Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**
PROJECT NUMBER: **112G00622-PHASE II**
DRILLING COMPANY: **DELTA WELL & PUMP**
DRILLING RIG: **MUD ROTARY**

BORING No.: **VPB-132**
DATE: 1/18/12
GEOLOGIST: **Conti**
DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0				DENSE	YELLOW BRN	F/C SAND	SW	DAMP				0
							TR TO SOME	GW	SUB ROUND				
							GRAVEL		GRAVEL				
	10												
							SAME						
	20						SAME						
													0
	30						SAME		MOIST				
	40						SAME						0
									SET 8" CAS				
									TO ~ 56' BGS				
	50												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: SET 8" CAS W/ CAS. HAMMER - THEN 8" MUD ROT TO BOTM

Converted to Well: Yes _____ No √ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 1/24/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	50				DENSE	BRN	SAND (F/M) TR GRAVEL	SP/SM	WET				0
	60						SAME		TOOK				
S-1 @ 1015	61								[BP-VPB132-GW-061]				
	70						SAME						0
	80						SAME						0
	90						SAME						
	100												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 11/24/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	100				DENSE	BRN	SAND (F/M) TR F. GRAVEL	SP	WET				O
	110						SAME						
S-2 @ 1330	120						SAME		TOOK BP-VPB132-GW-121				O
	130						SAME - MORE GRAVEL		BASED ON DRILL CUTTINGS				
	140						SAME						O
	150												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): O

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 1/25/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	150				DENSE	BRN	SAND F/M - TR		WET				0
							F. GRAVEL						
	160						SAME						
									FEW CLAY				
									STRINGERS				
									(CUTTINGS)				
									160 → 170 ?				
	170						SAME						
													0
S-3	180								TOOK				
@ 1030	181						SAME		[BP-VPB132-GW-181]				
	190												
							SAME						0
	200												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 1/25/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	200				DENSE	BRN	SAND F/M -TR	SM	WET				0
							F GRAVEL	SP					
	210												
							SAME						
S4	220								TOOK				
@ 1350	221						SAME		BP-VPB132-GW-221				0
	230												
							SAME						
S5	240								TOOK				
1600	241						SAME - TR		BP-VPB132-GW-241				0
							CLAY						
									CLAY ON SCREEN OF HP- DARK GRAY				
	250												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**
PROJECT NUMBER: **112G00622-PHASE II**
DRILLING COMPANY: **DELTA WELL & PUMP**
DRILLING RIG: **MUD ROTARY**
BORING No.: **VPB-132**
DATE: 11/26/12
GEOLOGIST: **Conti**
DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	250				DENSE	GRAY	SAND F/M	SM	WET				0
							TR GRAVEL	SP					
							AND CLAY						
11/25													
S6	260								TOOK				
11/26 C 1110	261			•			SAME		[BP-VPB132-GW-261]				
	270						SAME.						
													0
S7	280								TOOK				
C 1400	281			•			SAME		[BP-VPB132-GW-281]				
	290												0
							SAME.						
	300												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**
PROJECT NUMBER: **112G00622-PHASE II**
DRILLING COMPANY: **DELTA WELL & PUMP**
DRILLING RIG: **MUD ROTARY**

BORING No.: **VPB-132**
DATE: 1/27/12 - 1/30/12
GEOLOGIST: **Conti**
DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
SB	300												
@1300	301			•	DENSE	GRAY	SAND (F/M)	SM/SP	WET				0
									TOOK				
									BP-VPB132-GW-301				
	310						SAME						
SB	320						SAME		TOOK				
1500	321			•					BP-VPB132-GW 321				0
	330						SAME						
SB	340						SAME		TOOK				
1050	341			•					BP-VPB132-GW-341				0
	350												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 1/31/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	350				DENSE	GRAY	SAND F/M	SW/SP	WET				0
S11	360						SAME		TOOK				
@ 1315	361								BP-VPB132-GW-361				
	370						SAME						
													0
S12	380						SAME		TOOK				
1510	381								BP-VPB132-GW-381				
	390						SAME						
													0
	400												

1/31

2/1

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW**
PROJECT NUMBER: **112G00622-PHASE II**
DRILLING COMPANY: **DELTA WELL & PUMP**
DRILLING RIG: **MUD ROTARY**

BORING No.: **VPB-132**
DATE: 2/1/12
GEOLOGIST: **Conti**
DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	400												
S13 @ 1000	401			•	DENSE	GRAY	SAND (F/M)	SM SP	WET TOOK [BP-VPB132-GW-401]				0
	410						SAME						
S14 @ 1230	420						SAME		TOOK [BP-VPB132-GW-421]				0
	421			•									
	430						SAME						
S15 @ 1415	440						SAME		TOOK [BP-VPB132-GW-441]				0
	441			•									
	450												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/1/12 → 2/2/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	450				DENSE	GRAY	SAND (F/M)	SM/SP	WET				0
2/1													
S16	460						SAME		TOOK				
2/2 C 0940	461			•			TRACE CLAY		[BP-VPB132-GW-461]				
									MORE CLAY PER DRILLER 461 → 465				
	470												
							SAME						0
S17	480								TOOK				
C 1205	481			•			SAME		[BP-VPB132-GW-481]				
	490												
							SAME						0
	500												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: **2/2/12**
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	500												
S18 C	501			•	DENSE	GRAY	SAND - (F/M)	SM	WET				0
1435	502		SS-1				SILTY F SAND	SP/SM	TOOK BP-VPB132-GW-501				
	510						SAME - TR CLAY -		PER DRILLER 510-520				
S19 C	520								TOOK				
	521			•			SAME		BP-VPB132-GW-521				0
	530												
2/3 S20	540								TOOK				
2/6 C 1210	541			•			SAME		BP-VPB132-GW-541				0
	550												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: **2/6/12 → 2/7/12**
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	550				DENSE	GRAY	SAND F/M	SM/SP	WET				0
521	560						SAME.		TOOK				
1400	561						– TR		BP-VPB132-GW-561				
							SANDY						
							~3' FEET → CLAY		ONLY 1 VIAL. SOME SANDY				
							561 → 564		CLAY ON EXPOSED H.P SCREEN.				
	570												
							MORE CLAY ~ 571						0
2/6													
522	580								TOOK				
2/7 1000	581						SAME.		BP-VPB132-GW-581				
	590												
							SAME						0
	(600)												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/7/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S23 @ 1215	600												
	601			•	DENSE	GRAY	SAND (F/M)	SM	WET - TOOK				0
SS2 @ 1230	602						TR CLAY	SP	[BP-VPB132-GW-601]				
							(PYRITE?)						
							SILTY FINE SAND - TR CLAY, LIGNITE	SM	WET				
	610						V-THIN LAMINATIONS		MICACEOUS GOT GOOD				
									HP SAMPLE AT 600 → 601				
S24 @ 1500	620			X			SAME		X NO GW SAMPLE				0
	621												
	630						SAME						
2/7													
S25 @ 1000	640						SAME		TOOK				
2/8	641			•					[BP-VPB132-GW-641]				0
	650												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/8/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	650				DENSE	GRAY	SILTY F/M SAND	SM	WET				0
							TR CLAY	/SP					
S26	660								NO GW SAMPLE				
@ 1205	661			X					SCREEN EXPOSED ONLY 4" W/				
							POSSIBLE MORE CLAY ~ 660 - BASED		CLAYEY SAND ON BOTTOM PORTION				
							ON DRILLING WAS HARD AND SLOW.						
	670												
							SAME.						0
S27	680								TOOK				
@ 1435	681			°			SILTY F/M SAND		BP-VPB132-GW-681				
							TR CLAY						
							DRILLER NOTES MORE CLAY		1 VIAL ONLY				
							681 → 683±						
	690												
							SAME						0
	700												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: **2/9/12**
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S28	700												
2/9 @ 1010	701			•	DENSE	GRAY	F/M SAND -	SM	WET				O
S63 @ 1040	702			702'			SILTY TR CLAY	SP	BP-VPB132 - GW-701				
							F SAND - TR LIGNITE TR -						
							ORANGE BRN LENS SL. TRACE OF CLAY	SM	WET	O			
	710								MICACEOUS.				
							SAME - TR TO	SP					
							SOME		WET				
							F/C GRAVEL		EASY DRILLING 700-720				
							SOME LOSS OF DRIL FLUIDS 710 - 720		GRAVEL NOTED IN CUTTINGS				
S29	720						SUB ROUND ½"Φ		TOOK				
@ 1310	721			•			SAME. (See GRAVEL Baggie)		BP-VPB132 - GW-721				O
									S29 WAS TURBID GRAY				
	730						FINE SAND -						
							SOME		STILL IN GRAVEL				
							GRAVEL		ZONE TO				
							FROM 702'		740				
S30	740								TOOK				
@ 1515	741			•			SAME		BP-VPB132 - GW-741				O
							740-760 GRAVEL						
							MIX MORE ZONE MUD		1 VIAL				
							SOME LOSS OF						
	750						WATER.						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/13/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	750				DENSE	GRAY	SAND - SOME	SM	WET				0
							GRAVEL	SP	HAD TO THICKEN MUD MIX 750-760 GRAVELLY				
2/10 531	760						SAME.		TOOK				
2/13 @ 1215	761			•					[BP-VPB132-GW-761] 1 VIAL				
	770						SAME - LESS GRAVEL						0
532 @ 1450	780			•			SAME - LESS GRAVEL		TOOK [BP-VPB132-GW-781]				
	790						SAME.						0
	800												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/14/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
533	800												
C 1015	801			X	DENSE	GRAY	SAND		WET				0
SS4	802				V DENSE	LT GRAY	SILTY F SAND (MOIST → WET)		TOOK BP-VPB132-GW-801 NO SAMPLE RECOVERED				
	810						SAME						
S34	820								TOOK				
1310	821			•			SAME		BP-VPB132-GW-821				0
	830						SAME						
S35	840								TOOK				
2/14 C 1530	841			•					BP-VPB132-GW-841				0
2/15 SS5 C	842				DENSE	GRAY	SILTY F/M SAND TR F. GRAVEL →		SUBROUND				
0910													
	850												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/15/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	850				DENSE		SILTY F/M SAND	SM	WET				0
							TR F GRAVEL	SP					
							TR CLAY						
536	860								TOOK				
C 1215	861				DENSE	GRAY	CLAYEY SAND		BP-VPB132-GW-861				
SS6	862						(POOR REC)		V. TURBID				
									MICACEOUS				
	870												
													0
SS	880				VERY	G	TOP 6" - SILTY CLAY		MOIST				
7 1530	881		1/1		STIFF TO	RAY	TR SAND LENS. TO BOT 6" CLAYEY SAND		NO HP HERE				
					M DENSE		(WET)		DUE TO CLAY CONTENT				
SS	890				M	GRAY	SILTY F/M SAND	SM	WET				
8 1000	891		1/1		DENSE		TR LIGNITE AT TOP OF SAMPLE		MICACEOUS				0
									(TOC HERE)				
	900												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/16/12 → 2/21/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
SS9	900												
1200	901		1/1		DENSE	GRAY	SILTY F SAND	SM	- MICACEOUS				0
							TR MED SAND		WET				
SS10	910												
@ 1330	911		1/1		DENSE	GRAY	SILTY VF SAND	SM	MOIST				
							TR CLAY		PROBABLY WILL NOT				
							CLAYEY SAND		PRODUCE H2O FOR H. PUNCH				
SS11	920			~920	STIFF	GRAY	SANDY CLAY	SC	MOIST				
1320	921		1/1				V. THIN LAMINATIONS W/ DARK MINERALS						0
				?			FIRST SAMPLE OF		VERY DIFFICUT TO PULL SPOON				
				CLAY			REALLY GOOD CLAY MATERIAL		W/ RIG - INDICATING GOOD CLAY MATERIAL				
				W/					WOULD NOT HAVE PRODUCED WATER				
				SAND									
2/16 SS12	930				STIFF	GRAY	SANDY CLAY		DRILLER DID NOT				
2/20 @ 1245	931		8/1	931			MICACEOUS W/SAND		NOTICE EVIDENCE OF CLAY DURING				
							LENSES - LAMINATED		DRILLING - OTHER THAN TR. OF CLAY IN				
							LIGNITE PRESENT		CUTTINGS 915 → 920				
SS13	940				DENSE	GRAY	SILTY F/M SAND - TR C. SAND	(SP) SM	WET				
2/21 0940	941		6/8	•					TOOK BP-VPB132-GW-942 1 VIAL				0
S37	942	•											
	950												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: **VPB-132**

