



ANEXOS



Registro Provincial de Prestadores Ambientales de EySA SRL



RAWSON, 12 DIC 2014

VISTO:

El Expediente N° 0320-MAyCDS-07; y

CONSIDERANDO:

Que por el Expediente citado en el Visto la empresa ESTUDIOS Y SERVICIOS AMBIENTALES S.R.L., solicita la renovación de la inscripción en el Registro Provincial de Prestadores de Consultoría Ambiental en las categorías "Consultoría Ambiental" y "Expertos Ambientales de la Industria Petrolera";

Que por aplicación del Decreto 39/2013, se establece en su artículo 1°: *"De acuerdo a lo establecido por los Artículos 110° inciso e) y 130° de la Ley XI N° 35 «Código Ambiental de la Provincia del Chubut», la Autoridad de Aplicación llevará el Registro Provincial de Prestadores de Consultoría Ambiental, en el que deberán inscribirse las personas físicas y/o jurídicas que realicen servicios de consultoría para la evaluación ambiental en el ámbito de la Provincia del Chubut, y cuyos trabajos sean presentados ante la Administración"*;

Que el artículo 2° del Decreto 39/2013 establece: *"El Registro Provincial de Prestadores de Consultoría Ambiental se compondrá a su vez de cuatro categorías: Consultoría Ambiental, Expertos Ambientales de la Industria Petrolera, Actividad Minera - minerales de primera y segunda categoría, y Actividad Minera - minerales de tercera categoría"*;

Que los profesionales que integran el grupo de trabajo son comunes para ambas categorías: en calidad de responsable técnico el Licenciado en Ciencias Geológicas Fernando VALDOVINO, D.N.I. N° 16.206.305, el Licenciado en Gestión Ambiental Daniel Alejandro WARTON, D.N.I. N° 30.605.559, la Ingeniera Ambiental María Leonor AZAGRA, D.N.I. N° 26.632.478, la Licenciada en Geología Melina Gisela SANTOMAURO, D.N.I. N° 29.718.611, la Ingeniera Ambiental María Eugenia ZANDUETA, D.N.I. N° 24.820.593, el Licenciado en Ciencias Geológicas Juan Manuel CASAL, D.N.I. N° 24.508.074, el Licenciado en Diagnóstico y Gestión Ambiental Andrés Alexis IRIBE, D.N.I. N° 30.461.106, el Licenciado en Ciencias Biológicas Pablo Antonio MONTES, D.N.I. N° 30.742.668 y el Licenciado en Ciencias Antropológicas Santiago Francisco BARBICH, D.N.I. N° 32.173.157;

Que el Señor Director de Registros y Sistemas de Información Ambiental, mediante Nota N° 182/14/DRySIA-DGGA, de fecha 25 de noviembre de 2014 expresa que: *"...en relación al trámite de solicitud de renovación de la empresa ESTUDIOS y SERVICIOS AMBIENTALES S.R.L. (CUIT: 30-70822204-2) en el Registro Provincial de Prestadores de Consultoría Ambiental... por el título universitario, perfil profesional y la formación académica de su responsable técnico, el perfil profesional de los integrantes del grupo de trabajo y los antecedentes laborales declarados por la empresa, sugiero se le renueve la inscripción para las categorías 'Consultoría Ambiental' y 'Expertos Ambientales de la Industria Petrolera' bajo el número 086 del mencionado registro..."*;

Que a fin de agilizar la tramitación de inscripciones en el Registro Provincial de Prestadores de Consultoría Ambiental, resulta conveniente propiciar la extensión de inscripciones existentes sujeta a la acreditación de extremos de admisibilidad previstos en la normativa vigente y en la presente Disposición;

Que la Dirección General de Asesoría Legal y Normativa Ambiental ha tomado intervención en el presente trámite;

//...

ES COPIA FIEL DEL ORIGINAL

Audradel
A/C Jefa Laura Deparlamiento Letrado
Dirección General Asesoría Legal
y Normativa Ambiental
Ministerio de Ambiente y Control
del Desarrollo Sustentable

SECRETARÍA DE GESTIÓN AMBIENTAL Y DESARROLLO SUSTENTABLE



//2.-

POR ELLO:

**EL SUBSECRETARIO DE GESTIÓN AMBIENTAL
Y DESARROLLO SUSTENTABLE**

DISPONE:

Artículo 1º.- RENUÉVESE por el término de UN (1) año la inscripción para las categorías “Consultoría Ambiental” y “Expertos Ambientales de la Industria Petrolera” con el N° 086 en el Registro Provincial de Prestadores de Consultoría Ambiental a la empresa ESTUDIOS Y SERVICIOS AMBIENTALES S.R.L. (CUIT: 30-70822204-2) con domicilio legal en calle Alicia Moreau de Justo N° 750, 2º 212 de la Ciudad Autónoma de Buenos Aires y oficina técnico comercial declarada en la Provincia del Chubut en calle Río Pico N° 83 de la localidad de Rada Tilly.-

Artículo 2º.- Al término de la vigencia establecida en el Artículo 1º, y a los efectos de extender el plazo de la inscripción por igual período, la empresa ESTUDIOS Y SERVICIOS AMBIENTALES S.R.L. y el grupo de trabajo detallados en el Anexo I que forma parte de la presente Disposición, deberán cumplimentar los deberes establecidos en los artículos 12º, 15º y 16º del Decreto 39/2013, debiendo presentar la siguiente documentación, bajo apercibimiento de Ley:

- Antes de los DOS (2) años presentar los cambios que se hayan producido en el Estatuto Social respectivo, en la designación de autoridades o mandatarios, composición societaria, etc.
- Antes de los DOS (2) años presentar para cada uno de los profesionales integrantes: curriculum vitae actualizado conteniendo además de los datos personales, información relacionada a cursos, congresos, posgrados y demás aspectos académicos y los nuevos trabajos realizados, debiendo acompañar la documentación respectiva que acredite dicha información. El mismo tendrá carácter de Declaración Jurada.
- Deberá mantenerse actualizada en la temática ambiental a través de cursos, congresos, talleres, congresos, publicaciones, etc. para lo cual deberá acreditar la realización de alguna de estas actualizaciones como mínimo una cada DOS (2) años.
- Abonar ANUALMENTE la Tasa Retributiva de Servicios prevista en la Ley de Obligaciones Tributarias vigente en la Provincia del Chubut.

Artículo 3º.- La empresa ESTUDIOS Y SERVICIOS AMBIENTALES S.R.L. deberá confeccionar los documentos ambientales que presente bajo su exclusiva responsabilidad y en función de las incumbencias profesionales determinadas para cada uno de los títulos universitarios de los profesionales que integran el grupo de trabajo, de acuerdo a las categorías en las que fue inscripta, debiendo acompañar copia de las mismas en cada presentación.-

Artículo 4º.- La presente disposición será refrendada por el Señor Director General de Evaluación Ambiental.-

Artículo 5º.- Regístrese, notifíquese a la empresa, dese al Boletín Oficial para su publicación y cumplido, ARCHÍVESE.-

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DISPOSICION N° _____/14-SGAYDS.

Juan Francisco Arenas
Lic. en Geología
Director General de Evaluación Ambiental
Ministerio de Ambiente y Control
del Desarrollo Sustentable

Dr. Ariel Grande Garibon
Subsecretario de Gestión Ambiental
y Desarrollo Sustentable
Ministerio de Ambiente y Control
del Desarrollo Sustentable
Provincia del Chubut

//...

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DEL ORIGINAL

Gabriela Alejandrina ANDRADE
ABCGADA
A/C Jefatura Departamento Letrado
Dirección General Asesoría Legal
y Normativa Ambiental
Ministerio de Ambiente y Control
del Desarrollo Sustentable

Blog: Pablo Zarba Williams

DIRECCIÓN DE REGISTROS Y
SISTEMAS DE INFORMACIÓN
AMBIENTAL
M.A. y C.D.S.

Blaq. Pablo Barba Williams
DIRECCIÓN DE REGISTROS Y
SISTEMAS DE INFORMACION

ES COPIA FIEL
DEL ORIGINAL

//3.-

REPUBLICA ARGENTINA
PROVINCIA DEL CHUBUT

MINISTERIO DE AMBIENTE Y CONTROL DEL
DESARROLLO SUSTENTABLE

SUBSECRETARÍA DE GESTION AMBIENTAL Y
DESARROLLO SUSTENTABLE



ANEXO I: "PROFESIONALES DEL GRUPO DE TRABAJO"

Categoría "Consultoría Ambiental"

Categoría "Expertos Ambientales de la Industria Petrolera"

- 1- Licenciado en Ciencias Geológicas Fernando VALDOVINO, D.N.I. N° 16.206.305, en calidad de Responsable Técnico,
- 2- Licenciado en Gestión Ambiental Daniel Alejandro WARTON, D.N.I. N° 30.605.559,
- 3- Ingeniera Ambiental María Leonor AZAGRA, D.N.I. N° 26.632.478,
- 4- Licenciada en Geología Melina Gisela SANTOMAURO, D.N.I. N° 29.718.611,
- 5- Ingeniera Ambiental María Eugenia ZANDUETA, D.N.I. N° 24.820.593,
- 6- Licenciado en Ciencias Geológicas Juan Manuel CASAL, D.N.I. N° 24.508.074,
- 7- Licenciado en Diagnóstico y Gestión Ambiental Andrés Alexis IRIBE, D.N.I. N° 30.461.106,
- 8- Licenciado en Ciencias Biológicas Pablo Antonio MONTES, D.N.I. N° 30.742.668, y
- 9- Licenciado en Ciencias Antropológicas Santiago Francisco BARBICH, D.N.I. N° 32.173.157.-

Gabriela Alejandra ANDRADE
 ABOGADA
 A/C Jefatura Departamento
 Dirección General Asesoría Legal
 y Normativa Ambiental
 Ministerio de Ambiente y Control
 del Desarrollo Sustentable

Juan Francisco Arce
 Lic. en Geología
 Director General de Evaluación Ambiental
 Ministerio de Ambiente y Control
 Del Desarrollo Sustentable

Dr. Daniel Andrés Guebara
 Superintendente de Gestión Ambiental
 y Desarrollo Sustentable
 Ministerio de Ambiente y Control
 del Desarrollo Sustentable
 Provincia del Chubut

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DISPOSICION N° _____ 14-SG y DS.-



**Nota de Renovación de Inscripción de EySA ante el
Registro de Prestadores de Consultoría
Ambiental de la Provincia del Chubut**



Rawson, 8 de Enero de 2016

A pedido de la Consultora "Estudios y Servicios Ambientales S.R.L."
Para ser presentado ante las autoridades que lo requieran

De mi mayor consideración:

Tengo el agrado de dirigirme a Ud. a los efectos de informarle que la consultora Estudios y Servicios Ambientales S.R.L., CUIT N° 30-70822204-2, ha solicitado la renovación de su inscripción N°86 en el Registro Provincial de Prestadores de Consultoría Ambiental, para las categorías: "Consultoría Ambiental" y "Expertos Ambientales de la Industria Petrolera".

Se deja constancia que la citada empresa se encuentra en proceso de renovación de su registro habiendo presentado las solicitudes y documentación para tal fin, obrando las mismas en el Expediente N° 0320/07-MAyCDS para su análisis.

La presente constancia tiene una validez de veinte (20) días corridos, desde la fecha de la presente.

Sin otro particular saludo a Ud. muy atentamente.


Tec. Natalia L. Pastrian
Directora de Registros y
Sistemas de Información Ambiental
M.A. y C.D.S.

NOTA N° 11/16 DRySIA-DGGA.-



Perfiles del Pozo EN-625

F E C P P P P C U P P P S F D N Z D S F C U P P P C H I D B

Provincia: CHUBUT



Compañia: **YPF S.A.**

Pozo: **YPF.Ch.EN-625**

Campo: **ESCALANTE NORTE**

Provincia: **CHUBUT**

País: **ARGENTINA**

CONTROL DE CEMENTO CBL VDL CNL COMPENSADO CCL 1/200

Campo: ESCALANTE NORTE
 Locacion: CAS
 Pozo: YPF.Ch.EN-625
 Compañia: YPF S.A.

LOCACION		Elev.:	
CAS		B.V.	708.47 m
X:4.937.719,08		N.T.	703.77 m
Y:2.581.620,25		M.R.	708.18 m
Ref. Permanente:	NIVEL DE TERRENO	Elev.:	703.77 m
Reg. Medido Desde:	NIVEL DE TERRENO	0.0 m	sobre Ref. Permanente
Perforacion Medida Desde:	NIVEL DE TERRENO		
Equipo	Desviacion Maxima del Hoyo	Longitud	Latitud
	2-Apr-2005	X:4.937.719,08	Y:2.581.620,25

Fecha de Registro	2-Apr-2005
Corrida Numero	1
Prof. Perforador	2792 m
Prof. Schlumberger	2608 m
Primera Lectura	2608 m
Ultima Lectura	1200 m
Pozo de Fluido en la Caneria	AGUA
Salinidad	
Densidad	1 g/cm3
Nivel del Fluido	0 m
BROCA/CANERIA/TUBERIA	
Broca	8.500 in
Desde	0 m
Hasta	0 m
Caneria / Tuberia	413 m
Peso	5.500 in
Grado	15.5 lbn/ft
Desde	0 m
Hasta	2792 m
Temperaturas Maximas Medidas	106 degC
Registro en Fondo	2-Apr-2005
Unidad Numero	8116
Registrado por	CAS
Testigo	D.PEROTTI

DATOS PVT

	Corrida 1	Corrida 2	Corrida 3
Densidad del Crudo			
Salinidad del Agua			
Gravedad del Gas			
Bo			
Bw			
1/Bq			
Presion del Punto de Burbuja			
Temperatura del Punto de Burbuja			
GOR en Solucion			
Desviacion Maxima			
DATOS DE CEMENTACION			
Primaria/Reparacion	Primary		
Sarta de la Caneria No.			
Tipo de Cemento Primario			
Volumen			
Densidad			
Perdida de Agua			
Aditivos			
Tipo de Cemento Cola			
Volumen			
Densidad			
Perdida de Agua			
Aditivos			
Topo de Cemento Esperado			
Fecha de Registro			
Corrida Numero			
Prof. Perforador			
Prof. Schlumberger			
Primera Lectura			
Ultima Lectura			
Tipo de Fluido en la Caneria			
Salinidad			
Densidad			
Nivel del Fluido			
BROCA/CANERIA/TUBERIA			
Broca			
Desde			
Hasta			
Caneria / Tuberia			
Peso			
Grado			
Desde			
Hasta			
Temperaturas Maximas Medidas			
Registro en Fondo			
Unidad Numero			
Registrado por			
Testigo			

DEPTH SUMMARY LISTING

Date Created: 25-APR-2004 15:28:43

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 824 Calibration Date: Calibrator Serial Number: Calibration Cable Type: 7-46P Wheel Correction 1: -2 Wheel Correction 2: -2	Type: CMTD-B/A Serial Number: 1689 Calibration Date: 3-Ene-2004 Calibrator Serial Number: 1077 Calibration Gain: 1.00 Calibration Offset: 0.00	Type: 7-46P Serial Number: 77353 Length: 6985.10 M Conveyance Method: Wireline Rig Type: LAND

Depth Control Parameters

Log Sequence: Subsequent Log In the Well
Reference Log Name: Combinada
Reference Log Run Number: 1
Reference Log Date: 27-Mar-2005

Depth Control Remarks

1. IDW usado como sistema de profundidad primario.
2.
3.
4.
5.
6.

LIMITACION DE RESPONSABILIDAD





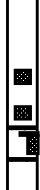




LA UTILIZACION Y CONFIANZA EN LOS DATOS AQUI GRABADOS POR PARTE DE LA NOMBRADA COMPANIA (Y POR CUALQUIERA DE SUS SUBSIDIARIAS, AFILIADAS, REPRESENTANTES, AGENTES, CONSULTORES Y EMPLEADOS) ESTA SUJETA A LOS TERMINOS Y CONDICIONES ACORDADOS ENTRE SCHLUMBERGER Y LA COMPANIA, INCLUYENDO: (a) RESTRICCIONES EN EL USO DE LOS DATOS GRABADOS; (b) LIMITACION DE RESPONSABILIDAD Y REVOCACION DE GARANTIAS EN RELACION A LA UTILIZACION Y CONFIANZA EN LOS DATOS GRABADOS POR PARTE DE LA COMPANIA, Y (c) LA SOLA Y TOTAL RESPONSABILIDAD DEL CLIENTE POR CUALQUIER INTERPRETACION HECHA O DECISION BASADA EN EL USO DE ESTOS DATOS.

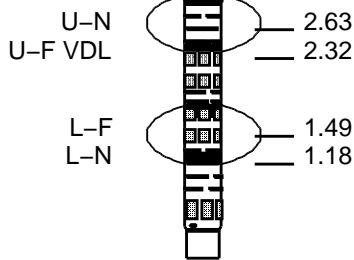
OTROS SERVICIOS #1	OTROS SERVICIOS #2
OS1: PUNZADO 4"	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5: MASTIL	OS5:
OBSERVACIONES: CORRIDA #1	OBSERVACIONES: CORRIDA #2
-Perfil de correlacion de cia .Schlumberger del dia 27-mar-2005	
-Herramienta corrida segun diagrama	
-Sonico centralizado con tres gemcos de 5.5"	
-Primer tramo de registro sin correccion de profundidad	
-Se registra neutron compensado	
-Trabajo con mastil de cia.Schlumberger	

CORRIDA #1			CORRIDA #2		
ORDEN DE SERVICIO:			ORDEN DE SERVICIO:		
VERSION DEL PROGRAMA:			VERSION DEL PROGRAMA:		
NIVEL DEL FLUIDO:			NIVEL DEL FLUIDO:		
	11C0-305	0 m			
INTERVALO REGISTRADO	COMIENZO	FINAL	INTERVALO REGISTRADO	COMIENZO	FINAL

DESCRIPCION DEL EQUIPO

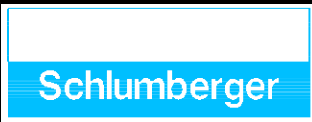
CORRIDA #1	CORRIDA #2
SURFACE EQUIPMENT WITM (CTS)-A	
STM-C CNB-AB NCT-B NCS-VB	

DOWNHOLE EQUIPMENT				
PEH-A PEH-A 8116				16.46
AH-64 AH-64 8116				15.91
CAL-Y CAL-Y 489	CCL		— 15.20	15.51
TCC-B ECH-KC 2375 TCC-B	TelStatus CTEM		— 13.53	14.44
CNT-H CND-NA NLS-KL NSR-F CNC-HA CNH-A 2021 NPV-N	CFTC CNTC		— 12.18 — 12.03	13.53
ILE-E ILE-E				11.32
AH-107 AH-107				8.88
AH-107 AH-107				8.27
SDT-C SDC-CB ECH-KR 2222 SLS-WA 1208				7.66



BNS-CCS Tension HV 0.00 0.14
TOOL ZERO

MAXIMUM STRING DIAMETER 7.50 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS



TRAMO PRINCIPAL

Company: YPF S.A. Well: YPF.Ch.EN-625

Output DLIS Files

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OP System Version: 11C0-305
MCM

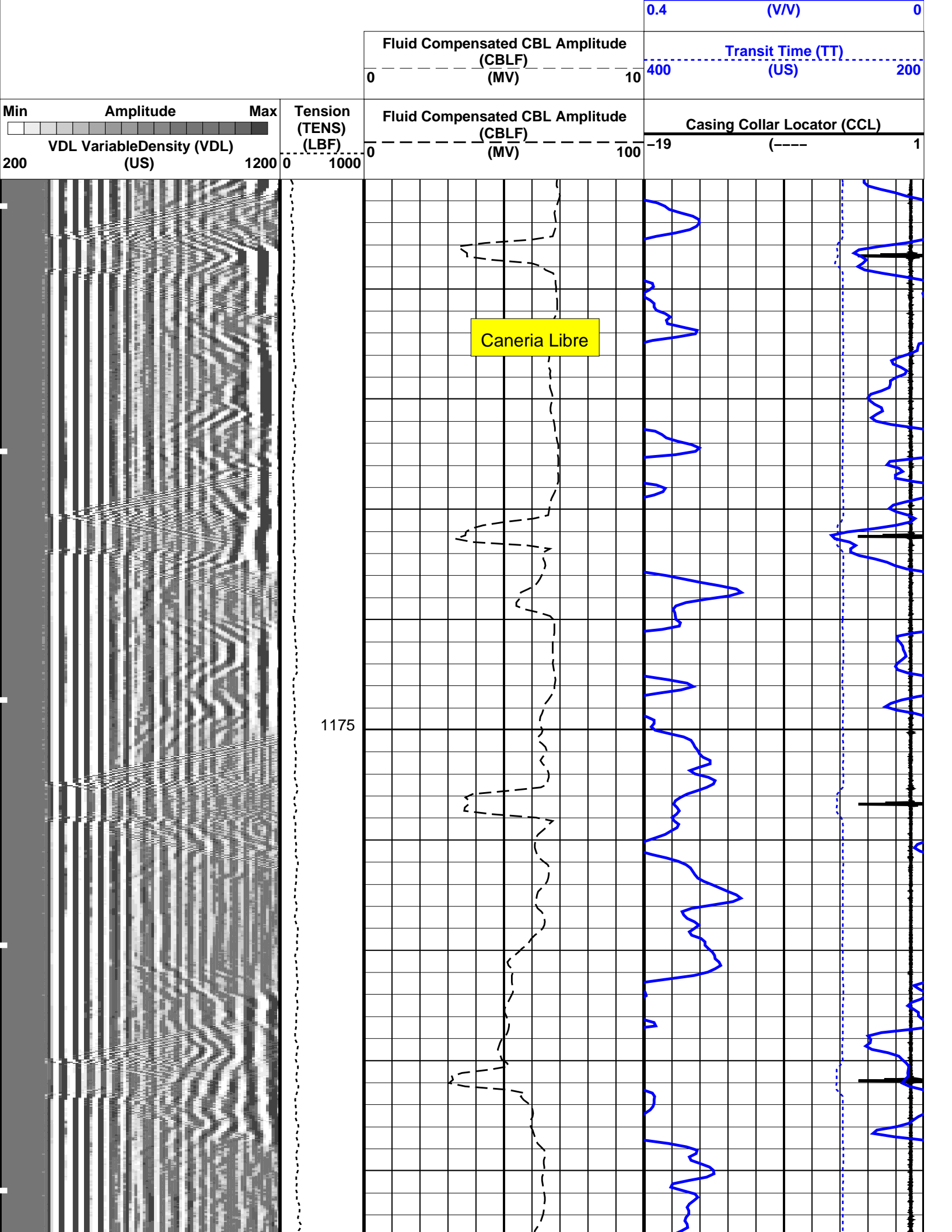
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TCC-B OP11-KP1 CAL-Y 11C0-305

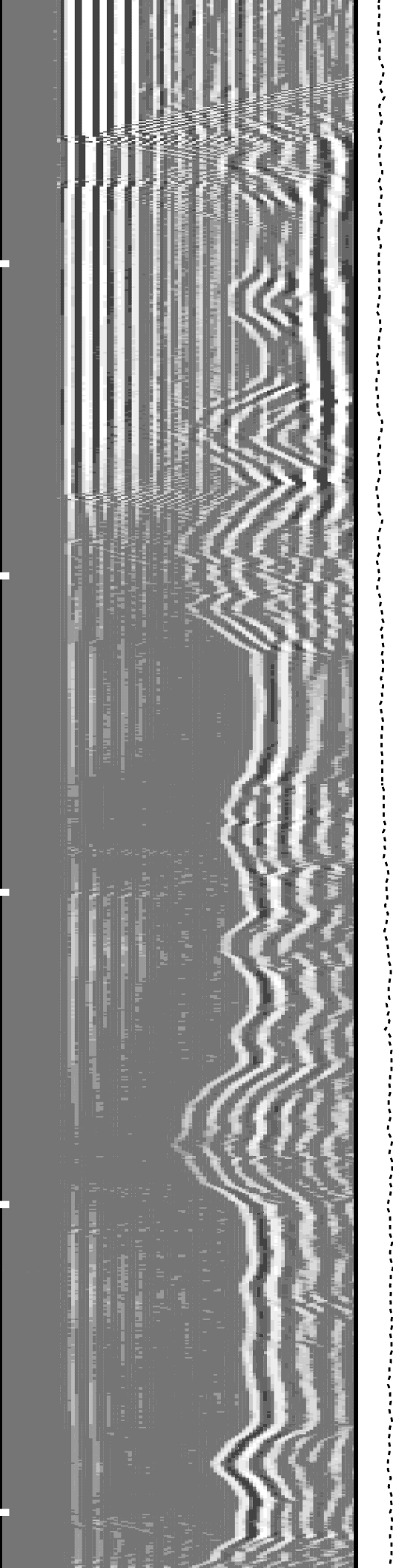
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BSAL	-50000.00 PPM	-50000.00 PPM	1807.4 17:20:58
CSIZ	5.500 IN	5.500 IN	1810.3 17:20:42
CWEI	15.50 LB/F	15.50 LB/F	1809.0 17:20:49
DFD	1.00 G/C3	1.00 G/C3	1807.8 17:20:56
TDD	2792.00 M	-50000.00 M	1819.3 17:19:50
TDL	2608.00 M	-50000.00 M	1817.7 17:19:59

PIP SUMMARY

Time Mark Every 60 S

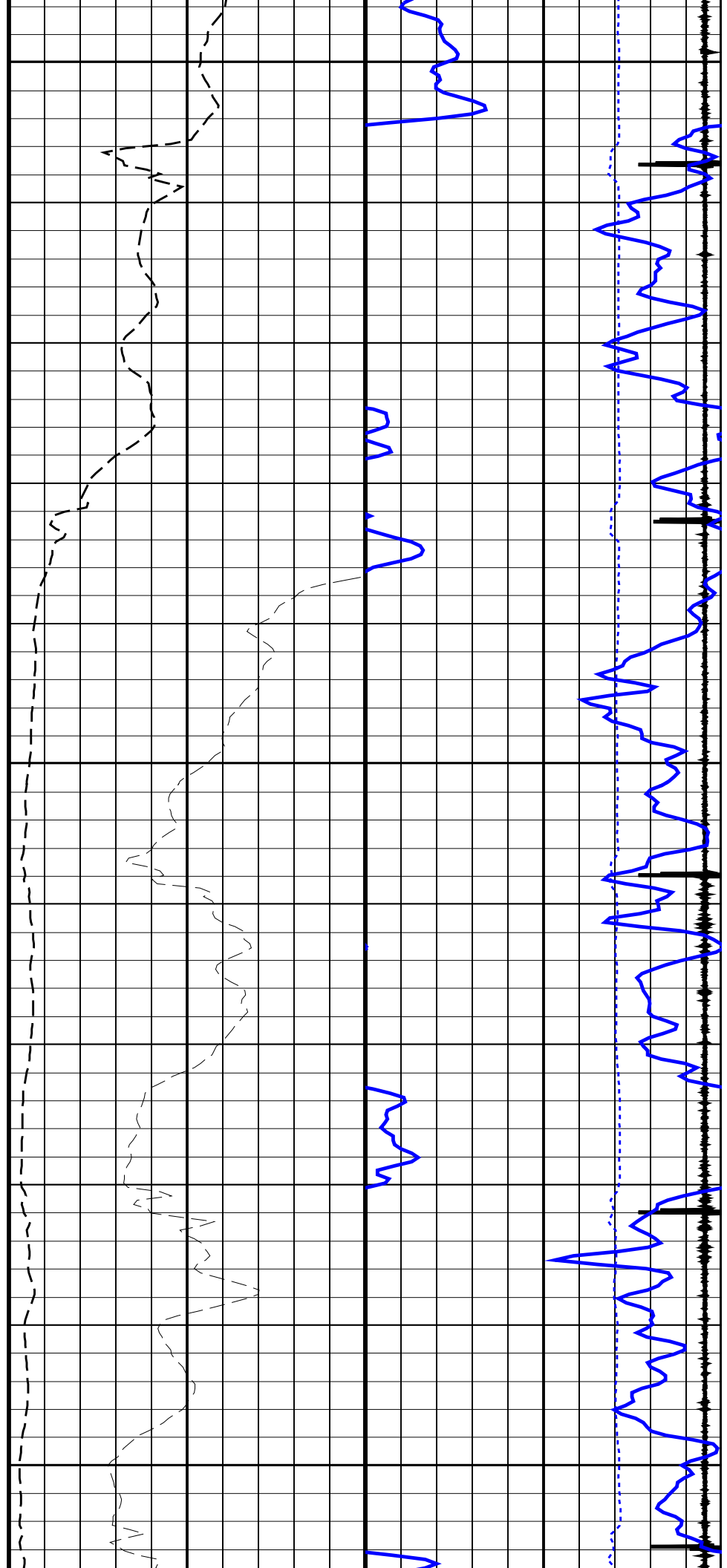


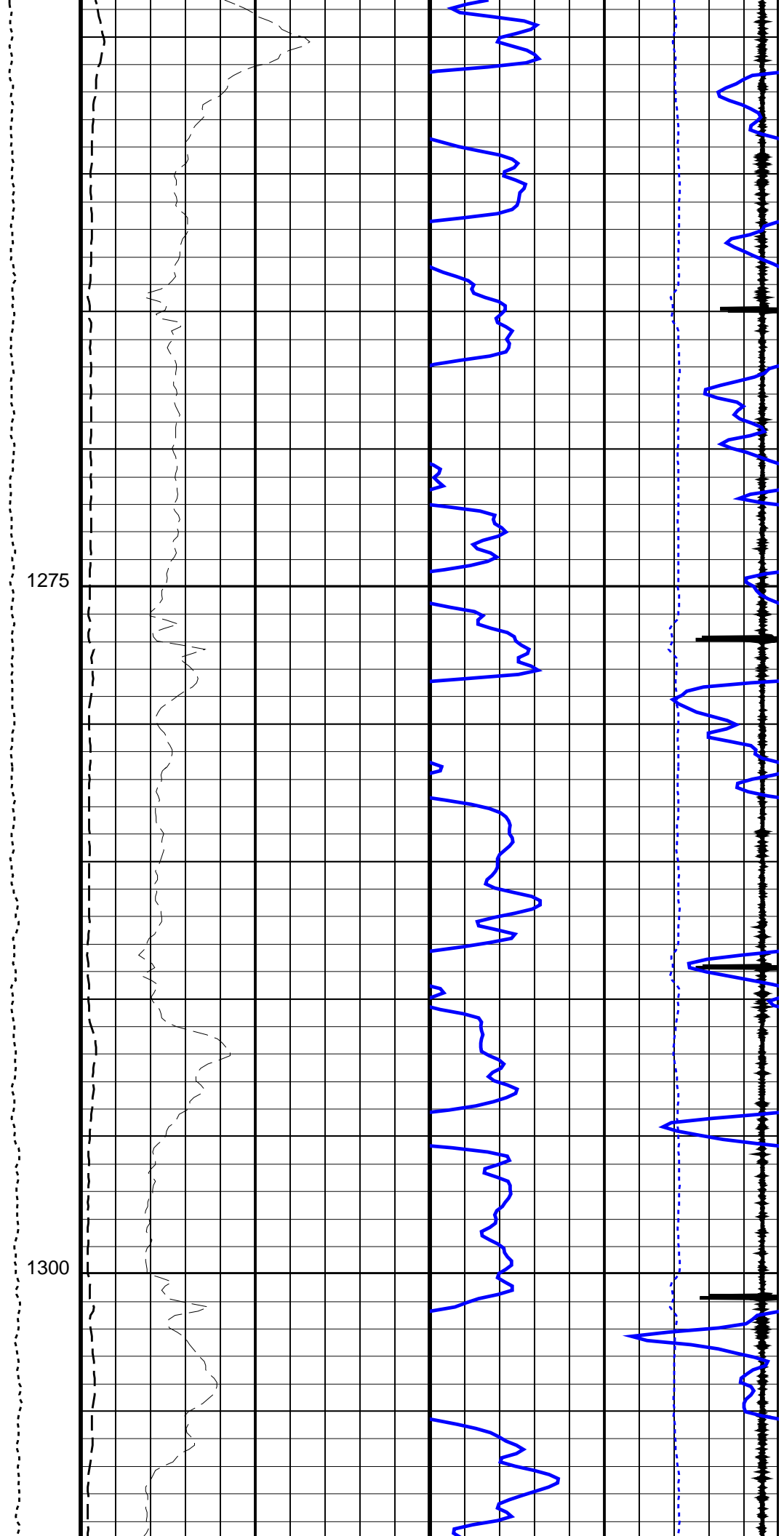
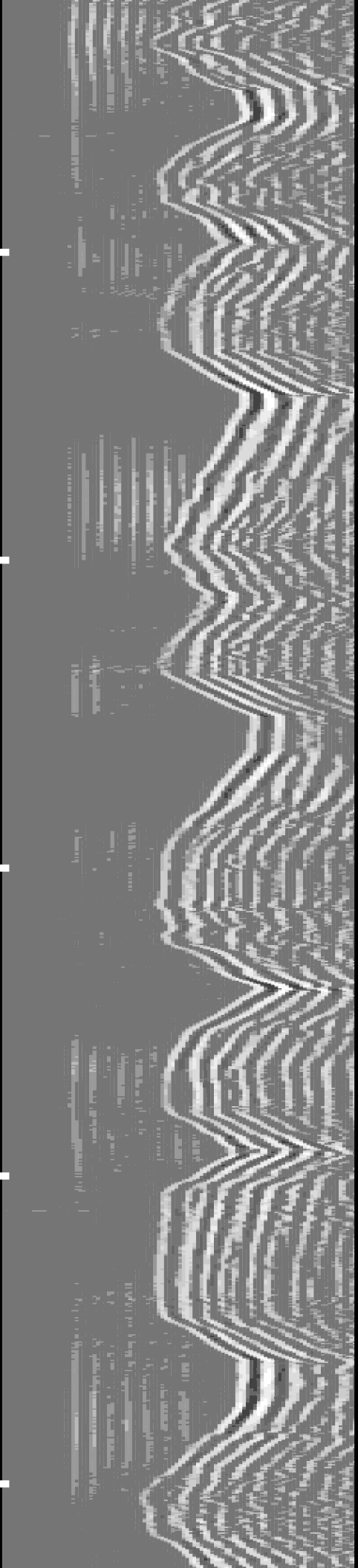


