BURTON & HAWKS, INC.

#2 Glenn Spaulding

Northeast Southwest

Section 21, Township 9 North, Range 81 West

Jackson County, Colorado

TABLE OF CONTENTS

STATISTICAL WELL DATA

OPERATOR	BURTON-HAWKS EXPLORATION
Lease	Glenn Spaulding
Well	#2
Location	NE SW 21-9N-81W
County & State	Jackson Co., Colo.
Elevation	8254 KB 8247 GR
Contractor	George McGee
Pusher	George McGee
Mud Company	Basin Mud
Engineer	Joe King
Spud Date	6/18/73
Set Surface	6/19/73
Under Surface	6/23/73
Completed Drilling	6/29/73
Completed Logging	6/30/73
Set Plug	6/30/73

Hole drilled under surface with gas to 2481'. Drilled with mud 2481' to T.D.

Set cement plug with 120 sx, bottom of plug @ 1800'.

CASING RECORD

8 jts 24# J55 8 5/8 @ 276' w/200sx Reg Halliburton Cement 2% CaCl.

BIT RECORD

1	7 7/8	Retip	0 - 283'	(Pilot Hole)
Reamed to 12 1/4 RR			0 - 283'	
2	7 7/8	Retip	283 - 1529'	
3	7 7/8	Smith 3JS RR	1529 - 1644'	
4	7 7/8	Smith 3JS	1644 - 2760'	

MUD PROGRAM

Surface Hole:

6/18/73 30 sx Gel 1/2 sk (50#)

Mud after converting from gas to mud:

6/26/73 82 50# sx Gel, 10 50# sx Caustic, 6 Ligmite, 2 Cypan

6/27/73 27.5 bbls oil, 2 Soda Ash, 4 Lignite, 1 Bicarbonate Soda, 24 sx Gel, 2 Rhe-L-Con.

6/28/73 19 sx Gel, 1 Soda Ash, 1/2 Starch.

DAILY CHRONOLOGICAL REPORT

6/17/73	Moving in rotary tools & rigging up.
6/18/73	Lay water line, mix gel, drilling rat hole. Drill pilot hole 7 7/8.
6/19/73	Drilling pilot hole, drill to 12 1/4. T.D. 282'. Survey, run casing and cement. Plug down 4:45 P.M. Waiting on cement.
6/20/73	Waiting on cement. Nipple up. Work on cellar.
6/21/73	Waiting on gas.
6/22/73	Waiting on gas.
6/23/73	Trip in and waiting on gas. Blow gas line. Test blow out preventors. Drill cement, blow hole. Waiting on gas well to clean up for more gas. Drilling 480' @ 12:00 P.M. Start in Niobrara.
6/24/73	Drilling 994' @ 8:00 A.M. Frontier @ 1420'.
6/25/73	Drilling 1734' @ 8:00 A.M. Fort Hays @ 1904'.
6/26/73	Shut down blowing hole @ 2481'. Making much water some oil, no sand in samples, possible Mowry fractures. Shut down to mix mud. Prepare to drill with mud. Had pulled up 10 jts off bottom. Went back in to 5 jts off bottom. Couldn't break circulation. Pulled 15 jts. Reaming back in.
6/27/73	Circulate hole and trying to ream to bottom. Hole caving. Add 27 1/2 bbls. oil.
6/28/73	Reaming to bottom. On bottom drilling @ 6:50 A.M. Start out in Dakota. Drilling 2544' @ 8:00 P.M. in shale.
6/29/73	Drilling 2642' @ 8:00 A.M. Shale. Come out of hole to 1700' ±. Tight on 7th & 15th stand. Drilling to 2760'. Prepare to log.
6/30/73	Logging. Set cement plug.

SAMPLE DESCRIPTION (con't)

2595 - 2600	Trace light grey siltstone.
2600 - 2630	As above.
2530 - 2635	Shale. Dark grey. Trace grey siltstone.
2635 - 2640	As above.
2640 - 2645	Grey shale.
2645 - 2760	As above.