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: **BETHPAGE OU-2 OFFSITE GW** BORING No.: **VPB-132**
PROJECT NUMBER: **112G00622-PHASE II** DATE: 2/21/12 → 2/22/12
DRILLING COMPANY: **DELTA WELL & PUMP** GEOLOGIST: **Conti**
DRILLING RIG: **MUD ROTARY** DRILLER: **C. Twigg**

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
SS14	950												
C 1300	951		•8/1		DENSE	GRAY	SILTY F SAND - TR	SM	WET				0
							LIGNITE - TR CLAY		MICACEOUS				
									GOOD SAMPLE				
									MOSTLY SAND				
									BUT FINER THAN				
									SS13.				
SS15	960			960									
2/21 C 1525	961		•3/.5		V DENSE	GRAY	SILTY F. SAND - TR	SM	MOIST - MICACEOUS				
2/22				964			LIGNITE		SOME PCS CEMENTED AND				
				⊛			HARD CEMENTED		V HARD NOTICED THAT MICA				
							960-964 4000 PSI ROT. PRESS		APPEARED LARGER HERE AND MORE				
SS16	970			970			VS. 1200 AVE.		NOTICEABLE				
C 1140	971		•7/.8		V STIFF	GRAY	SANDY CLAY - LAMINATED	SC	MOIST				0
				974			TR SILTY CLAY (CL)		DID NOT NOTICE ANY LIGNITE				
				976	HARD		CEMENTED SAND?		HARD DRILLING				
							THEN CLAY ↓						
2/22 SS17	980			R									
2/23 C 0900	981		•7/1	A	V. STIFF	GRAY	SILTY CLAY	CL	MOIST				
				R			V. THIN LAMINATIONS		↓ DAMP (DRY)				
				I			DRILLS LIKE CLAY TO 990 - TR RED BRN		IN SHOE OF SPOON.				
				T			CLAY IN CUTTINGS. ~988		GOOD REC. AND VERY GOOD PC.				
				A					OF CLAY SAMPLE				
SS18	990			N									
1130	991		•4/.5	?	V. STIFF	RED GRAY	SILTY CLAY	CL	MOIST → DRY				0
									DRY BOTTOM OF				
									SHOE.				
					V	RED							
SS19 C	1000		•3/.5		STIFF	GRAY	SILTY CLAY	CL	MOIST → DRY				

* When rock coring, enter rock brokeness. BOTTOM OF SHOE DRY CLAY

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

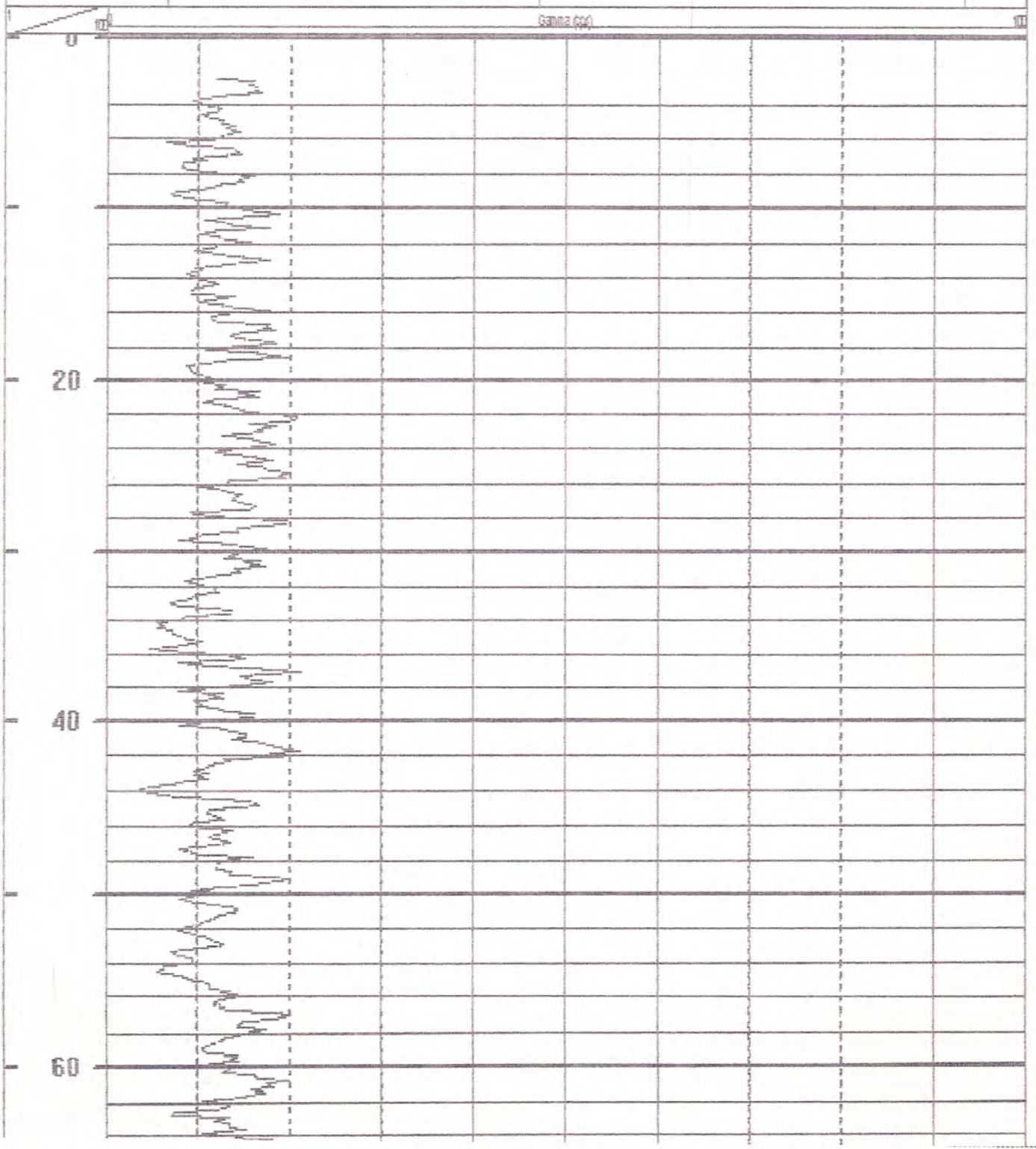
Drilling Area Background (ppm): 0

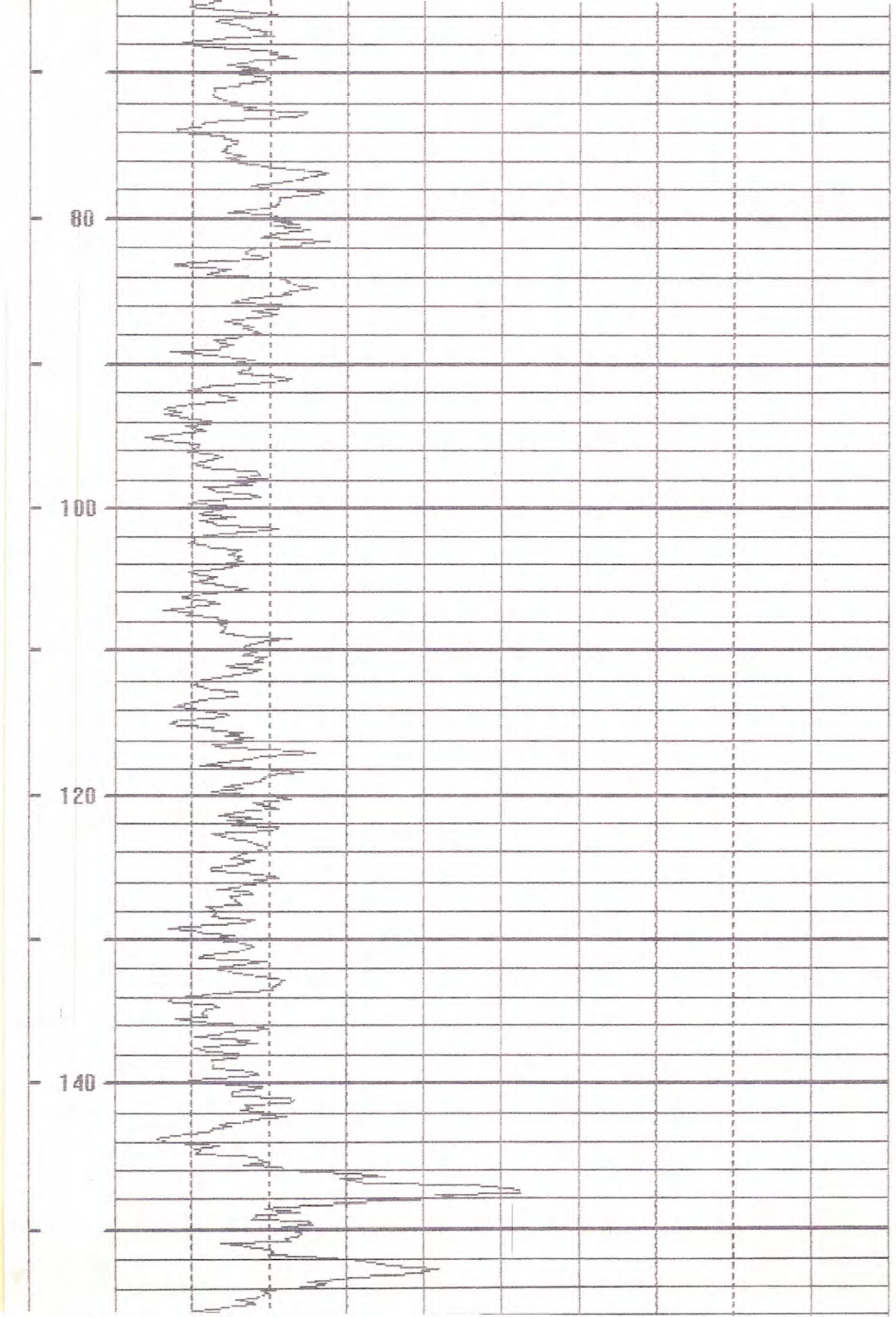
Remarks: ⊛ RARITAN POSSIBLE START @ 964 - CHECK GAMMA LOG WHEN COMPLETE. ALSO USGS WILL LOG ON 2/28/12.

Converted to Well: Yes ____ No ✓ Well I.D. #: **VPB-132**

Date: Thursday, February 23, 2012 Time: 15:41 File: C:\Documents and Settings\Administrator\My Documents\717\VP-132.id

	COMPANY: DELTA WELL & PUMP CO., INC.	Casing
	Location: NWRP KILDARE CRESCENT	
Well: VP-132	Depth Driller:	
	Depth Logger:	
Date: 02/23/12	BH Fluid: VP B-132	Logged by: CMO
File Name: 717	DOWN	Witness: STAN

