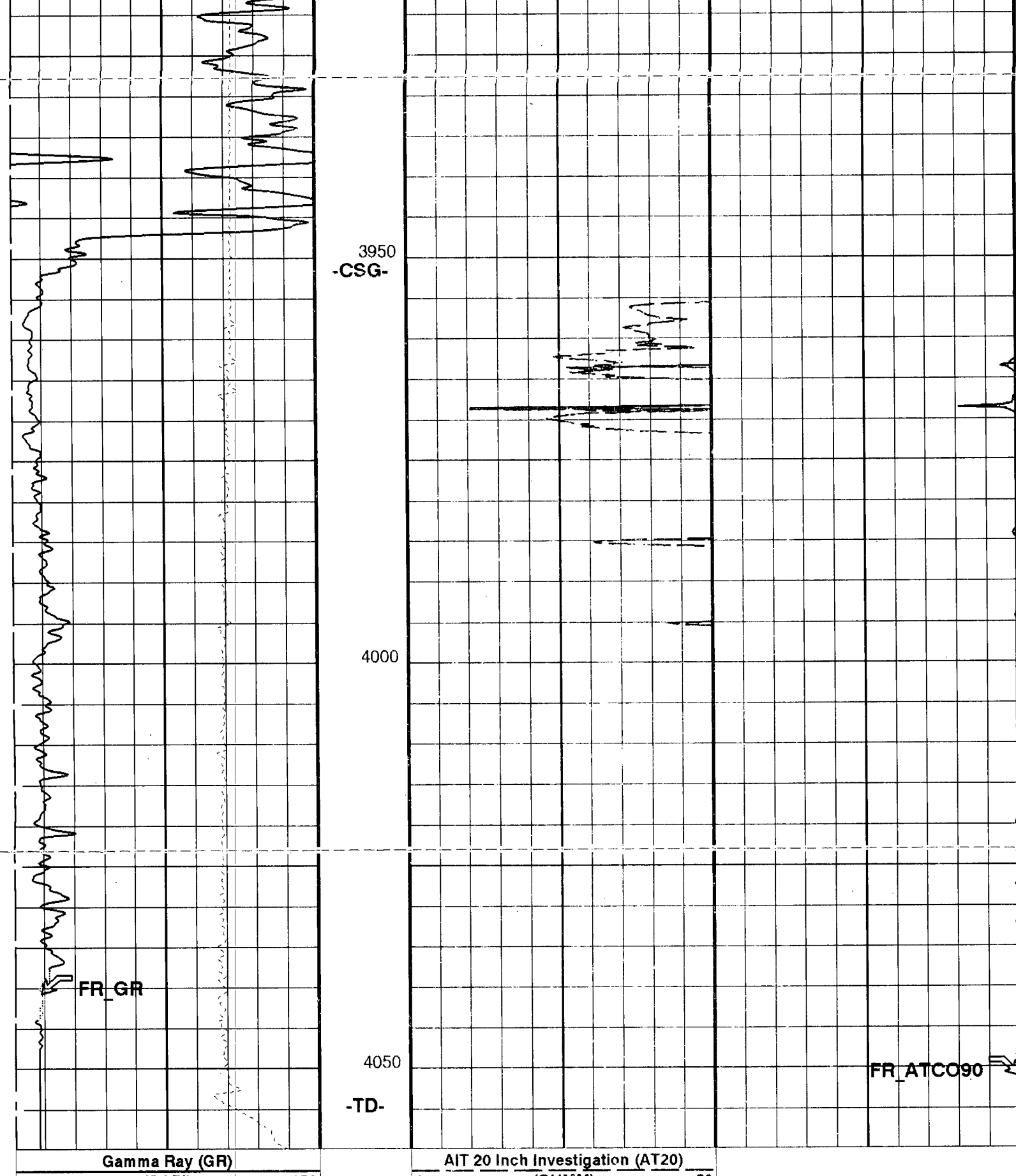
OP System Version: 12C0-301
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS) 25000 (N) 0		AIT 90 Inch Investigation Conductivity (ATCO90) (MM/M) 0	
Gamma Ray (GR) (GAPI) 150		AIT 90 Inch Investigation (AT90) (OHMM) 50	
		AIT 20 Inch Investigation (AT20) (OHMM) 50	



Tension (TENS) 25000 (N) 0		AIT 20 Inch Investigation (AT20) (OHMM) 50	
Gamma Ray (GR) (GAPI) 150		AIT 90 Inch Investigation (AT90) (OHMM) 50	
		AIT 90 Inch Investigation Conductivity (ATCO90) (MM/M) 0	

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity	
ABHV	Array Induction Borehole Correction Code Version Number	880	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered	
AFFSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARPV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4054.50	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
BS	Bit Size	156.000	MM
DFD	Drilling Fluid Density	850.000	K/M3
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	16.000	DEGC
TD	Total Depth	4054.5	M

Format: COND-AITH-2FT-CAN Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M 3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M 3913.9 M

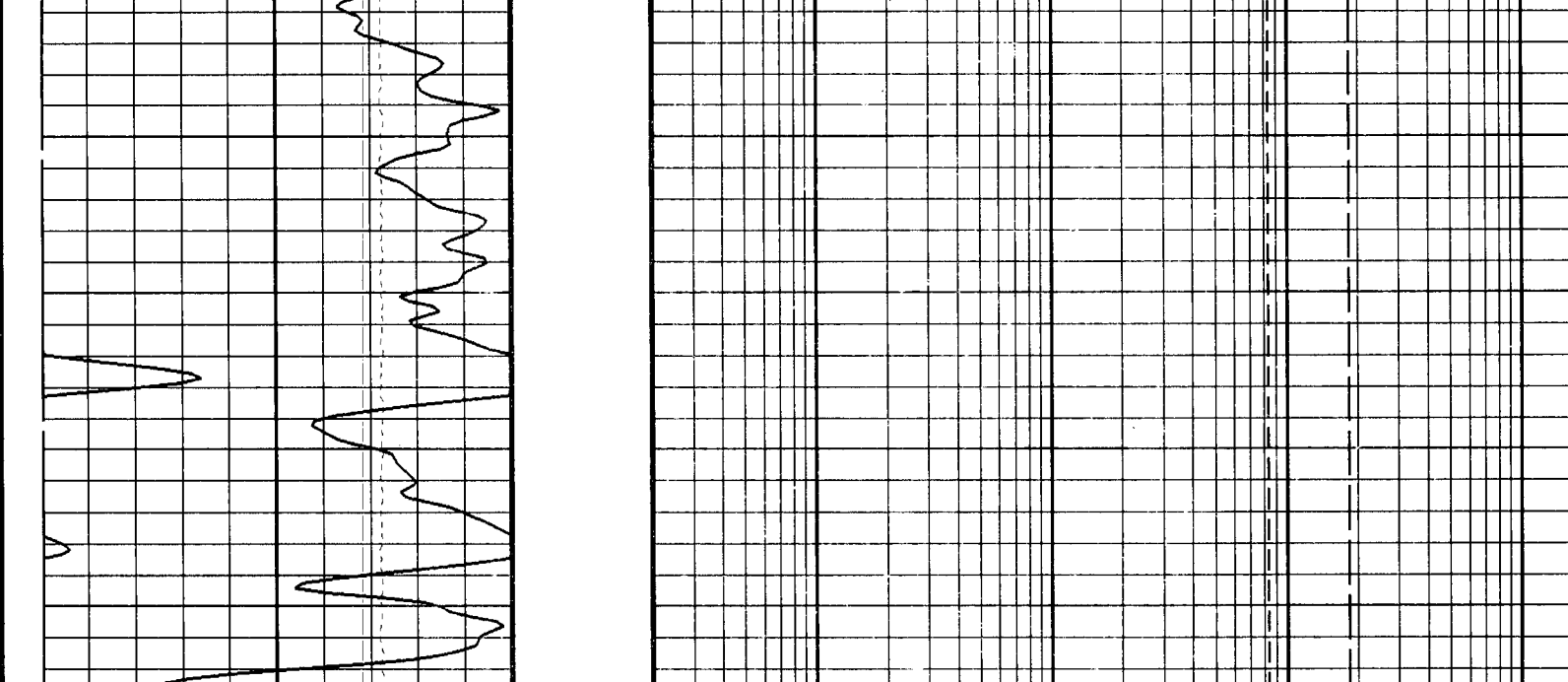
OP System Version: 12C0-301
MCM

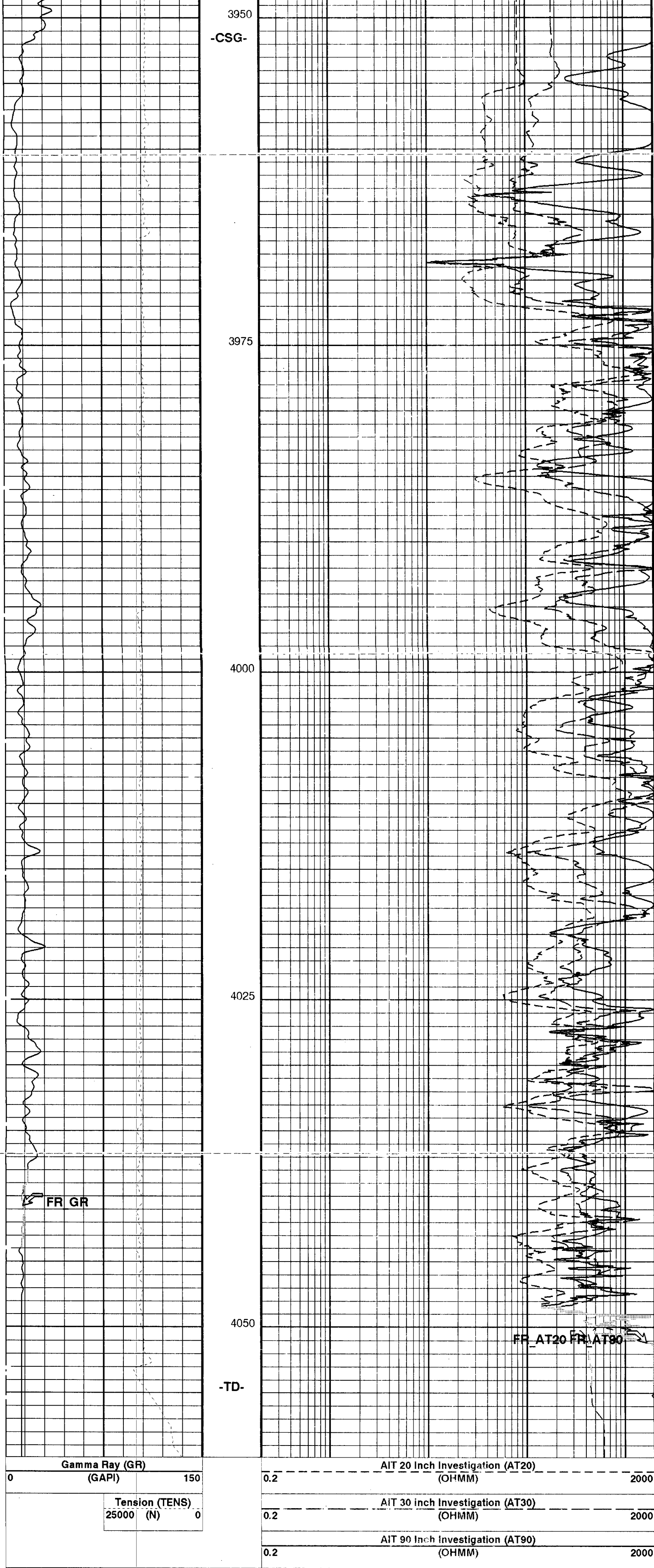
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS) 25000 (N) 0		AIT 90 Inch Investigation (AT90) (OHMM) 2000	
Gamma Ray (GR) (GAPI) 150		AIT 30 Inch Investigation (AT30) (OHMM) 2000	
		AIT 20 Inch Investigation (AT20) (OHMM) 2000	





PIP SUMMARY
Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0	Compute Mud Resistivity
ABHV	Array Induction Borehole Correction Code Version Number	880	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered	
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARFV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
BS	Bit Size	156.000	MM
DFD	Drilling Fluid Density	850.00	K/M3
DCRL	Depth Offset for Repeat Analysis	0.00	M
MST	Mud Sample Temperature	18.00	DEGC
TD	Total Depth	4054.5	M

Format: AITH-2FT-CAN Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

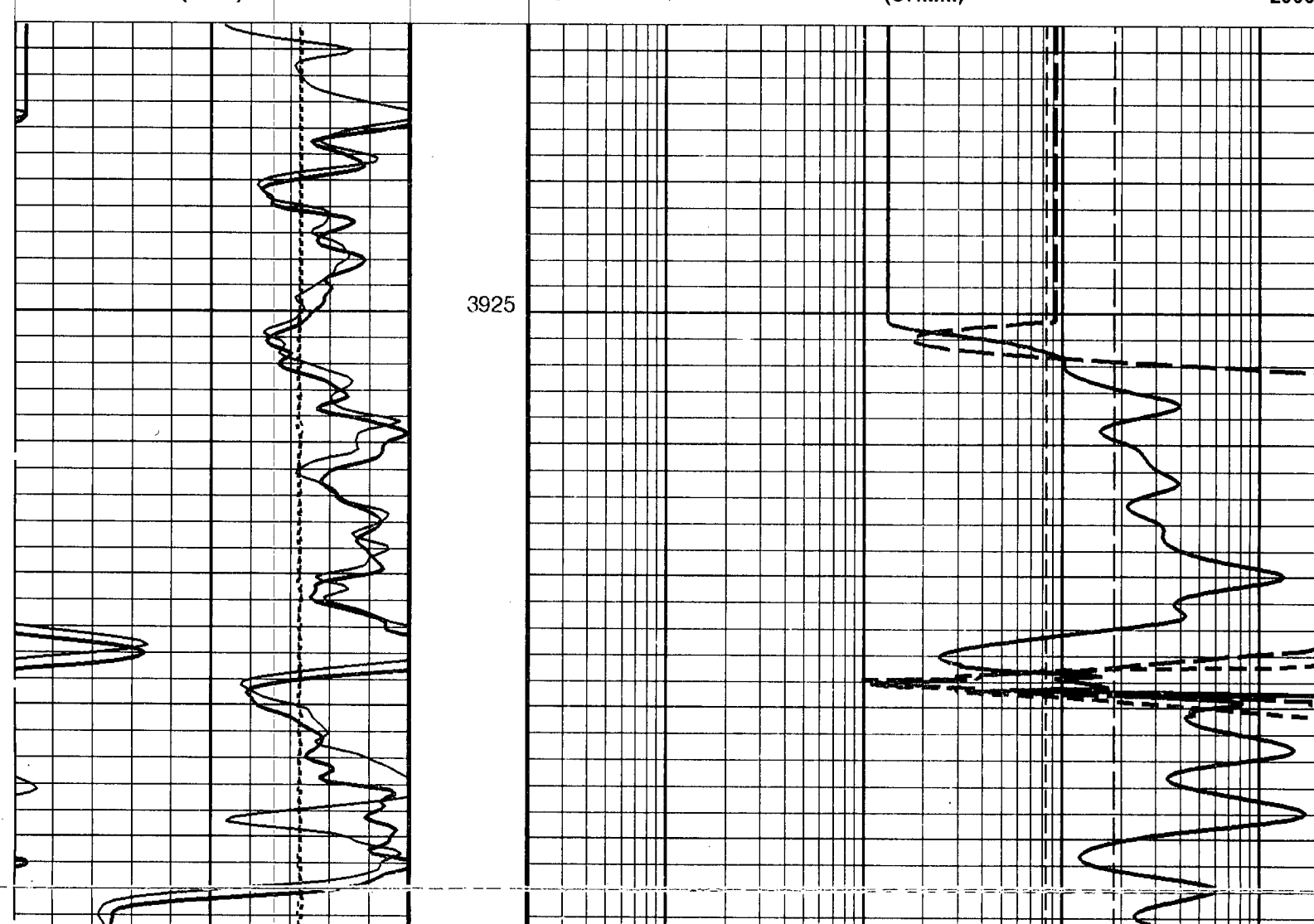
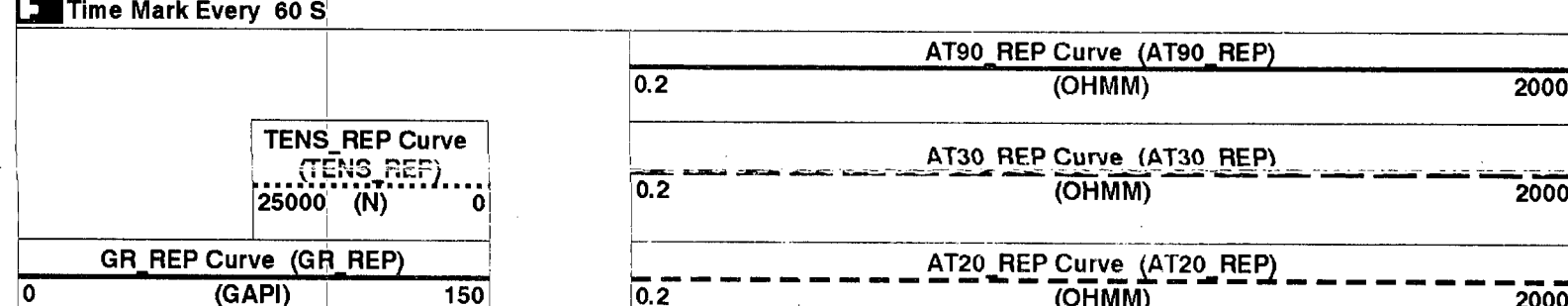
Output DLIS Files					
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	

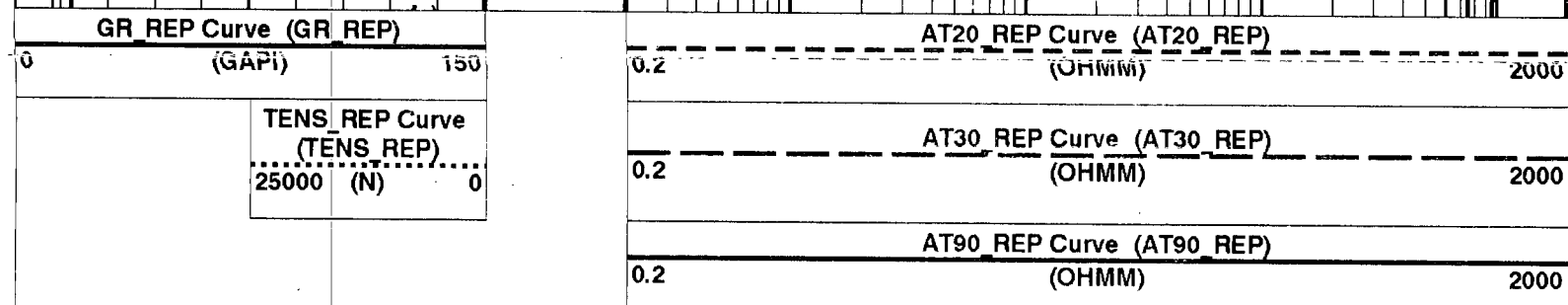
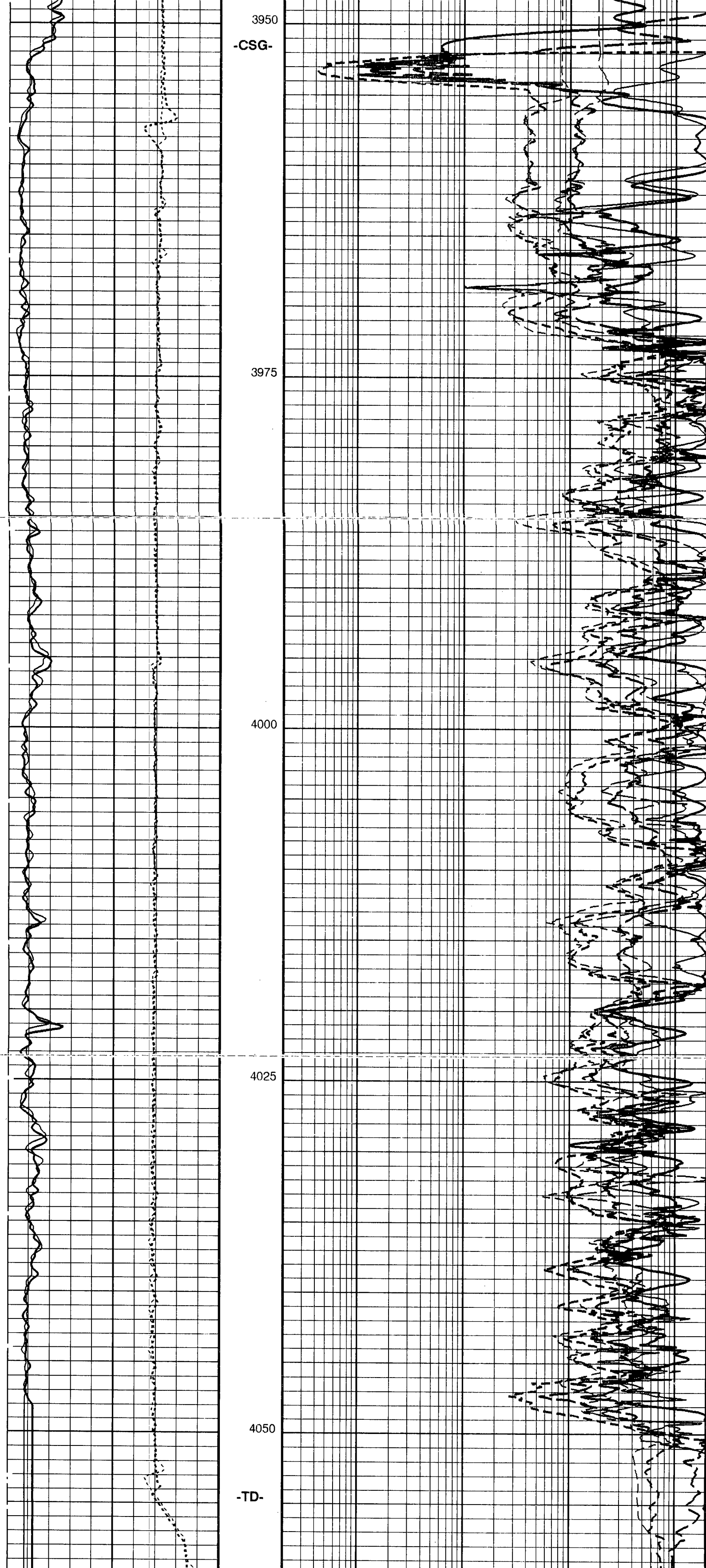
Input DLIS Files					
DEFAULT	AIT_CAL_081PUP	FN:109	PRODUCER	09-Mar-2005 22:23	3903.1 M

Output DLIS Files					
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY
Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
ACRSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
System and Miscellaneous		
BS	Bit Size	156.000
DFD	Drilling Fluid Density	850.00
DORL	Depth Offset for Repeat Analysis	0.0
MST	Mud Sample Temperature	16.00
TD	Total Depth	4054.5

Format: AITH-2FT-CAN_REP Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301
MCM

AIT-D skk-2570-ppc_b PPC1-A skk-2570-ppc_b
SGT-N 12C0-301 DTC-A 12C0-301

Input DLIS Files

DEFAULT AIT_CAL_081PUP FN:109 PRODUCER 09-Mar-2005 22:23 4061.3 M 3903.1 M

Output DLIS Files

DEFAULT AIT_CAL_082LUP FN:111 PRODUCER 09-Mar-2005 22:25 4059.9 M 3913.9 M
OPTICAL AIT_CAL_082LUP FN:112 PRODUCER 09-Mar-2005 22:25 4059.9 M 3913.9 M

Output DLIS Files

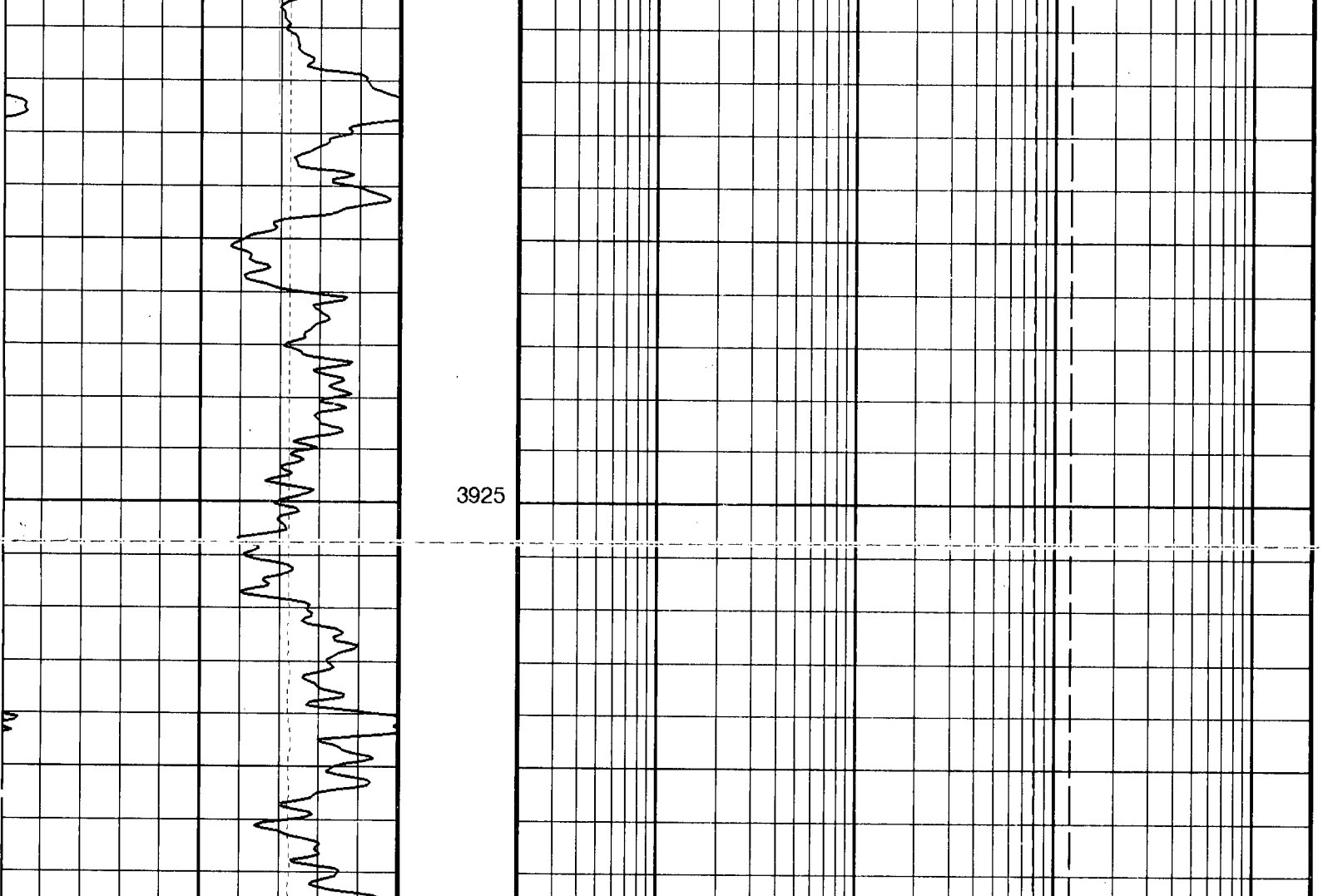
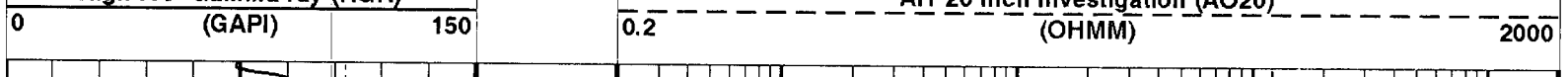
DEFAULT AIT_CAL_082LUP FN:111 PRODUCER 09-Mar-2005 22:25 4059.9 M 3913.9 M
OPTICAL AIT_CAL_082LUP FN:112 PRODUCER 09-Mar-2005 22:25 4059.9 M 3913.9 M

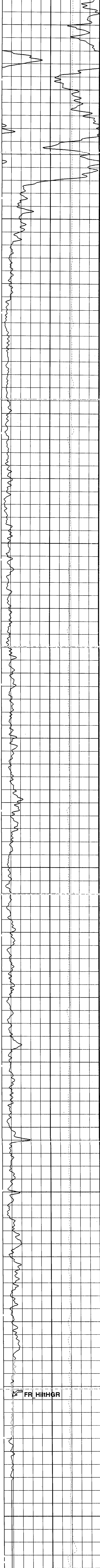
OP System Version: 12C0-301
MCM

AIT-D skk-2570-ppc_b PPC1-A skk-2570-ppc_b
SGT-N 12C0-301 DTC-A 12C0-301

PIP SUMMARY

Time Mark Every 60 S





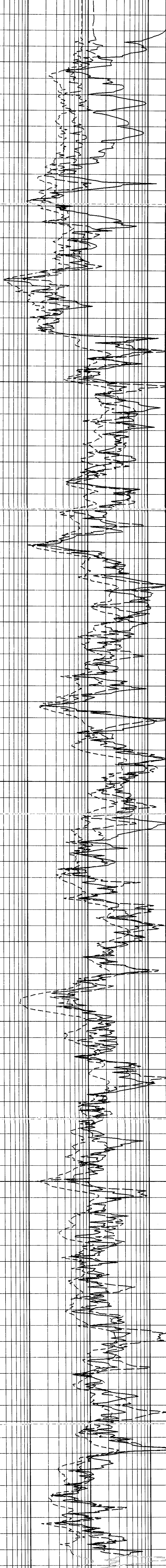
3950
-CSG-

3975

4000

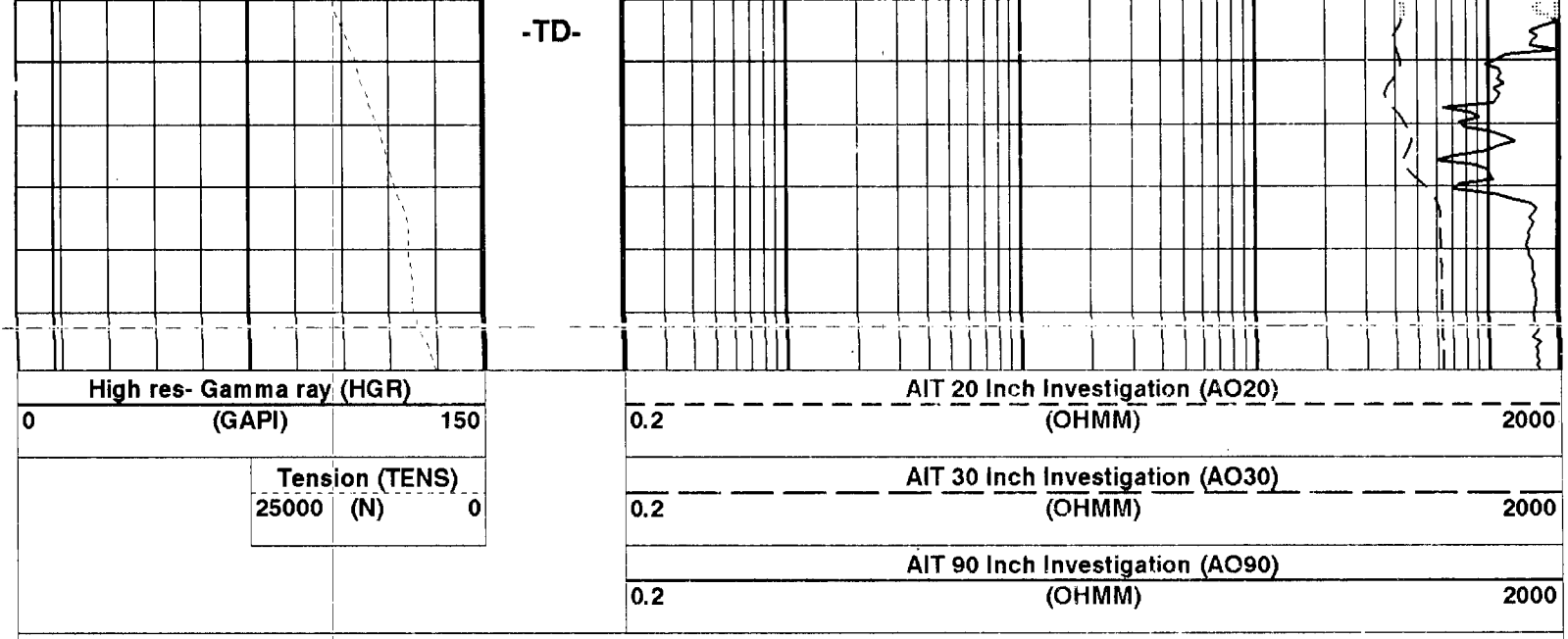
4025

4050



FR_HIHGR

FR_A020FR_A020000



PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
TD	Total Depth	4054.5 M

Format: HIRS-AITH-1FT-CAN Vertical Scale: 1:120 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Output DLIS Files			
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER 09-Mar-2005 22:25
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER 09-Mar-2005 22:25

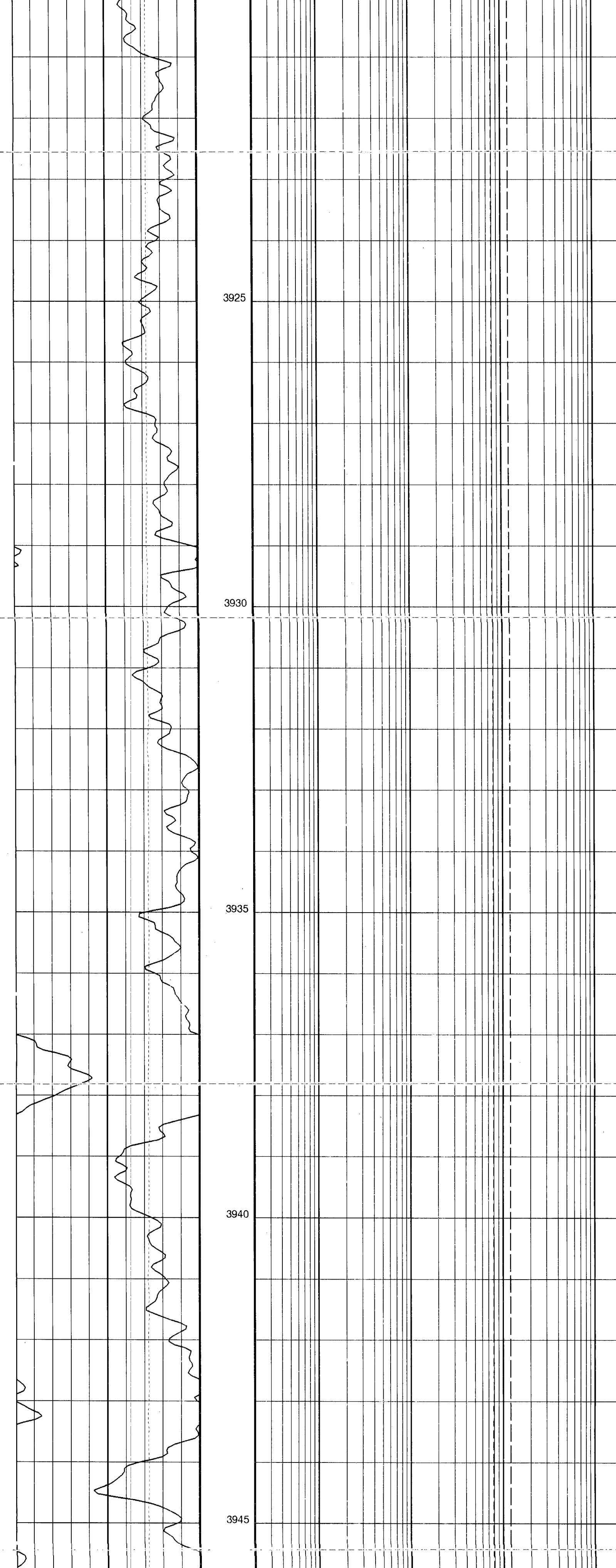
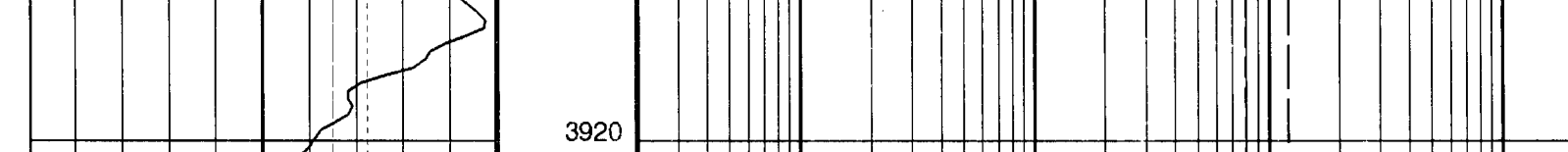
Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

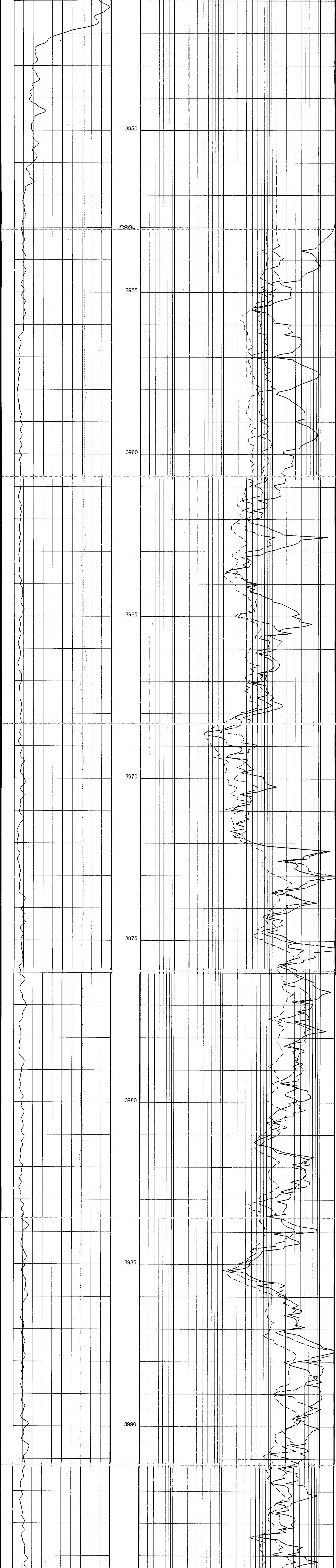
OP System Version: 12C0-301
MCM

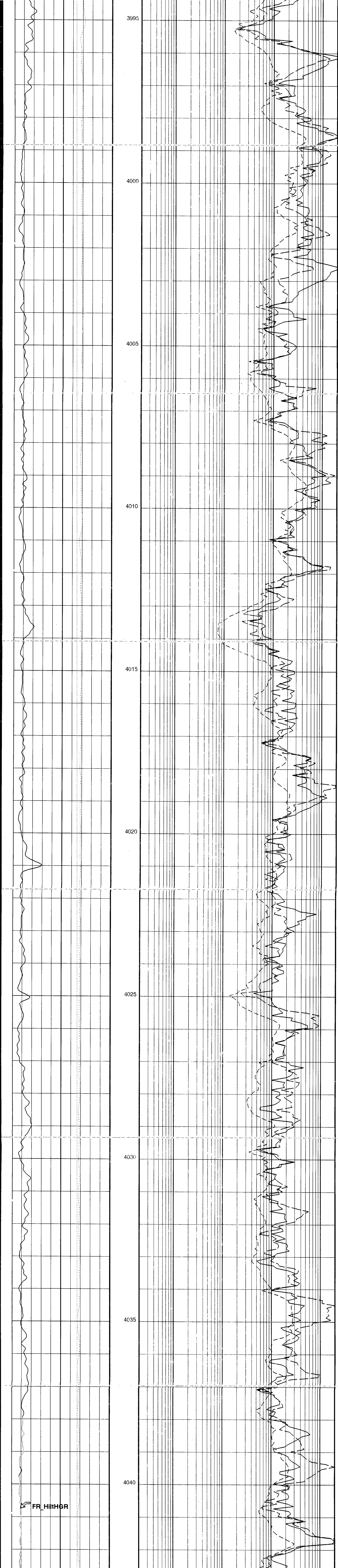
AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S







3995

4000

4005

4010

4015

4020

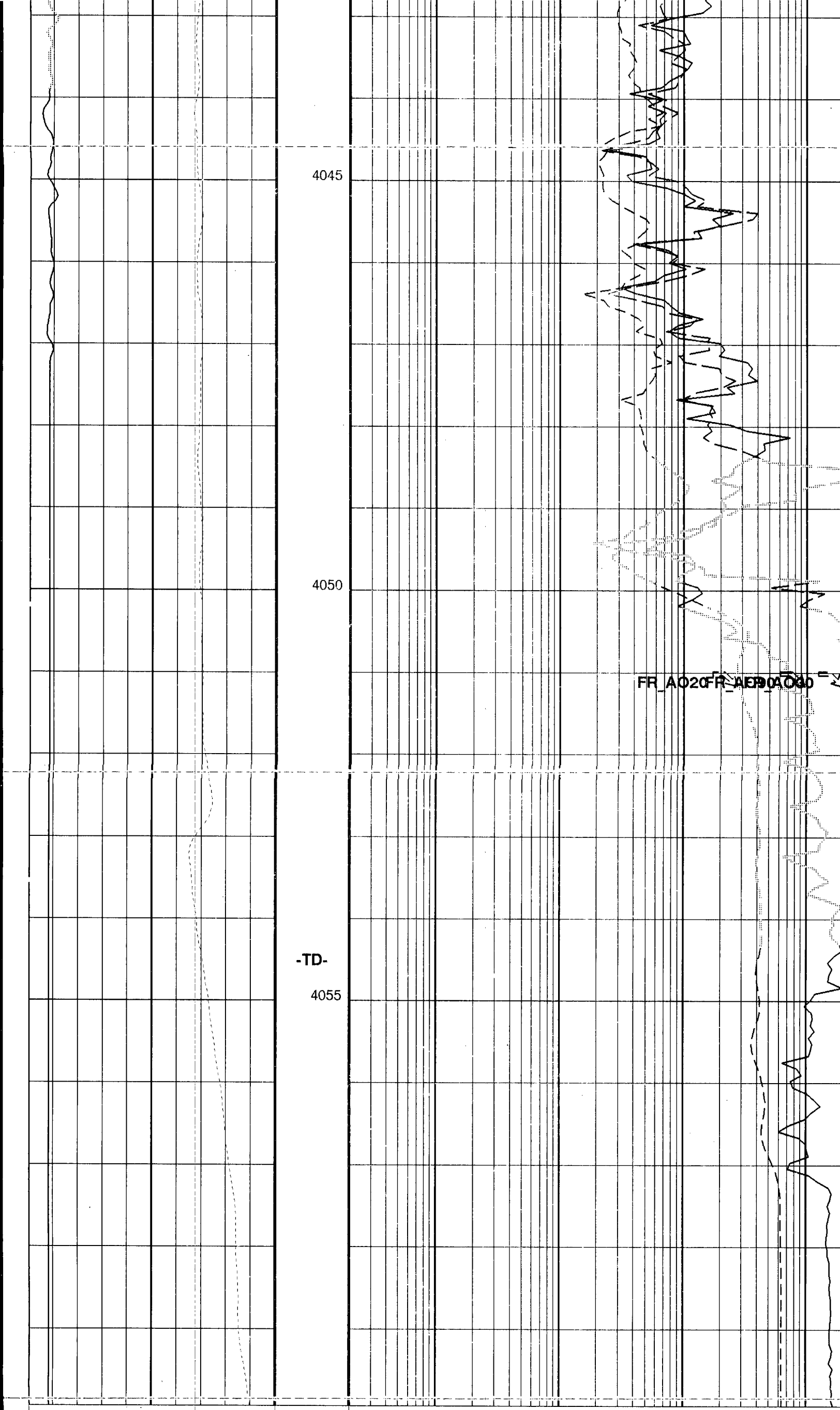
4025

4030

4035

4040

FR_H1HGR



High res- Gamma ray (HGR)	AIT 20 Inch Investigation (AO20)
0 (GAPI) 150	0.2 (OHMM) 2000
Tension (TENS)	AIT 30 Inch Investigation (AO30)
25000 (N) 0	0.2 (OHMM) 2000
	AIT 90 Inch Investigation (AO90)
	0.2 (OHMM) 2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	4065.00
TDL	Total Depth - Logger	4054.50
System and Miscellaneous		
BS	Bit Size	156.000
DFD	Drilling Fluid Density	850.000
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PP	Playback Processing	NORMAL
ID	Total Depth	4054.5

Format: HIRS_AITH-1FT-CAN_1 Vertical Scale: 1:48 Graphics File Created: 10-Mar-2005 01:01

OP System Version: 12C0-301

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEELEE L-38A/ST3

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

OP System Version: 12C0-301

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

AIT Boosted Borehole Corrected Average Conductivities
 Average performed from depth 13220.00 ft/ 4029.46 m with 1781 samples
 A1: -954.397 A2: -38.372 A3: 58.725 A4: 18.450
 A5: -18.624 A6: -0.057 A7: 68.455 A8: 30.964
 Casing shoe depth estimated from AIT Induction measurements: 12965.75 +/- .5 ft

PIP SUMMARY

Time Mark Every 60 S

	Tension (TENS)
	30000 (N) 5000
AIT QC Fully Calibrated A8 Signal (AQABN[7])	2 (MM/M) 20000
AIT QC Fully Calibrated A7 Signal (AQABN[6])	2 (MM/M) 20000
AIT QC Fully Calibrated A6 Signal (AQABN[5])	2 (MM/M) 20000
AIT QC Fully Calibrated A5 Signal (AQABN[4])	2 (MM/M) 20000
AIT QC Fully Calibrated A4 Signal (AQABN[3])	2 (MM/M) 20000
AIT QC Fully Calibrated A3 Signal (AQABN[2])	2 (MM/M) 20000
AIT QC Fully Calibrated A2 Signal (AQABN[1])	2 (MM/M) 20000
AIT QC Fully Calibrated A1 Signal (AQABN[0])	2 (MM/M) 20000

AIT Bhole/Form Signal Ratio (ABFR)	0 (----) 25
Caliper (AIBD)	125 (MM) 375

Magnetic Mud Flag (tenth small division): White=No Magnetic Mud, Yellow=Magnetic Mud Detected and Magnetic Mud Processing, Red=Magnetic Mud Detected and Non-Magnetic Processing (U-AIT_AEMF) (----)

AIT ECLP Flags: White=1 FT, Yellow=2 FT, Green=4 FT Black=OR (Chart Flag: eleventh small division; Hole Flag: twelfth small division; Resolution Flag: thirteenth small division) (U-AIT_AEFL) (----)

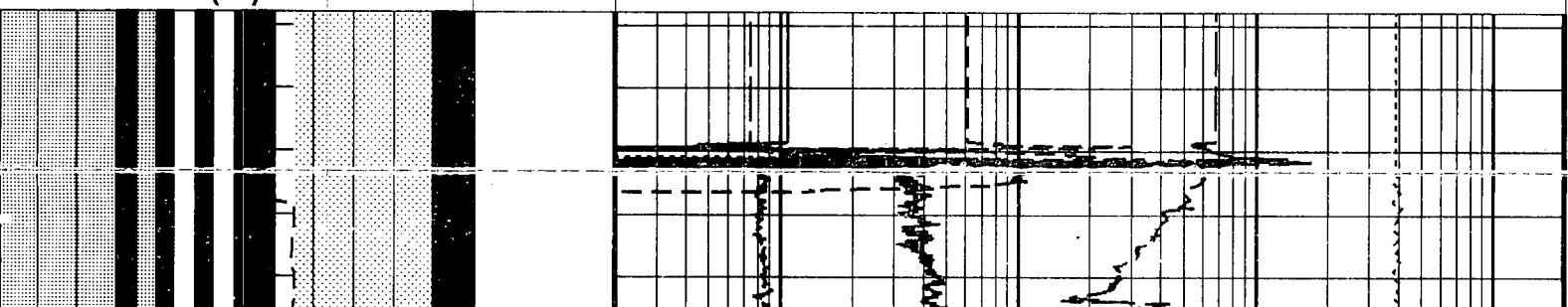
AIT Normal Array Monitor: Green=Normal (Ratio One to Array Eight: first to eighth small divisions) (AQRI) (----)

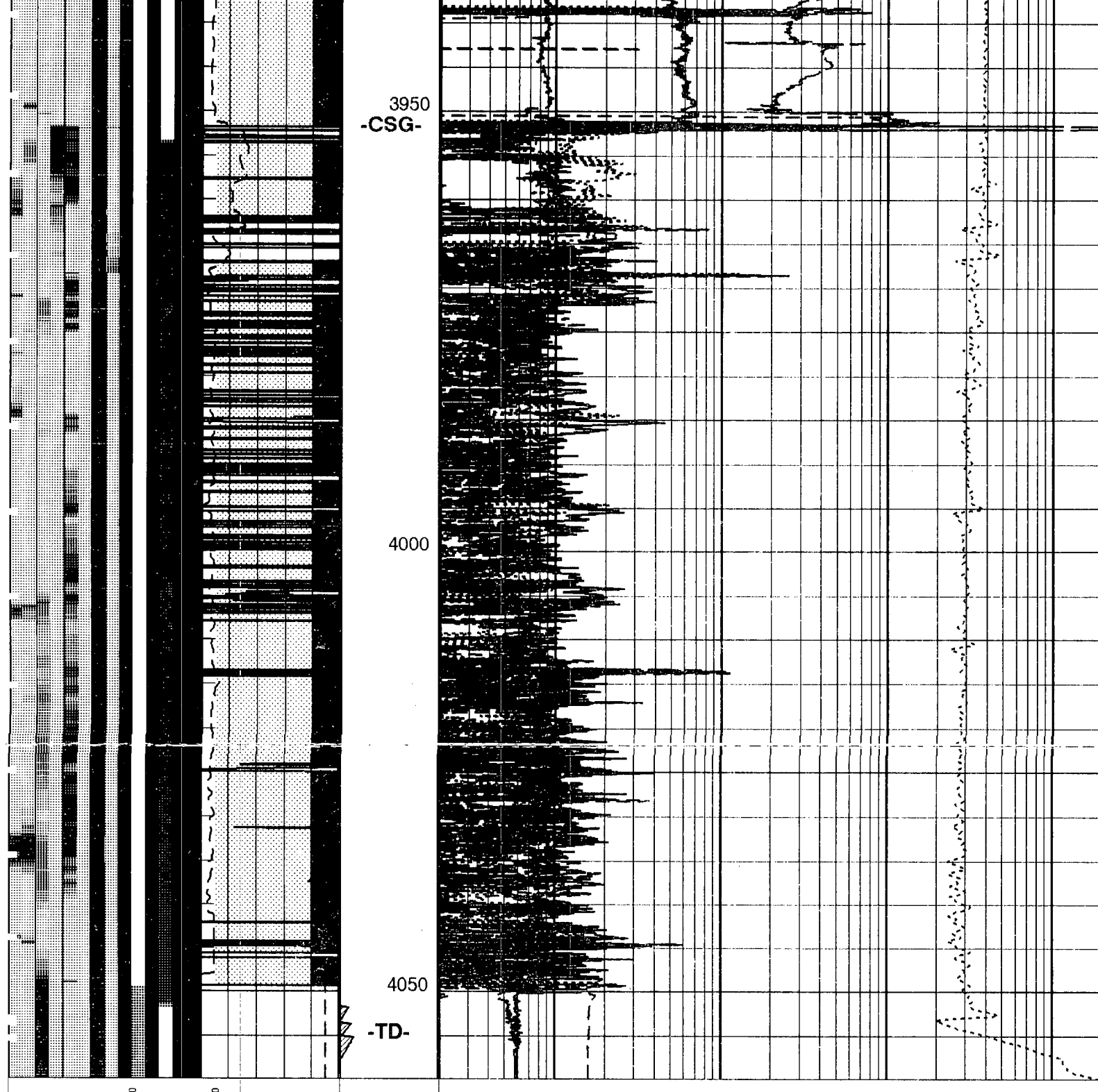
Tool Electronics Monitor (ninth small division, from ADES Channel): White=Normal, Blue=Warning, Red=Failure (AQTI) (----)

Tool/Tot. Drag From D3T to STIA

Cable Drag From STIA to STIT

Stuck Stretch (STIT)





<p>AIT QC Fully Calibrated A1 Signal (AQABN[0])</p> <p>AIT QC Fully Calibrated A2 Signal (AQABN[1])</p> <p>AIT QC Fully Calibrated A3 Signal (AQABN[2])</p> <p>AIT QC Fully Calibrated A4 Signal (AQABN[3])</p> <p>AIT QC Fully Calibrated A5 Signal (AQABN[4])</p> <p>AIT QC Fully Calibrated A6 Signal (AQABN[5])</p> <p>AIT QC Fully Calibrated A7 Signal (AQABN[6])</p> <p>AIT QC Fully Calibrated A8 Signal (AQABN[7])</p> <p>Tension (TENS)</p>	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>30000</p> <p>5000</p>	<p>20000</p> <p>20000</p> <p>20000</p> <p>20000</p> <p>20000</p> <p>20000</p> <p>20000</p> <p>20000</p> <p>(N)</p>
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PIP SUMMARY

Time Mark Every 60 S

AIT Answer Product Processing Summary. Data taken with Sonde # 97 (ASNO)

**** Borehole Correction ****

Effective Mud Resistivity computed. Borehole diameter taken as input (see GCSE parameter)

Tool is run in CENTERED mode. Bit Size is 156.00 MM.

