

GLO1457-DOC 1

Schlumberger

FOUR - ARM  
HIGH RESOLUTION  
CONTINUOUS DIPMETER  
(COMPUTED)

COUNTY MILLARD		COMPANY UNION OIL COMPANY OF CALIFORNIA	
FIELD or LOCATION COVE FORT		WELL COVE FORT #31-33	
COMPANY UNION OIL		WELL COVE FORT #31-33	
FIELD COVE FORT		COUNTY MILLARD	
COUNTY MILLARD		STATE UTAH	
LOCATION		Other Services: DIL, TEMP. BHC-GR FDC/CNL-GR	
Sec. 33	Twp. 255	Rge. 6W	Elev.: K.B. 6501
Permanent Datum: GL		Elev.: K.B. 6501	
Log Measured From KB		D.F. ---	
Drilling Measured From KB		G.I. 6481	
Date 7-18-78	Run No. ONE		
Depth—Driller 5221	(4 X 2 X 30 X 2)		
Depth—Logger 5208			
Btm. Log Interval 5207			
Top Log Interval 1735			
Casing—Driller 13-3/8" 1735			
Casing—Logger 1735			
Bit Size 12-1/4			
Type Fluid in Hole WATER			
Dens. Visc.			
pH Fluid Loss			
Source of Sample RETURNS			
R <sub>m</sub> @ Meas. Temp.	@	°F	@
R <sub>mf</sub> @ Meas. Temp.	@	°F	@
R <sub>mc</sub> @ Meas. Temp.	@	°F	@
Source: R <sub>mf</sub> R <sub>mc</sub>			
R <sub>m</sub> @ BHT	@	°F	@
R <sub>mf</sub> @ BHT	@	°F	@
R <sub>mc</sub> @ BHT	@	°F	@
Time Since Circ. NA			
Max. Rec. Temp. NA			
Equip. Location 7711 FARM.			
Recorded By BRUCE-BECK			
Witnessed By MOSS-IRVINE			

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

Changes in Mud Type or Additional Samples		Run No.	1	2	3	4
Date	Sample No.	Tool Type	HDT-C			
Depth—Driller		HDM No.	F-933			
Type Fluid in Hole		Magnetic Declination	NA			
Dens.	Visc.	Analog Panel No.	839			
pH	Fluid Loss ml	Digital Panel No.	---			
Source of Sample		Correlated By	4 X 2 X 30 X 2			
R <sub>m</sub> @ Meas. Temp.	@ °F	Computed By	DEC 10			
R <sub>mf</sub> @ Meas. Temp.	@ °F	Plotted By	CAL COMP			
R <sub>mc</sub> @ Meas. Temp.	@ °F	Remarks —	SO #16922 JOB #4447			
Source: R <sub>mf</sub> R <sub>mc</sub>						
R <sub>m</sub> @ BHT	@ °F					
R <sub>mf</sub> @ BHT	@ °F					
R <sub>mc</sub> @ BHT	@ °F					

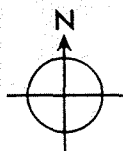
"Any directional computations made from the dipmeter log must be regarded as approximate only. This is because the dipmeter log indicates the orientation of the instrument itself, rather than the direction and amount of the wall drift. Therefore, we do not and cannot guarantee the accuracy of such directional computations, and we shall not, except in the case of willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained that may result from any such computations."

TABLE OF VERTICAL DISPLACEMENT IN FEET CORRESPONDING TO VARIOUS HORIZONTAL DISTANCES AND ANGLES OF DIP

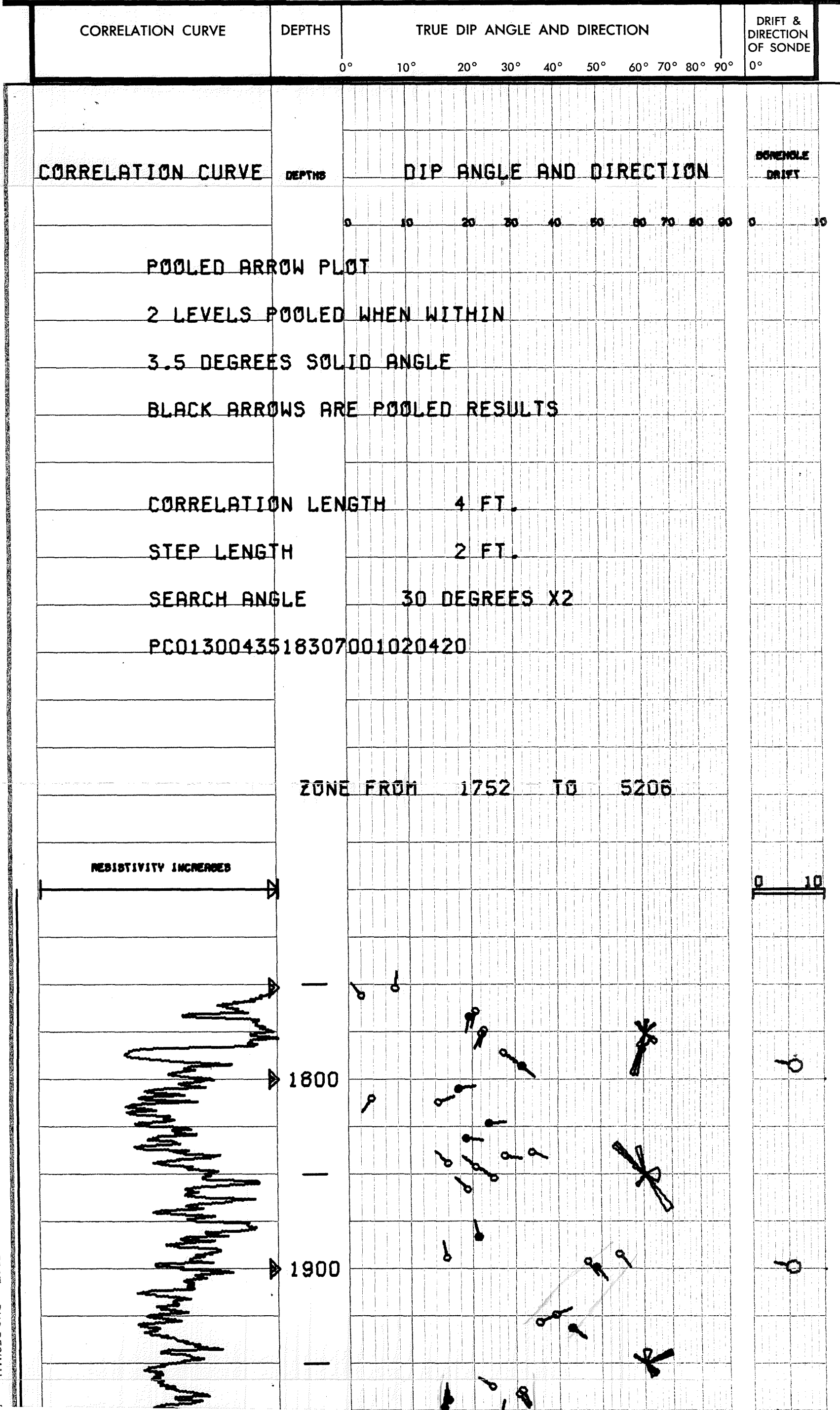
VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF				VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF			
DIP ANGLES (degrees)	100'	1000'	1 mile (5280')	DIP ANGLES (degrees)	100'	1000'	1 mile (5280')
1	1.75	17.5	92.2	19	34.4	344.	1818.
2	3.5	35.	184.	20	36.4	364.	1922.
3	5.2	52.	277.	21	38.4	384.	2027.
4	7.0	70.	369.	22	40.4	404.	2133.
5	8.8	88.	462.	23	42.5	425.	2241.
6	10.5	105.	555.	24	44.5	445.	2351.
7	12.3	123.	648.	25	46.6	466.	2462.
8	14.1	141.	742.	30	57.7	577.	3048.
9	15.8	158.	836.	35	70.0	700.	3697.
10	17.6	176.	931.	40	83.9	839.	4430.
11	19.4	194.	1026.	45	100.0	1000.	5280.
12	21.3	213.	1122.	50	119.2	1192.	6293.
13	23.1	231.	1219.	55	142.8	1428.	7540.
14	24.9	249.	1316.	60	173.2	1732.	9145.
15	26.8	268.	1415.	65	214.4	2144.	11323.
16	28.7	287.	1514.	70	274.8	2748.	14507.
17	30.6	306.	1614.	75	373.2	3732.	19705.
			1716.	80	567.1	5671.	29945.

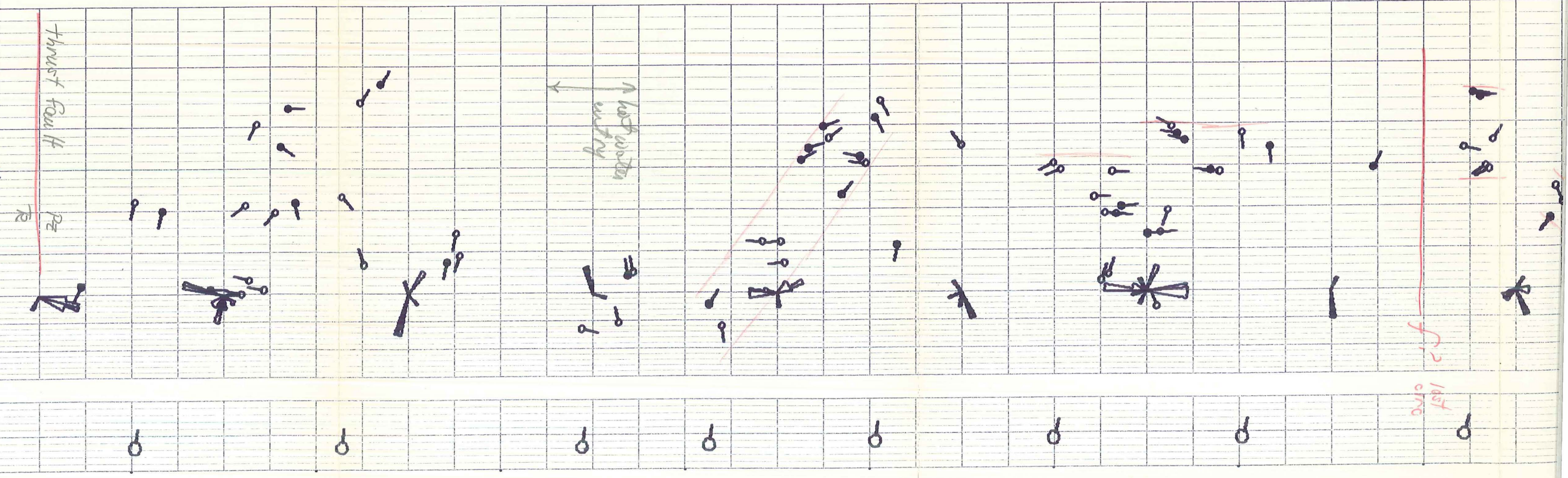
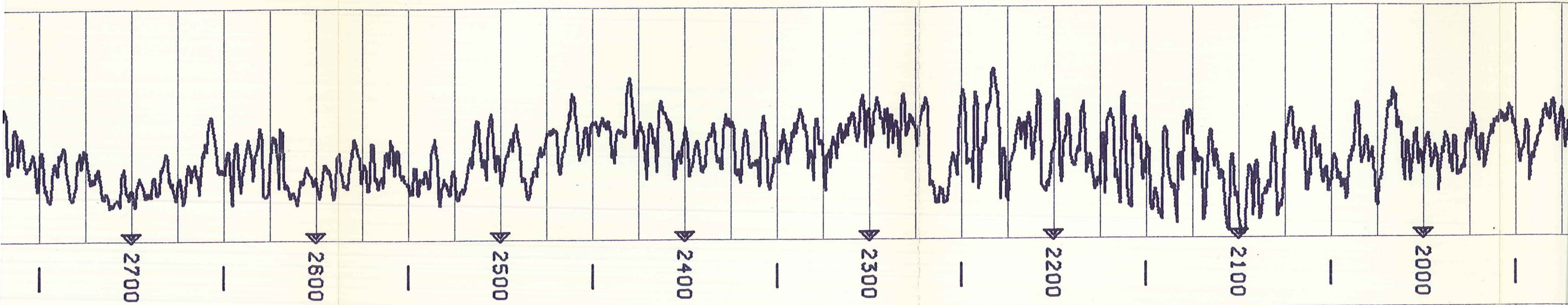
To obtain vertical displacements corresponding to multiples of hundreds feet, thousands of feet or miles, multiply the number found in the table by the number of hundreds, thousands or miles.

