national accelerator laboratory

TM-169
0330

MAGNETIC MATERIAL SAMPLE CATALOG

EDITION 16

4/6/70

NATIONAL ACCELERATOR LABORATORY

RADIO FREQUENCY SECTION

STATEMENT OF PURPOSE

THIS MATERIAL SAMPLE CATALOGUE PROVIDES PRECISE INPUT DATA FOR THE SUBSEQUENT MEASUREMENTS OF FERRITE ELECTRICAL PARAMETERS. ITEMS CATALOGUED HERE FOR EACH SAMPLE ARE THE QUANTITIES OF LENGTH, MASS AND TIME TOGETHER WITH THE DERIVED QUANTITIES DENSITY, CROSS-SECTIONAL AREA, VOLUME, MAGNETIC AND MEAN RADII, AND AIR-CORE CHARACTERISTIC IMPEDANCE ZO. CALENDAR DATES PROVIDE A REFERENCE FOR PURCHASE ORDERS AND COMMUNICATIONS WITH MATERIAL SUPPLIERS.

QUANTITIES ARE GIVEN HERE TO SUFFICIENT ACCURACY TO PERMIT MEANINGFUL CALCULATIONS FOR LOW-LOSS SAMPLES. SUCH SAMPLES ARE THE MOST DIFFICULT TO MEASURE BECAUSE THEY APPEAR FOR RF LOSS AS RELATIVELY SMALL PERTURBATIONS IN A RESONANT CAVITY. DENSITY IS RECORDED BECAUSE IT IS RELEVANT TO HIGH-LEVEL NON-LINEARITIES AND EASE OF MAGNETIC SATURATION, BOTH OF WHICH DEPEND ON SAMPLE POROSITY. TO OBTAIN TRUE POROSITY, ONE MUST KNOW THE X-RAY DENSITY, WHICH IN TURN DEPENDS ON CHEMICAL COMPOSITION AND STOICHIOMETRY, BUT IS AVAILABLE IN THE LITERATURE FOR A FEW COMPOSITIONS.

THE SAMPLES INCLUDE FERRITES, LAMINATED CORES AND POWDERED CORES. FOR A LISTING OF FERRITE MANUFACTURERS SEE THE 'FERRITE MANUFACTURERS SOURCE BOOK' - UCID 10197X. FOR FURTHER READING, SEE UCID - 10176, AS/MAIN RING/04, '50-200 MHZ FERRITE EVALUATION, REPORT 1' AND 'REPORT 2' (UCID-10133).

QUENTIN KERNS

GERRY TOOL

JOSEPH KATZ

COLUMN HEADINGS

TYPE = MANUFACTURER'S MATERIAL DESIGNATION

S.N. = SERIAL NUMBER ASSIGNED BY R.F. SYSTEMS GROUP

O.D. = OUTER DIAMETER (INCHES)

I.D. = INNER DIAMETER (INCHES)

THICK. = THICKNESS (INCHES)

WEIGHT = WEIGHT (GRAMS)

DENSITY = DENSITY (GRAMS/CUBIC CENTIMETER)

R(MAG) = MAGNETIC RADIUS (CENTIMETERS)
R(MAG) = (O.D. - I.D.)/(2*LN(O.D./I.D.))

G/L = LN(O.D./I.D.)/(2*PI)

AREA = CROSS SECTIONAL AREA (SQUARE CENTIMETERS)

VOL. = VOLUME (CUBIC CENTIMETERS)

ZO = SQRT(UO/EO)/(2*PI)*LN(O.D./I.D.) (OHMS)
EO = PERMITTIVITY OF VACUUM
UO = PERMEABILITY OF VACUUM

DATE REC. = DATE SAMPLE RECEIVED BY R.F. SYSTEMS GROUP

NOTE.. WHEN A SAMPLE IS NON-UNIFORM THE DIMENSIONS GIVEN ARE THE AVERAGE VALUES OF SEVERAL MEASUREMENTS TAKEN ON THE SAMPLE.

TABLE OF MANUFACTURER CODES

AB	ALLEN BRADLEY CO.
ARN	ARNOLD ENGINEERING CO.
BL	BELL TELEPHONE LABORATORIES
CER	CERAMIC MAGNETICS, INC. (FORMERLY CERAMAGNETICS, INC.)
CTR	CORE-TRONICS, INC.
FXC	FERROXCUBE CORP. OF AMERICA
HUG	HUGHES AIRCRAFT CO.
IG	INDIANA GENERAL CORP.
KC	KEARFOTT DIVISION, GENERAL PRECISION,INC.(KC FERRITE PROD. NOW BY CER)
LTT	LIGNES TEL. AND TEL.
MCC	MAGNETIC CORE CORPORATION
MM	MAGNETIC METALS COMPANY
MAG	MAGNETICS, INC.
MIC	MICROMETALS
NMC	NATIONAL MOLDITE CO., INC.
PE	PHILIPS, EINDHOVEN
PYF	PYROFERRIC CO.
RAY	RAYTHEON CO.
SSR	SOLID STATE RESEARCH
ST	STACKPOLE CARBON CO.
ST6	STACKPOLE CARBON CO. (6 INCH CORES)
TDK	T.D.K. ELECTRONICS, LTD.
TEL	TELCON METALS LIMITED
TOH	TOHOKU METAL INDUSTRIES
TOH6	TOHOKU METAL INDUSTRIES (6 INCH CORES)
TOH-8	TOHOKU METAL INDUSTRIES (8 INCH CORES)
TOS	TOSHIBA
TT	TRANSTECH CO.
TT6	TRANSTECH CO. (6 INCH CORES)
TT-8	TRANSTECH CO. (8 INCH CORES)
W	WESTINGHOUSE ELECTRIC

FERRITE SAMPLES

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ALLEN BRADLEY CO.												
53	1	1.851	1.260	.400	38.630	4.081	1.951	.0612	.763	9.465	23.06	
53	2	1.835	1.258	.402	38.618	4.182	1.941	.0601	.748	9.234	22.64	
53	3	1.123	.812	.403	12.740	4.082	1.218	.0516	.404	3.121	19.44	
(FLAT FACES HAVE FIRED SILVER COATING)												
53	4	1.123	.813	.403	12.600	4.048	1.219	.0514	.403	3.113	19.37	
53	5	1.860	.816	.402	59.268	4.100	1.609	.1311	1.354	14.455	49.40	
53	6	1.832	.813	.401	58.620	4.214	1.593	.1293	1.318	13.910	48.71	
R-02	1	2.749	1.913	1.111	225.500	4.046	2.928	.0577	2.996	55.729	21.74	
R-02	2	2.750	1.919	1.009	223.500	4.436	2.933	.0573	2.705	50.386	21.57	
W-01	1	3.051	1.903	.999	354.100	4.843	3.089	.0751	3.700	73.123	28.30	
W-04	1	2.947	1.843	1.000	331.250	4.867	2.987	.0747	3.561	68.061	28.14	
W-04	2	2.950	1.844	1.005	328.600	4.791	2.989	.0748	3.586	68.582	28.17	
W-07	1	2.943	1.834	1.005	328.000	4.787	2.978	.0753	3.595	68.524	28.36	
ARNOLD ENGINEERING CO.												
AM03	2	1.285	.773	.384	20.090	3.858	1.279	.0809	.634	5.208	30.47	8/9/67
THREE SAMPLES RECEIVED												
AM03	4	1.219	.731	.367	20.500	4.561	1.212	.0814	.578	4.495	30.66	8/9/67
THREE SAMPLES RECEIVED												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
AM03	5	1.202	.719	.361	20.270	4.702	1.194	.0818	.562	4.311	30.81	8/9/67
THREE SAMPLES RECEIVED												
AM03	6	1.265	.759	.380	21.820	4.356	1.258	.0813	.620	5.009	30.63	9/18/67
(LABELED 609-2220)												
AM03	7	1.300	.776	.390	22.600	4.139	1.290	.0821	.659	5.460	30.94	9/18/67
(LABELED 615-2220)												
AM03	8	1.226	.741	.365	21.390	4.773	1.223	.0801	.571	4.482	30.19	9/18/67
(LABELED 609-2330)												
AM03	9	1.238	.747	.372	21.970	4.708	1.234	.0804	.589	4.666	30.29	9/18/67
(LABELED 615-2330)												
AM03	10	1.226	.741	.363	21.470	4.817	1.223	.0801	.568	4.457	30.19	9/18/67
(LABELED 609-2350)												
AM03	11	1.231	.739	.370	22.090	4.786	1.224	.0812	.587	4.616	30.60	9/18/67
(LABELED 615-2350)												
AM03	12	1.231	.740	.365	21.600	4.751	1.225	.0810	.578	4.546	30.51	9/18/67
(LABELED 609-2400)												
AM03	13	1.238	.743	.370	21.935	4.697	1.231	.0813	.591	4.670	30.61	9/18/67
(LABELED 615-2400)												
AM03	14	1.223	.737	.365	21.405	4.783	1.219	.0806	.572	4.475	30.37	9/18/67
(LABELED 609-2450)												
AM03	15	1.233	.740	.370	21.970	4.743	1.226	.0813	.588	4.632	30.61	9/18/67
(LABELED 615-2450)												
AM03	16	1.221	.734	.361	21.410	4.840	1.215	.0810	.567	4.424	30.51	9/18/67
(LABELED 609-2300)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
AM03	17	1.223	.741	.361	21.250	4.831	1.222	.0797	.561	4.398	30.04	9/18/67
(LABELED 609-2400 AND MAGNETIZED)												
CERAMIC MAGNETICS, INC. (FORMERLY CERAMAGNETICS, INC.)												
AN-15-MW	1	2.061	1.251	.374	63.030	4.881	2.060	.0795	.977	12.913	29.93	04/11/66
AN-15-MW	2	2.061	1.251	.374	62.790	4.862	2.060	.0795	.977	12.913	29.93	04/11/66
AN-50-MW	1	2.005	1.254	.382	47.985	3.988	2.032	.0747	.925	12.033	28.14	04/11/66
AN-50-MW	2	2.005	1.254	.382	48.110	3.998	2.032	.0747	.925	12.033	28.14	04/11/66
MGM-11-MW	1	2.005	1.253	.382	49.750	4.130	2.032	.0748	.927	12.045	28.19	04/11/66
MGM-11-MW	2	2.005	1.253	.382	49.720	4.128	2.032	.0748	.927	12.045	28.19	04/11/66
MN-60	1	3.258	1.750	.759	353.500	4.792	3.082	.0989	3.692	73.773	37.26	2/2/66
MN-60	2	3.258	1.750	.759	352.100	4.773	3.082	.0989	3.692	73.773	37.26	2/2/66
MN-60	3	3.258	1.750	.759	353.000	4.785	3.082	.0989	3.692	73.773	37.26	2/2/66
MN-60	4	3.258	1.750	.759	352.300	4.775	3.082	.0989	3.692	73.773	37.26	
MN-60	5	.374	.125	.211	1.580	4.683	.289	.1744	.169	.337	65.71	
MN-60	6	.374	.125	.211	1.590	4.712	.289	.1744	.169	.337	65.71	
N-40-MW	1	2.007	1.254	.382	51.610	4.278	2.033	.0748	.927	12.063	28.18	04/11/66
N-40-MW	2	2.007	1.254	.382	52.930	4.384	2.033	.0749	.928	12.073	28.20	04/11/66
N-40-MW	3	.912	.592	.301	6.780	3.636	.940	.0688	.311	1.864	25.91	12/02/66
(MARKED N40-21-145-160-203)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
N-40-MW	4	.911	.592	.304	6.850	3.652	.940	.0686	.313	1.876	25.84	12/02/66
(MARKED N40-21-145-160-203)												
N-40-MW	5	.912	.592	.303	7.550	4.023	.940	.0688	.313	1.877	25.91	12/02/66
(MARKED N40-23-217)												
N-40-MW	6	.912	.592	.305	7.710	4.081	.940	.0688	.315	1.889	25.91	12/02/66
(MARKED N40-23-217)												
N-40-MW	7	.912	.592	.303	7.240	3.858	.940	.0688	.313	1.877	25.91	12/02/66
(MARKED N40-23-204-217R)												
N-40-MW	8	.912	.592	.303	7.230	3.852	.940	.0688	.313	1.877	25.91	12/02/66
(MARKED N40-23-204-217R)												
N-40-MW	9	1.890	1.255	.252	27.000	4.168	1.970	.0652	.516	6.477	24.55	1/69
(INITIALLY DESIGNATED TYPE MW, SER.1 - CHANGED 4/7/69 - BADLY CHIPPED)												
N-40-MW	10	1.896	1.255	.252	27.980	4.271	1.973	.0657	.521	6.551	24.74	1/69
(INITIALLY DESIGNATED TYPE MW, SER.2 - CHANGED 4/7/69)												
N-50	1	2.006	1.251	.382	61.615	5.096	2.031	.0752	.930	12.090	28.31	04/11/66
N-50	2	2.006	1.251	.382	60.180	4.978	2.031	.0752	.930	12.090	28.31	04/11/66
N-51	1	2.006	1.253	.382	61.800	5.122	2.032	.0749	.928	12.065	28.22	04/11/66
N-51	2	2.006	1.252	.382	61.670	5.106	2.031	.0750	.929	12.077	28.26	04/11/66
N-2025	1	2.061	1.252	.374	49.555	3.841	2.061	.0793	.976	12.901	29.89	4/11/66
N-2025	2	2.061	1.252	.374	49.630	3.847	2.061	.0793	.976	12.901	29.89	4/11/66
N-2050	1	2.061	1.251	.374	47.570	3.684	2.060	.0795	.977	12.913	29.93	4/11/66