**** Input Selections to AIT Answer Product Processing ****

Caliper (GCSE): HD1_PPC1 Mud Resistivity (GRSE): GEN_9 Temperature (GTSE): LINEAR_ESTIMATE Porosity (FPH): DPHI

**** Other Parameters used by AIT Answer Product Processing ****

Mud Sample Resistivity (RMS) 1.000 OHMM Mud Sample Temperature (MST) 16.000 DEGC

Surface Hole Temperature (SHT) 20.000 DEGC Bottom Temperature (BHT) 144.000 DEGC

Total Depth (TD) 4054.500 M

**** AIT Answer Product Processing Control Parameters ****

(AAPL): 2_BholeCorr_BasicLogs

(ABHM): 0_ComputeMudResistivity (ABLM): 6_One_Two_and_Four

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HOLEV: Integrated Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	16.000 DEGC
TD	Total Depth	4054.5 M

Format: AIT_QualityControlImage Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301

MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool - D Wellsite Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Thru Cal Magnitude - 0	0	0.6297	0.6320	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.256	1.261	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	1.530	1.530	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.3952	0.3962	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	2.247	2.248	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	0.5835	0.5848	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.355	1.353	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	0.4600	0.4602	N/A	N/A	N/A	V
Thru Cal Magnitude - 8	0	2.033	2.029	N/A	N/A	N/A	V
Thru Cal Magnitude - 9	0	0.6729	0.6733	N/A	N/A	N/A	V
Thru Cal Magnitude - 10	0	2.344	2.340	N/A	N/A	N/A	V
Thru Cal Magnitude - 11	0	0.6810	0.6813	N/A	N/A	N/A	V
Thru Cal Magnitude - 12	0	2.056	2.053	N/A	N/A	N/A	V
Thru Cal Magnitude - 13	0	0.6010	0.6011	N/A	N/A	N/A	V
Phase - 0	0	-83.21	-83.59	N/A	N/A	N/A	DEG
Phase - 1	0	-84.39	-84.78	N/A	N/A	N/A	DEG
Phase - 2	0	70.48	70.22	N/A	N/A	N/A	DEG
Phase - 3	0	-130.0	-130.2	N/A	N/A	N/A	DEG
Phase - 4	0	70.18	69.92	N/A	N/A	N/A	DEG
Phase - 5	0	-130.6	-130.8	N/A	N/A	N/A	DEG
Phase - 6	0	-18.88	-18.78	N/A	N/A	N/A	DEG
Phase - 7	0	73.51	73.14	N/A	N/A	N/A	DEG
Phase - 8	0	-19.05	-18.95	N/A	N/A	N/A	DEG
Phase - 9	0	73.22	72.85	N/A	N/A	N/A	DEG
Phase - 10	0	-4.713	-4.547	N/A	N/A	N/A	DEG
Phase - 11	0	77.10	76.83	N/A	N/A	N/A	DEG
Phase - 12	0	-5.367	-5.219	N/A	N/A	N/A	DEG
Phase - 13	0	75.95	75.87	N/A	N/A	N/A	DEG
Array Induction Tool - D Wellsite Calibration - Electronics Calibration Check - Rel Gain Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
ADC Rel Gain Magnitude - 0	25.00	25.05	25.06	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 1	25.00	25.10	25.09	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 2	25.00	25.11	25.09	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 3	25.00	25.04	25.04	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 4	25.00	25.05	25.04	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 5	25.00	25.07	25.07	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 6	25.00	25.08	25.07	N/A	N/A	N/A	N/A
Phase - 0	0	0.7018	0.7104	N/A	N/A	N/A	DEG
Phase - 1	0	0.2004	0.2120	N/A	N/A	N/A	DEG
Phase - 2	0	0.3910	0.4059	N/A	N/A	N/A	DEG
Phase - 3	0	0.09962	0.09066	N/A	N/A	N/A	DEG
Phase - 4	0	0.2201	0.2220	N/A	N/A	N/A	DEG
Phase - 5	0	0.1113	0.1111	N/A	N/A	N/A	DEG
Phase - 6	0	0.2055	0.2014	N/A	N/A	N/A	DEG
Array Induction Tool - D Wellsite Calibration - Electronics Calibration Check - Auxillary							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Array Induction SPA Plus	3950	3963	3963	N/A	N/A	N/A	MV
Array Induction SPA Zero	-50.00	-54.60	-54.75	N/A	N/A	N/A	MV
Array Induction Temperature Pi	4.500	4.508	4.509	N/A	N/A	N/A	V
Array Induction Temperature Zl	-0.05000	-0.05518	-0.05542	N/A	N/A	N/A	V
Array Induction Tool - D Wellsite Calibration - Test Loop Gain Correction							
Master: 8-Jan-2005 18:16							
Test Loop Gain Magnitude - 0	0	1.000	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 1	0	1.007	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 2	0	1.016	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 3	0	1.013	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 4	0	1.022	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 5	0	1.021	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 6	0	1.021	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 7	0	1.020	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 8	0	1.014	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 9	0	1.014	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 10	0	1.013	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 11	0	1.013	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 12	0	1.013	N/A	N/A	N/A	N/A	N/A

11	6.594	1.000 (Minimum)	7.000 (Nominal)	12.00 (Maximum)	-7.362	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
12	-1.347	-6.000 (Minimum)	-2.000 (Nominal)	4.000 (Maximum)	-3.819	-32.00 (Minimum)	0 (Nominal)	32.00 (Maximum)
13	0.8529	-5.000 (Minimum)	1.000 (Nominal)	6.000 (Maximum)	-18.52	-38.00 (Minimum)	0 (Nominal)	38.00 (Maximum)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration								
Electronics Calibration Check - Thru Cal Mag & Phase								
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG		
0	Master	0.6297		0.5920	-83.21			
1	Master	1.256		1.185	-84.39			
2	Master	1.530		1.399	70.48			
3	Master	0.3952		0.3980	-130.0			
4	Master	2.247		2.057	70.18			
5	Master	0.8835		0.5820	-130.6			
6	Master	1.355		1.423	-18.66			
7	Master	0.4600		0.4000	73.51			
8	Master	2.033		2.111	-19.05			
9	Master	0.6729		0.5930	73.22			
10	Master	2.344		2.111	-4.713			
11	Master	0.6810		0.5930	77.10			
12	Master	2.056		1.853	-5.367			
13	Master	0.6010		0.5200	75.95			
		70.00 % (Minimum)	25.00 (Nominal)	130.0 (Maximum)		Nom -45.00 (Minimum)	0 (Nominal)	45.00 (Maximum)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration							
Electronics Calibration Check - Rel Gain Mag & Phase							
Idx	Phase	Value	ADC Rel Gain Magnitude	Phase DEG			
0	Master	25.05		0.7018			
1	Master	25.10		0.2004			
2	Master	25.11		0.3970			
3	Master	25.04		0.09962			
4	Master	25.05		0.2201			
5	Master	25.07		0.1113			
6	Master	25.08		0.2055			
		23.75 (Minimum)	25.00 (Nominal)	26.25 (Maximum)	-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration					
Electronics Calibration Check - Auxiliary					
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value
Master		3963	Master		-54.60
	3750 (Minimum)	4150 (Nominal)		-100.0 (Minimum)	0 (Nominal)
Phase	Array Induction Temperature Plus V	Value	Phase	Array Induction Temperature Zero V	Value
Master		4.508	Master		-0.05818
	4.250 (Minimum)	4.500 (Nominal)		-0.1000 (Minimum)	0 (Nominal)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude	Value	Phase DEG	Value		
0	1.000		0.4952				
1	1.007		0.3450				
2	1.016		0.07556				
3	1.013		0.2596				
4	1.022		-0.03066				
5	1.021		0.2088				
6	1.021		-0.4215				
7	1.020		-1.073				
8	1.014		-0.04490				
9	1.014		0.1851				
10	1.013		0.1448				
11	1.013		0.3883				
12	1.016		-0.01529				
13	1.018		0.09701				
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M	Value		
0	2.311		93.91				
1	33.72		-0.6939				
2	50.42		6.871				
3	34.20		-73.75				
4	48.96		98.87				
5	43.19		-103.3				
6	26.53		6.624				
7	14.36		-5.417				
8	6.973		8.789				
9	9.981		-18.99				
10	7.778		8.772				
11	6.594		-7.362				
12	-1.347		-3.819				
13	0.8529		-18.52				
		-27.00 (Minimum)	0 (Nominal)	24.00 (Maximum)	-548.0 (Minimum)	0 (Nominal)	548.0 (Maximum)

Master: 8-Jan-2005 18:16

Powered Positioning Device/Caliper 1 / Equipment Identification	
Primary Equipment: PPC Powered Positioning Device/Caliper PPC1 Caliper Standard	PPC1 - A PPC1 -
Auxiliary Equipment:	

Powered Positioning Device/Caliper 1 Wellsite Calibration					
PPC1 Caliper Calibration					
Phase	PPC1 Radius 1 Raw Small Radius MM	Value	Phase	PPC1 Radius 1 Raw Large Radius MM	Value
Before		109.2	Before		215.7
	30.48 (Minimum)	88.90 (Nominal)		154.9 (Minimum)	203.2 (Nominal)
		142.2 (Maximum)			246.4 (Maximum)
Phase	PPC1 Radius 2 Raw Small Radius MM	Value	Phase	PPC1 Radius 2 Raw Large Radius MM	Value
Before		91.24	Before		200.9
	30.48 (Minimum)	88.90 (Nominal)		154.9 (Minimum)	203.2 (Nominal)
		142.2 (Maximum)			246.4 (Maximum)
Phase	PPC1 Radius 3 Raw Small Radius MM	Value	Phase	PPC1 Radius 3 Raw Large Radius MM	Value
Before		106.7	Before		212.8
	30.48 (Minimum)	88.90 (Nominal)		154.9 (Minimum)	203.2 (Nominal)
		142.2 (Maximum)			246.4 (Maximum)
Phase	PPC1 Radius 4 Raw Small Radius MM	Value	Phase	PPC1 Radius 4 Raw Large Radius MM	Value
Before		75.65	Before		184.3
	30.48 (Minimum)	88.90 (Nominal)		154.9 (Minimum)	203.2 (Nominal)
		142.2 (Maximum)			246.4 (Maximum)


Before: 1-Mar-2005 13:50

Scintillation Gamma-Ray - N / Equipment Identification			
Primary Equipment: Scintillation Gamma Cartridge Scintillation Gamma Detector	SGC - TB SGD - TAA		
Auxiliary Equipment: Scintillation Gamma Housing Gamma Source Radioactive	SGH - K GSR - U/Y		

Scintillation Gamma-Ray - N Wellsite Calibration							
Detector Calibration							
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI
Before		44.05	Before		153.8	Before	
	30.00 (Minimum)	120.0 (Maximum)		139.8 (Minimum)	153.8 (Nominal)		150.0 (Minimum)
				167.8 (Maximum)			165.0 (Nominal)
							180.0 (Maximum)

Before: 4-Mar-2005 14:00

Company:	DEVON CANADA CORPORATION	Schlumberger
Well:	DEVON ET AL KOTANEELEE L-38A/ST3	
Field:	KOTANEELEE	
Territory:	YUKON	**MD**
ARRAY INDUCTION IMAGER GAMMA RAY		

	
Company:	DEVON CANADA CORPORATION
Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Field:	KOTANEELEE
Territory:	YUKON *** TVD ***

HALF SCALE LOG	
Logging Date: 6-Mar-2005 Run Number: THREE Depth Driller: 4065 m Schlumberger Depth: 4054.5 m Bottom Log Interval: 4051.2 m Top Log Interval: 3951.5 m Casing Driller Size @ Depth: 177.800 mm @ 3953 m Casing Schlumberger: 3951.5 m Bit Size: 156.000 mm Type Fluid In Hole: VERSACLEAN 1400 (INVERT) / FRESH WATER	Permanent Datum: GROUND LEVEL Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING Elev.: 803.65 m 6.8 m above Perm. Datum G.L. 803.65 m D.F. 810.4 m K.B. 810.4 m

API Serial No.: 1117 Longitude: 124 D 07' 23.6" W Density: 850 kg/m ³ Viscosity: 37 s Fluid Loss: PH Source Of Sample: N/A RM @ Measured Temperature: 1.000 ohm.m @ 16 degC RMF @ Measured Temperature: @ RMC @ Measured Temperature: @ Source RMF: RMC RM @ MRT: 0.227 @ 144 RMF @ MRT: @ 144 Maximum Recorded Temperatures: 144 degC Circulation Stopped: 5-Mar-2005 14:15 Logger On Bottom: 9-Mar-2005 22:05 Unit Number: 2016 Location: GRANDE PRAIRIE Recorded By: I. FIRIE, J. EASTON Witnessed By: PETER WASYLKY	Logging Date: 6-Mar-2005 Run Number: *** TVD *** Depth Driller: 3756 m Schlumberger Depth: 3746 m Bottom Log Interval: 3744.5 m Top Log Interval: Casing Driller Size @ Depth: @ Casing Schlumberger: Bit Size: Type Fluid In Hole: Density: Viscosity: Fluid Loss: PH: Source Of Sample: RM @ Measured Temperature: @ RMF @ Measured Temperature: @ RMC @ Measured Temperature: @ Source RMF: RMC RM @ MRT: @ RMF @ MRT: @ Maximum Recorded Temperatures: Circulation Stopped: Logger On Bottom: Unit Number: Location: Recorded By: Witnessed By:
---	--

CORRECTED LOG

Run 1	Run 2	Run 3	Run 4

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment		Depth Control Parameters	
Depth Measuring Device	Tension Device	Logging Cable	
Type: IDW-B Serial Number: 6169 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND	

Log Sequence:
 Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
 Reference Log Run Number: TWO
 Reference Log Date: 21-DEC-2004
 Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks
 1. PRIMARY DEPTH DEVICE: IDW.
 2.
 3.
 4.
 5.
 6.

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY ANY COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS, AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON THE USE OF THE RECORDED DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED DATA; AND (c) CUSTOMERS FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED DATA.

OTHER SERVICES:
 OS1: AT
 OS2: HLDS/AFS
 OS3: DSI
 OS4: UBI
 OS5: PPC
 REMARKS: RUN NUMBER 1
 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.

FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS.
 FLUID LEVEL: FINAL RUN: 1845 M.

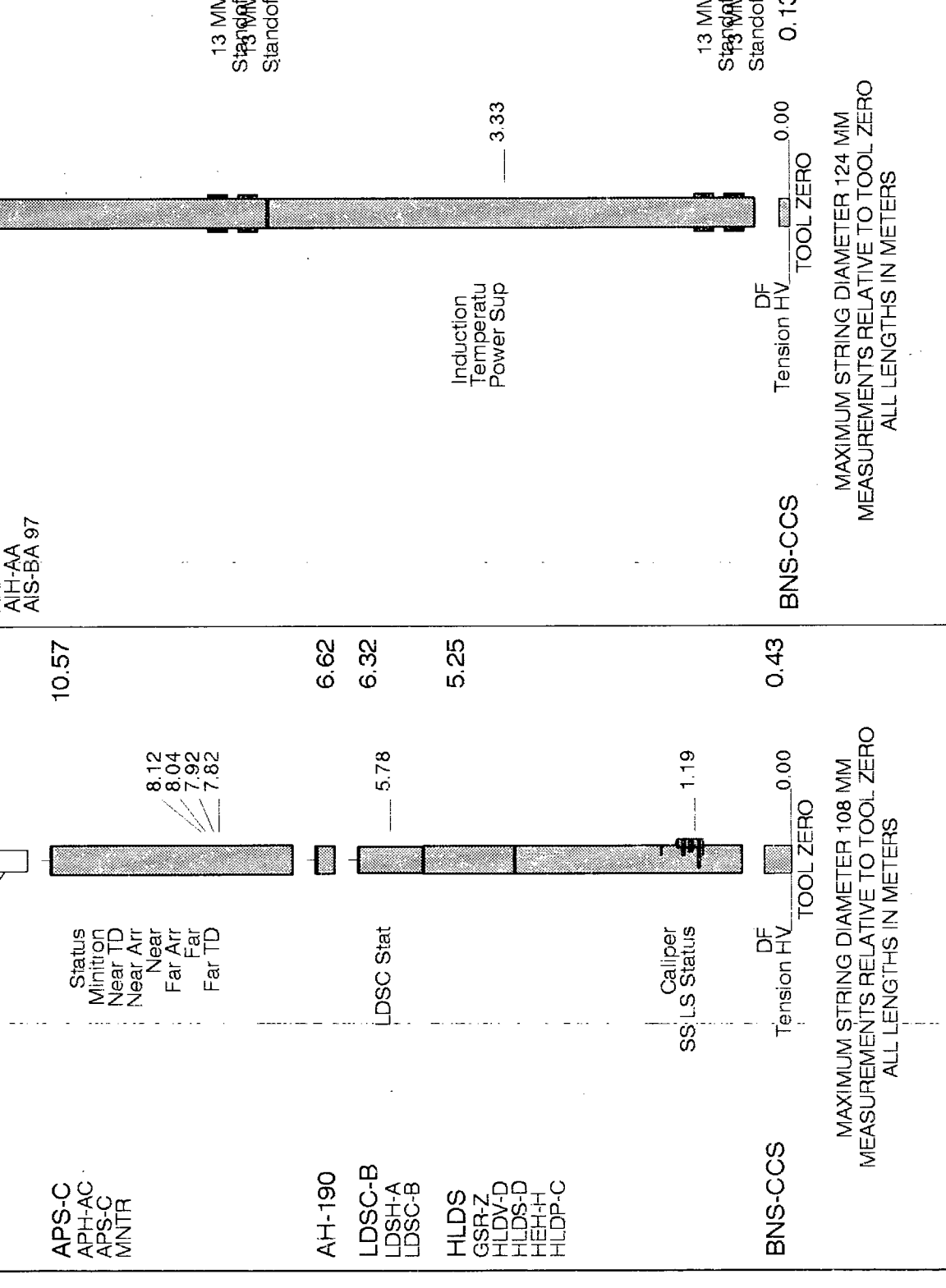
AIT RUN IN COMPUTE MUD RESISTIVITY MODE.
 PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION
 AND AS SHORT AXIS LOGGING TOOL FOR NUC RUN.

THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.
 GRANDE PRAIRIE, AB 780-539-5060
 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.

SERVICE ORDER #: 1082914 PROGRAM VERSION: 12C-301 FLUID LEVEL: 1845 m	SERVICE ORDER #: 1082914 PROGRAM VERSION: 12C-301 FLUID LEVEL: 1845 m
---	---

EQUIPMENT DESCRIPTION

SURFACE EQUIPMENT		DOWNHOLE EQUIPMENT	
LOGGED INTERVAL	START	LOGGED INTERVAL	STOP
SURFACE EQUIPMENT RUN 1 SFT-281 SFT-178 GSR-JY WITM (DTS)-A		SURFACE EQUIPMENT RUN 2 GSR-JY WITM (DTS)-A	
DOWNHOLE EQUIPMENT LEH-QT LEH-OT DTC-A ECH-KN DTC-A SGT-N SGH-K SGC-TB SGT-TAA PPC1-A PPC1-A PPC_CAL_STD AH-178 ILE-D ILE-D		DOWNHOLE EQUIPMENT LEH-QT LEH-OT DTC-A ECH-KN DTC-A SGT-N SGH-K SGC-TB SGT-TAA PPC1-A PPC1-A PPC_CAL_STD AIT-D AIC-BA AIH-AA AIS-BA 97	



BNS-CCS
 Maximum String Diameter 108 MM
 Measurements Relative to Tool Zero
 All Lengths in Meters

BNS-CCS
 Maximum String Diameter 124 MM
 Measurements Relative to Tool Zero
 All Lengths in Meters

Input DLIS Files

DEFAULT AIT_CAL_LDL_APS_097PUP FN:129 PRODUCER 10-Mar-2005 00:31 4061.8 M 3131.8 M

OP System Version: 12C0-301
MCM

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	APS-C	SPC-2602-NUCL_b

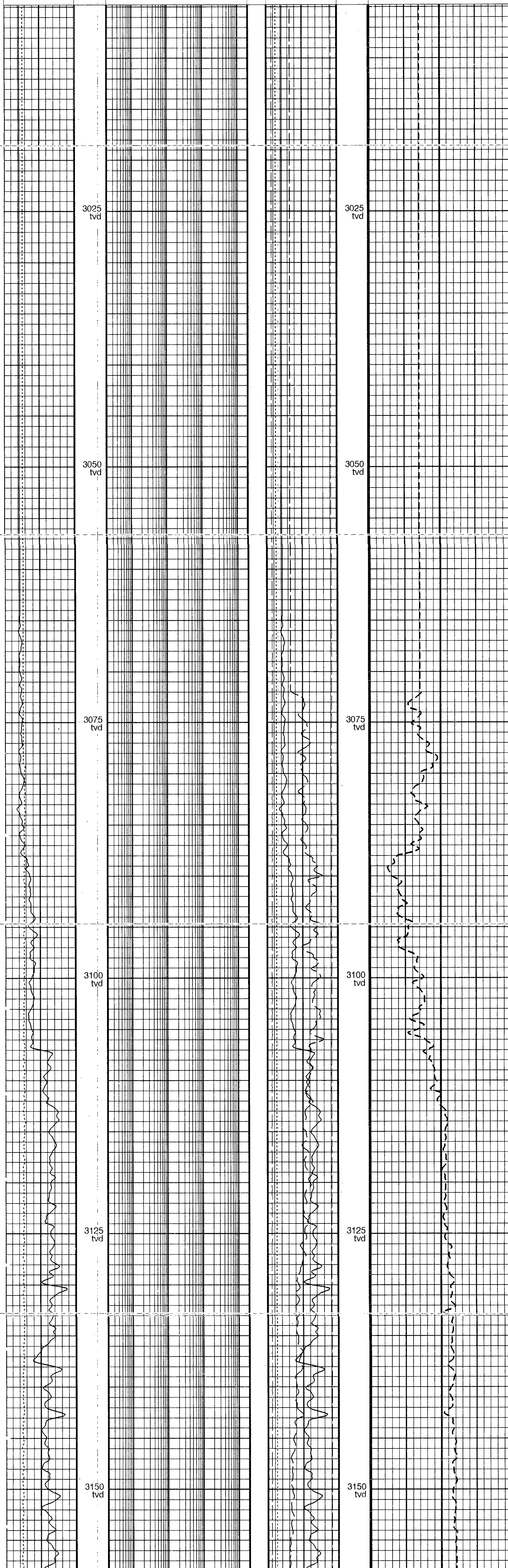
Changed Parameter Summary

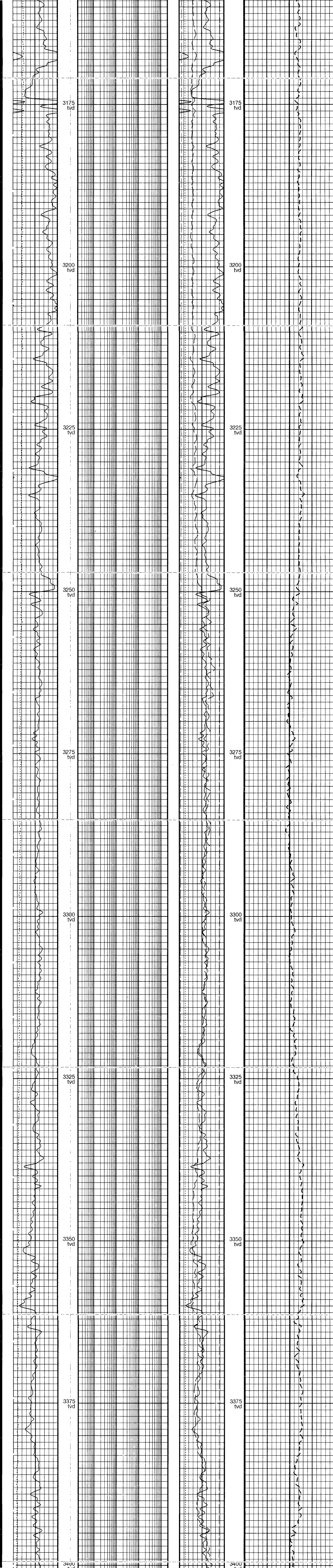
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3669.8 16:19:15

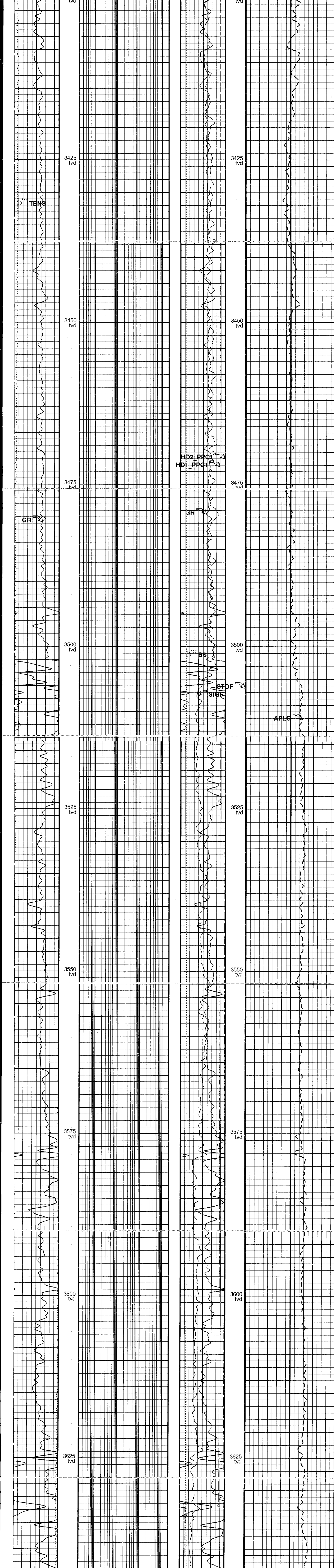
PIP SUMMARY

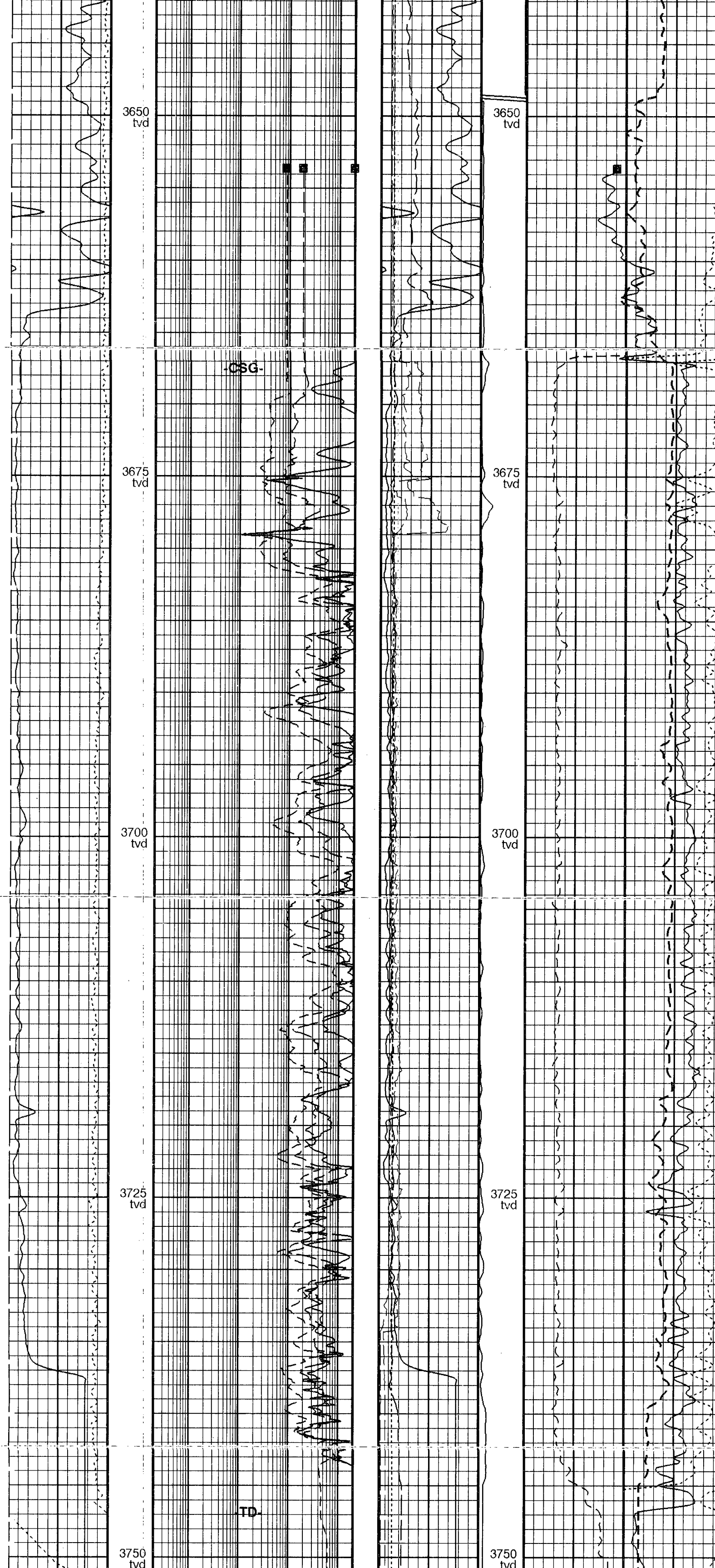
Time Mark Every 60 S

Tension (TENS) 20000 (N) 0	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	Gamma Ray (GR) 0 (GAPI) 150	Bit Size (BS) 125 (MM) 375	APS Formation Capture Cross-Section (SIGF) 0 (CU) 50	HLDS Long Spaced Photoelectric Effect (PEFL) 0 (---) 10	HLDS Bulk Density Correction (DRH) 450 (K/M3) -50
	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375	HLDS Density Porosity (DPO) 0.45 (V/V) -0.15	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) 0 (MM) 125	APS Near/Array Corrected Limestone Porosity (APLC) 0.45 (V/V) -0.15
Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000					









Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) (MM) 0 125	APS Near/Array Corrected Limestone Porosity (APLC) (V/V) 0.45 -0.15
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375		HLDS Density Porosity (DPO) (V/V) 0.45 -0.15
	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) 0 (CU) 50		HLDS Long Spaced Photoelectric Effect (PEFL) (---) 0 10
		Bit Size (BS) 125 (MM) 375		HLDS Bulk Density Correction (DRH) (K/M3) 450 -50
		Gamma Ray (GR) 0 (GAPI) 150		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N: Scintillation Gamma-Ray - N	PPC Calibration data selection	ROM
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
WDEV	Matrix Density	2710 K/M3
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	0 V
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	0 V
AHSS	APS Holesize Correction Source	BS
AMTY	APS Holesize Correction Switch	ON
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite
ASOS	APS Near Detector High Voltage Setting	0 V
ATSS	APS Standoff Correction Switch	ON
BHS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHT	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-50000 PPM
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	0.5
NFRG	APS Near/Far Calibration Ratio	0.5
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
System and Miscellaneous		
ALTDPCAN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	155.000 MM
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	177.800 MM
CWEI	Casing Weight	43.16 KG/M3
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5 M

Format: Ait_Nuc_45_15_sand Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:18

OP System Version: 12C0-301

AIT-D	SKK:2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	DTC-C	SPC-2602-NUCL_b

True Vertical Depth Log

Input DLIS Files

DEFAULT	AIT_CAL_LD_LAPS_097PUP	FN:129	PRODUCER	10-Mar-2005 00:31	4061.8 M	3131.8 M
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Directional Survey Manually-Entered Inclination Summary

Tie In Point : Measured Depth True Vertical Depth North Departure East Departure						
	3509.00 M	3286.00 M	866.12 M	-411.40 M		
Depth	24.90 DEG	12.90 DEG	3286.00 M	866.12 M	-411.40 M	
3518.50 M	25.30 DEG	15.00 DEG	3294.60 M	870.03 M	-410.43 M	

3528.10 M	25.00 DEG	17.10 DEG	3303.29 M	873.95 M	-409.30 M
3537.90 M	25.00 DEG	18.50 DEG	3312.17 M	877.89 M	-408.03 M
3547.40 M	25.40 DEG	20.30 DEG	3320.77 M	881.71 M	-406.69 M
3557.40 M	25.80 DEG	22.40 DEG	3329.79 M	885.73 M	-405.12 M
3566.90 M	25.50 DEG	23.80 DEG	3338.35 M	889.52 M	-403.50 M
3576.20 M	25.30 DEG	27.60 DEG	3346.75 M	893.11 M	-401.78 M
3585.80 M	24.80 DEG	29.40 DEG	3355.45 M	896.68 M	-399.84 M
3595.30 M	23.70 DEG	31.20 DEG	3364.11 M	900.05 M	-397.87 M
3604.70 M	22.30 DEG	32.90 DEG	3372.76 M	903.16 M	-395.92 M
3614.40 M	21.60 DEG	36.10 DEG	3381.76 M	906.15 M	-393.87 M
3624.10 M	22.40 DEG	39.60 DEG	3390.76 M	909.02 M	-391.64 M
3633.60 M	23.60 DEG	41.70 DEG	3399.50 M	911.84 M	-389.22 M
3643.10 M	24.30 DEG	41.40 DEG	3408.18 M	914.72 M	-386.66 M
3652.40 M	25.60 DEG	42.80 DEG	3416.61 M	917.63 M	-384.03 M
3662.10 M	26.60 DEG	42.40 DEG	3425.32 M	920.77 M	-381.14 M
3672.00 M	27.00 DEG	41.30 DEG	3434.16 M	924.10 M	-378.16 M
3681.60 M	25.90 DEG	42.10 DEG	3442.76 M	927.29 M	-375.32 M
3691.10 M	24.60 DEG	42.10 DEG	3451.35 M	930.30 M	-372.60 M
3700.60 M	24.40 DEG	42.10 DEG	3459.99 M	933.22 M	-369.96 M
3710.10 M	24.00 DEG	43.50 DEG	3468.66 M	936.08 M	-367.32 M
3719.60 M	23.50 DEG	44.50 DEG	3477.35 M	938.83 M	-364.66 M
3729.20 M	23.60 DEG	44.20 DEG	3486.15 M	941.57 M	-361.98 M
3738.80 M	24.20 DEG	42.40 DEG	3494.93 M	944.40 M	-359.31 M
3748.60 M	24.40 DEG	43.50 DEG	3503.86 M	947.36 M	-356.56 M
3758.10 M	24.40 DEG	43.80 DEG	3512.51 M	950.20 M	-353.85 M
3767.60 M	25.10 DEG	44.50 DEG	3521.14 M	953.05 M	-351.08 M
3777.00 M	26.70 DEG	44.20 DEG	3529.60 M	955.99 M	-348.21 M
3786.70 M	28.70 DEG	42.40 DEG	3538.18 M	959.27 M	-345.12 M
3796.20 M	30.50 DEG	39.90 DEG	3546.44 M	962.80 M	-342.03 M
3806.10 M	32.40 DEG	39.20 DEG	3554.89 M	966.78 M	-338.75 M
3815.60 M	33.90 DEG	39.60 DEG	3562.84 M	970.80 M	-335.45 M
3825.00 M	35.50 DEG	39.20 DEG	3570.57 M	974.93 M	-332.05 M
3834.70 M	37.10 DEG	39.20 DEG	3578.39 M	979.38 M	-328.42 M
3844.30 M	38.90 DEG	39.90 DEG	3585.95 M	983.94 M	-324.66 M
3853.80 M	40.30 DEG	39.90 DEG	3593.27 M	988.59 M	-320.77 M
3863.40 M	40.80 DEG	39.60 DEG	3600.57 M	993.38 M	-316.78 M
3872.90 M	40.30 DEG	40.60 DEG	3607.79 M	998.11 M	-312.81 M
3882.40 M	40.00 DEG	42.10 DEG	3615.05 M	1002.71 M	-308.76 M
3891.60 M	39.80 DEG	43.10 DEG	3622.10 M	1007.05 M	-304.76 M
3900.70 M	39.30 DEG	45.20 DEG	3629.12 M	1011.21 M	-300.73 M
3910.30 M	39.60 DEG	45.90 DEG	3636.53 M	1015.48 M	-296.37 M
3919.80 M	42.40 DEG	42.10 DEG	3643.70 M	1019.96 M	-292.05 M
3929.30 M	43.00 DEG	42.80 DEG	3650.69 M	1024.72 M	-287.70 M
3939.00 M	43.80 DEG	42.40 DEG	3657.73 M	1029.62 M	-283.19 M
3945.00 M	44.50 DEG	40.60 DEG	3662.04 M	1032.75 M	-280.42 M
3951.50 M	44.30 DEG	40.60 DEG	3666.68 M	1036.20 M	-277.46 M
3961.10 M	44.60 DEG	41.00 DEG	3673.53 M	1041.29 M	-273.07 M
3967.90 M	42.70 DEG	41.40 DEG	3678.45 M	1044.83 M	-269.98 M
3977.40 M	41.80 DEG	43.50 DEG	3685.49 M	1049.54 M	-265.66 M
3987.00 M	40.40 DEG	44.20 DEG	3692.72 M	1054.09 M	-261.29 M
3996.50 M	39.90 DEG	44.20 DEG	3699.98 M	1058.48 M	-257.02 M
4006.20 M	38.80 DEG	44.50 DEG	3707.48 M	1062.88 M	-252.72 M
4018.50 M	37.90 DEG	46.30 DEG	3717.13 M	1068.24 M	-247.29 M
4028.10 M	36.70 DEG	48.40 DEG	3724.77 M	1072.18 M	-243.01 M
4037.60 M	35.50 DEG	50.10 DEG	3732.44 M	1075.83 M	-238.77 M
4047.00 M	34.90 DEG	50.50 DEG	3740.12 M	1079.29 M	-234.60 M
4056.50 M	34.50 DEG	50.50 DEG	3747.93 M	1082.73 M	-230.43 M
4065.00 M	34.10 DEG	50.50 DEG	3754.95 M	1085.78 M	-226.73 M

Company: **DEVON CANADA CORPORATION**

Schlumberger

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**

Field: **KOTANEELEE**

Territory: **YUKON**

*** TVD ***

HALF SCALE LOG

Schlumberger

Company: **DEVON CANADA CORPORATION**

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON** *** TVD ***

Location: L-38
 Well: DEVON ET AL KOTANEELEE L-38A/ST3
 Company: DEVON CANADA CORPORATION

**ACCELERATED POROSITY
 HOSTILE LITHOLOGY
 DENSITY LOG**

LSD: L-38
 UWID: 300L386010124003
 Elev.: K.E. 810.4 m
 G.L. 803.65 m
 D.F. 810.4 m

Permanent Datum: GROUND LEVEL Elev.: 803.65 m
 Log Measured From: KELLY BUSHING 6.8 m above Perm. Datum
 Drilling Measured From: KELLY BUSHING

API Serial No. 1117 Latitude: 60 D 07' 32.4" N Longitude: 124 D 07' 23.6" W

Logging Date: 6-Mar-2005
 Run Number: THREE
 Depth Driller: 4085 m
 Schlumberger Depth: 4054.5 m
 Bottom Log Interval: 4053 m
 Top Log Interval: 3275 m
 Casing Driller Size @ Depth: 177.800 mm @ 3953 m
 Casing Schlumberger: 3953 m
 Bit Size: 156.000 mm
 Type Fluid In Hole: VERSACLEAN 1400 (INVERT) / FRESH WATER
 Density: 850 kg/m3 Viscosity: 37 s
 Fluid Loss: PH
 Source Of Sample: N/A

RM @ Measured Temperature: @
 RMF @ Measured Temperature: @
 RMC @ Measured Temperature: @
 Source RMF: N/A RMC: N/A
 RM @ MRT: @ 144 RMF @ MRT: @ 144

Maximum Recorded Temperatures: 144 degC
 Circulation Stopped: 5-Mar-2005 14:15
 Logger On Bottom: 9-Mar-2005 16:00

Unit Number: 2016 Location: GRANDE PRAIRIE
 Recorded By: I. PIRIE, J. EASTON
 Witnessed By: PETER WASYLYK

CORRECTED LOG

Run	Run 1	Run 2	Run 3	Run 4
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth				
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density				
Viscosity				
Fluid Loss				
PH				
Source Of Sample				
RM @ Measured Temperature				
RMF @ Measured Temperature				
RMC @ Measured Temperature				
Source RMF				
RMC				
RM @ MRT				
RMF @ MRT				
Maximum Recorded Temperatures				
Circulation Stopped				
Time				
Logger On Bottom				
Time				
Unit Number				
Location				
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 7 MAR 2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Trip To the Well
 Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
 Reference Log Run Number: TWO
 Reference Log Date: 21-DEC-2004
 Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks

1. PRIMARY DEPTH DEVICE: IDW.
 2.
 3.
 4.
 5.
 6.

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED DATA, (b) DISCLAIMERS AND WARNINGS OF WARRANTIES AND REPRESENTATIONS REGARDING THE RECORDED DATA, (c) LIMITATIONS ON LIABILITY, (d) LIMITATIONS ON THE RECORDED DATA, (e) LIMITATIONS ON REMEDY, (f) LIMITATIONS ON THE RECORDED DATA, (g) LIMITATIONS ON THE RECORDED DATA, (h) LIMITATIONS ON THE RECORDED DATA, (i) LIMITATIONS ON THE RECORDED DATA, (j) LIMITATIONS ON THE RECORDED DATA, (k) LIMITATIONS ON THE RECORDED DATA, (l) LIMITATIONS ON THE RECORDED DATA, (m) LIMITATIONS ON THE RECORDED DATA, (n) LIMITATIONS ON THE RECORDED DATA, (o) LIMITATIONS ON THE RECORDED DATA, (p) LIMITATIONS ON THE RECORDED DATA, (q) LIMITATIONS ON THE RECORDED DATA, (r) LIMITATIONS ON THE RECORDED DATA, (s) LIMITATIONS ON THE RECORDED DATA, (t) LIMITATIONS ON THE RECORDED DATA, (u) LIMITATIONS ON THE RECORDED DATA, (v) LIMITATIONS ON THE RECORDED DATA, (w) LIMITATIONS ON THE RECORDED DATA, (x) LIMITATIONS ON THE RECORDED DATA, (y) LIMITATIONS ON THE RECORDED DATA, (z) LIMITATIONS ON THE RECORDED DATA.

OTHER SERVICES:
 OS1: AT
 OS2: HLDS/APS
 OS3: DSI
 OS4: UBI
 OS5: PPC

REMARKS: RUN NUMBER 1
 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.
 LOGGED FROM TD TO SURFACE CASING WITH APS TO 3300 MKB
 LOGGED REPEAT FROM TD TO SURFACE CASING
 PPC USED TO KEEP TOOL IN SHORT AXIS
 FLUID LEVEL FOUND AT 1945 MKB

THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.
 GRANDE PRAIRIE, AB 780-539-5080
 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.

SERVICE ORDER #: 10829914
 PROGRAM VERSION: 1200-301
 FLUID LEVEL: 1945 m

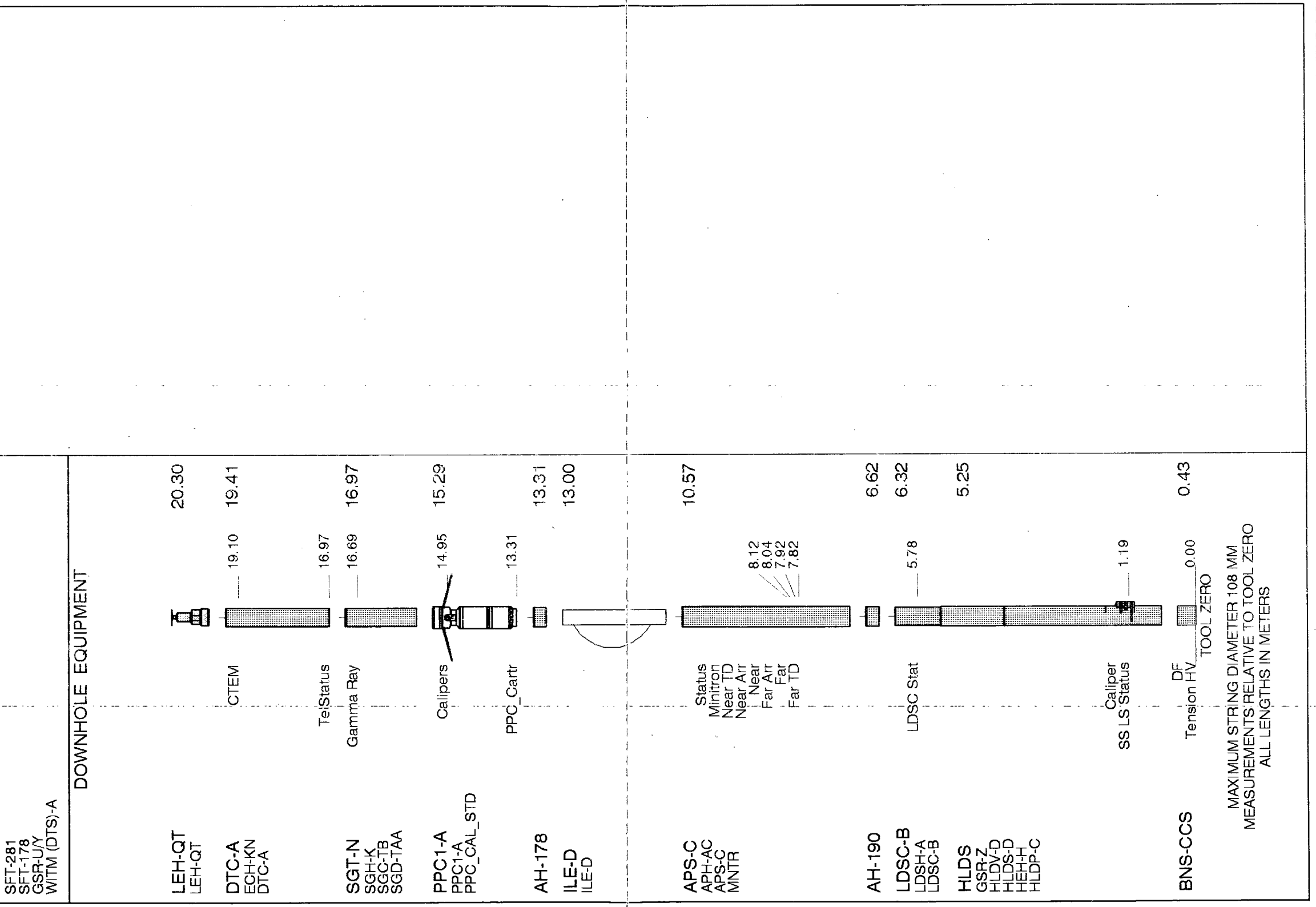
RUN 1
 LOGGED INTERVAL START STOP
 LOGGED INTERVAL START STOP

RUN 2
 SERVICE ORDER #: 10829914
 PROGRAM VERSION: 1200-301
 FLUID LEVEL: 1945 m

RUN 1
 LOGGED INTERVAL START STOP
 LOGGED INTERVAL START STOP

RUN 2
 LOGGED INTERVAL START STOP
 LOGGED INTERVAL START STOP

EQUIPMENT DESCRIPTION



Input DLIS Files					
DEFAULT	LDL_APS_CAL_068PUP	FN:89	PRODUCER	09-Mar-2005 18:44	4060.4 M 3230.6 M

Output DLIS Files					
DEFAULT	LDL_APS_CAL_072PUP	FN:96	PRODUCER	09-Mar-2005 19:55	
OPTICAL	LDL_APS_CAL_072PUP	FN:97	PRODUCER	09-Mar-2005 19:55	

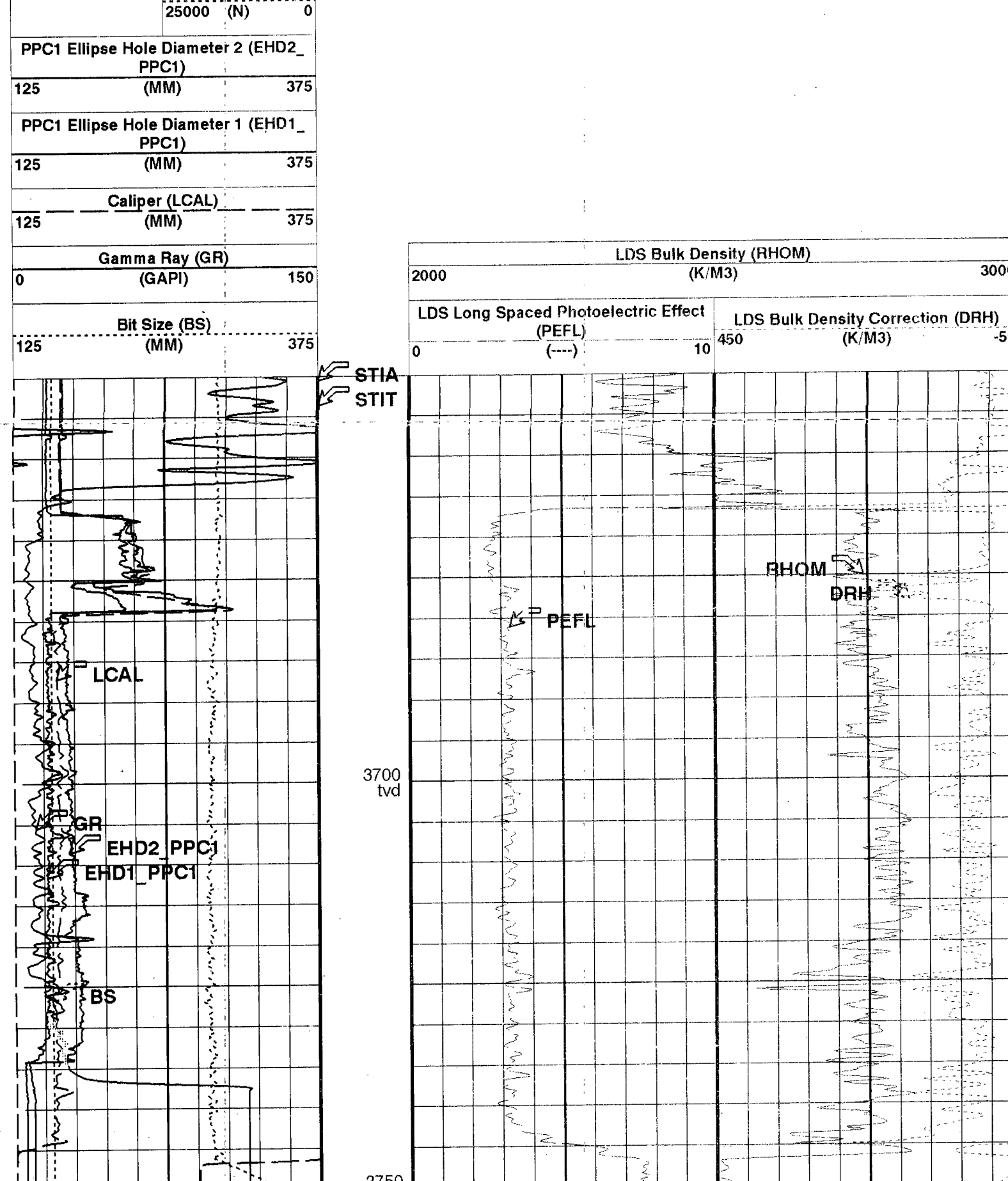
Indexed to True Vertical Depth in this Playback

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

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



Bit Size (BS)	125 (MM)	375
Gamma Ray (GR)	0 (GAPI)	150
Caliper (LCAL)	125 (MM)	375
PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)	125 (MM)	375
PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)	125 (MM)	375
Tension (TENS)	25000 (N)	0

LDS Long Spaced Photoelectric Effect (PEFL)	0	10	LDS Bulk Density Correction (DRH)	450	-50
LDS Bulk Density (RHOM)			2000		
			(K/M3)		

LDS Long Spaced Photoelectric Effect (PEFL)	0	10	LDS Bulk Density Correction (DRH)	450	-50
LDS Bulk Density (RHOM)			2000		
			(K/M3)		

Bit Size (BS)	125 (MM)	375
Gamma Ray (GR)	0 (GAPI)	150
Caliper (LCAL)	125 (MM)	375
PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)	125 (MM)	375
PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)	125 (MM)	375
Tension (TENS)	25000 (N)	0

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
HLDS	Hostile Litho-Density Sonde	BS
DHC	Density Hole Correction	HIRS
DPPM	Density Porosity Processing Mode	1000 K/M3
FD	Fluid Density	ON
LATC	HLDS Activation Correction	2710 K/M3
MDEN	Matrix Density	5
APS-C	Accelerator-Porosity Tool	HIRS
DPPM	APS Software Version	5
PPC1-A	Powered Positioning Device/Caliper 1	PPC1-Calipers
CLBD	Primary Tool for WellCAD	NONE
	Secondary Tool for WellCAD (45 Degrees Rotation PPC Tool)	CAL STD
	PPC Calibration data selection	NONE
	PPC Calibration data selection	ROM
SGT-N	Scintillation Gamma-Ray	HIRS
DPPM	Density Porosity Processing Mode	1.524 M
DIR	Directional Survey Computation	3509 M
SPVD	TVD of Starting Point	3286 M
TIMD	Along-hole depth of Tie-in Point	0 MM
TIVD	TVD of Tie-in Point	PPC1-Calipers
HOLEV	Integrated Hole/Cement Volume	0
FCD	Future Casing (Outer) Diameter	0
HVCS	Integrated Hole Volume Caliper Selection	PPC1-Calipers
STI	Stuck Tool Indicator	TDL
LBFR	Trigger for MAXIS First Reading Label	1.524 M
STKT	STI Stuck Threshold	4065.00 M
TDD	Total Depth - Driller	4053.50 M
TDL	Total Depth - Logger	4065 M
System and Miscellaneous		
ALTDCHAN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4065 M

Format: DENS Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 19:55

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M 3246.7 M
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Output DLIS Files

DEFAULT	LDL_APS_CAL_072PUP	FN:96	PRODUCER	09-Mar-2005 19:55	
OPTICAL	LDL_APS_CAL_072PUP	FN:97	PRODUCER	09-Mar-2005 19:55	

Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEEL L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M 3246.7 M
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OP System Version: 12C0-301
MCM

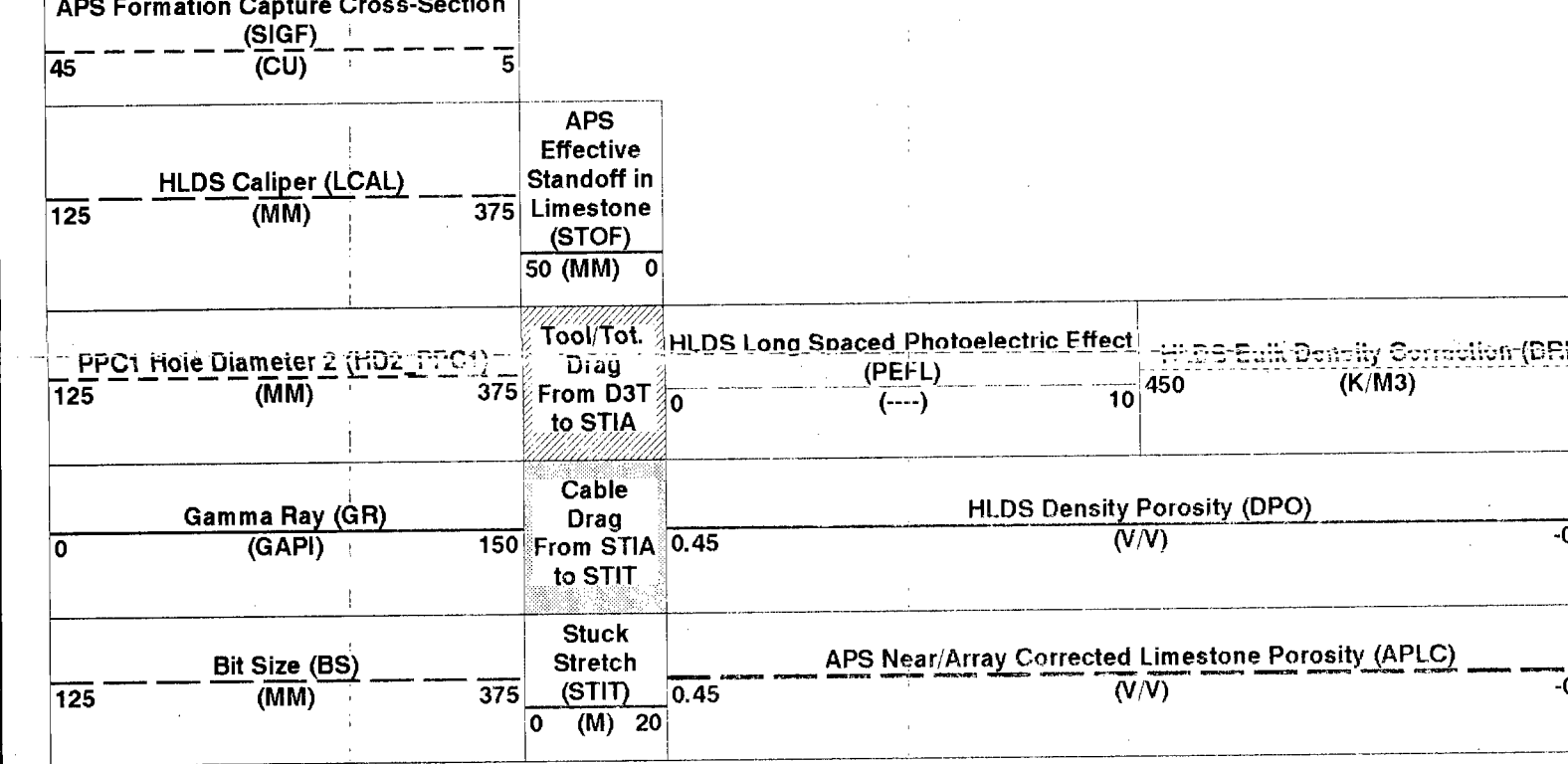
HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Changed Parameter Summary

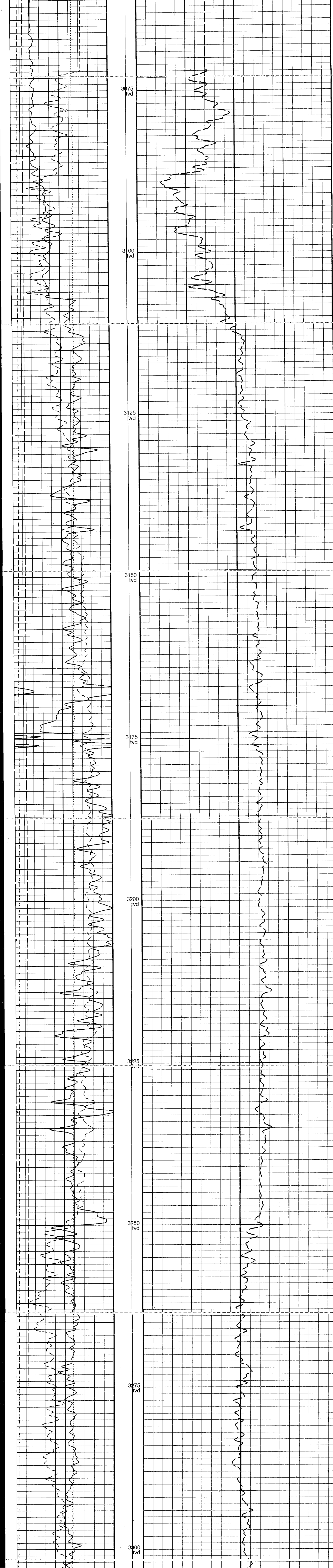
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3659.6 16:39:49