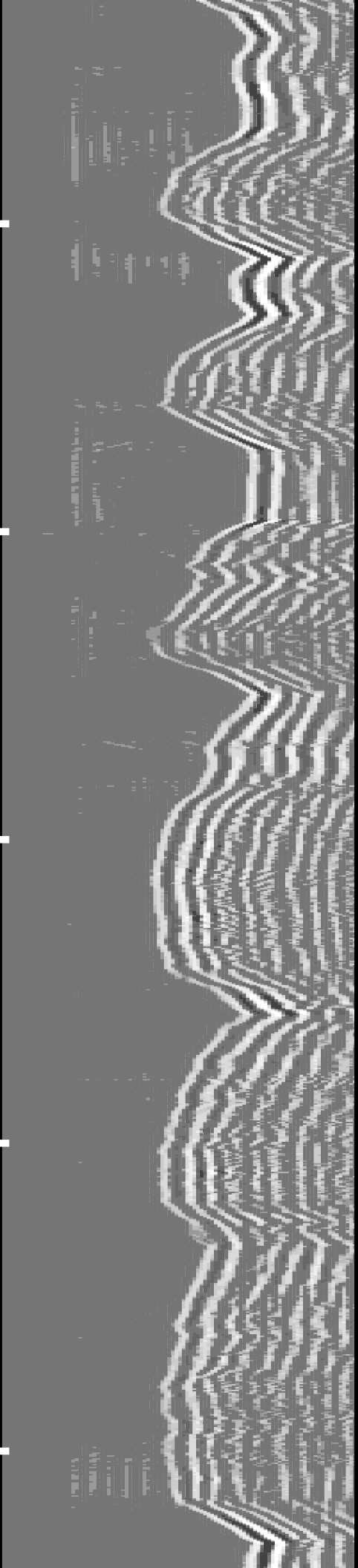
1200

1225

1250

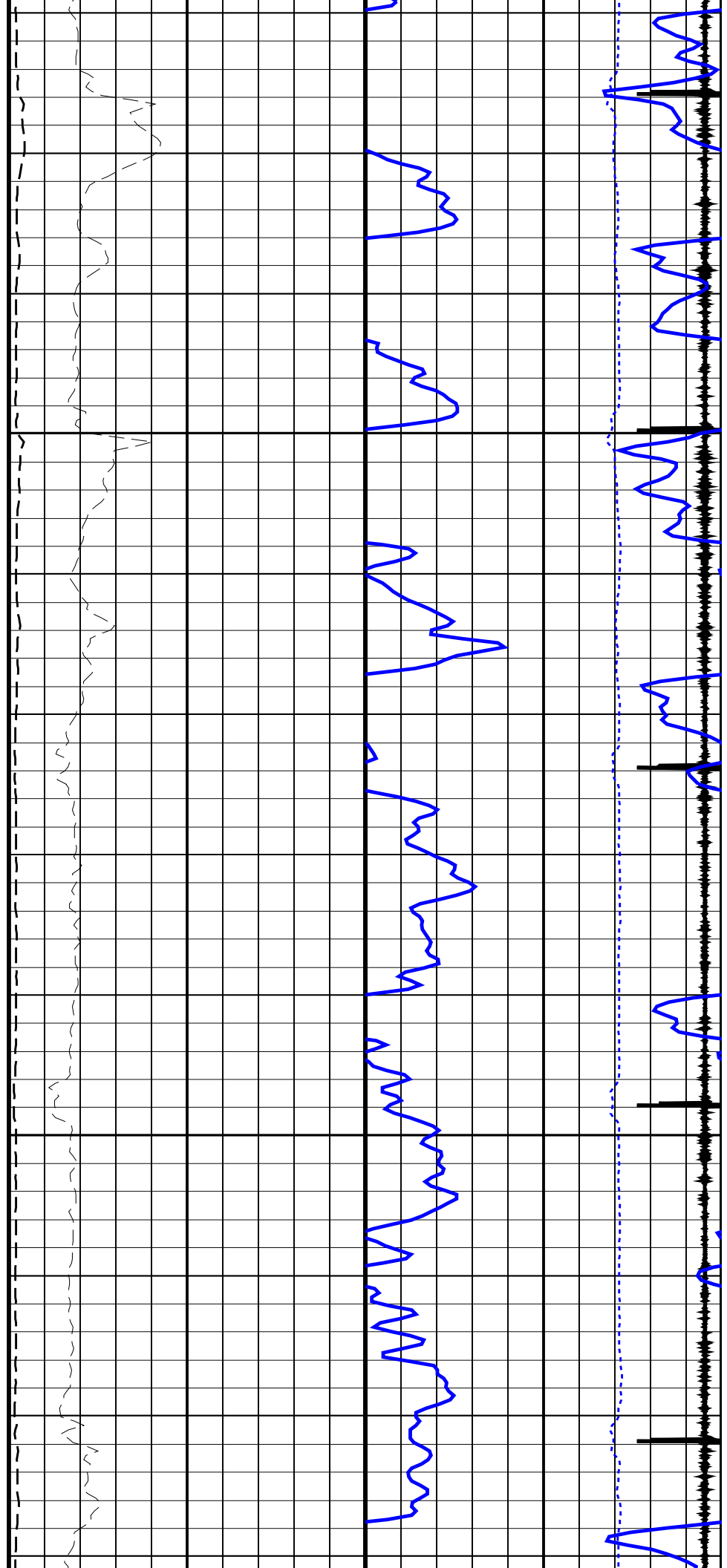


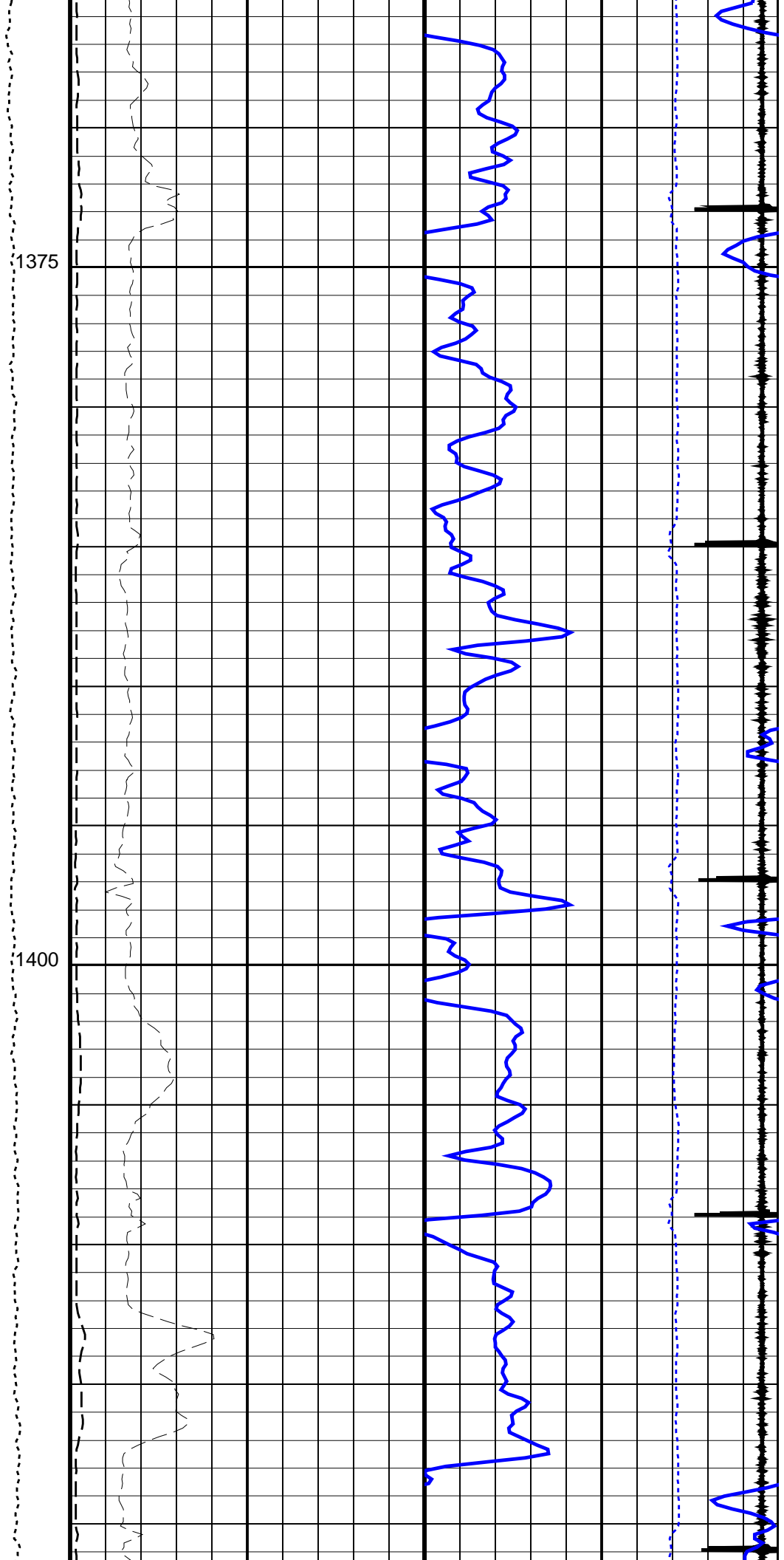
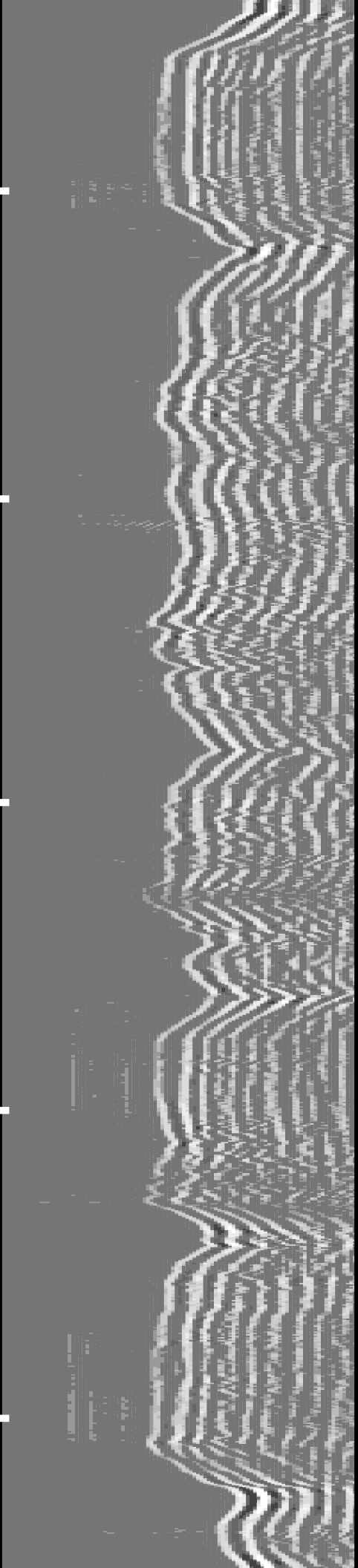


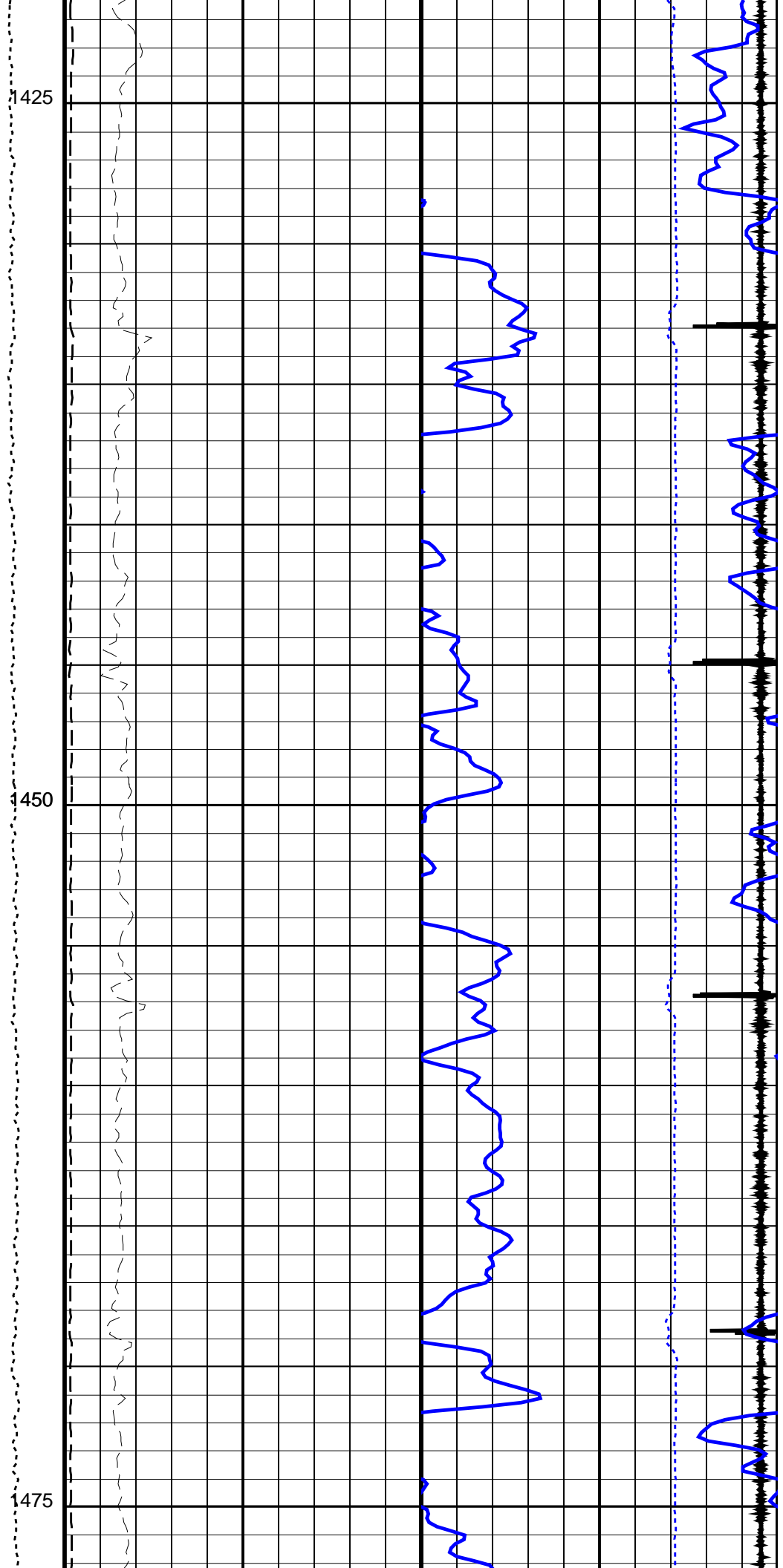
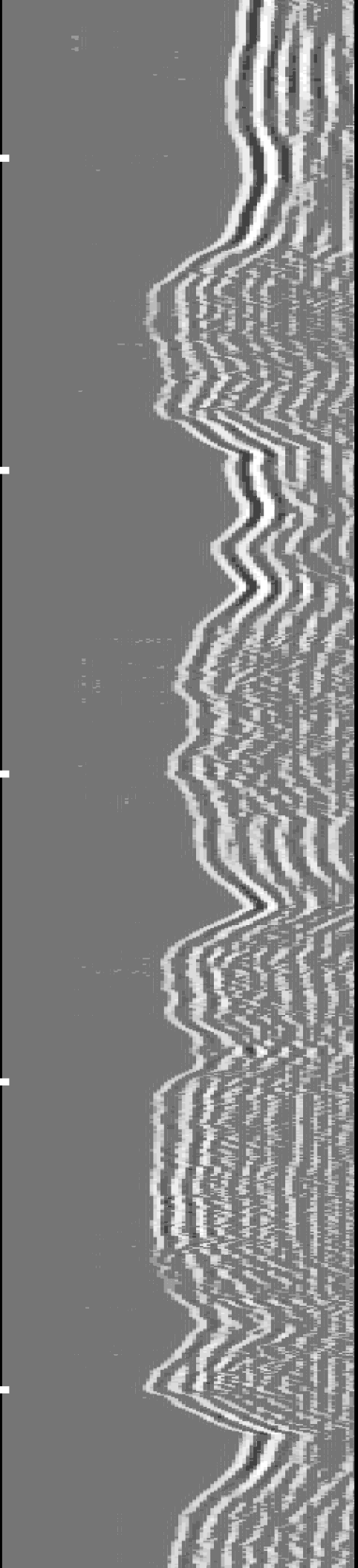


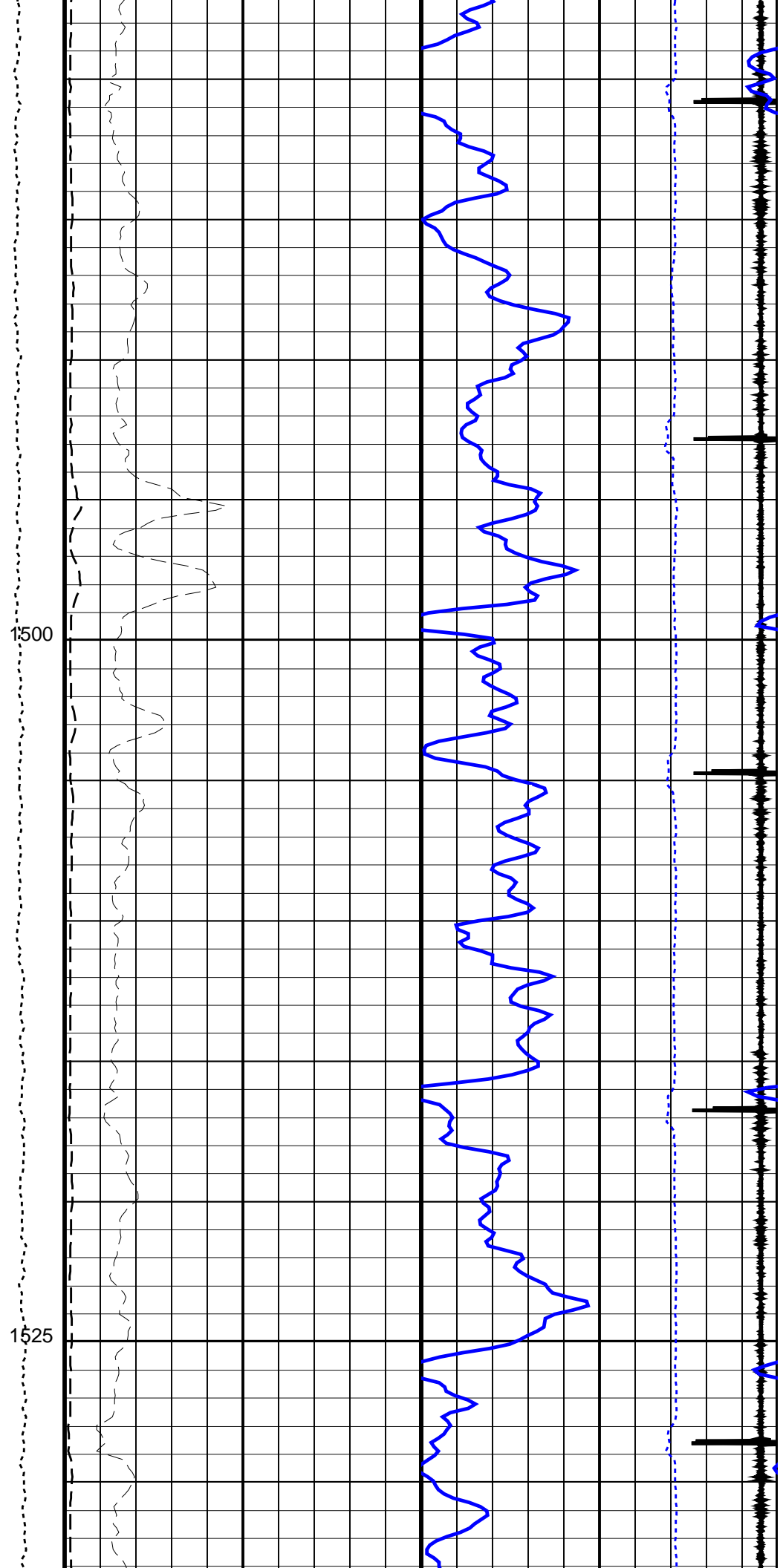
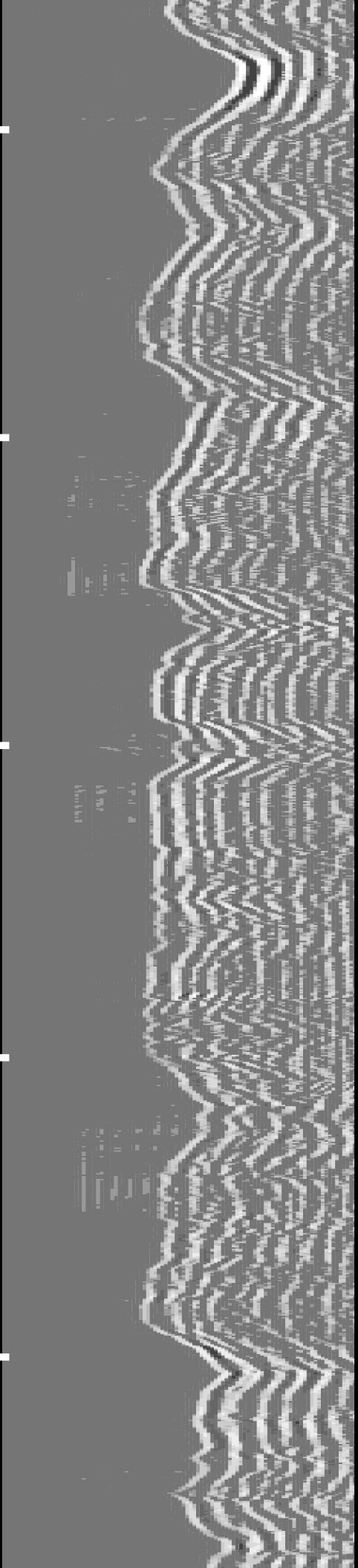
1325

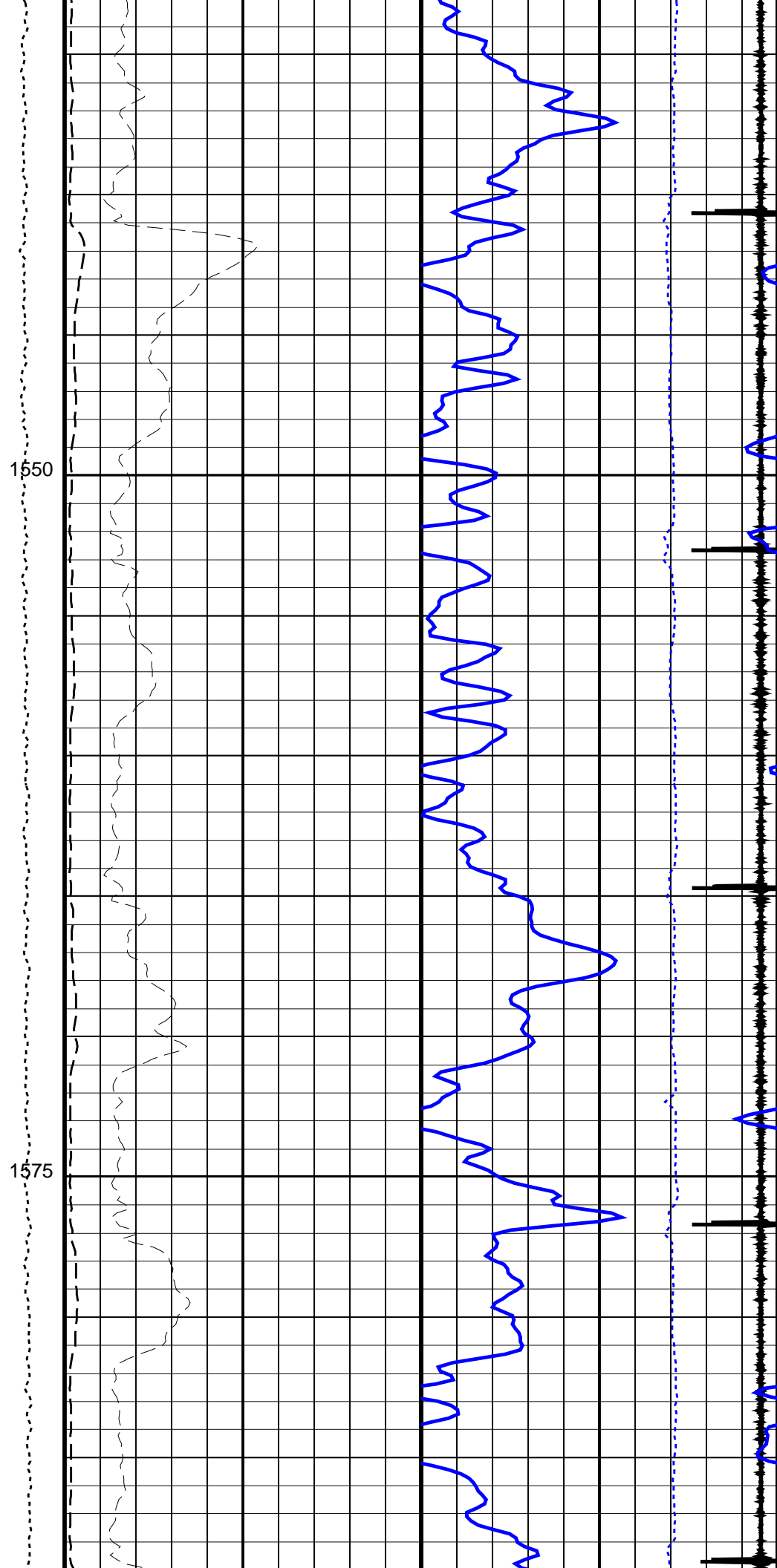
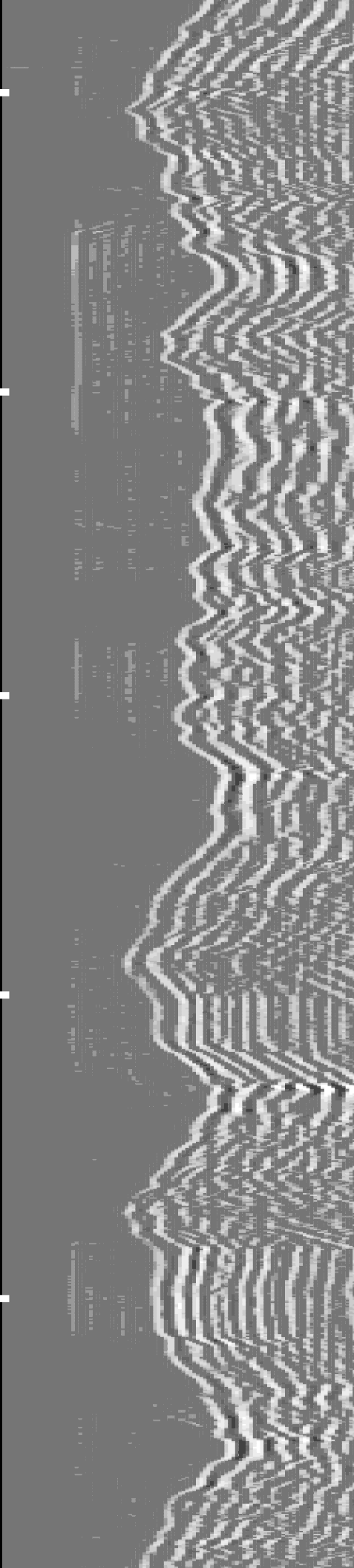
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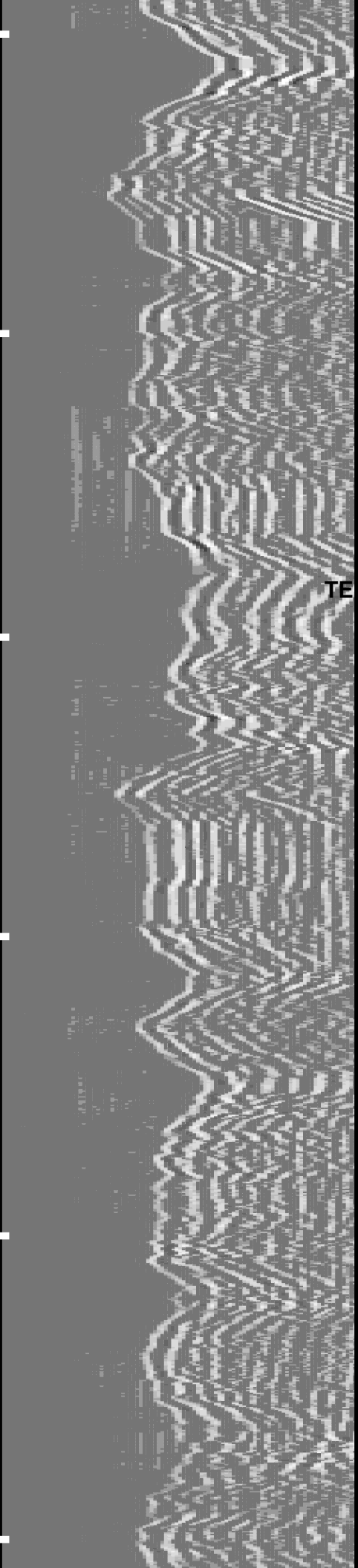








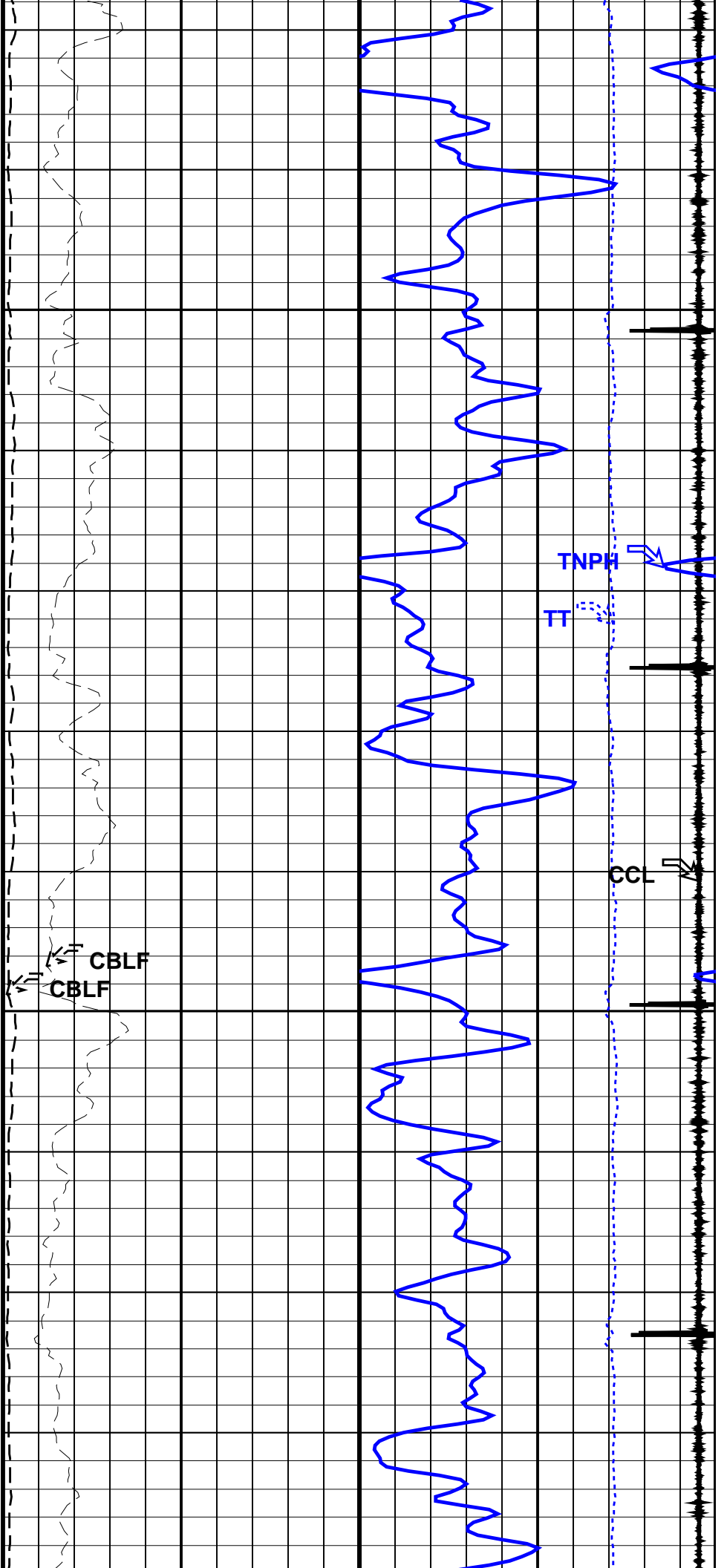


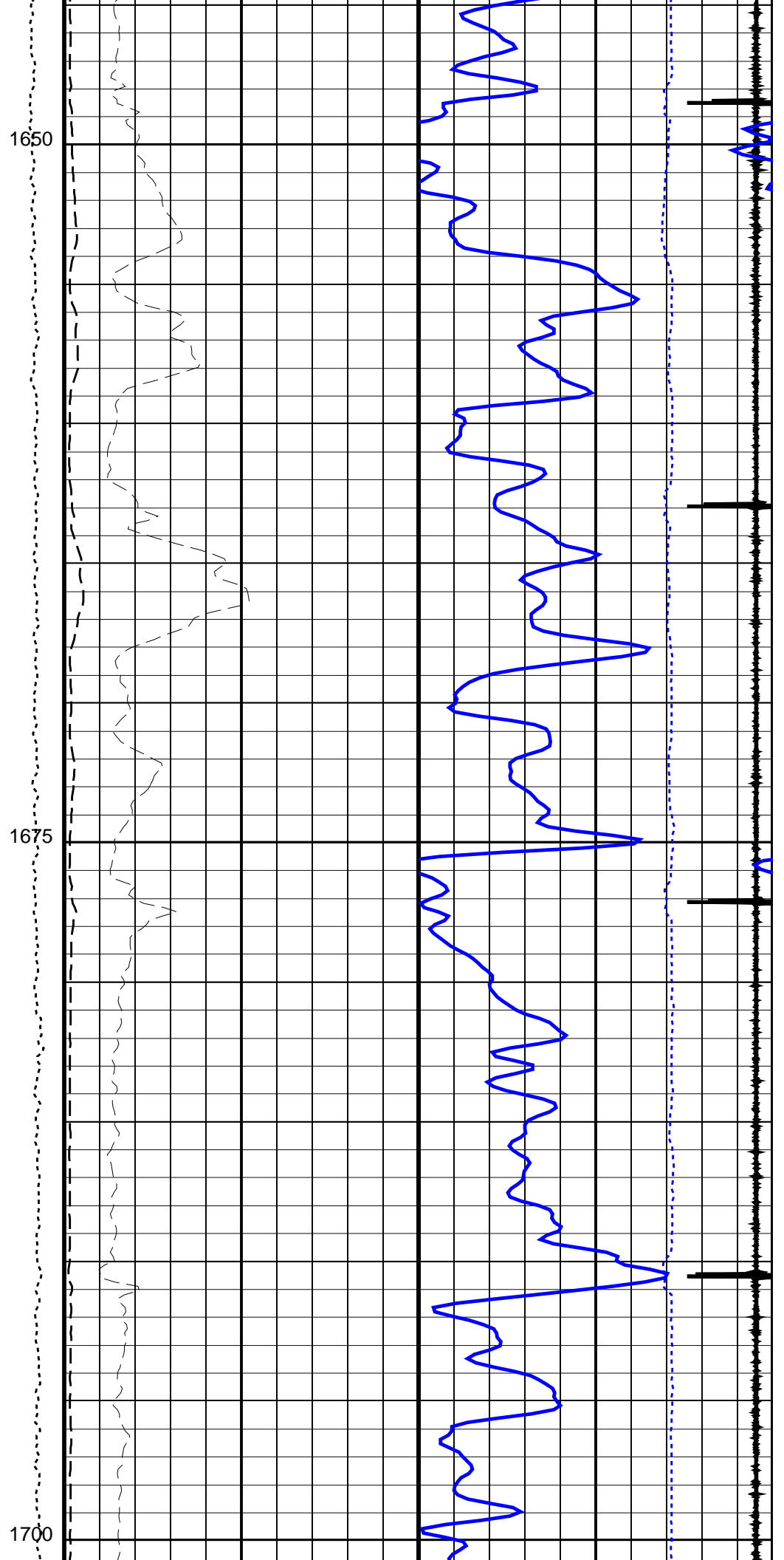
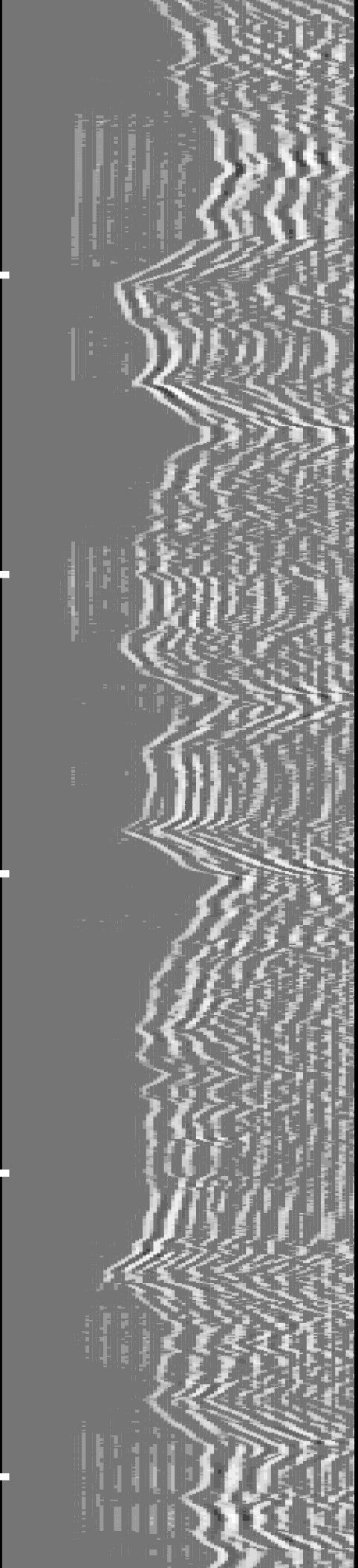