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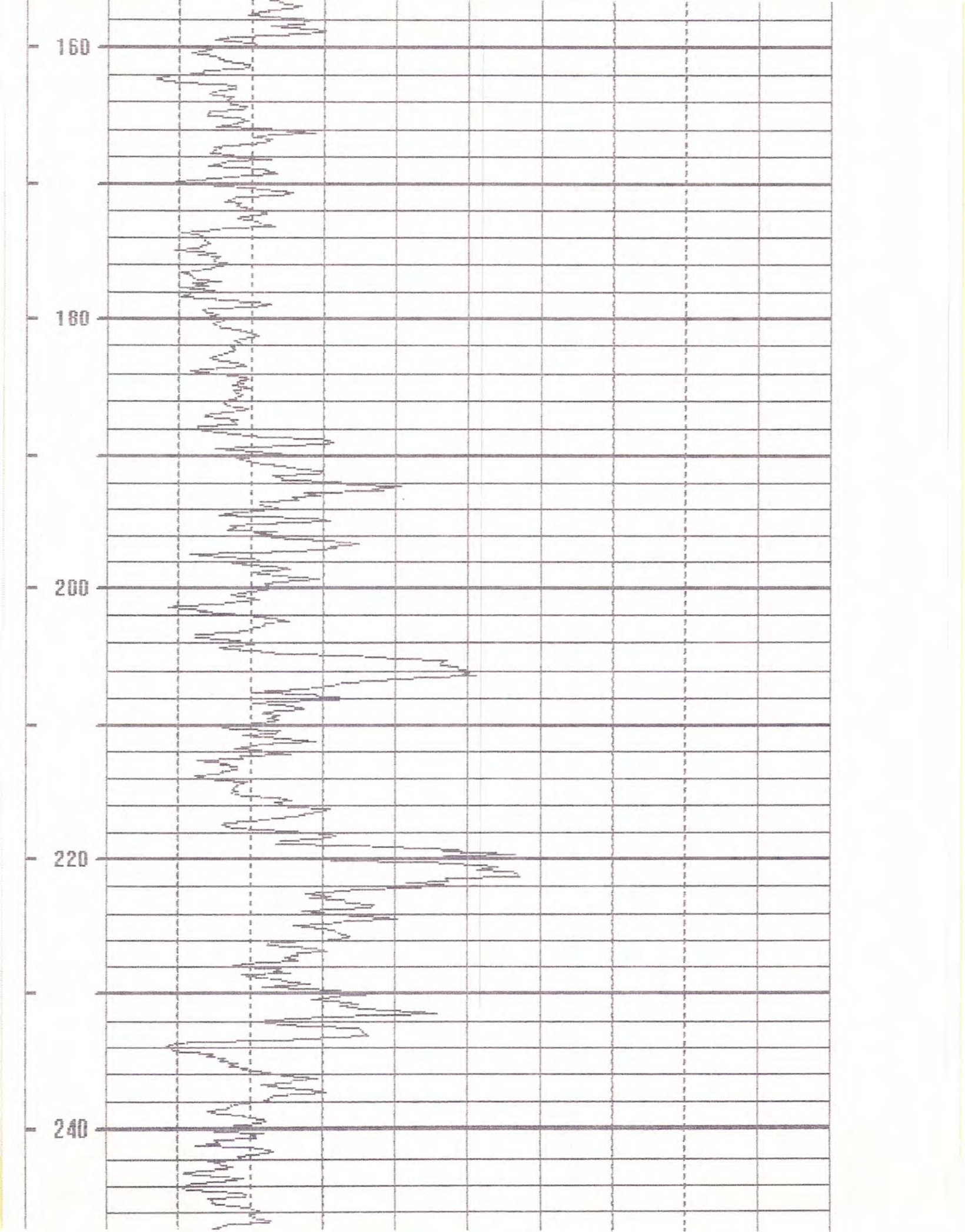
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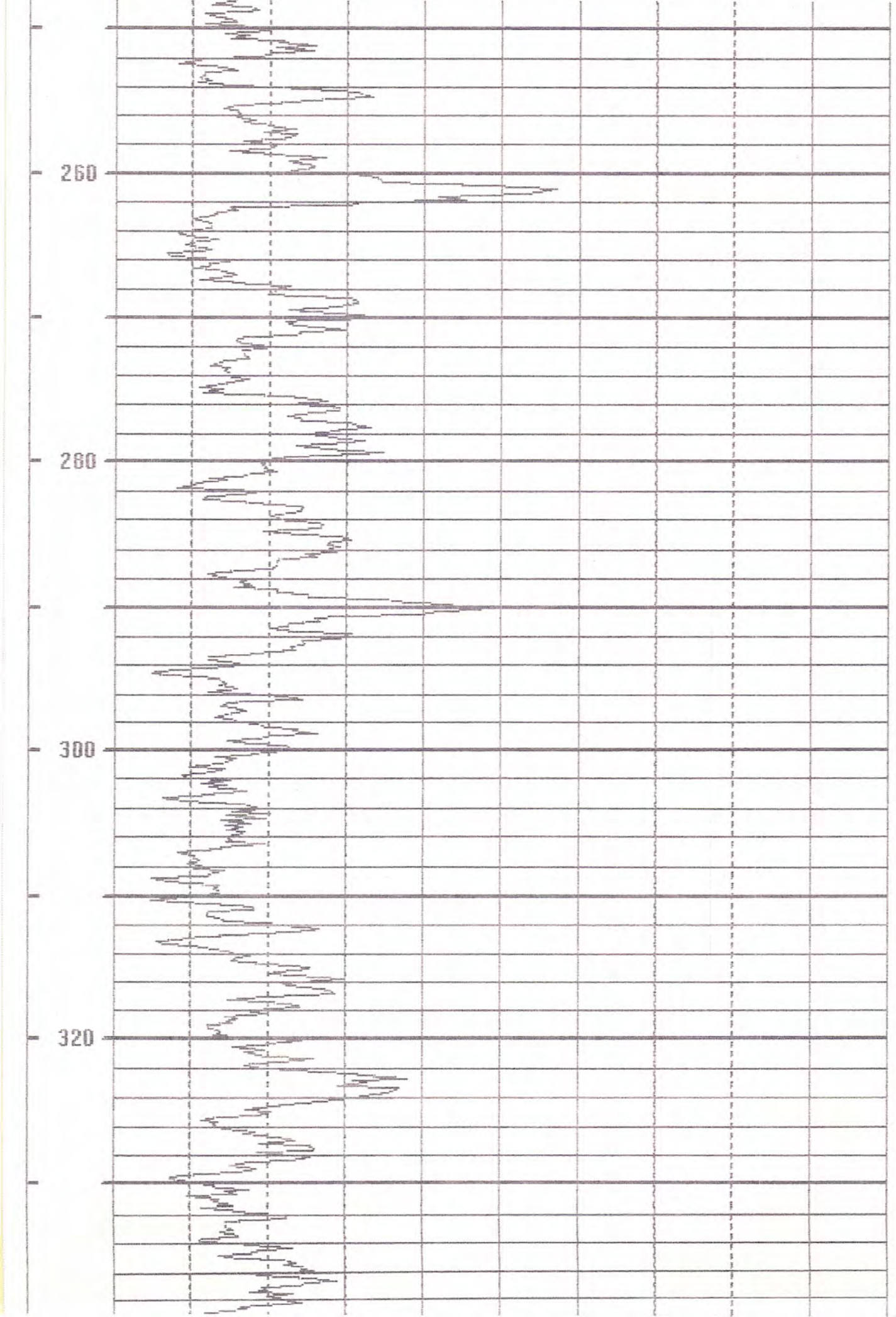
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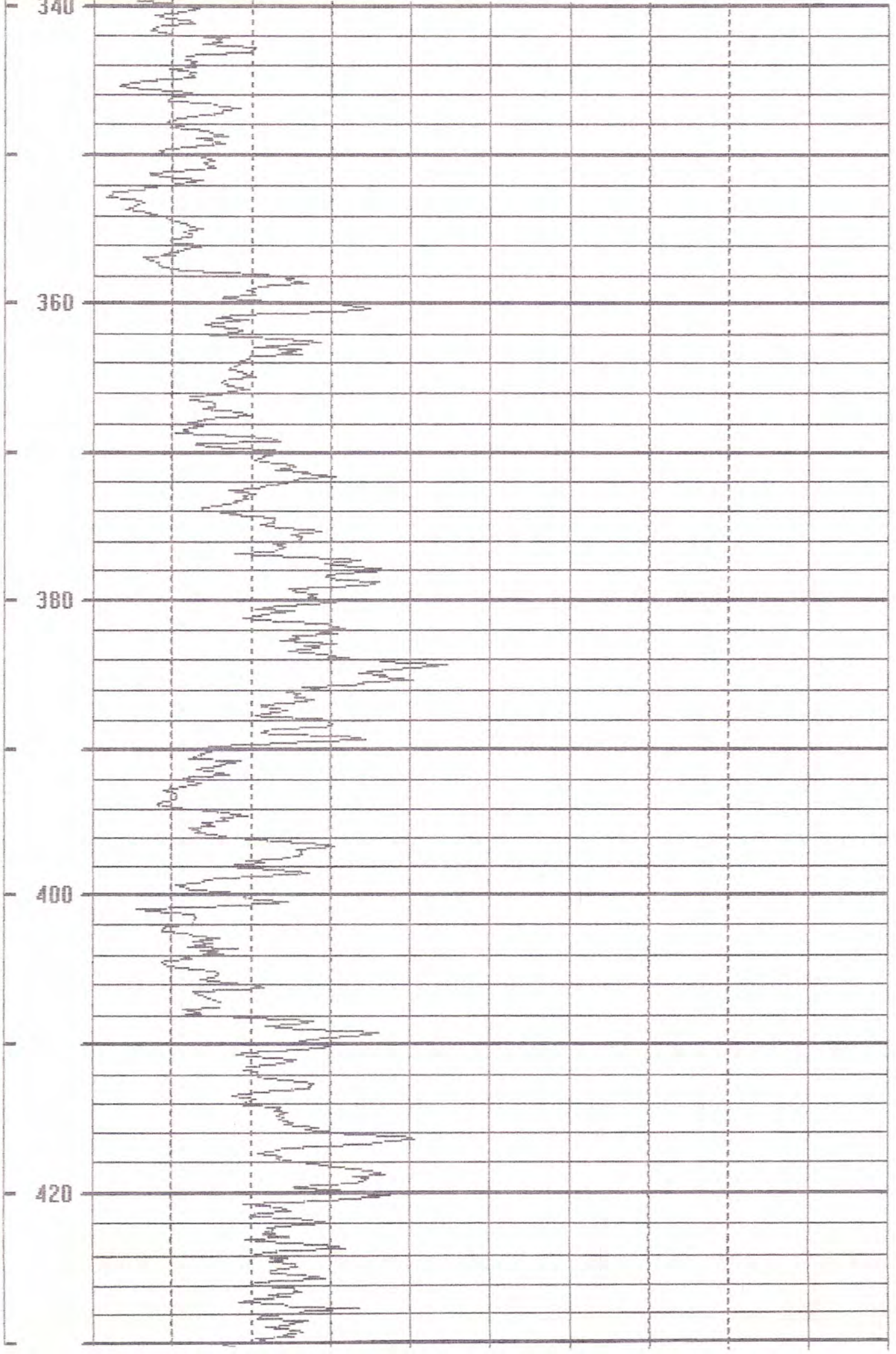
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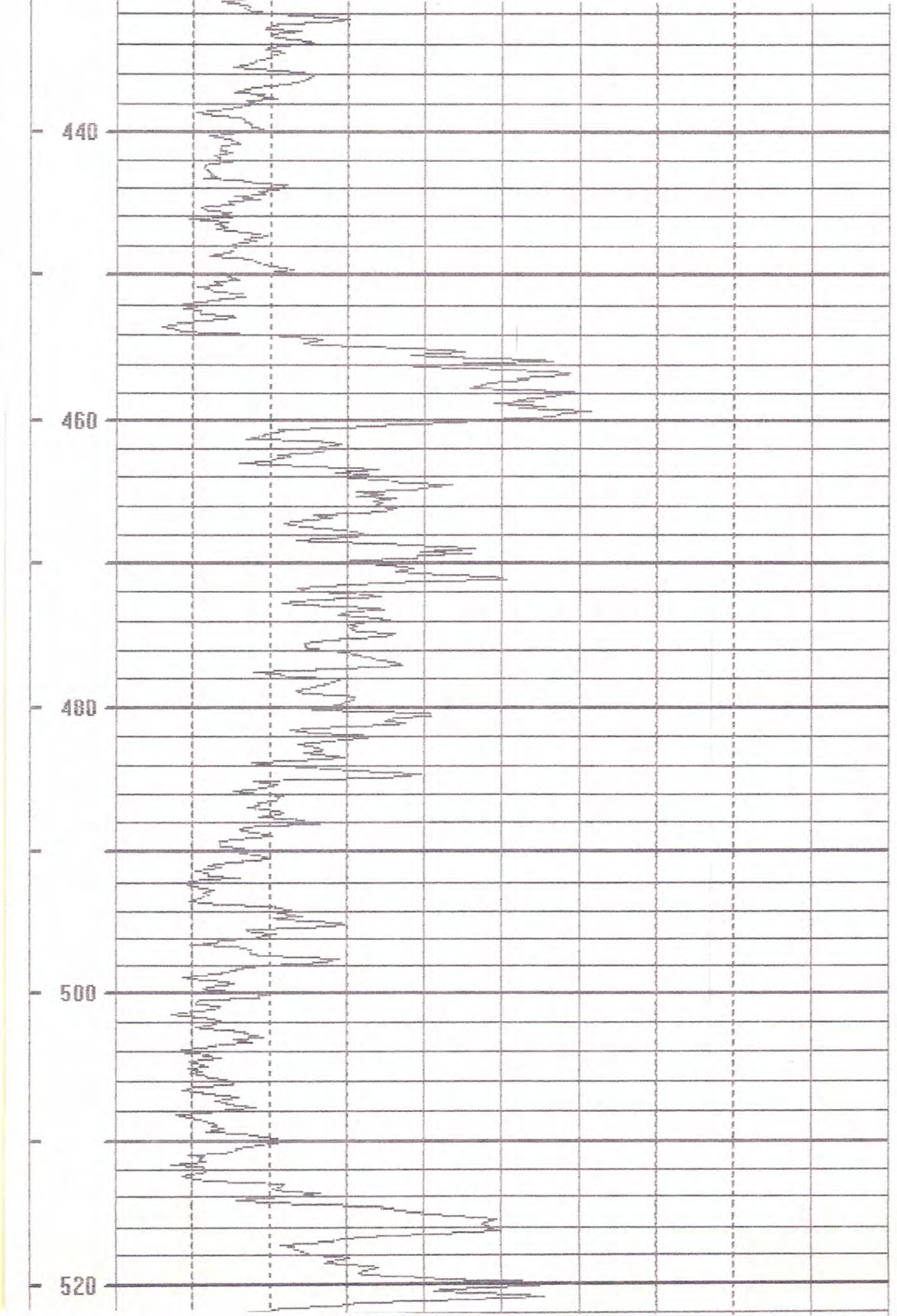
