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(NASA-CR-158709) QUANTITATIVE ANALYSIS OF
 DEFECTS IN SILICON: SILICON SHEET GROWTH
 DEVELOPMENT FOR THE LARGE AREA SILICON SHEET
 TASK OF THE LOW COST SOLAR ARRAY PROJECT
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Silicon Sheet Growth Development for the Large
 Area Silicon Sheet Task of the Low Cost Solar Array Project

QUARTERLY PROGRESS REPORT NO. 3

by

R. Natesh
 J.M. Smith
 H.A. Qidwai



Covering the period 1 October 1978 to 31 December 1978

JPL Contract No. 954977

MATERIALS RESEARCH, INC.
 790 East 700 South Street
 Centerville, Utah 84014
 Phone: (801) 531-9600

The JPL Low-Cost Silicon Solar Array Project is sponsored by the U.S. Department of Energy and forms part of the Solar Photovoltaic Conversion Program to initiate a major effort toward the development of low-cost solar arrays. This work was performed for the Jet Propulsion Laboratory, California Institute of Technology, by agreement between NASA and DOE.

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TECHNICAL CONTENT STATEMENT

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NEW TECHNOLOGY

No new technology is reportable for the period covered by this report.

C O N T E N T S

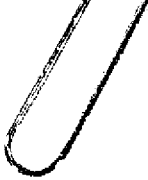
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SECTION I

S U M M A R Y

This report describes the various steps involved in the chemical polishing and etching of Mobil Tyco silicon samples and discusses the data on twins, grain boundaries and dislocation pits from forty six (46) Mobil Tyco samples and seven (7) IBM samples.

SECTION II

INTRODUCTION

The objective of this program is to evaluate and, if possible, predict conversion efficiency for a variety of silicon samples with differences in structural defects, such as grain boundaries, twin boundaries, precipitate particles, dislocations, etc. Quantitative characterization of these structural defects, which have been revealed by etching the surface of silicon samples, can then be performed by using a Quantimet 720 Image Analyzer.

The silicon samples have been obtained by JPL from different manufacturers. Each of these manufacturers use their own crystal growth and fabrication techniques and, therefore, the various types of silicon produced contain a variety of trace impurity elements and structural defects. The two most important criteria in evaluating the various silicon types for solar cell applications are: (i) cost and (ii) conversion efficiency. At present, the solar cells with highest conversion efficiency are made of high purity silicon single crystals, which are free from structural defects such as dislocations, twin boundaries, precipitate particles, etc. But these crystals are very expensive and may not meet the DOE goal of 50 cent/watt by 1986. On the other hand, silicon crystals such as EFG ribbons, Dendritic Webs, etc. are NOT single crystals; but made of highly ordered crystals which contain large numbers of dislocations, twin boundaries, grain boundaries, precipitates, etc., compared to the premium grade silicon.

The following important questions must be answered to evaluate the conversion efficiency of low cost and high cost silicons: (i) What effect do these defects have on conversion efficiency of low cost and high cost silicons? (ii) Of the various types of defects, which defect/defects severely affects conversion efficiency? (iii) At what concentrations does this effect become significant? (iv) Is there a rapid, accurate, quantitative method that can be used routinely as a Quality Assurance tool?

Quantitative analysis of surface defects is being performed by using a Quantimet 720 Quantitative Image Analyzer. This system can differentiate and count 67 shades of gray levels between black and white contrasts. In addition, it can characterize structural defects by measuring their length, perimeter, area, density, spatial distribution, frequency distribution (in any preselected direction), and so on. However, the Quantitative Image Analyzer is extremely sensitive to optical contrasts of various defects. Therefore, to obtain reproducible results, the contrasts produced by various defects must be similar and uniform for each defect types along the entire surface area of samples to be analyzed. To achieve this, a chemical cleaning and polishing technique has now been perfected for silicon samples from Mobil Tyco, Wacker, and IBM. The cleaning and polishing preparation technique produces a very clean and even surface for silicon crystals suitable for analyses by the QTM 720 Image Analyzer. We are now obtaining quantitative information from a variety of silicon crystals. Quantitative data on 53 samples are given in this report.

SECTION III

CHEMICAL POLISHING AND ETCHING OF MOBIL TYCO SAMPLES

CHEMICAL POLISHING:

In our previous Quarterly Report¹ and One-Time Report² on Crystal Cleaning and Polishing techniques, we have discussed in detail the procedures of chemical polishing and chemical etching. These techniques were perfected for Wacker and IBM samples. However, as mentioned in our Quarterly Report¹, there is a variation in polishing time for the Wacker and IBM samples. This variation is due to certain inherent manufacturing, fabrication, and processing variables, which affect the reaction rates for the two types of the samples under otherwise identical polishing conditions. Similarly, the polishing time of the silicon samples manufactured by Mobil Tyco has been observed to be different from those of IBM and Wacker samples.

The results of chemical polishing of Mobil Tyco samples are summarized in Table 1. It may be observed from the Table 1 that the polishing temperature of $50^{\circ} \pm 3^{\circ}\text{C}$ and polishing time of 40 seconds are acceptable for the Mobil Tyco samples. However, the Wacker samples require 80-85 seconds and the IBM samples require 30 seconds for polishing.

It may be noted that samples which are slightly underpolished as well as samples which are well-polished, exhibit bright and shiny surfaces when observed by the naked eye. Therefore, visual observation can not be used to determine the quality of polishing. However, when the samples are observed in a high quality optical metallograph, the underpolished samples show faceting and sub-grain type structure, whereas the well polished samples show

clearly defined grain boundaries and some of the twin boundaries in sharp contrast. Therefore, an optical metallograph must be used to determine the quality of polishing.

CHEMICAL ETCHING:

We have discussed in detail the composition and variation of the etching solution, the etching procedure, and the variation of the etching time in our previous reports^{1,3}. Etching solution III was used to distinctly reveal the structural defects such as grain boundaries, twin boundaries, and dislocation pits for IBM and Wacker samples. This etching solution contained 10 g C_rO_3 in 60 ml deionized water and 60 ml concentrated HF.

The silicon samples supplied by Mobil Tyco were also etched for 50 seconds using etching solution III. This resulted in distinct grain boundaries, twin boundaries, and dislocation pits. However, the Mobil Tyco RH samples (first batch containing the first thirty samples) contained certain impurities which reacted with the etching solution III producing a surface film over 50% of the surface area. Due to the presence of the surface film, it was not possible to analyze these samples with the QTM 720 Image Analyzer.

Twenty (20) out of thirty (30) Mobil Tyco had already been polished when the surface film problem during etching was encountered. To eliminate surface film from these twenty samples, the samples were repolished. During the repolishing process, however, the samples were preferentially dissolved at places where they contained silicon carbide particles, creating tiny holes in the samples. Out of the twenty (20) samples, only eight (8) samples could be recovered during the repolishing process. Even among these

eight (8) samples, four (4) sample surfaces had tiny holes but they were analyzed as suggested by JPL.

The remaining ten (10) as-received Mobil Tyco samples were first etched for 15 seconds, to produce the surface film. Then, these samples were polished and etched (i.e. polished for 40 seconds and then etched for 50 seconds) to remove the surface film and reveal the structural defects.

Mobil Tyco sample Nos. 19 thru 46 did not, however, react with the etching solution. Hence, they were first cleaned and polished, and then etched in the normal manner.

SECTION IV

TECHNICAL DISCUSSION

Chemical polishing and chemical etching of forty six (46) Mobil Tyco samples and seven (7) IBM samples were completed in the current reporting period. These samples were then analyzed for twin boundaries, grain boundaries, and dislocation pits.

Procedure for QTM analysis, method of selecting fields, and explanation of teletype printout are discussed below.

Measurement of Twins:

In the Mobil Tyco samples, almost all the twins are oriented parallel to one another and run from one edge of the wafer to the opposite edge (parallel to the longitudinal axis of the silicon ribbon). Therefore, in order to measure twin density, 50 fields were chosen along the central transverse axis of the sample. In other words, the central transverse axis is perpendicular to the twins. The distance between each of these 50 fields where measurements for twins were made was 0.31 mm. The long dimension of each field is 0.30 mm. Therefore, each of these fields are adjacent to one another by a distance of 0.01 mm, and therefore, do not overlap one another. It is important that the fields do not overlap, since the same twin should not be counted twice. At the same time, the fields must be close to one another so that almost all the twins are counted by the QTM. On the other hand, counting may also be done using a square raster of 50 fields distributed evenly over the entire sample surface.

In this case, the horizontal distance separating each field will be 2.5 mm, which is much larger than the long dimension of the frame i.e., 0.30 mm. Therefore, under the method of square raster, there is a possibility that areas in the sample where the twin or dislocation density is very high may not be counted. This will result in large errors. Therefore, all the 50 fields were counted along the central transverse axis of the sample.

In the IBM samples also, almost all the twins are oriented parallel to one another and run from one edge of the wafer to the opposite edge. Therefore, the above procedure was also used for measuring twins in the IBM samples. However, the Mobil Tyco samples have dimensions of 2.5 cm. by 2.5 cm., whereas the IBM samples have dimensions of 3 cm. by 3 cm. Therefore, in the case of IBM samples, 70 fields were chosen for analysis along the central transverse axis of each samples to cover the additional 0.5 cm in length.

Measurement of Dislocation Pits:

Measurements on dislocation pits from Mobil Tyco samples 1 to 9 were made on 50 equidistant fields, which were uniformly distributed in a square raster over the entire sample surface. During these measurements, it was observed that dislocation pit density also had longitudinal symmetry similar to the twins. This was confirmed by taking measurements for 50 equidistant fields for sample 10 along three (3) transverse axes, e.g. along the top edge, along the bottom edge, and along the central axis. From the attached QTM data sheets for Sample 10, the following may be observed for dislocation pits from the average of 50 measurement fields:

	No.	No. /Area	L/A
transverse axis along top edge	287	0.008	0.010
transverse axis along center	360	0.010	0.010
transverse axis along bottom edge	368	0.010	0.011

The above data shows good agreement as far as "No./Area" and "L/A". There is good agreement as far as "No." is concerned for data along central axis and bottom transverse axis. The data along the top transverse axis is somewhat off (287) from the data for central axis (360) and bottom axis (368). However, this variation is not significant. On the other hand, significant error may be introduced for the case of 50 measurement fields taken in a square raster, if some of the large dislocation density areas are missed. Such an error is unlikely if the 50 fields are taken on a transverse axis, since the distance between fields not analyzed is only 0.01 mm. Therefore, a higher accuracy for dislocation density will be achieved if 50 equidistant fields are taken along the transverse central axis of the sample. Therefore, from MobilTyco sample No. 10 onwards all samples were analyzed for twins and dislocation density along 50 equidistant fields along the transverse central axis of the sample.

The distribution of dislocation pits in the IBM samples also have longitudinal symmetry. Therefore, the above procedure was used for measuring dislocation pits in the IBM samples. However, since the IBM samples are longer by 0.5 cm. compared to Mobil Tyco samples, 70 fields were chosen for analysis along the central transverse axis of each IBM sample to cover the additional 0.5 cm. in length.

Measurement of Average Area of Twins and Dislocation Pits:

Before measurements were made for twins, each sample was scanned to determine manually the average area of one twin. The method of determining the average twin area is as follows: First, the sample surface was randomly scanned, and those fields were selected where the twins were not touching each other. Each field, generally containing more than 5 distinct twins, were then displayed on the display module of the QTM. The total area of all the twins in each field was determined and divided by the number of twins in that field to get the average twin area for that field. The average twin area was then determined in an additional 4 fields. The arithmetic average was then calculated from the average twin area in these five fields. Generally, 30 to 40 twins are used in 5 fields to get the average twin area. The same procedure was used to obtain the average dislocation pit area. The average twin area in each sample was then fed into the Register (038) of the HP 9810. This is an important step to get actual number of twins and dislocation pits, especially in areas where the densities of these defects are high and they touch one another. In order to verify that the average area of a twin so obtained was accurate, an additional six fields were selected at random where the twin density were high, and the twins were touching one another. The twin density in each of these six fields were counted manually, and also counted by the QTM using the average area of a twin. The entire procedure was repeated until close agreement was reached between manual counting and QTM counting. After this procedure, measurements were then made on all the fields (50 for Mobil Tyco and 70 for IBM) using the automatic QTM mode.

Explanation of Teletype Printout:

The QTM measurements for twins and dislocation pits on Mobil Tyco samples 1 to 46 and IBM samples 1 to 7 are shown in attached teletype printouts. The first paragraph of the teletype printout gives the date, name of the manufacturer, sample number, name of the defect type being measured, size of the X and Y steps, and average values of twin area and dislocation pit area that were measured manually and fed into the Register 038 for each sample. In addition, the teletype print-out for twin measurements also shows that the QTM output data is divided by 100. This procedure was followed in order to avoid frequent overflow problems in the classifier-collector.

The second paragraph of the teletype printout lists: 1) the 800 X magnification that was used; 2) calibrated equivalent value of one picture point in the units being used i.e. mm for twins and microns for dislocation pits; and 3) calculated area of one field (frame) in the units being used. The frame area of a standard frame in the QTM is 500,000 picture points (pp). In case of twins, the standard frame was used. However, during dislocation density measurements the uneven sample surfaces caused problems in focusing dislocation pits over the entire standard frame. Therefore, during dislocation density measurements half the standard frame (250,000 pp) was used. This is shown under "Frame Area" in the QTM data sheets. The unit of measurement was millimeter for twins, and microns for dislocation pits.

The third paragraph of the teletype printout lists the titles for the different measurements, which are explained below:

Field: indicates the sequence number of the field in which measurements were made.

No: denotes the total number of features detected in any field. This is obtained by dividing the total area of a feature by the average area of that feature.

No. /Area: denotes the computed number of features/mm² or features/microns² in each field.

MFPV: denotes the mean free path in the vertical direction. This quantity is the frame area divided by the vertical projection of all detected features in the field (frame).

MFPH: denotes mean free path in the horizontal direction. This is the horizontal analogue of MFPV.

L/A: This quantity is length of detected features per unit area. The unit area is mm² in the case of twins and microns² in the case of dislocation pits.

Note: The quantity L/A is subject to large errors when twin bands are present. The QTM computes L/A by dividing the perimeter by 2. A twin band usually contains 20 to 100 individual twins, many of them touching one another. The QTM will compute L/A by dividing the perimeter of the twin band by 2. In other words, the QTM may count the entire twin band as one large area rather than consisting of several individual twins. Thus, L/A is subject to large errors and is underestimated by QTM.

AFETA: This denotes the average area of the features detected in each field. This is to be ignored in the attached teletype printouts, since the average area was determined manually at the start.

Note: The attached teletype printouts show, after 25 and 50 fields, the computed values of average, standard deviation, and standard error for all data from field No. 1 onwards. This averaging can be done at any time during the course of the measurement.

In the case of Mobil Tyco samples 1 and 2, the actual twin area was fed into the Register 038 of the HP 9810. However, the QTM output is always divided by 100. Therefore, the QTM output data for "NO", "No./Area", and "L/A" are to be multiplied by 100 to get the actual values. However, "MFPV" and "MFPH" are to be divided by 100 (because "area" is the numerator and "intercept distance" is the denominator) to get actual values.

For all other samples (except Mobil Tyco samples 1 and 2), the average twin area was divided by 100 before feeding into Register 038 of the HP 9810. Therefore, the QTM data for "No." and "No./Area" are actual and not to be multiplied by 100. However, "MFPV" and "MFPH" are to be divided by 100 and "L/A" is to be multiplied by 100 to obtain actual values.

The grain boundaries in each sample were counted under the binocular microscope using 7X magnification. Most of the grain boundaries were parallel or approximately parallel to the twins. In general, there were no complete grains in a sample, i.e., the grain boundaries were running from bottom edge to top edge of a sample.

SECTION V

RESULTS

The data on twins and dislocation pits for Mobil Tyco samples from 1 to 46 and for IBM samples from 1 to 7 are given separately in the attached teletype printouts. In addition to the teletype printouts, the average data for 50 fields for each Mobil Tyco sample has been summarized in Tables 2, 3, 4, and 5 for ease in correlation and comparison. The average data for 70 fields for each IBM sample has been listed in Table 6. In addition, Tables 3, 4, 5 and 6 give the grain boundary length (cm)/(cm)² for each sample. Table 2, however, lists the number of grain boundaries present in the entire sample surface for each sample (Nos. 1 to 18). The reason for this is because these samples were analyzed in the month of October, 1978 and had already been sent back to JPL.

Complete grain was not observed in any of these samples.

Observation of the data in Table 2 (samples Nos. 1 to 18) shows that, in general, samples having smaller twin densities have larger dislocation densities, and vice versa. For example, sample 6 has 18 twins/mm² and 485 dislocations/field. The same data for sample 14 are 563 twins/mm² and 143 dislocations/field. Thus, an inverse relationship exists between twin density and dislocation density. This inverse relationship, however, was not clearly observed in the Mobil Tyco sample Nos. 19 to 46. Nonetheless, a broad inverse relationship does exist between twins and dislocation pits in the samples taken out from the same ribbon (Tables 3, 4, and 5). In addition to the broad inverse relationship between twins and dislocation

pits, another interesting feature has been observed in the case of IBM samples. As per the diagram provided by JPL (Fig. 1), the 7 IBM samples were cut from the same ribbon and were designated specimens A to G. The twin density decreases systematically from specimen A to G as shown in Figure 2. The twin density in specimen A is $621.5/\text{mm}^2$ and in G is $224.5/\text{mm}^2$. Similar plots were also prepared for all Mobil Tyco samples (Nos. 19 to 46) cut from the same ribbon, but no such relationship has been discovered. There is, however, no relationship between dislocation pits or grain boundary length/ cm^2 and the specimen position.

Table 3 also lists number of silicon carbide particles in each sample surface. This was obtained by visually counting the particles in the as-received condition (before polishing).

SECTION VI

C O N C L U S I O N S

Polishing and etching procedures have been perfected for Mobil Tyco, Wacker, and IBM silicon samples for obtaining proper contrast of structural defects suitable for QTM analyses.

A computer program for automated quantitative image analyses of grain boundaries, twin boundaries, and dislocation pits using a Quantimet 720 Image Analyzer has been perfected and is being used routinely.

Data collected on fortysix (46) Mobil Tyco and Seven (7) IBM samples using the Quantimet 720 Image Analyzer is discussed.

SECTION VII

REFERENCES

1. R. Natesh, J. M. Smith, H. A. Qidwai: "Quantitative Analysis of Defects in Silicon," Quarterly Progress Report No. 2, DOE/JPL 954977, Materials Research, Inc., Technical Report: MRI-260, 1978.
2. R. Natesh: "Quantitative Analysis of Defects in Silicon," One-Time Report on Crystal Cleaning and Polishing Preparation Technique, DOE/JPL 954977, Materials Research Inc., Technical Report: MRI-254, 1978.
3. R. Natesh, H. A. Qidwai: "Quantitative Analysis of Defects in Silicon," One-Time Report on Crystal Etching Preparation Technique, DOE/JPL 954977, Materials Research Inc., Technical Report: MRI-259, 1978.

T A B L E 1

CHEMICAL POLISHING OF MOBIL TYCO SAMPLESPolishing solution: mixture of HNO_3 :HF: CH_3COOH = 1:2:3 by volume

Temperature ($^{\circ}\text{C}$)	Time (Sec.)	Surface Condition
50	30	Growth lines persist. Sub-grain type structures present
50	40	Good even polishing
50	50	Faceting develops

T A B L E 2

ANALYSIS OF MOBIL TYCO SAMPLES

Sample No. MRI	Average No. of Twins/field	Average No. of Twins/mm ²	No. of grain Boundaries	Average No. of dislocations/field	Average No. of dislocations/ μm^2
1	18.0	261.2	5	362.6	0.010
2	26.0	368.5	2	698.6	0.020
3	31.8	451.9	2	411.4	0.012
4	13.1	186.8	5	256.3	0.007
5	14.6	207.9	6	387.8	0.011
6	1.3	18.4	6	485.3	0.014
7	9.7	137.7	5	505.8	0.014
8	16.7	238.1	8	495.4	0.014
9	24.6	350.3	0	401.0	0.011
10	15.8	224.7	7	368.0	0.010
11	32.8	466.1	4	250.4	0.007
12	13.2	188.0	4	578.1	0.016
13	27.2	387.0	1	353.6	0.010
14	39.6	563.3	0	143.2	0.004
15	27.0	384.0	7	227.6	0.006
16	33.0	470.0	4	197.1	0.006
17	34.5	490.5	1	214.1	0.006
18	11.4	162.2	4	503.7	0.014

T A B L E 3

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample # (Mobil Tyco)	JPL No.	Ave.No.of Twins/field	No.of Si Carbide Particles	Ave.No.of Twins/mm ²	Grain boundary length/cm ²	Ave.No.of Disl./field	Ave.No.of Disl./μm ²
19	5-685 A	24.40	37	347.085	1.22	2759.08	0.078
20	5-685 B	14.76	55	209.916	0.89	3702.18	0.105
21	5-685 C	21.25	21	302.189	1.39	2480.51	0.071
22	5-685 E	14.52	50	206.449	0.54	3595.42	0.102
23	5-685 F	20.76	27	295.247	1.08	2219.70	0.063
24	5-685 G	23.26	28	330.782	1.91	1191.12	0.034
25	5-685 H	19.10	48	271.659	0.88	1796.13	0.051
26	5-685 J	17.78	23	252.923	0.80	1818.59	0.052
27	5-685 K	12.87	30	182.978	1.82	2914.59	0.083
28	5-685 M	18.86	21	268.240	0.93	3536.89	0.101
29	5-685 N	15.45	28	219.769	1.15	2606.93	0.074
30	5-685 P	17.87	18	254.185	1.02	2960.46	0.084

TABLE 4

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample # (Mobil Tyco)	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/ μm^2
31	5-744 E	28.10	399.595	1.12	792.45	0.023
32	5-744 F	19.60	278.780	1.76	814.16	0.023
33	5-744 H	25.96	369.253	2.32	1161.55	0.033
34	5-744 G	22.05	313.650	2.51	1512.83	0.043
35	5-744 A	16.89	240.180	2.01	2704.46	0.077
36	5-744 B	29.35	417.464	1.20	1861.84	0.053
37	5-744 C	51.78	736.382	1.74	1189.71	0.034
38	5-744 D	59.35	844.084	0.74	1266.99	0.036

T A B L E 5

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample No.	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/μm ²
39	5-742 A	38.83	552.220	1.76	2740.94	0.078
40	5-742 B	28.15	400.298	1.6	1798.02	0.051
41	5-742 C	53.75	764.416	1.50	949.78	0.027
42	5-742 D	46.79	665.410	1.57	846.78	0.024
43	5-742 E	45.57	648.059	0.80	1904.34	0.054
44	5-742 F	29.32	416.969	1.76	2705.71	0.077
45	5-742 G	49.34	701.677	2.11	1780.49	0.051
46	5-742 H	48.64	691.801	0.64	1979.37	0.056

TABLE 6

ANALYSIS OF IBM SAMPLES

MRI Sample No.	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/μm ²
1	4-457 A	43.70	621.581	1.3	460.56	0.013
2	4-457 B	41.30	587.374	1.5	205.37	0.006
3	4-457 C	39.96	568.254	1.12	373.20	0.011
4	4-457 D	37.25	529.826	0.51	302.98	0.009
5	4-457 E	29.82	424.114	0.52	328.91	0.010
6	4-457 F	38.09	541.730	1.33	405.75	0.012
7	4-457 G	15.79	224.585	1.5	342.75	0.010

Ribbon Identified as
IBM #4-457

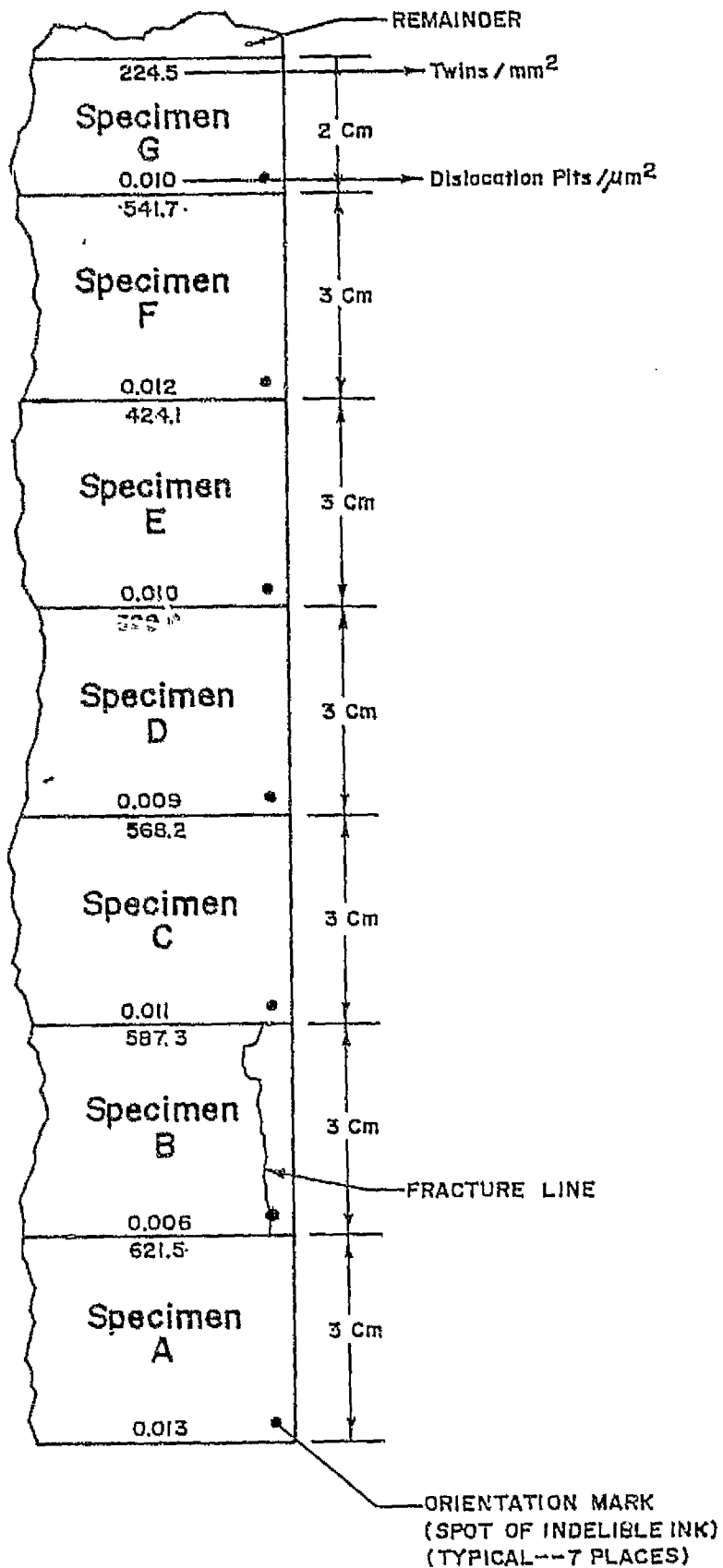


Fig. 1. Schematic sketch showing locations of specimens from IBM Ribbon No. 4-457.

IBM #1-7
JPL 4-457 Spec A-G

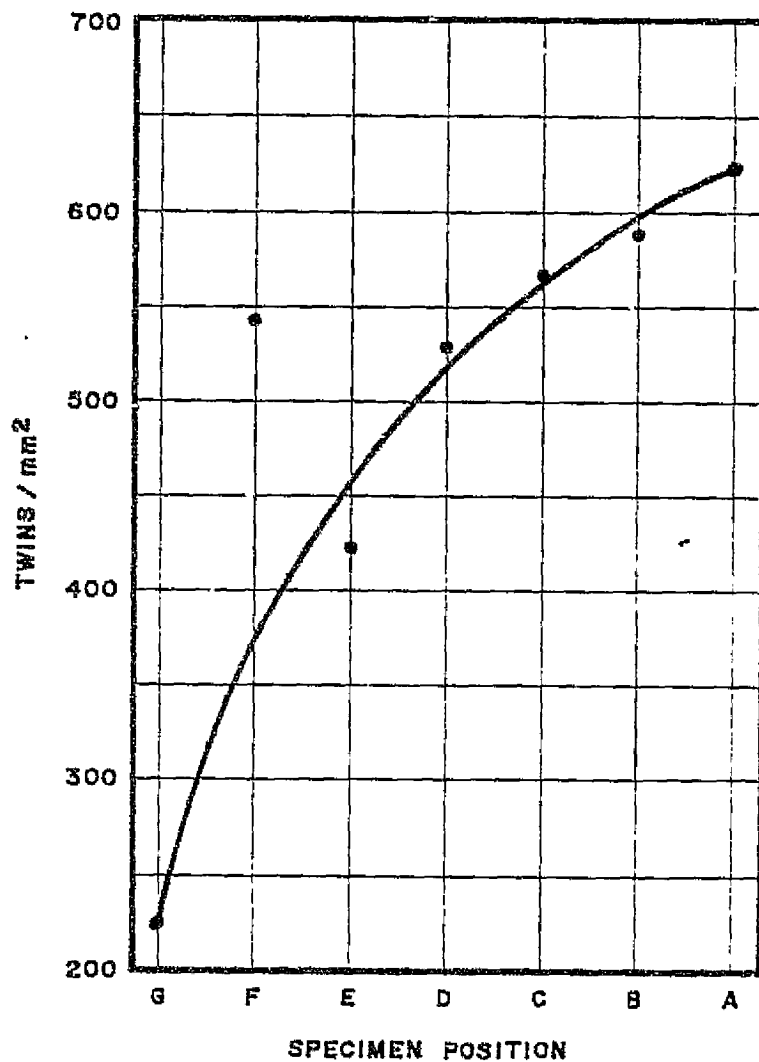


Fig. 2. Graphical plot showing systematic variation in twin density with respect to specimen location in IBM Ribbon No. 4-457.

MOBIL TYCO SAMPLE NUMBER 1
 TWINS ONLY
 AVERAGE TWIN AREA - 3682PP
 BTM OJT PJT DATA DIVIDED BY 100

13/17/78

MAG-837.7 UNITS-MM CAL. FACTOR-
 FRAME AREA- 3.077313

1.000375 UNITS/PP

ORIGINAL PAGE IS
 127 10 0117

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.02	0.236	62.500	14.423	0.372	1.000004
2	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
3	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
4	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
5	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
6	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
7	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
8	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
9	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
10	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
11	0.06	0.919	15.625	4.934	0.224	1.000007
12	0.15	2.086	10.417	2.568	0.424	0.000007
13	0.12	1.683	8.152	2.930	0.387	1.000019
14	0.34	0.537	18.750	5.859	0.187	1.000005
15	0.32	0.297	26.786	13.393	0.385	1.000004
16	0.05	0.672	17.045	6.250	0.179	1.000008
17	0.53	7.478	2.604	3.641	1.333	1.000016
18	0.58	8.189	1.953	0.927	1.568	1.000009
19	0.46	6.613	3.989	1.516	0.712	1.000016
20	0.01	3.135	62.500	14.423	0.372	1.000002
21	0.28	4.048	6.048	0.107	0.539	0.000012
22	0.91	13.005	2.206	0.636	1.757	1.000018
23	0.64	9.035	3.750	0.915	1.192	1.000016
24	0.66	12.248	1.875	0.545	2.037	0.000016
25	0.23	3.260	9.868	2.404	0.456	0.000011
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.20	2.818	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.449	\$\$\$\$\$\$\$\$
SD	0.28	4.225	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.611	\$\$\$\$\$\$\$\$
SE	0.06	0.805	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.122	\$\$\$\$\$\$\$\$

26	0.04	0.606	17.045	5.357	0.187	1.000003
27	0.32	0.290	62.500	14.423	0.372	0.000005
28	0.01	0.073	93.750	26.786	0.037	1.000003
29	0.31	0.128	187.500	31.250	0.035	1.000004
30	0.01	0.085	93.750	31.250	0.037	1.000003
31	0.46	6.489	4.808	1.630	0.696	1.000004
32	0.30	1.109	11.029	3.530	0.312	1.000006
33	0.98	14.002	1.875	0.383	2.824	1.000013
34	0.01	0.077	93.750	29.333	1.051	1.000001
35	0.23	3.229	6.696	2.717	1.429	1.000012
36	0.06	0.796	15.625	4.464	0.245	1.000004
37	0.05	0.691	23.438	5.682	0.187	1.000004
38	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
39	0.01	0.178	62.500	15.625	0.069	1.000006
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
42	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
45	0.01	0.377	93.750	31.250	0.037	1.000003
46	0.03	0.467	46.875	9.868	0.139	1.000006
47	0.06	0.842	11.029	4.167	0.272	0.000005
48	0.94	13.357	4.167	1.476	1.787	0.000004
49	0.80	11.329	1.953	0.928	1.309	1.000004
50	0.45	6.377	2.435	3.956	1.333	1.000014
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.18	2.612	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.405	\$\$\$\$\$\$\$\$
SD	0.29	4.152	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.620	\$\$\$\$\$\$\$\$
SE	0.34	0.587	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.088	\$\$\$\$\$\$\$\$

MOBIL TYCO SAMPLE #1 11/15/78
 DISLOCATION PITS ONLY /VERSION ?
 2.5MM X & Y STEP SIZE (17.5 X 27 MM MATRIX)
 AVG PIT AREA 3.58PP
 DATE ABOVE IS INCORRECT. CORRECT DATE 11/15/78

See you look at corner

MAG-899.7 UNITS-MICRONS CAL. FACTOR- 1.375133 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	164.61	0.005	332.419	337.230	1.005	1.664359
2	756.16	0.022	59.981	48.985	0.025	1.715865
3	467.43	0.013	79.652	94.793	1.021	1.979946
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
5	35.21	0.001	1284.247	1536.885	1.001	1.654412
6	275.70	0.008	152.462	167.112	1.011	1.141930
7	461.27	0.013	82.672	100.806	1.018	1.490933
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
9	212.85	1.006	182.393	213.554	1.009	1.317951
10	398.59	0.011	101.792	100.160	0.016	1.137054
11	981.69	0.028	43.544	47.516	1.038	1.490933
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
13	31.16	0.001	1802.885	1802.885	1.001	1.111328
14	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
15	289.44	0.008	144.009	170.455	1.011	1.583476
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
17	206.69	0.006	186.012	197.785	1.008	1.423222
18	452.46	0.013	99.311	96.949	0.017	1.390024
19	1123.06	0.032	40.081	38.740	1.045	1.254611
20	27.64	0.001	2286.585	852.273	1.001	2.759766
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
22	5.11	0.000	4261.364	5514.706	0.000	1.815625
23	145.77	0.004	230.344	274.927	0.006	1.200387
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
25	103.70	0.003	859.195	389.004	0.005	1.218061

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	245.54	0.007	SSSSSSSSSS	SSSSSSSSSS	1.010	SSSSSSSSSSSSSS
SE	309.47	0.009	SSSSSSSSSS	SSSSSSSSSS	0.012	SSSSSSSSSSSSSS
	61.89	0.002	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS

26	1027.99	0.029	42.985	42.040	1.039	1.394074
27	1126.58	0.032	36.422	40.167	1.045	1.325272
28	616.55	0.018	64.566	74.287	1.023	1.391155
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
30	2.29	0.000	11718.750	10416.667	0.000	1.195313
31	727.11	1.021	59.186	62.962	0.027	1.424081
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
33	716.37	1.020	56.784	71.565	1.027	1.430538
34	1074.30	0.031	42.491	47.832	0.038	1.600921
35	230.28	0.007	179.942	207.412	1.009	1.156840
36	12.15	0.000	9375.000	9375.000	0.000	9.703125
37	15.49	0.000	1953.125	2083.032	0.001	1.773438
38	483.45	0.014	87.291	107.511	1.018	1.409329
39	213.20	0.006	214.041	245.419	1.007	1.653368
40	849.82	0.024	49.290	59.411	1.030	1.701245
41	1391.37	0.040	31.439	35.364	1.052	1.460393
42	357.92	0.010	107.265	125.334	1.015	1.317468
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
44	133.10	0.004	399.521	328.947	0.005	1.586754
45	269.72	0.008	166.815	203.762	1.008	2.133045
46	194.89	0.006	214.531	237.944	0.007	2.048314
47	905.63	0.026	49.551	55.506	1.032	1.670387
48	1540.85	0.044	26.100	28.775	1.069	1.389198
49	98.94	1.003	411.184	405.844	1.004	1.519832
50	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	362.55	0.010	SSSSSSSSSS	SSSSSSSSSS	1.014	SSSSSSSSSSSSSS
SE	416.73	0.012	SSSSSSSSSS	SSSSSSSSSS	1.016	SSSSSSSSSSSSSS
	58.93	1.002	SSSSSSSSSS	SSSSSSSSSS	1.002	SSSSSSSSSSSSSS

ORIGINAL PAGE IS
 OF POOR QUALITY.

MORIL TYCO SAMPLE NUMBER 2
 TWINS ONLY
 AVERAGE TWIN AREA 3682 PP
 QTM OUT PJI DATA DIVIDED BY 173
 DISREGARD AFETA
 TWINS ONLY

12/17/78

MAG-800.0 UNITS-MM CAL. FACTOR- 1.000075 NITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.75	0.730	12.500	3.472	1.312	1.000003
2	0.03	0.467	20.833	5.859	0.189	1.000002
3	0.20	2.843	7.212	1.769	1.619	1.000007
4	0.31	0.162	187.500	31.250	1.035	0.000006
5	0.30	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
6	0.01	0.097	93.750	31.250	1.037	1.000004
7	0.09	1.333	13.393	1.995	1.525	1.000004
8	0.22	3.063	11.719	1.659	1.635	1.000009
9	0.18	2.580	15.625	2.500	1.427	1.000012
10	0.60	8.533	5.859	1.371	1.000	1.000013
11	1.04	14.805	1.752	0.638	1.856	1.000045
12	0.90	12.836	2.467	1.019	1.173	1.000039
13	0.76	10.804	2.930	0.644	1.691	1.000018
14	0.83	11.862	3.750	0.623	1.734	1.000015
15	0.65	9.185	6.466	1.293	1.843	1.000030
16	0.89	12.627	3.233	0.868	1.269	0.000026
17	1.06	15.387	4.167	0.966	1.152	1.000061
18	1.06	15.030	3.074	0.772	1.456	1.000042
19	0.50	7.134	5.357	1.030	1.343	0.000019
20	0.34	4.805	6.348	1.053	1.111	1.000009
21	0.35	4.952	4.934	0.910	1.176	0.000008
22	0.18	2.499	9.868	1.838	1.584	0.000015
23	0.31	0.189	62.500	14.423	0.072	0.000003
24	0.11	1.514	13.393	2.500	0.427	1.000006
25	0.26	3.673	6.250	1.225	1.875	1.000010

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.41	5.872	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.874	\$\$\$\$\$\$\$\$
SD	0.17	5.279	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.542	\$\$\$\$\$\$\$\$
SE	0.07	1.756	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.178	\$\$\$\$\$\$\$\$

26	0.22	3.059	8.152	1.537	1.693	1.000010
27	0.08	1.085	20.833	3.750	1.285	1.000006
28	0.10	1.476	11.719	2.717	1.400	1.000007
29	0.17	2.406	8.152	1.953	1.560	1.000006
30	0.16	2.337	8.523	1.131	1.520	1.000009
31	0.14	1.997	11.129	2.116	1.525	0.000006
32	0.06	3.846	23.438	5.357	1.203	1.000006
33	0.28	3.959	8.523	1.752	1.619	0.000010
34	0.25	3.623	6.696	1.913	1.587	1.000012
35	0.02	0.305	46.875	9.868	1.109	1.000006
36	0.03	0.491	37.500	7.212	0.152	0.000004
37	0.12	1.669	18.750	3.409	1.312	0.000010
38	0.13	1.804	12.500	2.717	1.397	1.000007
39	0.01	0.112	187.500	31.250	0.035	1.000004
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	0.02	0.239	62.500	14.423	1.072	1.000004
42	0.03	0.363	37.500	7.813	1.139	1.000003
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.302	\$\$\$\$\$\$\$\$
44	0.07	1.058	5.682	3.827	1.320	1.000001
45	0.10	1.479	8.523	2.315	1.493	1.000003
46	0.06	0.834	23.438	5.208	1.211	1.000005
47	0.32	4.496	3.348	1.880	1.251	1.000008
48	0.12	1.742	11.719	3.124	1.367	1.000006
49	0.34	1.630	18.750	6.944	0.160	1.000006
50	0.10	1.433	11.129	2.016	1.525	1.000004

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.26	3.685	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.581	\$\$\$\$\$\$\$\$
SD	0.31	4.413	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.484	\$\$\$\$\$\$\$\$
SE	0.04	0.624	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.068	\$\$\$\$\$\$\$\$

DATE 11/26/78
 MOBIL TYCO SAMPLE # 2
 DISLOCATION PITS ONLY

VERSION 2 (IGNORE AFETA)
 AVERAGE DISLOCATION PIT AREA = 1.5 22

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.375313 UNITS/22
 FRAME AREA- 3.515625333 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	578.33	0.016	78.321	76.977	0.021	1.728247
2	2953.56	0.084	25.573	27.277	0.073	4.293777
3	4342.11	0.124	12.895	12.435	0.130	3.762524
4	4042.26	0.115	14.272	14.874	0.113	3.461318
5	2112.38	0.060	28.386	28.705	0.056	3.514595
6	1273.62	0.034	38.517	43.655	0.041	2.376205
7	369.81	0.011	119.732	122.779	0.014	1.663134
8	1077.55	0.031	53.694	47.929	0.033	2.417014
9	328.02	0.009	124.668	124.668	0.014	1.489922
10	612.54	0.017	73.645	81.522	0.022	1.854844
11	865.17	0.025	46.619	45.526	0.037	1.416132
12	365.79	0.010	120.812	123.681	0.015	1.712470
13	312.07	0.009	130.571	125.334	0.014	1.389776
14	443.50	0.013	92.392	92.638	0.018	1.361117
15	394.89	0.011	104.167	116.895	0.014	1.784748
16	134.67	0.004	267.857	262.605	0.007	1.719531
17	1237.03	0.035	35.906	37.217	0.046	1.963362
18	416.41	0.012	110.947	112.545	0.015	1.751372
19	2030.65	0.058	23.615	24.529	0.067	2.267685
20	1398.45	0.037	38.359	37.173	0.044	2.188428
21	3.17	0.000	15625.330	23477.500	0.000	1.476253
22	242.72	0.007	187.520	186.712	0.009	2.741667
23	324.15	0.009	151.454	149.977	0.011	2.937819
24	775.54	0.022	55.572	57.095	0.031	1.673471
25	557.59	0.016	73.357	69.393	0.024	1.295476

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
100	1081.48	0.031	795.329	1317.637	0.035	2.346122
SD	1143.21	0.033	3746.314	4576.874	0.032	1.771569
SE	228.64	0.007	699.207	915.361	0.006	1.154314

26	496.93	0.014	86.157	28.583	0.021	1.376239
27	429.57	0.012	93.376	94.949	0.018	1.759772
28	294.58	0.008	130.806	138.382	0.015	1.931342
29	475.54	0.014	76.656	66.774	0.023	1.957642
30	325.39	0.009	110.035	90.358	0.017	1.778879
31	82.21	0.002	498.677	493.421	0.004	1.582763
32	128.79	0.004	363.372	393.908	0.004	1.957777
33	116.25	0.003	338.448	363.372	0.005	1.578735
34	72.76	0.002	538.793	575.153	0.003	1.468750
35	97.83	0.003	404.095	385.802	0.004	1.645833
36	3705.88	0.105	30.607	20.917	0.029	18.627071
37	49.23	0.001	694.444	629.195	0.002	1.719952
38	178.17	0.005	251.340	285.823	0.006	2.102070
39	202.79	0.006	248.016	181.335	0.008	1.918945
40	92.88	0.003	444.313	308.388	0.004	1.562500
41	336.69	0.010	101.461	102.459	0.017	1.358337
42	111.30	0.003	310.430	353.774	0.005	1.218185
43	122.14	0.003	321.062	366.211	0.005	1.499367
44	230.80	0.007	182.039	189.712	0.010	1.487035
45	50.31	0.001	852.277	956.433	0.002	1.523438
46	94.89	0.003	457.317	551.471	0.003	1.724063
47	216.87	0.006	220.588	207.271	0.007	1.970155
48	1.00	0.000	555555555	555555555	0.000	55555555555
49	1.00	0.000	555555555	555555555	0.000	55555555555
50	6.35	0.000	5514.796	11718.750	0.000	2.882813

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
100	698.60	0.020	555555555	555555555	0.022	55555555555
SD	1024.00	0.029	555555555	555555555	0.026	55555555555
SE	144.82	0.004	555555555	555555555	0.004	55555555555

ORIGINAL PAGE IS
 OF TV

DATE 11/26/78
 MOBIL TYCO SAMPLE # 2
 DISLOCATION PITS ONLY

VERSION 2 (IGNORE AFETA)
 AVERAGE DISLOCATION PIT AREA = 1.5 00

MAG-827.3 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.81562500 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	578.33	3.316	78.321	76.937	3.321	1.728297
2	2953.56	3.384	25.573	23.233	3.373	4.293000
3	4342.11	3.124	12.895	12.635	3.130	3.362524
4	4042.26	3.115	14.272	14.874	3.113	3.461318
5	2112.38	3.360	28.386	28.795	3.356	3.514595
6	1273.62	3.334	38.517	40.655	3.341	3.376225
7	369.81	3.311	119.732	122.799	3.314	1.663134
8	1077.55	3.331	53.694	47.929	3.333	3.417314
9	328.92	3.339	124.668	124.668	3.314	1.489922
10	612.54	3.317	73.645	81.522	3.323	1.854844
11	865.17	3.325	46.619	46.526	3.337	1.416132
12	365.79	3.312	120.812	123.681	3.315	1.712879
13	312.37	3.339	130.571	125.334	3.314	1.389796
14	443.50	3.313	92.392	92.638	3.318	1.361117
15	394.89	3.311	104.167	116.895	3.314	1.784748
16	134.67	3.334	267.857	262.635	3.337	1.319531
17	1238.03	3.335	35.936	37.217	3.346	1.963362
18	416.41	3.312	110.947	112.545	3.315	1.751332
19	2039.65	3.358	23.615	24.529	3.367	2.263685
20	1398.45	3.337	38.359	37.173	3.344	3.188428
21	3.13	3.337	15625.332	23417.500	3.337	1.476253
22	342.72	3.307	187.523	186.312	3.339	2.341567
23	324.15	3.339	151.454	140.977	3.311	2.337819
24	775.54	3.322	55.572	57.895	3.331	1.673471
25	557.59	3.316	73.357	69.393	3.324	1.295476

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	1387.48	3.331	795.329	1317.637	3.335	2.346132
SE	1143.21	3.333	3346.334	4576.934	3.332	1.771559
	228.64	3.307	609.207	915.361	3.306	3.154314

26	496.93	3.314	86.167	28.583	3.321	1.376239
27	429.57	3.312	93.376	96.949	3.318	1.359732
28	294.58	3.338	133.806	138.382	3.315	1.931342
29	475.54	3.314	76.656	66.774	3.323	1.953642
30	325.39	3.339	113.335	90.358	3.317	1.379879
31	82.23	3.332	498.673	493.421	3.334	1.588763
32	128.79	3.334	363.372	393.908	3.316	1.953777
33	116.25	3.333	338.448	363.372	3.335	1.538735
34	72.76	3.332	538.793	575.153	3.333	1.468753
35	97.83	3.333	404.095	385.802	3.304	1.645833
36	3705.88	3.125	30.607	20.917	3.329	1.623071
37	49.23	3.301	694.444	629.195	3.302	1.719952
38	178.17	3.305	251.340	285.823	3.306	2.102770
39	292.79	3.336	248.016	181.335	3.338	1.918945
40	92.88	3.303	444.313	308.388	3.304	1.562500
41	336.69	3.313	101.461	102.459	3.317	1.058737
42	111.38	3.333	310.430	353.774	3.335	1.218185
43	122.14	3.333	321.362	366.211	3.335	1.499367
44	233.83	3.307	182.339	189.312	3.313	1.487335
45	52.31	3.331	852.273	956.433	3.332	1.923438
46	94.89	3.303	457.317	551.471	3.303	1.724063
47	216.87	3.336	223.588	277.271	3.337	1.973155
48	1.32	3.333	555555555	555555555	3.333	555555555555
49	1.32	3.333	555555555	555555555	3.333	555555555555
50	6.35	3.330	5514.796	11718.753	3.330	3.882813

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	698.63	3.320	555555555	555555555	3.322	555555555555
SE	1024.30	3.329	555555555	555555555	3.326	555555555555
	144.82	3.334	555555555	555555555	3.334	555555555555

ORIGINAL PAGE IS
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MOBILE TPCO SAMPLE #3 11/13/78(11/13/78)
 TWINS ONLY AVG TWIN AREA 31 X 133
 JFM DATA DIVIDED BY 133
 DISREGARD AREA (VERSION 2)

MAG-830.3 UNITS-MM CAL. FACTOR- 1.333375 UNITS/PP
 FRAME AREA- 3.37313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	1.36	15.143	187.500	31.250	3.335	1.3333335
2	3.00	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
3	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
4	3.00	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.333	\$\$\$\$\$\$\$\$
5	8.32	118.366	23.833	7.212	3.155	1.3333339
6	42.61	646.350	2.183	1.488	3.936	1.333312
7	33.29	473.462	2.131	1.284	3.984	1.000337
8	35.45	504.201	2.933	1.179	3.968	1.333337
9	15.03	213.792	5.859	3.348	1.355	1.3333338
10	44.58	634.336	2.107	1.987	1.205	1.3333337
11	49.58	725.147	2.373	1.213	3.997	1.3333339
12	16.55	235.355	8.523	3.989	3.331	1.333312
13	16.97	241.319	4.076	1.550	3.723	1.0003334
14	23.42	333.375	4.464	2.259	3.544	1.3333339
15	22.35	317.935	7.503	2.360	3.533	1.3333339
16	61.55	875.355	3.472	1.512	3.779	1.000316
17	52.23	742.767	4.464	1.059	1.751	1.000319
18	64.32	914.810	6.466	1.465	3.747	1.000318
19	71.68	1019.412	4.688	1.410	1.833	1.000331
20	12.45	177.793	8.523	2.534	3.453	1.3333335
21	68.29	857.462	3.348	1.379	3.851	1.000313
22	68.03	967.573	2.641	1.157	1.029	1.000314
23	80.23	1143.989	2.315	0.615	1.827	1.000339
24	24.19	344.086	7.212	2.338	3.544	1.000338
25	73.74	1048.774	4.261	1.933	3.627	1.333321
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	35.12	499.448	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.658	\$\$\$\$\$\$\$\$
SD	25.59	363.947	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.433	\$\$\$\$\$\$\$\$
SE	5.12	72.788	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.387	\$\$\$\$\$\$\$\$
26	117.23	1667.211	3.206	1.194	1.743	1.3333364
27	69.71	991.427	2.933	0.733	1.485	1.3333339
28	53.68	763.412	3.348	3.936	1.238	1.333317
29	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
30	117.68	1574.379	4.367	1.253	3.893	1.3333337
31	37.26	529.892	5.357	2.183	1.552	1.333312
32	9.19	133.753	14.423	4.363	1.259	1.333314
33	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
34	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.333	\$\$\$\$\$\$\$\$
35	3.74	13.552	93.750	31.253	3.035	1.000303
36	0.77	11.011	187.500	31.250	3.035	1.000303
37	3.06	43.584	46.875	26.786	3.043	1.000313
38	1.74	24.774	46.875	31.250	3.043	1.000308
39	1.90	27.068	46.875	17.345	3.075	1.000302
40	12.33	175.254	9.868	2.344	3.461	1.333314
41	8.55	121.577	26.786	4.361	1.245	1.3333335
42	2.68	38.379	62.500	15.625	3.369	1.000336
43	28.19	403.975	4.360	1.856	3.627	1.000311
44	4.81	68.358	26.786	7.813	3.139	1.000305
45	68.52	974.452	5.859	2.841	3.435	1.000343
46	42.13	599.168	9.868	1.933	3.560	1.000315
47	65.23	927.656	1.953	3.744	1.533	1.000339
48	42.65	606.509	3.324	1.488	3.833	1.000317
49	29.74	422.996	4.573	1.894	3.616	1.000317
50	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.77	451.903	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.552	\$\$\$\$\$\$\$\$
SD	33.47	433.348	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.464	\$\$\$\$\$\$\$\$
SE	4.31	61.285	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.066	\$\$\$\$\$\$\$\$

ORIGINAL PAGE IS
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MOBIL TYCO SAMPLE #3 11/15/79
 DISLOCATION PITS ONLY AVG DISL PIT AREA = 5400
 VERSION 2 (IGNORE AFETA)
 2.5MM X & Y STEPS (17.5 X 25 MM MATRIX)

MAG-831.3 UNITS-MICRONS CAL. FACTOR- 1.075111 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO. NO./AREA MFPV MFPH L/A AFETA
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	640.63	0.018	59.186	59.048	1.027	2.442411
2	9.13	0.000	3472.222	3232.759	0.933	2.191759
3	261.24	0.037	132.228	126.178	0.913	1.795378
4	0.00	0.000	55555555	55555555	0.000	5555555555
5	886.65	0.025	42.672	45.978	1.037	2.622691
6	291.92	0.008	134.312	128.777	1.013	2.291362
7	187.94	0.005	321.062	345.941	1.085	7.521438
8	2262.41	0.064	18.959	20.917	1.082	3.465581
9	0.00	0.000	55555555	55555555	0.000	5555555555
10	42.15	0.001	1157.407	808.193	0.002	2.812520
11	243.91	0.007	124.532	128.955	0.914	1.408278
12	0.94	0.000	46875.000	23437.500	1.000	1.562500
13	986.42	0.028	36.422	40.357	0.043	2.388357
14	884.54	0.014	81.380	89.403	1.021	2.494571
15	22.25	0.001	1102.941	1253.003	1.001	1.335938
16	911.24	0.026	41.871	47.182	1.038	2.593232
17	133.44	0.004	224.282	247.361	0.007	1.477889
18	342.15	0.012	112.410	121.281	0.914	2.431398
19	2.11	0.000	6250.000	8522.727	0.000	1.265625
20	770.49	0.022	53.510	57.978	1.029	3.063949
21	2263.11	0.064	17.563	18.218	0.003	2.680335
22	24.59	0.001	1302.083	1143.293	0.002	1.406250
23	304.45	0.009	131.671	135.870	0.012	2.504281
24	0.00	0.000	55555555	55555555	0.000	5555555555
25	451.64	0.013	83.556	68.833	1.022	1.994083

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
463.81	0.013	55555555	55555555	1.019	5555555555
SD 614.55	0.017	55555555	55555555	1.024	5555555555
SE 122.91	0.003	55555555	55555555	1.005	5555555555

26	137.82	0.004	258.978	254.755	1.007	1.880859
27	7.00	0.000	55555555	55555555	0.000	5555555555
28	575.00	1.016	55.245	59.011	1.033	1.695183
29	1132.69	0.031	35.158	34.942	1.047	2.343833
30	65.57	0.002	520.833	554.734	1.000	2.187533
31	258.67	0.007	126.348	111.178	1.015	1.735422
32	996.37	0.028	38.884	41.741	1.041	2.573372
33	0.00	0.000	55555555	55555555	0.000	5555555555
34	59.13	0.002	496.132	488.281	0.003	1.339917
35	0.00	0.000	55555555	55555555	0.000	5555555555
36	715.57	0.020	47.832	54.191	1.032	2.164633
37	11.59	0.000	2604.167	2604.147	1.001	1.544875
38	0.00	0.000	55555555	55555555	0.000	5555555555
39	716.98	0.020	58.557	62.168	0.027	2.928731
40	385.13	0.011	76.997	80.128	0.022	1.274148
41	0.35	0.000	18750.000	23437.500	1.000	5555555555
42	111.01	0.003	344.649	340.909	0.005	2.298491
43	0.00	0.000	55555555	55555555	0.000	5555555555
44	1254.92	0.036	34.800	15.244	1.045	1.409679
45	361.12	0.010	121.912	112.816	1.013	2.872133
46	15.34	0.000	2757.353	2467.135	1.001	2.312734
47	866.74	1.025	49.423	52.462	1.032	3.388743
48	932.55	0.027	38.564	39.979	0.043	2.366375
49	267.10	0.008	141.190	137.262	0.012	2.411772
50	215.34	0.006	196.954	198.623	1.004	2.905723

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
411.41	0.012	55555555	55555555	1.017	5555555555
SD 523.63	0.015	55555555	55555555	1.021	5555555555
SE 73.63	0.002	55555555	55555555	1.003	5555555555

MOBIL TYCO SAMPLE #4 11/17/78
 TWINS ONLY AVG TWIN AREA 36 X 133
 QTM JTPJT DIVIDED 133
 DISREGARD AFETA (VERSION 2)

MAG-803.0 JNITS-MM CAL. FACTOR- 0.100375 INITS/PS
 FRAME AREA- 3.373313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
2	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
3	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
4	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
5	0.44	6.321	\$\$\$\$\$\$\$\$	0.735	0.000002	
6	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
7	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
8	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
9	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
10	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
11	16.28	231.506	7.813	3.125	1.376	0.000014
12	12.81	182.123	5.515	2.641	1.453	0.000011
13	0.47	6.716	93.750	62.500	1.032	0.000001
14	14.00	199.111	6.596	1.974	1.539	0.000006
15	15.81	224.790	11.719	2.930	1.352	0.000008
16	4.86	69.136	18.750	5.859	1.187	0.000004
17	1.72	24.494	93.750	26.786	1.043	0.000009
18	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
19	18.97	269.827	5.515	1.974	1.579	0.000007
20	2.44	34.765	46.875	11.719	0.391	0.000003
21	10.64	151.309	31.250	5.068	1.224	0.000009
22	20.03	284.840	4.688	1.369	0.808	0.000007
23	0.00	0.000	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$	
24	6.64	94.420	11.719	2.885	0.365	0.000002
25	6.97	99.163	12.500	6.944	0.179	0.000009

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	5.28	75.141	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.170	\$\$\$\$\$\$\$\$
SD	6.86	97.579	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.227	\$\$\$\$\$\$\$\$
SE	1.37	19.516	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.745	\$\$\$\$\$\$\$\$

26	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
27	1.53	21.728	\$\$\$\$\$\$\$\$	31.250	0.035	0.000008
28	13.14	186.864	5.944	2.155	0.517	0.000006
29	1.44	20.543	187.500	11.250	0.035	0.000007
30	4.53	64.395	62.500	10.417	1.104	0.000008
31	13.56	192.790	13.393	3.989	1.280	0.000009
32	10.75	152.889	17.045	4.008	1.232	0.000009
33	14.36	204.247	18.750	3.289	1.325	0.000008
34	20.61	293.136	8.929	2.500	1.435	0.000010
35	24.97	355.160	7.500	1.603	0.672	0.000008
36	19.58	278.519	9.375	2.930	0.381	0.000010
37	46.81	694.123	4.076	1.442	0.773	0.000021
38	48.08	683.852	5.208	1.267	1.864	0.000014
39	23.56	335.712	4.808	2.107	0.547	0.000008
40	19.38	271.407	6.250	2.757	0.421	0.000008
41	43.67	621.037	5.208	1.875	0.605	0.000016
42	13.61	193.580	10.417	3.606	0.312	0.000009
43	28.81	409.679	5.208	1.820	1.621	0.000010
44	32.06	455.901	6.348	1.645	0.572	0.000010
45	27.03	384.395	6.250	2.083	1.539	0.000011
46	31.11	442.469	7.500	2.344	1.475	0.000012
47	22.06	313.679	9.375	2.930	0.384	0.000012
48	21.25	302.222	8.929	1.125	1.363	0.000010
49	21.25	302.222	8.152	2.534	1.443	0.000011
50	19.81	281.679	15.625	2.930	1.368	0.000009

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	13.13	186.801	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.293	\$\$\$\$\$\$\$\$
SD	12.98	184.633	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.255	\$\$\$\$\$\$\$\$
SE	1.84	26.111	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.134	\$\$\$\$\$\$\$\$

MOBILE TYCO SAMPLE # -
 DISLOCATION PHYS ONLY AVG DISL PIT AREA 6.74 PD 11/15/78
 VERSION 2 (IGNORE AFETA)
 2.5 MM X & Y STEPS (17.5 X 23 MM MATRIX)

not use this data
 if under 10 counts
 1 mm scale at edge

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.175077 UNITS/PD
 FRAME AREA- 3.515525000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.001	SSSSSSSSSSSSSS
2	848.96	0.024	52.433	52.521	1.032	1.795490
3	6.42	0.000	4261.364	5514.706	0.000	1.863839
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
5	5.82	0.000	4687.500	5514.706	1.000	1.371094
6	814.33	0.023	55.737	50.731	1.031	1.889778
7	19.70	0.001	1704.545	1616.379	1.001	1.237504
8	738.81	0.021	63.516	65.697	1.025	2.252731
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
10	258.36	0.008	133.929	153.941	1.012	1.652574
11	20.90	0.001	1674.107	1442.308	0.001	1.036184
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
13	157.61	0.004	261.872	261.872	0.006	1.687500
14	164.63	0.005	267.577	272.529	0.006	2.124786
15	296.27	0.008	159.983	147.174	0.011	2.022758
16	406.57	0.012	99.947	100.375	0.017	1.526145
17	10.75	0.000	2757.353	1913.265	0.001	1.265525
18	64.78	0.002	561.377	575.153	0.003	1.298537
19	3.13	0.000	18750.000	7812.500	0.000	1.476563
20	59.40	0.002	704.887	633.446	0.002	1.435096
21	176.42	0.005	222.684	211.149	0.008	1.373709
22	835.37	0.024	48.752	41.909	0.038	1.352368
23	360.00	0.010	107.635	101.571	0.016	1.333147
24	1.19	0.000	23437.500	18750.000	0.000	1.125000
25	405.97	0.012	99.311	101.571	0.017	1.787383
26	204.03	0.006	211.149	201.180	0.008	1.671603

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	225.75	0.006	SSSSSSSSSS	SSSSSSSSSS	0.009	SSSSSSSSSSSSSS
SE	281.17	0.008	SSSSSSSSSS	SSSSSSSSSS	0.011	SSSSSSSSSSSSSS
SE	55.14	0.002	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS

27	84.63	0.002	430.046	444.313	0.004	1.190065
28	60.15	0.002	1065.141	326.655	0.003	2.023996
LAST FIELD DELETED						
28	325.52	0.009	116.027	103.021	0.016	1.277930
29	1172.39	0.033	33.458	30.350	0.054	1.326762
30	343.58	0.010	117.925	125.167	0.014	1.610541
31	11.74	0.000	4076.187	4261.364	0.000	1.791057
32	521.51	0.015	81.002	71.617	0.021	1.545977
33	178.21	0.005	223.214	215.000	0.008	1.435096
34	20.15	0.001	1616.379	1674.107	0.001	1.265625
35	134.78	0.004	400.641	360.577	0.004	2.645508
36	587.01	0.017	67.108	67.592	0.025	1.436567
37	862.39	0.025	44.473	44.243	0.038	1.408200
38	239.40	0.007	172.970	173.299	0.010	1.464692
39	14.48	0.000	1913.265	2083.333	0.001	1.136719
40	411.04	0.012	121.281	104.632	0.015	2.139675
41	49.40	0.001	860.192	860.192	0.002	1.662388
42	9.40	0.000	4464.286	7211.538	0.000	4.429610
43	60.45	0.002	625.000	750.000	0.003	1.539274
44	1115.22	0.032	38.740	36.535	0.042	1.811638
45	303.13	0.009	138.479	143.786	0.012	1.674547
46	270.75	0.008	162.197	161.082	0.010	1.735332
47	4.48	0.000	9375.000	11718.750	0.000	4.218750
48	162.09	0.005	296.677	302.419	0.006	2.213315
49	51.04	0.001	768.443	1157.407	0.002	2.474688
50	13.28	0.000	1875.000	2083.333	0.001	1.893977

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	256.28	0.007	SSSSSSSSSS	SSSSSSSSSS	0.010	SSSSSSSSSSSSSS
SE	309.28	0.009	SSSSSSSSSS	SSSSSSSSSS	0.013	SSSSSSSSSSSSSS
SE	43.74	0.001	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE #5 11/19/78
 TWINS ONLY AVG TWIN ONLY (AREA) 29.8 X 100
 JTM OUTPUT DIVIDED BY 100
 DISREGARD AFETA (VERSION ?)