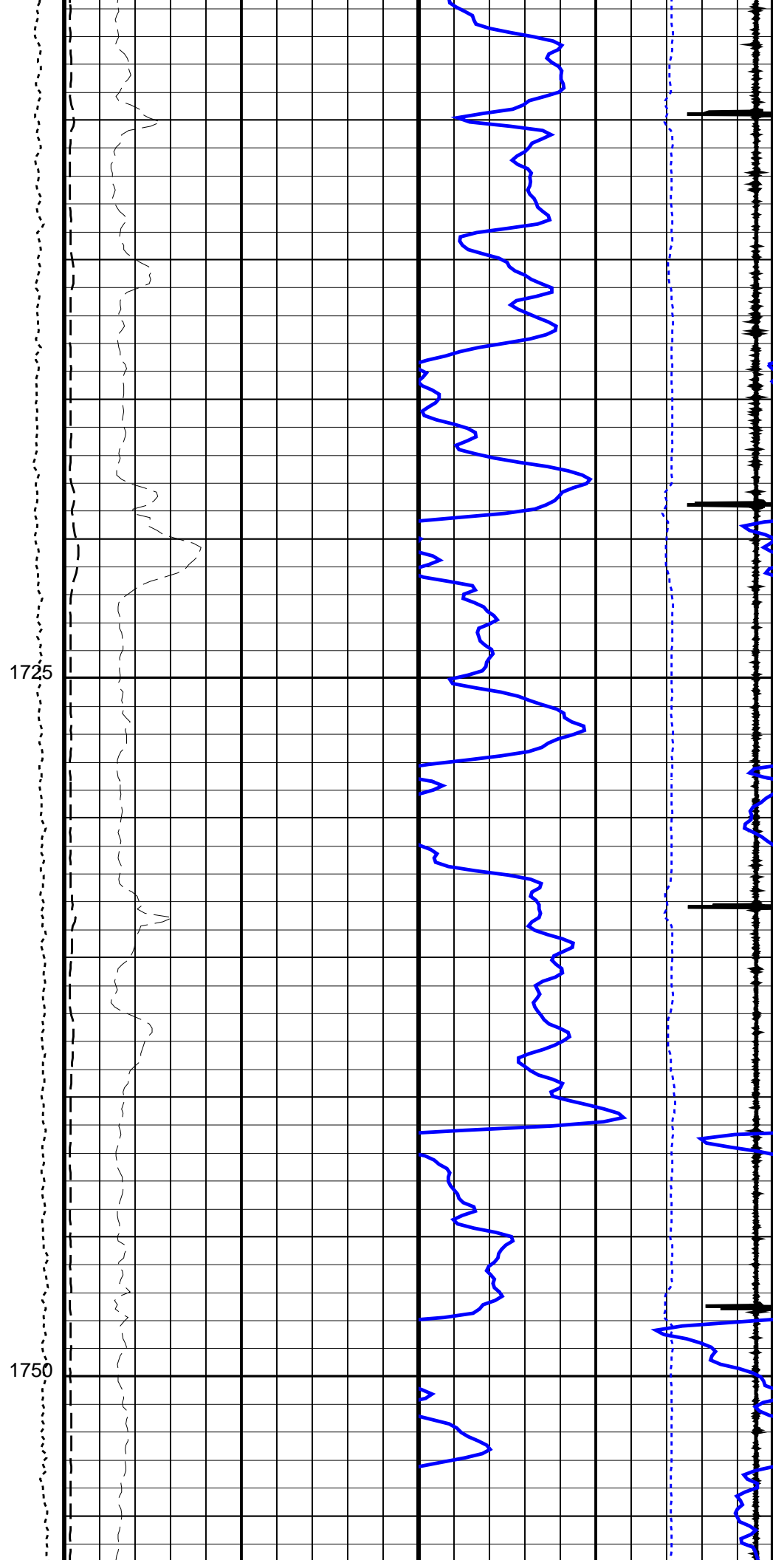
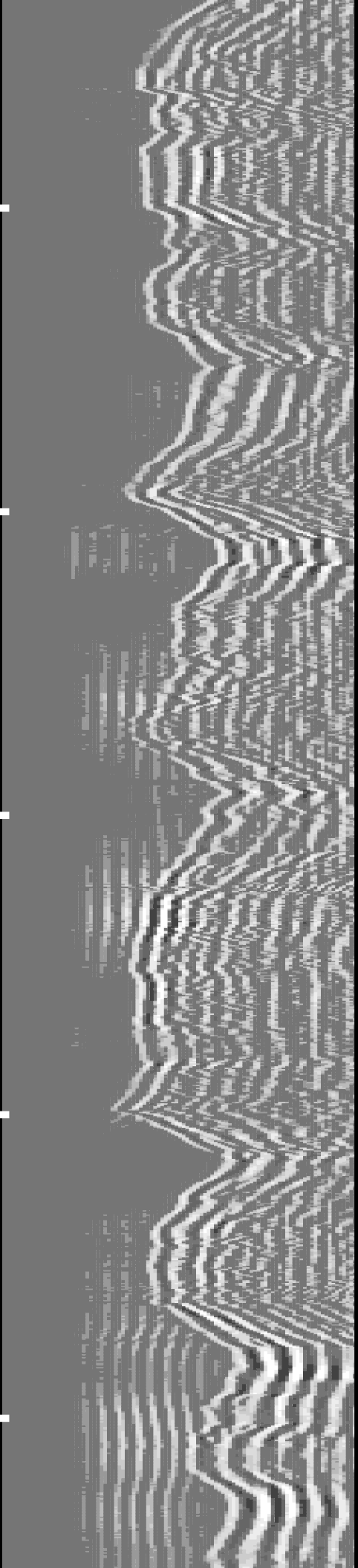
TENS

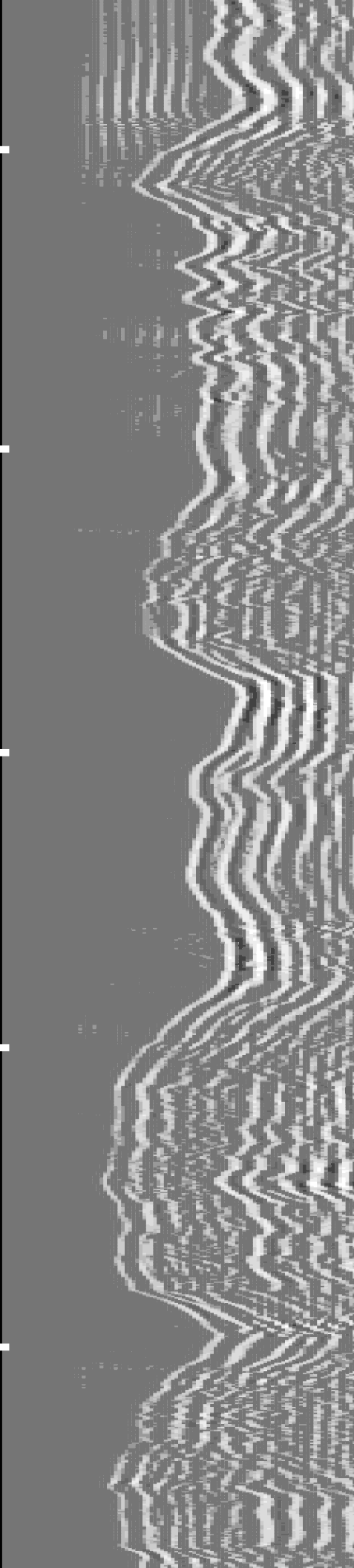
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1625



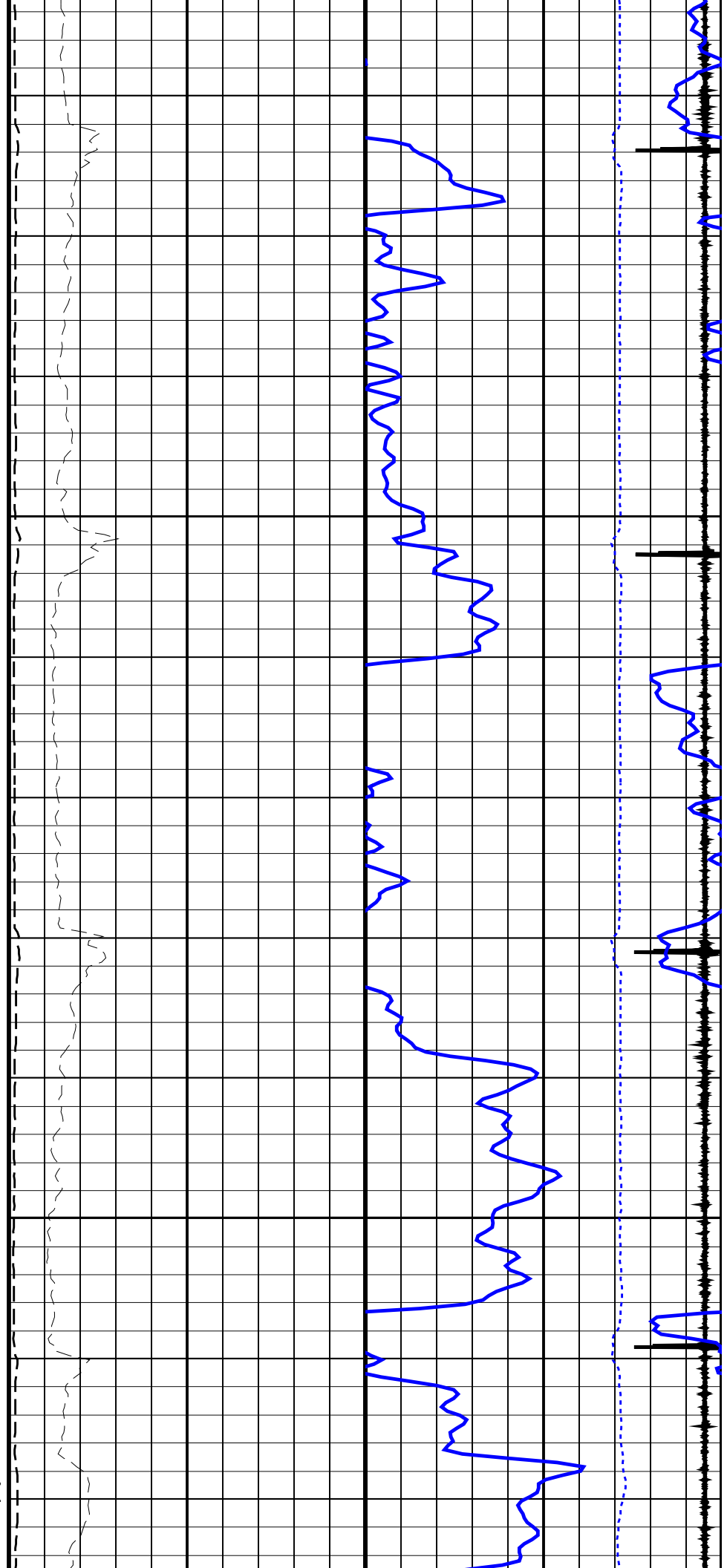


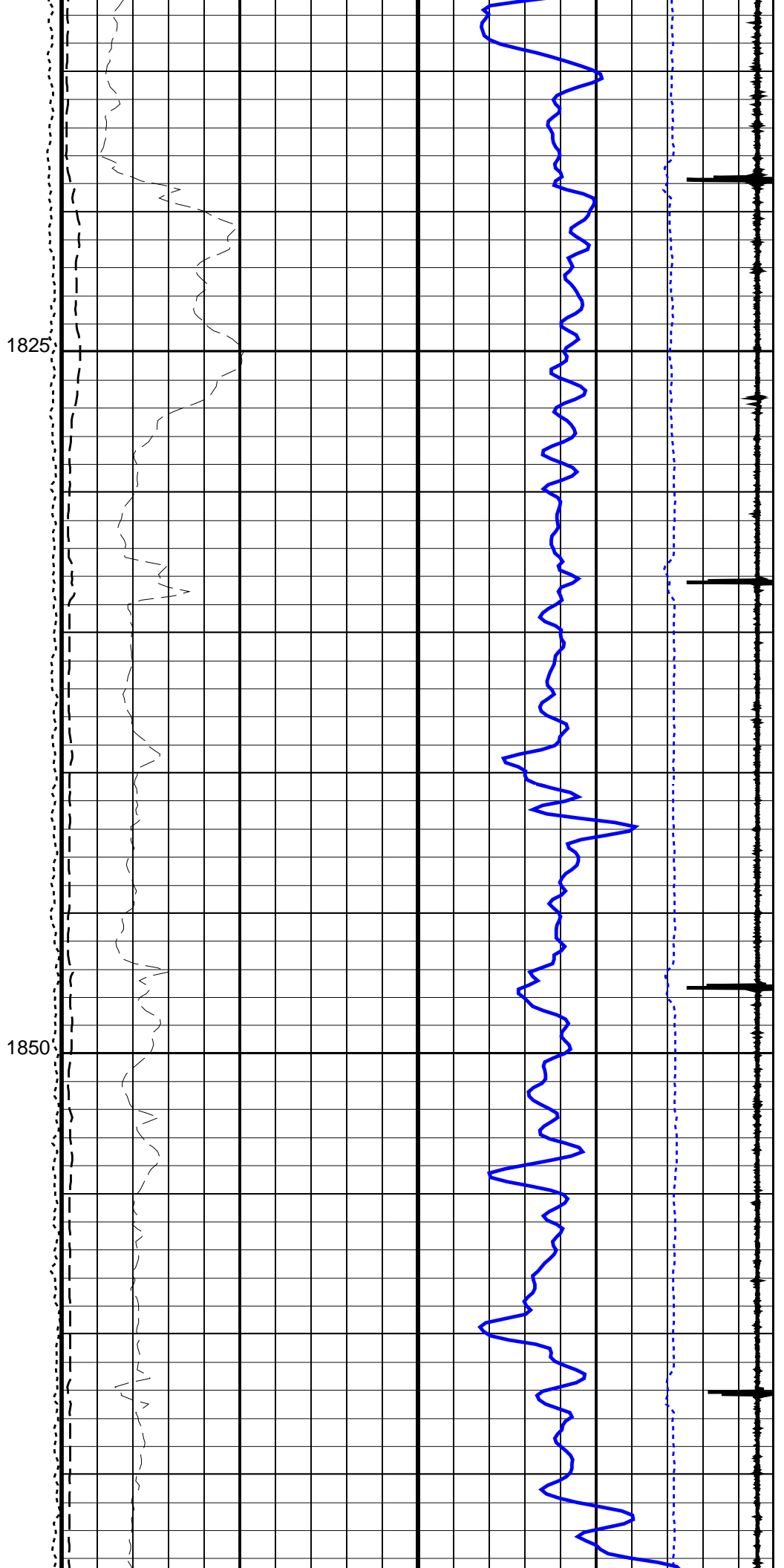
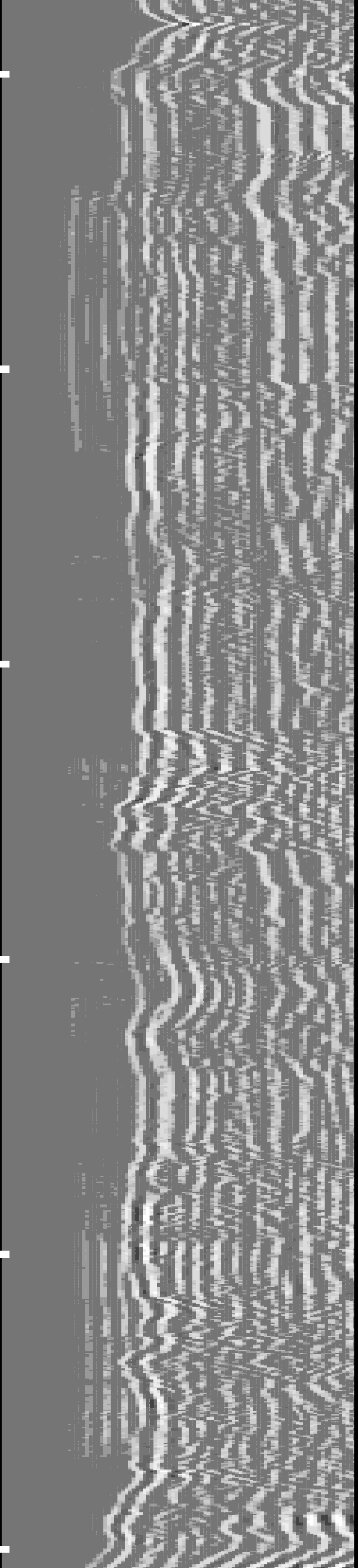


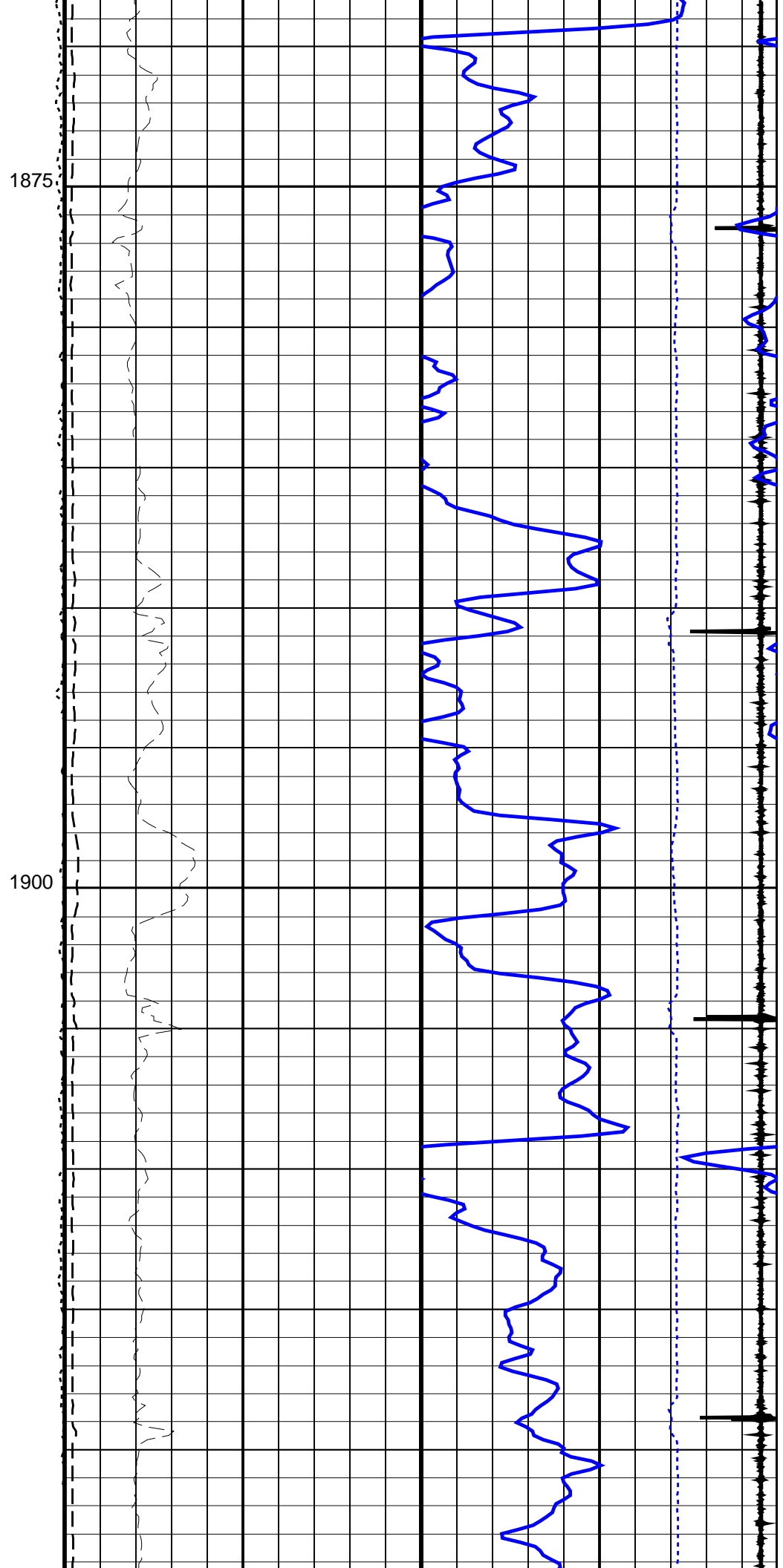
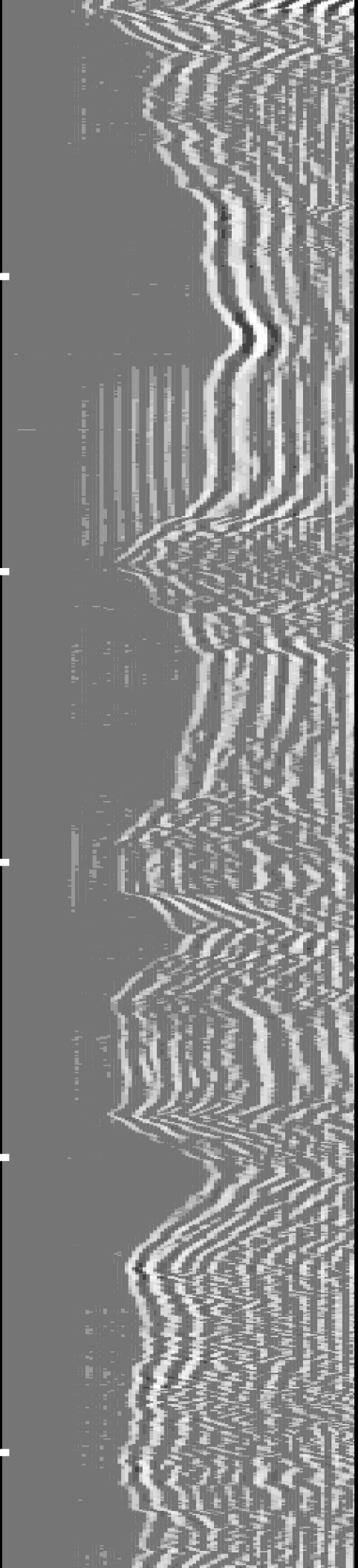


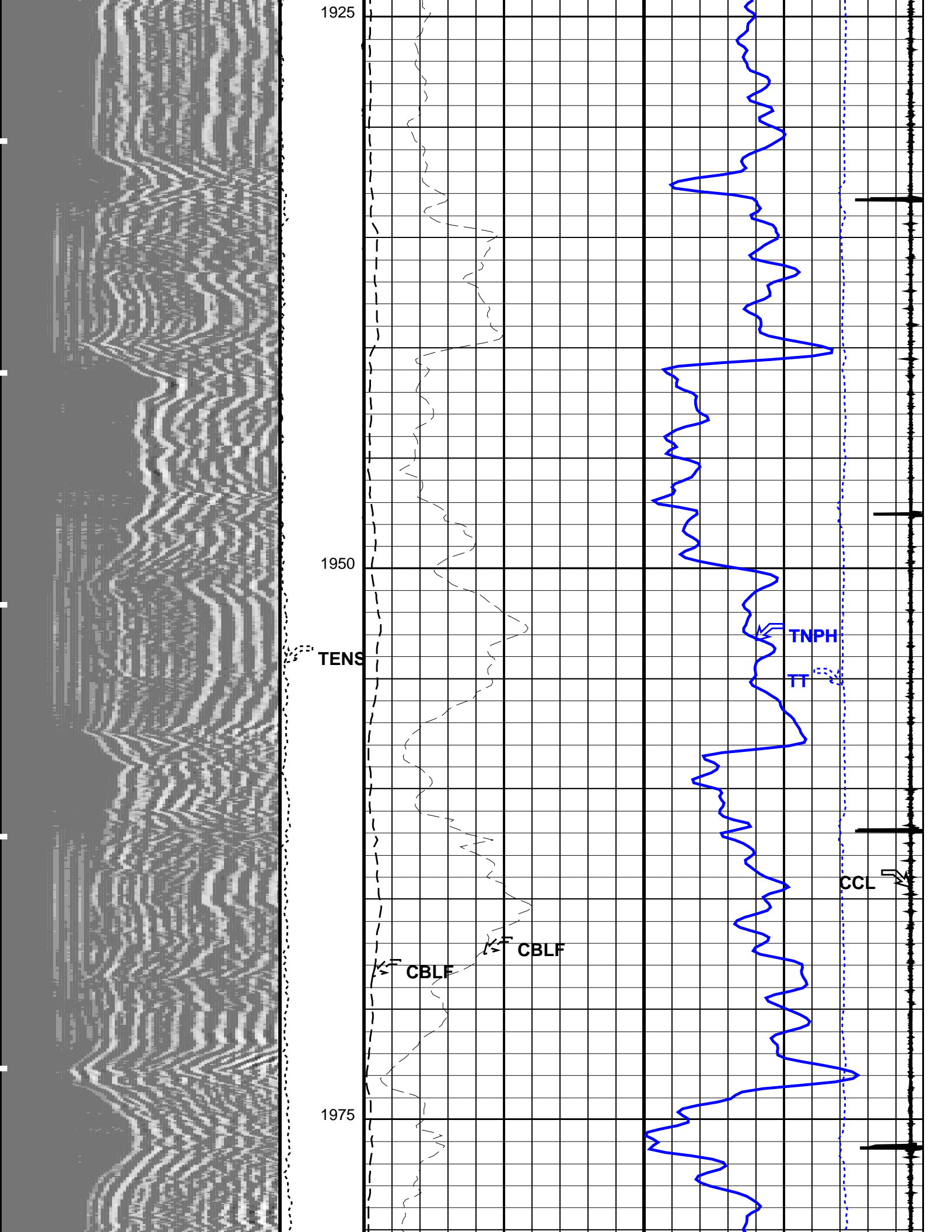
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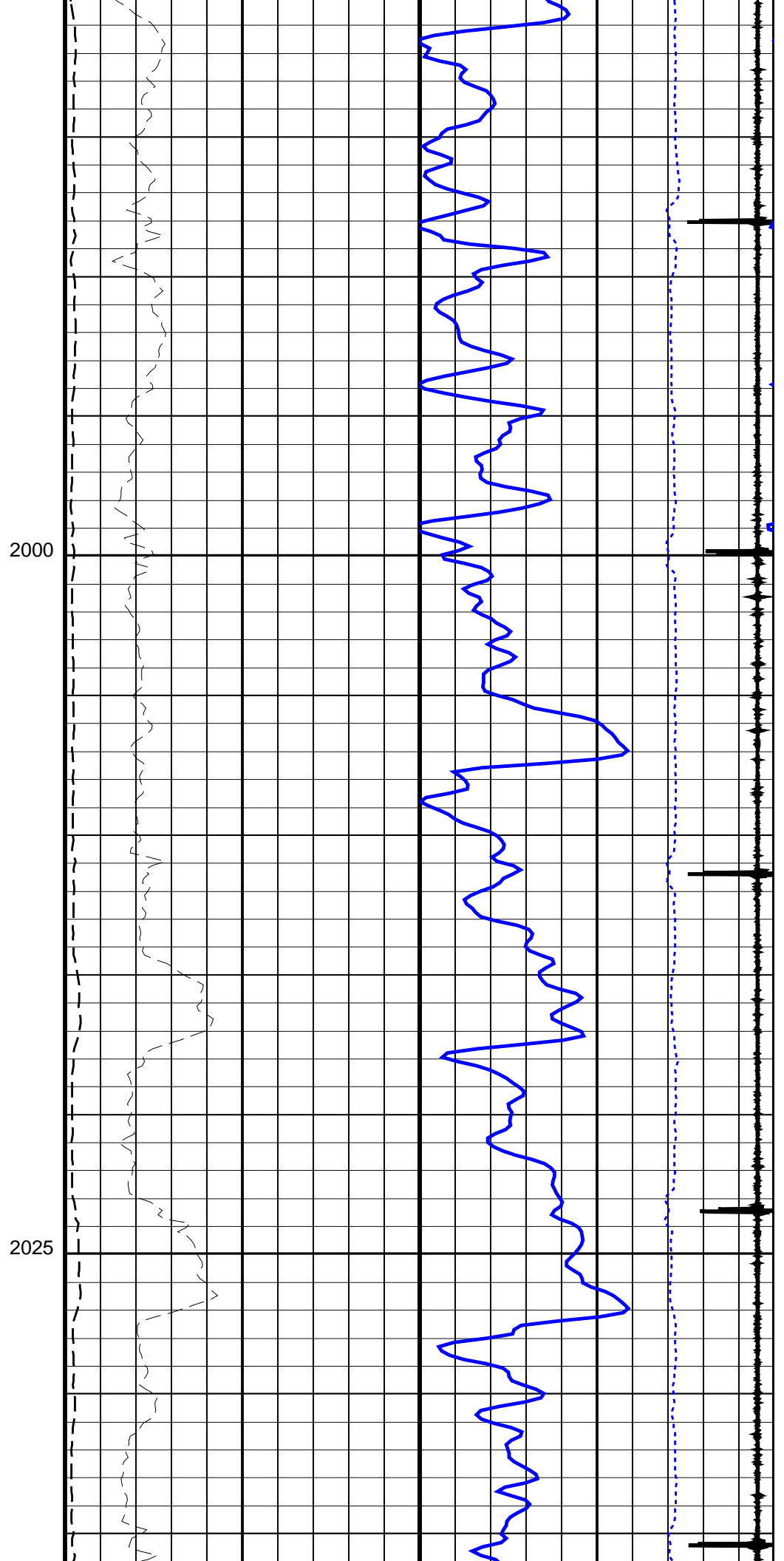
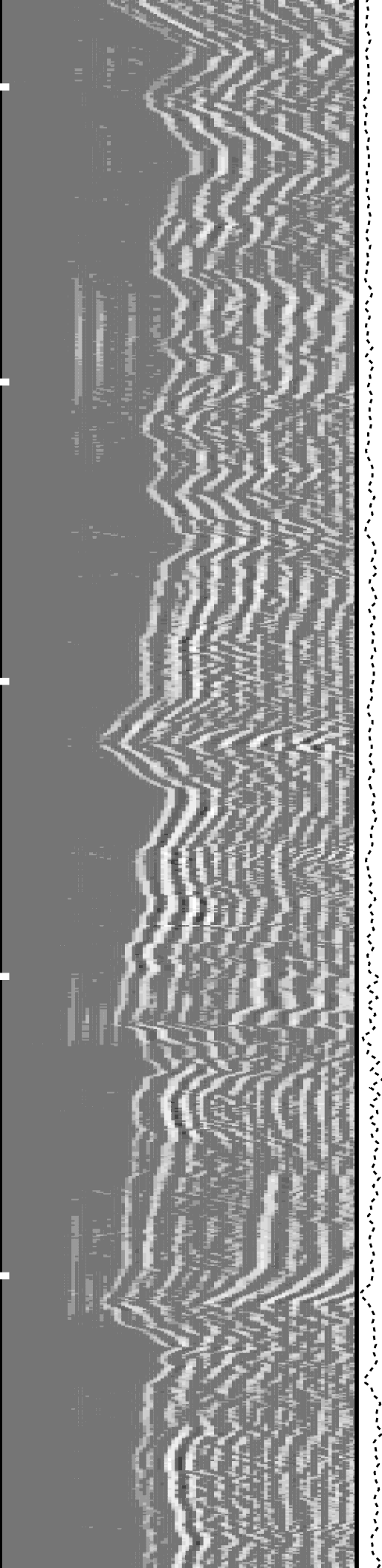
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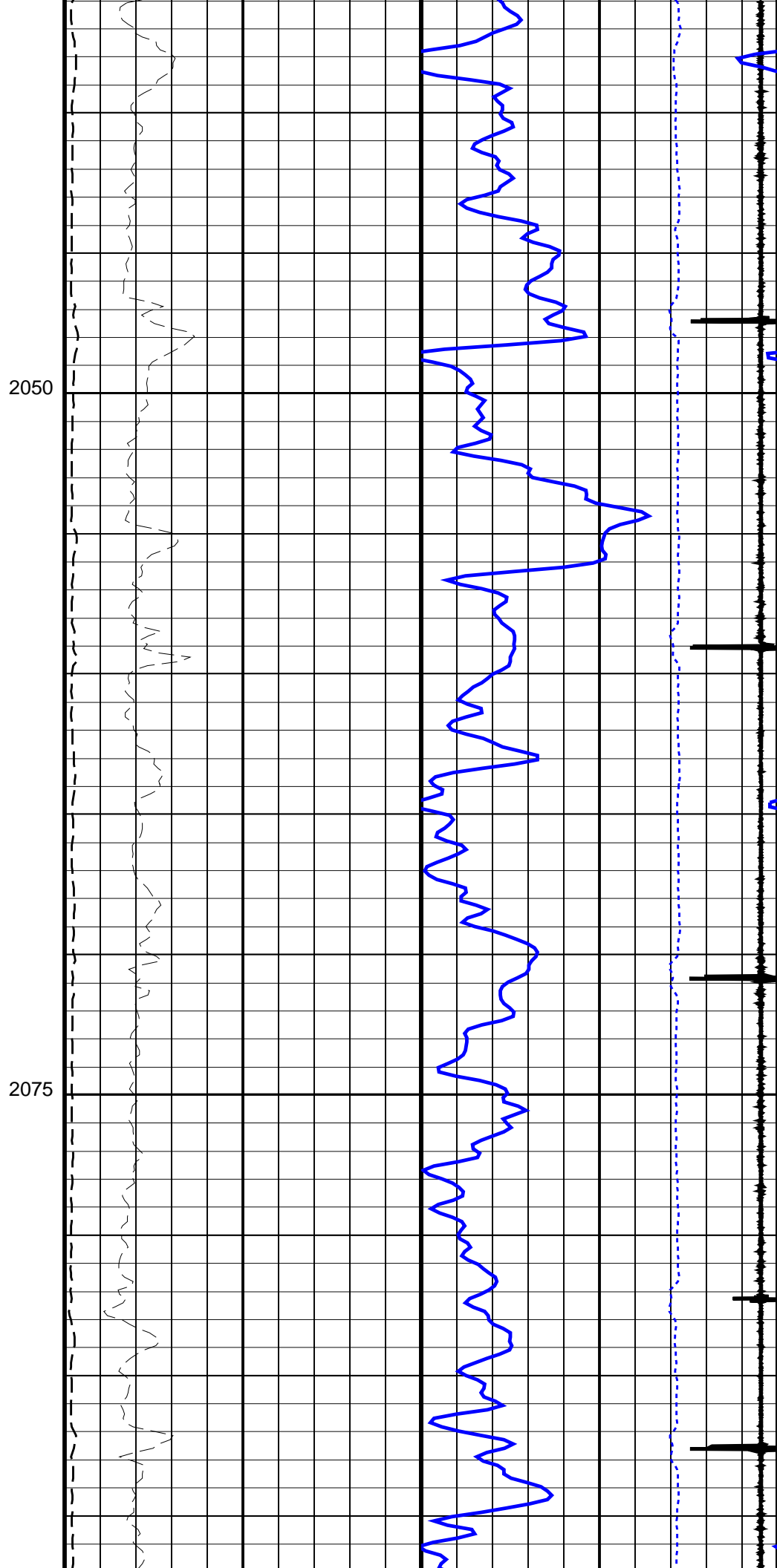
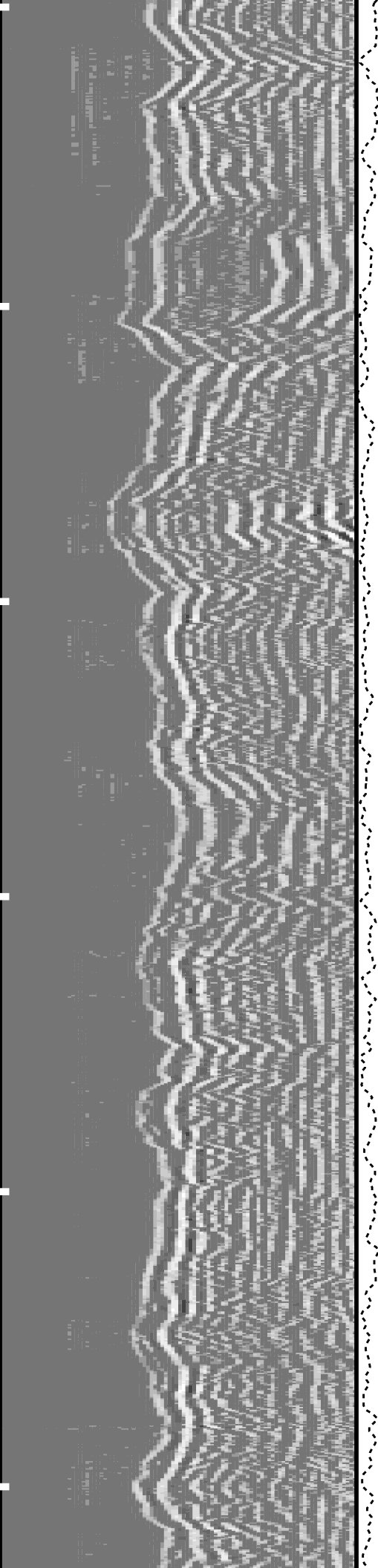


