

Company: APACHE CANADA LTD.

Well: APACHE PARAMOUNT WEST NOGHA K-14

Field: UNDEFINED

Province: NORTHWEST TERRITORIES

Province: NORTHWEST TERRITORIES

Field: UNDEFINED

Location: UWID: 300K146640126000

Well: APACHE PARAMOUNT WEST NOGHA K-14

Company: APACHE CANADA LTD.

LOCATION

UWID: 300K146640126000

LSD: K-14

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elev.: K.B. 313.2 m

G.L. 308 m

D.F. 312.9 m

Elev.: 308 m

5.2 m above Perm. Datum

PLATFORM EXPRESS:

ARRAY INDUCTION LOG

NEBCOPY

Logging Date	19-Mar-2004	Latitude: 66 DEG 34'	Longitude: 126 DEG 03'
Run Number	ONE		
Depth Driller	1404.2 m		
Schlumberger Depth	1404 m		
Bottom Log Interval	1401.6 m		
Top Log Interval	548 m		
Casing Driller Size @ Depth	244.500 mm @ 548 m		
Casing Schlumberger	548 m		
Bit Size	216.000 mm		
Type Fluid In Hole	INVERT		
Density	1230 kg/m3	152 s	
Viscosity			
Fluid Loss			
PH			
Source Of Sample	NO SAMPLE		
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF			
RMF @ MRT			
RM @ MRT	NO SAMPLE @ 25	NO SAMPLE @ 25	@
Maximum Recorded Temperatures	25 degC		
Circulation Stopped	18-Mar-2004	16:00	
Logger On Bottom	19-Mar-2004	05:45	
Unit Number	3139	NORMAN WELLS	
Recorded By	KELLY RONCIN		
Witnessed By	TOM HEBERT		

	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				
RMF @ MRT				
RM @ MRT	@	@	@	@
Maximum Recorded Temperatures				
Circulation Stopped				
Logger On Bottom				
Unit Number				
Recorded By				
Witnessed By				

DEPTH SUMMARY LISTING

Date Created: 19-MAR-2004 6:51:38

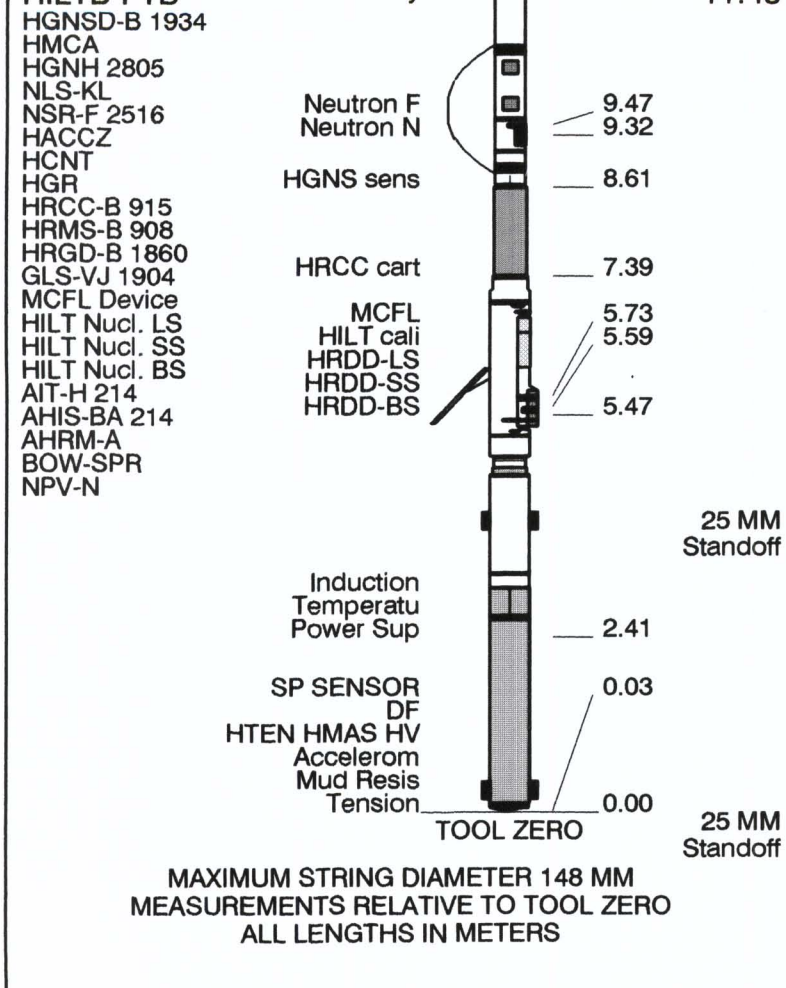
Depth System Equipment		
Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B	Type: CMTD-B/A	Type: 7-39P
Serial Number: 5825	Serial Number: 3139	Serial Number: 1180
Calibration Date: 9-SEP-2003	Calibration Date: 22-JAN-2004	Length: 5299.86 M
Calibrator Serial Number: 4	Calibrator Serial Number: 2000	Conveyance Method: Wireline Rig Type: LAND
Calibration Cable Type: 7-39P	Calibration Gain: 0.96	
Wheel Correction 1: -2	Calibration Offset: 1175.00	
Wheel Correction 2: -3		

Depth Control Parameters	
Log Sequence:	First Log In the Well
Rig Up Length At Surface:	61.90 M
Rig Up Length At Bottom:	61.90 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	1.20 M
Tool Zero Check At Surface:	0.10 M

Depth Control Remarks	
1. CALIBRATED IDW WHEELS USED AS PRIMARY DEPTH CONTROL	
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: DSI-EMS-GR	OS1:
OS2: PEX-AIT-LDT	OS2:
OS3: VSP	OS3:
OS4: HIRES	OS4:
OS5: LOGNET	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
AIT RAN ECCENTERED USING TWO 25 MM STANDOFFS	
AIT RAN USING COMPUTED MUD REISITIVITY AND 2 &1 FOOT VERTICAL RESOLUTION	
CNL RAN ECCENTERED USING 90 DEGREE OFFSET BOWSPRINGS	
CVL COMPUTED USING HILT AND LDT CALPERS WITH FCD = 177.8 MM	
CLIENT REQUESTED HIRES TD-1300 M	
CLIENT REQUESTED LIMESTONE PLAYBACK TD-CASING	
CLIENT REQUESTED DOLOMITE PLAYBACK TD-CASING	
CLIENT REQUESTED CNL-GR RAN TO SURFACE	
BOREHOLE STATUS CHANGED TO CASED AT 540 M	
PRINTS: 1 FIELD 7 FINAL	
OPERATORS: FRANK MACEACHERN / BRENT O'CONNELL / RANDALL PROSSER	
RIG: AKITA-SAHU 51	
MAX DEV: 0 DEGREES	
RUN 1	
SERVICE ORDER #: 10764789	SERVICE ORDER #: RUN 2
PROGRAM VERSION: 11C0-305	PROGRAM VERSION:
FLUID LEVEL:	FLUID LEVEL:
LOGGED INTERVAL	LOGGED INTERVAL
START	START
STOP	STOP

EQUIPMENT DESCRIPTION	
RUN 1	RUN 2
SURFACE EQUIPMENT	
WITM (DTS)-A	
GSR-U/Y	
NCT-B	
CNB-AB	
NCS-VB 4546	
DOWNHOLE EQUIPMENT	
LEH-QT	21.56
LEH-QT	
DTC-H	20.39 20.67
ECH-KC 9302	
DTCH0-A 8226	19.76
DTA-A	
ECH-MEAA 1729	
DTA-A 27	
LDT-D	18.54
GSR-J 2043	
PGD-G 3745	
NSC-F 1868	
ECH-MKA	
DRS-E 723	
PDH-L	
Caliper	14.07
SS	13.89
SS	
AH-90	13.25
AH-107	12.97
AH-107 2814	
AH-107	12.36
AH-107 32	
AH-FAKE	11.76
HGNS HTEM	
HMCA	11.48
Gamma-Ray	11.25
HII TR-ETR	11.48



Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

OP System Version: 11C0-305

MCM

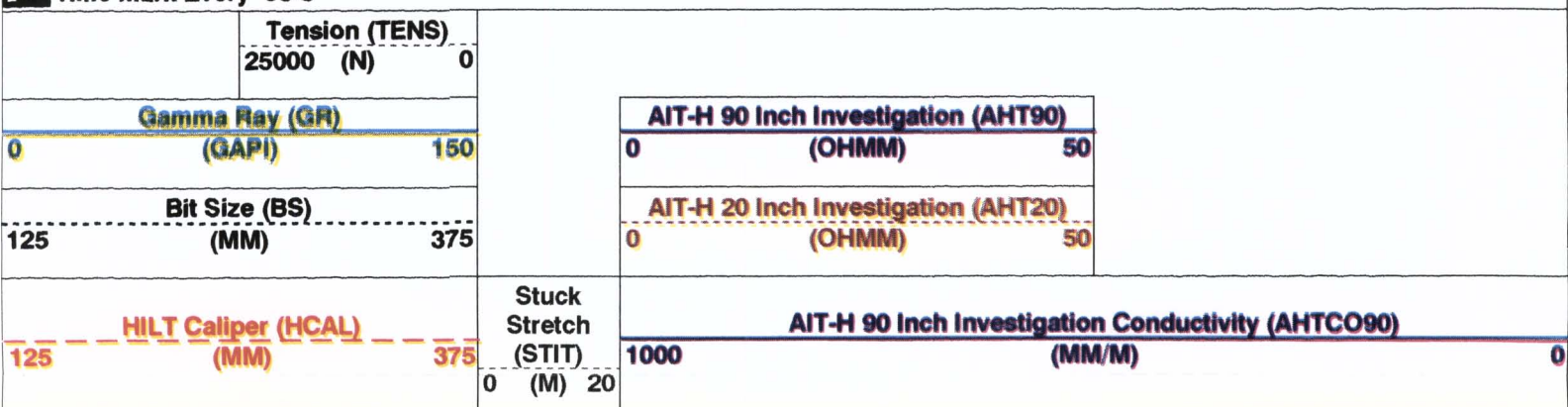
HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