Example: The formation dip is 16 degrees. The vertical displacement occurring at a spot 660 feet away from the well is desired. The table shows 28.7 feet per 100 feet for 16° dip. Therefore  $28.7 \times 6.60 = 189.42$ , or 189. feet.



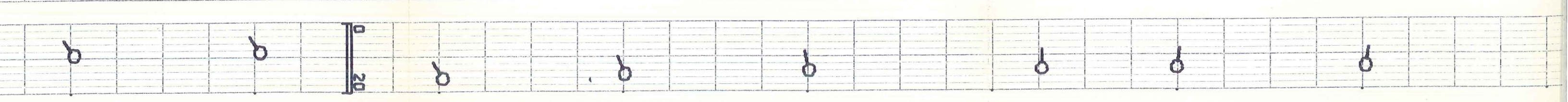
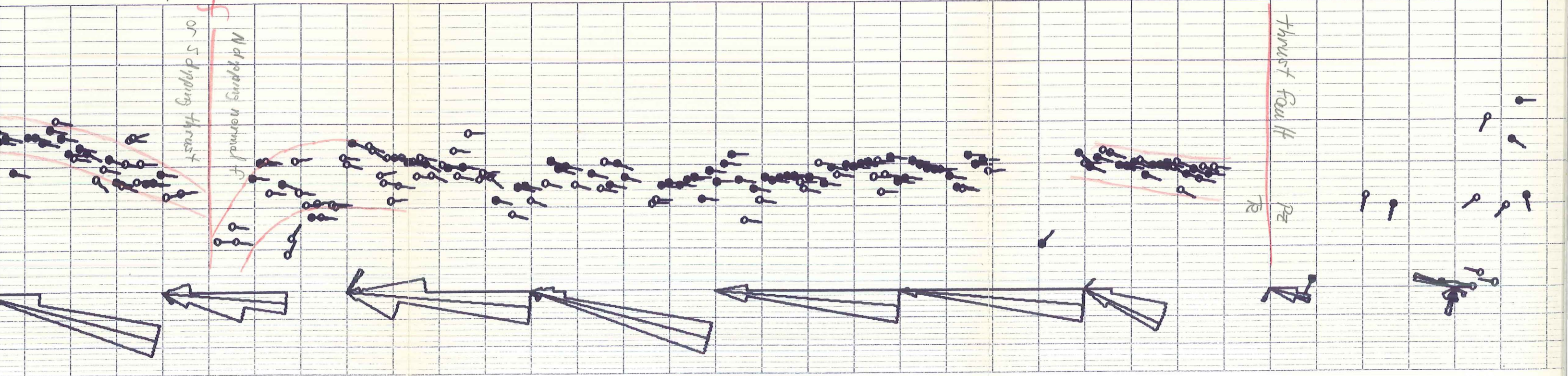
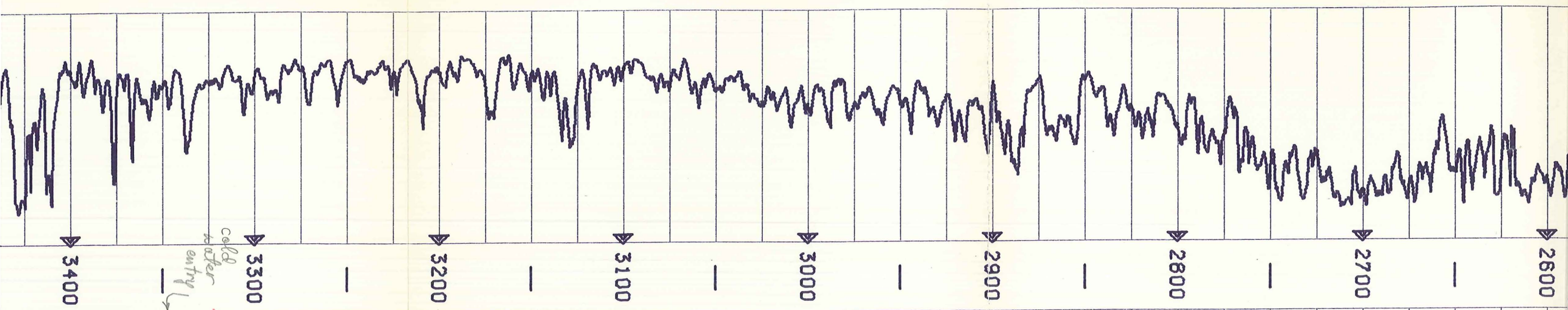
## GRAPHIC PRESENTATION

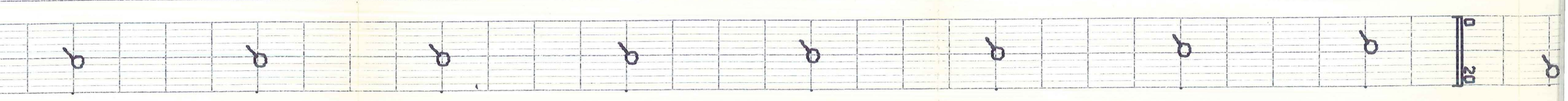
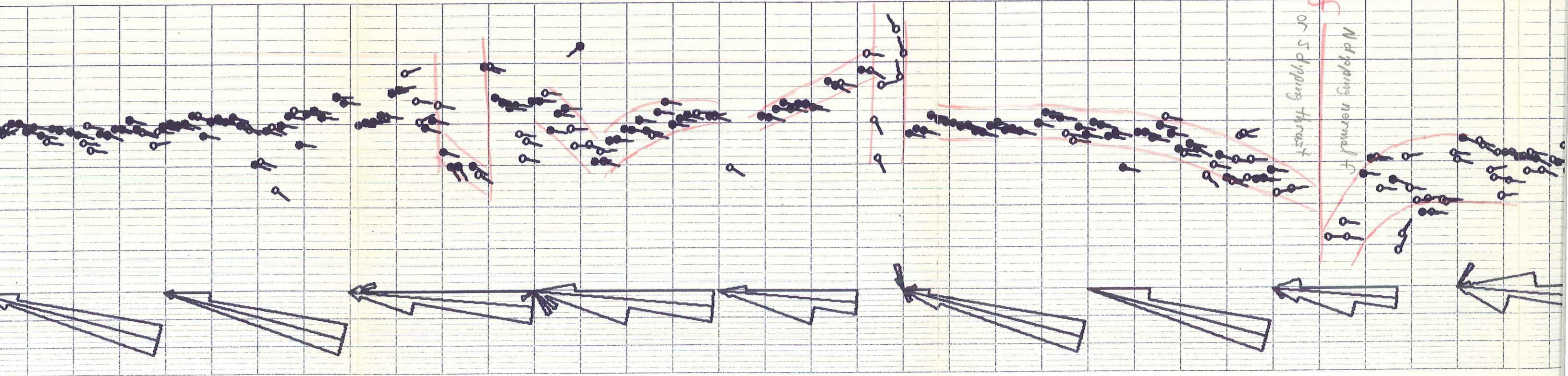
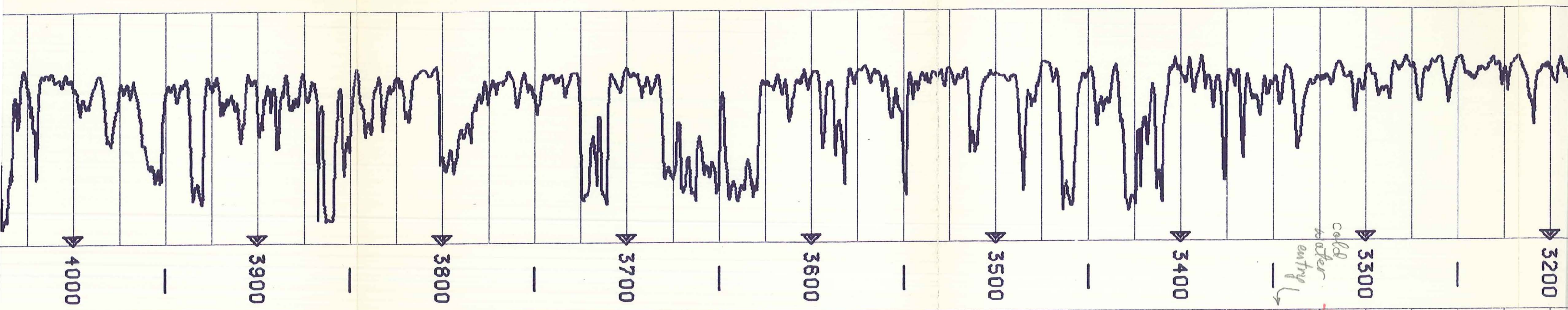


