COMPANY: **ENERFIN RESOURCES NORTHWEST**

WELL: **John Hancock 32-27-64**

FIELD: **Mist**

COUNTY: **Columbia** **STATE:** **Oregon**

COUNTY Columbia
Field: Mist
Location 1632' S & 1387' N From the
Well: John Hancock 32-27-64
Company: ENERFIN RESOURCES NORTH

Schlumberger

Platform Express BHC Sonic Quality Log

LOCATION
1632' S & 1387' N From the
NE Corner of Section 27

		Elev.:	K.B.	1046 F
			G.L.	1036 F
			D.F.	
Permanent Datum:	GROUND LEVEL	Elev.:	1036 F	
Log Measured From	KELLY BUSHING	10.0 F	above Perm. Datum	
Drilling Measured From:	KELLY BUSHING			

API Serial No.	SECTION	TOWNSHIP	RANGE
	27	6N	4W

Logging Date	7-NOV-1998				
Run Number	One				
Depth Driller	2212 F				
Schlumberger Depth	2185 F				
Bottom Log Interval	2177 F				
Top Log Interval	30 F				
Casing Driller Size @ Depth	7.000 IN	@	5?? F	@	
Casing Schlumberger	520 F				
Bit Size	6.250 IN				
Type Fluid In Hole	Cypan /LCM				
Density / Viscosity	9.1 LB/G	42 S			
Fluid Loss / PH	5.6 C3	7.8			
Source Of Sample	Flowline				
RM @ Measured Temperature	5.700 OHMM	@	65 DEGF	@	
RMF @ Measured Temperature	4.700 OHMM	@	46 DEGF	@	
RMC @ Measured Temperature	4.500 OHMM	@	45 DEGF	@	
Source RMF / RMC	Press	Press			
RM @ MRT / RMF @ MRT	4.826 @ 78	2.926 @ 78		@	@
Maximum Recorded Temperatures	78 DEGF				
Circulation Stopped / Time	7-NOV-1998	0:15			
Logger On Bottom / Time	7-NOV-1998	4:45			
Unit Number / Location	3152	Sacramento			
Recorded By	Jason Gendur				
Witnessed By	Dave Huggins				

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			

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	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Thank you for choosing Schlumberger!	
Rig: Taylor Drilling #7	
AIT run with 1/2" standoffs.	
Log run on sandstone matrix = 2.65 g/c3.	
Rwa computed with density porosity.	
SP shifted at 1575 ft.	
Sonic cycle skip at 879 ft.	
Your crew today is Forehand & Wright	

RUN 1		RUN 2	
SERVICE ORDER #	1222193	SERVICE ORDER #	
PROGRAM VERSION:	9C1-205	PROGRAM VERSION:	
FLUID LEVEL:		FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

RUN 2

SURFACE EQUIPMENT

GSR-U WITM CTS-A
NCT-B
CNB-AB
NCS-VB

DOWNHOLE EQUIPMENT

LEH-QT
LEH-QT

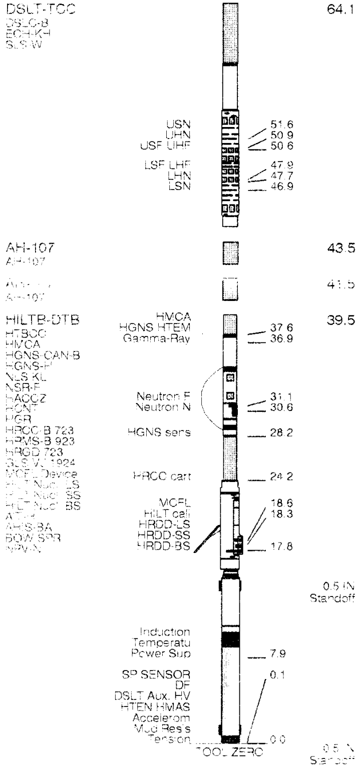
70.0

TCC-BF
ECH-KC
TCC-BF

TelStatus

67.1

64.1



MAXIMUM STRING DIAMETER 4.88 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Output DLIS Files

DEFAULT HILTB .011 FN:8 FIELD 07-Nov-1998 04:50 2196.0 FT 147.5 FT

Speed Corrected - Depth Matched LOG

OP System Version: 8C1-205

MCM

HILTB-DTB	APCW-98Q2	DSLT-TCC	APCW-98Q2
TCC-BF	APCW-98Q2		

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
BHT	78 DEGF	212 DEGF	2173.6 04:56:25
TDL	2185.00 FT	2212.00 FT	2093.3 04:57:45