Changed Parameter Summary

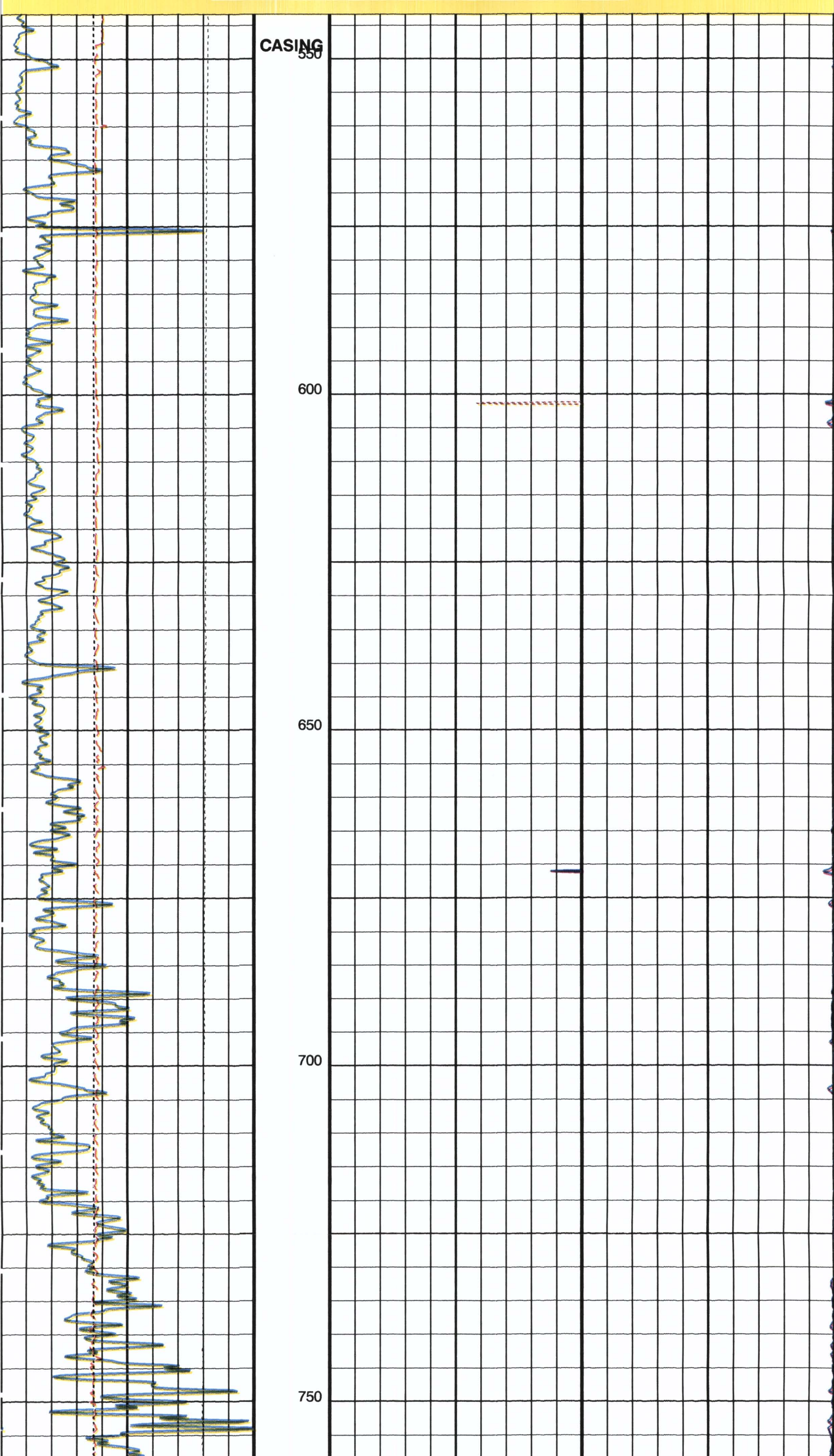
DLIS Name	New Value	Previous Value	Depth & Time
BHT	25 DEGC	21 DEGC	1373.8 05:54:30

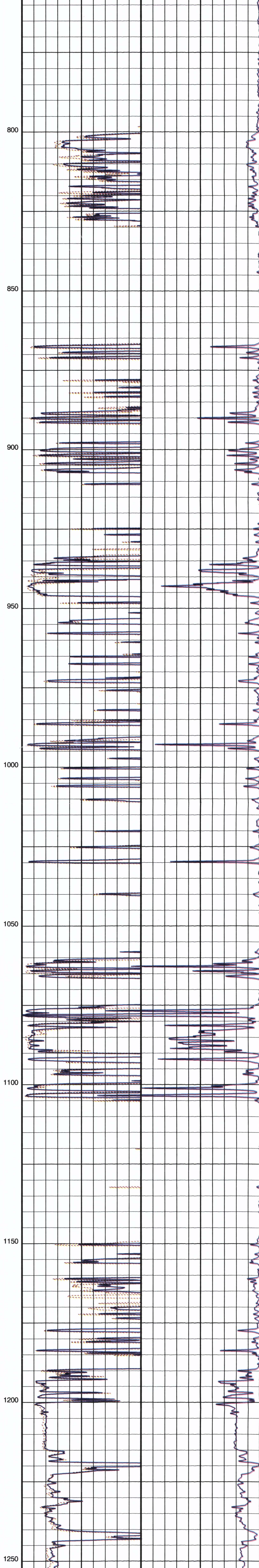
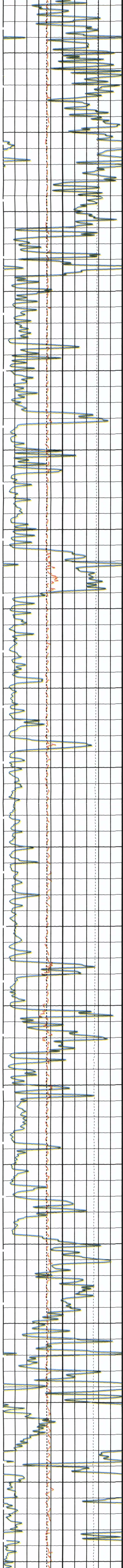
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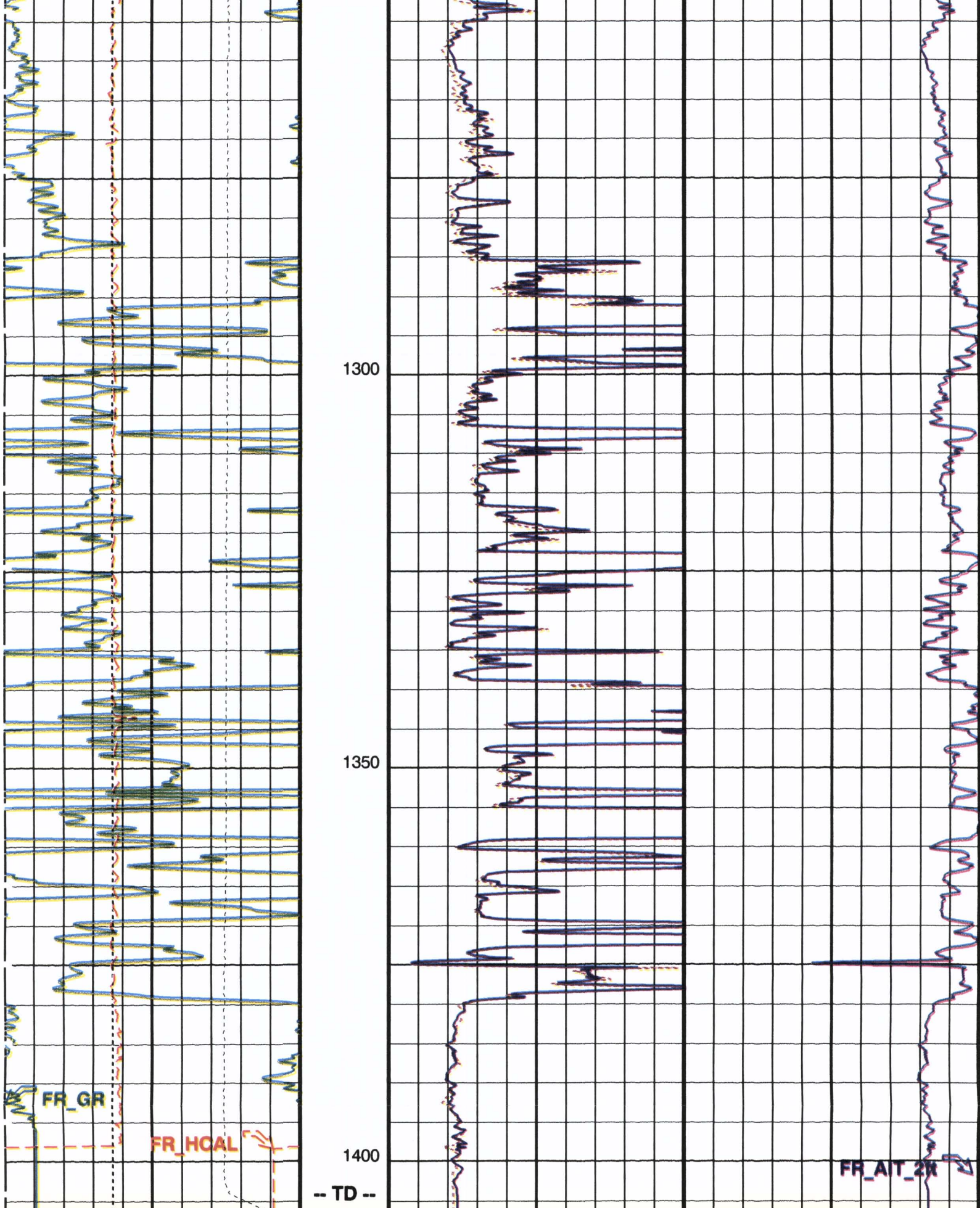
Time Mark Every 60 S



MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***







MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***			
HILT Caliper (HCAL) (MM)	125	375	AIT-H 90 Inch Investigation Conductivity (AHTCO90) (MM/M)
Bit Size (BS) (MM)	125	375	AIT-H 20 Inch Investigation (AHT20) (OHMM)
Gamma Ray (GR) (GAPI)	0	150	AIT-H 90 Inch Investigation (AHT90) (OHMM)
Tension (TENS) 25000 (N)	0		

PIP SUMMARY	
Time Mark Every 60 S	
AIT-H Answer Product Processing Summary. Data taken with Tool # 214 (AHTNO)	
...Acquired data from HILT/HAIT	
***** Borehole Correction *****	
Effective Mud Resistivity computed. Borehole diameter taken as input (see GCSE parameter)	
Tool is run in ECCENTERED mode with a tool stand-off of 25.00 MM. Bit Size is 216.00 MM.	
***** Input Selections to AIT-H Answer Product Processing *****	
Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ	
***** Other Parameters used by AIT-H Answer Product Processing *****	
***** AIT-H Answer Product Processing Control Parameters *****	
(AHAPL): 2_BholeCorr_BasicLogs	
(AHBHM): 0_ComputeMudResistivity (AHBLM): 6_One_Two_and_Four	

Parameters		
DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
AHBHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity
AHBHV	Array Induction Borehole Correction Code Version Number	880
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	108
AHCDE	Array Induction Casing Detection Enable	Yes
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AHMRF	Array Induction Mud Resistivity Factor	1
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
AHRFV	Array Induction Radial Profiling Code Version Number	700
AHRPV	Array Induction Radial Parametrization Code Version Number	223
AHSTA	Array Induction Tool Standoff	25 MM
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	1404.20 M
TDL	Total Depth - Logger	1404.00 M
System and Miscellaneous		
BS	Bit Size	216.000 MM
DFD	Drilling Fluid Density	1230.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	-50000.00 DEGC
TD	Total Depth	1404 M

Format: AITH2_S2 Vertical Scale: 1:600 Graphics File Created: 19-Mar-2004 05:47

OP System Version: 11C0-305			
MCM			
HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

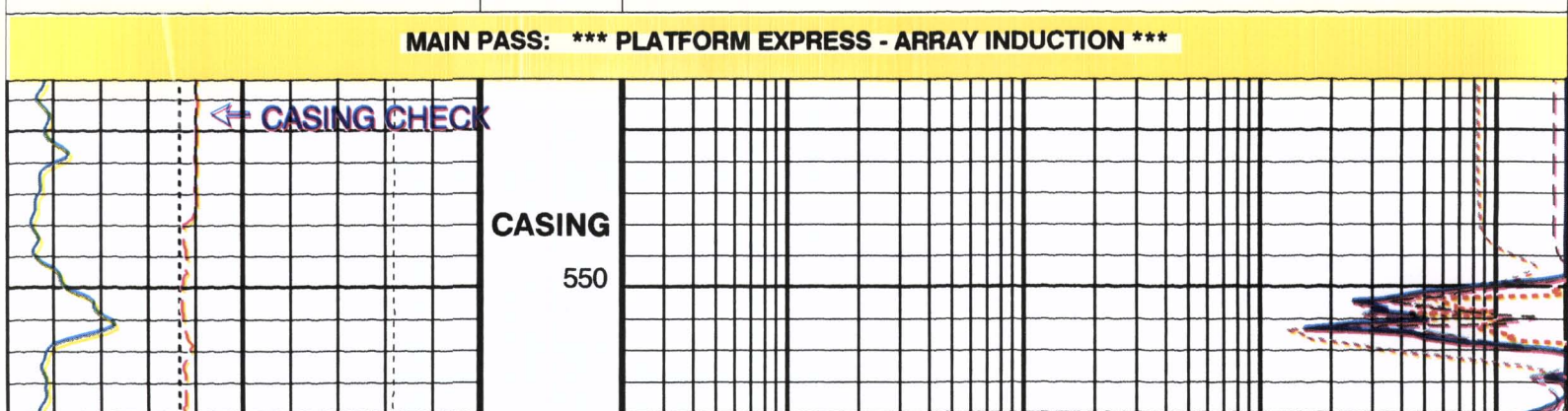
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BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