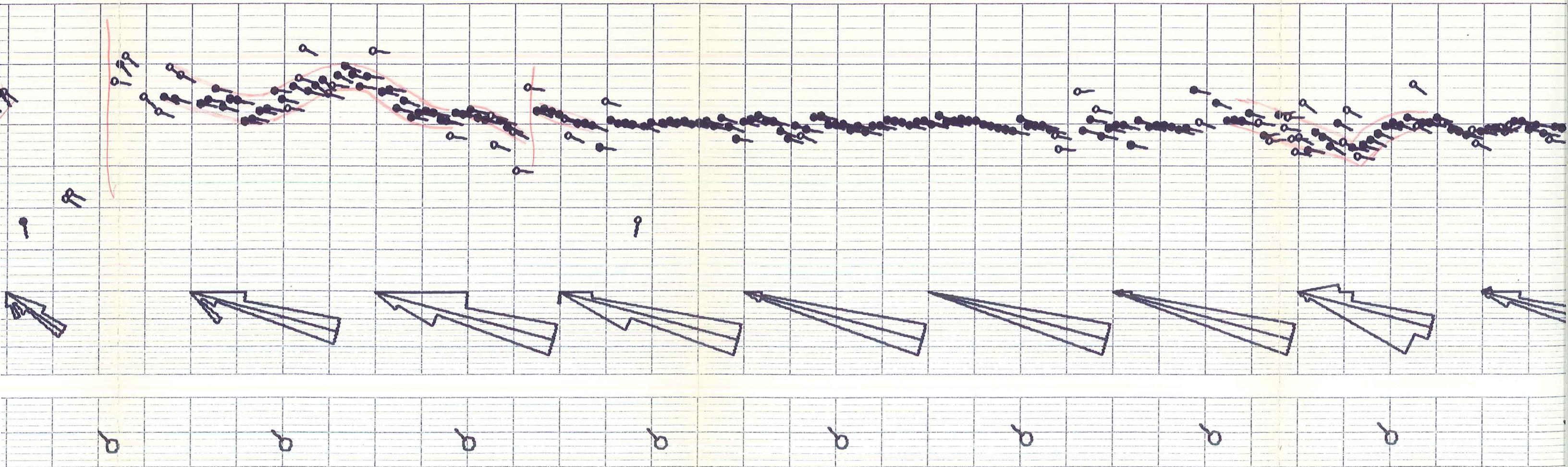
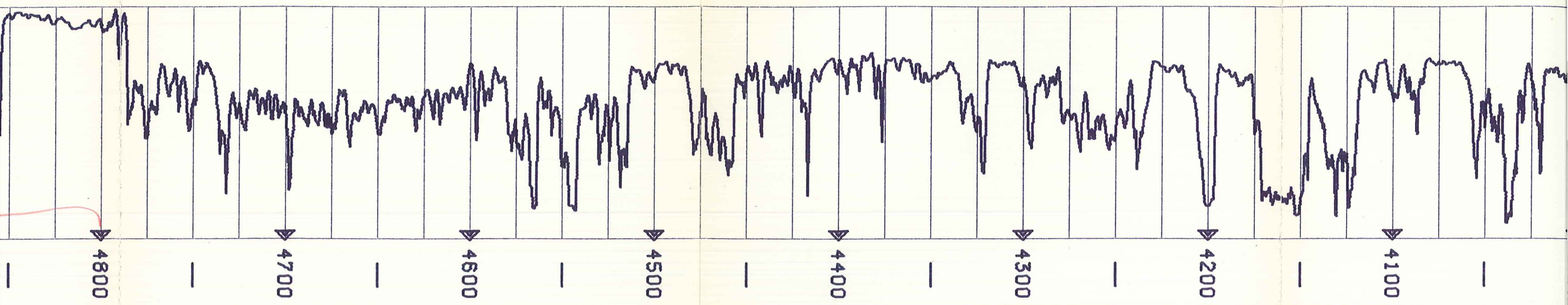


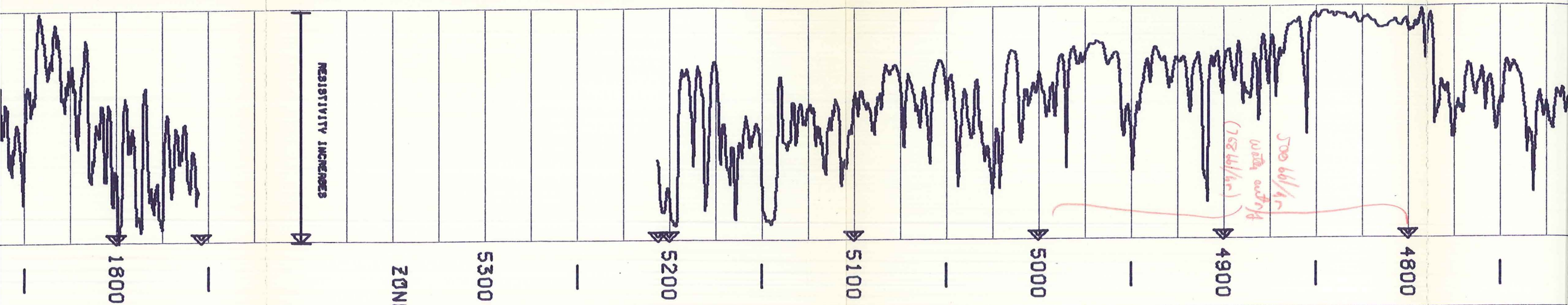
FOOT AND DECIMAL FOR IN GRID

FOOT AND DECIMAL FOR IN GRID

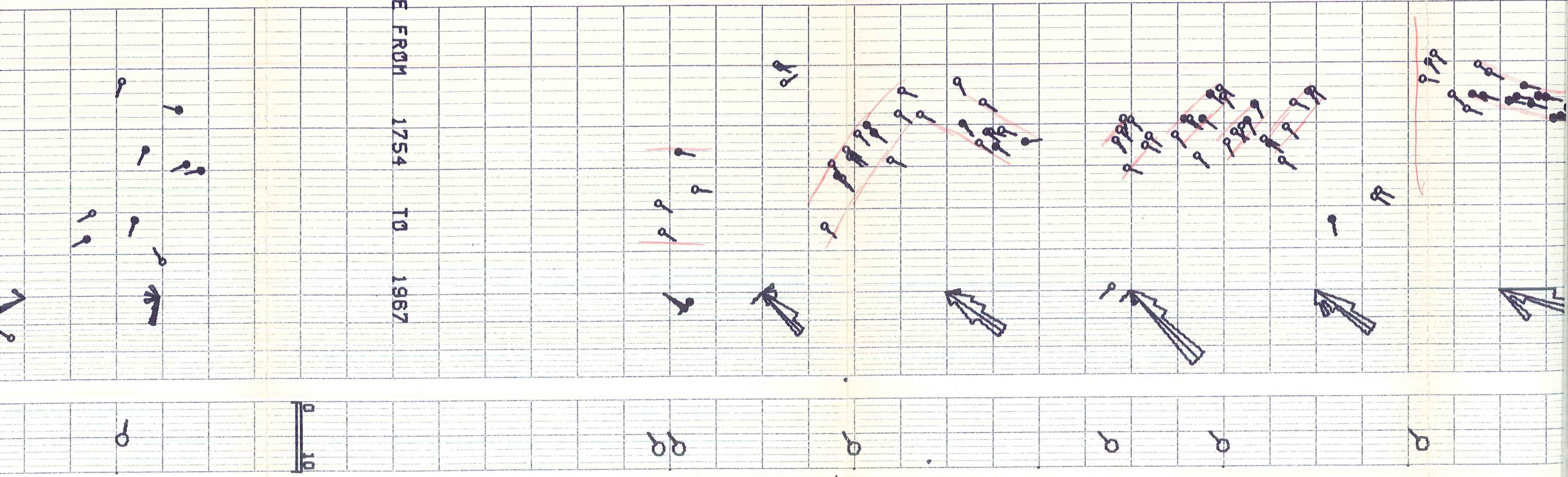




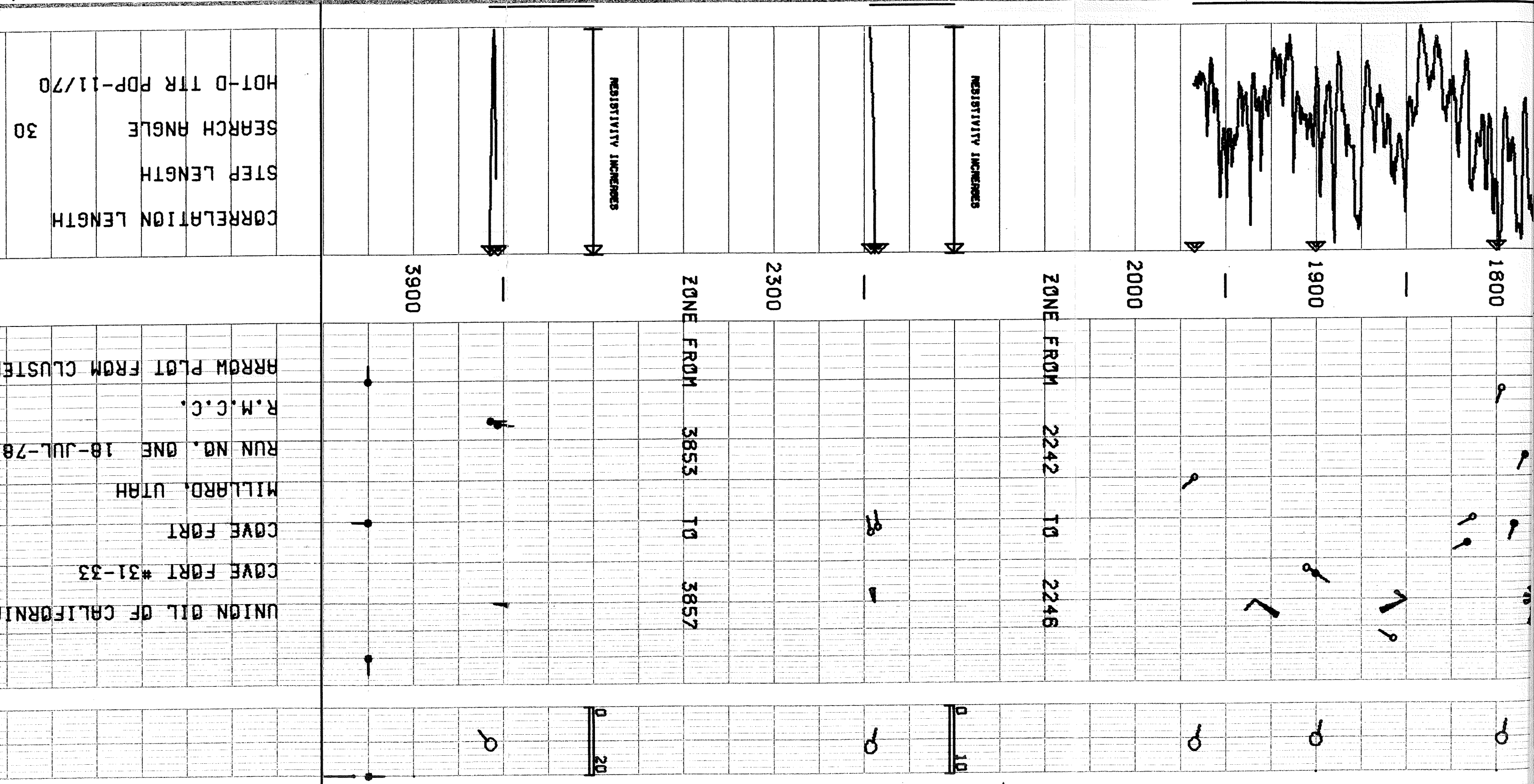




ZONE FROM 1754 TO 1967



0  
10



CORRELATION LENGTH  
 STEP LENGTH  
 SEARCH ANGLE 30  
 HOT-D TTR PDP-11/70

UNION OIL OF CALIFORNIA  
 COVE FORT #31-33  
 COVE FORT  
 MILLARD, UTAH  
 RUN NO. ONE 18-JUL-78  
 R.M.C.C.  
 ARROW PLOT FROM CLUSTE



5TH 4 FT.  
30 DEGREES X2 2 FT.