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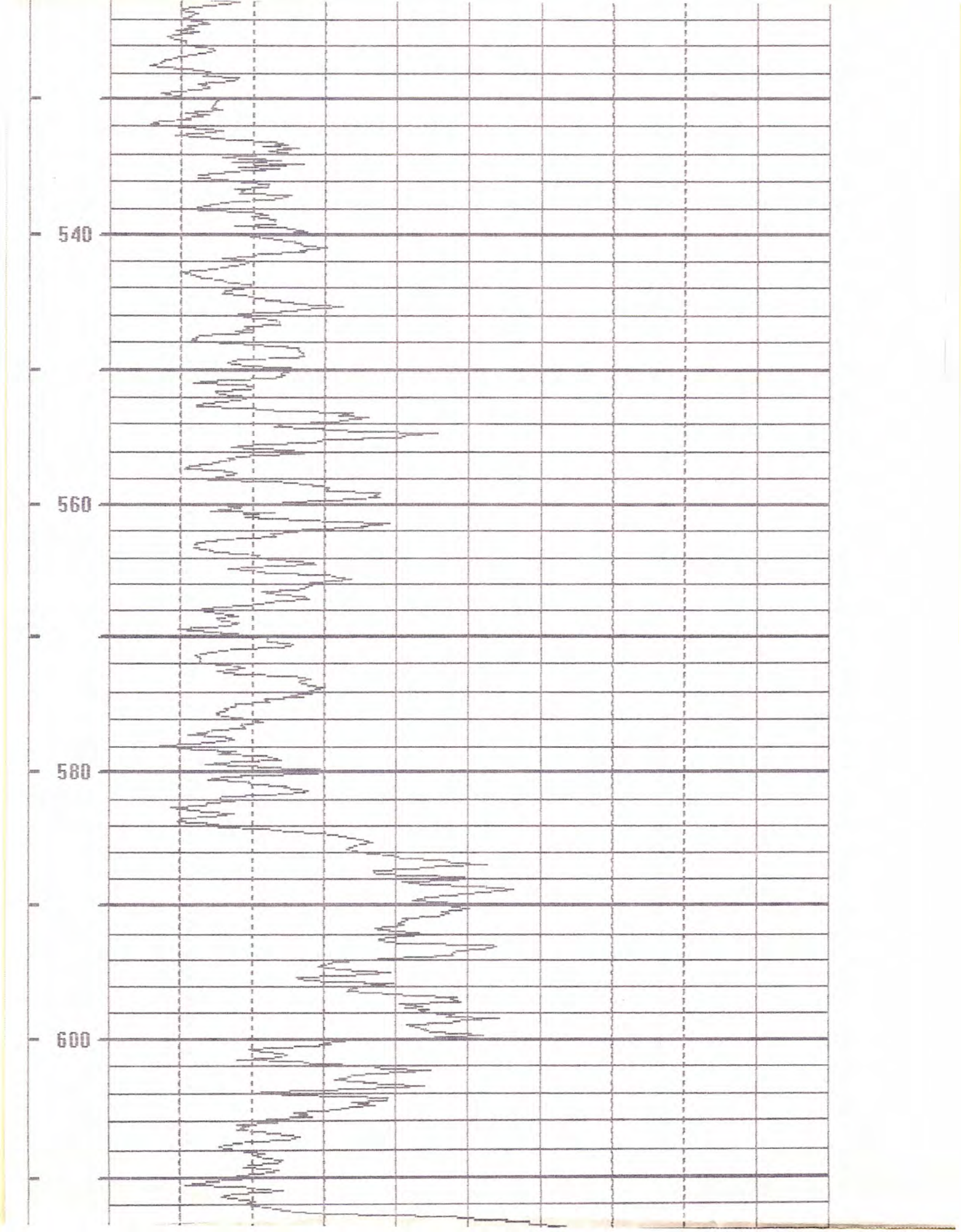
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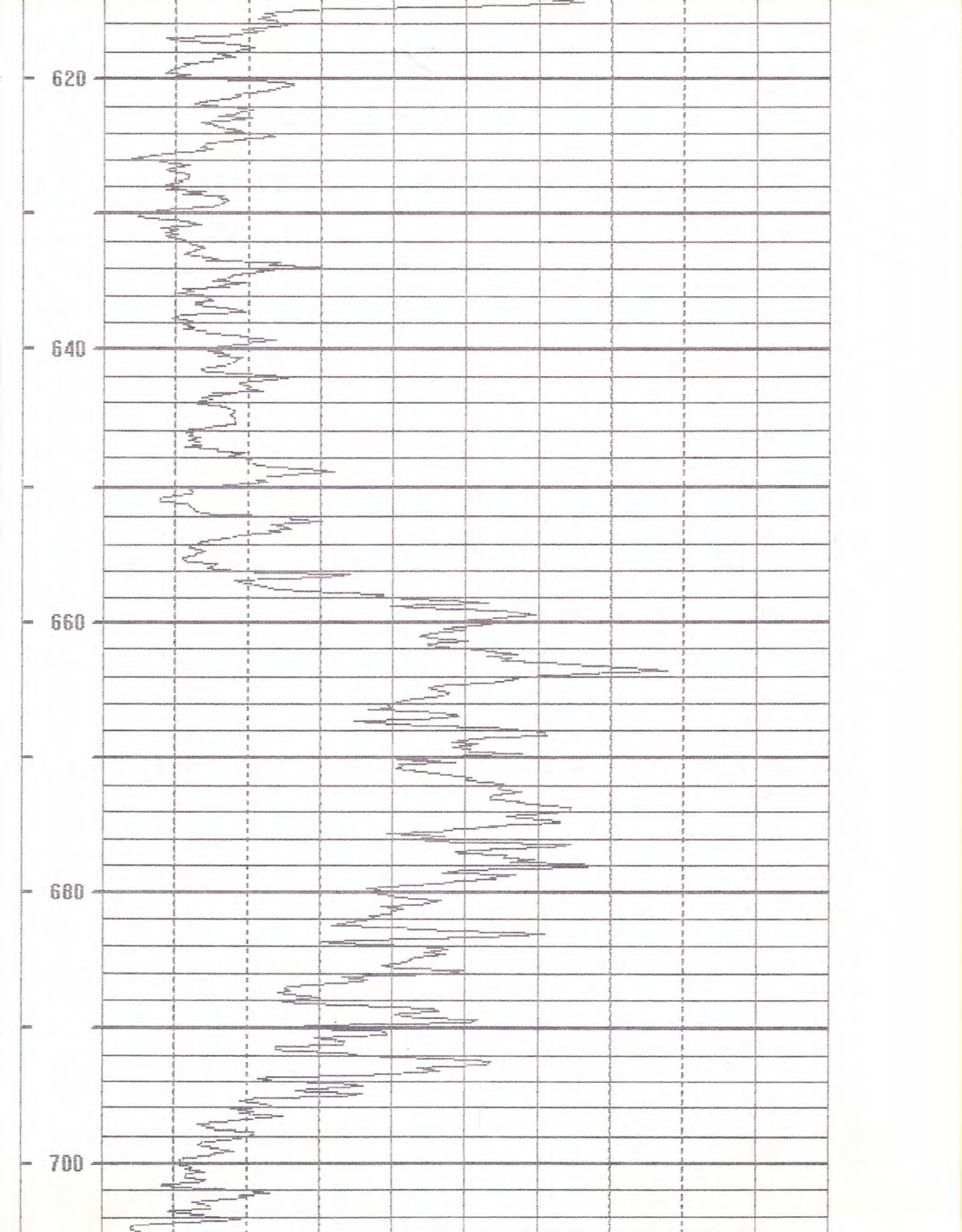
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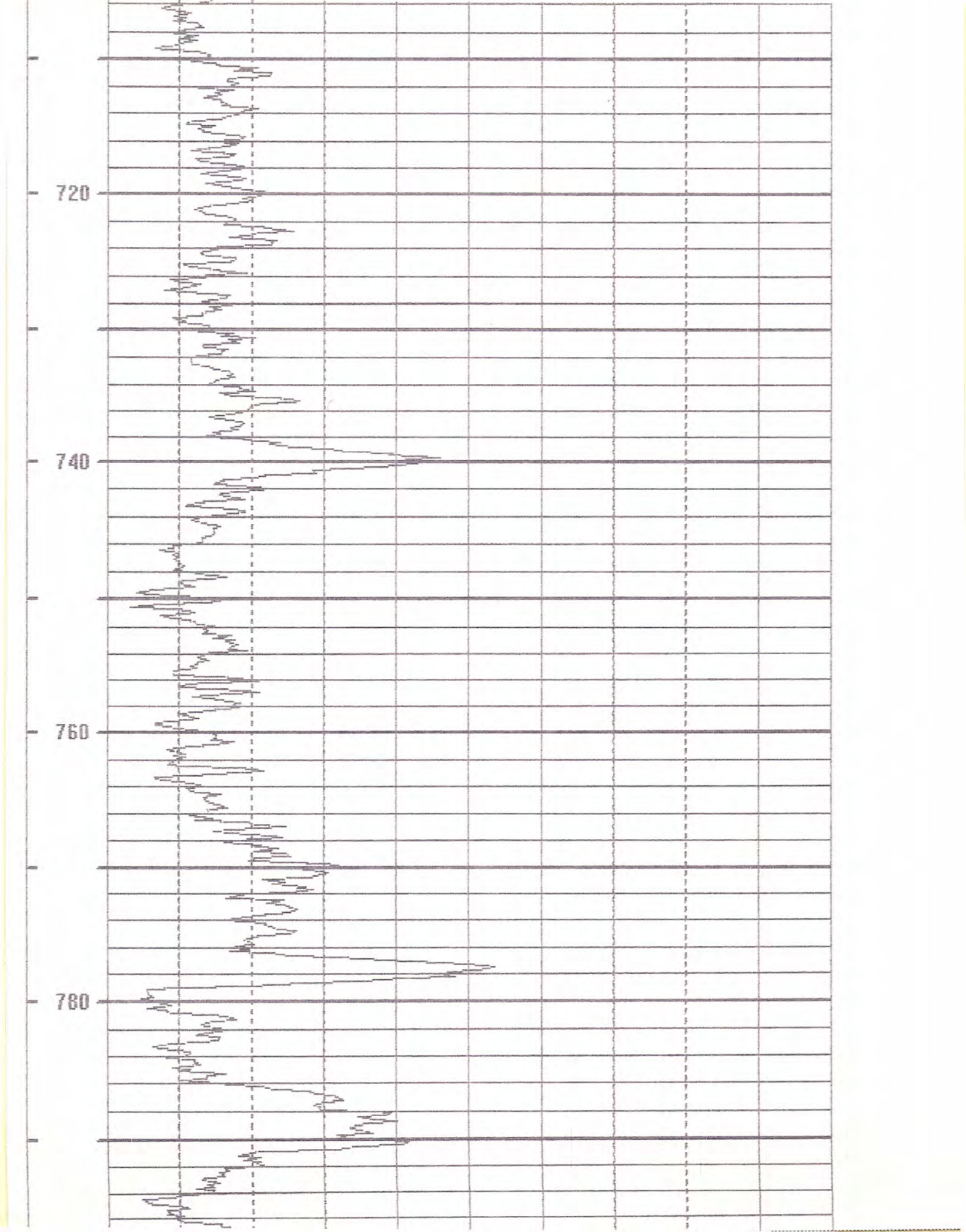