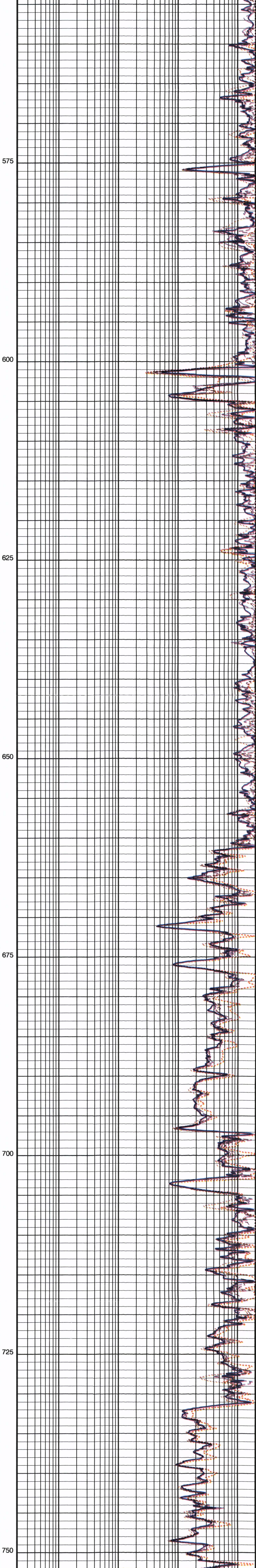
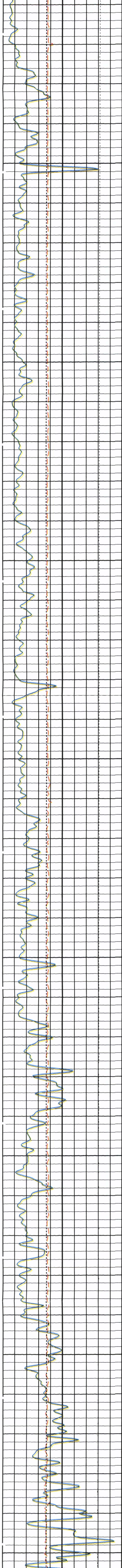
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BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

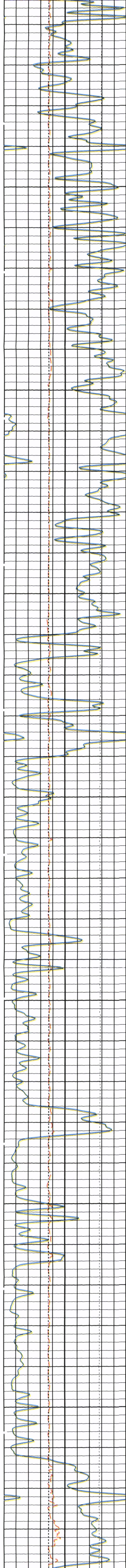
OP System Version: 11C0-305			
MCM			
HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

Changed Parameter Summary			
DLIS Name	New Value	Previous Value	Depth & Time
BHT	25 DEGC	21 DEGC	1373.8 05:54:30

PIP SUMMARY	
Time Mark Every 60 S	
Tension (TENS) 25000 (N)	AIT-H 90 Inch Investigation (AHT90) (OHMM)
Gamma Ray (GR) (GAPI)	AIT-H 60 Inch Investigation (AHT60) (OHMM)
Bit Size (BS) (MM)	AIT-H 30 Inch Investigation (AHT30) (OHMM)
HILT Caliper (HCAL) (MM)	AIT-H 20 Inch Investigation (AHT20) (OHMM)
Stuck Stretch (STIT) (M)	AIT-H 10 Inch Investigation (AHT10) (OHMM)







775

800

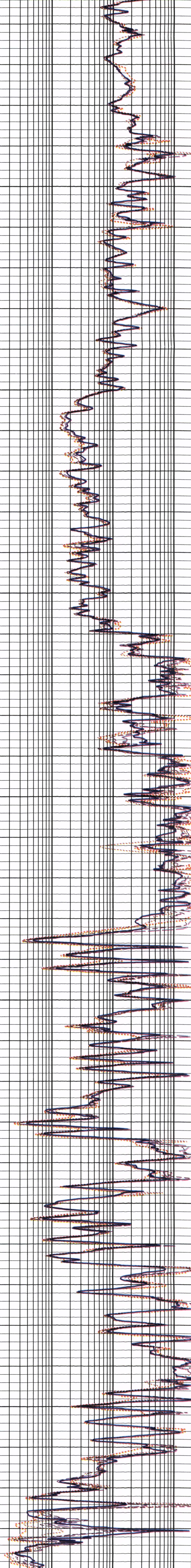
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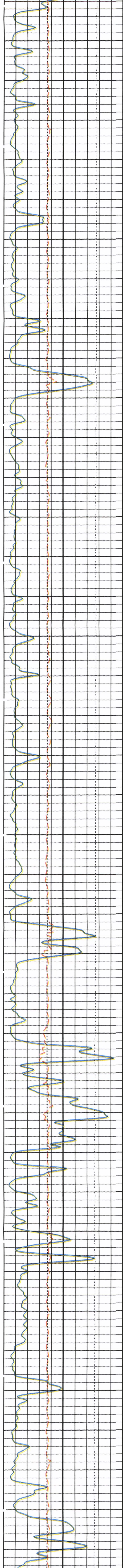
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875

900

925





950

975

1000

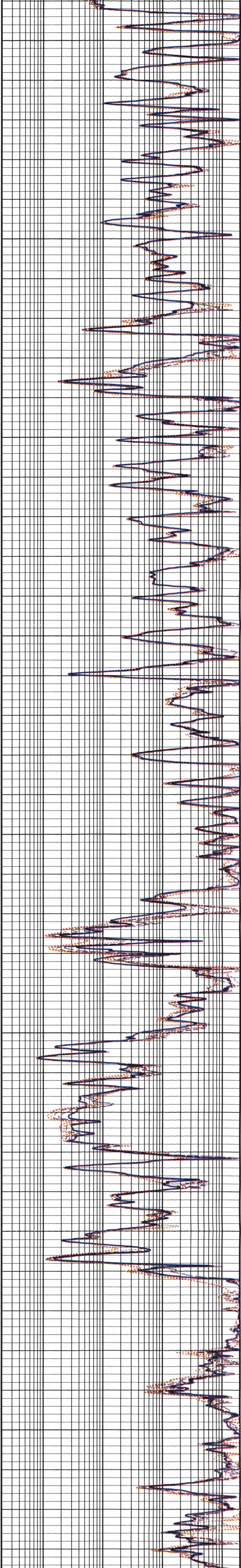
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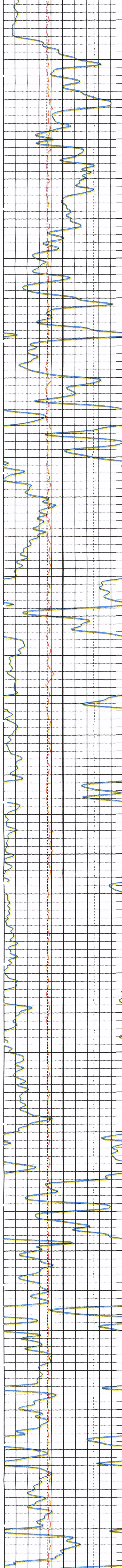
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1075

1100

1125





1150

1175

1200

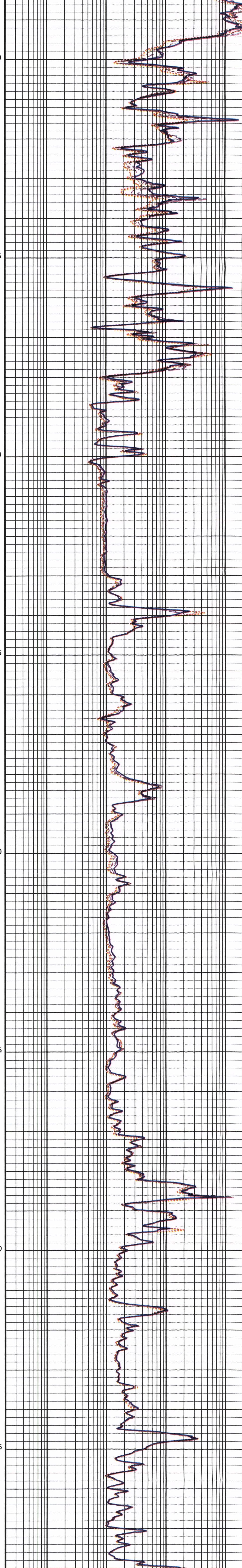
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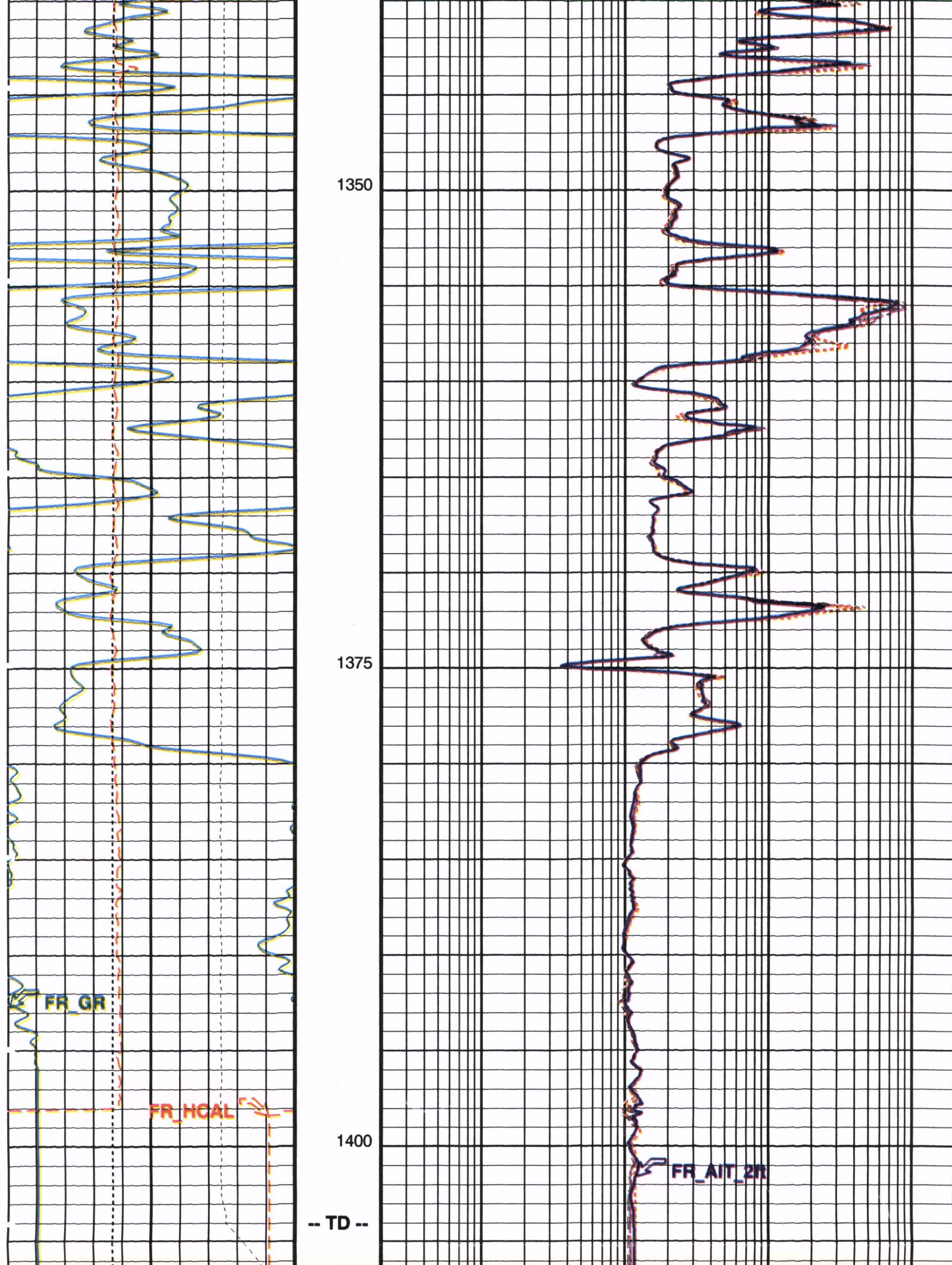
1250

1275

1300

1325





MAIN PASS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***

125	HILT Caliper (HCAL) (MM)	375	0.2	AIT-H 10 Inch Investigation (AHT10) (OHMM)	2000
125	Bit Size (BS) (MM)	375	0.2	AIT-H 20 Inch Investigation (AHT20) (OHMM)	2000
0	Gamma Ray (GR) (GAPI)	150	0.2	AIT-H 30 Inch Investigation (AHT30) (OHMM)	2000
	Tension (TENS) 25000 (N)	0	0.2	AIT-H 60 Inch Investigation (AHT60) (OHMM)	2000
			0.2	AIT-H 90 Inch Investigation (AHT90) (OHMM)	2000

PIP SUMMARY

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 214 (AHTNO)

...Acquired data from HILT/HAIT

***** Borehole Correction *****

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

Tool is run in ECCENTERED mode with a tool stand-off of 25.00 MM. Bit Size is 216.00 MM.