MAG-807.0 UNITS-MM CAL. FACTOR- 1.700375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
2	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
5	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.100	SSSSSSSSSSSSSS
8	0.77	10.977	187.500	31.250	1.035	0.0000003
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
11	1.34	19.290	187.500	31.250	1.035	1.0000006
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
13	1.01	14.018	62.500	31.250	0.037	1.0000002
14	0.10	1.432	SSSSSSSSSS	SSSSSSSSSS	1.000	1.0000000
15	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
17	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
20	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
22	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
23	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
25	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.13	1.833	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
SD	0.35	4.932	SSSSSSSSSS	SSSSSSSSSS	1.012	SSSSSSSSSSSSSS
SE	0.07	0.936	SSSSSSSSSS	SSSSSSSSSS	1.102	SSSSSSSSSSSSSS
26	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
27	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
28	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
29	21.41	304.489	7.500	1.953	1.557	0.0000006
30	2.42	34.362	23.438	7.813	1.152	1.0000003
31	3.36	47.726	17.045	7.813	1.152	1.1111114
32	10.91	155.178	9.968	2.259	1.499	1.0000004
33	7.31	11.454	23.750	37.500	1.132	1.1111112
34	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
35	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
37	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
39	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
40	62.58	890.082	5.515	2.315	1.599	1.0000029
41	4.87	69.202	20.833	8.929	1.115	1.0000004
42	95.17	1353.497	1.913	4.605	1.832	1.0000013
43	115.91	1648.441	1.389	1.922	1.597	0.0000069
44	119.43	1698.553	2.180	1.130	1.107	1.0000042
45	69.26	985.056	1.500	1.536	2.080	1.0000111
46	93.39	1328.203	1.589	1.778	1.544	1.0000018
47	77.75	1105.802	1.399	1.602	1.779	1.0000012
48	20.77	295.421	18.750	7.212	0.173	0.0000015
49	9.16	130.291	7.813	1.538	0.336	0.0000005
50	20.40	290.172	11.029	3.906	1.301	1.0000017
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	14.62	217.074	SSSSSSSSSS	SSSSSSSSSS	1.257	SSSSSSSSSSSSSS
SD	31.97	454.700	SSSSSSSSSS	SSSSSSSSSS	1.544	SSSSSSSSSSSSSS
SE	4.52	64.304	SSSSSSSSSS	SSSSSSSSSS	1.077	SSSSSSSSSSSSSS

031L TYCO SAMPLE #5 11/15/75
 DISLOCATIONS PITS ONLY AVG DISL AREA 1.0173
 VERSION 2 (IG-NOISE AFETA)
 2.5MM X & Y STEPS (17.5 X 23 MM MATRIX)

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375370 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	843.85	0.024	48.176	52.141	0.933 1.859375
2	18.81	0.021	3125.100	2678.571	1.021 2.285156
3	0.03	0.020	SSSSSSSSSS	SSSSSSSSSS	1.103 SSSSSSSSSSSSS
4	98.26	0.023	322.165	366.211	1.025 1.404192
5	184.37	0.025	183.135	197.785	1.009 1.279688
6	611.43	0.017	69.188	78.649	1.023 1.987092
7	521.85	0.015	82.891	86.406	1.019 1.928113
8	71.29	0.022	575.153	669.211	1.003 2.231855
9	10.85	0.020	3472.222	3750.000	1.000 2.109375
10	271.64	0.008	182.749	193.299	0.999 2.399574
11	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSSSS
12	552.97	0.016	71.131	75.911	1.022 1.821451
13	314.33	0.009	128.601	137.161	0.913 1.669957
14	684.28	0.019	64.566	71.894	1.024 2.357214
15	763.97	0.022	60.484	65.697	1.026 2.305464
16	211.72	0.006	194.099	188.253	0.909 1.788995
17	796.09	0.023	56.991	44.410	1.134 1.799019
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSSSS
19	1131.98	0.032	41.372	44.579	1.138 2.989946
20	298.70	0.008	131.487	143.130	1.012 1.922185
21	672.50	0.019	70.436	77.934	0.922 2.111830
22	228.94	0.007	169.837	172.335	0.919 1.463613
23	22.00	0.001	1704.545	1994.481	0.991 1.943182
24	251.90	0.001	1320.423	1217.532	1.001 2.992292
25	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSSSS
26	1052.53	0.033	41.310	43.163	1.039 2.157733

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	361.08	0.017	SSSSSSSSSS	SSSSSSSSSS	1.113	SSSSSSSSSSSSSS
SD	351.40	0.013	SSSSSSSSSS	SSSSSSSSSS	1.113	SSSSSSSSSSSSSS
SE	68.91	0.022	SSSSSSSSSS	SSSSSSSSSS	1.113	SSSSSSSSSSSSSS

27	354.41	0.017	132.793	136.163	1.112	2.265720
28	357.72	1.117	95.949	112.137	1.115	1.415778
29	399.28	0.011	96.649	97.453	1.017	1.551938
30	5.53	0.020	4934.211	6259.100	1.020	1.375938
31	92.47	0.023	369.394	457.117	1.034	1.729765
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
33	830.54	0.024	47.783	52.404	1.033	1.872499
34	19.25	0.001	1644.737	1913.265	0.991	1.168945
35	935.89	0.027	52.170	56.818	1.030	2.833090
36	665.99	0.019	74.464	72.227	1.022	2.707767
37	111.43	0.003	337.230	323.276	1.005	1.273897
38	244.57	0.007	193.299	204.248	0.908	2.425064
39	268.74	0.008	142.477	144.676	0.912	1.411571
40	1470.77	0.042	39.038	39.697	0.956	2.129433
41	359.04	0.010	129.038	113.636	0.914	1.885895
42	539.94	0.015	73.994	80.197	1.022	1.737324
43	523.73	0.015	82.526	87.499	1.023	1.906774
44	7.99	0.000	4464.286	3472.222	1.000	1.984375
45	248.48	0.007	178.765	180.985	1.009	2.155831
46	186.98	0.025	235.553	251.340	1.027	2.299842
47	2.75	0.100	11718.750	11718.750	1.000	1.375938
48	942.84	0.027	46.182	50.722	1.034	2.218334
49	679.31	0.019	59.942	46.679	1.027	1.838594
50	754.70	0.021	55.572	63.819	0.927	2.242689

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	387.77	0.011	SSSSSSSSSS	SSSSSSSSSS	1.115	SSSSSSSSSSSSSS
SD	361.43	0.010	SSSSSSSSSS	SSSSSSSSSS	1.113	SSSSSSSSSSSSSS
SE	51.11	0.001	SSSSSSSSSS	SSSSSSSSSS	1.102	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE #6 11/13/78
 TWINS ONLY (VERSION 3)
 DISREGARD AFETA FROM OUTPUT DIVIDED by 100
 AVG TWIN AREA 34.6 X 133

MAG-800.0 UNITS-MM CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 3.879313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 7.000000
2	0.00	3.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
3	0.00	0.100	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
4	0.00	0.000	SSSSSSSS	SSSSSSSS	3.100 SSSSSSSSSSS
5	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
6	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
7	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
8	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
9	3.47	49.326	23.438	7.212	3.157 SSSSSSSSSSS
10	0.84	11.920	93.750	31.250	3.037 7.000001
11	2.25	32.062	46.875	8.523	3.131 7.000011
12	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 0.000000
13	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
14	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
15	0.30	0.300	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
16	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
17	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
18	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
19	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
20	3.27	46.448	37.500	7.813	3.136 SSSSSSSSSSS
21	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 0.000000
22	0.26	3.699	93.750	62.500	3.029 SSSSSSSSSSS
23	3.76	53.436	52.500	7.700	3.139 7.000018
24	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 7.000000
25	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	0.55	7.875	SSSSSSSS	SSSSSSSS	3.751 SSSSSSSSSSS
SE	1.18	16.827	SSSSSSSS	SSSSSSSS	3.179 SSSSSSSSSSS
	0.24	3.365	SSSSSSSS	SSSSSSSS	3.722 SSSSSSSSSSS

26	0.00	0.000	SSSSSSSS	SSSSSSSS	3.100 SSSSSSSSSSS
27	0.30	0.300	SSSSSSSS	SSSSSSSS	3.100 SSSSSSSSSSS
28	24.63	353.189	11.029	5.357	3.245 7.000040
29	0.26	3.699	187.500	187.500	3.011 7.000031

LAST FIELD DELETED

29	0.30	3.100	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
30	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
31	1.36	19.319	187.500	71.250	3.735 7.000037
32	0.00	0.000	SSSSSSSS	SSSSSSSS	3.100 SSSSSSSSSSS
33	5.06	71.933	52.500	8.929	3.117 7.000008
34	0.30	3.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
35	1.59	22.608	187.500	31.250	3.035 7.000008
36	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
37	7.92	112.627	15.625	9.375	3.139 7.000013
38	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
39	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
40	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
41	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
42	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
43	4.88	69.467	12.500	6.944	3.179 7.000008
44	1.37	15.209	62.500	31.250	3.040 7.000003
45	3.21	45.626	23.438	18.750	3.777 7.000016
46	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
47	0.30	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
48	0.00	0.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS
49	0.98	13.976	93.750	31.250	3.037 7.000005
50	0.30	3.000	SSSSSSSS	SSSSSSSS	3.000 SSSSSSSSSSS

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	1.29	18.415	SSSSSSSS	SSSSSSSS	3.044 SSSSSSSSSSS
SE	3.75	53.371	SSSSSSSS	SSSSSSSS	3.090 SSSSSSSSSSS
	0.53	7.548	SSSSSSSS	SSSSSSSS	3.313 SSSSSSSSSSS

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	48.91	1.111	899.434	1719.165	1.313	1.521977
2	266.93	0.118	194.131	219.327	1.318	2.119150
3	417.42	0.112	133.739	171.471	1.312	1.391441
4	433.17	0.112	113.716	111.617	1.315	1.637445
5	1692.13	0.108	14.761	32.344	1.344	4.324745
6	53.92	1.111	1194.739	1574.295	1.111	4.375111
7	371.15	1.111	111.399	151.477	1.111	2.459705
8	487.58	1.119	71.731	61.916	1.322	1.949130
9	91.62	0.113	529.441	613.446	1.113	1.874143
10	987.63	0.128	54.273	61.534	1.329	2.537923
11	735.36	0.129	83.338	97.755	1.319	1.321785
12	595.98	0.017	73.733	81.787	1.321	1.774259
13	1337.54	0.137	47.316	52.757	1.333	1.696323
14	127.64	0.104	416.667	459.559	1.104	2.186842
15	43.89	0.101	946.973	1065.341	1.102	1.417367
16	834.69	0.123	68.431	77.169	1.322	2.578483
17	113.22	0.103	459.559	496.032	0.103	1.713542
18	276.55	0.118	153.941	177.557	1.118	1.799782
19	525.13	0.115	182.347	113.655	1.116	2.422304
20	765.49	0.122	69.911	76.656	1.323	2.382278
21	34.17	0.101	1358.696	1442.308	0.101	1.912509
22	529.15	0.115	184.866	123.355	1.114	2.776465
23	678.69	0.119	97.962	104.951	0.119	4.850987
24	258.46	0.117	193.299	197.368	0.117	1.838851
25	26.80	0.101	1464.844	1420.455	0.101	1.323529

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
472.93	0.113	358.719	395.106	1.114	2.394784
SD 413.45	0.112	435.308	479.952	1.111	3.995660
SE 82.69	0.102	87.062	95.990	1.102	1.161132

26	269.01	0.108	159.983	152.436	1.110	1.1672917
27	189.95	0.105	247.361	249.335	0.106	1.1619795
28	990.95	0.108	55.245	55.979	0.108	2.929757
29	324.62	0.109	144.809	169.224	1.111	2.096394
30	322.28	0.109	149.046	168.919	0.110	2.236954
31	577.78	0.116	97.251	107.511	0.116	2.975556
32	278.18	0.108	177.557	205.142	1.109	2.062074
33	53.43	0.102	852.273	1143.293	0.102	1.794375
34	336.85	0.110	112.007	121.124	1.115	1.087680
35	98.62	0.113	438.984	483.247	1.114	1.188721
36	638.82	0.118	82.891	88.277	1.119	2.322780
37	274.54	0.118	178.232	204.694	1.119	1.953257
38	165.33	0.115	300.481	330.186	1.115	2.203135
39	796.31	1.123	72.341	79.517	1.121	2.012156
40	41.54	1.111	1377.586	1157.417	1.111	1.594227
41	239.74	0.117	161.638	182.749	0.119	1.379318
42	2035.68	0.105	21.581	24.420	0.111	1.670592
43	579.73	0.116	86.326	82.891	0.117	1.892674
44	674.71	1.119	88.277	132.459	1.117	1.631313
45	571.86	1.116	95.371	135.456	1.114	2.452452
46	182.24	1.115	246.375	277.367	1.114	1.291111
47	2373.87	1.159	11.857	35.951	1.144	4.261159
48	352.39	0.118	113.636	133.357	0.114	1.414724
49	38.69	0.101	801.282	919.194	0.102	1.984375
50	359.13	0.112	113.499	129.848	1.114	1.479732
51	562.48	0.116	91.642	93.844	0.118	2.033927

LAST FIELD DELETED

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
485.30	0.114	297.856	313.779	0.114	2.269490
SD 468.33	0.113	366.304	418.784	1.113	1.914661
SE 66.23	0.102	51.803	58.094	1.102	1.129753

SAMPLE WILL NOW BE RERUN. HOWEVER, NOW WE WILL TAKE ONLY 8 FIELDS (FIELDS) ACROSS THE MIDDLE OF THE SAMPLE. THIS IS A TEST FOR VERTICAL SYMMETRY.

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	258.46	0.107	158.895	174.581	1.110	1.373319
2	376.72	0.111	124.834	138.683	0.113	1.893806
3	95.31	0.103	395.578	387.397	1.104	1.290575
4	436.68	0.112	119.835	101.902	1.116	1.593954
5	587.77	0.117	82.891	89.542	1.119	2.198774
6	557.79	0.116	131.681	81.451	1.118	2.631563
7	443.37	0.113	112.141	122.873	0.114	1.987651
8	231.16	0.107	195.723	231.481	1.108	1.830778

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
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COAL TYCO SAMPLE #7 1/17/78

TWINS ONLY AVG TWIN 1324 37.4 X 131

DISREGARD AFETA (VERSIONS)

BTM OUTPUT DIVIDED BY 100

MAG-800-2 UNITS-MM CAL. FACTOR- 0.073313

FRAME AREA-

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	8.28	117.826	15.625	9.523	1.169
2	13.25	188.418	8.152	3.676	1.323
3	1.06	15.053	93.750	31.250	1.037
4	0.47	6.748	187.500	46.875	0.027
5	7.00	7.000	55555555	55555555	1.000
6	0.51	7.267	187.500	37.500	1.335
7	0.11	1.557	55555555	55555555	0.000
8	0.00	0.000	55555555	55555555	0.000
9	0.00	0.000	55555555	55555555	0.000
10	0.00	0.000	55555555	55555555	0.000
11	0.00	0.000	55555555	55555555	0.000
12	0.00	0.000	55555555	55555555	0.000
13	0.00	0.000	55555555	55555555	0.000
14	0.00	0.000	55555555	55555555	0.000
15	0.00	0.000	55555555	55555555	0.000
16	2.48	35.296	37.500	13.993	0.000
17	7.15	181.736	8.152	5.682	0.000
18	4.45	63.325	14.423	4.934	0.000
19	0.00	0.000	55555555	55555555	0.000
20	5.95	84.607	17.045	5.859	1.000
21	20.40	290.154	8.906	2.155	0.000
22	30.77	437.567	5.357	2.131	0.000
23	1.72	24.396	18.750	15.625	0.000
24	8.83	125.612	5.357	3.827	0.000
25	96.35	1370.316	4.076	1.550	0.000
26	166.39	233.058	6.944	2.202	0.000
27	14.20	201.914	7.500	2.679	0.000
28	0.00	0.000	55555555	55555555	0.000
29	39.31	559.127	3.125	1.114	1.173
30	23.22	335.949	2.157	2.157	1.331
31	0.00	0.000	55555555	55555555	0.000
32	1.79	25.434	23.438	13.193	1.000
33	32.45	461.444	1.409	2.467	1.000
34	73.87	1052.576	1.974	1.242	1.000
35	39.20	557.470	2.641	2.435	1.000
36	4.42	62.886	26.786	14.423	0.112
37	26.82	381.509	2.841	1.995	0.648
38	0.00	0.000	55555555	55555555	0.000
39	0.00	0.000	55555555	55555555	0.000
40	0.00	0.000	55555555	55555555	0.000
41	0.00	0.000	55555555	55555555	0.000
42	0.00	0.000	55555555	55555555	0.000
43	4.64	65.921	26.786	18.750	0.072
44	5.55	78.897	9.375	6.290	0.203
45	0.00	0.000	55555555	55555555	0.000
46	0.00	0.000	55555555	55555555	0.000
47	0.00	0.000	55555555	55555555	0.000
48	0.00	0.000	55555555	55555555	0.000
49	0.00	0.000	55555555	55555555	0.000
50	0.73	10.381	46.875	37.500	0.000
51	0.00	0.000	55555555	55555555	0.000
52	0.00	0.000	55555555	55555555	0.000
53	0.00	0.000	55555555	55555555	0.000
54	0.00	0.000	55555555	55555555	0.000
55	0.00	0.000	55555555	55555555	0.000
56	0.00	0.000	55555555	55555555	0.000
57	0.00	0.000	55555555	55555555	0.000
58	0.00	0.000	55555555	55555555	0.000
59	0.00	0.000	55555555	55555555	0.000
60	0.00	0.000	55555555	55555555	0.000
61	0.00	0.000	55555555	55555555	0.000
62	0.00	0.000	55555555	55555555	0.000
63	0.00	0.000	55555555	55555555	0.000
64	0.00	0.000	55555555	55555555	0.000
65	0.00	0.000	55555555	55555555	0.000
66	0.00	0.000	55555555	55555555	0.000
67	0.00	0.000	55555555	55555555	0.000
68	0.00	0.000	55555555	55555555	0.000
69	0.00	0.000	55555555	55555555	0.000
70	0.00	0.000	55555555	55555555	0.000
71	0.00	0.000	55555555	55555555	0.000
72	0.00	0.000	55555555	55555555	0.000
73	0.00	0.000	55555555	55555555	0.000
74	0.00	0.000	55555555	55555555	0.000
75	0.00	0.000	55555555	55555555	0.000
76	0.00	0.000	55555555	55555555	0.000
77	0.00	0.000	55555555	55555555	0.000
78	0.00	0.000	55555555	55555555	0.000
79	0.00	0.000	55555555	55555555	0.000
80	0.00	0.000	55555555	55555555	0.000
81	0.00	0.000	55555555	55555555	0.000
82	0.00	0.000	55555555	55555555	0.000
83	0.00	0.000	55555555	55555555	0.000
84	0.00	0.000	55555555	55555555	0.000
85	0.00	0.000	55555555	55555555	0.000
86	0.00	0.000	55555555	55555555	0.000
87	0.00	0.000	55555555	55555555	0.000
88	0.00	0.000	55555555	55555555	0.000
89	0.00	0.000	55555555	55555555	0.000
90	0.00	0.000	55555555	55555555	0.000
91	0.00	0.000	55555555	55555555	0.000
92	0.00	0.000	55555555	55555555	0.000
93	0.00	0.000	55555555	55555555	0.000
94	0.00	0.000	55555555	55555555	0.000
95	0.00	0.000	55555555	55555555	0.000
96	0.00	0.000	55555555	55555555	0.000
97	0.00	0.000	55555555	55555555	0.000
98	0.00	0.000	55555555	55555555	0.000
99	0.00	0.000	55555555	55555555	0.000
100	0.00	0.000	55555555	55555555	0.000

ORIGINAL PAGE IS OF GOOD QUALITY

MOBIL TYCO SAMPLE # 7 11/17/78
 DISLOCATION PITS ONLY AVG DISL PIT AREA 6.29
 VERSION 2 (IGNORE AFETA)
 2.5 MM X & Y STEPS (17.5 X 24 MM MATRIX)
 MAG=800.0 UNITS-MICRONS CAL. FACTOR= 1.375000 UNITS/PP
 FRAME AREA= 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	111.92	0.003	375.390	411.184	1.329000	
2	216.53	0.006	183.195	217.517	1.496338	
3	411.61	0.012	115.456	114.469	1.339801	
4	222.26	0.006	204.694	239.770	2.529433	
5	1.27	0.000	46875.000	SSSSSSSSSS	0.000	1.125000
6	7.79	0.000	4976.087	4261.364	1.000	1.378125
7	574.09	0.016	88.778	103.135	1.018	1.686756
8	755.33	0.021	78.125	86.009	1.019	4.514253
9	1321.30	0.038	40.167	42.750	0.038	1.075617
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
11	39.43	0.001	844.595	837.454	1.002	1.341346
12	141.49	0.004	235.553	248.016	1.007	1.840533
13	14.79	0.000	2467.105	2678.571	1.091	1.006010
14	12.88	0.000	3605.769	3125.100	1.000	1.898438
15	1540.54	0.044	35.391	41.227	0.042	4.167144
16	485.53	0.014	107.265	122.770	0.014	2.788758
17	3687.44	0.105	17.573	16.265	0.093	4.419588
18	59.30	0.002	679.348	684.307	0.003	1.279345
19	127.50	0.004	348.513	339.674	1.005	1.911547
20	44.52	0.001	710.227	904.442	1.002	1.312500
21	6.27	0.000	6250.000	5514.706	1.000	1.371094
22	68.20	0.002	655.594	694.444	0.002	1.828125
23	736.80	0.021	70.489	79.181	1.022	2.871352
24	739.43	0.021	64.212	77.865	0.024	2.505927
25	2136.25	0.061	60.367	36.507	1.040	6.036991
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	638.50	0.015	SSSSSSSSSS	SSSSSSSSSS	1.015	SSSSSSSSSSSSSS
SE	638.63	0.024	SSSSSSSSSS	SSSSSSSSSS	1.020	SSSSSSSSSSSSSS
SE	167.73	0.005	SSSSSSSSSS	SSSSSSSSSS	1.004	SSSSSSSSSSSSSS
26	212.08	0.006	207.412	200.749	1.008	1.432011
27	1.43	0.000	18750.000	31250.000	1.000	1.265625
28	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
30	356.60	0.010	109.312	120.347	1.014	1.762044
31	943.88	0.027	50.054	61.881	0.029	2.859214
32	444.20	0.013	106.172	124.337	0.014	2.271134
33	1947.22	0.055	25.587	27.182	0.060	1.939206
34	1372.66	0.039	40.514	44.964	1.038	1.753644
35	240.36	0.007	193.698	203.362	0.008	1.144886
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
37	0.00	0.000	31250.000	46875.000	0.000	0.000000
38	296.66	0.008	152.936	173.290	1.010	2.150871
39	965.34	0.027	52.609	60.289	1.025	2.914249
40	721.14	0.021	60.758	69.342	1.026	1.817308
41	556.44	0.016	87.291	90.065	0.018	2.366286
42	804.29	0.023	53.116	59.904	1.030	1.627968
43	152.31	0.004	295.741	325.521	1.005	1.010728
44	19.87	0.001	1442.308	1050.371	1.021	1.757813
45	25.76	0.001	1102.941	750.000	1.001	1.199713
46	123.37	0.004	338.448	373.506	1.005	1.417208
47	406.84	0.012	106.393	122.709	1.015	1.681586
48	785.53	0.022	59.398	63.759	1.027	1.867818
49	316.69	0.009	123.681	139.925	1.012	1.794236
50	1134.98	0.032	37.394	40.747	1.044	1.539757
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	689.38	0.020	SSSSSSSSSS	SSSSSSSSSS	1.018	SSSSSSSSSSSSSS
SE	97.45	0.003	SSSSSSSSSS	SSSSSSSSSS	1.003	SSSSSSSSSSSSSS

ORIGINAL PAGE IS
 OF POOR QUALITY

081L TYCO SAMPLE #8 11/19/78
 TWINS ONLY (VERSION 2)
 DISREGARD AFETA
 JTM OUTPJT DIVIDED BY 100
 AVG TWIN AREA 25.5 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	56.78	797.560	4.167	1.872	1.243	0.133078
2	31.73	451.207	4.076	1.267	3.941	0.000096
3	86.90	1235.939	3.606	7.788	1.179	0.000111
4	47.37	673.743	6.944	1.065	1.095	0.000037
5	90.78	1291.155	4.076	1.071	1.037	0.000023
6	5.02	71.390	31.250	7.500	0.152	0.000023
7	4.90	69.717	93.750	10.417	0.104	0.000036
8	8.82	125.490	31.250	4.076	0.256	0.000035
9	10.98	156.166	8.929	2.799	0.405	0.000029
10	112.35	1597.908	1.389	0.437	2.613	0.000015
11	142.51	2026.806	1.689	0.781	1.568	0.000023
12	112.31	1597.351	4.167	0.625	1.712	0.000027
13	27.06	384.837	20.833	8.152	0.147	0.000097
14	0.94	13.386	187.500	31.250	0.035	0.000003
15	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
16	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
17	2.12	30.118	23.438	20.833	0.788	0.000001
18	5.02	71.390	26.786	7.212	0.157	0.000004
19	16.63	236.479	23.438	8.750	0.285	0.000007
20	20.24	287.791	17.045	2.916	0.520	0.000007
21	2.12	30.118	187.500	12.500	0.085	0.000004
22	1.73	24.540	62.500	20.833	0.064	0.000001
23	6.51	92.584	62.500	9.375	0.117	0.000012
24	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
25	4.43	63.024	31.250	11.719	0.101	0.000003
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.86	453.148	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.561	\$\$\$\$\$\$\$\$
SD	42.01	597.482	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.678	\$\$\$\$\$\$\$\$
SE	8.40	119.496	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.136	\$\$\$\$\$\$\$\$
26	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
27	5.49	78.083	187.500	31.250	0.035	0.000002
28	30.04	427.224	9.375	1.276	0.824	0.000010
29	0.59	8.366	\$\$\$\$\$\$\$\$	31.250	0.032	0.000002
30	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
31	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
32	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
33	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
34	3.22	45.734	26.786	11.329	0.104	0.000002
35	0.12	1.673	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
36	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
37	0.82	11.712	62.500	62.500	0.035	0.000001
38	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
39	0.31	4.462	\$\$\$\$\$\$\$\$	62.500	0.013	0.000000
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
42	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
45	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
46	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
47	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
48	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
50	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	16.74	238.119	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.301	\$\$\$\$\$\$\$\$
SD	33.59	477.789	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.557	\$\$\$\$\$\$\$\$
SE	4.75	67.570	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.079	\$\$\$\$\$\$\$\$

JOHIL TYCO SAMPLE # F 11/17/79
 DISLOCATION PITS ONLY AVG DISL PIT AREA 4.71
 VERSION 2 (IGNORE AFETA)
 2.5 MM X 4 Y STEPS (17.5 X 20 MM AFFIX)

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 3.375333 UNITS/PP
 FRAME AREA- 3.515625333 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	10.40	0.000	5514.706	5514.706	1.000	1.378125
2	17.41	0.000	2457.105	2403.846	1.001	1.768750
3	53.29	0.002	876.168	976.563	1.002	1.260673
4	6579.70	0.187	13.420	14.049	0.115	4.262549
5	10.62	0.000	4464.286	4261.364	1.000	1.406250
6	100.40	0.003	393.908	485.751	1.004	1.889407
7	1029.94	0.029	51.511	65.422	1.029	1.701177
8	822.29	0.023	62.583	73.819	1.023	1.403713
9	9.98	0.000	5514.706	5208.333	1.000	1.652344
10	19.53	0.001	2403.846	2343.750	1.001	1.808594
11	62.63	0.002	837.054	781.250	1.002	1.185268
12	2140.76	0.061	35.471	34.341	0.047	2.758603
13	542.89	0.015	96.055	108.507	0.017	1.393714
14	26.33	0.001	1442.398	1300.423	1.001	0.670673
15	683.44	0.019	63.387	76.344	1.023	1.075230
16	170.70	0.005	292.056	312.500	0.006	1.226947
17	74.31	0.002	901.442	837.154	0.002	1.822917
18	1.91	0.000	10416.667	10416.667	0.000	1.316406
19	0.00	0.000	55555555	55555555	0.000	5555555555
20	368.58	0.010	130.936	150.723	1.012	1.214552
21	134.61	0.004	331.272	376.506	1.005	1.061384
22	80.59	0.002	541.908	629.195	0.003	1.010908
23	126.39	0.006	271.739	303.398	0.006	1.354980
24	39.07	0.001	1129.518	1266.892	1.002	1.892241
25	59.66	0.002	910.194	976.563	1.002	1.411272

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
529.19	0.015	55555555	55555555	0.012	5555555555
SD 1319.28	0.138	55555555	55555555	1.024	5555555555
SE 263.86	0.008	55555555	55555555	1.105	5555555555

26	14.44	0.000	3125.000	3348.214	0.001	1.362597
27	0.00	0.000	55555555	55555555	1.000	5555555555
28	1517.83	0.043	41.336	45.454	0.039	1.455896
29	329.33	0.009	158.361	183.636	1.010	1.389372
31	92.14	0.003	504.132	597.134	1.003	1.317188
31	331.63	0.009	179.942	199.937	1.009	1.664063
32	47.35	0.001	1033.220	1217.532	1.002	1.206137
33	200.42	0.006	288.462	347.222	1.005	1.981343
34	1.27	1.000	18750.000	31250.000	0.000	1.843750
35	1342.89	0.038	55.147	64.789	0.027	1.543638
36	3309.77	0.094	22.477	24.433	0.069	1.172106
37	1051.59	0.030	51.426	61.395	0.030	1.638860
38	274.52	0.008	192.901	216.513	0.008	1.431718
39	151.59	0.004	402.361	432.328	1.004	1.731142
40	69.64	0.002	704.887	808.199	1.002	1.317657
41	177.92	0.005	289.352	304.383	1.006	1.253657
42	0.00	0.000	55555555	55555555	0.000	5555555555
43	763.06	0.022	77.097	86.725	0.020	1.914416
44	397.45	0.011	143.130	149.283	1.011	1.548529
45	472.82	0.013	118.671	133.357	1.013	1.639643
46	341.83	0.010	148.810	184.547	1.010	1.583260
47	92.14	1.003	829.546	744.048	1.002	1.653533
48	503.61	0.014	133.168	146.084	1.012	1.316406
49	46.97	0.001	1116.071	1233.553	1.001	1.453125
50	13.16	0.000	4261.364	5859.175	1.000	1.453125

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
495.44	0.014	55555555	55555555	1.012	5555555555
SD 1059.79	0.030	55555555	55555555	0.020	5555555555
SE 149.68	0.004	55555555	55555555	1.003	5555555555

DATE 11/12/78
 MOJIL TYCO SAMPLE NO. 9
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 QTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 36.87 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	53.05	754.507	3.827	1.030	1.000015	
2	51.13	727.119	4.368	1.194	1.000013	
3	14.75	209.842	10.417	3.989	1.000013	
4	8.03	114.179	23.438	5.682	1.000008	
5	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	
6	55.71	792.309	4.464	1.500	1.000024	
7	49.63	705.984	2.841	1.143	1.000014	
8	23.81	338.679	8.929	2.155	1.000015	
9	12.34	171.268	9.375	2.467	1.000006	
10	9.03	128.451	13.393	5.208	1.000008	
11	25.09	356.809	5.515	1.752	1.000009	
12	33.44	475.617	5.068	1.563	1.000010	
13	30.27	400.485	5.068	1.267	1.000009	
14	21.35	303.577	6.048	1.410	1.000007	
15	57.15	812.754	3.989	1.065	1.000015	
16	36.78	523.063	2.344	1.379	1.000014	
17	15.13	215.243	8.152	3.476	1.000010	
18	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	
19	11.01	156.610	8.929	4.360	1.000008	
20	7.21	102.607	17.045	5.515	1.000006	
21	12.37	175.897	7.810	4.464	1.000011	
22	7.46	106.078	13.393	5.859	1.000008	
23	68.81	978.622	2.287	0.906	1.000016	
24	6.29	89.492	10.417	5.682	1.000005	
25	6.18	87.949	18.750	6.944	1.000008	
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	24.63	350.282	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.531	\$\$\$\$\$\$\$\$
SE	23.77	285.404	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.766	\$\$\$\$\$\$\$\$
	4.01	57.181	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.073	\$\$\$\$\$\$\$\$
26	12.53	178.212	6.466	3.259	1.488	1.000005
27	6.70	95.276	11.719	4.696	1.187	1.000009
28	1.38	19.673	\$\$\$\$\$\$\$\$	31.253	1.735	1.000007
29	2.98	42.431	46.875	14.023	1.077	1.000008
30	34.50	490.661	2.344	1.258	1.984	1.000010
31	32.98	469.059	3.024	1.150	1.997	1.000007
32	77.00	1095.115	1.630	1.588	1.949	1.000014
33	36.91	524.982	5.208	1.293	1.853	1.000011
34	6.54	92.963	20.833	7.212	1.160	1.000008
35	23.62	334.436	3.750	1.369	0.813	1.000006
36	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
37	7.05	100.292	17.745	6.696	2.176	1.000012
38	47.63	677.359	3.989	2.344	0.531	1.000025
39	45.29	644.185	3.024	1.649	1.672	1.000008
40	62.90	894.530	2.500	3.915	1.275	1.000014
41	39.49	561.637	5.208	1.786	1.661	1.000016
42	57.39	816.225	3.641	1.700	1.528	1.000012
43	14.97	212.928	8.152	1.095	1.001	1.000006
44	00.77	1281.041	2.534	1.000	1.448	1.000019
45	48.11	684.302	4.160	1.320	1.861	1.000018
46	2.58	36.645	93.750	15.425	1.069	1.000007
47	54.92	781.123	3.989	1.258	1.920	1.000012
48	16.71	237.616	6.048	1.838	1.565	1.000007
49	24.38	346.788	8.929	4.930	1.389	1.000018
50	91.67	1303.800	2.155	1.702	1.627	1.000003

031L TYCO SAMPLE # 9 11/17/78
 DISLOCATION PIV(PITS) ONLY AVG DISL PIT AREA 6.79
 VERSION 2 (IGNORE AFETA)
 2.5 MM X 4 Y STEPS (17.5 X 21 MM MATRIX)

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	33.68	0.001	1116.071	1233.553	0.001	1.192255
2	273.58	0.008	150.256	163.143	1.011	1.318747
3	89.12	0.003	564.759	490.838	0.003	1.422794
4	3045.94	0.087	20.847	21.268	0.076	4.000101
5	17.27	0.000	2403.846	1802.885	0.001	0.937500
6	49.05	0.001	919.118	1090.116	0.001	1.736413
7	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
8	37.82	0.001	1019.022	966.495	0.002	0.933239
9	61.66	0.002	774.793	808.190	0.002	1.568848
10	200.86	0.006	236.146	216.513	0.007	1.409887
11	106.91	0.003	438.084	432.128	0.004	1.507818
12	3222.11	0.192	19.160	20.586	0.082	0.588919
13	144.39	0.004	359.195	244.141	0.005	1.588682
14	96.55	0.003	366.211	306.373	0.005	1.355334
15	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
16	1409.84	0.040	42.022	60.058	0.034	0.972148
17	222.28	0.006	706.044	224.282	0.008	1.615932
18	732.30	0.021	73.299	68.985	0.024	1.851748
19	55.79	0.002	787.815	822.368	0.002	1.335938
20	1307.94	0.037	33.967	35.892	0.048	1.584752
21	85.84	0.002	512.295	532.679	0.003	1.344050
22	105.31	0.003	384.221	366.211	0.004	1.676471
23	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
24	57.86	0.002	721.154	715.649	0.002	1.149009
25	120.03	0.003	373.506	418.527	0.004	1.503606
26	176.51	0.005	218.531	203.804	0.008	0.933239
27	2.25	0.000	23437.500	31250.000	0.000	1.828125

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	431.65	0.012	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.013	\$\$\$\$\$\$\$\$
SD	242.34	0.024	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.022	\$\$\$\$\$\$\$\$
SE	162.11	0.005	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.004	\$\$\$\$\$\$\$\$

28	2527.81	0.072	22.514	25.476	0.068	0.878584
29	313.99	0.009	176.887	189.777	0.009	0.345470
30	59.93	0.002	710.227	589.423	0.003	1.807292
31	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
32	53.78	0.001	1019.122	1217.532	0.002	0.767188
33	490.16	0.014	97.860	106.534	0.017	1.698271
34	46.46	0.001	1616.379	948.970	0.001	0.225184
35	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
36	1646.11	0.047	31.662	33.833	0.050	0.351398
37	271.85	0.008	176.554	173.297	0.009	1.844531
38	68.05	0.002	664.894	674.460	0.002	1.458059
39	22.45	0.001	1994.681	2757.353	0.001	0.031250
40	191.54	0.005	275.735	298.567	0.006	0.107475
41	144.04	0.004	305.375	336.122	0.005	1.466016
42	138.51	0.004	342.153	305.775	0.005	0.988542
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	1696.20	0.048	29.528	30.788	0.053	0.079937
45	173.92	0.005	242.876	279.951	0.006	1.573438
46	47.84	0.001	1116.071	1512.097	0.001	0.596875
47	0.69	0.000	46875.000	46875.000	0.000	0.562500
48	186.18	0.005	254.755	282.380	0.006	1.918918
49	254.16	0.007	173.290	197.368	0.009	1.521025
50	64.77	0.002	625.000	612.745	0.003	1.098633

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	401.00	0.011	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.012	\$\$\$\$\$\$\$\$
SD	758.46	0.022	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.020	\$\$\$\$\$\$\$\$
SE	107.26	0.003	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.003	\$\$\$\$\$\$\$\$

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 10
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 9TM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 36.87 X 100 ← DisREGARD

ORIGINAL PAGE IS
 OF POOR QUALITY

DISREGARD ABOVE TWIN AREA
 NEW AVERAGE TWIN AREA = 29.35 X 100
 MAG-800.0 UNITS-MM CALN FACTOR- 1.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
2	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
3	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
4	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
5	11.83	168.215	31.250	3.289	0.315	0.000005
6	0.59	8.337	187.500	31.250	0.735	0.000002
7	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
8	1.66	23.540	187.500	15.625	0.169	0.000003
9	2.55	36.291	93.750	15.625	0.069	0.000005
10	0.45	6.375	187.500	37.500	0.432	0.000002
11	0.24	3.433	187.500	187.500	0.008	0.000001
12	0.24	3.433	\$\$\$\$\$\$\$\$	187.500	0.008	0.000001
13	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
14	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
15	20.41	290.330	4.167	1.453	0.755	0.000005
16	106.50	1514.912	4.261	1.276	0.891	0.000029
17	77.21	1098.054	5.859	1.096	0.989	0.000017
18	29.83	424.215	3.906	1.090	1.000	0.000006
19	5.62	79.939	31.250	4.688	0.229	0.000005
20	101.00	1436.444	4.808	2.604	0.483	0.000022
21	111.28	1502.590	1.676	1.987	1.123	0.000028
22	118.93	1691.464	4.808	1.389	0.811	0.000030
23	89.41	1271.663	4.573	1.130	0.957	0.000019
24	8.83	125.548	12.500	4.160	0.253	0.000005
25	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.46	390.591	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.321	\$\$\$\$\$\$\$\$
SD	42.30	601.647	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.403	\$\$\$\$\$\$\$\$
SE	8.46	120.329	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.191	\$\$\$\$\$\$\$\$
26	15.66	222.651	10.417	4.167	0.272	0.000009
27	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
28	4.41	62.774	23.438	6.696	0.165	0.000004
29	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
30	1.21	17.165	187.500	31.250	1.335	0.000005
31	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
32	7.97	113.287	12.500	3.676	0.304	0.000003
33	9.07	128.981	20.833	5.859	0.189	0.000007
34	3.41	48.552	46.875	14.423	0.075	0.000007
35	39.38	560.061	2.805	1.187	0.944	0.000007
36	1.90	26.973	62.500	15.625	0.072	0.000004
37	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
38	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
39	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	6.69	95.142	20.833	4.261	0.253	0.000004
42	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
45	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
46	1.31	18.636	93.750	31.250	0.037	0.000005
47	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
48	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
50	12.31	175.000	7.212	3.409	0.384	0.000005
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	15.80	224.682	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.215	\$\$\$\$\$\$\$\$
SD	32.65	464.317	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.337	\$\$\$\$\$\$\$\$
SE	4.62	65.664	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.148	\$\$\$\$\$\$\$\$

Twins had
 different
 orientation

DATE 11/18/78
 MOBIL TYCO SAMPLE NO. 17
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 1.31 MM, ALONG TOP EDGE OF SAMPLE ONLY
 AVERAGE PIT AREA = 5.67 μ²
 REPEAT AVERAGE PIT AREA = 5.67 μ²

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.51562500 μ²

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	15.70	0.000	2840.999	3348.214	1.001	1.251563
2	43.39	0.001	1038.227	1233.553	1.001	1.823724
3	62.96	0.002	732.422	768.143	1.002	1.255178
4	53.62	0.002	876.168	946.970	1.002	1.379032
5	125.04	0.004	432.028	493.421	1.004	1.077148
6	43.74	1.001	1077.586	1102.941	1.002	1.453125
7	49.91	0.001	986.842	966.495	1.002	1.591875
8	1488.54	0.034	41.155	44.664	0.039	2.007779
9	181.83	0.005	250.668	243.506	1.006	1.526151
10	549.74	0.016	103.706	103.936	1.016	1.057879
11	537.57	0.015	89.885	99.734	1.017	1.496571
12	98.94	0.003	430.046	446.429	1.014	1.293289
13	221.87	0.006	213.554	233.791	1.007	1.684821
14	111.46	0.003	384.221	422.297	1.014	1.532328
15	14.81	0.000	2403.846	2840.999	1.001	1.181250
16	194.53	0.006	220.079	241.003	1.007	1.599066
17	3.70	0.000	11718.750	11718.750	0.000	1.476563
18	240.56	0.007	189.777	162.760	0.010	2.179688
19	843.74	0.024	61.435	59.866	0.027	1.020270
20	164.55	0.005	274.927	339.158	1.007	1.111891
21	656.08	0.019	59.411	62.542	0.026	1.282169
22	536.51	0.015	88.111	79.517	0.019	1.445207
23	384.13	0.011	91.642	98.477	0.017	1.063477
24	192.59	0.005	232.630	234.962	1.005	1.089036
25	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	260.62	0.007	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.009	\$\$\$\$\$\$\$\$
SD	295.10	0.008	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.010	\$\$\$\$\$\$\$\$
SE	59.12	1.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.002	\$\$\$\$\$\$\$\$

26	0.00	1.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
27	4.76	0.000	8522.727	8522.727	1.000	1.265625
28	28.92	0.001	2674.167	2678.571	1.001	1.843750
29	2.82	1.000	11718.750	11718.750	1.000	1.750000
30	262.18	1.007	318.878	226.998	1.006	1.940222
31	297.88	0.008	174.120	120.812	1.014	1.349521
32	238.98	1.007	157.563	171.733	0.010	1.287479
33	333.69	0.009	143.568	143.130	1.011	1.523357
34	687.83	1.024	76.593	88.443	1.021	1.845591
35	13.58	0.000	4464.286	2929.688	1.000	1.353516
36	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
37	1.06	0.000	31250.000	46875.000	0.000	1.843750
38	30.86	0.001	1129.518	829.646	1.002	1.946514
39	274.25	0.008	149.760	152.439	1.012	1.156994
40	360.14	0.010	144.453	149.283	1.012	1.650323
41	40.39	0.001	997.343	1102.941	0.002	1.238582
42	102.65	0.003	436.047	395.570	1.004	1.221549
43	637.92	0.018	84.232	82.965	0.021	1.609622
44	17.11	0.000	2467.105	2180.233	1.001	1.136719
45	3537.92	0.101	13.273	14.621	0.119	1.785403
46	704.76	1.020	74.464	76.158	1.023	1.866902
47	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
48	1.59	0.000	13392.857	18750.000	1.000	1.265625
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
50	254.67	0.007	203.804	239.770	1.008	1.115234

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	286.99	0.008	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.010	\$\$\$\$\$\$\$\$
SD	534.06	1.015	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.018	\$\$\$\$\$\$\$\$
SE	75.53	0.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.003	\$\$\$\$\$\$\$\$

DATE 11/18/78
 MOBIL (YOC) SAMPLE NO. 13
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP .31 MM ALONG CENTERLINE ONLY
 AVERAGE PIT AREA = 5.67 μ^2

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375111 UNITS/ μ^2
 FRAME AREA- 3.515625074 34

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	43.21	0.001	715.649	829.646	1.000	3.748981
2	19.22	0.001	1758.868	1994.681	1.001	3.696733
3	65.08	0.002	651.342	759.000	1.002	1.482589
4	8.64	0.000	6696.429	4934.211	1.000	1.722656
5	23.81	0.001	1588.983	1536.885	0.001	3.949219
6	14.81	0.000	3024.194	3232.759	0.001	1.476563
7	64.32	0.002	768.443	801.282	1.002	1.546875
8	40.04	0.001	1143.293	1233.553	1.001	1.453994
9	27.51	0.001	1488.395	1704.545	1.001	1.462530
10	47.97	0.001	1053.371	1266.892	0.002	1.593750
11	191.71	0.005	274.123	297.619	0.006	1.934929
12	304.23	0.009	156.511	178.912	0.009	1.956275
13	173.54	0.005	255.450	307.377	0.006	1.590517
14	172.49	0.005	239.158	259.695	0.007	1.206414
15	60.85	0.002	801.282	801.282	0.002	1.617188
16	247.97	0.007	186.753	196.954	0.009	1.392386
17	0.00	0.000	555555555	555555555	0.000	555555555
18	6.53	0.000	5859.375	535.714	0.000	1.000625
19	12.35	0.000	5859.375	5208.333	1.000	2.460938
20	1589.77	0.045	48.981	47.954	0.034	4.765300
21	354.32	0.010	164.474	196.541	0.010	3.665242
22	5498.59	0.014	112.680	110.685	0.015	2.070557
23	347.09	0.010	142.261	147.174	0.012	1.627941
24	112.52	0.003	436.947	424.208	0.004	1.401855
25	50.79	0.001	1019.022	937.500	1.002	1.557692
26	21.69	0.001	1704.545	2232.143	1.001	1.235491

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	173.33	0.005	555555555	555555555	1.005	555555555
SE	311.94	0.019	555555555	555555555	1.017	555555555
SE	61.18	0.002	555555555	555555555	0.001	555555555

27	27.87	0.001	1674.137	1562.500	1.001	1.234375
28	43.56	0.001	997.340	1077.586	0.002	1.197737
29	16.58	0.000	3125.000	3125.000	1.001	1.468751
30	145.33	0.004	341.909	341.909	1.005	1.466772
31	282.01	0.008	162.767	173.290	0.010	1.594747
32	282.89	0.008	142.912	160.256	0.009	1.790179
33	151.85	0.004	318.878	270.954	0.006	1.288065
34	1502.65	0.043	41.778	45.956	0.037	3.587201
35	17.28	0.000	2083.333	1588.983	0.001	1.069096
36	22.22	0.001	1704.545	1644.737	0.001	1.197422
37	13.93	0.000	4464.286	4934.211	1.000	2.221075
38	271.70	0.008	187.126	162.478	0.010	1.526978
39	264.93	0.008	158.629	169.837	0.010	1.446704
40	271.60	0.008	196.954	186.012	0.009	1.746472
41	35.45	0.001	1090.116	1143.293	0.002	0.974677
42	1254.32	0.036	58.122	44.579	0.034	2.571015
43	1413.93	0.040	44.263	42.325	0.037	2.875996
44	89.95	0.003	420.404	490.808	1.003	1.707589
45	5095.41	0.145	12.473	12.266	1.033	3.324711
46	2096.12	0.060	31.566	32.283	1.052	3.410874
47	0.00	0.000	555555555	555555555	1.000	555555555
48	0.00	0.000	555555555	555555555	1.000	555555555
49	0.00	0.000	555555555	555555555	0.000	555555555
50	188.89	0.005	250.000	268.625	0.007	1.602227

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	359.75	0.010	555555555	555555555	0.010	555555555
SE	818.48	0.023	555555555	555555555	0.021	555555555
SE	115.75	0.003	555555555	555555555	0.003	555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 11/18/78
 MOBIL TYCO SAMPLE NO. 11
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 1.31 MM, ALONG BOTTOM EDGE OF SAMPLE ONLY
 AVERAGE PIT AREA = 5.57 μ^2
 AVERAGE PIT AREA = 1.67 μ^2

MAG-300.0 UNITS-MICRONS CAL. FACTOR- 0.375333 UNITS/PP
 FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	2835.29	0.381	20.310	21.339	1.388	2.000699
2	237.04	0.307	179.598	199.045	0.309	1.233822
3	546.74	0.716	79.315	87.239	1.021	1.370873
4	884.13	0.325	54.538	56.239	0.331	1.519536
5	258.38	0.007	211.149	179.254	1.009	1.492867
6	48.50	0.001	1319.322	1512.097	1.001	2.578125
7	95.41	0.003	416.667	488.281	1.003	2.000956
8	3.70	0.000	3392.857	15625.000	1.000	2.953125
9	21.87	0.001	1512.097	1768.868	1.001	1.341346
10	50.44	0.001	1157.407	1233.553	1.001	1.748641
11	19.22	0.001	2403.846	2678.571	0.001	1.393466
12	32.63	0.001	1464.844	1488.995	0.001	1.303781
13	62.43	0.002	876.168	928.318	1.002	2.074219
14	14.99	0.000	2840.909	3125.000	1.001	1.086648
15	11.64	0.000	4934.211	4076.087	1.000	1.856250
16	70.72	0.002	815.217	600.962	1.002	1.944504
17	286.60	0.008	171.389	191.718	1.008	2.929688
18	162.96	0.005	267.994	292.056	1.006	1.584604
19	1989.95	0.057	35.007	37.026	1.046	3.768817
20	651.50	0.019	96.055	101.242	1.018	2.869993
21	85.54	0.002	554.734	582.298	0.003	1.623884
22	124.87	0.004	314.723	378.024	1.005	1.118680
23	518.69	0.015	84.232	77.930	1.019	1.238258
24	101.36	0.003	405.844	457.317	1.004	1.492188
25	148.85	0.004	290.248	308.388	1.005	1.483594

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	369.33	0.011	1341.979	1459.749	1.011	1.838656
SD	648.25	0.018	2695.813	3072.757	1.019	1.671778
SE	129.65	0.004	539.163	614.551	1.004	1.134356

26	79.19	0.002	597.134	604.839	1.003	1.403125
27	86.95	0.002	523.743	526.685	0.003	1.386563
28	164.23	0.005	244.141	258.978	1.007	1.212247
29	182.36	1.105	57.107	253.378	1.007	1.454763
30	167.37	0.005	265.581	271.173	1.006	1.499473
31	267.02	0.008	176.222	199.893	0.010	1.588853
32	497.88	0.014	94.697	96.451	1.018	1.829421
33	752.38	0.021	64.611	72.060	0.023	2.150202
34	78.31	0.002	679.348	637.755	0.002	1.951172
35	27.87	0.001	1875.000	1875.000	1.001	1.587054
36	17.11	0.000	2929.688	3750.100	1.001	2.273438
37	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
38	12.87	0.000	3125.000	3906.250	1.000	1.283203
39	21.52	0.001	1512.097	1644.737	1.001	1.319712
40	15.87	0.000	2678.571	2604.167	1.000	1.150568
41	495.41	0.014	95.371	96.253	0.016	1.747857
42	967.55	0.028	57.269	63.216	1.029	2.173841
43	71.37	0.002	744.148	600.962	1.002	1.148945
44	3225.75	0.002	18.784	19.947	1.004	3.167526
45	1587.30	0.045	39.641	37.787	1.041	1.132735
46	18.17	1.001	5859.375	2533.784	0.001	2.414063
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
49	11.11	0.000	4464.286	4687.500	1.000	1.476563
50	415.34	0.012	107.883	115.172	0.015	1.554798

