

LOGGING DATE: 28-JUN-2000
 LOGGING TIME: 10:00 AM
 LOGGING LOCATION: 1329 N & 251 E from the SW corner of section 28
 COMPANY: Enerfin Resources Northwest
 WELL: "Bascom Pacific LLC" 14-26-64 RD #1
 FIELD: Mist Gas
 COUNTY: Columbia
 STATE: Oregon

LOGGING DEPTH: 3050 ft
 LOGGING INTERVAL: 28
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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 INTERPRETATIONS, 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 INTERPRETATION 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.

OTHER SERVICES1
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:
 REMARKS: RUN NUMBER 1

OTHER SERVICES2
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:
 REMARKS: RUN NUMBER 2

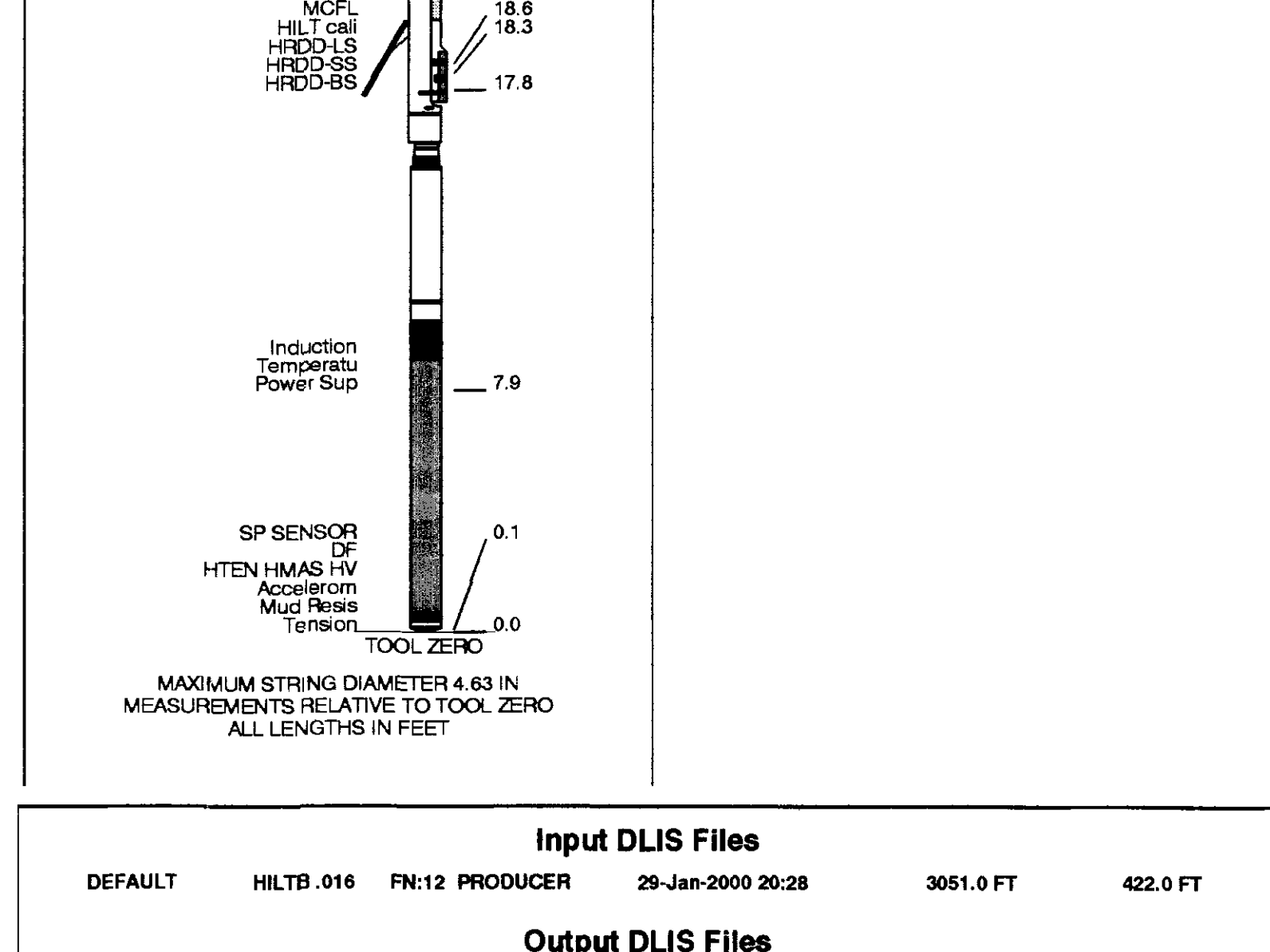
0.5 inch standoffs used on array induction
 Two 0.5 inch standoffs used on BHC sonic sonde
 log calculated on a sandstone matrix (2.65 g/cc 56 us/ft)
 cement volume calculated assuming 2.975 OD production casing
 First logging attempt made logged from 1702
 Centralizers and standoffs reduced to minimum possible for 2nd wireline attempt
 Rg: John Taylor #7

