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NASA-CR-168086 Vol II

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(NASA-CR-168086-Vol-2) FREE-JET ACOUSTIC  
INVESTIGATION OF HIGH-RADIUS-RATIO COANNULAR  
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VOLUME 2 (General Electric Co.) 782 p  
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# FREE JET ACOUSTIC INVESTIGATION OF HIGH-RADIUS-RATIO COANNULAR PLUG NOZZLES

Contract NAS3-20619

## Comprehensive Data Report

VOLUME II

By

P.G. Vogt  
P.K. Bhutani  
P.R. Knott



January 1981

Prepared for  
National Aeronautics and Space Administration  
Lewis Research Center  
21000 Brookpark Road  
Cleveland, Ohio 44135

N83-18409, Pt. I

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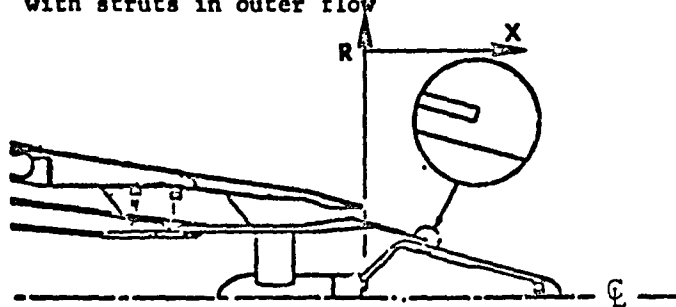
6.2.2 Laser Velocimeter Data for Model 1A

6.2.2.1 Laser Velocimeter (LV) Point Histogram Measurements  
for Model 1A

Table XVII contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

Following Table XVII are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general dynostic information.

$R_r^o = 0.853$       C-D outer nozzle  
 $R_r^i = 0.933$       conic inner nozzle  
 $A^i/A^o = 0.194$   
with struts in outer flow



MODEL 1A Day 5.24 ms

$V_i^0$  2453 FPS

$V_i^M$  2270 FPS

POINT 101A  $R_2$  4.593 ms

$V_i^i$  1648 FPS

$V_{Ac}$  0 FPS

054

TYPE TRAY	POSITION (VOLTS)			AXIAL POSITION		N-S		E-W		RADIAL POSITION			HISTO #	U FPS	U' FPS	D/V <sub>i</sub>	D/V <sub>i</sub> '	D/V <sub>i</sub> ''	D/V <sub>i</sub> '''
	AXIAL	EW	NS	PLANE	INS	X/100	POS	IN	POS	IN	LOC	R <sub>IN</sub>							
	2.706	3.249	1282																
N-S	2.712	3.886			.40	076			W	4.54			6038	-	-	-	-	-	-
E-W	"		1288		"	"	S	.20					6039	-	-	-	-	-	-
EW	3.116			J	2715	5181							6040	-	-	-	-	-	-
EW	3.303			K	3254	7546							6041	-	-	-	-	-	-
EW			1282				E	0					6042	-	-	-	-	-	-
		4.523							W	2.29	2.29	499	6043	1724	240	.703	.098	.759	.106
		4.965							"	.95	.95	207	6044	1574	123	.650	.05	.702	.054
		5.495							E	1.49	1.49	324	6045	2098	239	.855	.099	.924	.105
EW	3.116			J	2715	5181							6046	-	-	-	-	-	-

Table XVII. LV Log Sheet Model 1A (Concluded).

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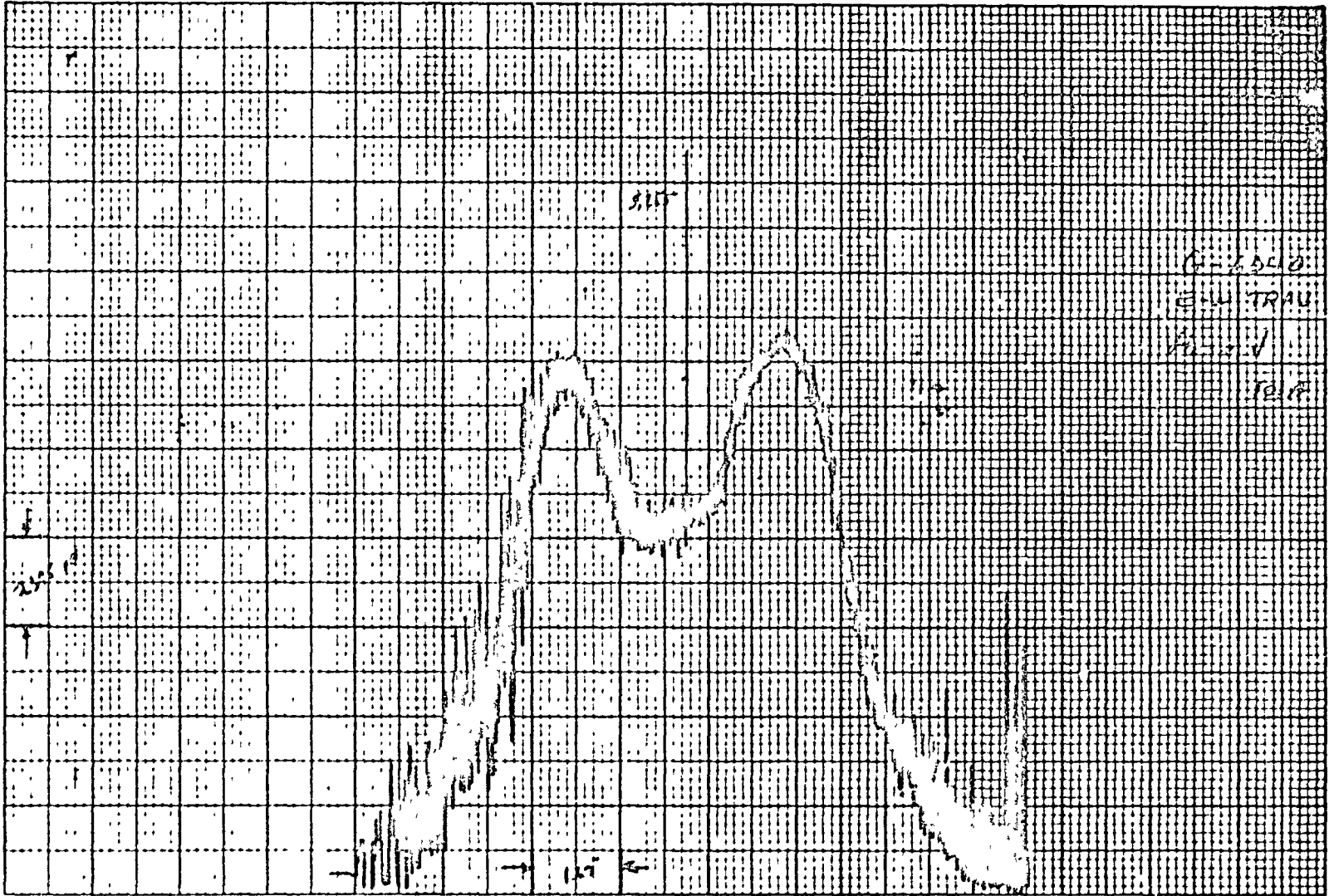
6.2.2.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 1A

Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XVII.

The velocity and physical position information is identified with hand-written scales on the ordinate and abscissa.

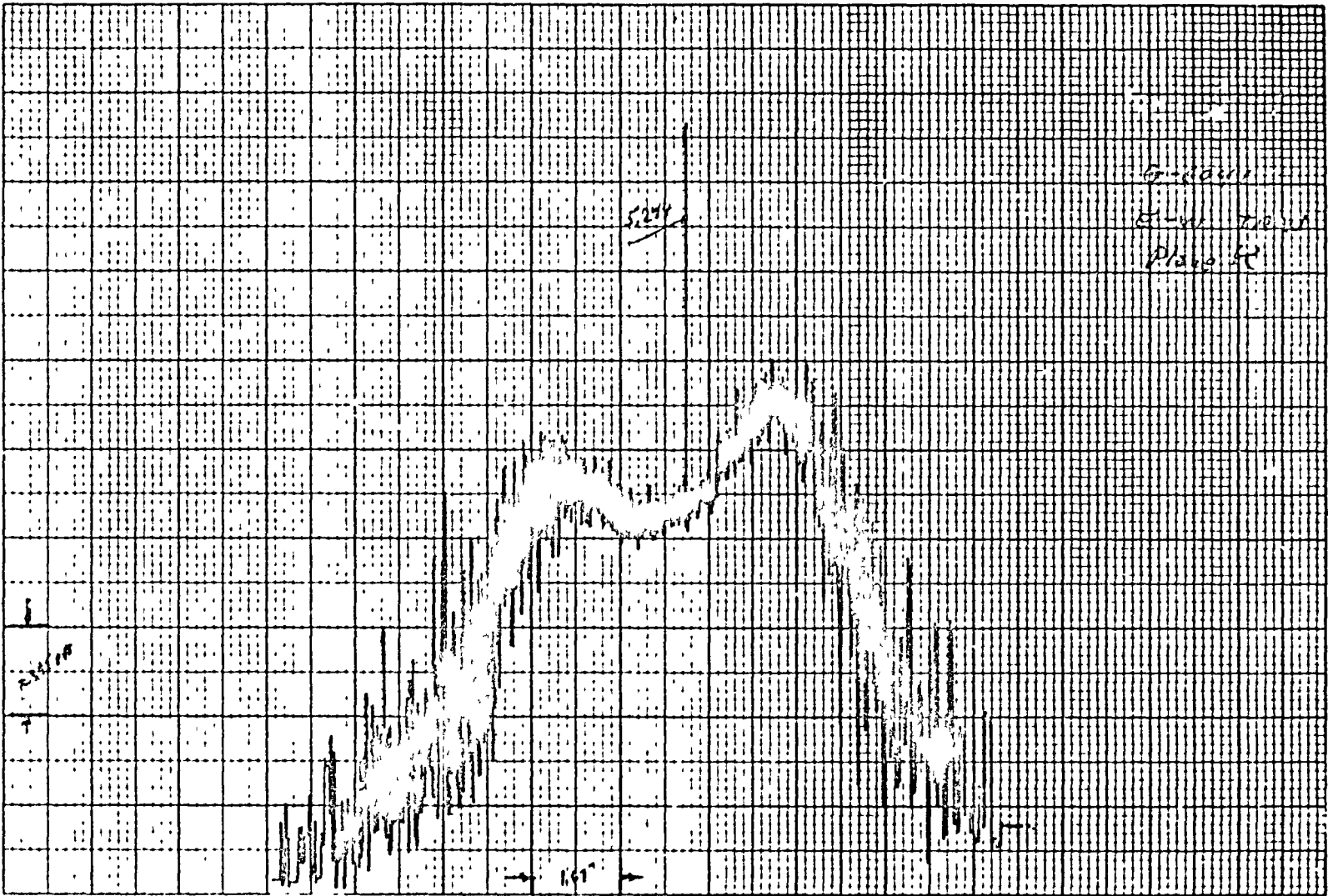
MODEL 1A  
TEST POINT 101A

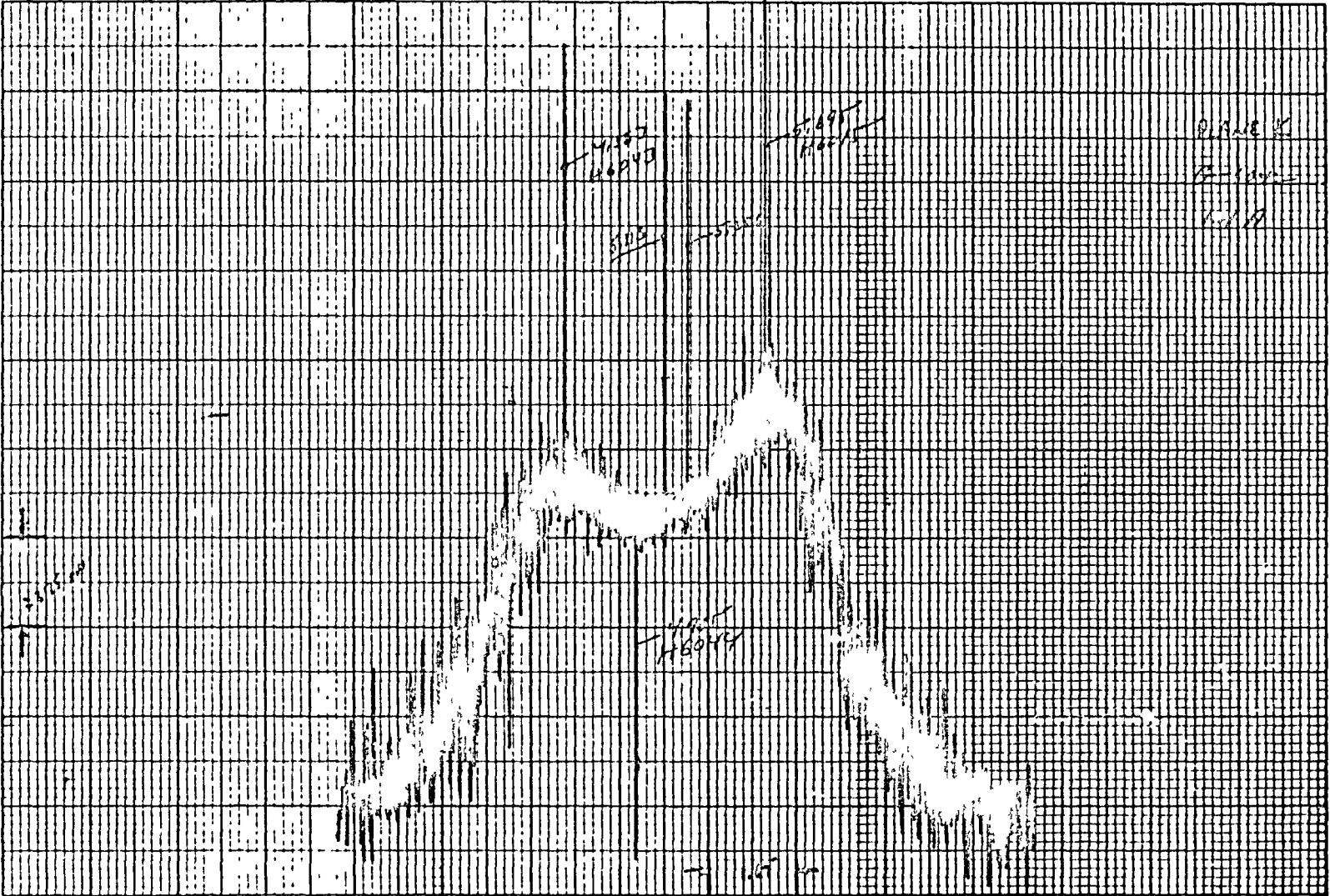




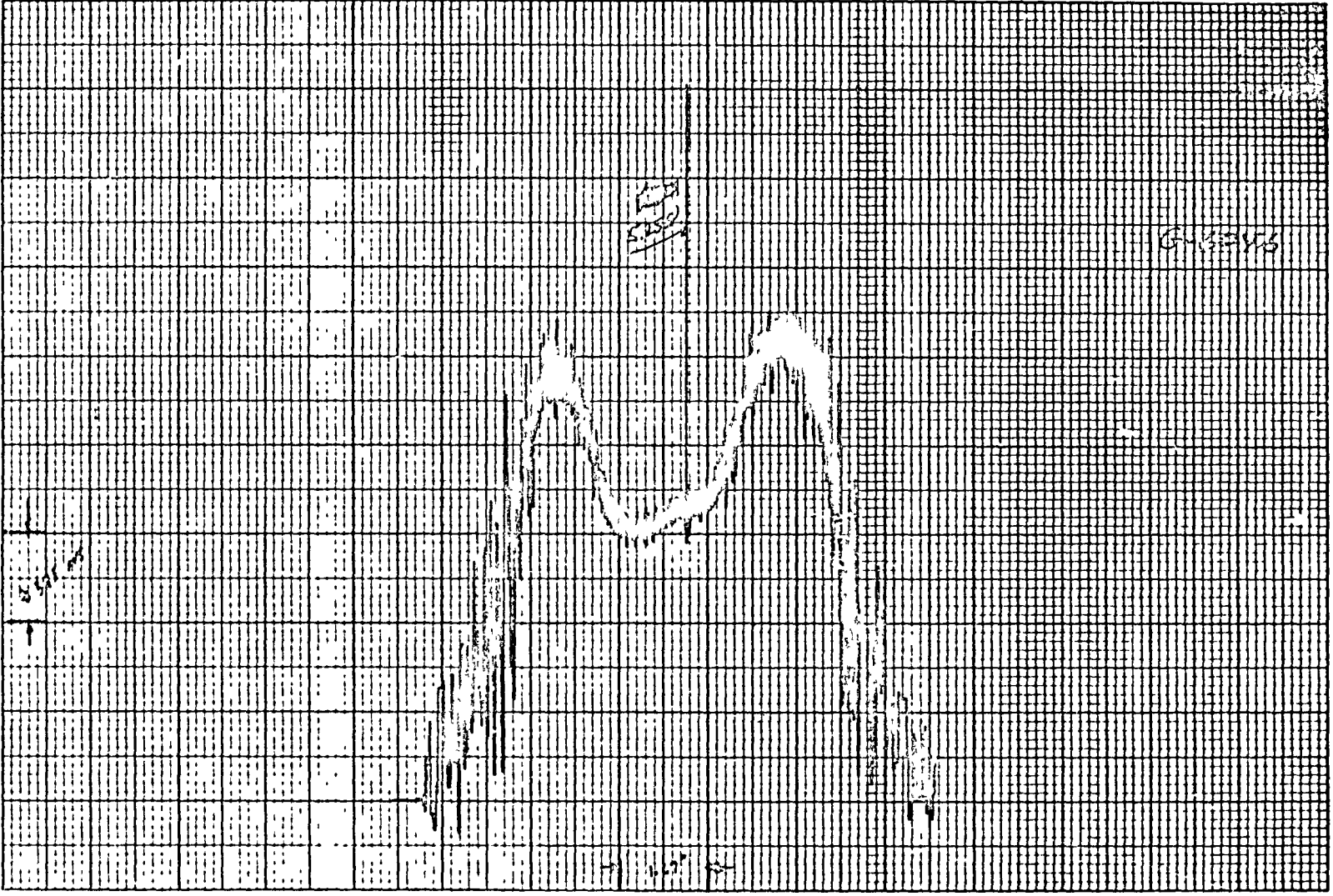
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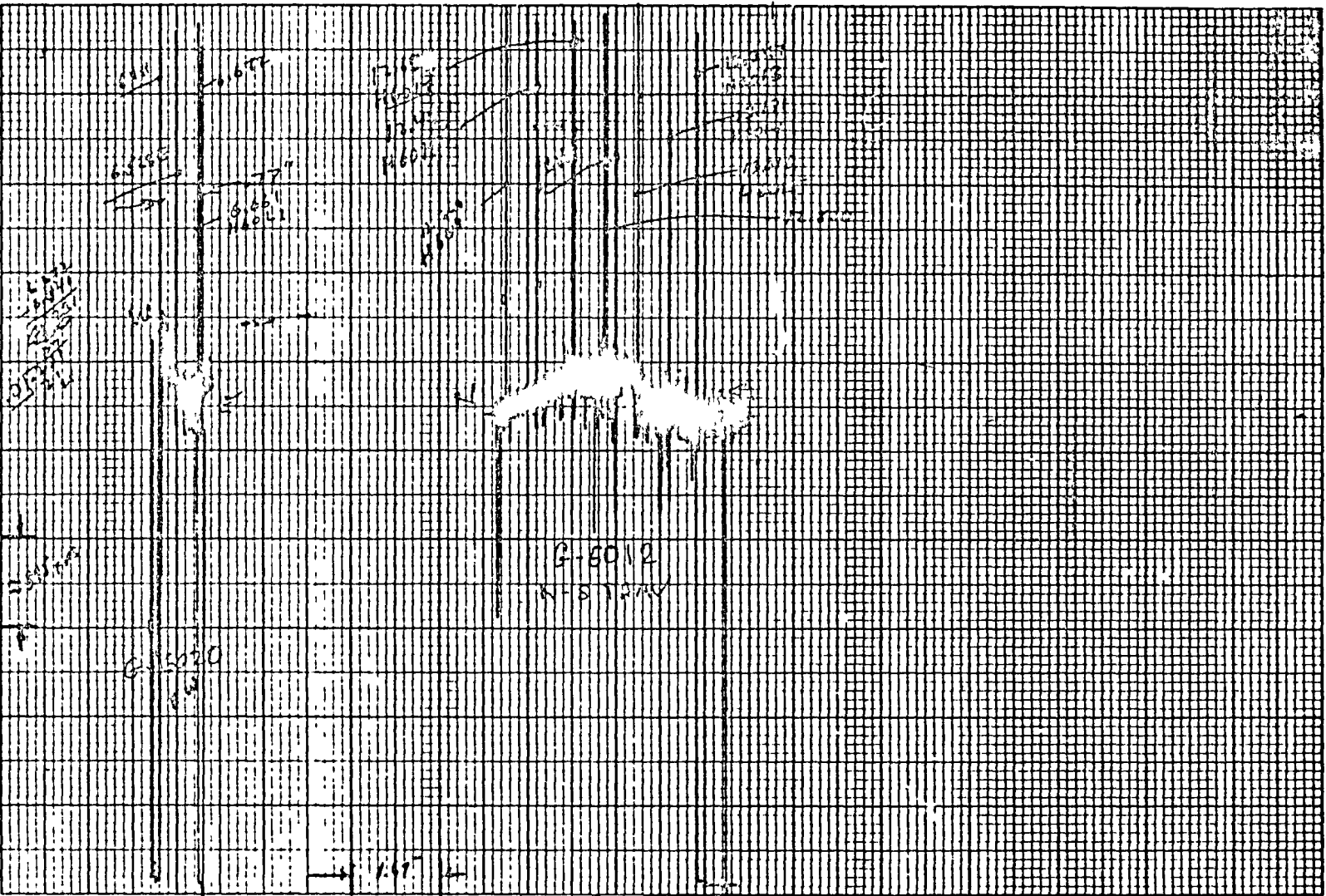


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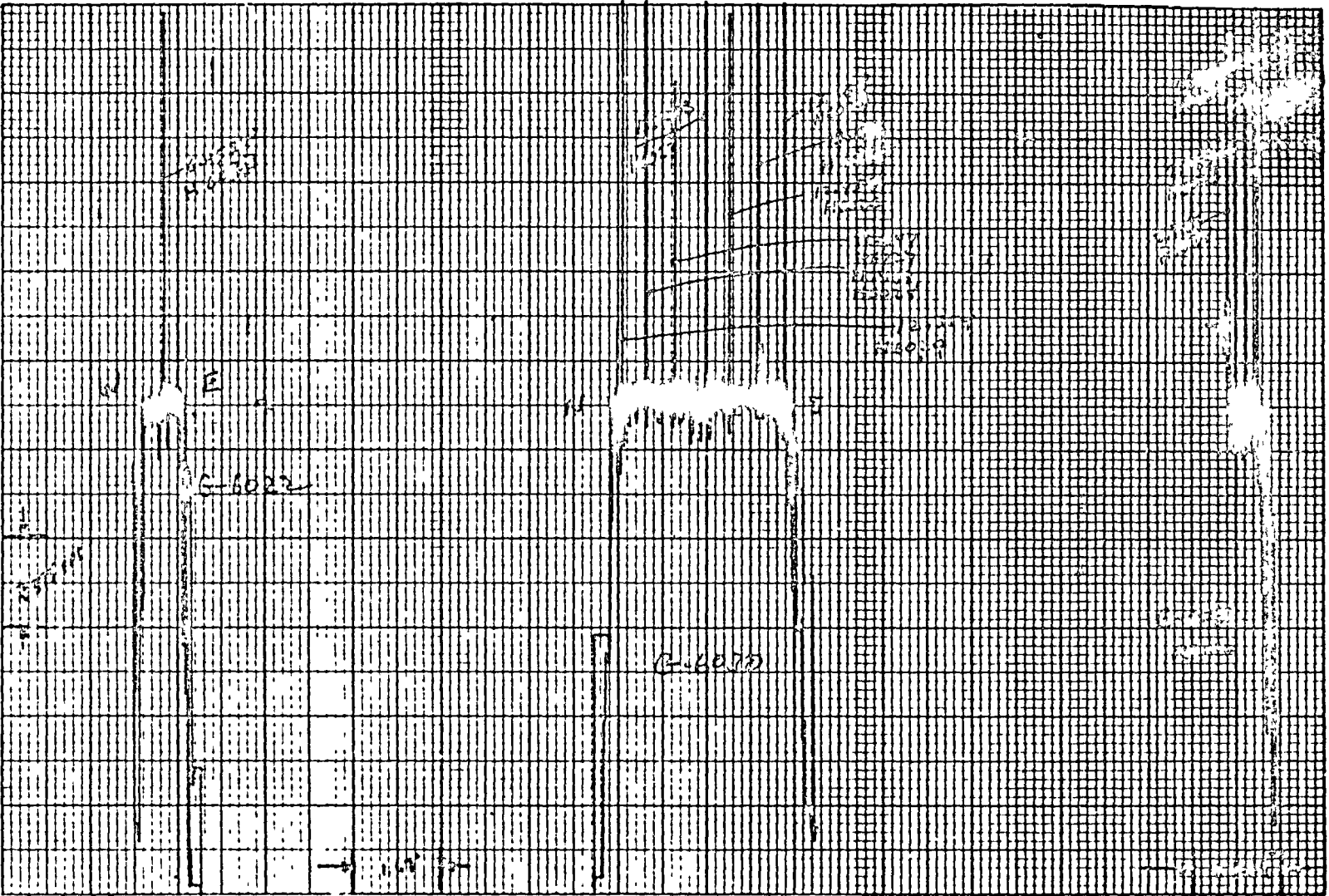
MODEL 1A  
TEST POINT 116A

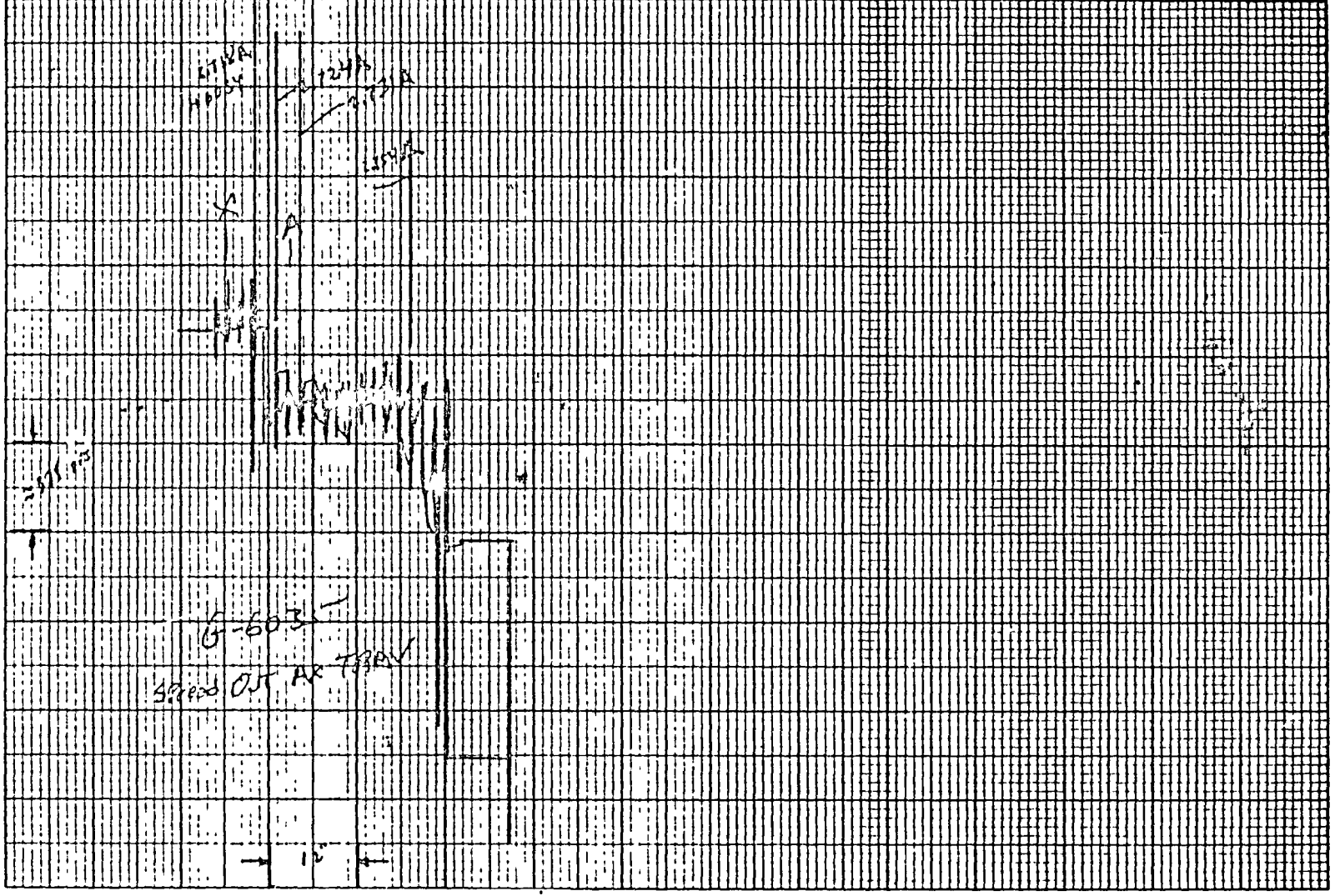
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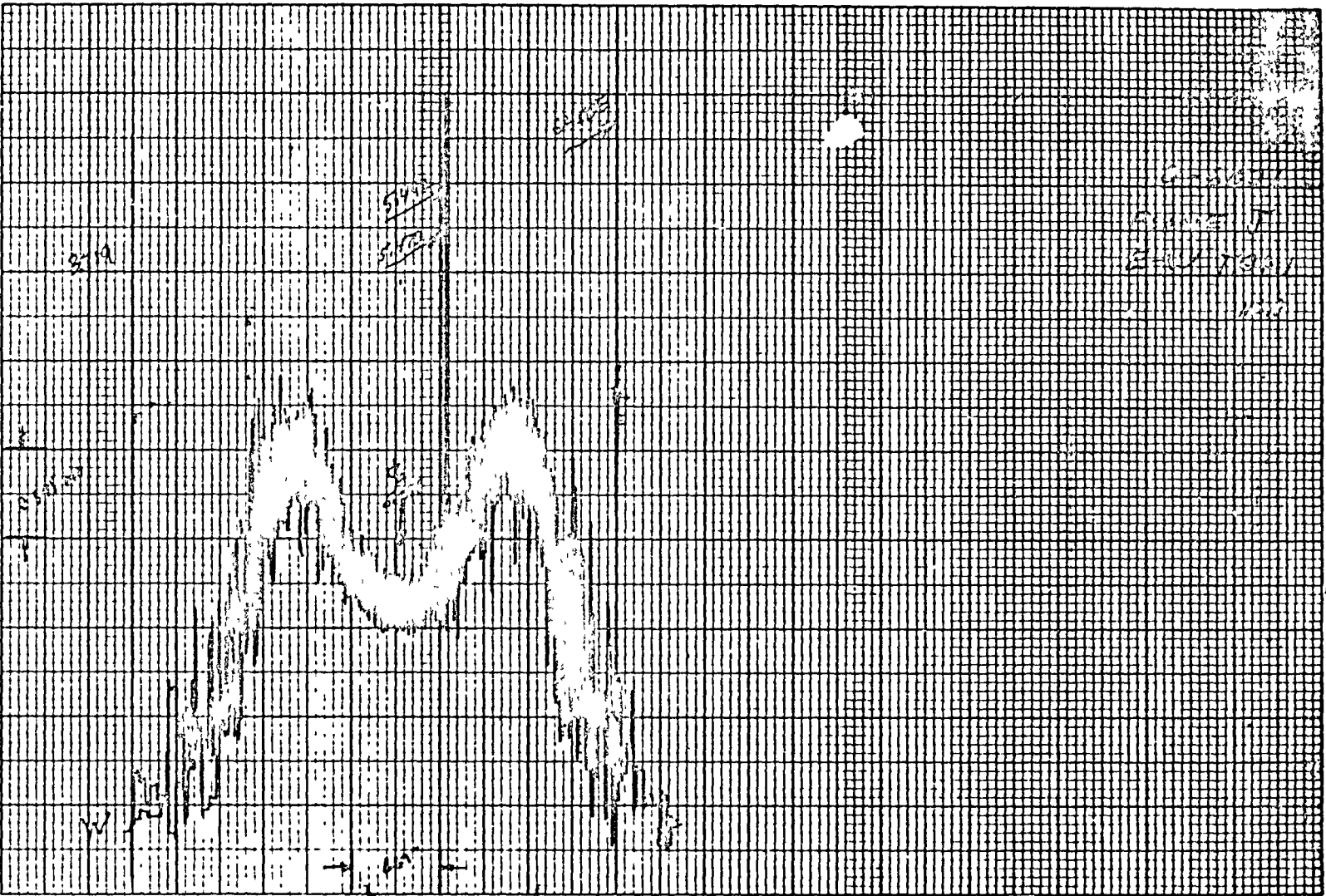
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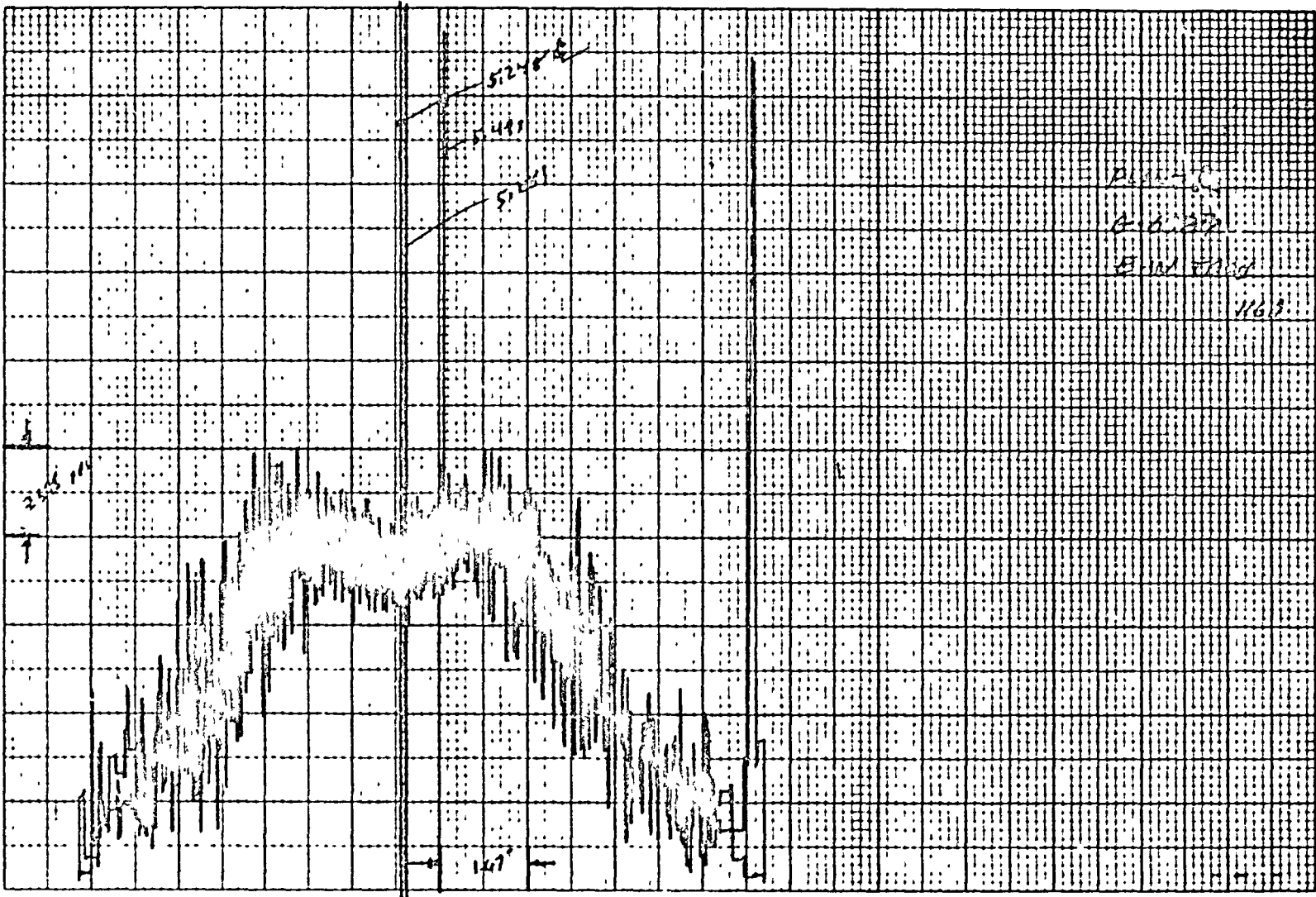




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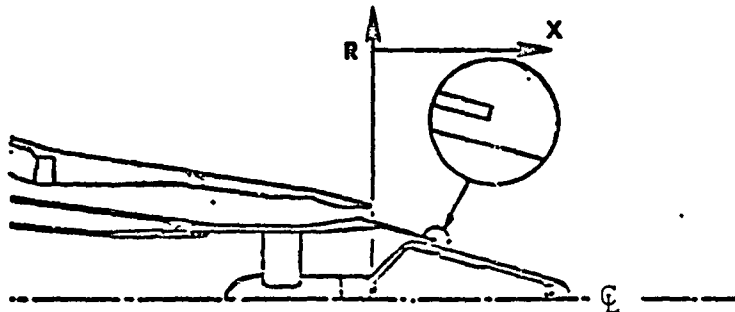
6.2.3 Laser Velocimeter Data for Model 2

6.2.3.1 Laser Velocimeter (LV) Point Histogram Measurements for Model 2

Table XVIII contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

Following Table XVIII are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general <sup>(a)</sup>diagnostic information.

$R_r^o = 0.853$       C-D outer nozzle  
 $R_r^i = 0.933$       Conic inner nozzle  
 $A^i/A^o = 0.191$   
without struts in outer flow



MODEL 2 Deg 5.115  
 POINT 201 R<sub>i</sub> 4593

V<sub>i</sub><sup>0</sup> = 2435 FPS V<sub>i</sub><sup>M</sup> = 2250 FPS  
 V<sub>i</sub><sup>i</sup> = 1629 FPS V<sub>h/c</sub> = 0 FPS Date 1/14/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/4</sub>	J <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/R <sub>2</sub>							
REF	3.107	4.958	13.486													
EW	3.126	—	13.486	A	1.26	.243	—	—	—	1706	—	—	—	—	—	—
		3.823					W	3.78	.823	1707	2383	160	.979	.066	1059	.071
		6.277					E	4.40	.958	1708	2305	156	.947	.064	1024	.069
		6.051						3.64	.793	1709	2520	194	1.035	.080	1.120	.086
		6.115						3.86	.840	1710	2450	352	1.006	.145	1.089	.156
		6.196						4.13	.899	1711	2380	363	.977	.149	1.058	.161
EW	3.141	—		B	2.25	.435	—	—	—	1712	—	—	—	—	—	—
E-W	3.160	—		C	3.51	.678	—	—	—	1714	—	—	—	—	—	—
		4.101					W	2.86	.623	1715	1474	134	.605	.055	.655	.060
		4.011					"	3.16	.688	1716	2393	256	.983	.105	1.064	.114
		6.091					E	3.78	.823	1717	2350	171	.965	.070	1.044	.076
		5.969						3.37	.734	1718	2344	159	.963	.065	1.042	.071
		5.876						3.06	.666	1719	2320	138	.953	.057	1.031	.061
		5.742						2.75	.599	1720	1499	166	.616	.068	.666	.074
E-W	3.175	—		D	4.50	.869	—	—	—	1721	—	—	—	—	—	—
E-W	3.190	—		E	5.50	1.062	—	—	—	1722	—	—	—	—	—	—
		4.250					W	2.36	.514	1723	1476	66.8	.606	.027	.656	.030
		4.057					"	3.00	.653	1724	2245	81.4	.922	.033	.998	.036
		5.921					E	3.38	.736	1725	2218	184	.911	.076	.986	.082
		5.829						2.90	.631	1726	2343	119	.962	.049	1.041	.053
		5.746						2.63	.573	1727	2299	64.5	.944	.026	1.022	.029
		5.628						2.40	.523	1728	1574	88.7	.646	.036	.700	.039
E-W	3.220	—		F	7.48	1.445	—	—	—	1729	—	—	—	—	—	—
E-W	3.258	—		G	10.00	1.931	—	—	—	1730	—	—	—	—	—	—
"	"	5.801		"	"	"	E	2.84	.618	1731	2233	195	.917	.080	.992	.087

Table XVIII. LV Log Sheet Model 2.

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MODEL 2 Deg 5.178 $V_j^0 = 2435 \text{ FPS}$   $V_j^M = 2250 \text{ FPS}$ POINT 201  $R_i = 4.598$  $V_j^i = 1629 \text{ FPS}$   $V_{1/2} = 0 \text{ FPS}$ Date 1/14/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R <sub>2</sub>							
REF	3.107	4958	13.486													
	3.258	5682	13.486	G	10.00	1.931	E	2.42	.527	1732	2370	254	.973	.104	1.053	.113
		5.569						2.04	.444	1733	2340	142	.961	.058	1.040	.063
		5.408						1.50	.327	1734	1545	90.8	.634	.037	.687	.040
		5.335						1.26	.274	1735	1444	46.2	.593	.019	.642	.021
		4.568					W	1.30	.283	1736	1498	61.1	.615	.025	.666	.027
		4.324					"	2.11	.459	1737	2303	175	.946	.072		
E-W	3.325	-		H	14.44	2.788	-	-	-	1738	-	-	-	-	-	-
		5.600					E	2.14	.466	1739	2330	161	.957	.066	1.036	.072
		5.201					"	.81	.126	1740	1578	63.	.648	.026	.701	.028
		4.941					W	.060	.011	1741	1289	130	.529	.053	.575	.058
		4.383						1.92	.418	1742	2361	266	.970	.109	1.049	.118
		4.269						2.30	.501	1743	2219	231	.911	.095	.986	.103
E-W	3.511	-		J	26.75	5.167	-	-	-	1744	-	-	-	-	-	-
		4.957					E	0	0	1745	1611	98.7	.662	.041	.716	.044
		5.759					E	2.67	.581	1746	1535	402	.630	.165	.682	.179
		5.494						1.79	.390	1747	2357	136	.968	.056	1.048	.060
		5.234						.92	.200	1748	2209	142	.907	.058	.982	.063
		4.766					W	.64	.139	1749	1545	88.8	.634	.036	.687	.038
		4.306					"	2.17	.472	1750	1967	246	.808	.101	.874	.109
E-W	3.511	-					-	-	-	1751	-	-	-	-	-	-
E-W	3.692	-		K	39.14	7.559	-	-	-	1752	-	-	-	-	-	-
		4.859					E	0	0	1753	1794	185	.737	.076	.797	.082
		4.393					W	1.88	.409	1754	1714	197	.704	.081	.762	.088
		4.777					"	.60	.131	1755	1732	160	.711	.066	.770	.071
		5.343					F	1.28	.279	1756	2187	234	.848	.096	.972	.104

Table XVIII. LV Log Sheet Model 2 (Continued).

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MODEL 2 Deg 5,178

$V_j^0 = 2435 \text{ FPS}$   $V_j^M = 2250 \text{ FPS}$

POINT 201  $R_i = 4518$

$V_j^i = 1629 \text{ FPS}$   $\sqrt{u/c} = 0 \text{ FPS}$

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/4</sub> <sup>o</sup>	J <sub>1/8</sub> <sup>o</sup>	J <sub>1/4</sub> <sup>m</sup>	J <sub>1/8</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X	INS %Deg	LOC.	R.INS.	R <sub>1/2</sub> <sup>o</sup>							
REF	3,107	4,954	13,486													
	3,698	5,866	13,486	K	3,914	7,559	E	3.03	.660	1757	1162	387	477	.159	.516	.172
	"	6,288		"	"	"	"	4.43	.965	1758	599	208	246	.085	.781	.092
E-W	3,885	—		L	5,152	9,95	—	—	—	1759	—	—	—	—	—	—
		6,696					E	5.29	1.261	1760	460	187	.189	.077	.204	.083
		4,566					W	1.31	.285	1761	1705	219	.700	.090	.758	.097
		4,791					"	.56	.122	1762	1790	186	.735	.076	.756	.083
		4,953					E	0	0	1763	1819	204	.759	.084	.822	.091
		5,336					E	1.26	.274	1764	1932	248	.793	.102	.859	.110
		6,035					"	3.59	.782	1765	911	299	.374	.123	.405	.133
E-W	4,196	—		M	7,212	13,928	—	—	—	1766	—	—	—	—	—	—
		6,844					E	6.45	1.404	1767	475	186	.195	.076	.211	.083
		4,953					E	0	0	1768	1497	294	.615	.121	.665	.131
		4,110					W	2.83	.616	1769	1109	295	.455	.121	.493	.131
		4,768					"	.63	.137	1770	1501	282	.616	.116	.667	.125
		5,510					E	1.84	.431	1771	1262	330	.518	.136	.561	.147
		6,216					"	4.19	.912	1772	768	241	.315	.099	.341	.107
E-W	4,296	—		N	7,774	15,207	—	—	—	1773	—	—	—	—	—	—
		6,986					E	6.76	1.492	1774	474	175	.195	.072	.211	.078
		6,241					"	4.28	.932	1775	733	236	.301	.097	.326	.105
		4,952					E	0	0	1776	1280	297	.526	.122	.569	.132
		5,612					E	2.18	.475	1777	1023	279	.420	.115	.455	.124
		3,828					W	3.77	.871	1778	1264	291	.519	.120	.562	.129
AXIAL	—	5,362		—	—	—	E	1.35	—	1779	—	—	—	—	—	—
AXIAL	—	4,958		—	—	—	E	0	—	1779	—	—	—	—	—	—
AXIAL	—	5,790		—	—	—	E	2.77	—	1779	—	—	—	—	—	—

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).



MODEL 2 Deg = 5.172

$V_j^0$  2425 FPS  $V_j^M$  = 2247 FPS

POINT 203  $R_i$  = 4573

$V_j^i$  = 1630 FPS  $V_{ALC}$  = 400 FPS

Date 1/17/72

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> <sup>o</sup>	U <sub>1/3</sub> <sup>o</sup>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X	MS	Y/deg	LOC.	R <sub>INS.</sub>							
REF	3107	4.889	13375													
AXIAL	—	4.889	13375	—	—	—	Q	0	0	2496	—	—	—	—	—	—
AXIAL	—	5.402		—	—	—	E	1.71	.372	2499	—	—	—	—	—	—
AXIAL	—	5.691		—	—	—		2.67	.581	2498	—	—	—	—	—	—
AXIAL	—	6.010		—	—	—		3.74	.814	2499	—	—	—	—	—	—
AXIAL	—	6.162		—	—	—		4.24	.923	2500	—	—	—	—	—	—
N-S	3.130	"	—	A	1.52	2.94		"	"	2501	—	—	—	—	—	—
N-S	"	6.115	—	"	"	"		1.23	.268	2502	—	—	—	—	—	—
N-S	3.160	5.969	—	C	3.51	6.78		3.60	.784	2503	—	—	—	—	—	—
E-W		—	13375					—	—	2503A	—	—	—	—	—	—
		3.742					W	3.83	.834	2504	2322	113	.958	.047	1033	.050
		5.998					E	3.70	.806	2505	2373	177	.979	.073	1056	.079
		6.052						3.88	.845	2506	2358	256	.972	.106	1049	.114
		6.138						4.16	.906	2507	2360	143	.973	.059	1050	.064
		6.181						4.31	.938	2508	1971	448	.813	.185	.877	.199
		8.320						11.44	2.491	2509	399	624	—	—	—	—
E-W	3.130	—		A	1.52	2.94	—	—	—	2510	—	—	—	—	—	—
		8.320					E	11.44	2.491	2511	398	77	—	—	—	—
		6.021						3.77	.821	2512	2521	110	1035	.045	1.122	.049
		6.113						4.08	.888	2513	2403	282	.991	.116	1.118	.126
		6.166						4.26	.927	2514	2357	221	.972	.091	1.049	.098
		3.645					W	4.15	.904	2515	2368	235	.976	.097	1.054	.105
E-W	3.155	—		B	2.52	4.87	—	—	—	2516	—	—	—	—	—	—
E-W	3.175	—		D	4.50	8.69	—	—	—	2517	—	—	—	—	—	—
E-W	3.190	—		E	5.50	10.62	—	—	—	2518	—	—	—	—	—	—
	"	4.202		"	"	"	W	2.29	.499	2519	1413	177	.583	.073	.629	.079

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.178

$V_j^0 = 2425 \text{ FPS}$   $V_j^M = 2247 \text{ FPS}$

POINT 203  $R_i = 4.593$

$V_j^i = 1630 \text{ FPS}$   $V_{A/C} = 400 \text{ FPS}$  Date 1/17/78

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TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U_j^0$	$U'/U_j^M$	$U'/U_j^i$	
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/R <sub>i</sub>								
	REF 3.107	4889	13.375														
		3.190	3.965	13.375	E	5.50	1.062	W	3.08	1.671	2520	2236	73.6	.922	.030	.995	.033
			5.532					E	2.14	4.66	2521	1556	73.6	.642	.030	.692	.033
			5.630						2.47	5.38	2522	2279	126	.940	.052	1.014	.056
			5.749						2.87	.625	2523	2325	90.2	.959	.037	1.035	.040
			5.855						3.22	.701	2524	2296	134	.947	.055	1.022	.060
			8.314						11.42	2.486	2525	396	8.7	-	-	-	-
E-W	3.220	-		F	7.48	1.445			-	-	2526	-	-	-	-	-	-
E-W	3.258	-		G	10.00	1.931			-	-	2527	-	-	-	-	-	-
			5.872					E	3.28	.714	2528	974	272	.402	.112	.433	.121
			5.689						2.67	.581	2529	2268	239	.935	.099	1.009	.106
			5.552						2.21	.481	2530	2310	143	.949	.059	1.028	.064
			5.353						1.55	.337	2531	1965	137	.810	.057	.874	.061
			4.241					W	2.16	.470	2532	2307	117	.951	.048	1.027	.052
E-W	3.325	-		H	14.44	2.789			-	-	2533	-	-	-	-	-	-
			4.890					E	0	0	2534	-	-	-	-	-	-
			5.871					E	3.27	.712	2535	1044	244	.431	.101	.465	.109
			5.682						2.64	.575	2536	2116	186	.873	.077	.942	.083
			5.583						2.08	.453	2537	2332	175	.962	.072	1.038	.078
			5.267						1.26	.274	2538	2067	105	.852	.043	.920	.047
			4.286					W	.34	.074	2539	1365	104	.563	.043	.607	.046
			4.315					"	1.91	.416	2540	2359	223	.973	.092	1.050	.099
E-W	3.511	-		I	20.75	5.166			-	-	2541	-	-	-	-	-	-
			4.889					E	0	0	2542	1610	78.6	.664	.032	.717	.035
			4.638					W	.84	.183	2543	1498	82.7	.618	.034	.667	.037
			4.129					"	2.53	.551	2544	1867	225	.770	.093	.831	.100

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.17P

$V_j^0 = 2425$  FPS  $V_j^M = 2247$  FPS

POINT 203  $R_i = 4.573$

$V_j^i = 1630$  FPS  $V_{MC} = 400$  FPS

Date 1/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/3</sub> <sup>M</sup>	J <sub>1/3</sub> <sup>M</sup>		
	AXIAL	EW	NS	PLANE	X	MUS	4Deg	LOC.	R INS.								R/2	
	REF 3107	4889	13.375															
		3511	5415	13.375	J	2675	5.166	E	1.75	.381	2545	2360	152	.973	.063	1.050	.068	
			5.806							3.06	.666	2546	1285	337	.530	.139	.572	.150
			8.658		Y	Y	Y	Y	12.56	2.795	2547	405	35.7	-	-	-	-	
E-W	3698	-			K	3914	7.559	-	-	-	2548	-	-	-	-	-	-	
			8.658					E	12.56	2.735	2549	404	16.9	-	-	-	-	
			4883					E	0	0	2550	1882	150	.776	.062	.838	.067	
			4.268					W	2.07	.461	2551	1767	148	.729	.061	.786	.066	
			4.728					"	.54	.118	2552	1751	114	.722	.047	.779	.051	
			5.297					E	1.36	.296	2553	2314	159	.954	.066	1.030	.071	
			5.775							2.95	.642	2554	1378	360	.568	.149	.613	.160
			6.132		Y	Y	Y	Y	4.14	.901	2555	1697	176	.287	.073	.310	.078	
E-W	3.885	-			L	5152	9.95	-	-	-	2556	-	-	-	-	-	-	
			3.793					W	3.65	.795	2557	1044	253	.431	.104	.465	.113	
			4.370						1.73	.377	2558	1696	158	.699	.065	.755	.070	
			4.693					Y	.65	.142	2559	1756	152	.724	.063	.781	.068	
			4.888					E	0	0	2560	1866	165	.769	.068	.830	.073	
			5.301					E	1.38	.300	2561	2083	204	.859	.084	.927	.091	
			5.850						3.20	.697	2562	1125	310	.464	.128	.501	.138	
			6.389						5.00	1.089	2563	565	128	.233	.053	.251	.057	
			8.648		Y	Y	Y	Y	12.53	2.728	2564	401	23.7	-	-	-	-	
E-W	4.196	-			M	7212	13.928	-	-	-	2565	-	-	-	-	-	-	
			8.645					E	12.52	2.728	2566	390	31.	-	-	-	-	
			6.326						4.82	1.049	2567	698	163	.288	.067	.311	.073	
			5.791						3.01	.655	2568	998	243	.412	.100	.444	.108	
			5.370	Y	Y	Y	Y	Y	1.60	.348	2569	1419	310	.585	.128	.632	.138	

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 2 Deg 5.17F $V_j^0 = 242 \text{ FPS}$   $V_j^M = 2247 \text{ FPS}$ POINT 203  $R_i = 4.593$  $V_j^i = 1630 \text{ FPS}$   $V_{A/C} = 400 \text{ FPS}$ Date 1/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/3}$	$U_{1/3}^M$	$U_{1/3}^M$
	AXIAL	EW	NS	PLANE	X	MS	Y/DEG	LOC.	R.INS.							
REF	3.107	4.889	13.375													
	4.196	4.887	13.375	M	72.12	13.929	E	0	0	2570	1761	232	.726	.096	.784	.103
		4.262					W	2.09	.455	2571	1537	247	.634	.102	.684	.110
		3.630					"	4.20	.914	2572	1019	231	.420	.095	.453	.103
E-W	4.496	—		N	91.99	17.767	—	—	—	2573	—	—	—	—	—	—
		3.653					W	4.12	.897	2574	1078	207	.445	.085	.480	.092
		4.262					"	2.09	.455	2575	1337	234	.551	.097	.595	.104
		4.891					E	0	0	2576	1404	227	.579	.094	.625	.101
		4.576					W	1.04	.226	2577	1416	235	.584	.096	.630	.105
		5.596					E	2.36	.514	2578	1056	236	.435	.097	.470	.105
		6.424						5.12	1.115	2579	680	153	.280	.063	.303	.068
		7.284						7.98	1.737	2580	446	76.5	.184	.032	.198	.034
		8.653						12.55	2.732	2581	372	43	—	—	—	—

Table XVII. LV Log Sheet Model 2 (Continued). OF POOR QUALITY ORIGINAL PAGE IS

MODEL 2 Deg 5.172

$V_j^0 = 2551$  FPS  $V_j^M = 2372$  FPS

POINT 204  $R_i = 4.573$

$V_j^i = 1632$  FPS  $V_{R/C} = 0$  FPS Date 1/14/72

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U/\bar{U}$	$U'/\bar{U}$	$U/\bar{U}^M$	$U'/\bar{U}^M$
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/2							
REF	3.107	4.840	13380													
N-S	3.112	6.091	—		.33	064	E	4.17	—	1786	—	—	—	—	—	—
E-W		—	13324				—	—	—	1787	—	—	—	—	—	—
N-S	↓	3.589	—		↓	↓	W	4.17	—	1788	—	—	—	—	—	—
E-W	3.110	—	1338		.20	.039	—	—	—	1789	—	—	—	—	—	—
AXIAL	—	4.840		—	—	—	E	0	0	1790	—	—	—	—	—	—
AXIAL	—	6.119		—	—	—	E	4.26	.927	1791	—	—	—	—	—	—
AXIAL	—	5.860		—	—	—		3.40	.740	1792	—	—	—	—	—	—
AXIAL	—	5.244		—	—	—		1.35	.294	1793	—	—	—	—	—	—
E-W	3.160	—		C	3.51	.678	—	—	—	1794	—	—	—	—	—	—
AXIAL	—	5.677		—	—	—	E	2.79	.607	1795	—	—	—	—	—	—
AXIAL	—	5.446		—	—	—	"	2.02	.440	1796	—	—	—	—	—	—
E-W	3.130	—		A	1.52	.294	—	—	—	1797	—	—	—	—	—	—
		3.731					W	3.70	.806	1798	2552	237	1.003	.093	1.078	.100
		5.980					E	3.80	.827	1799	2623	234	1.028	.092	1.106	.099
		6.062						4.07	.886	1800	2531	301	.992	.118	1.067	.127
		6.101						4.20	.914	1801	2479	337	.972	.132	1.045	.142
		6.160						4.40	.958	1802	2431	324	.953	.127	1.025	.137
E-W	3.145	—		B	2.52	.427	—	—	—	1803	—	—	—	—	—	—
E-W	3.160	—		C	3.51	.678	—	—	—	1804	—	—	—	—	—	—
		3.762					W	3.59	.782	1805	2365	208	.927	.082	.997	.088
		4.036					"	2.61	.583	1806	1612	67.2	.632	.026	.680	.028
		5.600					E	2.80	.610	1807	1384	87.8	.544	.032	.586	.035
		5.786						3.15	.686	1808	2195	64	.860	.025	.925	.027
		5.849						3.36	.732	1809	2246	82.3	.880	.032	.947	.035
		5.906						3.55	.773	1810	2314	145	.907	.057	.976	.061

Table XVIII. IV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY



MODEL 2 Deg 5.178 $V_j^0$  2551 FPS  $V_j^m =$  2372 FPSPOINT 204 R: 4593 $V_j^i =$  1638 FPS  $V_{1/2} =$  0 FPS Date 1/14/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/5}$	$U_{1/m}$	$U_{1/5}^m$
	AXIAL	EW	NS	PLANE	X	INS	4/DES	LOC.	R.INS.							
REF	3.107	4.840	13380													
	3.160	5.996	13380	C	3.51	.678	E	3.85	.838	1811	2107	280	.826	.110	.888	.112
E-W	3.173	—		D	4.37	.844	—	—	—	1812	—	—	—	—	—	—
E-W	3.190	—		E	5.50	1.062	—	—	—	1813	—	—	—	—	—	—
		4.135					W	2.35	.512	1814	1758	76.5	.689	.030	.741	.032
		3.937					"	3.01	.655	1815	2498	271	.979	.106	1.053	.114
		5.554					E	2.38	.518	1816	1665	77.	.653	.030	.702	.032
		5.900						3.53	.769	1817	2407	203	.944	.080	1.014	.086
		5.737						2.99	.651	1818	2498	237	.979	.093	1.053	.100
		5.642						2.67	.581	1819	2502	210	.981	.082	1.055	.089
E-W	3.220	—		F	7.48	1.445	—	—	—	1820	—	—	—	—	—	—
E-W	3.258	—		G	19.02	1.931	—	—	—	1821	—	—	—	—	—	—
		4.523					W	1.06	.231	1822	1572	72.6	.616	.028	.663	.031
		4.260					"	1.93	.420	1823	2487	290	.975	.114	1.048	.122
		5.652					E	2.71	.590	1824	2443	280	.958	.110	1.030	.118
		5.578						2.46	.534	1825	2475	238	.970	.093	1.043	.100
		5.897						2.19	.477	1826	2438	276	.956	.108	1.028	.116
		5.365						1.75	.381	1827	2359	197	.925	.077	.995	.083
		5.228						1.29	.281	1828	1599	78.6	.627	.031	.674	.033
		5.199						1.20	.261	1829	1573	62.	.617	.024	.663	.026
E-W	3.325	—		H	14.44	2.79	—	—	—	1830	—	—	—	—	—	—
		4.228					W	2.04	.444	1831	2435	203	.955	.080	1.027	.086
		4.569					"	.90	.196	1832	1590	78.3	.623	.031	.670	.033
		4.845					E	0	0	1833	1220	107	.478	.042	.514	.045
		5.030					E	.63	.137	1834	1112	167	.436	.065	.469	.070
		5.324						1.61	.357	1835	2287	182	.897	.071	.964	.077

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.178

$V_j^0 = 2551$  FPS  $V_j^M = 2372$  FPS

POINT 204  $R_i = 4.593$

$V_j^i = 1638$  FPS  $V_{A/C} = 0$  FPS DATE 1/14/78

ORIGINAL PAGE IS  
OF POOR QUALITY

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/3</sub> <sup>o</sup>	J <sub>1/3</sub> <sup>o</sup>	J <sub>1/3</sub> <sup>M</sup>	J <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/R <sub>2</sub>							
REF	3.107	4810	13380													
	3.325	5542	13380	H	14.44	2.789	E	2.34	.509	1836	2440	280	.956	.110	1.029	.118
	"	5.676		"	"	"	"	2.79	.607	1837	2257	221	.885	.087	.952	.093
E-W	3.511	—		J	26.75	5.166	—	—	—	1838	—	—	—	—	—	—
		4.292					W	1.83	.398	1839	2396	222	.939	.087	1.010	.094
		4.514					"	1.19	.237	1840	1640	146	.643	.057	.691	.062
		4.838					R	0	0	1841	1452	141	.569	.055	.612	.059
		5.192					E	1.17	.255	1842	1839	319	.721	.125	.775	.134
		5.519						2.26	.492	1843	2289	274	.897	.107	.965	.116
		5.754						3.05	.664	1844	1614	432	.633	.169	.680	.182
		5.958						3.73	.812	1845	852	321	.334	.126	.359	.135
E-W	3.688	—		K	39.14	7.559	—	—	—	1846	—	—	—	—	—	—
		4.158					W	2.27	.494	1847	1960	313	.768	.123	.826	.132
		4.651					"	.63	.137	1848	1681	186	.659	.073	.709	.078
		4.840					R	0	0	1849	1738	203	.681	.080	.733	.086
		5.402					E	1.87	.392	1850	2041	228	.801	.089	.860	.096
		5.510						2.23	.486	1851	1989	287	.780	.113	.839	.121
		5.919						3.60	.784	1852	1131	409	.443	.160	.477	.172
E-W	3.885	—		L	51.52	9.95	—	—	—	1853	—	—	—	—	—	—
		4.492					W	1.33	.290	1854	1821	186	.714	.073	.768	.078
		4.661					"	.60	.131	1855	1855	162	.727	.064	.782	.068
		4.840					R	0	0	1856	1900	166	.745	.065	.801	.070
		4.921					E	.27	.059	1857	1934	170	.758	.067	.815	.072
		5.212						1.24	.261	1858	1942	191	.761	.075	.819	.081
		5.889						3.50	.762	1859	1100	367	.431	.144	.464	.155
E-W	4.196	—		M	72.12	13.928	—	—	—	1860	—	—	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.178

$V_j^0 = 2551$  FPS  $V_j^M = 2372$  FPS

POINT 204 R: 4.593

$V_j^i = 1638$  FPS  $V_{1/2} = 0$  FPS Date 1/14/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U/4	U/15	U/4 <sup>M</sup>	U/15 <sup>M</sup>	
	AXIAL	EW	NS	PLANE	X	MS	X/Deg	LOC.	R.INS.								R/2
	KRA 3107	4840	13380														
		4196	4563	13380	M	7212	13.924	W	.92	.200	1861	1678	289	.658	.113	.707	.122
			4840					E	0	0	1862	1687	288	.661	.113	.711	.121
			4961					E	.40	.097	1863	1653	309	.648	.121	.697	.130
			5235						1.32	.287	1864	1517	339	.595	.133	.640	.143
			5772						3.11	.677	1865	1034	317	.405	.124	.436	.136
			6316						4.92	1.071	1866	693	234	.272	.092	.292	.099
E-W	4.296	-		N	91.99	17.767		-	-	-	1867	-	-	-	-	-	-
			4840					E	0	0	1868	1508	323	.591	.127	.636	.136
			4480					W	1.20	.261	1869	1429	322	.560	.126	.602	.136
			4681					"	.53	.115	1870	1502	327	.589	.128	.633	.138
			5.021					E	.60	.131	1871	1421	324	.557	.131	.599	.141
			5.671					"	2.77	.603	1872	1013	297	.397	.116	.427	.125

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 2 Deg. 5.178

$V_j^0 = 2559$  FPS  $V_j^M = 2376$  FPS

POINT 206  $R_i = 4.593$

$V_j^i = 1635$  FPS  $V_{1/2} = 400$  FPS

Date 1/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}^0$	$U_{1/2}^i$	$U_{1/2}^M$	$U_{1/2}^m$
	AXIAL	EW	NS	PLANE	X	MS /Deg	LOC.	R.INS.	R/ $R_i$							
	Ref 3.107	4.895	13.380													
AXIAL	—	6.157	13.380	—	—	—	E	4.21	.917	2584	—	—	—	—	—	—
AXIAL	—	5.957		—	—	—		3.52	.766	2585	—	—	—	—	—	—
AXIAL	—	5.716		—	—	—		2.74	.597	2586	—	—	—	—	—	—
AXIAL	—	5.299		—	—	—		1.35	.294	2587	—	—	—	—	—	—
AXIAL	—	4.895		—	—	—	E	E	0	2588	—	—	—	—	—	—
E-W	3.130	—		A	1.52	294	—	—	—	2589	—	—	—	—	—	—
		3.692					W	4.01	.873	2590	2505	262	.979	.102	1.054	.110
		6.018					E	3.74	.814	2591	2599	245	1.016	.096	1.094	.103
		6.084						3.96	.862	2592	2564	291	1.002	.114	1.079	.122
		6.151						4.19	.912	2593	2531	273	.989	.107	1.065	.115
		6.248						4.57	.982	2594	2408	318	.941	.124	1.013	.134
		8.653						12.53	2.728	2595	402	56.2	—	—	—	—
E-W	3.160	—		C	3.51	.678	—	—	—	2596	—	—	—	—	—	—
		8.650					E	12.52	2.726	2597	399	11.3	—	—	—	—
		6.020						3.75	.816	2598	2269	164	.887	.064	.955	.069
		5.915						3.40	.740	2599	2235	89.5	.874	.035	.941	.038
		5.822						3.09	.673	2600	2133	71.2	.834	.028	.898	.030
		5.719						2.75	.599	2601	1341	83.6	.524	.033	.564	.035
		4.069					W	2.75	.599	2602	1494	79.1	.584	.031	.629	.033
		3.821					"	3.58	.779	2603	2348	134	.918	.052	.988	.056
E-W	3.145	—		B	2.52	.487	—	—	—	2604	—	—	—	—	—	—
E-W	3.125	—		D	4.50	.869	—	—	—	2605	—	—	—	—	—	—
E-W	3.190	—		C	5.50	1.062	—	—	—	2606	—	—	—	—	—	—
		4.243					W	2.17	.472	2607	1571	84.8	.614	.033	.661	.036
		4.099					"	2.65	.577	2608	2464	235	.963	.092	1.037	.099

Table XVIII. LV Log Sheet Model 2 (Continued). OF PCOR QUALITY

ORIGINAL PAGE IS

MODEL 2 Deg = 5.178

$V_j^0 = 2559$  F.P.S  $V_j^m = 2376$  FPS

POINT 206  $R_i = 4.543$

$V_j^i = 1635$  FPS  $\sqrt{u/c} = 400$  FPS Date 1/17/38

882

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U'$	$U'/U^m$	$U'/U^m$
	AXIAL	EW	NS	PLANE	X	MS	°/Deg	LOC.	R. IN.							
	RBA → 3.107	4895	13380													
	3.190	5559	13380	C	5.50	1062	E	2.21	481	2609	1669	75.9	.652	.030	.702	.032
		5611						2.39	.520	2610	1785	101	.698	.039	.751	.043
		5.763						2.89	.629	2611	2488	246	.973	.096	1.047	.104
		5944						3.50	.762	2612	2449	293	.957	.115	1.031	.123
		8642						12.49	2.719	2613	399	66.4	—	—	—	—
E-W	3.258	—		G	10.00	1931	—	—	—	2614	—	—	—	—	—	—
		8642					E	12.49	2.719	2615	397	11.4	—	—	—	—
		5316						1.40	.305	2616	1689	119	.660	.047	.711	.050
		5.253						1.19	.259	2617	1522	67.4	.595	.026	.641	.028
		5.481						1.95	.425	2618	2369	307	.926	.120	.997	.129
		5679						2.61	.568	2619	2509	61.9	.981	.024	1.056	.026
		4480					W	1.38	.300	2620	1980	151	.774	.059	.833	.064
		4328					"	1.90	.418	2621	2464	315	.963	.123	1.037	.133
E-W	3.220	—		F	748	1.445	—	—	—	2622	—	—	—	—	—	—
E-W	3.325	—		H	1444	2.789	—	—	—	2623	—	—	—	—	—	—
		4313					W	1.94	.422	2624	2378	331	.930	.129	1.001	.139
		4706					"	.63	.137	2625	1515	87.	.592	.034	.638	.037
		4.896					L	0	0	2626	1238	101	.484	.039	.521	.043
		5.070					E	.58	.126	2627	1093	149	.427	.058	.460	.063
		5.285						1.30	.283	2628	1610	294	.629	.115	.678	.124
		5.447						1.84	.401	2629	2336	369	.913	.144	.983	.155
		5.659						2.55	.555	2630	2432	343	.951	.124	1.024	.144
		8675						12.60	2.743	2631	403	95.9	—	—	—	—
E-W	3.511	—		J	2675	5.166	—	—	—	2632	—	—	—	—	—	—
		8673		"	"	"	E	12.59	2.741	2633	404	14.9	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg = 5.128

$V_j^0 = 2559$  FPS  $V_j^M = 2376$  FPS

POINT 206  $R_i = 4.593$

$V_j^i = 1635$  FPS  $V_{M/C} = 430$  FPS Date 1/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/V_j^0$	$U'/V_j^i$	$U'/V_j^M$	$U'/V_j^M$
	AXIAL	EW	NS	PLANE	X	MUS	Y/DEG	LOC.	R.INS.							
REF	3.107	4895	13.380													
	3.511	4896	13.380	J	2675	5.166	E	0	0	2634	1537	166	.601	.065	.647	.070
		5579					E	2.28	.496	2635	2220	286	.868	.112	.934	.120
		5.263					"	1.13	.268	2636	1772	253	.693	.099	.746	.106
		4655					W	.80	.174	2637	1588	133	.621	.052	.668	.056
		4778						.39	.085	2638	1507	120	.589	.047	.634	.051
		4372						1.74	.379	2639	2399	295	.938	.115	1.010	.124
E-W	3.698	—		K	39.14	7.559	—	—	—	2640	—	—	—	—	—	—
		4364					W	1.77	.385	2641	2157	241	.843	.094	.908	.101
		4638					"	.86	.187	2642	1897	159	.742	.062	.798	.067
		4899					E	0	0	2643	1971	180	.771	.070	.830	.076
		5.502					E	2.02	.440	2644	2090	209	.817	.082	.880	.088
		8664					"	12.56	2.735	2645	408	73.8	—	—	—	—
E-W	3.885	—		L	56.52	9.95	—	—	—	2646	—	—	—	—	—	—
		8664					E	12.56	2.735	2647	402	22.1	—	—	—	—
		4898					E	0	0	2648	2045	160	.799	.063	.861	.067
		5.147					E	.84	.183	2649	2105	174	.823	.068	.886	.073
		5.299						1.35	.294	2650	2095	173	.819	.068	.882	.073
		5.439						1.81	.394	2651	2029	180	.793	.070	.854	.076
		4357					W	1.81	.394	2652	1938	180	.758	.070	.816	.076
E-W	4.196	—		M	72.12	13.928	—	—	—	2653	—	—	—	—	—	—
		4897					E	0	0	2654	1885	197	.737	.077	.793	.083
		4650					W	.82	.179	2655	1835	202	.717	.079	.772	.085
		5.392					E	1.66	.361	2656	1723	269	.674	.105	.725	.113
		4034						3.80	.827	2657	1158	285	.453	.111	.487	.120
		6655						5.87	1.278	2658	705	178	.276	.070	.297	.075

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg = 5.17P

$V_j^0 = 2559 \text{ FPS}$   $V_j^M = 2376 \text{ FPS}$

POINT 206  $R_2 = 4.593$

$V_j^i = 1635 \text{ FPS}$   $V_{A/C} = 400 \text{ FPS}$  Date 1/17/68

TYPE TRAIL	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U/1/3	U/1/3	U/1/3 M	U/1/3 M
	AXIAL	EW	NS	PLANE	X INS	X/DEG	LOC.	R INS	R/R <sub>2</sub>							
	3.107	4.895	13.380													
	4.196	8.649	13.380	M	72.12	13.928	E	12.51	2724	2659	392	329	—	—	—	—
E-W	4.296	—		N	78.74	15.207	—	—	—	2660	—	—	—	—	—	—
		8.648					E	12.51	2724	2661	387	361	—	—	—	—
		6.532					"	5.46	1189	2662	796	199	.311	.078	.335	.084
		4.896					E	0	0	2663	1809	230	.707	.090	.762	.097
		5.670					E	2.58	.562	2664	1478	301	.578	.118	.622	.127
		4.736					W	.53	.115	2665	1809	210	.707	.082	.761	.088
		4.117					"	2.59	.564	2666	1466	285	.572	.111	.615	.120

Table XVIII. IV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.172  $V_i^0$  221 FPS  $V_j^M$  1379 FPS  
 POINT 210  $R_i$  4.543  $V_i^1$  1264 FPS  $V_{i/c}$  0 FPS Date 11/16/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/3}$	$U_{1/4}$	$U_{1/5}$
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/R <sub>2</sub>							
	3.107	4.47	133.7													
EW	3.11	—	13.38		.200	.032	—	—	—	2127	—	—	—	—	—	—
AXIAL	—	1.524		—	—	—	E	4.21	.817	2128	—	—	—	—	—	—
AXIAL	—	1.527		—	—	—	"	1.54	.226	2129	—	—	—	—	—	—
EW	3.160	—		C	3.51	.678	—	—	—	2130	—	—	—	—	—	—
AXIAL	—	5.714		—	—	—	E	2.75	.599	2131	—	—	—	—	—	—
AXIAL	—	5.327		—	—	—	"	1.39	.303	2132	—	—	—	—	—	—
AXIAL	—	4.97		—	—	—	E	0	0	2133	—	—	—	—	—	—
EW	3.130	—		A	1.52	.294	—	—	—	2134	—	—	—	—	—	—
		3.81					W	3.27	.843	2135	1455	61.4	.936	.029	1.024	.032
		6.026					E	3.53	.769	2136	1664	55.8	.843	.027	.976	.024
		6.224						4.12	.91	2137	1949	45.1	.733	.045	1.021	.047
		6.148						5.73	.856	2138	162	44	.925	.039	1.012	.042
		6.006						3.73	.212	2131	1920	50.7	.920	.024	1.076	.027
EW	3.145	—		B	2.52	.487	—	—	—	2140	—	—	—	—	—	—
EW	3.160	—		C	3.71	.678	—	—	—	2141	—	—	—	—	—	—
		4.14					W	3.24	.612	2142	1361	170	.652	.081	.713	.031
		3.934						3.45	.751	2143	2012	51	.764	.027	1.004	.030
		3.784						3.27	.716	2144	20	40.4	.763	.024	1.053	.014
		5.227					E	2.73	.594	2145	1213	62.4	.521	.030	.625	.031
		5.07						2.91	.651	2146	3020	72.5	.967	.035	1.058	.032
		5.074						3.35	.724	2147	2037	46.1	.977	.022	1.068	.024
		6.095						3.75	.816	2148	1954	122	.736	.058	1.024	.064
EW	3.175	—		L	4.5	.561	—	—	—	2149	—	—	—	—	—	—
EW	3.190	—		E	5.5	.662	—	—	—	2150	—	—	—	—	—	—
	"	4.274		"	"	"	W	2.97	.647	2151	2055	79.7	.96	.038	1.05	.042

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY



MODEL 2 Deg 2.7  $V_i^0$  23.1 FPS  $V_i^M$  1727 FPS  
 POINT 212  $R_i$  4.573  $V_j^0$  12.4 FPS  $V_j^M$  0 FPS  $V_{i/j}$  1/16177

886

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/5</sub>	J <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/2							
	3.11	417	132													
	3.17	425	132	E	5.50	12.2	W	24	522	2152	1262	76.5	504	.037	.661	.2-
		5777					E	3.36	732	2153	1828	169	.104	.011	.187	.34
		5828						3.25	666	2154	2015	59.2	.165	.021	1.056	.031
		5854						2.95	642	2155	2224	58.6	.161	.024	1.051	.021
		5732						2.54	553	2156	1916	71.7	.118	.034	1.004	.021
		5613						2.24	468	2157	1173	43.1	.596	.021	.614	.023
		5612						2.14	466	2158	1129	46.2	.541	.022	.571	.025
F1	3.22	—		F	7.18	1445	—	—	—	2159	—	—	—	—	—	—
F1	3.28	—		G	10.21	1931	—	—	—	2160	—	—	—	—	—	—
		4338					W	2.04	444	2161	2023	75.2	.759	.040	1.049	.044
		4418						1.84	401	2162	1577	76.3	.937	.046	1.025	.05
		458						1.3	223	2163	13--	291	.615	.043	.673	.047
		5227					E	1.06	231	2164	1051	65.5	.503	.033	.551	.032
		5267						1.32	227	2165	1271	75.4	.620	.046	.772	.05
		5721						2.44	531	2166	2210	94.3	.963	.045	1.053	.049
		5722						1.93	42	2167	1577	67.4	.947	.032	1.036	.036
EW	3.25	—		H	14.14	2721	—	—	—	2168	—	—	—	—	—	—
		4447					W	1.74	379	2169	1451	71	.731	.053	1.022	.051
		4357					"	2.04	444	2170	1843	221	.203	.076	.965	.105
		4767					E	0	0	2171	786	72.4	.472	.039	.517	.043
		5122					E	.97	211	2172	1355	152	.601	.073	.710	.050
		5225						1.16	405	2173	2011	77.7	.723	.037	1.053	.041
		5855						2.21	627	2174	1229	617	.589	.142	.644	.156
F11	3.511	—		J	2.15	5162	—	—	—	2175	—	—	—	—	—	—
	"	4972		"	"	"	E	0	0	2176	1221	144	.535	.067	.640	.015

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 2 Deg 5.178

$V_i^0$  2800 FPS  $V_j^M$  1907 FPS

POINT 210  $R_i^0$  4.573

$V_i^i$  1264 FPS  $V_{i/c}$  0 FPS Date 1/16/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EXT	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/R <sub>2</sub>							
	3.107	4.97	13.28													
	3.511	6.345	13.38	T	2.175	5.166	E	3.58	.779	2177	120	230	.340	.11	.371	.120
		5.418						1.47	.324	2172	1157	172	.289	.060	.173	.070
		5.193						.74	.161	2179	1427	235	.712	.113	.779	.123
		4.348					W	2.07	.451	21.0	1554	244	.744	.117	.814	.129
		4.112					"	1.81	.294	21.81	1565	233	.750	.112	.820	.122
		4.58						.37	.08	2						
EW	3.67	—		L	3.14	7.559	—	—	—	283	—	—	—	—	—	—
		4.12					R	0	0	2184	1130	174	.685	.083	.749	.091
		4.472					W	1.60	.361	2185	1272	181	.622	.087	.660	.075
		5.363					E	1.31	.285	2186	1591	215	.762	.102	.733	.112
		5.983						3.38	.736	2187	21	772	.422	.130	.461	.142
		6.496						5.09	1.108	2188	456	173	.212	.083	.239	.071
EW	3.285	—		L	5.52	7.15	—	—	—	2189	—	—	—	—	—	—
		6.51					E	5.13	1.117	2190	510	176	.244	.084	.267	.092
		5.151						3.27	.712	2191	20	294	.425	.119	.465	.130
		5.466						1.65	.359	2192	1279	234	.622	.112	.68	.123
		4.971					R	0	0	2193	1375	172	.659	.082	.72	.090
		5.12					E	.50	.109	2194	1420	184	.67	.088	.733	.096
		4.451					W	1.71	.372	2195	1143	221	.547	.106	.599	.116
		5.233					E	.88	.192	2196	13.7	204	.665	.078	.728	.107
E	4.196	—		L	72.12	13.728	—	—	—	2197	—	—	—	—	—	—
		4.971					R	0	0	2198	577	200	.477	.101	.522	.110
		4.452					W	1.73	.377	2199	846	207	.429	.10	.469	.109
		6.797					E	6.10	1.328	2200	437	162	.121	.078	.229	.065
		6.18					"	4.03	.877	2201	500	176	.278	.084	.304	.092

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 2 Deg 5.17%

$V_i^0$  2007 FPS  $V_M$  1907 FPS

POINT 2.2  $R_i$  4.57%

$V_i^i$  1260 FPS  $V_{1/2}$  0 FPS

Date 1/16/78

888

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$\bar{U}_{1/2}$	$U'_{1/2}$	$\bar{U}_{1/2M}$	$U'_{1/2M}$
	AXIAL	EW	NS	PLANE	X MUS	Y Deg	LOC.	R INS.	R/2							
	3107	197	13.38													
	4116	5073	13.22	M	72.12	13.92	E	234	507	2202	707	220	.4	.100	412	.109
	"	49		"	"	"	"	23	05	2203	973	210	.466	.101	510	.110
EW	4216	-		N	78.74	15.206	-	-	-	2204	-	-	-	-	-	-
		4973					E	2	0	2205	259	175	.411	.095	450	.104
		5621					E	2.17	472	2206	767	171	.367	.071	402	.100
		6257						429	934	2207	512	173	.284	.083	310	.071
		7741						924	2012	2208	303	230	.145	.112	154	.122
		6757						676	1472	2209	407	144	.196	.069	214	.075
		4454					"	1.72	374	2210	774	173	.371	.072	405	.101
		3648					"	4.24	923	2211	514	167	.280	.071	306	.071

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 22 Deg 5.17  $V_i$  2014 FPS  $V_j$  1924 FPS

POINT 212  $R_i$  4.573  $V_i$  1257 FPS  $V_j$  437 FPS Date 1/16/76

TYPE TRAJ.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U'' %	U''' %	U'''' %	U''''' %
	AXIAL	SW	NS	PLANE	X	MUS	Y/DEG	LOC.	R IN.							
	3.107	4.97	1332													
AXIAL	—	6.23	1332	—	—	—	E	4.2	.914	2220	—	—	—	—	—	—
AXIAL	—	6.033		—	—	—	E	3.44	.749	2221	—	—	—	—	—	—
AXIAL	—	5.794		—	—	—	E	2.75	.599	2222	—	—	—	—	—	—
EPI	3.161	—			3.58	.691	—	—	—	2223	—	—	—	—	—	—
AXIAL	—	5.37		—	—	—	E	1.39	.303	2224	—	—	—	—	—	—
AXIAL	—	4.97		—	—	—	E	0	0	2225	—	—	—	—	—	—
E.W.	3.130	—		A	1.52	.294	—	—	—	2226	—	—	—	—	—	—
		3.735					W	4.12	.897	2227	1927	55.4	.926	.028	1.913	.031
		3.56					"	3.71	.808	2228	1881	498	.903	.024	.986	.026
		6.247					E	3.57	.782	2229	1876	55.0	.900	.027	.745	.029
		6.262						4.31	.938	2230	1762	250.	.845	.120	.925	.131
		6.17						4.0	.871	2231	1844	58.4	.952	.028	1.042	.031
		6.126						3.75	.838	2232	1842	62.8	.932	.040	1.020	.043
		8.638						12.23	2.663	2233	377	52.	—	—	—	—
EPI	3.160	—		C	3.51	.678	—	—	—	2234	—	—	—	—	—	—
		8.638					E	12.23	2.663	2235	396	10.5	—	—	—	—
		6.246						4.37	.956	2236	286	24.8	.137	.012	.150	.013
		6.313						4.48	.975	2237	208	21.1	.138	.013	.152	.014
		5.785						2.72	.572	2238	1243	38.5	.596	.018	.653	.020
		5.13						3.2	.697	2239	30.3	46.8	.961	.022	1.052	.025
		1.15						3.62	.801	2240	1971	47.5	.946	.047	1.035	.051
		4.149					W	2.81	.625	2241	1187	11.9	.570	.057	.623	.063
		3.925					"	3.48	.758	2242	1994	68.6	.959	.033	1.047	.036
EPI	3.145	—		B	2.52	.487	—	—	—	2243	—	—	—	—	—	—
E.W.	3.175	—		D	4.50	.869	—	—	—	2244	—	—	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.176  $V_i^0$  2001 FPS  $V_s^m$  1704 FPS  
 POINT 212  $R_i$  4.593  $V_i^i$  1265 FPS  $V_n/c$  470 FPS 206 1/2 1/2

890

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/3}$	$U_{1/4}$	$U_{1/5}$
	AXIAL	EW	NS	PLANE	K	MUS	4/Dec3	LOC.	R.INS.							
	3107	4.77	13.38													
EW	3190	—	13.38	E	5.58	1062	—	—	—	2245	—	—	—	—	—	—
		11.5					W	2.78	627	2246	1978	623	.749	.030	1057	.033
		12.25					"	2.31	503	2247	1229	718	.590	.385	645	.038
		5615					E	2.1	468	2248	1146	472	.550	.023	602	.025
		5651						2.3	501	2249	1233	728	.592	.035	648	.031
		5725						2.52	549	2250	1202	766	.646	.042	981	.045
		5878						3.03	660	2251	1993	522	.956	.025	1041	.027
		5938						3.23	703	2252	1916	116	.919	.053	1006	.058
		8.673						12.34	2687	2253	398	477	—	—	—	—
EN	3259	—		G	10.0	1931	—	—	—	2254	—	—	—	—	—	—
		8.673					E	12.34	2.687	2255	396	12.1	—	—	—	—
		6.174						4.08	.88	2256	323	31.3	.155	.015	170	.016
		5.267						.99	.216	2257	1024	69.4	.491	.033	539	.036
		5.34						1.37	.298	2258	1311	956	.629	.046	689	.057
		5653						2.78	605	2259	1992	572	.956	.027	1046	.030
		5.615						3.02	658	2260	1221	300	.586	.144	641	.158
		4.58					W	1.3	.283	2261	242	81	.596	.039	652	.013
		4.283					"	2.29	499	2262	1907	140	.915	.067	1012	.074
EA	3220	—		F	748	1845	—	—	—	2263	—	—	—	—	—	—
EA	3225	—		H	1444	2789	—	—	—	2264	—	—	—	—	—	—
		6.655					E	12.28	2674	2265	400	43.	—	—	—	—
		6.216						4.35	947	2266	357	25.4	.171	.012	188	.013
		5.51						2.0	435	2267	2012	64.3	.765	.031	1057	.034
		4.967					E	0	0	2268	781	77	.471	.048	515	.052
		5.174					E	.68	148	2269	1211	124	.581	.060	636	.065

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL        Deg 5178  $V_1^0$  2084 FPS  $V_1^M$  734 FPS  
 POINT 2 R<sub>i</sub> 4593  $V_1^i$  1255 FPS  $V_{1/c}$  432 FPS Date 11/16/68

TYPE TRAJ.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub> <sup>o</sup>	J <sub>1/2</sub> <sup>i</sup>	J <sub>1/2</sub> <sup>M</sup>	J <sub>1/2</sub> <sup>m</sup>
	AXIAL	EN	NS	PLANE	X	MUS /Deg	LOC.	R.INS.	R/R <sub>2</sub>							
	3107	497	1338													
	3325	535	1338	H	14.14	279	E	1.27	.277	2270	1757	147	.829	.071	.707	.077
		4141					W	1.67	.392	2271	1948	104	.435	.050	1.023	.055
		4795					"	.75	.163	2272	1167	2.3	.652	.041	.613	.045
EW	3511	—		J	2675	5.166	—	—	—	2273	—	—	—	—	—	—
		4385					W	1.95	.425	2274	1714	173	.822	.083	.781	.091
		484						.10	.022	2275	1246	164	.598	.079	.654	.076
		4265						.35	.076	2276	1158	143	.556	.069	.608	.075
		5482					E	1.71	.372	2277	1907	137	.920	.066	1.007	.072
		5175						.68	.148	2278	1452	20	.700	.100	.766	.107
		5530						1.89	.411	2279	1922	137	.922	.066	1.007	.072
		5852						2.94	.64	2280	1104	266	.530	.128	.580	.140
		8695						12.25	2.667	2281	403	13.1	—	—	—	—
EW	3698	—		K	3914	7.579	—	—	—	2282	—	—	—	—	—	—
		2649					E	12.26	2.667	2283	403	13.1	—	—	—	—
		4976					E	0	0	2284	1452	107	.697	.081	.763	.084
		5392					E	1.81	.307	2285	1706	185	.819	.089	.816	.097
		5256						2.75	.642	2286	1571	22	.514	.123	.563	.136
		6217						4.16	.906	2287	641	157	.307	.075	.337	.082
		4610					W	1.17	.255	2288	1364	156	.657	.075	.719	.082
		4364					"	2.02	.440	2289	1364	154	.655	.088	.716	.087
EW	3775	—		L	5152	1.95	—	—	—	2290	—	—	—	—	—	—
		4224					E	0	0	2291	1472	154	.706	.074	.723	.081
		4425					W	1.78	.372	2292	1209	107	.580	.090	.635	.088
		5113					E	1.81	.394	2293	1407	196	.692	.084	.755	.103
		5267					"	.99	.216	2294	1522	166	.730	.080	.799	.087

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.17°  $V_i^0$  2281 FPS  $V_i^M$  1705 FPS  
 POINT 212  $R_i$  4593  $V_i^i$  1265 FPS  $V_i^M$  400 FPS Date 1/16/68

892

TYPE TRAJ.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/V_i^0$	$U'/V_i^M$	$U'/V_i^i$
	AXIAL	EW	NS	PLANE	X	MUS	Y/DEG	LOC.	R.INS.							
	3.107	4.27	13.36													
	3.275	3.274	13.36	L	51.52	9.95	E	3.46	.754	2295	920	213	.411	.102	.423	.112
		6.475						5.02	1.073	2296	568	131	.273	.063	.278	.069
		8.657						12.29	2.676	2297	404	24.	-	-	-	-
E-W	4.196	-		N	72.12	13.928	-	-	-	2298	-	-	-	-	-	-
		8.652					E	12.27	2.671	2297	391	32.1	-	-	-	-
		6.685					"	5.72	1.245	2300	534	124.	.256	.060	.250	.065
		3.904					W	3.54	.771	2301	868	16.7	.417	.080	.456	.011
		4.463					"	1.69	.368	2302	1123	123	.539	.088	.590	.026
		4.768					E	0	0	2303	1251	173	.603	.083	.660	.011
		5.969					E	3.33	.725	2304	846	184	.406	.088	.444	.097
		5.467					"	1.66	.361	2305	1140	193	.547	.093	.599	.101
E-W	4.296	-		N	78.74	15.207	-	-	-	2306	-	-	-	-	-	-
		4.973					E	0	0	2307	1194	111	.573	.082	.627	.090
		4.336					W	2.11	.459	2308	1020	178	.469	.085	.536	.043
		5.593					E	2.08	.453	2307	789	189	.475	.091	.519	.079
		6.228						4.19	.912	2310	713	149	.342	.071	.374	.072
		6.837						6.22	1.354	2311	515	105	.247	.050	.270	.055
		6.657						12.27	2.671	2312	382	35.2	-	-	-	-

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.17°

$V_i^0$  2400 FPS  $V_M$  2500 FPS

POINT 213  $R_i$  4-10

$V_i^i$  2500 FPS  $V_M$  2500 FPS  $V_M$  2500 FPS  $V_M$  2500 FPS

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U'$	$U'/U_M$	$U'/U_M$
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	$R/R_2$							
	3.124	4.768	13.375													
EW	3.124	—	13.375	A	1.52	.274	—	—	—	1955	—	—	—	—	—	—
		3.764					W	4.0	.871	1956	2353	119	.761	.049	1.037	.052
		6.071					E	3.69	.803	1957	2447	59	1.007	.024	1.077	.026
		6.112						3.83	.834	1958	2390	220	.764	.091	1.054	.077
		6.114						4.12	.893	1957	2376	225	.786	.093	1.056	.099
		6.212						4.37	.956	1960	2326	70.2	.957	.040	1.026	.042
EW	3.141	—		B	2.52	.498	—	—	—	1961	—	—	—	—	—	—
		3.665					W	3.66	.797	1962	2203	57.4	.707	.024	.971	.026
		6.213					E	4.16	.906	1963	2125	229	.874	.094	.937	.101
		6.161						4.01	.873	1964	2352	206	.764	.085	1.037	.071
		6.012						3.73	.812	1965	2327	57.4	.749	.022	1.017	.023
		6.057						3.51	.779	1966	2244	57.0	.723	.023	.989	.025
EW	3.158	—		C	3.51	.678	—	—	—	1967	—	—	—	—	—	—
		3.716					W	3.47	.760	1965	2346	16.3	.765	.067	1.034	.072
		5.114					E	3.37	.734	1961	2277	45.9	.742	.019	1.009	.020
		6.214						3.60	.784	1970	2335	157	.761	.065	1.030	.067
		6.111						3.82	.832	1971	2332	143	.768	.059	1.037	.063
		6.150						3.15	.700	1972	2207	171	.709	.070	.974	.075
EW	3.173	—		D	4.5	.867	—	—	—	1971	—	—	—	—	—	—
EW	3.173	—		E	5.5	1.062	—	—	—	1974	—	—	—	—	—	—
		3.71					W	3.22	.701	1971	2249	31	.742	.057	1.004	.061
		4.263					"	2.34	.531	1970	1772	46.4	.402	.020	.431	.021
		5.01					E	2.32	.505	1971	1824	49.4	.331	.020	.363	.022
		5.011						2.82	.614	1971	2194	76.2	.903	.031	.967	.034
		5.154						3.45	.751	1974	2218	16.7	.713	.069	.978	.074

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY



MODEL 2 Deg 5.17.7

$V_i^0$  2427 FPS  $V_j^M$  2255 FPS

POINT 215 R: 4.513

$V_i^1$  1104 FPS  $V_{R/C}$  492 FPS

Date: 11/17/74

894

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/4</sub>	J <sub>1/5</sub>	
	AXIAL	EW	NS	PLANE	X	MS	Dec3	LOC.	R.INS.								R/R <sub>2</sub>
	3107	4754	13381														
F11	3.160	—	13381	A	1.52	.294	—	—	—	2410	—	—	—	—	—	—	
		6.264						E	4.35	947	2411	1825	378	.751	.156	.806	.167
		6.113							4.07	870	2412	2359	207	.971	.085	1.042	.091
		6.126							3.17	.243	2413	2362	178	.972	.073	1.043	.079
		6.240							3.61	.786	2414	2403	191	.989	.079	1.061	.074
		3.833						W	3.77	.821	2415	2355	138	.970	.051	1.040	.061
		1.39						E	11.25	2.847	2416	401	57	—	—	—	—
E11	3.160	—		C	3.51	.678	—	—	—	—	2411	—	—	—	—	—	—
		8.318						E	11.18	2.434	2418	397	2.92	—	—	—	—
		6.12							3.85	.839	2419	1854	275	.963	.113	.819	.121
		6.061							3.66	.797	2420	2311	129	.951	.053	1.02	.057
		6.073							3.46	.753	2421	2319	138	.955	.057	1.024	.061
		5.815							3.10	.675	2422	2317	135	.954	.056	1.023	.060
		5.842							2.72	.592	2423	1158	61.4	.477	.025	.511	.027
		3.211						W	3.25	.708	2424	2358	95.5	.971	.039	1.041	.042
		4.14						"	2.75	.598	2425	1247	52.4	.513	.022	.551	.023
F11	3.143	—		B	2.52	.487	—	—	—	—	2426	—	—	—	—	—	—
F11	3.175	—		D	.45	.861	—	—	—	—	2427	—	—	—	—	—	—
E11	3.197	—		E	5.5	1.062	—	—	—	—	2428	—	—	—	—	—	—
		4.020						W	3.19	.645	2427	2293	162	.944	.067	1.012	.072
		4.210						"	2.26	.492	2430	1044	74.4	.430	.031	.461	.033
		3.43						E	2.27	.499	2431	918	54.4	.366	.022	.572	.024
		5.161							2.67	.583	2432	2220	71.8	.914	.030	.740	.032
		5.577							3.12	.679	2433	2225	117	.940	.049	1.008	.052
		5.84							2.72	.636	2434	2270	53.4	.735	.022	1.012	.024

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL \_\_\_\_\_ Deg 5.172

$V_i^0$  2427 FPS  $V_j^M$  226.5 FPS

POINT -  $R_i$  7513

$V_i^i$  1124 FPS  $V_{R/L}$  407 FPS

Lat 117/78

ORIGINAL PAGE IS  
OF POOR QUALITY

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X	MUS	Y/DEG	LOC.	R IN.							
	3127	4,128	1334													
	311	5,976	1334	E	5.5	1.002	E	179	.390	2435	2201	162	.709	.070	.774	.015
	"	5,325	"	"	"	"	"	11.2	2438	2132	398	573	-	-	-	-
FI	3,22	-		F	242	1.445	-	-	-	2437	-	-	-	-	-	-
EW	3,252	-		G	13.0	1.931	-	-	-	2438	-	-	-	-	-	-
		4315					W	216	.47	2439	2320	158	.755	.065	1.024	.070
		5216					E	1.11	.242	2440	876	123	.361	.051	.387	.054
		5482						173	.377	2441	2181	146	.278	.06	.963	.064
		5647						228	.496	2442	2303	254	.981	.105	1.052	.112
		5.77						267	.586	2443	2342	264	.964	.107	1.034	.117
		5.74						3.03	.66	2444	1869	205	.767	.119	.825	.127
		2,172						11.09	2.414	2445	388	473	-	-	-	-
EW	3325	-		H	1444	2.789	-	-	-	2446	-	-	-	-	-	-
		8272					E	11.09	2.414	2447	398	432	-	-	-	-
		4167					R	0	0	2448	853	731	.351	.030	.377	.033
		1,416					W	1.75	.390	2449	2351	233	.968	.096	1.038	.103
		4077					"	.77	.192	2450	1293	209	.532	.086	.571	.072
		2,173					E	1.03	.224	2451	1655	201	.681	.082	.731	.088
		5317						1.04	.401	2452	539	762	.963	.040	1.033	.043
		5,321						2.08	1.627	2453	1753	269	.722	.111	.774	.119
FI	3511	-		J	26.75	5.166	-	-	-	2454	-	-	-	-	-	-
		1					E	11.14	2.825	2455	405	35	-	-	-	-
		4,762					Y	0	0	2456	1362	14	.560	.066	.621	.071
		1,1					W	1.78	.431	2457	5217	101	.713	.083	.979	.089
		16					"	.55	.192	2458	1567	279	.645	.115	.692	.123
		111					E	.26	.187	2459	1549	182	.782	.075	.838	.083

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.1%  $V_i^0$  2727 FPS  $V_j^m$  211 FPS  
 POINT 1  $R_i$  4.575  $V_j^i$  1 FPS  $V_k/c$  400 FPS Date 11/7/78

896

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/3</sub> '	U <sub>1/3</sub> <sup>m</sup>	U <sub>1/3</sub> <sup>m</sup> '	
	AXIAL	EW	NS	PLANE	X	MUS	°/Deg	LOC.	R <sub>INS</sub>								R <sub>1/2</sub>
	3.107	4.964	13.381														
	3.511	5.545	13.381	J	26.15	5166		E	1.14	422	2460	2333	201	.46	.085	103	.211
	"	5.834		"	"	"		"	2.90	.631	2461	1449	357	.613	.145	.657	.155
FN	3.698	—		K	5214	7.554		—	—	—	2462	—	—	—	—	—	—
		8.31						E	11.15	2428	2463	406	23.	—	—	—	—
		4.974						E	0	0	2464	1744	179	.712	.074	.770	.079
		4.063						W	2.94	.64	2465	1411	319	.581	.131	.623	.141
		4.474						"	1.63	.354	2466	1828	215	.753	.089	.807	.045
		5.467						E	1.74	.319	2467	2139	185	.721	.076	.944	.082
		5.864							5.0	.653	2468	1355	344	.552	.142	.578	.151
		6.202							4.13	.879	2469	696	214	.287	.088	.307	.294
FN	3.885	—		L	5152	7.95		—	—	—	2470	—	—	—	—	—	—
		8.314						E	11.17	2432	2471	403	20.	—	—	—	—
		4.664						E	0	0	2472	1832	164	.754	.068	.801	.072
		4.164						W	2.66	.579	2473	1390	263	.673	.108	.614	.116
		4.544						"	1.4	.305	2474	1704	175	.702	.072	.752	.077
		5.405						I	1.47	.32	2475	1935	183	.797	.075	.854	.081
		5.141							3.26	.710	2476	1147	310	.492	.128	.506	.137
		6.214							4.17	.708	2477	774	209	.327	.086	.351	.092
FI	4.196	—		M	7212	13.729		—	—	—	2478	—	—	—	—	—	—
		5.274						E	11.04	2414	2479	352	29.5	—	—	—	—
		4.724						E	0	0	2480	1660	221	.683	.091	.733	.098
		4.512						W	1.51	.329	2481	1522	232	.627	.096	.672	.102
		5.02						E	2.19	.477	2482	1312	260	.54	.118	.579	.126
		6.019						"	3.72	.71	2483	703	229	.373	.094	.400	.101
FI	4.211	—		N	76.74	15.206		—	—	—	2484	—	—	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.178

$V_1^0$  242 = FPS  $V_1^M$  2265 FPS

POINT 215  $R_2$  4.573

$V_1^i$  1100 FPS  $V_{1/2}$  1.11 FPS

Date 1/17/68

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/3</sub> <sup>M</sup>	J <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X	MUS	Y/deg	LOC.	R <sub>INS.</sub>							
	3.107	4.764	13381													
	-1.296	2.31	13381	N	78.74	15206	E	1.157	2.028	2485	398	24.6	-	-	-	-
		4.965					E	0	0	2486	1553	228	.651	.074	.680	.101
		4.495					W	1.56	.340	2487	1433	237	.590	.098	.633	.105
		5.529					E	1.82	.396	2488	1309	259	.539	.107	.578	.114
		5.863						3.0	.653	2489	1017	234	419	076	.477	.103
		6.259					↓	4.32	.941	2490	807	194	332	.080	.356	.086
AXIAL		4.755					R	0	0	2491	-	-	-	-	-	-
AXIAL		6.178					E	4.05	.882	2492	-	-	-	-	-	-
AXIAL		6.01						3.44	.760	2493	-	-	-	-	-	-
AXIAL		5.702						2.45	.533	2494	-	-	-	-	-	-
AXIAL		5.393					↓	1.43	.311	2495	-	-	-	-	-	-

Table XVIII. IV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL        Deg 5.170  $V_j^0$  2.2-1 FPS  $V_j^M$  2.0-1 FPS  
 POINT 2-1  $R_i$  45.5  $V_j^i$  10.8 FPS  $V_{1/2}$         FPS

DATE 1/14/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J/4°	J/1/2°	J/3/4°	J/1/4°
	AXIAL	EW	NS	PLANE	X IN	Y/DEG	LOC.	R IN	R/R <sub>2</sub>							
	3.107	404	1330													
EW	3.130	—	1330	A	1.52	.294	—	—	—	1874	—	—	—	—	—	—
		3.613					W	3.20	.24	1875	2520	120	1.015	.047	1.077	.050
		3.141					"	3.64	.793	1876	2700	278	1.058	.109	1.124	.116
		5.94					E	3.07	.779	1877	2721	331	1.067	.130	1.133	.138
		6.015						3.92	.253	1878	2624	200	1.03	.103	1.094	.109
		6.074						-1.13	.879	1879	2535	340	.994	.133	1.055	.142
		6.144						4.55	.747	1880	2474	328	.970	.129	1.030	.137
FW	3.145	—		B	2.52	.427	—	—	—	1881	—	—	—	—	—	—
EW	3.160	—		C	3.51	.677	—	—	—	1882	—	—	—	—	—	—
		3.606					W	3.71	.851	1883	2414	257	.940	.101	1.005	.107
		6.054					E	4.06	.224	1884	2410	237	.959	.093	1.018	.099
		5.479						3.80	.227	1885	2475	312	.97	.122	1.030	.130
		5.11						3.57	.777	1886	2524	280	.985	.110	1.042	.117
		5.14						3.35	.729	1887	2431	297	.953	.116	1.012	.124
I I'	3.175	—		D	1.5	.867	—	—	—	1888	—	—	—	—	—	—
I II'	3.10	—		F	5.5	1.062	—	—	—	1889	—	—	—	—	—	—
		5.167					E	3.42	.745	1890	2508	212	.983	.111	1.044	.117
		5.16						3.16	.608	1891	2504	259	.984	.102	1.045	.108
		5.731						2.77	.647	1892	2524	281	.989	.11	1.051	.117
		5.11						2.73	.514	1893	2539	237	1.003	.093	1.065	.099
		5.10						2.54	.553	1894	2562	200	1.004	.098	1.067	.104
		5.449						2.20	.479	1895	1174	901	.946	.035	.489	.038
		11.15					W	2.3	.501	1896	1870	61.9	.949	.027	.371	.029
		3.715					"	2.12	.614	1897	2000	174	.983	.068	1.044	.072
FW	11	—		F	7.48	1.445	—	—	—	1898	—	—	—	—	—	—

Table XVIII. IV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.178

$V_j^0$  FPS  $V_j^M$  12 FPS

POINT 2.0  $R_i$  4513

$V_j^i$  10 FPS  $V_{1/2}$  0 FPS

Date 11/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J/1/3	J/1/3	J/1/3	J/1/3
	AXIAL	EW	NS	PLANE	X	MUS	1/2 Deg	LOC.	R.INS.							
	1.137	4.84	1332													
FW	3.258	—	1331	G	10.0	1.931	—	—	1899	—	—	—	—	—	—	—
		4.55					W	.77	211	1900	637	319	.250	.125	.265	.133
		4.15					"	2.22	4.0	1901	2405	402	.743	.160	1.021	.170
		5.15					E	1.05	.229	1902	1022	170	.400	.067	.425	.071
		5.438						1.77	.433	1903	2555	55.2	1.002	.022	1.064	.023
		5.516						2.25	.490	1904	2534	245	.793	.096	1.055	.102
		5.625						2.62	.57	1905	2520	225	.728	.088	1.249	.094
EW	3.325	—		H	14.44	2.257	—	—	1906	—	—	—	—	—	—	—
		4.215					W	2.07	.453	1907	2523	201	.789	.079	1.050	.084
		4.661					"	.60	.131	1908	1064	114	.417	.045	.443	.047
		4.81					E	0	0	1901	1325	131	.519	.051	.552	.055
		5.417						1.42	.418	1910	2425	219	.793	.109	1.034	.116
		5.597						2.52	.549	1911	2244	208	.880	.105	.734	.112
		5.634						3.31	.721	1911	231	216	.365	.108	.328	.115
EW	3.511	—		J	26.15	5.16	—	—	1911	—	—	—	—	—	—	—
		4.14					E	0	0	1911	2203	203	.864	.080	.917	.085
		4.204					W	2.57	.56	1911	2167	304	.850	.119	.903	.127
		4.404					"	1.45	.31	1916	1175	214	.556	.084	.697	.089
		5.242					E	1.34	.272	1917	2476	201	.911	.079	1.031	.084
		5.327					"	1.62	.353	1911	2430	211	.753	.109	1.012	.115
FW	3.618	—		K	34.14	7.559	—	—	1911	—	—	—	—	—	—	—
		4.145					E	0	0	1911	2203	216	.904	.085	.960	.090
		4.215					W	2.05	.446	1921	1.71	172	.736	.075	.782	.080
		4.753					E	.38	.053	1922	234	263	.720	.103	.778	.101
		5.071					"	.86	.187	1923	2391	317	.737	.124	.995	.131

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. IV Log Sheet Model 2 (Continued).

MODEL 1 Deg 51.7°  $V_i^0$  25.1 FPS  $V_j^M$  24.2 FPS

POINT 11  $R_i$  4.500  $V_i^i$  10.11 FPS  $V_{i/c}$  0 FPS 1/14/78

TYPE TRAIL	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> °	U <sub>1/2</sub> °	U <sub>1/2</sub> M	U <sub>1/2</sub> M
	AXIAL	EN	NS	PLANE	X	MSI °/Deg	LOC.	R INS.	R/R <sub>2</sub>							
	1.77	4.24	13.32													
	5.696	7.233	13.38	K	78.14	7559	E	1.41	.307	1924	2311	313	.506	.123	.962	.130
EW	3.825	—	—	L	51.52	9.15	—	—	—	1925	—	—	—	—	—	—
	—	4.252	—				W	1.76	.427	1926	1525	250	.743	.098	.789	.104
	—	4.803	—				"	.12	.026	1927	2260	265	.286	.104	.941	.110
	—	4.843	—				E	0	0	1928	2266	254	.881	.100	.943	.106
	—	4.545	—				W	.72	.213	1929	2148	224	.842	.081	.844	.093
	—	5.171	—				E	1.1	.239	1930	2139	317	.838	.124	.891	.132
	—	5.545	—				"	2.36	.514	1931	1390	434	.545	.172	.579	.183
FW	4.196	—	—	M	72.12	13.928	—	—	—	1932	—	—	—	—	—	—
	—	4.24	—				E	0	0	1933	1678	337	.658	.132	.699	.140
	—	4.13	—				W	2.37	.516	1934	1537	378	.603	.148	.640	.157
	—	4.366	—					1.58	.344	1935	1659	361	.650	.142	.641	.15
	—	4.54	—					1.02	.274	1936	1705	345	.668	.135	.710	.144
	—	3.612	—				E	2.51	.560	1937	970	313	.388	.123	.412	.137
FW	4.058	—	—	L	62.92	12.163	—	—	—	1938	—	—	—	—	—	—
	—	4.65	—	"	"	"	W	.63	.137	1937	2037	260	.799	.102	.848	.102
EW	4.296	—	—	N	78.14	15.207	—	—	—	1940	—	—	—	—	—	—
	—	4.857	—				E	.06	.013	1941	1409	348	.552	.136	.587	.145
	—	4.124	—				W	2.31	.52	1942	1355	350	.531	.137	.56	.146
	—	4.446	—					1.31	.275	1943	1496	342	.586	.134	.622	.142
	—	4.671	—					.50	.109	1944	1464	346	.574	.136	.609	.144
	—	5.624	—				E	2.26	.557	1945	912	241	.358	.114	.380	.121
WHL	—	4.61	—	—	—	—	E	0	0	1946	—	—	—	—	—	—
FW	3.162	—	—	—	3.64	.703	—	—	—	1947	—	—	—	—	—	—
WHL	—	5.55	—	—	—	—	E	3.51	.734	1948	—	—	—	—	—	—

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).





MODEL 2 Deg 5.178

$V_j^0$  2025 FPS  $V_j^M =$  1924 FPS

POINT 219  $R_i$  4.593

$V_j^i =$  1092 FPS  $V_{1/2} =$  0 FPS Date 1/16/78

902

TYPE TRAJ.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	ENV	NS	PLANE	X MS	Y Deg	LOC.	R INS.	R/2							
NET	3.107	4.970	1330													
AXIAL	—	6.228		—	—	—	E	4.19	.913	2041	—	—	—	—	—	—
AXIAL	—	6.007		—	—	—		3.46	.753	2042	—	—	—	—	—	—
AXIAL	—	5.387		—	—	—		1.39	.303	2043	—	—	—	—	—	—
AXIAL	—	5.795		—	—	—	↓	2.74	.579	2044	—	—	—	—	—	—
AXIAL	—	4.970		—	—	—	R	0	0	2046	—	—	—	—	—	—
E-W	3.130	—		A	1.52	.294	—	—	—	2047	—	—	—	—	—	—
		3.813					W	3.86	.737	2048	1946	65.1	.933	.031	1.012	.038
		6.226					E	4.19	.911	2049	1956	75.3	.936	.036	1.016	.039
		6.049						3.60	.688	2050	1892	56.8	.908	.025	.984	.027
		6.105						3.78	.723	2051	1921	52.2	.922	.025	.999	.027
		6.158					↓	3.96	.757	2052	1937	54.0	.929	.026	1.007	.028
E-W	3.145	—		B	2.52	.487	—	—	—	2053	—	—	—	—	—	—
E-W	3.160	—		C	3.51	.678	—	—	—	2054	—	—	—	—	—	—
		3.951					W	3.40	.649	2055	2013	54.7	.965	.026	1.046	.028
		4.151					"	2.73	.522	2056	1113	40.4	.534	.019	.578	.021
		5.789					E	2.73	.522	2057	1057	28.9	.509	.014	.544	.015
		5.923						3.18	.607	2058	2027	55.4	.972	.027	1.053	.029
		5.982						3.37	.645	2059	2035	43.0	.976	.021	1.058	.022
		6.024					↓	3.71	.710	2060	1993	45.7	.956	.046	1.036	.050
E-W	3.175	—		D	4.50	.869	—	—	—	2061	—	—	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

NO. 2  $\Delta$  deg 5.178

$V_j^0 = 2055 \text{ FPS}$   $V_j^m = 1924 \text{ FPS}$

POINT 219  $R_i = 4.593$

$V_j^i = 1072 \text{ FPS}$   $V_{jk} = 0 \text{ FPS}$  Date 1/16/74

ORIGINAL PAGE IS  
OF POOR QUALITY

TYPE TRAIL	POSITION (INCHES)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$\sigma_{1/2}$	$\sigma_{1/3}$	$\sigma_{1/5}$	$\sigma_{1/10}$
	AXIAL	EW	NS	PLANE	X	MS	DEG	LOC.	R							
REF	3107	4970	13380													
E-W	3190	—	13380	E	5.50	1062	—	—	—	2062	—	—	—	—	—	—
		4.270					W	2.33	.446	2063	1036	667	.497	.032	.538	.035
		4051					"	3.06	.586	2064	1993	109	.956	.052	1.036	.057
		5632					E	2.21	.422	2065	958	562	.459	.027	.498	.029
		5665						2.32	.443	2066	1054	644	.506	.031	.548	.032
		5.775						2.68	.513	2067	1967	648	.943	.031	1.022	.034
		5.971						3.34	.638	2068	1916	150	.919	.072	.996	.078
		5.872						3.01	.575	2069	2027	558	.972	.027	1.054	.029
E-W	3.220	—		F	7.48	1.444	—	—	—	2070	—	—	—	—	—	—
E-W	3.258	—		G	10.00	1.931	—	—	—	2071	—	—	—	—	—	—
		4.313					W	2.19	.419	2072	1964	141	.942	.068	1.020	.073
		4.215						1.95	.373	2073	1993	83.5	.956	.040	1.036	.043
		4.583						1.29	.247	2074	1113	123	.534	.059	.579	.064
		5.298					E	1.09	.209	2075	879	79.3	.422	.038	.457	.041
		5.368						1.33	.254	2076	1144	130.	.549	.062	.575	.067
		5.512						1.81	.345	2077	1855	140	.902	.067	.964	.073
		5.968						3.53	.636	2078	800	246	.383	.118	.416	.128
		5.610						2.23	.427	2079	2033	63.1	.975	.030	1.056	.032

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.17E

$V_j^0$  2085 FPS  $V_j^M =$  1924 FPS

POINT 219  $R_i$  4.593

$V_j^i =$  1092 FPS  $V_{H/C} =$  0 FPS Date 1/16/78

904

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE X INS $\frac{X}{D}$ $\frac{L}{C}$			RADIAL POSITION LOC. R. INS. $\frac{R}{R_2}$			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$\frac{U}{U_0}$	$\frac{U'}{U_0}$	$\frac{U}{U_M}$	$\frac{U'}{U_M}$
	AXIAL	EW	NS													
	REF#3 107	4.970	13.360													
E-W	3.325	—	13.360	H	14.44	2.789	—	—	—	2080	—	—	—	—	—	—
		6.127					E	3.86	.737	2081	453	176	.217	.084	.236	.092
		4.971					E	0	0	2082	810	834	.389	.040	.421	.083
		5.207					E	.79	.151	2083	1141	158	.547	.076	.593	.082
		5.620					"	2.17	.472	2084	1999	100	.959	.048	1.139	.052
		4.258					W	2.24	.488	2085	1545	289	.741	.139	.803	.150
		4.46						1.75	.380	2086	1941	129	.931	.062	1.009	.067
		3.807						3.88	.844	2087	299	138	.144	.066	.156	.072
E-W	3.511	—		J	26.76	5.168	—	—	—	2088	—	—	—	—	—	—
		4.969					E	0	0	2089	1199	163	.575	.078	.623	.085
		4.877					W	.31	.067	2090	1183	152	.568	.073	.615	.079
		4.425						1.82	.396	2091	1578	221	.757	.106	.820	.115
		3.974						3.32	.713	2092	556	208	.267	.100	.289	.108
		5.476					E	1.69	.367	2093	1827	164	.876	.079	.950	.085
		6.129					"	3.86	.841	2094	608	201	.292	.097	.316	.105
E-W	3.698	—		K	39.14	7.554	—	—	—	2095	—	—	—	—	—	—
		6.375					E	4.62	1.020	2096	501	180	.240	.086	.260	.093
		4.968					E	0	0	2097	1426	177	.684	.085	.741	.092
		5.782					E	1.04	.226	2098	1546	193	.742	.093	.804	.100
		5.743					"	2.58	.561	2099	1165	300	.559	.144	.605	.156
		4.700					W	.90	.196	2100	1358	179	.652	.086	.706	.093
		4.536						1.45	.315	2101	1321	194	.633	.093	.686	.101
		3.657						4.38	.953	2102	475	185	.228	.089	.247	.096

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.178

$V_1^0$  2025 FPS  $V_1^M$  1924 FPS

POINT 219  $R_1$  4.573

$V_2^i$  1892 FPS  $V_2^M$  0 FPS

Date 1/16/78

ORIGINAL PAGE IS  
OF POOR QUALITY

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X	MSI	Y/deg	LOC.	R INS.							
REF	3.107	4.970	13.340													
E-W	3.885	—	13.380	L	51.52	9.95	—	—	—	2103	—	—	—	—	—	—
		6.583					E	5.38	1.111	2104	485	171	233	.082	.252	.089
		5.975						3.35	.729	2105	848	240	407	.115	.441	.125
		5.238					V	.89	.194	2106	1359	201	.652	.096	.706	.104
		4.971					E	0	0	2107	1357	199	.648	.095	.702	.103
		4.304					W	2.22	.483	2108	998	321	.479	.154	.519	.167
		4.699					"	.90	.197	2109	1231	223	.590	.107	.640	.116
E-W	4.196	—		M	72.12	13.928	—	—	—	2110	—	—	—	—	—	—
		4.696					W	.91	.199	2111	944	204	.453	.098	.491	.106
		6.852					E	6.27	1.366	2112	424	154	.203	.074	.220	.080
		6.246						4.25	.926	2113	597	162	.286	.088	.310	.095
		6.636					V	5.55	1.209	2114	808	215	.387	.103	.420	.112
		4.973					E	0	0	2115	953	196	.457	.094	.495	.102
		4.876					W	.31	.062	2116	940	205	.451	.099	.489	.107
		4.482						1.63	.354	2117	870	199	.417	.096	.452	.104
		3.692					V	4.27	.927	2118	619	187	.297	.090	.322	.097
E-W	4.296	—		N	76.74	15.207	—	—	—	2119	—	—	—	—	—	—
		3.685					W	4.25	.927	2120	611	178	.293	.085	.318	.092
		4.324					"	2.15	.469	2121	767	189	.368	.091	.399	.098
		4.962					E	0	0	2122	844	183	.405	.088	.438	.095
		4.703					W	.89	.194	2123	827	182	.396	.088	.430	.095
		5.673					E	2.18	.474	2124	746	189	.358	.091	.388	.098
		6.225					"	4.18	.911	2125	598	183	.287	.088	.311	.095

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.178

$V_j^0 = 2069$  FPS  $V_j^M = 1925$  FPS

POINT 221  $R_i = 4.513$

$V_j^i = 1094$  FPS  $V_{M/C} = 400$  FPS

Date 1/17/78

906

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U/4	U/15	U/45	U/15
	AXIAL	EW	NS	PLANE	R MS	4Deg	LOC.	R INS.	R/2							
	3.105	4.970	13.381							1						
E-W	3.109	-	13.381		.265	.052	-	-	-	2313	-	-	-	-	-	-
		8.655					E	12.28	2.674	2314	399	89	-	-	-	-
		8.428						11.53	2.510	2315	297	242	-	-	-	-
AXIAL	-	6.230		-	-	-		4.20	.714	2316	-	-	-	-	-	-
AXIAL	-	6.003		-	-	-		3.44	.750	2317	-	-	-	-	-	-
AXIAL	-	5.794		-	-	-		2.75	.598	2318	-	-	-	-	-	-
AXIAL	-	5.387		-	-	-		1.39	.303	2319	-	-	-	-	-	-
AXIAL	-	4.970		-	-	-	E	0	0	2320	-	-	-	-	-	-
E-W	3.127	-		A	1.46	.282	-	-	-	2321	-	-	-	-	-	-
		3.289					W	3.94	.857	2322	1952	58.5	.934	.024	1.014	.026
		6.067					E	3.66	.796	2323	1933	57.0	.925	.027	1.004	.030
		6.139						3.90	.848	2324	1946	61.9	.931	.030	1.011	.032
		6.162						3.97	.865	2325	1956	52.5	.936	.025	1.016	.027
		6.226						4.19	.912	2326	1950	75.7	.933	.036	1.023	.039
		8.659						12.30	2.677	2327	400	50.2	-	-	-	-
E-W	3.157	-		C	3.44	.664	-	-	-	2328	-	-	-	-	-	-
		8.657					E	12.29	2.676	2329	399	8.3	-	-	-	-
		6.092						3.74	.814	2330	1932	137	.925	.065	1.004	.071
		6.032						3.54	.771	2331	2016	48.4	.965	.023	1.047	.025
		5.771						3.34	.726	2332	2016	38.7	.965	.019	1.047	.020
		5.898						3.09	.673	2333	2009	42.5	.962	.020	1.044	.022
		5.773						2.68	.583	2334	1049	47.1	.502	.023	.545	.024
		4.177					W	2.64	.576	2335	1099	54.2	.526	.026	.571	.028
		2.886					"	3.61	.787	2336	1973	91.6	.944	.044	1.025	.048

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.17K

$V_j^0 = 2069$  FPS  $V_j^m = 1925$  FPS

POINT 221  $R_i = 4593$

$V_j^i = 1094$  FPS  $V_{1/2} = 484$  FPS  $V_{1/3} = 1/17/78$

ORIGINAL PAGE IS  
OF POOR QUALITY

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/2</sub>	U <sub>1/3</sub> <sup>m</sup>	U <sub>1/2</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/12							
	REF 3105	4970	13381													
E-W	3.145	—	13381	B	265	512	—	—	—	2337	—	—	—	—	—	—
		3794					W	3.92	853	2338	1958	89.0	937	.043	1.017	.046
		6.124					E	3.85	.838	2339	1990	628	.952	.032	1.034	.035
		6.079						3.70	.805	2340	2045	44.2	.960	.021	1.042	.023
		6.043						3.58	.779	2341	2003	38.3	.959	.018	1.040	.020
	V	5.996			V	V	V	3.42	.745	2342	1983	39.7	.949	.019	1.030	.021
E-W	3.175	—		D	464	.896	—	—	—	2343	—	—	—	—	—	—
E-W	3.190	—		E	563	1.087	—	—	—	2344	—	—	—	—	—	—
		4.006					W	2.95	.642	2345	1993	55.9	.954	.027	1.035	.029
		4.263					"	2.36	.513	2346	993	47.8	.476	.023	.576	.025
		5.631					E	2.20	.480	2347	995	44.6	.476	.021	.517	.023
		5.966						3.32	.723	2348	1844	128	.883	.085	.958	.093
		5.906						3.12	.679	2349	1992	72.3	.954	.035	1.035	.038
		5.791						2.74	.596	2350	1981	48.3	.949	.023	1.029	.025
		5.730						2.53	.552	2351	1916	74.4	.917	.036	.995	.039
	V	8.324			V	V	V	1.18	.284	2352	398	45.9	—	—	—	—
E-W	3.220	—		F	762	1.472	—	—	—	2353	—	—	—	—	—	—
E-W	3.258	—		G	1013	1.956	—	—	—	2354	—	—	—	—	—	—
		8.351					E	1.27	.2454	2355	397	9.0	—	—	—	—
		4.294					W	2.25	.491	2356	1967	93.1	.942	.045	1.022	.048
		4.640					"	1.10	.239	2357	885	71.2	.424	.034	.460	.037
		5.327					E	1.19	.259	2358	108	1.04	.516	.050	.560	.054
		5.58						1.83	.398	2359	1936	88.3	.927	.042	1.006	.046
		5.641						2.24	.487	2360	2020	57.9	.967	.028	1.049	.030
	V	5.764			V	V	V	2.65	.576	2361	1856	181	.889	.087	.964	.094

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.17F

$V_j^0 = 20.89$  FPS  $V_j^M = 1925$  FPS

POINT 221 R: 4.593

$V_j^i = 10.94$  FPS  $V_{1/2} = 400$  FPS

Date 1/17/78

806

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> <sup>0</sup>	U <sub>1/2</sub> <sup>i</sup>	U <sub>1/2</sub> <sup>M</sup>	U <sub>1/2</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X	MUSI Y/deg	LOC.	R <sub>INS.</sub>	R <sub>1/2</sub>							
	REF → 2.105	4.970	13381													
E-W	3.325	—	13381	H	1457	2.814	—	—	—	2362	—	—	—	—	—	—
		8320					E	11.17	2.931	2363	400	48.4	—	—	—	—
		4.964					E	0	0	2364	879	102	.421	.049	.457	.053
		4.382					W	1.96	.427	2365	1960	108	.938	.053	1.018	.056
		4.647					"	1.08	.234	2366	1285	165	.615	.079	.667	.086
		5.245					E	.92	.200	2367	1342	154	.642	.074	.697	.080
		5.605						2.12	.461	2368	2007	79.8	.961	.038	1.043	.041
	↓	5.885		↓	↓	↓	↓	3.05	.664	2369	1038	246	.497	.118	.539	.128
E-W	3.511	—		J	26.89	5.193	—	—	—	2370	—	—	—	—	—	—
		8309					E	11.13	2.423	2371	403	19.9	—	—	—	—
		4.978					E	0	0	2372	1252	164	.599	.079	.651	.085
		4.349					W	2.07	.451	2373	1659	189	.794	.091	.862	.098
		4.699						.90	.197	2374	1250	176	.599	.084	.650	.091
		4.811					↓	.53	.115	2375	1203	159	.576	.076	.625	.083
		5.233					E	.88	.191	2376	1640	193	.785	.093	.852	.100
		5.467						1.66	.361	2377	1908	139	.913	.066	.991	.072
	↓	5.819		↓	↓	↓	↓	2.83	.616	2378	1157	273	.554	.131	.601	.142
E-W	3.698	—		K	38.27	7.584	—	—	—	2379	—	—	—	—	—	—
		8323					E	11.18	2.493	2380	406	22.6	—	—	—	—
		4.964					E	0	0	2381	1499	163	.708	.078	.769	.085
		4.272					W	2.33	.507	2382	1295	212	.628	.101	.673	.110
		4.209					"	.87	.189	2383	1399	149	.670	.071	.727	.077
		5.449					E	1.60	.348	2384	1690	178	.809	.085	.878	.092
	↓	5.977		↓	↓	↓	"	3.36	.731	2385	900	215	.431	.103	.467	.112

Table XVIII. LV Log Sheet Model 2 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 2 Deg 5.178

$V_j^0 = 2089$  FPS  $V_j^M = 1925$  FPS

POINT 221  $R_i = 4.593$

$V_j^i = 1094$  FPS  $V_{r/c} = 400$  FPS

Date 11/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/3}$	$U_{1/5}$	$U_{1/10}$	
	AXIAL	EX'	NS	PLANE	X	MS	%Deg	LOC.	R.INS.								R/2
	REF → 3.105	4.970	13.381														
E-W	3.885	—	13.381	L	51.66	9.977	—	—	—	2386	—	—	—	—	—	—	
		8.302						E	11.11	2.418	2387	403	30.1	—	—	—	
		4.976						E	0	0	2388	1539	157	.723	.075	.784	.082
		4.483						W	1.62	.353	2389	1291	166	.618	.080	.671	.086
		5.238						E	.89	.194	2390	1543	170	.738	.082	.801	.089
		5.525							1.98	.432	2391	1366	230	.654	.110	.710	.120
		5.805							2.78	.606	2392	1043	234	.499	.112	.542	.121
	↓	6.337		↓	↓	↓	↓	↓	4.56	.993	2393	1241	190	.594	.091	.644	.099
E-W	4.196	—		M	72.75	14.050	—	—	—	2394	—	—	—	—	—	—	
		8.283						E	11.04	2.40	2395	399	29.7	—	—	—	
		4.975						E	0	0	2396	1273	179	.609	.086	.661	.093
		4.358						W	2.04	.444	2397	1071	192	.512	.092	.556	.100
		4.781						"	.63	.137	2398	1241	190	.594	.091	.644	.097
		5.176						E	.69	.150	2399	1231	188	.589	.090	.640	.097
		5.654							2.28	.496	2400	1026	198	.491	.095	.533	.103
	↓	6.338		↓	↓	↓	↓	↓	4.56	.993	2401	660	145	.316	.070	.343	.076
E-W	4.296	—		N	78.87	15.218	—	—	—	2402	—	—	—	—	—	—	
		8.295						E	11.08	2.413	2403	396	32.4	—	—	—	
		4.972						E	0	0	2404	1171	177	.561	.085	.608	.092
		4.087						W	2.94	.641	2405	905	176	.433	.084	.470	.092
		4.604						"	1.22	.266	2406	1092	186	.523	.089	.567	.096
		5.353						E	1.28	.228	2407	1029	186	.493	.089	.535	.097
		5.703							3.11	.677	2408	816	168	.391	.080	.424	.087
	↓	6.439		↓	↓	↓	↓	↓	4.90	1.066	2409	607	125	.291	.084	.315	.091

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XVIII. IV Log Sheet Model 2 (Continued).



MODEL 2 Deg 5178

$V_j^0 = 2165$  FPS  $V_j^M = 1917$  FPS

POINT 222  $R_i = 4.593$

$V_j^i = 1324$  FPS  $V_{A/C} = 0$  FPS Date 1/17/78

910

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	R/2							
	REF 3.106	4.900	13.384													
AXIAL	—	6.166		—	—	—	E	4.22	.919	2669	—	—	—	—	—	—
AXIAL	—	5.946		—	—	—		3.49	.754	2680	—	—	—	—	—	—
AXIAL	—	5.702		—	—	—		2.67	.582	2671	—	—	—	—	—	—
AXIAL	—	5.310		—	—	—	↓	1.37	.298	2672	—	—	—	—	—	—
AXIAL	—	4.900		—	—	—	E	0	0	2673	—	—	—	—	—	—
AXIAL	—	5.934		—	—	—	E	3.45	.750	2764	—	—	—	—	—	—
E-W	3.130	—		A	1.59	.307	—	—	—	2765	—	—	—	—	—	—
		6.064					E	3.88	.845	2766	2061	69.7	.952	.032	1.037	.035
N-S		"	—					"	—	2767	—	—	—	—	—	—
		6.156	13.384					4.19	.912	2768	2026	102	.936	.047	1.020	.051
		5.971					↓	3.57	.777	2769	2051	533	.947	.025	1.032	.027
		3.656					W	4.15	.903	2770	2068	930	.955	.043	1.041	.047
		3.697					"	4.01	.873	2771	2038	86.3	.941	.040	1.026	.043
E-W	3.145	—		B	2.58	.499	—	—	—	2773	—	—	—	—	—	—
N-S	3.130	—		A	1.59	.307	—	—	—	2774	—	—	—	—	—	—
E-W	3.160	—		C	3.58	.691	—	—	—	2775	—	—	—	—	—	—
		4.022					W	2.93	.637	2776	1309	121	.605	.056	.659	.061
		3.814						3.62	.788	2777	2057	102	.950	.047	1.035	.051
		3.935					↓	3.22	.700	2778	2100	568	.970	.024	1.057	.026
		5.710					E	2.70	.588	2779	1274	129	.588	.060	.641	.065
		5.807						3.02	.658	2780	2071	543	.957	.025	1.042	.027
		5.819						3.16	.689	2781	2066	43.6	.954	.020	1.040	.022
		5.925						3.42	.744	2782	2066	55.6	.954	.026	1.040	.028
N-S		5.876	—				↓	3.25	—	2783	—	—	—	—	—	—
N-S	↓	3.871	—	↓	↓	↓	W	3.43	—	2784	—	—	—	—	—	—

Table XVIII. LV Log Sheet Model 2 (Continued).

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MODEL 2 Deg 5.178

$V_j^0 = 2165$  FPS  $V_j^m = 1987$  FPS

POINT 222  $R_i = 4.593$

$V_j^i = 1324$  FPS  $V_{1/2} = 0$  FPS

Date 1/17/78

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OF POOR QUALITY

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	D/4	D/1/2	D/1/3	U/1/3
	AXIAL	EW	NS	PLANE	X	M/100	LOC.	R INS.	R/1/2							
	REF 106	4900	13384													
E-W	3.175	—	13384	D	4.59	1892	—	—	—	2785	—	—	—	—	—	—
		4096					W	2.68	.583	2786	1222	849	.564	.039	.615	.043
		3909					"	3.30	.719	2787	2014	69.2	.930	.032	1.014	.035
		5906					E	3.35	.730	2788	1995	104	.922	.048	1.004	.052
		5639					"	2.46	.536	2789	1177	82.5	.544	.038	.593	.042
E-W	3.190	—		E	5.52	1.074	—	—	—	2790	—	—	—	—	—	—
		5870					E	3.24	.705	2791	2033	115	.939	.053	1.023	.058
		5716						2.72	.592	2792	2088	474	.969	.022	1.056	.024
		5549						2.30	.500	2793	1411	134	.652	.062	.710	.068
		5554						2.18	.475	2794						
		4158					W	2.47	.539	2795	1372	109	.634	.050	.690	.055
		4024					"	2.92	.636	2796	2042	50.0	.943	.023	1.020	.025
E-W	3.220	—		F	7.55	1.858	—	—	—	2797	—	—	—	—	—	—
E-W	3.258	—		G	10.07	1.944	—	—	—	2798	—	—	—	—	—	—
		5764					E	1.23	.267	2799	1321	84.5	.610	.039	.665	.043
		5421						1.74	.378	2800	1993	76.3	.921	.036	1.003	.039
		5544						2.16	.470	2801	2078	52.4	.958	.026	1.044	.029
		5685						2.62	.570	2802	1937	16.4	.895	.076	.975	.082
		4241					W	2.20	.478	2803	2047	95.4	.946	.044	1.030	.048
		4551					"	1.16	.253	2804	1162	71.4	.537	.033	.585	.036

Table XVIII. LV Log Sheet Model 2 (Continued).

MODEL 2 Deg 5.12F

$V_j^0 = 2165$  FPS  $V_j^m = 1987$  FPS

POINT 222  $R_i = 4.593$

$V_j^i = 1324$  FPS  $V_{1/2} = 0$  FPS

Date 1/17/78

912

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/2							
	$R_i = 3.106$	4.900	13.384													
E-W	3.325	—	13.384	H	14.50	2.801	—	—	—	2805	—	—	—	—	—	—
		4.305					W	1.98	.432	2806	2026	118	.936	.055	1020	.059
		4.891					E	0	0	2807	944	104	.436	.048	475	.052
		4.570					W	1.10	.239	2808	1459	148	.674	.068	734	.075
		5.438					E	1.86	.405	2809	2097	68.6	.968	.032	1056	.035
		5.186					"	.95	.208	2810	1538	113	.710	.066	774	.072
E-W	3.511	—		J	24.82	5.880	—	—	—	2811	—	—	—	—	—	—
		5.837					E	1.79	.390	2812	1982	153	.915	.071	997	.077
		5.755					"	2.85	.621	2813	1153	329	.533	.152	580	.165
		4.900					R	0	0	2814	1271	155	.587	.071	640	.078
		5.112					E	.71	.154	2815	1677	250	.775	.115	844	.126
		4.678					W	.74	.161	2816	1113	138	.500	.064	611	.070
		4.342					"	1.86	.405	2817	1722	214	.795	.099	867	.108
E-W	3.698	—		K	39.21	7.572	—	—	—	2818	—	—	—	—	—	—
		4.905					E	0	0	2819	1514	186	.699	.082	762	.094
		4.239					W	2.20	.480	2820	1344	217	.621	.109	676	.109
		4.513					"	1.29	.281	2821	1405	161	.649	.074	707	.081
		5.897					E	3.32	.724	2822	874	276	.404	.128	440	.139
		5.332					"	6.44	.314	2823	1718	213	.794	.099	865	.107

Table XVIII. LV Log Sheet Model 2 (Continued).

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MODEL 2 Deg 5178

$V_j^0 = 2165$  FPS  $V_j^m = 1987$  FPS

POINT 222 R: 4.593

$V_j^i = 1324$  FPS  $V_{R/C} = 0$  FPS Date 1/17/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	D <sub>1/2</sub>	D <sub>1/4</sub>	D <sub>1/8</sub>	D <sub>1/16</sub>
	AXIAL	EW	NS	PLANE	X	INS	°/Deg	LOC.	R. INS.							
REF	3106	4900	133PY													
E-W	3.885	—	133PY	L	51.59	9.963	—	—	—	2824	—	—	—	—	—	—
		4.901					E	0	0	2825	1488	183	.687	.085	.749	.092
		5.288					E	.63	.136	2826	1512	198	.698	.091	.761	.100
		5.260						1.20	.261	2827	1470	222	.679	.102	.740	.112
		5.797						2.99	.651	2828	973	290	.449	.134	.490	.146
		3.977					W	3.08	.67	2829	965	238	.446	.110	.416	.120
E-W	4.196	—		M	72.19	13.948	—	—	—	2830	—	—	—	—	—	—
		4.903					E	0	0	2831	1074	270	.486	.102	.541	.111
		3.809					W	3.30	.719	2832	824	212	.381	.098	.415	.107
		4.444					"	1.64	.357	2833	1008	224	.466	.103	.508	.113
		5.410					E	1.70	.370	2834	944	234	.436	.108	.475	.118
		5.927					"	3.42	.745	2835	733	208	.339	.096	.369	.105
E-W	4.296	—		N	28.81	15.249	—	—	—	2836	—	—	—	—	—	—
		3.866					W	3.45	.750	2837	713	199	.343	.092	.374	.100
		4.635					"	.88	.192	2838	926	195	.433	.090	.471	.098
		4.902					E	0	0	2839	935	202	.432	.093	.471	.102
		5.139					E	.80	.173	2840	924	206	.429	.095	.467	.104
		5.920					"	3.40	.740	2841	686	188	.317	.087	.345	.095

ORIGINAL PAGE IS OF POOR QUALITY

Table XVIII. LV Log Sheet Model 2 (Continued).

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MODEL 2 Day 5.23 hrs  
 POINT 222A R<sub>2</sub> 4593 ins

V<sub>1</sub>° 2184 FPS  
 V<sub>1</sub>′ 1334 FPS

V<sub>1</sub><sup>M</sup> 2007 FPS  
 V<sub>1</sub>/c 0 FPS

Date  
 4/16/74

ORIGINAL PAGE 19  
 OF POOR QUALITY

TYPE TRAY	POSITION (VOLTS)			AXIAL POSITION			N-S		E-W		RADIAL POSITION			HISTO #	U FPS	U' FPS	U <sub>1</sub> /U <sub>2</sub>	U <sub>1</sub> /U <sub>3</sub>	U <sub>1</sub> /U <sub>4</sub>	U <sub>1</sub> /U <sub>5</sub>
	AAAL	EW	NS	PLANE	INS	%LOG	POS	IN	POS	IN	LOC	R <sub>IN</sub>	R <sub>OUT</sub>							
	2.704	5266	1282																	
EW	2.71	—	12.852	X	40	.076	S	.11	—	—	—	—	—	6052	—	—	—	—	—	—
		6.511					"	"	E	4.15	SE	4.15	904	6053	2117	158	969	.072	1059	.079
NS			—				—	—						6054	—	—	—	—	—	—
			12.289				N	1.77			NE	4.51	982	6055	1992	884	912	.041	996	.045
			12.434					1.29				4.35	947	6056	1997	127	914	.058	999	.064
			12.556					.88				4.24	923	6057	2067	127	956	.058	1034	.064
			12.706					.05				4.15	904	6058	2060	142	943	.065	1030	.071
			13.333				S	1.71			SE	4.49	978	6059	2012	71.7	921	.033	1006	.036
			13.216					1.32				4.35	947	6060	2010	110.	920	.05	1005	.055
			13.108					.96				4.26	927	6061	2020	118.	925	.054	1010	.059
			12.978					.53				4.18	910	6062	2075	139	95	.064	1038	.070
EW	2.731	—	12.852	A	1.79	3.42		.11	—	—	—	—	—	6063	—	—	—	—	—	—
NS		6.436	—				—	—	E	3.9				6064	—	—	—	—	—	—
			12.852				S	.11			SE	4.15	904	6065	2074	48.6	954	.023	1042	.025
			12.422				N	1.33			NE	4.36	949	6066	2042	116.	935	.053	1021	.058
			12.521					1.0				4.27	930	6067	2084	550	954	.025	1042	.028
			12.618					.67				4.20	914	6068	2082	50.1	953	.023	1041	.025
			12.733					.29				4.16	906	6069	2088	50.5	956	.023	1044	.025
			13.196				S	1.25			SE	4.33	943	6070	2018	131.	924	.060	1009	.066
			13.118					.99				4.27	930	6071	2072	52.2	949	.024	1036	.026
			13.028					.69				4.21	917	6072	2083	52.2	954	.024	1042	.026
			12.934					.38				4.17	908	6073	2085	51.7	955	.024	1043	.026
EW	2.926	—	12.852	H	14.7	2.11		.11	—	—	—	—	—	6074	—	—	—	—	—	—
EW	3.112	—		J	27.02	5.166			—	—	—	—	—	6075	—	—	—	—	—	—
EW	3.2	—		K	39.4	7.533			—	—	—	—	—	6076	—	—	—	—	—	—

TABLE XVIII. LV LOG SHEET MODEL 2 (CONTINUED).

MODEL 2 Day 5.23 hrs  $V_1$  2184 FPS  $V_1$  2800 FPS  
 POINT 222A  $R_2$  4.593 ins  $V_2$  1334 FPS  $V_2$  0 FPS

Date 4/8/78

ORIGINAL PAGE 15  
 OF POOR QUALITY

TYPE TRAY	POSITION (VOLTS)			AXIAL POSITION			N-S		E-W		RADIAL POSITION			HISTO #	U FPS	U' FPS	U'/V <sub>1</sub>	U'/V <sub>2</sub>	U'/V <sub>1</sub>	U'/V <sub>2</sub>
	AXIAL	EW	NS	PLANE	INS	X/deg	POS	IN	POS	IN	LOC	R <sub>IN</sub>	R <sub>OUT</sub>							
	2.704	5.266	12.82																	
EW	3.299	—	12.352	K	394	7533	N	1.56	—	—	—	—	—	6077	—	—	—	—	—	—
EW	"	—	13.352	"	"	"	S	1.77	—	—	—	—	—	6078	—	—	—	—	—	—
NS	2.715	6.528	—	X	.73	.140	—	—	E	4.21	—	—	—	6079	—	—	—	—	—	—
			12.82				E	0			E	4.21	917	6080	2195	141	1005	.065	1098	.071
			13.265				S	1.48			SE	4.46	971	6081	2055	65.0	941	.031	1028	.034
			13.175					1.18				4.37	951	6082	2076	94.8	951	.043	1038	.047
			13.069					.83				4.29	934	6083	2108	103	965	.047	1054	.052
			12.941					.40				4.23	921	6084	2172	162	995	.074	1066	.081
			12.333				N	1.62			NE	4.51	982	6085	2069	75.5	947	.035	1035	.038
			12.44					1.27				4.40	960	6086	2093	113	958	.052	1047	.057
			12.573					.82				4.29	934	6087	2119	134	97	.061	1060	.067
			13.654					.42				4.23	921	6088	2155	145	987	.066	1078	.073
EW		—	12.82				E	0	—	—	—	—	—	6089	—	—	—	—	—	—
EW	2.735	—	"	A	205	392	—	—	—	—	—	—	—	6090	—	—	—	—	—	—
NS		6.453	—				—	—	E	3.96	—	—	—	6091	—	—	—	—	—	—
			12.82				E	0			E	3.96	862	6092	2109	48.8	966	.022	1055	.024
			13.132				S	1.04			SE	4.09	890	6093	2034	122	931	.056	1017	.061
			13.021					.67				4.02	875	6094	2092	53.8	958	.025	1046	.027
			2.922					.34				3.97	864	6095	2102	53.3	962	.024	1051	.027
			12.462				N	1.18			NE	4.13	899	6096	2078	79.7	951	.036	1039	.040
			12.555					.88				4.06	884	6097	2103	50.6	963	.023	1052	.025
			12.679					.47				3.99	869	6098	2106	51.6	964	.024	1053	.026
NS		6.372	—				—	—	—	—	—	—	—	6099	—	—	—	—	—	—
			12.824				E	0	E	3.64	E	3.64	803	6100	2084	48.9	956	.022	1044	.024
			12.777				N	.14	"	"	NE	3.69	803	6101	2083	46.4	954	.021	1042	.023

Table XVIII. LV Log Sheet Model 2 (Continued).

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MODEL 2 Day 5.23 hrs  $V_i^*$  2184 FPS  $V_i^m$  2000 FPS  
 POINT 222A  $R_i^*$  4.593 ins  $V_i^i$  1334 FPS  $V_i^e$  0 FPS Date 4/18/78

TYPE TRAY	POSITION (VOLTS)			AXIAL POSITION			N-S		E-W		RADIAL POSITION			HISTO #	U FPS	U' FPS	U/V <sub>i</sub>	U'/V <sub>i</sub>	U/V <sub>i</sub>	U'/V <sub>i</sub>
	AXIAL	EW	NS	PLANE	INS	*/deg	POS	IN	POS	IN	LOC	R <sub>IN</sub>	R/R <sub>IN</sub>							
	2704	5266	12.82																	
	↓	↓	↓	A	2.05	392	N	.31	E	3.69	NE	3.70	.806	6102	2083	430	.954	.020	1042	.022
			12.655					.55			"	3.73	.812	6103	2092	474	.958	.022	1046	.024
			12.884				S	.21			SE	3.70	.806	6104	2087	502	.956	.023	1048	.025
			12.555					.45				3.72	.810	6105	2090	50.1	.957	.023	1045	.025
			13.018					.66				3.75	.816	6106	2096	50.1	.960	.023	1048	.025
			13.332					1.71				4.09	.886	6107	2094	70.1	.959	.032	1047	.035
EW	3112	—	12.852	J	2702	5166	S	.11	—	—	—	—	—	6108	—	—	—	—	—	—
		4.206							W	1.87	SW	1.87	.407	6109	1836	205	.841	.094	.918	.103
		5.806							F	1.8	SE	1.8	.392	6110	1843	213	.845	.098	.922	.107
EW	3299	—		K	39.4	2533			—	—	—	—	—	6111	—	—	—	—	—	—
		4.683							W	1.94	SW	1.94	.422	6112	1849	237	.663	.109	.725	.119
		5.751							E	1.62	SE	1.62	.353	6113	1859	264	.686	.121	.750	.132

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Table XVIII. LV Log Sheet Model 2 (Concluded).

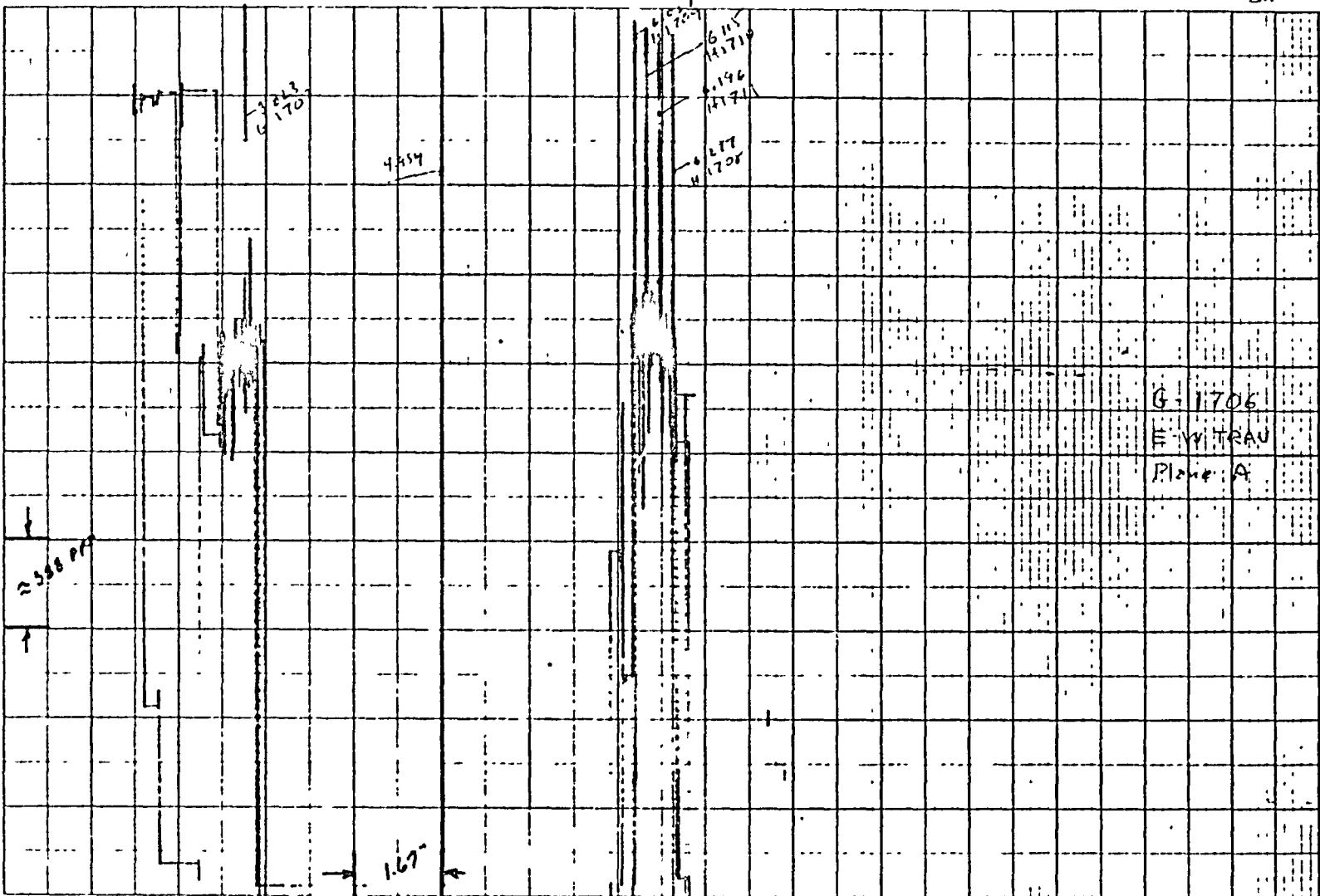
**6.2.3.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 2**

Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XVIII.

The velocity and physical position information is identified with hand-written scales on the ordinate and abscissa.