SAMPLE DESCRIPTION

GAS SAMPLES:

1648 - 1912	Grey Shale.
1912 - 1950	Grey - dark grey spicular argillaceous lime. Fort Hays.
1950 - 2250	Shale, dark grey carbonaceous.
2250 - 2481	Shale. Hard grey-brownish grey. Slightly silty in part.

MUD SAMPLES:

2481 - 2485	Sand and grey shale. Fine grain, friable, brown sand. Good oil saturation.
2485 - 2490	Sand as above. Some hard white tight fine grain sand.
2490 - 2515	As above.
2515 - 2520	Shale. Grey blocky. Trace siltstone.
2520 - 2525	As above.
2525 - 2530	Grey shale.
2530 - 2555	As above.
2555 - 2560	Siltstone, light grey - grey hard.
2560 - 2565	Shale. Grey, blocky. Occasional pieces light grey siltstone and dark sand.
2565 - 2585	As above.
2585 - 2590	As above. Some hard white glassy sand. White bentonite (or clay), yellow, dark.
2590 - 2595	As above.

LOGGING PROGRAM

Schlumberger - Induction Electric Log
Density Log
Dipmeter

ELECTRIC LOG FORMATION TOPS

Frontier	1420	+6834
Fort Hays	1900	+6354
Mowry	2222	+6032
Dakota	2442	+5812
Fuson	2512	+5742

Schlumberger

INDUCTION ELECTRICAL LOG

COUNTY
FIELD or LOCATION
WELL
COMPANY

COMPANY Burton - Hawks Exploration
J.A. Terteling & Sons

WELL Glen Spaulding No. 2

FIELD Wildcat

COUNTY Jackson STATE Colorado

LOCATION NE SE SW
1100' FSL 2400' FWL

Sec. 21 Twp. 9 N Rge. 81 W

Other Services:
FDC-GR
HDT

Permanent Datum: Ground Level, Elev. 8247
Log Measured From KB, 7 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 8254
D.F. —
G.L. 8247

Date	6/30/73			
Run No.	one			
Depth—Driller	2760			
Depth—Logger	2760			
Btm. Log Interval	2759			
Top Log Interval	270			
Casing—Driller	8 5/8 @ 276	@	@	@
Casing—Logger	280			
Bit Size	7 7/8			
Type Fluid in Hole	H_2O			
Dens. / Visc.	9.6 / 80			
pH / Fluid Loss	9.3 / 5.2 ml	ml	ml	ml
Source of Sample	Flowline			
R_m @ Meas. Temp.	1.54 @ 64 °F	0.96 @ 103 °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	1.10 @ 64 °F	0.61 @ 103 °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	— @ — °F	@ °F	@ °F	@ °F
Source: R_{mf} / R_{mc}	M / —			
R_m @ BHT	0.96 @ 103 °F	@ °F	@ °F	@ °F
Time Since Circ.	3.5 hr			
Max. Rec. Temp.	103 °F	°F	°F	
Equip. / Location	5657 / FM			
Recorded By	Shaw			
Witnessed By	Conner / Slinkard			

Changes in Mud Type or Additional Samples

Date / Sample No.		
Depth—Driller		
Type Fluid in Hole		
Dens. / Visc.		
ph / Fluid Loss	ml	
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} / R_{mc}		
R_m @ BHT	@ °F	@ °F
R_{mf} @ BHT	@ °F	@ °F
R_{mc} @ BHT	@ °F	@ °F