PIP SUMMARY

▬ Time Mark Every 60 S

AIT-H QC Fully Calibrated A8 Signal (AHQABN[7])
2 (MM/M) 20000

AIT-H QC Fully Calibrated A7 Signal (AHQABN[6])
2 (MM/M) 20000

Std. Res. Resistivity Standoff (RSOZ)
2.5 (IN) 0

AIT-H QC Fully Calibrated A6 Signal (AHQABN[5])
2 (MM/M) 20000

HGNS Deviation (GDEV)
-5 (DEG) 45

AIT-H QC Fully Calibrated A5 Signal (AHQABN[4])
2 (MM/M) 20000

Pe Correction (HPRA)
-3 (----) 3

Std. Res. Density Standoff (DSOZ)
2.5 (IN) 0

AIT-H QC Fully Calibrated A4 Signal (AHQABN[3])
2 (MM/M) 20000

Density Correction (HDRA)
-0.25 (G/C3) 0.25

Bit Size (BS)
4 (IN) 14

AIT-H QC Fully Calibrated A3 Signal (AHQABN[2])
2 (MM/M) 20000

Hdrx (HDRX)
0 (----) 3

AIT-H Bhole Form Signal Ratio (AHBFR)
0 (----) 25

AIT-H QC Fully Calibrated A2 Signal (AHQABN[1])
2 (MM/M) 20000

Delta Neutron Porosity (DNPH)
-0.1 (V/V) 0.1

Caliper (HCAL)
4 (IN) 14

Tension (TENS) (LBF)
10000 0

AIT-H QC Fully Calibrated A1 Signal (AHQABN[0])
2 (MM/M) 20000

GR Borehole Correction Factor (CFGR)
0.5 (----) 1.5

*** Flag Tracks ***

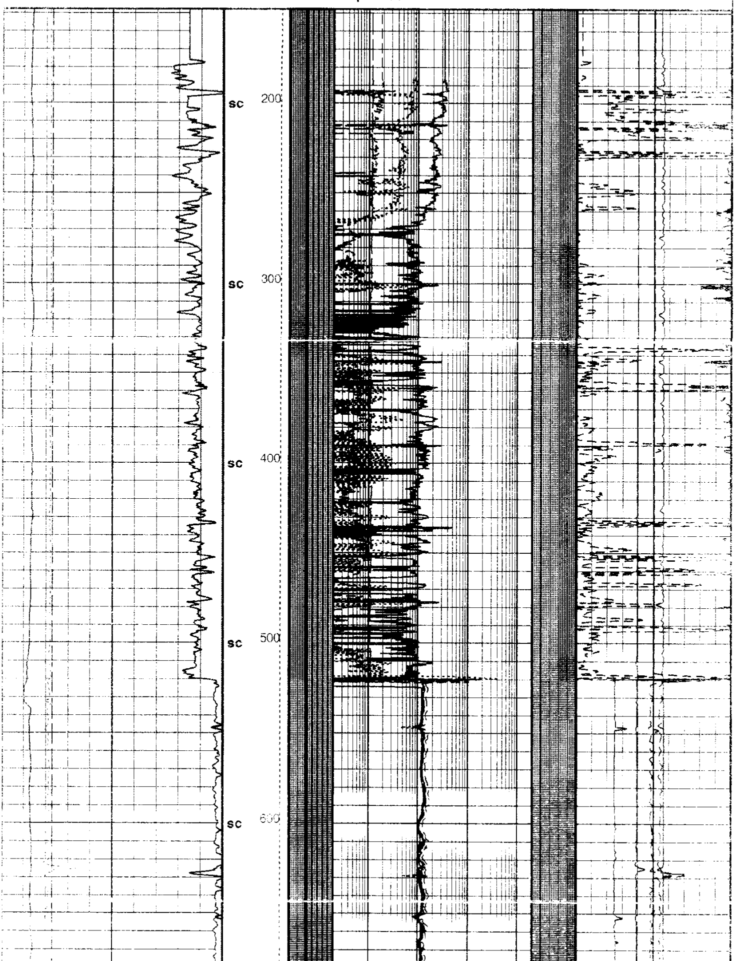
White = Absent Green = Good Yellow = Warn Red Black = Bad

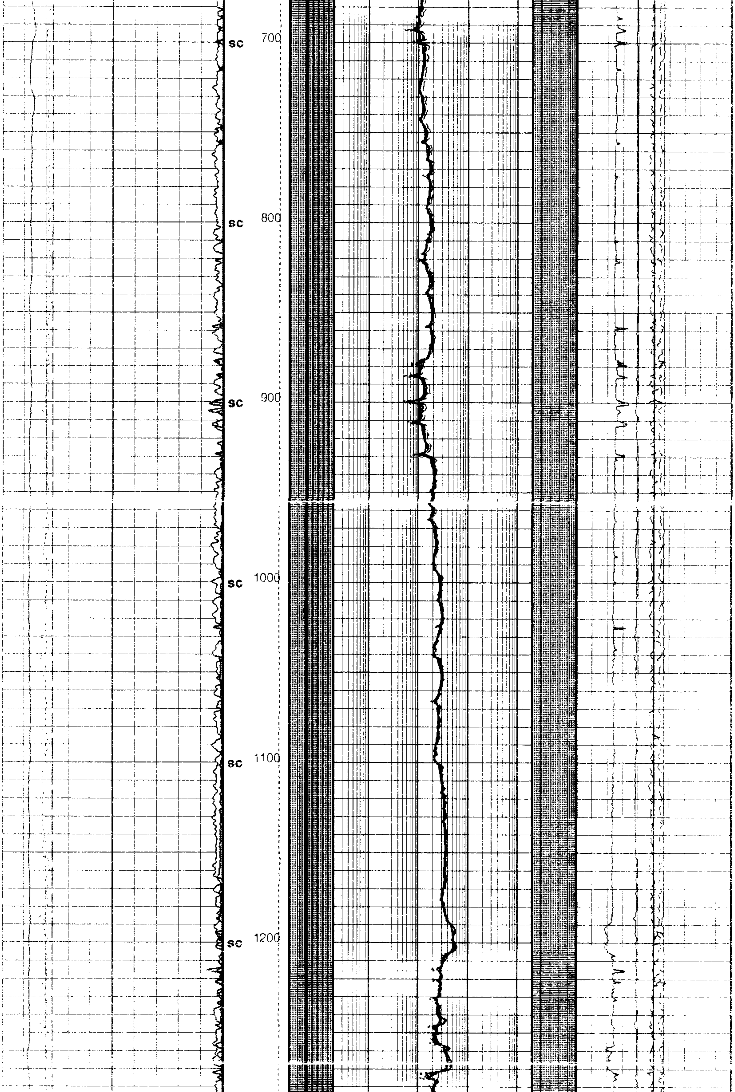
RESISTIVITY TRACK :