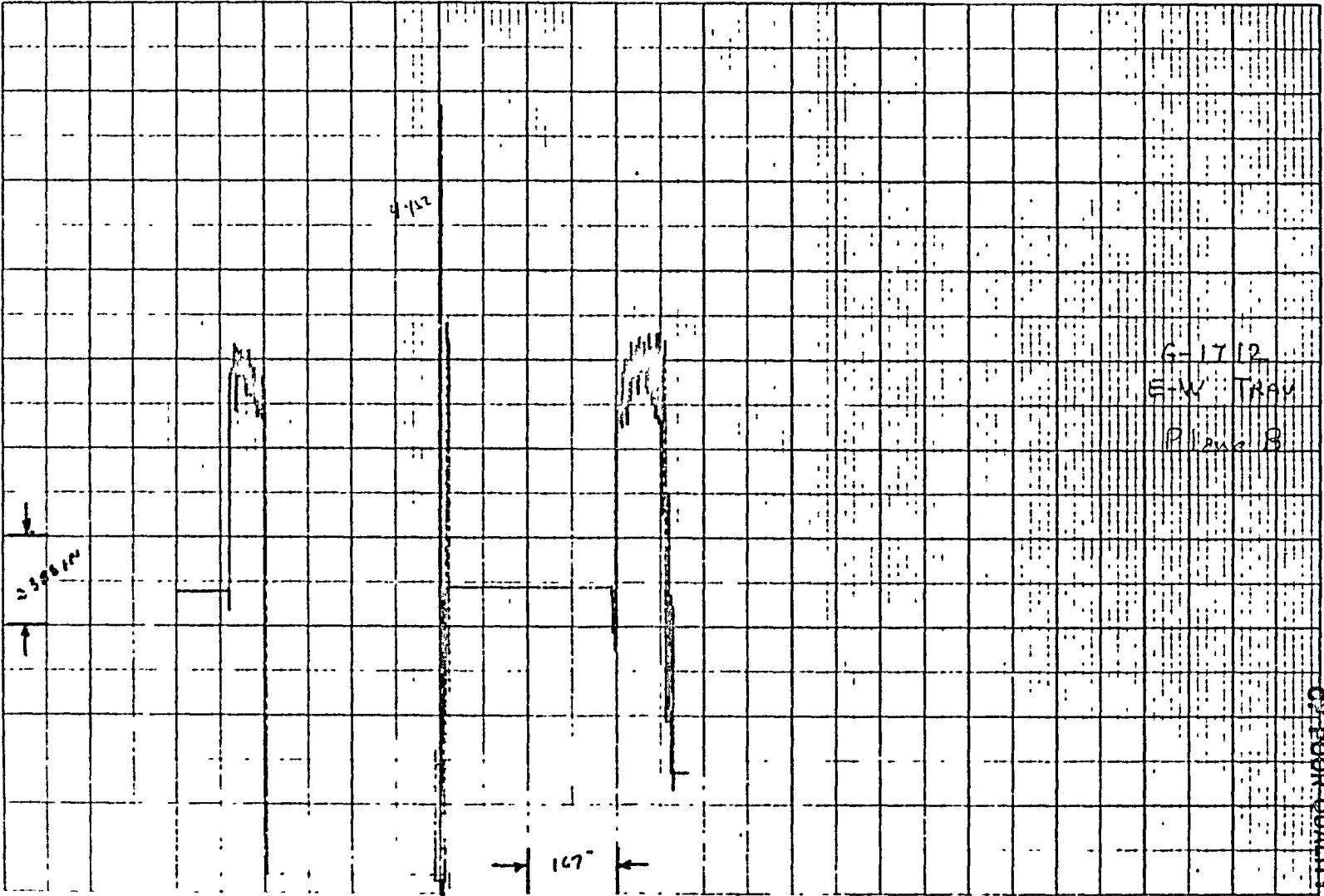


MODEL 2  
TEST POINT 201



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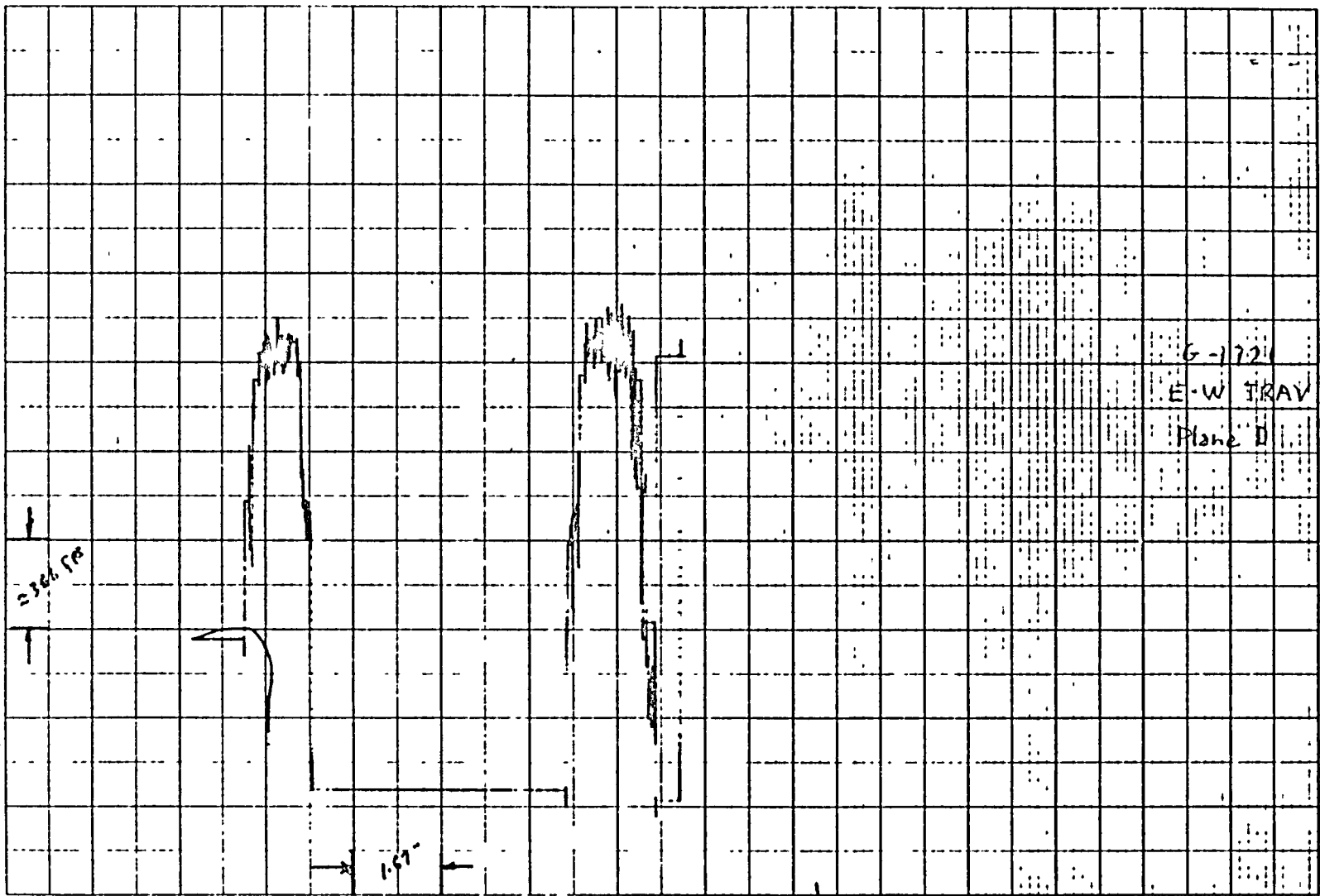
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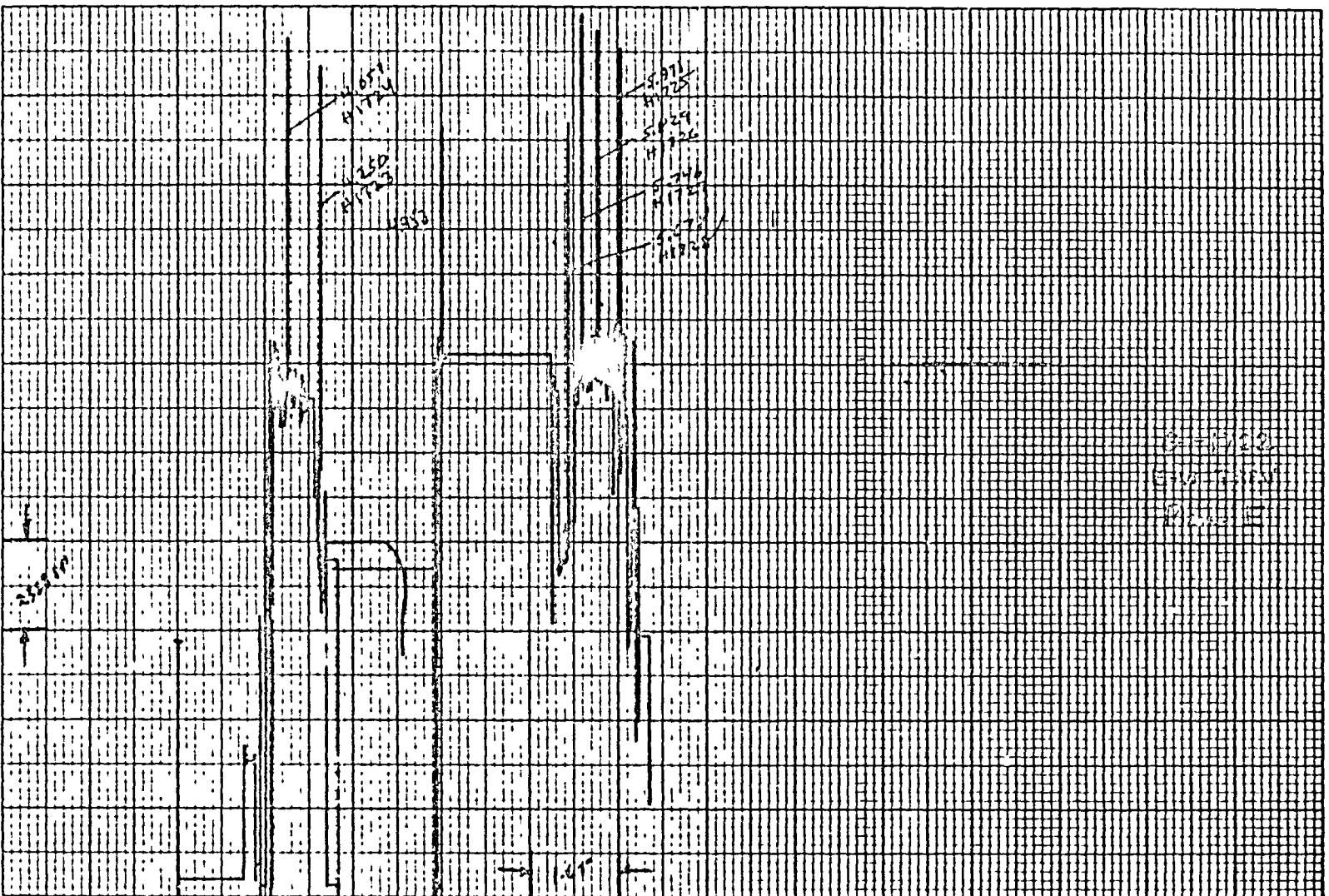
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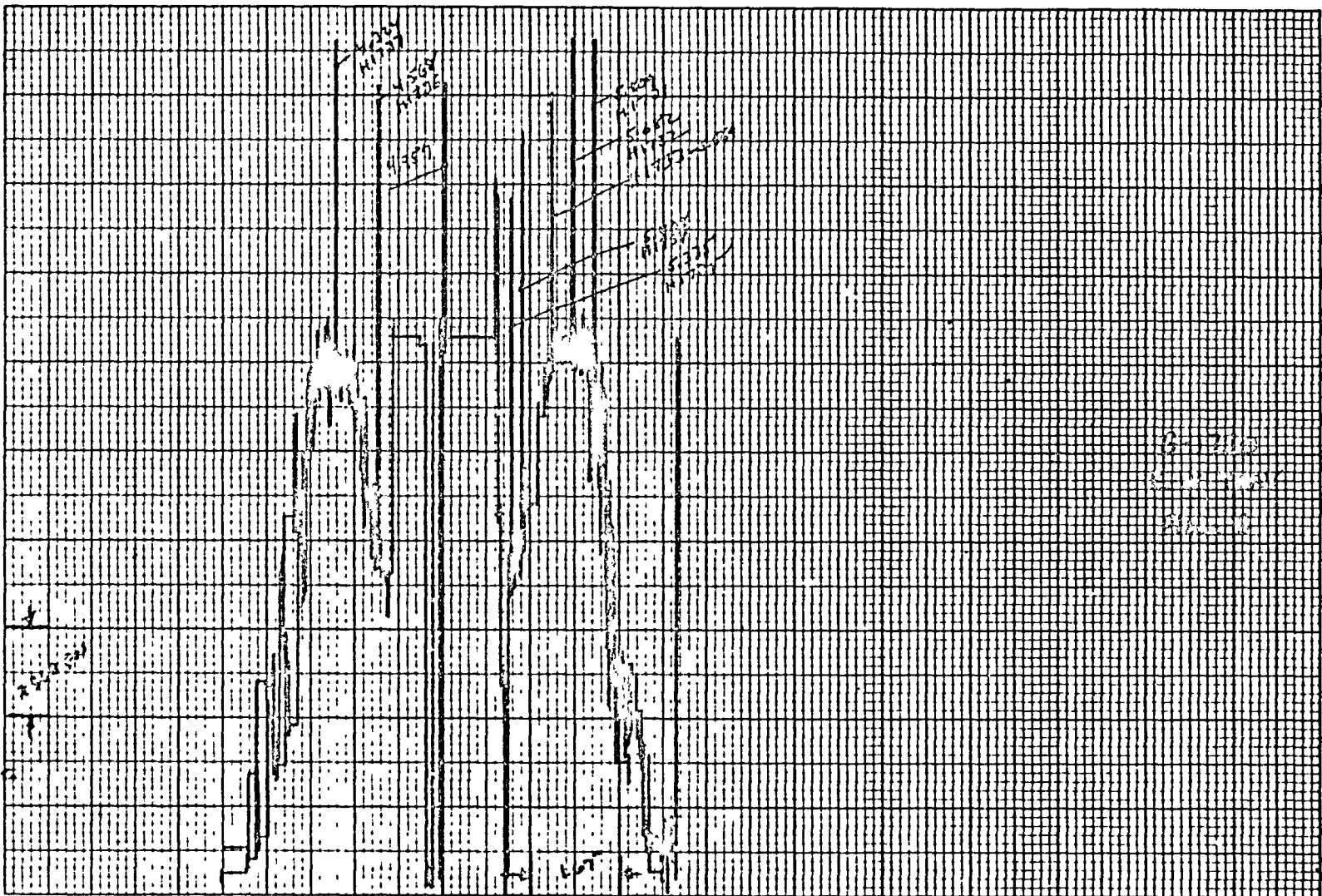
G-1721  
E-W TRAY  
Plane D

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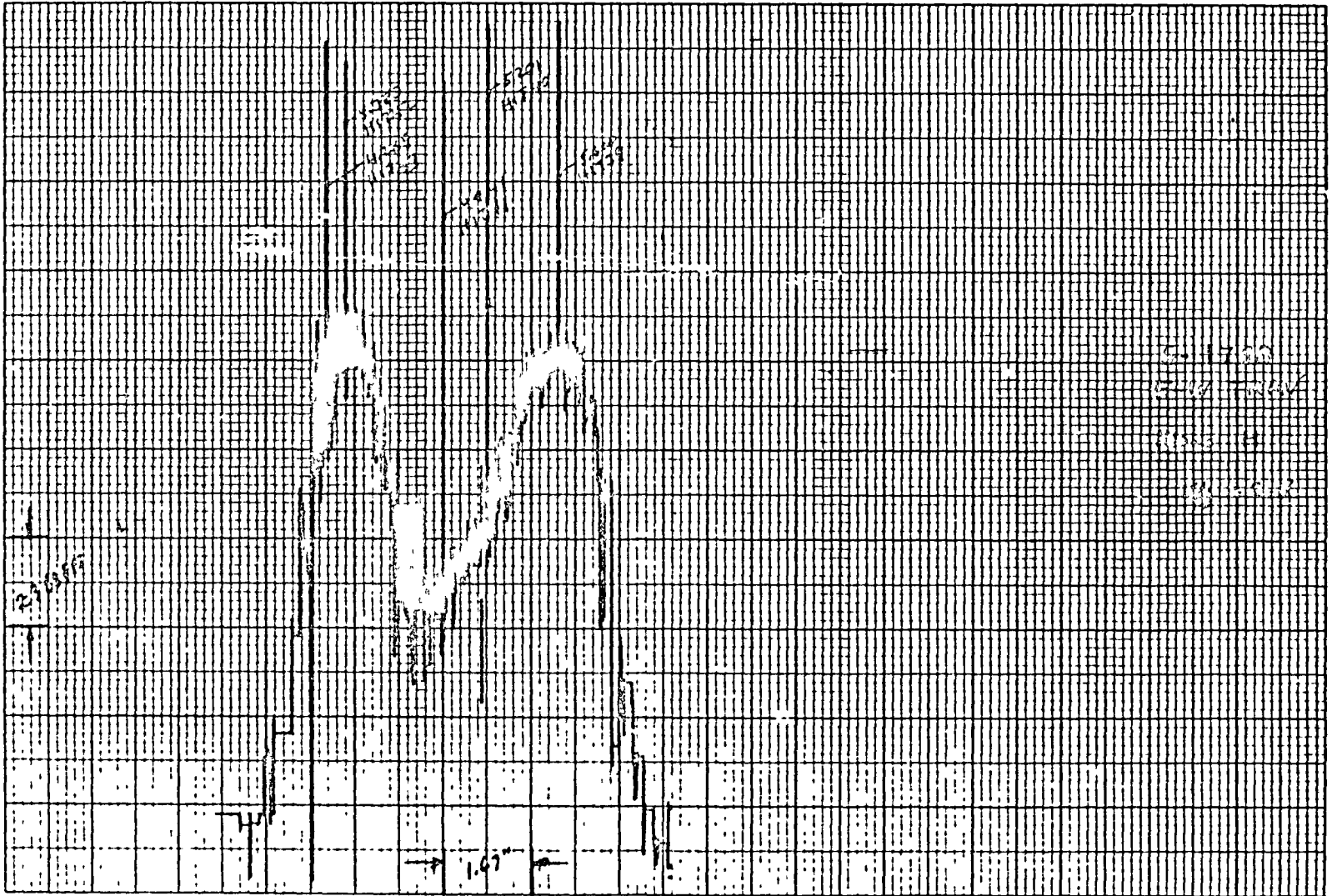




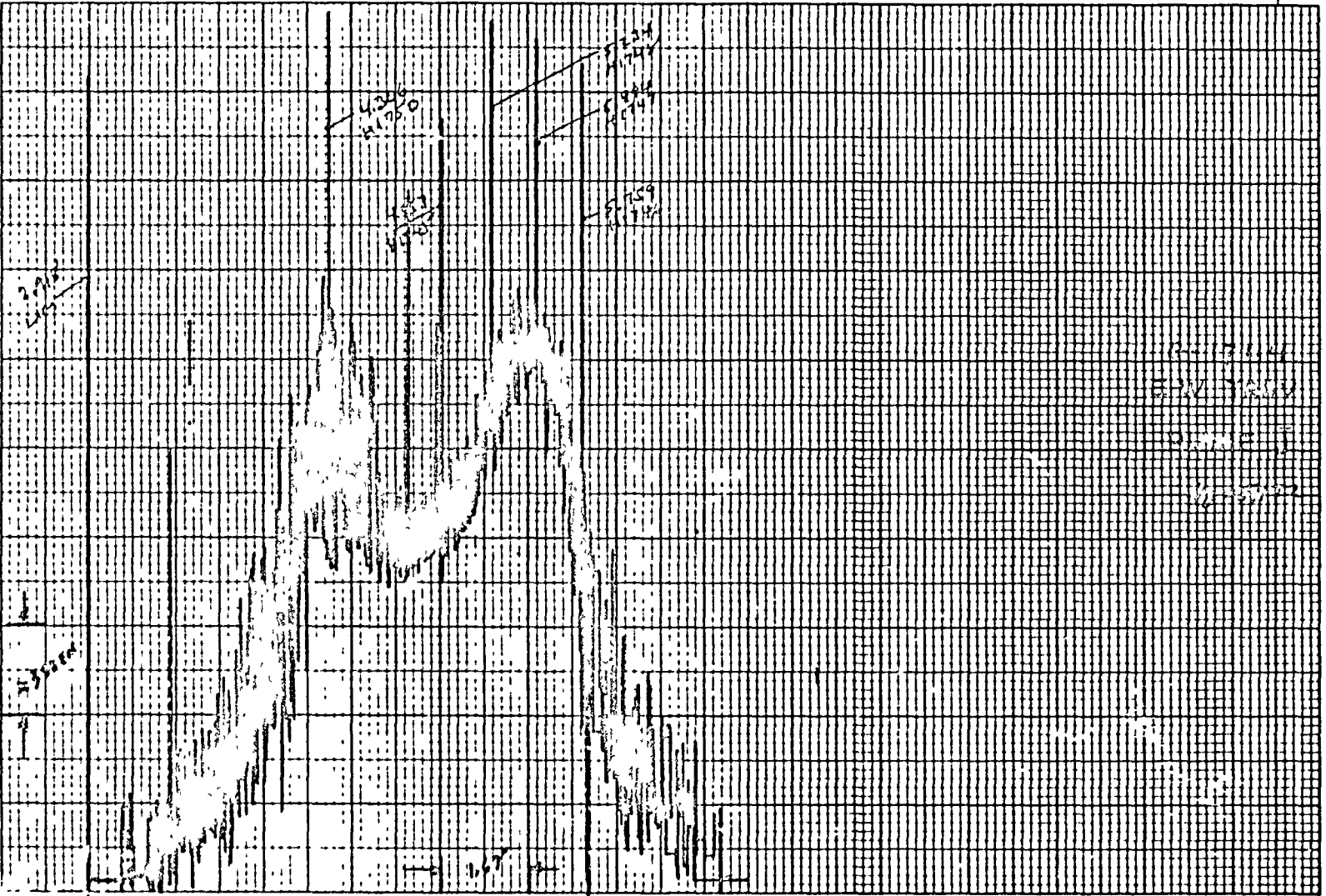


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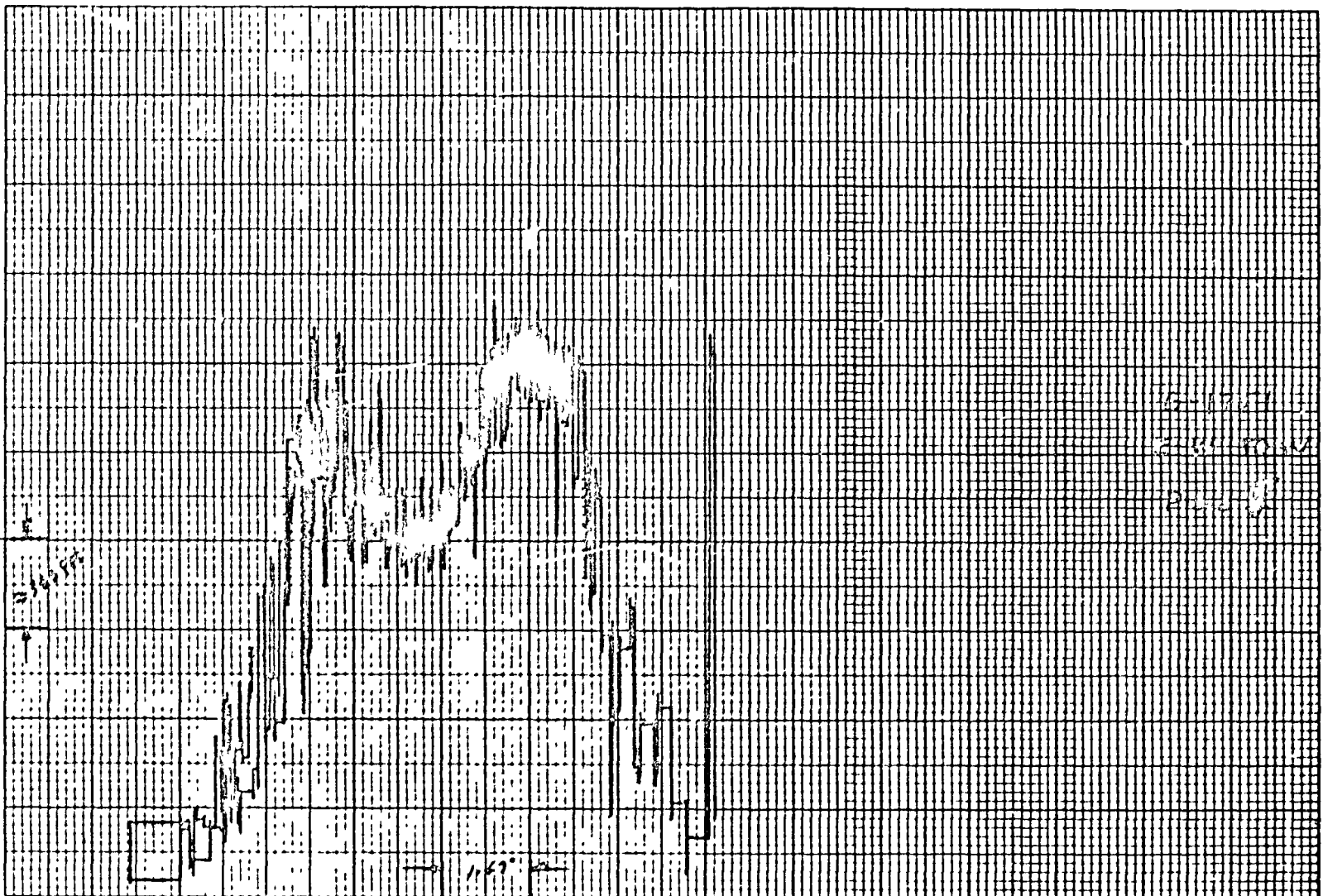


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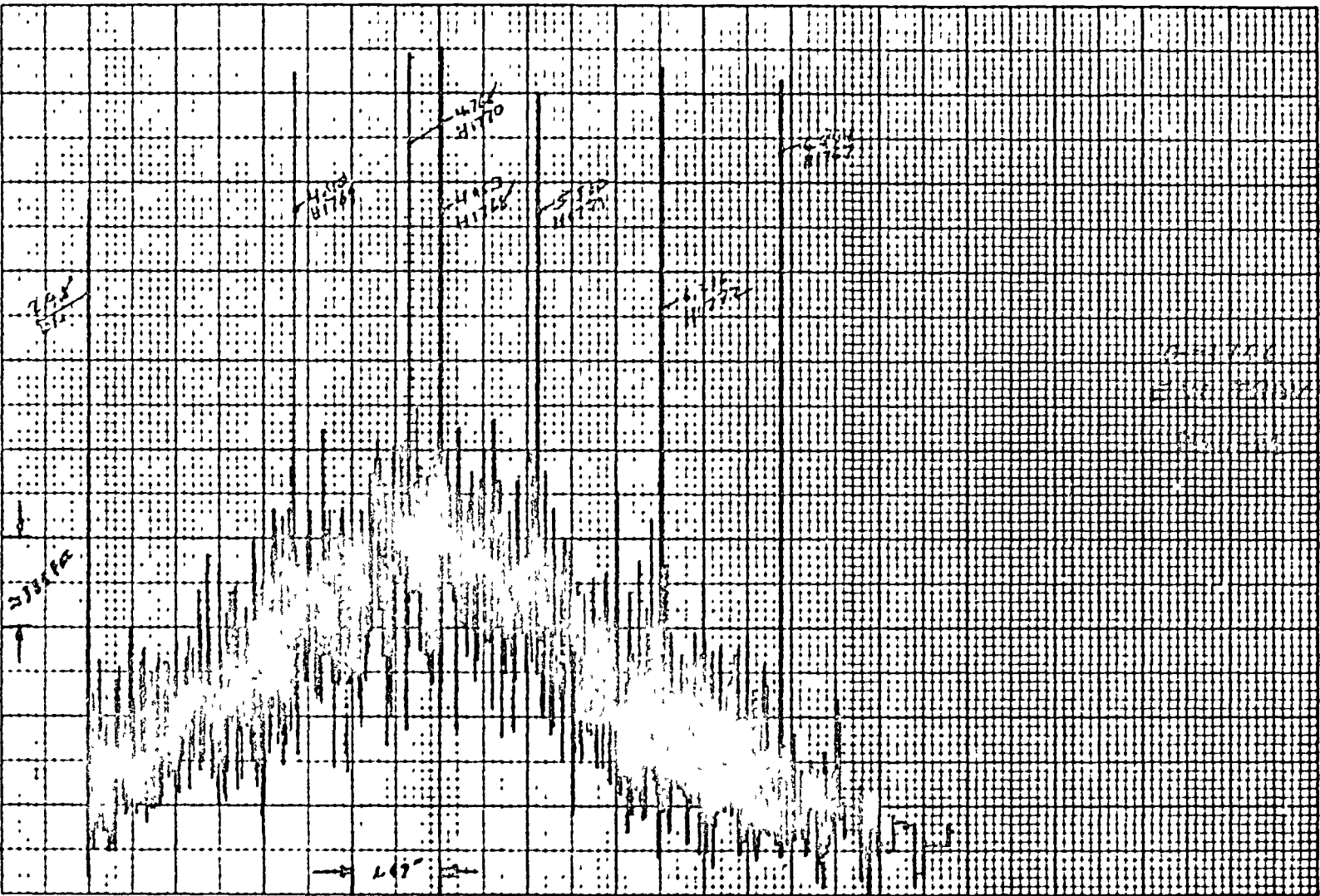
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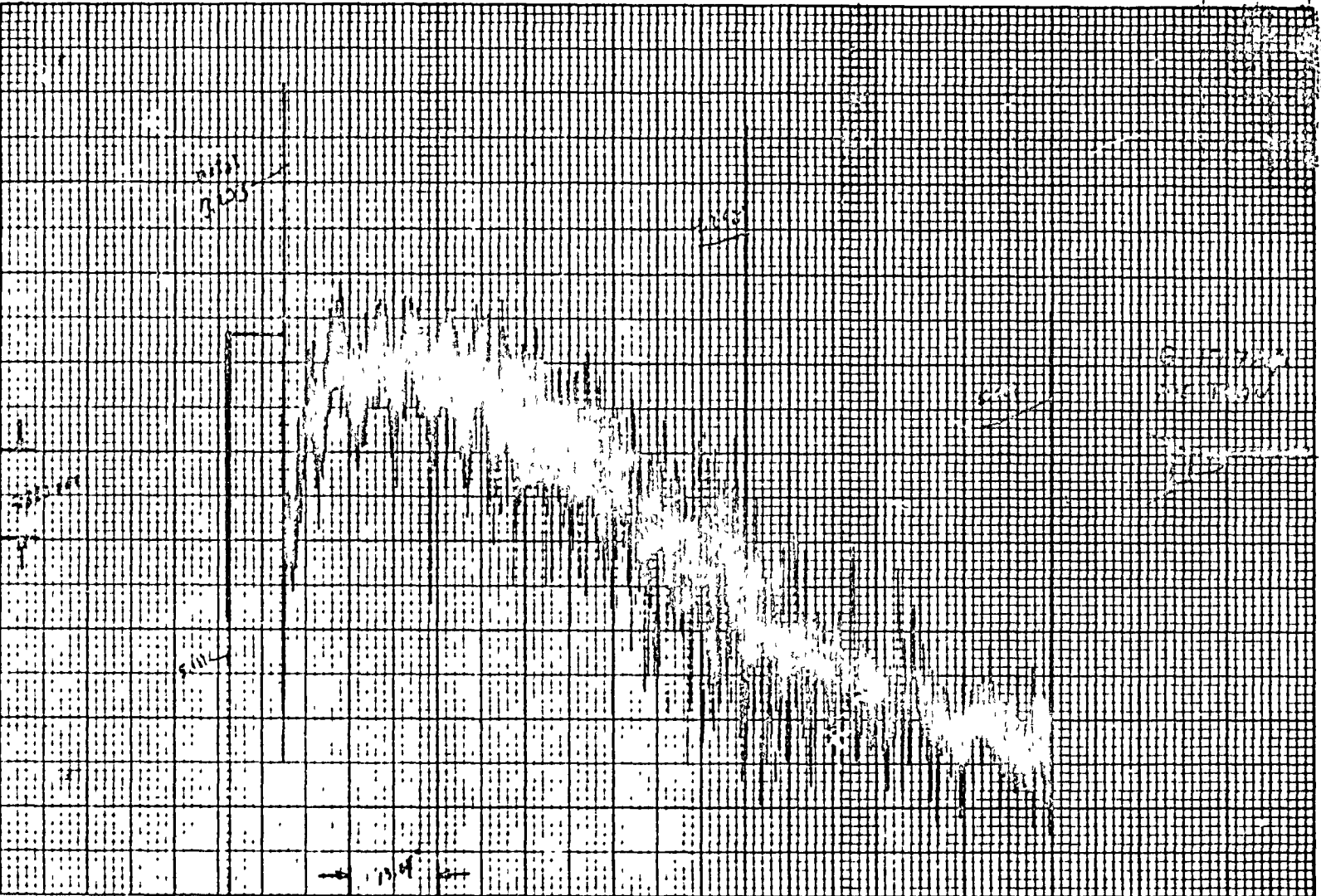


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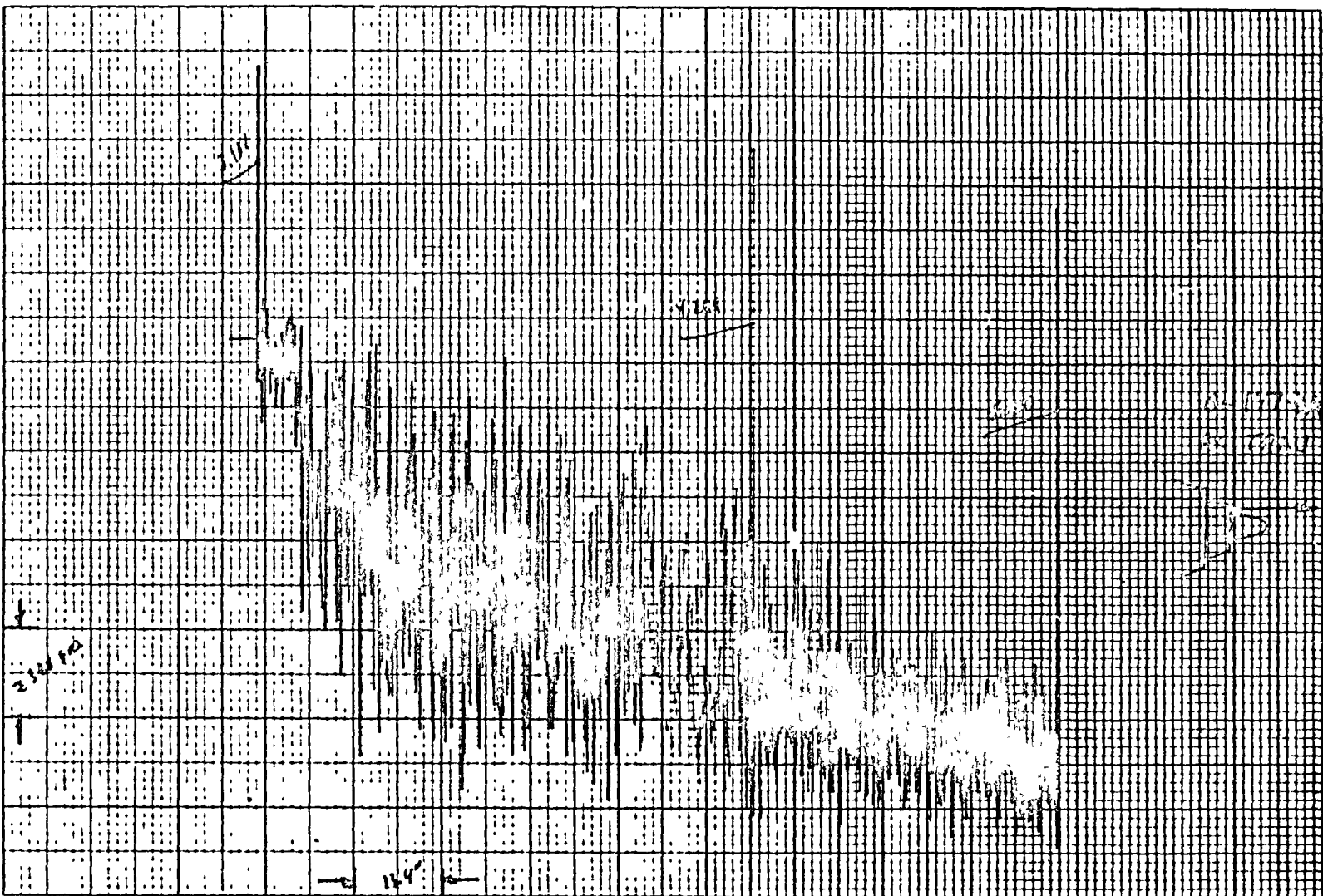


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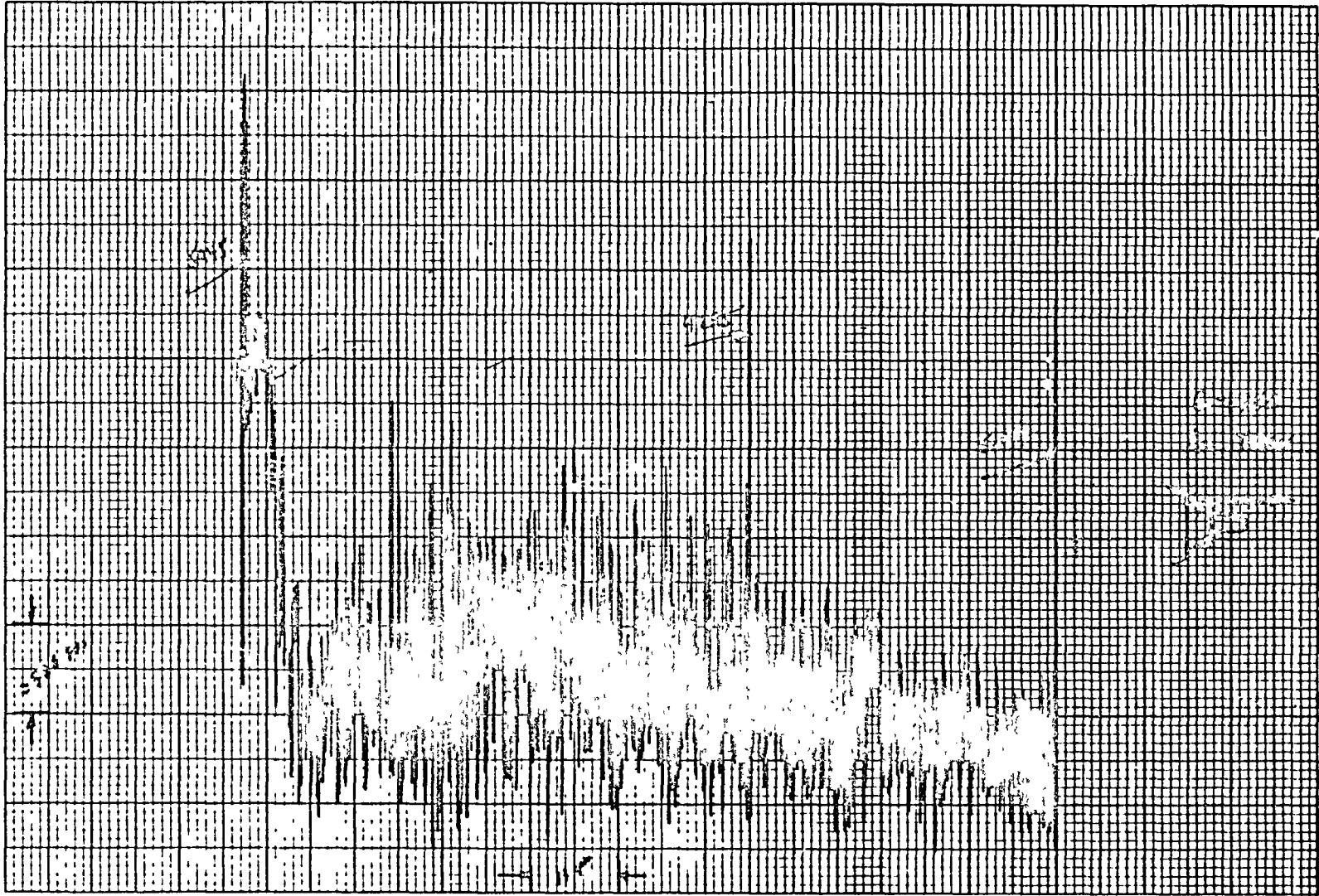


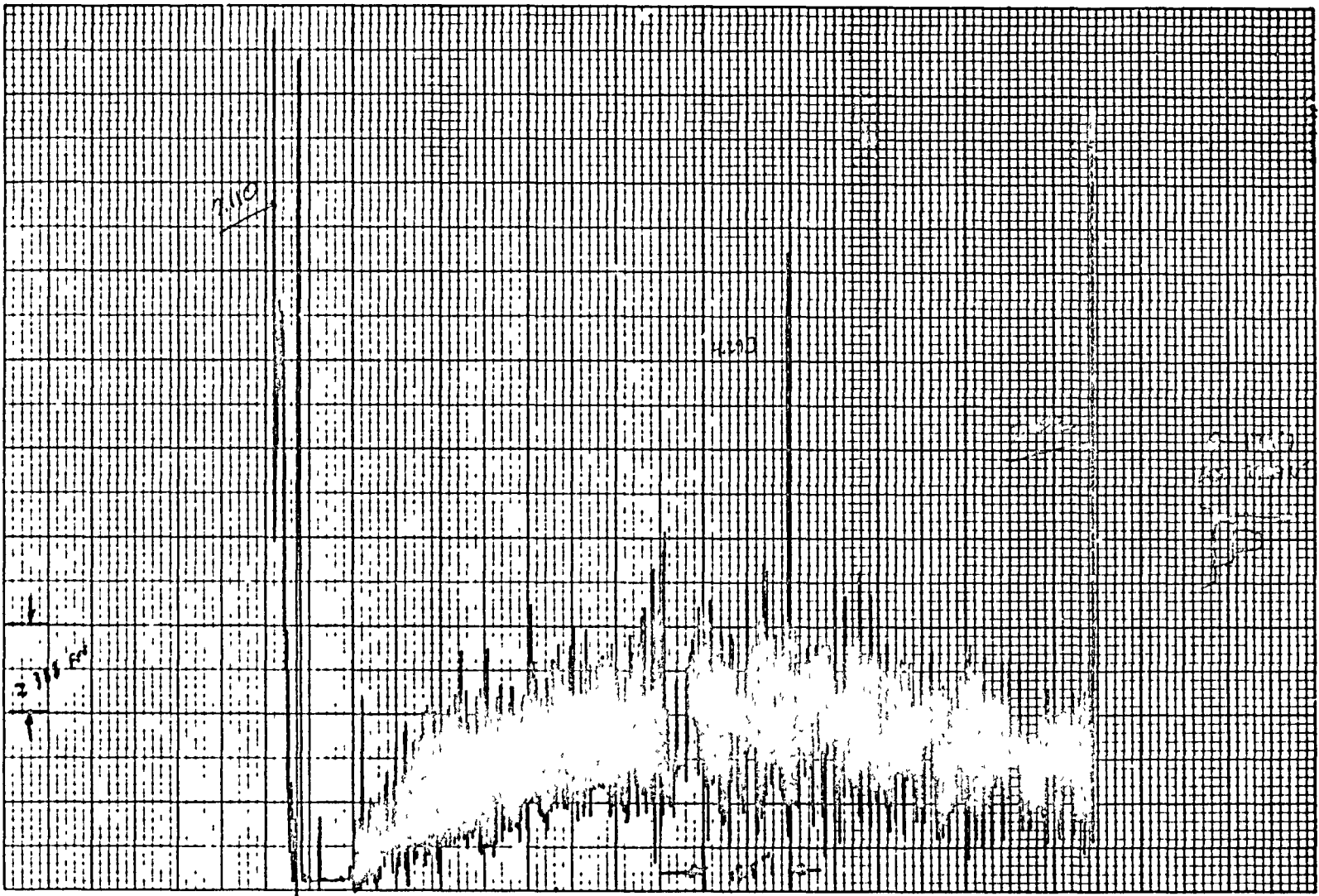




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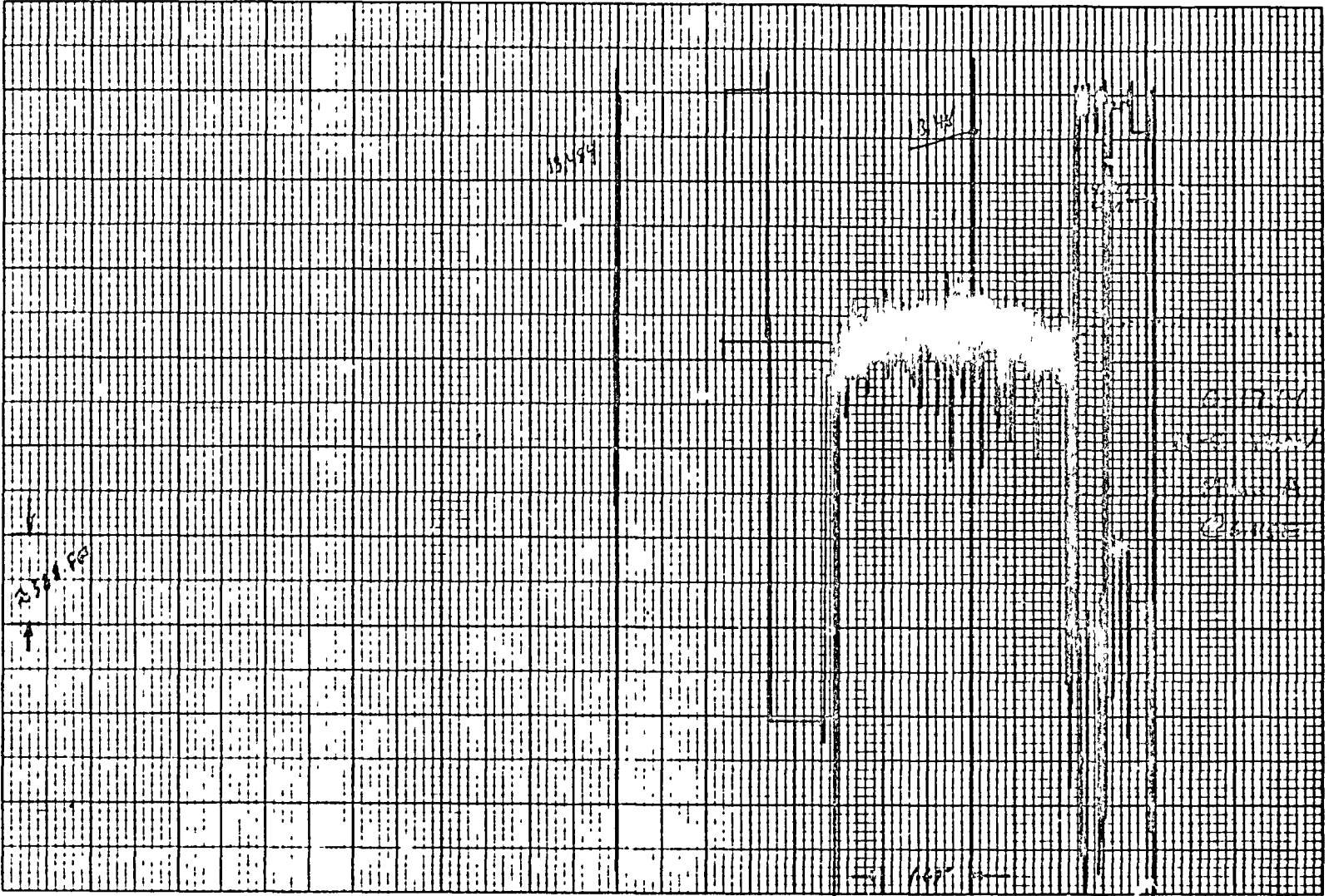




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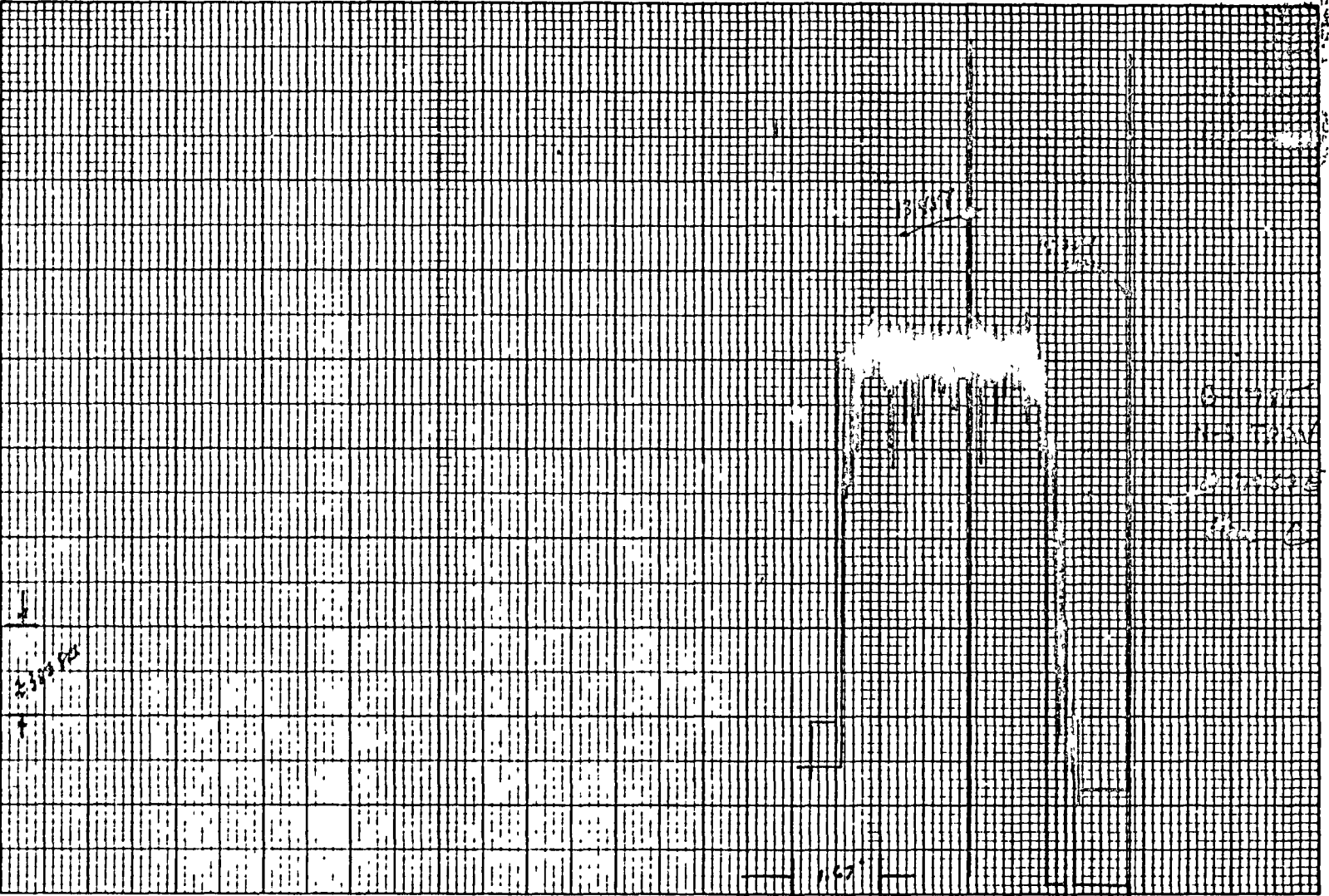


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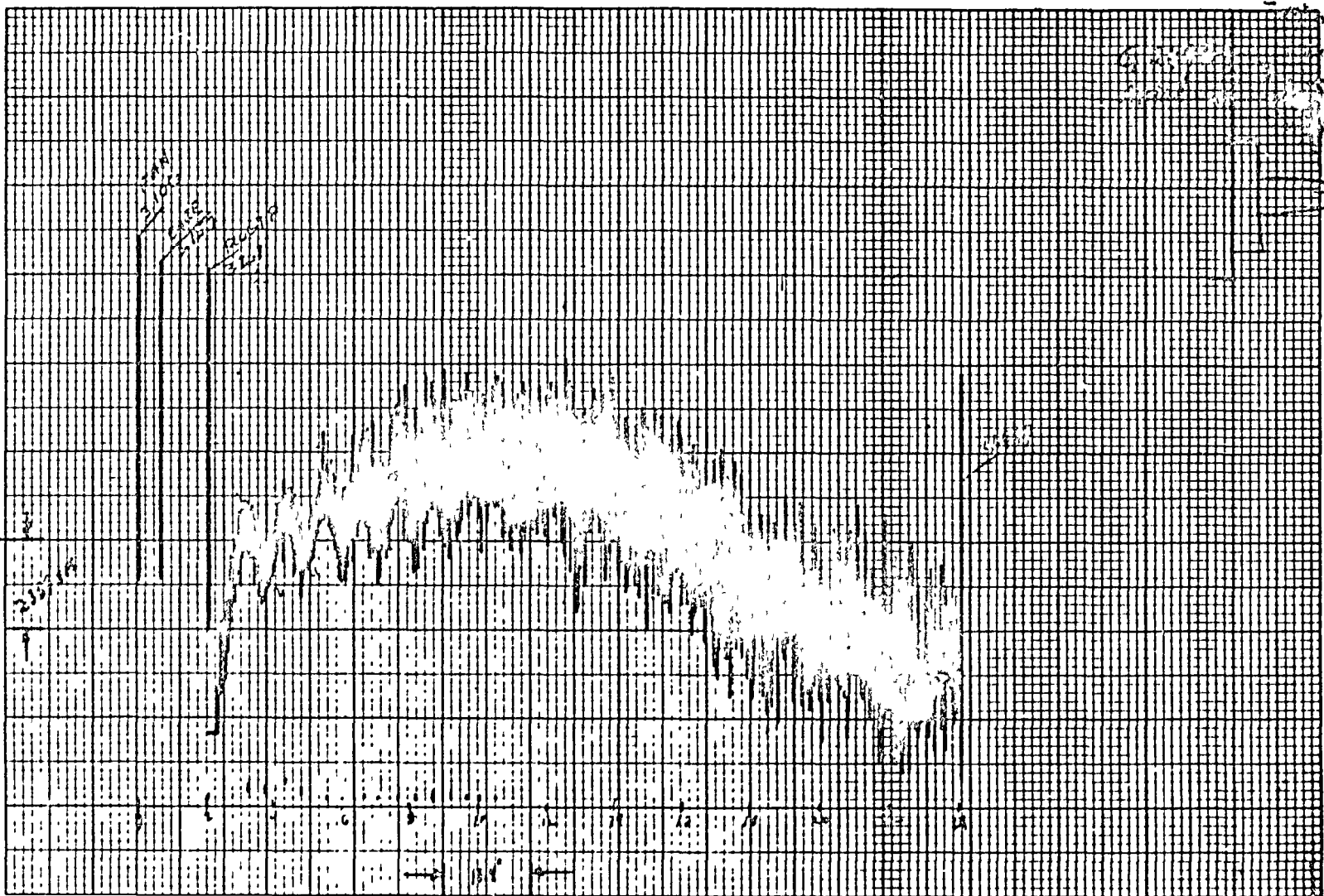
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TEST POINT 203

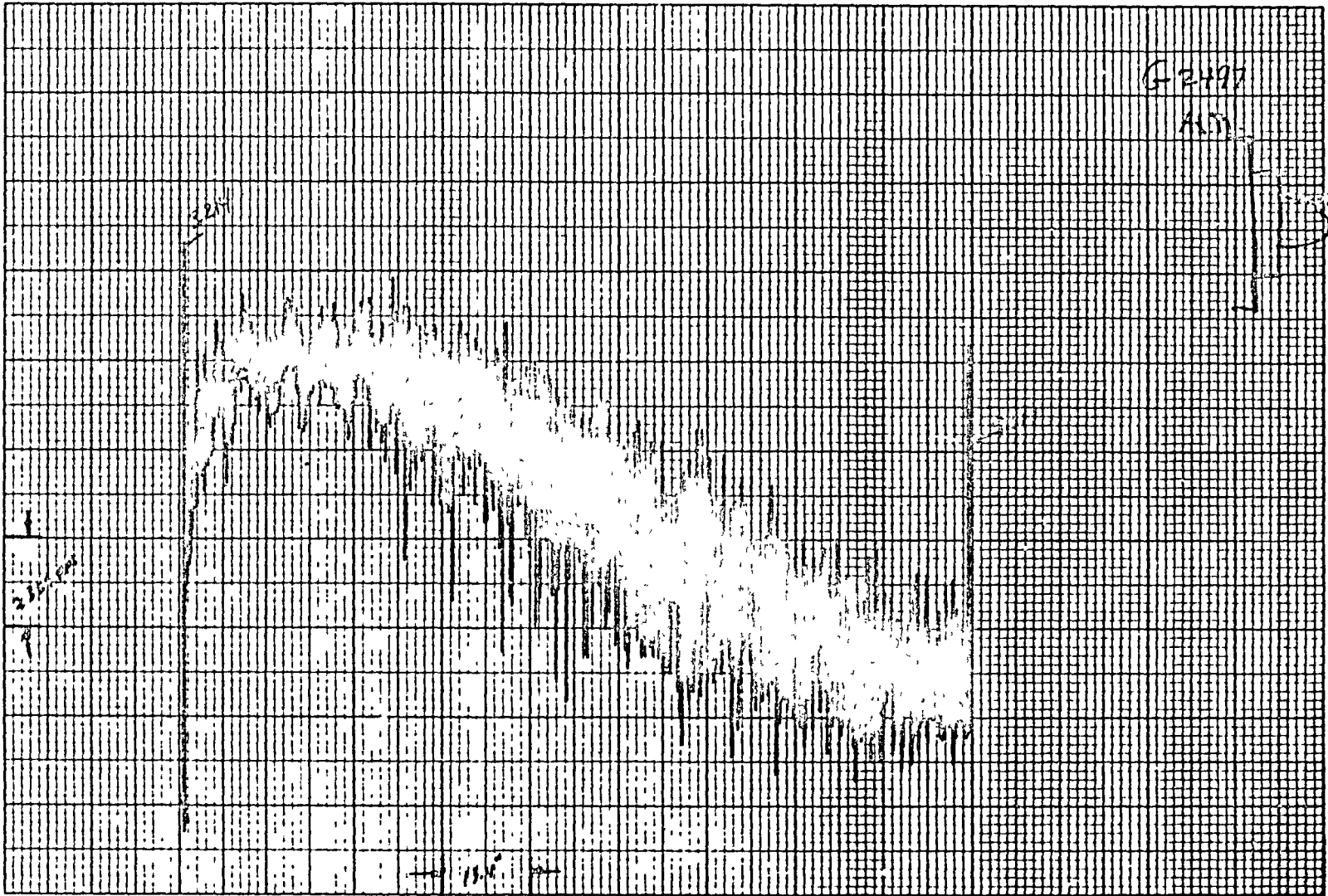


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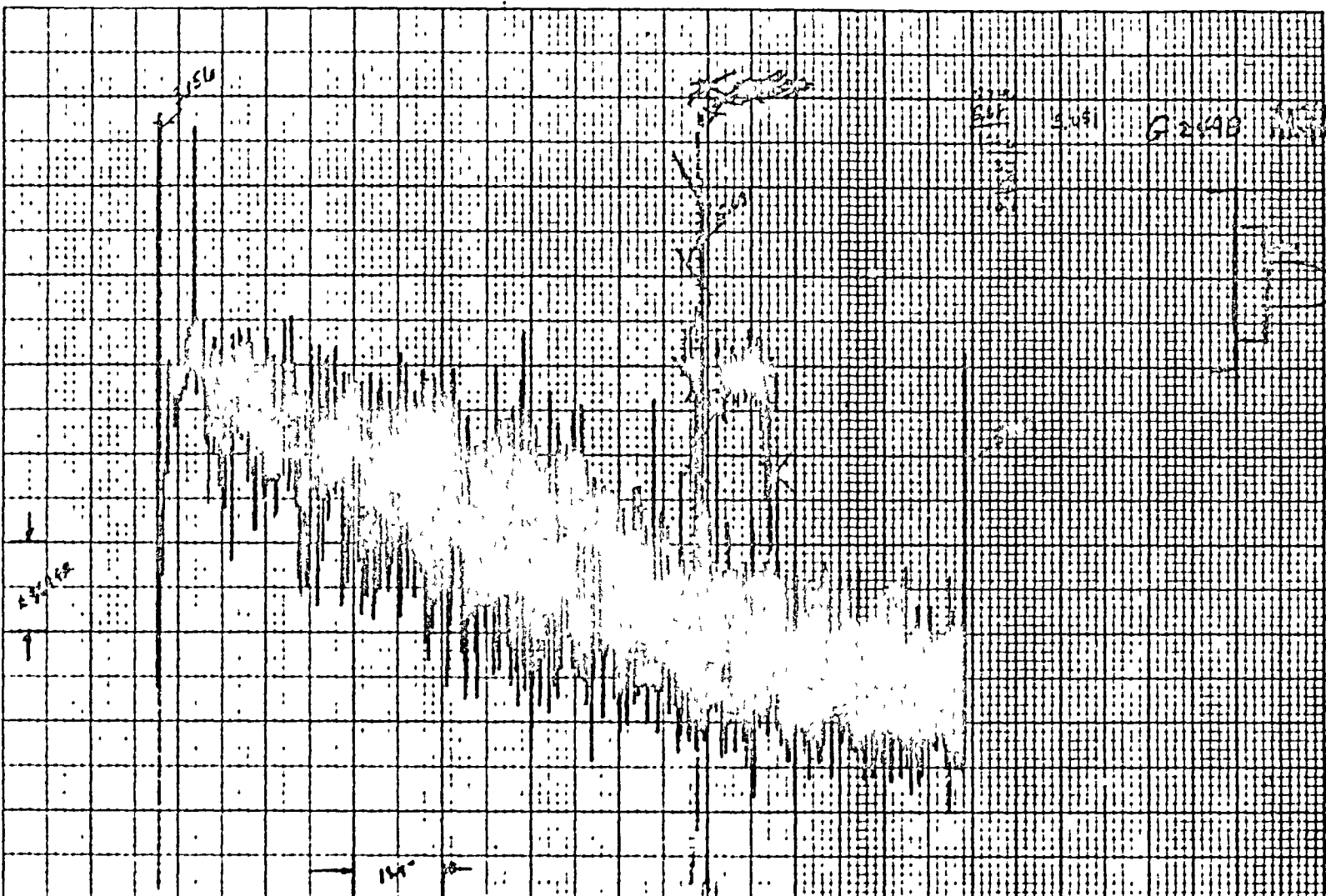
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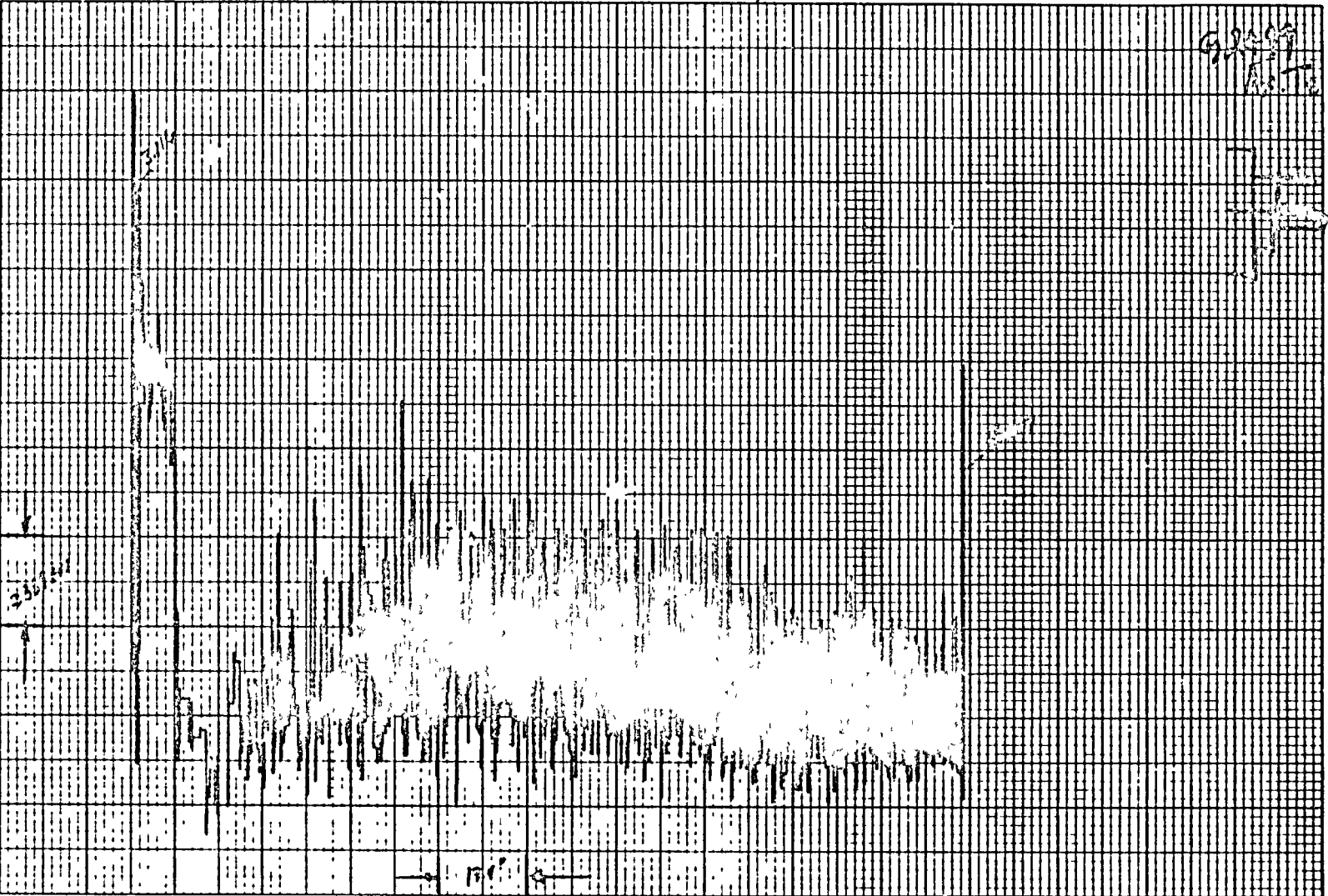


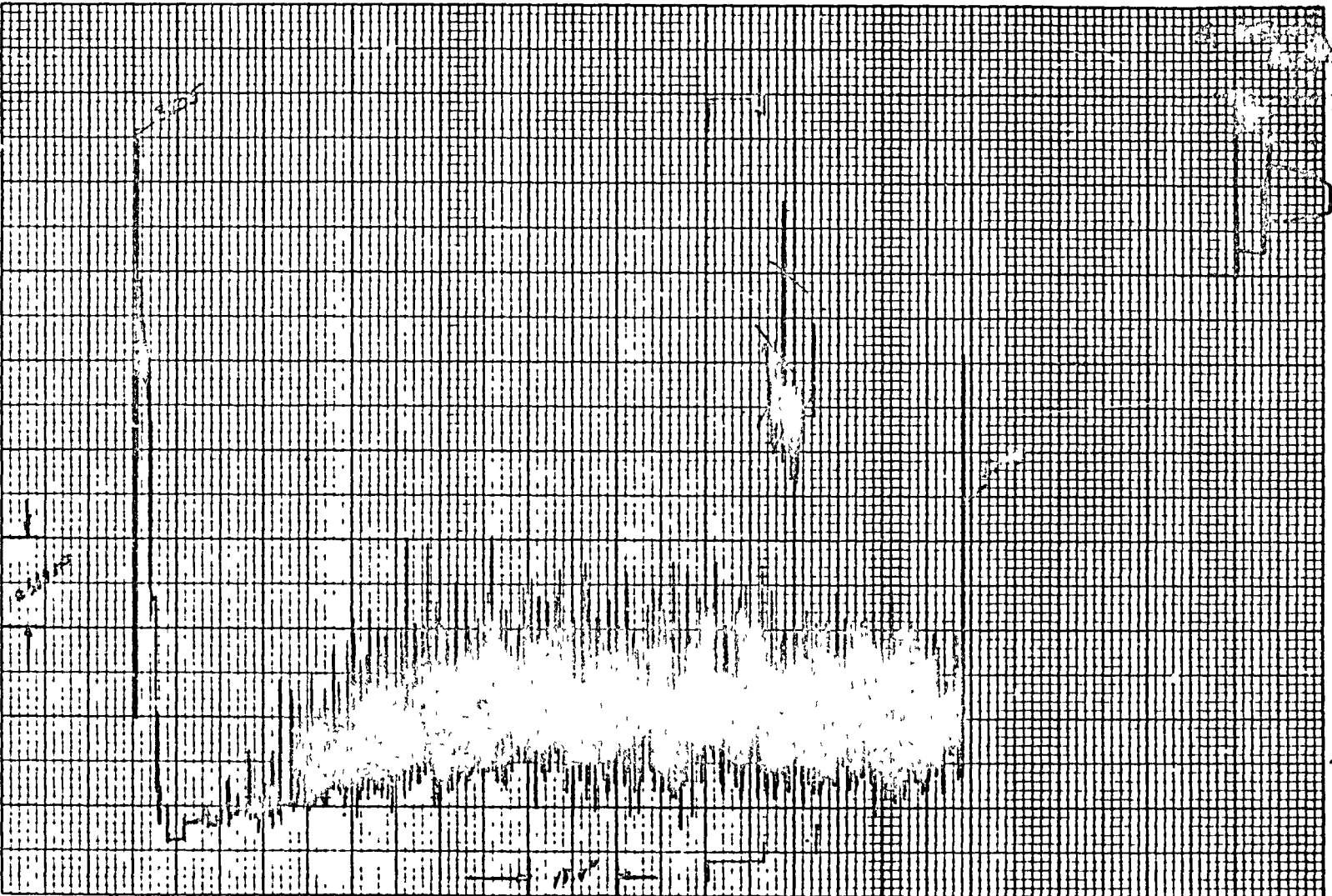
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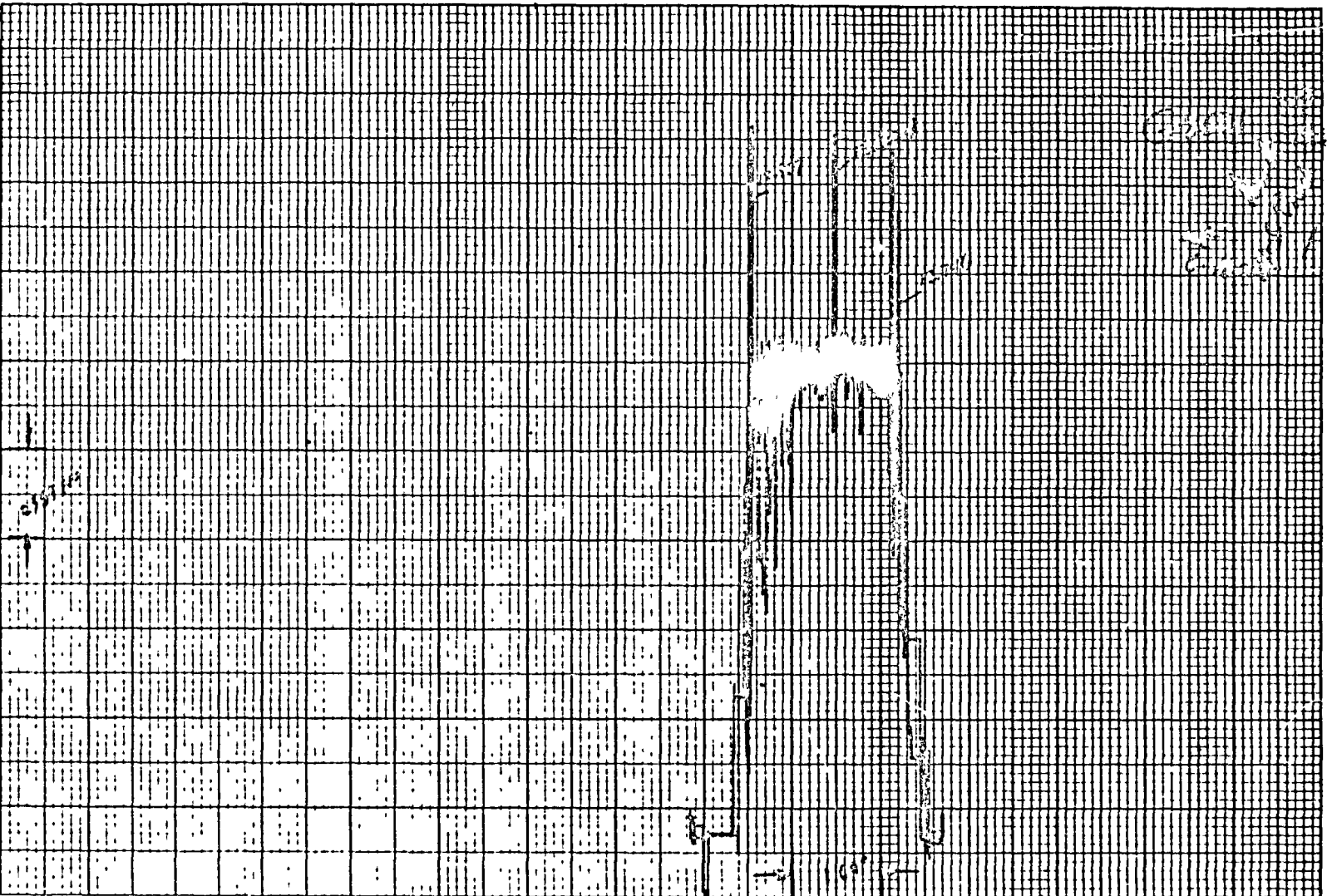
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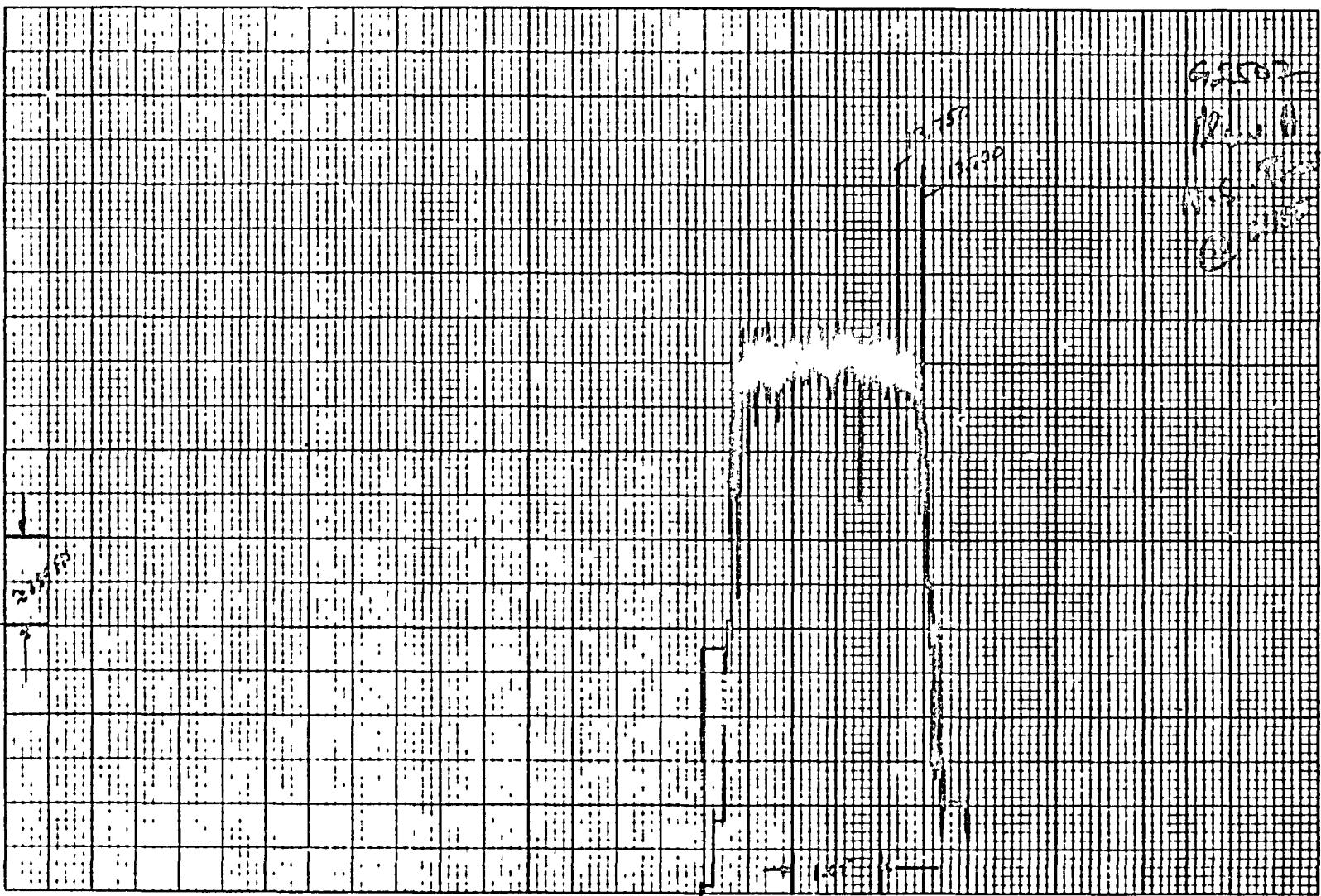




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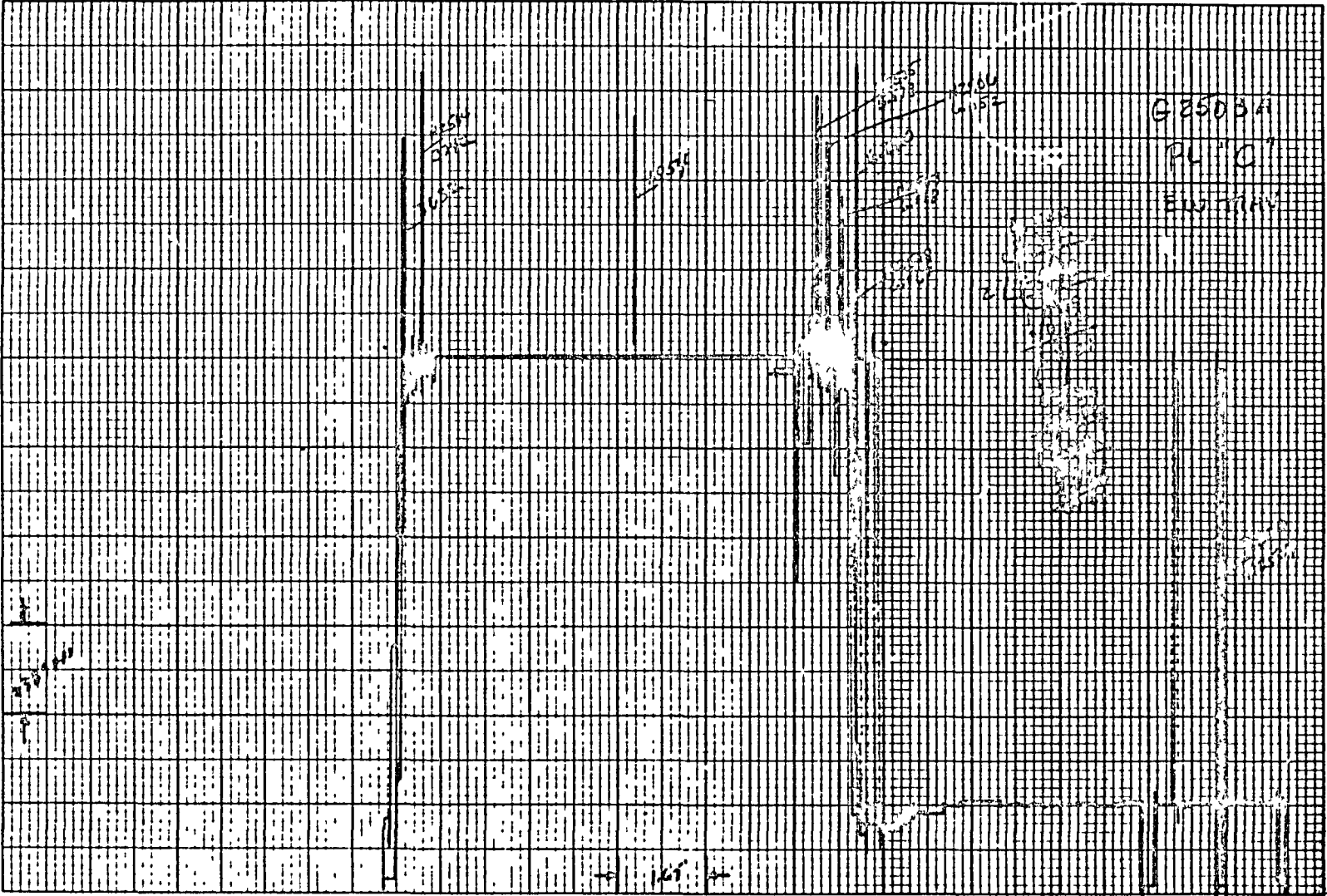
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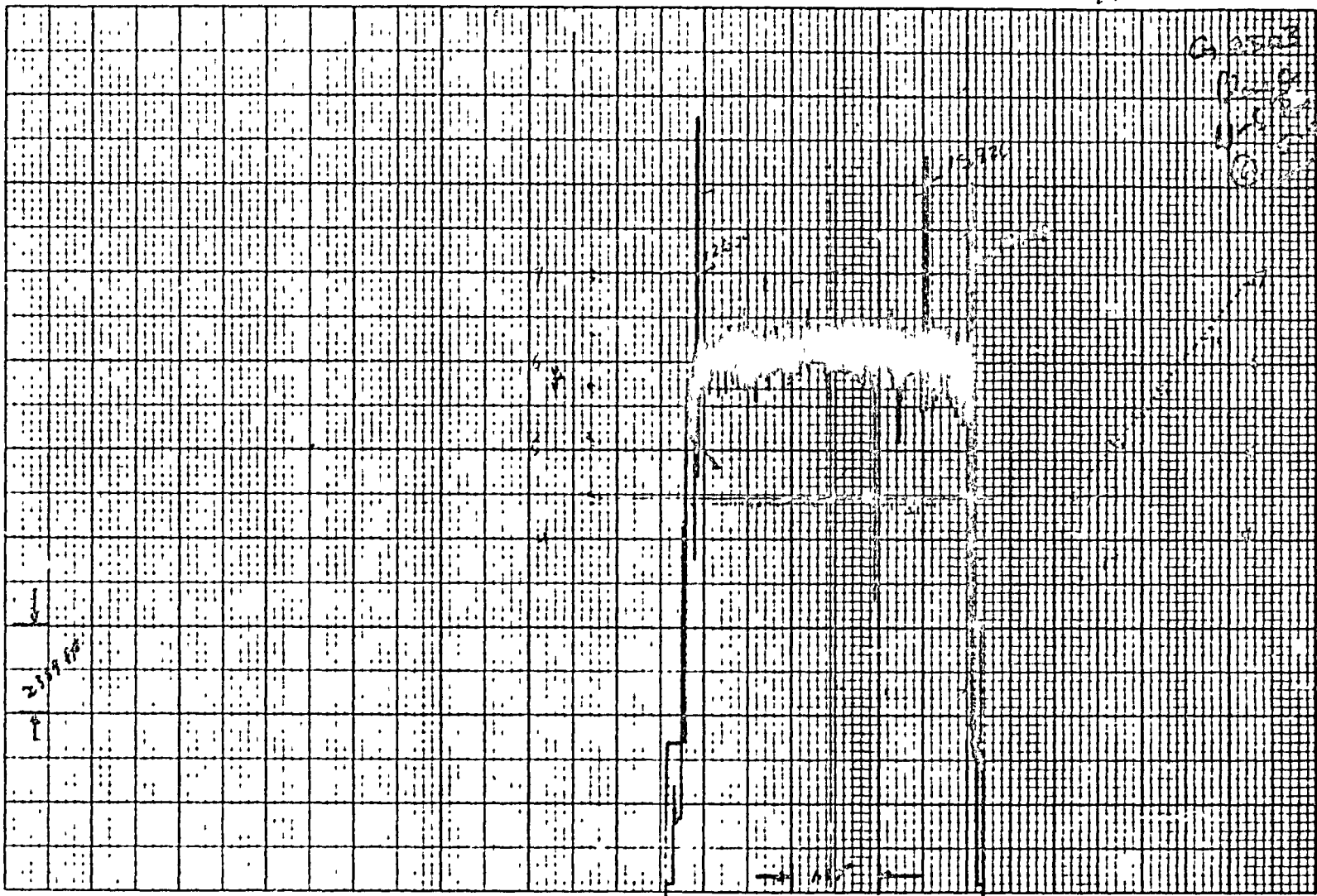
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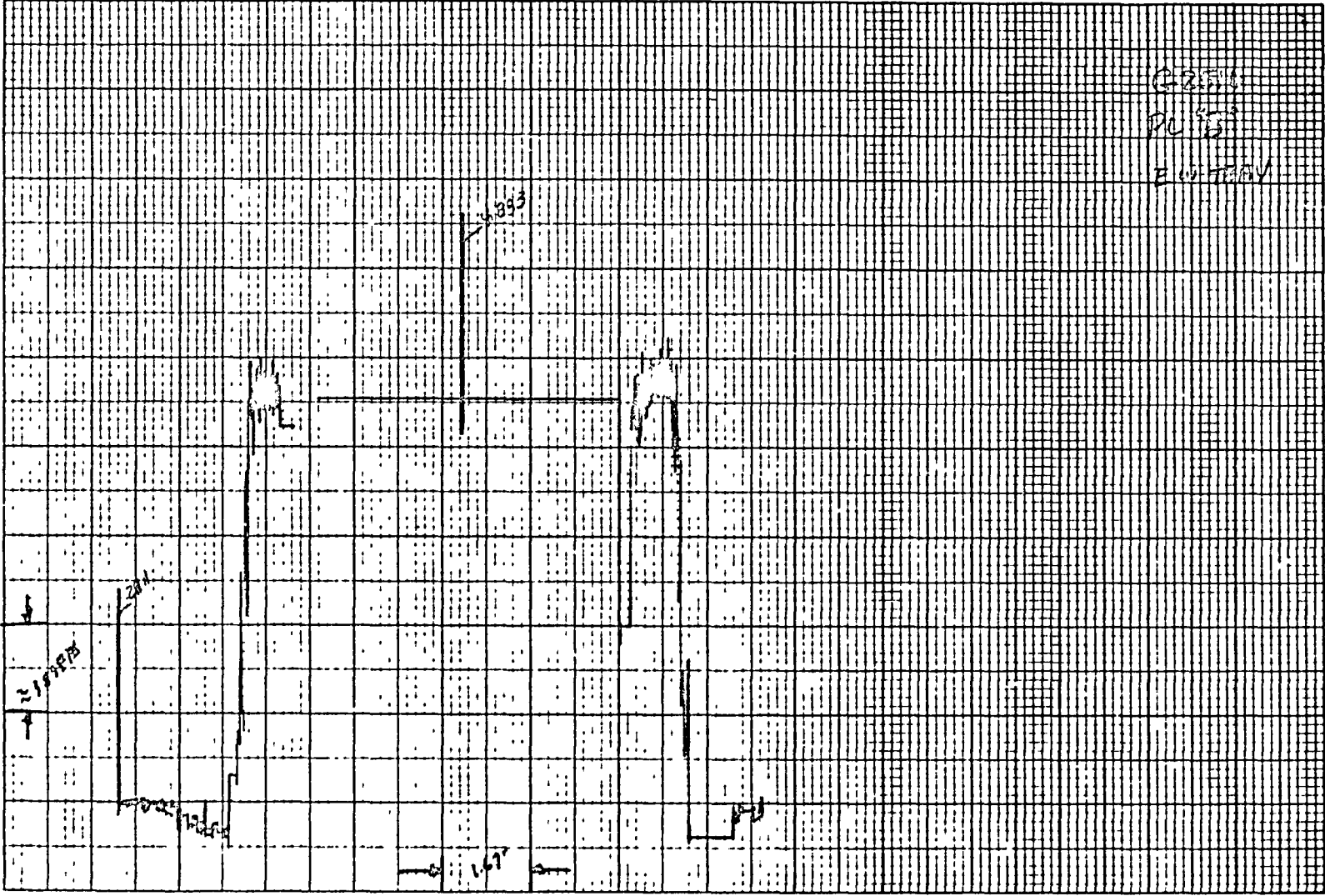
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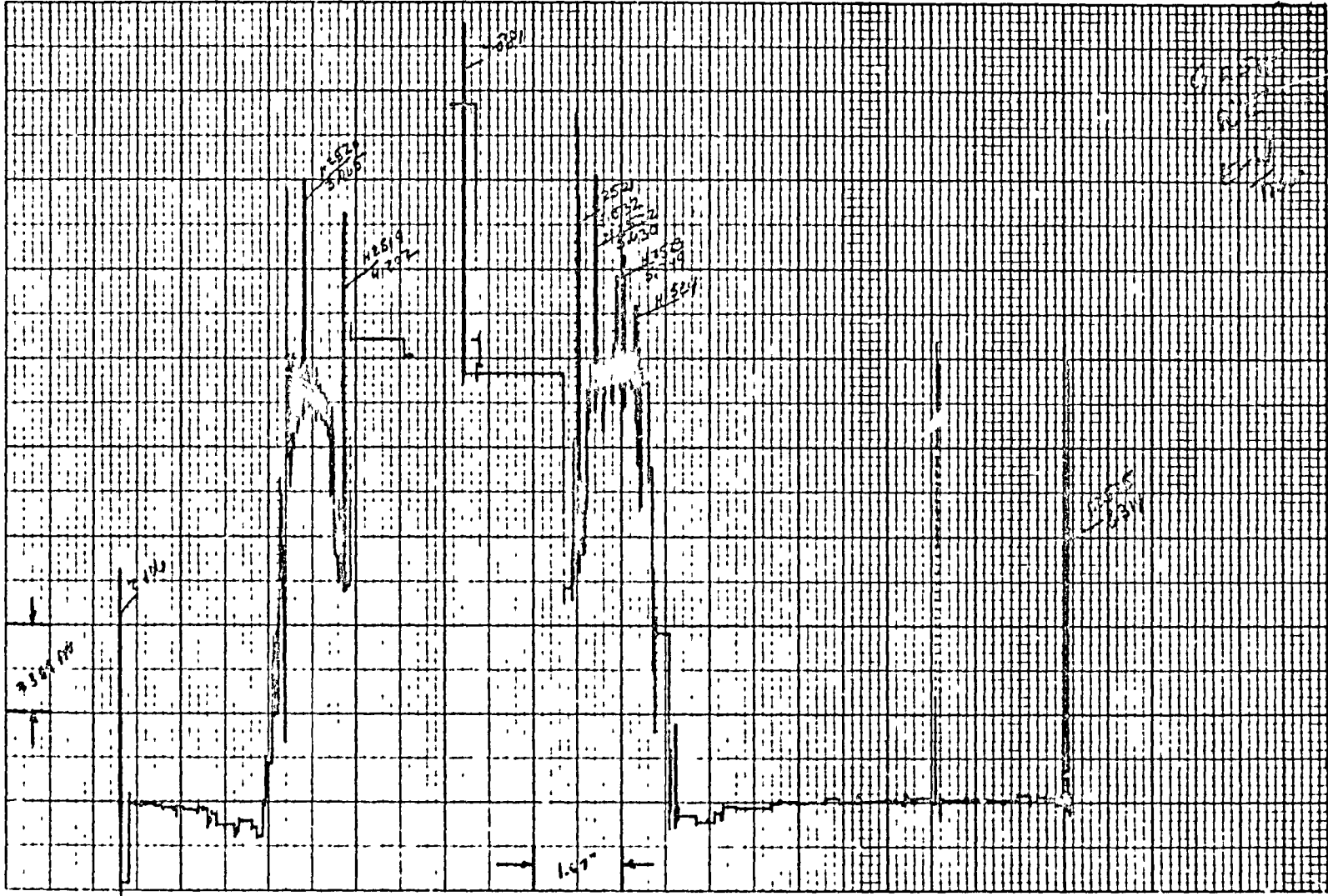




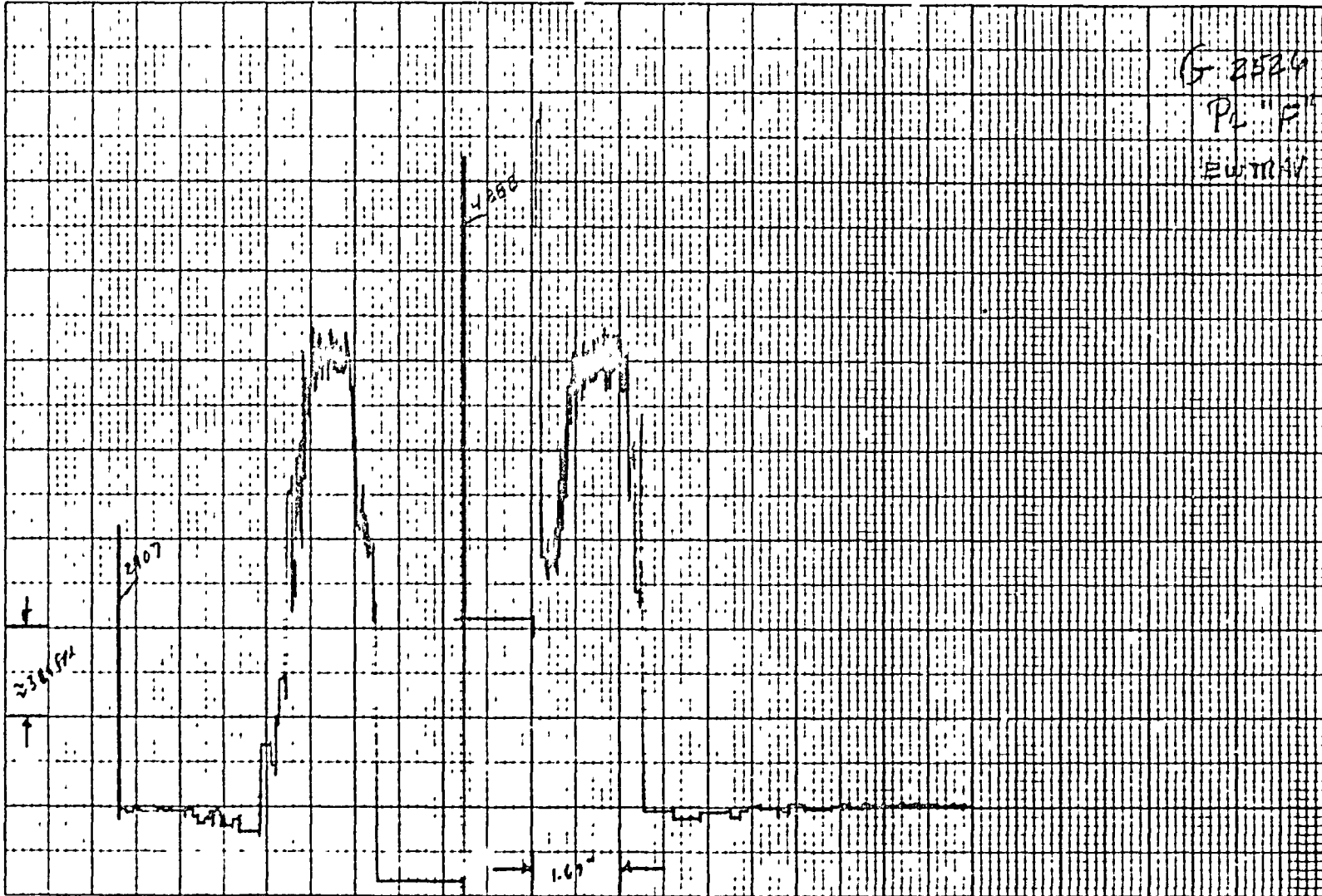
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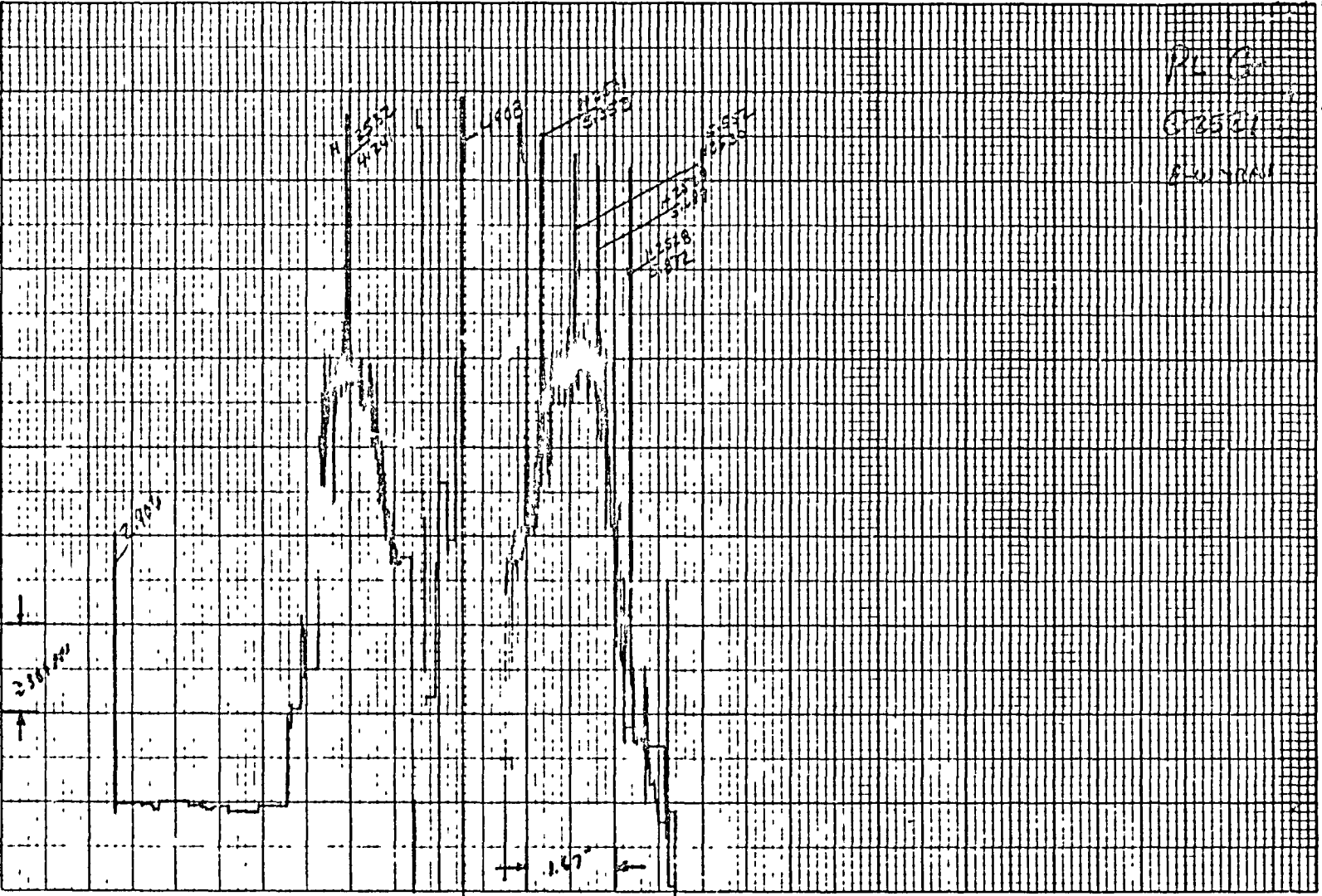


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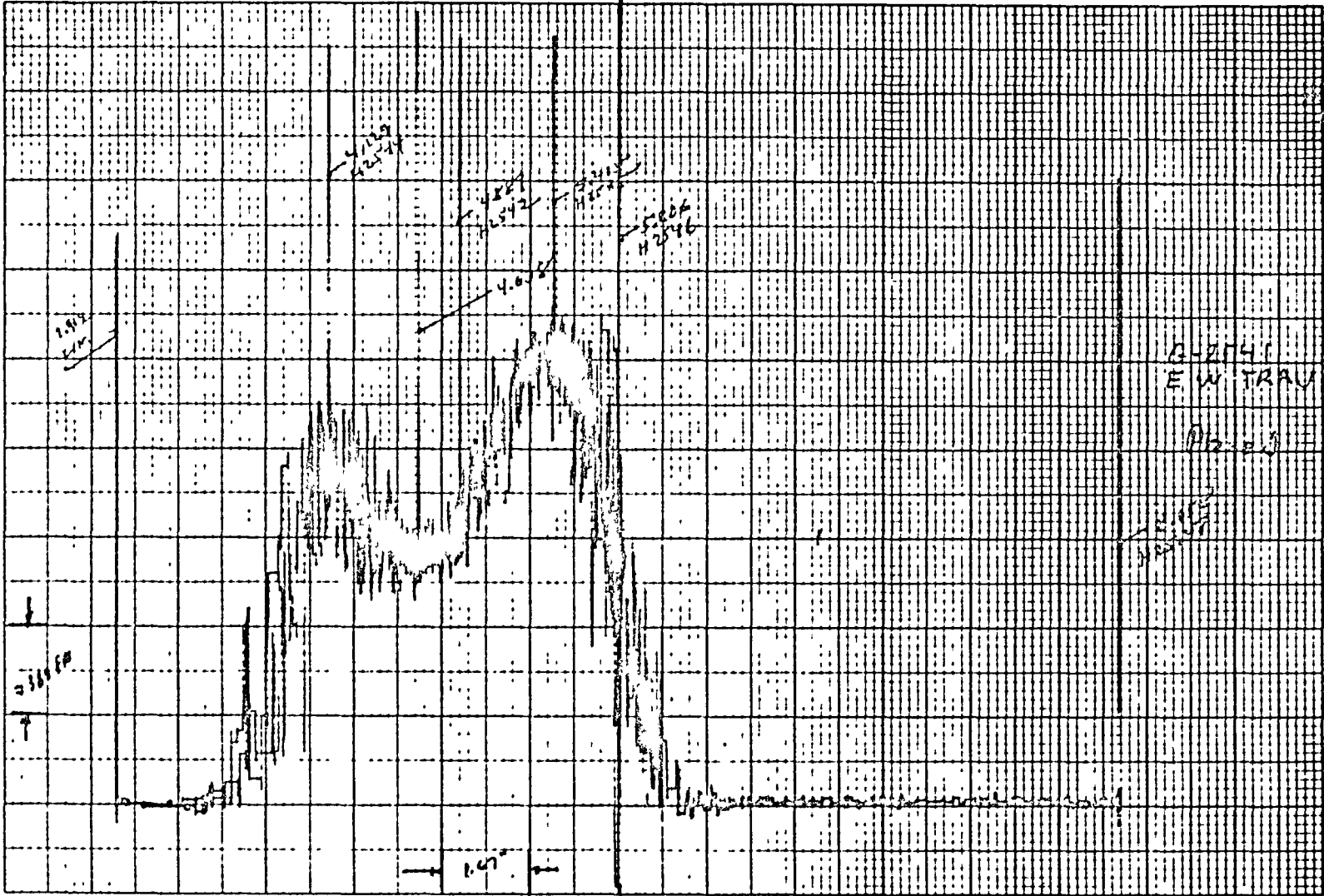


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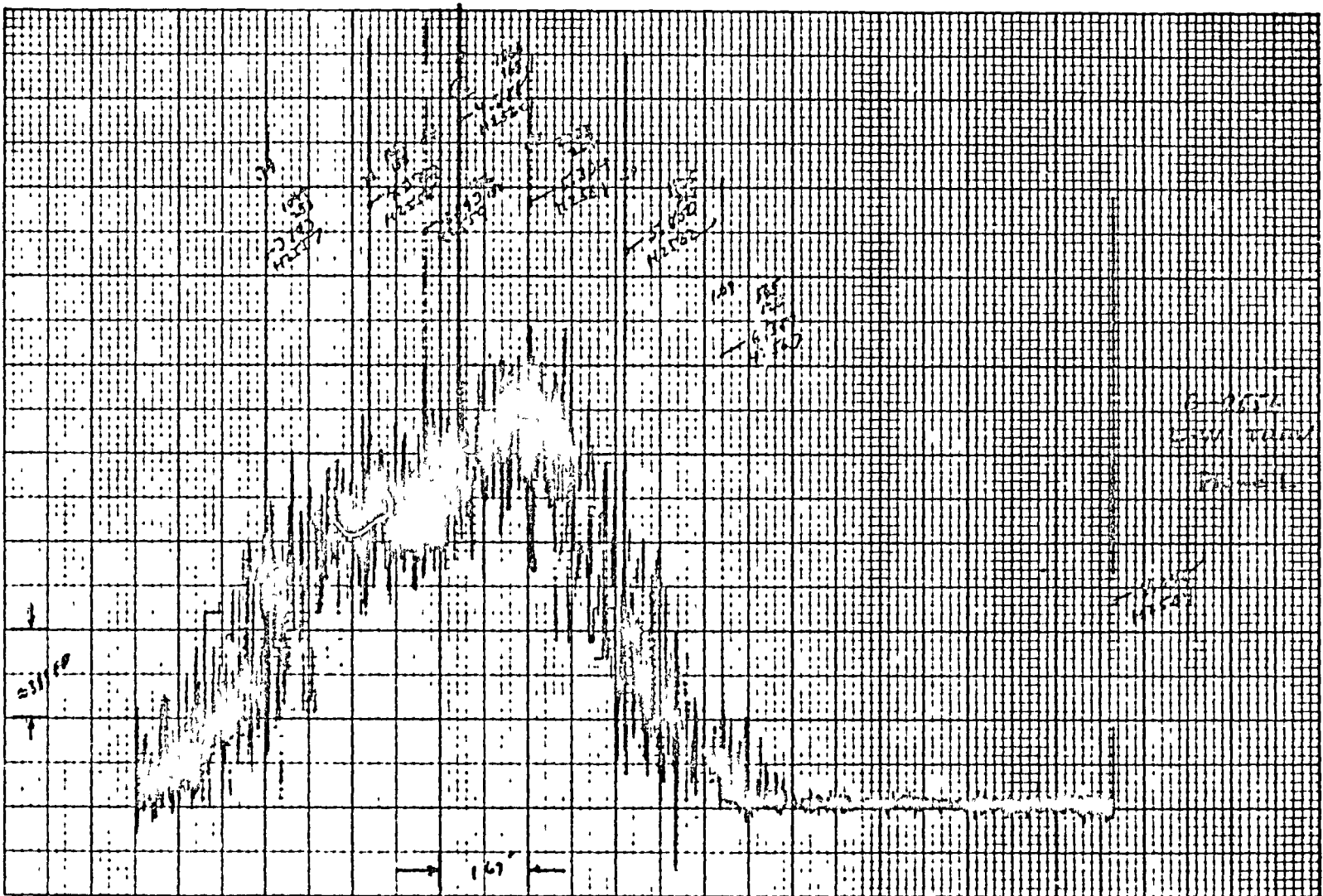




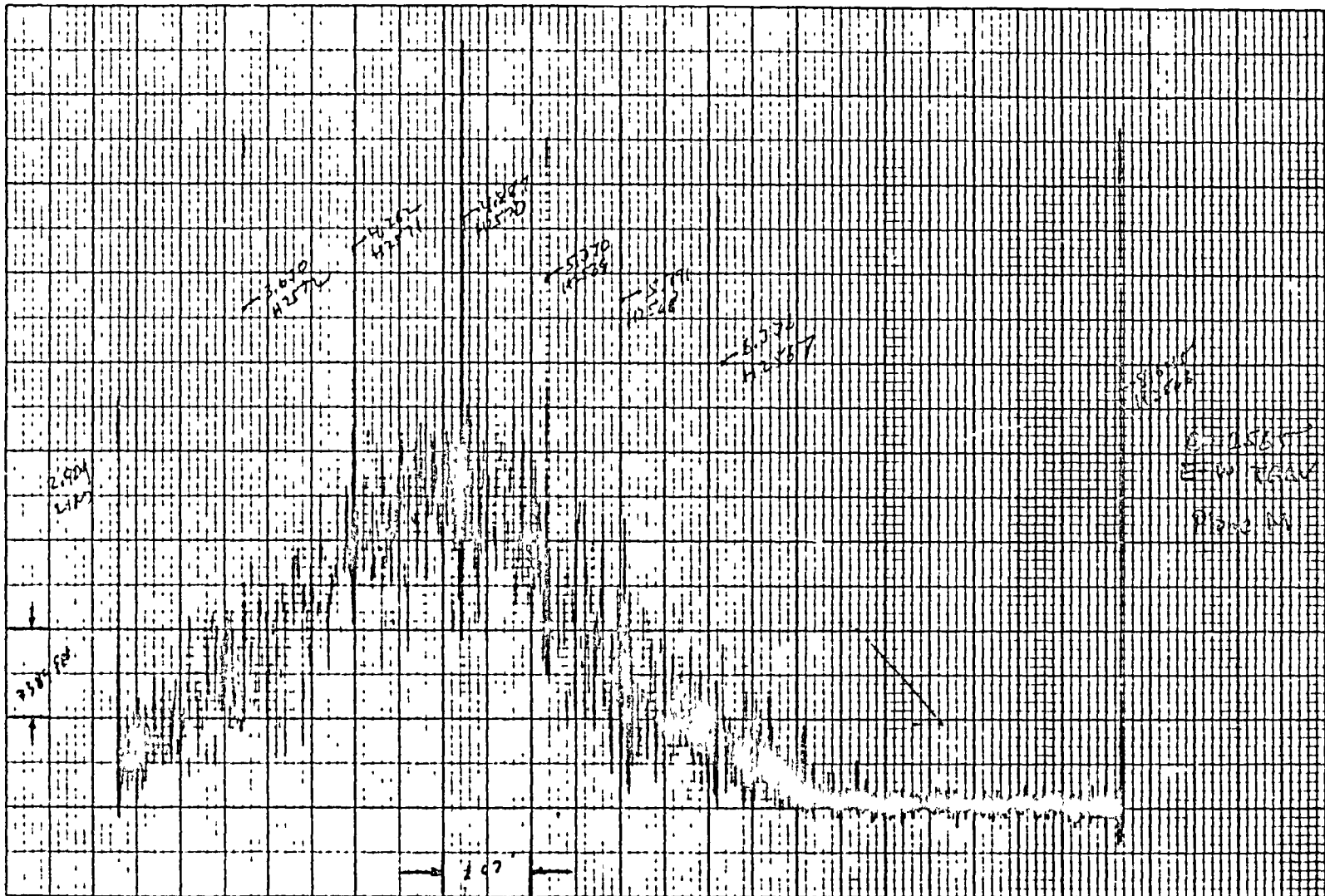


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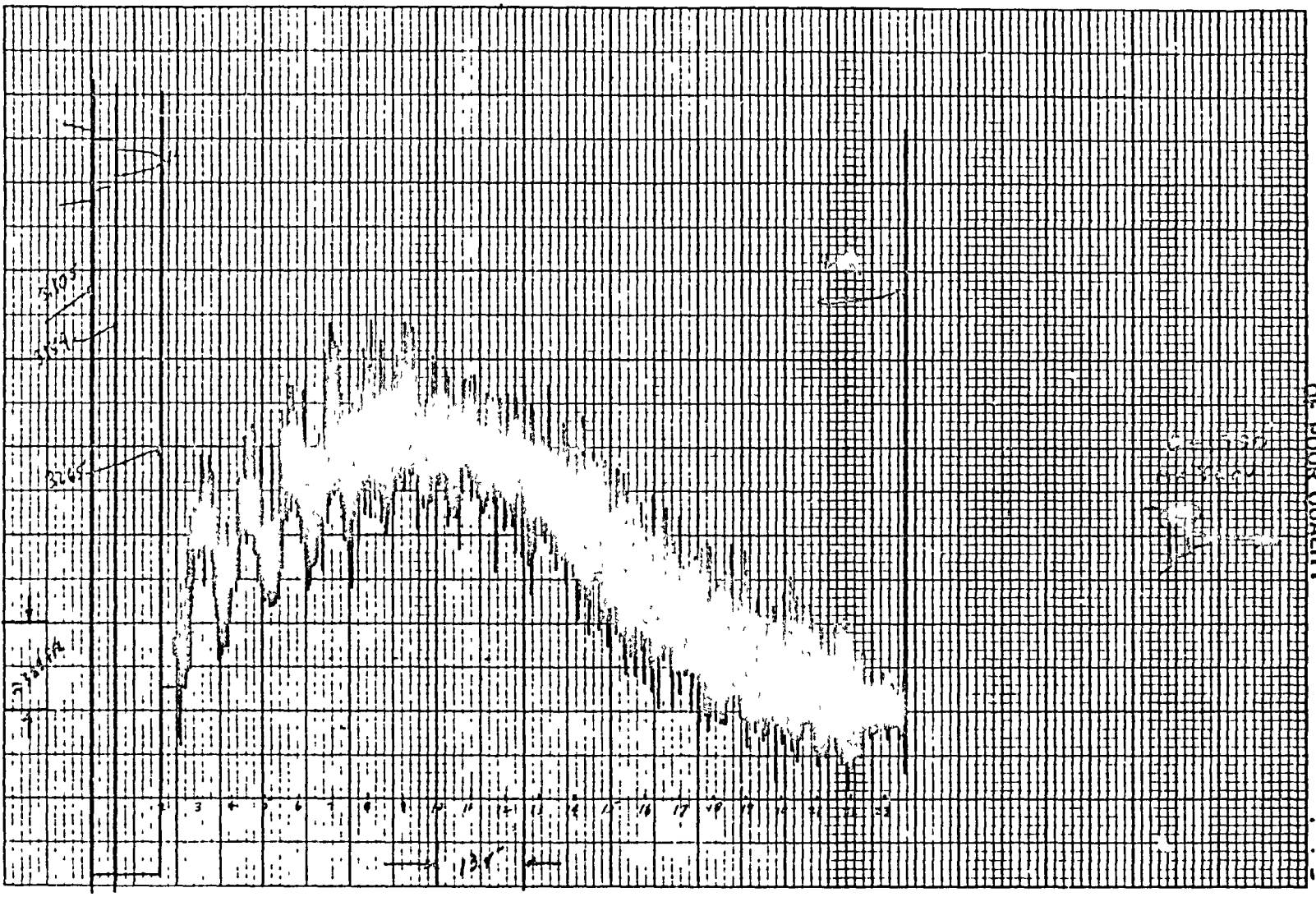


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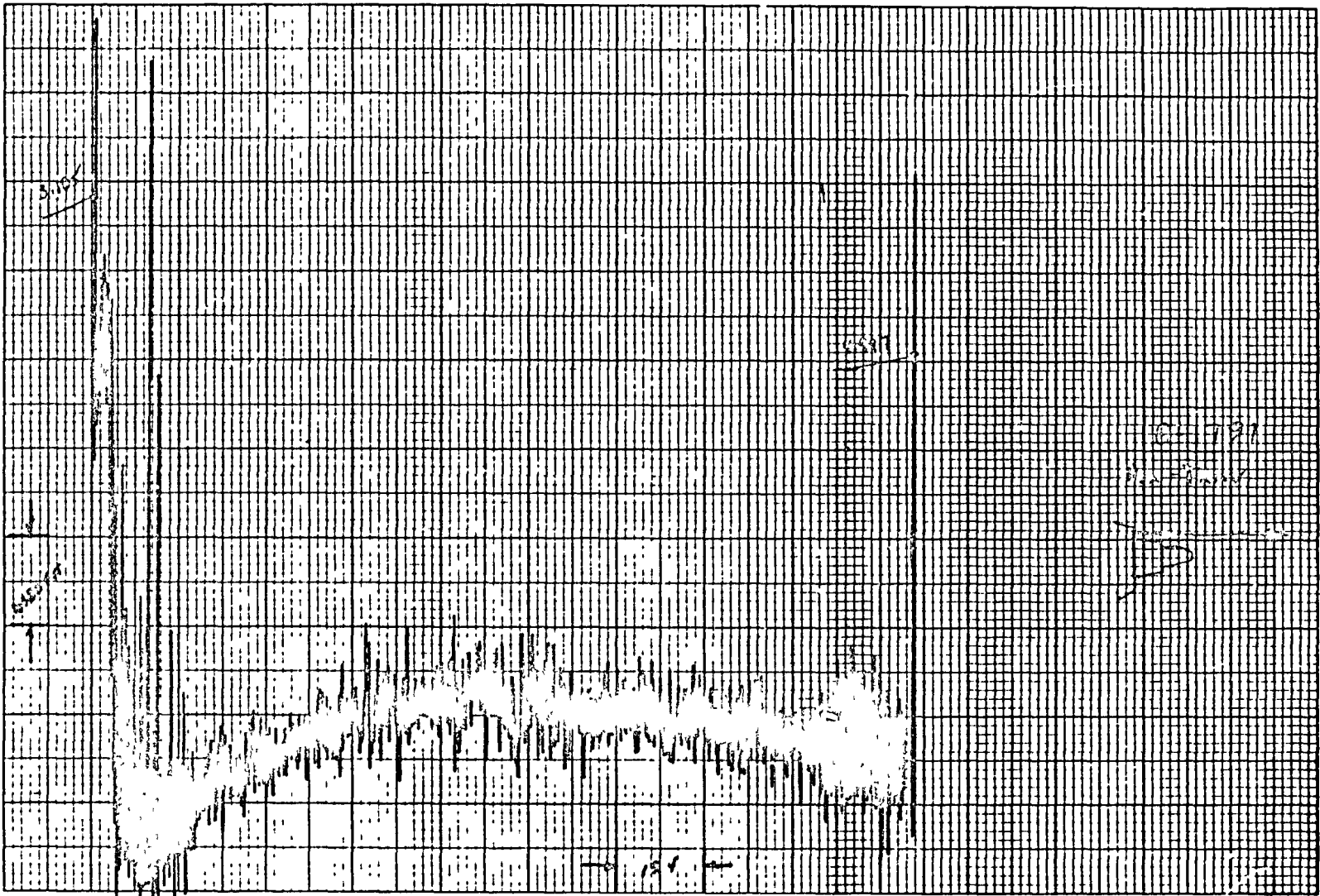


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TEST POINT 204

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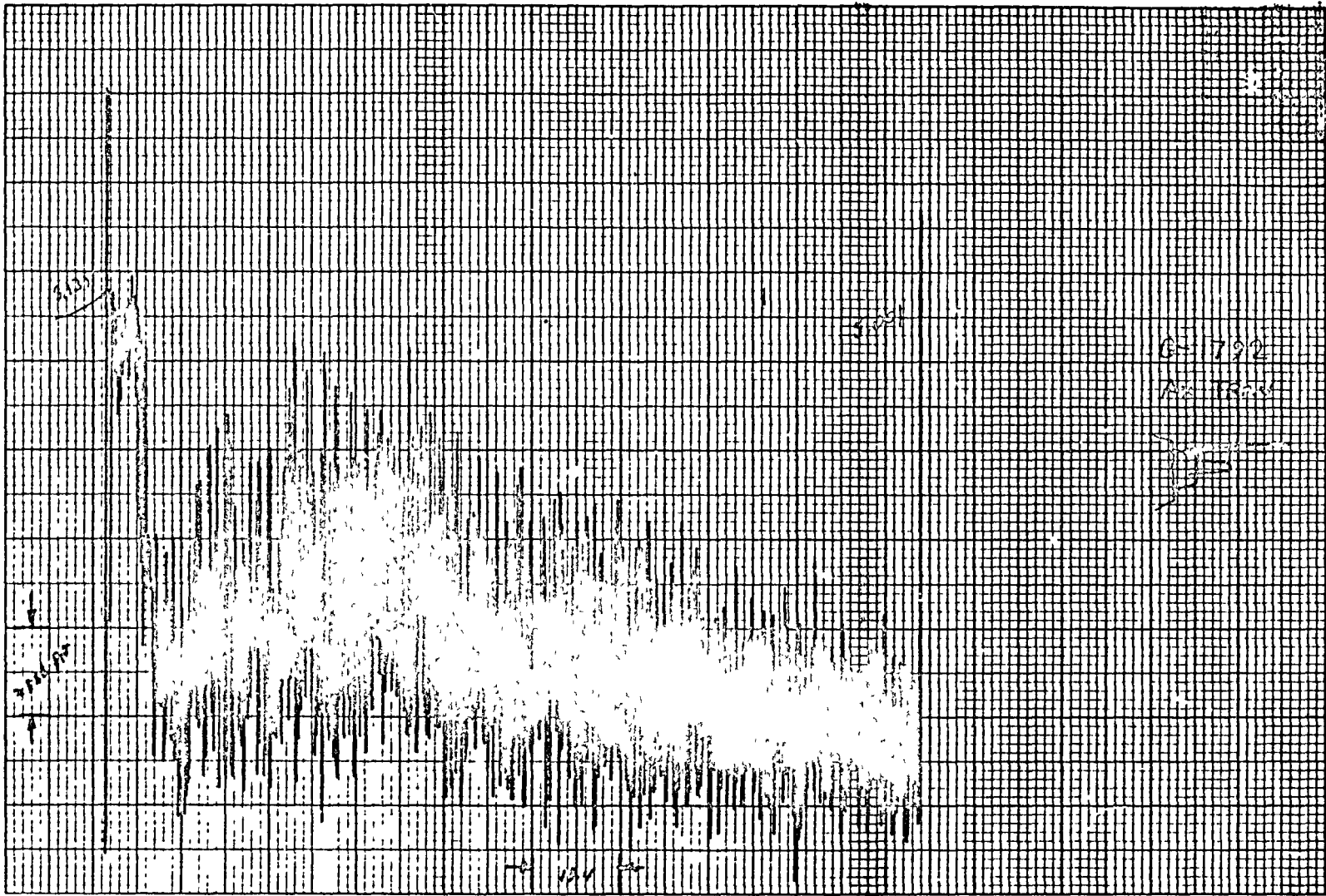


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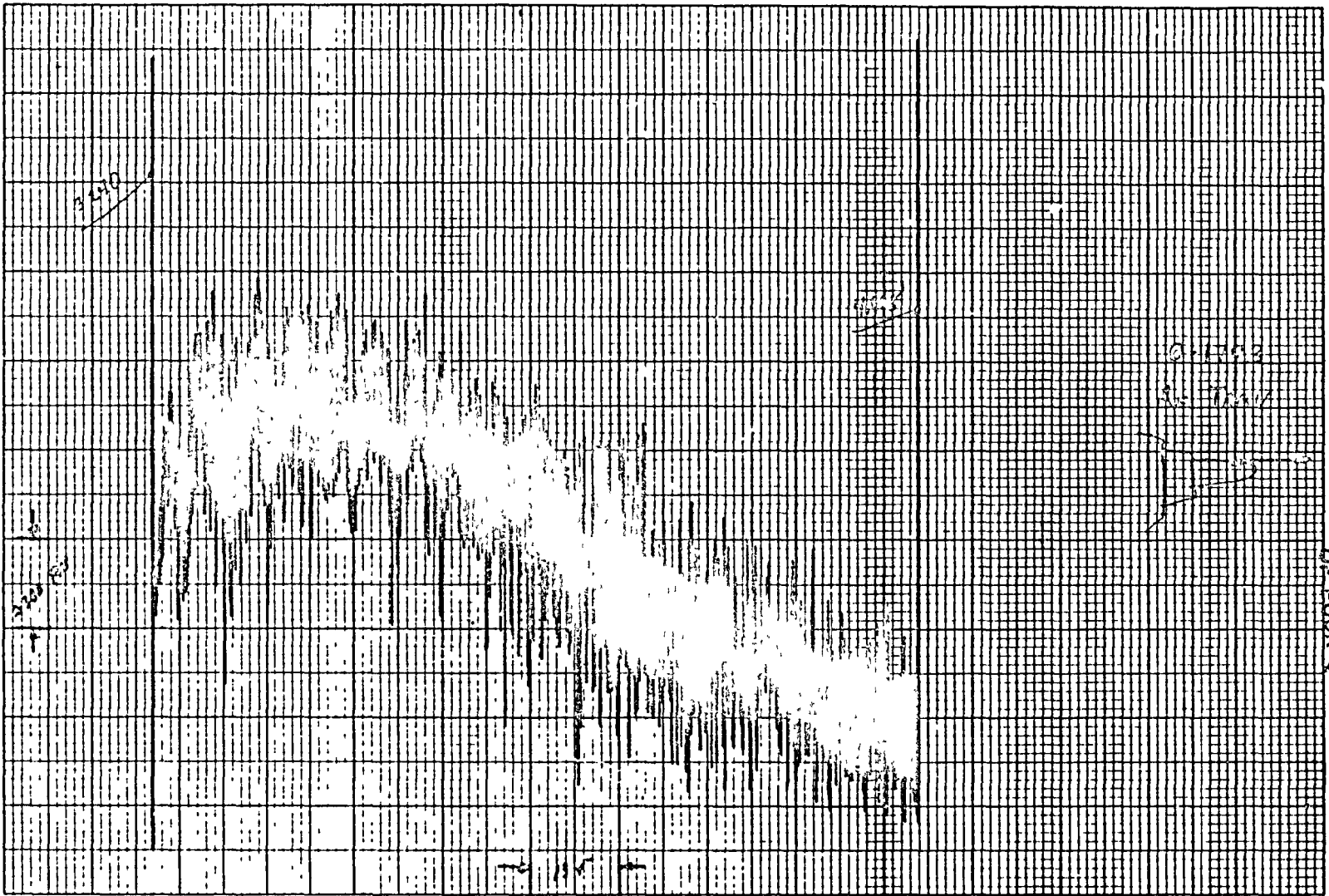


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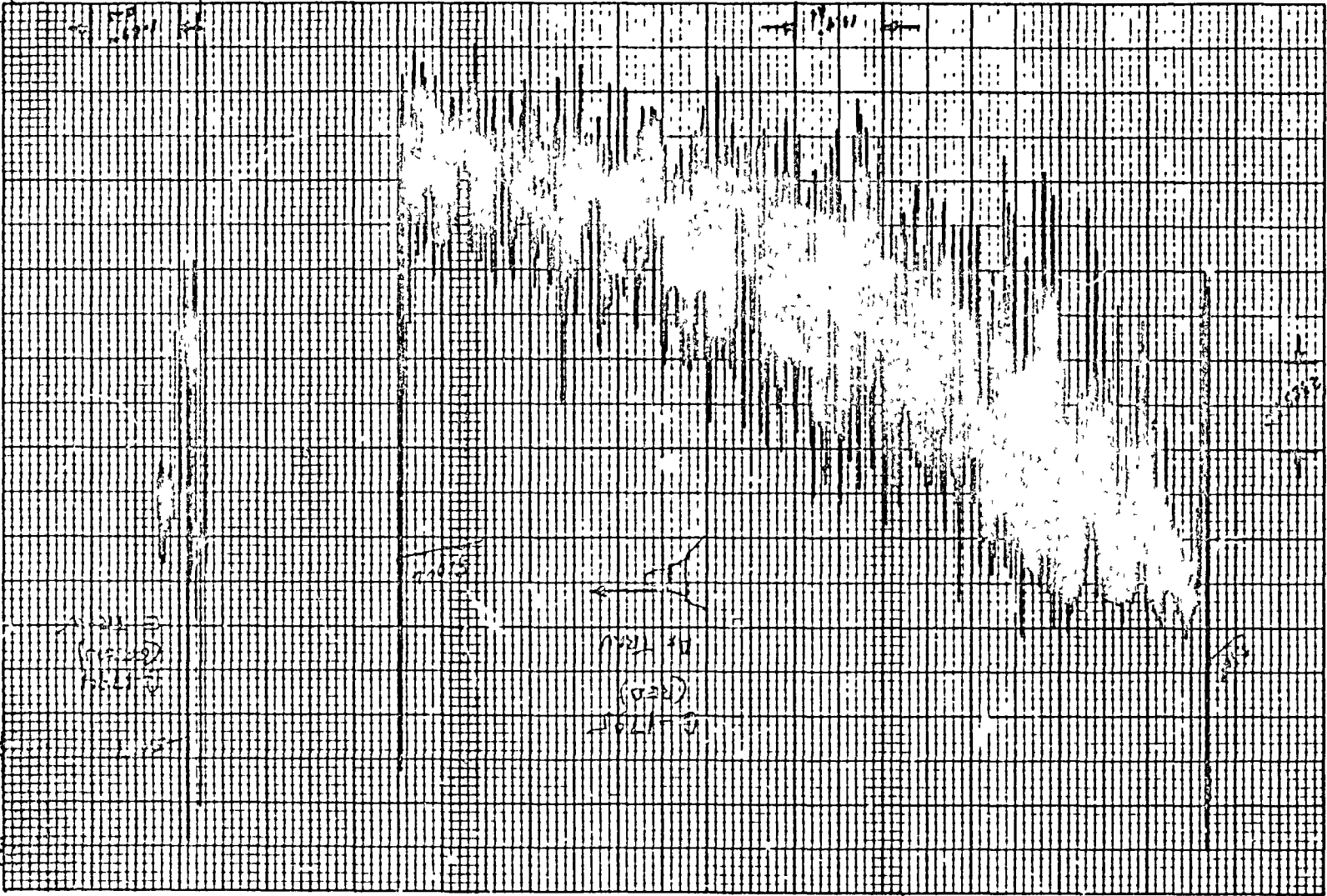


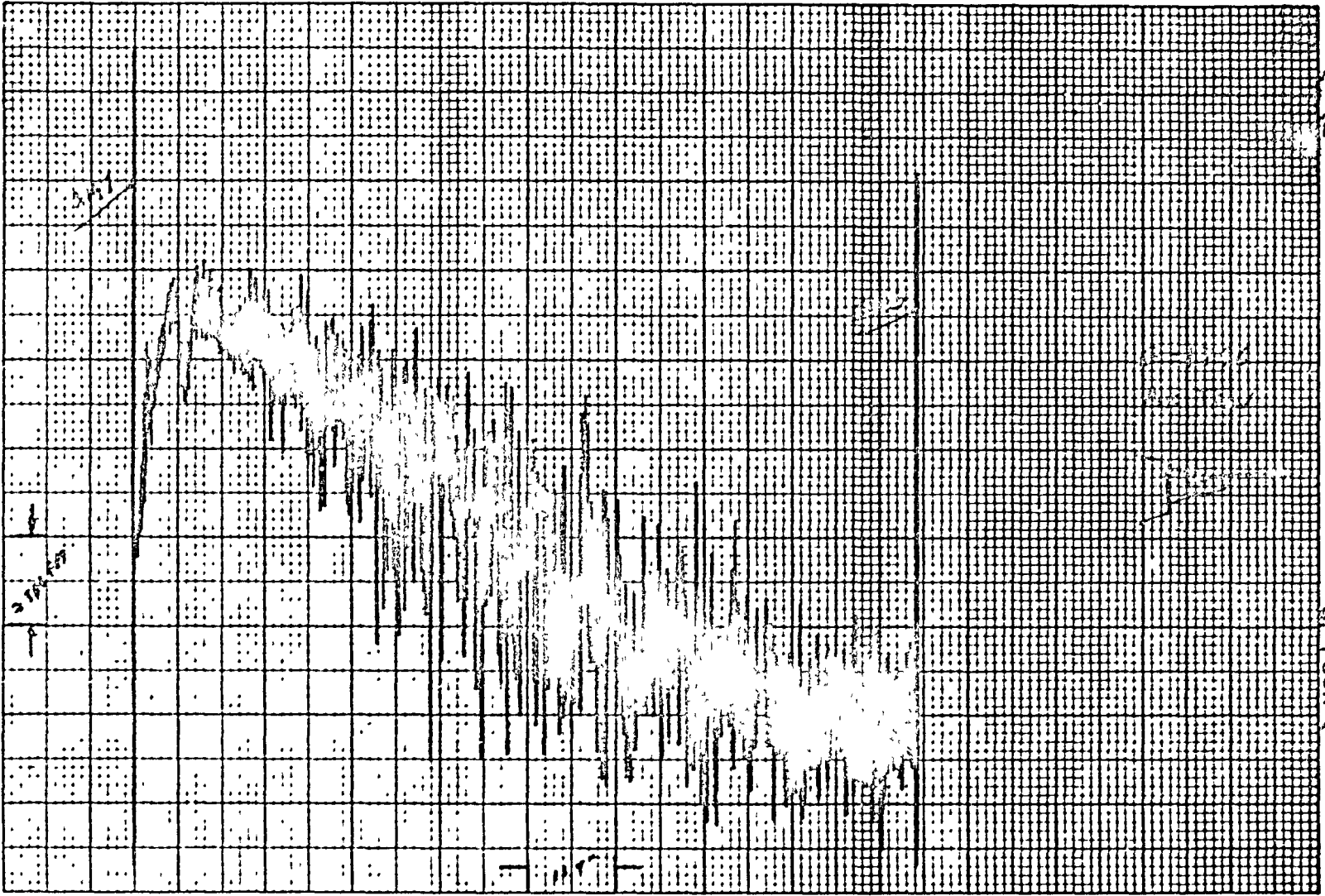
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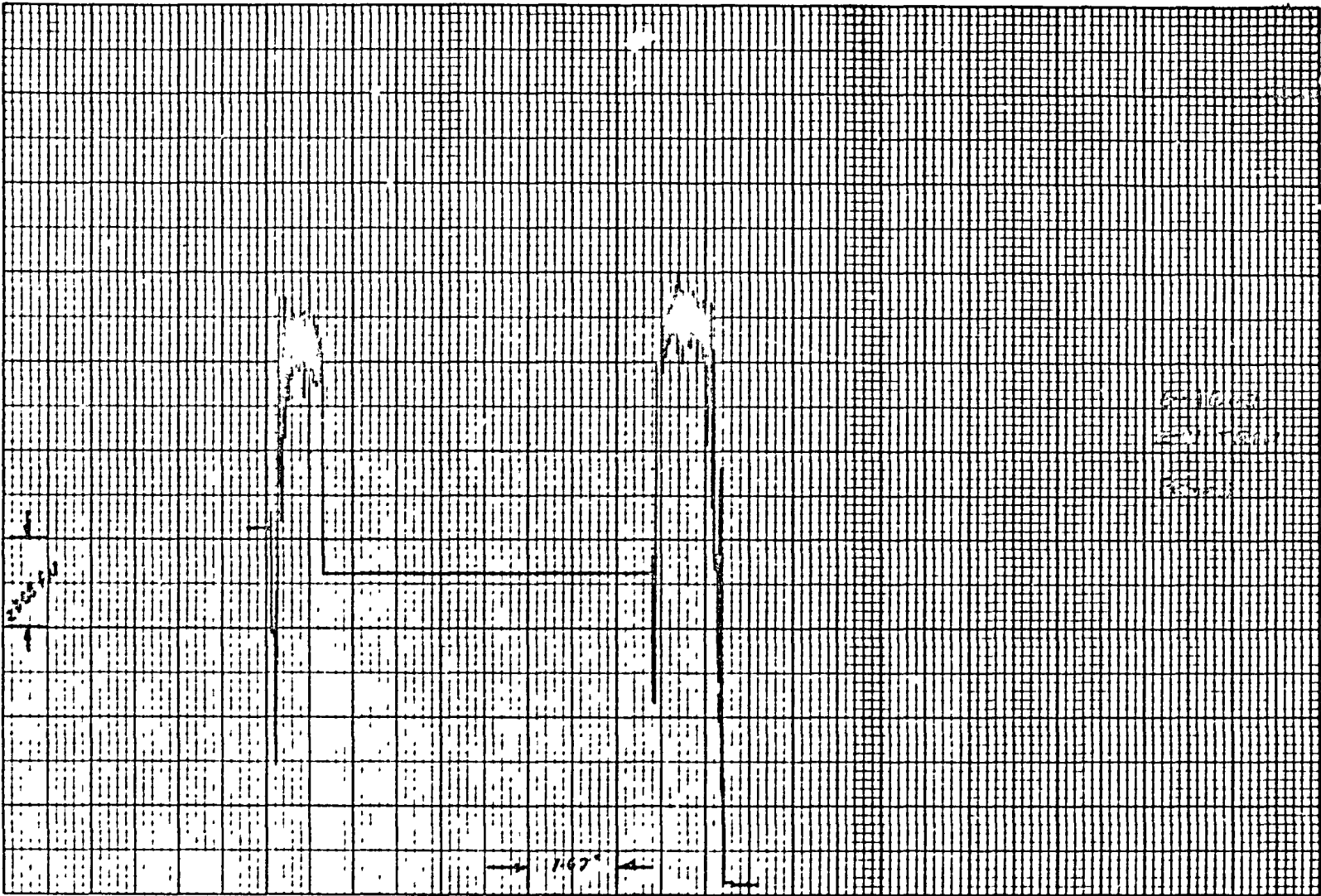
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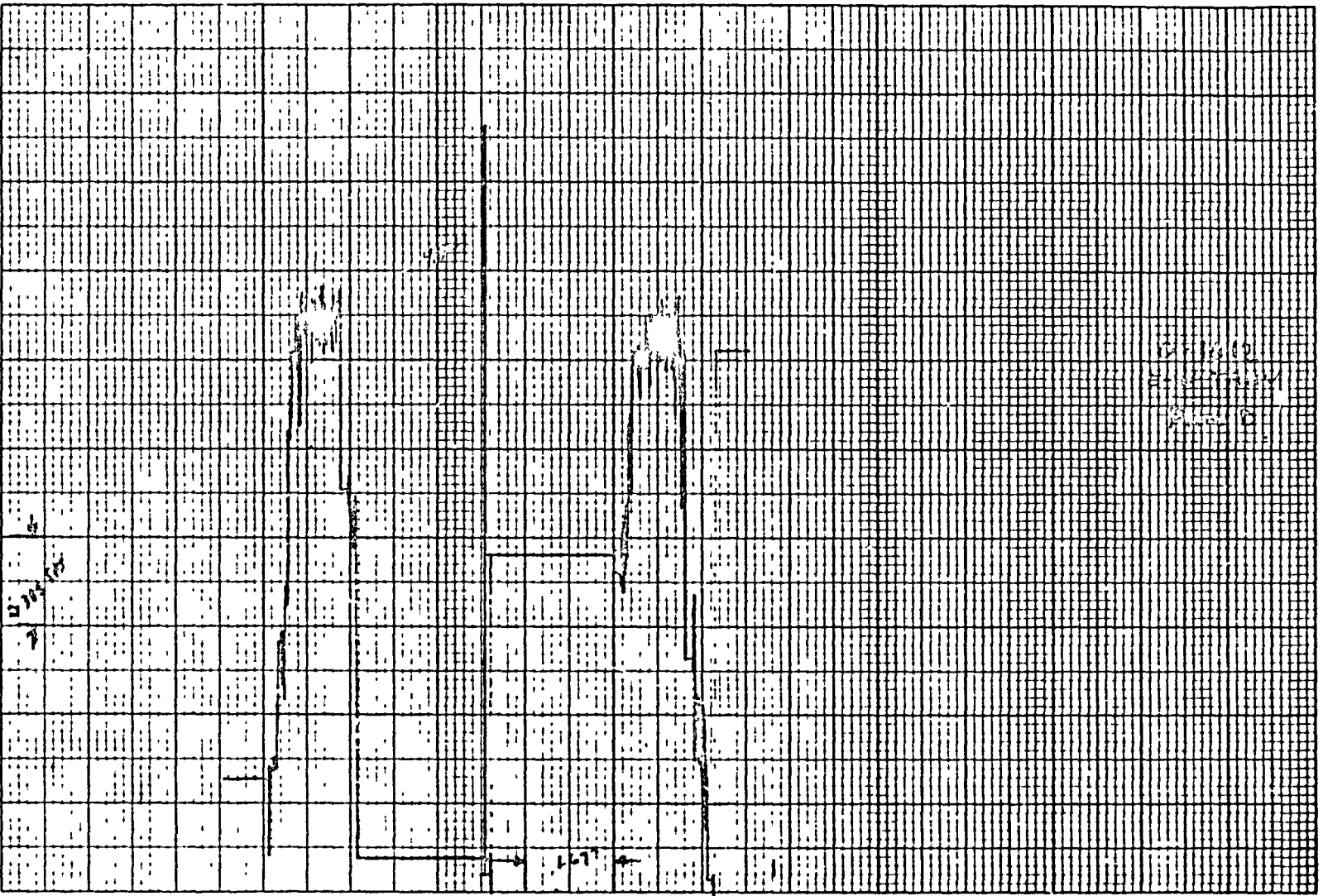


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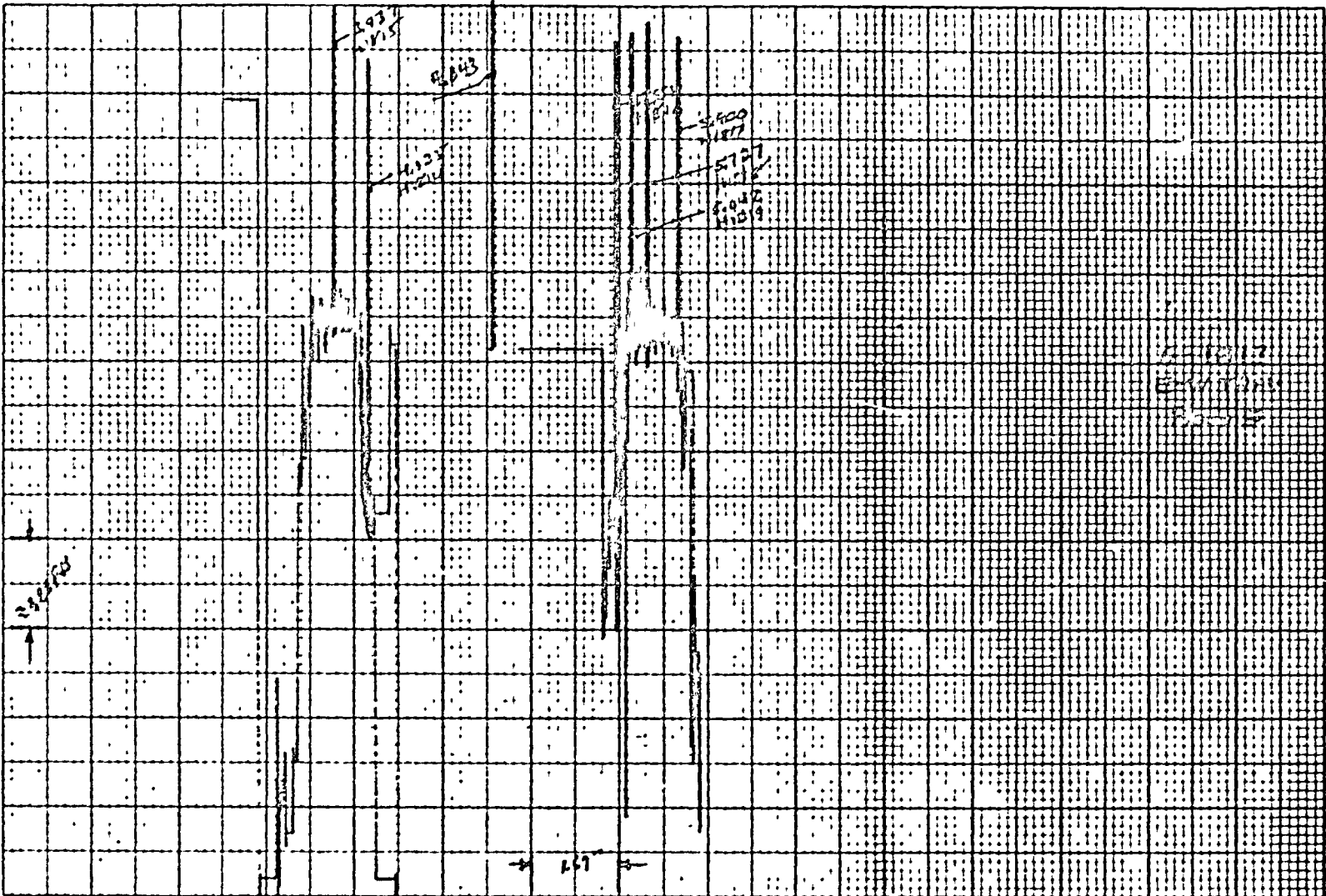




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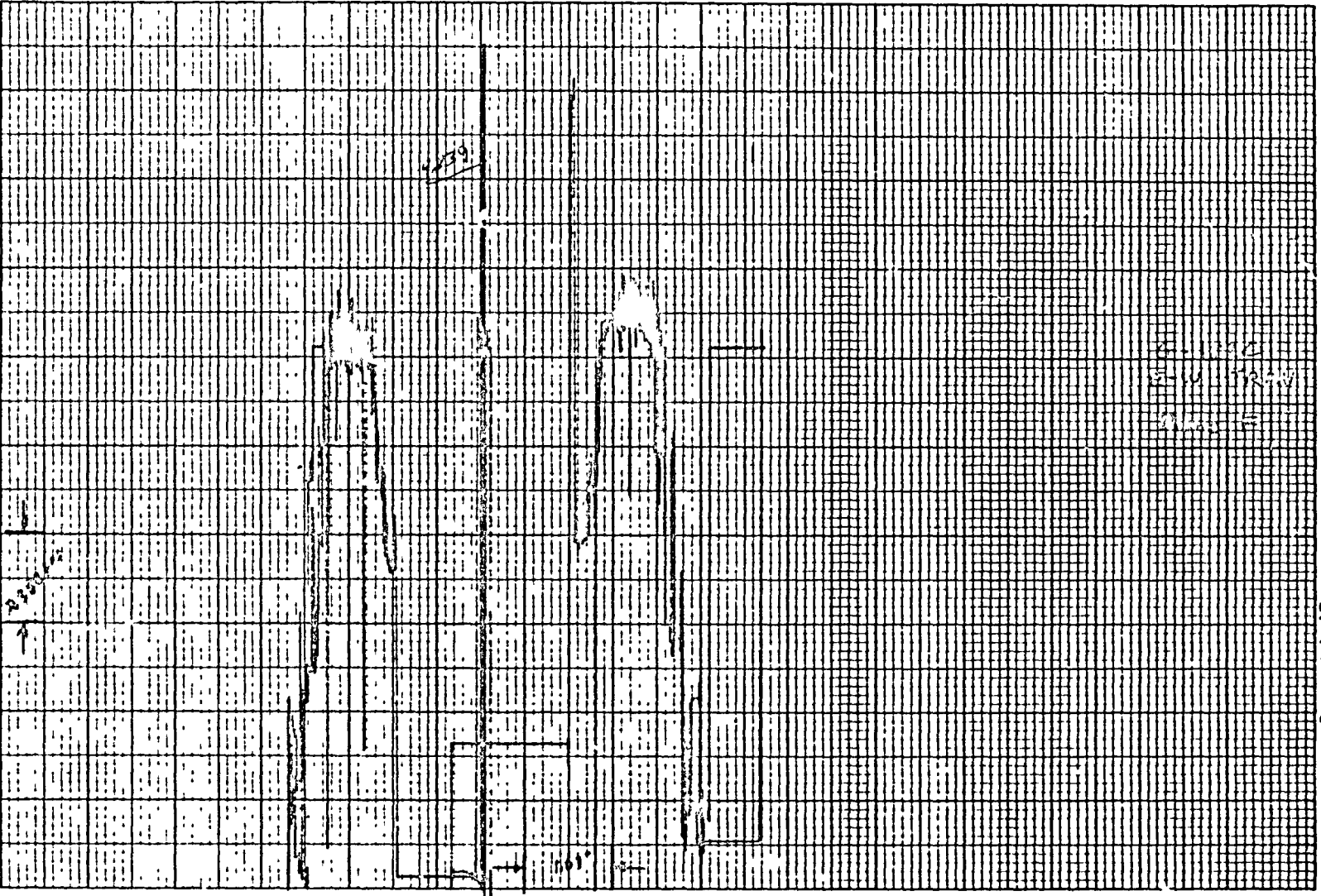






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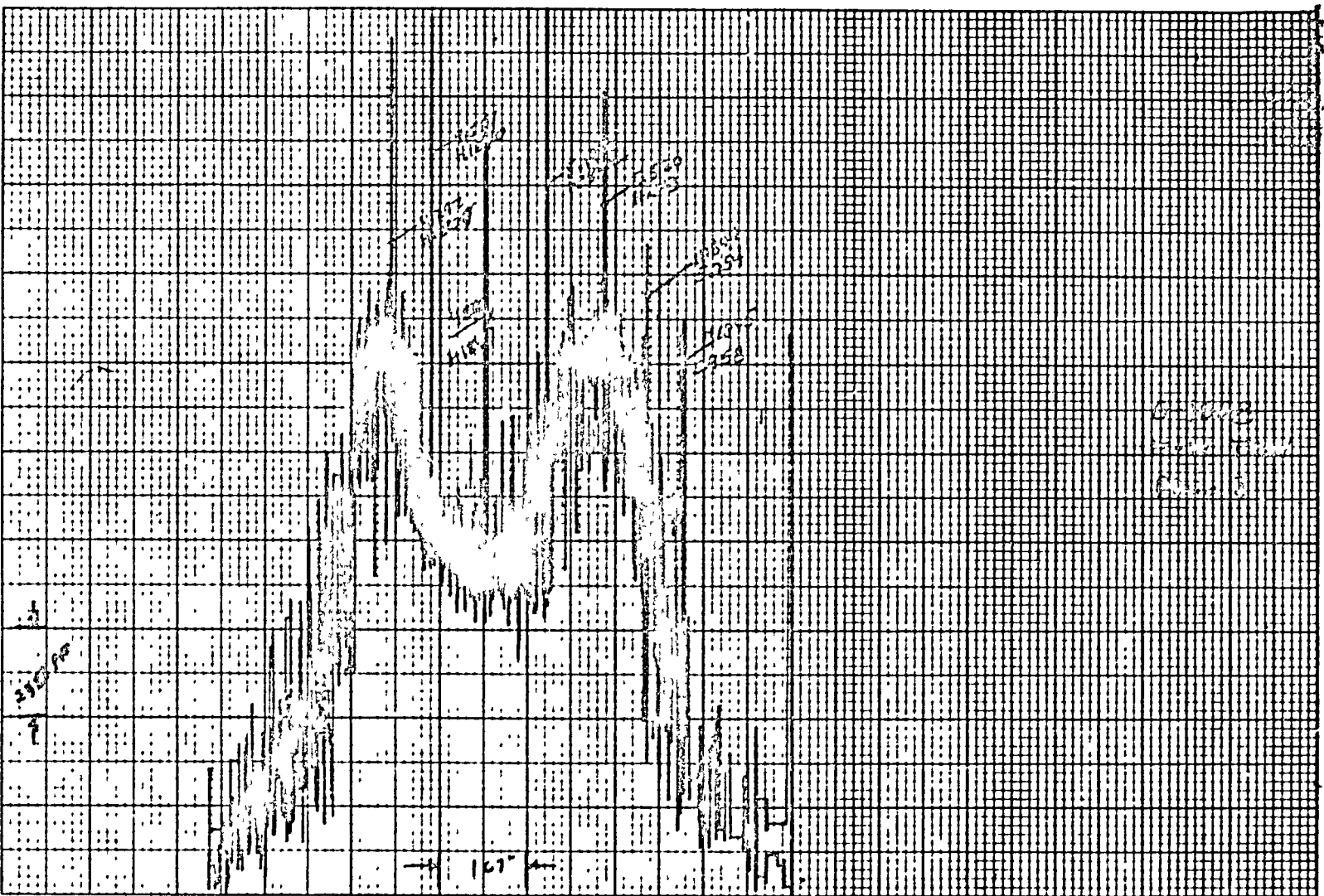
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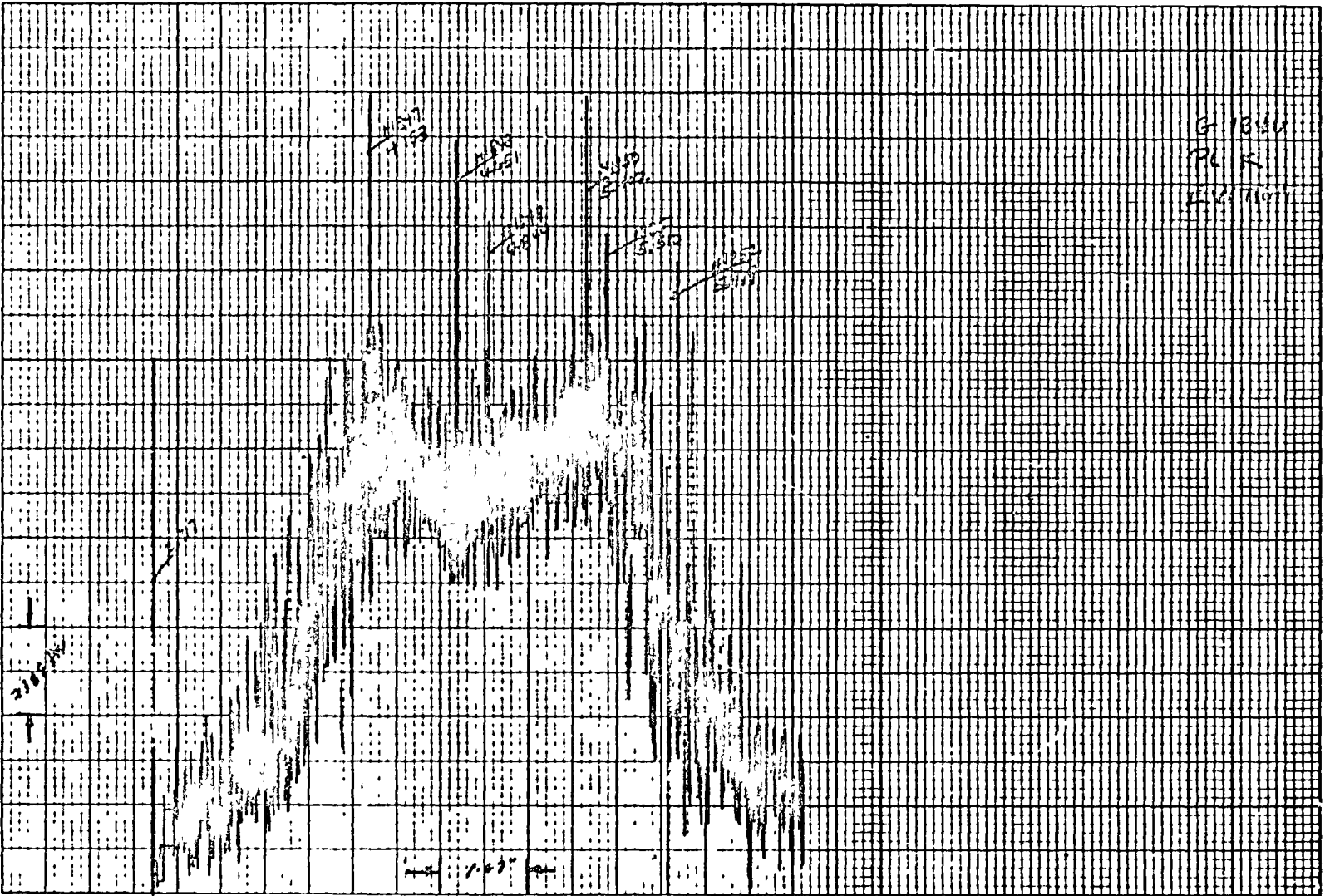


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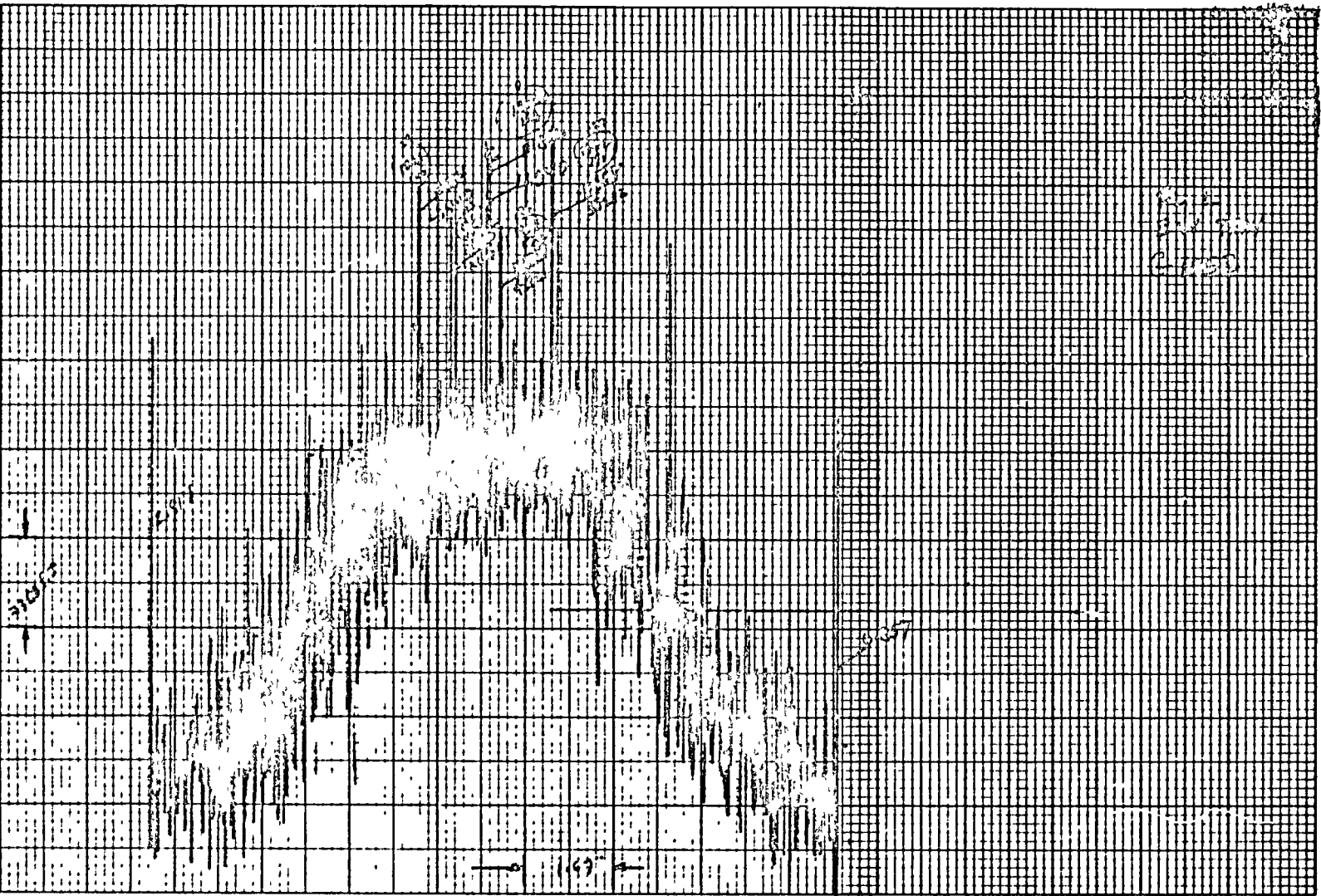


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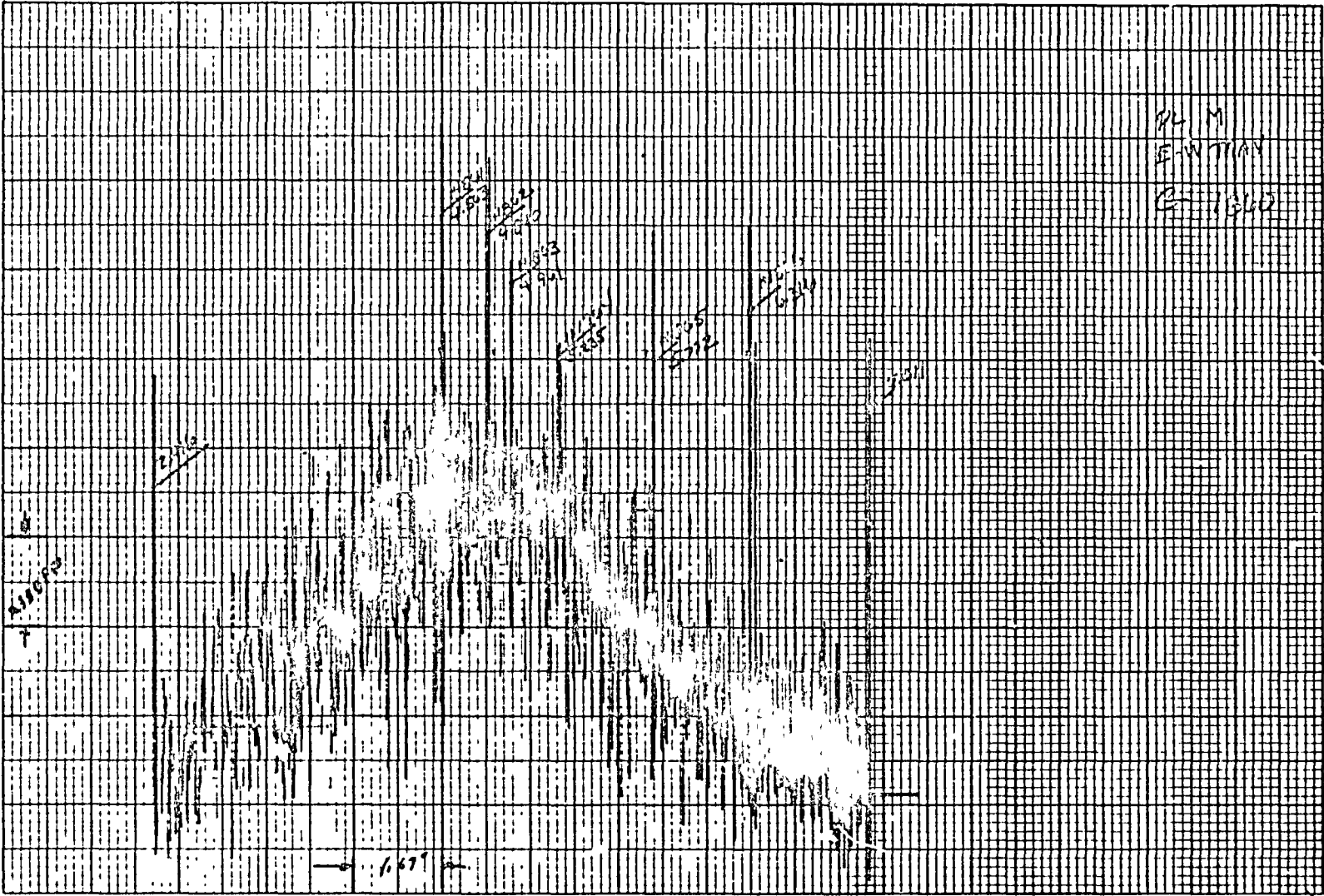


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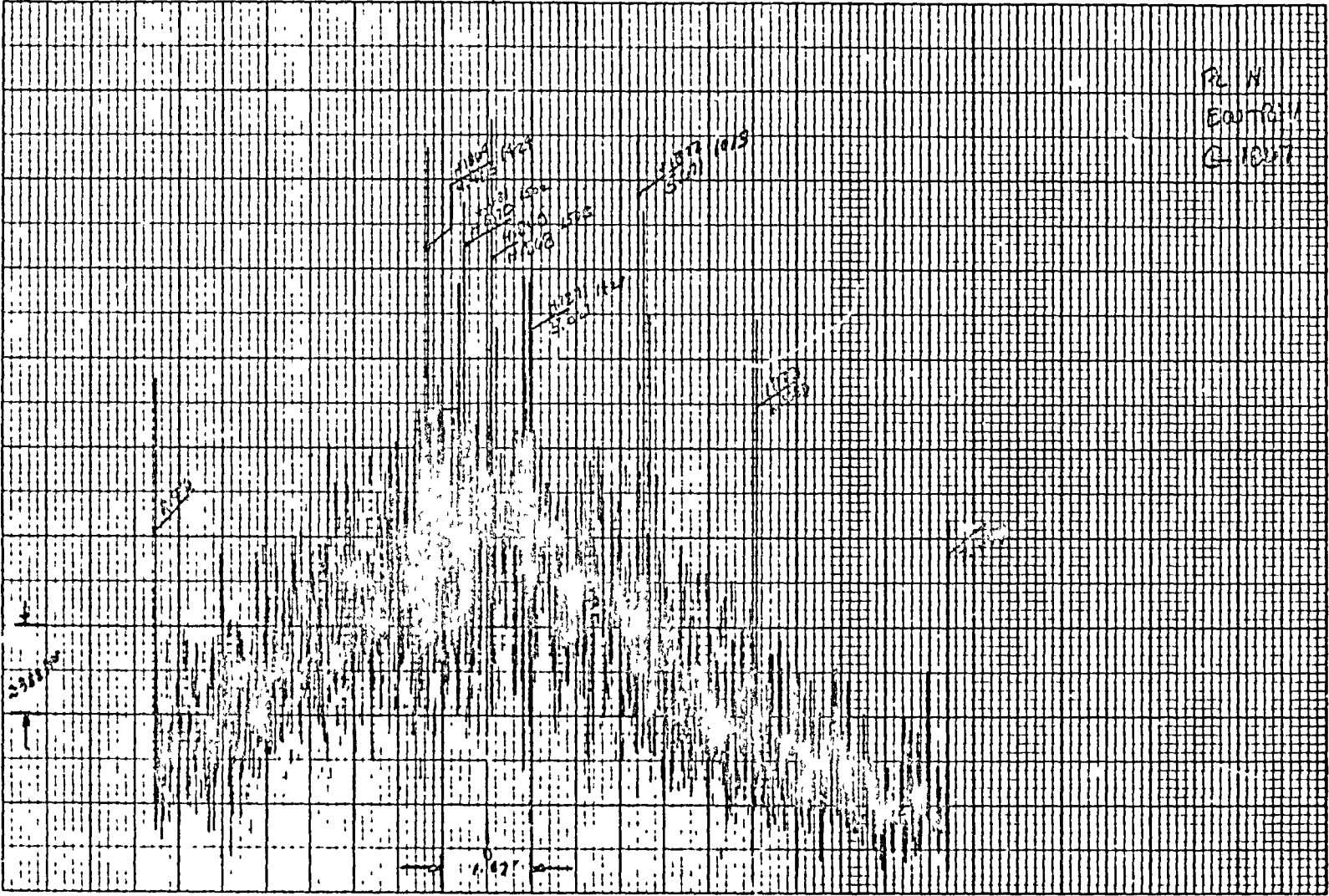




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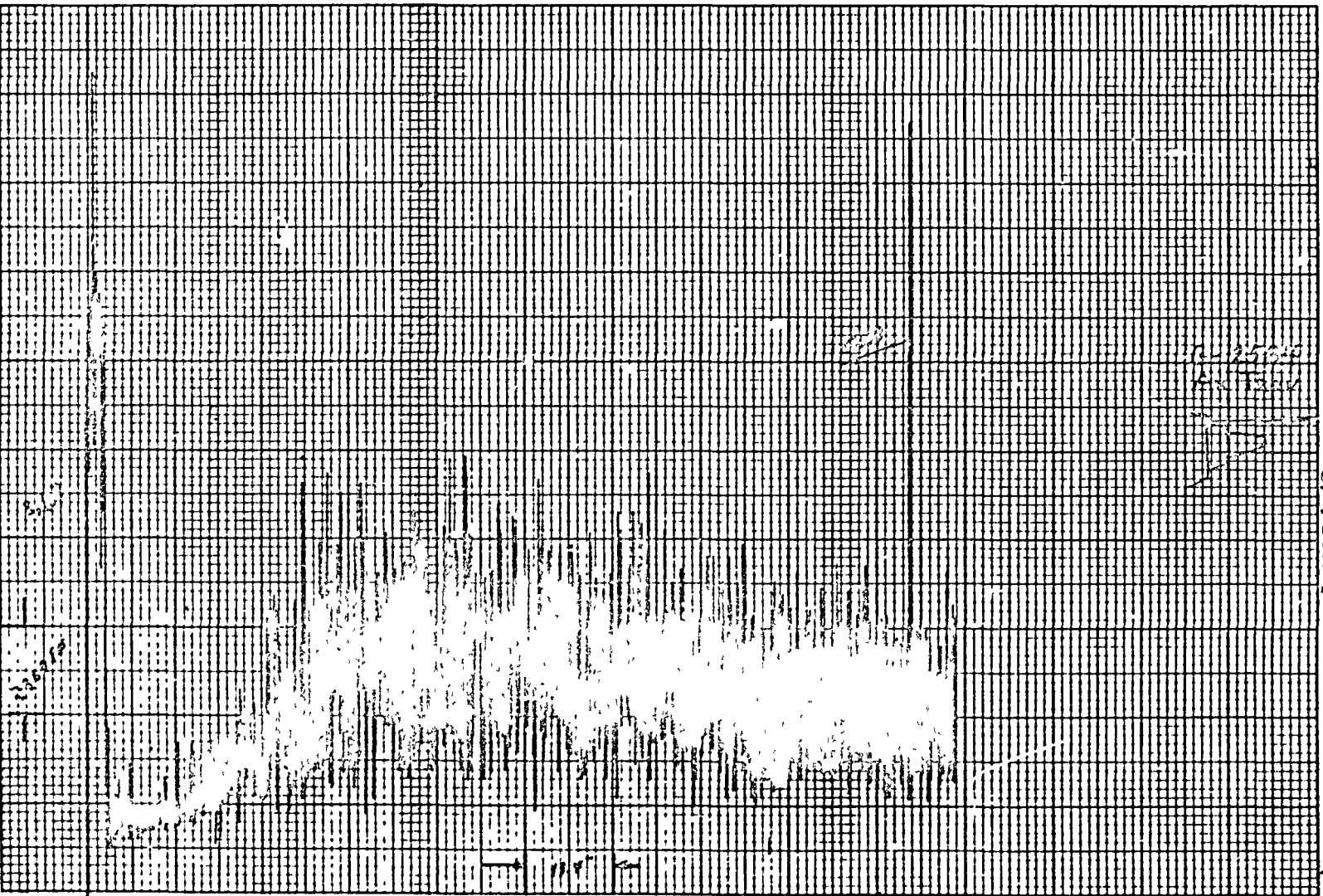