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole

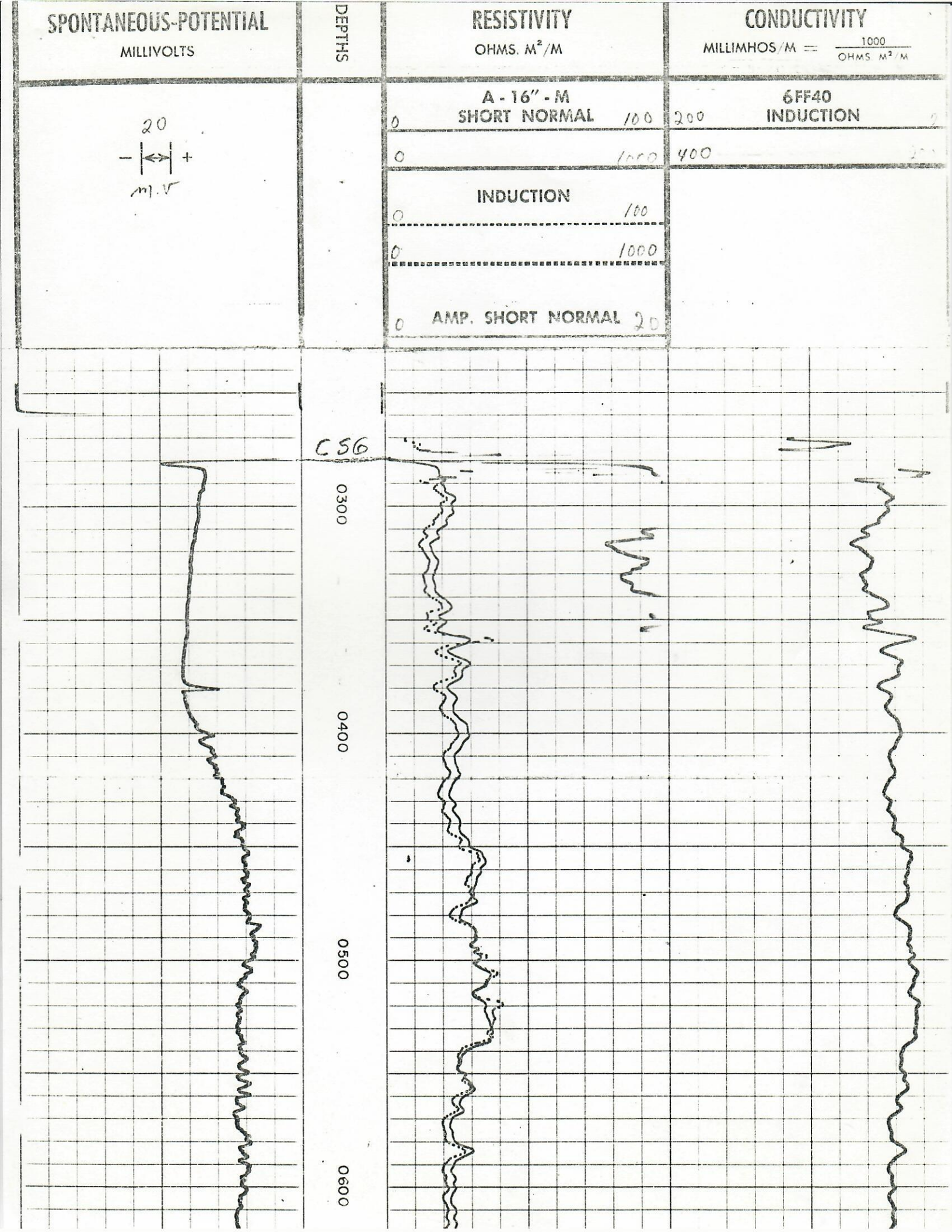
Equipment Data

Run No.	Tool Type	Tool Position	Other

Run No.: one
C.D.: yes
S.O.: 3/4"
Equip. PANEL No.: IRD-H 435
Used: CART. No.: IRC-FB 515
SONDE No.: IRS-M 796
IAP No.: AHP-B 258
S.B.R.: 1