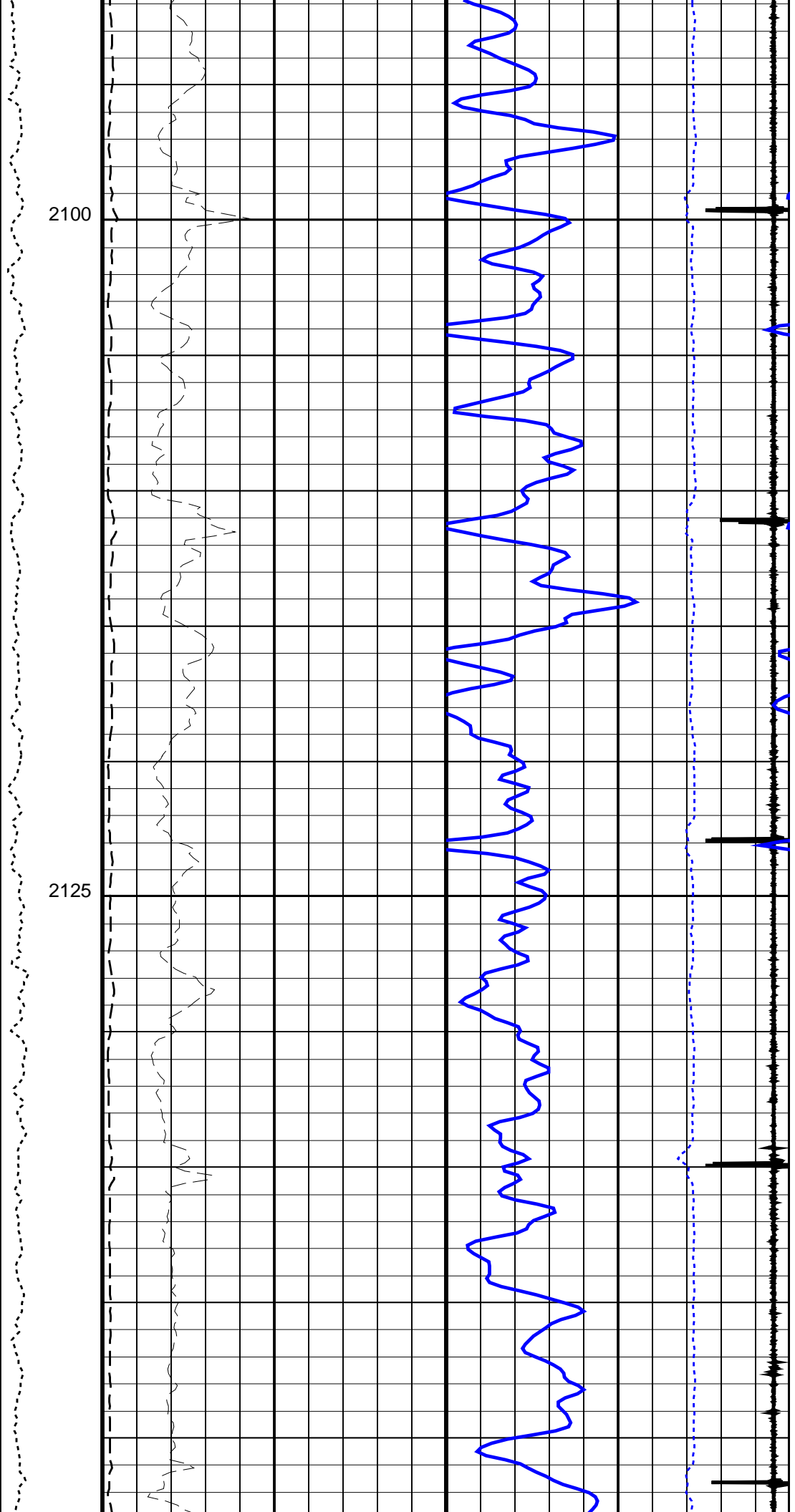
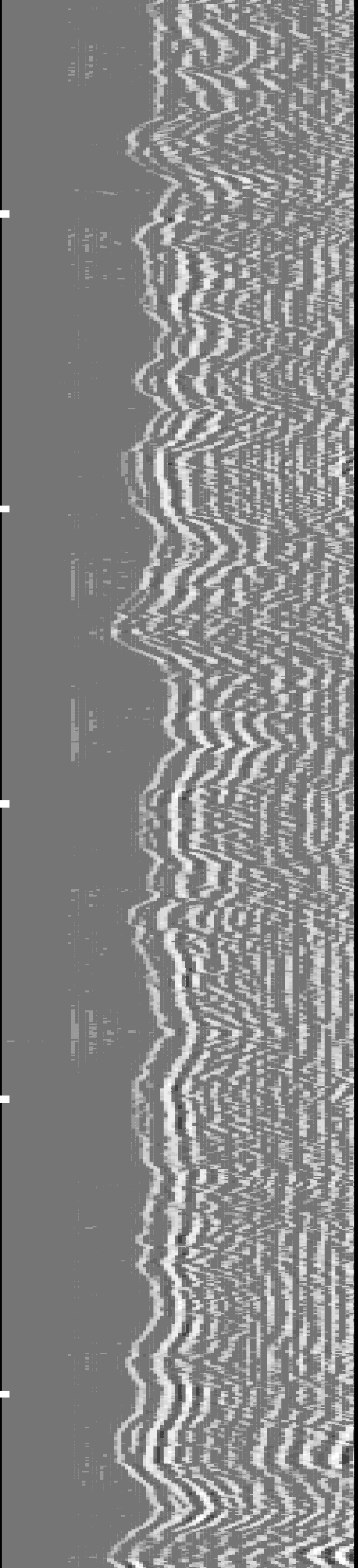


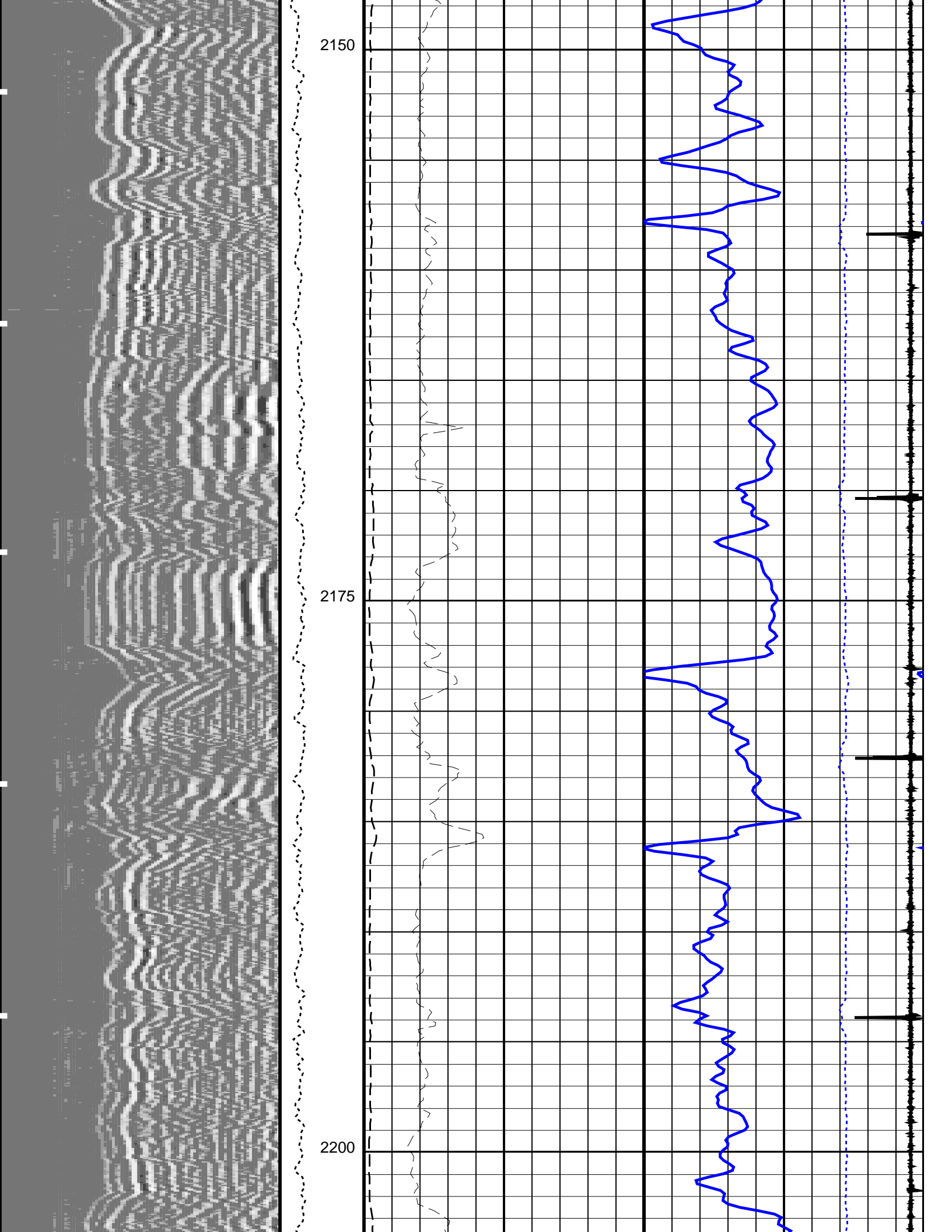


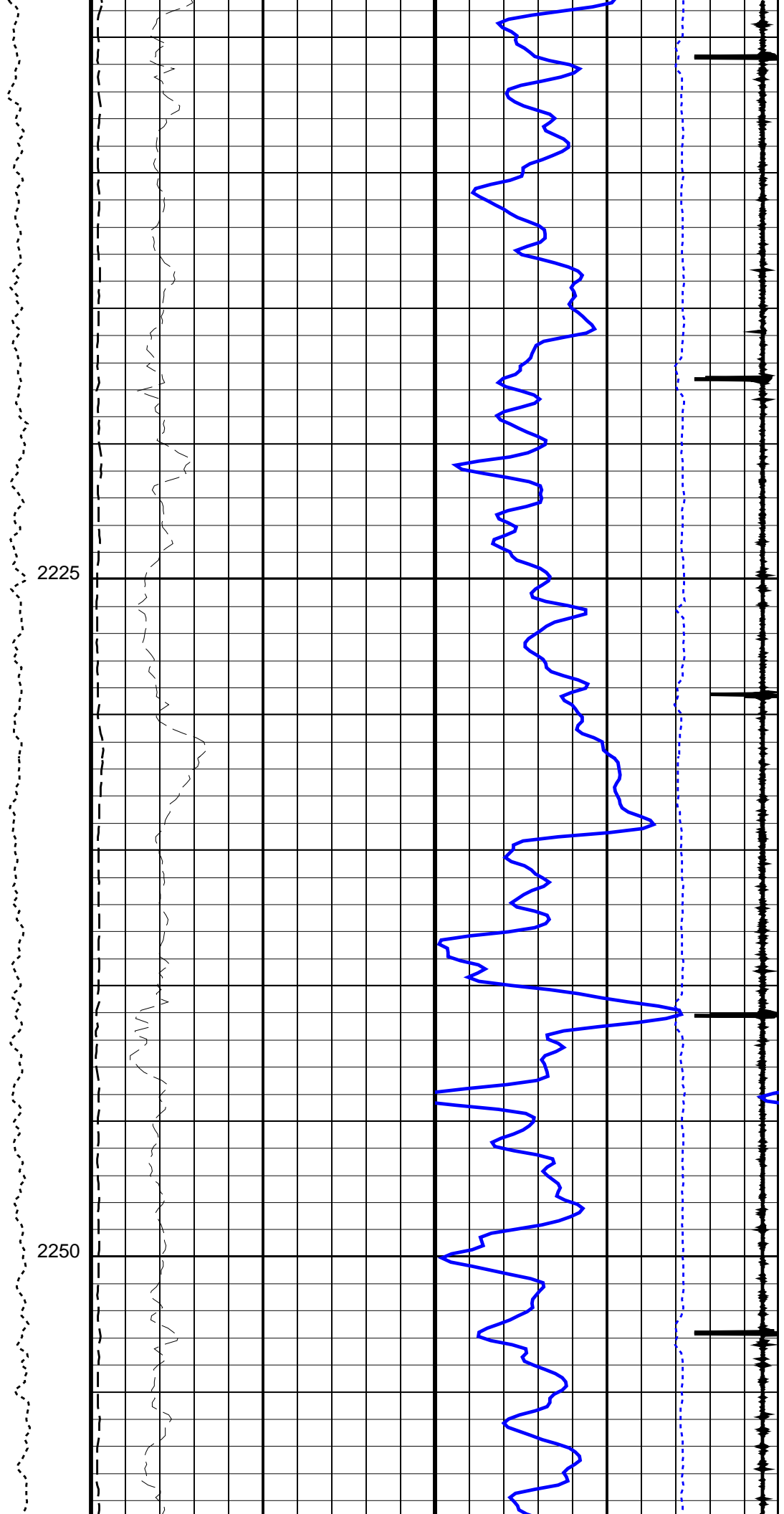
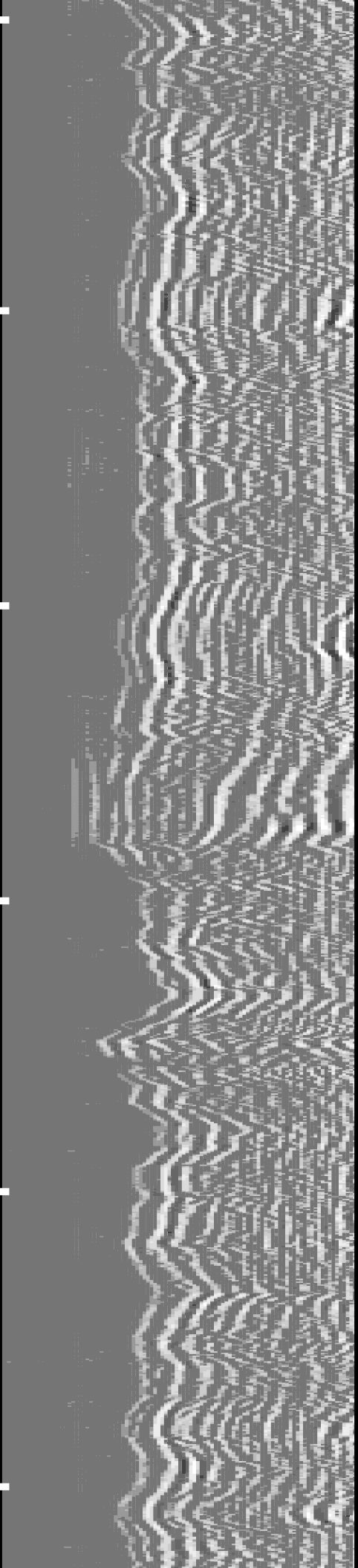


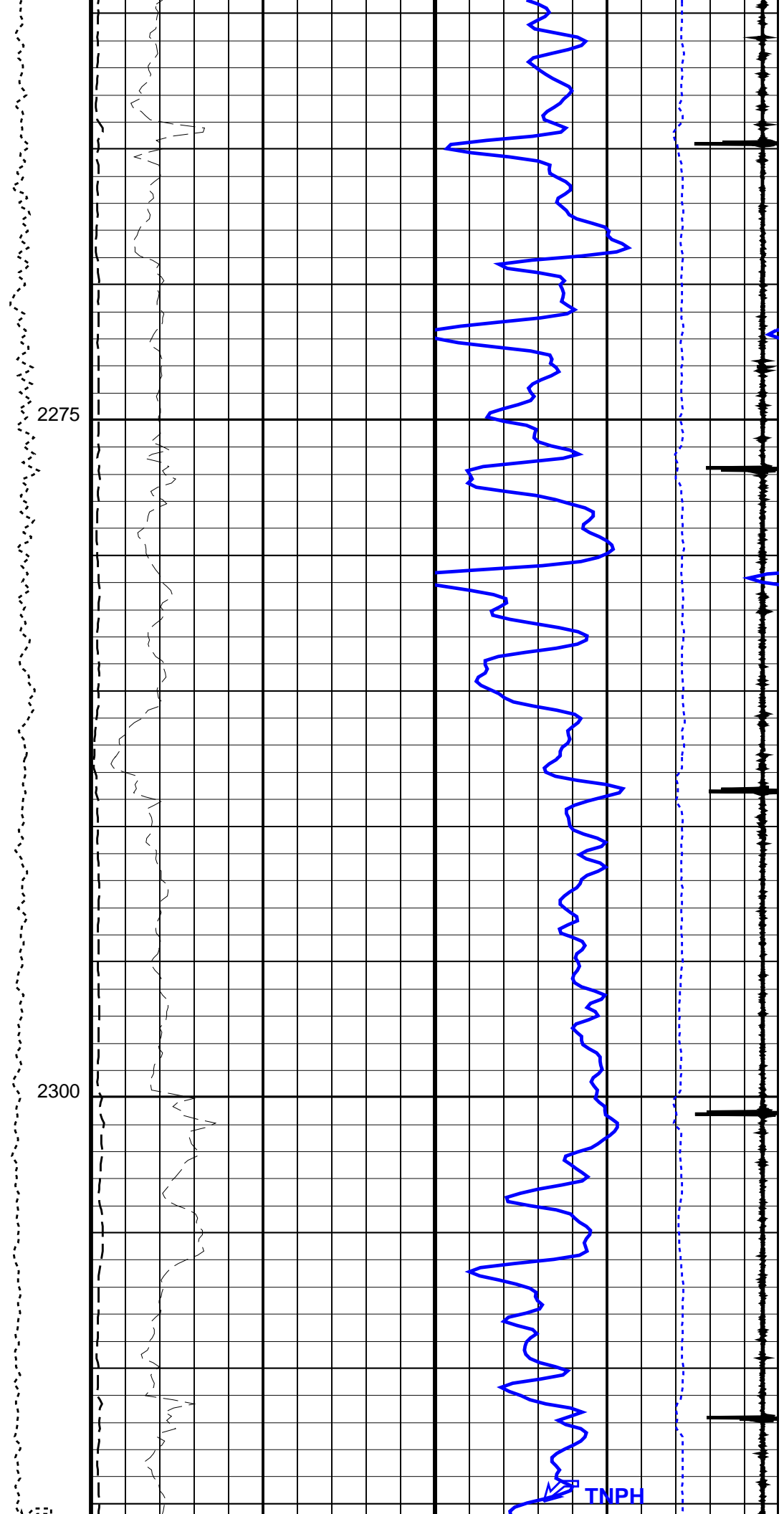
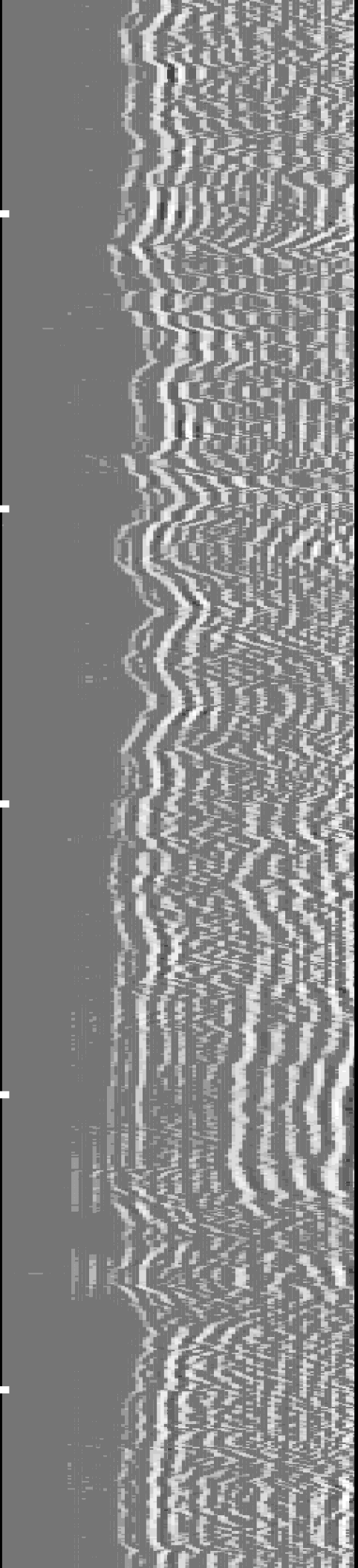


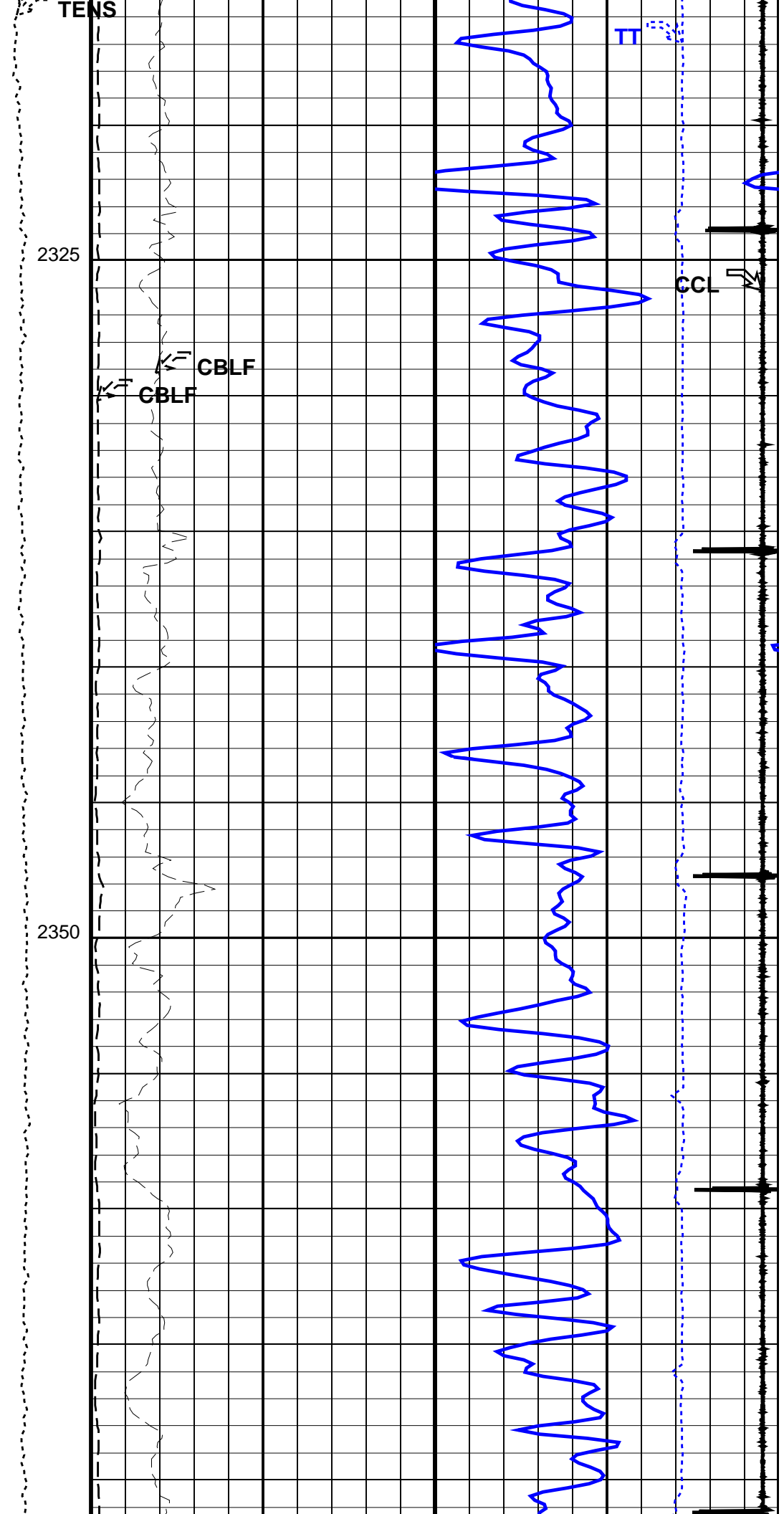
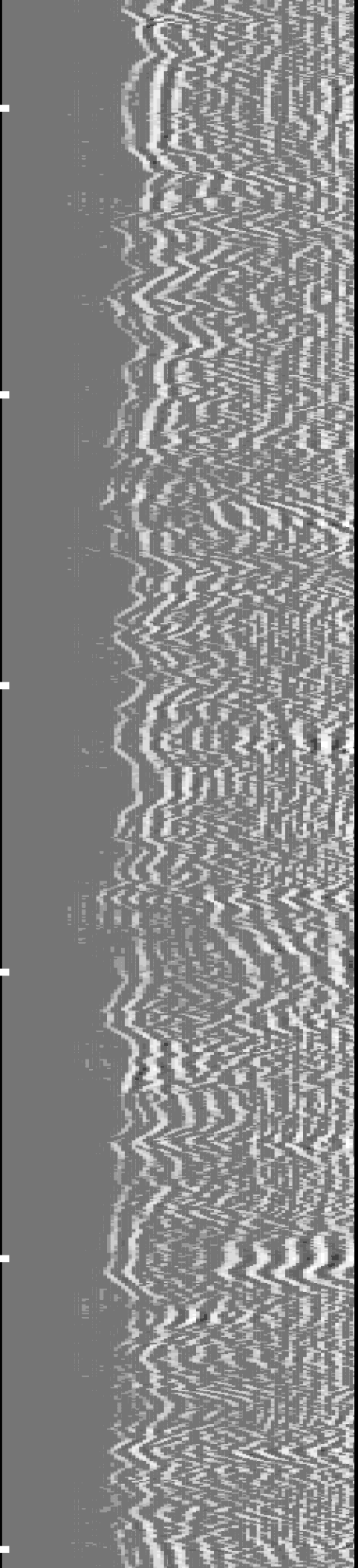


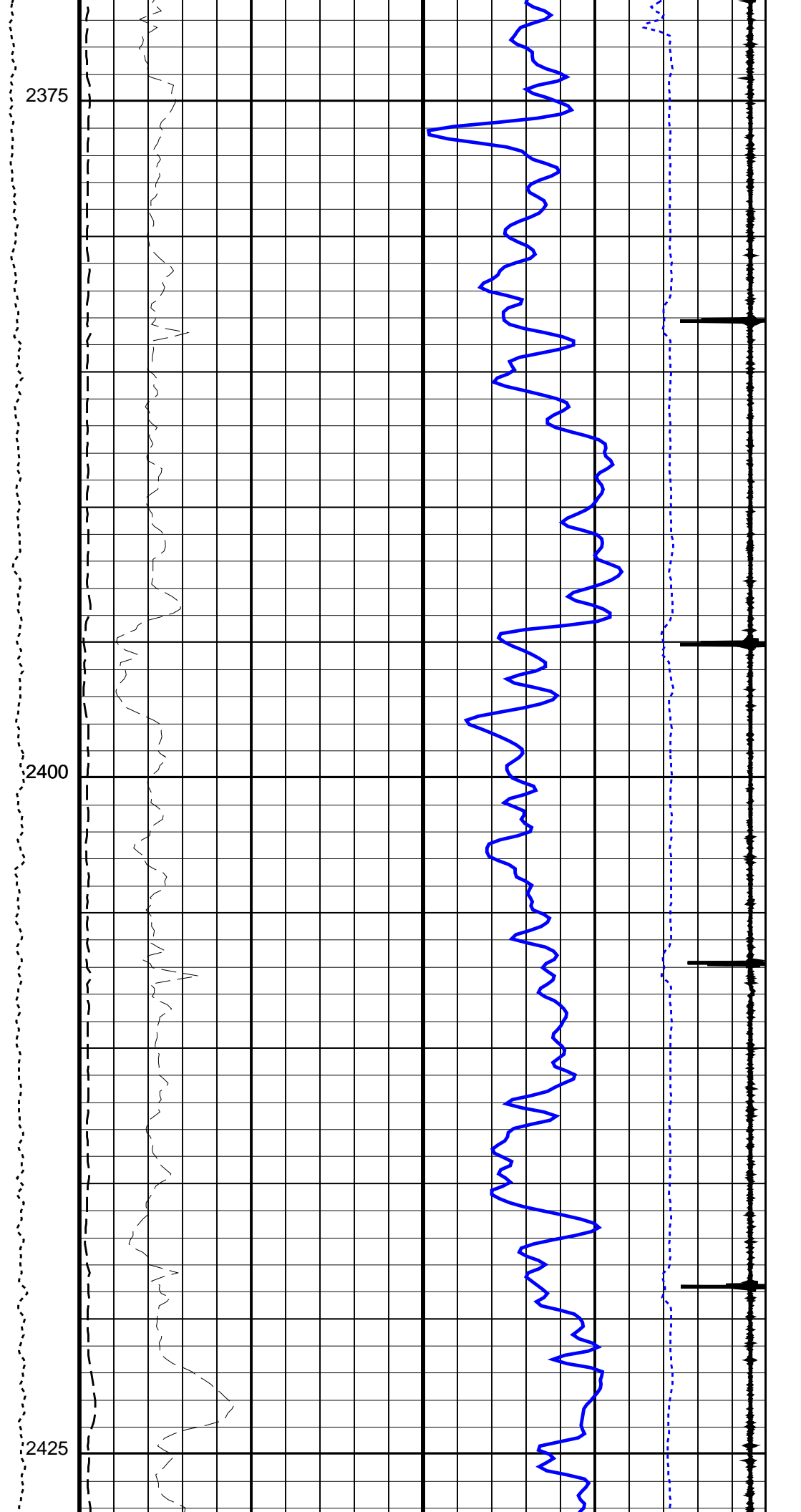
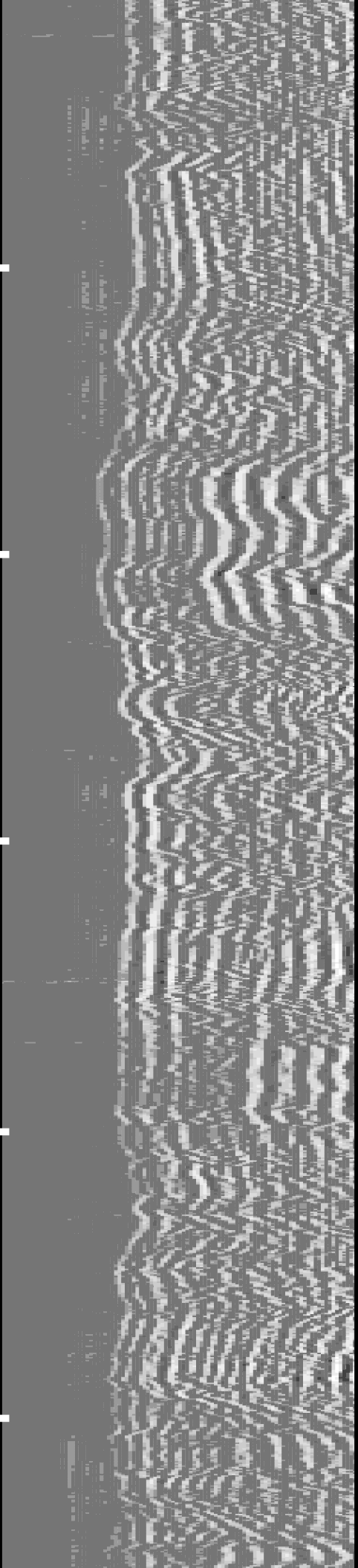


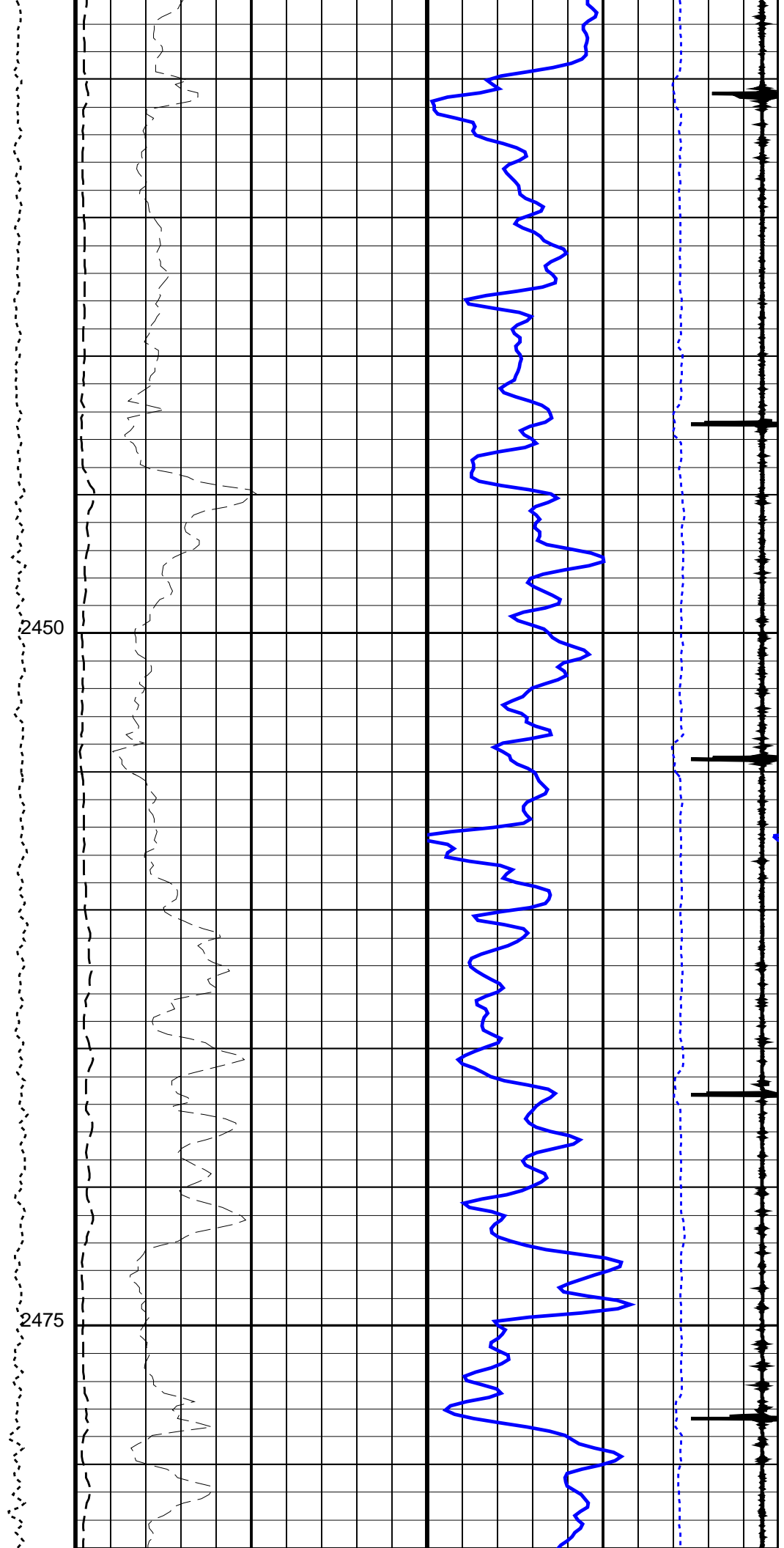
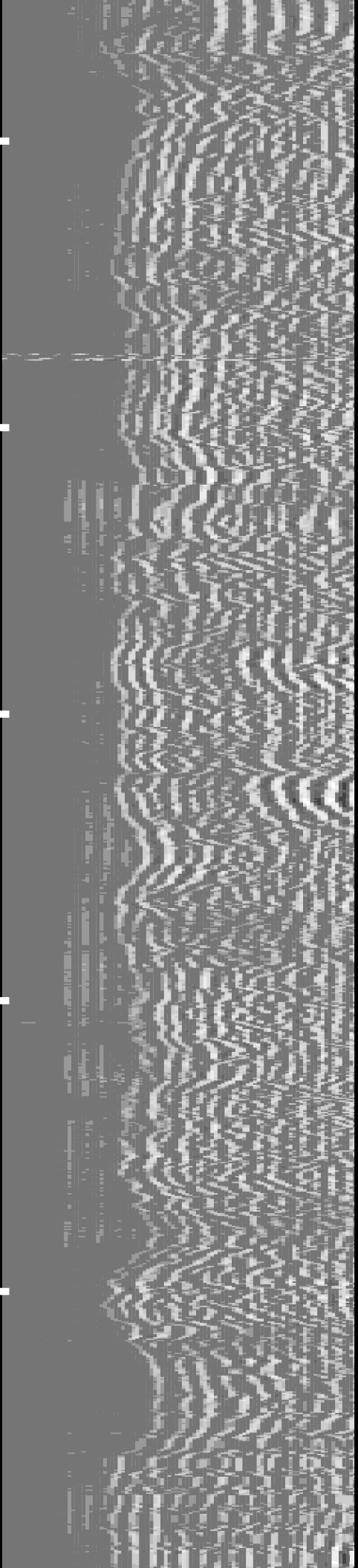