CLUSTER PROGRAM

-JUL-78

LIFORNIA

CORRELATION CURVE

DEPTH

DIP ANGLE AND DIRECTION

SCHEMATIC  
DIPST

ALL QUALITY FROM PLOT 04447  
FROM THE CLUSTER PROGRAM

BLACK ARROWS ARE HIGHEST QUALITY

CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

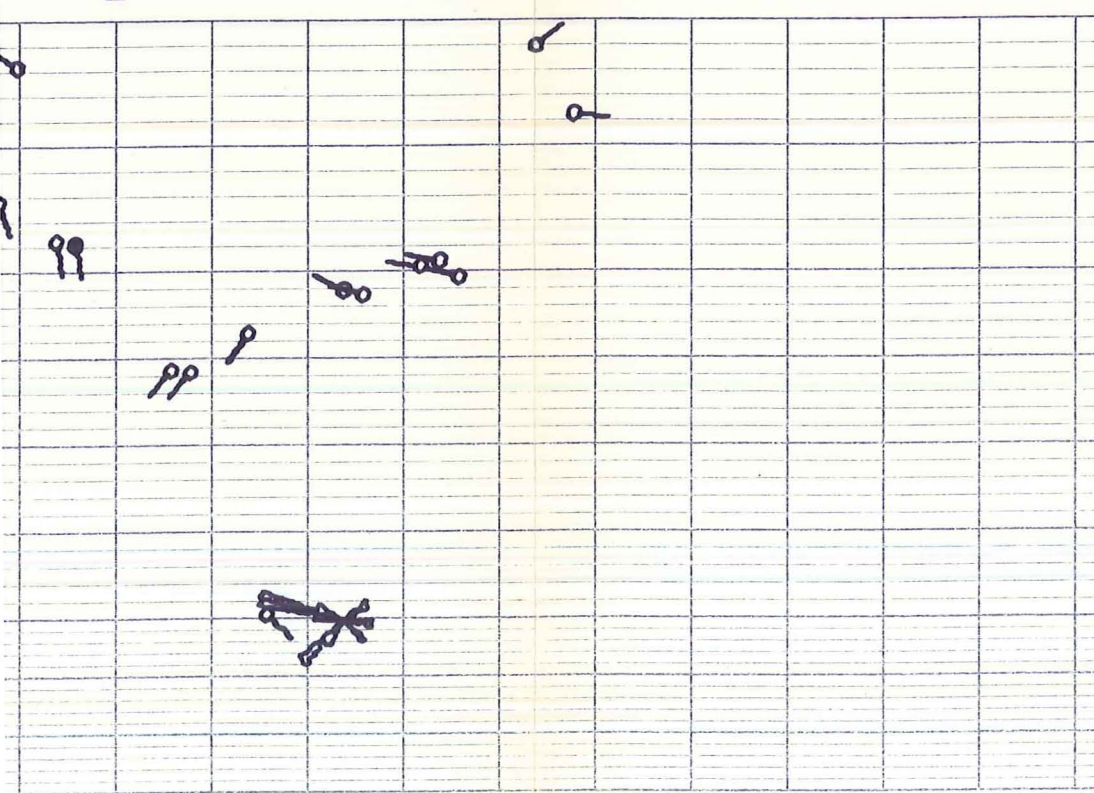
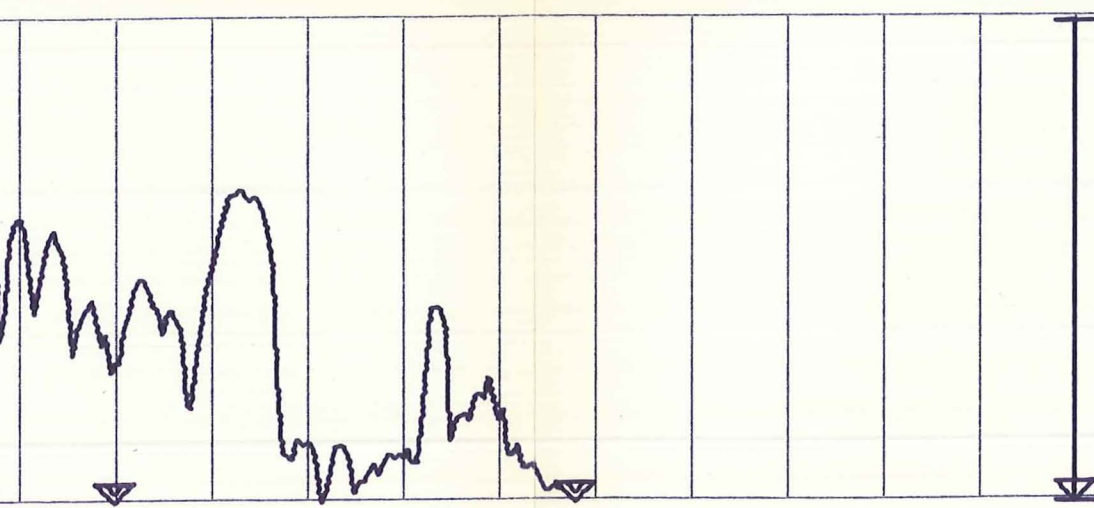
SEARCH ANGLE 30 DEGREES X2

PC0130043518307001020420

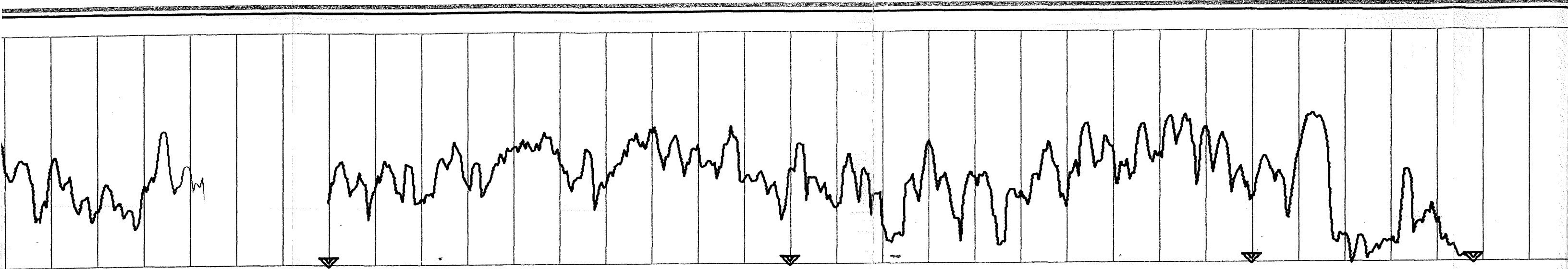
ZONE FROM 1752 TO 5218

RESISTIVITY INCREASES

0 10



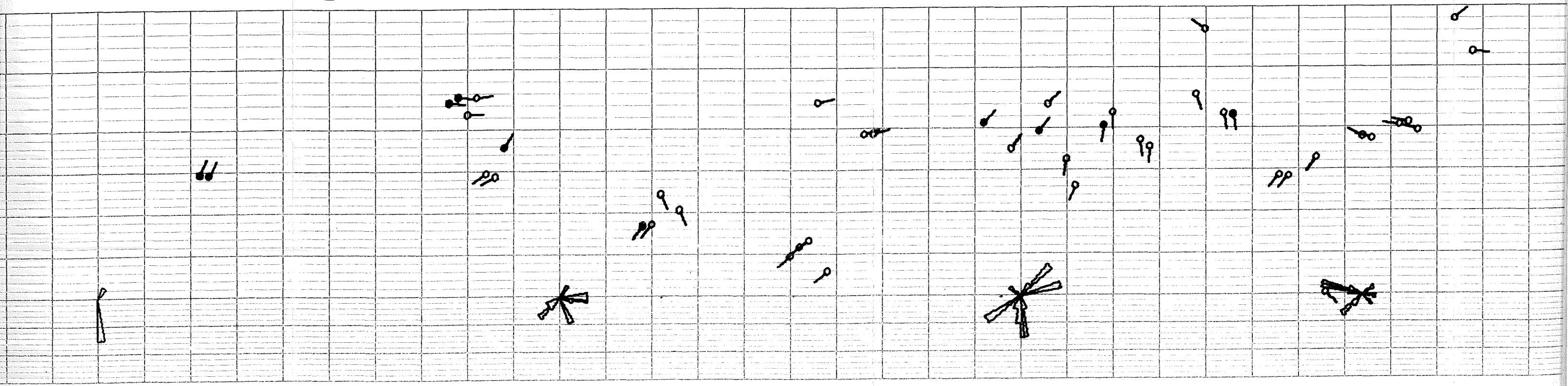
1800

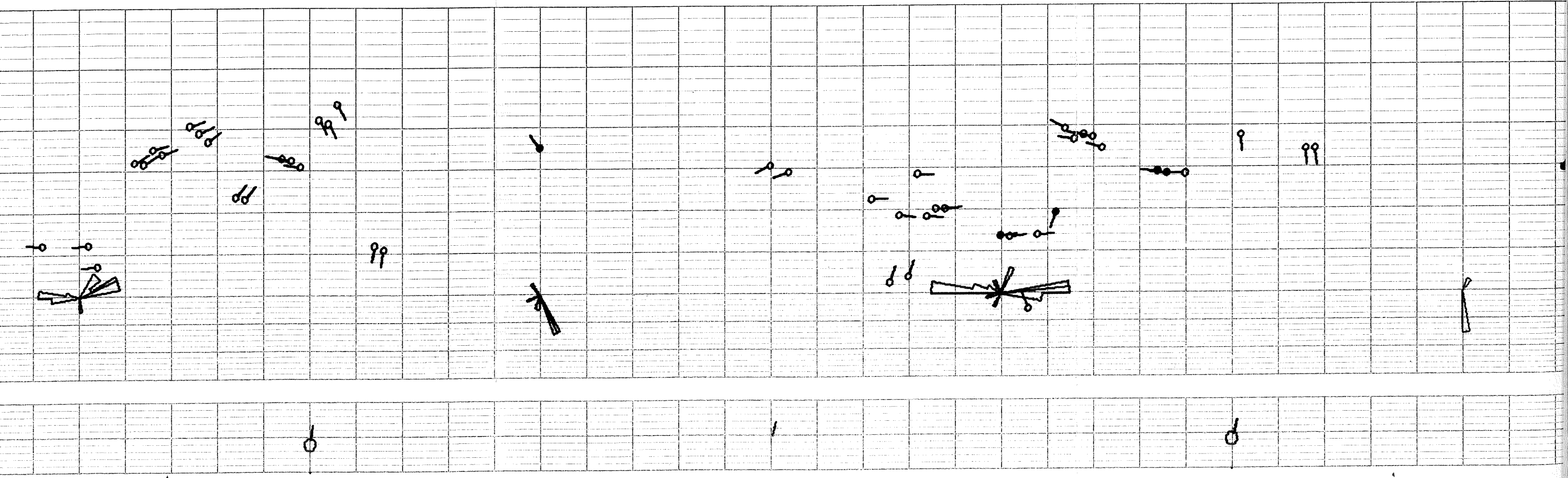
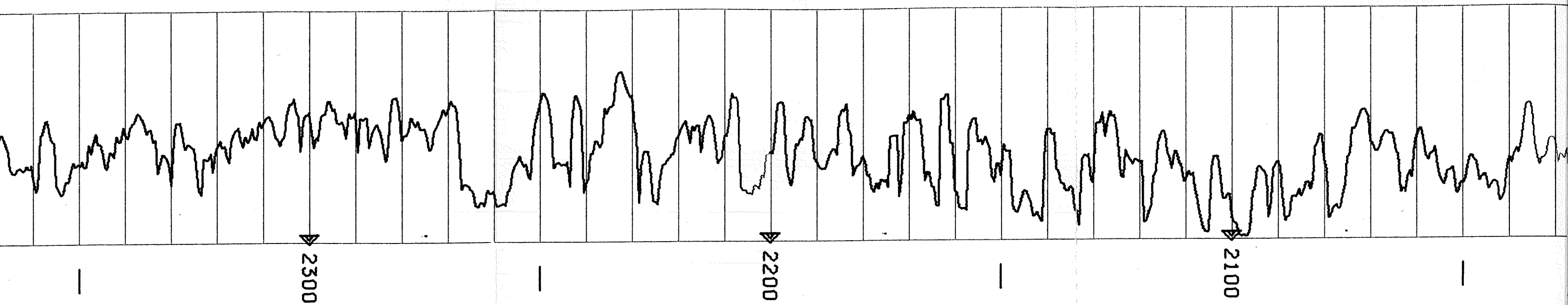