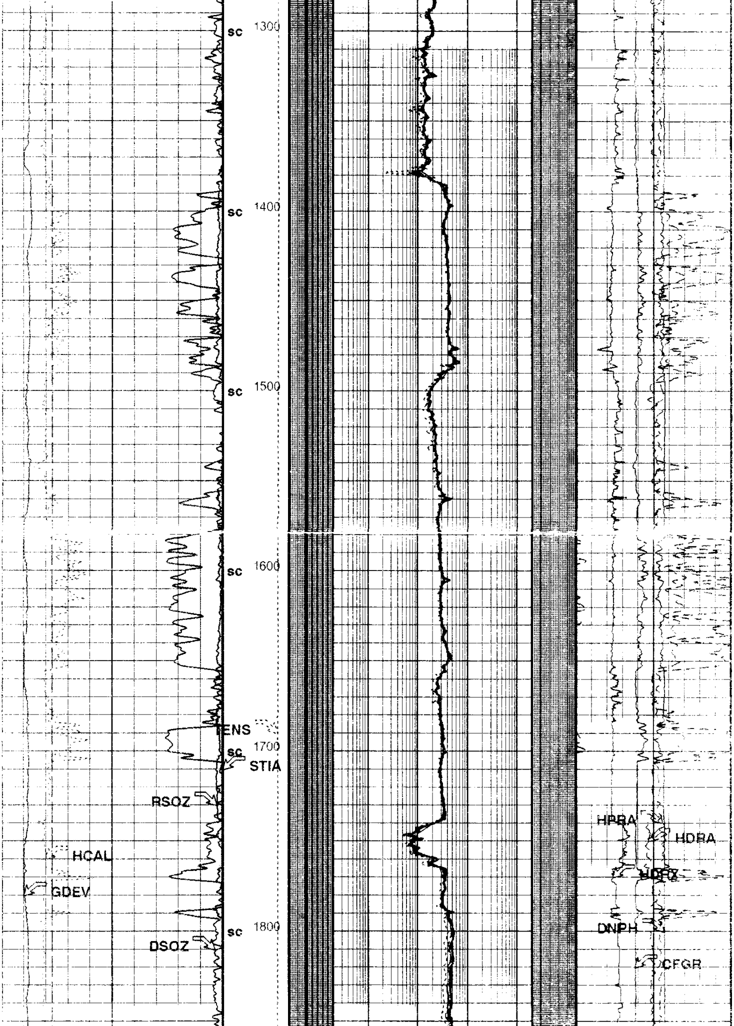
1. MCFL Hardware
2. RXC Processing
3. HAIT Hardware
4. HAIT Array[1-2]
5. HAIT Array[3-4]
6. HAIT Array[5-6]
7. HAIT Array[7-8]

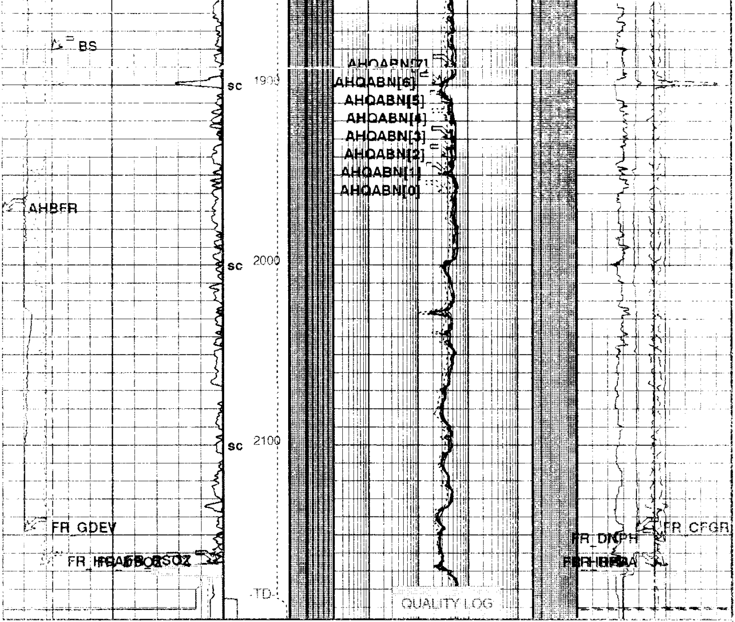
NUCLEAR TRACK :

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









-*- 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

Caliper (HCAL)
4 (IN) 14

Tension (TENS) (LBF)
10000 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 Bhole Form Signal Ratio (AHBFR)
0 (----) 25

AIT-H QC Fully Calibrated A2 Signal (AHQABN[1])
2 (MM/M) 20000

Delta Neutron Porosity (DNPH)
-0.1 (V/V) 0.