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

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

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

***** AIT-H Answer Product Processing Control Parameters *****

(AHAPL): 2_BholeCorr_BasicLogs

(AHBHM): 0_ComputeMudResistivity (AHBLM): 6_One_Two_and_Four

Parameters

DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
AHBHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity
AHBHV	Array Induction Borehole Correction Code Version Number	880
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	108
AHCDE	Array Induction Casing Detection Enable	Yes
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AHMRV	Array Induction Mud Resistivity Factor	1
AHORV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
AHRSV	Array Induction Radial Profiling Code Version Number	700
AHRPV	Array Induction Radial Parametrization Code Version Number	223
AHSTA	Array Induction Tool Standoff	25 MM
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5 DEGC
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GRSD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	1404.20 M
TDL	Total Depth - Logger	1404.00 M
System and Miscellaneous		
BS	Bit Size	216.000 MM
DFD	Drilling Fluid Density	1230.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	-50000.00 DEGC
TD	Total Depth	1404 M

Format: AITH2_S5 Vertical Scale: 1:240 Graphics File Created: 19-Mar-2004 05:47

OP System Version: 11C0-305

MCM

HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_007PUP	FN:12	PRODUCER	19-Mar-2004 05:45	1406.7 M	1249.8 M
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Output DLIS Files

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BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

OP System Version: 11C0-305

MCM

HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

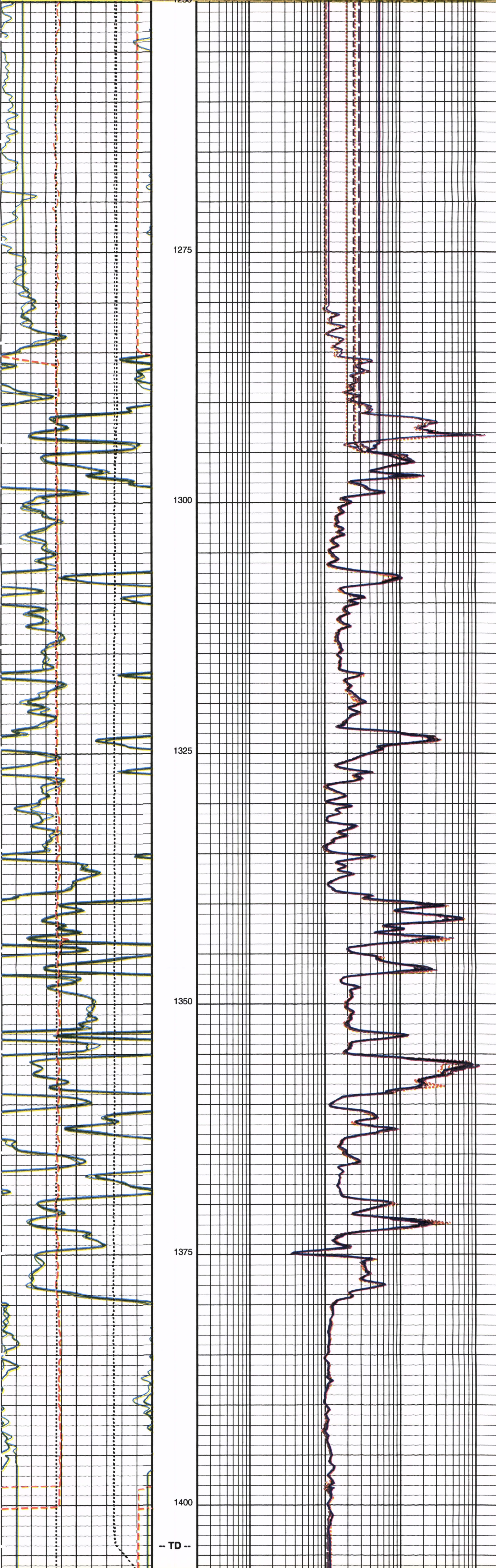
Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
BHT	25 DEGC	21 DEGC	1373.8 05:54:30

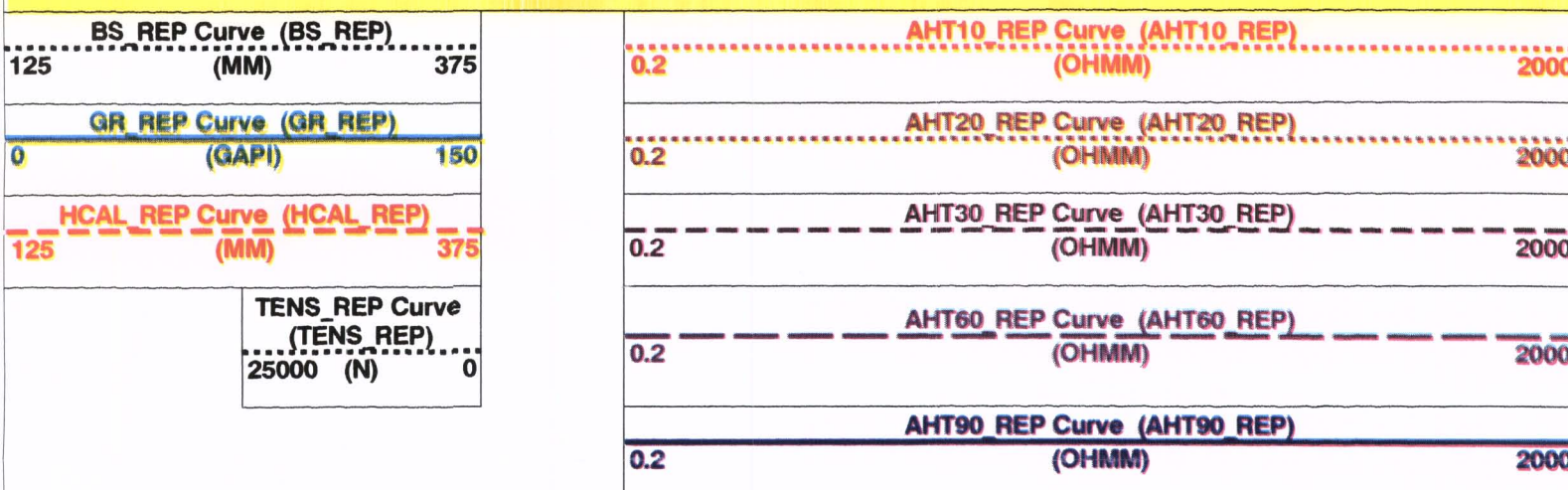
PIP SUMMARY

Time Mark Every 60 S			0.2	AHT90 REP Curve (AHT90 REP) (OHMM)	2000
TENS REP Curve (TENS REP) 25000 (N)			0.2	AHT60 REP Curve (AHT60 REP) (OHMM)	2000
HCAL REP Curve (HCAL REP) 125 (MM)			0.2	AHT30 REP Curve (AHT30 REP) (OHMM)	2000
GR REP Curve (GR REP) 0 (GAPI)			0.2	AHT20 REP Curve (AHT20 REP) (OHMM)	2000
BS REP Curve (BS REP) 125 (MM)			0.2	AHT10 REP Curve (AHT10 REP) (OHMM)	2000

REPEAT ANALYSIS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***



REPEAT ANALYSIS: *** PLATFORM EXPRESS - ARRAY INDUCTION ***



PIP SUMMARY

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 214 (AHTNO)
...Acquired data from HILT/HAIT

***** Borehole Correction *****

Effective Mud Resistivity computed. Borehole diameter taken as input (see GCSE parameter)
Tool is run in ECCENTERED mode with a tool stand-off of 25.00 MM. Bit Size is 216.00 MM.

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

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

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

Form Factor Exponent (FEXP) 2.000 Form Factor Numerator (FNUM) 1.000
Mud Filtrate Sample Resistivity (RMFS) -50000.000 OHMM Mud Filtrate Sample Temperature (MFST) -50000.000 DEGC
Resistivity Connate Water (RW) 1.000 OHMM

***** AIT-H Answer Product Processing Control Parameters *****

Playback Mode: NORMAL

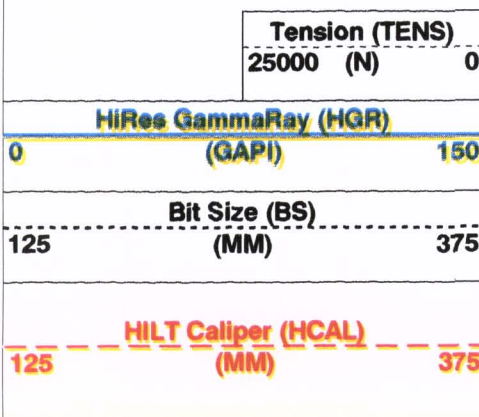
Parameters			
DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHBHM	Array Induction Borehole Correction Mode	0	ComputeMudResistivity
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21	
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21	
AHRFV	Array Induction Radial Profiling Code Version Number	700	
AHRPV	Array Induction Radial Parametrization Code Version Number	223	
AHSTA	Array Induction Tool Standoff	25	MM
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
BHT	Bottom Hole Temperature (used in calculations)	21	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	AITH RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	-5	DEGC
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	21	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	AITH RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	-5	DEGC
System and Miscellaneous			
BS	Bit Size	216.000	MM
DFD	Drilling Fluid Density	1230.00	K/M3
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	-50000.00	DEGC
TD	Total Depth	1404	M

Format: AITH2_S5_REP Vertical Scale: 1:240 Graphics File Created: 19-Mar-2004 05:47