PIP SUMMARY

Time Mark Every 60 S



MAIN PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone 2710 kg/m3***



3075
tvd

3100
tvd

3125
tvd

3150
tvd

3175
tvd

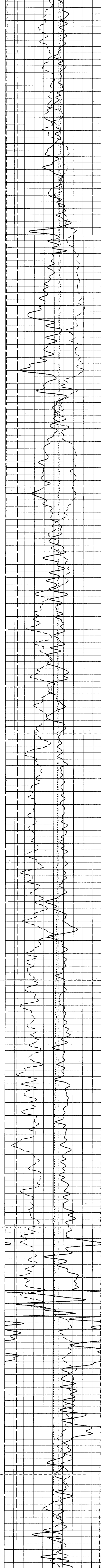
3200
tvd

3225
tvd

3250
tvd

3275
tvd

3300
tvd



3325
I/II

3350
I/II

3375
I/II

3400
I/II

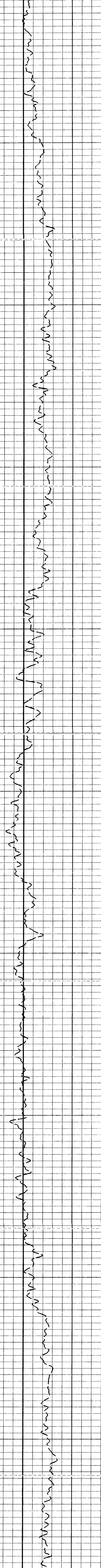
3425
I/II

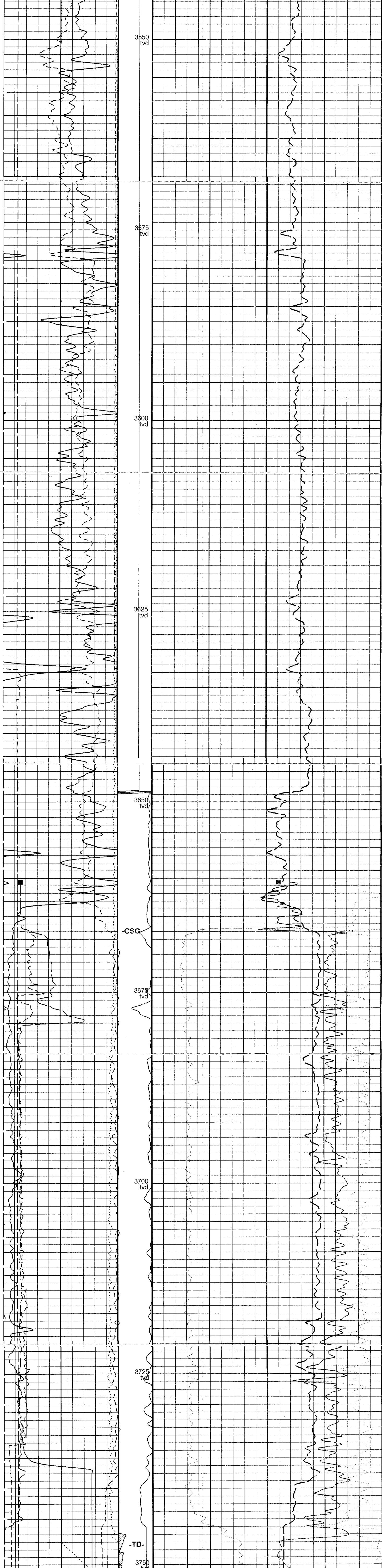
3450
I/II

3475
I/II

3500
I/II

3525
I/II





MAIN PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone 2710 kg/m3***

125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT)	0.45	APS Near/Array Corrected Limestone Porosity (APLC)	(V/V)	-0.15
0	Gamma Ray (GR)	150	Cable Drag From STIA to STIT	0.45	HLDS Density Porosity (DPO)	(V/V)	-0.15
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot Drag From D3T to STIA	0	HLDS Long Spaced Photoelectric Effect (PEFL)	(---)	10
125	HLDS Caliper (LCAL) (MM)	375	APS Effective Standoff in Limestone (STOF)	50 (MM)	HLDS Bulk Density Correction (DRH)	(K/M3)	-50
45	APS Formation Capture Cross-Section (SIGF) (CU)	5					
	Tension (TENS)	20000 (N)					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DI IS Name	Description	Value
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DLIS Name	Description	Value	Unit
DHC	HLDS: Hostile Litho-Density Sonde		
DPPM	Density Hole Correction	BS	
FD	Density Porosity Processing Mode	HIRS	
LATC	Fluid Density	1000	K/M3
MDEN	HLDS Activation Correction	ON	
	Matrix Density	2710	K/M3
APS-C: Accelerator-Porosity Tool			
	APS Software Version	5	
AASD	APS Thermal and Array Detectors High Voltage Setting	2017.73	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2088.04	V
AHCS	APS Hole Size Correction Source	BS	
AHSS	APS Hole Size Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1743.05	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.04598	
NARC	APS Near/Far Calibration Ratio	0.923984	
SHT	Surface Hole Temperature	20	DEGC
PPC1-A: Powered Positioning Device/Caliper 1			
	PPC1 Caliper Type	CAL STD	
CLBD_PPC	PPC Calibration data selection	ROM	
SGT-N: Scintillation Gamma-Ray - N			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIVD	TVD of Tie-in Point	3286	M
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4053.50	M
System and Miscellaneous			
ALTDPCAN	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	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
TD	Total Depth	4065	M

Format: APS_HLDS Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:39

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEELEE L-38A/S13

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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True Vertical Depth Log

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3659.6 16:39:49

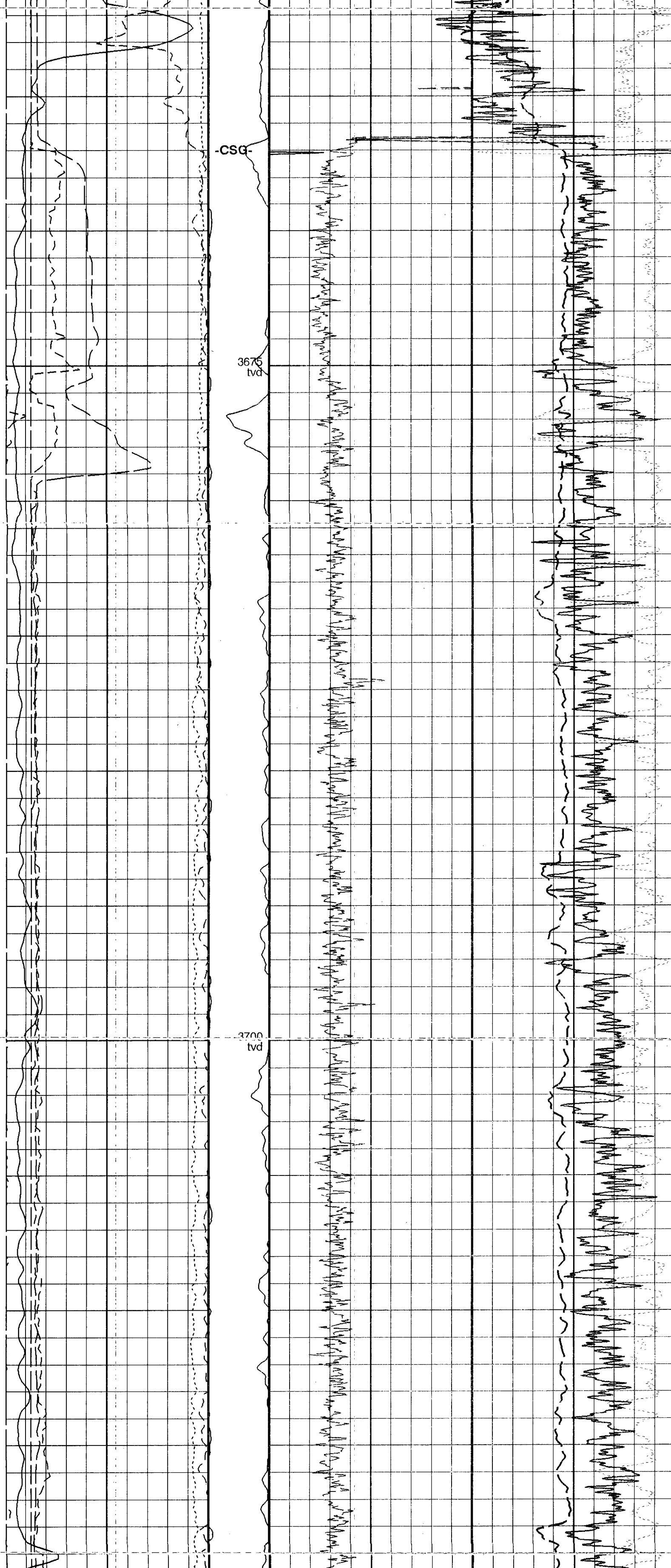
PIP SUMMARY

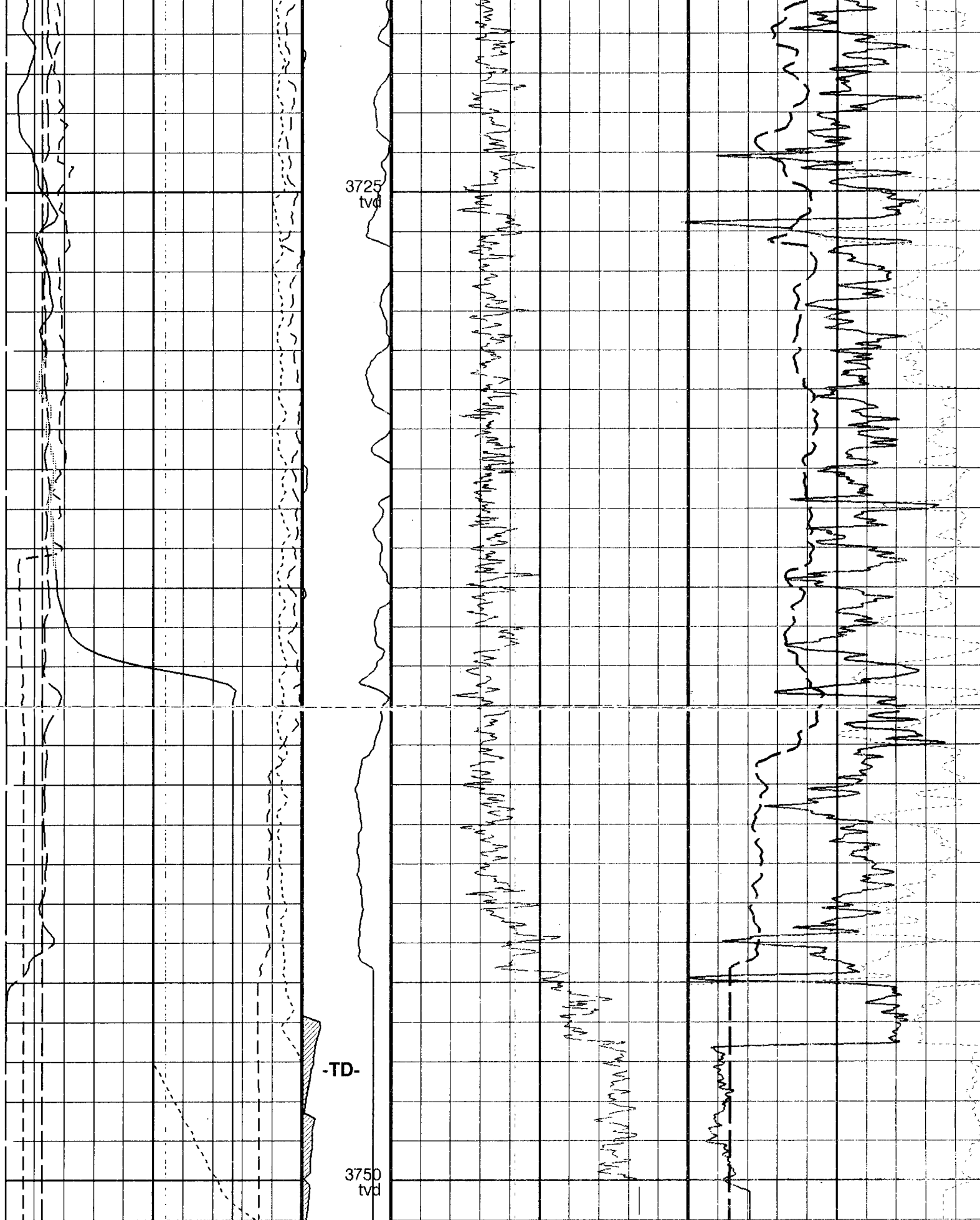
Time Mark Every :60 S

Tension (TENS)	20000 (N)	0
APS HR Formation Capture Cross-Section (HSIG)	(CU)	5
HLDS Caliper (LCAL)	(MM)	375
PPC1 Hole Diameter 2 (HD2_PPC1)	(MM)	375
Gamma Ray (GR)	(GAPI)	150
Bit Size (BS)	(MM)	375

APS HR Effective Standoff in Limestone (HSTO)	50 (MM)	0
HLDS HR Long Spaced Photoelectric Effect (HLEF)	(---	10 450
HLDS HR Bulk Density Correction (HBDC)	(K/M3)	-50
Cable Drag	From STIA to STIT	0.45
HLDS HR Density Porosity (HDPO)	(V/V)	-0.15
Stuck Stretch (STIT)	(M)	20
APS HR Near/Array Corrected Limestone Porosity (HALC)	(V/V)	-0.15

HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***





HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***

Bit Size (BS) (MM)	375	Stuck Stretch (STII) (M)	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC) (V/V)	-0.15
Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS HR Density Porosity (HDPO) (V/V)	-0.15
PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot. Drag From D3T to STIA	0	HLDS HR Long Spaced Photoelectric Effect (HLEF) (---)	10 450
HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO) 50 (MM)	0	HLDS HR Bulk Density Correction (HBDC) (K/M3)	-50
APS HR Formation Capture Cross-Section (HSIG) (CU)	45		5		
Tension (TENS) 20000 (N)			0		

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	2017.73 V
AFSD	APS Array Detectors Data Source Switch	Both
AHSS	APS Far Detector High Voltage Setting	2088.04 V
AHCS	APS Holesize Correction Source	BS
AHSS	APS Holesize Correction Switch	ON
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite
ANSD	APS Near Detector High Voltage Setting	1743.05 V
ASOS	APS Standoff Correction Switch	ON
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-5000 PPM
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	1.04598
NFRC	APS Near/Far Calibration Ratio	0.923984
SHT	Surface Hole Temperature	20 DEGC
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N	PPC Calibration data selection	ROM
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4053.50 M
System and Miscellaneous		
ALTDPCAN	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	43.16 KG/M
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4065 M

Format: APS_HLDS_HIRS Vertical Scale: 1:120 Graphics File Created: 11-Mar-2005 16:39

OP System Version: 12C0-301

MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEEL L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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True Vertical Depth Log

OP System Version: 12C0-301

MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Changed Parameter Summary

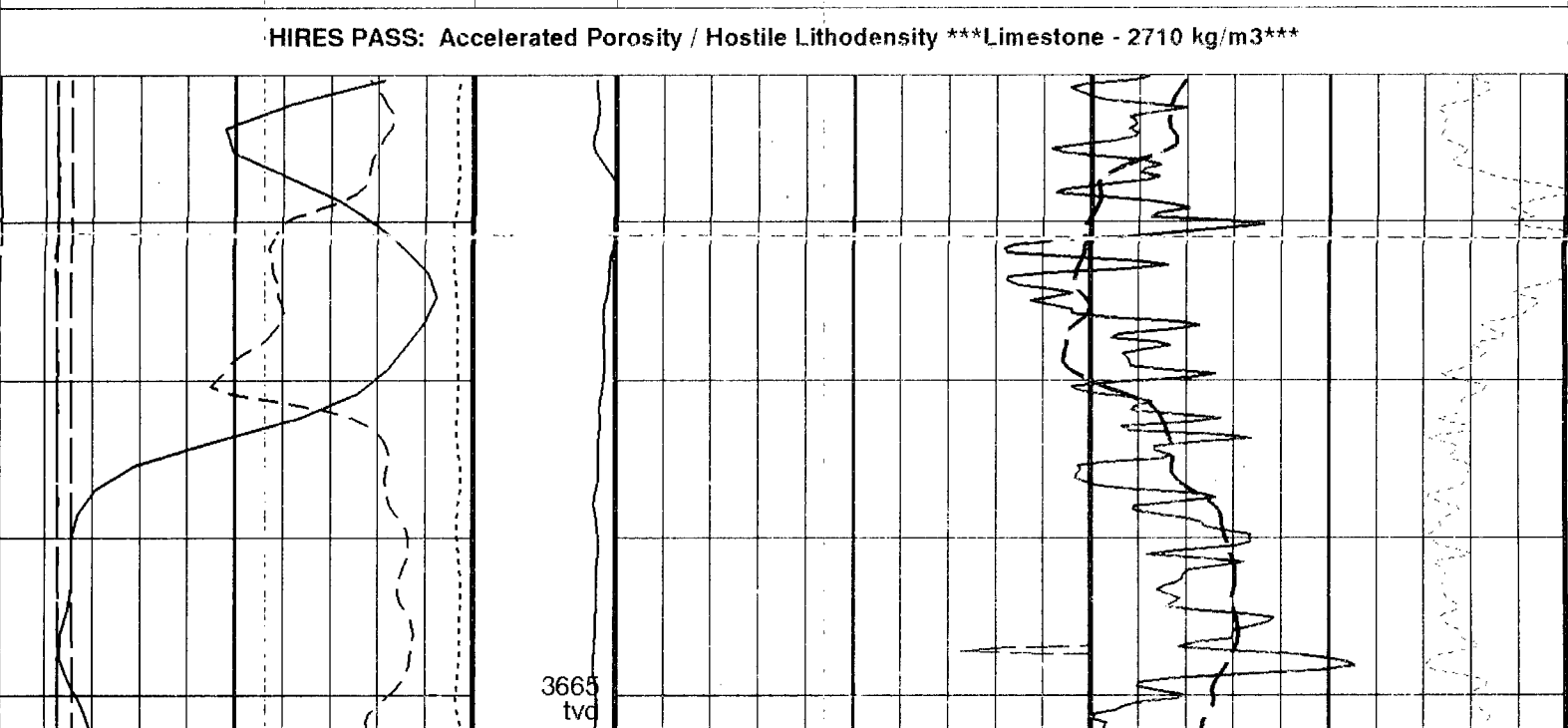
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3659.6 16:39:49

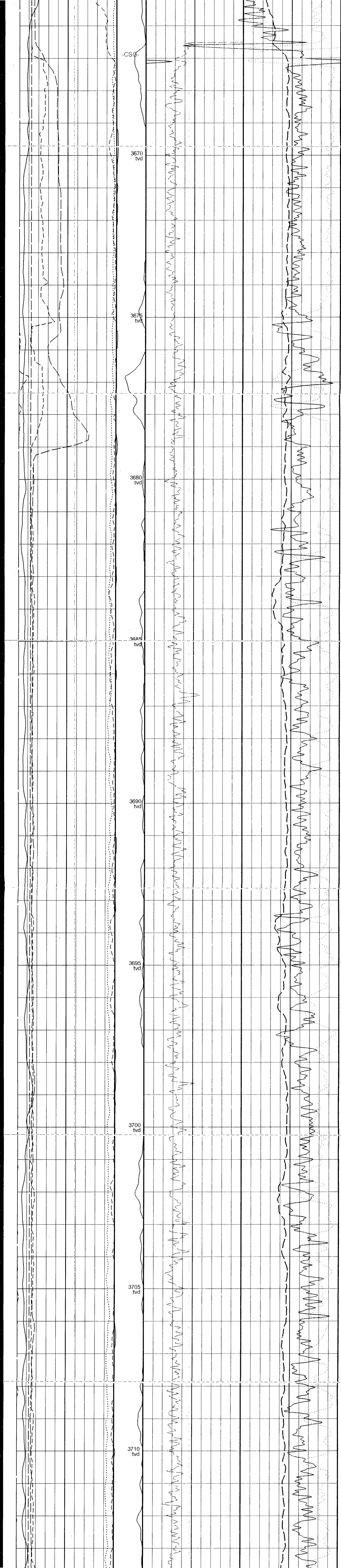
PIP SUMMARY

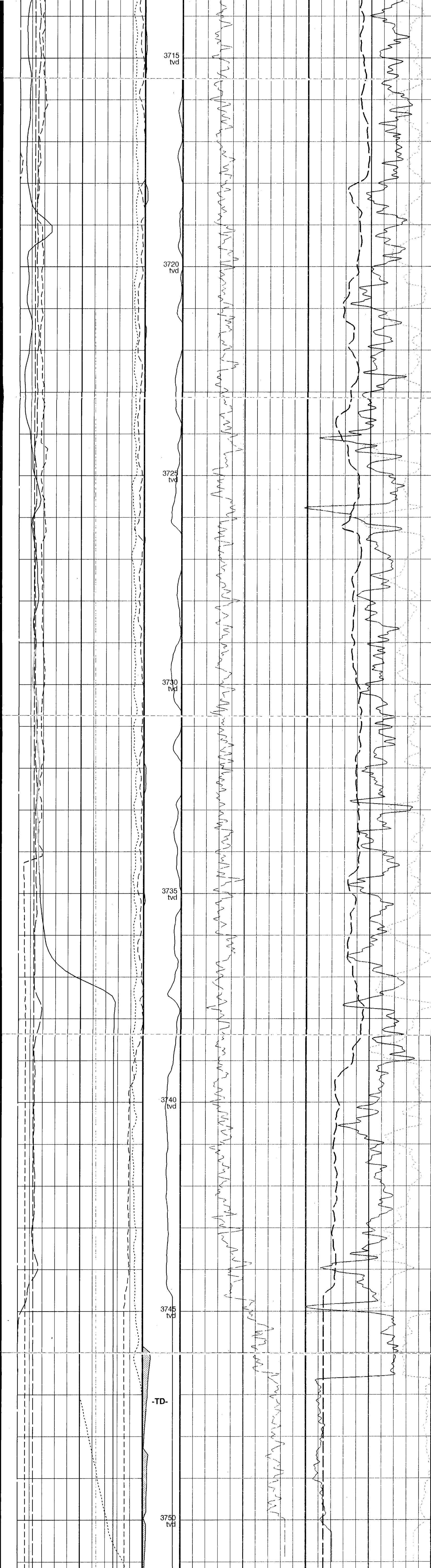
Time Mark Every 60 S

Tension (TENS) 20000 (N)			0
APS HR Formation Capture Cross-Section (HSIG) (CU)	45		5
HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO) 50 (MM)	0
PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot. Drag From D3T to STIA	0
Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45
Bit Size (BS) (MM)	375	Stuck Stretch (STII) (M)	0.45

HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***







HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***

125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT) (M)	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC) (V/V)	-0.15
0	Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS HR Density Porosity (HDPO) (V/V)	-0.15
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	100/101 Drag From D3T to STIA	0	HLDS HR Long Spaced Photoelectric Effect (HLEF) (----)	10 450
125	HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO) (MM)	0	HLDS HR Bulk Density Correction (HBDC) (K/M3)	-50
45	APS HR Formation Capture Cross-Section (HSIG) (CU)	5				
	Tension (TENS) 20000 (N)	0				

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
	HLDS: Hostile Litho-Density Sonde	
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
	APS-C: Accelerator-Porosity Tool	
	APS Software Version	5
AASD	APS Thermal and Array Detectors High Voltage Setting	2017.73 V
ADSD	APS Array Detectors Data Source Switch	Both
AFSD	APS Far Detector High Voltage Setting	2088.04 V
AHCS	APS Holesize Correction Source	BS
AHSS	APS Holesize Correction Switch	ON
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite
ANSD	APS Near Detector High Voltage Setting	1743.05 V
ASOS	APS Standoff Correction Switch	ON
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHS	Bottom Hole Temperature	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-50000 PPM
GCSE	Generalized Caliper Selection	BS

GDEV	Average Angular Deviation of Borehole from Normal	0.018227	DEG
GGRD	Geothermal Gradient		DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.04598	
NFRC	APS Near/Far Calibration Ratio	0.923984	
SHT	Surface Hole Temperature	20	DEGC
	PPC1-A: Powered Positioning Device/Caliper 1		
	PPC1 Caliper Type	CAL STD	
CLBD_PPC	PPC Calibration data selection	ROM	
	SGT-N: Scintillation Gamma-Ray - N		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIVD	TVD of Tie-in Point	3286	M
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL	
SKTK	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4053.50	M
	System and Miscellaneous		
ALTDPCAN	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	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
TD	Total Depth	4065	M

Format: APS_HLDS_HIRS_1 Vertical Scale: 1:48 Graphics File Created: 11-Mar-2005 16:39

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

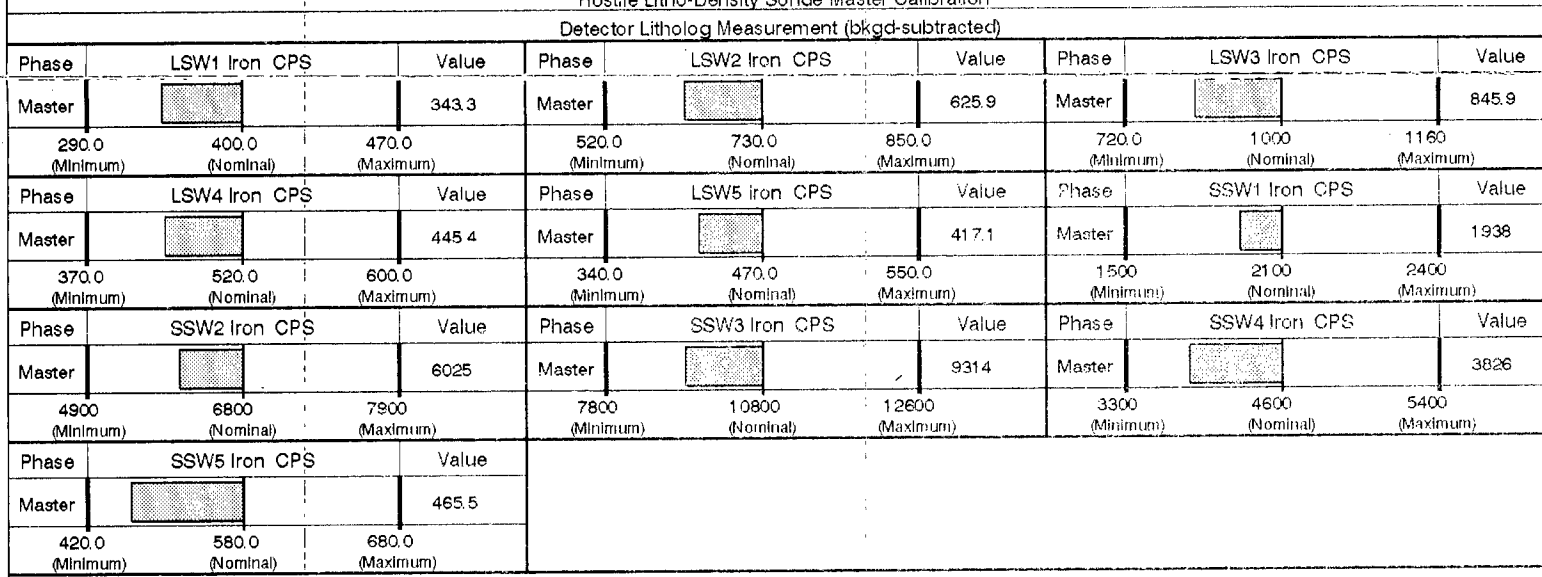
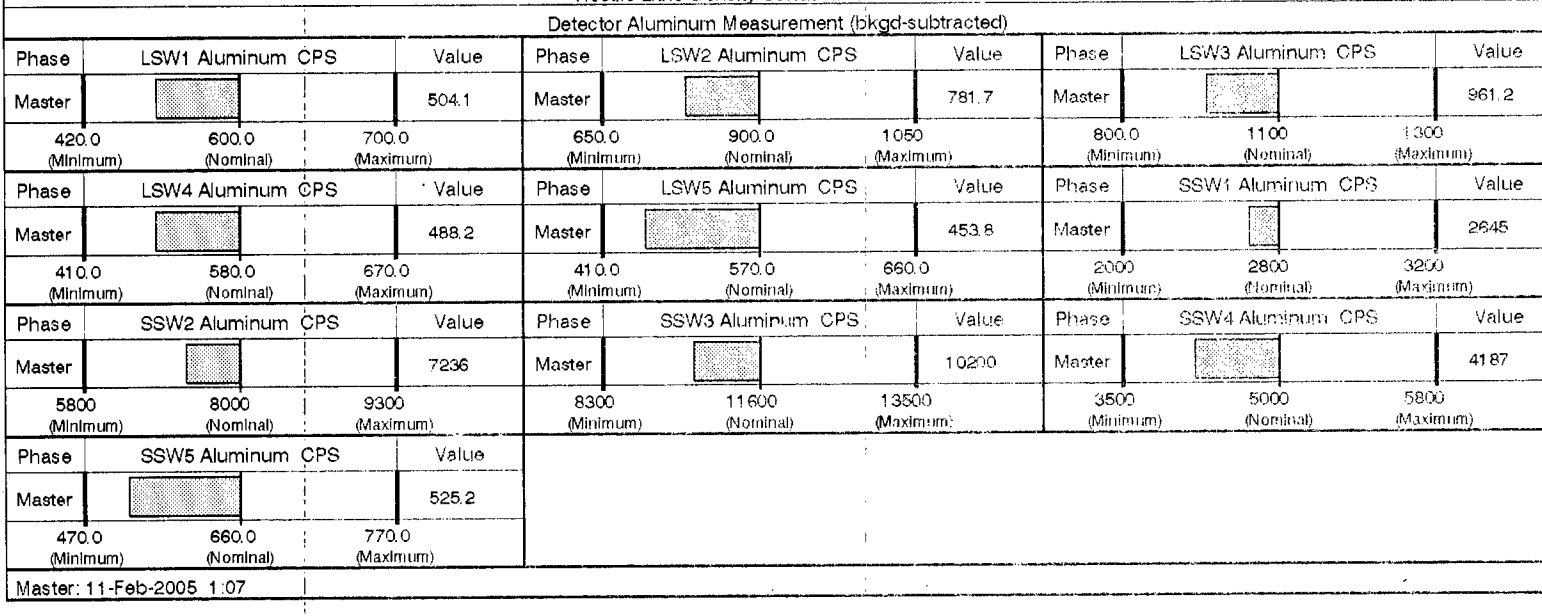
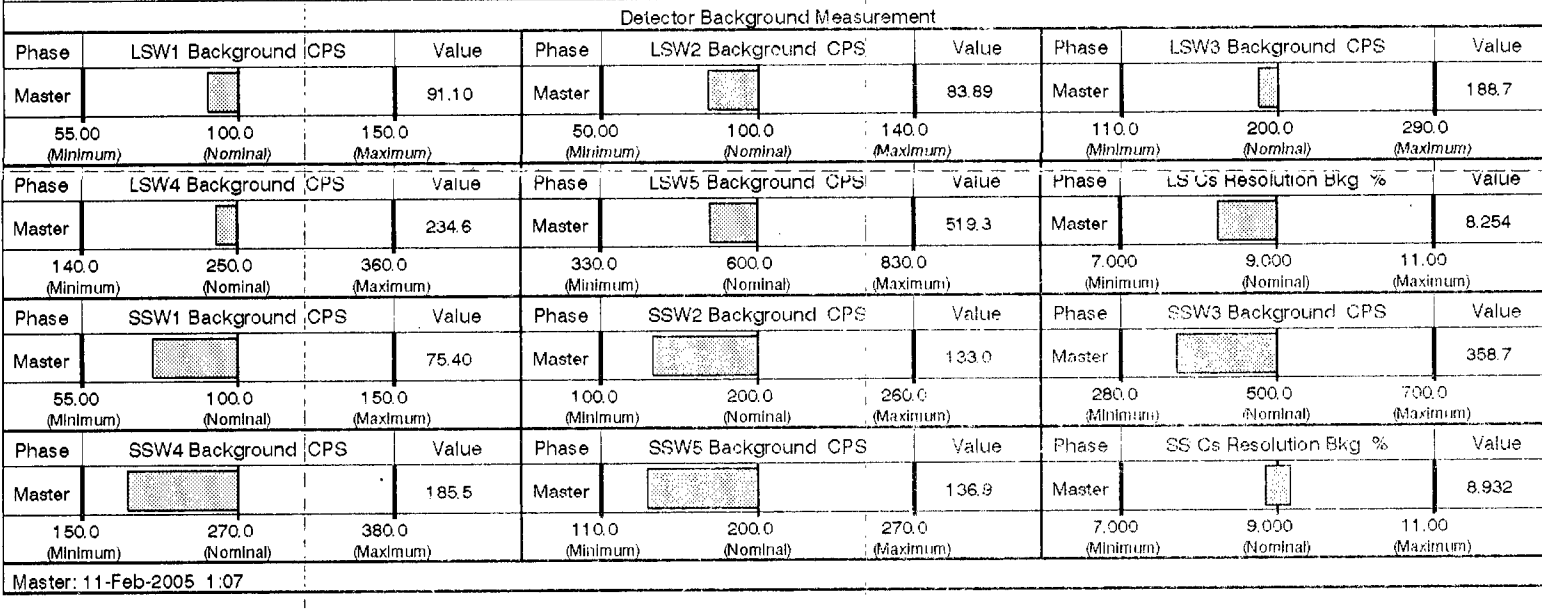
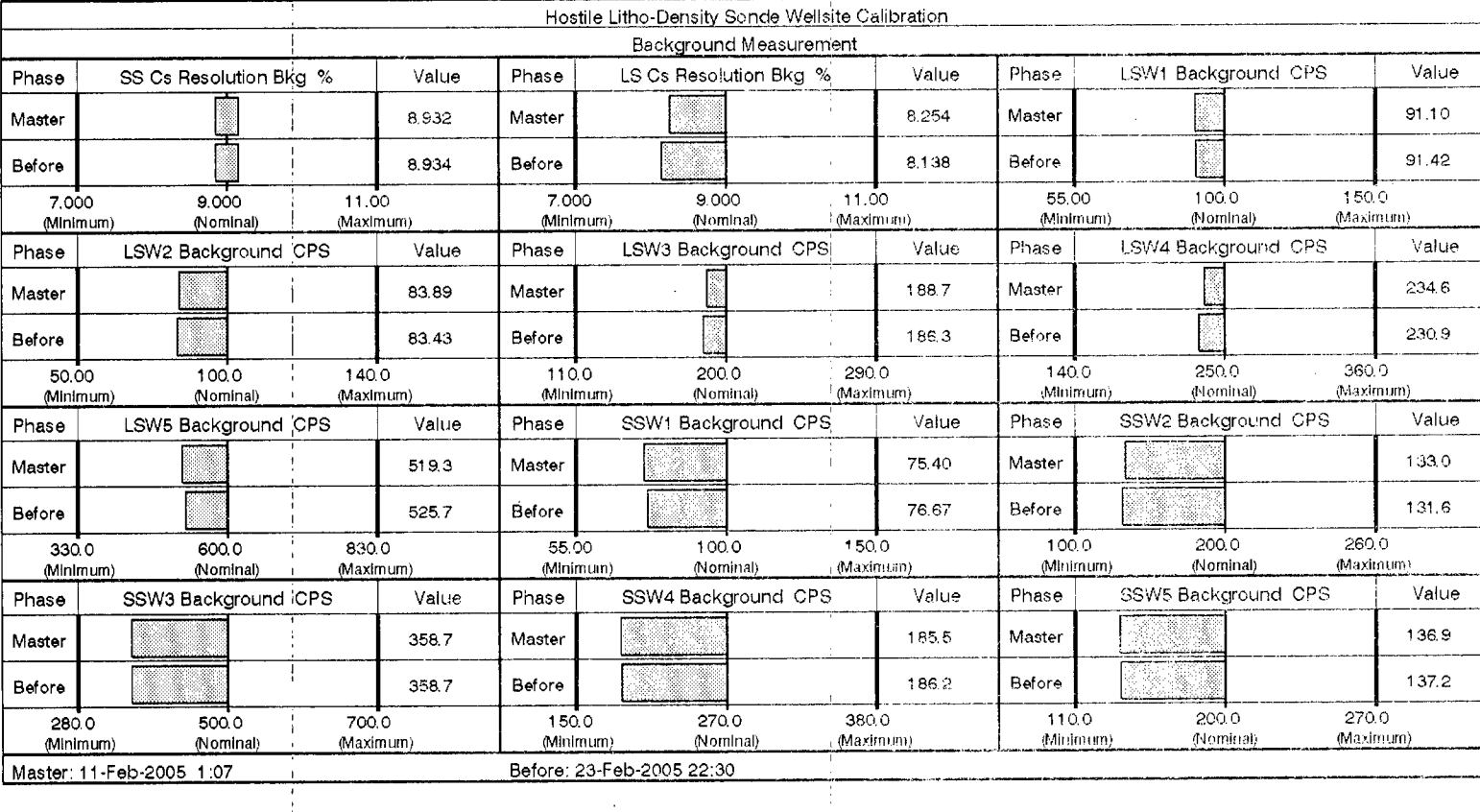
True Vertical Depth Log

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Calibration and Check Summary							
Measurement	Nominal	Master	Before	Alter	Change	Limit	Units
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 11-Feb-2005 1:07	Before: 23-Feb-2005 22:30						
SS Cs Resolution Bkg	9.000	8.932	8.934	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.254	8.138	N/A	N/A	1.800	%
LSW1 Background	100.0	91.10	91.42	N/A	N/A	3.000	CPS
LSW2 Background	100.0	83.89	83.43	N/A	N/A	3.000	CPS
LSW3 Background	200.0	186.7	186.3	N/A	N/A	6.000	CPS
LSW4 Background	250.0	234.6	230.9	N/A	N/A	7.500	CPS
LSW5 Background	600.0	519.3	525.7	N/A	N/A	18.00	CPS
SSW1 Background	100.0	75.40	76.67	N/A	N/A	3.000	CPS
SSW2 Background	200.0	133.0	131.6	N/A	N/A	6.000	CPS
SSW3 Background	500.0	358.7	358.7	N/A	N/A	15.00	CPS
SSW4 Background	270.0	185.5	186.2	N/A	N/A	8.100	CPS
SSW5 Background	200.0	136.9	137.2	N/A	N/A	6.000	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement							
Master: 11-Feb-2005 1:07							
LSW1 Aluminum	600.0	504.1	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	781.7	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	961.2	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	488.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	453.9	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2645	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	7236	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10200	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4187	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	525.2	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement							
Master: 11-Feb-2005 1:07							
LSW1 Iron	400.0	343.3	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	625.9	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	845.9	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	445.4	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	417.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1938	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	6025	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9314	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3826	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	465.5	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration							
Before: 4-Mar-2005 13:57							
HLDS Caliper Small Ring	203.2	N/A	346.1	N/A	N/A	N/A	MM
HLDS Caliper Large Ring	304.8	N/A	462.1	N/A	N/A	N/A	MM
Accelerator-Porosity Tool Wellsite Calibration - Detector Background							
Master: 16-Feb-2005 21:36	Before: 4-Mar-2005 13:52						
Near Det Bkg Cntrate	30.00	30.69	31.94	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	40.84	41.33	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	33.96	34.19	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	34.33	33.89	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	31.43	32.03	N/A	N/A	N/A	CPS
Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios							
Master: 16-Feb-2005 21:36							
Near/Far Calibration Ratio	0.9250	0.9240	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	1.046	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	1.004	N/A	N/A	N/A	N/A	
Accelerator-Porosity Tool Wellsite Calibration - Tank Check							
Master: 16-Feb-2005 21:36							
Array-1 Standoff Porosity	0.1175	0.1119	N/A	N/A	N/A	N/A	V/V
Array-2 Standoff Porosity	0.1175	0.1148	N/A	N/A	N/A	N/A	V/V
Average Slowing Down Time	6.000	5.883	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9747	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	0.9857	N/A	N/A	N/A	N/A	
Sigma Formation	2.750	2.729	N/A	N/A	N/A	N/A	M-1
Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes							
Master: 16-Feb-2005 21:36							
Near Detector Plateau Setting	1650	1743	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2088	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	2018	N/A	N/A	N/A	N/A	V
Powered Positioning Device/Caliper 1 Wellsite Calibration - PPC1 Caliper Calibration							
Before: 1-Mar-2005 13:50							
PPC1 Radius 1 Raw Small Radius	88.90	N/A	109.2	N/A	N/A	12.70	MM
PPC1 Radius 1 Raw Large Radius	203.2	N/A	215.7	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Small Radius	88.90	N/A	91.24	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Large Radius	203.2	N/A	200.9	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Small Radius	88.90	N/A	106.7	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Large Radius	203.2	N/A	212.8	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Small Radius	88.90	N/A	75.85	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Large Radius	203.2	N/A	184.3	N/A	N/A	12.70	MM
Scintillation Gamma-Ray - N Wellsite Calibration - Detector Calibration							
Before: 4-Mar-2005 14:00							
Gamma Ray (Jig - Bkg)	153.8	N/A	153.8	N/A	N/A	13.98	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI
Accelerator-Porosity Tool - Detector Plateau Settings :							
Near Detector Plateau Setting	1743 V						
Far Detector Plateau Setting	2088 V						
Array Detector Plateau Setting	2018 V						

Hostile Litho-Density Sonde / Equipment Identification			
Primary Equipment:			
Hostile Litho Density Sonde		HLDS - D	29
Hostile Litho Density High Voltage		HLDV - Z	29
Gamma Source Radioactive		GSR - Z	2368
Auxiliary Equipment:			
Hostile Litho Density Pad		HLDP - C	30
Hostile Litho Density High Voltage House		HEH - H	28



ACCELERATED POROSITY

HOSTILE LITHOLOGY

DENSITY LOG

Company: **DEVON CANADA CORPORATION**
 Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**
ARRAY INDUCTION IMAGER
GAMMA RAY
 MD

Schlumberger

Territory: YUKON
 Field: KOTANEELEE
 Location: LSD: L-38
 Well: DEVON ET AL KOTANEELEE L-38A/ST3
 Company: DEVON CANADA CORPORATION

LOCATION
 LSD: L-38
 UWI: 3001396010124003
 ELEV: K.B. 810.4 m
 G.L. 803.65 m
 D.F. 810.4 m

Permanent Datum: GROUND LEVEL
 Log Measured From: KELLY BUSHING
 Drilling Measured From: KELLY BUSHING
 ELEV: 803.65 m
 6.8 m above Perm. Datum

API Serial No. 1117
 Latitude: 60 D 07' 32.4" N 124 D 07' 23.6" W
 Longitude:

Logging Date: 6-Mar-2005
 Run Number: THREE
 Depth Driller: 4065 m
 Schlumberger Depth: 4054.5 m
 Bottom Log Interval: 4051.2 m
 Top Log Interval: 3951.5 m
 Casing Driller Size @ Depth: 177.800 mm @ 3963 m
 Casing Schlumberger: 3951.5 m
 Bit Size: 156.000 mm
 Type Fluid in Hole: VESICULAN 1400 (INVERT) / FRESH WATER
 Density: 850 kg/m3
 Viscosity: 37 s
 PH: N/A

MUD
 Fluid Loss: N/A
 Source Of Sample: 1.000 ohm.m @ 16 degC
 RM @ Measured Temperature: @
 RMF @ Measured Temperature: @
 RMC @ Measured Temperature: @
 Source RMF: N/A
 RM @ MRT: N/A
 RMF @ MRT: N/A
 Maximum Recorded Temperature: 144 degC @ 144
 Circulation Stopped: 5-Mar-2005 14:15
 Logger On Bottom: 9-Mar-2005 22:05
 Unit Number: 2016
 Location: GRANDE PRAIRIE
 Recorded By: PIERRE J EASTON
 Witnessed By: PETER WASZYLYK

Run	Run 1	Run 2	Run 3	Run 4
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth				
Casing Schlumberger				
Bit Size				
Type Fluid in Hole				
Density				
Viscosity				
PH				
MUD Fluid Loss				
Source Of Sample				
RM @ Measured Temperature				
RMF @ Measured Temperature				
RMC @ Measured Temperature				
Source RMF				
RM @ MRT				
RMF @ MRT				
Maximum Recorded Temperature				
Circulation Stopped				
Logger On Bottom				
Unit Number				
Location				
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Trip To the Well
 Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
 Reference Log Run Number: TWO
 Reference Log Date: 21-DEC-2004
 Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks

1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2
OS1: AIT OS2: HLDS/APS OS3: DSI OS4: UBI OS5: PPC	OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.	REMARKS: RUN NUMBER 2

FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS.
 FLUID LEVEL THIS RUN: 1845 M.

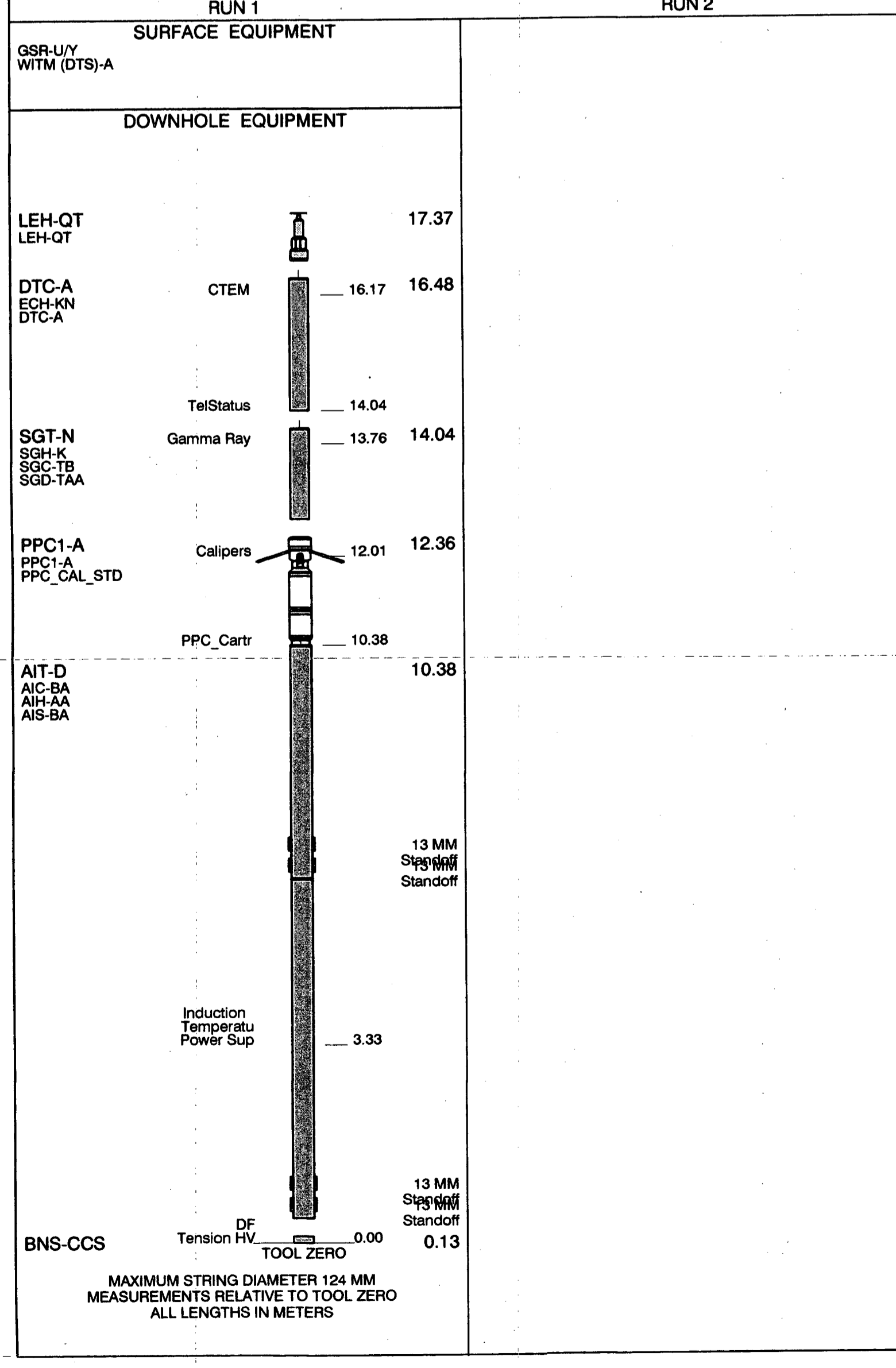
AIT RUN IN COMPUTE MUD RESISTIVITY MODE.
 PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION.
 (NOT POWERED).

SIDE TRACKED WELL BETWEEN 3965 M AND 3970 M.

THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.
 GRANDE PRAIRIE, AB 780-539-5060
 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.

RUN 1			RUN 2		
SERVICE ORDER #:	PROGRAM VERSION:	FLUID LEVEL:	SERVICE ORDER #:	PROGRAM VERSION:	FLUID LEVEL:
10829914	12C0-301	1845 m			
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

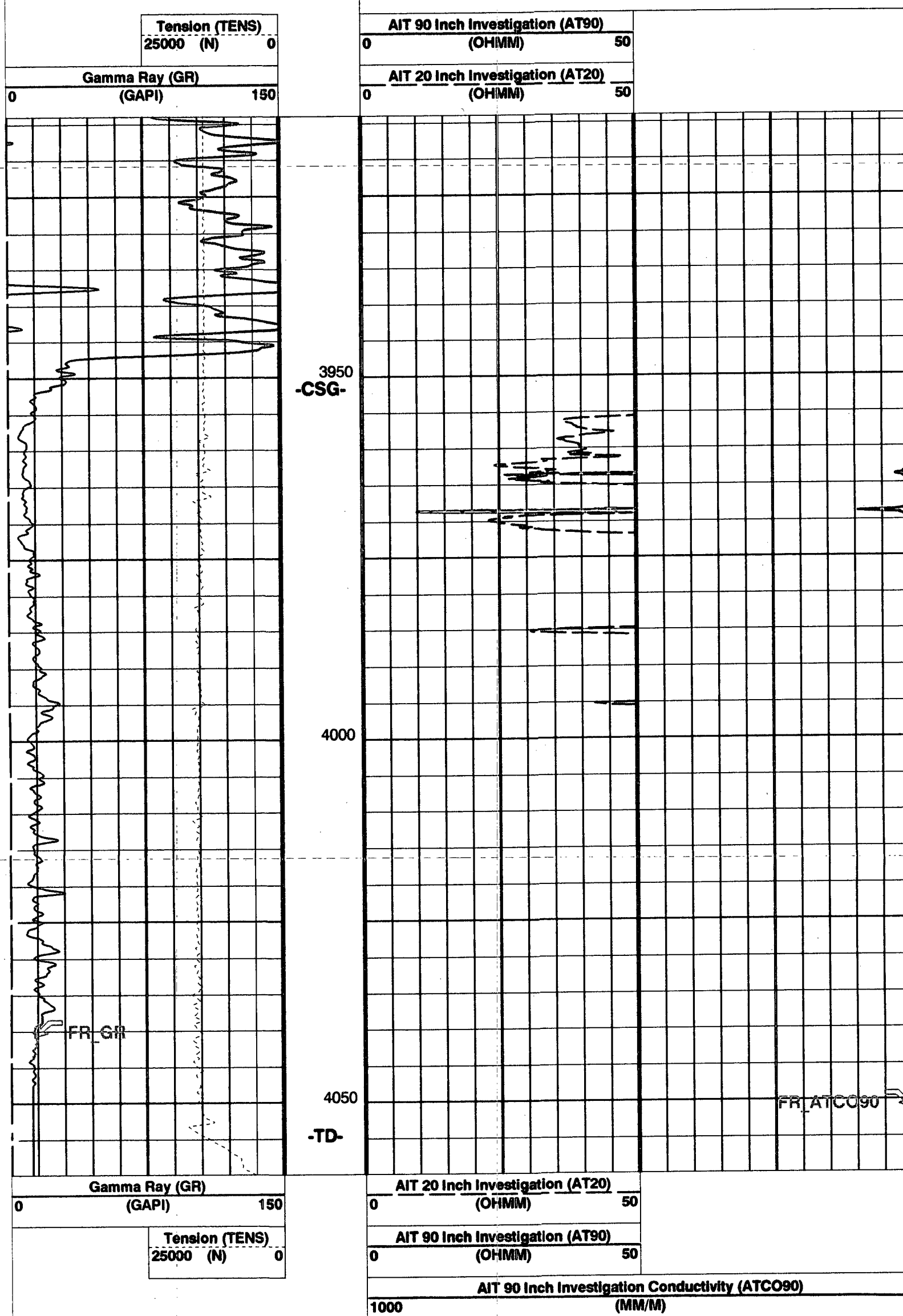


Output DLIS Files					
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S



Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four R Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One R Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parameterization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two R Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0.018227 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
DFS	Drilling Fluid Density	850.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
TD	Total Depth	4054.5 M

Format: COND-AITH-2FT-CAN Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

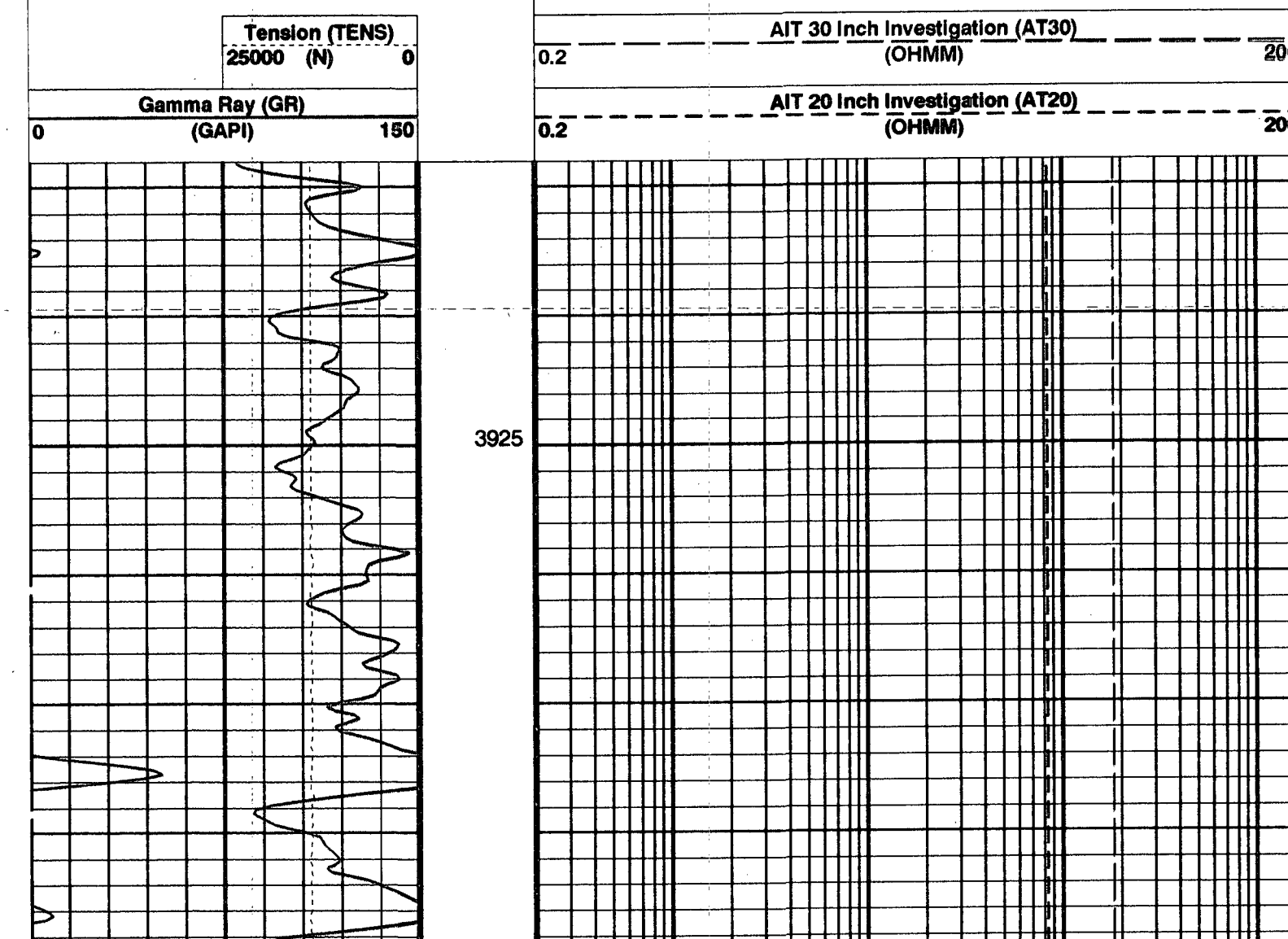
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OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	

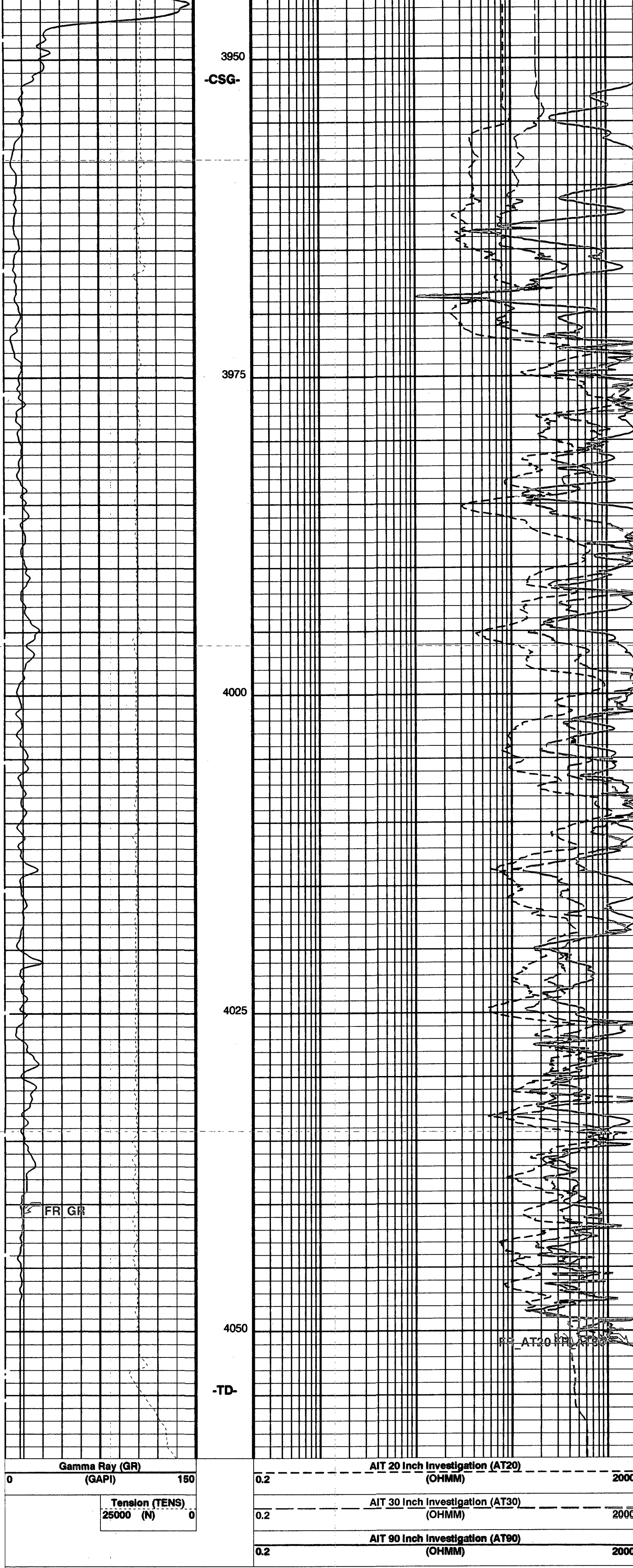
Output DLIS Files					
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OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY
Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered	
AFRSV	Array Induction Response Set Version for Four R Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One R Resolution	40.70.24.21	
ARFV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two R Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Calliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
BS	Bit Size	158.000	MM
DFD	Drilling Fluid Density	850.00	K/M3
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	16.00	DEGC
TD	Total Depth	4054.5	M