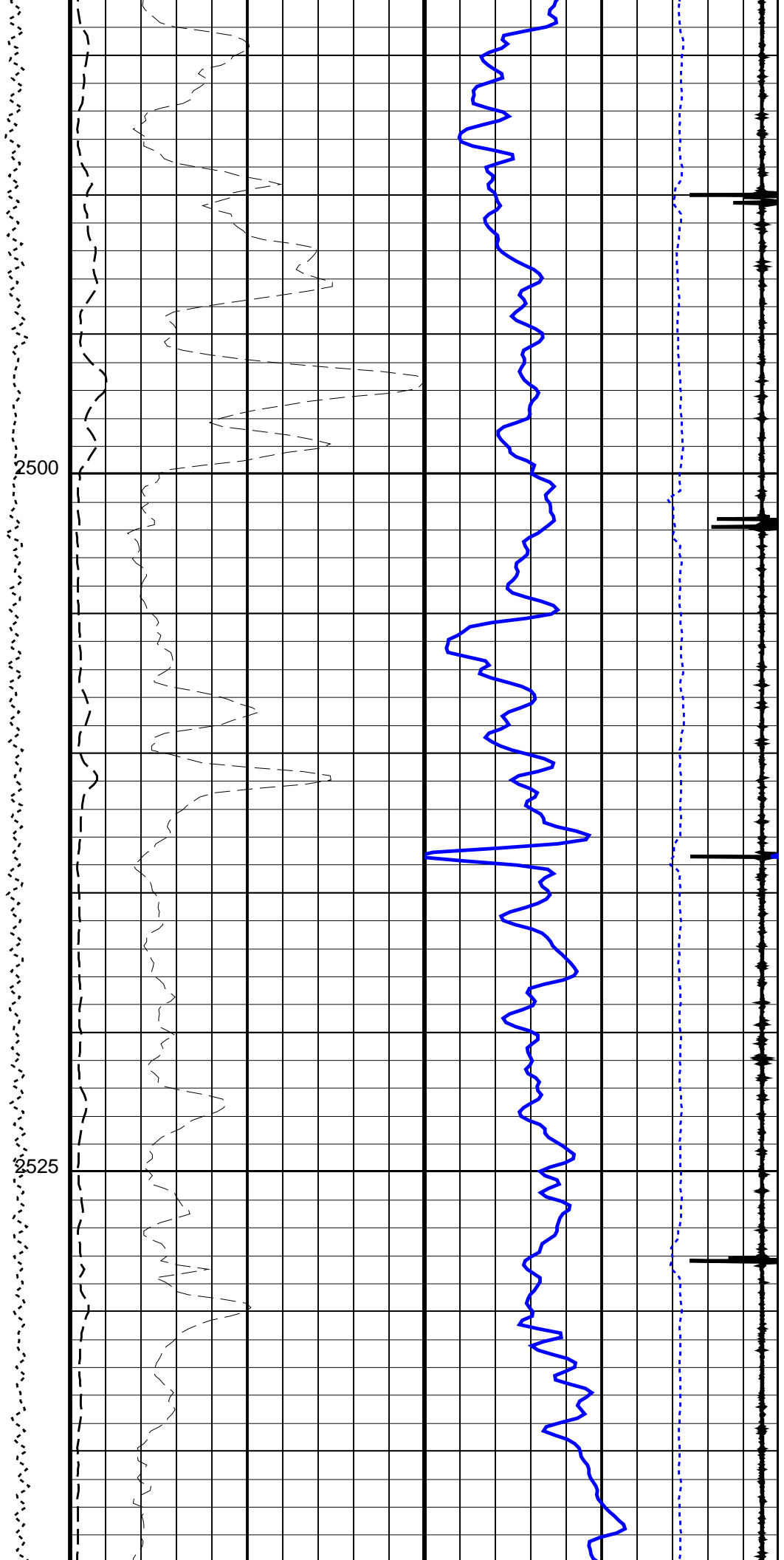
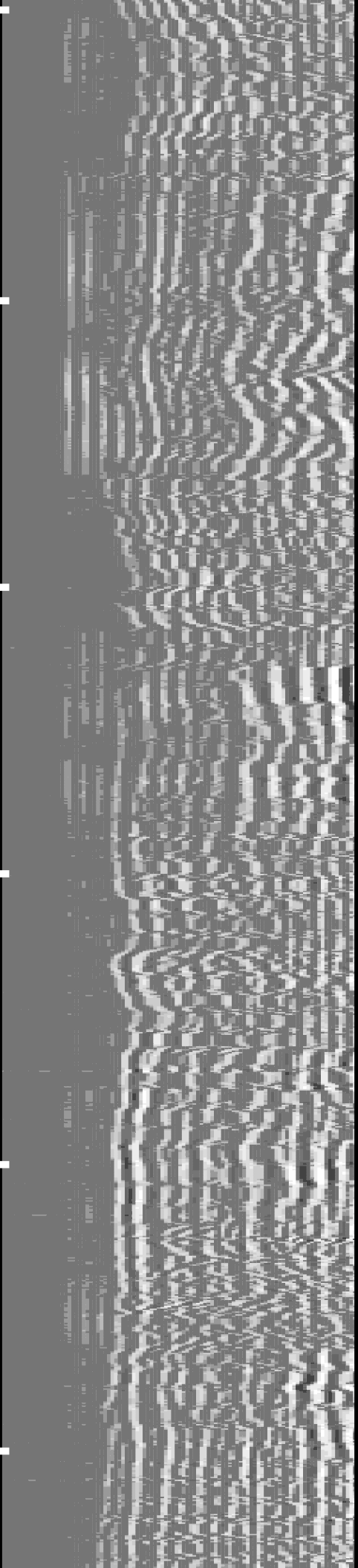


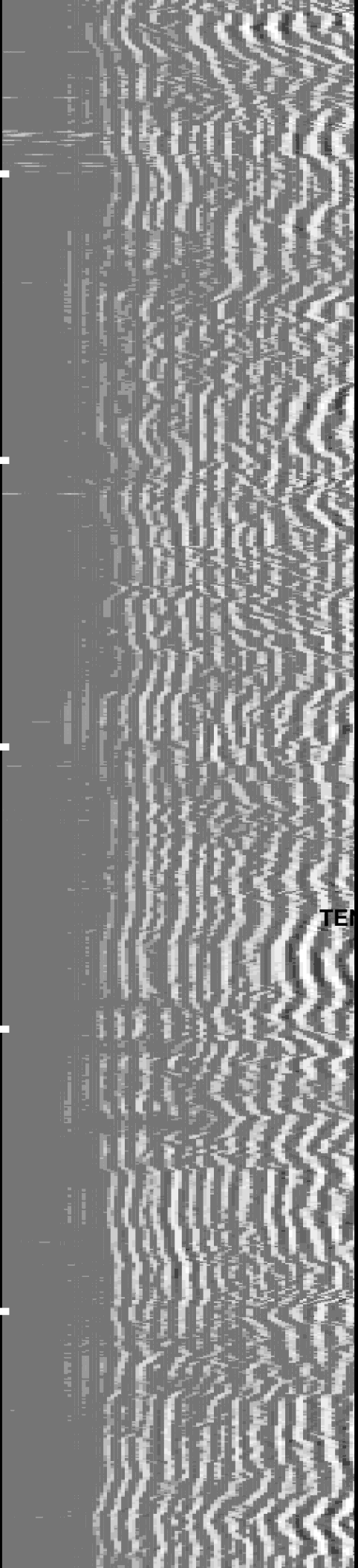








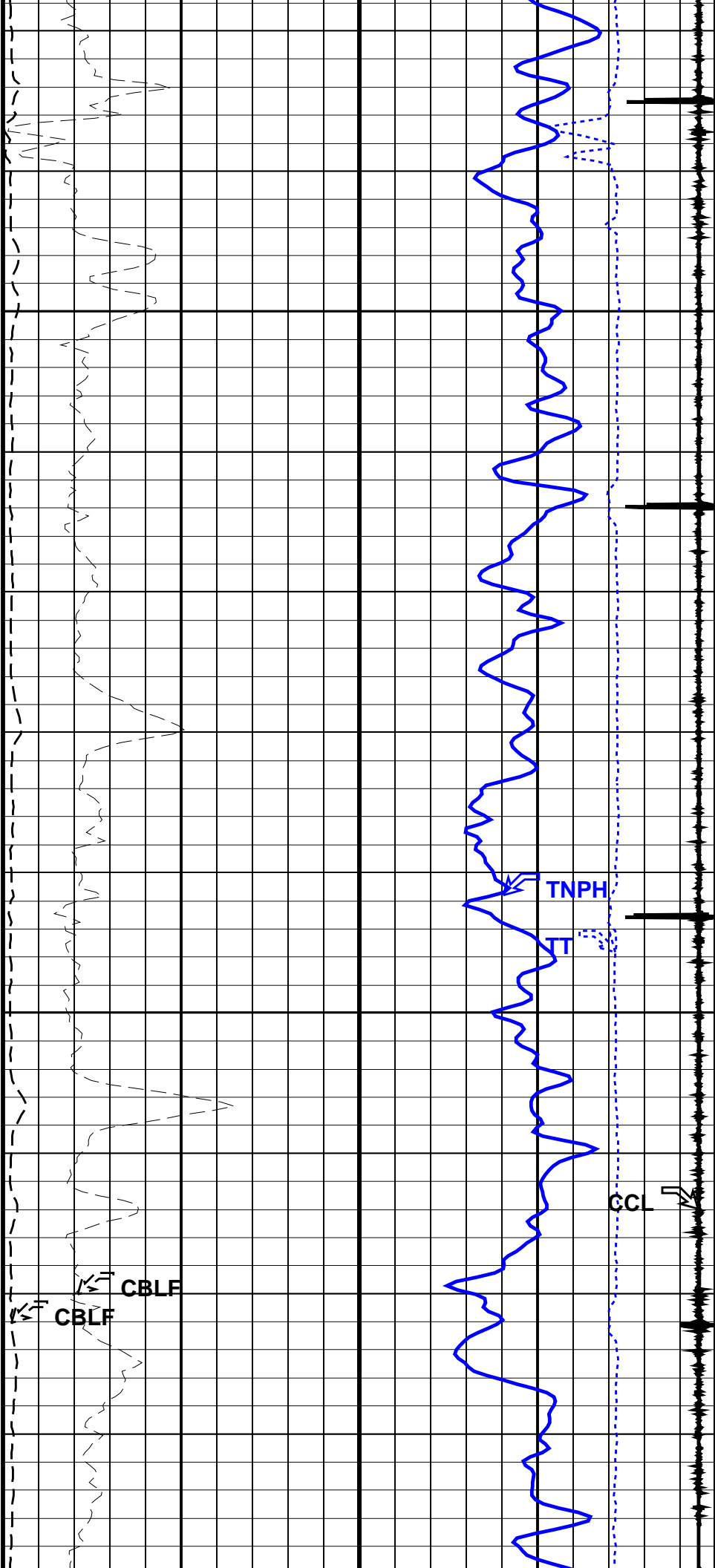


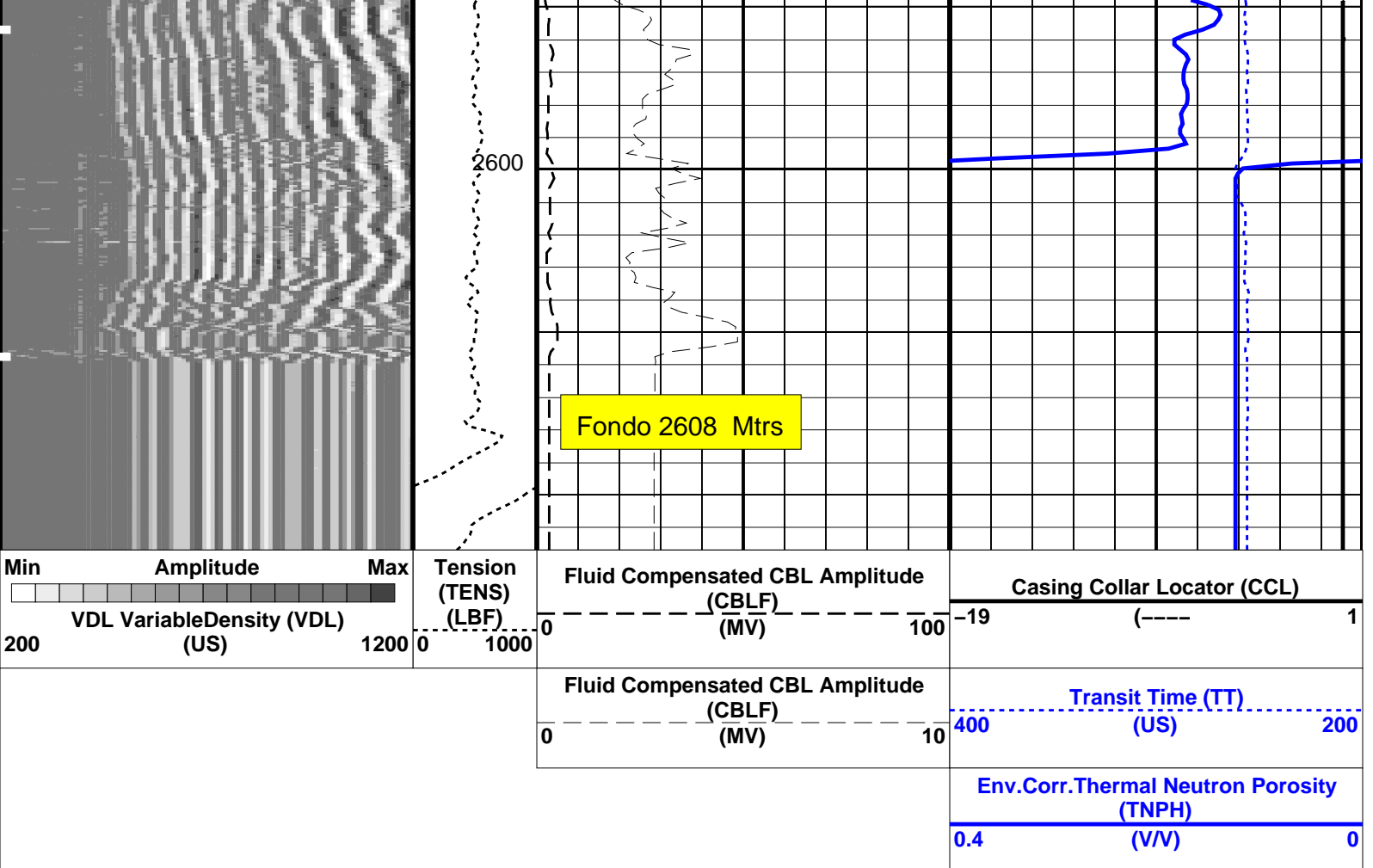


TENS

2550

2575





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
SDT-C: Sonic Digital - C		
AGC	Automatic Gain Control	ON
AMSG	Auxilliary Minimum Sliding Gate	140 US
ASGL	Auxilliary Minimum Sliding Gate Width	100 US
BILI	Bond Index Level for Zone Isolation	0.8
CBLG	CBL Gate Width	40 US
CDDEL	Digitizing Delay (Acq Monitor Checked)	200 US
CDSIN	Digitizer Sample Interval (Acq Monitor Checked)	DS10
CDSIN	C-Delta-T Shale	100 US/F
CDWCO	Digitizer Word Count (Acq Monitor Checked)	500
CRMOD	Receiver Mode (Acq Monitor Checked)	B
CSTR	Compressive Strength of Cement	13789.5 KPAA
CVDLM	VDL Firing Mode (Acq Monitor Checked)	UTFR
CWMOD	Waveform Firing Mode (Acq Monitor Checked)	NONE
DDE0	Digitizing Delay 0	200 US
DDEL	Digitizing Delay	200 US
DDMG	Downhole Differential Multi-Gain	10
DETE	Detection	E1
DSI0	Digitizer Sample Interval 0	10 US
DSIN	Digitizer Sample Interval	DS10
DTCM	Delta-T Computation Mode	FULL
DTF	Delta-T Fluid	189 US/F
DTM	Delta-T Matrix	56 US/F
DWCO	Digitizer Word Count 0	500
DWCO	Digitizer Word Count	500
FCF	CBL Fluid Compensation Factor	0.47
GAI	Manual Gain	40
GOBO	Good Bond	2 MV
ITTS	Integrated Transit Time Source	DT
MCI	Minimum Cemented Interval for Isolation	1.4478 M
MGAI	Maximum Gain	3500
MODE	Firing Mode	CBL
MSA	Minimum Sonic Amplitude	1.05764 MV
NMSG	Near Minimum Sliding Gate	248 US
RATE	Firing Rate	R15

RMOD	Receiver Mode	B	
SFAF	Sonic Formation Attenuation Factor	0	DB/M
SGAD	Sliding Gate	ON	
SGDT	Sliding Gate Delta-T	50	US/F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	MV
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SWW	Sonic Window Width	13	MS
T0CA	T0 Correction	ON	
TSIG	Test Signal	OFF	
VDLG	VDL Manual Gain	5	
VDLM	VDL Firing Mode	UTFR	
WAGC	Waveform AGC	ON	
WGAI	Waveform Manual Gain WGAI	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	4800	US
WMOD	Waveform Firing Mode	NONE	
CNT-H: Compensated Neutron - H			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	YES	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
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	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	15	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	12	IN
CCLT	CCL Detection Level	0.3	V
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	15.50	LB/F
DFD	Drilling Fluid Density	1.00	G/C3
DORL	Depth Offset for Repeat Analysis	0.0	M
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	-50000	M
TDD	Total Depth - Driller	-50000.00	M
TDL	Total Depth - Logger	-50000.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBL_Fluid_Compensated Vertical Scale: 1:200 Graphics File Created: 02-Apr-2005 16:03

OP System Version: 11C0-305

MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

Output DLIS Files

DEFAULT	SONIC_CNL_006LUP	FN:5	PRODUCER 02-Apr-2005 16:03
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TRAMO REPETIDO

Company: YPF S.A.

Well: YPF.Ch.EN-625

Output DLIS Files

DEFAULT SONIC_CNL_008LUP FN:7 PRODUCER 02-Apr-2005 18:23

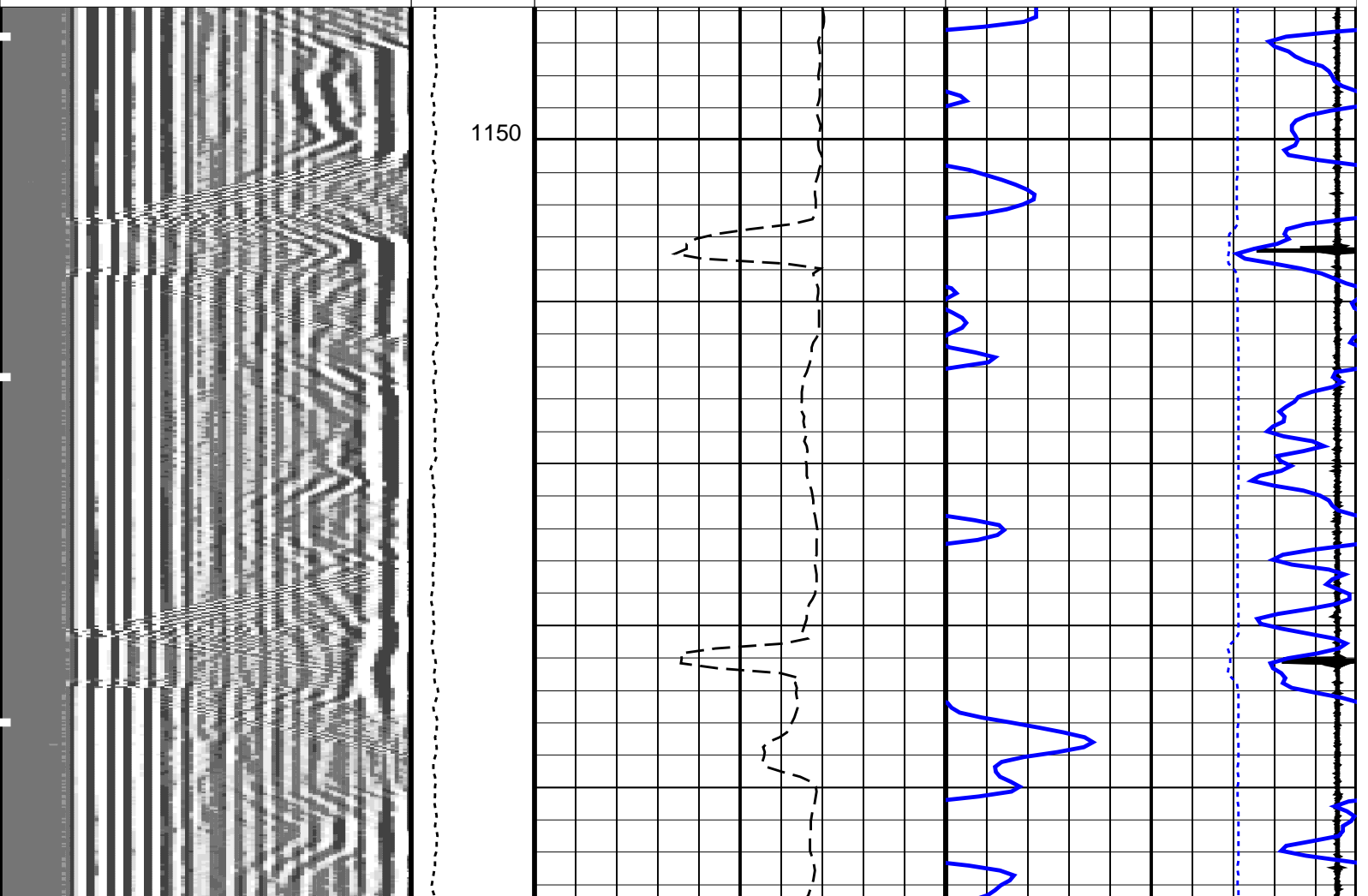
OP System Version: 11C0-305 MCM

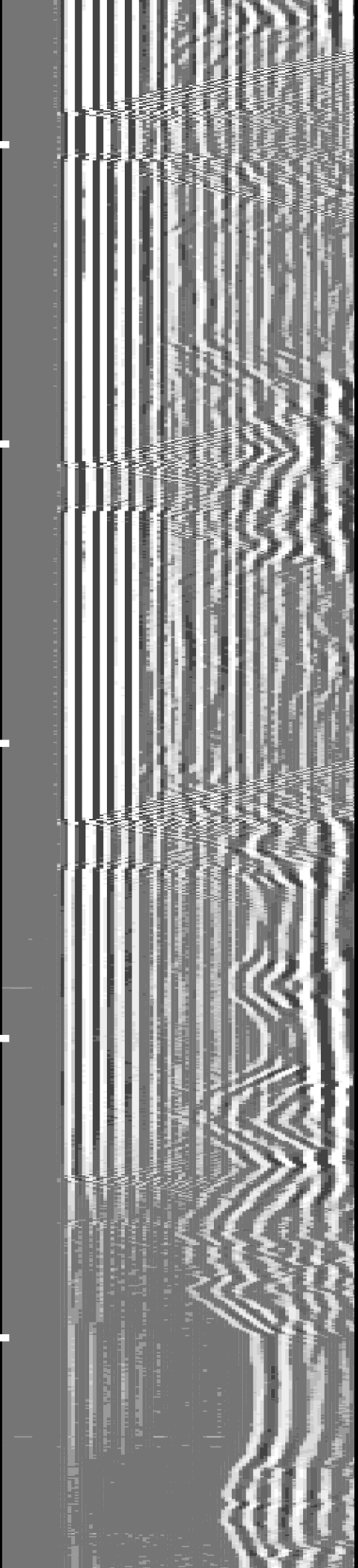
SDT-C 11C0-305 CNT-H OP11-KP1
TCC-B OP11-KP1 CAL-Y 11C0-305

PIP SUMMARY

Time Mark Every 60 S

		Env.Corr.Thermal Neutron Porosity (TNP) (V/V)		0.4	0
		Fluid Compensated CBL Amplitude (CBLF) (MV)		400	200
		Transit Time (TT) (US)			
Min	Amplitude	Max	Tension (TENS) (LBF)		
200	VDL VariableDensity (VDL) (US)	1200	0	1000	1000
		Fluid Compensated CBL Amplitude (CBLF) (MV)		-19	1
		Casing Collar Locator (CCL)			





1175

TENS

1200

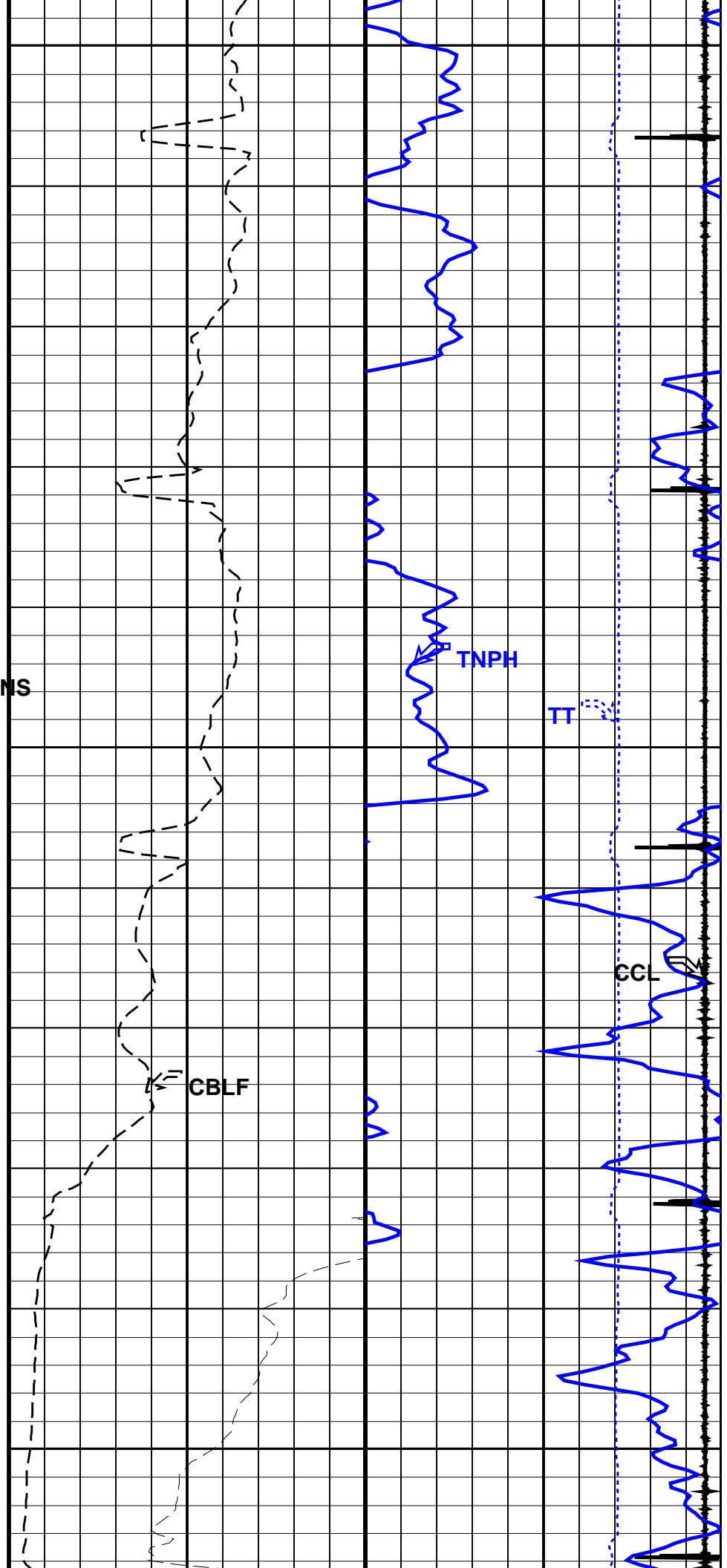
CBLF

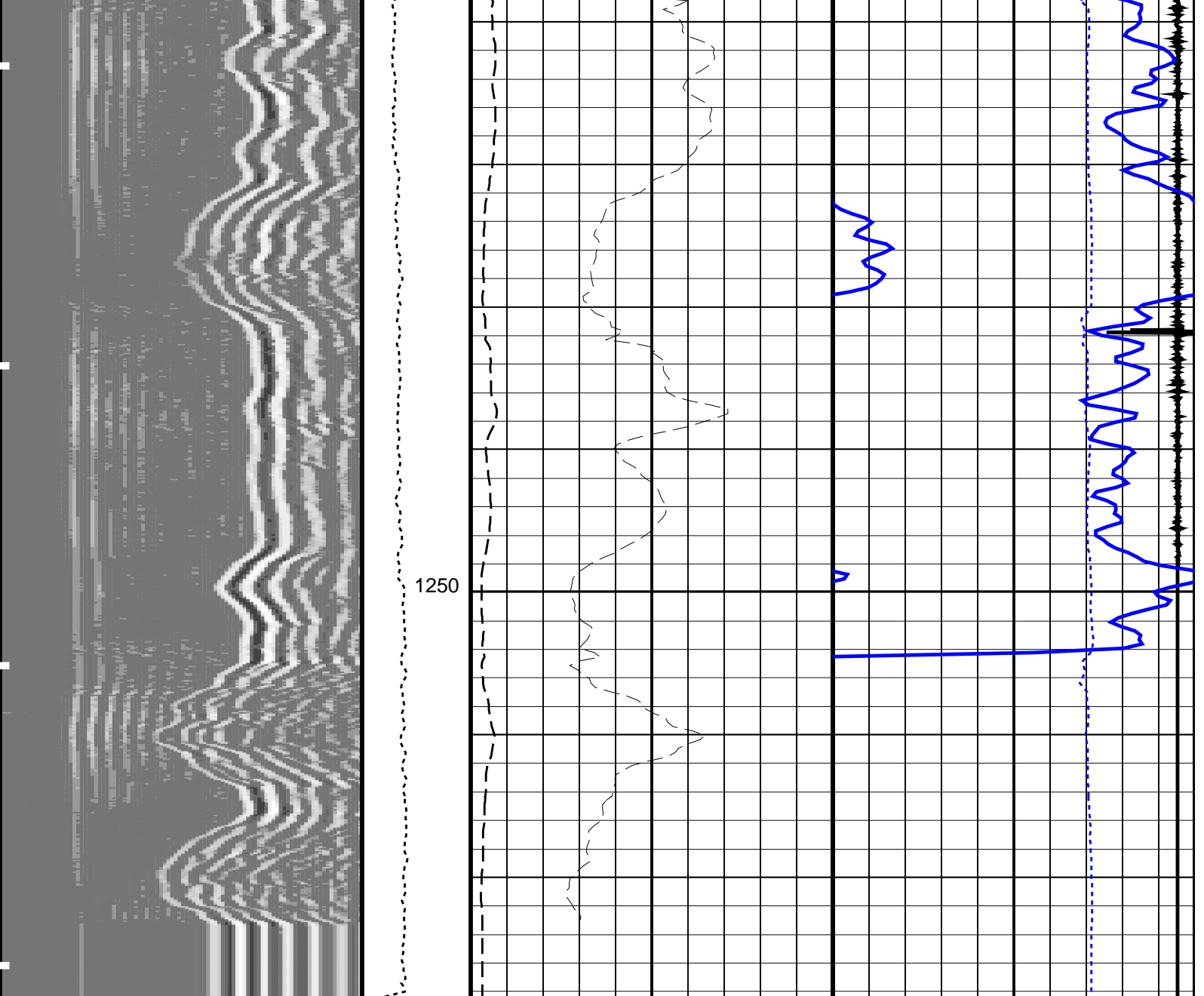
TNPH

TT

CCL

1225





Min	Amplitude	Max	Tension (TENS) (LBF)	Fluid Compensated CBL Amplitude (CBLF) (MV)	Casing Collar Locator (CCL)
200	VDL Variable Density (VDL) (US)	1200	0 1000	0 100	-19 (----) 1
				Fluid Compensated CBL Amplitude (CBLF) (MV)	Transit Time (TT) (US)
				0 10	400 (US) 200
					Env. Corr. Thermal Neutron Porosity (TNPH) (V/V)
					0.4 (V/V) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
SDT-C: Sonic Digital - C		
AGC	Automatic Gain Control	ON
AMSG	Auxilliary Minimum Sliding Gate	140 US
ASGL	Auxilliary Minimum Sliding Gate Width	100 US
BILI	Bond Index Level for Zone Isolation	0.8
CBLG	CBL Gate Width	40 US
CDDEL	Digitizing Delay (Acq Monitor Checked)	200 US
CDSIN	Digitizer Sample Interval (Acq Monitor Checked)	DS10

CDS	C-Delta-T Shale	500	US/F
CDWCO	Digitizer Word Count (Acq Monitor Checked)	500	
CRMOD	Receiver Mode (Acq Monitor Checked)	B	
CSTR	Compressive Strength of Cement	13789.5	KPAA
CVDLM	VDL Firing Mode (Acq Monitor Checked)	UTFR	
CWMOD	Waveform Firing Mode (Acq Monitor Checked)	NONE	
DDE0	Digitizing Delay 0	200	US
DDEL	Digitizing Delay	200	US
DDMG	Downhole Differential Multi-Gain	10	
DETE	Detection	E1	
DSI0	Digitizer Sample Interval 0	10	US
DSIN	Digitizer Sample Interval	DS10	
DTCM	Delta-T Computation Mode	FULL	
DTF	Delta-T Fluid	189	US/F
DTM	Delta-T Matrix	56	US/F
DWCO	Digitizer Word Count 0	500	
DWCO	Digitizer Word Count	500	
FCF	CBL Fluid Compensation Factor	0.47	
GAI	Manual Gain	40	
GOBO	Good Bond	2	MV
ITTS	Integrated Transit Time Source	DT	
MCI	Minimum Cemented Interval for Isolation	1.4478	M
MGAI	Maximum Gain	3500	
MODE	Firing Mode	CBL	
MSA	Minimum Sonic Amplitude	1.05764	MV
NMSG	Near Minimum Sliding Gate	248	US
RATE	Firing Rate	R15	
RMOD	Receiver Mode	B	
SFAF	Sonic Formation Attenuation Factor	0	DB/M
SGAD	Sliding Gate	ON	
SGDT	Sliding Gate Delta-T	50	US/F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	MV
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SWW	Sonic Window Width	13	MS
T0CA	T0 Correction	ON	
TSIG	Test Signal	OFF	
VDLG	VDL Manual Gain	5	
VDLM	VDL Firing Mode	UTFR	
WAGC	Waveform AGC	ON	
WGAI	Waveform Manual Gain WGAI	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	4800	US
WMOD	Waveform Firing Mode	NONE	
CNT-H: Compensated Neutron - H			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	YES	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
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	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	15	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	12	IN
CCLT	CCL Detection Level	0.3	V
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	15.50	LB/F
DFD	Drilling Fluid Density	1.00	G/C3
DORL	Depth Offset for Repeat Analysis	0.0	M
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	50000	M