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
N-2050	2	2.061	1.251	.374	47.400	3.671	2.060	.0795	.977	12.913	29.93	4/11/66
FERROXCUBE CORP. OF AMERICA												
3C5	1	2.910	1.545	.500	183.100	4.679	2.738	.1008	2.202	39.133	37.96	
3E2A	1	.374	.185	.124	.770	4.567	.341	.1120	.076	.169	42.20	
3E2A	2	.374	.185	.124	.770	4.567	.341	.1120	.076	.169	42.20	
3E2A	3	.868	.533	.248	6.949	4.639	.872	.0776	.268	1.498	29.24	
3E2A	4	.869	.530	.247	6.959	4.616	.871	.0787	.270	1.508	29.65	
3E2A (LABELED 608)	5	2.847	1.512	.510	172.200	4.510	2.679	.1007	2.195	38.178	37.93	1/16/68
3E2A (LABELED 610)	6	2.871	1.511	.489	173.970	4.637	2.691	.1021	2.145	37.515	38.48	1/16/68
3E2A (LABELED 618)	7	2.846	1.512	.495	175.560	4.740	2.679	.1007	2.130	37.037	37.92	1/16/68
3E2A (LABELED 626)	8	2.846	1.511	.500	177.820	4.745	2.677	.1008	2.156	37.478	37.98	1/16/68
3E2A (LABELED 630)	9	2.846	1.513	.502	178.180	4.745	2.679	.1006	2.159	37.551	37.90	1/16/68
3E2A (LABELED 634)	10	2.846	1.512	.513	182.250	4.748	2.679	.1007	2.208	38.384	37.92	1/16/68
3E2A (LABELED 634)	11	2.847	1.511	.512	182.700	4.766	2.678	.1007	2.205	38.338	37.95	1/16/68

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
4C	1	2.630	1.758	1.001	220.700	4.477	2.749	.0641	2.816	49.296	24.15	
4D	1	2.537	1.700	1.004	218.200	4.764	2.655	.0637	2.709	45.803	24.00	
4D	2	2.537	1.700	1.005	219.300	4.781	2.655	.0637	2.713	45.871	24.00	
4E	1	2.685	1.873	1.001	190.000	3.985	2.863	.0573	2.622	47.682	21.59	
4E	3	2.689	1.875	1.000	192.300	4.022	2.867	.0574	2.626	47.815	21.62	
HUGHES AIRCRAFT CO.												
H-300	1	2.373	1.701	.370	64.850	4.974	2.563	.0530	.802	13.037	19.96	02/04/66
(MADE FROM SLUG MARKED 72-84LR (HUG-495), FORMERLY CALLED 84-LR-2)												
H-300	2	2.376	1.701	.363	63.450	4.935	2.565	.0532	.790	12.857	20.04	02/04/66
(MADE FROM SLUG MARKED 72-84LR (HUG-495), FORMERLY CALLED 84-LR-1)												
H-300	3	2.393	1.700	.374	68.350	5.006	2.574	.0544	.836	13.653	20.50	02/04/66
(MADE FROM SLUG MARKED 72-80LR (HUG-501), FORMERLY CALLED 80-LR-1)												
H-300	4	2.403	1.700	.354	65.450	4.980	2.580	.0551	.803	13.142	20.75	02/04/66
(MADE FROM SLUG MARKED 72-80LR (HUG-501), FORMERLY CALLED 80-LR-2)												
INDIANA GENERAL CORP.												
H	1	2.397	1.390	.505	119.500	4.821	2.347	.0867	1.640	24.786	32.67	
O-5	1	2.380	1.400	.503	113.700	4.741	2.346	.0845	1.590	23.982	31.82	
Q-1	1	2.356	1.367	.488	98.585	4.263	2.307	.0866	1.557	23.126	32.64	
Q-1	2	1.870	1.380	.376	31.467	4.083	2.048	.0484	.594	7.707	18.22	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
Q-2	1	1.888	1.384	.253	22.240	4.142	2.061	.0494	.411	5.370	18.62	
Q-2	3	1.892	1.385	.253	22.540	4.166	2.064	.0496	.414	5.410	18.70	
Q-2	4	1.876	1.383	.252	22.324	4.284	2.054	.0485	.401	5.211	18.28	
Q-2	5	1.249	.743	.383	18.250	3.673	1.237	.0827	.625	4.969	31.14	
(FLAT FACES HAVE FIRED SILVER COATING)												
Q-2	6	1.873	1.380	.375	32.724	4.228	2.050	.0486	.596	7.740	18.31	
Q-3	1	1.861	1.381	.246	23.500	4.770	2.044	.0475	.381	4.927	17.89	
Q-3	2	1.852	1.374	.247	23.750	4.845	2.033	.0475	.381	4.902	17.90	
Q-3	3	1.859	1.374	.250	23.984	4.754	2.037	.0481	.391	5.045	18.13	
Q-3	4	1.859	1.380	.249	23.332	4.693	2.042	.0474	.385	4.972	17.86	
Q-3	5	1.865	1.371	.367	31.390	4.157	2.039	.0490	.585	7.551	18.45	
Q-3	7	.876	.535	.259	6.713	4.185	.878	.0785	.285	1.604	29.57	
(FLAT FACES HAVE FIRED SILVER COATING)												
Q-3	8	.874	.533	.257	6.561	4.134	.876	.0787	.283	1.587	29.65	
(FLAT FACES HAVE FIRED SILVER COATING)												
Q-3	9	1.863	1.369	.378	32.345	4.164	2.036	.0490	.602	7.767	18.47	
KEARFOTT DIVISION, GENERAL PRECISION, INC. (KC FERRITE PROD. NOW BY CER)												
CN-20	1	1.255	.820	.251	14.574	4.998	1.298	.0677	.352	2.916	25.52	
CN-20	2	1.251	.821	.251	14.090	4.895	1.297	.0670	.348	2.878	25.25	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
MN-60	1	.913	.636	.303	7.970	4.763	.973	.0575	.271	1.673	21.68	
MN-60	2	.913	.635	.303	7.937	4.729	.972	.0578	.272	1.678	21.77	
MN-60	3	.913	.638	.303	7.930	4.768	.974	.0570	.269	1.663	21.49	
N-40-MW	1	1.358	.895	.355	19.870	4.169	1.410	.0664	.530	4.766	25.00	
LIGNES TEL. AND TEL.												
1103	1	2.033	1.231	.395	61.620	4.629	2.030	.0799	1.022	13.312	30.09	1/69
1103	2	2.050	1.245	.394	61.710	4.585	2.050	.0794	1.024	13.461	29.92	1/69
1103 (CORE BROKEN)	3	2.068	1.252	.395	61.050	4.433	2.065	.0799	1.040	13.773	30.09	1/69
1104	1	2.158	1.307	.393	60.125	4.026	2.155	.0798	1.080	14.934	30.07	
1104	2	2.065	1.257	.395	60.545	4.437	2.067	.0790	1.030	13.646	29.76	
1104 (ARRIVED LABELED NO. 1)	3	2.086	1.262	.393	61.560	4.411	2.083	.0800	1.045	13.956	30.13	1/69
1104 (ARRIVED LABELED NO. 2)	4	2.093	1.269	.393	61.050	4.361	2.091	.0796	1.044	13.998	29.97	1/69
1104 (ARRIVED LABELED NO. 3)	5	2.095	1.271	.393	61.230	4.363	2.094	.0796	1.045	14.035	29.97	1/69
1105	1	2.114	1.285	.393	60.475	4.243	2.115	.0792	1.051	14.252	29.85	
1105	2	2.112	1.285	.394	60.800	4.268	2.114	.0791	1.051	14.246	29.79	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
PHILIPS, EINDHOVEN												
4H1	1	1.383	1.073	.196	9.380	4.869	1.551	.0404	.197	1.926	15.23	
4H1	2	1.385	1.073	.196	9.383	4.841	1.553	.0406	.198	1.938	15.29	
4H1	3	1.384	1.077	.197	9.110	4.752	1.555	.0400	.195	1.917	15.06	
4K1	1	1.383	1.071	.196	9.252	4.775	1.550	.0407	.198	1.938	15.33	
4K1	2	1.384	1.071	.196	9.265	4.775	1.551	.0408	.198	1.941	15.35	
4K1	3	1.384	1.071	.197	9.256	4.760	1.551	.0408	.199	1.944	15.35	
4K1	4	1.384	1.072	.196	9.182	4.737	1.551	.0407	.198	1.938	15.33	
4K1	5	1.384	1.071	.197	9.180	4.716	1.550	.0408	.199	1.947	15.37	
4L1	1	1.383	1.072	.199	8.625	4.403	1.551	.0406	.200	1.959	15.31	
4L1	2	1.383	1.072	.198	8.633	4.425	1.551	.0406	.199	1.951	15.31	
4L1	3	1.383	1.072	.198	8.635	4.432	1.550	.0406	.199	1.948	15.30	
8C1	1	1.381	1.058	.177	9.409	5.240	1.540	.0424	.185	1.796	15.96	
8C1	2	1.382	1.058	.177	9.400	5.215	1.540	.0425	.185	1.803	16.02	
8D1	1	1.355	1.036	.197	10.010	5.178	1.509	.0427	.203	1.933	16.07	
8D1	2	1.355	1.036	.197	9.988	5.161	1.509	.0427	.203	1.935	16.09	
8D1	3	.634	.394	.197	3.233	5.161	.640	.0758	.153	.626	28.55	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
8E1	1	1.382	1.061	.178	9.312	5.191	1.543	.0421	.184	1.794	15.86	
8E1	2	1.383	1.061	.177	9.340	5.204	1.543	.0422	.184	1.795	15.89	
8E1	3	.634	.394	.217	3.560	5.167	.640	.0758	.168	.689	28.55	
RAYTHEON CO.												
R-191 (BATCH 921)	1	1.001	.508	.328	15.485	4.931	.923	.1080	.522	3.141	40.67	
R-191	2	1.001	.505	.326	15.595	4.976	.921	.1089	.522	3.134	41.02	
R-191 (BATCH 921, RECTANGULAR SAMPLE, TWO LARGEST SURFACES GOLD PLATED.)	3	1.568	1.378	.315	56.020	5.023			2.800	11.153		
R-192 (BATCH 921)	1	1.001	.504	.260	12.830	5.126	.920	.1092	.417	2.503	41.14	
R-192 (BATCH 924)	2	1.001	.502	.262	12.943	5.118	.918	.1098	.422	2.529	41.38	
R-192 (BATCH 924, RECTANGULAR SAMPLE, TWO LARGEST SURFACES GOLD PLATED.)	3	1.460	1.187	.254	37.120	5.146			1.945	7.213		
R-192 (BATCH 924, RECTANGULAR SAMPLE.)	4	6.523	1.226	.249	168.160	5.145			1.973	32.682		
SOLID STATE RESEARCH												
NMZ200	1	1.184	.590	.284	18.925	4.905	1.083	.1109	.545	3.858	41.76	12/65
NMZ200	2	1.182	.588	.270	17.922	4.905	1.080	.1111	.517	3.654	41.87	12/65