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	367.90	0.013	SSSSSSSSSS	SSSSSSSSSS	1.011	SSSSSSSSSSSS
SD	669.75	0.019	SSSSSSSSSS	SSSSSSSSSS	1.019	SSSSSSSSSSSS
SE	94.72	0.003	SSSSSSSSSS	SSSSSSSSSS	1.003	SSSSSSSSSSSS

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 11
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 GTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 30.92 X 100

MAG-800.0 UNITS-MM.CAL. FACTOR- 1.100375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	24.35	346.380	2.885	1.778	1.072	1.000005
2	20.16	286.738	2.180	1.042	1.188	1.000004
3	26.87	382.165	1.659	1.136	1.278	1.000011
4	42.71	637.427	1.047	1.713	1.238	1.000009
5	49.61	705.606	0.721	3.591	2.357	1.000011
6	36.90	524.846	1.420	0.972	1.368	1.000008
7	29.26	416.115	2.107	1.202	1.075	1.000009
8	74.84	1064.373	1.512	3.694	1.736	1.000033
9	72.03	1024.459	2.038	3.601	1.819	1.000012
10	7.97	113.319	6.466	2.679	1.405	1.000003
11	19.32	274.810	18.750	3.989	1.272	1.000014
12	3.10	44.043	37.500	8.523	0.123	1.000005
13	18.58	264.258	3.472	2.155	1.571	1.000009
14	6.23	88.545	11.719	3.125	1.355	1.000002
15	19.84	282.151	8.929	3.724	1.373	1.000010
16	14.13	230.946	23.438	4.808	1.229	1.000009
17	61.32	872.143	5.357	1.258	1.888	1.000013
18	12.39	176.172	3.989	2.206	1.579	1.000005
19	9.71	138.093	8.929	3.178	1.384	1.000005
20	12.39	176.172	5.208	2.232	1.541	1.000004
21	6.58	93.591	7.212	5.859	1.237	1.000003
22	22.55	320.688	5.357	2.232	1.552	1.000010
23	14.84	211.039	6.466	2.467	1.459	1.000006
24	7.87	111.943	13.393	3.909	0.261	1.000005
25	37.16	528.516	3.074	1.165	0.973	1.000008
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	26.03	370.182	7.193	3.433	1.829	1.000008
SD	19.88	282.731	8.258	1.855	1.594	1.000006
SE	3.98	56.543	1.652	1.371	1.119	1.000001
26	27.84	395.928	6.496	2.467	1.453	1.000015
27	6.87	97.720	23.833	6.250	0.179	1.000010
28	4.06	57.836	31.250	7.500	1.147	1.000004
29	48.77	693.677	4.464	1.349	1.835	1.000015
30	63.65	935.175	3.178	0.845	1.125	1.000016
31	31.19	443.642	4.261	1.276	1.877	1.000008
32	86.97	1236.875	1.995	1.499	1.213	1.000011
33	83.17	1181.821	3.125	1.992	1.157	1.000012
34	114.48	1628.215	3.827	3.928	1.197	1.000026
35	87.00	1237.333	4.360	1.109	1.997	1.000018
36	26.74	380.330	11.329	3.024	0.371	1.000019
37	50.45	717.534	5.515	2.083	1.557	1.000018
38	46.26	657.892	6.466	1.589	0.696	1.000014
39	9.32	132.588	12.500	4.261	1.264	1.000006
40	2.61	37.161	62.500	15.625	0.072	1.000006
41	19.55	278.322	6.250	1.974	0.571	1.000008
42	17.10	243.154	11.719	2.841	1.389	1.000007
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
45	74.94	1065.749	5.357	1.465	1.771	1.000027
46	6.90	98.179	37.500	7.212	1.149	1.000008
47	32.74	465.663	9.375	1.995	0.547	1.000013
48	78.65	1118.509	4.808	1.786	1.464	1.000049
49	15.39	218.839	11.029	2.757	1.395	1.000006
50	53.19	756.530	4.808	1.442	1.792	1.000019
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	32.77	466.058	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.727	\$\$\$\$\$\$\$\$
SD	27.81	395.482	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.554	\$\$\$\$\$\$\$\$
SE	3.93	55.930	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.078	\$\$\$\$\$\$\$\$

DATE 11/18/76
 MOBIL TYCO SAMPLE NO. 11
 DISLOCATION PITS ONLY
 VERSION 3, IGNORE AFETA
 STEP 0.31 MM, ALONG CENTER LINE OF SAMPLE ONLY
 AVERAGE PIT AREA = 6.63 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.375000 INITS/PP
 FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	1917.65	0.055	24.459	24.529	3.367	2.221772
2	492.61	0.014	96.055	78.321	3.319	1.808194
3	17.50	0.000	2533.784	2533.784	3.001	1.359375
4	65.76	0.002	597.134	485.751	3.303	1.393466
5	10.41	0.000	3906.250	1513.265	3.000	3.978313
6	28.51	0.001	1266.892	1217.532	3.031	1.107422
7	45.85	0.001	787.815	689.338	3.002	1.858696
8	35.75	0.001	997.340	966.495	3.002	1.234375
9	35.14	0.001	582.298	1143.293	3.002	1.927399
10	16.89	0.000	3605.769	1802.885	3.001	1.431818
11	36.50	0.001	997.340	838.190	3.002	1.308894
12	0.60	0.000	55555555	31250.000	3.000	3.562597
13	68.02	0.002	538.793	473.485	3.003	1.074947
14	199.40	0.006	216.513	211.149	3.008	1.602640
15	9.35	0.000	4687.500	4261.364	3.003	1.989844
16	120.21	0.003	279.018	284.091	3.006	1.205141
17	20.97	0.001	1420.455	997.340	3.001	1.020083
18	23.23	0.001	1442.308	1420.455	3.001	1.273897
19	1.36	0.000	23437.500	23437.500	0.000	3.632813
20	130.17	0.004	331.272	324.394	3.005	1.989498
21	124.89	0.004	356.464	351.124	3.005	1.878024
22	9.00	0.000	4261.364	4261.364	0.000	1.305874
23	44.04	0.001	1008.765	928.218	3.002	1.642509
24	78.13	0.002	604.839	548.246	3.003	1.821094
25	207.84	0.016	219.555	213.554	3.008	1.588371

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	149.62	0.004	55555555	3225.127	1.176	1.412672
SD	375.02	0.011	55555555	7231.212	1.313	1.412676
SE	75.30	0.002	55555555	1456.242	1.003	1.382121

26	64.40	0.002	600.952	558.736	3.003	1.305367
27	221.12	0.006	232.922	199.345	3.009	1.585817
28	228.66	0.007	178.912	166.815	3.009	1.922115
29	16.44	0.000	1953.125	2403.246	3.001	1.321875
30	1978.73	0.156	47.288	35.399	3.044	2.153239
31	693.36	0.023	72.382	82.672	3.022	2.357739
32	165.61	0.002	660.311	616.776	0.002	1.653294
33	6.79	0.000	5514.706	4934.211	0.000	1.582031
34	37.86	0.001	1512.097	1339.286	0.001	2.715144
35	29.41	0.001	1536.885	1536.885	0.001	1.523438
36	0.00	0.000	55555555	55555555	0.000	555555555555
37	0.00	0.000	55555555	55555555	0.000	555555555555
38	2.11	0.000	18750.000	15625.000	1.000	2.984375
39	61.24	0.002	734.887	646.552	3.003	1.463942
40	77.98	0.002	529.661	480.769	3.003	1.275493
41	4.52	0.000	9375.000	9375.000	0.000	1.406250
42	39.82	0.001	986.842	937.500	0.002	1.280172
43	470.59	0.013	94.032	93.191	3.019	1.668251
44	684.01	0.019	64.256	66.395	3.026	1.837851
45	268.17	0.008	184.185	168.312	3.009	1.953369
46	856.86	0.024	54.128	52.609	3.030	2.136971
47	1960.94	0.056	28.766	28.002	3.059	2.834527
48	887.33	0.025	54.697	56.476	3.031	2.302679
49	61.69	0.002	704.887	646.552	0.002	1.691636
50	61.99	0.002	600.962	526.685	0.003	1.179528

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	250.40	0.007	55555555	55555555	0.008	555555555555
SD	481.58	0.014	55555555	55555538	1.015	555555555555
SE	68.11	0.002	55555555	55555555	0.002	555555555555

DATE 11/12/78
 DRILL TYPED SAMPLE NO. 12
 DISTRESS AVERAGE STATISTICS AREA (AFETA)
 TWIN ONLY (PROGRAM VERSION NO. 2)
 ITEM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 37.45 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	70.59	1004.912	2.757	1.008	1.144	7.000018
2	57.89	823.351	4.688	1.359	7.816	0.000017
3	53.81	765.309	2.799	1.225	7.973	7.000020
4	39.65	563.892	7.500	2.467	7.469	7.000021
5	13.51	192.192	8.523	2.107	8.520	7.000006
6	23.73	337.489	8.152	2.287	8.483	7.000012
7	10.84	154.138	17.045	4.076	8.275	7.000008
8	5.49	78.030	17.045	6.944	9.168	7.000007
9	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
10	13.00	184.889	10.417	3.125	7.365	7.000007
11	65.92	937.514	4.464	1.389	7.811	7.000019
12	77.35	1100.108	4.167	7.901	1.213	7.000025
13	0.62	8.841	\$\$\$\$\$\$\$\$	31.250	7.735	7.000003
14	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
15	11.49	163.363	11.029	2.976	0.373	7.000005
16	15.84	225.249	14.423	5.515	0.216	7.000021
17	13.92	197.958	13.393	3.233	3.341	7.000009
18	31.73	451.267	10.417	2.930	7.379	0.000018
19	20.00	285.213	18.750	7.212	7.165	7.000021
20	10.74	154.138	15.625	5.357	7.213	7.000011
21	7.43	219.483	14.423	4.934	0.232	7.000011
22	16.65	236.781	8.152	4.076	0.315	0.000012
23	25.54	363.243	15.208	1.689	0.672	7.000017
24	14.14	201.033	10.417	2.500	0.424	7.000007
25	3.27	46.511	93.750	10.417	7.104	7.000006
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	24.45	347.760	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.428	\$\$\$\$\$\$\$\$
SD	22.56	320.970	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.371	\$\$\$\$\$\$\$\$
SE	4.51	64.180	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.766	\$\$\$\$\$\$\$\$
26	8.95	127.231	26.786	4.688	7.224	7.000008
27	0.35	4.997	37.500	62.500	7.040	7.000001
28	3.22	7.375	\$\$\$\$\$\$\$\$	62.500	7.719	7.000001
29	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
30	1.11	15.763	187.500	37.500	7.027	7.000006
31	0.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.100	\$\$\$\$\$\$\$\$
32	3.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.300	\$\$\$\$\$\$\$\$
33	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
34	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
35	6.54	93.021	26.786	7.500	7.149	0.000011
36	14.24	202.571	10.417	2.641	0.413	0.000008
37	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
38	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
39	2.84	40.360	15.625	8.523	0.136	7.000002
40	8.46	120.312	13.393	4.167	7.269	7.000009
41	5.84	83.727	15.625	4.360	0.245	0.000003
42	0.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
45	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
46	0.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
47	0.00	7.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
48	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
49	0.62	8.841	187.500	37.500	7.032	7.000003
50	0.57	8.372	187.500	31.250	0.335	7.000003
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	13.22	188.025	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.246	\$\$\$\$\$\$\$\$
SD	19.69	279.981	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.307	\$\$\$\$\$\$\$\$
SE	2.78	39.595	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.043	\$\$\$\$\$\$\$\$

DATE 11/18/78
 MOBIL TYCO SAMPLE # 12
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 3.31 MM. ALONG CENTER LINE OF SAMPLE ONLY
 AVERAGE PIT AREA = 5.66 PP
 MAG-833.3 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.515625000 34

See 2 holes (not center and
 two at ends)

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	140.11	0.034	398.936	355.114	1.704	1.770989
2	567.14	0.016	107.883	107.388	1.015	2.735795
3	477.56	0.014	121.281	114.329	1.115	1.969479
4	573.50	1.016	98.684	103.821	0.016	3.022972
5	396.82	0.011	137.463	138.479	0.012	2.050933
6	1601.94	0.046	37.940	38.564	0.042	2.783945
7	943.99	0.027	70.225	69.858	0.023	1.339375
8	923.67	0.026	70.172	72.450	0.021	4.201071
9	263.96	0.008	184.911	175.562	1.009	1.616106
10	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
11	750.00	0.021	70.067	72.282	0.024	1.859667
12	45.58	1.001	937.500	956.633	1.002	1.133789
13	281.13	0.008	187.288	186.182	0.008	1.997629
14	273.85	1.008	192.505	192.505	0.009	1.946159
15	699.29	0.020	69.651	66.395	0.025	1.500253
16	373.32	0.011	143.788	139.717	0.012	1.994232
17	208.13	0.006	239.770	250.700	1.007	1.533854
18	12.31	0.000	4076.087	3625.769	0.000	1.195313
19	304.95	0.009	174.581	165.636	0.010	1.824953
20	73.50	0.002	910.194	852.273	0.002	2.925000
21	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
22	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
23	62.19	0.002	744.948	738.189	0.003	1.237500
24	1356.01	0.039	62.175	57.978	0.018	4.515887
25	630.04	0.018	87.347	89.542	0.018	2.228750
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	438.35	0.012	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.012	\$\$\$\$\$\$\$\$
SE	417.64	0.012	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.010	\$\$\$\$\$\$\$\$
	83.53	0.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.002	\$\$\$\$\$\$\$\$
26	2998.59	0.085	23.275	22.189	0.072	1.794416
27	1279.15	0.036	42.402	46.688	1.037	2.351328
28	1360.78	0.039	42.344	44.643	0.038	2.572669
29	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
30	12.19	1.000	5208.333	2130.682	1.000	1.940625
31	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
32	0.00	1.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
33	14.84	0.000	2338.043	2180.233	1.001	1.984375
34	199.12	0.006	715.549	231.481	1.005	4.339375
35	201.77	0.006	184.547	214.041	1.008	1.115234
36	245.41	0.007	176.222	173.611	0.010	1.103549
37	393.29	0.011	103.249	117.741	0.014	1.416431
38	665.19	0.019	72.900	70.595	0.025	1.347209
39	774.73	0.022	94.127	66.068	0.022	2.657934
40	1393.46	0.040	41.989	40.375	0.039	1.497994
41	710.60	0.020	76.718	78.386	1.022	1.854006
42	1043.46	0.030	46.898	45.334	1.038	1.540874
43	496.82	0.014	85.383	78.190	0.018	1.159041
44	1413.07	0.040	36.650	36.722	0.044	1.966292
45	865.90	0.025	49.656	54.066	0.035	1.312768
46	474.38	0.013	111.740	126.518	0.014	2.133210
47	916.78	0.026	59.866	60.758	0.028	2.026953
48	733.39	0.021	71.620	68.732	1.021	2.289154
49	733.04	0.021	65.559	71.077	0.025	1.691168
50	1022.26	0.029	50.322	52.404	0.034	1.749798
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	578.14	0.016	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.017	\$\$\$\$\$\$\$\$
SE	565.41	0.016	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.015	\$\$\$\$\$\$\$\$
	79.96	0.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.002	\$\$\$\$\$\$\$\$

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 13
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 QTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 30.51 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 1.000375 UNITSYPP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	46.48	661.104	2.287	1.165	1.340	0.000010
2	21.94	311.971	6.048	3.233	3.392	1.000007
3	29.55	420.244	11.029	2.568	0.424	1.000009
4	12.48	177.548	14.423	7.500	0.176	1.000014
5	79.35	1128.602	3.472	1.550	3.792	1.000020
6	16.00	227.556	8.929	4.261	3.285	1.000005
7	34.45	489.978	2.435	2.206	3.731	1.000008
8	57.06	811.584	3.827	1.803	3.696	1.000018
9	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.334	\$\$\$\$\$\$\$\$

LAST FIELD DELETED

9	16.39	233.061	7.813	4.360	1.323	1.000004
10	40.39	574.394	6.696	2.568	0.459	0.000015
11	33.32	473.921	7.212	2.180	1.525	1.000011
12	17.13	243.613	17.045	3.538	3.304	0.000007
13	15.65	222.509	9.375	3.750	3.301	1.000006
14	28.71	408.315	5.515	3.074	3.397	1.000010
15	12.55	178.466	11.719	5.682	3.216	0.000007
16	17.68	251.412	5.068	3.340	1.397	0.000006
17	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.000	\$\$\$\$\$\$\$\$
18	8.90	126.624	14.423	6.696	3.203	0.000008
19	1.58	22.480	93.750	31.250	0.037	1.000007
20	26.35	374.824	10.417	3.348	1.325	1.000010
21	10.03	142.681	9.375	6.048	1.232	0.000006
22	13.65	194.065	12.500	7.212	3.176	0.000008
23	28.42	404.186	0.757	3.125	0.573	1.000025
24	55.03	782.681	5.208	2.500	3.493	0.000022
25	95.87	1363.498	4.688	2.060	0.592	1.000030

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	28.76	489.013	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.404	\$\$\$\$\$\$\$\$
SD	22.74	323.365	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.236	\$\$\$\$\$\$\$\$
SE	4.55	64.673	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.147	\$\$\$\$\$\$\$\$

26	89.68	1275.412	5.208	1.630	1.591	1.000026
27	81.19	1154.753	5.682	2.435	1.483	1.000025
28	7.32	104.143	17.500	7.813	1.141	1.000018
29	19.52	277.563	20.833	6.250	1.157	1.000017
30	55.81	793.592	5.368	3.236	1.555	1.000017
31	18.36	256.918	12.513	4.573	1.253	1.000016
32	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
33	34.94	496.860	5.357	2.315	1.517	1.000015
34	8.19	116.530	17.045	8.929	3.144	0.000006
35	61.39	873.361	4.944	2.016	3.557	1.000022
36	26.48	376.659	11.719	3.750	3.299	0.000012
37	3.81	54.136	93.750	15.625	1.769	1.000008
38	49.90	709.735	9.375	3.409	3.357	1.000031
39	29.16	414.738	4.464	2.757	1.491	1.000013
40	36.29	516.129	13.393	2.568	0.419	1.000013
41	28.94	411.527	17.500	12.500	3.101	1.000032
42	1.42	20.186	187.500	31.250	1.035	0.000026
43	3.39	48.172	62.500	15.625	3.075	1.000007
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
45	13.39	190.394	9.868	1.989	0.291	1.000008
46	5.39	76.616	37.500	17.145	1.172	1.000008
47	54.77	779.311	3.152	1.933	1.568	1.000015
48	10.58	150.480	20.833	6.696	0.173	1.000002
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
50	2.13	30.280	62.500	31.250	0.040	0.000009

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.21	387.046	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.332	\$\$\$\$\$\$\$\$
SD	24.37	346.536	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.236	\$\$\$\$\$\$\$\$
SE	3.45	49.008	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.133	\$\$\$\$\$\$\$\$

DATE 11/18/78
 MOBIL TYCO SAMPLE # 13
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 3.31 MM, ALONG CENTER LINE OF SAMPLE ONLY
 AVERAGE DISL PIT AREA = 5.24 PP

8 holes all along 3 edges.

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.175000 INITS/PP
 FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	1241.52	0.035	39.177	40.975	1.042	1.742878
2	962.01	0.027	47.335	49.187	1.035	1.531406
3	528.09	0.018	72.060	67.495	1.022	1.025191
4	600.18	0.017	91.463	94.889	1.019	1.802653
5	737.10	0.021	68.934	68.182	1.025	1.585642
6	1043.29	0.030	53.972	41.984	0.930	2.179593
7	229.86	0.007	349.813	190.162	0.007	2.690487
8	277.03	0.008	190.162	168.312	0.010	1.736220
9	0.53	0.000	46875.000	46875.000	0.000	0.210938
10	354.06	0.010	138.274	136.463	1.013	1.361413
11	290.11	0.008	174.907	174.581	1.010	1.489718
12	563.60	0.016	89.713	86.088	1.019	1.461217
13	505.12	0.014	120.656	85.383	1.017	2.072497
14	204.42	0.006	202.484	208.797	1.008	1.261265
15	480.74	0.014	86.886	88.028	0.021	1.102711
16	476.33	0.014	99.840	90.589	0.018	1.272232
17	292.58	0.008	125.000	124.172	0.014	1.992616
18	442.23	0.013	118.073	119.275	1.015	1.742497
19	581.98	0.017	181.335	96.355	0.014	4.063322
20	136.57	0.004	351.124	322.165	1.005	1.894885
21	468.90	0.013	105.813	85.159	1.018	1.492875
22	6.36	0.000	6250.000	3024.194	0.000	1.265625
23	701.41	0.020	61.355	65.286	0.024	1.622911
24	565.55	0.016	71.185	74.880	1.022	1.229892
25	537.46	0.015	86.645	89.971	1.021	1.265625

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	489.08	0.014	2242.043	2098.699	0.017	1.576217
SD	291.79	0.008	9189.531	9157.901	0.010	1.683445
SE	58.36	0.002	1837.906	1831.583	1.002	1.136689

26	539.22	0.015	77.801	77.608	1.023	1.202206
27	202.47	0.006	249.335	243.506	1.007	1.751698
28	162.72	0.005	243.506	244.141	1.007	1.852973
29	17.84	0.001	1953.125	1994.681	1.011	1.835478
30	0.00	0.000	555555555	555555555	1.000	555555555
31	722.79	0.021	67.935	67.689	1.027	1.137493
32	545.76	0.016	246.363	72.115	1.016	6.388797
33	0.00	0.000	555555555	555555555	1.000	555555555
34	0.00	0.000	555555555	555555555	1.000	555555555
35	85.16	0.002	512.295	340.909	0.004	1.148835
36	278.62	0.008	163.328	182.749	1.013	1.344034
37	316.96	0.009	140.555	134.505	1.012	1.224666
38	32.69	0.001	1302.083	1053.171	0.002	1.839214
39	237.81	0.007	321.062	153.437	1.008	2.1794018
40	446.47	0.013	100.375	99.522	1.017	1.306468
41	105.83	0.003	600.962	450.721	0.004	1.831182
42	0.71	0.000	31250.000	46875.000	0.000	0.562500
43	1.24	0.000	31250.000	46875.000	0.000	1.492188
44	0.00	0.000	555555555	555555555	1.000	555555555
45	15.55	0.000	2929.688	2343.750	1.001	1.237500
46	157.77	0.004	279.851	286.697	1.006	1.219205
47	182.69	0.005	254.755	239.171	1.007	1.439466
48	157.49	1.005	137.233	318.078	1.005	1.338216
49	1174.73	1.003	45.312	49.446	1.006	2.225228
50	60.60	0.002	679.348	629.195	0.003	1.927584

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	353.64	0.010	555555555	555555555	0.012	555555555
SD	314.89	0.009	555555555	555555555	1.011	555555555
SE	44.53	0.001	555555555	555555555	1.001	555555555

DATE 11/26/78
 MOBIL TYCJ SAMPLE # 14
 TWINS ONLY
 VERSION 2 , IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 JTM JTT PJT DATA DIVIDED BY 133
 AVERAGE TWIN AREA = 28.89 X 133

MAG-800.7 UNITS-MM CAL. FACTOR- 7.130375 UNITS/PP
 FRAME AREA- 3.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	84.53	1232.169	3.472	1.084	1.319	1.000014
2	115.99	1649.660	4.261	1.389	1.819	1.000034
3	102.56	1458.652	3.989	1.359	0.832	1.000022
4	68.29	971.286	3.676	1.123	1.995	1.000012
5	84.31	1194.785	4.808	1.576	0.717	1.000024
6	129.77	1717.595	3.606	1.830	1.307	1.000020
7	49.95	710.373	4.688	1.369	0.805	0.000010
8	21.25	382.265	13.393	3.538	0.312	1.000011
9	28.80	409.584	8.929	1.476	1.720	0.000006
10	24.26	345.094	10.417	2.679	0.405	0.000009
11	27.52	391.370	5.515	1.465	0.736	0.000006
12	29.25	415.984	8.523	1.550	0.715	1.000007
13	11.46	162.948	13.393	3.348	1.325	1.000005
14	9.80	139.318	14.423	4.167	0.261	0.000007
15	24.47	348.048	6.696	1.410	0.760	1.000005
16	131.74	1873.651	3.233	1.165	1.003	1.000045
17	46.66	663.605	4.688	0.972	1.104	1.000009
18	12.25	174.270	10.417	2.435	0.448	1.000005
19	17.86	242.698	12.500	2.131	1.496	1.000005
20	18.38	261.405	11.719	2.038	1.520	1.000006
21	29.53	419.922	8.523	1.339	1.789	0.000007
22	101.94	1449.790	3.233	1.165	0.987	1.000017
23	88.89	1252.875	6.944	1.537	1.704	1.000030
24	102.84	1462.590	5.515	1.524	1.741	1.000026
25	126.48	1798.823	5.357	1.242	1.588	0.100029
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	59.12	843.753	7.277	1.756	1.736	1.000015
SD	41.36	588.262	3.588	1.535	1.258	1.000011
SE	8.27	117.652	1.718	1.157	1.152	1.100002
26	71.41	1015.592	4.688	3.952	1.123	1.000010
27	5.16	73.351	26.786	3.348	1.339	1.000003
28	2.56	36.429	93.750	15.625	1.069	0.000005
29	25.82	367.247	14.423	3.827	1.288	1.000015
30	73.61	1074.269	4.376	0.822	1.315	1.000019
31	105.92	1536.434	6.348	1.213	1.991	1.000021
32	14.57	206.269	13.417	1.974	1.555	1.000015
33	23.19	329.833	9.868	1.674	0.651	1.000016
34	34.93	496.719	6.466	1.938	1.128	1.000005
35	15.75	223.991	11.719	1.913	0.552	0.000004
36	8.76	124.549	18.750	4.688	0.229	1.000007
37	98.41	1399.577	4.934	3.889	1.232	0.000015
38	1.11	15.753	187.500	15.625	1.367	1.000002
39	1.25	17.722	93.750	15.625	1.069	1.000003
40	3.70	52.675	31.250	6.048	1.176	1.000003
41	0.66	9.353	187.500	31.250	1.335	0.000003
42	1.32	18.707	187.500	31.250	0.035	1.000005
43	3.32	47.260	37.500	61.250	1.168	1.000003
44	3.77	53.659	93.750	15.625	1.069	1.000008
45	2.89	39.875	46.875	7.813	1.123	0.000003
46	2.60	36.922	46.875	10.417	1.107	1.000003
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
48	1.49	21.168	46.875	31.250	1.045	1.000006
49	0.97	13.784	93.750	11.250	1.037	1.000002
50	2.42	34.460	46.875	11.329	1.099	0.000003
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	39.61	563.287	SSSSSSSSSS	SSSSSSSSSS	1.556	SSSSSSSSSSSSSS
SD	41.41	588.987	SSSSSSSSSS	SSSSSSSSSS	1.393	SSSSSSSSSSSSSS
SE	5.86	83.295	SSSSSSSSSS	SSSSSSSSSS	1.056	SSSSSSSSSSSSSS

DATE 11/26/78
 MOBIL TYCO SAMPLE # 14
 DISLOCATION PITS ONLY
 VERSION 2 , IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.32 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.175033 UNITS/PP
 FRAME AREA- 3.015625733 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	13.53	0.000	7812.500	7812.500	3.000	3.937500
2	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.000	\$\$\$\$\$\$\$\$
3	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
4	99.44	0.003	471.196	526.685	0.003	1.305099
5	27.02	0.001	1090.116	1041.667	3.002	1.600962
6	5.38	0.010	18750.000	10416.667	0.000	3.796875
7	147.56	0.004	382.653	252.695	1.004	1.971261
8	433.83	0.012	109.649	102.683	0.016	1.262889
9	110.53	0.003	404.395	366.311	0.005	1.132795
10	7.03	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	3.000	\$\$\$\$\$\$\$\$
11	24.06	0.001	1339.266	1588.983	3.001	1.285714
12	257.33	0.007	168.615	164.186	0.013	1.395041
13	201.13	0.006	253.378	225.904	1.007	1.791295
14	185.34	0.005	294.811	271.739	1.006	1.540625
15	144.92	0.004	385.802	305.375	0.006	1.485231
16	3.57	0.000	2286.585	1802.885	0.000	3.445313
17	121.43	0.003	364.786	363.372	0.005	1.195313
18	374.81	0.011	138.889	94.506	0.016	1.287394
19	40.60	0.001	1171.875	1399.354	3.001	1.518750
20	231.95	0.007	226.998	242.248	0.007	1.606771
21	14.14	0.000	13392.857	10416.667	0.000	1.546875
22	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
23	116.92	0.003	446.409	440.141	0.004	1.602091
24	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
25	2.63	0.000	11718.750	18750.000	0.000	3.984375

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	131.74	0.003	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.004	\$\$\$\$\$\$\$\$
SD	120.23	0.003	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.005	\$\$\$\$\$\$\$\$
SE	24.34	0.001	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.001	\$\$\$\$\$\$\$\$

26	55.26	0.002	726.744	738.189	0.002	3.961483
27	419.17	0.012	134.866	107.883	0.015	1.201539
28	189.10	0.005	316.723	267.194	1.006	1.872256
29	57.32	0.002	664.894	679.340	1.002	1.956251
30	1.77	0.011	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.011	\$\$\$\$\$\$\$\$
31	15.34	0.003	3348.214	4261.364	1.001	1.253777
32	87.41	0.002	541.908	548.246	0.003	1.257512
33	100.38	0.003	490.838	427.404	1.003	1.365341
34	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
35	9.02	0.000	5208.333	5859.375	0.000	1.350000
36	4.51	0.000	7812.500	8502.727	0.000	1.125000
37	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
38	6.58	0.000	6696.409	8522.727	0.000	1.640625
39	38.35	0.001	910.194	852.273	0.002	1.193365
40	1210.34	0.004	46.342	37.909	0.006	2.016669
41	86.65	0.002	561.377	545.758	0.003	1.157645
42	97.74	0.003	488.281	501.337	1.003	1.354167
43	1.88	0.000	31250.000	23437.500	0.000	1.406250
44	8.46	0.007	3750.100	1750.000	0.003	1.791316
45	7.14	0.000	4687.500	4261.364	0.003	1.667969
46	64.66	0.002	684.307	750.000	1.003	1.007813
47	289.47	0.008	162.197	158.094	1.011	1.273897
48	1251.32	0.005	93.844	134.749	0.018	1.821982
49	379.12	0.011	134.092	144.009	0.011	1.866980
50	234.40	0.007	176.554	196.954	0.009	1.043806

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	143.15	0.004	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.004	\$\$\$\$\$\$\$\$
SD	251.70	0.007	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.007	\$\$\$\$\$\$\$\$
SE	35.60	0.001	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.001	\$\$\$\$\$\$\$\$

DATE 11/26/78
 MOBIL TYCO SAMPLE # 15
 TWINS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 BTM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 31.19 X 100

MAG-83043 UNITS-MM GAL. FACTOR- 1.100375 UNITS/PP
 FRAME AREA- 1.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	0.000	0.000	0.00000000	
2	0.00	0.000	0.000	0.000	0.00000000	
3	0.00	0.000	0.000	0.000	0.00000000	
4	0.54	7.702	93.750	46.875	1.127	0.000002
5	3.57	53.745	20.833	15.425	0.991	1.000000
6	6.59	92.429	23.438	6.748	0.181	0.000006
7	9.88	148.455	26.786	5.368	0.213	0.000007
8	5.13	72.946	37.500	6.048	0.165	0.000006
9	25.07	356.575	11.029	2.679	0.408	0.000010
10	29.60	420.913	7.813	1.431	0.744	0.000006
11	34.69	493.406	6.250	1.369	0.792	0.000007
12	6.56	93.335	23.438	4.934	0.227	0.000015
13	60.53	860.854	6.250	1.018	0.877	0.000013
14	46.86	666.483	8.523	1.786	0.624	0.000017
15	22.36	318.063	9.375	1.488	0.696	0.000005
16	8.12	115.536	13.393	1.995	0.475	0.000003
17	46.07	655.156	11.029	3.233	0.341	0.000029
18	41.54	598.818	5.368	1.234	0.877	0.000009
19	10.83	154.048	11.719	3.472	0.317	0.000006
20	41.26	586.740	4.261	1.165	0.941	0.000010
21	77.51	1102.347	6.048	1.130	0.952	0.000016
22	80.41	1143.577	5.368	1.078	1.019	0.000014
23	83.69	1190.245	6.048	1.630	0.677	0.000026
24	113.06	1607.986	6.944	1.894	0.603	0.000042
25	63.71	906.163	5.682	1.410	0.784	0.000017

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	32.70	466.061	0.000	0.000	0.481	0.00000000
SD	31.32	446.033	0.000	0.000	0.337	0.00000000
SE	6.28	89.247	0.000	0.000	0.067	0.00000000

26	96.91	1378.273	4.076	1.130	0.997	0.000020
27	84.61	1203.384	5.859	1.589	0.699	0.000021
28	16.34	232.431	11.719	4.261	0.269	0.000010
29	5.54	78.836	14.423	0.934	0.224	0.000003
30	8.82	125.534	9.968	0.841	0.373	0.000003
31	8.86	125.957	14.423	2.467	0.427	0.000004
32	11.47	163.109	12.500	1.995	0.531	0.000003
33	13.63	193.919	18.750	5.357	0.208	0.000015
34	0.00	0.000	0.000	0.000	0.000	0.00000000
35	17.78	252.819	8.152	1.736	0.624	0.000005
36	33.48	476.188	4.261	1.042	0.837	0.000006
37	4.40	62.525	31.250	9.868	0.112	0.000006
38	8.89	126.418	11.719	3.348	0.331	0.000004
39	7.45	106.021	17.045	2.604	0.392	0.000003
40	44.89	638.392	4.573	1.157	0.941	0.000009
41	42.88	609.847	3.827	1.150	0.968	0.000010
42	4.97	70.681	26.786	5.515	0.203	0.000004
43	22.11	314.438	11.719	0.060	0.517	0.000007
44	26.47	376.511	8.523	2.568	0.437	0.000010
45	30.87	439.036	9.968	3.827	0.301	0.000019
46	19.11	271.849	14.423	2.717	0.192	0.000008
47	16.95	241.039	31.250	7.590	0.147	0.000019
48	1.40	19.936	93.750	18.750	0.323	0.000003
49	0.00	0.000	0.000	0.000	0.000	0.00000000
50	4.65	66.150	20.833	7.212	0.169	0.000005

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.00	383.995	0.000	0.000	0.453	0.00000000
SD	28.46	404.790	0.000	0.000	0.319	0.00000000
SE	4.03	57.246	0.000	0.000	0.045	0.00000000

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 11/26/78
MOBIL TYCO SAMPLE # 15
DISLOCATION PITS ONLY
VERSION 2, IGNORE AFETA
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE DISLOCATION PIT AREA = 4.42. PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	566.29	0.016	89.799	95.178	1.018	1.197226
2	1192.31	0.034	41.519	43.586	1.039	1.069399
3	1315.38	0.037	40.921	39.524	0.944	1.218471
4	379.64	0.011	122.870	126.008	0.014	0.918166
5	365.38	0.010	138.683	150.000	0.012	1.107851
6	176.24	0.005	276.549	226.449	0.006	1.005017
7	308.82	0.009	158.094	165.344	0.011	0.974381
8	32.58	0.001	1420.455	1488.195	0.001	0.964286
9	118.55	0.003	448.565	418.527	1.004	1.023438
10	76.24	0.002	689.338	426.136	0.003	0.894163
11	183.94	0.005	280.689	220.770	0.006	1.203454
12	218.33	0.006	232.054	224.282	0.008	0.969308
13	57.24	0.002	732.422	732.422	0.002	0.912260
14	52.71	0.001	986.842	655.594	0.002	0.840144
15	68.55	0.002	704.887	710.227	0.003	0.835478
16	283.94	0.008	183.464	181.335	0.010	1.116990
17	27.38	0.001	2757.353	1768.868	0.001	2.126953
18	54.52	0.002	794.492	762.195	0.002	1.355625
19	251.58	0.007	224.820	195.313	0.008	1.071062
20	184.62	0.005	306.373	342.153	0.006	1.002530
21	75.79	0.002	738.189	732.422	0.002	1.207933
22	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
23	12.44	0.000	11718.750	6250.000	0.000	1.933594
24	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
25	40.05	0.001	2343.750	604.839	0.001	2.765625

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	241.70	0.007	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.008	\$\$\$\$\$\$\$\$
SD	329.76	0.009	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.011	\$\$\$\$\$\$\$\$
SE	65.95	0.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.002	\$\$\$\$\$\$\$\$

26	94.57	0.003	551.471	485.751	0.004	1.399554
27	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
28	223.98	0.006	264.831	172.529	0.007	1.169905
29	177.38	0.005	317.797	192.069	0.006	1.167796
30	43.57	0.001	2604.167	7812.533	0.001	0.725156
31	227.36	0.006	232.354	223.588	0.008	0.951172
32	78.73	0.002	679.348	684.307	0.003	1.112216
33	113.00	0.003	520.833	538.793	0.003	1.571875
34	1529.64	0.044	42.730	44.452	0.039	1.835455
35	719.91	0.020	87.291	76.593	0.018	1.741124
36	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
37	6.11	0.000	7211.538	6696.429	0.000	0.632813
38	503.39	0.014	127.033	103.363	0.014	1.655506
39	61.99	0.002	1339.286	1143.293	0.001	0.210938
40	115.38	0.003	679.348	349.813	0.004	2.049107
41	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
42	12.22	0.000	4076.387	3024.194	0.000	0.843750
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
45	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
46	3.62	0.000	4464.286	15625.700	0.000	0.281250
47	3.62	0.000	11718.750	11718.750	0.000	0.750000
48	15.84	0.000	3605.769	3472.222	0.000	0.461938
49	656.11	0.019	89.331	85.150	0.019	1.406250
50	756.33	0.022	84.383	66.254	0.022	1.358698

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	227.58	0.006	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.007	\$\$\$\$\$\$\$\$
SD	342.96	0.010	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.010	\$\$\$\$\$\$\$\$
SE	48.50	0.001	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.001	\$\$\$\$\$\$\$\$

DATE 11/26/78
 MOBIL TYCO SAMPLE # 16
 TWINS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 JTM DJT PJT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 26.65 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 1.178313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	20.94	297.786	8.523	2.344	7.472	3.000005
2	21.31	303.123	20.833	4.726	7.267	0.000011
3	52.95	753.004	6.944	11.645	7.645	3.000013
4	39.55	562.485	8.929	2.783	7.531	3.000015
5	92.91	1321.359	4.934	1.784	1.005	3.000022
6	107.19	1523.085	5.357	1.465	7.757	3.000029
7	26.23	373.033	8.523	1.705	7.637	3.000005
8	9.23	131.282	26.786	3.989	7.267	3.000004
9	5.59	79.516	31.250	6.250	7.171	3.000003
10	34.22	486.704	9.868	1.759	7.576	3.000011
11	29.27	416.260	11.029	2.107	7.512	3.000009
12	17.79	252.958	11.029	2.976	7.365	3.000006
13	29.31	416.794	5.859	1.330	7.824	3.000007
14	10.51	149.427	15.825	3.348	7.312	3.000003
15	44.17	628.126	7.813	1.720	7.800	3.000008
16	38.58	434.939	8.152	1.563	7.685	3.000007
17	36.70	521.926	8.929	1.500	7.712	3.000007
18	144.13	2049.814	4.688	1.447	7.356	3.000002
19	100.79	1433.429	6.944	1.130	7.952	3.000018
20	47.43	674.555	6.696	1.130	7.936	3.000008
21	1.01	14.409	187.500	18.750	7.356	3.000002
22	10.28	146.225	20.833	7.212	7.163	3.000010
23	26.57	377.836	9.375	1.537	7.691	3.000008
24	21.84	319.594	11.129	1.689	7.629	3.000005
25	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	38.42	546.347	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.561	\$\$\$\$\$\$\$\$
SD	35.38	503.138	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.193	\$\$\$\$\$\$\$\$
SE	7.08	100.628	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.759	\$\$\$\$\$\$\$\$

26	11.33	161.167	23.438	3.827	7.287	3.000006
27	24.32	341.547	17.417	1.114	7.656	3.000005
28	124.15	1754.373	5.718	1.349	7.329	3.000004
29	115.38	1641.126	5.682	1.256	7.624	3.000009
30	23.15	286.579	17.417	1.752	7.514	3.000005
31	3.90	56.531	62.500	11.129	7.131	3.000005
32	54.93	781.288	6.944	2.799	7.421	3.000003
33	30.39	432.270	11.029	1.410	7.731	3.000006
34	4.02	57.132	46.875	13.393	7.988	3.000005
35	14.75	209.731	23.438	4.167	7.267	3.000011
36	12.98	184.649	18.750	4.573	7.237	3.000008
37	18.65	265.232	13.393	2.738	7.517	3.000006
38	7.69	109.402	20.833	4.934	7.227	3.000005
39	4.43	62.973	93.750	15.625	7.769	3.000008
40	22.14	314.863	12.500	1.500	7.693	3.000005
41	58.09	826.116	6.466	1.359	7.816	3.000011
42	41.88	595.572	13.393	2.259	7.487	3.000013
43	23.53	334.609	9.868	1.752	7.608	3.000005
44	23.11	328.739	9.868	2.641	7.413	3.000009
45	3.30	46.963	187.500	15.625	7.167	3.000006
46	11.74	167.738	10.417	3.324	7.373	3.000005
47	35.61	506.450	14.423	2.641	7.405	3.000015
48	12.68	180.379	14.423	3.676	7.301	3.000005
49	9.19	130.748	12.500	6.696	7.205	3.000011
50	3.86	54.968	8.929	26.786	7.104	3.000007

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	33.04	469.958	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.483	\$\$\$\$\$\$\$\$
SD	33.64	478.375	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.278	\$\$\$\$\$\$\$\$
SE	4.76	67.652	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.009	\$\$\$\$\$\$\$\$

M DATE 11/26/78
 MOBIL TYCOJ SAMPLE # 16
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.00

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	268.60	0.008	214.531	197.785	3.008	1.587754
2	154.40	0.004	344.669	319.966	3.006	1.696289
3	157.40	0.004	385.802	356.464	3.004	1.875794
4	257.60	0.007	218.531	202.922	3.008	1.631757
5	5.40	0.000	5696.429	7812.500	3.003	1.898438
6	19.30	0.001	3605.769	3605.769	0.000	2.671875
7	133.20	0.004	398.936	196.954	0.006	1.300781
8	357.00	0.010	150.700	124.834	0.012	1.559103
9	254.60	0.007	232.054	211.625	0.007	1.614920
10	115.20	0.003	426.136	384.221	0.005	1.140845
11	350.60	0.010	141.190	116.895	0.013	1.384919
12	858.60	0.024	64.789	64.566	0.026	1.775376
13	388.80	0.011	144.900	129.668	0.013	1.469758
14	528.30	0.018	103.249	88.328	0.017	2.073063
15	303.80	0.009	232.054	206.954	0.008	2.347356
16	130.00	0.004	430.046	299.521	0.004	1.344210
17	495.20	0.014	110.424	100.698	0.017	1.409666
18	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
19	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
20	93.80	0.003	568.182	545.858	0.003	1.244399
21	5.60	0.000	4687.500	6696.429	0.000	3.787500
22	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
23	222.20	0.006	265.581	150.966	0.008	1.460134
24	401.60	0.011	123.193	132.742	0.013	1.319509
25	449.40	0.013	107.883	103.249	0.015	1.234314

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	242.01	0.007	SSSSSSSS	SSSSSSSS	0.008	SSSSSSSSSSSS
SD	212.44	0.006	SSSSSSSS	SSSSSSSS	0.007	SSSSSSSSSSSS
SE	42.49	0.001	SSSSSSSS	SSSSSSSS	0.001	SSSSSSSSSSSS

26	159.10	0.005	284.091	252.315	0.006	1.796748
27	228.40	0.006	289.352	217.674	0.007	1.529464
28	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
29	6.00	0.000	13416.667	11718.750	0.000	2.119375
30	133.40	0.004	301.447	313.545	0.004	1.775398
31	751.40	0.021	79.114	79.449	0.021	1.886884
32	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
33	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
34	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
35	0.00	0.000	SSSSSSSS	SSSSSSSS	0.000	SSSSSSSSSSSS
36	35.80	0.001	1320.423	1284.247	0.001	1.258594
37	266.40	0.008	218.531	224.082	0.008	1.992686
38	21.60	0.001	2038.043	2038.043	0.001	1.084821
39	204.80	0.006	263.343	252.695	0.007	1.321171
40	75.00	0.002	710.327	679.348	0.002	1.425253
41	155.40	0.004	461.823	414.095	0.004	2.023438
42	3.40	0.000	13392.857	13392.857	0.000	1.796875
43	1.40	0.000	13392.857	15625.700	0.000	1.195313
44	22.60	0.001	2083.333	2083.333	0.001	1.059375
45	40.20	0.001	1266.892	1143.293	0.001	1.046875
46	355.80	0.010	182.749	177.321	0.009	2.156654
47	188.40	0.005	292.056	283.233	0.006	1.471875
48	336.40	0.010	214.041	143.349	0.010	2.296420
49	162.80	0.005	284.954	300.481	0.006	1.286166
50	652.40	0.019	80.680	90.758	0.019	1.744178

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	197.16	0.006	SSSSSSSS	SSSSSSSS	0.006	SSSSSSSSSSSS
SD	209.03	0.006	SSSSSSSS	SSSSSSSS	0.006	SSSSSSSSSSSS
SE	29.56	0.001	SSSSSSSS	SSSSSSSS	0.001	SSSSSSSSSSSS

DATE 11/26/78
 MOBIL TYCO SAMPLE # 17
 TWINS ONLY
 VERSION 2. IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 JTM OUT PJT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 27.48 * 100

MAG-800.0 UNITS-MM CAL. FACTOR- 1.770375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	79.34 1128.324	4.934	1.084	1.308	1.000013
2	119.04 1692.999	6.348	1.379	0.805	1.000051
3	28.83 410.019	7.500	1.705	3.635	1.000006
4	8.56 121.773	23.438	6.496	1.165	1.000007
5	17.85 253.821	9.375	1.974	3.549	1.000005
6	68.53 974.695	5.682	1.003	1.059	1.000011
7	3.61 51.381	46.875	7.813	0.139	1.000004
8	2.75 39.049	62.500	10.417	1.194	1.000004
9	16.51 234.811	18.750	3.606	3.296	1.000008
10	68.61 975.723	8.523	1.399	1.760	1.000017
11	2.96 42.132	62.500	7.500	1.139	1.000013
12	38.33 545.751	15.625	2.500	1.429	1.000017
13	66.73 949.004	6.944	1.894	1.589	1.000029
14	6.94 98.651	31.250	4.934	1.219	1.000003
15	32.26 458.831	7.212	1.500	3.728	1.000006
16	24.42 347.335	11.719	3.178	1.357	1.000011
17	47.65 677.714	5.515	1.123	1.965	1.000012
18	17.16 244.059	17.045	2.180	1.477	1.000006
19	19.87 282.595	12.500	2.060	3.509	1.000006
20	61.85 879.640	8.152	2.344	1.483	1.000022
21	33.27 473.216	8.523	1.071	1.973	1.000005
22	78.58 1117.534	7.813	1.913	1.579	1.000024
23	55.60 790.751	6.944	1.500	1.725	1.000015
24	56.21 799.486	12.500	2.107	1.515	1.000017
25	81.30 1151.959	13.393	1.579	1.411	1.000039

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
AVERAGE						
SD	41.46	589.626	16.853	1.022	1.544	1.000014
SE	39.27	430.529	16.299	1.442	1.278	1.000012
	6.35	86.106	3.260	1.488	1.156	1.000002

26	1.13	1.100	55555555	55555555	1.700	5555555555
27	1.55	22.394	187.500	11.250	1.137	1.000016
28	3.30	3.100	55555555	55555555	4.100	5555555555
29	9.47	134.618	62.500	7.500	1.141	1.000019
30	7.37	104.817	46.875	6.348	1.173	1.000006
31	17.30	246.114	37.500	15.625	1.000	1.000034
32	5.74	81.696	23.438	7.500	3.155	1.000007
33	12.17	173.154	8.152	4.454	1.388	1.000012
34	39.27	558.510	9.375	1.537	1.691	1.000015
35	72.36	1029.159	9.868	2.435	1.461	1.000026
36	57.70	820.552	7.500	1.537	1.709	1.000013
37	47.33	673.380	8.523	1.689	1.640	1.000012
38	53.83	722.929	11.329	1.786	1.592	1.000016
39	104.59	1487.476	6.466	1.913	1.607	1.000011
40	58.71	829.287	11.719	1.838	1.584	1.000014
41	58.71	834.939	17.045	3.174	1.355	1.000038
42	25.40	361.207	9.375	1.705	1.627	1.000006
43	13.66	194.220	17.045	1.178	1.339	1.000005
44	2.42	34.425	62.500	15.625	1.372	1.000005
45	14.13	200.899	62.500	12.500	1.391	1.000005
46	10.01	142.325	46.875	5.968	1.308	1.000008
47	11.85	168.529	20.833	1.538	1.299	1.000006
48	39.96	568.272	11.719	3.024	1.363	1.000014
49	20.16	286.705	17.045	2.155	1.488	1.000006
50	7.62	108.414	37.500	6.048	1.176	1.000007

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
AVERAGE						
SD	34.49	490.482	55555555	55555555	1.436	5555555555
SE	29.36	417.525	55555555	55555555	1.278	5555555555
	4.15	59.347	55555555	55555555	1.339	5555555555

DATE 11/26/78
MOBIL TYCO SAMPLE # 17
DISLOCATION PITS ONLY
VERSION 2, IGNORE AFETA
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE DISLOCATION PIT AREA = 5.38 μ^2

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 0.375000 UNITS/PP
FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	5.11	1.111	13392.257	13392.857	1.111	1.949219
2	5.49	1.111	11718.753	11719.750	1.111	1.359375
3	105.11	0.003	402.361	375.000	1.104	1.322828
4	135.23	0.004	352.444	246.063	1.006	1.521307
5	138.83	0.004	480.769	340.999	1.005	1.662559
6	27.84	0.001	1616.379	1704.545	1.001	1.148438
7	14.39	0.000	3125.000	4934.211	0.000	3.562500
8	823.11	0.023	76.844	73.414	1.022	2.332657
9	230.49	0.007	242.876	339.770	1.007	1.746333
10	62.31	0.002	808.190	808.190	1.002	1.492448
11	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
12	546.21	0.016	96.451	93.376	0.017	1.485577
13	169.32	0.005	264.085	261.142	1.006	1.142898
14	338.64	0.010	196.954	188.253	1.009	2.465074
15	180.11	0.005	264.085	239.770	1.007	1.123818
16	93.18	0.003	884.434	446.429	1.003	2.162109
17	73.48	0.002	837.354	822.368	1.002	2.020833
18	82.95	0.002	732.422	704.887	1.003	2.053125
19	67.61	0.002	787.515	732.422	0.002	1.056841
20	23.30	0.001	2403.846	1019.022	0.002	2.882813
21	68.56	0.002	646.552	551.471	1.003	1.156960
22	1.33	0.000	18750.000	9375.000	0.000	0.328125
23	3.60	0.000	15625.000	10416.667	0.000	1.335938
24	41.48	0.001	1464.844	1420.455	0.001	2.799716
25	1.14	0.000	18750.000	31250.000	0.000	0.843750

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
129.55	1.004	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.104	\$\$\$\$\$\$\$\$
SD 186.68	1.005	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.105	\$\$\$\$\$\$\$\$
SE 37.34	1.001	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.101	\$\$\$\$\$\$\$\$

26	1.52	1.111	18751.000	31250.000	1.111	1.125000
27	732.95	0.021	68.481	67.204	1.025	1.471861
28	1122.35	1.100	32.492	50.453	1.102	2.112000
29	506.44	1.017	85.327	87.372	1.019	1.558067
30	387.31	1.011	134.892	137.061	1.012	1.562925
31	1.73	1.100	23437.500	18750.000	1.100	1.432813
32	749.81	1.021	71.347	77.735	1.123	1.795917
33	731.63	1.121	59.551	54.879	1.124	1.829072
34	951.52	1.027	54.793	63.289	1.028	1.951657
35	53.98	0.002	956.633	837.854	1.002	1.382004
36	11.74	0.000	3750.000	4261.364	0.000	1.245536
37	21.97	0.001	2467.105	5514.796	0.000	2.039063
38	43.18	0.001	1399.254	1378.676	1.001	2.137500
39	21.78	0.001	2180.233	2343.750	1.001	1.243990
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	3.98	0.000	13392.857	10416.667	0.000	1.476563
42	40.91	0.001	1041.667	1129.518	0.002	1.215000
43	40.15	0.001	1953.125	1953.125	0.001	2.981250
44	260.80	0.007	192.111	185.277	0.009	1.423828
45	806.82	0.023	73.299	82.965	1.022	2.277804
46	712.31	0.020	72.674	77.608	1.023	1.637432
47	38.90	0.001	1339.286	1378.676	0.001	1.144176
48	117.61	0.003	436.147	404.195	1.004	1.364502
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
50	11.93	0.000	4076.087	4261.364	0.000	1.265625

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
214.10	0.006	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.007	\$\$\$\$\$\$\$\$
SD 302.23	0.009	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.009	\$\$\$\$\$\$\$\$
SE 42.74	0.001	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.001	\$\$\$\$\$\$\$\$

DATE 11/26/78
 MOBIL TYCO SAMPLE # 18
 PRINTS ONLY
 VERSION 3, IGNORE AFETA
 .11 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 9MM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 37.22 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 3.00375 INITS/PP
 FRAME AREA- 7.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
2	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.100	SSSSSSSSSSSSSS
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
4	10.73	152.568	13.393	2.976	7.363	7.000008
5	87.80	1248.755	4.934	1.725	1.053	7.000015
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.700	SSSSSSSSSSSSSS
7	3.78	53.817	62.500	5.859	7.173	7.000003
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
9	1.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.100	SSSSSSSSSSSSSS
10	4.22	60.787	93.750	14.423	7.369	7.000008
11	44.31	630.125	26.786	7.500	7.421	7.000057
12	6.58	93.526	17.045	5.682	7.200	0.000004
13	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
14	43.50	618.630	23.438	6.466	7.440	7.000083
15	19.84	282.145	10.417	2.287	7.464	0.000007
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
17	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
20	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
22	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
23	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
24	3.09	43.889	93.750	15.625	7.339	0.000006
25	5.73	81.509	37.500	8.929	0.125	7.000007

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
9.18	130.602	SSSSSSSSSS	SSSSSSSSSS	7.146	SSSSSSSSSSSSSS
SD 20.08	285.618	SSSSSSSSSS	SSSSSSSSSS	7.245	SSSSSSSSSSSSSS
SE 4.02	57.124	SSSSSSSSSS	SSSSSSSSSS	7.149	SSSSSSSSSSSSSS

26	4.85	58.969	17.745	8.929	7.147	0.000006
27	7.92	13.062	93.750	31.250	7.032	7.000004
28	2.68	18.142	37.500	11.719	7.090	7.000003
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.100	SSSSSSSSSSSSSS
30	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
31	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
33	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
34	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
35	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
36	31.81	452.478	11.729	2.344	7.459	0.000010
37	3.16	44.934	187.500	15.625	0.769	7.000006
38	57.90	823.447	15.625	4.973	7.248	7.000055
39	85.34	1213.748	11.029	2.760	1.528	7.000036
40	26.41	375.671	37.500	6.148	7.179	0.000025
41	5.00	71.859	62.500	7.500	7.139	7.000006
42	2.02	28.737	93.750	15.625	7.341	7.000004
43	76.30	1085.215	4.934	1.576	0.731	7.000037
44	13.23	188.397	17.045	4.761	7.259	7.000008
45	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
46	4.30	61.132	26.786	9.368	7.120	7.000008
47	14.18	201.682	11.729	4.688	7.253	7.000011
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
49	18.07	143.163	20.833	12.500	0.107	7.000039
50	2.39	33.962	93.750	31.250	7.037	0.000009

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
11.40	162.171	SSSSSSSSSS	SSSSSSSSSS	7.148	SSSSSSSSSSSSSS
SD 22.10	314.373	SSSSSSSSSS	SSSSSSSSSS	7.218	SSSSSSSSSSSSSS
SE 3.13	44.459	SSSSSSSSSS	SSSSSSSSSS	7.031	SSSSSSSSSSSSSS

DATE 11/26/78
 MOBIL TYCJ SAMPLE # 18
 DISLOCATION PITS ONLY
 VERSION 3, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.93 ²

MAG-800-0 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.515625000 74

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	377.07	0.311	117.776	123.193	1.314	1.596129
2	540.47	0.315	77.736	80.128	1.022	1.266023
3	581.96	0.317	69.733	71.784	1.024	1.213242
4	1.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
5	503.71	0.014	88.194	94.985	1.319	1.395505
6	126.81	0.004	292.969	315.657	0.306	1.979183
7	539.46	0.015	89.885	93.938	1.318	1.736909
8	315.18	0.009	139.509	138.889	0.012	1.307603
9	263.41	0.007	150.482	158.361	0.011	1.300333
10	11.64	0.000	3750.300	2840.909	0.001	1.302102
11	185.16	0.005	214.041	202.484	0.008	0.977255
12	100.67	0.003	340.909	359.195	1.005	1.893118
13	346.54	0.013	123.131	127.235	1.013	1.437733
14	131.23	0.004	363.172	284.091	1.005	1.541933
15	187.69	0.005	185.277	194.906	1.009	0.960219
16	365.43	0.010	117.481	127.333	0.014	1.391481
17	371.50	0.011	101.461	107.883	0.017	1.138959
18	429.68	0.012	96.055	95.660	0.018	1.220910
19	377.74	0.011	90.231	97.050	0.019	0.877437
20	1454.64	0.041	31.374	30.728	0.055	1.418750
21	1591.66	0.046	25.713	25.538	0.067	1.210498
22	401.42	0.012	92.102	99.734	0.016	1.071767
23	371.84	0.011	119.123	121.281	0.014	1.390485
24	1529.91	0.043	31.136	31.931	0.053	1.709295
25	2368.80	0.067	21.522	20.894	0.080	1.719199

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	539.14	0.315	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.321	\$\$\$\$\$\$\$\$
SE	564.10	0.316	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.020	\$\$\$\$\$\$\$\$
SE	112.82	0.003	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.004	\$\$\$\$\$\$\$\$

26	1062.23	0.030	41.759	41.472	0.043	1.431913
27	329.34	0.039	112.307	113.947	1.315	1.132974
28	328.16	0.009	118.222	123.618	0.014	1.169471
29	1642.56	0.047	35.371	31.449	0.051	0.133689
30	413.15	0.012	92.733	74.995	1.019	1.137745
31	158.85	0.005	214.694	213.162	1.018	0.771167
32	265.43	0.008	135.477	143.369	1.012	1.992573
33	395.62	0.011	90.667	97.555	0.019	0.979313
34	141.32	0.004	238.550	248.016	1.007	1.547797
35	136.93	0.004	261.872	244.141	1.007	0.913500
36	296.80	0.008	122.229	110.335	1.015	1.853448
37	191.74	0.005	216.513	201.180	0.008	1.058878
38	84.15	0.002	373.506	449.141	1.004	1.845444
39	57.50	0.002	582.298	585.938	0.003	1.726563
40	89.71	0.003	359.195	372.324	1.005	1.850142
41	10.62	0.000	3232.759	3024.194	0.001	0.738281
42	9.95	0.000	1994.681	3024.194	0.001	1.630221
43	253.38	0.037	163.899	157.399	0.011	1.248784
44	406.41	0.012	92.547	100.806	0.018	1.159082
45	239.12	0.007	164.186	167.112	0.010	1.146913
46	720.74	0.021	66.254	67.112	0.025	1.451185
47	1407.38	0.040	33.566	32.136	0.051	1.685884
48	1459.32	0.042	37.833	36.211	0.045	1.115978
49	814.50	0.023	53.879	59.637	0.030	1.496377
50	793.76	0.023	57.410	56.349	0.030	1.435839

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	533.67	0.314	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.019	\$\$\$\$\$\$\$\$
SE	517.54	0.015	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.018	\$\$\$\$\$\$\$\$
SE	73.19	0.002	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.003	\$\$\$\$\$\$\$\$

MOBILE (YD) SAMPLE #19 PL# 5-685 (18-63-1) PECO. A
 12/14/78
 AVERAGE TWIN AREA 28.19 X 100
 ITM DTPPT DIVIDED BY 100
 DISREGARD AFETA (VERSION 2)

MAG-831.3 UNITS-MM CAL. FACTOR- 3.11175 UNITS/PP
 FRAME AREA- 3.37313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	31.54	448.512	3.212	0.211	1.363	1.333333
LAST FIELD DELETED						
1	34.84	495.432	5.682	1.234	1.893	1.333333
2	28.49	405.124	4.573	2.259	1.549	0.000000
3	17.13	243.175	12.500	3.606	1.317	1.333333
4	51.22	728.517	8.152	1.369	0.781	1.333333
5	46.36	659.399	4.261	1.559	0.768	1.333333
6	21.89	311.285	9.375	3.750	1.333	1.333333
7	25.38	356.691	7.500	2.016	1.552	1.333333
8	35.23	500.981	4.934	1.465	0.781	1.000000
9	48.21	685.633	6.466	1.267	1.851	1.333333
10	19.19	272.942	9.375	2.205	0.499	1.000000
11	28.70	438.151	8.929	1.389	0.765	1.333333
12	38.24	543.865	6.466	1.320	0.816	1.000000
13	27.21	386.961	7.813	3.178	1.371	1.333333
14	70.10	996.918	4.261	1.003	1.139	1.333333
15	50.41	716.913	4.688	2.947	1.152	0.333333
16	29.50	291.639	11.029	1.820	1.584	1.000000
17	28.36	289.550	8.929	1.420	1.744	1.000000
18	30.05	427.323	4.360	1.276	1.996	1.333333
19	27.49	390.998	3.676	2.060	1.600	1.333333
20	30.05	427.323	5.068	2.060	1.584	1.000000
21	35.97	511.576	6.250	1.500	1.744	1.333333
22	26.14	371.826	4.167	1.323	1.883	1.333333
23	22.21	315.825	11.719	2.679	1.419	1.333333
24	29.36	289.599	13.393	1.736	1.600	1.333333
25	24.83	353.159	7.300	1.220	0.837	1.000000
26	37.46	532.766	6.944	1.000	1.968	1.000000
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	32.22	458.214	7.231	1.833	1.739	1.333333
SD	12.29	174.756	2.722	0.747	1.217	1.333333
SE	2.41	34.272	0.534	0.147	0.943	1.333333
27	13.76	195.751	18.750	2.500	1.427	1.333333
28	14.51	236.346	8.929	4.167	0.299	0.333333
29	41.97	596.839	2.885	1.736	1.779	1.000000
30	34.34	488.369	4.934	1.769	1.664	1.333333
31	2.63	37.334	46.875	11.719	1.000	1.333333
32	1.00	1.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	1.111	\$\$\$\$\$\$\$\$\$\$
33	1.00	1.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	1.111	\$\$\$\$\$\$\$\$\$\$
34	1.33	47.424	45.875	23.333	1.154	1.111111
35	18.55	263.869	7.813	4.360	1.299	1.333333
36	18.38	261.338	5.859	2.757	1.451	1.000000
37	33.52	476.765	5.859	2.435	0.499	1.000000
38	44.20	628.623	4.573	1.258	0.885	1.000000
39	68.46	973.710	2.799	0.919	1.264	1.000000
40	37.21	529.234	3.906	2.180	1.592	1.000000
41	17.95	255.284	6.250	5.208	1.293	0.333333
42	5.89	83.749	18.750	8.523	0.149	0.333333
43	0.00	0.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$\$
44	2.34	33.298	33.298	18.750	1.069	0.333333
45	17.56	249.734	6.944	3.906	1.344	1.000000
46	7.95	113.711	8.523	6.696	1.219	1.333333
47	0.00	0.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$\$
48	0.00	0.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$\$
49	0.00	0.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$\$
50	0.00	0.000	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$\$
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	24.40	347.085	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.516	\$\$\$\$\$\$\$\$\$\$
SD	17.35	246.815	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	1.342	\$\$\$\$\$\$\$\$\$\$
SE	2.45	34.905	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$	0.348	\$\$\$\$\$\$\$\$\$\$

DATE 12/14/78
 MOBIL TYCO SAMPLE # 19 JPL # 5-685 (IR-67-1) SPEC .A
 DISLOCATION PITS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 .31 MM STEP SIZE
 AVERAGE DISLOCATION PIT AREA = 5.11 μ^2 .