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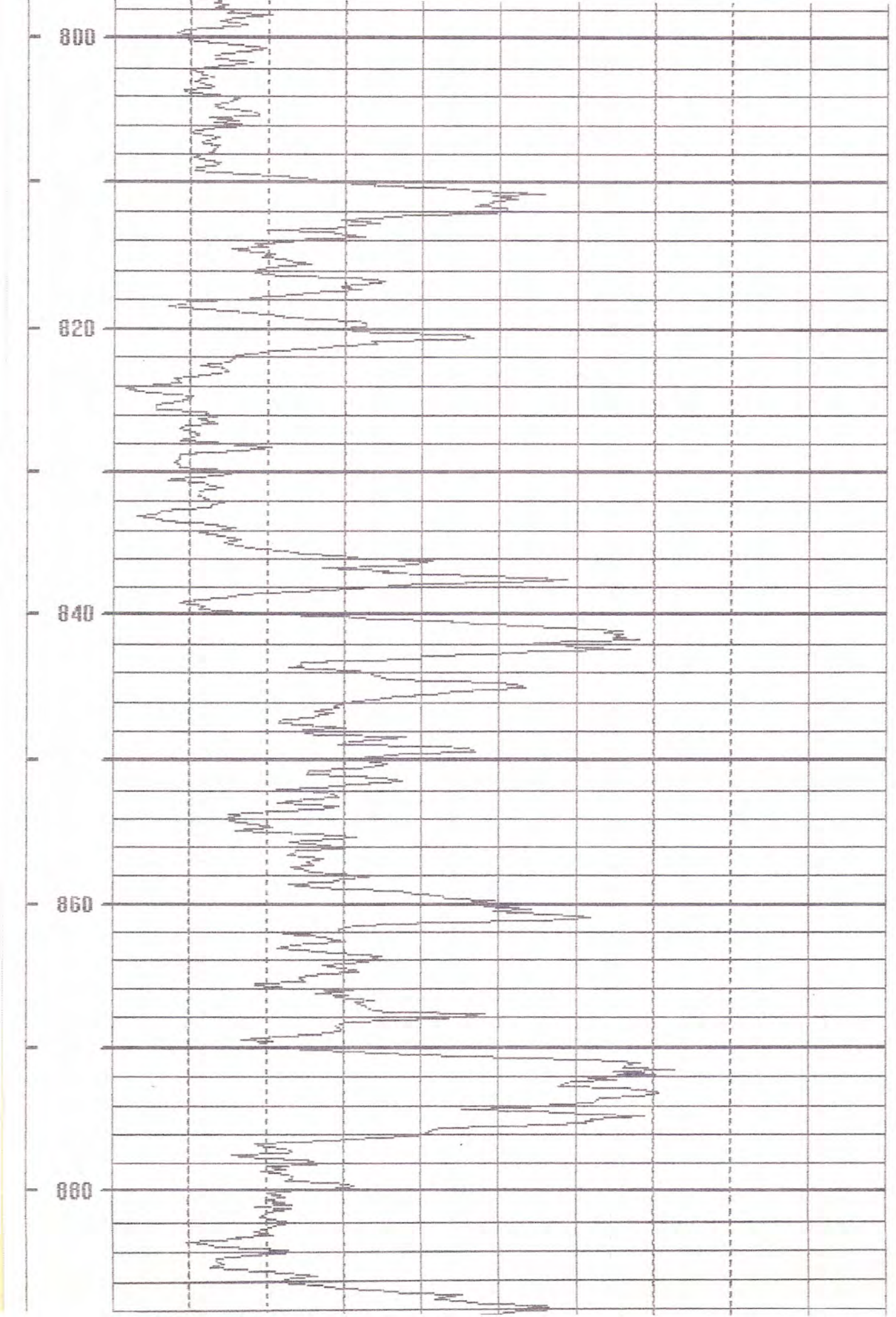
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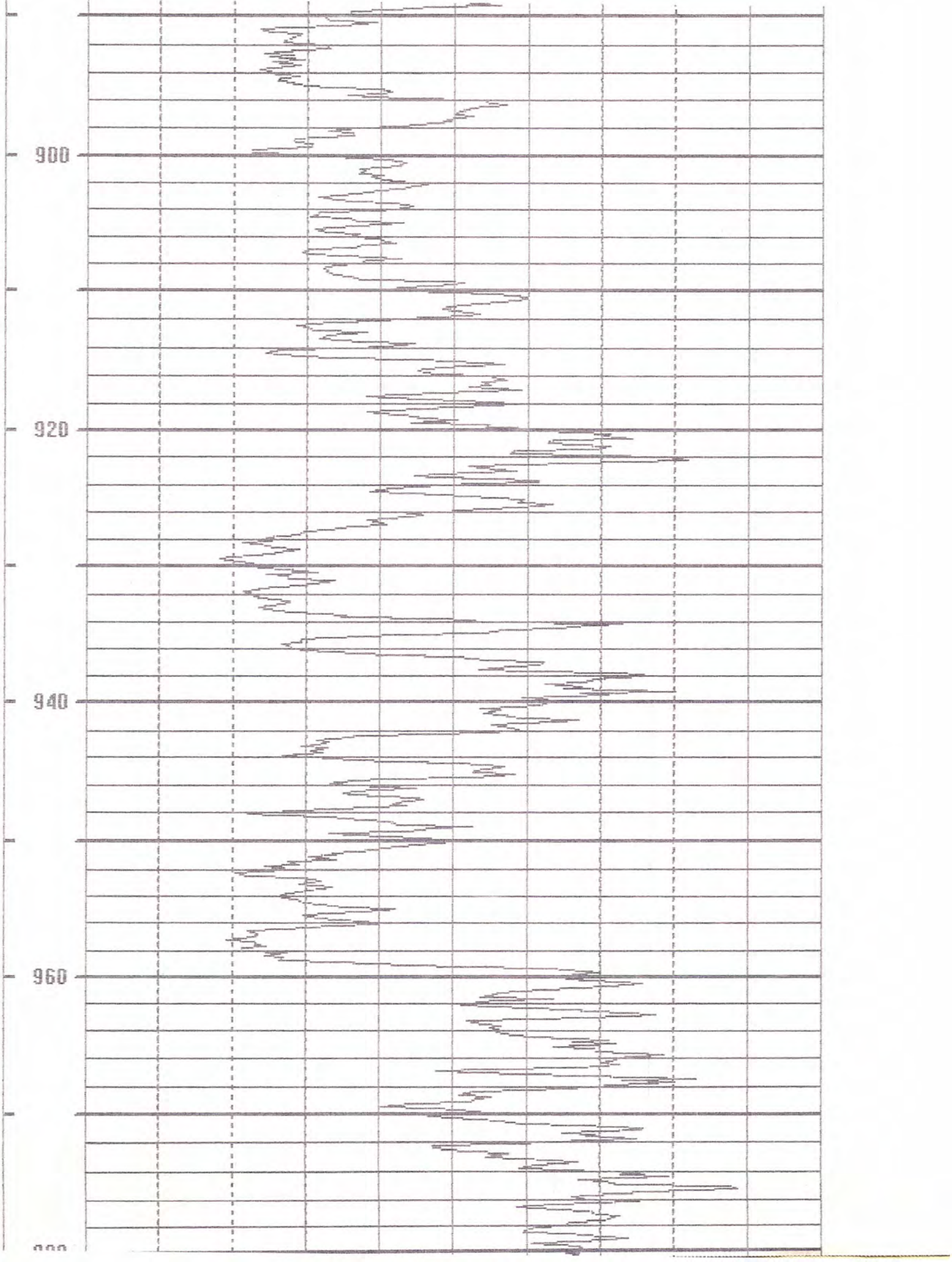
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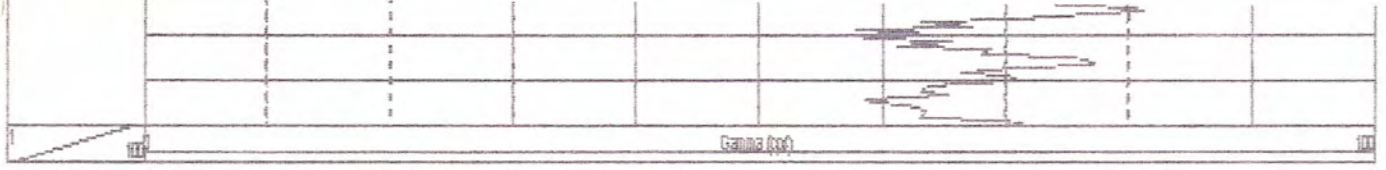
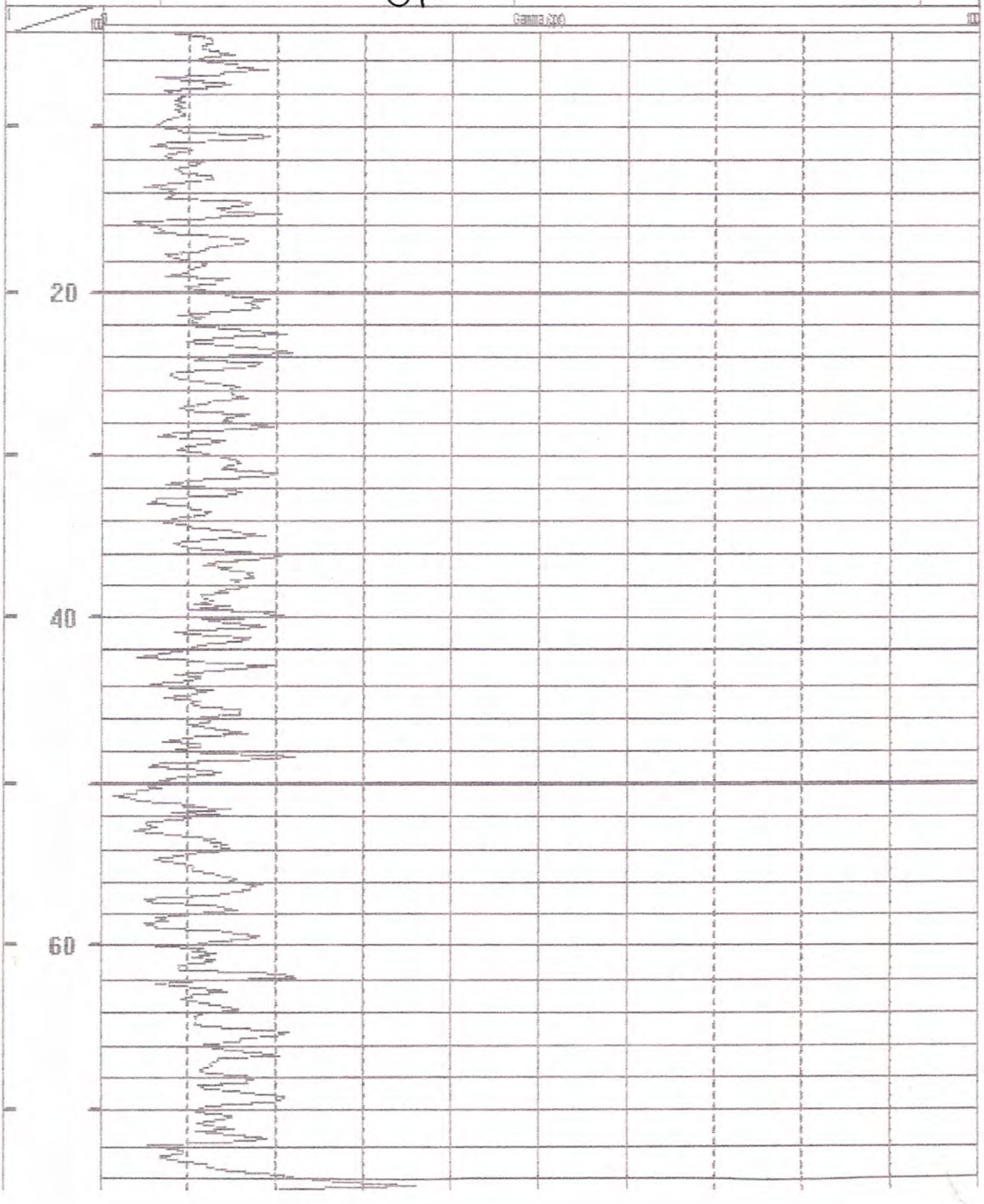
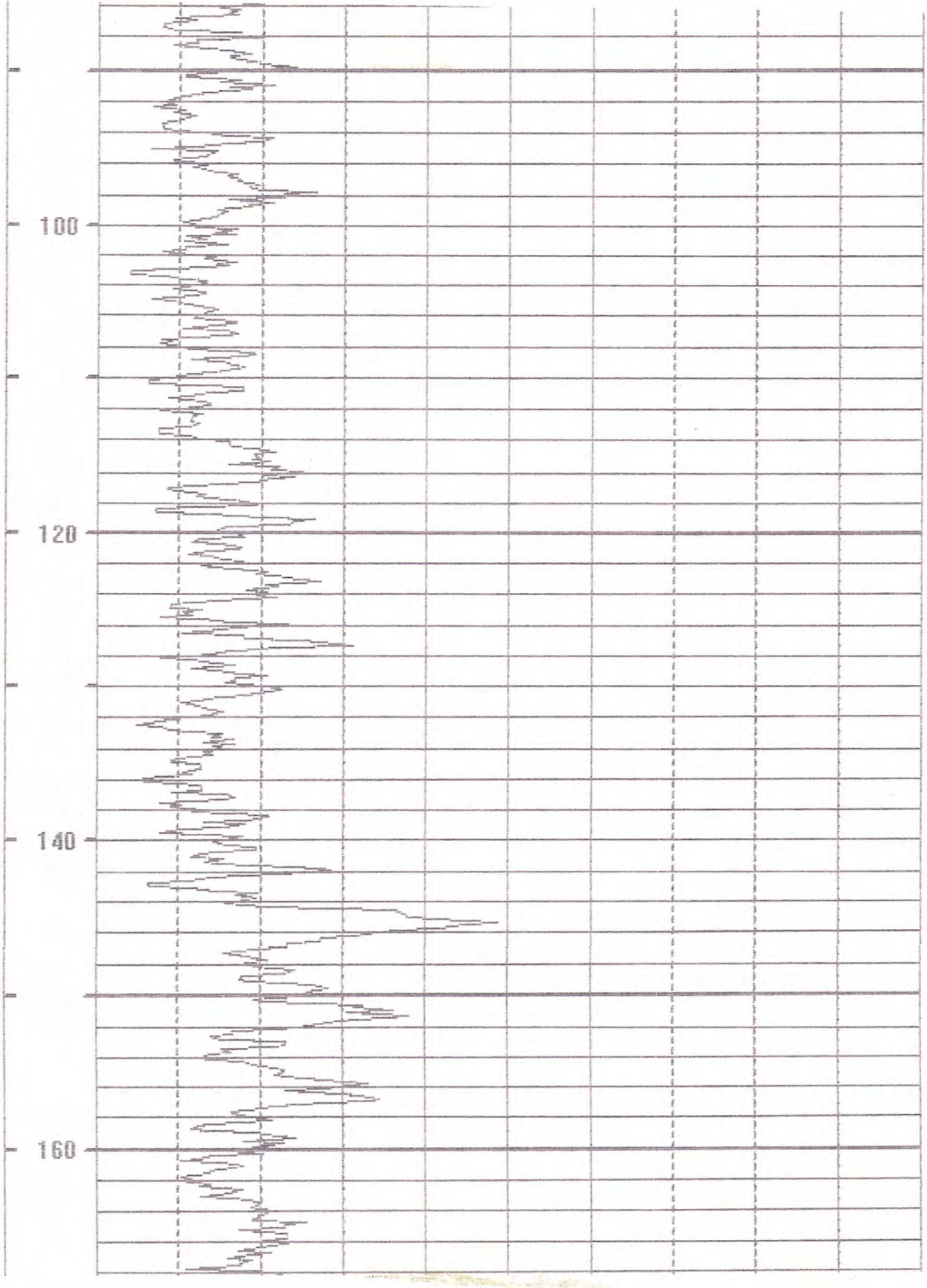