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
NMZ300	1	1.213	.605	.274	18.067	4.643	1.110	.1107	.536	3.891	41.71	12/65
NMZ400	1	1.200	.598	.265	17.790	4.819	1.098	.1108	.515	3.692	41.76	12/65
STACKPOLE CARBON CO.												
9A	1	1.535	1.020	.249	18.790	4.456	1.600	.0651	.414	4.217	24.51	
9A	2	1.531	1.018	.248	18.755	4.484	1.597	.0649	.411	4.182	24.47	
9A	3	1.542	1.025	.250	18.643	4.366	1.608	.0650	.417	4.270	24.49	
THIS CORE WAS BROKEN 7/7/68.												
9A	4	1.538	1.023	.250	18.805	4.431	1.604	.0649	.415	4.244	24.45	
11	1	1.527	1.017	.255	19.010	4.464	1.594	.0647	.420	4.258	24.37	2/17/67
11	2	1.528	1.016	.253	19.150	4.515	1.593	.0649	.418	4.241	24.47	2/17/67
11A	1	1.556	1.033	.257	18.850	4.209	1.621	.0652	.434	4.479	24.56	2/17/67
12	1	1.600	1.069	.258	18.990	4.031	1.672	.0642	.442	4.711	24.18	
12	2	1.597	1.067	.258	18.991	4.059	1.669	.0642	.440	4.679	24.18	
12	3	1.604	1.070	.260	19.235	4.026	1.675	.0644	.448	4.778	24.27	
(FLAT FACES HAVE FIRED SILVER COATING)												
12	4	1.600	1.066	.257	18.985	4.032	1.670	.0646	.443	4.709	24.35	
12	5	1.600	1.070	.258	18.970	4.037	1.673	.0640	.441	4.699	24.12	
12	6	1.595	1.058	.261	18.190	3.801	1.661	.0653	.452	4.786	24.61	2/17/67

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
12	7	1.597	1.064	.264	18.270	3.791	1.667	.0646	.454	4.819	24.35	2/17/67
24	1	10.073	7.472	.520	1473.20	4.824	11.06	.0475	4.363	305.41	17.91	
(NO. L5P3 FROM STANFORD-CRACKED)												
24	2	10.098	7.485	.519	1479.90	4.822	11.08	.0477	4.375	306.90	17.95	
(NO. L9P2 FROM STANFORD)												
24	3	1.514	1.018	.248	19.730	4.922	1.587	.0632	.397	4.009	23.80	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 10, WEIGHT IS CALCULATED												
24	4	1.516	1.020	.247	19.690	4.924	1.590	.0631	.395	3.999	23.76	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 11, WEIGHT IS CALCULATED												
24	5	1.511	1.019	.249	19.720	4.943	1.586	.0627	.395	3.989	23.62	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 12, WEIGHT IS CALCULATED												
24A	1	1.510	1.006	.247	19.320	4.793	1.576	.0646	.402	4.031	24.35	
24A	2	1.507	1.005	.251	19.580	4.806	1.574	.0645	.406	4.074	24.29	
24A	3	1.509	1.006	.251	19.550	4.784	1.575	.0645	.407	4.087	24.31	
24A	4	1.509	1.006	.253	19.800	4.807	1.575	.0645	.411	4.119	24.31	
24A	5	1.508	1.005	.251	19.670	4.817	1.574	.0646	.407	4.083	24.33	
24A	6	1.510	1.007	.251	19.600	4.792	1.577	.0645	.407	4.090	24.29	
24A	7	5.961	3.696	.502	685.600	4.851	6.018	.0761	3.668	141.32	28.66	
24A	8	5.949	3.689	.499	680.400	4.864	6.006	.0761	3.638	139.89	28.65	
24A	9	5.959	3.696	.500	686.200	4.875	6.017	.0760	3.654	140.74	28.64	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
24A	10	1.517	1.021	.249	19.660	4.873	1.591	.0630	.398	4.034	23.74	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 1, WEIGHT IS CALCULATED												
24A	11	1.517	1.020	.249	19.680	4.870	1.590	.0632	.399	4.041	23.80	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 2, WEIGHT IS CALCULATED												
24A	12	1.521	1.023	.249	19.640	4.837	1.595	.0631	.400	4.060	23.78	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 3, WEIGHT IS CALCULATED												
24B	1	1.512	1.016	.250	19.620	4.863	1.584	.0633	.400	4.035	23.84	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 4, WEIGHT IS CALCULATED												
24B	2	1.516	1.017	.249	19.590	4.836	1.587	.0635	.401	4.051	23.94	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 5, WEIGHT IS CALCULATED												
24B	3	1.513	1.020	.249	19.540	4.883	1.588	.0628	.396	4.002	23.64	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 6, WEIGHT IS CALCULATED												
24C	1	1.517	1.012	.248	19.680	4.828	1.584	.0644	.404	4.076	24.27	3-30-68
STACKPOLE S.N. 7												
24C	2	1.507	1.018	.249	19.640	4.963	1.583	.0624	.393	3.957	23.52	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 8, WEIGHT IS CALCULATED												
24C	3	1.508	1.012	.249	19.550	4.881	1.579	.0635	.398	4.006	23.91	3-30-68
DIMENSIONS BY STACKPOLE, S.N. 9, WEIGHT IS CALCULATED												
2285	1	1.602	1.062	.260	18.805	3.908	1.668	.0655	.453	4.812	24.66	2/66
2285	2	1.587	1.054	.264	18.905	3.956	1.654	.0651	.453	4.779	24.51	2/66
2285	3	1.563	1.041	.259	18.245	4.027	1.631	.0647	.436	4.531	24.37	2/66
2285	4	1.538	1.025	.252	16.520	3.874	1.606	.0646	.417	4.264	24.33	5-17-68

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
2285	5	1.538	1.028	.250	16.530	3.926	1.608	.0641	.411	4.211	24.16	5-17-68
2285	6	1.632	1.085	.270	19.640	3.803	1.702	.0650	.476	5.165	24.48	5-17-68
2285	7	1.628	1.082	.268	19.630	3.846	1.697	.0650	.472	5.104	24.50	5-17-68
2285	8	1.643	1.083	.258	19.600	3.859	1.706	.0663	.467	5.079	24.99	8/19/68
2285	9	1.628	1.078	.259	19.700	3.969	1.694	.0656	.460	4.963	24.72	8/19/68
2285	10	1.616	1.070	.256	19.400	4.021	1.682	.0656	.450	4.824	24.72	8/19/68
2285	11	1.624	1.074	.257	19.800	4.037	1.689	.0658	.456	4.904	24.79	8/19/68
2285	12	1.633	1.080	.257	19.600	3.945	1.699	.0658	.459	4.968	24.79	8/19/68
2285	13	1.624	1.075	.256	19.500	4.000	1.690	.0657	.453	4.874	24.74	8/19/68
2285A	1	1.579	1.055	.257	18.490	4.058	1.650	.0642	.434	4.556	24.18	2/66
2285A	2	1.583	1.059	.257	18.580	4.057	1.655	.0640	.434	4.579	24.10	2/66
2285A	3	1.583	1.059	.257	18.640	4.071	1.655	.0640	.434	4.579	24.10	2/66
QT1174	1	1.512	1.019	.244	19.600	5.002	1.587	.0628	.388	3.919	23.66	3-1-68
GIVEN TO W. DEXTER 5-7-68												
QT1174	2	1.520	1.018	.246	19.770	4.901	1.590	.0638	.398	4.034	24.04	3-1-68
GIVEN TO W. DEXTER 5-7-68												
QT1174	3	1.512	1.009	.245	19.820	4.957	1.579	.0644	.398	3.999	24.25	4/22/68
THIS PIECE TAGGED NO. 1 BY MFGR.												
QT1174	4	1.512	1.009	.245	19.800	4.952	1.579	.0644	.398	3.999	24.25	4/22/68
THIS PIECE TAGGED NO. 2 BY MFGR.												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
STACKPOLE CARBON CO. (6 INCH CORES)												
2285	1	6.037	3.724	.490	570.500	4.006	6.080	.0769	3.657	142.41	28.97	8/19/68
2285	2	6.055	3.740	.493	566.300	3.938	6.102	.0767	3.679	143.79	28.89	8/19/68
2285	3	6.041	3.736	.494	569.800	3.974	6.092	.0765	3.675	143.37	28.81	8/19/68
2285	4	6.050	3.740	.492	565.800	3.949	6.100	.0765	3.668	143.29	28.84	8/19/68
(IMPERFECT INNER DIAMETER, CHIPPED OUTER EDGE)												
2285	5	6.061	3.741	.491	570.200	3.965	6.106	.0768	3.678	143.82	28.93	8/19/68
2285	6	6.038	3.732	.494	570.600	3.980	6.087	.0766	3.678	143.36	28.85	8/19/68
T.D.K. ELECTRONICS, LTD.												
H3K	1	2.508	1.566	.583	132.900	4.618	2.540	.0749	1.771	28.781	28.23	11-22-68
(I.D. TAPERS TO 1.559)												
H3K	2	2.505	1.562	.572	131.300	4.644	2.536	.0752	1.742	28.272	28.33	11-22-68
H3K	3	2.505	1.564	.581	132.500	4.628	2.537	.0750	1.764	28.632	28.24	11-22-68
H3K	4	2.512	1.565	.571	131.100	4.620	2.542	.0753	1.744	28.374	28.37	11-22-68
(BROKEN IN THREE PLACES)												
H3K	5	2.506	1.566	.575	131.200	4.632	2.539	.0748	1.744	28.327	28.19	11-22-68
(BROKEN IN FOUR PLACES)												
H3K	6	2.510	1.568	.582	132.000	4.587	2.543	.0749	1.769	28.775	28.21	11-22-68
(BROKEN IN THREE PLACES)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TOHOKU METAL INDUSTRIES												
ACL-1	1	2.474	1.717	.409	73.526	4.403	2.632	.0581	.999	16.700	21.90	
ACL-1	2	2.498	1.722	.441	80.010	4.300	2.649	.0592	1.105	18.608	22.30	
(FLAT FACES HAVE FIRED SILVER COATING)												
ACL-1	3	2.474	1.706	.994	181.300	4.420	2.624	.0591	2.460	41.017	22.27	
ACL-1	4	2.482	1.710	.945	171.300	4.352	2.632	.0593	2.353	39.361	22.34	
ACL-1	5	2.527	1.743	.992	177.900	4.162	2.681	.0591	2.509	42.741	22.27	
ACL-1	6	17.724	10.630	.985	11740.0	4.604	17.62	.0814	22.54	2550.0	30.65	10/25/65
(LABELED 50607-15-3)												
D2	1	.986	.590	.176	6.815	4.827	.980	.0818	.224	1.412	30.82	
D2	2	.991	.589	.176	6.805	4.730	.981	.0828	.228	1.439	31.20	
D2	3	.980	.585	.173	6.730	4.882	.973	.0822	.221	1.379	30.97	
D2	4	.989	.595	.173	6.770	4.858	.985	.0809	.221	1.394	30.47	
D3	1	.983	.589	.168	6.735	5.022	.977	.0814	.214	1.341	30.68	
D3	2	.980	.588	.171	6.790	5.011	.975	.0814	.217	1.355	30.66	
D3	3	.983	.590	.171	6.855	5.038	.978	.0812	.217	1.361	30.61	
D3	4	.983	.590	.172	6.870	5.012	.978	.0813	.218	1.371	30.64	
NFC	1	1.014	.602	.184	7.220	4.592	1.004	.0830	.244	1.572	31.26	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
NFC (CRACKED)	2	1.014	.601	.181	7.140	4.608	1.003	.0832	.240	1.549	31.36	
NFC	3	1.014	.605	.184	7.290	4.649	1.006	.0822	.243	1.568	30.96	
TOHOKU METAL INDUSTRIES (6 INCH CORES)												
ACL-1	1	5.999	3.997	1.000	1263.10	4.907	6.262	.0646	6.455	257.43	24.35	
ACL-1	2	5.999	3.996	1.000	1265.30	4.911	6.261	.0647	6.461	257.66	24.36	
ACL-51	1	5.997	3.996	1.000	1277.50	4.966	6.260	.0646	6.452	257.23	24.34	
ACL-51	2	5.998	3.997	.991	1262.25	4.946	6.261	.0646	6.400	255.22	24.34	
FBX51R SEVERAL CHIPS, CRACK AT INNER RADIUS	1	6.004	3.991	1.001	1224.00	4.724	6.260	.0650	6.497	259.08	24.49	4/1/68
FBX51R SEVERAL SMALL CHIPS	2	6.008	3.998	1.001	1235.00	4.769	6.257	.0648	6.487	258.98	24.42	4/1/68
FBX70R LARGE CHIP FROM OUTER RADIUS	1	6.004	3.997	1.001	1311.00	5.070	6.264	.0648	6.481	258.59	24.40	4/1/68
FBX70R LARGE CHIP FROM OUTER RADIUS	2	6.004	3.996	1.001	1309.00	5.060	6.264	.0648	6.484	258.70	24.41	4/1/68
FBX130R SMALL CHIPS	1	5.875	3.997	.938	1101.00	4.919	6.192	.0613	5.682	223.82	23.09	4/1/68
FBX130R	2	5.882	4.003	.938	1102.00	4.915	6.201	.0613	5.685	224.23	23.08	4/1/68
FBX131R	1	5.883	3.998	.938	1158.00	5.150	6.198	.0615	5.704	224.86	23.16	4/1/68