Format: AITH-2FT-CAN Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

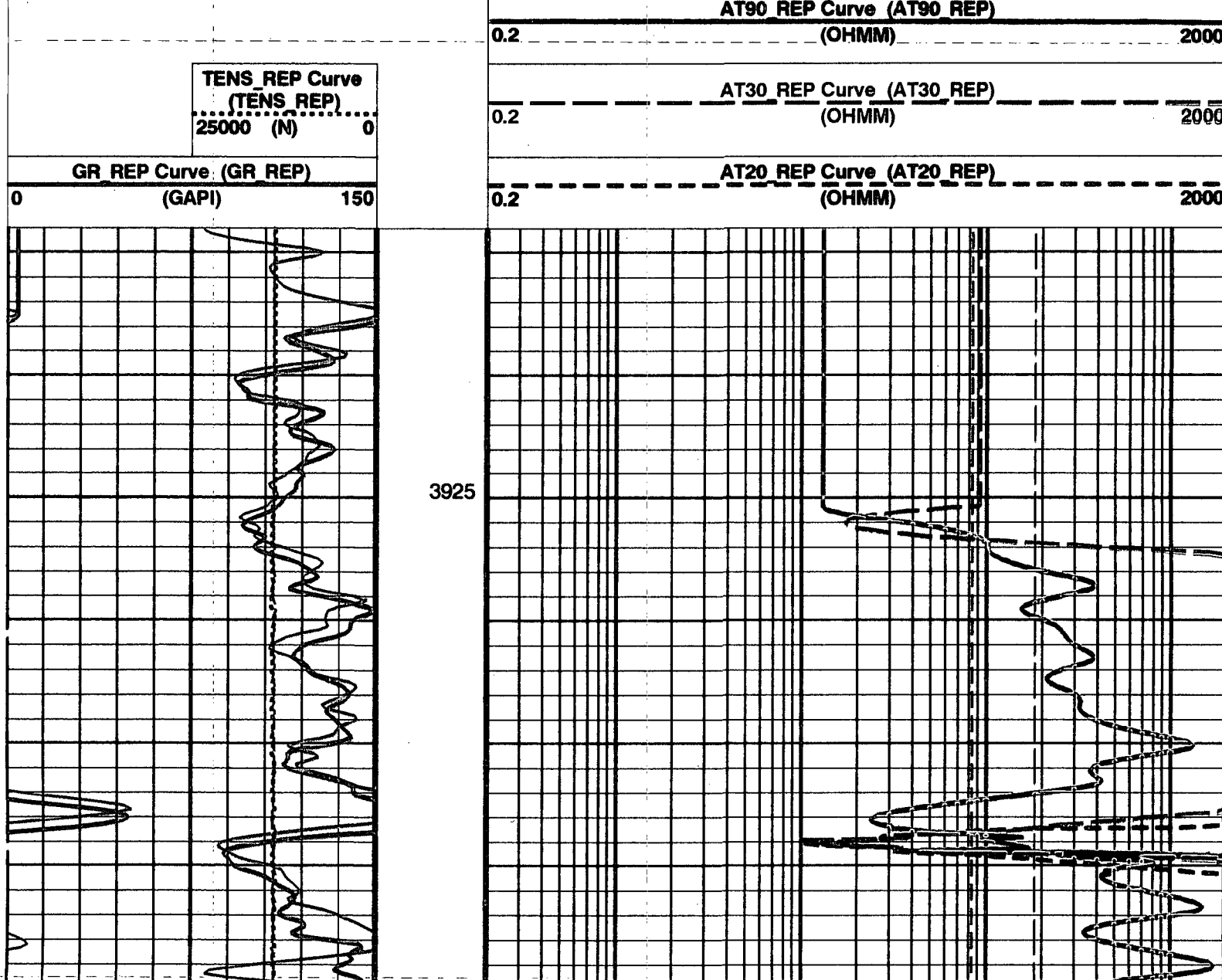
Output DLIS Files					
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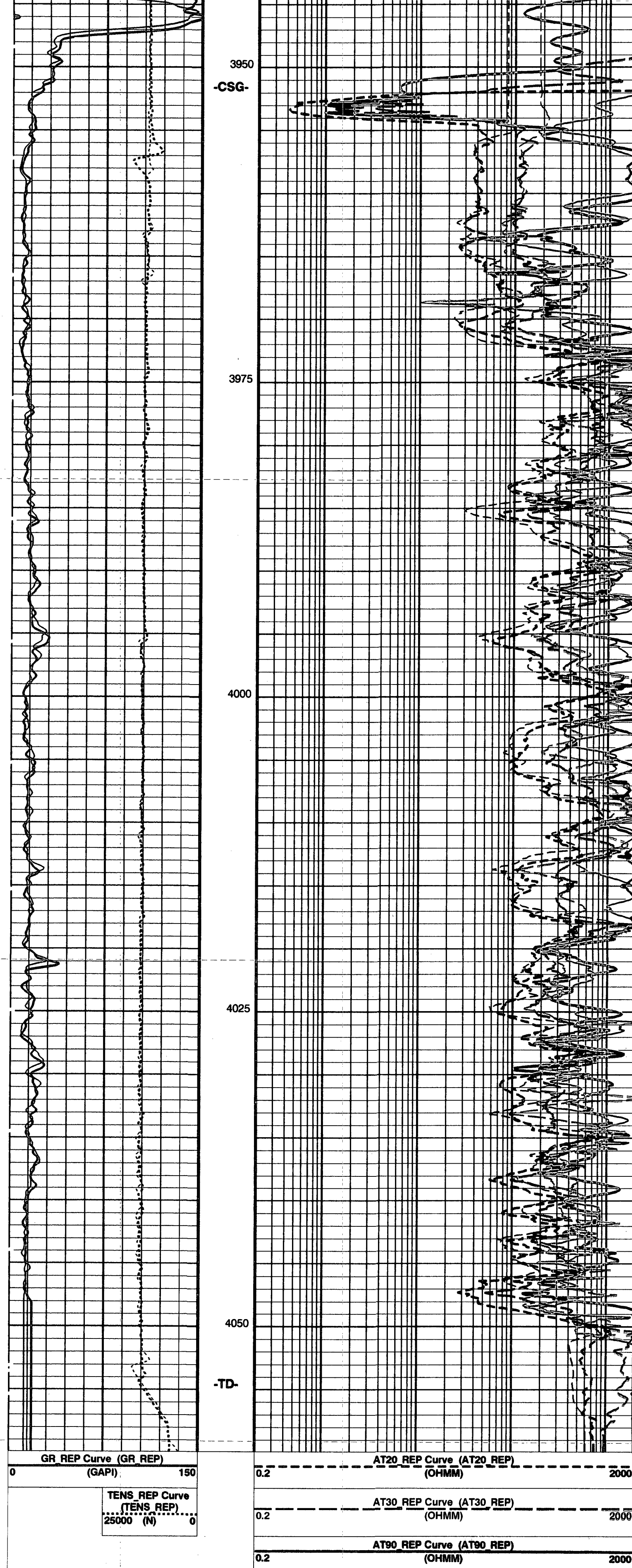
Input DLIS Files						
DEFAULT	AIT_CAL_081PUP	FN:109	PRODUCER	09-Mar-2005 22:23	4061.3 M	3903.1 M

Output DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

OP System Version: 12C0-301			
MCM			
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY
Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
System and Miscellaneous		
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
TD	Total Depth	4054.5 M

Format: AITH-2FT-CAN_REP Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301

MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	AIT_CAL_081PUP	FN:109	PRODUCER	09-Mar-2005 22:23	4061.3 M	3903.1 M
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Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

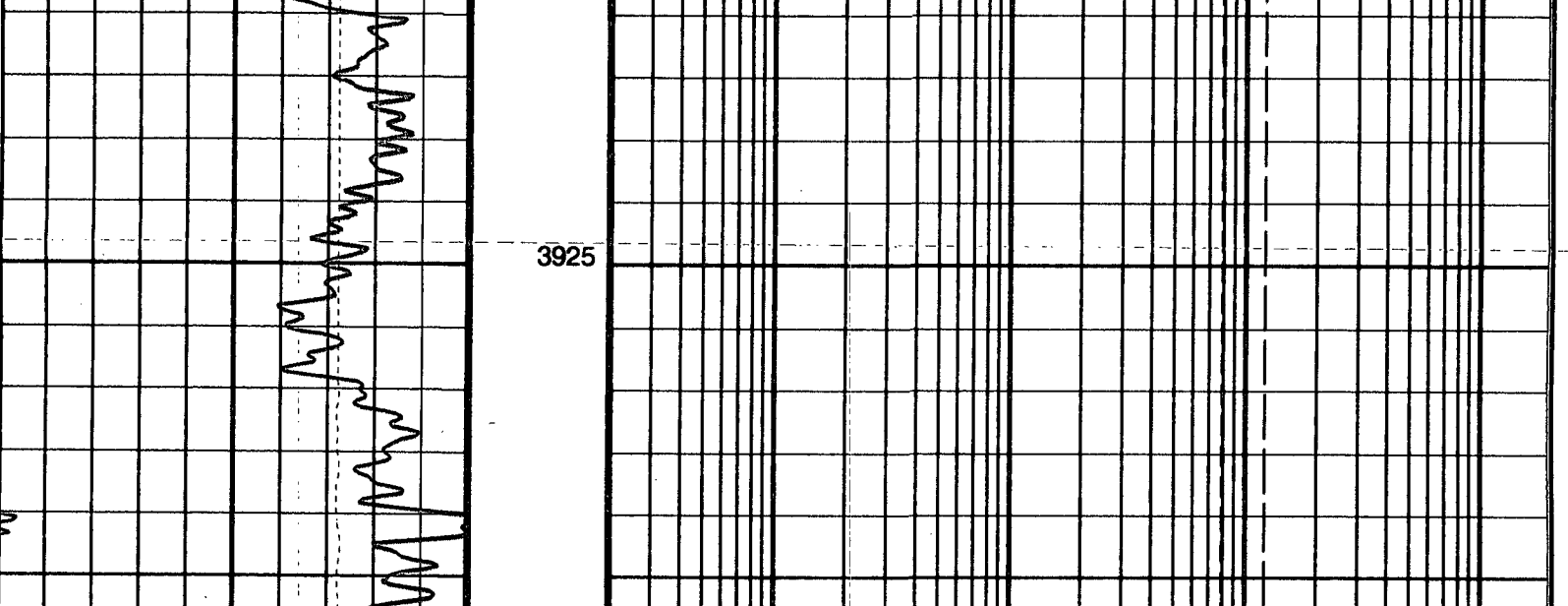
OP System Version: 12C0-301

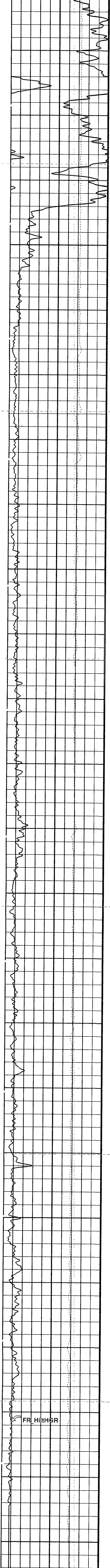
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S





3950

-CSG-

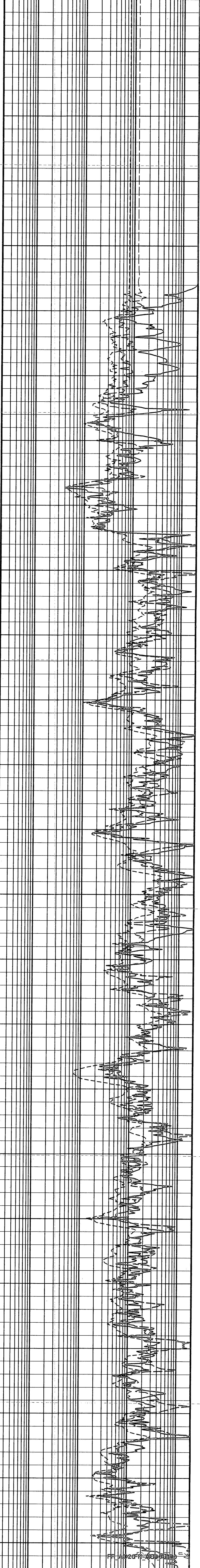
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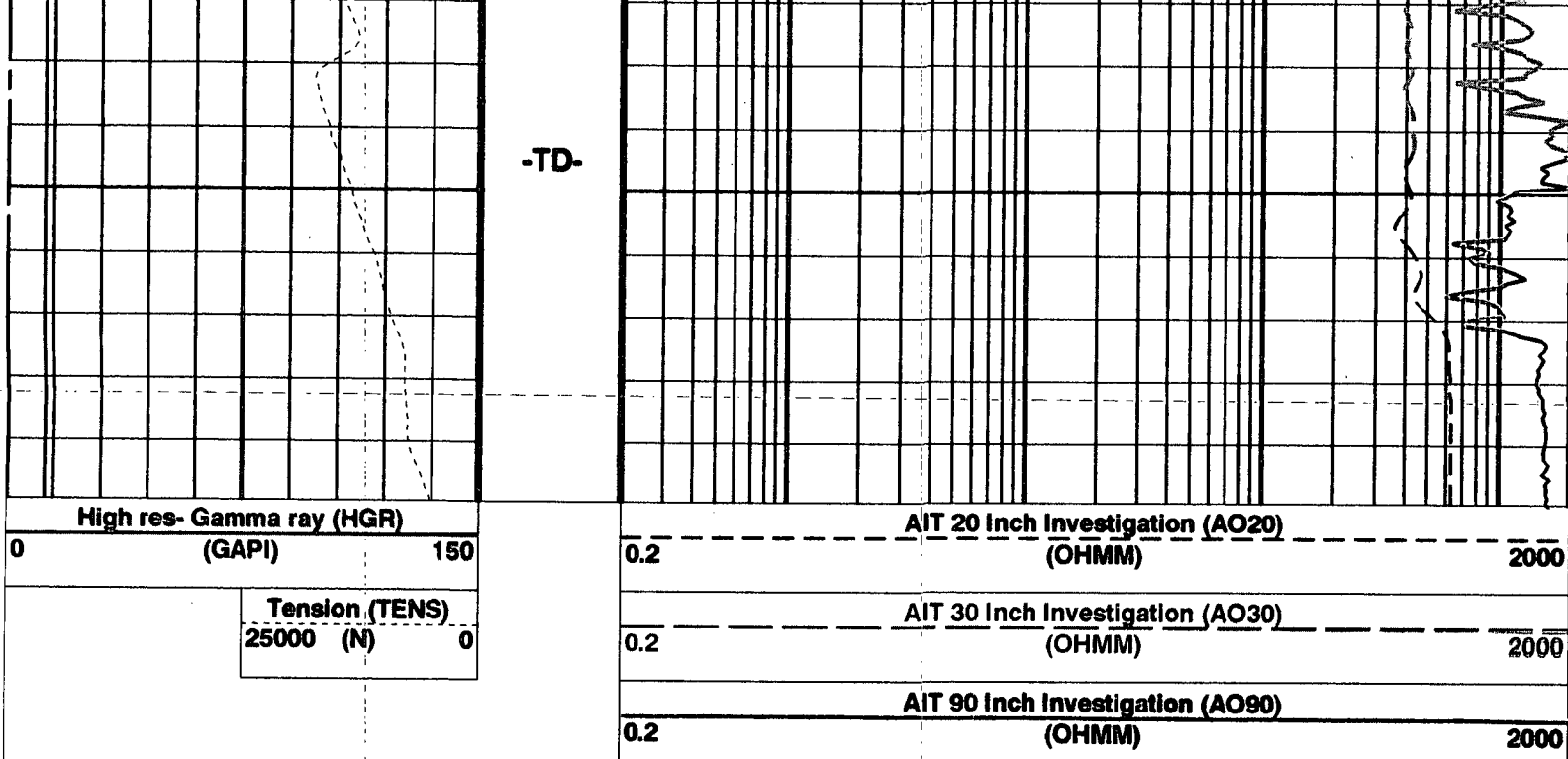
4000

4025

4050

FR_HIRHGR





High res- Gamma ray (HGR) (GAPI)	0	150	AIT 20 Inch Investigation (AO20) (OHMM)	0.2	2000
Tension (TENS) 25000 (N)	0		AIT 30 Inch Investigation (AO30) (OHMM)	0.2	2000
			AIT 90 Inch Investigation (AO90) (OHMM)	0.2	2000

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value	
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
ABLV	Array Induction Borehole Correction Code Version Number	880	
ABLV	Array Induction Basic Logs Mode	6	One_Two_and_Four
ACDE	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
AFRSV	Array Induction Tool Centering Flag (in Borehole)	Centered	
AMRF	Array Induction Response Set Version for Four R Resolution	40.70.24.21	
AORSV	Array Induction Mud Resistivity Factor	1	
ARFV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARPV	Array Induction Radial Profiling Code Version Number	700	
ASTA	Array Induction Radial Parametrization Code Version Number	223	
ATRSV	Array Induction Tool Standoff	12.7	MM
BHT	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GDEV	Generalized Caliper Selection	HD1_PPC1	DEG
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GDEV	Generalized Caliper Selection	HD1_PPC1	DEG
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GDEV	Generalized Caliper Selection	HD1_PPC1	DEG
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4065.00	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
BS	Bit Size	156.000	MM
DFD	Drilling Fluid Density	850.00	K/M3
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	16.00	DEGC
TD	Total Depth	4054.5	M

Format: HIRS-AITH-1FT-CAN Vertical Scale: 1:120 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25

Input DLIS Files

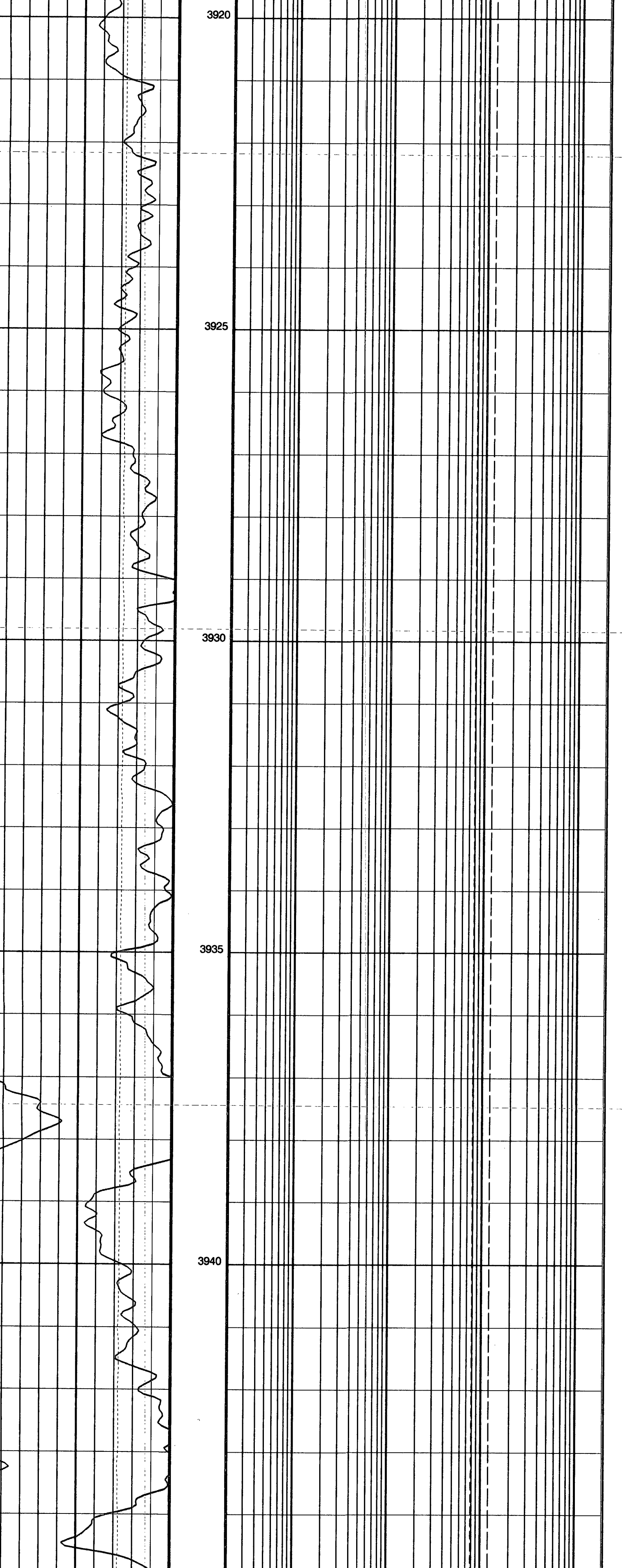
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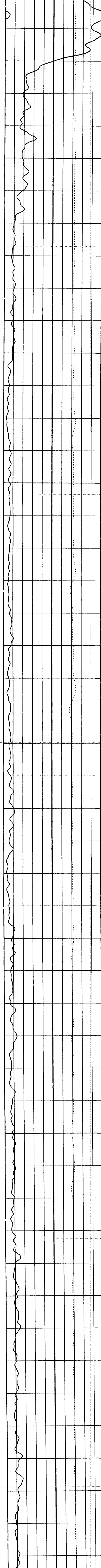
OP System Version: 12C0-301

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

High res- Gamma ray (HGR) (GAPI)	0	150	AIT 90 Inch Investigation (AO90) (OHMM)	0.2	2000
Tension (TENS) 25000 (N)	0		AIT 30 Inch Investigation (AO30) (OHMM)	0.2	2000
			AIT 20 Inch Investigation (AO20) (OHMM)	0.2	2000





3950

-CSG-

3955

3960

3965

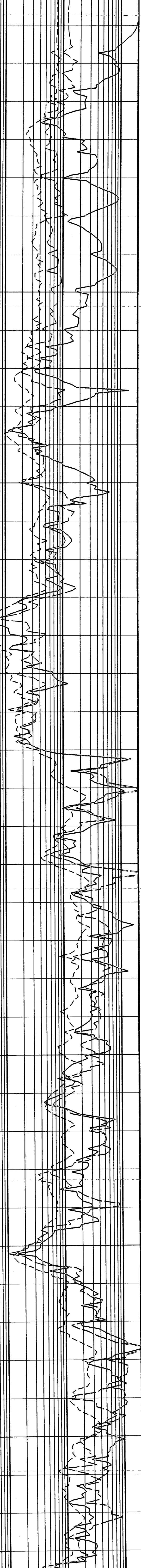
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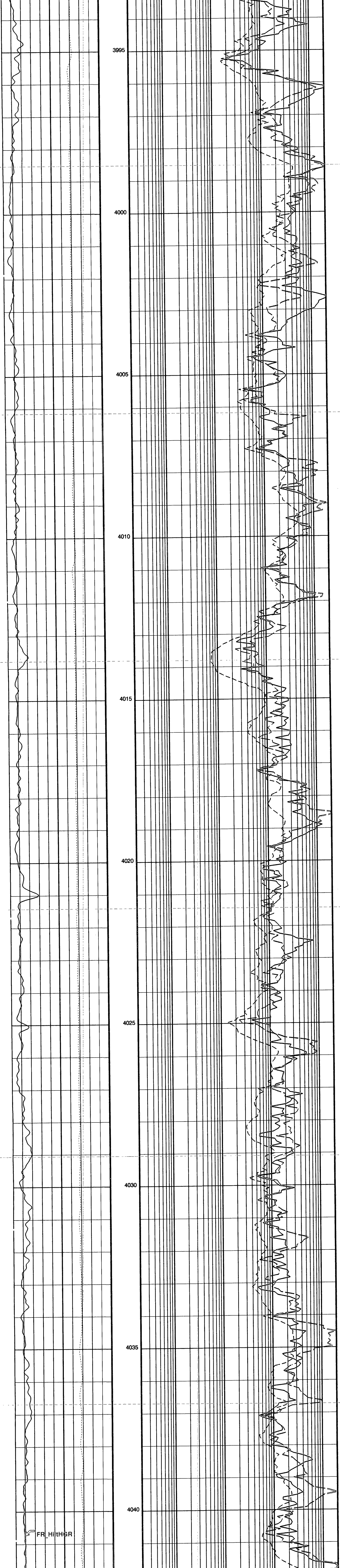
3975

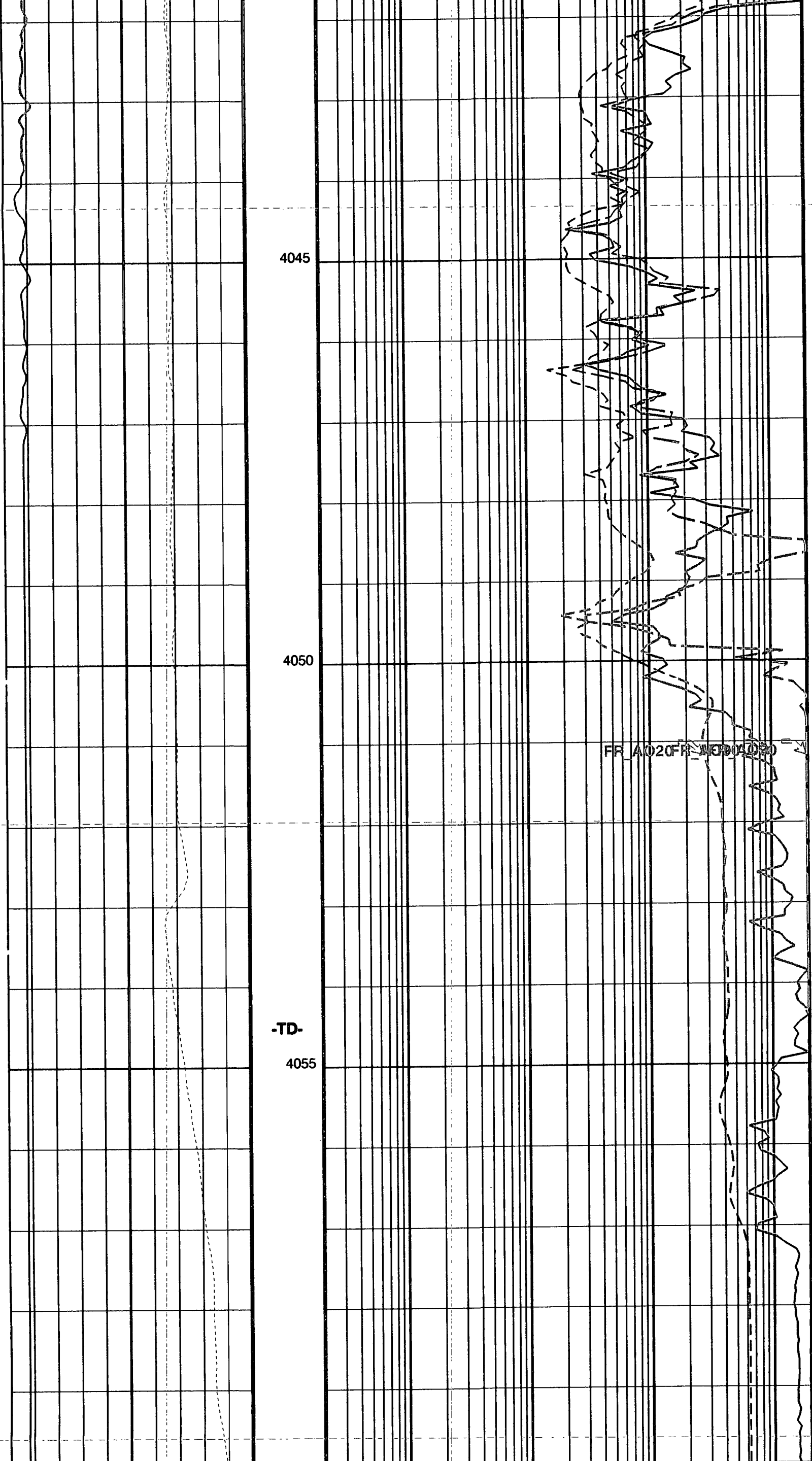
3980

3985

3990







High res- Gamma ray (HGR)	AIT 20 Inch Investigation (AO20)	0.2	2000
(GAPI)	(OHMM)		
Tension (TENS)	AIT 30 Inch Investigation (AO30)	0.2	2000
25000 (N)	(OHMM)		
	AIT 90 Inch Investigation (AO90)	0.2	2000
	(OHMM)		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	680
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	4065.00
TDL	Total Depth - Logger	4054.50
System and Miscellaneous		
BS	Bit Size	156.000
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5

Format: HIRS_AITH-1FT-CAN_1 Vertical Scale: 1:48 Graphics File Created: 10-Mar-2005 01:01

OP System Version: 12C0-301

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEEL L-38A/ST3

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

OP System Version: 12C0-301

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

AIT Boosted Borehole Corrected Average Conductivities

Average performed from depth 13220.00 ft/ 4029.46 m with 1781 samples
 A1: -954.397 A2: -38.372 A3: 58.725 A4: 18.450
 A5: -18.624 A6: -0.057 A7: 68.455 A8: 30.964

Casing shoe depth estimated from AIT Induction measurements: 12965.75 +/- .5 ft

PIP SUMMARY

Time Mark Every 60 S

	Tension (TENS)
	30000 (N) 5000
AIT QC Fully Calibrated A8 Signal (AQABN[7])	2 (MM/M) 20000
AIT QC Fully Calibrated A7 Signal (AQABN[6])	2 (MM/M) 20000
AIT QC Fully Calibrated A6 Signal (AQABN[5])	2 (MM/M) 20000
AIT QC Fully Calibrated A5 Signal (AQABN[4])	2 (MM/M) 20000
AIT QC Fully Calibrated A4 Signal (AQABN[3])	2 (MM/M) 20000
AIT QC Fully Calibrated A3 Signal (AQABN[2])	2 (MM/M) 20000
AIT QC Fully Calibrated A2 Signal (AQABN[1])	2 (MM/M) 20000
AIT QC Fully Calibrated A1 Signal (AQABN[0])	2 (MM/M) 20000

AIT Bhole/Form Signal Ratio (ABFR)	0 (---) 25
Calliper (AIBD)	125 (MM) 375

Magnetic Mud Flag (tenth small division): White=No Magnetic Mud, Yellow=Magnetic Mud Detected and Magnetic Mud Processing, Red=Magnetic Mud Detected and Non-Magnetic Processing (U-AIT_AEMF)

AIT ECLP Flags: White=1 FT, Yellow=2 FT, Green=4 FT Black=OR (Chart Flag: eleventh small division; Hole Flag: twelfth small division; Resolution Flag: thirteenth small division) (U-AIT_AEFL)

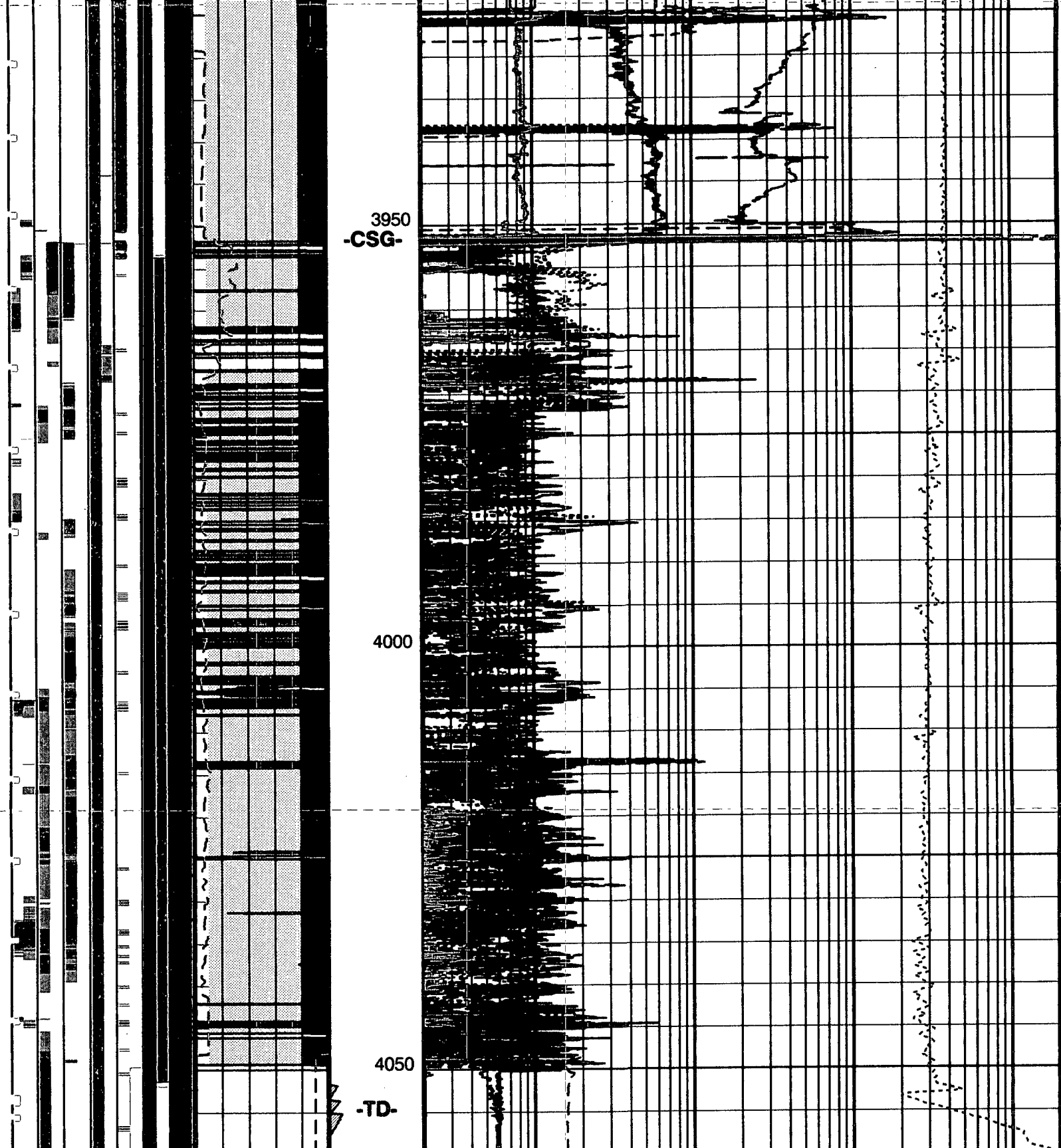
AIT Array Ratio Monitor: Green=Normal (Array One to Array Eight: first to eighth small divisions) (AQRI)

Tool Electronics Monitor (ninth small division, from ADES Channel): White=Normal, Blue=Warning, Red=Failure (AQTI)

Tool/Tot. Drag From D3T to STIA

Cable Drag From STIA to STIT

Stuck Stretch (STIT)



Tool Electronics Monitor (ninth small division, from ADES Channel): White=Normal, Blue=Warning, Red=Failure (AQTI) (---)	Stuck Stretch (STIT) 2	AIT QC Fully Calibrated A1 Signal (AQABN[0]) (MM/M)	20000
AIT Array Ratio Monitor: Green=Normal (Array One to Array Eight: first to eighth small divisions) (AQRI) (---)	Cable Drag From STIA to STIA 2	AIT QC Fully Calibrated A2 Signal (AQABN[1]) (MM/M)	20000
AIT ECLP Flag: White=1 FT, Yellow=2 FT, Green=4 FT Black=OR (Chart Flag: eleventh small division; Hole Flag: twelfth small division; Resolution Flag: thirteenth small division) (U-AIT_AEFL) (---)	Tool/Tot. Drag From D3T to STIA 2	AIT QC Fully Calibrated A3 Signal (AQABN[2]) (MM/M)	20000
Magnetic Mud Flag (tenth small division): White=No Magnetic Mud, Yellow=Magnetic Mud Detected and Magnetic Mud Processing, Red=Magnetic Mud Detected and Non-Magnetic Processing (U-AIT_AEMF) (---)		AIT QC Fully Calibrated A4 Signal (AQABN[3]) (MM/M)	20000
Caliper (AIBD) 125 (MM) 375		AIT QC Fully Calibrated A5 Signal (AQABN[4]) (MM/M)	20000
AIT Bhole/Form Signal Ratio (ABFR) 0 (---) 25		AIT QC Fully Calibrated A6 Signal (AQABN[5]) (MM/M)	20000
		AIT QC Fully Calibrated A7 Signal (AQABN[6]) (MM/M)	20000
		AIT QC Fully Calibrated A8 Signal (AQABN[7]) (MM/M)	20000
		Tension (TENS) (N)	30000 5000

PIP SUMMARY

Time Mark Every 60 S

AIT Answer Product Processing Summary. Data taken with Sonde # 97 (ASNO)

**** Borehole Correction ****

Effective Mud Resistivity computed. Borehole diameter taken as input (see GCSE parameter)

Tool is run in CENTERED mode. Bit Size is 156.00 MM.

**** Input Selections to AIT Answer Product Processing ****

Caliper (GCSE): HD1_PPC1 Mud Resistivity (GRSE): GEN_9 Temperature (GTSE): LINEAR_ESTIMATE Porosity (FPHI): DPHI

**** Other Parameters used by AIT Answer Product Processing ****

Mud Sample Resistivity (RMS) 1.000 OHMM Mud Sample Temperature (MST) 16.000 DEGC

Surface Hole Temperature (SHT) 20.000 DEGC Bottom Temperature (BHT) 144.000 DEGC

Total Depth (TD) 4054.500 M

**** AIT Answer Product Processing Control Parameters ****

(AAPL): 2_BholeCorr_BasicLogs

(ABHM): 0_ComputeMudResistivity (ABLM): 6_One_Two_and_Four

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	850
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEGC
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEGC
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEGC
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.000 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	16.000 DEGC
TD	Total Depth	4054.5 M

Format: AIT_QualityControlImage Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 22:25

OP System Version: 12C0-301

MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Output DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25
OPTICAL	AIT_CAL_082LUP	FN:112	PRODUCER	09-Mar-2005 22:25

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool - D Well-site Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Thru Cal Magnitude - 0	0	0.6297	0.6320	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.256	1.261	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	1.530	1.530	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.3952	0.3962	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	2.247	2.248	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	0.5835	0.5848	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.355	1.353	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	0.4600	0.4602	N/A	N/A	N/A	V
Thru Cal Magnitude - 8	0	2.033	2.029	N/A	N/A	N/A	V
Thru Cal Magnitude - 9	0	0.6729	0.6733	N/A	N/A	N/A	V
Thru Cal Magnitude - 10	0	2.344	2.340	N/A	N/A	N/A	V
Thru Cal Magnitude - 11	0	0.6810	0.6813	N/A	N/A	N/A	V
Thru Cal Magnitude - 12	0	2.056	2.053	N/A	N/A	N/A	V
Thru Cal Magnitude - 13	0	0.6010	0.6011	N/A	N/A	N/A	V
Phase - 0	0	-83.21	-83.59	N/A	N/A	N/A	DEG
Phase - 1	0	-84.39	-84.78	N/A	N/A	N/A	DEG
Phase - 2	0	70.48	70.22	N/A	N/A	N/A	DEG
Phase - 3	0	-130.0	-130.2	N/A	N/A	N/A	DEG
Phase - 4	0	70.18	69.92	N/A	N/A	N/A	DEG
Phase - 5	0	-130.6	-130.8	N/A	N/A	N/A	DEG
Phase - 6	0	-18.88	-18.78	N/A	N/A	N/A	DEG
Phase - 7	0	73.51	73.14	N/A	N/A	N/A	DEG
Phase - 8	0	-19.05	-18.95	N/A	N/A	N/A	DEG
Phase - 9	0	73.22	72.85	N/A	N/A	N/A	DEG
Phase - 10	0	-4.713	-4.547	N/A	N/A	N/A	DEG
Phase - 11	0	77.10	76.83	N/A	N/A	N/A	DEG
Phase - 12	0	-5.367	-5.219	N/A	N/A	N/A	DEG
Phase - 13	0	75.95	75.67	N/A	N/A	N/A	DEG
Array Induction Tool - D Well-site Calibration - Electronics Calibration Check - Rel Gain Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
ADC Rel Gain Magnitude - 0	25.00	25.05	25.06	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 1	25.00	25.10	25.09	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 2	25.00	25.11	25.09	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 3	25.00	25.04	25.04	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 4	25.00	25.05	25.04	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 5	25.00	25.07	25.07	N/A	N/A	N/A	N/A
ADC Rel Gain Magnitude - 6	25.00	25.08	25.07	N/A	N/A	N/A	N/A
Phase - 0	0	0.7018	0.7104	N/A	N/A	N/A	DEG
Phase - 1	0	0.2004	0.2120	N/A	N/A	N/A	DEG
Phase - 2	0	0.3910	0.4059	N/A	N/A	N/A	DEG
Phase - 3	0	0.09962	0.09066	N/A	N/A	N/A	DEG
Phase - 4	0	0.2201	0.2220	N/A	N/A	N/A	DEG
Phase - 5	0	0.1113	0.1111	N/A	N/A	N/A	DEG
Phase - 6	0	0.2055	0.2014	N/A	N/A	N/A	DEG
Array Induction Tool - D Well-site Calibration - Electronics Calibration Check - Auxiliary							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Array Induction SPA/Plus	3950	3963	3963	N/A	N/A	N/A	MV
Array Induction SPA/Zero	-50.00	-54.60	-54.75	N/A	N/A	N/A	MV
Array Induction Temperature PI	4.500	4.508	4.509	N/A	N/A	N/A	V
Array Induction Temperature Ze	-0.05000	-0.05518	-0.05542	N/A	N/A	N/A	V
Array Induction Tool - D Well-site Calibration - Test Loop Gain Correction							
Master: 8-Jan-2005 18:16							
Test Loop Gain Magnitude - 0	0	1.000	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 1	0	1.007	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 2	0	1.016	N/A	N/A	N/A	N/A	N/A
Test Loop Gain Magnitude - 3	0	1.013	N/A	N/A	N/A	N/A	N/A

9	9.981	2.000 (Minimum)	11.00 (Nominal)	18.00 (Maximum)	-18.99	32.00 (Minimum)	0 (Nominal)	32.00 (Maximum)
10	7.778	2.000 (Minimum)	8.000 (Nominal)	13.00 (Maximum)	8.772	-38.00 (Minimum)	0 (Nominal)	38.00 (Maximum)
11	6.594	1.000 (Minimum)	7.000 (Nominal)	12.00 (Maximum)	-7.362	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
12	-1.347	-6.000 (Minimum)	-2.000 (Nominal)	4.000 (Maximum)	-3.819	-32.00 (Minimum)	0 (Nominal)	32.00 (Maximum)
13	0.6529	-5.000 (Minimum)	1.000 (Nominal)	6.000 (Maximum)	-18.52	-38.00 (Minimum)	0 (Nominal)	38.00 (Maximum)

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration						
Electronics Calibration Check - Thru Cal Mag. & Phase						
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG
0	Master	0.6287		0.5920	-83.21	-88.00
1	Master	1.256		1.185	-84.39	-89.00
2	Master	1.530		1.399	70.48	72.00
3	Master	0.3952		0.3960	-130.0	-138.0
4	Master	2.247		2.057	70.18	71.00
5	Master	0.5835		0.5820	-130.6	-139.0
6	Master	1.355		1.423	-18.88	-3.000
7	Master	0.4600		0.4000	73.51	68.00
8	Master	2.033		2.111	-19.05	-3.000
9	Master	0.6729		0.5930	73.22	68.00
10	Master	2.344		2.111	-4.713	0
11	Master	0.6810		0.5930	77.10	75.00
12	Master	2.056		1.853	-5.367	-1.000
13	Master	0.6010		0.5200	75.95	74.00

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration						
Electronics Calibration Check - Rel Gain Mag. & Phase						
Idx	Phase	Value	ADC Rel Gain Magnitude	Value	Phase DEG	Nominal
0	Master	25.05		0.7018		
1	Master	25.10		0.2004		
2	Master	25.11		0.3910		
3	Master	25.04		0.09962		
4	Master	25.05		0.2201		
5	Master	25.07		0.1113		
6	Master	25.08		0.2055		

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration						
Electronics Calibration Check - Auxiliary						
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value	
Master		3963	Master		-54.60	
3750 (Minimum)	3950 (Nominal)	4150 (Maximum)	-100.0 (Minimum)	-50.00 (Nominal)	0 (Maximum)	
Phase	Array Induction Temperature Plus V	Value	Phase	Array Induction Temperature Zero V	Value	
Master		4.508	Master		-0.05518	
4.250 (Minimum)	4.500 (Nominal)	4.750 (Maximum)	-0.1000 (Minimum)	-0.05000 (Nominal)	0 (Maximum)	

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Magnitude	Value	Phase DEG		
0	1.000		0.4952			
1	1.007		0.3450			
2	1.016		0.07556			
3	1.013		0.2596			
4	1.022		-0.03066			
5	1.021		0.2088			
6	1.021		-0.4215			
7	1.020		-1.073			
8	1.014		-0.04480			
9	1.014		0.1851			
10	1.013		0.1448			
11	1.013		0.3883			
12	1.016		-0.01529			
13	1.018		0.09701			

Master: 8-Jan-2005 18:16

Array Induction Tool - D Master Calibration						
Sonde Error Correction						
Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M		
0	2.311		93.91			
1	33.72		-0.6939			
2	50.42		6.971			
3	34.20		-73.75			
4	48.96		98.87			
5	43.19		-103.3			
6	26.83		6.624			
7	14.36		-5.417			
8	6.973		8.789			
9	9.981		-18.99			
10	7.778		8.772			
11	6.594		-7.362			
12	-1.347		-3.819			
13	0.6529		-18.52			

Master: 8-Jan-2005 18:16

Powered Positioning Device/Caliper 1 / Equipment Identification

Primary Equipment: PPC Powered Positioning Device/Caliper
 PPC1 Caliper Standard
 Auxiliary Equipment:

PPC1 - A
 PPC -

Powered Positioning Device/Caliper 1 Wellsite Calibration						
PPC1 Caliper Calibration						
Phase	PPC1 Radius 1 Raw Small Radius MM	Value	Phase	PPC1 Radius 1 Raw Large Radius MM	Value	
Before		109.2	Before		215.7	
30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)	154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
Before		91.24	Before		200.9	
30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)	154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
Before		106.7	Before		212.8	
30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)	154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
Before		75.65	Before		184.3	
30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)	154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	

Before: 1-Mar-2005 13:50

Scintillation Gamma-Ray - N / Equipment Identification

Primary Equipment: Scintillation Gamma Cartridge
 Scintillation Gamma Detector
 Auxiliary Equipment: Scintillation Gamma Housing
 Gamma Source Radioactive

SGC - TB
 SGD - TAA
 SGH - K
 GSR - U/Y

Scintillation Gamma-Ray - N Wellsite Calibration								
Detector Calibration								
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		44.05	Before		153.8	Before		165.0
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)	139.8 (Minimum)	153.8 (Nominal)	167.8 (Maximum)	150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)

Before: 4-Mar-2005 14:00

Company:	DEVON CANADA CORPORATION	Schlumberger
Well:	DEVON ET AL KOTANEELEE L-38A/ST3	
Field:	KOTANEELEE	
Territory:	YUKON	**MD**
ARRAY INDUCTION IMAGER GAMMA RAY		

Shear Wave Anisotropy Advisor

MD

*A Mark of Schlumberger

Using the following logs:

DSI - GPIT

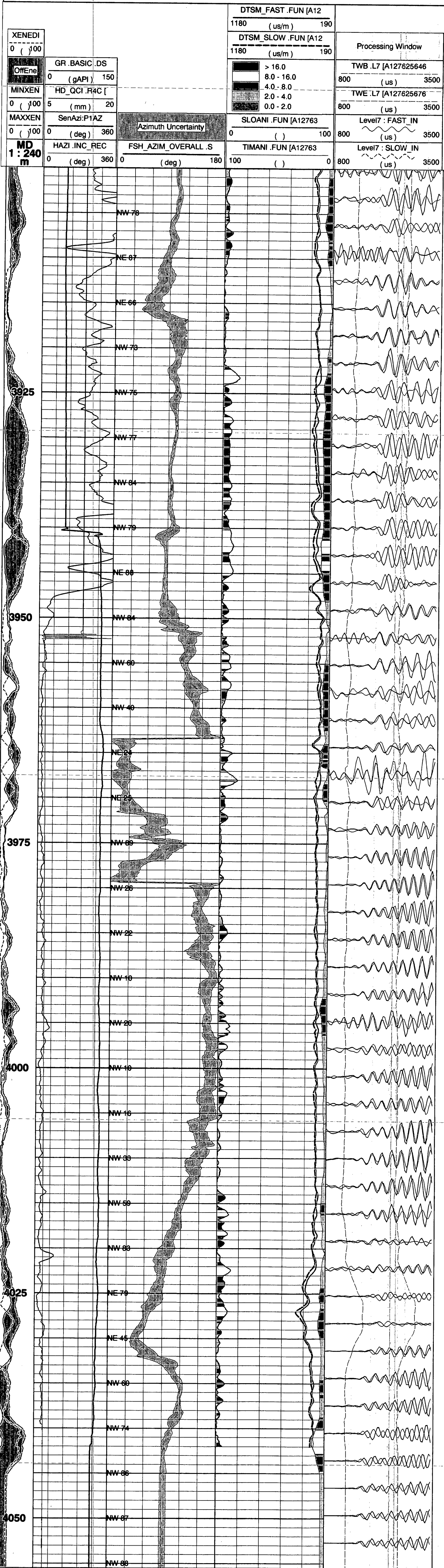
COMPANY: DEVON CANADA CORPORATION
 WELL: DEVON ET AL KOTANEELLEE L-38A/ST3
 FIELD: KOTANEELLEE
 Territory: YUKON
 COUNTRY: CANADA
 Date Logged: 2005/03/06 Date Processed: 15-MAR-2005
 Well Location: LSD: L-38
 UWID: 3001.386010124003
 Elevations: KB: 810.4m DF: 810.4m GL: 803.65m
 API Number: 1117 Job Number: 10829914

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording:	Location: GRANDE PRAIRIE	Software Version: 12C0-301	Engineer: I.PIRIE, J. EASTON
Office Recording:	ICS Center:	Baseline:	Log Analyst:
Mud and Borehole Measurements:			
Rm @ Measured Temperature:	@	BHT: 144degC	Bitsize: 0mm
Rmf @ Measured Temperature:	@	Type Fluid in Hole:	VERSACLEAN 1400 (INVERT) / F
Rmc @ Measured Temperature:	@	Mud Density: 850kg/m3	

Remarks:



XENEDI	GR.BASIC_DS
0 () 100	0 (gAPI) 150
OffEne	HD_QCI.R4C [
0 () 100	5 (mm) 20
MAXXEN	SenAzi:P1AZ
0 () 100	0 (deg) 360
MD	HAZI.INC REC
1 : 240	0 (deg) 360
m	

Azimuth Uncertainty	FSH_AZIM_OVERALL.S
0 () 180	0 (deg) 180

DTSM_FAST.FUN [A12	1180 (us/m) 190
DTSM_SLOW.FUN [A12	1180 (us/m) 190
SLOANI.FUN [A12763	0 () 100
TIMANI.FUN [A12763	100 () 0

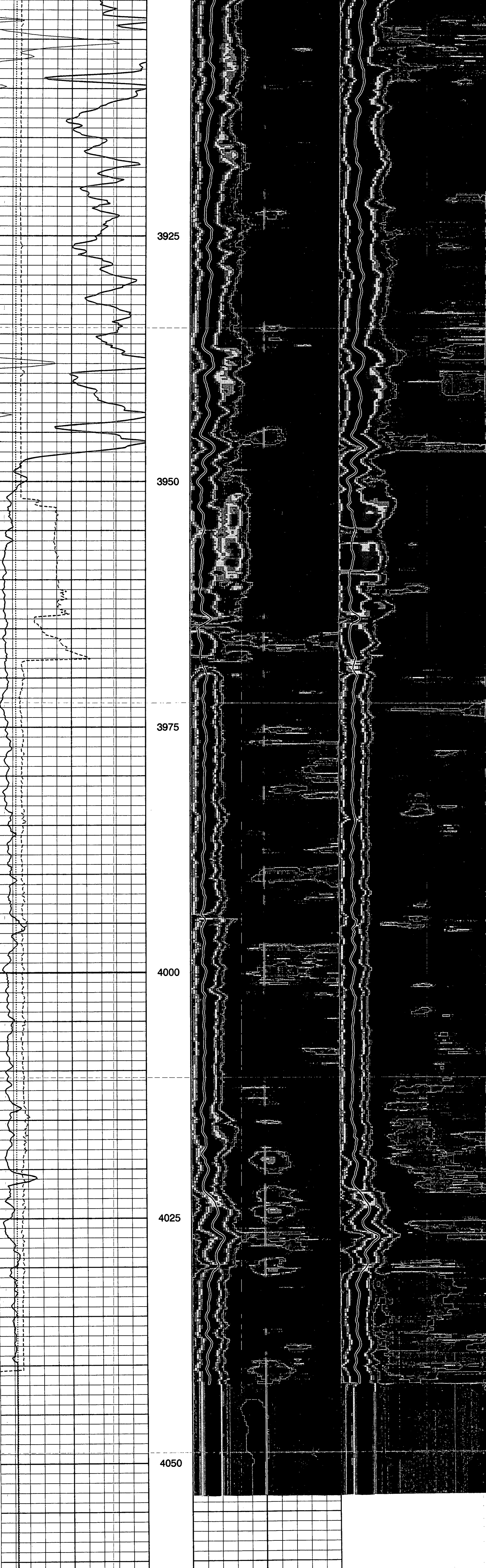
Processing Window	TWB.L7 [A127625646	800 (us) 3500
TWE.L7 [A127625676	800 (us) 3500	
Level7: FAST_IN	800 (us) 3500	
Level7: SLOW_IN	800 (us) 3500	

> 16.0	8.0 - 16.0	4.0 - 8.0	2.0 - 4.0	0.0 - 2.0
--------	------------	-----------	-----------	-----------

1 : 240 m	0 (deg) 360	0 (deg) 180	100 ()	0	800 (us)	3500
MAXXEN	SenAzi:P1AZ	Azimuth Uncertainty	SLOANI .FUN [A12763	Level7 : FAST_IN		
0 ()100	0 (deg) 360		0 ()	100	800 (us)	3500
MINXEN	HD_QCI .R4C [TWE .L7 [A127625676	
0 ()100	5 (mm) 20				800 (us)	3500
OffEne	GR .BASIC .DS				TWB .L7 [A127625646	
	0 (gAPI) 150				800 (us)	3500
XENEDI					Processing Window	
0 ()100						

HDAR .CUSTOMER .DSI .CAL	125 (mm)	375
Gamma Ray	0 (gAPI)	150
BS	125 (mm)	375

TENS	MD	SPREX_FAST	SPREX_SLOW
25000 (N)	1 : 240 m	190 (us/m)	190 (us/m)
0		1180	1180
		DTSM_FAST	DTSM_SLOW
		190 (us/m)	190 (us/m)
		1180	1180



TENS	MD	DTSM_FAST	DTSM_SLOW
25000 (N)	1 : 240 m	190 (us/m)	190 (us/m)
0		1180	1180
BS		SPREX_FAST	SPREX_SLOW
125 (mm)		190 (us/m)	190 (us/m)
375		1180	1180
Gamma Ray			
0 (gAPI)			
150			
HDAR .CUSTOMER .DSI .CAL			
125 (mm)			
375			

Company: DEVON ET AL KOTANEELEE L-38A/S'3
Well: KOTANEELEE
FIELD: YUKON
Territory: Schlumberger

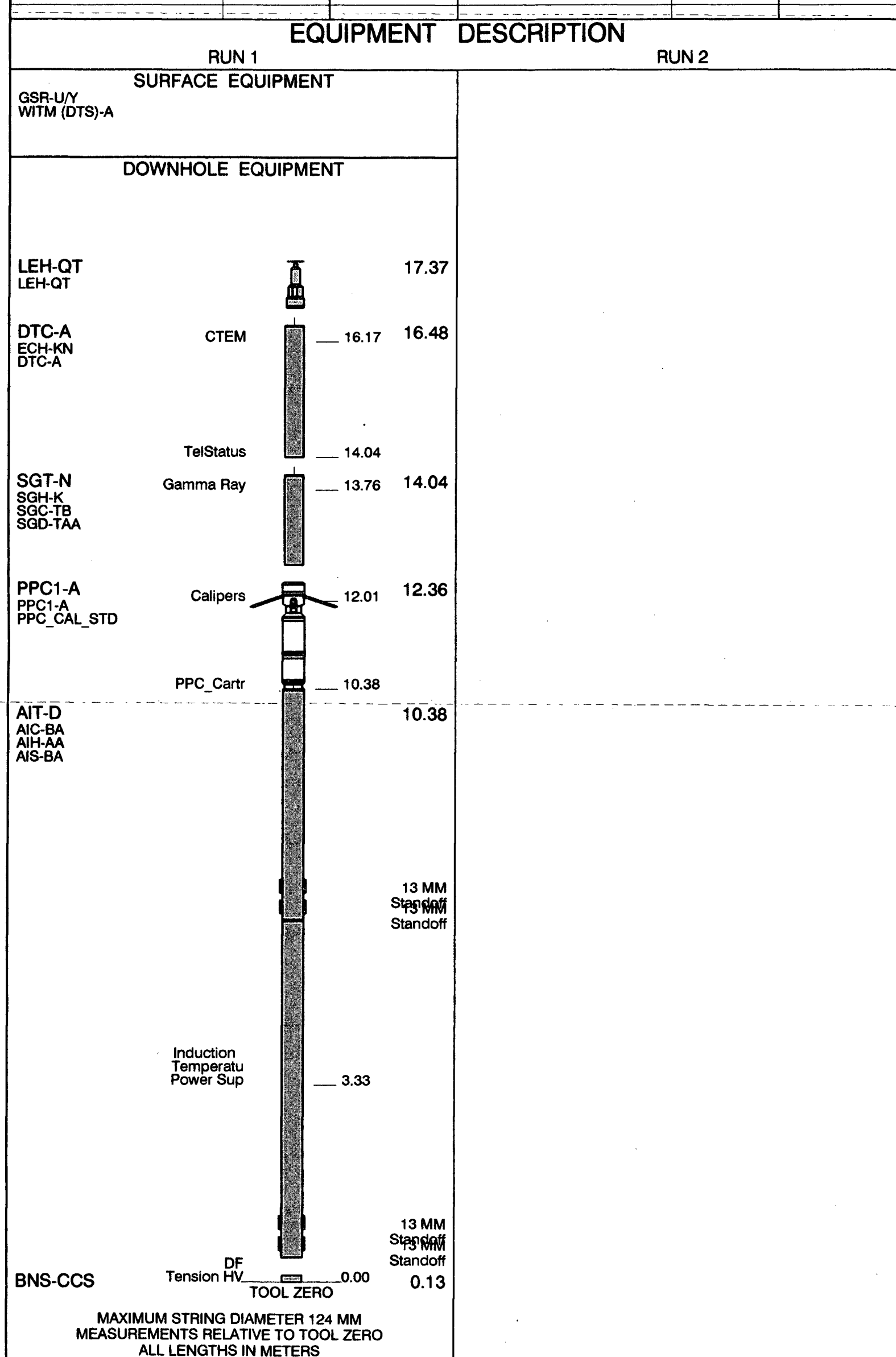
Date Logged: 2005/03/06 Date Processed:
Well Location: LSD: L-38
UWID: 300L386010124003

Elevations: KB: DF: 810.4m GL: 803.65m
API Number: 1117 Job Number:

Territory: YUKON		Well: KOTANEELEE	
Field: KOTANEELEE		Location: LSD: L-38	
Well: DEVLON ET AL KOTANEELEE L-38A/ST3		Company: DEVON CANADA CORPORATION	
DEVON CANADA CORPORATION DEVON ET AL KOTANEELEE L-38A/ST3 KOTANEELEE YUKON ARRAY INDUCTION IMAGER GAMMA RAY *** TVD ***			
LOCATION LSD: L-38 UMIID: 300L386010124003 Permanent Datum: GROUND LEVEL Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING		Elev.: K.B. 810.4 m G.L. 803.65 m D.F. 810.4 m Elev.: 803.65 m 6.8 m above Perm. Datum	
API Serial No. 1117	Latitude: 60 D 07' 32.4" N	Longitude: 124 D 07' 23.6" W	
Logging Date: 6-Mar-2005	Run Number: THREE	Depth Driller: 4085.5 m	Schlumberger Depth: 4084.5 m
Bottom Log Interval: 3961.5 m	Top Log Interval: 3961.5 m	Casing Driller Size @ Depth: 177.800 mm @ 3953 m	Casing Schlumberger: 3951.5 m
Bit Size: 156.000 mm	Type Fluid In Hole: VERSACLEAN 1400 (INVERT) / FRESH WATER	Density: 850 kg/m3	Viscosity: 37 s
MUD	Source Of Sample: N/A	Fluid Loss: N/A	PH: N/A
RM @ Measured Temperature: 1.000 ohm.m @ 16 degC	RMF @ Measured Temperature: @	RMC @ Measured Temperature: @	Source RMF: N/A
RM @ MRT: 0.227 @ 144	RMF @ MRT: @	RMC @ MRT: @	Source RMF: N/A
Maximum Recorded Temperature: 144 degC	Maximum Recorded Temperature: 14.15	Circulation Stopped: 5-Mar-2005	Logger On Bottom: 22:05
Unit Number: 2016	Location: GRANDE PRAIRIE	Recorded By: L.PRIE, J. EASTON	Witnessed By: PETER WASTUK

DEPTH SUMMARY LISTING				
Date Created: 7-MAR-2005 8:22:27				
Depth System Equipment				
Depth Measuring Device	Tension Device	Logging Cable		
Type: IDW-B	Type: CMTD-B/A	Type: 7-52P	Serial Number: 8240	
Serial Number: 6159	Serial Number: 2449	Serial Number: 7315.20	Length: M	
Calibration Date: 07-SEP-2004	Calibration Date: 30-AUG-2004	Conveyance Method: Wireline		
Calibrator Serial Number: 4	Calibrator Serial Number: 78130	Rig Type: LAND		
Calibration Cable Type: 7-46P	Calibration Gain: 0.89			
Wheel Correction 1: -8	Calibration Offset: 414.00			
Wheel Correction 2: -8				
Depth Control Parameters				
Log Sequence:	Subsequent Trip To the Well			
Reference Log Name:	BOREHOLE COMPENSATED SONIC LOG			
Reference Log Run Number:	TWO			
Reference Log Date:	21-DEC-2004			
Subsequent Trip Down Log Correction:	1.50 M			
Depth Control Remarks				
1. PRIMARY DEPTH DEVICE: IDW.				
2.				
3.				
4.				
5.				
6.				