SERVICE ORDER #:
 PROGRAM VERSION:
 FLUID LEVEL:
 LOGGED INTERVAL: START STOP

EQUIPMENT DESCRIPTION

SURFACE EQUIPMENT
 TCM-AB

DOWNHOLE EQUIPMENT



MAXIMUM STRING DIAMETER 4.63 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN FEET

Input DLIS Files
 DEFAULT HILTB_016 FN:12 PRODUCER 29-Jan-2000 20:28 3051.0 FT 422.0 FT

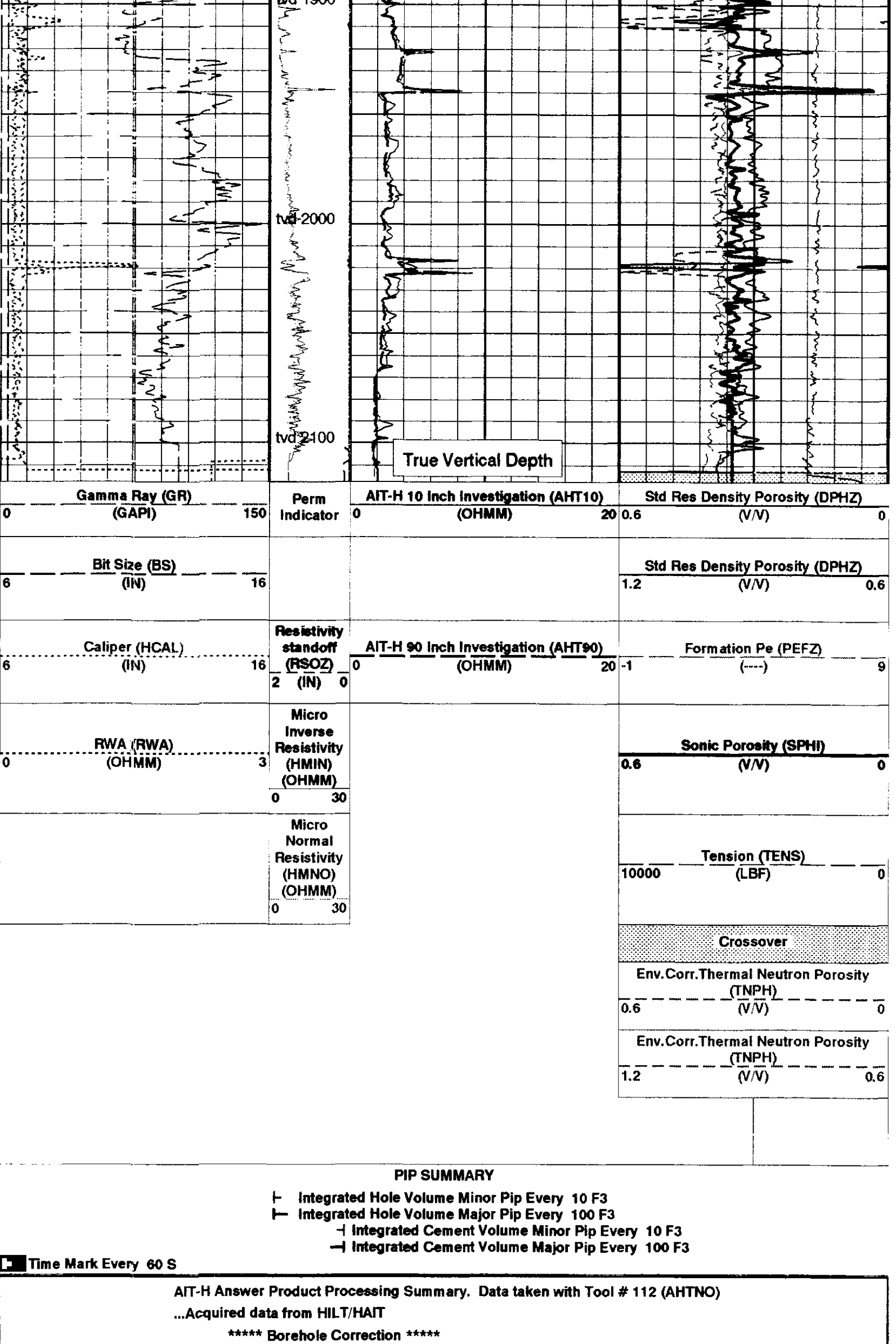