MAG-833.1 UNITS-MICRONS CAL. FACTOR- 1.37511 UNITS/ μ^2
 FRAME AREA- 3.51525111 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	VFETA	
1	3461.73	0.398	24.144	22.639	1.173	4.419337
2	1239.25	0.035	66.821	53.449	1.229	3.498587
3	2429.43	0.369	33.627	23.977	0.361	2.934664
4	2676.34	0.376	23.644	21.473	0.375	2.869762
5	2314.34	0.366	28.679	29.944	1.359	2.716388
6	2929.43	0.383	27.444	16.127	1.358	4.928541
7	3198.87	0.397	22.844	22.242	1.171	5.731264
8	1971.73	0.056	33.869	32.117	1.051	2.529314
9	2247.17	0.064	30.899	22.514	1.367	1.316522
10	936.34	0.026	99.131	63.946	1.021	4.168407
11	792.38	0.023	125.678	58.648	1.024	1.534997
12	551.51	0.316	119.732	57.139	1.023	2.569043
13	319.25	0.339	187.876	123.581	1.112	1.735777
14	619.36	0.318	73.994	72.787	1.023	1.227197
15	1581.13	0.343	41.191	25.926	0.956	1.959391
16	468.38	1.013	163.899	95.178	1.113	2.317522
17	318.68	0.339	252.695	111.342	1.311	2.243717
18	1245.89	0.335	59.866	36.997	1.118	1.178729
19	1661.32	0.347	51.568	51.258	1.331	4.672465
20	2761.73	0.079	33.045	23.499	1.063	5.563349
21	5199.81	0.148	16.932	15.591	0.999	4.632188
22	332.64	0.389	154.448	69.599	1.311	1.859163
23	8225.28	0.063	29.593	28.705	1.056	3.297279
24	3842.08	0.109	22.541	21.722	1.072	4.911744
25	592.08	0.017	314.531	71.347	1.113	5.316642
26	915.47	0.026	155.215	98.374	0.937	7.336694
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	VFETA	
1874.59	0.351	83.415	48.817	0.943	3.458368	
SD 1257.89	0.336	67.574	32.144	1.124	1.561361	
SE 246.69	0.337	13.252	5.912	1.115	1.136218	

27	1272.83	0.336	211.149	71.177	1.145	11.124176
28	725.42	1.121	297.887	50.143	1.112	14.432511
29	277.42	1.179	27.636	35.834	1.142	1.677191
30	1696.98	1.348	47.661	42.828	1.337	1.366921
31	1764.72	0.358	39.388	19.814	1.343	2.736118
32	7226.23	0.206	12.191	12.421	1.134	5.778752
33	4881.51	1.119	21.453	21.539	1.171	12.947519
34	1296.42	0.293	13.392	13.113	1.154	12.748797

LAST FIELD DELETED

34	4431.32	0.126	16.353	16.479	1.399	1.536732
35	5183.38	0.147	15.271	15.268	1.197	4.651877
36	3754.72	0.107	19.438	19.174	1.383	4.499196
37	3129.25	0.089	28.069	28.828	1.163	8.879840
38	886.63	0.023	104.151	71.293	1.023	3.264311
39	1799.25	0.051	51.568	36.258	0.939	4.688811
40	3485.14	0.097	22.105	22.308	1.374	4.488838
41	3698.11	0.105	19.683	21.777	0.178	5.180921
42	2728.94	0.377	22.849	21.782	1.371	2.852255
43	2386.79	0.068	24.953	23.538	1.369	2.207189
44	3594.34	0.102	22.514	22.961	1.072	4.532876
45	4483.96	0.128	19.495	18.978	1.381	4.489229
46	5353.21	0.172	17.345	17.569	1.199	2.496292
47	3736.44	0.377	20.257	23.919	1.381	1.917152
48	7914.53	1.225	13.944	11.451	1.145	5.416713
49	7799.43	1.222	9.749	11.184	1.158	2.812399
50	6943.40	0.198	13.653	15.635	0.111	7.747996
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	VFETA	
2759.88	0.078	63.657	37.958	1.059	4.897384	
SD 1991.82	0.357	69.222	26.136	1.035	3.347141	
SE 281.57	1.338	9.789	1.739	1.115	1.423195	

DATE 12/14/78
 MOBIL TYCO SAMPLE # 21 JPL # 5-685-(18-63-1) SPEC .3
 TWINS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 .31 MM STEP SIZE
 ITEM OUT PUT DATA DIVIDED BY 133
 AVERAGE TWIN AREA = 27.22 X 133

MAG-800.3 UNITS-MM CAL. FACTOR- 3.39375 NITS/PP
 FRAME AREA- 3.870313

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AFETA	
1	12.49	177.647	15.625	4.368	9.251	7.000006
2	13.30	189.142	7.212	2.509	7.464	7.000006
3	25.53	363.132	13.393	1.524	3.683	7.000005
4	33.80	483.692	7.813	1.339	7.797	7.000016
5	22.30	317.152	8.152	2.084	7.477	7.000009
6	21.75	309.315	7.813	2.757	7.403	7.000009
7	24.28	345.367	9.375	2.107	7.517	7.000008
8	43.13	613.435	7.500	1.719	1.740	7.000007
9	71.68	1019.381	5.515	1.842	1.029	7.000012
10	27.52	391.346	6.250	1.894	3.603	7.000011
11	12.49	177.647	10.417	3.989	7.293	7.000007
12	51.33	725.741	3.989	1.198	1.137	7.000013
13	28.94	297.823	7.813	2.107	7.536	7.000007
14	40.41	574.741	4.261	1.189	1.333	7.000009
15	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
16	6.87	97.706	18.750	6.048	3.163	7.000007
17	4.89	69.491	14.423	6.466	3.192	7.000013
18	4.22	60.087	23.438	9.375	4.147	7.000003
19	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
20	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
21	2.17	30.827	37.500	31.250	7.053	7.000003
22	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
23	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
24	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
25	1.76	35.083	37.500	26.786	7.051	7.000002
26	4.22	60.087	37.500	11.719	7.131	7.000003

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
	17.11	243.330	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.381	\$\$\$\$\$\$\$\$
SD	18.38	261.339	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.365	\$\$\$\$\$\$\$\$
SE	3.67	51.253	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.372	\$\$\$\$\$\$\$\$

27	24.72	351.637	7.813	2.287	3.496	7.100017
28	16.75	238.256	4.363	2.287	7.557	7.100017
29	2.53	35.529	46.875	15.625	7.769	7.100017
30	26.52	77.239	9.375	2.338	7.557	7.100011
31	25.32	355.817	7.813	2.183	7.515	7.100017
32	5.11	72.626	23.438	9.375	7.128	7.100013
33	19.65	279.333	11.719	2.641	7.427	7.100019
34	5.99	85.166	18.753	7.533	7.155	7.100016
35	7.85	109.318	15.625	4.688	0.253	7.000005
36	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
37	29.32	416.948	3.024	1.399	3.885	7.000017
38	0.66	9.405	\$\$\$\$\$\$\$\$	23.750	0.016	7.000007
39	4.59	69.311	26.786	12.500	7.399	7.000004
40	2.79	39.709	18.750	12.500	7.115	7.000005
41	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
42	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
43	3.53	50.159	31.250	14.417	7.115	7.000003
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.000	\$\$\$\$\$\$\$\$
45	17.93	254.976	5.859	2.757	7.451	7.100017
46	29.98	426.353	6.944	1.389	7.794	7.100017
47	15.33	213.699	9.868	4.466	7.295	7.100019
48	17.67	251.318	6.944	3.753	7.339	7.100017
49	27.66	393.436	5.748	2.641	7.461	7.100013
50	13.73	152.568	13.193	4.464	7.261	7.100017

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
	14.76	209.916	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.376	\$\$\$\$\$\$\$\$
SD	15.34	218.123	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.319	\$\$\$\$\$\$\$\$
SE	2.17	38.847	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	7.345	\$\$\$\$\$\$\$\$

DATE 12/14/78
 MOBIL TYCD SAMPLE # 29 JPL # 5-485 (18-63-1) SPEC . 1
 DISLOCATION PITS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 .31 MM STEP SIZE
 AVERAGE DISLOCATION PIT AREA = 5.15 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.115625000 04.

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	2508.78	0.371	28.133	29.449	0.957	3.773145
2	2724.08	0.377	23.719	24.929	0.966	3.863321
3	267.96	0.008	171.793	174.581	0.913	1.155134
4	952.04	0.027	196.954	47.807	0.018	12.312221
5	1645.44	0.047	35.646	37.232	0.946	2.139419
6	2973.68	0.384	26.989	27.190	0.759	3.787715
7	1733.11	0.048	59.111	41.946	0.031	5.696463
8	424.27	0.012	127.551	129.848	0.013	1.726211
9	465.05	0.013	100.353	100.698	0.317	1.207157
10	2554.56	0.073	34.687	37.485	0.044	5.948754
11	4587.57	0.130	20.196	18.852	0.083	5.964823
12	1593.59	0.045	43.083	37.321	0.042	2.424630
13	2099.03	0.060	39.275	37.833	0.041	4.053750
14	1529.90	0.044	45.844	41.648	0.340	3.077734
15	5828.93	0.166	15.167	15.063	0.137	6.464650
16	3015.73	0.086	23.408	24.927	0.367	3.798342
17	5149.71	0.146	14.452	15.010	0.119	4.053821
18	6860.78	0.195	12.779	12.257	0.125	5.804560
19	9327.38	0.265	8.345	8.416	0.198	4.784039
20	5007.38	0.142	24.357	23.938	0.064	14.165771
21	3585.24	0.102	21.321	19.535	0.079	4.993269
22	3170.68	0.090	18.859	19.243	0.385	2.970589
23	5517.28	0.157	13.313	13.986	0.118	4.802547
24	4781.75	0.134	12.239	12.853	0.132	2.641655
25	6092.62	0.173	13.136	12.917	0.123	5.303354

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
3371-J2	0.096	45.216	38.582	0.371	4.632922
SJ 2223.39	0.363	49.238	38.664	0.345	2.953862
SE 444.62	0.113	9.642	7.733	0.199	1.593772

26	4828.93	0.137	15.353	14.953	0.113	4.752379
27	2994.95	0.385	27.193	23.919	0.364	6.392697
28	5140.97	0.146	15.933	14.879	0.199	6.520468
29	4193.23	0.119	15.831	15.612	0.104	3.290137
30	1940.58	0.355	36.765	23.819	0.358	3.715893
31	595.92	0.317	92.365	94.289	0.118	1.699124
32	5326.72	0.151	14.687	15.553	0.137	4.877216
33	2313.98	0.066	31.208	35.099	0.149	2.535532
34	2164.85	0.362	29.828	31.715	0.355	2.516578
35	6359.03	0.181	10.794	11.362	0.149	4.268145
36	7674.95	0.218	12.924	12.394	0.135	9.566857
37	3995.73	0.114	16.158	14.259	0.107	3.226066
38	6142.52	0.175	10.846	10.942	0.149	4.228642
39	5711.65	0.162	14.341	13.178	0.119	4.855029
40	4381.17	0.125	17.967	19.191	0.091	4.450131
41	5988.54	0.170	13.811	14.761	0.113	5.517832
42	4290.68	0.122	18.426	18.437	0.086	4.825141
43	2390.10	0.068	33.566	24.026	0.359	3.489825
44	4625.24	0.132	19.184	19.398	0.085	5.145449
45	5072.82	0.144	14.630	15.145	0.111	4.059479
46	1841.17	0.052	37.143	36.507	0.043	2.897171
47	3177.86	0.190	19.113	20.447	0.084	2.437997
48	1852.23	0.353	35.334	38.265	0.044	2.783033
49	2743.69	0.378	28.971	29.895	0.157	3.586699
50	5086.80	0.145	16.667	17.946	0.096	5.109505

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
3702.18	0.105	34.576	31.313	0.379	1.435467
SD 2317.23	0.057	38.164	30.695	0.340	2.380339
SE 285.28	0.008	5.397	4.341	0.006	1.336627

DATE 12/16/78
 MOBILE TYCO SAMPLE #21 JPL 5-685 (18-63-1) SPEC. 1
 TWINS ONLY
 JTM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 31.14X100

AG-839-3 UNITS-MM CAL. FACTOR- 1.333375 UNITS/PP
 FRAME AREA- 3.373313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	0.000	0.000	0.0000000000
LAST FIELD DELETED					
1	52.53	747.393	6.466	1.793	1.333377
2	46.54	661.873	6.944	1.179	1.000000
3	59.55	846.989	4.464	1.250	1.333314
4	37.66	436.341	8.152	1.000	1.333378
5	1.00	0.000	0.000	0.000	0.0000000000
6	11.88	169.819	6.250	2.933	1.000000
7	18.61	264.655	7.212	2.373	0.000011
8	9.42	133.984	11.719	3.409	1.000004
9	18.51	263.234	19.417	2.467	1.000007
10	0.00	0.000	0.000	0.000	0.0000000000
11	9.89	140.613	18.417	3.906	1.000006
12	28.15	400.533	14.423	1.894	1.000008
13	13.78	196.095	17.045	3.024	0.000006
14	7.49	136.525	62.300	9.868	0.000016
15	71.84	1021.690	6.696	1.250	1.000014
16	75.30	1070.928	6.048	3.889	1.000013
17	57.86	822.844	6.250	1.157	0.000010
18	57.82	822.370	6.944	3.884	1.000008
19	30.16	428.939	8.152	1.875	0.000009
20	30.36	431.780	6.250	0.995	0.000011
21	60.42	859.299	3.289	3.833	1.000009
22	19.27	274.123	5.515	2.107	0.000006
23	29.73	422.784	3.827	1.953	0.000003
24	11.75	167.125	18.750	4.167	0.000007
25	28.30	402.426	5.859	1.856	1.000013

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.19	443.635	0.000	0.000	1.613	0.0000000000
SD	22.22	315.972	0.000	0.000	1.767	0.0000000000
SE	4.44	63.194	0.000	0.000	1.372	0.0000000000

26	12.62	179.435	6.944	3.568	1.501	1.000005
27	16.91	247.509	8.523	2.534	0.445	1.000007
28	30.06	427.519	6.496	1.769	0.632	1.000010
29	14.55	236.895	14.423	5.368	1.229	1.000015
30	36.98	525.995	5.682	1.176	1.741	1.000011
31	31.39	432.253	4.360	1.187	0.949	1.000011
32	4.69	66.755	18.750	6.466	1.184	1.000005
33	56.09	797.751	4.076	1.442	0.856	1.000018
34	28.66	407.634	5.859	2.717	0.459	0.000003
35	3.76	53.499	37.500	23.438	0.053	0.000016
36	0.00	0.000	0.000	0.000	0.000	0.0000000000
37	3.86	54.919	23.438	9.868	3.123	0.000004
38	27.46	390.590	6.048	2.373	0.496	0.000009
39	7.62	108.418	9.375	3.750	0.325	0.000003
40	7.22	102.737	26.786	7.500	1.152	0.000006
41	0.00	0.000	0.000	0.000	0.000	0.0000000000
42	1.66	23.672	37.500	26.786	1.356	1.000002
43	0.00	0.000	0.000	0.000	0.000	0.0000000000
44	0.00	0.000	0.000	0.000	0.000	0.0000000000
45	0.00	0.000	0.000	0.000	0.000	0.0000000000
46	0.00	0.000	0.000	0.000	0.000	0.0000000000
47	0.00	0.000	0.000	0.000	0.000	0.0000000000
48	0.00	0.000	0.000	0.000	0.000	0.0000000000
49	0.00	0.000	0.000	0.000	0.000	0.0000000000
50	0.00	0.000	0.000	0.000	0.000	0.0000000000

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	21.25	302.189	0.000	0.000	1.431	0.0000000000
SD	21.37	303.932	0.000	0.000	1.376	0.0000000000
SE	3.02	42.978	0.000	0.000	0.053	0.0000000000

DATE 12/16/78
 MOBILE (YC) SAMPLE # 31 JPL 9-685 (19-63-1) PEO C
 DISLOCATION SITES
 DISLOCATION PITS
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT SIZE = 5.91 PP

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 94

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	1351.42	3.339	34.559	36.772	1.747	1.748793
2	1206.89	0.034	38.375	37.681	1.745	1.581333
3	12.18	0.000	3232.759	3929.688	0.001	1.125000
4	3794.25	0.138	14.754	15.402	1.198	1.115983
5	4175.80	0.119	15.185	15.677	1.196	4.141389
6	143.32	0.004	333.630	357.647	1.095	2.318833
7	0.00	0.000	55555555	55555555	1.000	5555555555
8	28.14	0.001	2083.333	2286.585	1.093	1.673438
9	487.65	1.014	422.297	82.021	1.719	12.665339
10	45.85	0.001	1320.423	616.776	1.032	1.199918
11	685.45	0.019	68.581	68.883	1.024	1.735814
12	263.62	0.007	182.039	182.039	1.000	1.841124
13	1803.51	0.051	32.883	31.125	1.153	1.536255
14	5425.55	0.154	11.692	11.869	1.141	1.738923
15	5354.82	0.132	13.467	10.467	1.157	1.771282
16	6429.47	0.183	10.813	11.288	1.157	5.195731
17	1852.96	0.053	33.057	32.106	1.000	1.333300
18	7549.07	0.215	10.446	10.875	1.148	1.949421
19	5751.95	0.164	11.597	11.830	1.138	4.737766
20	322.00	0.009	176.222	172.970	1.000	1.261529
21	1895.77	0.054	29.866	30.992	1.055	1.823589
22	6945.18	0.198	12.350	12.619	1.127	1.584880
23	4931.13	0.026	127.205	62.045	0.021	6.558130
24	0.00	0.000	55555555	55555555	1.000	5555555555
25	40.44	0.001	1157.477	1053.371	1.102	1.292668

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2259.42	1.364	55555555	55555555	1.157	5555555555
SD	2577.59	1.071	55555555	55555555	1.157	5555555555
SE	501.52	0.114	55555555	55555555	1.111	5555555555

26	313.32	0.009	166.519	183.135	1.013	2.147279
27	903.38	1.026	50.457	51.713	1.134	1.455333
28	1500.51	0.343	39.128	33.626	1.347	1.581913
29	414.89	0.012	159.713	77.734	1.112	1.856514
30	2539.93	1.072	29.269	19.353	1.191	1.919115
31	3435.33	1.098	19.353	19.353	1.131	1.517133
32	2889.68	1.182	23.638	27.194	1.163	1.473611
33	1271.40	0.036	40.957	40.167	1.042	1.113313
34	4082.74	0.116	14.123	14.436	1.114	1.231563
35	1375.47	0.039	32.895	31.002	0.052	1.858765
36	745.85	0.021	63.473	59.037	1.029	1.538151
37	1711.17	0.049	26.874	29.133	1.158	1.232563
38	1536.38	1.044	30.301	31.323	1.053	1.976507
39	2168.70	0.062	23.408	22.838	1.071	1.150824
40	2519.29	1.072	18.453	18.325	1.089	2.015174
41	1680.54	0.048	39.079	32.328	1.144	1.816086
42	4574.62	0.130	14.419	13.666	1.114	4.252727
43	3095.43	0.088	15.344	15.524	1.107	1.965312
44	4932.32	0.140	12.424	13.540	1.126	4.037697
45	3391.71	1.088	16.602	17.442	0.199	1.316952
46	2138.75	1.061	24.897	25.433	1.065	1.528450
47	2022.50	1.058	29.583	33.280	1.045	1.437389
48	4146.70	1.118	13.273	13.384	1.126	1.581496
49	7962.94	0.227	8.365	8.717	1.189	1.884098
50	6489.85	0.185	13.685	13.524	1.153	1.975712

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2480.51	0.071	55555555	55555555	1.067	5555555555
SD	2203.60	0.163	55555555	55555555	1.051	5555555555
SE	311.64	0.009	55555555	55555555	1.007	5555555555

DATE 12/18/78
 MOBIL TYCO SAMPLE # 22 JPL 7-895 (17-53-1) SPEC 1
 TWIN ONLY
 TEM DIT PJT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA =26.63X100

MAG-500.3 UNITS-MM CAL. FACTOR- 3.70375 UNITS/μm
 FRAME AREA- 3.77313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	72.06	1024.876	3.348	1.453	1.835	1.111122
2	22.72	323.111	8.152	1.894	1.568	1.111115
3	47.95	682.004	5.768	2.259	1.525	1.111123
4	24.67	350.882	6.696	2.259	1.536	1.111117
5	12.39	171.977	13.417	3.410	1.334	1.111116
6	2.97	42.191	31.250	13.793	1.393	1.111116
7	17.80	25.635	46.875	12.500	1.069	1.111112
8	39.47	561.385	3.472	1.419	1.845	1.111111
9	55.43	788.284	6.250	1.705	0.659	1.111116
10	4.06	57.679	31.250	13.417	0.131	1.111115
11	1.65	23.499	93.753	31.250	1.140	1.111116
12	9.73	138.324	9.375	5.168	1.248	1.111117
13	6.50	92.394	13.393	6.250	0.249	1.111115
14	0.00	0.000	55555555	55555555	0.333	5555555555
15	0.00	0.000	55555555	55555555	0.333	5555555555
16	4.43	63.020	23.438	11.719	1.109	1.111116
17	0.98	13.886	187.593	31.250	1.329	1.111114
18	0.00	0.000	55555555	55555555	1.000	5555555555
19	20.17	286.794	8.523	3.827	1.315	1.111119
20	0.00	0.000	55555555	55555555	1.300	5555555555
21	7.21	132.541	14.423	8.523	1.155	1.111117
22	1.89	25.635	62.500	26.786	1.051	1.111117
23	5.29	75.304	15.625	7.813	1.149	1.111115
24	5.37	76.372	26.786	9.468	0.117	1.111117
25	0.00	0.000	55555555	55555555	1.000	5555555555
26	6.80	96.666	15.625	5.859	1.195	1.111115
27	1.00	1.000	55555555	55555555	1.000	5555555555
28	4.12	57.145	17.171	15.625	1.188	1.111114

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	12.76	181.411	55555555	55555555	1.225	5555555555
SE	18.52	263.442	55555555	55555555	1.253	5555555555
	3.50	49.786	55555555	55555555	1.348	5555555555

29	60.05	853.974	4.167	1.218	1.896	1.111116
30	24.22	353.119	9.152	1.193	1.536	1.111112
31	43.48	575.725	6.944	2.041	1.441	1.111119
32	16.97	241.399	8.929	3.676	1.323	1.111111
33	19.68	279.851	8.152	3.363	1.531	1.111118
34	19.34	275.045	8.152	2.534	1.453	1.111115
35	30.42	432.195	7.813	1.512	1.709	1.111119
36	9.46	134.585	13.417	4.261	0.280	1.111116
37	23.62	335.929	4.898	2.467	0.512	1.111118
38	22.16	315.180	4.934	2.534	1.504	1.111119
39	36.50	519.114	7.212	2.107	1.531	1.111112
40	13.93	198.139	18.750	4.261	1.251	1.111113
41	5.41	76.936	17.745	6.696	1.176	1.111114
42	25.15	356.223	5.368	1.974	1.581	1.111117
43	4.88	69.429	26.786	8.523	1.136	1.111115
44	1.00	1.000	55555555	55555555	1.000	5555555555
45	2.19	29.918	62.500	18.750	1.364	1.111114
46	3.94	56.077	62.533	23.438	1.353	1.111117
47	1.65	23.499	46.875	46.875	1.048	1.111112
48	8.19	116.427	14.423	4.934	1.229	1.111116
49	1.00	1.000	55555555	55555555	1.000	5555555555
50	1.00	1.000	55555555	55555555	0.100	5555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	14.52	206.449	55555555	55555555	1.271	5555555555
SE	17.86	245.486	55555555	55555555	1.257	5555555555
	2.44	34.717	55555555	55555555	1.316	5555555555

DATE 12/18/78
 MOBIL FY00 SAMPLE # 22 JPL 7-695 (48-63-1) SPEC
 DISLOCATION PITS ONLY
 .31 UM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DIASLOCATED DISLOCATION PIT AREA = 7.3 μ^2

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AFETA	
1	743.42	3.321	45.466	51.118	7.335	1.457638
2	489.86	3.314	112.141	51.637	7.122	3.332298
3	721.78	3.321	45.422	61.516	7.027	2.135312
4	2901.78	3.383	26.364	19.858	7.375	6.724288
5	1113.15	3.432	39.593	43.779	7.441	2.457463
6	5894.38	3.168	13.163	13.666	7.121	8.756876
7	8933.84	3.254	11.269	13.713	7.148	23.563196
8	1527.12	3.343	53.756	23.898	7.363	4.945196
9	683.15	3.319	128.425	51.898	7.127	8.552431
10	1849.86	3.353	37.355	34.391	7.346	4.181512
11	6406.58	3.182	12.862	12.583	7.126	8.139542
12	3252.33	3.393	21.823	19.483	7.374	5.097281
13	1287.48	3.037	31.198	28.584	7.055	7.294434
14	5595.21	3.159	11.713	11.616	7.137	5.643735
15	5381.23	3.145	12.569	13.249	7.125	5.732091
16	6936.44	3.197	15.491	16.479	7.131	16.037584
17	4468.22	3.127	12.771	12.592	7.126	4.905782
18	2671.64	3.376	18.743	18.966	7.088	3.307372
19	5161.78	3.147	16.039	15.788	7.133	12.526928
20	4636.39	3.132	13.387	14.524	7.122	6.320655
21	4523.01	3.129	14.681	14.256	7.119	6.586037
22	5113.42	3.145	12.429	11.815	7.134	6.103779
23	3352.33	3.395	16.164	17.715	7.395	4.492657
24	3886.85	3.111	15.612	14.881	7.139	3.911857
25	2545.34	3.372	17.358	17.963	7.395	2.417163

AVERAGE					
NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
3591.06	3.182	30.207	24.773	7.088	6.260164
SD 2214.33	3.363	29.311	16.589	7.139	4.363578
SE 442.81	3.013	5.862	3.316	7.098	1.872716

26	2315.37	3.366	21.606	24.828	7.083	1.135347
27	8747.67	3.249	7.374	7.284	7.191	2.431563
28	1184.66	3.334	33.784	34.353	7.148	1.987132
29	261.37	3.037	207.412	97.869	7.015	1.958485
30	1224.38	3.335	36.380	32.837	7.148	2.314273
31	587.53	3.314	102.124	77.801	7.329	2.126594
32	6347.40	3.172	12.069	12.427	7.132	7.372959
33	3592.33	3.132	16.167	17.354	7.197	4.364271
34	2338.36	3.358	24.782	23.983	7.167	3.264431
35	2321.78	3.158	23.562	14.937	7.169	2.866591
36	4332.63	3.122	14.220	13.472	7.129	4.800958
37	1862.33	3.353	25.524	23.880	7.067	2.950304
38	5875.48	3.144	12.094	13.284	7.128	6.115372
39	2868.82	3.081	17.233	18.668	7.091	3.383425
40	1384.38	3.339	34.329	34.442	7.147	2.736964
41	5947.40	3.162	9.756	10.630	7.156	6.128350
42	292.74	3.008	180.288	159.710	7.089	4.553267
43	5533.42	3.157	12.344	11.738	7.140	4.201547
44	5690.14	3.162	15.155	10.529	7.157	5.373764
45	5767.67	3.164	10.568	10.992	7.151	5.013442
46	894.11	3.325	40.514	41.501	7.342	1.696598
47	7141.23	3.293	12.569	12.742	7.127	13.937114
48	1683.55	3.348	30.119	21.463	7.163	1.242834
49	5793.14	3.165	11.305	12.255	7.138	7.813693
50	7860.82	3.224	9.575	10.184	7.163	17.537324

AVERAGE					
NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
3595.42	3.132	33.407	27.558	7.091	5.573754
SD 2368.91	3.367	41.192	26.641	7.045	3.777526
SE 335.31	3.313	5.825	3.768	7.086	1.534223

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DATE 12/18/78
 MOBIL TYCO SAMPLE # 23 JPL # 5-685 (19-63-1) SPEC #
 TWINS ONLY
 DIM DUT PWT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 37.65X100

MAG-500.3 UNITS-MM CAL. FACTOR- 0.100375 UNITS/PP
 FRAME AREA- 3.370313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	3.52	50.114	23.438	9.268	1.123	1.111114
2	11.78	167.511	23.833	5.15	1.197	1.111114
3	14.49	206.325	11.719	2.679	1.397	1.111114
4	18.59	263.130	13.393	2.344	1.448	1.111114
5	14.36	199.993	8.929	2.930	1.419	1.111114
6	65.94	937.785	5.859	1.442	1.755	1.111118
7	49.76	737.631	5.288	1.311	1.867	1.111113
8	26.69	379.569	6.696	1.913	1.693	1.111112
9	44.96	639.420	4.464	1.258	1.885	1.111119
10	62.15	883.959	3.906	1.139	1.843	1.111113
11	30.73	436.643	4.076	1.616	1.741	1.111117
12	23.56	335.323	6.253	1.873	1.638	1.111118
13	21.60	337.161	6.348	1.995	1.549	1.111117
14	19.15	272.383	15.625	2.757	1.387	1.111117
15	31.58	449.172	5.682	1.320	1.913	1.111117
16	35.92	513.885	5.582	1.736	1.651	1.111115
17	33.38	470.517	8.152	1.465	1.728	1.111113
18	23.82	296.345	9.375	2.206	1.477	1.111117
19	16.61	236.186	9.868	2.259	1.480	1.111116
20	49.59	705.311	4.454	1.645	1.734	1.111114
21	39.67	564.249	6.466	2.155	1.531	1.111113
22	52.19	741.040	4.276	1.992	1.117	1.111111
23	44.47	632.460	3.233	1.320	1.899	1.111115
24	22.90	325.742	6.944	1.838	1.605	1.111117
25	30.77	437.571	5.868	1.410	1.789	1.111118
26	32.69	464.948	5.859	1.803	1.632	1.111112

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.43	446.941	8.127	2.266	1.625	1.111111
SD	15.61	221.952	5.114	1.747	1.221	1.111114
SE	3.36	43.528	0.983	0.343	1.343	1.111111

27	11.81	167.975	5.859	2.641	1.451	1.111117
28	10.34	147.094	8.152	1.676	1.323	1.111116
29	14.88	211.593	5.288	3.324	1.448	1.111111
30	6.26	89.092	13.393	5.515	1.219	1.111117
31	7.47	116.261	13.393	5.368	1.240	1.111115
32	11.91	169.167	1.838	2.568	1.337	1.111117
33	5.19	73.779	18.751	11.719	1.115	1.111114
34	10.05	427.363	1.238	1.533	1.691	1.111117
35	20.36	289.549	6.250	2.259	1.549	1.111119
36	35.69	506.246	4.808	1.500	1.757	1.111115
37	18.73	266.348	3.676	2.155	1.635	1.111112
38	0.52	7.424	187.500	31.250	1.019	1.111112
39	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
40	9.27	131.782	15.625	5.357	1.219	1.111113
41	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
42	11.71	166.583	37.500	8.929	1.125	1.111117
43	1.47	20.881	187.500	31.250	1.035	1.111116
44	1.96	27.841	37.500	18.750	1.169	1.111118
45	8.74	124.357	31.250	6.944	0.157	1.111118
46	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.333	\$\$\$\$\$\$\$\$
47	4.14	58.931	23.438	13.393	1.383	1.111116
48	3.62	8.816	187.500	46.875	1.324	1.111113
49	3.62	51.506	23.438	11.719	1.134	1.111114
50	6.26	89.092	13.393	5.859	1.195	1.111115

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	20.76	295.247	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.444	\$\$\$\$\$\$\$\$
SD	17.33	242.224	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.294	\$\$\$\$\$\$\$\$
SE	2.41	34.256	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.342	\$\$\$\$\$\$\$\$

DATE 12/18/78
 MOBIL TYCO, SAMPLE # 23 JPL # 5-685 (18-63-1) SPEC #
 DISLOCATION PITS ONLY
 .31 NM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE INLJ
 AVERAGE DISLOCATION PIT AREA = 6.31 μ^2

MAG-800.3 UNITS-MICRONS CAL. FACTOR= 1.175100 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	5588.19	0.159	9.834	19.315	1.162	3.555488
2	3276.54	0.093	23.993	25.713	1.156	3.757672
3	2741.13	0.078	19.254	20.367	0.984	2.741695
4	2540.10	0.072	29.253	23.125	1.079	2.377388
5	3742.76	0.106	16.416	18.426	0.992	3.885918
6	139.15	0.003	343.497	334.821	0.105	1.036517
7	726.12	0.021	169.530	37.666	0.025	1.958795
8	803.66	0.023	91.463	49.867	0.026	2.684659
9	277.20	0.008	296.677	79.915	0.016	5.093971
10	321.63	0.009	167.719	114.197	0.112	2.922883
11	1633.93	0.046	32.161	15.714	0.349	2.356141
12	4281.70	0.122	18.743	23.825	0.072	7.618322
13	945.42	0.027	49.368	55.770	0.032	1.744610
14	1548.75	0.144	33.650	16.722	0.043	2.644318
15	221.96	0.006	226.998	76.656	1.011	2.374694
16	615.81	0.018	55.804	61.556	0.024	1.487739
17	1851.75	0.053	15.663	16.267	0.045	3.972121
18	385.52	0.011	171.389	52.876	0.023	2.585938
19	636.44	0.018	100.375	83.934	0.018	0.744349
20	664.89	0.019	68.833	59.411	0.026	1.702841
21	1675.54	0.048	26.687	27.056	0.060	2.302961
22	1035.61	0.029	56.749	37.757	0.037	2.171836
23	2113.81	0.160	29.288	27.041	0.057	3.900655
24	2098.34	0.069	33.578	44.118	0.045	4.679213
25	958.07	0.027	95.458	43.183	0.026	0.797963
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1633.52	0.146	87.731	56.292	0.345	3.618272	
SD	1379.23	0.035	89.570	61.497	0.033	2.333974
SE	275.84	0.008	17.914	12.281	1.007	1.466781
26	534.28	0.015	171.733	131.242	0.016	0.677393
27	4658.90	0.133	14.839	14.339	0.119	1.331524
28	2997.18	0.085	17.196	18.119	0.089	2.610715
29	5217.97	0.148	12.696	14.222	0.120	4.783380
30	1531.13	0.043	36.678	36.239	0.044	2.923539
31	1786.72	0.051	33.547	31.662	0.050	1.433611
32	3255.24	0.093	16.619	15.844	0.075	1.24719
33	879.87	0.025	67.360	44.145	0.026	2.527763
34	925.99	0.026	78.321	40.832	0.031	1.525586
35	1475.37	0.042	35.351	30.261	0.051	2.164795
36	1587.03	0.045	45.888	35.458	0.051	2.196340
37	1842.60	0.052	36.678	15.191	0.044	5.407227
38	5036.74	0.143	15.222	16.028	0.102	5.514249
39	2777.20	0.079	19.426	22.574	0.077	2.784908
40	2348.99	0.067	24.332	25.812	0.066	3.349949
41	4311.81	0.123	15.938	18.803	0.091	6.187922
42	1234.44	0.035	57.375	49.973	0.030	4.311144
43	1484.03	0.042	28.998	34.353	0.053	1.828330
44	1415.64	0.040	31.043	34.505	0.051	1.697974
45	4802.83	0.137	17.523	18.303	0.091	5.661284
46	3721.13	0.106	14.841	16.299	0.104	3.389370
47	9683.36	0.275	9.517	11.187	0.166	0.386913
48	2378.87	0.166	21.793	21.125	0.174	1.525773
49	2146.42	0.059	22.585	25.365	0.071	1.999476
50	2353.41	0.067	21.858	24.914	0.069	2.982999
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
2219.78	0.063	61.126	43.298	0.058	3.750280	
SD	1791.73	0.051	72.499	47.259	0.036	2.144764
SE	253.39	0.007	19.253	6.683	0.005	0.303315

DATE 12/19/78
 MOBIL TYCO SAMPLE # 24 JPL # 5-685 (18-63-1) SP20
 TWINS ONLY
 ITEM OUT PUT DATA DIVIDED BY 100
 .31 MM SPIES SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE PIN AREA = 15.51111

MAG-800.1 UNITS-MM CAL. FACTOR- 1.113375 UNITS/IN
 FRAME AREA- 3.071313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	6.33	93.365	8.929	4.376	0.296
2	4.73	67.248	11.029	7.212	1.211
3	2.36	33.624	23.438	13.417	1.141
4	10.02	142.502	7.212	4.376	1.337
5	31.47	447.522	5.515	1.829	1.595
6	32.17	457.529	6.456	2.314	1.563
7	28.29	431.388	4.464	1.399	1.797
8	25.19	358.257	5.208	1.953	1.592
9	93.38	1323.751	2.494	1.143	1.361
10	14.02	199.343	4.688	2.534	1.496
11	26.79	381.074	4.688	1.488	1.763
12	44.16	628.051	4.360	1.537	1.728
13	56.43	832.577	2.976	1.896	1.337
14	24.15	343.447	3.906	1.721	1.717
15	19.28	274.197	5.682	2.236	1.544
16	18.38	261.388	11.329	3.289	1.341
17	25.58	363.862	4.934	1.829	1.635
18	28.16	399.087	5.268	1.752	1.645
19	15.87	225.762	6.250	2.568	1.456
20	14.66	208.550	5.357	2.344	1.485
21	34.17	485.949	4.363	1.603	1.723
22	48.44	688.895	3.289	1.150	1.984
23	49.39	702.595	3.676	1.729	1.717
24	41.18	585.621	3.538	2.316	1.643
25	18.15	258.184	5.515	1.752	1.632
26	29.38	417.903	4.261	1.399	1.809
27	5.18	73.653	9.868	5.357	1.245

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.66	393.394	5.224	2.447	1.597	1.333333
SD	19.33	273.238	4.344	2.346	1.236	1.333333
SE	3.66	52.117	1.778	1.394	1.145	1.111111

28	3.33	3.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.333	\$\$\$\$\$\$\$\$
29	11.15	158.514	6.944	2.679	1.443	1.333333
30	9.67	136.498	6.464	3.753	1.373	1.333333
31	13.34	189.736	5.238	2.373	1.539	1.333333
32	5.38	76.455	11.329	8.152	1.189	1.333333
33	15.62	222.163	5.682	2.717	1.443	1.333333
34	43.77	622.447	4.376	1.875	1.643	1.333333
35	36.39	517.572	4.934	1.136	1.969	1.000000
36	26.43	375.473	4.573	1.752	1.685	1.333333
37	19.84	282.293	4.688	1.974	1.629	1.433333
38	48.24	686.393	3.827	1.512	1.787	1.000000
39	62.14	883.835	4.076	1.369	1.827	1.333333
40	47.20	671.282	3.348	1.803	1.737	1.333333
41	7.33	3.330	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.330	\$\$\$\$\$\$\$\$
42	3.86	54.839	26.786	18.753	1.372	1.333333
43	15.31	217.757	4.464	2.316	1.633	1.333333
44	6.32	85.662	11.719	6.694	1.299	1.333333
45	3.94	56.347	25.786	14.423	1.393	1.000000
46	7.34	100.372	13.417	8.523	1.171	1.333333
47	8.32	114.382	12.137	5.464	1.197	1.333333
48	7.99	113.682	5.859	3.906	1.339	1.333333
49	21.84	317.623	3.676	2.641	1.475	1.333333
50	2.98	42.433	23.438	9.375	1.125	1.333333

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	23.24	330.782	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.512	\$\$\$\$\$\$\$\$
SD	10.84	267.880	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.272	\$\$\$\$\$\$\$\$
SE	2.66	37.884	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.338	\$\$\$\$\$\$\$\$

DATE 12/19/76
 MOBILE TPOO SAMPLE # 24 JPL # 5-685 (1P-63-1) SPED
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 4.25 μ^2

MAG-813.1 UNITS-MICRONS CAL. FACTOR- 3.375333 UNITS/ μ^2
 FRAME AREA- 3.515625117 μ^2

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	2897.76	3.182	21.596	22.656	3.977	3.486391
2	1137.44	3.332	35.112	38.531	3.345	1.834318
3	1811.52	3.352	27.671	28.758	3.355	2.871928
4	2379.36	3.359	21.894	25.749	3.373	2.147547
5	182.88	3.335	262.635	199.745	3.337	1.747113
6	232.56	3.336	238.797	146.944	3.338	1.633714
7	579.36	3.315	74.169	58.777	3.326	1.689578
8	411.52	3.312	79.923	88.360	3.319	1.197641
9	3.33	3.333	55555555	55555555	3.333	5555555555
10	571.88	3.316	62.583	68.782	3.325	1.279253
11	332.32	3.339	98.477	138.685	3.316	1.949883
12	388.64	3.311	93.759	92.183	3.318	1.284128
13	64.64	3.332	538.793	352.444	3.334	1.136257
14	783.96	3.322	45.137	52.173	3.335	1.332797
15	286.72	3.338	135.693	115.314	3.315	3.996347
16	493.44	3.314	78.125	87.299	3.319	1.737735
17	144.48	3.334	183.638	242.248	3.337	1.743856
18	489.96	3.314	93.755	93.284	3.319	1.638445
19	331.92	3.319	194.936	134.167	3.319	2.948438
20	167.28	3.335	237.142	161.917	3.337	1.181723
21	452.16	3.313	83.185	94.221	3.318	2.453195
22	243.48	3.337	327.797	143.782	3.339	5.032946
23	979.36	3.328	55.347	52.345	3.333	2.937992
24	656.96	3.319	74.169	66.331	3.323	2.187145
25	24.96	3.331	1399.254	1953.125	3.331	1.687599
26	1395.52	3.331	49.789	2.592	3.328	4.839489

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	644.49	3.318	55555555	55555555	3.323	5555555555
SE	674.42	3.319	55555555	55555555	3.319	5555555555
SE	132.26	3.334	55555555	55555555	3.334	5555555555

27	2346.56	3.367	23.843	23.416	3.377	2.657747
28	3219.36	3.392	14.919	14.468	3.112	2.267243
29	1224.48	3.335	51.286	46.922	3.336	2.429352
30	858.24	3.324	67.495	63.251	3.329	2.377996
31	2118.48	3.363	22.531	19.799	3.370	1.082827
32	1335.68	3.338	38.332	36.779	3.347	2.415539
33	894.38	3.325	131.698	55.737	3.322	2.938365
34	131.24	3.314	311.431	196.133	3.316	1.182799
35	132.38	3.333	347.222	282.383	3.335	1.936259
36	458.24	3.313	183.135	65.286	3.321	4.152762
37	1455.34	3.341	33.918	23.526	3.359	2.329951
38	83.48	3.332	428.382	357.824	3.334	1.178976
39	981.92	3.328	47.954	48.375	3.335	2.233815
40	1638.96	3.346	34.981	31.449	3.353	2.476576
41	3696.36	3.335	13.809	18.278	3.336	2.687216
42	3233.76	3.392	14.241	15.329	3.113	2.271927
43	3549.76	3.331	24.219	28.496	3.385	4.642718
44	4152.48	3.318	11.331	13.359	3.132	2.846834
45	1899.28	3.354	22.689	24.187	3.373	1.975437
46	3132.38	3.389	15.131	18.487	3.398	2.178577
47	783.84	3.322	55.277	48.752	3.333	1.672147
48	3379.74	3.396	14.217	16.883	3.174	2.193397
49	1138.48	3.332	37.651	32.216	3.344	1.712214
50	1349.28	3.330	45.844	49.358	3.337	2.193543

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	1191.12	3.334	55555555	55555555	3.337	5555555555
SE	1135.95	3.332	55555555	55555555	3.334	5555555555
SE	163.65	3.385	55555555	55555555	3.385	5555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/19/78

MOBIL TYCO SAMPLE # 25 IPL # 5-685 (18-63-1) PEO + TWINS ONLY

IFM OIPII DATA DIVIDED BY 100

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE TWIN AREA = 29.74X100

MAG-800.3 UNITS-MM CAL. FACTOR-
FRAME AREA- 0.070313

0.000375 UNITS/PP

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	28.34	473.393	5.859	2.316	1.579	1.000010
2	32.31	459.533	3.538	1.659	0.720	1.000012
3	22.18	315.427	8.523	3.004	1.379	1.000028
4	27.08	385.077	4.167	1.537	0.739	1.000011
5	16.31	227.754	3.472	2.115	1.081	1.000016
6	13.62	193.739	6.696	2.717	3.454	1.000009
7	13.55	150.108	17.045	7.212	1.171	1.000009
8	37.83	537.987	3.750	1.974	1.627	1.000019
9	20.41	290.209	8.929	1.875	1.571	0.000007
10	22.49	319.833	5.068	1.752	0.635	1.000008
11	29.30	416.700	6.048	2.107	3.552	0.000011
12	4.11	58.442	17.045	5.682	1.216	1.000003
13	9.51	135.297	14.003	3.989	1.296	1.000006
14	27.39	389.483	4.167	1.875	1.624	1.000009
15	26.34	374.669	6.250	1.856	1.597	1.000010
16	40.36	574.313	4.808	1.913	1.589	1.000016
17	15.11	214.954	5.859	2.435	1.480	1.000009
18	1.31	14.410	46.875	37.500	1.000	1.000005
19	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
20	3.52	50.036	31.250	17.045	1.193	1.000004
21	12.92	183.733	13.417	2.841	0.387	1.000006
22	12.99	186.134	6.944	2.641	0.400	1.000007
23	18.74	266.592	6.466	2.541	0.416	1.000010
24	17.82	253.382	5.859	4.167	1.328	1.000010
25	14.62	308.950	5.496	2.568	0.453	0.000008

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	18.59	264.382	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.417	\$\$\$\$\$\$\$\$
SD	13.66	151.663	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.213	\$\$\$\$\$\$\$\$
SE	2.13	33.333	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.141	\$\$\$\$\$\$\$\$

26	23.41	391.219	13.417	3.209	1.341	1.000011
27	27.72	394.283	5.682	1.933	0.592	1.000011
28	11.37	161.716	17.045	3.750	1.380	1.000007
29	54.26	771.755	4.573	1.720	1.672	1.000021
30	17.31	216.177	12.500	3.333	1.347	1.000010
31	19.34	274.998	11.719	2.841	1.389	1.000011
32	17.51	248.979	5.368	1.259	1.531	1.000011
33	2.17	31.822	37.500	15.625	1.181	1.000015
34	8.75	124.489	7.813	5.368	1.267	1.000009
35	11.96	179.122	8.152	3.024	1.416	1.000007
36	21.87	311.024	5.515	2.155	1.552	0.000014
37	36.31	516.371	4.608	1.442	0.779	1.000011
38	43.63	620.446	6.696	1.953	1.547	1.000020
39	25.87	357.864	5.068	1.420	0.787	0.000008
40	3.43	48.835	14.423	9.929	1.144	1.000004
41	2.84	40.429	20.833	8.152	1.176	1.000004
42	8.33	118.485	9.868	4.808	0.232	1.000007
43	50.15	713.313	3.989	1.359	1.819	1.000016
44	18.49	262.989	4.688	2.232	0.552	1.000012
45	12.89	183.332	5.859	2.717	1.437	1.000007
46	37.52	533.584	2.717	1.689	1.776	1.000021
47	7.85	111.680	11.719	3.606	1.315	1.000004
48	16.16	229.765	7.813	2.604	1.459	1.000010
49	4.19	59.643	15.625	7.813	0.155	1.000003
50	9.99	142.102	9.468	2.568	1.424	1.000005

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	19.10	271.659	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.440	\$\$\$\$\$\$\$\$
SD	12.67	180.256	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.207	\$\$\$\$\$\$\$\$
SE	1.79	25.492	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.029	\$\$\$\$\$\$\$\$

DATE 12/19/78
 MOBIL TYCO SAMPLE # 25 JPL # 5-685 (18-63-1) SPEC #
 DISLOCATION: PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.23 PP

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 1.775333 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	166.15	3.335	235.592	231.481	1.007	3.987835
2	686.54	3.327	73.299	70.436	1.021	2.677379
3	3022.49	3.386	38.375	37.143	1.042	11.335796
4	422.88	3.012	226.449	74.947	3.714	1.716331
5	3112.12	3.350	29.528	29.169	1.055	2.953125
6	1314.74	3.337	42.151	44.856	1.131	1.674574
7	2349.34	3.367	31.334	14.632	3.751	4.957243
8	434.23	3.312	94.697	106.777	1.115	1.339794
9	283.85	3.308	162.197	159.168	1.013	1.634350
10	693.08	3.323	68.231	69.911	1.022	1.729735
11	93.38	3.333	376.506	444.313	1.104	1.895559
12	1228.46	3.335	44.776	46.251	1.017	2.318687
13	2177.53	3.362	33.396	29.762	1.057	2.495763
14	243.33	3.337	185.644	169.533	1.099	1.271739
15	569.62	3.319	62.417	73.325	1.025	1.255529
16	837.69	3.324	59.223	55.147	1.024	1.978294
17	6261.15	3.178	20.358	19.507	1.081	9.996657
18	4747.12	3.135	18.264	19.251	1.082	6.846831
19	6295.58	3.179	13.338	13.343	1.118	6.717846
20	8836.92	3.251	13.339	11.764	1.119	12.382659
21	1793.65	3.351	33.494	33.477	1.047	3.130333
22	1889.23	3.354	30.667	31.513	1.053	3.342952
23	1698.46	3.348	35.377	37.711	1.044	2.576763
24	3635.77	3.183	34.697	33.374	1.147	11.821851
25	6257.88	3.178	14.990	15.759	1.133	6.729527
26	992.69	3.328	63.956	55.734	1.029	2.341633

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	2272.29	3.365	77.341	74.545	1.044	4.278497
SE	2297.52	3.365	84.350	91.261	1.132	3.464791
SE	453.58	3.313	15.542	17.732	1.076	2.579537

27	784.81	3.322	58.732	59.448	1.027	1.834668
28	738.27	3.321	68.581	57.728	1.024	2.133832
29	72.31	3.332	478.316	564.759	1.033	3.911638
30	879.81	3.325	63.182	65.514	1.024	1.234963
31	397.12	3.311	115.315	117.481	1.014	1.459249
32	831.73	3.323	81.399	61.115	1.023	2.628994
33	2343.19	3.358	33.345	33.662	1.049	3.592091
34	1476.46	3.149	35.337	36.422	1.042	1.319072
35	1579.81	3.148	37.597	29.672	1.142	2.453744
36	466.15	3.313	147.638	103.885	1.313	2.727733
37	225.38	3.336	232.630	155.215	1.108	1.851826
38	1984.23	3.331	50.241	48.174	1.034	2.114250
39	1102.50	3.331	46.781	47.192	1.033	1.883652
40	2361.35	3.367	26.634	24.491	1.056	2.706480
41	1647.88	3.347	40.697	29.379	1.049	2.209896
42	3389.81	3.396	24.690	24.137	1.056	8.153937
43	41.73	3.331	852.273	762.195	1.002	3.871875
44	1433.38	3.341	49.238	39.346	1.036	3.504838
45	1327.12	3.329	58.888	59.621	1.033	2.215579
46	1291.15	3.337	44.305	35.619	1.043	2.932162
47	1434.81	3.341	42.847	36.337	1.048	2.487786
48	1954.42	3.356	32.183	17.852	1.056	2.472614
49	2851.54	3.381	31.395	24.769	1.055	6.475718
50	737.69	1.323	67.543	73.172	1.122	1.554354
51	1293.65	3.337	43.857	44.537	1.038	2.231395
52	3134.23	3.389	18.532	21.179	1.085	2.510303

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	1796.13	3.351	92.331	76.925	1.049	3.474321
SD	1872.38	3.351	138.125	135.476	1.027	2.774519
SE	249.97	3.307	19.154	19.787	1.094	1.385037

ORIGINAL PAGE IS
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* DATE 12/16/78
 MOBIL TYCO SAMPLE # 26 JPL #5-685 (18-53-1) SPEC 1
 TWINS ONLY
 JTM OUT PUT DATA DIVIDED BY 100
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 32.54X100

MAG-800.0 UNITS-MM CAL. FACTOR- 1.139375 UNITS/PP
 FRAME AREA- 3.373313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	35.86	510.359	4.688	1.416	1.794
2	22.96	326.490	3.238	2.338	1.587
3	17.36	242.573	12.530	2.287	3.459
4	57.68	823.378	2.634	3.638	1.727
5	17.15	243.884	6.048	1.633	1.667
6	37.39	527.542	3.324	3.982	1.117
7	4.45	335.374	5.696	1.786	3.613
8	77.99	1137.690	3.074	3.651	1.648
9	46.16	556.477	7.212	1.234	1.867
10	25.94	368.886	10.417	2.155	1.579
11	32.48	461.982	6.250	1.293	1.832
12	26.46	376.310	4.838	1.735	3.715
13	19.76	281.935	8.523	1.723	3.653
14	18.09	273.139	6.048	1.953	3.571
15	9.86	12.238	187.500	37.530	3.227
16	50.68	720.727	4.838	1.179	1.936
17	9.96	141.610	17.045	3.324	3.384
18	10.53	150.780	10.417	3.324	3.365
19	20.99	298.518	12.500	2.373	3.459
20	1.44	20.542	62.500	11.329	0.396
21	5.04	71.679	37.500	6.466	3.168
22	2.52	35.840	46.875	15.625	3.075
23	21.39	304.200	11.029	1.720	3.605
24	8.64	122.816	31.250	4.573	3.235
25	1.17	16.609	62.500	14.423	0.877
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
23.69	1336.943	22.841	4.905	3.634	3.000007
SD	19.08	270.220	37.860	3.424	3.000003
SE	3.80	54.044	7.574	1.553	0.000001
26	35.74	508.311	5.298	1.630	1.919
27	42.17	598.784	4.261	1.384	1.011
28	31.47	447.559	6.466	1.065	1.364
29	5.37	72.116	4.076	1.325	3.213
30	3.30	3.000	23.438	4.934	3.000

DISREGARD FIELDS 26 THROUGH 30 ABOVE.