DISCLAIMER					
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.					
OTHER SERVICES1	OTHER SERVICES2				
OS1: AIT	OS1:				
OS2: HLDS/APS	OS2:				
OS3: DSI	OS3:				
OS4: UBI	OS4:				
OS5: PPC	OS5:				
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2				
THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.					
FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS.					
FLUID LEVEL THIS RUN: 1845 M.					
AIT RUN IN COMPUTE MUD RESISTIVITY MODE.					
PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION. (NOT POWERED).					
SIDE TRACKED WELL BETWEEN 3965 M AND 3970 M.					
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.					
GRANDE PRAIRIE, AB 780-539-5060					
YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.					
RUN 1 SERVICE ORDER #: 10829914 PROGRAM VERSION: 12C0-301 FLUID LEVEL: 1845 m	RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:				
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP



Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

Indexed to True Vertical Depth in this Playback

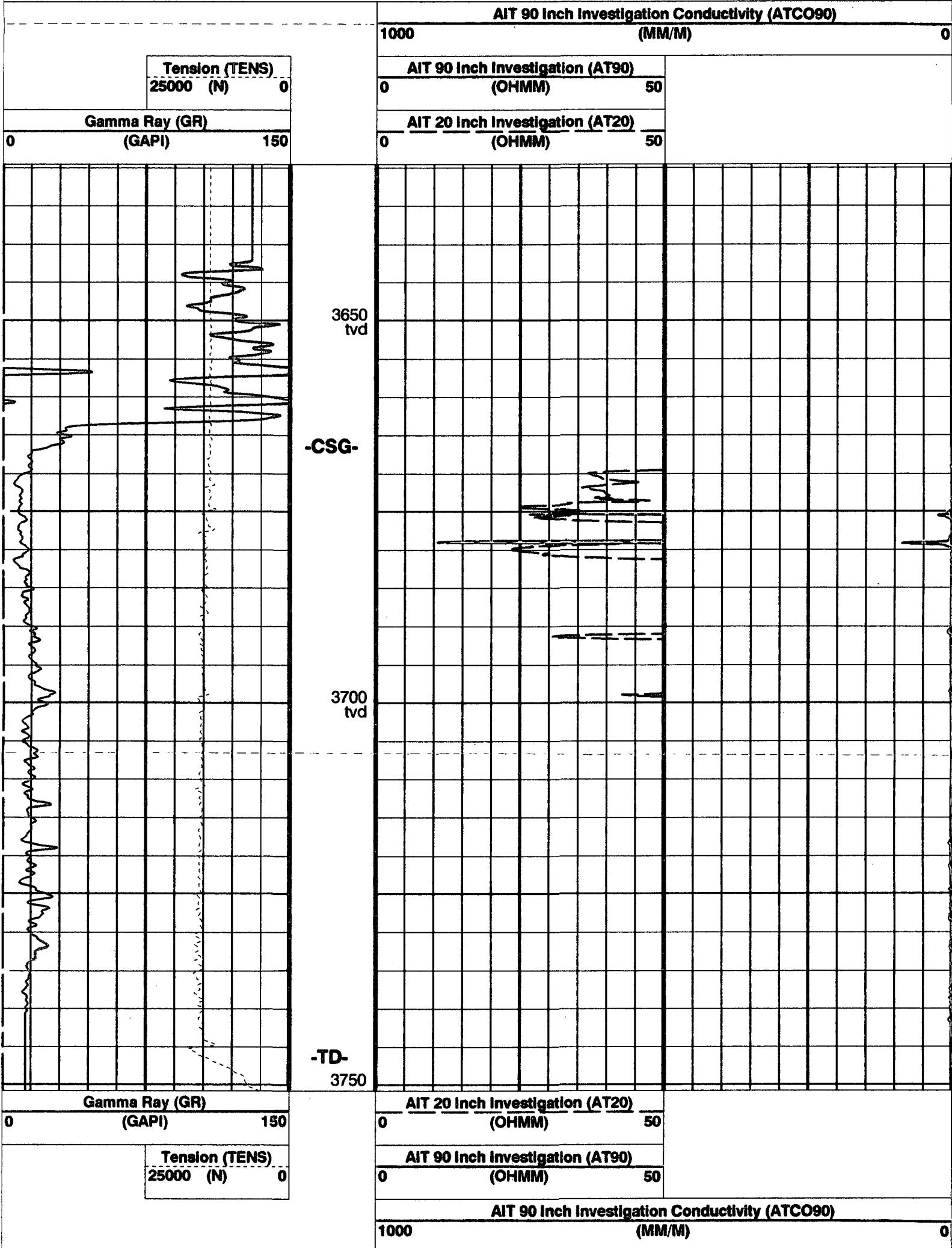
OP System Version: 12C0-301

MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code	880
ABLM	Array Induction Basic Log Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Log Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
ACORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	4065.00
TDL	Total Depth - Logger	4054.50
System and Miscellaneous		
ALTDPCAN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	156.000
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5

Format: COND-AITH-2FT-CAN Vertical Scale: 1:800 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301

MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

Indexed to True Vertical Depth in this Playback

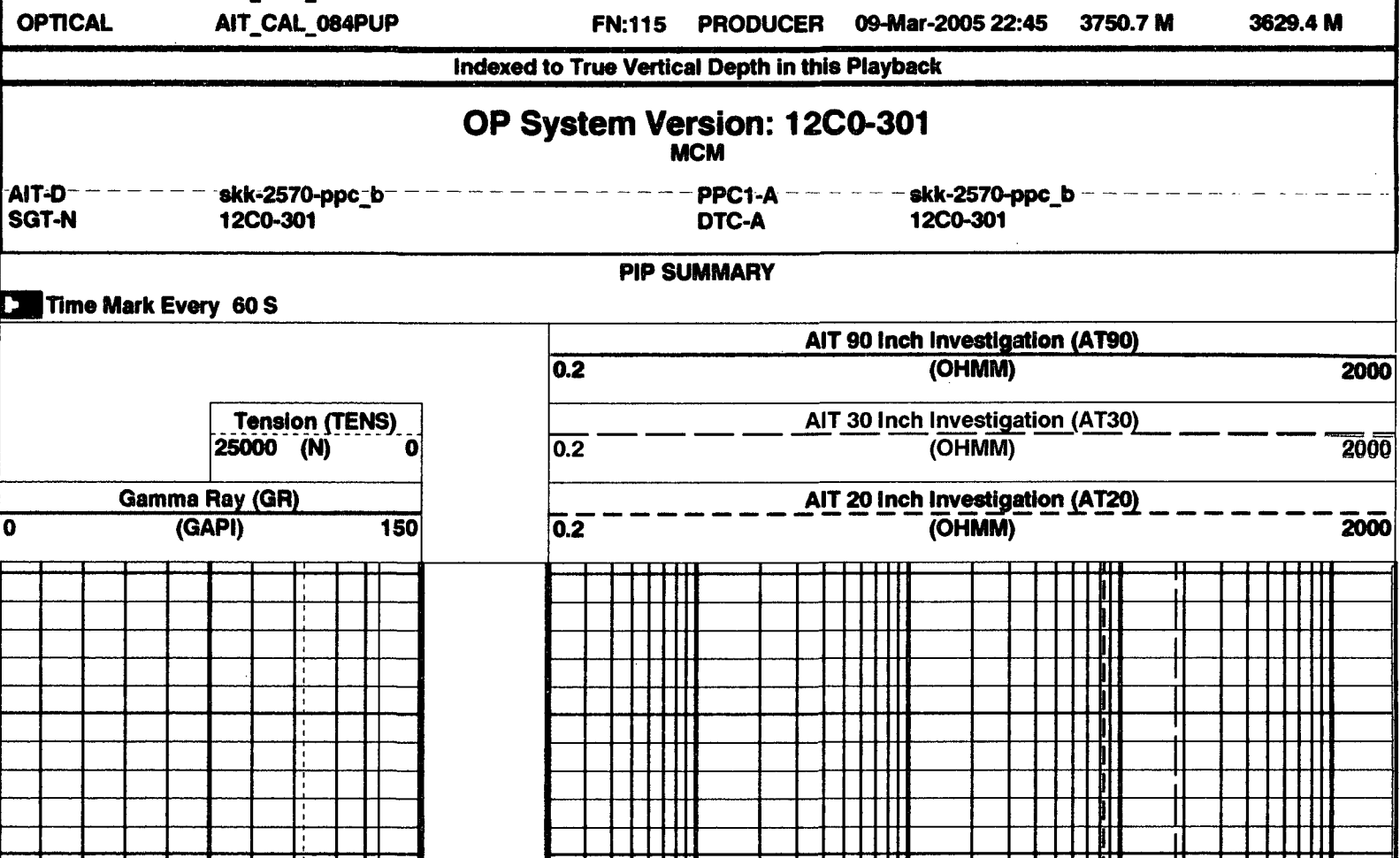
OP System Version: 12C0-301

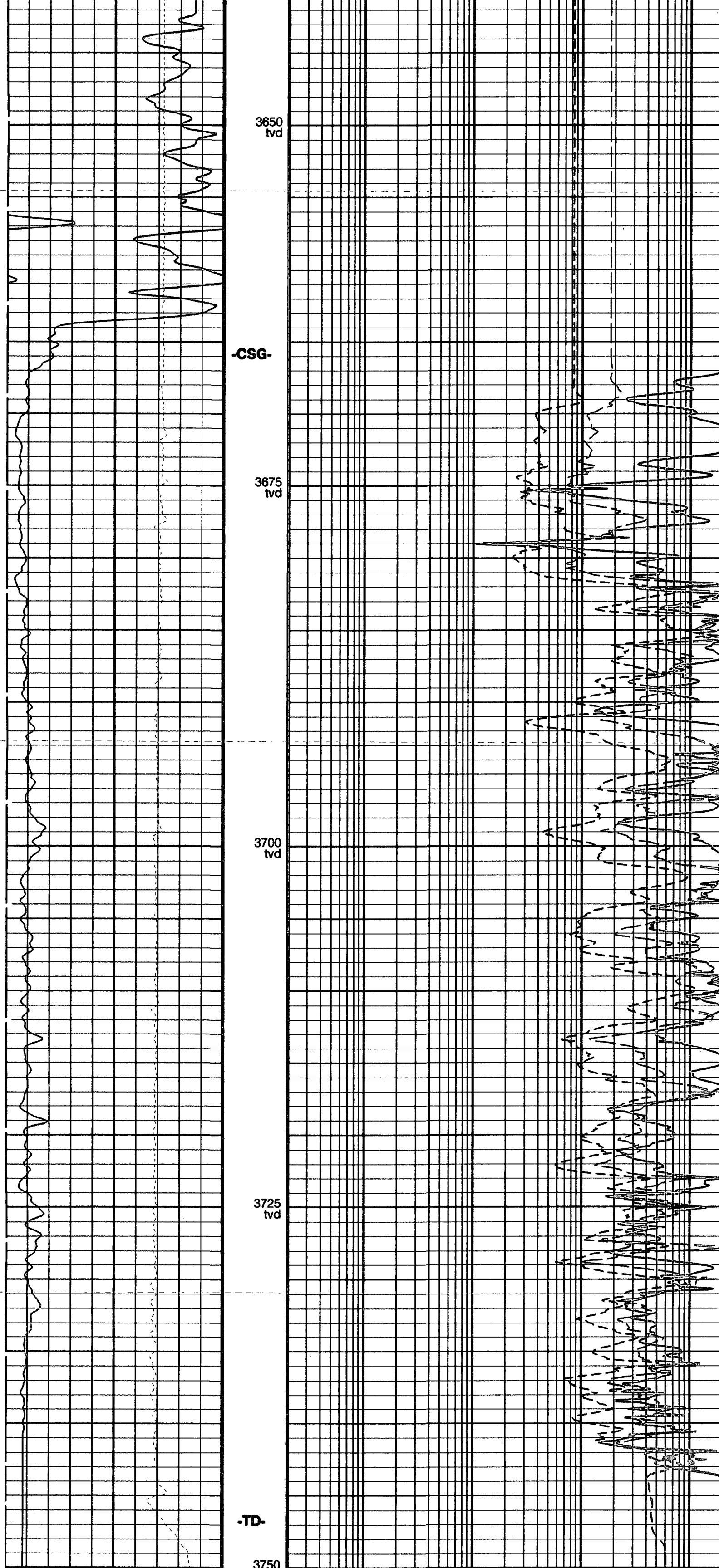
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S





Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000
Tension (TENS) 25000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000
	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLW	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARPV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1 DEG
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1 DEG
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1 DEG
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
ALTDPCAN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5 M

Format: AITH-2FT-CAN Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45		
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45		

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

Indexed to True Vertical Depth in this Playback

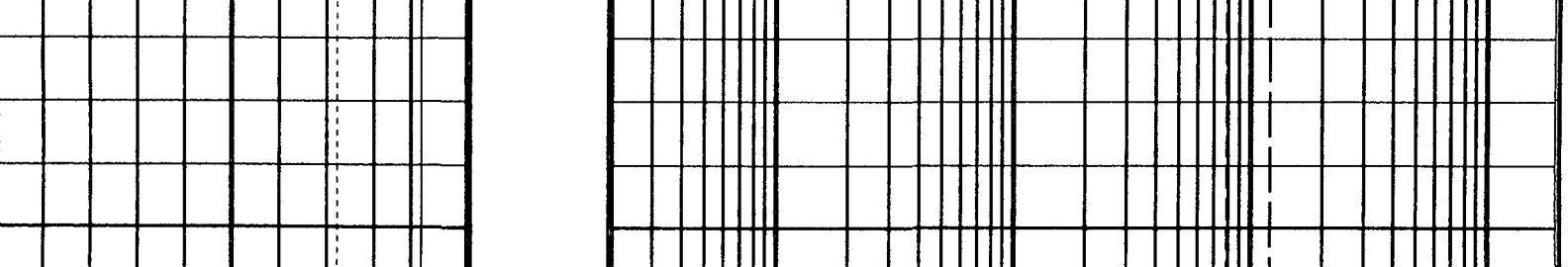
OP System Version: 12C0-301

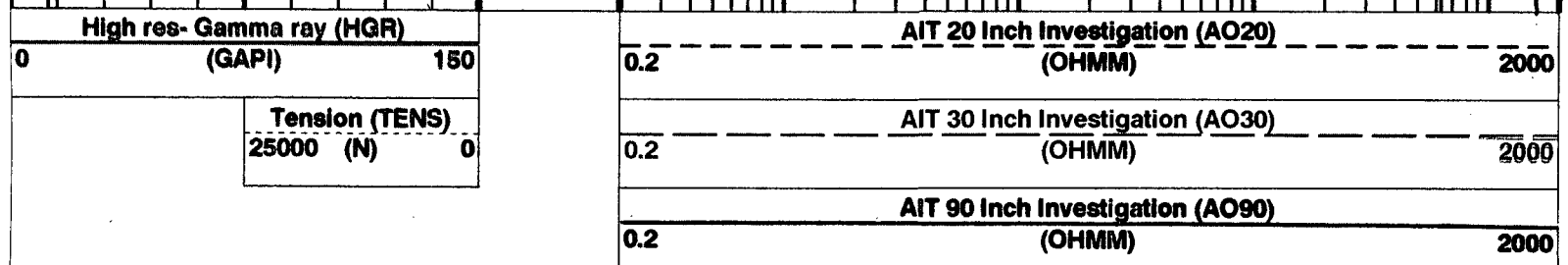
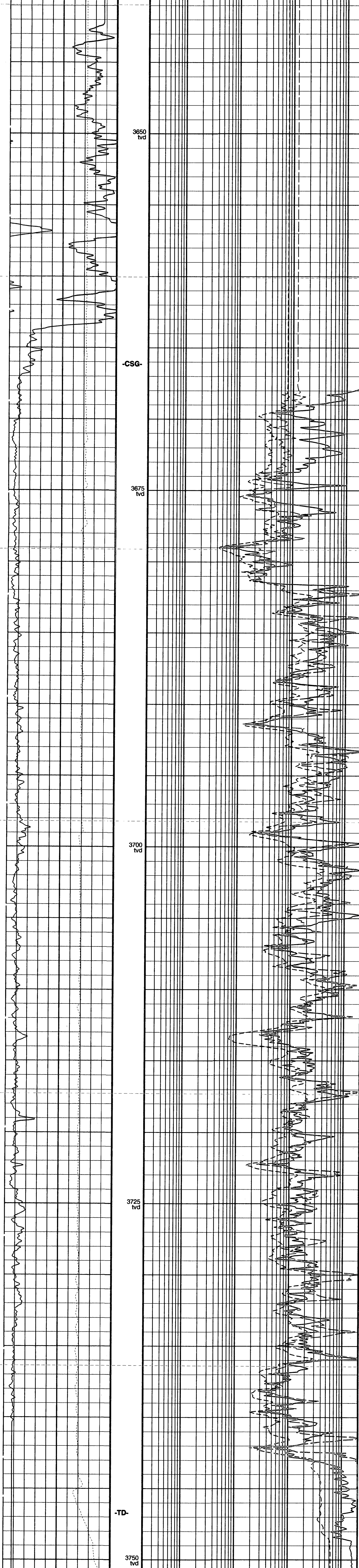
AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S

High res- Gamma ray (HGR) 0 (GAPI) 150	AIT 90 Inch Investigation (AO90) 0.2 (OHMM) 2000
Tension (TENS) 25000 (N) 0	AIT 30 Inch Investigation (AO30) 0.2 (OHMM) 2000
	AIT 20 Inch Investigation (AO20) 0.2 (OHMM) 2000





PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Parameters	Value
DLIS Name	DLIS Name	DLIS Name	DLIS Name
ABHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880	
ABLM	Array Induction Basic Logs Mode	6	One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered	
AERSV	Array Induction Borehole Saline Line for Four 6 Resolution	40	70.74

AMRF	Array Induction Mud Resistivity Factor	40.702421	1	
AORSV	Array Induction Response Set Version for One ft Resolution	40.702421	1	
ARFV	Array Induction Radial Profiling Code Version Number	700		
ARPV	Array Induction Radial Parametrization Code Version Number	223		
ASTA	Array Induction Tool Standoff	12.7		MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.702421	1	
BHT	Bottom Hole Temperature (used in calculations)	144		DEGC
FEXP	Form Factor Exponent	2		
FNUM	Form Factor Numerator	1		
GCSE	Generalized Caliper Selection	HD1_PPC1		
GDEV	Average Angular Deviation of Borehole from Normal	0		DEG
GGRD	Geothermal Gradient	0.018227		DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20		DEGC
SGT-N: Scintillation Gamma-Ray - N				
BHT	Bottom Hole Temperature (used in calculations)	144		DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1		
GDEV	Average Angular Deviation of Borehole from Normal	0		DEG
GGRD	Geothermal Gradient	0.018227		DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20		DEGC
DIR: Directional Survey Computation				
SPVD	TVD of Starting Point	0		M
TIMD	Along-hole depth of Tie-in Point	3509		M
TIVD	TVD of Tie-in Point	3286		M
HOLEV: Integrated Hole-Cement Volume				
BHT	Bottom Hole Temperature (used in calculations)	144		DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1		
GDEV	Average Angular Deviation of Borehole from Normal	0		DEG
GGRD	Geothermal Gradient	0.018227		DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20		DEGC
STI: Stuck Tool Indicator				
LBFR	Trigger for MAXIS First Reading Label	TDL		
STKT	STI Stuck Threshold	1.524		M
TDD	Total Depth - Driller	4065.00		M
TDL	Total Depth - Logger	4054.50		M
System and Miscellaneous				
ALTDPCCHAN	Name of alternate depth channel	TrueVerticalDepth		
BS	Bit Size	156.000		MM
DFD	Drilling Fluid Density	850.00		K/M3
DO	Depth Offset for Playback	0.0		M
MST	Mud Sample Temperature	16.00		DEGC
PBVSADP	Use alternate depth channel for playback	YES		
PP	Playback Processing	NORMAL		
TD	Total Depth	4054.5		M

Format: HIRS-AITH-1FT-CAN Vertical Scale: 1:120 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Output DLIS Files

DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45		
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45		

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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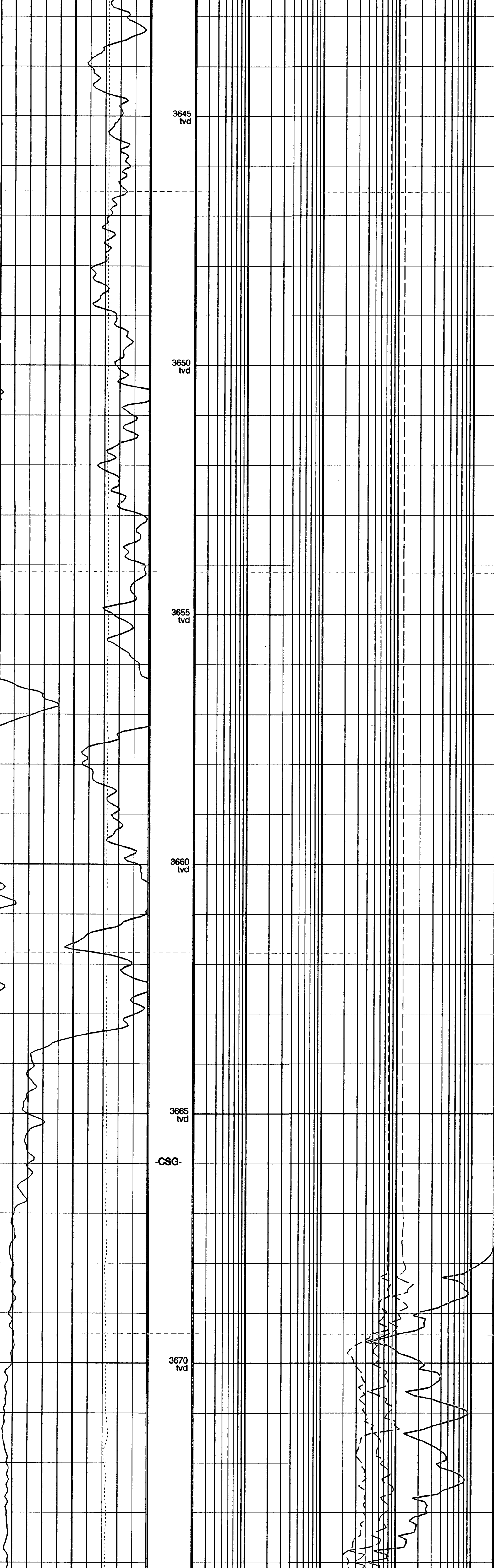
OP System Version: 12C0-301
MCM

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

PIP SUMMARY

Time Mark Every 60 S

AIT 90 Inch Investigation (AO90)		2000
0.2	(OHMM)	
AIT 30 Inch Investigation (AO30)		2000
0.2	(OHMM)	
AIT 20 Inch Investigation (AO20)		2000
0.2	(OHMM)	



3675
tvd

3680
tvd

3685
tvd

3690
tvd

3695
tvd

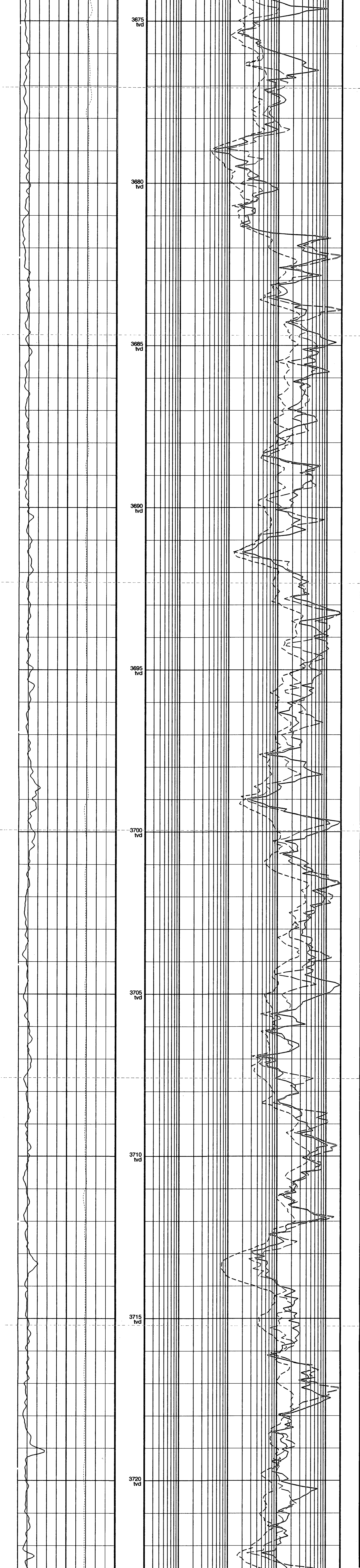
3700
tvd

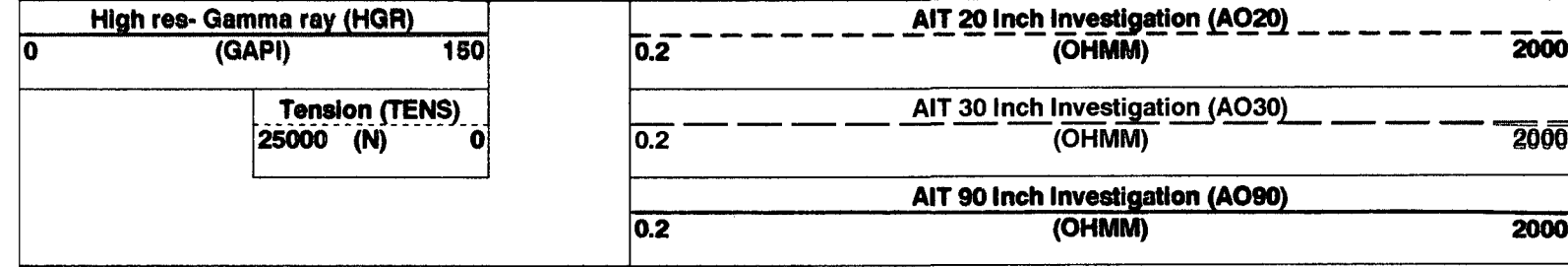
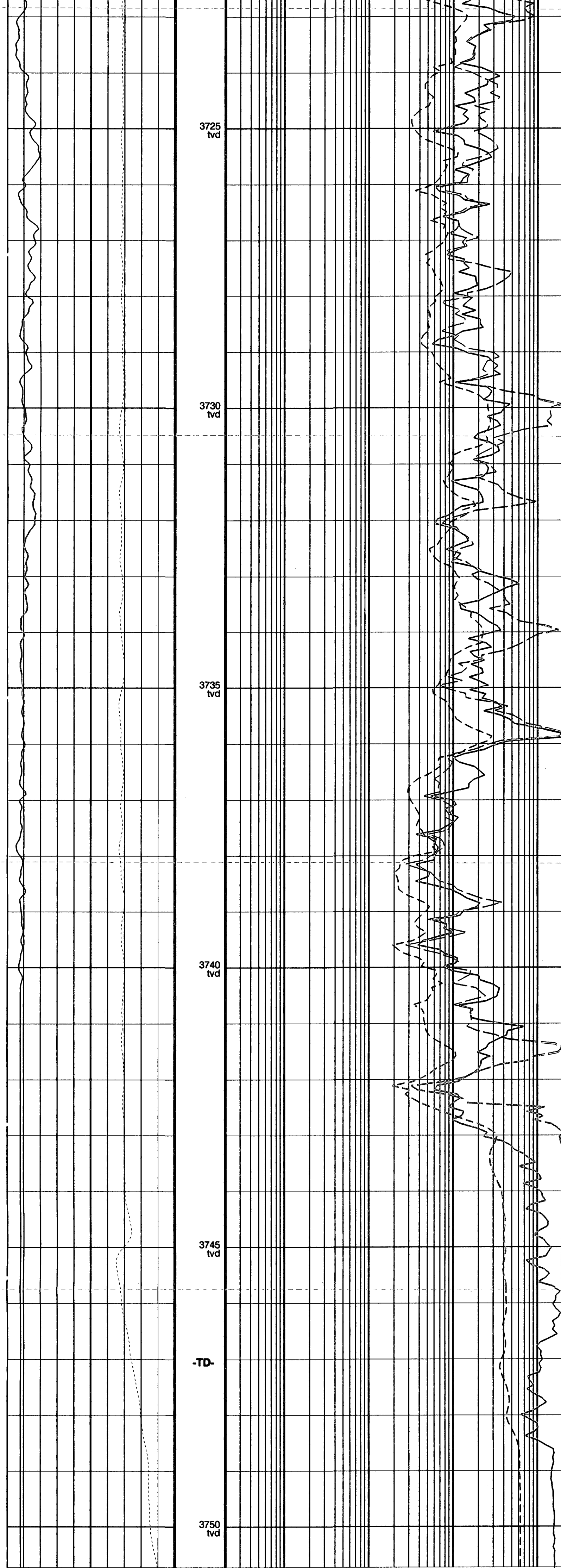
3705
tvd

3710
tvd

3715
tvd

3720
tvd





Parameters

DLIS Name	Description	Value	Units
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	890	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLY	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (In Borehole)	Eccentered	
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARFV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIVD	TVD of Tie-in Point	3286	M
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4054.50	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	TrueVerticalDepth	
BS	Bit Size	156.000	MM
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	16.00	DEGC
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
TD	Total Depth	4054.5	M

Format: HIRS_AITH-1FT-CAN_1 Vertical Scale: 1:48 Graphics File Created: 10-Mar-2005 01:17

OP System Version: 12C0-301

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool - D Well-site Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Thru Cal Magnitude - 0	0	0.6297	0.6320	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.256	1.261	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	1.530	1.530	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.3952	0.3962	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	2.247	2.248	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	0.5895	0.5848	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.355	1.353	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	0.4600	0.4602	N/A	N/A	N/A	V
Thru Cal Magnitude - 8	0	2.033	2.029	N/A	N/A	N/A	V
Thru Cal Magnitude - 9	0	0.6729	0.6733	N/A	N/A	N/A	V
Thru Cal Magnitude - 10	0	2.344	2.340	N/A	N/A	N/A	V
Thru Cal Magnitude - 11	0	0.6810	0.6813	N/A	N/A	N/A	V
Thru Cal Magnitude - 12	0	2.056	2.053	N/A	N/A	N/A	V
Thru Cal Magnitude - 13	0	0.6010	0.6011	N/A	N/A	N/A	V
Phase - 0	0	-83.21	-83.59	N/A	N/A	N/A	DEG
Phase - 1	0	-84.39	-84.78	N/A	N/A	N/A	DEG
Phase - 2	0	70.48	70.22	N/A	N/A	N/A	DEG
Phase - 3	0	-130.0	-130.2	N/A	N/A	N/A	DEG
Phase - 4	0	70.18	69.92	N/A	N/A	N/A	DEG
Phase - 5	0	-130.6	-130.8	N/A	N/A	N/A	DEG
Phase - 6	0	-18.88	-18.78	N/A	N/A	N/A	DEG

Phase - 7	0	73.51	73.14	N/A	N/A	N/A	DEG
Phase - 8	0	-19.05	-18.95	N/A	N/A	N/A	DEG
Phase - 9	0	73.22	72.85	N/A	N/A	N/A	DEG
Phase - 10	0	-4.713	-4.547	N/A	N/A	N/A	DEG
Phase - 11	0	77.10	76.83	N/A	N/A	N/A	DEG
Phase - 12	0	-5.367	-5.219	N/A	N/A	N/A	DEG
Phase - 13	0	75.95	75.67	N/A	N/A	N/A	DEG

Array Induction Tool - D Wellsite Calibration - Electronics Calibration Check - Rel Gain Mag. & Phase

Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
ADC Rel Gain Magnitude - 0	25.00	25.05	25.06	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 1	25.00	25.10	25.09	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 2	25.00	25.11	25.09	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 3	25.00	25.04	25.04	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 4	25.00	25.05	25.04	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 5	25.00	25.07	25.07	N/A	N/A	N/A	
ADC Rel Gain Magnitude - 6	25.00	25.08	25.07	N/A	N/A	N/A	
Phase - 0	0	0.7018	0.7104	N/A	N/A	N/A	DEG
Phase - 1	0	0.2004	0.2120	N/A	N/A	N/A	DEG
Phase - 2	0	0.3910	0.4059	N/A	N/A	N/A	DEG
Phase - 3	0	0.09962	0.09066	N/A	N/A	N/A	DEG
Phase - 4	0	0.2201	0.2220	N/A	N/A	N/A	DEG
Phase - 5	0	0.1113	0.1111	N/A	N/A	N/A	DEG
Phase - 6	0	0.2055	0.2014	N/A	N/A	N/A	DEG

Array Induction Tool - D Wellsite Calibration - Electronics Calibration Check - Auxillary

Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Array Induction SPA Plus	3950	3963	3963	N/A	N/A	N/A	MV
Array Induction SPA Zero	-50.00	-54.60	-54.75	N/A	N/A	N/A	MV
Array Induction Temperature Plus	4.500	4.508	4.509	N/A	N/A	N/A	V
Array Induction Temperature Zi	-0.05000	-0.05518	-0.05542	N/A	N/A	N/A	V

Array Induction Tool - D Wellsite Calibration - Test Loop Gain Correction

Master: 8-Jan-2005 18:16							
Test Loop Gain Magnitude - 0	0	1.000	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 1	0	1.007	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 2	0	1.016	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 3	0	1.013	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 4	0	1.022	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 5	0	1.021	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 6	0	1.021	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 7	0	1.020	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 8	0	1.014	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 9	0	1.014	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 10	0	1.013	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 11	0	1.013	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 12	0	1.016	N/A	N/A	N/A	N/A	
Test Loop Gain Magnitude - 13	0	1.018	N/A	N/A	N/A	N/A	
Phase - 0	0	0.4952	N/A	N/A	N/A	N/A	DEG
Phase - 1	0	0.3450	N/A	N/A	N/A	N/A	DEG
Phase - 2	0	0.07556	N/A	N/A	N/A	N/A	DEG
Phase - 3	0	0.2596	N/A	N/A	N/A	N/A	DEG
Phase - 4	0	-0.03066	N/A	N/A	N/A	N/A	DEG
Phase - 5	0	0.2088	N/A	N/A	N/A	N/A	DEG
Phase - 6	0	-0.4215	N/A	N/A	N/A	N/A	DEG
Phase - 7	0	-1.073	N/A	N/A	N/A	N/A	DEG
Phase - 8	0	-0.04480	N/A	N/A	N/A	N/A	DEG
Phase - 9	0	0.1851	N/A	N/A	N/A	N/A	DEG
Phase - 10	0	0.1448	N/A	N/A	N/A	N/A	DEG
Phase - 11	0	0.3883	N/A	N/A	N/A	N/A	DEG
Phase - 12	0	-0.01529	N/A	N/A	N/A	N/A	DEG
Phase - 13	0	0.09701	N/A	N/A	N/A	N/A	DEG

Array Induction Tool - D Wellsite Calibration - Sonde Error Correction

Master: 8-Jan-2005 18:16							
R Sonde Error Correction - 0	0	2.311	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 1	0	33.72	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 2	0	50.42	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 3	0	34.20	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 4	0	48.96	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 5	0	43.19	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 6	0	26.83	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 7	0	14.36	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 8	0	6.973	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 9	0	7.776	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 10	0	6.594	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 11	0	6.594	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 12	0	-1.347	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 13	0	0.6529	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 0	0	93.91	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 1	0	-0.6939	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 2	0	6.971	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 3	0	-73.75	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 4	0	98.87	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 5	0	-103.3	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 6	0	6.624	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 7	0	-5.417	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 8	0	8.789	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 9	0	-18.99	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 10	0	8.772	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 11	0	-7.362	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 12	0	-3.819	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 13	0	-18.52	N/A	N/A	N/A	N/A	MM/M

Powered Positioning Device/Caliper 1 Wellsite Calibration - PPC1 Caliper Calibration

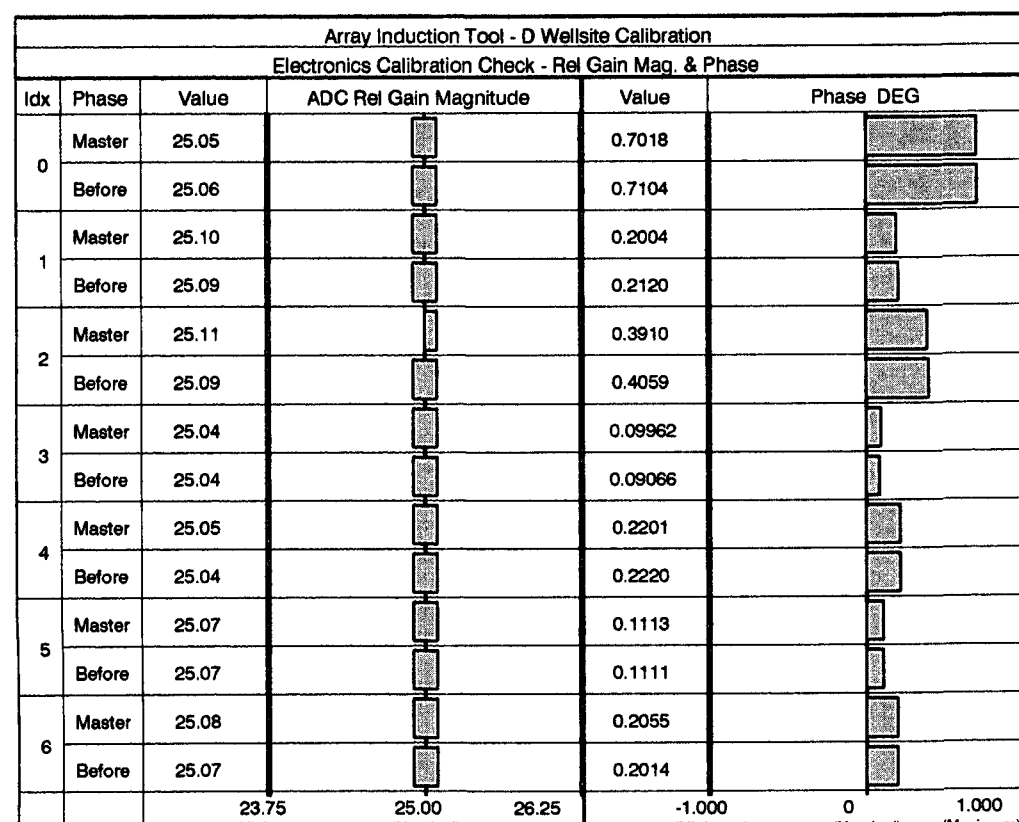
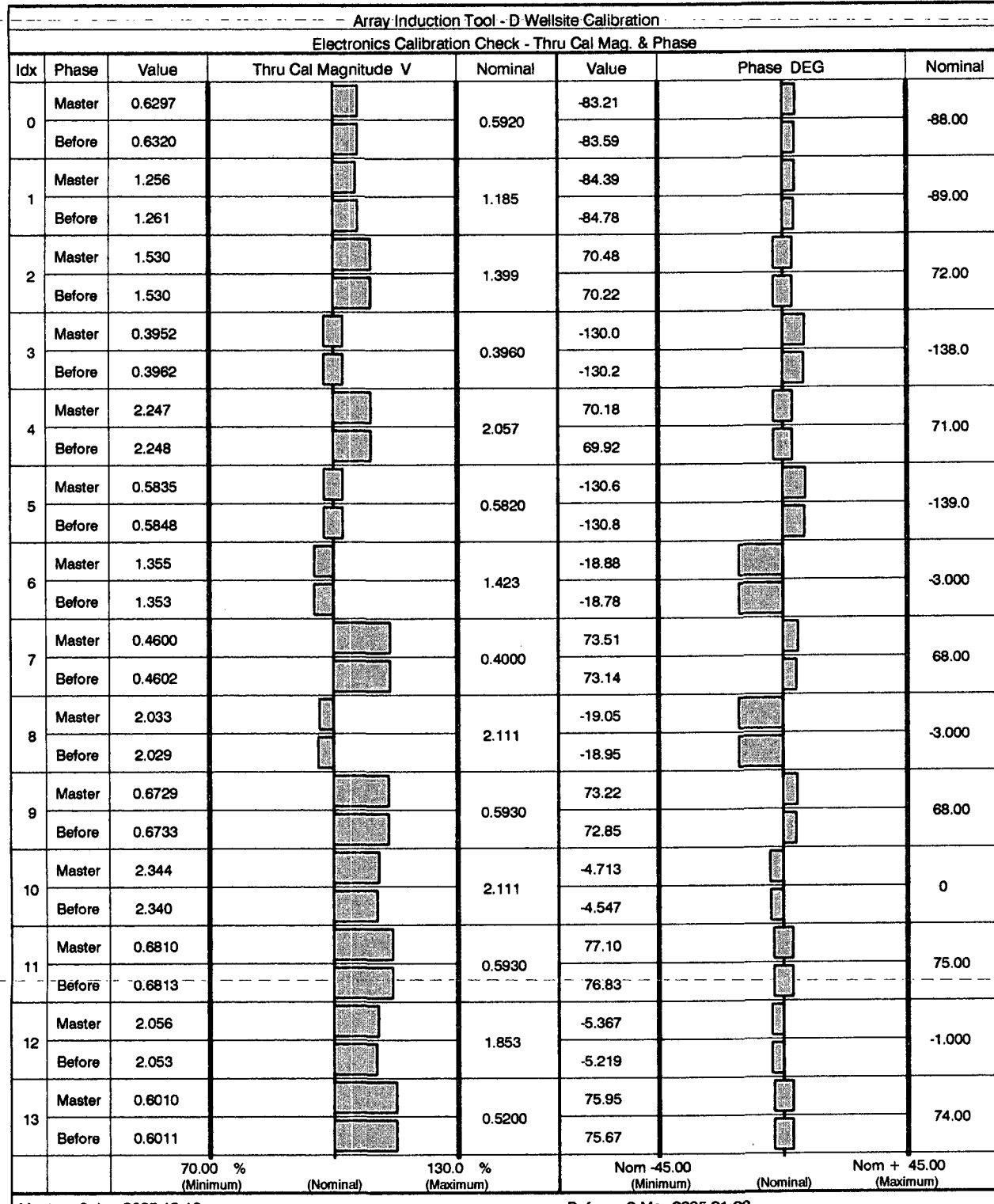
Before: 1-Mar-2005 13:50							
PPC1 Radius 1 Raw Small Radius	88.90	N/A	109.2	N/A	N/A	12.70	MM
PPC1 Radius 1 Raw Large Radius	203.2	N/A	215.7	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Small Radius	88.90	N/A	91.24	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Large Radius	203.2	N/A	200.9	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Small Radius	88.90	N/A	106.7	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Large Radius	203.2	N/A	212.8	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Small Radius	88.90	N/A	75.65	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Large Radius	203.2	N/A	184.3	N/A	N/A	12.70	MM

Scintillation Gamma-Ray - N Wellsite Calibration - Detector Calibration

Before: 4-Mar-2005 14:00							
Gamma Ray (Jig - Bkg)	153.8	N/A	153.8	N/A	N/A	13.98	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Array Induction Tool - D / Equipment Identification

Primary Equipment:							
Array Induction Sonde		AIS - BA	97				
Adaptive Response Cartridge		AIC - BA					
Auxiliary Equipment:							
Mass Isolated Housing		AIH - AA					



Array Induction Tool - D Wellsite Calibration Electronics Calibration Check - Auxillary							
Phase	Array Induction SPA Plus	MV	Value	Phase	Array Induction SPA Zero	MV	Value
Master			3963	Master			-54.60
Before			3963	Before			-54.75
			3750 (Minimum) 3950 (Nominal) 4150 (Maximum)				-100.0 (Minimum) -50.00 (Nominal) 0 (Maximum)
Phase	Array Induction Temperature Plus	V	Value	Phase	Array Induction Temperature Zero	V	Value
Master			4.508	Master			-0.05518
Before			4.509	Before			-0.05542
			4.250 (Minimum) 4.500 (Nominal) 4.750 (Maximum)				-0.1000 (Minimum) -0.05000 (Nominal) 0 (Maximum)

Array Induction Tool - D Wellsite Calibration Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude	Value	Phase	DEG		
0	1.000		0.4952				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
1	1.007		0.3450				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
2	1.016		0.07556				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
3	1.013		0.2596				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
4	1.022		-0.03066				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
5	1.021		0.2088				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
6	-1.021		-0.4215				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
7	1.020		-1.073				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
8	1.014		-0.04480				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
9	1.014		0.1851				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
10	1.013		0.1448				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
11	1.013		0.3883				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
12	1.016		-0.01529				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		
13	1.018		0.09701				
		0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)		

Scintillation Gamma-Ray - N Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig - Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			44.05	Before			153.8	Before			165.0
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		139.8 (Minimum)	153.8 (Nominal)	167.8 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)	

Before: 4-Mar-2005 14:00

Directional Survey Manually-Entered Inclineretry Summary

Tie In Point : Measured Depth True Vertical Depth North Departure East Departure

3509.00 M

3286.00 M

866.12 M

-411.40 M

Depth	Deviation	Azimuth	True Vertical Depth	North Departure	East Departure
3509.00 M	24.90 DEG	12.90 DEG	3286.00 M	866.12 M	-411.40 M
3518.50 M	25.30 DEG	15.00 DEG	3294.60 M	870.03 M	-410.43 M
3528.10 M	25.00 DEG	17.10 DEG	3303.29 M	873.95 M	-409.30 M
3537.90 M	25.00 DEG	18.50 DEG	3312.17 M	877.89 M	-408.03 M
3547.40 M	25.40 DEG	20.30 DEG	3320.77 M	881.71 M	-406.69 M
3557.40 M	25.80 DEG	22.40 DEG	3329.79 M	885.73 M	-405.12 M
3566.90 M	25.50 DEG	23.80 DEG	3338.35 M	889.52 M	-403.50 M
3576.20 M	25.30 DEG	27.60 DEG	3346.75 M	893.11 M	-401.78 M
3585.80 M	24.80 DEG	29.40 DEG	3355.45 M	896.68 M	-399.84 M
3595.30 M	23.70 DEG	31.20 DEG	3364.11 M	900.05 M	-397.87 M
3604.70 M	22.30 DEG	32.90 DEG	3372.76 M	903.16 M	-395.92 M
3614.40 M	21.60 DEG	36.10 DEG	3381.76 M	906.15 M	-393.87 M
3624.10 M	22.40 DEG	39.60 DEG	3390.76 M	909.02 M	-391.64 M
3633.60 M	23.60 DEG	41.70 DEG	3399.50 M	911.84 M	-389.22 M
3643.10 M	24.30 DEG	41.40 DEG	3408.18 M	914.72 M	-386.66 M
3652.40 M	25.60 DEG	42.80 DEG	3416.61 M	917.63 M	-384.03 M
3662.10 M	26.60 DEG	42.40 DEG	3425.32 M	920.77 M	-381.14 M
3672.00 M	27.00 DEG	41.30 DEG	3434.16 M	924.10 M	-378.16 M
3681.60 M	25.90 DEG	42.10 DEG	3442.76 M	927.29 M	-375.32 M
3691.10 M	24.60 DEG	42.10 DEG	3451.35 M	930.30 M	-372.60 M
3700.60 M	24.40 DEG	42.10 DEG	3459.99 M	933.22 M	-369.96 M
3710.10 M	24.00 DEG	43.50 DEG	3468.66 M	936.08 M	-367.32 M
3719.60 M	23.50 DEG	44.50 DEG	3477.35 M	938.83 M	-364.66 M
3729.20 M	23.60 DEG	44.20 DEG	3486.15 M	941.57 M	-361.98 M
3738.80 M	24.20 DEG	42.40 DEG	3494.93 M	944.40 M	-359.31 M
3748.60 M	24.40 DEG	43.50 DEG	3503.86 M	947.36 M	-356.56 M
3758.10 M	24.40 DEG	43.80 DEG	3512.51 M	950.20 M	-353.85 M
3767.60 M	25.10 DEG	44.50 DEG	3521.14 M	953.05 M	-351.08 M
3777.00 M	26.70 DEG	44.20 DEG	3529.60 M	955.99 M	-348.21 M
3786.70 M	28.70 DEG	42.40 DEG	3538.18 M	959.27 M	-345.12 M
3796.20 M	30.50 DEG	39.90 DEG	3546.44 M	962.80 M	-342.03 M
3806.10 M	32.40 DEG	39.20 DEG	3554.89 M	966.78 M	-338.75 M
3815.60 M	33.90 DEG	39.60 DEG	3562.84 M	970.80 M	-335.45 M
3825.00 M	35.50 DEG	39.20 DEG	3570.57 M	974.93 M	-332.05 M
3834.70 M	37.10 DEG	39.20 DEG	3578.39 M	979.38 M	-328.42 M
3844.30 M	38.90 DEG	39.90 DEG	3585.95 M	983.94 M	-324.66 M
3853.80 M	40.30 DEG	39.90 DEG	3593.27 M	988.59 M	-320.77 M
3863.40 M	40.80 DEG	39.60 DEG	3600.57 M	993.38 M	-316.78 M
3872.90 M	40.30 DEG	40.60 DEG	3607.79 M	998.11 M	-312.61 M
3882.40 M	40.00 DEG	42.10 DEG	3615.05 M	1002.71 M	-308.76 M
3891.60 M	39.80 DEG	43.10 DEG	3622.10 M	1007.05 M	-304.76 M
3900.70 M	39.30 DEG	45.20 DEG	3629.12 M	1011.21 M	-300.73 M
3910.30 M	39.60 DEG	45.90 DEG	3636.53 M	1015.48 M	-296.37 M
3919.80 M	42.40 DEG	42.10 DEG	3643.70 M	1019.96 M	-292.05 M
3929.30 M	43.00 DEG	42.80 DEG	3650.69 M	1024.72 M	-287.70 M
3939.00 M	43.80 DEG	42.40 DEG	3657.73 M	1029.62 M	-283.19 M
3945.00 M	44.50 DEG	40.60 DEG	3662.04 M	1032.75 M	-280.42 M
3951.50 M	44.30 DEG	40.60 DEG	3666.68 M	1036.20 M	-277.46 M
3961.10 M	44.60 DEG	41.00 DEG	3673.53 M	1041.29 M	-273.07 M
3967.90 M	42.70 DEG	41.40 DEG	3678.45 M	1044.83 M	-269.98 M
3977.40 M	41.80 DEG	43.50 DEG	3685.49 M	1049.54 M	-265.66 M
3987.00 M	40.40 DEG	44.20 DEG	3692.72 M	1054.09 M	-261.29 M
3996.50 M	39.90 DEG	44.20 DEG	3699.98 M	1058.48 M	-257.02 M
4006.20 M	38.80 DEG	44.50 DEG	3707.48 M	1062.88 M	-252.72 M
4018.50 M	37.90 DEG	46.30 DEG	3717.13 M	1068.24 M	-247.29 M
4028.10 M	36.70 DEG	48.40 DEG	3724.77 M	1072.18 M	-243.01 M
4037.60 M	35.50 DEG	50.10 DEG	3732.44 M	1075.83 M	-238.77 M
4047.00 M	34.90 DEG	50.50 DEG	3740.12 M	1079.29 M	-234.60 M
4056.50 M	34.50 DEG	50.50 DEG	3747.93 M	1082.73 M	-230.43 M
4065.00 M	34.10 DEG	50.50 DEG	3754.95 M	1085.78 M	-226.73 M

Company: DEVON CANADA CORPORATION

Schlumberger

Well: DEVON ET AL KOTANEELEE L-38A/ST3

Field: KOTANEELEE

Territory: YUKON

*** TVD ***

ARRAY INDUCTION IMAGER
GAMMA RAY

Company: DEVON CANADA CORPORATION

Well: DEVON ET AL KOTANEELEE L-38A/ST3

Field: KOTANEELEE

Territory: YUKON

*** TVD ***

ARRAY INDUCTION IMAGER

GAMMA RAY

Field:	KOTANEELEE	Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Company:	DEVON CANADA CORPORATION	Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Well:	DEVON ET AL KOTANEELEE L-38A/ST3	Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Field:	KOTANEELEE	Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Territory:	YUKON	Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3

Logging Date	6-Mar-2005	Latitude	80 D 07 32 41 N	Longitude	124 D 07 23 6 W
Run Number	THREE	AP Serial No.	1117		
Depth Driller	4055 m	Permeant Datum:	GROUND LEVEL	Elev.:	KB 810.4 m
Schlumberger Depth	3736.5 m	Log Measured From:	KELLY BUSHING	G.L.	803.65 m
Bottom Log Interval	4051.2 m	Drilling Measured From:	KELLY BUSHING	D.F.	810.4 m
Top Log Interval	3951.5 m				
Casing Driller Size @ Depth	177 800 mm @ 3953 m				
Casing Schlumberger	3951.5 m				
Bit Size	158 000 mm				
Type Fluid In Hole	VERSACLEAN 1400 (INVERT) / FRESH WATER				
Density	850 kg/m ³				
Viscosity	37 s				
PH					
Source Of Sample					
FM @ Measured Temperature	1 000 ohm.m @ 16 degC				
FMC @ Measured Temperature					
FMF @ Measured Temperature					
Source RMT					
RM @ MHT					
RMF @ MHT					
Maximum Recorded Temperature	144 degC @ 144				
Circulation Stopped	5-Mar-2005 14:15				
Logger On Bottom	9-Mar-2005 22:05				
Unit Number	2016				
Location	GRANDE PRAIRIE				
Recorded By	IPRIE, J EASTON				
Witnessed By	PETER WASTYXK				

Logging Date	Run Number	Depth Driller	Schlumberger Depth	Bottom Log Interval	Top Log Interval	Casing Driller Size @ Depth	Casing Schlumberger	Bit Size	Type Fluid In Hole	Density	Viscosity	PH	Source Of Sample	FM @ Measured Temperature	FMC @ Measured Temperature	FMF @ Measured Temperature	Source RMT	RM @ MHT	RMF @ MHT	Maximum Recorded Temperature	Circulation Stopped	Logger On Bottom	Unit Number	Location	Recorded By	Witnessed By
6-Mar-2005	THREE	4055 m	3736.5 m	4051.2 m	3951.5 m	177 800 mm @ 3953 m	3951.5 m	158 000 mm	VERSACLEAN 1400 (INVERT) / FRESH WATER	850 kg/m ³	37 s			1 000 ohm.m @ 16 degC						144 degC @ 144	5-Mar-2005 14:15	9-Mar-2005 22:05	2016	GRANDE PRAIRIE	IPRIE, J EASTON	PETER WASTYXK

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B	Type: CMTD-B/A	Type: 7-52P
Serial Number: 6159	Serial Number: 2449	Serial Number: 8240
Calibration Date: 07-SEP-2004	Calibration Date: 30-AUG-2004	Length: 7315.20 M
Calibrator Serial Number: 4	Calibrator Serial Number: 78130	Conveyance Method: Wireline
Calibration Cable Type: 7-46P	Calibration Gain: 0.89	Rig Type: LAND
Wheel Correction 1: -8	Calibration Offset: 414.00	
Wheel Correction 2: -8		

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	BORE-HOLE COMPENSATED SONIC LOG
Reference Log Run Number:	TWO
Reference Log Date:	21-DEC-2004
Subsequent Trip Down Log Correction:	1.50 M

Depth Control Remarks

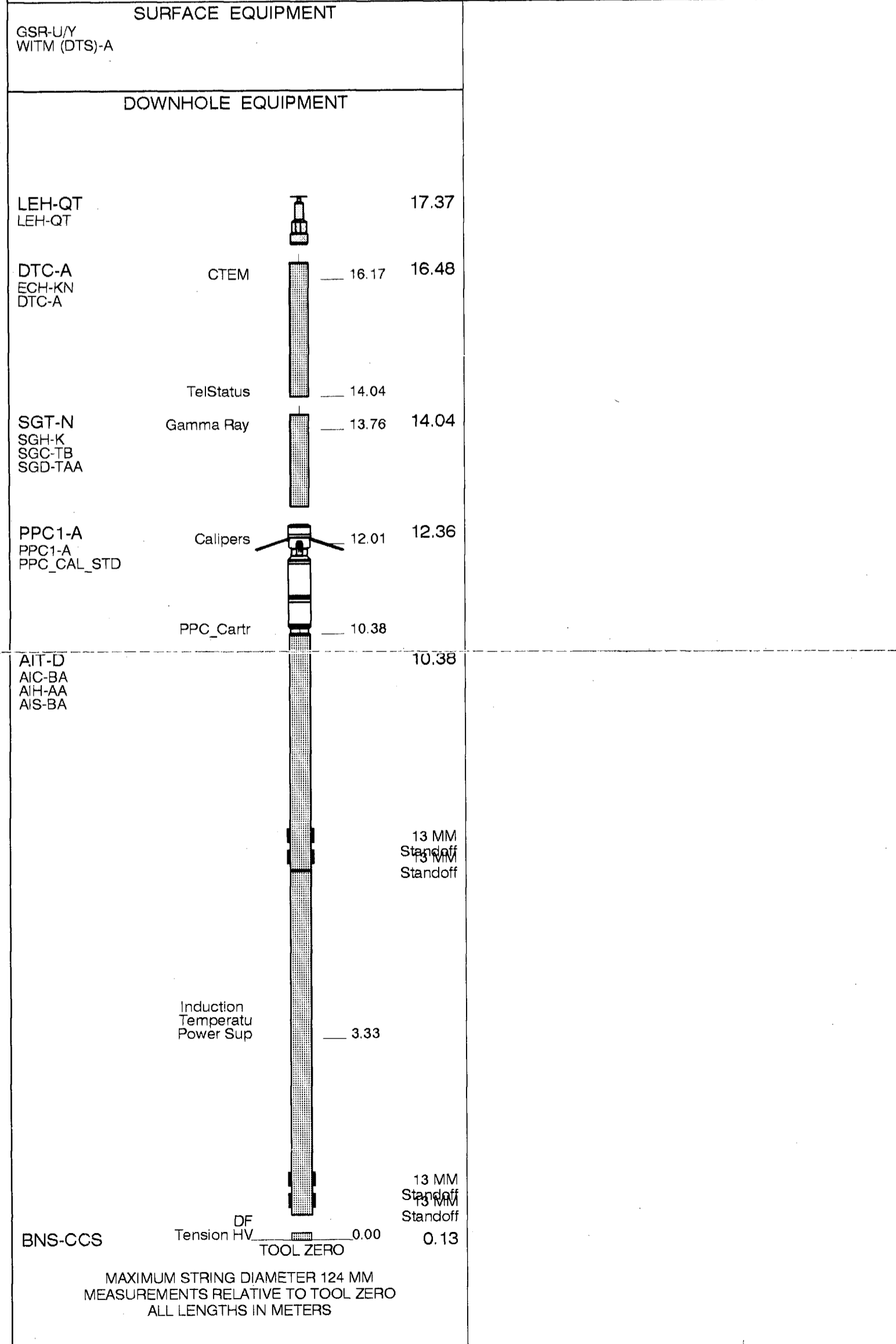
1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED DATA.