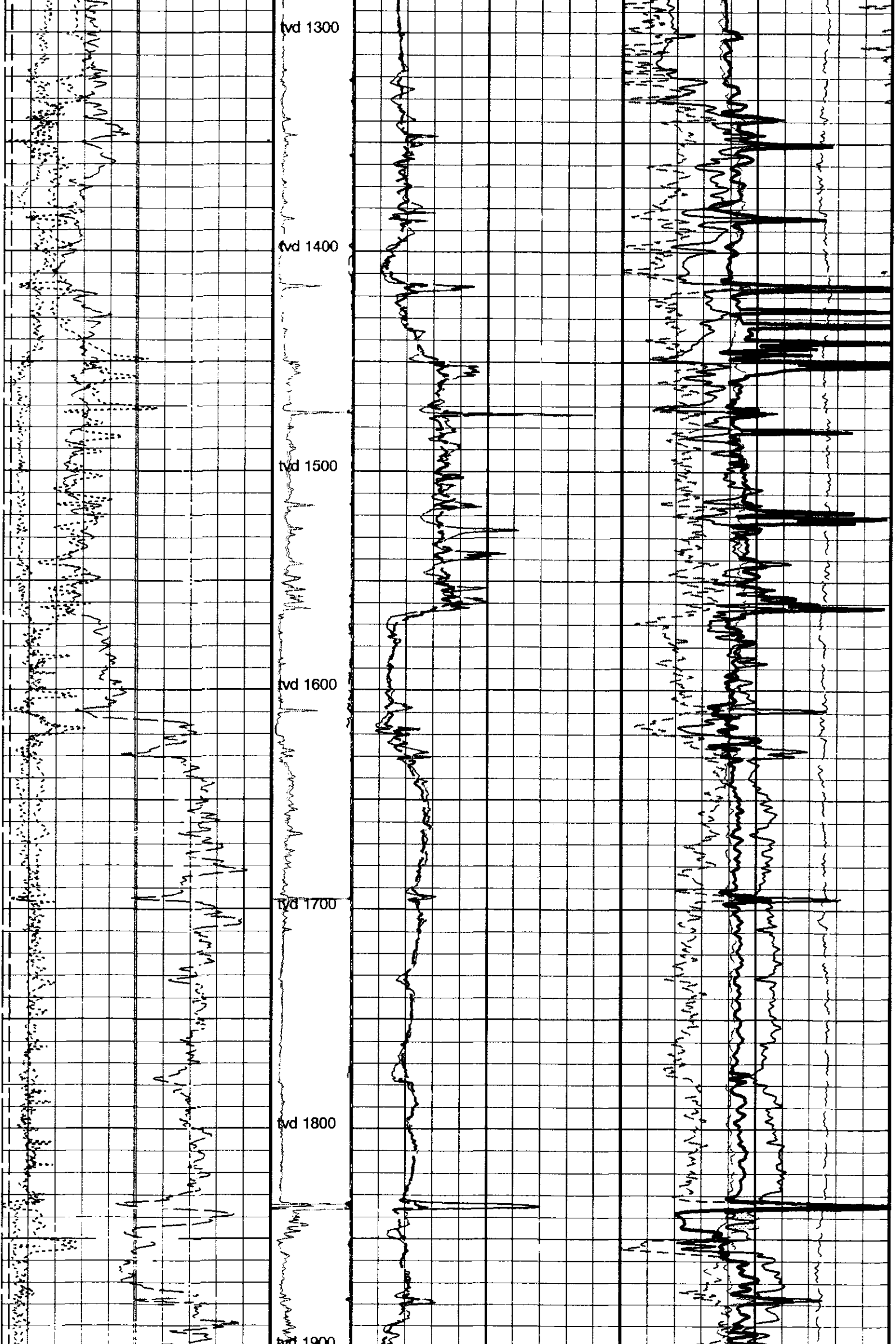
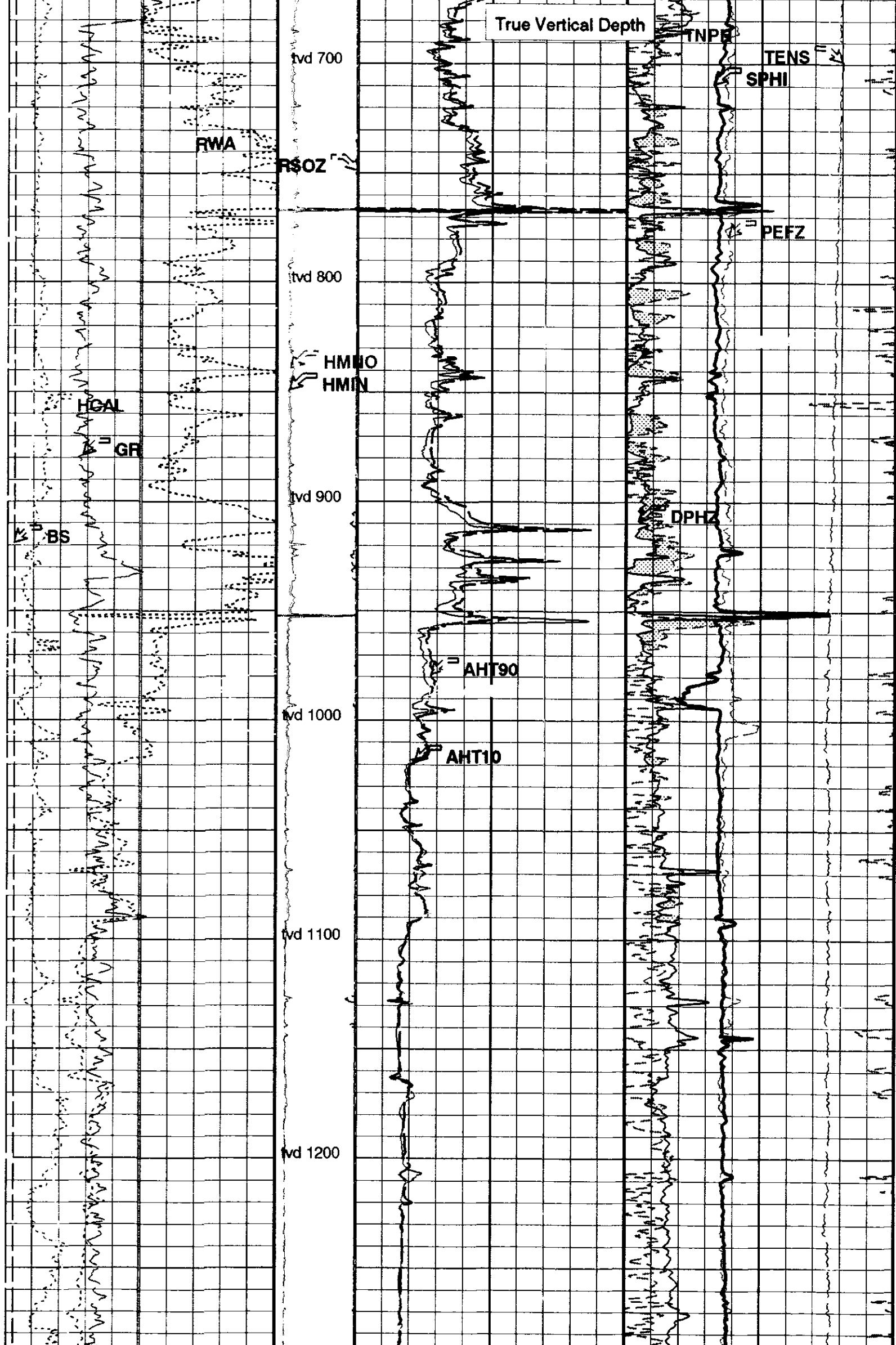
Output DLIS Files
 DEFAULT HILTB_020 FN:16 PRODUCER 29-Jan-2000 20:48 2117.5 FT 424.0 FT