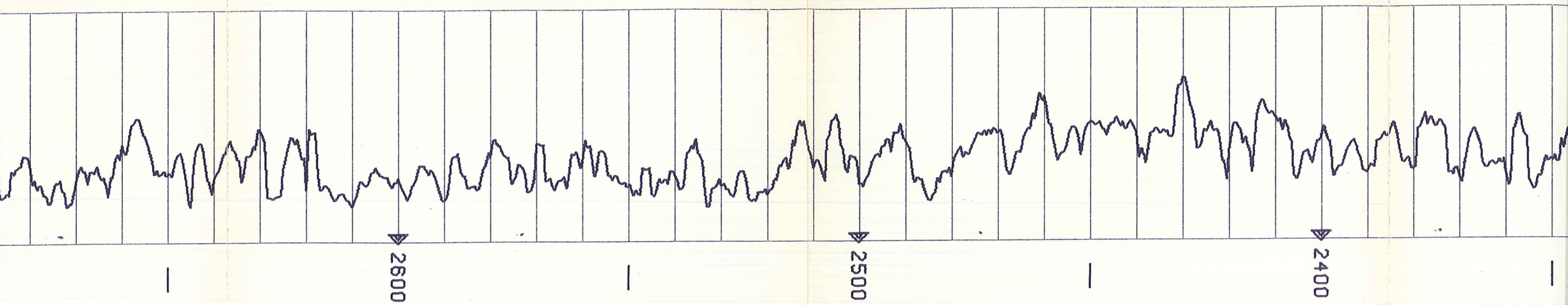
2000

1900

1800



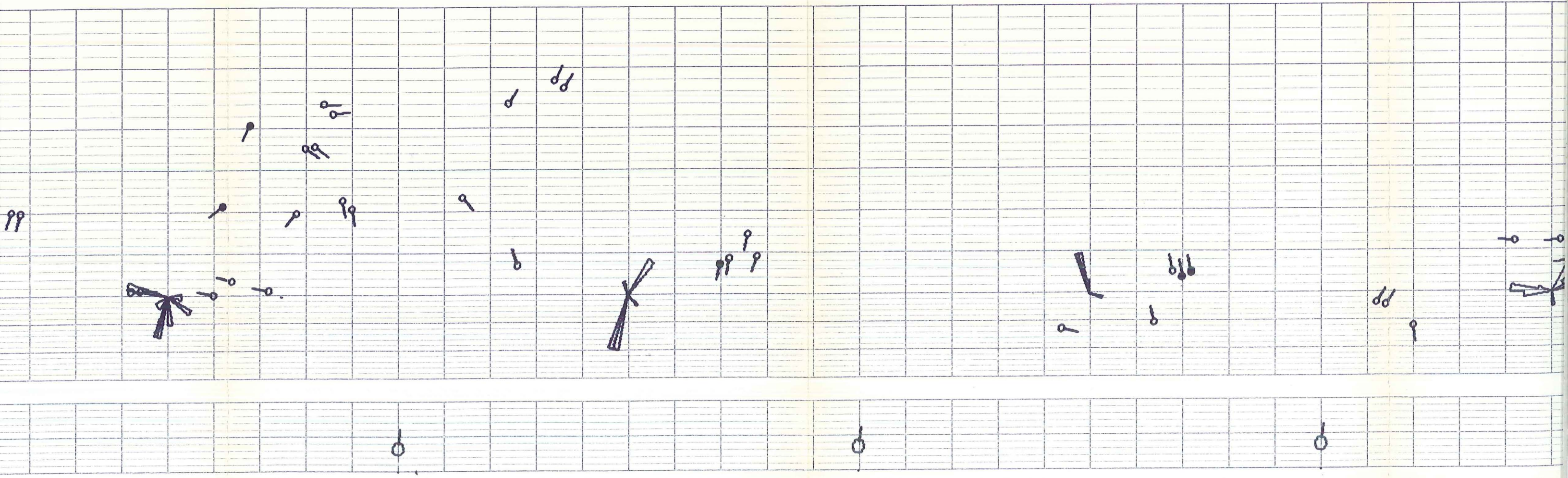




2600

2500

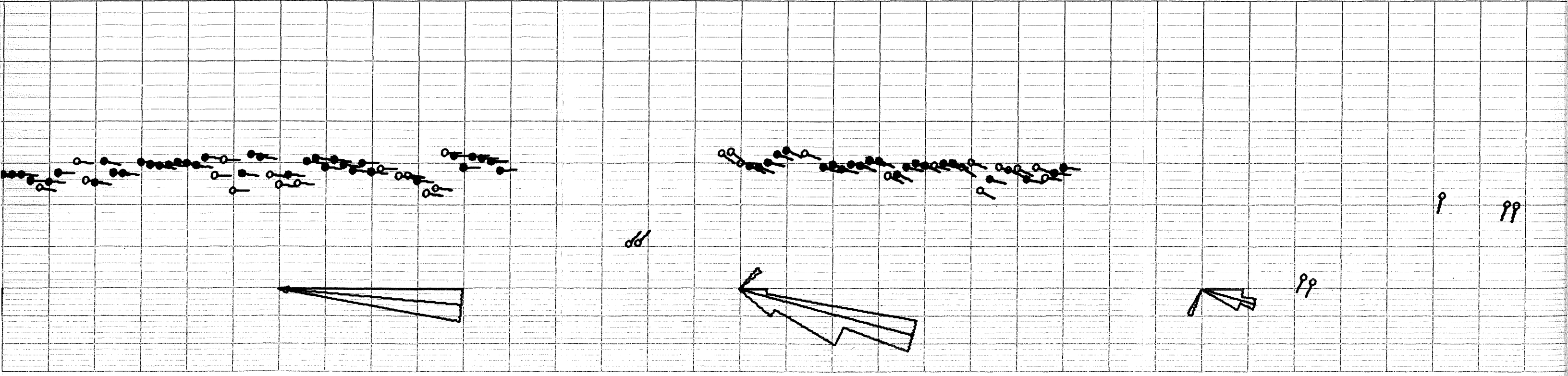
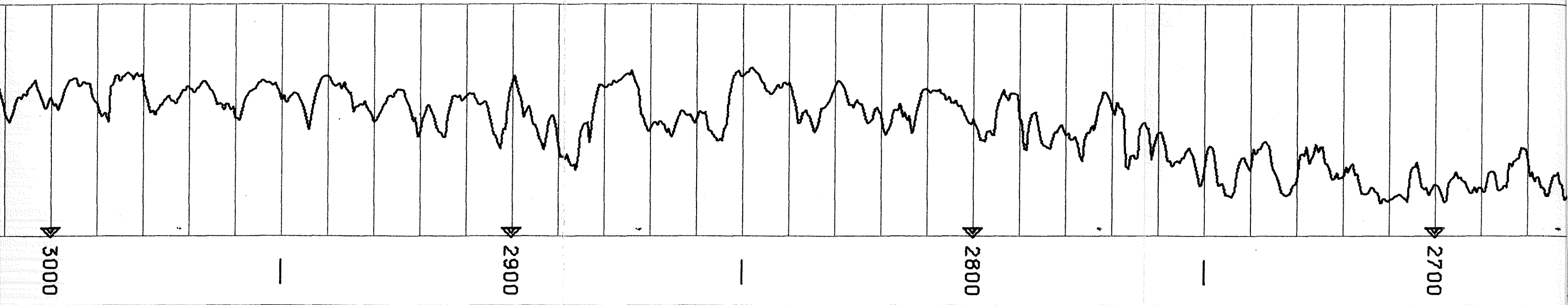
2400

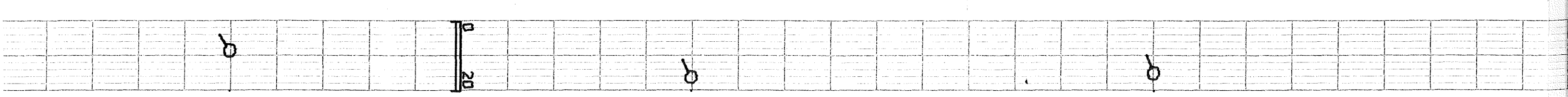
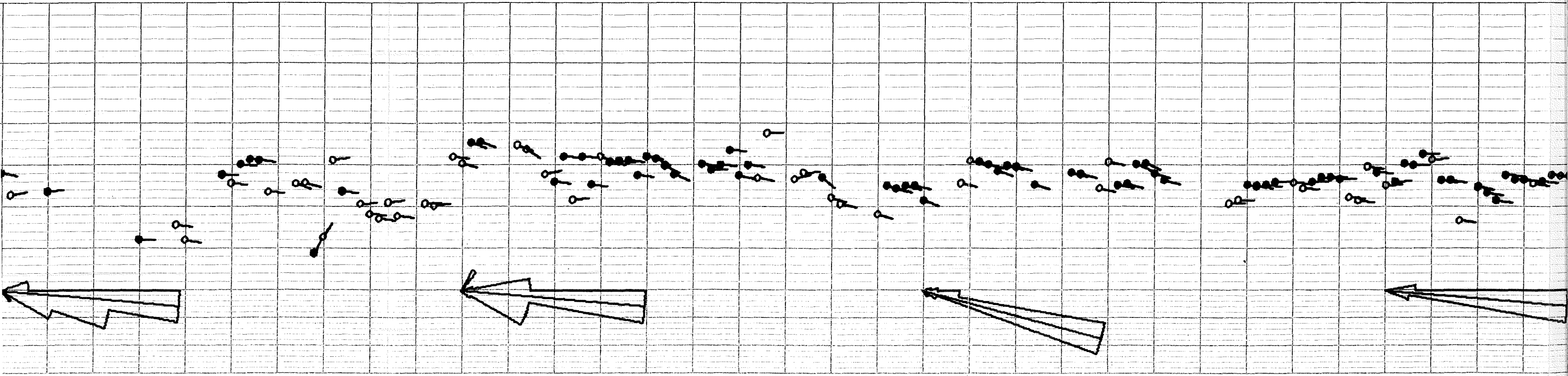
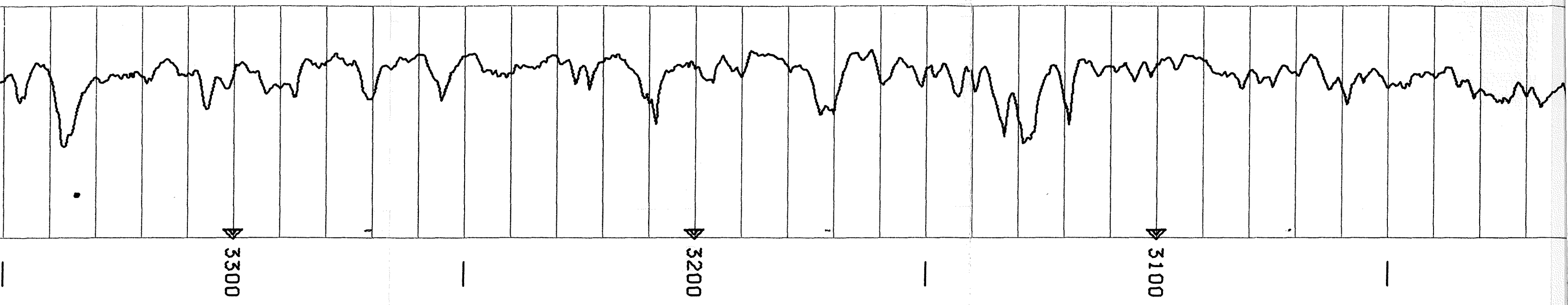