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
FBX131R	2	5.894	3.983	.938	1168.00	5.126	6.193	.0624	5.782	227.87	23.50	4/1/68
FBX200R	1	5.883	4.000	.938	1107.00	4.927	6.199	.0614	5.698	224.66	23.13	4/1/68
FBX200R	2	5.883	4.003	.938	1107.00	4.934	6.201	.0613	5.689	224.37	23.09	4/1/68
FBX201R	1	5.899	3.998	.938	1132.00	4.984	6.207	.0619	5.752	227.13	23.32	4/1/68
FBX201R	2	5.876	4.001	.938	1119.00	5.005	6.196	.0612	5.673	223.57	23.04	4/1/68
CRACK AT INNER RADIUS												
TOHOKU METAL INDUSTRIES (8 INCH CORES)												
ACL51R	1	7.999	5.000	1.000	2398.00	4.779	8.106	.0748	9.674	501.74	28.17	5/22/69
CHIPPED ON EDGES												
ACL51R	2	7.996	5.000	1.000	2398.00	4.785	8.104	.0747	9.664	501.12	28.15	5/22/69
CHIPPED ON EDGES												
ACL51R	3	7.996	4.997	1.000	2354.00	4.694	8.102	.0748	9.674	501.51	28.19	7/15/69
ACL51R	4	7.994	4.998	.999	2346.00	4.688	8.102	.0747	9.655	500.47	28.16	7/15/69
ACL51R	5	7.997	4.997	1.000	2347.00	4.678	8.102	.0748	9.677	501.71	28.19	7/15/69
ACL51R	6	7.997	4.998	1.000	2354.00	4.693	8.103	.0748	9.674	501.58	28.18	7/15/69
ACL51R	7	7.998	4.997	1.000	2361.00	4.704	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	8	7.998	4.998	1.000	2366.00	4.715	8.104	.0748	9.677	501.79	28.19	7/15/69
ACL51R	9	7.997	4.994	1.000	2396.00	4.772	8.100	.0749	9.687	502.10	28.23	7/15/69
ACL51R	10	7.997	4.998	1.000	2341.00	4.667	8.103	.0748	9.674	501.58	28.18	7/15/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	11	7.995	4.997	.999	2336.00	4.665	8.101	.0748	9.661	500.80	28.18	7/15/69
ACL51R	12	7.998	4.998	1.000	2365.00	4.713	8.104	.0748	9.677	501.79	28.19	7/15/69
ACL51R	13	7.998	4.998	.999	2353.00	4.694	8.104	.0748	9.668	501.29	28.19	7/15/69
SMALL CHIPS ON INSIDE EDGE												
ACL51R	14	7.998	4.997	1.000	2353.00	4.688	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	15	7.997	4.998	1.000	2349.00	4.683	8.103	.0748	9.674	501.58	28.18	7/15/69
ACL51R	16	7.995	4.998	1.000	2346.00	4.681	8.102	.0748	9.668	501.17	28.17	7/15/69
ACL51R	17	7.997	4.997	1.000	2348.00	4.680	8.102	.0748	9.677	501.71	28.19	7/15/69
ACL51R	18	7.997	4.997	1.000	2350.00	4.684	8.102	.0748	9.677	501.71	28.19	7/15/69
ACL51R	19	7.998	4.997	1.000	2343.00	4.668	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	20	7.998	4.996	1.000	2396.00	4.772	8.102	.0749	9.684	502.05	28.21	7/15/69
ACL51R	21	7.999	4.997	1.000	2385.00	4.750	8.104	.0749	9.684	502.12	28.21	7/15/69
ACL51R	22	7.997	4.997	1.000	2389.00	4.762	8.102	.0748	9.677	501.71	28.19	7/15/69
ACL51R	23	7.997	4.997	.999	2376.00	4.741	8.102	.0748	9.668	501.21	28.19	7/15/69
CHIP ON ONE FLAT SURFACE												
ACL51R	24	7.998	4.997	1.000	2402.00	4.786	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	25	8.000	4.998	1.000	2406.00	4.791	8.105	.0749	9.684	502.20	28.20	7/15/69
ACL51R	26	7.996	4.998	.999	2438.00	4.867	8.103	.0748	9.661	500.88	28.17	7/15/69
ACL51R	27	7.997	4.998	1.000	2422.00	4.829	8.103	.0748	9.674	501.58	28.18	7/15/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	28	7.997	5.003	1.002	2423.00	4.827	8.107	.0746	9.677	501.94	28.12	6/2/69
ACL51R	29	7.993	5.002	1.000	2421.00	4.840	8.104	.0746	9.648	500.25	28.10	6/2/69
A SMALL CHIP ON EDGE												
ACL51R	30	7.998	4.997	1.000	2411.00	4.804	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	31	7.995	4.996	.999	2434.00	4.859	8.101	.0748	9.665	500.93	28.19	7/15/69
ACL51R	32	7.996	4.997	.999	2404.00	4.798	8.102	.0748	9.665	501.01	28.19	7/15/69
ACL51R	33	7.995	4.998	1.000	2415.00	4.819	8.102	.0748	9.668	501.17	28.17	7/15/69
ACL51R	34	7.998	4.996	1.000	2347.00	4.675	8.102	.0749	9.684	502.05	28.21	7/15/69
ACL51R	35	7.998	4.996	.999	2352.00	4.690	8.102	.0749	9.674	501.55	28.21	7/15/69
ACL51R	36	7.999	4.998	1.000	2350.00	4.681	8.104	.0748	9.681	502.00	28.20	7/15/69
ACL51R	37	7.998	4.997	1.000	2350.00	4.682	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	38	7.998	4.997	.999	2345.00	4.677	8.103	.0749	9.671	501.42	28.20	7/15/69
ACL51R	39	7.998	4.997	1.000	2344.00	4.670	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	40	7.996	4.994	1.000	2345.00	4.672	8.100	.0749	9.684	501.89	28.22	7/15/69
ACL51R	41	7.998	4.997	.999	2347.00	4.681	8.103	.0749	9.671	501.42	28.20	7/15/69
ACL51R	42	7.997	4.997	1.000	2353.00	4.690	8.102	.0748	9.677	501.71	28.19	7/15/69
ACL51R	43	7.998	4.999	.999	2356.00	4.701	8.104	.0748	9.665	501.16	28.18	7/15/69
ACL51R	44	7.998	4.997	1.000	2364.00	4.710	8.103	.0749	9.681	501.92	28.20	7/15/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	45	7.999	4.997	1.000	2357.00	4.694	8.104	.0749	9.684	502.12	28.21	7/15/69
ACL51R	46	7.997	4.997	.999	2359.00	4.707	8.102	.0748	9.668	501.21	28.19	7/15/69
ACL51R	47	7.999	4.997	1.000	2352.00	4.684	8.104	.0749	9.684	502.12	28.21	7/15/69
ACL51R	48	7.998	4.998	1.000	2349.00	4.681	8.104	.0748	9.677	501.79	28.19	7/15/69
ACL51R	49	7.998	4.997	1.000	2353.00	4.688	8.103	.0749	9.681	501.92	28.20	7/15/69
ACL51R	50	7.997	4.999	.998	2359.00	4.714	8.104	.0748	9.652	500.45	28.17	7/15/69
ACL51R	51	7.996	4.998	1.000	2350.00	4.687	8.103	.0748	9.671	501.38	28.17	7/15/69
ACL51R	52	7.999	4.998	1.000	2356.00	4.693	8.104	.0748	9.681	502.00	28.20	7/15/69
ACL51R	53	7.993	4.999	1.000	2371.00	4.736	8.102	.0747	9.658	500.63	28.14	7/15/69
ACL51R	54	7.999	4.999	1.000	2353.00	4.688	8.105	.0748	9.677	501.87	28.19	7/15/69
ACL51R	55	8.000	5.000	1.000	2334.00	4.650	8.106	.0748	9.677	501.94	28.18	7/15/69
ACL51R	56	8.000	5.000	.998	2334.00	4.659	8.106	.0748	9.658	500.94	28.18	7/15/69
ACL51R	57	7.998	4.999	1.001	2350.00	4.680	8.104	.0748	9.684	502.16	28.18	7/15/69
ACL51R	58	7.999	4.998	1.000	2341.00	4.663	8.104	.0748	9.681	502.00	28.20	7/15/69
ACL51R	59	7.998	5.001	1.000	2353.00	4.693	8.106	.0747	9.668	501.40	28.15	7/15/69
ACL51R	60	7.993	4.999	.998	2340.00	4.683	8.102	.0747	9.639	499.63	28.14	7/15/69
ACL51R	61	7.995	4.998	1.001	2352.00	4.688	8.102	.0748	9.677	501.67	28.17	7/15/69