TDD	Total Depth	-50000	M
TDL	Total Depth - Driller	2792.00	M
TWS	Total Depth - Logger	2608.00	M
	Temperature of Connate Water Sample	37.78	DEGC

Format: CBL_Fluid_Compensated Vertical Scale: 1:200 Graphics File Created: 02-Apr-2005 18:23

OP System Version: 11C0-305

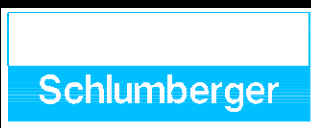
MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

Output DLIS Files

DEFAULT	SONIC_CNL_008LUP	FN:7	PRODUCER 02-Apr-2005 18:23
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MAXIS EXPRESS



ANALISIS DE REPETIBILIDAD

Company: YPF S.A. Well: YPF.Ch.EN-625

Input DLIS Files

DEFAULT	SONIC_CNL_006LUP	FN:5	PRODUCER 02-Apr-2005 16:03 2611.7 M 1150.0 M
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Output DLIS Files

DEFAULT	SONIC_CNL_008LUP	FN:7	PRODUCER 02-Apr-2005 18:23
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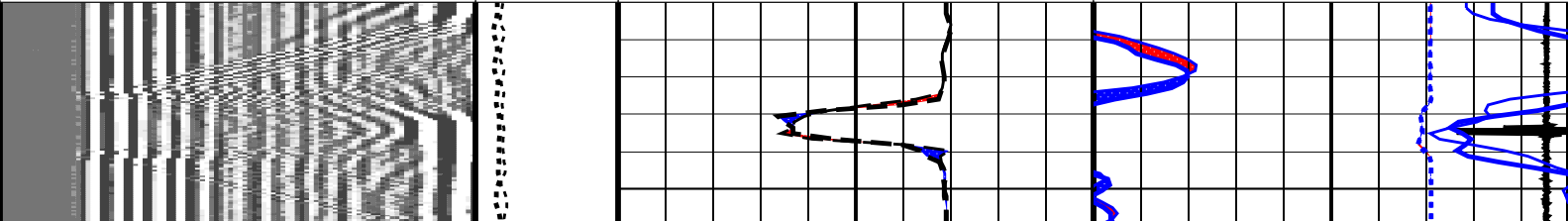
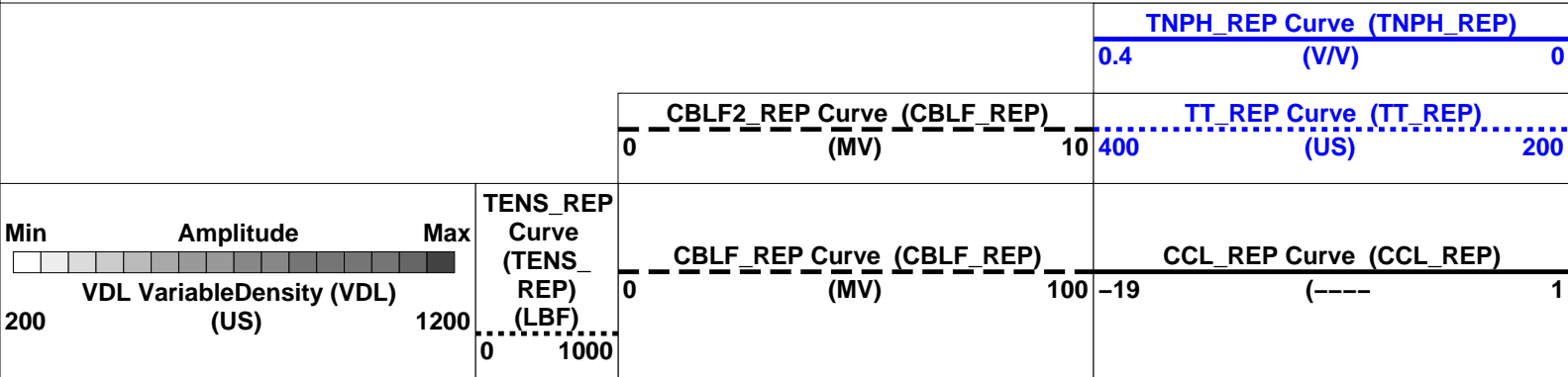
OP System Version: 11C0-305

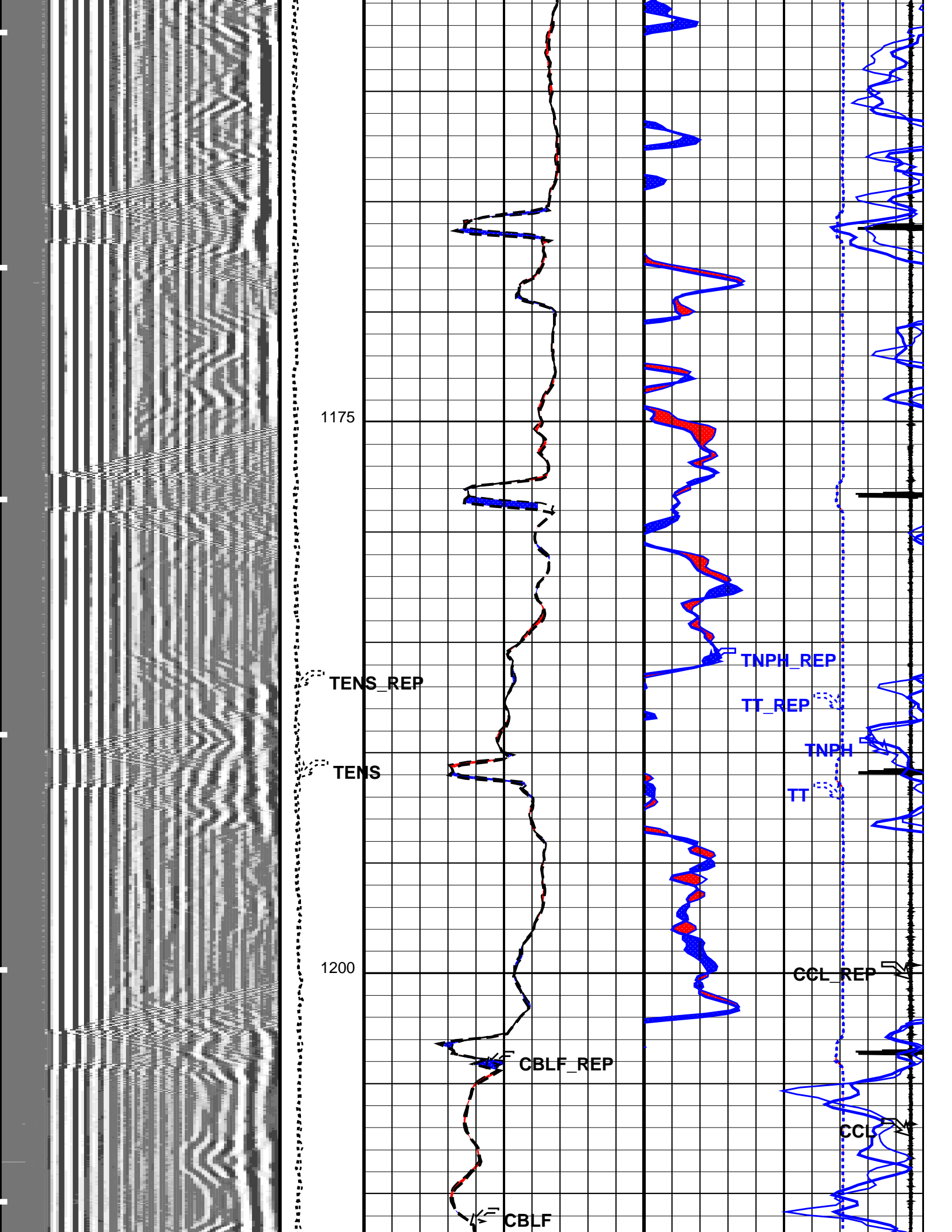
MCM

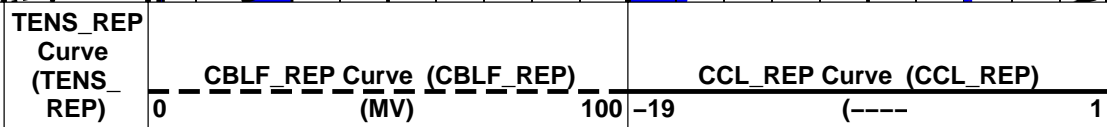
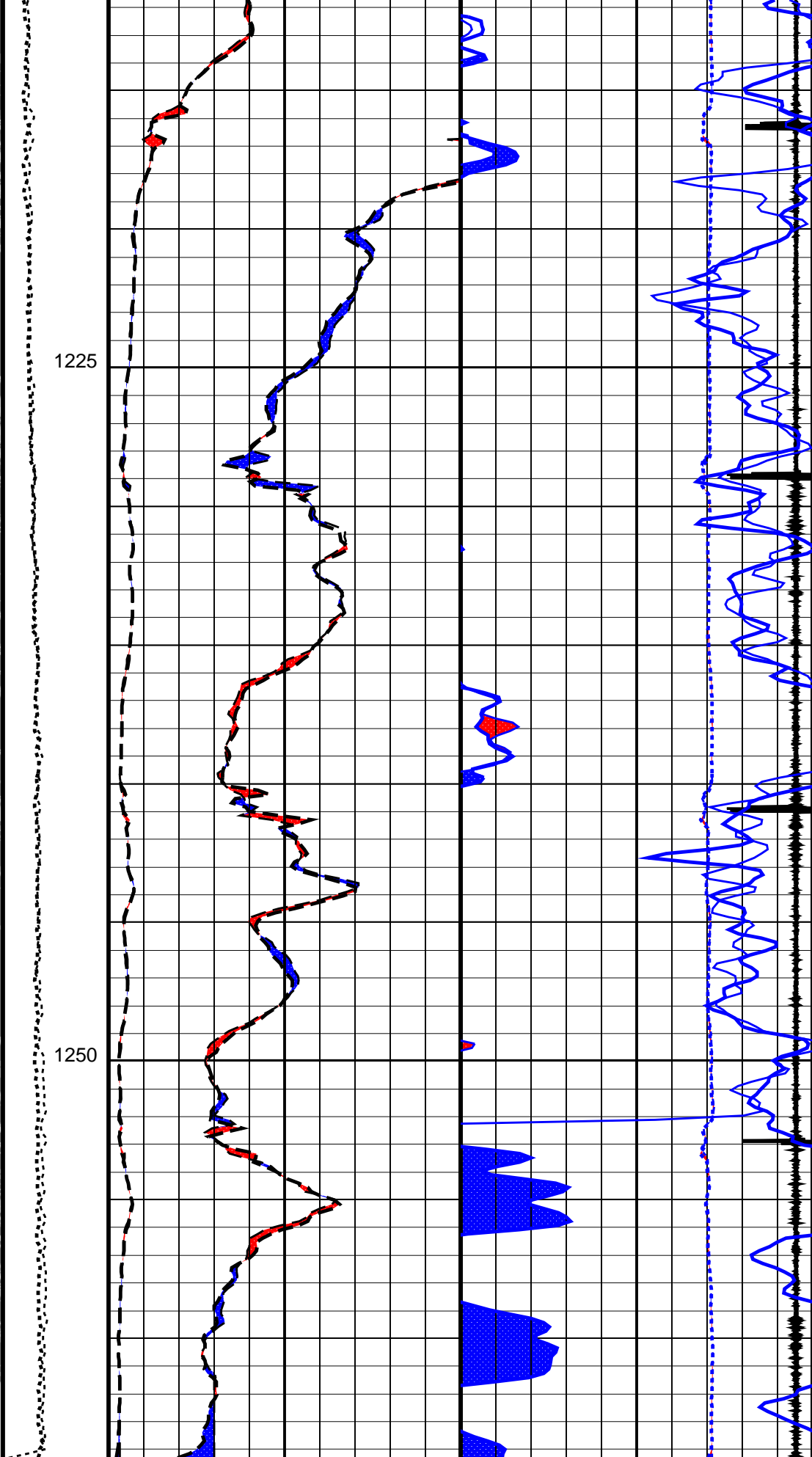
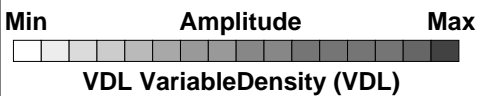
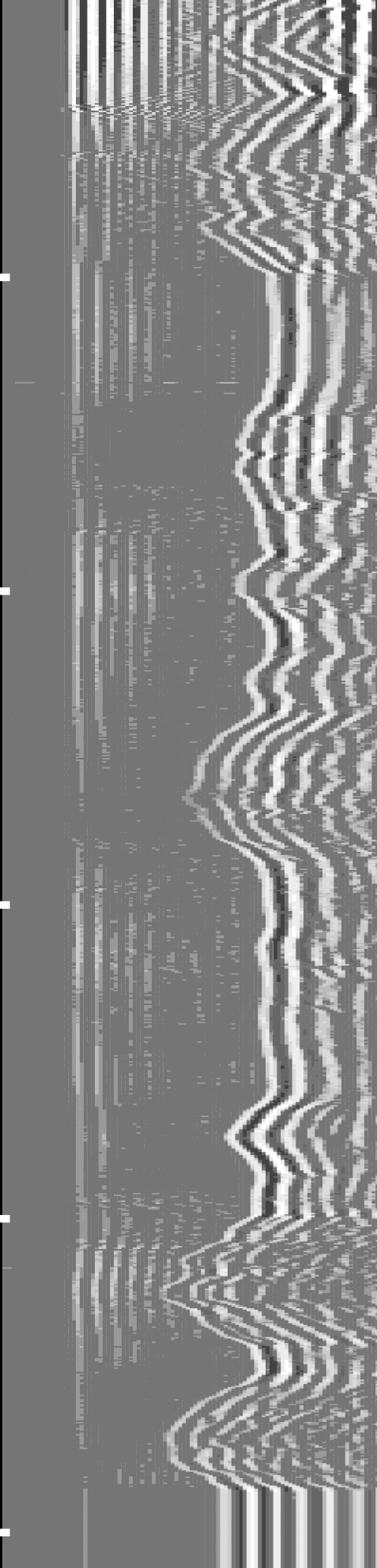
SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

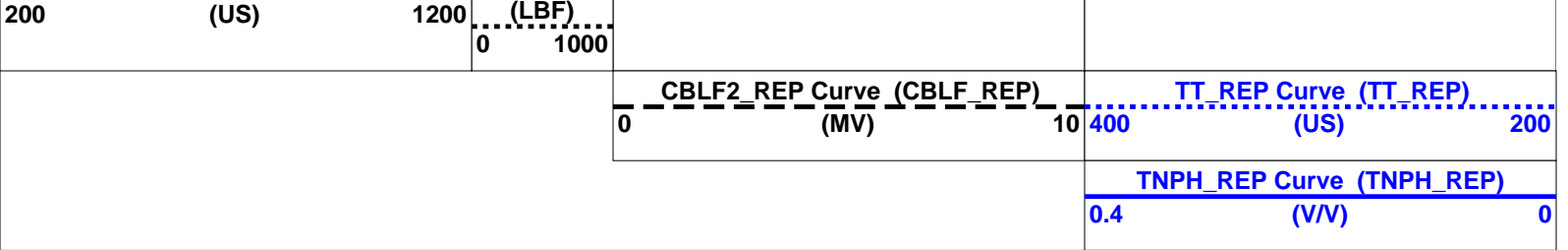
PIP SUMMARY

Time Mark Every 60 S









PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
SDT-C: Sonic Digital - C			
AGC	Automatic Gain Control	ON	
AMSG	Auxilliary Minimum Sliding Gate	140	US
ASGL	Auxilliary Minimum Sliding Gate Width	100	US
BILI	Bond Index Level for Zone Isolation	0.8	
CBLG	CBL Gate Width	40	US
CDDEL	Digitizing Delay (Acq Monitor Checked)	200	US
CDSIN	Digitizer Sample Interval (Acq Monitor Checked)	DS10	
CDTS	C-Delta-T Shale	100	US/F
CDWCO	Digitizer Word Count (Acq Monitor Checked)	500	
CRMOD	Receiver Mode (Acq Monitor Checked)	B	
CSTR	Compressive Strength of Cement	13789.5	KPAA
CVDLM	VDL Firing Mode (Acq Monitor Checked)	UTFR	
CWMOD	Waveform Firing Mode (Acq Monitor Checked)	NONE	
DDE0	Digitizing Delay 0	200	US
DDEL	Digitizing Delay	200	US
DDMG	Downhole Differential Multi-Gain	10	
DETE	Detection	E1	
DSI0	Digitizer Sample Interval 0	10	US
DSIN	Digitizer Sample Interval	DS10	
DTCM	Delta-T Computation Mode	FULL	
DTF	Delta-T Fluid	189	US/F
DTM	Delta-T Matrix	56	US/F
DWCO	Digitizer Word Count 0	500	
DWCO	Digitizer Word Count	500	
FCF	CBL Fluid Compensation Factor	0.47	
GAI	Manual Gain	40	
GOBO	Good Bond	2	MV
ITTS	Integrated Transit Time Source	DT	
MCI	Minimum Cemented Interval for Isolation	1.4478	M
MGAI	Maximum Gain	3500	
MODE	Firing Mode	CBL	
MSA	Minimum Sonic Amplitude	1.05764	MV
NMSG	Near Minimum Sliding Gate	248	US
RATE	Firing Rate	R15	
RMOD	Receiver Mode	B	
SFAF	Sonic Formation Attenuation Factor	0	DB/M
SGAD	Sliding Gate	ON	
SGDT	Sliding Gate Delta-T	50	US/F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	MV
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SWW	Sonic Window Width	13	MS
T0CA	T0 Correction	ON	
TSIG	Test Signal	OFF	
VDLG	VDL Manual Gain	5	
VDLM	VDL Firing Mode	UTFR	
WAGC	Waveform AGC	ON	
WGAI	Waveform Manual Gain WGAI	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	4800	US
WMOD	Waveform Firing Mode	NONE	
CNT-H: Compensated Neutron - H			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	YES	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRGD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART GEN 9	

ORSE	Generalized mud Resistivity Selection	LINEAR_ESTIMATE	YES	
GTSE	Hole Size Correction Option		SANDSTONE	
HSCO	Rock Matrix for Neutron Porosity Corrections		NO	
MATR	Mud Cake Correction Option		NATU	
MCCO	Mud Correction		NO	
MCOR	Mud Weight Correction Option		NO	
MWCO	Pressure/Temperature Correction Option		NO	
PTCO	Standoff Data Source	SOCN		
SDAT	Surface Hole Temperature		15	DEGC
SHT	Standoff Distance		0.5	IN
SOCN	Standoff Correction Option		NO	
SOCO	CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay		12	IN
CCLT	CCL Detection Level		0.3	V
System and Miscellaneous				
ALTDPC	Name of alternate depth channel	SpeedCorrectedDepth		
BS	Bit Size		8.500	IN
BSAL	Borehole Salinity		-50000.00	PPM
CSIZ	Current Casing Size		5.500	IN
CWEI	Casing Weight		15.50	LB/F
DFD	Drilling Fluid Density		1.00	G/C3
DORL	Depth Offset for Repeat Analysis		0.0	M
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		-50000	M
TDD	Total Depth - Driller		2792.00	M
TDL	Total Depth - Logger		2608.00	M
TWS	Temperature of Connate Water Sample		37.78	DEGC

Format: CBL_Fluid_Compensated_REP Vertical Scale: 1:200 Graphics File Created: 02-Apr-2005 18:23

OP System Version: 11C0-305
MCM

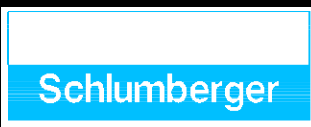
SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

Input DLIS Files

DEFAULT	SONIC_CNL_006LUP	FN:5	PRODUCER	02-Apr-2005 16:03	2611.7 M	1150.0 M
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Output DLIS Files

DEFAULT	SONIC_CNL_008LUP	FN:7	PRODUCER	02-Apr-2005 18:23		
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TRAMO SIN CORRECCION DE PROFUNDIDAD

Company: _____ Well: _____

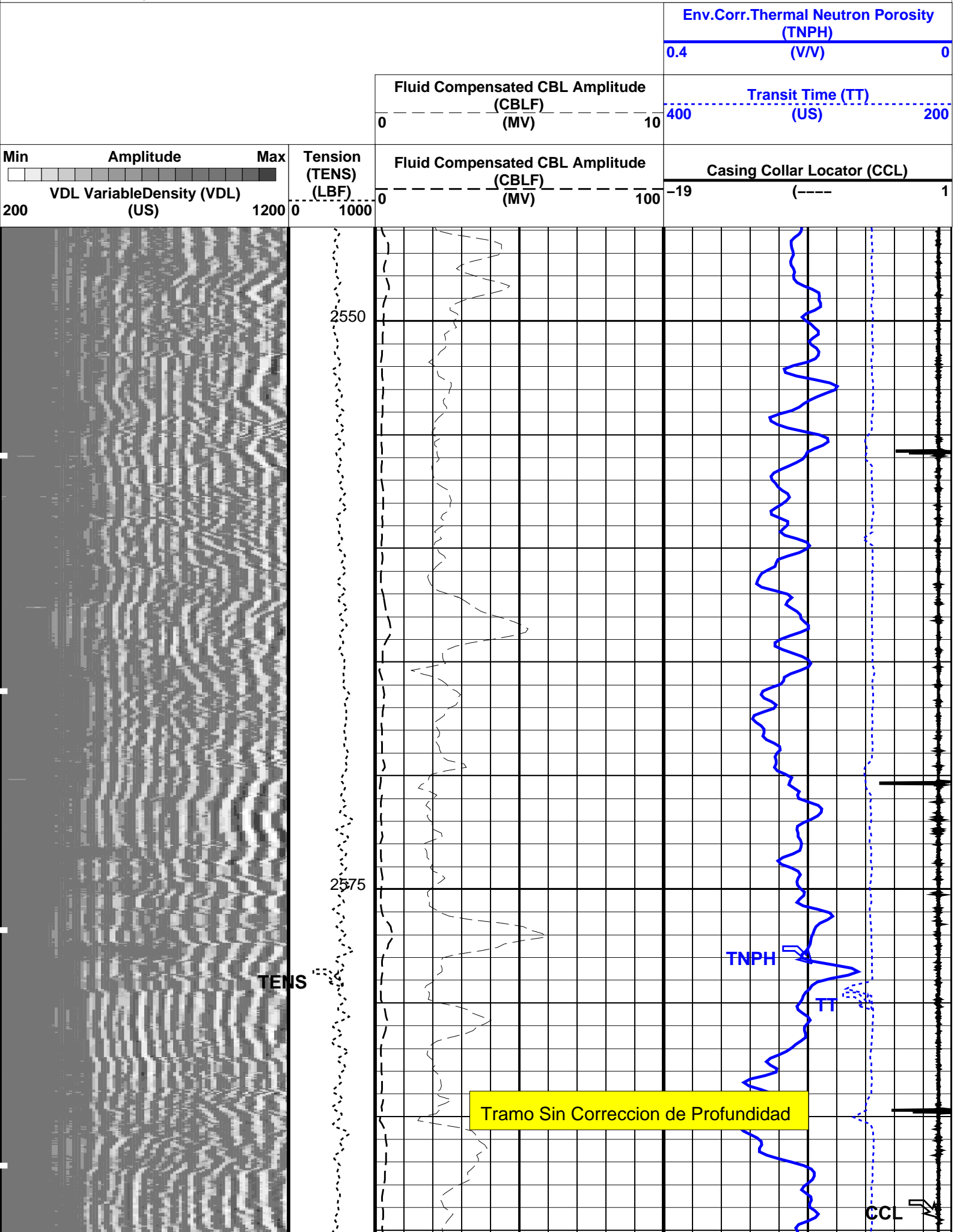
Output DLIS Files

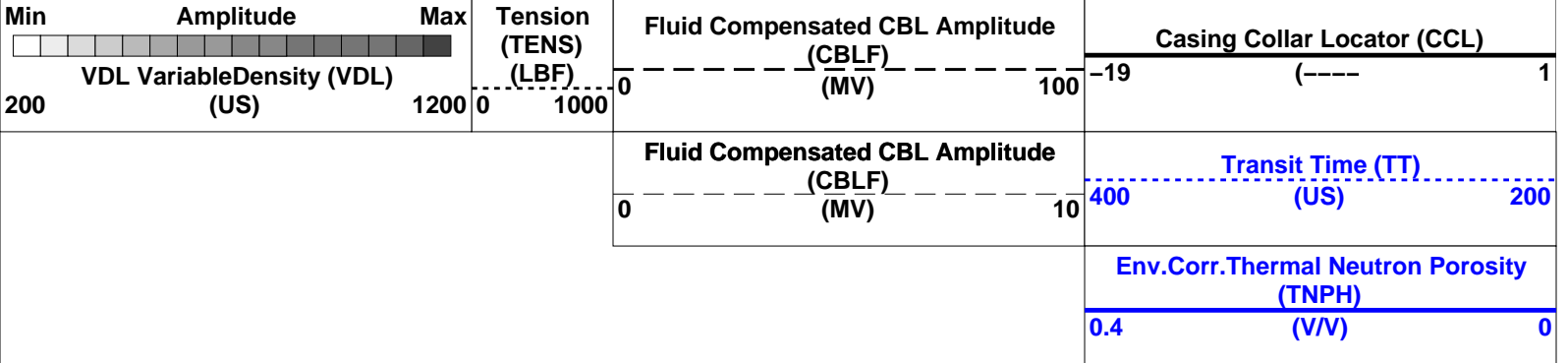
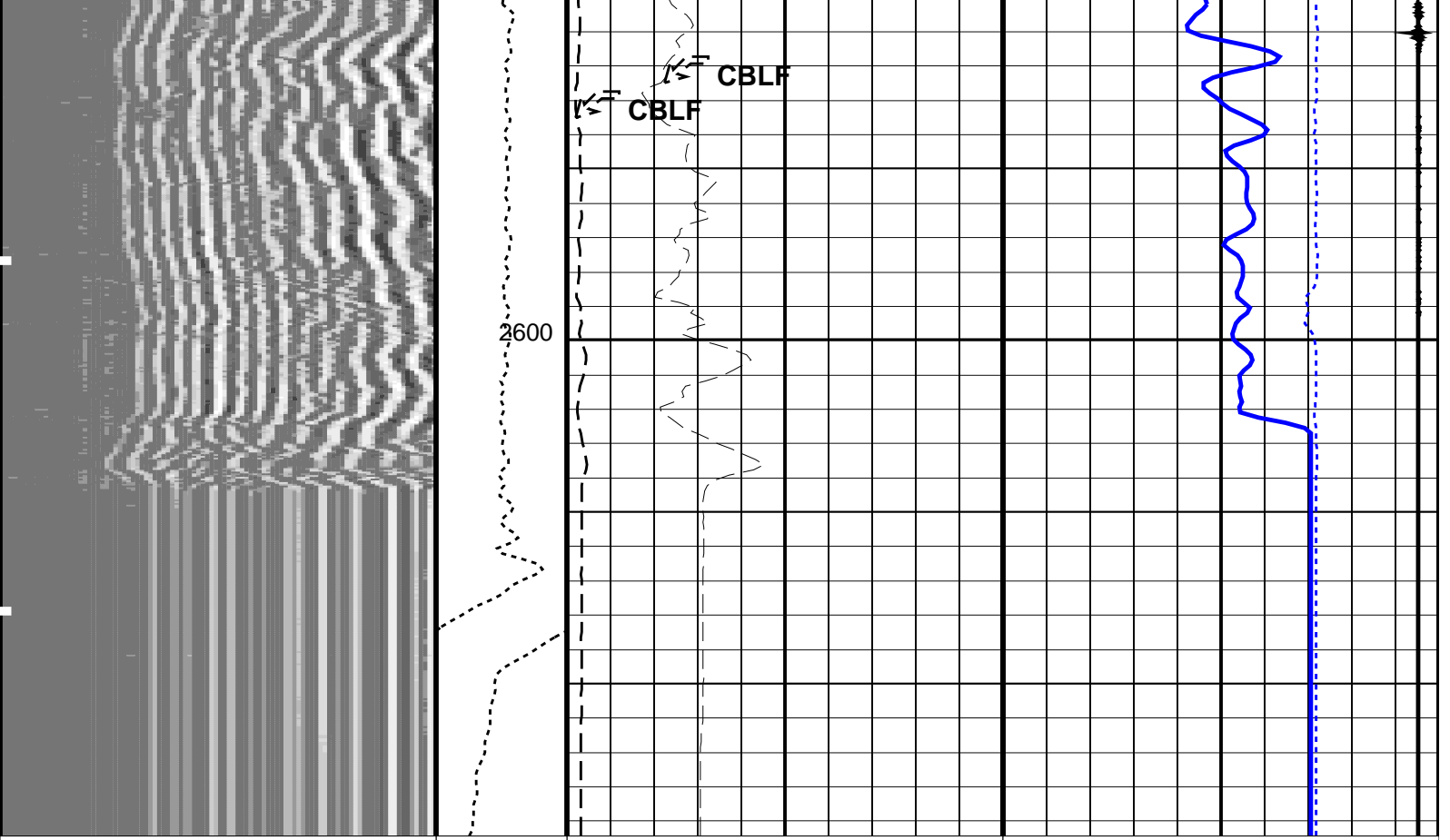
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OP System Version: 11C0-305
MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
SDT-C: Sonic Digital - C		
AGC	Automatic Gain Control	ON
AMSG	Auxilliary Minimum Sliding Gate	140 US
ASGL	Auxilliary Minimum Sliding Gate Width	100 US
BILI	Bond Index Level for Zone Isolation	0.8
CBLG	CBL Gate Width	40 US
CDDEL	Digitizing Delay (Acq Monitor Checked)	200 US
CDSIN	Digitizer Sample Interval (Acq Monitor Checked)	DS10
CDTS	C-Delta-T Shale	100 US/F
CDWCO	Digitizer Word Count (Acq Monitor Checked)	500
CRMOD	Receiver Mode (Acq Monitor Checked)	B
CSTR	Compressive Strength of Cement	13789.5 KPAA
CVDLM	VDL Firing Mode (Acq Monitor Checked)	UTFR
CWMOD	Waveform Firing Mode (Acq Monitor Checked)	NONE
DDE0	Digitizing Delay 0	200 US
DDEL	Digitizing Delay	200 US
DDMG	Downhole Differential Multi-Gain	10
DETE	Detection	E1
DSI0	Digitizer Sample Interval 0	10 US
DSIN	Digitizer Sample Interval	DS10
DTCM	Delta-T Computation Mode	FULL
DTF	Delta-T Fluid	189 US/F
DTM	Delta-T Matrix	56 US/F
DWCO	Digitizer Word Count 0	500

DWCO	Digitizer Word Count	500	
FCF	CBL Fluid Compensation Factor	0.47	
GAI	Manual Gain	40	
GOBO	Good Bond	2	MV
ITTS	Integrated Transit Time Source	DT	
MCI	Minimum Cemented Interval for Isolation	1.4478	M
MGAI	Maximum Gain	3500	
MODE	Firing Mode	CBL	
MSA	Minimum Sonic Amplitude	1.05764	MV
NMSG	Near Minimum Sliding Gate	248	US
RATE	Firing Rate	R15	
RMOD	Receiver Mode	B	
SFAF	Sonic Formation Attenuation Factor	0	DB/M
SGAD	Sliding Gate	ON	
SGDT	Sliding Gate Delta-T	50	US/F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	MV
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SWW	Sonic Window Width	13	MS
T0CA	T0 Correction	ON	
TSIG	Test Signal	OFF	
VDLG	VDL Manual Gain	5	
VDLM	VDL Firing Mode	UTFR	
WAGC	Waveform AGC	ON	
WGAI	Waveform Manual Gain WGAI	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	4800	US
WMOD	Waveform Firing Mode	NONE	
CNT-H: Compensated Neutron - H			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	YES	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
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	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	15	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	12	IN
CCLT	CCL Detection Level	0.3	V
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	15.50	LB/F
DFD	Drilling Fluid Density	1.00	G/C3
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	-50000	M
TDD	Total Depth - Driller	-50000.00	M
TDL	Total Depth - Logger	-50000.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBL_Fluid_Compensated Vertical Scale: 1:200 Graphics File Created: 02-Apr-2005 15:52

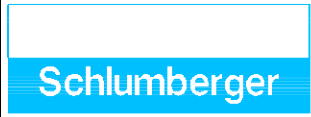
OP System Version: 11C0-305

MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

Output DLIS Files

DEFAULT	SONIC CNL 004LUP	FN:3	PRODUCER	02-Apr-2005 15:52
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Analisis de Repetibilidad en Tramo sin Correccion

Company: _____ Well: _____

Input DLIS Files

DEFAULT	SONIC_CNL_005PUP	FN:4	PRODUCER	02-Apr-2005 16:01	2615.6 M	2547.5 M
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Output DLIS Files