OTHER SERVICES 1	OTHER SERVICES 2
OS1: AIT	OS1:
OS2: HLDS/APS	OS2:
OS3: DSI	OS3:
OS4: UBI	OS4:
OS5: PPC	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.	
FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS. FLUID LEVEL THIS RUN: 1845 M.	
AIT RUN IN COMPUTE MUD RESISTIVITY MODE. PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION. (NOT POWERED).	
SIDE TRACKED WELL BETWEEN 3965 M AND 3970 M.	
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES. GRANDE PRAIRIE, AB 780-539-5060 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.	
RUN 1	RUN 2
SERVICE ORDER #: 10629914	SERVICE ORDER #: 1200-301
PROGRAM VERSION: 1200-301	PROGRAM VERSION: 1845 m
FLUID LEVEL:	FLUID LEVEL:
LOGGED INTERVAL	LOGGED INTERVAL
START	START
STOP	STOP

EQUIPMENT DESCRIPTION



MAXIMUM STRING DIAMETER 124 MM
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

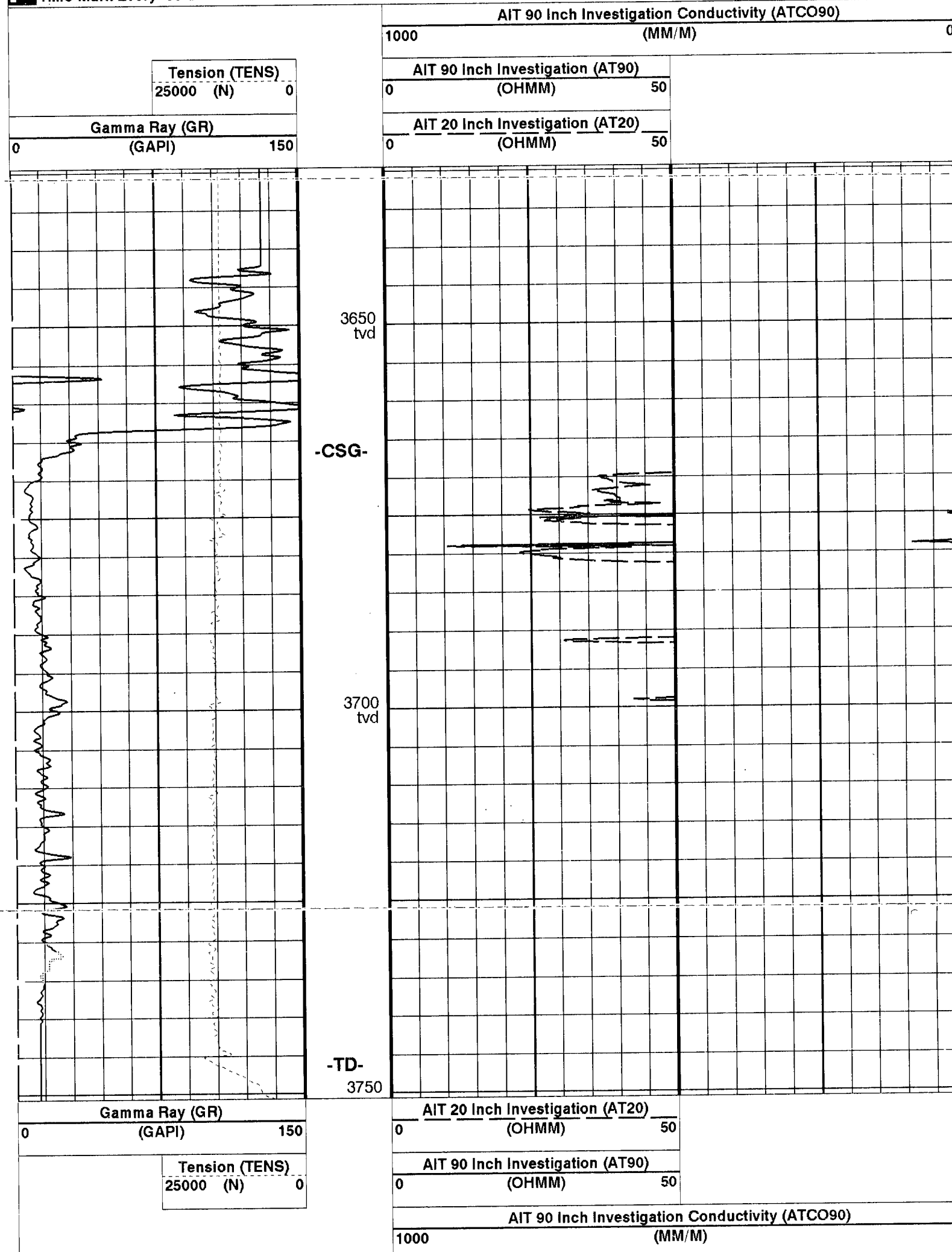
Indexed to True Vertical Depth in this Playback

OP System Version: 12C0-301
MCM

AIT-D: skk-2570-ppc_b PPC1-A: skk-2570-ppc_b
SGT-N: 12C0-301 DTC-A: 12C0-301

PIP SUMMARY

Time Mark Every 60 S



PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4054.50 M
System and Miscellaneous		
ALTDPCN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
MST	Mud Sample Temperature	16.00 DEGC
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5 M

Format: COND-AITH-2FT-CAN Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301
MCM

AIT-D: skk-2570-ppc_b PPC1-A: skk-2570-ppc_b
SGT-N: 12C0-301 DTC-A: 12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

Input DLIS Files						
DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M

Output DLIS Files						
DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

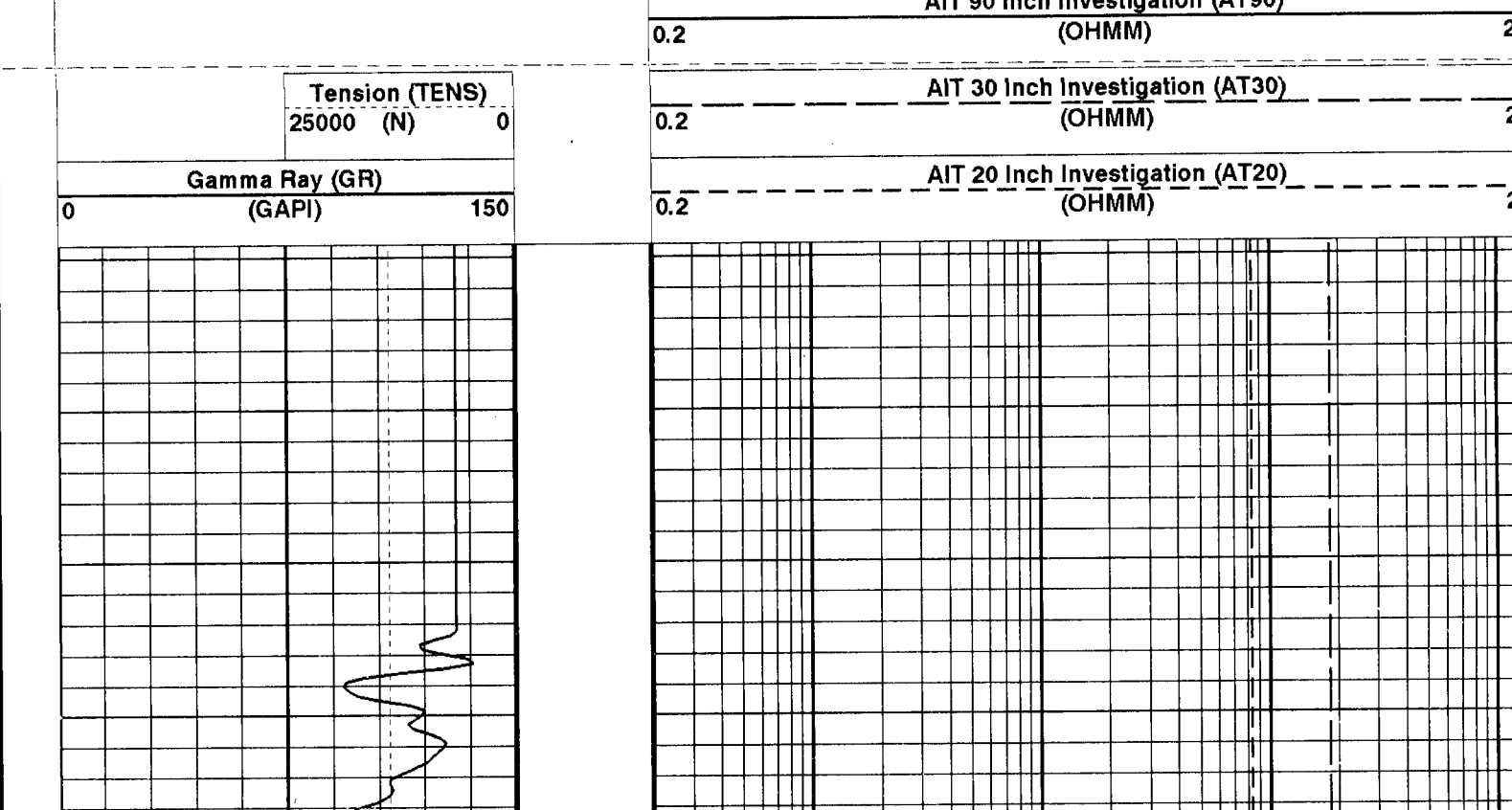
Indexed to True Vertical Depth in this Playback

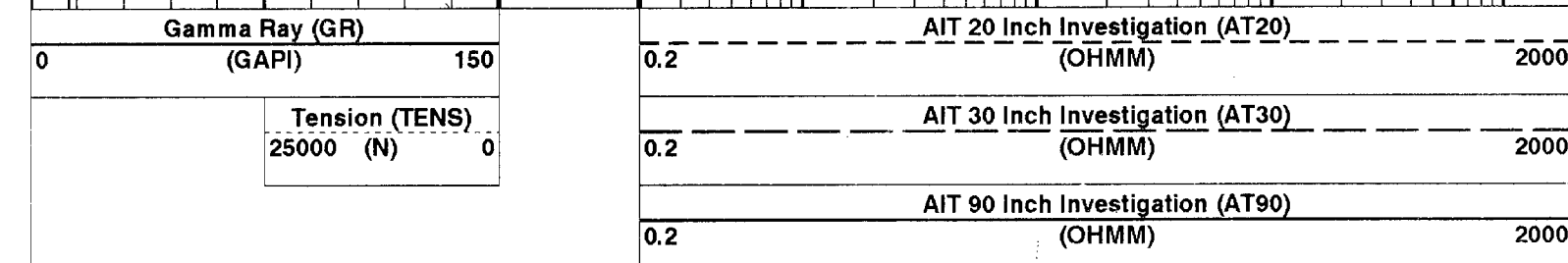
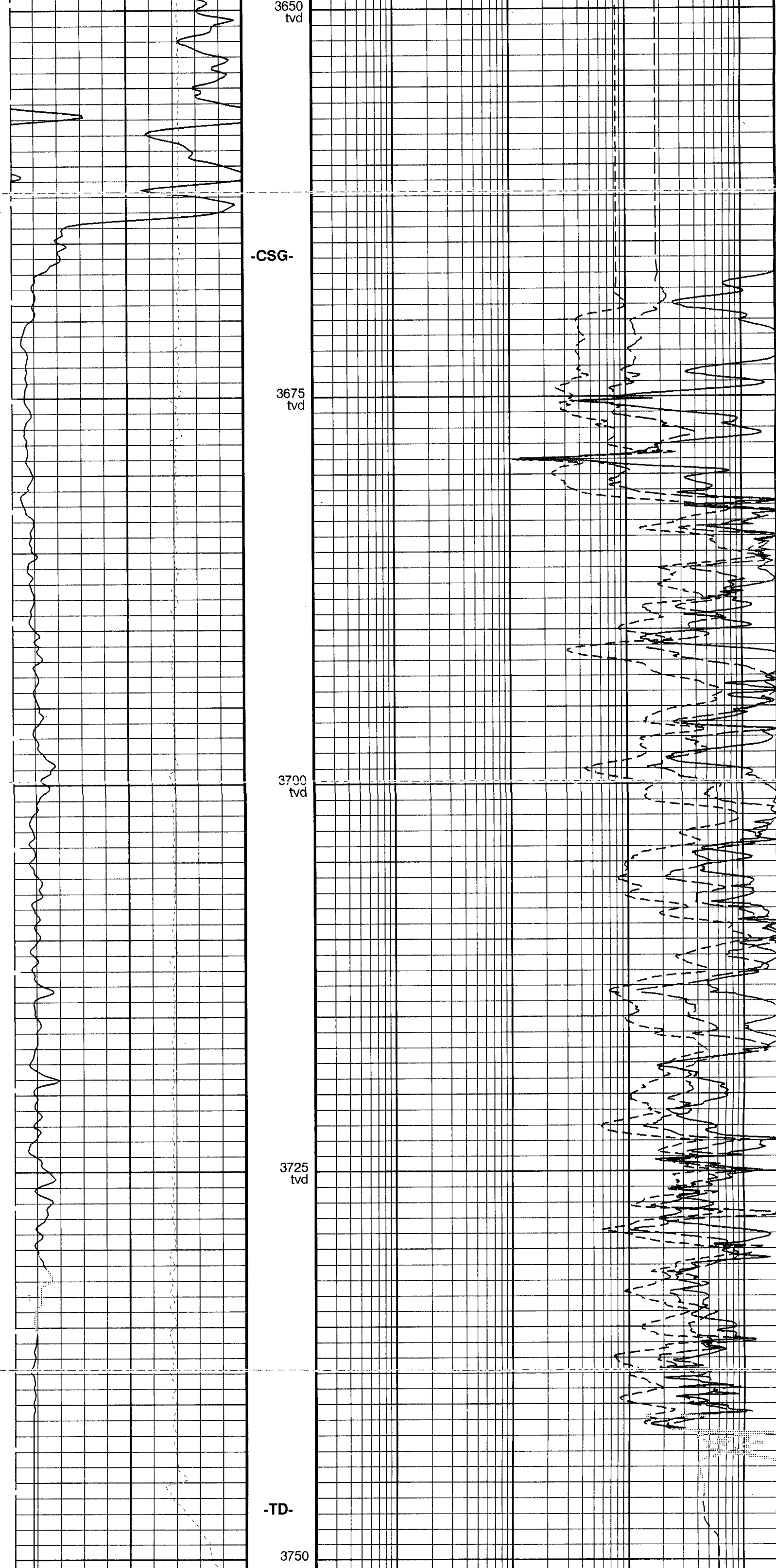
OP System Version: 12C0-301
MCM

AIT-D: skk-2570-ppc_b PPC1-A: skk-2570-ppc_b
SGT-N: 12C0-301 DTC-A: 12C0-301

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLV	Array Induction Basic Logs Mode	6_One_Two_and_Four
ACDE	Array Induction Basic Logs Code Version Number	108
ACEN	Array Induction Casing Detection Enable	Yes
AFRSV	Array Induction Tool Centering Flag (in Borehole)	Centered
AMRF	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AORSV	Array Induction Mud Resistivity Factor	1
ARFV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARPV	Array Induction Radial Profiling Code Version Number	700
ASTA	Array Induction Radial Parametrization Code Version Number	223
ASTV	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
SGT-N: Scintillation Gamma-Ray - N		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	4065.00
TDL	Total Depth - Logger	4054.50
System and Miscellaneous		
ALTDPCAN	Name of alternate depth channel	TrueVerticalDepth
BS	Bit Size	156.000
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PBVSADP	Use alternate depth channel for playback	YES
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5

Format: AITH-2FT-CAN Vertical Scale: 1:240 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301
MCM

AIT-D skk-2570-ppc_b PPC1-A skk-2570-ppc_b
SGT-N 12C0-301 DTC-A 12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Output DLIS Files

DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45		
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45		

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Output DLIS Files

DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45	3750.7 M	3629.4 M

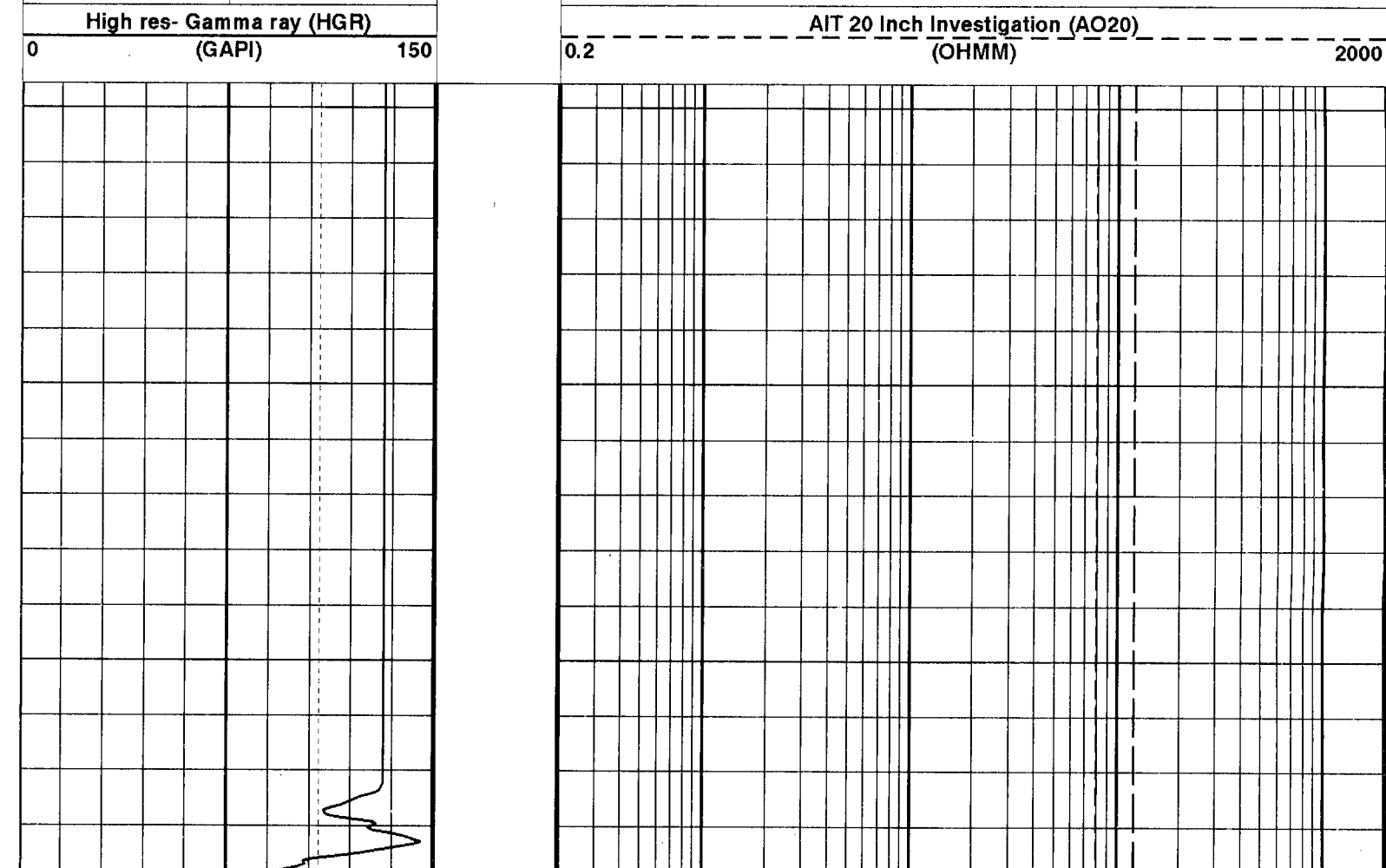
Indexed to True Vertical Depth in this Playback

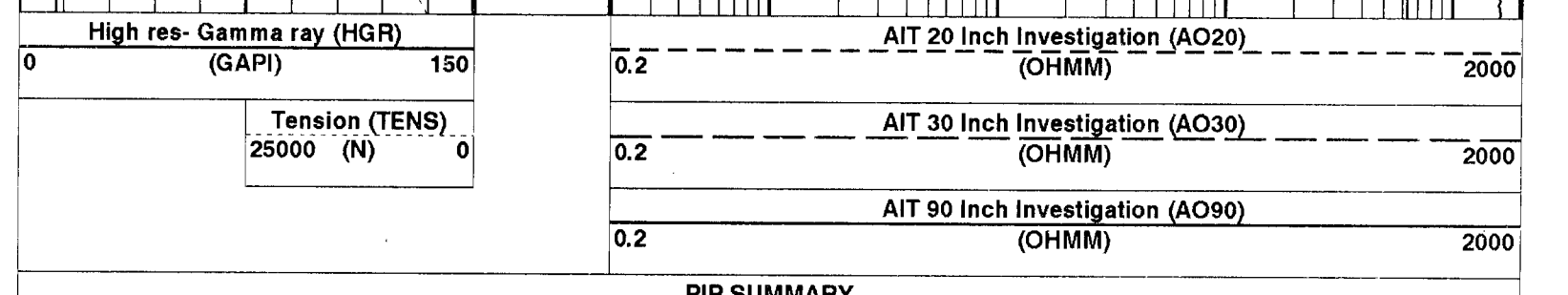
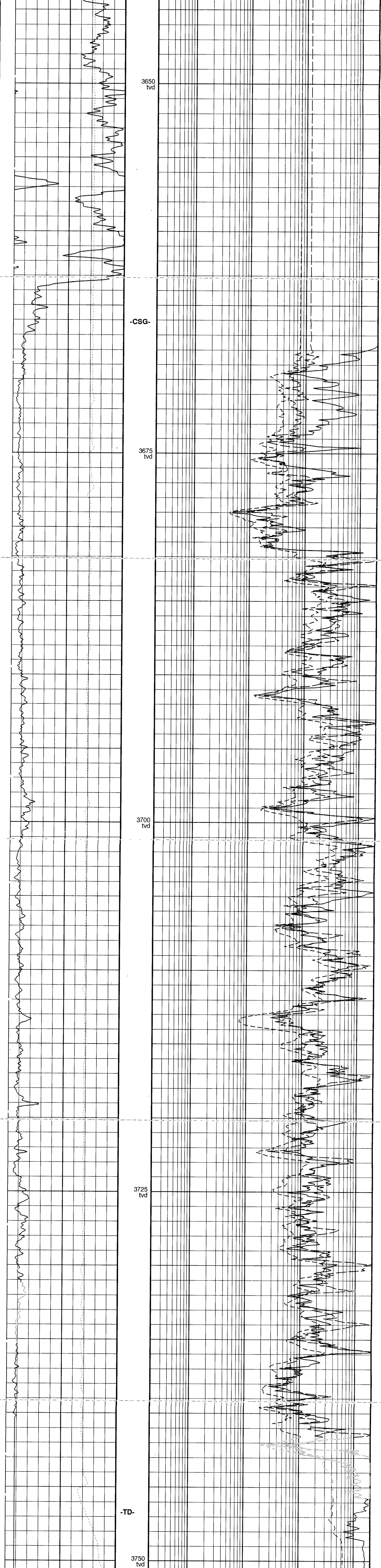
OP System Version: 12C0-301
MCM

AIT-D skk-2570-ppc_b PPC1-A skk-2570-ppc_b
SGT-N 12C0-301 DTC-A 12C0-301

PIP SUMMARY

Time Mark Every 60 S





Time Mark Every 60 S

PIP SUMMARY

DLIS Name	Description	Value
AIT-D	Array Induction Tool - D	
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACEN	Array Induction Casing Detection Enable	Yes
ACDE	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORFV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7 MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
FEXP	Form Factor Exponent	2
FNIM		

GCSE	Generalized Caliper Selection	HD1_PPC1	0	DEG
GDEV	Average Angular Deviation of Borehole from Normal		0.018227	DC/M
GGRD	Geothermal Gradient			
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature		20	DEGC
SGT-N: Scintillation Gamma-Ray - N				
BHT	Bottom Hole Temperature (used in calculations)		144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature		20	DEGC
DIR: Directional Survey Computation				
SPVD	TVD of Starting Point		0	M
TMD	Along-hole depth of Tie-in Point		3509	M
TVD	TVD of Tie-in Point		3286	M
HOLEV: Integrated Hole/Cement Volume				
BHT	Bottom Hole Temperature (used in calculations)		144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1		
GDEV	Average Angular Deviation of Borehole from Normal		0	DEG
GGRD	Geothermal Gradient		0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature		20	DEGC
STI: Stuck Tool Indicator				
LBFR	Trigger for MAXIS First Reading Label		TDL	
STKT	STI Stuck Threshold		1.524	M
TDD	Total Depth - Driller		4085.00	M
TDL	Total Depth - Logger		4054.50	M
System and Miscellaneous				
ALTDCHAN	Name of alternate depth channel		TrueVerticalDepth	
BS	Bit Size		156.000	MM
DFD	Drilling Fluid Density		850.00	K/M3
DO	Depth Offset for Playback		0.0	M
MST	Mud Sample Temperature		16.00	DEGC
PBVSADP	Use alternate depth channel for playback		YES	
PP	Playback Processing		NORMAL	
TD	Total Depth		4054.5	M

Format: HIRS-AITH-1FT-CAN Vertical Scale: 1:120 Graphics File Created: 09-Mar-2005 22:45

OP System Version: 12C0-301
MCM

AIT-D	skk-2570-ppc_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Output DLIS Files

DEFAULT	AIT_CAL_084PUP	FN:114	PRODUCER	09-Mar-2005 22:45		
OPTICAL	AIT_CAL_084PUP	FN:115	PRODUCER	09-Mar-2005 22:45		

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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OP System Version: 12C0-301
MCM

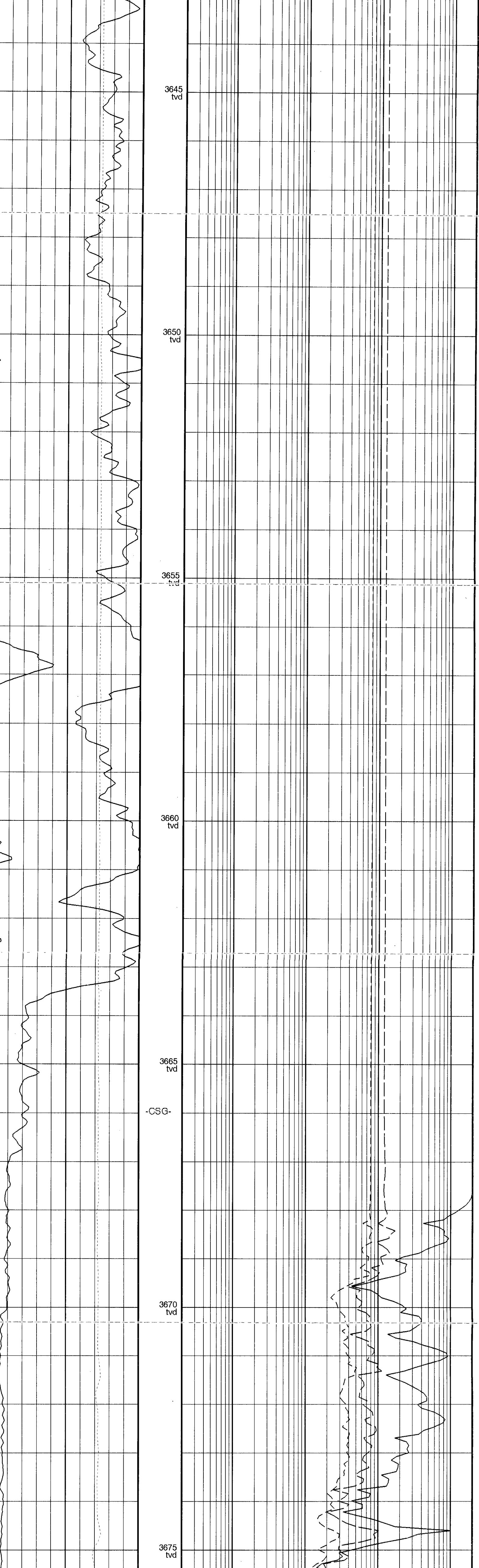
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SGT-N	12C0-301	DTC-A	12C0-301

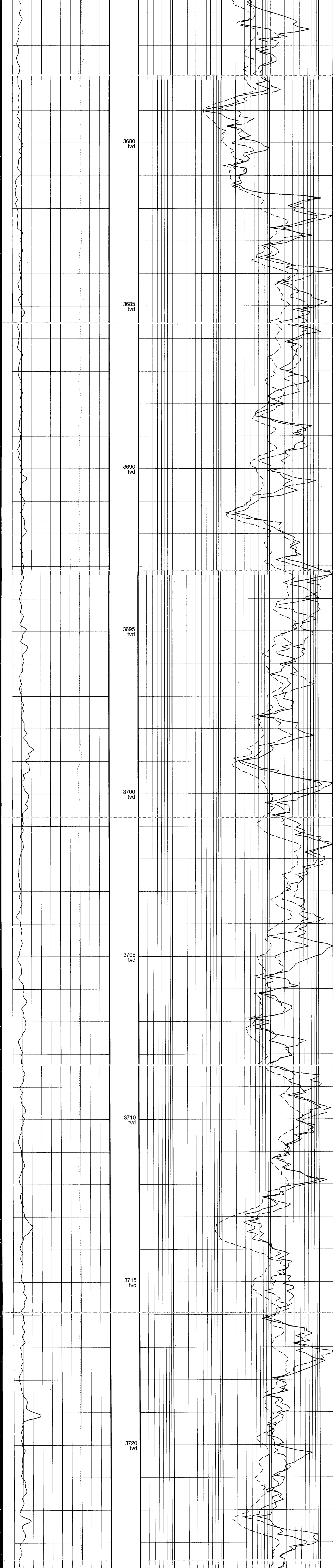
PIP SUMMARY

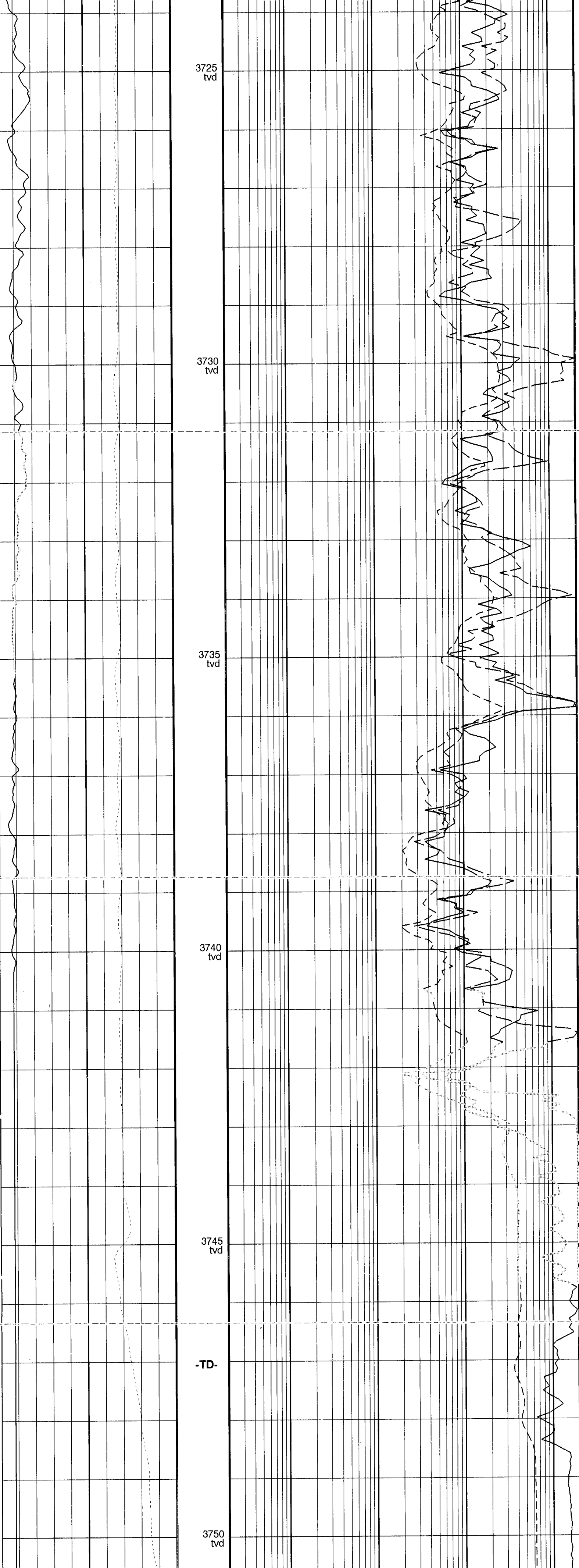
Time Mark Every 60 S

AIT 90 Inch Investigation (AO90)	0.2	(OHMM)	2000
AIT 30 Inch Investigation (AO30)	0.2	(OHMM)	2000
AIT 20 Inch Investigation (AO20)	0.2	(OHMM)	2000

Tension (TENS)	0
25000 (N)	
High res- Gamma ray (HGR)	150
(GAPI)	







High res- Gamma ray (HGR)	AIT 20 Inch Investigation (AO20)	0.2	2000
(GAPI) 150	(OHMM)		
Tension (TENS)	AIT 30 Inch Investigation (AO30)	0.2	2000
25000 (N) 0	(OHMM)		
	AIT 90 Inch Investigation (AO90)	0.2	2000
	(OHMM)		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
AIT-D: Array Induction Tool - D			
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudHesivity	
ABHV	Array Induction Borehole Correction Code Version Number	880	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARFV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
SGT-N: Scintillation Gamma-Ray - N			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIVD	TVD of Tie-in Point	3286	M
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	4055.00	M
TDL	Total Depth - Logger	4054.50	M
System and Miscellaneous			
ALTDPCNAN	Name of alternate depth channel	TrueVerticalDepth	
BS	Bit Size	156.000	MM
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	16.00	DEGC
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
TD	Total Depth	4054.5	M

Format: HIRS_AITH-1FT-CAN_1 Vertical Scale: 1:48 Graphics File Created: 10-Mar-2005 01:17

OP System Version: 12C0-301

MCM

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

True Vertical Depth Log

Input DLIS Files

DEFAULT	AIT_CAL_082LUP	FN:111	PRODUCER	09-Mar-2005 22:25	4059.9 M	3913.9 M
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool - D WellSite Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 8-Jan-2005 18:16 Before: 9-Mar-2005 21:28							
Thru Cal Magnitude - 0	0	0.6297	0.6320	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.256	1.261	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	1.530	1.530	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.3952	0.3962	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	2.247	2.248	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	0.5935	0.5946	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.355	1.353	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	0.4600	0.4602	N/A	N/A	N/A	V
Thru Cal Magnitude - 8	0	2.033	2.029	N/A	N/A	N/A	V
Thru Cal Magnitude - 9	0	0.6729	0.6729	N/A	N/A	N/A	V
Thru Cal Magnitude - 10	0	2.344	2.340	N/A	N/A	N/A	V
Thru Cal Magnitude - 11	0	0.6910	0.6913	N/A	N/A	N/A	V
Thru Cal Magnitude - 12	0	2.056	2.053	N/A	N/A	N/A	V
Thru Cal Magnitude - 13	0	0.6010	0.6011	N/A	N/A	N/A	V
Phase - 0	0	83.21	83.59	N/A	N/A	N/A	DEG
Phase - 1	0	-84.39	-84.78	N/A	N/A	N/A	DEG
Phase - 2	0	70.48	70.22	N/A	N/A	N/A	DEG
Phase - 3	0	-130.0	-130.2	N/A	N/A	N/A	DEG
Phase - 4	0	70.18	69.92	N/A	N/A	N/A	DEG
Phase - 5	0	-130.6	-130.8	N/A	N/A	N/A	DEG
Phase - 6	0	-18.88	-18.78	N/A	N/A	N/A	DEG
Phase - 7	0	73.51	73.14	N/A	N/A	N/A	DEG
Phase - 8	0	-19.05	-18.95	N/A	N/A	N/A	DEG
Phase - 9	0	73.22	72.85	N/A	N/A	N/A	DEG
Phase - 10	0	-4.713	-4.547	N/A	N/A	N/A	DEG
Phase - 11	0	77.10	76.83	N/A	N/A	N/A	DEG
Phase - 12	0	-5.367	-5.219	N/A	N/A	N/A	DEG

Idx	Value	Min	Nom	Max	Value	Min	Nom	Max
0	2.311	-27.00	0	34.00	93.91	-548.0	0	548.0
1	33.72	23.00	37.00	48.00	-0.6939	-208.0	0	208.0
2	50.42	43.00	54.00	64.00	6.971	-191.0	0	191.0
3	34.20	25.00	37.00	46.00	-73.75	-101.0	0	101.0
4	48.96	23.00	53.00	74.00	98.87	-208.0	0	208.0
5	43.19	13.00	47.00	69.00	-103.3	-196.0	0	196.0
6	26.83	16.00	27.00	37.00	6.624	-67.00	0	67.00
7	14.36	4.000	15.00	25.00	-5.417	-34.00	0	34.00
8	6.973	-2.000	8.000	18.00	8.789	-43.00	0	43.00
9	9.981	2.000	11.00	18.00	-18.99	-32.00	0	32.00
10	7.778	2.000	8.000	13.00	8.772	-38.00	0	38.00
11	6.594	1.000	7.000	12.00	-7.362	-30.00	0	30.00
12	-1.347	-6.000	-2.000	4.000	-3.819	-32.00	0	32.00
13	0.6529	-5.000	1.000	6.000	-18.52	-38.00	0	38.00

Master: 8-Jan-2005 18:16

Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6297		0.6290	-83.21		-86.00
1	Master	1.256		1.185	-84.39		-89.00
2	Master	1.530		1.399	70.48		72.00
3	Master	0.3952		0.3960	-130.0		-138.0
4	Master	2.247		2.057	70.18		71.00
5	Master	0.5835		0.5820	-130.6		-138.0
6	Master	1.355		1.423	-18.88		-3.000
7	Master	0.4600		0.4000	73.51		68.00
8	Master	2.033		2.111	-19.05		-3.000
9	Master	0.6729		0.6930	73.22		68.00
10	Master	2.344		2.111	-4.713		0
11	Master	0.6810		0.6930	77.10		75.00
12	Master	2.056		1.853	-5.387		-1.000
13	Master	0.6010		0.6200	75.95		74.00

Master: 8-Jan-2005 18:16

Idx	Phase	Value	ADC Ref Gain Magnitude	Value	Phase DEG
0	Master	25.05		0.7018	
1	Master	25.10		0.2004	
2	Master	25.11		0.3910	
3	Master	25.04		0.09962	
4	Master	25.05		0.2201	
5	Master	25.07		0.1113	
6	Master	25.08		0.2055	

Master: 8-Jan-2005 18:16

Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value
Master		3963	Master		-54.60
3750	3950	4150	-100.0	-50.00	0
Phase Array Induction Temperature Plus Y	Value	4.508	Phase Array Induction Temperature Zero Y	Value	-0.05518
4.250	4.500	4.750	-0.1000	-0.05000	0

Master: 8-Jan-2005 18:16

Idx	Value	Test Loop Gain Magnitude	Value	Phase DEG
0	1.000		0.4952	
1	1.007		0.3450	
2	1.016		0.07556	
3	1.013		0.2596	
4	1.022		-0.03066	
5	1.021		0.2088	
6	1.021		-0.4215	
7	1.020		-1.073	
8	1.014		-0.04480	
9	1.014		0.1851	
10	1.013		0.1448	
11	1.013		0.3883	
12	1.016		-0.01529	
13	1.018		0.09701	

Master: 8-Jan-2005 18:16

Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M
0	2.311		93.91	
1	33.72		-0.6939	
2	50.42		6.971	
3	34.20		-73.75	
4	48.96		98.87	
5	43.19		-103.3	
6	26.83		6.624	
7	14.36		-5.417	
8	6.973		8.789	
9	9.981		-18.99	
10	7.778		8.772	
11	6.594		-7.362	
12	-1.347		-3.819	
13	0.6529		-18.52	

Master: 8-Jan-2005 18:16

Powered Positioning Device/Caliper 1 / Equipment Identification

Primary Equipment:
 PPC Powered Positioning Device/Caliper
 PPC1 Caliper Standard
 Auxiliary Equipment:

PPC1 - A
 PPC -

Phase	PPC1 Radius 1 Raw Small Radius MM	Value	Phase	PPC1 Radius 1 Raw Large Radius MM	Value
Before		109.2	Before		215.7
30.48	88.90	142.2	154.9	203.2	246.4
Phase PPC1 Radius 2 Raw Small Radius MM	Value	91.24	Phase PPC1 Radius 2 Raw Large Radius MM	Value	200.9
30.48	88.90	142.2	154.9	203.2	246.4
Phase PPC1 Radius 3 Raw Small Radius MM	Value	106.7	Phase PPC1 Radius 3 Raw Large Radius MM	Value	212.8
30.48	88.90	142.2	154.9	203.2	246.4
Phase PPC1 Radius 4 Raw Small Radius MM	Value	75.65	Phase PPC1 Radius 4 Raw Large Radius MM	Value	184.3
30.48	88.90	142.2	154.9	203.2	246.4

Before: 1-Mar-2005 13:50

Scintillation Gamma-Ray - N / Equipment Identification

Primary Equipment:
 Scintillation Gamma Cartridge
 Scintillation Gamma Detector
 Auxiliary Equipment:
 Scintillation Gamma Housing
 Gamma Source Radioactive

SGC - TB
 SGD - TAA
 SGH - K
 GSR - U/Y

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jiq - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
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Before			44.05	Before		153.8	Before		165.0
0	30.00	120.0		139.8	153.8	167.8	150.0	165.0	180.0
(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)

Before: 4-Mar-2005 14:00

Directional Survey Manually-Entered Inclinometry Summary

Tie In Point : Measured Depth True Vertical Depth North Departure East Departure
 3509.00 M 3286.00 M 866.12 M -411.40 M

Depth	Deviation	Azimuth	True Vertical Depth	North Departure	East Departure
3509.00 M	24.90 DEG	12.90 DEG	3286.00 M	866.12 M	-411.40 M
3518.50 M	25.30 DEG	15.00 DEG	3294.60 M	870.03 M	-410.43 M
3528.10 M	25.00 DEG	17.10 DEG	3303.29 M	873.95 M	-409.30 M
3537.90 M	25.00 DEG	18.50 DEG	3312.17 M	877.89 M	-408.03 M
3547.40 M	25.40 DEG	20.30 DEG	3320.77 M	881.71 M	-406.69 M
3557.40 M	25.80 DEG	22.40 DEG	3329.79 M	885.73 M	-405.12 M
3566.90 M	25.50 DEG	23.80 DEG	3338.35 M	889.52 M	-403.50 M
3576.20 M	25.30 DEG	27.60 DEG	3346.75 M	893.11 M	-401.78 M
3585.80 M	24.80 DEG	29.40 DEG	3355.45 M	896.68 M	-399.84 M
3595.30 M	23.70 DEG	31.20 DEG	3364.11 M	900.05 M	-397.87 M
3604.70 M	22.30 DEG	32.90 DEG	3372.76 M	903.16 M	-395.92 M
3614.40 M	21.60 DEG	36.10 DEG	3381.76 M	906.15 M	-393.87 M
3624.10 M	22.40 DEG	39.60 DEG	3390.76 M	909.02 M	-391.64 M
3633.60 M	23.60 DEG	41.70 DEG	3399.50 M	911.84 M	-389.22 M
3643.10 M	24.30 DEG	41.40 DEG	3408.18 M	914.72 M	-386.66 M
3652.40 M	25.60 DEG	42.80 DEG	3416.61 M	917.63 M	-384.03 M
3662.10 M	26.60 DEG	42.40 DEG	3425.32 M	920.77 M	-381.14 M
3672.00 M	27.00 DEG	41.30 DEG	3434.16 M	924.10 M	-378.16 M
3681.60 M	25.90 DEG	42.10 DEG	3442.76 M	927.29 M	-375.32 M
3691.10 M	24.60 DEG	42.10 DEG	3451.35 M	930.30 M	-372.60 M
3700.60 M	24.40 DEG	42.10 DEG	3459.99 M	933.22 M	-369.96 M
3710.10 M	24.00 DEG	43.50 DEG	3468.66 M	936.08 M	-367.32 M
3719.60 M	23.50 DEG	44.50 DEG	3477.35 M	938.83 M	-364.66 M
3729.20 M	23.60 DEG	44.20 DEG	3486.15 M	941.57 M	-361.98 M
3738.80 M	24.20 DEG	42.40 DEG	3494.93 M	944.40 M	-359.31 M
3748.60 M	24.40 DEG	43.50 DEG	3503.86 M	947.36 M	-356.56 M
3758.10 M	24.40 DEG	43.80 DEG	3512.51 M	950.20 M	-353.85 M
3767.60 M	25.10 DEG	44.50 DEG	3521.14 M	953.05 M	-351.08 M
3777.00 M	26.70 DEG	44.20 DEG	3529.60 M	955.99 M	-348.21 M
3786.70 M	28.70 DEG	42.40 DEG	3538.18 M	959.27 M	-345.12 M
3796.20 M	30.50 DEG	39.90 DEG	3546.44 M	962.80 M	-342.03 M
3806.10 M	32.40 DEG	39.20 DEG	3554.89 M	966.78 M	-338.75 M
3815.60 M	33.90 DEG	39.60 DEG	3562.84 M	970.80 M	-335.45 M
3825.00 M	35.50 DEG	39.20 DEG	3570.57 M	974.93 M	-332.05 M
3834.70 M	37.10 DEG	39.20 DEG	3578.39 M	979.38 M	-328.42 M
3844.30 M	38.90 DEG	39.90 DEG	3585.95 M	983.94 M	-324.66 M
3853.80 M	40.30 DEG	39.90 DEG	3593.27 M	988.59 M	-320.77 M
3863.40 M	40.80 DEG	39.60 DEG	3600.57 M	993.38 M	-316.78 M
3872.90 M	40.30 DEG	40.60 DEG	3607.79 M	998.11 M	-312.81 M
3882.40 M	40.00 DEG	42.10 DEG	3615.05 M	1002.71 M	-308.76 M
3891.60 M	39.80 DEG	43.10 DEG	3622.10 M	1007.05 M	-304.76 M
3900.70 M	39.30 DEG	45.20 DEG	3629.12 M	1011.21 M	-300.73 M
3910.30 M	39.60 DEG	45.90 DEG	3636.53 M	1015.48 M	-296.37 M
3919.80 M	42.40 DEG	42.10 DEG	3643.70 M	1019.96 M	-292.05 M
3929.30 M	43.00 DEG	42.80 DEG	3650.69 M	1024.72 M	-287.70 M
3939.00 M	43.80 DEG	42.40 DEG	3657.73 M	1029.62 M	-283.19 M
3945.00 M	44.50 DEG	40.60 DEG	3662.04 M	1032.75 M	-280.42 M
3951.50 M	44.30 DEG	40.60 DEG	3666.68 M	1036.20 M	-277.46 M
3961.10 M	44.60 DEG	41.00 DEG	3673.53 M	1041.29 M	-273.07 M
3967.90 M	42.70 DEG	41.40 DEG	3678.45 M	1044.83 M	-269.98 M
3977.40 M	41.80 DEG	43.50 DEG	3685.49 M	1049.54 M	-265.66 M
3987.00 M	40.40 DEG	44.20 DEG	3692.72 M	1054.09 M	-261.29 M
3996.50 M	39.90 DEG	44.20 DEG	3699.98 M	1058.48 M	-257.02 M
4006.20 M	38.80 DEG	44.50 DEG	3707.48 M	1062.88 M	-252.72 M
4018.50 M	37.90 DEG	46.30 DEG	3717.13 M	1068.24 M	-247.29 M
4028.10 M	36.70 DEG	48.40 DEG	3724.77 M	1072.18 M	-243.01 M
4037.60 M	35.50 DEG	50.10 DEG	3732.44 M	1075.83 M	-238.77 M
4047.00 M	34.90 DEG	50.50 DEG	3740.12 M	1079.29 M	-234.60 M
4056.50 M	34.50 DEG	50.50 DEG	3747.93 M	1082.73 M	-230.43 M
4065.00 M	34.10 DEG	50.50 DEG	3754.95 M	1085.78 M	-226.73 M

Company: **DEVON CANADA CORPORATION**



Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**

*** TVD ***

ARRAY INDUCTION IMAGER
 GAMMA RAY

Company: DEVON CANADA CORPORATION
Well: DEVON ET AL KOTANEELEE L-38A/ST3
Field: KOTANEELEE
Territory: YUKON
Half Scale Log
***** TVD *****



Territory:	YUKON	Field:	KOTANEELEE
Location:	LSD: L-38	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Company:	DEVON CANADA CORPORATION	Location:	LSD: L-38
Well:	DEVON ET AL KOTANEELEE L-38A/ST3	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Field:	KOTANEELEE	Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Territory:	YUKON	Well:	DEVON ET AL KOTANEELEE L-38A/ST3

Logging Date	Run Number	Depth Driller	Schlumberger Depth	Bottom Log Interval	Top Log Interval	Casing Driller Size @ Depth	Casing Schlumberger	Bit Size	Type Fluid In Hole	Density	Viscosity	PH	Source Of Sample	FMF @ Measured Temperature	FMF @ Measured Temperature	FMF @ Measured Temperature	Source RMT	RMC	FMF @ MRT	FMF @ MRT	Maximum Recorded Temperature	Circulation Stopped	Time	Location	Unit Number	Recorded By	Witnessed By	
6-Mar-2005	THREE	THREE	4055 m	4054.5 m	4051.2 m	3951.5 m	177 800 mm	3953 m	VERBACLEAN 1400 (INVERT) / FRESH WATER	156 000 mm	850 kg/m3	37 s	N/A	1 000 ohm m	16 degC	16 degC	16 degC	N/A	N/A	144	144	144 degC	9-Mar-2005	14:15	GRANDE PRAIRIE	2016	PETER WASTYK	PETER WASTYK

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7.46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	BOREHOLE COMPENSATED SONIC LOG
Reference Log Run Number:	TWO
Reference Log Date:	21-DEC-2004
Subsequent Trip Down Log Correction:	1.50 M