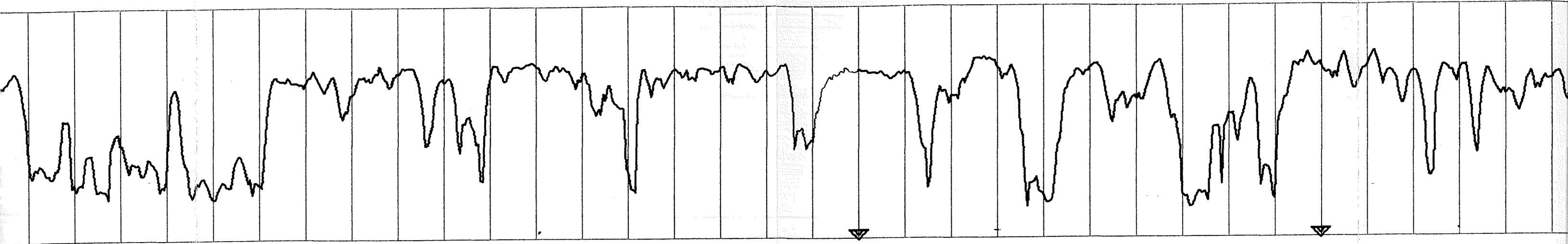
2600

2500

2400



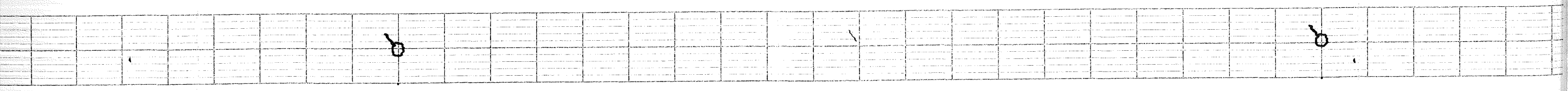
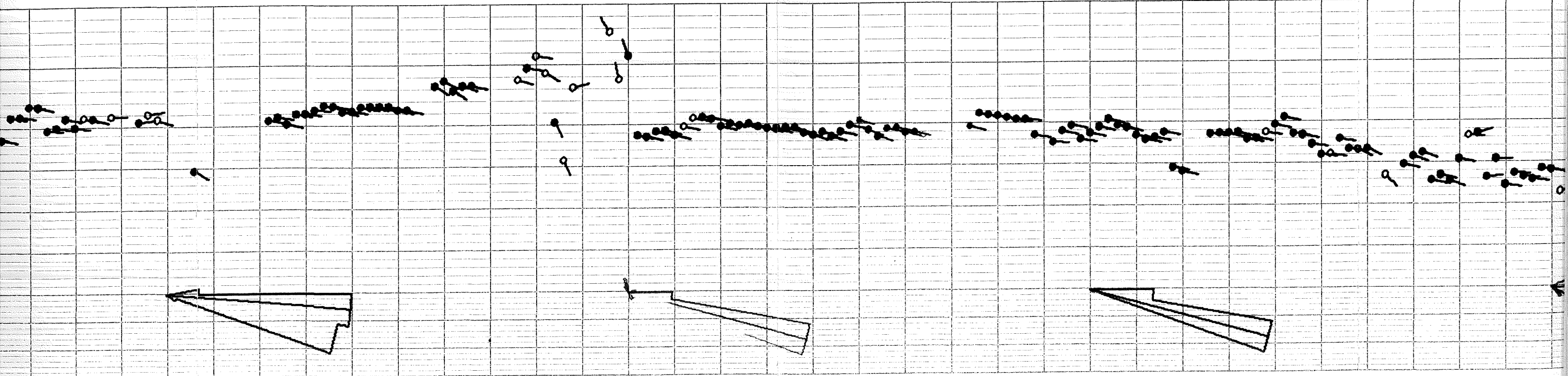


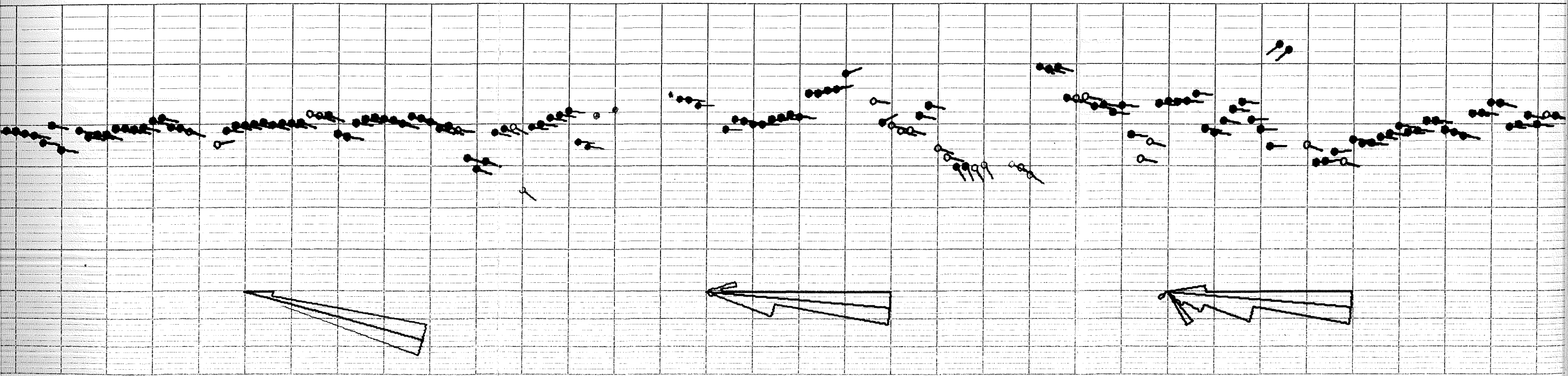
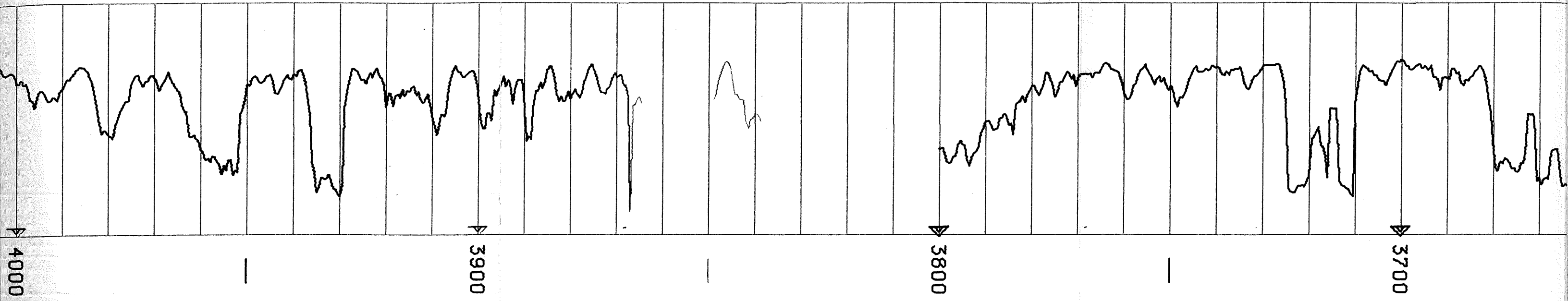


3600

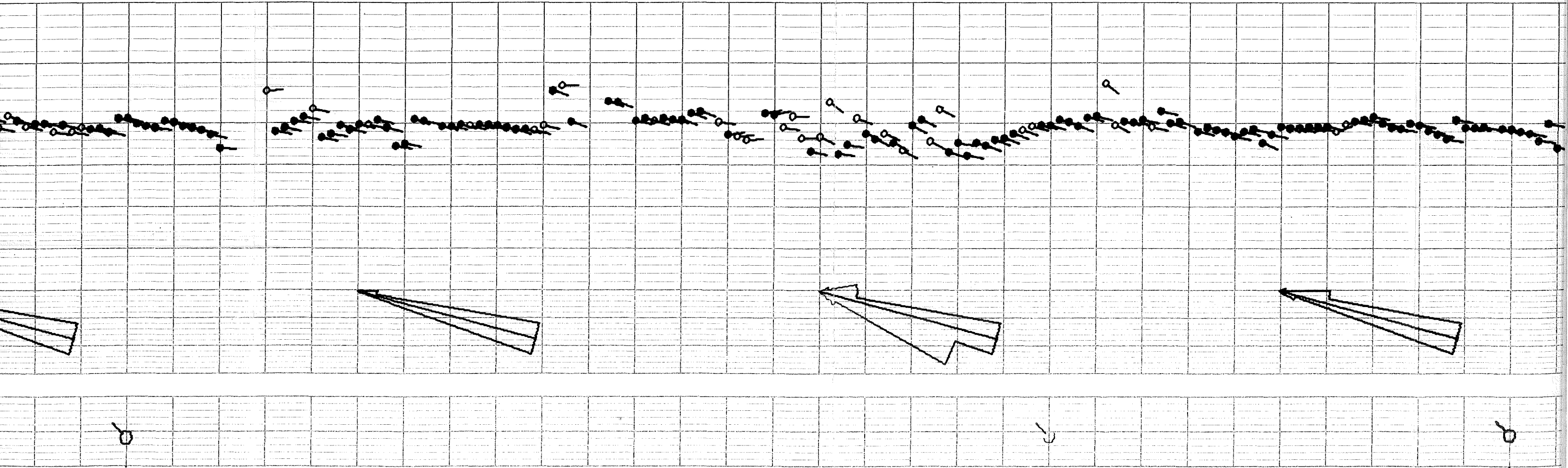
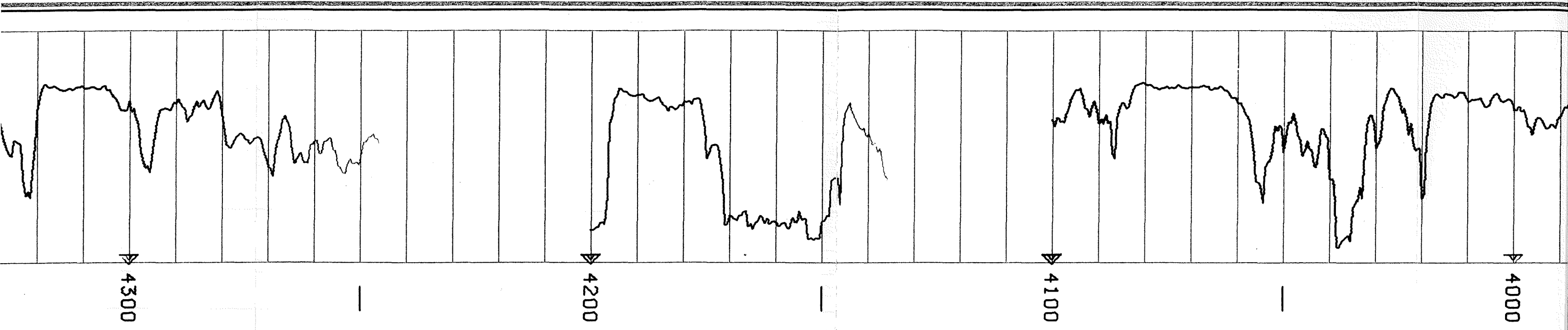
3500