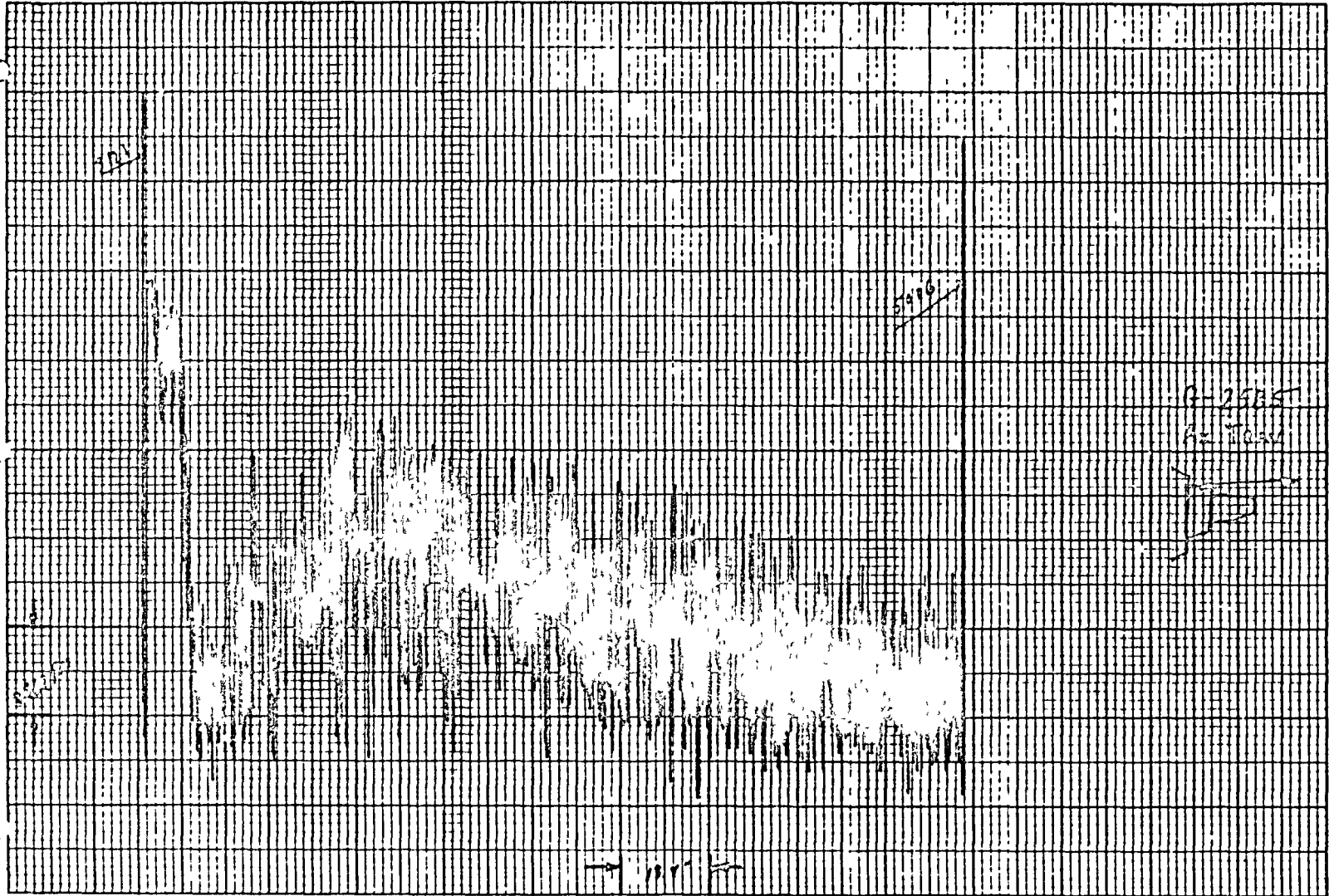
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MODEL 2  
TEST POINT 206

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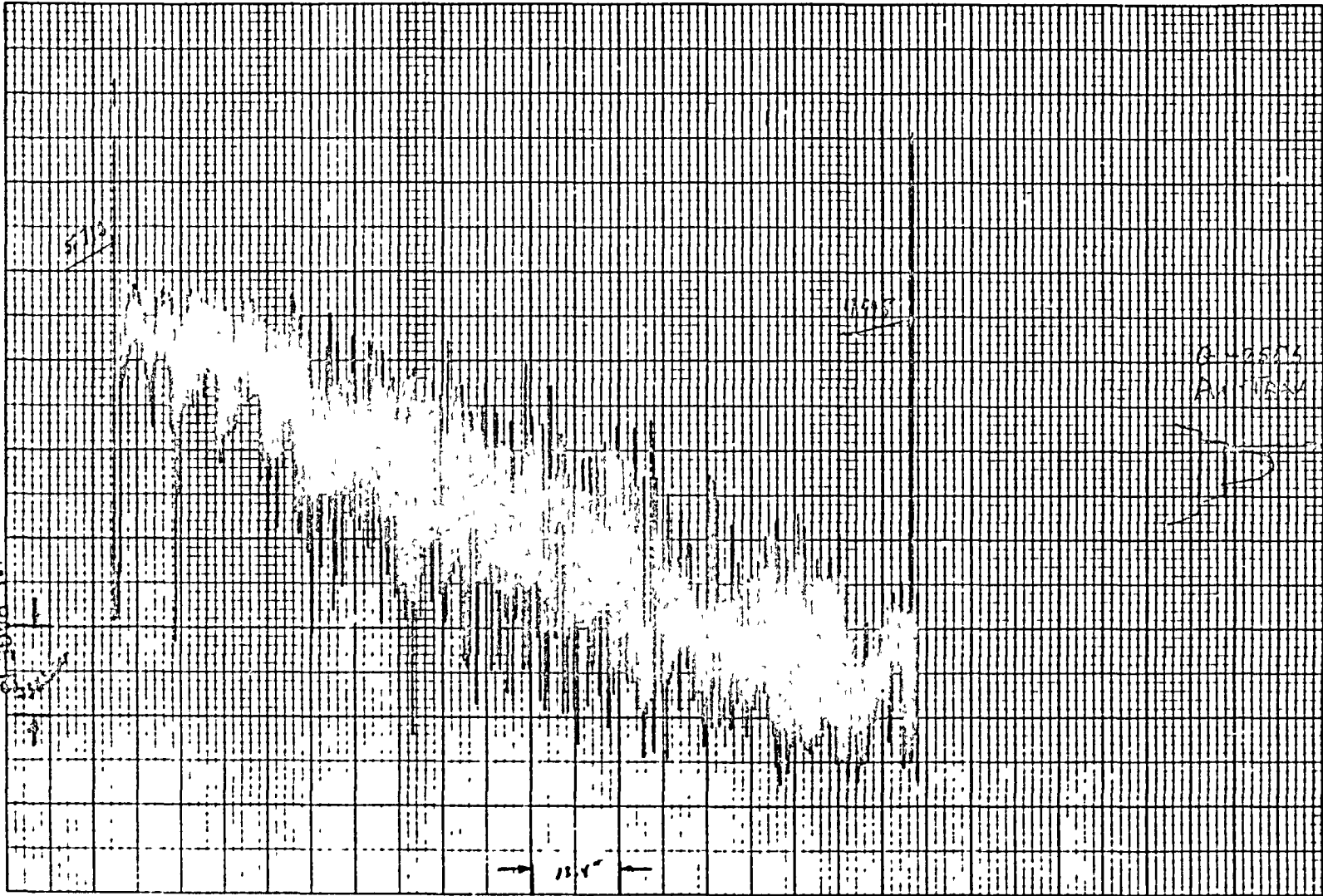
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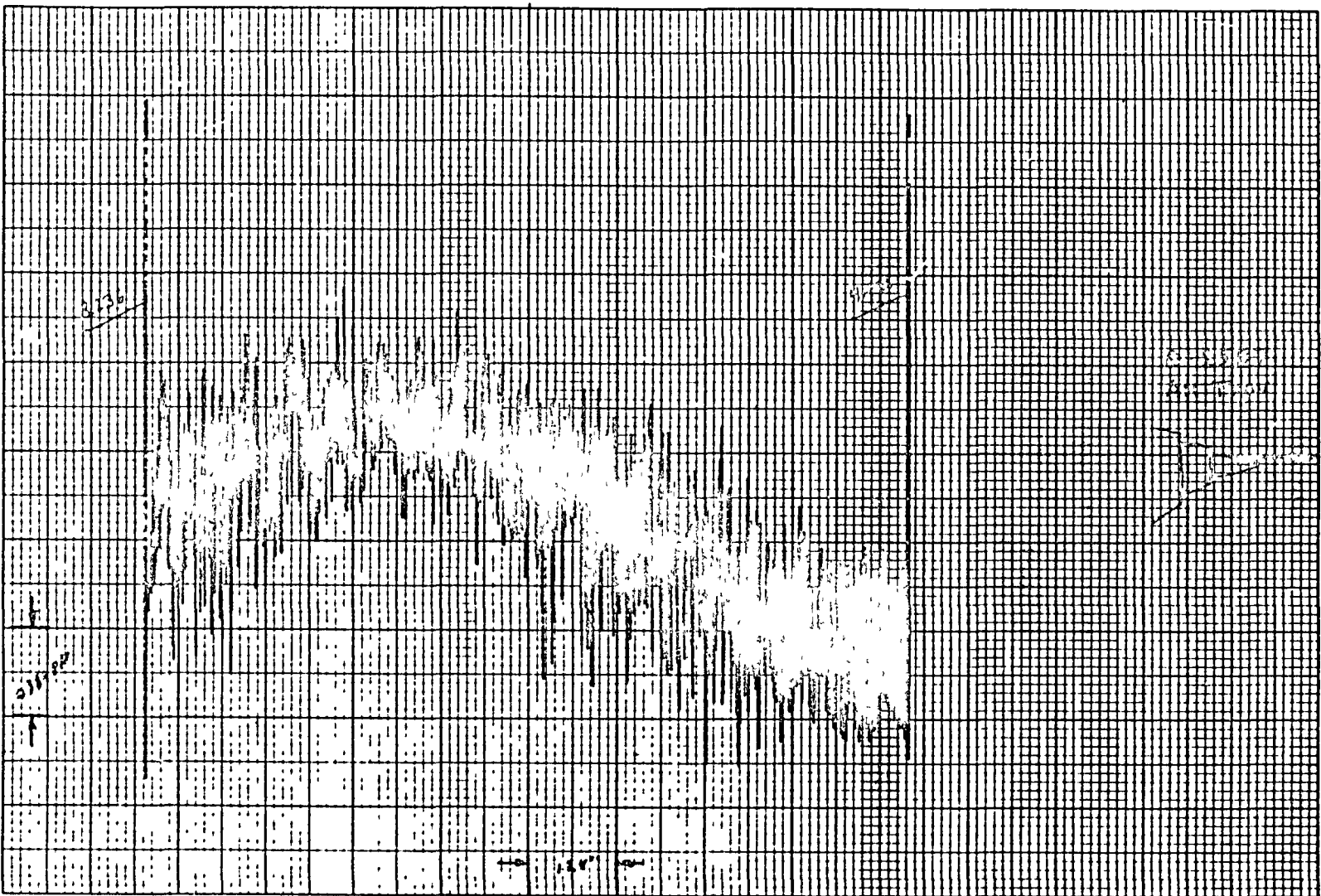


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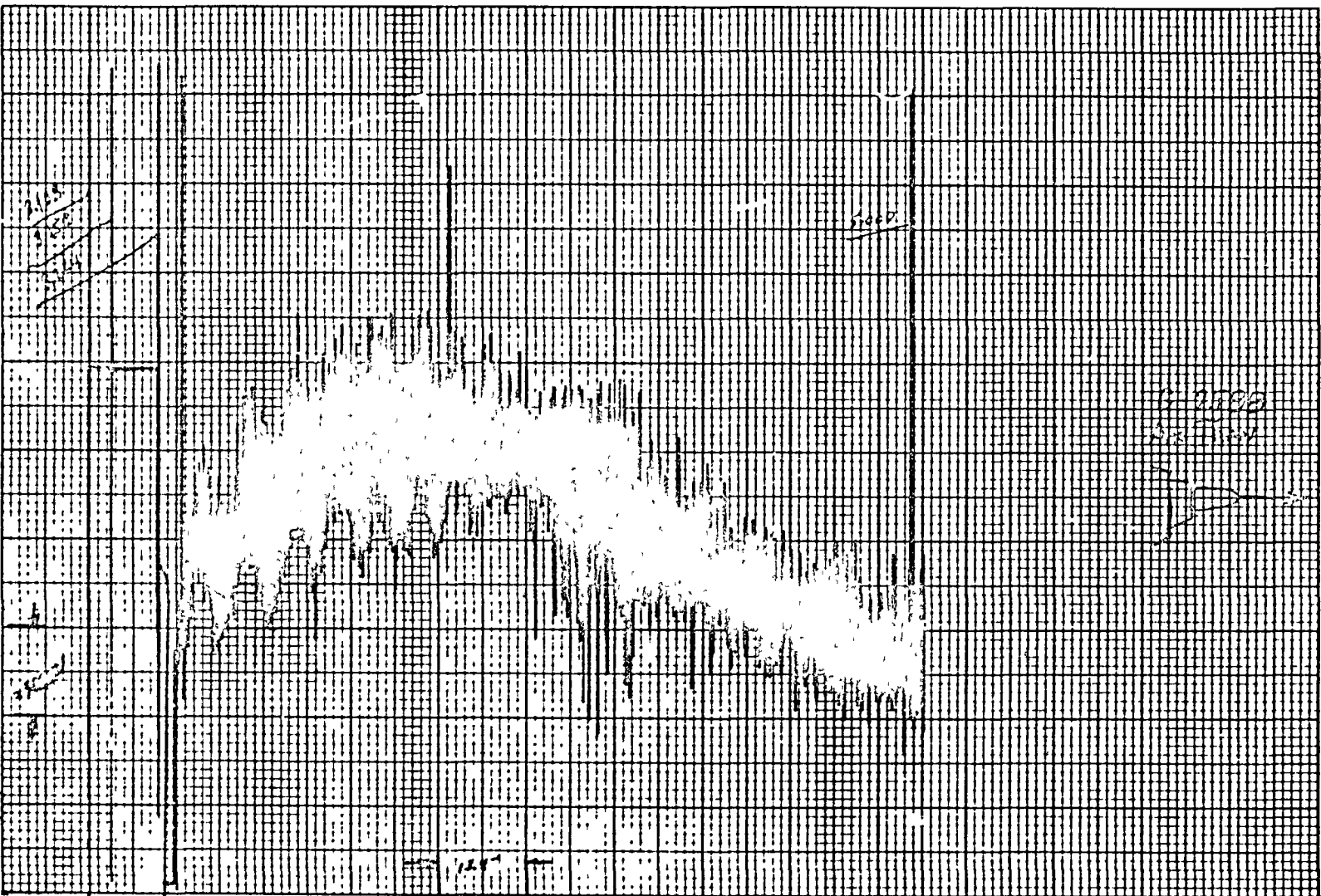
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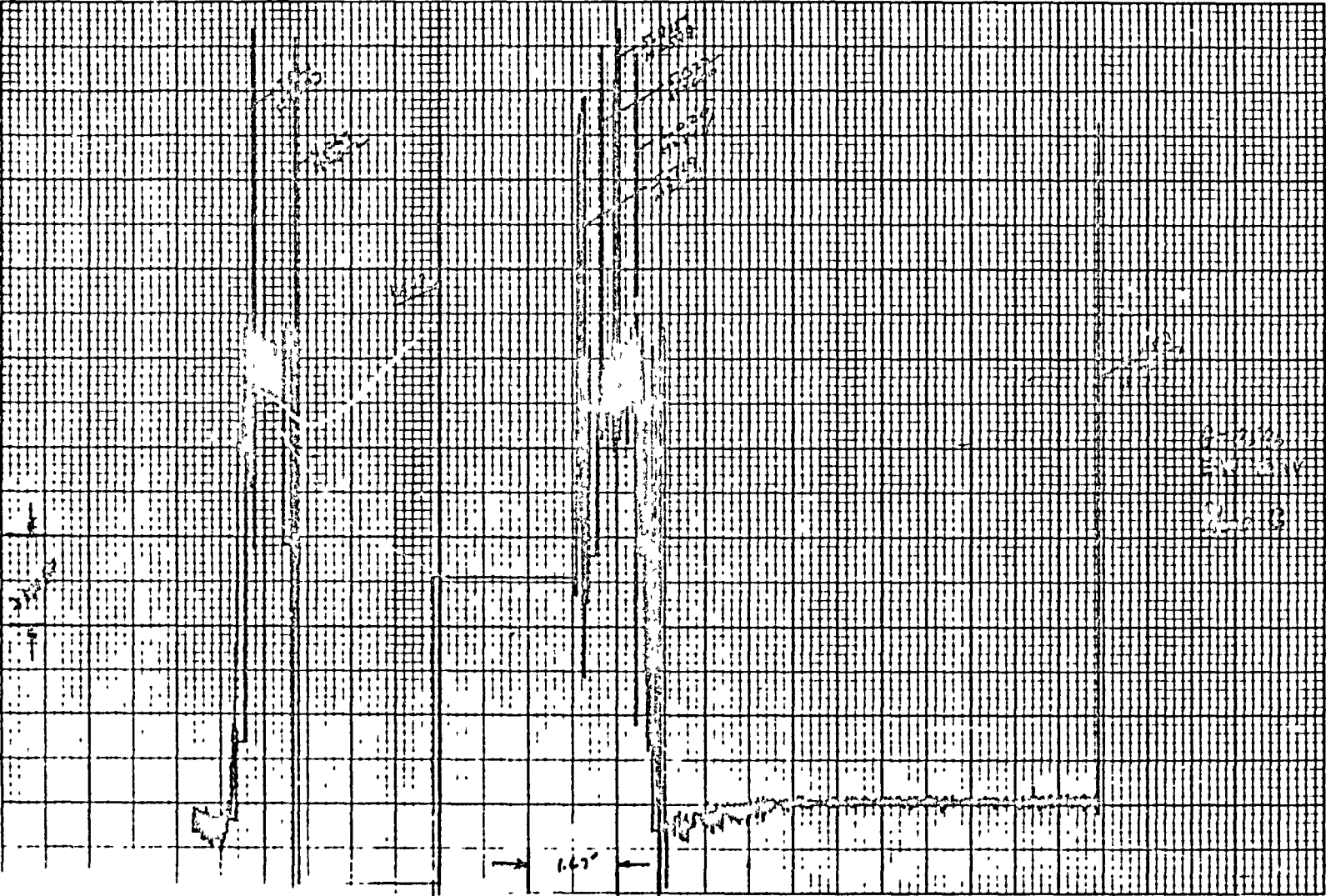




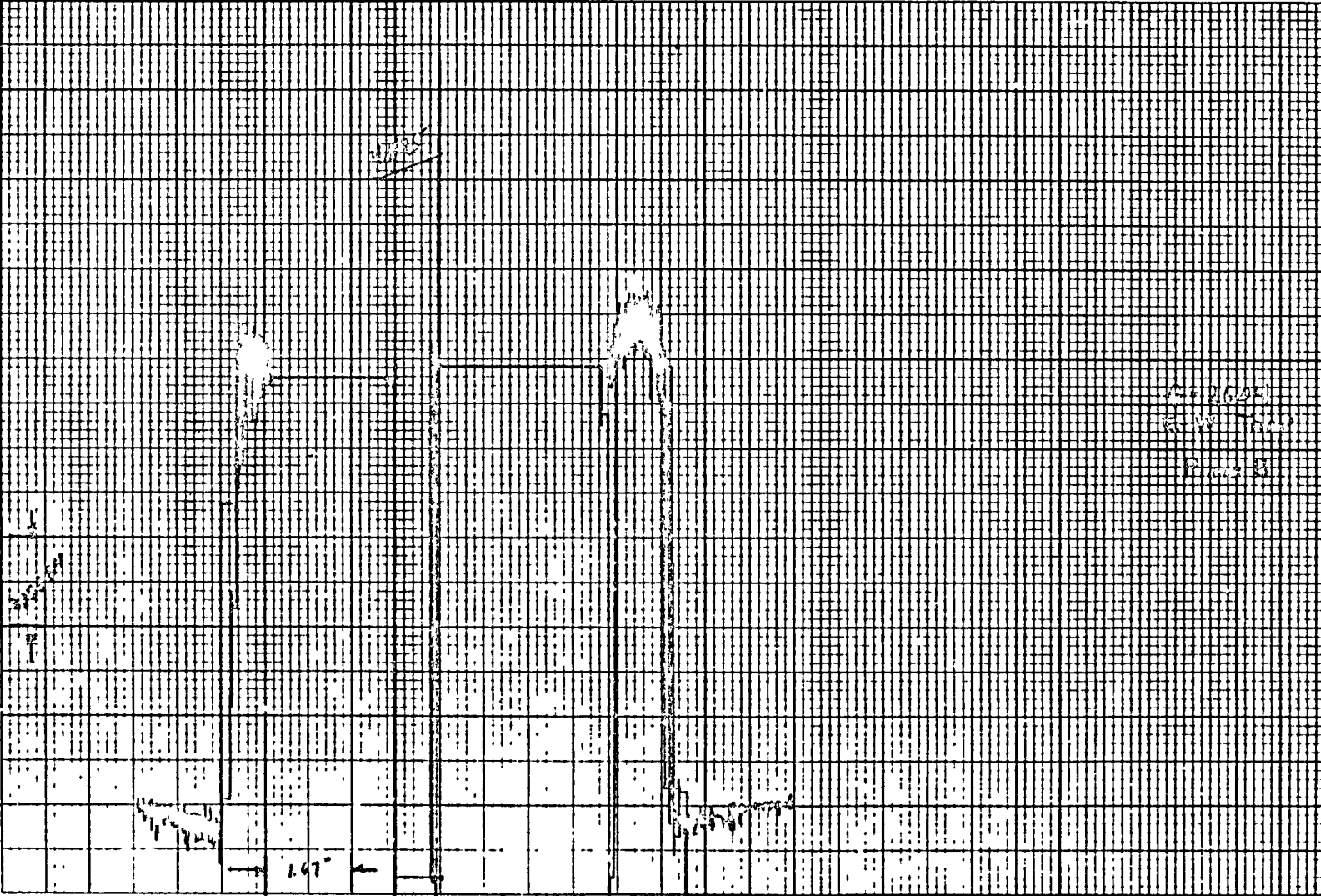
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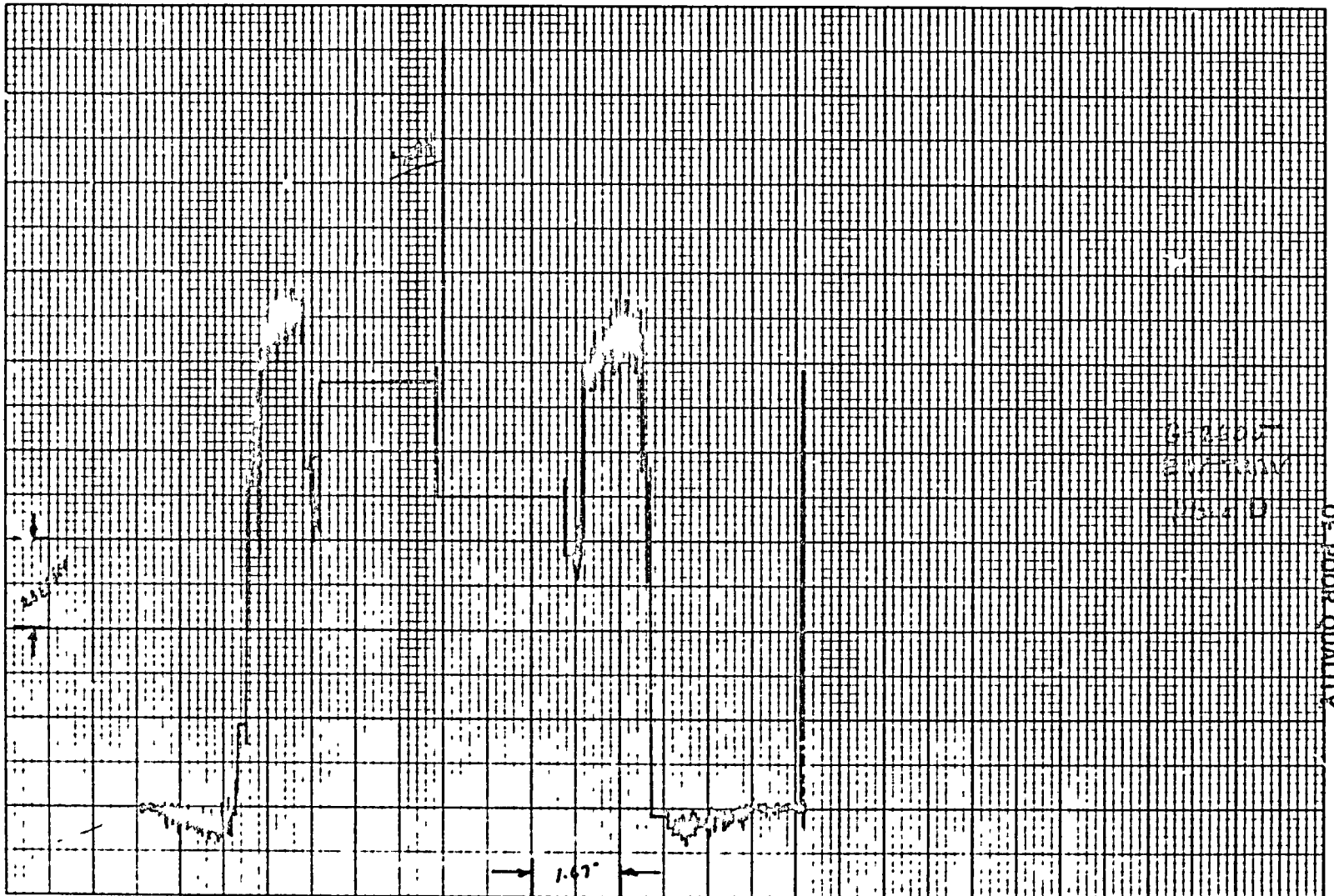


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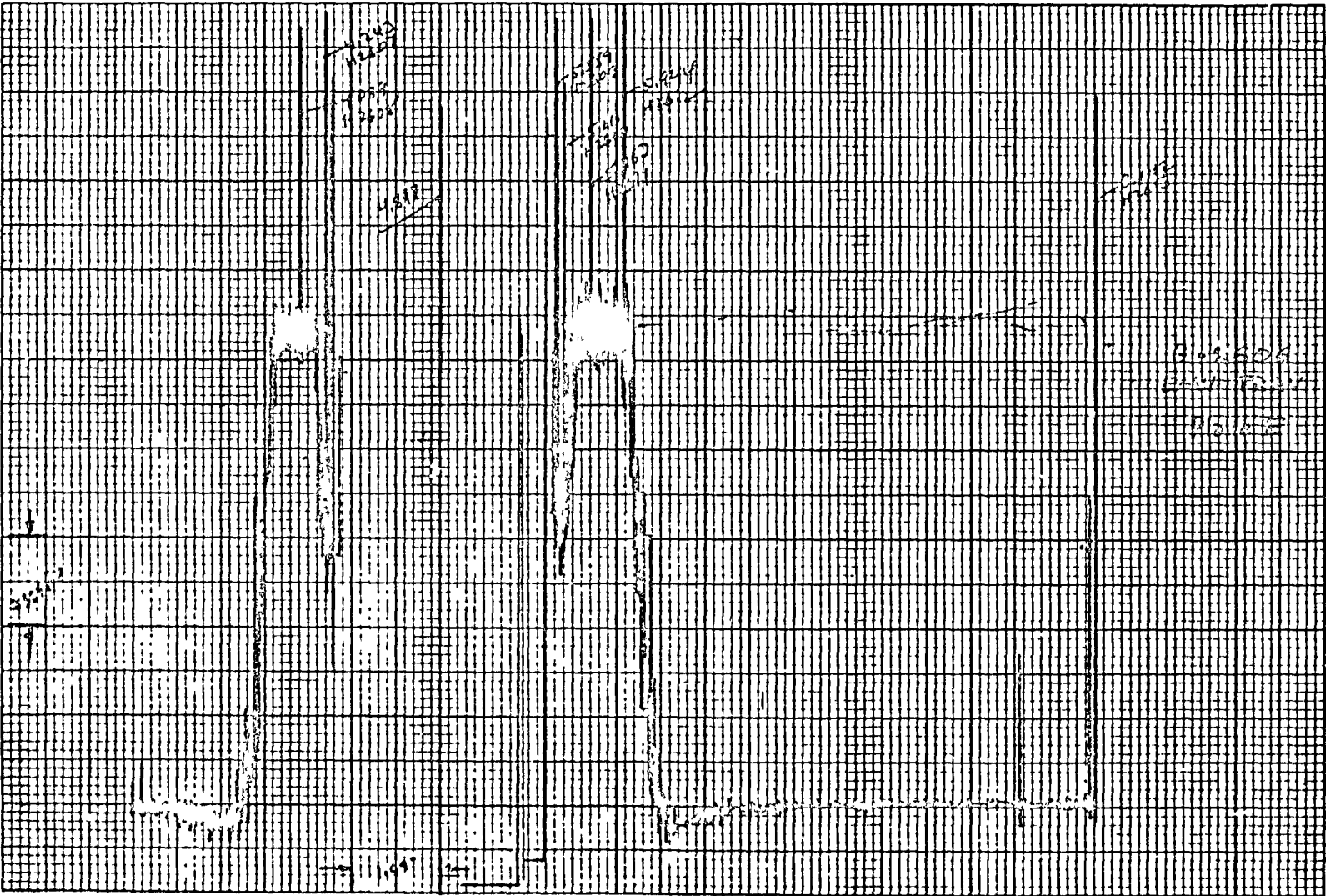
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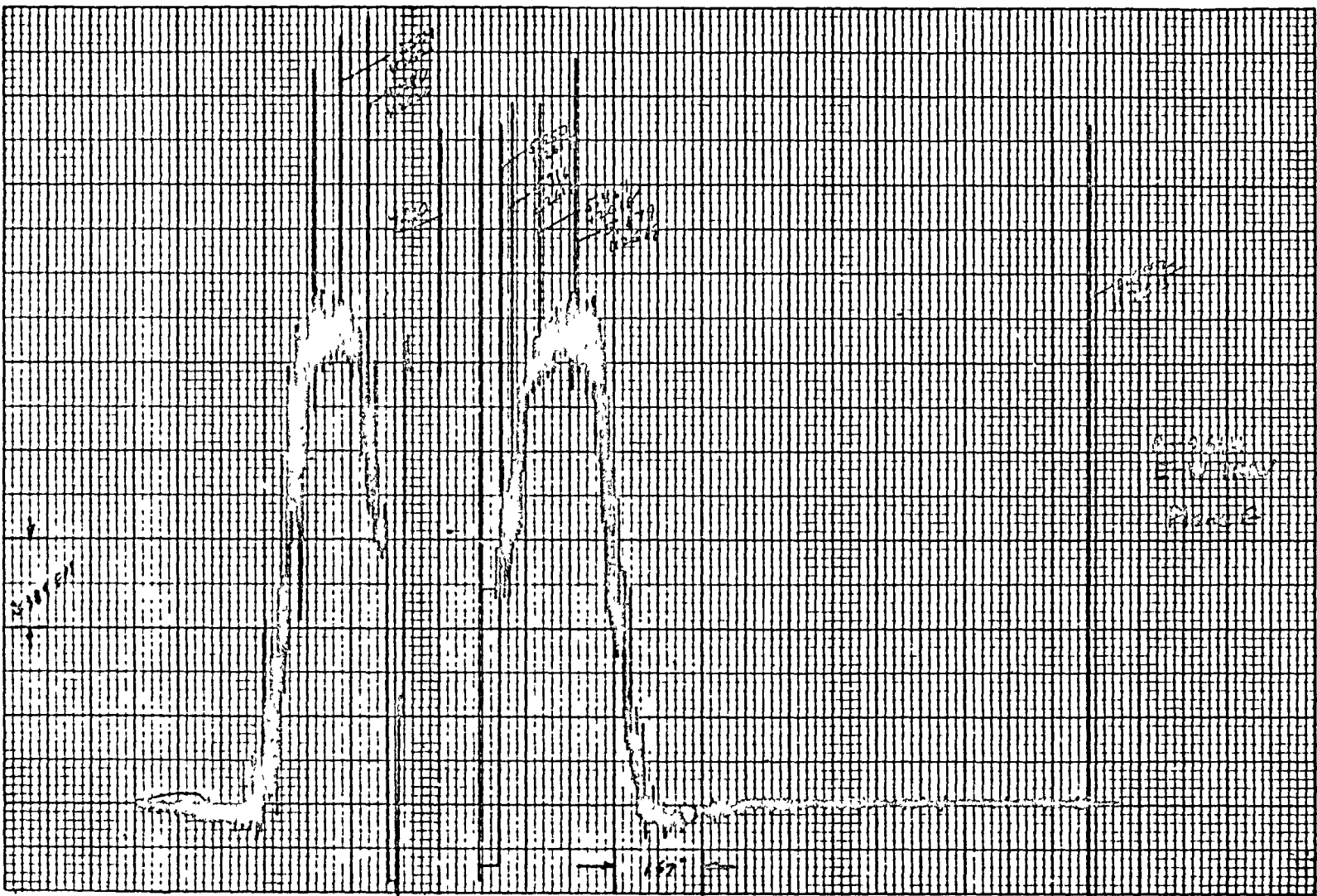


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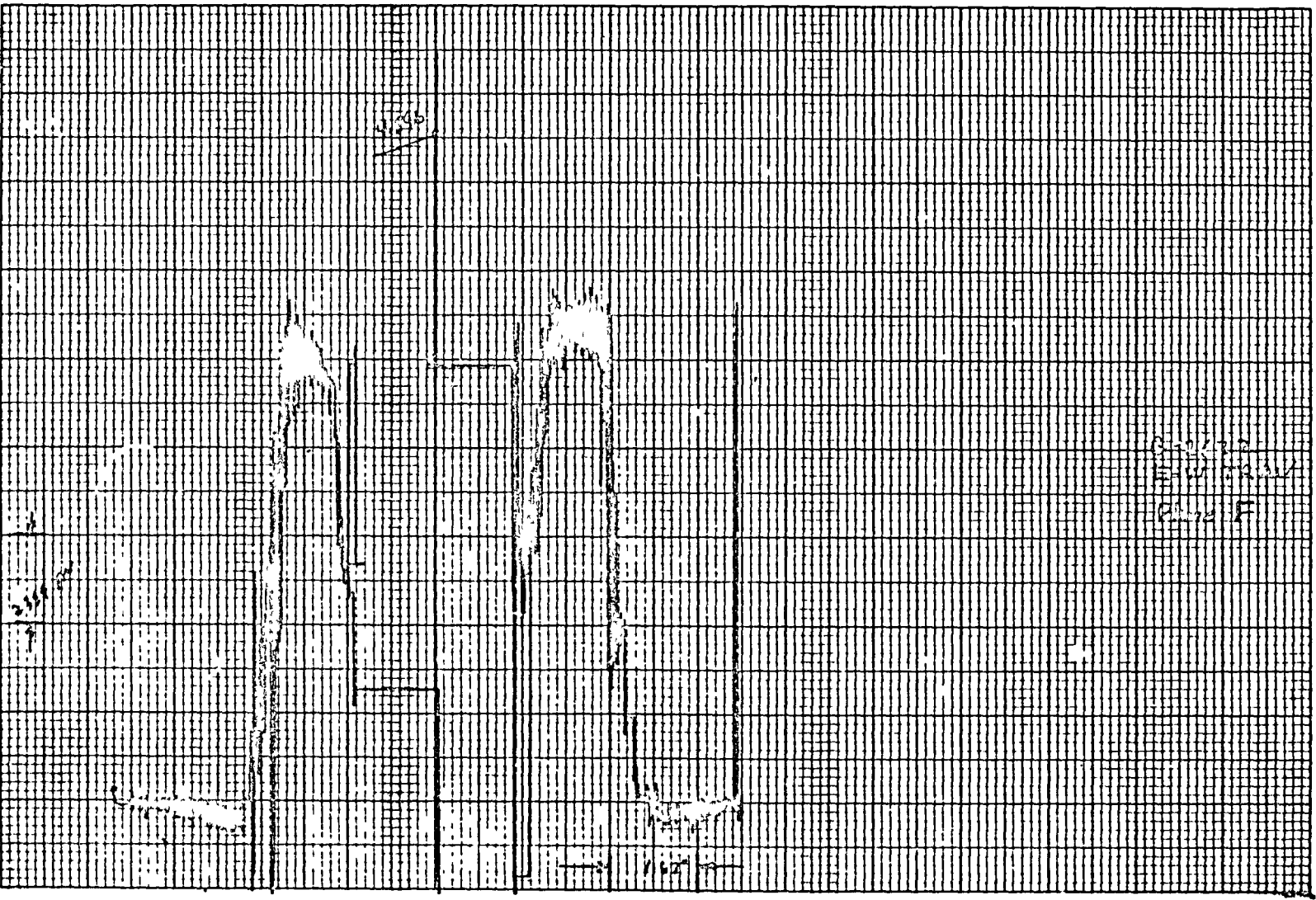
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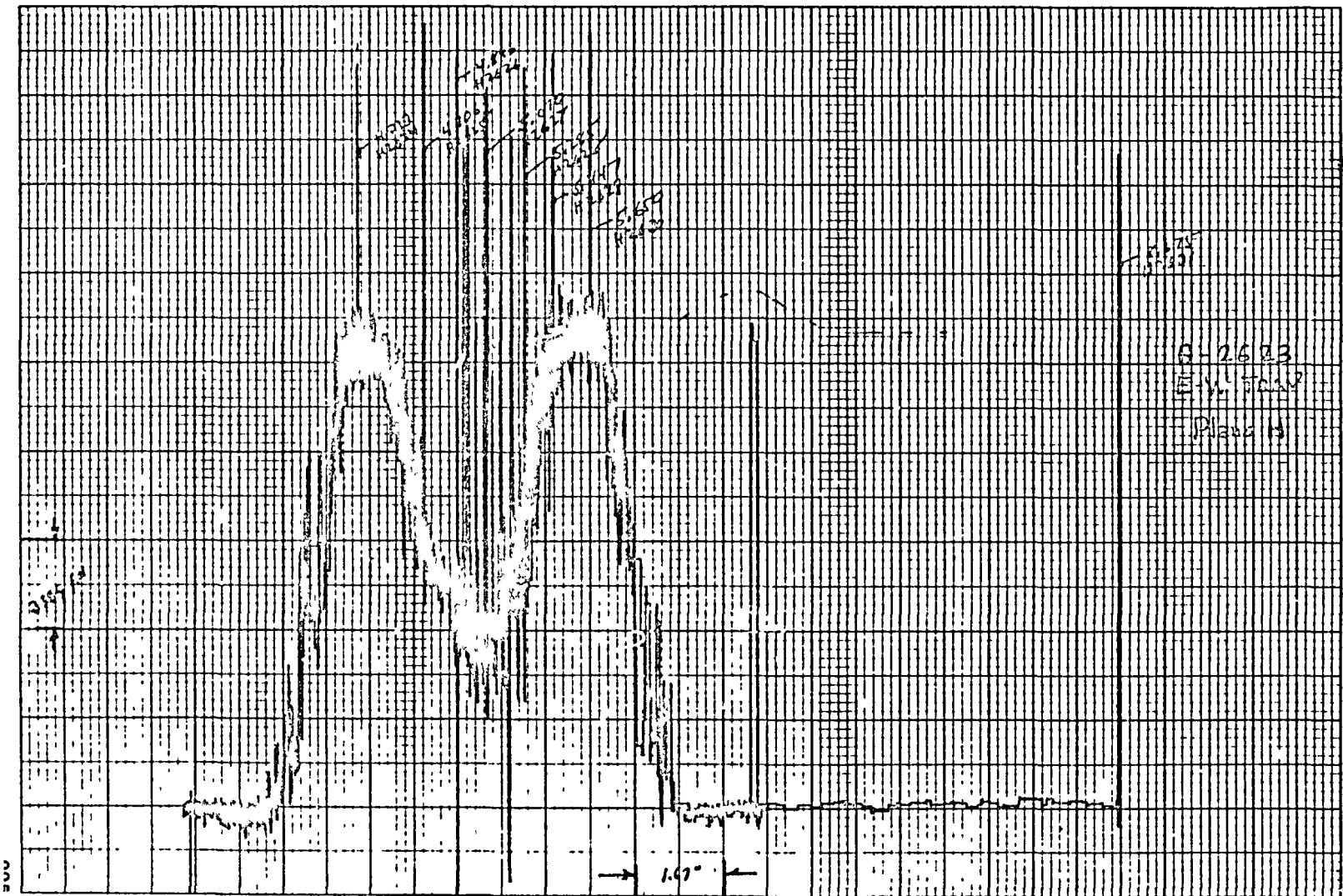
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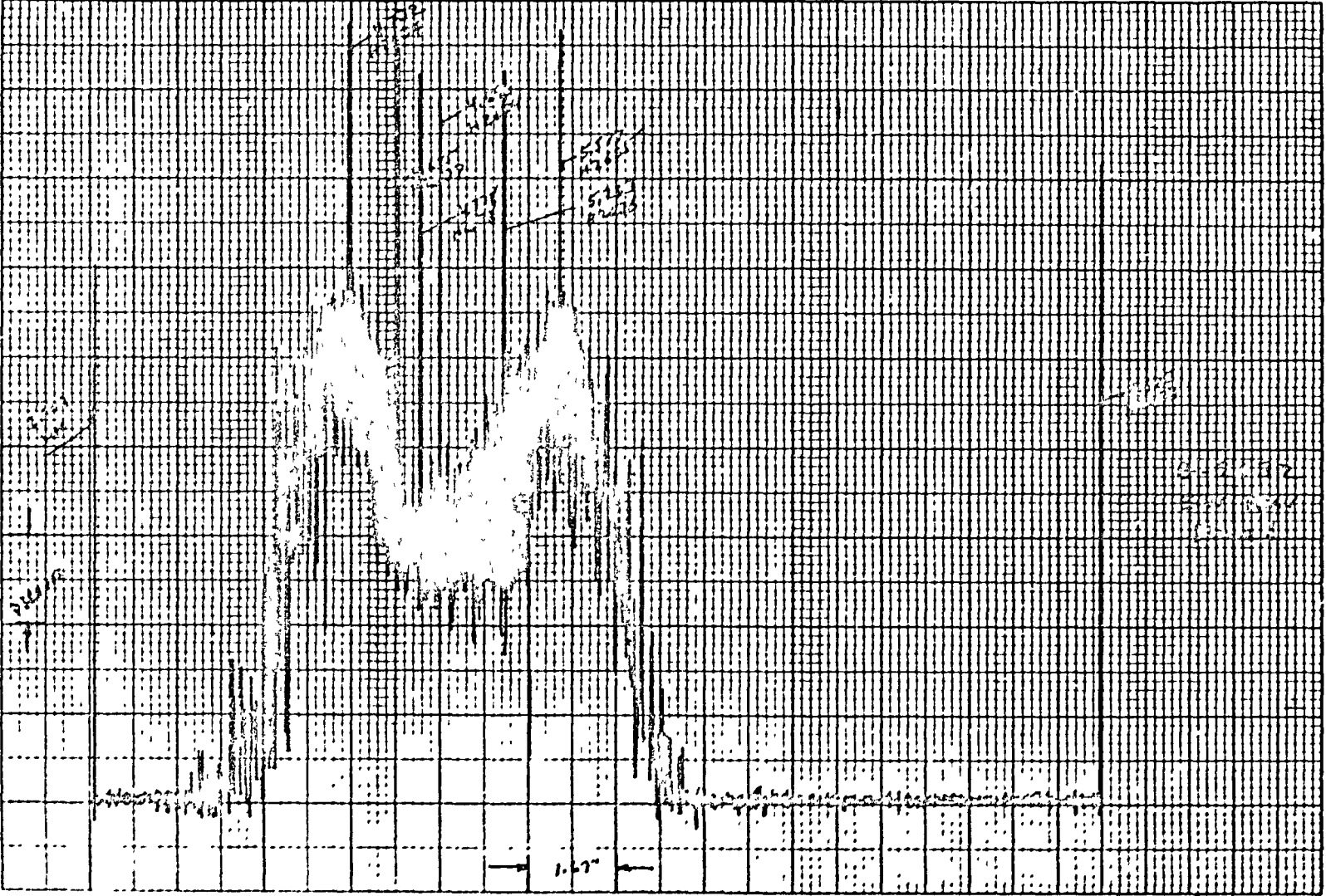


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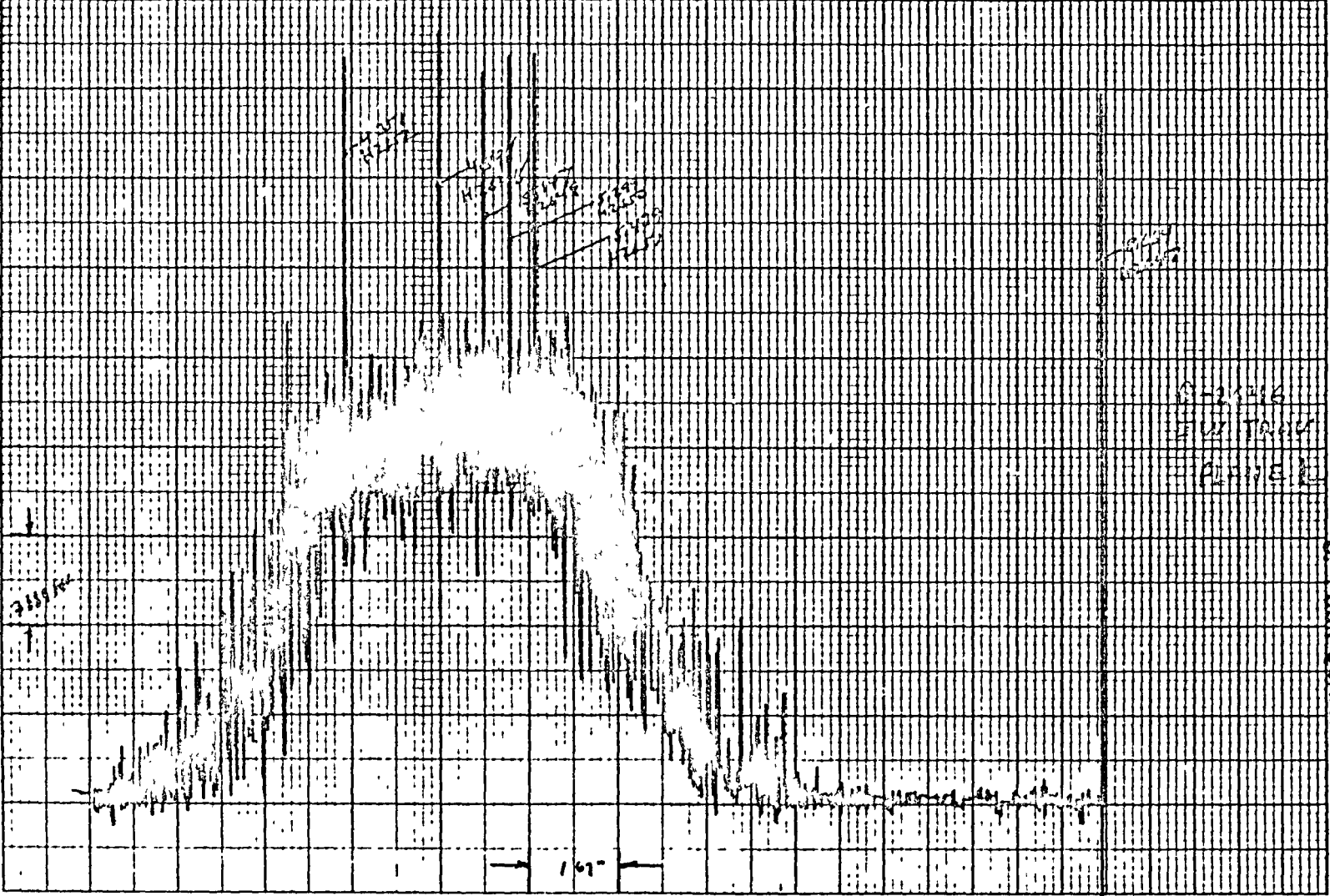




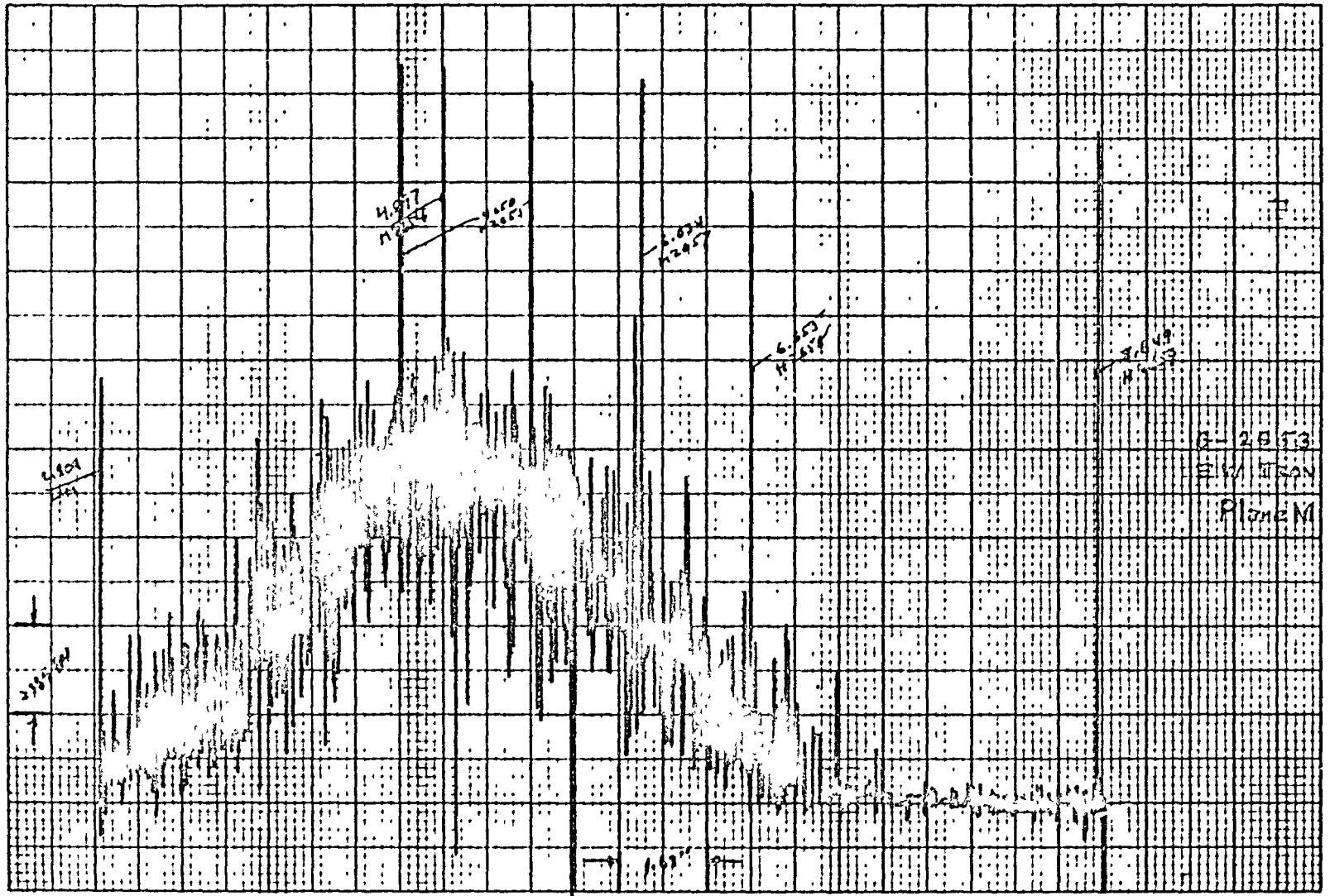
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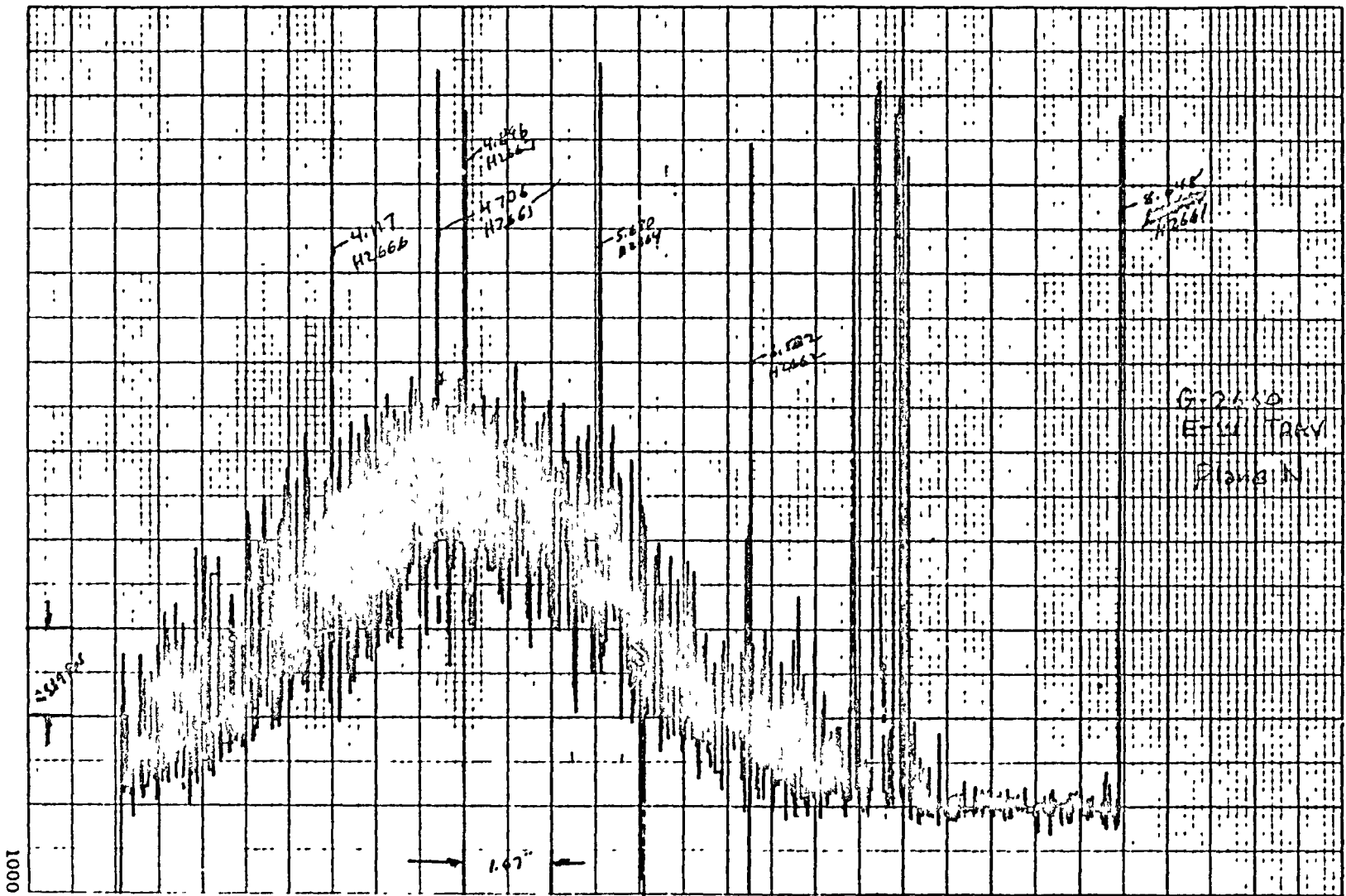




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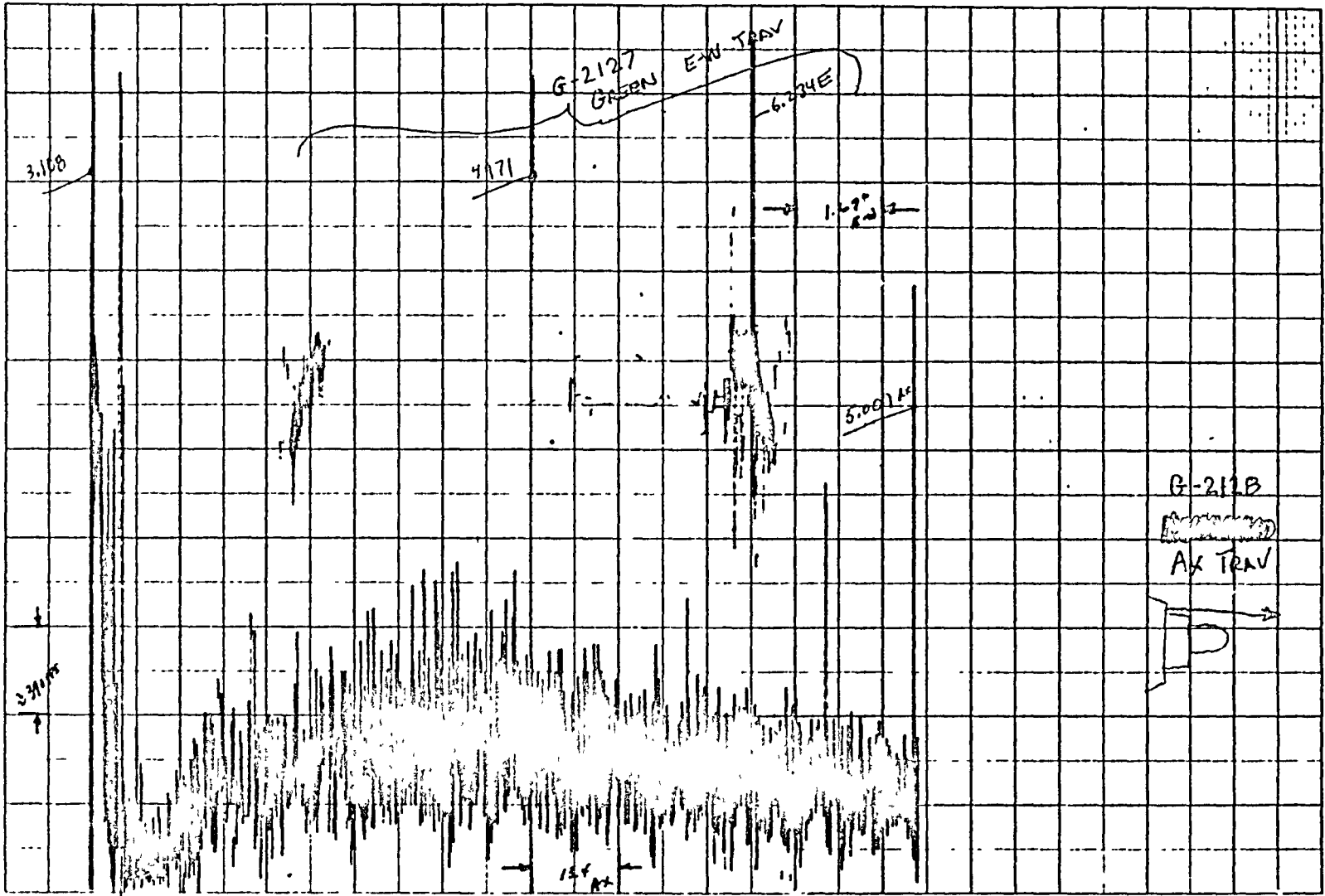


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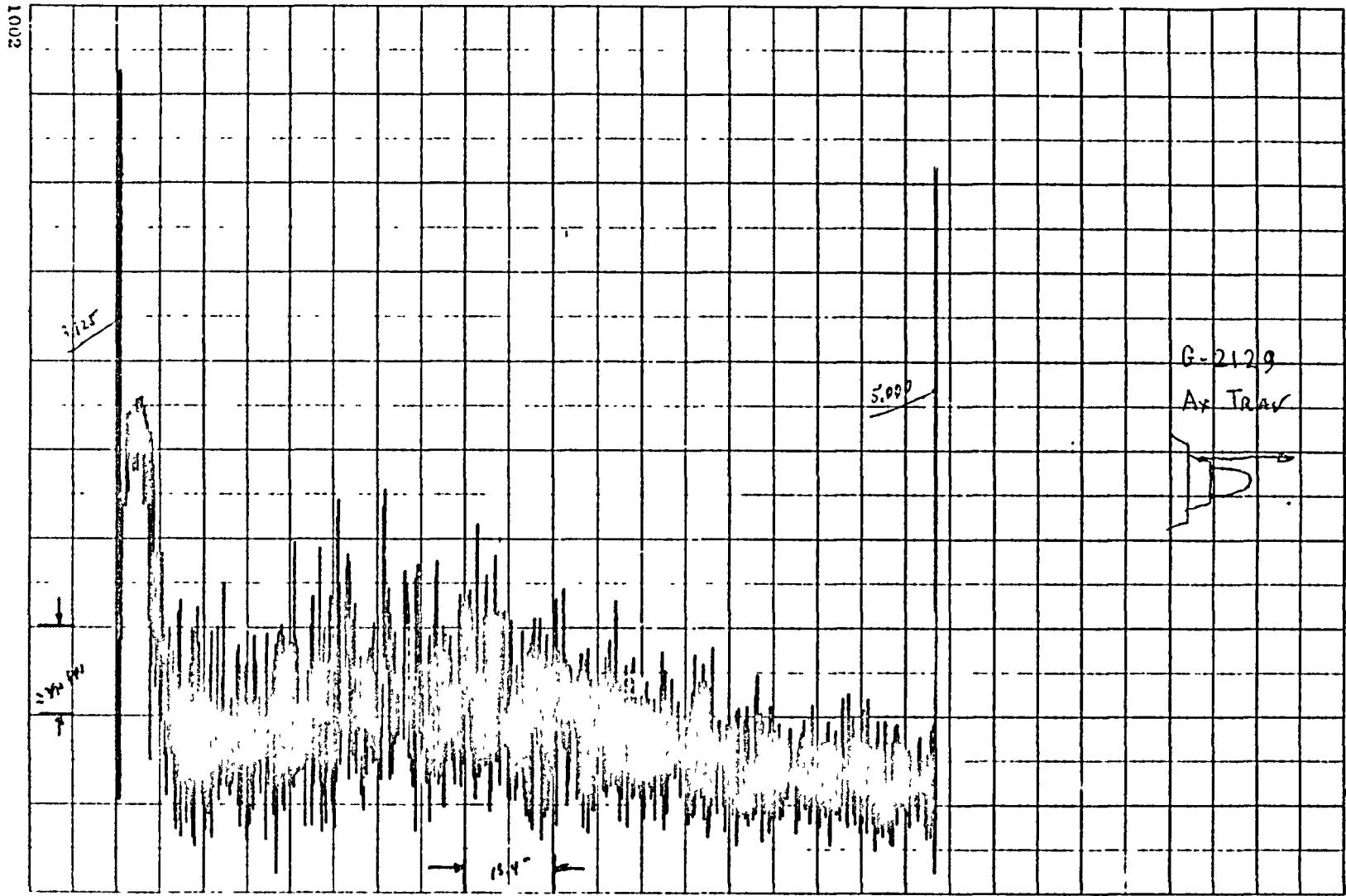
MODEL 2  
TEST POINT 210

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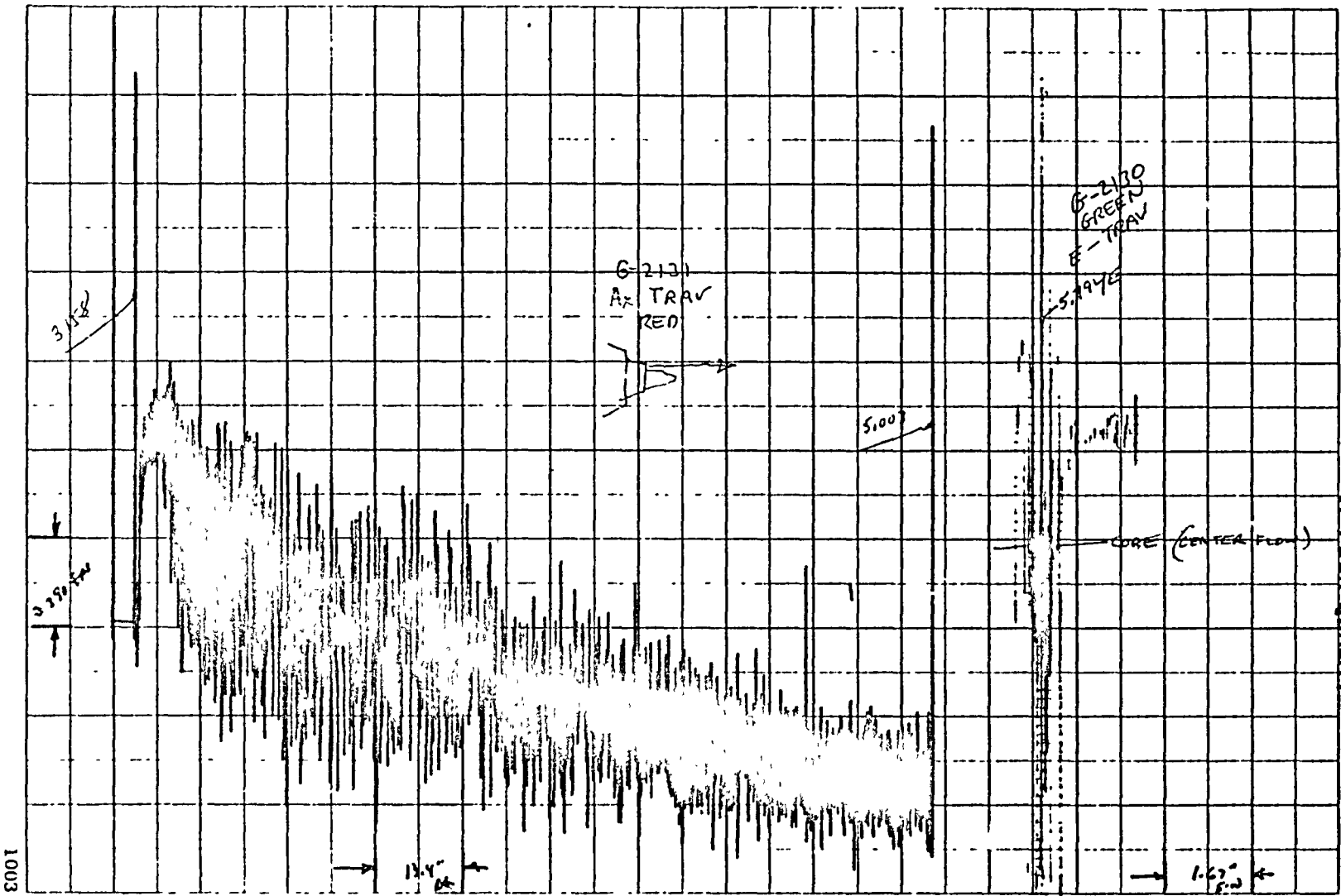


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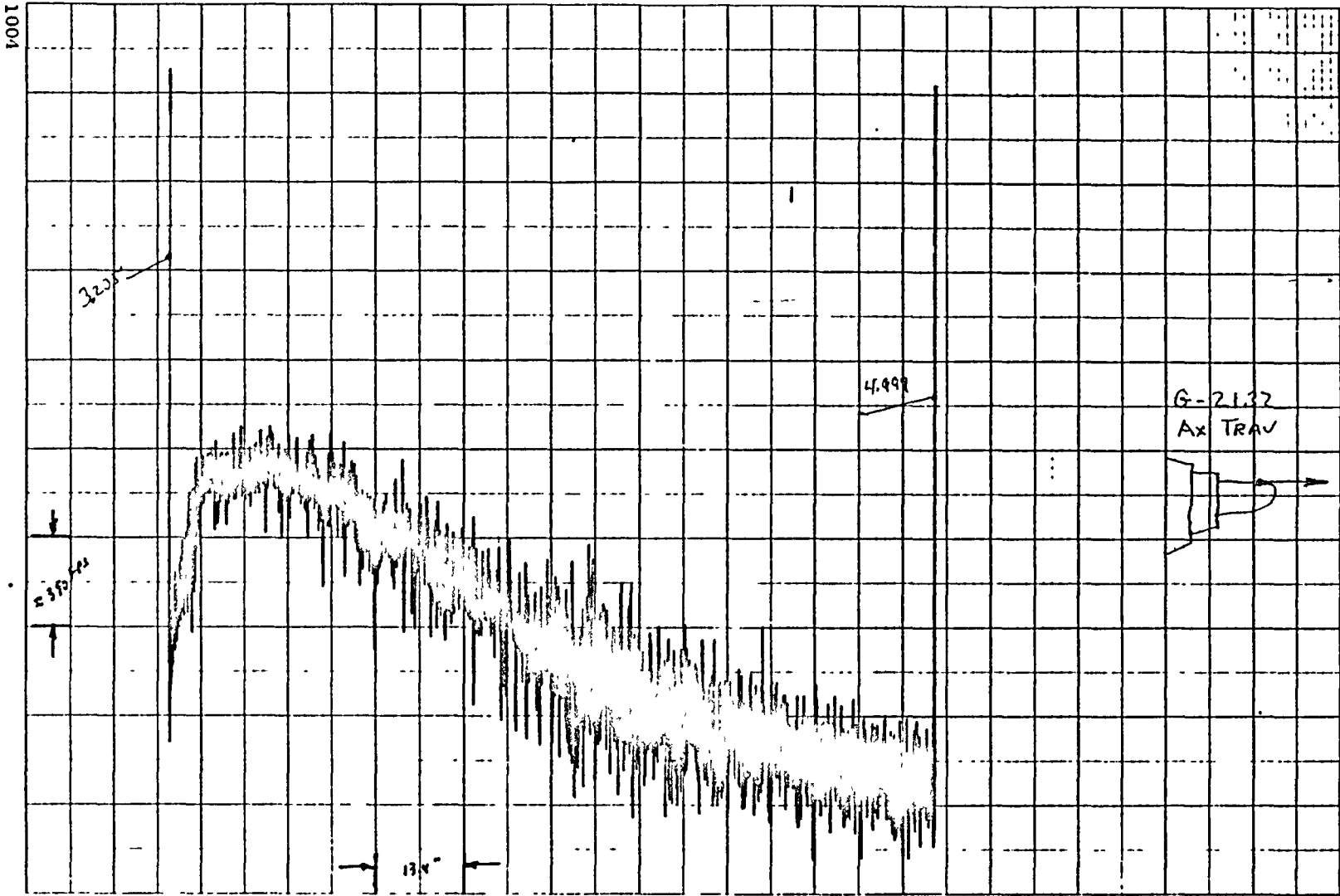
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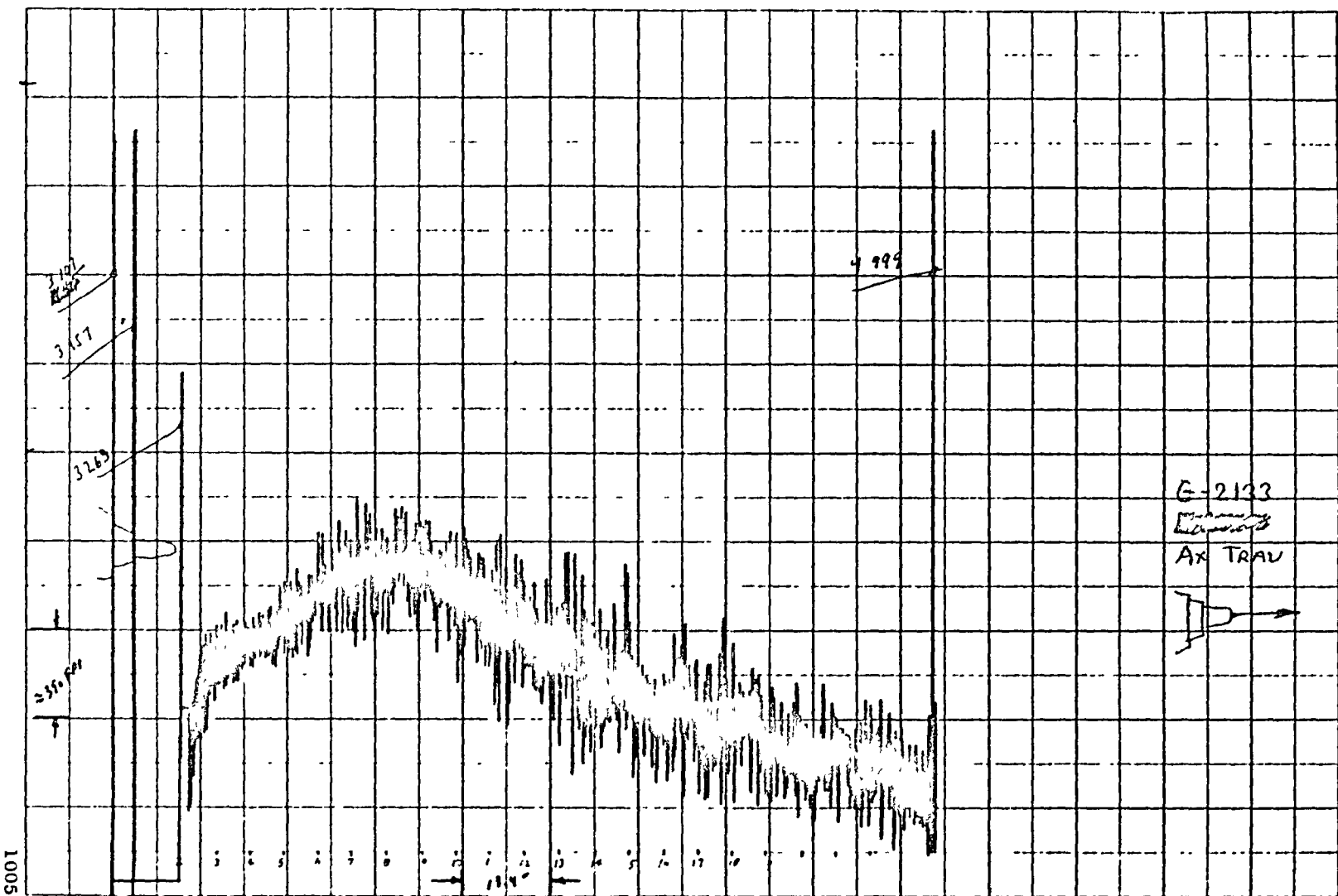


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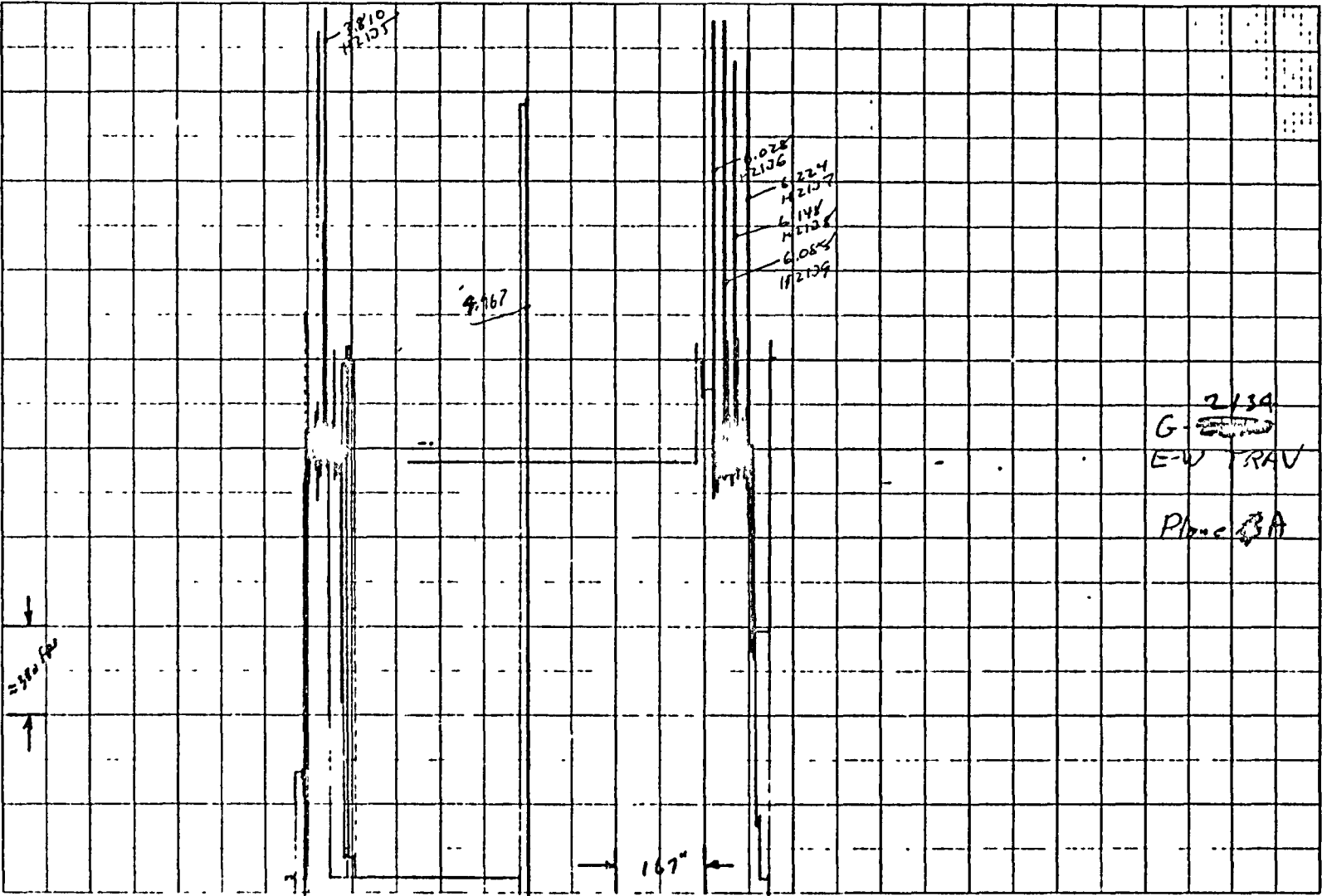




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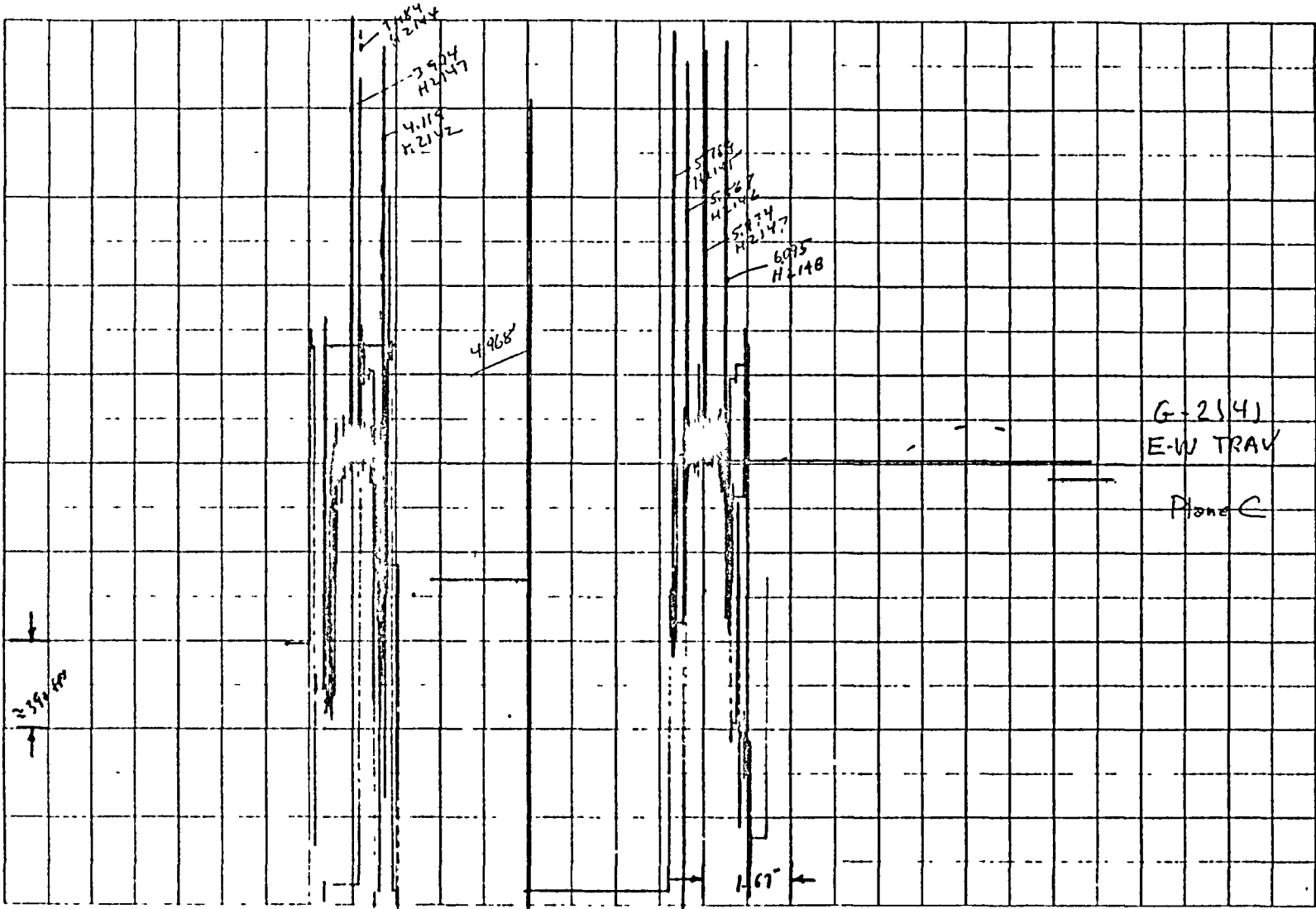
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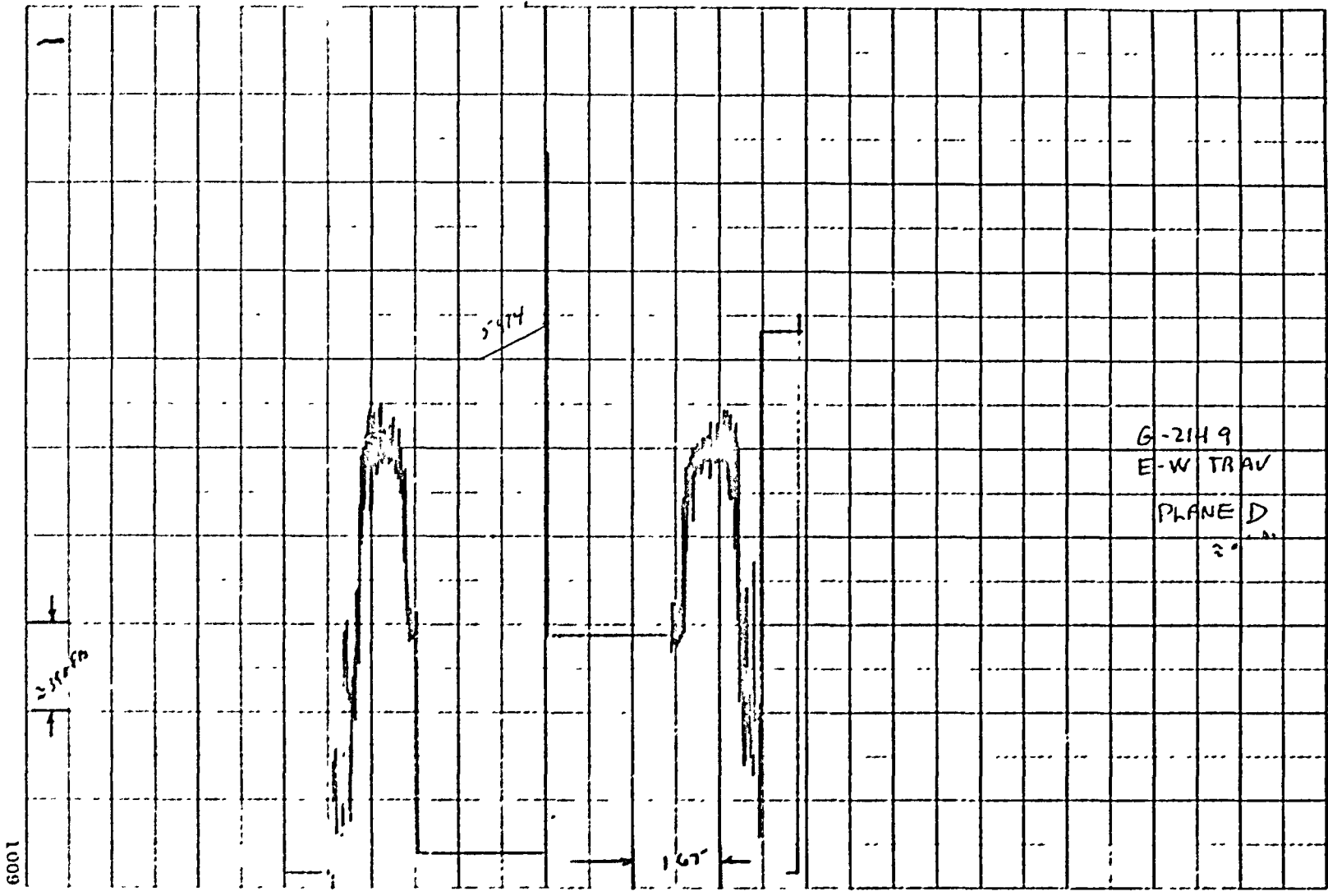
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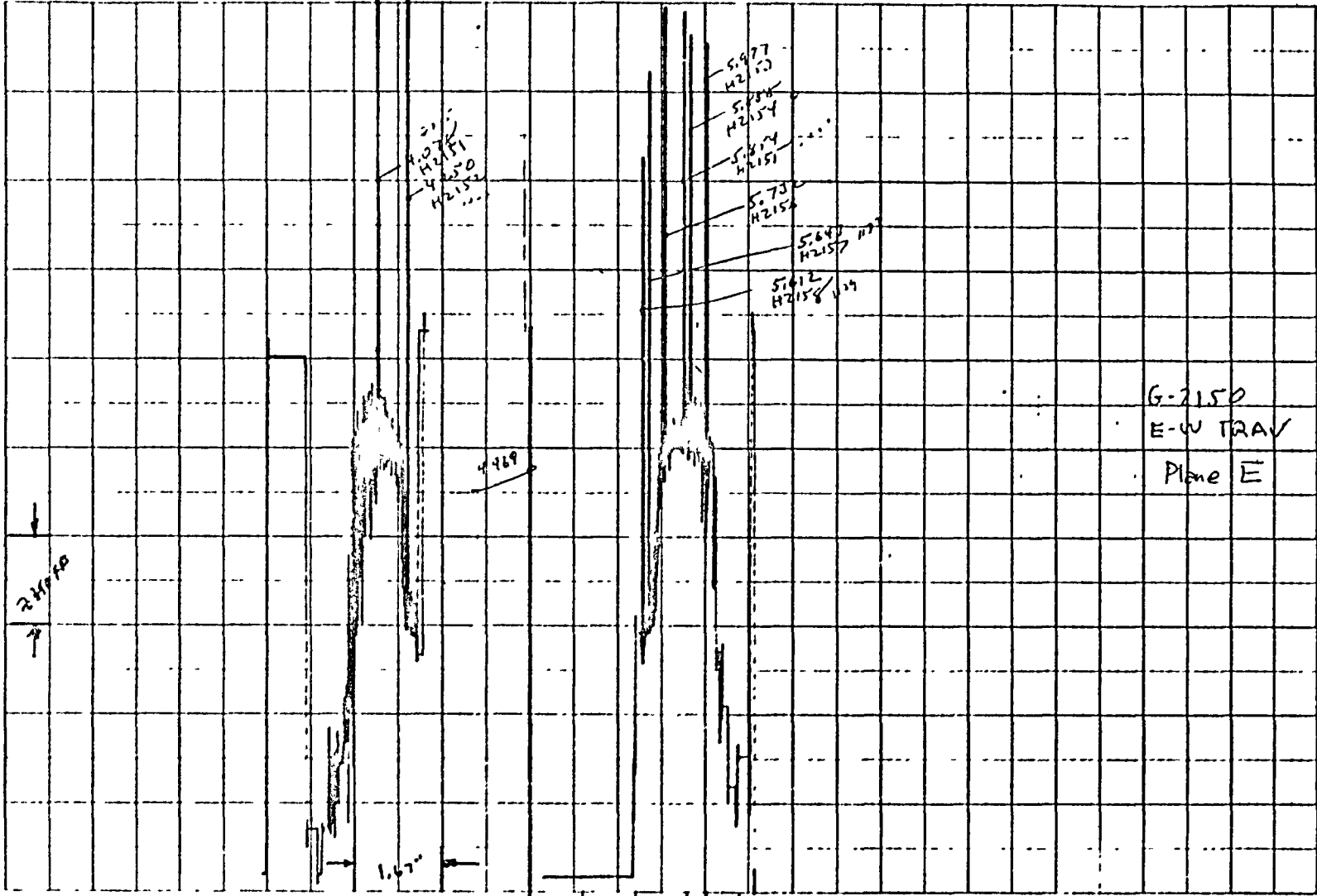
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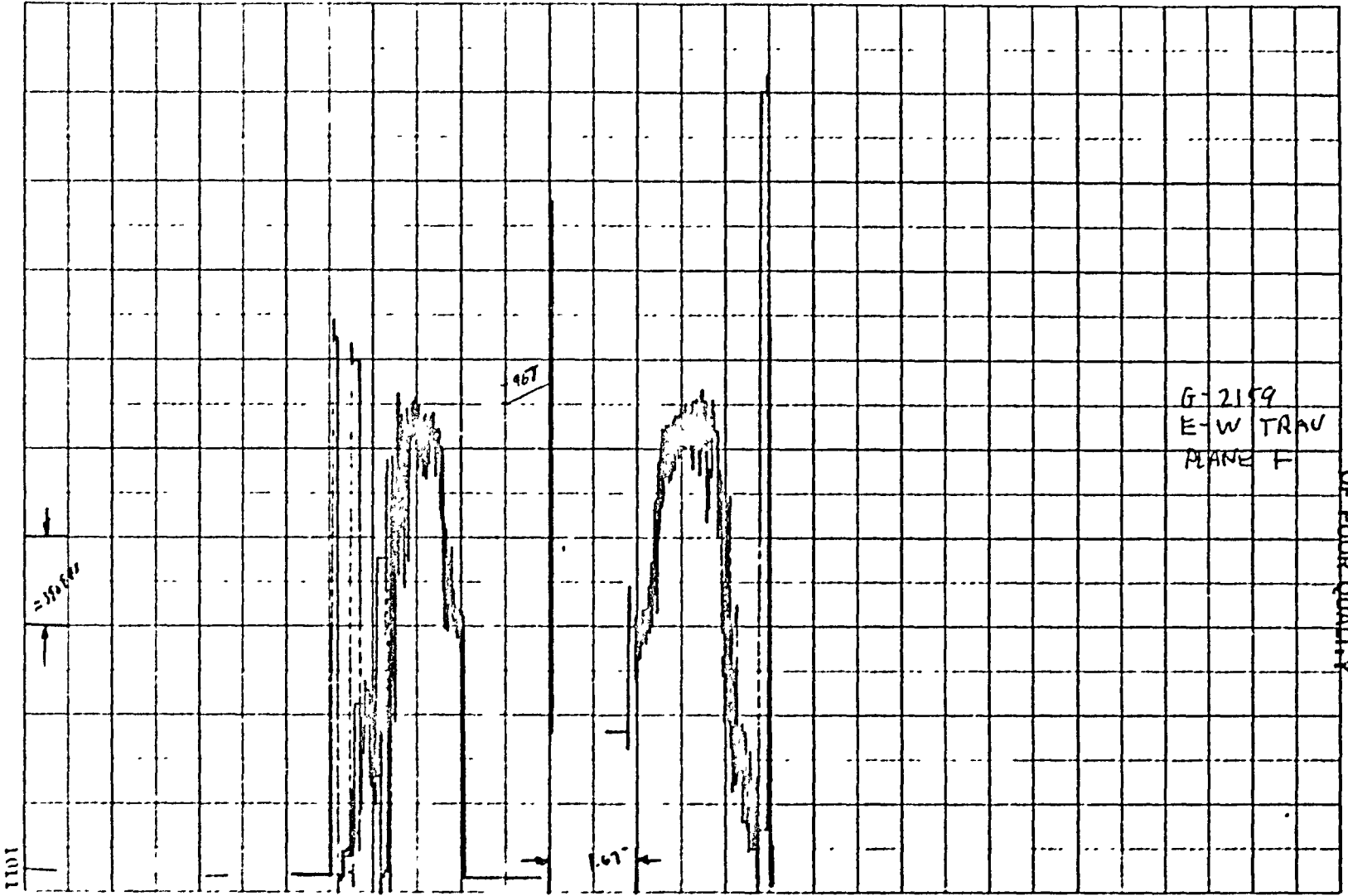
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G-2159  
E-W TRAU  
PLANE F

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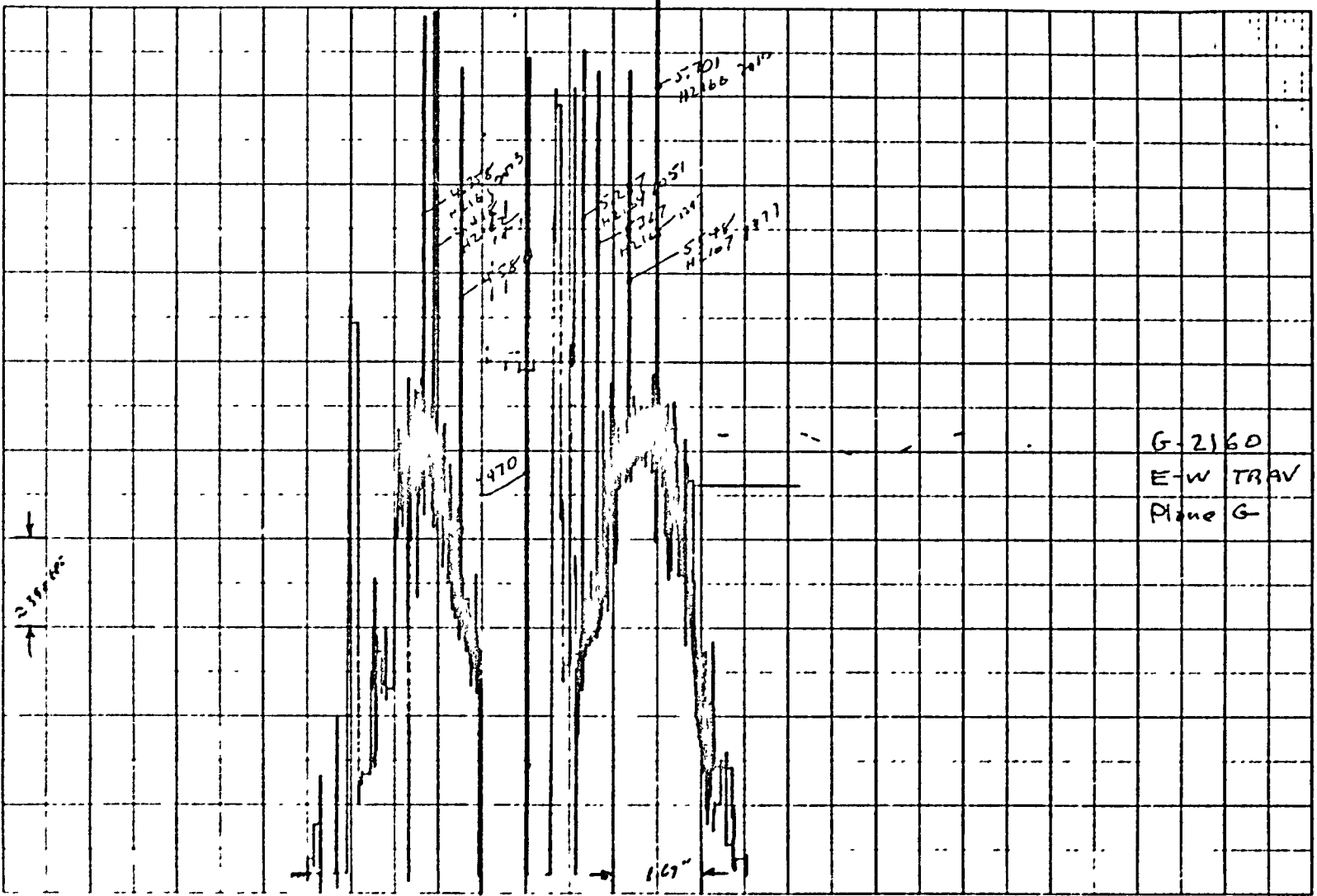
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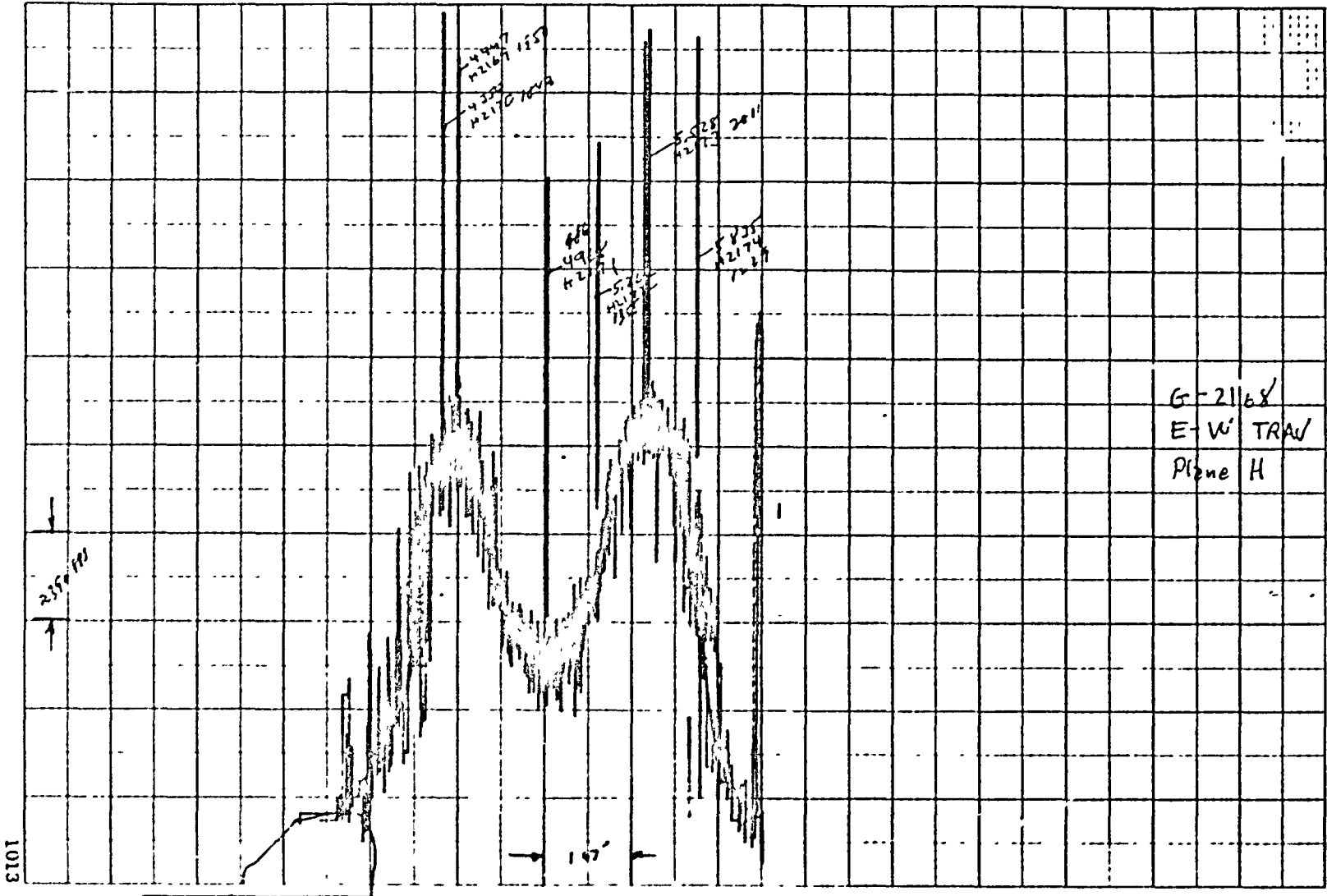
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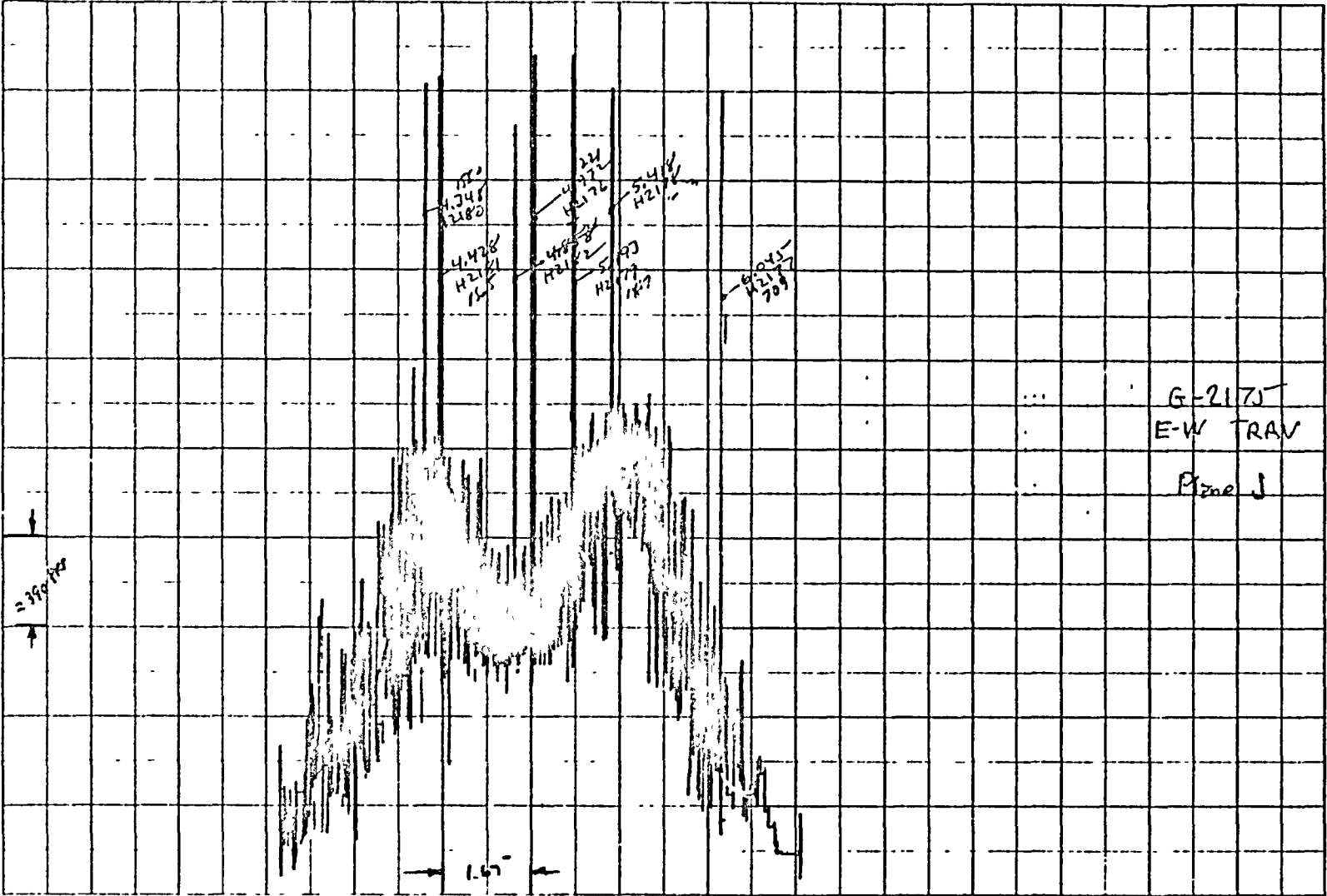
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 E-W TRAV  
 Plane G

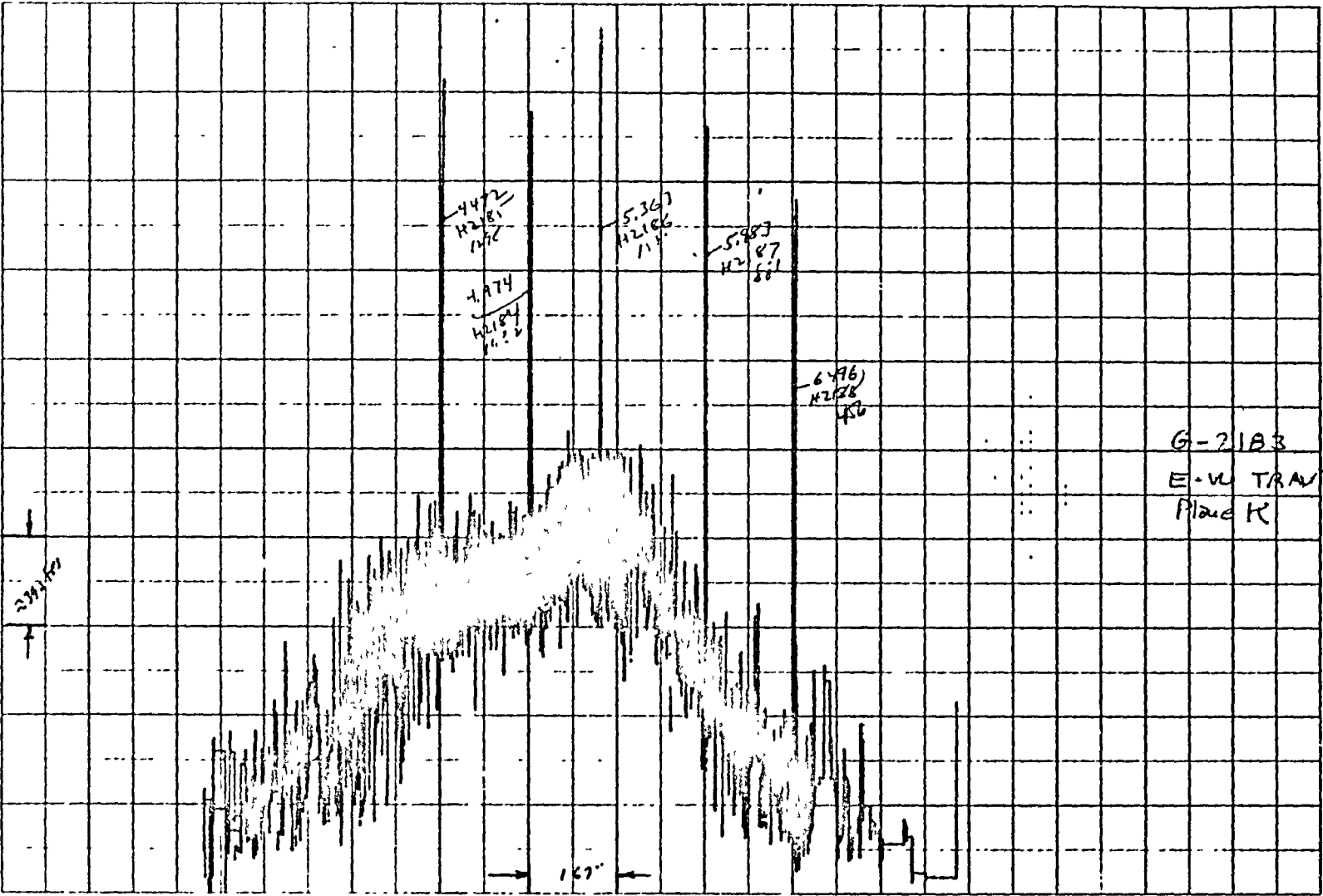
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1013

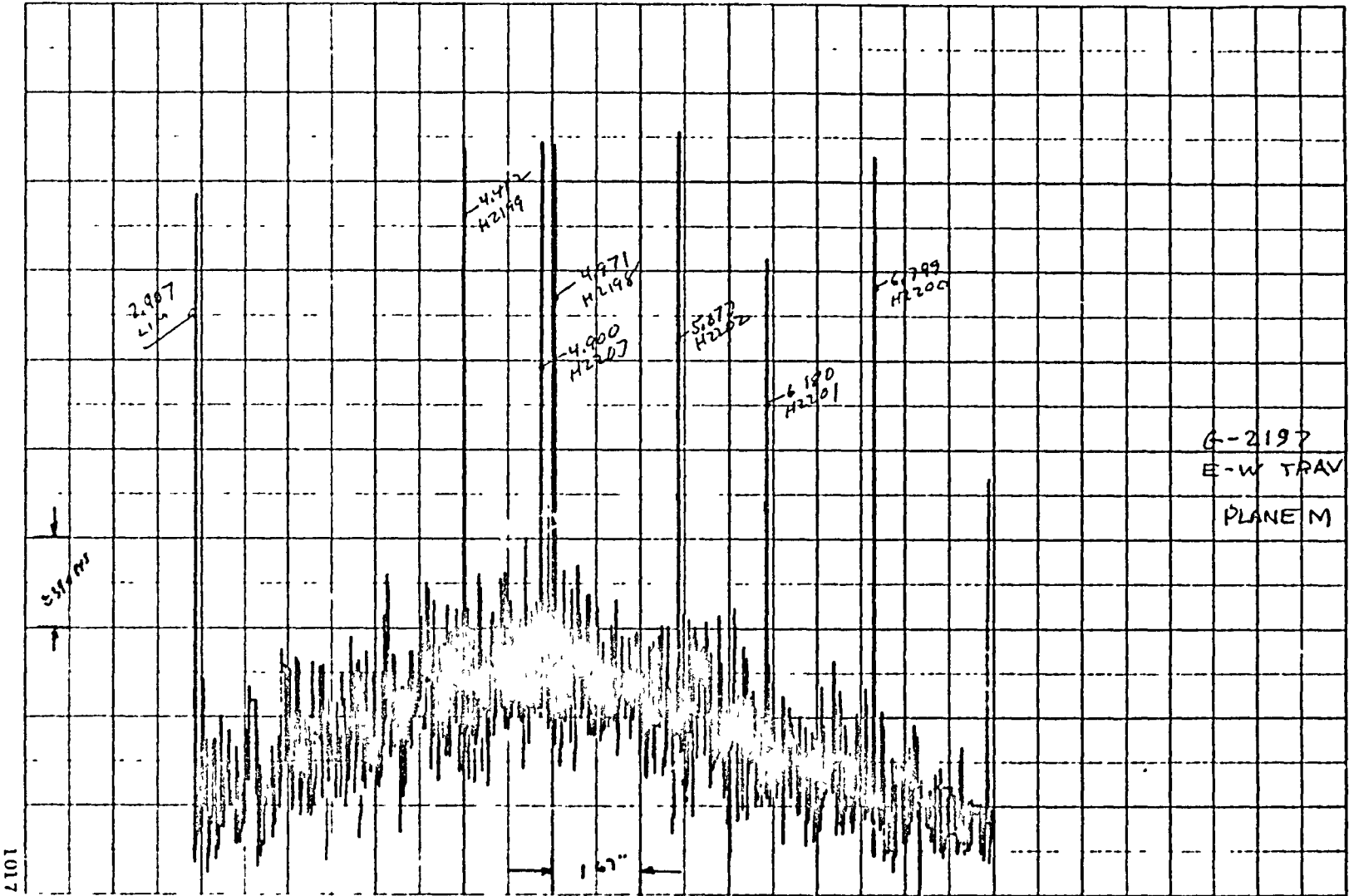
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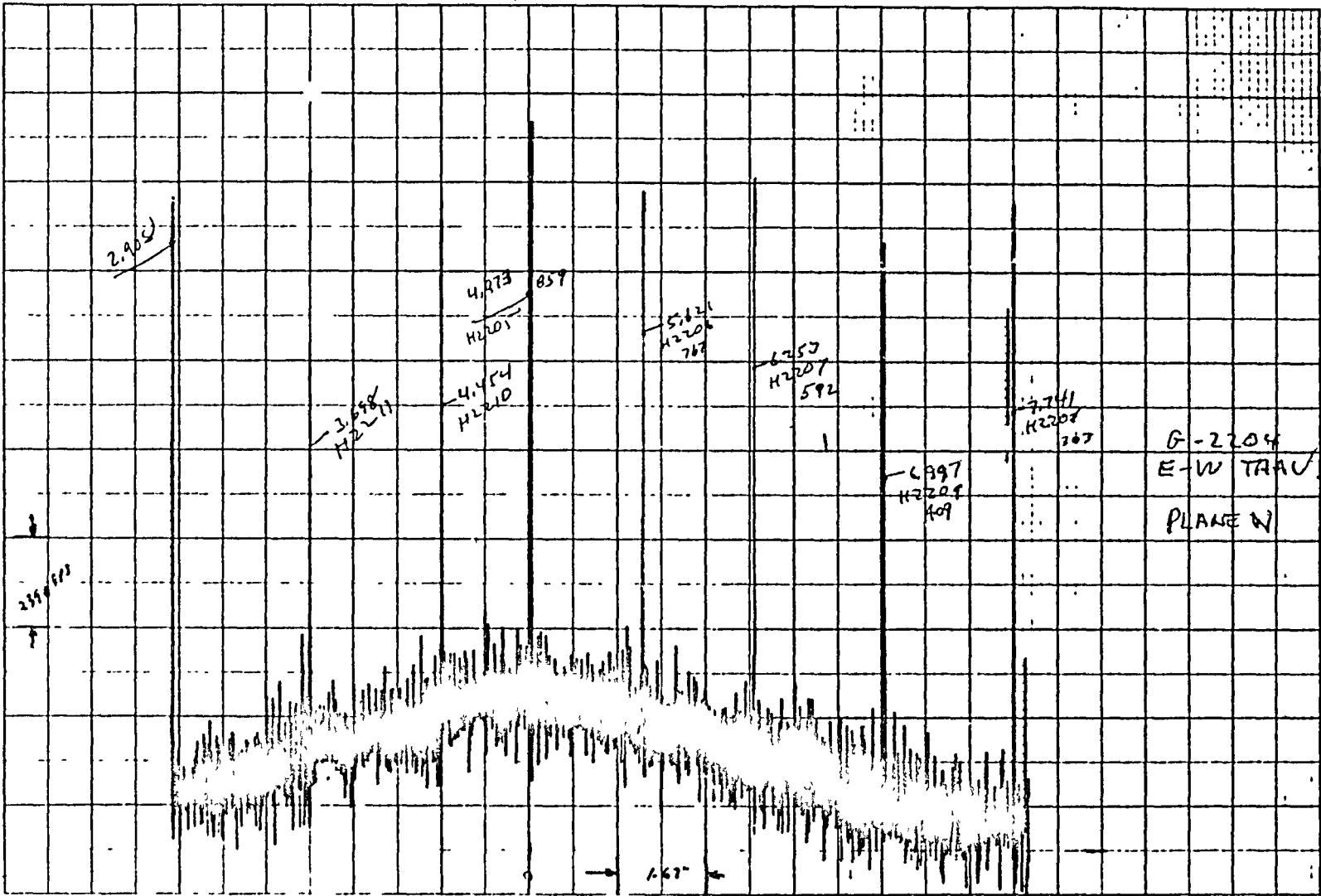




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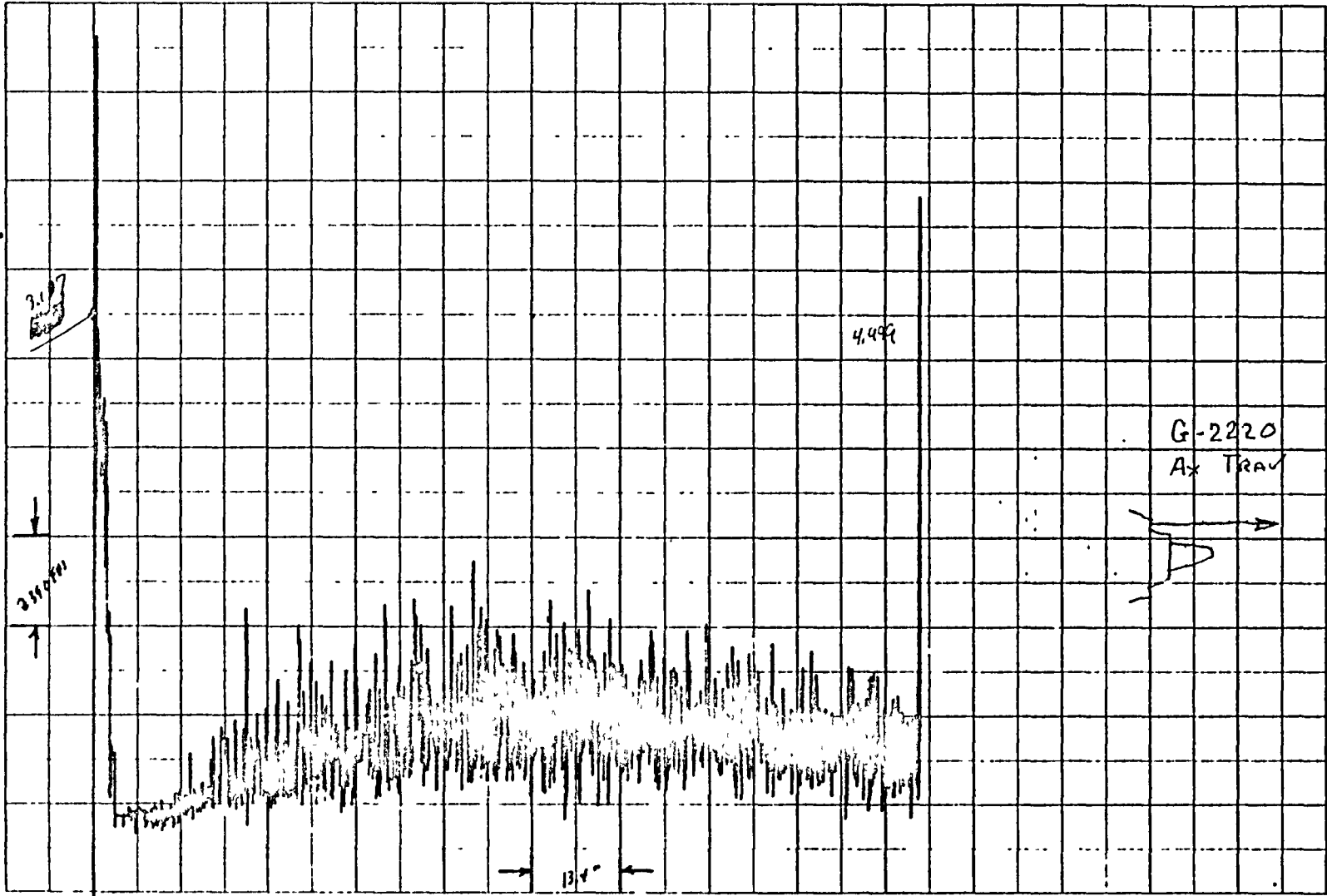
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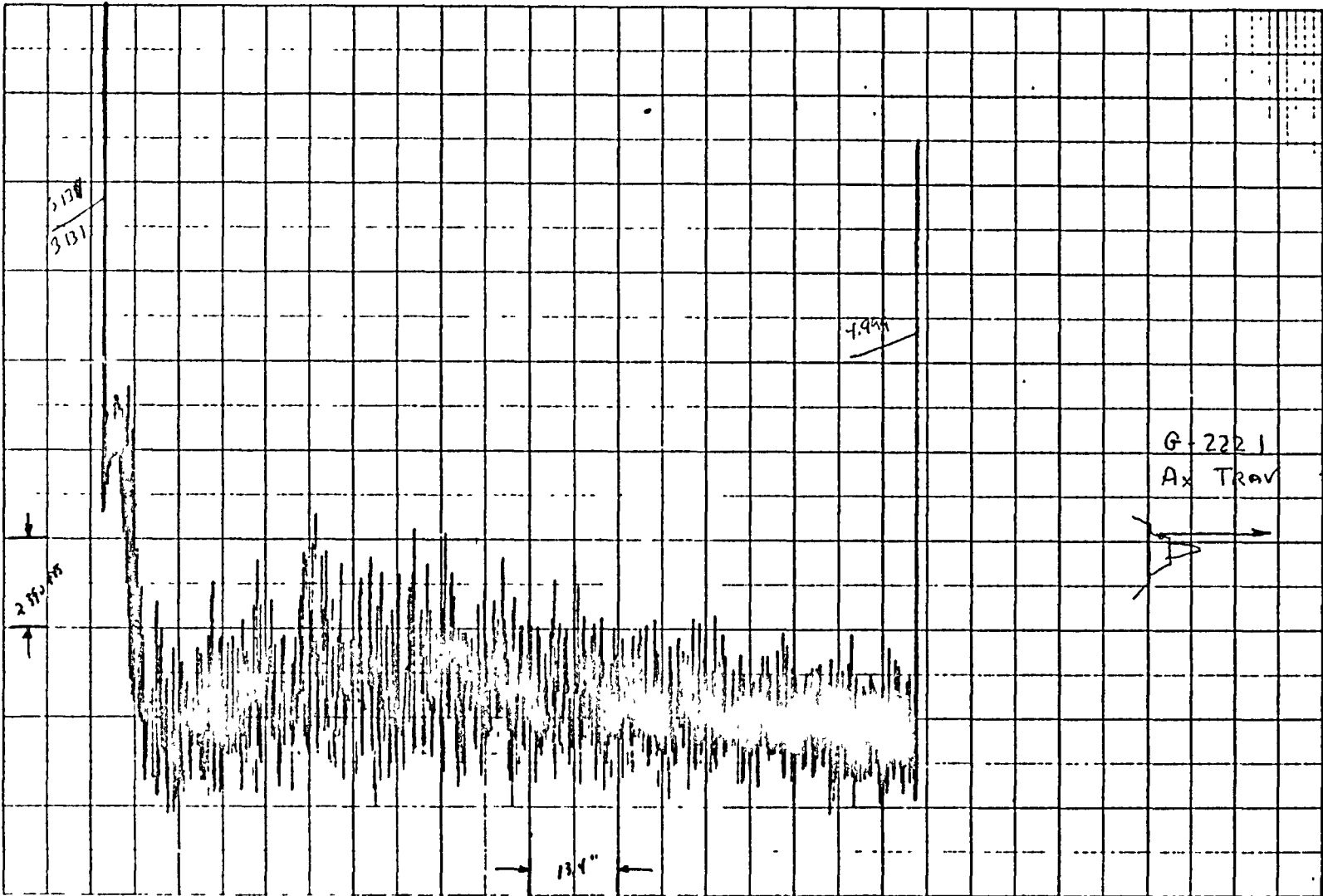
MODEL 2  
TEST POINT 212



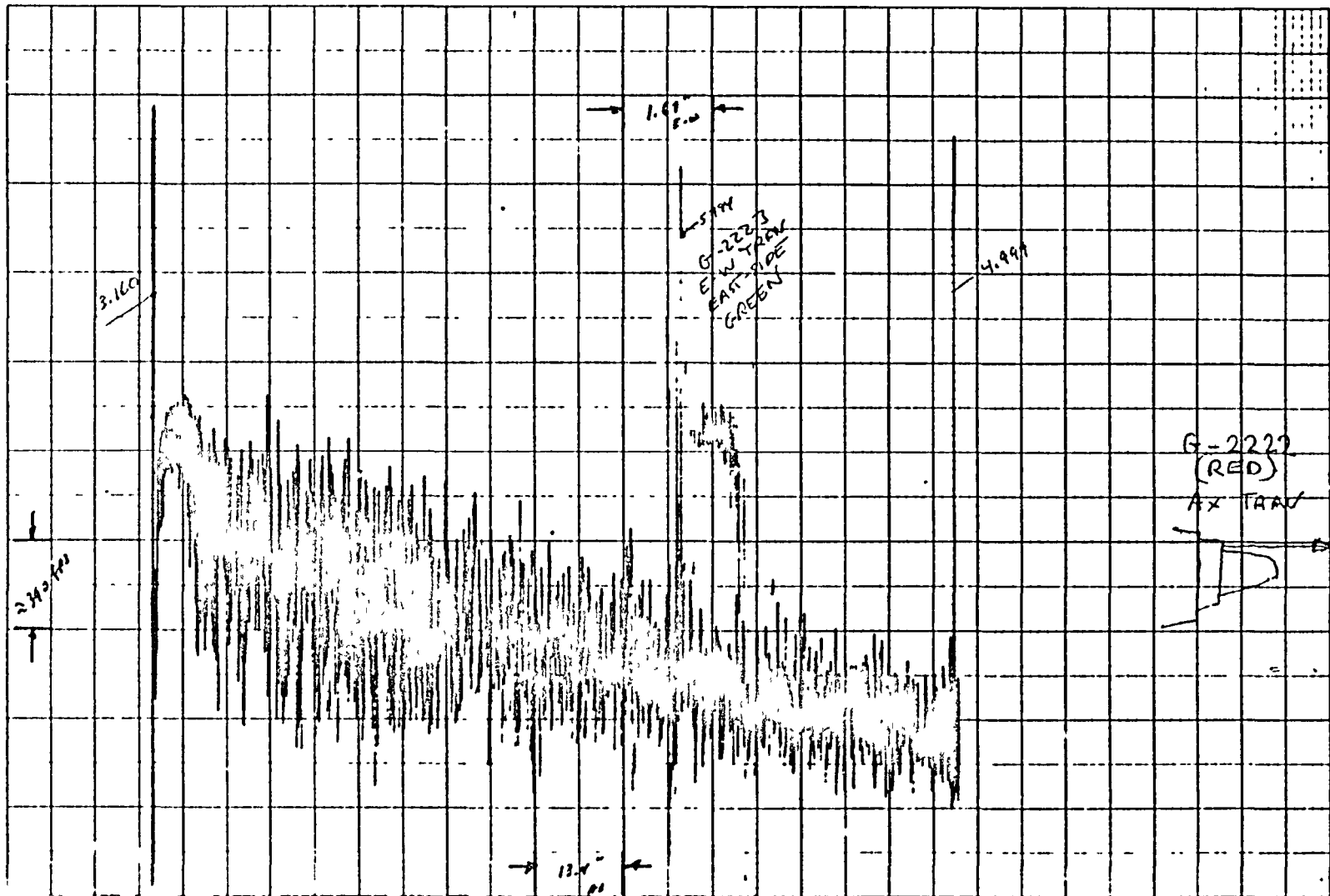
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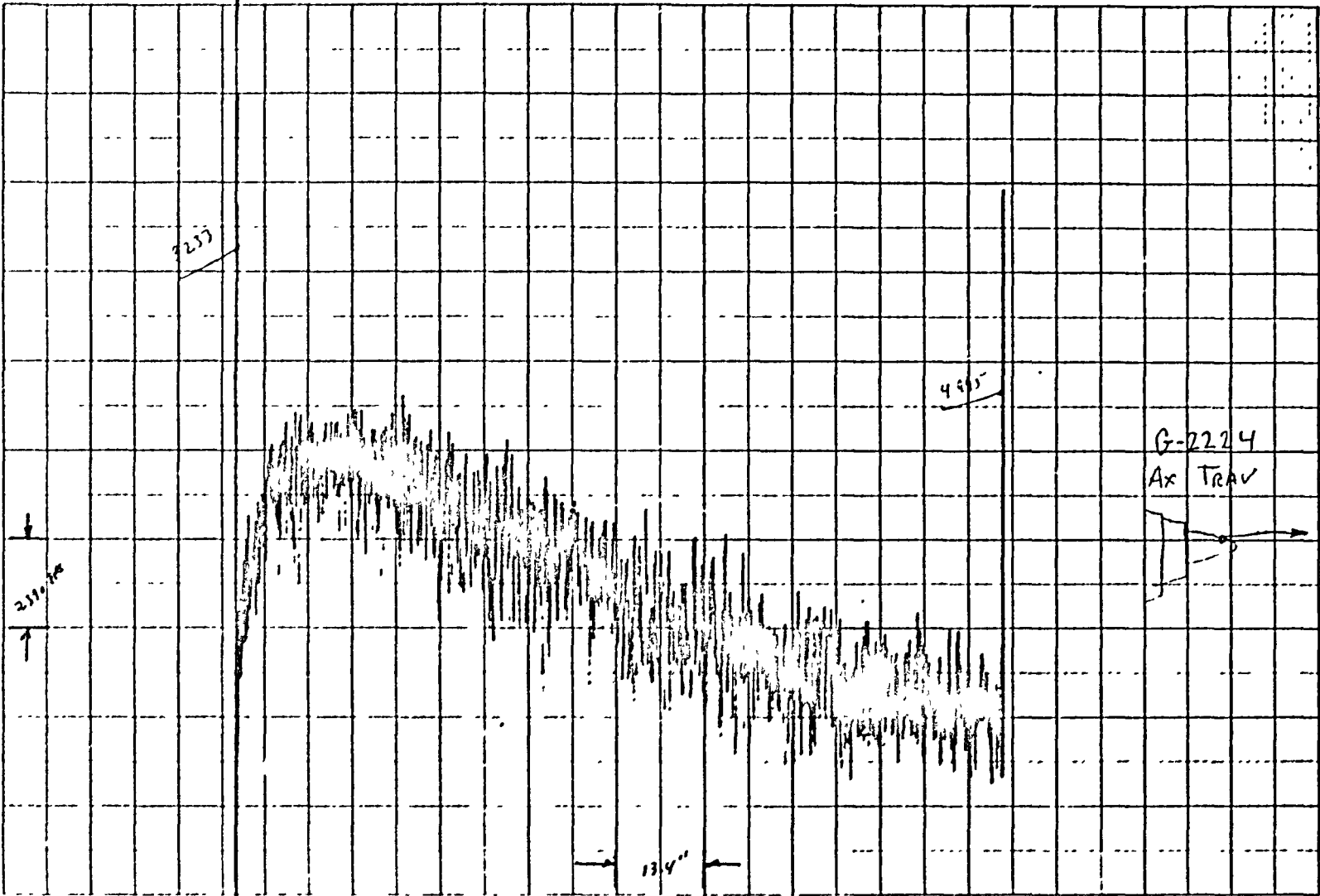


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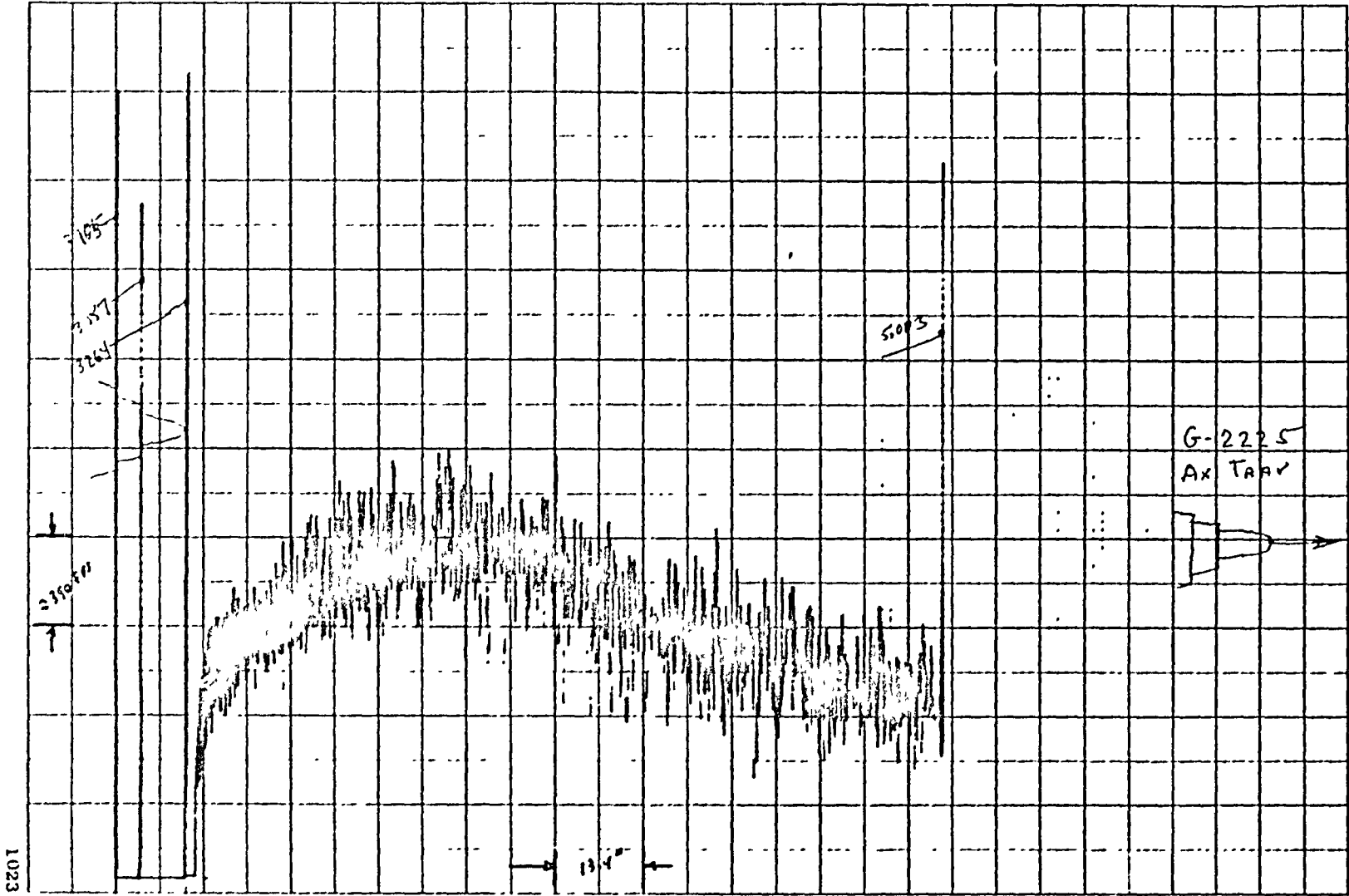
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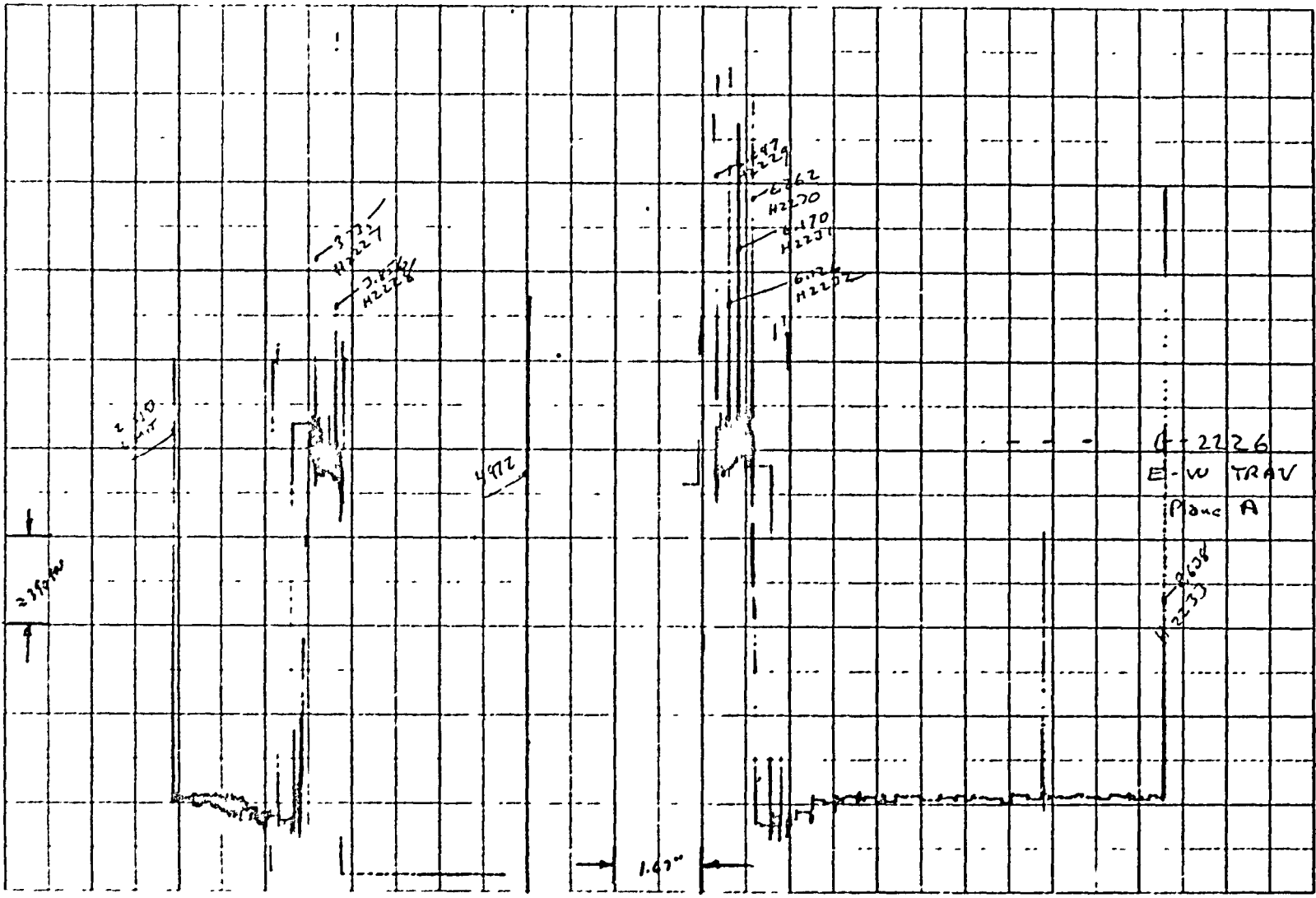
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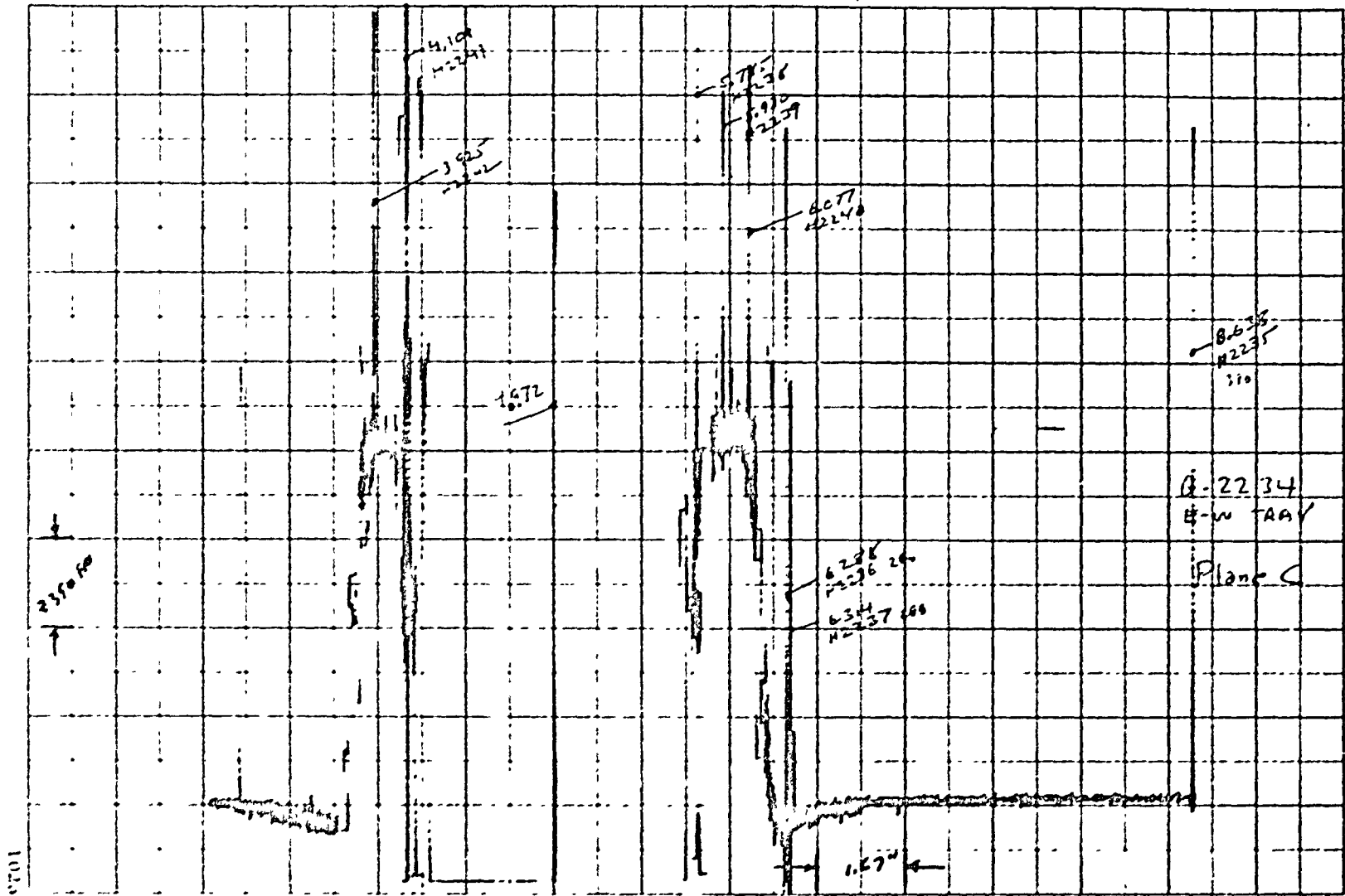


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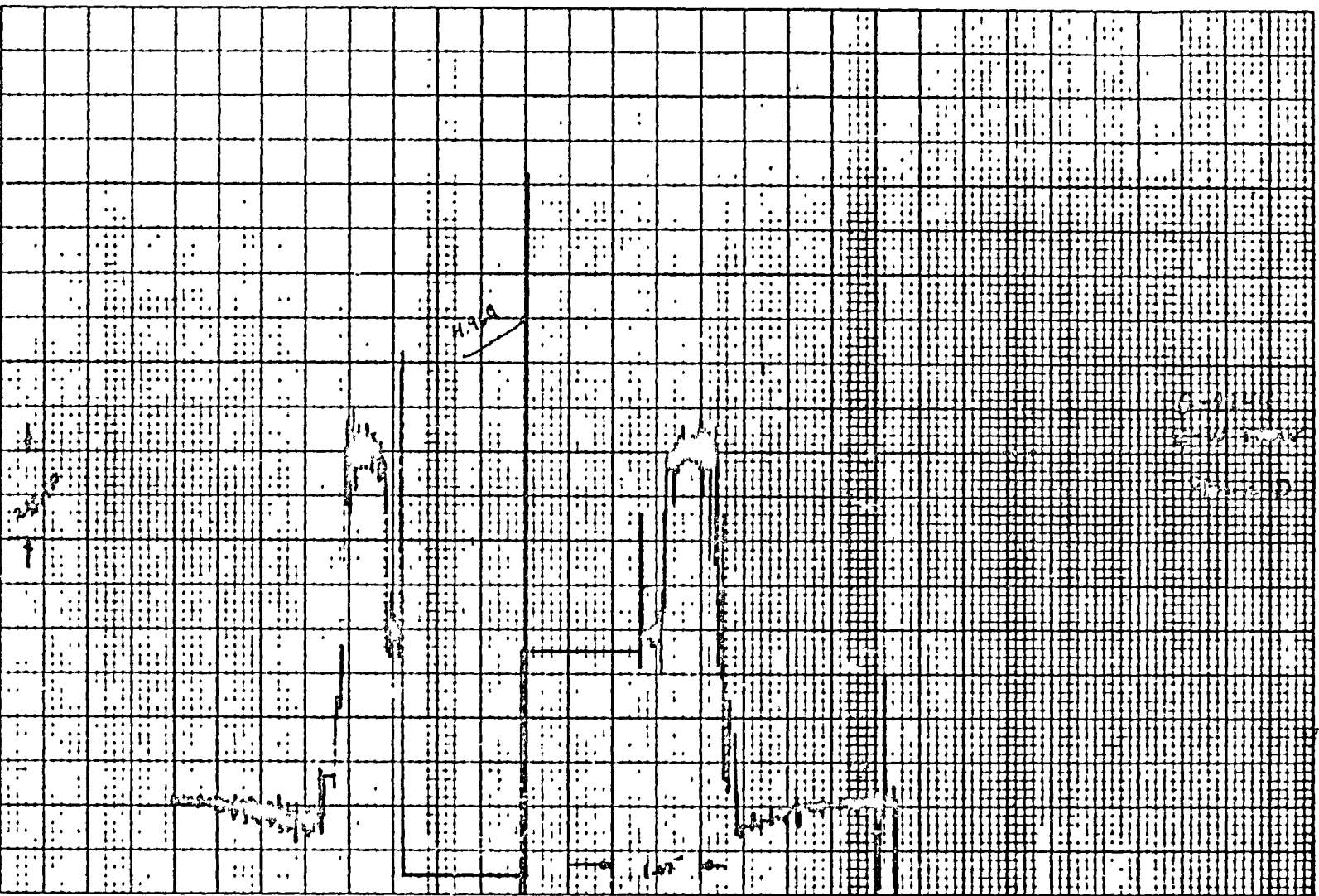
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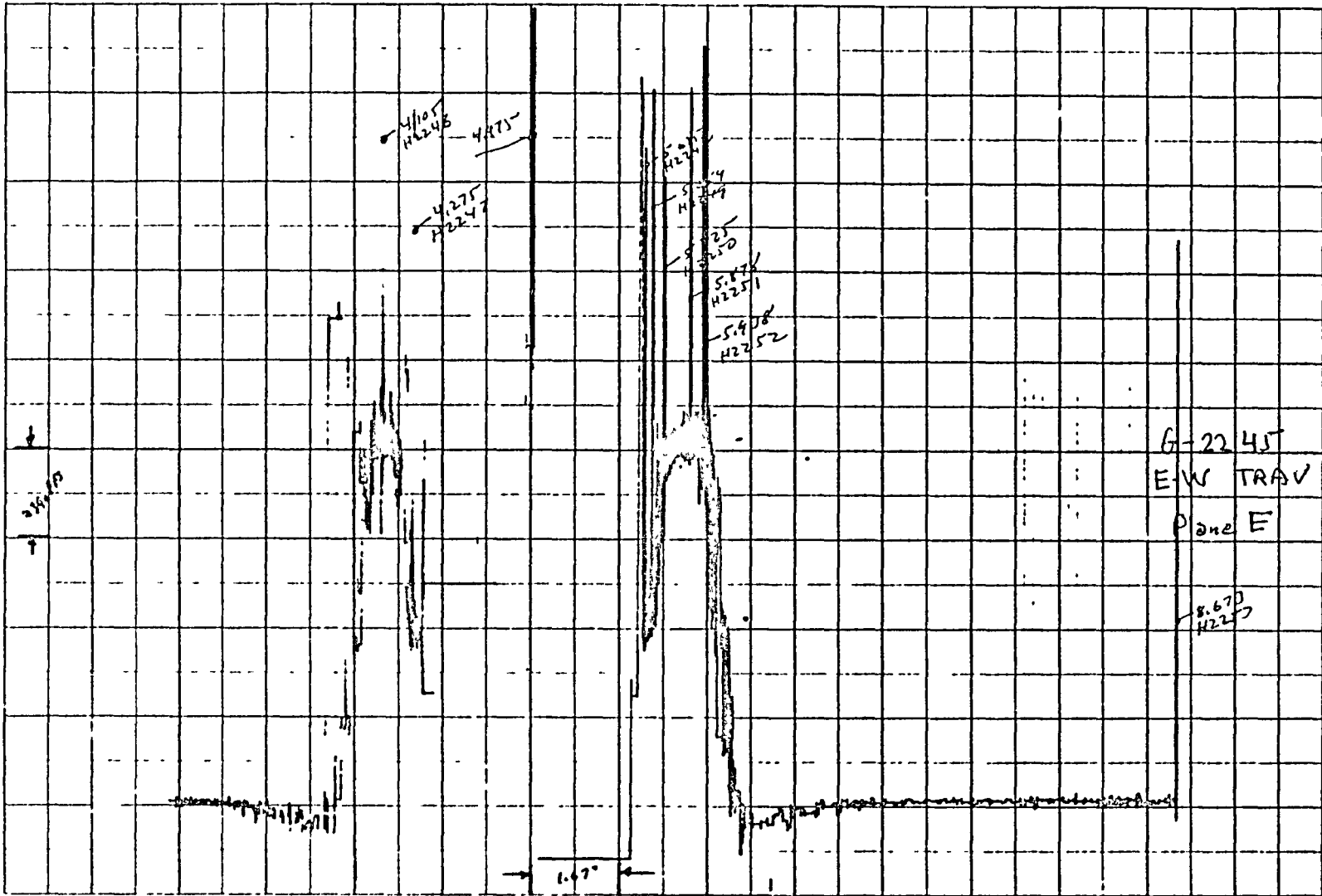




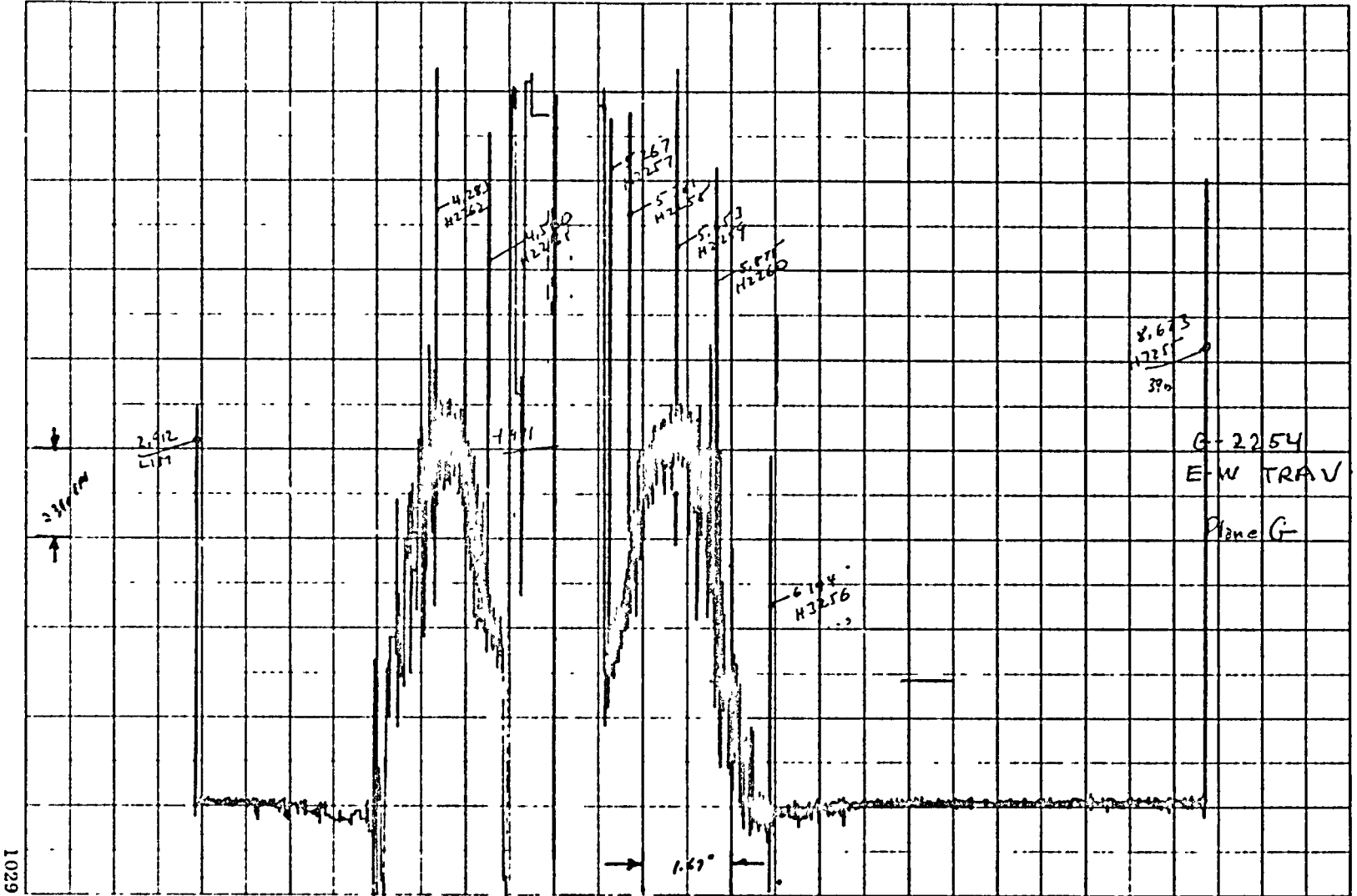
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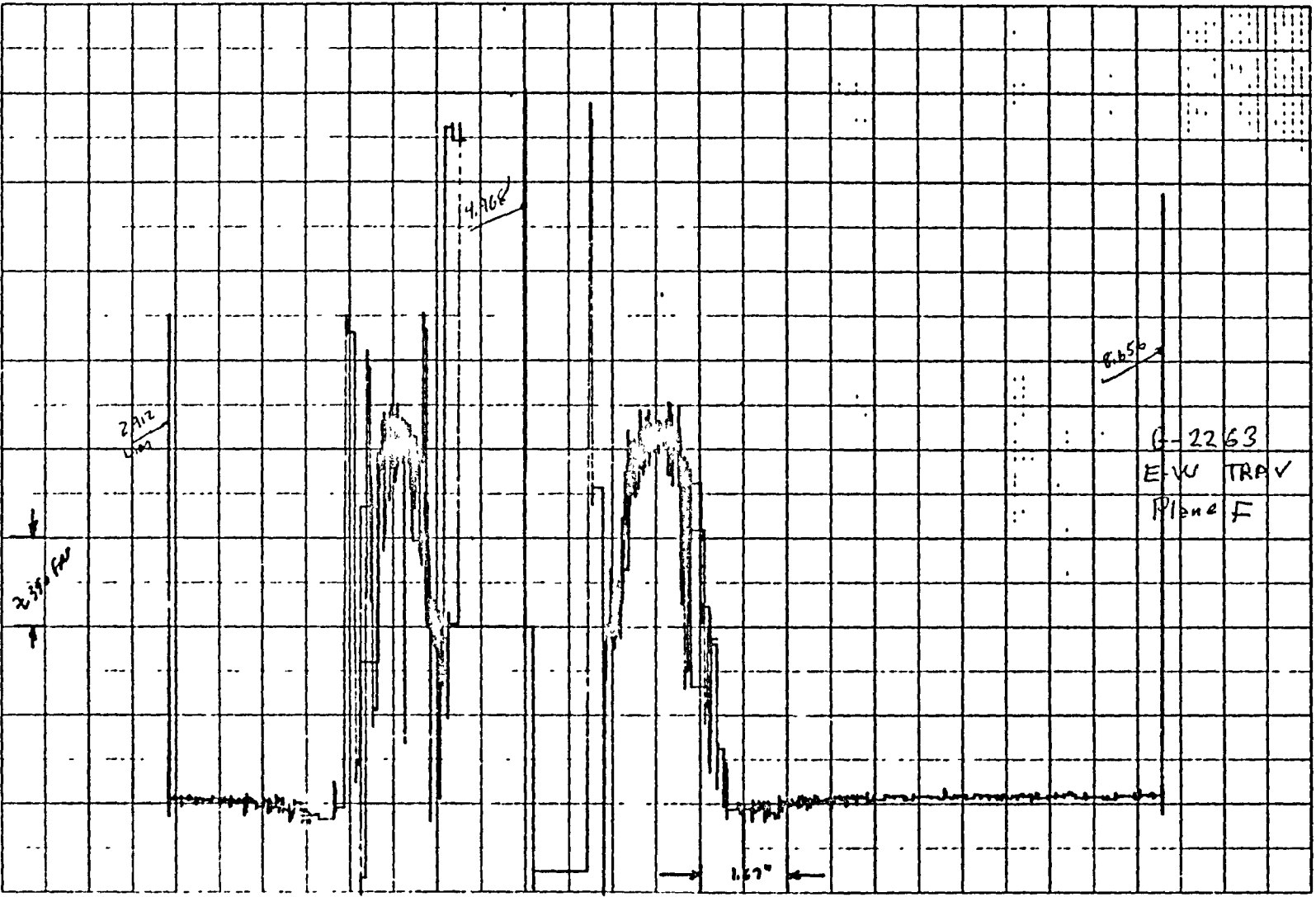
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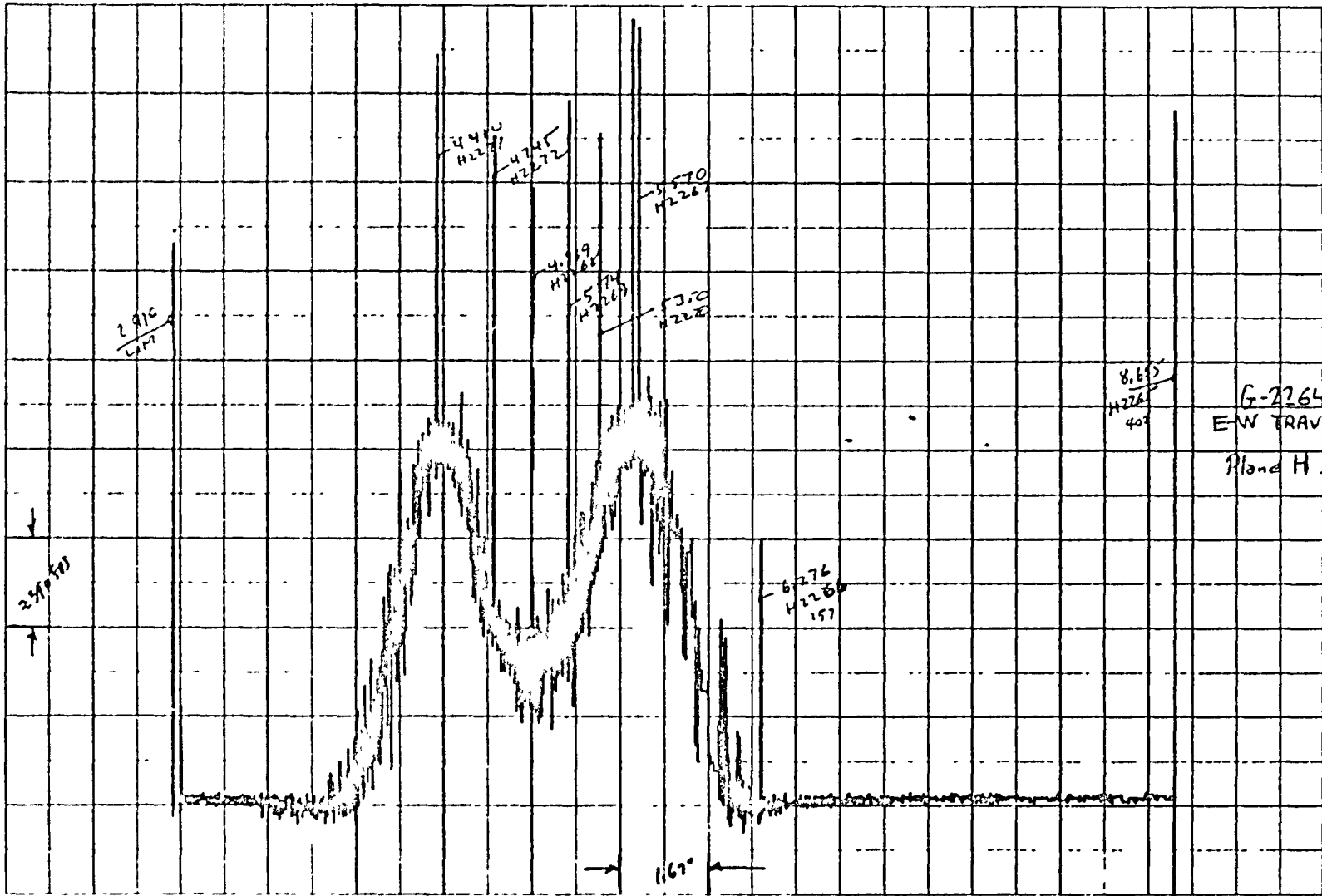
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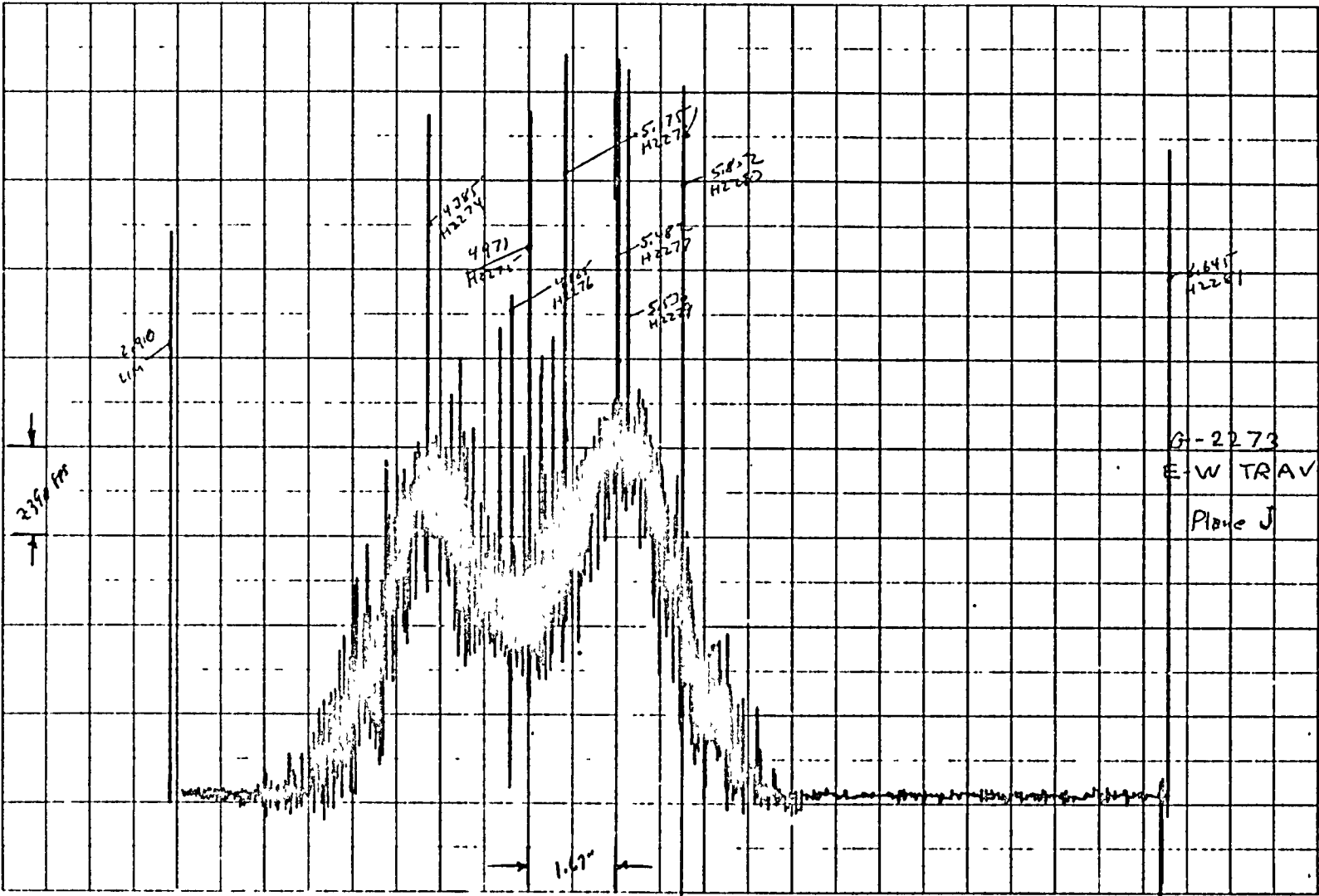
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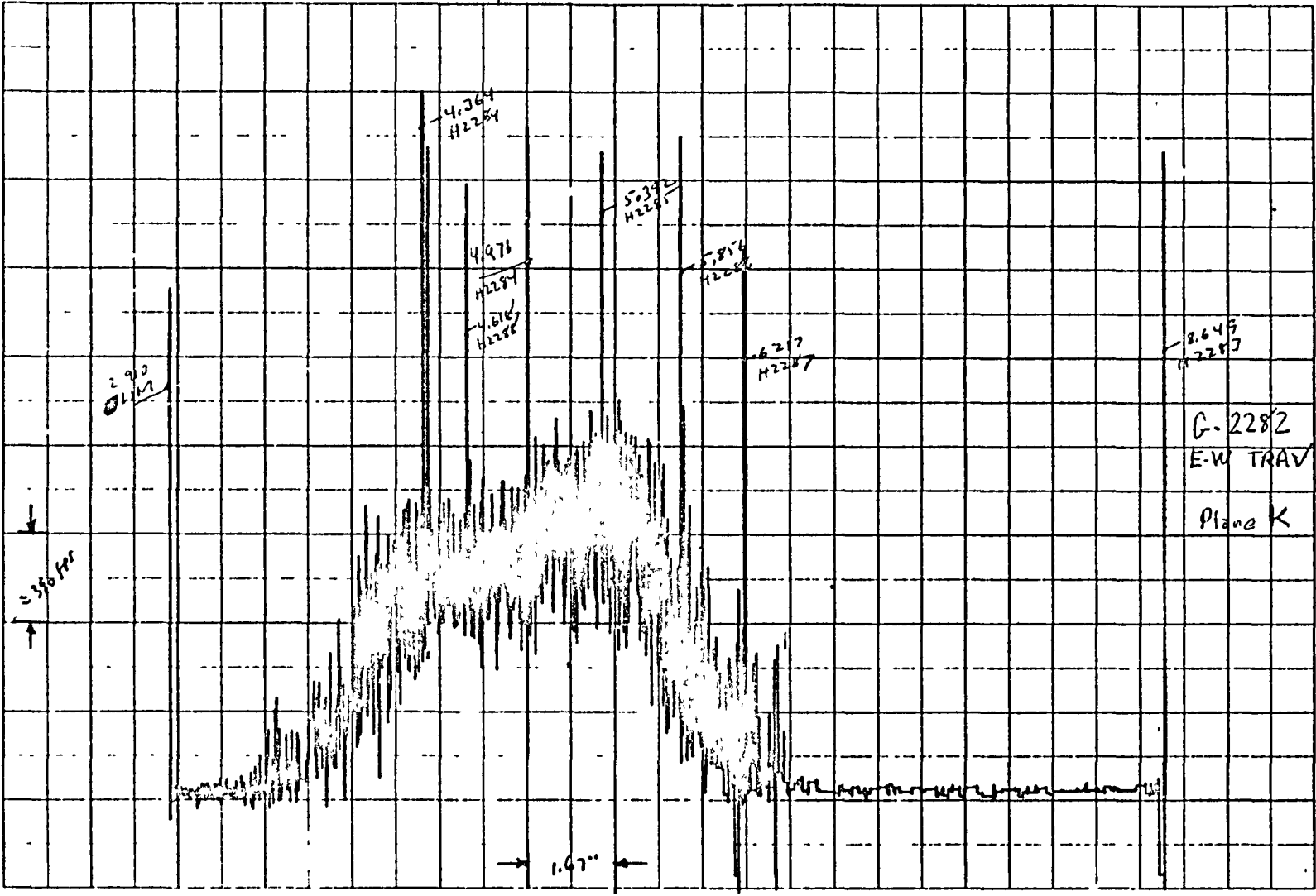
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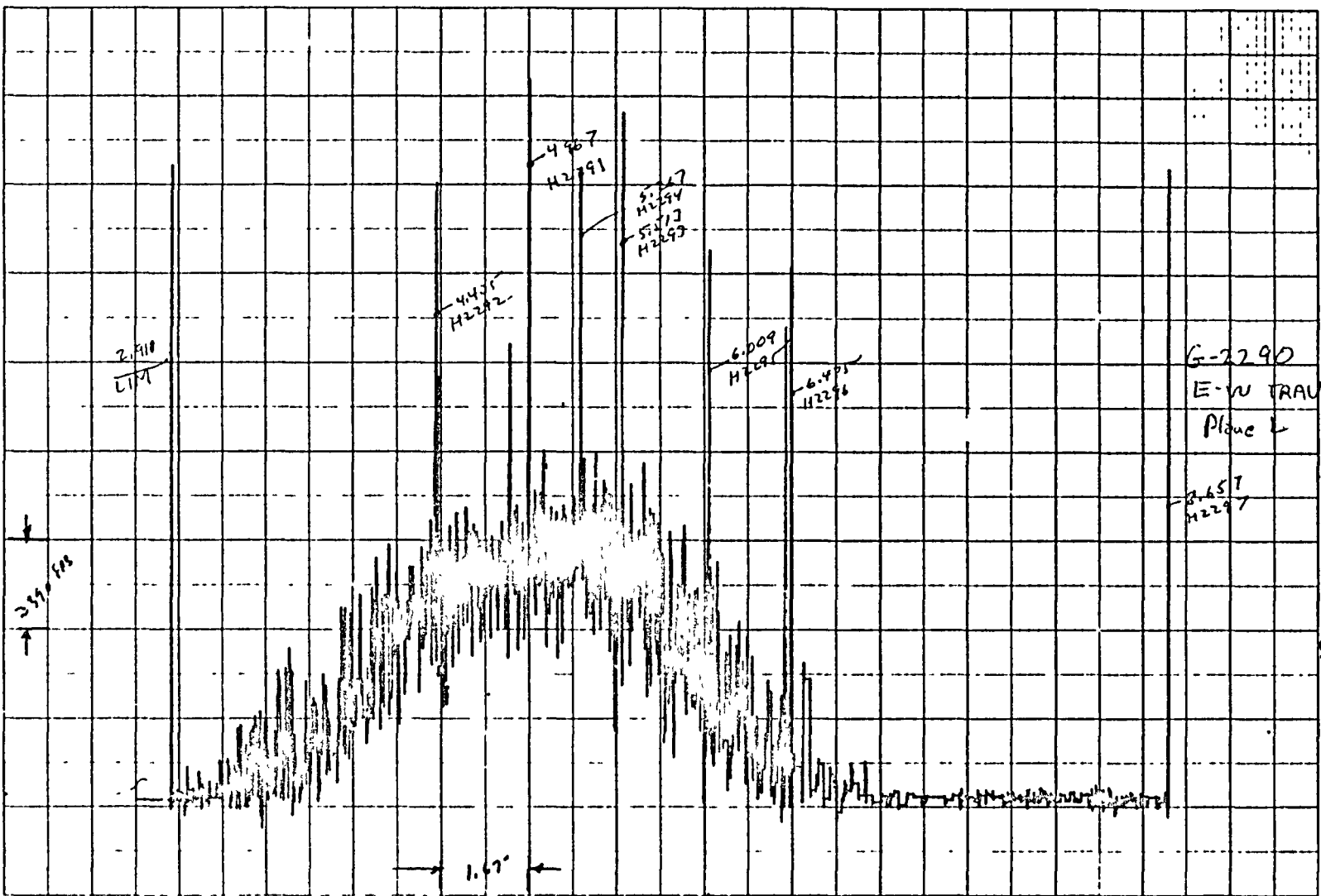


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G-2282  
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Plane K

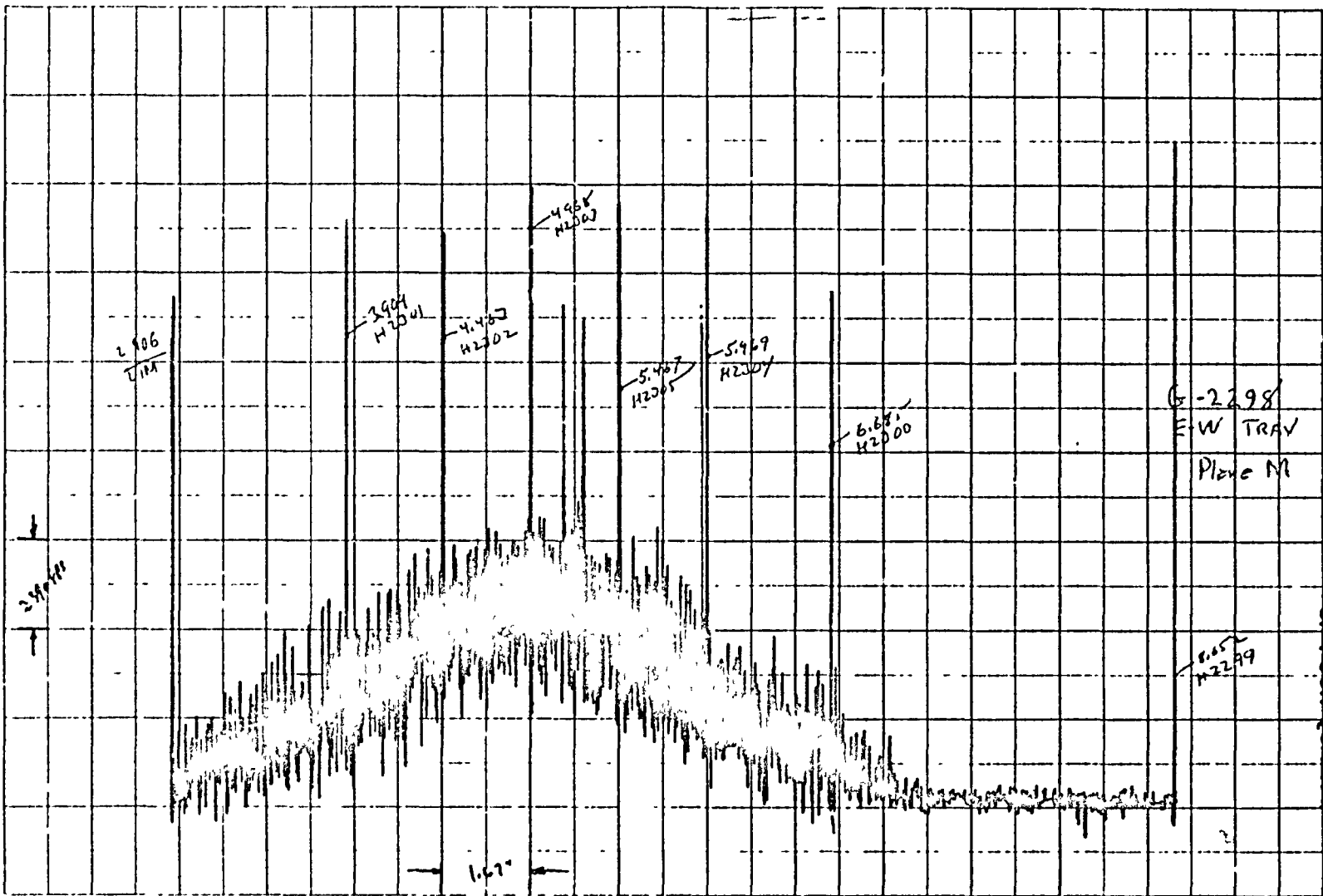
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G-2290  
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Plane L

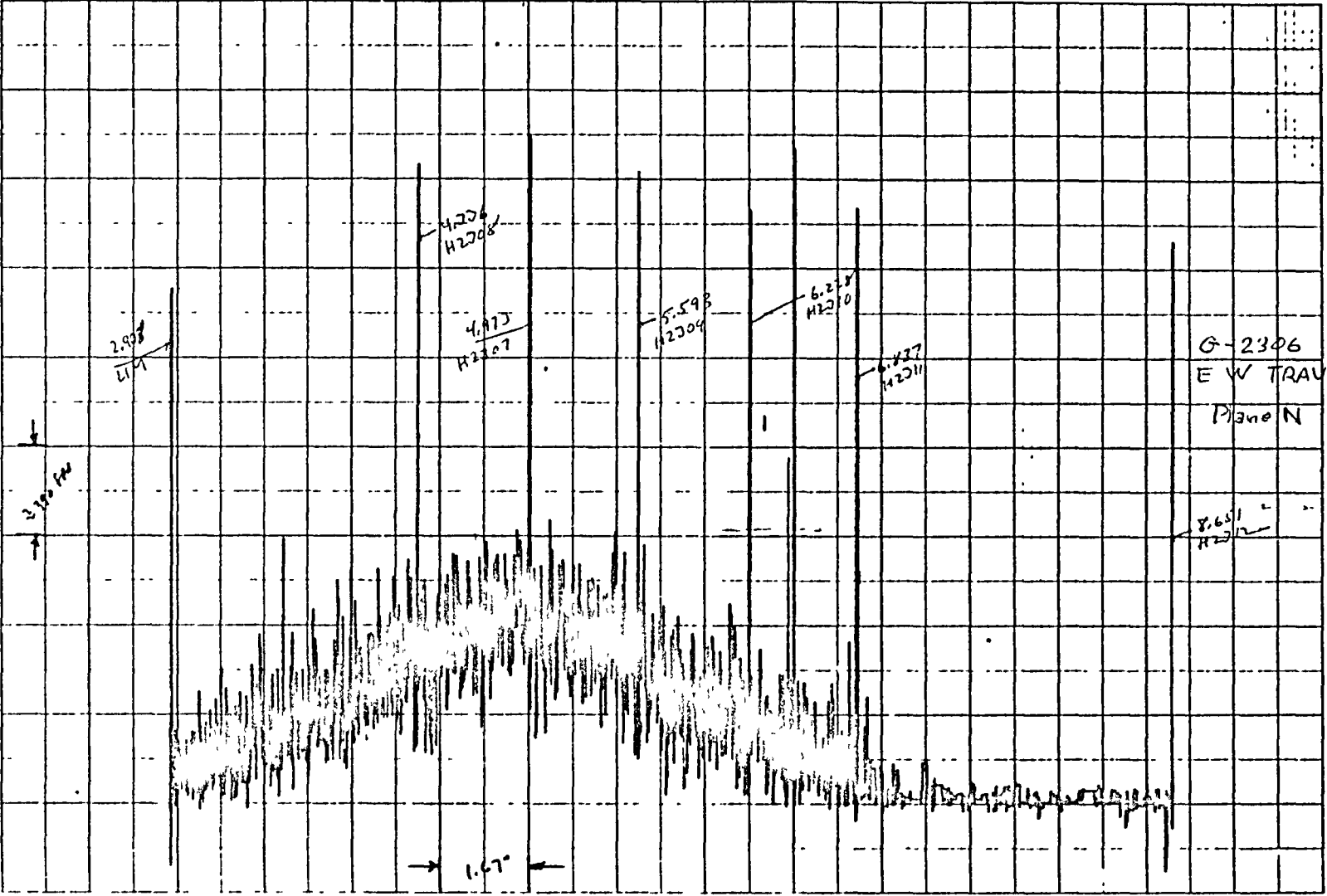
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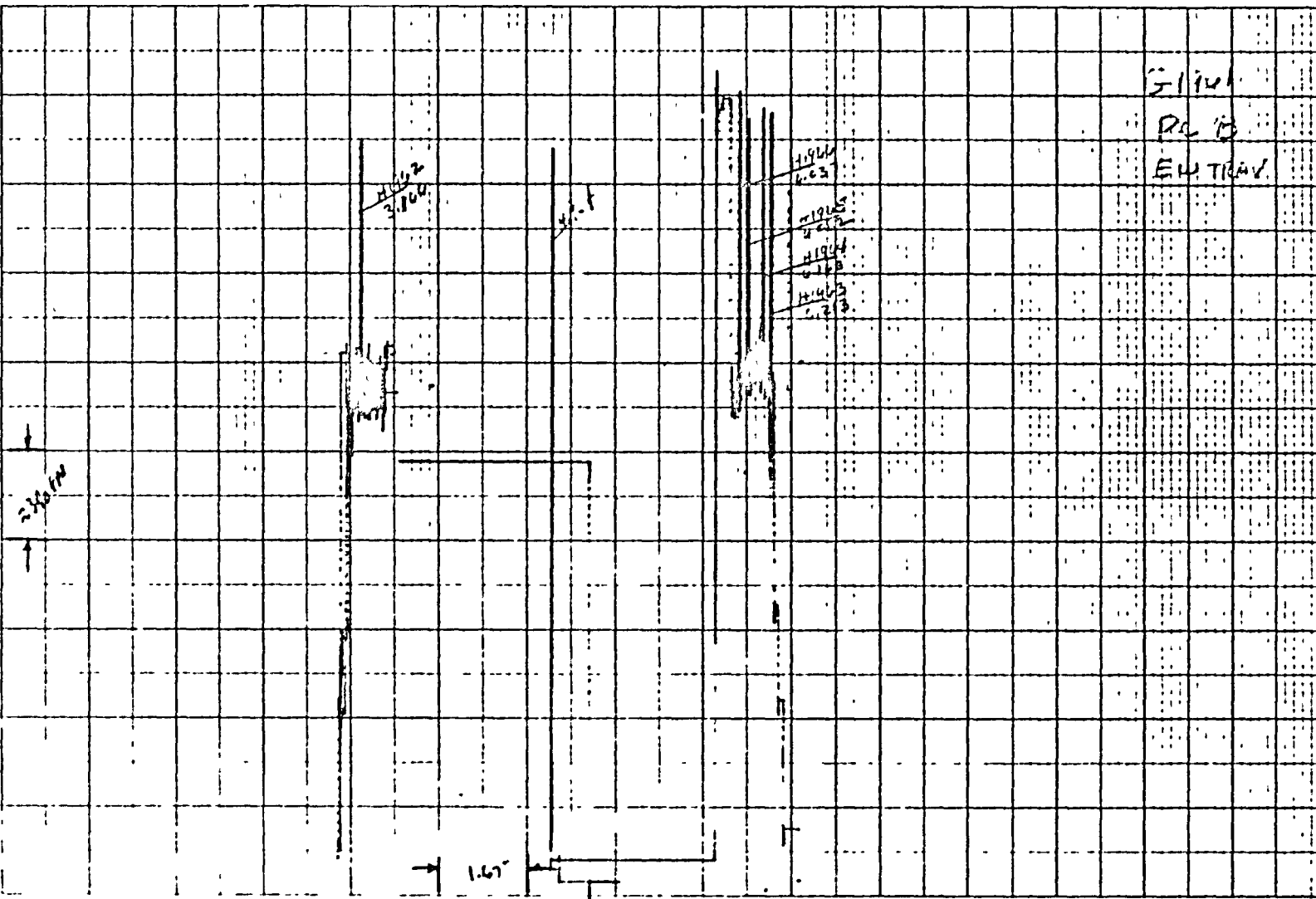
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MODEL 2  
TEST POINT 213





Глиня  
Руб.  
ЕУТІВ.