MAG-800.0 UNITS-MM CAL. FACTOR- 1.000375 UNITS/PP
 FRAME AREA- 3.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	36.94	525.357	4.688	1.217	3.917
2	4.36	57.593	26.796	5.238	1.195
3	5.35	76.350	20.833	5.208	1.211
4	1.66	23.692	46.875	17.045	0.093
5	3.26	46.329	46.875	8.523	3.133
6	2.67	38.025	18.750	9.375	3.133
7	1.26	17.920	93.750	46.875	0.029
8	2.30	32.780	31.250	14.423	3.085
9	66.75	949.314	4.838	1.293	3.869
10	23.76	337.854	20.833	5.068	3.219
11	22.16	315.127	7.813	1.974	0.557
12	1.63	23.165	187.500	23.438	3.048
13	0.00	0.000	55555555	55555555	1.000
14	3.31	4.371	55555555	93.750	3.011
15	3.00	3.000	55555555	55555555	1.330
16	1.75	24.913	187.500	31.250	1.335
17	3.33	3.330	55555555	55555555	3.333
18	0.43	6.119	55555555	93.750	3.016
19	12.51	177.887	11.719	3.472	3.309
20	19.45	276.665	5.515	1.786	3.653
21	26.86	381.998	8.929	1.838	1.573
22	21.88	311.193	6.944	2.107	1.523
23	7.90	112.327	14.423	4.360	1.259
24	23.72	337.417	9.868	2.155	3.504
25	10.26	145.981	31.250	6.348	1.176
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
11.87	158.883	55555555	55555555	1.262	5555555555
SD	15.35	213.376	55555555	55555555	1.272
SE	3.07	43.675	55555555	55555555	1.154

THE SECPMD 25 FIELDS ARE A CONTINUATION OF THE FIRST 25 FIELDS

DATE 12/19/78
 MAIL ROOM SAMPLE # 25 JPL # 5-695 (19-63-1) SPEC 11
 DISLOCATION PITS ONLY
 .31 MICRON SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA 7.1122

MAG-811.7 UNITS-MICRONS CAL. FACTOR- 3.375143 UNITS/0.1
 FRAME AREA- 3.515625333 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	449.15	3.313	128.955	97.962	3.315	2.685748
2	1117.75	3.332	17.661	48.126	3.334	3.282353
3	436.36	3.312	117.629	98.788	3.314	3.333533
4	5.35	3.333	5859.375	6257.377	3.333	3.893625
5	874.93	3.325	58.677	55.572	3.329	3.817944
6	333.94	3.333	555555555	555555555	3.333	555555555555
7	333.94	3.333	254.145	138.683	3.333	1.746528
8	619.72	3.318	95.653	84.383	3.319	4.326923
9	219.448	3.335	196.954	187.126	3.339	1.855727
10	884.56	3.325	68.934	66.395	3.325	3.854384
11	146.95	3.334	276.549	255.457	3.334	3.488742
12	1976.34	3.356	34.581	35.714	3.347	3.419844
13	1129.33	3.332	41.184	35.218	3.345	2.155891
14	2159.31	3.361	28.153	29.343	3.358	4.251757
15	2675.92	3.376	23.763	19.131	3.382	3.456319
16	1385.63	3.331	54.953	53.841	3.331	3.674354
17	1517.81	3.343	37.787	33.614	3.345	3.348761
18	1188.28	3.334	51.174	49.368	3.335	3.694151
19	948.87	3.327	78.783	63.346	3.325	8.397356
20	1918.73	3.355	33.279	33.322	3.349	4.899576
21	2377.32	3.368	23.921	24.376	3.368	3.843792
22	298.83	3.338	135.281	146.714	3.312	1.983758
23	1331.55	3.329	58.212	48.879	3.329	4.327468
24	716.28	3.328	81.399	62.892	3.323	3.942788
25	2449.72	3.378	31.833	19.679	3.373	6.928869
26	2885.35	3.382	29.364	22.812	3.375	5.062994

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	1129.72	3.332	555555555	555555555	3.333	555555555555
SE	846.33	3.324	555555555	555555555	3.323	555555555555
SE	165.98	3.335	555555555	555555555	3.335	555555555555

27	2263.85	3.364	31.513	26.297	3.358	4.635139
28	489.31	3.314	91.285	74.287	3.329	1.835526
29	716.62	3.329	85.159	55.441	3.325	4.112369
30	269.58	3.338	171.877	121.595	3.313	3.398629
31	4427.32	3.126	17.135	17.857	3.391	4.587789
32	3441.83	3.398	23.577	19.318	3.385	6.134523
33	3892.11	3.111	15.836	15.121	3.134	3.935823
34	4349.86	3.124	15.445	13.307	3.115	5.431819
35	4189.15	3.119	15.615	14.196	3.113	4.955698
36	918.87	3.326	47.637	49.264	3.333	3.299342
37	566.21	3.316	99.405	87.699	3.319	3.726223
38	4123.38	3.117	15.925	14.188	3.113	5.146172
39	2912.96	3.357	35.471	34.153	3.349	7.389917
40	3251.97	3.393	18.289	19.366	3.386	5.297359
41	6768.83	3.193	18.831	18.532	3.139	9.893782
42	3717.46	3.186	16.569	18.179	3.193	5.340513
43	2300.78	3.365	21.742	23.344	3.374	3.975533
44	5875.49	3.167	11.271	11.628	3.143	6.774333
45	1434.88	3.346	38.899	32.194	3.351	3.392595
46	1236.90	3.335	44.835	42.003	3.338	3.518429
47	976.34	3.328	49.929	44.138	3.334	3.383405
48	885.27	3.323	68.934	57.692	3.326	3.813274
49	1187.61	3.334	38.297	38.363	3.343	3.273996
50	2145.92	3.381	26.793	26.121	3.361	4.337171

AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	1818.59	3.352	555555555	555555555	3.359	555555555555
SE	1545.95	3.344	555555555	555555555	3.376	555555555555
SE	216.63	3.306	555555555	555555555	3.305	555555555555

DATE 12/16/78
 MOBIL TYCO SAMPLE #27 JPL 5-685 (12-53-1) 1957 W
 TWIN ONLY
 TWY OUTPUT DATA DIVIDED BY 111
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 26.27X100

MAG-800-J UNITS-MM-CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 3.373313

FIELD NO.	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	6.36	90.412	37.590	9.868	1.199	3.000000
2	0.91	12.993	187.500	31.250	3.335	3.000000
3	3.08	43.852	46.875	15.625	1.077	3.000000
4	0.99	14.076	55555555	37.593	0.029	3.000000
5	0.03	1.000	55555555	55555555	0.000	55555555
6	8.07	114.774	9.375	4.808	3.245	3.000000
7	48.92	695.682	1.262	1.059	7.816	3.000000
8	1.18	16.783	93.750	37.593	7.032	3.000000
9	9.71	138.854	9.929	5.068	3.216	3.000000
10	5.56	79.042	23.138	13.193	1.179	3.000000
11	0.69	9.745	55555555	16.875	1.321	3.000000
12	1.87	26.528	93.750	17.045	3.357	3.000000
13	1.98	28.152	93.750	11.719	1.093	3.000000
14	6.24	88.787	12.000	5.208	3.232	3.000000
15	0.95	13.535	187.500	31.250	0.035	3.000000
16	0.00	0.000	55555555	55555555	0.000	55555555
17	17.36	346.872	7.212	5.357	7.269	3.000000
18	3.16	44.935	23.438	14.423	3.093	3.000000
19	8.64	122.895	11.719	4.688	7.283	3.000000
20	0.00	0.000	55555555	55555555	0.000	55555555
21	4.87	69.297	20.833	7.813	0.152	3.000000
22	2.25	32.942	46.875	0.833	3.059	3.000000
23	0.38	5.414	55555555	55555555	0.000	55555555
24	4.57	64.966	13.393	0.696	0.187	3.000000
25	18.08	257.159	7.212	2.534	3.440	3.000000
AVERAGE						
SD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SE	6.23	88.636	55555555	55555555	1.144	55555555
	9.95	141.523	55555555	55555555	1.176	55555555
	1.99	28.315	55555555	55555555	7.315	55555555
26	12.60	179.199	14.423	4.076	1.275	3.000000
27	22.76	323.749	4.808	2.206	7.512	3.000000
28	35.67	507.279	8.152	1.659	0.653	3.000000
29	9.21	131.316	11.029	4.360	1.253	3.000000
30	22.57	321.042	6.250	1.995	1.573	3.000000
31	6.32	89.873	18.750	4.934	1.211	3.000000
32	5.22	74.173	9.375	6.944	1.192	3.000000
33	13.93	155.378	7.500	3.676	7.312	3.000000
34	22.19	315.528	7.500	1.838	1.595	3.000000
35	37.38	531.640	3.989	1.431	3.827	3.000000
36	25.20	358.398	8.152	2.287	0.485	3.000000
37	18.34	218.179	9.868	3.472	1.336	3.000000
38	19.34	275.024	12.500	2.930	3.373	3.000000
39	16.10	229.006	8.583	2.799	7.419	3.000000
40	17.24	245.248	14.423	2.107	9.488	3.000000
41	33.35	474.256	9.375	1.276	1.024	3.000000
42	33.58	476.420	8.152	1.179	1.925	3.000000
43	11.91	169.454	9.868	4.808	3.229	3.000000
44	3.57	8.121	55555555	37.590	0.329	3.000000
45	42.79	608.518	6.148	1.293	1.829	3.000000
46	16.79	238.751	6.250	2.763	3.539	3.000000
47	12.75	181.364	9.868	3.125	7.368	3.000000
48	7.23	102.863	31.250	5.357	7.179	3.000000
49	15.07	214.189	11.719	2.799	7.387	3.000000
50	35.44	504.031	4.464	1.165	3.939	3.000000
AVERAGE						
SD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SE	12.47	182.978	55555555	55555555	1.307	55555555
	1.76	25.786	55555555	55555555	1.338	55555555

DATE 12/18/78
 MODEL TPOC SAMPLE # 27 JPL # 5-685 (18-63-1) SPEC
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA =
 AVERAGE DISLOCATION PIT AREA = 7.35 μ^2

MAG-800.1 UNITS-MICRONS CAL. FACTOR- 1.37533 UNITS/ μ^2
 FRAME AREA- 3.515625MM² 94

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	4482.13	3.127	17.553	17.938	0.195	7.977755
2	1383.83	3.339	41.155	42.344	1.319	4.314249
3	2886.95	3.382	23.644	25.256	1.366	5.829277
4	3860.00	3.387	34.994	43.153	1.342	19.179894
5	2932.20	3.083	22.147	17.813	1.085	4.861234
6	2048.23	3.258	49.446	49.735	3.032	15.864258
7	1864.11	3.054	28.111	24.156	1.065	3.188923
8	439.43	3.312	115.741	199.412	1.215	2.269943
9	2518.87	3.072	28.528	23.695	1.074	1.699587
10	201.99	3.096	262.695	143.130	3.010	2.843967
11	1301.70	3.037	53.510	35.865	1.741	4.329298
12	579.31	3.015	85.450	46.758	1.126	11.793848
13	798.58	3.023	89.231	41.209	0.331	3.598722
14	480.33	3.014	183.363	86.725	1.017	2.355817
15	954.68	3.327	63.212	57.339	1.327	3.595453
16	1489.53	3.042	39.095	37.114	1.340	3.619373
17	2297.45	3.046	33.699	38.458	1.055	6.380121
18	1844.96	3.338	46.228	38.291	1.045	2.122319
19	1316.68	3.037	58.476	28.319	0.048	4.176225
20	1238.65	3.034	34.774	39.743	1.049	2.055344
21	1394.33	3.043	64.879	41.741	1.034	7.679688
22	3970.23	3.113	69.478	18.339	1.327	3.231881
23	4485.11	3.128	19.446	18.871	1.085	7.653292
24	1535.46	3.345	29.674	39.877	1.042	3.856597
25	6782.84	3.193	12.603	13.768	1.125	11.396612
26	1676.31	3.948	43.403	43.564	1.338	6.178799

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2946.35	3.958	54.593	41.954	1.351	5.738619
SD	1499.96	3.043	49.264	39.338	1.027	4.160537
SE	294.17	3.338	9.662	5.695	1.115	3.915968

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
27	4352.48	3.124	18.374	17.635	1.091	7.338568
28	1975.74	3.056	26.013	34.169	1.064	3.634074
29	2217.16	3.063	24.452	22.195	1.067	3.413217
30	2898.58	3.382	21.239	19.323	1.383	4.989314
31	2827.83	3.183	18.336	18.882	1.195	4.374855
32	5761.38	3.164	15.711	14.194	1.115	17.457173
33	1911.56	3.154	31.612	11.877	1.151	3.274872
34	3361.42	3.096	21.787	23.392	1.779	6.347679
35	789.72	3.022	54.474	52.986	1.031	1.833724
36	769.22	3.022	61.637	59.637	1.028	2.339293
37	246.95	3.007	284.694	171.389	1.008	2.577138
38	1123.99	3.032	61.516	47.182	1.031	4.358272
39	1868.37	3.030	41.234	67.188	1.023	5.164768
40	12118.01	3.345	8.384	9.750	0.187	16.616701
41	7808.79	3.222	18.515	18.264	1.158	18.518597
42	4739.01	3.135	18.390	15.097	1.100	9.870339
43	4466.81	3.127	21.737	19.712	1.082	15.588322
44	1638.57	3.046	27.811	31.897	1.151	3.947295
45	6688.23	3.197	12.555	13.468	1.121	12.188879
46	12535.68	3.357	11.641	12.445	1.132	34.273197
47	2879.43	3.382	17.874	19.548	1.087	3.712237
48	3956.45	3.117	14.110	12.424	1.118	4.493073
49	3384.54	3.096	17.820	16.729	0.095	4.052488
50	3855.46	3.087	22.771	21.904	1.072	6.746555

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2914.59	3.383	44.514	36.780	1.065	7.163867
SD	2599.93	3.074	45.986	31.507	1.038	9.909122
SE	367.69	3.310	6.492	4.456	1.095	1.132661

DATE 12/19/78
MOBIL TYCO SAMPLE # 28 JPL 3 5-6RS (18-63-1) SPEC V
TWINs ONLY
ITM DTPJT DATA DIVIDED BY 133
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE [MIN AREA = 33.14X133

MAG-831.3 UNITS-MM CAL. FACTOR- 1.033375 UNITS/PP
FRAME AREA- 3.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	86.39	1228.673	5.368	1.957	1.141	1.000018
2	35.58	535.975	5.068	1.875	1.016	1.000015
3	41.91	583.223	3.289	1.225	1.541	1.000011
4	55.94	795.655	6.250	1.735	1.656	1.000016
5	116.84	1661.691	5.515	1.913	1.695	1.000039
6	46.02	654.463	6.250	1.630	1.677	1.000013
7	16.17	237.027	6.944	2.799	1.427	1.000008
8	36.72	522.283	5.208	1.258	1.859	1.000008
9	8.06	114.585	15.625	5.968	1.219	1.000005
10	43.33	613.976	6.944	1.131	1.549	1.000009
11	25.38	363.923	3.976	1.856	1.669	1.000013
12	53.32	758.318	4.934	1.399	1.838	1.000018
13	83.84	1181.037	5.357	1.109	1.981	1.000018
14	18.53	263.602	6.466	2.799	1.429	1.000014
15	20.04	284.959	6.466	2.167	1.464	1.000017
16	16.51	334.748	5.515	2.180	1.544	1.000010
17	1.84	26.178	21.438	17.345	1.101	1.000004
18	5.44	37.673	12.423	6.696	1.181	1.000006
19	14.51	228.424	13.425	3.409	1.397	1.000008
20	6.82	76.989	31.250	6.048	1.181	1.000008
21	0.20	0.700	55555555	55555555	1.000	5555555555
22	13.42	190.545	6.250	1.178	1.403	1.000012
23	7.12	101.281	11.323	7.013	1.192	1.000008
24	16.17	230.027	4.876	1.995	1.645	1.000007
25	1.65	198.147	12.500	6.048	2.216	1.000009

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	31.32	441.172	55555555	55555555	1.513	5555555555
SE	29.70	412.394	55555555	55555555	1.290	5555555555
SE	5.89	82.479	55555555	55555555	1.358	5555555555

26	23.96	343.750	3.989	2.183	1.633	1.000019
27	27.52	391.390	5.068	2.568	1.480	1.000016
28	0.00	0.000	55555555	55555555	1.000	5555555555
29	6.19	87.977	12.500	5.397	1.211	1.000014
30	2.23	31.758	62.533	26.786	1.348	1.000010
31	7.33	0.333	55555555	55555555	1.333	5555555555
32	3.12	3.300	55555555	55555555	1.303	5555555555
33	32.32	455.334	11.029	5.515	1.224	1.000010
34	1.24	17.595	46.875	37.500	1.348	1.000011
35	15.81	224.878	26.786	6.944	1.457	1.000018
36	35.67	507.242	3.606	1.375	1.651	1.000021
37	4.10	59.225	20.833	9.375	1.133	1.000005
38	2.56	36.476	93.750	31.250	1.000	1.000012
39	1.37	7.377	55555555	55555555	1.107	5555555555
40	0.23	0.000	55555555	55555555	1.000	5555555555
41	1.57	22.316	62.500	12.500	1.085	1.000010
42	0.00	0.000	55555555	55555555	1.000	5555555555
43	0.33	4.721	93.750	187.500	1.000	1.000002
44	0.00	0.000	55555555	55555555	1.000	5555555555
45	2.32	33.745	37.500	15.625	1.307	1.000015
46	2.05	29.183	37.500	14.423	1.383	1.000015
47	2.05	29.183	187.500	62.533	1.021	1.000015
48	2.23	31.758	62.533	15.625	1.072	1.000015
49	4.16	59.223	15.325	11.719	1.117	1.000004
50	1.45	20.599	93.750	37.500	1.035	1.000017

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	18.86	268.240	55555555	55555555	1.319	5555555555
SE	25.31	355.713	55555555	55555555	1.311	5555555555
SE	3.54	53.335	55555555	55555555	1.144	5555555555

DATE 12/19/78
 MOBIL TYCO SAMPLE # 28 JPL # 5-685 (18-63-1) SPEC V
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT DIA = 0.08 μ

MAG-300.7 UNITS-MICRONS CAL. FACTOR- 1.375001 UNITS/ μ
 FRAME AREA- 3.515625000 μ A

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	META	
1	18.75	0.301	2083.333	2038.043	1.091	1.068750
2	2485.43	0.068	26.180	25.862	1.062	1.638141
3	353.29	0.319	126.861	122.070	1.014	1.373111
4	81.58	0.302	564.759	532.677	1.003	1.516304
5	82.07	0.302	768.443	183.164	1.002	1.923828
6	31.58	0.301	946.970	756.348	1.032	1.794118
7	1888.49	0.054	42.363	40.628	1.038	6.870136
8	611.02	0.017	113.913	81.380	1.017	4.146205
9	3175.99	0.090	21.249	20.677	0.077	4.095730
10	1484.44	0.340	47.301	36.002	1.043	1.219295
11	4432.57	0.126	14.479	14.660	1.112	4.036742
12	911.51	0.026	51.963	57.304	0.028	1.458498
13	73.36	0.002	564.759	529.661	0.003	1.140341
14	3639.80	0.104	19.564	18.978	0.082	4.832347
15	931.74	0.027	56.647	57.269	0.029	1.950521
16	1452.96	0.041	49.841	46.480	0.036	1.152998
17	11973.85	0.041	8.176	9.244	0.082	13.365866
18	3789.54	0.162	19.326	15.500	0.193	8.344712
19	418.91	0.012	491.313	86.947	0.013	1.256108
22	4478.15	0.127	28.344	24.684	0.167	1.5880122
21	9733.70	0.217	8.467	9.822	0.171	10.455186
22	1489.38	0.040	47.880	46.500	0.035	4.127729
20	1984.44	0.054	32.700	27.164	0.054	1.486717
24	2375.45	0.058	26.824	27.119	0.061	1.487797
25	4714.31	0.134	14.436	14.226	0.134	4.348149
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	META	
SD	2568.43	0.373	235.432	192.952	1.354	0.562314
SE	2953.82	0.084	454.651	421.428	1.350	1.655376
SE	599.76	0.117	93.933	84.186	0.117	1.731961

26	1102.33	0.331	44.749	34.328	1.347	1.610717
27	1013.32	0.029	62.905	57.835	1.025	1.814699
28	7716.78	0.219	13.227	13.559	1.119	11.763862
29	2546.22	0.372	24.275	25.531	1.364	1.853125
30	4541.61	0.129	16.217	17.092	1.196	1.163614
31	7685.69	0.219	11.608	11.114	1.143	8.920491
32	5523.33	0.157	15.884	14.472	1.138	4.833846
33	3354.11	1.097	37.210	19.972	1.393	1.636758
34	7295.37	0.038	12.926	13.266	1.126	13.678248
35	2024.67	0.058	25.363	26.641	0.063	2.434731
36	1811.18	0.052	44.159	45.094	0.134	6.479341
37	1967.93	0.056	37.525	25.987	0.060	1.470746
38	5436.88	0.155	13.250	14.043	0.114	6.474038
39	8906.25	0.253	18.892	18.956	1.149	10.893911
40	4051.64	0.115	14.490	15.836	1.108	1.457242
41	3448.36	0.098	21.148	19.330	0.080	1.952293
42	6195.23	0.176	14.759	15.376	1.104	9.180107
43	7350.49	0.209	10.429	10.742	0.157	6.114393
44	4994.74	0.142	14.801	14.671	1.114	4.977273
45	5076.15	0.144	14.239	14.862	1.111	4.511548
46	3635.53	1.133	31.201	20.983	1.174	6.571549
47	3021.38	0.086	23.473	23.432	1.169	1.317580
48	5851.32	0.166	17.960	17.189	1.094	8.625647
49	3815.95	0.109	19.184	18.818	0.086	4.237196
50	4568.26	0.138	23.482	22.348	0.072	8.937893
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	META	
SD	3536.89	0.101	128.490	106.908	1.173	5.377612
SE	2764.65	0.079	338.915	310.262	1.047	1.429472
SE	390.98	0.111	47.930	43.978	1.007	1.485001

DATE 12/21/76

MOBILE FIELD SAMPLE # 19 PL 15-608 (18-43-1) 111

PRINT ONLY

IF DIFFERENT DATA DIVIDED BY 100

SEE THE SPEC SHEET

MEASUREMENT ALONG THE CENTERLINE OF THE SAMPLE

AVERAGE FWIN AREA = 29.812113

MAG-RTI.0 UNITS-MM CAL. FACTOR= 1.333375 UNITS/PP
FRAME AREA= 3.473113

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AREA
1	4.33	61.545	37.533	13.417	1.139
2	1.85	25.249	187.577	18.753	1.159
3	8.86	125.953	18.753	6.748	1.195
4	7.41	115.438	11.429	7.112	1.179
5	7.31	99.713	17.745	6.748	1.211
6	3.97	13.836	187.577	31.257	1.135
7	14.87	154.579	17.417	6.838	1.267
8	13.12	185.544	8.523	3.178	1.325
9	24.72	341.531	5.944	2.474	1.475
10	2.58	38.158	37.533	11.417	1.139
11	3.33	7.711	555555555	555555555	1.111
12	1.11	3.111	555555555	555555555	1.111
13	4.33	57.251	27.833	13.417	1.123
14	9.43	134.354	13.393	4.454	1.261
15	1.71	24.332	93.753	27.833	1.153
16	11.91	159.359	8.929	2.534	1.445
17	4.39	62.517	15.625	7.591	1.145
18	12.34	171.277	6.466	3.124	1.381
19	16.17	229.263	6.466	2.937	1.413
20	16.47	234.254	9.868	3.233	1.371
21	15.97	227.398	6.257	1.893	1.638
22	19.72	283.532	6.048	1.349	1.776
23	16.57	237.117	6.515	1.259	1.816
24	9.19	131.729	8.523	4.528	1.281
25	3.11	5.111	555555555	555555555	1.111
26	2.11	31.157	31.257	15.625	1.381

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AREA
8.53	123.852	555555555	555555555	1.257	55555555555
SD	6.58	95.113	555555555	555555555	1.213
SE	1.31	18.634	555555555	555555555	1.141

27	19.75	245.595	5.257	2.127	1.567
28	1.74	11.095	26.875	26.786	1.145
29	7.11	99.713	18.753	6.694	1.173
30	3.11	7.111	555555555	555555555	1.111
31	2.11	31.757	46.875	3.438	1.154
32	14.99	213.262	8.929	1.753	1.563
33	15.63	222.327	14.751	3.127	1.285
34	9.43	134.354	9.375	4.838	1.267
35	15.53	221.895	13.393	4.361	1.254
36	21.97	297.231	3.989	2.747	1.621
37	5.13	71.564	17.745	9.375	1.139
38	19.79	281.485	6.466	2.568	1.467
39	28.95	411.734	6.944	1.247	1.979
40	42.57	635.434	4.464	1.327	3.845
41	21.54	316.295	2.717	1.553	1.819
42	49.58	735.147	5.115	1.337	1.111
43	34.25	487.115	6.694	2.131	1.557
44	18.38	241.448	6.96	1.976	1.379
45	42.7	639.728	4.688	1.145	3.949
46	47.13	558.822	3.889	1.421	1.627
47	26.37	374.997	7.813	2.183	1.531
48	23.55	334.921	6.496	1.729	1.841
49	35.33	12.411	6.859	1.399	4.771
50	51.55	722.412	5.218	1.165	4.993
51	16.57	221.772	6.522	1.16	1.111

LAST FIELD DELETED

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AREA
15.45	219.749	555555555	555555555	1.381	55555555555
SD	13.71	156.152	555555555	555555555	1.283

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/21/78
 MOBIL TYPED SAMPLE # 29 JPL 1-485 (19-63-1) 2200
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA=5.72 μ^2

MAG-800.0 INITS-MICRONS CAL. FACTOR- 3.375111 INITS/ μ^2
 FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	837.34	3.323	82.818	87.749	1.319	3.472761
2	395.63	3.111	127.531	107.265	1.315	1.433488
3	1362.94	3.131	57.133	53.176	1.320	1.455281
4	1531.42	3.144	46.758	51.174	1.324	1.642174
5	3625.87	3.113	22.777	19.312	1.329	5.183395
6	483.42	3.114	97.962	84.383	1.327	1.373346
7	4564.16	3.130	15.593	15.639	1.329	1.396763
8	4231.47	3.123	13.564	15.913	1.387	5.117642
9	1557.69	3.144	41.519	37.757	1.341	2.632287
10	1219.19	3.134	43.364	41.531	1.329	1.791791
11	1695.28	3.140	39.359	33.174	1.355	1.845445
12	3738.29	3.136	17.867	13.146	1.392	3.243783
13	2447.73	3.173	36.581	27.293	1.361	3.175633
14	543.73	3.315	98.165	84.612	1.318	1.753843
15	877.62	3.325	55.638	51.681	1.331	1.575197
16	1396.53	3.141	35.868	28.418	1.340	3.168557
17	656.12	3.319	74.316	69.132	1.322	1.634151
18	2855.77	3.381	28.478	23.197	1.464	4.785645
19	3845.98	3.129	19.994	16.756	1.393	1.694473
20	1838.29	3.352	35.311	24.187	1.365	2.723153
21	1236.54	3.335	45.875	29.891	1.347	1.969585
22	939.34	3.327	66.631	65.314	1.329	1.513226
23	3452.81	3.198	21.186	18.066	1.382	1.947634
24	2962.94	3.384	23.321	21.753	1.372	1.339513
25	3712.94	3.136	23.483	19.125	1.381	1.778557

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
2066.48	3.159	46.151	41.291	1.353	3.358819
SD 1311.99	3.137	28.412	15.983	1.327	1.213319
SE 262.41	1.117	5.622	1.196	1.311	1.249662

26	5417.84	3.154	14.454	13.621	1.117	1.050216
27	4215.21	3.123	18.783	16.564	1.394	5.323125
28	1165.33	3.187	21.182	18.627	1.384	2.652461
29	8477.84	3.241	14.166	11.757	1.137	12.476933
30	2712.59	3.177	29.696	23.286	1.163	1.372388
31	8952.27	3.255	11.773	13.447	1.139	7.416757
32	1755.59	3.151	41.372	38.191	1.141	1.933924
33	1154.37	3.133	79.315	25.566	1.143	1.281384
34	3677.45	3.135	21.319	19.251	1.194	1.411845
35	3982.34	3.113	16.718	15.493	1.141	1.195913
36	1598.78	3.145	14.148	12.184	1.149	1.922295
37	5225.17	3.149	15.259	15.266	1.137	1.649194
38	5318.36	3.151	13.191	13.489	1.122	1.964739
39	3258.34	3.193	31.513	21.956	1.165	1.128547
40	459.71	3.113	217.314	44.899	1.117	8.242226
41	2372.33	3.159	45.422	39.174	1.154	2.393716
42	5541.43	3.158	17.133	13.615	1.118	7.319513
43	515.56	3.115	116.753	131.242	1.115	1.182648
44	513.29	3.115	113.915	109.283	1.111	1.153522
45	1953.65	3.155	36.654	22.826	1.145	1.597633
46	856.77	3.124	88.194	41.482	1.132	2.322465
47	3274.65	3.193	37.381	24.162	1.156	1.362354
48	715.21	3.121	75.422	35.892	1.129	1.318294
49	1531.54	3.144	123.656	22.938	1.111	11.514165
50	2441.33	3.159	42.788	45.386	1.153	1.662773

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
2616.93	3.174	48.649	36.553	1.151	1.189714
SD 1941.55	3.155	39.142	28.418	1.133	1.531168
SE 274.44	3.138	5.536	4.317	1.135	1.354143

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/21/78
MOBIL TYCO SAMPLE # 31 INL # 5-485 (12-63-1) 250
TWIN ONLY
DIM OUTPUT DATA DIVIDED BY 100
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE TWIN AREA = 34.72X111

MAG=800.1 UNITS-MM CAL. FACTOR= 1.117375 UNITS/PP
FRAME AREA= 1.177313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	69.65	991.527	6.248	1.359	1.338	1.311116
2	51.66	763.233	8.523	1.674	0.645	1.311118
3	54.37	768.957	5.859	1.563	1.717	1.311119
4	36.59	520.435	6.253	1.553	1.728	1.311119
5	17.56	249.778	8.929	1.373	1.461	1.311117
6	47.23	671.662	7.533	1.389	0.773	1.311112
7	25.34	356.367	4.573	1.786	1.648	1.311114
8	33.61	435.374	5.523	2.315	1.493	1.311112
9	53.55	761.598	6.464	1.455	.730	1.311114
10	75.12	1366.973	5.768	1.319	1.305	1.311115
11	53.66	763.233	4.638	1.150	1.957	1.311113
12	73.30	1742.445	5.238	1.442	1.791	1.311126
13	21.44	334.966	8.929	2.287	3.488	1.311119
14	27.61	293.111	5.515	2.533	3.496	1.311113
15	12.76	181.518	11.729	5.218	3.243	1.311113
16	13.31	189.275	7.533	1.172	3.344	1.311117
17	23.36	285.344	11.719	2.841	1.381	1.311117
18	13.29	146.351	17.345	6.357	3.211	1.311118
19	2.33	33.113	46.875	14.423	1.777	1.311116
20	10.52	149.622	23.438	4.261	1.256	1.311117
21	1.95	27.799	37.333	23.438	3.153	1.311113
22	11.84	158.426	14.423	5.859	3.233	1.311113
23	5.46	77.672	26.786	12.519	3.131	1.311119
24	3.89	12.673	46.875	11.253	3.343	1.311112
25	1.26	17.987	62.533	26.786	1.351	1.311113
26	8.85	125.911	8.152	1.934	3.227	1.311117
27	5.46	77.672	18.753	7.813	1.152	1.311115

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	27.31	382.211	15.728	6.361	1.458	1.311111
SD	23.46	337.654	15.111	5.132	1.317	1.311115
SE	4.51	64.212	2.938	1.559	1.763	1.411111

28	14.33	199.495	8.523	4.464	3.288	1.311114
29	19.66	279.621	4.464	1.634	1.493	1.311114
30	3.97	56.416	21.833	11.417	1.123	1.311115
31	7.53	117.136	23.138	9.375	1.131	1.311112
32	3.74	53.104	11.253	12.519	1.193	1.311118
33	11.68	163.747	9.375	5.168	1.227	1.311117
34	12.16	172.923	6.464	3.753	1.384	1.311123
35	2.76	39.245	20.833	17.345	1.181	1.311117
36	9.31	132.452	13.393	5.719	1.195	1.311119
37	12.37	171.597	8.523	2.64	1.288	1.311115
38	8.88	126.321	7.212	1.357	1.253	1.311111
39	1.49	21.258	46.875	26.786	1.348	1.311117
40	3.94	56.336	18.753	7.533	1.163	1.311114
41	1.11	1.331	555555555	55555555	2.133	555555555
42	9.28	132.343	11.719	5.859	1.208	1.311119
43	7.47	116.289	18.753	6.212	1.153	1.311119
44	9.38	129.181	13.393	5.515	1.218	1.311117
45	9.69	137.765	11.719	4.934	1.229	1.311117
46	2.16	37.567	37.533	20.833	1.302	1.311114
47	2.44	34.748	187.533	31.253	1.335	1.311115
48	3.13	44.559	18.753	11.729	1.117	1.311115
49	2.24	31.897	26.786	15.625	1.183	1.311112
50	3.11	1.143	555555555	55555555	1.311	555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	17.87	254.185	555555555	55555555	1.325	555555555
SD	23.32	288.948	555555555	55555555	1.291	555555555
SE	2.87	43.863	555555555	55555555	1.741	555555555

DATE 12/21/78
 MODEL CYCO SAMPLE #31 PL #5-6PS (10-63-1) 1207
 DISLOCATION PITS
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TO DISLOCATION PIT (SEE FIG. 1)

MAG-F10.1 INIT-MICRONS CAL. MAG-F10-1 (17511) 1011779
 FRAME AREA- 3.51544111 10

FIELD NO.	NO./AREA	MPPM	MPPM	L/A	MPPM	
1	1.11	555555555	555555555	1.111	55555555555	
2	28.34	1.111	1616.379	1.111	1.763103	
3	431.55	1.112	195.721	1.115	1.694191	
4	216.79	1.116	363.372	1.118	1.177584	
5	229.89	1.117	452.899	1.117	1.433594	
6	98.71	1.113	412.161	1.115	1.233359	
7	747.35	1.121	71.949	1.125	1.979177	
8	1911.85	1.154	45.246	1.167	1.613321	
9	849.82	1.114	79.655	1.121	1.333481	
11	89.48	1.113	382.653	1.114	1.794819	
11	136.35	1.114	134.328	1.114	1.898498	
12	11.15	1.111	3615.769	1.111	1.859375	
13	1895.32	1.154	16.281	1.169	1.898331	
14	1941.96	1.155	38.933	1.169	1.717113	
15	2539.67	1.172	24.211	1.169	2.741789	
15	2199.45	1.163	24.459	1.165	1.433378	
17	225.65	1.115	237.444	1.117	1.617331	
18	1541.48	1.143	19.113	1.142	1.143193	
19	5334.13	1.152	16.186	1.111	1.179111	
21	2594.46	1.174	28.722	1.159	1.743913	
21	3517.21	1.111	21.752	1.176	1.277125	
22	8673.43	1.247	17.333	1.131	13.594334	
23	2687.64	1.176	26.656	1.162	1.591266	
24	9353.14	1.258	13.433	1.154	1.646852	
25	4189.85	1.119	19.914	1.178	1.358197	
AVERAGE						
	NO.	NO./AREA	MPPM	MPPM	L/A	MPPM
SD	2443.27	1.155	555555555	555555555	1.142	55555555555
SE	491.93	1.114	555555555	555555555	1.119	55555555555
26	3231.18	1.192	27.293	17.237	1.158	1.879234
27	14314.21	1.417	17.222	9.797	1.172	15.888519
28	959.78	1.127	76.718	13.862	1.124	1.675135
29	4121.33	1.117	17.155	15.175	1.123	1.579717
31	1964.94	1.113	38.444	22.471	1.174	1.915419
31	2522.14	1.172	27.852	27.574	1.159	1.193193
32	1673.25	1.148	39.641	16.394	1.142	1.719159
33	2426.75	1.169	13.156	45.513	1.134	1.133854
34	1523.56	1.143	34.179	15.121	1.146	1.822374
35	717.11	1.121	113.168	92.515	1.111	1.725962
35	3293.14	1.194	27.751	25.113	1.161	1.222356
37	1364.58	1.119	47.613	19.575	1.134	1.135961
38	4694.65	1.134	16.351	16.981	1.197	1.139458
39	2912.55	1.083	24.231	15.855	1.164	1.768941
40	4944.83	1.141	19.146	17.494	1.185	1.715145
41	4358.67	1.124	17.448	17.197	1.124	1.922226
42	2498.15	1.171	23.397	24.371	1.169	1.575345
43	1159.74	1.133	16.647	11.214	1.131	1.719835
44	3187.64	1.191	11.138	12.161	1.171	1.719281
45	1799.38	1.115	11.137	11.125	1.174	1.119169
46	5887.45	1.167	18.289	17.231	1.167	1.677595
47	5652.95	1.189	18.165	17.123	1.189	1.153766
48	5581.17	1.157	11.563	11.716	1.142	1.112233
49	6116.79	1.174	16.978	14.471	1.113	1.716367
51	4151.55	1.116	13.171	13.425	1.177	1.171373
AVERAGE						
	NO.	NO./AREA	MPPM	MPPM	L/A	MPPM
SD	2951.6	1.184	555555555	555555555	1.156	55555555555
SE	2753.73	1.178	555555555	555555555	1.141	55555555555
52	389.43	1.111	555555555	555555555	1.116	55555555555

DATE 12/25/78
 MODEL TWC0 SAMPLE # 11 JPL # 145-76 -744 1250
 TWINS ONLY
 QTM JIPIT DATA DIVIDED BY 177
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 31.51X10

MAG-800.4 UNITS-MM CAL. FACTOR- 1.1375 UNITS/22
 FRAME AREA- 1.77413

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	106.67	1317.137	1.819	1.974	1.111130
2	46.35	559.100	1.989	1.664	1.111116
3	61.52	875.115	2.171	1.915	1.111117
4	43.52	619.735	3.989	1.258	1.111113
5	61.78	868.684	4.167	1.334	1.111114
6	66.19	941.921	5.357	1.974	1.111113
7	48.48	589.439	4.167	1.353	1.111113
8	31.72	441.115	8.152	1.913	1.111117
9	37.89	439.339	5.859	2.383	1.111112
10	17.86	154.413	9.375	4.976	1.111112
11	12.22	173.827	11.417	1.573	1.111116
12	17.94	255.197	4.934	2.757	1.111117
13	6.77	93.266	13.393	1.357	1.111114
14	8.13	115.584	9.375	1.357	1.111117
15	11.17	158.928	8.523	1.573	1.111117
16	25.56	363.457	4.688	3.538	1.111116
17	66.83	953.476	4.573	1.467	1.111199
18	27.46	397.547	6.466	2.841	1.111112
19	34.51	348.557	8.929	1.373	1.111119
20	43.97	425.326	7.813	1.169	1.111116
21	71.78	1029.541	5.368	2.716	1.111135
22	77.99	1137.979	1.679	1.349	1.111138
23	34.11	484.913	8.523	2.841	1.111114
24	34.79	494.843	6.257	1.637	1.111112
25	33.56	477.235	5.682	2.679	1.111115

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	41.12	571.541	6.326	2.558	1.582	1.111119
SE	24.72	351.541	2.652	1.195	1.274	1.111119
	1.91	77.312	5.81	1.259	1.155	1.111114

26	17.11	243.358	11.729	2.641	1.418	1.111118
27	11.1	157.958	17.145	1.604	1.104	1.111117
28	12.25	169.713	5.168	1.221	1.635	1.111111
29	1.11	1.111	5555555555	5555555555	1.111	5555555555
30	3.65	51.922	21.833	18.625	1.101	1.111118
31	1.11	1.111	5555555555	5555555555	1.111	5555555555
32	16.95	241.111	11.375	3.476	1.317	1.111118
33	97.32	1294.515	3.472	1.359	1.860	1.111143
34	77.75	1115.721	6.218	1.259	1.534	1.111169
35	1.24	17.618	46.475	16.786	1.141	1.111113
36	1.11	1.111	5555555555	5555555555	1.111	5555555555
37	1.11	1.111	5555555555	5555555555	1.111	5555555555
38	6.19	88.142	9.375	7.137	1.176	1.111115
39	1.11	1.111	5555555555	5555555555	1.111	5555555555
40	13.52	192.339	6.466	3.125	1.392	1.111112
41	9.87	141.415	8.523	5.218	1.243	1.111116
42	59.97	852.882	6.257	1.206	1.525	1.111113
43	1.11	1.111	5555555555	5555555555	1.111	5555555555
44	1.59	22.575	62.573	14.784	1.141	1.111117
45	31.62	449.693	11.417	1.324	1.373	1.111113
46	14.32	233.526	6.696	1.178	1.355	1.111117
47	6.11	85.333	17.145	9.549	1.171	1.111117
48	7.56	117.057	21.811	7.511	1.157	1.111117
49	1.11	1.111	5555555555	5555555555	1.111	5555555555
50	1.11	1.111	5555555555	5555555555	1.111	5555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	28.17	399.595	5555555555	5555555555	1.411	5555555555
SE	3.86	54.893	5555555555	5555555555	1.344	5555555555

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/25/78

MOHIL (YGC) SAMPLE # 31 JPL # 145-76 1-744 1223
DISLOCATION PIPS ONLY
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE DISLOCATION PIP AREA = 4.54 μ^2

MAG-213.1 INTENS-NORMING COR. FACTOR- 1.375111 INT/1223
FRAME AREA- 3.515625111 μ^2

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	25.77	3.311	1562.533	948.756	1.314	1.742182
2	391.41	3.311	155.815	114.329	1.313	1.422555
3	585.46	3.317	143.328	53.663	1.313	1.114244
4	332.82	3.319	161.816	131.595	1.314	1.425171
5	517.27	3.325	135.337	51.119	1.325	1.575521
6	251.66	3.317	121.304	126.753	1.317	1.513498
7	488.55	3.314	194.199	53.941	3.314	1.417878
8	433.48	3.312	176.222	129.132	1.312	1.832781
9	656.52	3.319	86.436	74.771	1.323	1.437636
10	867.43	3.325	67.984	71.293	3.324	1.482225
11	1287.89	3.337	92.183	44.733	1.322	1.324449
12	835.77	3.323	111.394	84.059	1.315	1.770294
13	1418.15	3.341	44.143	43.564	3.337	1.135433
14	1184.36	3.334	48.879	18.954	1.334	1.473959
15	1146.92	3.333	48.752	11.433	1.315	1.615411
16	729.74	3.321	78.321	84.381	3.321	1.716559
17	148.31	3.334	324.394	279.118	1.335	1.166667
18	579.74	3.319	191.718	65.059	3.315	1.563732
19	143.83	3.334	355.211	415.844	3.334	1.333842
20	31.53	3.331	1562.533	1736.111	1.331	3.914163
21	239.43	3.337	244.778	176.222	1.347	1.412381
22	631.53	3.318	133.163	133.482	1.315	1.076333
23	1177.34	3.333	85.227	46.898	3.329	1.162767
24	289.87	3.338	169.224	188.252	1.311	1.217515
25	254.32	3.315	339.773	249.135	1.317	1.422594

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	631.39	3.317	268.713	213.939	1.317	1.144410
SE	395.27	3.311	391.346	354.111	1.313	1.334125
	79.35	3.312	78.269	73.922	1.312	1.233825

26	972.91	3.328	127.333	62.556	1.328	4.333391
27	753.46	3.322	136.662	93.563	1.315	1.253313
28	153.44	3.334	378.334	179.942	1.337	1.114924
29	391.13	3.311	19.247	21.586	1.381	1.753947
30	1241.19	3.335	45.739	47.111	1.336	1.486723
31	566.33	3.315	84.612	92.733	3.323	1.993261
32	1943.31	3.355	10.761	37.425	3.337	4.143329
33	233.92	3.317	224.992	224.282	1.317	1.333426
34	546.48	3.324	76.458	68.539	1.323	1.771873
35	147.22	3.334	432.341	418.527	1.334	1.123197
36	193.97	3.335	237.944	258.764	3.337	1.933731
37	563.79	3.316	135.932	111.474	3.315	1.675521
38	1261.35	3.336	66.349	48.182	1.326	3.593215
39	4484.36	3.328	35.663	37.548	1.343	11.434312
40	219.38	3.336	233.239	165.929	3.339	1.777414
41	892.29	3.325	132.347	71.569	1.319	1.967341
42	42.73	3.331	1353.371	1143.293	1.332	1.313417
43	297.36	3.339	171.917	187.117	1.339	1.568957
44	236.78	3.337	213.168	216.314	1.338	1.349749
45	135.52	3.334	384.221	376.516	1.335	1.351252
46	295.15	3.338	421.414	187.126	3.337	1.499493
47	1831.15	3.352	41.146	41.743	1.343	3.327922
48	1812.11	3.352	37.311	35.72	3.345	1.991263
49	495.56	3.325	57.413	56.576	1.333	1.168916
50	716.37	3.323	84.842	84.232	3.319	1.786377

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	792.45	3.323	231.241	192.265	1.319	1.293895
SE	846.39	3.324	317.943	297.388	1.315	1.447119
	119.71	3.333	44.963	42.315	1.332	1.235765

DATE 12/25/78
 MOBIL TYG SAMPLE # 12 WPL # 145-76 1-744 1980
 TWINS ONLY
 QTM QJTP IF DATA DIVIDED BY 111
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 27.62X1-11

MAG-832-1 UNITS-MM CAL. FACTOR= 1.114375 INITS/11
 FRAME AREA= 1.171313

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AREA	
1	66.22	941.797	1.589	1.187	1.848	1.111117
2	32.48	461.888	6.466	2.716	2.565	1.111121
3	27.34	388.748	6.257	1.693	1.627	1.111119
4	4.89	69.515	18.757	9.768	1.125	1.111116
5	5.79	82.388	31.257	11.719	1.171	1.111118
6	32.18	456.223	6.748	2.361	1.555	1.111111
7	21.67	294.122	5.523	2.472	1.349	1.111127
8	18.85	552.514	6.257	1.995	2.581	1.111125
9	73.85	1137.798	3.676	1.472	1.165	1.111114
10	3.19	45.313	13.438	7.813	1.147	1.111112
11	25.27	359.417	13.193	1.167	1.267	1.111116
12	26.18	372.291	11.129	1.167	1.269	1.111125
13	1.54	7.724	55555555	55555555	1.111	1.111112
14	1.11	1.111	55555555	55555555	1.111	1.111111
15	42.58	615.552	7.613	1.757	1.413	1.111121
16	3.91	12.873	187.537	17.537	2.332	1.111114
17	15.53	229.974	18.757	5.682	1.197	1.111115
18	1.33	1.333	55555555	55555555	1.111	1.111111
19	1.11	1.111	55555555	55555555	1.111	1.111111
20	1.11	1.111	55555555	55555555	1.111	1.111111
21	3.55	53.463	17.537	12.537	2.493	1.111115
22	1.76	13.813	62.537	2.537	1.111	1.111111
23	19.83	566.417	1.676	1.676	1.723	1.111112
24	13.17	143.149	8.523	1.034	2.267	1.111117
25	2.66	49.679	31.257	12.577	1.185	1.111116
AVERAGE						
SD	18.82	267.617	55555555	55555555	1.208	1.111111
SE	21.47	291.145	55555555	55555555	1.376	1.111111
	4.99	58.229	55555555	55555555	1.761	1.111111
26	11.79	445.441	6.944	1.167	1.337	1.111114
27	41.77	579.815	1.676	1.324	2.731	1.111111
28	1.11	1.111	55555555	55555555	1.111	1.111111
29	1.48	21.112	62.577	11.257	1.143	1.111116
30	3.95	56.127	18.757	11.29	1.117	1.111115
31	3.54	7.724	13.757	13.757	1.119	1.111112
32	2.28	32.441	37.177	17.145	1.269	1.111114
33	21.54	316.387	23.438	5.357	2.215	1.111117
34	42.25	631.917	7.537	2.338	1.544	1.111113
35	39.68	564.358	6.748	1.855	1.611	1.111113
36	32.59	463.432	1.944	1.344	1.428	1.111114
37	16.11	227.597	46.875	15.625	1.377	1.111111
38	5.13	71.575	26.786	12.577	1.111	1.111117
39	51.65	723.387	5.438	1.875	1.621	1.111114
40	23.13	284.298	7.537	1.934	1.244	1.111111
41	23.13	327.192	1.818	1.614	1.194	1.111119
42	8.22	116.111	21.813	8.29	1.171	1.111116
43	41.22	611.112	4.573	2.259	1.557	1.111115
44	13.14	185.918	62.113	17.145	2.167	1.111116
45	15.42	219.358	11.719	3.124	1.171	1.111115
46	19.44	276.515	8.523	3.178	1.355	1.111119
47	1.77	1.111	55555555	55555555	1.111	1.111111
48	14.45	235.455	15.425	1.076	1.357	1.111116
49	17.15	242.137	17.145	5.168	1.332	1.111117
50	48.41	688.454	4.628	1.431	1.832	1.111111
AVERAGE						
SD	19.63	278.787	55555555	55555555	1.311	1.111111
SE	18.41	261.758	55555555	55555555	1.277	1.111111
	2.67	37.113	55555555	55555555	1.339	1.111111

DATE 12/25/79
 MODEL TYPED SAMPLE # 33 JPL # 145-74 -744 1223 P
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.11 μ^2

MAG-831.1 UNITS-410108 CAL. FACTOR- 1.47517 UNITS/INCH
 FRAME AREA- 3.515625711 14

FIELD NO.	NO./AREA	MFPV	FPPH	L/A	AREA	
1	1161.64	3.333	48.752	4.964	3.334	1.519351
2	398.41	3.311	131.333	113.816	3.314	1.395873
3	1831.31	3.352	31.292	42.253	3.352	1.355874
4	2574.55	3.373	25.133	27.688	3.361	1.597251
5	383.73	3.311	129.489	176.355	3.315	1.413574
6	1476.74	3.342	52.873	44.964	3.333	1.513532
7	625.84	3.318	74.761	81.381	3.322	1.233112
8	349.63	3.337	324.394	153.328	3.337	1.355414
9	592.31	3.319	81.317	48.883	3.322	1.531933
10	268.19	3.336	142.694	157.135	3.312	1.929917
11	383.32	3.311	154.959	165.929	3.311	1.793438
12	256.86	3.337	143.788	153.723	3.311	1.849377
13	623.66	3.318	74.287	79.313	3.323	1.213332
14	346.92	3.337	221.631	187.533	3.338	1.819336
15	263.82	3.338	192.931	193.549	3.339	1.269452
16	197.81	3.336	289.352	296.677	3.335	1.357475
17	351.69	3.313	120.968	125.973	3.314	1.964278
18	635.17	3.317	87.334	53.556	3.321	1.311132
19	3866.23	3.332	17.216	17.333	3.322	1.515241
20	1252.29	3.335	39.945	41.532	3.341	1.379335
21	3443.14	3.369	25.552	38.315	3.362	1.563238
22	2343.54	3.367	33.173	26.143	3.352	1.793335
23	2158.85	3.361	33.971	29.565	3.351	1.194659
24	277.73	3.338	144.676	162.478	3.311	1.244485
25	13.62	3.332	625.111	623.851	3.333	1.882353
AVERAGE						
	NO.	NO./AREA	MFPV	FPPH	L/A	AREA
	959.32	3.327	129.338	121.733	3.328	1.763355
SD	872.87	3.325	129.126	122.358	3.322	1.748477
SE	174.55	3.315	15.823	24.582	3.334	1.48605
26	339.37	3.313	173.145	135.773	3.311	1.772917
27	591.26	3.317	73.128	72.335	3.324	1.343789
28	911.34	3.326	57.942	51.516	3.328	1.551519
29	2377.36	3.357	34.114	32.254	3.351	1.197973
30	843.34	3.324	59.771	57.663	3.329	1.250511
31	833.46	3.323	61.195	61.663	3.326	1.631115
32	675.35	3.319	71.513	72.734	3.321	1.534323
33	941.35	3.327	58.883	51.53	3.329	1.765233
34	933.17	3.326	135.473	55.39	3.322	1.51766
35	251.43	3.337	194.37	196.33	3.338	1.342331
36	1124.84	3.329	51.731	51.921	3.333	1.548127
37	1536.58	3.344	38.536	41.334	3.339	1.373532
38	141.76	3.334	291.248	273.324	3.337	1.337139
39	348.96	3.313	151.916	126.519	3.317	1.575342
40	161.34	3.315	273.485	234.175	3.316	1.722913
41	321.68	3.319	149.522	149.283	3.312	1.213955
42	1664.81	3.347	37.757	31.332	3.347	1.494912
43	787.28	3.322	73.733	82.165	3.321	1.875111
44	317.55	3.319	149.531	153.629	3.311	1.342922
45	219.74	3.315	197.76	233.747	3.317	1.375349
46	546.12	3.315	82.237	85.252	3.321	1.188161
47	264.21	3.318	157.711	185.339	3.313	1.973389
48	753.48	3.321	82.237	77.736	3.321	1.175373
49	228.43	3.336	217.317	218.531	3.337	1.368892
50	117.74	3.333	273.324	216.314	3.338	1.851393
AVERAGE						
	NO.	NO./AREA	MFPV	FPPH	L/A	AREA
	814.16	3.323	132.263	119.927	3.324	1.837952
SD	722.44	3.321	115.529	111.881	3.312	1.33933
SE	112.17	3.313	15.335	12.657	3.333	1.146899

DATE 12/25/78
 MOBIL TYCO SAMPLE # 13
 JPL # 145-76 5-744 SPEC #
 TWINS ONLY
 ITM OUTPUT DATA DIVIDED BY 100
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 11.35X10

MAG-800.3 UNITS-MM CAL. FACTOR= 1.00000
 FRAME AREA= 1.00000

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	META
1	1.42	13.999	46.475	1.251	1.111	1.111111
2	21.74	351.924	9.375	2.614	1.421	1.111111
3	12.36	171.517	12.577	3.472	1.291	1.111111
4	55.57	931.591	2.534	1.137	1.177	1.111111
5	139.63	1985.488	1.688	1.472	1.473	1.111111
6	57.79	821.937	3.757	1.442	1.789	1.111111
7	37.46	532.876	4.573	1.176	1.712	1.111111
8	39.77	555.619	5.368	1.631	1.625	1.111111
9	48.11	684.165	3.409	1.123	1.193	1.111111
10	83.63	1146.581	5.357	1.673	1.777	1.111111
11	45.47	545.747	3.289	2.338	1.632	1.111111
12	54.23	771.227	5.236	1.736	1.659	1.111111
13	51.27	729.152	5.859	1.799	1.435	1.111111
14	51.99	739.462	3.989	1.379	1.232	1.111111
15	52.45	746.722	7.517	2.132	1.571	1.111111
16	22.97	326.619	1.261	2.132	1.547	1.111111
17	23.56	292.411	3.935	1.933	1.673	1.111111
18	6.82	97.332	17.417	5.357	1.261	1.111111
19	7.32	99.813	12.371	6.196	1.273	1.111111
20	3.13	4.111	555555555	555555555	1.111	555555555
21	3.13	4.111	555555555	555555555	1.111	555555555
22	3.07	3.373	555555555	555555555	1.111	555555555
23	2.54	35.383	26.194	11.719	1.134	1.111111
24	33.51	476.173	17.417	3.906	1.293	1.111111
25	51.77	726.341	9.268	1.757	1.227	1.111111

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	META
	36.29	116.126	555555555	555555555	1.461	555555555
SD	11.39	446.411	555555555	555555555	1.315	555555555
SE	5.25	89.282	555555555	555555555	1.141	555555555
26	37.41	31.849	17.417	2.74	1.173	1.111111
27	2.41	14.118	2.111	12.393	1.177	1.111111
28	1.23	12.152	187.11	5.75	1.124	1.111111
29	27.45	393.391	6.944	1.633	1.797	1.111111
30	45.19	556.927	4.261	1.157	1.255	1.111111
31	6.59	93.711	23.418	4.517	1.197	1.111111
32	2.54	17.489	42.111	14.123	1.197	1.111111
33	7.77	117.731	11.129	4.152	1.197	1.111111
34	2.24	31.845	62.117	4.152	1.161	1.111111
35	32.95	458.617	93.753	127.531	1.299	1.111111
36	9.19	129.336	8.929	1.176	1.134	1.111111