Depth Control Remarks

1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1 OS1: AIT OS2: HLDS/APS OS3: DSI OS4: UBI OS5: PPC	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.	REMARKS: RUN NUMBER 2
FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS. FLUID LEVEL FINAL RUN: 1845 M.	
AIT RUN IN COMPUTE MUD RESISTIVITY MODE. PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION AND AS SHORT AXIS LOGGING TOOL FOR NUC RUN.	
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES. GRANDE PRAIRIE AB 780-539-5060 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.	
RUN 1 SERVICE ORDER #: 10829914 PROGRAM VERSION: 12C0-301 FLUID LEVEL: 1845 m	RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:
LOGGED INTERVAL START STOP	LOGGED INTERVAL START STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT SFT-281 SFT-178 GSR-U/J WITM (DTS)-A	SURFACE EQUIPMENT GSR-U/J WITM (DTS)-A
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT
LEH-QT 20.30 LEH-QT DTC-A 19.10 19.41 ECH-KN DTC-A TelStatus 16.97 Gamma Ray 16.69 16.97 SGT-N SGH-K SGC-TB SGD-TAA Calipers 14.95 15.29 PPC1-A PPC1-A PPC_CAL_STD PPC_Cartr 13.31 AH-178 13.31 ILE-D 13.00 ILE-D APS-C 10.57 APH-AC APS-C MNTR Status Mintron Near TD 8.12 Near Arr 8.04 Far Arr 7.92 Far TD 7.82 AH-190 6.62 LDSC-B 6.32 LDSC-A LDSC-B LDSC Stat 5.78 HLDS 5.25 GSR-Z HLDS-D HLDS-D HLDS-D HLDP-C Caliper SS LS Status 1.19 BNS-CCS 0.43 DF Tension HV TOOL ZERO 0.00	LEH-QT 17.37 LEH-QT DTC-A 16.17 16.48 ECH-KN DTC-A TelStatus 14.04 Gamma Ray 13.76 14.04 SGT-N SGH-K SGC-TB SGD-TAA Calipers 12.01 12.36 PPC1-A PPC1-A PPC_CAL_STD PPC_Cartr 10.38 AII-D 10.38 AIC-BA AIH-AA AIS-AA 97 13 MM Standoff Induction Temperature Power Sup 3.33 13 MM Standoff BNS-CCS 0.13 DF Tension HV TOOL ZERO 0.00
MAXIMUM STRING DIAMETER 108 MM MEASUREMENTS RELATIVE TO TOOL ZERO ALL LENGTHS IN METERS	MAXIMUM STRING DIAMETER 124 MM MEASUREMENTS RELATIVE TO TOOL ZERO ALL LENGTHS IN METERS

Input DLIS Files						
DEFAULT	AIT_CAL_LD_LAPS_097PUP	FN:129	PRODUCER	10-Mar-2005 00:31	4061.8 M	3131.8 M
Output DLIS Files						
DEFAULT	AIT_CAL_LD_LAPS_098PUP	FN:131	PRODUCER	10-Mar-2005 00:36	3752.2 M	3034.6 M
OPTICAL_REDUCED	AIT_CAL_LD_LAPS_098PUP	FN:132	PRODUCER	10-Mar-2005 00:36	3752.2 M	3034.6 M

Indexed to True Vertical Depth in this Playback

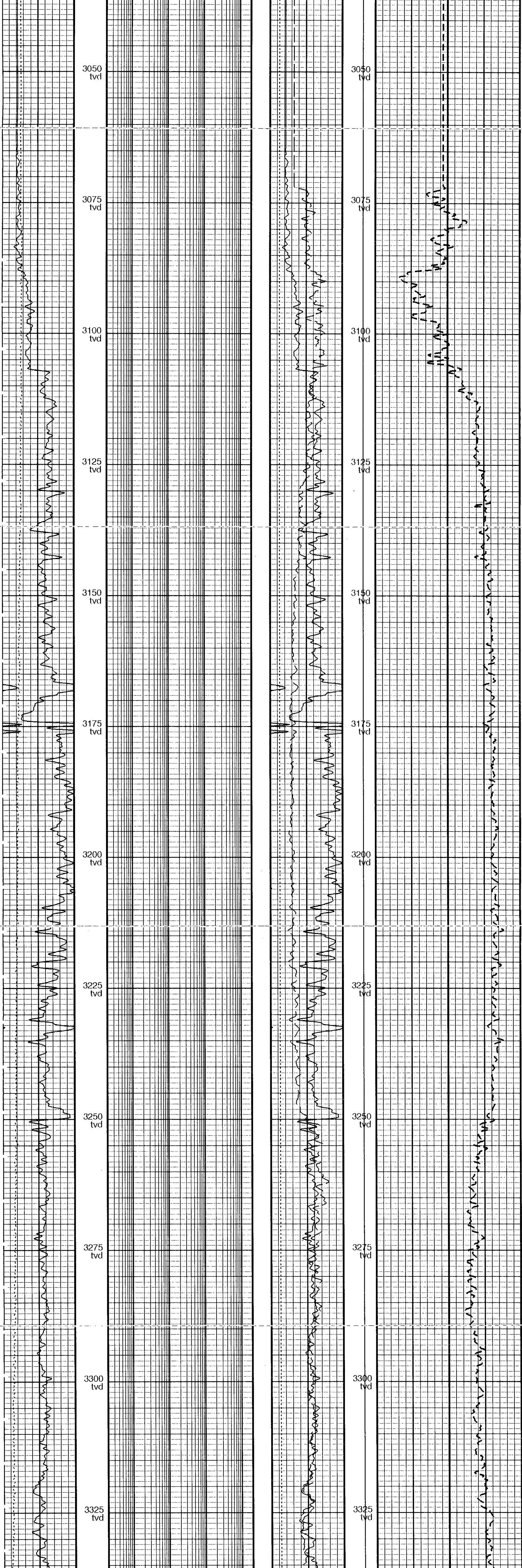
OP System Version: 12C0-301			
MCM			
AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	APS-C	SPC-2602-NUCL_b

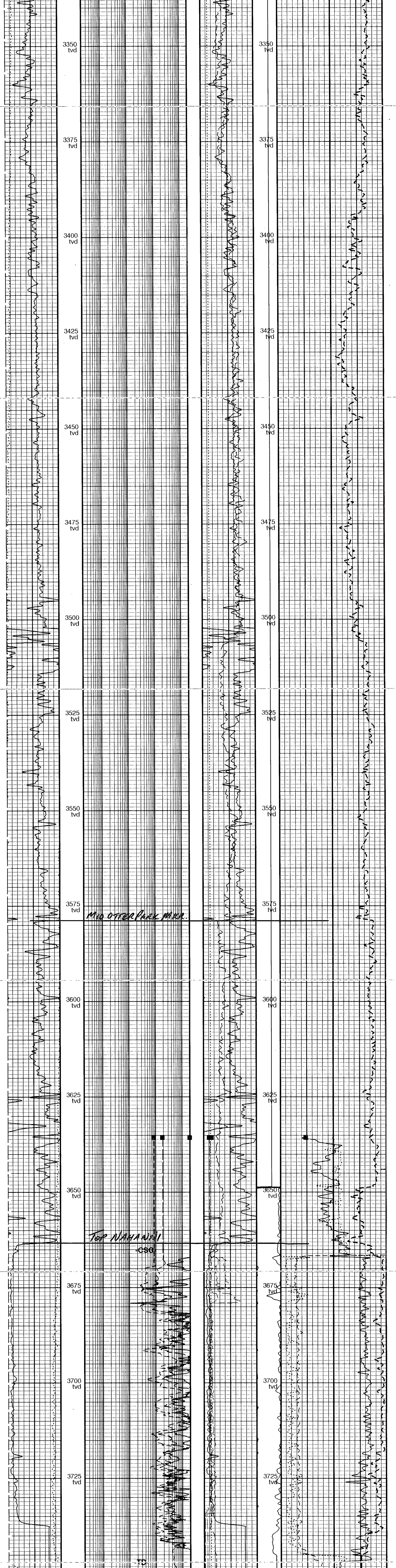
Changed Parameter Summary			
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	CASED	3752.2 00:36:03

PIP SUMMARY

Time Mark Every 60 S

Gamma Ray (GR) 0 (GAPI) 150	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2) PPC1 125 (MM) 375	HLDS Long Spaced Photoelectric Effect (PEFL) 0 (---) 20
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1) PPC1 125 (MM) 375	HLDS Density Porosity (DPO) 0.45 (V/V) -0.15
Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	APS Effective Standoff in Limestone (STOF) (MM) 50 0	HLDS Bulk Density Correction (DRH) -50 (K/M3) 950
			APS Near/Array Corrected Limestone Porosity (APLC) (PU) 45 -0.15





MID OTTOKPARK MKA

TOP NAHAWAI
GSO

Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) (MM) 45 0	APS Near/Array Corrected Limestone Porosity (APLC) (PU) -0.15
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2) 125 (MM) 375	HLDS Bulk Density Correction (DRH) -50 (K/M3) 950	HLDS Density Porosity (DPO) 0.45 (V/V) -0.15
	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) (CU) 0 50	HLDS Long Spaced Photoelectric Effect (PEFL) (---) 0 20	
		Bit Size (BS) 125 (MM) 375		
		Gamma Ray (GR) 0 (GAPI) 150		

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		

ABHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
ADIV	Array Induction Borehole Correction Code Version Number	660	
ABLM	Array Induction Basic Logs Mode	6	One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108	
ACDE	Array Induction Casing Detection Enable	Yes	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered	
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AMRF	Array Induction Mud Resistivity Factor	1	
AGRSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
ARFV	Array Induction Radial Profiling Code Version Number	700	
ARPV	Array Induction Radial Parametrization Code Version Number	223	
ASTA	Array Induction Tool Standoff	12.7	MM
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
PPC1-A: Powered Positioning Device/Caliper 1			
	PPC1 Caliper Type	CAL STD	
CLBD_PPC	PPC Calibration data selection	ROM	
SGT-N: Scintillation Gamma-Ray - N			
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
HLDS: Hostile Litho-Density Sonde			
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1000	K/M3
LATC	HLDS Activation Correction	ON	
MDEN	Matrix Density	2710	K/M3
APS-C: Accelerator-Porosity Tool			
	APS Software Version	0	
AASD	APS Thermal and Array Detectors High Voltage Setting	0	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	0	V
AHCS	APS Holesize Correction Source	BS	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections-Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	0	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	0.5	
NFRC	APS Near/Far Calibration Ratio	0.5	
SHT	Surface Hole Temperature	20	DEGC
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	3509	M
TIVD	TVD of Tie-in Point	3286	M
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	144	DEGC
GCSE	Generalized Caliper Selection	HD1_PPC1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
ALTDPCAN	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	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	16.00	DEGC
PBVSADP	Use alternate depth channel for playback	YES	
PP	Playback Processing	NORMAL	
TD	Total Depth	4054.5	M

Format: Ait_Nuc_45_15_sand Vertical Scale: 1:480 Graphics File Created: 10-Mar-2005 00:36

OP System Version: 12C0-301

MCM

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	APS-C	SPC-2602-NUCL_b

True Vertical Depth Log

Indexed to True Vertical Depth in this Playback

Input DLIS Files

DEFAULT	AIT_CAL_LDL_APS_097PUP	FN:129	PRODUCER	10-Mar-2005 00:31	4061.8 M	3131.8 M
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Output DLIS Files

DEFAULT	AIT_CAL_LDL_APS_098PUP	FN:131	PRODUCER	10-Mar-2005 00:36		
OPTICAL_REDUCED	AIT_CAL_LDL_APS_098PUP	FN:132	PRODUCER	10-Mar-2005 00:36		

Directional Survey Manually-Entered Inclineretry Summary

Tie In Point : Measured Depth True Vertical Depth North Departure East Departure

3509.00 M 3286.00 M 866.12 M -411.40 M

Depth	Deviation	Azimuth	True Vertical Depth	North Departure	East Departure
3509.00 M	24.90 DEG	12.90 DEG	3286.00 M	866.12 M	-411.40 M
3518.50 M	25.30 DEG	15.00 DEG	3294.60 M	870.03 M	-410.43 M
3528.10 M	25.00 DEG	17.10 DEG	3303.29 M	873.95 M	-409.30 M
3537.90 M	25.00 DEG	18.50 DEG	3312.17 M	877.89 M	-408.03 M
3547.40 M	25.40 DEG	20.30 DEG	3320.77 M	881.71 M	-406.69 M
3557.40 M	25.80 DEG	22.40 DEG	3329.79 M	885.73 M	-405.12 M
3566.90 M	25.50 DEG	23.80 DEG	3338.35 M	889.52 M	-403.50 M
3576.20 M	25.30 DEG	27.60 DEG	3346.75 M	893.11 M	-401.78 M
3585.80 M	24.80 DEG	29.40 DEG	3355.45 M	896.68 M	-399.84 M
3595.30 M	23.70 DEG	31.20 DEG	3364.11 M	900.05 M	-397.87 M
3604.70 M	22.30 DEG	32.90 DEG	3372.76 M	903.16 M	-395.92 M
3614.40 M	21.60 DEG	36.10 DEG	3381.76 M	906.15 M	-393.87 M
3624.10 M	22.40 DEG	39.60 DEG	3390.76 M	909.02 M	-391.64 M
3633.60 M	23.60 DEG	41.70 DEG	3399.50 M	911.84 M	-389.22 M
3643.10 M	24.30 DEG	41.40 DEG	3408.18 M	914.72 M	-386.66 M
3652.40 M	25.60 DEG	42.80 DEG	3416.61 M	917.63 M	-384.03 M
3662.10 M	26.60 DEG	42.40 DEG	3425.32 M	920.77 M	-381.14 M
3672.00 M	27.00 DEG	41.30 DEG	3434.16 M	924.10 M	-378.16 M
3681.60 M	25.90 DEG	42.10 DEG	3442.76 M	927.29 M	-375.32 M
3691.10 M	24.60 DEG	42.10 DEG	3451.35 M	930.30 M	-372.60 M
3700.60 M	24.40 DEG	42.10 DEG	3459.99 M	933.22 M	-369.96 M
3710.10 M	24.00 DEG	43.50 DEG	3468.66 M	936.08 M	-367.32 M
3719.60 M	23.50 DEG	44.50 DEG	3477.35 M	938.83 M	-364.66 M
3729.20 M	23.60 DEG	44.20 DEG	3486.15 M	941.57 M	-361.98 M
3738.80 M	24.20 DEG	42.40 DEG	3494.93 M	944.40 M	-359.31 M
3748.60 M	24.40 DEG	43.50 DEG	3503.86 M	947.36 M	-356.56 M
3758.10 M	24.40 DEG	43.80 DEG	3512.51 M	950.20 M	-353.85 M
3767.60 M	25.10 DEG	44.50 DEG	3521.14 M	953.05 M	-351.08 M
3777.00 M	26.70 DEG	44.20 DEG	3529.60 M	955.99 M	-348.21 M
3786.70 M	28.70 DEG	42.40 DEG	3538.18 M	959.27 M	-345.12 M
3796.20 M	30.50 DEG	39.90 DEG	3546.44 M	962.80 M	-342.03 M
3806.10 M	32.40 DEG	39.20 DEG	3554.89 M	966.78 M	-338.75 M
3815.60 M	33.90 DEG	39.60 DEG	3562.84 M	970.80 M	-335.45 M
3825.00 M	35.50 DEG	39.20 DEG	3570.57 M	974.93 M	-332.05 M
3834.70 M	37.10 DEG	39.20 DEG	3578.39 M	979.38 M	-328.42 M
3844.30 M	38.90 DEG	39.90 DEG	3585.95 M	983.94 M	-324.66 M
3853.80 M	40.30 DEG	39.90 DEG	3593.27 M	988.59 M	-320.77 M
3863.40 M	40.80 DEG	39.60 DEG	3600.57 M	993.38 M	-316.78 M
3872.90 M	40.30 DEG	40.60 DEG	3607.79 M	998.11 M	-312.81 M
3882.40 M	40.00 DEG	42.10 DEG	3615.05 M	1002.71 M	-308.76 M
3891.60 M	39.80 DEG	43.10 DEG	3622.10 M	1007.05 M	-304.76 M
3900.70 M	39.30 DEG	45.20 DEG	3629.12 M	1011.21 M	-300.73 M
3910.30 M	39.60 DEG	45.90 DEG	3636.53 M	1015.48 M	-296.37 M
3919.80 M	42.40 DEG	42.10 DEG	3643.70 M	1019.96 M	-292.05 M
3929.30 M	43.00 DEG	42.80 DEG	3650.69 M	1024.72 M	-287.70 M
3939.00 M	43.80 DEG	42.40 DEG	3657.73 M	1029.62 M	-283.19 M
3945.00 M	44.50 DEG	40.60 DEG	3662.04 M	1032.75 M	-280.42 M
3951.50 M	44.30 DEG	40.60 DEG	3666.68 M	1036.20 M	-277.46 M
3961.10 M	44.60 DEG	41.00 DEG	3673.53 M	1041.29 M	-273.07 M
3967.90 M	42.70 DEG	41.40 DEG	3678.45 M	1044.83 M	-269.98 M
3977.40 M	41.80 DEG	43.50 DEG	3685.49 M	1049.54 M	-265.66 M
3987.00 M	40.40 DEG	44.20 DEG	3692.72 M	1054.09 M	-261.29 M
3996.50 M	39.90 DEG	44.20 DEG	3699.98 M	1058.48 M	-257.02 M
4006.20 M	38.80 DEG	44.50 DEG	3707.48 M	1062.88 M	-252.72 M
4018.50 M	37.90 DEG	46.30 DEG	3717.13 M	1068.24 M	-247.29 M
4028.10 M	36.70 DEG	48.40 DEG	3724.77 M	1072.18 M	-243.01 M
4037.60 M	35.50 DEG	50.10 DEG	3732.44 M	1075.83 M	-238.77 M
4047.00 M	34.90 DEG	50.50 DEG	3740.12 M	1079.29 M	-234.60 M
4056.50 M	34.50 DEG	50.50 DEG	3747.93 M	1082.73 M	-230.43 M
4065.00 M	34.10 DEG	50.50 DEG	3754.95 M	1085.78 M	-226.73 M

Company: **DEVON CANADA CORPORATION**

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**

Field: **KOTANEELEE**

Territory: **YUKON**



*** TVD ***

Company: **DEVON CANADA CORPORATION**
Schlumberger
 Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**

Territory:	YUKON
Field:	KOTANEELEE
Location:	LSD: L-38
Well:	DEVON ET AL KOTANEELEE L-38A/ST3
Company:	DEVON CANADA CORPORATION

UWIID:	3001386010124003	Elev.:	K.B. 810.4 m
Permanent Datum:	GROUND LEVEL	Elev.:	G.L. 803.65 m
Log Measured From:	KELLY BUSHING	D.F.:	810.4 m
Drilling Measured From:	KELLY BUSHING	Elev.:	6.8 m above Perm. Datum

Latitude:	60 D 07' 32.4" N	Longitude:	124 D 07' 23.6" W
API Serial No.:	1117		

Logging Date:	6-Mar-2005	Run Number:	THREE
Depth Driller:	4085 m	Schlumberger Depth:	4084.5 m
Bottom Log Interval:	4051.2 m	Top Log Interval:	3951.5 m
Casing Driller Size @ Depth:	177.800 mm	Casing Schlumberger:	3953 m
Bit Size:	3951.5 m	Type Fluid In Hole:	VERSACLAN 1400 (INVERT) / FRESH WATER
Density:	156.000 mm	Viscosity:	850 kg/m ³
Fluid Loss:	PH	Source Of Sample:	N/A
RMF @ Measured Temperature:	1.000 ohm.m	RMF @ Measured Temperature:	@ 16 degC
RMF @ Measured Temperature:	N/A	RMF @ Measured Temperature:	@
Source FIMF:	FMC	Source FIMF:	FMC
RM @ MHT:	RM @ MHT	RM @ MHT:	RM @ MHT
Maximum Recorded Temperature:	144 degC	Maximum Recorded Temperature:	144
Circulation Stopped:	5-Mar-2005	Circulation Stopped:	14:15
Logger On Bottom:	9-Mar-2005	Logger On Bottom:	22:05
Unit Number:	2016	Location:	GRANDE PRAIRIE
Recorded By:	TERRE, J ESTON	Witnessed By:	PETER WASYLYK

CORRECTED LOG

Logging Date:	6-Mar-2005	Run Number:	THREE
Depth Driller:	4085 m	Schlumberger Depth:	4084.5 m
Bottom Log Interval:	4051.2 m	Top Log Interval:	3951.5 m
Casing Driller Size @ Depth:	177.800 mm	Casing Schlumberger:	3953 m
Bit Size:	3951.5 m	Type Fluid In Hole:	VERSACLAN 1400 (INVERT) / FRESH WATER
Density:	156.000 mm	Viscosity:	850 kg/m ³
Fluid Loss:	PH	Source Of Sample:	N/A
RMF @ Measured Temperature:	1.000 ohm.m	RMF @ Measured Temperature:	@ 16 degC
RMF @ Measured Temperature:	N/A	RMF @ Measured Temperature:	@
Source FIMF:	FMC	Source FIMF:	FMC
RM @ MHT:	RM @ MHT	RM @ MHT:	RM @ MHT
Maximum Recorded Temperature:	144 degC	Maximum Recorded Temperature:	144
Circulation Stopped:	5-Mar-2005	Circulation Stopped:	14:15
Logger On Bottom:	9-Mar-2005	Logger On Bottom:	22:05
Unit Number:	2016	Location:	GRANDE PRAIRIE
Recorded By:	TERRE, J ESTON	Witnessed By:	PETER WASYLYK

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	BOREHOLE COMPENSATED SONIC LOG
Reference Log Run Number:	TWO
Reference Log Date:	21-DEC-2004
Subsequent Trip Down Log Correction:	1.50 M

Depth Control Remarks

1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED DATA.

OTHER SERVICES1 OS1: AIT OS2: HLDS/APS OS3: DSI OS4: UBI OS5: PPC	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:				
REMARKS: RUN NUMBER 1 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.	REMARKS: RUN NUMBER 2				
FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS. FLUID LEVEL FINAL RUN: 1845 M.					
AIT RUN IN COMPUTE MUD RESISTIVITY MODE. PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION AND AS SHORT AXIS LOGGING TOOL FOR NUC RUN.					
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES. GRANDE PRAIRIE, AB 780-539-5060 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.					
RUN 1 SERVICE ORDER #: 10829914 PROGRAM VERSION: 12CO-301 FLUID LEVEL: 1845 m	RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:				
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT SFT-281 SFT-178 GSR-U/Y WITM (DTS)-A	SURFACE EQUIPMENT GSR-U/Y WITM (DTS)-A
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT
LEH-QT 20.30 LEH-QT DTC-A 19.41 ECH-KN DTC-A CTEM TelStatus 16.97 Gamma Ray 16.69 SGT-N 16.97 SGH-K SGC-TB SGD-TAA Calipers 14.95 PPC1-A 15.29 PPC1-A PPC_CAL_STD PPC_Cartr 13.31 AH-178 13.31 ILE-D 13.00 ILE-D APS-C 10.57 APH-AC APS-C MNTR Status Minitron Near TD Near Arr Far Arr Far TD 8.12 8.04 7.92 7.82 AH-190 6.62 LDSC-B 6.32 LDSC-A LDSC-B LDSC Stat 5.78 HLDS 5.25 GSR-Z HLDV-D HLDV-D HLDV-D HLDV-D HLDV-D HLDV-D Caliper SS LS Status 1.19 DF 0.00 Tension HV 0.43 BNS-CCS TOOL ZERO	LEH-QT 17.37 LEH-QT DTC-A 16.48 ECH-KN DTC-A CTEM TelStatus 14.04 Gamma Ray 13.76 SGT-N 14.04 SGH-K SGC-TB SGD-TAA Calipers 12.01 PPC1-A 12.36 PPC1-A PPC_CAL_STD PPC_Cartr 10.38 AIT-D 10.35 AIC-BA AIH-AA AIS-BA 97 13 MM Standoff Induction Temperatu Power Sup 3.33 13 MM Standoff DF 0.00 Tension HV 0.13 BNS-CCS TOOL ZERO MAXIMUM STRING DIAMETER 108 MM MEASUREMENTS RELATIVE TO TOOL ZERO ALL LENGTHS IN METERS

AIT-D
SGT-N
HLDS

SKK-2637-PPC_b
12C0-301
SPC-2602-NUCL_b

PPC1-A
DTC-A
APS-C

SKK-2637-PPC_b
12C0-301
SPC-2602-NUCL_b

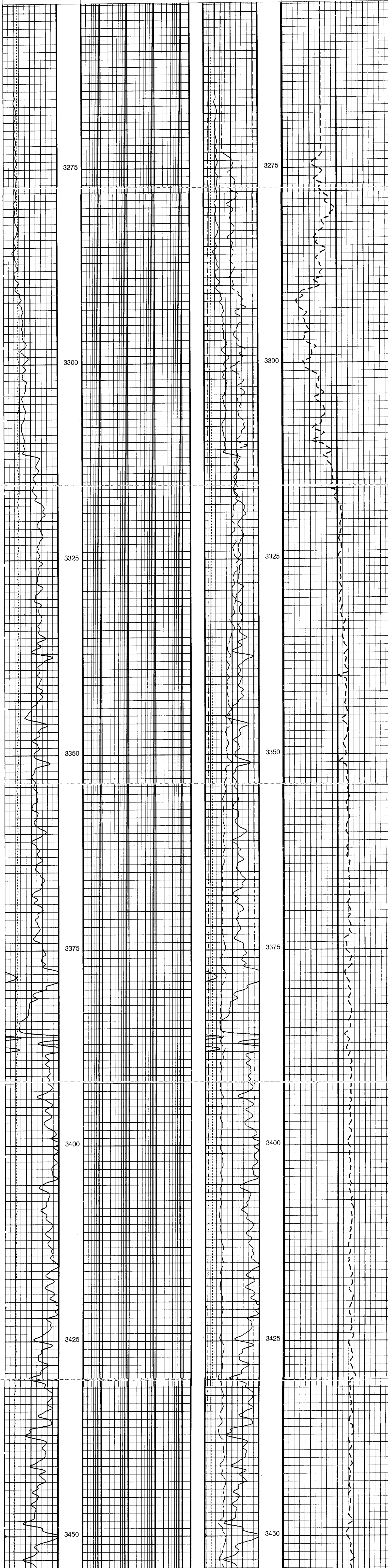
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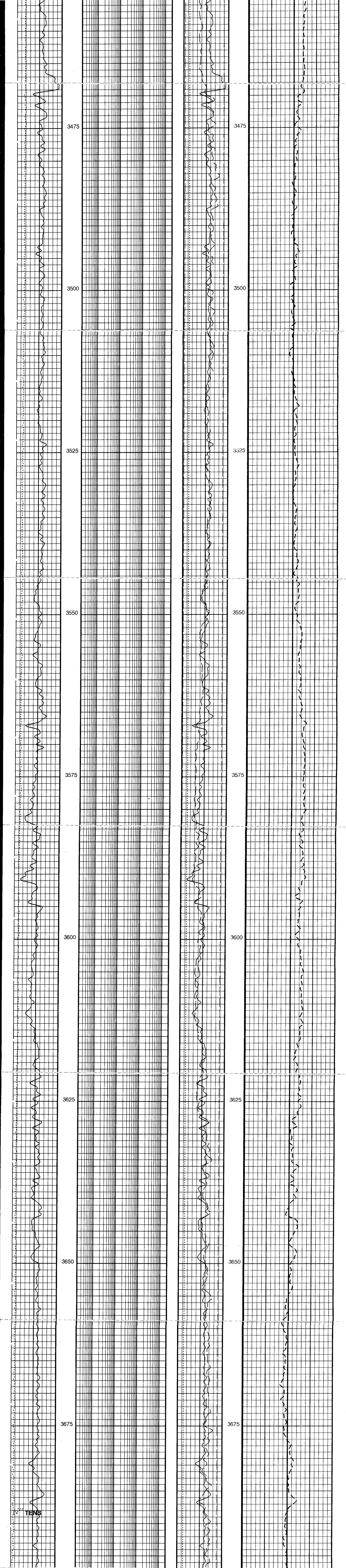
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3944.9 16:23:28

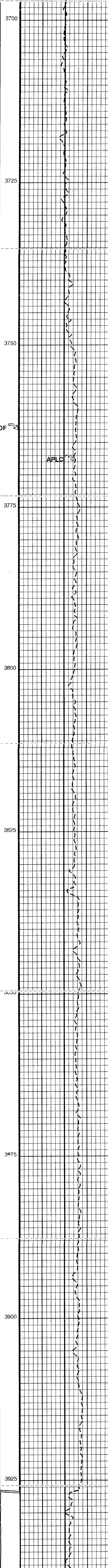
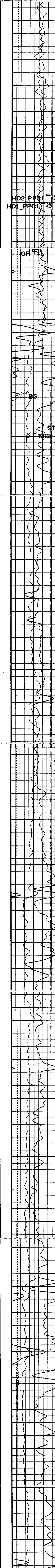
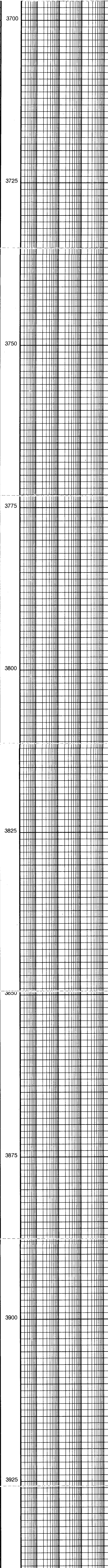
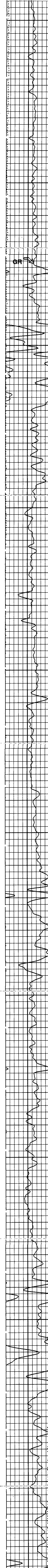
PIP SUMMARY

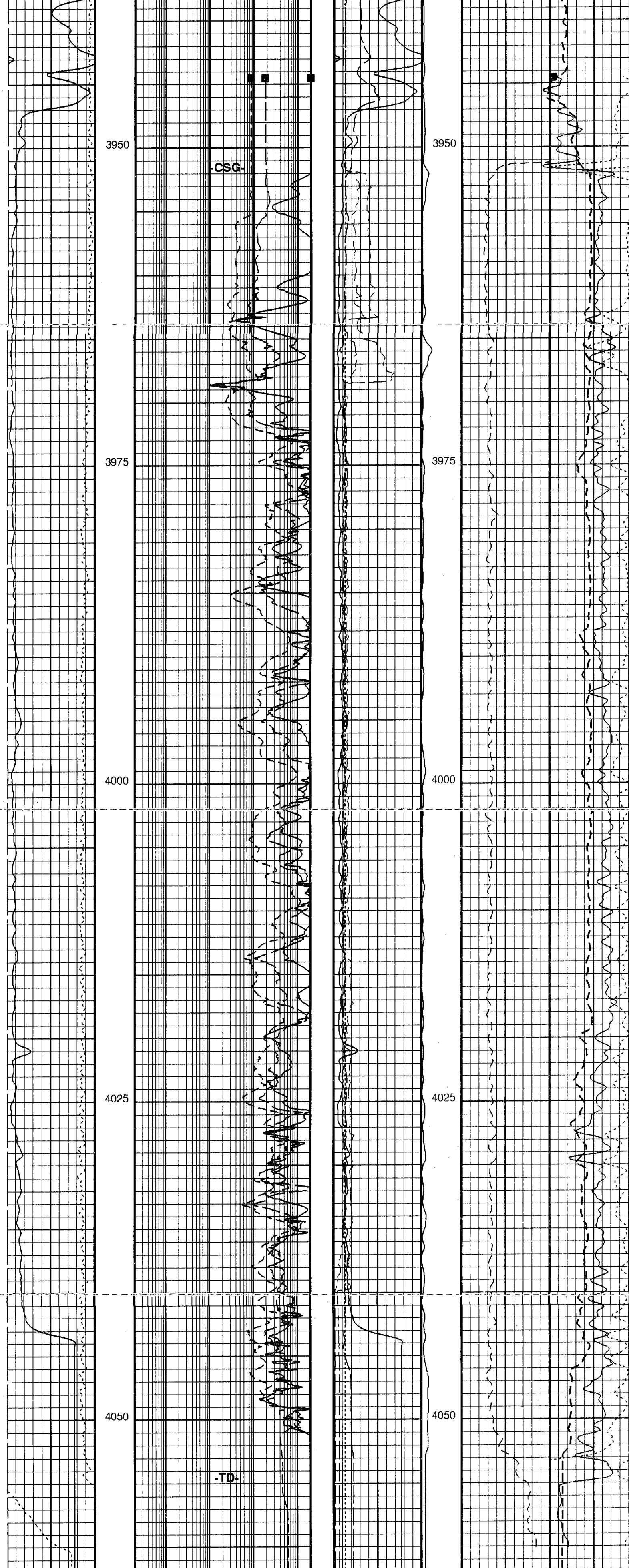
Time Mark Every 60 S

		Gamma Ray (GR) 0 (GAPI) 150	
		Bit Size (BS) 125 (MM) 375	
	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) 0 (CU) 50	HLDS Long Spaced Photoelectric Effect (PEFL) 0 (---) 10
			HLDS Bulk Density Correction (DRH) 450 (K/M3) -50
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375	HLDS Density Porosity (DPO) 0.45 (V/V) -0.15
Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Near/Array Corrected Limestone Porosity (APLC) 0.45 (V/V) -0.15
			APS Effective Standoff in Limestone (STOF) 0 (MM) 125









Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) (MM) 0 125	APS Near/Array Corrected Limestone Porosity (APLC) (V/V) 0.45 -0.15
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375		HLDS Density Porosity (DPO) (V/V) 0.45 -0.15
	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) (CU) 0 50		HLDS Long Spaced Photoelectric Effect (PEFL) (---) 10
		Bit Size (BS) 125 (MM) 375		HLDS Bulk Density Correction (DRH) (K/M3) -50
		Gamma Ray (GR) 0 (GAPI) 150		

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Code	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
CLBD_PPC	PPC Calibration data selection	ROM
SGT-N: Scintillation Gamma-Ray		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	0
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	0
AHSS	APS Holesize Correction Source	BS
AMTY	APS Holesize Correction Switch	ON
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite
ASOS	APS Near Detector High Voltage Setting	0
ATSS	APS Standoff Correction Switch	ON
BHT	Bottom Hole Temperature (used in calculations)	144
BHS	Borehole Status	OPEN
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-5000
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	0.5
NFRC	APS Near/Far Calibration Ratio	0.5
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole-Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Calliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
System and Miscellaneous		
BS	Bit Size	156.00
BSAL	Borehole Salinity	-50000.00
CSIZ	Current Casing Size	177.800
CWEI	Casing Weight	43.16
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5

Format: Ait_Nuc_45_15_sand Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:23

OP System Version: 12C0-301

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	APS-C	SPC-2602-NUCL_b

Input DLIS Files

DEFAULT	AIT_CAL_LDL_APS_097PUP	FN:129	PRODUCER	10-Mar-2005 00:31	4061.8 M	3131.8 M
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Well: DEVON ET AL KOTANEELEE L-38A/ST3
Field: KOTANEELEE
Territory: YUKON

HALF SCALE LOG

Schlumberger

DEVON CANADA CORPORATION

WELL: DEVON ET AL KOTANEELEE L-38A/ST3

FIELD: KOTANEELEE

TERRITORY: YUKON

HALF SCALE LOG

Company: DEVON CANADA CORPORATION
 Well: KOTANEELEE
 Field: KOTANEELEE
 Territory: YUKON

Location: LSD: L-38
 Location: LSD: L-38
 Well: DEVON ET AL KOTANEELEE L-38A/ST3
 Company: DEVON CANADA CORPORATION

Permanent Datum: GROUND LEVEL
 Log Measured From: KELLY BUSHING
 Drilling Measured From: KELLY BUSHING

UWI: 3001386010124003
 Elevation: K.B. 810.4 m
 G.L. 803.65 m
 D.F. 810.4 m

API Serial No. 1117
 Latitude: 60 D 07' 32.4" N
 Longitude: 124 D 07' 23.6" W

Logging Date: 6-Mar-2005
 Run Number: THREE
 Depth Driller: 4085 m
 Schlumberger Depth: 4051.2 m
 Bottom Log Interval: 4051.2 m
 Top Log Interval: 3951.5 m
 Casing Driller Size @ Depth: 177.800 mm @ 3953 m
 Casing Schlumberger: 156.000 mm
 Bit Size: 156.000 mm
 Type Fluid in Hole: VESICACLEAN 1400 (INVERT) / FRESH WATER
 Density: 850 kg/m³
 Viscosity: 57 s
 Fluid Loss: N/A
 PH: N/A
 Source Of Sample: N/A
 RM @ Measured Temperature: 1000 ohm.m @ 16 degC
 RMF @ Measured Temperature: @
 RMC @ Measured Temperature: @
 Source RMF: N/A
 RM @ MFT: N/A
 RMF @ MFT: N/A
 Maximum Recorded Temperature: 144 degC @ 144
 Circulation Stopped: 9-Mar-2005 14:15
 Logger On Bottom: 9-Mar-2005 22:05
 Unit Number: 2016
 Location: GRANDE PRAIRIE
 Recorded By: L.P.HIE, J. EASTON
 Witnessed By: PETER WASYLYK

Logging Date	Run Number	Depth Driller	Schlumberger Depth	Bottom Log Interval	Top Log Interval	Casing Driller Size @ Depth	Casing Schlumberger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	PH	Source Of Sample	RM @ Measured Temperature	RMF @ Measured Temperature	RMC @ Measured Temperature	Source RMF	RM @ MFT	RMF @ MFT	Maximum Recorded Temperature	Circulation Stopped	Logger On Bottom	Unit Number	Location	Recorded By	Witnessed By
6-Mar-2005	THREE	4085 m	4051.2 m	4051.2 m	3951.5 m	177.800 mm @ 3953 m	156.000 mm	156.000 mm	VESICACLEAN 1400 (INVERT) / FRESH WATER	850 kg/m ³	57 s	N/A	N/A	N/A	1000 ohm.m @ 16 degC	@	@	N/A	N/A	N/A	144 degC @ 144	9-Mar-2005 14:15	9-Mar-2005 22:05	2016	GRANDE PRAIRIE	L.P.HIE, J. EASTON	PETER WASYLYK

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Trip To the Well
 Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
 Reference Log Run Number: TWO
 Reference Log Date: 21-DEC-2004
 Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks

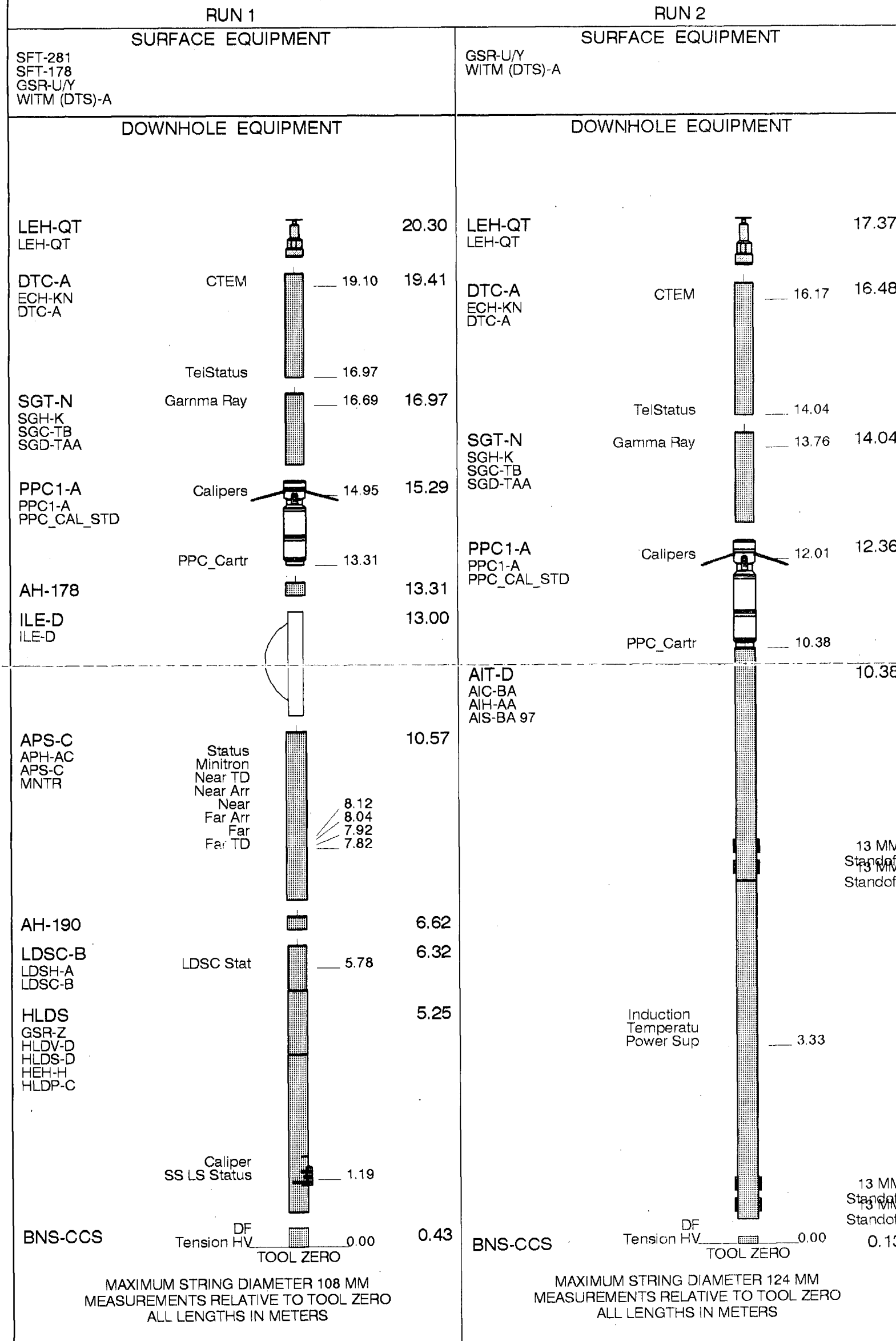
1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2
OS1: AIT OS2: HLDS/APS OS3: DSI OS4: UBI OS5: PPC	OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1 THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.	REMARKS: RUN NUMBER 2
FRESH WATER DUMPED ON INVERT DUE TO MUD LOSS. FLUID LEVEL FINAL RUN: 1845 M.	
AIT RUN IN COMPUTE MUD RESISTIVITY MODE. PPC RUN AS CALIPER INPUT FOR RESISTIVITY COMPUTATION AND AS SHORT AXIS LOGGING TOOL FOR NUC RUN.	
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES. GRANDE PRAIRIE, AB 780-539-5060 YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.	
SERVICE ORDER #: 10829914 PROGRAM VERSION: 12C0-301 FLUID LEVEL: 1845 m	SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:
LOGGED INTERVAL	LOGGED INTERVAL
START	START
STOP	STOP

EQUIPMENT DESCRIPTION



AIT-D
SGT-N
HLDS

SKK-2637-PPC_b
12C0-301
SPC-2602-NUCL_b

PPC1-A
DTC-A
APS-C

SKK-2637-PPC_b
12C0-301
SPC-2602-NUCL_b

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3944.9 16:23:28

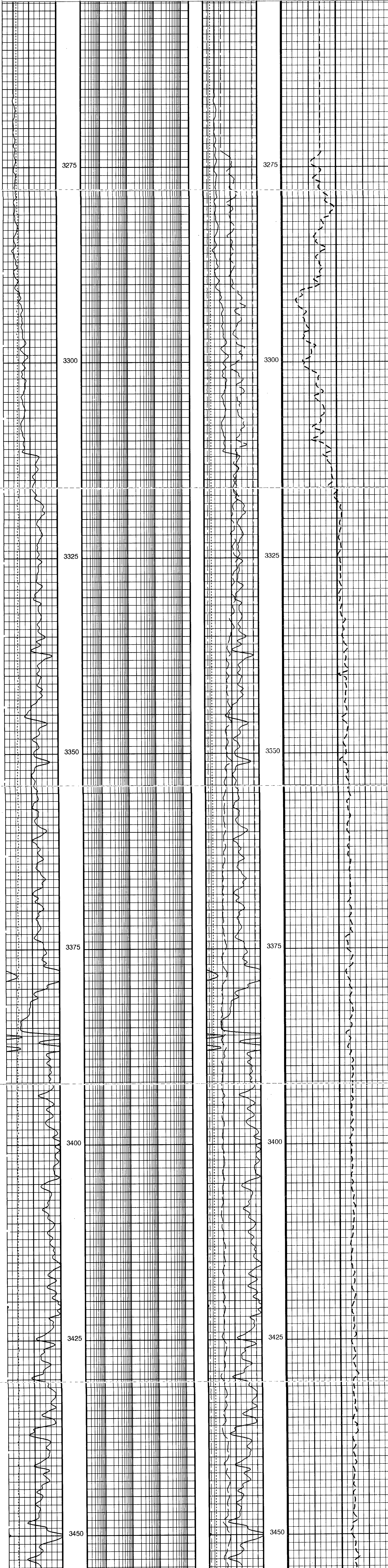
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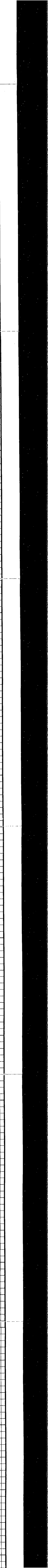
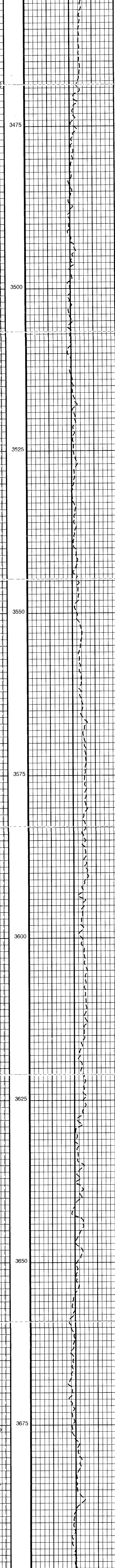
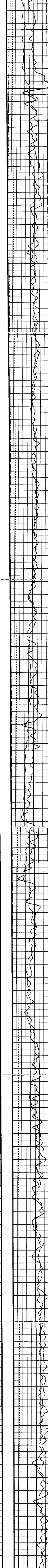
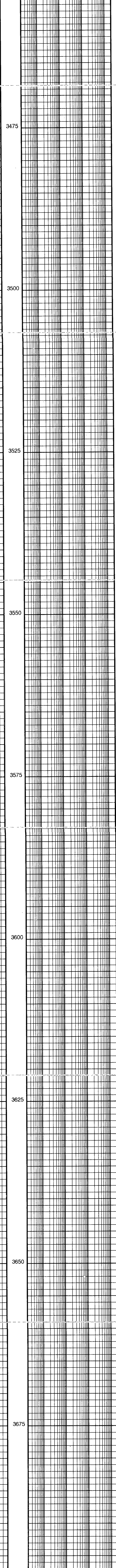
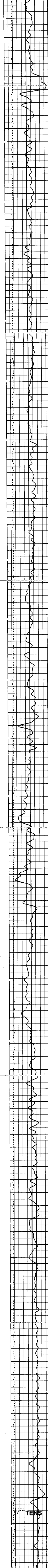
Time Mark Every 60 S

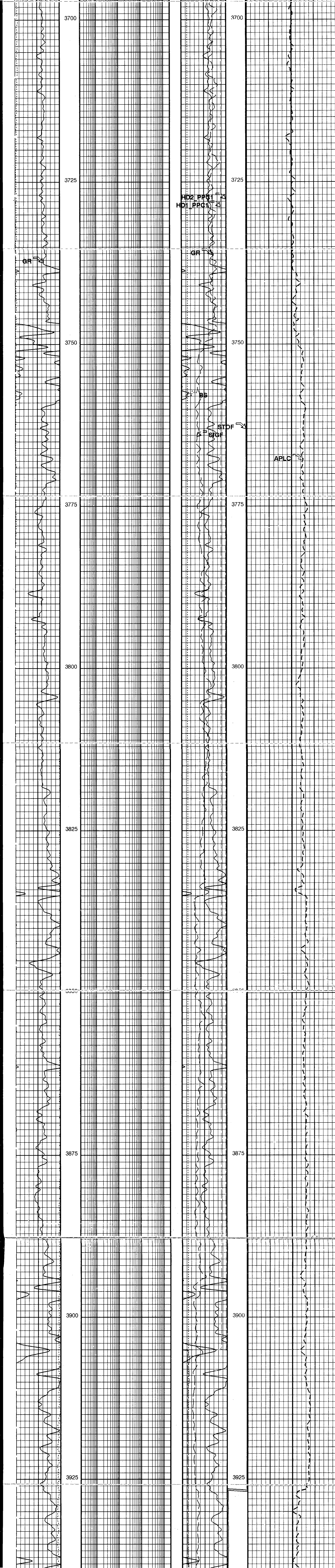
Gamma Ray (GR) 0 (GAPI) 150	AIT 90 Inch Investigation (AT90) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) 0 (CU) 50	HLDS Long Spaced Photoelectric Effect (PEFL) 0 (---) 10	HLDS Bulk Density Correction (DRH) 450 (K/M3) -50
Bit Size (BS) 125 (MM) 375				

Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375	HLDS Density Porosity (DPO) 0.45 (V/V) -0.15
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Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) (MM) 0 125	APS Near/Array Corrected Limestone Porosity (APLC) 0.45 (V/V) -0.15
--------------------------------	---	---	--	--







3700

3725

3750

3775

3800

3825

3850

3875

3900

3925

3700

3725

3750

3775

3800

3825

3850

3875

3900

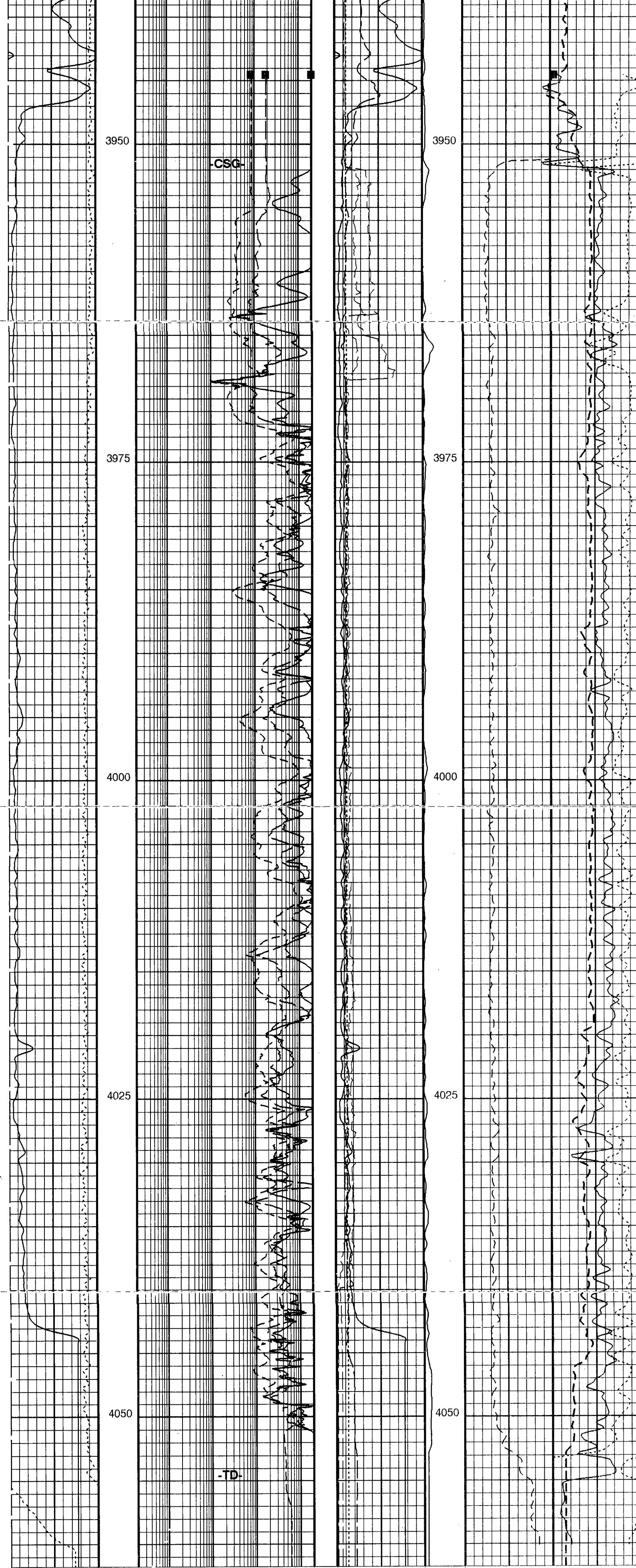
3925

FD2 PPG1
FD1 PPG2

GR

BB

STDF
APLC



Gamma Ray (GR) 0 (GAPI) 150	AIT 20 Inch Investigation (AT20) 0.2 (OHMM) 2000	PPC1 Hole Diameter 1 (HD1_PPC1) 125 (MM) 375	APS Effective Standoff in Limestone (STOF) (MM) 0 125	APS Near/Array Corrected Limestone Porosity (APLC) (V/V) 0.45 -0.15
Tension (TENS) 20000 (N) 0	AIT 30 Inch Investigation (AT30) 0.2 (OHMM) 2000	PPC1 Hole Diameter 2 (HD2_PPC1) 125 (MM) 375		HLDS Density Porosity (DPO) (V/V) 0.45 -0.15
	AIT 30 Inch Investigation (AT90) 0.2 (OHMM) 2000	APS Formation Capture Cross-Section (SIGF) (CU) 0 50		HLDS Long Spaced Photoelectric Effect (PEFL) (---) 10
		Bit Size (BS) 125 (MM) 375		HLDS Bulk Density Correction (DRH) (K/M3) -50
		Gamma Ray (GR) 0 (GAPI) 150		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-D: Array Induction Tool - D		
ABHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Code	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	Yes
ACEN	Array Induction Tool Centering Flag (in Borehole)	Centered
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	12.7
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N	PPC1 Calibration data selection	ROM
SGT-N: Scintillation Gamma-Ray - N		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	0
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	0
AHSC	APS Holesize Correction Source	BS
AHSD	APS Holesize Correction Switch	ON
AMSD	APS Environmental Corrections Mud Type	WaterBaseBarite
ANSO	APS Near Detector High Voltage Setting	0
ASOS	APS Standoff Correction Switch	ON
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-50000
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	0.5
NFRC	APS Near/Far Calibration Ratio	0.5
SHT	Surface Hole Temperature	20
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
GCSE	Generalized Caliper Selection	HD1_PPC1
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
System and Miscellaneous		
BS	Bit Size	156.00
BSAL	Borehole Salinity	-50000.00
CSIZ	Current Casing Size	177.800
CWEI	Casing Weight	43.16
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
MST	Mud Sample Temperature	16.00
PP	Playback Processing	NORMAL
TD	Total Depth	4054.5

Format: Ait_Nuc_45_15_sand Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:23

OP System Version: 12C0-301

MCM

AIT-D	SKK-2637-PPC_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301
HLDS	SPC-2602-NUCL_b	APS-C	SPC-2602-NUCL_b

Input DLIS Files

DEFAULT	AIT_CAL_LDL_APS_097PUP	FN:129	PRODUCER	10-Mar-2005 00:31	4061.8 M	3131.8 M
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Company: DEVON CANADA CORPORATION

Schlumberger

Well: DEVON ET AL KOTANEELEE L-38A/ST3
Field: KOTANEELEE
Territory: YUKON

HALF SCALE LOG

Company: **DEVON CANADA CORPORATION**

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**
 Field: **KOTANEELEE**
 Territory: **YUKON**

**ACCELERATED POROSITY
 HOSTILE LITHOLOGY
 DENSITY LOG**

Territory: YUKON	Field: KOTANEELEE	Location: LSD: L-38	Well: DEVON ET AL KOTANEELEE L-38A/ST3	Company: DEVON CANADA CORPORATION
LOCATION				
LSD: L-38	UWID: 300L389010124003	Elev.: K.B. 810.4 m	G.L. 803.85 m	D.F. 810.4 m
Permanent Datum: GROUND LEVEL	Log Measured From: KELLY BUSHING	Elev.: 803.85 m	6.8 m above Perm. Datum	
Drilling Measured From: KELLY BUSHING	API Serial No. 1117	Latitude: 60 D 07 32 4' N	Longitude: 124 D 07 23 6' W	

Logging Date: 6-Mar-2005	Run Number: THREE	Depth Driller: 4054 m	Schlumberger Depth: 4054.5 m	Bottom Log Interval: 3275 m	Top Log Interval: 177.800 m	Casing Driller Size @ Depth: 3953 m	Casing Schlumberger: 156,000 mm	Bit Size: 156,000 mm	VERSACLEAN 1400 (INVERT) / FRESH WATER	Type Fluid In Hole: Viscosity: 37 s	Density: 850 kg/m3	Fluid Loss: PH: N/A	Source Of Sample: N/A	RM @ Measured Temperature: @	RMC @ Measured Temperature: @	Source RMC: @	RM @ MFT: @	RMC @ MFT: @	Maximum Recorded Temperatures: 144 degC	Circulation Stopped: 5-Mar-2005	Logger On Bottom: 5-Mar-2005	Unit Number: 2016	Location: GRANDE PRAIRIE	Recorded By: PETER WASYLIVK	Witnessed By: PETER WASYLIVK
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CORRECTED LOG