DEFAULT	SONIC_CNL_006LUP	FN:5	PRODUCER	02-Apr-2005 16:03
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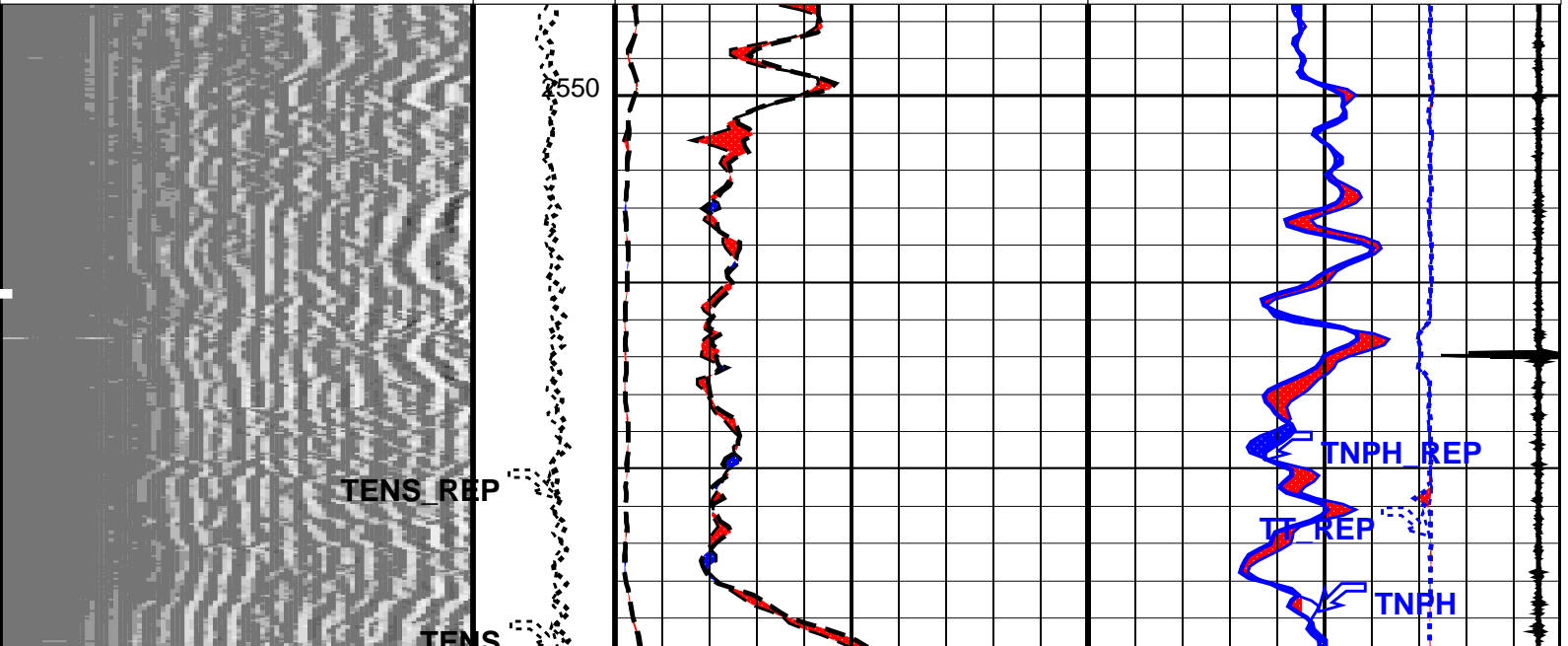
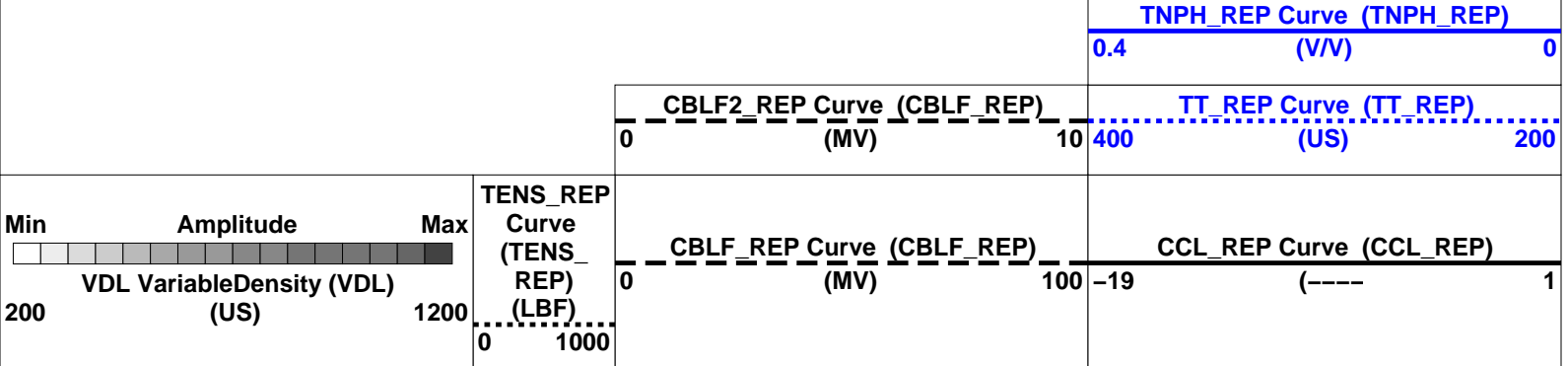
OP System Version: 11C0-305

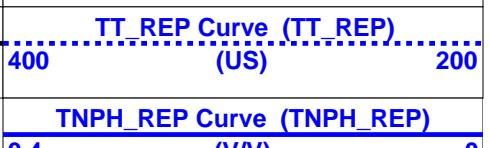
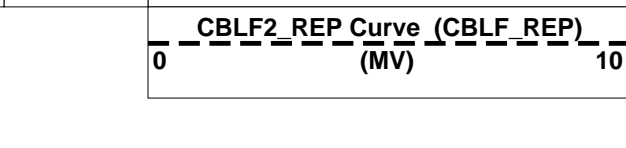
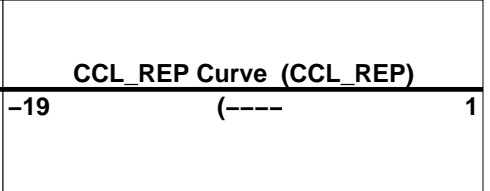
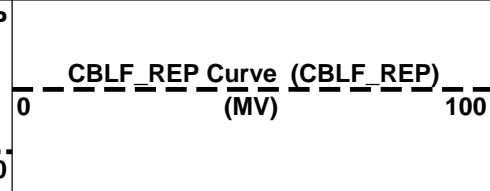
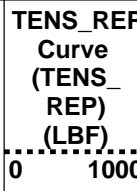
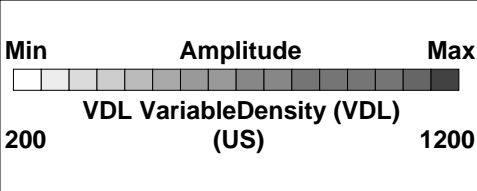
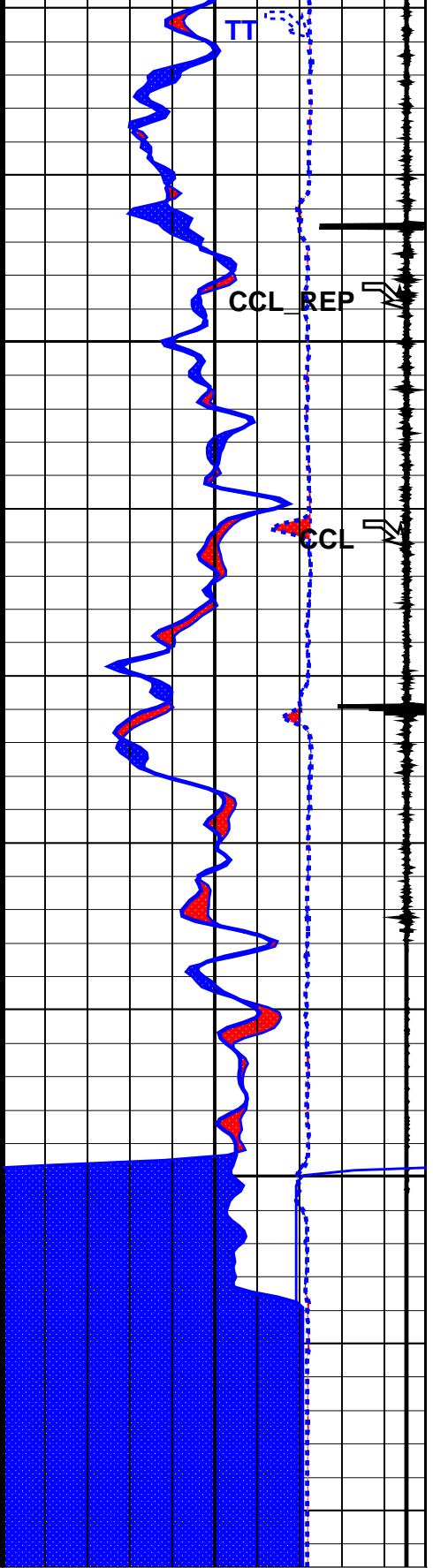
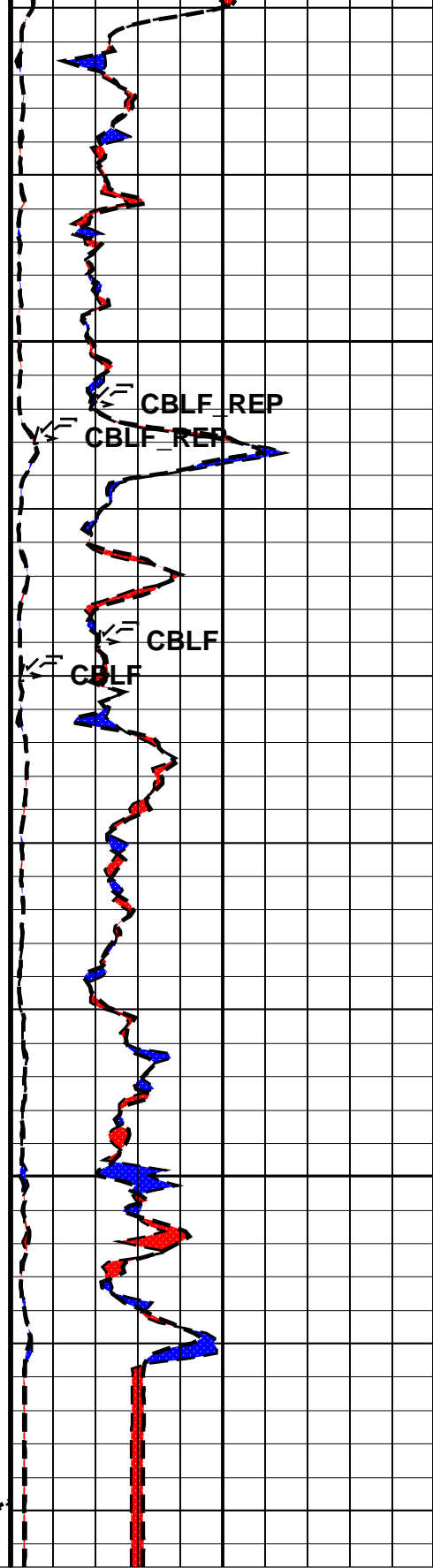
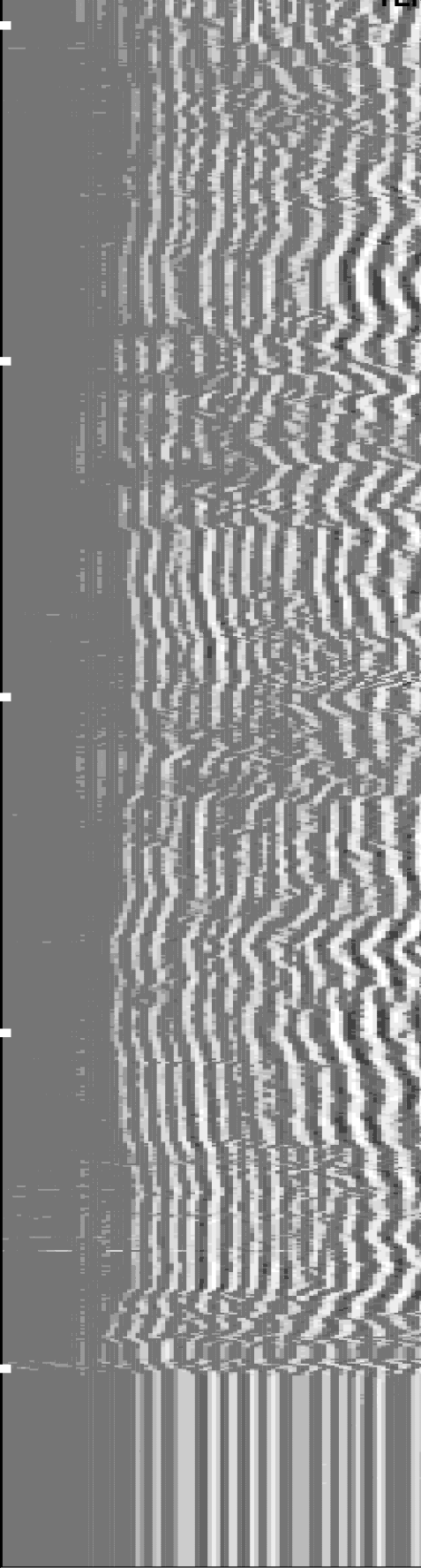
MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

PIP SUMMARY

Time Mark Every 60 S





0.4

(V/V)

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
SDT-C: Sonic Digital - C			
AGC	Automatic Gain Control	ON	
AMSG	Auxilliary Minimum Sliding Gate	140	US
ASGL	Auxilliary Minimum Sliding Gate Width	100	US
BILI	Bond Index Level for Zone Isolation	0.8	
CBLG	CBL Gate Width	40	US
CDDEL	Digitizing Delay (Acq Monitor Checked)	200	US
CDSIN	Digitizer Sample Interval (Acq Monitor Checked)	DS10	
CDS	C-Delta-T Shale	100	US/F
CDWCO	Digitizer Word Count (Acq Monitor Checked)	500	
CRMOD	Receiver Mode (Acq Monitor Checked)	B	
CSTR	Compressive Strength of Cement	13789.5	KPAA
CVDLM	VDL Firing Mode (Acq Monitor Checked)	UTFR	
CWMOD	Waveform Firing Mode (Acq Monitor Checked)	NONE	
DDE0	Digitizing Delay 0	200	US
DDEL	Digitizing Delay	200	US
DDMG	Downhole Differential Multi-Gain	10	
DETE	Detection	E1	
DSIO	Digitizer Sample Interval 0	10	US
DSIN	Digitizer Sample Interval	DS10	
DTCM	Delta-T Computation Mode	FULL	
DTF	Delta-T Fluid	189	US/F
DTM	Delta-T Matrix	56	US/F
DWC0	Digitizer Word Count 0	500	
DWCO	Digitizer Word Count	500	
FCF	CBL Fluid Compensation Factor	0.47	
GAI	Manual Gain	40	
GOBO	Good Bond	2	MV
ITTS	Integrated Transit Time Source	DT	
MCI	Minimum Cemented Interval for Isolation	1.4478	M
MGAI	Maximum Gain	3500	
MODE	Firing Mode	CBL	
MSA	Minimum Sonic Amplitude	1.05764	MV
NMSG	Near Minimum Sliding Gate	248	US
RATE	Firing Rate	R15	
RMOD	Receiver Mode	B	
SFAF	Sonic Formation Attenuation Factor	0	DB/M
SGAD	Sliding Gate	ON	
SGDT	Sliding Gate Delta-T	50	US/F
SGW	Sliding Gate Width	80	US
SLEV	Signal Level for AGC	5000	MV
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SWW	Sonic Window Width	13	MS
T0CA	T0 Correction	ON	
TSIG	Test Signal	OFF	
VDLG	VDL Manual Gain	5	
VDLM	VDL Firing Mode	UTFR	
WAGC	Waveform AGC	ON	
WGAI	Waveform Manual Gain WGAI	20	
WGDT	Waveform Gain Delta-T	240	US/F
WGIN	Waveform Gain Interval	4800	US
WMOD	Waveform Firing Mode	NONE	
CNT-H: Compensated Neutron - H			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	CASED	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	YES	
DPPM	Density Porosity Processing Mode	STAN	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
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	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	

SHT	Surface Hole Temperature	15	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
CAL-Y: Casing Anomaly Locator - Y			
CCLD	CCL reset delay	12	IN
CCLT	CCL Detection Level	0.3	V
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	15.50	LB/F
DFD	Drilling Fluid Density	1.00	G/C3
DORL	Depth Offset for Repeat Analysis	0.0	M
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	-50000	M
TDD	Total Depth - Driller	-50000.00	M
TDL	Total Depth - Logger	-50000.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CBL_Fluid_Compensated_REP Vertical Scale: 1:200 Graphics File Created: 02-Apr-2005 16:03

OP System Version: 11C0-305
MCM

SDT-C	11C0-305	CNT-H	OP11-KP1
TCC-B	OP11-KP1	CAL-Y	11C0-305

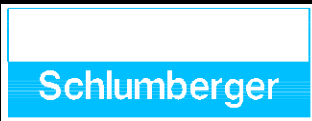
Input DLIS Files

DEFAULT	SONIC_CNL_005PUP	FN:4	PRODUCER	02-Apr-2005 16:01	2615.6 M	2547.5 M
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Output DLIS Files

DEFAULT	SONIC_CNL_006LUP	FN:5	PRODUCER	02-Apr-2005 16:03
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MAXIS EXPRESS



CALIBRACION

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Compensated Neutron - H Wellsite Calibration - Zero Measurement							
Master: 31-Mar-2005 11:43 Before: 2-Apr-2005 15:03 After: 2-Apr-2005 18:51							
CNTC Background	1.000	0	0.5334	0	-0.5334	N/A	CPS
CFTC Background	0	0	1.598	1.627	0.02850	N/A	CPS
Compensated Neutron - H Wellsite Calibration - Jig Measurement							
Master: 31-Mar-2005 11:58 Before: 2-Apr-2005 15:01 After: 2-Apr-2005 18:58							
CNTC Jig	2821	2821	2804	2794	-10.10	N/A	CPS
CFTC Jig	1169	1169	1181	1172	-9.081	N/A	CPS
CNTC/CFTC (Jig)	2.412	2.412	2.374	2.384	0.009780	N/A	
Compensated Neutron - H Wellsite Calibration - Apparent Porosity Change At 20 PU							
After: 2-Apr-2005 18:58							
Normalized Porosity Change	0	N/A	N/A	0.1400	N/A	N/A	

The CNT Master Calibration Was Done With The Following Parameters :

NCT-B Water Temperature 15.0 DEGC.
 Thermal Housing Size 3.375 IN.

Compensated Neutron – H / Equipment Identification

Primary Equipment:		
Compensated Neutron Cartridge	CNC – HA	212
Neutron Logging Source	NLS – KL	
Neutron Source Radioactive	NSR – F	2112
Compensated Neutron Box	CNB – AB	3625
Neutron Detector without Alpha Source	CND – NA	
Compensated Neutron Box	CNB – AB	3625
Auxiliary Equipment:		
Compensated Neutron Housing	CNH – A	2021
Neutron Calibration Tank	NCT – B	

Compensated Neutron – H Wellsite Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		0	Master		0
Before		0.5334	Before		1.598
After		0	After		1.627
-0.010000 (Minimum)		1.000 (Nominal)	-0.010000 (Minimum)		5.000 (Maximum)
Master: 31-Mar-2005 11:43			Before: 2-Apr-2005 15:03		
After: 2-Apr-2005 18:51					

Compensated Neutron – H Wellsite Calibration

Jig Measurement

Phase	CNTC Jig CPS	Value	Phase	CFTC Jig CPS	Value	Phase	CNTC/CFTC (Jig)	Value
Master		2821	Master		1169	Master		2.412
Before		2804	Before		1181	Before		2.374
After		2794	After		1172	After		2.384
2679 (Minimum)		2821 (Nominal)	2962 (Maximum)		1111 (Minimum)	1169 (Nominal)	1228 (Maximum)	
Master: 31-Mar-2005 11:58			Before: 2-Apr-2005 15:01			After: 2-Apr-2005 18:58		

Compensated Neutron – H Wellsite Calibration

Apparent Porosity Change At 20 PU

Phase	Normalized Porosity Change	Value
After		0.1400
-0.6000 (Minimum)		0 (Nominal)
		0.6000 (Maximum)
After: 2-Apr-2005 18:58		

Compania: YPF S.A.

Pozo: YPF.Ch.EN-625

Campo: ESCALANTE NORTE



Campo: **ESCALANTE NORTE**
Provincia: **CHUBUT**
Pais: **ARGENTINA**

CONTROL DE CEMENTO
CBL VDL CNL COMPENSADO CCL
1/200

C
P
C
P

Provincia: CHUBUT
Campo: ESCALANTE NORTE

Fee	
Con	
Pro	
Pro	
Prir	
Utili	
Fon	
Fon	
Dia	
Tip	
De	
Pe	
Fu	
RM	
RM	
RM	
RM	
Fue	
RM	
Ten	
Circ	
Ree	
Uni	
Reg	
Tes	

COMPANIA: YPF S.A.

OZO: YPF.Ch.EN-625

CAMPO: ESCALANTE NORTE

PROVINCIA: CHUBUT

PAIS: ARGENTINA



COMBINADA

ESCALA: 1/200

AIT-BHC-LDL-CAL

RFT

Elev.: B.V. 708.47 m
N.T. 703.77 m
M.R. 708.17 m

Ref. Permanente: NIVEL TERRENO
Reg. Medido Desde: NIVEL TERRENO
Perforacion Medida Desde: NIVEL TERRENO

UWI: AR0100006323
Equipo Pl-354
Longitud X: 4.937.710,08
Latitud Y: 2.581.620,25

Locacion: CAS

Pozo: YPF.Ch.EN-625

Compania: YPF S.A.

Identificación	1
f. Perforador	2792 m
f. Registro	2796.1 m
Profundidad Lectura	2793.4 m
Profundidad Lectura	413 m
Tubería Perforador	9.625 in @ 412.86 m
Tubería Registro	413 m
Medidor Trepano	8.500 in
Medidor Trepano	PHPA
Viscosidad	1.19 g/cm3 66 s
PH	6.8 cm3 9
Mediente Muestra De Lodo	PILETA
@ Temp.	2.000 ohm.m @ 18 degC
F @ Temp.	2.200 ohm.m @ 17 degC
C @ Temp.	1.900 ohm.m @ 17 degC
RMF	PRENSA
RMF @ T. Fdo.	0.675 @ 95 0.733 @ 95
RMF @ T. Fdo.	95 degC
Medición Final	27-Mar-2005 9:45
Fondo	27-Mar-2005 17:16
Localización	3064 CAS
Registrado por:	Roberto Zerkowski
Apellido	Antibal Silveira

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

DEPTH SUMMARY LISTING

Date Created: 28-MAR-2005 7:54:07

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B	Type: CMTD-B/A	Type: 7-42P-XS
Serial Number: 4858	Serial Number: 1686	Serial Number: 4213
Calibration Date: 6-Jun-2003	Calibration Date: 21-Aug-2004	Length: 4799.99 M
Calibrator Serial Number: 5969	Calibrator Serial Number: 1028	Conveyance Method: Wireline
Calibration Cable Type: 7-42P-XS	Calibration Gain: 0.99	Rig Type: LAND
Wheel Correction 1: -2	Calibration Offset: 519.00	
Wheel Correction 2: -2		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	62.40 M
Rig Up Length At Bottom:	62.40 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	4.00 M
Tool Zero Check At Surface:	0.10 M

Depth Control Remarks

<ol style="list-style-type: none"> 1. Primera carrera en el pozo y perfil de referencia de profundidad. 2. Control estandar de profundidad de Schlumberger aplicado a esta carrera. 3. Estiramiento del cable entre perfil subiendo y bajando = 4 m. 4. 5. 6.

LIMITACION DE RESPONSABILIDAD

LA UTILIZACION Y CONFIANZA EN LOS DATOS AQUI GRABADOS POR PARTE DE LA NOMBRADA COMPANIA (Y POR CUALQUIERA DE SUS SUBSIDIARIAS, AFILIADAS, REPRESENTANTES, AGENTES, CONSULTORES Y EMPLEADOS) ESTA SUJETA A LOS TERMINOS Y CONDICIONES ACORDADOS ENTRE SCHLUMBERGER Y LA COMPANIA, INCLUYENDO: (a) RESTRICCIONES EN EL USO DE LOS DATOS GRABADOS; (b) LIMITACION DE RESPONSABILIDAD Y REVOCACION DE GARANTIAS EN RELACION A LA UTILIZACION Y CONFIANZA EN LOS DATOS GRABADOS POR PARTE DE LA COMPANIA, Y (c) LA SOLA Y TOTAL RESPONSABILIDAD DEL CLIENTE POR CUALQUIER INTERPRETACION HECHA O DECISION BASADA EN EL USO DE ESTOS DATOS.

OTROS SERVICIOS # 1 OS1: AIT-BHC-LDL-CAL OS2: RFT OS3: OS4: OS5: PI-354	OTROS SERVICIOS # 2 OS1: OS2: OS3: OS4: OS5:
--	---

OBSERVACIONES: CORRIDA # 1	OBSERVACIONES: CORRIDA # 2
1. Primera carrera en el pozo y perfil de referencia de profundidad.	
2. Herramienta corrida segun diagrama.	
3. Esquema del pozo segun datos del perforador.	
4. AIT y DSLT corridos descentralizados usando standoff de 1,5".	
5. Ultima circulacion termino en 27-Mar-2005 a las 9:00 y duro 2:00 hs.	
6. Datos adicionales del lodo: Cl= 500 ppm, Ca= 100 ppm.	
7. Coordenadas definitivas.	
8. Maxima desviacion del pozo segun datos del perforador: 3 grados.	
9. Maxima temperatura registrada: 95 degC, tomada desde termometro en la punta de la herramienta.	

10. Lectura de LDL y BHC afectados en zonas de mal caliper.

11. FPHI=SPHI, FEXP=2 y FNUM=0.81 utilizados para el calculo de RWA.

12. Lectura de BHC y CALI registrados hasta zapato a pedido del cliente.

13. Lectura de LDL registrada hasta 1450 m a pedido del cliente.

CORRIDA #1			CORRIDA #2		
ORDEN DE SERVICIO:			ORDEN DE SERVICIO:		
VERSION DEL PROGRAMA:			VERSION DEL PROGRAMA:		
NIVEL DEL LODO:			NIVEL DEL LODO:		

DESCRIPCION DEL EQUIPO

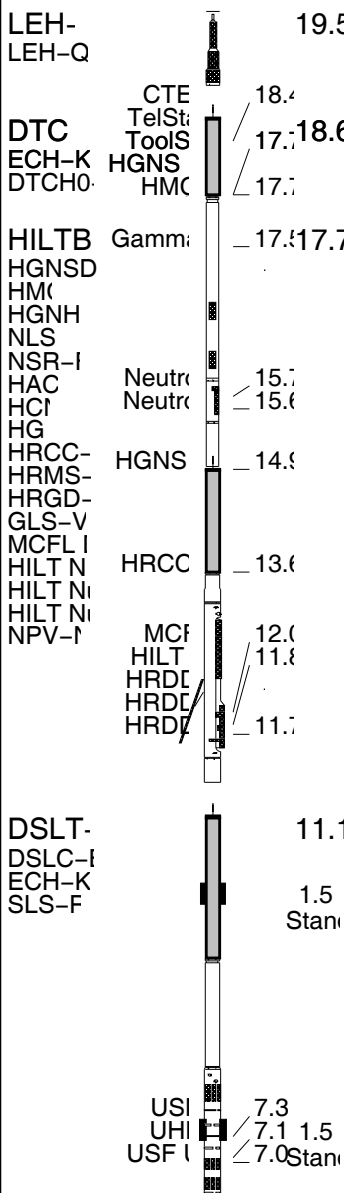
CORRIDA # 1

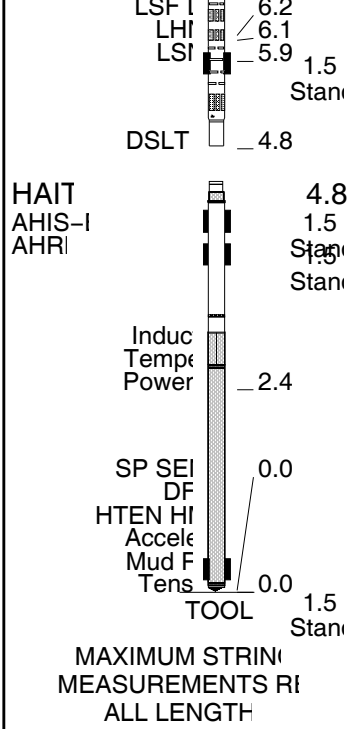
CORRIDA # 2

SURFACE I

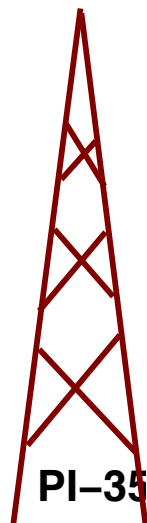
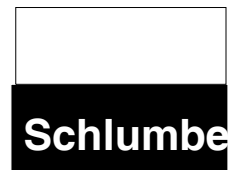
GSR-U WITM ()
NCT-
CNB
NCS

DOWNHOLE





YPF.Ch.EN



Altura Mesa: 4

Nivel Terr ←

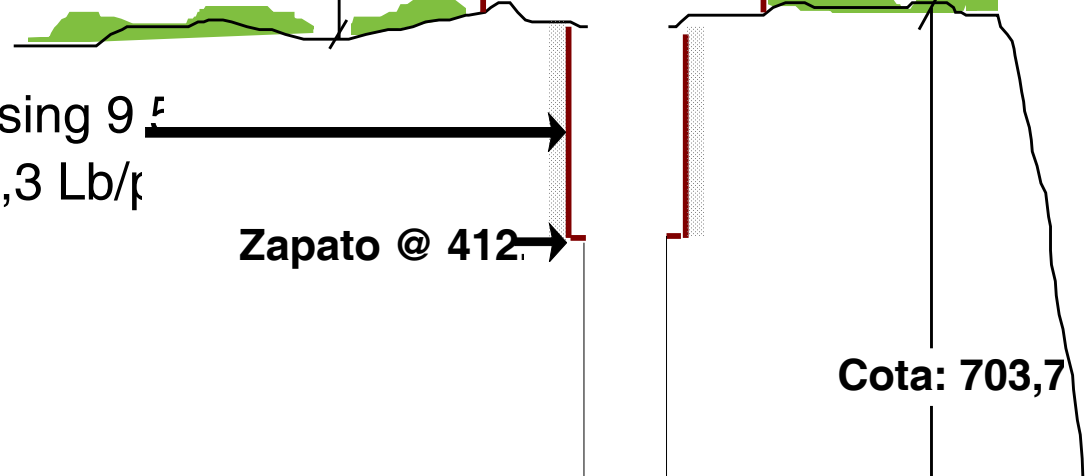
Nivel Refere

Casing 9" ←

32,3 Lb/p

Zapato @ 412 ←

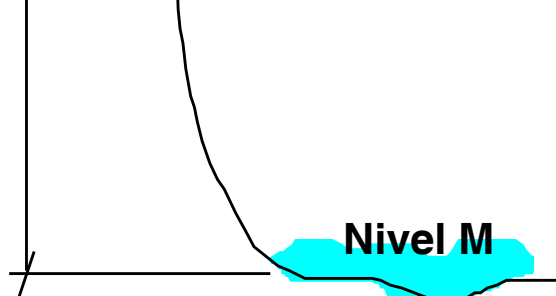
Cota: 703,7



Trepano



8 3/4" @ 200



Trepano



8 1/2" @



2792 r



Schlumberger

TRAMO PRINCIPAL

MAXIS Field Log

Input DLIS Files

DEFAULT AIT_SONIC_TLD_MCFL_112PUP FN:143 PRODUCER 28-Mar-2005 06:19 2802.0 M 257.1 M

Output DLIS Files

DEFAULT AIT_SONIC_TLD_MCFL_114PUP FN:145 PRODUCER 28-Mar-2005 06:40 2802.0 M 397.0 M

Integrated Hole/Cement Volume Summary

Hole Volume = 108.56 M3

Cement Volume = 72.03 M3 (assuming 5.50 IN casing O.D.)

Computed from 2796.1 M to 413.0 M using data channel(s) HCAL

OP System Version: 12C0-301

MCM

HAIT-H SRPC-2699-HILT
HILTB-FTB SRPC-2699-HILT

DSLTL-FTB 12C0-301
DTC-H 12C0-301

Changed Parameter Summary

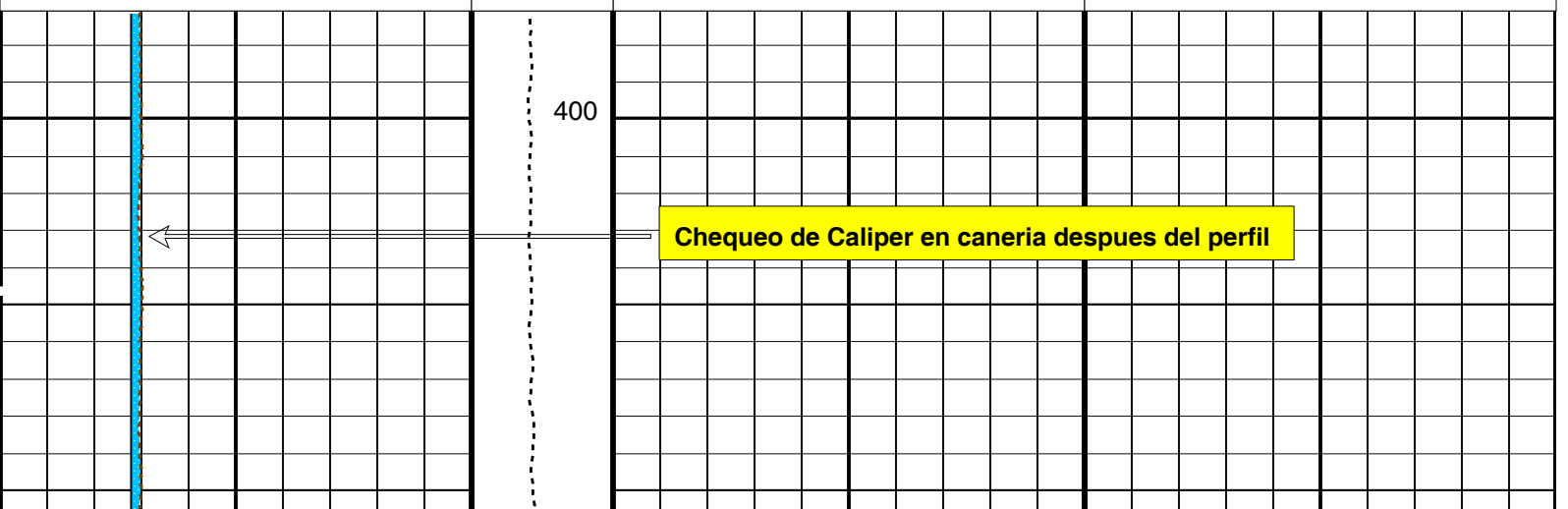
DLIS Name	New Value	Previous Value	Depth & Time
BS	8.500 IN	8.750 IN	2802.0 06:40:37
	8.750 IN	8.500 IN	2003.0 06:41:59
	8.750 IN	8.750 IN	1743.0 06:42:26
	8.750 IN	8.750 IN	1731.9 06:42:27
	8.750 IN	8.750 IN	1583.9 06:42:42
	8.750 IN	8.750 IN	1583.0 06:42:42
	8.750 IN	8.750 IN	1569.9 06:42:44
	8.750 IN	8.750 IN	1565.0 06:42:44
	8.750 IN	8.750 IN	1549.0 06:42:46
	8.750 IN	8.750 IN	1547.9 06:42:46
SPDR	0 MV/M	0 MV/M	2802.0 06:40:37
	0 MV/M	0 MV/M	2003.0 06:41:59
	0.37 MV/M	0 MV/M	1743.0 06:42:26
	0 MV/M	0.37 MV/M	1731.9 06:42:27
	0 MV/M	0 MV/M	1583.9 06:42:42
	0 MV/M	0 MV/M	1583.0 06:42:42
	0.4 MV/M	0 MV/M	1569.9 06:42:44
	0 MV/M	0.4 MV/M	1565.0 06:42:44
	0 MV/M	0 MV/M	1549.0 06:42:46
	0 MV/M	0 MV/M	1547.9 06:42:46