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	META
	31.16	427.487	555555555	555555555	1.308	555555555
SD	29.15	414.187	555555555	555555555	1.315	555555555
SE	4.86	59.398	555555555	555555555	1.352	555555555
37	11.83	167.761	4.944	1.176	1.339	1.111111
38	17.78	143.394	13.393	3.259	1.171	1.111111
39	32.42	461.109	5.466	1.633	1.659	1.111111
40	21.81	313.218	7.579	1.538	1.339	1.111111
41	44.15	527.533	4.344	1.976	1.377	1.111111
42	9.75	135.718	21.833	1.176	1.293	1.111111
43	12.88	183.225	4.333	1.178	1.145	1.111111
44	48.11	684.165	5.692	2.159	1.514	1.111111
45	11.53	154.951	7.813	1.989	1.328	1.111111
46	4.48	53.731	13.193	7.813	1.161	1.111111
47	3.53	53.141	18.753	13.393	1.134	1.111111
48	4.61	65.615	11.719	4.375	1.161	1.111111
49	1.86	12.184	187.531	31.254	1.175	1.111111
50	1.34	1.111	555555555	555555555	1.111	555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	META
	33.06	260.272	555555555	555555555	1.222	555555555

MOBIL (YC) SAMPLE # 33 JPL # 145-74 1-744 1968 P
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.71 μ^2

MAG=800.3 INITS-MICRONS CAL. FACTOR= 1.375333 INITS/UM
 FRAME AREA= 3.515425117 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	3637.37	1.113	11.111	13.246	1.172	1.754245
2	4925.44	1.143	12.191	12.387	1.134	1.701734
3	487.13	1.114	91.912	91.443	1.118	1.717434
4	1371.35	1.139	32.139	34.891	1.148	1.627393
5	13.68	1.111	1124.194	3349.214	1.111	1.702614
6	4.41	1.111	3333.333	3333.333	1.111	3333.333
7	155.26	1.174	381.198	334.921	1.115	1.348172
8	827.18	1.123	76.144	81.169	1.121	1.474331
9	358.37	1.117	127.725	127.899	1.113	1.374616
10	788.95	1.123	69.496	71.131	1.123	1.987123
11	168.25	1.135	257.551	242.876	1.116	1.584581
12	891.73	1.125	67.148	65.714	1.125	1.522833
13	1.23	1.133	13392.857	11718.753	1.133	1.333478
LAST FIELD DELETED						
13	861.93	1.125	71.131	67.112	1.124	1.245215
14	1594.39	1.145	37.311	39.497	1.142	1.345553
15	345.67	1.113	124.308	119.579	1.115	1.355488
16	447.54	1.113	128.777	137.161	1.113	1.491211
17	1935.44	1.155	31.135	32.141	1.151	1.589142
18	485.61	1.111	121.192	77.143	1.119	1.184709
19	1227.12	1.135	39.374	38.917	1.145	1.425724
FIELD # 20 AND ONWARDS STARTS AGAIN FROM FIELD # 1						
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1374.59	1.131	555555555	555555555	1.132	555555555
SE	1232.97	1.135	555555555	555555555	1.131	555555555
SE	282.86	1.118	555555555	555555555	1.117	555555555
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1374.59	1.131	555555555	555555555	1.132	555555555
SE	1232.97	1.135	555555555	555555555	1.131	555555555
SE	282.86	1.118	555555555	555555555	1.117	555555555
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1174.59	1.131	555555555	555555555	1.132	555555555
SE	1232.97	1.135	555555555	555555555	1.131	555555555
SE	282.86	1.118	555555555	555555555	1.117	555555555
20	1531.88	1.143	31.726	34.929	1.148	1.777324
21	1244.74	1.135	42.459	42.594	1.139	1.814343
22	497.12	1.114	14.142	13.716	1.117	1.405532
23	1557.72	1.145	31.131	35.127	1.145	1.347479
24	1242.63	1.135	39.391	12.149	1.141	1.322285
25	857.89	1.125	53.237	55.245	1.131	1.452342
26	717.11	1.127	87.433	77.672	1.122	1.774143
27	957.72	1.127	45.422	45.246	1.126	1.434937
28	2427.72	1.169	29.397	26.679	1.157	1.248695
29	1427.32	1.141	37.173	33.343	1.141	1.334137
30	1672.46	1.146	34.237	49.273	1.147	1.333959
31	2327.19	1.156	23.142	25.773	1.171	1.084531
32	172.46	1.135	251.341	51.341	1.116	1.774597
33	151.58	1.114	274.927	245.581	1.115	1.384552
34	246.67	1.117	161.638	173.197	1.119	1.142893
35	581.75	1.117	99.522	127.147	1.116	1.724974
36	2976.23	1.125	19.371	21.416	1.121	1.742131
37	679.12	1.119	68.391	75.403	1.123	1.555313
38	5.32	1.111	4594.429	4464.429	1.111	4594.429
39	234.91	1.137	151.723	146.223	1.131	1.114193
40	1136.32	1.132	47.229	51.149	1.132	1.455476
41	4257.37	1.121	18.123	17.262	1.121	1.581471
42	4916.32	1.147	12.981	13.464	1.127	1.371737
43	2372.98	1.159	24.497	24.177	1.167	1.023177
44	437.19	1.112	133.477	117.925	1.114	1.343171
45	1344.56	1.133	54.631	63.877	1.139	1.514358
46	881.71	1.125	71.923	72.144	1.122	1.026867
47	541.93	1.119	62.127	65.159	1.127	1.119343
48	415.79	1.112	97.758	134.283	1.117	1.194556
49	237.18	1.137	161.917	171.189	1.131	1.172717
50	217.35	1.136	179.155	232.431	1.136	1.057796
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1151.55	1.133	555555555	555555555	1.134	555555555
SE	1183.13	1.134	555555555	555555555	1.138	555555555
SE	157.31	1.115	555555555	555555555	1.114	555555555

ORIGINAL PAGE IS OF POOR QUALITY

DATE 12/25/78
MOBIL (YOC) SAMPLE # 34 JPL # 145-74 1-744 SPEC #
TWIN ONLY
3M OJIP IF DATA DIVIDED BY 147
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE TWIN AREA = 29.16X100

MAG-800.0 INITS-MM CAL. FACTOR- 3.033375 INITS/PP
FRAME AREA- 3.477313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	69.53	989.635	5.238	1.786	1.637	1.333333
2	132.23	1453.725	3.696	1.219	1.939	1.333333
3	35.94	311.142	4.261	1.339	1.859	1.333333
4	25.58	363.847	17.145	1.369	1.256	1.333333
5	1.99	28.288	17.533	15.625	1.172	1.333333
6	22.92	313.123	5.859	1.729	1.643	1.333333
7	51.51	732.571	5.859	1.76	1.851	1.333333
8	3.32	42.521	17.531	9.468	1.112	1.333333
9	6.58	93.544	17.145	7.433	1.141	1.333333
11	17.11	243.378	14.423	3.233	1.336	1.333333
11	135.11	1494.894	7.537	1.953	1.613	1.333333
12	4.85	7.552	37.537	13.393	1.388	1.333333
13	146.43	2382.122	5.929	3.415	1.495	1.333333
14	73.27	1186.161	5.859	1.827	1.630	1.333333
15	11.18	159.391	26.786	4.934	1.221	1.333333
16	3.33	3.333	555555555	555555555	1.333	5555555555
17	3.94	55.389	15.625	4.466	1.152	1.333333
18	3.33	3.333	555555555	555555555	1.333	5555555555
19	3.33	3.333	555555555	555555555	1.333	5555555555
20	3.53	53.216	21.833	12.537	1.137	1.333333
21	1.65	21.411	46.975	37.533	1.137	1.333333
22	3.33	3.333	555555555	555555555	1.333	5555555555
23	27.19	386.771	5.368	3.197	1.573	1.333333
24	44.23	628.685	4.573	1.337	1.845	1.333333
25	3.91	55.531	23.438	12.493	1.391	1.333333

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
NS	31.81	432.117	555555555	555555555	1.348	5555555555
SE	39.66	564.327	555555555	555555555	1.417	5555555555
SE	7.93	112.935	555555555	555555555	1.363	5555555555

26	6.52	92.450	37.538	14.423	1.383	1.333333
27	3.47	48.285	17.530	15.425	1.377	1.333333
28	3.33	3.333	555555555	555555555	1.333	5555555555
29	8.44	110.982	13.393	7.927	1.206	1.333333
30	17.14	328.212	6.606	1.823	1.631	1.333333
31	11.32	145.817	14.423	4.427	1.285	1.333333
32	3.33	3.333	555555555	555555555	1.333	5555555555
33	5.52	78.525	13.393	4.253	1.235	1.333333
34	56.21	799.393	4.361	1.172	1.941	1.333333
35	13.25	145.831	26.786	6.748	1.179	1.333333
36	5.14	73.161	21.833	11.729	1.131	1.333333
37	11.67	161.644	14.423	6.480	1.143	1.333333
38	5.11	72.572	26.786	7.531	1.169	1.333333
39	6.87	69.238	15.625	11.417	1.117	1.333333
40	15.43	219.479	7.212	1.717	1.629	1.333333
41	1.27	18.746	93.753	17.345	1.364	1.333333
42	14.64	218.261	5.929	4.488	1.259	1.333333
43	3.33	3.333	555555555	555555555	1.333	5555555555
44	1.82	25.851	37.537	14.423	1.383	1.333333
45	61.84	855.334	2.841	1.933	1.253	1.333333
46	19.42	318.473	4.488	1.414	1.513	1.333333
47	33.71	479.439	3.233	1.823	1.729	1.333333
48	2.98	42.433	21.833	12.533	1.199	1.333333
49	3.73	52.675	26.786	12.753	1.172	1.333333
50	5.14	73.161	17.145	12.533	1.112	1.333333

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
NS	21.15	313.653	555555555	555555555	1.313	5555555555
SE	41.43	449.887	555555555	555555555	1.314	5555555555
SE	4.47	63.624	555555555	555555555	1.344	5555555555

DATE 12/25/78
 MOBIL TYCO SAMPLE # 34 JPK JPL # 145-75 1-744 1950
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.19 μ²

MAG-800.1 INITS-MIDLINE CAL. FACTOR:- .375013 INITS/μ²
 FRAME AREA- 3.515625000 μ²

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	1.11	31257.837	31257.799	1.777	3.421875
2	165.49	3.335	219.267	148.818	1.491759
3	323.96	3.379	119.885	126.348	1.928554
4	1371.99	3.339	43.398	41.118	1.44169
5	512.24	3.315	92.914	93.479	1.422218
6	24.12	3.371	1892.885	1913.265	1.731
7	1993.88	3.457	31.626	37.129	1.347
8	823.41	3.323	82.965	86.723	1.319
9	117.81	3.373	323.276	352.899	1.375
10	42.38	3.331	919.118	1165.341	1.301
11	1529.68	3.344	35.714	37.711	1.346
12	3.37	3.313	555555555	555555555	1.377
13	141.26	3.374	281.689	162.197	1.346
14	2696.85	3.377	27.852	33.377	1.355
15	5897.22	3.168	13.728	14.168	1.116
16	4215.48	3.127	14.468	13.944	1.115
17	5381.15	3.145	13.732	14.883	1.118
18	2352.12	3.358	38.962	38.274	1.354
19	1786.46	3.351	27.237	28.722	1.347
20	4393.17	3.116	15.614	17.118	1.398
21	3631.93	3.132	17.517	18.939	1.322
22	363.45	3.117	126.118	122.229	1.313
23	699.37	3.323	68.985	78.452	1.324
24	2512.36	3.371	21.148	21.391	1.373
25	1492.95	3.142	38.379	38.836	1.346
26	1127.34	3.312	41.853	49.432	1.318
27	3861.63	3.114	15.284	17.655	1.112
28	762.15	3.322	61.356	73.315	1.326
29	826.35	3.324	81.116	85.173	1.319

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	1648.89	3.147	555555555	555555555	1.343	555555555555
SE	316.19	3.147	555555555	555555555	1.317	555555555555

31	181.82	3.315	225.351	191.152	1.339	1.328451
32	883.12	3.325	56.273	61.735	1.329	1.579715
33	632.84	3.318	146.328	9.799	1.317	1.411929
34	239.28	3.316	143.395	295.741	1.336	1.244477
35	417.95	3.312	129.968	118.371	1.314	1.384375
36	326.16	3.339	143.349	141.493	1.311	1.648125
37	1521.34	3.343	46.712	41.834	1.335	1.462839
38	1182.93	3.334	52.374	53.297	1.331	1.669527
39	5433.34	3.154	13.361	12.323	1.123	1.399462
40	964.94	3.327	34.474	34.116	1.331	1.649842
41	795.92	3.323	85.852	88.611	1.319	1.179376
42	385.16	3.311	122.173	131.471	1.313	1.247596
43	596.29	3.317	91.553	87.599	1.317	1.366329
44	1833.21	3.329	45.372	47.929	1.337	1.533149
45	813.73	3.323	82.672	86.612	1.329	1.373389
46	1314.46	3.337	31.918	31.428	1.349	1.946328
47	875.51	3.325	62.793	59.382	1.327	1.727651
48	271.24	3.319	178.332	127.511	1.319	1.553374
49	792.95	3.323	51.882	55.372	1.333	1.276175
50	1846.31	3.333	46.922	57.137	1.334	1.761875
50	7932.97	3.225	11.875	12.684	1.124	1.944566

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	1512.83	3.343	555555555	555555555	1.339	555555555555
SE	244.27	3.337	555555555	555555555	1.335	555555555555

DATE 12/24/67
 MOJIL (YD) SAMPLE # 35 JPL # 145-74 5-744 1250
 TWINS ONLY
 JFM JIP IF DATA DIVIDED BY 111
 .31 MM STOP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 29.54X114

MAG-830.3 INITS-MM CAL. FACTOR:- 1.73375 INITS/PP
 FRAME AREA- 1.73313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	3.27	3.849	187.593	62.533	1.335	1.733771
2	3.38	48.113	31.253	14.423	1.388	1.733397
3	1.91	14.434	93.753	37.593	1.335	1.733374
4	14.72	219.292	8.152	3.344	1.477	1.733374
5	4.14	59.179	46.875	11.129	1.114	1.733336
6	8.73	124.112	9.848	4.147	1.283	1.733375
7	1.33	1.333	555555555	555555555	1.333	555555555555
8	4.93	57.255	18.753	11.429	1.128	1.733374
9	8.53	121.245	9.375	6.448	1.229	1.733379
10	8.42	119.832	11.719	6.696	1.179	1.733379
11	1.33	1.333	555555555	555555555	1.333	555555555555
12	2.74	38.972	24.786	11.423	1.385	1.733376
13	7.24	132.952	9.868	4.688	1.251	1.733377
14	5.39	65.634	15.625	7.112	1.171	1.733325
15	9.57	136.163	8.523	3.924	1.181	1.733374
16	15.16	215.547	8.523	3.676	1.344	1.733377
17	12.96	184.273	13.417	3.573	1.261	1.733379
18	6.63	94.332	13.393	5.357	1.213	1.733379
19	1.33	1.333	555555555	555555555	1.333	555555555555
20	3.33	3.333	555555555	555555555	1.333	555555555555
21	1.33	1.333	555555555	555555555	1.333	555555555555
22	1.42	23.277	187.593	31.253	1.335	1.733376
23	3.33	3.333	555555555	555555555	1.333	555555555555
24	1.33	1.333	555555555	555555555	1.333	555555555555
25	3.33	3.333	555555555	555555555	1.333	555555555555
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	4.61	65.453	555555555	555555555	1.131	555555555555
SD	4.94	59.816	555555555	555555555	1.138	555555555555
SE	1.97	13.751	555555555	555555555	1.128	555555555555
26	1.59	22.413	62.533	37.593	1.343	1.733377
27	2.37	33.679	24.786	14.423	1.377	1.733377
28	1.11	1.111	555555555	555555555	1.111	555555555555
29	1.11	1.111	555555555	555555555	1.111	555555555555
30	1.11	1.111	555555555	555555555	1.111	555555555555
31	1.11	1.111	555555555	555555555	1.111	555555555555
32	1.11	1.111	555555555	555555555	1.111	555555555555
33	2.11	21.111	62.533	31.253	1.143	1.733378
34	1.33	1.333	555555555	555555555	1.333	555555555555
35	14.85	211.216	7.533	1.454	1.334	1.733377
36	6.29	59.491	17.345	4.241	1.259	1.733377
37	42.12	599.118	5.278	3.118	1.584	1.733377
38	21.38	334.375	11.719	3.472	1.325	1.733375
39	6.81	96.777	17.345	1.176	1.275	1.733375
40	43.81	623.454	5.368	1.234	1.891	1.733377
41	85.69	1218.714	3.289	1.715	1.485	1.733377
42	45.75	651.923	1.989	1.453	1.795	1.733377
43	71.41	1315.657	7.813	1.333	1.833	1.733377
44	39.99	568.496	8.152	1.534	1.451	1.733378
45	52.54	747.196	5.515	1.576	1.719	1.733377
46	34.33	484.417	3.324	1.913	1.645	1.733377
47	9.23	137.848	13.393	4.176	1.275	1.733376
48	48.68	692.347	1.682	1.524	1.723	1.733377
49	123.43	1712.825	3.989	1.659	1.723	1.733376
50	79.43	1129.214	11.329	1.841	1.197	1.733377
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	16.89	241.191	555555555	555555555	1.241	555555555555
SD	26.36	374.242	555555555	555555555	1.311	555555555555
SE	1.73	53.411	555555555	555555555	1.344	555555555555

DATE 12/26/78
 MJJIL (YD) SAMPLE # 75 JPL # 145-76 S-744 5000 A
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.25 μ^2

MAG=831.1 UNITS=MICRONS CAL. FACTOR=
 FRAME AREA= 3.515625333 44

3.175317 UNITS/22

FIELD NO.	NO./AREA	MPDV	MPDM	L/A	AREA	
1	879.92	3.325	62.127	65.422	3.324	3.333576
2	1399.43	3.331	44.579	45.373	3.338	1.293775
3	853.83	3.325	57.657	56.177	3.329	1.419336
4	733.98	3.321	83.819	78.649	3.321	1.598481
5	11436.44	3.324	11.845	12.412	3.333	13.433761
6	1458.14	3.341	43.829	42.287	3.343	3.422385
7	4139.66	3.317	15.336	15.898	3.333	3.833261
8	2878.52	3.383	22.799	23.716	3.373	3.577661
9	1398.48	3.343	44.549	43.514	3.343	3.119133
10	4745.72	3.316	14.895	15.254	3.304	6.717731
11	11264.77	3.377	8.755	8.452	3.395	9.639149
12	4943.12	3.383	23.253	23.041	3.381	5.235137
13	4337.53	3.323	14.423	14.748	3.315	3.842536
14	1231.63	3.335	38.821	43.849	3.342	1.539357
15	837.53	3.324	59.148	57.799	3.329	1.353779
16	828.33	3.324	57.586	58.194	3.333	1.291623
17	4664.96	3.333	14.831	17.395	3.395	4.419313
18	2555.49	3.373	22.338	23.148	3.374	3.394319
19	3279.55	3.493	18.524	23.344	3.384	3.532318
20	1832.84	3.353	27.393	27.329	3.361	1.673543
21	9138.41	3.263	9.433	9.535	3.369	3.833657
22	3535.33	3.373	18.724	19.766	3.395	3.733915
23	12141.85	3.345	7.228	7.461	3.333	8.893856
24	1678.41	3.348	32.135	32.768	3.351	1.836114
25	1791.85	3.351	32.451	32.153	3.353	1.873878
AVERAGE						
	NO.	NO./AREA	MPDV	MPDM	L/A	AREA
	3714.17	3.336	31.411	31.698	3.379	3.333688
SD	3643.28	3.334	19.738	19.279	3.353	3.943731
SE	738.66	3.321	3.948	3.856	3.311	1.555146
26	2192.13	3.357	14.963	17.340	3.362	1.753111
27	2223.33	3.363	23.941	26.411	3.360	1.847417
28	1741.13	3.353	31.146	31.513	3.355	1.478916
29	3926.52	3.312	16.167	17.355	3.331	3.489518
30	3367.42	3.357	21.491	21.782	3.374	3.861259
31	5516.82	3.357	14.259	15.128	3.311	4.213929
32	5418.52	3.354	12.766	13.424	3.325	3.197315
33	1591.48	3.343	32.439	33.772	3.349	1.735348
34	6381.25	3.382	15.419	15.239	3.335	3.353761
35	881.44	3.325	41.155	51.426	3.329	1.454375
36	718.56	3.323	41.833	52.521	3.329	1.249488
37	338.91	3.339	134.662	131.487	3.331	1.146797
38	1317.83	3.337	39.657	39.772	3.342	1.614635
39	834.93	3.324	71.423	69.448	3.325	1.743679
40	524.81	3.312	141.182	77.865	3.314	3.831541
41	71.11	3.332	433.962	433.123	3.333	1.133959
42	188.37	3.315	257.378	195.313	3.317	1.333709
43	1198.48	3.334	54.316	39.394	3.333	3.145146
44	993.34	3.339	42.533	49.916	3.329	1.919917
45	489.58	3.314	253.468	99.788	3.312	3.471464
46	2114.49	3.363	32.849	39.935	3.351	3.252709
47	554.17	3.319	113.436	81.735	3.317	3.217094
48	49.42	3.331	876.148	922.368	3.332	1.977232
49	1.11	3.333	555555555	555555555	3.333	55555555555
50	76.89	3.332	459.559	424.238	3.334	1.934253
AVERAGE						
	NO.	NO./AREA	MPDV	MPDM	L/A	AREA
SD	2734.46	3.377	555555555	555555555	3.361	55555555555
SE	3341.24	3.387	555555555	555555555	3.349	55555555555
	413.13	3.312	555555555	555555555	3.337	55555555555

DATE 12/26/78
 MOBIL TYCO SAMPLE # 16 JPL # 145-76 5-744 P200
 TWINS ONLY
 TIM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 26.15X100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.133375 UNITS/PP
 FRAME AREA- 3.973313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	39.25	433.232	6.348	2.757	1.435	1.777719
2	17.25	145.757	8.523	4.167	1.285	1.777776
3	27.17	329.586	8.523	3.233	2.357	1.777717
4	22.18	315.445	7.212	2.799	1.415	1.777714
5	27.27	288.252	8.929	1.148	1.349	1.777712
6	9.13	129.441	23.438	11.929	2.115	1.777717
7	36.94	525.379	5.682	1.488	1.739	1.777711
8	14.03	199.671	15.625	4.464	2.253	1.777717
9	11.43	162.617	8.929	2.724	1.363	1.777715
10	2.18	31.011	127.477	31.257	1.735	1.777719
11	1.49	21.211	37.173	23.438	1.354	1.777717
12	3.25	46.229	37.597	14.423	1.385	1.777714
13	2.79	39.733	62.593	18.759	1.361	1.777719
14	11.55	164.249	15.625	4.076	1.275	1.777718
15	20.41	293.146	8.929	2.568	1.437	1.777719
16	8.49	127.739	23.438	9.175	1.128	1.777717
17	54.76	778.823	9.375	2.679	1.437	1.777719
18	12.77	181.553	11.129	2.511	2.443	1.777715
19	35.76	512.873	6.944	1.717	1.435	1.777717
20	19.69	283.393	2.357	2.287	2.541	1.777719
21	3.30	3.033	555555555	2.287	1.099	1.777719

LAST FIELD DELETED

21	3.30	3.033	555555555	555555555	1.777	555555555555
22	4.21	59.836	11.257	12.593	2.283	1.777715
23	15.95	226.794	8.152	2.187	2.515	1.777718
24	21.91	311.638	7.212	1.875	2.589	1.777717
25	13.12	186.548	8.929	2.976	1.365	1.777715

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
16.26	231.232	555555555	555555555	1.311	555555555555
SD 12.74	181.142	555555555	555555555	1.093	555555555555
SE 2.55	36.232	555555555	555555555	1.139	555555555555

26	16.11	797.859	5.859	1.757	1.448	1.777719
27	77.13	997.459	5.682	1.218	1.911	1.777718
28	24.17	343.726	6.696	2.593	1.469	1.777713
29	58.62	833.754	5.859	2.236	1.536	1.777711
30	4.36	62.331	37.577	2.868	1.112	1.777715
31	4.28	51.911	11.257	1.606	1.171	1.777717
32	1.84	26.136	31.257	15.625	1.377	1.777712
33	23.38	289.883	5.682	2.534	1.448	1.777717
34	13.58	193.174	8.152	3.178	1.368	1.777716
35	32.85	467.185	4.573	1.633	1.712	1.777713
36	41.19	585.749	5.859	2.197	1.557	1.777717
37	55.76	792.964	4.696	1.875	1.595	1.777711
38	1.45	23.667	93.757	11.257	1.337	1.777715
39	27.27	288.252	9.375	2.167	1.633	1.777717
40	67.83	964.283	4.351	1.226	1.389	1.777713
41	31.97	454.676	7.212	1.856	1.584	1.777715
42	118.97	1691.982	3.472	2.291	1.376	1.777712
43	67.46	959.388	4.573	1.378	1.329	1.777712
44	175.93	1576.522	3.576	1.325	1.114	1.777715
45	59.21	651.613	4.157	1.417	1.919	1.777712
46	77.44	1115.472	3.129	1.119	1.131	1.777711
47	18.55	263.777	23.833	4.818	1.227	1.777711
48	13.88	197.425	23.833	5.859	1.189	1.777714
49	57.39	811.999	8.523	2.474	1.464	1.777716
50	36.33	516.677	8.929	2.187	1.574	1.777715

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
29.35	417.464	555555555	555555555	1.449	555555555555
SD 27.29	326.872	555555555	555555555	1.325	555555555555
SE 2.85	64.712	555555555	555555555	1.146	555555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/16/78
 MODEL (YCO) SAMPLE # 36 JPL # 145-75 1-748 1983
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.97 μ^2

MAG-831.1 INITS-MICRONS CAL. FACTOR= 1.375111 INITS/ μ^2
 FRAME AREA= 3.515625000 μ^2

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	MFTA	
1	463.75	1.313	177.265	24.688	1.318	1.715133
2	1462.33	1.142	33.594	16.536	1.452	1.971333
3	2118.31	1.161	27.488	12.935	1.169	1.934179
4	2378.64	1.168	26.143	23.272	1.764	1.954308
5	1553.39	1.344	39.184	11.971	1.355	1.675979
6	1314.75	1.337	42.536	43.911	1.139	1.267834
7	1241.53	1.335	43.133	14.347	1.335	1.418924
8	2613.39	1.374	24.927	24.326	1.466	1.893148
9	1582.20	1.343	32.941	31.344	1.153	1.924831
10	3438.47	1.197	19.525	11.571	1.181	1.115433
11	2319.83	1.146	22.477	13.567	1.173	1.141973
12	7544.24	1.217	13.478	11.347	1.149	1.820246
13	5533.56	1.169	12.936	13.934	1.122	1.614117
14	1836.44	1.352	26.573	16.596	1.363	1.966328
15	1242.85	1.335	41.110	13.133	1.839	1.392511
16	1321.86	1.338	36.635	35.111	1.448	1.676917
17	12523.39	1.356	17.719	17.148	1.343	1.73683673
18	474.17	1.313	138.633	71.674	1.127	1.277339
19	713.39	1.323	37.942	62.110	1.329	1.231210
20	3884.92	1.111	17.458	18.179	1.392	1.945246
21	3432.33	1.398	16.272	17.249	1.399	1.491265
22	4296.27	1.122	14.454	16.353	1.117	1.214213
23	2319.15	1.366	19.275	21.331	1.383	1.853165
24	1182.27	1.134	35.391	36.051	1.147	1.393266
25	1544.02	1.344	46.828	15.559	1.751	1.553387

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	MFTA
	2739.72	1.078	14.913	11.966	1.364	1.276819
SD	2574.83	1.373	24.416	17.179	1.331	1.339537
SE	514.96	1.315	4.883	3.556	1.336	1.679769

26	632.71	1.317	59.486	46.584	1.126	1.136333
27	1171.53	1.331	42.133	42.847	1.339	1.597766
28	155.59	1.334	28.112	16.449	1.117	1.694484
29	839.49	1.124	45.391	15.332	1.136	1.128715
30	481.86	1.314	11.093	14.612	1.321	1.175873
31	1269.15	1.136	37.894	11.336	1.342	1.214545
32	1131.68	1.332	31.664	49.264	1.337	1.886493
33	3344.41	1.397	19.373	19.683	1.393	1.197915
34	3756.17	1.117	13.184	14.142	1.121	1.231337
35	1396.61	1.343	33.369	11.117	1.362	1.638967
36	1878.1	1.153	26.536	27.376	1.152	1.998498
37	699.66	1.323	55.837	56.818	1.337	1.184604
38	595.25	1.117	65.221	73.185	1.121	1.333133
39	1394.24	1.331	35.823	39.674	1.344	1.327333
40	2974.77	1.358	24.423	17.388	1.165	1.335755
41	95.95	1.313	382.653	432.361	1.115	1.040127
42	372.13	1.111	13.135	11.815	1.116	1.125133
43	4.41	1.113	7211.538	6596.439	1.113	1.214163
44	233.85	1.317	171.389	143.133	1.117	1.092397
45	287.68	1.318	279.851	117.233	1.138	1.154351
46	536.44	1.315	98.788	97.434	1.323	1.764463
47	8.81	1.333	3472.222	3734.194	1.133	1.212513
48	664.58	1.119	69.444	72.474	1.125	1.641773
49	1553.73	1.144	39.843	39.979	1.143	1.111938
50	744.34	1.321	56.922	51.135	1.329	1.333326

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	MFTA
	1861.84	1.353	272.223	252.169	1.149	1.444727
SD	2119.46	1.363	1172.479	1712.157	1.333	1.655573
SE	299.74	1.339	155.914	143.183	1.335	1.365594

AGE 12 / 26/78
 MOBIL TYCO SAMPLE # 37 PPL # 145-76 1-744 PEG C
 TWINS ONLY
 QTM OUTPUT DATA DIVIDED BY 133
 .41 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 25.53X133

MAG-833.1 UNITS-MM CAL. FACTOR- 1.333375 UNITS/PP
 FRAME AREA- 9.371113

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	MFTA	
1	35.25	591.371	4.838	2.373	1.491	1.333375
2	79.71	1123.628	5.515	1.474	1.677	1.333375
3	41.28	587.161	6.148	1.187	1.523	1.333375
4	3.72	52.922	13.193	11.117	1.165	1.333375
5	27.34	386.941	5.218	1.752	1.651	1.333375
6	95.13	1351.473	5.357	1.769	1.643	1.333375
7	87.74	1247.857	4.363	1.856	1.643	1.333375
8	76.53	1187.975	3.439	1.413	1.793	1.333375
9	11.44	163.657	8.929	1.936	1.299	1.333375
10	42.84	619.444	3.138	1.235	1.974	1.333375
11	27.03	384.324	5.368	2.885	1.435	1.333375
12	2.97	41.224	31.253	17.145	1.389	1.333375
13	14.25	232.777	11.129	1.838	1.245	1.333375
14	34.98	497.471	5.859	1.189	1.523	1.333375
15	2.82	49.113	37.533	26.786	1.751	1.333375
16	3.13	1.373	333333333	333333333	1.373	333333333
17	2.19	38.411	46.775	15.625	1.377	1.333375
18	29.34	417.839	4.688	1.174	1.611	1.333375
19	11.73	136.713	7.518	1.132	1.805	1.333375
20	14.96	212.814	9.868	1.439	1.341	1.333375
21	11.79	167.681	6.259	4.176	1.344	1.333375
22	19.47	276.868	4.688	2.144	1.574	1.333375
23	28.28	432.211	6.259	1.717	1.429	1.333375
24	2.19	31.196	37.533	12.133	1.388	1.333375
25	9.64	137.41	15.625	7.112	1.165	1.333375
26	47.51	75.737	5.218	1.116	1.573	1.333375
27	24.99	355.416	9.868	1.688	1.261	1.333375
28	89.58	1274.339	3.233	1.333	1.891	1.333375

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	MFTA
SD	31.85	453.144	333333333	333333333	1.441	333333333
SE	28.39	473.818	333333333	333333333	1.371	333333333
	5.37	76.313	333333333	333333333	1.751	333333333

29	147.38	2391.831	3.538	1.143	1.318	1.333375
30	133.45	1471.243	3.148	1.165	1.383	1.333375
31	33.23	429.538	13.393	5.515	1.235	1.333375
32	65.66	1218.331	3.976	1.396	1.316	1.333375
33	43.16	413.931	6.348	1.856	1.618	1.333375
34	175.68	2498.498	5.515	1.442	1.787	1.333375
35	84.84	1236.633	3.757	1.189	1.765	1.333375
36	57.66	823.123	4.934	1.752	1.633	1.333375
37	49.31	711.352	4.573	1.184	1.977	1.333375
38	16.73	237.373	9.868	1.176	1.314	1.333375
39	42.38	432.759	4.934	1.389	1.819	1.333375
40	3.72	42.795	31.253	11.129	1.115	1.333375
41	3.55	7.199	187.533	46.775	1.327	1.333375
42	16.41	233.416	11.417	1.166	1.197	1.333375
43	99.33	1412.752	1.674	1.159	1.859	1.333375
44	73.65	1034.971	4.167	1.133	1.179	1.333375
45	134.47	1912.452	4.363	1.212	1.587	1.333375
46	94.14	1355.157	1.751	1.111	1.519	1.333375
47	183.17	3561.448	7.513	1.338	1.573	1.333375
48	67.69	962.632	4.167	1.188	1.773	1.333375
49	43.99	625.533	1.253	1.132	1.519	1.333375
50	95.18	1219.975	4.838	1.234	1.993	1.333375
51	115.23	1638.369	5.859	1.913	1.597	1.333375

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	MFTA
SD	51.78	736.711	333333333	333333333	1.453	333333333
SE	45.27	643.811	333333333	333333333	1.327	333333333
	6.34	91.152	333333333	333333333	1.146	333333333

DATE 12/26/78
 MOBIL TYCO SAMPLE # 37 JPL # 145-76 1-744 1980
 DISLOCATION PITS ONLY
 .31 MM STAIN SLIP
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA=5.1322

MAG-875.0 INITS-MICRONS CAL. FACTOR- 0.175309 INITS/PP
 FRAME AREA- 3.515625777 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	764.05	3.322	65.559	67.738	1.725	1.394386
2	263.61	3.337	162.767	175.234	1.311	1.376898
3	952.58	3.327	67.319	67.064	1.724	1.289522
4	6178.33	1.174	15.457	14.235	1.117	1.936416
5	1426.58	3.341	39.487	39.213	3.353	1.957469
6	563.67	3.316	98.755	95.449	3.318	1.794643
7	847.74	3.324	96.451	92.365	3.319	1.499824
8	319.12	3.339	197.481	289.352	1.346	1.989719
9	1846.46	3.353	37.184	28.452	3.358	1.839211
10	585.39	3.317	68.481	76.158	3.322	1.717287
11	3894.77	1.111	16.664	18.531	1.193	1.389572
12	4145.51	1.118	15.557	15.923	1.101	1.328483
13	1755.26	3.359	37.468	26.494	1.758	1.559193
14	1371.53	1.928	64.256	59.174	3.328	1.974782
15	1396.37	3.349	38.647	34.492	1.352	1.321147
16	1817.33	3.351	27.745	29.379	1.358	1.619861
17	4983.17	1.142	12.795	13.400	1.126	1.529779
18	1777.36	3.350	29.752	28.574	1.357	1.615443
19	1015.33	3.329	42.633	46.619	1.337	1.152344
20	682.98	3.319	72.282	77.489	1.324	1.372439
21	1581.26	3.345	35.988	37.985	3.347	1.944764
22	1183.56	3.334	13.817	44.495	3.334	1.453951
23	734.42	3.321	43.418	48.449	1.325	1.892323
24	2431.55	1.159	22.417	24.453	3.373	1.777662
25	317.78	3.339	131.487	145.575	1.312	1.316168
26	1431.93	3.341	49.672	47.253	1.341	2.748912
27	886.81	3.325	45.554	47.979	1.335	1.397567
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	1655.39	3.347	62.819	63.171	1.346	1.157371
SD	1442.96	1.141	58.681	58.495	1.331	1.168371
SE	277.77	1.338	11.291	11.257	1.336	1.224853
28	347.74	3.313	144.719	141.977	1.311	1.553377
29	37.19	3.311	111.423	1339.286	1.311	1.186141
30	121.99	3.313	313.545	144.169	1.317	1.313241
31	3481.69	1.199	18.924	18.548	1.385	1.018971
32	57.74	3.332	661.211	622.368	1.312	1.884766
33	1747.34	1.357	32.529	44.422	1.349	1.072217
34	7.39	3.311	555555555	555555555	3.311	555555555555
35	847.23	3.324	51.853	57.951	1.329	1.186975
36	192.16	3.335	416.667	434.928	3.334	1.997537
37	439.58	3.313	113.155	113.225	1.315	1.289735
38	971.73	1.126	49.525	57.155	1.331	1.431635
39	831.74	3.324	67.334	57.692	1.328	1.671343
40	1327.46	3.338	34.897	36.693	3.343	1.478148
41	1587.38	3.345	29.528	29.611	3.356	1.248988
42	969.69	3.328	49.738	52.966	1.334	1.574458
43	117.55	3.343	597.134	473.485	1.333	1.684538
44	739.77	3.321	69.293	65.286	3.325	1.457733
45	42.26	3.311	884.434	1033.221	1.312	1.971191
46	1.76	3.337	31257.177	18757.717	1.317	1.562577
47	1.13	3.333	555555555	555555555	3.311	555555555555
48	137.21	3.314	559.736	377.797	1.315	1.369928
49	691.63	3.323	65.985	77.915	1.323	1.567778
50	134.73	3.334	322.165	277.173	1.334	1.133276
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	1189.71	1.334	555555555	555555555	1.334	555555555555
SD	1292.91	1.317	555555555	555555555	1.317	555555555555
SE	182.84	3.315	555555555	555555555	1.314	555555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/2/77
 MODEL (YD) #38 JPL # 145-78 5-744 SPECIMEN 1
 TWIN ONLY
 TFM (IF) IF DIVIDED BY 111
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 29.1X131

MAG-813.1 UNITS-MM CAL. FACTOR- 9.133375 UNITS/IN
 FRAME AREA- 9.37313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	MFTA
1	3.83	54.437	27.438	8.523	3.133	7.117774
2	34.21	484.498	7.577	2.475	3.464	1.117714
3	24.24	344.766	17.115	4.938	3.235	2.117725
4	82.76	1177.311	4.688	1.349	3.784	2.117727
5	97.72	1389.854	3.676	1.725	1.127	1.117744
6	29.31	416.858	9.375	2.232	2.496	1.117717
7	42.34	632.278	9.868	2.315	1.475	1.117717
8	132.24	1454.131	4.363	1.551	1.749	1.117747
9	179.41	1556.177	4.571	1.689	1.711	1.117751
10	51.76	736.123	5.762	1.524	1.741	1.117718
11	132.13	1452.138	3.827	1.252	1.283	1.117717
12	78.52	1116.697	5.859	1.267	1.835	1.117719
13	65.13	925.914	4.361	1.157	3.949	1.117717
14	21.34	333.571	12.571	2.976	1.365	1.117719
15	48.97	987.847	5.368	1.828	1.627	1.117723
16	179.52	1557.579	5.859	1.854	3.624	1.117723
17	112.62	1631.716	5.515	1.165	1.939	3.117723
18	15.69	223.142	17.417	2.435	2.451	1.117724
19	12.17	173.119	14.423	2.574	1.421	1.117724
20	5.34	74.544	25.786	1.511	2.149	1.117724
21	138.79	1547.283	5.153	1.332	2.253	1.117724
22	79.14	1125.517	3.827	1.952	1.121	1.117724
23	87.73	1237.824	3.916	1.919	1.333	1.117727
24	41.48	575.755	5.357	1.157	3.939	1.117719
25	59.28	715.334	4.934	1.173	3.971	1.117719
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	MFTA
	61.39	873.146	8.292	2.258	2.718	1.117722
SD	16.15	514.277	6.769	1.777	1.321	1.117714
SE	7.23	172.841	1.214	1.387	1.364	1.117722
26	48.41	688.552	2.799	1.791	1.472	1.117720
27	97.72	1332.966	4.167	1.931	1.213	1.117722
28	178.17	1538.452	3.138	1.133	1.134	1.117741
29	93.97	1336.398	3.538	1.593	1.219	1.117721
30	51.97	739.165	4.934	1.125	1.761	1.117711
31	97.76	1397.345	2.885	1.563	1.931	1.117713
32	72.48	1339.866	3.538	1.935	1.388	1.117714
33	57.14	812.624	6.944	2.155	1.533	1.117747
34	55.38	787.617	4.938	1.563	2.731	1.117723
35	79.38	1128.957	2.199	1.788	1.419	1.117718
36	98.48	1433.644	4.376	1.257	3.974	1.117729
37	114.76	1632.123	3.289	1.319	1.112	1.117726
38	67.52	963.245	2.568	1.863	1.377	1.117714
39	61.59	877.364	3.277	1.169	1.864	1.117718
40	25.52	377.134	5.768	1.488	3.755	1.117713
41	76.34	1385.793	4.264	1.737	1.329	1.117719
42	96.59	1373.677	2.648	1.777	1.584	1.117721
43	17.24	245.211	17.417	1.315	1.454	1.117720
44	2.14	31.476	37.571	17.393	1.785	1.117714
45	1.11	1.111	375.555	375.555	1.111	375.555
46	24.91	354.384	17.145	4.96	1.179	1.117711
47	4.45	51.251	14.423	1.157	1.171	1.117710
48	19.33	277.713	5.515	1.111	1.541	1.117710
49	14.75	219.977	4.376	1.533	1.477	1.117720
50	49.86	739.149	2.976	1.234	1.943	1.117727
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	MFTA
	59.35	844.384	375.555	375.555	1.797	375.555
SD	35.69	517.672	375.555	375.555	1.419	375.555
SE	5.35	71.786	375.555	375.555	2.159	375.555

DATE 12/26/70
 MODEL P127 48 JPL 7 145-71 5-7AM (SPECIMEN 7)
 DISLOCATION PIPS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE IN THE FRAME
 AVERAGE DISLOCATION PIP AREA = 4.91 μ^2

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 3.375333 UNITS/ μ^2
 FRAME AREA- 3.515625333 μ^2

FIELD NO.	NO./AREA	MFPV	MFSH	L/A	AREA	
1	1922.24	3.353	34.278	16.714	1.347	2.731724
2	1163.47	3.333	45.233	46.377	3.334	1.710908
3	3717.35	3.135	17.414	17.719	3.326	2.425482
4	7164.19	3.234	13.485	11.119	1.131	5.591671
5	965.71	3.327	55.681	51.913	3.332	1.419369
6	86.94	3.332	558.335	515.113	3.333	1.883976
7	579.39	3.316	77.351	85.695	3.321	1.271447
8	193.82	3.335	253.378	113.774	3.311	1.241419
9	741.22	3.321	117.925	55.734	1.327	2.435967
10	447.55	3.313	131.171	114.899	3.316	1.185882
11	232.65	3.337	160.311	168.919	3.317	1.785846
12	148.78	3.334	397.625	316.723	3.335	1.384984
13	368.98	3.313	116.315	128.777	1.313	1.374324
14	633.82	3.317	197.883	48.531	1.323	1.237878
15	35.10	3.331	1488.395	1423.455	3.332	1.151784
16	5.92	3.333	5514.734	4261.364	1.333	1.470488
17	617.76	3.318	132.979	81.128	3.318	1.433761
18	2241.84	3.364	26.963	29.288	3.353	1.719658
19	1148.98	3.333	62.458	57.395	3.327	1.595789
20	3.33	3.333	5555555555	5555555555	3.333	5555555555
21	43.41	3.331	255.453	323.276	1.335	1.397748
22	2873.82	3.382	17.874	18.867	1.390	1.639444
23	942.24	3.327	52.173	51.141	1.332	1.253119
24	4386.94	3.125	15.882	16.567	3.131	1.743381
25	75.31	3.332	361.969	541.938	1.335	1.946323
26	44.29	3.311	1562.533	1132.941	1.311	1.334375
27	93.47	3.333	623.861	222.156	3.319	1.238582

AVERAGE						
NO.	NO./AREA	MFPV	MFSH	L/A	AREA	
SD	1141.63	3.332	5555555555	5555555555	1.333	5555555555
SE	1641.75	3.347	5555555555	5555555555	1.334	5555555555
SE	315.75	3.319	5555555555	5555555555	1.317	5555555555

28	482.34	3.314	133.936	96.749	3.317	1.287427
29	569.18	3.316	92.392	89.456	1.318	1.463444
30	1463.67	3.342	51.853	31.981	3.347	2.586758
31	59.18	3.332	571.646	519.511	1.333	1.882813
32	21.47	3.331	1333.223	1416.379	3.331	1.735385
33	97.96	3.333	379.324	326.655	3.334	1.854433
34	171.22	3.335	243.385	135.131	1.333	1.325051
35	23.27	3.311	1994.621	997.311	4.331	1.433135
36	189.14	3.335	219.555	227.569	1.333	1.320318
37	835.13	3.324	57.233	58.122	3.333	1.233844
38	784.38	3.332	62.292	62.127	3.326	1.379248
39	264.82	3.338	172.335	176.222	3.311	1.187117
40	139.59	3.333	444.313	373.536	1.334	1.217904
41	48.16	3.331	876.168	876.168	1.332	1.857962
42	571.84	3.316	93.753	133.267	1.317	1.481323
43	1332.86	3.337	46.388	51.146	3.334	1.163253
44	983.41	3.328	51.425	52.757	3.331	1.178355
45	134.93	3.334	274.927	294.811	3.334	1.923124
46	418.16	3.312	135.477	133.929	3.312	1.633781
47	3332.34	3.394	18.897	19.354	3.385	1.194133
48	4583.41	3.133	15.377	16.195	3.134	2.966742
49	4278.37	3.122	16.828	17.579	3.122	3.334113
50	4229.18	3.123	18.411	19.342	3.125	3.938373

AVERAGE						
NO.	NO./AREA	MFPV	MFSH	L/A	AREA	
SD	1115.75	3.332	5555555555	5555555555	1.333	5555555555
SE	1556.11	3.344	5555555555	5555555555	3.333	5555555555
SE	221.77	3.316	5555555555	5555555555	1.315	5555555555

51	8829.19	3.251	8.639	8.637	1.185	4.257523
AVERAGE						
NO.	NO./AREA	MFPV	MFSH	L/A	AREA	
SD	1266.99	3.332	5555555555	5555555555	1.333	5555555555
SD	1875.77	1.333	5555555555	5555555555	1.333	5555555555
SE	262.63	3.317	5555555555	5555555555	1.315	5555555555

DATE 12/18/78
 MOBILE (YCS) # 19 JPL 144-11 6-741 1900
 TWIN ONLY
 (FORM DIFFER DIVISION BY 111)
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE THIN ARE = 27.447141

MAG-891.3 UNITS-MM GAL. FACTOR = 1.13375 UNITS/??
 FRAME AREA = 1.171113

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	55.94 795.594	3.676	1.759	1.997	1.13375
2	35.39 513.272	6.948	1.838	3.616	1.13375
3	73.81 1149.563	3.827	1.957	1.179	1.13375
4	97.41 1385.423	3.233	1.159	3.883	1.13375
5	155.39 2217.942	1.357	1.293	1.885	1.13375
6	82.22 1169.291	5.768	1.218	3.888	1.13375
7	28.32 412.721	9.868	2.933	3.389	1.13375
8	33.49 475.121	7.212	1.974	1.544	1.13375
9	7.73 111.132	14.423	5.357	1.273	1.13375
10	43.33 616.252	6.257	1.736	3.672	1.13375
11	3.33 3.333	55555555	55555555	1.333	55555555
12	3.33 3.333	55555555	55555555	1.333	55555555
13	3.33 3.333	55555555	55555555	1.333	55555555
14	3.33 3.333	55555555	55555555	1.333	55555555
15	3.87 12.439	93.759	31.253	3.337	1.13375
16	3.87 3.733	55555555	55555555	3.333	55555555
17	3.87 3.733	55555555	55555555	3.333	55555555
18	4.62 8.811	187.533	46.875	3.324	1.13375
19	1.28 18.141	187.533	46.875	1.327	1.13375
20	3.33 3.333	55555555	55555555	1.333	55555555
21	3.62 17.312	62.533	19.753	1.344	1.13375
22	1.28 18.141	46.875	31.253	1.343	1.13375
23	3.86 54.943	31.253	13.393	1.993	1.13375
24	3.33 3.333	55555555	55555555	1.333	55555555
25	5.58 79.393	17.345	8.152	1.152	1.13375

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	25.14	357.534	55555555	55555555	1.338	55555555
SE	39.16	555.919	55555555	55555555	1.386	55555555
	7.83	111.384	55555555	55555555	1.377	55555555

26	5.14	73.381	14.423	8.523	1.157	1.13375
27	26.13	371.623	1.472	1.465	1.843	1.13375
28	1.49	21.253	62.533	31.253	1.437	1.13375
29	3.33	122.119	18.753	1.559	1.102	1.13375
30	3.48	1211.425	1.419	1.041	1.209	1.13375
31	91.93	1293.165	4.454	1.794	1.352	1.13375
32	88.88	1264.147	4.157	3.848	1.293	1.13375
33	56.71	835.479	4.688	1.725	1.353	1.13375
34	66.76	949.538	2.976	3.831	1.353	1.13375
35	74.13	1954.227	3.348	1.194	1.172	1.13375
36	32.58	463.362	7.533	1.339	3.791	1.13375
37	12.65	179.851	8.523	3.472	1.347	1.13375
38	54.77	779.719	3.472	1.284	1.894	1.13375
39	61.59	875.931	4.361	1.112	1.875	1.13375
40	38.99	554.584	6.948	1.576	1.737	1.13375
41	64.87	922.579	4.974	1.193	1.856	1.13375
42	47.39	573.133	6.253	1.225	1.889	1.13375
43	57.19	954.195	5.157	3.947	1.131	1.13375
44	86.99	1217.188	3.538	1.633	1.715	1.13375
45	87.32	1241.853	4.573	1.765	1.329	1.13375
46	41.84	595.311	5.515	1.659	1.659	1.13375
47	22.33	317.291	9.868	3.616	1.677	1.13375
48	34.84	495.497	6.456	1.379	1.797	1.13375
49	72.61	1117.979	3.174	1.732	1.456	1.13375
50	85.23	1211.791	1.751	3.841	1.328	1.13375

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	38.83	552.223	55555555	55555555	1.639	55555555
SE	16.86	524.331	55555555	55555555	1.531	55555555
	5.21	74.147	55555555	55555555	1.371	55555555

ORIGINAL PAGE IS
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DATE 12/29/78
 MOBILE FIELD NO. 100-11-5-732
 DISLOCATION PIPE NO. 1
 MEASUREMENT POINTS 1-25
 AVERAGE DISLOCATION PIPE NO. 100-11-5-732
 5.01 PP

MAG-FIELD INFO-MIDLINE CAL. FACTOR= 1.375111 INFO/PP
 FRAME AREA= 3.515525111 14

FIELD NO.	NO./AREA	MPPV	MPPH	L/A	NESTA	
1	662.87	3.319	113.294	32.334	7.714	2.712999
2	2289.32	3.365	38.172	34.153	7.745	2.777427
3	5.79	3.311	2929.588	245.419	7.771	2.739844
4	99.23	3.333	674.463	618.744	7.773	1.454755
5	771.86	3.322	45.189	45.195	7.725	1.349765
6	1152.69	3.333	48.433	51.177	7.734	1.746472
7	4543.48	3.337	15.397	15.342	7.777	2.719737
8	1458.88	3.341	55.245	74.617	7.734	2.152548
9	4733.14	3.335	13.729	14.585	7.715	2.986139
10	11792.22	3.335	9.473	10.869	7.786	12.335758
11	8273.35	3.235	12.616	12.814	7.722	11.613837
12	8145.71	3.232	9.922	10.793	7.742	2.536195
13	7895.31	3.225	11.787	13.465	7.749	4.931177
14	13157.29	3.374	7.673	7.873	7.725	2.933738
15	9271.86	3.264	13.147	10.775	7.763	2.489129
16	7946.51	3.226	13.892	11.187	7.745	2.198294
17	4084.23	3.116	16.552	18.381	7.795	2.722299
18	1645.51	3.347	33.537	25.399	7.748	1.791828
19	1473.45	3.342	34.316	35.636	7.746	1.542497
20	4278.84	3.122	17.395	16.356	7.795	2.241492
21	4826.75	3.137	13.742	14.142	7.716	2.755749
22	3831.81	3.138	16.384	16.974	7.799	2.397241
23	3294.79	3.391	19.657	16.114	7.793	2.274956
24	5582.24	3.152	16.296	15.866	7.731	2.791306
25	2915.77	3.383	25.316	23.521	7.765	2.964734
AVERAGE						
NO.	NO./AREA	MPPV	MPPH	L/A	NESTA	
SD	4564.88	3.137	148.474	15.785	7.791	2.938479
SE	3571.82	3.122	578.149	121.076	7.757	2.897167
	714.36	3.227	115.637	242.395	7.711	3.579433
26	5732.79	3.142	16.886	17.315	7.797	4.141745
27	2547.73	3.172	26.173	3.692	7.768	1.254947
28	613.59	3.117	18.531	64.721	7.717	2.517756
29	51.88	3.112	928.218	177.994	7.733	1.389844
30	172.46	3.135	603.962	311.662	7.734	1.585136
31	191.42	3.135	351.124	315.375	7.736	1.481971
32	1278.81	3.134	49.923	46.758	7.735	2.114097
33	2263.27	3.364	11.229	11.986	7.766	2.415923
34	882.74	3.125	78.649	45.333	7.731	1.684373
35	1832.27	3.151	33.151	32.339	7.753	1.798623
36	267.27	3.338	213.232	172.922	7.738	1.576775
37	538.74	3.315	126.655	74.582	7.717	1.427183
38	545.51	3.216	127.725	73.225	7.725	1.812869
39	731.21	3.323	74.884	73.733	7.722	1.568734
40	441.52	3.313	454.179	136.213	7.715	1.538152
41	165.87	3.335	318.578	258.978	7.736	1.294160
42	75.45	3.332	651.142	721.154	7.732	1.512753
43	572.85	3.116	93.191	82.722	7.719	1.277453
44	311.45	3.115	135.219	5.616	7.719	1.306094
45	973.65	3.128	59.988	7.763	7.729	1.484781
46	675.85	3.119	93.197	62.386	7.723	1.453327
47	875.75	3.325	12.822	17.717	7.724	2.741482
48	513.17	3.315	153.437	79.522	7.716	1.277556
49	933.3	3.326	73.472	46.34	7.731	1.27416
50	361.48	3.313	132.142	3.415	7.711	1.271151
AVERAGE						
NO.	NO./AREA	MPPV	MPPH	L/A	NESTA	
SD	2743.94	3.178	108.13	9.673	7.730	1.16552
SE	452.79	3.313	62.384	19.731	7.719	1.342554

FIELD NO.	NO.	NO./AREA	AREA	AREA	AREA
1	5.95	71.819	10.751	.515	1.218
2	14.34	213.221	12.441	.973	1.774
3	23.33	331.834	8.152	1.093	1.777
4	18.58	244.209	9.974	1.094	1.777
5	13.36	173.247	11.774	1.094	1.777
6	11.33	153.232	11.774	1.094	1.777
7	11.33	153.232	11.774	1.094	1.777
8	13.33	173.247	11.774	1.094	1.777
9	2.84	39.541	37.573	1.191	1.777
10	43.77	579.250	4.473	1.749	1.777
11	7.31	133.797	29.873	4.686	1.777
12	3.33	71.773	33.333	1.777	1.777
13	3.33	71.773	33.333	1.777	1.777
14	4.94	71.773	33.333	1.777	1.777
15	9.17	123.959	11.129	.682	1.777
16	2.55	37.744	37.744	1.423	1.777
17	1.14	15.251	93.751	1.258	1.777
18	31.67	435.155	7.813	1.183	1.777
19	34.91	495.441	7.212	1.131	1.777
20	42.14	673.752	5.257	1.042	1.777
21	49.74	687.793	4.157	1.384	1.777
22	17.77	252.576	9.245	.114	1.777
23	44.11	645.925	5.682	1.293	1.777
24	85.81	1221.396	3.538	1.133	1.777
25	25.21	358.574	7.579	2.117	1.777
26	2.17	37.929	25.786	19.153	1.785
27	8.99	127.911	8.523	4.534	1.264
28	1.95	21.784	21.873	71.751	1.749
29	8.11	115.329	19.751	.74	1.212
30	11.33	173.247	5.157	1.194	1.777
31	5.15	71.773	11.774	1.094	1.777
32	23.11	341.795	1.417	.467	1.456
33	83.13	1139.645	7.099	1.113	1.777
34	47.81	679.923	4.454	1.765	1.927
35	75.74	1191.436	1.439	1.234	1.927
36	193.41	1477.797	3.676	1.489	1.555
37	112.36	1583.296	3.751	1.987	1.128
38	25.11	721.435	3.378	1.942	1.155
39	52.34	744.399	4.898	1.776	1.667
40	3.58	51.857	18.757	14.423	1.396
41	15.15	215.456	8.029	1.757	1.717
42	5.26	117.476	13.417	.55	1.211
43	11.13	155.115	15.676	7.011	1.643
44	38.89	553.157	5.378	.51	1.481
45	28.11	472.673	11.129	1.232	1.481
46	1.11	55555555	33333333	1.11	1.11
47	3.46	49.277	71.257	0.029	1.131
48	54.96	781.119	7.012	.095	1.597
49	15.41	111.773	.51	.78	1.597
50	25.15	193.298	55555555	55555555	1.477
51	1.81	15.687	17.011	18.757	1.177

DATE 12/29/78
 MOBIL PVT 541 JPL 144-11 1-743 1981
 DISLOCATION PITS ONLY
 .31 MM JEP 31-5
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.1 10