Bit Size (BS)
4 (IN) 14

AIT-H QC Fully Calibrated A3 Signal (AHQABN[2])
2 (MM/M) 20000

Hdrx (HDRX)
0 (----) 3

Std. Res. Density Standoff (DSOZ)
2.5 (IN) 0

AIT-H QC Fully Calibrated A4 Signal (AHQABN[3])
2 (MM/M) 20000

Density Correction (HDRA)
-0.25 (G/C3) 0.25

HGNS Deviation (GDEV)
-5 (DEG) 45

Std. Res. Resistivity Standoff (RSOZ)
2.5 (IN) 0

AIT-H QC Fully Calibrated A5 Signal (AHQABN[4])
2 (MM/M) 20000

AIT-H QC Fully Calibrated A6 Signal (AHQABN[5])
2 (MM/M) 20000

AIT-H QC Fully Calibrated A7 Signal (AHQABN[6])
2 (MM/M) 20000

AIT-H QC Fully Calibrated A8 Signal (AHQABN[7])
2 (MM/M) 20000

Pe Correction (HPRA)
-3 (----) 1

PIP SUMMARY

▮ Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
AHBHM	AIT-H Bhole Correction Mode	2_ComputeStandoff	
AHBLM	AIT-H Basic Logs Mode	6_One_Two_and_Four	
AHCEN	AIT-H Tool Centering Flag (in Borehole)	Eccentered	
AHMRF	AIT-H Mud Resistivity Factor	1	
AHSTA	AIT-H Tool Standoff	0.5	IN
BHFL	Borehole Fluid Type	WATER	
BHS	Bore Hole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	212	DEGF
BS	Bit Size	6.250	IN
BSAL	Borehole Salinity	350.00	PPM
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
CWEI	Casing Weight	-50000.00	LB/F
DFD	Drilling Fluid Density	9.10	LB/G
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	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCM	HILT Speed Correction Mode	TSCD_SPEED_CORRECTION	
HSCO	Hole Size Correction Option	YES	
HSTI	STI Uses HILT Acceleration	YES	
LBFR	Trigger for MAXIS First Reading Label	STI	
MATR	Rock Matrix Type	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MPOF	MCFL Processing Operation Mode	ON	
MST	Mud Sample Temperature	65.00	DEGF
MWCO	Mud Weight Correction Option	NO	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
RMFS	Resistivity of Mud Filtrate Sample	4.7000	OHMM
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
STKT	STI Stuck Threshold	2.5	FT
TD	Total Depth	2212	FT
TDD	Total Depth - Driller	2212.00	FT
TDL	Total Depth - Logger	2212.00	FT

Format: Hilt_indi.QC Vertical Scale: 2" per 100' Graphics File Created: 07-Nov-1998 04:50