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P. C.  
G 1707  
E. W. TRAY

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4.148

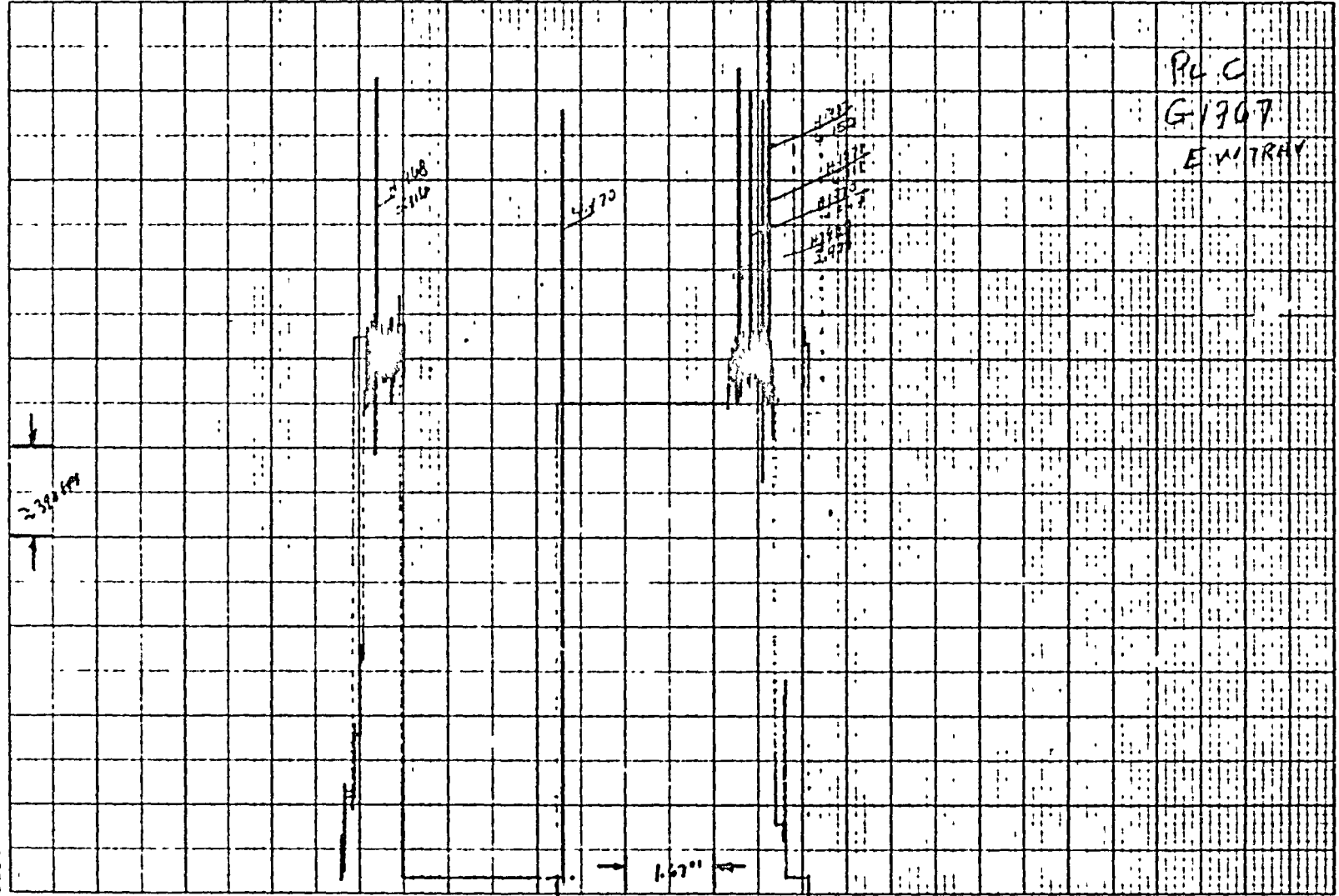
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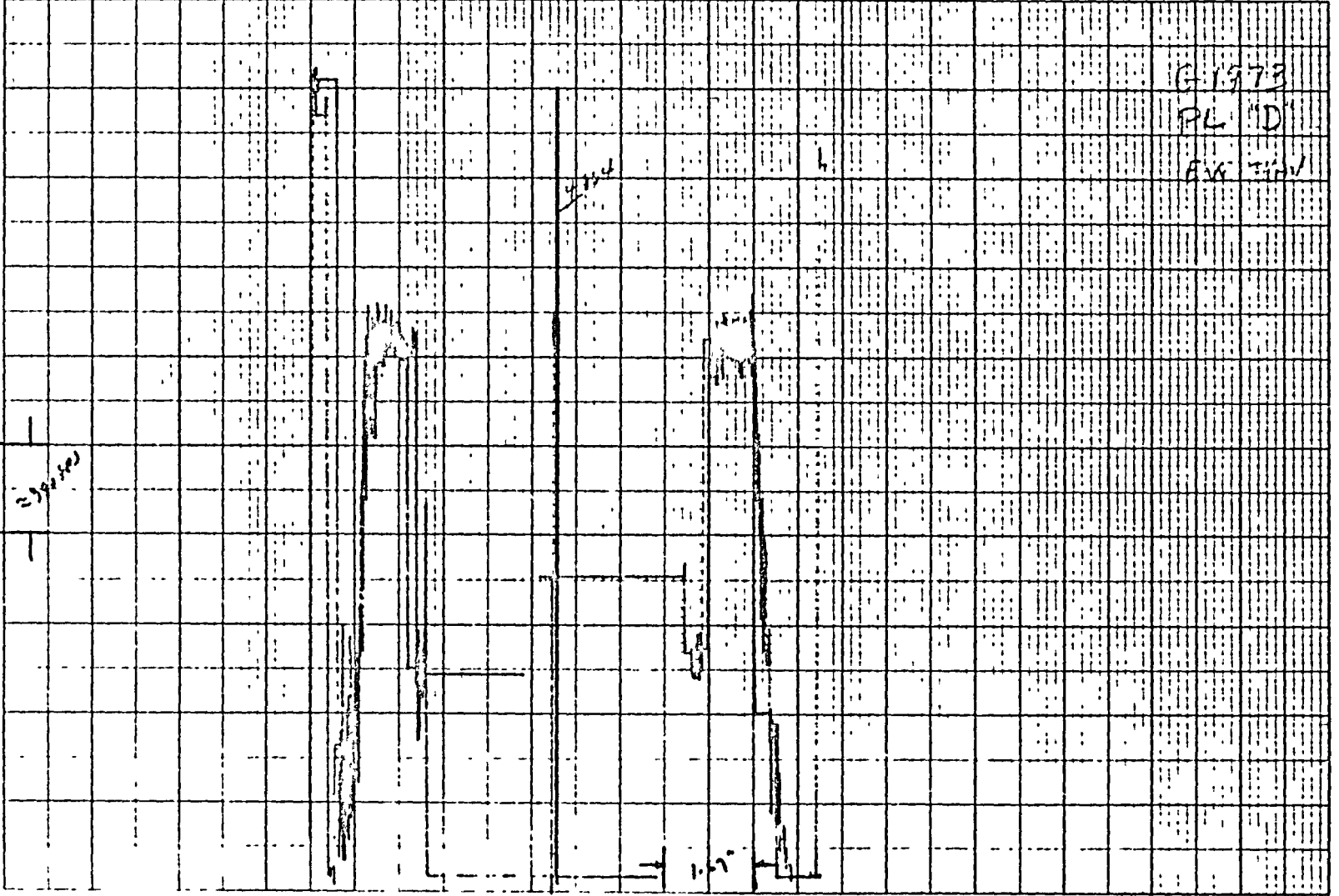
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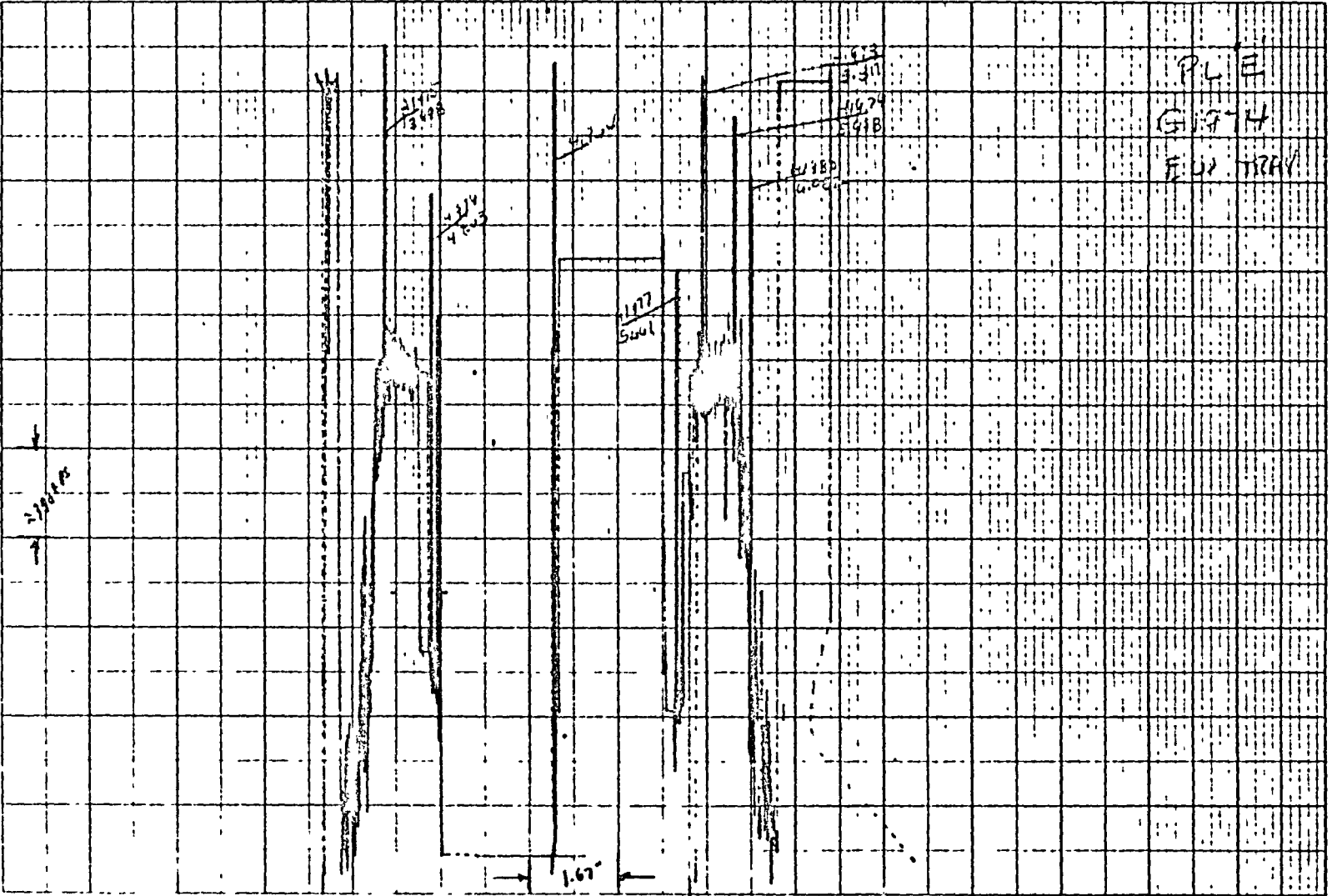
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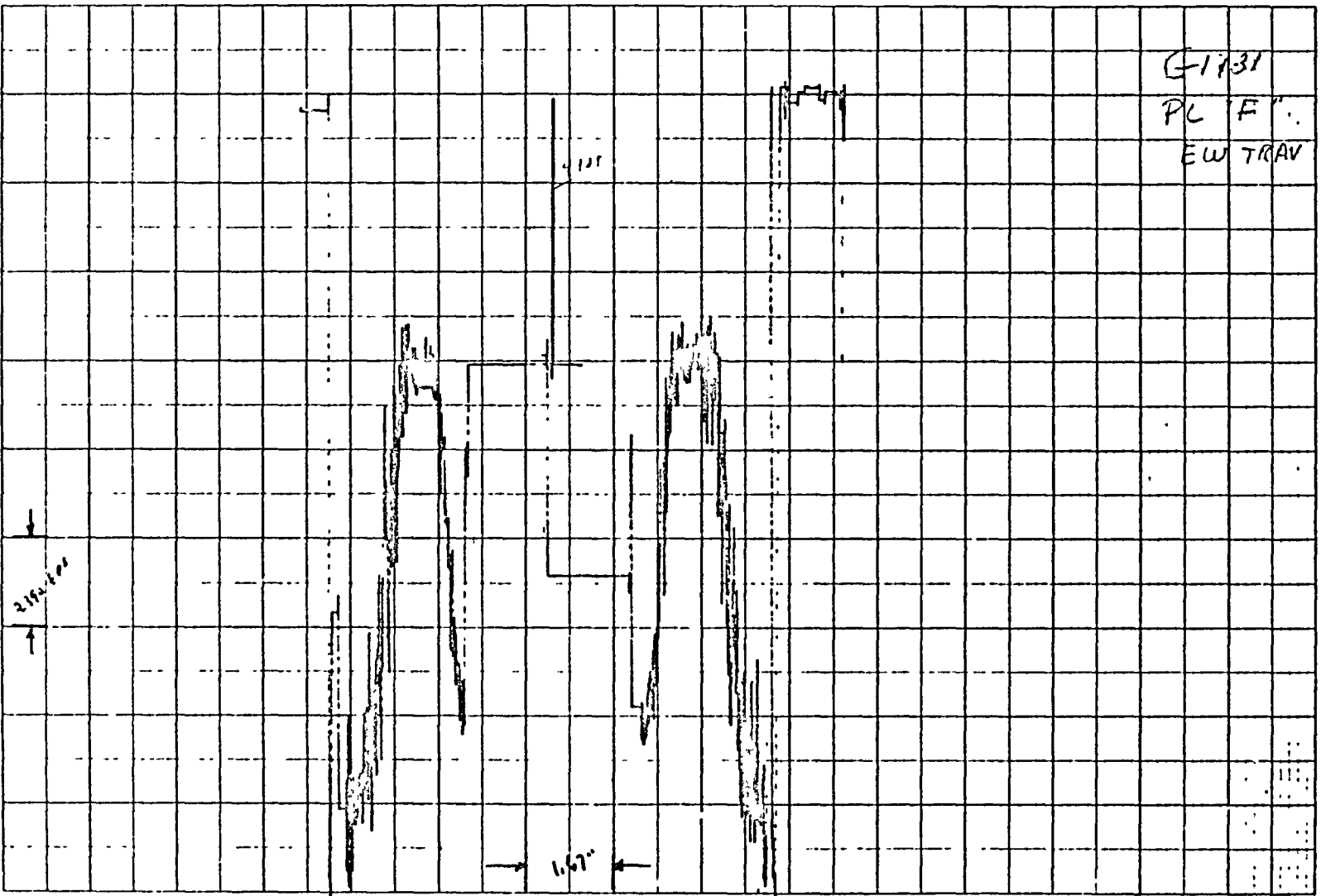
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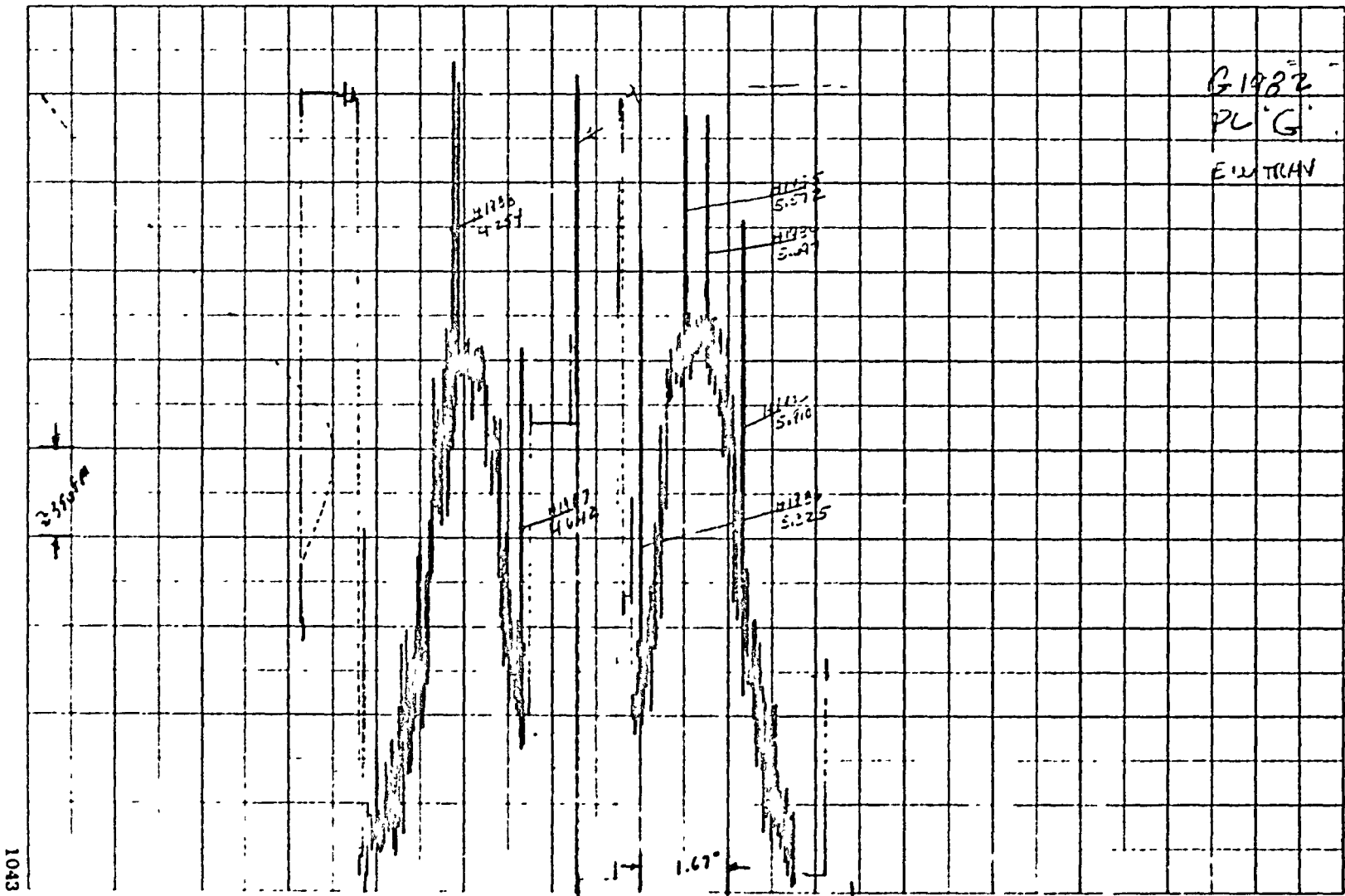




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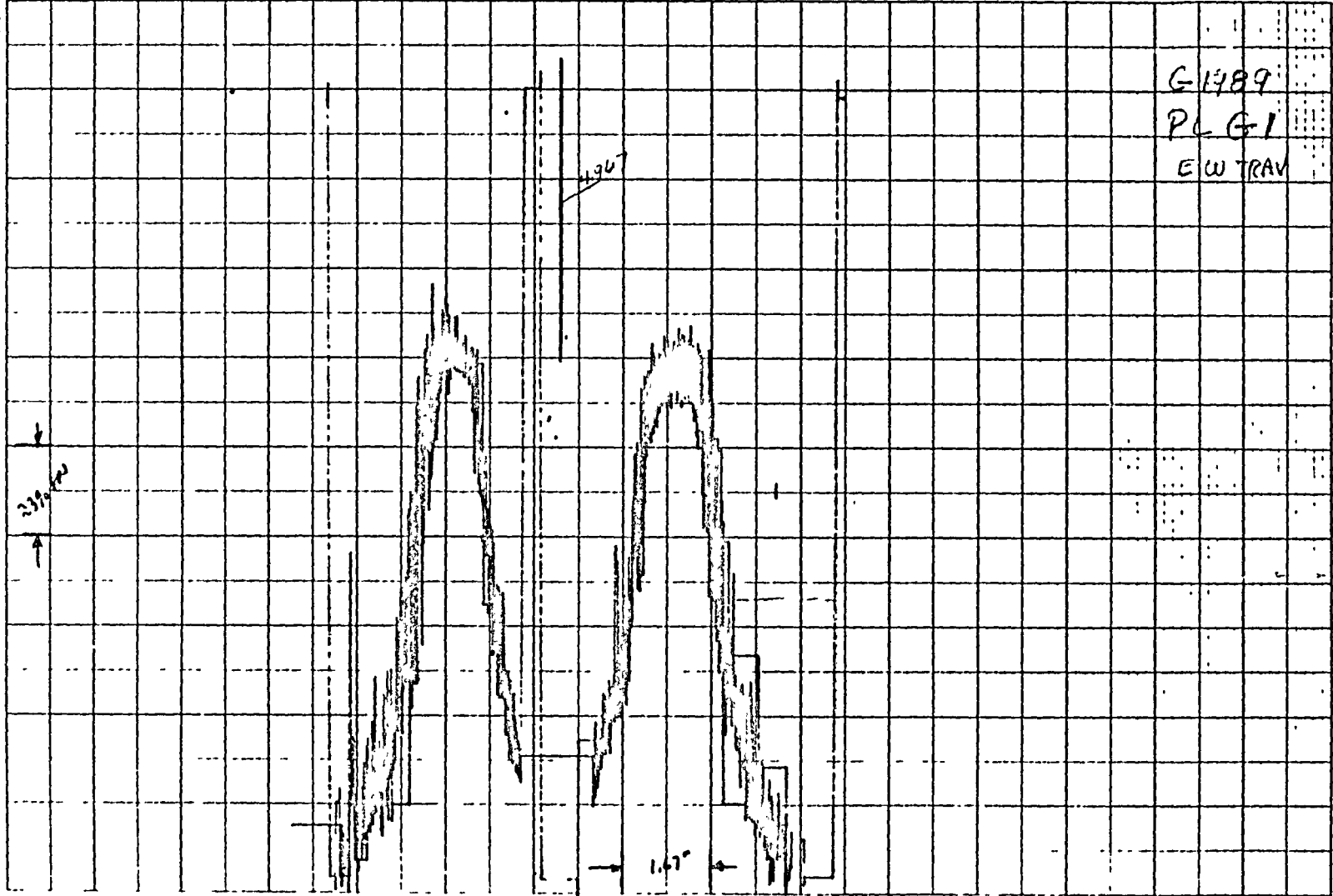
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G1982  
 PL'G  
 E.W. TRAV

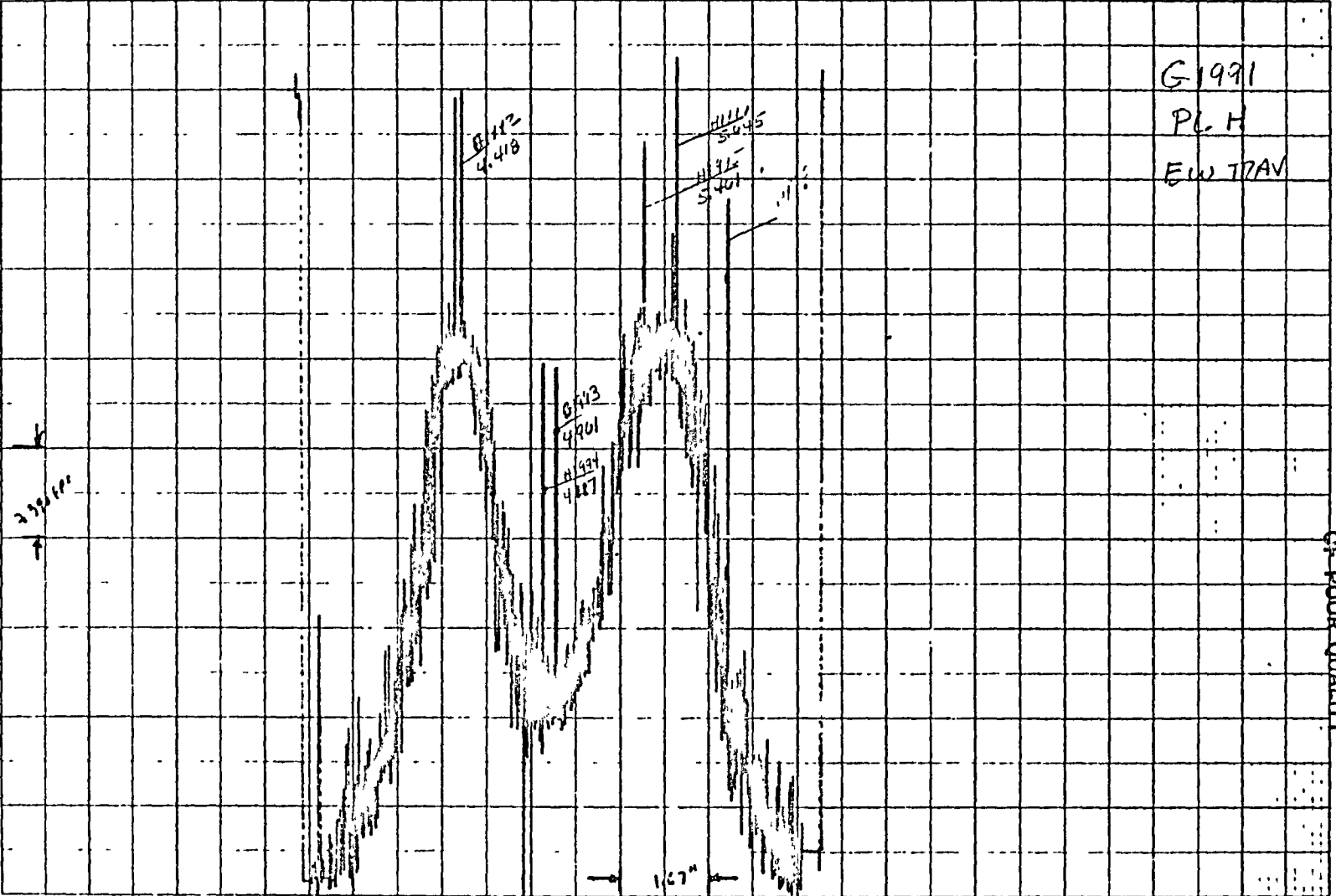
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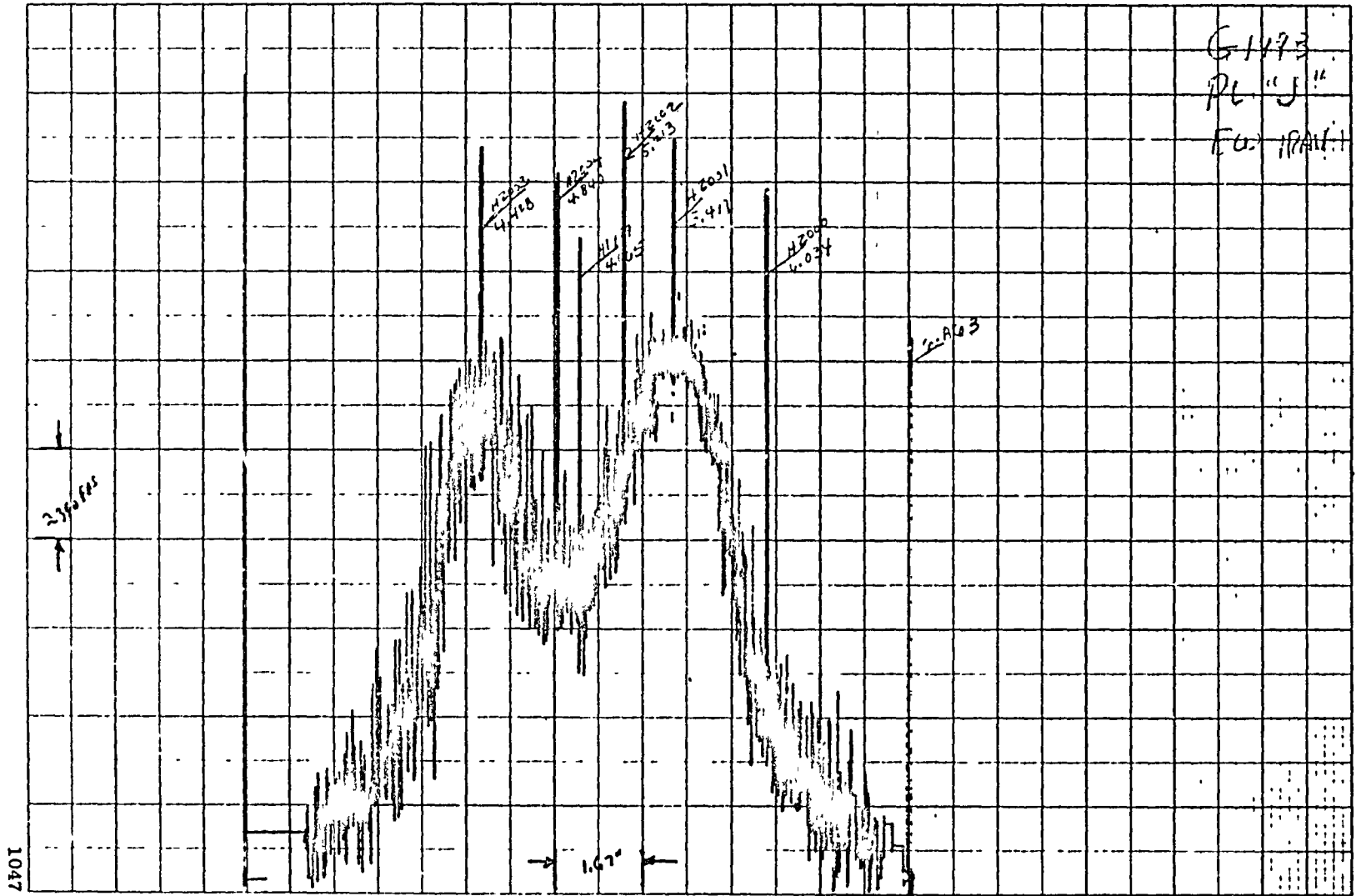
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G1991  
 PLH  
 EW TRAV

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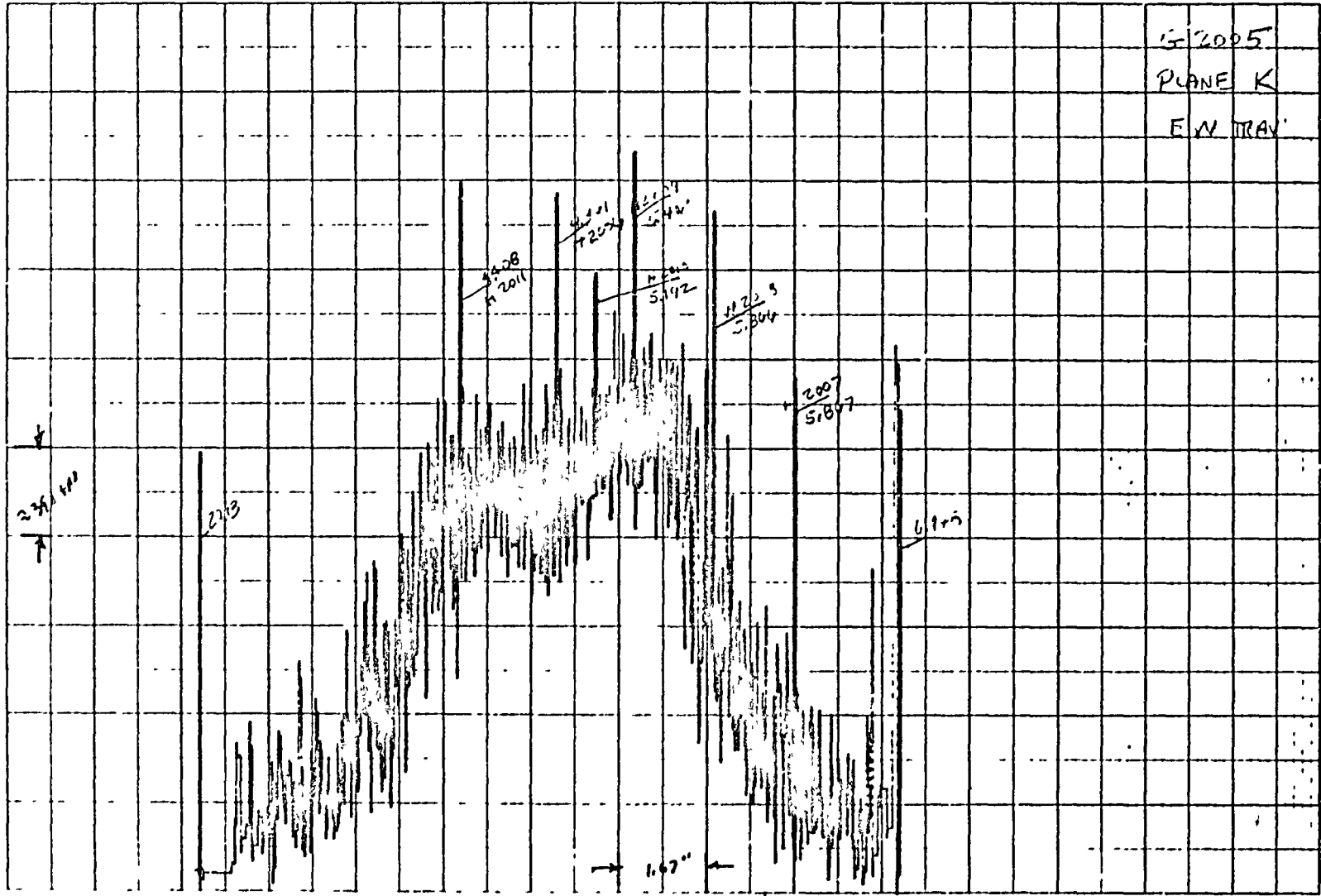


G-1473  
 PL "J"  
 E07 11/11/11

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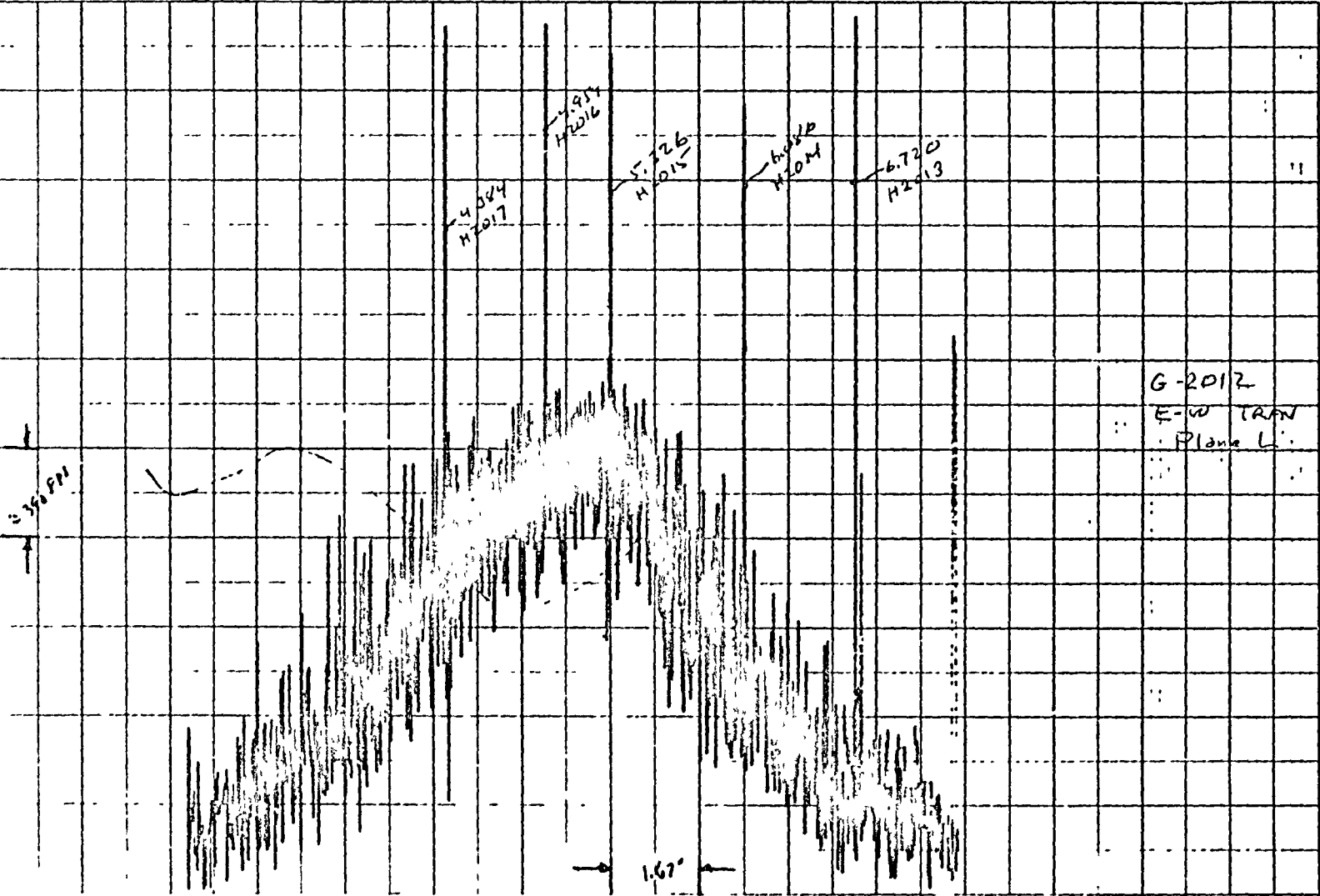
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SI 2005  
PLANE K  
E-W TRAV



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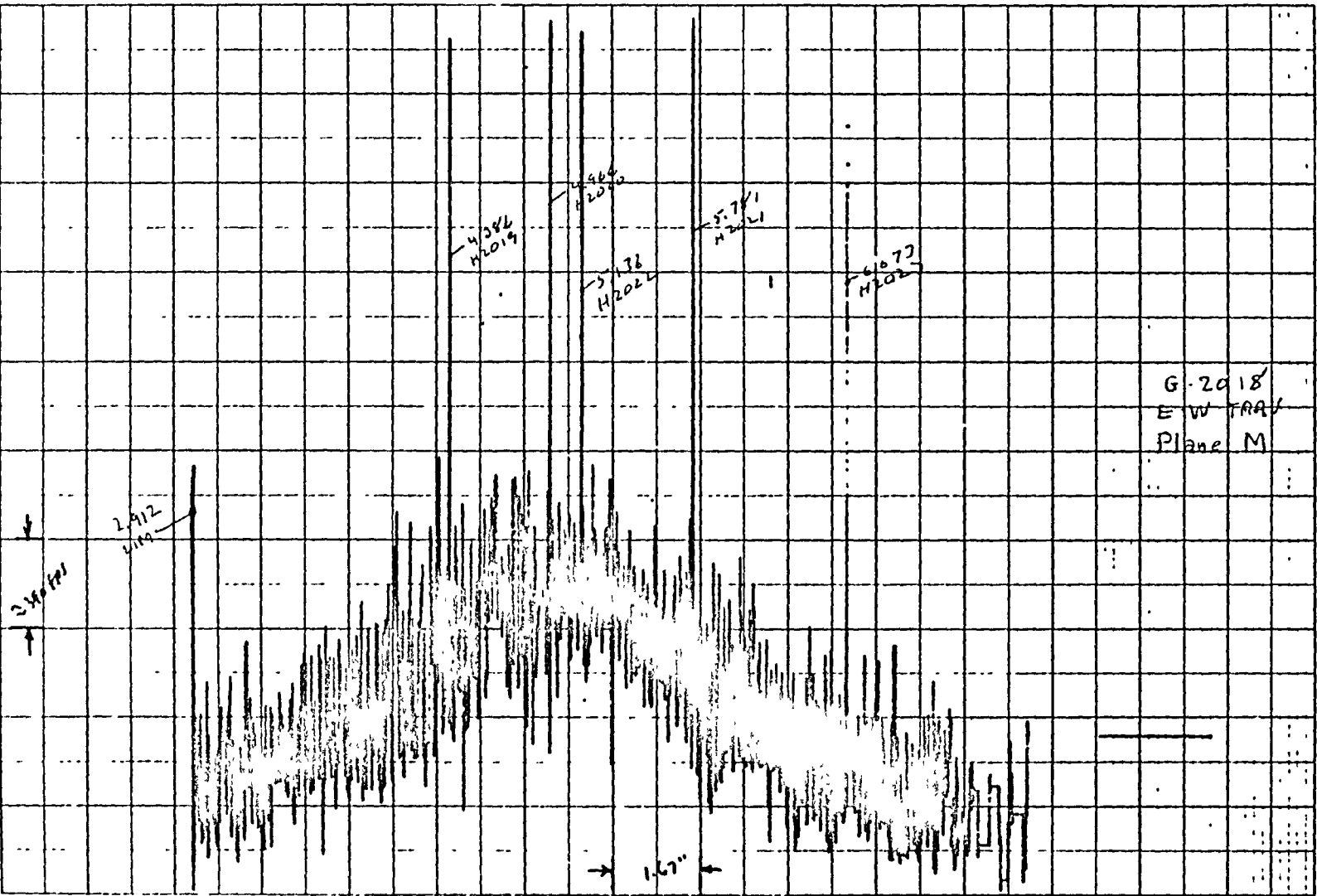
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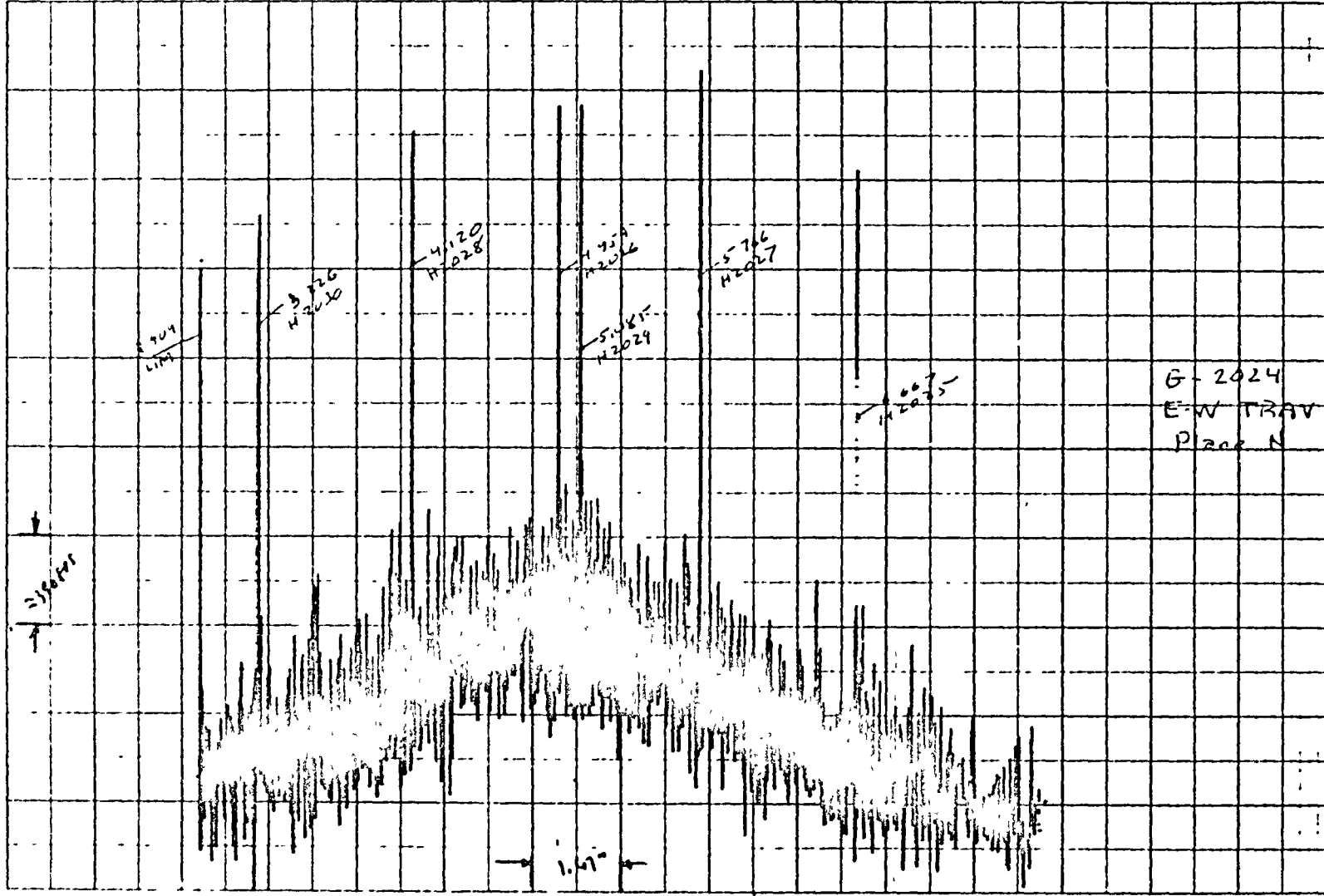
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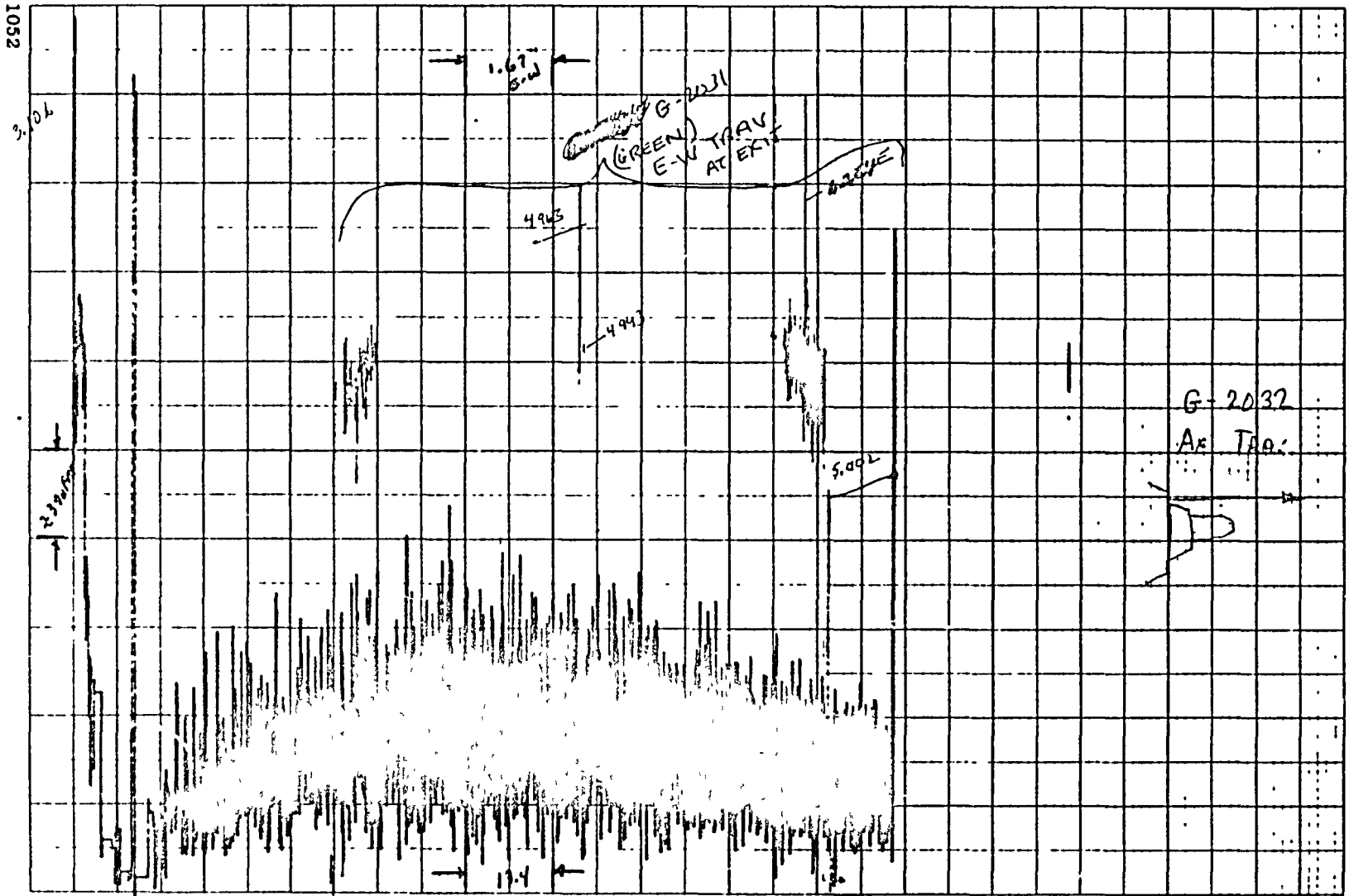




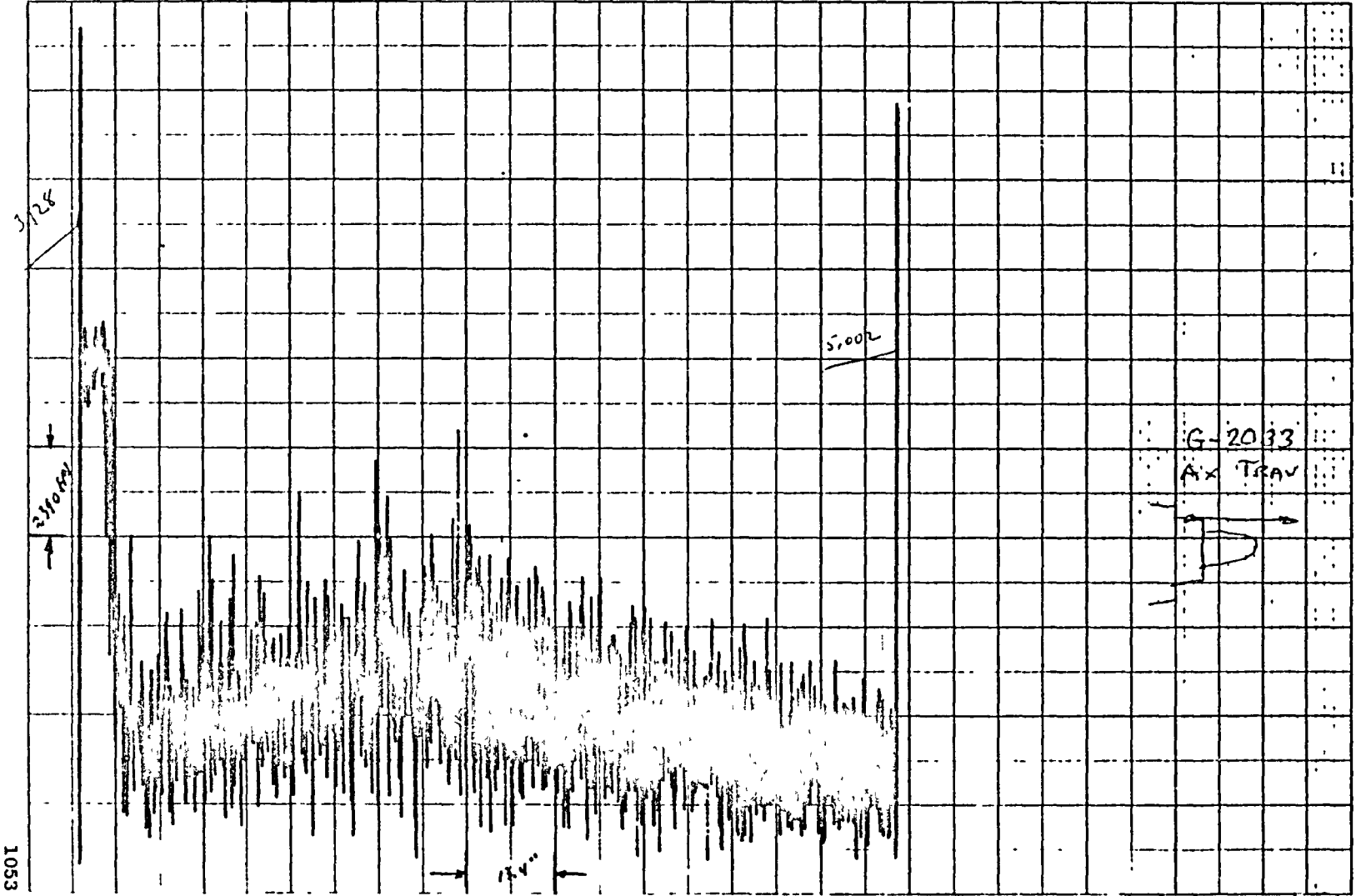
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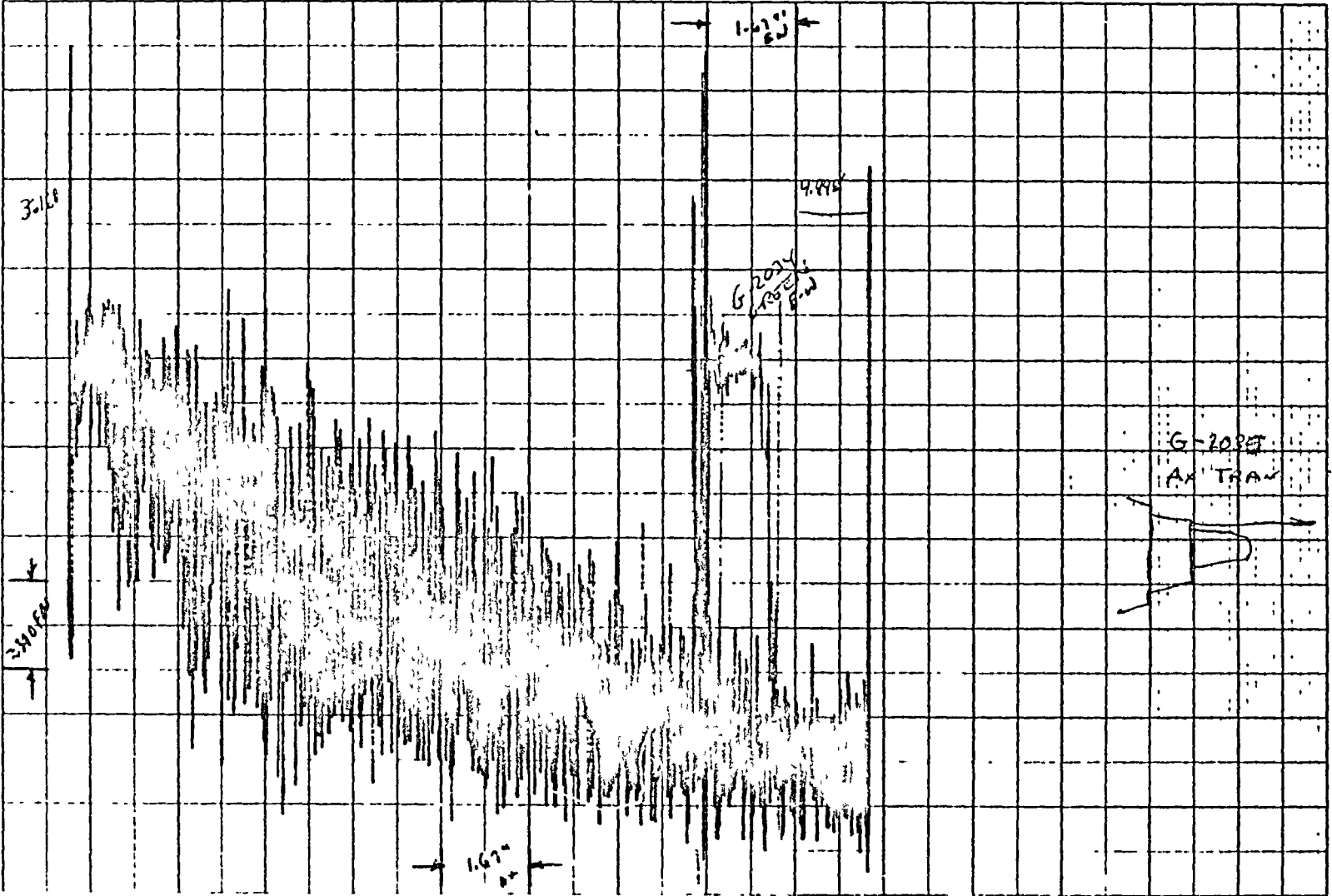


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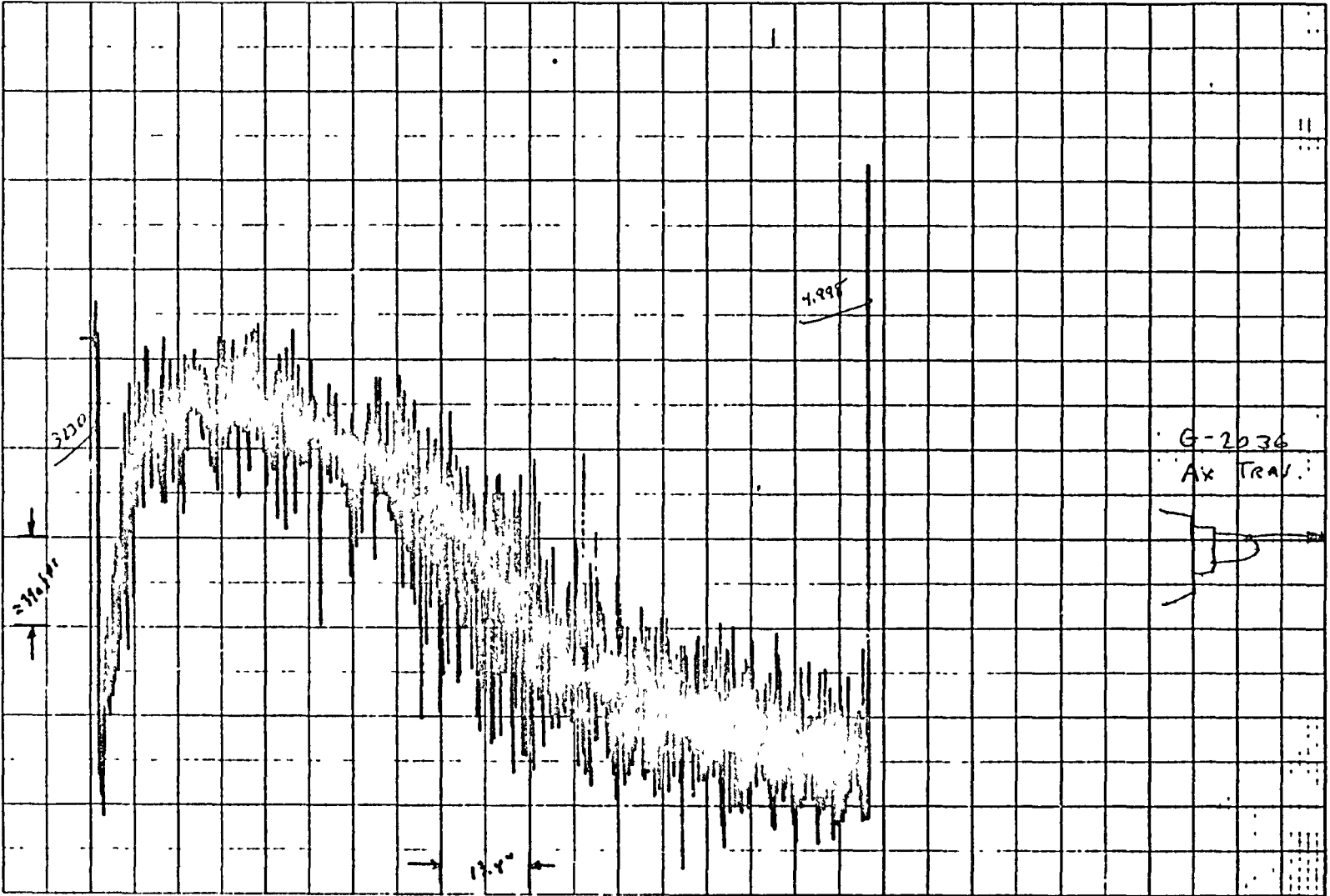
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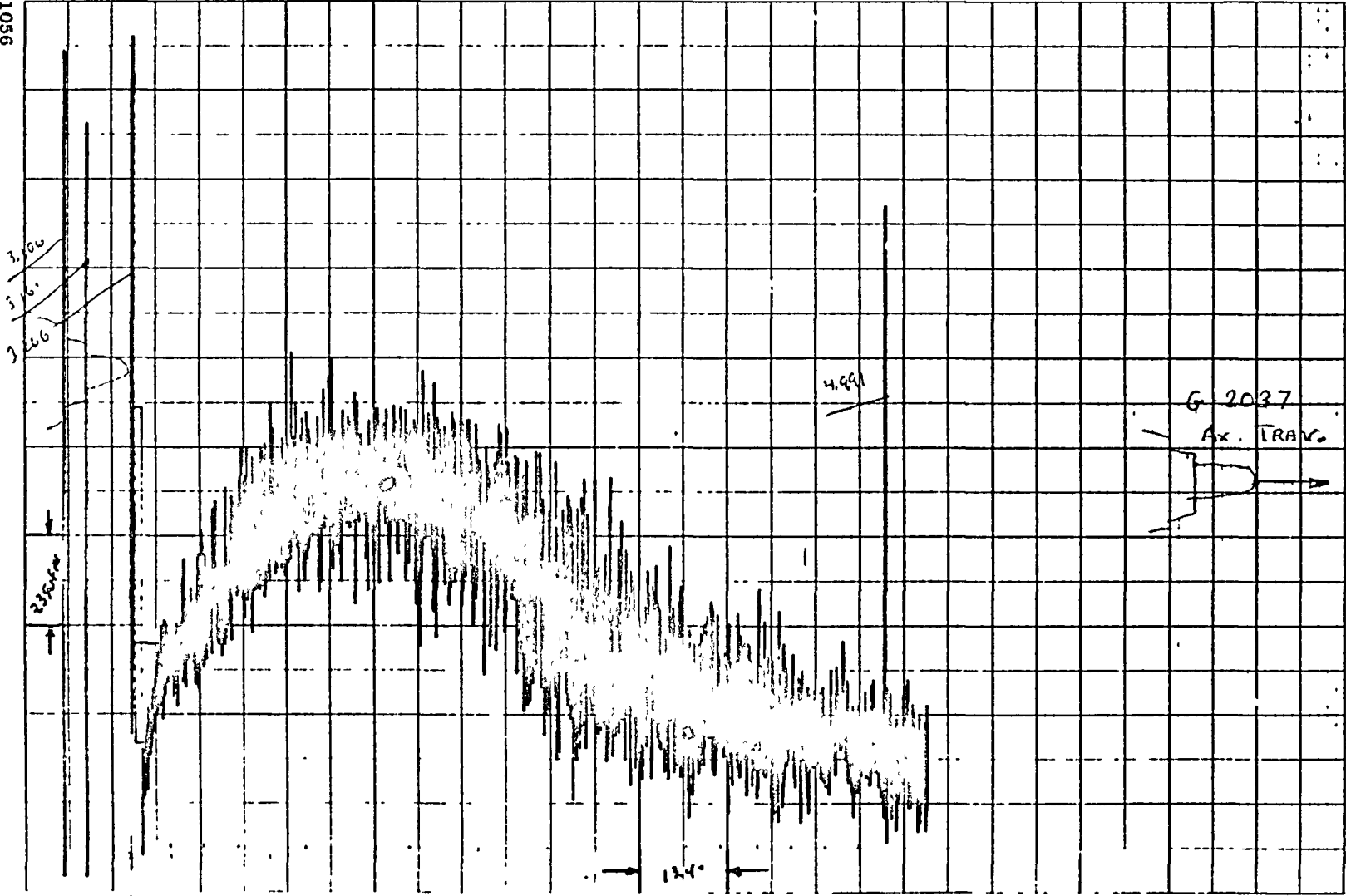
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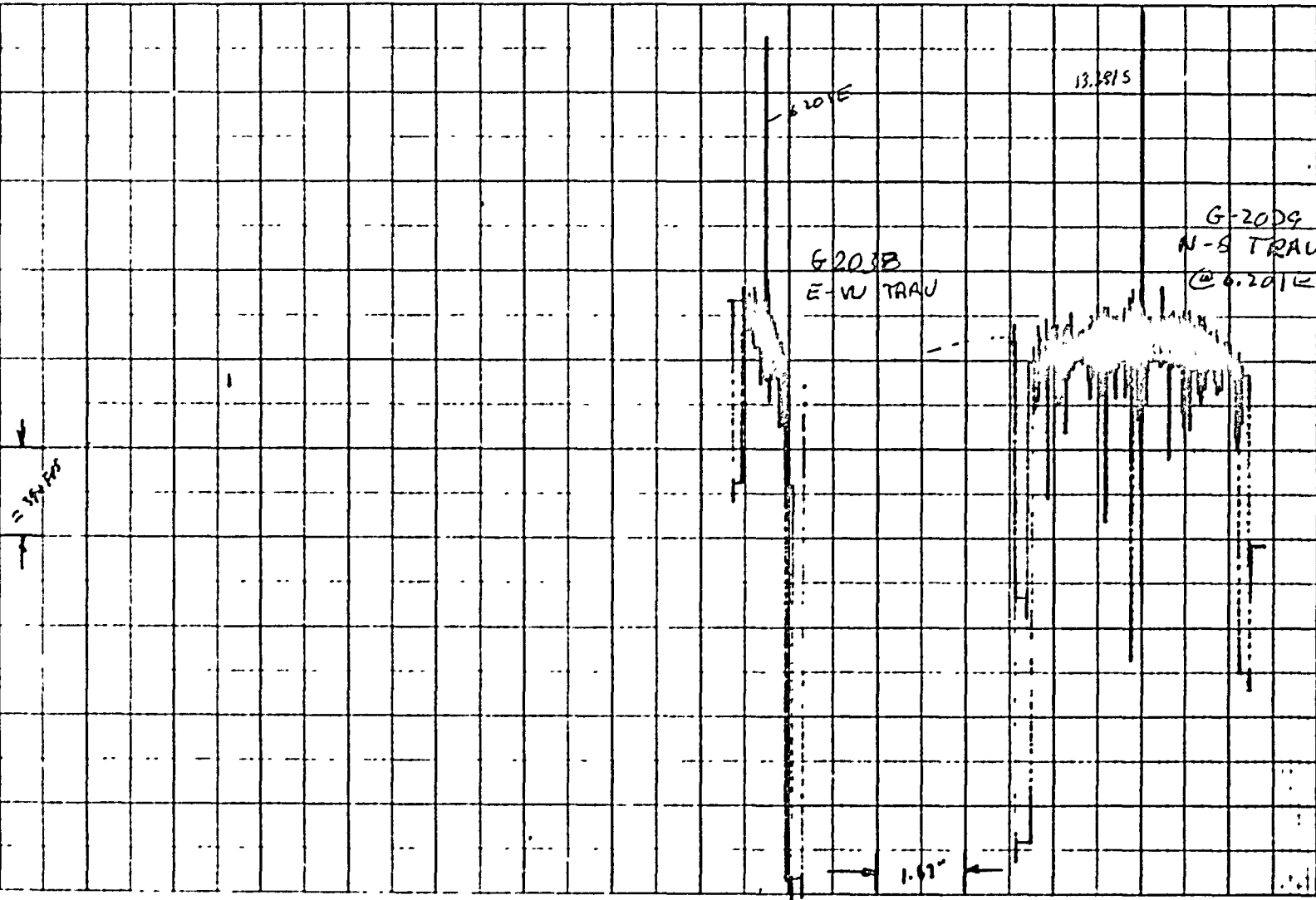


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13.2815

G-203B  
E-W TRAU

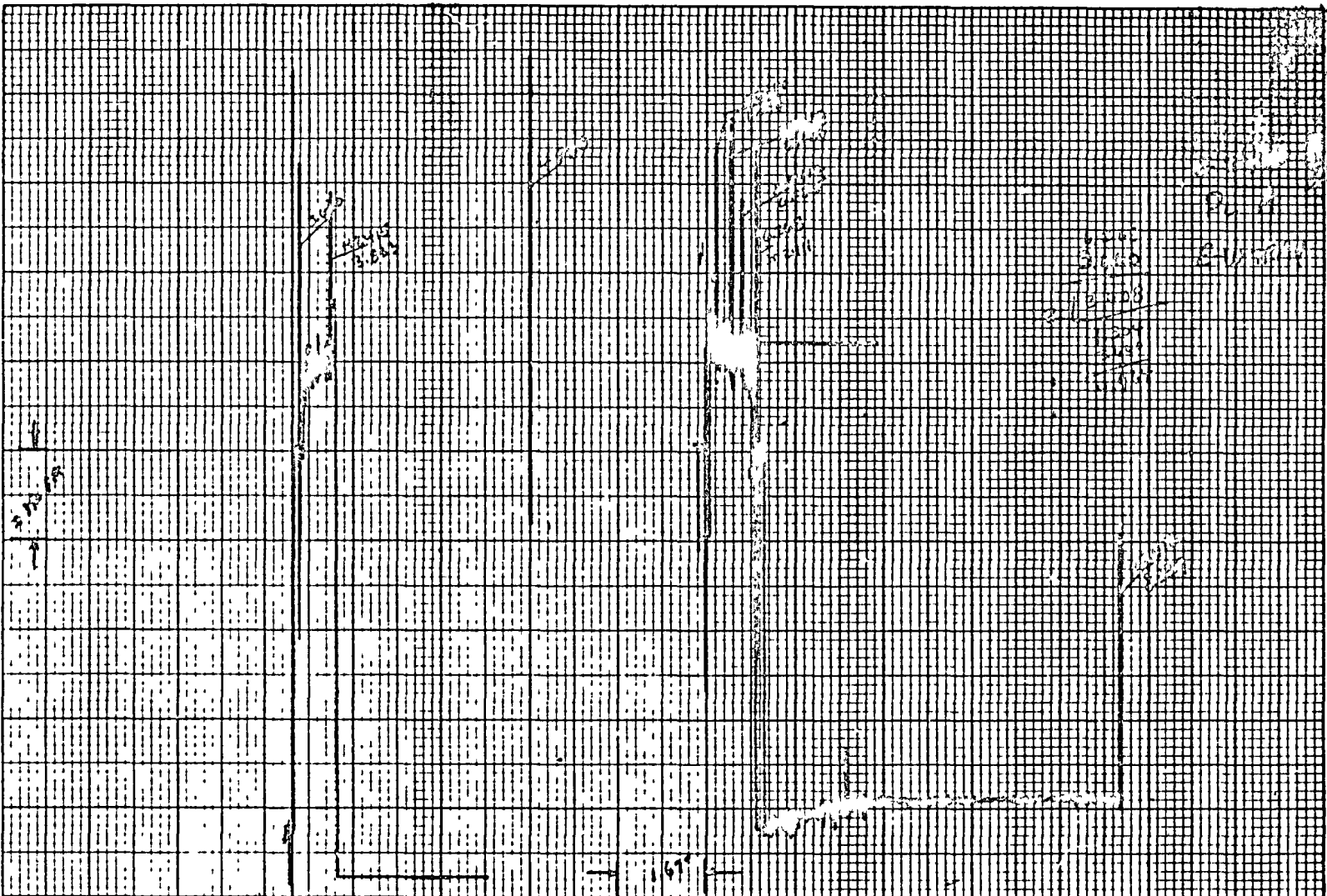
G-203A  
N-S TRAU  
@ 6.201K

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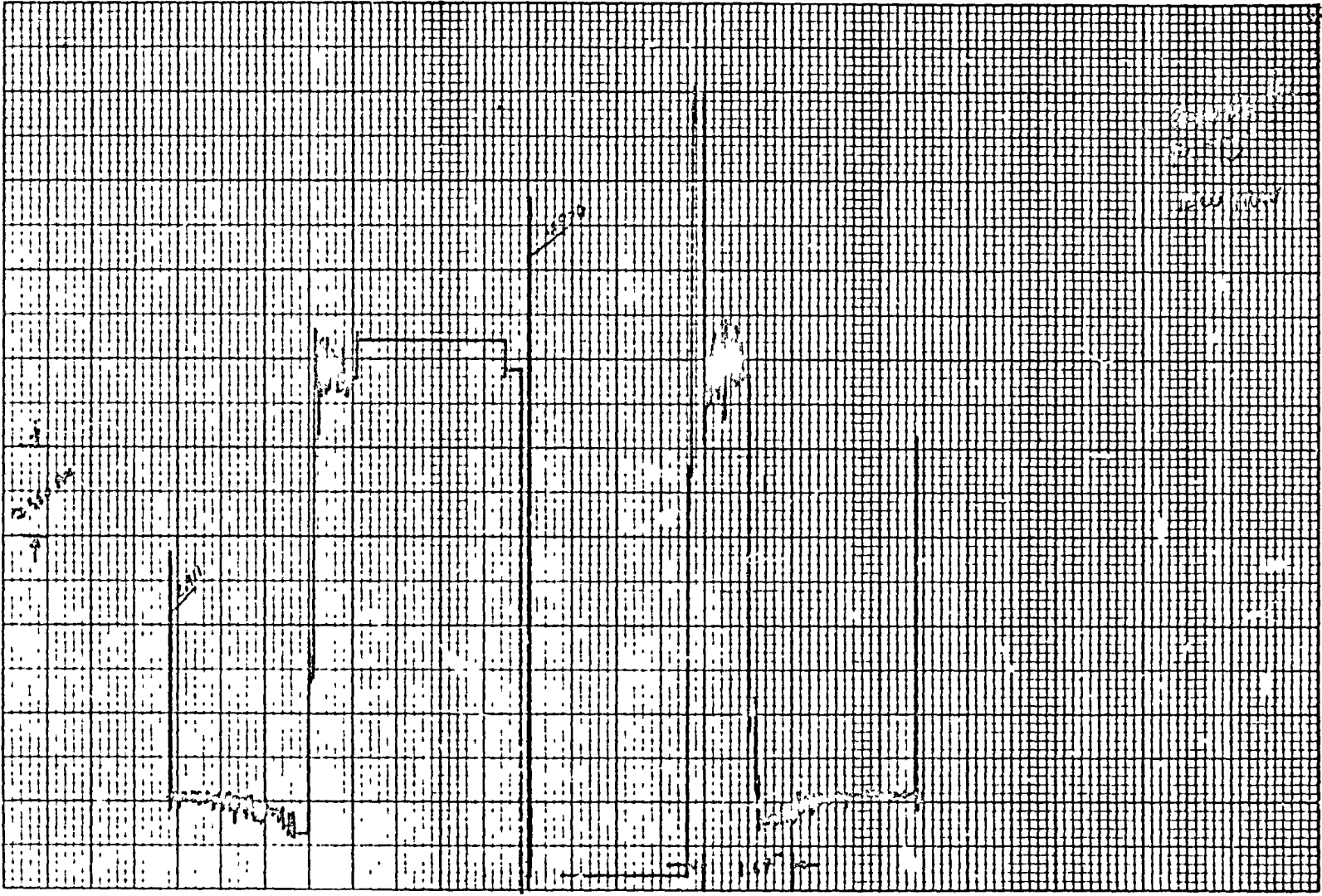
MODEL 2  
TEST POINT 215

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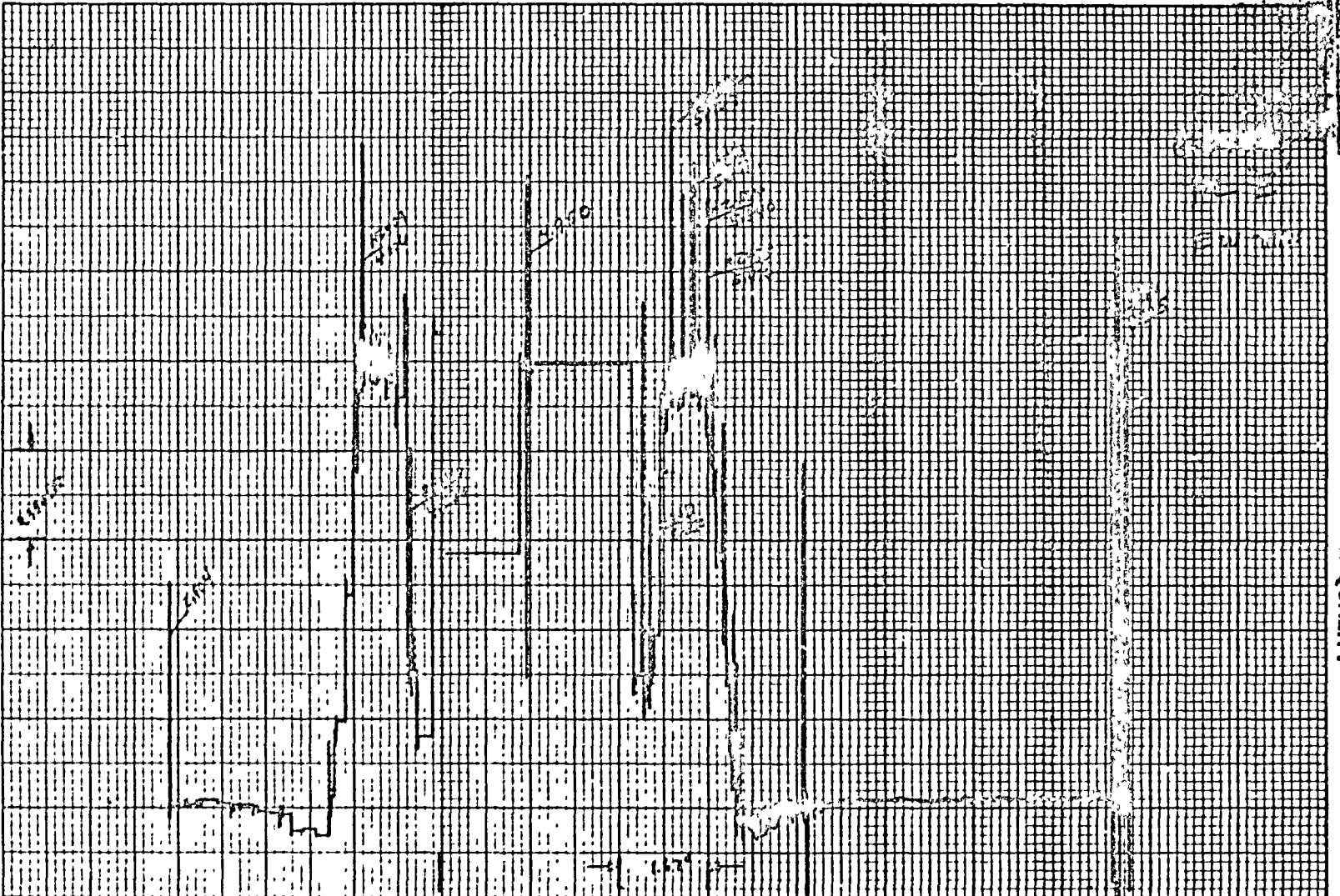
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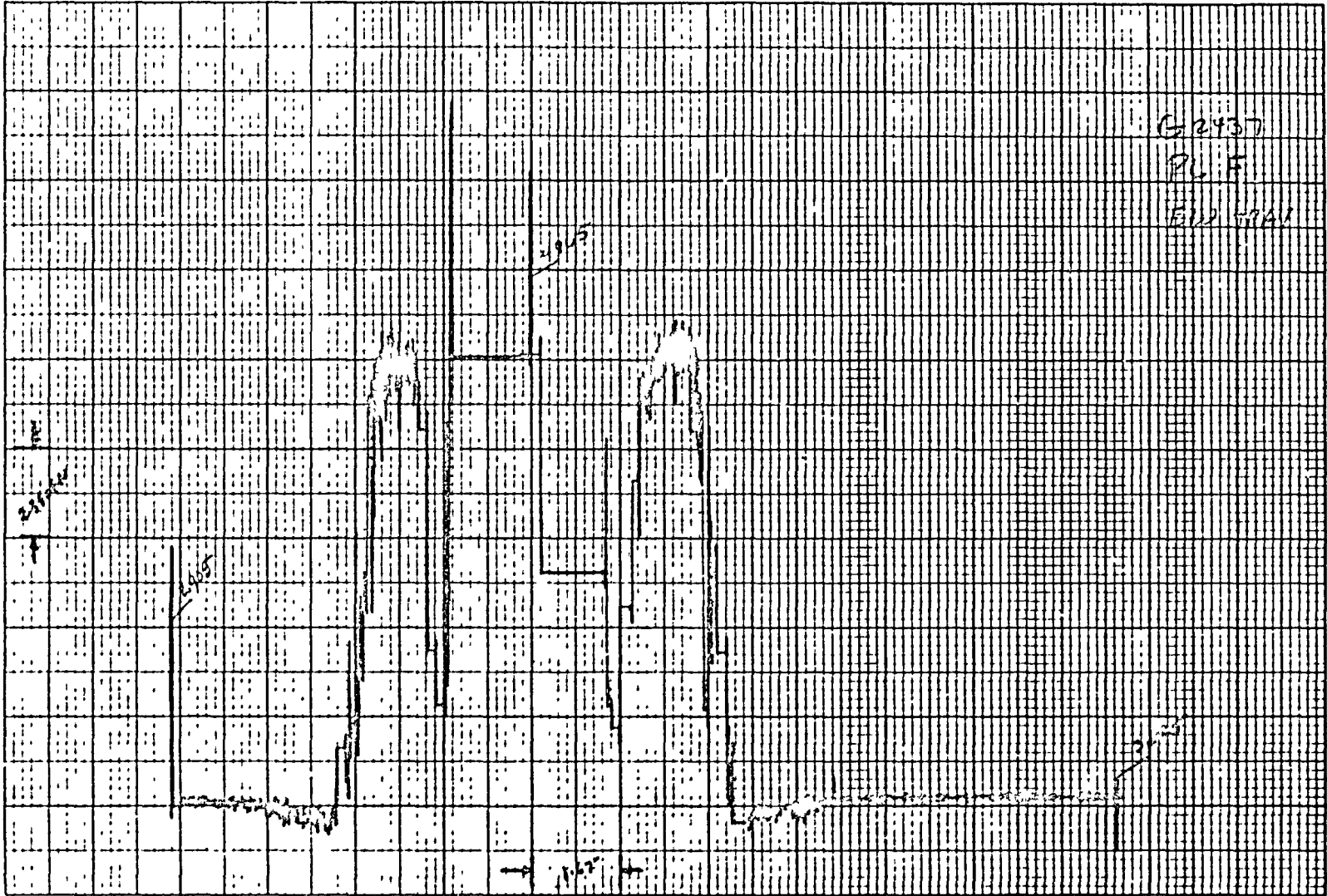


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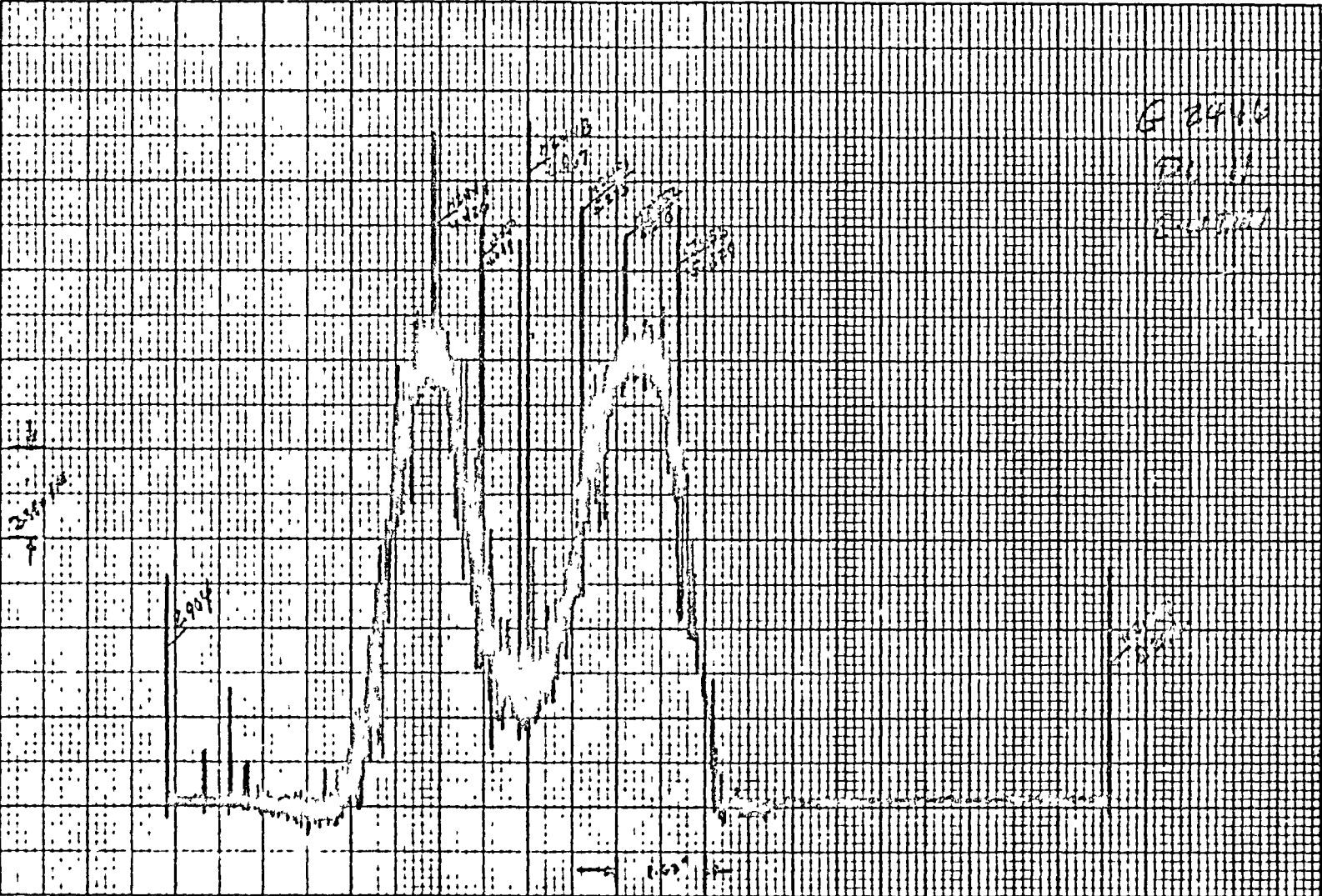
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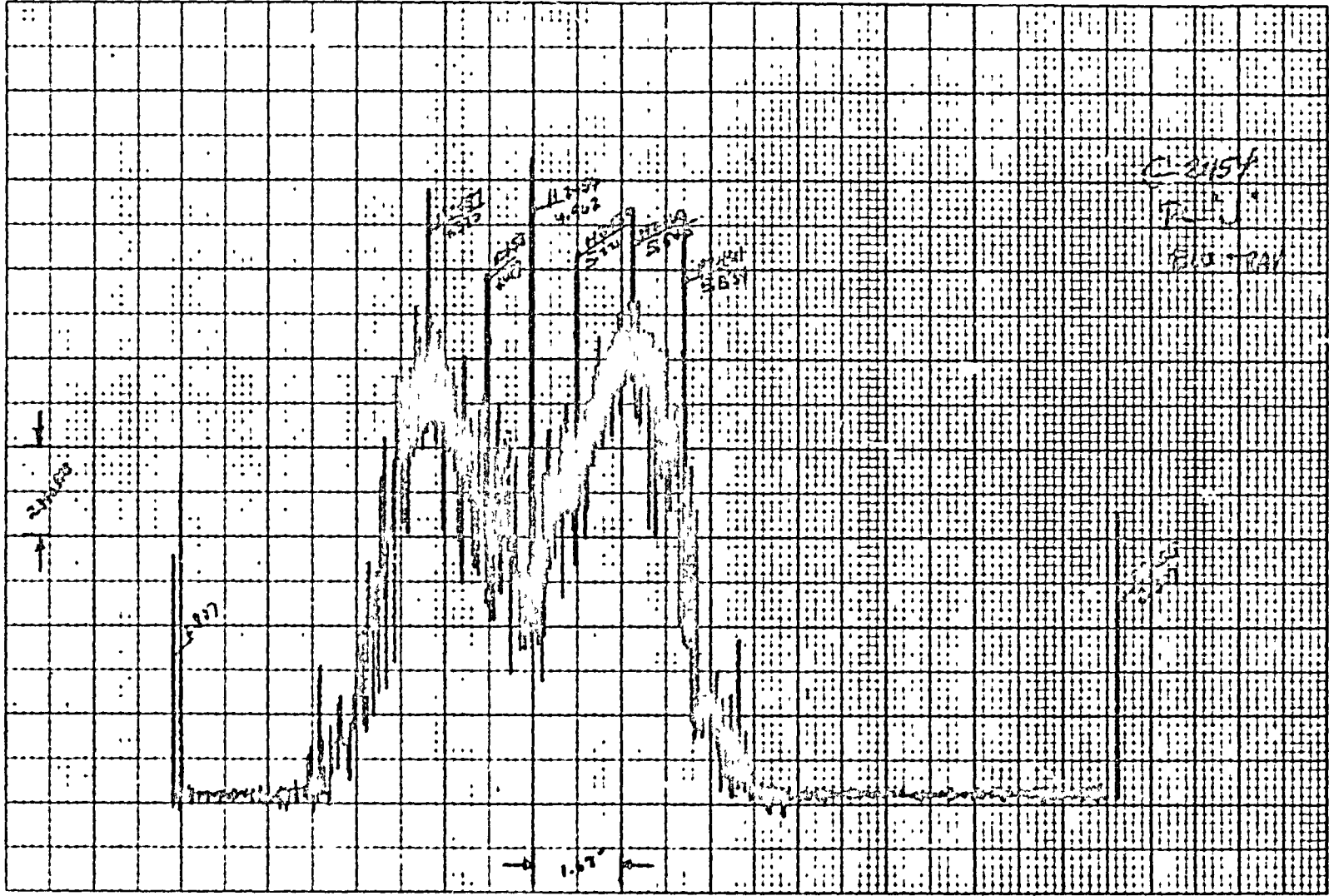




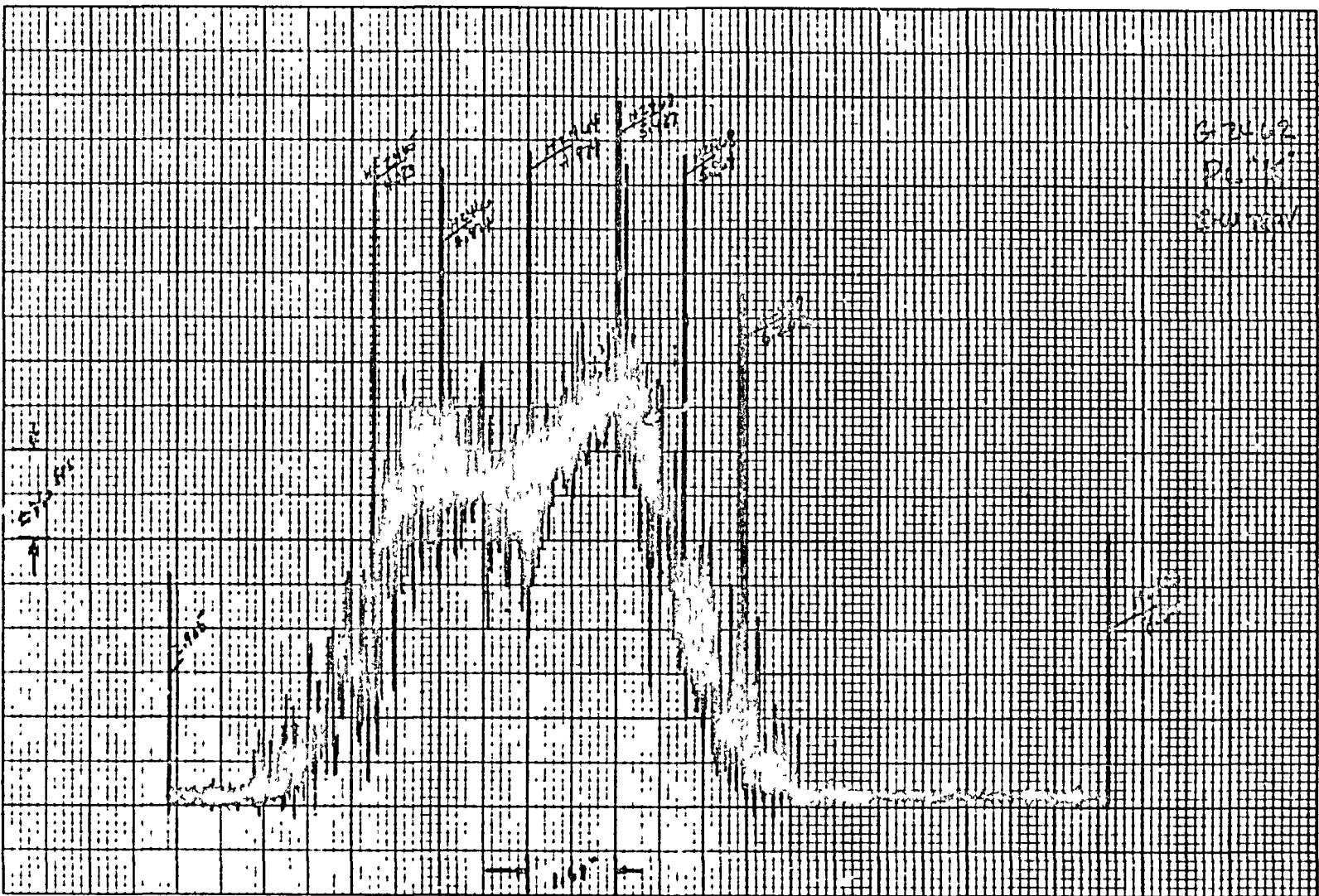




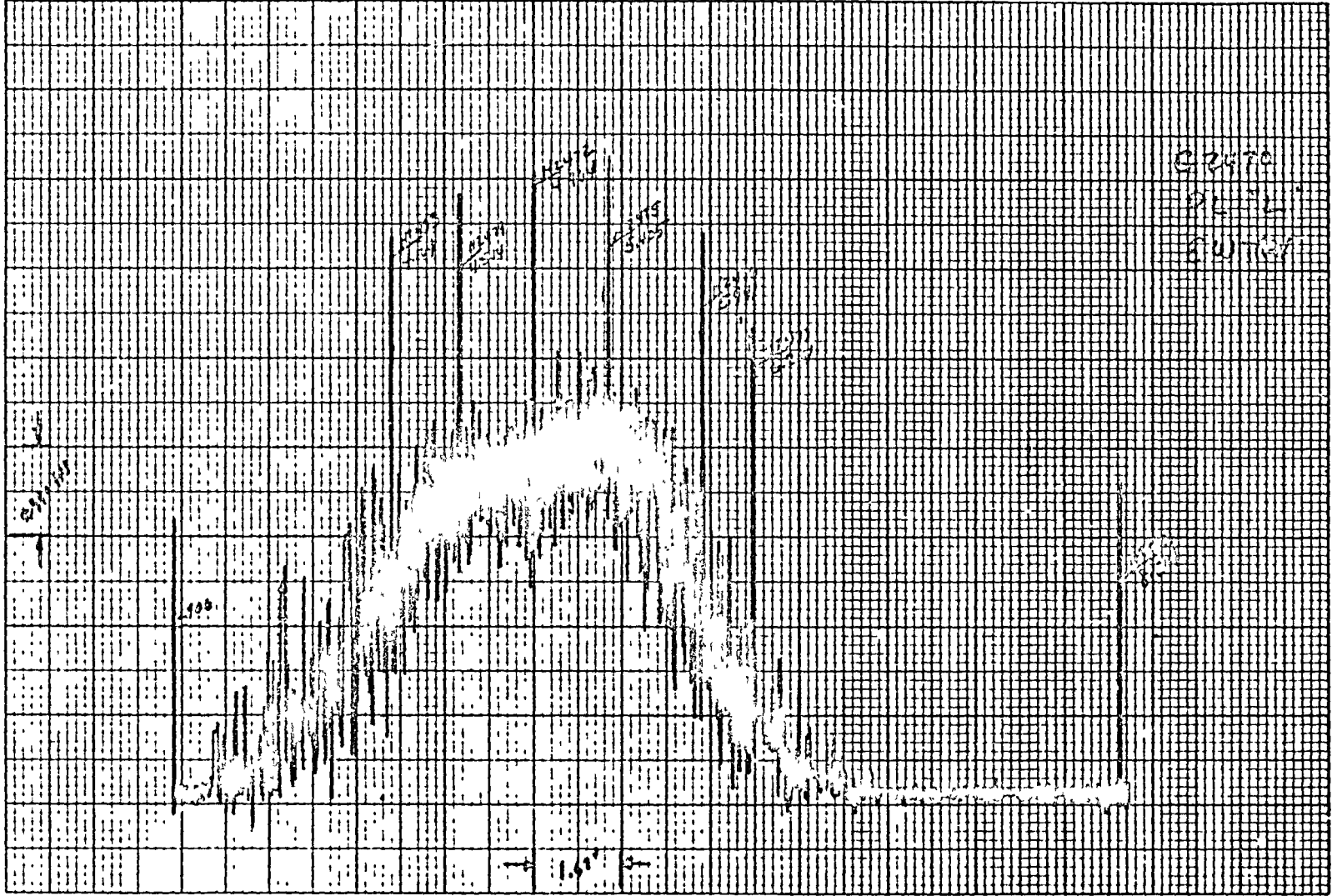
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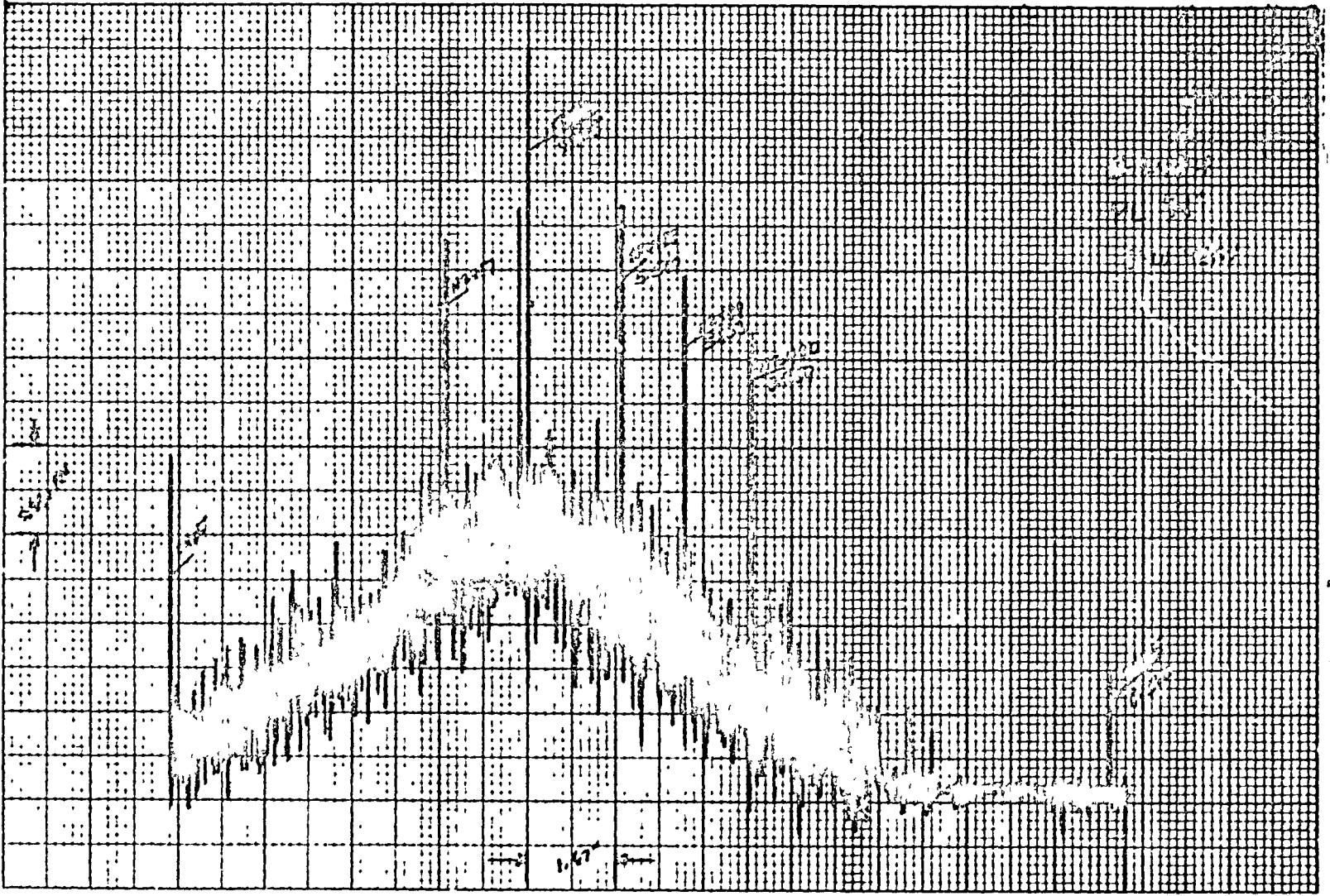


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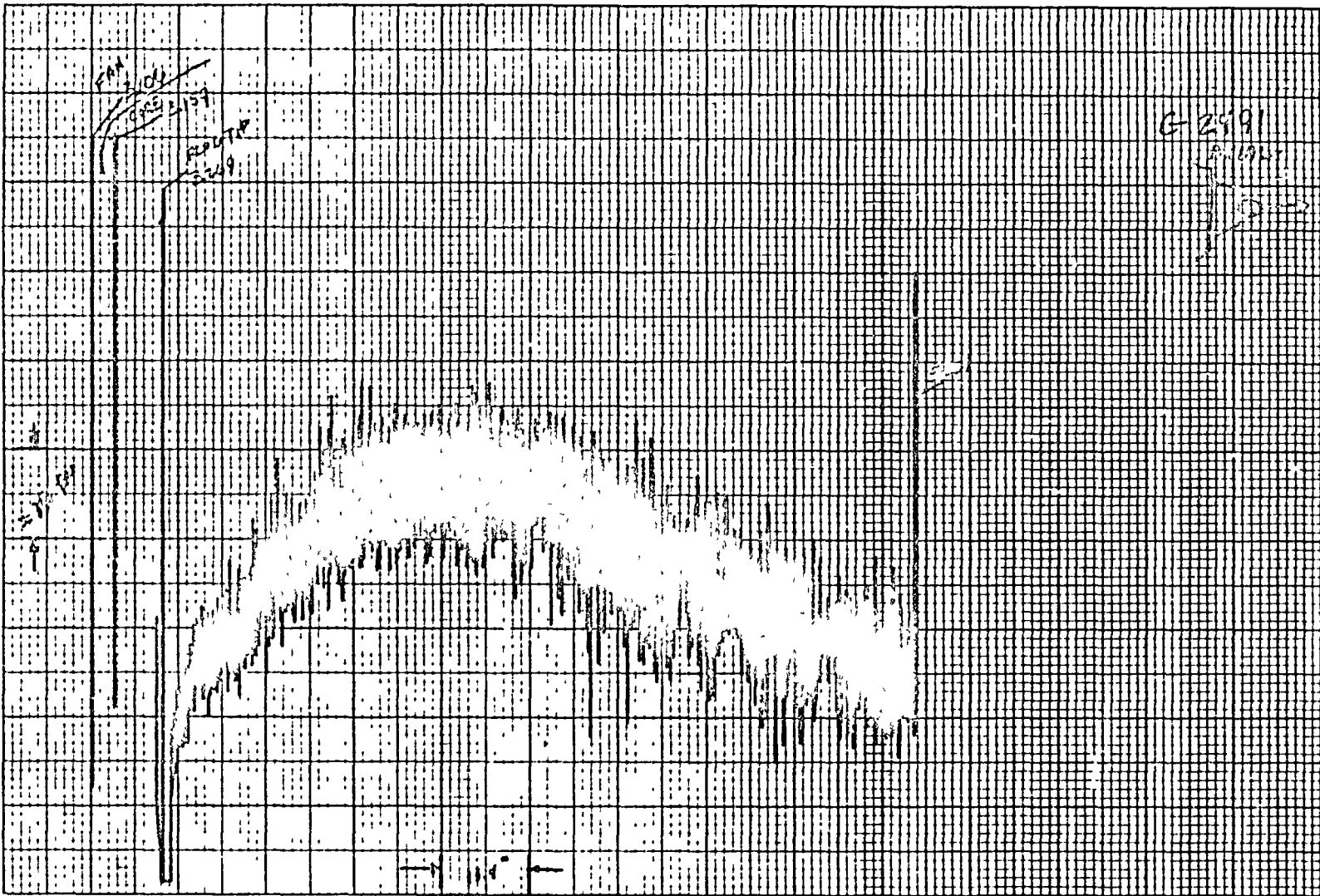


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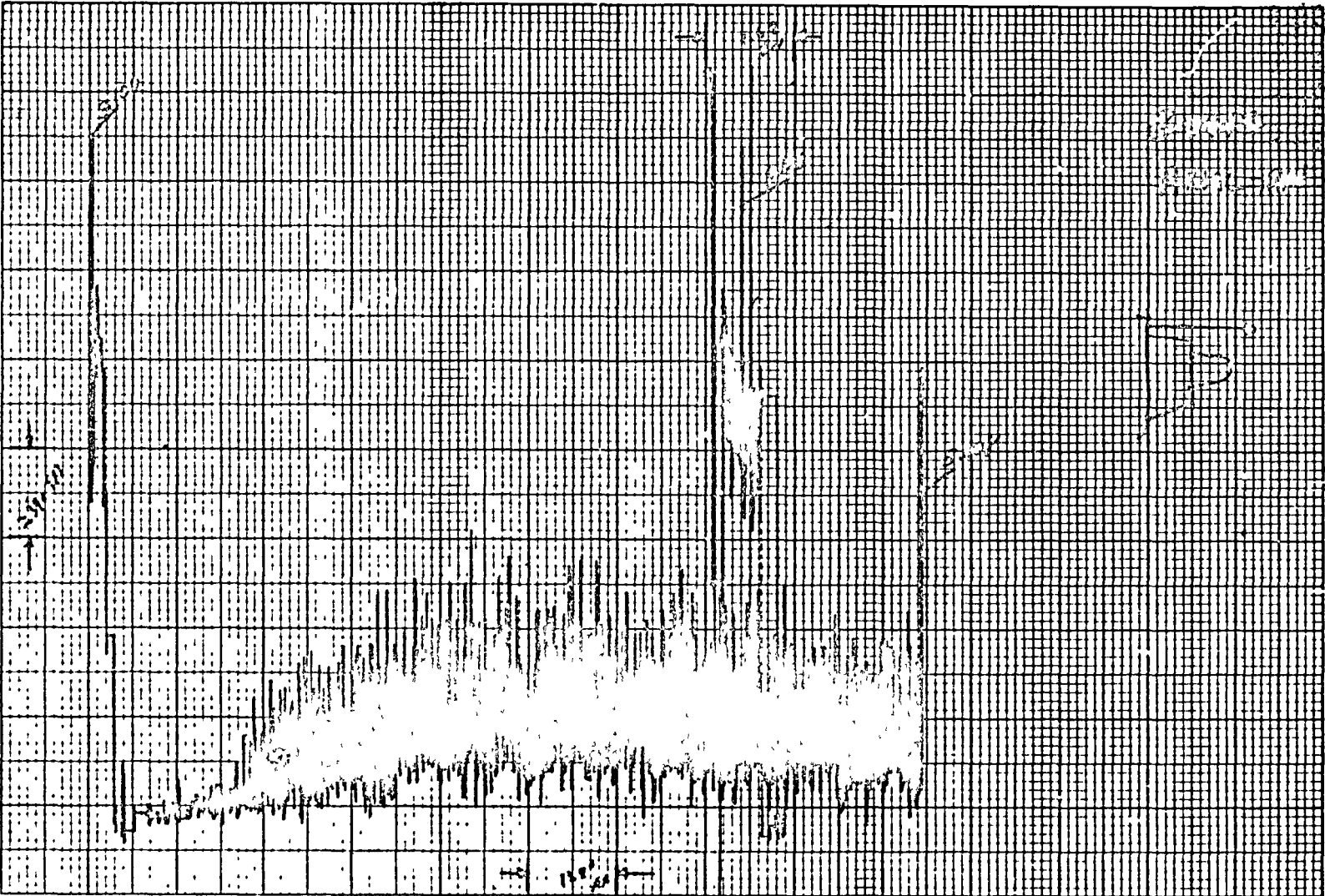


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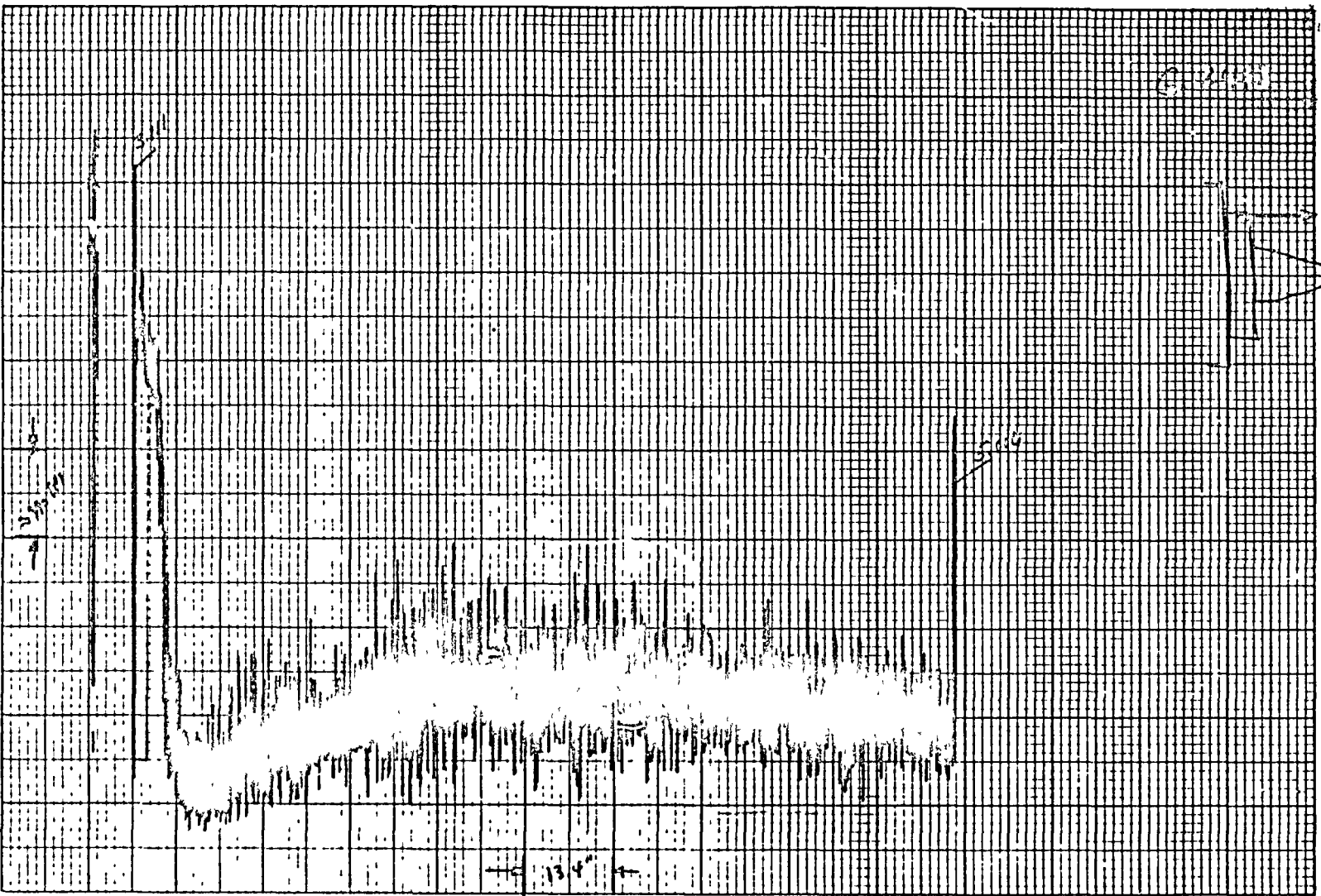




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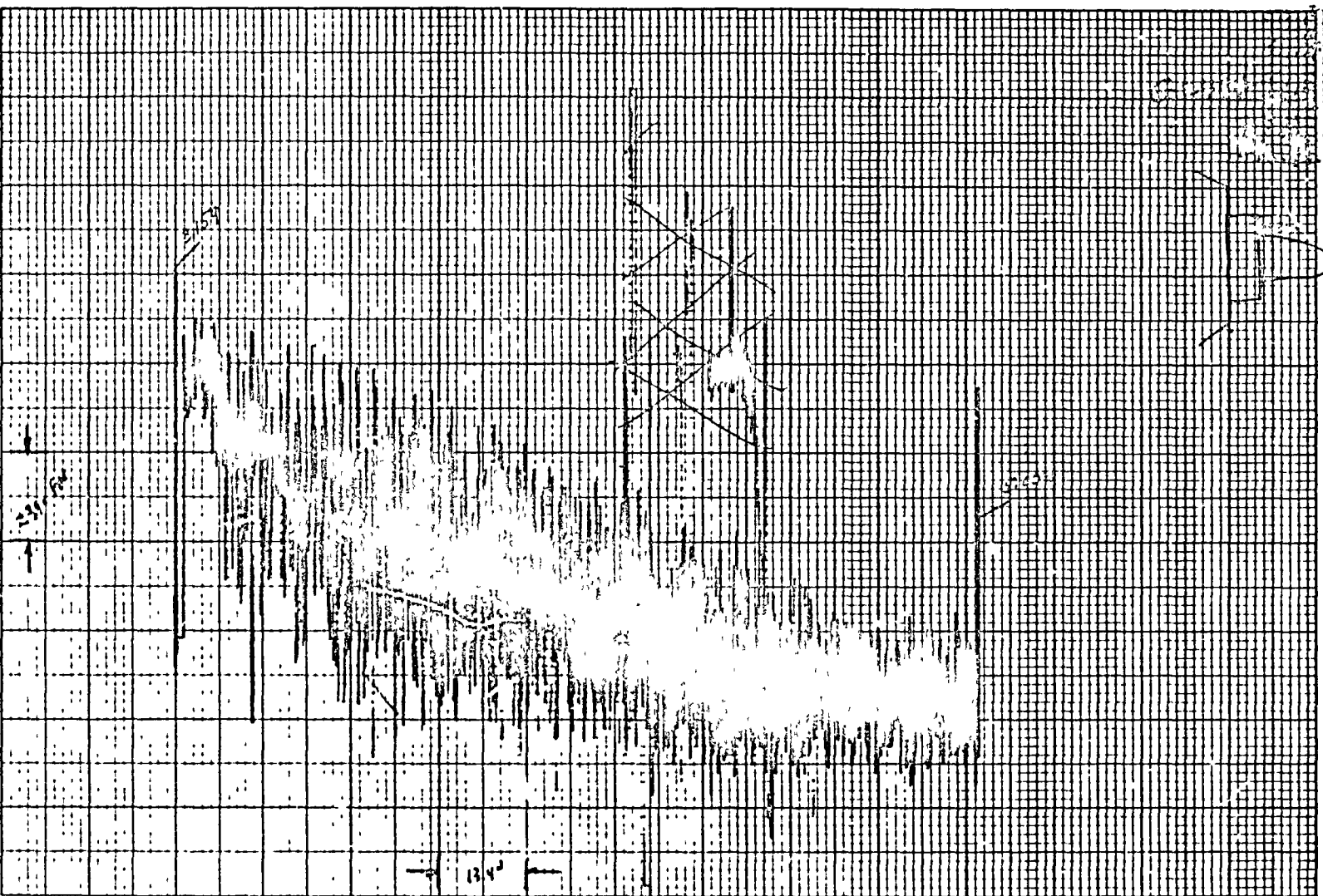


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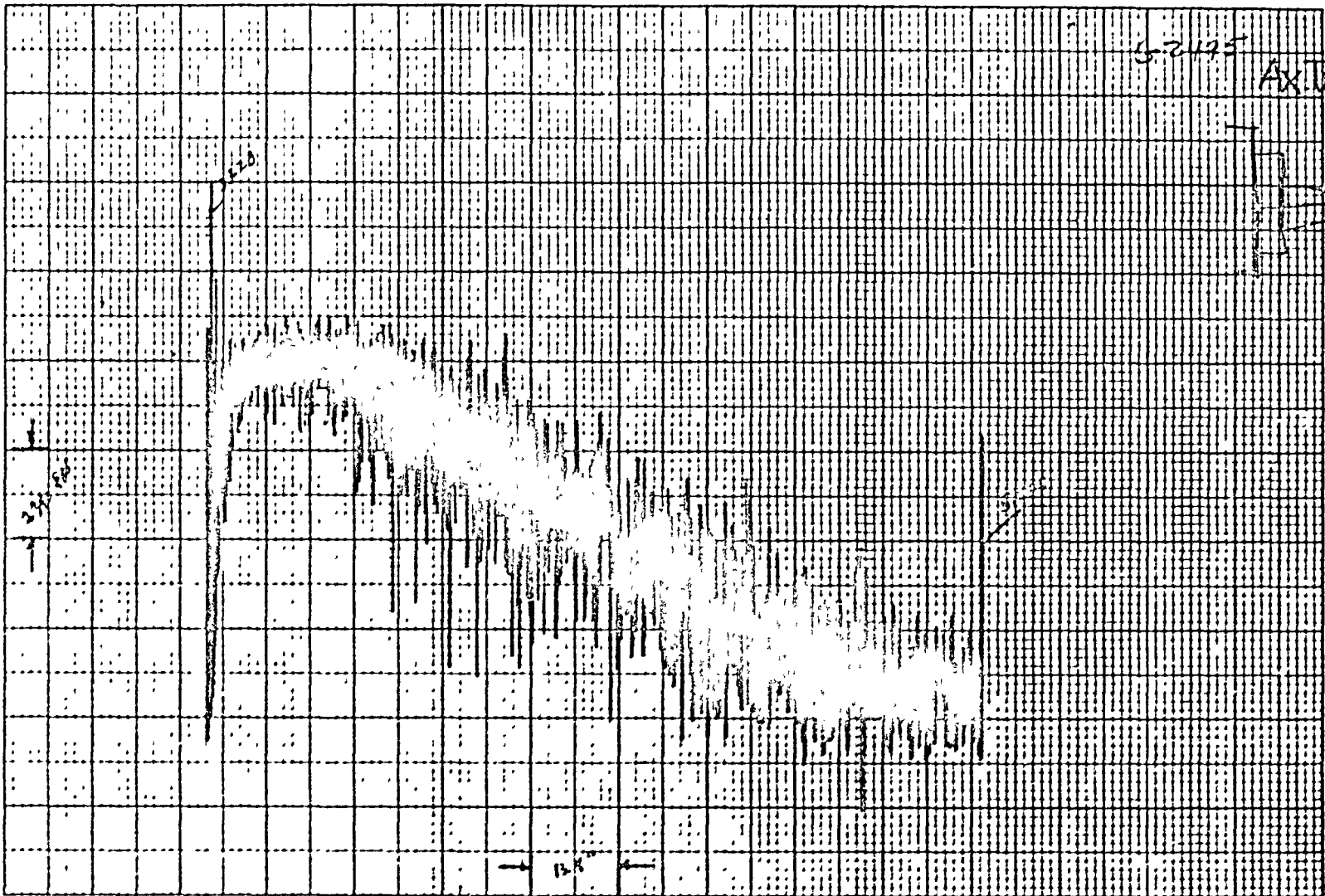
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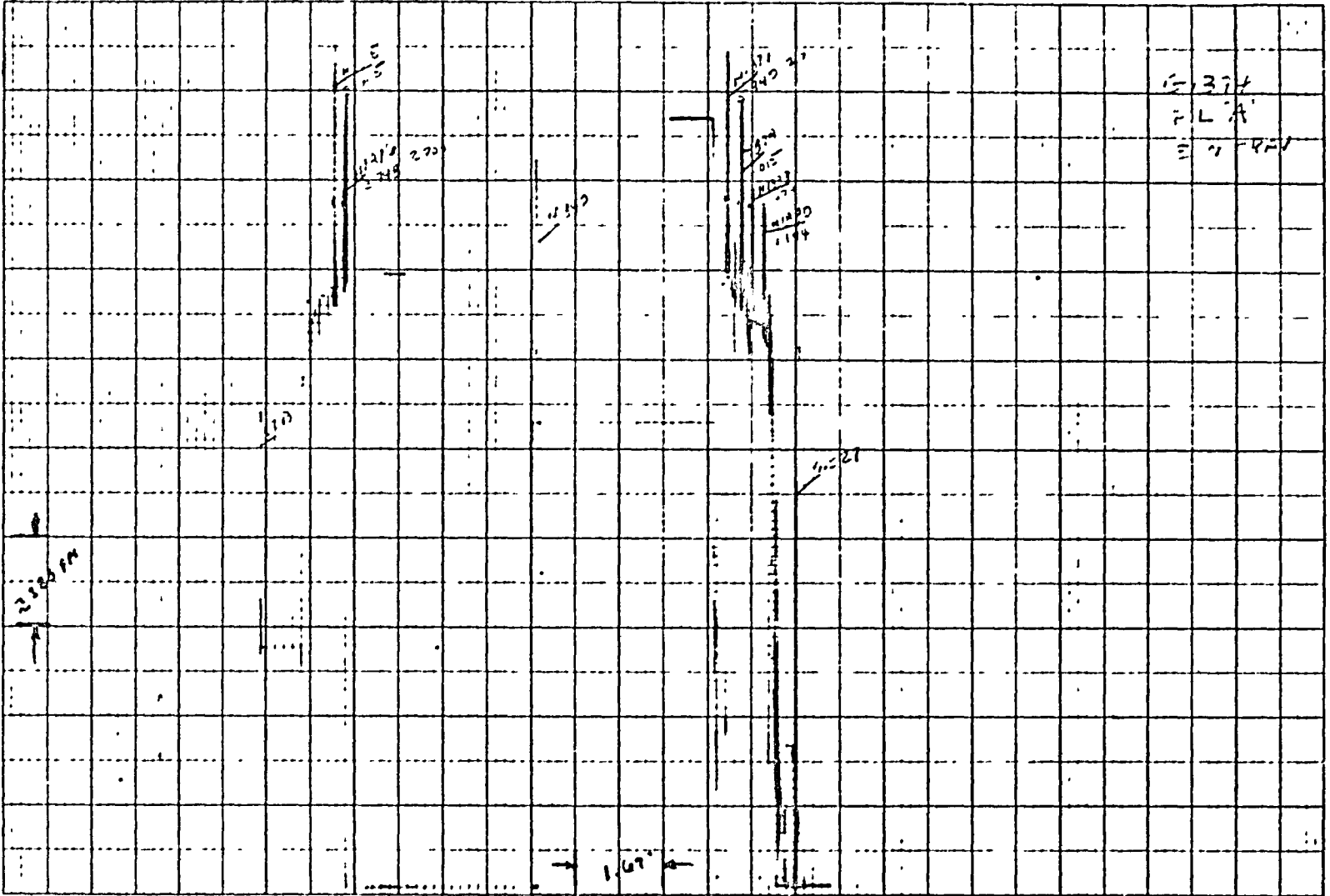


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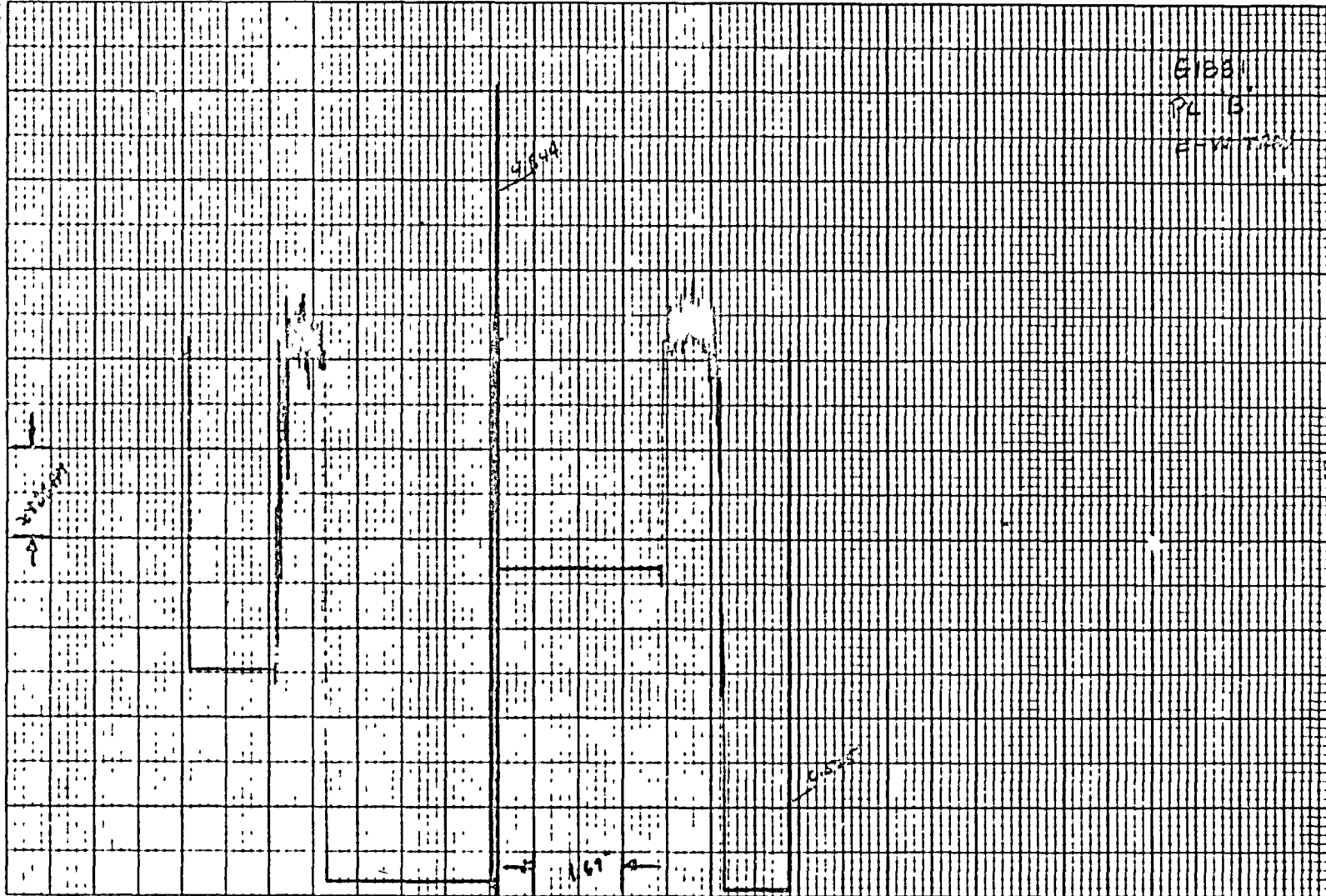
MODEL 2  
TEST POINT 216



374  
 PL A  
 2-9-71

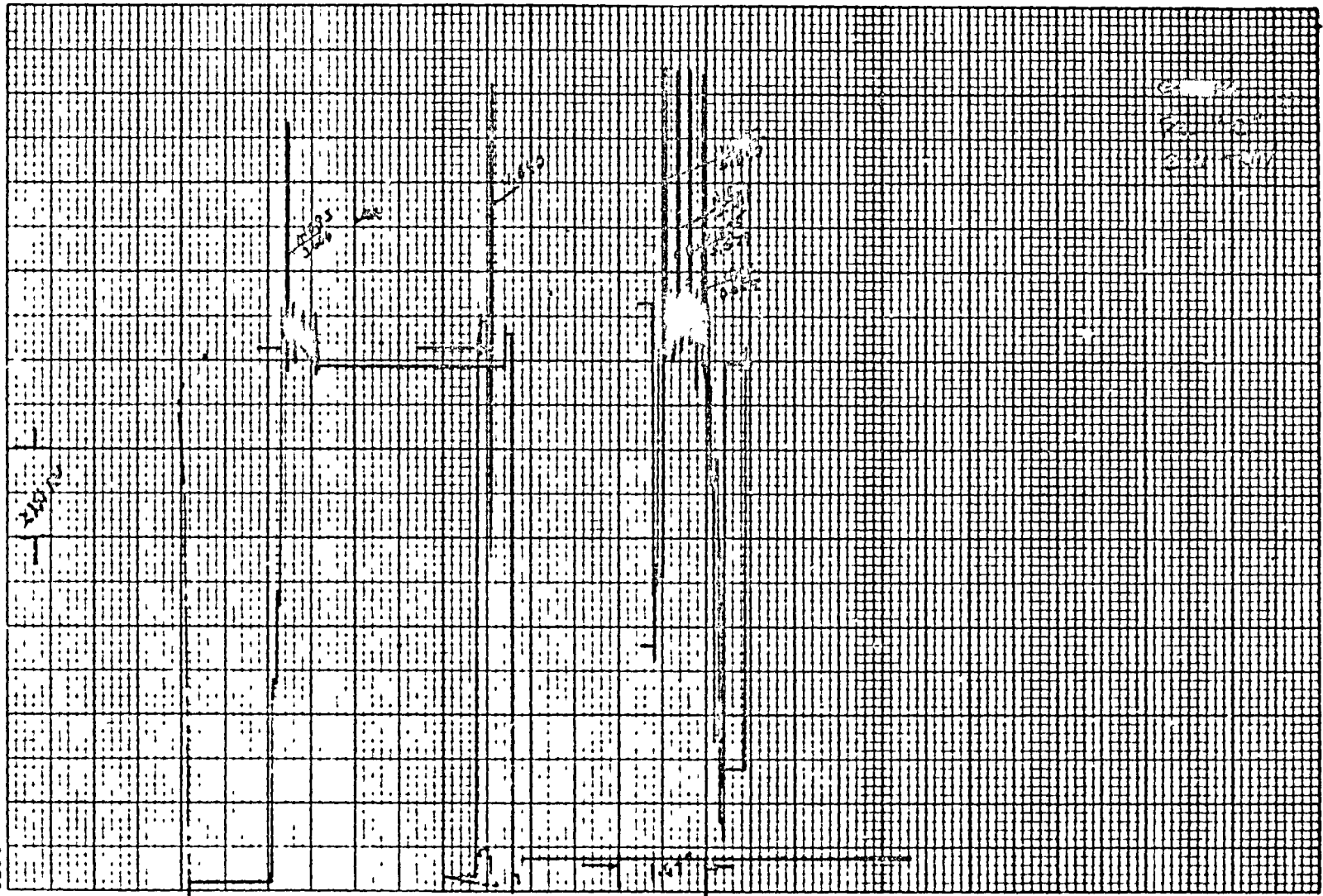
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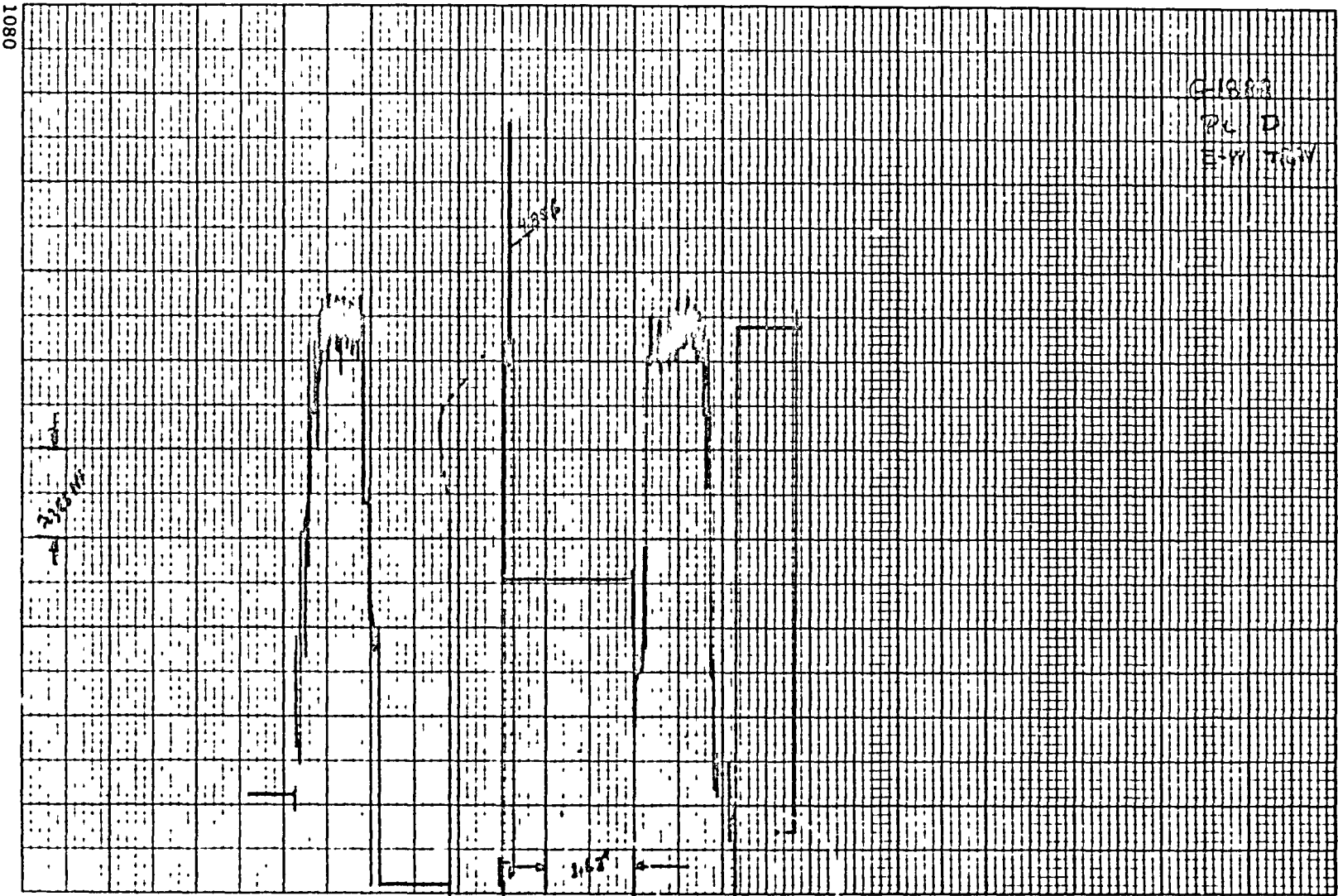
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1080

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G1309

P.E.

ENTER

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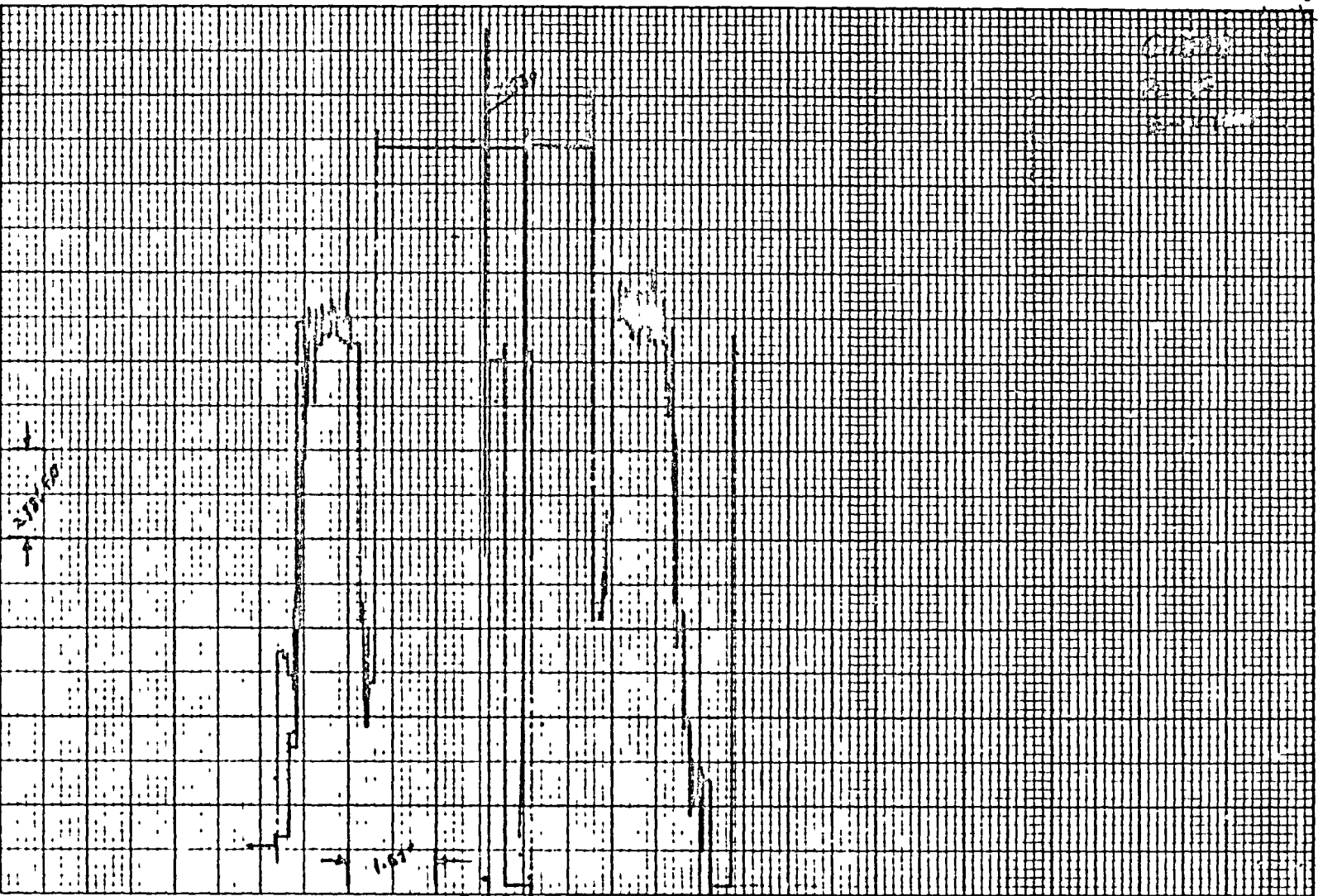
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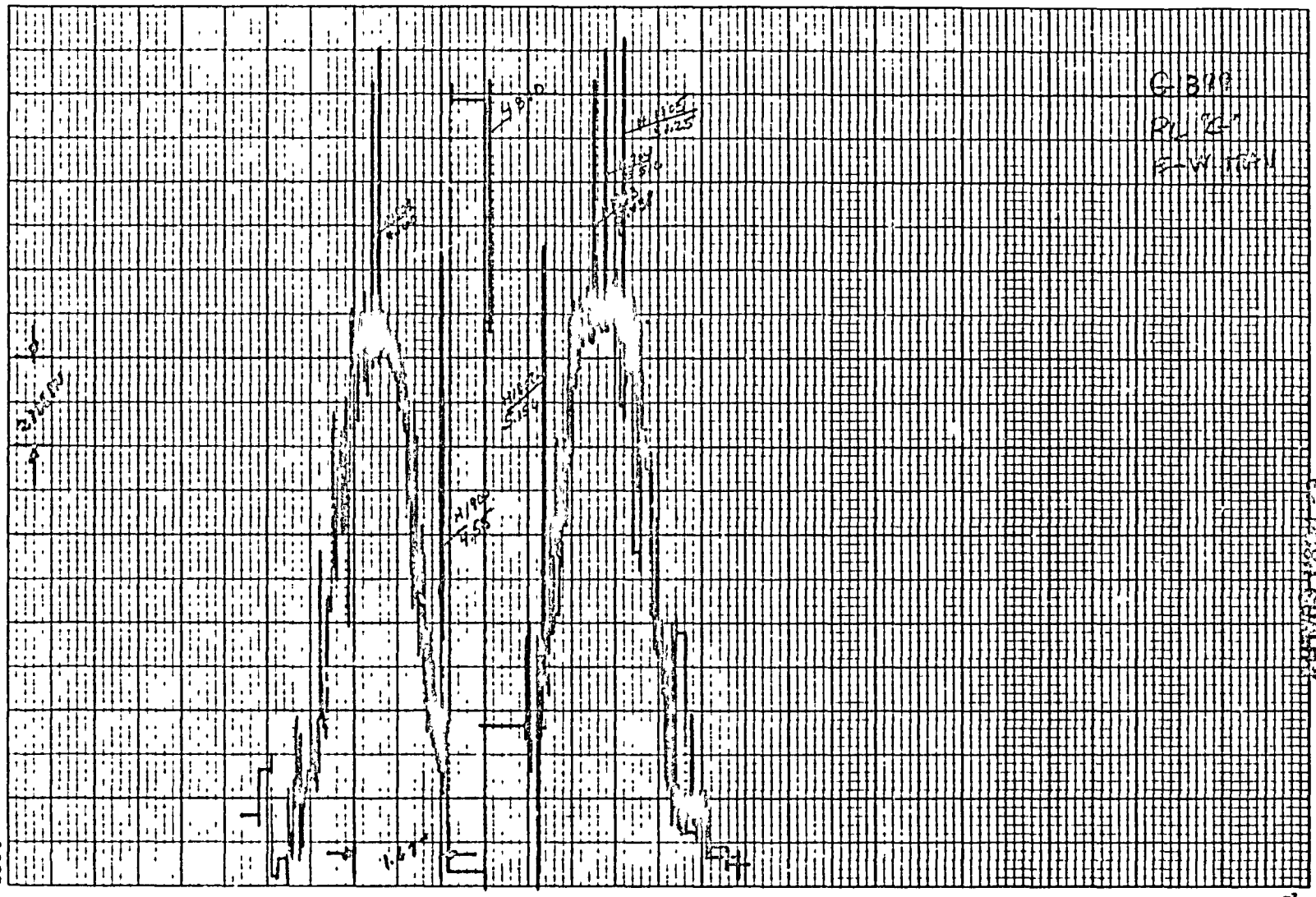
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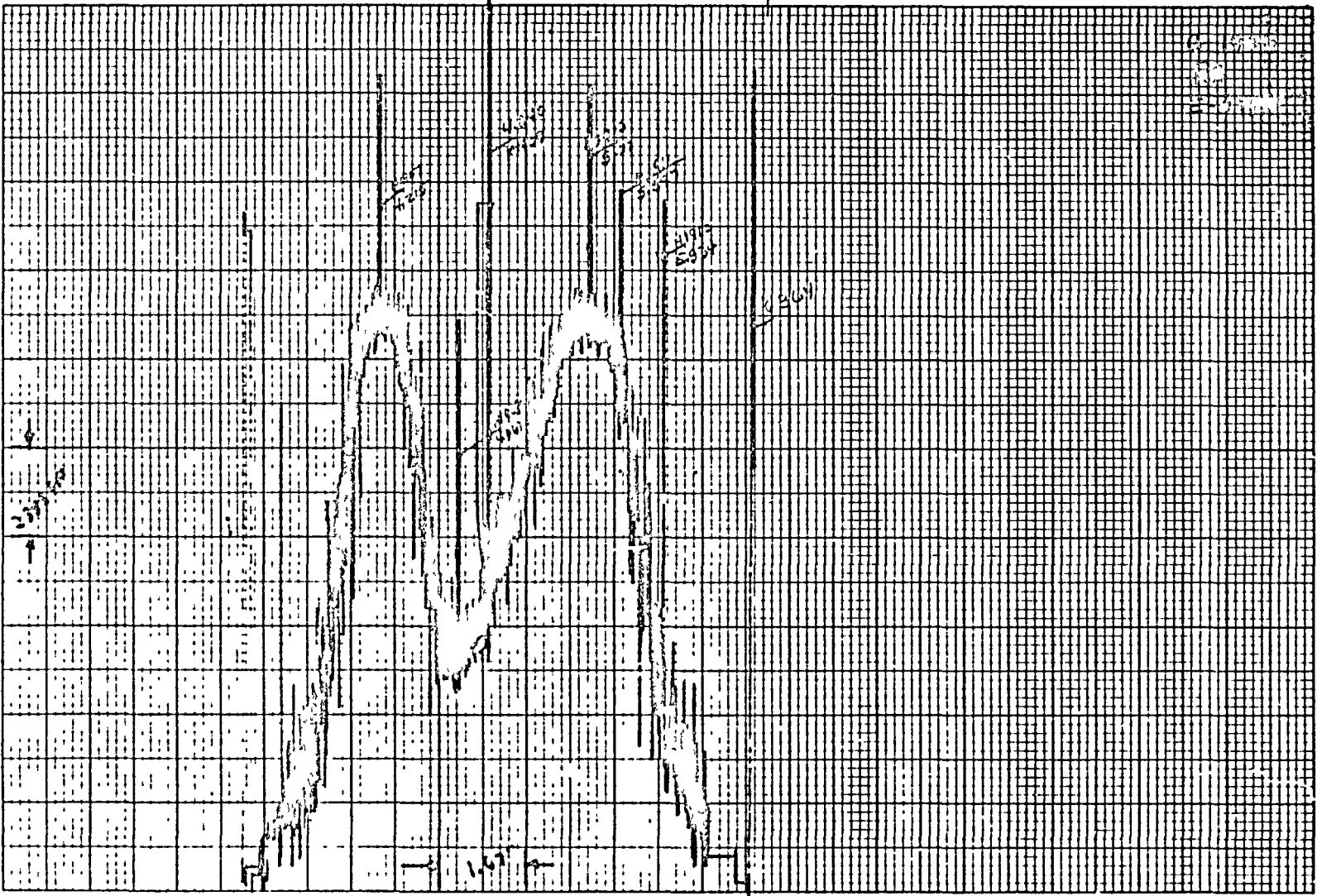
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G. B. R.  
P. L. R.  
E. W. R.