OP System Version: 9C0-413
 MCM
 HILTB-DTB OP9-KP2 DSLT-TCC OP9-KP2
 TCC-BF OP9-KP2

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
SPNV	-30 MV	-60 MV	827.0 20:51:37

PIP SUMMARY
 Integrated Hole Volume Minor Pip Every 10 F3
 Integrated Hole Volume Major Pip Every 100 F3
 Integrated Cement Volume Minor Pip Every 10 F3
 Integrated Cement Volume Major Pip Every 100 F3
 Time Mark Every 60 S



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 Integrated Hole Volume Minor Pip Every 10 F3
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 Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 112 (AHT10)
 Acquired data from HILT/HAIT
 Borehole Correction

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)
 Tool is run in ECCENTERED mode with a tool stand-off of 0.50 IN. BR Size is 6.25 IN.

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): LINEAR_ESTIMATE Porosity (FPHI): DPHZ
 Other Parameters used by AIT-H Answer Product Processing

Surface Hole Temperature (SHT) 68.000 DEGF Bottom Temperature (BHT) 76.000 DEGF
 Total Depth (TD) 3050.000 FT
 Form Factor Exponent (FEXP) 2.000 Form Factor Numerator (FNUM) 1.000
 Mud Filtrate Sample Resitivity (RMFS) 2.970 OHMM Mud Filtrate Sample Temperature (MFT) 58.000 DEGF
 Resitivity Connate Water (RW) 1.000 OHMM