OP System Version: 8C1-205

MCM

HILTB-DTB	APCW-98Q2	DSLT-TCC	APCW-98Q2
TCC-BF	APCW-98Q2		

Speed Corrected - Depth Matched LOG

Output DLIS Files

DEFAULT HILTB .011 FN:6 FIELD 07-Nov-1998 04:50

Input DLIS Files

DEFAULT	HILTB .014	FN:11	FIELD	07-Nov-1998 05:56	2196.0 FT	390.5 FT

Output DLIS Files

OP System Version: 8C1-205

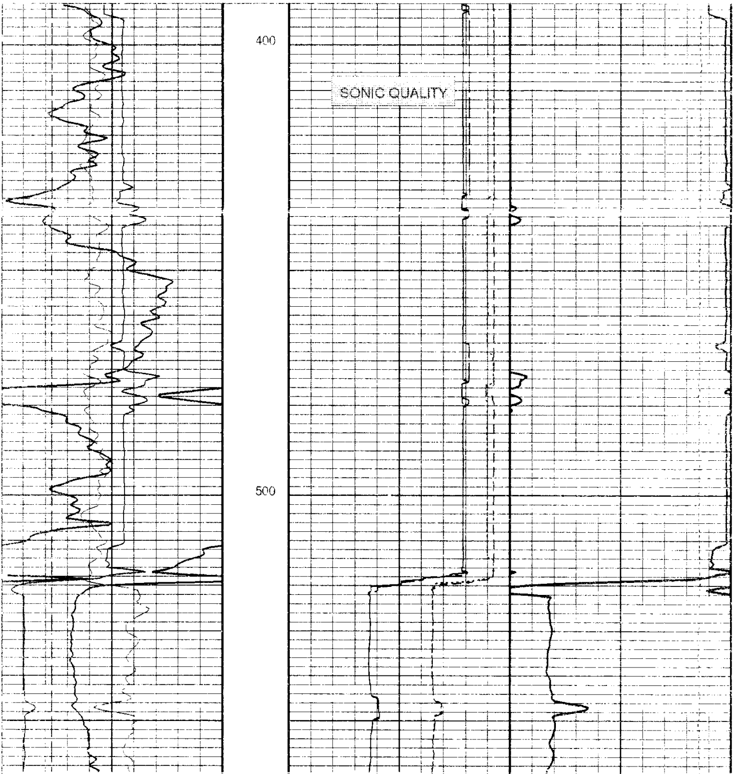
MCM

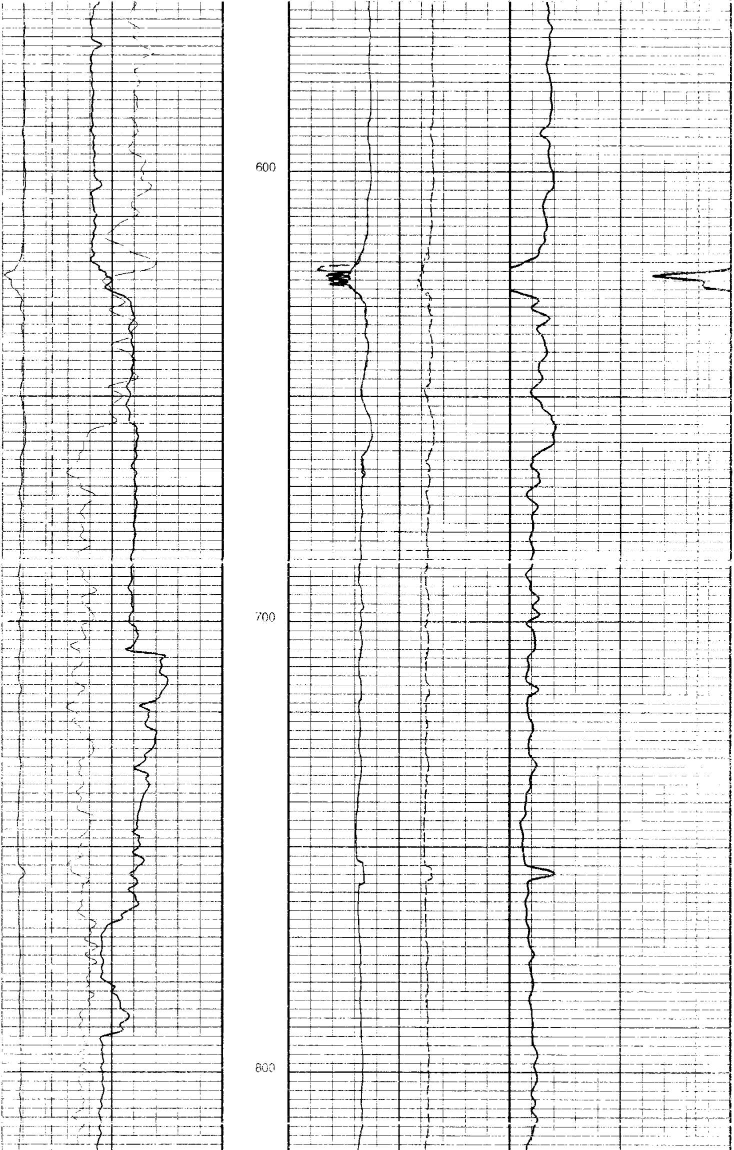
HILTB-DTB	APCW-98Q2	DSLT-TCC	APCW-98Q2
TCC-BF	APCW-98Q2		