MAG-800.1 INFL-MICRONS CAL. FACTOR- 1.175333 INFL/200
 FRAME AREA- 3.515525110 34

FIELD NO.	NO./AREA	MFPV	MPH	L/A	AREA	
1	158.83	3.115	281.532	276.149	1.114	1.133379
2	974.83	3.125	71.131	73.977	3.124	2.546992
3	916.23	1.125	69.381	67.156	1.125	1.978795
4	743.83	1.121	79.449	67.156	1.124	1.599341
5	1114.83	3.129	61.922	79.543	1.115	1.775126
6	678.43	3.119	95.371	71.949	1.122	1.766667
7	313.23	3.119	171.733	152.139	3.117	1.351375
8	793.23	3.122	71.347	55.519	3.128	1.439477
9	1494.83	3.143	39.226	34.779	1.152	1.649971
10	851.47	3.124	57.137	49.498	3.131	1.377324
11	1317.23	3.118	52.354	48.834	1.119	2.186555
12	3484.33	3.119	19.758	11.584	1.181	2.754544
13	1214.67	3.115	46.373	49.164	3.115	1.725831
14	1159.47	3.111	51.713	51.118	1.113	1.558349
15	1427.27	3.141	38.418	48.874	1.143	1.627786
16	4286.23	3.122	27.531	18.788	1.179	1.471465
17	1216.43	3.115	49.498	51.156	1.112	2.132871
18	2175.83	3.162	28.263	28.358	1.158	2.748775
19	1376.23	3.111	53.787	51.413	1.113	1.544292
20	1549.23	3.144	34.467	31.013	3.157	1.458238
21	1354.83	3.113	115.172	11.391	1.119	3.724916
22	1141.34	3.113	43.358	39.424	3.112	2.119175
23	1389.23	3.111	53.297	51.767	3.112	1.598819
24	791.64	3.122	112.414	79.248	1.119	2.738777
25	591.43	3.114	111.778	91.174	1.118	1.375729
AVERAGE						
	NO.	NO./AREA	MFPV	MPH	L/A	AREA
SD	1253.46	3.116	73.768	62.347	1.115	1.972372
SE	882.29	3.125	54.198	51.191	1.118	1.767184
	176.46	3.115	17.847	17.118	1.114	1.152777
26	875.31	3.115	72.332	51.879	1.119	1.695574
27	8751.31	3.149	11.158	11.912	1.145	1.396709
28	6472.67	3.113	12.194	11.912	1.114	3.933489
29	2436.81	3.149	24.815	24.371	1.163	2.534578
30	6728.47	3.191	11.499	11.871	3.147	1.096123
31	2538.43	3.172	21.419	21.858	3.181	1.579487
32	423.31	3.112	129.132	121.595	1.117	1.479711
33	591.67	3.117	71.595	66.154	1.115	1.918678
34	27.11	3.113	51.113	71.114	1.114	1.896531
35	551.61	3.112	121.691	75.113	1.111	2.147400
36	371.61	3.118	441.141	211.232	1.117	1.498747
37	51.69	3.113	734.887	51.471	3.113	1.941576
38	91.83	3.113	612.745	629.195	1.112	1.792969
39	253.47	3.117	432.328	157.828	1.117	3.161733
40	734.47	3.111	95.375	1.317	1.114	1.762772
41	4621.31	3.131	16.379	16.842	3.111	3.216751
42	2181.21	1.162	35.418	27.356	1.161	1.921273
43	9346.41	3.164	11.116	9.151	1.171	1.329113
44	2117.11	3.161	25.341	23.877	1.171	1.411251
45	3211.21	1.191	1.152	19.491	1.191	1.744174
46	103.64	3.111	113.913	91.931	3.117	1.325517
47	961.21	3.117	45.369	51.868	1.113	1.922244
48	2486.41	3.171	24.574	25.448	1.166	1.142436
49	1725.67	3.149	13.516	14.684	3.149	1.784763
50	631.41	3.118	78.386	73.114	1.112	1.261217
AVERAGE						
	NO.	NO./AREA	MFPV	MPH	L/A	AREA
SD	1798.32	3.151	139.882	88.215	1.115	1.129945
SE	2163.92	3.159	151.174	118.125	1.117	1.126194
	291.88	3.115	21.874	19.114	1.115	1.159254

MOBILE PLYWOOD CO. INC. 194-11 5-741 1971
 TWINS ONLY
 1PM DIPPED DIVISION BY 111
 .31 MM GROSS SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE GRIN AREA = 19.847111

MAG-833.1 INITS-MM CAL. FACTOR- 1.133375 INITS/P2
 FRAME AREA- 1.179313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	16.13	329.252	13.417	2.641	3.421	1.377713
2	43.11	611.498	3.676	1.417	1.847	1.377714
3	23.19	329.818	5.468	1.775	2.654	1.377717
4	13.86	154.424	11.719	3.178	1.352	1.377717
5	15.48	223.197	8.152	2.373	1.469	1.377715
6	26.74	389.349	7.813	2.131	1.517	1.377719
7	8.91	125.789	9.868	3.676	3.325	1.377714
8	15.18	315.977	6.253	2.259	1.573	1.377714
9	13.81	194.366	7.212	3.289	1.357	1.377718
10	3.33	1.733	55555555	55555555	1.733	55555555
11	25.84	357.471	7.212	1.629	1.673	1.377710
12	113.34	1611.915	1.537	1.117	1.819	1.377710
13	23.34	332.231	1.934	1.119	1.741	1.377710
14	32.27	458.981	4.688	1.172	1.965	1.377719
15	35.69	537.596	5.348	1.856	1.614	1.377721
16	39.91	567.659	4.167	1.419	1.932	1.377724
17	57.34	815.493	4.167	1.332	1.917	1.377724
18	44.13	627.227	5.682	1.633	1.731	1.377721
19	58.61	833.611	3.695	1.314	1.788	1.377712
20	64.31	913.337	3.753	3.976	1.221	1.377712
21	69.37	985.642	5.168	1.784	1.375	1.377715
22	47.99	682.514	1.261	1.096	1.929	1.377711
23	87.86	1153.074	3.753	3.976	1.211	1.377721
24	56.88	837.414	3.472	1.338	1.788	1.377715
25	47.21	571.939	3.233	1.225	1.963	1.377713

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	25.54	548.985	55555555	55555555	1.731	55555555
SE	5.13	364.519	55555555	55555555	1.375	55555555
		72.922	55555555	55555555	1.361	55555555

26	19.27	274.354	13.417	2.467	1.443	1.377717
27	29.66	421.835	1.234	1.111	1.837	1.377718
28	55.49	948.466	3.636	1.958	1.283	1.377714
29	117.93	1676.735	5.515	1.349	1.835	1.377718
30	86.96	1235.819	4.464	3.971	1.233	1.377724
31	7.94	112.958	14.423	2.717	1.365	1.377723
32	132.61	1885.973	3.538	1.674	1.749	1.377719
33	119.33	1695.753	2.799	1.753	1.177	1.377714
34	45.98	533.917	2.679	1.997	1.137	1.377713
35	34.35	484.242	1.538	1.178	1.343	1.377718
36	79.93	1136.729	2.841	3.772	1.435	1.377722
37	13.86	154.424	9.375	3.289	1.363	1.377715
38	93.53	1329.759	5.348	1.442	1.752	1.377725
39	139.48	1557.135	5.357	1.133	1.992	1.377716
40	133.65	1913.634	3.175	1.633	1.773	1.377723
41	147.55	2198.141	7.511	1.177	1.544	1.377719
42	81.43	1143.878	1.937	1.656	1.629	1.377714
43	87.85	1192.493	4.341	1.319	1.175	1.377718
44	117.41	1527.554	4.676	1.756	1.441	1.377711
45	55.13	754.133	1.689	1.093	1.192	1.377711
46	45.55	521.321	2.533	1.734	1.624	1.377715
47	47.45	574.888	2.523	2.234	1.512	1.377722
48	35.35	535.193	4.466	1.995	1.579	1.377717
49	33.53	433.721	5.357	1.258	1.867	1.377717
50	3.33	1.733	55555555	55555555	1.733	55555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	19.25	754.416	55555555	55555555	1.819	55555555
SE	5.41	514.111	55555555	55555555	1.344	55555555
		76.938	55555555	55555555	1.151	55555555

DATE 12/25/78
 MODEL 1937 H JPL 119-31 -741 PDS. 1
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 1.26 μ²

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG-833.3 UNITS-MICRONS CAL. FACTOR:-
 FRAME AREA- 3.515525111 34

1.375111 UNITS/μ²

FIELD	NO.	NO./AREA	MFPV	FPH	L/A	FETA
1	818.19	3.123	71.960	47.497	0.113	1.14637
2	818.23	3.114	91.056	56.254	0.111	1.587179
3	465.87	3.113	97.453	66.468	0.123	1.448713
4	643.19	3.118	71.915	45.554	0.133	1.344867
5	729.71	3.121	82.091	66.395	0.122	1.168773
6	2032.76	3.158	24.947	23.444	0.149	1.023223
7	1830.72	3.152	33.041	28.461	0.155	1.176948
8	2235.86	3.164	21.552	21.467	0.177	1.737813
9	994.37	3.128	41.871	45.776	0.119	1.268455
11	317.41	3.139	125.673	131.857	0.113	1.147274
11	34.37	3.171	725.744	878.193	0.112	1.785156
12	1187.71	3.134	41.593	45.191	0.145	1.696274
13	675.93	3.119	64.834	67.712	0.126	1.378355
14	1124.91	3.138	35.271	46.394	0.147	1.659293
15	921.65	3.126	47.129	45.719	0.141	1.354153
15	425.96	3.112	112.571	95.071	0.116	1.613942
17	948.12	3.127	31.189	4.395	0.125	1.536729
18	491.37	3.114	169.837	171.932	0.117	1.472183
19	244.71	3.137	151.911	243.516	0.130	1.639482
21	417.92	3.112	128.425	17.059	0.117	1.945711
21	674.74	3.125	53.174	42.474	0.132	1.546875
22	658.87	3.119	113.135	57.134	0.125	1.525363
23	461.39	3.113	136.172	83.431	0.118	1.439276
24	372.73	3.111	111.142	99.627	0.115	1.181259
25	541.81	3.115	81.451	64.655	0.124	1.157776

AVERAGE

	NO.	NO./AREA	MFPV	FPH	L/A	FETA
	819.11	3.123	176.976	70.956	0.113	1.749597
SD	536.42	0.115	133.114	51.255	0.118	1.575455
SE	117.23	0.113	5.523	7.251	0.114	1.15741

26	1112.77	3.129	41.427	30.449	0.143	1.107554
27	224.45	3.125	185.444	163.113	0.117	1.373492
28	74.57	3.132	538.793	478.114	0.113	1.359537
29	224.36	3.116	212.156	217.931	0.117	1.398793
31	563.48	3.116	68.733	8.381	0.125	1.123536
31	49.02	3.111	1171.75	2019.688	0.112	1.164153
32	215.55	3.115	514.731	470.215	0.118	1.153145
33	3373.72	3.136	17.448	13.119	0.116	1.455844
34	1939.39	3.154	35.183	19.178	0.176	1.475892
35	217.51	3.116	182.339	161.382	0.111	1.759195
36	1225.63	3.135	13.022	11.753	0.151	1.275213
37	27.47	3.111	1217.532	174.793	0.132	1.737343
38	43.86	3.111	946.973	931.442	0.132	1.891479
39	98.12	3.133	555555333	555555333	0.109	555555333
40	11.77	3.133	2533.784	1533.784	0.131	1.744394
41	13.41	3.133	5859.375	4687.579	0.133	1.715625
42	795.73	3.123	69.393	72.162	0.124	1.927411
43	2.35	3.117	15625.131	18757.337	0.117	1.943757
44	212.83	3.116	213.968	188.153	0.138	1.234925
45	1294.88	3.137	42.268	39.134	0.141	1.251187
46	886.69	3.115	52.258	4.133	0.131	1.739732
47	2775.6	3.119	19.103	19.054	0.104	1.181411
48	1113.55	3.129	49.138	9.656	0.133	1.778902
49	2911.39	3.133	16.142	16.787	0.132	1.765211
51	7873.55	3.124	11.264	11.139	0.142	1.874147

AVERAGE

	NO.	NO./AREA	MFPV	FPH	L/A	FETA
	949.78	3.127	333333333	333333333	0.131	333333333
SD	1259.73	3.115	533333333	333333333	0.131	333333333
SE	178.05	3.115	533333333	533333333	0.131	333333333

DATE 12/26/78
 MODEL TPCO 742 JUL 1968-73 1-742 700
 PRINT ONLY
 DATA INPUT DIVISION BY 100
 .31 MM SPOT SIZE
 MEASUREMENT ALONG THE LONGEST LINE OF THE SPOT
 AVERAGE PIN AREA = 29.67X117

MAG-800.1 UNITS-MM CAL. FACTOR- 1.000075 UNITS/PP
 FRAME AREA- 3.073313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	31.73	298.533	6.696	2.155	1.541	1.079313
2	4.55	64.712	31.251	4.246	3.158	1.079314
3	1.11	3.113	555555555	555555555	1.111	555555555
4	3.21	45.548	23.438	12.751	1.195	1.079314
5	3.74	10.545	187.183	1.251	1.135	1.079313
6	3.07	1.113	555555555	555555555	1.111	555555555
7	5.53	83.351	18.751	7.113	1.111	1.079316
8	1.65	23.488	46.075	14.786	1.148	1.079317
9	34.14	485.578	3.753	1.369	1.853	1.079314
10	51.26	729.997	4.359	1.488	3.771	1.079316
11	29.69	122.115	7.212	6.614	1.443	1.079312
12	70.11	1129.11	3.675	1.977	1.117	1.079316
13	15.11	543.117	4.341	1.517	1.733	1.079313
14	32.51	748.241	3.676	1.157	1.995	1.079314
15	42.97	511.157	1.361	1.132	1.835	1.079316
16	24.17	343.692	6.157	1.786	1.627	1.079313
17	63.27	898.775	1.675	1.133	1.776	1.079316
18	33.73	469.753	5.218	1.633	1.712	1.079319
19	56.62	835.333	1.233	1.199	1.118	1.079314
20	32.93	553.645	4.144	1.114	1.169	1.079317
21	33.76	337.941	5.208	1.136	1.653	1.079317
22	36.56	548.373	4.818	1.974	1.627	1.079312
23	45.14	441.366	3.133	1.178	1.372	1.079311
24	62.12	851.998	2.568	1.873	1.311	1.079312
25	44.99	639.938	4.838	1.276	1.956	1.079313
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	31.39	456.196	555555555	555555555	1.631	555555555
SE	22.17	323.941	555555555	555555555	1.193	555555555
SE	4.51	64.188	555555555	555555555	1.179	555555555
26	11.11	575.215	3.753	1.631	1.733	1.079313
27	44.69	635.611	1.125	1.197	1.951	1.079317
28	110.39	1841.313	5.682	1.135	1.667	1.079316
29	134.55	1914.191	4.144	1.633	1.731	1.079316
30	64.75	1333.839	2.796	1.165	1.193	1.079313
31	28.75	478.683	1.929	2.167	1.517	1.079311
32	91.18	1376.711	5.218	1.485	1.763	1.079312
33	45.92	652.871	5.682	1.131	1.935	1.079311
34	33.11	158.751	5.157	1.155	1.911	1.079317
35	81.62	1175.152	1.175	1.957	1.157	1.079311
36	53.21	1212.168	5.218	1.117	1.733	1.079314
37	57.47	816.128	3.148	1.957	1.149	1.079313
38	112.47	1598.422	3.289	1.333	1.145	1.079316
39	139.43	1983.358	3.916	1.213	1.915	1.079317
40	96.56	1373.129	2.679	1.679	1.427	1.079312
41	99.22	1411.197	3.172	1.738	1.448	1.079319
42	118.37	1575.193	5.157	1.333	1.177	1.079312
43	91.91	1317.179	4.818	1.938	1.131	1.079316
44	11.76	167.192	18.753	1.357	1.213	1.079316
45	3.11	1.113	555555555	555555555	1.111	555555555
46	3.11	1.113	555555555	555555555	1.111	555555555
47	2.63	19.786	16.875	1.111	1.151	1.079314
48	1.11	1.113	555555555	555555555	1.111	555555555
49	3.76	39.316	62.511	15.125	1.172	1.079314
50	1.45	20.412	23.138	9.268	1.197	1.079317
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	46.79	665.411	555555555	555555555	1.146	555555555
SE	19.67	164.198	555555555	555555555	1.135	555555555
SE	5.51	79.791	555555555	555555555	1.162	555555555

DATE 12/1/78
 MODEL P100 # 12 JPL 11-11 6-741 100.
 DISLOCATION PITS ONLY .01 MIC. DIA. IF
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 0.002

MAG-800.1 INITS-MICRONS CAL. FACTOR- 1.375113 INITS/777
 FRAME AREA- 3.515625113 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	1251.23	7.115	46.124	74.594	1.111	1.499722
2	917.51	7.126	47.492	59.987	1.135	1.724767
3	869.17	7.125	57.167	59.675	1.129	1.747521
4	1847.27	7.153	17.798	19.064	1.157	1.859171
5	542.27	7.115	97.587	97.492	1.118	1.727771
6	824.27	7.123	57.234	57.667	1.129	1.189971
7	928.81	7.125	57.741	57.761	1.122	1.217971
8	757.41	7.122	64.774	69.547	1.125	1.341429
9	1325.43	7.138	48.192	45.911	1.135	1.945567
10	877.43	7.125	64.389	69.867	1.131	1.778925
11	1245.67	7.135	52.326	45.956	1.135	1.777479
12	179.69	7.133	347.222	178.448	1.116	1.846841
13	645.69	7.117	137.761	12.316	1.113	1.474573
14	1319.69	7.129	62.962	58.194	1.133	1.869942
15	829.67	7.123	99.322	47.493	1.129	1.672456
16	1777.49	7.131	49.761	44.728	1.135	1.795135
17	1234.43	7.135	2.625	11.748	1.141	1.827158
18	329.49	7.139	149.522	159.983	1.113	1.447559
19	155.43	7.174	397.625	198.936	1.174	2.171262
20	585.23	7.117	278.333	110.947	1.111	1.898438
21	452.49	7.113	165.344	75.311	1.115	1.972819
22	3234.33	7.192	27.153	18.535	1.193	1.777311
23	543.39	7.115	157.965	177.477	1.113	1.634719
24	794.93	7.123	133.732	79.991	1.116	1.171563
25	569.33	7.116	92.274	99.417	1.117	1.538762
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	915.88	7.126	177.257	88.769	1.128	2.751593
SE	697.35	7.117	97.236	78.466	1.117	1.977649
	121.47	7.133	18.347	17.693	1.133	1.187137
26	137.43	7.114	361.969	318.273	1.115	1.995987
27	519.61	7.114	123.518	115.693	1.115	1.819845
28	1.33	7.133	555555555	555555555	1.133	555555555555
29	56.87	7.112	822.369	757.824	1.112	1.139375
30	373.23	7.111	169.537	147.112	1.113	1.929125
31	581.11	7.117	97.331	97.355	1.119	1.725350
32	51.21	7.111	852.173	968.154	1.112	1.726571
33	947.11	7.127	58.594	57.797	1.137	1.474718
34	874.67	7.125	71.323	55.973	1.122	1.876171
35	273.23	7.138	343.949	248.716	1.136	1.927348
36	313.87	7.119	225.747	157.823	1.119	1.891537
37	701.19	7.127	64.477	61.523	1.129	1.141951
38	571.11	7.114	139.795	125.296	1.111	1.197321
39	22.21	7.111	1938.125	1413.746	1.111	1.377921
40	221.23	7.116	551.471	243.576	1.115	1.774424
41	62.33	7.132	756.348	762.195	1.132	1.147214
42	118.67	7.193	357.824	355.114	1.176	1.191295
43	319.53	7.119	132.573	141.616	1.112	1.159344
44	4516.13	7.128	14.157	14.132	1.114	2.565945
45	2485.67	7.171	23.797	23.114	1.173	1.977172
46	1798.11	7.151	77.333	79.687	1.154	1.594227
47	1497.23	7.143	35.674	35.779	1.145	1.554217
48	1231.67	7.134	47.311	49.557	1.142	1.151172
49	779.23	7.121	79.147	75.311	1.122	1.462198
50	1181.43	7.134	32.536	46.355	1.141	1.192565
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	845.78	7.124	555555555	555555555	1.124	555555555555
SE	815.39	7.123	555555555	555555555	1.122	555555555555
	115.31	7.133	555555555	555555555	1.133	555555555555

DATE 12/29/74
 WIND (Y) 731 (Z) 100-100-100 5000
 WINDS ONLY
 TEM (D) 10 (W) 10 (M) 10
 1.01 KM 5000 (Z)
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE JAWLE
 AVERAGE WIND AREA = 11.11111

MAG-841.1 INITS-4M CAL. PAGE 01- 1.111175 INITS/20
 FRAME 1127- 1.771111

FIELD	NO.	NJ./A22A	M220	M224	L/1	M22A
1	86.82	1234.747	5.859	1.187	1.923	1.111127
2	66.33	943.417	5.859	1.445	1.485	1.111124
3	93.48	1329.552	2.373	1.871	1.414	1.111122
4	119.12	1494.148	2.457	1.944	1.224	1.111127
5	115.91	1648.485	3.348	1.442	1.848	1.111149
6	93.19	1324.941	4.819	1.431	1.779	1.111136
7	79.19	1124.848	3.233	1.897	1.251	1.111117
8	26.58	377.966	8.523	2.314	1.519	1.111112
9	22.76	323.663	11.417	1.324	1.413	1.111112
10	66.18	941.253	5.515	1.393	1.897	1.111115
11	59.73	721.455	9.648	2.983	1.525	1.111121
12	63.19	834.524	1.233	1.319	1.195	1.111115
13	12.31	174.976	8.152	1.614	1.125	1.111117
14	74.15	63.354	21.833	7.212	1.157	1.111114
15	29.39	416.347	5.444	1.752	1.435	1.111119
16	92.82	1321.321	4.454	1.133	1.973	1.111125
17	115.54	1643.113	7.813	1.193	1.519	1.111154
18	131.94	1449.835	4.573	1.478	1.119	1.111128
19	53.67	753.259	5.259	1.349	1.833	1.111113
20	52.17	1171.111	3.916	1.489	1.544	1.111111
21	12.53	154.152	4.919	1.499	1.815	1.111114
AVERAGE						
	NJ./A22A	M220	M224	L/1	M22A	
SD	55.91	951.679	5.313	1.775	1.833	1.111121
SE	14.56	491.583	3.944	1.421	1.377	1.111113
	7.54	137.272	3.261	1.313	1.182	1.111113
22	31.52	476.461	6.348	2.131	1.541	1.111111
23	19.31	271.222	6.348	2.155	1.512	1.111113
24	28.11	399.222	3.348	1.553	1.784	1.111113
25	11.21	329.484	11.417	2.976	1.387	1.111121
26	29.24	415.892	7.212	1.757	1.419	1.111119
27	27.15	184.155	5.168	2.250	1.525	1.111113
28	7.57	119.377	8.152	5.168	1.231	1.111114
29	15.11	312.199	3.539	1.153	1.156	1.111111
30	27.47	1247.129	5.483	1.436	1.935	1.111124
31	122.13	1735.522	5.251	1.866	1.526	1.111163
32	49.89	993.843	3.436	1.431	1.789	1.111122
33	42.73	437.477	6.148	1.225	1.491	1.111113
34	78.45	1115.798	4.588	1.413	1.781	1.111124
35	31.15	428.222	5.148	1.551	1.693	1.111118
36	14.79	211.315	9.929	2.338	1.516	1.111135
37	7.54	119.416	11.417	5.238	1.267	1.111114
38	13.48	191.745	9.868	2.717	1.411	1.111116
39	11.73	195.212	13.393	1.178	1.349	1.111117
40	9.52	135.127	17.345	4.944	1.176	1.111115
41	1.33	14.453	52.531	31.251	1.147	1.111115
42	13.27	189.768	11.119	3.324	1.169	1.111117
43	15.15	113.587	5.515	1.24	1.731	1.111112
44	11.18	211.597	11.417	3.614	1.312	1.111119
45	4.82	69.135	16.786	7.212	1.157	1.111117
46	1.32	1.111	555555555	555555555	1.111	55555555555
47	16.41	231.865	11.119	3.389	1.333	1.111118
48	32.64	464.162	6.251	1.631	1.691	1.111113
49	22.52	323.215	9.868	1.138	1.533	1.111118
50	39.94	568.127	2.531	1.492	1.174	1.111111
AVERAGE						
	NJ./A22A	M220	M224	L/1	M22A	
SD	45.97	648.159	555555555	555555555	1.439	55555555555
SE	15.52	535.162	555555555	555555555	1.355	55555555555
	5.32	71.441	555555555	555555555	1.151	55555555555

DATE 12/19/78
 MODEL PLOT FOR JPL 114-111-741 1901.0
 DISLOCATION PITS ONLY
 ALL BY 1000 Å
 MAGIFICATION TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 0.1622

MAG=831.1 INITS=MICRONS GAL. FUSTED= 1.178111 INITS/22
 FRAME AREA= 3.515625113 14

FIELD NO.	NO./AREA	MPV	MPHM	L/A	AREA	
1	345.54	3.111	265.115	91.495	3.114	0.776675
2	318.91	3.119	288.452	119.712	3.115	0.861255
3	42.08	3.112	557000000	557000000	3.111	0.000000000
4	18.91	3.111	2413.845	1349.114	3.111	1.2335019
5	5.42	3.113	11416.457	11416.47	3.111	2.110163
6	45.12	3.111	919.118	1714.505	3.111	0.611345
7	151.35	3.113	195.541	141.831	3.119	0.179241
8	2562.43	3.173	24.784	27.253	3.161	0.864972
9	915.43	3.125	47.118	7.111	3.125	1.471712
10	13.14	3.116	1199.250	1442.118	3.111	1.145190
11	559.77	3.119	91.454	59.122	3.121	2.215531
12	9.49	3.111	3916.251	3232.740	3.111	1.878916
13	2691.51	3.177	25.418	19.187	3.161	3.443216
14	8452.91	3.241	11.198	11.271	3.157	6.179716
15	348.43	3.115	111.715	87.153	3.114	1.745477
16	188.57	3.115	474.451	129.132	3.117	0.894719
17	1.75	3.111	45875.111	45875.111	3.111	1.562511
18	1.74	3.111	1125.111	557000000	3.111	0.000000000
19	28.88	3.111	1444.717	1336.095	3.111	1.147656
20	1.11	3.111	557000000	557000000	3.111	0.000000000
21	557.75	3.114	93.554	84.485	3.110	1.477176
22	314.71	3.119	218.797	151.566	3.111	1.085873
23	4452.98	3.127	19.318	18.232	3.180	1.984153
24	3349.57	3.194	21.198	17.639	3.198	3.111662
25	3351.78	3.195	23.114	22.014	3.174	3.519523
AVERAGE						
	NO.	NO./AREA	MPV	MPHM	L/A	AREA
SD	1171.87	3.133	557000000	557000000	3.124	0.000000000
SE	1957.49	3.155	557000000	557000000	3.130	0.000000000
SE	391.51	3.111	557000000	557000000	3.119	0.000000000
26	2415.71	3.160	28.127	27.995	3.158	0.142515
27	5231.19	3.148	15.137	15.136	3.115	0.226111
28	3451.19	3.199	23.457	19.074	3.179	0.197459
29	8481.11	3.241	11.259	11.819	3.147	0.112512
30	1581.23	3.145	61.819	42.433	3.132	0.197147
31	71.15	3.112	425.111	418.744	3.112	1.131251
32	84.43	3.112	561.177	522.743	3.113	1.279974
33	849.41	3.124	64.442	75.435	3.123	2.225632
34	698.64	3.121	73.414	45.174	3.127	1.714913
35	444.93	3.118	142.261	117.188	3.112	0.513522
36	487.41	3.121	82.454	79.923	3.121	1.813917
37	589.34	3.117	74.971	72.161	3.121	1.343544
38	3715.71	3.114	22.571	19.429	3.119	0.514253
39	1788.95	3.151	35.823	34.445	3.147	2.417336
40	3454.53	3.199	21.194	21.212	3.169	1.977453
41	1659.41	3.147	41.382	33.466	3.117	3.271874
42	5426.16	3.143	12.572	13.117	3.121	0.214557
43	2484.15	3.124	24.158	24.478	3.145	1.989361
44	2272.87	3.155	24.832	28.177	3.161	1.661191
45	1313.29	3.137	41.871	41.467	3.141	1.743372
46	1842.35	3.152	31.291	31.418	3.153	1.928774
47	1497.74	3.124	4.717	7.79	3.156	16.760115
48	521.16	3.111	91.664	75.111	3.117	0.71541
49	333.52	3.111	93.458	111.114	3.117	1.141111
50	555.52	3.116	84.612	88.494	3.121	1.292318
AVERAGE						
	NO.	NO./AREA	MPV	MPHM	L/A	AREA
SD	1914.34	3.154	557000000	557000000	3.141	0.000000000
SE	2744.71	3.178	557000000	557000000	3.145	0.000000000
SE	388.16	3.111	557000000	557000000	3.114	0.000000000

ORIGINAL PAGE IS
OF POOR QUALITY

NO. 122978
MULTI (Y3) 7 14 JPL 144-3375-742 4300. F
TWINN ONLY
QTM JIP/JI 011/00 BY 111
3.31 MM STEP SIZE
MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE TWIN AREA = 27.13X133

MAG-830.0 INIPS-MM CAL. FACTOR- 3.173375 INIP/220
FRAME AREA- 3.173375

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	MFEPA	
1	3.43	3.133	555555555	555555555	1.143	55555555555
2	2.13	29.881	62.533	23.833	1.153	1.111134
3	1.13	14.472	93.753	37.543	1.137	1.111134
4	1.53	49.411	46.875	17.145	1.160	1.111137
5	1.73	34.114	31.234	16.875	1.150	1.111133
6	9.55	135.774	9.868	4.357	1.177	1.111139
7	14.19	271.827	6.349	3.476	1.141	1.111137
8	12.53	178.235	26.786	5.850	1.184	1.111137
9	17.99	255.822	7.133	1.999	1.121	1.111137
10	11.35	141.461	14.421	5.515	1.113	1.111130
11	2.93	41.238	17.511	10.138	1.150	1.111134
12	34.32	488.153	8.930	1.233	1.155	1.111132
13	139.69	1567.193	4.176	1.160	1.150	1.111134
14	13.17	144.685	9.133	3.174	1.123	1.111136
15	9.51	135.351	13.417	4.261	1.291	1.111139
16	17.13	242.192	6.944	1.724	1.115	1.111136
17	8.81	125.294	13.394	1.357	1.261	1.111137
18	24.83	381.112	7.212	1.144	1.100	1.111135
19	24.88	353.852	5.230	1.995	1.597	1.111134
20	4.28	63.813	23.438	11.329	1.115	1.111138
21	18.84	257.355	5.850	2.155	1.534	1.111137
22	11.15	157.257	9.375	3.989	1.312	1.111130
23	14.19	231.827	6.944	2.574	1.454	1.111139
24	1.55	22.317	62.533	23.438	1.153	1.111133
25	114.19	1454.535	4.573	1.856	1.248	1.111130

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	MFEPA
SD	18.89	268.718	555555555	555555555	1.117	55555555555
SE	27.36	389.374	555555555	555555555	1.278	55555555555
	5.47	77.815	555555555	555555555	1.155	55555555555

26	84.37	1199.951	4.838	1.133	1.095	1.111137
27	24.17	372.211	1.682	1.913	1.587	1.111138
28	56.58	834.685	4.573	1.714	1.172	1.111131
29	14.24	231.183	8.929	1.431	1.739	1.111133
30	44.94	494.695	5.515	1.157	1.047	1.111137
31	75.27	1171.167	4.176	1.942	1.165	1.111132
32	58.98	838.761	1.696	1.293	1.810	1.111133
33	36.39	513.216	5.238	1.736	1.654	1.111131
34	15.55	221.223	7.212	2.373	1.477	1.111136
35	24.51	348.614	13.417	3.916	1.331	1.111139
36	15.96	226.989	11.329	2.155	1.597	1.111134
37	5.57	79.159	13.394	7.212	1.174	1.111137
38	15.59	221.747	4.573	2.825	1.457	1.111137
39	32.29	459.221	1.827	2.137	1.435	1.111132
40	89.31	1274.197	4.464	1.267	1.255	1.111132
41	55.79	935.741	5.850	1.133	1.965	1.111132
42	67.27	956.717	4.482	1.589	1.712	1.111135
43	58.83	836.563	6.496	1.714	1.557	1.111139
44	147.34	1526.319	7.213	1.633	1.561	1.111133
45	57.51	718.188	5.768	1.833	1.451	1.111135
46	4.39	58.189	16.875	15.625	1.381	1.111139
47	6.38	93.491	31.253	8.929	1.129	1.111138
48	3.99	42.462	62.533	23.833	1.159	1.111131
49	8.65	125.814	4.533	1.112	1.272	1.111137
50	21.19	285.733	6.944	2.757	1.437	1.111138

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	MFEPA
SD	29.32	416.969	555555555	555555555	1.457	55555555555
SE	30.36	431.797	555555555	555555555	1.325	55555555555
	4.29	61.364	555555555	555555555	1.146	55555555555

DATE 12/15/77
 WIDE (70) * 10 JUL 1974-1975-76 *
 DISLOCATION PITS ONLY
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION DENSITY AREA = 10000

MAG-89(1) JIN3-MI30NS CAL. FAC11- 1.75114 NIFS/75

FRAME 1523- 3-515625119 74

FIELD NO.	NO.	NO./AREA	AREA	AREA	AREA	AREA
25	242.59	1.117	142.115	1.117	1.117	1.117
24	848.84	0.124	56.481	0.124	0.124	0.124
23	2632.71	3.175	35.753	3.175	3.175	3.175
22	5117.01	0.171	11.124	0.171	0.171	0.171
21	2787.45	3.179	23.532	3.179	3.179	3.179
20	1511.91	0.141	19.557	0.141	0.141	0.141
19	1571.14	3.145	44.728	3.145	3.145	3.145
18	1112.17	3.132	49.257	3.132	3.132	3.132
17	749.09	3.121	45.834	3.121	3.121	3.121
16	1385.55	0.139	48.752	0.139	0.139	0.139
15	1592.01	3.105	37.596	3.105	3.105	3.105
14	2469.01	1.082	35.356	1.082	1.082	1.082
13	2155.13	1.161	42.789	1.161	1.161	1.161
12	1226.03	1.135	45.655	1.135	1.135	1.135
11	5419.02	1.145	13.297	1.145	1.145	1.145
10	1375.13	3.139	38.179	3.139	3.139	3.139
9	7549.52	1.215	12.951	1.215	1.215	1.215
8	5871.91	3.157	16.259	3.157	3.157	3.157
7	3689.14	0.135	21.139	0.135	0.135	0.135
6	4151.74	3.115	14.885	3.115	3.115	3.115
5	2147.53	0.151	37.819	0.151	0.151	0.151
4	555.92	3.119	75.241	3.119	3.119	3.119
3	2187.25	3.159	28.534	3.159	3.159	3.159
2	2053.02	1.201	0.911	1.201	1.201	1.201
LAST FIELD DELETED						
1	22672.35	1.525	6.375	1.525	1.525	1.525
LAST FIELD DELETED						
1	5513.84	1.157	2.946	1.157	1.157	1.157
SE	4419.47	1.122	10.77	1.122	1.122	1.122
SD	7614.73	1.173	45.223	1.173	1.173	1.173
NO.	NO.	NO./AREA	AREA	AREA	AREA	AREA
26	486.31	1.214	131.571	1.214	1.214	1.214
27	1795.25	3.151	35.537	3.151	3.151	3.151
28	612.17	1.123	88.543	1.123	1.123	1.123
29	1174.13	1.131	05.485	1.131	1.131	1.131
30	51.45	1.115	131.753	1.115	1.115	1.115
31	1346.58	1.139	54.611	1.139	1.139	1.139
32	467.54	3.114	91.196	3.114	3.114	3.114
33	1194.87	3.134	41.815	3.134	3.134	3.134
34	2825.86	0.181	23.117	0.181	0.181	0.181
35	2117.54	1.141	26.483	1.141	1.141	1.141
36	1496.77	1.203	13.197	1.203	1.203	1.203
37	1994.87	1.115	18.965	1.115	1.115	1.115
38	5886.31	1.195	17.937	1.195	1.195	1.195
39	6327.57	0.203	17.751	0.203	0.203	0.203
40	228.52	3.117	117.377	3.117	3.117	3.117
41	515.59	3.115	115.000	3.115	3.115	3.115
42	531.84	1.112	95.097	1.112	1.112	1.112
43	272.24	1.178	142.615	1.178	1.178	1.178
44	534.98	3.115	145.901	3.115	3.115	3.115
45	135.17	1.174	339.474	1.174	1.174	1.174
46	1130.42	1.132	43.829	1.132	1.132	1.132
47	1495.44	3.108	32.251	3.108	3.108	3.108
48	4577.75	1.152	34.191	1.152	1.152	1.152
49	4577.75	1.152	33.725	1.152	1.152	1.152
50	1317.21	1.117	61.790	1.117	1.117	1.117
NO.	NO./AREA	AREA	AREA	AREA	AREA	AREA
2735.71	3.177	59.497	3.177	3.177	3.177	3.177
3564.17	3.131	24.171	3.131	3.131	3.131	3.131
SE	534.35	1.214	11.889	1.214	1.214	1.214
SD	3564.17	3.131	24.171	3.131	3.131	3.131
NO.	NO./AREA	AREA	AREA	AREA	AREA	AREA
2735.71	3.177	59.497	3.177	3.177	3.177	3.177
3564.17	3.131	24.171	3.131	3.131	3.131	3.131
SE	534.35	1.214	11.889	1.214	1.214	1.214
SD	3564.17	3.131	24.171	3.131	3.131	3.131

DATE 12/29/78
 MOBIL TYCO 7 45 JPL 100-1175-742 1981 B
 TWINS ONLY
 OUTPUT AREA OF IEM DIVIDED BY 100
 3.31 MM DPEP SIZE
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 31.13X100

MAG-879.3 INITS-MM CAL. FACTOR: 1.113375 INITS/??
 FRAME AREA- 1.171813

FIELD	NO.	NO./AREA	MPH	MPH	L/A	AREA
1	21.55	316.148	7.511	1.752	1.589	1.113377
2	119.13	1553.657	3.472	1.768	1.421	1.113317
3	61.39	873.171	4.934	1.524	1.744	1.113314
4	67.23	956.175	5.859	1.674	1.667	1.113326
5	13.81	196.429	17.345	7.577	1.143	1.113315
6	56.78	797.521	3.989	1.752	1.696	1.113319
7	36.82	533.654	6.251	1.589	1.696	1.113312
8	172.16	1451.495	5.682	1.574	1.677	1.113328
9	47.01	668.614	3.676	1.823	1.675	1.113333
10	58.21	837.741	4.696	1.638	1.613	1.113321
11	38.25	543.958	3.934	1.638	1.641	1.113327
12	122.81	1745.614	7.511	1.124	1.413	1.113387
13	98.17	1396.252	1.989	1.293	1.872	1.113333
14	65.77	949.555	3.676	1.359	1.953	1.113322
15	74.89	1353.834	3.178	1.694	1.552	1.113313
16	43.94	582.235	1.464	1.637	1.725	1.113311
17	3.29	46.746	26.786	14.423	1.188	1.113337
18	17.81	253.391	7.511	2.259	1.517	1.113325
19	5.17	115.158	21.813	1.115	1.215	1.113326
20	96.48	1375.111	2.717	1.188	1.832	1.113351
21	61.79	864.571	4.464	1.349	1.925	1.113314
22	97.88	1392.112	3.827	1.541	1.749	1.113332
23	57.33	814.992	4.167	1.465	1.773	1.113313
24	48.61	691.279	8.929	2.641	1.419	1.113323
25	23.64	336.196	19.417	2.187	1.461	1.113318
AVERAGE						
	NO.	NO./AREA	MPH	MPH	L/A	AREA
SD	57.16	812.971	7.252	1.589	1.675	1.113321
SE	32.74	465.573	5.771	2.031	1.318	1.113317
	6.55	91.114	1.154	1.563	1.744	1.113333
26	61.74	864.199	4.934	1.157	1.949	1.113315
27	39.41	551.454	4.144	1.885	1.419	1.113319
28	45.12	641.711	4.157	1.459	1.517	1.113313
29	56.94	1322.427	2.315	1.513	1.633	1.113335
30	58.82	972.881	3.617	1.157	1.799	1.113321
31	29.24	1349.231	3.476	1.997	1.123	1.113322
32	65.39	645.477	3.827	1.465	1.791	1.113316
33	97.11	1379.726	3.072	1.897	1.216	1.113334
34	58.76	935.768	3.472	1.744	1.432	1.113319
35	6.51	92.548	15.625	5.682	1.213	1.113325
36	11.62	155.265	12.533	4.061	1.291	1.113337
37	15.93	226.177	9.375	1.976	1.376	1.113337
38	41.74	579.371	12.533	1.573	1.269	1.113325
39	18.33	251.646	3.989	1.749	1.771	1.113317
40	23.71	322.975	7.212	1.786	1.619	1.113313
41	31.97	454.714	6.152	1.574	1.645	1.113311
42	17.86	254.336	4.251	1.534	1.456	1.113318
43	87.62	1246.197	3.689	1.111	1.927	1.113334
44	12.32	175.181	11.329	3.174	1.157	1.113337
45	44.95	539.339	5.357	1.349	1.787	1.113312
46	31.38	432.353	6.148	1.563	1.734	1.113318
47	8.27	117.574	21.033	1.148	1.197	1.113310
48	41.14	571.872	7.813	1.414	1.667	1.113319
49	42.56	615.342	4.241	1.334	1.659	1.113313
50	13.44	219.566	11.329	1.125	1.351	1.113316
AVERAGE						
	NO.	NO./AREA	MPH	MPH	L/A	AREA
SD	49.34	771.677	7.277	1.128	1.686	1.113318
SE	39.94	439.974	5.134	2.243	1.339	1.113314
	4.37	62.222	1.726	1.317	1.748	1.113312

DATE 12/19/78
 MODEL TYPD 7 AS JPL 144-1175-742 1250. 0
 DISLOCATION PITS ONLY
 7.31 MM STEP SIZE
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 1.04122

MAG-800.7 INIPS-MICRONS CAL. FACTOR- 1.375311 INIPS/22
 FRAME AREA- 3.515425311 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	1.11	3.331	555555555	333333333	1.311	55555555555
2	1118.87	3.332	51.725	53.512	1.331	2.128248
3	418.29	3.312	148.817	118.222	0.313	3.251338
4	256.93	3.338	192.071	189.777	1.339	1.778125
5	26.46	3.331	1913.165	1474.177	1.331	1.597757
6	321.31	3.339	175.234	159.168	3.139	1.597659
7	267.32	3.332	148.374	129.489	1.312	1.133465
8	951.75	3.327	73.542	45.378	1.337	2.566931
9	2352.53	3.358	31.438	12.131	3.357	1.149981
10	1197.86	1.334	58.581	3.716	1.334	1.49514
11	1.11	3.331	555555555	555555555	3.337	55555555555
12	16.34	3.331	937.507	721.154	3.333	1.476567
13	969.64	1.332	137.488	79.855	1.312	1.465768
14	15.56	3.331	278.333	247.135	1.331	1.811571
15	848.44	3.324	75.337	75.129	1.324	1.592762
16	7555.25	3.315	12.335	11.977	1.335	1.651482
17	3455.76	3.339	19.774	18.992	1.335	3.794531
18	4452.65	3.327	1.425	17.124	1.324	1.95643
19	95.63	3.333	27.277	356.464	1.333	1.64777
20	1.11	3.331	555555555	555555555	1.331	55555555555
21	51.75	3.331	755.348	627.861	1.332	1.330763
22	352.92	3.311	147.432	451.333	1.311	1.464754
23	599.81	3.317	93.415	54.135	1.327	1.477024
24	1312.65	3.337	41.647	34.172	1.344	1.659734
25	169.84	1.335	589.623	151.945	1.335	3.231674

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1361.63	3.334	555555555	555555555	1.325	55555555555
SE	1718.43	3.349	555555555	555555555	1.332	55555555555
SE	341.69	1.313	555555555	555555555	1.336	55555555555

26	1359.46	3.331	51.979	52.817	1.331	1.797711
27	2322.37	3.356	33.119	14.215	1.357	1.200277
28	537.19	3.314	114.619	2.321	1.314	1.721031
29	379.57	3.311	281.532	340.079	1.315	1.458125
30	179.57	3.335	309.389	223.747	1.334	1.532461
31	3339.14	3.394	21.257	18.694	1.397	2.034377
32	752.14	1.321	140.837	14.337	1.327	1.723473
33	199.33	3.336	231.481	219.142	1.337	1.153875
34	5373.54	3.144	15.359	15.853	1.144	1.488647
35	5911.39	3.147	12.173	11.722	1.145	1.555211
36	7831.62	1.323	11.461	11.462	1.154	1.995138
37	4381.52	3.125	15.831	15.241	3.127	1.465316
38	4936.19	3.147	13.168	11.411	1.128	1.875353
39	991.36	3.326	66.114	54.284	1.339	1.329624
40	322.76	3.339	153.997	57.185	1.317	1.138334
41	3857.78	3.111	16.238	15.591	1.106	1.323447
42	71.23	3.442	928.212	416.776	1.333	1.411156
43	727.94	3.321	62.458	64.564	1.327	1.257214
44	278.49	3.338	148.817	153.689	1.311	1.731166
45	596.33	3.317	84.617	77.224	1.322	1.207327
46	787.74	3.322	62.251	55.473	1.329	1.137012
47	349.81	3.311	126.178	113.362	1.314	1.265752
48	597.25	3.317	74.827	74.924	1.328	1.244145
49	2278.29	3.355	36.297	25.117	1.363	1.172778
50	15767.79	3.449	7.137	7.741	1.233	17.361994

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
SD	1781.49	3.351	555555555	555555555	1.142	55555555555
SE	2787.94	3.379	555555555	555555555	1.357	55555555555
SE	394.27	1.311	555555555	555555555	1.337	55555555555

FIELD NO.	NO. / AREA	AREA	NO. / AREA	AREA	NO. / AREA	AREA
1	157.556	1.261	15.525	1.041	1.219	1.134
2	377.141	1.525	13.393	1.041	1.373	1.134
3	58.181	1.041	13.393	1.041	1.373	1.134
4	79.813	1.041	5.682	1.153	1.941	1.134
5	633.274	1.168	1.168	1.153	1.739	1.134
6	459.538	1.929	8.929	1.336	1.574	1.134
7	452.973	4.688	4.688	1.551	1.744	1.134
8	188.732	2.287	2.287	1.889	1.344	1.134
9	748.859	5.318	5.318	1.689	1.677	1.134
10	174.558	23.833	9.375	1.133	1.133	1.134
11	556.633	7.037	1.013	1.755	1.133	1.134
12	945.335	6.257	1.053	1.609	1.133	1.134
13	1509.941	1.027	1.744	1.443	1.133	1.134
14	851.183	6.056	1.139	1.068	1.133	1.134
15	1139.935	1.176	1.647	1.679	1.133	1.134
16	741.135	3.072	1.633	1.747	1.133	1.134
17	152.123	1.073	1.073	1.433	1.133	1.134
18	175.503	6.251	1.073	1.149	1.133	1.134
19	173.505	7.111	1.073	1.131	1.133	1.134
20	273.547	9.868	4.146	1.231	1.133	1.134
21	723.255	0.868	2.593	1.464	1.133	1.134
22	228.362	13.117	2.457	1.435	1.133	1.134
23	557.488	1.562	1.759	1.92	1.133	1.134
24	1493.584	3.757	1.759	1.429	1.133	1.134
25	154.773	4.838	1.759	1.131	1.133	1.134
26	154.773	4.838	1.759	1.131	1.133	1.134
27	13.631	1.059	1.374	1.211	1.133	1.134
28	97.130	4.717	1.76	1.576	1.133	1.134
29	1535.731	3.616	1.011	1.074	1.133	1.134
30	851.145	1.167	1.162	1.341	1.133	1.134
31	1244.334	3.174	1.738	1.211	1.133	1.134
32	1245.441	4.167	1.997	1.123	1.133	1.134
33	1535.779	1.576	3.839	1.333	1.133	1.134
34	1142.748	3.827	1.884	1.329	1.133	1.134
35	353.194	9.868	2.474	1.467	1.133	1.134
36	237.927	7.573	2.717	1.495	1.133	1.134
37	351.134	1.147	1.74	1.171	1.133	1.134
38	73.337	13.193	1.251	1.179	1.133	1.134
39	131.755	7.813	7.599	1.179	1.133	1.134
40	257.401	11.129	2.717	1.475	1.133	1.134
41	129.511	13.193	1.034	1.345	1.133	1.134
42	452.135	1.257	1.435	1.537	1.133	1.134
43	378.884	5.682	1.435	1.528	1.133	1.134
44	545.818	4.041	1.284	1.079	1.133	1.134
45	425.776	4.934	1.359	1.019	1.133	1.134
46	337.333	9.929	1.178	1.353	1.133	1.134
47	517.214	6.466	2.183	1.536	1.133	1.134
48	825.231	5.515	1.736	1.664	1.133	1.134
49	583.132	2.841	1.292	1.216	1.133	1.134
50	396.231	4.174	1.259	1.152	1.133	1.134
NO. / AREA	NO. / AREA	AREA	NO. / AREA	AREA	NO. / AREA	AREA
458.387	6.669	1.783	1.769	1.198	1.133	1.134
54.826	3.535	1.249	1.169	1.133	1.134	1.134

FIELD NO. 1.177313
 FRAME AREA -
 MAG-801.1 INTS-M CAL. EXPDZ -
 1.177313
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE TUNNEL
 AVERAGE TWIN AREA = 31.33X111
 0.31 CM TYP SIZE
 ONE DIRECTION ONLY
 TUNNEL ONLY

DATE 12/19/79

MODEL CYCO 44 JPL 144-3395-742 1200 P

DISLOCATION PIT

0.31 MM STEP SIZE

MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE PIT AREA = 5.15PP

MAG-800.J UNITS-MICRONS CAL. FACTOR-
FRAME AREA- 3.515625777 74

0.375377 UNITS/PP

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	3.11	3.111	555555555	555555555	3.111	555555555
2	1724.95	3.149	555555555	555555555	3.152	1.775631
3	133.15	3.113	428.182	177.557	3.114	1.075161
4	50.29	3.112	928.218	822.168	3.112	1.229454
5	4662.29	3.133	16.262	17.896	3.898	4.511243
6	2898.76	3.388	22.221	23.615	3.373	2.641637
7	7296.19	3.218	15.134	13.315	3.115	2.882846
8	2515.81	3.172	55.473	24.555	3.341	12.169877
9	1676.38	3.148	37.622	34.748	3.145	2.551433
10	2322.29	3.166	3.368	22.422	3.173	2.117759
11	443.43	3.913	116.574	117.481	3.115	1.417270
12	7.35	3.113	5859.375	5695.429	3.113	1.571055
13	5.97	3.111	4914.211	3751.111	3.113	1.622768
14	11.43	3.133	4464.286	3635.769	3.111	1.215357
15	3.35	3.111	11718.753	15625.333	3.111	1.753133
16	2336.11	3.357	35.947	33.314	3.343	2.412586
17	2754.29	3.378	29.131	23.292	3.382	1.964674
18	4751.48	3.135	14.521	14.594	3.113	2.465473
19	3932.29	0.111	18.222	18.157	3.389	2.487875
20	1692.57	3.148	38.612	39.725	3.142	2.892578
21	2194.29	3.152	25.494	23.121	3.150	2.118754
22	549.14	3.118	92.156	73.299	3.121	1.724778
23	1726.86	3.149	38.917	36.422	3.145	1.565244
24	3174.86	3.197	21.134	18.899	3.184	1.944645
25	3.43	3.111	555555555	555555555	3.111	555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	1858.63	3.153	555555555	555555555	3.144	555555555
SD	1841.11	3.152	555555555	555555555	3.118	555555555
SE	368.32	3.111	555555555	555555555	3.115	555555555

26	264.33	3.118	317.871	147.638	3.113	1.531352
27	124.57	3.114	115.723	255.849	3.114	1.117357
28	2151.11	3.151	29.389	22.443	3.156	1.761986
29	725.76	3.121	95.154	11.516	3.123	1.241422
30	2177.71	3.159	22.161	20.574	3.154	1.405007
31	456.27	3.114	111.227	17.378	3.114	1.117357
32	2131.75	3.151	9.555	21.493	3.151	1.411547
33	474.48	3.111	120.777	111.747	3.113	1.115641
34	157.15	3.145	493.421	273.124	3.145	2.171495
35	137.62	3.113	161.177	485.751	3.113	1.147382
36	146.95	3.134	351.124	144.669	3.135	1.527344
37	1626.29	3.145	14.483	11.267	3.157	1.855728
38	3291.29	3.194	18.943	17.643	3.191	2.419912
39	3151.14	3.193	19.913	18.724	3.195	2.425731
40	4195.62	3.119	15.441	15.131	3.117	1.793799
41	13383.24	3.195	9.355	9.652	3.189	6.198449
42	3255.33	3.193	23.698	22.777	3.169	1.938513
43	3294.57	3.193	23.666	11.753	3.179	2.942834
44	2118.48	3.161	11.712	29.263	3.155	1.355469
45	5623.33	3.161	14.775	14.779	3.131	1.215634
46	2319.51	3.157	17.431	23.873	3.157	1.241191
47	1320.27	3.111	19.857	11.126	3.142	1.349148
48	1771.48	3.151	11.133	34.155	3.149	1.393625
49	964.57	3.227	53.473	43.111	3.131	1.849475
50	534.86	3.115	29.471	74.158	3.119	1.317218

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	1979.37	3.155	555555555	555555555	3.148	555555555
SD	2332.68	3.158	555555555	555555555	3.141	555555555
SE	287.46	3.112	555555555	555555555	3.116	555555555

DATE 12/16/78
 ITEM SAMPLE # 1 JPL 4-457 1900 A
 TWINS ONLY
 ITEM #12 DATA DIVIDED BY 111
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE TWIN = 21.76 X 111

MAG-PILOT INTER-AREA CAL. FACTOR = 1.1111111111111111

FIELD NO.	AREA	PERCENT	AREA	PERCENT	AREA	PERCENT
1	31.33	511.177	0.375	0.000	0.000	0.000
LAST FIELD SELECTED						
1	31.33	511.177	0.375	0.000	0.000	0.000
2	41.11	599.177	0.475	0.000	0.000	0.000
3	11.75	391.161	11.710	0.000	0.000	0.000
4	81.81	1149.271	0.348	0.000	0.000	0.000
5	113.00	1461.731	0.479	0.000	0.000	0.000
6	81.59	1189.777	0.167	0.000	0.000	0.000
7	16.21	799.741	6.696	0.000	0.000	0.000
8	81.43	1186.181	0.419	0.000	0.000	0.000
9	91.41	1189.739	0.434	0.000	0.000	0.000
10	41.71	578.825	6.464	0.000	0.000	0.000
11	44.74	676.289	4.464	0.000	0.000	0.000
12	71.71	1115.413	5.850	0.000	0.000	0.000
13	11.14	431.178	7.112	0.000	0.000	0.000
14	14.44	275.112	11.259	0.000	0.000	0.000
15	19.11	554.179	14.423	0.000	0.000	0.000
16	54.54	775.159	7.441	0.000	0.000	0.000
17	17.41	515.129	8.152	0.000	0.000	0.000
18	58.38	826.118	5.168	0.000	0.000	0.000
19	26.71	781.197	7.112	0.000	0.000	0.000
20	4.29	41.155	11.251	0.000	0.000	0.000
21	7.51	117.146	21.478	0.000	0.000	0.000
22	15.19	214.197	18.751	0.000	0.000	0.000
23	13.81	196.174	14.423	0.000	0.000	0.000
24	11.19	441.547	8.152	0.000	0.000	0.000
25	51.11	754.259	5.859	0.000	0.000	0.000
26	17.47	348.411	11.259	0.000	0.000	0.000
27	4.29	41.155	57.511	0.000	0.000	0.000
28	25.91	146.711	11.251	0.000	0.000	0.000
29	12.51	177.778	11.251	0.000	0.000	0.000
30	4.81	48.238	41.511	0.000	0.000	0.000
31	5.15	77.415	44.871	0.000	0.000	0.000
32	21.99	341.191	11.391	0.000	0.000	0.000
33	44.11	517.411	7.112	0.000	0.000	0.000
34	22.51	749.211	5.515	0.000	0.000	0.000
35	122.77	1746.111	2.415	0.000	0.000	0.000
AVERAGE						
	41.51	591.441	14.717	0.587	0.711	0.000
SD	29.87	414.876	15.119	2.241	0.444	0.000
SE	5.15	71.411	3.589	0.379	0.175	0.000
35	81.21	1147.199	0.464	0.741	0.451	0.000
36	51.94	719.516	5.219	0.151	0.179	0.000
37	11.99	451.911	5.111	0.854	0.589	0.000
38	17.94	491.781	6.148	0.451	0.755	0.000
39	51.11	728.471	7.111	0.219	0.877	0.000
40	42.75	578.155	11.391	2.111	0.511	0.000
41	17.71	479.461	14.423	0.674	0.474	0.000
42	19.94	548.449	4.251	0.211	0.888	0.000
43	59.11	841.111	9.175	0.141	0.912	0.000
44	14.51	237.797	15.625	2.761	0.512	0.000
45	15.11	515.111	11.417	0.974	0.547	0.000
46	56.46	945.115	5.168	0.471	0.655	0.000
47	59.97	851.971	5.515	0.848	0.251	0.000
48	46.97	668.113	5.929	0.194	0.881	0.000
49	77.14	1131.187	4.914	0.694	0.531	0.000
50	98.86	1416.161	4.464	0.871	0.281	0.000
51	15.51	514.197	7.571	0.928	0.117	0.000
52	28.87	411.125	7.212	0.919	0.151	0.000
53	47.44	859.559	4.688	0.918	0.141	0.000
54	12.25	174.184	12.511	2.287	0.454	0.000
55	12.95	448.587	6.944	0.119	0.971	0.000
56	9.68	137.471	18.751	0.414	0.291	0.000
57	21.87	294.294	7.811	0.474	0.751	0.000
58	24.15	374.711	6.694	0.149	0.885	0.000
59	41.84	431.719	4.469	0.011	0.157	0.000
60	74.87	1154.871	5.959	0.771	0.155	0.000
61	57.45	817.159	5.859	0.874	0.179	0.000
62	29.51	421.199	11.417	0.119	0.749	0.000
63	14.95	525.552	7.571	0.212	0.877	0.000
64	53.79	744.987	7.212	0.184	0.011	0.000
65	71.81	1174.541	7.571	0.174	0.115	0.000
66	71.19	1111.999	4.914	0.744	0.411	0.000
67	11.24	159.821	24.784	0.827	0.177	0.000
68	71.53	1145.716	4.888	0.212	0.925	0.000
69	12.74	171.191	15.425	0.749	0.272	0.000
AVERAGE						
	41.71	511.501	11.697	0.111	0.811	0.000
SD	14.51	171.911	11.799	0.791	0.114	0.000
SE	3.17	45.154	1.432	0.111	0.151	0.000