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1084

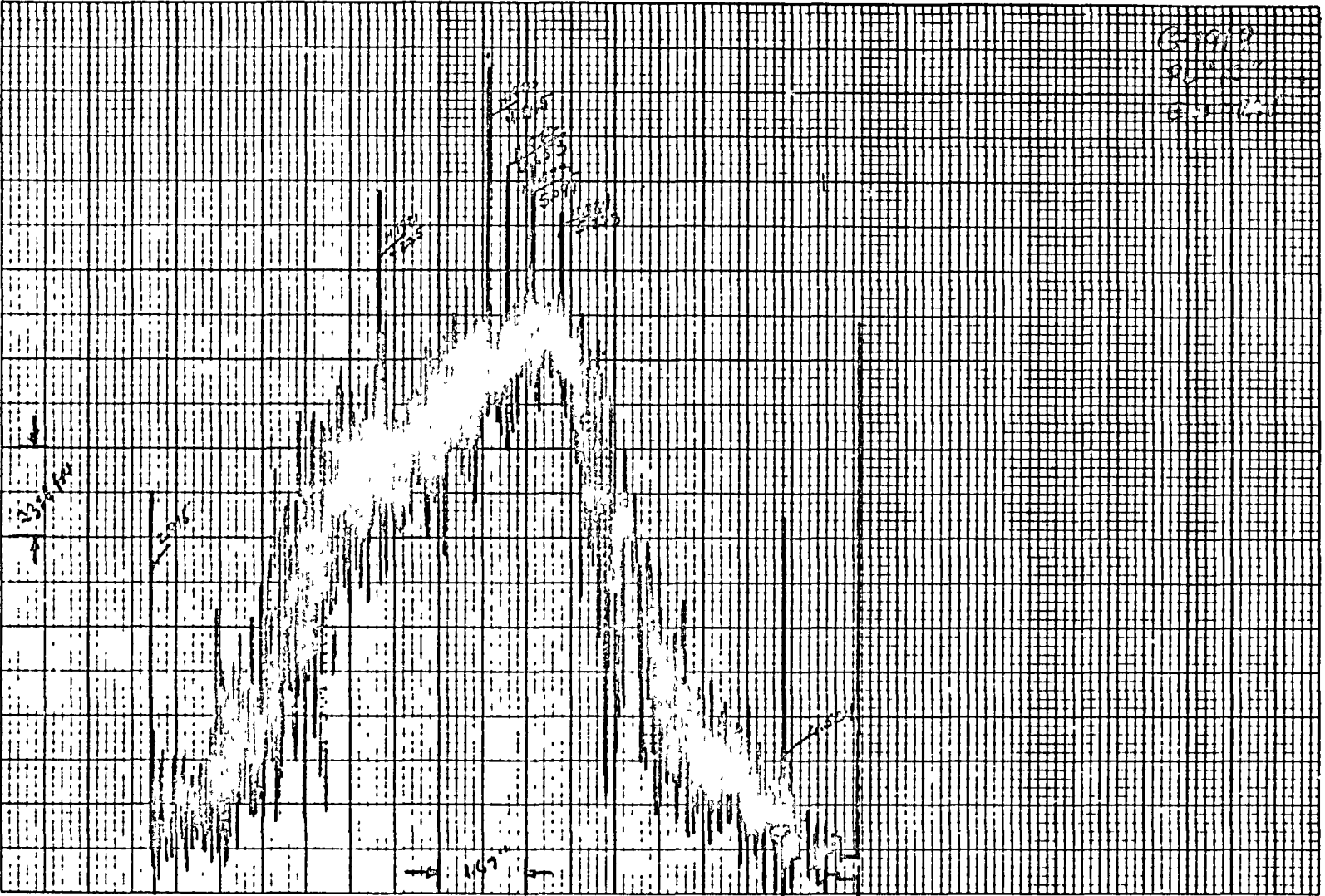


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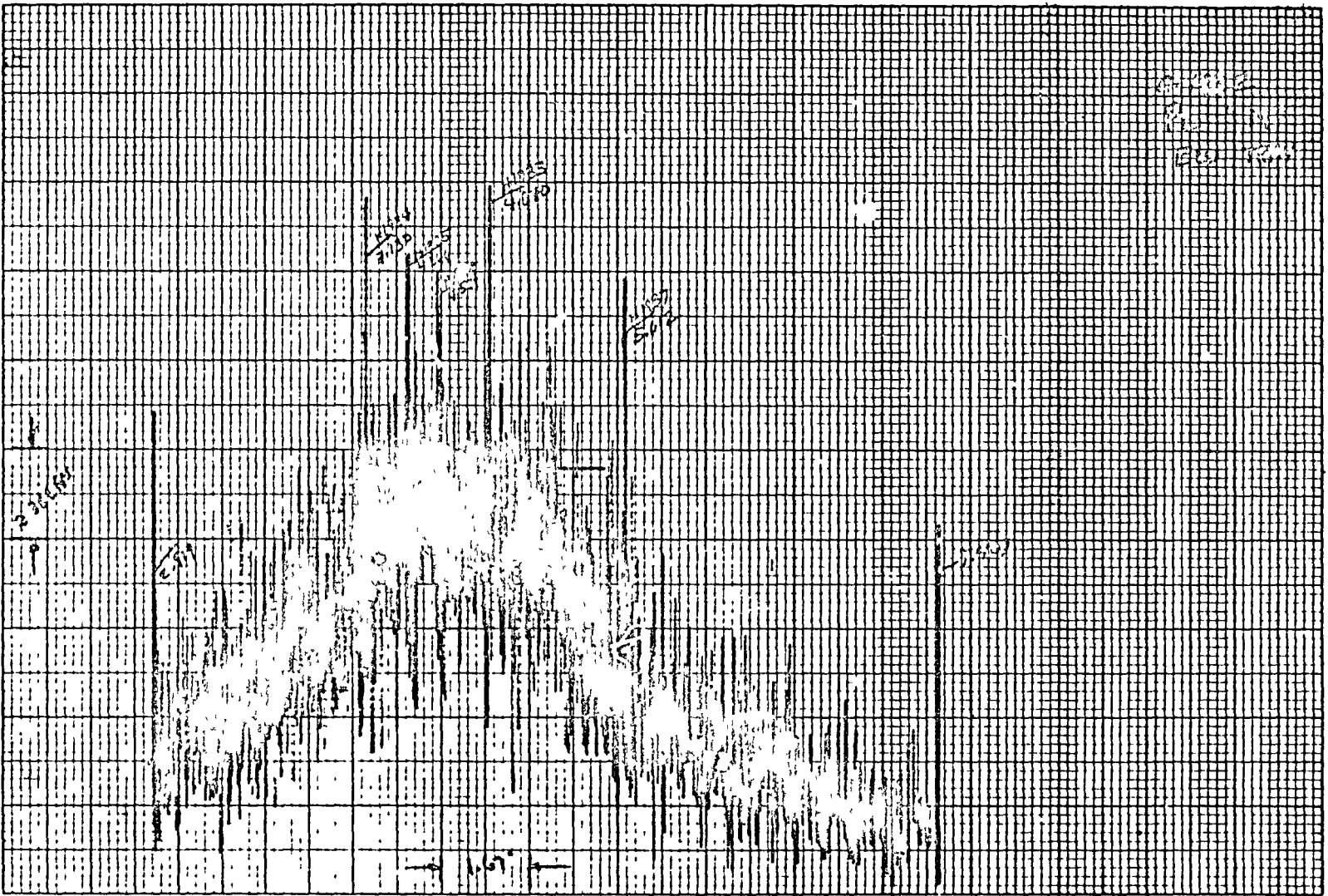


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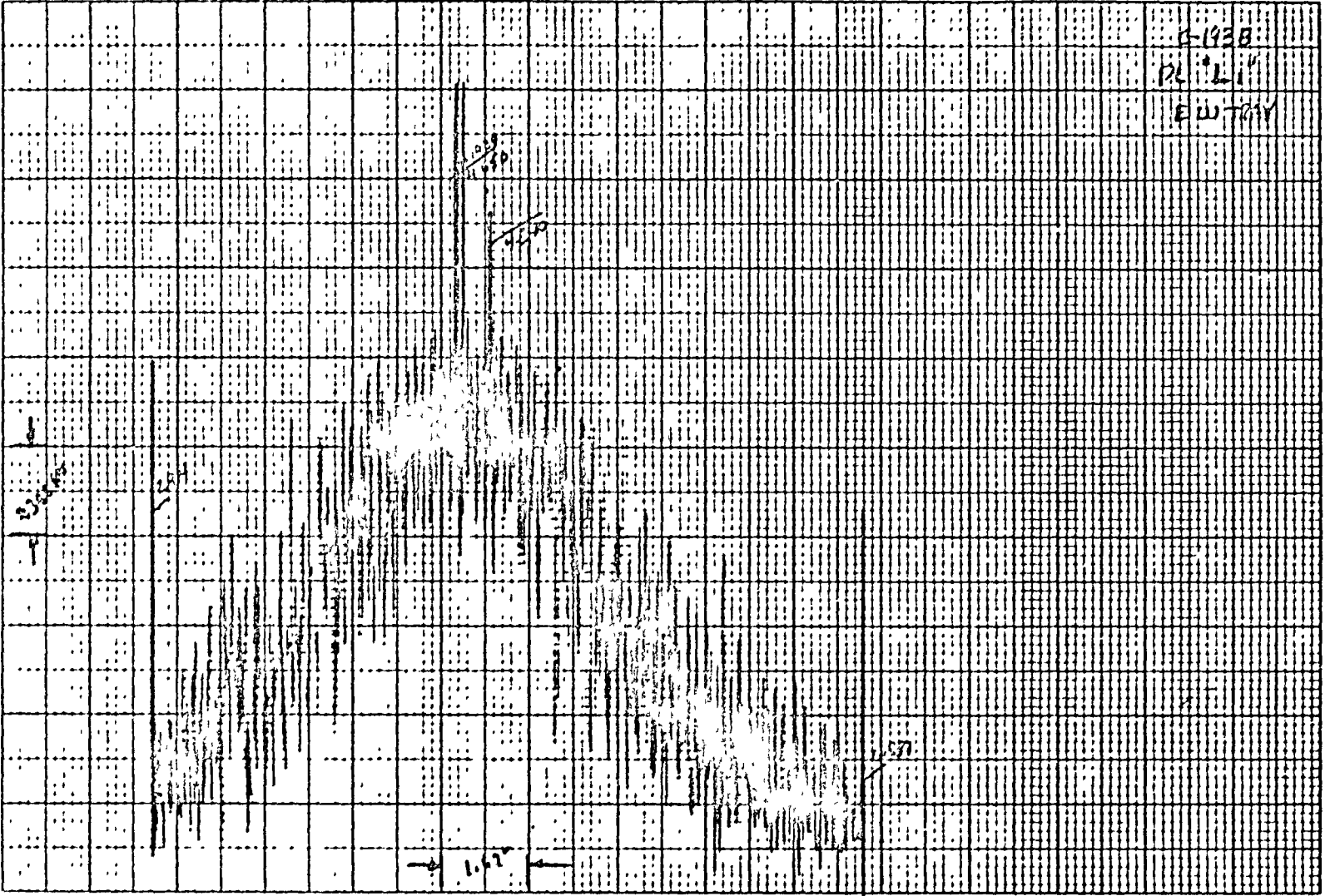




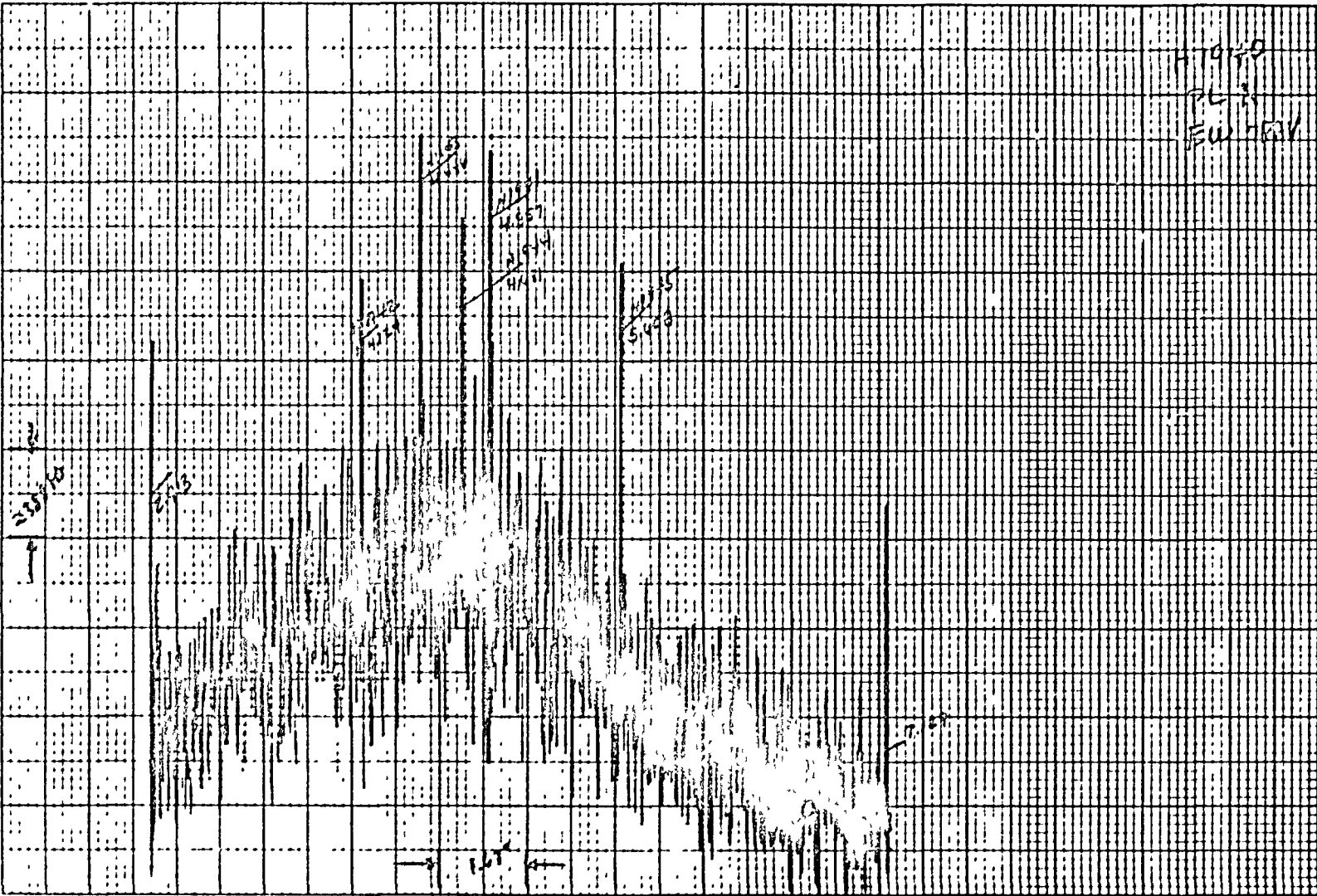
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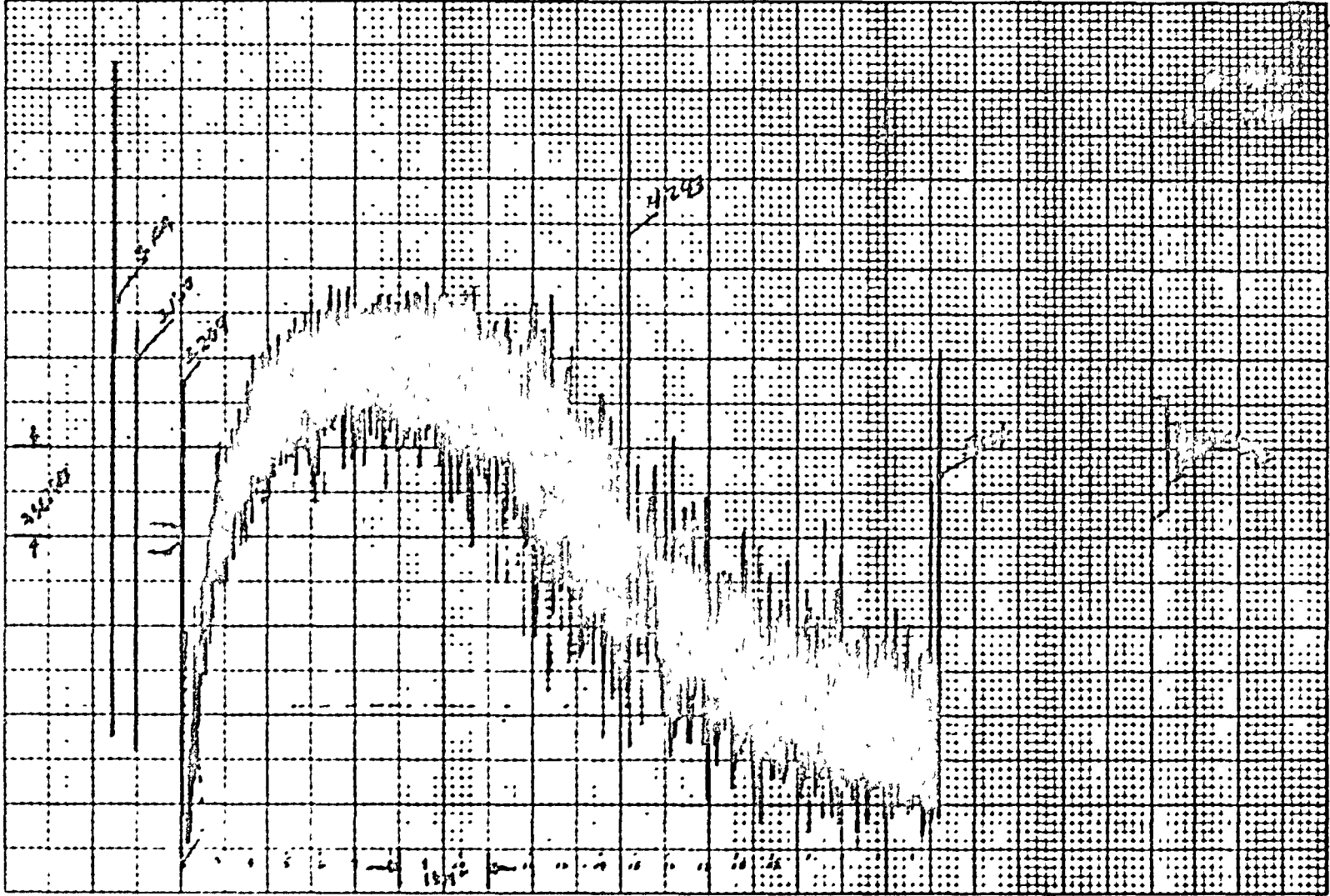


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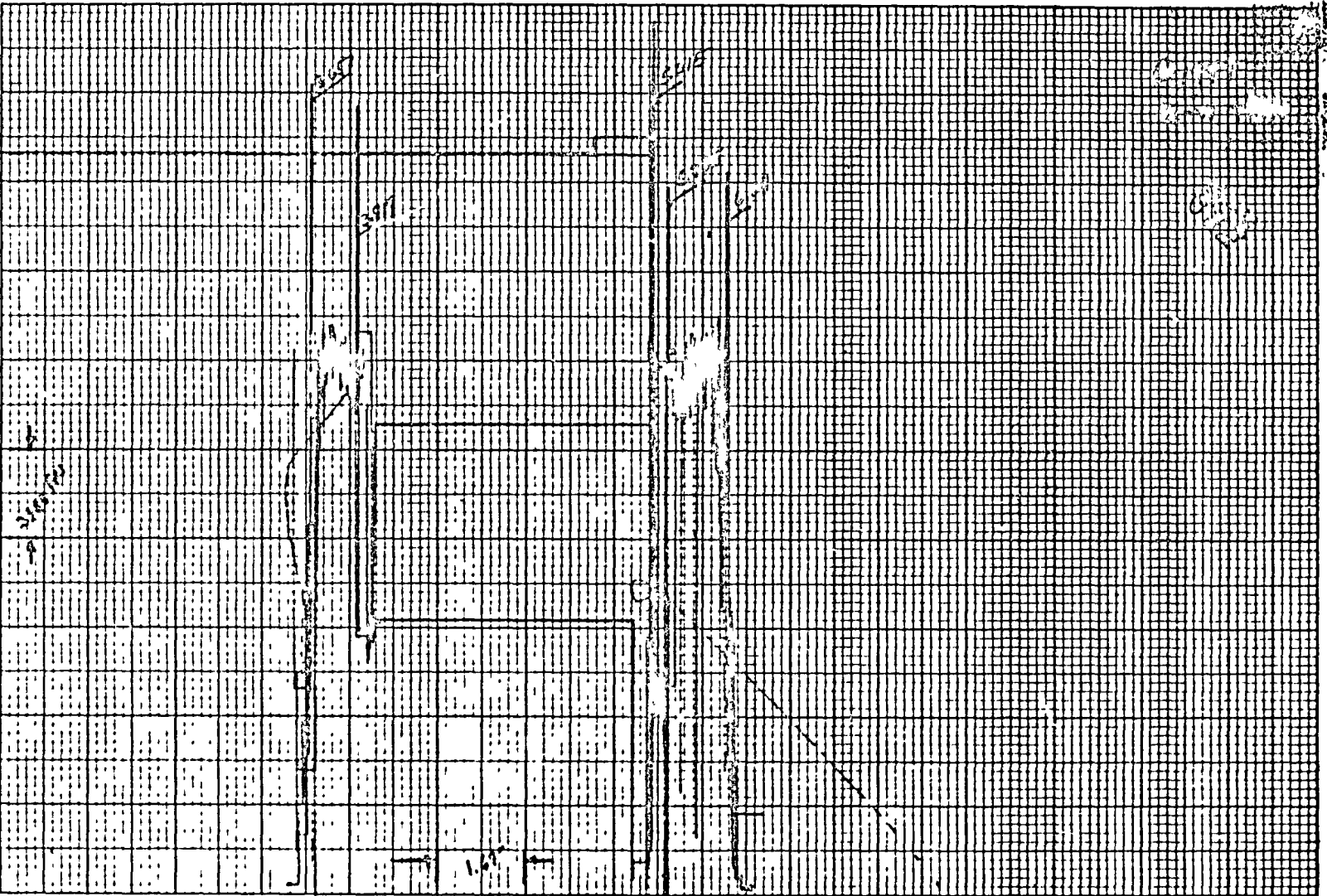


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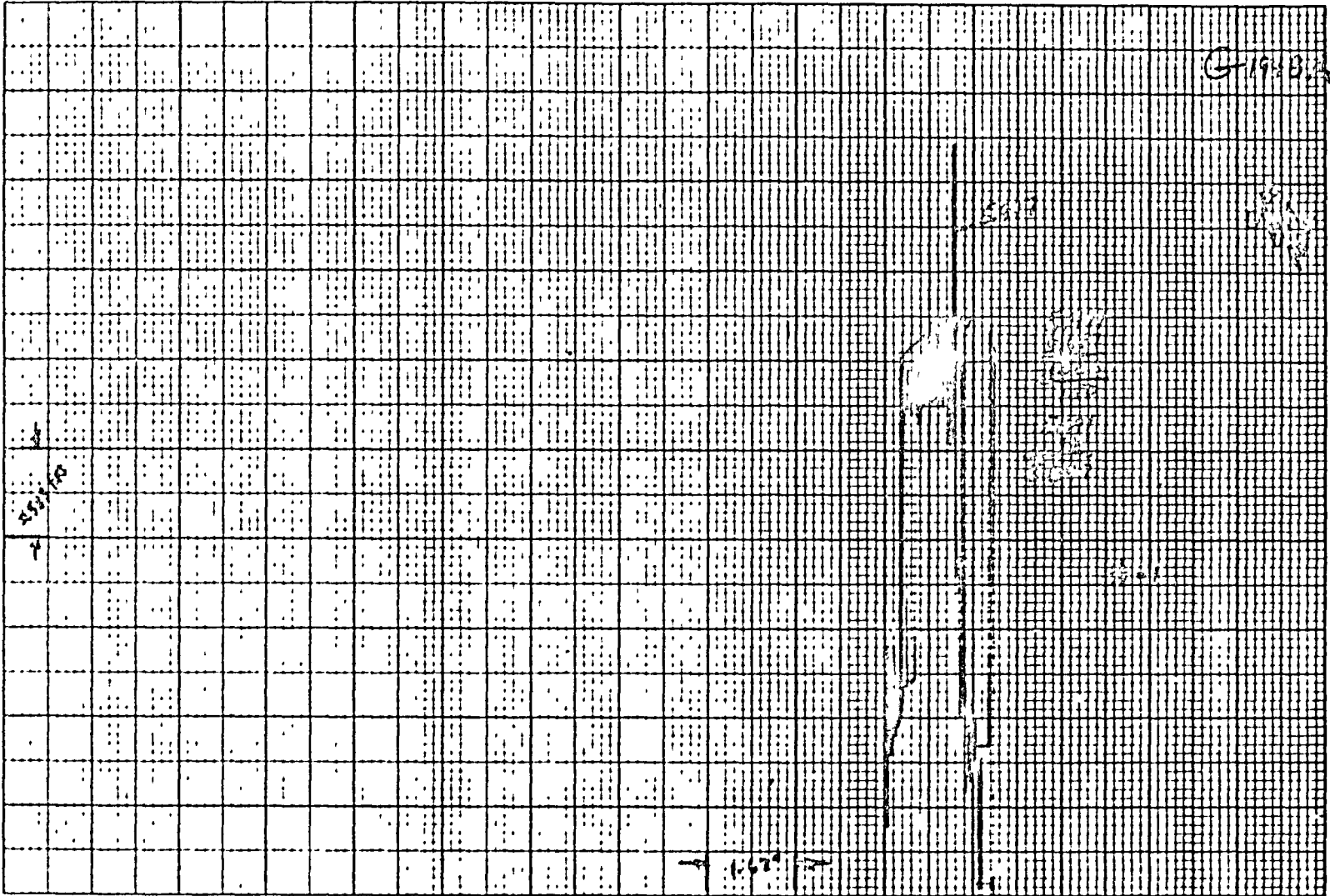
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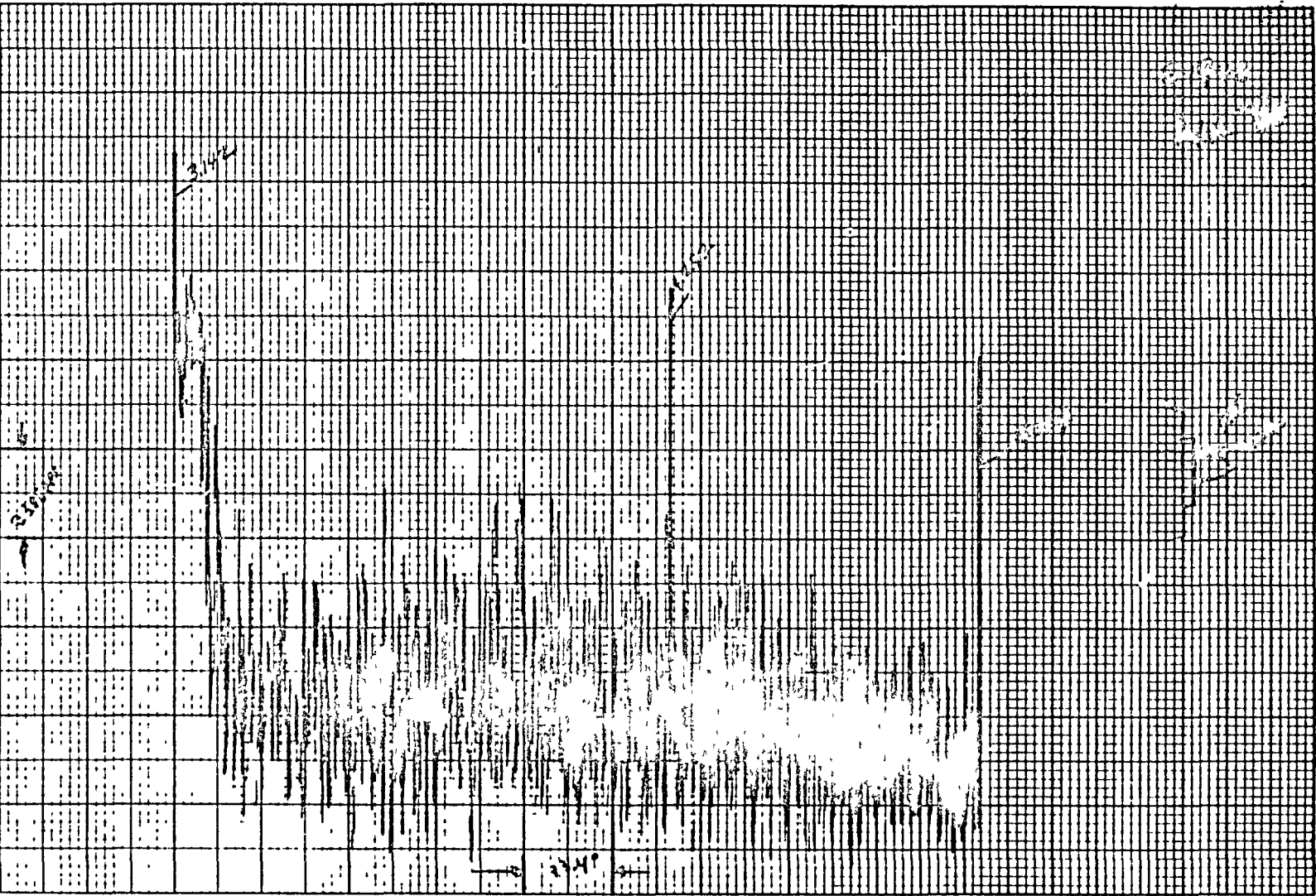
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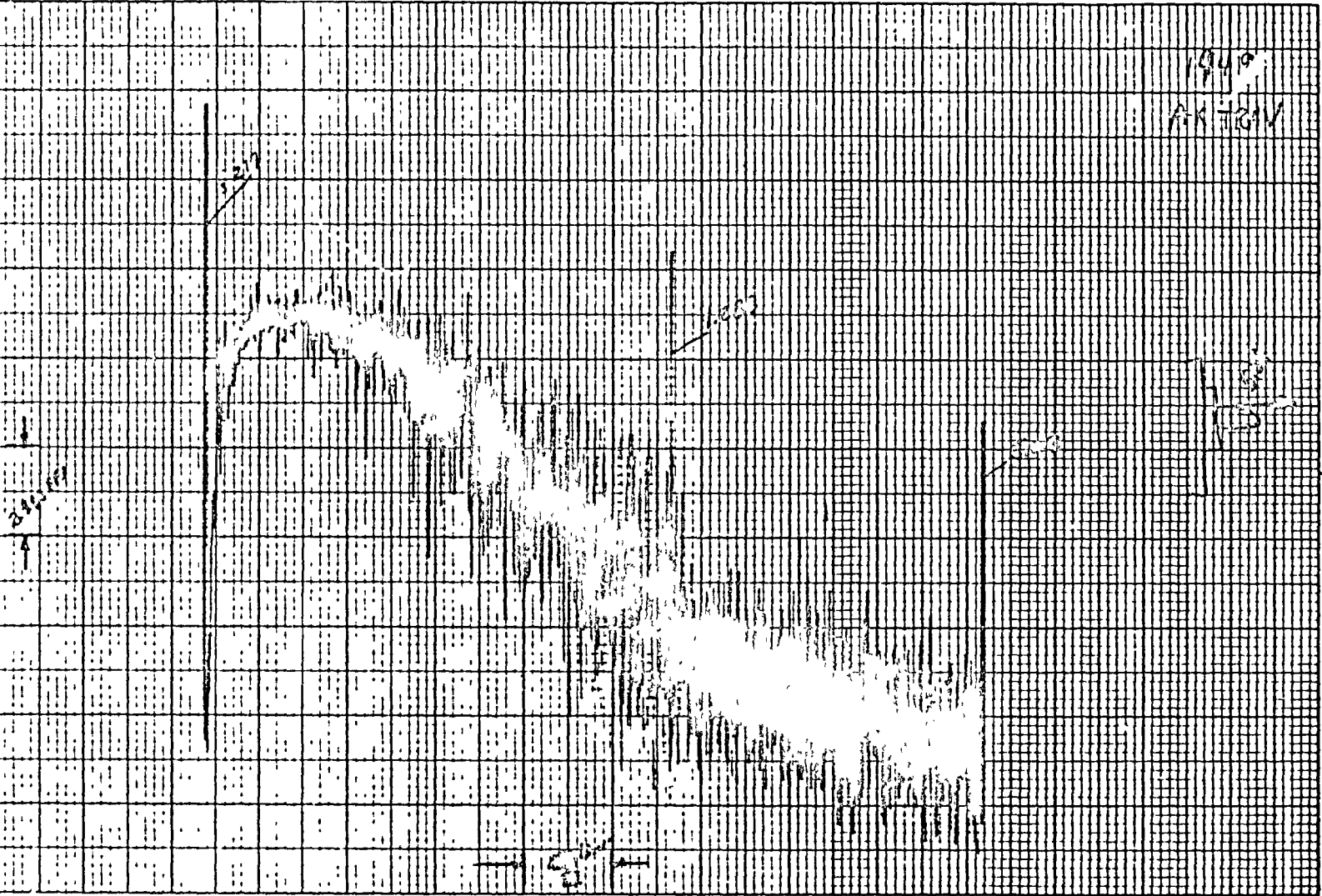
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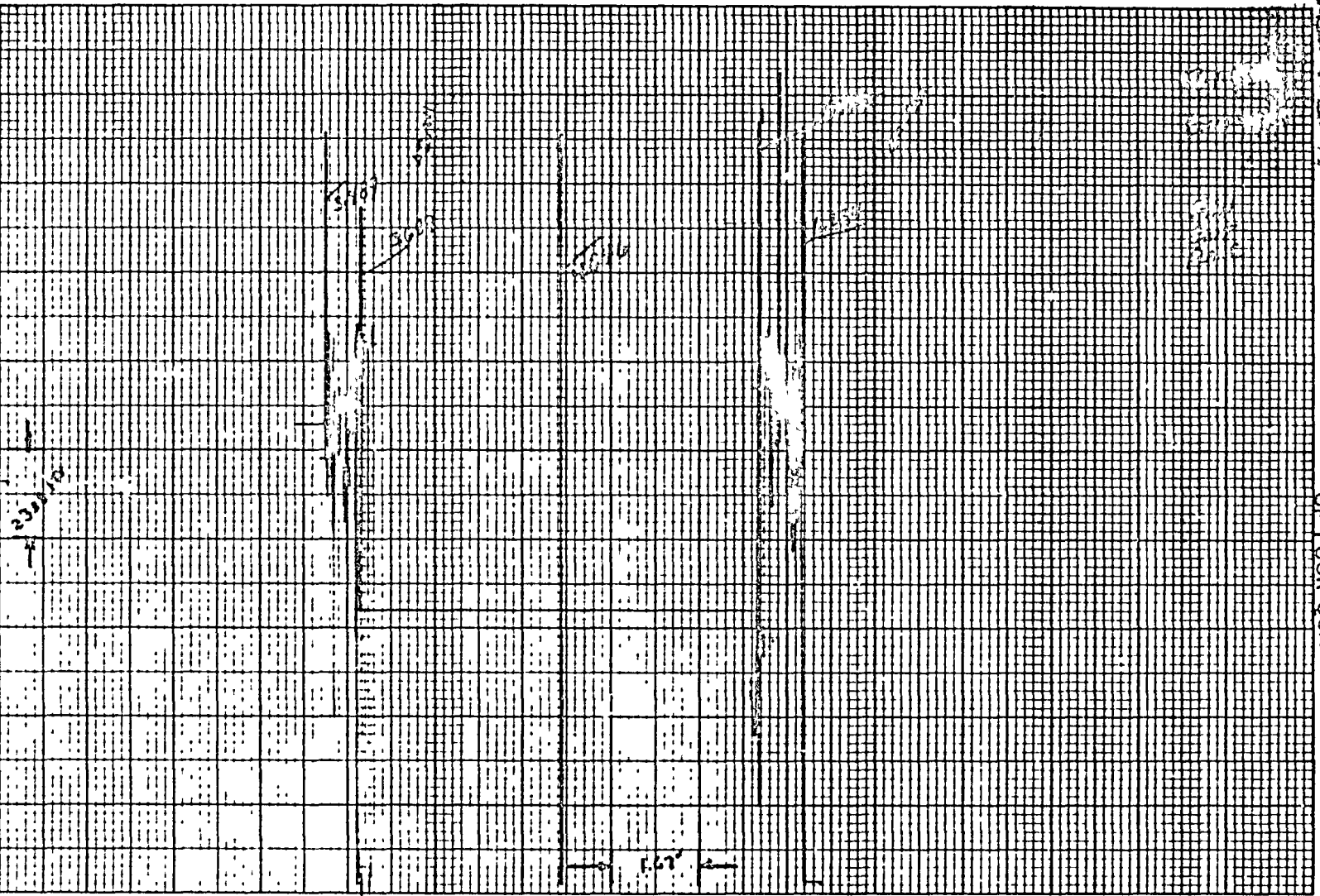
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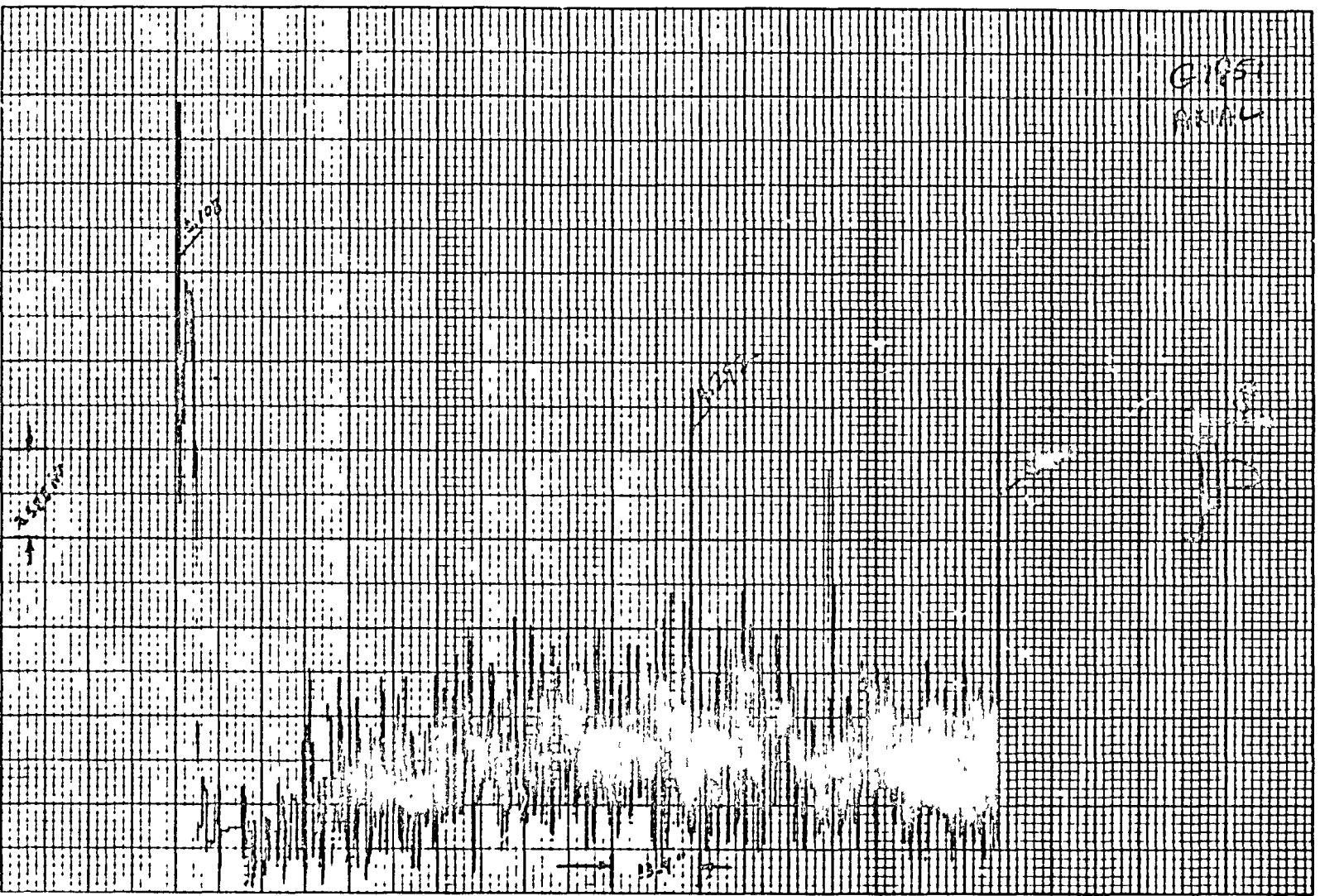
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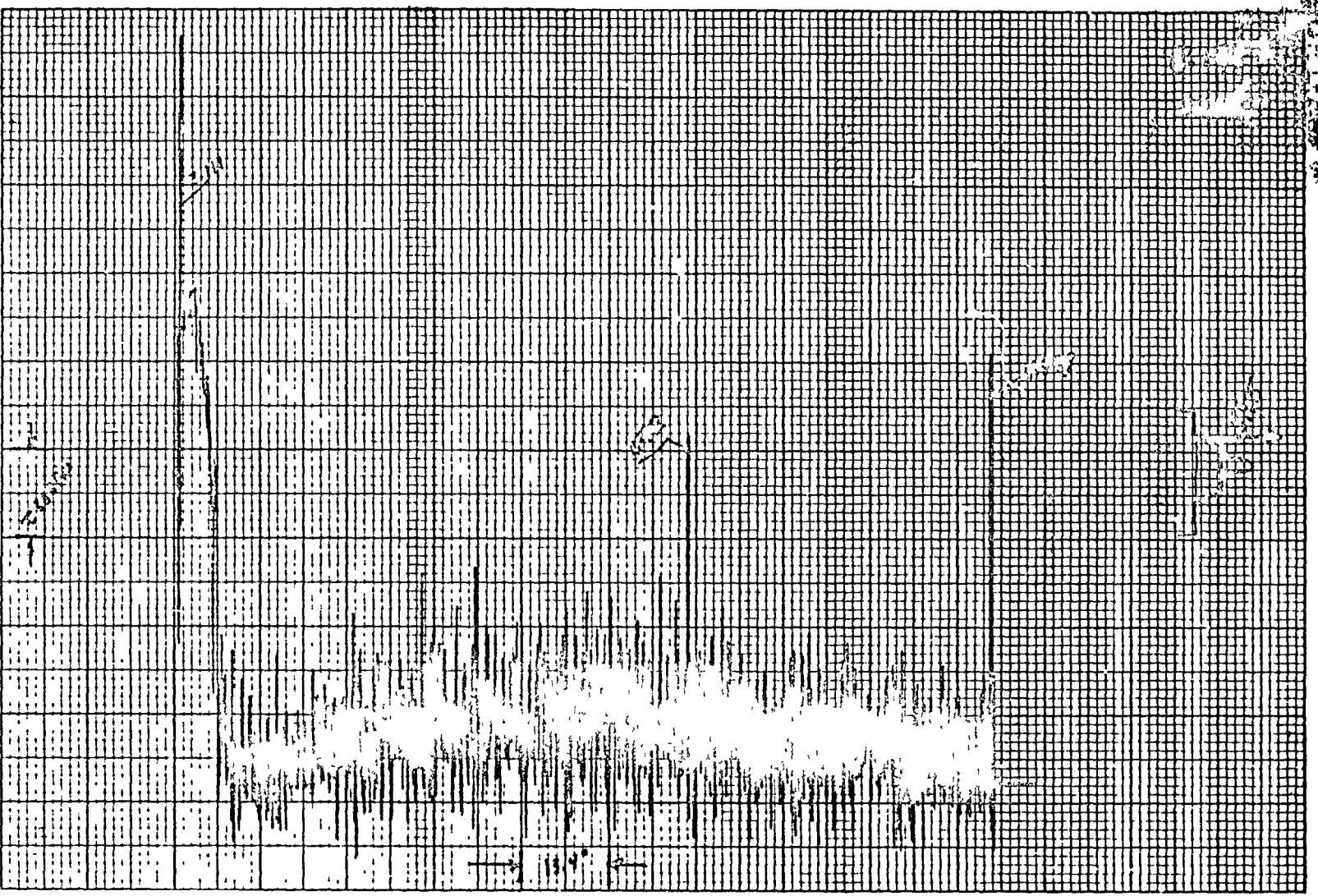
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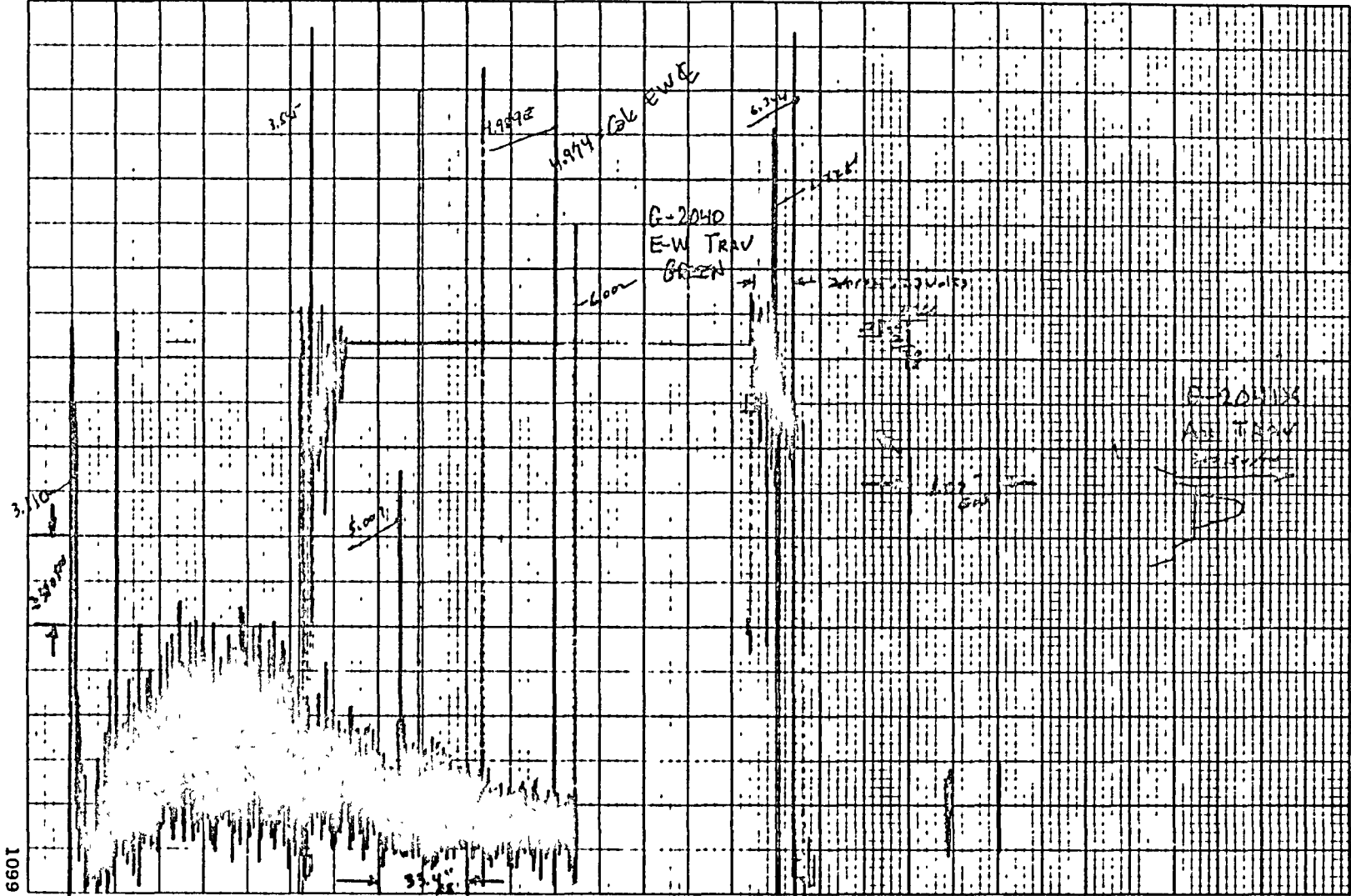
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1098

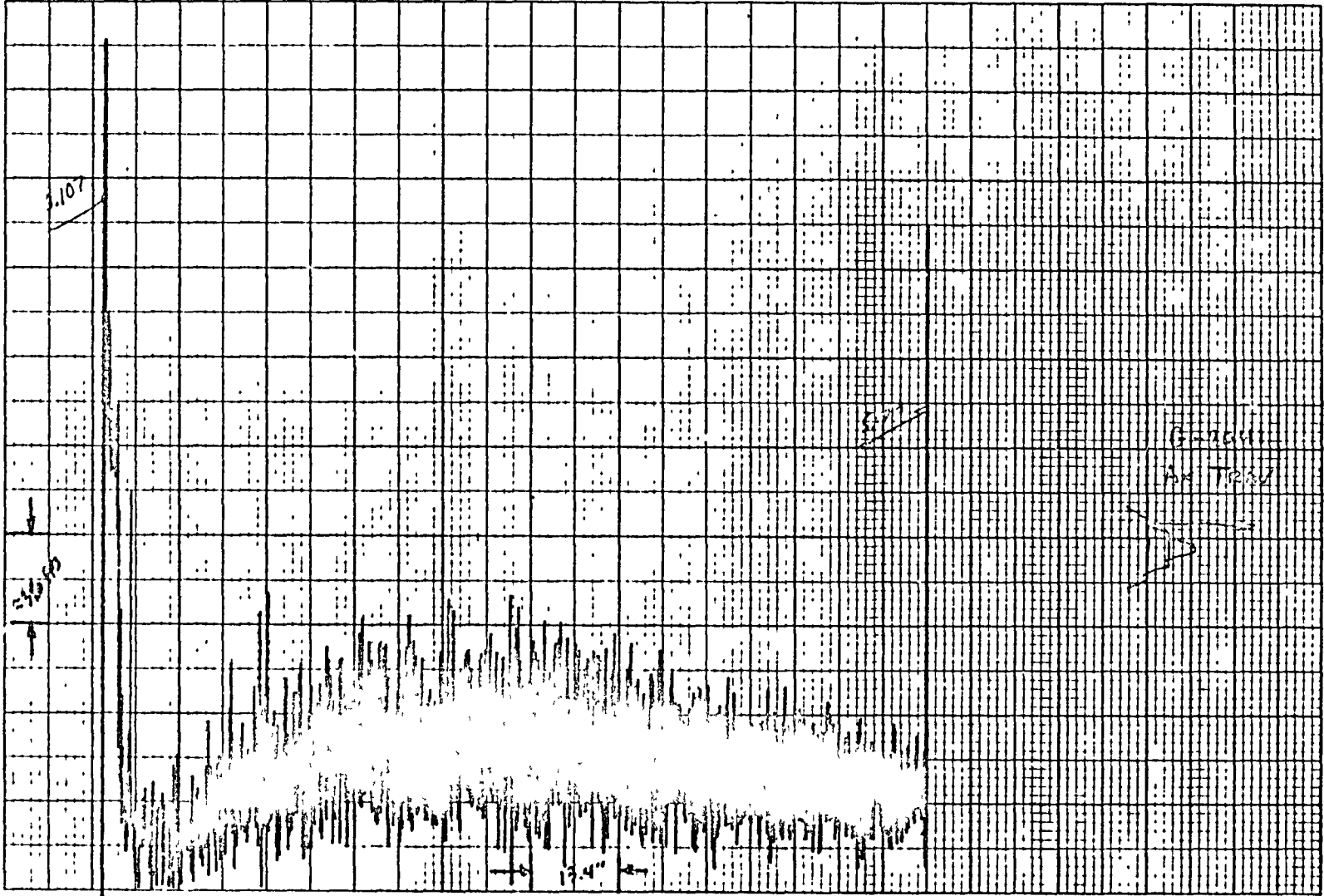
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MODEL 2  
TEST POINT 219



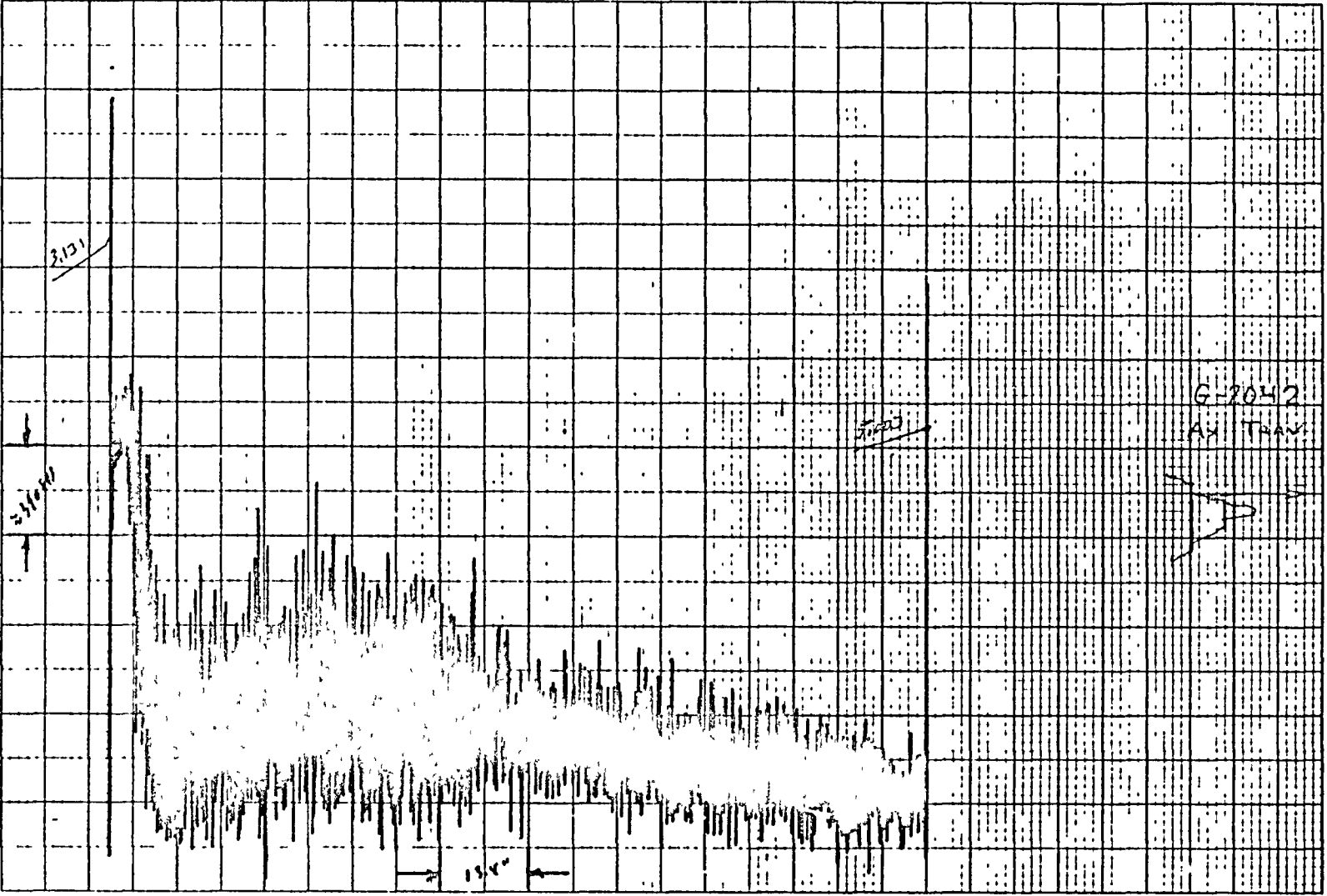
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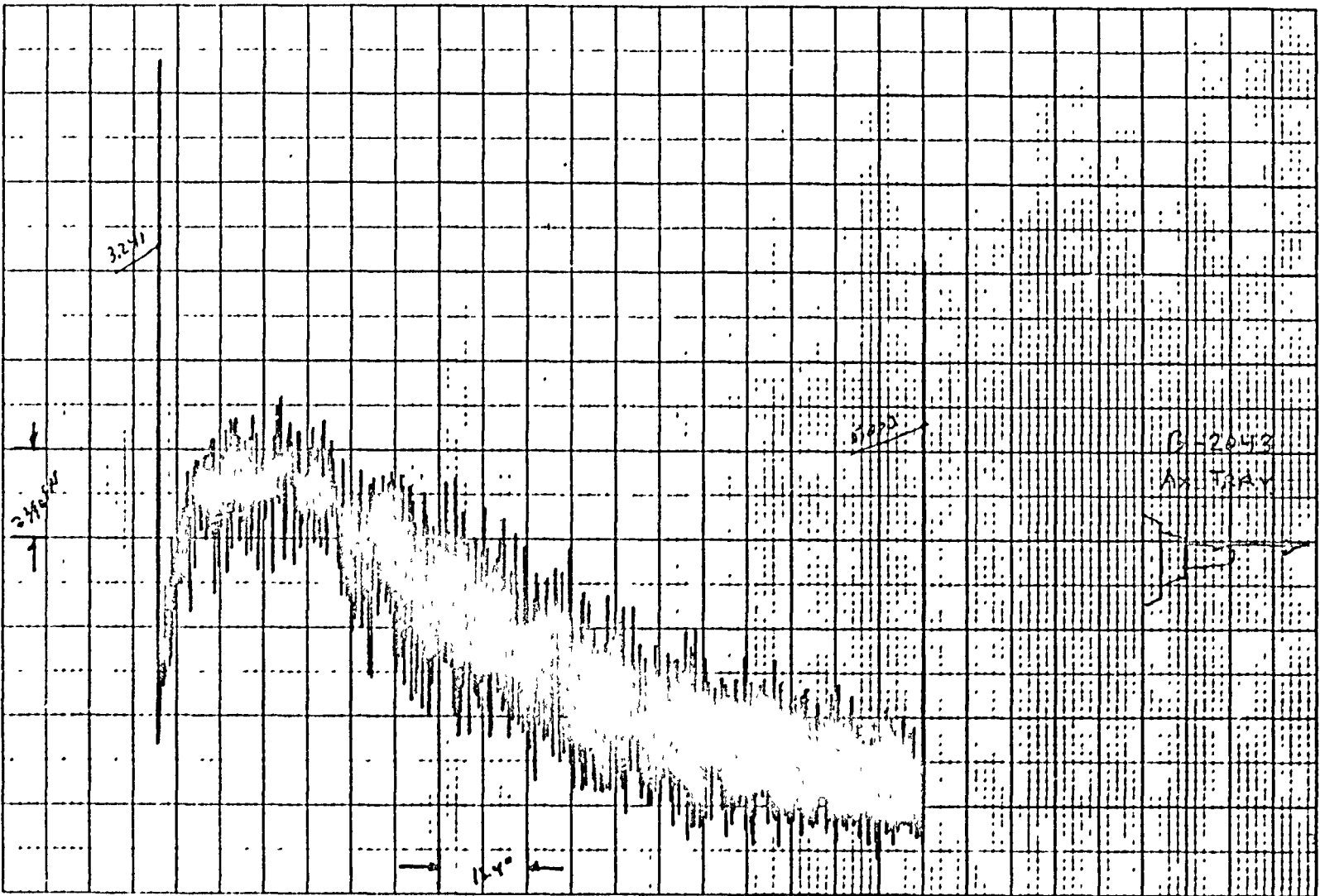
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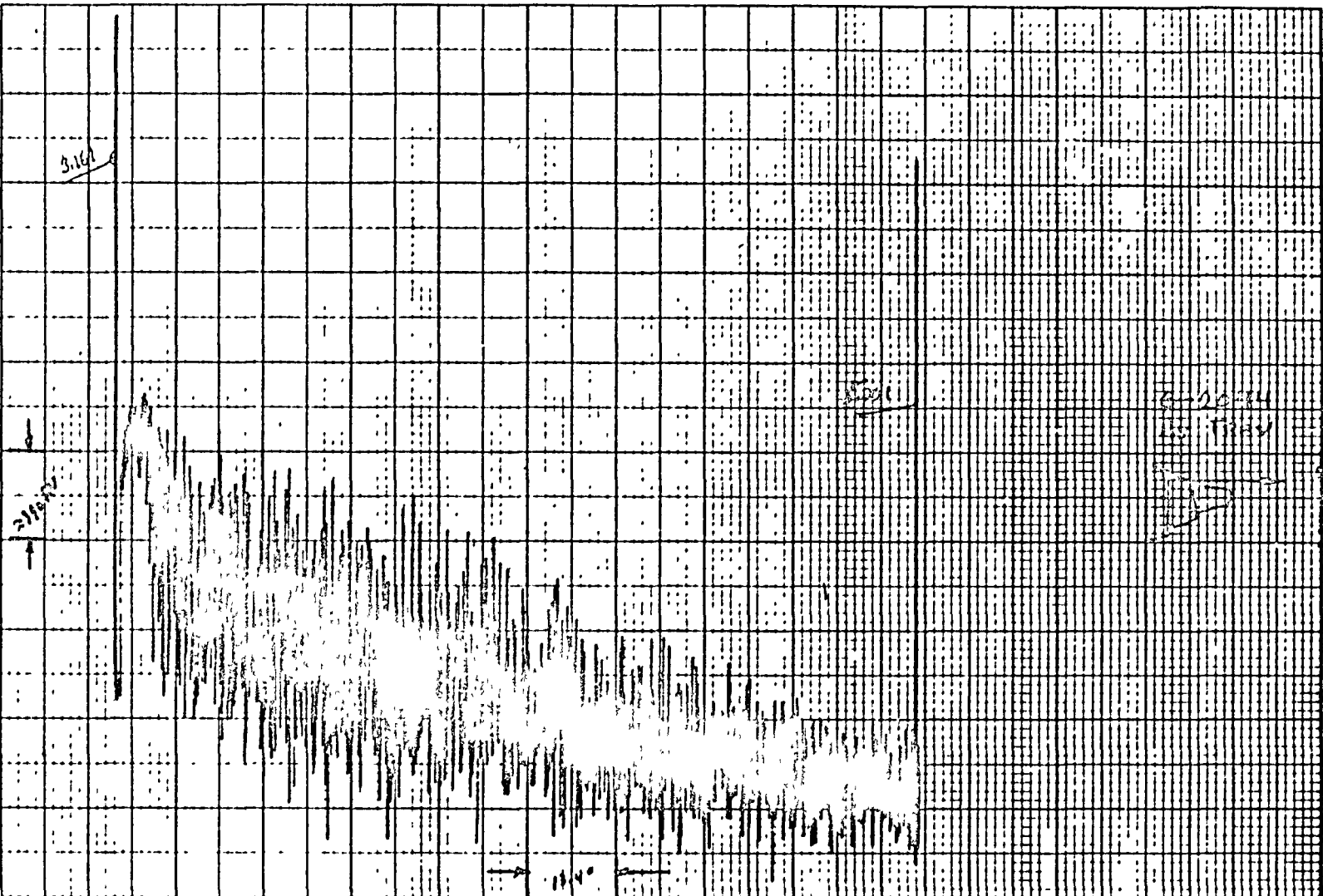
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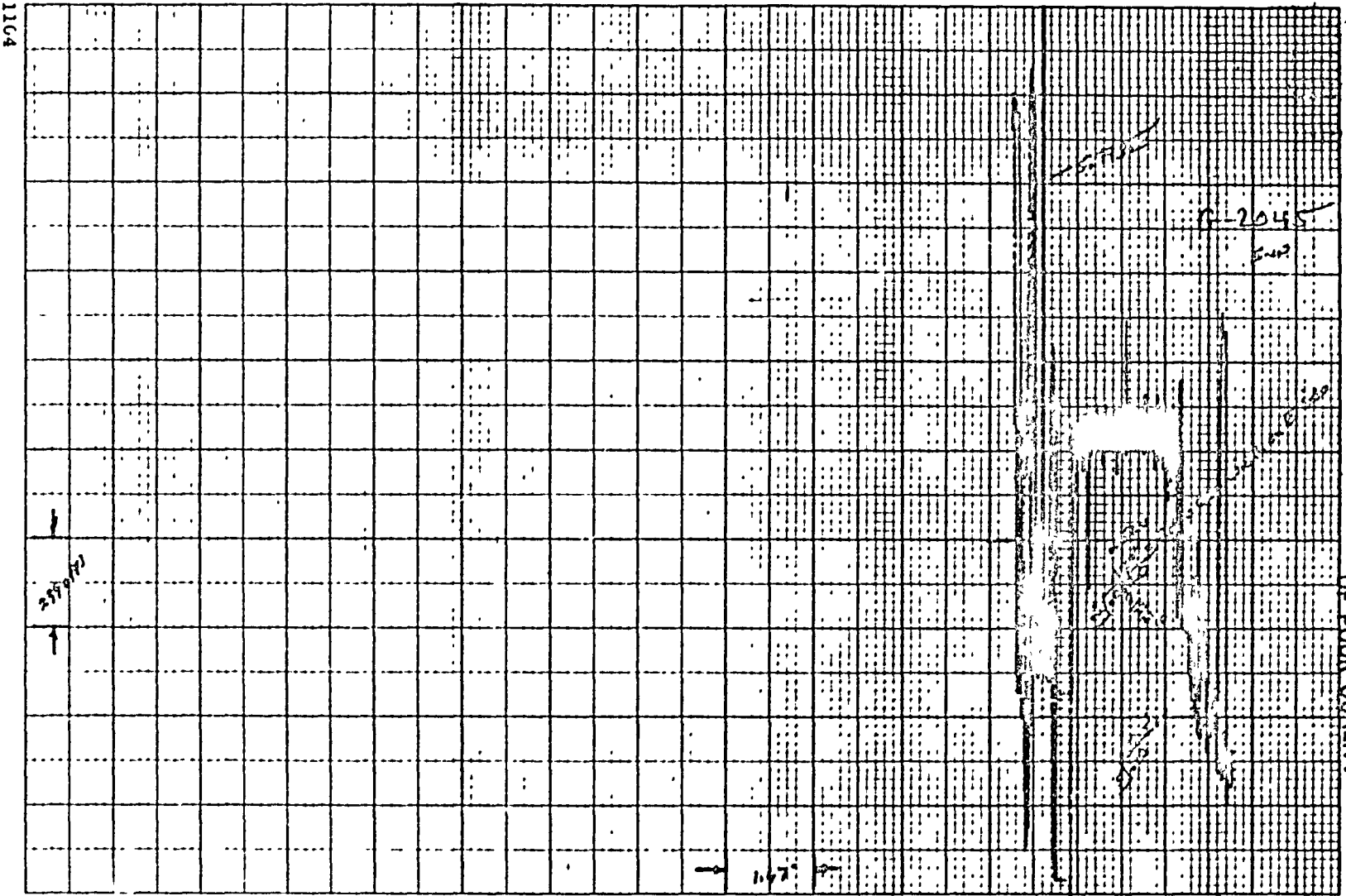


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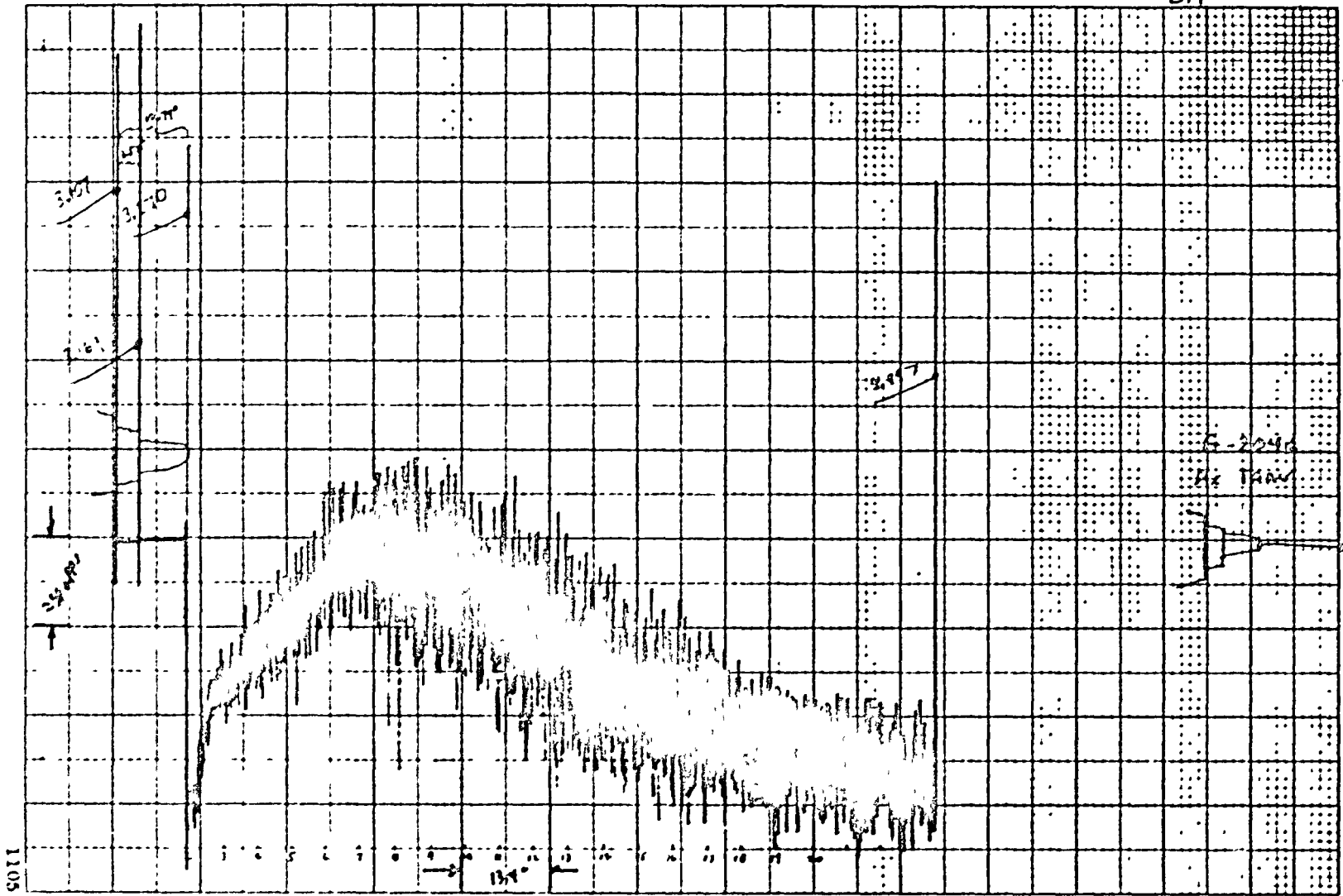
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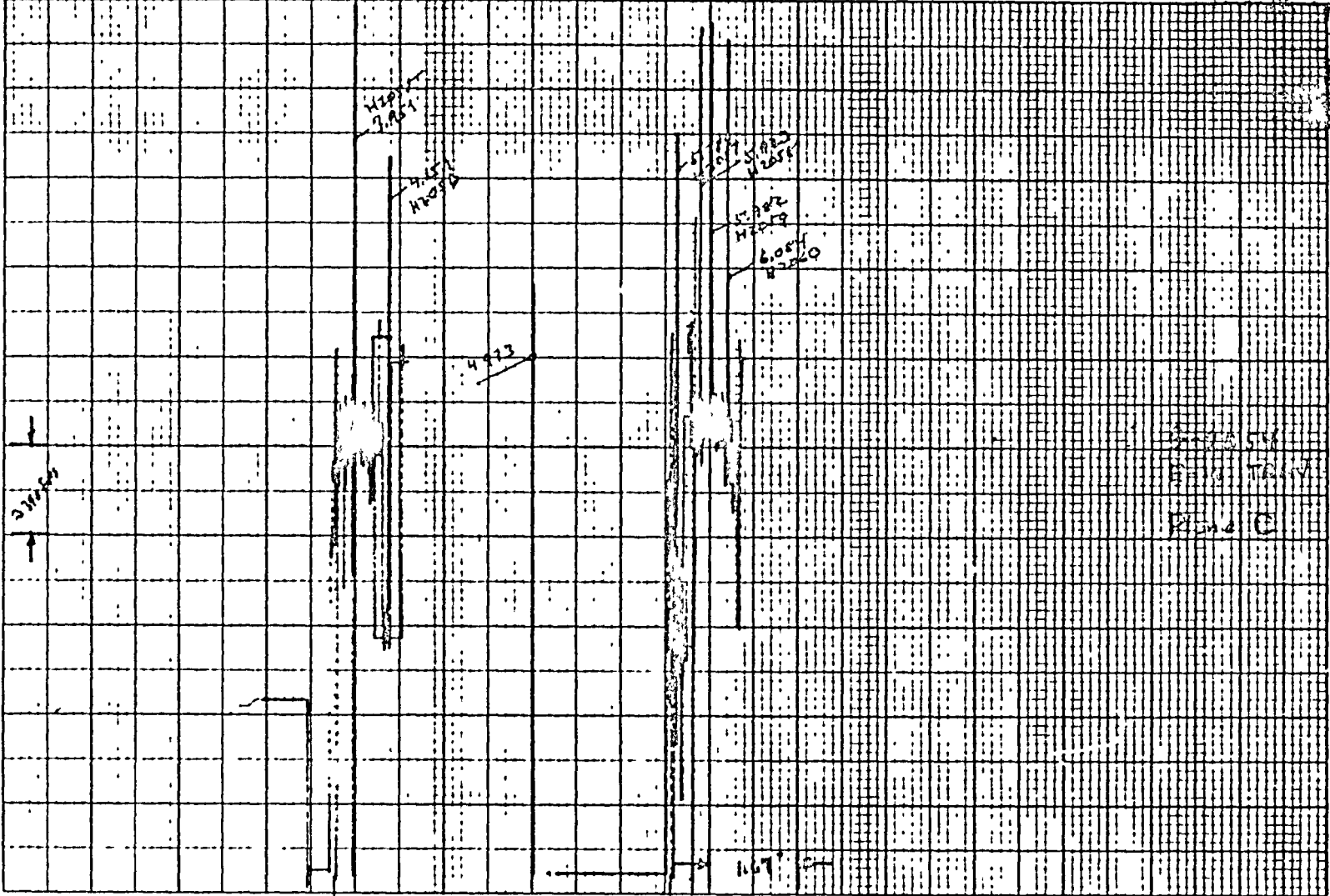
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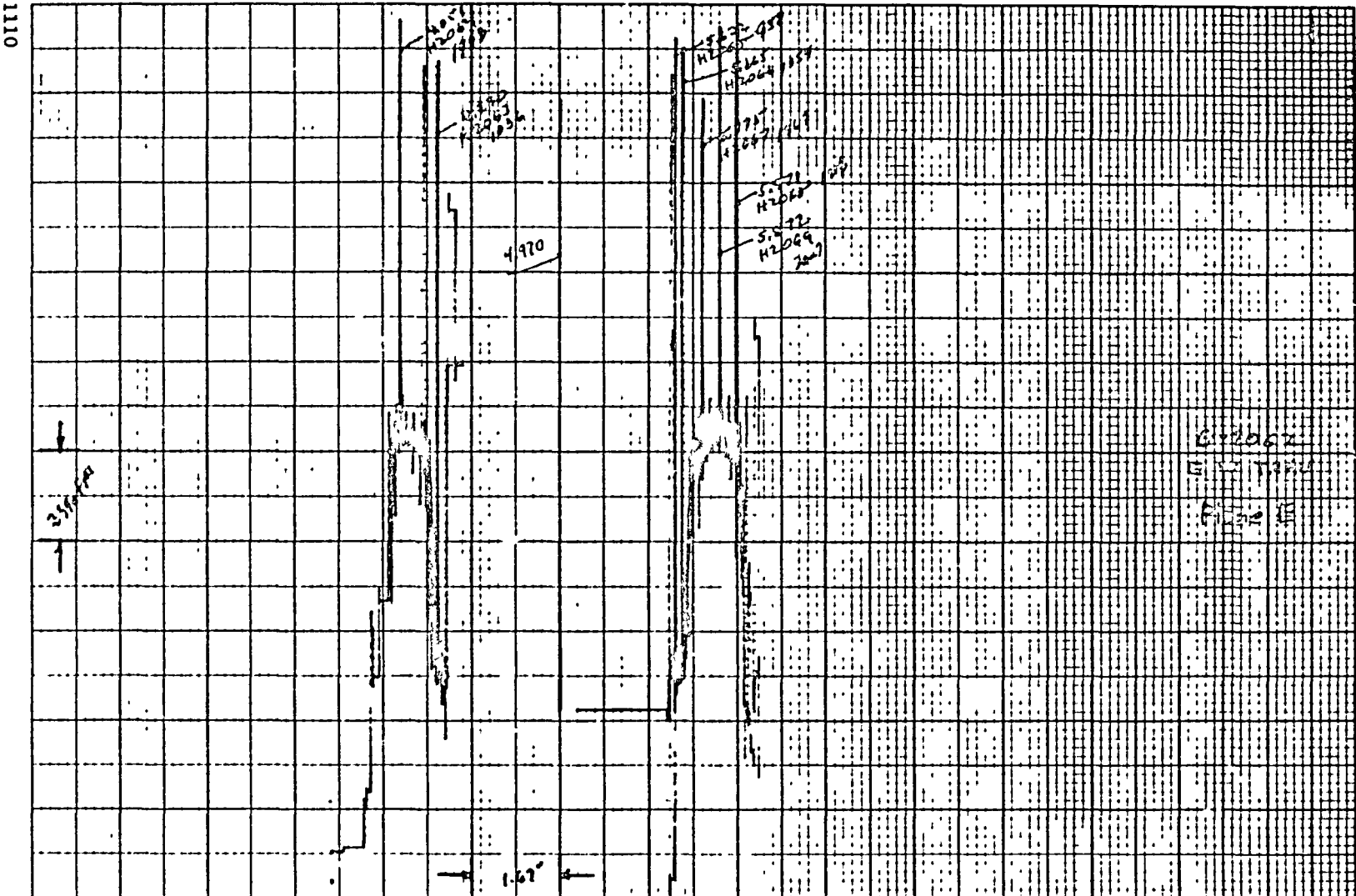






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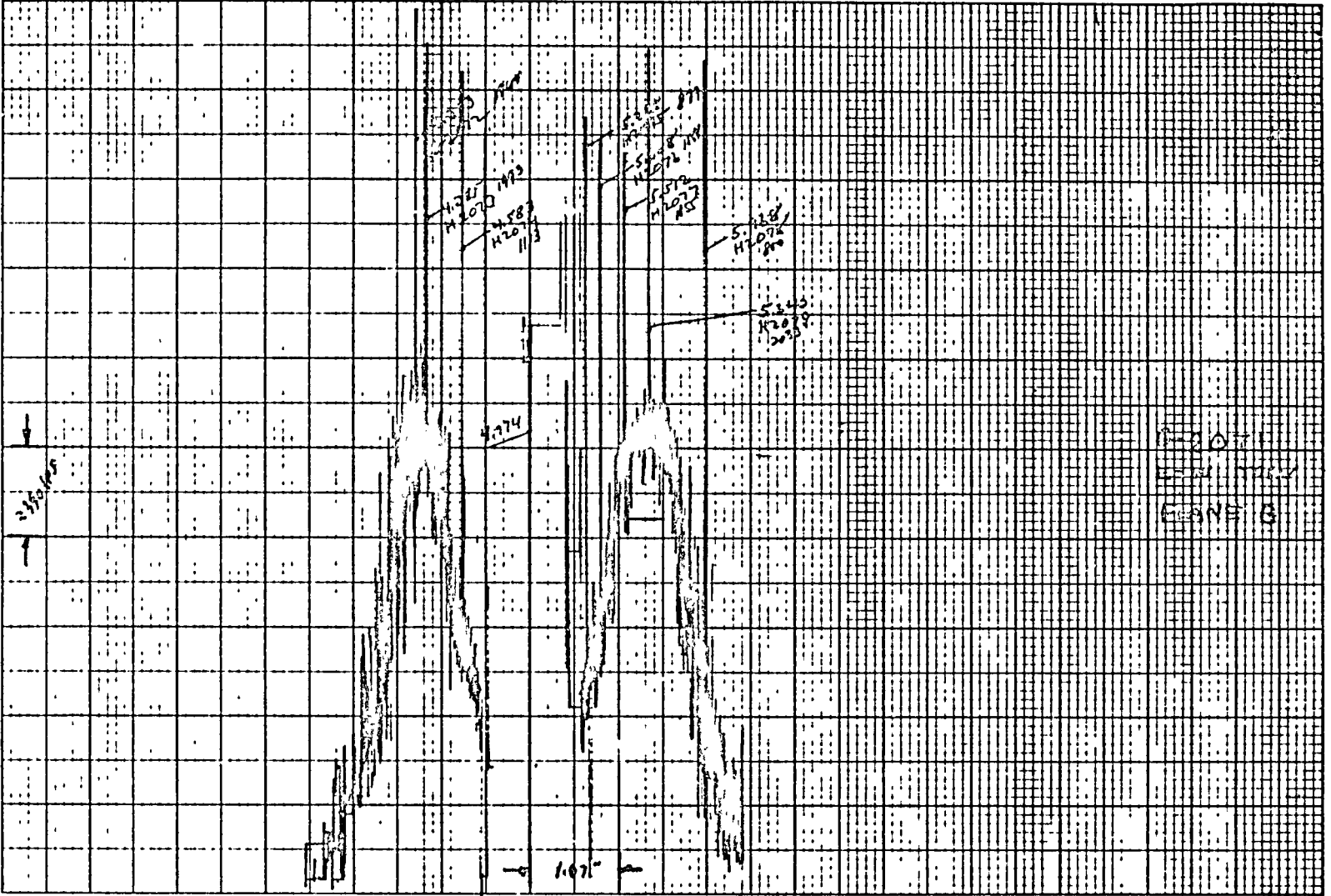


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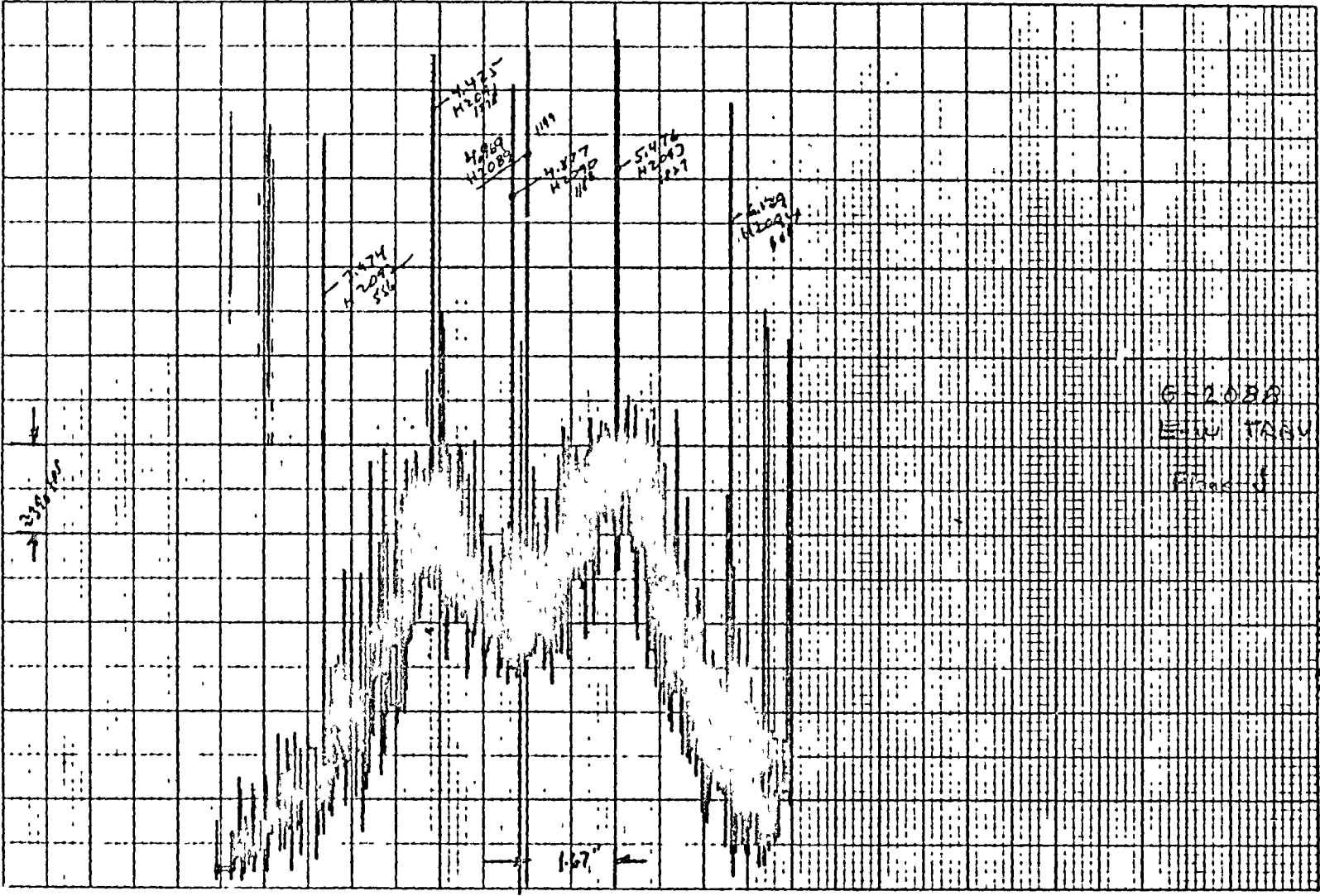






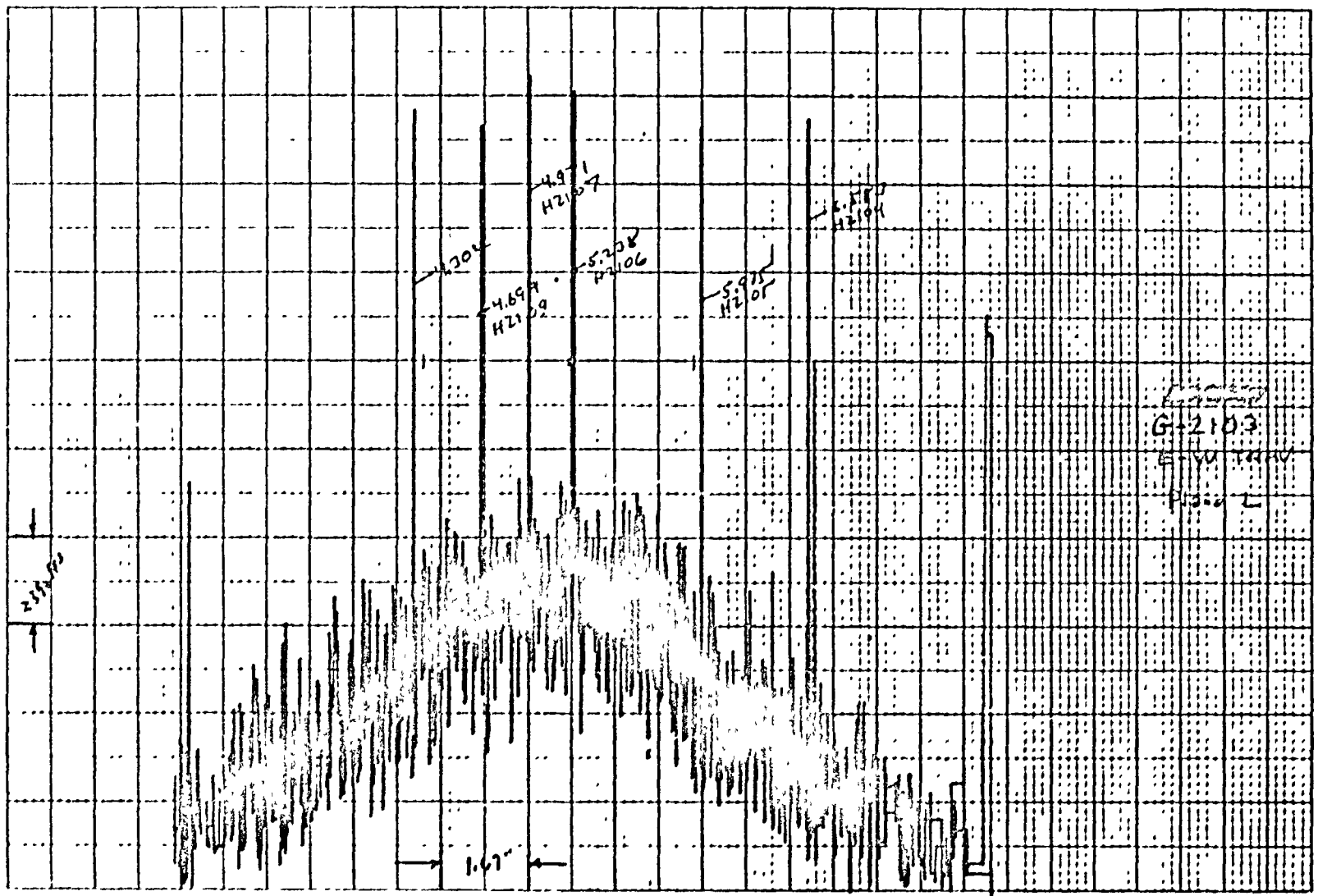
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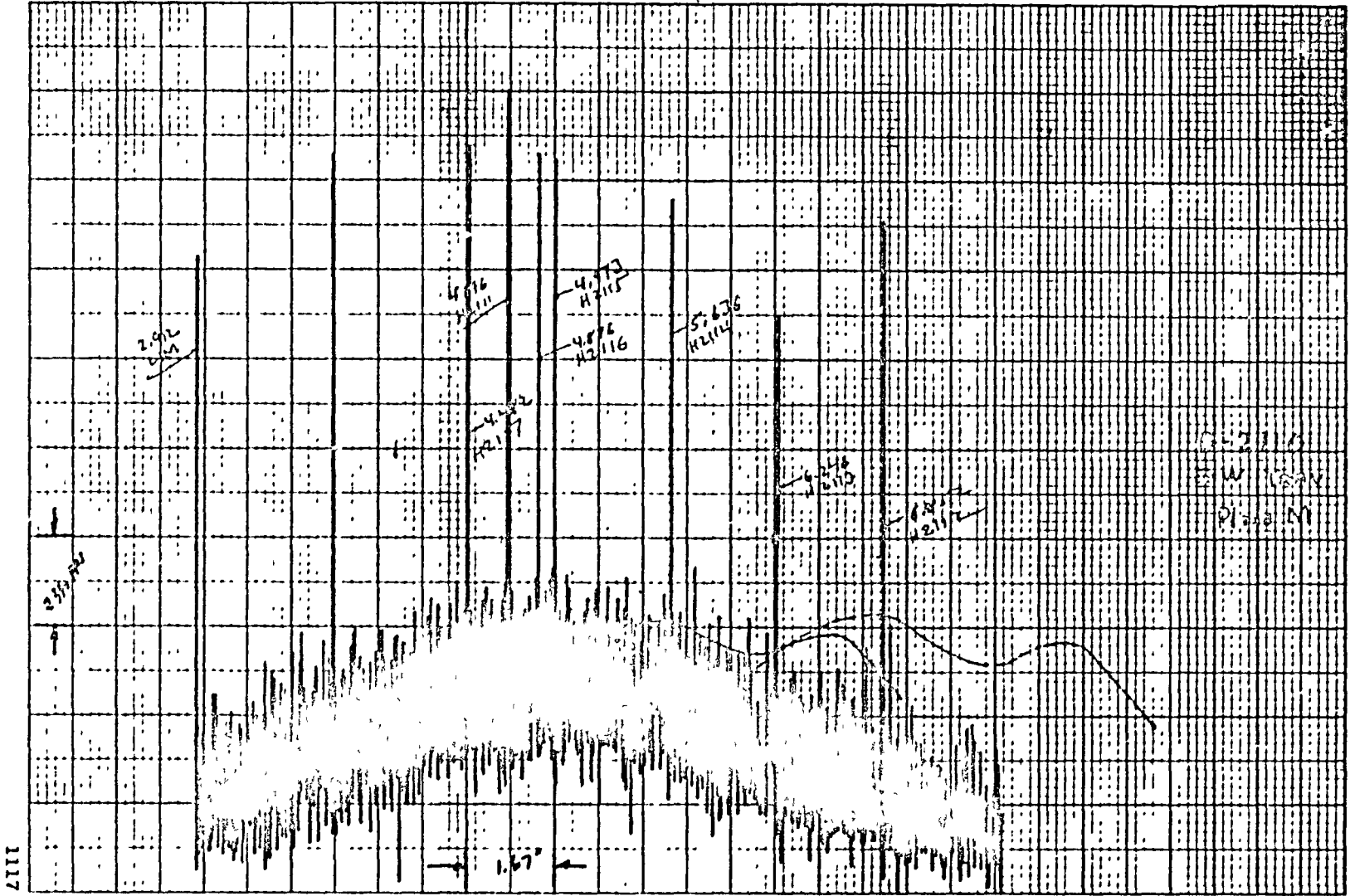


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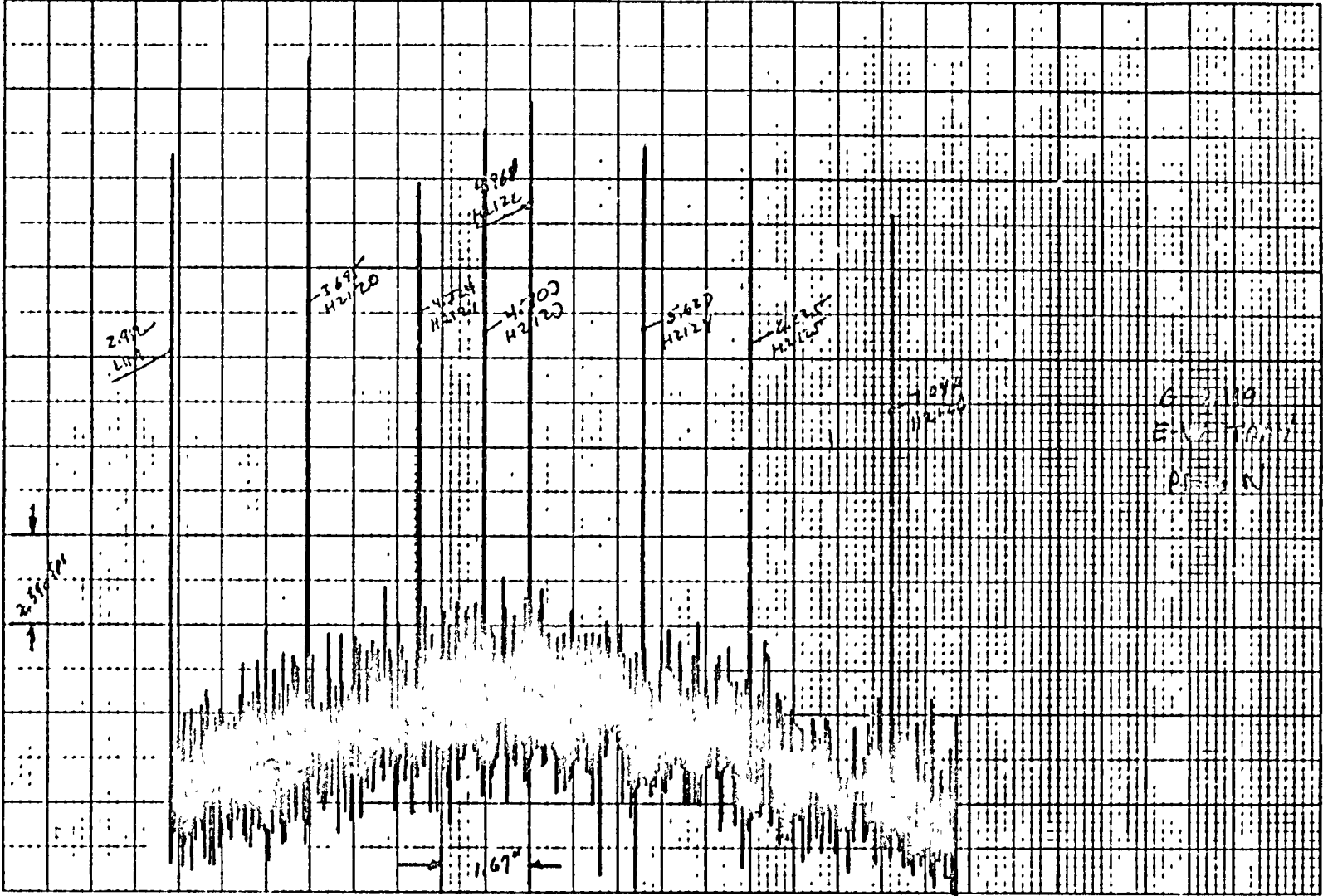




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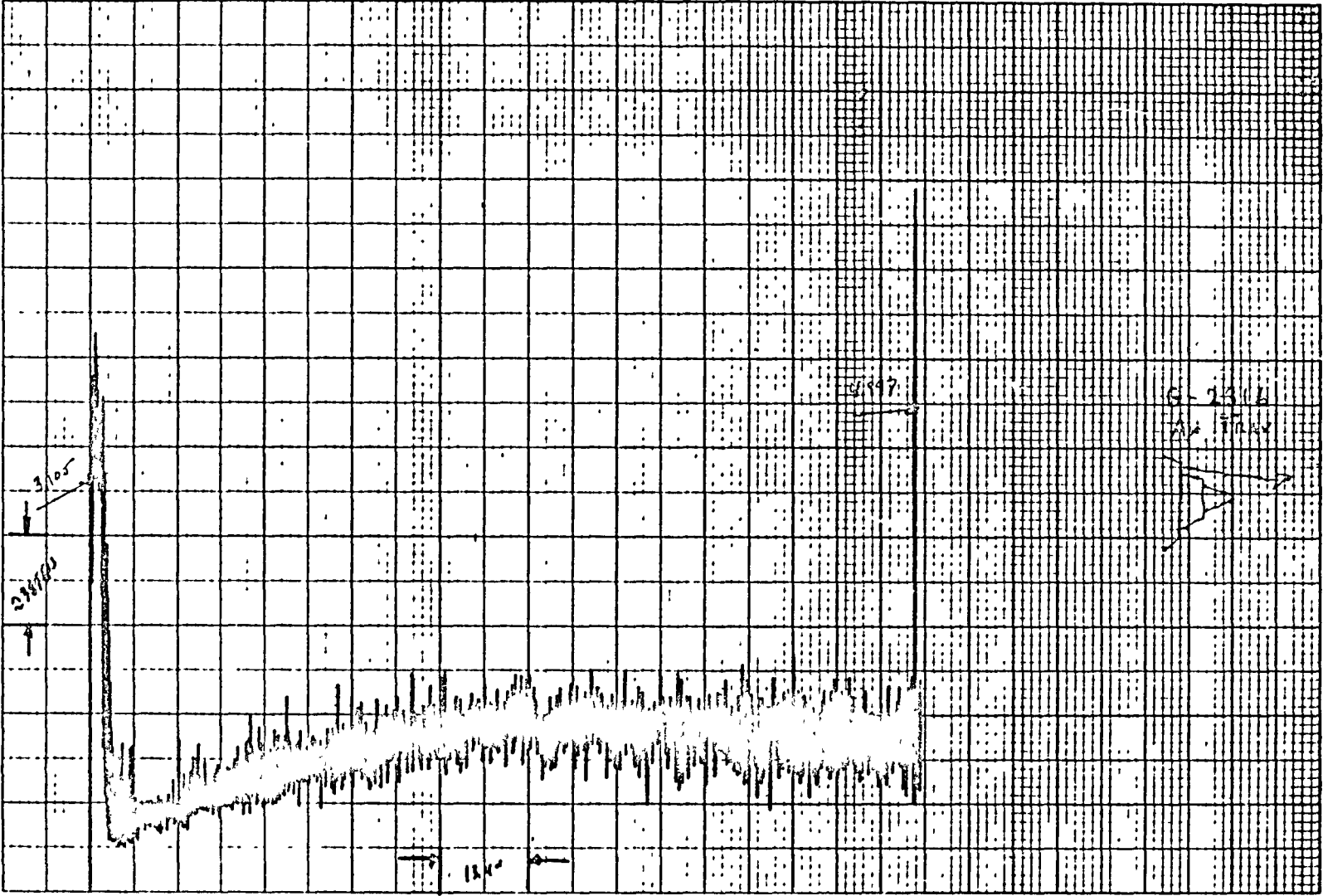


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MODEL 2  
TEST POINT 221

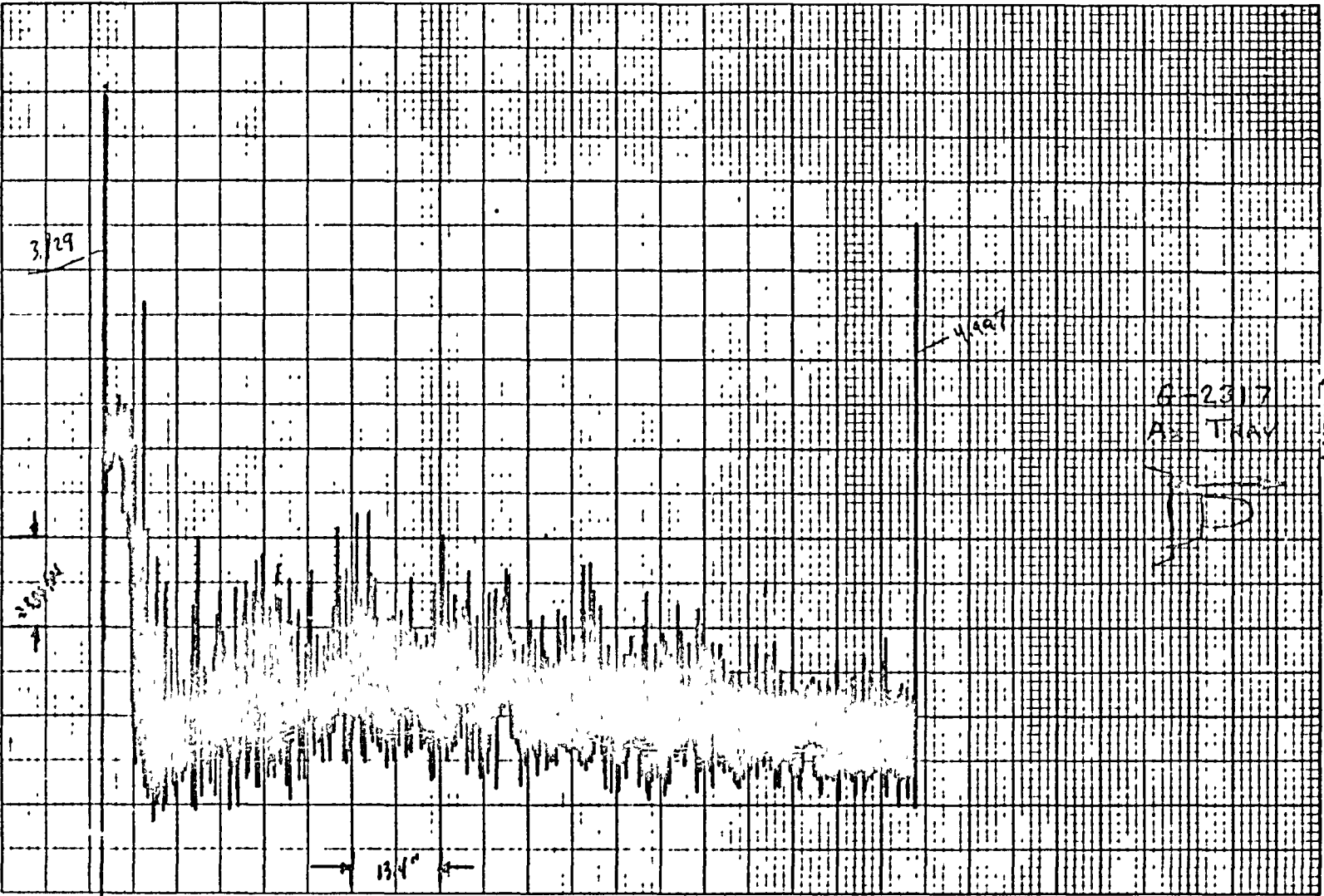


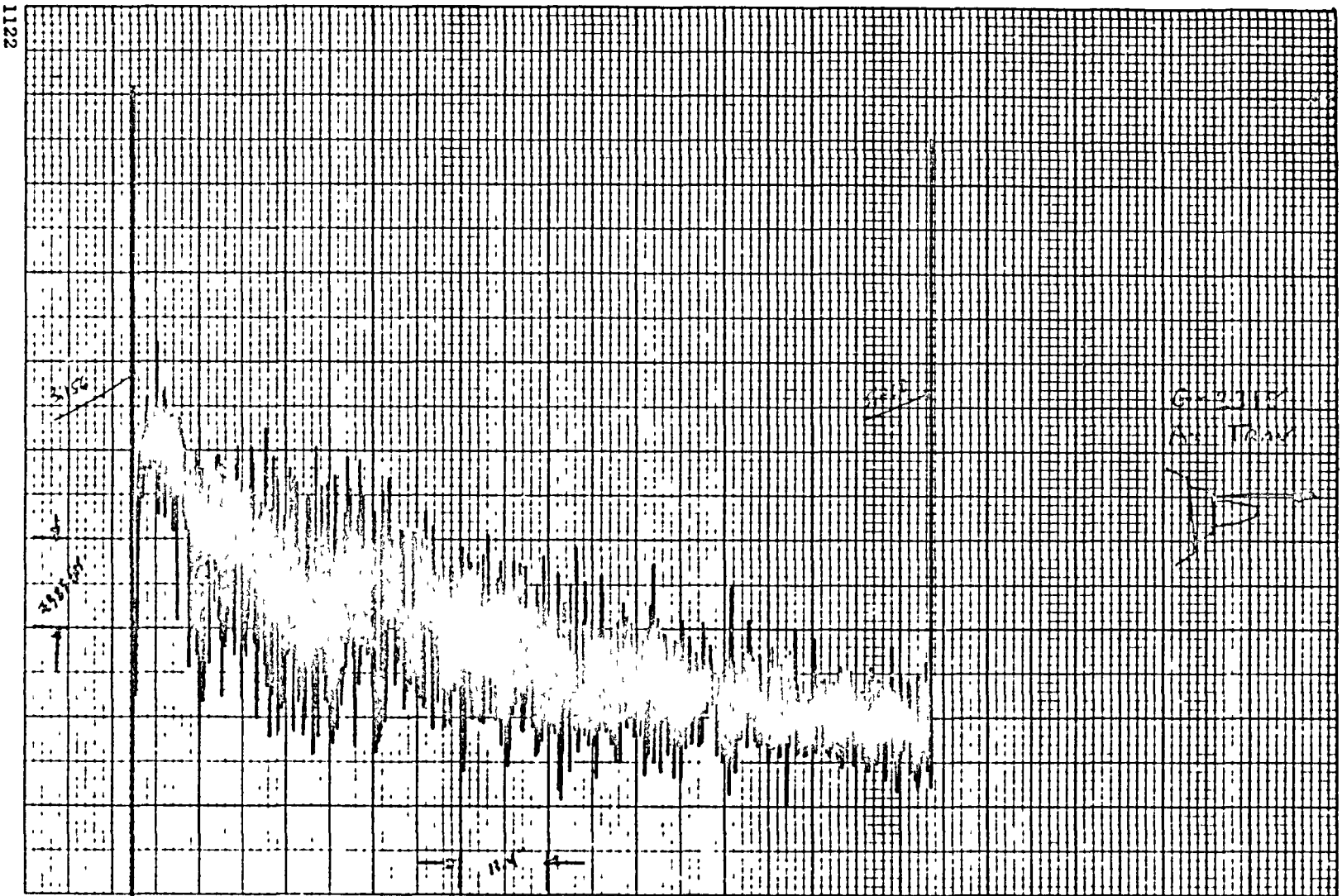




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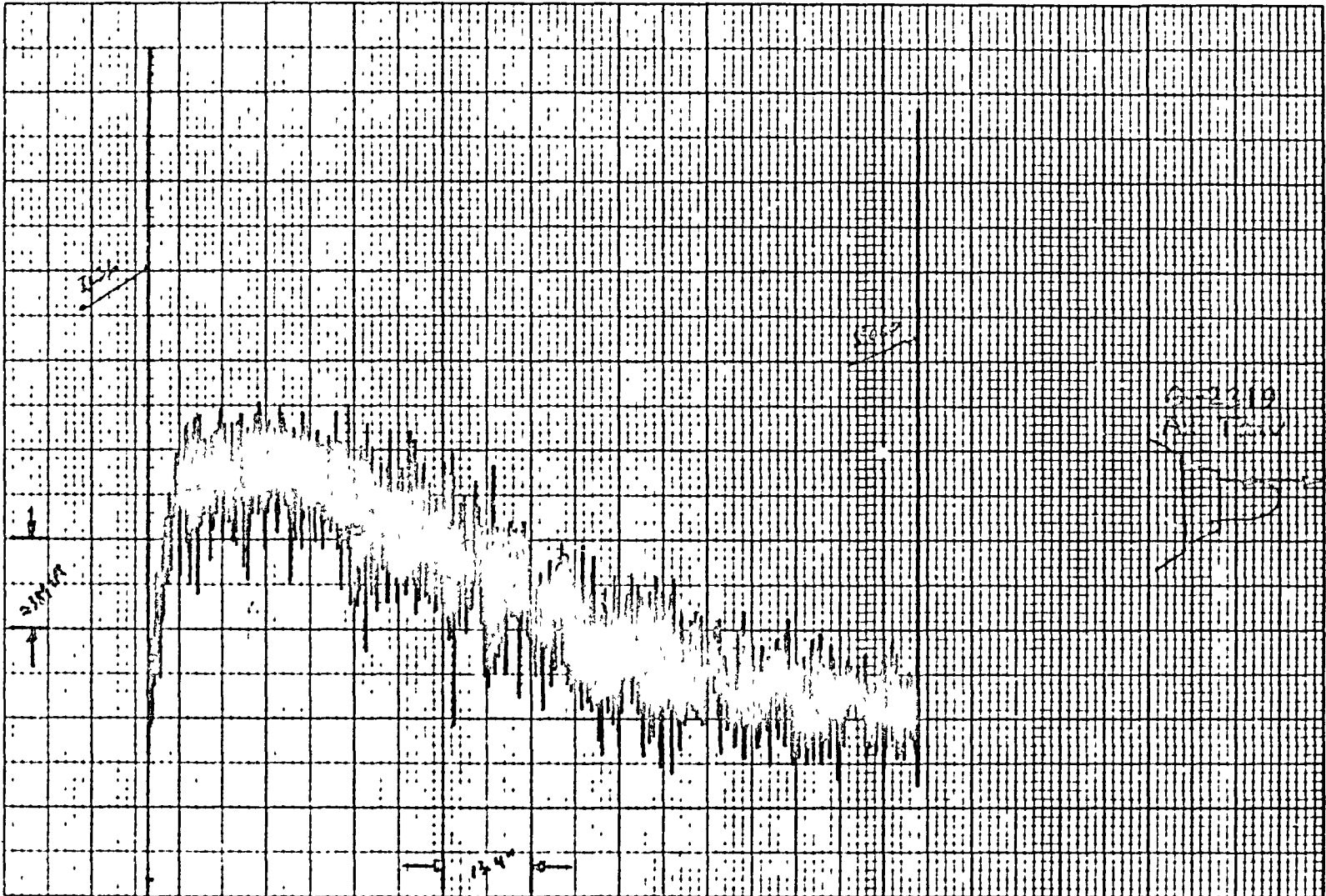
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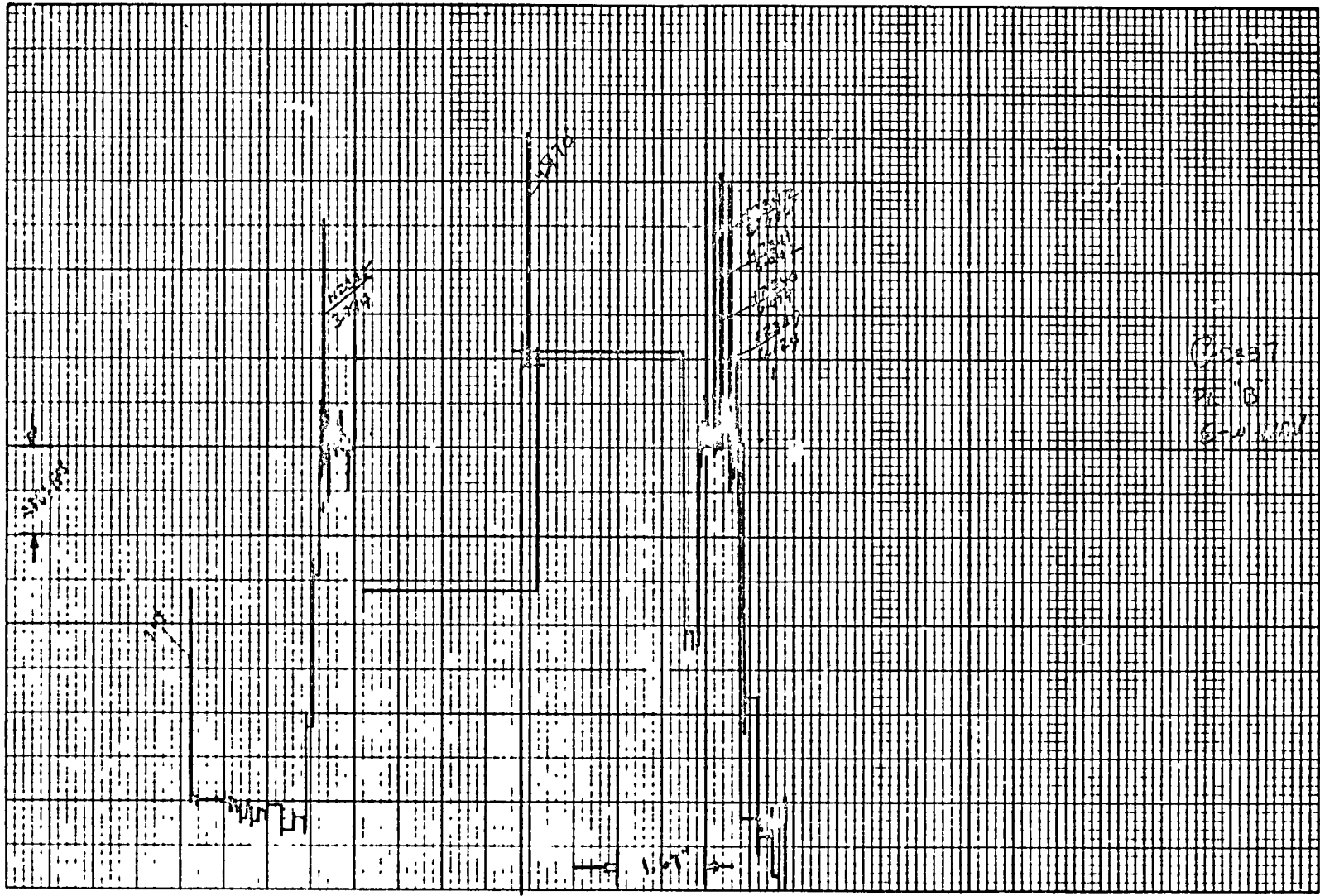
1123



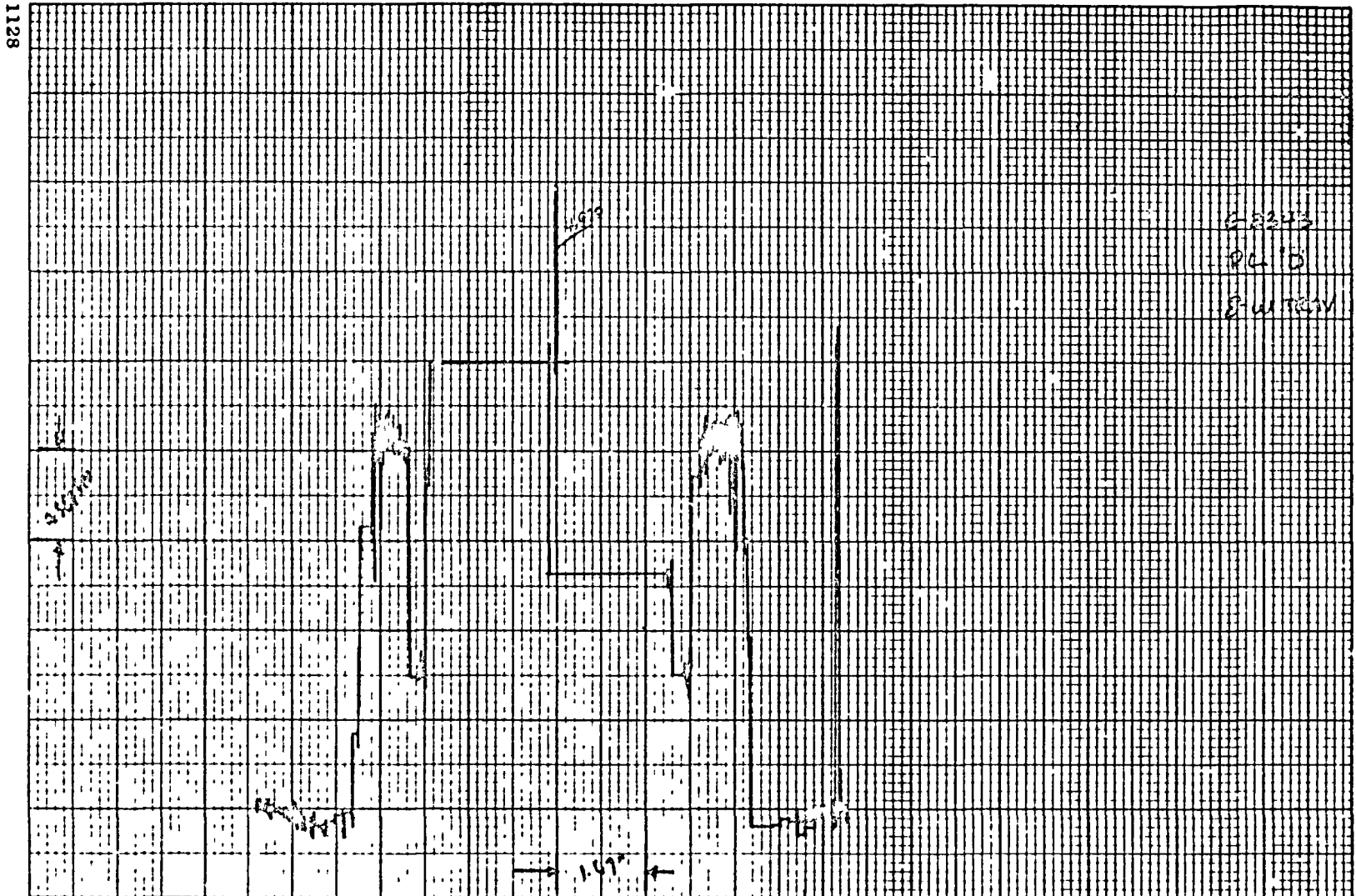








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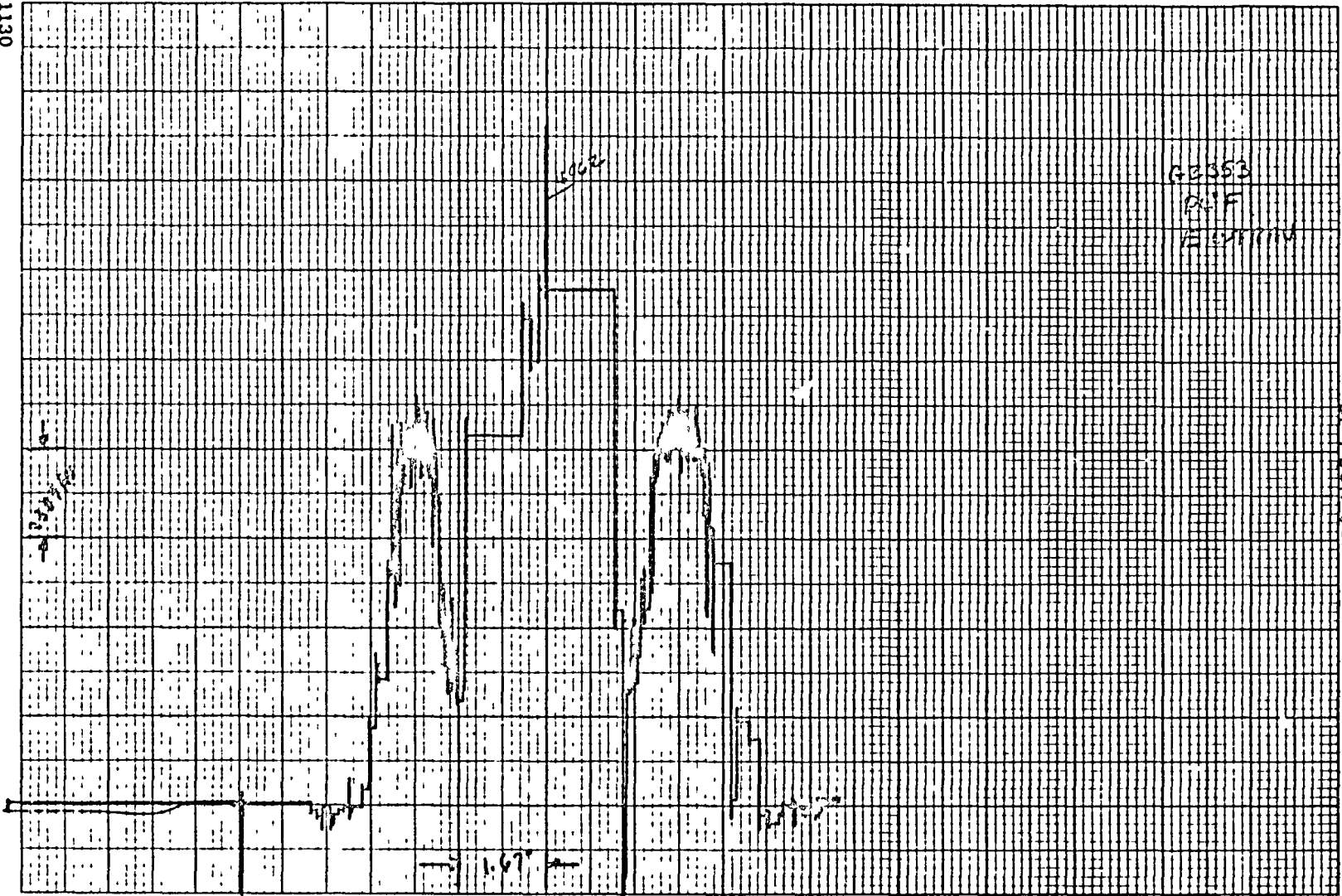


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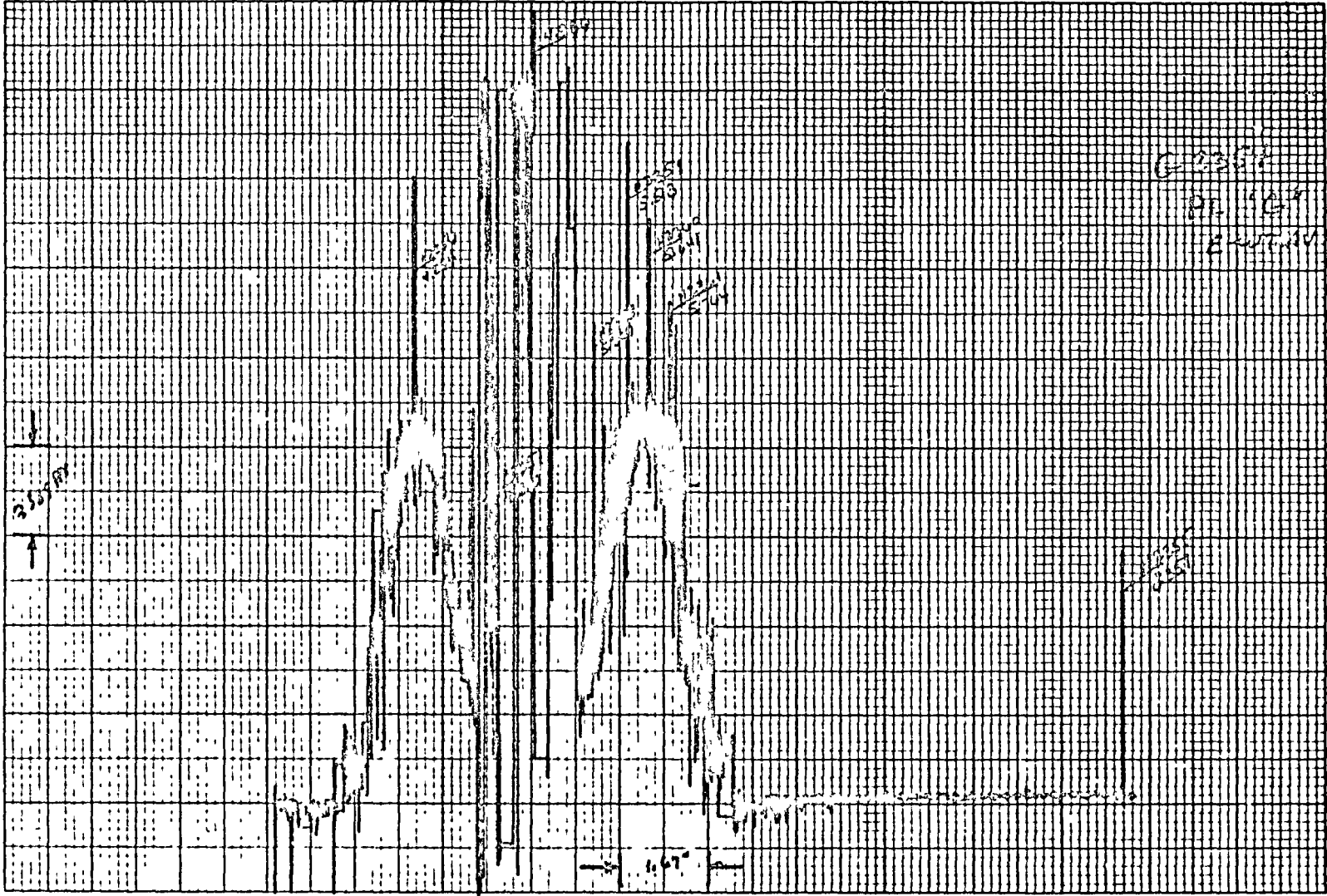


1130

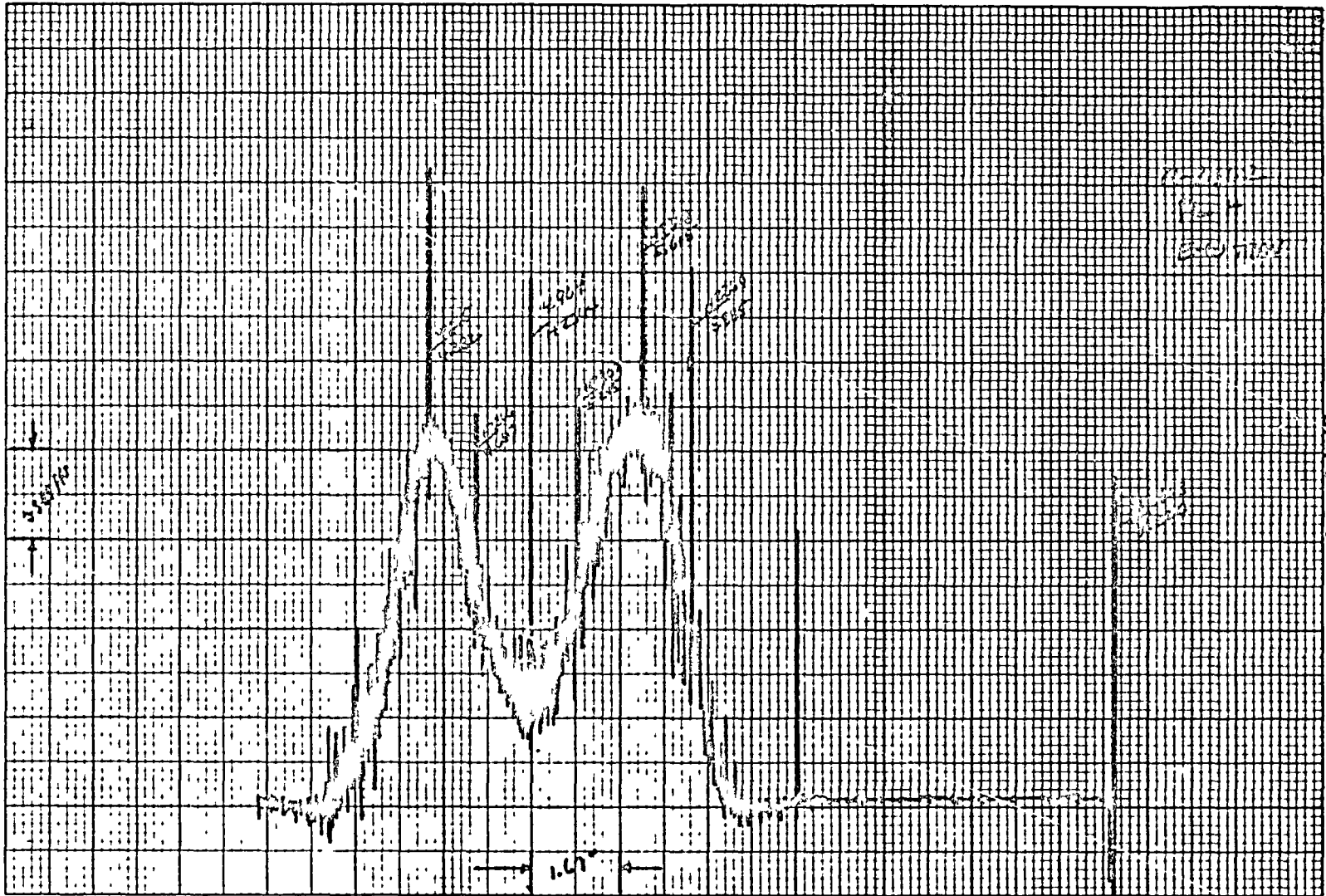


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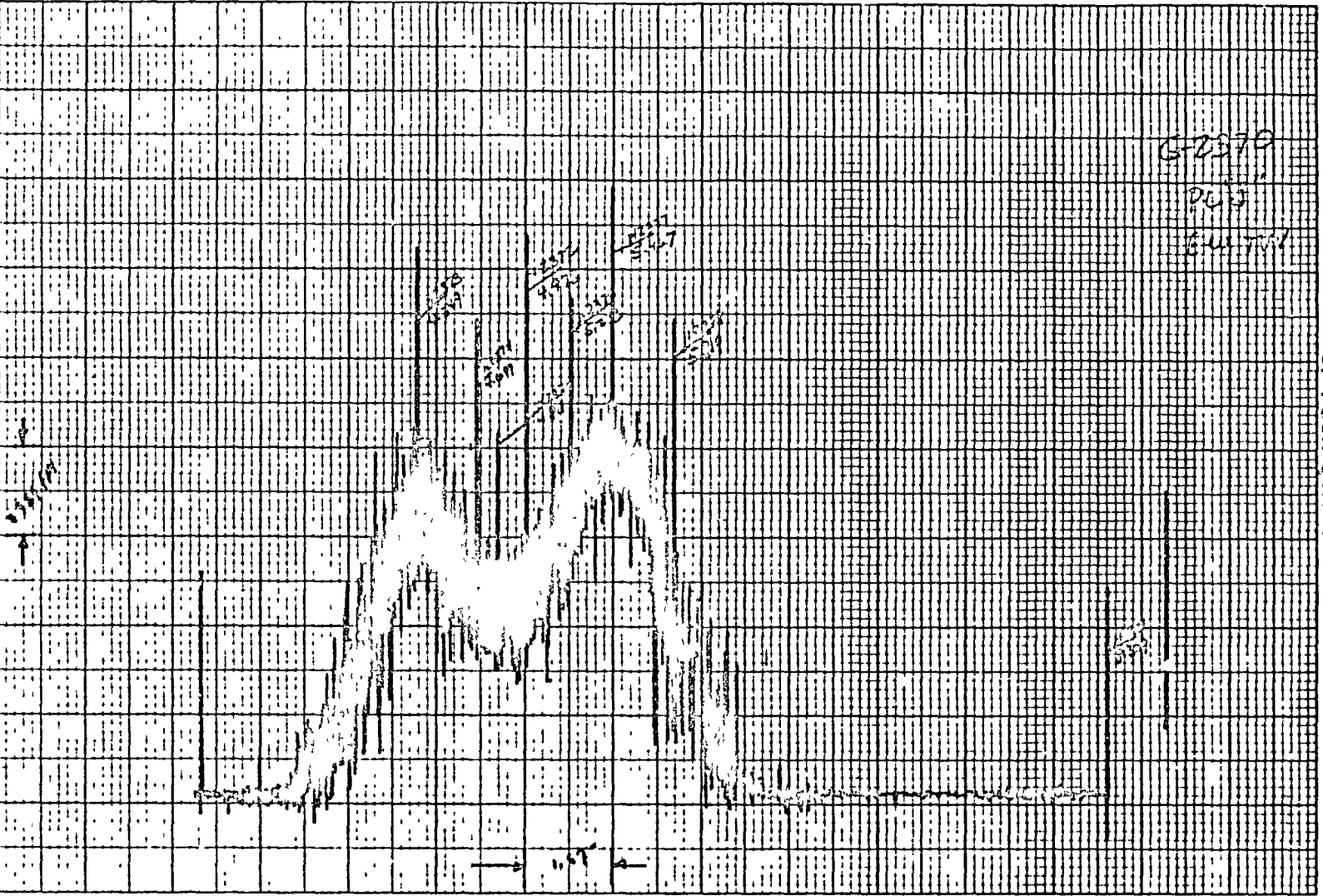
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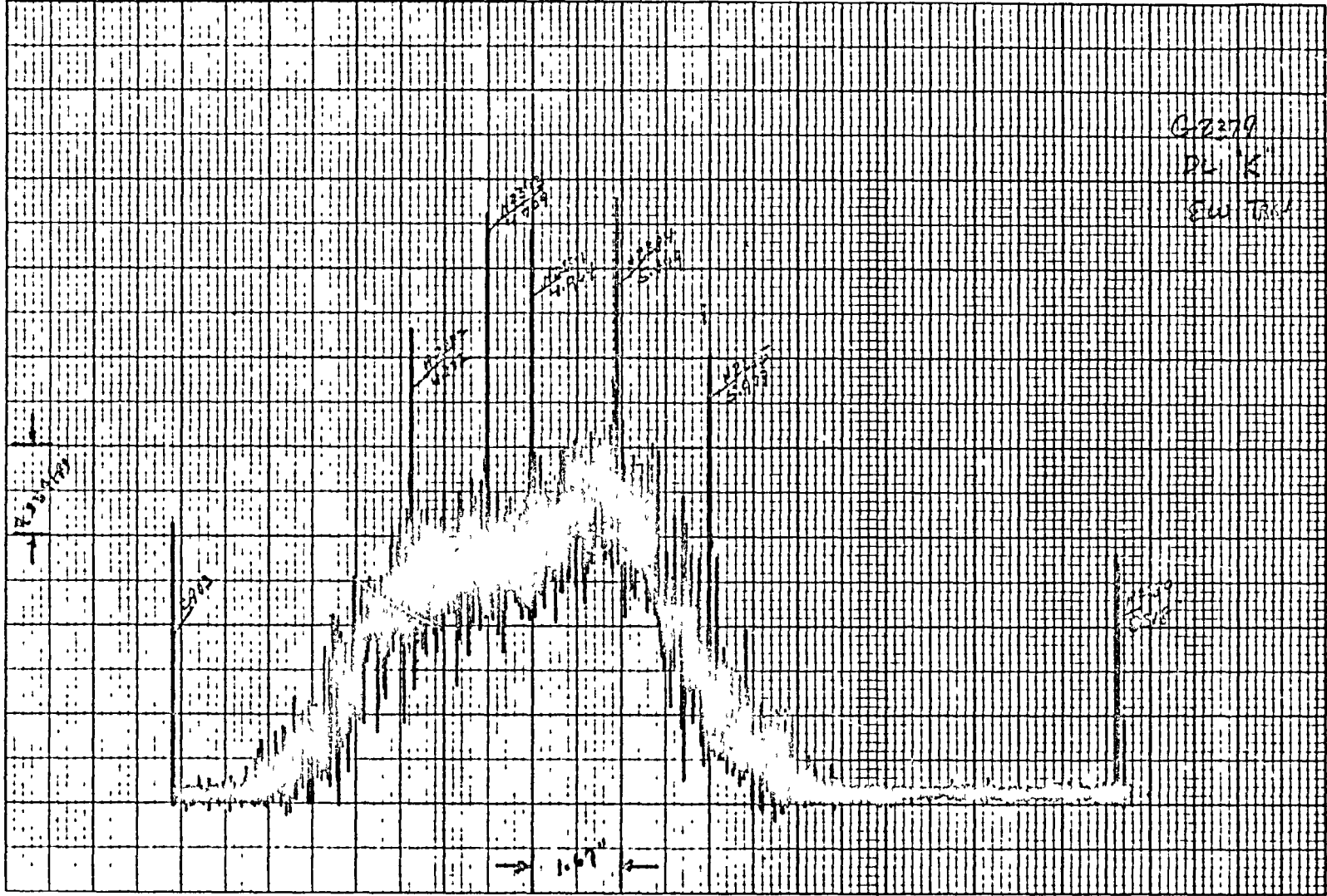
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P-13  
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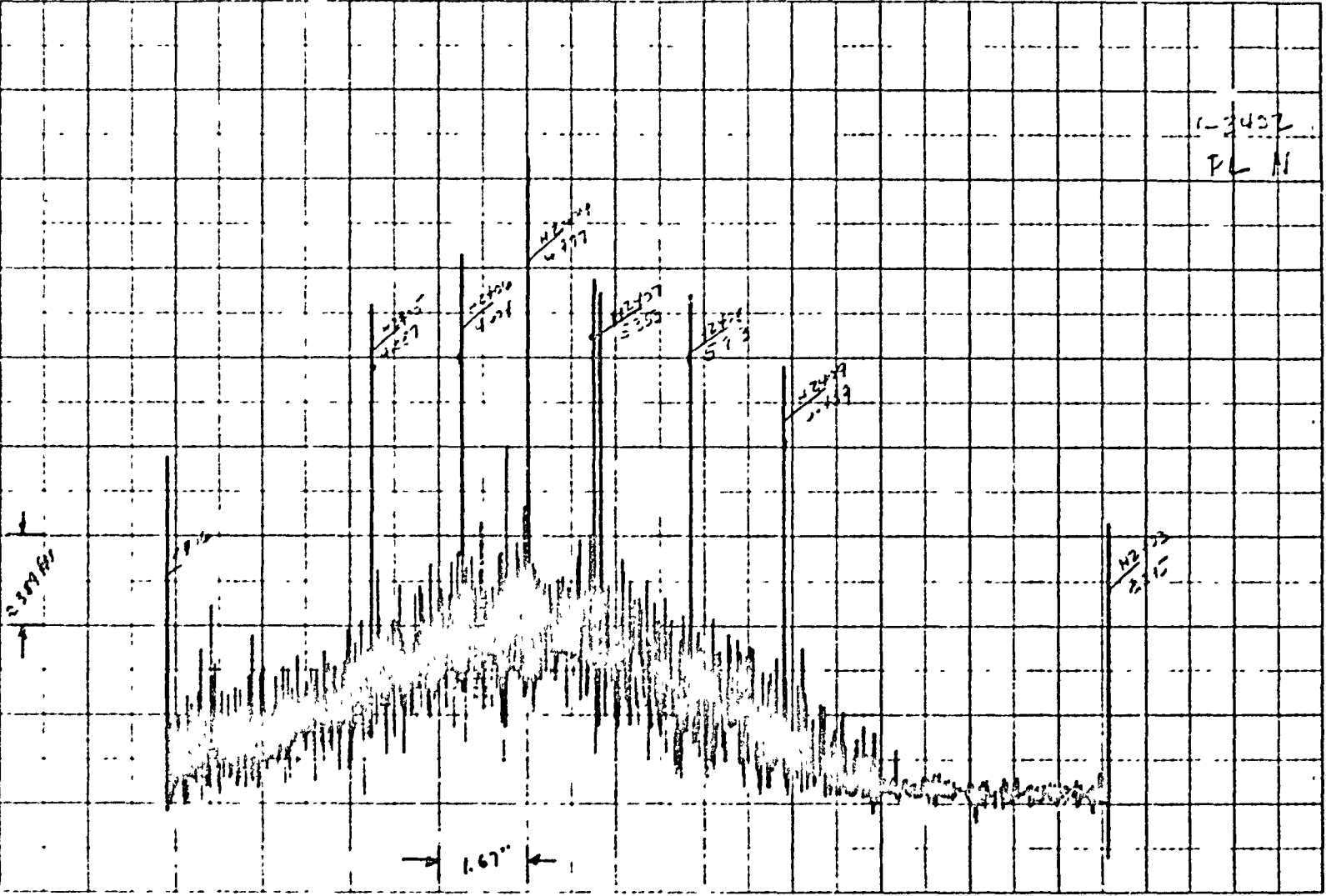


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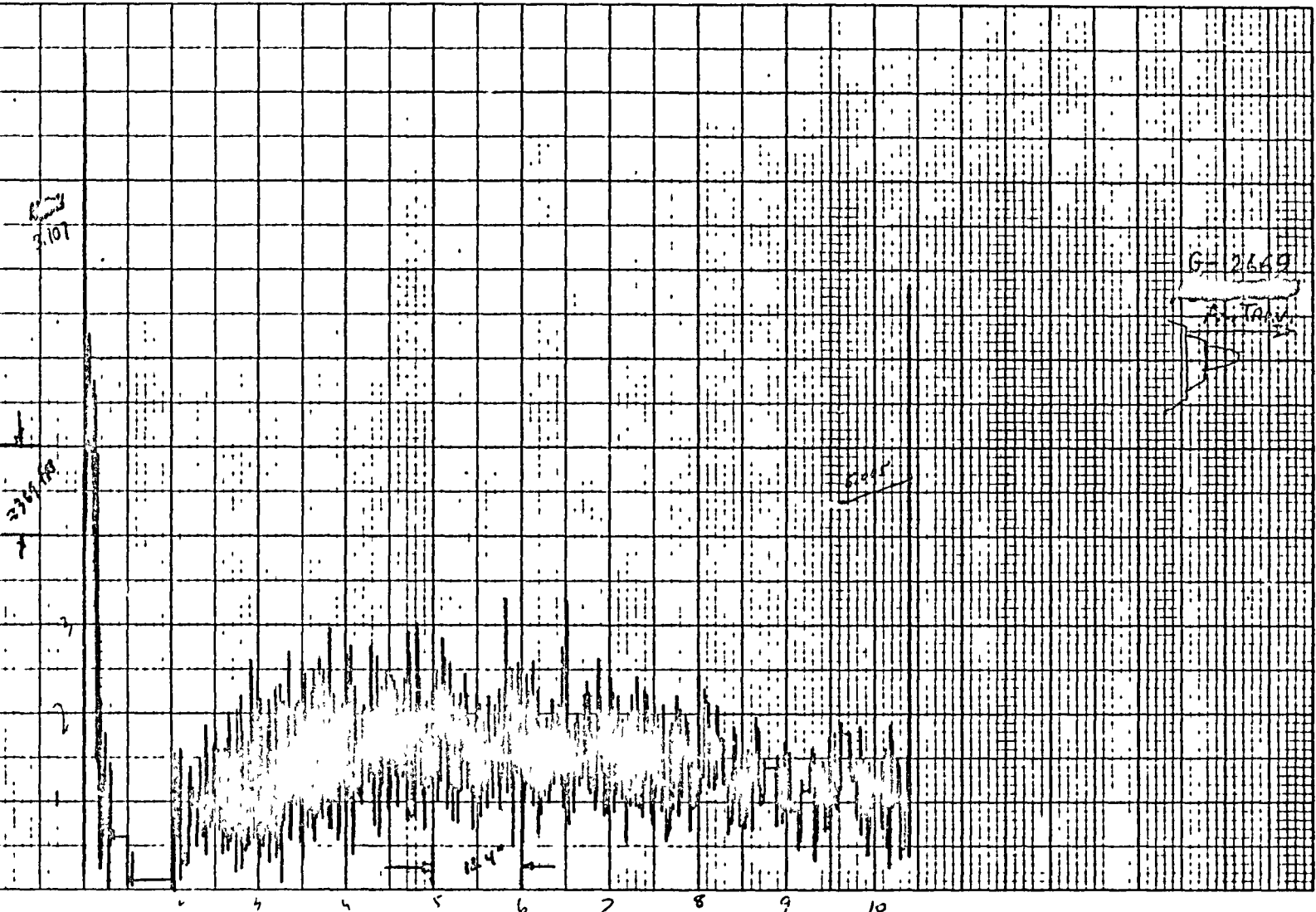




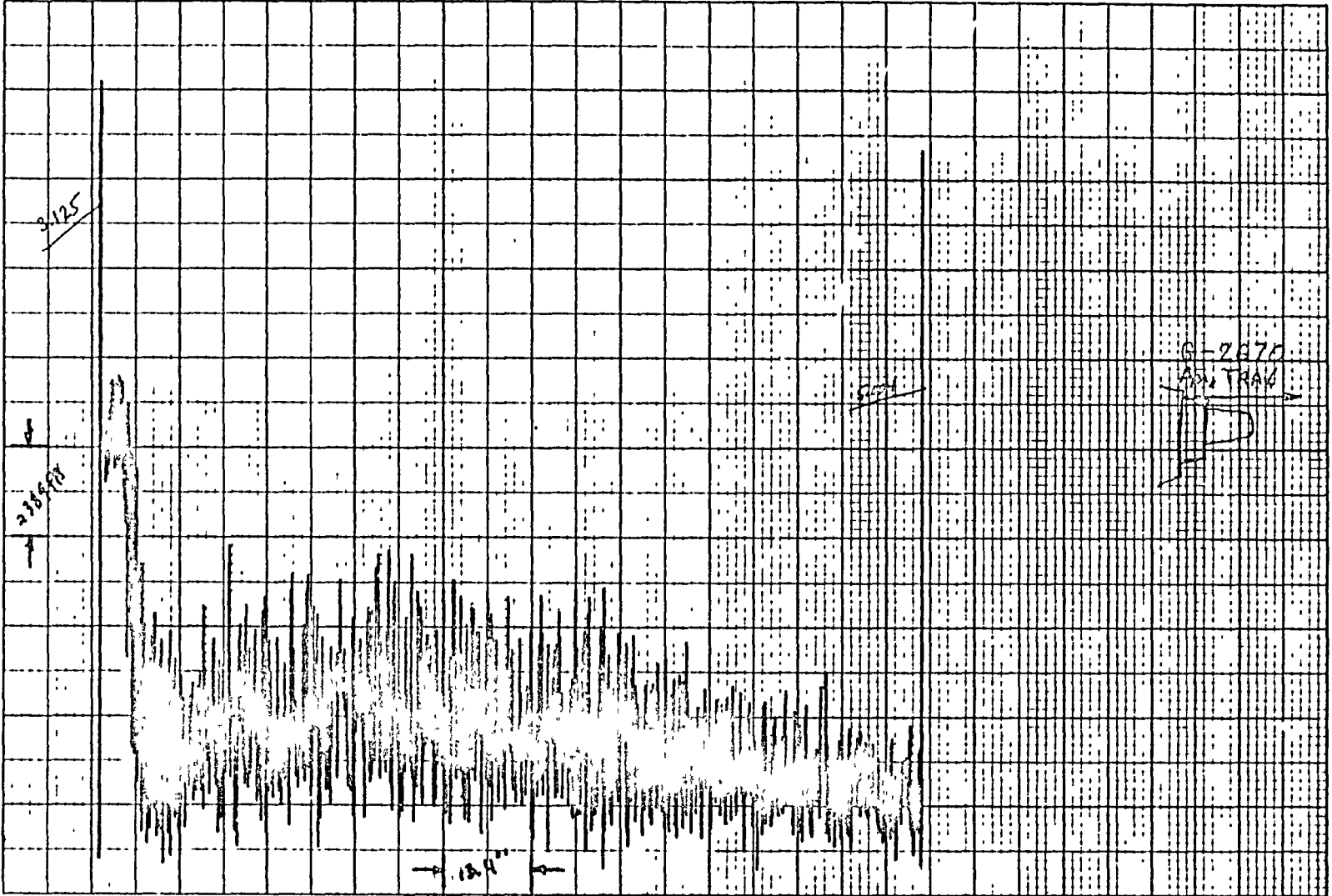
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MODEL 2  
TEST POINT 222

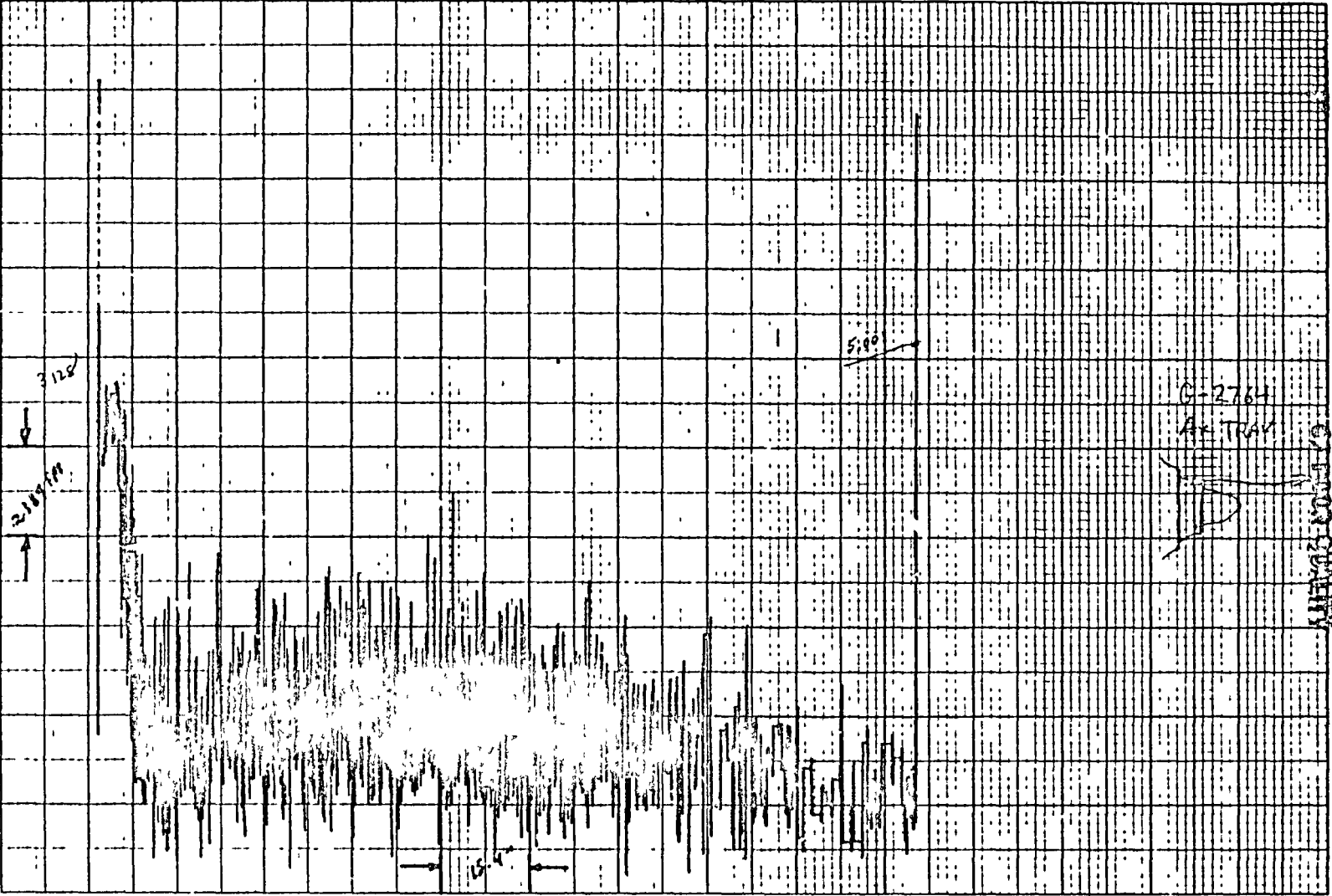
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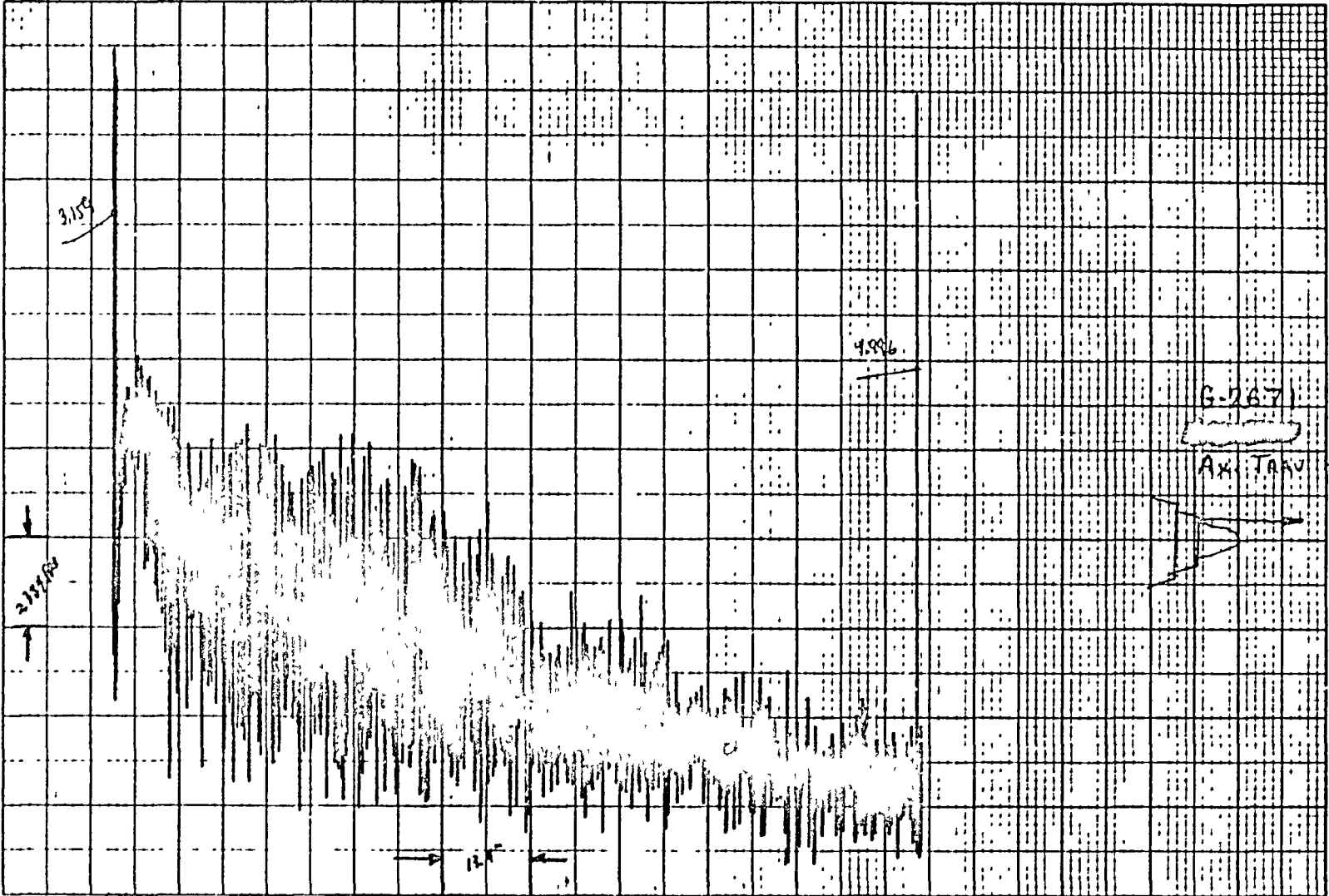


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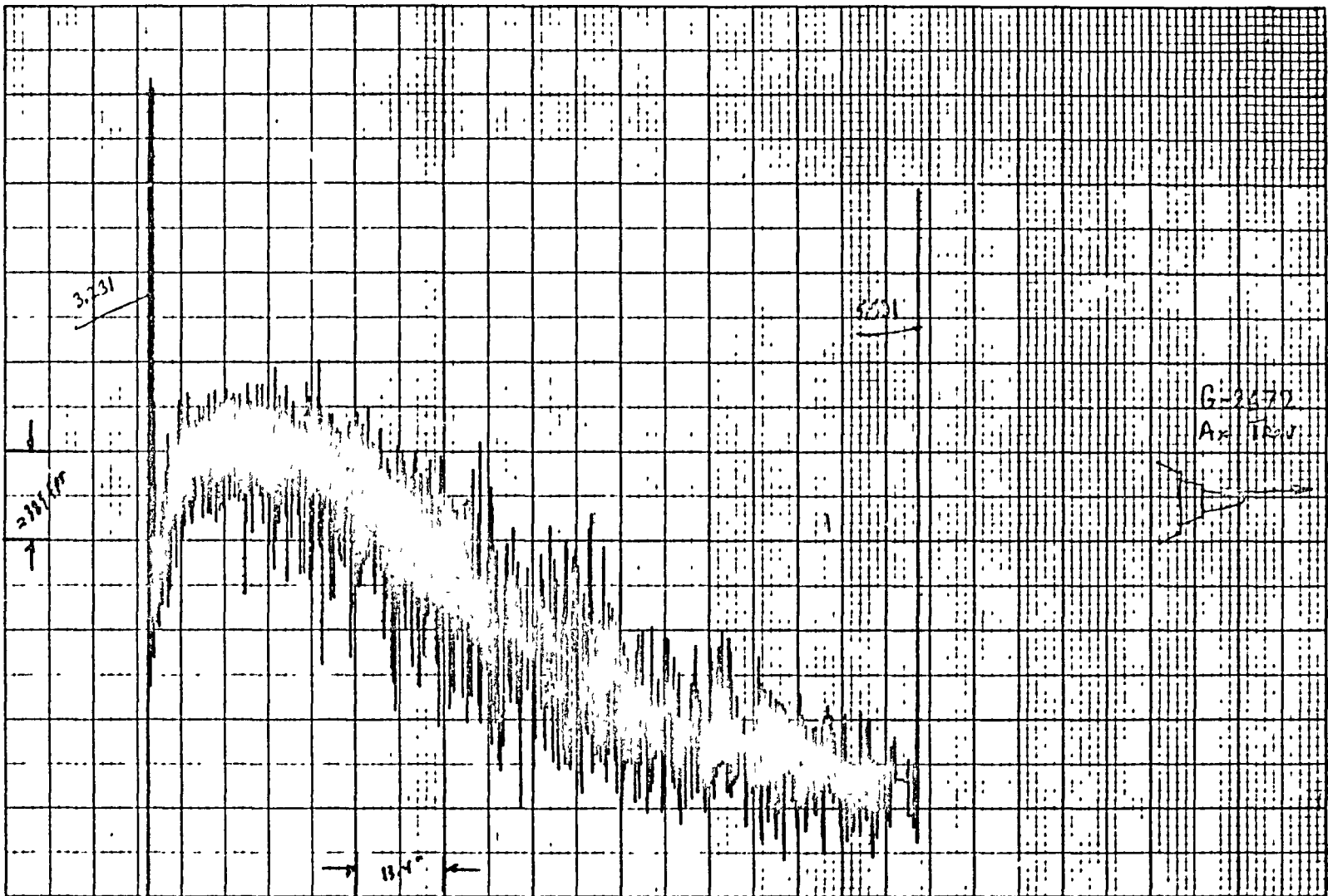
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A-TRAY