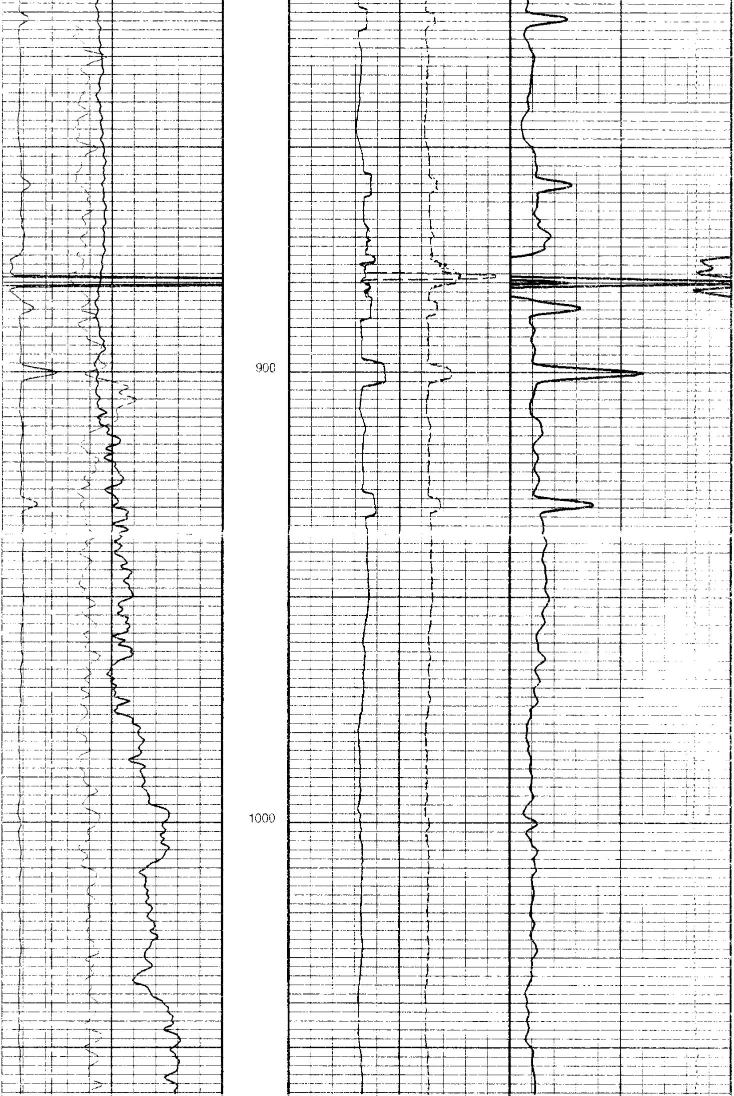
PIP SUMMARY

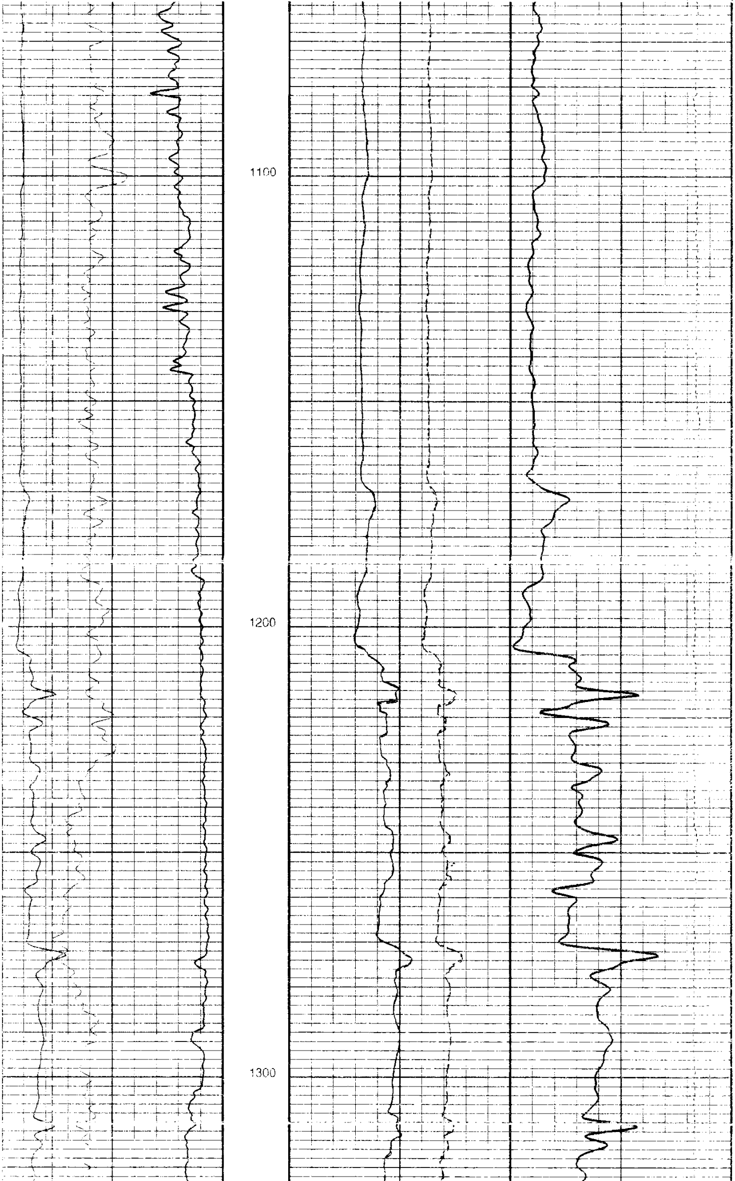
▮ Time Mark Every 60 S

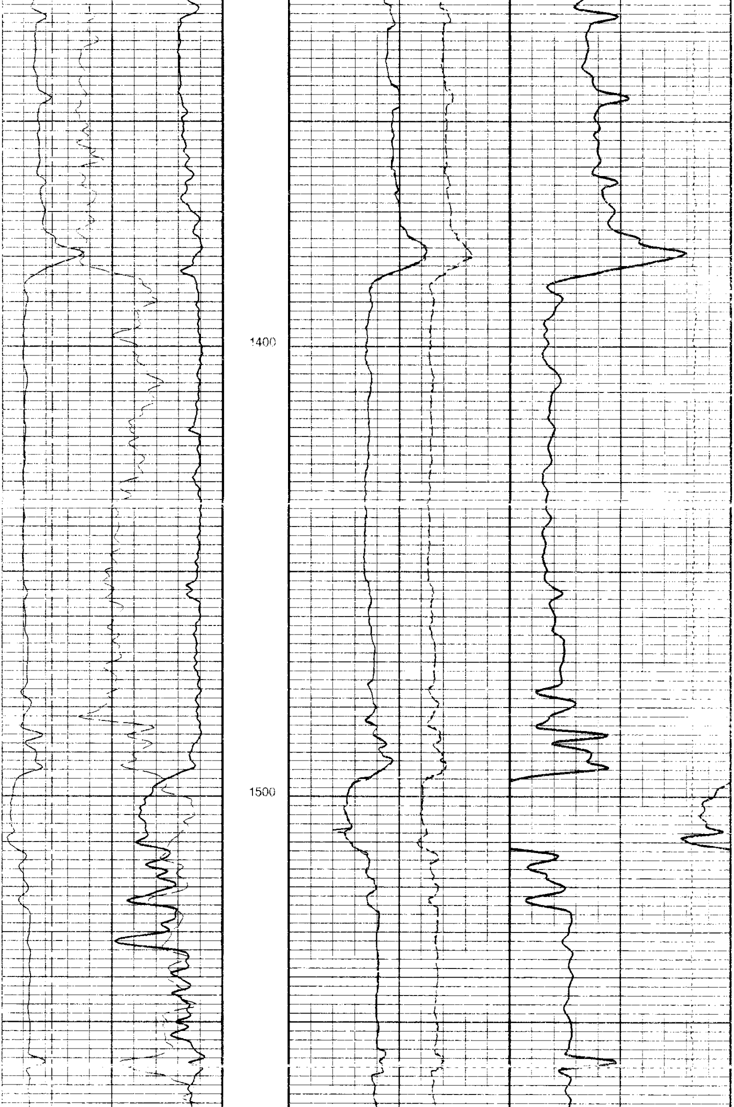
Curve	Left	Unit	Right
SP (SP)	-100	(MV)	0
Sonic Velocity (SVEL)	5000	(FT/S)	25000
Bit Size (BS)	4	(IN)	14
Gamma Ray (GR)	0	(GAPI)	150
Transit Time 4 (TT4)	1200	(US)	200
Transit Time 3 (TT3)	1200	(US)	200
Transit Time 2 (TT2)	1200	(US)	200
Transit Time 1 (TT1)	1200	(US)	200
Tension (TENS)	10000	(LBF)	0
Delta-T (DT)	160	(US/F)	60