LARGE, DEEP CHIP ON ONE EDGE AND SURFACE

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	62	8.002	4.998	1.000	2374.00	4.723	8.106	.0749	9.690	502.61	28.22	7/15/69
ACL51R	63	7.998	4.997	.999	2393.00	4.772	8.103	.0749	9.671	501.42	28.20	7/29/69
ACL51R	64	7.998	4.998	.999	2390.00	4.768	8.104	.0748	9.668	501.29	28.19	7/29/69
ACL51R	65	7.997	4.997	1.000	2385.00	4.754	8.102	.0748	9.677	501.71	28.19	7/29/69
ACL51R	66	8.000	4.998	1.000	2395.00	4.769	8.105	.0749	9.684	502.20	28.20	7/29/69
ACL51R	67	8.000	4.999	1.001	2376.00	4.728	8.106	.0748	9.690	502.58	28.19	7/29/69
MINOR MOLDING CHIPS ON INSIDE CORNER												
ACL51R	68	7.999	4.999	1.000	2376.00	4.734	8.105	.0748	9.677	501.87	28.19	7/29/69
ACL51R	69	7.997	4.998	.999	2387.00	4.764	8.103	.0748	9.665	501.08	28.18	7/29/69
ACL51R	70	7.997	4.997	1.001	2378.00	4.735	8.102	.0748	9.687	502.21	28.19	7/29/69
ACL51R	71	7.997	4.998	1.001	2402.00	4.784	8.103	.0748	9.684	502.09	28.18	7/29/69
ACL51R	72	7.999	5.000	1.000	2395.00	4.773	8.106	.0748	9.674	501.74	28.17	7/29/69
ACL51R	73	7.998	4.999	1.001	2403.00	4.785	8.104	.0748	9.684	502.16	28.18	7/29/69
ACL51R	74	7.996	4.997	.999	2397.00	4.784	8.102	.0748	9.665	501.01	28.19	7/29/69
ACL51R	75	7.998	4.997	1.001	2395.00	4.767	8.103	.0749	9.690	502.42	28.20	7/29/69
ACL51R	76	7.999	4.998	1.001	2401.00	4.778	8.104	.0748	9.690	502.50	28.20	7/29/69
ACL51R	77	7.998	5.000	.998	2396.00	4.787	8.105	.0748	9.652	500.53	28.17	7/29/69
ACL51R	78	7.998	4.998	1.001	2394.00	4.766	8.104	.0748	9.687	502.29	28.19	7/29/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	79	7.998	4.999	.999	2397.00	4.783	8.104	.0748	9.665	501.16	28.18	7/29/69
ACL51R	80	7.999	4.998	.999	2400.00	4.786	8.104	.0748	9.671	501.49	28.20	7/29/69
ACL51R	81	7.998	5.000	.999	2384.00	4.758	8.105	.0748	9.661	501.03	28.17	7/29/69
ACL51R	82	7.998	4.997	1.001	2393.00	4.763	8.103	.0749	9.690	502.42	28.20	7/29/69
ACL51R	83	8.000	4.998	1.001	2385.00	4.744	8.105	.0749	9.694	502.70	28.20	7/29/69
ACL51R	84	7.997	4.997	1.000	2385.00	4.754	8.102	.0748	9.677	501.71	28.19	7/29/69
ACL51R	85	7.999	4.997	1.001	2378.00	4.731	8.104	.0749	9.694	502.63	28.21	7/29/69
ACL51R	86	7.997	4.999	.999	2367.00	4.725	8.104	.0748	9.661	500.95	28.17	7/29/69
ACL51R	87	7.999	4.997	1.000	2371.00	4.722	8.104	.0749	9.684	502.12	28.21	7/29/69
ACL51R	88	7.995	4.998	1.000	2380.00	4.749	8.102	.0748	9.668	501.17	28.17	7/29/69
CHIP OUT OF OUTSIDE SURFACE												
ACL51R	89	7.997	4.997	1.002	2396.00	4.766	8.102	.0748	9.697	502.72	28.19	7/29/69
ACL51R	90	7.998	4.997	1.000	2336.00	4.654	8.103	.0749	9.681	501.92	28.20	7/29/69
ACL51R	91	7.995	4.994	1.001	2382.00	4.743	8.099	.0749	9.690	502.19	28.22	7/29/69
ACL51R	92	7.998	4.998	1.000	2389.00	4.761	8.104	.0748	9.677	501.79	28.19	7/29/69
ACL51R	93	7.995	4.998	.997	2384.00	4.771	8.102	.0748	9.639	499.67	28.17	7/29/69
ACL51R	94	7.999	5.000	.996	2383.00	4.769	8.106	.0748	9.635	499.73	28.17	7/29/69
ACL51R	95	7.994	4.999	.998	2380.00	4.762	8.102	.0747	9.642	499.84	28.15	7/29/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	96	7.997	4.998	1.000	2397.00	4.779	8.103	.0748	9.674	501.58	28.18	7/29/69
ACL51R	97	7.993	4.999	.999	2371.00	4.741	8.102	.0747	9.648	500.13	28.14	7/29/69
ACL51R	98	8.000	4.999	1.000	2371.00	4.722	8.106	.0748	9.681	502.07	28.19	7/29/69
ACL51R	99	7.998	4.998	.998	2381.00	4.755	8.104	.0748	9.658	500.79	28.19	7/29/69
ACL51R	100	7.998	4.999	.997	2381.00	4.761	8.104	.0748	9.645	500.16	28.18	7/29/69
ACL51R	101	7.998	4.998	.998	2390.00	4.772	8.104	.0748	9.658	500.79	28.19	7/29/69
ACL51R	102	7.999	4.998	.999	2400.00	4.786	8.104	.0748	9.671	501.49	28.20	7/29/69
ACL51R	103	7.999	4.998	.998	2402.00	4.794	8.104	.0748	9.661	500.99	28.20	7/29/69
SMALL CHIPS ON INSIDE AND OUTSIDE CORNERS												
ACL51R	104	7.999	4.997	.998	2410.00	4.809	8.104	.0749	9.664	501.12	28.21	7/29/69
ACL51R	105	7.999	4.997	.998	2406.00	4.801	8.104	.0749	9.664	501.12	28.21	7/29/69
ACL51R	106	7.999	4.997	.999	2400.00	4.784	8.104	.0749	9.674	501.62	28.21	7/29/69
ACL51R	107	7.999	4.998	.999	2407.00	4.800	8.104	.0748	9.671	501.49	28.20	7/29/69
ACL51R	108	7.997	4.998	.999	2412.00	4.814	8.103	.0748	9.665	501.08	28.18	7/29/69
SMALL CHIPS AND CRACKS ON INNER CORNERS												
ACL51R	109	8.000	4.999	.999	2395.00	4.775	8.106	.0748	9.671	501.57	28.19	7/29/69
ACL51R	110	7.997	4.998	.999	2394.00	4.778	8.103	.0748	9.665	501.08	28.18	7/29/69
ACL51R	111	8.000	4.998	.999	2405.00	4.794	8.105	.0749	9.674	501.70	28.20	7/29/69
SURFACE CHIP												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	112	7.998	5.000	.999	2368.00	4.726	8.105	.0748	9.661	501.03	28.17	7/29/69
ACL51R	113	7.999	4.998	1.000	2382.00	4.745	8.104	.0748	9.681	502.00	28.20	7/29/69
ACL51R	114	7.998	4.999	1.000	2393.00	4.770	8.104	.0748	9.674	501.66	28.18	7/29/69
ACL51R	115	7.999	4.997	.999	2335.00	4.655	8.104	.0749	9.674	501.62	28.21	7/29/69
ACL51R	116	7.997	4.998	.999	2332.00	4.654	8.103	.0748	9.665	501.08	28.18	7/29/69
ACL51R	117	7.999	4.999	.998	2362.00	4.716	8.105	.0748	9.658	500.86	28.19	7/29/69
ACL51R	118	7.997	4.998	.998	2329.00	4.653	8.103	.0748	9.655	500.58	28.18	7/29/69
SURFACE CHIPS												
ACL51R	119	7.999	5.000	.999	2366.00	4.720	8.106	.0748	9.665	501.24	28.17	7/29/69
CRACKS ON INNER SURFACE												
ACL51R	120	7.998	4.998	1.000	2375.00	4.733	8.104	.0748	9.677	501.79	28.19	7/29/69
CHIPS ON OUTER CORNER												
ACL51R	121	7.999	4.999	.999	2394.00	4.775	8.105	.0748	9.668	501.37	28.19	7/29/69
ACL51R	122	7.999	5.000	1.000	2381.00	4.745	8.106	.0748	9.674	501.74	28.17	7/29/69
ACL51R	123	8.003	4.997	1.000	2373.00	4.718	8.106	.0750	9.697	502.95	28.24	8/28/69
ACL51R	124	8.004	4.997	1.000	2384.00	4.738	8.106	.0750	9.700	503.15	28.25	8/28/69
ACL51R	125	8.005	4.997	1.001	2381.00	4.725	8.107	.0750	9.713	503.86	28.25	8/28/69
ACL51R	126	8.005	4.998	.999	2344.00	4.663	8.108	.0750	9.690	502.73	28.24	8/28/69
PITS ALONG INNER EDGE AND ON ONE LATERAL SURFACE												
ACL51R	127	8.003	4.998	1.001	2385.00	4.739	8.106	.0749	9.703	503.32	28.23	8/28/69
SMALL PIT ON ONE SIDE.												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	128	8.003	4.998	1.001	2397.00	4.762	8.106	.0749	9.703	503.32	28.23	8/28/69
PITTED AREA ON ONE SIDE AND CHIPS FROM ONE INNER EDGE												
ACL51R	129	8.004	4.998	1.001	2395.00	4.756	8.107	.0749	9.706	503.53	28.23	8/28/69
CHIPPED ON ONE EDGE OF INNER SURFACE.												
ACL51R	130	8.003	4.998	1.001	2392.00	4.752	8.106	.0749	9.703	503.32	28.23	8/28/69
CHIPPED INNER EDGE AND PITS ON ONE SIDE												
ACL51R	131	8.002	4.998	1.001	2400.00	4.770	8.106	.0749	9.700	503.12	28.22	8/28/69
ACL51R	132	8.004	4.998	1.000	2385.00	4.741	8.107	.0749	9.697	503.03	28.23	8/28/69
PITTED AREAS ON BOTH LATERAL SURFACES.												
ACL51R	133	8.003	4.998	1.000	2393.00	4.759	8.106	.0749	9.694	502.82	28.23	8/28/69
CHIP ON OUTER SURFACE.												
ACL51R	134	8.004	4.998	1.001	2364.00	4.695	8.107	.0749	9.706	503.53	28.23	8/28/69
PITTED AREAS ON BOTH LATERAL SURFACES.												
ACL51R	135	8.004	4.998	1.000	2363.00	4.698	8.107	.0749	9.697	503.03	28.23	8/28/69
CHIP ON OUTER SURFACE.												
ACL51R	136	8.004	4.997	1.000	2381.00	4.732	8.106	.0750	9.700	503.15	28.25	8/28/69
SMALL CHIPS FROM INNER EDGE.												
ACL51R	137	8.003	4.998	1.000	2376.00	4.725	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	138	8.002	4.998	1.000	2360.00	4.695	8.106	.0749	9.690	502.61	28.22	8/28/69
ACL51R	139	8.003	4.998	1.000	2354.00	4.682	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	140	7.996	4.998	1.000	2383.00	4.753	8.103	.0748	9.671	501.38	28.17	8/28/69
SLIGHT CRACKS ALONG PART OF ONE INNER EDGE.												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	141	8.002	4.997	1.000	2398.00	4.770	8.105	.0749	9.694	502.74	28.23	8/28/69
CRACKED ON INNER SURFACE AND CRACKED ALONG ONE INNER EDGE.												
ACL51R	142	8.004	4.999	1.001	2403.00	4.774	8.108	.0749	9.703	503.40	28.22	8/28/69
ACL51R	143	8.003	4.997	1.000	2347.00	4.666	8.106	.0750	9.697	502.95	28.24	8/28/69
ACL51R	144	8.004	4.998	1.000	2333.00	4.638	8.107	.0749	9.697	503.03	28.23	8/28/69
PIT ALONG ONE INNER EDGE												
ACL51R	145	8.002	4.997	1.000	2336.00	4.647	8.105	.0749	9.694	502.74	28.23	8/28/69
SMALL CHIPS ALONG ONE INNER EDGE												
ACL51R	146	8.003	4.999	1.000	2366.00	4.707	8.107	.0749	9.690	502.69	28.22	8/28/69
ACL51R	147	8.004	4.998	1.001	2354.00	4.675	8.107	.0749	9.706	503.53	28.23	8/28/69
SMALL CHIPS ON OUTER EDGE.												
ACL51R	148	8.003	4.998	1.000	2342.00	4.658	8.106	.0749	9.694	502.82	28.23	8/28/69
FOREIGN MATERIAL IMBEDDED IN ONE LATERAL SURFACE.												
ACL51R	149	8.004	4.998	1.001	2352.00	4.671	8.107	.0749	9.706	503.53	28.23	8/28/69
ACL51R	150	8.003	4.999	1.001	2346.00	4.662	8.107	.0749	9.700	503.19	28.22	8/28/69
ACL51R	151	8.003	4.998	1.001	2341.00	4.651	8.106	.0749	9.703	503.32	28.23	8/28/69
ACL51R	152	8.004	4.999	1.001	2356.00	4.680	8.108	.0749	9.703	503.40	28.22	8/28/69
ACL51R	153	8.003	4.998	1.000	2379.00	4.731	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	154	8.002	5.000	1.000	2349.00	4.676	8.107	.0748	9.684	502.36	28.20	8/28/69
ACL51R	155	8.003	4.998	1.002	2348.00	4.660	8.106	.0749	9.713	503.83	28.23	8/28/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	156	8.004	4.998	1.000	2326.00	4.624	8.107	.0749	9.697	503.03	28.23	8/28/69
ACL51R	157	8.004	4.998	1.000	2349.00	4.670	8.107	.0749	9.697	503.03	28.23	8/28/69
ACL51R	158	8.004	4.998	1.000	2328.00	4.628	8.107	.0749	9.697	503.03	28.23	8/28/69
ACL51R	159	8.004	4.999	1.000	2325.00	4.623	8.108	.0749	9.694	502.90	28.22	8/28/69
ACL51R	160	8.003	4.998	1.000	2359.00	4.692	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	161	8.003	4.998	1.000	2353.00	4.680	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	162	8.002	4.997	.999	2361.00	4.701	8.105	.0749	9.684	502.24	28.23	8/28/69
ACL51R	163	8.003	4.999	1.000	2362.00	4.699	8.107	.0749	9.690	502.69	28.22	8/28/69
ACL51R	164	8.004	4.998	1.000	2360.00	4.692	8.107	.0749	9.697	503.03	28.23	8/28/69
ACL51R	165	8.002	4.999	1.001	2362.00	4.696	8.107	.0749	9.697	502.99	28.21	8/28/69
CHIP FROM INNER EDGE AND SURFACE.												
ACL51R	166	8.002	5.000	1.000	2362.00	4.702	8.107	.0748	9.684	502.36	28.20	8/28/69
ACL51R	167	8.004	4.999	1.001	2360.00	4.688	8.108	.0749	9.703	503.40	28.22	8/28/69
ACL51R	168	8.003	4.998	.999	2363.00	4.704	8.106	.0749	9.684	502.32	28.23	8/28/69
ACL51R	169	8.003	5.000	1.000	2364.00	4.704	8.108	.0749	9.687	502.56	28.20	8/28/69
ACL51R	170	8.003	4.999	1.000	2358.00	4.691	8.107	.0749	9.690	502.69	28.22	8/28/69
ACL51R	171	8.002	5.000	.999	2373.00	4.728	8.107	.0748	9.674	501.85	28.20	8/28/69
ACL51R	172	8.003	5.000	1.000	2334.00	4.644	8.108	.0749	9.687	502.56	28.20	8/28/69
CHIP FROM OUTER EDGE												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ACL51R	173	8.003	5.000	1.000	2332.00	4.640	8.108	.0749	9.687	502.56	28.20	8/28/69
ACL51R	174	8.004	5.000	.999	2367.00	4.713	8.109	.0749	9.681	502.27	28.21	8/28/69
ACL51R	175	8.003	5.000	1.000	2362.00	4.700	8.108	.0749	9.687	502.56	28.20	8/28/69
ACL51R	176	8.003	4.999	1.000	2381.00	4.737	8.107	.0749	9.690	502.69	28.22	8/28/69
ACL51R	177	8.003	4.998	1.001	2370.00	4.709	8.106	.0749	9.703	503.32	28.23	8/28/69
FLAKEY AREA ON PART OF ONE INNER EDGE.												
ACL51R	178	8.003	4.999	1.000	2334.00	4.643	8.107	.0749	9.690	502.69	28.22	8/28/69
ACL51R	179	8.003	4.999	1.001	2355.00	4.680	8.107	.0749	9.700	503.19	28.22	8/28/69
ACL51R	180	8.003	4.998	1.000	2354.00	4.682	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	181	8.003	4.998	1.000	2330.00	4.634	8.106	.0749	9.694	502.82	28.23	8/28/69
ACL51R	182	8.003	5.000	1.000	2355.00	4.686	8.108	.0749	9.687	502.56	28.20	8/28/69
TOSHIBA												
M4C21A	1	3.026	1.815	.403	140.300	4.615	3.009	.0813	1.574	30.401	30.64	10-1-68
(TOSHIBA SAMPLE NO. C4. C4 SCRATCHED ON O.D.)												
M4C21A	2	3.028	1.813	.413	141.850	4.537	3.008	.0816	1.619	31.265	30.75	10-1-68
(TOSHIBA SAMPLE NO. C6. C6 SCRATCHED ON O.D.)												
M4D21A	1	3.053	1.828	.410	139.900	4.431	3.033	.0816	1.621	31.576	30.75	10-1-68
(TOSHIBA SAMPLE NO. D5. D5 SCRATCHED ON O.D.)												
M4D21A	2	3.055	1.827	.415	141.700	4.425	3.034	.0818	1.644	32.021	30.82	10-1-68
(TOSHIBA SAMPLE NO. D6. D6 SCRATCHED ON O.D.)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TRANSTECH CO.												
G-300	1	1.765	1.260	.501	49.380	5.013	1.903	.0536	.816	9.850	20.21	
G-300	2	1.764	1.261	.501	49.360	5.031	1.903	.0534	.813	9.811	20.13	
G-300	3	1.123	.627	.483	27.076	5.009	1.080	.0929	.774	5.405	34.99	
G-300	4	1.123	.626	.485	27.205	5.014	1.080	.0930	.778	5.426	35.04	
TT2-101	2	1.252	1.000	.500	18.765	5.150	1.424	.0357	.406	3.644	13.45	
TT2-101	3	2.226	1.271	.451	99.240	5.119	2.164	.0892	1.389	19.385	33.60	
TT2-101	4	2.225	1.274	.451	98.947	5.123	2.166	.0887	1.384	19.315	33.43	
TT2-101	5	2.753	1.782	.500	146.200	5.159	2.835	.0692	1.566	28.337	26.08	
TT2-101	6	6.500	2.250	.795	830.000	4.356			11.54	190.53		
TWO CYLINDRICAL HOLES IN THIS PIECE. ONE PIECE SENT TO LIVERMORE 12/67												
TT3-300	1	4.000	2.000	1.001	753.990	4.877	3.664	.1103	6.458	154.60	41.56	2/9/68
(MFR. NUMBER-G.C. MS-2907)												
TRANSTECH CO. (6 INCH CORES)												
TT2-101	1	6.000	4.002	1.000	1335.00	5.190	6.266	.0645	6.445	257.20	24.28	1/26/66
(ASSIGNED TO THE CYCLOTRON)												
TT2-101	2	6.000	4.002	1.000	1332.35	5.180	6.266	.0645	6.445	257.20	24.28	1/26/66
(ASSIGNED TO THE CYCLOTRON)												
TT2-101	3	6.000	4.002	1.000	1338.20	5.203	6.266	.0645	6.445	257.20	24.28	1/26/66