S.E. 3L
Cal 1050

Check one, filling in blanks where applicable:
☑ Surface determined sonde errors used for 6FF40.
☐ 6FF40 sonde error corrected for ______ inch borehole signal at Rm = ______
☐ 6FF40 zero set in hole at depth of ______ feet.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0
1000
INDUCTION
0
100
0
1000
0
AMP. SHORT NORMAL
20
CONDUCTIVITY
MILLIMHOS/M = 1000 / OHMS M²/M
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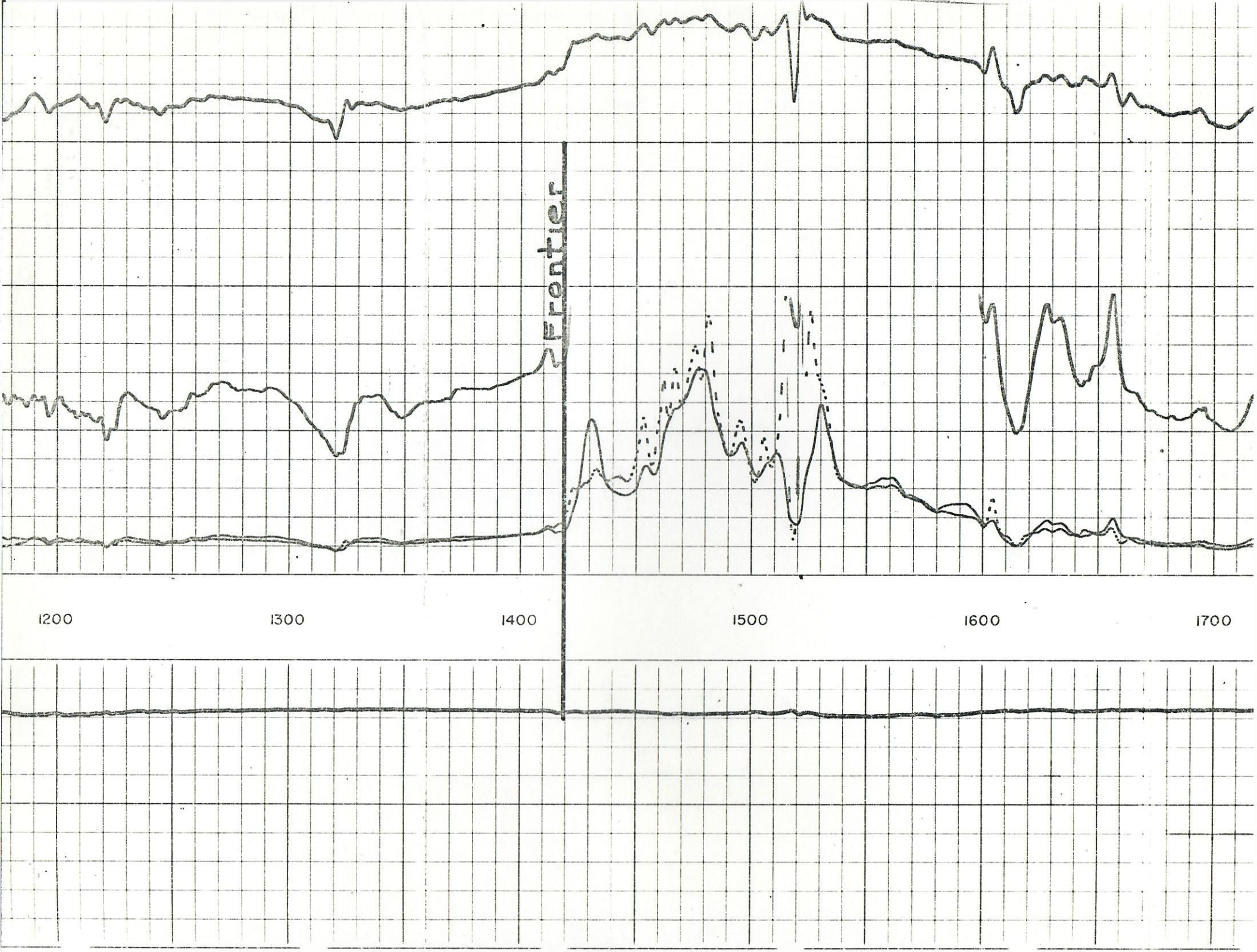