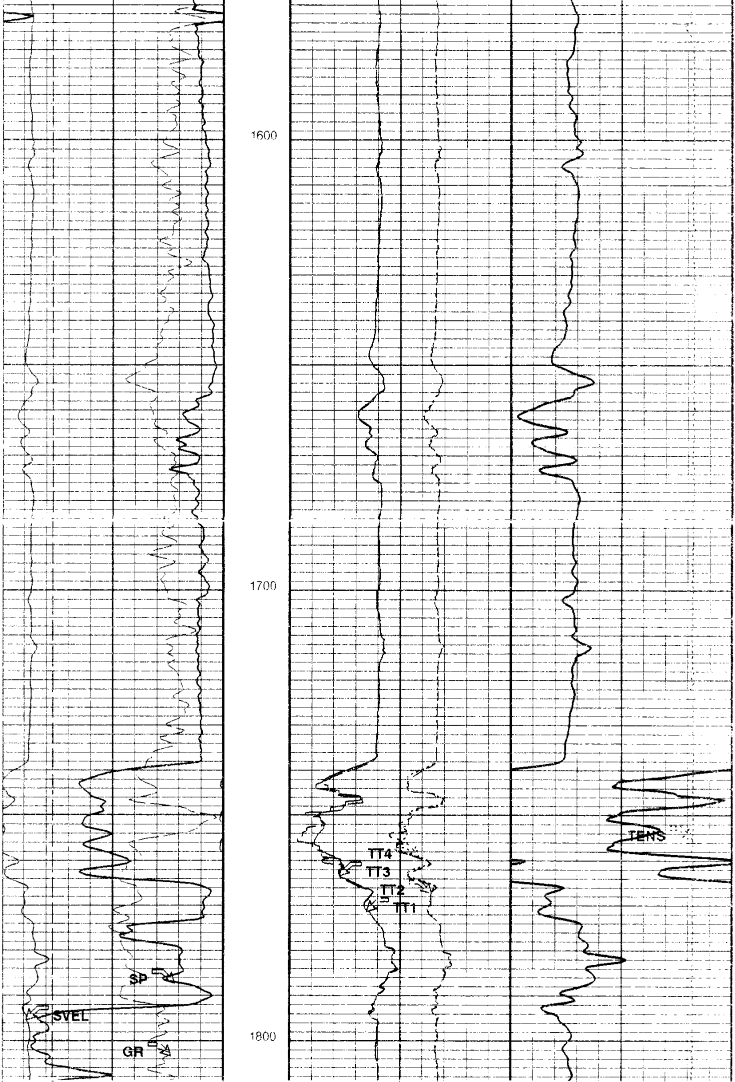


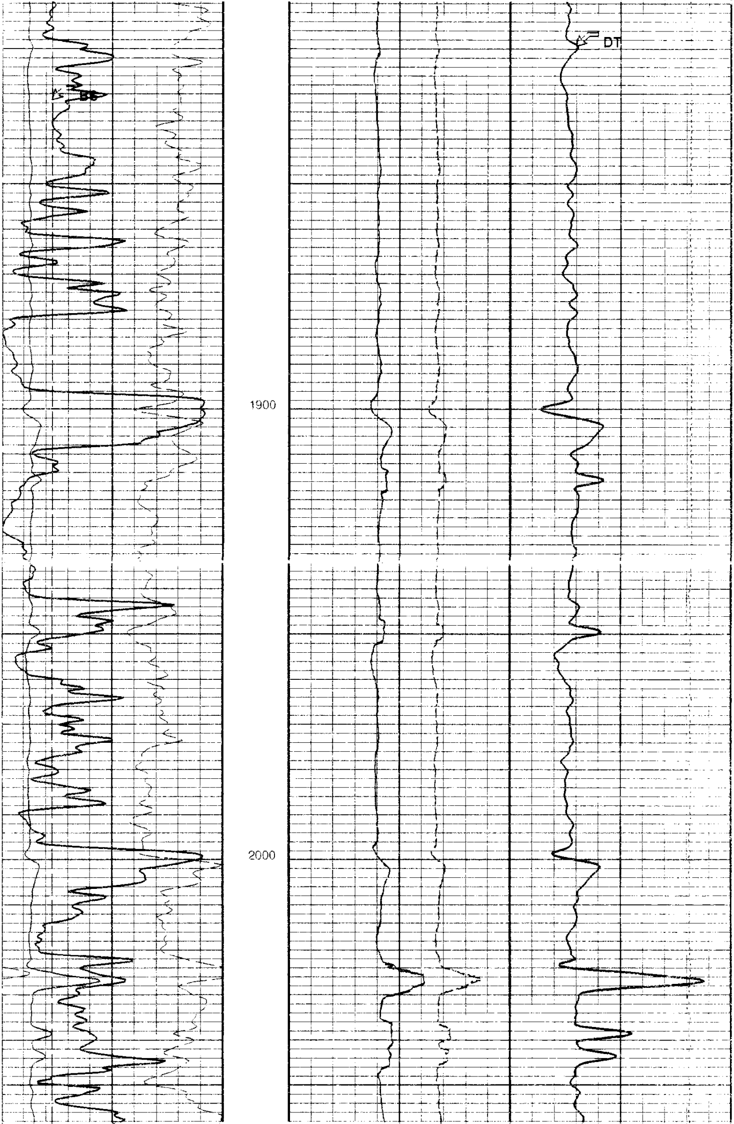


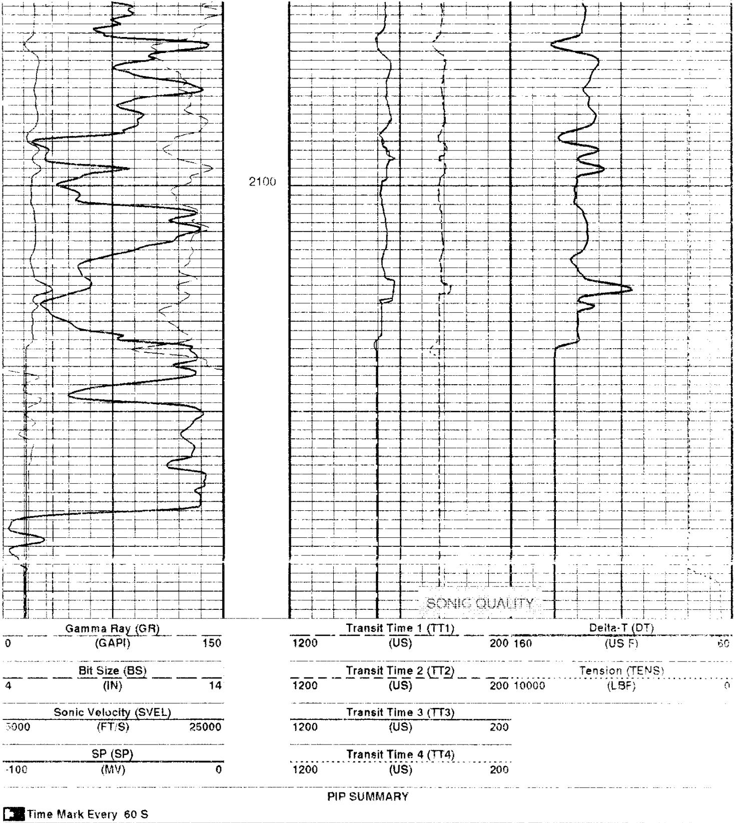












Parameters

DLIS Name	Description	Value	
	Telemetry Mode	DSLC_TCC	
	DSLT Firing Mode	BHC	
AGC	Automatic Gain Control Status	ON	
AMSG	Auxilliary Minimum Sliding Gate	180	US
BS	Bit Size	6.250	IN
CBLG	CBL Gate Width	45	US
DDEL	Digitizing Delay	0	US
DETE	Delta-T Detection	E2	
DFAD	Digital First Arrival Detection Switch	DSP	
DO	Depth Offset	0.0	FT
DTCM	Delta-T Computation Mode	FULL	
DWCO	Digitizer Word Count	40	
GAI	Manual Gain	40	
HSCM	HILT Speed Correction Mode	TSCD_SPEED_CORRECTION	
HSTI	STI Uses HILT Acceleration	YES	
MGAI	Maximum Gain	150	
MIGA	Minimum Gain	1	
MODE	Sonic Firing Mode	BHC	
NMSG	Near Minimum Sliding Gate	180	US
NMXG	Near Maximum Sliding Gate	750	US

NUMP	Number of Detection Passes	2	
PP	Playback Processing	OFF	
SFAF	Sonic Formation Attenuation Factor	0	DB F
SGAD	Sliding Gate Status	ON	
SGAI	Selectable Acquisition Gain	AUTO	
SGCL	Sliding Gate Closing Delta-T	250	US F
SGCW	Sliding Gate Closing Width	25	US
SGDT	Sliding Gate Delta-T	50	US F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	
SPNV	SP Next Value	-15	MV

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OP System Version: 8C1-205

MCM

HILTB-DTB	APCW-98Q2	DSLT-TCC	APCW-98Q2
TCC-BF	APCW-98Q2		

Input DLIS Files

DEFAULT	HILTB .014	FN:11	FIELD	07-Nov-1998 05:56	2196 0 FT	390.5 FT

Output DLIS Files

COMPANY: ENERFIN RESOURCES NORTHWEST

WELL: John Hancock 32-27-64

FIELD: Mist

COUNTY: Columbia

STATE: Oregon

BOTTOM LOG INTERVAL	2171
SCHLUMBERGER DEPTH	2191 F
DEPTH DRILLER	2212 F
KELLY BUSHING	1048 F
DRILL FLOOR	
GROUND LEVEL	1036 F

Schlumberger

Platform Express
BHC Sonic
Quality Log