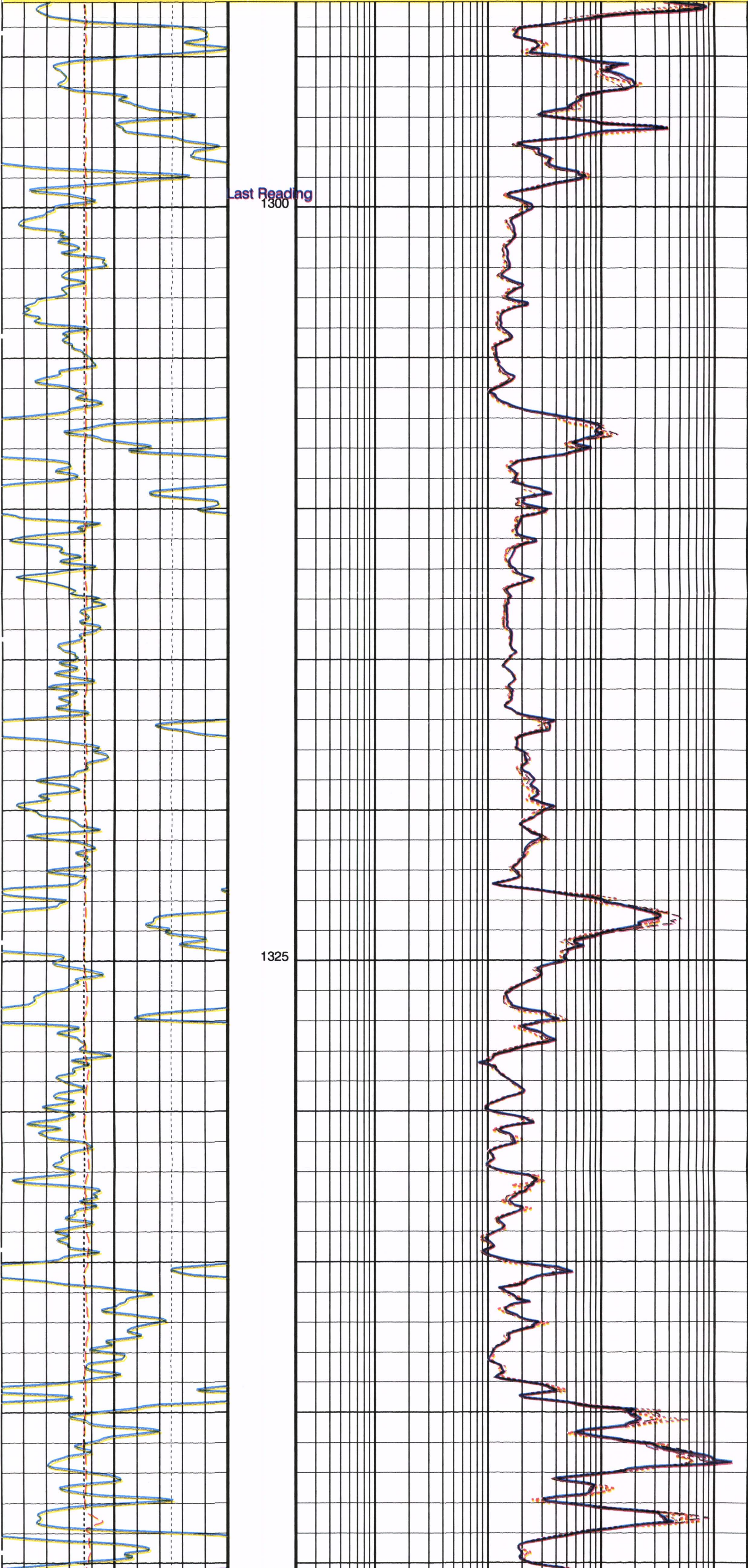
OP System Version: 11C0-305						
MCM						
HILTB-FTB	11C0-305	LDT-D	11C0-305			
DTA-A	OP11-KP1	DTC-H	11C0-305			
Input DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_007PUP	FN:12	PRODUCER	19-Mar-2004 05:45	1406.7 M	1249.8 M
Output DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47		
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57		
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47		

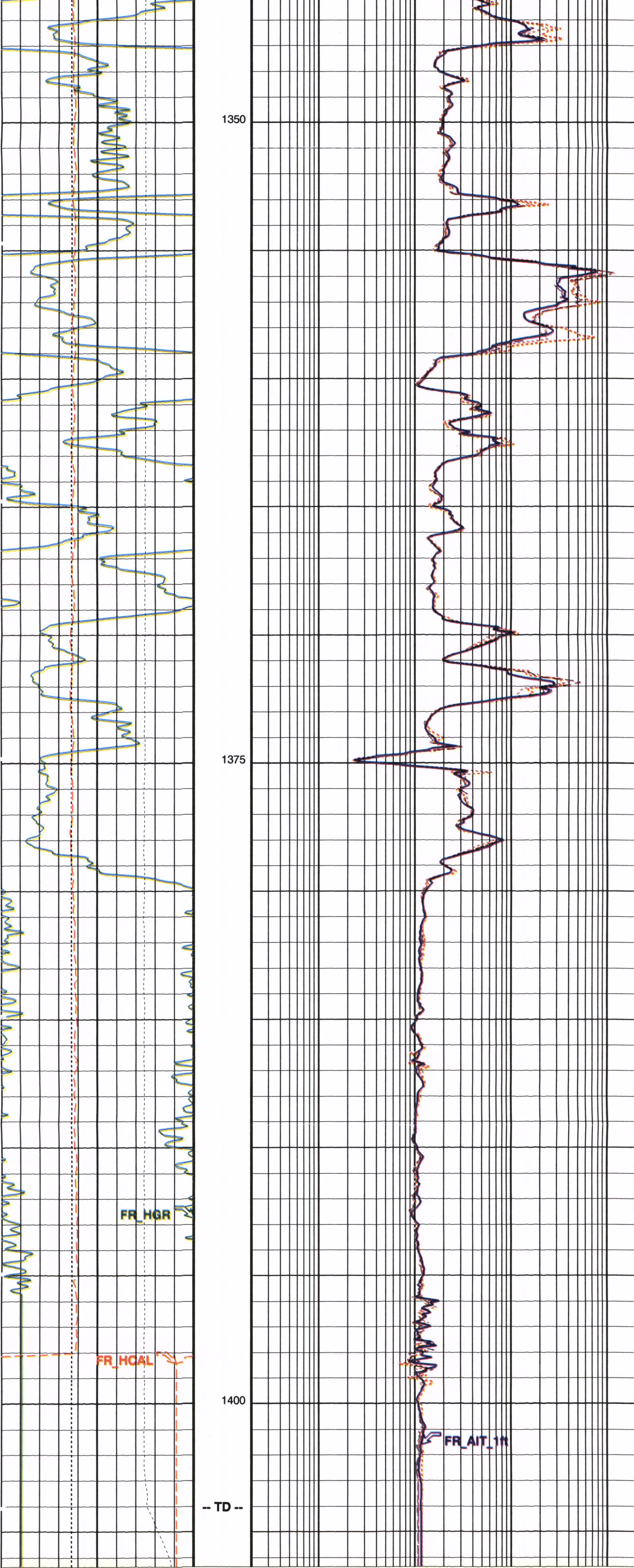
Output DLIS Files				
DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47
OP System Version: 11C0-305				
MCM				
HILTB-FTB	11C0-305	LDT-D	11C0-305	
DTA-A	OP11-KP1	DTC-H	11C0-305	

Changed Parameter Summary			
DLIS Name	New Value	Previous Value	Depth & Time
BHT	25 DEGC	21 DEGC	1373.8 05:54:30

PIP SUMMARY			
Time Mark Every 60 S			
	AIT-H 90 Inch Investigation (AHO90)		
	0.2	(OHMM)	2000
	AIT-H 60 Inch Investigation (AHO60)		
	0.2	(OHMM)	2000
	AIT-H 30 Inch Investigation (AHO30)		
	0.2	(OHMM)	2000
	AIT-H 20 Inch Investigation (AHO20)		
	0.2	(OHMM)	2000
	AIT-H 10 Inch Investigation (AHO10)		
	0.2	(OHMM)	2000

HIRES SECTION: *** PLATFORM EXPRESS - ARRAY INDUCTION ***





HIRES SECTION: *** PLATFORM EXPRESS - ARRAY INDUCTION ***

125	HILT Caliper (HCAL) (MM)	375	0.2	AIT-H 10 Inch Investigation (AHO10) (OHMM)	2000
125	Bit Size (BS) (MM)	375	0.2	AIT-H 20 Inch Investigation (AHO20) (OHMM)	2000
0	HiRes GammaRay (HGR) (GAPI)	150	0.2	AIT-H 30 Inch Investigation (AHO30) (OHMM)	2000
25000	Tension (TENS) (N)	0	0.2	AIT-H 60 Inch Investigation (AHO60) (OHMM)	2000
			0.2	AIT-H 90 Inch Investigation (AHO90) (OHMM)	2000

PIP SUMMARY

Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 214 (AHTNO)

...Acquired data from HILT/HAIT

***** Borehole Correction *****

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

Tool is run in ECCENTERED mode with a tool stand-off of 25.00 MM. Bit Size is 216.00 MM.

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

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): HTEM Porosity (FPHI): DPHZ

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

***** AIT-H Answer Product Processing Control Parameters *****

(AHAPL): 2_BholeCorr_BasicLogs

(AHBHM): 0_ComputeMudResistivity (AHBLM): 6_One_Two_and_Four

Parameters		
DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
AHBHM	Array Induction Borehole Correction Mode	0 ComputeMudResistivity
AHBHV	Array Induction Borehole Correction Code Version Number	880
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	108
AHCEN	Array Induction Casing Detection Enable	Yes
AHCEV	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AHMRV	Array Induction Mud Resistivity Factor	1
AHORV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
AHRSV	Array Induction Radial Profiling Code Version Number	700
AHRSV	Array Induction Radial Parametrization Code Version Number	223
AHSTA	Array Induction Tool Standoff	25
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
BHT	Bottom Hole Temperature (used in calculations)	21
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5
HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	21
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0
GGRD	Geothermal Gradient	0.018227
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
SHT	Surface Hole Temperature	-5
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524
TDD	Total Depth - Driller	1404.20
TDL	Total Depth - Logger	1404.00
System and Miscellaneous		
BS	Bit Size	216.000
DFD	Drilling Fluid Density	1230.00
DORL	Depth Offset for Repeat Analysis	0.0
MST	Mud Sample Temperature	-50000.00
TD	Total Depth	1404

OP System Version: 11C0-305				
MCM				
HILTB-FTB	11C0-305	LDT-D	11C0-305	
DTA-A	OP11-KP1	DTC-H	11C0-305	

Output DLIS Files				
DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

Output DLIS Files				
DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
BACKUP	AIT_TLD_MCFL_CNL_008LUP	FN:16	PRODUCER	19-Mar-2004 05:57
CUST	AIT_TLD_MCFL_CNL_008LUP	FN:17	PRODUCER	19-Mar-2004 05:47

HRDD Processing Flags Statistical Analysis:				
Percentages computed on interval 4571.2 to 1808.0 ft (1393.3 to 551.1 m)				
Pef Flags Up	1.1 %			
Density Flags Up	0.4 %			
	Window 1	Window 2	Window 3	Window 4
BS Average Reconstruction Error	0.37 %	-0.85 %	-0.45 %	
SS Average Reconstruction Error	-0.04 %	0.03 %	-0.22 %	0.09 %
LS Average Reconstruction Error	1.12 %	0.53 %	0.64 %	0.86 %