DATE 12/14/78
 JHM SAMPLE # 1 JPL 4-457 SPEC 11
 DISLOCATION PITS
 .31 MM SPEC SIZE
 MEASUREMENT ALONG HC CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE DISLOCATION PIT 1.43 μ²

MAG-811.1 UNITS-MICRONS CAL. FACTOR- 1.775111 UNITS/μ²
 FRAME AREA- 3.513428111 μ²

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AREA	
1	44.5R	1.112	459.443	531.114	1.112	1.059751
2	251.17	1.112	191.152	145.474	1.112	1.042448
3	464.74	1.112	135.186	124.512	1.112	1.074494
4	211.62	1.114	115.175	271.613	1.114	1.422291
5	73.25	1.112	829.614	545.158	1.112	1.325172
6	311.47	1.119	194.512	132.228	1.119	1.091314
7	419.74	1.112	134.274	123.681	1.114	1.087902
8	124.54	1.114	337.233	249.152	1.115	1.344578
9	1.11	1.111	555555555	555555555	1.111	555555555
10	225.2R	1.116	224.409	129.448	1.111	1.291111
11	151.12	1.114	122.155	284.697	1.115	1.639813
12	371.59	1.111	144.453	75.183	1.118	1.290149
13	526.94	1.115	89.799	79.248	1.121	1.181259
14	579.33	1.114	82.193	77.933	1.122	1.277422
15	61.25	1.112	625.899	655.594	1.113	1.897817
16	371.22	1.111	124.834	114.699	1.114	1.187839
17	157.954	1.115	74.366	29.934	1.113	1.491268
18	324.17	1.119	145.349	145.575	1.111	1.128727
19	3191.77	1.129	17.543	17.533	1.125	1.352955
20	1781.44	1.149	27.325	27.322	1.163	1.377192
21	1979.19	1.155	29.555	24.799	1.161	1.844617
22	1472.13	1.141	42.926	42.614	1.139	1.457953
23	252.21	1.117	178.571	145.344	1.113	1.179352
24	244.5R	1.118	172.118	146.119	1.111	1.101332
25	471.13	1.113	129.249	114.371	1.113	1.199517
26	491.94	1.114	97.454	94.431	1.118	1.259943
27	338.67	1.119	144.743	147.871	1.111	1.314333
28	591.22	1.117	87.781	51.383	1.119	1.599439
29	113.52	1.112	437.679	384.221	1.114	1.151894
30	143.94	1.114	184.619	172.529	1.114	1.821134
31	163.72	1.115	159.585	233.791	1.117	1.874888
32	432.47	1.112	137.242	113.947	1.114	1.225785
33	186.16	1.115	232.533	214.341	1.118	1.143313
34	534.24	1.114	99.628	93.118	1.118	1.172433
35	297.79	1.118	185.753	159.168	1.119	1.251971

	NO.	NO./AREA	MFPV	MFRH	L/A	AREA
	528.45	1.115	555555555	555555555	1.118	555555555
SD	442.48	1.118	555555555	555555555	1.123	555555555
SE	118.43	1.111	555555555	555555555	1.111	555555555

36	131.14	1.114	379.585	147.957	1.114	1.430079
37	221.33	1.114	422.297	177.718	1.117	1.445170
38	594.12	1.117	89.885	84.485	1.119	1.679488
39	435.02	1.112	122.199	114.463	1.114	1.771033
40	35.24	1.111	1217.532	1739.284	1.111	1.370718
41	326.44	1.119	147.871	129.313	1.113	1.271345
42	175.17	1.113	191.938	244.778	1.115	1.281938
43	283.5R	1.118	191.718	143.636	1.119	1.771295
44	12.1R	1.113	1454.284	1774.387	1.113	1.546875
45	61.25	1.112	787.815	781.253	1.112	1.414773
46	375.65	1.111	158.898	72.292	1.115	1.536938
47	55.19	1.112	748.443	684.137	1.111	1.513573
48	111.53	1.119	142.144	123.139	1.113	1.333341
49	134.53	1.114	114.373	174.549	1.114	1.881994
50	43.41	1.111	1377.584	1147.293	1.111	1.184495
51	173.66	1.115	258.264	232.633	1.117	1.749317
52	44.83	1.111	984.842	848.354	1.112	1.949219
53	354.83	1.113	227.549	243.534	1.112	1.633213
54	1723.99	1.149	12.197	29.538	1.153	1.340023
55	416.42	1.118	72.787	9.177	1.125	1.107995
56	2948.29	1.184	23.461	17.991	1.178	1.045184
57	1669.74	1.147	32.314	31.715	1.151	1.899487
58	412.73	1.112	114.893	114.899	1.115	1.332958
59	259.23	1.117	193.698	143.328	1.113	1.372373
60	1713.24	1.149	17.132	25.848	1.158	1.591553
61	24.57	1.111	1474.137	1414.379	1.111	1.145429
62	33.95	1.111	748.443	376.374	1.111	1.417188
63	39.85	1.111	1745.341	1745.341	1.112	1.384921
64	23.25	1.111	2533.784	2434.147	1.111	1.531253
65	1.11	1.111	555555555	555555555	1.111	555555555
66	25.23	1.111	984.842	944.495	1.112	1.748329
67	3.33	1.111	555555555	555555555	1.111	555555555
68	144.13	1.114	334.821	129.496	1.115	1.137478
69	3.33	1.111	555555555	555555555	1.111	555555555
70	411.85	1.111	141.614	4.773	1.114	1.197544

	NO.	NO./AREA	MFPV	MFRH	L/A	AREA
	463.36	1.113	555555555	555555555	1.114	555555555
SD	641.49	1.118	555555555	555555555	1.119	555555555
SE	74.47	1.112	555555555	555555555	1.112	555555555

MTC 12/16/78
 IHM SAMPLE #2 JPL 4-457 SPEC. 1
 TWINS ONLY
 OTM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE TWIN = 31.14X111

MAG-834.3 UNIFORM-MM CAL. FACTOR- 3.193375 NITS/IN
 FRAME AREA- 1.171111

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	25.55	363.315	17.417	1.645	1.651	1.177779
2	8.99	127.799	26.786	1.827	1.277	1.177775
3	39.67	563.239	5.357	1.687	1.525	1.177774
4	31.16	443.189	7.379	1.284	1.843	1.177778
5	47.21	671.492	7.759	1.196	1.724	1.177779
6	49.78	737.916	6.257	1.091	1.163	1.177777
7	22.37	317.216	9.375	1.953	1.555	1.177777
8	54.34	768.621	5.357	1.123	1.971	1.177772
9	34.66	492.949	8.523	1.116	1.939	1.177778
10	8.65	123.235	18.759	1.989	1.269	1.177775
11	39.75	559.578	8.152	1.293	1.963	1.177777
12	55.17	783.683	17.417	1.232	1.848	1.177771
13	65.75	925.175	1.573	1.243	1.259	1.177771
14	47.91	641.443	1.469	1.431	1.711	1.177771
15	74.17	1119.281	4.934	1.251	1.433	1.177772
16	87.93	1257.636	5.768	1.872	1.235	1.177779
17	56.45	832.853	4.573	1.741	1.447	1.177778
18	87.29	1241.478	4.261	1.456	1.624	1.177772
19	57.96	824.375	1.934	1.727	1.475	1.177773
20	75.74	1177.164	5.357	1.824	1.285	1.177772
21	38.61	549.383	6.259	1.264	1.277	1.177776
22	26.22	172.937	11.719	1.829	1.584	1.177778
23	36.68	521.694	5.859	1.952	1.179	1.177776
24	33.79	487.416	7.436	1.116	1.738	1.177779
25	43.93	624.399	1.238	1.716	1.467	1.177777

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	45.88	652.524	7.874	1.293	1.135	1.177779
SE	29.71	294.594	5.764	1.144	1.369	1.177777
	4.14	58.919	1.113	1.169	1.374	1.177771

26	91.95	1297.517	3.324	1.464	1.296	1.177774
27	98.46	1477.314	4.688	1.794	1.367	1.177779
28	7.77	3.777	555555555	555555555	1.111	555555555555
29	5.71	81.244	11.251	1.859	1.184	1.177776
30	17.72	152.446	18.757	1.194	1.547	1.177773
31	31.97	723.891	7.577	1.194	1.896	1.177772
32	49.23	717.157	7.212	1.972	1.191	1.177778
33	17.33	246.477	11.719	1.953	1.547	1.177776
34	36.97	525.872	5.682	1.741	1.475	1.177776
35	41.62	591.984	6.466	1.651	1.589	1.177775
36	25.61	364.219	13.393	1.524	1.685	1.177777
37	32.77	455.111	7.112	1.133	1.167	1.177776
38	47.41	674.597	5.549	1.697	1.515	1.177776
39	22.98	326.871	11.129	1.276	1.819	1.177775
40	54.38	769.777	7.813	1.931	1.181	1.177779
41	51.35	737.281	6.466	1.737	1.424	1.177776
42	49.94	711.198	7.312	1.864	1.231	1.177777
43	52.77	882.727	6.944	1.721	1.447	1.177777
44	64.31	914.677	6.466	1.738	1.421	1.177779
45	25.32	361.121	11.129	1.838	1.581	1.177779
46	13.32	189.112	14.123	1.236	1.487	1.177774
47	28.79	479.414	5.696	1.972	1.793	1.177775
48	11.74	157.717	18.759	1.717	1.792	1.177775
49	11.42	151.777	18.757	1.132	1.461	1.177774
50	16.44	234.146	17.745	1.293	1.574	1.177775

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	41.38	587.174	555555555	555555555	1.971	555555555555
SE	23.37	332.323	555555555	555555555	1.451	555555555555
	3.30	46.998	555555555	555555555	1.764	555555555555

DATE 12/16/78
 IBM SAMPLE #2 JPL 4-457 5000.
 DISLOCATION PITCH
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE DISLOCATION PIT - 7.14 SQ.

MAG-900: INITI-MIDLINE CAL. PAGE 11- 1.175111 UNIT 1222
 FRAME AREA- 1.515625111 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA	
1	273.25	1.118	142.912	112.493	1.111	1.129453
2	331.99	1.119	112.175	112.417	1.115	1.517103
3	1.11	1.111	55555555	55555555	1.111	5555555555
4	243.45	1.117	133.238	124.874	1.113	1.772413
5	156.59	1.114	236.146	227.588	1.118	1.333223
6	1.11	1.113	55555555	55555555	1.111	5555555555
7	272.58	1.118	153.489	144.053	1.111	1.914313
8	424.19	1.112	134.983	132.459	1.114	2.786399
9	111.29	1.113	389.334	432.328	1.114	2.531253
10	299.73	1.119	121.281	118.171	1.114	1.412584
11	175.54	1.115	299.521	181.486	1.117	2.414533
12	35.29	1.111	1333.223	1145.741	1.112	1.564453
13	13.89	1.111	3936.254	1878.235	1.111	1.139963
14	34.41	1.111	892.857	919.119	1.112	1.125393
15	81.24	1.112	1343.114	868.754	1.112	2.623535
16	331.74	1.119	194.976	99.276	1.113	3.844893
17	264.25	1.118	142.745	132.793	1.112	1.527452
18	28.49	1.111	946.973	931.442	1.112	1.993753
19	217.23	1.114	179.942	179.154	1.111	1.529476
20	21.13	1.111	1512.097	1464.844	1.111	1.162337
21	151.13	1.111	115.219	131.681	1.116	1.425431
22	217.62	1.116	173.933	172.335	1.113	1.288451
23	145.83	1.114	217.517	213.554	1.118	1.782114
24	1217.47	1.115	34.645	16.939	1.144	2.376458
25	152.92	1.114	218.531	194.399	1.119	1.913337

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	213.89	1.116	55555555	55555555	1.119	5555555555
SD	238.26	1.117	55555555	55555555	1.119	5555555555
SE	47.65	1.111	55555555	55555555	1.112	5555555555

26	49.87	1.111	1464.844	1378.474	1.112	1.998438
27	12.37	1.111	1467.175	2678.171	1.111	1.178125
28	22.18	1.111	1333.383	1246.892	1.111	1.893438
29	647.98	1.118	58.332	55.471	1.129	1.741017
30	284.56	1.118	794.492	145.349	1.112	19.987533
31	186.29	1.115	195.313	189.394	1.119	1.523775
32	136.16	1.114	473.485	497.038	1.114	2.267857
33	834.30	1.123	51.524	42.976	1.116	1.825393
34	33.33	1.111	712.422	757.815	1.112	1.389844
35	46.24	1.111	738.189	744.348	1.112	1.179878
36	279.73	1.118	143.548	149.555	1.119	1.433936
37	179.33	1.115	262.435	128.955	1.119	1.753584
38	314.78	1.119	153.941	92.914	1.115	2.784454
39	763.58	1.122	69.995	53.725	1.113	2.544238
40	313.44	1.119	323.276	112.137	1.112	1.299315
41	51.44	1.111	1332.383	139.793	1.113	1.244141
42	173.54	1.115	333.111	221.138	1.117	1.714333
43	1.11	1.113	55555555	55555555	1.113	5555555555
44	1.11	1.113	55555555	55555555	1.119	5555555555
45	96.24	1.113	298.567	117.797	1.116	1.382651
46	146.91	1.114	236.146	232.439	1.117	1.343215
47	1.11	1.111	55555555	55555555	1.113	5555555555
48	323.54	1.119	148.339	42.148	1.119	1.729919
49	58.87	1.112	1736.111	627.861	1.112	1.599432
50	1.11	1.113	55555555	55555555	1.111	5555555555

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	235.37	1.116	55555555	55555555	1.119	5555555555
SD	230.33	1.117	55555555	55555555	1.119	5555555555
SE	33.30	1.111	55555555	55555555	1.111	5555555555

LINE NO.	DESCRIPTION	AMOUNT	CREDIT	DEBIT	BALANCE
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MEMORANDUM FOR THE RECORD

DATE: 11/11/50

BY: [Signature]

DATE 12/21/78
 JOB SAMPLE 7 1 101 7 1-457 1001
 DISLOCATION 1111 ONLY
 *11 1001 1111
 WEATHERING ALONG THE COAST LINE OF THE ISLAND ONLY
 AVERAGE DISLOCATION 1111 1111 1111

MAR-PTL 1 1111-1111 101 101 101
 FRAME AREA- 1-515535111 101 101

FIELD NO.	NO./AREA	MP3V	MP3H	L/A	MP3A	
1	26.15	1.111	1872.895	1748.868	1.111	1.114570
2	113.85	1.111	453.721	453.800	1.114	1.151450
3	416.73	1.112	111.389	93.711	1.115	1.040534
4	172.88	1.115	270.123	249.474	1.116	1.071014
5	126.92	1.114	277.167	261.872	1.116	1.154438
6	198.85	1.111	262.615	114.329	1.111	1.171177
7	157.12	1.114	222.165	222.165	1.115	1.121500
8	916.15	1.123	81.112	81.149	1.124	1.111848
9	1315.94	1.129	68.581	57.326	1.127	1.0525945
11	42.53	1.111	569.643	159.479	1.117	1.171659
11	139.42	1.114	318.878	286.697	1.116	1.094234
12	148.85	1.112	1542.577	221.747	1.115	1.1748751
13	761.11	1.122	98.892	68.786	1.122	1.040712
14	47.51	1.111	744.148	937.517	1.112	1.078747
15	424.42	1.112	113.774	114.574	1.115	1.097158
16	261.54	1.117	281.689	184.547	1.119	1.044134
17	259.62	1.118	141.846	145.124	1.112	1.177357
18	49.21	1.122	527.841	429.195	1.122	1.125119
19	422.69	1.112	128.777	94.468	1.115	1.101237
21	114.14	1.113	179.555	179.555	1.114	1.142177
21	254.81	1.117	149.224	174.455	1.119	1.129437
22	837.69	1.124	85.773	54.711	1.124	1.050544
23	149.42	1.114	748.513	141.478	1.117	1.111731
24	276.15	1.118	149.112	150.419	1.111	1.141160
25	131.15	1.114	351.120	295.741	1.115	1.131437
24	84.92	1.112	718.189	591.154	1.112	1.015171
27	257.19	1.117	185.277	165.929	1.111	1.251785
28	219.42	1.116	219.771	12.134	1.118	1.181217
29	832.88	1.124	62.292	45.435	1.124	1.034123
33	199.42	1.115	111.116	145.941	1.115	1.071451
41	276.18	1.118	171.190	152.419	1.111	1.073410
42	241.14	1.140	12.895	20.528	1.151	1.012118
31	322.69	1.119	153.680	121.124	1.112	1.045544
34	549.14	1.116	91.194	81.111	1.121	1.0413477
35	134.81	1.112	279.942	148.474	1.111	1.078421

AVERAGE

	NO.	NO./AREA	MP3V	MP3H	L/A	MP3A
	371.11	1.111	144.434	247.411	1.112	1.011706
SD	431.94	1.112	178.859	117.441	1.111	1.029714
SE	73.11	1.112	44.110	51.114	1.112	1.050452

35	519.14	1.118	98.997	77.845	1.111	1.054504
37	151.54	1.114	185.812	177.141	1.114	1.040404
38	114.23	1.114	311.372	247.847	1.116	1.028111
39	1.44	1.111	11192.847	11192.847	1.111	1.045511
44	591.58	1.117	115.894	75.111	1.121	1.001114
41	1.58	1.111	15975.171	193.299	1.112	1.031974
42	1.85	1.111	2133.522	2141.751	1.111	1.148431
43	715.94	1.121	74.169	79.255	1.122	1.043027
44	1.11	1.111	555555555	555555555	1.111	555555555
45	1.11	1.111	555555555	555555555	1.111	555555555
46	1.11	1.111	555555555	555555555	1.111	555555555
47	1.11	1.111	555555555	555555555	1.111	555555555
48	444.21	1.113	129.111	128.055	1.113	1.041133
49	1.11	1.111	555555555	555555555	1.111	555555555
53	2998.46	1.185	47.541	46.474	1.177	1.0491883
51	11.58	1.111	5514.774	6251.111	1.111	1.0578125
52	1.11	1.111	555555555	555555555	1.111	555555555
53	1.11	1.111	555555555	555555555	1.111	555555555
54	1.11	1.111	555555555	555555555	1.111	555555555
55	98.25	1.111	985.751	571.415	1.111	1.0414251
56	374.42	1.111	137.161	149.741	1.112	1.041889
57	1471.15	1.133	45.248	47.545	1.134	1.121829
58	1731.94	1.129	48.111	66.849	1.125	1.041431
59	311.77	1.119	153.723	151.111	1.111	1.104151
61	13.44	1.111	4374.187	4374.187	1.111	1.040751
61	517.51	1.114	297.419	149.112	1.117	1.073715
62	225.15	1.112	129.173	98.997	1.117	1.175741
63	113.58	1.113	473.485	442.217	1.111	1.007196
64	258.85	1.117	172.971	174.937	1.113	1.141235
65	21.54	1.111	1953.125	1442.118	1.111	1.094375
66	35.11	1.111	2183.121	1913.245	1.111	1.175168
67	14.14	1.113	48.431	48.491	1.125	1.071347
68	447.12	1.113	99.522	97.942	1.117	1.127425
69	1413.45	1.143	38.414	39.242	1.144	1.028453
79	423.85	1.112	118.571	113.165	1.115	1.091731

AVERAGE

	NO.	NO./AREA	MP3V	MP3H	L/A	MP3A
	371.21	1.111	555555555	555555555	1.111	555555555
SD	519.59	1.114	555555555	555555555	1.111	555555555
SE	63.91	1.112	555555555	555555555	1.111	555555555

UNIT 11221775

13M SAMPLE # 4 JUL 4-457 5-523 3

DISLOCATION PITS ONLY

31 MM DIA. PITS

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE DISLOCATION PIT AREA = 1.73 SQ

MAG-817.1 UNITS-MICRONS CAL. FACTOR-
FRAME AREA- 3.515425111 14

3.375113 INIT773

FIELD NO.	NO./AREA	MPZY	MPZH	1/A	AREA
1	246.61	3.117	1284.247	141.531	1.046125
2	19.44	3.111	2343.753	1421.455	1.472607
3	123.21	3.114	319.674	314.097	1.554690
4	124.18	3.113	314.723	293.731	1.590140
5	134.53	3.113	314.193	241.142	1.637975
6	453.57	3.113	161.182	131.595	1.677925
7	21.80	3.111	1714.545	1734.111	1.911543
8	561.43	3.115	115.193	135.293	1.924704
9	521.77	3.115	115.193	67.154	1.935532
10	296.51	3.113	161.899	145.344	1.931551
11	29.49	3.111	1399.254	1231.923	1.991234
12	182.55	3.115	437.639	147.871	2.042991
13	539.63	3.114	95.614	82.193	1.911293
14	295.11	3.119	256.840	129.180	1.977160
15	74.17	3.112	515.113	97.749	1.919641
16	222.34	3.115	236.954	217.871	1.937717
17	519.27	3.115	111.915	114.351	1.922715
18	213.99	3.114	243.534	233.339	1.951092
19	53.53	3.112	715.649	549.443	1.972477
20	446.97	3.113	133.128	134.861	1.94723
21	475.22	3.114	143.794	132.313	1.946891
22	384.82	3.118	185.277	162.478	1.987533
23	159.63	3.115	274.927	256.148	1.96958
24	325.65	3.119	444.313	172.124	1.992151
25	497.73	3.114	47.291	97.111	1.914959
26	3.43	3.111	222222222	222222222	1.911
27	792.15	3.123	89.456	52.876	1.924
28	164.75	3.115	318.878	313.545	1.945
29	1.22	3.111	13392.857	31254.333	1.911
30	3.14	3.113	7812.577	11718.753	1.913
31	3.19	3.111	555555555	555555555	1.911
32	3.73	3.113	13416.667	31259.333	1.913
33	524.38	3.115	94.697	97.543	1.918
34	3.33	3.111	555555555	555555555	1.911
35	328.13	3.119	342.649	119.375	1.919
AVERAGE					
NO.	247.87	3.117	222222222	222222222	1.917
SD	213.11	3.116	222222222	222222222	1.916
SE	35.52	3.111	222222222	222222222	1.911
36	6.11	3.117	4251.319	8522.737	1.917
37	3.65	3.113	8522.727	17416.457	1.913
38	19.55	3.111	1951.125	2383.333	1.911
39	5.38	3.111	5219.333	5614.734	1.911
40	111.17	3.119	153.417	151.945	1.919
41	114.49	3.119	141.614	142.345	1.912
42	464.32	3.113	137.153	82.945	1.919
43	298.63	3.118	164.474	177.894	1.913
44	1.11	3.111	555555555	555555555	1.911
45	35.43	3.111	1284.247	1159.494	1.911
46	3.11	3.111	555555555	555555555	1.911
47	5.11	3.111	4451.294	7912.511	1.911
48	1733.68	3.119	35.674	15.731	1.949
49	963.35	3.127	52.669	53.731	1.932
50	448.49	3.113	96.553	95.859	1.917
51	389.73	3.111	114.351	119.175	1.915
52	219.12	3.114	174.111	185.177	1.913
53	493.99	3.114	134.571	96.481	1.915
54	12.91	3.111	2841.939	3232.759	1.911
55	93.34	3.112	457.317	143.135	1.913
56	1613.11	3.117	32.956	31.747	1.949
57	115.41	3.113	354.759	144.184	1.917
58	244.33	3.117	241.385	126.841	1.911
59	715.94	3.121	133.547	115.932	1.914
60	3.11	3.111	555555555	555555555	1.911
61	19.21	3.111	23437.513	23437.443	1.911
62	74.51	3.112	1616.179	239.158	1.912
63	5.75	3.113	5219.333	13392.857	1.913
64	5.93	3.113	7812.577	6606.429	1.913
65	32.11	3.111	1512.197	1114.371	1.911
66	271.33	3.111	92.332	94.449	1.919
67	129.14	3.114	325.121	341.577	1.915
68	131.37	3.114	297.619	328.448	1.915
69	3114.32	3.119	19.339	19.112	1.911
70	37.17	3.111	1119.322	1193.114	1.911
AVERAGE					
NO.	312.98	3.119	555555555	555555555	1.919
SD	471.12	3.113	555555555	555555555	1.913
SE	55.14	3.112	555555555	555555555	1.912

DATE 12/1/77
 13M SAMPLE # 5 JUL 7 1-457 1-500
 TWINS ONLY
 3CM THERM DATA OBTAINED BY 111
 -11 100 100 100
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE CORE AREA = 11.49 111

KAR-1111 1111-24 111. FACTOR- 1.171113
 FRAME AREA- 1.171113

FIELD NO.	NO./AREA	MFRV	MFRH	L/A	VFETA	
1	51.35	733.242	5.682	1.736	1.475	1.111114
2	51.33	715.777	1.368	1.419	1.353	1.111110
3	33.45	433.713	7.111	1.423	1.720	1.111110
4	58.23	227.751	4.776	1.911	1.313	1.111110
5	88.71	1251.719	3.837	1.436	1.172	1.111124
6	62.57	889.822	5.682	1.512	1.739	1.111122
7	1.75	11.732	187.111	11.453	1.335	1.111111
8	17.75	252.435	11.423	2.841	1.179	1.111118
9	14.99	213.243	11.719	1.289	1.365	1.111119
10	25.36	363.588	1.482	1.512	1.736	1.111118
11	17.57	534.257	5.515	2.155	1.531	1.111113
12	37.94	824.133	6.696	1.723	1.651	1.111119
13	54.49	772.237	1.436	1.119	1.332	1.111112
14	5.73	95.455	14.423	1.989	1.383	1.111114
15	65.29	928.551	2.933	1.952	1.171	1.111115
16	43.83	632.922	5.168	1.112	1.237	1.111112
17	41.91	532.777	4.167	1.184	1.711	1.111118
18	51.43	862.292	4.748	1.639	1.683	1.111125
19	56.36	874.433	1.915	1.957	1.141	1.111111
20	41.96	596.792	6.465	2.138	1.149	1.111116
21	45.77	553.919	5.357	1.589	1.696	1.111115
22	16.44	233.771	7.813	2.513	1.451	1.111118
23	19.39	271.555	11.129	1.457	1.435	1.111117
24	33.13	474.374	6.348	1.309	1.747	1.111118
25	58.83	835.629	3.439	1.852	1.275	1.111111
26	57.32	815.166	3.538	1.748	1.197	1.111118
27	41.45	874.357	2.976	1.735	1.547	1.111119
28	67.36	953.747	3.348	1.913	1.216	1.111112
29	114.43	1484.748	3.753	1.123	1.733	1.111113
30	73.94	1352.232	1.538	1.915	1.219	1.111111
31	47.45	659.115	4.473	1.131	1.067	1.111111
32	11.44	271.424	1.909	1.179	1.935	1.111115
33	16.47	232.838	11.129	2.183	1.483	1.111115
34	14.33	145.982	12.514	2.799	1.181	1.111115
35	14.21	222.341	11.129	1.577	1.243	1.111112

AVERAGE

	NO.	NO./AREA	MFRV	MFRH	L/A	VFETA
SD	44.53	632.924	11.541	2.133	1.796	1.111112
SE	31.64	316.271	11.354	5.178	1.359	1.111117
	4.33	56.843	5.131	1.847	1.161	1.111111

36	7.50	137.787	14.423	5.515	1.310	1.111110
37	27.95	397.551	7.212	2.141	1.435	1.111111
38	5.84	93.156	17.531	7.533	1.141	1.111118
39	15.62	222.136	11.719	1.717	1.473	1.111117
40	13.42	191.843	14.423	1.124	1.352	1.111116
41	16.18	238.510	11.719	1.550	1.215	1.111116
42	5.7	91.111	11.111	4.163	1.243	1.111116
43	17.22	244.969	9.268	2.334	1.464	1.111118
44	12.43	175.372	14.423	1.989	1.275	1.111117
45	33.51	475.417	3.123	1.154	1.514	1.111111
46	7.15	131.721	21.833	5.157	1.315	1.111116
47	7.45	134.523	18.753	3.125	1.341	1.111117
48	23.65	336.425	6.348	1.379	1.768	1.111115
49	8.43	119.452	17.345	1.289	1.325	1.111114
50	3.71	52.727	62.533	11.417	1.134	1.111119
51	25.26	359.288	8.152	2.134	1.448	1.111112
52	19.59	278.545	6.348	2.155	1.517	1.111112
53	11.23	152.110	11.111	1.476	1.111	1.111116
54	17.53	245.535	17.115	5.157	1.310	1.111117
55	11.55	144.215	11.129	1.233	1.341	1.111118
56	51.37	858.459	4.934	1.589	1.723	1.111112
57	26.51	377.321	7.813	1.823	1.473	1.111119
58	34.42	489.472	5.682	1.465	1.731	1.111111
59	43.47	645.719	1.838	1.378	1.316	1.111119
60	18.72	692.913	5.218	1.116	1.987	1.111111
61	2.49	38.252	17.511	1.269	1.112	1.111116
62	1.11	1.111	1111111111	1111111111	1.111	1111111111
63	1.11	1.111	1111111111	1111111111	1.111	1111111111
64	1.11	1.111	1111111111	1111111111	1.111	1111111111
65	1.11	1.111	1111111111	1111111111	1.111	1111111111
66	1.11	1.111	1111111111	1111111111	1.111	1111111111
67	1.11	1.111	1111111111	1111111111	1.111	1111111111
68	4.13	59.793	23.438	1.944	1.195	1.111117
69	9.25	131.584	12.333	1.044	1.433	1.111117
70	8.34	114.319	12.533	1.676	1.349	1.111114

AVERAGE

	NO.	NO./AREA	MFRV	MFRH	L/A	VFETA
SD	29.82	424.114	1111111111	1111111111	1.572	1111111111
SE	24.57	349.411	1111111111	1111111111	1.384	1111111111
	2.94	41.743	1111111111	1111111111	1.116	1111111111

ORIGINAL PAGE IS
OF POOR QUALITY

PAGE 12/27/70
100 SAMPLE 73 JUL 7 0-457 5000 E
DISLOCATION PITS ONLY
.11 MM GRID SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE DISLOCATION PIT AREA = 5.37 12

MAG-834.3 UNITS-MICRONS CAL. FACTOR- 1.775117 UNITS/μ
FRAME AREA- 3.515525117 14

FIELD NO.	NO. AREA	MFRV	MFRH	L/A	AREA	
1	7.59	3.331	4464.284	467.107	1.773	1.937517
2	38.85	3.331	1714.545	721.154	1.773	1.775791
3	137.69	3.333	569.192	749.194	1.774	1.431210
4	1.31	3.111	55775555	55775555	1.331	5577555555
5	98.38	3.113	561.377	197.244	1.314	1.559173
6	472.31	3.113	125.839	97.656	1.314	1.753173
7	839.81	3.124	64.148	68.985	1.327	1.514319
8	284.23	3.118	192.111	194.712	1.319	1.473475
9	596.54	3.123	133.821	94.355	1.315	2.677757
10	169.62	3.135	297.887	218.123	1.337	1.333594
11	2329.62	3.155	28.917	27.773	1.357	1.486958
12	483.96	3.114	131.133	97.583	1.318	1.225444
13	564.42	3.116	241.393	78.914	1.315	2.163215
14	2343.27	3.158	35.351	29.215	1.349	2.658613
15	121.15	3.333	459.559	414.667	1.374	1.474563
16	18.85	3.331	2232.143	2467.135	1.371	1.294375
17	7.51	3.114	497.533	5859.375	1.317	1.914744
18	17.38	3.113	5859.375	2467.135	1.331	3.956259
19	29.34	3.111	1838.235	928.218	1.322	1.514741
20	73.19	3.112	625.377	649.547	1.323	1.413425
21	73.13	3.112	1114.771	551.471	1.322	2.225543
22	276.54	3.118	219.732	221.138	1.327	1.543455
23	133.96	3.113	419.182	48.565	1.324	1.135917
24	3.19	3.117	9375.177	15424.177	1.339	1.949219
25	32.12	3.111	2634.167	1246.892	1.322	1.851151
26	216.54	3.116	689.338	174.381	1.324	2.197443
27	25.38	3.111	4261.364	1333.229	1.311	1.323313
28	14.35	3.113	3724.194	1972.885	1.321	1.328125
29	7.31	3.113	5859.375	1574.167	1.321	1.751253
30	26.55	3.111	1551.514	1199.195	1.311	1.113197
31	25.92	3.111	1552.514	1604.737	1.311	1.315184
32	43.38	3.111	1734.545	552.273	1.321	1.447625
33	34.19	3.111	1953.125	1872.885	1.321	1.498317
34	11.92	3.113	3348.214	3615.769	1.323	1.245534
35	112.15	3.113	363.372	377.233	1.324	1.733472

NO.	NO. AREA	MFRV	MFRH	L/A	AREA	
36	246.18	3.119	55775555	55775555	1.319	5577555555
37	517.14	3.115	55775555	55775555	1.313	5577555555
38	87.41	3.112	55775555	55775555	1.312	5577555555

36	241.11	3.117	239.771	110.254	1.319	1.513071
37	173.27	3.115	279.193	252.695	1.326	1.377229
38	323.88	3.112	131.454	121.181	1.315	1.344407
39	594.11	3.117	91.285	10.158	1.319	1.374445
40	1219.21	3.115	47.259	38.249	1.325	1.824799
41	324.52	3.115	215.742	247.361	1.317	1.464518
42	578.85	3.119	15.179	97.341	1.319	1.911713
43	453.77	3.119	83.333	92.454	1.323	1.614583
44	377.96	3.111	127.379	126.861	1.313	1.190762
45	11.30	3.111	1100.354	1154.494	1.311	1.140295
46	449.21	3.113	137.183	134.167	1.314	1.234842
47	7.51	3.111	3238.333	3472.222	1.313	1.787482
48	9.34	3.111	55775555	55775555	1.313	5577555555
49	93.45	3.113	498.671	538.793	1.319	1.457114
50	132.31	3.113	452.699	454.319	1.314	1.314453
51	219.14	3.115	22.484	36.742	1.319	1.261196
52	631.35	3.117	21.169	79.181	1.323	1.372478
53	1295.32	3.117	48.177	47.189	1.327	1.920236
54	323.49	3.116	124.377	134.319	1.314	1.845467
55	732.31	3.122	81.128	71.323	1.322	1.594915
56	583.45	3.117	151.449	77.133	1.318	1.711277
57	7.11	3.111	55775555	55775555	1.311	5577555555
58	111.15	3.113	97.133	64.449	1.314	1.593751
59	391.57	3.113	1.131	134.513	1.317	1.991110
60	1.71	3.117	914.503	164.111	1.317	1.377334
61	593.23	3.117	4.779	74.843	1.319	1.438454
62	517.49	3.114	114.598	113.463	1.317	1.323112
63	241.11	3.117	213.474	197.785	1.319	1.291322
64	221.96	3.116	232.151	251.343	1.327	1.435127
65	463.48	3.113	133.591	94.492	1.317	1.131275
66	375.38	3.115	137.635	143.375	1.314	1.438375
67	994.74	3.128	19.962	7.414	1.321	1.912495
68	276.92	3.114	244.778	237.944	1.328	1.336149
69	3.11	3.111	55775555	55775555	1.311	5577555555
70	3.11	3.111	55775555	55775555	1.311	5577555555

NO.	NO. AREA	MFRV	MFRH	L/A	AREA	
71	328.91	3.119	55775555	55775555	1.319	5577555555
72	437.87	3.112	55775555	55775555	1.312	5577555555
73	11.11	3.111	55775555	55775555	1.311	5577555555

100 SAMPLE * 4 JPL * 4-37 3207 F
TWINS ONLY
NEW DIPPED DATA DIVIDED BY 100
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE D-IN AREA = 24.71211

MAG-511.1 IN/INCHY CAL. 20012- 1.111775 IN/INCHY
FRAME AREA- 1.111111

FIELD	NJ.	NJ./AREA	WZV	WZM	L/A	AREA
1	12.13	172.524	11.253	6.253	7.173	1.111111
2	51.11	854.031	8.153	1.742	1.119	1.111111
3	66.67	948.149	5.515	1.123	1.061	1.111115
4	75.12	1166.913	4.934	1.022	1.206	1.111111
5	44.79	517.171	7.813	1.379	1.173	1.111119
6	53.41	911.816	6.466	1.962	1.196	1.111119
7	45.61	651.452	7.511	1.123	1.036	1.111117
8	61.19	771.471	7.811	1.101	1.061	1.111111
9	46.74	664.769	6.696	1.116	1.255	1.111117
10	65.91	1236.121	4.241	1.942	1.139	1.111117
11	26.29	373.911	6.940	1.769	1.617	1.111119
12	75.99	1383.782	4.261	1.692	1.541	1.111111
13	21.35	333.421	12.512	2.344	1.136	1.111111
14	27.72	494.174	9.848	1.521	1.699	1.111117
15	18.13	247.911	26.786	3.751	1.203	1.111114
16	24.16	343.571	13.193	2.447	1.317	1.111119
17	27.49	417.645	7.411	1.674	1.664	1.111111
18	22.17	319.672	6.666	1.349	1.035	1.111115
19	13.91	196.152	21.439	1.737	1.201	1.111119
20	16.73	287.183	11.120	1.159	1.721	1.111114
21	42.89	519.913	7.111	1.151	1.114	1.111116
22	96.39	1176.111	4.913	1.067	1.184	1.111111
23	91.51	1299.155	1.927	1.724	1.025	1.111115
24	53.28	786.117	6.944	1.312	1.912	1.111112
25	24.72	351.561	17.145	2.717	4.397	1.111119
26	64.41	918.951	6.149	1.794	1.128	1.111119
27	13.22	145.418	17.511	1.751	1.277	1.111115
28	39.91	567.824	11.719	1.111	1.714	1.111118
29	35.88	511.295	13.193	1.813	1.589	1.111111
30	58.95	918.419	6.696	1.123	1.957	1.111119
31	49.33	597.262	11.417	1.633	1.653	1.111112
32	21.91	311.613	17.145	1.917	1.547	1.111115
33	7.19	132.272	16.753	4.148	3.179	1.111115
34	51.46	874.147	4.934	7.082	1.156	1.111111
35	94.71	1175.147	4.571	1.724	1.447	1.111111

AVERAGE

	NJ.	NJ./AREA	WZV	WZM	L/A	AREA
31	25.79	366.811	7.916	1.352	1.166	1.111115
32	4.34	52.111	1.336	1.229	1.162	1.111111

36	81.42	1158.319	3.989	1.795	1.373	1.111111
37	81.76	1215.427	5.218	7.030	1.147	1.111111
38	14.17	229.514	15.625	2.287	1.461	1.111115
39	39.74	565.164	6.251	1.194	1.026	1.111117
40	31.18	354.727	9.919	1.951	1.547	1.111119
41	37.75	536.929	7.212	2.155	1.521	1.111112
42	1.31	1.111	1.111	1.111	1.111	1.111111
43	1.69	21.973	93.751	15.625	7.169	1.111117
44	11.42	345.918	9.848	1.716	3.413	1.111117
45	2.77	19.417	45.875	15.625	1.301	1.111115
46	22.12	317.471	14.423	2.151	3.489	1.111116
47	7.19	114.272	21.438	8.029	1.131	1.111116
48	14.12	485.251	7.507	1.123	1.898	1.111119
49	55.54	789.945	8.523	1.749	7.789	1.111112
50	18.15	398.948	9.375	2.131	1.517	1.111111
51	14.64	492.717	14.423	1.441	4.439	1.111112
52	14.96	214.167	13.193	2.974	1.150	1.111116
53	12.73	455.551	6.696	1.232	7.948	1.111115
54	17.45	248.223	13.193	7.289	1.341	1.111119
55	14.58	213.167	13.193	2.189	3.489	1.111117
56	14.22	145.418	23.438	3.424	1.347	1.111115
57	15.19	214.455	19.751	2.514	1.416	1.111115
58	5.46	37.433	11.251	4.919	1.117	1.111114
59	11.97	114.129	9.016	1.111	1.030	1.111115
60	13.37	210.991	16.705	4.111	1.111	1.111119
61	13.16	184.564	15.625	4.568	1.413	1.111114
62	36.41	375.531	21.433	3.751	1.291	1.111115
63	51.63	762.781	6.696	1.576	1.693	1.111111
64	71.19	1311.111	6.696	1.453	1.757	1.111117
65	34.31	487.913	11.129	1.433	1.621	1.111119
66	11.79	494.818	11.417	1.123	1.025	1.111115
67	17.75	536.929	6.149	1.259	1.951	1.111119
68	12.73	455.551	11.129	1.559	1.441	1.111119
69	2.85	11.491	46.753	14.423	1.177	1.111111
70	1.16	15.411	91.753	16.775	1.115	1.111116

AVERAGE

	NJ.	NJ./AREA	WZV	WZM	L/A	AREA
31	25.71	366.811	7.916	1.352	1.166	1.111115
32	4.37	47.499	1.336	1.229	1.165	1.111111

DATE 12/21/75
 13M SAMPLE # 6 JUL 7 4-457 1957
 DISLOCATION RATE ONLY
 #11 MK 1002 1170
 MEASUREMENT METHOD FOR DISLOCATION RATE SAMPLE
 AVERAGE DISLOCATION RATE 1.11111111

MAG-PRO-3 INFO-MITTING CAL. FACTOR: 1.375111
 FRAME AREA- 3.51555511 14

FIELD NO.	NO. / AREA	AVERAGE	WAVE	L/A	WAVE	
1	54.22	1.112	893.957	893.273	1.112	1.1126997
2	374.11	1.111	138.955	133.129	1.111	1.1141177
3	27.31	1.111	2181.313	1649.737	1.111	1.1125117
4	5.22	1.111	9522.727	8533.727	1.111	1.0914163
5	37.75	1.111	3753.111	4261.364	1.111	1.5491375
6	15.26	1.111	3232.759	3324.194	1.111	1.0715591
7	44.78	1.111	1512.197	823.368	1.112	1.1633451
8	17.11	1.114	417.419	375.111	1.114	1.1338491
9	49.81	1.111	1442.318	1116.371	1.111	1.0937511
10	132.53	1.114	551.471	371.553	1.114	1.1117463
11	782.93	1.122	84.612	49.547	1.121	1.1294571
12	716.14	1.121	115.458	9.161	1.124	1.0701325
13	218.84	1.115	752.195	167.111	1.117	1.5477227
14	1884.54	1.114	25.518	23.114	1.117	1.1184710
15	211.41	1.114	378.188	99.743	1.114	1.0711530
16	272.29	1.118	428.182	222.684	1.114	1.0747198
17	7.43	1.111	7211.538	6696.429	1.111	1.1117791
18	51.77	1.111	1143.293	699.627	1.112	1.0233581
19	43.96	1.111	2212.143	1246.892	1.111	1.1391625
20	911.11	1.126	75.292	51.377	1.126	1.0942228
21	557.43	1.119	395.812	35.981	1.117	1.1127344
22	211.52	1.117	349.513	71.894	1.118	1.0439515
23	489.15	1.114	195.723	169.221	1.119	1.0224535
24	28.51	1.111	2038.143	2138.343	1.111	1.0643763
25	552.41	1.116	131.114	63.957	1.117	1.1181511
26	6.41	1.111	4934.211	2218.131	1.111	1.0941751
27	14.54	1.111	4175.187	1741.111	1.111	1.0714175
28	5.42	1.111	251.111	6251.131	1.111	1.0332913
29	13.55	1.111	1472.222	2757.153	1.111	1.0849319
30	14.54	1.111	3232.759	2757.153	1.111	1.0711379
31	1.11	1.111	555555555	555555555	1.111	55555555555
32	1.11	1.111	555555555	555555555	1.111	55555555555
33	1.11	1.111	555555555	555555555	1.111	55555555555
34	1.11	1.111	555555555	555555555	1.111	55555555555
35	1.11	1.111	555555555	555555555	1.111	55555555555
36	1.11	1.111	45875.121	45875.121	1.111	55555555555

LAST FIELD DELETED

	NO.	NO. / AREA	AVERAGE	WAVE	L/A	WAVE
37	227.55	1.115	555555555	555555555	1.117	1.1111111
38	181.11	1.111	555555555	555555555	1.111	1.1111111
39	54.21	1.112	555555555	555555555	1.112	1.1111117
40	1.11	1.111	555555555	555555555	1.111	55555555555
41	149.28	1.115	319.436	314.383	1.115	1.0111272
42	2.11	1.111	31251.313	23437.519	1.111	1.0742531
43	391.77	1.111	911.442	434.728	1.110	1.1344732
44	211.92	1.117	241.385	191.917	1.117	1.0117109
45	1181.13	1.114	62.567	54.316	1.129	1.0733595
46	5.43	1.111	7111.518	7812.533	1.111	1.0511391
47	124.92	1.114	475.844	371.553	1.114	1.0142931
48	1495.78	1.143	41.344	35.953	1.143	1.0200049
49	212.45	1.116	491.838	256.149	1.115	1.0755319
50	52.95	1.117	195.723	182.139	1.119	1.0227188
51	51.21	1.121	69.186	57.547	1.124	1.0409165
52	7.13	1.117	555555555	555555555	1.117	55555555555
53	237.72	1.117	147.222	143.766	1.119	1.0644732
54	348.19	1.113	125.839	112.683	1.113	1.0111931
55	71.69	1.112	437.755	427.861	1.113	1.0472320
56	1222.89	1.115	48.151	44.914	1.116	1.0747749
57	1116.22	1.129	94.949	31.327	1.129	1.0169592
58	1883.32	1.153	32.711	29.923	1.153	1.018872
59	552.81	1.115	131.487	114.411	1.119	1.0182317
60	477.31	1.111	414.833	172.161	1.112	1.0545316
61	929.92	1.126	141.977	54.513	1.129	1.0422726
62	267.25	1.117	251.341	114.147	1.111	1.0491373
63	1.61	1.111	18751.111	18757.111	1.111	1.0124311
64	1.11	1.111	555555555	555555555	1.111	55555555555
65	1619.17	1.106	151.141	128.174	1.112	1.0452744
66	387.15	1.111	119.371	118.182	1.113	1.0148991
67	524.52	1.119	31.144	24.454	1.121	1.0714230
68	331.52	1.119	191.06	145.124	1.111	1.064336
69	1.11	1.111	555555555	555555555	1.111	55555555555
70	1612.45	1.146	45.888	41.957	1.149	1.0492317
71	1374.41	1.139	59.381	41.942	1.149	1.0703373
72	1975.91	1.155	41.748	38.11	1.155	1.0111357
73	759.24	1.122	94.71	71.479	1.121	1.0474311
74	1.11	1.111	555555555	555555555	1.111	55555555555
75	415.75	1.112	555555555	555555555	1.112	55555555555
76	512.15	1.115	555555555	555555555	1.115	55555555555
77	41.54	1.112	555555555	555555555	1.112	55555555555

DATE 11/21/77
 IAN SAMPLE 77 JPL 4-457 3700
 TINS ONLY
 JIM CUT PIT DATA BEING DIVIDED BY 100
 .1 MM STOP SIZE
 MW MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE GRAIN AREA = 20.44111

MAG-811.1 INITS-MW CAL. FACTOR= 1.111375 INITS/??
 GRAIN AREA= 1.111111

FIELD NO.	NO./AREA	MFW	MFM	L/A	AREA
1	10.54	296.712	1.317	1.314	1.597
LAST FIELD DELETED					
1	17.11	142.539	12.111	5.515	1.114
2	1.11	1.111	55555555	55555555	1.11
3	4.89	69.511	24.784	9.868	1.112
4	14.56	217.333	14.423	5.571	1.111
5	13.52	178.122	17.345	6.278	1.111
6	13.11	185.329	24.784	9.868	1.114
7	24.47	348.154	7.212	2.714	1.112
8	27.81	395.552	9.175	3.314	1.493
9	35.31	439.549	5.278	1.933	1.737
10	49.61	735.611	4.571	1.320	1.845
11	13.85	197.311	11.417	3.773	1.331
12	1.11	1.111	52.511	19.75	1.115
13	2.29	32.515	24.784	9.868	1.117
14	1.11	1.111	55555555	55555555	1.11
15	3.11	3.111	55555555	55555555	1.111
16	3.11	3.111	55555555	55555555	1.111
17	3.11	3.111	55555555	55555555	1.111
18	3.11	3.111	55555555	55555555	1.111
19	3.11	3.111	55555555	55555555	1.111
20	2.19	34.735	31.111	12.11	1.296
21	24.76	391.532	1.868	0.68	1.514
22	33.19	472.174	6.148	1.531	1.734
23	28.69	418.164	7.813	1.311	1.833
24	76.93	1194.171	1.159	0.389	1.789
25	43.15	569.589	5.144	1.442	1.741
26	23.59	335.552	8.523	2.99	1.433
27	9.5	147.322	23.933	8.125	1.334
28	7.18	135.116	14.423	5.757	1.244
29	1.18	22.514	187.513	18.757	1.135
30	1.16	16.513	55555555	31.259	1.134
31	1.11	1.111	55555555	55555555	1.111
32	2.74	9.114	31.251	10.417	1.141
33	3.16	43.517	46.875	12.537	1.377
34	21.94	312.349	11.212	3.717	1.477
35	15.63	235.517	12.537	3.233	1.41

AVERAGE

	NO.	NO./AREA	MFW	MFM	L/A	AREA
US	11.54	216.712	55555555	55555555	1.274	5555555555
SS	16.99	241.539	55555555	55555555	1.271	5555555555
SE	2.87	41.844	55555555	55555555	1.145	5555555555

36	11.1	150.525	11.101	2.541	1.137	1.11114
37	9.42	112.511	13.438	4.157	1.219	1.11115
38	8.37	119.119	13.438	4.924	1.231	1.11116
39	1.75	25.111	15.975	5.920	1.134	1.11117
40	13.94	155.323	17.751	6.31	1.131	1.11118
41	1.11	1.111	55555555	55555555	1.11	5555555555
42	15.95	214.333	21.438	7.73	1.143	1.11119
43	14.28	211.111	21.438	4.571	1.247	1.11120
44	9.57	137.511	13.103	5.31	1.201	1.11121
45	1.11	1.111	55555555	55555555	1.11	5555555555
46	1.11	1.111	55555555	55555555	1.11	5555555555
47	1.11	1.111	55555555	55555555	1.11	5555555555
48	1.11	1.111	55555555	55555555	1.11	5555555555
49	1.11	1.111	55555555	55555555	1.11	5555555555
50	1.11	1.111	55555555	55555555	1.11	5555555555
51	2.11	25.514	31.133	15.125	1.172	1.11124
52	5.47	92.414	31.151	1.538	1.296	1.11125
53	5.49	78.312	31.257	7.513	1.144	1.11126
54	7.77	111.517	31.833	1.464	1.247	1.11127
55	55.71	792.134	7.212	1.111	1.814	1.11128
56	76.72	1191.171	1.538	1.942	1.194	1.11129
57	21.53	291.546	11.719	1.735	1.411	1.11130
58	7.45	136.317	19.753	3.178	1.134	1.11131
59	26.55	379.359	8.152	1.689	1.647	1.11132
60	14.11	483.375	4.944	1.974	1.574	1.11133
61	27.53	391.561	9.868	1.699	1.415	1.11134
62	1.35	91.514	24.784	1.64	1.117	1.11135
63	52.55	109.519	4.174	1.674	1.510	1.11136
64	19.27	274.343	9.375	1.645	1.623	1.11137
65	57.73	821.428	4.241	7.826	1.299	1.11138
66	19.87	282.541	14.423	1.974	1.533	1.11139
67	13.33	191.333	19.757	3.174	1.344	1.11140
68	13.36	191.333	15.625	2.548	1.411	1.11141
69	19.34	275.343	23.833	1.717	1.387	1.11142
70	15.37	218.534	42.433	14.423	1.177	1.11143
71	18.53	243.341	23.833	3.999	1.269	1.11144

AVERAGE

	NO.	NO./AREA	MFW	MFM	L/A	AREA
SD	15.79	224.985	55555555	55555555	1.129	5555555555
SE	2.15	31.515	55555555	55555555	1.139	5555555555

DATE 1/27/77
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 MEASUREMENT ALONG THE CENTER LINE OF THE APPLIC ONLY
 AVERAGE MEASUREMENT AT AREA 15.0000

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 OF POOR QUALITY

MAG=21.0 INTENSITY=20.0 COL=000100 1.37500 01/27/77
 FRAME AREA= 3.515535100 10

FIELD	NO.	NO. AREA	AREA	AREA	AREA	AREA
1	48.35	1.111	1339.294	1233.151	1.111	1.111210
2	171.08	1.111	111.447	152.425	1.111	1.111177
3	37.27	1.111	1264.022	114.927	1.111	1.111010
4	89.64	1.111	521.743	412.128	1.111	1.111077
5	37.77	1.111	554.734	475.880	1.111	1.097550
6	3.64	1.111	13414.667	13414.667	1.111	1.111357
7	119.11	1.111	114.839	157.104	1.111	1.111417
8	257.91	1.111	311.147	121.147	1.111	1.097935
9	513.11	1.111	85.252	44.124	1.111	1.109525
10	115.97	1.111	294.811	294.811	1.111	1.111105
11	167.52	1.111	247.141	221.118	1.111	1.111110
12	2194.34	1.111	25.482	25.152	1.111	1.111110
13	915.82	1.111	44.970	2.111	1.111	1.111110
14	1365.16	1.111	25.973	11.115	1.111	1.111000
15	1228.45	1.111	11.961	11.769	1.111	1.111110
16	943.27	1.111	44.111	15.992	1.111	1.111440
17	218.97	1.111	155.635	141.531	1.111	1.097917
18	324.29	1.111	115.174	98.177	1.111	1.067314
19	374.74	1.111	95.761	81.581	1.111	1.044482
20	617.15	1.111	48.125	14.752	1.111	1.111110
21	395.51	1.111	217.871	72.194	1.111	1.097465
22	2.57	1.111	1792.857	15625.187	1.111	1.111468
23	10.53	1.111	21417.593	18751.177	1.111	1.111425
24	195.74	1.111	211.174	171.115	1.111	1.111110
25	214.48	1.111	224.611	119.519	1.111	1.111110
26	1218.64	1.111	44.101	11.847	1.111	1.111110
27	197.17	1.111	178.124	141.141	1.111	1.111110
28	619.97	1.111	11.581	11.111	1.111	1.111110
29	111.65	1.111	316.723	224.449	1.111	1.111110
30	3.49	1.111	522.727	781.111	1.111	1.094375
31	1.11	1.111	525555555	525555555	1.111	1.111110
32	1.11	1.111	525555555	525555555	1.111	1.111110
33	151.25	1.111	281.589	181.233	1.111	1.111110
34	942.73	1.111	52.157	44.688	1.111	1.111110
35	227.79	1.111	141.343	157.143	1.111	1.067100
36	258.74	1.111	256.148	185.147	1.111	1.049488

AVERAGE

NO.	NO. AREA	AREA	AREA	AREA	AREA	
37	414.51	1.111	525555555	525555555	1.111	1.111110
38	11.11	1.111	525555555	525555555	1.111	1.111110
39	11.11	1.111	525555555	525555555	1.111	1.111110

37	11.11	1.111	151.444	199.167	1.111	1.111270
38	84.14	1.111	421.474	444.111	1.111	1.087210
39	579.51	1.111	68.481	14.111	1.111	1.097557
40	231.62	1.111	151.723	159.419	1.111	1.099172
41	215.92	1.111	155.171	159.158	1.111	1.111110
42	249.71	1.111	154.119	151.111	1.111	1.111110
43	171.72	1.111	275.551	111.111	1.111	1.111110
44	1226.42	1.111	11.012	11.111	1.111	1.111110
45	41.14	1.111	11.111	11.111	1.111	1.111110
46	111.11	1.111	44.111	11.111	1.111	1.111110
47	176.14	1.111	214.531	111.707	1.111	1.111110
48	181.11	1.111	97.555	14.111	1.111	1.111110
49	527.79	1.111	79.855	75.111	1.111	1.111110
50	78.17	1.111	489.291	444.111	1.111	1.099918
51	15.64	1.111	781.211	711.519	1.111	1.111110
52	295.11	1.111	159.419	141.977	1.111	1.052159
53	351.89	1.111	121.172	114.111	1.111	1.111110
54	111.11	1.111	114.111	111.111	1.111	1.111110
55	111.11	1.111	11.111	74.554	1.111	1.054714
56	118.82	1.111	338.448	119.944	1.111	1.111110
57	191.65	1.111	125.471	111.519	1.111	1.111110
58	15.11	1.111	1115.749	1112.895	1.111	1.111110
59	8.12	1.111	424.144	451.204	1.111	1.111110
60	32.11	1.111	1147.115	1111.245	1.111	1.111110
61	52.51	1.111	514.595	499.427	1.111	1.111110
62	1.91	1.111	1111.111	1111.111	1.111	1.111110
63	37.40	1.111	1111.111	94.111	1.111	1.111110
64	42.43	1.111	111.494	114.111	1.111	1.111110
65	5.15	1.111	2521.727	2521.727	1.111	1.111110
66	2.66	1.111	1392.857	15525.111	1.111	1.111110
67	5.32	1.111	2511.147	1494.429	1.111	1.111110
68	111.65	1.111	571.145	111.111	1.111	1.111110
69	117.02	1.111	111.111	111.111	1.111	1.111110
70	117.11	1.111	111.111	111.111	1.111	1.111110

AVERAGE

NO.	NO. AREA	AREA	AREA	AREA	AREA	
37	414.51	1.111	525555555	525555555	1.111	1.111110
38	414.51	1.111	525555555	525555555	1.111	1.111110