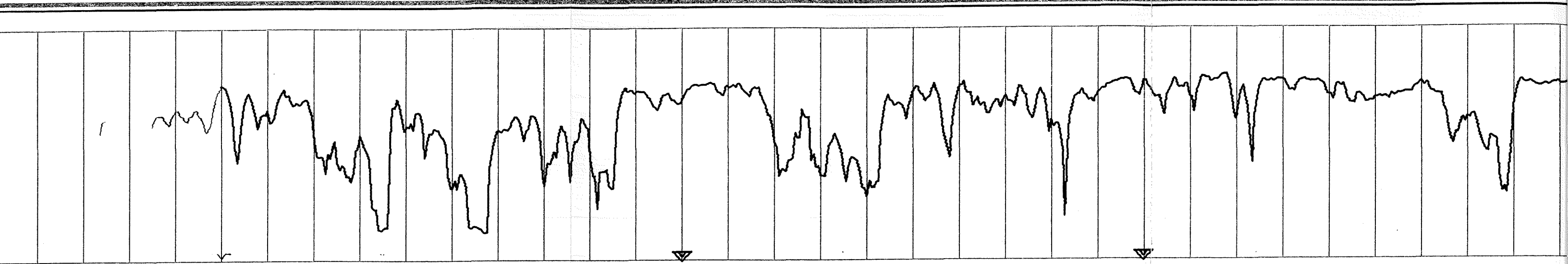
3400







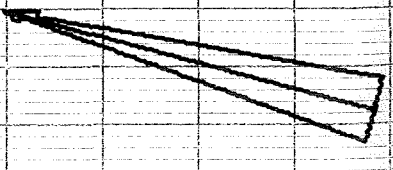
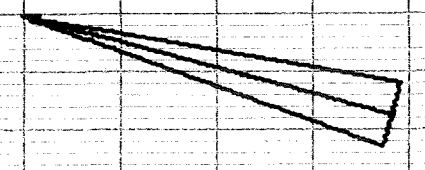
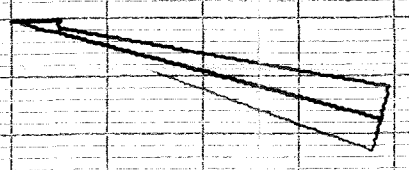
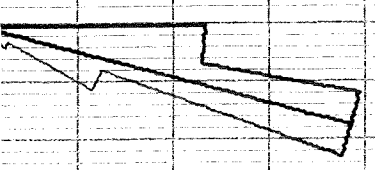
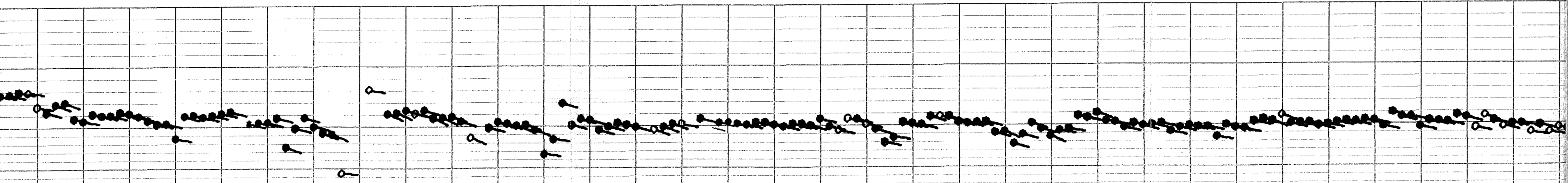


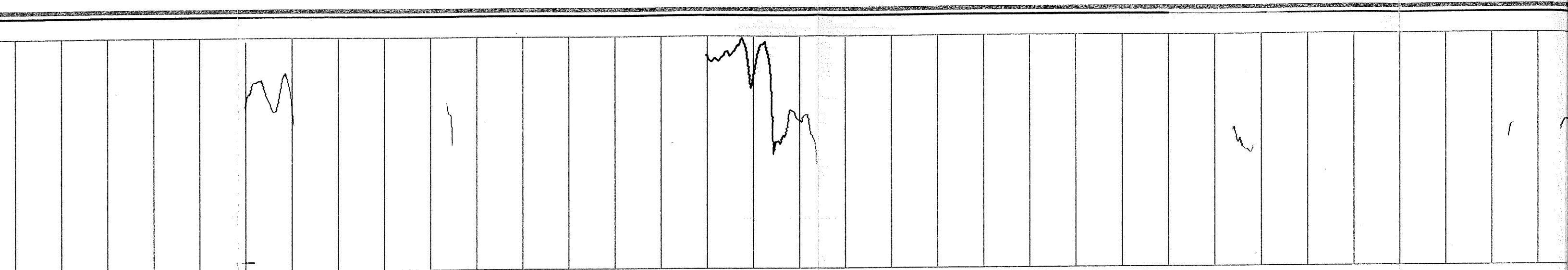


4600

4500

4400

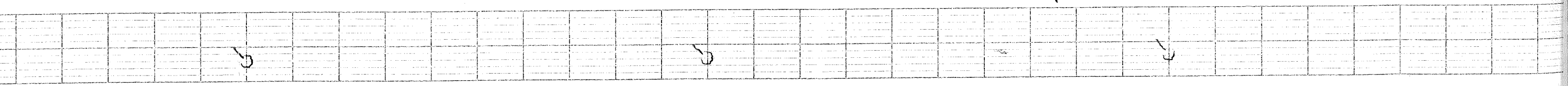
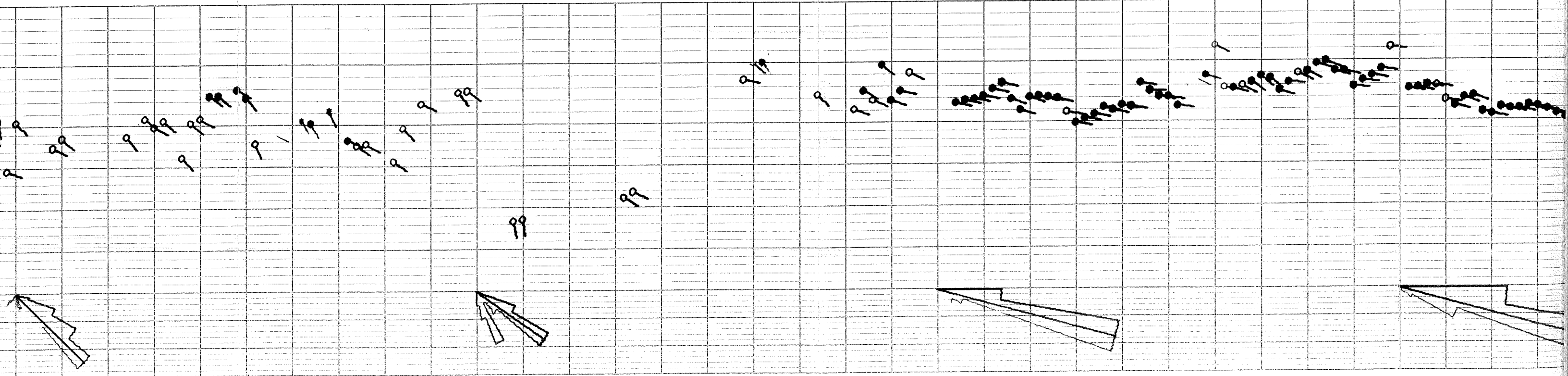


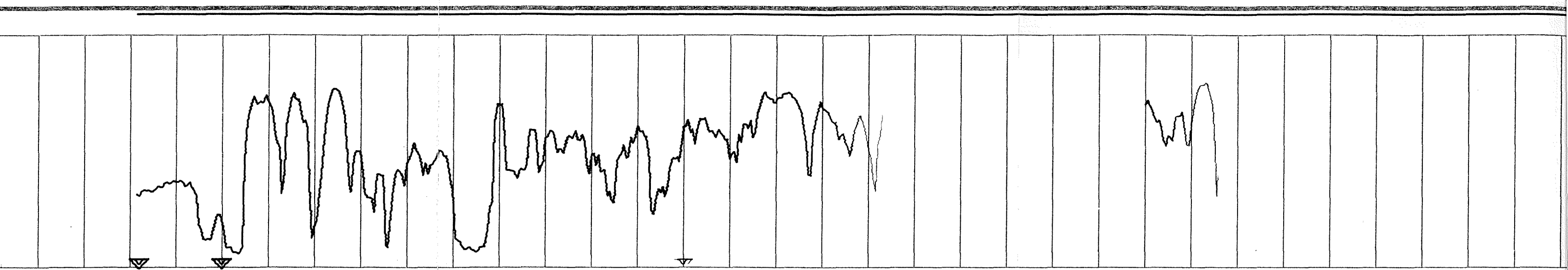


4900

4800

4700

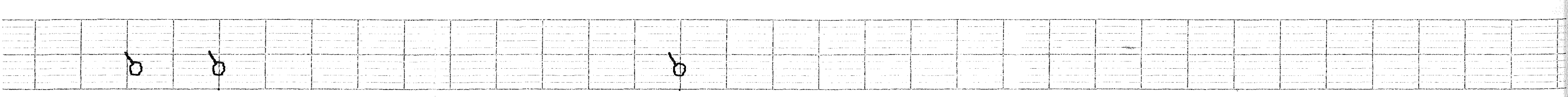
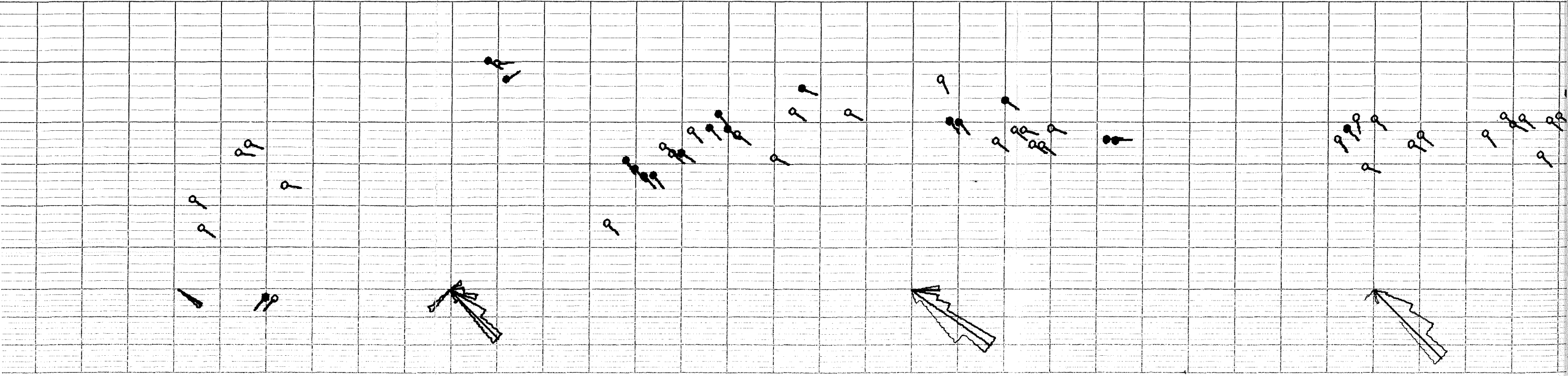