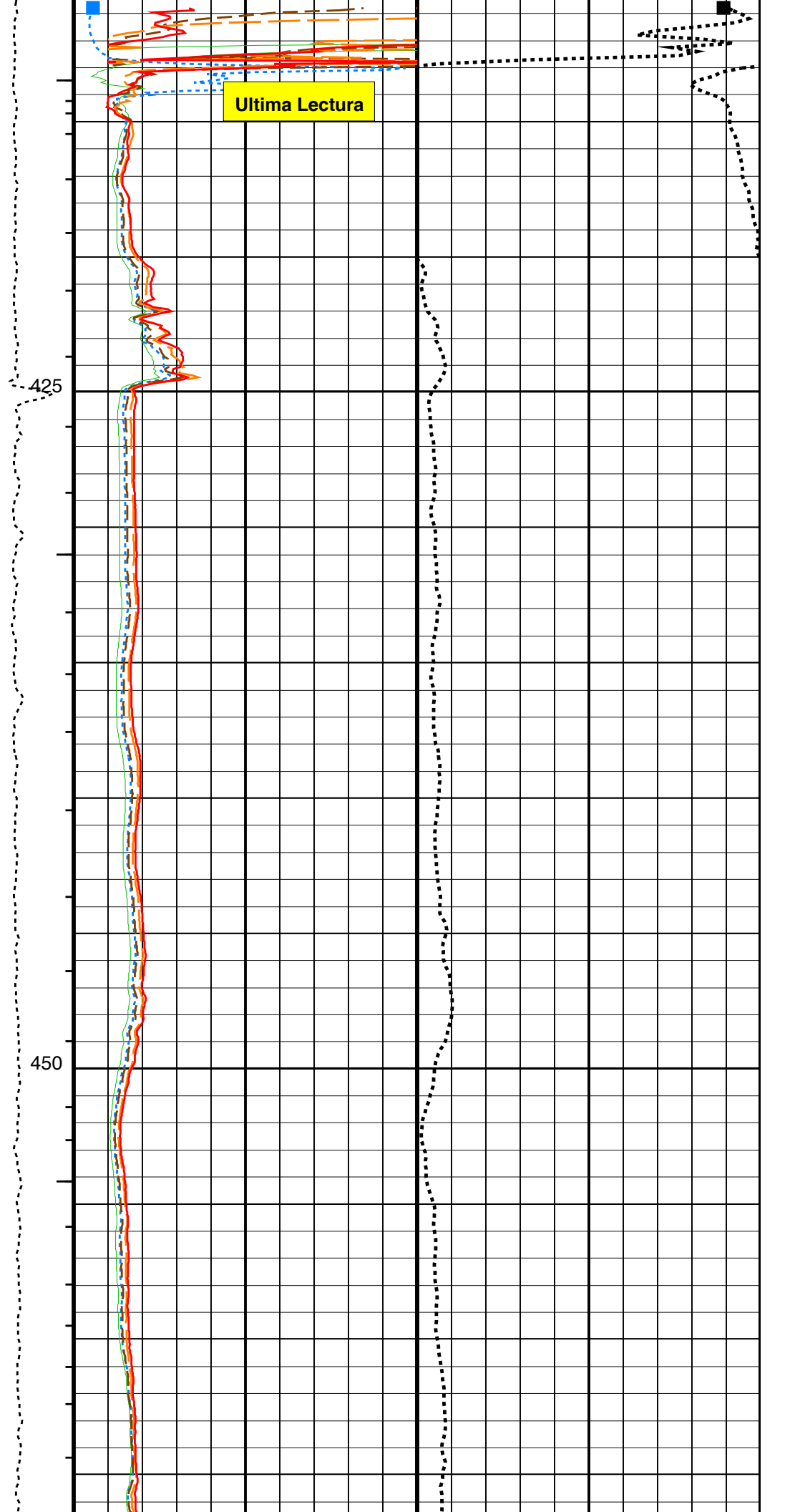
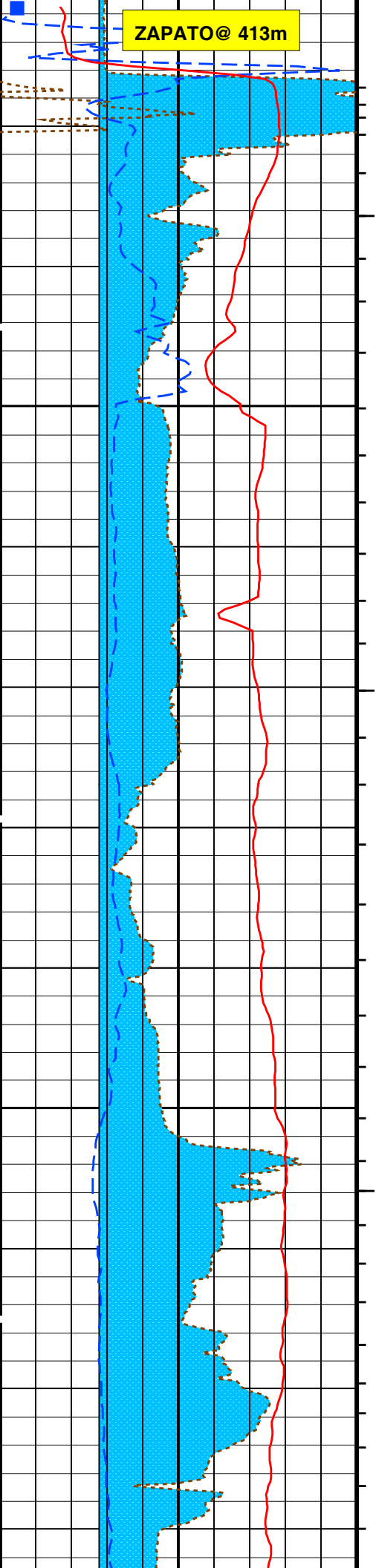
PIP SUMMARY

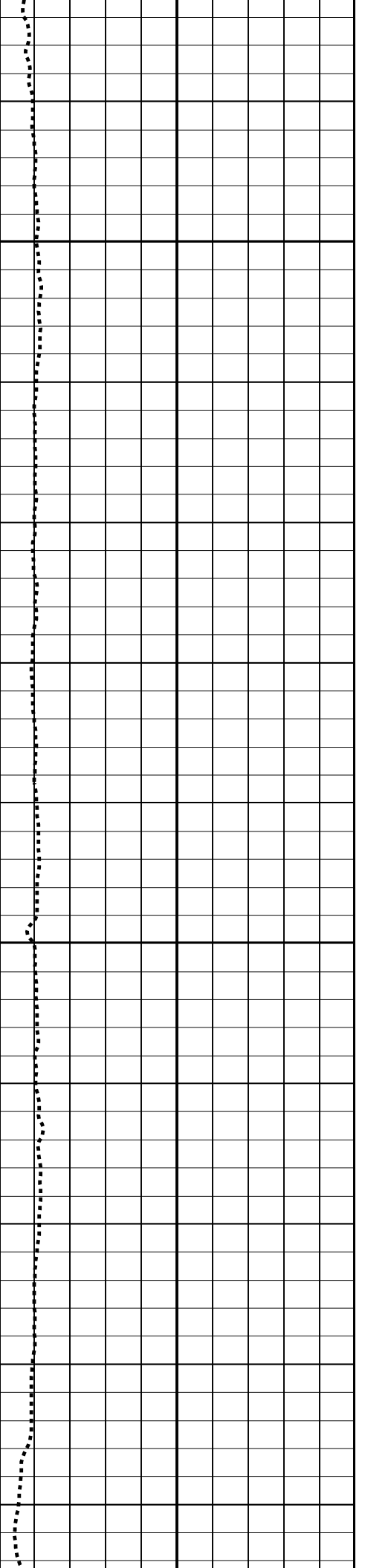
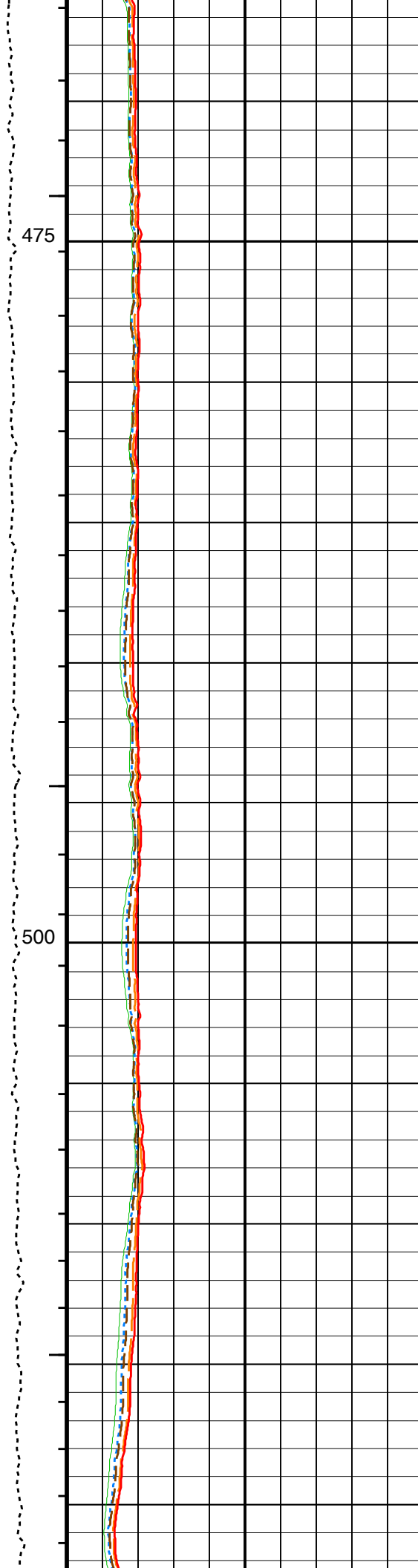
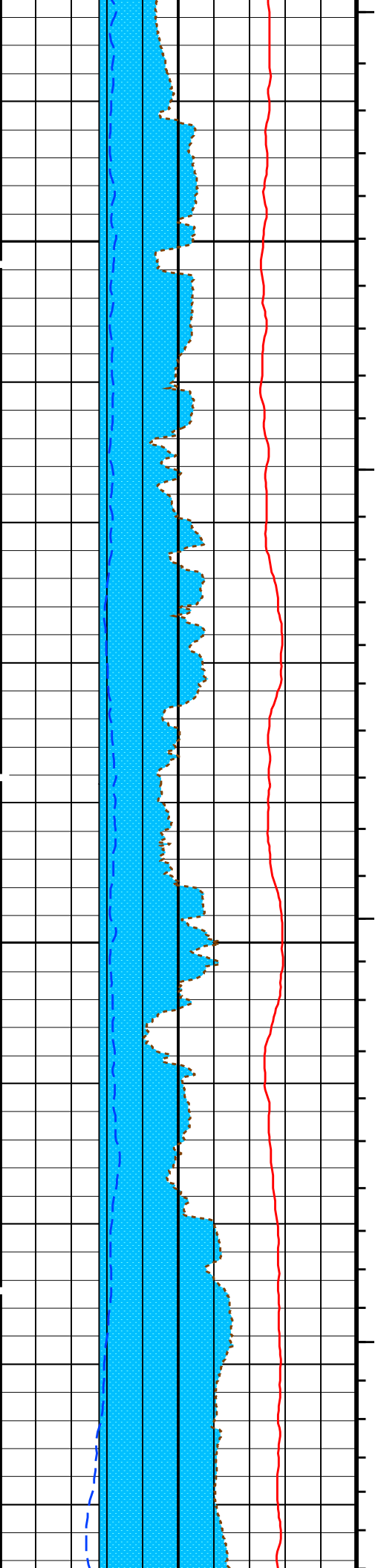
- ┆ Integrated Hole Volume Minor Pip Every 0.1 M3
- ┆ Integrated Hole Volume Major Pip Every 1 M3
 - ┆ Integrated Cement Volume Minor Pip Every 0.1 M3
 - ┆ Integrated Cement Volume Major Pip Every 1 M3

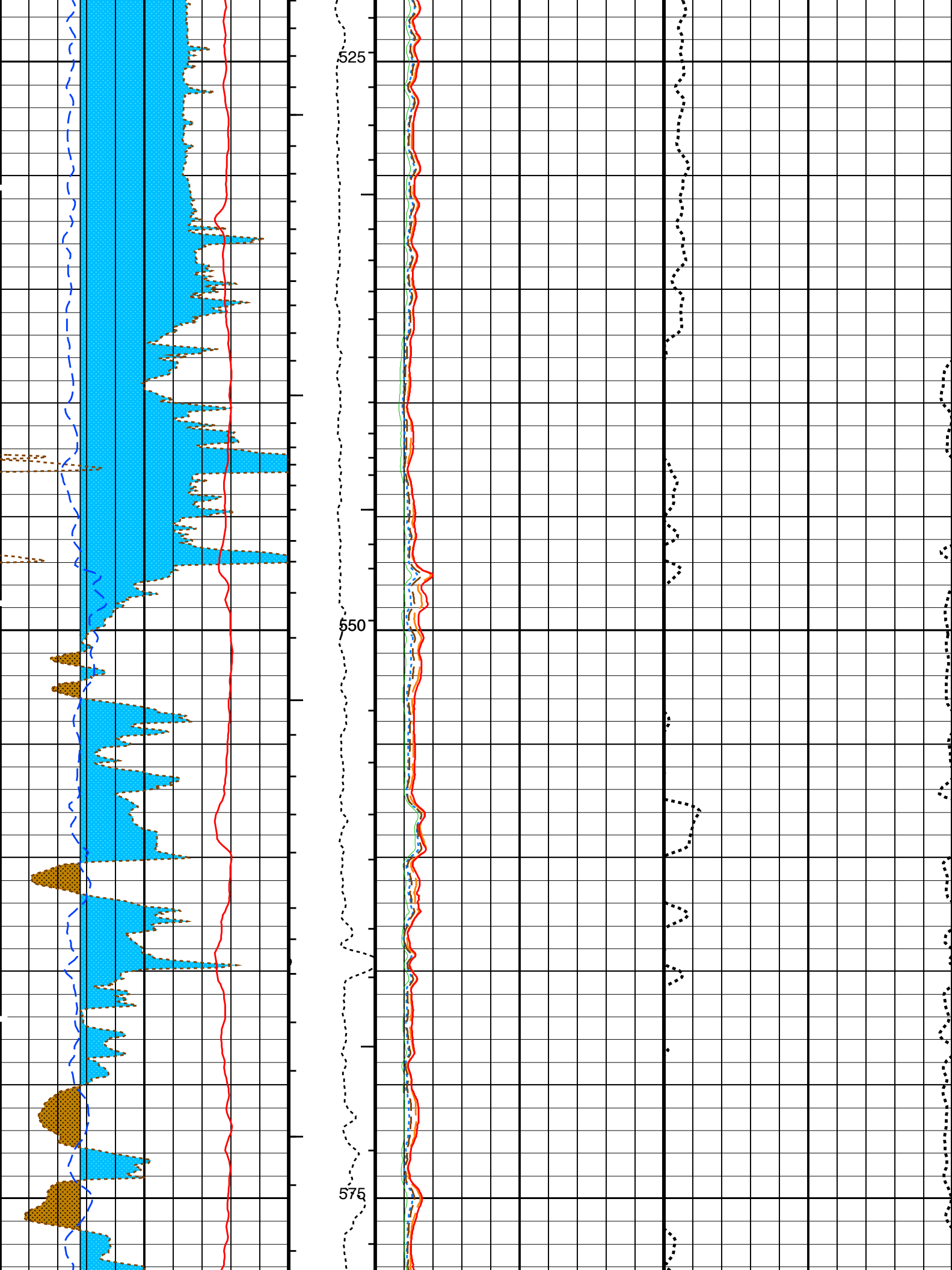
Time Mark Every 60 S

CAVERNA From BS to HCAL			
REVOQUE From HCAL to BS			
SP (SP) -80 (MV) 20		AIT-H 90 Inch Investigation (AHT90) 0 (OHMM) 10	
RWA (RWA) 0 (OHMM) 1		AIT-H 60 Inch Investigation (AHT60) 0 (OHMM) 10	
Std. Res. Formation Pe (PEFZ) 0 (----) 5		AIT-H 30 Inch Investigation (AHT30) 0 (OHMM) 10	
Caliper (HCAL) 6 (IN) 16	Stuck Stretch (STIT) 0 (M) 20	AIT-H 20 Inch Investigation (AHT20) 0 (OHMM) 10	Sonic Porosity (SPHI) 0.4 (V/V) 0
Bit Size (BS) 6 (IN) 16	Tension (TENS) 0 (LBF) 1000	AIT-H 10 Inch Investigation (AHT10) 0 (OHMM) 10	Std. Res. Density Porosity (DPHZ) 0.4 (V/V) 0









	(OHMM)	
SP (SP)		
-80	(MV)	20
REVOQUE From HCAL to BS		
CAVERNA From BS to HCAL		

	(OHMM)	
AIT-H 90 Inch Investigation (AHT90)		
0	(OHMM)	10

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	
HAIT-H: Array Induction Tool - H			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
AHBHV	Array Induction Borehole Correction Code Version Number	880	
AHBLM	Array Induction Basic Logs Code	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	108	
AHCDE	Array Induction Casing Detection Enable	No	
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	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21	
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
BHT	Bottom Hole Temperature (used in calculations)	95	DEGC
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	0.81	
FPHI	Form Factor Porosity Source	SPHI	
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	
RTCO	RTCO - Rt Invasion Correction	YES	
SHT	Surface Hole Temperature	20	DEGC
SPDR	SP Drift	0	MV/M
SPNV	SP Next Value	12	MV
DSLTT-FTB: Digitizing			
CDTS	C-Delta-T Shale	100	US/F
DTF	Delta-T Fluid	189	US/F
DTM	Delta-T Matrix	56	US/F
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	95	DEGC
DFB	HILT Nuclear Mud Base	Water	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	0.81	
FPHI	Form Factor Porosity Source	SPHI	
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	
MDEN	Matrix Density	2.65	G/C3
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	STI	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth - Driller	2792.00	M
TDL	Total Depth - Logger	2796.10	M
HOLEV: Integrated Hole/Cement Volume			

BHT	Bottom Hole Temperature (used in calculations)	95	DEGC
FCD	Future Casing (Outer) Diameter	5.5	IN
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	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
SHT	Surface Hole Temperature	20	DEGC
ALLRES: Basic Resistivity Transforms			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO - Rt Invasion Correction	YES	
RWA: Apparent Water Resistivity			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	0.81	
FPHI	Form Factor Porosity Source	SPHI	
RTCO	RTCO - Rt Invasion Correction	YES	
System and Miscellaneous			
BS	Bit Size	8.750	IN
DFD	Drilling Fluid Density	1.19	G/C3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	17.80	DEGC
PP	Playback Processing	OFF	
RMFS	Resistivity of Mud Filtrate Sample	2.2000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	2796.1	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: COMBINADA Vertical Scale: 1:200 Graphics File Created: 28-Mar-2005 06:40

OP System Version: 12C0-301

MCM

HAIT-H	SRPC-2699-HILT	DSLTT-FTB	12C0-301
HILTB-FTB	SRPC-2699-HILT	DTC-H	12C0-301

Input DLIS Files

DEFAULT	AIT_SONIC_TLD_MCFL_112PUP	FN:143	PRODUCER	28-Mar-2005 06:19	2802.0 M	257.1 M
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Output DLIS Files

DEFAULT	AIT_SONIC_TLD_MCFL_114PUP	FN:145	PRODUCER	28-Mar-2005 06:40
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TRAMO REPETIDO

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_SONIC_TLD_MCFL_116PUP	FN:147	PRODUCER	28-Mar-2005 07:15	2805.7 M	2602.5 M
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Output DLIS Files

DEFAULT	AIT_SONIC_TLD_MCFL_118PUP	FN:149	PRODUCER	28-Mar-2005 07:22	2690.9 M	2624.0 M
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Integrated Hole/Cement Volume Summary

Hole Volume = 10.09 M3

Cement Volume = 7.12 M3 (assuming 5.50 IN casing O.D.)

Computed from 2796.1 M to 2602.7 M using data channel(s) HCAL

Thru Cal Magnitude - 5	0	1.919	1.917	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.916	1.914	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	1.349	1.349	N/A	N/A	N/A	V
Phase - 0	0	58.02	58.34	N/A	N/A	N/A	DEG
Phase - 1	0	57.00	57.32	N/A	N/A	N/A	DEG
Phase - 2	0	52.73	53.07	N/A	N/A	N/A	DEG
Phase - 3	0	51.87	52.21	N/A	N/A	N/A	DEG
Phase - 4	0	44.78	45.15	N/A	N/A	N/A	DEG
Phase - 5	0	42.61	42.99	N/A	N/A	N/A	DEG
Phase - 6	0	42.63	43.01	N/A	N/A	N/A	DEG
Phase - 7	0	36.57	37.09	N/A	N/A	N/A	DEG

Array Induction Tool - H Wellsite Calibration - Electronics Calibration Check - Auxilliary

Master: 7-Mar-2005 12:03 Before: 26-Mar-2005 18:05

Array Induction SPA Plus	990.5	989.1	989.3	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	0.4989	0.4882	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9159	0.9161	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	0.0005063	0.0004901	N/A	N/A	N/A	V

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

Master: 7-Mar-2005 12:03

Test Loop Gain Magnitude - 0	0	1.011	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 1	0	1.011	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 2	0	1.013	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 3	0	1.013	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 4	0	0.9922	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 5	0	1.009	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 6	0	1.017	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 7	0	1.030	N/A	N/A	N/A	N/A	V
Phase - 0	0	0.6056	N/A	N/A	N/A	N/A	DEG
Phase - 1	0	0.5810	N/A	N/A	N/A	N/A	DEG
Phase - 2	0	-0.02779	N/A	N/A	N/A	N/A	DEG
Phase - 3	0	0.03244	N/A	N/A	N/A	N/A	DEG
Phase - 4	0	0.007671	N/A	N/A	N/A	N/A	DEG
Phase - 5	0	-0.1680	N/A	N/A	N/A	N/A	DEG
Phase - 6	0	0.2834	N/A	N/A	N/A	N/A	DEG
Phase - 7	0	-0.2827	N/A	N/A	N/A	N/A	DEG

Array Induction Tool - H Wellsite Calibration - Sonde Error Correction

Master: 7-Mar-2005 12:03

R Sonde Error Correction - 0	0	-86.16	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 1	0	172.9	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 2	0	111.0	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 3	0	52.01	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 4	0	25.67	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 5	0	12.37	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 6	0	8.859	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 7	0	-1.031	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 0	0	174.9	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 1	0	-59.31	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 2	0	95.78	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 3	0	86.91	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 4	0	34.45	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 5	0	18.85	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 6	0	5.475	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 7	0	-6.647	N/A	N/A	N/A	N/A	MM/M

Array Induction Tool - H Wellsite Calibration - Mud Gain Correction

Master: 7-Mar-2005 12:03

Coarse - Mag, Real, Imag - 0	0	1.083	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 1	0	1.083	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 2	0	1.083	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 0	0	1.074	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 1	0	1.074	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 2	0	1.074	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Stab Measurement Summary

Before: 26-Mar-2005 18:10

BS Window Ratio	0.7591	N/A	0.7617	N/A	N/A	N/A	
BS Window Sum	12440	N/A	12430	N/A	N/A	N/A	CPS
SS Window Ratio	0.4799	N/A	0.4789	N/A	N/A	N/A	
SS Window Sum	10870	N/A	10880	N/A	N/A	N/A	CPS
LS Window Ratio	0.2909	N/A	0.2952	N/A	N/A	N/A	
LS Window Sum	1324	N/A	1332	N/A	N/A	N/A	CPS

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Photo-multiplier High Voltages Calibrations

Before: 26-Mar-2005 18:10

BS PM High Voltage (Command)	1846	N/A	1848	N/A	N/A	N/A	V
SS PM High Voltage (Command)	2013	N/A	2014	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1934	N/A	1936	N/A	N/A	N/A	V

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Crystal Quality Resolutions Calibration

Before: 26-Mar-2005 18:10

BS Crystal Resolution	12.79	N/A	12.91	N/A	N/A	N/A	%
SS Crystal Resolution	11.17	N/A	11.20	N/A	N/A	N/A	%
LS Crystal Resolution	9.706	N/A	9.640	N/A	N/A	N/A	%

High resolution Integrated Logging Tool-DTS Wellsite Calibration - HILT Caliper Calibration

Before: 26-Mar-2005 18:05

HILT Caliper Zero Measurement	8.000	N/A	8.260	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.54	N/A	N/A	N/A	IN

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Detector Calibration

Before: 26-Mar-2005 18:04

Gamma Ray Background	30.00	N/A	61.70	N/A	N/A	N/A	GAPI
Gamma Ray (Jig - Bkg)	170.9	N/A	170.9	N/A	N/A	15.54	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: 26-Jan-2005 10:45 Before: 26-Mar-2005 18:05

CNTC Background	26.47	26.47	26.68	N/A	N/A	3.970	CPS
CFTC Background	26.11	26.11	26.54	N/A	N/A	3.917	CPS

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Ratio Measurement

Master: 26-Jan-2005 10:45

Thermal Near Corr. (Tank)	6031	5476	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2793	2248	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.436	N/A	N/A	N/A	N/A	

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Accelerometer Calibration

Before: 27-Mar-2005 15:17

Z-Axis Acceleration	9.810	N/A	9.793	N/A	N/A	N/A	M/S2
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High resolution Integrated Logging Tool-DTS Master Calibration - Inversion results

Master: 26-Mar-2005 16:59

Rho Aluminum	2.596	2.604	--	--	--	--	G/C3
Rho Magnesium	1.686	1.684	--	--	--	--	G/C3
Pe Aluminum	2.570	2.566	--	--	--	--	
Pe Magnesium	2.650	2.642	--	--	--	--	

High resolution Integrated Logging Tool-DTS Master Calibration - Deviation Summary

Master: 26-Mar-2005 16:59

BS Average Deviation	0	0.5426	--	--	--	--	%
BS Max Deviation	0	1.369	--	--	--	--	%
SS Average Deviation	0	0.2532	--	--	--	--	%
SS Max Deviation	0	1.094	--	--	--	--	%
LS Average Deviation	0	0.9750	--	--	--	--	%
LS Max Deviation	0	2.146	--	--	--	--	%

The GLS-VJ source activity is acceptable.

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

NCT-B Water Temperature 21.0 DEGC.
 Thermal Housing Size 3.374 IN.
 NSR-F serial number 1577

Array Induction Tool - H / Equipment Identification

Primary Equipment:
 Rm/SP Bottom Nose AHRM - A
 Array Induction Sonde AHIS - BA 383

Auxiliary Equipment:

Array Induction Tool - H Wellsite Calibration

Electronics Calibration Check - Thru Cal Mag. & Phase

Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6176		0.6050	58.02		71.00
	Before	0.6168			58.34		
	Master	1.265			57.00		

1	Before	1.264		1.270	57.32		70.00
2	Master	0.6278		0.6230	52.73		66.00
	Before	0.6271			53.07		
3	Master	0.7086		0.7040	51.87		65.00
	Before	0.7077			52.21		
4	Master	1.334		1.337	44.78		59.00
	Before	1.332			45.15		
5	Master	1.919		1.955	42.61		57.00
	Before	1.917			42.99		
6	Master	1.916		1.955	42.63		57.00
	Before	1.914			43.01		
7	Master	1.349		1.415	36.57		53.00
	Before	1.349			37.09		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)
Master: 7-Mar-2005 12:03				Before: 26-Mar-2005 18:05			

Array Induction Tool - H Wellsite Calibration							
Electronics Calibration Check - Auxilliary							
Phase	Array Induction SPA Plus MV		Value	Phase	Array Induction SPA Zero MV		Value
Master			989.1	Master			0.4989
Before			989.3	Before			0.4882
		941.0 (Minimum)	990.5 (Nominal)	1040 (Maximum)			
					-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
Phase	Array Induction Temperature Plus V		Value	Phase	Array Induction Temperature Zero V		Value
Master			0.9159	Master			0.0005063
Before			0.9161	Before			0.0004901
		0.8700 (Minimum)	0.9150 (Nominal)	0.9600 (Maximum)			
					-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)
Master: 7-Mar-2005 12:03				Before: 26-Mar-2005 18:05			

Array Induction Tool - H Wellsite Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG	
0	1.011				0.6056		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.011				0.5810		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.013				-0.02779		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.013				0.03244		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9922				0.007671		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	1.009				-0.1680		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	1.017				0.2834		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.030				-0.2827		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			
					-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Array Induction Tool - H Wellsite Calibration								
Sonde Error Correction								
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M		
0	-86.16				174.9			
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	172.9				-59.31			
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)		-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	111.0				95.78			
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)		-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	52.01				86.91			
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)		-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	25.67				34.45			
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)		-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	12.37				18.85			
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)		-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	8.859				5.475			
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)		-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
7	-1.031				-6.647			
		-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)		-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

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Array Induction Tool - H Wellsite Calibration								
Mud Gain Correction								
Idx	Value	Coarse - Mag, Real, Imag			Value	Fine - Mag, Real, Imag		
0	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 7-Mar-2005 12:03

Array Induction Tool - H Master Calibration									
Electronics Calibration Check - Thru Cal Mag. & Phase									
Idx	Phase	Value	Thru Cal Magnitude V		Nominal	Value	Phase DEG	Nominal	
0	Master	0.6176			0.6050	58.02		71.00	
1	Master	1.265			1.270	57.00		70.00	
2	Master	0.6278			0.6230	52.73		66.00	
3	Master	0.7086			0.7040	51.87		65.00	
4	Master	1.334			1.337	44.78		59.00	
5	Master	1.919			1.955	42.61		57.00	
6	Master	1.916			1.955	42.63		57.00	
7	Master	1.349			1.415	36.57		53.00	
			60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)		Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 7-Mar-2005 12:03

Array Induction Tool - H Master Calibration					
Electronics Calibration Check - Auxilliary					
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value

Phase	Array Induction SPA Plus mV	Value	Phase	Array Induction SPA Zero mV	Value	
Master		989.1	Master		0.4989	
	941.0 (Minimum)	990.5 (Nominal)	1040 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
Phase	Array Induction Temperature Plus V	Value	Phase	Array Induction Temperature Zero V	Value	
Master		0.9159	Master		0.0005063	
	0.8700 (Minimum)	0.9150 (Nominal)	0.9600 (Maximum)	-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)

Master: 7-Mar-2005 12:03

Array Induction Tool - H Master Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG	
0	1.011				0.6056		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.011				0.5810		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.013				-0.02779		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.013				0.03244		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9922				0.007671		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	1.009				-0.1680		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	1.017				0.2834		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.030				-0.2827		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Master: 7-Mar-2005 12:03

Array Induction Tool - H Master Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M	
0	-86.16				174.9		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)	-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	172.9				-59.31		
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)	-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	111.0				95.78		
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	52.01				86.91		
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	25.67				34.45		
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	12.37				18.85		
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	8.859				5.475		
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
7	-1.031				-6.647		
		-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

Array Induction Tool - H Master Calibration								
Mud Gain Correction								
Idx	Value	Coarse - Mag, Real, Imag			Value	Fine - Mag, Real, Imag		
0	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.083				1.074			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 7-Mar-2005 12:03

High resolution Integrated Logging Tool-DTS / Equipment Identification			
Primary Equipment:			
HILT high-Resolution Mechanical Sonde	HRMS - B	1915	
HILT Rxo Gamma-ray Device	HRGD - B	1940	
GR Logging Source	GLS - VJ	3765	
HILT High Res. Control Cartridge	HRCC - B	1942	
HILT Gamma-Ray Neutron Sonde-DTS	HGNS - B	1931	
HILT Gamma-Ray Device	HGR -		
HILT Neutron Detector with Alpha Source	HCNT -		
Z-Axis Accelerometer	HACC -		
Auxiliary Equipment:			
Neutron Calibration Tank	NCT - B	190	
Gamma Source Radioactive	GSR - U/Y	1910	

High resolution Integrated Logging Tool-DTS Wellsite Calibration									
Stab Measurement Summary									
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value
Before				0.7617	Before				0.4789
	0.7212 (Minimum)	0.7591 (Nominal)	0.7971 (Maximum)			0.4559 (Minimum)	0.4799 (Nominal)	0.5039 (Maximum)	
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value
Before				12430	Before				10880
	11810 (Minimum)	12440 (Nominal)	13060 (Maximum)			10330 (Minimum)	10870 (Nominal)	11420 (Maximum)	
Phase	LS Window Ratio			Value					
Before				0.2952					
	0.2763 (Minimum)	0.2909 (Nominal)	0.3054 (Maximum)						
Phase	LS Window Sum CPS			Value					
Before				1332					
	1258 (Minimum)	1324 (Nominal)	1390 (Maximum)						

Before: 26-Mar-2005 18:10

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
Before				1848	Before				2014
	1746 (Minimum)	1846 (Nominal)	1946 (Maximum)			1913 (Minimum)	2013 (Nominal)	2113 (Maximum)	
Phase <th colspan="3">LS PM High Voltage (Command) V</th> <th>Value</th> <td colspan="5"></td>	LS PM High Voltage (Command) V			Value					
Before				1936					
	1834 (Minimum)	1934 (Nominal)	2034 (Maximum)						

Before: 26-Mar-2005 18:10

High resolution Integrated Logging Tool-DTS Wellsite Calibration									
Crystal Quality Resolutions Calibration									
Phase	BS Crystal Resolution %			Value	Phase	SS Crystal Resolution %			Value
Before				12.91	Before				11.20
	11.79 (Minimum)	12.79 (Nominal)	13.79 (Maximum)			10.17 (Minimum)	11.17 (Nominal)	12.17 (Maximum)	
Phase <th colspan="3">LS Crystal Resolution %</th> <th>Value</th> <td colspan="5"></td>	LS Crystal Resolution %			Value					
Before				9.640					
	8.706 (Minimum)	9.706 (Nominal)	10.71 (Maximum)						

Before: 26-Mar-2005 18:10

High resolution Integrated Logging Tool-DTS Wellsite Calibration									
HILT Caliper Calibration									
Phase	HILT Caliper Zero Measurement IN			Value	Phase	HILT Caliper Plus Measurement IN			
Before				8.260	Before				12.54
	6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)			9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)	

Before: 26-Mar-2005 18:05

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		61.70	Before		170.9	Before		165.0	
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			155.4 (Minimum) 170.9 (Nominal) 186.4 (Maximum)			150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)		

Before: 26-Mar-2005 18:04

High resolution Integrated Logging Tool-DTS Wellsite Calibration					
Zero Measurement					
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		26.47	Master		26.11
Before		26.68	Before		26.54
	5.000 (Minimum) 26.47 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 26.11 (Nominal) 40.00 (Maximum)	

Master: 26-Jan-2005 10:45

Before: 26-Mar-2005 18:05

High resolution Integrated Logging Tool-DTS Wellsite Calibration									
Ratio Measurement									
Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value	
Master		5476	Master		2248	Master		2.436	
	5000 (Minimum) 6031 (Nominal) 7200 (Maximum)			2075 (Minimum) 2793 (Nominal) 3125 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)		

Master: 26-Jan-2005 10:45

High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration M/S2	Value
Before		9.793
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	

Before: 27-Mar-2005 15:17

High resolution Integrated Logging Tool-DTS Master Calibration					
Inversion results					
Phase	Rho Aluminum G/C3	Value	Phase	Rho Magnesium G/C3	Value
Master		2.604	Master		1.684
	2.586 (Minimum) 2.596 (Nominal) 2.606 (Maximum)			1.676 (Minimum) 1.686 (Nominal) 1.696 (Maximum)	
Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value
Master		2.566	Master		2.642
	2.470 (Minimum) 2.570 (Nominal) 2.670 (Maximum)			2.550 (Minimum) 2.650 (Nominal) 2.750 (Maximum)	

Master: 26-Mar-2005 16:59


High resolution Integrated Logging Tool-DTS Master Calibration									
Deviation Summary									
Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %	Value	
Master		0.5426	Master		0.2532	Master		0.9750	
	-0.6000 (Minimum) 0 (Nominal) 0.6000 (Maximum)			-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-1.500 (Minimum) 0 (Nominal) 1.500 (Maximum)		
Phase	BS Max Deviation %	Value	Phase	SS Max Deviation %	Value	Phase	LS Max Deviation %	Value	
Master		1.369	Master		1.094	Master		2.146	
	-1.600 (Minimum) 0 (Nominal) 1.600 (Maximum)			-2.500 (Minimum) 0 (Nominal) 2.500 (Maximum)			-3.500 (Minimum) 0 (Nominal) 3.500 (Maximum)		

Master: 26-Mar-2005 16:59

High resolution Integrated Logging Tool-DTS Master Calibration					
Zero Measurement					
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		26.47	Master		26.11

5.000 (Minimum)	26.47 (Nominal)	40.00 (Maximum)	5.000 (Minimum)	26.11 (Nominal)	40.00 (Maximum)
Master: 26-Jan-2005 10:45					

High resolution Integrated Logging Tool-DTS Master Calibration											
Tank Measurement											
Phase	Thermal Near Corr. (Tank) CPS		Value	Phase	Thermal Far Corr. (Tank) CPS		Value	Phase	CNTC/CFTC (Tank)		Value
Master	[Yellow Box]		5476	Master	[Yellow Box]		2248	Master	[Yellow Box]		2.436
	5000 (Minimum)	6031 (Nominal)	7200 (Maximum)		2075 (Minimum)	2793 (Nominal)	3125 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)
Master: 26-Jan-2005 10:45											

COMPANIA: YPF S.A. POZO: YPF.Ch.EN-625 CAMPO: ESCALANTE NORTE PROVINCIA: CHUBUT PAIS: ARGENTINA	PRIMERA LECTURA	2793.4 m
	PROFUNDIDAD PERFIL	2796.1 m
	PROF. PERFORADOR	2792 m
	BUJE DE VASTAGO	708.47 m
	MESA ROTATIVA	708.17 m
	NIVEL TERRENO	703.77 m
 COMBINADA ESCALA: 1/200		