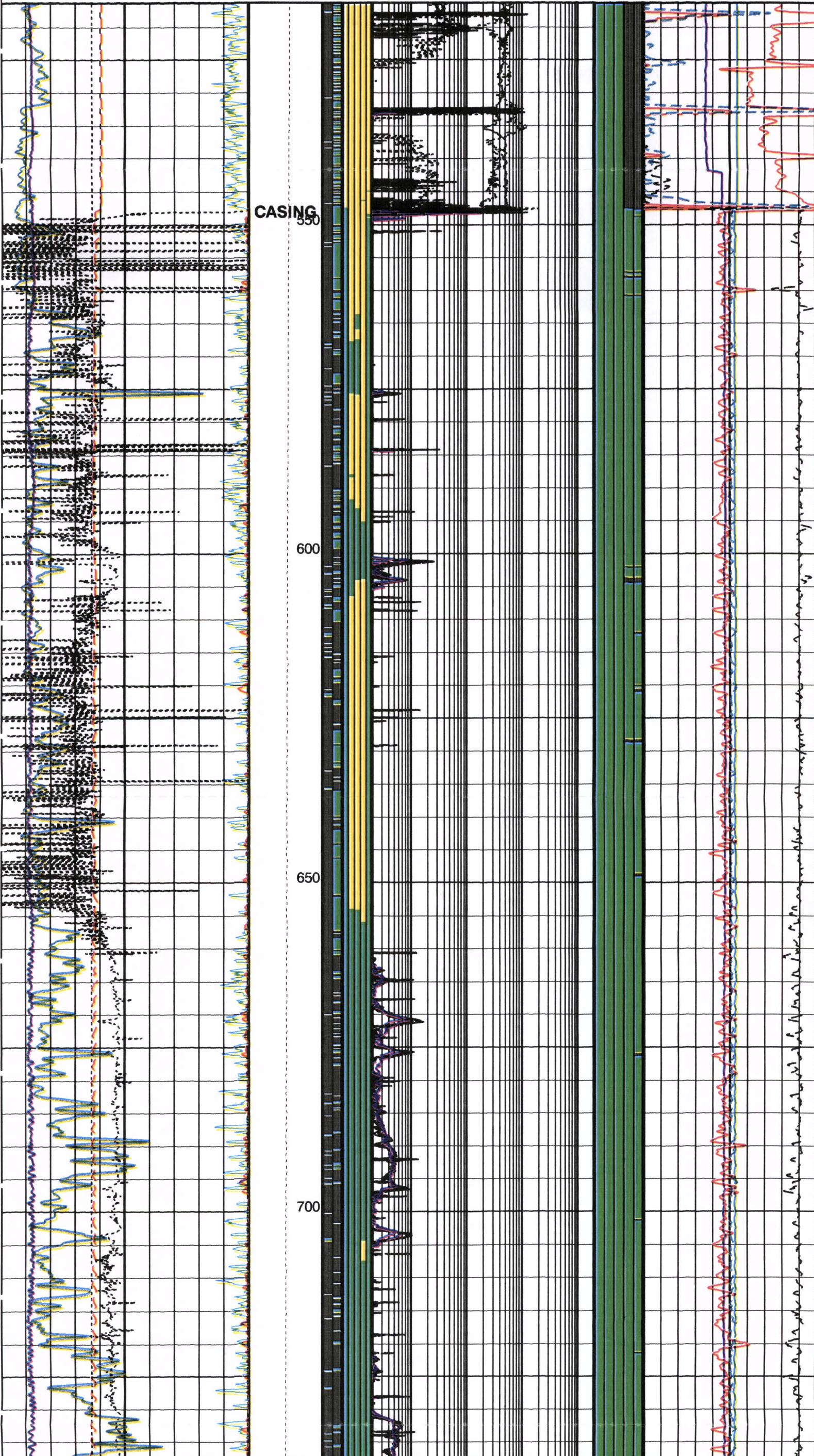
OP System Version: 11C0-305				
MCM				
HILTB-FTB	11C0-305	LDT-D	11C0-305	
DTA-A	OP11-KP1	DTC-H	11C0-305	

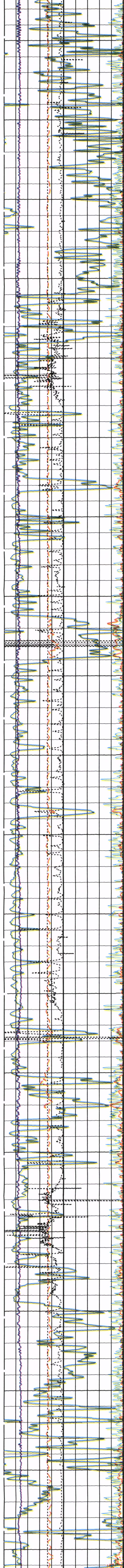
Changed Parameter Summary				
DLIS Name	New Value	Previous Value	Depth & Time	
BHT	25 DEGC	21 DEGC	1373.8 05:54:30	

PIP SUMMARY				
Time Mark Every 60 S				
AIT-H Mud Full Cal (AHMF) (OHMM)	0	5		
HILT Caliper (HCAL) (MM)	125	375		
HGNS Deviation (GDEV) (DEG)	-5	45		
Gamma Ray (ECGR) (GAPI)	0	150		
Std. Res. Density Standoff (DSOZ) (MM)	65	0		
Bit Size (BS) (MM)	125	375		
AIT-H Bhole/Form Signal Ratio (AHBFR) (---)	25	-25		
AIT-H TEMP (AHTCA) (DEGC)	25	125		
Std. Res. Resistivity Standoff (RSOZ) (MM)	65	0		
		Stuck Stretch (STIT) (M)	0	20
		Tension (TENS) (N)	20000	0
		AIT-H QC Fully Calibrated A8 Signal (AHQABN[7]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A7 Signal (AHQABN[6]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A6 Signal (AHQABN[5]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A5 Signal (AHQABN[4]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A4 Signal (AHQABN[3]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A3 Signal (AHQABN[2]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A2 Signal (AHQABN[1]) (MM/M)	2	20000
		AIT-H QC Fully Calibrated A1 Signal (AHQABN[0]) (MM/M)	2	20000
		Pe Correction (HPRA) (---)	-3	3
		BS Delta Rho (HDRB) (G/C3)	-0.5	0.5
		Density Correction (HDRA) (K/M3)	450	-50
		Delta Neutron Porosity (DNPH) (V/V)	-0.1	0.1
		GR Borehole Correction Factor (CFGR) (---)	0.5	1.5

LOG QUALITY: *** PLATFORM EXPRESS ***				
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*** Flag Tracks ***				
White = Absent Green = Good Yellow = Warn Red/Black = Bad				
RESISTIVITY TRACK :				
1. MCFL Hardware				
2. RXO Processing				
3. HAIT Hardware				
4. HAIT Array[1-2]				
5. HAIT Array[3-4]				
6. HAIT Array[5-6]				
7. HAIT Array[7-8]				
NUCLEAR TRACK :				
1. Accelerometer				
2. Density Detector				
3. Neutron Porosity				
4. Density Computation				
5. Pef Computation				





750

800

850

900

950

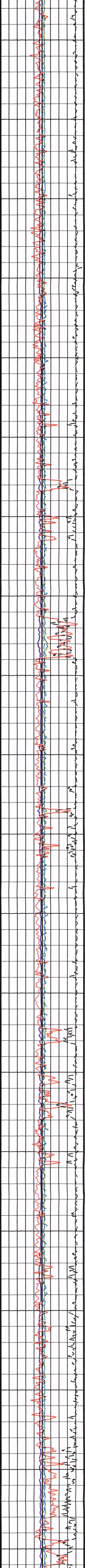
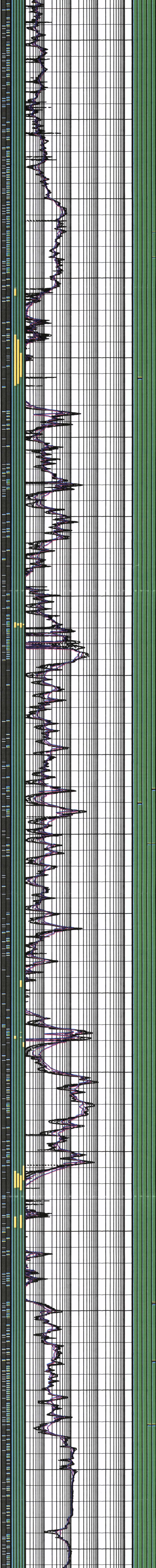
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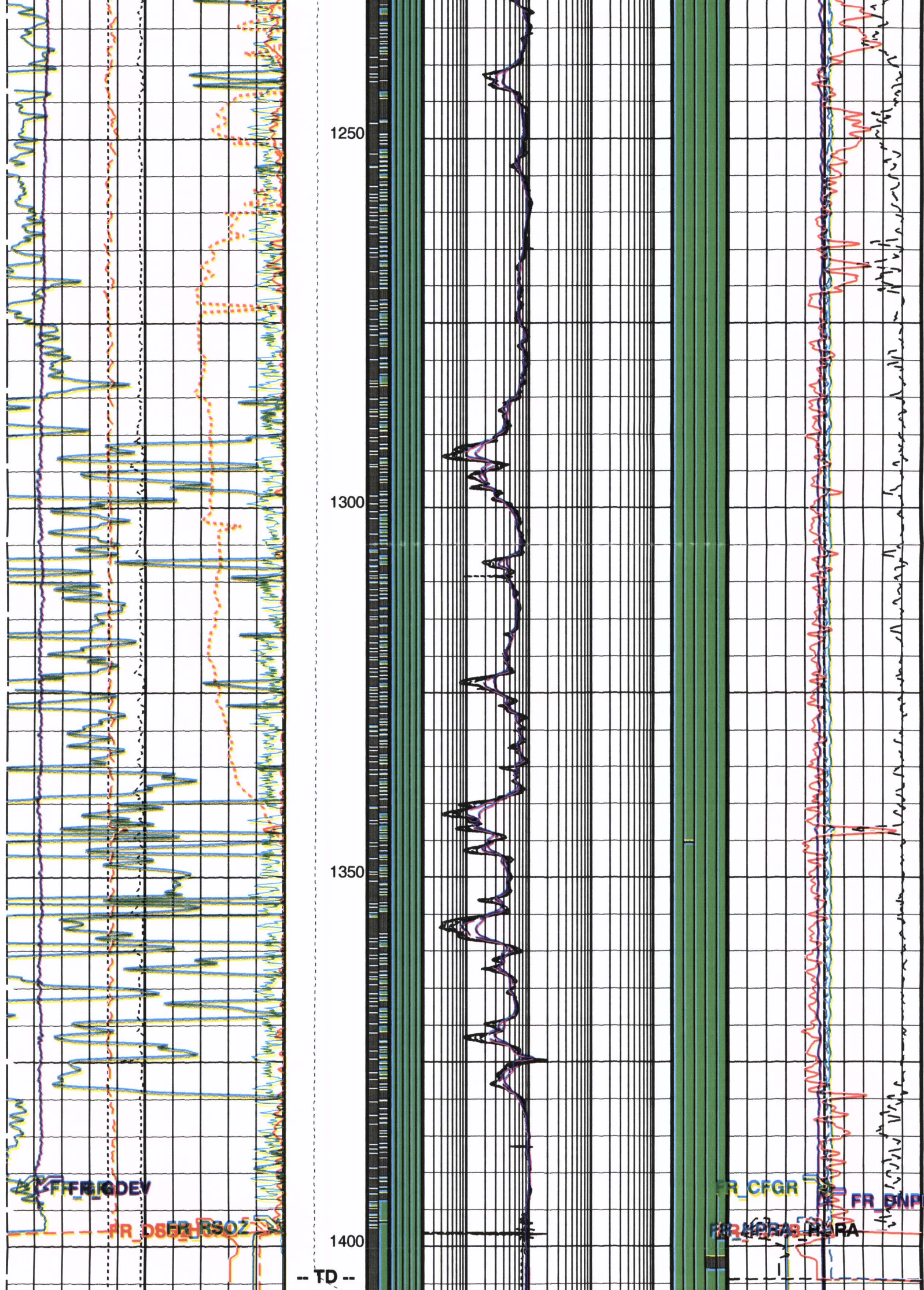
1050

1100

1150

1200





*** Flag Tracks ***
White = Absent Green = Good Yellow = Warn Red/Black = Bad

RESISTIVITY TRACK :

1. MCFL Hardware
2. RXO Processing
3. HAIT Hardware
4. HAIT Array[1-2]
5. HAIT Array[3-4]
6. HAIT Array[5-6]
7. HAIT Array[7-8]

NUCLEAR TRACK :