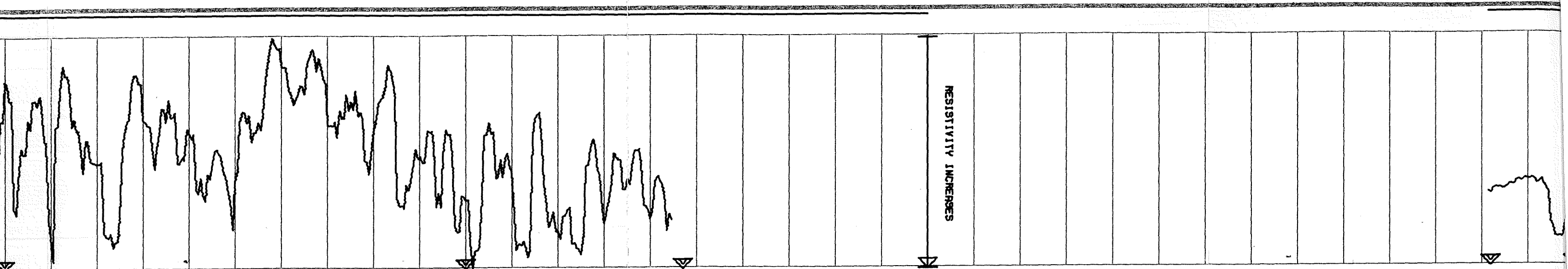


5200

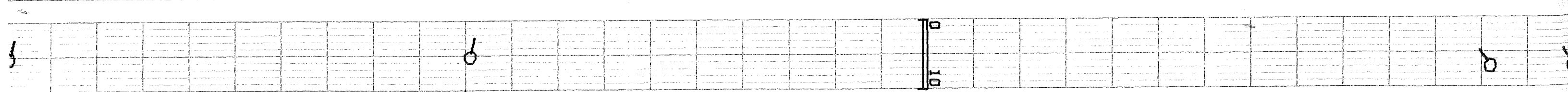
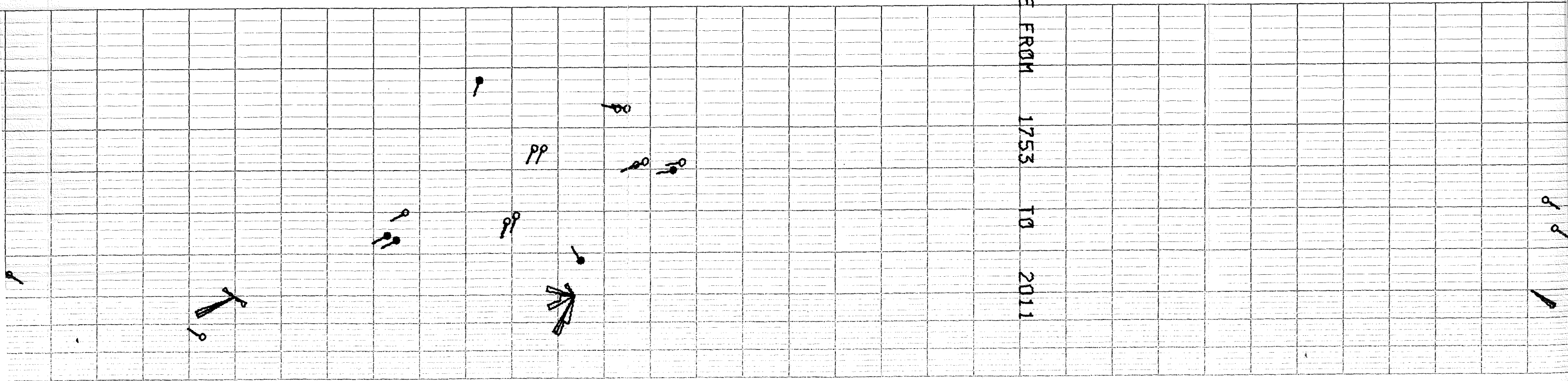
5100

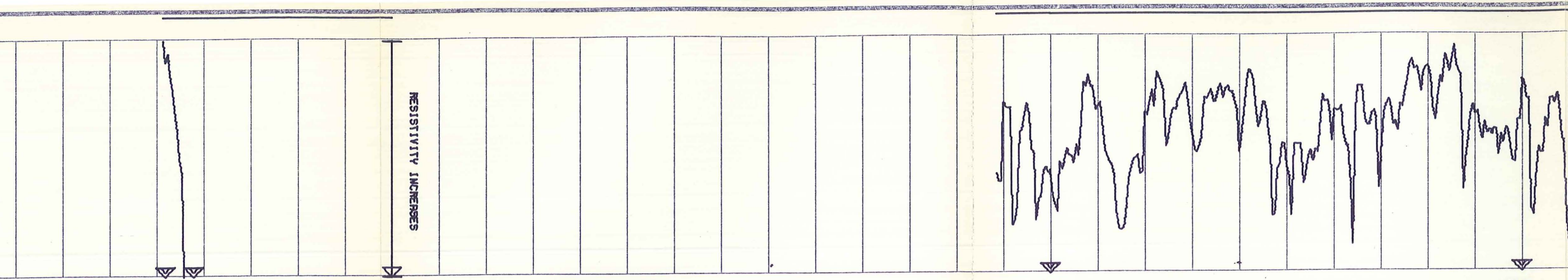
5000





1900 1800 5300 ZONE FROM 1753 TO 2011





1900

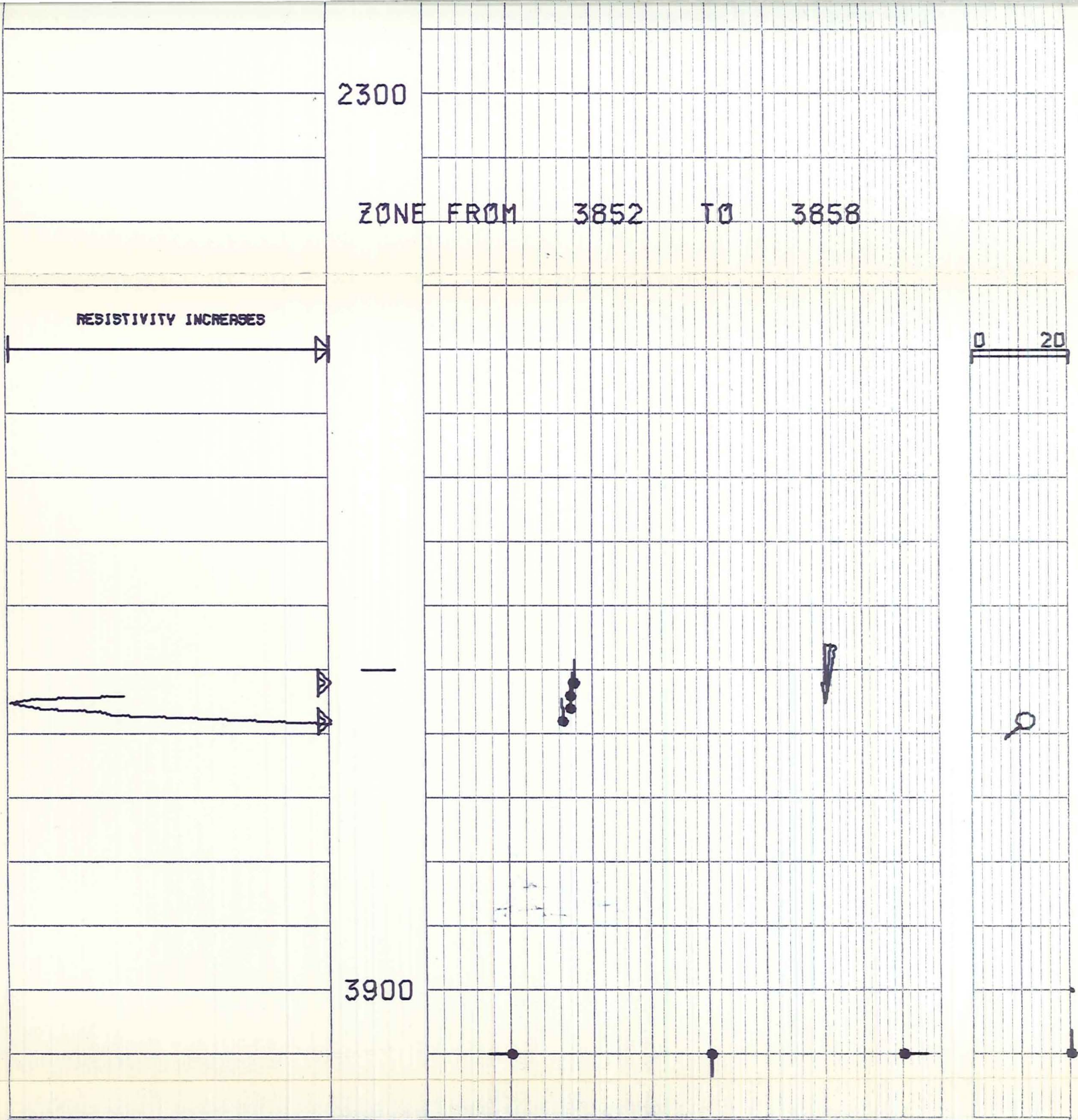
2000

2100

ZONE FROM 2242 TO 2248

0 10





CORRELATION CURVE	DEPTHS	TRUE DIP ANGLE AND DIRECTION	DRIFT & DIRECTION OF SONDE
-------------------	--------	------------------------------	----------------------------

COMPANY	UNION OIL COMPANY OF CALIFORNIA	Rm	NA	@	NA	°F	SCHL. FR	5207
WELL	COVE FORT #31-33	Rmf	NA	@	NA	°F	SCHL. TD	5208
FIELD	COVE FORT	Rmc	NA	@	NA	°F	DRLR TD	5221
COUNTY	MILLARD	BHT	NA	°F			Elev:	KB 6501
STATE	UTAH							DF ----
								GL 6481

GEOPHYSICAL ELECTRICITY SURVEYING  
 1000 EAST 1000 NORTH  
 SALT LAKE CITY, UTAH