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TT2-101	4	6.000	4.002	1.001	1336.70	5.192	6.266	.0645	6.452	257.46	24.28	3/1/66
TT2-101	5	6.000	4.004	1.001	1332.70	5.181	6.267	.0644	6.445	257.25	24.25	3/1/66
TT2-101	6	6.000	4.002	1.001	1316.90	5.115	6.266	.0645	6.452	257.46	24.28	4/20/66
TT2-101	7	6.000	4.002	1.001	1288.70	5.008	6.266	.0645	6.448	257.33	24.28	4/20/66
TT2-101	8	6.002	4.002	1.001	1330.70	5.162	6.267	.0645	6.458	257.77	24.30	4/20/66
TT2-101	9	5.998	4.002	1.001	1317.50	5.123	6.265	.0644	6.445	257.15	24.26	4/20/66
TT2-101	10	6.002	4.002	1.001	1319.70	5.120	6.267	.0645	6.458	257.77	24.30	4/20/66
TT2-101	11	6.002	4.002	1.001	1302.50	5.056	6.267	.0645	6.455	257.64	24.30	4/20/66
TT2-101	12	6.000	4.002	.998	1312.60	5.114	6.266	.0645	6.432	256.69	24.28	4/20/66
TT2-101	13	6.001	4.002	1.000	1314.80	5.109	6.266	.0645	6.448	257.36	24.29	4/20/66
TT2-101	14	6.000	4.002	1.001	1307.10	5.077	6.266	.0645	6.452	257.46	24.28	4/20/66
TT2-101	15	6.001	4.002	1.001	1315.20	5.105	6.266	.0645	6.455	257.61	24.29	4/20/66
TT2-101	16	6.001	4.002	.996	1305.50	5.093	6.266	.0645	6.423	256.33	24.29	4/20/66
TT2-101	17	6.000	4.002	1.001	1312.70	5.099	6.266	.0645	6.452	257.46	24.28	4/20/66
TT2-101	18	6.003	4.003	1.001	1320.00	5.120	6.268	.0645	6.458	257.82	24.30	6/9/66
TT2-101	19	6.001	4.002	1.001	1326.10	5.148	6.266	.0645	6.455	257.61	24.29	6/9/66
TT2-101	20	6.001	4.002	1.001	1327.50	5.156	6.266	.0645	6.452	257.48	24.29	6/9/66
TT2-101	21	6.003	4.003	1.002	1323.00	5.126	6.268	.0645	6.465	258.08	24.30	6/9/66

(ASSIGNED TO THE CYCLOTRON)

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TT2-101	22	6.003	4.003	1.002	1324.60	5.133	6.268	.0645	6.465	258.08	24.30	6/9/66
(ASSIGNED TO THE CYCLOTRON)												
TT2-101	23	6.004	4.004	1.002	1323.40	5.127	6.270	.0645	6.465	258.13	24.29	6/9/66
(ASSIGNED TO THE CYCLOTRON)												
TT2-101	24	6.001	4.001	1.001	1328.00	5.156	6.266	.0645	6.455	257.59	24.31	6/13/66
TT2-101	25	6.000	4.000	1.002	1334.80	5.175	6.264	.0645	6.465	257.92	24.31	6/13/66
TT2-101	26	6.001	4.001	1.001	1330.30	5.164	6.266	.0645	6.455	257.59	24.31	6/13/66
TT2-101	27	6.002	4.001	1.002	1333.00	5.164	6.266	.0645	6.468	258.13	24.32	6/13/66
TT2-101	28	6.001	4.003	1.002	1327.80	5.151	6.267	.0644	6.458	257.77	24.28	6/13/66
TT2-101	29	6.000	4.003	1.000	1327.40	5.166	6.267	.0644	6.439	256.97	24.27	6/13/66
TT2-101	30	6.003	4.002	1.001	1320.00	5.119	6.268	.0645	6.460	257.87	24.30	6/13/66
(INSIDE DIAMETER TAPERS FROM 4.001 TO 4.004)												
TT2-101	31	6.001	4.001	1.002	1327.30	5.145	6.266	.0645	6.465	257.97	24.31	6/13/66
TT2-101	32	6.002	4.002	1.002	1333.70	5.169	6.267	.0645	6.465	258.03	24.30	8/1/66
TT2-101	33	6.002	4.002	1.002	1326.80	5.142	6.267	.0645	6.465	258.03	24.30	8/1/66
(ASSIGNED TO THE CYCLOTRON)												
TT2-101	34	6.000	4.000	1.000	1340.50	5.208	6.264	.0645	6.452	257.41	24.31	11/17/66
TT2-101	35	6.002	4.003	1.000	1341.00	5.210	6.268	.0645	6.448	257.41	24.29	11/17/66
TT2-111	1	6.002	4.010	1.000	1312.30	5.112	6.273	.0642	6.426	256.69	24.18	11/11/66
TT2-116	1	6.000	4.001	1.001	1287.35	4.998	6.265	.0645	6.455	257.56	24.30	3/1/66