1. Accelerometer
2. Density Detector
3. Neutron Porosity
4. Density Computation
5. Pef Computation

LOG QUALITY: *** PLATFORM EXPRESS ***

Std. Res. Resistivity Standoff (RSOZ) 65 (MM) 0	Tension (TENS) (N) 0 20000 0	AIT-H QC Fully Calibrated A1 Signal (AHQABN[0]) 2 (MM/M) 20000	GR Borehole Correction Factor (CFGR) 0.5 (---) 1.5
AIT-H TEMP (AHTCA) (DEGC) 25 125	Stuck Stretch (STIT) 0 (M) 20	AIT-H QC Fully Calibrated A2 Signal (AHQABN[1]) 2 (MM/M) 20000	Delta Neutron Porosity (DNPH) -0.1 (V/V) 0.1
AIT-H Bhole/Form Signal Ratio (AHBFR) 25 (---) -25		AIT-H QC Fully Calibrated A3 Signal (AHQABN[2]) 2 (MM/M) 20000	Density Correction (HDRA) 450 (K/M3) -50
Bit Size (BS) (MM) 125 375		AIT-H QC Fully Calibrated A4 Signal (AHQABN[3]) 2 (MM/M) 20000	BS Delta Rho (HDBR) -0.5 (G/C3) 0.5
Std. Res. Density Standoff (DSOZ) 65 (MM) 0		AIT-H QC Fully Calibrated A5 Signal (AHQABN[4]) 2 (MM/M) 20000	Pe Correction (HPRA) -3 (---) 3
Gamma Ray (ECGR) (GAPI) 0 150		AIT-H QC Fully Calibrated A6 Signal (AHQABN[5]) 2 (MM/M) 20000	
HGNS Deviation (GDEV) (DEG) -5 45		AIT-H QC Fully Calibrated A7 Signal (AHQABN[6]) 2 (MM/M) 20000	
HILT Caliper (HCAL) (MM) 125 375		AIT-H QC Fully Calibrated A8 Signal (AHQABN[7]) 2 (MM/M) 20000	
AIT-H Mud Full Cal (AHMF) (OHMM) 0 5			

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
AHBHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
AHMRFB	Array Induction Mud Resistivity Factor	1
AHSTA	Array Induction Tool Standoff	25 MM
BHFL	Borehole Fluid Type	OIL
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
DHC	Density Hole Correction	BS
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
FSAL	Formation Salinity	-50000 PPM
FSCO	Formation Salinity Correction Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
HSCO	Hole Size Correction Option	HSTS_YES
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE
MCCO	Mud Cake Correction Option	NO
MFOR	Mud Correction	NATU
MPOF	MCFL Processing Operation Mode	ON
MWCO	Mud Weight Correction Option	NO
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HiRes
NSAR	HRDD Depth Sampling Rate	25.4 MM
PTCO	Pressure/Temperature Correction Option	NO
SDAT	Standoff Data Source	SOCN
SHT	Surface Hole Temperature	-5 DEGC
SOCN	Standoff Distance	3.175 MM
SOCO	Standoff Correction Option	YES
LDT-D: Litho Density - D		
DHC	Density Hole Correction	BS
HOLEV: Integrated Hole/Cement Volume		
BHFL	Borehole Fluid Type	OPEN
BHT	Bottom Hole Temperature (used in calculations)	21 DEGC
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE
SHT	Surface Hole Temperature	-5 DEGC
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	1404.20 M
TDL	Total Depth - Logger	1404.00 M
System and Miscellaneous		
BS	Bit Size	216.000 MM
BSAL	Borehole Salinity	-50000.00 PPM
CSIZ	Current Casing Size	244.500 MM
CWEI	Casing Weight	59.50 KG/M
DFD	Drilling Fluid Density	1230.00 K/M3
DORL	Depth Offset for Repeat Analysis	0.0 M
MST	Mud Sample Temperature	-50000.00 DEGC
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000 OHMM
TD	Total Depth	1404 M

Format: PEX_LQC

Vertical Scale: 1:600

Graphics File Created: 19-Mar-2004 05:47

OP System Version: 11C0-305

MCN

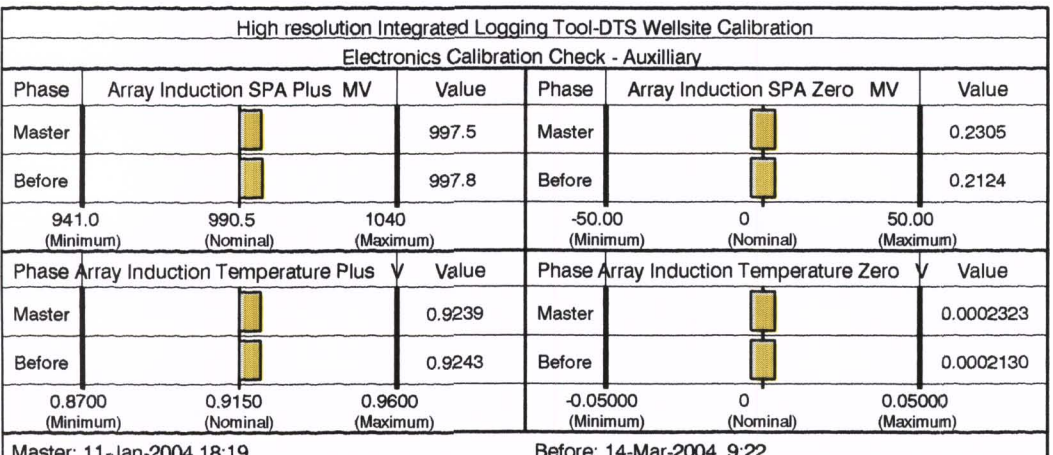
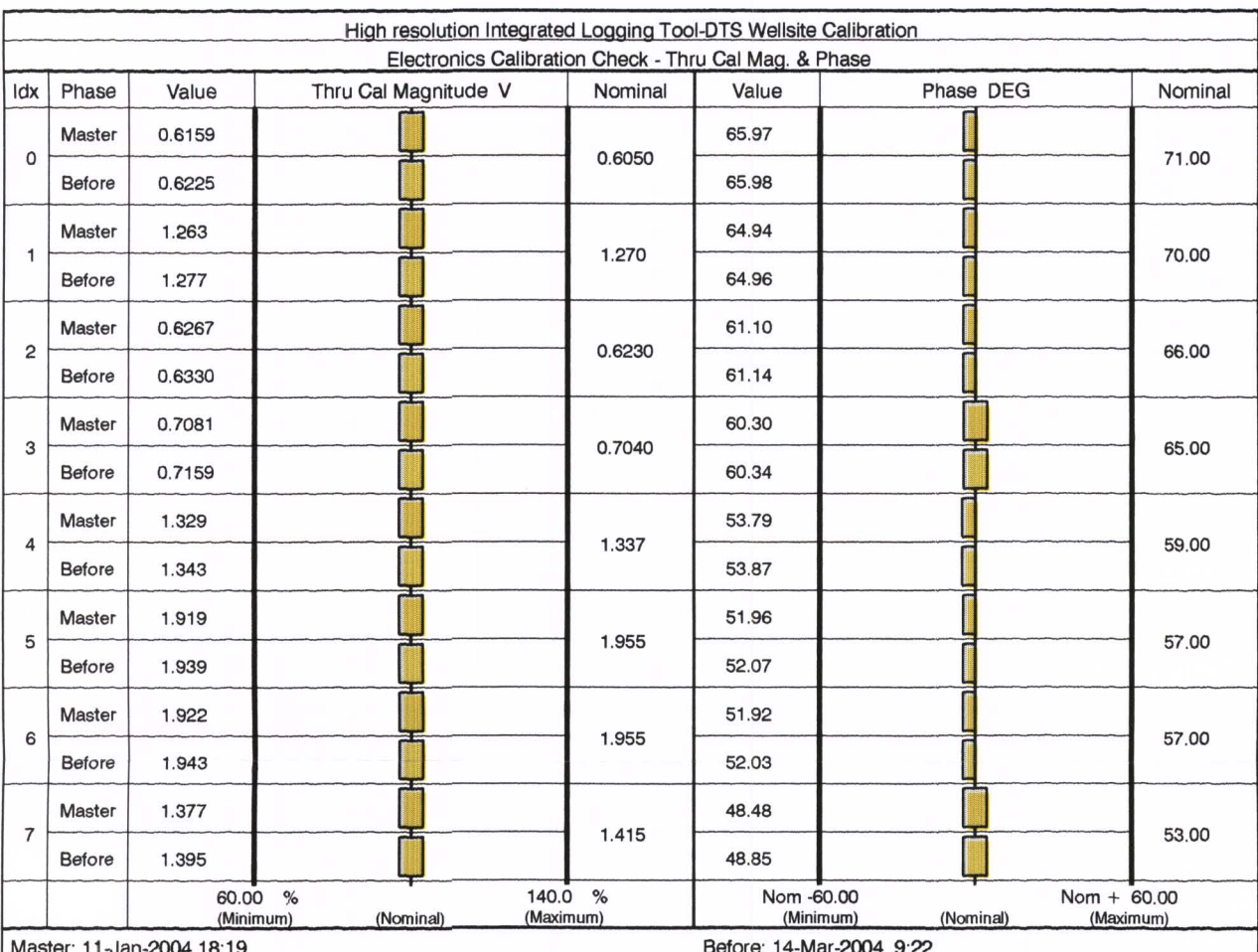
HILTB-FTB	11C0-305	LDT-D	11C0-305
DTA-A	OP11-KP1	DTC-H	11C0-305