Playback Mode: NORMAL
 AIT-H Answer Product Processing Control Parameters

DLIS Name	Description	Value
AHBMH	AIT-H Borehole Correction Mode	2_ComputeStandoff
AHBIW	AIT-H Borehole Correction Code Version Number	6_One_Two_and_Four
AHBLM	AIT-H Basic Logs Code Version Number	973
AHBLV	AIT-H Basic Logs Processing Option	Standard_Processing
AHCDL	AIT-H Casing Detection Enable	Yes
AHCEN	AIT-H Tool Centering Flag (In Borehole)	Eccentered
AHCSD	AIT-H Casing Shoe Estimated Depth	50000
AHFRSV	AIT-H Response Set Version for Four ft Resolution	30.662311
AHFRF	AIT-H Mud Resistivity Factor	1
AHFRV	AIT-H Response Set Version for One ft Resolution	30.662311
AHRSV	AIT-H Radial Parameterization Code Version Number	710
AHRPV	AIT-H Radial Parameterization Code Version Number	700
AHSTA	AIT-H Tool Standoff	0.5
AHTRSV	AIT-H Response Set Version for Two ft Resolution	30.662311
ALDTPCHAN	Alternate depth channel name	TYDE
ARTS	AIT RT Selection (for ALLRES computation)	13_AHT90
BHFI	Borehole Fluid Type	WATER
BHS	Bore Hole Status	OPEN
BHT	Borehole Hole Temperature (used in calculations)	76
BS	Bit Size	6.25
BSAL	Borehole Salinity	1500.00
BSCO	Borehole Salinity Correction Option	NO
CCCO	Casing & Cement Thickness Correction Option	NO
CDTS	C-Delta-T Shale	100
CSIZ	Current Casing Size	9.625
CWEI	Casing Weight	24.00
DMID	Drilling Fluid Density	8.80
DHC	Density Hole Correction	BS
DO	Depth Offset	0.0
DTF	Delta-T Fluid	0
DTM	Delta-T Matrix	1
FD	Fluid Density	56
FEXP	Form Factor Exponent	2
FNUM	Form Factor Numerator	1
FPHI	Form Factor Porosity Source	DPHZ
FSAL	Formation Salinity	50000
FSCO	Formation Salinity Correction Option	NO
GCSE	Generalized Caliper Selection	HCAL
GDEV	Average Angular Deviation of Borehole from Normal	0.0
GGRD	Geothermal Gradient	0.0
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
HILT	HILT Speed Correction Mod	TSCD_SPEED_CORRECTION
HSCO	Hole Size Correction Option	YES
HSTI	STI Uses HILT Resistivity	NO
MATR	Rock Matrix Type	SANDSTONE
MCCO	Mud Cake Correction Option	YES
MCCR	Mud Correction	NO
MPCF	Matrix Density	NATU
MST	Mud Sample Temperature	62.00
MWCO	Mud Weight Correction Option	NO
NIT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HIREAS
NSAR	HRDD Depth Sampling Rate	1
PEVADDP	Alternate depth channel playback enabled	Yes
PP	Playback Processing	NORMAL
PTCO	Pressure/Temperature Correction Option	NO
RHFS	Response Set Version for Filtrate Sample	2.9700
RTCO	AIT-H Radial Parameterization Code Version Number	100
RW	Resistivity of Connate Water	1.0000
SDAT	Standoff Data Source	SOCN
SDT	Standoff Distance	0.125
SOCN	Standoff Correction Option	RAYMER_HUNT
SOCO	Standoff Correction Formula	-60
SPNV	SP Next Value	30
SPSO	Sonic Porosity Source	DT
SPSD	TVD of Starting Point	0
TD	Total Depth	3050
TDL	Total Depth - Logger	3047.00
TDID	Along-hole depth of Tie-In Point	500
TDVD	TVD of Tie-In Point	2500
TWS	Temperature of Connate Water Sample	100.00

OP System Version: 9C0-413
 MCM
 HILTB-DTB OP9-KP2 DSLT-TCC OP9-KP2
 TCC-BF OP9-KP2

Speed Corrected - Depth Matched LOG

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 DEFAULT HILTB_016 FN:12 PRODUCER 29-Jan-2000 20:28 3051.0 FT 422.0 FT

Output DLIS Files
 DEFAULT HILTB_020 FN:16 PRODUCER 29-Jan-2000 20:48

BOTTOM LOG INTERVAL	3039 ft
SCHLUMBERGER DEPTH	3047 ft
DEPTH DRILLER	3050 ft
KELLY BUSHING	1647 ft
DRILL FLOOR	1647 ft
GROUND LEVEL	1637 ft