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TT2-116	2	6.000	4.002	1.001	1287.30	5.000	6.266	.0645	6.452	257.46	24.28	3/1/66
TT2-116	3	6.001	4.002	1.000	1286.90	5.000	6.266	.0645	6.448	257.36	24.29	3/1/66
TT2-125	1	6.000	4.003	1.001	1325.60	5.151	6.267	.0644	6.448	257.36	24.27	3/1/66
TT2-125	2	6.000	4.000	1.001	1329.20	5.159	6.264	.0645	6.458	257.66	24.31	5/11/66
TT2-125	3	6.000	4.000	1.001	1329.50	5.162	6.264	.0645	6.455	257.54	24.31	5/11/66
TRANSTECH CO. (8 INCH CORES)												
ENG.SAMP.	1	8.001	4.999	1.004	2562.00	5.080	8.106	.0749	9.723	504.29	28.20	6/12/69
ENG.SAMP.	2	8.000	4.999	1.002	2550.00	5.069	8.106	.0748	9.700	503.08	28.19	6/12/69
ENG.SAMP.	3	8.003	4.997	1.002	2561.00	5.082	8.106	.0750	9.716	503.95	28.24	6/12/69
ENG.SAMP.	4	8.004	5.001	1.010	2561.00	5.045	8.109	.0749	9.784	507.67	28.20	6/12/69
ENG.SAMP.	5	8.001	5.000	1.003	2561.00	5.085	8.107	.0748	9.710	503.66	28.19	6/12/69
ENG.SAMP.	6	8.000	4.999	1.003	2561.00	5.086	8.106	.0748	9.710	503.58	28.19	6/12/69
ENG.SAMP.	7	7.999	5.002	1.000	2461.00	4.907	8.107	.0747	9.668	501.48	28.15	7/29/69
CORE STAINED BY HANDPRINTS UPON RECEIPT (2ND E.S. DELIVERY)												
2NDEN.SAMP	8	8.007	5.000	1.001	2529.00	5.019	8.110	.0749	9.710	503.89	28.23	8-28-69
CHIPS ON OUTER EDGE.												
2NDEN.SAMP	9	8.007	5.001	1.001	2518.00	4.998	8.111	.0749	9.706	503.76	28.22	8-28-69
CHIPS ON INNER AND OUTER EDGES.												
2NDEN.SAMP	10	8.004	5.001	1.000	2504.00	4.982	8.109	.0749	9.687	502.64	28.20	8-28-69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
2NDEN.SAMP	11	8.006	5.001	1.000	2514.00	4.997	8.110	.0749	9.694	503.05	28.21	8-28-69
CRACK ON OUTER EDGE.												
2NDEN.SAMP	12	8.004	5.001	1.001	2479.00	4.927	8.109	.0749	9.697	503.14	28.20	8-28-69
CRACK THROUGH ENTIRE SECTION OF RING.												
2NDEN.SAMP	13	8.006	5.001	1.002	2493.00	4.946	8.110	.0749	9.713	504.06	28.21	8-28-69
2NDEN.SAMP	14	8.003	5.001	1.003	2509.00	4.979	8.109	.0748	9.713	503.94	28.19	8-28-69
CRACK THROUGH ENTIRE SECTION OF RING.												
2NDEN.SAMP	15	8.004	5.001	1.000	2467.00	4.908	8.109	.0749	9.687	502.64	28.20	8-28-69
ONE CHIP ON OUTER EDGE.												
2NDEN.SAMP	16	8.006	5.002	1.001	2529.00	5.024	8.111	.0749	9.700	503.43	28.20	8-28-69
CHIPS ALONG OUTER EDGE AND SPLIT ALONG OTHER OUTER EDGE												

WESTINGHOUSE ELECTRIC

HIG	1	1.434	.993	.303	18.754	4.493	1.524	.0585	.431	4.174	22.03

LAMINATED CORE SAMPLES

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ARNOLD ENGINEERING CO.												
D	1	1.950	1.625	.250	29.180	7.805	2.264	.0290	.262	3.738	10.93	
(LABELED 3T4179-D2)												
L	2	14.000	9.500	3.000	30618.0	7.499	14.74	.0617	43.55	4083.1	23.25	
(LABELED T8226-L12,WEIGHT CALCULATED)												
L	3	1.600	.890	.501	61.030	5.354	1.537	.0934	1.147	11.400	35.17	
(LABELED 3T5778-L12)												
L	4	3.500	2.500	.500	284.550	7.370	3.774	.0536	1.613	38.611	20.17	
(LABELED 3T6100-L12)												
L	5	9.030	4.610	4.500	25572.0	7.324	8.349	.1070	64.16	3491.7	40.31	5/66
(FORMERLY LISTED AS T8052-L12, SER. 2 - CHANGED 4/7/69)												
S	1	2.500	1.500	.450	192.000	8.288	2.486	.0813	1.452	23.167	30.63	
(LABELED 4T5320-S4, THICKNESS ADJUSTED FROM 0.5, WT IS CATALOG VALUE)												
S	2	2.500	1.500	.450	192.000	8.288	2.486	.0813	1.452	23.167	30.63	11/3/67
(LABELED 4T-5320-S4, THICKNESS ADJUSTED FROM 0.5, WT IS CATALOG VALUE)												
S	3	2.500	1.500	.450	192.000	8.288	2.486	.0813	1.452	23.167	30.63	11/3/67
(LABELED 4T-5320-S4, THICKNESS ADJUSTED FROM 0.5, WT IS CATALOG VALUE)												
S	4	6.000	4.000	2.000	4430.00	8.605	6.264	.0645	12.90	514.81	24.31	4/22/69
(LABELLED ST9260-S4-AA, NOMINAL CORE DIMENSIONS EXCLUDING CASE)												
S	5	6.000	4.000	2.000	4410.00	8.565	6.264	.0645	12.90	514.81	24.31	4/22/69
(LABELLED ST9260-S4-AA, NOMINAL CORE DIMENSIONS EXCLUDING CASE)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
BELL TELEPHONE LABORATORIES												
4-79 (2 MIL PERMALLOY)	1	6.160	3.201	.508	1403.20	7.748	5.741	.1042	4.849	181.10	39.25	
MAGNETICS, INC.												
D (LABELED 50001-2D, WEIGHT CALCULATED)	1	2.500	1.500	.500	190.000	7.381	2.486	.0813	1.613	25.741	30.63	
D (LABELED 51030-1/2D, WEIGHT CALCULATED)	2	1.750	1.250	.250	21.000	4.351	1.887	.0536	.403	4.826	20.17	
F (LABELED 51176-1F, WEIGHT CALCULATED)	1	.750	.500	.250	6.560	6.524	.783	.0645	.202	1.005	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	2	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	3	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	4	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	5	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	6	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
F (52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)	7	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
F	8	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
(52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)												
F	9	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
(52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)												
F	10	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
(52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)												
F	11	1.500	1.000	.450	63.000	8.702	1.566	.0645	.726	7.240	24.31	
(52038-4F, ELECTRONICS RESEARCH GROUP CORE, WEIGHT CALCULATED)												
F	12	3.500	2.250	2.000	1450.00	7.837	3.593	.0703	8.065	185.01	26.49	
(50341-4F, FORMERLY DESIGNATED NO. 1, WEIGHT CALCULATED)												
R	1	3.000	2.000	.900	476.000	8.219	3.132	.0645	2.903	57.917	24.31	9/15/67
(LABELED 51022-2R, THICKNESS ADJUSTED FROM 1.0, WT. CALCULATED												
R	2	3.000	2.000	.900	476.000	8.219	3.132	.0645	2.903	57.917	24.31	9/15/67
(LABELED 51022-2R, THICKNESS ADJUSTED FROM 1.0, WT. CALCULATED												
R	3	3.000	2.000	.900	476.000	8.219	3.132	.0645	2.903	57.917	24.31	9/15/67
(LABELED 51022-2R, THICKNESS ADJUSTED FROM 1.0, WT. CALCULATED												
R	4	3.000	2.000	.900	476.000	8.219	3.132	.0645	2.903	57.917	24.31	9/15/67
(LABELED 51022-2R THICKNESS ADJUSTED FROM 1.0, WT. CALCULATED												
R	5	5.000	3.500	1.400	2263.14	9.851	5.341	.0568	6.774	229.74	21.39	3/5/68
(LABELED 51427-2R, WT. INCLUDES CASE, THICK. ADJ. FROM 1.5)												
R	6	5.000	3.500	1.400	2261.10	9.842	5.341	.0568	6.774	229.74	21.39	3/5/68
(LABELED 51427-2R, WT. INCLUDES CASE, THICK, ADJ. FROM 1.5)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
MAGNETIC METALS COMPANY												
CENT20	1	3.000	2.000	.900	476.000	8.219	3.132	.0645	2.903	57.917	24.31	10/12/67
(LABELED 58A-8002, THICKNESS ADJUSTED FROM 1.0 WT CALCULATED)												
CENT20	2	3.000	2.000	.900	593.000	10.239	3.132	.0645	2.903	57.917	24.31	10/12/67
(LABELED 58A-8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	3	3.000	2.000	.900	594.500	10.265	3.132	.0645	2.903	57.917	24.31	10/12/67
(LABELED 58A-8002, WT INCLUDES CASE, THICK. ADJ. FROM 1.0												
CENT20	4	3.000	2.000	.900	549.400	9.486	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	5	3.000	2.000	.900	554.020	9.566	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	6	3.000	2.000	.900	554.690	9.577	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	7	3.000	2.000	.900	545.200	9.414	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	8	3.000	2.000	.900	548.050	9.463	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
CENT20	9	3.000	2.000	.900	554.230	9.569	3.132	.0645	2.903	57.917	24.31	3/11/68
(LABELED 58A8002, WT. INCLUDES CASE, THICK. ADJ. FROM 1.0)												
TELCON METALS LIMITED												
SATMUMETAL	1	3.000	2.000	.450	227.000	7.839	3.132	.0645	1.452	28.958	24.31	10/23/67
(LABELED SAT. MU. .002. 90 THICKNESS ADJUSTED FROM 0.5, WT. CALCULATED												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
SATMUMETAL	2	3.000	2.000	.450	227.000	7.839	3.132	.0645	1.452	28.958	24.31	10/23/67
(LABELED SAT. MU. .002. 9C THICKNESS ADJUSTED FROM 0.5, WT. CALCULATED												
SATMUMETAL	3	3.000	2.000	.450	227.000	7.839	3.132	.0645	1.452	28.958	24.31	10/23/67
(LABELED SAT. MU. .002. 9C THICKNESS ADJUSTED FROM 0.5, WT. CALCULATED												
SATMUMETAL	4	3.000	2.000	.450	227.000	7.839	3.132	.0645	1.452	28.958	24.31	10/23/67
(LABELED SAT. MU. .002. 9C THICKNESS ADJUSTED FROM 0.5, WT. CALCULATED												