Date: Thursday, February 23, 2012 Time: 15:41 File: C:\Documents and Settings\Administrator\My Documents\PTW\P-132.td

Well	VPB-132		Depth Logger
Date	02/23/12	BH Fluid	Logged by: CMO
File Name	717	VPB-132 UP	Witness: STAN

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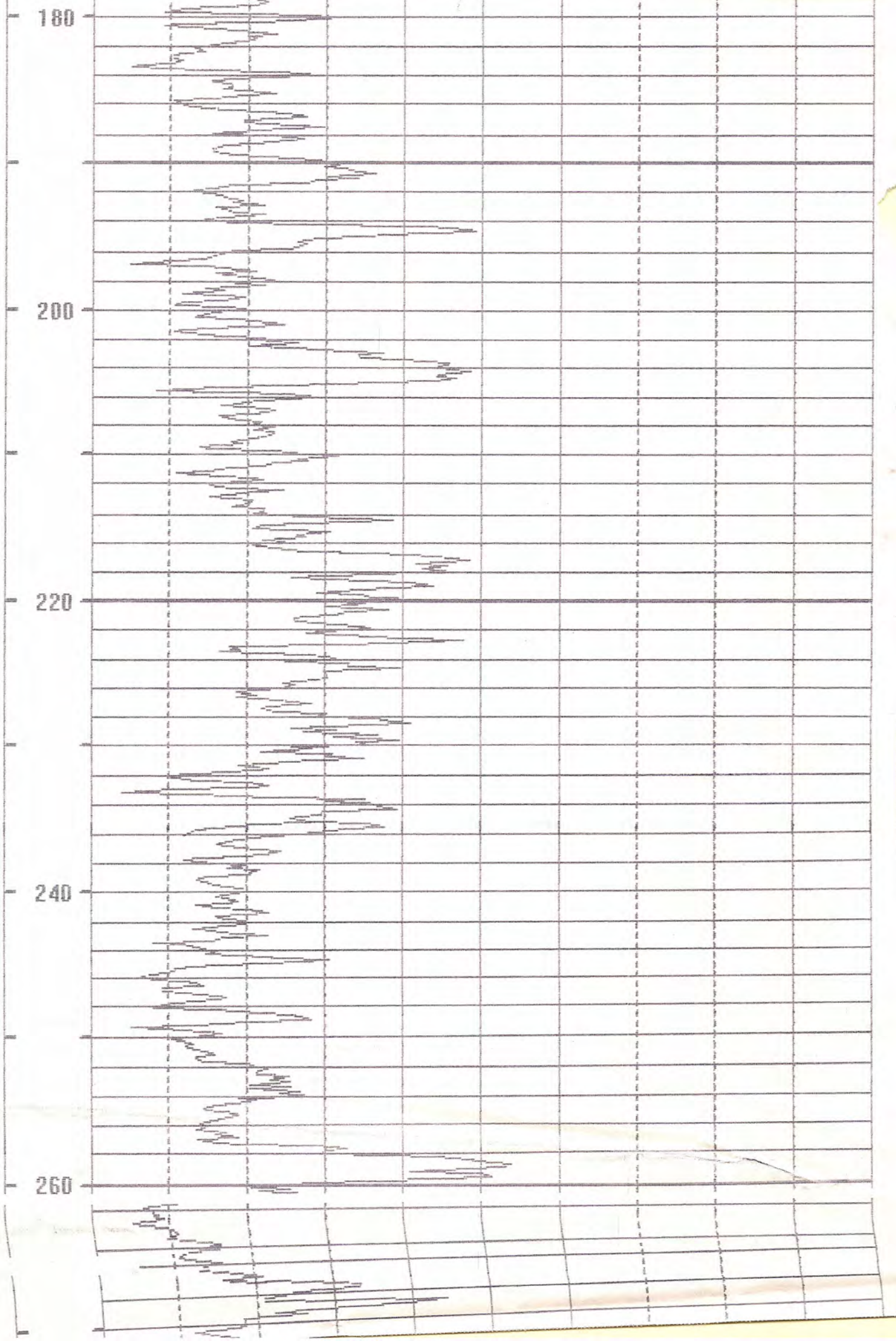
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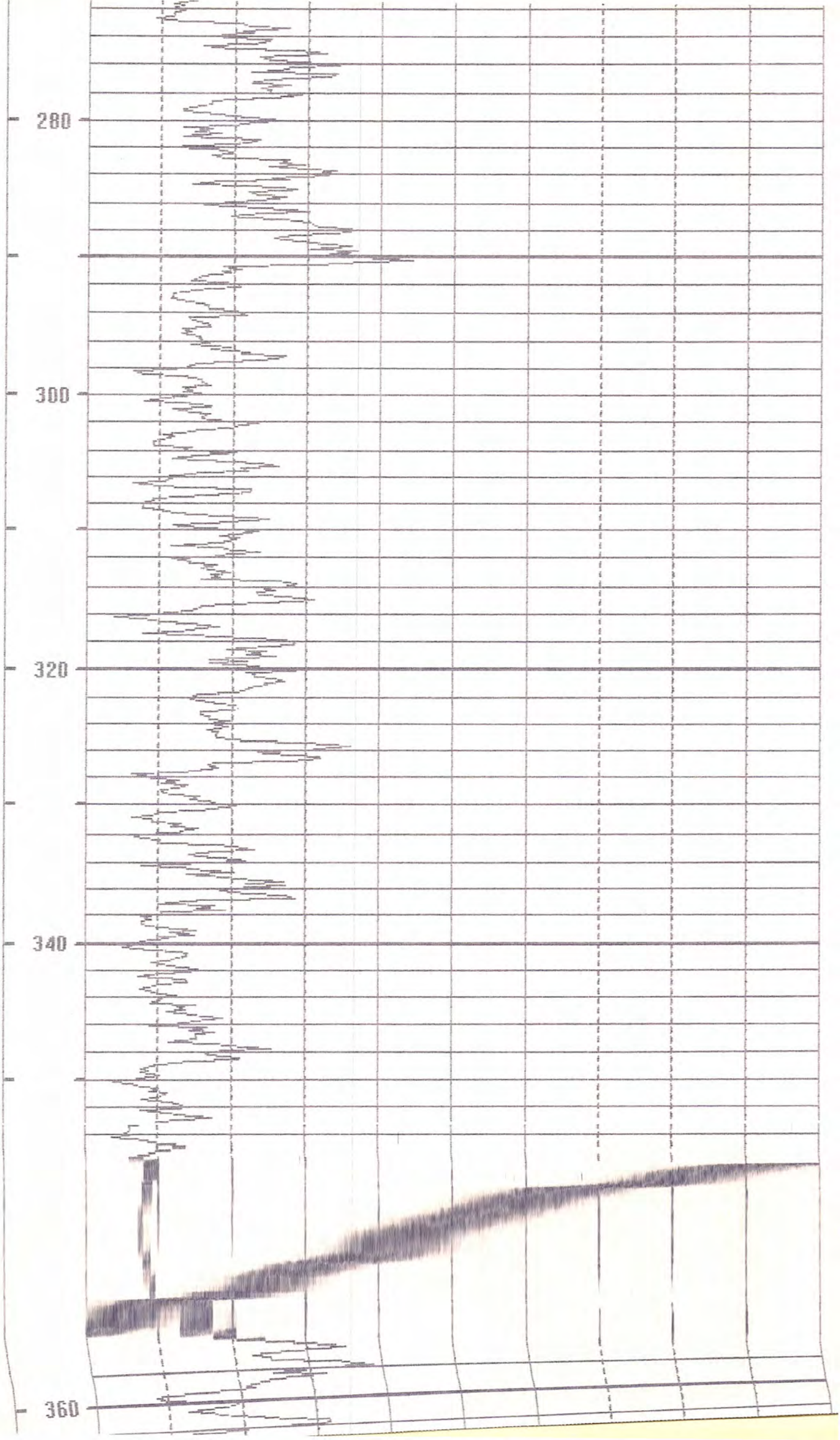