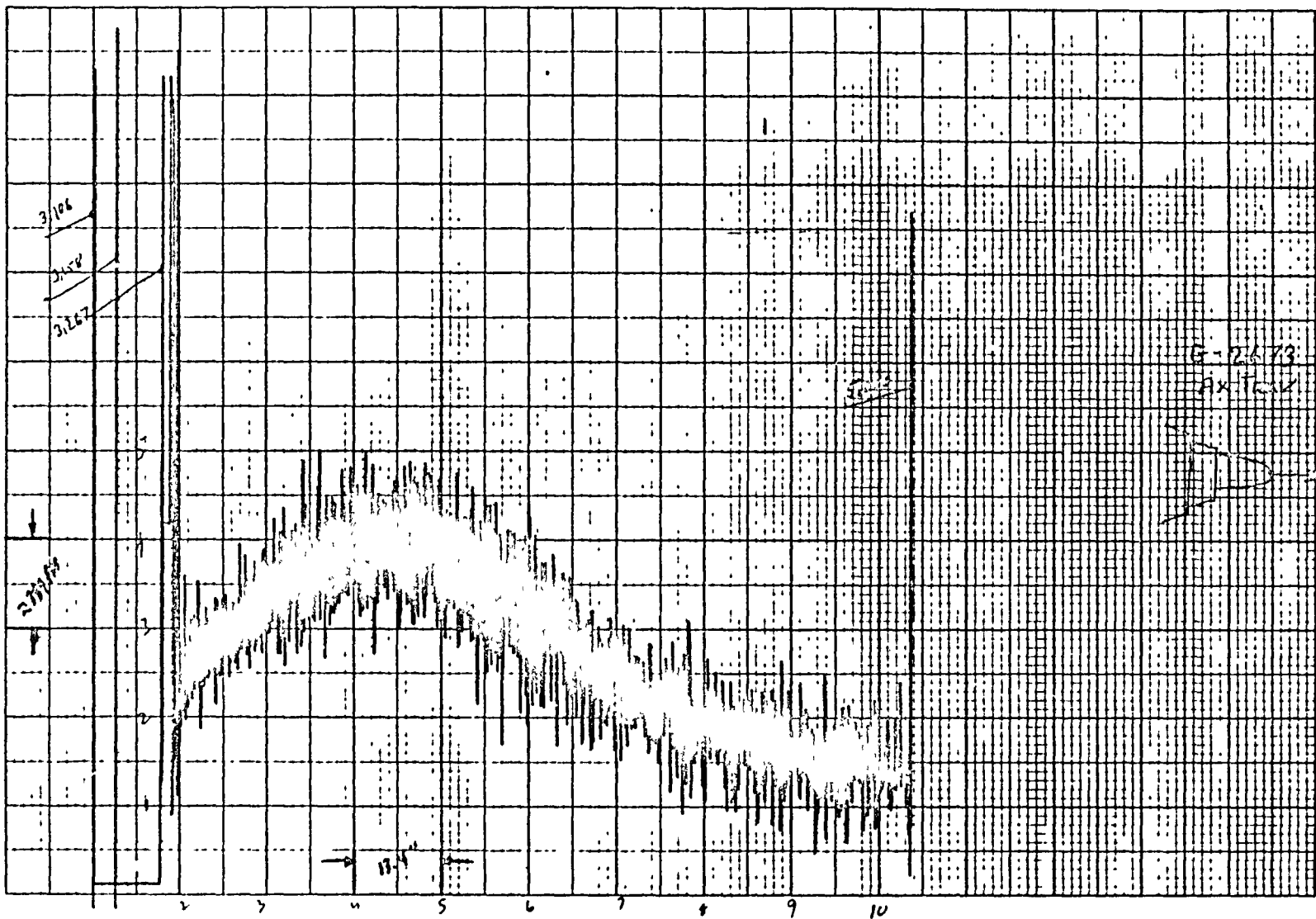


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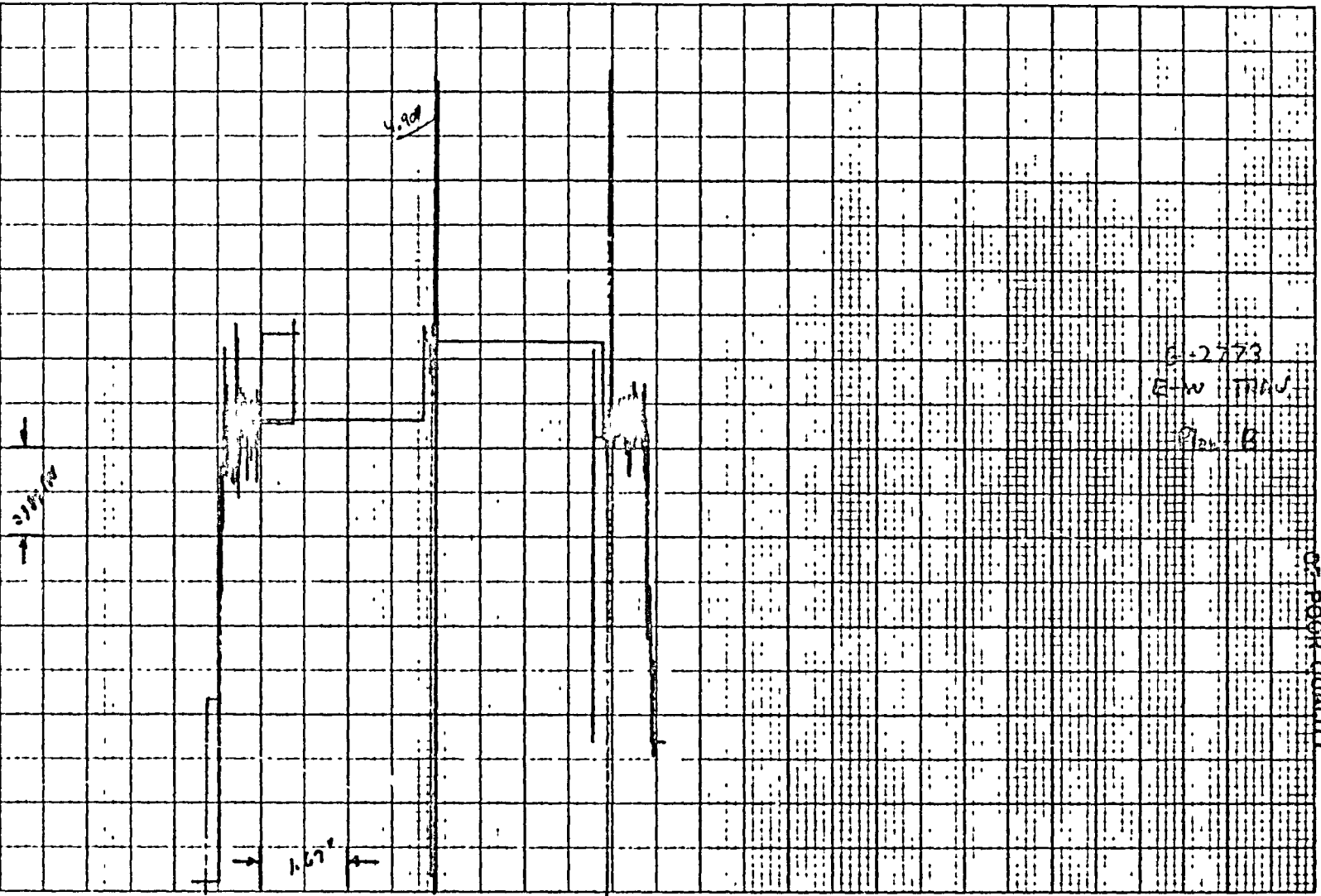


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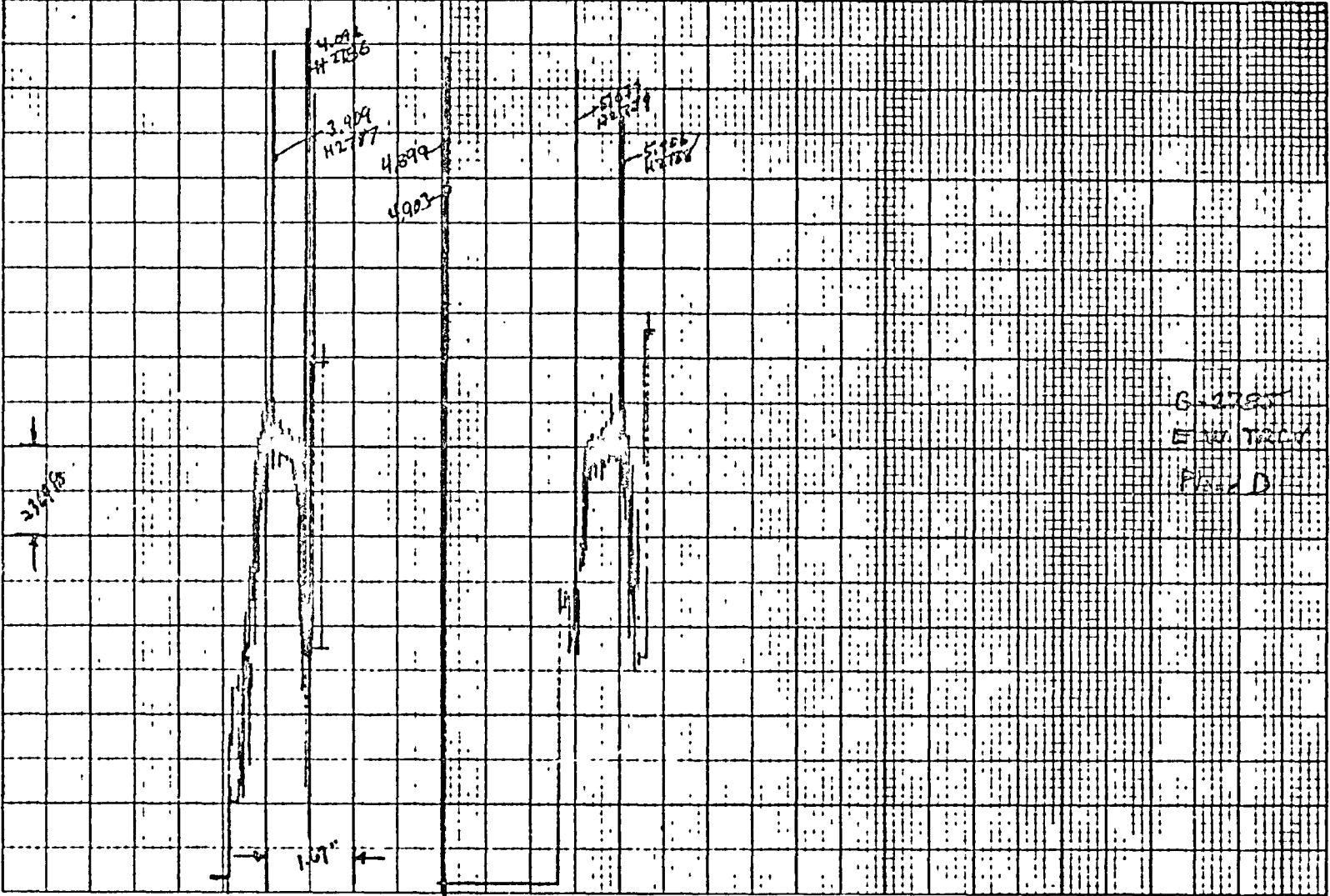


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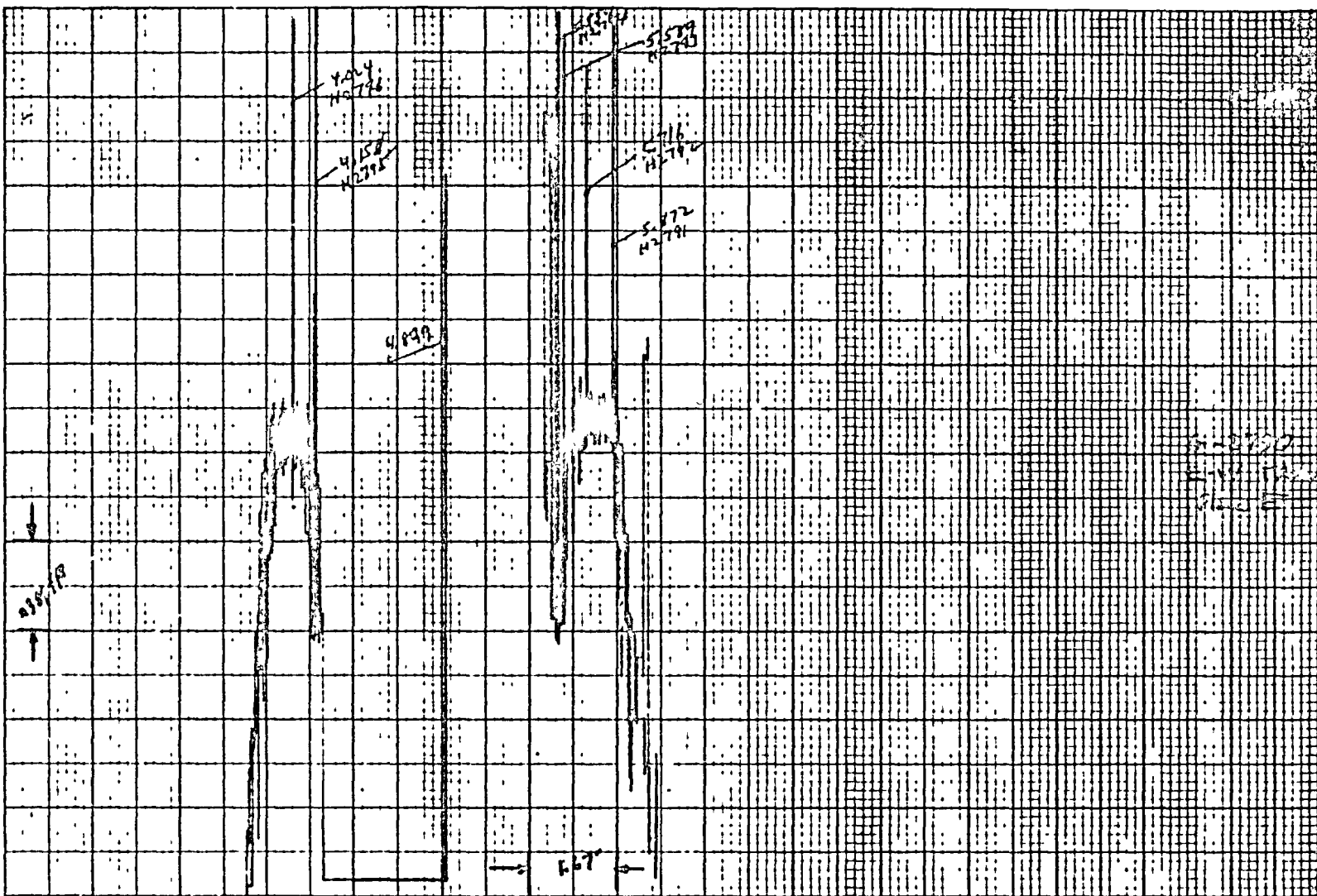
2-2773  
E-W THW  
P. 2. B



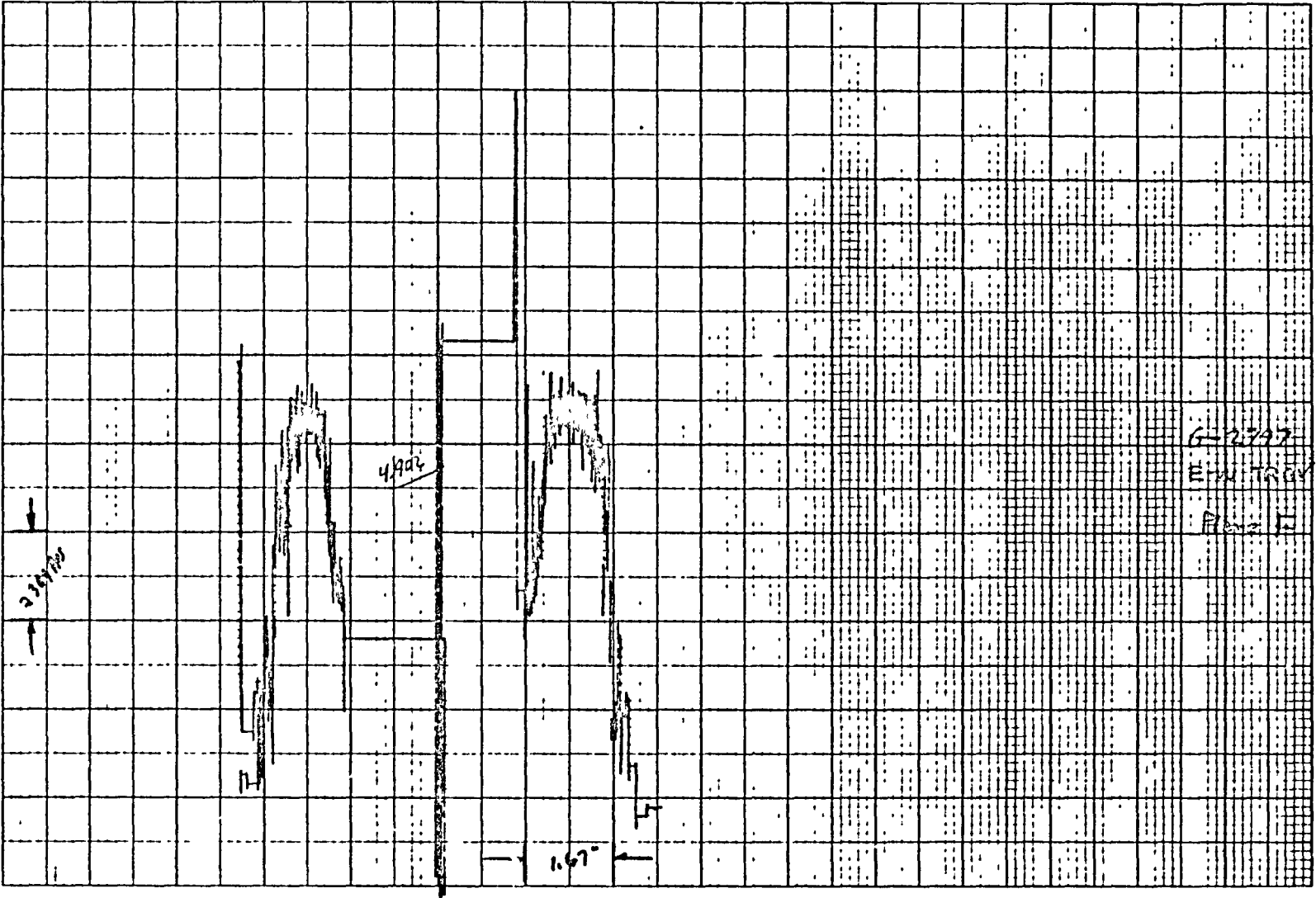




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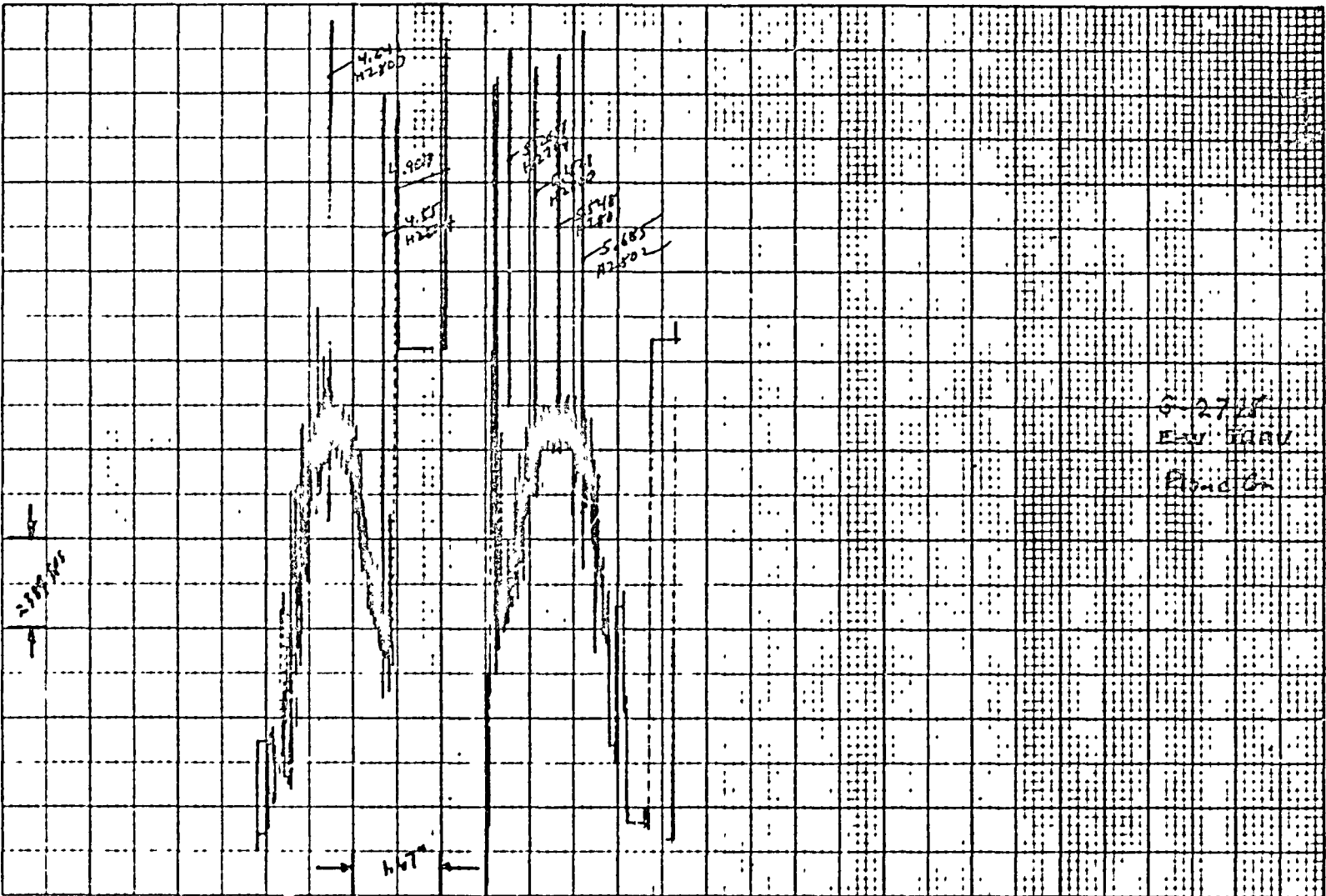


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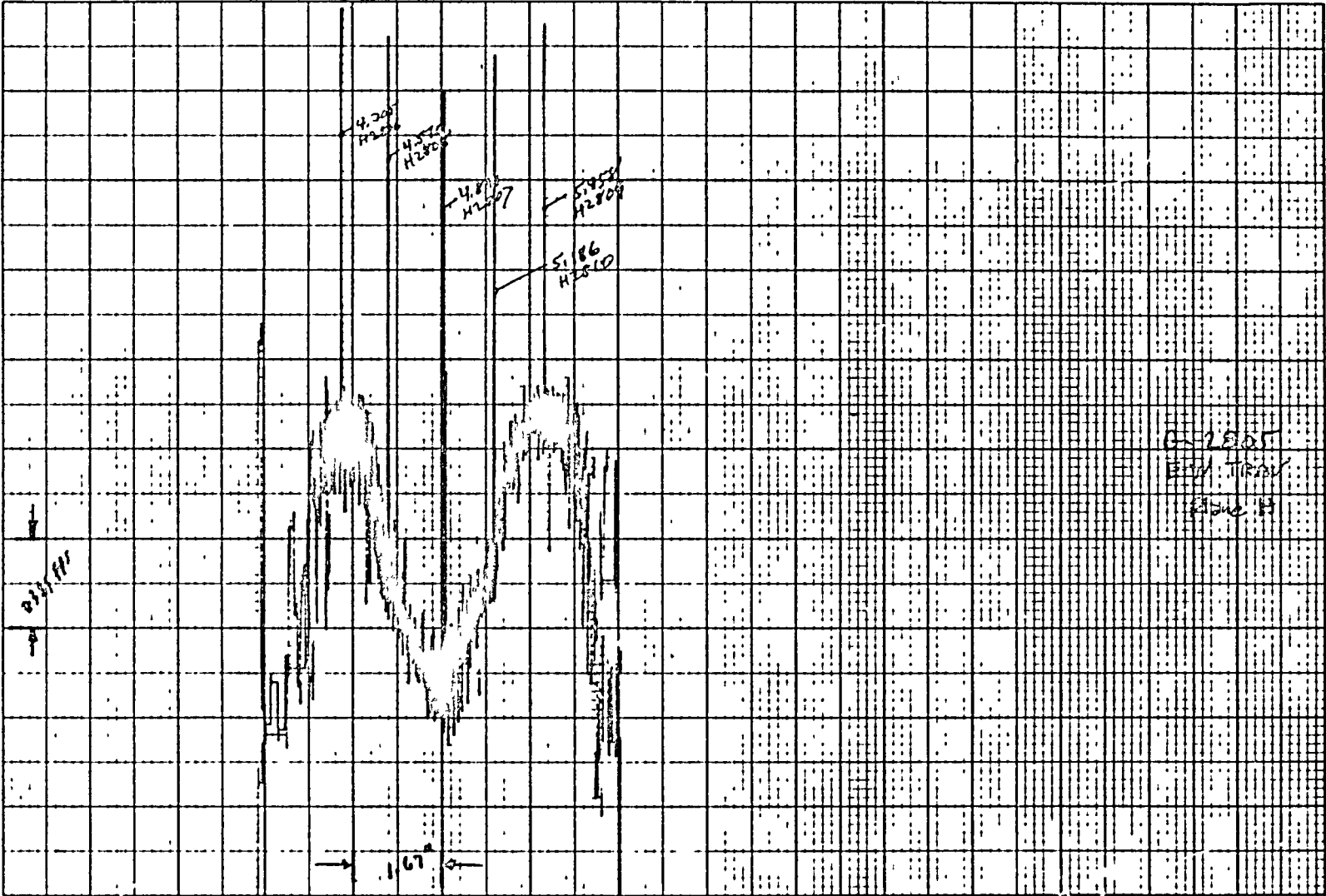


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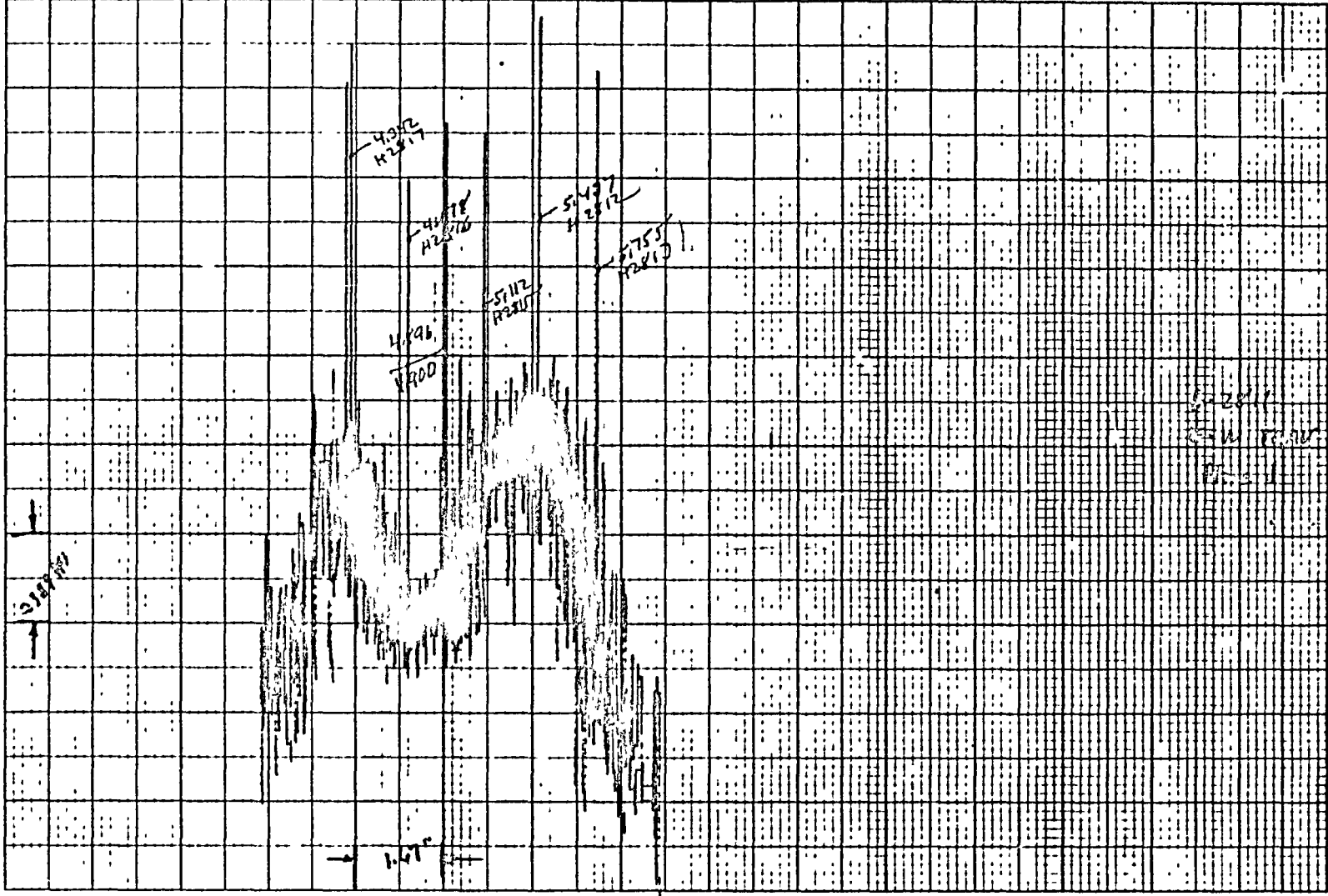




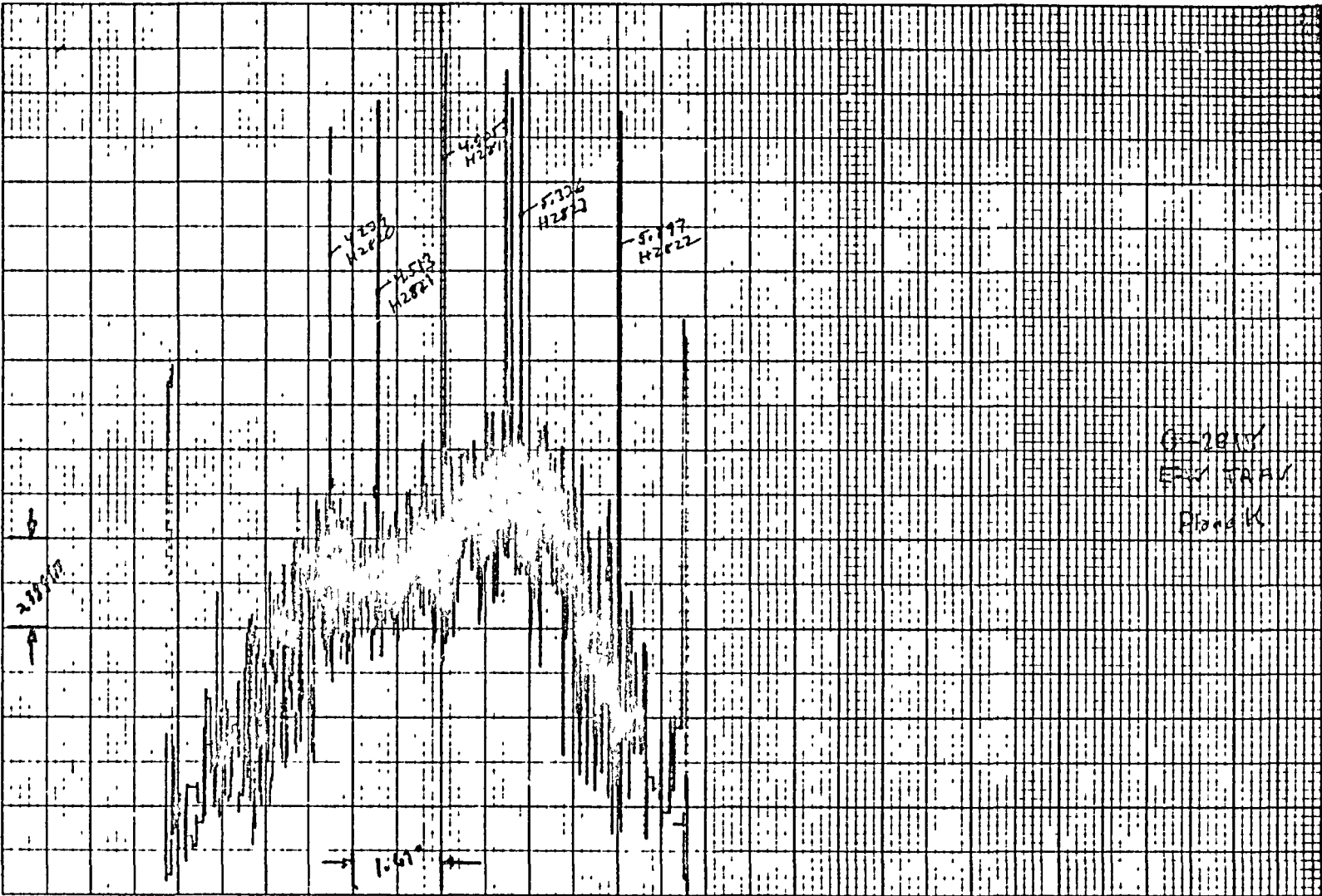
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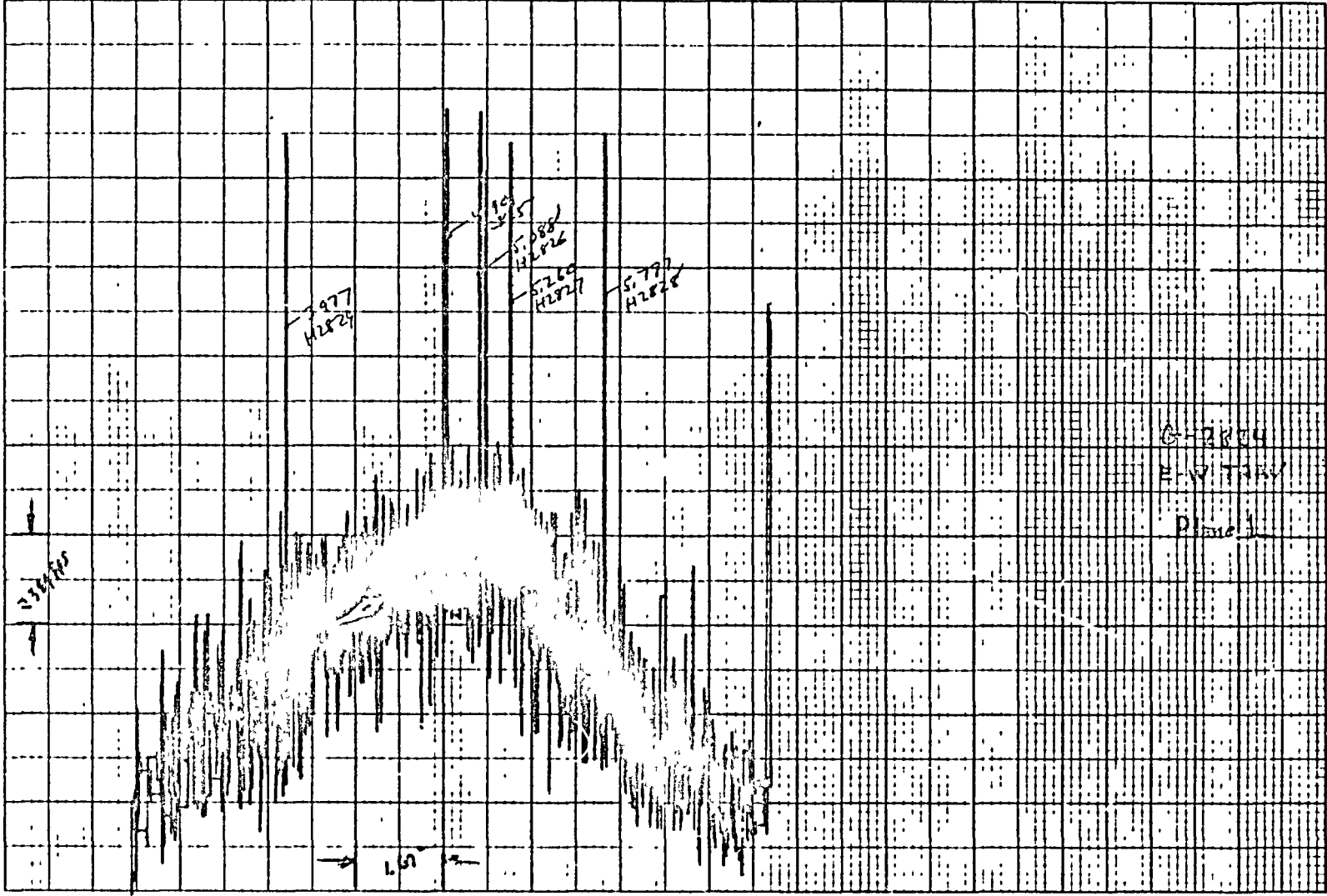
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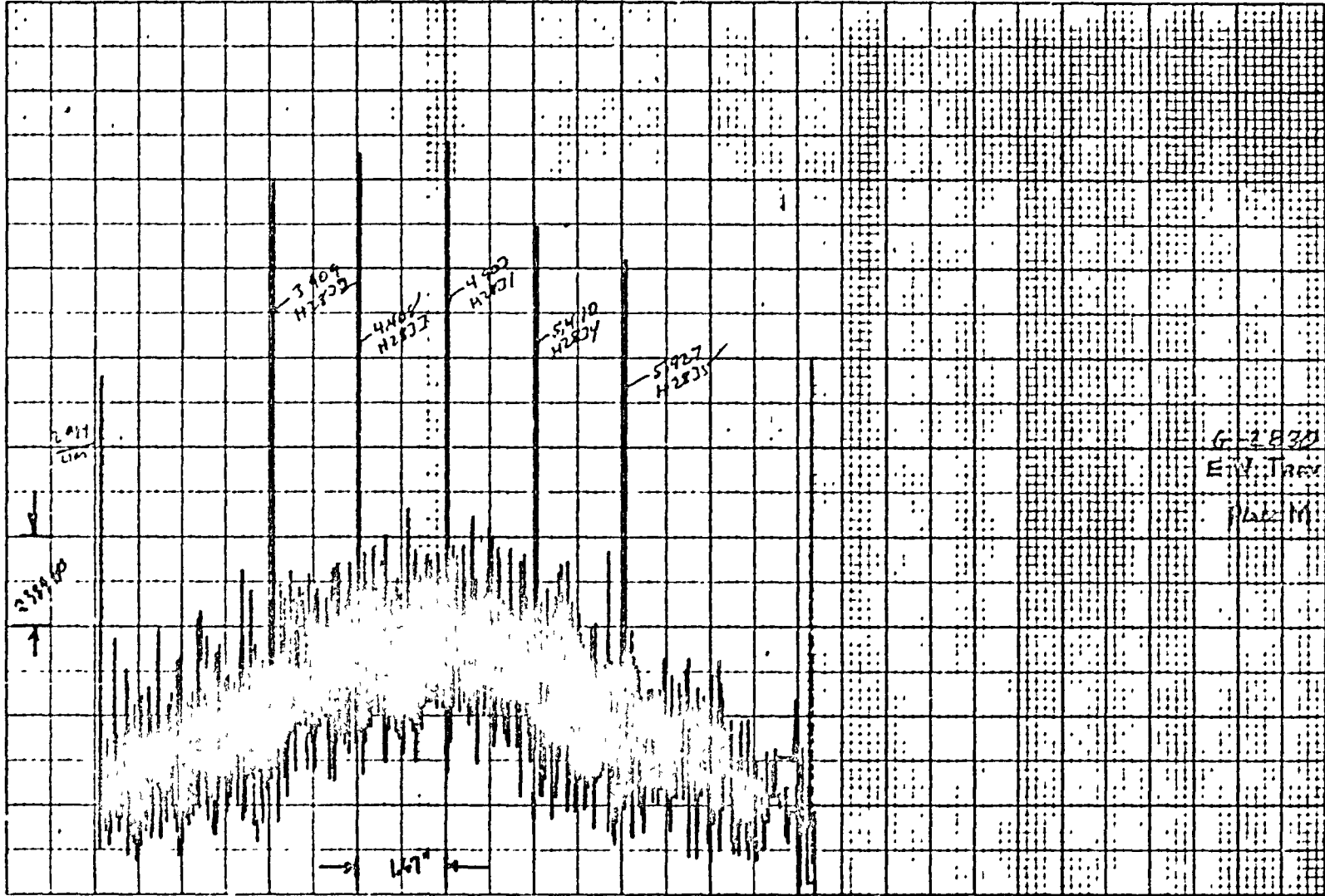


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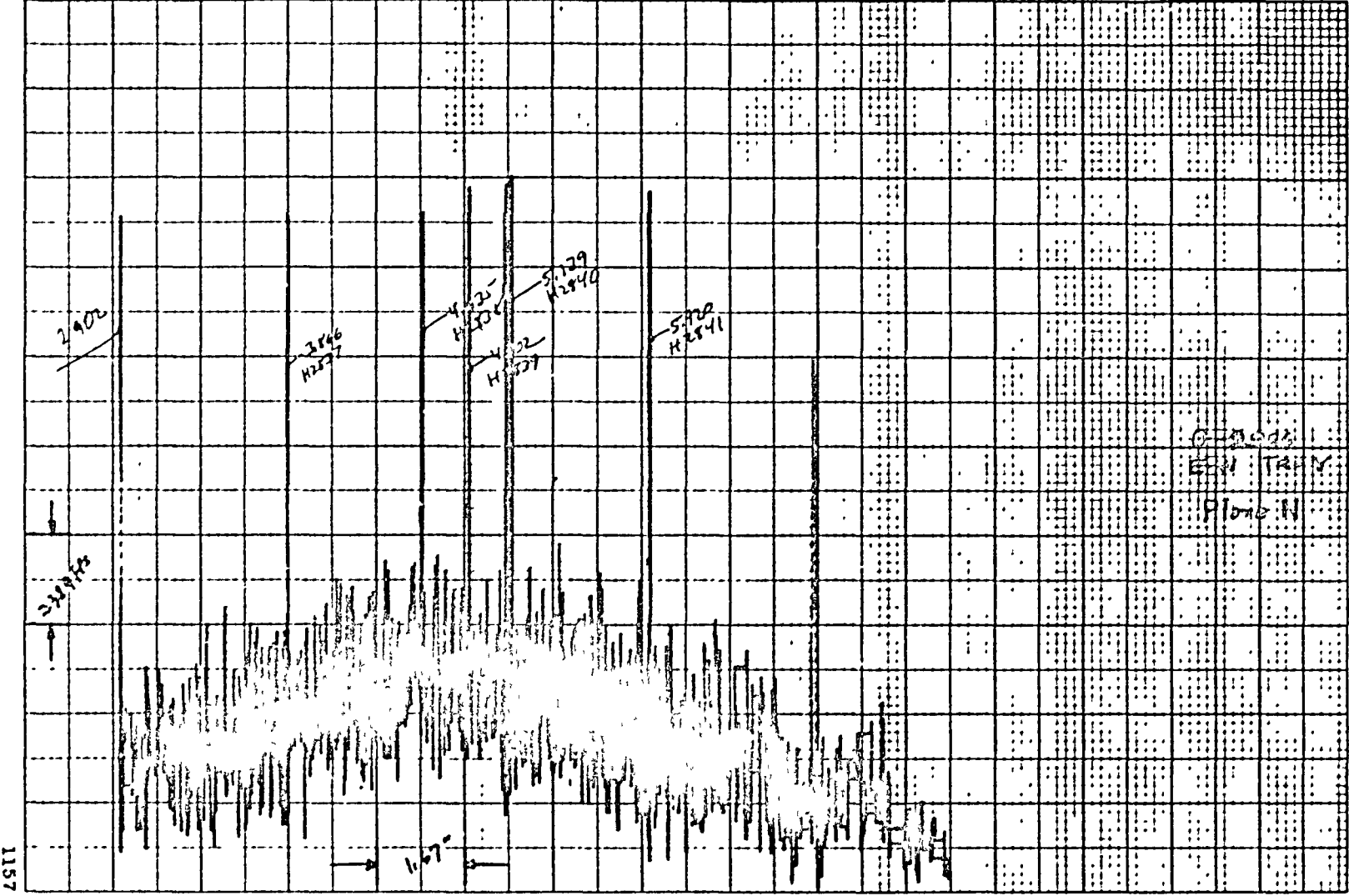


CH 200V  
M.V. 100V  
Plane 1

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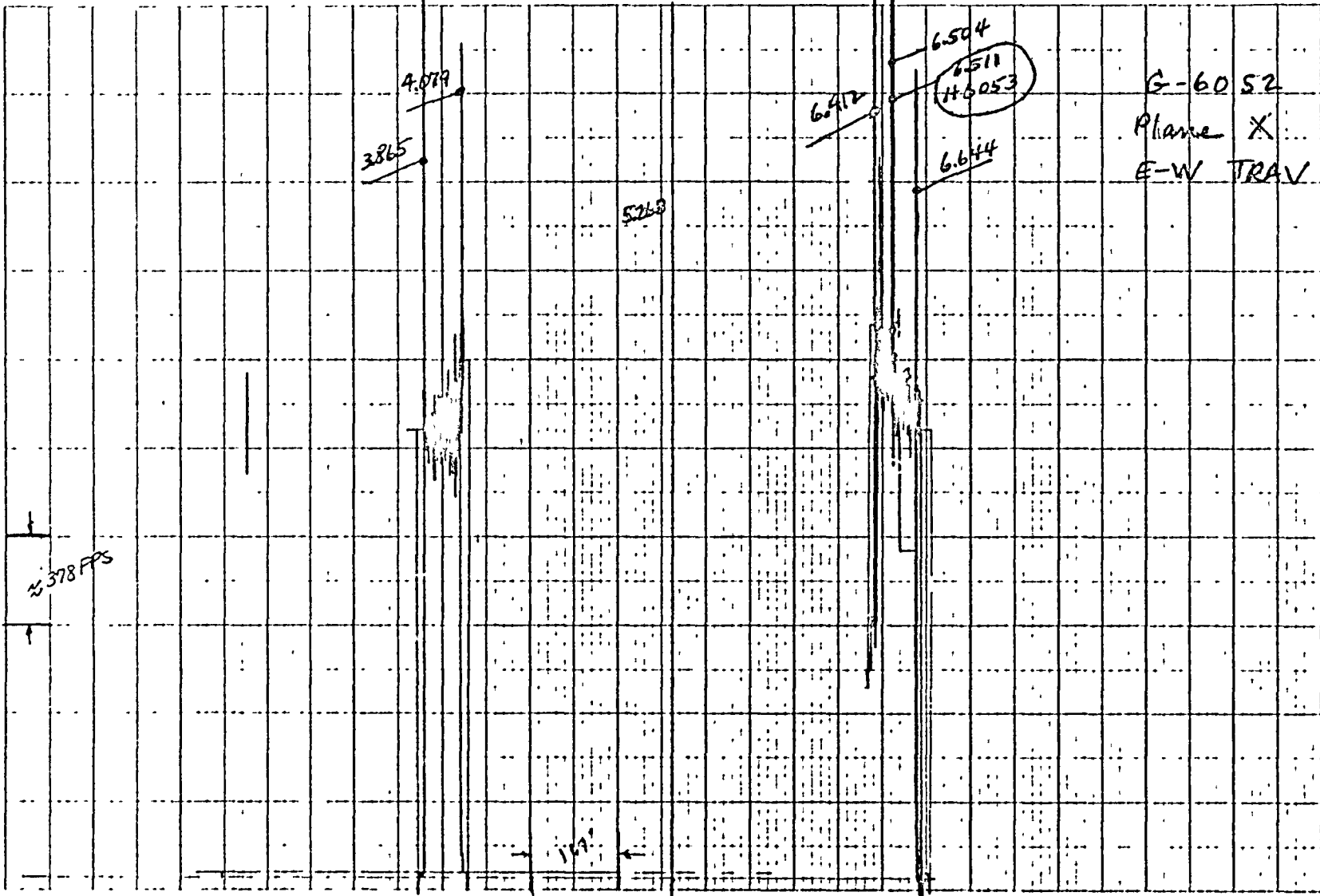


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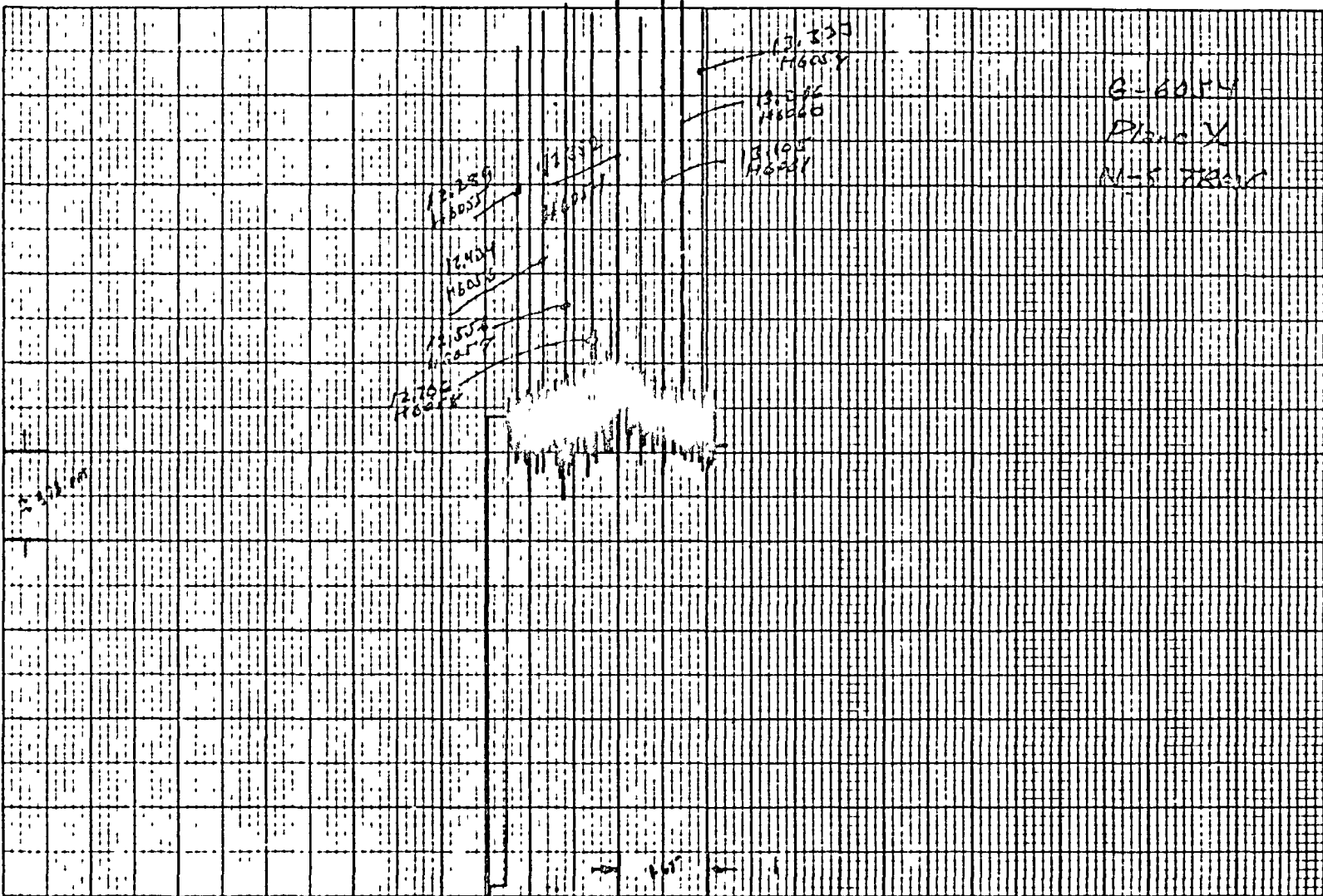
MODEL 2  
TEST POINT 222A



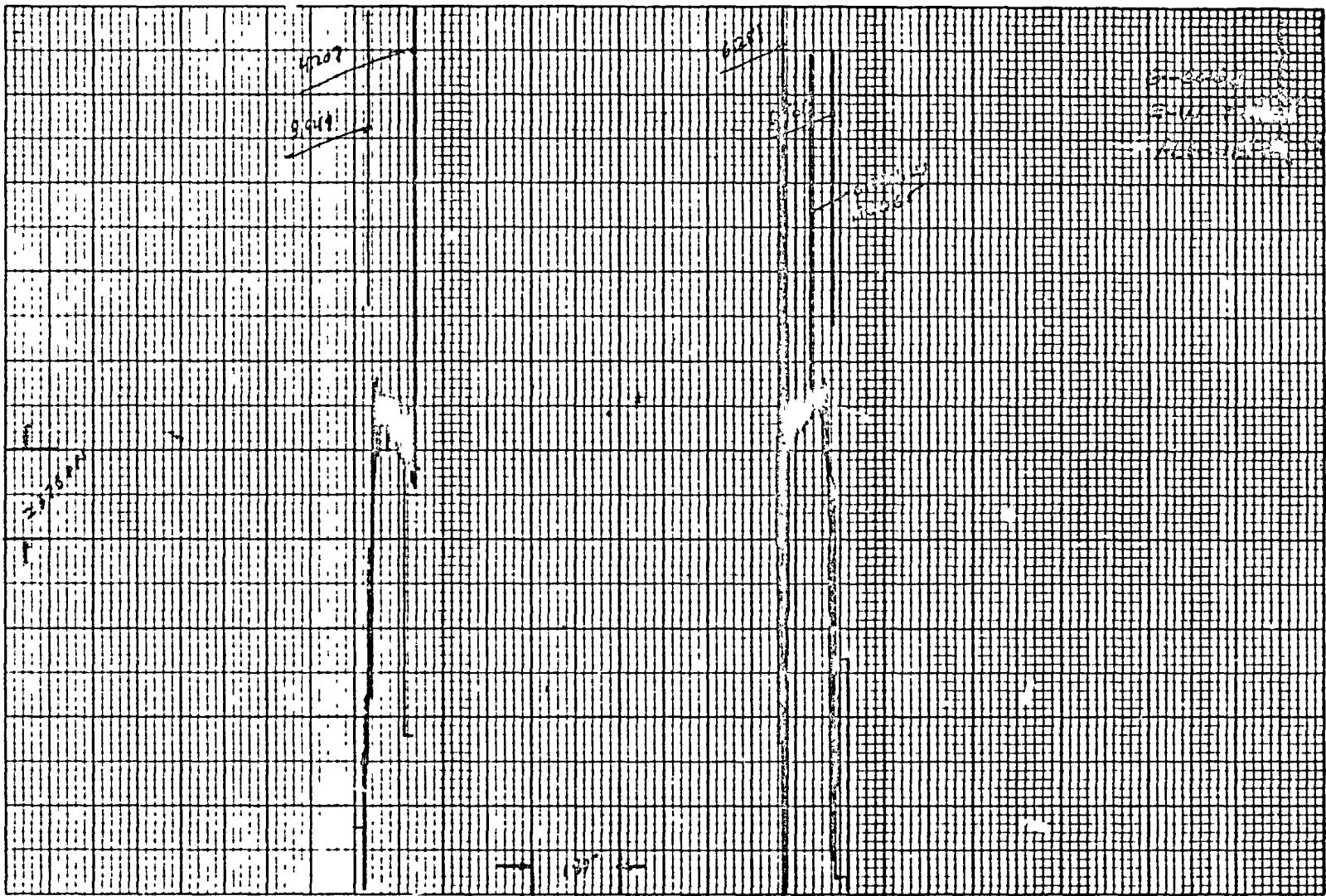
222A



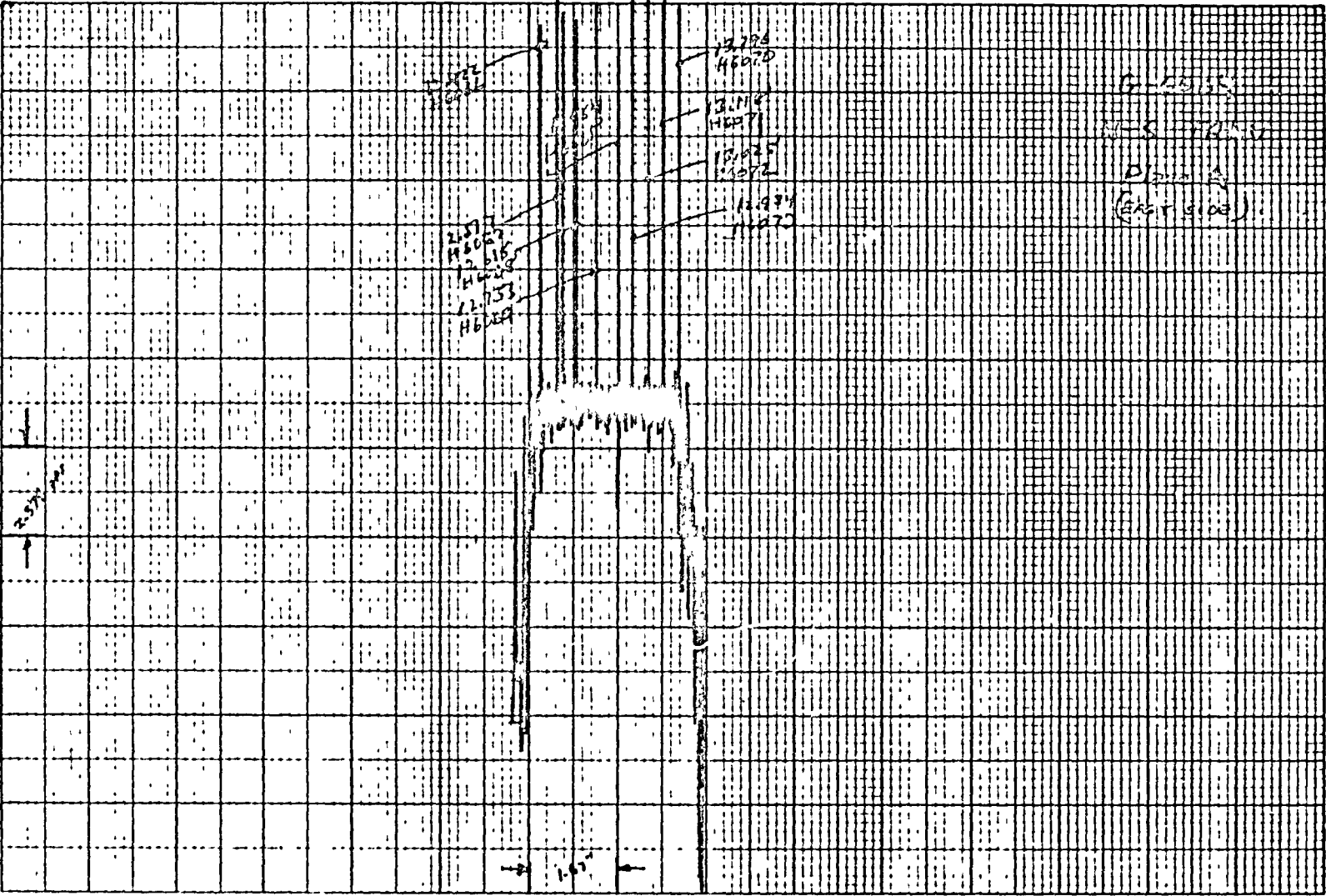
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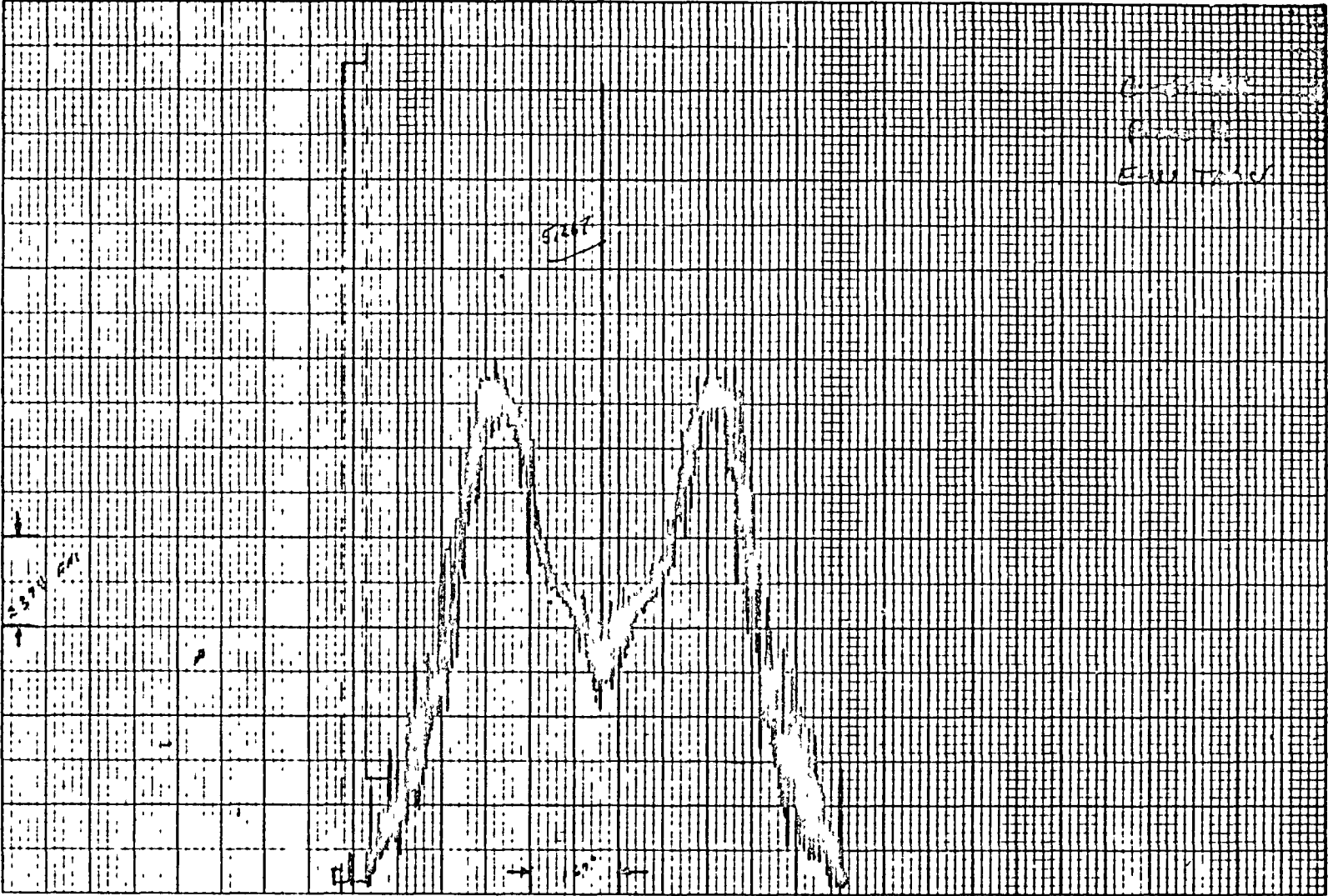
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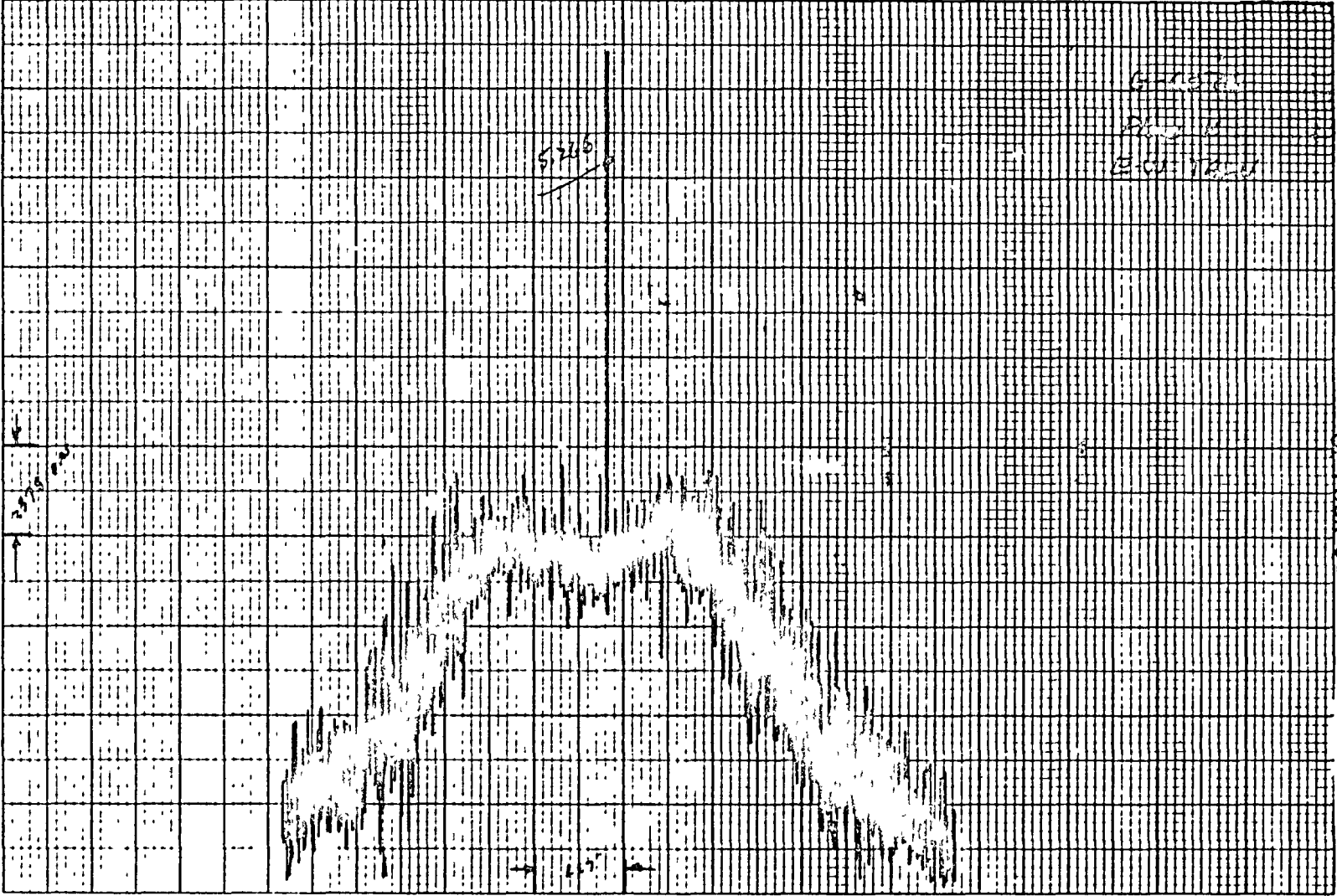


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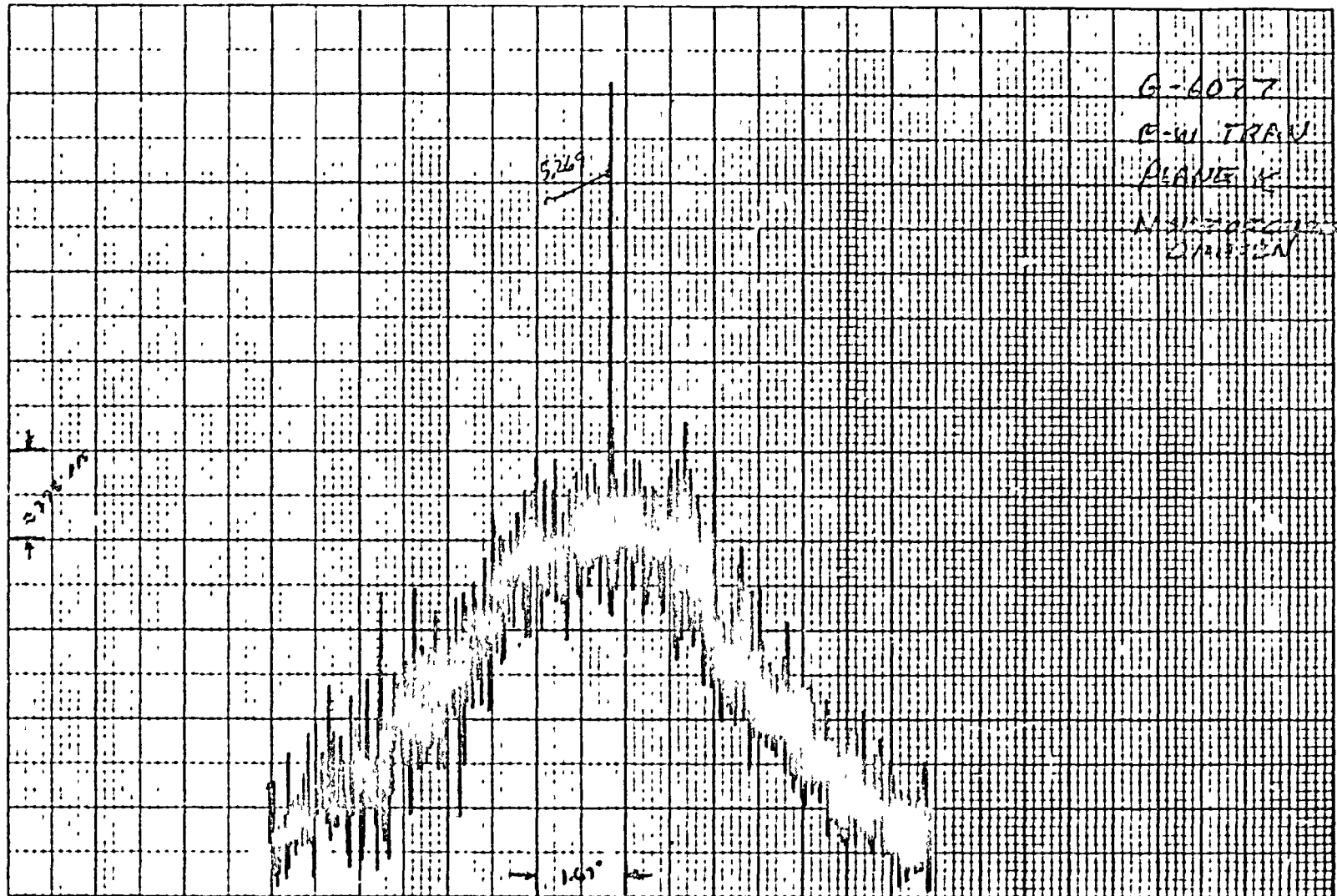
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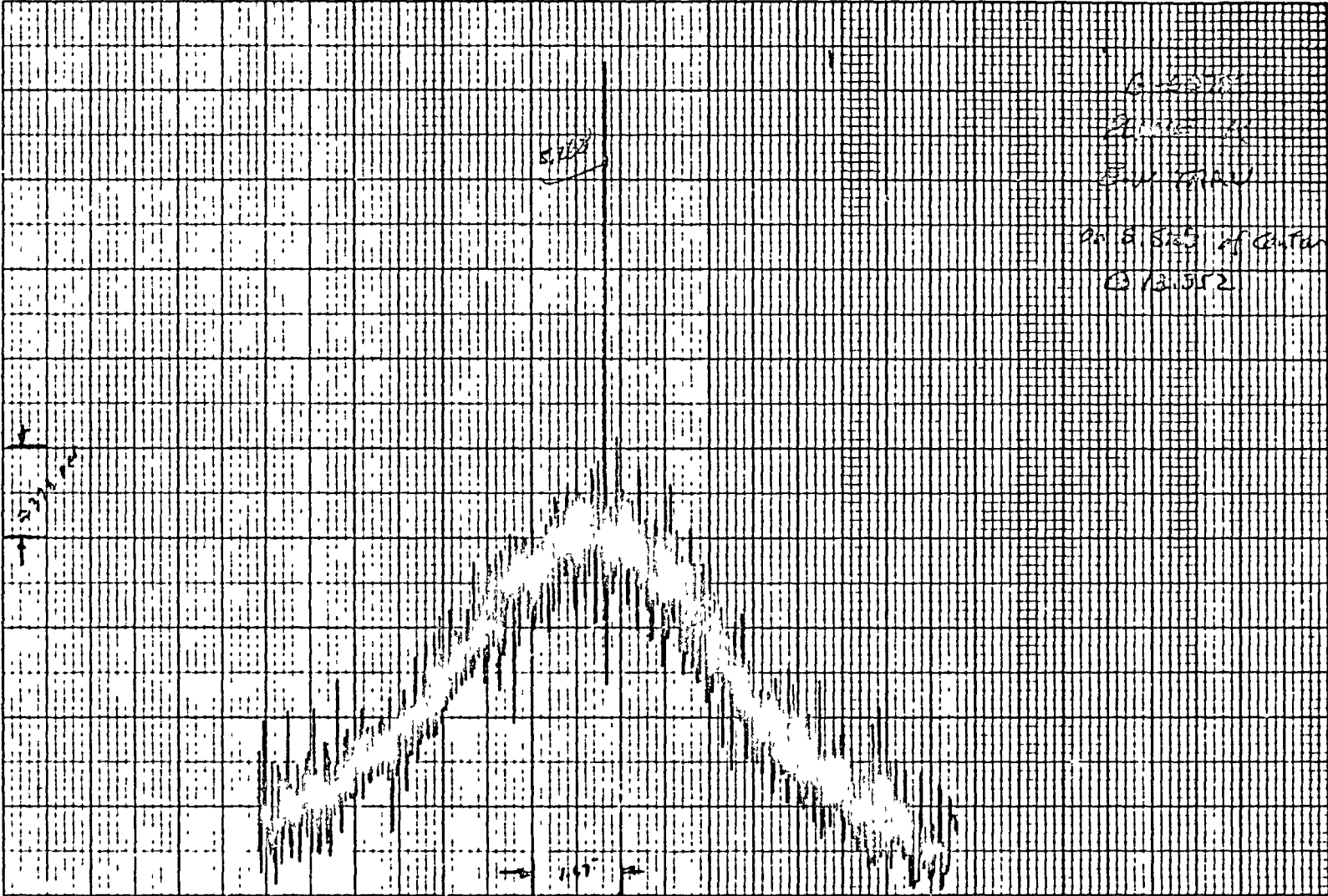
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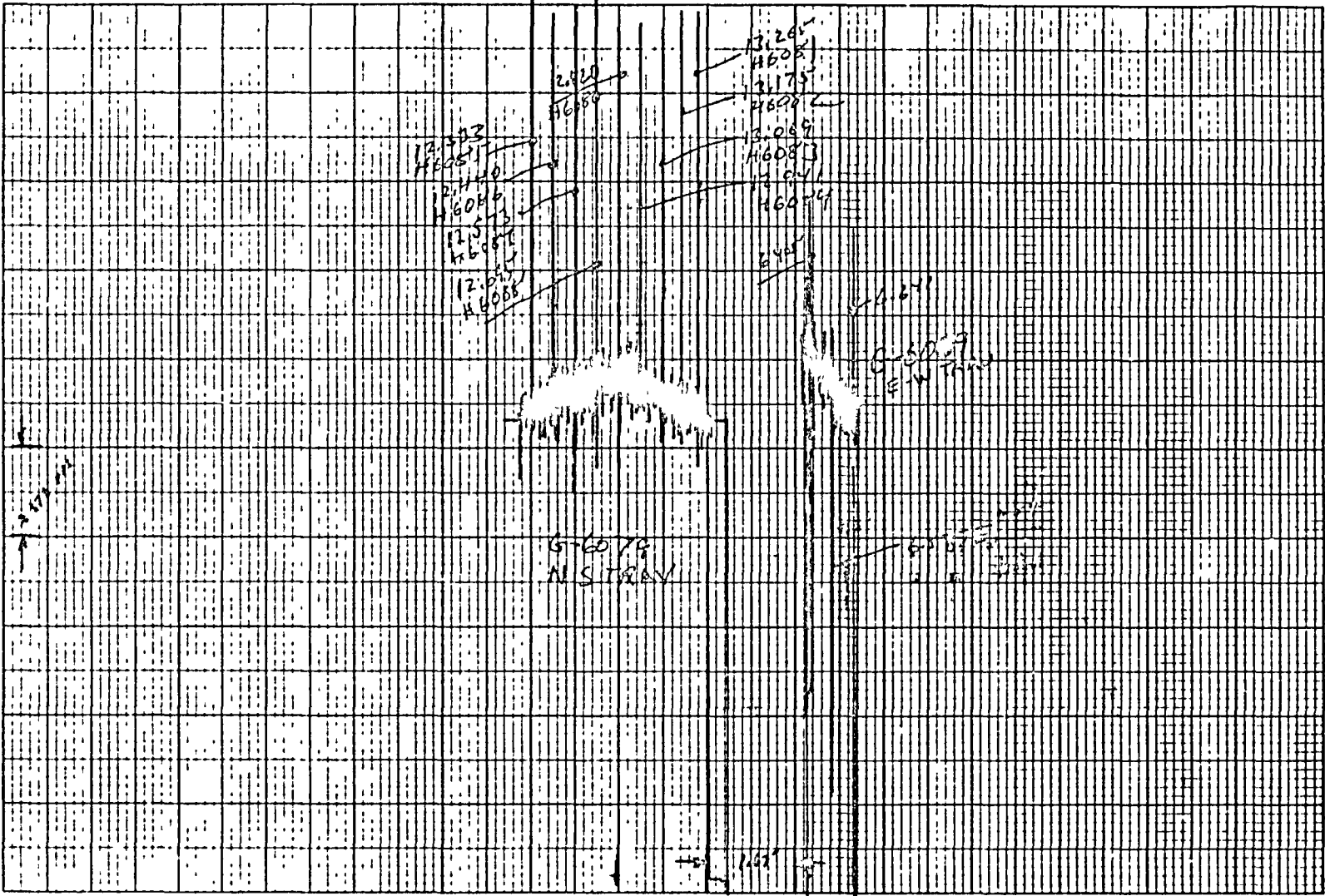
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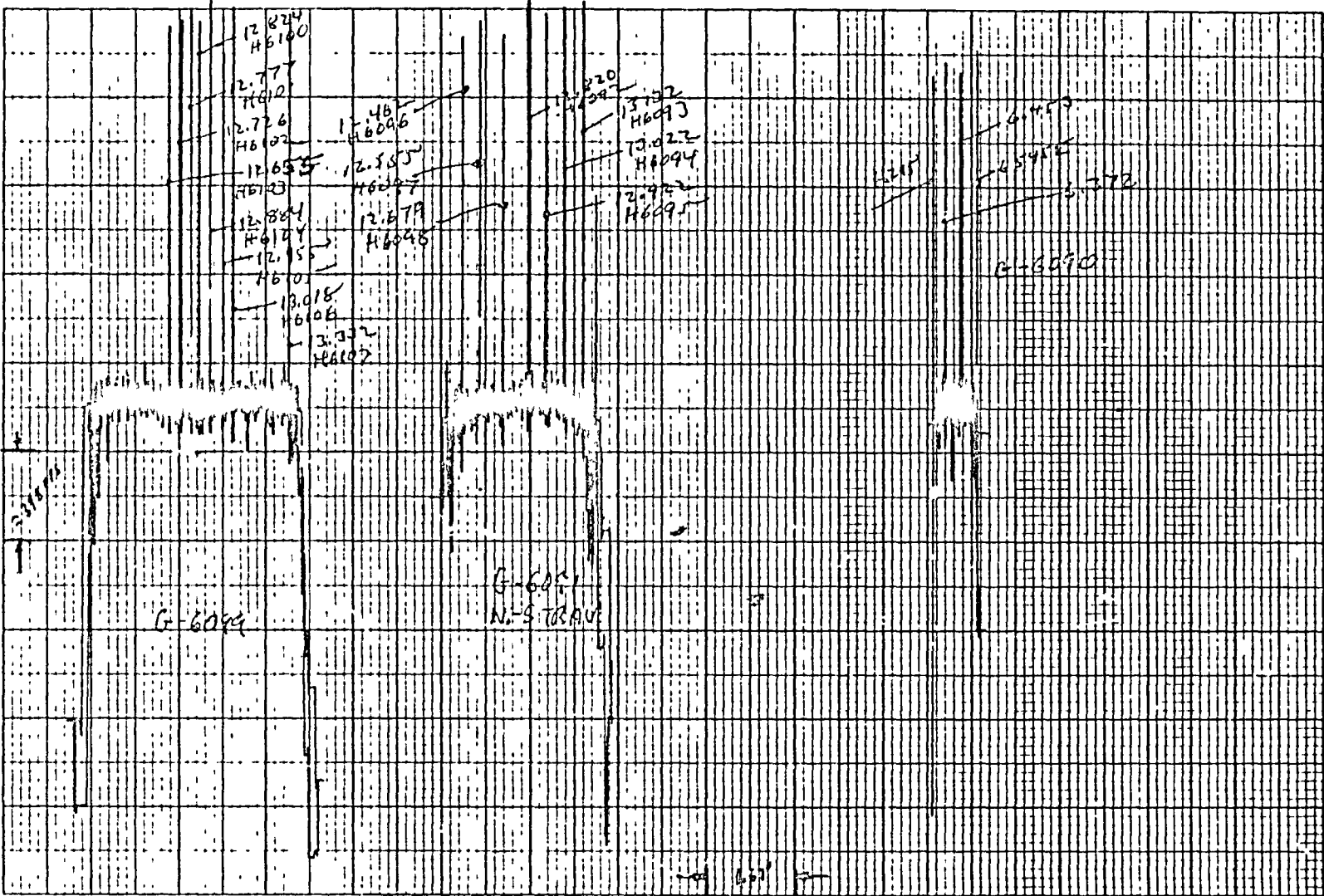




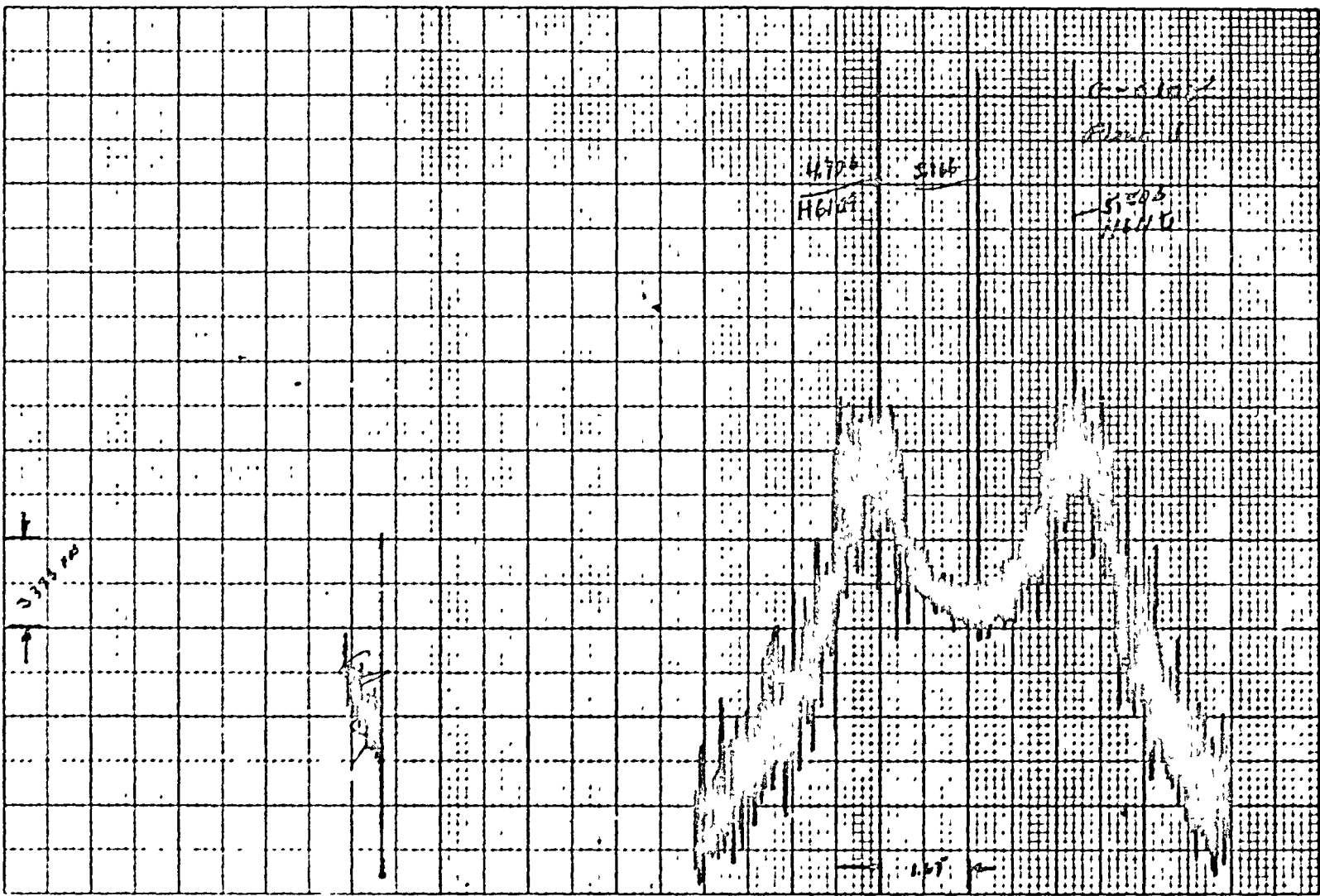
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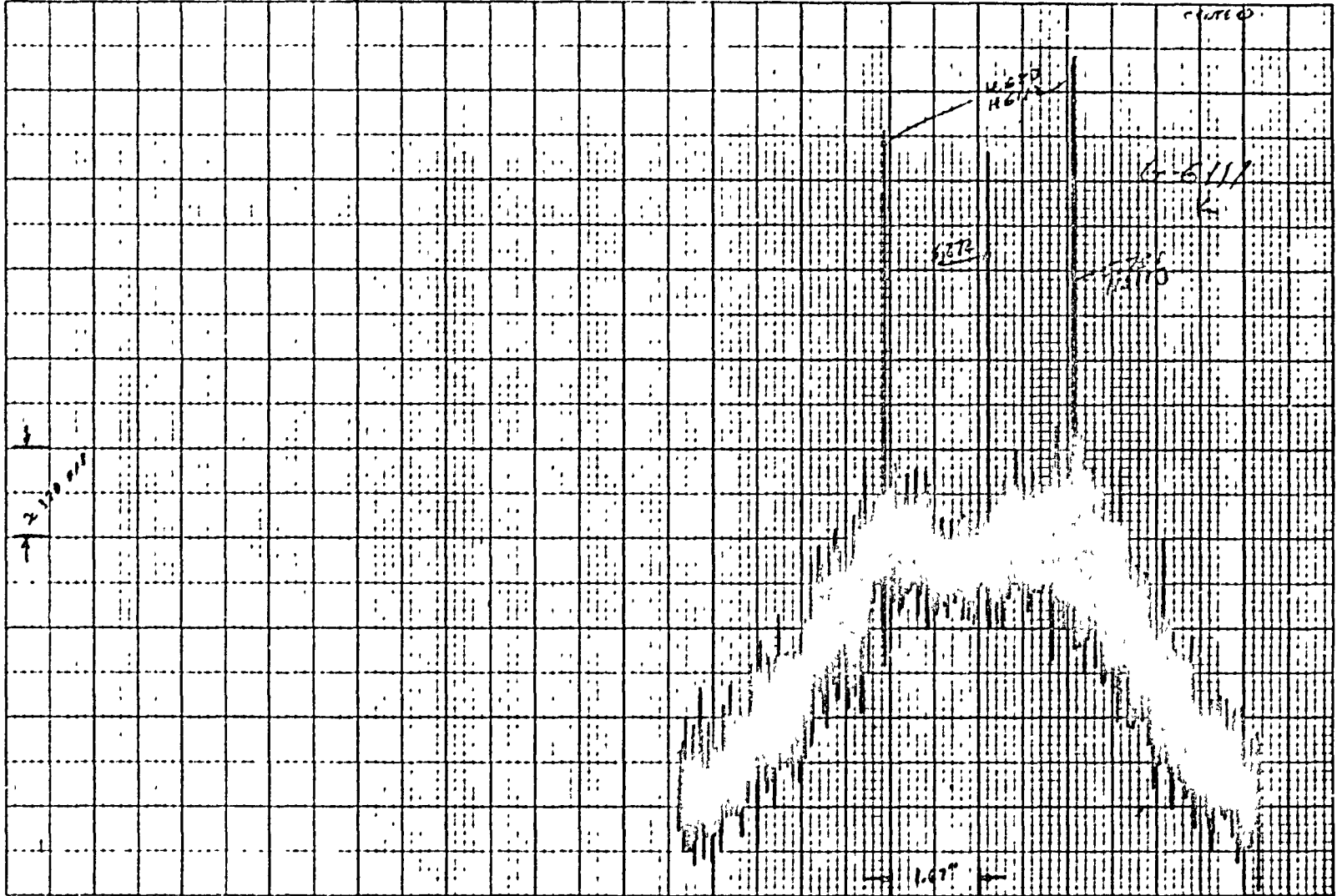
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6.2.4 Laser Velocimeter Data for Model 3

6.2.4.1 Laser Velocimeter (LV) Point Histogram Measurements for Model 3

Table XIX contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

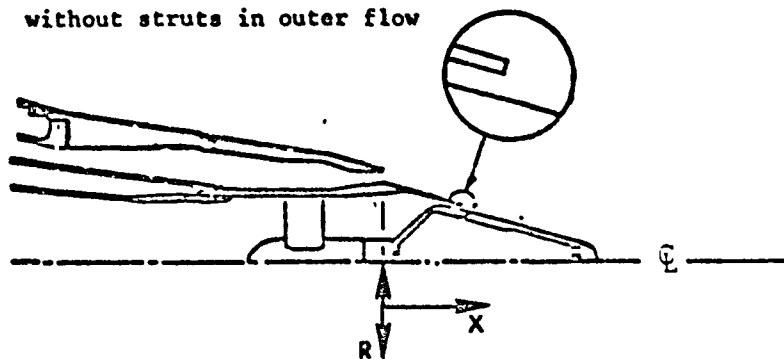
Following Table XIX are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general diagnostic information.

$R_T^0 = 0.853$  conic outer nozzle

$R_T^0 = 0.933$  conic inner nozzle

$A^1/A^0 = 0.194$

without struts in outer flow



MODEL 3 Deg 511R

$V_j^0 = 2434$  FPS  $V_j^M = 2250$  FPS

POINT 301  $R_i = 4.593$

$V_j^i = 1634$  FPS  $V_{ALC} = 0$  FPS Date 1/16/78

1172

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X	MUS	40deg	LOC.	R. INS.							
REF	3.102	4.889	13.381													
AXIAL	—	4.889	13.381	—	—	—	E	0	0	2903	—	—	—	—	—	—
AXIAL	—	5.384		—	—	—	E	165	.359	2904	—	—	—	—	—	—
AXIAL	—	5.705		—	—	—		272	.592	2905	—	—	—	—	—	—
AXIAL	—	5.902		—	—	—		3.38	.735	2906	—	—	—	—	—	—
AXIAL	—	6.180		—	—	—		4.30	.937	2907	—	—	—	—	—	—
E-W	3.125	—		A	1.52	.294	—	—	—	2908	—	—	—	—	—	—
		3.664					W	4.08	.888	2909	2526	192	1038	.079	1123	.085
		6.066					E	3.92	.854	2910	2528	231	1059	.095	1146	.103
		6.141						4.17	.909	2911	2603	215	1069	.088	1157	.095
		6.195						4.35	.948	2912	2540	215	1044	.089	1129	.096
		6.256						4.56	.992	2913	2422	98.8	.995	.041	1.076	.014
E-W	3.140	—		B	2.52	.489	—	—	—	2914	—	—	—	—	—	—
E-W	3.155	—		C	3.51	.678	—	—	—	2915	—	—	—	—	—	—
		3.857					W	3.46	.753	2916	2172	595	.892	.024	.956	.026
		5.919					E	3.83	.748	2917	2045	124	.840	.051	.909	.055
		5.971						3.61	.785	2918	1908	174	.784	.071	.848	.077
		6.047						3.86	.840	2919	2109	179	.866	.074	.937	.080
		6.113						4.08	.888	2920	1763	430	.720	.177	.779	.191
E-W	3.170	—		D	4.57	.869	—	—	—	2921	—	—	—	—	—	—

Table XIX. IV Log Sheet Model 3.

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MODEL 3 Deg 518

$V_j^0 = 2434$  FPS  $V_j^M = 2250$  FPS

POINT 301  $R_i = 4.593$

$V_j^i = 1634$  FPS  $V_{r/c} = 0$  FPS

Date 11/1/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U_j^0$	$U'/U_j^M$	$U'/U_j^M$
	AXIAL	EW	NS	PLANE	X	NS	°/Deg	LOC.	R							
	REF 3102	4.889	13.381													
E-W	3.185	-	13.381	E	5.50	1.062			2922	-						
		4.011					W	2.93	.637	2923	2207	71.0	.907	.029	.981	.032
		4.175					"	2.38	.518	2924	1410	50.7	.579	.021	.627	.023
		5.556					E	2.22	.484	2925	1477	48.4	.607	.020	.656	.022
		5.701						2.71	.589	2926	2.235	20.0	.918	.033	.993	.036
		5.788						3.03	.660	2927	2257	67.9	.927	.028	1.003	.030
		5.913						3.41	.743	2928	2230	111	.916	.046	.991	.050
E-W	3.215	-		F	7.48	1.445			2930	-	-	-	-	-	-	-
E-W	3.252	-		G	9.93	1.918			2931	-	-	-	-	-	-	-
		5.817					E	3.09	.673	2932	1927	261	.792	.107	.856	.116
		5.614						2.42	.526	2933	2339	121	.961	.050	1.040	.054
		5.361						1.57	.343	2934	1766	128	.726	.053	.785	.057
		5.249						1.20	.261	2935	1511	51.7	.621	.021	.672	.023
		4.211					W	2.26	.492	2936	2235	157	.918	.065	.994	.070
E-W	3.32	-		H	14.44	2.889			2937	-	-	-	-	-	-	-
		5.793					E	3.01	.656	2938	1685	289	.692	.119	.749	.128
		5.539						2.17	.472	2939	2240	65.9	.920	.027	.996	.029
		5.145						.85	.186	2940	1703	110	.700	.045	.757	.049
		4.892					E	0	0	2941	1266	166	.520	.068	.523	.074
		4.610					W	.93	.202	2942	1561	62.2	.641	.016	.694	.028
		4.343					"	1.82	.396	2943	2267	123	.931	.051	1.007	.055

Table XIX. LV Log Sheet Model 3 (Continued).

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MODEL 3 Deg 5.178

$V_j^0 = 2434$  FPS  $V_j^M = 2250$  FPS

POINT 301  $R_i = 4.593$

$V_j^i = 1634$  FPS  $V_{R/C} = 0$  FPS Date 1/18/78

1174

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/3</sub> '	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup> '
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	R <sub>1/2</sub>							
REF	3102	4889	13381													
E-W	3506	-	1341	J	2676	5.162	-	-	-	2944	-	-	-	-	-	-
		5669					E	3.27	.71	2945	1314	354	.540	.145	.584	.157
		5420						1.77	.385	2946	2326	212	.956	.087	1.034	.094
		5044						.53	.115	2947	2132	117	.876	.048	.948	.052
		4886					E	0	0	2948	1904	186	.781	.076	.845	.083
		4660					W	.76	.166	2949	1575	123	.647	.050	.700	.055
		4218					"	2.24	.487	2950	2028	227	.833	.093	.901	.101
E-W	3693	-		K	3814	7.557	-	-	-	2951	-	-	-	-	-	-
		4892					E	0	0	2952	1866	157	.767	.044	.830	.070
		5798					E	3.03	.660	2953	1348	386	.554	.159	.599	.172
		5573						2.35	.511	2954	1852	306	.761	.126	.823	.136
		5308						1.38	.301	2955	2102	149	.863	.061	.934	.066
		4598					W	.97	.211	2956	1583	140	.650	.058	.704	.062
		4241					"	2.16	.470	2957	1595	211	.656	.087	.709	.094
E-W	3880	-		L	5152	9.95	-	-	-	2958	-	-	-	-	-	-
		4893					E	0	0	2959	1915	169	.749	.070	.864	.075
		5209					E	3.07	.668	2960	1231	379	.506	.156	.547	.168
		6244						4.45	.969	2961	748	253	.307	.104	.333	.112
		5258						1.23	.268	2962	2005	190	.824	.078	.891	.084
		5010						.50	.110	2963	1989	162	.817	.067	.884	.072
		4402					W	1.62	.353	2964	1591	190	.654	.078	.707	.085
		3996					"	2.98	.648	2965	1233	280	.507	.115	.548	.124

Table XIX. LV Log Sheet Model 3 (Continued).

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MODEL 3 Deg 5.178  $V_j^0 = 2434$  FPS  $V_j^m = 2250$  FPS  
 POINT 301  $R_i = 4.593$   $V_j^i = 1634$  FPS  $V_{r/c} = 0$  FPS Date 1/18/76

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/3</sub>	U <sub>1/3</sub>	U <sub>1/3</sub>	
	AXIAL	EW	NS	PLANE	X	MS	°Deg	LOC.	R INS.								R/K <sub>L</sub>
REF	3102	4.869	13.381														
E-W	4191	—	13.381	M	72.12	13.928	—	—	—	2966	—	—	—	—	—	—	
		4.884						Q	0	0	2967	1554	272	.638	.112	.691	.121
		6.151						E	421	916	2968	767	234	.315	.096	.341	.104
		5.80							230	.501	2969	1153	312	.474	.128	.513	.139
		5.066							.59	.12	2970	1523	289	.626	.119	.677	.128
		4.751						W	46	100	2971	1537	275	.631	.113	.683	.122
		3.953						"	312	.679	2972	1063	277	.437	.114	.472	.123
E-W	4.291	—		N	78.74	15.207	—	—	—	2973	—	—	—	—	—	—	—
		4.900						E	04	008	2974	1331	283	.547	.116	.591	.126
		6.575							522	1.224	2975	585	198	.240	.081	.260	.088
		6.48							432	.940	2976	737	234	.303	.096	.328	.104
		5.623							245	.533	2977	1011	282	.415	.116	.449	.125
		5.20							1.08	.235	2978	1194	292	.490	.120	.531	.120
		4.653						W	.79	.171	2979	1263	296	.519	.122	.561	.132
		4.177						"	237	.517	2980	1115	273	.458	.112	.496	.121

Table XIX. LV Log Sheet Model 3 (Continued).

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MODEL 3 Deg 5.178

$V_j = 2433$  FPS  $V_j^m = 2251$  FPS

POINT 323  $R_i = 4.543$

$V_j^i = 1631$  FPS  $V_{1/2} = 400$  FPS Date 1/16/77

1176

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>m</sup>	U <sub>1/3</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/R <sub>i</sub>							
REF	3102	4880	13381													
AXIAL	—	4880	13381	—	—	—	E	0	0	2981	—	—	—	—	—	—
AXIAL	—	5384		—	—	—	E	1.68	.366	2982	—	—	—	—	—	—
AXIAL	—	5702		—	—	—		2.74	.597	2983	—	—	—	—	—	—
AXIAL	—	5902		—	—	—		3.41	.742	2984	—	—	—	—	—	—
AXIAL	—	6.40		—	—	—	↓	4.33	.943	2985	—	—	—	—	—	—
E-W	3.125	—		A	1.52	294	—	—	—	2986	—	—	—	—	—	—
		8323					E	11.47	2.499	2987	402	7.48	—	—	—	—
		6.041						3.87	.843	2988	2619	128	1.077	.052	1.164	.057
		6.142						4.21	.916	2989	2598	252	1.068	.103	1.154	.112
		6.209						4.43	.965	2990	2520	290	1.036	.119	1.120	.129
		6.266					↓	4.69	1.020	2991	2228	329	.916	.135	.990	.146
	↓	3.714		↓	↓	↓	W	3.89	.846	2992	2592	302	1.065	.124	1.152	.134
E-W	3.140	—		B	2.52	487	—	—	—	2993	—	—	—	—	—	—
E-W	3.155	—		C	3.51	678	—	—	—	2994	—	—	—	—	—	—
		5.897					E	3.39	.738	2995	2071	990	.851	.041	.920	.044
		5.920						3.63	.791	2996	1984	148	.815	.061	.881	.066
		6.038						3.76	.819	2997	1963	146	.807	.060	.872	.065
		6.092					↓	4.04	.880	2998	1958	334	.805	.137	.870	.148
	↓	3.900		↓	↓	↓	W	3.27	.711	2999	2181	639	.896	.026	.969	.028
E-W	3.170	—		D	4.50	869	—	—	—	3000	—	—	—	—	—	—

Table XIX. LV Log Sheet Model 3 (Continued).

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MODEL 3 Deg 517P

$V_j^0 = 2433$  FPS  $V_j^M = 2251$  FPS

POINT 303 R: 4.593

$V_j^i = 1634$  FPS  $V_{N/C} = 400$  FPS Date 1/18/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE X MS / Deg			RADIAL POSITION LOC. R INS. R/R <sub>2</sub>			HISTO No.	U FPS	U' FPS	U <sub>i</sub> %	U <sub>i</sub> ' %	U <sub>i</sub> <sup>M</sup> %	U <sub>i</sub> <sup>M</sup> ' %
	AXIAL	EW	NS													
	REF 3102	4.880	13381													
E-W	3185	—	13381	E	5.50	1062	—	—	—	3001	—	—	—	—	—	—
		3980					W	3.00	.653	3002	2212	675	.909	.028	.983	.030
		4.185					"	2.32	.504	3003	1460	625	.600	.026	.649	.028
		5605					E	2.42	.526	3004	1402	686	.576	.027	.623	.029
		5725						2.82	.613	3005	2086	93.9	.858	.039	.927	.042
		5888						3.26	.732	3006	2147	62.6	.882	.026	.954	.028
		5979						3.66	.798	3007	1848	256	.760	.105	.831	.114
		6055						3.92	.853	3008	997	269	.810	.111	.443	.120
		P.324						11.48	2.499	3009	399	6.57	—	—	—	—
E-W	3215	—		F	7.48	1445	—	—	—	3010	—	—	—	—	—	—
E-W	3253	—		G	10.00	1.931	—	—	—	3011	—	—	—	—	—	—
		5908					E	3.43	.746	3012	1066	264	.438	.109	.473	.117
		5779						3.02	.652	3013	2007	198	.825	.051	.842	.058
		5639						2.53	.551	3014	2224	68.7	.914	.028	.988	.031
		5508						2.09	.456	3015	2128	115	.875	.047	.945	.051
		5334					↓	1.51	.329	3016	1572	104	.646	.043	.698	.046
		4.471					W	1.36	.297	3017	1480	41.8	.608	.017	.657	.019
		4.207					"	2.24	.488	3018	2223	84.9	.914	.035	.988	.038

Table XIX. LV Log Sheet Model 3 (Continued). ORIGINAL PAGE IS OF POOR QUALITY

1178

A102FL 3 Deg 5.17°

 $V_j'' = 2433$  FPM  $V_j^M = 2251$  FPMPOINT 303 R<sub>i</sub> 4.593 $V_j^i = 1634$  FPM  $V_{i/c} = 402$  FPM

Date 11/18/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	D <sub>1/3</sub> '	D <sub>1/3</sub> %	D <sub>1/3</sub> <sup>m</sup>	U <sub>1/3</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X MUS	Y Deg	LOC.	R <sub>INS.</sub>	R <sub>1/2</sub>							
REF	3.102	4880	13381													
E-W	3.320	—	13381	H	1444	2789	—	—	—	3019	—	—	—	—	—	—
		5545					E	2.22	.483	3020	2315	129	.951	.053	1.028	.057
		5.197						1.06	.230	3021	1736	126	.714	.052	.771	.056
		4.972						.31	.067	3022	1164	182	.479	.075	.517	.081
		4.880					E	0	0	3023	1117	135	.459	.056	.496	.060
		4.583					W	.99	.216	3024	1620	69.3	.666	.028	.720	.031
		4.329						1.81	.400	3025	2248	120	.924	.049	.999	.053
		4.201						2.26	.492	3026	1962	196	.806	.081	.871	.087
		8630						12.50	2.722	3027	404	12.7	—	—	—	—
E-W	3.506	—		J	2676	5168	—	—	—	3028	—	—	—	—	—	—
		4887					E	0	0	3030	1594	142	.655	.058	.708	.063
		4.254					W	2.09	.454	3031	2111	177	.868	.073	.938	.078
		4.533						1.16	.252	3032	1634	109	.672	.045	.726	.048
		4.685						6.50	.112	3033	1552	84.5	.632	.035	.689	.038
		5.192					E	1.04	.226	3034	1941	193	.798	.079	.862	.086
		5.854						1.91	.417	3035	2281	179	.937	.074	1.013	.080
		5.839						3.20	.696	3036	1367	334	.562	.137	.607	.148
E-W	3.693	—		K	3914	7559	—	—	—	3037	—	—	—	—	—	—
		4.264					W	2.05	.447	3038	1728	187	.731	.072	.790	.083
		5.152					E	1.92	.418	3039	1998	124	.821	.051	.888	.055
		4.749					W	.44	.095	3040	1549	124	.636	.051	.688	.055
		4.886					E	0	0	3041	1609	140	.661	.057	.715	.062
		5.144					E	.88	.192	3042	1833	175	.754	.072	.814	.078
		5.927					"	3.49	.760	3043	1119	284	.460	.117	.497	.126

Table XIX. LV Log Sheet Model 3 (Continued). ORIGINAL PAGE IS OF POOR QUALITY

MODE L 3 Deg 5.178

$V_j = 2433$  FFS  $V_j^M = 2251$  FFS

POINT 303  $R_i = 4.593$

$V_j^i = 1634$  FFS  $\sqrt{R_i} = 400$  FFS

Date 1/14/78

TYPE TKAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U'$	$U'/V_j^M$	$U'/V_j^i$
	AXIAL	EW	NS	PLANE	X MS	Y Deg	LOC.	K MS	R/R <sub>i</sub>							
REF	3102	4880	13281													
E-W	3.880	-	13281	L	57.56	995	-	-	-	3045	-	-	-	-	-	-
		3808					W	3.57	.778	3046	1037	266	.426	.109	.461	.118
		4264					"	1.72	.374	3047	1612	165	.663	.068	.716	.073
		4880					E	0	0	3048	1728	148	.710	.061	.764	.066
		4492					W	1.29	.282	3049	1644	152	.676	.062	.730	.067
		5340					E	1.53	.334	3050	1905	162	.783	.067	.846	.072
		5408						1.76	.383	3051	1894	190	.779	.078	.842	.085
		5968						3.64	.790	3052	1107	296	.455	.121	.492	.131
E-W	4.191	-		M	72.12	13928	-	-	-	3054	-	-	-	-	-	-
		6.190					E	4.37	.951	3055	873	210	.359	.086	.388	.093
		4886					E	0	0	3056	1720	176	.707	.073	.764	.078
		5764					E	2.95	.642	3057	1176	270	.483	.111	.522	.120
		5327					"	1.49	.324	3058	1588	242	.653	.099	.705	.107
		4.474					W	1.35	.295	3059	1567	205	.644	.084	.696	.091
E-W	4.291	-		N	78.74	15207	-	-	-	3060	-	-	-	-	-	-
		4884					E	0	0	3061	1624	190	.667	.078	.721	.084
		4377					W	1.68	.365	3062	1438	235	.591	.097	.639	.104
		5447					E	1.89	.411	3063	1402	255	.576	.105	.623	.113
		5978						3.66	.297	3064	970	230	.399	.095	.421	.102
		6550						5.57	1.212	3065	674	166	.277	.068	.360	.074
		8661						12.60	2.744	3066	391	31.4	-	-	-	-

Table XIX. LV Log Sheet Model 3 (Continued).

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6.2.4.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 3

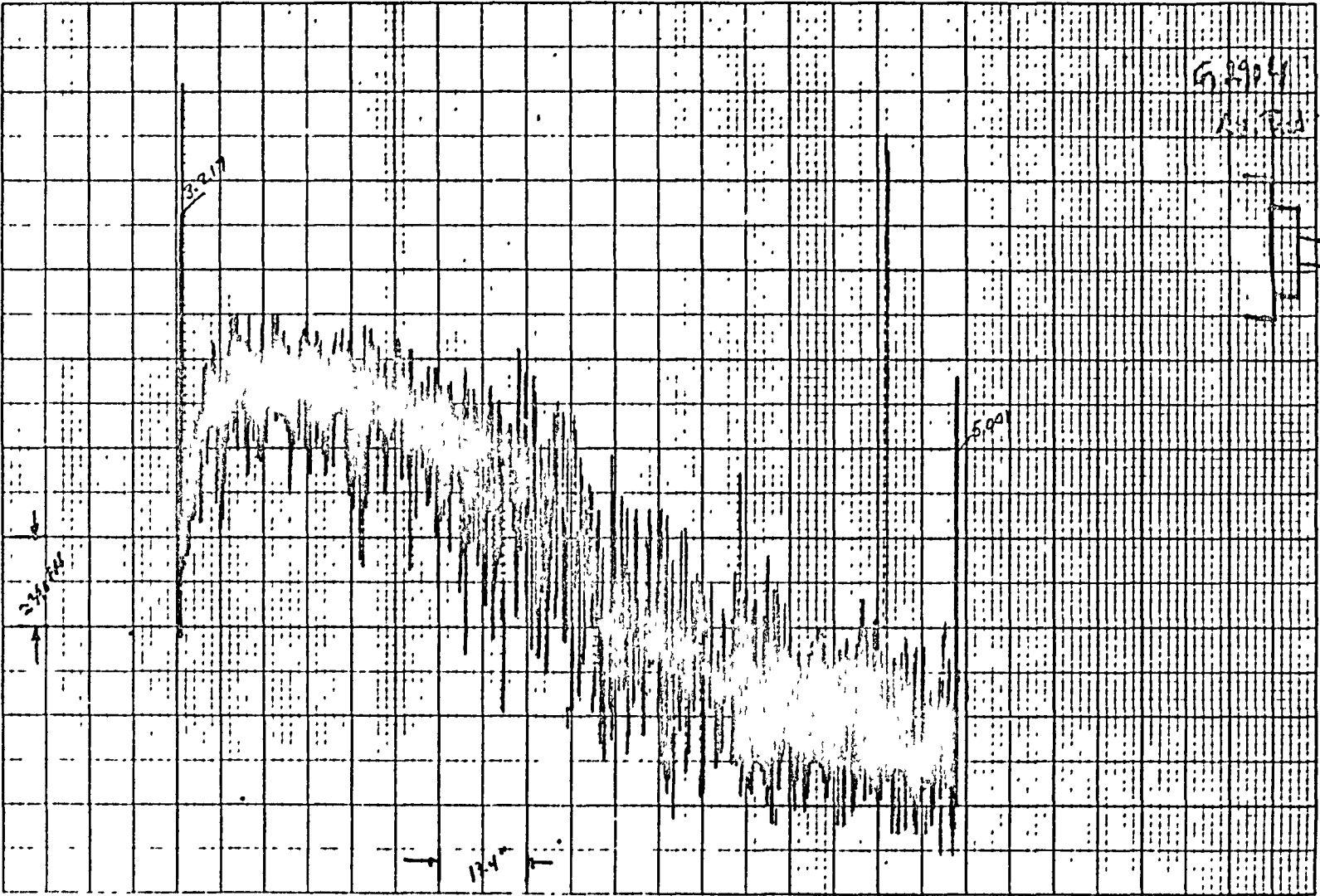
Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XIX.

The velocity and physical position information is identified with handwritten scales on the ordinate and abscissa.

MODEL 3  
TEST POINT 301

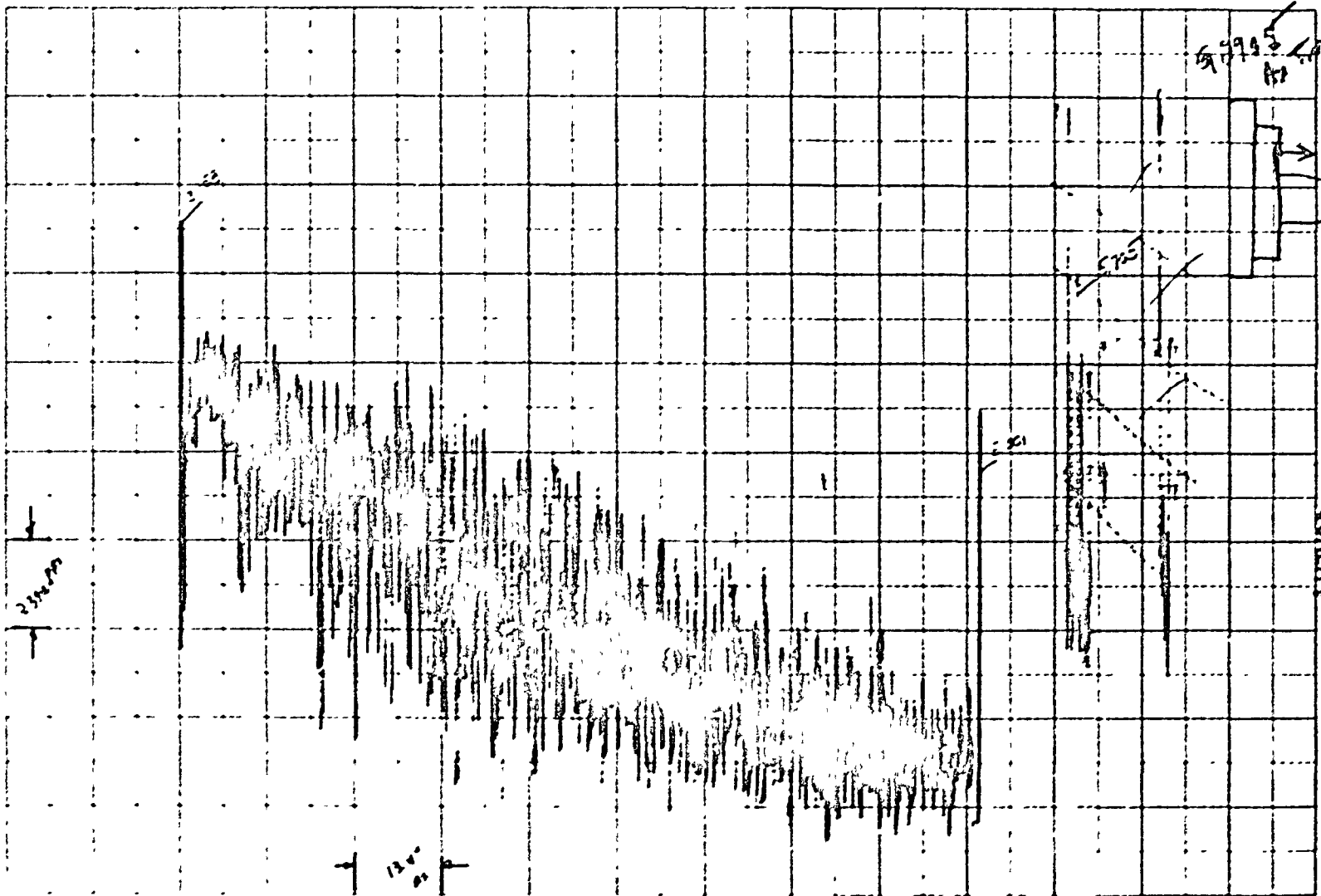




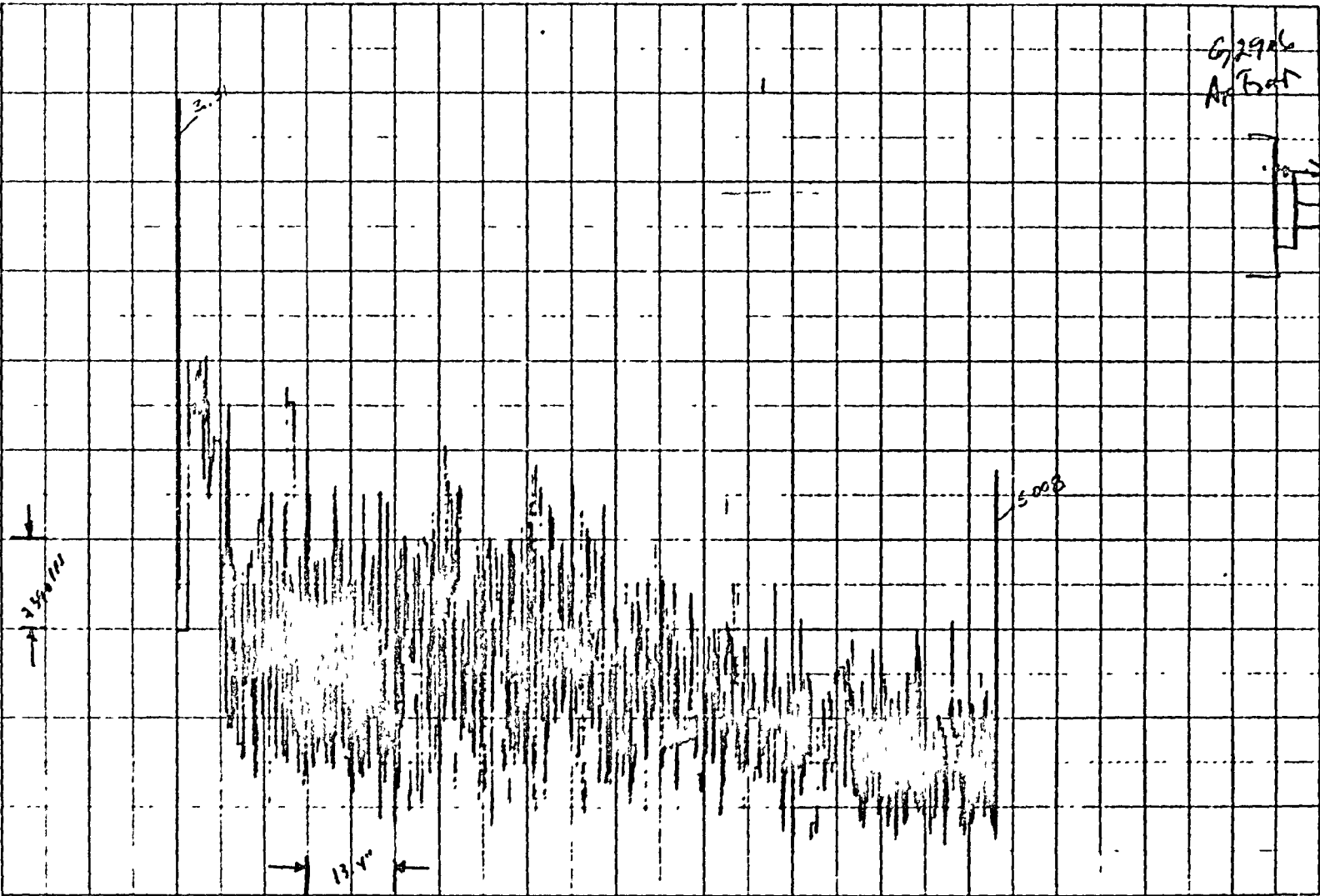


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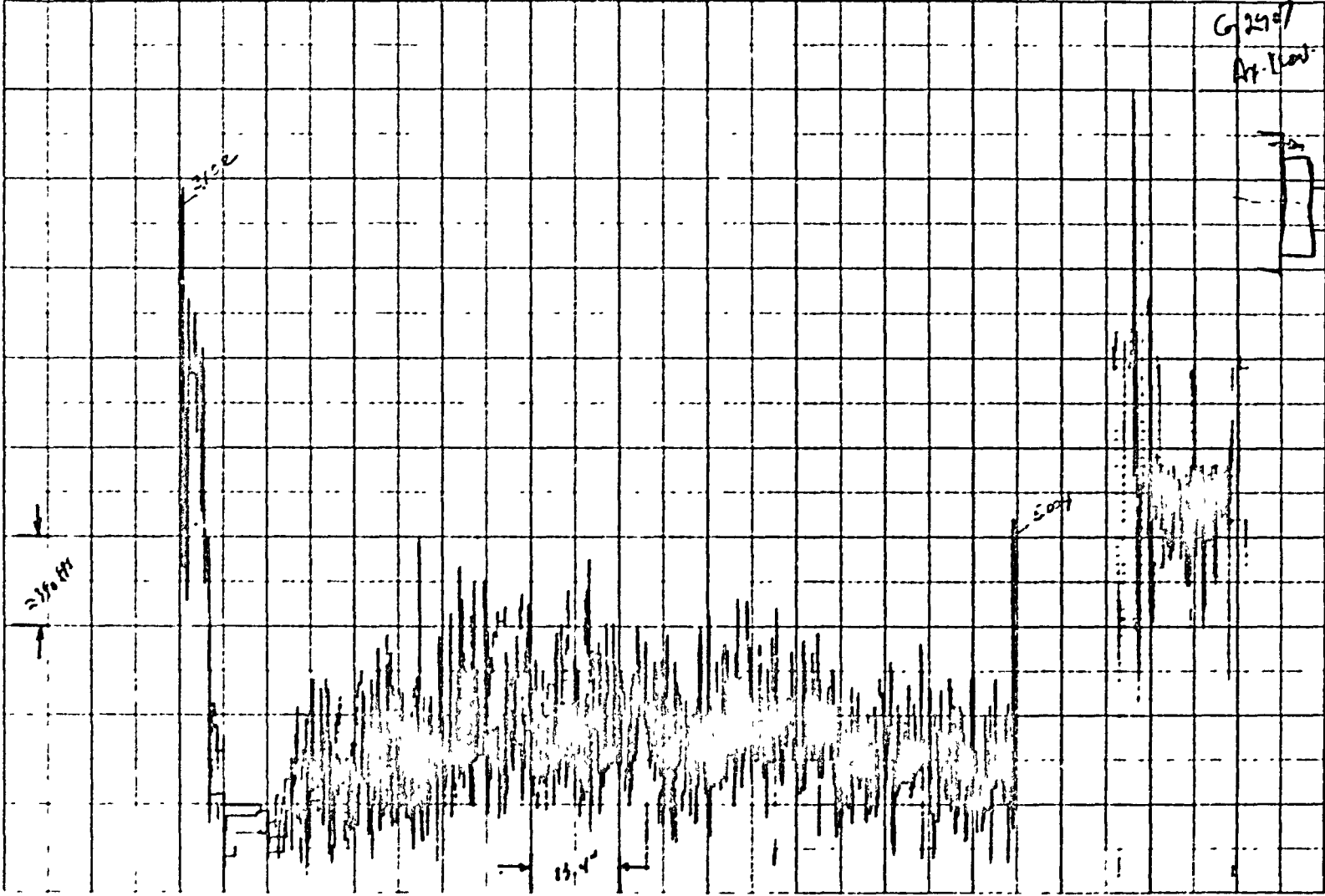
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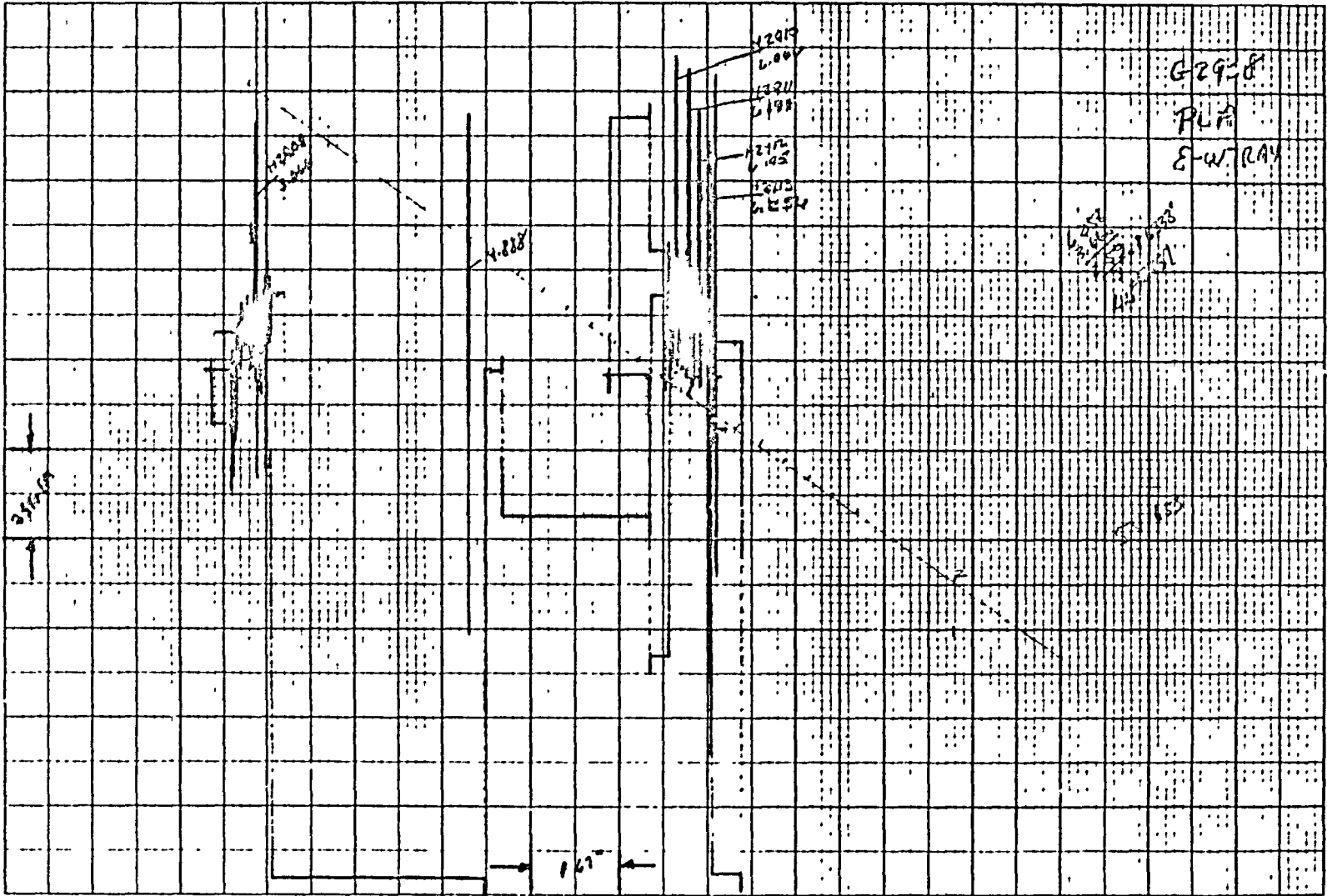
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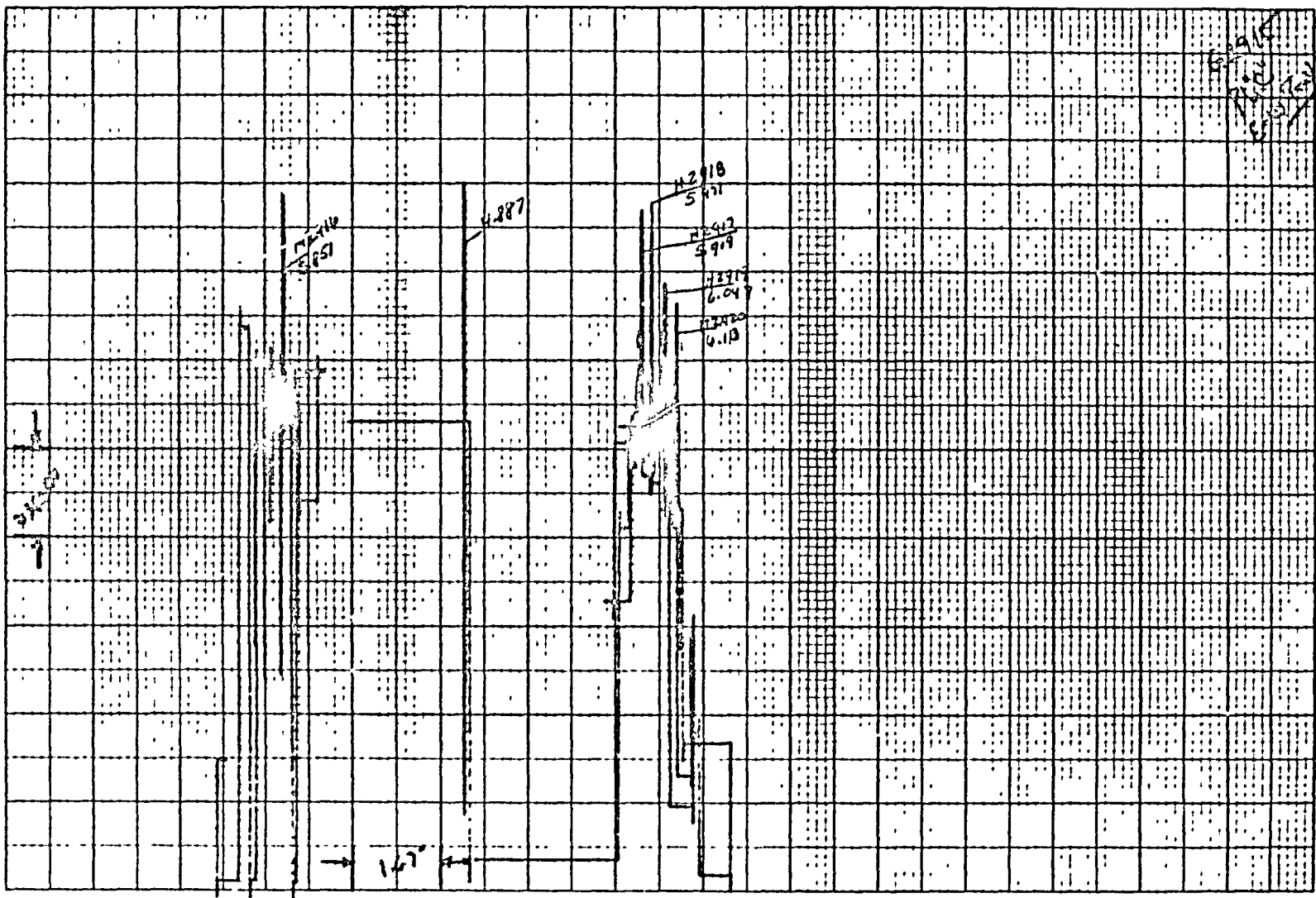


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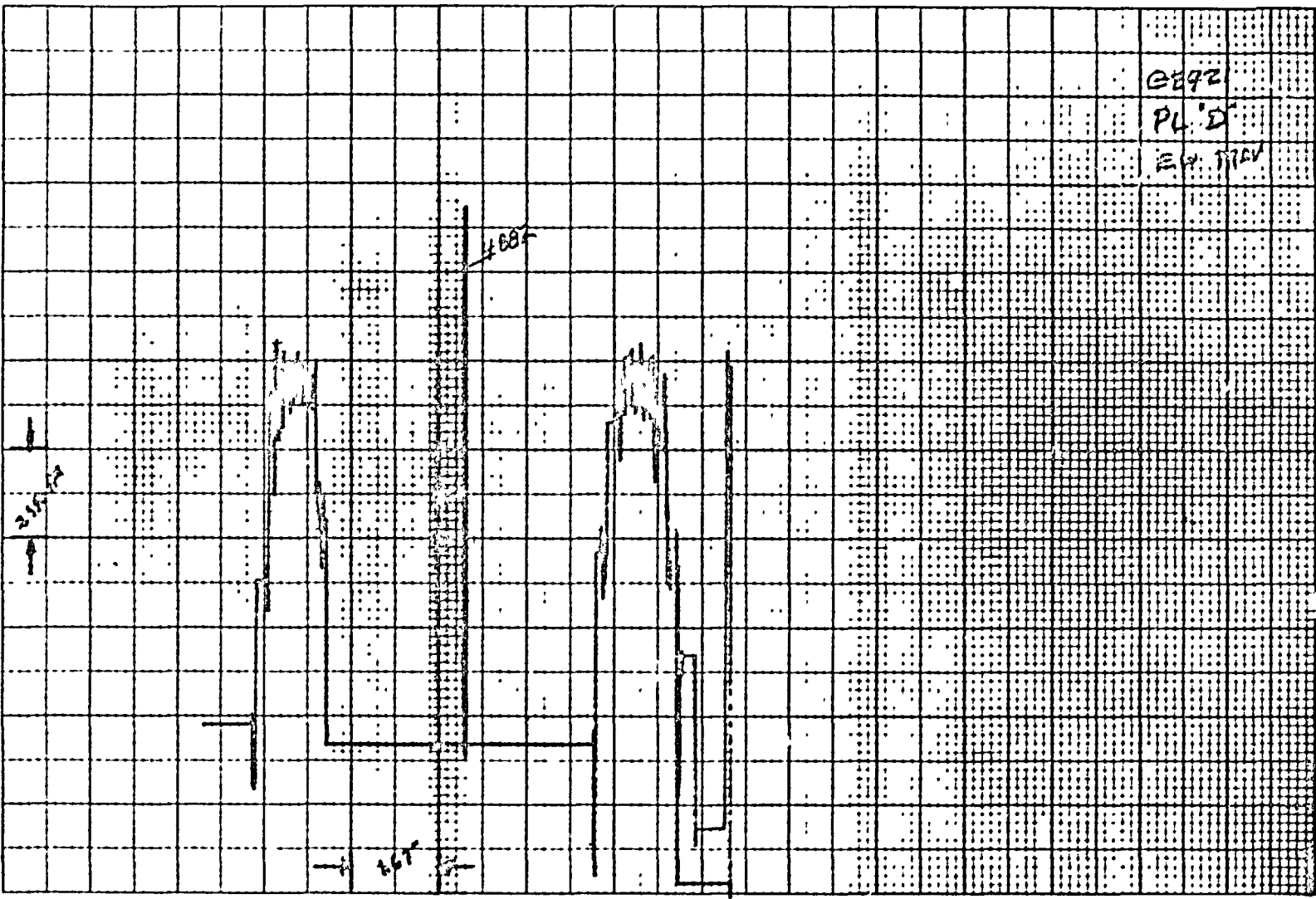
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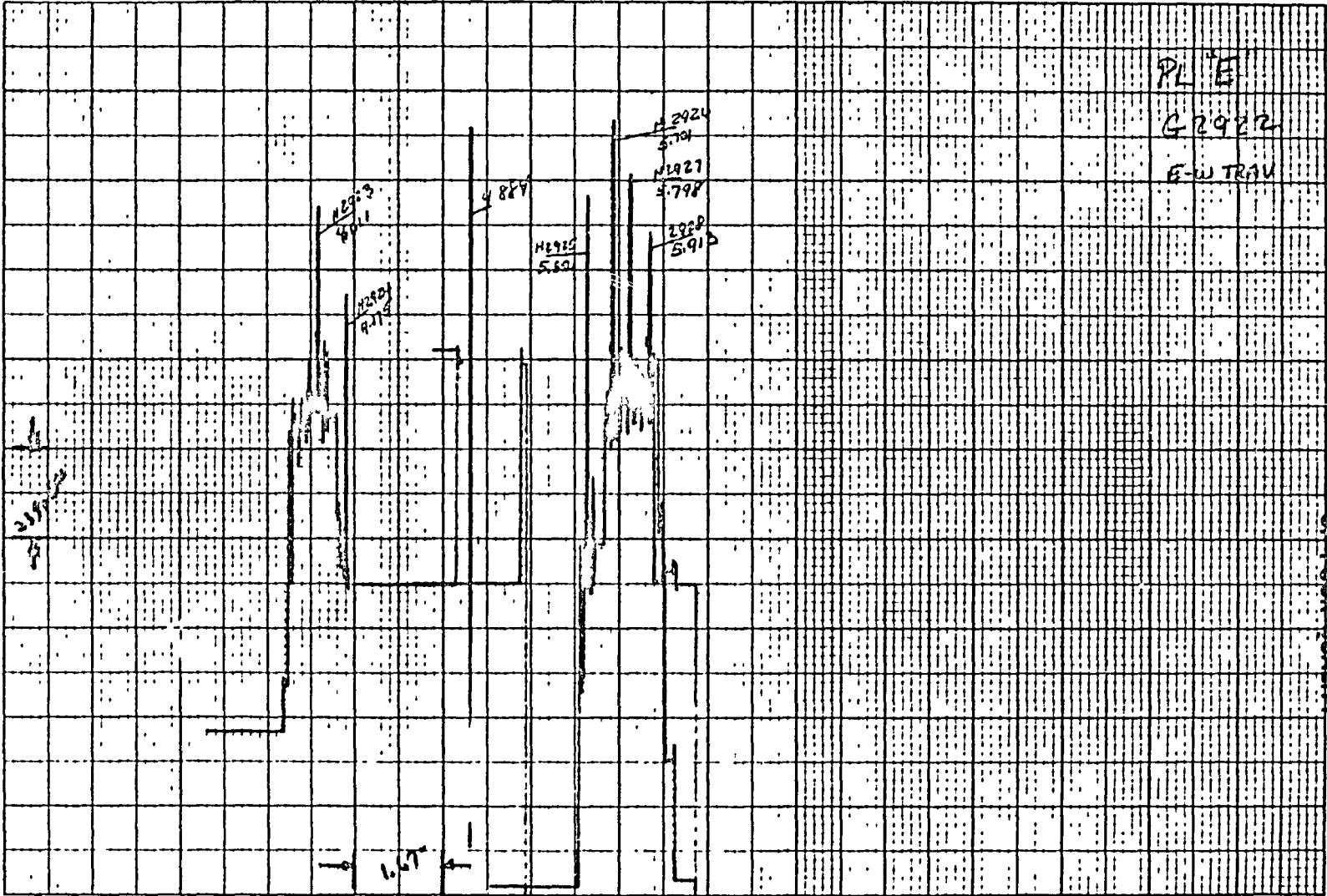


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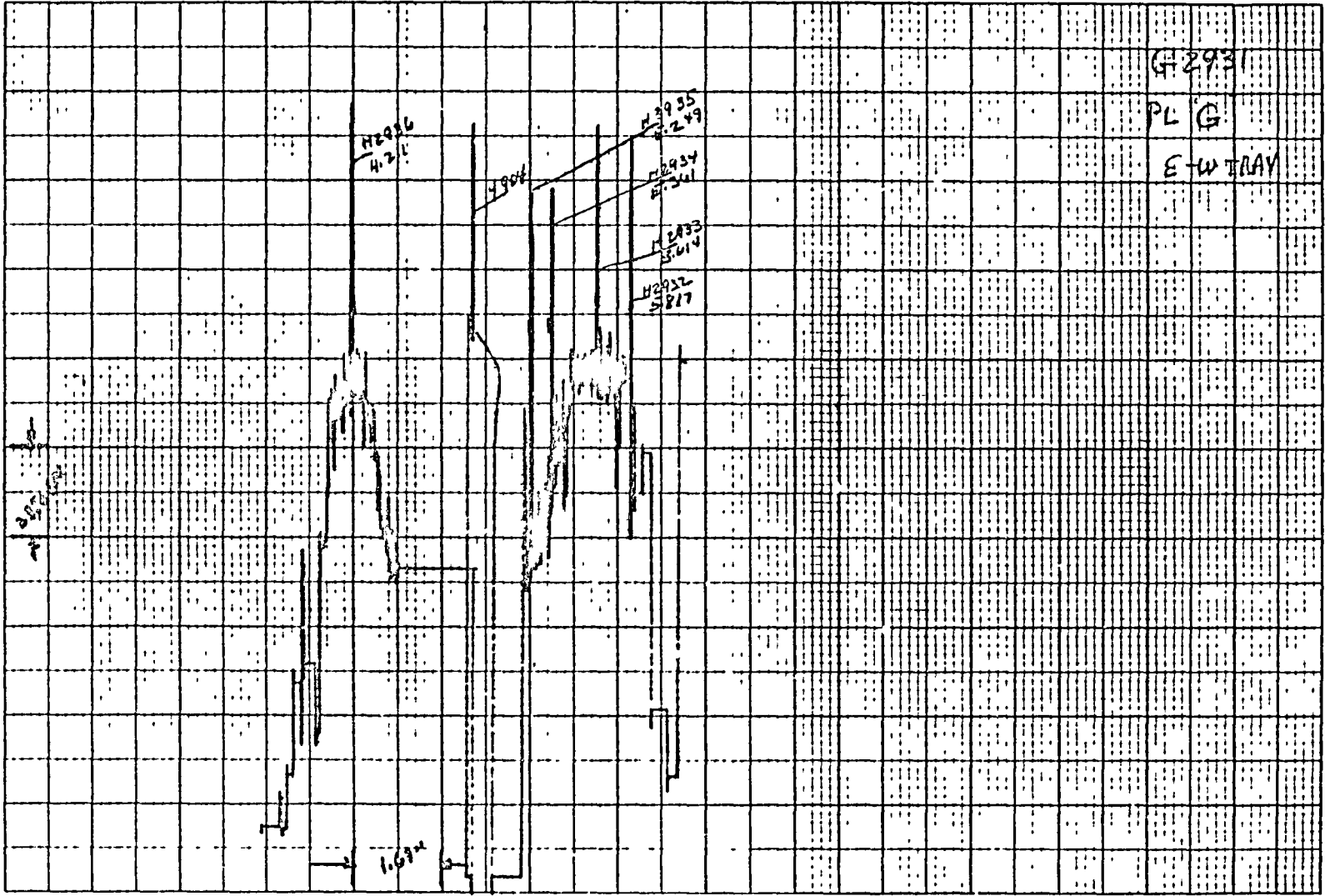
GE92  
PL'D  
EXP. 11/24





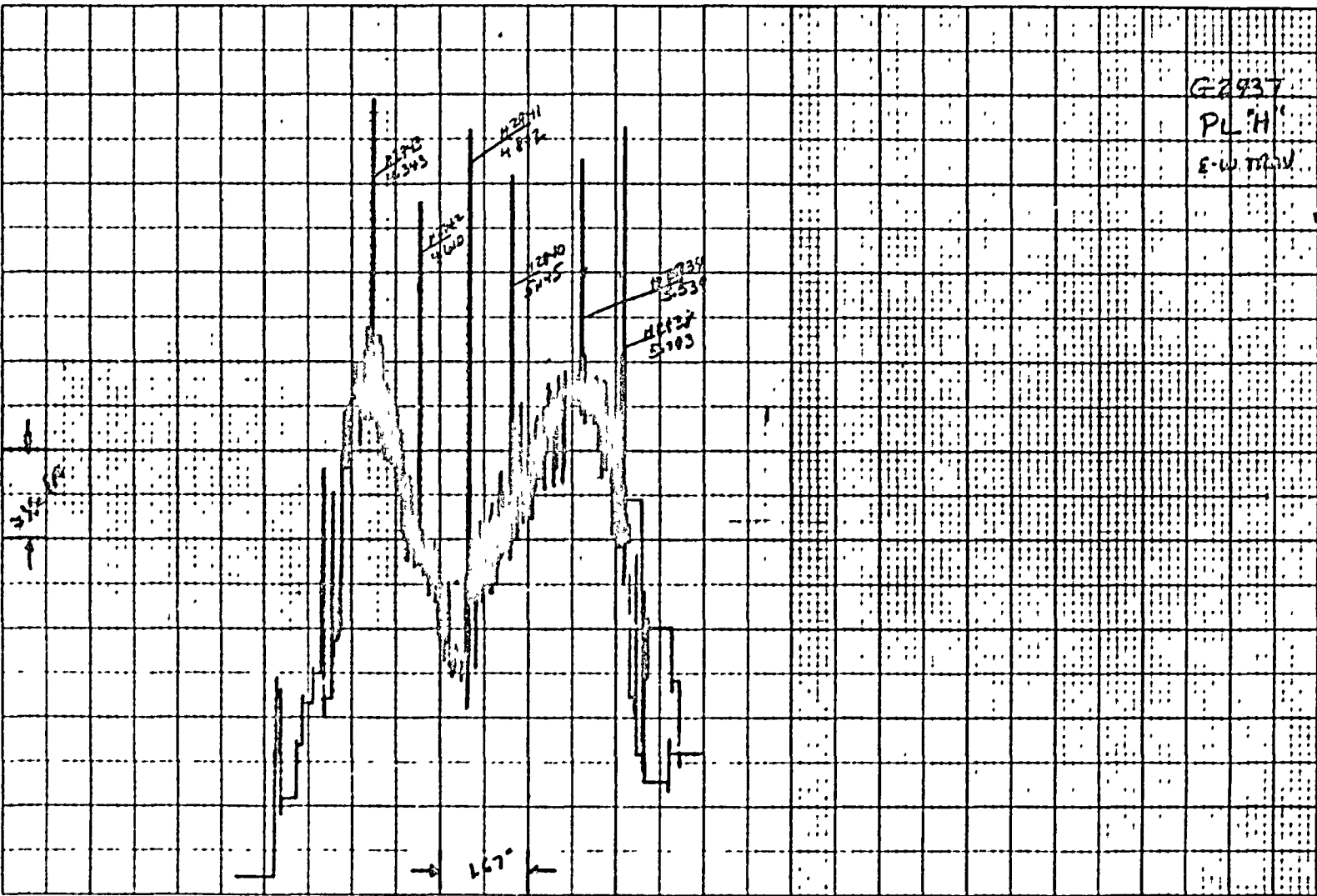
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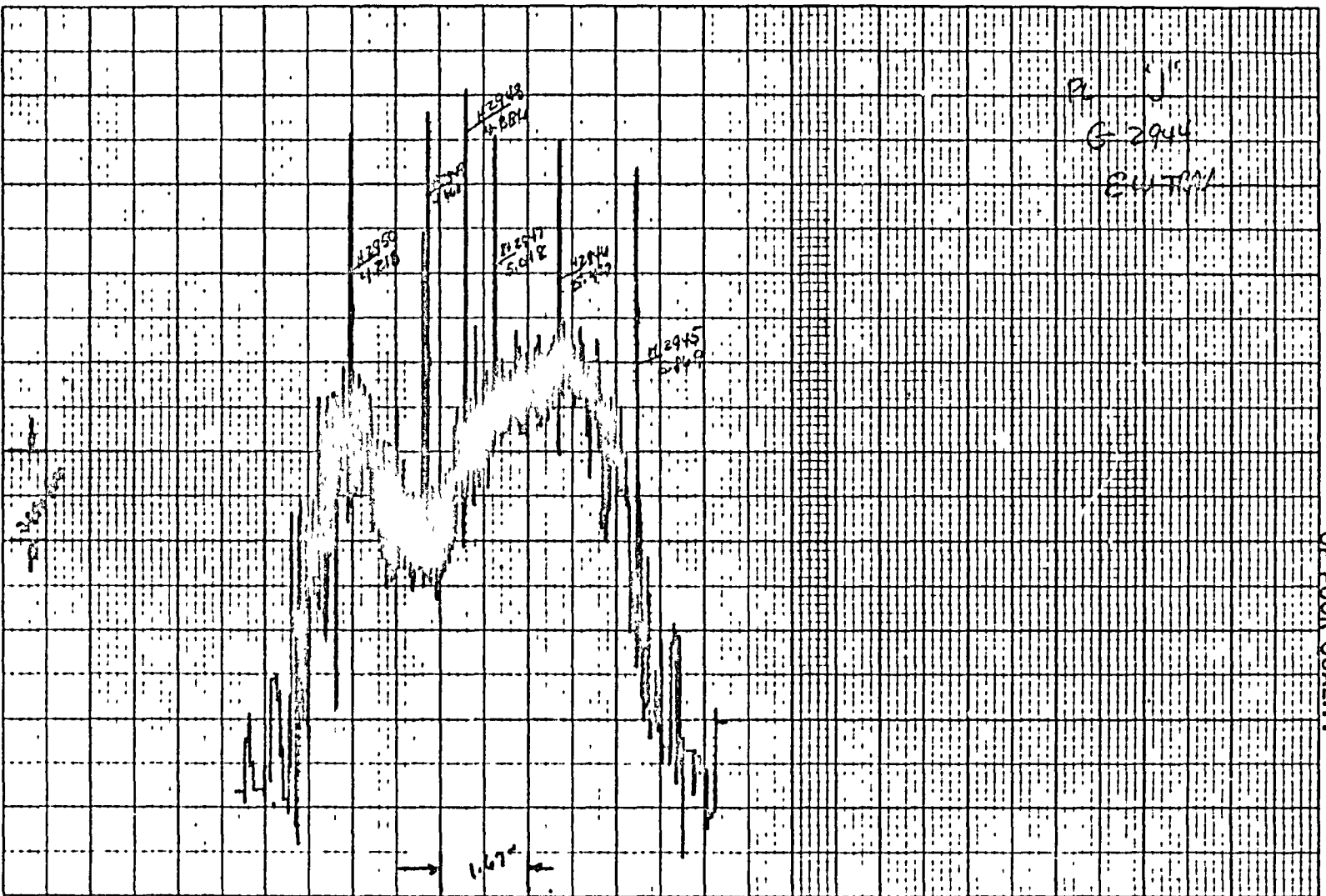


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PL. K.

E-W TRAN.