Logging Date	Run Number	Depth Driller	Schlumberger Depth	Bottom Log Interval	Top Log Interval	Casing Driller Size @ Depth	Casing Schlumberger	Bit Size	Type Fluid In Hole	Density	Fluid Loss	Viscosity	PH	Source Of Sample	RM @ Measured Temperature	RMC @ Measured Temperature	Source RMC	RM @ MFT	RMC @ MFT	Maximum Recorded Temperatures	Circulation Stopped	Logger On Bottom	Unit Number	Location	Recorded By	Witnessed By
6-Mar-2005	THREE	4054 m	4054.5 m	3275 m	177.800 m	3953 m	156,000 mm	156,000 mm	VERSACLEAN 1400 (INVERT) / FRESH WATER	850 kg/m3		37 s	PH: N/A		@	@	@	@	@	144 degC	5-Mar-2005	5-Mar-2005	2016	GRANDE PRAIRIE	PETER WASYLIVK	PETER WASYLIVK

DEPTH SUMMARY LISTING

Date Created: 7-MAR-2005 8:22:27

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 6159 Calibration Date: 07-SEP-2004 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P Wheel Correction 1: -8 Wheel Correction 2: -8	Type: CMTD-B/A Serial Number: 2449 Calibration Date: 30-AUG-2004 Calibrator Serial Number: 78130 Calibration Gain: 0.89 Calibration Offset: 414.00	Type: 7-52P Serial Number: 8240 Length: 7315.20 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Trip To the Well
Reference Log Name: BOREHOLE COMPENSATED SONIC LOG
Reference Log Run Number: TWO
Reference Log Date: 21-DEC-2004
Subsequent Trip Down Log Correction: 1.50 M

Depth Control Remarks

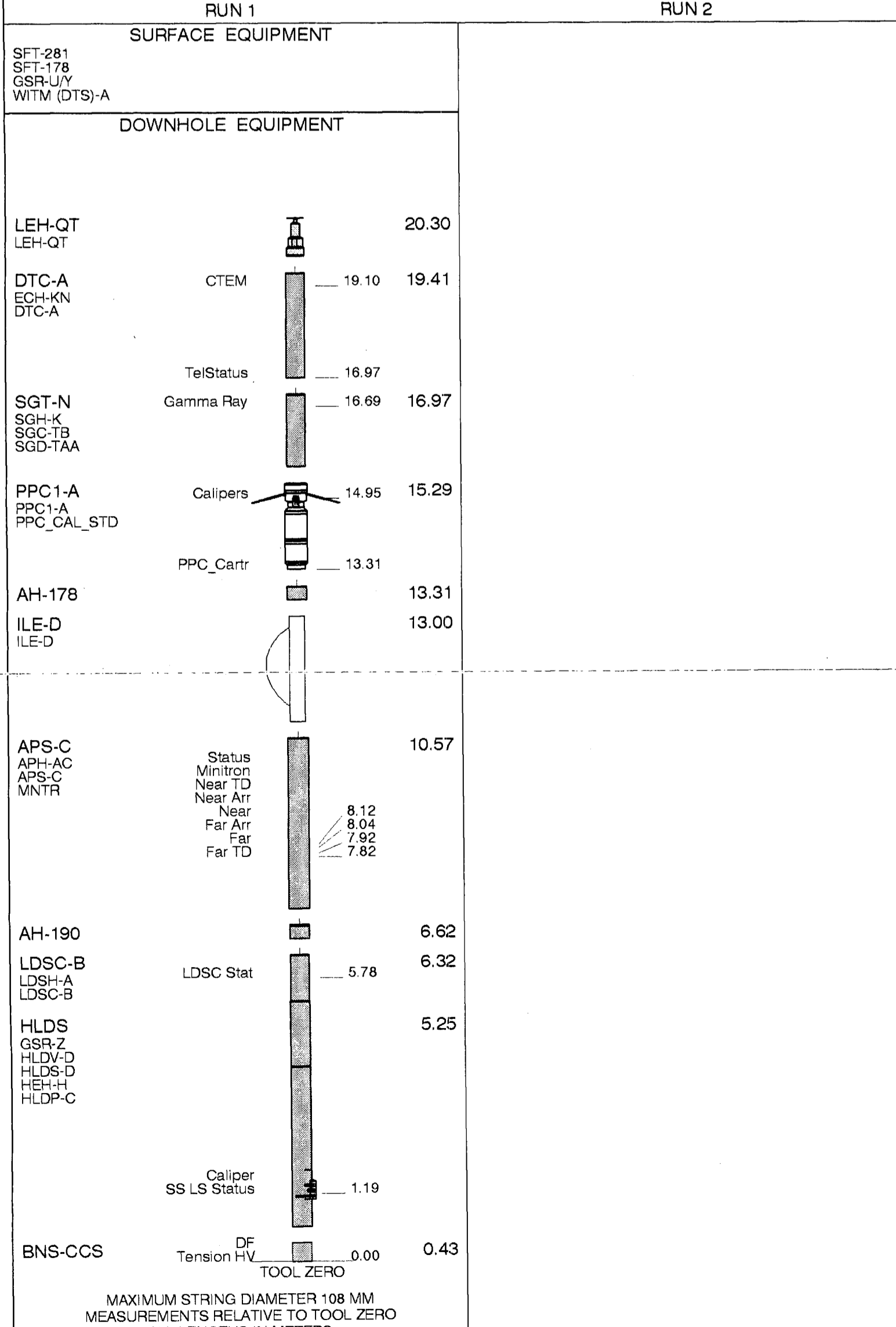
1. PRIMARY DEPTH DEVICE: IDW.
- 2.
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2	
OS1: AIT	OS1:	
OS2: HLDS/APS	OS2:	
OS3: DSI	OS3:	
OS4: UBI	OS4:	
OS5: PPC	OS5:	
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2	
THIS LOG CORRELATED TO SLB LOG DATED 21-DEC-2004.		
LOGGED FROM TD TO SURFACE CASING WITH APS TO 3300 MKB		
LOGGED REPEAT FROM TD TO SURFACE CASING		
PPC USED TO KEEP TOOL IN SHORT AXIS		
FLUID LEVEL FOUND AT 1845 MKB		
THANK YOU FOR CHOOSING SCHLUMBERGER OILFIELD SERVICES.		
GRANDE PRAIRIE, AB 780-539-5060		
YOUR 2016 CREW SERVING YOU TODAY: JASON BOWDRING & JEFF PENNY.		
SERVICE ORDER #: 10829914	SERVICE ORDER #: 12C0-301	
PROGRAM VERSION: 12C0-301	PROGRAM VERSION: 1845 m	
FLUID LEVEL: 1845 m	FLUID LEVEL:	
LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION



Input DLIS Files						
DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M

Output DLIS Files						
DEFAULT	LDL_APS_CAL_068PUP	FN:89	PRODUCER	09-Mar-2005 18:44		
OPTICAL	LDL_APS_CAL_068PUP	FN:90	PRODUCER	09-Mar-2005 18:44		

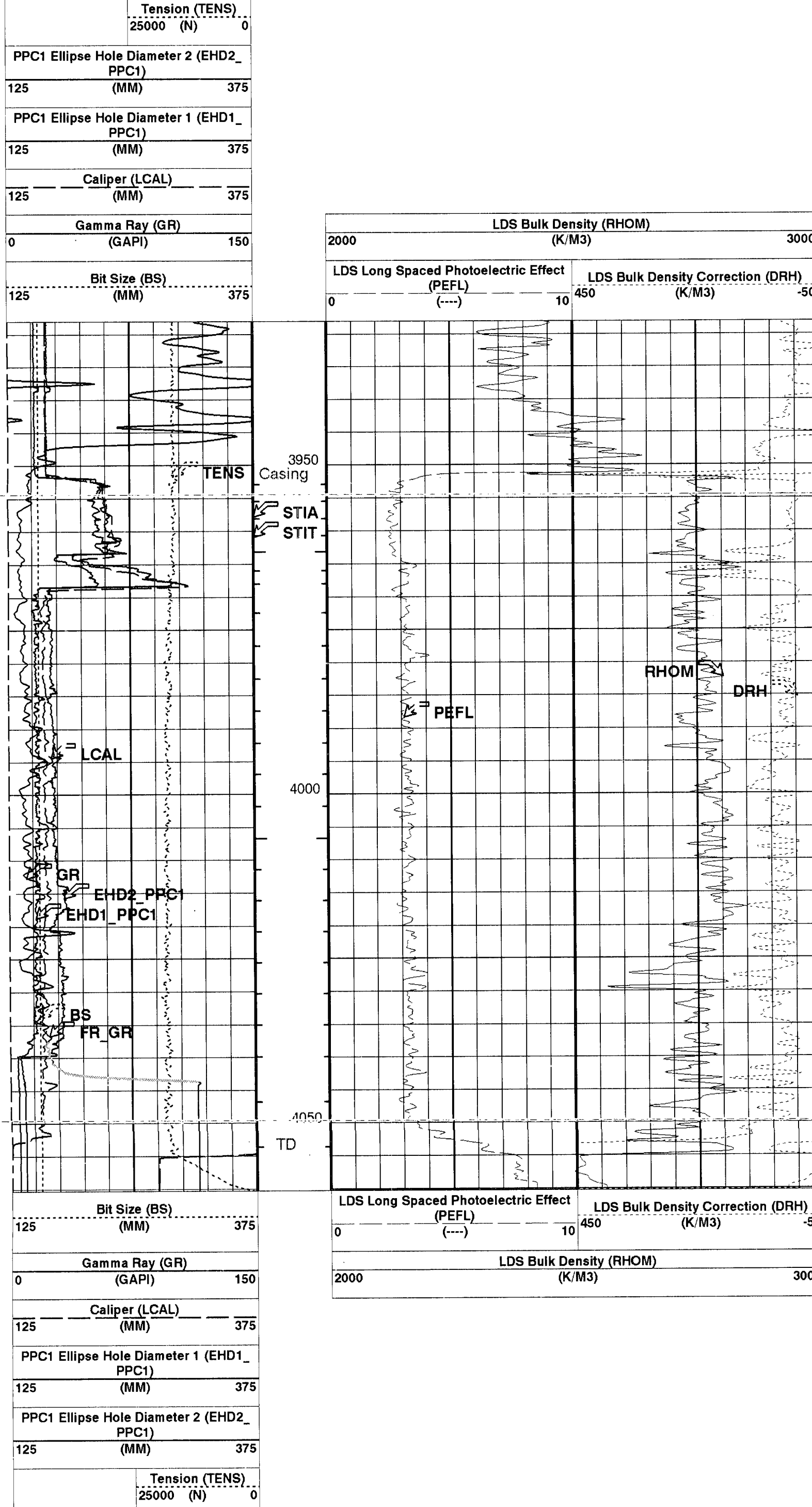
OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

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



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
DHC	HLDS: Hostile Litho-Density Sonde	
DPPM	Density Porosity Processing Mode	BS
FD	Fluid Density	1000 K/M3
LATS	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
APS-C	Accelerator-Porosity Tool	
DPPM	APS Software Version	5
PPC1-A	Powered Positioning Device/Caliper 1	
CLBD	Primary Tool for WellCAD	NONE
DPPM	PPC1 Caliper Type	CAL STD
SGT-N	Secondary Tool for WellCAD (45 Degrees Rotation PPC Tool)	NONE
DIR	PPC Calibration data selection	ROM
DPPM	Scintillation Gamma-Ray - N	
SPVD	Directional Survey Computation	HIRS
TIMD	TVD of Starting Point	0 M
TIVD	Along-hole depth of Tie-in Point	3509 M
FCD	TVD of Tie-in Point	3286 M
HVCS	HOLEV: Integrated Hole/Cement Volume	
STI	Future Casing (Outer) Diameter	0 MM
LBFR	Integrated Hole Volume Caliper Selection	PPC1_Calipers
STKT	STI: Stuck Tool Indicator	
TDD	Trigger for MAXIS First Reading Label	TDL
TDL	STI Stuck Threshold	1.524 M
	Total Depth - Driller	4065.00 M
	Total Depth - Logger	4053.50 M
	System and Miscellaneous	
BS	Bit Size	156.000 MM
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PP	Playback Processing	NORMAL
TD	Total Depth	4065 M

Format: DENS Vertical Scale: 1:600 Graphics File Created: 09-Mar-2005 18:44

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	skk-2570-ppc_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files						
DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M

Output DLIS Files						
DEFAULT	LDL_APS_CAL_068PUP	FN:89	PRODUCER	09-Mar-2005 18:44		
OPTICAL	LDL_APS_CAL_068PUP	FN:90	PRODUCER	09-Mar-2005 18:44		

Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEELEE L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Changed Parameter Summary

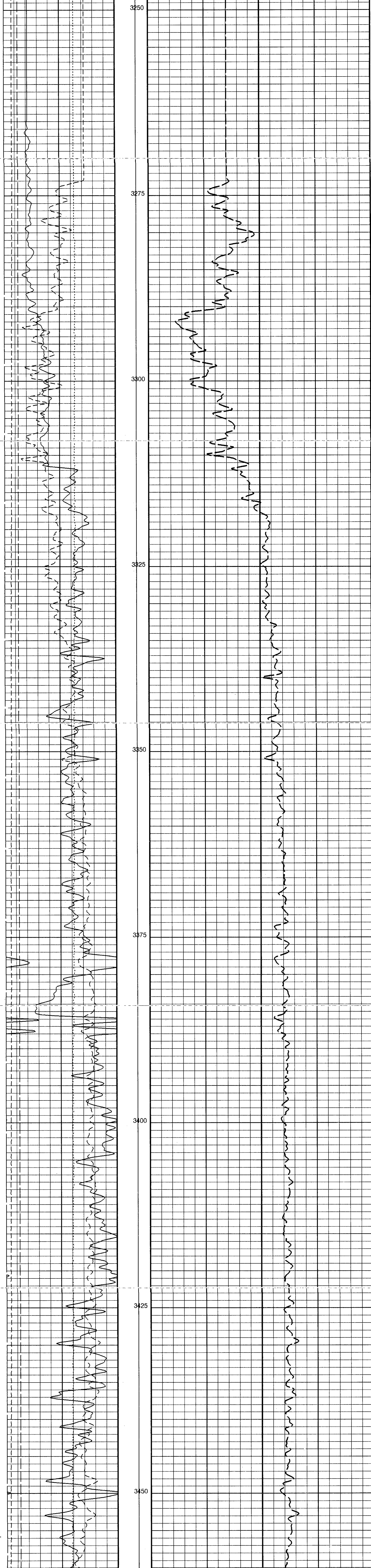
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3941.7 16:35:27

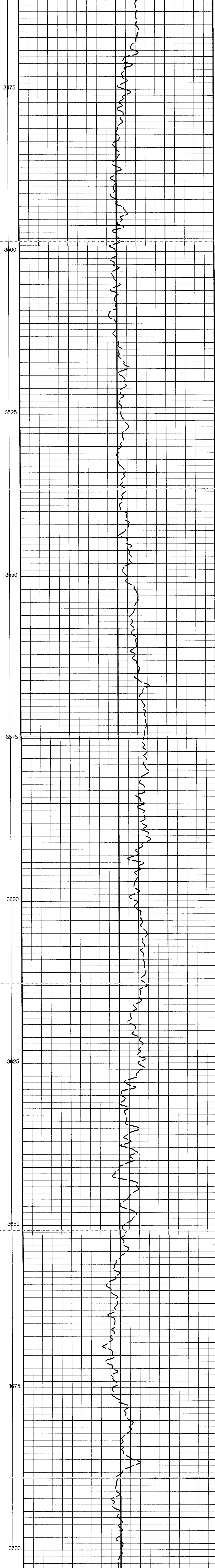
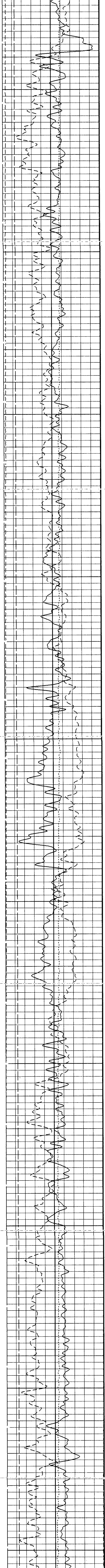
PIP SUMMARY

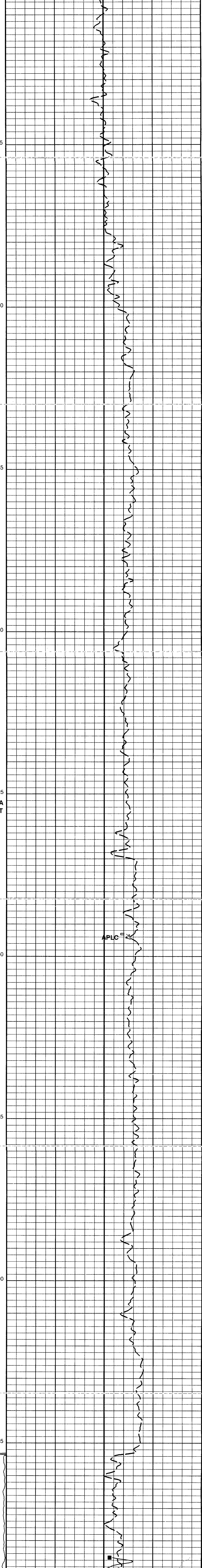
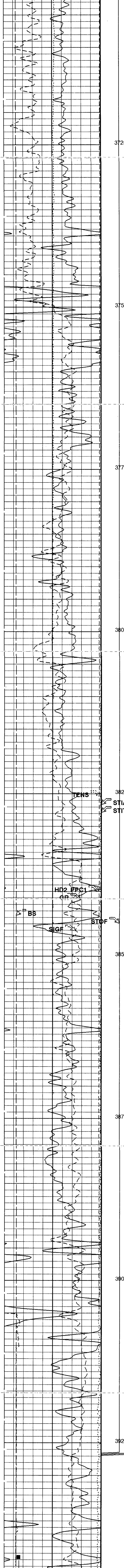
Time Mark Every 60 S

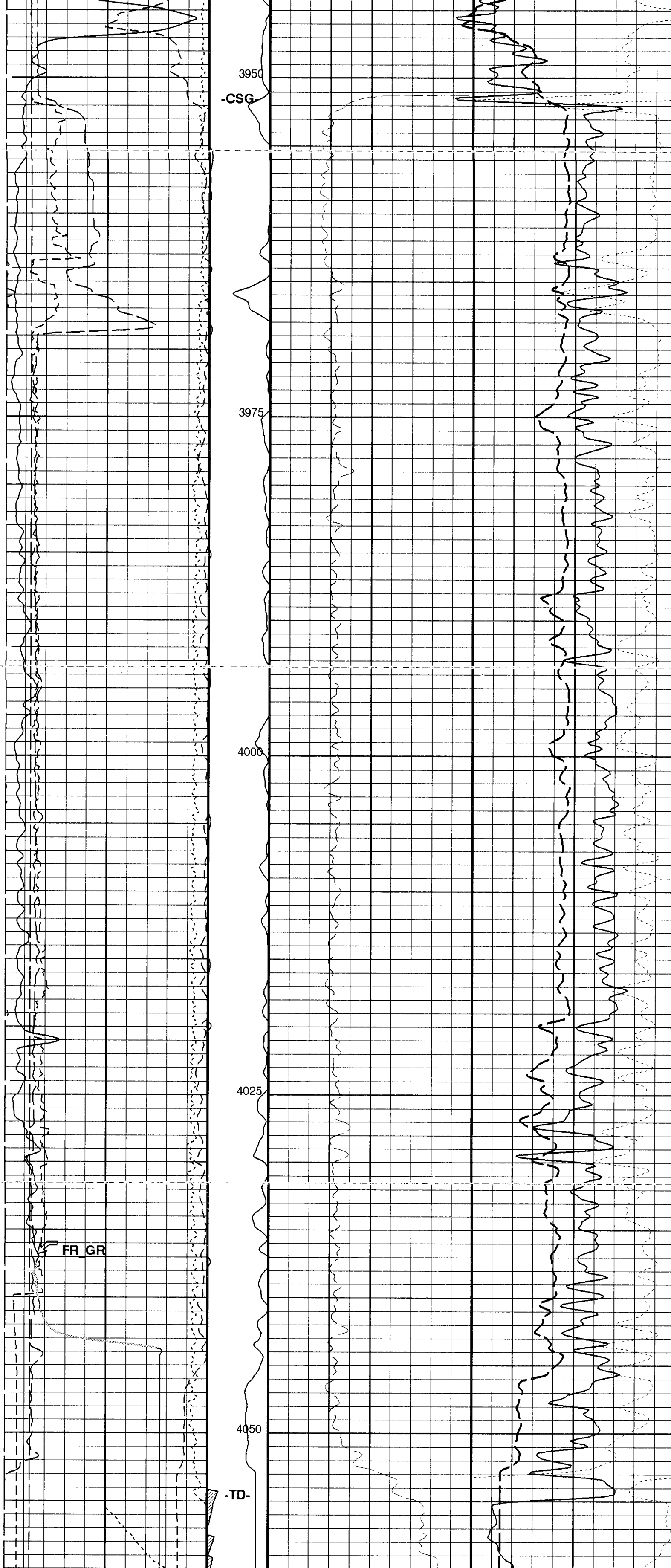
APS Formation Capture Cross-Section (SIGF) (CU)		20000 (N)	0
45			5
125	HLDS Caliper (LCAL) (MM)	375	50 (MM) 0
APS Effective Standoff in Limestone (STOF)			
PPC1 Hole Diameter 2 (HD2 PPC1) (MM)		375	0
Tool/Tot. Drag From D3T to STIA			
HLDS Long Spaced Photoelectric Effect (PEEL) (----)		10	
HLDS Bulk Density Correction (DRH) (K/M3)		450	-50
Gamma Ray (GR) (GAPI)		150	
Cable Drag From STIA to STIT		0.45	
HLDS Density Porosity (DPO) (V/V)			-0.15
Bit Size (BS) (MM)		375	
Stuck Stretch (STIT) (M)		20	
APS Near/Array Corrected Limestone Porosity (APLC) (V/V)		0.45	-0.15

MAIN PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone 2710 kg/m3***









MAIN PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone 2710 kg/m3***

125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT) 0 (M) 20	0.45	APS Near/Array Corrected Limestone Porosity (APLC) (V/V)	-0.15
0	Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS Density Porosity (DPO) (V/V)	-0.15
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot. Drag From D3T to STIA	0	HLDS Long Spaced Photoelectric Effect (PEFL) (---)	10
125	HLDS Caliper (LCAL) (MM)	375	APS Effective Standoff in Limestone (STOF) 50 (MM) 0	450	HLDS Bulk Density Correction (DRH) (K/M3)	-50
45	APS Formation Capture Cross-Section (SIGF) (CU)	5				
	Tension (TENS) 20000 (N)	0				

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	2017.73 V
AUSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	2088.04 V
AHSS	APS Holesize Correction Source	BS
AMTY	APS Holesize Correction Switch	ON
ANSD	APS Environmental Corrections-Mud Type	WaterBaseDense
ASOS	APS Near Detector High Voltage Setting	1743.05 V
ATSS	APS Standoff Correction Switch	ON
BHS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHT	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-50000 PPM
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	1.04598
NFRG	APS Near/Far Calibration Ratio	0.923984
SHT	Surface Hole Temperature	20 DEGC
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N	PPC Calibration data selection	ROM
SGT-N: Scintillation Gamma-Ray - N		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TTD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4053.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	177.800 MM
CWEI	Casing Weight	43.16 K/M3
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PP	Playback Processing	NORMAL
TD	Total Depth	4065 M

Format: APS_HLDS Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:34

OP System Version: 12C0-301

MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Company: DEVON CANADA CORPORATION

Well: DEVON ET AL. KOTANEEL L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
DEFAULT	LDL_APS_CAL_066PUP	FN:85	PRODUCER	09-Mar-2005 18:39	4059.0 M	3889.7 M

OP System Version: 12C0-301

MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

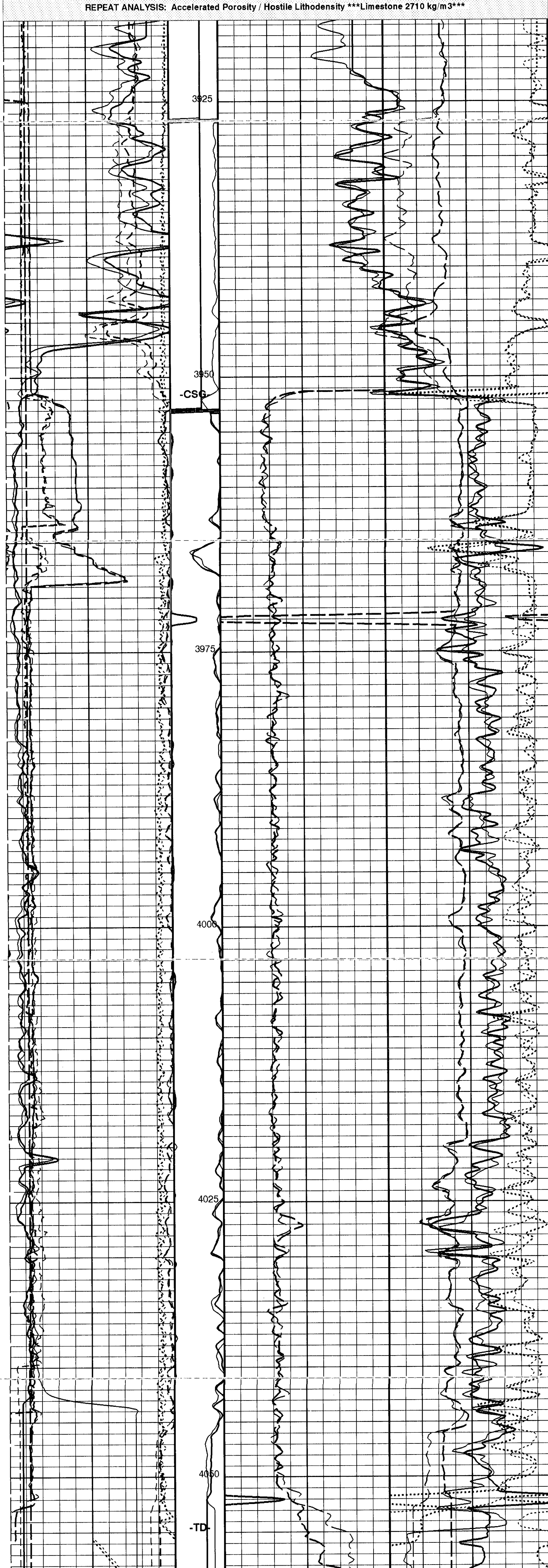
Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3941.7 16:35:27

PIP SUMMARY

Time Mark Every 60 S

TENS REP Curve (TENS REP) 20000 (N) 0		HLDS LS PE REP Curve (PEFL REP) 0 10		HLDS_BULK_DENS_COR_REP Curve (DRH REP) 450 -50	
HLDS_CALIPER REP Curve (LCAL REP) 125 (MM) 375		HLDS_DENSITY POROSITY REP Curve (DPO REP) 0.45 (V/V) -0.15			
HD2_PPC1 REP Curve (HD2_PPC1 REP) 125 (MM) 375		APS EPI ARR POR LS COR REP Curve (APLC REP) 0.45 (V/V) -0.15			
APS_SIGMA_FORMATION REP Curve (SIGF REP) 45 (CU) 5		GR REP Curve (GR REP) 0 (GAPI) 150			
BS REP Curve (BS REP) 125 (MM) 375		APS STANDOFF REP Curve (STOF REP) 50 (MM) 0			



REPEAT ANALYSIS: Accelerated Porosity / Hostile Lithodensity ***Limestone 2710 kg/m3***

BS REP Curve (BS REP) 125 (MM) 375		APS STANDOFF REP Curve (STOF REP) 50 (MM) 0		APS EPI ARR POR LS COR REP Curve (APLC REP) 0.45 (V/V) -0.15	
GR REP Curve (GR REP) 0 (GAPI) 150		HLDS_DENSITY POROSITY REP Curve (DPO REP) 0.45 (V/V) -0.15			
APS_SIGMA_FORMATION REP Curve (SIGF REP) 45 (CU) 5		HLDS_LS_PE REP Curve (PEFL REP) 0 10		HLDS_BULK_DENS_COR_REP Curve (DRH REP) 450 -50	
HD2_PPC1 REP Curve (HD2_PPC1 REP) 125 (MM) 375		HLDS_CALIPER REP Curve (LCAL REP) 125 (MM) 375			
TENS REP Curve (TENS REP) 20000 (N) 0					

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	2017.73 V
AFSD	APS Array Detectors Data Source Switch	Both
AFSD	APS Far Detector High Voltage Setting	2088.04 V
AHCS	APS Holesize Correction Source	BS
AHSS	APS Holesize Correction Switch	ON
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite
ANSD	APS Near Detector High Voltage Setting	1743.05 V
ASOS	APS Standoff Correction Switch	ON
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHT	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-5000 PPM
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	1.04598
NARC	APS Near/Far Calibration Ratio	0.923984
SHT	Surface Hole Temperature	20 DEGC
PPC1-A: Powered Positioning Device/Caliper 1		
		CAL STD
CLBD_PPC	PPC1 Caliper Type	ROM
SGT-N: Scintillation Gamma-Ray - N		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	BS

GDEV	Average Angular Deviation of Borehole from Normal	0.018227	DEG
GGRD	Geothermal Gradient		DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
BS	Bit Size	156.000	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	177.800	MM
CWEI	Casing Weight	43.16	KG/M
DFD	Drilling Fluid Density	850.00	K/M3
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	NORMAL	
TD	Total Depth	4065	M

Format: APS_HLDS_REP Vertical Scale: 1:240 Graphics File Created: 11-Mar-2005 16:34

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
DEFAULT	LDC_APS_CAL_066PUP	FN:85	PRODUCER	09-Mar-2005 18:39	4059.0 M	3869.7 M

Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEEL L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

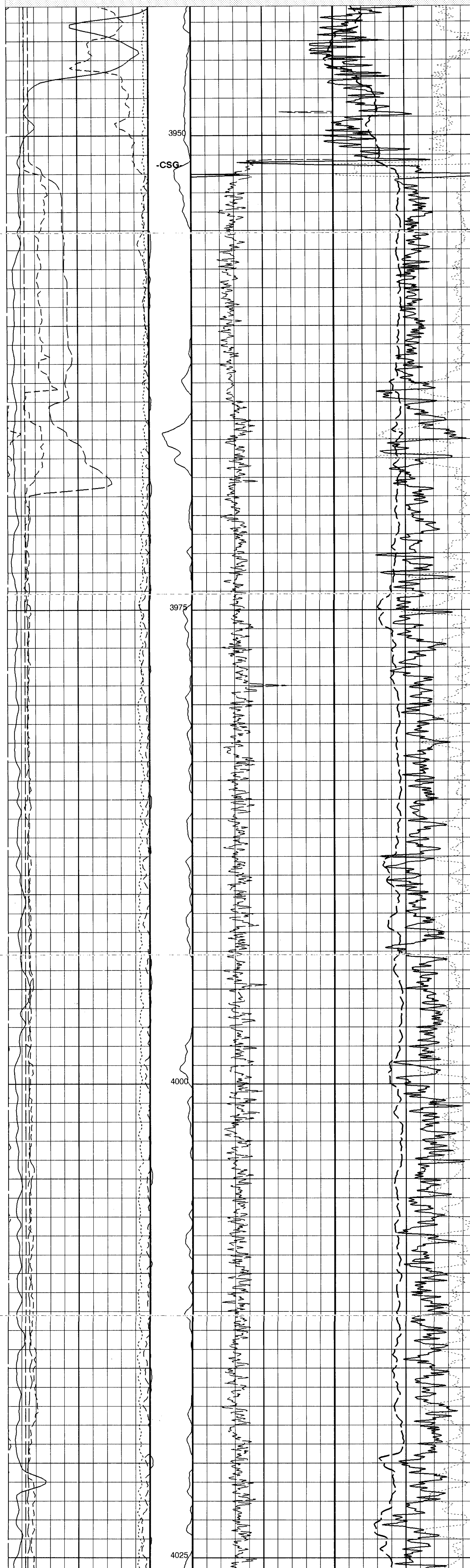
Changed Parameter Summary

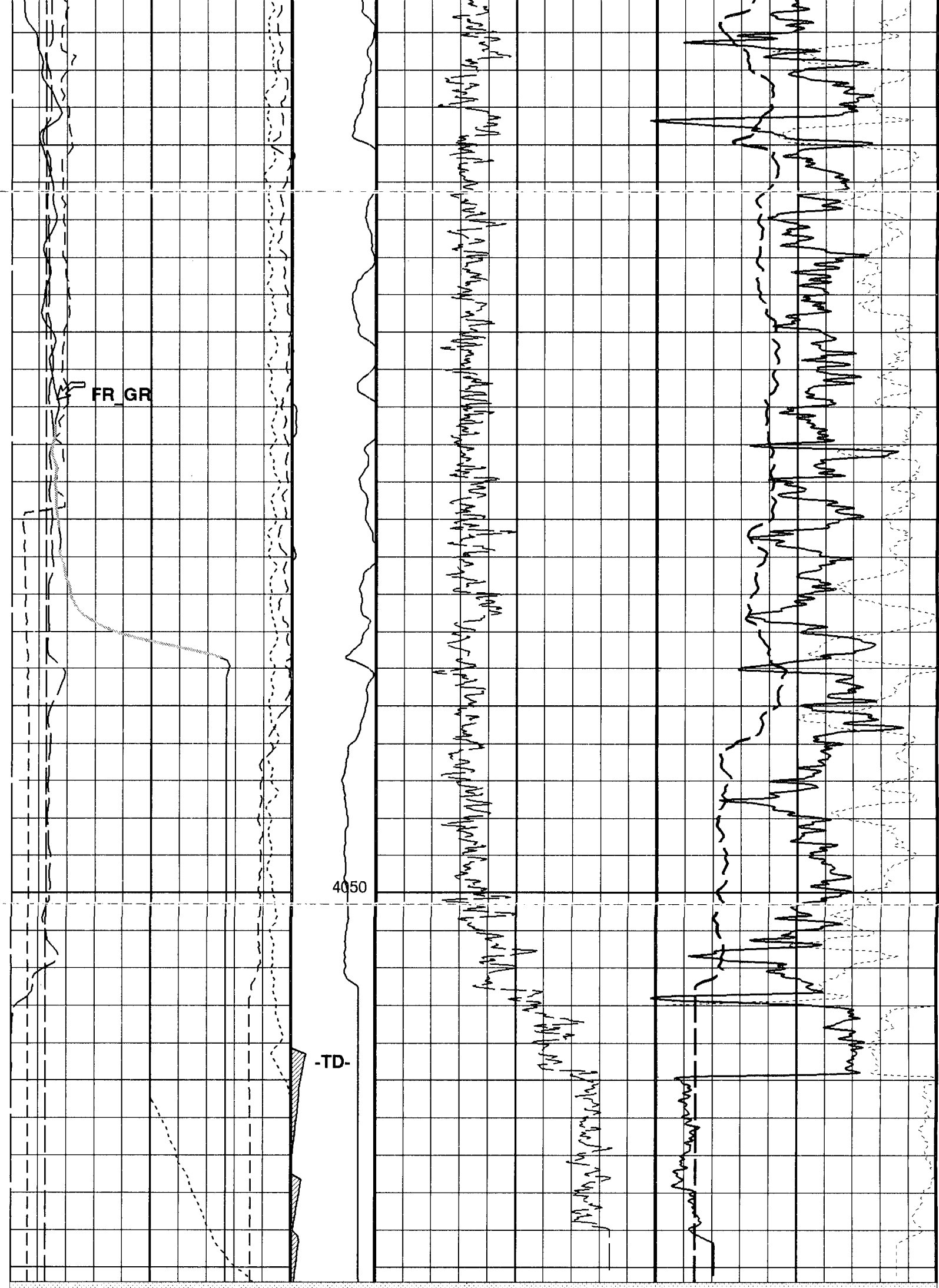
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3941.7 16:35:27

PIP SUMMARY

<input checked="" type="checkbox"/> Time Mark Every 60 S			
Tension (TENS)	20000 (N)	0	
APS HR Formation Capture Cross-Section (HSG)	(CU)	45	5
HLDS Caliper (LCAL)	(MM)	125	375
APS HR Effective Standoff in Limestone (HSTO)	(MM)	50	0
PPC1 Hole Diameter 2 (HD2_PPC1)	(MM)	125	375
Tool/Tot Drag From D3T to STIA		0	
HLDS HR Long Spaced Photoelectric Effect (HIFE)	(---)	10	450
HLDS HR Bulk Density Correction (HRDC)	(K/M3)		-50
Gamma Ray (GR)	(GAPI)	0	150
Cable Drag From STIA to STIT		0.45	
HLDS HR Density Porosity (HDPO)	(V/V)		-0.15
Bit Size (BS)	(MM)	125	375
Stuck Stretch (STIT)	(M)	0	20
APS HR Near/Array Corrected Limestone Porosity (HALC)	(V/V)		-0.15

HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***





HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***

125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT)	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC)	0	(M)	20	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC)	-0.15	
0	Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS HR Density Porosity (HDPO)	0			0.45	HLDS HR Density Porosity (HDPO)	-0.15	
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot. Drag From D3T to STIA	0	HLDS HR Long Spaced Photoelectric Effect (HLEF)	10	450		10	450	HLDS HR Bulk Density Correction (HBDC) (K/M3)	-50
125	HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO)	50	50	0			50	0		
45	APS HR Formation Capture Cross-Section (HSIG) (CU)	5										
	Tension (TENS) 20000 (N)	0										

PIP SUMMARY

Time Mark Every 60 S

DLIS Name	Description	Value
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000 K/M3
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710 K/M3
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	2017.73 V
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	2088.04 V
AHSS	APS Holesize Correction Source	BS
AMTY	APS Holesize Correction Switch	ON
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite
ASOS	APS Near Detector High Voltage Setting	1743.05 V
ATSS	APS Standoff Correction Switch	ON
BHS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHT	Borehole Status	OPEN
DPPM	Bottom Hole Temperature (used in calculations)	144 DEGC
FSAL	Density Porosity Processing Mode	HIRS
GCSE	Formation Salinity	-50000 PPM
GDEV	Generalized Caliper Selection	BS
GGRD	Average Angular Deviation of Borehole from Normal	0 DEG
GTSE	Geothermal Gradient	0.018227 DC/M
NARC	Generalized Temperature Selection	LINEAR_ESTIMATE
NFRC	APS Near/Array Calibration Ratio	1.04598
SHT	APS Near/Far Calibration Ratio	0.923984
	Surface Hole Temperature	20 DEGC
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N	PPC Calibration data selection	ROM
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	3509 M
TIVD	TVD of Tie-in Point	3286 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144 DEGC
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	4065.00 M
TDL	Total Depth - Logger	4063.50 M
System and Miscellaneous		
BS	Bit Size	156.000 MM
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	177.800 MM
CWEI	Casing Weight	43.16 KG/M
DFD	Drilling Fluid Density	850.00 K/M3
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PP	Playback Processing	NORMAL
TD	Total Depth	4065 M

Format: APS_HLDS_HIRS Vertical Scale: 1:120 Graphics File Created: 11-Mar-2005 16:34

OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Company: DEVON CANADA CORPORATION Well: DEVON ET AL KOTANEEL L-38A/ST3

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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OP System Version: 12C0-301
MCM

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Changed Parameter Summary

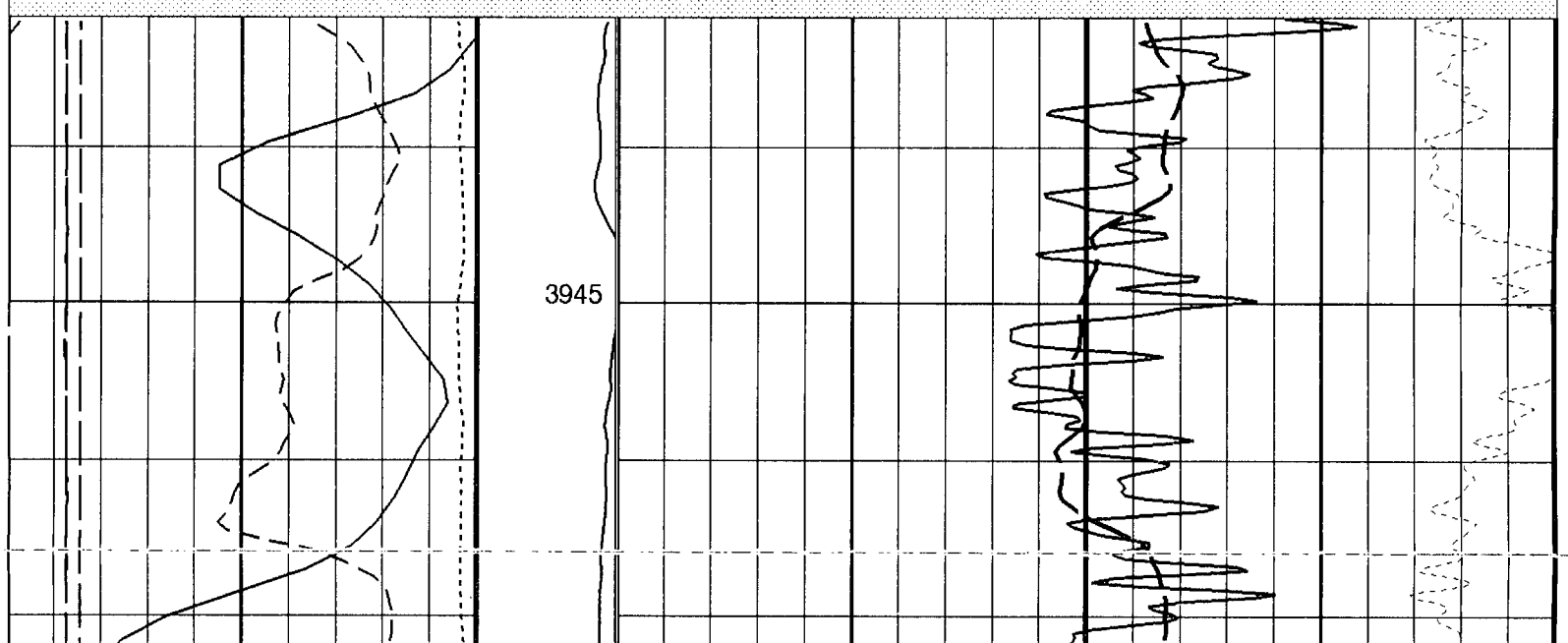
DLIS Name	New Value	Previous Value	Depth & Time
BHS	CASED	OPEN	3941.7 16:35:27

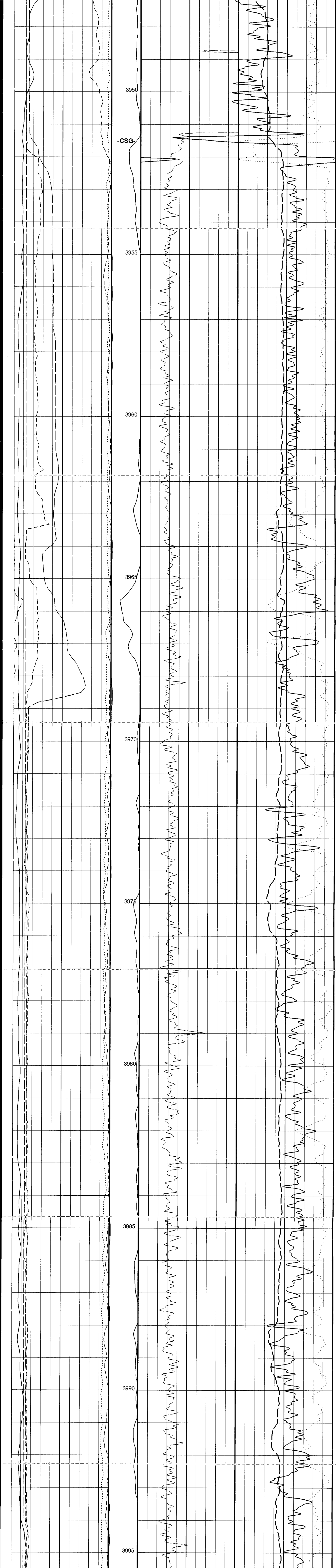
PIP SUMMARY

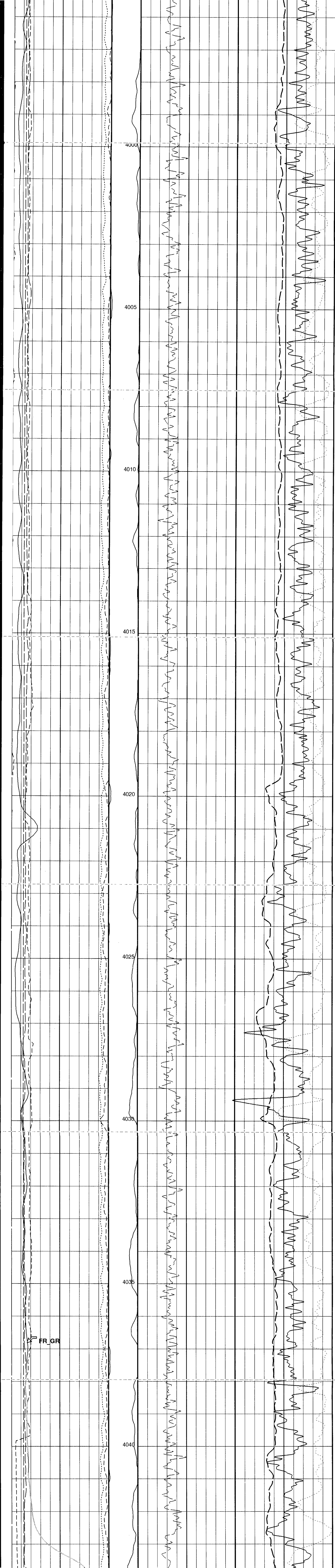
Time Mark Every 60 S

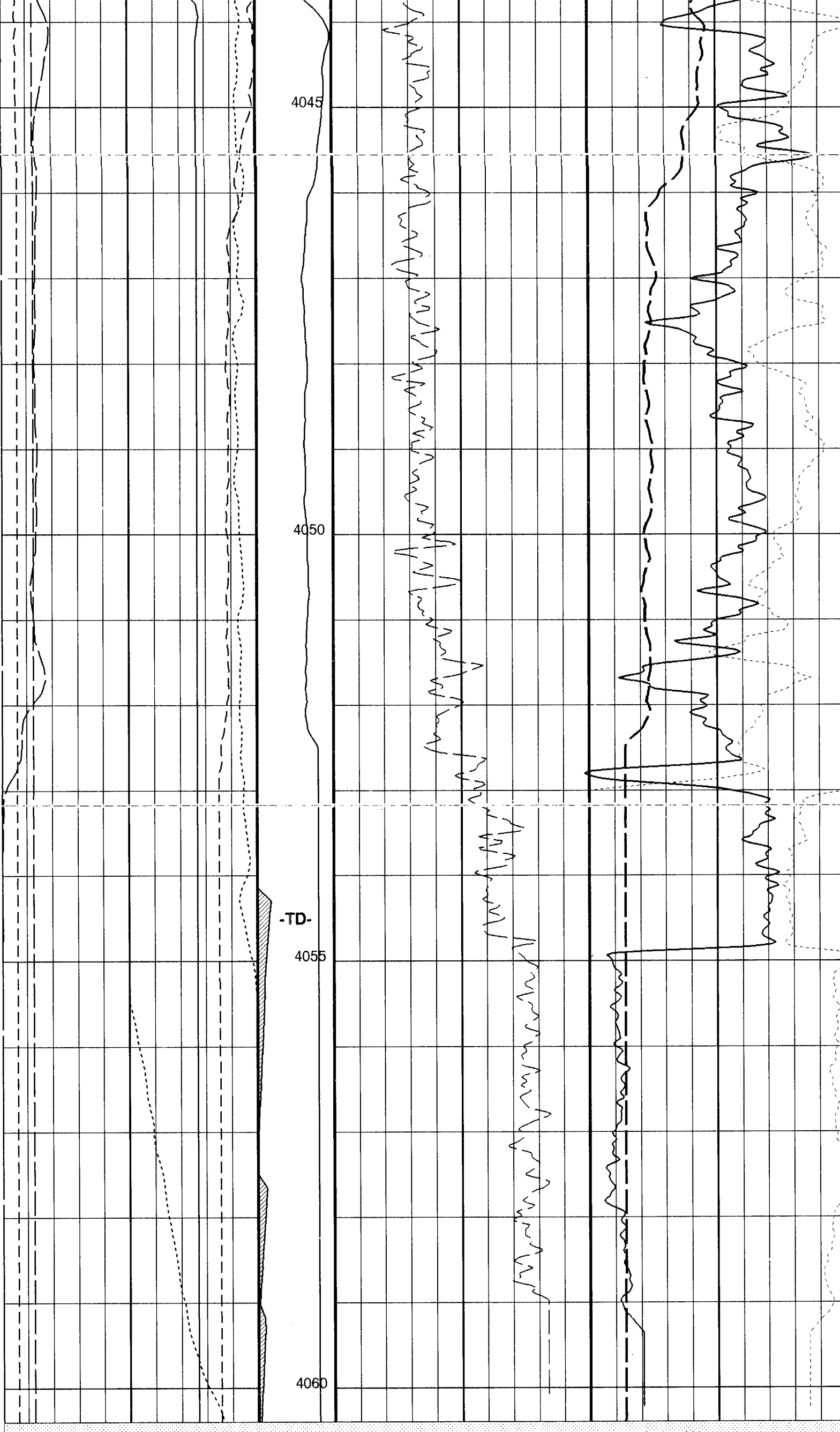
	Tension (TENS) 20000 (N)	0										
45	APS HR Formation Capture Cross-Section (HSIG) (CU)	5										
125	HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO)	50	50	0						
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot. Drag From D3T to STIA	0	HLDS HR Long Spaced Photoelectric Effect (HLEF)	10	450		10	450	HLDS HR Bulk Density Correction (HBDC) (K/M3)	-50
0	Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS HR Density Porosity (HDPO)	0			0.45	HLDS HR Density Porosity (HDPO)	-0.15	
125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT)	0	0	(M)	20	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC)	0	(V/V)	-0.15

HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***









HIRES PASS: Accelerated Porosity / Hostile Lithodensity ***Limestone - 2710 kg/m3***

125	Bit Size (BS) (MM)	375	Stuck Stretch (STIT) (M)	0.45	APS HR Near/Array Corrected Limestone Porosity (HALC) (V/V)	-0.15
0	Gamma Ray (GR) (GAPI)	150	Cable Drag From STIA to STIT	0.45	HLDS HR Density Porosity (HDPO) (V/V)	-0.15
125	PPC1 Hole Diameter 2 (HD2_PPC1) (MM)	375	Tool/Tot Drag From D3T to STIA	0	HLDS HR Long Spaced Photoelectric Effect (HLEF) (---)	10 450
125	HLDS Caliper (LCAL) (MM)	375	APS HR Effective Standoff in Limestone (HSTO) (MM)	0	HLDS HR Bulk Density Correction (HBDC) (K/M3)	-50
45	APS HR Formation Capture Cross-Section (HSIG) (CU)	5				
	Tension (TENS) 20000 (N)					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HLDS: Hostile Litho-Density Sonde		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1000
LATC	HLDS Activation Correction	ON
MDEN	Matrix Density	2710
APS-C: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ADSO	APS Thermal and Array Detectors High Voltage Setting	2017.73
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	2088.04
AHSS	APS Holesize Correction Source	BS
AMTY	APS Holesize Correction Switch	ON
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite
ASOS	APS Near Detector High Voltage Setting	1743.05
ATSS	APS Standoff Correction Switch	ON
BHS	APS Temperature-Pressure-Salinity Correction Switch	ON
BHT	Borehole Status	OPEN
DPPM	Bottom Hole Temperature (used in calculations)	144
FSAL	Density Porosity Processing Mode	HIRS
GCSE	Formation Salinity	-50000
GDEV	Generalized Caliper Selection	BS
GGRD	Average Angular Deviation of Borehole from Normal	0
GTSE	Geothermal Gradient	0.018227
NARC	Generalized Temperature Selection	LINEAR_ESTIMATE
NFRG	APS Near/Array Calibration Ratio	1.04598
SHT	APS Near/Far Calibration Ratio	0.923984
PPC1-A: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL STD
SGT-N	PPC Calibration data selection	ROM
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0
TIMD	Along-hole depth of Tie-in Point	3509
TIVD	TVD of Tie-in Point	3286
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	144
DPPM	Density Porosity Processing Mode	HIRS
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
SHT	Surface Hole Temperature	20
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	4065.00
TDL	Total Depth - Logger	4053.50
System and Miscellaneous		
BS	Bit Size	156.000
BSAL	Borehole Salinity	-50000.00
CSIZ	Current Casing Size	177.800
CWEI	Casing Weight	43.16
DFD	Drilling Fluid Density	850.00
DO	Depth Offset for Playback	0.0
DORL	Depth Offset for Repeat Analysis	0.0
PP	Playback Processing	NORMAL
TD	Total Depth	4065

Format: APS_HLDS_HIRS_1 Vertical Scale: 1:48 Graphics File Created: 11-Mar-2005 16:34

OP System Version: 12C0-301

HLDS	SPC-2602-NUCL_b	LDSC-B	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	PPC1-A	SKK-2637-PPC_b
SGT-N	12C0-301	DTC-A	12C0-301

Input DLIS Files

DEFAULT	LDL_APS_CAL_064PUP	FN:81	PRODUCER	09-Mar-2005 17:55	4060.4 M	3246.7 M
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 11-Feb-2005 1:07 Before: 23-Feb-2005 22:30							
SS Cs Resolution Bkg	9.000	8.932	8.934	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.254	8.138	N/A	N/A	1.800	%
LSW1 Background	100.0	91.10	91.42	N/A	N/A	3.000	CPS
LSW2 Background	100.0	83.99	83.43	N/A	N/A	3.000	CPS
LSW3 Background	200.0	188.7	186.3	N/A	N/A	6.000	CPS
LSW4 Background	200.0	224.6	220.0	N/A	N/A	7.500	CPS
LSW5 Background	600.0	519.3	525.7	N/A	N/A	18.000	CPS
SSW1 Background	100.0	75.40	76.67	N/A	N/A	3.000	CPS
SSW2 Background	200.0	133.0	131.6	N/A	N/A	6.000	CPS
SSW3 Background	500.0	358.7	358.7	N/A	N/A	15.000	CPS
SSW4 Background	270.0	185.5	186.2	N/A	N/A	8.100	CPS
SSW5 Background	200.0	136.9	137.2	N/A	N/A	6.000	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement							
Master: 11-Feb-2005 1:07							
LSW1 Aluminum	600.0	504.1	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	781.7	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	961.2	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	488.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	453.8	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2645	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	7236	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10200	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4187	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	525.2	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement							
Master: 11-Feb-2005 1:07							
LSW1 Iron	400.0	343.3	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	625.9	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	945.9	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	445.4	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	417.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1938	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	6025	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9314	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3826	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	465.5	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration							
Before: 4-Mar-2005 13:57							
HLDS Caliper Small Ring	203.2	N/A	348.1	N/A	N/A	N/A	MM
HLDS Caliper Large Ring	304.8	N/A	462.1	N/A	N/A	N/A	MM
Accelerator-Porosity Tool Wellsite Calibration - Detector Background							
Master: 16-Feb-2005 21:36 Before: 4-Mar-2005 13:52							
Near Det Bkg Cntrate	30.00	30.69	31.94	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	40.84	41.33	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	33.98	34.19	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	34.33	33.89	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	31.43	32.03	N/A	N/A	N/A	CPS
Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios							
Master: 16-Feb-2005 21:36							
Near/Far Calibration Ratio	0.9250	0.9240	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.0300	1.0406	N/A	N/A	N/A	N/A	

Phase	CF Radius	Raw Small Radius	MM	Value	Phase	CF Radius	Raw Large Radius	MM	Value
Before				109.2	Before				215.7
	30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)			154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
PhasePC1 Radius 2 Raw Small Radius MM Value					PhasePC1 Radius 2 Raw Large Radius MM Value				
Before				91.24	Before				200.9
	30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)			154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
PhasePC1 Radius 3 Raw Small Radius MM Value					PhasePC1 Radius 3 Raw Large Radius MM Value				
Before				106.7	Before				212.8
	30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)			154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	
PhasePC1 Radius 4 Raw Small Radius MM Value					PhasePC1 Radius 4 Raw Large Radius MM Value				
Before				75.65	Before				184.3
	30.48 (Minimum)	88.90 (Nominal)	142.2 (Maximum)			154.9 (Minimum)	203.2 (Nominal)	246.4 (Maximum)	

Before: 1-Mar-2005 13:50

Scintillation Gamma-Ray - N / Equipment Identification

Primary Equipment:

Scintillation Gamma Cartridge
Scintillation Gamma Detector

SGC - TB
SGD - TAA

Auxiliary Equipment:

Scintillation Gamma Housing
Gamma Source Radioactive

SGH - K
GSR - U/Y

Scintillation Gamma-Ray - N Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig - Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			44.05	Before			153.8	Before			165.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		139.8 (Minimum)	153.8 (Nominal)	167.8 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)

Before: 4-Mar-2005 14:00

Company: **DEVON CANADA CORPORATION**

Schlumberger

Well: **DEVON ET AL KOTANEELEE L-38A/ST3**

Field: **KOTANEELEE**

Territory: **YUKON**

ACCELERATED POROSITY
HOSTILE LITHOLOGY
DENSITY LOG