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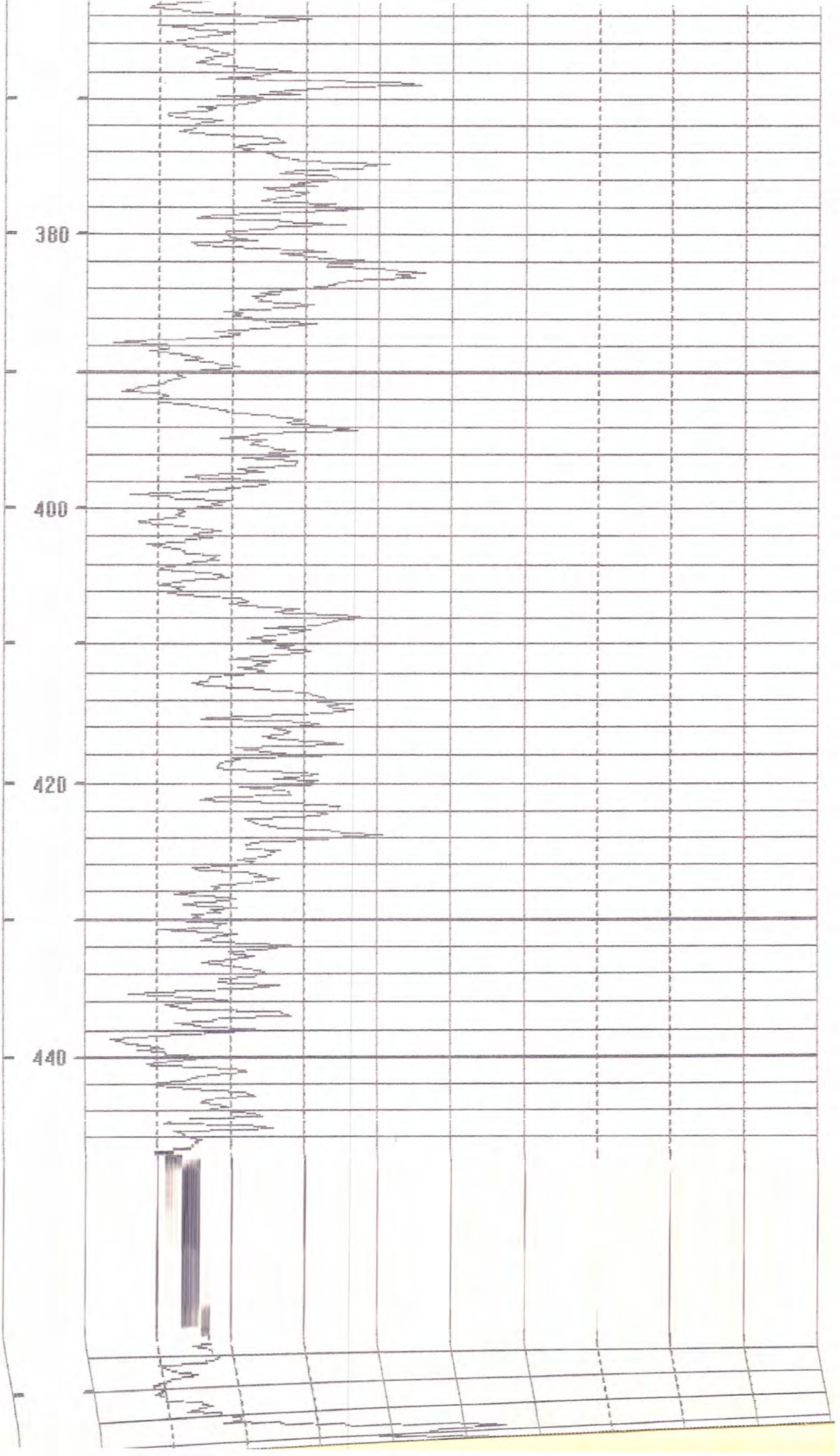
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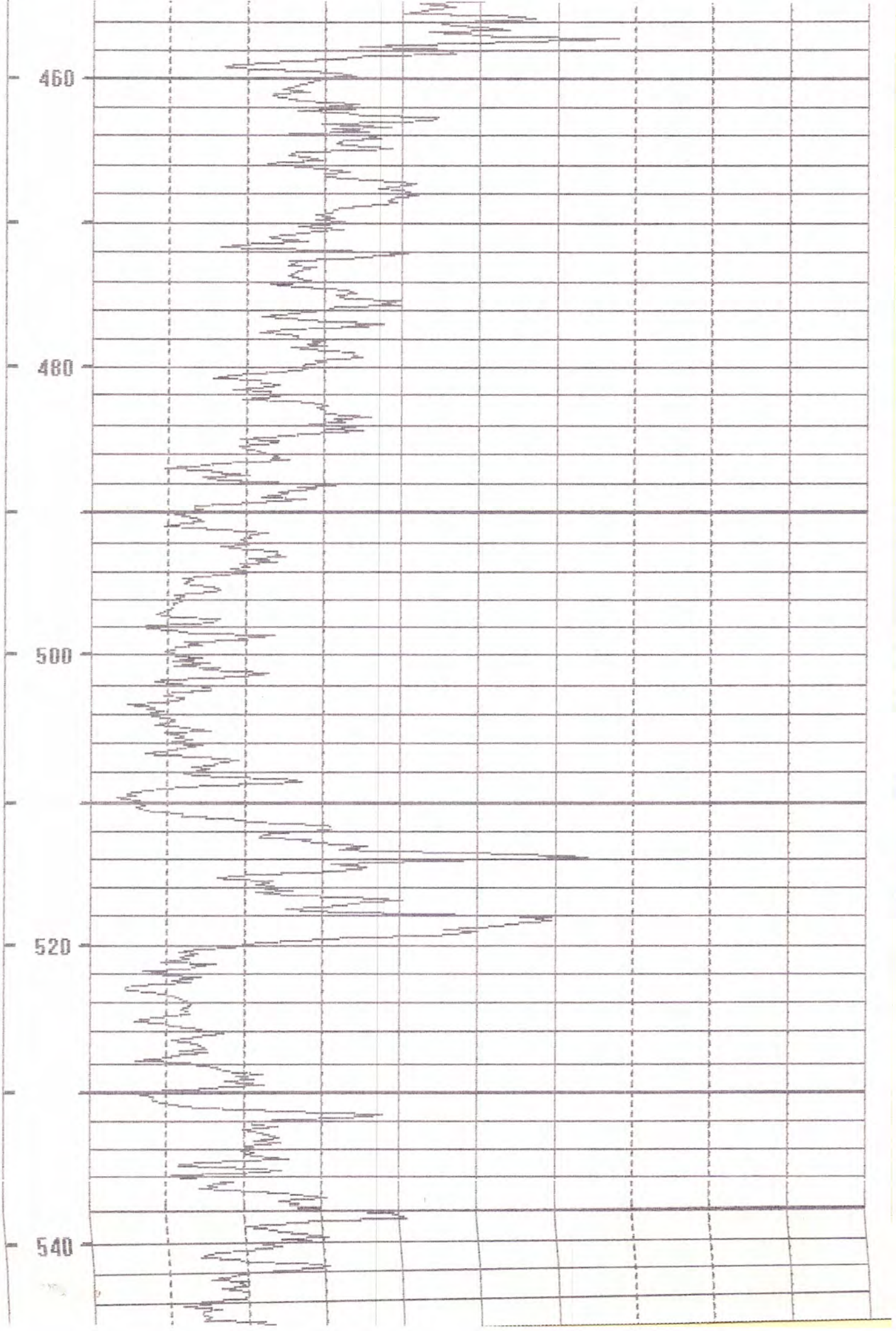
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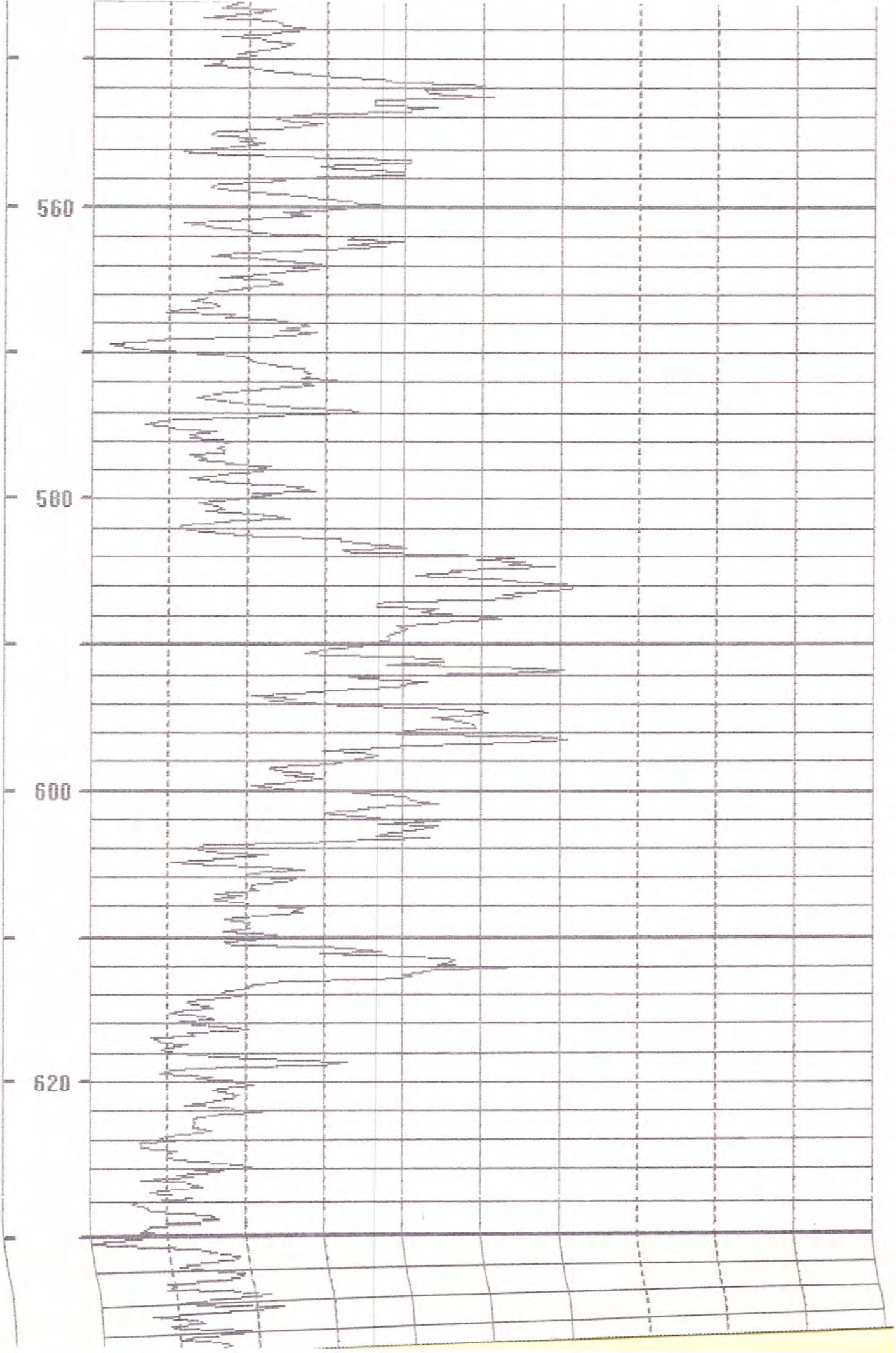
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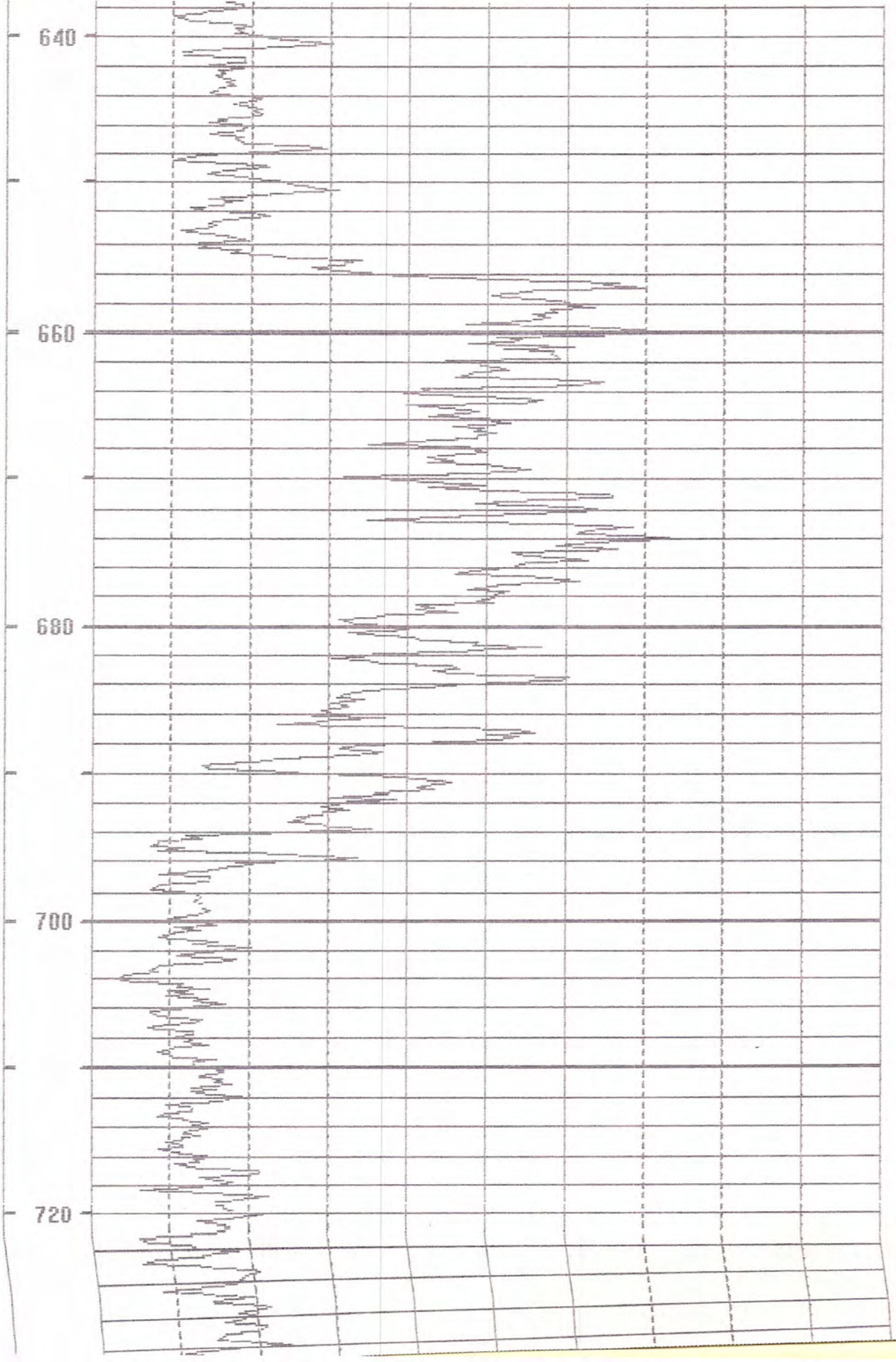