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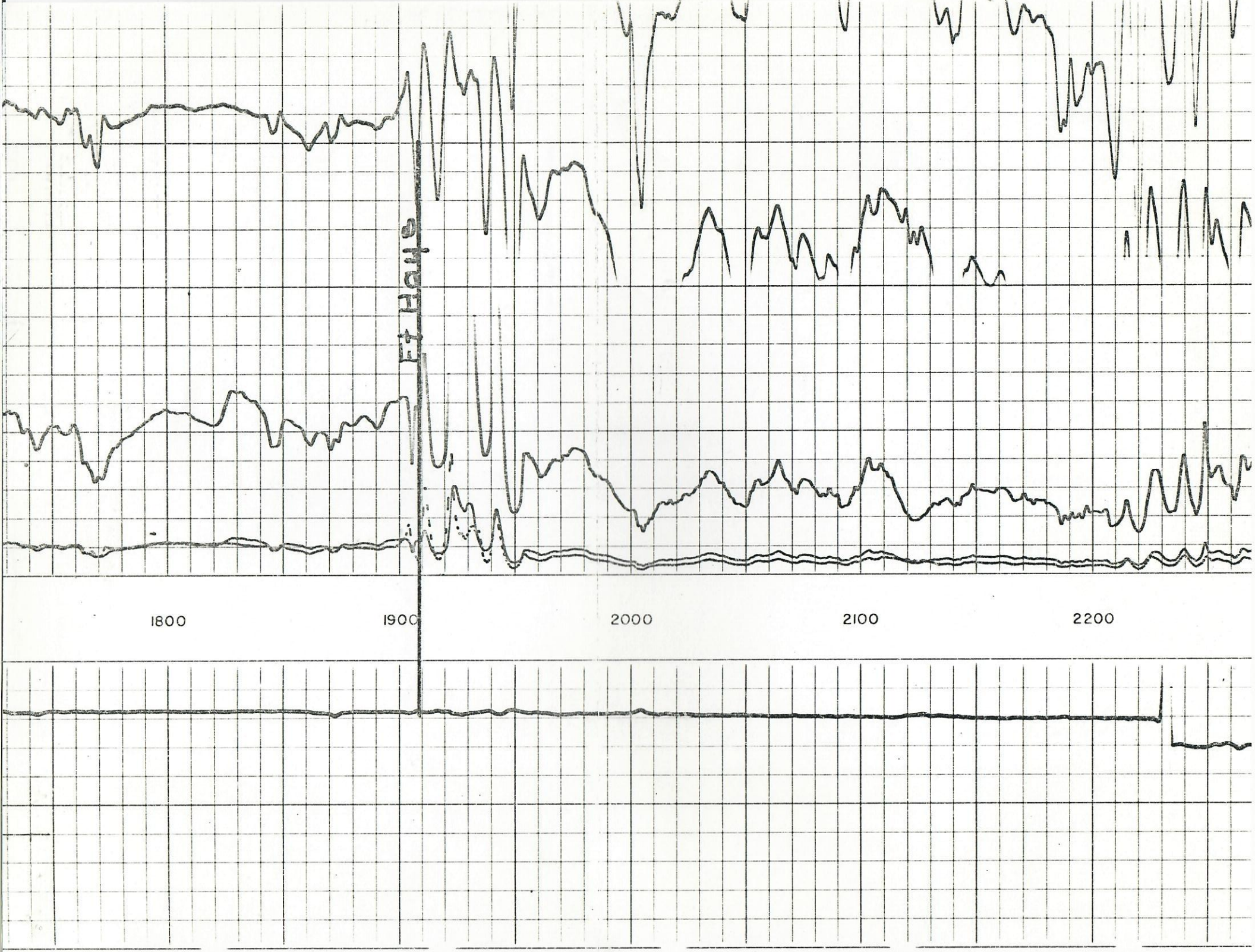
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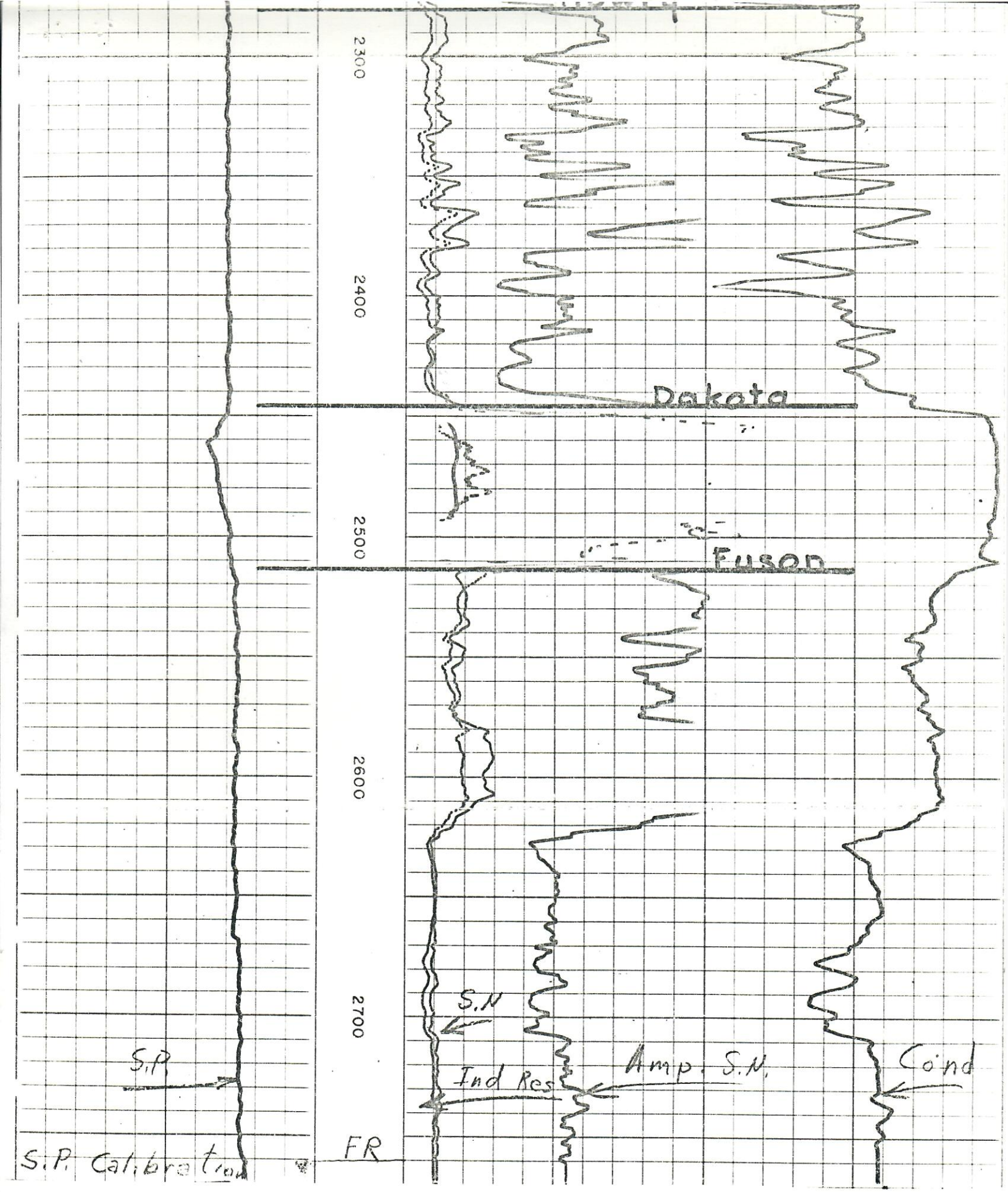
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