POWDERED CORE SAMPLES

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
ARNOLD ENGINEERING CO.												
FX-3588-E	1	5.212	3.119		696.000	6.401	5.177	.0817	3.271	108.73	30.79	3/18/69
FX-3588-E	2	5.211	3.121		694.000	6.258	5.178	.0816	3.336	110.89	30.74	3/18/69
FX-3589-E	1	5.208	3.120		695.000	6.250	5.176	.0815	3.347	111.21	30.72	3/18/69
FX-3589-E	2	5.208	3.119		694.000	6.163	5.175	.0816	3.390	112.62	30.74	3/18/69
FX-3590-E	1	5.205	3.116		688.000	6.150	5.171	.0817	3.370	111.88	30.76	3/18/69
FX-3590-E	2	5.206	3.117		692.000	6.315	5.172	.0816	3.300	109.58	30.76	3/18/69
FX-3591-E	1	5.202	3.117		724.000	6.365	5.170	.0815	3.427	113.74	30.71	3/18/69
FX-3591-E	2	5.200	3.116		728.000	6.433	5.168	.0815	3.411	113.16	30.71	3/18/69
FX-3592-E	1	5.204	3.117		725.000	6.378	5.171	.0816	3.424	113.66	30.73	3/18/69
FX-3592-E	2	5.203	3.116		722.000	6.384	5.170	.0816	3.407	113.09	30.74	3/18/69
FX-3610-B	1	5.211	3.120	.502	647.200	5.750	5.177	.0816	3.386	112.55	30.76	5/19/69
FX-3610-B	2	5.215	3.122	.502	661.800	5.870	5.181	.0817	3.389	112.74	30.76	5/19/69
FX-3610-B	3	5.214	3.120	.502	651.900	5.782	5.179	.0817	3.391	112.75	30.79	5/19/69
FX-3610-B	4	5.211	3.120	.502	643.900	5.721	5.177	.0816	3.386	112.55	30.76	5/19/69
FX-3610-E	1	5.211	3.108	.502	644.700	5.704	5.168	.0823	3.405	113.03	30.09	5/19/69
FX-3610-E	2	5.211	3.118	.501	640.300	5.696	5.176	.0817	3.383	112.41	30.79	5/19/69

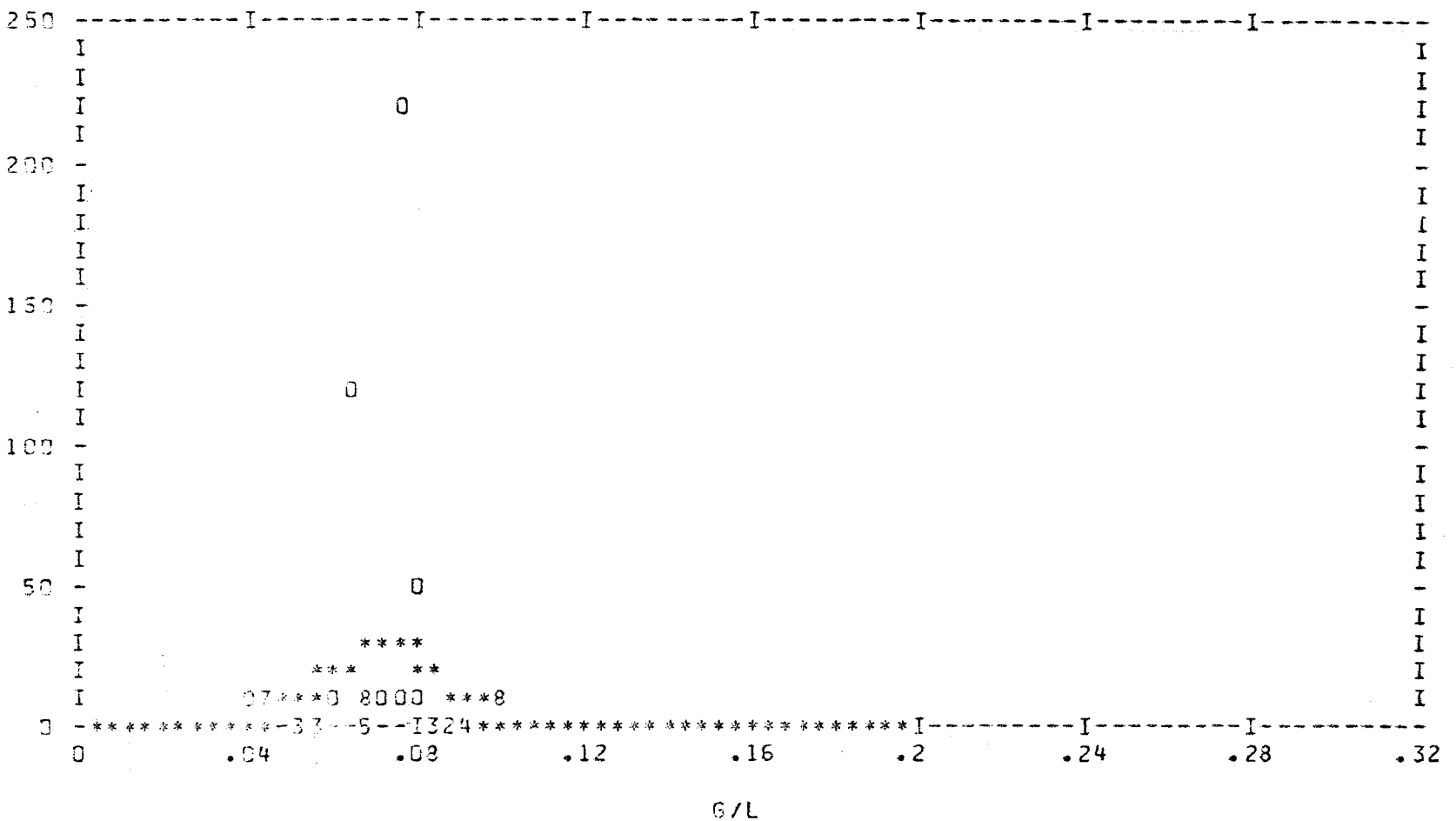
TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
FX-3616-E	1	5.208	3.106	.498	598.300	5.341	5.165	.0823	3.377	112.01	30.99	6/17/69
FX-3616-E	2	5.208	3.107	.498	589.300	5.263	5.166	.0822	3.375	111.97	30.97	6/17/69
THICKNESS VARIES FROM 0.498 TO 0.495												
FX-3617	1	5.206	3.106	.498	589.800	5.272	5.164	.0822	3.374	111.88	30.97	6/17/69
FX-3617	2	5.206	3.107	.498	589.300	5.269	5.165	.0821	3.372	111.84	30.95	6/17/69
MO-PERM	1	1.050	.580	.440	33.890	7.602	1.011	.0960	.681	4.458	36.15	
(LABELED A-930157-2, DIM. ARE NOMINAL BEFORE FINISH, WT. IS FINISHED.												
SF	1	2.008	1.128	.550	83.520	4.275	1.938	.0918	1.561	19.535	34.58	2/69
CORE-TRONICS, INC.												
1024	1	.799	.504		7.990	6.748	.813	.0733	.228	1.184	27.63	2-3-69
1024	2	.799	.506		7.970	6.740	.815	.0727	.227	1.182	27.39	2-3-69
1024	3	.797	.504		7.970	6.593	.812	.0729	.233	1.209	27.48	2-3-69
(SMALL CHIP)												
C	1	.792	.507		5.940	5.164	.811	.0710	.222	1.150	26.74	2-3-69
C	2	.788	.504		5.960	5.062	.807	.0711	.228	1.177	26.80	2-3-69
C	3	.791	.506		5.940	5.127	.810	.0711	.224	1.158	26.79	2-3-69
E	1	.792	.502		8.210	5.061	.808	.0726	.314	1.622	27.34	2-3-69
E	2	.792	.502		8.320	5.067	.808	.0726	.318	1.642	27.34	2-3-69
E	3	.792	.504		8.320	5.008	.809	.0719	.321	1.661	27.10	2-3-69
(CORE CRACKED)												

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
GQ-4	1	.791	.499		6.870	5.980	.805	.0733	.223	1.149	27.62	2-3-69
GQ-4	2	.792	.499		7.700	6.601	.806	.0735	.226	1.166	27.70	2-3-69
GQ-4	3	.792	.499		6.850	6.027	.806	.0735	.221	1.137	27.70	2-3-69
GQ-4	4	.792	.501		7.550	6.444	.807	.0729	.227	1.172	27.46	2-3-69
HP	1	.790	.501		6.310	5.552	.806	.0725	.221	1.137	27.31	2-3-69
HP	2	.790	.499		6.290	5.592	.804	.0731	.219	1.125	27.55	2-3-69
HP	3	.791	.508		6.050	5.140	.812	.0705	.227	1.177	26.55	2-3-69
(BADLY CHIPPED)												
MAGNETICS, INC.												
55	1	1.039	.606	.455	36.000	8.631	1.020	.0858	.636	4.171	32.33	6/63
(LABELED 55926-A2, DIM. ARE ADJUSTED TO GIVE TRUE AREA,CATALOG WT.)												
MAGNETIC CORE CORPORATION												
1024	1	1.568	.956	.250	29.380	5.911	1.571	.0787	.494	4.970	29.67	2/69
1024	2	1.568	.957	.250	29.520	5.947	1.572	.0786	.493	4.964	29.60	2/69
1024	3	1.568	.957	.251	29.360	5.891	1.572	.0786	.495	4.984	29.60	2/69
1024	4	1.569	.957	.250	29.760	5.983	1.572	.0787	.494	4.974	29.64	2/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
MICROMETALS												
T50-2	1	.498	.300	.186	1.900	5.023	.496	.0807	.119	.378	30.39	1-29-69
T50-4	1	.510	.300	.193	1.960	4.639	.503	.0845	.131	.423	31.82	1-29-69
T50-6	1	.498	.298	.186	1.860	4.881	.495	.0817	.120	.381	30.79	1-29-69
T50-7	1	.497	.300	.187	1.890	5.002	.496	.0803	.119	.378	30.27	1-29-69
T50-10	1	.497	.300	.194	1.830	4.668	.496	.0803	.123	.392	30.27	1-29-69
NATIONAL MOLDITE CO., INC.												
E17	1	.696	.502	.312	4.460	4.779	.754	.0520	.195	.933	19.59	2/69
J52	1	.696	.501	.313	4.330	4.605	.753	.0523	.197	.940	19.71	2/69
SF14	1	.697	.502	.313	4.120	4.374	.755	.0522	.197	.942	19.68	2/69
TH13	1	.696	.502	.315	4.640	4.924	.754	.0520	.197	.942	19.59	2/69
PYROFERRIC CO.												
E (CHIPPED IN 2 PLACES)	1	1.051	.577	.444	21.490	4.873	1.004	.0954	.679	4.410	35.95	2/69
E	2	1.052	.579	.443	21.370	4.858	1.006	.0950	.676	4.399	35.80	2/69
SF	1	1.051	.578	.442	21.120	4.818	1.005	.0952	.674	4.383	35.85	2/69
SF	2	1.050	.578	.443	21.210	4.841	1.004	.0950	.675	4.381	35.79	2/69

TYPE	S.N.	O.D.	I.D.	THICK.	WEIGHT	DENSITY	R(MAG)	G/L	AREA	VOL.	ZO	DATE REC.
TH	1	1.051	.576	.422	20.920	4.984	1.003	.0957	.647	4.197	36.06	2/69
TH	2	1.050	.577	.447	20.880	4.716	1.003	.0953	.682	4.427	35.90	2/69

HISTOGRAM OF G/L VALUES FOR ALL SAMPLES IN THE MAGNETIC MATERIALS SAMPLE CATALOG



MAGNETIC MATERIAL SAMPLE CATALOG, EDITION NUMBER 16

THE TOTAL NUMBER OF TOROIDAL SAMPLES = 596

THE DATA HAS BEEN SORTED INTO 100 BINS

STATISTICAL ANALYSIS OF THE G/L VALUES IN THIS EDITION OF THE MAGNETIC MATERIALS SAMPLE CATALOG, USING THE CDC 6000 SERIES STATISTICAL SUBROUTINES PROGRAM 'BDS', YIELDS THE FOLLOWING RESULTS

MEAN = 7.257E-02

2ND MOMENT = 1.933E-04

3RD MOMENT = 9.229E-06

4TH MOMENT = 5.078E-07

VARIANCE = 1.936E-04

STANDARD DEVIATION = 1.391E-02

SKEWNESS = 1.574E+00

KURTOSIS = 1.060E+01

THE MEAN G/L VALUE CORRESPONDS TO AN OD/ID RATIO OF 1.578

THE PRECISION CONSTANT (H) = 50.822

* IS A PLOT OF Y = H/SQRT(PI)*EXP@-H**Z*(X-MEAN)**2