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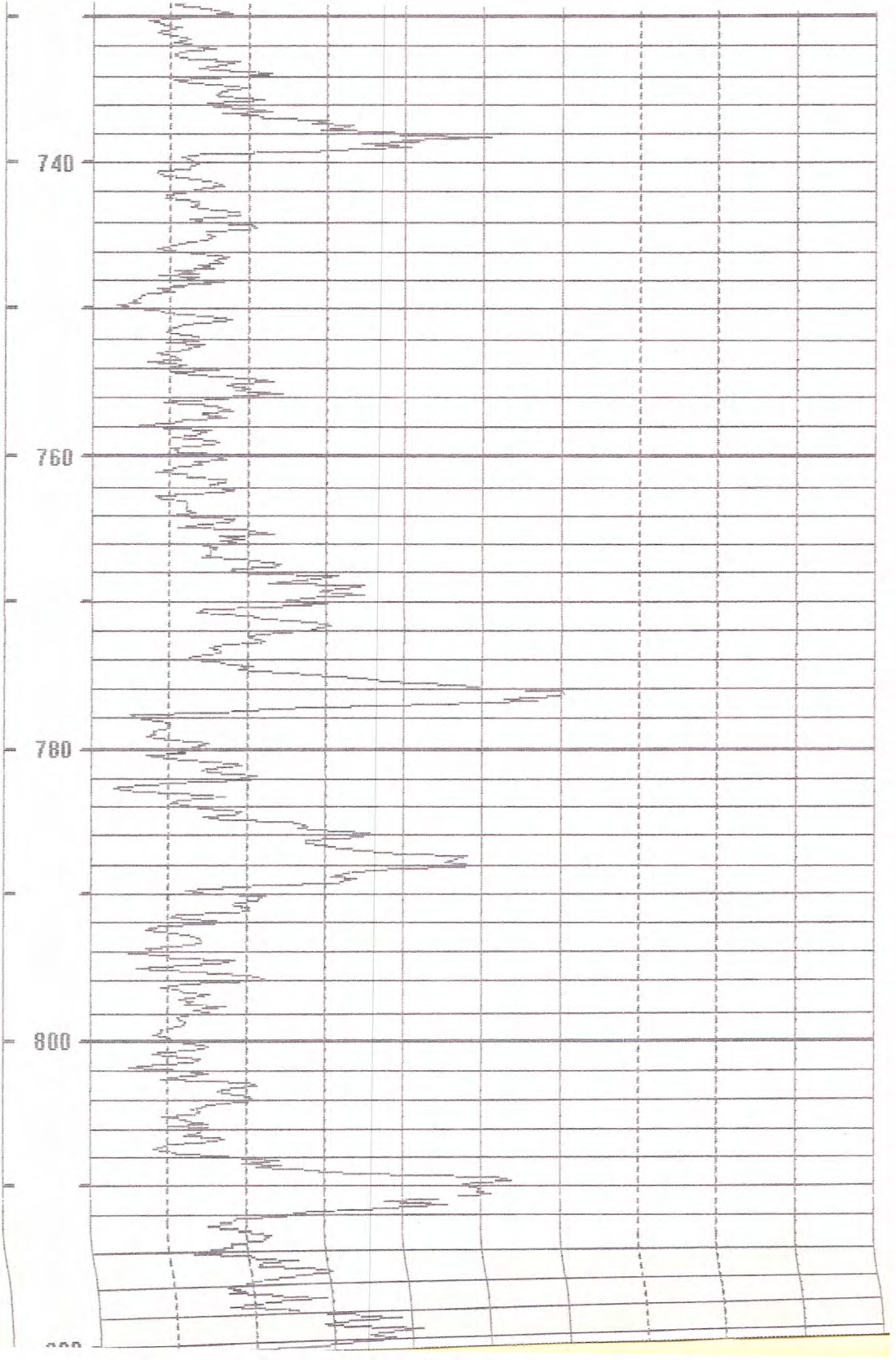
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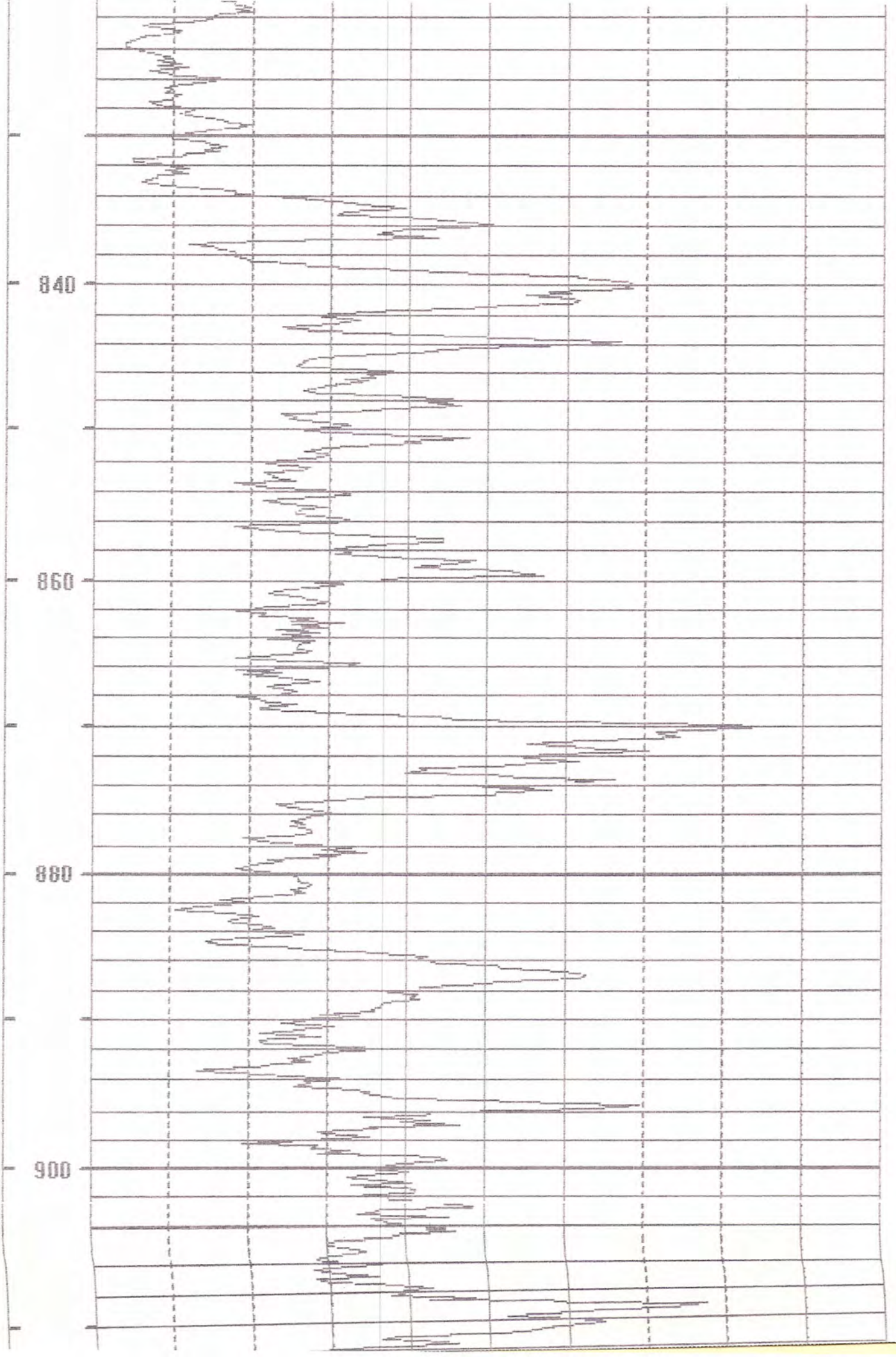
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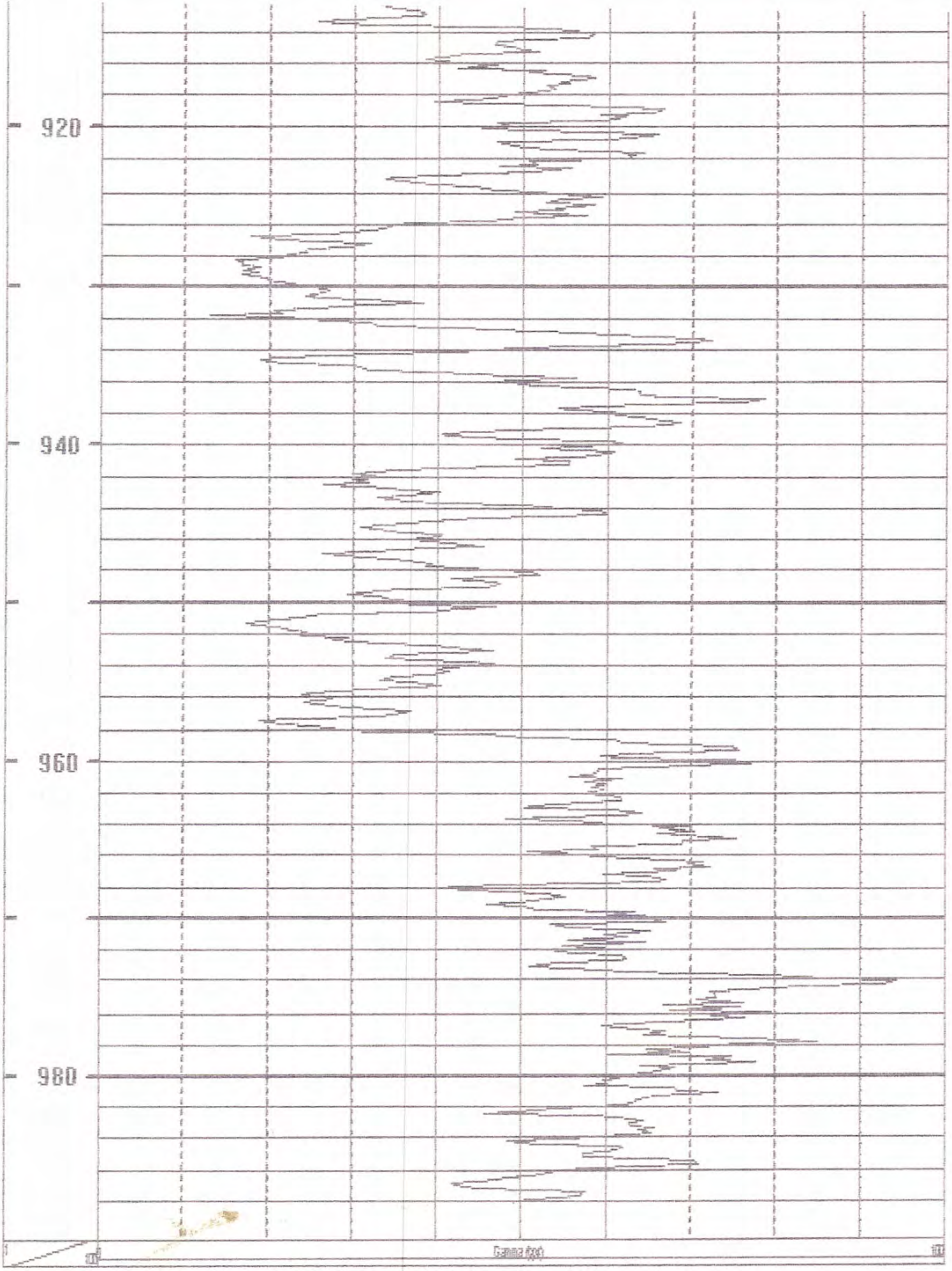

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