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_008LUP	FN:15	PRODUCER	19-Mar-2004 05:47
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Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 11-Jan-2004 18:19 Before: 14-Mar-2004 9:22							
Thru Cal Magnitude - 0	0	0.6159	0.6225	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.263	1.277	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	0.6267	0.6330	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.7081	0.7159	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	1.329	1.343	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	1.919	1.939	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.922	1.943	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	1.377	1.395	N/A	N/A	N/A	V
Phase - 0	0	65.97	65.98	N/A	N/A	N/A	DEG
Phase - 1	0	64.94	64.96	N/A	N/A	N/A	DEG
Phase - 2	0	61.10	61.14	N/A	N/A	N/A	DEG
Phase - 3	0	60.30	60.34	N/A	N/A	N/A	DEG
Phase - 4	0	53.79	53.87	N/A	N/A	N/A	DEG
Phase - 5	0	51.96	52.07	N/A	N/A	N/A	DEG
Phase - 6	0	51.92	52.03	N/A	N/A	N/A	DEG
Phase - 7	0	48.48	48.85	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Electronics Calibration Check - Auxilliary							
Master: 11-Jan-2004 18:19 Before: 14-Mar-2004 9:22							
Array Induction SPA Plus	990.5	997.5	997.8	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	0.2305	0.2124	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9239	0.9243	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	0.0002323	0.0002130	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Test Loop Gain Correction							
Master: 11-Jan-2004 18:19							
Test Loop Gain Magnitude - 0	0	1.019	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 1	0	1.017	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 2	0	1.015	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 3	0	1.014	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 4	0	0.9981	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 5	0	0.9868	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 6	0	0.9997	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 7	0	1.006	N/A	N/A	N/A	N/A	V
Phase - 0	0	0.4294	N/A	N/A	N/A	N/A	DEG
Phase - 1	0	0.5291	N/A	N/A	N/A	N/A	DEG
Phase - 2	0	0.005692	N/A	N/A	N/A	N/A	DEG
Phase - 3	0	0.1272	N/A	N/A	N/A	N/A	DEG
Phase - 4	0	-0.009129	N/A	N/A	N/A	N/A	DEG
Phase - 5	0	-0.1061	N/A	N/A	N/A	N/A	DEG
Phase - 6	0	0.3198	N/A	N/A	N/A	N/A	DEG
Phase - 7	0	-0.1423	N/A	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Sonde Error Correction							
Master: 11-Jan-2004 18:19							
R Sonde Error Correction - 0	0	-37.90	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 1	0	168.0	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 2	0	111.8	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 3	0	64.01	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 4	0	23.15	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 5	0	13.62	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 6	0	8.867	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 7	0	-0.5816	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 0	0	-39.61	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 1	0	132.9	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 2	0	68.86	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 3	0	140.6	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 4	0	-41.23	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 5	0	-6.873	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 6	0	4.019	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 7	0	-2.271	N/A	N/A	N/A	N/A	MM/M
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Mud Gain Correction							
Master: 11-Jan-2004 18:19							
Coarse - Mag, Real, Imag - 0	0	1.000	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 1	0	1.000	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 2	0	1.000	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 0	0	1.000	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 1	0	1.000	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 2	0	1.000	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Stab Measurement Summary							
Before: 14-Mar-2004 9:35							
BS Window Ratio	0.7522	N/A	0.7535	N/A	N/A	N/A	CPS
BS Window Sum	11230	N/A	11230	N/A	N/A	N/A	
SS Window Ratio	0.4807	N/A	0.4821	N/A	N/A	N/A	
SS Window Sum	11140	N/A	11110	N/A	N/A	N/A	CPS
LS Window Ratio	0.2940	N/A	0.2996	N/A	N/A	N/A	CPS
LS Window Sum	1251	N/A	1243	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Photo-multiplier High Voltages Calibrations							
Before: 14-Mar-2004 9:35							
BS PM High Voltage (Command)	1876	N/A	1823	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1923	N/A	1961	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1957	N/A	1971	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Crystal Quality Resolutions Calibration							
Before: 14-Mar-2004 9:35							
BS Crystal Resolution	11.52	N/A	11.33	N/A	N/A	N/A	%
SS Crystal Resolution	10.11	N/A	10.83	N/A	N/A	N/A	%
LS Crystal Resolution	9.105	N/A	9.205	N/A	N/A	N/A	%
High resolution Integrated Logging Tool-DTS Wellsite Calibration - MCFL Calibration							
Before: 14-Mar-2004 9:27							
Raw B0 Resistivity	3875	N/A	3857	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3834	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3847	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - HILT Caliper Calibration							
Before: 14-Mar-2004 10:10							
HILT Caliper Zero Measurement	203.2	N/A	200.8	N/A	N/A	N/A	MM
HILT Caliper Plus Measurement	304.8	N/A	307.6	N/A	N/A	N/A	MM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Detector Calibration							
Before: 14-Mar-2004 9:49							
Gamma Ray Background	30.00	N/A	30.17	N/A	N/A	N/A	GAPI
Gamma Ray (Jig - Bkg)	171.4	N/A	171.4	N/A	N/A	15.58	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Zero Measurement							
Master: 16-Jan-2004 11:48 Before: 14-Mar-2004 9:23							
CNTC Background	26.04	26.04	25.54	N/A	N/A	3.906	CPS
CFTC Background	27.25	27.25	26.08	N/A	N/A	4.088	CPS
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Accelerometer Calibration							
Before: 14-Mar-2004 9:20							
Z-Axis Acceleration	9.810	N/A	9.813	N/A	N/A	N/A	M/S2
Litho Density - D Wellsite Calibration - Background Measurement							
Master: 23-Jan-2004 12:21 Before: 14-Mar-2004 9:25							
LL Background	20.00	15.91	15.81	N/A	N/A	1.000	CPS
LU Background	76.00	60.35	60.27	N/A	N/A	1.000	CPS
LS Background	57.00	46.09	45.95	N/A	N/A	1.000	CPS
LITH Background	5.500	4.497	4.448	N/A	N/A	0.3000	CPS
SS1 Background	16.00	14.79	14.85	N/A	N/A	0.5000	CPS
SS2 Background	11.00	9.968	9.957	N/A	N/A	0.5000	CPS
Litho Density - D Wellsite Calibration - Tool Quality Control Information HV							
Master: 23-Jan-2004 12:21 Before: 14-Mar-2004 9:25							
LSHV Background	1500	1402	1406	N/A	N/A	N/A	V
SSHV Background	1500	1286	1295	N/A	N/A	N/A	V
Litho Density - D Wellsite Calibration - Detectors Resolution From BKG Measurments							
Master: 23-Jan-2004 12:21 Before: 14-Mar-2004 9:25							
LS Resolution Background	8.000	8.482	8.580	N/A	N/A	N/A	
SS Resolution Background	8.000	8.538	8.656	N/A	N/A	N/A	
Litho Density - D Wellsite Calibration - Caliper Calibration							
Before: 14-Mar-2004 9:43							
Caliper Small Ring	203.2	N/A	168.8	N/A	N/A	N/A	MM
Caliper Large Ring	304.8	N/A	275.5	N/A	N/A	N/A	MM
The GLS-VJ source activity is acceptable.							
The HGNS Neutron Master Calibration was done with the following parameters :							
NCT-B Water Temperature	20.2	DEGC.					
Thermal Housing Size	85.700	MM.					

High resolution Integrated Logging Tool-DTS / Equipment Identification			
Primary Equipment:			
Array Induction Tool - H	AIT - H	214	
Rm/SP Bottom Nose	AHRM - A		
Array Induction Sonde	AHIS - BA	214	
HILT high-Resolution Mechanical Sonde	HRMS - B	908	
HILT Rxo Gamma-ray Device	HRGD - B	1860	
HILT Nuclear Back-Scatter Detector	HILT -		
HILT Nuclear Short-Spacing Detector	HILT -		
HILT Nuclear Long-Spacing Detector	HILT -		
Auxiliary Equipment:			



High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Test Loop Gain Correction					
Idx	Value	Test Loop Gain Magnitude V			Value Phase DEG
0	1.019				0.4294
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
1	1.017				0.5291
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
2	1.015				0.005692
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
3	1.014				0.1272
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
4	0.9981				-0.009129
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
5	0.9868				-0.1061
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
6	0.9997				0.3198
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
7	1.006				-0.1423
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum) 0 (Nominal) 3.000 (Maximum)
Master: 11-Jan-2004 18:19					

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Sonde Error Correction					
Idx	Value	R Sonde Error Correction MM/M			Value X Sonde Error Correction MM/M
0	-37.90				-39.61
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)	-225.0 (Minimum) 0 (Nominal) 225.0 (Maximum)
1	168.0				132.9
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)	-625.0 (Minimum) 0 (Nominal) 625.0 (Maximum)
2	111.8				68.86
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum) 0 (Nominal) 350.0 (Maximum)
3	64.01				140.6
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum) 0 (Nominal) 250.0 (Maximum)
4	23.15				-41.23
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum) 0 (Nominal) 63.00 (Maximum)
5	13.62				-6.873
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)
6	8.867				4.019
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)
7	-0.5816				-2.271
		-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)
Master: 11-Jan-2004 18:19					

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Mud Gain Correction					
Idx	Value	Coarse - Mag, Real, Imag			Value Fine - Mag, Real, Imag
0	1.000				1.000
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum) 1.000 (Nominal) 1.200 (Maximum)
1	1.000				1.000
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum) 1.000 (Nominal) 1.200 (Maximum)
2	1.000				1.000
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum) 1.000 (Nominal) 1.200 (Maximum)
Master: 11-Jan-2004 18:19					

High resolution Integrated Logging Tool-DTS Wellsite Calibration														
Stab Measurement Summary														
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value	Phase	LS Window Ratio			Value
Before				0.7535	Before				0.4821	Before				0.2996
	0.7146 (Minimum)	0.7522 (Nominal)	0.7898 (Maximum)			0.4566 (Minimum)	0.4807 (Nominal)	0.5047 (Maximum)			0.2793 (Minimum)	0.2940 (Nominal)	0.3087 (Maximum)	
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value	Phase	LS Window Sum CPS			Value
Before				11230	Before				11110	Before				1243
	10670 (Minimum)	11230 (Nominal)	11790 (Maximum)			10590 (Minimum)	11140 (Nominal)	11700 (Maximum)			1189 (Minimum)	1251 (Nominal)	1314 (Maximum)	
Before: 14-Mar-2004 9:35														

High resolution Integrated Logging Tool-DTS Wellsite Calibration														
Photo-multiplier High Voltages Calibrations														
Phase	BS PM High Voltage (Command) V			Value	Phase	SS PM High Voltage (Command) V			Value	Phase	LS PM High Voltage (Command) V			Value
Before				1823	Before				1961	Before				1971
	1776 (Minimum)	1876 (Nominal)	1976 (Maximum)			1823 (Minimum)	1923 (Nominal)	2023 (Maximum)			1857 (Minimum)	1957 (Nominal)	2057 (Maximum)	
Before: 14-Mar-2004 9:35														

High resolution Integrated Logging Tool-DTS Wellsite Calibration														
Crystal Quality Resolutions Calibration														
Phase	BS Crystal Resolution %			Value	Phase	SS Crystal Resolution %			Value	Phase	LS Crystal Resolution %			Value
Before				11.33	Before				10.83	Before				9.205
	10.52 (Minimum)	11.52 (Nominal)	12.52 (Maximum)			9.106 (Minimum)	10.11 (Nominal)	11.11 (Maximum)			8.105 (Minimum)	9.105 (Nominal)	10.10 (Maximum)	
Before: 14-Mar-2004 9:35														

High resolution Integrated Logging Tool-DTS Wellsite Calibration																	
MCFL Calibration																	
Phase		Raw B0 Resistivity OHMM			Value	Phase		Raw B1 Resistivity OHMM			Value	Phase		Raw B2 Resistivity OHMM			Value
Before					3857	Before					3834	Before					3847
		3565 (Minimum)	3875 (Nominal)	4185 (Maximum)				3524 (Minimum)	3830 (Nominal)	4136 (Maximum)				3524 (Minimum)	3830 (Nominal)	4136 (Maximum)	
Before: 14-Mar-2004 9:27																	

High resolution Integrated Logging Tool-DTS Wellsite Calibration											
HILT Caliper Calibration											
Phase HILT Caliper Zero Measurement MM				Value	Phase HILT Caliper Plus Measurement MM				Value		
Before					200.8	Before					307.6
152.4 (Minimum)		203.2 (Nominal)		254.0 (Maximum)		228.6 (Minimum)		304.8 (Nominal)		381.0 (Maximum)	
Before: 14-Mar-2004 10:10											

High resolution Integrated Logging Tool-DTS Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig - Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			30.17	Before			171.4	Before			165.0
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		155.8 (Minimum)	171.4 (Nominal)	187.0 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)	
Before: 14-Mar-2004 9:49											

High resolution Integrated Logging Tool-DTS Wellsite Calibration									
Zero Measurement									
Phase	CNTC Background CPS			Value	Phase	CFTC Background CPS			Value
Master				26.04	Master				27.25
Before				25.54	Before				26.08
5.000 (Minimum)		26.04 (Nominal)		40.00 (Maximum)	5.000 (Minimum)		27.25 (Nominal)		40.00 (Maximum)
Master: 16-Jan-2004 11:48					Before: 14-Mar-2004 9:23				

High resolution Integrated Logging Tool-DTS			
Wellsite Calibration			
Accelerometer Calibration			
Phase	Z-Axis Acceleration M/S ²	Value	
Before		9.813	
	9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)
Before: 14-Mar-2004 9:20			

Litho Density - D / Equipment Identification		
Primary Equipment:		
Nuclear Services Cartridge	NSC - F	1868
Powered Gamma Detector	PGD - G	3745
Gamma Source Radioactive	GSR - J	2043
Auxiliary Equipment:		
Density Resistivity Sonde	DRS - E	723
Electronics Cartridge Housing	ECH - MKA	
Powered Detector Housing	PDH - L	

Litho Density - D Wellsite Calibration											
Background Measurement											
Phase	LL Background CPS		Value	Phase	LU Background CPS		Value	Phase	LS Background CPS		Value
Master			15.91	Master			60.35	Master			46.09
Before			15.81	Before			60.27	Before			45.95
15.00 (Minimum) 20.00 (Nominal) 25.00 (Maximum)				58.00 (Minimum) 76.00 (Nominal) 94.00 (Maximum)				43.00 (Minimum) 57.00 (Nominal) 72.00 (Maximum)			
Phase	LITH Background CPS		Value	Phase	SS1 Background CPS		Value	Phase	SS2 Background CPS		Value
Master			4.497	Master			14.79	Master			9.968
Before			4.448	Before			14.85	Before			9.957
4.000 (Minimum) 5.500 (Nominal) 7.000 (Maximum)				12.00 (Minimum) 16.00 (Nominal) 19.50 (Maximum)				8.000 (Minimum) 11.00 (Nominal) 13.50 (Maximum)			
Master: 23-Jan-2004 12:21				Before: 14-Mar-2004 9:25							

Field: **UNDEFINED**

Province: **NORTHWEST TERRITORIES**

PLATFORM EXPRESS:

ARRAY INDUCTION LOG