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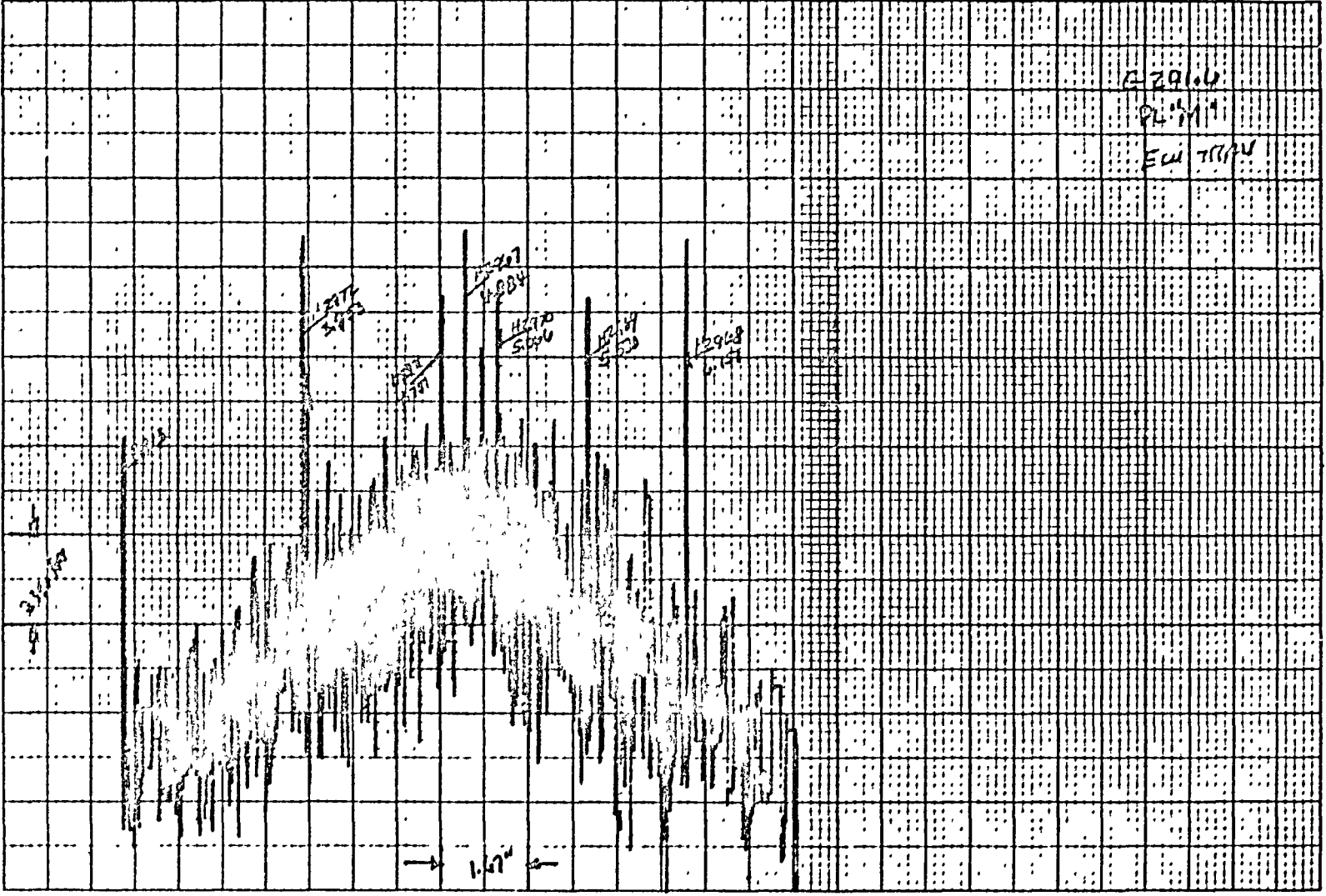
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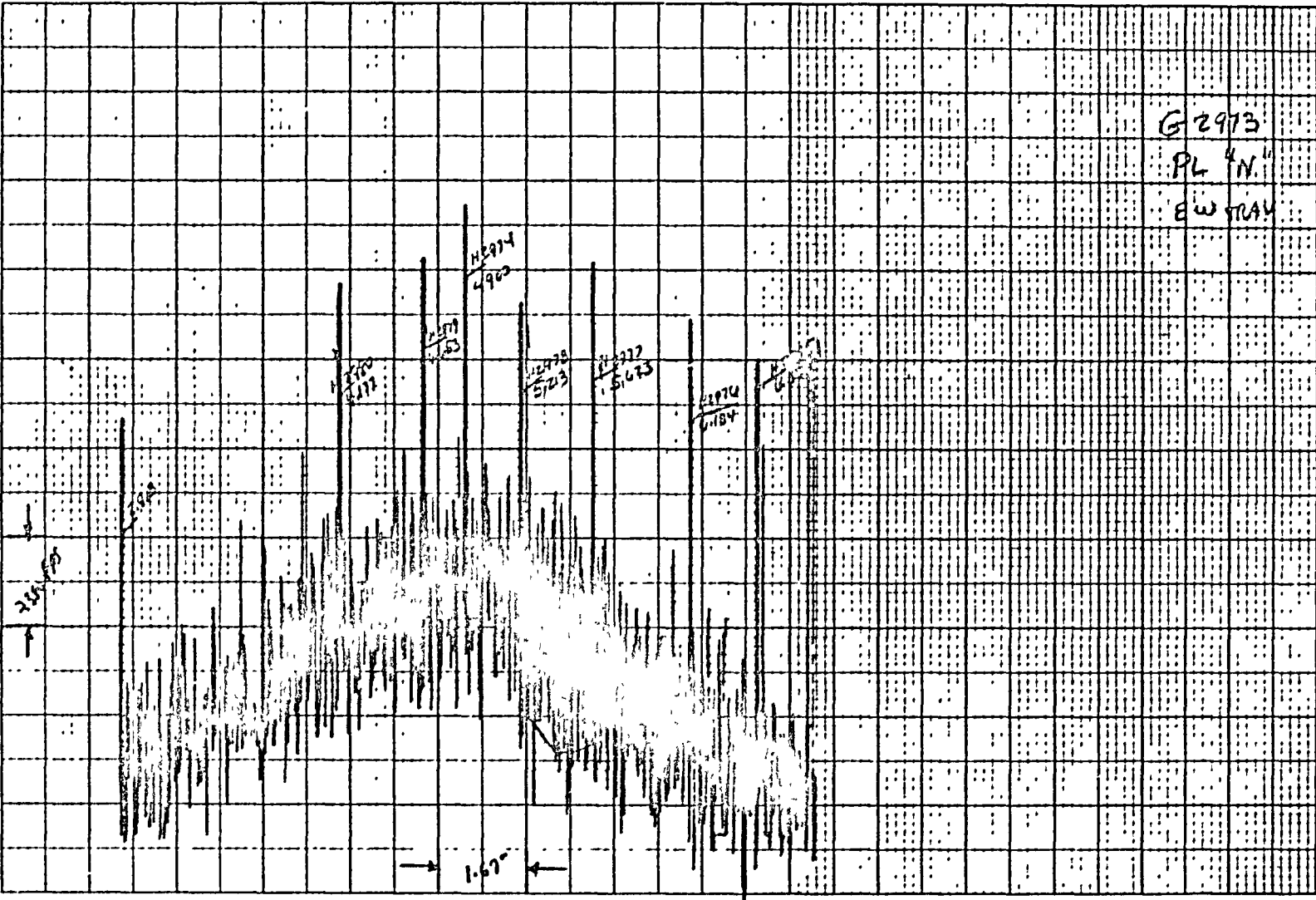
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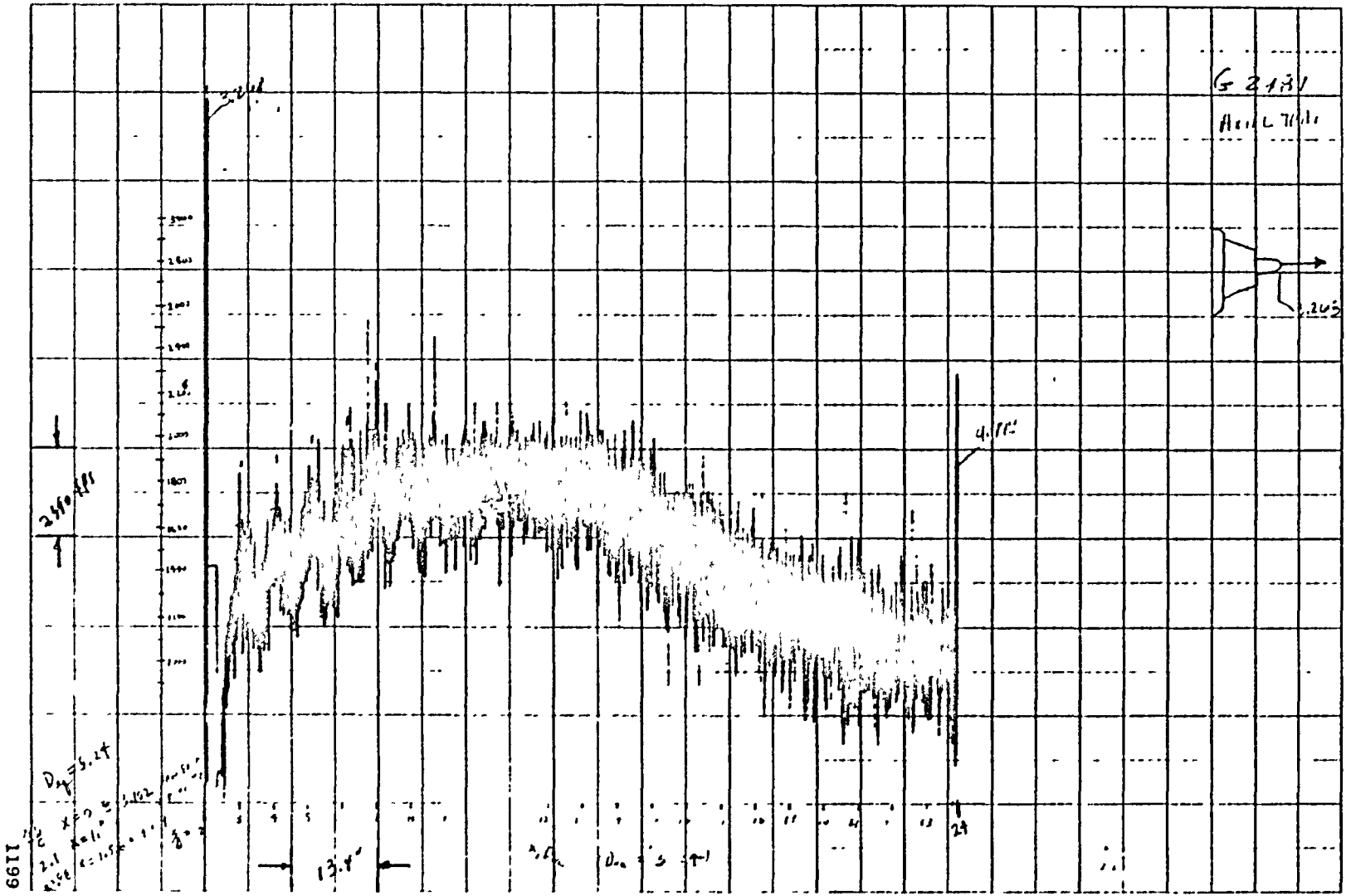


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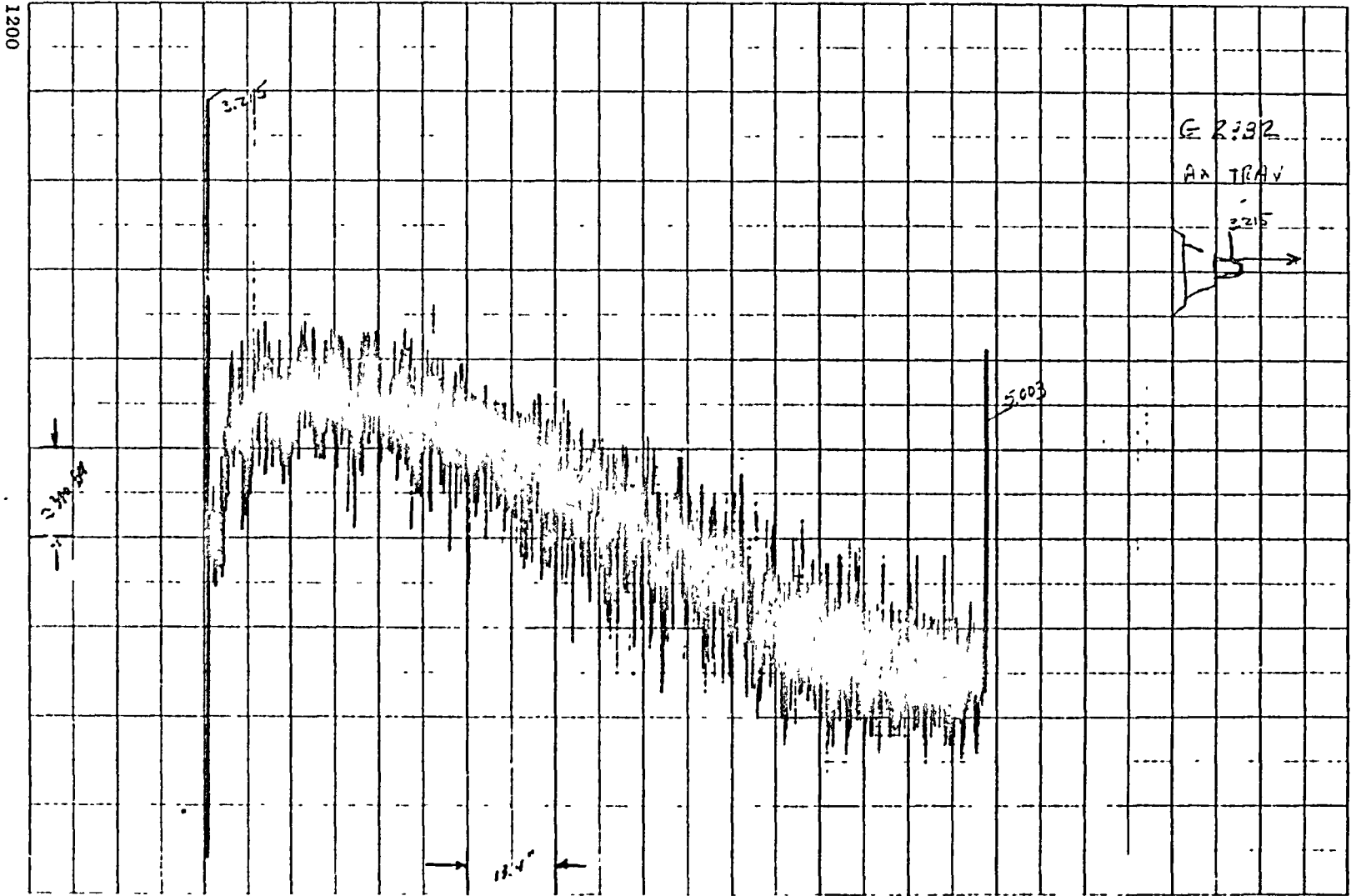


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MODEL 3  
TEST POINT 303



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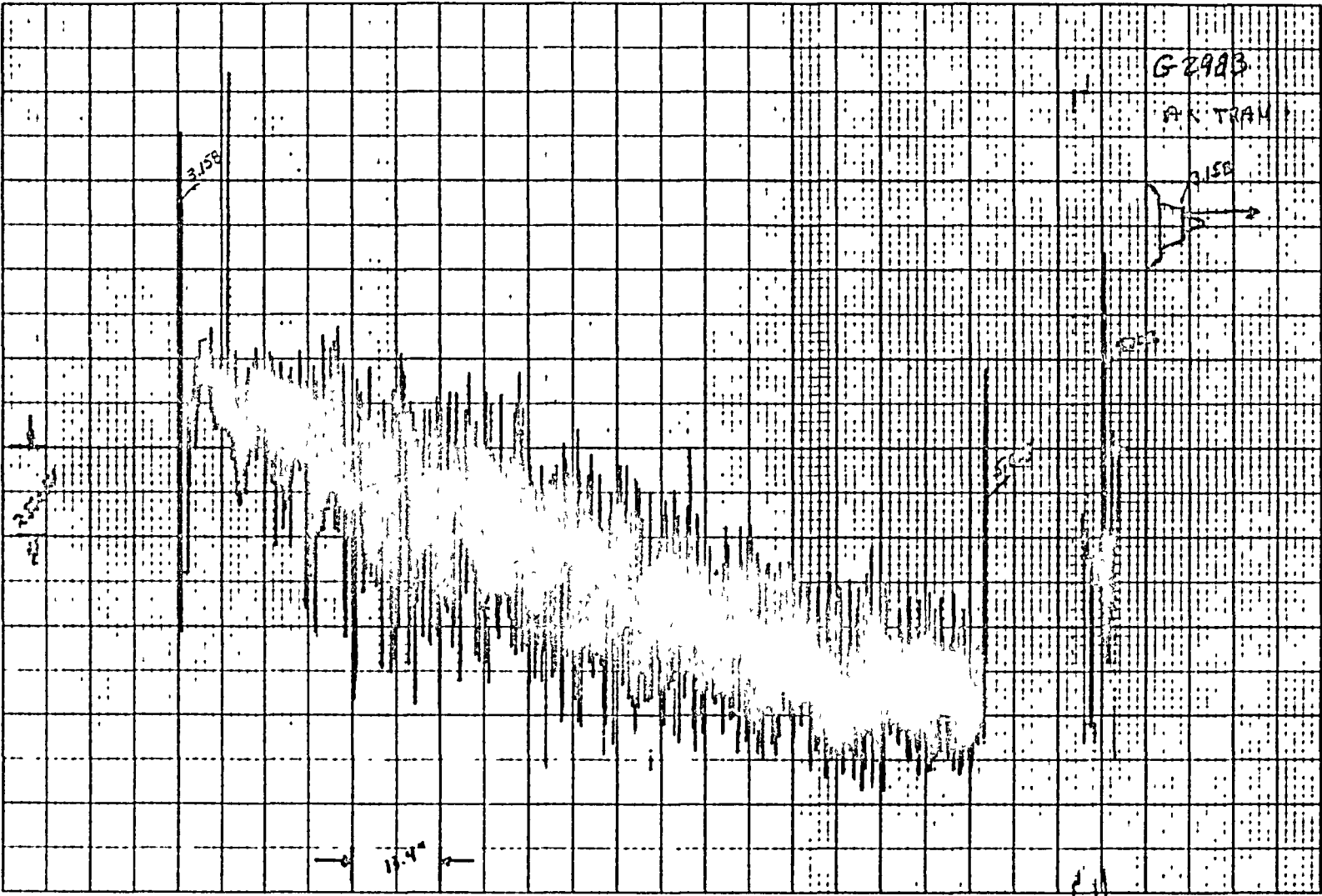
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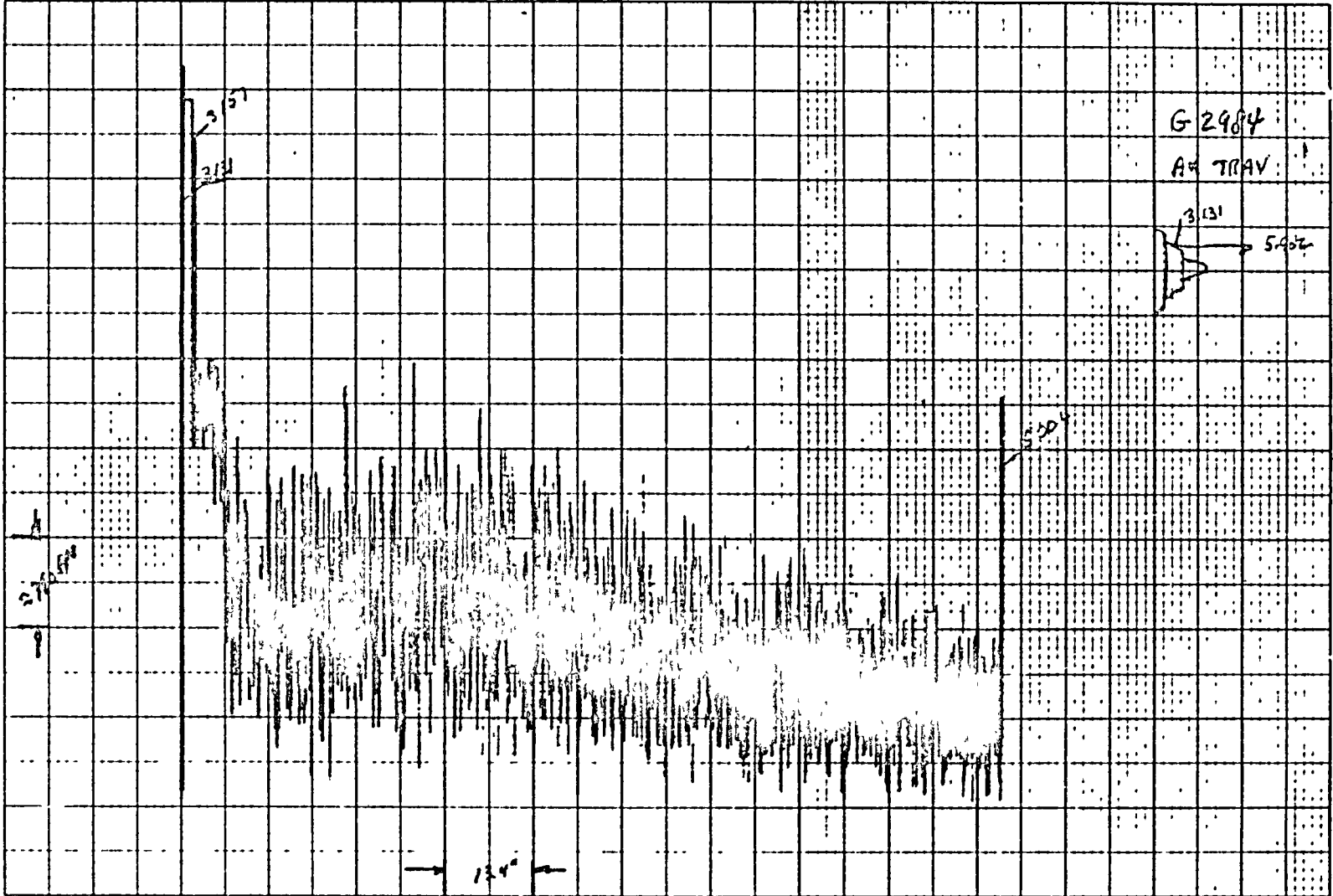
G 2983

AK TRAM

3.158

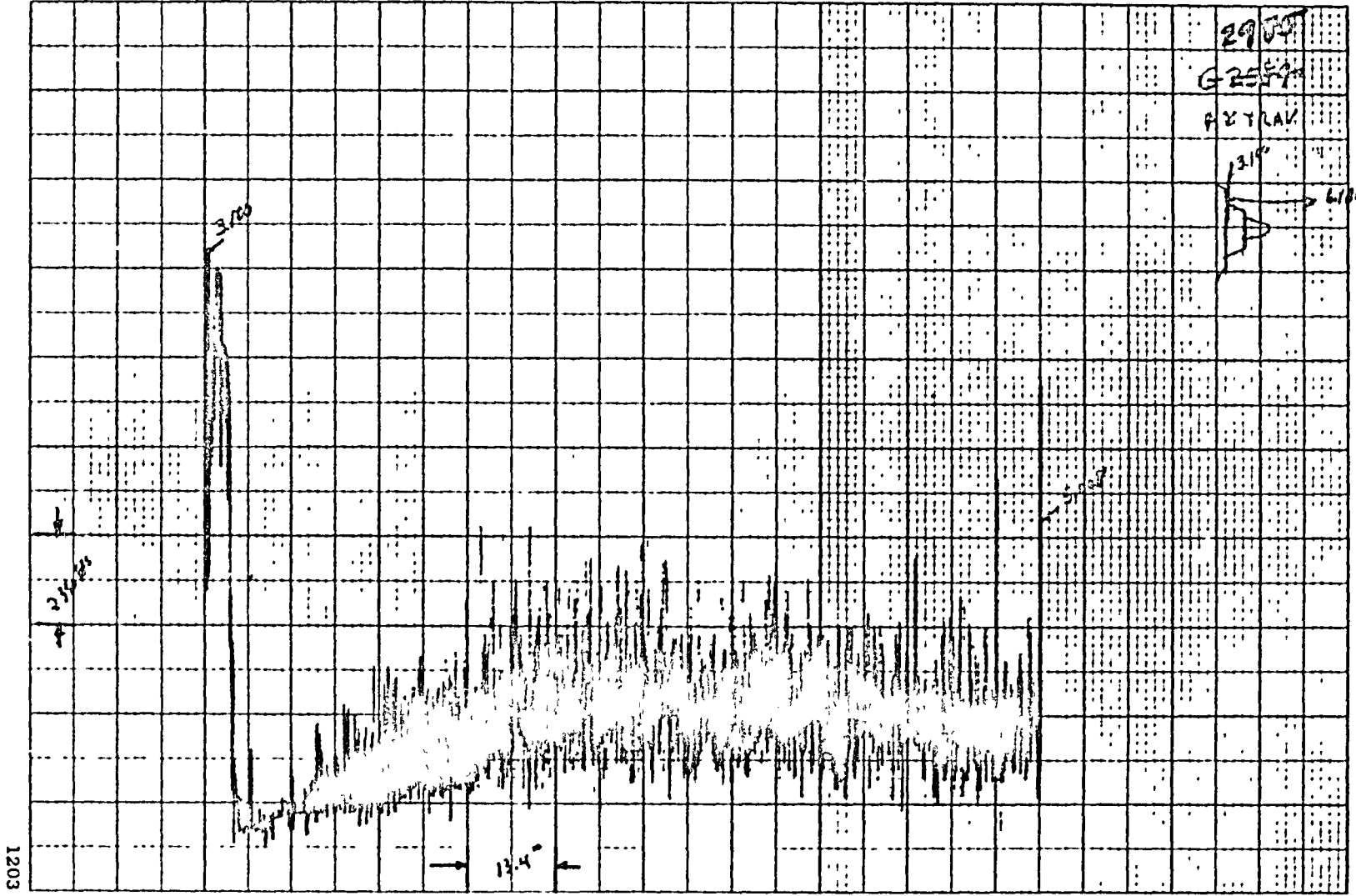


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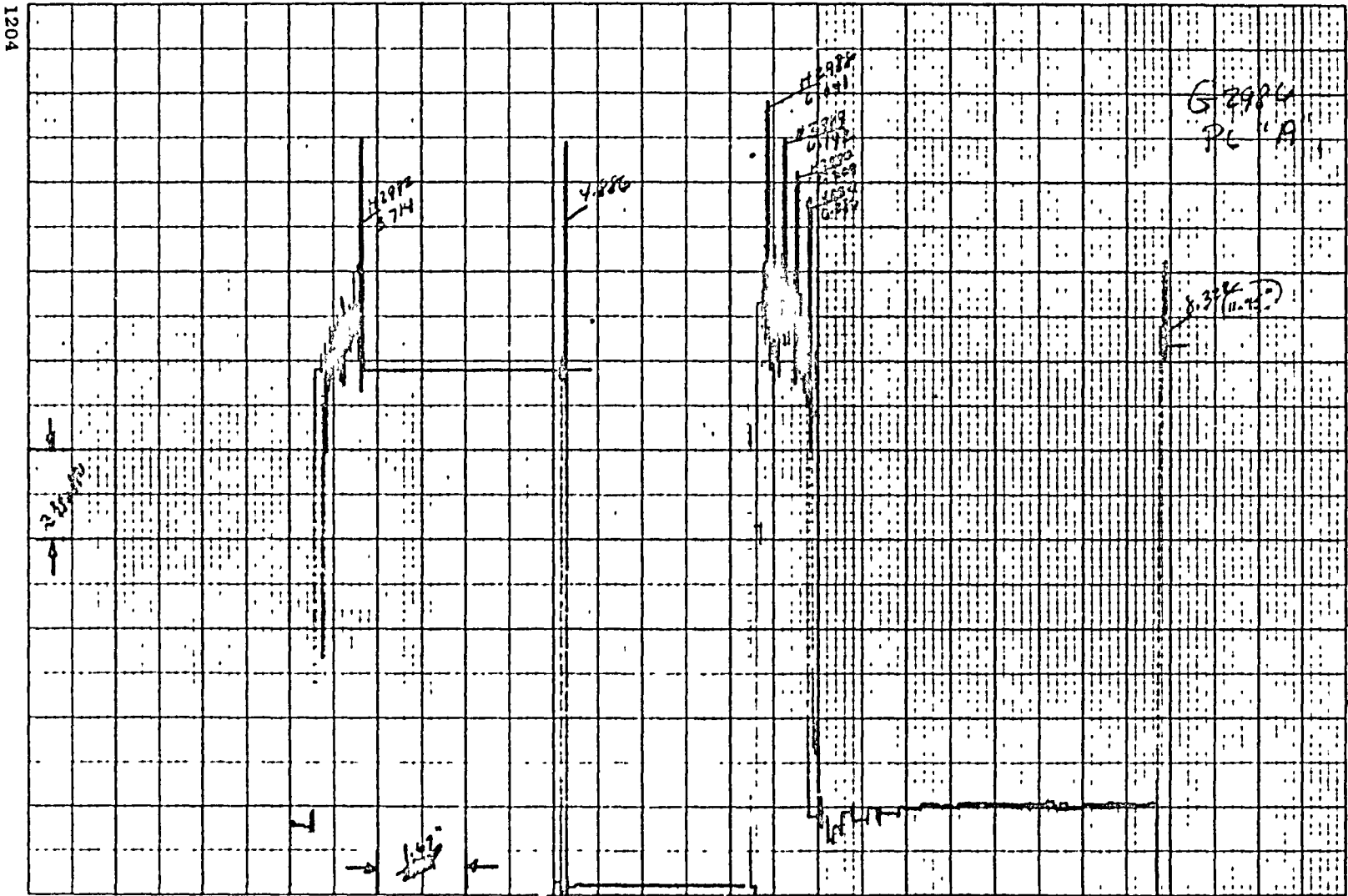
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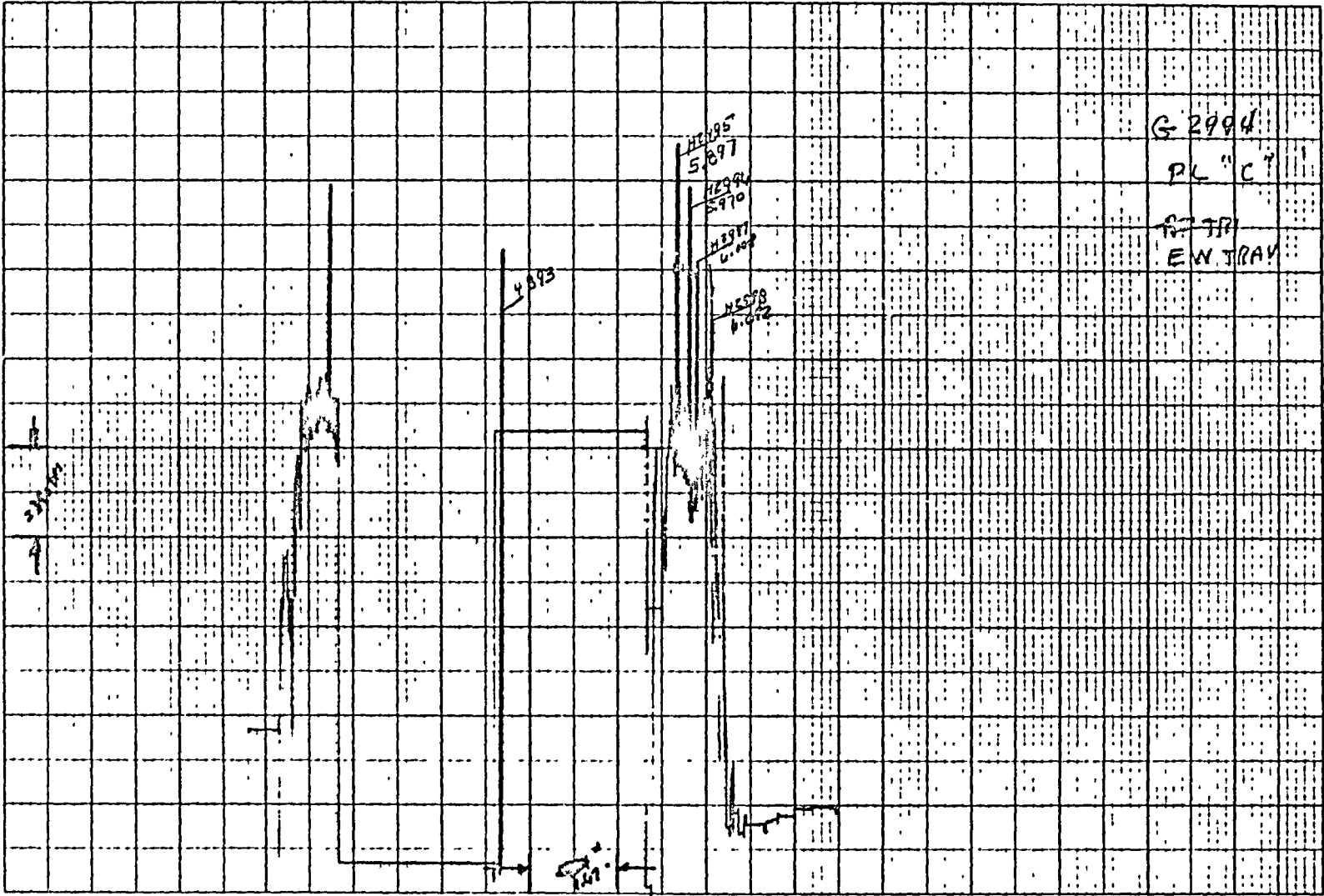
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PL B  
E-W-T-M

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22  
F

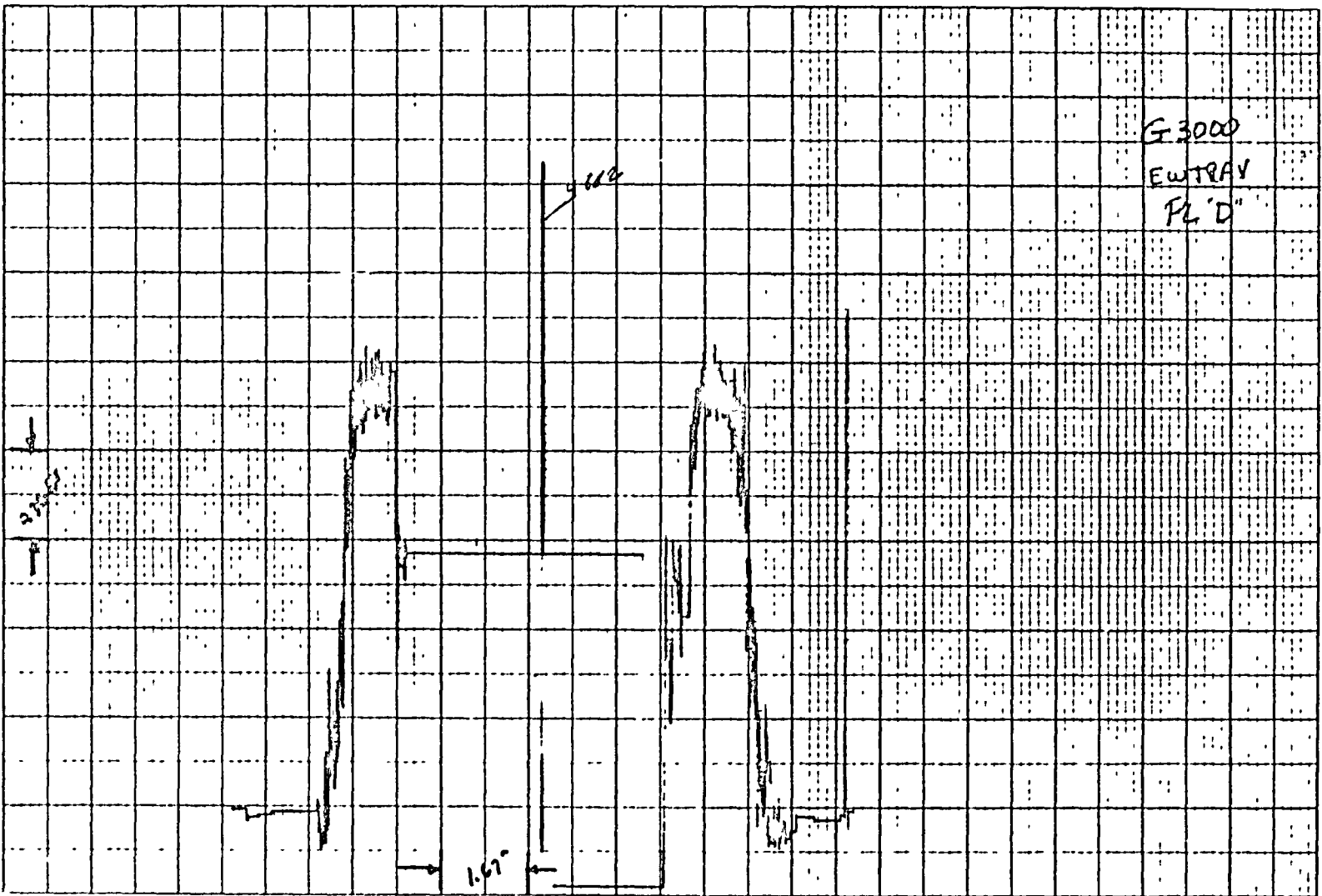
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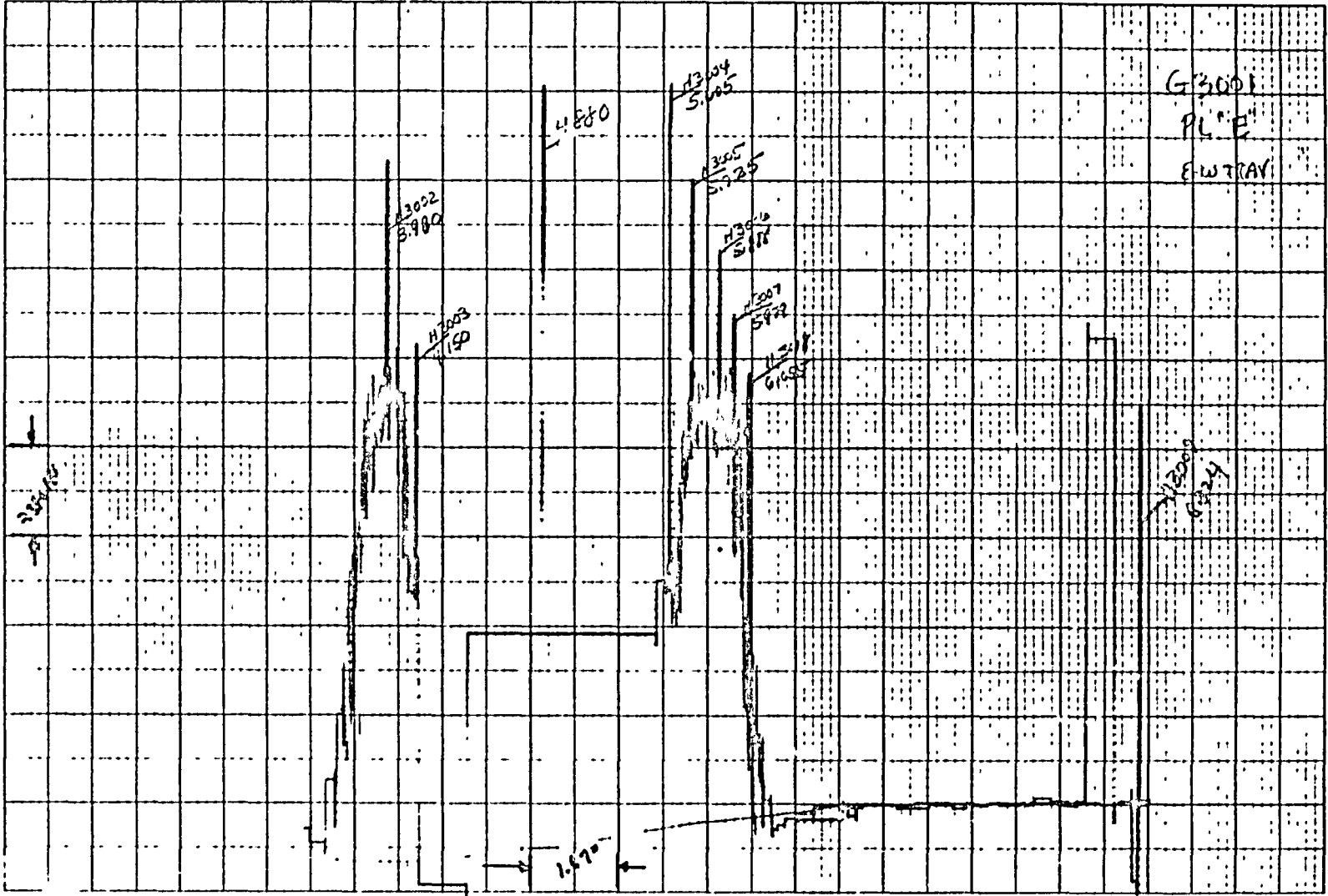


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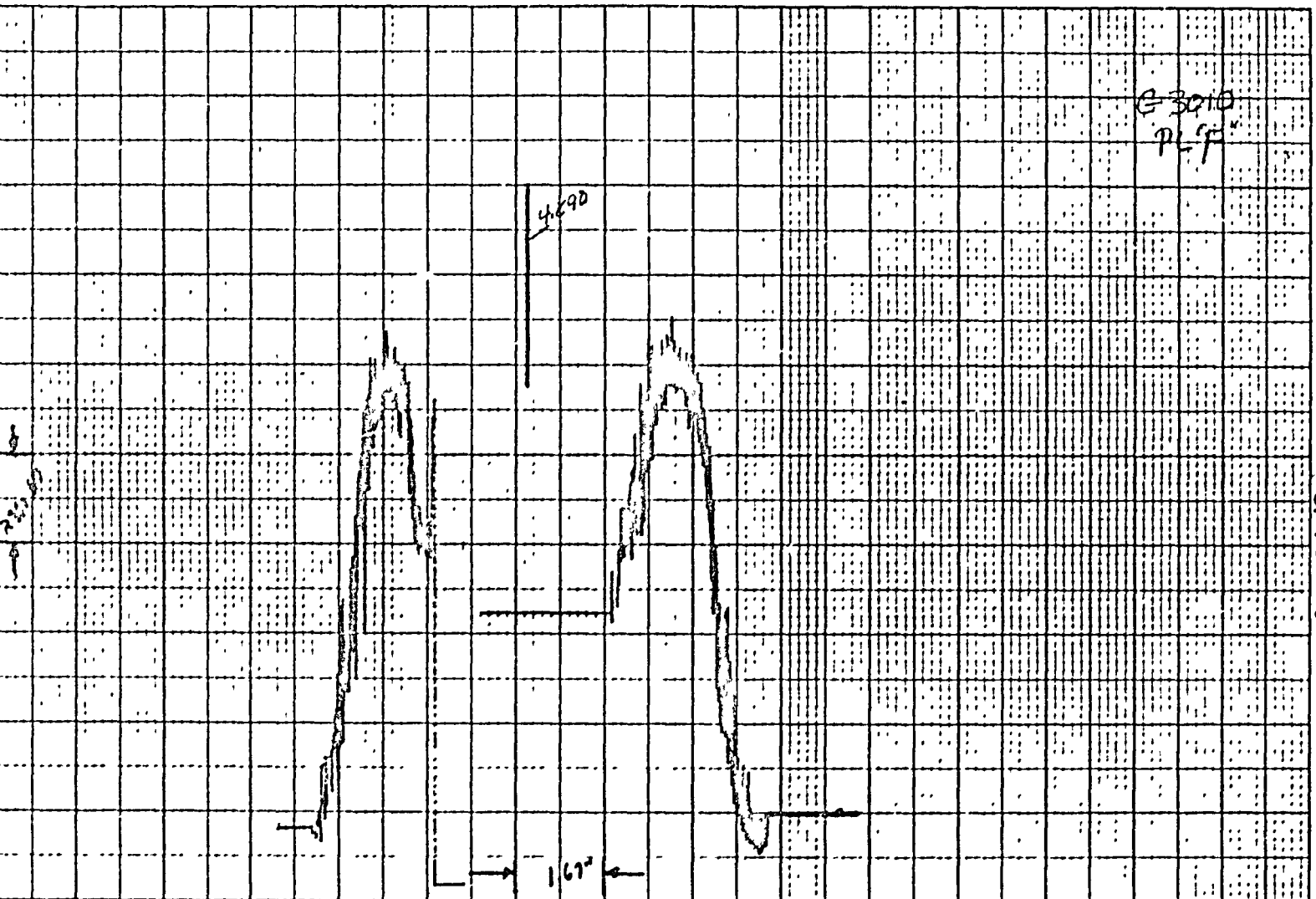
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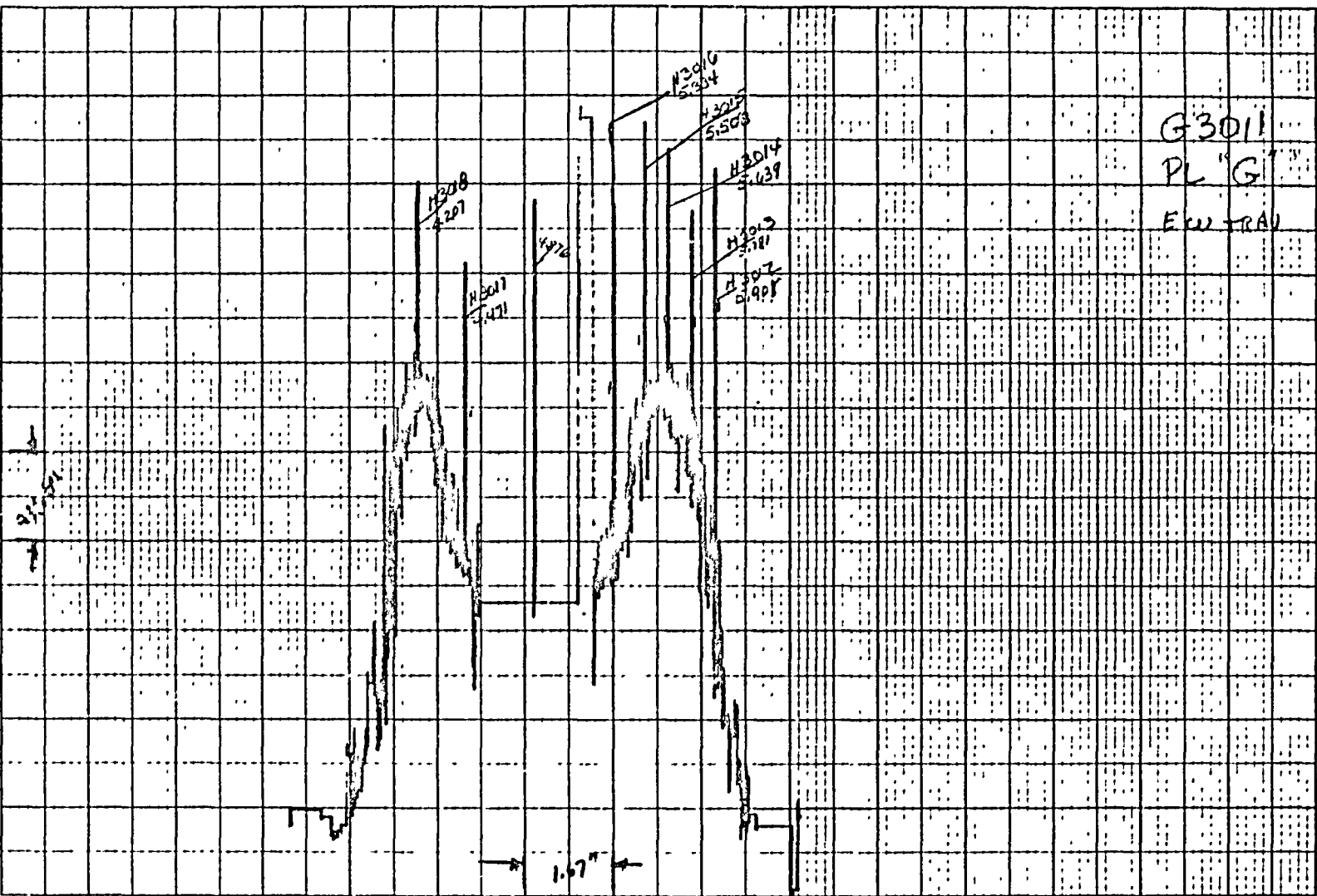
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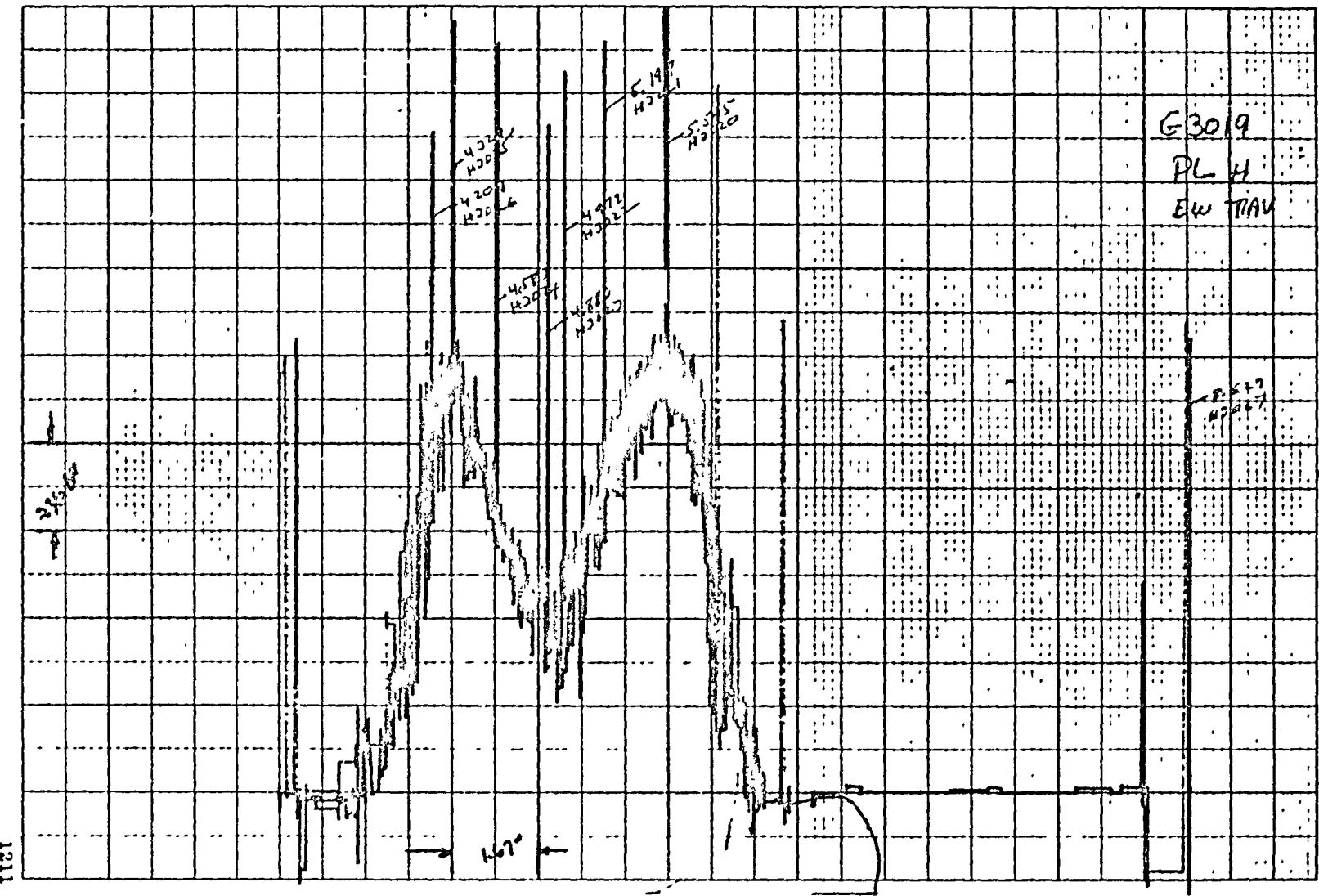
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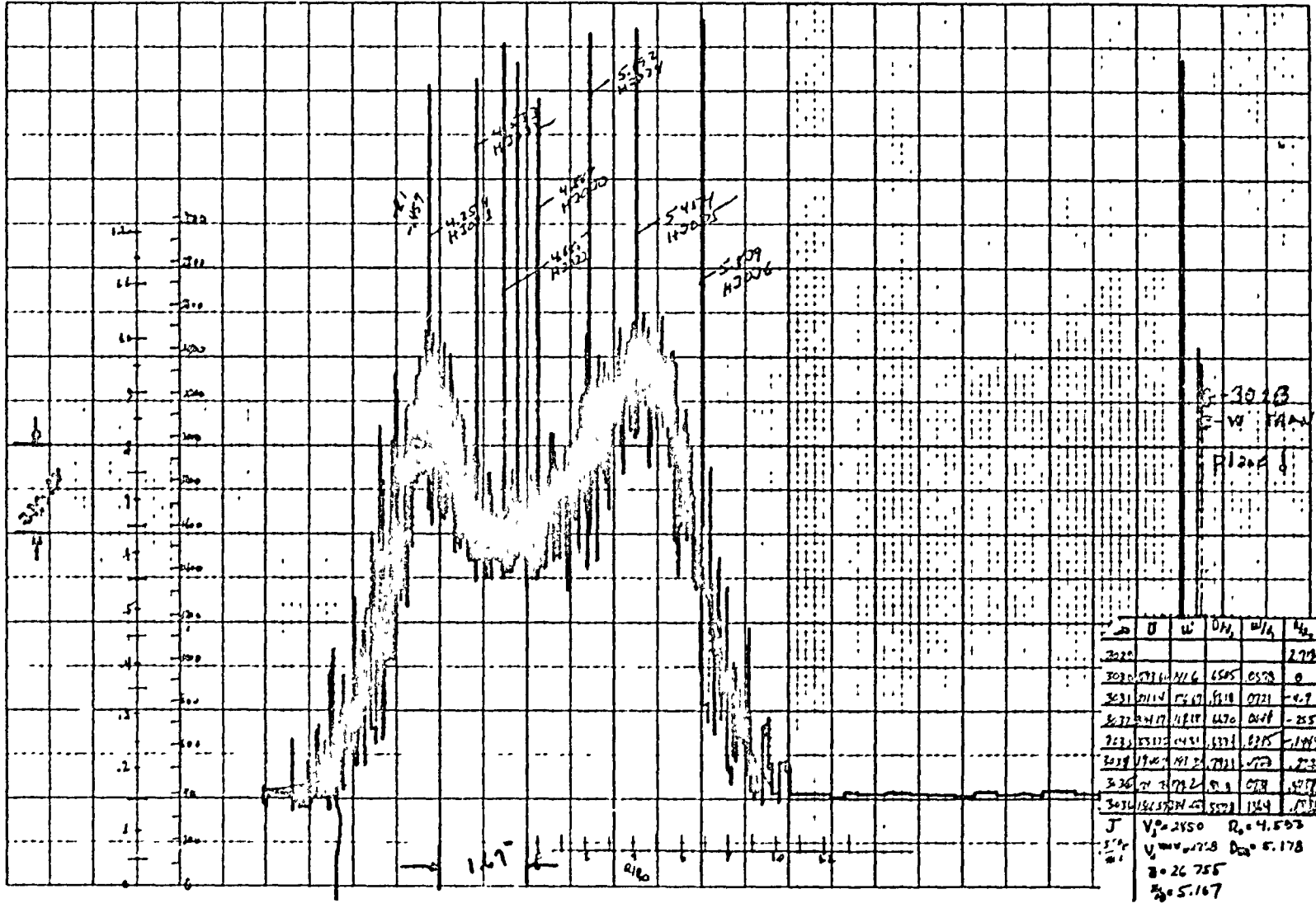


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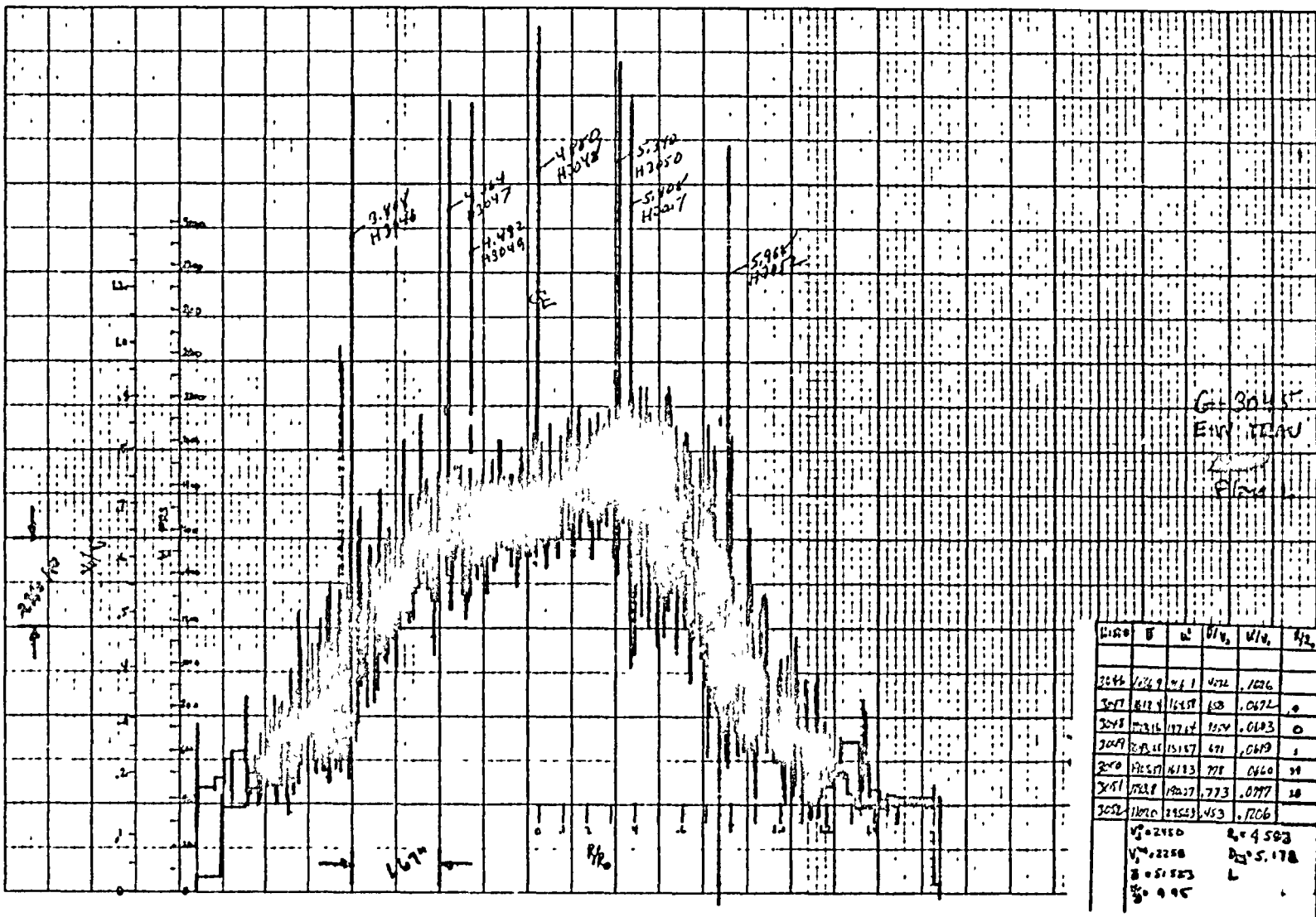


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2020	0.00	0.00	0.00	2.70
2020	0.01	0.16	0.50	0
2031	0.11	0.10	0.71	-0.9
2077	0.17	0.10	0.70	-2.55
2083	0.12	0.10	0.75	-1.94
2089	0.07	0.10	0.70	-2.35
3036	0.09	0.10	0.70	-1.17
3036	0.10	0.10	0.70	-1.11

$J = V_0 = 2450$      $R_0 = 4.502$   
 $V_0 = 2450$      $D_0 = 5.178$   
 $R = 26.755$   
 $R_0 = 5.167$



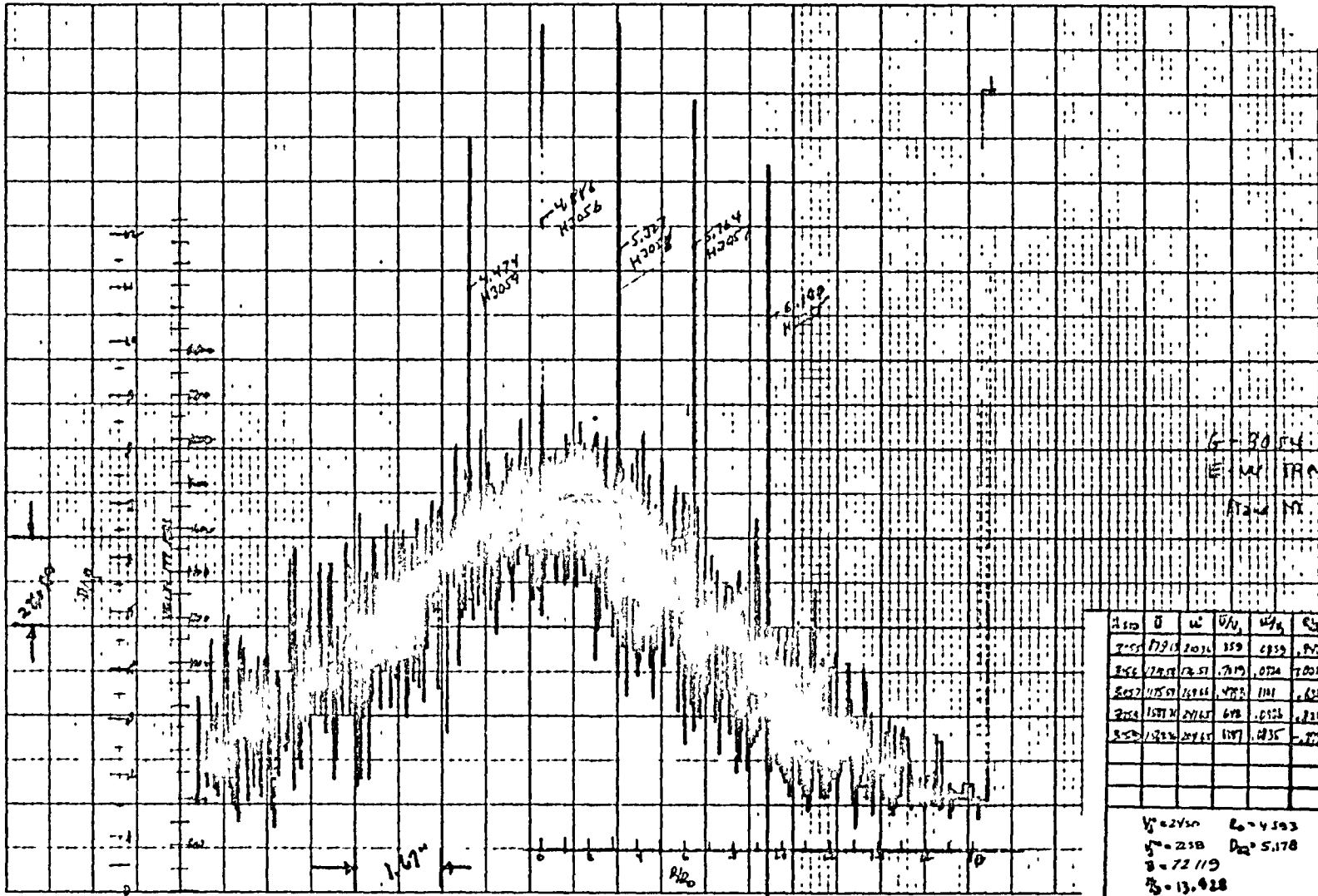


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 EIR 1240  
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3047	1128	1143	608	1072	0
3048	1216	1231	754	1043	0
3049	1316	1331	891	1043	1
3050	1427	1442	1028	1040	11
3051	1548	1563	1173	1077	18
3052	1680	1695	1323	1206	

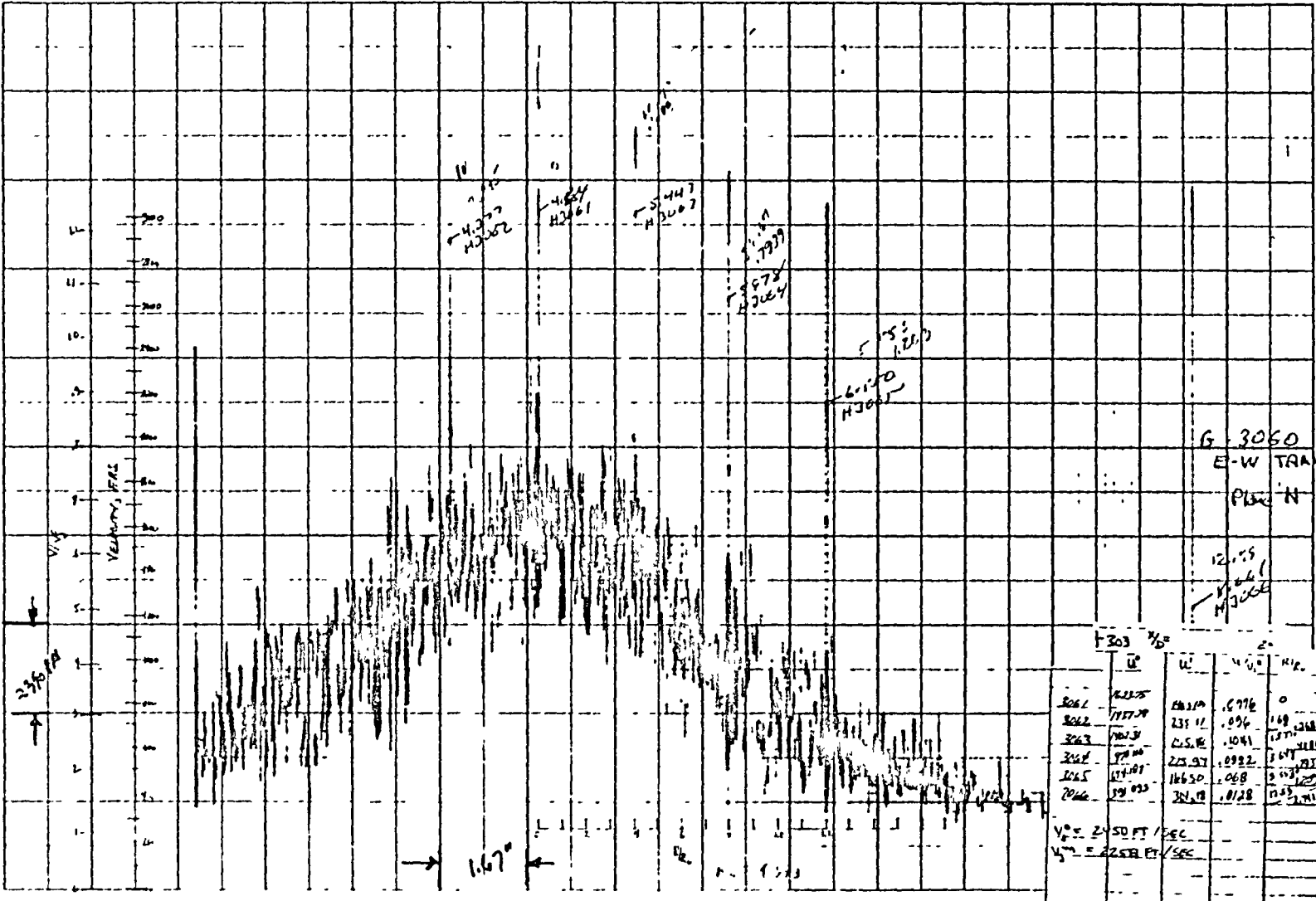
$\sum U = 2450$   
 $\sum W = 2528$   
 $\sum U_1 = 5825$   
 $\sum U_2 = 4503$   
 $\sum U_3 = 29$



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Time	U	W	U/V	W/V	R <sub>1</sub>
2055	179.13	1036	359	6859	0.79
2056	179.13	1251	719	6724	1.0014
2057	179.13	1696	1073	1101	0.816
2058	180.11	2715	678	0.013	0.215
2059	182.26	2945	1187	0.035	0.775

$V_0 = 2.50$      $R_0 = 4.503$   
 $V_1 = 2.50$      $R_1 = 5.178$   
 $V_2 = 72.119$   
 $V_3 = 13.028$



F 303 1/16

U	W	U	W
2061	122.5	2061	0.976
2062	117.7	2062	0.996
2063	101.3	2063	1.041
2064	79.0	2064	0.982
2065	51.1	2065	0.968
2066	29.0	2066	0.928

$V_p = 2450 \text{ FT/SEC}$   
 $V_s = 825 \text{ FT/SEC}$

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6.2.5 Laser Velocimeter Data for Model 5

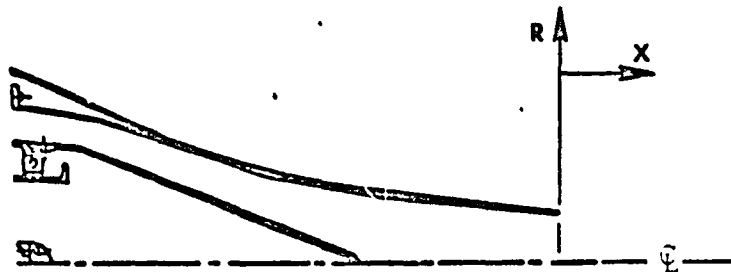
6.2.5.1 Laser Velocimeter (LV) Point Histogram Measurements for Model 5

Table XX contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

Following Table XX are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general <sup>199</sup>dynamic information.

without struts

conic nozzle



1218

NOZFL 5 Deg 52°4'

$V_1$  2420 FPS  $V_1^M$       FPS

POINT 513  $R_1$  2.517

$V_2$       FPS  $V_2^M$       FPS Date 12/17

TYPE TRAIL	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U'$	$U'/U'$	$U'/U'$
	AXIAL	EW	NS	PLANE	X	MS	4Deg	LOC.	R.INS.							
	REF 3.115	6.431	13.374													
E-W	3.132	—	13.374	H	1.52	.298	—	—	—	005	—	—			—	—
		6.406					E'	0	0	006	2073	150			.854	.062
		5.726					W	2.22	.845	007	2316	147			.754	.061
		6.053						1.19	.467	008	2200	163			.906	.067
		6.227						.60	.236	009	2289	186			.943	.077
		5.810						1.80	.707	010	2087	168			.860	.069
F-W	3.153	—		B	2.52	.494	—	—	—	011	—	—			—	—
	"	6.406		"	"	"	E	0	0	012	2428	252			1.000	.104
E-W	3.169	—		C	3.52	.702	—	—	—	013	—	—			—	—
		6.404					E	0	0	014	2734	219			1.126	.090
		7.183					E	2.58	1.013	015	2344	369			.986	.152
		6.975						1.89	.74	016	2503	357			1.031	.147
		6.606						.66	.259	017	2697	411			1.111	.169
		6.794						1.28	.503	018	2607	395			1.074	.163
		6.406					E	0	0	019	2734	364			1.126	.150
EW	3.183	—		D	4.50	.213	—	—	—	020	—	—			—	—
		6.408					E	0	0	021	2831	357			1.166	.147
		7.226					E	2.72	1.048	022	2319	350			.955	.144
		7.163						2.58	1.013	023	2386	378			.983	.156
		6.761						1.27	.499	024	2606	407			1.073	.168
		6.601						.64	.251	025	2720	114			1.120	.047
F-W		—						—	—	026	—	—			—	—
		7.179					E	2.57	1.009	027	2346	351			.966	.145
		6.195						1.29	.506	028	2578	275			1.062	.113
		6.960						1.84	.722	029	2476	314			1.020	.129

Table XX. IV Log Sheet Model 5.

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1102 FL 5 Deg 5074

V<sub>1</sub>: 2422 FPS V<sub>1M</sub>:          FPS

POINT 513 R<sub>i</sub>: 2547

V<sub>2</sub>:          FPS V<sub>2C</sub>: 0 FPS Date 12/19/77

TYPE TRAIL	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> <sup>o</sup>	U <sub>1/2</sub> <sup>o</sup>	U <sub>1/2</sub> <sup>m</sup>	U <sub>1/2</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X	MS	Y/DEG	LOC.	R.INS.							
KF	3.115	6.409	13374													
	3.183	6.405	13394	L	4.50	.283	E	0	0	030	2831	220			1.166	.091
E-W	3.198	—		E	550	1.079	—	—	—	031	—	—			—	—
		6.408					E	0	0	032	2191	155			.902	.064
		7.175					E	2.55	1.001	033	2203	237			.907	.098
		6.674					"	.83	.326	034	2476	243			1.020	.100
		6.092					W	1.06	.416	035	2421	397			.997	.164
F-W	3.228	—		F	748	1.468	—	—	—	036	—	—			—	—
		6.408					E	0	0	037	2001	849			.824	.035
		6.603					E	.65	.255	038	2021	592			.832	.024
		6.796						1.29	.506	039	2082	649			.857	.027
		6.949						1.80	.707	040	2184	645			.900	.027
		7.104						2.32	.911	041	2225	174			.916	.072
		7.175						2.55	1.001	042	1883	290			.776	.119
E-W	3.266	—		G	10.00	1.963	—	—	—	043	—	—			—	—
		7.175					E	2.55	1.001	044	2259	269			.930	.111
		6.406					E	0	0	045	2676	111			1.102	.046
		6.602					E	.65	.255	046	2619	338			1.079	.139
		6.794						1.28	.503	047	2572	252			1.059	.104
		6.981						1.91		048	2465	309			1.015	.127
E-W	3.326	—		H	1397	2.742	—	—	—	049	—	—			—	—
		6.794					E	1.28	.750	050	2089	118			.860	.049
		6.970						1.87	.734	051	2146	165			.884	.068
		7.047						2.13	.836	052	2090	191			.861	.079
		7.183						2.58	1.013	053	1422	432			.586	.178
		6.406					E	0	0	054	1998	56.8			.823	.023

Table XX. LV Log Sheet Model 5 (Continued).

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1220

NO. FL 5 Deg 5094

$V_1$  2428 FPS  $V_1^M$  \_\_\_\_\_ FPS

POINT 513  $R_1$  2547

$V_2$  \_\_\_\_\_ FPS  $V_2^M$  0 FPS

Date 12/19/77

TYPE TRAIL	POSITION (INCHES)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> FPS	U <sub>1/3</sub> FPS	U <sub>1/3</sub> FPS	U <sub>1/3</sub> FPS
	AXIAL	RW	NS	PLANE	X	INS	4Deg	LOC.	R.INS.							
	REF 3.115	6.409	13.394													
E-W	3507	—	13.394	J	25.76	5046	—	—	—	055	—	—			—	—
		6.406					E	0	0	056	2142	107			.882	.044
		7.377					E	3.23	1.268	057	892	304			.367	.125
		7.181						2.57	1.009	058	1571	439			.622	.181
		6.942						1.78	.699	059	2252	249			.928	.103
		6.795						1.29	.506	060	2354	365			.970	.150
		5.937					W	1.57	.616	061	2369	306.			.976	.126
E-W	—	—	—				—	—	—	062	—	—			—	—
		6.796					E	1.29	.506	063	2336	262			.962	.108
E-W	3609	—	—	K	3801	7462	—	—	—	064	—	—			—	—
		6.796					E	1.29	.506	065	2101	281			.865	.116
		7.368						3.20	1.256	066	891	308			.367	.127
		6.409					E	0	0	067	2243	166			.924	.068
		6.507					E	.66	.259	068	2189	202			.902	.083
		6.969						1.87	.734	069	1653	410			.681	.169
		7.196						2.62	1.029	070	1153	384			.475	.158
E-W	3890	—	—	L	5000	9815	—	—	—	071	—	—			—	—
		7.196					E	2.62	1.029	072	1156	394			.475	.162
		6.406					E	0	0	073	2180	296			.898	.122
		6.167					W	.81	.318	074	2181	294			.898	.121
		6.604					E	.65	.255	075	2088	348			.860	.143
		6.794						1.28	.503	076	1791	402.			.738	.166
		7.952						5.14	2.018	077	482	197			.199	.081
		7.565						3.85	1.512	078	713	255			.294	.105

Table XX. LV Log Sheet Model 5 (Continued).

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MODEL 5 Deg 5.09K

$V_j^0 = 2428$  FPS  $V_j^M = \text{---}$  FPS

POINT 513  $R_L^0 = 2.574$

$V_j^i = \text{---}$  FPS  $V_{ALC} = 0$  FPS

Date 12/19/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U'$	$U'/U_M$	$U'/U'_M$
	AXIAL	EW	NS	PLANE	X INS	$\theta$ Deg	LOC.	R INS.	$R/R_L^0$							
	3.115	6.409	13394													
E-W	4.172	—	13394	M	700	13.74	—	—	—	079	—	—			—	—
		7.565					E	3.85	1.512	080	731	245			.301	.101
		8.723					"	7.71	3.027	081	340	163			.140	.067
		5.957					W	1.51	.593	082	1548	360			.638	.148
		1.405					E	0	0	083	1550	370			.638	.152
		6.792					E	1.28	.503	084	1309	363			.539	.150
		7.178					"	2.56	1.005	085	982	324			.404	.133
E-W	3.138	—		A	1.52	.292	—	—	—	086	—	—			—	—
		7.172					E	2.56	1.005	087	2288	218			.942	.090
		6.407					E	0	0	088	2163	76.4			.891	.031
		6.601					E	.64	.251	089	2236	113			.921	.047
		6.794						1.28	.503	090	2334	271			.961	.112
		6.906						1.66		091	2345	314			.966	.129
AXIAL	—	6.406		—	—	—	E	0	0	092	—	—			—	—
AXIAL	—	6.602		—	—	—	E	.64	.252	093	—	—			—	—
AXIAL	—	6.794		—	—	—		1.28	.503	094	—	—			—	—
AXIAL	—	7.180		—	—	—		2.57	1.009	095	—	—			—	—
AXIAL	—	7.372			—	—		3.21	1.260	096	—	—			—	—

Table XX. LV Log Sheet Model 5 (Continued).

ORIGINAL PAGE IS  
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1222

MODEL 5 Deg 5.094 $V_j^0 = 2431$  FPS  $V_j^M =$  \_\_\_\_\_ FPSPOINT 515  $R_i^0 = 2.547$  $V_j^i =$  \_\_\_\_\_ FPS  $V_{R/C} = 400$  FPS

Date 12/18/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	R/R <sub>2</sub>							
AFW	3.113	6.386	13.388													
	3.117	10.712	13.374		265	.052	E	14.42	5.662	101	389	11.2				
	3.875	"			50.46	4.906	"	"	"	102	380	26.0				
E-W	3.138	-		A <sup>1</sup>	1.66	.326	-	-	-	103	-	-				
		7.197					E	2.70	1.060	101	2295	96.3			9.44	.040
		6.386					E	0	0	105	2210	85.3			.909	.035
		6.577					E	.64	.251	106	2248	127			.925	.052
		6.771						1.28	.503	107	2335	305			.961	.125
		6.912						1.75	.687	108	2364	330			.972	.136
		7.155						2.56	1.005	109	2338	302			.962	.124
AXIAL	-	6.386					E	0	0	110	-	-			-	-
AXIAL	-	6.579						.64	.251	111	-	-			-	-
AXIAL	-	6.771						1.28	.503	112	-	-			-	-
AXIAL	-	7.157						2.57	1.009	113	-	-			-	-
AXIAL	-	7.542						3.65	1.512	114	-	-			-	-
E-W	3.151	-		B	2.52	.495	-	-	-	115	-	-			-	-
	"	6.386		"	"	"	E	0	0	116	2494	78.1			1.026	.032
E-W	3.166	-		C	3.51	.689	-	-	-	117	-	-			-	-
		6.360					W	0.87	.034	118	2756	331			1.134	.136
		6.388					E	0	0	119	2737	375			1.126	.154
		6.58					E	.65	.255	120	2712	287			1.116	.118
		6.771						1.28	.503	121	2602	343			1.071	.141
		7.157						2.57	1.009	122	2416	296			.994	.122
		6.956						1.90	.746	123	2500	323			1.028	.133
		10.721						14.15	5.673	124	394	69.9			-	-

Table XX. LV Log Sheet Model 5 (Continued).

ORIGINAL PAGE IS  
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MODEL 5 Deg 5.094

$V_j^0 = 2431$  FPS  $V_j^M =$           FPS

POINT 515  $R_i =$  2.547

$V_j^i =$           FPS  $V_{R/C} =$  4/00 FPS Date 1.19/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> <sup>0</sup>	U <sub>1/2</sub> <sup>i</sup>	U <sub>1/2</sub> <sup>M</sup>	U <sub>1/2</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	°/Deg	LOC.	R INS.	R/R <sub>2</sub>							
REF	3.113	6386	13.39P													
E-W	3.19P	—	13.39P	E	5.63	1105	—	—	—	125	—	—			—	—
		10.71P					E	14.44	5.669	126	389	27.8			—	—
		6.110					W	.92	.361	127	2550	66.3			1049	.027
		6.389					E	0	0	128	2322	234			.955	.096
		6.578					E	.64	.251	129	2421	306			.996	.126
		6.773						1.29	.506	130	2507	391			1031	.161
		6.632						.82	.322	131	2478	300			1019	.123
		7.155						2.56	1.005	132	2340	276			.863	.114
E-W	3.181	—		D	4.50	.883	—	—	—	133	—	—			—	—
	"	6.386		"	"	"	E	0	0	134	2797	228			1.151	.094
E-W	3.228	—		F	7.62	1.476	—	—	—	135	—	—			—	—
		7.155					E	2.56	1.005	136	1997	226			.821	.093
		7.045					"	2.20	.864	137	2280	96.3			.938	.040
		6.384					E	0	0	138	1969	64.5			.810	.027
E-W	3.266	—		G	10.13	1.989	—	—	—	139	—	—			—	—
		6.383					E	0	0	140	2597	313			1.068	.129
		7.155					E	2.56	1.005	141	2368	287			.974	.118
		6.770						1.28	.503	142	2598	83.3			1.069	.034
		6.575						.63	.247	143	2611	239			1.074	.098
		6.251					W	.45	.177	144	2613	304			1.075	.125
		10.733					E	14.49	5.689	145	395	75.9			—	—
E-W	3.326	—		H	14.11	2.770	—	—	—	146	—	—			—	—
		10.733					E	14.49	5.689	147	393	14.6			—	—
		6.389					E	0	0	148	1999	95.6			.822	.039
		6.576					E	.63	.247	149	2034	72.2			.837	.030

Table XX. LV Log Sheet Model 5 (Continued).

ORIGINAL PAGE IS  
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1224

MODEL 5 Deg 5.298 $V_j^0 = 2431$  FPS  $V_j^M =$  \_\_\_\_\_ FPSPOINT 515  $R_i = 2517$  $V_j^i =$  \_\_\_\_\_ FPS  $V_{r/c} = 400$  FPS

Date 12/19/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U/4°	U/15°	U/1/2m	U/1/4m
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/R <sub>2</sub>							
REF	3113	6386	13398													
	3326	6768	13398	H	1411	2770	E	1.27	479	150	2073	90.7			853	.037
		7156						2.57	1009	151	1838	333			756	.137
		7023						2.12	.832	152	2156	150			.887	.062
EW	3507	—		J	2609	5.122	—	—	—	153	—	—			—	—
		7346					E	3.20	1.256	154	982	30.1			.404	.124
		6390					E	0	0	155	2417	107			.994	.040
		6580					E	.65	.255	156	2455	233			1.010	.096
		6.770						1.28	.503	157	2445	304			1.006	.125
		7157						2.57	1.009	158	1744	379			.717	.156
E-W	3.629	—		K	38.15	7.489	—	—	—	159	—	—			—	—
		6386					E	0	0	160	2417	252			.994	.104
		2246					W	13.80	5.418	161	2434	282			1.001	.116
		6.580					E	.65	.255	162	2444	249			1.005	.102
		6.771						1.28	.503	163	2337	288			.961	.1080
		7159						2.58	1.013	164	1521	400			.626	.165
		7349						3.21	1.260	165	1079	314			.444	.129
E-W	3.870	—		L	50.13	9.841	—	—	—	166	—	—			—	—
		7349					E	3.21	1.260	167	1077	300			.443	.123
		7971						5.28	2.073	168	552	139			.227	.057
		7158						2.57	1.009	169	1362	363			.560	.149
		6.770						1.28	.707	170	3010	294			.827	.121
		6.580						.65	.255	171	2152	210			.885	.086
		6.887					E	0	0	172	2183	181			.898	.074
		6.165					W	.74	.291	173	2176	224			.895	.092

Table XX. LV Log Sheet Model 5 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 5 Deg 5.094

POINT 15 R<sub>i</sub> 2.547

$V_j^0 = 2431$  FPS  $V_j^M = \text{---}$  FPS

$V_j^i = \text{---}$  FPS  $V_{0/c} = 431$  FPS  $\text{Inch } 12/13/17$

TYPE TRAJ.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/1</sub>	U <sub>1/1M</sub>	U <sub>1/1S</sub>
	AXIAL	EN	HS	PLANE	R	MS/1000	LOC.	R INS.	R/2							
	POS 3/13	6376	13391													
E-V	4.172	—	13397	M	2013	13.767	—	—	—	174	—	—			—	—
		10722					E	14.59	5.72	175	365	71.8			—	—
		7826						5.13	2014	176	658	176			.271	.072
		2546						2.57	1.519	177	265	228			.356	.094
		7318						3.21	1260	178	1600	370			.411	.111
		7158						2.57	1009	179	1159	303			.478	.125
		6772						1.29	506	180	1618	369			.666	.152
		6580						.65	255	181	1822	334			.901	.137
		6385						0	0	182	1929	286			.794	.118
		5992						W	1.31	514	183	1885	303		.775	.125

Table Xf. LV Log Sheet Model 5 (Concluded).

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6.2.5.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 5

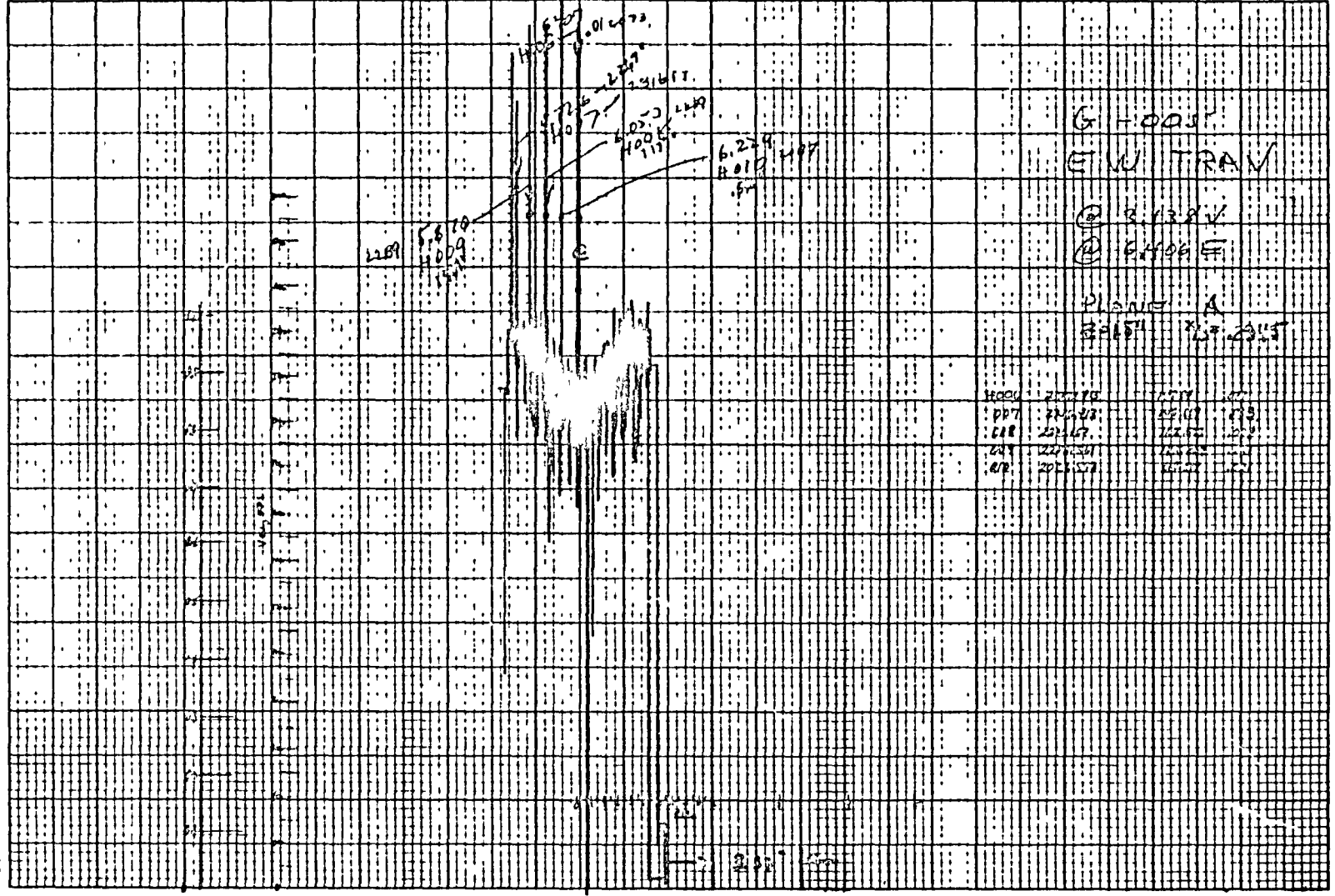
Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XX.

The velocity and physical position information is identified with handwritten scales on the ordinate and abscissa.

MODEL 5  
TEST POINT 513



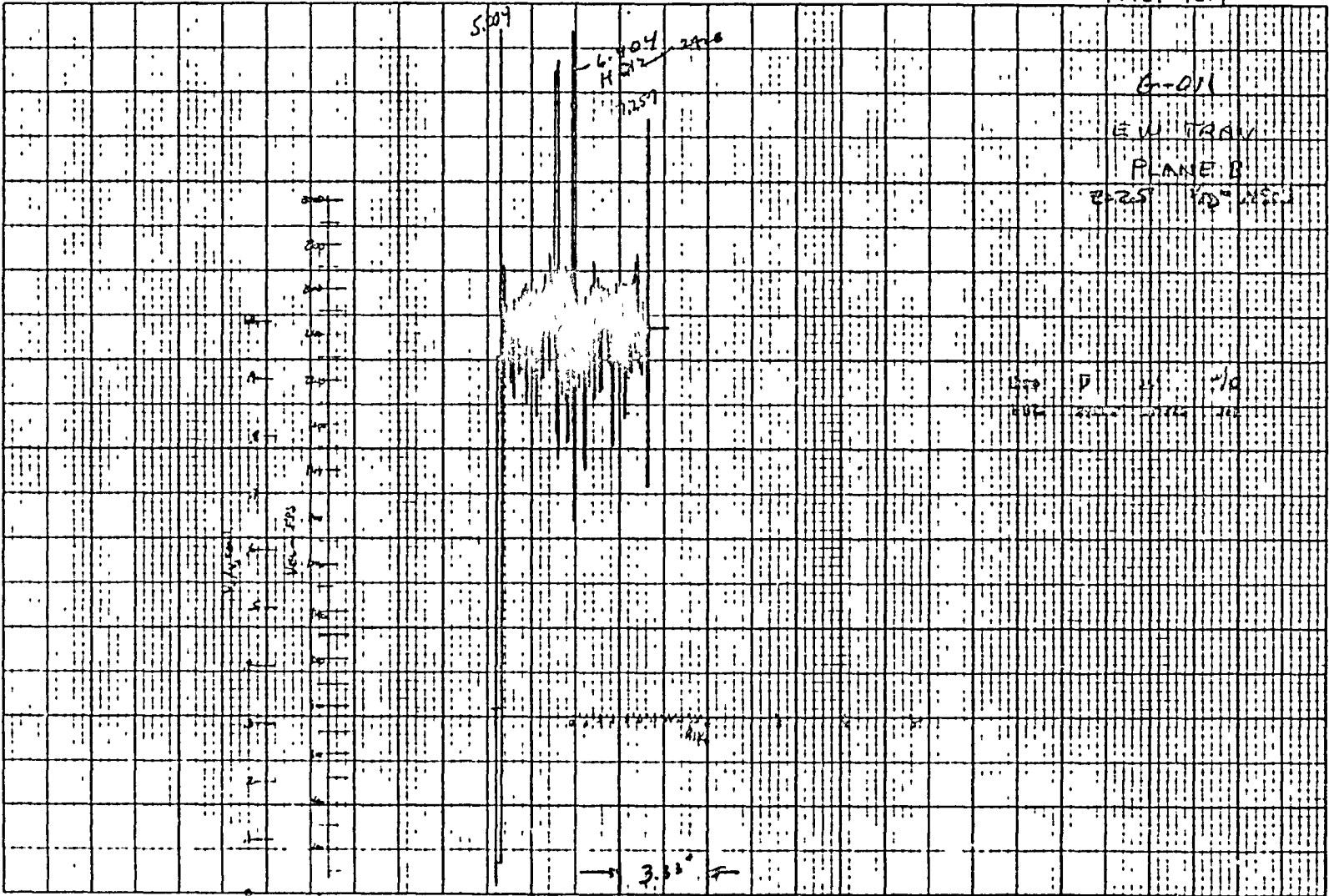
513 77429-1219



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1228

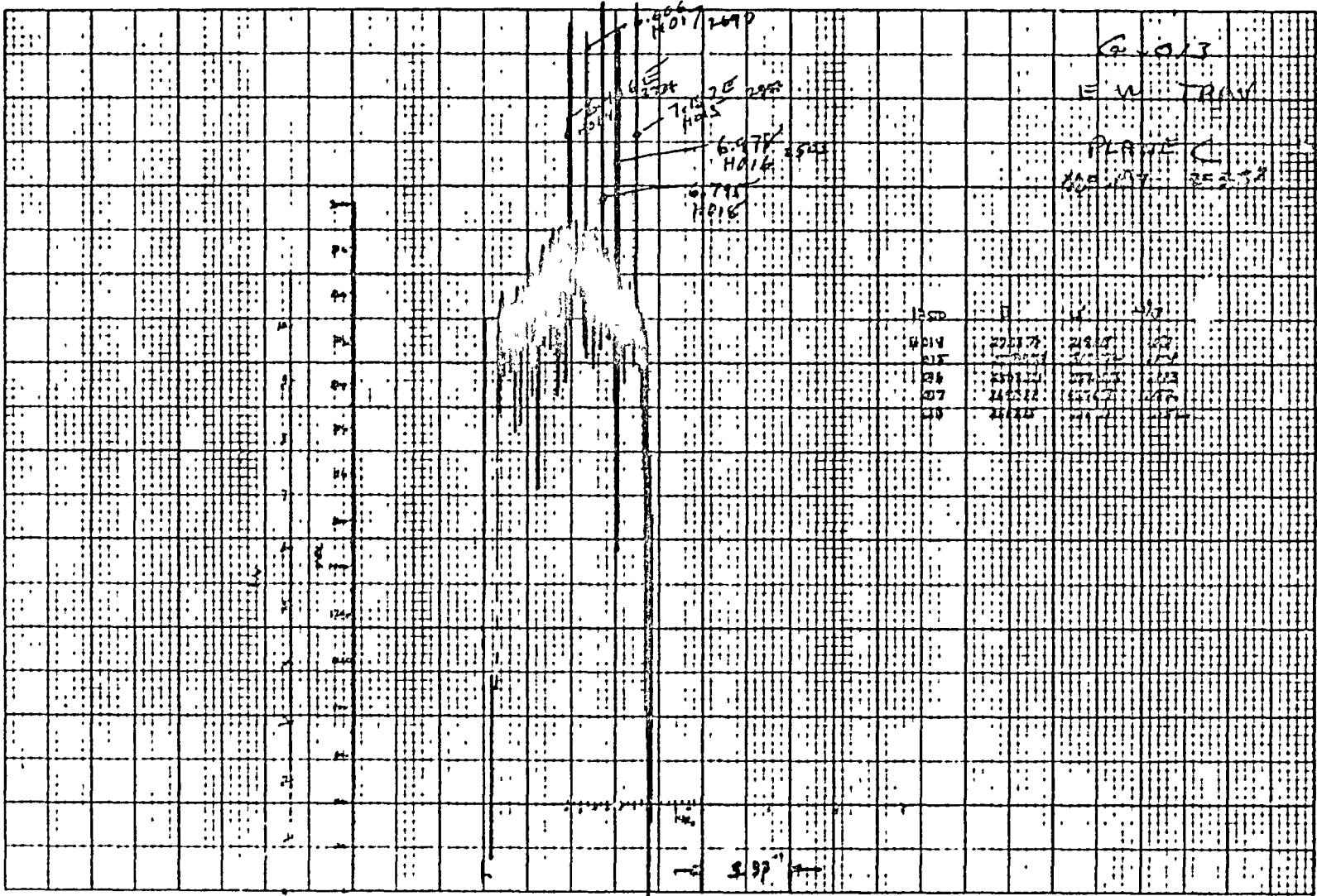
77429-1219



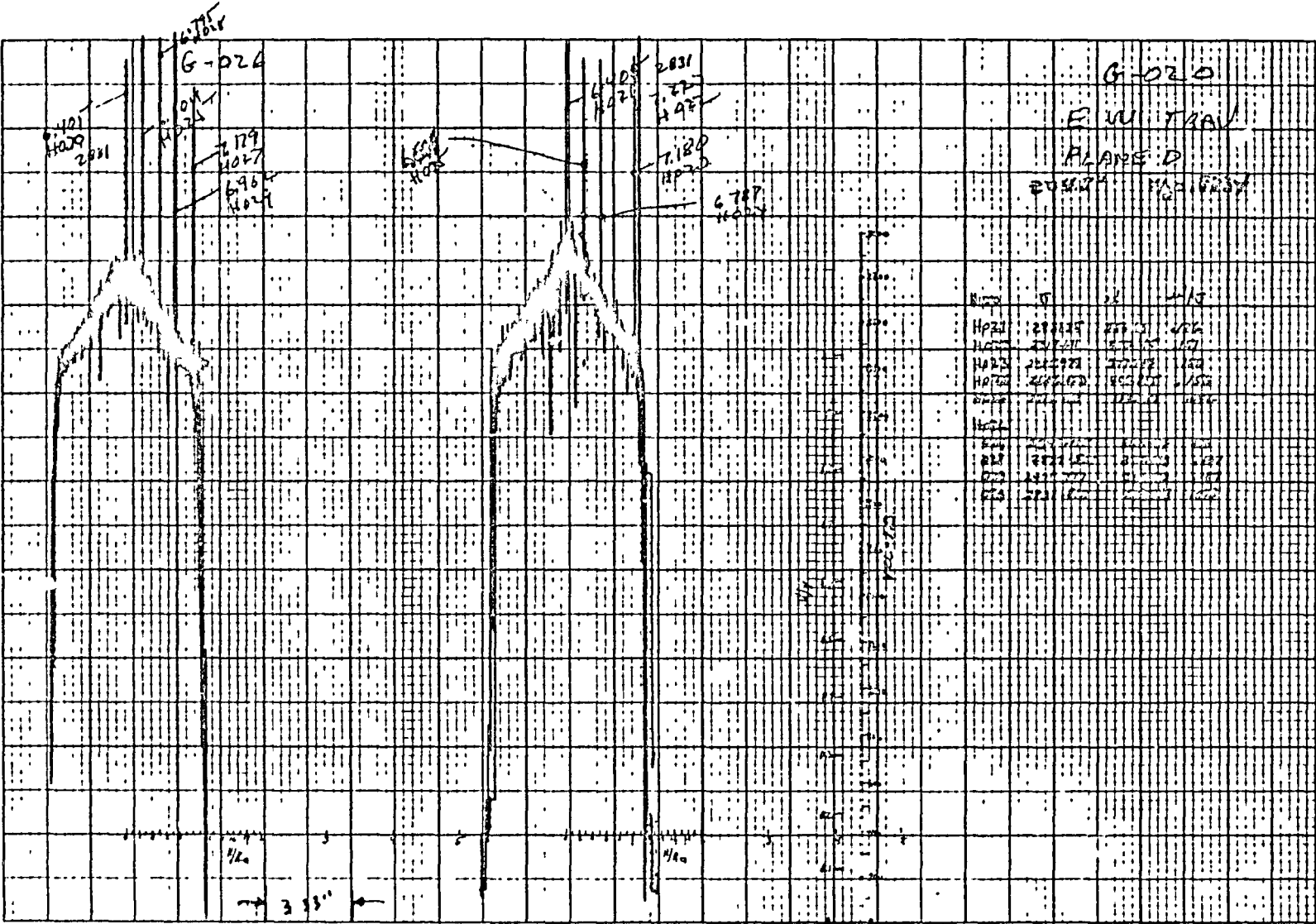
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2 JAN 1952  
01 200

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1230

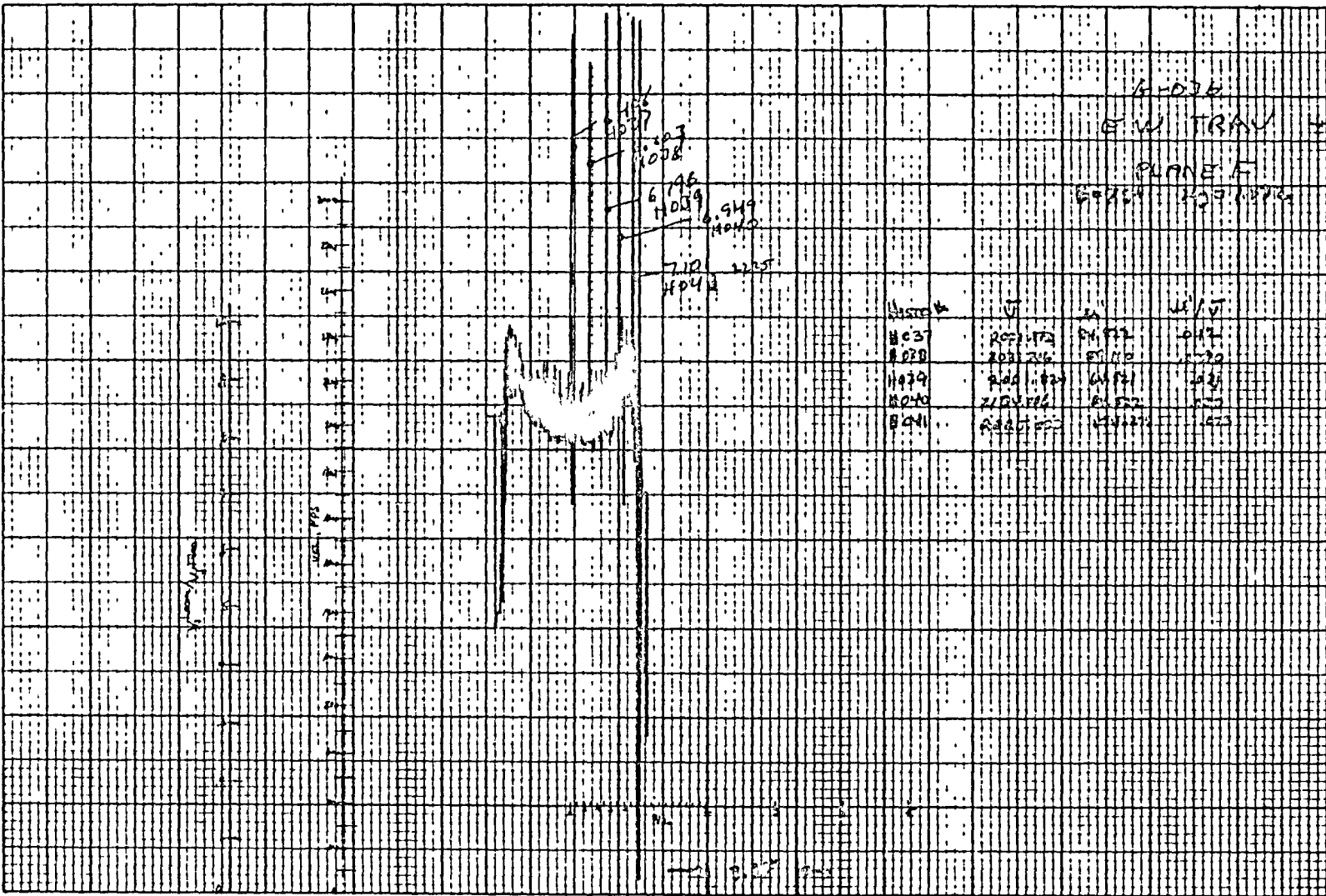


G-020  
 E W TRAV  
 ALARMS D  
 2031 11:27  
 11:28

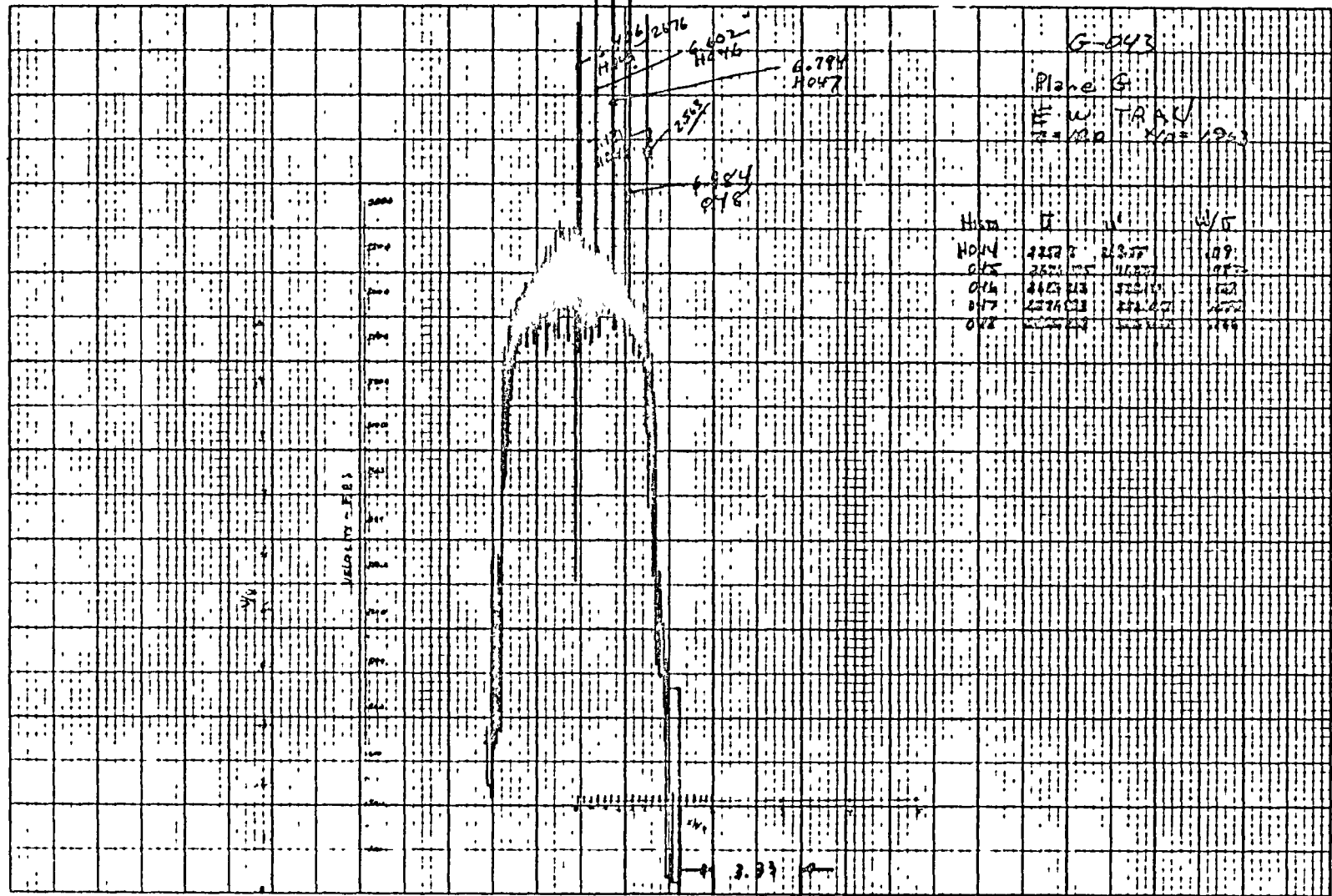
Time	1	2	3	4
11:27	11:27	11:27	11:27	11:27
11:28	11:28	11:28	11:28	11:28
11:29	11:29	11:29	11:29	11:29
11:30	11:30	11:30	11:30	11:30
11:31	11:31	11:31	11:31	11:31
11:32	11:32	11:32	11:32	11:32
11:33	11:33	11:33	11:33	11:33
11:34	11:34	11:34	11:34	11:34
11:35	11:35	11:35	11:35	11:35
11:36	11:36	11:36	11:36	11:36
11:37	11:37	11:37	11:37	11:37
11:38	11:38	11:38	11:38	11:38
11:39	11:39	11:39	11:39	11:39
11:40	11:40	11:40	11:40	11:40
11:41	11:41	11:41	11:41	11:41
11:42	11:42	11:42	11:42	11:42
11:43	11:43	11:43	11:43	11:43
11:44	11:44	11:44	11:44	11:44
11:45	11:45	11:45	11:45	11:45
11:46	11:46	11:46	11:46	11:46
11:47	11:47	11:47	11:47	11:47
11:48	11:48	11:48	11:48	11:48
11:49	11:49	11:49	11:49	11:49
11:50	11:50	11:50	11:50	11:50

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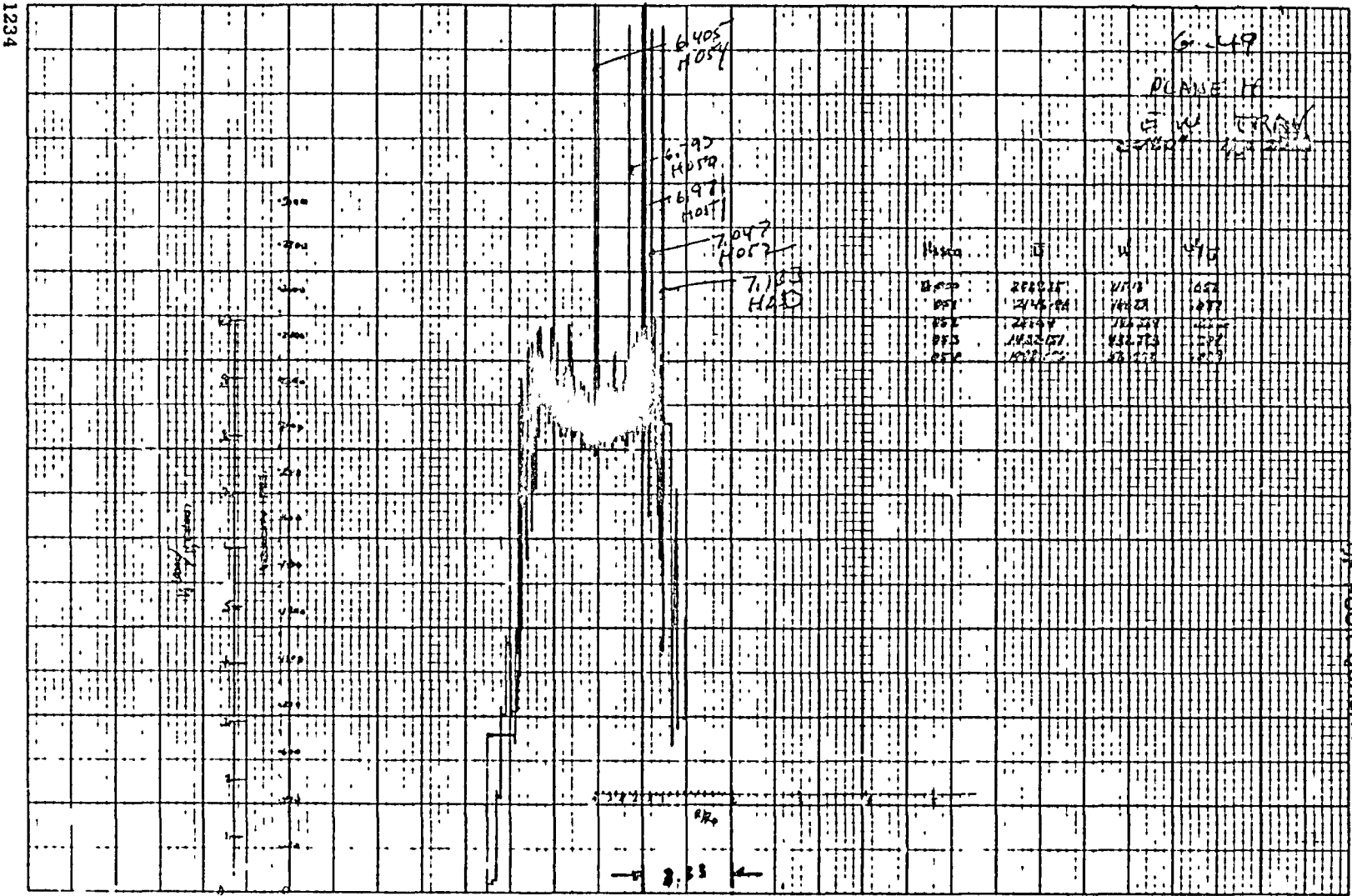




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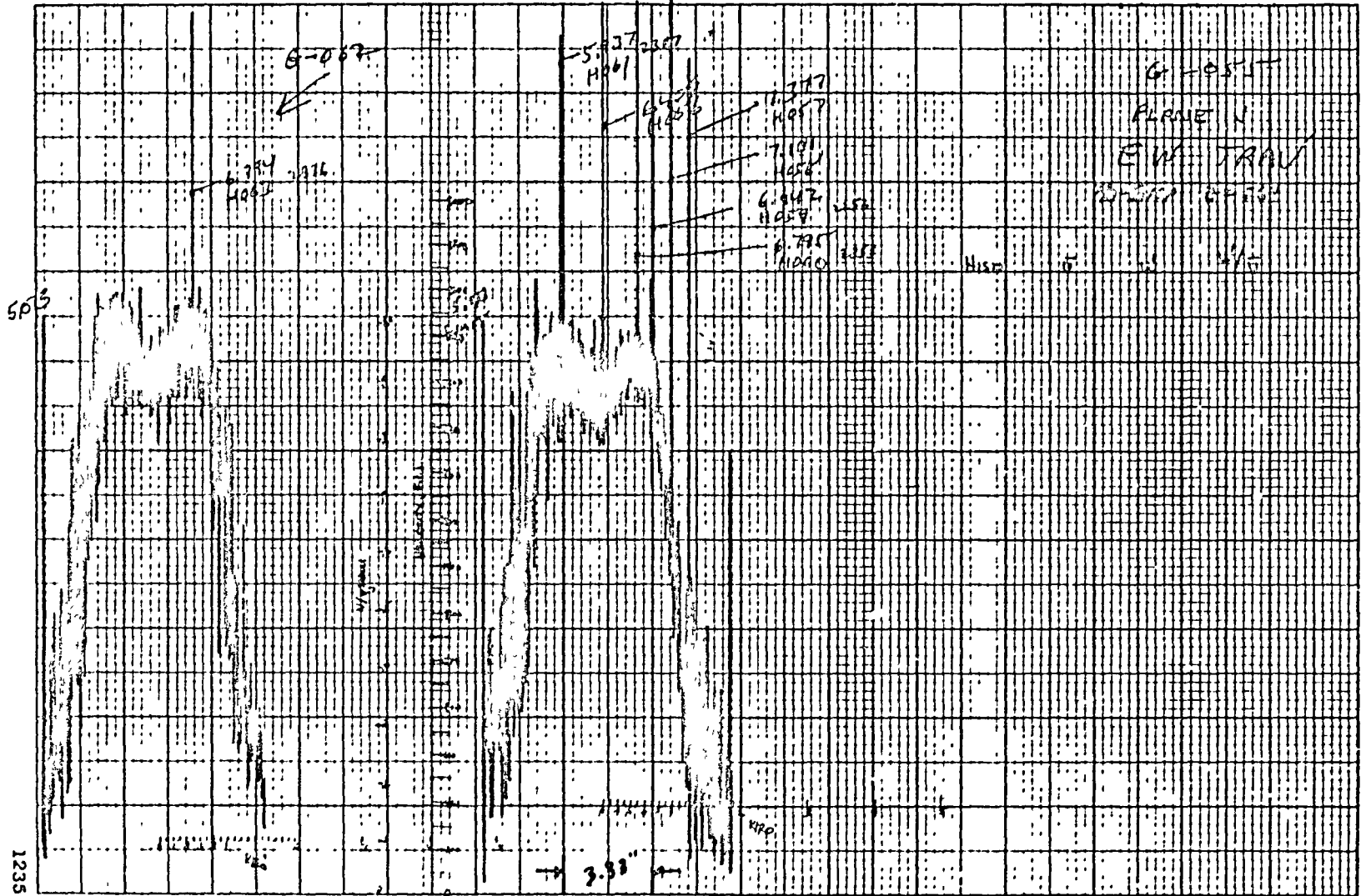
7000

2



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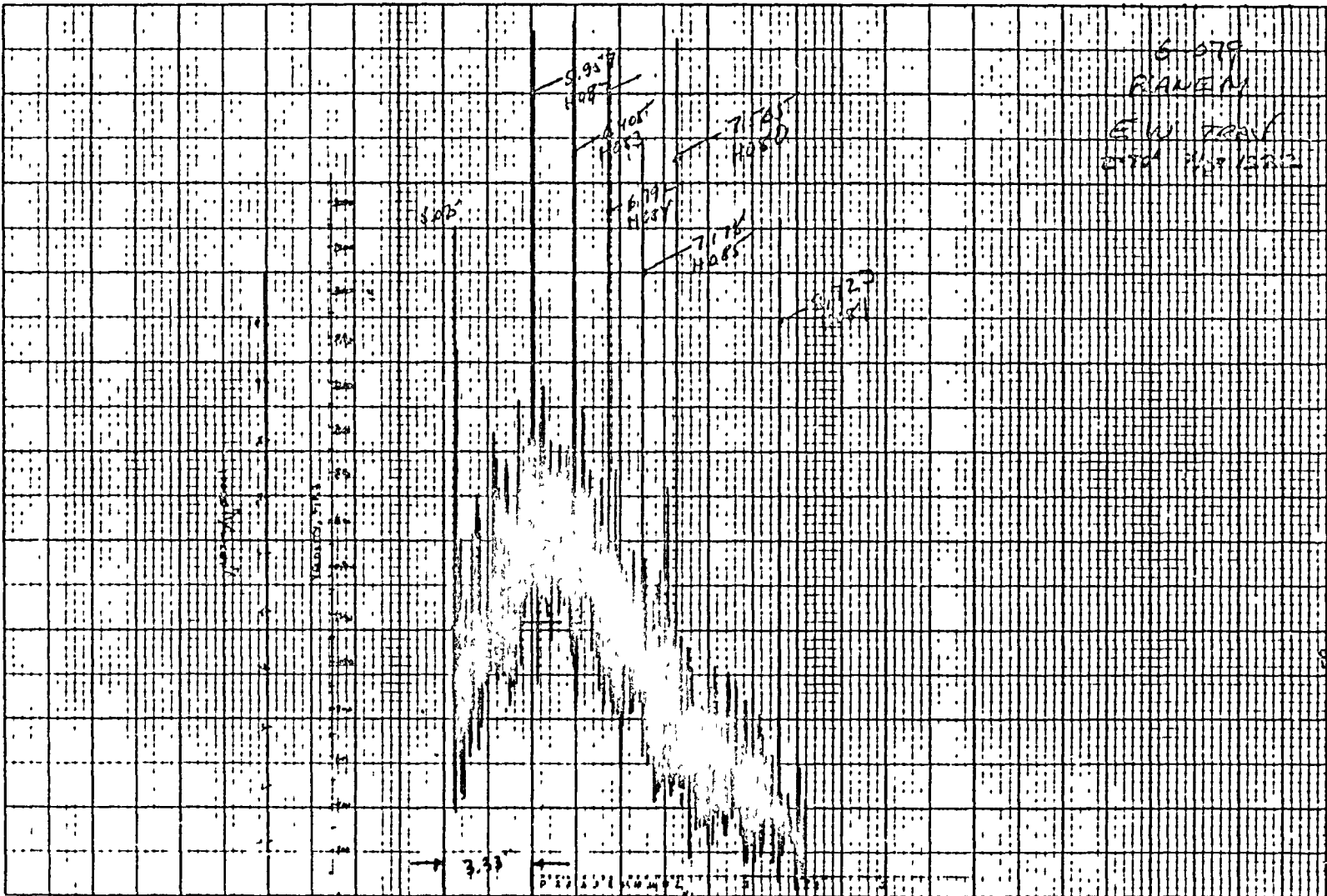


503

1235

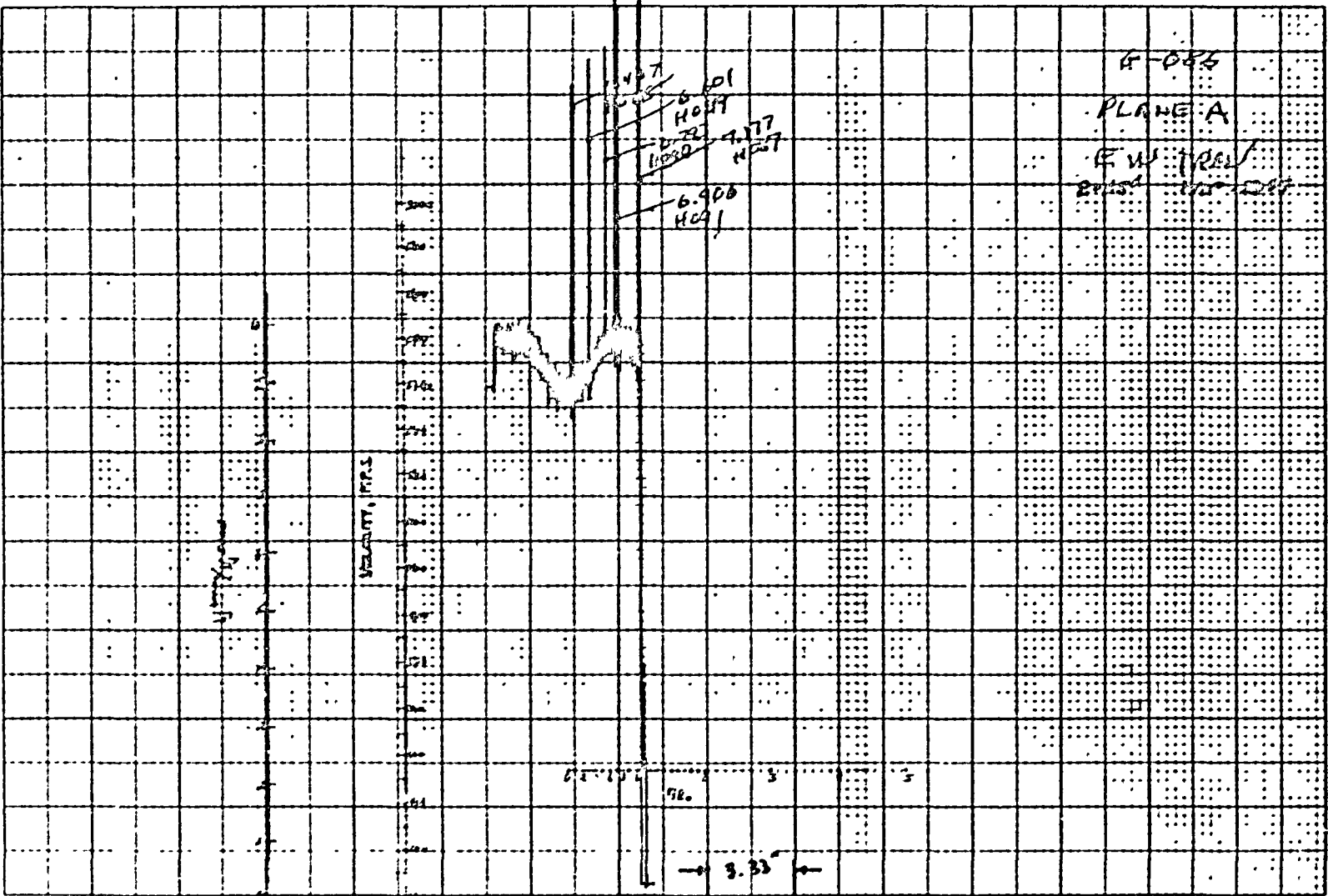




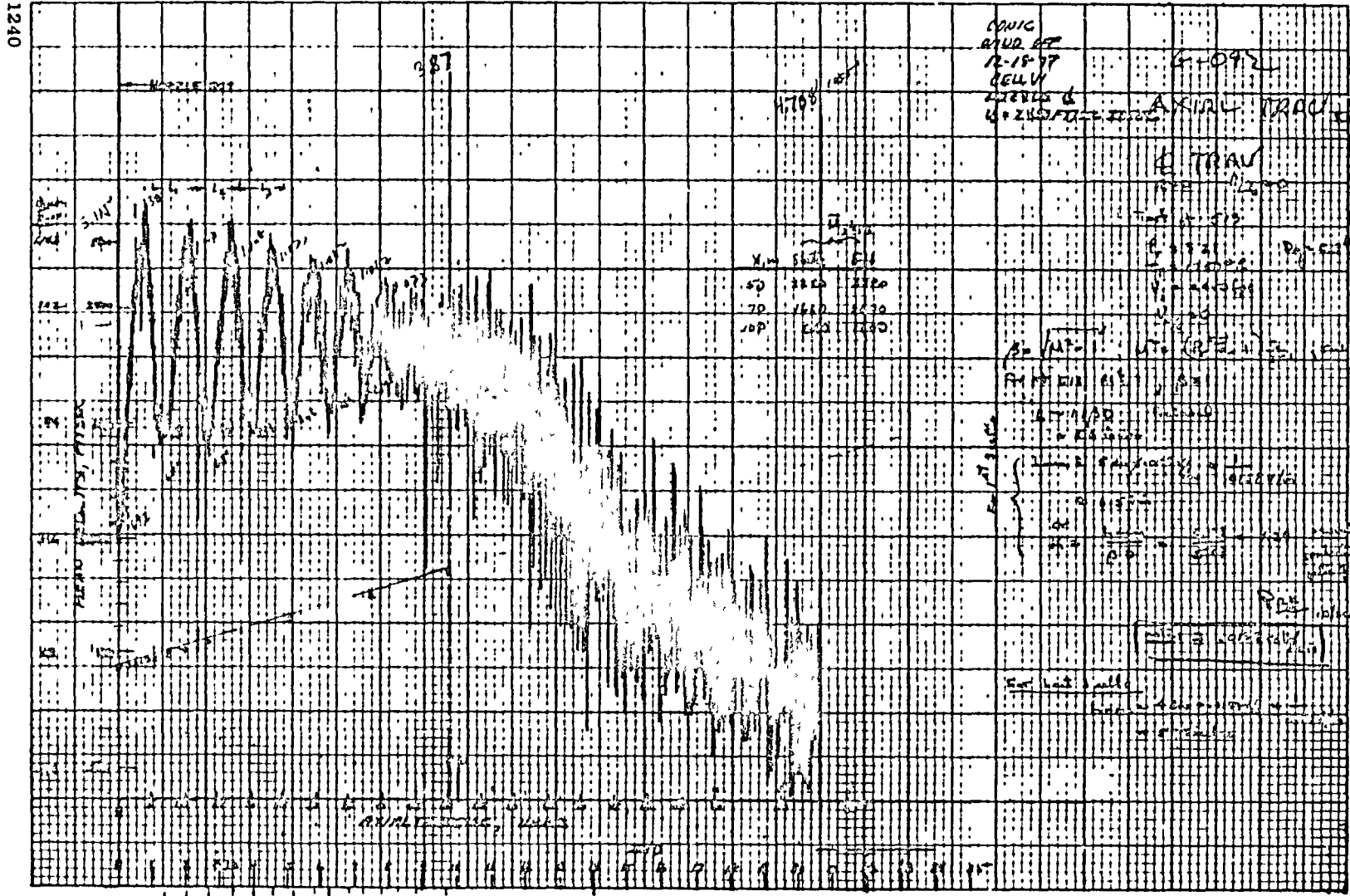


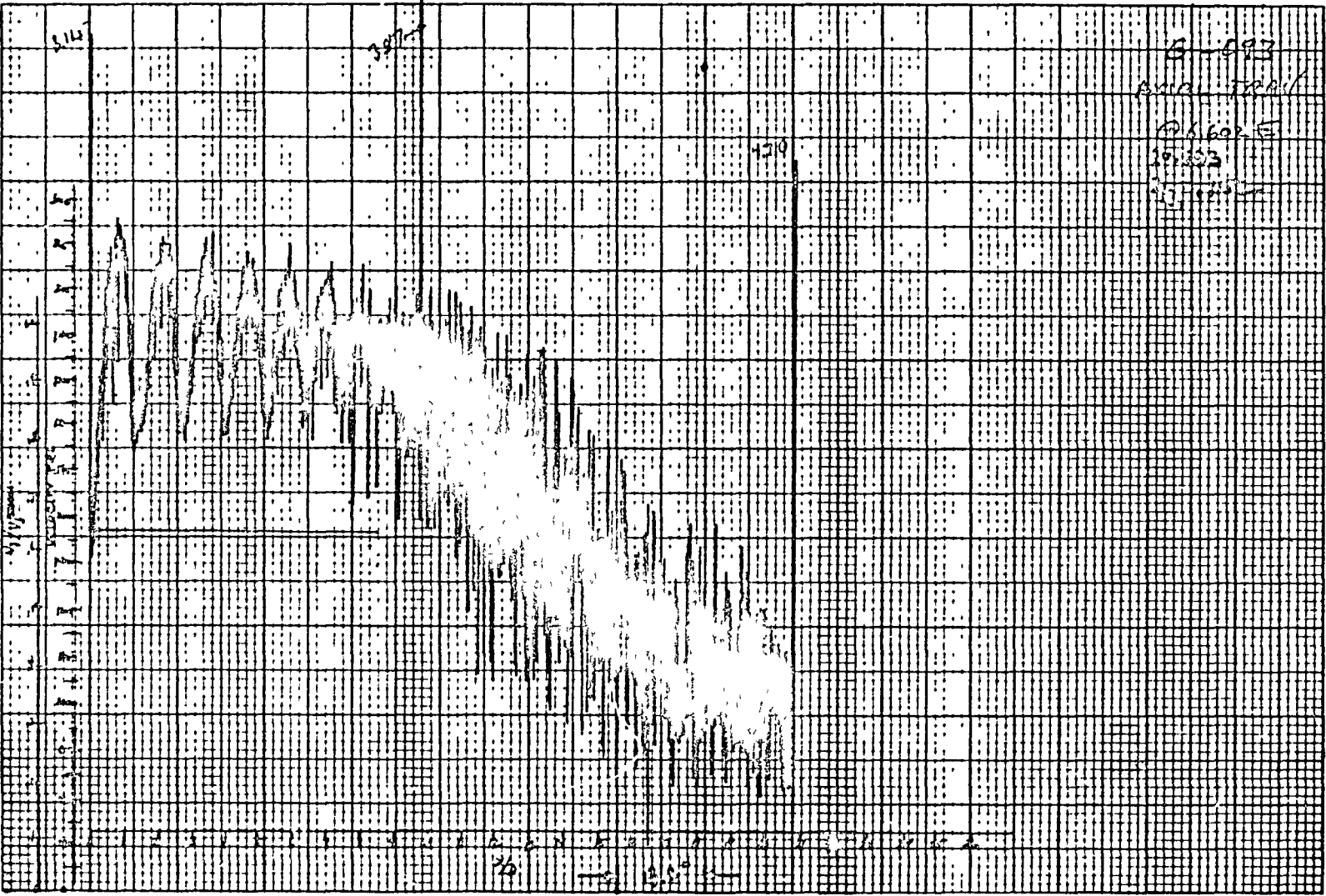
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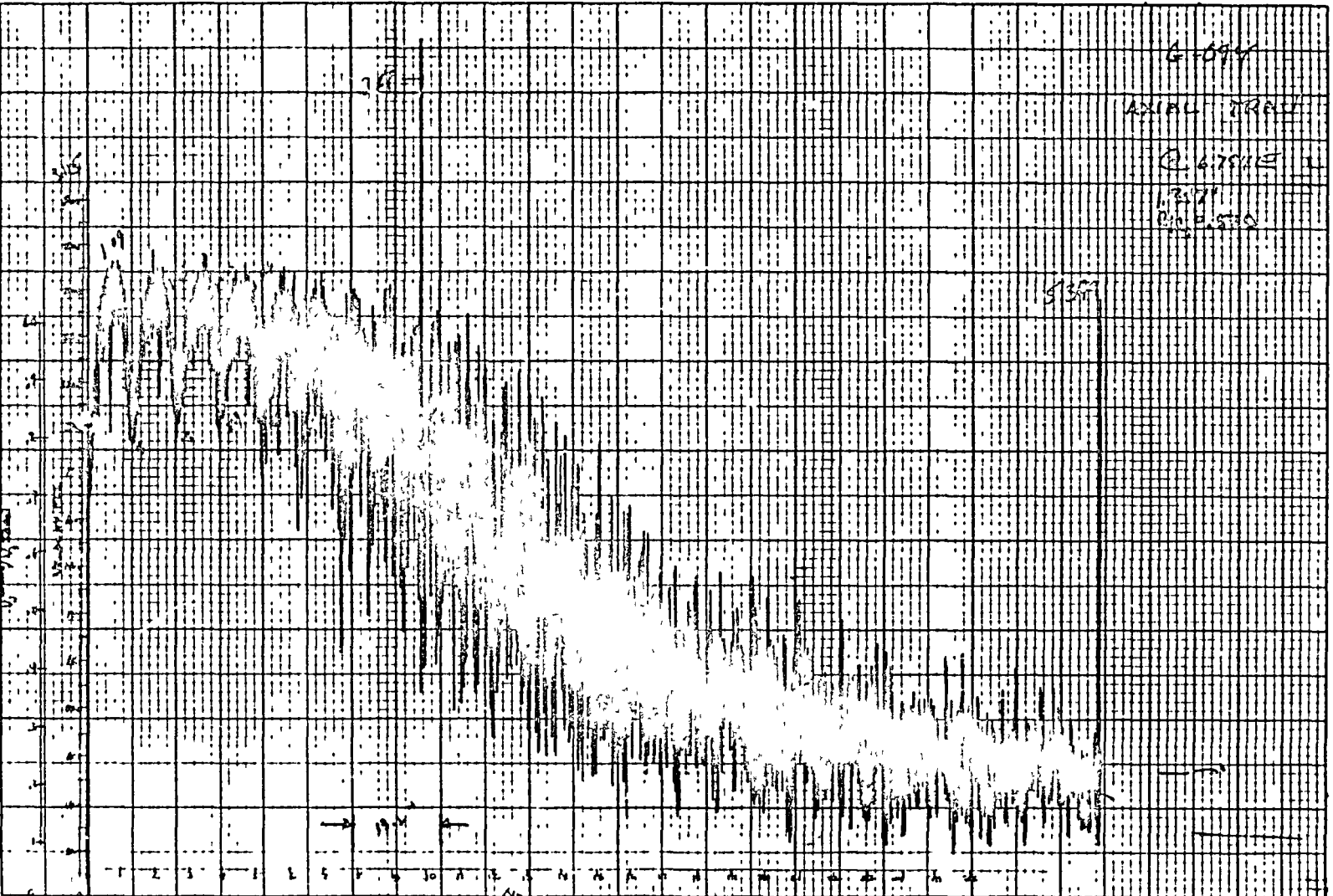
7 noticeable shock cells





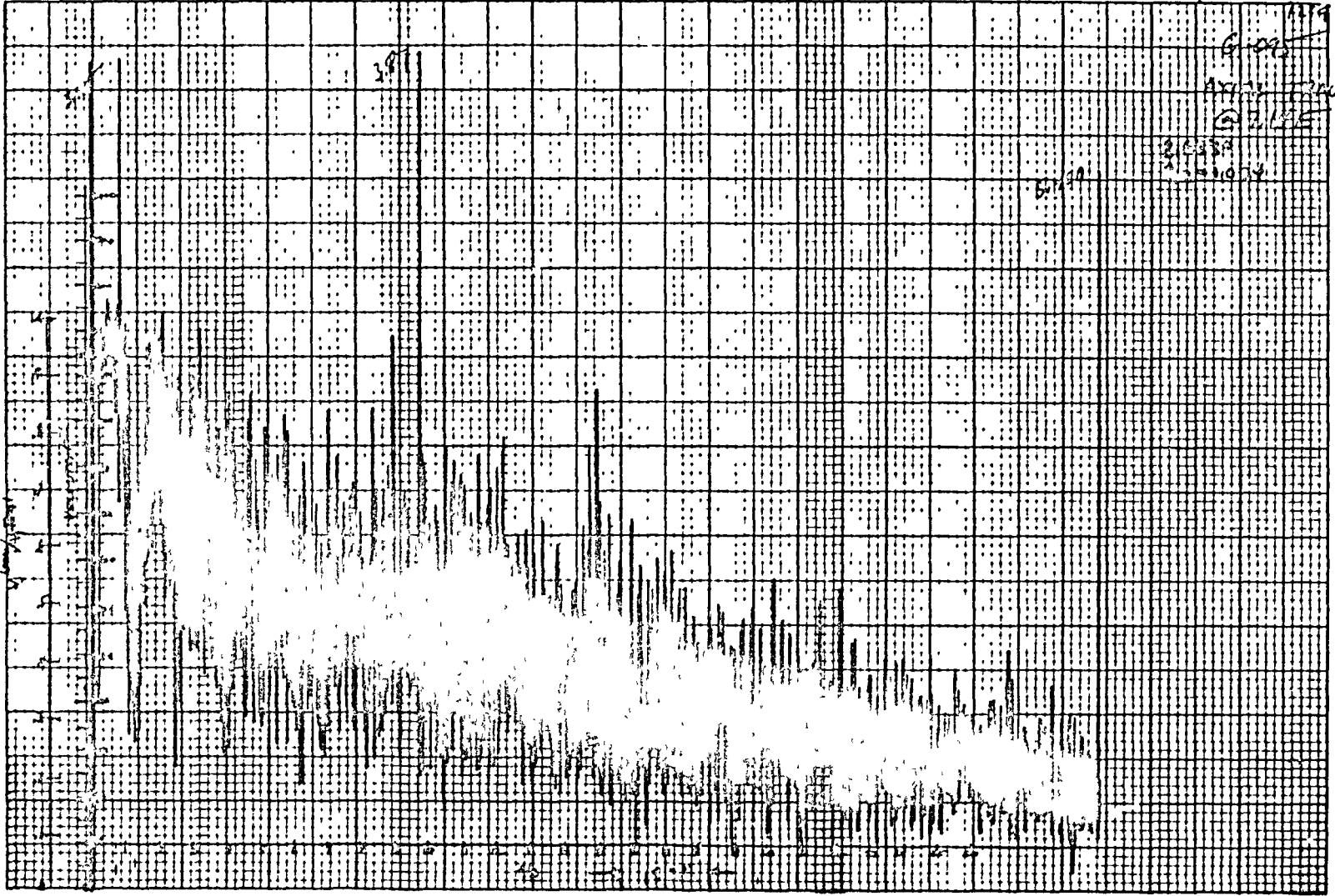
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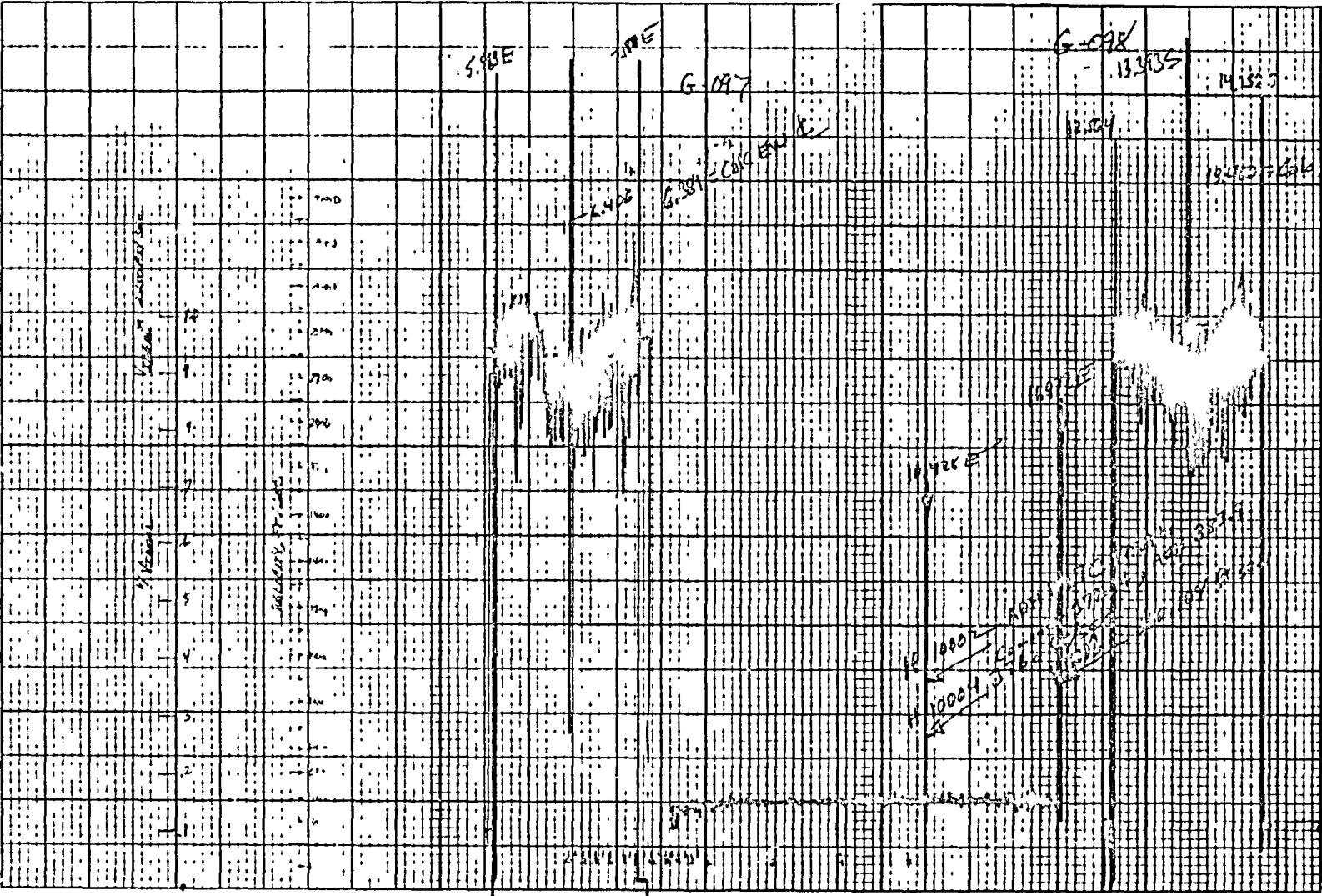




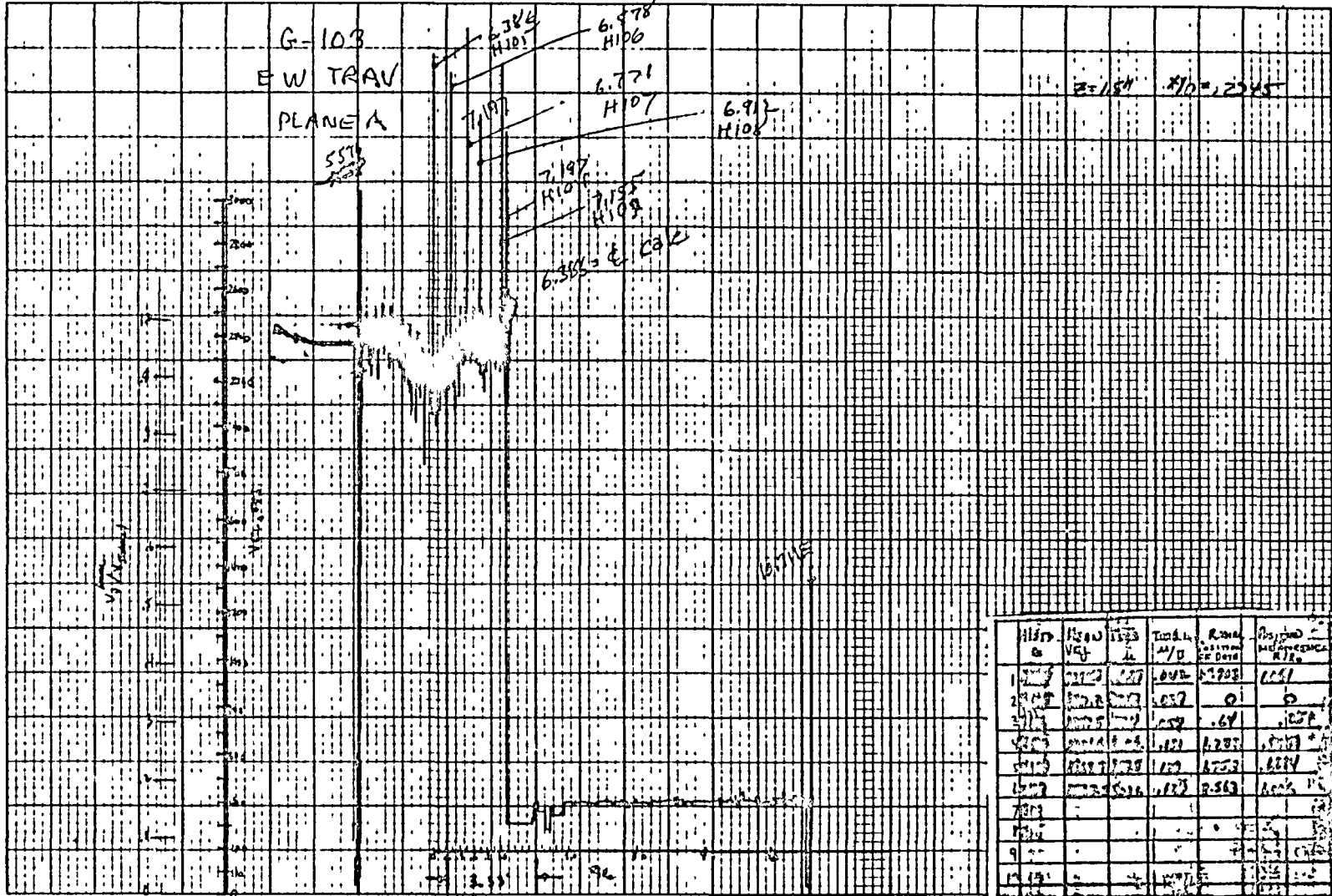
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MODEL 5  
TEST POINT 515



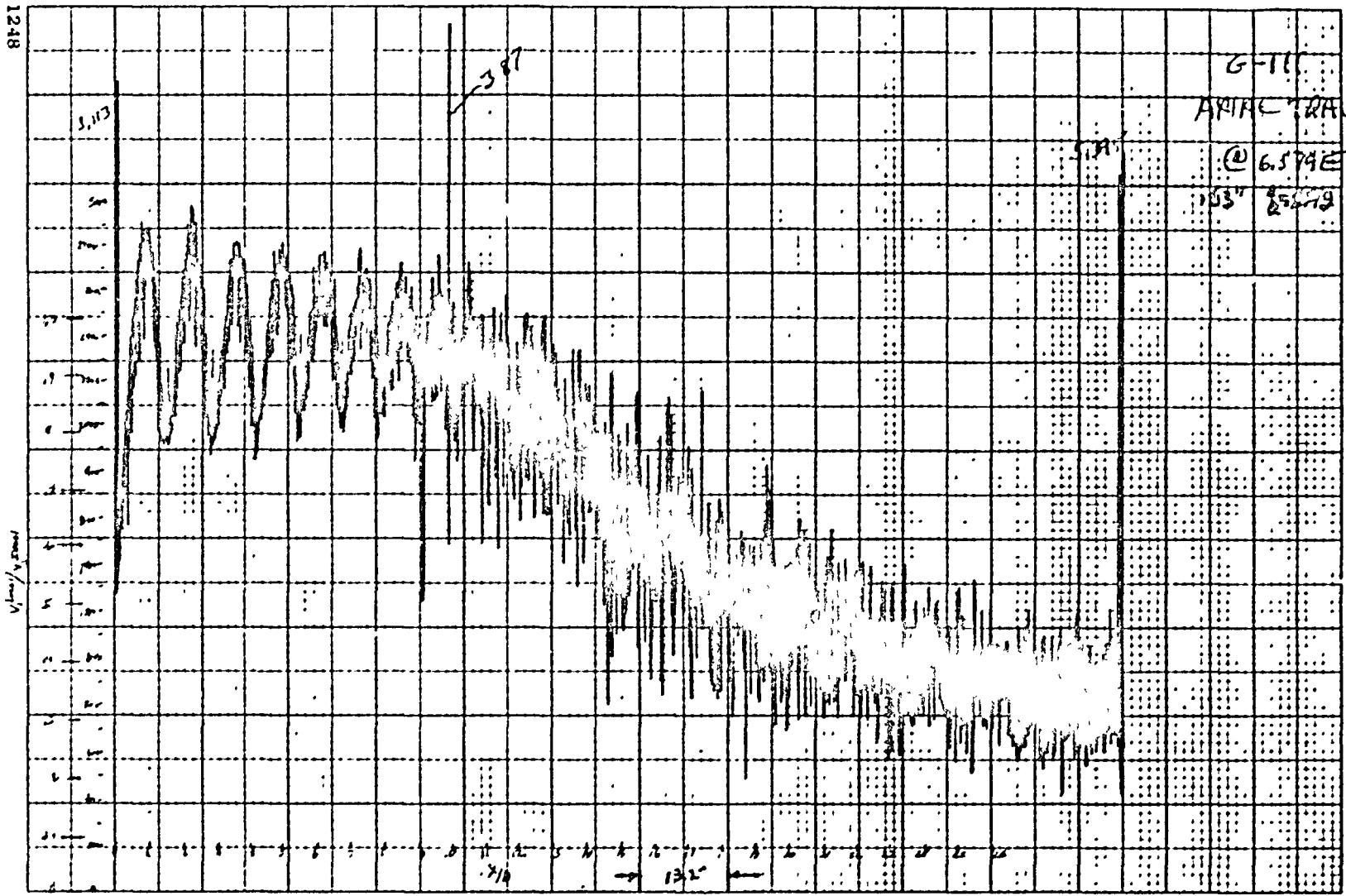
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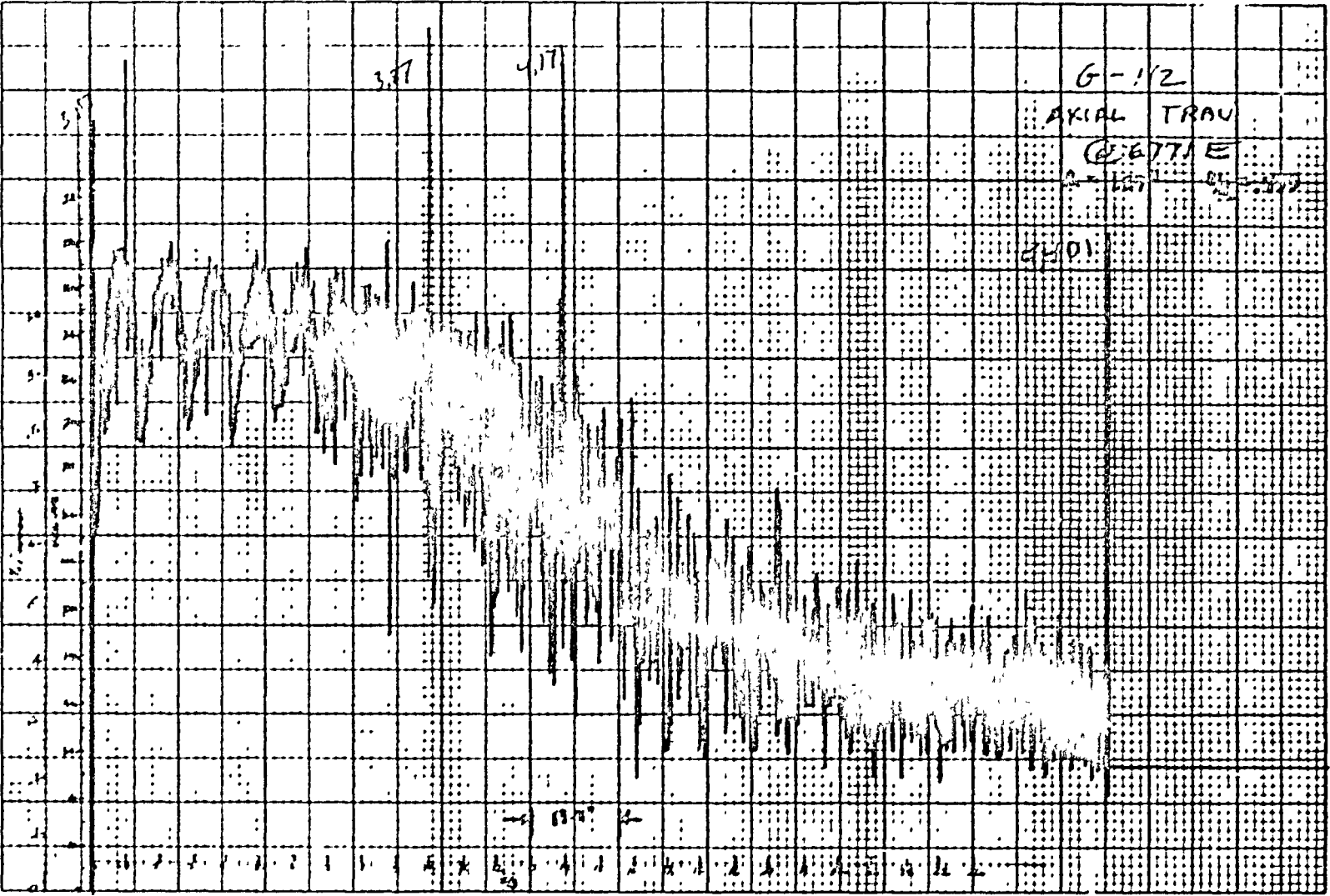


G-111  
 APAC TRAU  
 @ 6.574E  
 153" 25.79

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1248

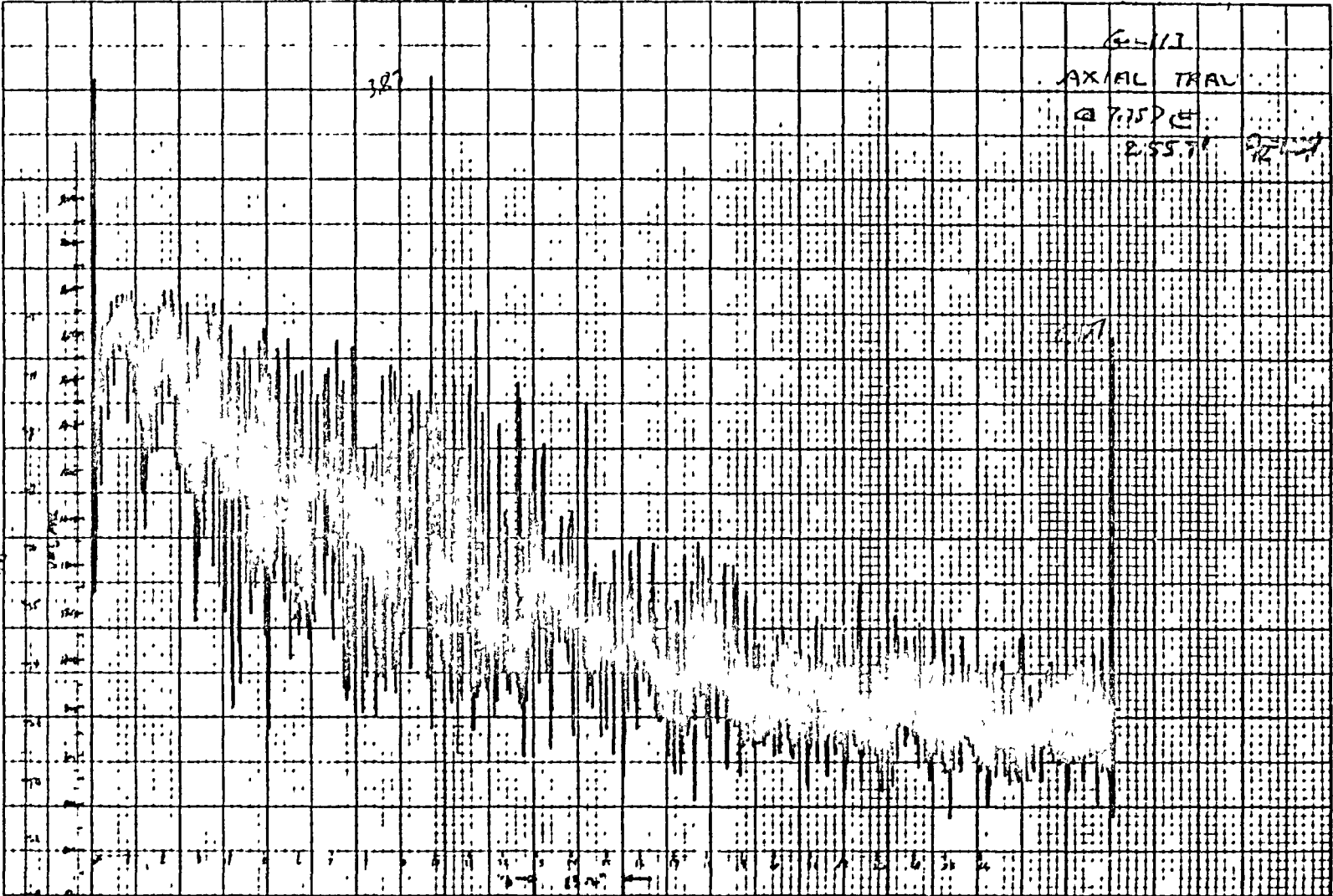
→ 132 ←



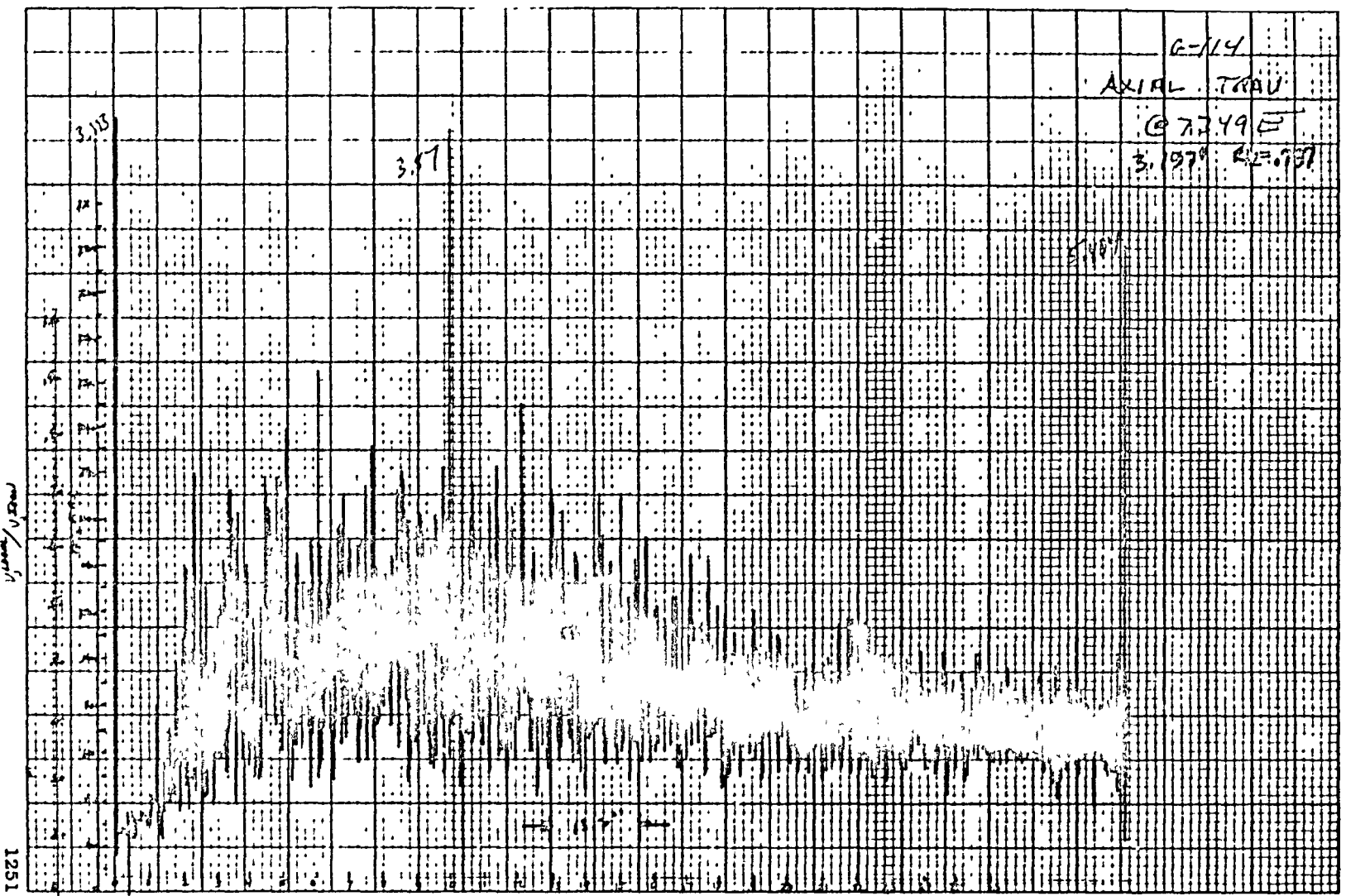
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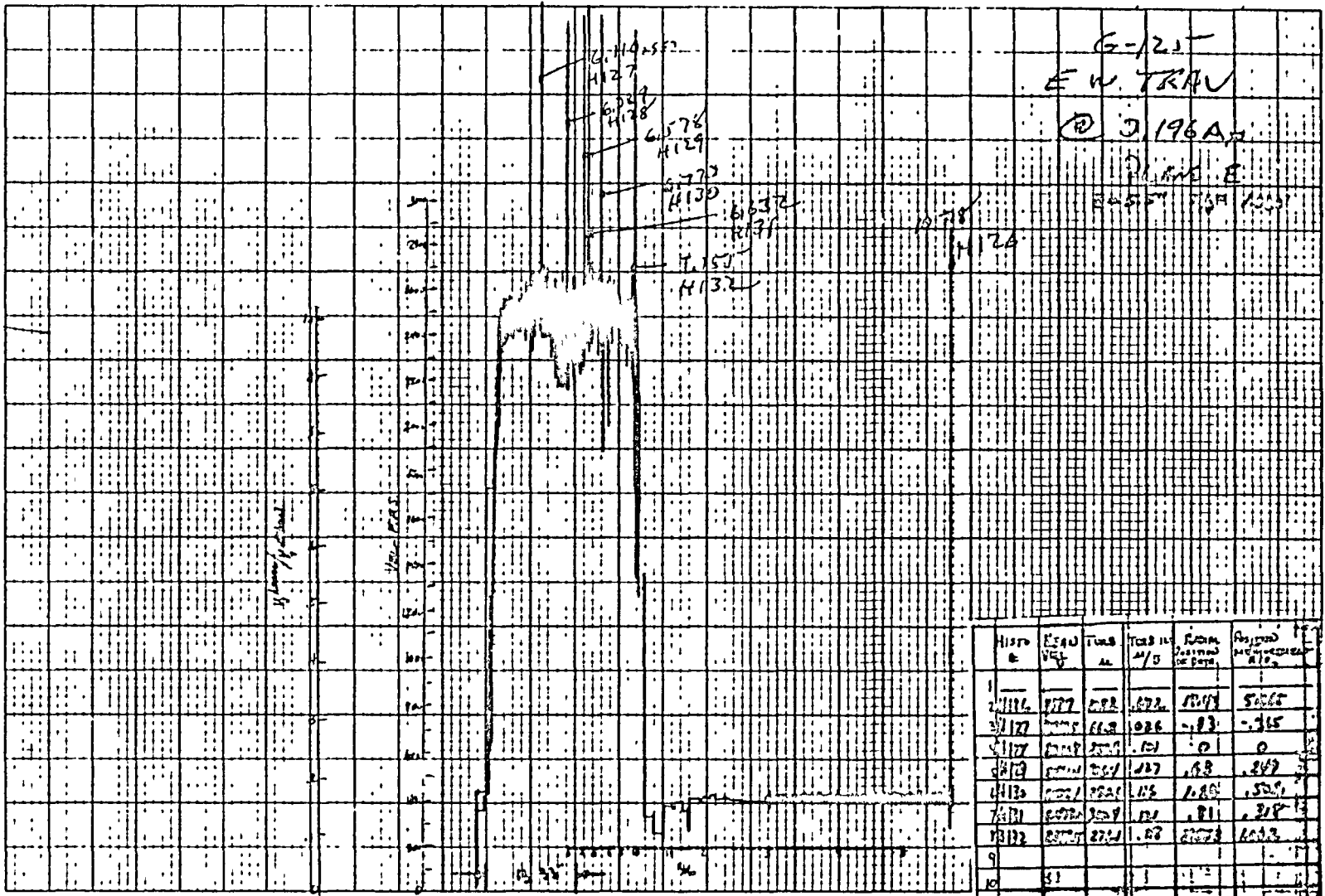
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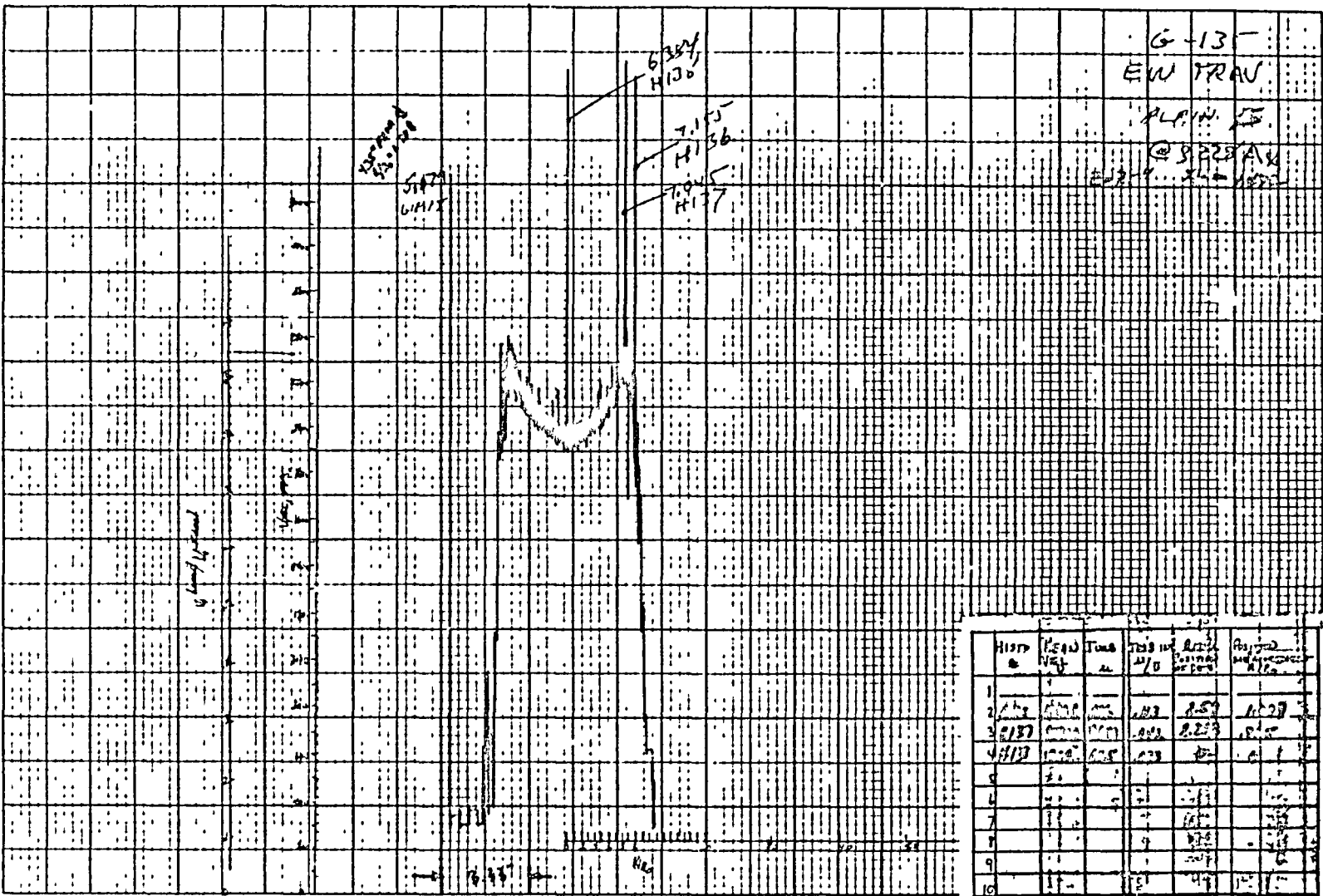




Line #	Start	End	Total	Room	Adjusted
			Area	Dimensions	Area
1					
2	1116	1177	661	1072	5005
3	1177	1238	661	1086	5165
4	1177	1238	661	1086	5165
5	1177	1238	661	1086	5165
6	1177	1238	661	1086	5165
7	1177	1238	661	1086	5165
8	1177	1238	661	1086	5165
9					
10					

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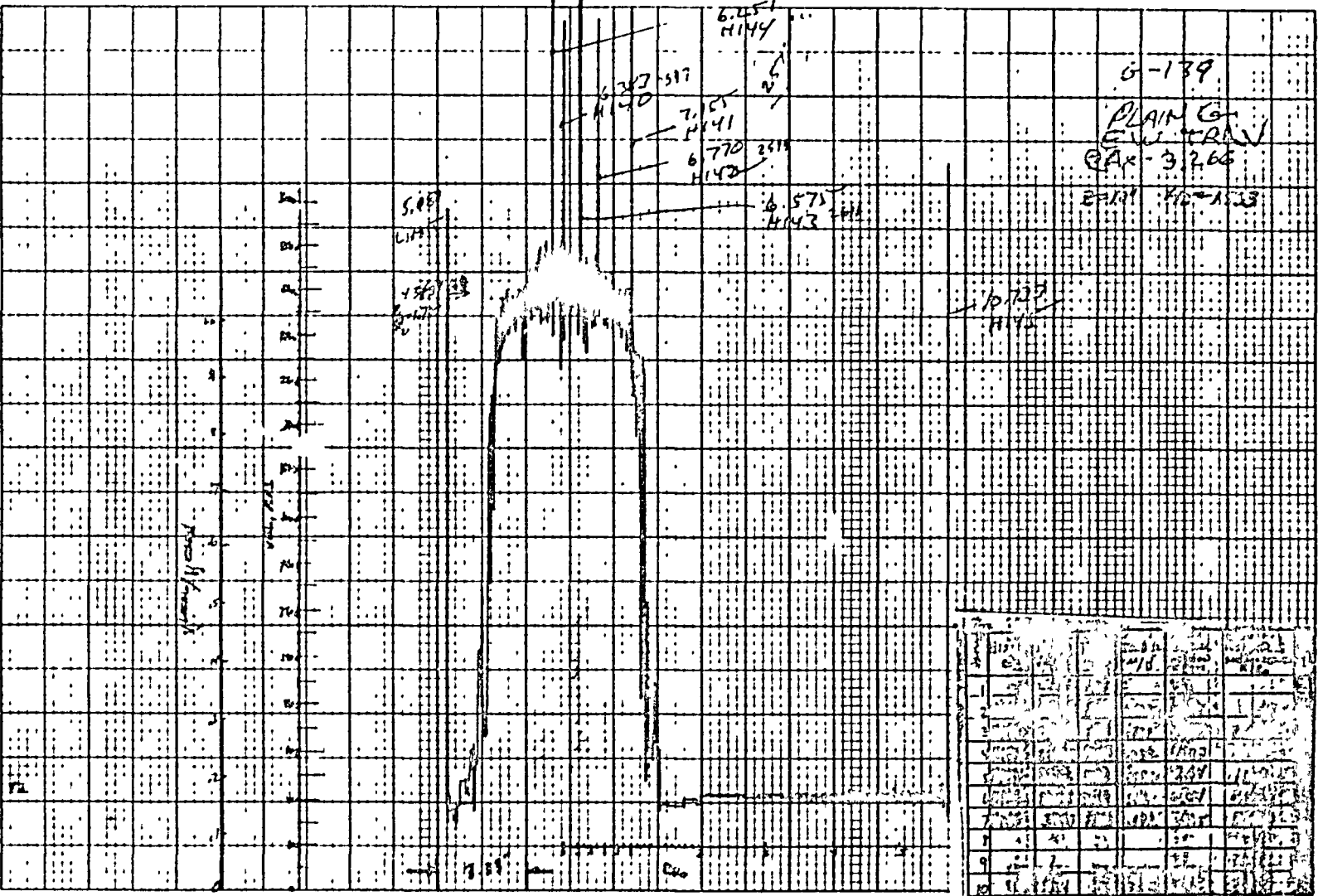




G-13  
EW TRAN  
ALPH. 5  
@ 8:25 AM  
E-2-1-24-1982

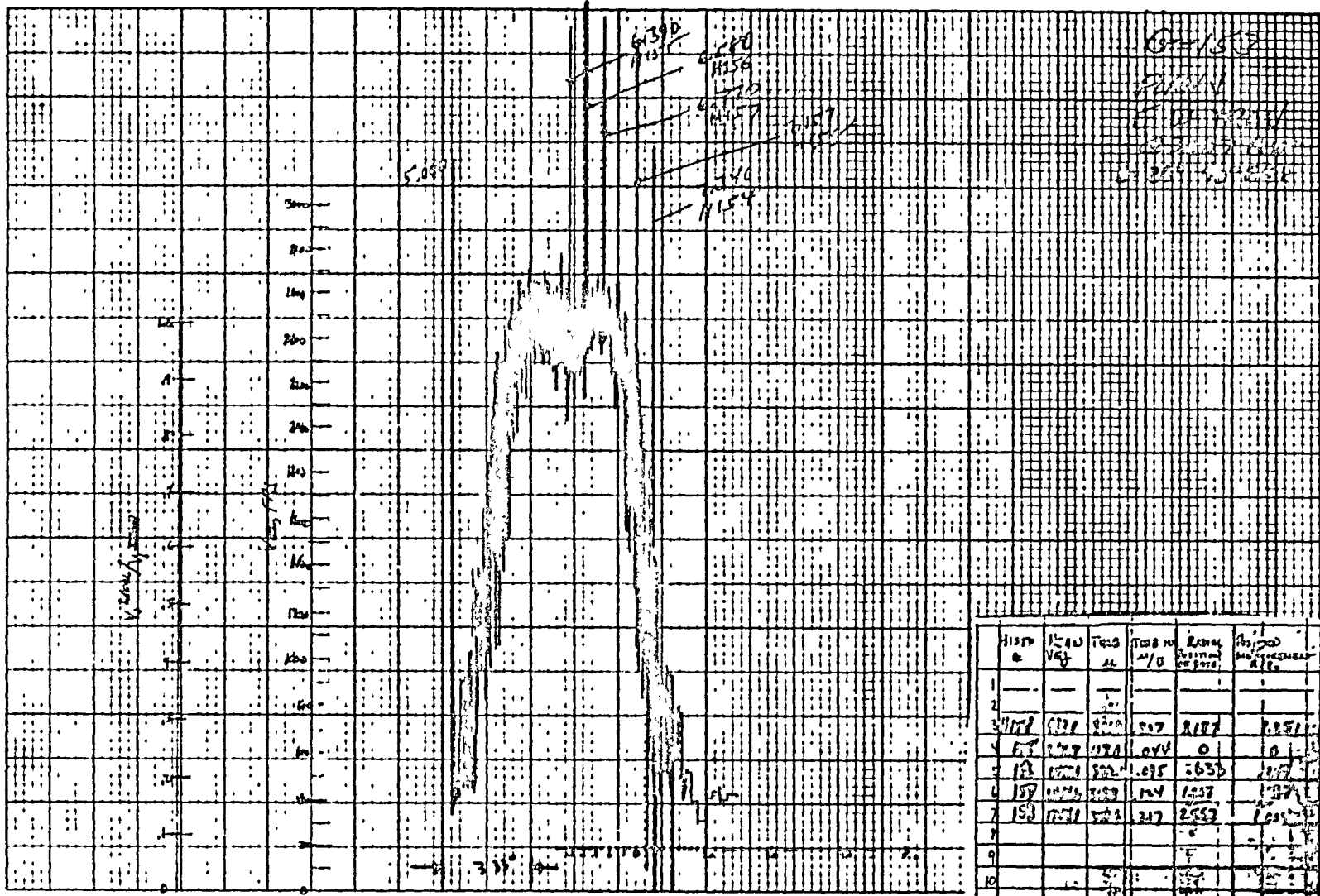
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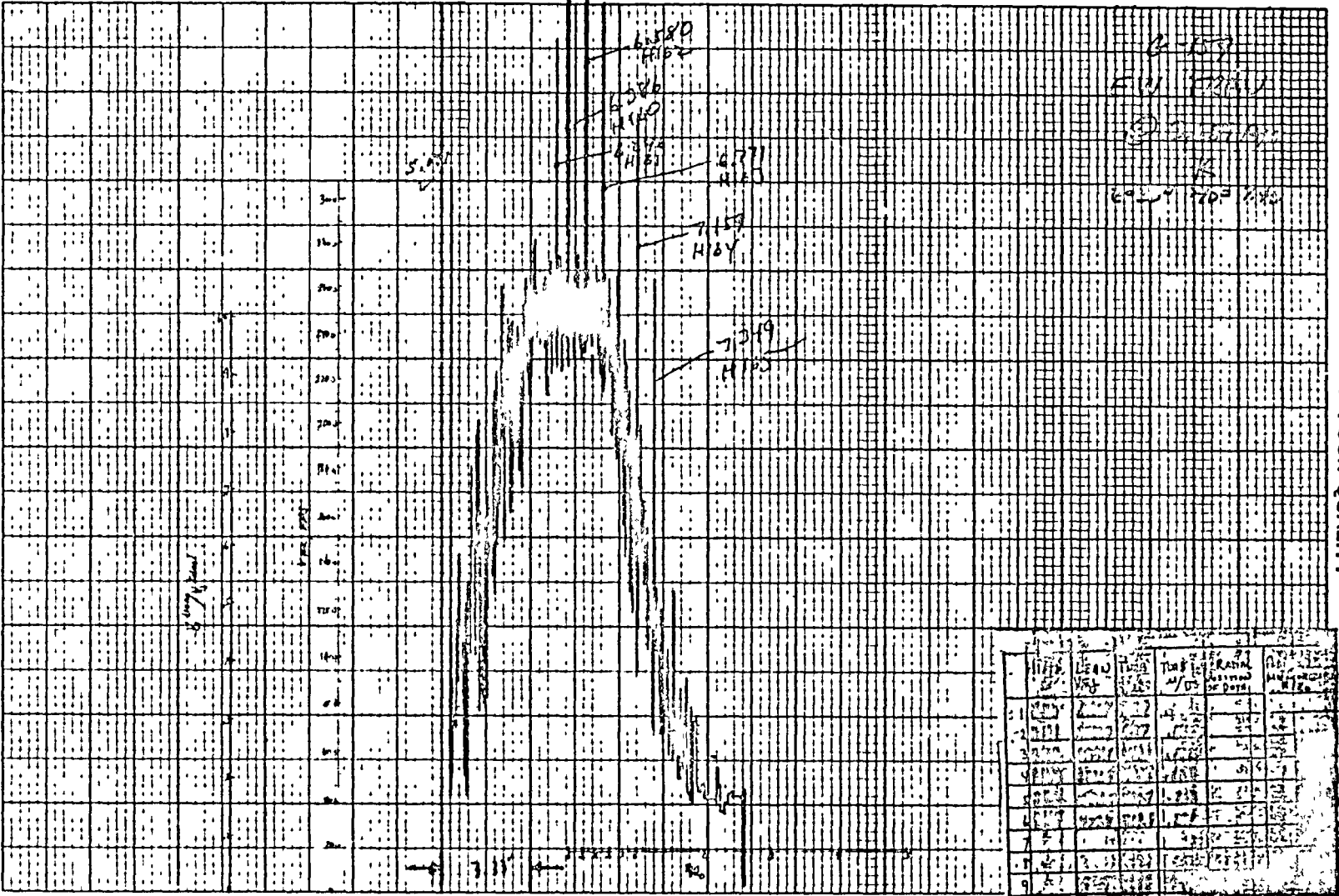




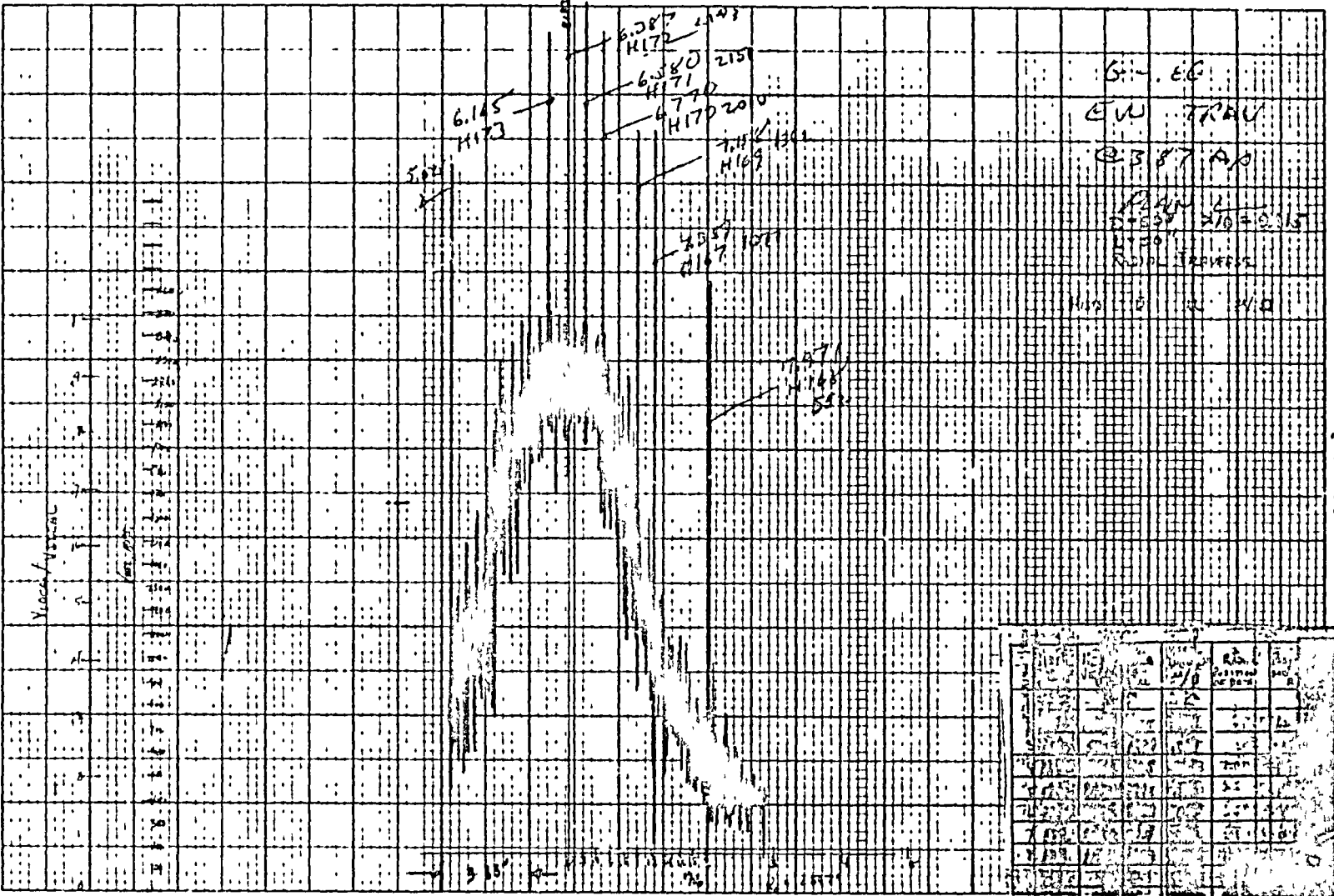


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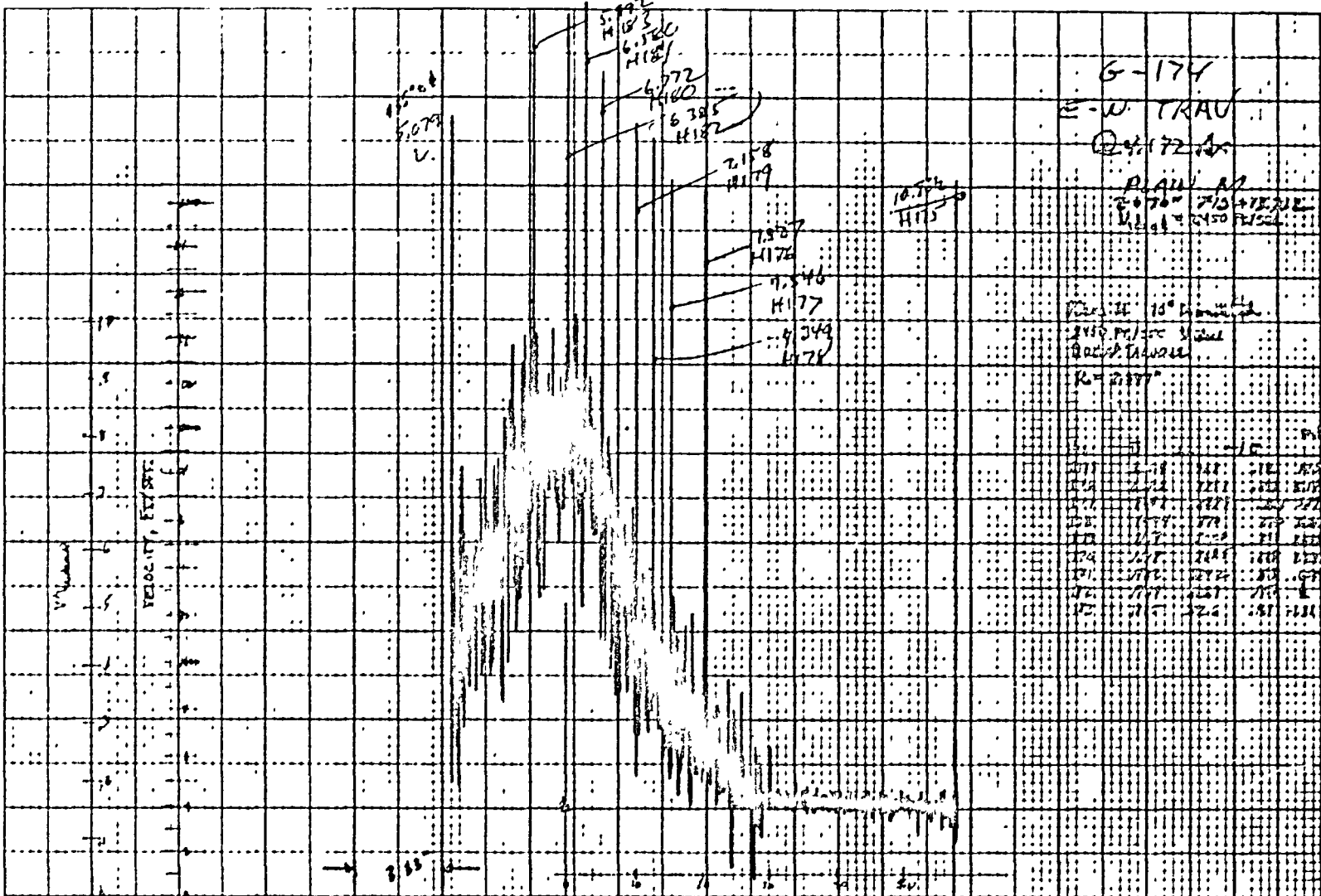
Dist #	Lead Vol	Time hr	Time in hr	Revol per min	Revol per hour
1					
2					
3	0.12	0.12	0.12	0.12	0.12
4	0.12	0.12	0.12	0.12	0.12
5	0.12	0.12	0.12	0.12	0.12
6	0.12	0.12	0.12	0.12	0.12
7	0.12	0.12	0.12	0.12	0.12
8					
9					
10					



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6.2.6 Laser Velocimeter Data for Model 6

6.2.6.1 Laser Velocimeter (LV) Point Histogram Measurements for Model 6

Table XXI contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

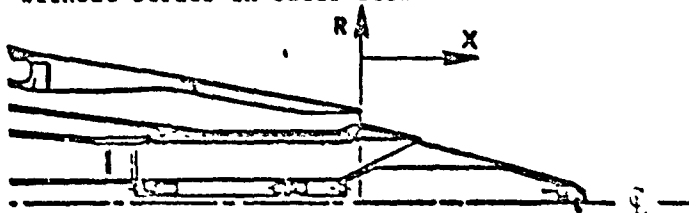
Following Table XXI are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general diagnostic information.

$R_r^o = 0.901$  conic outer nozzle

$R_r^i = 0.902$  conic inner nozzle

$A^i/A^o = 0.324$

without struts in outer flow



MODEL 6 Deg 41.3 (Nom)  $V_j^0$  2088 FPS  $V_j^M =$  1664 FPS

POINT 3331  $R_z$  4.344 (Nom)  $V_j^i =$  77 FPS  $V_{jk} =$  2 FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	D/4	D/1/2	D/3/4	D/M
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/2							
REF	3.124	7.141	13.350													
E-W	3.123	—	13.350	A	.93	.200	—	—	—	298	—	—	—	—	—	—
		5.911					W	4.10	944	299	2016	148	965	.071	1.211	.087
		8.331					E	3.97	714	301	2118	70.4	1.014	.034	1.273	.042
		8.357						4.05	932	301	2070	103	991	.049	1.244	.062
		8.398						4.19	965	302	2025	150	970	.048	1.217	.060
		8.434						4.31	992	303	1823	281	973	.134	1.095	.169
E-W	3.125	—		B	1.72	.371	—	—	—	304	—	—	—	—	—	—
		5.983					W	3.86	889	305	2059	44.4	986	.021	1.232	.027
		8.369					E	4.09	742	306	1761	257	844	.123	1.059	.155
		8.339						3.99	919	308	2007	77	961	.032	1.206	.047
		8.279						3.86	889	307	2047	52.4	981	.025	1.230	.031
		8.260						3.73	859	310	2062	36.6	984	.018	1.239	.023
E-W	3.143	—		C	2.25	.465	—	—	—	311	—	—	—	—	—	—
		5.964					W	3.92	902	312	2049	45.6	981	.023	1.231	.029
		8.277					E	3.79	872	313	2065	39.0	989	.019	1.241	.023
		8.318						3.92	902	314	2041	61.4	977	.029	1.227	.037
		8.347						4.02	925	315	2030	82.1	958	.039	1.202	.049
		8.381						4.13	951	316	1562	32.1	751	.158	942	.199
E-W	3.152	—		D	2.25	.614	—	—	—	317	—	—	—	—	—	—
	"	8.246		"	"	"	E	3.68	847	318	2027	62.4	971	.030	1.218	.038

Table XXI. LV Log Sheet Model 6 (Continued).

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MODEL 6 Deg 11.4 (Nsm)  $V_j^i = 2077$  FPS  $V_j^M = 1664$  FPS

POINT 3058  $R_i = 4.344$  (Nsm)  $V_j^i = 795$  FPS  $V_{M/C} = 0$  FPS

DATE 12/21/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	X	MS	YDeg	LOC.	R <sub>INS.</sub>	R <sub>1/2</sub>							
	3109	7.141	13.390													
E-W	3161	-	13.390	E	344	.741	-	-	-	320	-	-	-	-	-	-
		6.067					W	3.51	.808	321	2049	69.7	.981	.033	1231	.042
		6.312					"	2.76	.635	322	821	52.4	.393	.025	.494	.032
		8.035					E	2.98	.686	323	842	42.5	.403	.020	.586	.026
		8.147						3.35	.771	324	2042	56.3	.978	.027	1.227	.034
		8.180						3.46	.797	325	2049	40.5	.987	.019	1.231	.024
		8.208						3.56	.720	326	2037	52.0	.975	.027	1.224	.034
		8.254						3.71	.854	327	1876	127	.899	.085	1.128	.107
	✓	8.281		✓	✓	✓	✓	3.80	.875	328	1352	343	.647	.165	.812	.206
E-W	3.180	-		F	470	1.013	-	-	-	329	-	-	-	-	-	-
		8.098					E	3.19	.734	330	2019	50.7	.967	.024	1.213	.030
		7.900					"	2.53	.582	331	650	51.5	.312	.025	.391	.031
E-W	-	-						-	-	332	-	-	-	-	-	-
		6.213					W	3.09	.711	333	1939	124	.928	.060	1.165	.075
		6.399					"	2.47	.569	334	707	61.4	.339	.029	.425	.037
		7.862					E	2.10	.552	335	598	58.6	.287	.028	.360	.035
		7.920						2.60	.599	336	685	46.7	.328	.022	.412	.028
		7.957						2.72	.626	337	748	66.5	.358	.032	.450	.040
		8.073						3.12	.718	338	2029	62.2	.972	.030	1.219	.037
		8.105						3.21	.739	339	2023	66.5	.969	.032	1.216	.040
		8.163						3.41	.785	340	1854	127	.888	.090	1.114	.112
	✓	8.204		✓	✓	✓	✓	3.54	.815	341	1337	327	.640	.157	.808	.197

Table XXI. LV Log Sheet Model 6 (Continued).

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MODEL 6 Deg 4.64 (NONV)  $V_j^0 = 20.16$  FPS  $V_j^M = 16.64$  FPS  
 POINT 300JK  $R_i = 4.344$  (NONV)  $V_j^i = 795$  FPS  $V_{MC} = 0$  FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}$	$U_{1/3}$	$U_{1/5}$	$U_{1/10}$	
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	R/R <sub>2</sub>								
REF	3.109	7.141	13390														
EW	3.204	—	13390	G	6.29	1.356	—	—	—	342	—	—	—	—	—	—	—
		8.209					E	3.52	.820	343	653	215	.713	.103	.392	.129	
		8.104						3.21	.739	344	1548	299	.742	.143	.931	.179	
		8.012						2.90	.668	345	2027	42.0	.969	.030	1.215	.037	
		7.915						2.58	.594	346	1703	249	.816	.119	1.023	.150	
		7.813						2.34	.539	347	814	127	.390	.061	.489	.076	
		7.796						2.18	.502	348	681	60.9	.326	.029	.409	.037	
		7.731						1.97	.453	349	619	63.7	.296	.031	.372	.038	
		6.312					W	2.76	.635	350	1921	120.	.920	.058	1.155	.072	
		6.357					"	2.61	.601	351	630	76.7	.302	.037	.378	.046	
E-W	3.260	—		H	10.00	2.155	—	—	—	352	—	—	—	—	—	—	—
		6.546					W	1.78	.456	353	1702	201	.815	.096	1.023	.121	
		7.865					E	2.41	.555	354	1955	128	.937	.061	1.175	.077	
E-W	3.302	—		J	12.78	2.754	—	—	—	355	—	—	—	—	—	—	—
		6.650					E	1.64		356	1474	217	.706	.104	.886	.130	
		7.141					E	0	0	357	527	43.0	.254	.040	.318	.050	
		7.101						.87	.378	358	759	119	.364	.057	.456	.072	
		7.564						1.41	.325	359	1095	220	.524	.105	.658	.132	
		7.794						2.18	.502	360	1862	154	.892	.074	1.119	.093	
		7.839						2.66	.612	361	1410	291	.675	.134	.847	.175	
		8.128						3.29	.757	362	641	201	.307	.096	.385	.121	
		8.129						3.29	.757	363	619	184	.296	.088	.372	.111	

Table XXI. LV Log Sheet Model 6 (Continued).

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MODEL 6 Deg 4.64 (W/W)  $V_j^0$  300 F FPS  $V_j^m =$  1667 FPS  
 POINT 3007A  $R_j^0$  4.344 IN/IN  $V_j^i =$  795 FPS  $V_{K/C} =$  0 FPS DN 12/31/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U_{1/2}^0$	$U_{1/3}^0$	$U_{1/3}^m$	$U_{1/3}^m$
	AXIAL	EW	NS	PLANE	K INS	4Deg	LOC.	R INS.	R/2							
	3,109	7,141	13,350													
E-W	3,466	—	13,390	K	2364	5295	—	—	—	364	—	—	—	—	—	—
		6,619					W	1.14	401	365	1076	135	.516	.065	.647	.081
		7,008					"	.44	101	366	950	127	.455	.061	.571	.077
		7,144					E	0	0	367	996	152	.477	.073	.599	.091
		7,659					E	1.73	398	368	1438	182	.689	.087	.861	.110
		7,895						2.25	518	369	1383	220	.662	.096	.831	.120
		8,011						2.90	668	370	1012	257	.485	.123	.608	.155
		8,231						3.63	836	371	598	202	.287	.092	.362	.122
E-W	3,632	—		L	3464	7,466	—	—	—	372	—	—	—	—	—	—
		8,231					E	3.63	836	373	673	212	.327	.101	.411	.127
		7,511					"	1.23	283	374	1311	178	.628	.085	.788	.107
		7,182					E	0	0	375	1152	158	.552	.075	.692	.095
		7,806					E	2.22	511	376	1128	236	.540	.113	.678	.142
		8,609					"	4.89	1126	377	419	155	.201	.074	.252	.093
E-W	3,797	—		M	4556	9,819	—	—	—	378	—	—	—	—	—	—
		8,609					E	4.89	1126	379	440	165	.235	.078	.294	.099
		7,146					E	0	0	380	1074	167	.515	.080	.646	.100
		7,413					E	.91	209	381	1130	173	.541	.083	.679	.104
		7,891						2.33	536	382	770	223	.465	.107	.583	.134
		8,210						3.56	820	383	718	205	.344	.098	.431	.123
		8,907						5.89	1,356	384	362	139	.173	.067	.218	.084

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

1268

MODEL 6 Deg 464 (NIM)  $V_j^0 = 2088$  FPS  $V_j^M = 1664$  FPS

POINT 3809A  $R_i = 4.344$  (NIM)  $V_j^i = 795$  FPS  $V_{1/2} = 0$  FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>	U <sub>1/20</sub>
	AXIAL	EW	NS	PLANE	X MUS	Y Deg	LOC.	R INS.	R/R <sub>2</sub>							
REF	3.109	7.141	13370													
E-W	4.072	—	13390	N	63.77	13.744	—	—	—	385	—	—	—	—	—	—
		7.148					E	0	0	382	817	177	.391	.085	.491	.106
		7.393					E	.84	.193	387	821	182	.393	.087	.494	.109
		7.726						1.95	.447	388	766	175	.367	.084	.460	.105
		8.116						3.25	.742	389	637	162	.305	.078	.385	.097
		8.587						4.82	1.110	390	507	158	.243	.075	.305	.095
E-W	4.160	—		P	69.60	15.0	—	—	—	391	—	—	—	—	—	—
		6.624					W	1.72	.396	392	678	161	.325	.077	.428	.097
		7.139					E	0	0	393	737	160	.353	.076	.443	.096
		7.271					E	.43	.099	394	753	164	.361	.079	.453	.099
		7.443						1.01	.233	395	735	167	.352	.080	.441	.100
		7.846						2.35	.541	396	667	167	.320	.078	.401	.098
		8.167						4.42	1.017	397	513	157	.246	.075	.308	.094
		9.490						7.83	1.802	398	290	116	.139	.056	.174	.070
AXIAL	—	7.141		—	—	—	E	0	0	399	—	—	—	—	—	—
AXIAL	—	7.570		—	—	—	E	1.43	.329	400	—	—	—	—	—	—
AXIAL	—	8.045		—	—	—		3.01	.693	401	—	—	—	—	—	—
AXIAL	—	8.204		—	—	—		3.54	.815	402	—	—	—	—	—	—
AXIAL	—	8.380		—	—	—		4.13	.951	403	—	—	—	—	—	—
AXIAL	—	8.380		—	—	—		"	"	404	—	—	—	—	—	—

Table XXI. IV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 6 Deg 4.64 (N/M)  $V_j^0$  2070 FPS  $V_j^M$  = 1536 FPS

POINT 3011  $R_i$  4.344 (N/M)  $V_j^i$  = 796 FPS  $V_{R/C}$  = 700 FPS UNID 1/1/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION		RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$\sigma_{1/2}$	$\sigma_{1/1}$	$\sigma_{1/3}$	$\sigma_{1/5}$	
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.								R/R <sub>2</sub>
REF	3.110	7.109	13.489													
	3.111	7.375	13.485		.066	.014	E	4.25	978	871	1773	101	.257	.049	1.084	.062
	3.120				.66	.142				873	2186	102	1.056	.050	1.336	.063
	3.124			A	.73	.200				874	2036	93.4	.984	.045	1.245	.057
E-W										877						
		5.919					W	3.94	.906	878	2194	170	1.060	.042	1.341	.104
		8.332					E	4.11	.945	879	2110	161	1.020	.078	1.290	.099
		8.376						4.25	.979	880	2054	80.5	.992	.039	1.256	.049
		8.407						4.36	1.003	881	2009	61.4	.971	.030	1.228	.038
		10.823						11.54	2.657	882	395	53.7				
E-W	3.134			B	1.59	.343				883						
E-W	3.143			C	2.19	.472				884						
		6.041					W	3.53	.813	885	2018	63.7	.975	.031	1.234	.039
		8.229					E	3.76	.866	886	2020	39.4	.976	.019	1.235	.024
		8.268						3.89	.896	887	2021	40.7	.976	.020	1.235	.025
		8.318						4.06	.935	888	1968	22.7	.951	.040	1.203	.051
		8.357						4.19	.965	889	1182	30.7	.571	.148	.723	.188
		10.573						11.58	2.665	890	394	22.2				
E-W	3.153			D	2.25	.614				891						
E-W	3.162			E	3.44	.741				892						
		6.280					W	2.73	.629	893	810	61.3	.391	.030	.445	.037
		6.105					"	3.32	.764	894	2049	97.8	.990	.017	1.253	.060
		7.983					E	2.94	.678	895	781	75.2	.377	.036	.478	.046
		8.071						3.24	.745	896	822	57.4	.347	.028	.502	.035
		8.124						3.41	.786	897	1937	79.3	.936	.038	1.184	.048
		8.191						3.64	.837	898	2021	44.9	.976	.022	1.235	.027

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j^0 = 2070 \text{ FPS}$   $V_j^M = 1636 \text{ FPS}$

POINT 3011  $R_z = 4344 \text{ (Nom)}$   $V_j^i = -296 \text{ FPS}$   $\sqrt{V/c} = 4.77 \text{ FPS}$

Unit: 1/472

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R. INS.	R/2							
REF	3.110	7.100	13.489													
	3.162	8.268	13.489	E	3.44	1.741	E	3.89	.896	899	1437	301	.694	.146	.878	.188
	"	10.574		"	"	"	"	11.58	2.666	901	-	-	-	-	-	-
EW	3.181	-		F	4.70	1.013	-	-	-	901	-	-	-	-	-	-
E-W	3.205	-		G	6.29	1.356	-	-	-	902	-	-	-	-	-	-
		6.337					W	2.54	.585	903	1941	103	.938	.050	1.186	.063
		6.560					"	1.80	.414	904	685	55.7	.331	.027	.419	.034
		8.149					E	3.50	.805	905	1049	246	.507	.119	.641	.150
		7.974						3.93	.674	906	1979	58.3	.956	.028	1.210	.036
		7.943						2.81	.647	907	1948	63.5	.941	.031	1.191	.039
		7.817						2.39	.550	908	736	78.6	.356	.038	.450	.048
		7.734						2.11	.486	909	626	54.3	.303	.026	.383	.033
		7.583						11.54	2.657	910	393	26.5	-	-	-	-
E-W	3.261	-		H	10.00	2.155	-	-	-	911	-	-	-	-	-	-
E-W	3.303	-		J	12.78	2.754	-	-	-	912	-	-	-	-	-	-
		6.662					W	1.61	.370	913	1578	238	.762	.115	.764	.145
		7.040					"	.07	.015	914	535	89.2	.258	.043	.327	.054
		7.517					E	1.39	.320	915	1004	218	.425	.105	.614	.113
		7.604						1.68	.387	916	1340	246	.647	.138	.819	.175
		7.756						2.19	.503	917	1829	174	.884	.084	1.118	.106
		7.942						2.81	.646	918	1158	236	.554	.114	.708	.144
		10.572						11.57	2.664	919	346	21.8	-	-	-	-

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

1270.

MODEL 6 Deg 4.64 (nom)  $V_j^0 = 2070$  FPS  $V_j^M = 1636$  FPS

POINT 3011  $R_i = 4344$  (Plan)  $V_j^i = 796$  FPS  $V_{1/2} = 700$  FPS

Date 1/4/78

TYPE TK HV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> <sup>0</sup>	U <sub>1/2</sub> <sup>i</sup>	U <sub>1/2</sub> <sup>M</sup>	U <sub>1/2</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/R <sub>i</sub>							
	KEI 3.110	7.100	13.489													
E-W	3.467	—	13.489	K	23.64	50.95	—	—	—	920	—	—	—	—	—	—
		10.572					E	11.57	2.664	921	401	10.8	—	—	—	—
		6.125					W	3.25	.748	922	690	16.9	.333	.082	422	.103
		6.591					"	1.70	.391	923	1214	133	.586	.064	.742	.081
		7.096					E	0	0	924	936	139	.452	.066	.572	.084
		7.589					E	1.63	.375	925	1494	160	.722	.087	913	.110
		8.065					"	3.22	.740	926	757	204	.366	.098	.463	.124
E-W	3.633	—		L	34.64	7.466	—	—	—	927	—	—	—	—	—	—
		6.069					W	3.44	.791	928	713	154	.344	.074	.436	.094
		6.545						1.85	.426	929	1018	113	.516	.054	.653	.069
		6.849						.84	.193	930	1074	107	.519	.052	.657	.066
		7.099					E	0	0	931	1127	133	.545	.064	.689	.081
		7.485					E	1.28	.295	932	1341	151	.648	.073	.819	.092
		8.047						3.16	.727	933	832	194	.402	.094	.508	.119
		10.571						11.57	2.66	934	403	18.4	—	—	—	—
E-W	3.798	—		M	45.56	9.819	—	—	—	935	—	—	—	—	—	—
		10.571					E	11.57	2.66	936	401	23.6	—	—	—	—
		8.261						3.67	.891	937	669	142	.323	.068	.409	.087
		7.721						2.01	.477	938	1062	175	.513	.085	.649	.107
		7.388						.96	.221	939	1201	140	.580	.067	.734	.085
		7.105					E	0	0	940	1149	123	.555	.060	.703	.075
		6.031					W	3.56	.820	941	201	135	.339	.065	.429	.083
		6.643					"	1.52	.351	942	1032	104	.499	.050	.631	.063

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j^0$  2070 FPS  $V_j^M$  = 16.36 FPS

POINT 3011  $R_i$  4.344 (Nom)  $V_j^i$  = 796 FPS  $V_{R/C}$  = 400 FPS

Drake 1/4/72

1272

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/R <sub>2</sub>							
	REF 3110	7100	13.184													
EW	4073	—		N	13.78	13.746	—	—	—	943	—	—	—	—	—	—
		7106					R	0	0	944	1046	121	.505	.059	.639	.074
		5833					W	4.22	.972	945	648	119	.313	.057	.396	.073
		6433					"	2.22	.512	946	869	132	.420	.064	.531	.070
		7310					E	.70	.161	947	1035	128	.500	.062	.633	.079
		7943						2.81	.647	948	749	149	.362	.072	.458	.091
		8582						4.94	1.137	949	555	112	.268	.054	.245	.012
		10565						11.55	2.659	950	401	19.6	—	—	—	—
E-W	4161	—		P	169.60	15.0	—	—	—	951	—	—	—	—	—	—
		10565					E	11.55	2.659	952	396	260	—	—	—	—
		7097					R	0	0	953	927	125	.448	.061	.567	.077
		7851					E	2.50	.576	954	776	133	.375	.064	.475	.081
		8548					"	4.73	1.088	955	572	108	.276	.052	.350	.066
		6293					W	2.69	.619	956	798	125	.386	.061	.488	.077
		5539					"	5.20	1.198	957	590	104	.285	.050	.361	.064
AXIAL	—	7100					R	0	0	958	—	—	—	—	—	—
AXIAL	—	7529					E	1.43	.329	959	—	—	—	—	—	—
AXIAL	—	8.004						3.03	.694	960	—	—	—	—	—	—
AXIAL	—	8.163						3.54	.816	961	—	—	—	—	—	—
AXIAL	—	8.336						4.12	.948	962	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 464 (NOM)  $V_j^0$  2292 FPS  $V_j^M$  = 2073 FPS

POINT 3015K  $R_j^0$  4.344 (NOM)  $V_j^i$  = 1439 FPS  $V_{j/c}$  = 0 FPS Date 12/31/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X IN	Y/DEG	LOC.	R IN	R/2							
	NEAR 3.109	7100	13.392													
E-W	3.123	—	13.405	A	.93	.200	—	—	—	405	—	—	—	—	—	—
		5.238	13.392				W	4.21	.969	406	2095	279	.914	.122	1.011	.135
		8.254					E	3.85	.886	407	2070	271	.903	.121	.999	.134
		8.299						4.00	.921	408	2197	269	.959	.117	1.060	.130
		8.360						4.20	.967	409	2157	152	.941	.066	1.041	.073
		8.234						3.78	.870	410	2409	196	1.051	.086	1.162	.095
E-W	3.134	—		B	1.66	.352	—	—	—	411	—	—	—	—	—	—
		8.201					E	3.67	.845	412	2362	168	1.031	.073	1.139	.081
		8.230						3.77	.868	413	2319	98	1.012	.043	1.119	.047
		2.288						3.96	.912	414	2184	160	.953	.070	1.005	.077
		5.829					W	4.24	.976	415	2113	177	.922	.077		
E-W	3.144	—		C	2.32	.500	—	—	—	416	—	—	—	—	—	—
		5.954					W	3.82	.879	417	2232	48.0	.974	.021	1.077	.023
		8.184					E	3.61	.831	418	2147	54.4	.937	.024	1.036	.026
		8.155						3.52	.810	419	2102	48.8	.917	.021	1.014	.024
		8.226						3.75	.863	420	2159	61.7	.942	.027	1.041	.030
		8.269						3.90	.898	421	2061	148	.879	.065	.944	.071
E-W	3.153	—		D	2.91	.627	—	—	—	422	—	—	—	—	—	—
		5.961					W	3.80	.815	423	2191	68.2	.957	.030	1.058	.033
		8.159					E	3.53	.813	424	2213	46.2	.979	.020	1.082	.022
E-W	3.162	—		E	3.57	.756	—	—	—	425	—	—	—	—	—	—
		7.972					E	2.92	.672	426	1471	72.1	.642	.032	.710	.035
		8.113						3.39	.780	427	2221	51.0	.969	.023	1.071	.025
		8.147						3.49	.803	428	2204	54.7	.962	.024	1.063	.026
		8.168						3.63	.836	429	2128	118	.922	.051	1.027	.057

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY



MODEL 6 Deg - 4.64 (WOM)  $V_j^0 = 2252 \text{ FPS}$   $V_j^M = 2073 \text{ FPS}$

POINT 3015K  $R_i = 4344 \text{ (AJM)}$   $V_j^i = 1439 \text{ FPS}$   $\sqrt{a/c} = 0 \text{ FPS}$  Date 12/30/77

1274

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X MS	Y Deg	LOC.	R INS.	R/R <sub>2</sub>							
REF	3.109	7.100	13.392													
	3.162	8.219	13.392	E	3.51	.756	E	3.73	.859	430	1803	309	.787	.135	.870	.149
		6048					W	3.51	.708	431	2273	56.9	.992	.025	1.096	.027
	Y	6.195		Y	Y	Y	"	1.51	.348	432	1618	83.1	.706	.036	.781	.040
E-W	3.181	—		F	4.77	1.028	—	—	—	433	—	—	—	—	—	—
		6307					W	2.64	.608	434	1272	65.4	.555	.029	.614	.032
		6.135					"	3.22	.741	435	2152	126	.939	.055	1.038	.061
		8053					E	3.18	.732	436	2208	644	.963	.028	1.065	.031
	Y	7.253		Y	Y	Y	"	2.51	.578	437	1294	46.3	.565	.020	.624	.022
EW	3.206	—		G	6.42	1.384	—	—	—	438	—	—	—	—	—	—
		7.709					E	2.03	.467	439	1245	68.9	.543	.030	.601	.033
		7.84						2.28	.525	440	1362	72.1	.594	.031	.657	.035
		7.852						2.51	.578	441	1843	144	.804	.063	.879	.067
		7.933						2.78	.640	442	2200	103	.960	.045	1.061	.050
		8.017						3.06	.704	443	2041	98.1	.890	.043	.985	.047
		8.125					Y	3.42	.787	444	999	297	.436	.130	.482	.143
		6338					W	2.87	.661	445	2095	163	.914	.071	1.011	.079
	Y	6.379		Y	Y	Y	"	2.40	.552	446	1335	80.9	.582	.035	.644	.039
E-W	3.261	—		H	10.07	2.170	—	—	—	447	—	—	—	—	—	—
		6.442					W	2.12	.504	448	2013	158	.878	.069	.971	.076
		7.423					E	1.11	.256	449	1159	83.7	.506	.037	.559	.040
		7.803						2.34	.539	450	2148	143	.937	.062	1.036	.069
		7.930						2.77	.638	451	1460	318	.637	.139	.704	.153
		7.663						1.88	.433	452	1874	154	.818	.067	.904	.074
		7.530						1.43	.329	453	1352	84.9	.590	.037	.652	.041
	Y	8.116		Y	Y	Y	Y	3.39	.780	454	518	184	.226	.042	.250	.071

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j = \underline{22.2 F_{25}}$   $V_j^M = \underline{2073 F_{PS}}$

POINT 3015K  $R_i = \underline{4.344 (Nom)}$   $V_j^i = \underline{1437 F_{PS}}$   $V_{j/c} = \underline{0 F_{PS}}$  Date 1/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/4</sub>	J <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X	MS /Deg	LOC.	R <sub>INS.</sub>	R <sub>1/2</sub>							
	REF=3109	7.100	13392													
E-W	3,303	—	13392	J	12.85	2769	—	—	—	455	—	—	—	—	—	—
		6.530					W	1.90	.437	456	1903	164	.890	.072	.918	.079
		7.056					"	.15	.035	457	694	93.2	.303	.041	.335	.015
		7.105					E	0	0	458	734	117	.320	.051	.354	.056
		7.379					E	.93	.214	459	1365	134	.596	.058	.658	.065
		7.689						1.96	.451	460	2131	117	.930	.051	1.028	.056
		7.899						2.66	.612	461	1185	298	.517	.130	.572	.144
E-W	3,467	—		K	23.71	5.110	—	—	—	462	—	—	—	—	—	—
		6.552					W	1.83	.421	463	1686	179	.736	.078	.813	.086
		6.902						.66	.152	464	1255	151	.548	.066	.605	.073
		6.945						.52	.120	465	1249	155	.562	.068	.622	.075
		7.094					E	0	0	466	1562	211	.682	.092	.753	.102
		7.559					E	1.53	.352	467	1975	146	.862	.064	.953	.070
		7.815						2.38	.548	468	1405	317	.613	.138	.678	.153
		8.116						3.37	.780	469	620	206	.271	.090	.299	.099
E-W	3,633	—		L	34.70	2.478	—	—	—	470	—	—	—	—	—	—
		6.571					W	1.76	.405	471	1391	203	.607	.089	.671	.098
		6.878					"	.74	.170	472	1537	177	.671	.077	.741	.085
		7.100					E	0	0	473	1730	191	.755	.083	.835	.092
		7.429					E	1.10	.253	474	1858	167	.811	.073	.896	.081
		7.330						.77	.177	475	1870	161	.816	.070	.902	.078
		7.689						1.96	.451	476	1554	302	.678	.132	.752	.146
		8.038						3.13	.721	477	815	243	.356	.106	.393	.117
		8.432						4.44	1.022	478	447	164	.195	.072	.216	.079

Table XXI. IV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

1276

MODEL 6 Dog 464 (Nom)  $V_j^0 = 2272$  FPS  $V_j^M = 2073$  FPS

POINT 3015K  $R_i = 4344$  (Nom)  $V_j^i = 1439$  FPS  $V_{A/C} = 0$  FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U_j^0$	$U'/U_j^M$	$U'/U_j^M$
	AXIAL	EW	NS	PLANE	X. IN.	$\theta$ Deg	LOC.	R. IN.	$R/R_i$							
REF	3.109	7.100	13392													
E-W	3.798	—	13392	M	4563	9234	—	—	—	479	—	—	—	—	—	—
		6.885					W	.72	.166	480	1572	226	.660	.099	.729	.109
		7.099					E	0	0	481	1635	203	.713	.089	.789	.098
		7.263					E	.54	.124	482	1655	206	.722	.090	.798	.099
		7.647						1.82	.419	483	1378	366	.601	.134	.665	.148
		8.161						3.54	.815	484	763	237	.333	.103	.368	.114
		8.687						5.29	1.218	485	444	167	.194	.073	.214	.081
E-W	4.072	—		N	6378	13746	—	—	—	486	—	—	—	—	—	—
		8.687					E	5.29	1.218	487	496	173	.216	.075	.239	.083
		7.099					E	0	0	488	1123	255	.490	.111	.542	.123
		7.467					E	1.22	.281	489	1038	247	.453	.108	.501	.119
		6.918					W	.61	.140	490	1098	251	.479	.110	.530	.121
		7.965					E	2.68	.617	491	837	219	.365	.096	.404	.106
E-W	4.161	—		P	6967	15105	—	—	—	492	—	—	—	—	—	—
		6.402					W	2.33	.536	493	855	205	.373	.089	.412	.099
		6.675						1.42	.327	494	937	215	.409	.094	.452	.104
		6.882						.73	.168	495	978	225	.427	.097	.472	.108
		7.107					E	0	0	496	988	219	.431	.096	.477	.106
		7.714					E	2.05	.472	497	846	208	.369	.091	.408	.100
		8.388						4.33	.997	498	597	192	.260	.084	.288	.093
		8.143						6.81	1.568	499	378	130	.165	.057	.182	.063
AXIAL	—	7.100					E	0	0	500	—	—	—	—	—	—
AXIAL	—	7.529					E	1.43	.329	501	—	—	—	—	—	—
AXIAL	—	8.004						3.01	.693	502	—	—	—	—	—	—
AXIAL	—	8.163						3.54	.815	503	—	—	—	—	—	—
AXIAL	—	8.339						4.13	.951	504	—	—	—	—	—	—
										505	—	—	—	—	—	—
										506	—	—	—	—	—	—
										507	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 6 Deg 464 (NOM)  $V_j^i = 2210$  FPS  $V_j^m = 2063$  FPS

POINT 3016  $R_i = 4344$  (NOM)  $V_j^i = 1426$  FPS  $V_{1/2} = 300$  FPS Date 1/3/78

ORIGINAL PAGE IS  
OF POOR QUALITY

Table XXI. LV Log Sheet Model 6 (Continued).

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/5</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X	MS °/Deg	LOC.	R.INS.	R <sub>1/2</sub>							
	REF 2.110	7127	13481													
E-W	3.125	—	13449	A	.99	.213	—	—	—	586	—	—	—	—	—	—
		10217					E	1030	2371	589	298	6.0	—	—	—	—
		8289						3.67	892	588	2525	81.0	1.102	.035	1.224	.039
		2253						4.09	941	589	2362	287	1.031	.125	1.145	.139
		8404						4.26	980	590	2323	104	1.015	.045	1.136	.051
		5.909					W	4.06	935	591	2388	210	1.043	.092	1.157	.102
E-W	3.135	—		B	1.66	.358	—	—	—	592	—	—	—	—	—	—
E-W	3.144	—		C	2.25	.485	—	—	—	593	—	—	—	—	—	—
		12.767					E	11.47	2640	594	301	64.9	—	—	—	—
		8203						3.59	826	595	2047	76.8	.294	.034	.992	.037
		2328						4.01	922	596	2021	166	.882	.072	.979	.083
		8269						3.71	876	597	2117	49.0	.925	.021	1.026	.024
		6.911					W	3.72	856	598	2183	44.7	.953	.020	1.058	.022
		5.960						3.87	895	599	2137	66.5	.933	.029	1.036	.032
E-W	3.154	—		D	2.91	.627	—	—	—	601	—	—	—	—	—	—
E-W	3.163	—		E	3.51	.756	—	—	—	601	—	—	—	—	—	—
		10573					E	11.49	2644	602	292	71.4	—	—	—	—
		8010						2.94	878	603	1553	72.0	.678	.032	.753	.055
		8035						3.04	780	604	1467	552	.641	.024	.711	.077
		8180						3.38	777	605	2185	238	.954	.104	1.059	.115
		8220						3.64	839	606	2091	105	.913	.046	1.013	.051
		8297						3.90	892	607	—	—	—	—	—	—
		6.025					W	2.98	826	608	1567	31.8	.684	.014	.759	.015
		6.026					"	2.47	799	609	2212	240	.766	.105	1.072	.117

1278

MODEL 6 Deg 4.64 (Nom)  $V_j^0$  2290 FPS  $V_j^M$  = 2065 FPSPOINT 3016  $R_i$  4344 (Nom)  $V_j^i$  = 1426 FPS  $V_{R/C}$  = 300 FPS

Date 1/3/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U_j^0$	$U'/U_j^M$	$U'/U_j^M$
	AXIAL	EW	NS	PLANE	X INS	$^\circ/\text{Deg}$	LOC.	R INS.	$^\circ/R_2$							
REF	3.110	7127	13.449													
E-W	3.182	—	13.449	F	4.77	1.028	—	—	—	610	—	—	—	—	—	—
		10.571					E	11.48	2.643	611	301	84.6	—	—	—	—
		7.894					"	2.56	.588	612	1284	57.8	.561	.023	.622	.025
E-W	3.206	—		G	6.36	1.371	—	—	—	613	—	—	—	—	—	—
		10.570					E	11.48	2.643	614	322	178	—	—	—	—
		8.175						3.49	.804	615	764	232	.334	.101	.371	.112
		8.074						3.16	.727	616	1743	272	.761	.119	.845	.131
		7.886						2.86	.659	617	2171	66.4	.948	.029	1.052	.032
		7.892						2.55	.587	618	1879	163	.821	.071	.911	.079
		7.855						2.43	.559	619	1480	142	.646	.062	.718	.069
		7.782						2.18	.503	620	1263	52.7	.551	.023	.612	.026
		7.753						2.09	.480	621	1226	70.6	.535	.031	.574	.034
		6.264					W	2.86	.659	622	2138	159.	.934	.069	1.036	.077
		6.407					"	2.40	.552	623	1295	71.0	.566	.031	.628	.034
E-W	3.262	—		H	10.07	2.170	—	—	—	624	—	—	—	—	—	—
E-W	3.304	—		I	12.85	2.769	—	—	—	625	—	—	—	—	—	—
		10.570					E	11.50	2.647	626	302	39.2	—	—	—	—
		6.575					W	1.77	.408	627	1912	160	.835	.070	.927	.077
		7.075					"	1.73	.409	628	752	103	.328	.045	.364	.486
		7.284					E	.857	.197	629	1284	127	.561	.026	.623	.062
		7.745						2.06	.479	630	2117	113	.724	.049	1.026	.025
		7.969						2.81	.646	631	1143	242	.492	.106	.551	.117

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j^2$  2290 FPS  $V_j^M =$  2063 FPS

POINT 306  $R_i$  4344 (Nom)  $V_j^i =$  1426 FPS  $V_{A/C} =$  300 FPS Date 1/3/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE			RADIAL POSITION			HISTO No.	J FPS	J' FPS	J <sub>1/4</sub>	J <sub>1/8</sub>	J <sub>1/2</sub> <sup>M</sup>	J <sub>1/2</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X	MS	°/Deg	LOC.	R.INS.							
	REF=7110	7127	13489													
E-W	3468	—	13489	K	2371	5110	—	—	—	632	—	—	—	—	—	—
		10576					E	1150	2647	633	306	272	—	—	—	—
		6951					W	.59	.135	634	1229	130	.537	.057	.596	.063
		6631					"	1.65	.381	635	1729	167	.755	.073	.838	.081
		7266					E	.46	.107	636	1739	175	.759	.077	.843	.085
		2587						1.53	.353	637	1979	132	.864	.058	.959	.064
		7694						1.89	.435	638	1926	161	.841	.070	.934	.078
	↓	7905			↓	↓	↓	2.79	.643	639	1067	268	.466	.117	.517	.131
E-W	3633	—		L	3864	7466	—	—	—	640	—	—	—	—	—	—
		10570					E	1148	2643	641	305	18.8	—	—	—	—
		8121						3.31	.763	642	783	208	.342	.041	.379	.101
		7491					↓	1.21	.279	643	1856	195	.811	.085	.902	.094
		6676					W	1.57	.346	644	1440	265	.629	.115	.698	.128
	↓	6997			↓	↓	"	.43	.100	645	1527	222	.667	.097	.740	.108
EW	3799	—		M	4563	9834	—	—	—	646	—	—	—	—	—	—
		7102					W	.08	.019	647	1627	161	.711	.070	.790	.078
		7302					E	.58	.134	648	1695	155	.740	.068	.822	.075
		7655						1.76	.405	649	1489	242	.650	.106	.722	.117
		8280						3.84	.885	650	706	213	.301	.093	.342	.103
	↓	10576			↓	↓	↓	11.50	2647	651	300	43.2	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j^2$  2290 FPS  $V_j^M =$  2063 FPS

POINT 3016  $R_i$  4.344 (Nom)  $V_j^2 =$  1426 FPS  $V_{N/C} =$  3.50 FPS

DATE 11/3/71

1280

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub> <sup>M</sup>	U <sub>1/5</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/R <sub>2</sub>							
	REC-7110	7.127	13.889													
E-W	4073	—	13.889	N	6378	13.746	—	—	—	652	—	—	—	—	—	—
		10.576					E	11.50	2647	653	303	188	—	—	—	—
		5.123					W	6.68	1.538	654	433	113	.189	.049	.210	.055
		6.199						3.26	.250	655	838	183	.366	.446	.406	.087
		7.087						.13	.031	656	1371	209	.597	.091	.665	.101
		7.331					E	.68	.157	657	1335	234	.583	.102	.647	.113
		8.131					"	3.35	.270	658	828	207	.362	.090	.401	.100
E-W	4.162	—		P	6967	15.015	—	—	—	659	—	—	—	—	—	—
		8.131					E	3.35	.270	660	787	182	.344	.080	.382	.088
		10.573						11.49	2644	661	299	476	—	—	—	—
		8.926						6.09	1.380	662	419	127	.205	.055	.227	.062
		7.102					W	.08	.019	663	1255	203	.548	.089	.608	.099
		6.109						3.39	.281	664	826	200	.361	.088	.400	.097
		6.878						.23	.190	665	1201	248	.524	.102	.582	.120
AXIAL	—	7.100						.09	.021	666	—	—	—	—	—	—
AXIAL	—	7.529					E	1.34	.308	667	—	—	—	—	—	—
AXIAL	—	8.004						2.92	.672	668	—	—	—	—	—	—
AXIAL	—	8.163						3.45	.794	669	—	—	—	—	—	—
AXIAL	—	8.399						4.24	.976	670	—	—	—	—	—	—
AXIAL	—	8.339						4.24	.930	671	—	—	—	—	—	—

Table XXI. IV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_j^0 = 2293$  FPS  $V_j^M = 2068$  FPS

POINT 30.7  $R_i = 4.344$  (Nom)  $V_j^i = 1431$  FPS  $V_{1/2} = 400$  FPS

W. A. 1/3/72

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub> FPS	U <sub>1/3</sub> FPS	U <sub>1/4</sub> FPS	U <sub>1/5</sub> FPS
	AXIAL	EW	NS	PLANE	X MUS	Y/DEG	LOC.	R INS.	R <sub>1/2</sub>							
REF	3.110	7.099	13.492													
E-W	3.124	—	13.492	A	.93	200	—	—	—	680	—	—	—	—	—	—
		5.882					W	4.06	934	681	2358	274	1028	.119	1.140	.132
		2.293					E	3.98	.916	682	2375	275	1.036	.120	1.149	.133
		2.329						4.10	.944	683	2459	219	1072	.095	1.189	.106
		8.380						4.27	.983	684	2288	176	.998	.077	1.106	.085
		8.412						4.32	1.007	685	2164	143	.994	.063	1.046	.069
		10.577						11.59	2.669	686	397	53.6	—	—	—	—
E-W	3.134	—		B	1.59	.343	—	—	—	687	—	—	—	—	—	—
E-W	3.144	—		C	2.25	.485	—	—	—	688	—	—	—	—	—	—
		6.003					W	3.65	.841	689	2188	72.6	.954	.032	1.058	.035
		8.202					E	3.62	.846	690	2099	47.3	.915	.021	1.015	.023
		8.244						3.22	.879	691	2147	51.7	.936	.023	1.038	.025
		8.308						4.03	.928	692	2090	107	.911	.047	1.010	.052
		8.374						4.25	.978	693	269	272	.335	.119	.372	.132
		10.570						11.57	2.663	694	395	22.7	—	—	—	—
E-W	3.154	—		D	2.91	.627	—	—	—	695	—	—	—	—	—	—
E-W	3.162	—		E	3.44	.711	—	—	—	696	—	—	—	—	—	—
		6.103					W	3.32	.764	697	2251	108	.981	.047	1.088	.052
		6.223					"	2.92	.672	698	1561	43.9	.681	.019	.755	.021
		7.984					E	2.95	.679	699	1599	29.4	.677	.013	.773	.014
		8.045						3.15	.726	700	1462	86.5	.638	.038	.707	.042
		8.118						3.40	.782	701	2191	67.0	.956	.029	1.060	.032
		8.215						3.72	.856	702	2088	99.0	.911	.043	1.010	.048
		8.307						4.03	.927	703	809	253	.353	.110	.391	.122
		10.578						11.60	2.670	704	395	18.0	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY



MODEL 6 Deg 4.64 (Nom)  $V_j^0$  2293 FPS  $V_j^m$  = 2062 FPS

POINT 3017  $R_i$  4.344 (Nom)  $V_j^i$  = 1431 FPS  $V_{1/2}$  = 401 FPS date 1/3/78

1282

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/5</sub>	U <sub>1/5</sub> <sup>m</sup>	U <sub>1/5</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS.	R/2							
	REF → 3.110	7.099	13.492													
E-W	3.182	—	13.492	F	4.77	1.028	—	—	—	705	—	—	—	—	—	—
E-W	3.206	—		G	6.36	1.371	—	—	—	706	—	—	—	—	—	—
		6.283					W	2.72	.626	707	2150	114	.938	.050	1.040	.055
		6.478					"	2.07	.477	708	1233	73.9	.538	.032	.596	.036
		7.170					E	2.24	.515	709	1244	62.8	.543	.027	.602	.030
		7.831						2.44	.562	710	1353	74.8	.590	.033	.654	.036
		7.908						2.20	.621	711	1973	135	.360	.059	.954	.065
		7.984						2.95	.679	712	2179	57.9	.950	.025	1.054	.028
		8.148						3.50	.805	713	958	257	.418	.112	.463	.124
		10.570						11.57	2.663	714	394	16.7	—	—	—	—
E-W	3.261	—		H	10.0	2.155	—	—	—	715	—	—	—	—	—	—
E-W	3.303	—		J	12.78	2.754	—	—	—	716	—	—	—	—	—	—
		6.543					W	1.85	.426	717	1900	165	.824	.072	.919	.080
		7.067					"	.11	.024	718	730	104	.319	.046	.353	.051
		7.760					E	2.20	.507	719	2109	114	.920	.050	1.020	.055
		7.439						1.13	.261	720	1411	159	.615	.070	.682	.077
		7.993						2.94	.686	721	1027	222	.448	.097	.497	.107
		10.571						11.57	2.664	722	397	28.1	—	—	—	—
E-W	3.467	—		K	23.64	5.095	—	—	—	723	—	—	—	—	—	—
		10.571					E	11.57	2.664	724	401	11.0	—	—	—	—
		7.934						2.8	.641	725	1219	284	.532	.124	.590	.132
		7.632						1.80	.414	726	1993	134	.869	.059	.964	.065
		6.957					W	.47	.109	727	1235	129	.539	.057	.597	.063
		6.637					"	1.54	.354	728	1735	164	.757	.071	.839	.079
		7.277					E	.59	.136	729	1715	168	.748	.073	.829	.081

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (nom)  $V_j^i = 2293$  FPS  $V_j^m = 2068$  FPS

POINT 3017  $R_i = 7.344$  (nom)  $V_j^i = 1431$  FPS  $V_{1/2} = 400$  FPS Date 1/3/72

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>m</sup>	U <sub>1/3</sub> <sup>m</sup>
	AXIAL	EW	NS	PLANE	X MUS	Y/DEG	LOC.	R. INS.	R/R <sub>2</sub>							
	R <sub>1</sub> 3110	7099	13492													
E-W	3.633	—	13492	L	3464	2466	—	—	—	730	—	—	—	—	—	—
		7.277					E	.59	.136	731	1778	143	.775	.062	.800	.069
		6.650					W	1.50	.345	732	1491	166	.650	.072	.721	.080
		6.877					"	.74	.170	733	1439	147	.627	.064	.696	.071
		7.539					E	1.47	.338	734	1863	148	.812	.065	.901	.072
		7.838					↓	2.46	.567	735	1185	311	.517	.136	.573	.150
		8.145					↓	3.49	.803	736	703	219	.307	.095	.340	.106
E-W	—	—					—	—	—	739	—	—	—	—	—	—
		6.649					W	1.50	.345	740	1490	166	.650	.072	.721	.080
		6.876					"	.74	.171	741	1453	148	.634	.065	.702	.072
		7.272					E	.58	.133	742	1807	143	.788	.062	.874	.069
		7.530					↓	1.44	.331	743	1872	146	.816	.064	.902	.071
		7.824					↓	2.43	.559	744	1291	281	.563	.123	.624	.136
		8.139					↓	3.47	.798	745	789	190	.344	.082	.381	.092
		10.568					↓	11.56	2.662	746	403	205	—	—	—	—
E-W	3.798	—		M	4556	9819	—	—	—	747	—	—	—	—	—	—
		10.568					E	1.56	2.662	748	403	162	—	—	—	—
		8.249					↓	2.83	.282	749	736	176	.321	.077	.356	.085
		7.315					↓	.72	.166	750	1726	150	.753	.066	.834	.073
		7.800					↓	2.34	.538	751	1320	271	.576	.118	.638	.131
		6.929					W	.57	.130	752	1533	147	.668	.064	.741	.071
		6.84					"	1.72	.395	753	1321	173	.576	.076	.639	.084

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (NOM)  $V_j^0 = 2293$  FPS  $V_j^M = 2068$  FPS

POINT 3017  $R_i = 4.344$  (NOM)  $V_j^i = 1431$  FPS  $V_{M/C} = 400$  FPS  $\text{cont } 1/3 \text{ hr}$

1284

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/15</sub>	U <sub>1/30</sub>	U <sub>1/15</sub>
	AXIAL	EW	NS	PLANE	X MS	Y Deg	LOC.	R INS.	R/R <sub>2</sub>							
	Ref 3.110	7099	13.492													
E-W	4.072	—	13.492	N	63.71	13.731	—	—	—	754	—	—	—	—	—	—
		7029					W	.23	.054	755	1413	189	.616	.082	.683	.041
		7336					E	.79	.181	756	1022	196	.446	.086	.494	.095
		5.669					W	4.77	1.097	757	657	149	.287	.065	.38	.072
		7.715					E	2.05	.473	758	1138	224	.496	.098	.550	.108
		8.987					↓	4.63	1.065	759	624	147	.272	.064	.302	.071
		10.571		↓	↓	↓	↓	11.57	2.664	760	401	22.0	—	—	—	—
E-W	4.161	—		P	69.60	15.00	—	—	—	761	—	—	—	—	—	—
		10.571					E	11.57	2.664	762	399	22.2	—	—	—	—
		5.669					W	4.77	1.097	763	690	150	.301	.066	.334	.073
		6.354					↓	2.18	.572	764	1013	195	.442	.085	.490	.094
		7.010					↓	.30	.068	765	1308	194	.570	.085	.632	.094
		7.168					E	.23	.053	766	1295	198	.565	.086	.626	.096
		7.882					↓	2.61	1.601	767	903	197	.394	.086	.437	.095
		8.560		↓	↓	↓	↓	4.87	1.121	768	613	137	.267	.060	.297	.067
AXIAL	—	7.100		—	—	—	E	0	0	769	—	—	—	—	—	—
AXIAL	—	7.529		—	—	—	E	1.43	.330	770	—	—	—	—	—	—
AXIAL	—	8.004		—	—	—	↓	3.02	.694	771	—	—	—	—	—	—
AXIAL	—	8.163		—	—	—	↓	3.55	.816	772	—	—	—	—	—	—
AXIAL	—	8.339		↓	—	—	↓	4.13	.951	773	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS OF POOR QUALITY

MODEL 6 Deg = 4.64 (Nom)  $V_j^0 = 2255$  FPS  $V_j^M = 2052$  FPS

POINT 3018  $R_i = 4.344$  (Nom)  $V_j^i = 1630$  FPS  $V_{K/C} = 0$  FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup>
	AXIAL	EW	NS	PLANE	X INS	Y/DEG	LOC.	R INS	R/R <sub>2</sub>							
	REF → 3110	7100	13392													
E-W	3.124	—	13392	A	.93	.200	—	—	—	508	—	—	—	—	—	—
		P395					E	4.32	.994	509	2161	148	.946	.065	1038	.071
		P292					"	3.97	.915	510	2235	237	.928	.104	1073	.114
		5.852					W	4.16	.958	511	2163	305	.946	.133	1039	.146
		5.784					"	4.39	1.010	512	2147	146	.940	.064	1031	.070
E-W	3.134	—		B	1.59	.343	—	—	—	513	—	—	—	—	—	—
E-W	3.143	—		C	2.19	.471	—	—	—	514	—	—	—	—	—	—
		P243					E	3.94	.908	515	1792	304	.784	.133	.861	.146
		8.214						3.71	.855	516	2169	58.6	.949	.022	1.042	.024
		P.178						3.59	.774	517	2160	44.3	.945	.019	1.038	.021
		8.244					↓	3.81	.822	518	2127	96.8	.931	.042	1.021	.047
		5.965					W	3.78	.815	519	2222	49.1	.973	.022	1.067	.024
E-W	3.153	—		D	2.85	.614	—	—	—	520	—	—	—	—	—	—
E-W	3.162	—		E	3.44	.742	—	—	—	521	—	—	—	—	—	—
		P245					E	3.95	.851	522	753	288	.330	.126	.362	.138
		8.230						3.77	.812	523	2074	157	.908	.069	.996	.076
		8.176						3.59	.773	524	2239	50.9	.980	.022	1.075	.024
		8.111					↓	3.37	.726	525	2252	52.1	.786	.023	1.082	.025
		6.027					W	3.58	.771	526	2170	49.3	.950	.022	1.042	.024
E-W	3.181	—		F	4.70	1.013	—	—	—	527	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE IS  
OF POOR QUALITY

MODEL 6 Deg 4.64 (Nom)  $V_1^0$  225 FPS  $V_1^M$  2002 FPS  
 POINT 3010  $R_2$  4.344 (Nom)  $V_1^i$  1630 FPS  $V_1^C$  0 FPS Date 11/30/57

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/3</sub>	U <sub>1/3</sub> '	U <sub>1/3</sub> <sup>M</sup>	U <sub>1/3</sub> <sup>M</sup> '
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS.	R/R <sub>2</sub>							
REF #3110	7.100	13.392														
E-W	3.205	—	13.392	G	6.29	1356	—	—	—	528	—	—	—	—	—	—
		8.036					E	3.12	.672	529	1814	264	.794	.124	871	.136
		7.935						2.78	.600	530	2173	668	.951	.029	1044	.032
		8.036						3.12	.672	531	1517	492	.664	.022	729	.024
		6.247					W	2.84	.613	532	2132	120	.933	.052	1024	.058
		6.408					"	2.31	.497	533	1482	699	.648	.031	712	.034
E-W	3.261	—		H	10.00	2.155	—	—	—	534	—	—	—	—	—	—
E-W	3.303	—		J	12.78	2.755	—	—	—	535	—	—	—	—	—	—
		7.105					R	0	0	536	789	127	.345	.056	379	.061
		7.039					W	2.03	.432	537	737	114	.323	.050	354	.055
		7.713					E	2.05	.440	538	2154	948	.743	.042	1035	.045
		7.458					"	1.33	.286	539	1612	121	.706	.053	774	.058
		6.546					W	1.85	.398	540	1908	164	.835	.072	916	.079
E-W	3.467	—		K	23.64	5.095	—	—	—	541	—	—	—	—	—	—
		6.650					W	1.50	.323	542	1657	200	.725	.088	796	.096
		6.897					"	.61	.146	543	1373	133	.601	.058	659	.064
		7.292					E	.64	.132	544	1834	148	.802	.065	881	.071
		7.575					"	1.58	.341	545	1996	127	.874	.055	959	.061
		7.075					R	0	0	546	1620	151	.709	.069	778	.076
E-W	3.633	—		L	34.64	7.465	—	—	—	547	—	—	—	—	—	—
		7.393					E	.98	.210	548	1879	159	.822	.070	902	.076
		6.593					W	1.69	.364	549	1386	209	.606	.091	666	.107
		7.101					R	0	0	550	1791	153	.784	.067	860	.073
		7.825					E	2.42	.521	551	1391	320	.609	.140	668	.153
		8.161					"	3.54	.762	552	7620	243	.331	.106	366	.47

Table XXI. LV Log Sheet Model 6 (Continued). ORIGINAL PAGE IS OF POOR QUALITY

MODEL 6 Deg = 4.64 (Nom)  $V_j^0 = 2285$  FPS  $V_j^M = 2082$  FPS

POINT 3018  $R_i = 4.344$  (Nom)  $V_j^i = 1630$  FPS  $V_{1/2} = 0$  FPS Date 12/30/77

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EW	NS	PLANE	X INS	Y Deg	LOC.	R INS	R/R <sub>2</sub>							
E-W	3.798	—	13.392	M	4556	9820	—	—	—	553	—	—	—	—	—	—
		6.146					W	3.18	.732	554	664	225	.270	.099	.319	.108
		6.760					"	1.13	.260	555	1281	277	.561	.121	.615	.133
		7.103					E	0	0	556	1667	206	.729	.090	.801	.099
		7.231					E	.44	.101	557	1693	216	.741	.094	.813	.104
		7.750						2.17	.530	558	1297	308	.868	.135	.623	.148
		8.311						4.14	.953	559	665	217	.291	.095	.319	.104
E-W	4.073	—		N	63.77	13745	—	—	—	560	—	—	—	—	—	—
		7.103					E	0	0	561	1188	260	.520	.114	.571	.125
		6.233					W	2.89	.665	562	811	231	.355	.101	.390	.111
		7.909					E	2.67	.615	563	874	235	.382	.103	.420	.113
		8.780						5.60	1.289	564	475	167	.208	.073	.228	.080
		9.636						8.45	1.945	565	226	120	.099	.053	.109	.058
E-W	4.161	—		P	69.60	15.00	—	—	—	566	—	—	—	—	—	—
		9.644					E	8.48	1.952	567	259	120	.113	.052	.124	.058
		8.802						5.67	1.305	568	466	158	.204	.069	.224	.076
		7.918						2.73	.628	569	778	216	.340	.095	.374	.104
		7.110					E	0	0	570	1009	224	.441	.098	.485	.108
		6.209					W	2.97	.684	571	776	216	.339	.094	.373	.104
AXIAL	—	7.100					E	0	0	572	—	—	—	—	—	—
AXIAL	—	7.529					E	1.43	.329	573	—	—	—	—	—	—
AXIAL	—	8.004						3.01	.693	574	—	—	—	—	—	—
AXIAL	—	8.163						3.54	.815	575	—	—	—	—	—	—
AXIAL	—	8.339						4.13	.951	576	—	—	—	—	—	—
										577	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

ORIGINAL PAGE 13  
OF POOR QUALITY

MODEL 6 Deg. 4.64 (Wing)  $V_j^0 = 2281$  FPS  $V_j^M = 2078$  FPS

POINT 3022  $R_i = 4.344$  (Wing)  $V_j^i = 1622$  FPS  $V_{M/C} = 400$  FPS Date 1/4/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	$\bar{U}$ FPS	$U'$ FPS	$U'/\bar{U}$	$U'/U_j^0$	$U'/U_j^M$	$U'/U_j^M$
	AXIAL	EW	NS	PLANE	X MUS	X/DEG	LOC.	R INS.	R/R <sub>2</sub>							
	R&F 3.107	7.138	12.487													
	3.265	10.764	13.487		10.46	2254	E	12.09	2.606	776	350	9.2	—	—	—	—
	3.114				.46	.099				777	374	7.9	—	—	—	—
AXIAL	—			—	—	—				778	—	—	—	—	—	—
AXIAL	—	11.775		—	—	—		15.46	3.332	779	—	—	—	—	—	—
	2.564				-35.96	—				780	430	6.8	—	—	—	—
	32.63				10.33	2.226				781	398	14.5	—	—	—	—
E-W	3.121	—		A	.93	.200	—	—	—	782	—	—	—	—	—	—
		5.906					W	4.11	.886	783	2145	234	.940	.103	1.032	.113
		8.352					E	4.04	.871	784	2475	169	1.063	.074	1.167	.079
		8.313						3.91	.843	785	2493	321	1.093	.141	1.200	.155
		8.400						4.20	.905	786	2417	212	1.060	.093	1.163	.102
		8.455						4.39	.946	787	2186	142	.958	.062	1.052	.068
		10.864						11.42	2.461	788	396	54.2	—	—	—	—
E-W	3.131	—		B	1.59	.343	—	—	—	789	—	—	—	—	—	—
E-W	3.140	—		C	2.19	.472	—	—	—	790	—	—	—	—	—	—
		10.867					E	11.43	2.463	791	396	13.1	—	—	—	—
		8.190						3.50	.754	792	2061	104	.904	.046	.992	.050
		6.219						3.60	.776	793	2046	49.1	.919	.022	1.009	.024
		8.316						3.92	.845	794	2064	118	.905	.052	.993	.056
		8.260						3.74	.806	795	2135	53.0	.936	.023	1.027	.026
		5.958					W	3.94	.849	796	2147	59.8	.941	.026	1.033	.029
E-W	3.150	—		D	2.85	.614	—	—	—	797	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued). ORIGINAL PAGE IS OF POOR QUALITY

MODEL 6 Deg 4.64 Worn  $V_j^0 = 2281$  FPS  $V_j^m = 2078$  FPS

POINT 3020  $R_i = 4.344$  (Worn)  $V_j^i = 1622$  FPS  $\sqrt{N/C} = 401$  FPS

$\Delta_{114} 1/4/78$

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION			RADIAL POSITION			HISTO No.	U FPS	U' FPS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/5</sub>	U <sub>1/10</sub>
	AXIAL	EW	NS	PLANE	X	MS	1/2 Deg	LOC.	R. INS.							
	REF → 3.107	7138	13.487													
E-W	3.159	—	13.487	E	3.44	741	—	—	—	798	—	—	—	—	—	—
		10.570					E	11.44	2466	799	396	54.6	—	—	—	—
		7973						2.78	599	800	1855	64.3	.213	.028	.293	.031
		8043						3.01	649	801	1748	84.3	.267	.037	.841	.041
		8134						3.32	716	802	2155	56.1	.445	.025	1.037	.027
		8196						3.52	759	803	2160	52.3	.947	.023	1.040	.025
		8236					↓	3.66	789	804	1956	184	.857	.021	.941	.029
		6206					W	3.11	670	805	1672	117	.733	.052	.205	.066
	↓	6059			↓	↓	"	3.60	.776	806	2182	57.7	.957	.025	1.050	.028
E-W	3.178	—		F	4.70	1013	—	—	—	807	—	—	—	—	—	—
E-W	3202	—		G	6.29	1356	—	—	—	808	—	—	—	—	—	—
		10.575					E	11.45	2468	809	396	55.9	—	—	—	—
		8112						3.24	698	810	1321	309	.579	.136	.636	.149
		7993						2.55	614	811	2136	68.3	.937	.030	1.028	.033
		7897						2.53	545	812	1849	134	.811	.059	.240	.065
		7927						2.63	567	813	1953	139	.855	.061	.938	.067
		7862						2.41	579	814	1542	107	.676	.065	.742	.051
		7776					↓	2.12	457	815	1492	50.2	.645	.022	.708	.024
		6463					W	2.25	485	816	1455	65.5	.638	.029	.700	.032
	↓	6259			↓	↓	"	3.93	.631	817	2085	133	.914	.059	1.004	.064
E-W	3258	—	↓	H	10.10	2155	—	—	—	818	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Continued).

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1290

MODEL 6 Deg 464 (NMJ)  $V_j^0$  2261 FFS  $V_j^m =$  2076 FFS

POINT 3023  $R_i$  4344 (NMJ)  $V_j^i =$  1622 FFS  $V_{1/2} =$  402 FFS

Date 1/4/76

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE			RADIAL POSITION LOC.			HISTO No.	U FFS	U' FFS	U <sub>1/2</sub>	U <sub>1/3</sub>	U <sub>1/4</sub>	U <sub>1/5</sub>
	AXIAL	EN	NS	X	NS	°Deg	LOC.	R.INS.	°/2							
	REF → 3.107	7.138	13.467													
E-W	3300	—	13.487	J	1278	2754	—	—	—	819	—	—	—	—	—	—
		10568					E	11.43	2.463	820	403	75.6	—	—	—	—
		8022						2.94	.634	821	841	197	.367	.087	.405	.095
		7.736						1.99	.429	822	2071	114	.406	.070	.996	.055
		7.467					↓	1.16	.250	823	1478	97.4	.648	.043	.711	.065
		7.47					W	.17	.037	824	778	125	.341	.055	.374	.060
		6.824						1.05	.226	825	1350	91.1	.592	.040	.650	.044
	↓	6.557					↓	1.94	.418	826	1923	132	.843	.358	.425	.063
EW	3464	—		K	2364	5095	—	—	—	227	—	—	—	—	—	—
		6.565					W	1.91	.412	828	1783	156	.782	.068	.858	.075
		6.906						.78	.166	829	1346	106	.590	.047	.648	.052
		6.953					↓	.62	.134	830	1336	96.0	.586	.042	.643	.046
		7.618					E	1.60	.345	831	1990	125	.272	.055	.958	.030
		7.988						2.83	.610	832	1050	249	.463	.109	.505	.120
	↓	10.575					↓	11.45	2.468	833	401	27.4	—	—	—	—
EW	3620	—		L	3464	7466	—	—	—	834	—	—	—	—	—	—
		10.575					E	11.45	2.468	835	405	15.3	—	—	—	—
		6.572					W	1.89	1.07	836	1574	179	.659	.078	.724	.086
		6.885					"	.85	.183	837	1437	129	.630	.056	.691	.05
		7.520					E	1.27	.274	838	1511	131	.828	.061	.901	.067
		7.553						1.38	.247	839	1284	148	.826	.065	.901	.071
		7.681					↓	2.47	.532	840	1304	232	.571	.428	.627	.140
EW	3795	—		M	4556	9619	—	—	—	841	—	—	—	—	—	—
		6.601					W	1.78	.354	842	1363	171	.598	.075	.656	.082
	↓	7.134					E	0	0	843	1652	149	.724	.065	.795	.072

Table XXI. LV Log Sheet Model 6 (Continued).

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MODEL 6 Deg 4.64 NSM,  $V_j^0 = \underline{2251 \text{ FPS}}$   $V_j^M = \underline{2078 \text{ FPS}}$   
 POINT 3020  $R_i = \underline{4.344 (1210)}$   $V_j^i = \underline{1622 \text{ FPS}}$   $\sqrt{h/c} = \underline{411}$  FPS Date 1/4/78

TYPE TRAV.	POSITION (VOLTS)			AXIAL POSITION PLANE			RADIAL POSITION LOC.			HISTO No.	J FPS	J' FPS	J <sub>1/2</sub>	J <sub>1/3</sub>	J <sub>1/5</sub>	J <sub>1/10</sub>
	AXIAL	EW	NS	X MUS	Y Deg	Z	R INS.	R/R <sub>2</sub>								
	3107	7138	13447													
	3,795	7460	13,447	M	45.52	9.217	E	1.07	.231	844	1758	160	.771	.070	.816	.077
		7934						2.65	.571	245	1122	259	.476	.114	.540	.124
		8316						4.16	.897	846	652	157	.286	.069	.314	.216
		10.573						11.45	2.461	847	405	20.5				
E-W	4,050	—		N	64.44	13.144		—	—	848	—	—	—	—	—	—
		10.573					E	11.45	2.468	849	403	27.8	—	—	—	—
		5842					W	4.32	.931	850	761	170	.334	.075	.366	.082
		6,461						2.24	.483	851	1123	205	.492	.090	.540	.099
		7151					E	.04	.009	852	1464	195	.642	.055	.705	.194
		7,717						2.03	.438	853	1140	240	.570	.105	.549	.116
		8462						4.41	.950	854	651	160	.285	.070	.313	.077
E-W	4,158	—		P	69.60	15.000		—	—	855	—	—	—	—	—	—
		10.576					E	11.46	2.470	856	405	367	—	—	—	—
		6,544						4.35	.937	857	671	149	.297	.065	.326	.072
		7,737						1.99	.429	858	1074	216	.471	.045	.517	.104
		7,226						3.37	.726	859	1350	213	.592	.043	.650	.103
		7,089					W	.17	.037	860	1360	195	.596	.055	.655	.094
		1,961						.59	.127	861	1325	203	.581	.084	.638	.095
		6,383						2.52	.543	862	1055	200	.462	.088	.507	.097
		5,633						5.02	1.422	863	687	147	.301	.064	.331	.072
AXIAL	—	7,150					W	.13	.028	864	—	—	—	—	—	—
AXIAL	—	7,527					E	1.30	.280	865	—	—	—	—	—	—
AXIAL	—	8,004						2.08	.621	866	—	—	—	—	—	—
AXIAL	—	8,163						3.41	.735	867	—	—	—	—	—	—
AXIAL	—	8,339						4.02	.862	868	—	—	—	—	—	—

Table XXI. LV Log Sheet Model 6 (Concluded).

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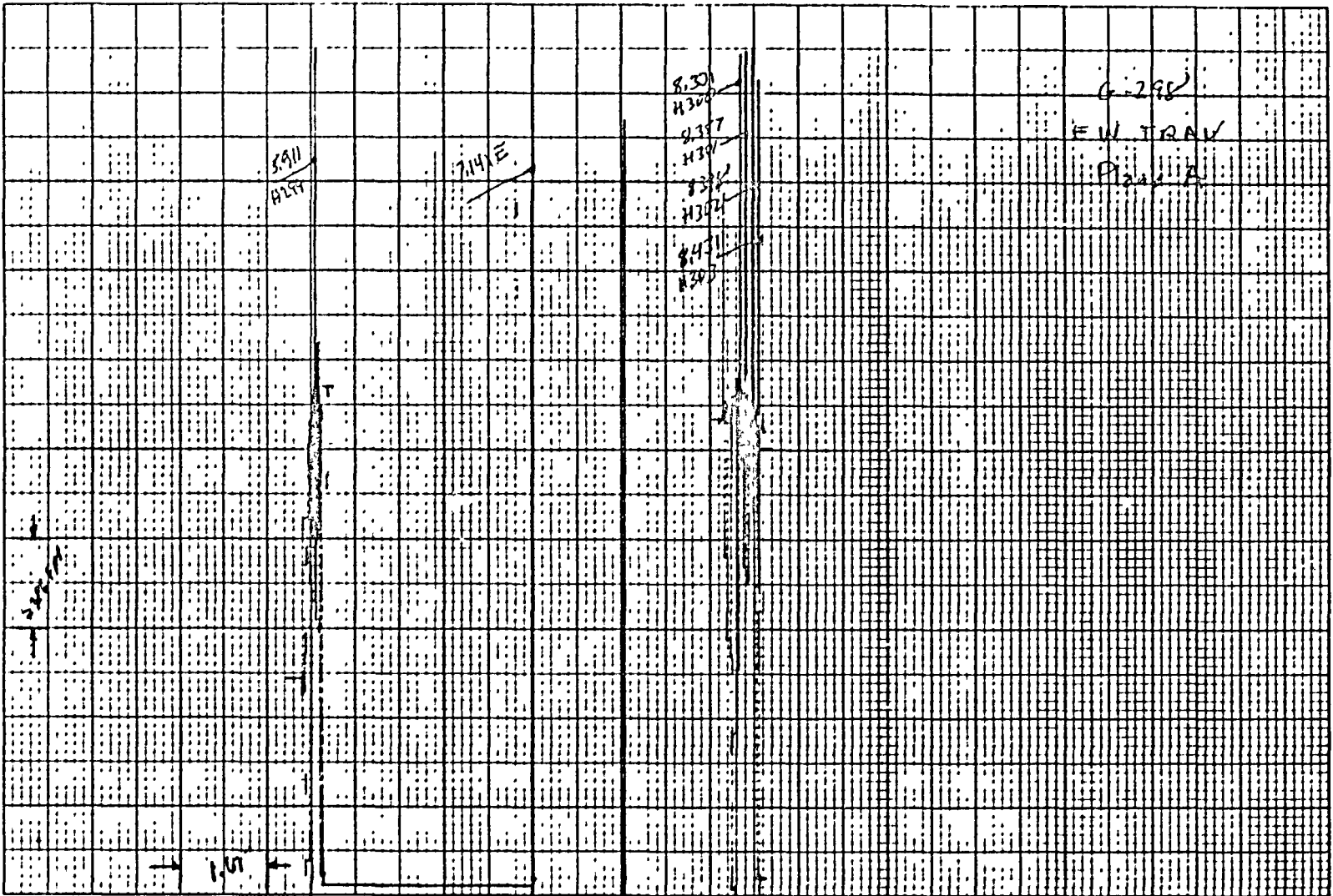
6.2.6.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 6

Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XXI.

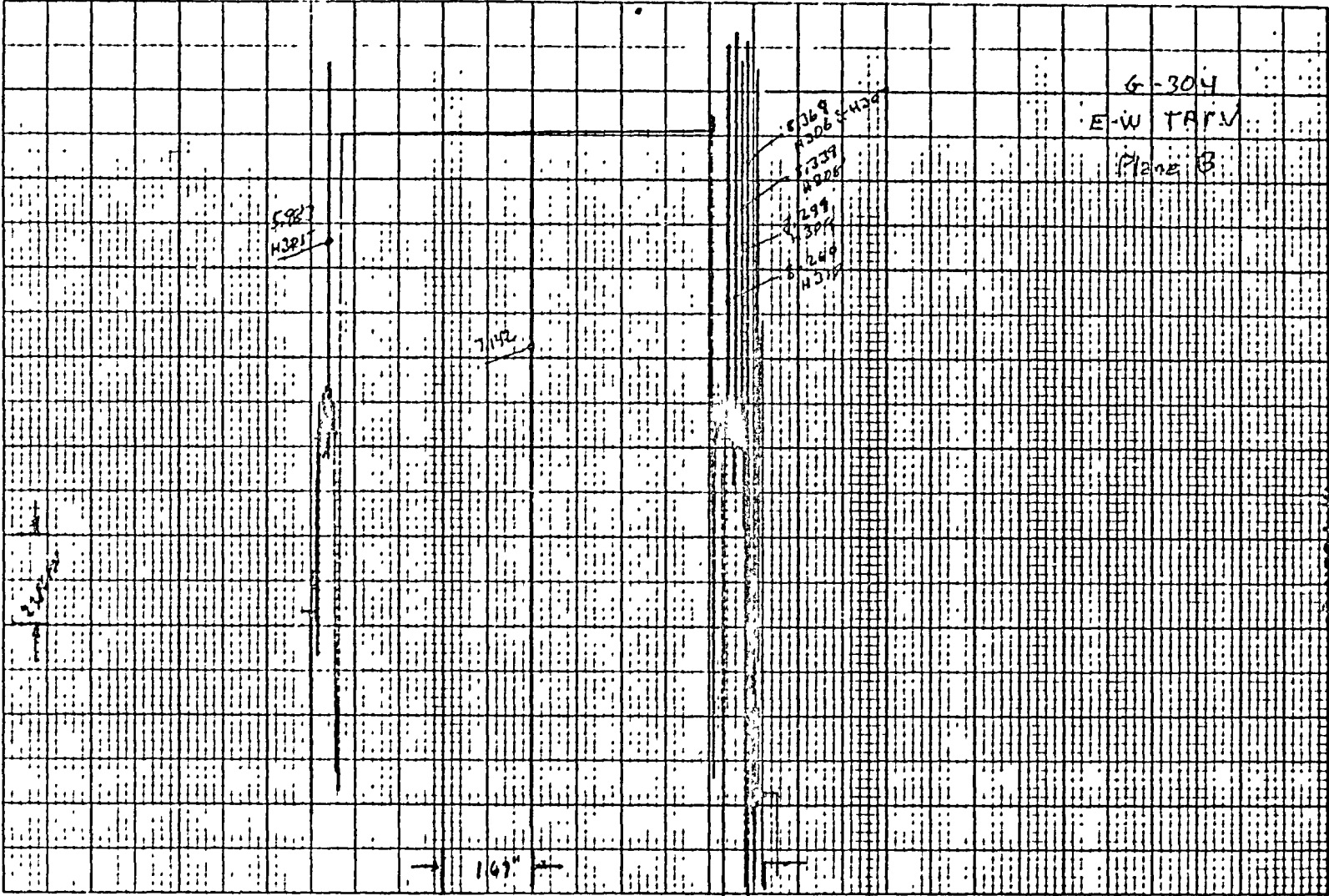
The velocity and physical position information is identified with handwritten scales on the ordinate and abscissa.

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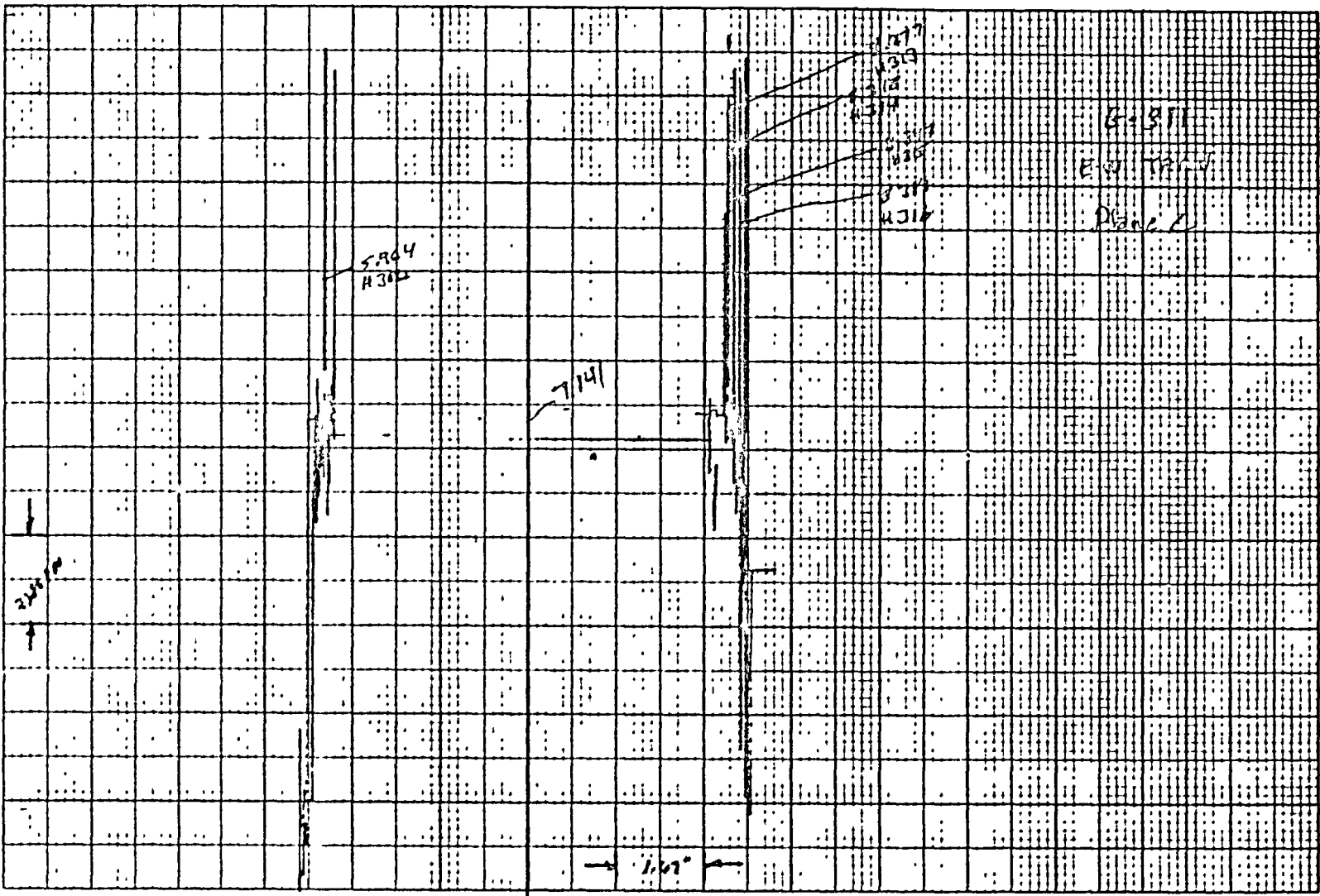
MODEL 6  
TEST POINT 3009R



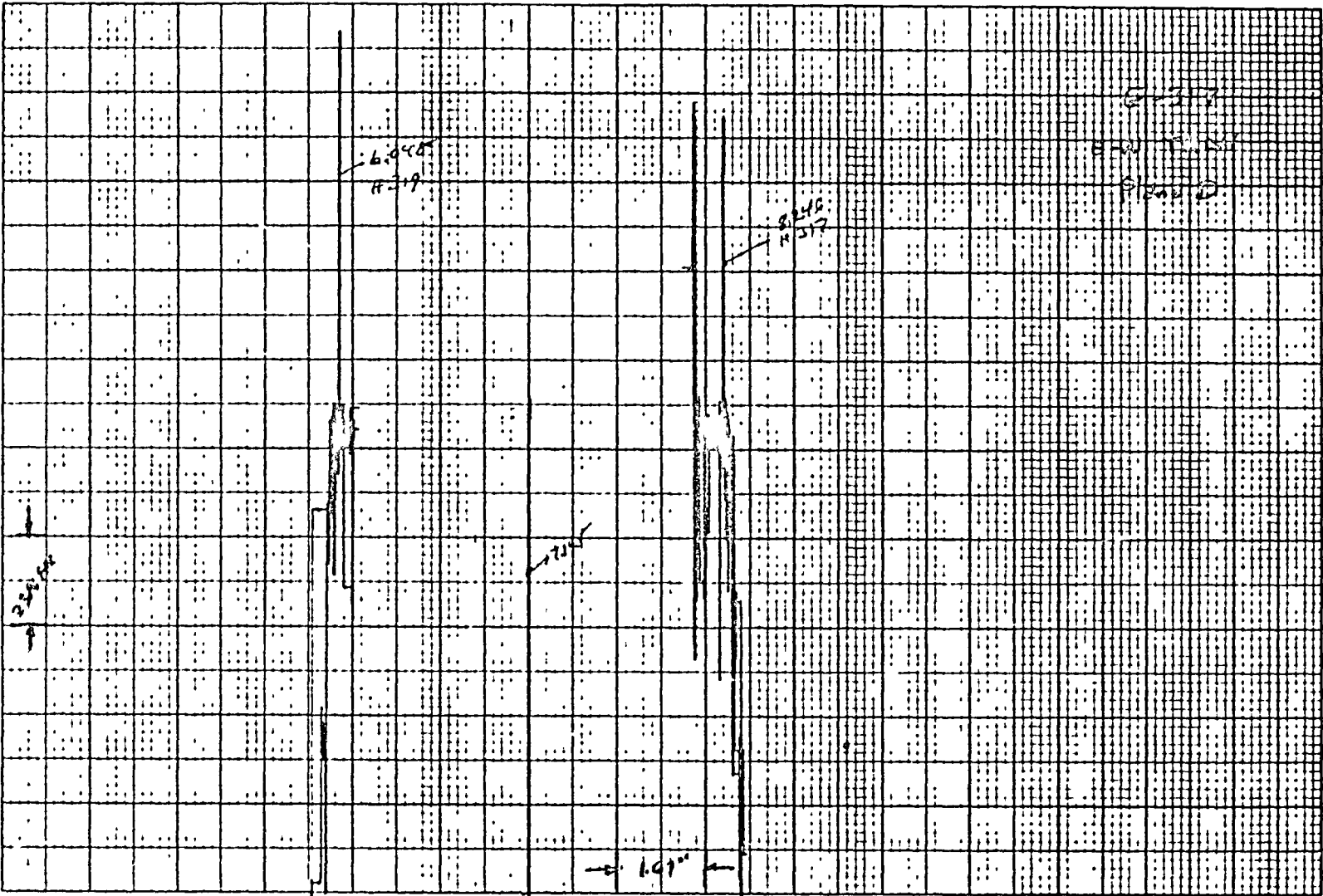
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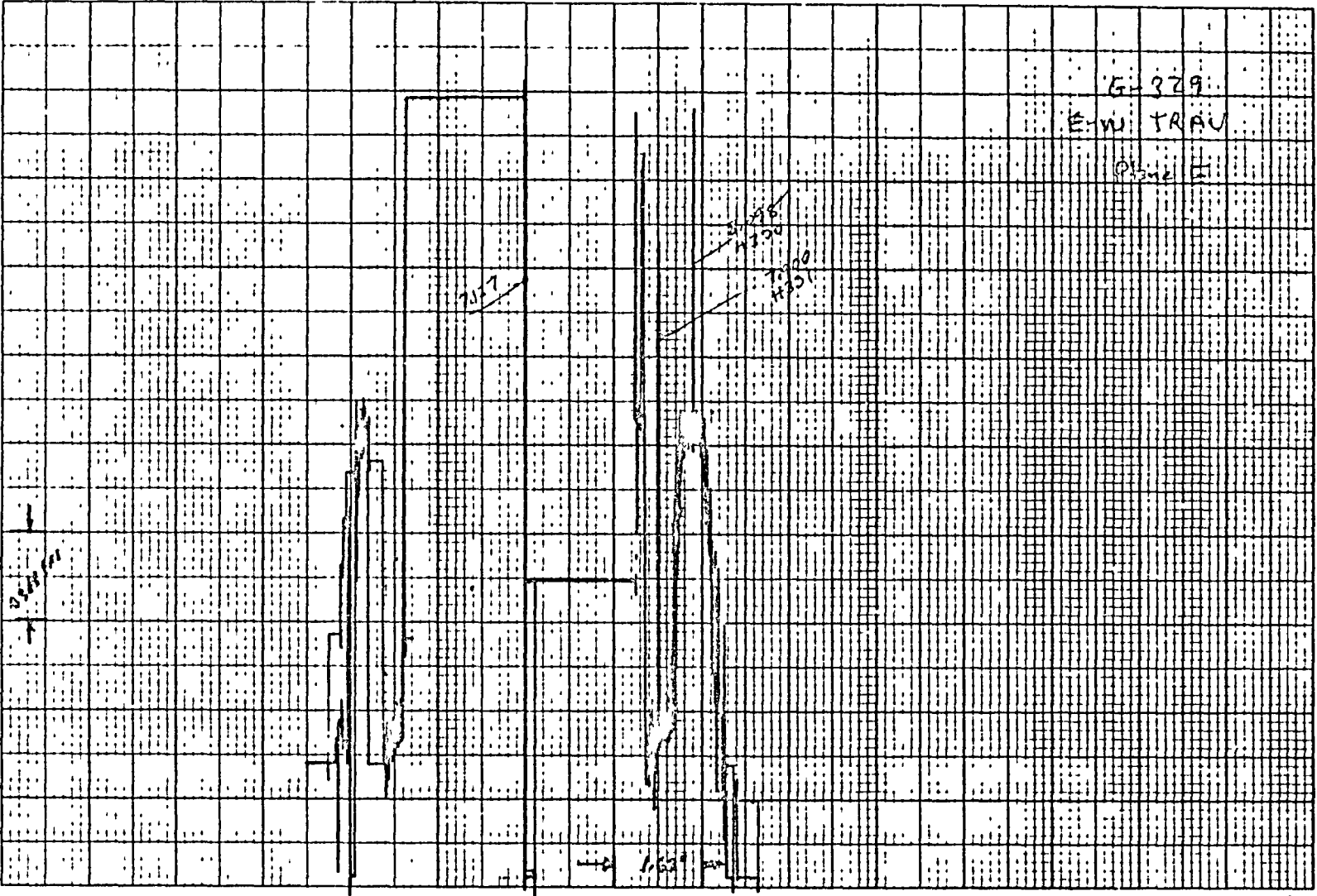
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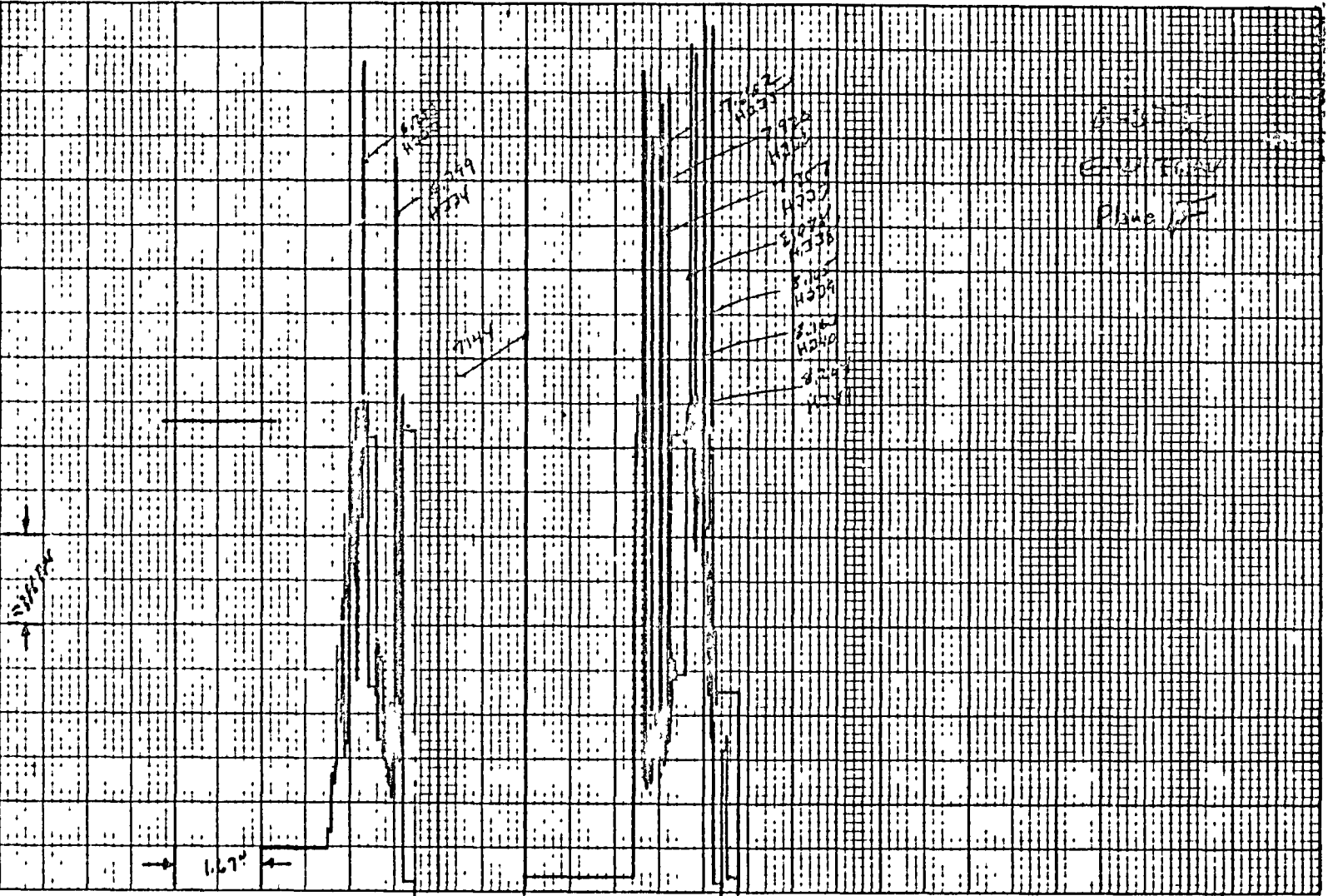






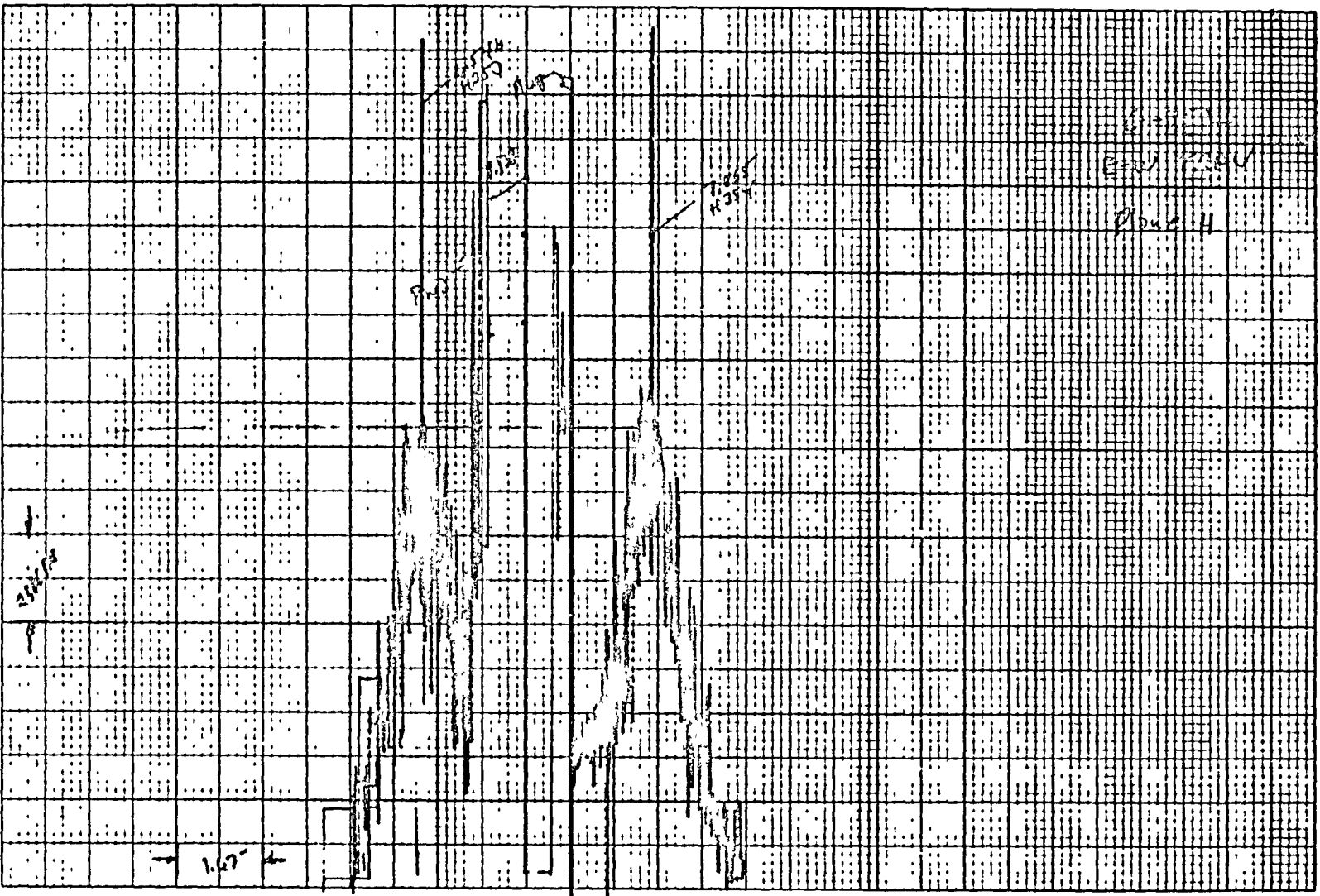
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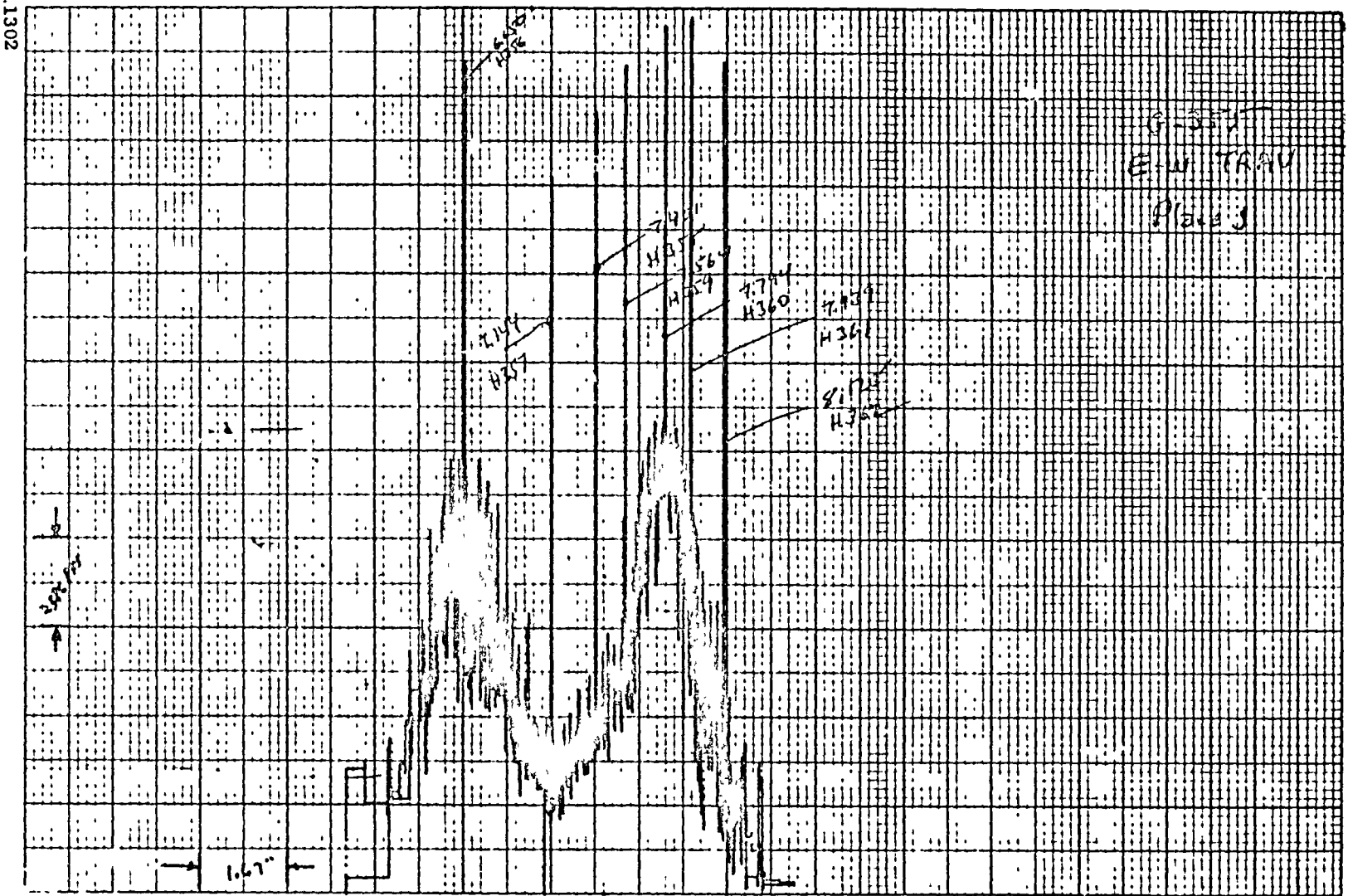
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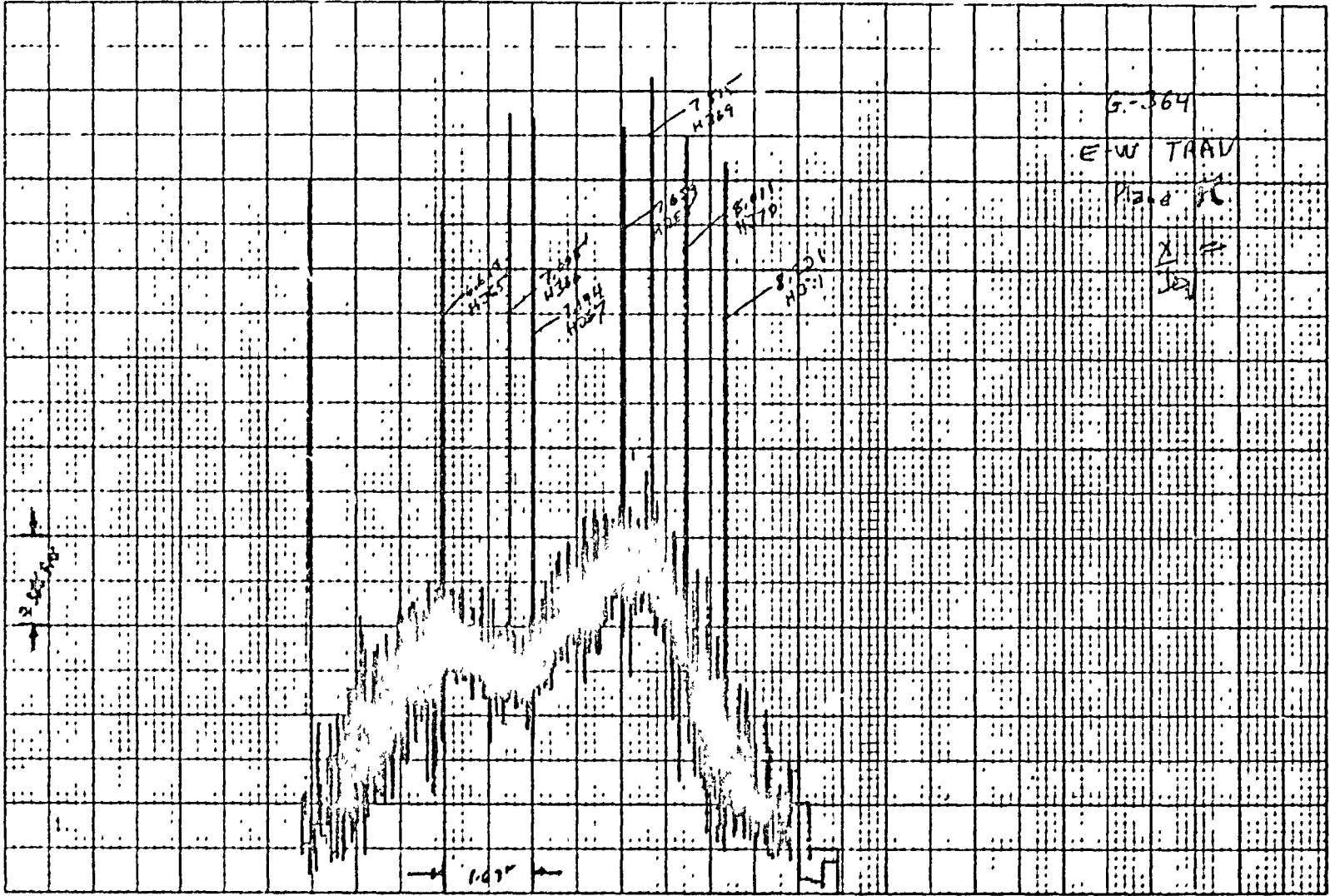




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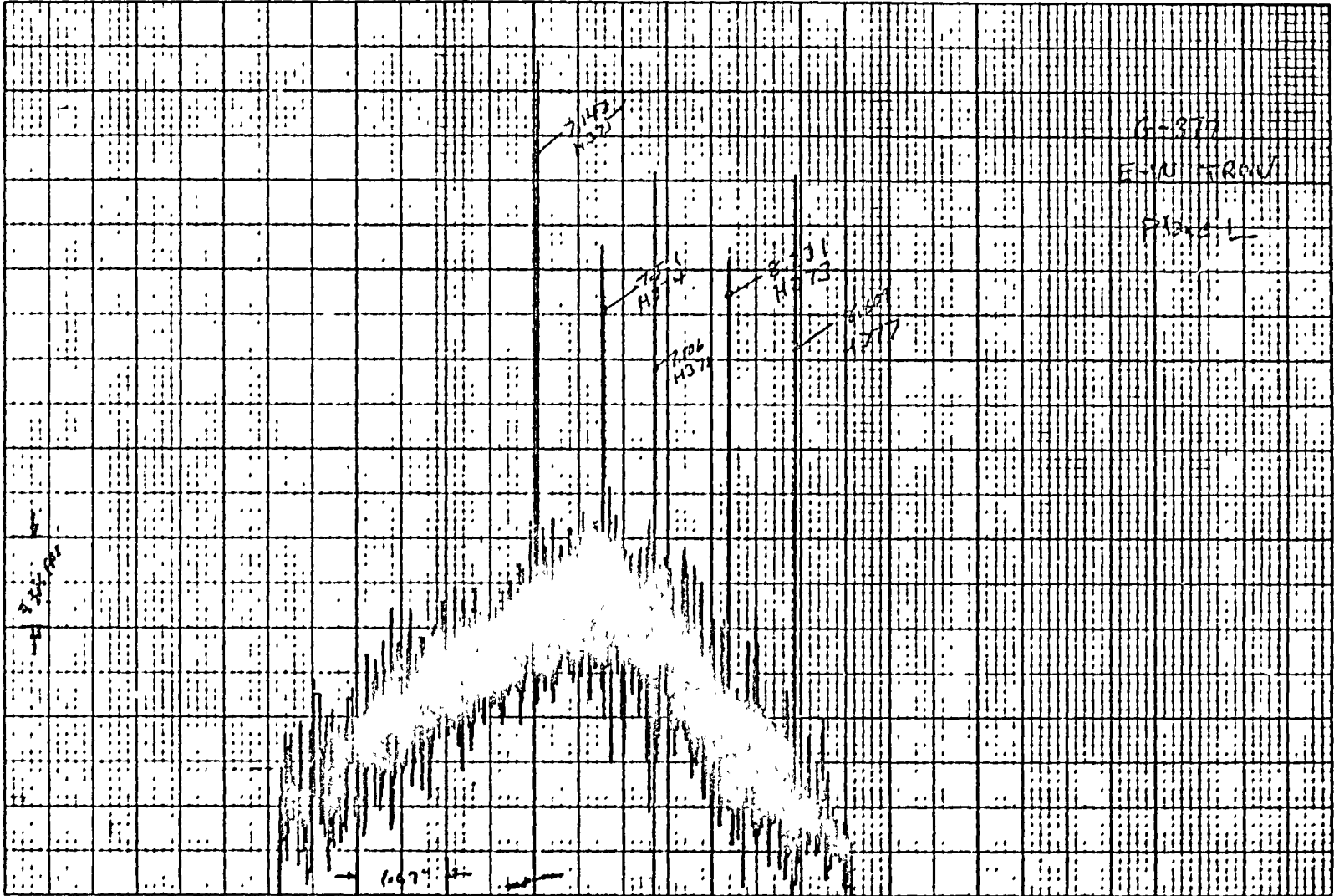


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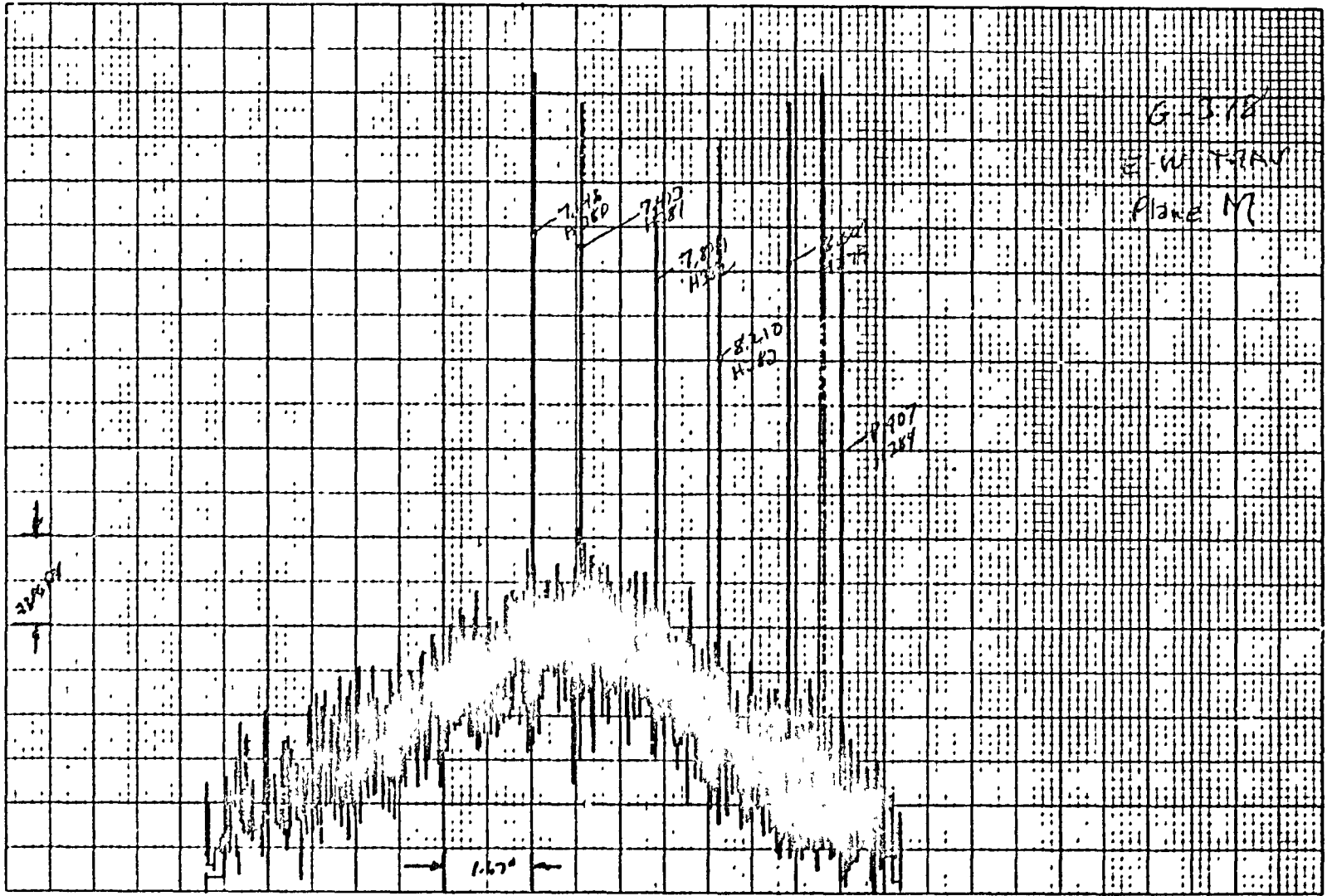
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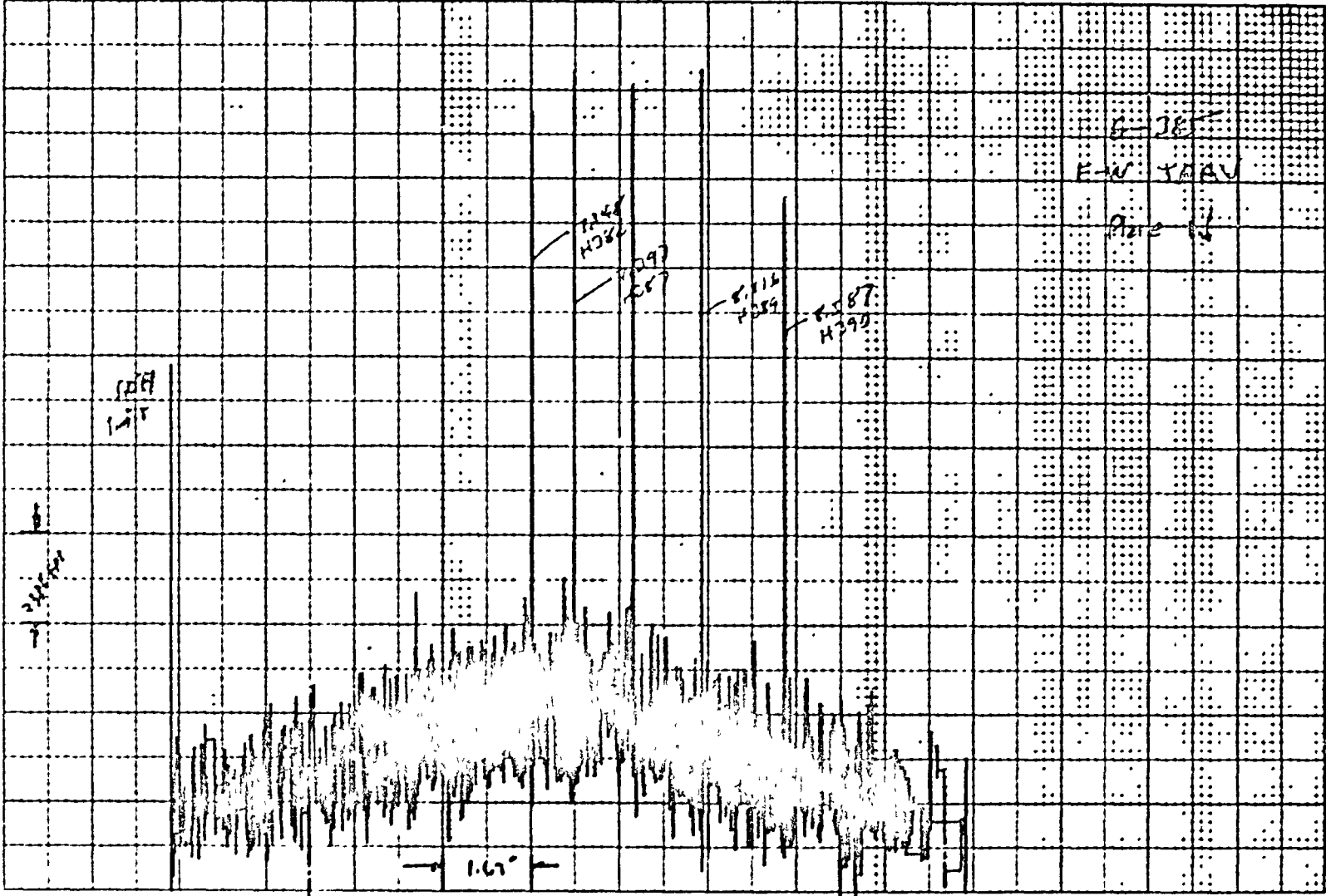
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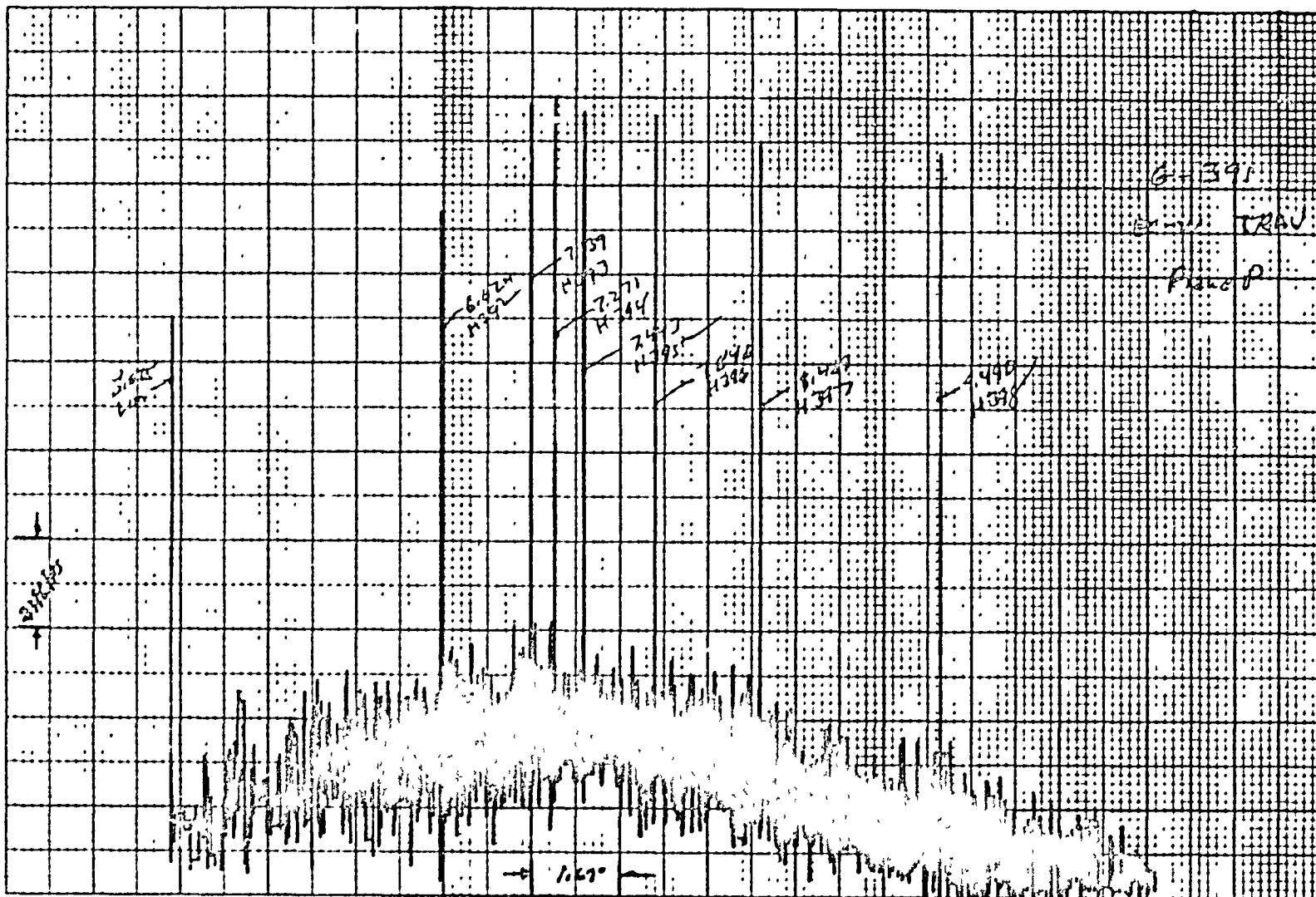
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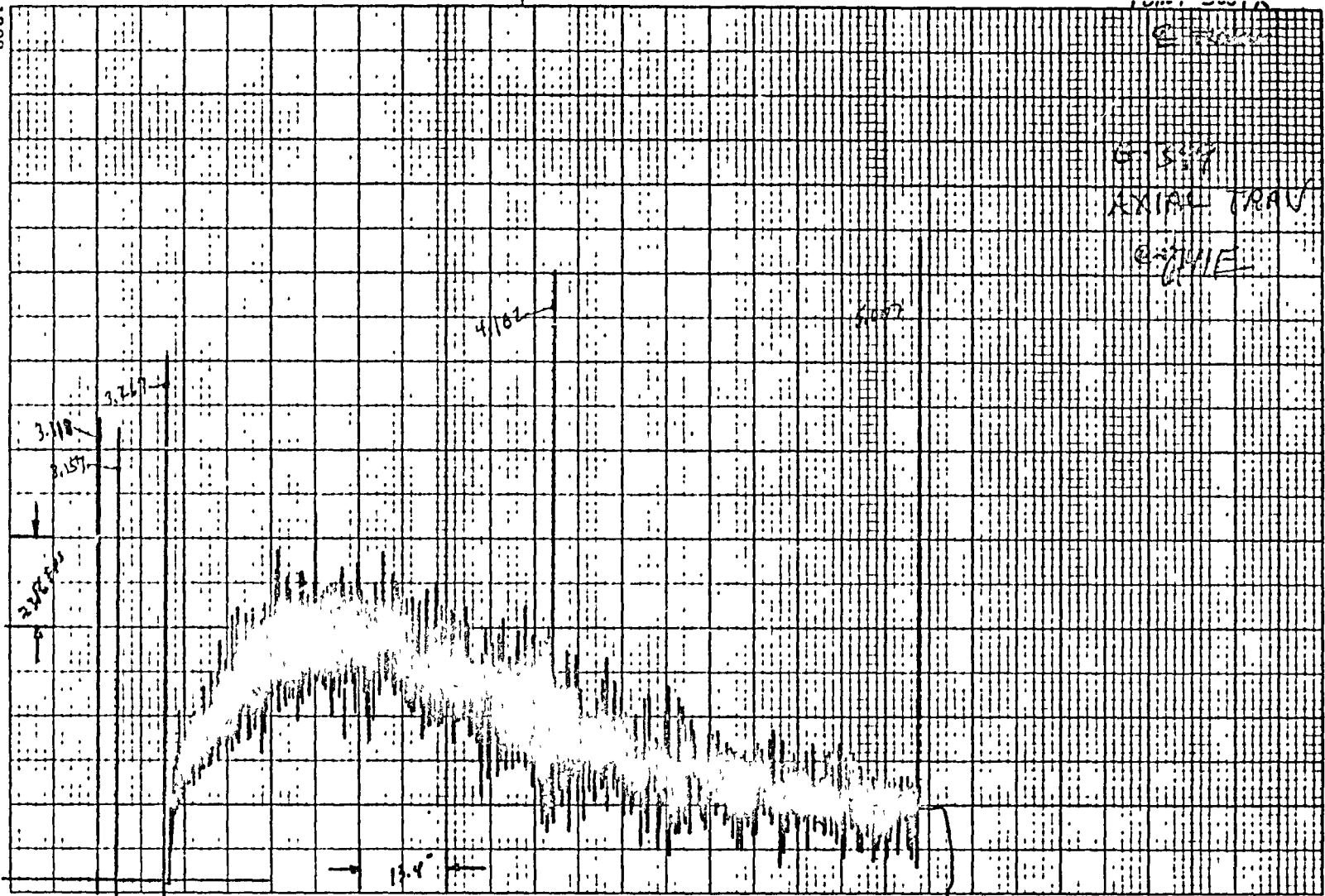
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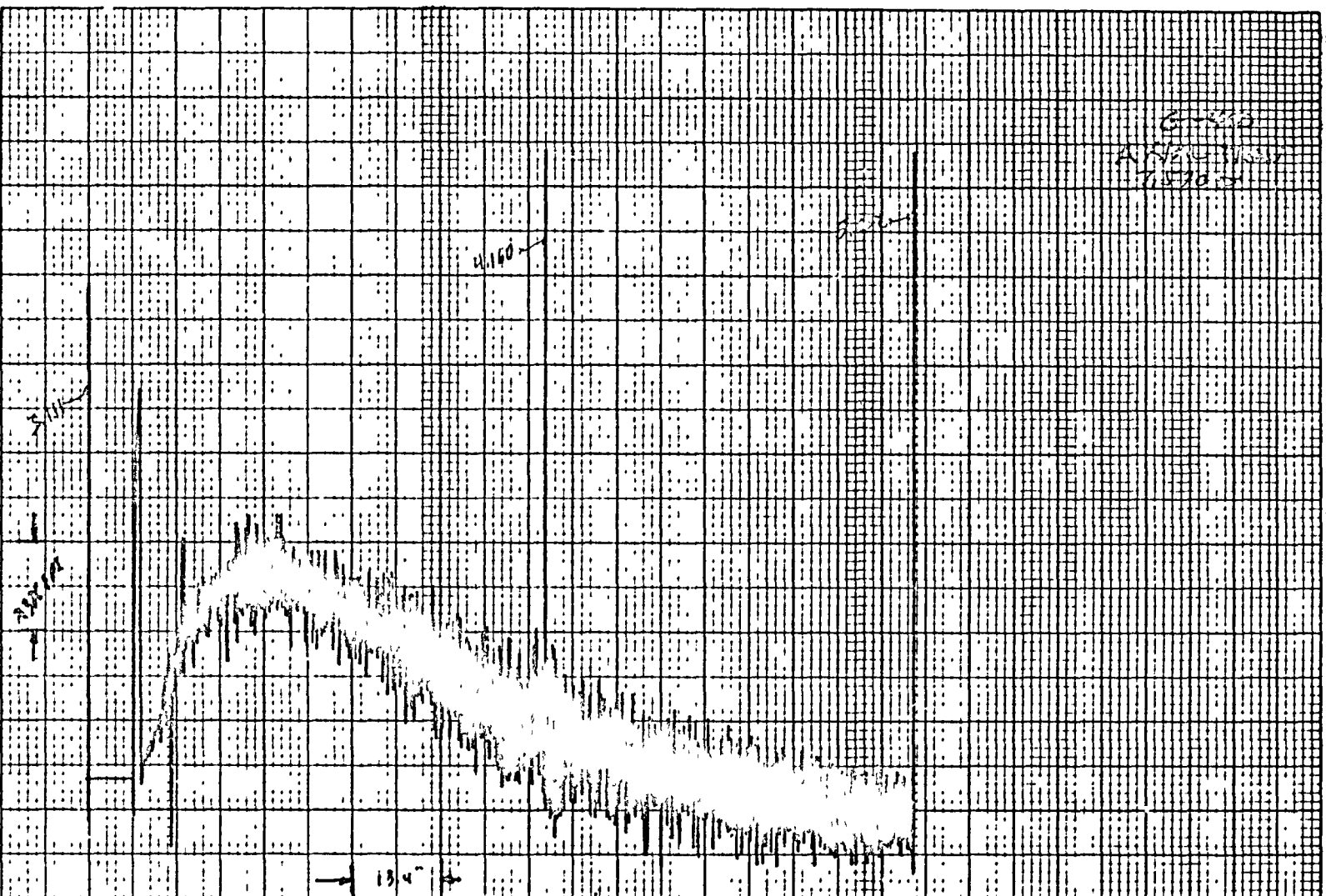
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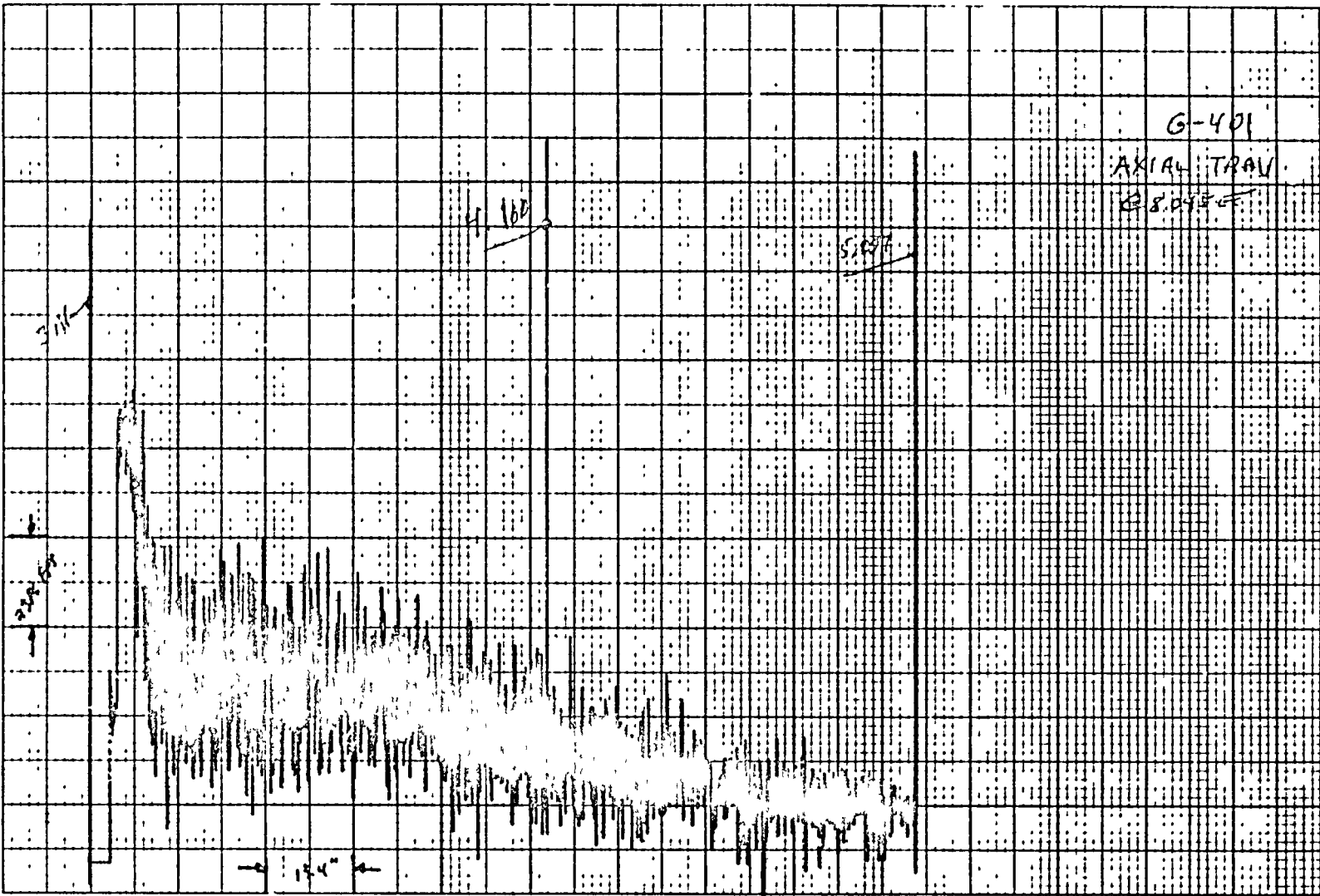
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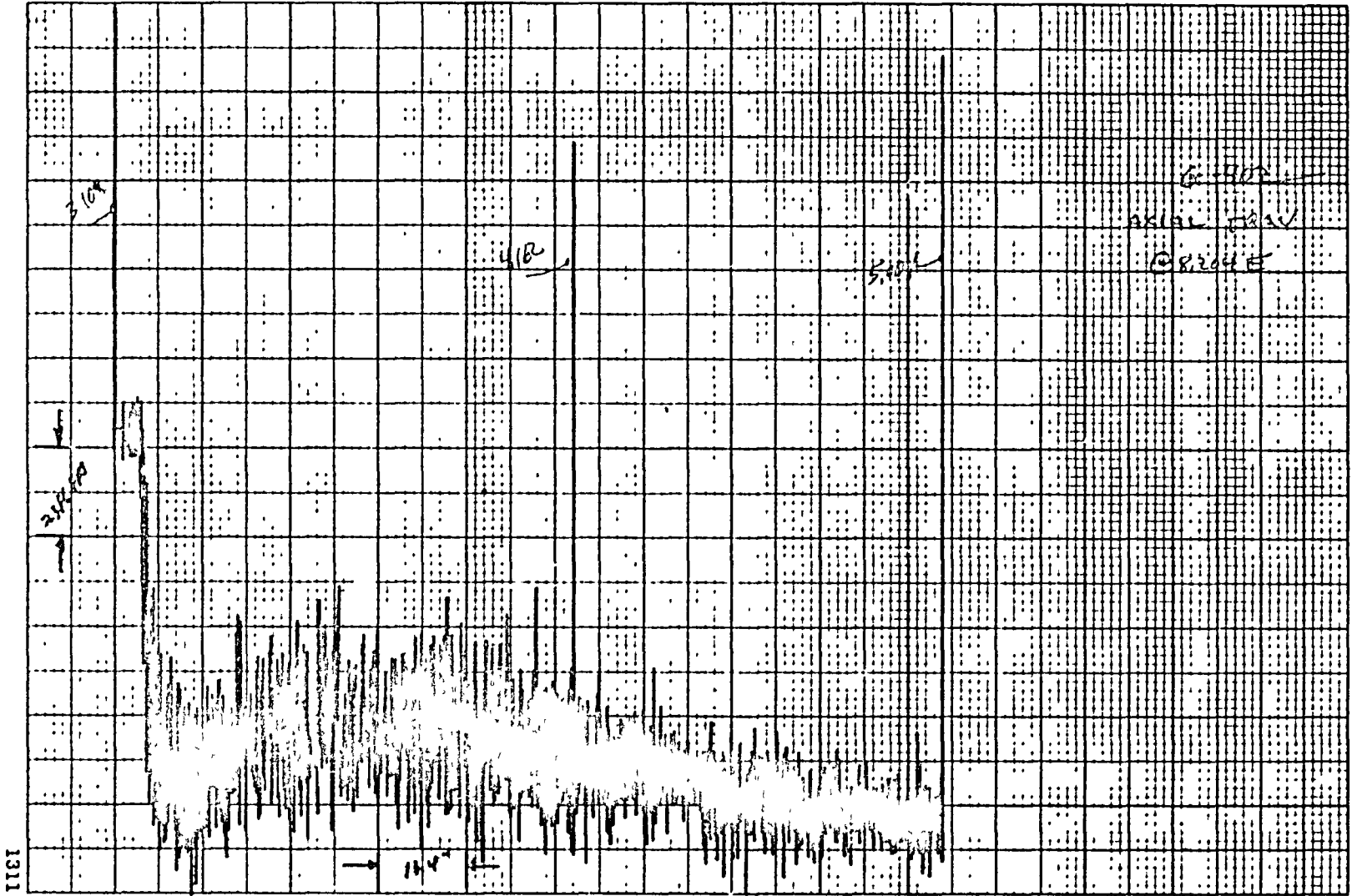


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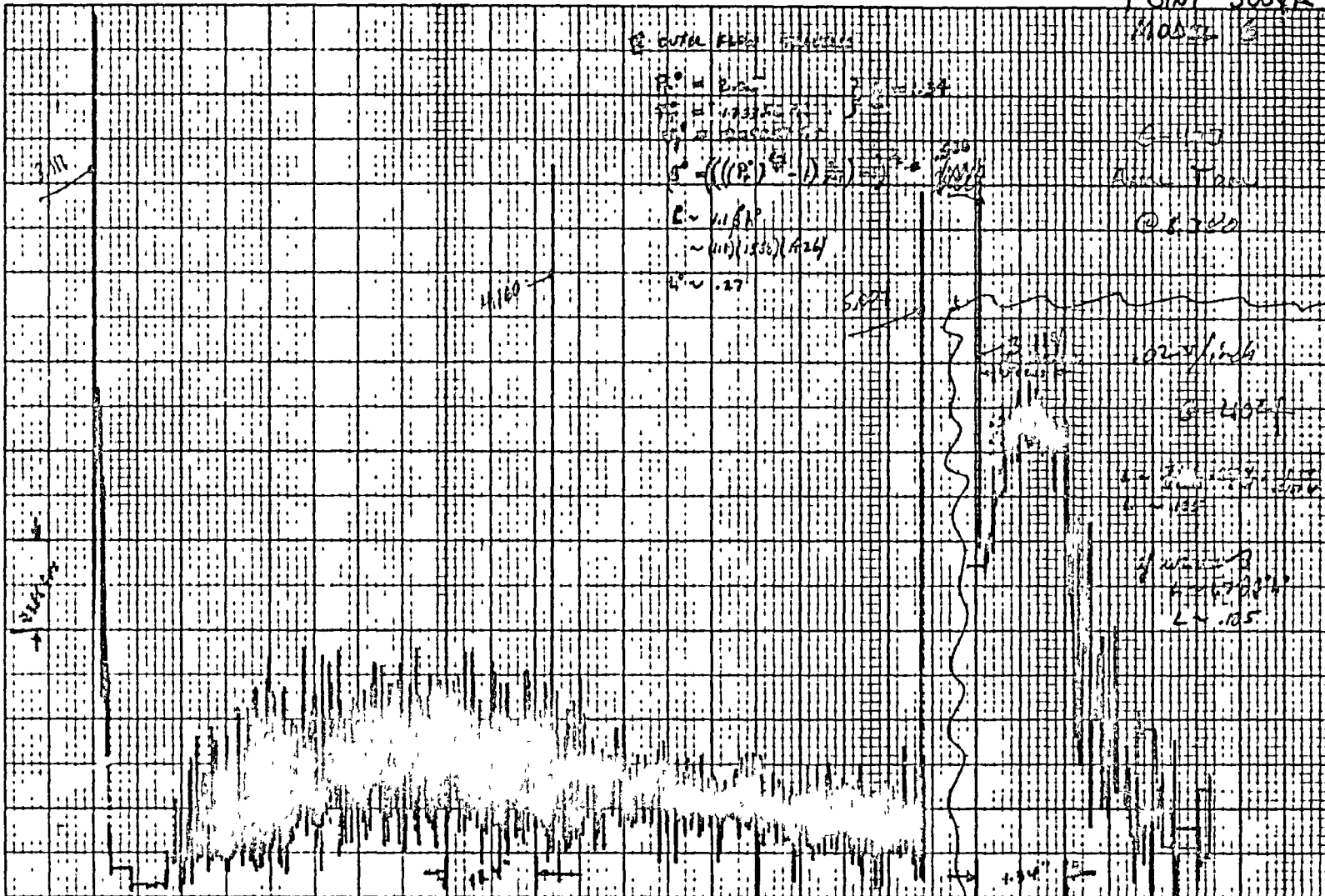
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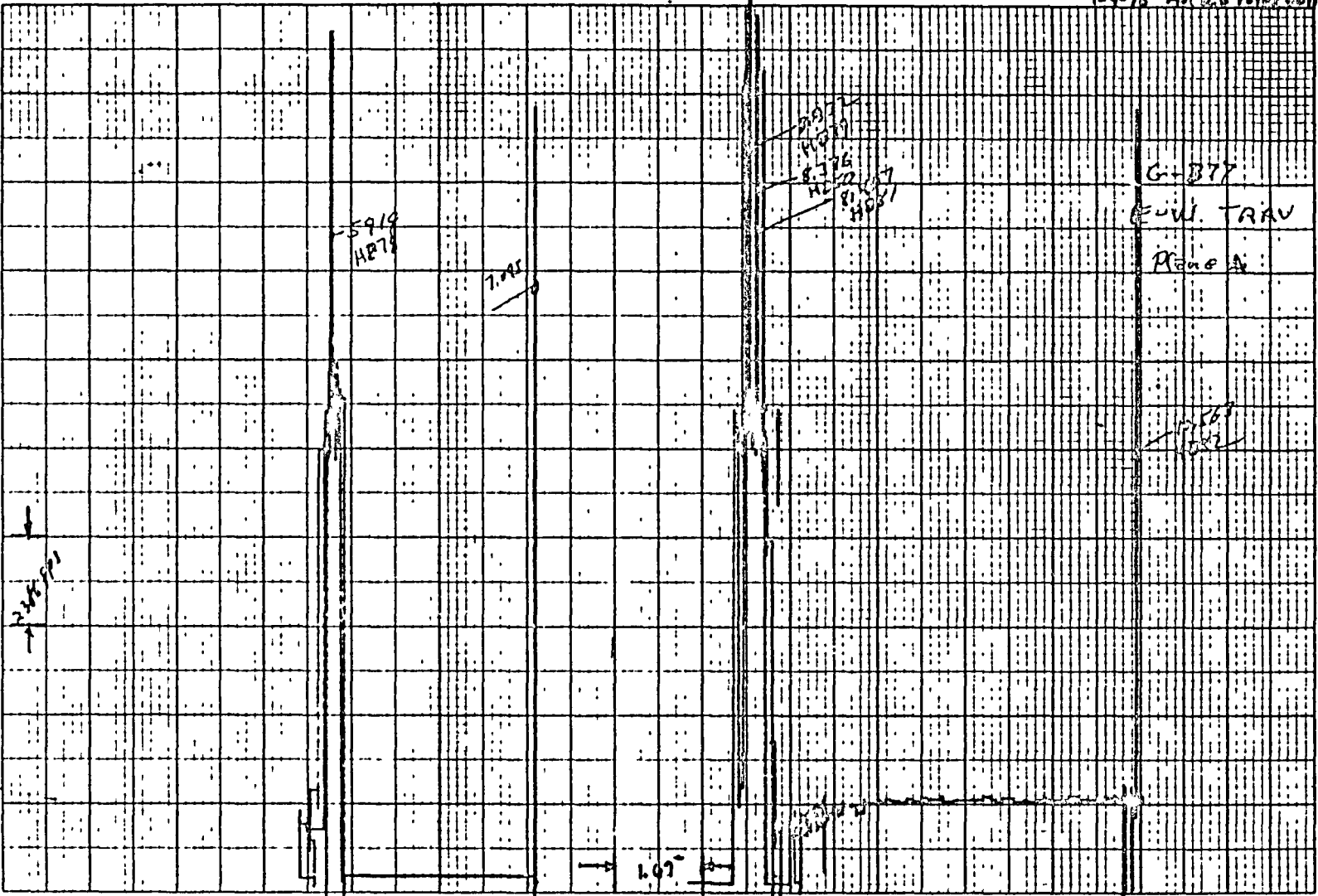
POINT 300R



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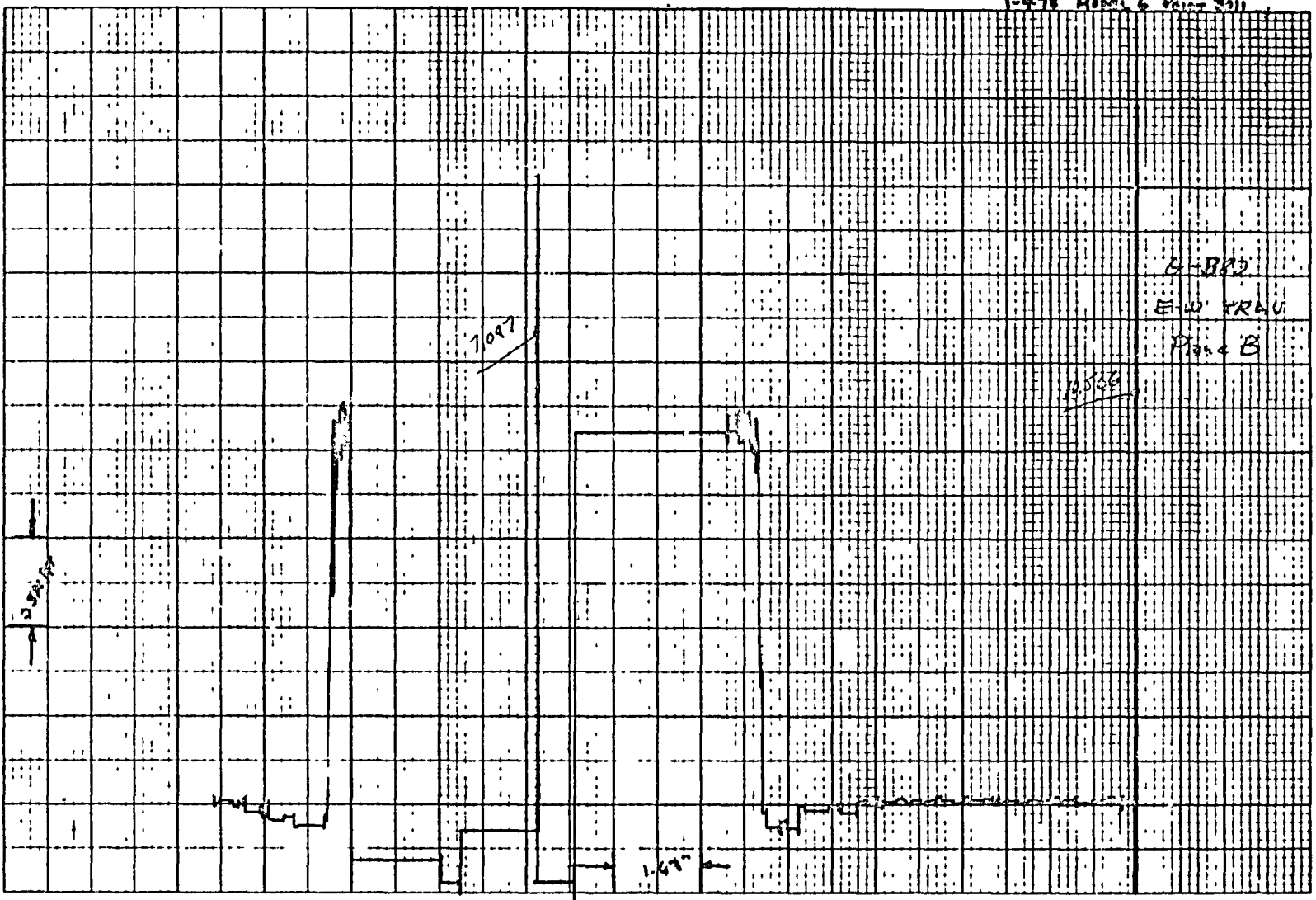


1-4-78 MARYLAND POINT



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E-803  
 E.W. FRAU  
 Plate B

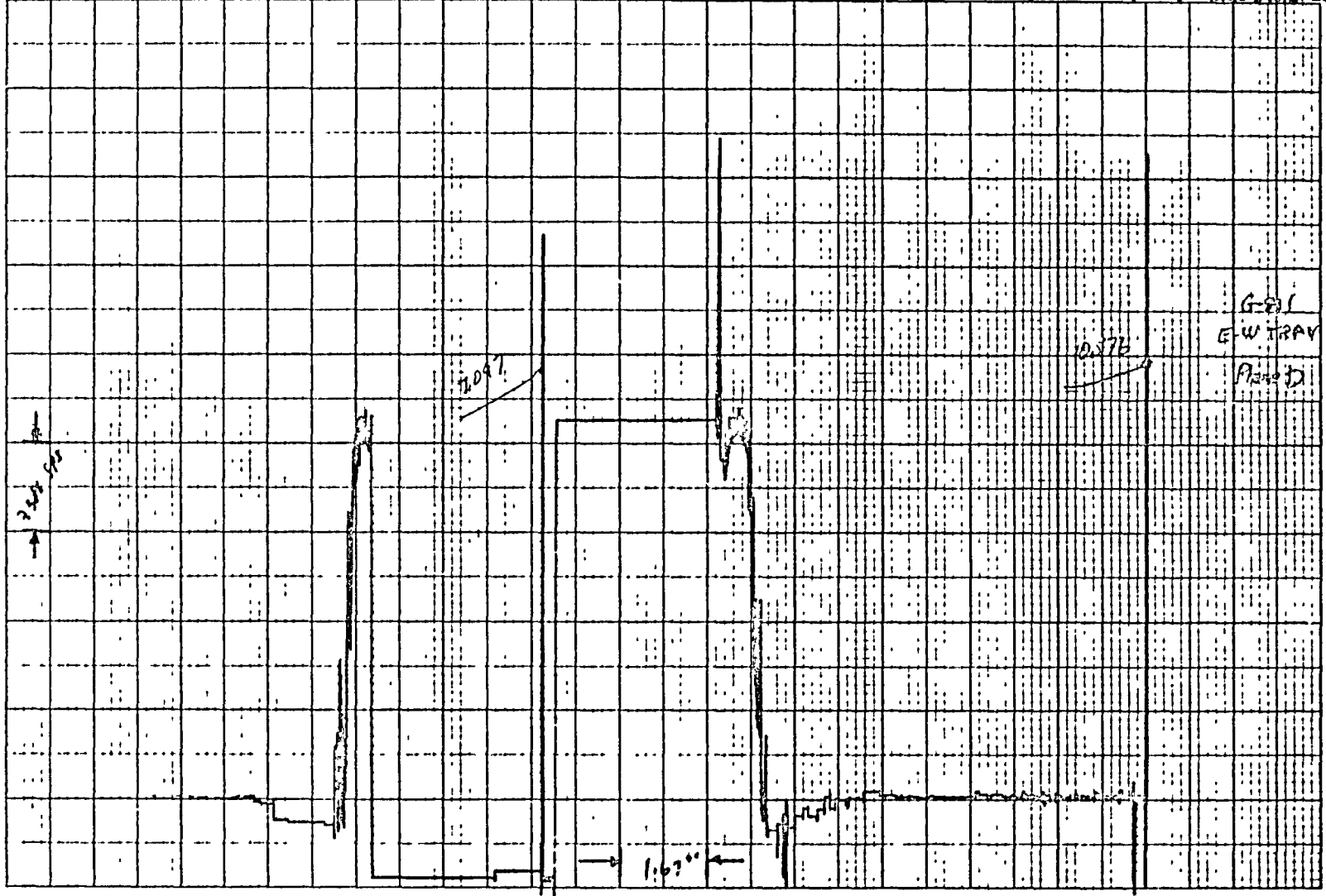
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1-4-78 Mural 6 Point 3011

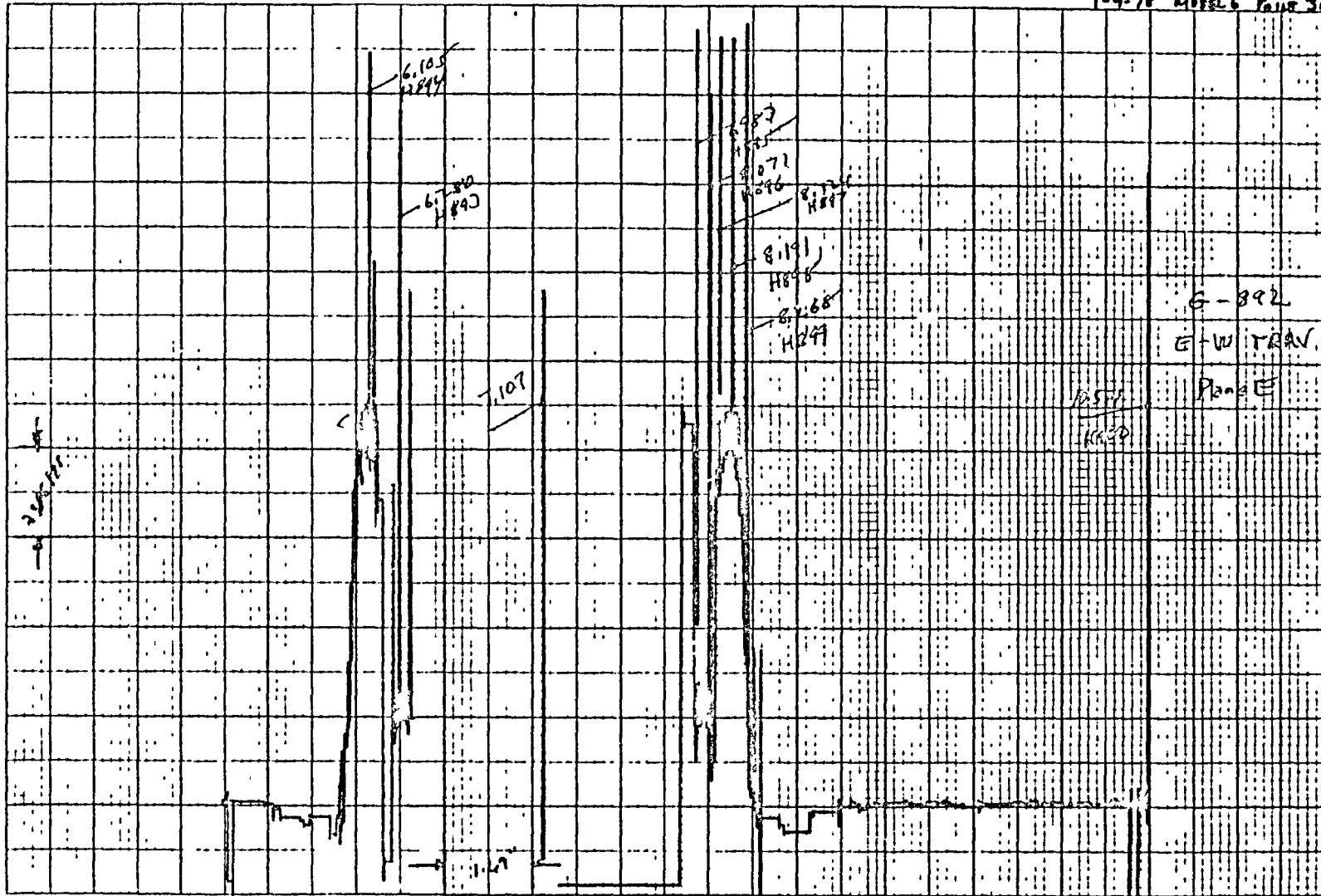
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C-6



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1-4-78 Model 6 PAINT 3011



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